THE DOCUMENT COMPANY
XEROX

DocuColor 1632/2240 Service Manual

Prelaunch CSE Training/Review



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CAUTION

Certain components in the DocuColor 1632/2240 are susceptible to damage from electrostatic discharge. Observe all ESD procedures to avoid component damage.

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NOTICE

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WARNING

This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions documentation, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to subpart J of part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user, at his own expense, will be required to correct the interference.

DANGER: Cet Èquipement gÈnËre, utilise et peut Émettre des frÈquences radio, et, s'il n'est pas installÈ et utilisÈ selon les recommandations du manuel d'instructions, peut causer des interfÈrences aux communications radio. Il a ÈtÈ testÈ et jugÈ conforme aux limites des systËmes de catÈgorie A, conformÈment ‡ la partie 15 de l'alinÈa J des rËglements FCC, Ètablis pour protÈger contre de telles interfÈrences pendant le fonctionnement en milieu commercial. Dans une zone rÈsidentielle, il peut causer des interfÈrences; dans ce cas, l'utilisateur devra corriger le problËme ‡ ses propres frais.

WARNING

This machine contains an invisible laser. There is no visual indication that the laser beam is present. During servicing, the machine is a Class 3B product because of the invisible laser. the laser beam could cause eye damage if looked at directly. Service procedures must be followed exactly as written without change. The service representative must observe the established local laser safety precautions when servicing the machine. Do not place tools with a reflective surface into the ROS opening. Do not look in the area of the ROS window if the power is On and the laser is energized.

DANGER: L'Èquipement contient un faisceau laser invisible et aucune indication visible signale la prÈsence du faisceau laser. De ce fait le produit est classÈ 3B pour tout ce qui concerne la maintenance. L'exposition directe des yeux au faisceau laser peut entraÓner des lÈsions visuelles. Les procÈdures de maintenance doivent Í tre rÈalisÈes sans aucun changement comme indiquÈ dans la documentation. Le reprÈsentant Xerox lors d'interventions sur l'Èquipement doit respecter les consignes de sÈcuritÈ locales concernant les faisceaux laser. Ne pas placer d'objet rÈflÈchissant dans la zone du ROS quand il est ouvert. Ne pas regarder dans la zone du ROS lorsque la machine est sous tension et que le laser est en fonctionnement.

Introduction

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About this Manual

This Service Manual is part of the multinational documentation system for DocuColor 1632/2240 copier/printers. The Service Documentation is used in order to diagnose machine malfunctions, adjust components and has information which is used to maintain the product in superior operating condition. It is the controlling publication for a service call. Information on its use is found in the Introduction of the Service Documentation.

This manual contains information that applies to **NASG and ESG** copiers.

Service Manual Revision

The Service Manual will be updated as the machine changes or as problem areas are identified.

Organization

This Service Manual is divided into seven sections. The titles of the sections and a description of the information contained in each section are contained in the following paragraphs:

Section 1 Service Call Procedures

This section contains procedures that determine what actions are to be taken during a service call on the machine and in what sequence they are to be completed. This is the entry level for all service calls.

Section 2 Status Indicator RAPs

This section contains the diagnostic aids for troubleshooting the Fault Code and non-Fault Code related faults (with the exception of copy quality problems).

Section 3 Image Quality

This section contains the diagnostic aids for troubleshooting any copy quality problems, as well as copy quality specifications and copy defect samples.

Section 4 Repairs/Adjustments

This section contains all the Adjustments and Repair procedures.

Repairs

Repairs include procedures for removal and replacement of parts which have the following special conditions:

- **When there is a personnel or machine safety issue.**
- **When removal or replacement cannot be determined from the exploded view of the Parts List.**
- **When there is a cleaning or a lubricating activity associated with the procedure.**
- **When the part requires an adjustment after replacement.**
- **When a special tool is required for removal or replacement.**

Use the repair procedures for the correct order of removal and replacement, for warnings, cautions, and notes.

Adjustments

Adjustments include procedures for adjusting the parts that must be within specification for the correct operation of the system.

Use the adjustment procedures for the correct sequence of operation for specifications, warnings, cautions and notes.

Section 5: Parts Lists

This section contains the Printer/Copier Parts List.

Section 6: General Procedures/Information

This section contains General Procedures, Diagnostic Programs, and Copier Information.

Section 7: Wiring Data

This section contains drawings, lists of plug/jack locations, and diagrams of the power distribution wire networks in the machine. Individual wire networks are shown in the Circuit Diagrams contained in Section 2. This section also contains the Block Schematic Diagrams.

How to Use this Documentation

The Service Call Procedures in Section 1 describe the sequence of activities used during the service call. The call **must** be entered using these procedures.

Use of the Circuit Diagrams

Circuit Diagrams (CDs) are included in Sections 2 (Status Indicator RAPs) and 3 (Image Quality RAPs) of the Service Manual. All wirenets, with the exception of power distribution wirenets, are shown on the CDs. Power distribution wirenets are shown in Section 7 (Wiring Data) of the Service Manual. The power distribution wirenets on the CDs will end at the terminal board for the power being distributed. Find the wirenet for that power and locate the terminal board on the wirenet. Use the wirenet to troubleshoot any power distribution wiring not shown on the CD.

Use of the Block Schematic Diagrams

Block Schematic Diagrams (BSDs) are included in Section 7 (Wiring Data) of the Service Manual. The BSDs show the functional relationship of the electrical circuitry to any mechanical, or non-mechanical, inputs or outputs throughout the machine. Inputs and outputs such as motor drive, mechanical linkages, operator actions, and air flow are shown. The BSDs will provide an overall view of how the entire subsystem works.

It should be noted that the BSDs no longer contain an Input Power Block referring to Chain 1. It will be necessary to refer to the Wirenets in order to trace a wire back to its source.

Symbology and Nomenclature

The following reference symbols are used throughout the documentation.

Warnings, Cautions, and Notes

Warnings, Cautions, and Notes will be found throughout the Service Documentation. The words **WARNING** or **CAUTION** may be listed on an illustration when the specific component associated with the potential hazard is pointed out; however, the message of the **WARNING** or **CAUTION** is always located in the text. Their definitions are as follows:

WARNING

A Warning is used whenever an operating or maintenance procedure, a practice, condition, or statement, if not strictly observed, could result in personal injury.

CAUTION

A Caution is used whenever an operating or maintenance procedure, a practice, condition, or statement, if not strictly observed, could result in damage to the equipment.

NOTE: *A Note is used whenever it is necessary to highlight an operating or maintenance procedure, practice, condition, or statement.*

Machine Safety Icons

The following safety icons are displayed on the machine:

WARNING

This machine contains an invisible laser. There is no visual indication that the laser beam is present. During servicing, the machine is a Class 3B product because of the invisible laser. the laser beam could cause eye damage if looked at directly. Service procedures must be followed exactly as written without change. The service representative must observe the established local laser safety precautions when servicing the machine. Do not place tools with a reflective surface in the area of the ROS opening. Do not look in the area of the ROS window if the power is On and the laser is energized.

The following symbol and statement appear on a label in the machine. The symbol by itself, or the symbol and the statement may also appear in the service documentation and in the training program. When this symbol appears, the service representative is warned that conditions exist that could result in exposure to the laser beam.

WARNING

Do not try to bypass any laser interlocks for any reason. Permanent eye damage could result if the laser is accidentally directed into your eye.



Figure 1 Laser Hazard Symbol

Laser Hazard Statement

DANGER INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM.

CAUTION

The use of controls or adjustments other than those specified in the Laser Safety Training Program may result in an exposure to dangerous laser radiation.

For additional information, review the Laser Safety Training program.

An arrow points to the location to install, to gain access to, or to release an object.



Figure 2 Customer Access Label

This symbol indicates that a surface can be hot. Use caution when reaching in the machine to avoid touching the hot surfaces.



Figure 3 Heated Surface Label

Danger label indicates where electrical currents exist when the machine is closed and operating. Use caution when reaching in the machine.



Figure 4 Shock Hazard Label

These symbols indicate components that may be damaged by Electrostatic Discharge (ESD).



Figure 5 ESD warning Label

Electrostatic Discharge (ESD) Field Service Kit

The purpose of the ESD Protection Program is to preserve the inherent reliability and quality of electronic components that are handled by the Field Service Personnel. This program is being implemented now as a direct result of advances in microcircuitry technology, as well as a new acknowledgment of the magnitude of the ESD problem in the electronics industry today.

This program will reduce Field Service costs that are charged to PWB failures. Ninety percent of all PWB failures that are ESD related do not occur immediately. Using the ESD Field Service Kit will eliminate these delayed failures and intermittent problems caused by ESD. This will improve product reliability and reduce callbacks.

The ESD Field Service Kit should be used whenever Printed Wiring Boards or ESD sensitive components are being handled. This includes activities like replacing or reseating of circuit boards or connectors. The kit should also be used in order to prevent additional damage when circuit boards are returned for repair.

The instructions for using the ESD Field Service Kit can be found in ESD Field Service Kit Usage in the General Procedures section of the Service Documentation.

Illustration Symbols

Figure 6 shows symbols and conventions that are commonly used in illustrations.

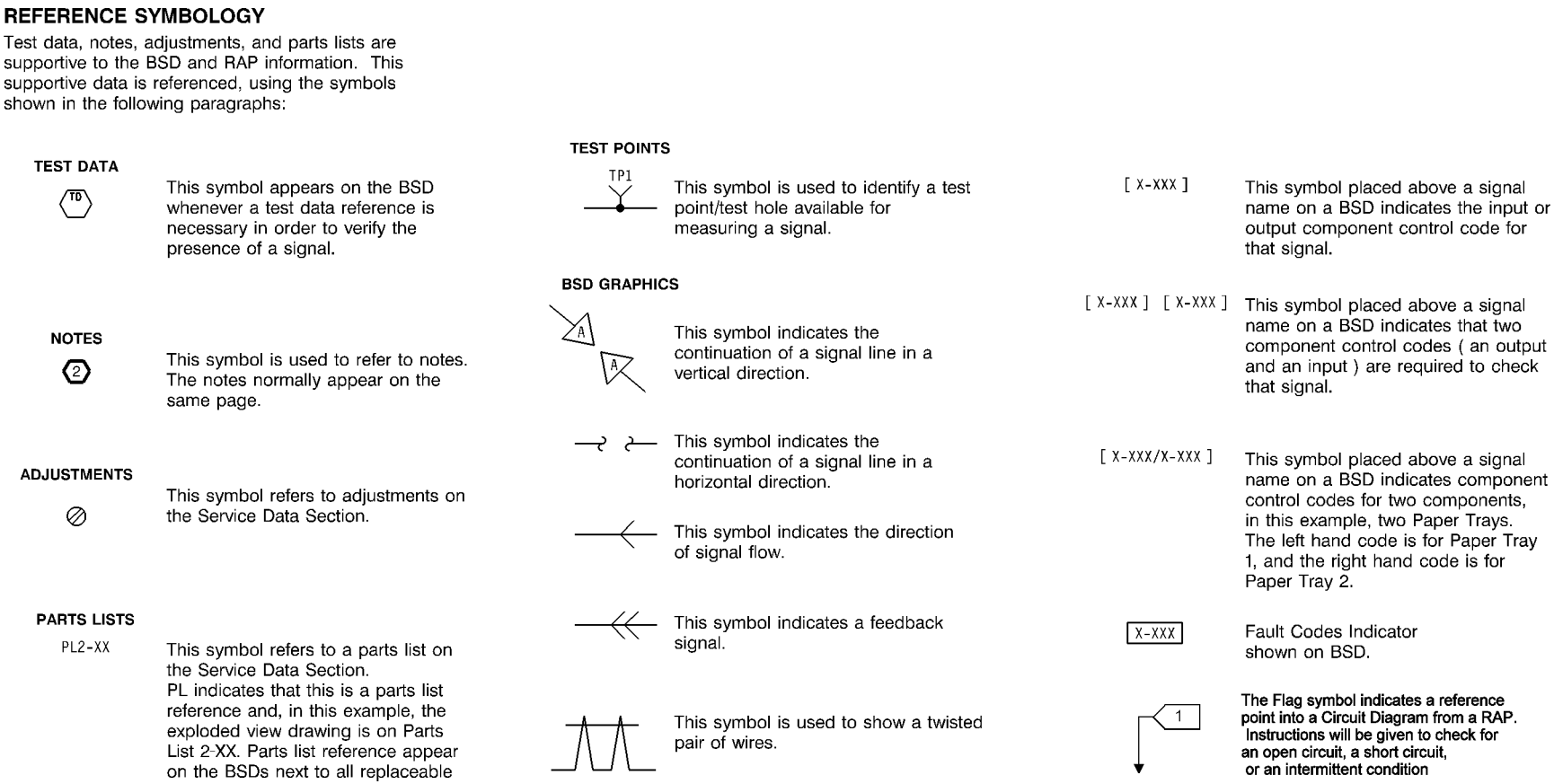


Figure 6 Illustration Symbols

Signal Nomenclature

Refer to Figure 7 for an example of Signal Nomenclature used in Circuit Diagrams and BSDs.

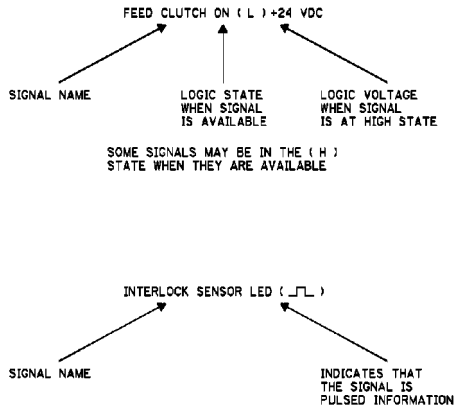


Figure 7 Signal Nomenclature

Voltage Measurement and Specifications

Measurements of DC voltage must be made with reference to the specified DC Common, unless some other point is referenced in a diagnostic procedure. All measurements of AC voltage should be made with respect to the adjacent return or ACN wire.

Table 1 Voltage Measurement and Specifications

VOLTAGE	SPECIFICATION
INPUT POWER 220 V	198 VAC TO 242 VAC
INPUT POWER 100 V	90 VAC TO 135 VAC
INPUT POWER 120 V	90 VAC TO 135 VAC
+5 VDC	+4.75 VDC TO +5.25 VDC
+24 VDC	+23.37 VDC TO +27.06 VDC

Logic Voltage Levels

Measurements of logic levels must be made with reference to the specified DC Common, unless some other point is referenced in a diagnostic procedure.

Table 2 Logic Levels

VOLTAGE	H/L SPECIFICATIONS
+5 VDC	H= +3.00 TO +5.25 VDC L= 0.0 TO 0.8 VDC
+24 VDC	H= +23.37 TO +27.06 VDC L= 0.0 TO 0.8 VDC

DC Voltage Measurements in RAPs

The RAPs have been designed so that when it is required to use the DMM to measure a DC voltage, the first test point listed is the location for the red (+) meter lead and the second test point is the location for the black meter lead. For example, the following statement may be found in a RAP:

There is +5 VDC from TP7 to TP68.

In this example, the red meter lead would be placed on TP7 and the black meter lead on TP68.

Another example of a statement found in a RAP might be:

There is -15 VDC from TP21 to TP33.

In this example, the red meter lead would be placed on TP21 and the black meter lead would be placed on TP33.

If a second test point is not given, it is assumed that the black meter lead may be attached to the copier frame.

Translated Warnings

Introduction

Symbology and Nomenclature

WARNING

A Warning is used whenever an operating or maintenance procedure, a practice, condition, or statement, if not strictly observed, could result in personal injury.

DANGER: Une note DANGER est utilisÈe ‡ chaque fois qu'une procÈdure de maintenance ou qu'une manipulation prÈsente un risque de blessure si elle n'a pas ÈtÈ strictement observÈe.

WARNING

This machine contains an invisible laser. There is no visual indication that the laser beam is present. During servicing, the machine is a Class 3B product because of the invisible laser. the laser beam could cause eye damage if looked at directly. Service procedures must be followed exactly as written without change. The service representative must observe the established local laser safety precautions when servicing the machine. Do not place tools with a reflective surface in the area of the ROS opening. Do not look in the area of the ROS window if the power is On and the laser is energized.

DANGER: L'Èquipement contient un faisceau laser invisible et aucune indication visible signale la prÈsence du faisceau laser. De ce fait le produit est classÈ 3B pour tout ce qui concerne la maintenance. L'exposition directe des yeux au faisceau laser peut entraÓner des lÈsions visuelles. Les procÈdures de maintenance doivent Í tre rÈalisÈes sans aucun changement comme indiquÈ dans la documentation. Le reprÈsentant Xerox lors d'interventions sur l'Èquipement doit respecter les consignes de sÈcuritÈ locales concernant les faisceaux laser. Ne pas placer d'objet rÈflÈchissant dans la zone du ROS quand il est ouvert. Ne pas regarder dans la zone du ROS lorsque la machine est sous tension et que le laser est en fonctionnement.

The following symbol and statement appear on a label in the machine. The symbol by itself, or the symbol and the statement may also appear in the service documentation and in the training program. When this symbol appears, the service representative is warned that conditions exist that could result in exposure to the laser beam.

DANGER: Les symboles et instructions suivants sont indiquÈs sur des Ètiquettes dans la machine et sont identifiÈs dans la documentation technique et dans le manuel de formation. Quand ces symboles s'affichent le reprÈsentant Xerox est prÈvenu des risques encourus concernant une exposition au rayon laser.

WARNING

Do not try to bypass any laser interlocks for any reason. Permanent eye damage could result if the laser is accidentally directed into your eye.

DANGER: Ne pas essayer de shunter les contacts laser pour quelques raisons que ce soit. Si le faisceau laser est dirigÈ accidentellement vers les yeux il peut en rÈsulter des lÈsions oculaires permanentes.

3 Image Quality

IQ6 IOT Background RAP

WARNING

HIGH VOLTAGE!

DANGER: HAUTE TENSION!

Exercise care when making the voltage check in the following steps.

DANGER: Soyez extrÍ mement vigilant lorsque vous effectuez les tests de tension au cours des Ètapes qui suivent.

IQ21 Developer Bias RAP

WARNING

HIGH VOLTAGE!

DANGER: HAUTE TENSION!

Exercise caution when performing the voltage checks in this procedure.

DANGER: Soyez extrÍ mement vigilant lorsque vous effectuez les tests de tension au cours de cette procÈdure.

4 Repairs and Adjustments

Electrical

REP 1.1 3.3/5 V LVPS Bracket

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 1.2 MCU PWB

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 1.3 ESS Chassis

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 1.4 3.3 V LVPS or 5 V LVPS

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 1.5 24 V LVPS

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 1.6 T5 T7 HVPS Chassis

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 1.7 T5 or T7 High Voltage Power Supplies

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 1.8 I/F (Interface) PWB

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 1.9 24 V LVPS Bracket

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 1.10 HVPS T6

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 1.11 AC Drive PWB

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 1.12 ESS PWB

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 1.13 ESS NVM PWB

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

Main Drives

REP 4.1 Main Drive Motor Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 4.2 IBT Motor

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 4.3 Developer Drive Motor

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 4.4 Drum Motor Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

Document Handler

REP 5.1 DADF

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 5.2 Registration Gate Solenoid

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 5.3 Left/Right Counterbalance

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 5.4 DADF Control PWB

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 5.5 Feed Motor Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 5.6 Nudger Roll

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 5.7 Feed Roll Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 5.8 Lower Chute Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 5.9 Retard Roll

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 5.10 Set Gate Solenoid Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 5.11 Registration Sensor

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon

d'alimentation branchÈ.

REP 5.12 Size Sensors 1/2 (Rear/Front)

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 5.13 DADF Belt Motor Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 5.14 Duplex Sensor

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 5.15 Registration Pinch Roll

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 5.16 Exit Motor Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 5.17 Document Transport

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 5.18 Rear Cover

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 5.19 Platen Belt

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

WARNING

Switch off the power and disconnect power cord.

DANGER: Mettre la machine sur Arrí t et dÈbrancher le cordon d'alimentation.

Imaging

REP 6.1 ROS

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 6.2 Platen Glass

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 6.3 IIT Top Cover

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 6.11 Carriage Cables

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 6.12 Carriage Motor

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 6.13 Exposure Lamp

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 6.14 Lamp Wire Harness

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

Paper Trays

REP 7.1 Tray 5

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 7.2 Tray 5 Feed Roll

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 7.3 Tray 1 Feeder

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 7.4 Tray 1 Feed/Lift Motor

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 7.5 Tray 1 Paper Size Sensor

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 7.6 Tray 3

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 7.7 Tray 4

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 7.8 Tray 1

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 7.9 Tray 2

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 7.10 Tray 2 Feeder

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 7.11 Tray 3 Feeder

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 7.12 Tray 4 Feeder

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

Paper Feed and Registration

REP 8.1 Left Cover Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 8.2 Duplex Chute

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 8.3 Duplex Transport Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 8.5 Inverter Transport

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 8.6 Registration Transport Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 8.7 Exit Transport Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

Xerographic

REP 9.1 Drum Cartridge

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.2 ROS Shutter Motor

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.3 Waste Toner Cartridge Cover

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.4 Waste Toner Cartridge

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.5 Full Toner Sensor

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.6 Inner Cover

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.7 Toner Dispenser

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.8 Plate Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.9 Developer Housing

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.10 Developer

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.11 Toner Dispenser Base Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.12 IBT Steering Drive Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.13 Agitator Motor Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.14 MOB Sensor Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.15 IBT Belt Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.16 IBT Cleaner Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.17 Auger Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.18 Lever

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.19 Left Hinge/Right Hinge

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.20 Right Lift Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.21 Left Lift Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.22 Transfer Belt

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.23 1st BTR Roll

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.24 2nd BTR Roll

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 9.26 ATC Sensor

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

Fuser

REP 10.1 Fuser

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

WARNING

Personal injury may result from grasping hot areas of Fuser Module. If a hot Fuser Module must be removed, grasp Fuser Module by black plastic frame component, shown in figure (Figure 1).

DANGER: Des blessures peuvent rÈsulter si les zones chaudes du module de four sont touchÈes. Si un module de four chaud doit Í tre enlevÈ, le saisir par l'ÈlÈment en plastique noir du b, ti, montrÈ sur la figure (Figure 1).

WARNING

If machine was making copies within 30 minutes, Fuser Module is hot. Grasp Fuser Module using Grip Rings.

DANGER: Si moins de 30 minutes se sont ÈcoulÈes depuis le dernier tirage de copies, le module de four est chaud. Saisir ce module par les demi-cercles en plastique noir.

REP 10.2 Fuser Fan

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

WARNING

Personal injury may result from grasping hot areas of Fuser Module. If a hot Fuser Module must be removed, grasp Fuser Module by black plastic frame component, shown in figure (Figure 1).

DANGER: Des blessures peuvent rÈsulter si les zones chaudes du module de four sont touchÈes. Si un module de four chaud doit Í tre enlevÈ, le saisir par l'ÈlÈment en plastique noir du b, ti, montrÈ sur la figure (Figure 1).

REP 10.3 Main/Sub Heater Rod

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

Finisher

REP 12.1 H Transport Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 12.2 H Transport Belt

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 12.3 Entrance Sensor

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 12.5 Stack Height Sensor Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 12.6 Eject Roll Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 12.7 Decurler Roll Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 12.8 Finisher Drive Motor

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 12.9 Belt

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 12.10 Rail

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 12.11 Stapler Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 12.12 Compiler Tray Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 12.13 Stacker Motor Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 12.14 Front Elevator Bracket

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 12.15 Paddle Gear Shaft

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 12.16 Finisher PWB

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 12.18 Cam Bracket Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

Covers

REP 14.1 Top Cover

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 14.2 Rear Cover

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 14.3 Right Cover

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 14.4 Rear Left Middle Cover

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 14.5 Rear Left Upper Cover

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 14.6 Left Lower Cover Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 14.7 Cover Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 14.8 Fuser Cover

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 14.9 Rear Cover

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 14.10 Inner Cover

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 14.11 Left Cover Assembly

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

REP 14.12 Lower Cover

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

DADF

ADJ 5.2 DADF Counterbalance

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

ADJ 5.3 DADF Parallelism

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

ADJ 5.4 Document Transport Height

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

Scanner

ADJ 6.1 Full/Half Rate Carriage

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

Xerographic/Registration

ADJ 9.6 Color Registration (dC685)

WARNING

To avoid exposure to laser light, reinstall the Waste Cartridge before attempting to recheck the adjustment.

DANGER: Pour Èviter toute exposition au rayon laser, rÈinstaller la cartouche de toner usagÈ avant de re-vÈrifier le rÈglage.

Finisher

ADJ 12.1 Finisher Alignment

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

DANGER: Afin d'Èviter des blessures ou des chocs Èlectriques, ne pas effectuer des activitÈs de maintenance ou de rÈglage avec l'Èquipement sur Marche ou avec le cordon d'alimentation branchÈ.

1 Service Call Procedures

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Service Call Procedures

Service Strategy

The service strategy for the DocuColor 1632/2240 Copier/Printer is to perform any High Frequency Service Item (HFSI) actions before attempting to repair any problems. Some problems will be corrected by this strategy without the need to diagnose them. The Repair Analysis Procedures (RAPs) will be used for any remaining problems.

Problems that occur in the Basic Printer mode will be repaired before problems that occur when using the accessories.

Image Quality problems should be repaired after all other problems are repaired.

Service Call Procedures

The **Service Call Procedures** are a guide for performing any service on this machine. The procedures are designed to be used with the Service Manual. Perform each step in order.

Initial Actions

The Initial Actions gather information about the condition of the machine and the problem that caused the service call.

Call Flow

Call Flow summarizes the sequence of the Service Call Procedures.

Detailed Maintenance Activities

This section provides the information needed to perform the DC135 High Frequency Service Item (HFSI) actions.

Cleaning Procedures

The cleaning procedures list what needs to be cleaned at each service call.

Final Actions

The Final Actions will test the copier/printer and return it to the customer. Administrative activities are also performed in the Final Actions.

Initial Actions

Purpose

The purpose of the Initial Action section of the Service Call Procedures is to determine the reason for the service call and to identify and organize the actions which must be performed.

Procedure

1. Gather the information about the service call and the condition of the copier/printer.
   a. Question the operator(s). Ask about the location of most recent paper jams. Ask about the image quality and the copier/printer performance in general, including any unusual sounds or other indications.
   b. After informing the customer, disconnect the machine from the customerís network.
   c. Check that the power cords are in good condition, correctly plugged in the power source, and free from any defects that would be a safety hazard. Repair or replace the power cords as required. Check that the circuit breakers are not tripped.
   d. Inspect any rejected copies. Inquire as to, or otherwise determine, the paper quality and weight. The specified paper for optimum image quality with this machine is TBD. Look for any damage to the copies, oil marks, image quality defects, or other indications of a problem.
   e. Record the billing meter readings.
   f. Enter the Diagnostics Mode. Go to the TBD RAP if the Diagnostic Mode can not be entered. Return here after repairing the Diagnostics entry problem.

      NOTE: *If a fault code is displayed while performing a diagnostics procedure, go to that fault code RAP and repair the fault. Return to Diagnostics and continue with the dC procedure that you were performing.*

   g. Go to dC135 and determine what HSFI action is required based on the customer output volume. Refer to the Detailed Maintenance Activities section for the detailed HSFI information. Record any items that require action.
   h. Select the History File. Display and record the information in the Fail History, Jam History, Fail Counter, and Jam Counter. Classify this information into categories:

      Information that is related to the problem that caused the service call.

      Information that is related to secondary problems.

      Information that does not require action, such as a single occurrence of a problem.

   i. Check the Service Log for any recent activities that are related to the problem that caused the service call or any secondary problem.
2. Perform any required HSFI activities identified above. Refer to the Detailed Maintenance Activities section.
3. Exit diagnostics. Try to duplicate the problem by running the same jobs that the customer was running.
4. Go to Call Flow.

Call Flow

This procedure should be performed at every service call.

Initial Actions

Ask the operator about the problem. If the problem appears to be related to operator error, or an attempt to perform a job outside of the machine specifications, assist the customer in learning the correct procedure.

Procedure

Does the UI display correctly?

Y N

The machine is completely dead (no cooling fans running, no indicator lamps on)

Y N

Go to the OF 2-1 RAP to repair the UI display error.

Go to the OF 1-2 RAP.

The reported problem occurs in Print Mode ONLY.

Y N

Place the Color Test Pattern on the Document Glass. Make a copy from each paper tray. **The Copier/Printer can copy from all trays.**

Y N

NOTE: *Not all fault codes can be displayed on the UI. Connect the PWS and launch the diagnostic tool to ensure that any fault code is displayed. Some codes will appear only the Last 40 Faults list.*

A fault code is displayed.

Y N

Go to the GP 4 Intermittent Problem RAP.

Go to the RAP for the displayed fault.

Place two originals into the DADF and program a duplex job. **The Copier/Printer can copy from the DADF**

Y N

A fault code is displayed.

Y N

Check the DADF Document Sensors for debris or damage. Check the document mechanical drives and Feed Rolls for contamination, wear, damage, or binding.

Go to the RAP for the displayed fault code.

Check the image quality in the BASIC COPIER MODE:

- Select a tray that is loaded with 11 X 17 or A3 paper.
- Select the following parameters:
  - Output Color to **Auto**
  - Original Type to **Photo and Text Halftone**
  - Reduce/Enlarge **Auto**
  - Lighter/Darker to **Auto Contrast**
  - Sharpness to **Normal**
  - Preset Color Balance **Normal**
  - Color Shift to **Normal**
  - Color Saturation to **Normal**
  - Copy Position to **No Shift**
  - Variable Color Balance **Normal**
- Run four copies of the Color Test Pattern.

The Image Quality of the copies produced is acceptable.

Y N

Go to the IQ1 RAP.

Go to Final Actions.

The problem occurs in all print jobs.

Y N

If the problem is specific to a single application or group of applications, ensure that current drivers are loaded. If the problem persists, escalate the call to the Customer Support Center.

Go to GP 1 (Network Printing Simulation) and send a print job. **An acceptable print is produced.**

Y N

- verify machine settings
- reload system software?
- replace the ESS PWB (PL 13.1).

The problem is in the customer network or the setup. Ask the customerís system administrator to verify the configuration.
Check network settings.
When resolved, go to Final Actions.

Detailed Maintenance Activities (HFSI)

Procedure

1. Clean the ADC Sensor on every call.
2. Enter Diagnostics and select dC135.
3. Perform the Service Actions in Table 1 for any High Frequency Service Item (HFSI) counters that are over threshold or approaching the threshold. Using the customer's output volume numbers (high, medium, or low volume), evaluate which HFSI actions should be accomplished now to avoid an additional service call in the near future.
4. Refer to Cleaning Procedures for detailed cleaning instructions.

Table 1

Counter	Name	Threshold	Service Action to be performed
006-802	IIT Scan No. of Scan (Including pre-scan) after HFSI Counter Cleared	0	No action required - counter only
005-805	Document Feed No. of DADF Feed after HFSI Counter Cleared.	0	No action required - counter only
954-801	IBT Belt Unit	480K increments by 1 for letter size or smaller; by 2 for longer than letter size	Replace of the IBT Belt Unit Warning at 478.5K
954-802	2nd BTR Unit	150K	Replacement of the 2nd BTR Unit Warning at 98.5K
954-803	IBT Belt CLN Assy	100K	Replacement of the IBT Belt Cleaner Warning at 98.5K
954-804	Fuser	10000000 Area conversion with A4L=100	Usage of Fuser CRU equivalent to A4L conversion Warning at 9000000
954-806	Tray 1 Feed counter	300000	Replace the Roll Kit (PL 2.5).
954-807	Tray 5 Feed counter	300000	Replace the Feed Roll Assembly and Retard Pad (PL 2.14).
954-808	Tray 2 Feed counter	300000	Replace the Roll Kit (PL 16.8).
954-809	Tray 3 Feed counter	300000	Replace the Roll Kit (PL 16.10).
954-810	Tray 4 Feed counter	300000	Replace the Roll Kit (PL 16.12).

Cleaning Procedures

Purpose

The purpose is to provide cleaning procedures to be performed at every call.

Procedure

CAUTION

Do not use any solvents unless directed to do so by the Service Manual.

General Cleaning

Use a dry lint free cloth or a lint free cloth moistened with water for all cleaning unless directed otherwise by the Service Manual. Wipe with a dry lint free cloth if a moistened cloth is used.

1. **Feed Components (Rolls and Pads)**
   Follow the General Cleaning procedure above.
2. **ROS Windows**
   Use the cleaning wand to clean the ROS windows (follow the procedure in the User Guide).
3. **Toner Dispense Units**
   Vacuum the Toner Dispense units.
4. **Jam Sensors**
   Clean the sensors with a dry cotton swab.
5. **IBT Cleaning**
   Check the Transfer Belt surface and wipe with a dry lint free cloth. If the surface is excessively dirty, replace the Transfer Belt (PL 5.3).
6. **Fuser Components** (best cleaned when hot).
   Wipe with a lint free cloth.
7. **Scanner**
   a. Switch off the power and allow the Exposure Lamp to cool off.
   b. Using the optical Cleaning Cloth, clean the front and rear of the Document Glass, Document Cover, White Reference Strip, Reflector, and Mirror.
   c. Clean the Exposure Lamp with a clean cloth and Film Remover.
   d. Clean the Lens with Lens and Mirror Cleaner and lint free cloth.
8. **ADF**
   Check the paper path for debris or damage. Clean the rolls with a clean cloth and Film Remover as required.
9. **Finisher**
   Check the paper path for debris or damage. Clean the Finisher with a dry lint free cloth.

Final Actions

Purpose

The intent of this procedure is to be used as a guide to follow at the end of every service call.

Procedure

1. Ensure that the exterior of the copier/printer and the adjacent area are clean. Use a dry cloth or a cloth moistened with water to clean the copier/printer. Do not use solvents.
2. Check the supply of consumables. Ensure that an adequate supply of consumables is available according to local operating procedures.
3. Conduct any operator training that is needed. Ensure that the operator understands that the Automatic Gradation Adjustment procedure in the Operator Manual should be used to adjust the colors.
4. Complete the Service Log.
5. Perform the following steps to make a copy of the Demonstration Original for the Customer:
   a. Load Tray 1 with 8.5 x 11 inch (A4) or 11 x 17 inch paper.
   b. Place the Color Test Pattern on the glass with the short edge of the test pattern registered to the left edge of the glass. Select Tray 1 and make a single copy.
   c. Print out the Machine Settings page.
   d. Present the copies to the customer.
6. Reconnect the machine to the customer network. Verify function.
7. Issue copy credits as needed.
8. Discuss the service call with the customer to ensure that the customer understands what has been done and is satisfied with the results of the service call.

2 Status Indicator RAPs

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1-300 RAP

Left Cover is open.

Procedure

Enter dC330 [001-301] and press Start. Open and close Left Cover. **Display changes state.**

Y N

Measure the voltage between +24 LVPS j502-1 and GND(-). **+24 VDC measured.**

Y N

Replace LVPS (PL 9.1).

Disconnect p/j 172 from Left Cover Interlock Switch. Check resistance between A1 and B1 when switch is actuated. **Resistance is less than 3 ohms.**

Y N

Replace Left Cover Interlock Switch (PL 2.10).

Reinstall switch. Close the Left Cover. Measure the voltage at j535-A1 on the I/F PWB. **+24 VDC measured.**

Y N

Repair the open circuit between the +24 VDC LVPS and the I/F PWB.

Replace the I/F PWB (PL 9.1).

If the problem continues, replace the MCU PWB (PL 13.1).

Check installation of Cover/Actuator.

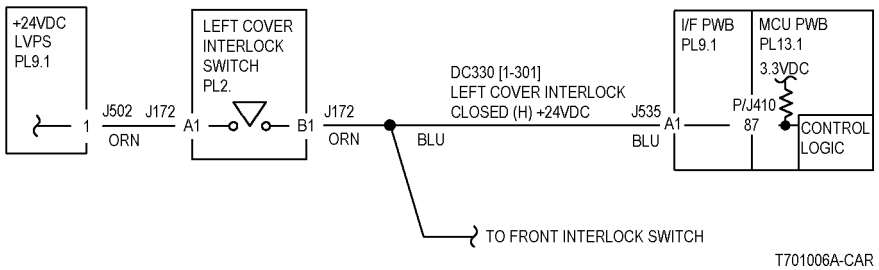


Figure 1 Left Cover Interlock Switch CD

1-301 RAP

Left Lower Cover is open

Procedure

Enter dC330 [001-302] and press Start. Open Left Lower Cover. Actuate Left Lower Cover Interlock Switch with screwdriver. **Display changes state.**

Y **N**

Go to General Transmissive Sensor RAP and repair LH Lower Cover Interlock Switch (PL 2.3).

Check Actuator and Left Lower Cover installation.

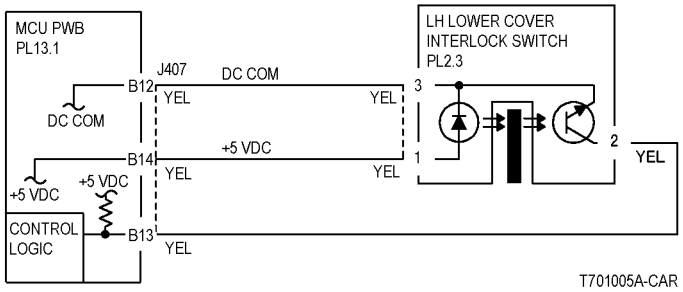


Figure 1 LH Lower Cover Interlock Switch CD

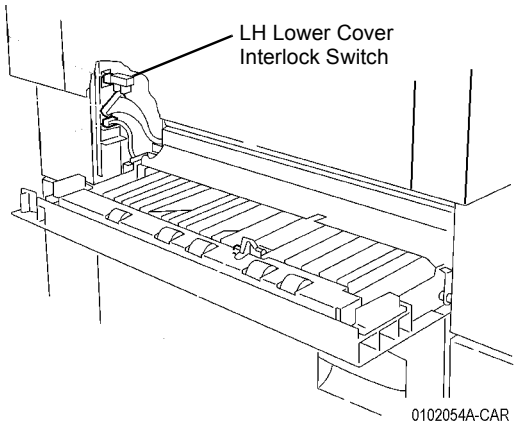


Figure 2 Component Location

1-302 RAP

Front Cover or is open

Initial Actions

Check the operation of the Actuator and the switch.

Procedure

Open the Front Cover. Cheat the Front Cover Interlock Switch. **001-302 is cleared.**

Y N

+24VDC is measured between the I/F PWB j531-1 (+) and GND (-).

Y N

+24VDC is measured between the Front Cover Interlock Switch j171-B1 (+) and GND (-).

Y N

24VDC is measured between the Front Cover Interlock Switch j171-A1 (+) and GND (-).

Y N

Repair the open circuit between the Left Cover Interlock Switch j172-B1 and the Front Interlock Switch j171-A1.

Replace the Front Cover Interlock Switch.

+24VDC is measured between the RH Cover Interlock Switch j173-B1 (+) and GND (-).

Y N

+24VDC is measured between the RH Cover Interlock Switch j173-A1 (+) and GND (-).

Y N

Repair the open circuit between the Front Cover Interlock Switch j171-B1 and the RH Cover Interlock Switch j173-A1.

Replace the RH Cover Interlock Switch.

Check the wire for an open circuit between the RH Cover Interlock Switch j173-B1 and the Interlock Relay PWB j569-2.
Check the wire for an open circuit between the Interlock Relay PWB j569-1 and the I/F PWB j531-1.

Replace the I/F PWB (PL 9.1).
If the problem continues, replace the MCU PWB (PL 13.1).

Check installation of Cover/Actuator.

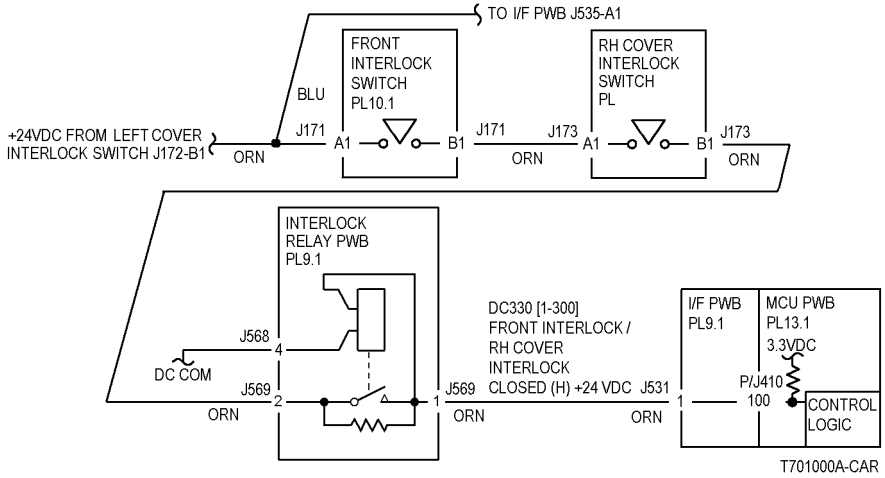


Figure 1 Front Cover / Right Cover Interlock CD

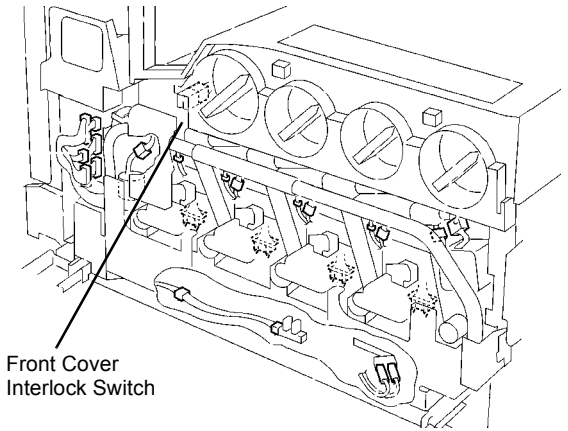


Figure 2 Front Cover Interlock Switch Location

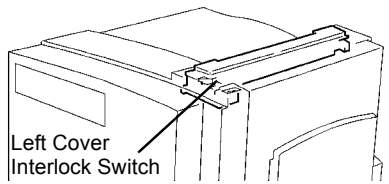


Figure 3 Left Cover Interlock Switch Location

1-303 RAP

HCF Left Door is open.

Procedure

Enter dC330 [001-304] and press Start. Actuate Tray Module LH Cover Interlock Switch with a screwdriver. **Display changes state.**

Y N

Check voltage between Tray Module PWB j554-3(+) and GND(-). **+24 VDC is measured.**

Y N

Check the wires from the Tray Module PWB j554-3 to Tray Module L/H Cover Interlock Switch FS813 for damage. If the wires are good, replace Tray Module L/H Cover Interlock Switch (PL 15.10).

Replace Tray Module PWB (PL15.9).

Check Cover Actuator and Cover installation.

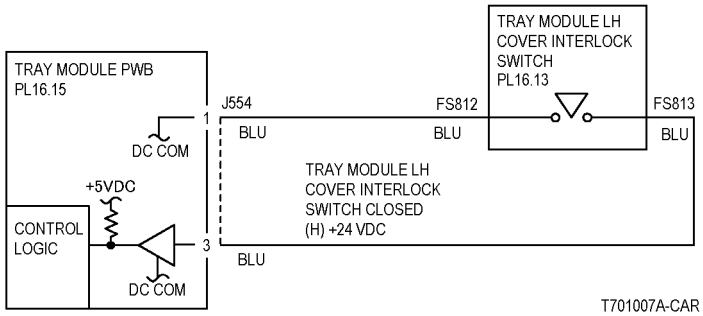


Figure 1 Tray Module LH Cover Interlock Switch Cd

1-306 RAP

Duplex Door is open.

Procedure

Enter dC330 [008-300] and press Start. Open Duplex Transport. Actuate Duplex Cover Interlock Switch with a screwdriver. **Display changes state.**

Y **N**

Deactuate Duplex Cover Interlock Switch. Check voltage on the Drawer Connector between j626-A6 (+) and GND(-). **+5 VDC is measured.**

Y **N**

Check voltage between MCU PWB j406-A9 and GND(-). **+5 VDC is measured.**

Y **N**

Replace MCU PWB (PL13.1).

Repair the open circuit between the MCU PWB j406-A9 and Drawer Connector between j626-A6

Check the wires between Drawer Connector between j626-A6 and Duplex PWB j540-1. If the wires are good, replace the Duplex Cover Interlock Switch.

Check Cover Actuator and Cover installation. If there is no problem, replace MCU PWB (PL13.1)

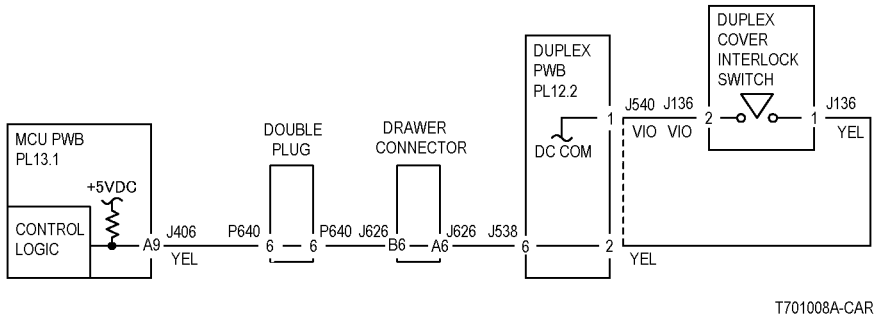


Figure 1 Duplex Cover Interlock Switch

3-317 IIT Software Failure

Configuration mismatch

Procedure

Change the position of the document sensor. **The problem is corrected.**

Y **N**

Rewrite the NVM values.

Return to Service Call Procedures.

3-318 IIT Software Failure

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the ESS PWB connectors. If the check is OK, replace the ESS PWB (PL 13.1).

Return to Service Call Procedures.

3-319 IIT Video Driver Failure

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the ESS PWB connectors. If the check is OK, replace the ESS PWB (PL 13.1).

Return to Service Call Procedures.

3-320 IIT-ESS Communication Failure 1

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the IIT/IPS PWB connectors. If the check is OK, replace the IIT/IPS PWB (PL 18.3).

Return to Service Call Procedures.

3-321 IIT-ESS Communication Failure 2

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the IIT/IPS PWB connectors. If the check is OK, replace the IIT/IPS PWB (PL 18.3).

Return to Service Call Procedures.

3-322 IIT-ESS Communication Failure 3

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the IIT/IPS PWB connectors. If the check is OK, replace the IIT/IPS PWB (PL 18.3).

Return to Service Call Procedures.

3-323 IIT-ESS Communication Failure 4

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the IIT/IPS PWB connectors. If the check is OK, replace the IIT/IPS PWB (PL 18.3).

Return to Service Call Procedures.

3-324 IIT-ESS Communication Failure 5

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the IIT/IPS PWB connectors. If the check is OK, replace the IIT/IPS PWB (PL 18.3).

Return to Service Call Procedures.

3-325 IIT-ESS Communication Failure 6

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the IIT/IPS PWB connectors. If the check is OK, replace the IIT/IPS PWB (PL 18.3).

Return to Service Call Procedures.

3-326 IIT-ESS Communication Failure 7

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the IIT/IPS PWB connectors. If the check is OK, replace the IIT/IPS PWB (PL 18.3).

Return to Service Call Procedures.

3-327 IIT-ESS Communication Failure 8

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the IIT/IPS PWB connectors. If the check is OK, replace the IIT/IPS PWB (PL 18.3).

Return to Service Call Procedures.

3-328 IIT-ESS Communication Failure 9

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the IIT/IPS PWB connectors. If the check is OK, replace the IIT/IPS PWB (PL 18.3).

Return to Service Call Procedures.

3-329 IIT-ESS Communication Failure 10

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the IIT/IPS PWB connectors. If the check is OK, replace the IIT/IPS PWB (PL 18.3).

Return to Service Call Procedures.

3-330 IIT-ESS Communication Failure 11

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the IIT/IPS PWB connectors. If the check is OK, replace the IIT/IPS PWB (PL 18.3).

Return to Service Call Procedures.

3-331 IIT-ESS Communication Failure 12

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the IIT/IPS PWB connectors. If the check is OK, replace the IIT/IPS PWB (PL 18.3).

Return to Service Call Procedures.

3-332 IIT-ESS Communication Failure 13

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the IIT/IPS PWB connectors. If the check is OK, replace the IIT/IPS PWB (PL 18.3).

Return to Service Call Procedures.

3-333 IIT-ESS Communication Failure 14

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the IIT/IPS PWB connectors. If the check is OK, replace the IIT/IPS PWB (PL 18.3).

Return to Service Call Procedures.

3-334 IIT-ESS Communication Failure 15

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the IIT/IPS PWB connectors. If the check is OK, replace the IIT/IPS PWB (PL 18.3).

Return to Service Call Procedures.

3-335 IIT-ESS Communication Failure 16

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the IIT/IPS PWB connectors. If the check is OK, replace the IIT/IPS PWB (PL 18.3).

Return to Service Call Procedures.

3-336 IIT-ESS Communication Failure 17

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the IIT/IPS PWB connectors. If the check is OK, replace the IIT/IPS PWB (PL 18.3).

Return to Service Call Procedures.

3-340 IOT-ESS Communication Failure 1

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the MCU PWB connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

3-341 IOT-ESS Communication Fail 2

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the MCU PWB connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

3-342 IOT-ESS Communication Failure 3

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y N

Reinstall the software. If the problem continues, check the MCU PWB connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

3-343 IOT-ESS Communication Failure 4

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y N

Reinstall the software. If the problem continues, check the MCU PWB connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

3-345 IOT-ESS Communication Failure 5

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the MCU PWB connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

3-346 IOT-ESS Communication Failure 6

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Reinstall the software. If the problem continues, check the MCU PWB connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

3-347 IOT-ESS Communication Failure 7

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y N

Reinstall the software. If the problem continues, check the MCU PWB connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

3-348 IOT-ESS Communication Failure 8

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y N

Reinstall the software. If the problem continues, check the MCU PWB connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

3-349 IOT-ESS Communication Failure 9

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y N

Reinstall the software. If the problem continues, check the MCU PWB connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

3-350 IOT-ESS Communication Failure 10

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y N

Reinstall the software. If the problem continues, check the MCU PWB connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

3-351 IOT-ESS Communication Failure 11

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y N

Reinstall the software. If the problem continues, check the MCU PWB connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

3-352 IOT-ESS Communication Failure 12

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y N

Reinstall the software. If the problem continues, check the MCU PWB connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

3-353 IOT-ESS Communication Failure 13

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y N

Reinstall the software. If the problem continues, check the MCU PWB connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

3-354 IOT-ESS Communication Failure 14

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y N

Reinstall the software. If the problem continues, check the MCU PWB connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

3-355 IOT-ESS Communication Failure 15

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y N

Reinstall the software. If the problem continues, check the MCU PWB connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

3-356 IOT-ESS Communication Failure 16

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y N

Reinstall the software. If the problem continues, check the MCU PWB connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

3-357 IOT-ESS Communication Failure 17

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y N

Reinstall the software. If the problem continues, check the MCU PWB connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

3-358 IOT-ESS Communication Failure 1

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y N

Reinstall the software. If the problem continues, check the MCU PWB connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

3-359 IOT-ESS Communication Failure 19

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y N

Reinstall the software. If the problem continues, check the MCU PWB connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

3-360 IOT-ESS Initialization Failure

Controller received check code error.

Procedure

Switch the power off then on. **The problem is corrected.**

Y N

Reinstall the software. If the problem continues, check the MCU PWB connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

3-364 DMA Transfer Failure

Compression/extraction did not complete.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Replace the RAM (PL13.1) then the HDD. If the problem continues, replace the ESS PWB (PL 13.1).

Return to Service Call Procedures.

3-370 Marker Code Detect Failure

The end code cannot be found in the compressed data.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Replace the RAM (PL13.1) then the HDD. If the problem continues, replace the ESS PWB (PL 13.1).

Return to Service Call Procedures.

3-747 Print Instruction Failure

The print parameter is incorrect.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Change the print parameter and print again.

Return to Service Call Procedures.

3-750 Insufficient Number of Document Pages

Insufficient number of pages programed when making a book.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Set the number of document pages to the maximum count.

Return to Service Call Procedures.

3-761 Tray Select Error

The paper sizes are different than the tray that will be selected by the APS.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Select an appropriate tray.

Return to Service Call Procedures.

3-941 Insufficient Page Memory

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Perform the operation again.

Return to Service Call Procedures.

3-942 Document Size Error

Procedure

Switch the power off then on. **The problem is corrected.**

Y N

Perform the operation again.

Return to Service Call Procedures.

3-946 Tray 1 Not In Position

Tray 1 not in ready position.

Initial Actions

- Check that the paper size setting is correct.
- Check the Paper Size Sensor for obstructions or damage.

Procedure

Ensure Tray 1 is closed. **The voltage measured at P/J536-B9 on the I/F PWB corresponds to the paper size in the table.**

Y N

There is +3.3VDC measured at P/J536-B10.

Y N

Check the connection between the I/F PWB and the MCU PWB. If the check is OK, replace the I/F PWB (PL 9.1). If the problem continues, replace the MCU PWB (PL 13.1)

Check the wires and connectors. If the check is OK, replace the Tray 1 Paper Size Sensor (PL 2.1).

Check the connection between I/F PWB and MCU PWB. If the check is OK, replace the MCU PWB (PL 13.1).

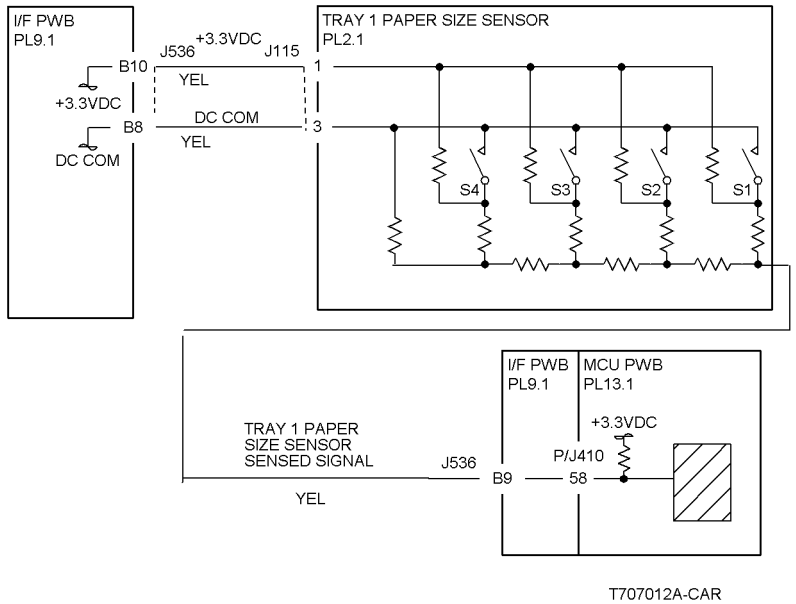


Figure 1 Tray 1 Paper Size Sensor

3-947 Tray 2 Not In Position

Tray 2 not in ready position.

Initial Actions

- Check that the paper size setting is correct.
- Check the Paper Size Sensor for obstructions or damage.

Procedure

Ensure Tray 2 is closed. **The voltage measured at P/J546-8 on the Tray Module PWB (PL 16.15) corresponds to the paper size in the table.**

Y N

There is +5VDC measured at P/J546-9 on the Tray Module PWB (PL 16.15)

Y N

Check the wires and connectors. If the check is OK, replace the **Tray Module PWB (PL 16.15)**

Check the wires and connectors. If the check is OK, replace the Tray 2 Paper Size Sensor (PL 16.1).

Check the wires and connectors, If the check is OK, replace the Tray Module PWB (PL 16.15). If the problem continues, replace the Tray 2 Paper Size Sensor (PL 16.1).

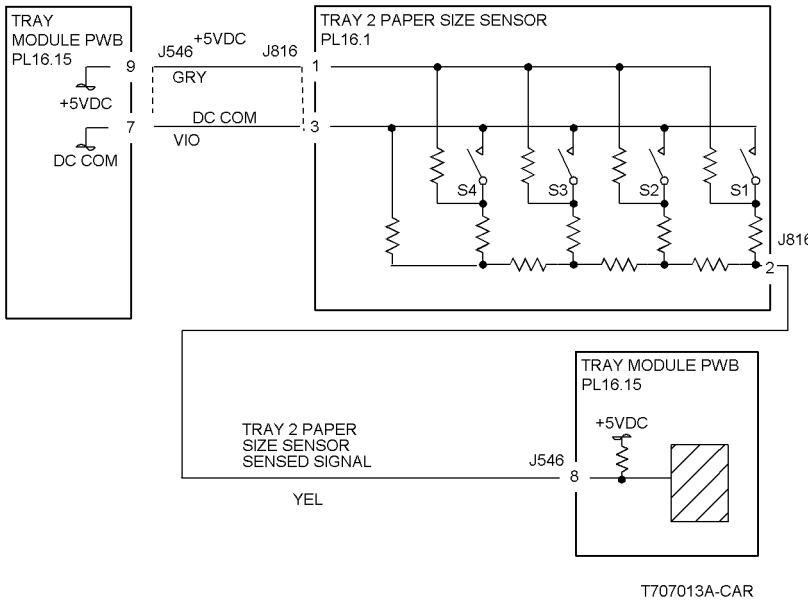


Figure 1 Tray 2 Paper Size Sensor

3-948 Tray 3 Not In Position

Tray 3 not in ready position.

Initial Actions

- Check that the paper size setting is correct.
- Check the Paper Size Sensor for obstructions or damage.

Procedure

Ensure Tray 3 is closed. **The voltage measured at P/J548-11 on the Tray Module PWB (PL 16.15) corresponds to the paper size in the table.**

Y N

There is +5VDC measured at P/J548-12 on the Tray Module PWB (PL 16.15)

Y N

Check the wires and connectors. If the check is OK, replace the **Tray Module PWB (PL 16.15)**

Check the wires and connectors. If the check is OK, replace the Tray 3 Paper Size Sensor (PL 16.1).

Check the wires and connectors, If the check is OK, replace the Tray Module PWB (PL 16.15). If the problem continues, replace the Tray 3 Paper Size Sensor (PL 16.1).

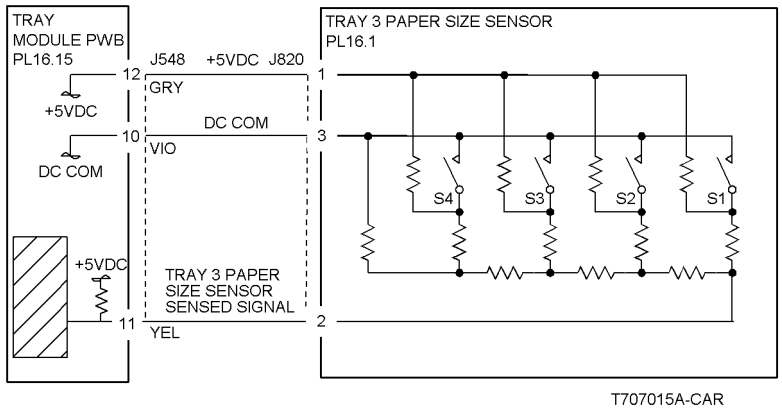


Figure 1 Tray 3 Paper Size Sensor

3-949 Tray 4 Not In Position

Tray 4 not in ready position.

Initial Actions

- Check that the paper size setting is correct.
- Check the Paper Size Sensor for obstructions or damage.

Procedure

Ensure Tray 4 is closed. **The voltage measured at P/J548-5 on the Tray Module PWB (PL 16.15) corresponds to the paper size in the table.**

Y N

There is +5VDC measured at P/J548-6 on the Tray Module PWB (PL 16.15)

Y N

Check the wires and connectors. If the check is OK, replace the **Tray Module PWB (PL 16.15)**

Check the wires and connectors. If the check is OK, replace the Tray 2 Paper Size Sensor (PL 16.1).

Check the wires and connectors, If the check is OK, replace the Tray Module PWB (PL 16.15). If the problem continues, replace the Tray 4 Paper Size Sensor (PL 16.1).

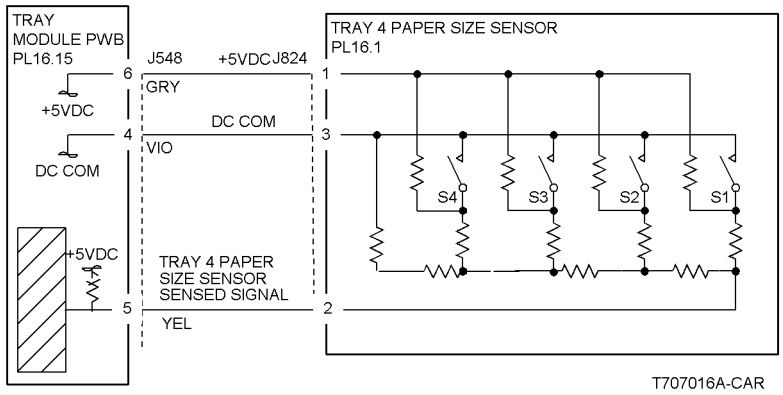


Figure 1 Tray 4 Paper Size Sensor

3-950 Tray 1 No Paper

No paper in Tray 1

Procedure

Enter dC330 [007-120] and press Start. Actuate Tray 1 No Paper Sensor. **The display changes state.**

Y N

Go to OF 99-2 Transmissive Sensor RAP, repair Tray 1 No Paper Sensor (PL 2.4).

Replace MCU PWB (PL 13.1).

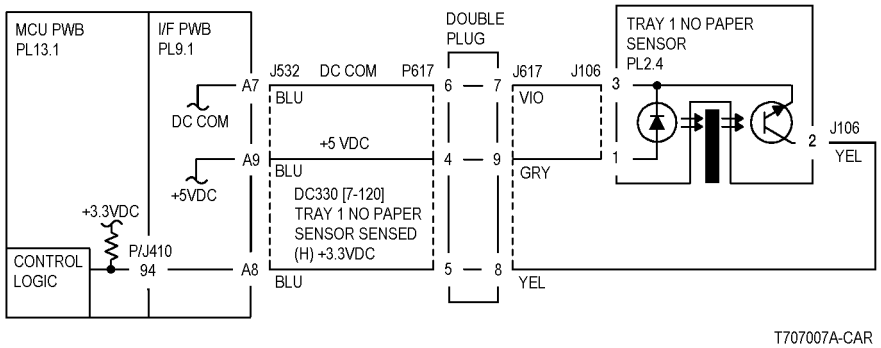


Figure 1 Tray 1 No Paper Sensor CD

3-951 Tray 2 No Paper

No paper in Tray 2

Procedure

Enter dC330 [007-121] and press Start. Actuate Tray 2 No Paper Sensor. **Display changes state.**

Y N

Go to OF 99-2 Transmissive Sensor RAP, repair Tray 2 No Paper Sensor (PL 15.3, PL 16.7).

Replace MCU PWB (PL 13.1).

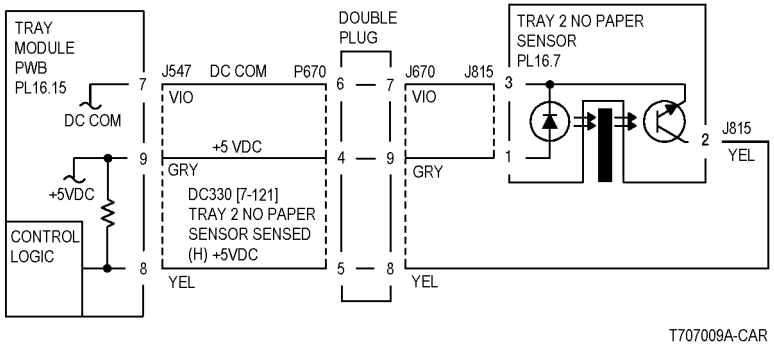


Figure 1 Tray 2 No Paper Sensor CD

3-952 Tray 3 No Paper

No paper in Tray 3

Procedure

Enter dC330 [007-122] and press Start. Actuate Tray 3 No Paper Sensor. **Display changes state.**

Y N

Go to OF 99-2 Transmissive Sensor RAP, repair Tray 3 No Paper Sensor (PL 15.5, PL 16.9).

Replace MCU PWB (PL 13.1).

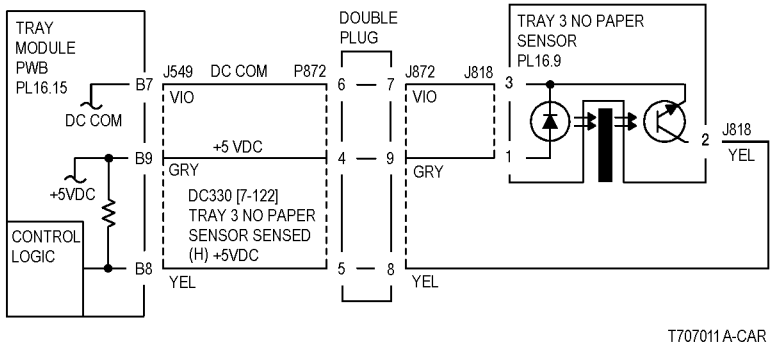


Figure 1 Tray 3 No Paper Sensor

3-953 Tray 4 No Paper

No paper in Tray 4.

Procedure

Enter dC330 [007-123] and press Start. Actuate Tray 4 No Paper Sensor. **Display changes state.**

Y N

Go to OF 99-2 Transmissive Sensor RAP, repair Tray 4 No Paper Sensor (PL 15.7, PL 16.1).

Replace MCU PWB (PL 13.1).

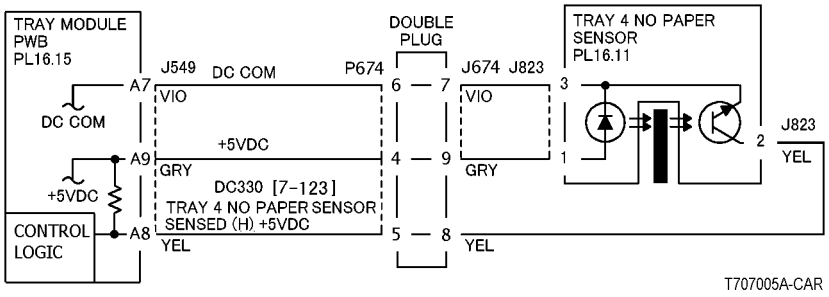


Figure 1 Tray 4 No Paper Sensor CD

3-954 Tray 5 Empty

Tray 5 is empty.

Procedure

Enter dC330 [007-125] and press Start. Actuate the Tray 5 No Paper Sensor. **Display changes state.**

Y N

Go to OF 99-2 Transmissive Sensor RAP, repair the Tray 5 No Paper Sensor (PL 2.13).

Replace I/F PWB (PL 9.1). If the problem continues, replace the MCU PWB (PL 13.1).

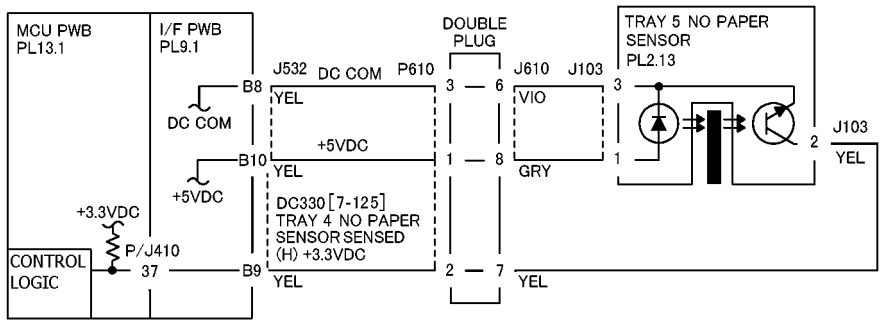


Figure 1 Tray 5 No Paper Sensor CD

3-958 Tray 5 Paper Size Mismatch

The paper in the Tray 5 does not match the paper size selected.

Procedure

The correct size paper is loaded in Tray 5.

Y **N**

Load the correct size paper and return to Service Call Procedures.

Go to RAP 7-954.

3-959 Tray 1 Paper Size Mismatch

The paper in Tray 1 does not match the paper size selected.

Procedure

The correct size paper is loaded in Tray 1.

Y **N**

Load the correct size paper and return to Service Call Procedures.

Go to RAP 7-955.

3-960 Tray 2 Paper Size Mismatch

The paper in Tray 2 does not match the paper size selected.

Procedure

The correct size paper is loaded in Tray 2.

Y **N**

Load the correct size paper and return to Service Call Procedures.

Go to RAP 7-271.

3-961 Tray 3 Paper Size Mismatch

The paper in Tray 3 does not match the paper size selected.

Procedure

The correct size paper is loaded in Tray 3.

Y **N**

Load the correct size paper and return to Service Call Procedures.

Go to RAP 7-276.

3-962 Tray 4 Paper Size Mismatch

The paper in Tray 4 does not match the paper size selected.

Procedure

The correct size paper is loaded in Tray 4.

Y **N**

Load the correct size paper and return to Service Call Procedures.

Go to RAP 7-277.

3-965 No Paper

The paper does not match the paper size selected.

Procedure

The correct size paper is loaded.

Y **N**

Load the correct size paper and return to Service Call Procedures.

Go to the appropriate paper size sensor RAP.

3-971 Magnification

Incompatible Magnification

Procedure

Switch the power off then on. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Change parameters and rerun job.

3-972 Over Number of Document Pages Stored

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Set the number of document pages to the maximum count.

Return to Service Call Procedures.

3-980 Stapler Position Error

The Stapler is not available at the specified position.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Re-set the parameters.

Return to Service Call Procedures.

3-985 Tray 5 Pause Check

The SMH tray jamed.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Go to RAP 7-794.

Return to Service Call Procedures.

3-986 Print Completion Error

The number of spooled pages does not match the output.

Procedure

Switch the power off then on. **The problem is corrected.**

Y **N**

Count the number of prints to ensure job integrity.

Return to Service Call Procedures.

4-340 IOT RAM

MCU PWB RAM test failed.

Procedure

Switch the power off then on. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Replace the MCU PWB (PL 13.1).

If the problem continues, replace the MCU NVM PWB (PL 13.1).

4-341 IOT Logic

Operation failure of an MCU PWB operation.

Initial Actions

Re-installation the software.

Procedure

CH3.1A, CH3.6A

Connect black meter lead to ground or machine frame. **There is +5VDC measured at J401-B20**

Y N

There is +5VDC measured at j568-5

Y N

There is +5VDC measured at j568-1

Y N

Repair the wire between FS534 and j568-2.

Replace ROS Assembly (PL 3.1).

Check for an open circuit between j568-5 the p400-9.
If the circuit is OK, replace the MCU PWB (PL 13.1).

Replace MCU PWB (PL 13.1).
If the problem continues, replace ROS Assembly (PL 3.1).

4-342 Flash ROM Motion

Motion failure of Flash ROM

Procedure

Switch the power off then on. **The problem continues.**

Y N

Return to Service Call Procedures.

Replace ROM PWB (PL13.1)

4-343 IOT Flash ROM Read Write

There is a FLASH ROM operation failure.

Procedure

Switch the power off then on. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Replace the MCU PWB (PL 13.1).

4-344 IOT Micro Pitch

The MICRO PIT did not occur within the specified time.

Procedure

Switch the power off then on. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Replace the MCU PWB (PL 13.1).

4-345 MCU HVPS Communication

Communication error between MCU PWB and HVPS Control PWB

Procedure

BSD: CH3.1B CH3.6A
Between MCU PWB j406-B1(+) and GND(-). **+5 VDC is measured.**
Y N
Between MCU PWB j406-B1(+) and GND(-). **+3.3 VDC is measured.**
Y N
Check frame short between MCU PWB j406-B1 and HVPS Control PWB j574-9. If the check is good, replace MCU PWB (PL 13.1).
Check for wire breakage and bad connection between MCU PWB j406-B1and HVPS Control PWB j574-9.

Turn the power OFF. Measure resistance of following.
Between HVPS CONTROL PWB j574-7 and MCU PWB j406-B3
Between HVPS CONTROL PWB j574-6 and MCU PWB j406-B4. **10 ohms or less is measured.**
Y N
Repair wire breakage and bad connection.

10 ohms or less is measured between HVPS Control PWB j574-8 and MCU PWB j406-B2.
Y N
Repair wire breakage and bad connection.

Replace MCU PWB (PL 13.1). If this does not solve the problem, replace HVPS Control PWB (PL 9.1).

4-346 IBT Home Sensor

IBT Home Sensor does not detect Belt Home signal.

Procedure

BSD: CH9.19 CH9.31A
If the IBT was just serviced, verify the installation is correct (REP 9.15).
If any Developer Housings were just serviced, verify installation is correct (REP 9.9).
If a Finisher status code occurred just before the 4-346 in fault history, go to the RAP for the Finisher status code.
Check the Belt Home Marker. **A Belt Home Marker is present.**
Y N
Replace IBT Belt (PL 5.3).

Block Belt Home Sensor with paper. Enter dC330 [004-100] and press Start. **Display indicates Hi.**
Y N
Between I/F PWB j533-A13(+) and GND(-). **+5 VDC is measured.**
Y N
Between I/F PWB j533-A9(+) j533-A12(-). **+5 VDC is measured.**
Y N
Replace MCU PWB (PL 13.1).
Check for wire breakage and bad connection between IBT Home Sensor j121 and I/F PWB j533. If the check is good, replace IBT Home Sensor (PL 5.4).
Replace MCU PWB (PL 13.1).
If the problem continues, replace I/F PWB (PL 9.1).

Reinstall IBT Assembly (REP 9.15). Enter dC330 [004-002] and press Start. **IBT Motor energizes.**
Y N
Between I/F PWB j551-3(+) and GND(-). **+24 VDC is measured.**
Y N
By following Ch7 Wire Network, check +24VDC circuit up to I/F PWB j551-3
Between IBT MOTOR j208-3(+) and GND(-). **+24 VDC is measured.**
Y N
Check wire breakage and bad connection between IBT MOTOR j208-3 and I/FPWB j551-3.
Check wire breakage and bad connection between IBT MOTOR j208 and I/FPWB j551. **There are broken wires or bad connections.**
Y N
Replace IBT MOTOR (PL 1.1).
Repair broken wire and bad connection.

Replace MCU PWB (PL 13.1).
If the problem continues, replace I/FPWB (PL 9.1).

4-347 IBT Belt Edge

IBT belt edge not in position.

Procedure

BSD: CH9.19 CH9.31A

Check if actuator for IBT Edge Sensor touches belt edge. **IBT Edge Sensor touches belt edge.**

Y N

Check actuator installation.

Turn the power ON. Between I/F PWB j533-A11(+) and GND(-). **Between +3 VDC and +1 VDC is measured.**

Y N

Between I/F PWB j533-A9(+) j533-A10(-). **+5 VDC is measured.**

Y N

Close FRONT door. If voltage between j533-A9(+) j533-A10(-) is less than +5VDC, replace MCU PWB (PL 13.1).

Between I/F PWB j533-A11(+) and GND(-). **+5 VDC is measured.**

Y N

Between I/F PWB j533-A11(+) and GND(-). **0 VDC is measured.**

Y N

Check wire breakage and bad connection between I/F PWB j533 and IBT-EDGE SENSOR j119.
If the check is good, replace IBT Edge Sensor (PL 5.4).
If the problem continues, replace MCU PWB (PL 13.1).

Check wire breakage and bad connection between I/F PWB j533-A11 and IBTEDGE SENSOR j119-2.

Replace IBT EDGE SENSOR (PL5.4)

between I/F PWB j550-5(+) and GND(-). **+24 VDC is measured.**

Y N

By following Wire Network, check +24VDC circuit up to I/F PWB j550-5.

Remove IBT Assembly. Enter dC330 [004-001] and energize the Steering Motor. **Steering Motor energized.**

Y N

Check wire breakage and bad connection between I/F PWB j550 and IBT STEERING MOTOR j207. **There are broken wires or bad connections.**

Y N

Replace MCU PWB (PL 13.1). If the problem continues, replace I/F PWB (PL 9.1), and IBT Steering Motor (PL 1.3).

Repair broken wire and bad connection.

Check IBT Belt installation (REP 9.22). If the check is good, replace MCU PWB (PL 13.1).

4-348 IBT Belt Edge

IBT Belt Edge not detected.

Procedure

BSD: CH9.19 CH9.31A

Check if actuator for IBT Edge Sensor touches belt edge. **IBT Edge Sensor touches belt edge.**

Y N

Check actuator installation.

Turn the power ON. Between I/F PWB j533-A11(+) and GND(-). **Between +3 VDC and 1 VDC is measured.**

Y N

Between I/F PWB j533-A9(+) j533-A10(-). **+5 VDC is measured.**

Y N

Close FRONT door. If voltage between j533-A9(+) j533-A10(-) is less than +5VDC, replace MCU PWB (PL 13.1).

Between I/F PWB j533-A11(+) and GND(-). **+5 VDC is measured.**

Y N

Between I/F PWB j533-A11(+) and GND(-). **0 VDC is measured.**

Y N

Check wire breakage and bad connection between I/F PWB j533and IBT Edge Sensor j119.
If the check is good, replace IBT Edge Sensor (PL 5.4).
If the problem continues, replace MCU PWB (PL 13.1).

Check wire breakage and bad connection between I/F PWB j533-A11 and IBT Edge Sensor j119-2.

Replace IBT Edge Sensor (PL 5.4).

Between I/F PWB j550-5(+) and GND(-). **+24 VDC is measured.**

Y N

Following Wire Network, check +24VDC circuit up to I/F PWB j550-5.

Remove IBT Assembly. Enter dC330 [004-001] and energize the Steering Motor. **Steering Motor energized.**

Y N

Check wire breakage and bad connection between I/F PWB j550 and IBT Steering Motor j207. **There are broken wires or bad connections.**

Y N

Replace MCU PWB (PL 13.1). If the problem continues, replace I/F PWB (PL 9.1), and IBT Steering Motor (PL 1.3).

Repair broken wire and bad connection.

Check IBT Belt installation (REP 9.22). If the check is good, replace MCU PWB (PL 13.1).

4-349 Marking Software Logic

Control Logic detected a fatal failure in the Marking software.

Procedure

Switch the power off then on. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Again, switch the power off then on. Run the job again.

4-358 ESS IOT Communication

Communication failure between the ESS and IOT.

Procedure

Switch the power off then on. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Check the MCU PWB and ESS PWB connectors.
If the problem continues, re-install the software.
If the problem continues, replace the MCU PWB (PL 13.1).
If the problem continues, replace the ESS PWB (PL 13.1).

4-361 Drum Motor

Drum Motor failure.

Procedure

BSD: CH9.1 CH9.31A

Remove Y/M/C/K Drum Assembly. Enter dC330 [004-003] and press Start. **Drum Motor energizes and drives rotate**

Y N

Between Drum Motor j210-4(+) and GND(-). **+5 VDC is measured.**

Y N

By following Wire Network, check +5VDC circuit to Drum Motor j210-4.

Between Drum Motor j210-6(+) and GND(-). **+24 VDC is measured.**

Y N

By following Wire Network, check +24VDC circuit to Drum Motor j210-6.

Between Drum Motor j210-1(+) and GND(-). Ensure dC330 [004-003] is entered and press Start. **0 VDC is measured.**

Y N

Between I/F PWB j535-B5(+) and GND(-). Ensure dC330 [004-003] is entered and press Start. **0 VDC is measured.**

Y N

Check for wire breakage and bad connection between Drum Motor j210-1 to I/F PWB j535-B5. If the check is good, replace MCU PWB? (PL 13.1).

Check for wire breakage and bad connection between Drum Motor j210-1 to I/FPWB j535-B5.

Between Drum Motor j210-2(+) and GND(-). Ensure dC330 [004-003] is entered and press Start. **0 VDC is measured.**

Y N

Between I/F PWB j535-B3(+) and GND(-). Ensure dC330 [004-003] is entered and press Start. **0 VDC is measured.**

Y N

Check for wire breakage and bad connection between Drum Motor j210-2 and I/F PWB j535-B3. If the check is good, replace I/F PWB (PL 9.1).

Check for wire breakage and bad connection between Drum Motor j210-2 and I/F PWB j535-B3.

Between Drum Motor j210-3(+) and GND(-). Ensure dC330 [004-003] is entered and press Start. **Frequency is between 1KHz and 1.3 KHz.**

Y N

Between I/F PWB j535-B2(+) and GND(-). Ensure dC330 [004-003] is entered and press Start. **Frequency is between 1KHz and 1.3 KHz.**

Y N

Check frame short between Drum Motor j210-3 and I/FPWB j535-B2. If the check is good, replace I/F PWB? (PL 9.1).

Check for wire breakage and bad connection between Drum Motor j210-3? and I/F PWB j535-B2.

A B

A B

Replace Drum Motor (REP 4.4) (PL 1.1).

Between I/F PWB j535-B1(+) and GND(-). Ensure dC330 [004-003] is entered and press Start. **+5 VDC is measured.**

Y N

Replace I/F PWB (PL 9.1).

Between Drum Motor j210-8(+) and GND(-). Ensure dC330 [004-003] is entered and press Start. **+5 VDC is measured.**

Y N

Check for wire breakage and bad connection between I/F PWB j535-B1 and Drum Motor j210-8.

Replace Drum Motor (PL 1.1).

4-362 IOT NVM Read Write

Read Write at the MCU PWB NVM R/W.

Procedure

Switch the power off then on. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Check the connection between the MCU PWB and the MCU NVM PWB.
If the problem continues, replace the MCU PWB (PL 13.1).
If the problem continues, replace the MCU NVM PWB (PL 13.1).

4-371 IOT Controller Timing Failure

There is a communication failure between the ESS and IOT.

Procedure

Switch the power off then on. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Check the MCU PWB and ESS PWB connectors.
If the problem continues, re-install software.
If the problem continues, replace the MCU PWB (PL 13.1).
If the problem continues, replace the ESS PWB (PL 13.1)

4-363 K Drum Motor

Drum Motor K failure

Procedure

BSD: CH9.2CH9.31A

Remove K DRUM. Enter dC330 [004-006] and press Start. **Drum Motor K energizes.**

Y **N**

Between Drum Motor K j235-4(+) and GND(-). **+5 VDC is measured.**

Y **N**

Following Wire Network, check +5VDC circuit to Drum Motor K j235-4.

Between Drum Motor K j235-2(+) and GND(-). **+24 VDC is measured.**

Y **N**

Following Ch7 Wire Network, check +24VDC circuit to Drum Motor K j235-2.

Between Drum Motor K j235-5(+) and GND(-). Ensure dC330 [004-006] is entered and press Start. **0 VDC is measured.**

Y **N**

Between I/F PWB j534-A11(+) and GND(-). Ensure dC330 [004-006] is entered and press Start. **0 VDC is measured.**

Y **N**

Check connection between MCU PWB and I/F PWB P410/j410.
If the check is good, replace MCU PWB (PL 13.1).
If the problem continues, replace I/F PWB (PL 9.1).

Check wire breakage and bad connection between I/F PWB j534-A11 and Drum Motor K j235-5

Between Drum Motor K j235-8(+) and GND(-). Ensure dC330 [004-006] is entered and press Start. **Frequency is between 1KHz and 1.3 KHz.**

Y **N**

Between I/F PWB j534-A8 and GND (-). **Frequency is between 1KHz and 1.3 KHz.**

Y **N**

Check connection between MCU PWB and I/F PWB p410/j410.
If the check is good, replace MCU PWB (PL 13.1).
If the problem continues, replace the I/F PWB (PL 9.1).

Check wire breakage and bad connection between I/F PWB j534-A8 and Drum Motor K j235-8.

Between I/F PWB j534-A10 and Drum Motor K j235-6
between I/F PWB j534-A9 and Drum Motor K j235-7
If the check is good, replace Drum Motor K (PL 1.1).

Between I/F PWB j534-A7(+) and GND(-). Enter dC330 [004-006] and press Start.

Y **N**

Check connector between MCU PWB and I/F PWB p410/j410. If the check is good, replace MCU PWB (PL 13.1).
If the problem continues, replace the I/F PWB (PL 9.1).

A

A

Between Drum Motor K j235-9(+) and GND(-). Ensure dC330 [004-006] is entered and press Start. **+5 VDC is measured**

Y **N**

Check wire breakage and bad connection between Drum Motor K j235-9 and I/FPWB j534-A7.

Check if there is load on K DRUM. If the check is good, replace Drum Motor K (PL 1.1).

4-414 IBT Belt Cleaner

IBT Belt Cleaner near end of life.

Procedure

Replace the Cleaner Assembly. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Replace the MCU PWB (PL 13.1).
If the problem continues, replace the MCU NVM PWB (PL 13.1)

4-415 2nd BTR Unit

It is time to replace the 2nd BTR UNIT.

Procedure

Replace the 2nd BTR Unit. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Replace the MCU PWB (PL 13.1).
If the problem continues, replace the MCU NVM PWB (PL 13.1)

4-417 1st BTR Unit

IBT Belt Unit near end of life.

Procedure

Replace the IBT Belt Unit. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Replace the MCU PWB (PL 13.1)

If the problem continues, replace the MCU NVM PWB (PL 13.1)

4-420 1st BTR Unit

IBT Belt Unit end of life.

Procedure

Replace the 1st IBT Belt Unit **The problem continues.**

Y **N**

Return to Service Call Procedures.

Replace the MCU PWB (PL 13.1).

If the problem continues, replace the MCU NVM PWB (PL 13.1).

4-421 IBT Belt Cleaner Life End

IBT Belt Cleaner Assembly end of life.

Procedure

Replace the IBT Belt Cleaner Assembly. **The problem continues.**

Y **N**

Return to Service Call Procedures.

If the problem continues, replace the MCU PWB (PL 13.1).
If the problem continues, replace the MCU NVM PWB (PL 13.1).

4-605 IOT NVM Corrupt

The system detected that the NVM of the IOT is empty.

Procedure

Turn the power OFF/ON. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Replace the MCU PWB (PL 13.1).
If the problem continues, replace the MCU NVM PWB (PL 13.1)

4-640 Belt Tracking

IBT tracking failure

Procedure

BSD: CH9.19 CH9.31A

Check if actuator for IBT Edge Sensor touches belt edge. **IBT Edge Sensor touches belt edge.**

Y N

Check actuator installation.

Turn the power ON. Between I/F PWB j533-A11(+) and GND(-). **Between +3 VDC and 1 VDC is measured.**

Y N

Between I/F PWB j533-A9(+) j533-A10(-). **+5 VDC is measured.**

Y N

Check +5VDC circuit to I/F PWB j533-A9.

Between I/F PWB j533-A11(+) and GND(-). +5 VDC is measured.

Y N

Between I/F PWB j533-A11(+) and GND(-). 0 VDC is measured.

Y N

Check wire breakage and bad connection between I/F PWB j533and IBT Edge Sensor j119.
If the check is good, replace IBT Edge Sensor (PL 5.4).
If the problem continues, replace MCU PWB (PL 13.1).

Check wire breakage and bad connection between I/F PWB j533-A11 and IBT Edge Sensor j119-2.

Replace IBT Edge Sensor (PL 5.4).

Between I/F PWB j530-A9(+) and GND(-). **+24 VDC is measured.**

Y N

Following Wire Network, check +24VDC circuit up to I/F PWB j530-A9.

Remove IBT Assembly (REP 9.15). Enter dC330 [004-001] and press Start. **IBT Steering Motor energizes.**

Y N

Check wire breakage and bad connection between I/F PWB j550 and IBT Steering Motor j207. **There are broken wires or bad connections.**

Y N

Replace MCU PWB (PL 13.1).
If the problem continues, replace I/F PWB (PL 9.1).
If the problem continues, replace IBT Steering Motor (PL 1.3).

Repair broken wire and bad connection.

Check IBT Belt installation (REP 9.22). If the check is good, replace MCU PWB (PL 13.1).

4-641 Belt Edge

IBT belt edge not detected.

Procedure

BSD: CH9.19 CH9.31A

Check if actuator for IBT Edge Sensor touches belt edge. **IBT Edge Sensor touches belt edge.**

Y N

Check actuator installation.

Turn the power ON. Between I/F PWB j533-A11(+) and GND(-). **Between +3 VDC and 1 VDC is measured.**

Y N

Between I/F PWB j533-A9(+) j533-A10(-). **+5 VDC is measured.**

Y N

Close FRONT door. If voltage between j533-A9(+) j533-A10(-) is less than +5VDC, replace MCU PWB (PL 13.1).

Between I/F PWB j533-A11(+) and GND(-). **+5 VDC is measured.**

Y N

Between I/F PWB j533-A11(+) and GND(-). **0 VDC is measured.**

Y N

Check wire breakage and bad connection between I/F PWB j533and IBT Edge Sensor j119.
If the check is good, replace IBT Edge Sensor (PL 5.4).
If the problem continues, replace MCU PWB (PL 13.1).

Check wire breakage and bad connection between I/F PWB j533-A11 and IBT Edge Sensor j119-2.

Replace IBT Edge Sensor (PL 5.4).

Between I/F PWB j530-A9(+) and GND(-). **+24 VDC is measured.**

Y N

Following Wire Network, check +24VDC circuit up to I/F PWB j530-A9

Remove IBT Assembly (REP 9.15). Enter dC330 [004-001] and press Start. **IBT Steering Motor energizes.**

Y N

Check wire breakage and bad connection between I/F PWB j550 and IBT Steering Motor j207. **There are broken wires or bad connections.**

Y N

Replace MCU PWB (PL 13.1).
If the problem continues, replace I/F PWB (PL 9.1).
If the problem continues, replace IBT Steering Motor (PL 1.3).

Repair broken wire and bad connection.

Check IBT Belt installation (REP 9.22). If the check is good, replace MCU PWB (PL 13.1).

4-642 Belt Edge

IBT belt edge not in position.

Procedure

BSD: CH9.19 CH9.31A

Check if actuator for IBT Edge Sensor touches belt edge. **IBT Edge Sensor touches belt edge.**

Y N

Check actuator installation.

Turn the power ON. Between I/F PWB j533-A11(+) and GND(-). **Between +3 VDC and 1 VDC is measured.**

Y N

Between I/F PWB j533-A9(+) j533-A10(-). **+5 VDC is measured.**

Y N

Close FRONT door. If voltage between j533-A9(+) j533-A10(-) is less than +5VDC, replace MCU PWB (PL 13.1).

Between I/F PWB j533-A11(+) and GND(-). **+5 VDC is measured.**

Y N

Between I/F PWB j533-A11(+) and GND(-). **0 VDC is measured.**

Y N

Check wire breakage and bad connection between I/F PWB j533and IBT Edge Sensor j119.
If the check is good, replace IBT Edge Sensor (PL 5.4).
If the problem continues, replace MCU PWB (PL 13.1).

Check wire breakage and bad connection between I/F PWB j533-A11 and IBT Edge Sensor j119-2.

Replace IBT Edge Sensor (PL 5.4).

Between I/F PWB j530-A9(+) and GND(-). **+24 VDC is measured.**

Y N

Following Wire Network, check +24VDC circuit up to I/F PWB j530-A9

Remove IBT Assembly (REP 9.15). Enter dC330 [004-001] and press Start. **IBT Steering Motor energizes.**

Y N

Check wire breakage and bad connection between I/F PWB j550 and IBT Steering Motor j207. **There are broken wires or bad connections.**

Y N

Replace MCU PWB (PL 13.1).
If the problem continues, replace I/F PWB (PL 9.1).
If the problem continues, replace IBT Steering Motor (PL 1.3).

Repair broken wire and bad connection.

Check IBT Belt installation (REP 9.22). If the check is good, replace MCU PWB (PL 13.1).

4-650 IOT Cycle Down Time Out

Incorrect print processing continued for 2 minutes.

Procedure

Check the wire between the ESS PWB and the MCU PWB for a poor contact. **The problem continues.**

Y N

Return to Service Call Procedures.

Replace the ESS PWB (PL 13.1)

4-908 2nd BTR Unit Life End

2nd BTR Unit end of life.

Procedure

Replace the 2nd BTR UNIT. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Replace the MCU PWB (PL 13.1).

If the problem continues, replace the MCU NVM PWB (PL 13.1).

5-110 Registration Sensor On

Registration Sensor did not detect a document after the Feed Motor energized.

Initial Actions

- Ensure document path is clear.
- Ensure Feed and Nudger Rolls are free of contamination and wear (PL 20.4).

Procedure

Feed a document and observe the Feed Rolls and prefeed action. **The Feed Rolls move down.**

Y N

Remove following:

- Front Cover (PL 20.1).
- Entrance Tray (PL 20.1).
- Document Feed Lower Chute (REP 5.8).

Check Set Gate Solenoid linkage. If the linkage is good, check the circuit of the Set Gate Solenoid (Figure 1).

Clear the jam and feed a document. **The Document prefeeds into the DADF.**

Y N

Remove Rear Cover (REP 5.18). Check Fuse F3 on DADF Control PWB (Figure 4). **Fuse is good.**

Y N

Check the +24 VDC wires on the Feed Motor (Figure 2) for a short circuit to frame. If the wires are good, replace the Feed Motor (PL 20.4). Also replace the DADF Control PWB (PL 20.3) if a fuse is not available.

Access the Feed Rolls (REP 5.7). Check the Feed Roll Drives. Repair as required (PL 20.4). If the drives are good, check the circuit of the Feed Motor (Figure 2).

Check the circuit of the Registration Sensor (Figure 3).

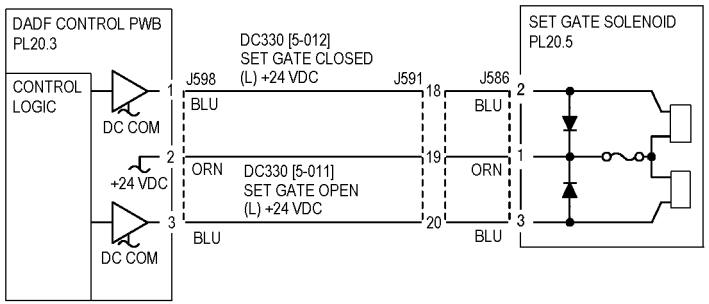


Figure 1 Set Gate Solenoid CD

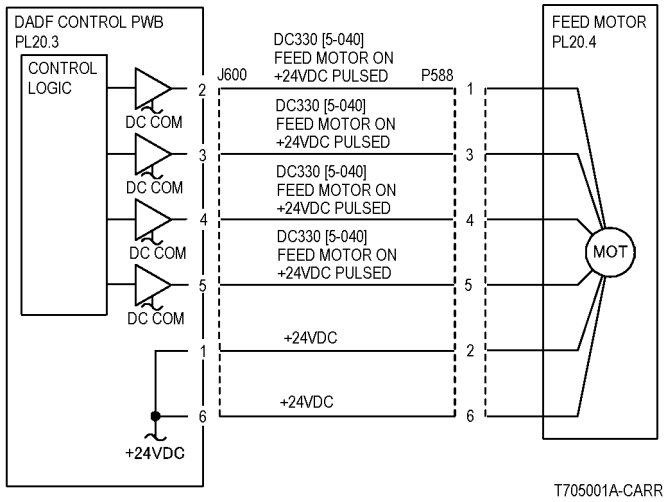


Figure 2 Feed Motor CD

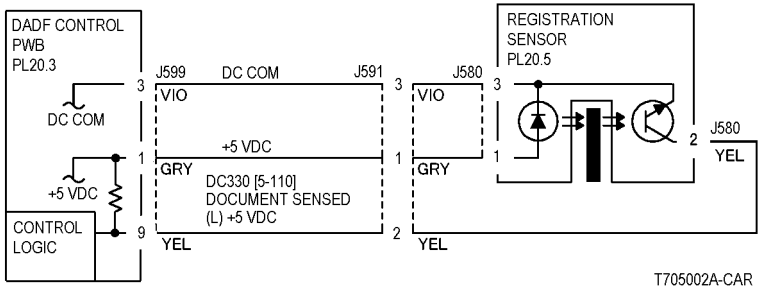


Figure 3 Registration Sensor CD

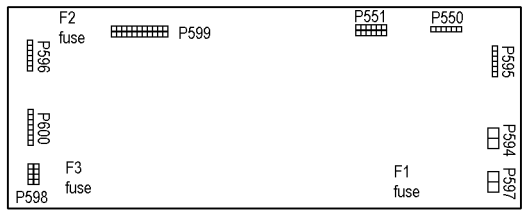


Figure 4 DADF Control PWB

5-111 Registration Sensor Off

The document did not deactuate the Registration Sensor after the DADF Belt Motor energized.

Initial Actions

Ensure document path is clear.

Procedure

Feed a document and observe the Platen Belt. **The Platen Belt rotates.**

Y **N**

Remove Rear Cover (REP 5.18).
Check drive components for DADF Belt Motor (PL 20.6).
Check the Fuse F1 on the DADF Control PWB (Figure 3).
If no problems are found, check the circuit of the DADF Belt Motor (Figure 1) (PL 20.6).

Remove the following:

- Front Cover (PL 20.1).
- Document Transport (REP 5.17).

Check the Registration Rolls and Registration Pinch Rolls for drive or contamination problems (PL 20.8).

Reinstall the Document Transport. Feed a document and observe the ends of the Registration Rolls and Registration Pinch Rolls. **The ends of the rolls rotate.**

Y **N**

There is a drives problem. Repair as required (PL 20.6) (PL 20.8). Ensure the Registration Pinch Roll Springs are in position (REP 5.15).

There is a blockage problem. Remove the Registration Rolls (REP 5.15). Ensure the document path is free of obstruction.

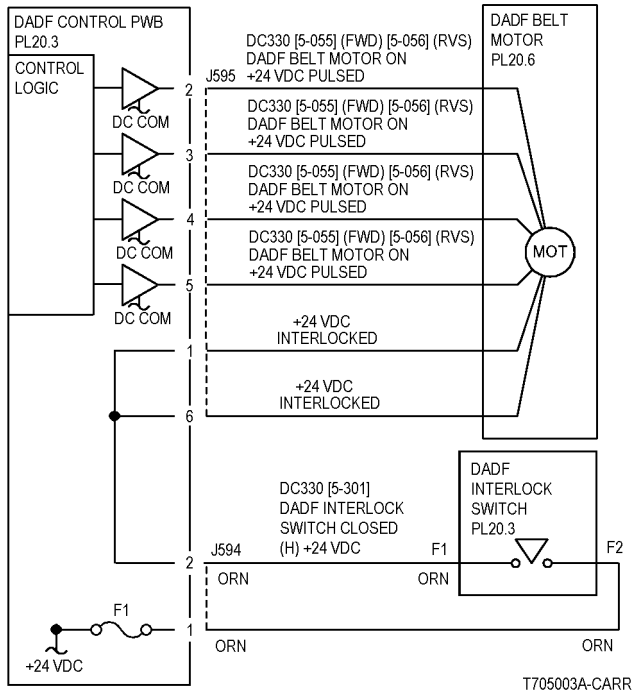


Figure 1 DADF Belt Motor CD

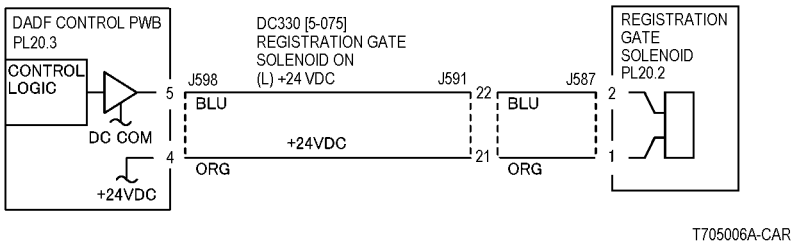


Figure 2 Registration Gate Solenoid CD

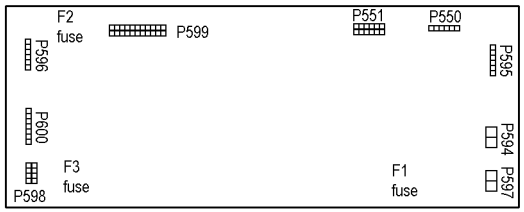


Figure 3 DADF Control PWB

5-112 Registration Sensor Inversion

The document does not actuate the DADF Registration Sensor after the Belt Motor energized for document inversion.

Procedure

Select 1 to 1 and make a copy. **The document exist the DADF.**

Y **N**

Go to the RAP for the displayed status code.

Enter dC330 [005-119] and press Start. Actuate the Duplex Sensor. **The display changes.**

Y **N**

Check the circuit of the Duplex Sensor (Figure 1).

Enter dC330 [005-075] and press Start. **The Registration Gate Solenoid energizes.**

Y **N**

Check the circuit of the Registration Gate Solenoid (Figure 2).

Check Following:

- The Platen Belt for contamination, wear and a rotation failure
- The Platen Belt for an improper tension
- The DADF Registration Gate Solenoid for a return failure

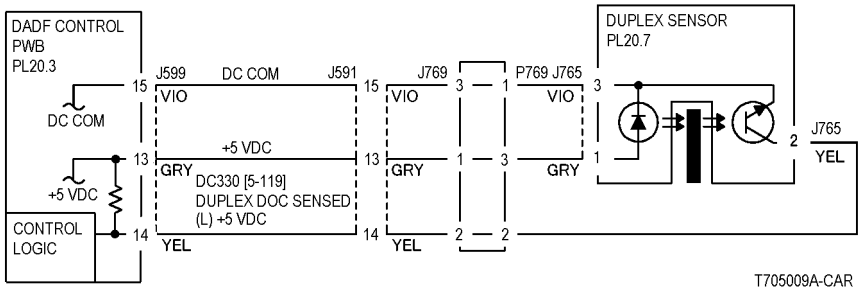


Figure 1 Duplex Sensor CD

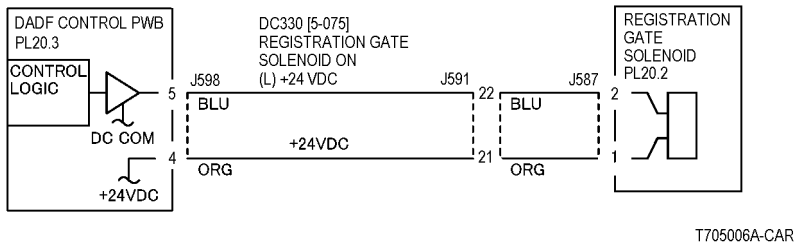


Figure 2 Registration Gate Solenoid CD

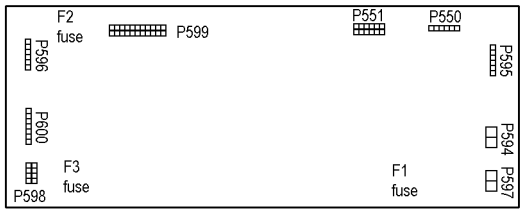


Figure 3 DADF Control PWB

5-113 Registration Sensor Inversion

The document does not deactuate the DADF Registration Sensor after the Belt Motor energized for document inversion.

Procedure

Check the following in dC330.

- [5-110] Registration Sensor
- [5-056] DADF Belt Motor
- [5-075] Registration Gate Solenoid

The components are good.

Y N

Go to the appropriate circuit and check the component.

Check the following:

- The NO. 1/NO. 2 Duplex ROLL for contamination, wear and a rotation failure
- The Duplex Roll Drive for a mechanical load
- The Duplex Chute for deformation
- The Registration Roll for a transportation failure due to contamination, paper chip, wear etc.
- Document Transport Height (ADJ 5.4).
- The wire between the DADF Registration Sensor and the DADF Control PWB for an open circuit or poor contact
- The DADF Control PWB for failure (PL 20.3)

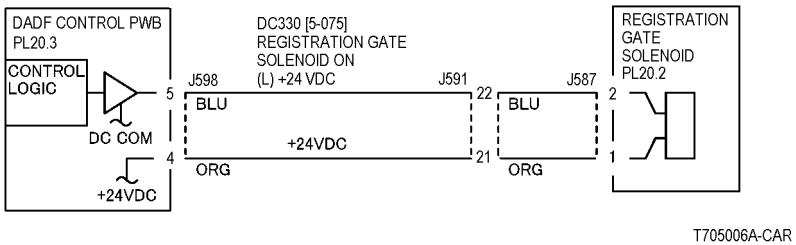


Figure 1 Registration Gate Solenoid CD

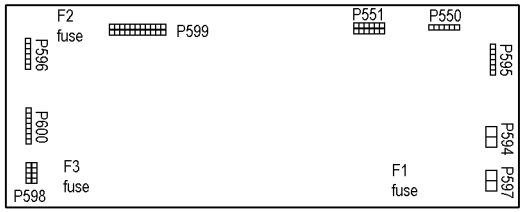


Figure 2 DADF Control PWB

5-115 Exit Sensor On

The DADF Exit Sensor does not detect a document after the DADF Exit Motor energized at document replacement/output.

Procedure

Check the following in dC330:

- [5-115] DADF Exit Sensor
- [5-081] DADF Exit Motor

The components are good.

Y N

Go to the appropriate circuit and check the component.

Check the following:

- The Platen Belt for contamination, wear, tear and a rotation failure
- The NO. 1~4 Belt Pinch RolLs for a rotation failure.
- The Platen Belt for an improper tension.
- The Platen Glass for contamination, a foreign substance and a high friction coefficient
- Document Transport Height (ADJ 5.4).
- The DADF Exit Sensor for an improper installation.
- The DADF Control PWB for a failure (PL 20.3).
- The Exit Lower Chute for correct installation.

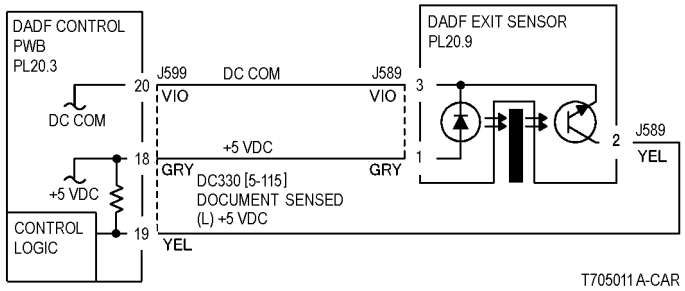


Figure 1 DADF Exit Sensor CD

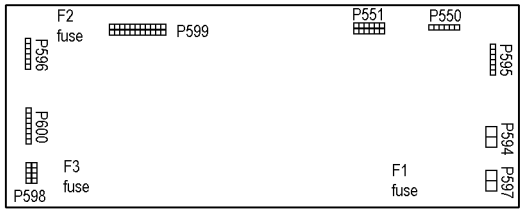


Figure 2 DADF Control PWB

5-116 Exit Sensor Off

The document does not deactuate the DADF Exit Sensor after the DADF Exit Sensor actuated.

Procedure

Check the following in dC330:

- [5-115] DADF Exit Sensor
- [5-081] DADF Exit Motor (Check Fuse F2 on DADF PWB)

The components are good.

Y **N**

Go to the appropriate circuit and check the component

Check the following:

- The Exit Roll for contamination, wear and a rotation failure
- The Exit Upper/lower Chute for deformation
- The Eliminator for deformation
- The Exit Roll Drive Belt for disengagement and damage
- The DADF Control PWB for failure (PL 20.3).

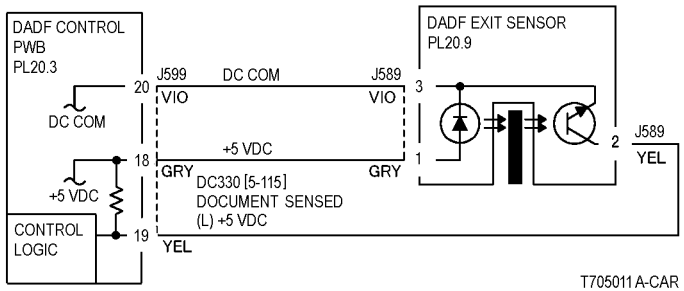


Figure 1 DADF Exit Sensor CD

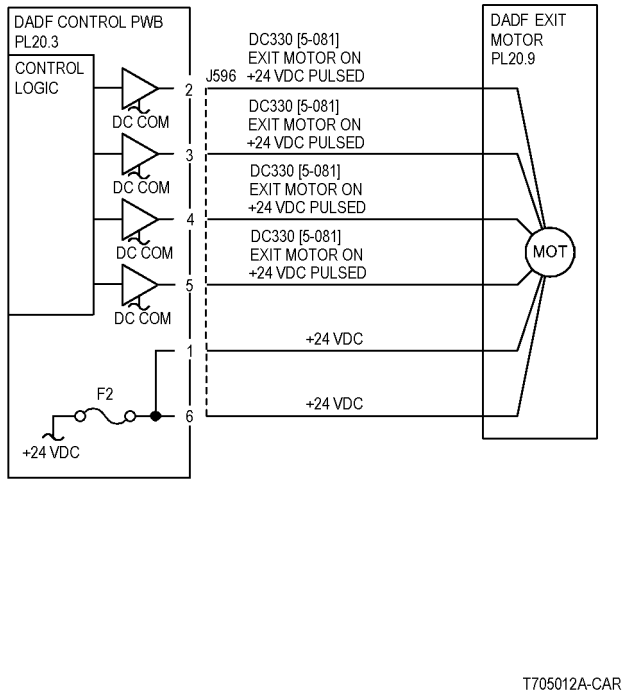


Figure 2 Exit Motor CD

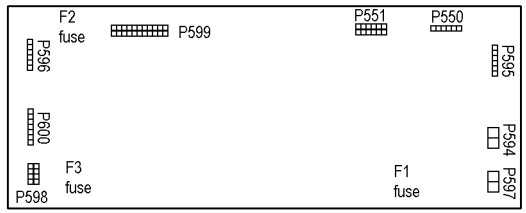


Figure 3 DADF Control PWB

5-195 Document Size Mismatch

Different sized documents are detected in the NO MIX mode.

Procedure

Check the following in dC330:

- [5-150] DADF Size Sensor 1 (Front)
- [5-151] DADF Size Sensor 2 (Rear)

The components are good.

Y N

Go to the appropriate circuit and check the component.

Check the following:

- The SIZE SENSOR for correct installation
- Multiple feed due to an improper retard pressure
- DADF document skew
- Document for damage, out of specification and an improper loading
- The DADF Control PWB for failure (PL 20.3).
- Different document size (such as Mixed documents)

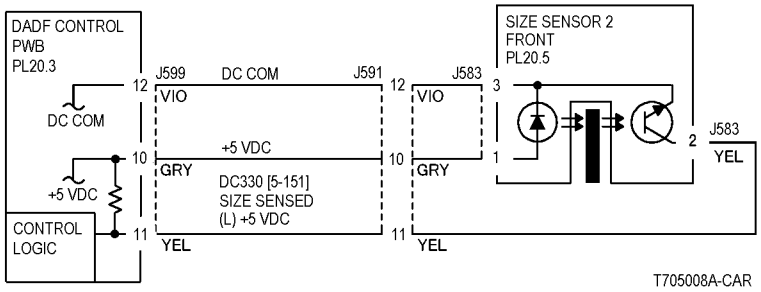


Figure 1 Size Sensor 2 Front CD

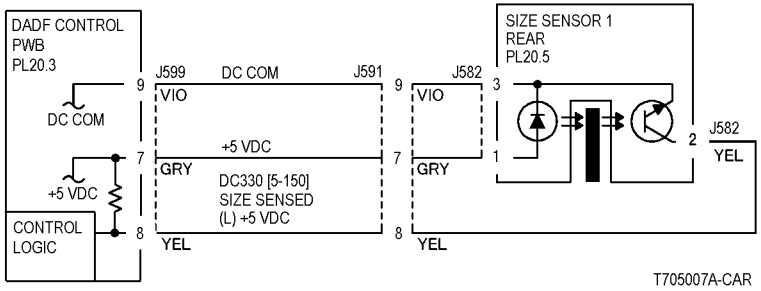


Figure 2 Size Sensor 1 Rear CD

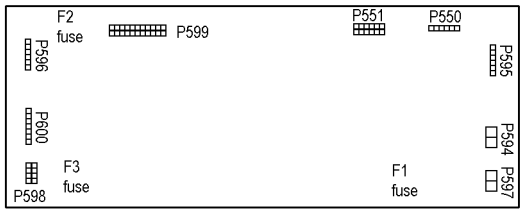


Figure 3 DADF Control PWB

5-274 Original Size Sensor

At power on, the DADF Registration Sensor turns OFF, and the DADF Size Sensor 1 or the DADF Size Sensor 2 turns ON when the document is loaded. (Size Sensor detection failure)

Procedure

Enter [5-150] and press Start. press Start. actuate sensor. **The display changes?**

Y **N**

Remove DADF Entrance Tray (PL 20.1). Remove the DADF Size Sensor 1 j582 (REP 5.12). **The display changes**

Y **N**

Disconnect j599 on the DADF Control PWB. Measure the resistance between the pin j599-8 and the frame. **Resistance 3 Ohm or less.**

Y **N**

Replace DADF Control PWB (PL 20.3).

Check wire between DADF Size Sensor 1 j582-2 and DADF Control PWB j599-8 for a short circuit to frame.

Replace DADF Size Sensor 1 (PL 20.5).

Enter dC330 [005-151] and press Start. **H is displayed.**

Y **N**

Remove the DADF Entrance Tray (PL 20.1). Remove the DADF Size Sensor 2 j583. **The display changes.**

Y **N**

Disconnect j599 on the DADF Control PWB. Measure the resistance between j599-11 and frame. **The resistance 3 Ohm or less.**

Y **N**

Replace DADF Control PWB (PL 20.3).

Check the wire between the DADF Size Sensor 1 j583-2 and the DADF Control PWB j599-11 for a short circuit to the frame.

Replace DADF Size Sensor 2 (PL 20.5).

Replace DADF Control PWB (PL 20.3).

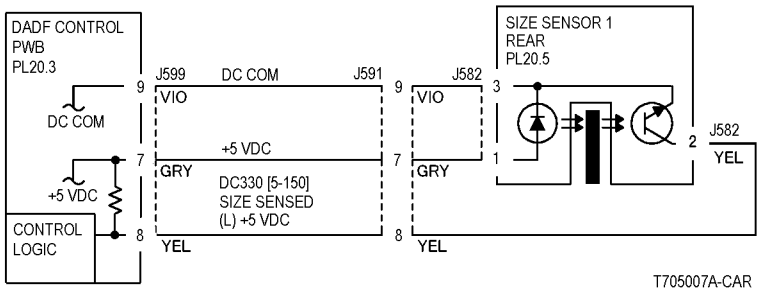


Figure 1 Size Sensor 1 Rear CD

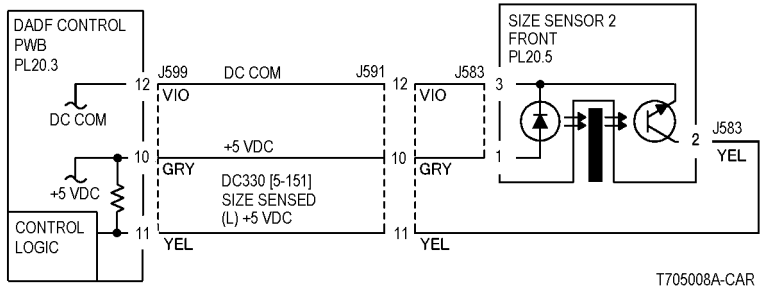


Figure 2 Size Sensor 2 Front CD

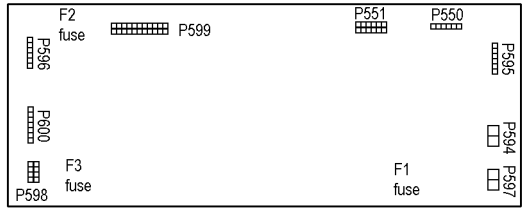


Figure 3 DADF Control PWB

5-275 DADF Ram Failure

RAM failure of the DADF PWB.

Procedure

Switch the power off then on. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Replace the DADF Control PWB (PL 20.3).

5-301 Top Cover Interlock Open

The Top Cover is open.

Procedure

Manually actuate DADF Top Cover Interlock Switch (front/rear) at the same time. **5-301 is cleared.**

Y N

Remove DADF Rear Cover (REP 5.18). Close the DADF Top Cover. **+5VDC is measured between the DADF Control PWB j599-17 (+) and GND (-).**

Y N

+5VDC is measured between the DADF Control PWB j599-22 (+) and GND (-).

Y N

Replace the DADF Control PWB (PL 20.3).

Cheat Pin j590-1 and Pin 2 of the DADF Top Cover Rear Interlock Switch. **5-301 is cleared.**

Y N

Check the wire between the Top Cover Rear Interlock Switch j590-1 and the DADF Control PWB j599-22, and the wire between the Top Cover Rear Interlock Switch j690-2 and the DADF Control PWB j599-21 for an open circuit or poor contact.

Replace the DADF Top Cover Rear Interlock Switch. (PL 20.2).

Cheat Pin j585-1 and Pin 2 of the DADF Top Cover Front Interlock Switch. **0VDC is measured between the DADF Control PWB j599-17 (+) and GND (-).**

Y N

Check the wire between the Top Cover Front Interlock Switch j585-1 and the DADF Control PWB j599-17, and the wire between the Top Cover Front Interlock Switch j585-2 and the DADF Control PWB j599-16 for an open circuit or poor contact.

Replace the DADF Top Cover Front Interlock Switch. (PL20.2)

Mismatching of the DADF Top Cover.
Check the actuator for breakage and bending, and the TOP COVER for correct installation.

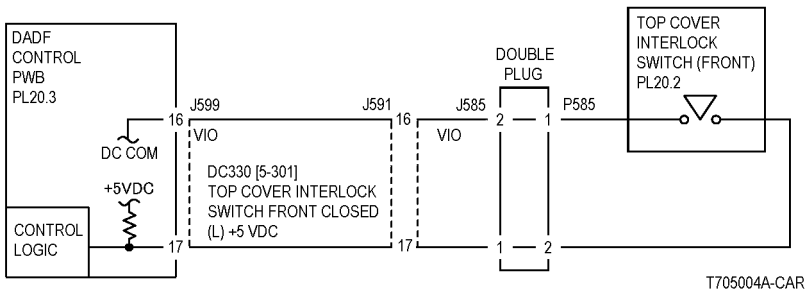


Figure 1 Top Cover Interlock Switch (front)

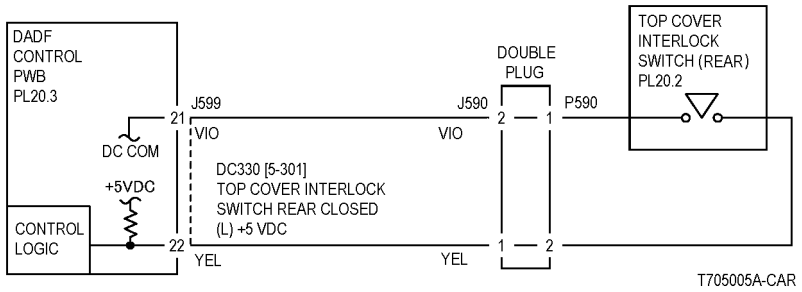


Figure 2 Top Cover Interlock Switch (rear)

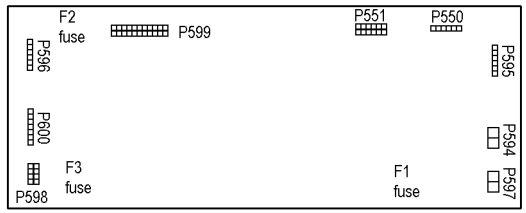


Figure 3 DADF Control PWB

5-900 Document Sensor Timing

A timing error occurred between document sensing and the opening of a DADF Interlock.

Procedure

Switch the power off then on. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Replace the DADF Control PWB (PL 20.3).

5-901 Power On Document Present

The Document Sensor detects a document at Power On.

Procedure

Check the following in dC330.

ï [5-102] DADF Document Sensor

The component is good.

Y N

Go to the appropriate circuit and check the component.

Check that the voltage at the customer outlet is in specification and does not drop during machine start.

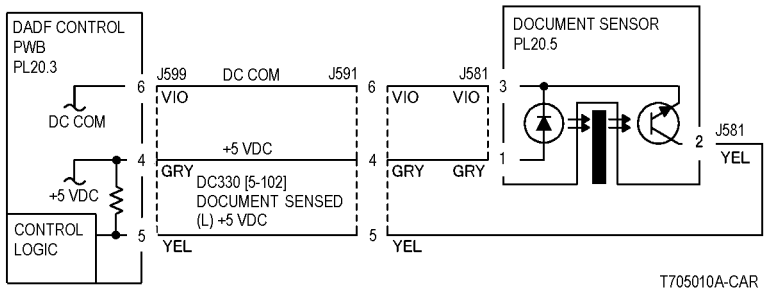


Figure 1 Document Sensor CD

5-902 Power On Registration Sensor

At Power On, the Registration Sensor detected a document when the Top Cover/platen Interlock was closed.

Procedure

Check the following in dC330.

ï [5-110] Registration Sensor

The component is good.

Y N

Go to the appropriate circuit and check the component.

Check that the voltage at the customer outlet is in specification and does not drop during machine start.

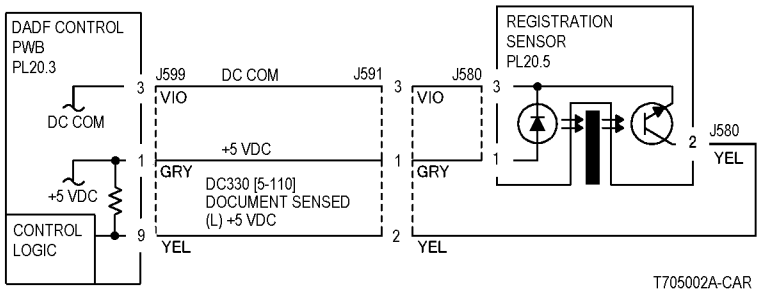


Figure 1 Registration Sensor CD

5-903 Power On Exit Sensor

At Power On, the DADF Exit Sensor detected a document when the Top Cover/platen Interlock was closed.

Procedure

Check the following in dC330.

ï [5-115] DADF Exit Sensor

The component is good.

Y N

Go to the appropriate circuit and check the component.

Check that the voltage at the customer outlet is in specification and does not drop during machine start.

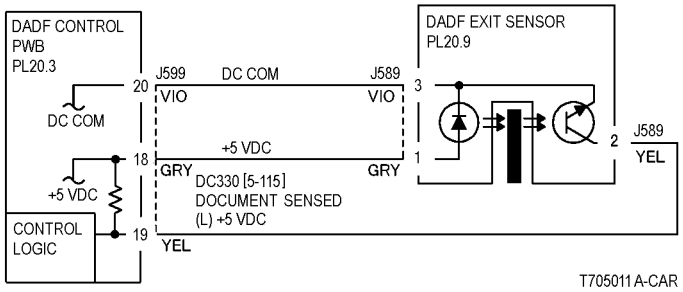


Figure 1 Exit Sensor CD

5-904 Power On Duplex Sensor

At Power On, the DADF Duplex Sensor detected a document when the Top Cover/platen Interlock was closed.

Procedure

Check the following in dC330.

ï [5-119] DADF Duplex Sensor

The component is good.

Y N

Go to the appropriate circuit and check the component.

Check that the voltage at the customer outlet is in specification and does not drop during machine start.

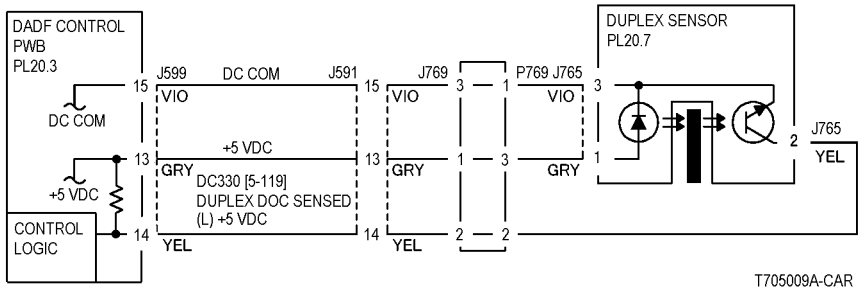


Figure 1 Duplex Sensor CD

5-940 Document Removed During Start

Control Logic detected that the document was removed immediately after the DADF started.

Procedure

Rerun job. **5-940 is declared again.**

Y **N**

Return to Service Call Procedures.

Replace the DADF Control PWB (PL 20.3).

5-941 Document Miscount

Document miscount.

Procedure

Rerun job. **5-941 is declared again.**

Y **N**

Return to Service Call Procedures.

Replace the DADF Control PWB (PL 20.3).

6-277 IISS DADF Communication

Communication cannot be established between the IIT/IPS and the DADF Control PWB.

Procedure

Turn on the power. **The CR4 on the DADF Control PWB illuminates.**

Y N

+5VDC is measured between the DADF Control PWB J550-6 (+) and GND (-).

Y N

Check the +5VDC circuit to the DADF Control PWB j550-6 by referring to Chapter 7 Wiring Data (DADF+5VDC)

Replace the DADF Control PWB (PL 20.3).

Turn off the power. Check conductivity of the following:

Between IIT/IPS PWB j725-20 and DADF Control PWB j755-a1

Between IIT/IPS PWB j725-19 and DADF Control PWB j551-a2

Between IIT/IPS PWB j725-18 and DADF Control PWB j551-a3

Between IIT/IPS PWB j725-17 and DADF Control PWB j551-a4

The resistance is 1 Ohm or less for all wires.

Y N

Check wires with more than 1 Ohm for an open circuit or poor contact.

Replace the following parts:

DADF Control PWB (PL 20.3)

IIT/IPS PWB (PL 18.3)

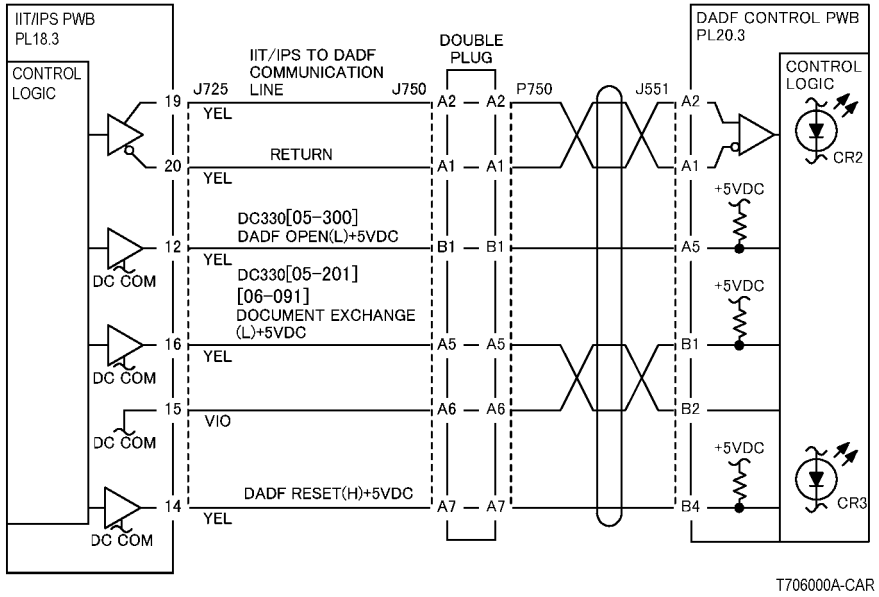


Figure 1 IIT DADF Communication CD

6-312 IIT Memory Hot Line

The system detected an open circuit in the IIT Memory Hot Line.

Procedure

Check connections at IIT/IPS PWB. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Replace the IIT/IPS PWB (PL 18.3).

6-340 IISS RAM TEST ERROR

At power on, the system detected a IIT/IPS PWB RAM test error.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Replace the IIT/IPS PWB (PL 18.3).

6-345 IISS EEPROM

- The NVM value cannot be written at the IIT/IPS PWB Write.
- A communication failure with the EEPROM was detected.

Procedure

Check connections at IIT/IPS PWB. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Replace the IIT/IPS PWB (PL 18.3).

6-355 IPS Fan

IPS Fan failure.

Procedure

Enter dC330 [006-014] and press Start. **The IPS FAN energizes.**

Y N

+24VDC is measured between the IIT/IPS PWB j725-2 (+) and GND (-)

Y N

Visually check the F6 Fuse on the IIT/IPS PWB. **The Fuse is open.**

Y N

Turn OFF the power. Disconnect the IIT LVPS j702 and turn the power ON. **+24VDC is measured between the IIT LVPS j702-1 (+) and GND (-)**

Y N

Check the power (ACH) to the IIT LVPS. If no problems are found, replace the IIT LVPS (PL 18.4)

Check for a short circuit by referring to Chapter 7 Wiring Data (IIT+24VDC)

Replace the IIT/IPS PWB (PL 18.3)

Enter dC330 [006-014] and press Start. **+24VDC is measured between the IIT/IPS PWB j722-b8 (+) and GND (-).**

Y N

Replace the IIT/IPS PWB (PL 18.3)

Turn the power OFF. Check the conductivity of the following. If no problems are found, replace the IPS FAN (PL 18.4)

Between the IIT/IPS PWB j722-b8 and the IPS FAN j738-1

Between the IIT/IPS PWB j722-b9 and the IPS FAN j738-2

Between the IIT/IPS PWB j722-b10 and the IPS FAN j738-3

Between the IIT/IPS PWB j722-b11 and the IPS FAN j738-4

+5VDC is measured at the IIT/IPS j722-b10

Y N

Replace the IIT/IPS PWB (PL 18.3)

Replace the IPS FAN (PL 18.4)

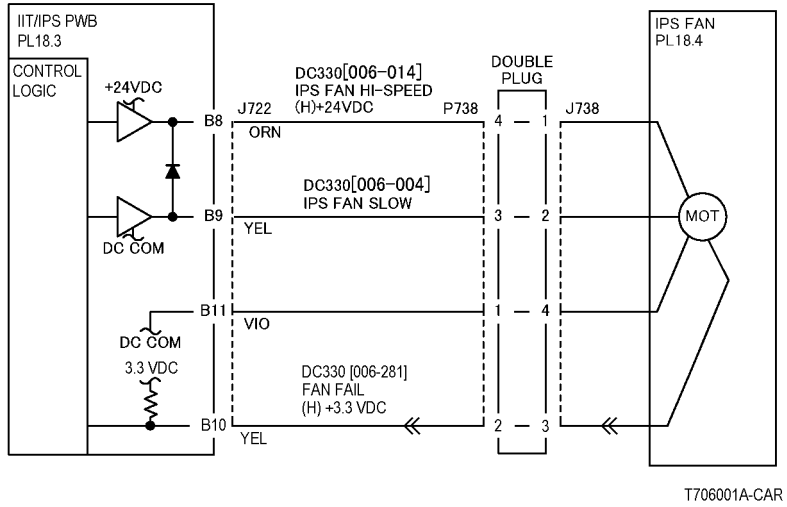


Figure 1 IPS Fan CD

6-360 Carriage Position

The CRG Position error was detected.

Procedure

BSD 6.3 BSD 6.12A
Turn off the power. Remove the Platen Glass.
Manually move the Full Rate Carriage. **The Carriage moves easily.**
Y N
Clear the Carriage Cable distortion, stranding, damage and foreign substance on the CARRIAGE RAIL etc., causing the load.

Turn on the power. Enter dC330 [006-212] and press Start.
Manually move the Full Rate Carriage and turn the IIT Registration Sensor ON/OFF. **The display changes.**
Y N
Repair the IIT Registration Sensor using Generic Transmissive Sensor RAP.

Enter dC330 [006-005] (Scan) or [06-006] (Return) and press Start. **The Carriage Motor energizes**
Y N
+24VDC is measured between the IIT/IPS PWB j725-2 (+) and GND (-)
Y N
Visually check the F6 Fuse on the IIT/IPS PWB. **The Fuse is open.**
Y N
Turn OFF the power. Disconnect the IIT LVPS j702 and turn the power ON. **+24VDC is measured between the IIT LVPS j702-1 (+) and GND (-) .**
Y N
Check the power (ACH) to the IIT LVPS. If no problems are found, replace the IIT LVPS (PL 18.4)

Check for a short circuit by referring to Chapter 7 Wiring Data (IIT+24VDC)

Replace the IIT/IPS PWB (PL 18.3)

When dC330 [006-005] (Scan) or [006-006] (Return) is ON, +24VDC is measured between the Carriage Motor p739-1 (+) and GND (-)
Y N
In the same Diagnostic, +24VDC is measured between the IIT/IPS PWB j725-1 (+) and GND (-).
Y N
Replace the IIT/IPS PWB (PL 18.3)

Check the wire between the IIT/IPS PWB j725-1~6 and the Carriage Motor p739-1-6 for an open circuit or poor contact.

Check the wire between the IIT/IPS PWB j725 and the Carriage Motor p739-5 for an open circuit or poor contact.
If no problems are found, replace the Carriage Motor (PL 18.5.
If the problem continues, replace the IIT/IPS PWB (PL 18.3).

Check the following:

- The Carriage Motor BELT for damage, loosening and disengagement
- The Carriage Capstan Shaft/pulley for wear, distortion and chips
- Full Rate/Half Rate Carriage Position Adjustment (ADJ)

If no problems are found, replace the IIT/IPS PWB (PL 18.3).

6-361 Scan Registration Sensor

Registration Sensor failure at CRG INIT

Procedure

BSD 6.4 BSD 6.12A

Turn off the power. Remove the Platen Glass. Manually move the Full Rate Carriage. **The Carriage moves easily.**

Y N

Clear the Carriage Cable distortion, stranding, damage and foreign substance on the Carriage Rail etc., causing the load.

Turn on the power. Enter dC330 [006-212] and press Start. Manually move the Full Rate Carriage and turn the IIT Registration Sensor ON/OFF. **The display changes**

Y N

Repair the IIT Registration Sensor using Generic Transmissive Sensor RAP.

Enter dC330 [006-005] (Scan) or [06-006] (Return) and press Start. **The Carriage Motor energizes.**

Y N

+24VDC is measured between the IIT/IPS PWB j725-2 (+) and GND (-).

Y N

Visually check the F6 Fuse on the IIT/IPS PWB. **The Fuse is open.**

Y N

Turn OFF the power. Disconnect the IIT LVPS j702 and turn the power ON. **+24VDC is measured between the IIT LVPS j702-1 (+) and GND (-).**

Y N

Check the power (ACH) to the IIT LVPS. If no problems are found, replace the IIT LVPS (PL 18.4)

Check for a short circuit by referring to Chapter 7 Wiring Data (IIT+24VDC)

Replace the IIT/IPS PWB (PL 18.3)

When dC330 [006-005] (Scan) or [006-006] (Return) is ON, +24VDC is measured between the Carriage Motor p739-1 (+) and GND (-).

Y N

In the same Diagnostic, +24VDC is measured between the IIT/IPS PWB j725-1 (+) and GND (-).

Y N

Replace the IIT/IPS PWB (PL 18.3).

Check the wire between the IIT/IPS PWB j725-1-6 and the Carriage Motor p739-1-6 for an open circuit or poor contact.

Check the wire between the IIT/IPS PWB j725 and the Carriage Motor p739-5 for an open circuit or poor contact.

If no problems are found, replace the Carriage Motor (PL 18.5).

If the problem continues, replace the IIT/IPS PWB (PL 18.3).

Check the following:

- The Carriage Motor BELT for damage, loosening and disengagement
- The CARRIAGE CAPSTAN SHAFT/PULLEY for wear, distortion and chips
- Full Rate/Half Rate Carriage Position Adjustment (ADJ)

If no problems are found, replace the IIT/IPS PWB (PL 18.3).

6-371 Exposure Lamp

Open circuit of the Lamp was detected.

Procedure

BSD 6.2 BSD 6.12A

Enter dC330 [006-002]. Press **Start.** **The Exposure Lamp illuminates.**

Y **N**

Switch off the power. Remove the following Platen Glass and the IPS Cover. Switch on the power.

There is +24VDC between J720-2 (+) on the IIT/IPS PWB and GND (-).

Y **N**

Remove the DADF and the IIT Top Cover. **There is +24VDC between J 702-1 on the IIT LVPS (+) and GND (-).**

Y **N**

Switch off the power. Disconnect J 702 from the IIT LVPS. Switch on the power. **There is +24VDC between the IIT LVPS P 502-1 (+) and GND (-).**

Y **N**

Check for IIT LVPS On signal from ESS

Check the input power (ACH) to the IIT LVPS.

If no problems are found, replace the IIT LVPS (PL 18.4)

Check for a short circuit. Refer to the IIT+24VDC wirenet

Check the wires from J 702 on the IIT LVPS to J 720 on the IIT/IPS PWB for an open or short circuit.

There is +24VDC from J 724-3 on the IIT/IPS PWB to GND.

Y **N**

There is +24VDC from J 724-1 to J 724-4 on the IIT/IPS PWB.

Y **N**

Replace the IIT/IPS PWB (PL 18.3)

Replace the following parts:

Lamp Wire Harness (PL 18.6)

Lamp Ballast PWB (PL 18.6)

IIT/IPS PWB (PL 18.3)

Enter dC 330 [006-002]. Press **Start**. **The voltage at J 724-3 drops to approximately 7.5 VDC.**

Y **N**

Replace the IIT/IPS PWB (PL 18.3)

Replace the following parts:

Exposure Lamp (PL 18.6)

Lamp Wire Harness (PL 18.6)

Lamp Ballast PWB (PL 18.6)

Check the following:

- The White Reference Board on the reverse side of the Platen Glass for excessive contamination
- The optical light path for contamination

If no problems are found, replace the Lens Kit (PL 18.4) (REP 6.4) (ADJ 9.6).
If the problem continues, replace the IIT/IPS PWB (PL 18.3).
If the Exposure Lamp is not brightly lit, replace the Exposure Lamp (PL 18.6).
If the problem continues, replace the Lamp Ballast PWB (PL 18.6).

6-372 ROS Polygon Motor

ROS Motor failure.

Procedure

BSD 6.9 BSD 6.1

Enter dC330 [006-031]. **+3.3VDC is measured between the MCU PWB j402-3 (+) and GND (-)**

Y N

Check the wire between the ROS ASSY Relay Connector j518-4 and the MCU PWB j402-3 for an open circuit.

+24VDC is measured between the MCU PWB j402-6 (+) and GND (-).

Y N

+24VDC is measured between the MCU PWB j402-6 (+) and GND (-)

Y N

Check the +24VDC circuit to the MCU MF PWB j402-6 by referring to Chapter 7 Wiring Data (+24V)

Check the wire between the MCU PWB j402-6 and the ROS ASSY Relay Connector j518-1 for an open circuit.

Enter dC330 [006-031]. **0VDC is measured between the MCU PWB j402-4 (+) and GND (-)**

Y N

Check the wire between the MCU PWB j402-4 and the ROS ASSY Relay Connector j518-3 for an open circuit. If no problems are found, replace the PWB (PL 13.1)

Check the wire between the MCU PWB j402-4 and the ROS ASSY Relay Connector j518-3 for an open circuit.

Enter dC330 [006-031]. **The frequency between the MCU PWB j402-4 (+) and GND (-) 2 KHz to 2.5 KHz.**

Y N

Check the wire between the MCU PWB j402-2 and the ROS ASSY Relay Connector j518-5 for an open circuit. If no problems are found, replace the PWB (PL 13.1)

Check the wire between the MCU PWB j402-2 and the ROS ASSY Relay Connector j518-5 for an open circuit.

Check the wiring status of the Harness in the ROS ASSY. If no problems are found, replace the ROS ASSY (PL 3.1)

6-380 ROS SOS Y Length

The interval of the ROS SOS (Y) signals exceeds the specified value.

Procedure

BSD 6.5 BSD 6.1

+5VDC is measured between the MCU PWB j401-b20 (+) and GND (-)

Y **N**

Replace the MCU PWB (PL 13.1)

Check the wire between the SOS PWB (Y) j516-1 and the MCU PWB j401 for an open circuit.

Check the wire between the LD Drive (Y) j529 and the MCU PWB j401 for an open circuit.

If no problems are found, replace the ROS Assembly (PL 3.1).

If the problem continues, replace the MCU PWB (PL 13.1).

6-381 ROS SOS Length Fail M

The interval of the ROS SOS (M) signals exceeds the specified value.

Procedure

BSD 6.6 BSD 6.1

Check the voltage between j401-b20 (+) and GND (-) on MCU PWB. **+5VDC is measured between the MCU PWB j401-b20 (+) and GND (-).**

Y N

Replace the MCU PWB (PL 13.1)

Check the wire between the SOS PWB (M) j517-1 and the MCU PWB j401 for an open circuit.
Check the wire between the LD Drive M j528 and the MCU PWB j401 for an open circuit.
If no problems are found, replace the ROS Assembly (PL 3.1).
If the problem continues, replace the MCU PWB (PL 13.1).

6-382 ROS SOS C Length

The interval of the ROS SOS (C) signals exceeds the specified value.

Procedure

BSD 6.7 BSD 6.1

+5VDC is measured between the MCU PWB j401-b20 (+) and GND (-).

Y N

Replace the MCU PWB (PL 13.1)

Check the wire between the SOS PWB (C) j514-1 and the MCU PWB j401 for an open circuit.
Check the wire between the LD Drive C j527 and the MCU PWB j401 for an open circuit.
If no problems are found, replace the ROS Assembly (PL 3.1).
If the problem continues, replace the MCU PWB (PL 13.1).

6-383 ROS SOS K Length

The interval of the ROS SOS (K) signals exceeds the specified value.

Procedure

BSD 6.8 BSD 6.1
Check the voltage between the MCU PWB j401-b20 (+) and GND (-). **+5VDC is measured.**

Y **N**
Replace the MCU PWB (PL 13.1)

Check the wire between the SOS PWB (K) j515-1 and the MCU PWB j401 for an open circuit.
Check the wire between the LD Drive K j526 and the MCU PWB j401 for an open circuit.
If no problems are found, replace the ROS Assembly (PL 3.1).
If the problem continues, replace the MCU PWB (PL 13.1).

6-385 ROS ASIC

Operation failure of the ROS ASIC in the MCU PWB.

Procedure

BSD 6.5 BSD 6.1
Switch power off then on. **The problem continues.**

Y **N**
Return to Service Call Procedures.

Replace the MCU PWB (PL 13.1).

6-389 Carriage Over Run Right

The carriage has overrun at the Scan End.

Procedure

BSD 6.4 BSD 6.12A

Turn off the power. Remove the Platen Glass. Manually move the Full Rate Carriage. **The Carriage moves easily.**

Y N

Clear the Carriage Cable distortion, stranding, damage and foreign substance on the CARRIAGE RAIL etc., causing the load.

Turn on the power. Enter dC330 [006-212] and press Start. Manually move the Full Rate Carriage and turn the IIT Registration Sensor ON/OFF. **The display changes.**

Y N

Repair the IIT Registration Sensor using Generic Transmissive Sensor RAP.

Enter dC330 [006-005] (Scan) or [06-006] (Return) and press Start. **The Carriage Motor energizes.**

Y N

+24VDC is measured between the IIT/IPS PWB j725-2 (+) and GND (-).

Y N

Visually check the F6 Fuse on the IIT/IPS PWB. **The fuse is open.**

Y N

Turn OFF the power. Disconnect the IIT LVPS j702 and turn the power ON. **+24VDC is measured between the IIT LVPS j702-1 (+) and GND (-).**

Y N

Check the power (ACH) to the IIT LVPS. If no problems are found, replace the IIT LVPS (PL 18.4)

Check for a short circuit by referring to Chapter 7 Wiring Data (IIT+24VDC)

Replace the IIT/IPS PWB (PL 18.3)

When dC330 [006-005] (Scan) or [006-006] (Return) is ON, +24VDC is measured between the Carriage Motor p739-1 (+) and GND (-).

Y N

In the same Diagnostic, +24VDC is measured between the IIT/IPS PWB j725-1 (+) and GND (-).

Y N

Replace the IIT/IPS PWB (PL 18.3)

Check the wire between the IIT/IPS PWB j725-1~6 and the Carriage Motor p739-1-6 for an open circuit or poor contact.

Check the wire between the IIT/IPS PWB j725 and the Carriage Motor p739-5 for an open circuit or poor contact.

If no problems are found, replace the Carriage Motor (PL 18.5).

If the problem continues, replace the IIT/IPS PWB (PL 18.3).

Check the following:

- The Carriage Motor BELT for damage, slackening and disengagement.
- The CARRIAGE CAPSTAN SHAFT/PULLEY for wear, distortion and chips
- Full Rate/Half Rate Carriage Position Adjustment (ADJ)

If no problems are found, replace the IIT/IPS PWB (PL 18.3).

6-390 Carriage Over Run Left

The CRG has overrun at the Home End.

Procedure

BSD 6.4 BSD 6.12A

Turn off the power. Remove the Platen Glass.

Manually move the Full Rate Carriage. **The Carriage moves easily.**

Y N

Clear the Carriage Cable distortion, stranding, damage and foreign substance on the CARRIAGE RAIL etc., causing the load.

Turn on the power. Enter dC330 [006-212] and press Start.

Manually move the Full Rate Carriage and turn the IIT Registration Sensor ON/OFF. **The display changes.**

Y N

Repair the IIT Registration Sensor using Generic Transmissive Sensor RAP.

Enter dC330 [006-005] (Scan) or [06-006] (Return) and press Start. **The Carriage Motor energizes.**

Y N

+24VDC is measured between the IIT/IPS PWB j725-2 (+) and GND (-).

Y N

Visually check the F6 Fuse on the IIT/IPS PWB. **The Fuse is open.**

Y N

Turn OFF the power. Disconnect the IIT LVPS j702 and turn the power ON. **+24VDC is measured between the IIT LVPS j702-1 (+) and GND (-).**

Y N

Check the power (ACH) to the IIT LVPS. If no problems are found, replace the IIT LVPS (PL 18.4)

Check for a short circuit by referring to Chapter 7 Wiring Data (IIT+24VDC)

Replace the IIT/IPS PWB (PL 18.3)

When dC330 [006-005] (Scan) or [006-006] (Return) is ON, +24VDC measured between the Carriage Motor p739-1 (+) and GND (-)

Y N

In the same diagnostic, +24VDC is measured between the IIT/IPS PWB j725-1 (+) and GND (-).

Y N

Replace the IIT/IPS PWB (PL 18.3)

Check the wire between the IIT/IPS PWB j725-1-6 and the Carriage Motor p739-1-6 for an open circuit or poor contact.

Check the wire between the IIT/IPS PWB j725 and the Carriage Motor p739-5 for an open circuit or poor contact.

If no problems are found, replace the Carriage Motor (PL 18.5).

If the problem continues, replace the IIT/IPS PWB (PL 18.3).

Check the following:

- The Carriage Motor BELT for damage, loosening and disengagement
- The CARRIAGE CAPSTAN SHAFT/PULLEY for wear, distortion and chips
- Full Rate/Half Rate Carriage Position Adjustment (ADJ)

If no problems are found, replace the IIT/IPS PWB (PL 18.3).

6-391 Scan Initialize Motor Driver

The Carriage Motor error was detected after the initialization was started.

Procedure

BSD 6.4 BSD 6.1

Turn off the power. Remove the following covers:

- TOP COVER
- IIT REAR COVER

Measure conductivity of the following:

Between the Carriage Motor p739-6 and the IIT/IPS PWB j725-6

Between the Carriage Motor p739-6 and the IIT/IPS PWB j725-5

Between the Carriage Motor p739-4 and the IIT/IPS PWB j725-4

Between the Carriage Motor p739-3 and the IIT/IPS PWB j725-3

Between the Carriage Motor p739-2 and the IIT/IPS PWB j725-2

Between the Carriage Motor p739-1 and the IIT/IPS PWB j725-1

The resistance is 1 Ohm or less for all wires.

Y N

Check wires with more than 1 Ohm for an open circuit or poor contact.

Replace the Carriage Motor (PL 18.5).

If the problem continues, replace the IIT/IPS PWB (PL 18.3)

7-104 Tray 1 Feed Out Sensor

The Tray 1 Feed Out Sensor does not detect paper after feeding from Tray 1.

Initial Actions

- Check condition and specification of paper in Tray 1.
- Check the paper path for obstructions.
- Check for wear and clean the Tray 1 Feeder Roll, Take Away Roll and the Nudger Roll.

Procedure

Enter dC330 [008-100] and press Start. Block and unblock Tray 1 Feed Out Sensor (PL2.3). **The display changes.**

Y N

Go to OF 99-2 Transmissive Sensor RAP.

Enter dC330 [008-106] and press Start. Block and unblock the Take Away Sensor (PL 16.6). **The display changes.**

Y N

Go to OF 99-2 Transmissive Sensor RAP.

Enter dC330 [008-029] then dC330 [008-036] and press Start. **The Take Away Motor 1 energizes (PL 15.9).**

Y N

Go to OF 99-6 Motor Open RAP.

Replace the Tray Module PWB (PL 16.15).

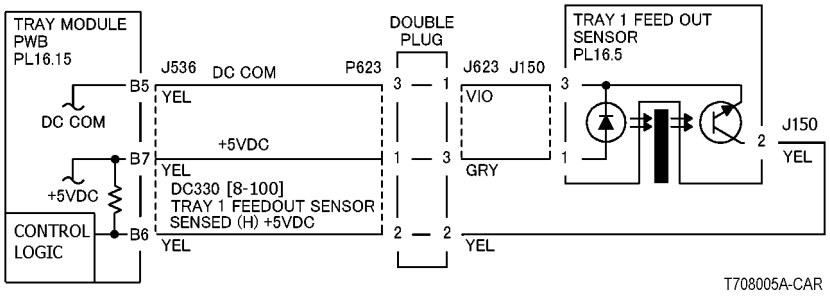


Figure 1 Tray 1 Feed Out Sensor CD

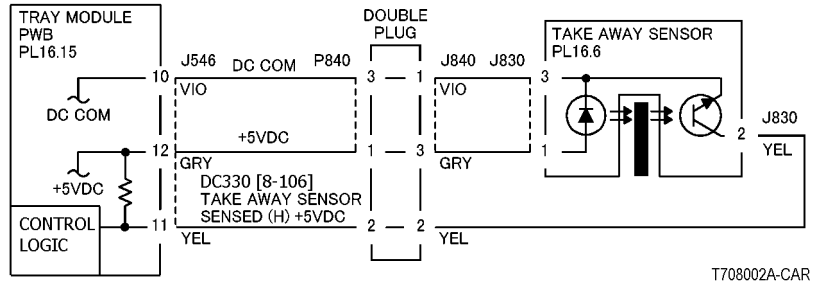


Figure 2 Takeaway Sensor CD

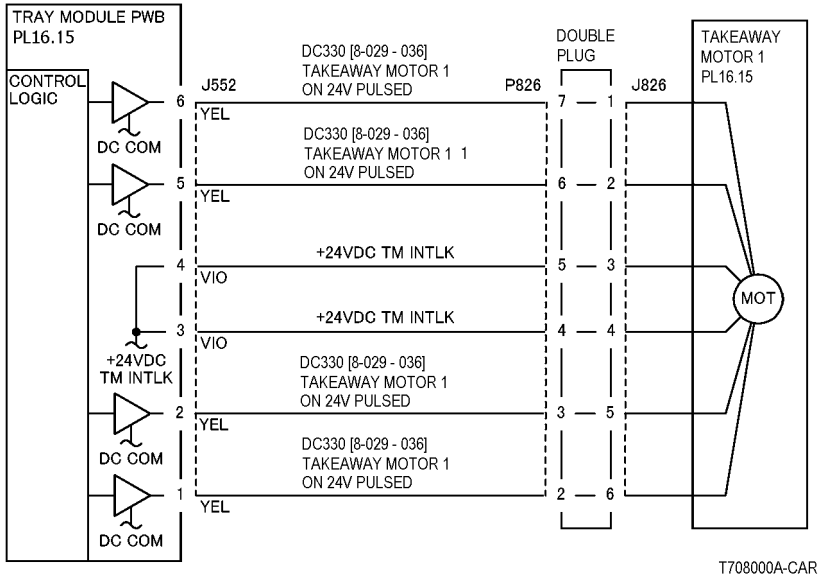


Figure 3 Takeaway Motor 1 CD

7-105 Tray 1 Misfeed

The Tray 1 Feed Out Sensor does not detect paper after feeding from Tray 1.

Initial Actions

- ï Check condition and specification of paper in Tray 1.
- ï Check the paper path for obstructions.
- ï Check for wear and clean the Tray 1 Feed Roll, Take Away Roll and the Nudger Roll.

Procedure

Enter dC330 [008-100] and press Start. Block and unblock the Tray 1 Feed Out Sensor (PL 2.3). **The display changes.**

Y N

Go to OF 99-2 Transmissive Sensor RAP.

Enter dC330 [008-001] and press Start. **The Tray 1 Feed/Lift motor energizes (PL 2.4).**

Y N

Go to OF 99-6 Motor Open RAP.

Enter dC330 [008-029] then dC330 [008-036] and press Start. **The Take Away Motor 1 energizes PL 15.9).**

Y N

Go to the OF 99-6 Motor Open RAP.

Replace the I/F PWB PL 9.1.

If the problem continues, replace the MCU PWB (PL 13.1).

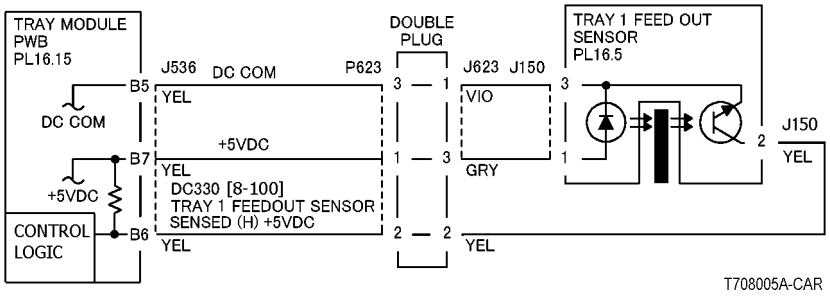


Figure 1 Tray 1 Feed out Sensor CD

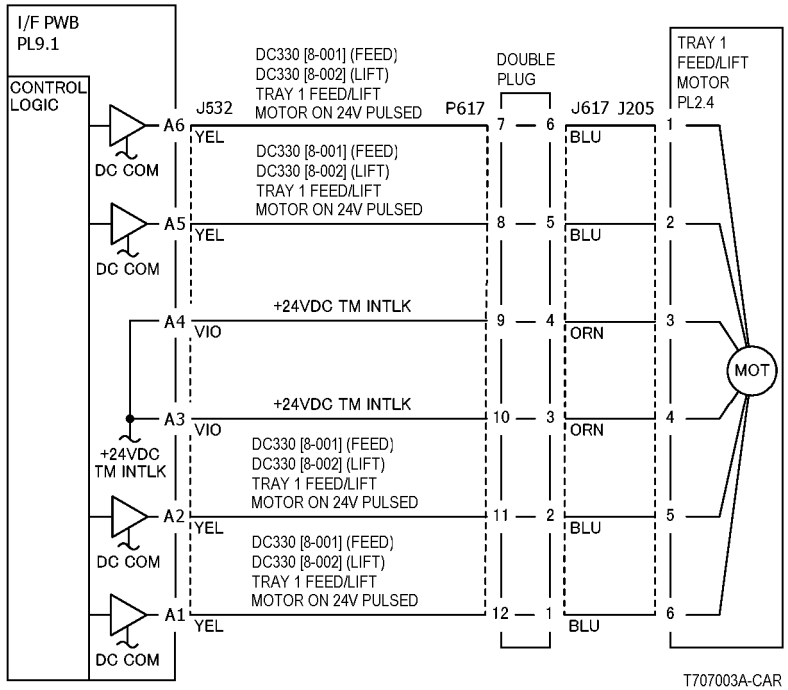


Figure 2 Tray 1 Feed/Lift Motor CD

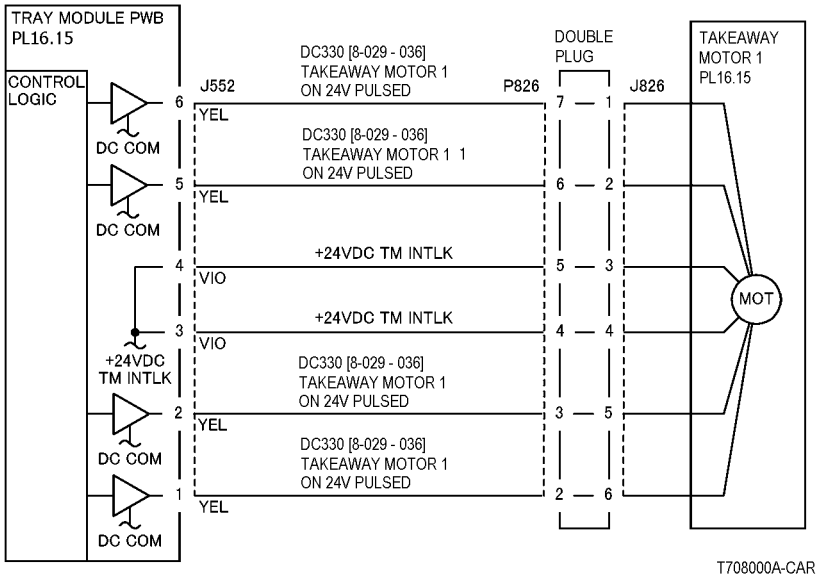


Figure 3 Takeaway Motor 1 CD

7-110 Tray 2 Misfeed

The Take Away Sensor does not detect paper after feeding from Tray 2.

Initial Actions

- Check condition and specification of paper in Tray 2.
- Check the paper path for obstructions.
- Check for wear and clean the Tray 2 Feeder Roll, Take Away Roll and the Nudger Roll.

Procedure

Enter dC330 [008-106] and press Start. Block and unblock the Take Away Sensor (PL 16.6). **The display changes.**

Y N

Go to OF 99-2 Transmissive Sensor RAP.

Enter dC330 [008-003] and press Start. **The Tray 2 Feed/Lift motor energizes (PL 15.3).**

Y N

Go to OF 99-6 Motor Open RAP.

Enter dC330 [008-029] then dC330 [008-036] and press Start. **The Take Away Motor 1 energizes (PL 15.9).**

Y N

Go to OF 99-6 Motor Open RAP.

Check the wires and connectors. If the check is OK, replace the Tray Module PWB (PL 16.15).

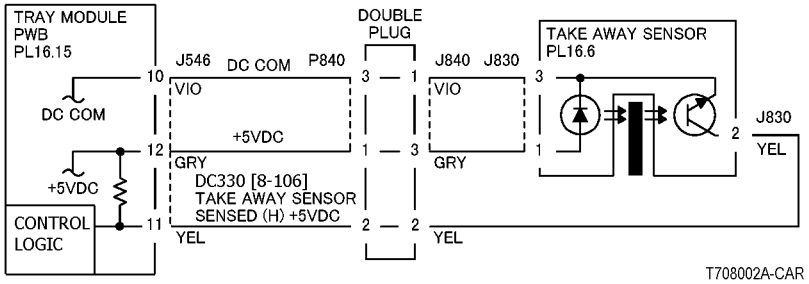


Figure 1 Takeaway Sensor CD

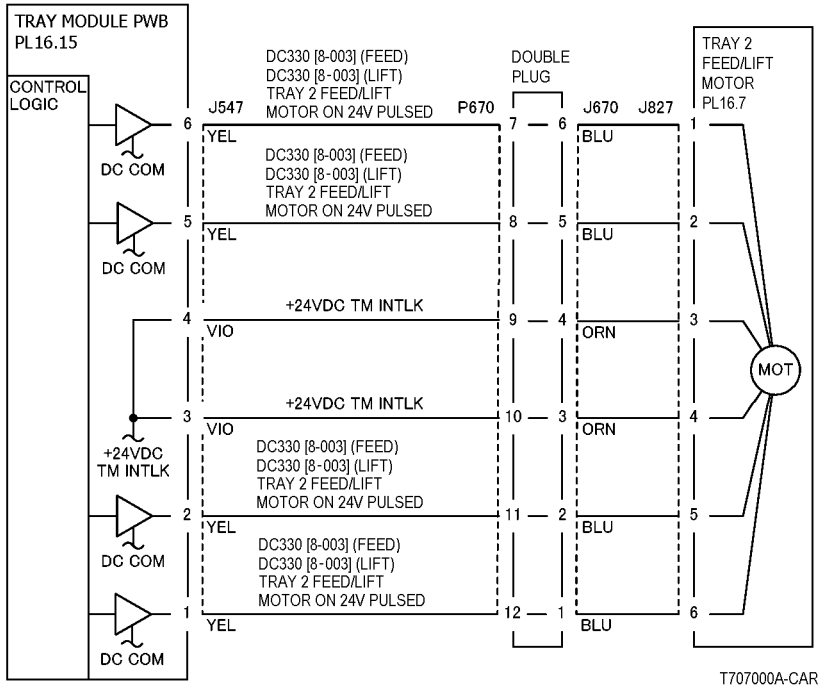


Figure 2 Tray 2 Feed/Lift Motor CD

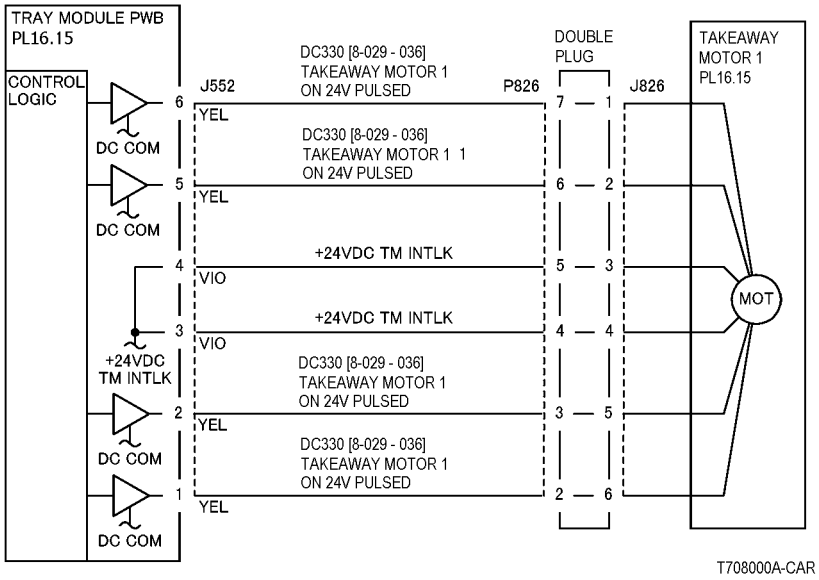


Figure 3 Takeaway Motor 1 CD

7-115 Tray 3 Misfeed

The Take Away Sensor does not detect paper after feeding from Tray 3.

Initial Actions

- Check condition and specification of paper in Tray 3.
- Check the paper path for obstructions.
- Check for wear and clean the Tray 3 Feeder Roll, Take Away Roll and the Nudger Roll.

Procedure

Enter dC330 [008-102] and press Start. Block and unblock the Tray 3 Feed Out Sensor (PL 15.10). **The display changes.**

Y N

Go to OF 99-2 Transmissive Sensor RAP.

Enter dC330 [008-005] and press Start. **The Tray 3 Feed/Lift motor energizes (PL 15.6).**

Y N

Go to OF 99-6 Motor Open RAP.

Enter dC330 [008-029] and press Start. **The Take Away Motor 1 energizes (PL 15.9).**

Y N

Go to OF 99-6 Motor Open RAP.

Check the wires and connectors. If the check is OK, replace the Tray Module PWB (PL 16.15).

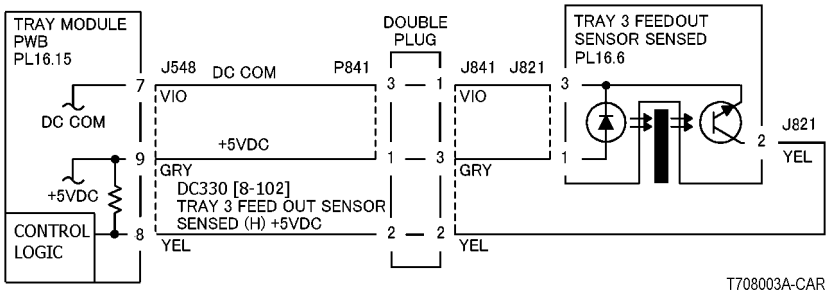


Figure 1 Tray 3 Feedout Sensor CD

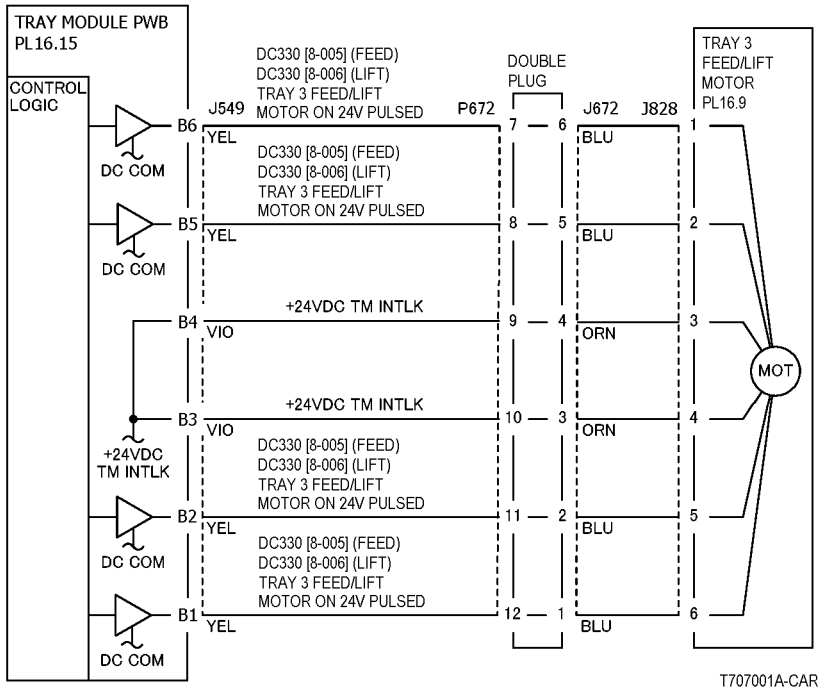


Figure 2 Tray 3 Feed/Lift Motor CD

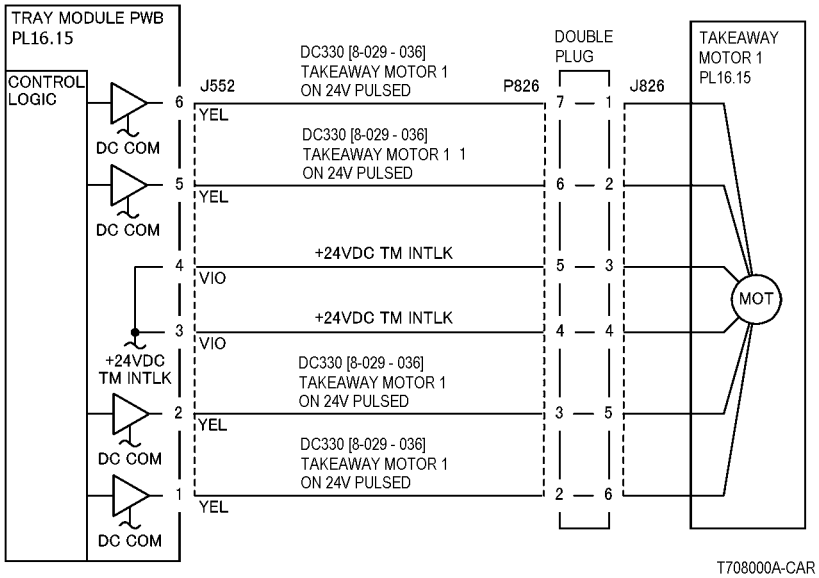


Figure 3 Takeaway Motor 1 CD

7-119 Tray 4 Misfeed

The Feed Out Sensor does not detect paper after feeding from Tray 4.

Initial Actions

- Check condition and specification of paper in Tray 4.
- Check the paper path for obstructions.
- Check for wear and clean the Tray 4 Feeder Roll, Take Away Roll and the Nudger Roll.

Procedure

Enter dC330 [008-103] and press Start. Block and unblock the Tray 4 Feed out Sensor (PL 16.5). **The display changes.**

Y N

Go to OF 99-2 Transmissive Sensor RAP.

Enter dC330 [008-007] and press Start. **The Tray 4 Feed/Lift motor energizes (PL 15.7).**

Y N

Go to OF 99-6 Motor Open RAP.

Enter dC330 [008-029] and press Start. **The Take Away Motor 2 energizes (PL 16.15).**

Y N

Go to OF 99-6 Motor Open RAP.

Check the wires and connectors. If the check is OK, replace the Tray Module PWB (PL 16.15).

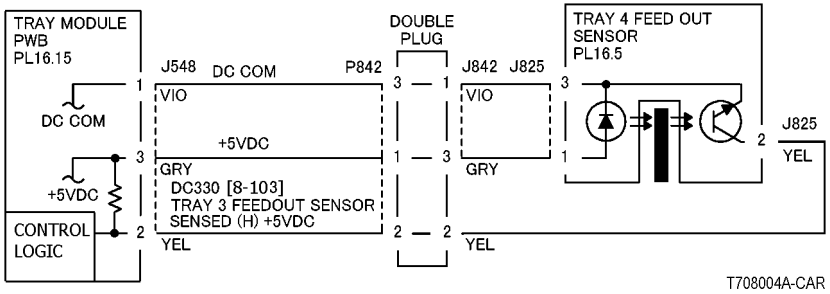


Figure 1 Tray 4 Feedout Sensor CD

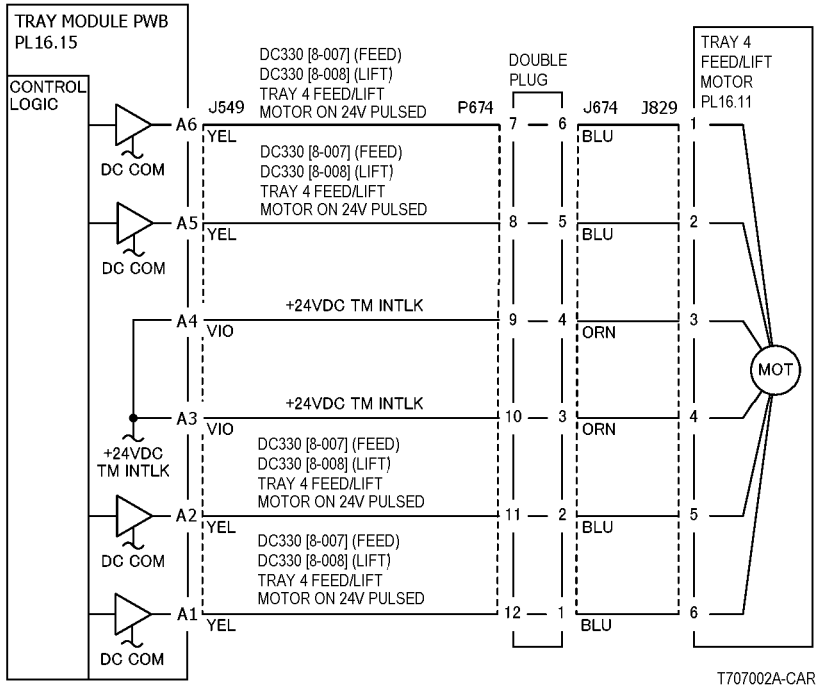


Figure 2 Tray 4 Feed/Lift Motor CD

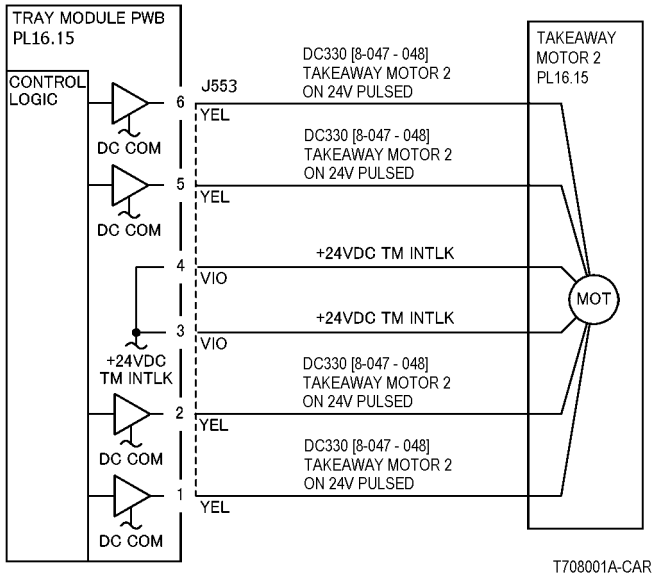


Figure 3 Takeaway Motor 2 CD

7-122 Tray 4 Opened

The Tray 4 Feed Out Sensor detected paper when Tray 4 is pulled out and pushed in during a print.

Initial Actions

- Check condition and specification of paper in Tray 4.
- Check the paper path for obstructions and clean the Tray 4 Feed out Sensor.
- Check the Tray 4 mechanical operation.

Procedure

Enter dC330 [008-103] and press Start. Block and unblock the Tray 4 Feed out Sensor (PL 16.5). **The display changes.**

Y N

Go to OF 99-2 Transmissive Sensor RAP.

Check the machine Shutdown History Report. If there is a history of this failure, replace the Tray 4 Feed Out Sensor (PL 16.5).
If the problem continues, replace the Tray Module PWB (PL 16.15).

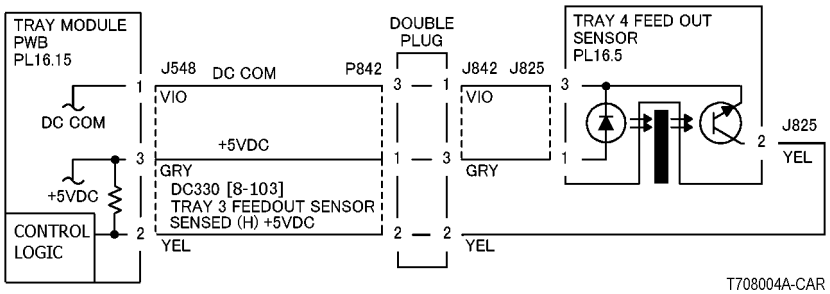


Figure 1 Tray 4 Feedout Sensor CD

7-250 Tray Communication

Communication fault between Tray Module PWB and MCU PWB.

Procedure

There is +5 VDC measured at P/J541-9 on the Tray Module PWB (PL 15.9).

Y **N**

Check the wires and connectors. If the check is OK, replace the MCU PWB (PL 13.1).
If the problem continues, replace the I/F PWB (PL 13.1)

A

A

CAUTION

ESS PWB and MCU PWB cannot be replaced at the same time.

Check the wires and connectors. If the check is OK, replace the Tray Module PWB (PL 15.9).
If the problem continues, replace the MCU PWB (PL 13.1).
If the problem continues, replace the ESS PWB (PL13.1).

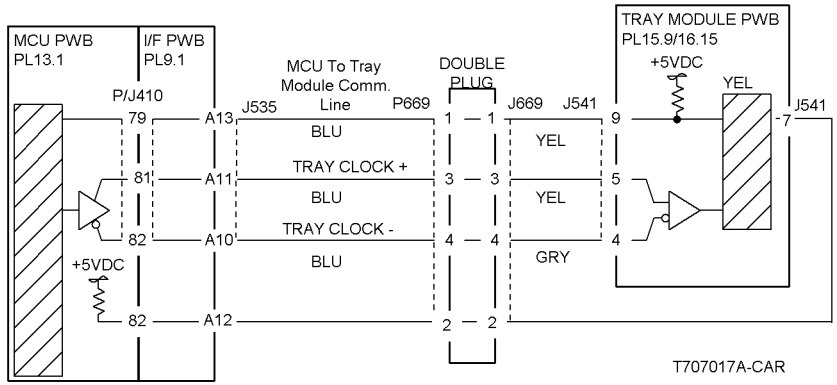


Figure 1 Tray Communication

7-252 Out Module Logic

Incorrect software data was detected.

Procedure

Switch the power off then on. **The problem continues.**

Y N

Return to Service Call Procedures.

Reinstall the software.

If the problem continues, replace the MCU PWB (PL 13.1).

7-270 Tray 1 Paper Size Sensor

An abnormal AD value was detected by the Tray 1 Paper Size Sensor.

Initial Actions

Ensure that the Paper Guide Tab makes contact with the sensor.

Procedure

Ensure that Tray 1 is fully seated. **The voltages measured at P/J536-B9 on the I/F PWB corresponds with the table on BSD 7.1**

Y N

There is 3.3VDC measured between P/J115-1 and 3 on the Paper Size Sensor.

Y N

Check the wires and connectors. If the check is OK, replace the I/F PWB (PL 9.1). If the problem continues replace the MCU PWB (PL 13.1).

Replace the Tray 1 Paper Size Sensor (PL 2.1).

Replace the I/F PWB (PL 9.1).

If the problem continues replace the MCU PWB (PL 13.1).

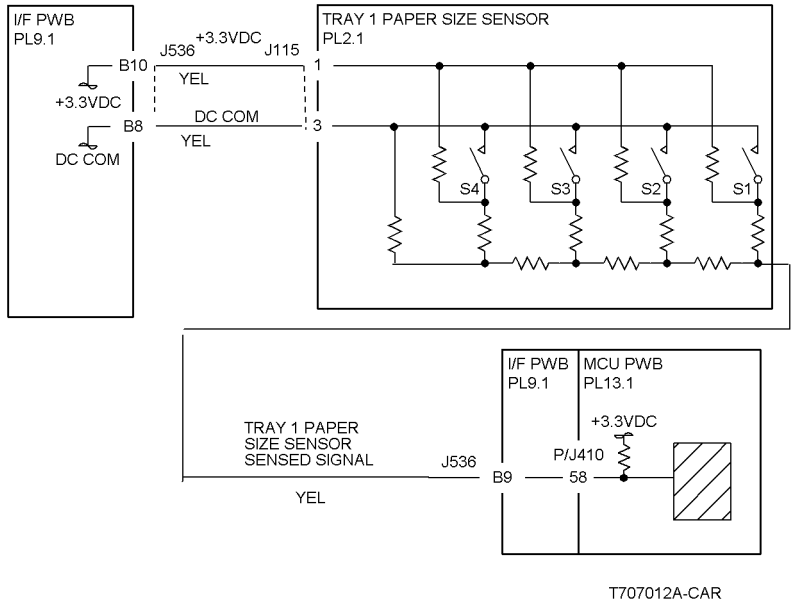


Figure 1 Tray 1 Paper Size Sensor

7-271 Tray 2 Paper Size Sensor

An abnormal AD value was detected by the Tray 2 Paper Size Sensor.

Initial Actions

Ensure that the Paper Guide Tab makes contact with the sensor.

Procedure

Ensure that Tray 2 is fully seated. **The voltages measured at P/J546-8 on the Tray Module PWB corresponds with the table on BSD 7.2**

Y N

There is +5VDC measured between P/J816-1 and 3 on the Tray 2 Paper Size Sensor.

Y N

Check the wires and connectors. If the check is OK, replace the Tray Module PWB (PL 16.15).

Replace the Tray 2 Paper Size Sensor (PL 16.1).

Replace the Tray Module PWB (PL 16.15).

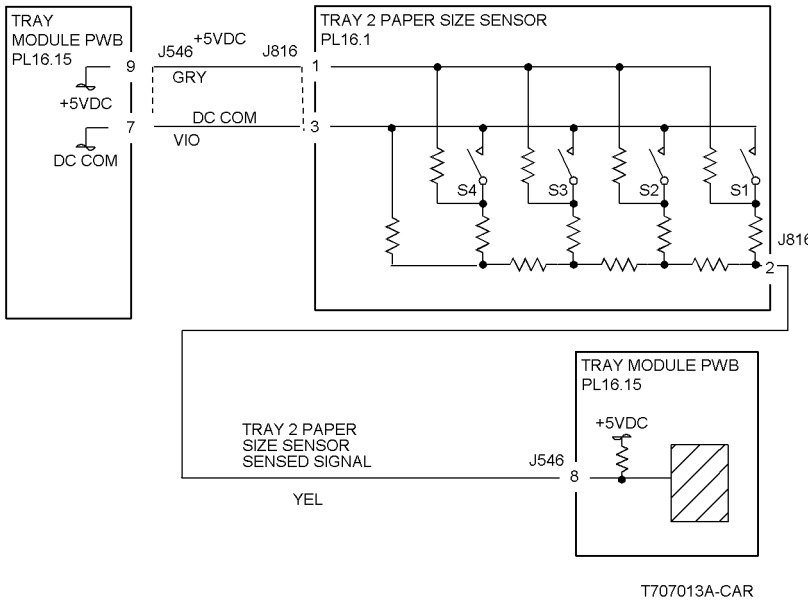


Figure 1 Tray 2 Paper Size Sensor

7-274 Tray 5 Paper Size Sensor

An abnormal AD value was detected by the MSI Paper Size Sensor.

Initial Actions

Check the connectors between the Tray 5 Paper Size Sensor and the I/F PWB

Procedure

Enter dC140 [007-100] and press Start. Move the Tray 5 Paper Size Sensor (PL 2.15). **The AD value changed.**

Y N

There is 3.3VDC measured at P/J265-3 on the Tray 5 Paper Size Sensor.

Y N

Check the wires and connectors. If the check is OK, replace the I/F PWB (PL 9.1)

Enter dC140 [007-100] and press Start. Move the Tray 5 Paper Size Sensor (PL 2.15). **The voltage at P/J265-2 changes.**

Y N

Check the wires and connectors. If the check is OK, replace the Tray 5 Paper Size Sensor (PL 2.15).

Replace the MCU PWB (PL 13.1).
If the problem continues, replace the I/F PWB (PL 9.1).

Replace the MCU PWB (PL 13.1).
If the problem continues, replace the I/F PWB (PL 9.1).

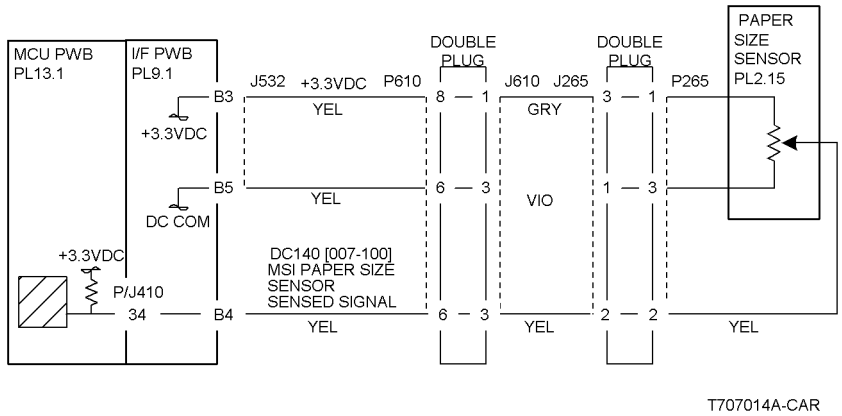


Figure 1 Tray 2 Paper Size Sensor

7-276 Tray 3 Paper Size Sensor

An abnormal AD value was detected by the Tray 3 Paper Size Sensor.

Initial Actions

Ensure that the Paper Guide Tab makes contact with the sensor.

Procedure

Ensure that Tray 3 is fully seated. **The voltages measured at P/J548-11 on the Tray Module PWB corresponds with the table on BSD 7.4**

Y N

There is +5VDC measured between P/J820-1 and 3 on the Tray 3 Paper Size Sensor (PL 16.1).

Y N

Check the wires and connectors. If the check is OK, replace the Tray Module PWB (PL 16.15).

Replace the Tray 3 Paper Size Sensor (PL 16.1).

Replace the Tray Module PWB (PL 16.15).

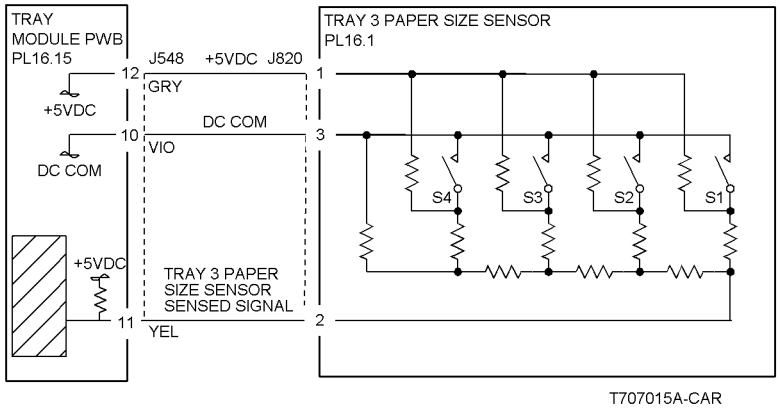


Figure 1 Tray 3 Paper Size Sensor

7-277 Tray 4 Paper Size Sensor

An abnormal AD value was detected by the Tray 4 Paper Size Sensor.

Initial Actions

Ensure that the Paper Guide Tab makes contact with the sensor.

Procedure

Ensure that Tray 4 is fully seated. **The voltages measured at P/J548-5 on the Tray Module PWB corresponds with the table on BSD 7.6**

Y N

There is +5VDC measured between P/J824-1 and 3 on the Tray 4 Paper Size Sensor (PL 16.1).

Y N

Check the wires and connectors. If the check is OK, replace the Tray Module PWB (PL 16.15).

Replace the Tray 4 Paper Size Sensor (PL 16.1).

Replace the Tray Module PWB (PL 16.15).

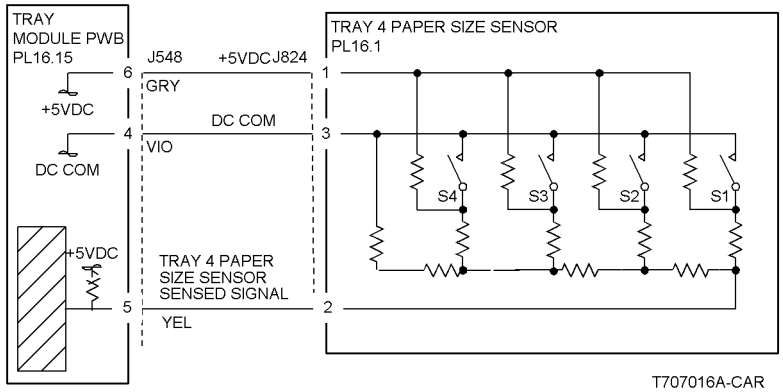


Figure 1 Tray 3 Paper Size Sensor

7-281 Tray 1 Lift

The Tray 1 Level Sensor does not detect tray lift.

Initial Actions

Check drive of the following:

- Manually turn the gear at rear of the TRAY 1 to check that the Bottom Plate moves up and down smoothly.
- Gently push Tray 1 in to check the drive transmission is firmly engaged.

Procedure

Enter dC330 [008-002] and press Start. **The Tray 1 Feed/Lift motor energizes (PL2.4).**

Y **N**

Go to OF 99-6 Motor Open RAP.

Enter dC330 [007-116] and press Start. Open and close Tray 1. **The display changes.**

Y **N**

Check the wires and connectors.
If the check is OK, replace the Tray 1 Level Sensor (PL 2.4).
If the problem continues, replace the Tray Module PWB (PL 16.15).

Check the wires and connectors. If the check is OK, replace the Tray Module PWB (PL 16.15).

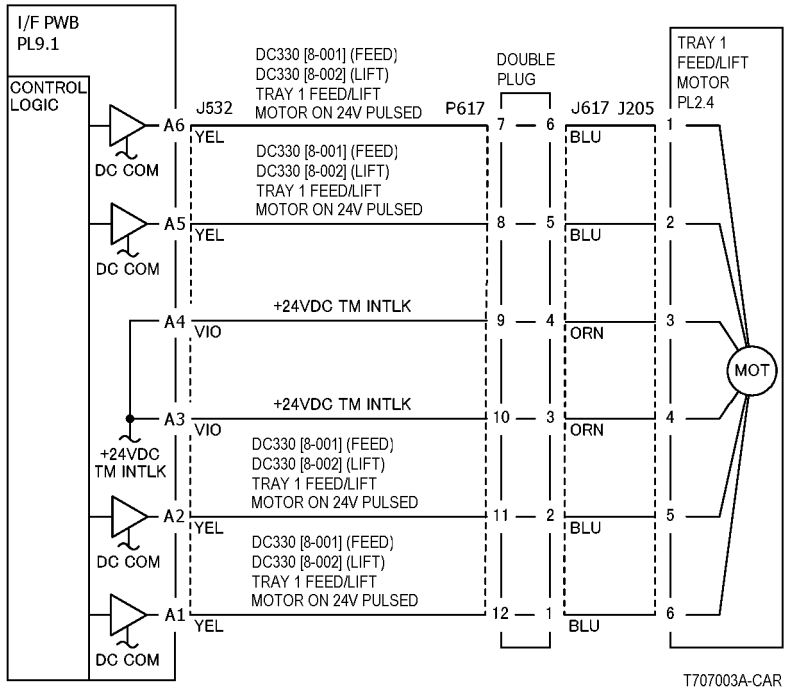


Figure 1 Tray 1 Lift/Feed Motor CD

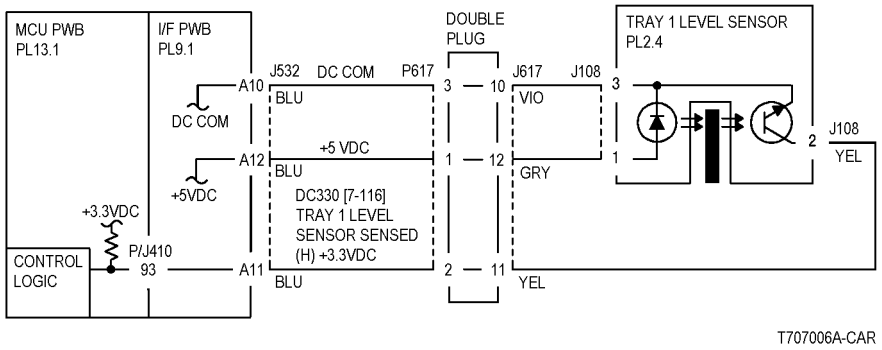


Figure 2 Tray 1 Level Sensor CD

7-282 Tray 2 Lift

The Tray 2 Level Sensor does detect tray lift.

Initial Actions

Check drive of the following:

- Manually turn the gear at rear of the Tray 2 to check that the Bottom Plate moves up and down smoothly.
- Gently push Tray 2 in to check the drive transmission is firmly engaged.

Procedure

Enter dC330 [008-004] and press Start. **The Tray 2 Feed/Lift motor energizes (PL16.7).**

Y N

Go to OF 99-6 Motor Open RAP.

Enter dC330 [007-117] and press Start. Open and close Tray 2. **The display changes.**

Y N

Check the wires and connectors. If the check is OK, replace the Tray 2 Level Sensor PL 16.7.

If the problem continues, replace the Tray Module PWB (PL 16.15).

Check the wires and connectors. If the check is OK, replace the Tray Module PWB (PL 16.15).

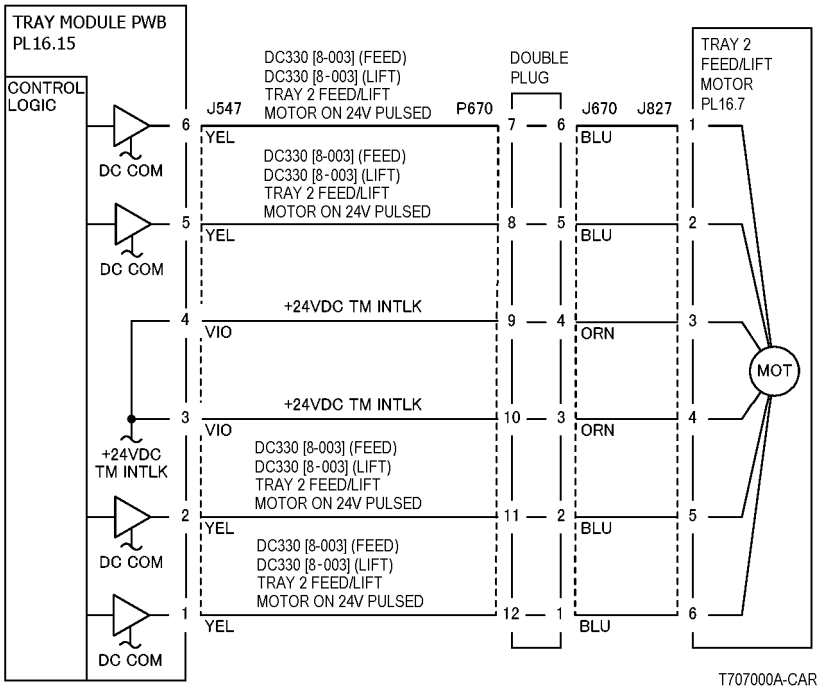


Figure 1 Tray 2 Lift/Feed Motor CD

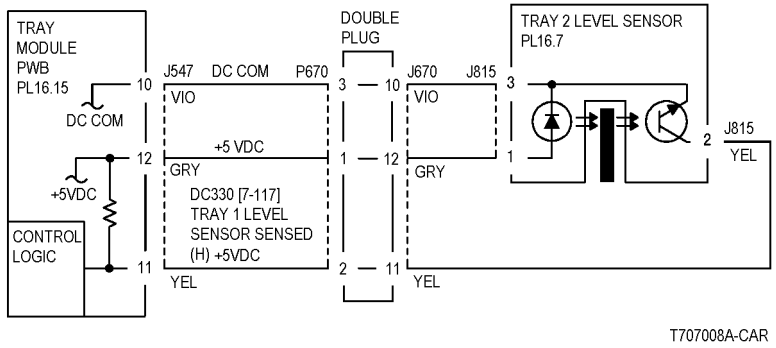


Figure 2 Tray 2 Level Sensor CD

7-291 Tray 3 Lift

The Tray 3 Level Sensor does detect tray lift.

Initial Actions

- Manually turn the gear at rear of the TRAY 3 to check that the Bottom Plate moves up and down smoothly.
- Gently push Tray 3 in to check the drive transmission is firmly engaged.

Procedure

Enter dC330 [008-006] and press Start. **The Tray 3 Feed/Lift motor energizes (PL 16.9).**

Y **N**

Go to OF 99-6 Motor Open RAP.

Enter dC330 [007-118] and press Start. Open and close Tray 3. **The display changes.**

Y **N**

Check the wires and connectors. If the check is OK, replace the Tray 3 Level Sensor PL 16.7.

If the problem continues, replace the Tray Module PWB (PL 16.15).

Check the wires and connectors. If the check is OK, replace the Tray Module PWB (PL 16.15).

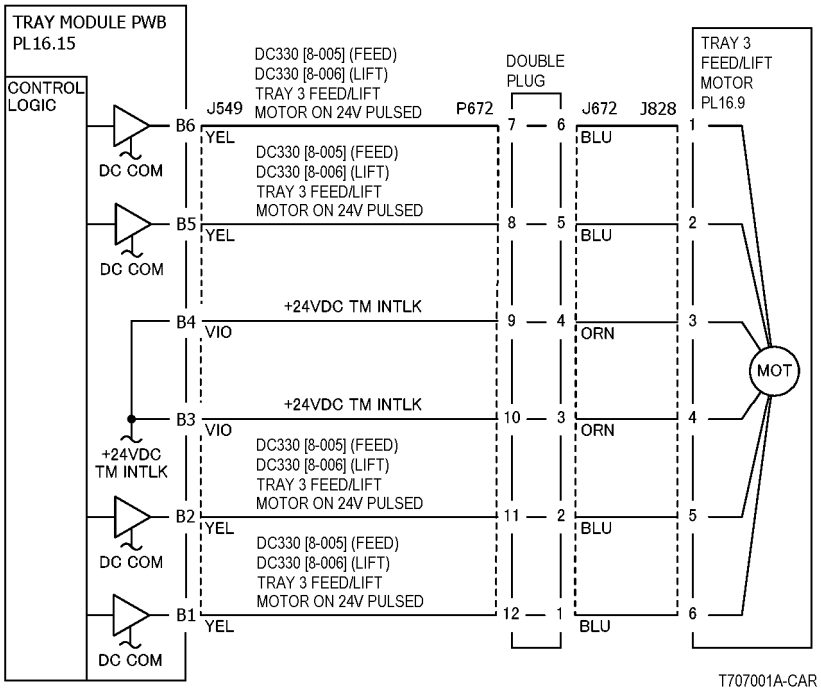


Figure 1 Tray 3 Lift/Feed Motor CD

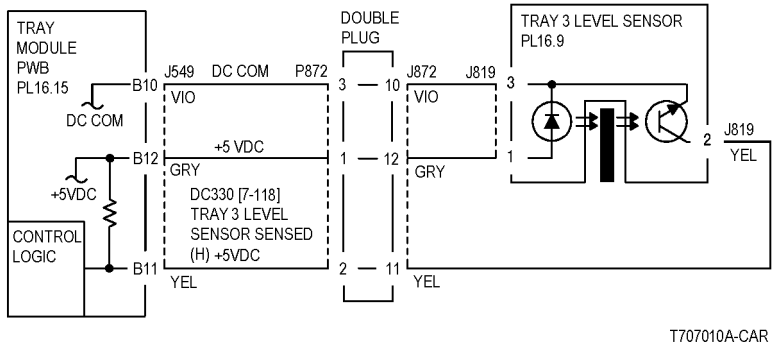


Figure 2 Tray 3 Level Sensor CD

7-293 Tray 4 Lift

The Tray 4 Level Sensor does detect tray lift.

Initial Actions

Check drive of the following:

- Manually turn the gear at rear of the TRAY 4 to check that the Bottom Plate moves up and down smoothly.
- Gently push Tray 4 in to check the drive transmission is firmly engaged.

Procedure

Enter dC330 [008-008] and press Start. **The Tray 4 Feed/Lift motor energizes (PL 16.11).**

Y **N**

Go to OF 99-6 Motor Open RAP.

Enter dC330 [007-119] and press Start. Open and close Tray 4. **The display changes.**

Y **N**

Check the wires and connectors. If the check is OK, replace the Tray 4 Level Sensor (PL 16.7).

If the problem continues, replace the Tray Module PWB (PL 16.15).

Check the wires and connectors. If the check is OK, replace the Tray Module PWB (PL 16.15).

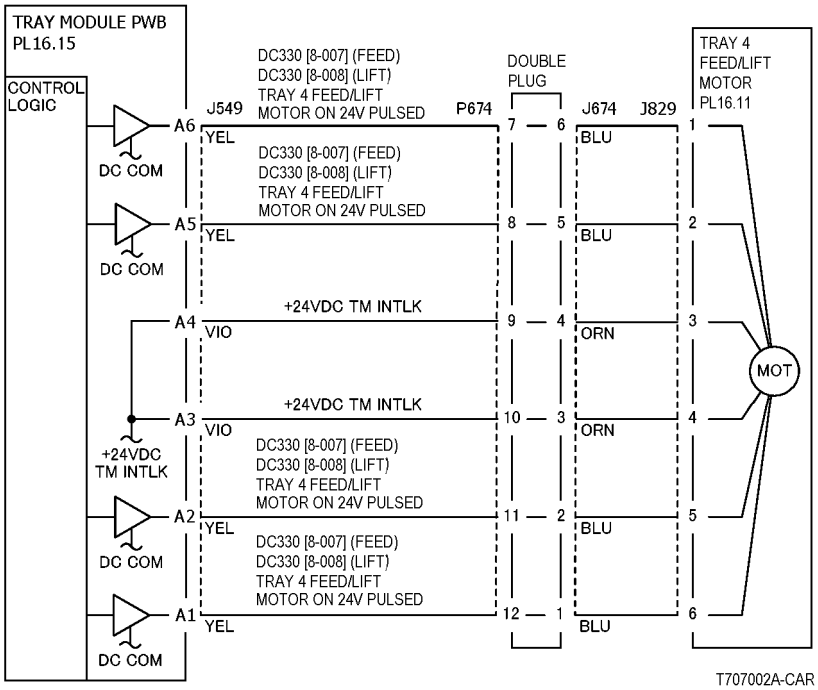


Figure 1 Tray 4 Lift/Feed Motor CD

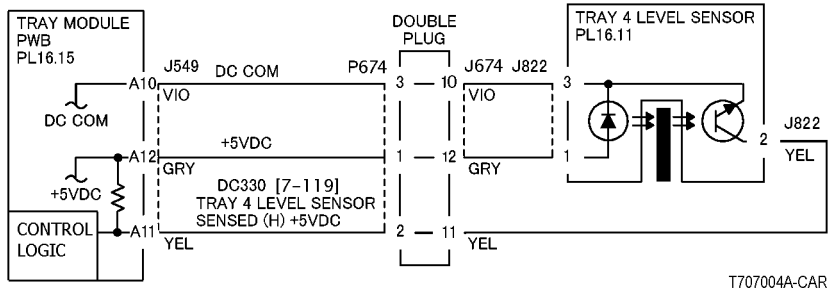


Figure 2 Tray 4 Level Sensor CD

7-397 All Trays Lift Sensors

All the Tray Level Sensors did not energize.

Procedure

Check the dC122 Shutdown History. **007-281, 007-282, 007-283, 007-284, 007-291, or 007-293 fault has occurred.**

Y **N**

Replace the following in sequence:

- Tray Module PWB (PL 15.9) (PL 16.15)
- MCU PWB (PL 13.1) (TRAY 1 only)

Go to the appropriate RAP.

7-930 Tray 1 Paper Size Mismatch

The paper in Tray 1 does not match the paper size selected.

Procedure

The correct size paper is loaded in Tray 1.

Y **N**

Load the correct size paper.

Go to (RAP7-270).

7-931 Tray 2 Paper Size Mismatch

The paper in Tray 2 does not match the paper size selected.

Procedure

The correct size paper is loaded in Tray 2.

Y **N**

Ensure Paper Guides are correctly adjusted.
Load the correct size paper.

Go to (RAP7-271).

7-932 Tray 3 Paper Size Mismatch

The paper in Tray 3 does not match the paper size selected.

Procedure

The correct size paper is loaded in Tray 3.

Y **N**

Ensure Paper Guides are correctly adjusted.
Load the correct size paper.

Go to (RAP7-276).

7-933 Tray 4 Paper Size Mismatch

The paper in Tray 4 does not match the paper size selected.

Procedure

The correct size paper is loaded in Tray 4.

Y **N**

Ensure Paper Guides are correctly adjusted.
Load the correct size paper.

Go to (RAP7-277).

7-935 Job Continue Not Available

Automatic Tray switching cannot be continued because a tray was not programed.

Procedure

Program the appropriate tray. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Refer to the User Guide information for Auto Tray Switching.

7-954 SMH Size Mismatch (Slow Scan Direction)

The paper in the slow scan direction is shorter than the specified paper size.

Procedure

The correct size paper is loaded in the SMH.

Y N

Load the correct size paper.

Replace the Registration Sensor. (PL 2.6).

7-959 Tray 5 Paper Mismatch 1

Other than dedicated stock is detected by the OHP sensor.

Initial Actions

- ï Ensure that dedicated stock is used.
- ï Check that the transparencies are oriented correctly.
- ï Check for obstructions and clean the OHP Sensor.

Procedure

Enter dC330 [008-110] and press Start. Block the OHP Sensor R using plain paper (PL 2.6).

The display changes.

Y N

Go to OF 99-1 Reflective Sensor RAP.

Check the wires and connectors. If the check is OK, replace the MCU PWB (PL 13.1).

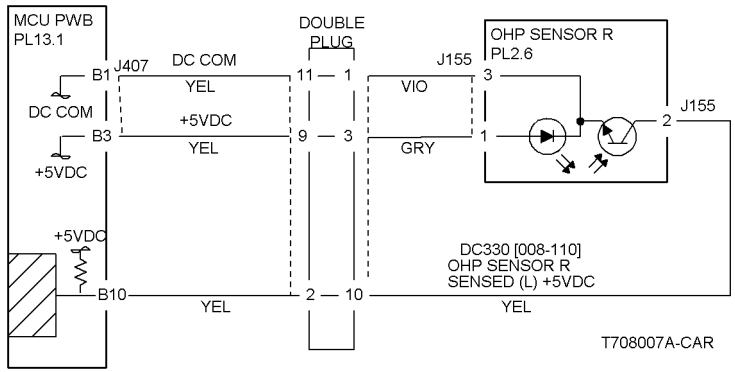


Figure 1 The OHP Sensor R

7-960 Tray 5 Paper Mismatch 2

A different paper type or transparency was detected when plain/heavyweight paper was specified.

Initial Actions

- Check that the loaded paper type matches the UI selection.
- Check the OHP sensor area for foreign substances

Procedure

Enter dC330 8-110. Block the OHP Sensor R using plain paper. **The display changes.**

Y N

Go to RAP OF 99-1 Reflective Sensor RAP.

Replace the MCU PWB (PL 13.1).

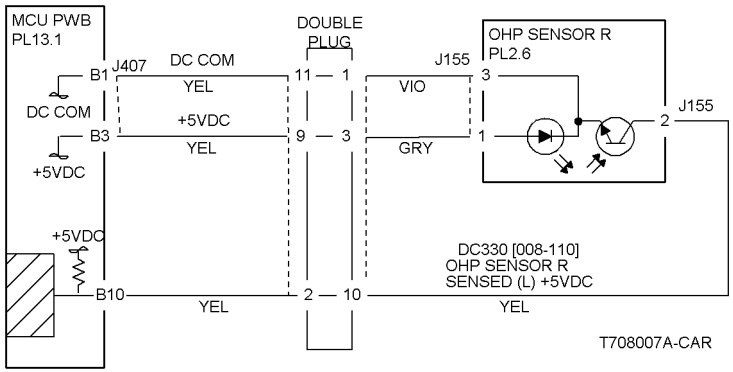


Figure 1 The OHP Sensor R

7-969 Full Paper Stack

The Full Paper Stack Sensor detects that Face Down Tray is full.

Initial Actions

Check the Full Paper Stack Sensor for obstructions and actuator operation.

Procedure

Enter dC330 [010-102] and press Start. Move the Full Paper Stack Sensor (PL 10.2) actuator up and down. **The display changes.**

Y N

Go to OF 99-2 Transmissive Sensor RAP.

Check the connectors and wires. If the check is OK, replace the MCU PWB (13.1).
If the problem continues, replace the I/F PWB (PL 9.1).

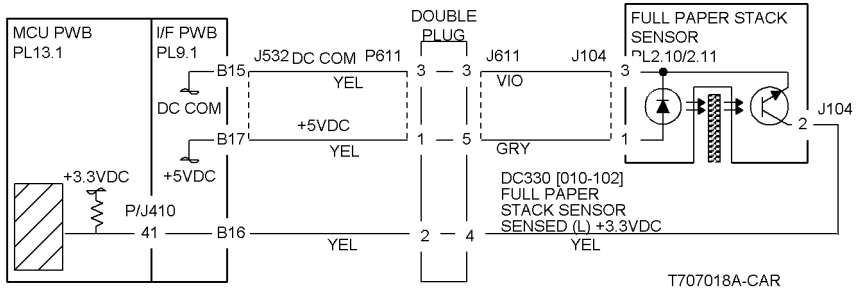


Figure 1 The Full Paper Stack Sensor

8-151 Tray 3 Take Away Sensor On

The Take Away Sensor does not detect paper fed from Tray 3.

Initial Actions

- Check condition and specification of paper in Tray 3.
- Check the paper path and sensor area for obstructions.
- Check for wear and clean the Tray2 and Tray3 Feeder Roll, Take Away Roll and the Nudger Roll.

Procedure

Enter dC330 [008-102] and press Start. Block and unblock the Take Away Sensor (PL 16.6).

The display changes state.

Y N

Go to OF 99-2 Transmissive Sensor RAP.

Enter dC330 [008-029. **The Take Away Motor 1 energizes.**

Y N

Go to OF 99-6 Motor Open RAP.

Replace the Tray Module PWB (PL 16.15).

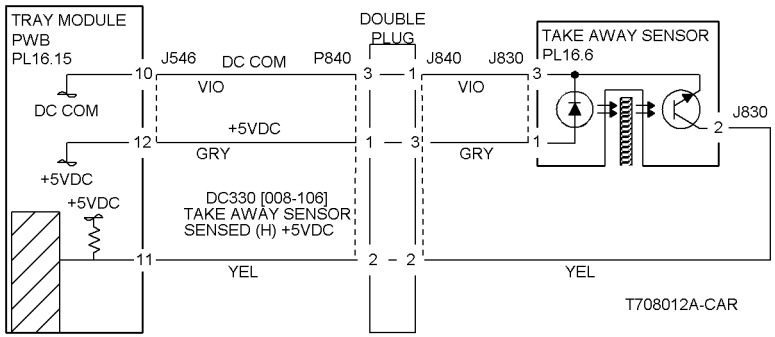


Figure 1 The Take Away Sensor

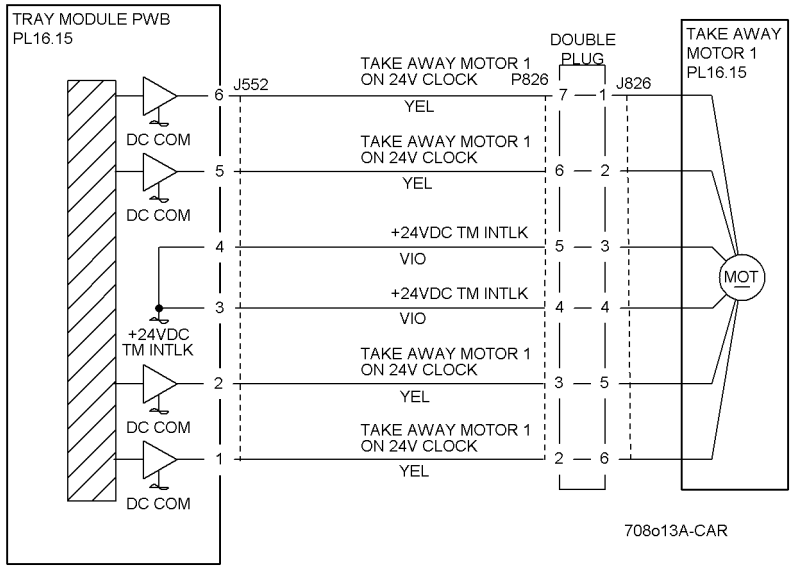


Figure 2 The Take Away Motor 1

8-152 Tray 4 Take Away Sensor On

The Take Away Sensor does not detect paper fed from Tray 4.

Initial Actions

- Check condition and specification of paper in Tray 4.
- Check the paper path and sensor area for obstructions.
- Check for wear and clean the Tray 4 Feeder Roll, Take Away Roll and the Nudger Roll.

Procedure

Enter dC330 [008-102] and press Start. Block and unblock the Block and unblock the Take Away Sensor (PL 16.6). **The display changes state.**

Y N

Go to OF 99-2 Transmissive Sensor RAP.

Enter dC330 [008-029] and press Start. **The Take Away Motor 1 PL 16.15 energizes.**

Y N

Go to OF 99-6 Motor Open RAP.

Enter dC330 [008-047] and press Start. **The Take Away Motor 2 (PL 16.15) energizes.**

Y N

Go to OF 99-6 Motor Open RAP.

Replace the Tray Module PWB (PL 16.15).

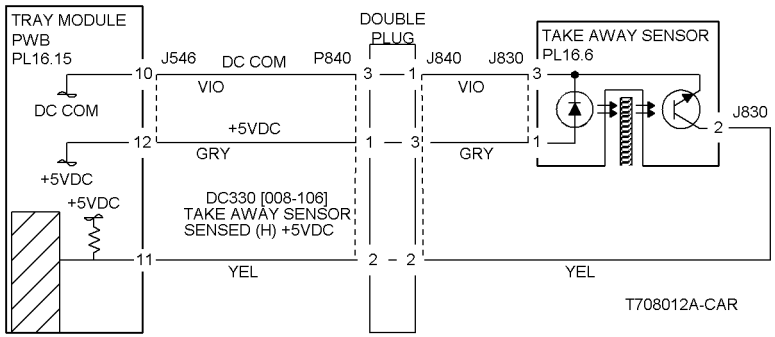


Figure 1 The Take Away Sensor

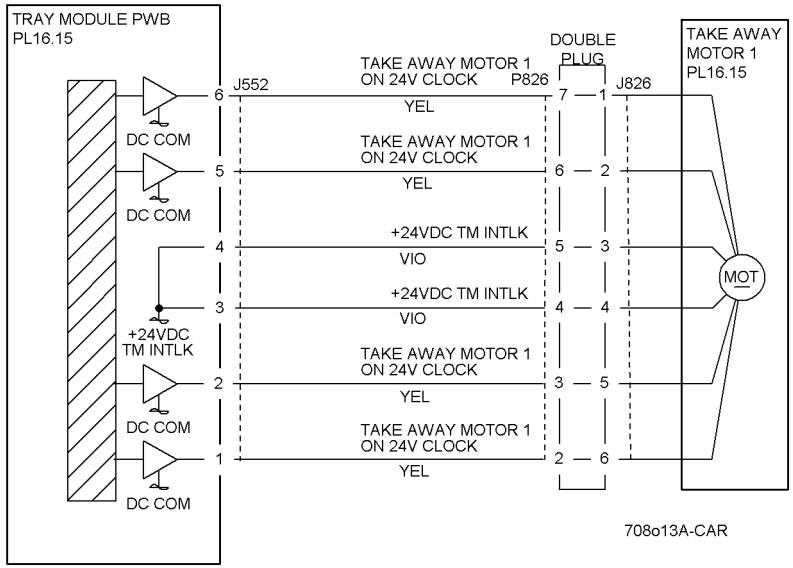


Figure 2 The Take Away Motor 1

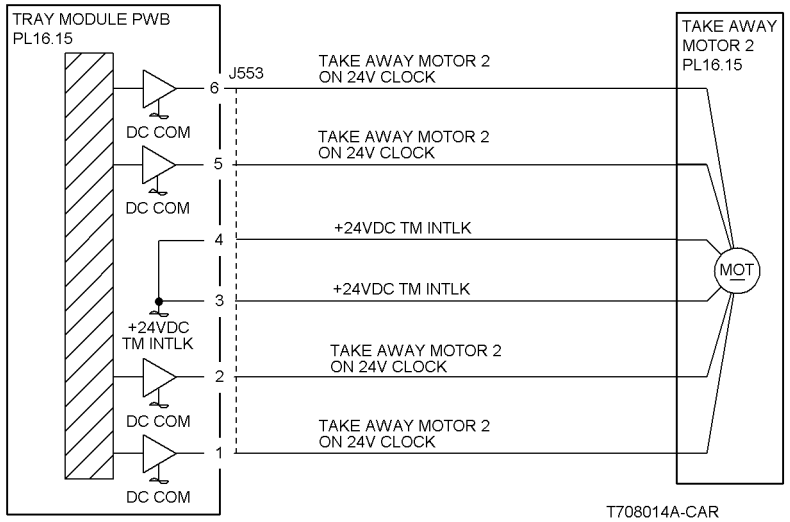


Figure 3 The Take Away Motor 2

8-164 POB Sensor

The POB Sensor did not detect paper after the Registration Clutch Energized.

Initial Actions

- Check condition and specification of the paper supply.
- Check for paper on the IBT.
- Check for obstructions in the paper feed path
- Clean the POB Sensor.
- Check the 2nd BTR transmission gears for breakage
- Clean the Registration Roll and check for damage or ware.

Procedure

NOTE: *Cheat the Left Cover Interlock.*

Enter dC330 [009-201] and press Start. Block and unblock the POB Sensor (PL 2.9). **The display changes state.**

Y N

Go to OF 99-1 Reflective Sensor RAP.

Enter dC330 [008-037] and press Start. **The Registration Clutch energizes (PL 2.6).**

Y N

Go to OF 99-4 Solenoid/Clutch Open RAP.

In sequence enter the following: dC330 [009-051] then dC330 [009-052] and press Start. **The 2BTR contacts and retracts.**

Y N

Go to RAP 9-342 for a contact failure or go to 9-343 for a retract failure.

Check the wires and connectors. If the check is OK, replace the ESS PWB (PL 13.1)

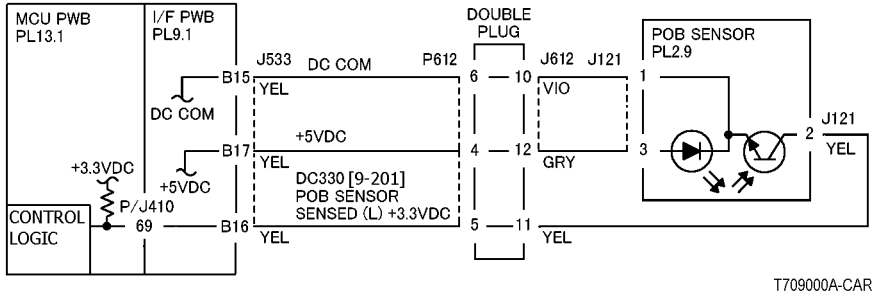


Figure 1 POB Sensor CD

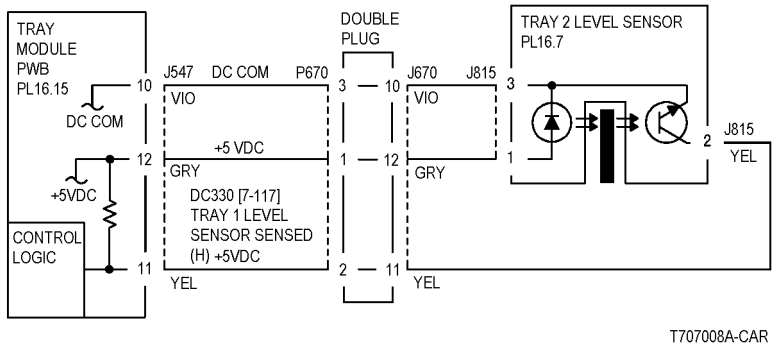


Figure 2 Registration Clutch CD

8-175 Registration Sensor On Jam Tray 5

The Registration Sensor does not detect paper fed from the MSI.

Initial Actions

- ï Check condition and specification of the paper supply.
- ï Check for obstructions in the paper feed path
- ï Clean the MSI Feed Roll and check for ware.
- ï Clean the Take Away Roll and check for ware.
- ï Check the drive transmissions for damage or ware.

Procedure

Enter dC330 [009-104] and press Start. Block and unblock the Registration Sensor (PL 2.6).

The display changes state.

Y N

Go to OF 99-1 Reflective Sensor RAP.

Enter dC330 [007-003] and press Start. **The Tray 5 Feed Solenoid energizes (PL 2.14).**

Y N

Go to OF 99-4 Solenoid/Clutch Open RAP.

Check the wires and connectors. If the check is OK, replace the ESS PWB (PL 13.1).

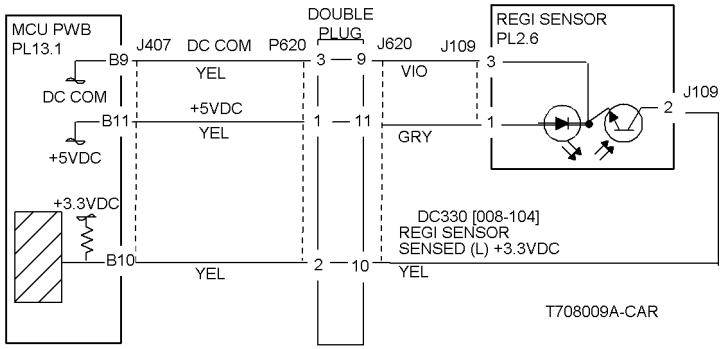


Figure 1 The Registration Sensor

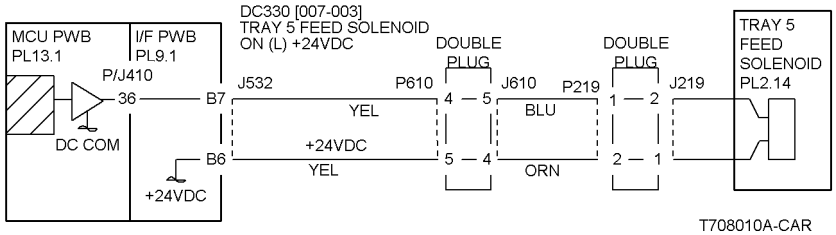


Figure 2 The Tray 5 Feed Solenoid

8-176 Registration Sensor On Jam Tray 1-4

The Registration Sensor does not detect paper fed from each Tray.

Initial Actions

- ï Check condition and specification of the paper supply.
- ï Check for obstructions in the paper feed path
- ï Clean the Take Away Roll and check for ware.
- ï Check the drive transmissions for damage or ware.

Procedure

Enter dC330 [008-104] and press Start. Block and unblock the Registration Sensor. **The display changes state.**

Y N

Go to OF 99-1 Reflective Sensor RAP.

Enter dC330 [008-038] and press Start. **The Take Away Clutch energizes (PL 1.2).**

Y N

Go to OF 99-4 Solenoid/Clutch Open RAP.

Check the wires and connectors. If the check is OK, replace the ESS PWB (PL 13.1).

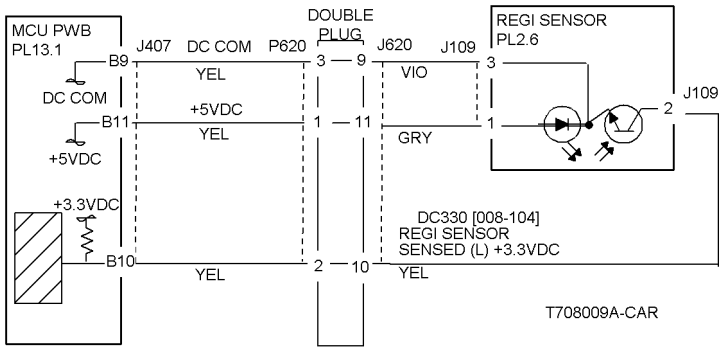


Figure 1 The Registration Sensor

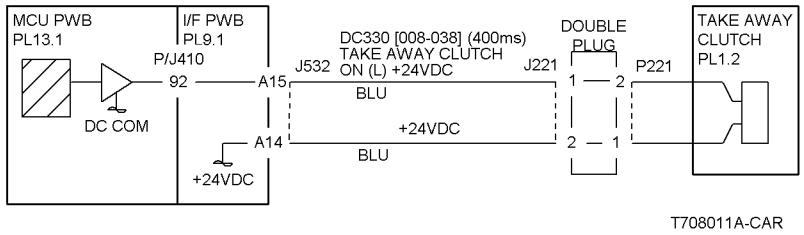


Figure 2 The Take Away Clutch

8-180 Registration Sensor On Duplex

The Registration Sensor does not detect paper after a duplex feed.

Initial Actions

- Check condition and specification of the paper supply.
- Check for obstructions in the paper feed path.
- Clean the Exit Roll, Transport Roll, Wait Roll and check for ware.
- Check the drive transmissions for damage or ware.

Procedure

Enter dC330 [008-104] and press Start. Block and unblock the Registration Sensor (PL 2.6). **The display changes state.**

Y N

Go to OF 99-1 Reflective Sensor RAP.

Enter dC330 [008-112] and press Start. **The Duplex Motor energizes (PL 12.2).**

Y N

Go to OF 99-6 Motor Open RAP.

Enter dC330 [008-043] and press Start. **The Inverter Reverse Clutch energizes (PL 11.2).**

Y N

Go to OF 99-4 Solenoid/Clutch Open RAP.

A

Enter dC330 [008-046] and press Start. **The Duplex Gate Solenoid energizes (PL 11.2).**

Y N

Go to OF 99-4 Solenoid/Clutch Open RAP.

Check the wires and connectors. If the check is OK, replace the Duplex PWB (PL 12.2).

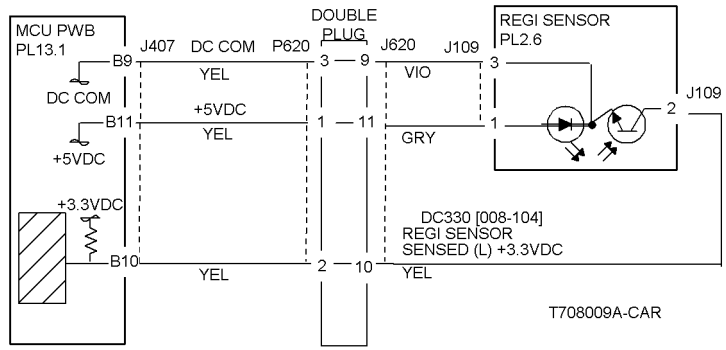


Figure 1 The Registration Sensor

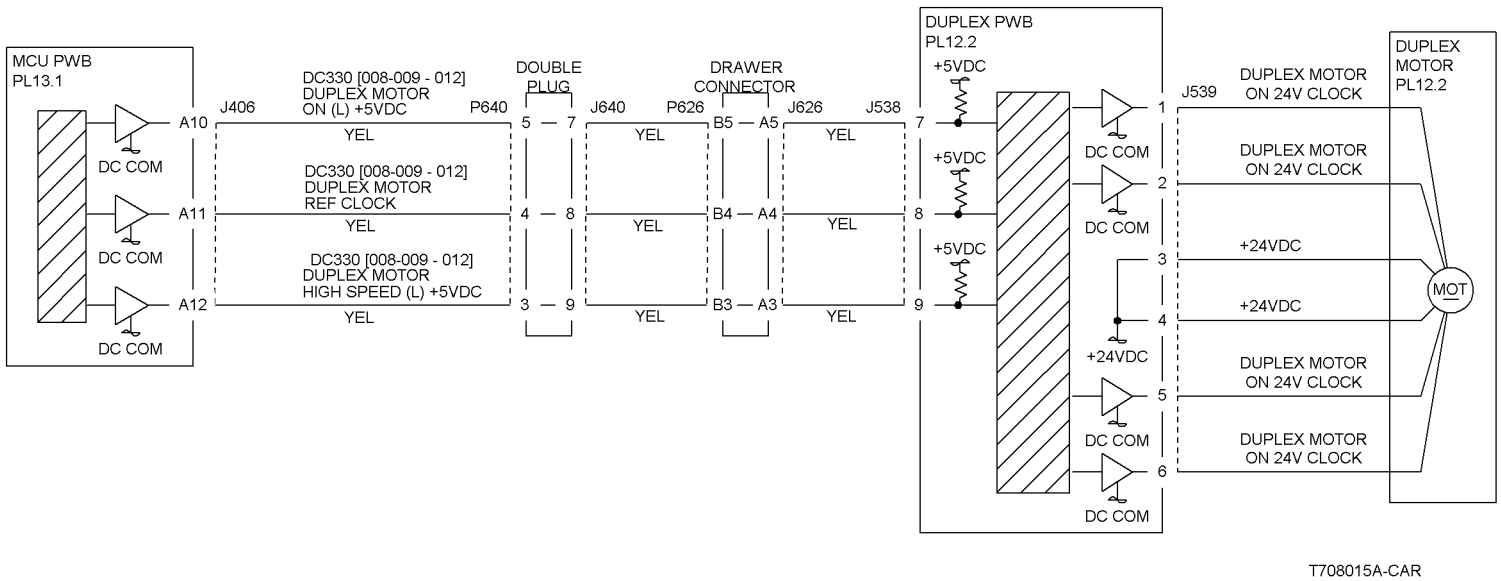


Figure 2 The Duplex Motor

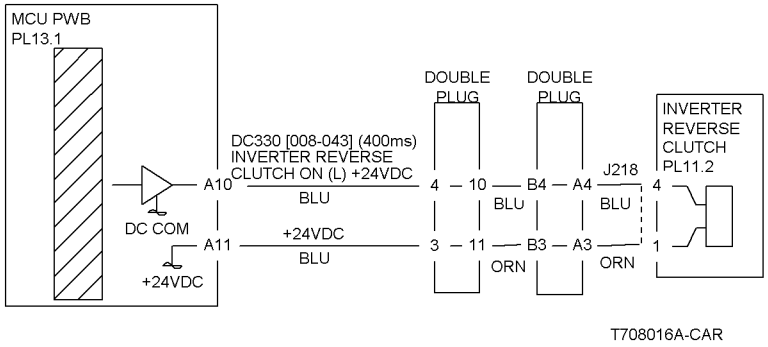


Figure 3 The Inverter Reverse Clutch

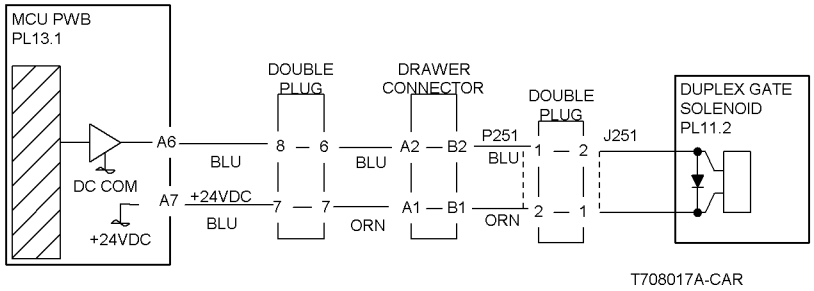


Figure 4 The Duplex Gate Solenoid

8-181 Registration Sensor On Wait Sensor

The Registration Sensor does not detect paper after the Duplex Wait Sensor was energized.

Initial Actions

- Check condition and specification of the paper supply.
- Check for obstructions in the paper feed path.
- Clean the Take Away Roll and check for ware.
- Check the drive transmissions for damage or ware.

Procedure

Enter dC330 [008-104] and press Start. Block and unblock the Registration Sensor (PL 2.6).
The display changes state.

Y **N**

Go to OF 99-1 Reflective Sensor RAP.

Enter dC330 [009-105] and press Start. Block and unblock the Duplex Wait Sensor (PL 12.2).
The display changes state.

Y **N**

Go to OF 99-2 Transmissive Sensor RAP.

Enter dC330 [008-112] and press Start. **The Duplex Motor energizes (PL 12.2).**

Y **N**

Go to the Motor Does Not Energize Failure RAP.

Check the wires and connectors. If the check is OK, replace the Duplex PWB(PL 12.2).

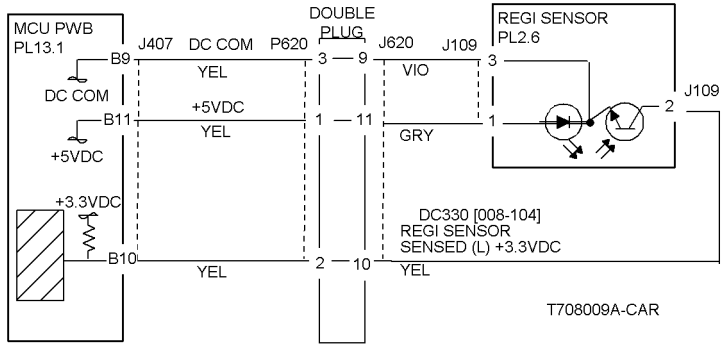


Figure 1 The Registration Sensor

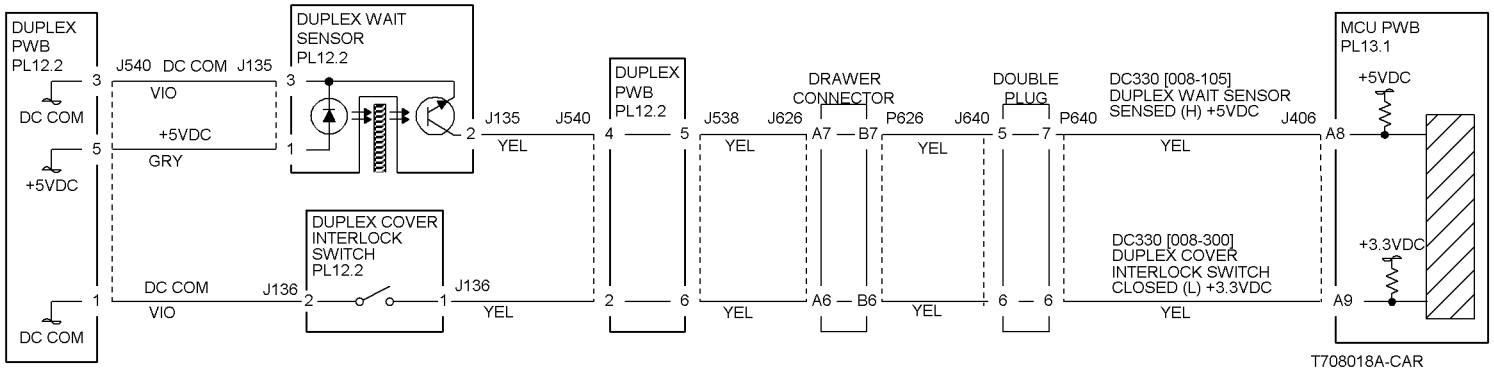


Figure 2 The Duplex Wait Sensor

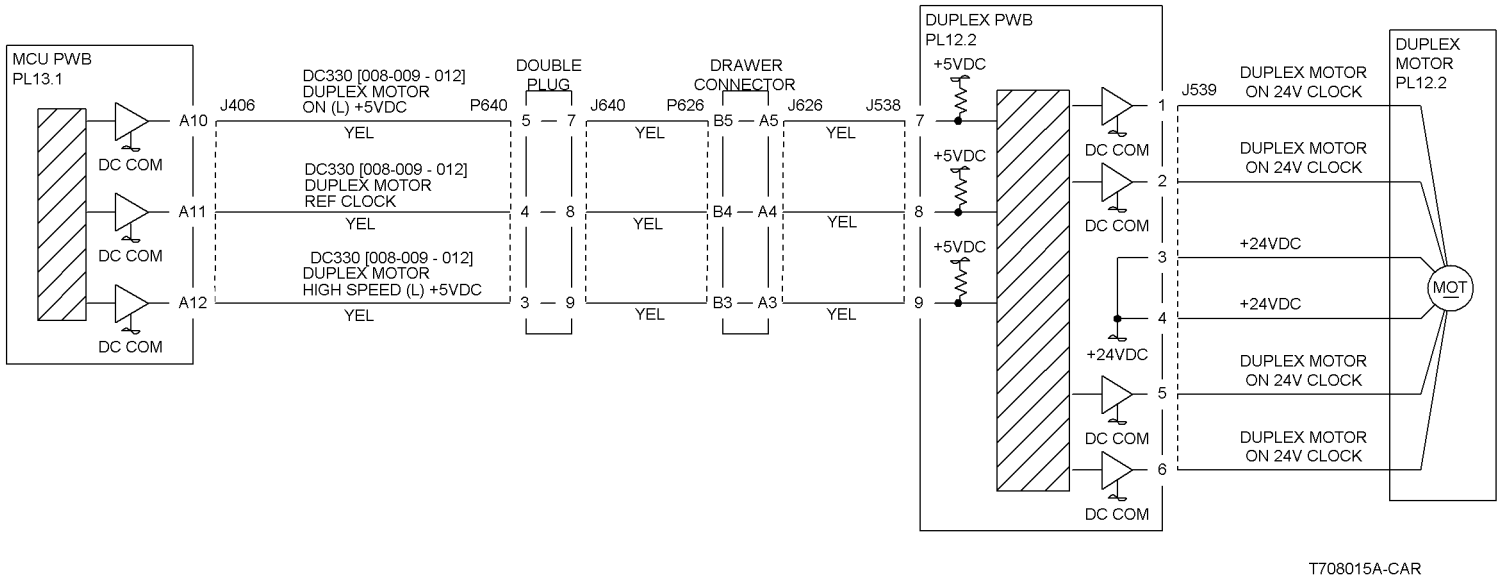


Figure 3 The Duplex Motor

8-184 Registration Sensor Off

The Fuser Exit Switch did not detect paper after the Registration Clutch was energized.

Initial Actions

- Check condition and specification of the paper supply.
- Check for obstructions in the paper feed path.
- Check the Fuser Belt and the Heat Roll for damage or ware.
- Clean the Registration Roll and check for ware or damage.
- Check the drive transmissions for damage or ware.

Procedure

Enter dC330 [010-101] and press Start. Actuate and de-actuate the Fuser Exit Switch PL 2.8.

The display changes state.

Y N

Go to the of 99-3 Switch RAP.

Enter dC330 [008-037] and press Start. **The Registration Clutch energizes (PL 2.6).**

Y N

Go to OF 99-4 Solenoid/Clutch Open RAP.

In sequence enter the following: dC330 [009-051] then dC330 [009-052] and press Start. **The 2nd BTR Retract Motor energizes (PL 2.9).**

Y N

Go to RAP 9-342 for a contact failure or go to 9-343 for a retract failure.

Check the wires and connectors. If the check is OK, replace the Duplex PWB (PL 12.2).

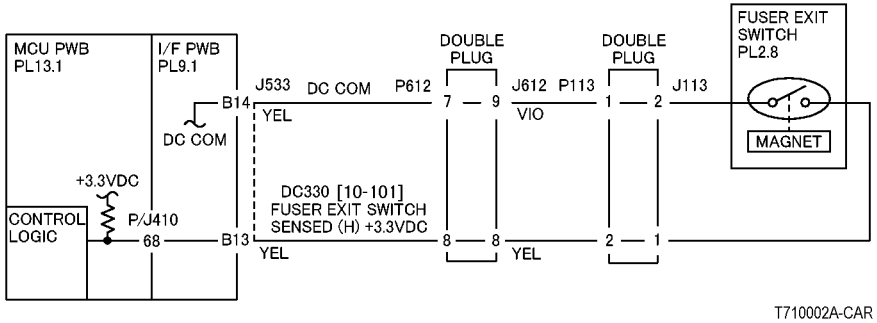


Figure 1 Fuser Exit Switch CD

8-620 Regicon Temp Sensor

Environment Sensor not in range.

Procedure

NOTE: *Machine operation continues. Status Code not displayed on UI. Status Code logged in History.*

Turn the power off. Disconnect the Environment Sensor (PL 1.3).
Measure the resistance between the following:

- I/F PWB P/J536-B4 and P/J255-1
- I/F PWB P/J536-B2 and P/J255-3
- I/F PWB P/J536-B1 and P/J255-4

The Resistance is 1 ohm or less.

Y N

Check the wires and connectors. If the check is OK, replace the replace MCU PWB (PL 13.1).

Measure resistance between P/J255-3 and P/J255-4 on Environment Sensor. **6k ohms to 20k ohms is measured.**

Y N

Replace Environment Sensor (PL 1.3).

Replace MCU PWB (PL 13.1). If problem continues, replace ESS PWB (PL 13.1).

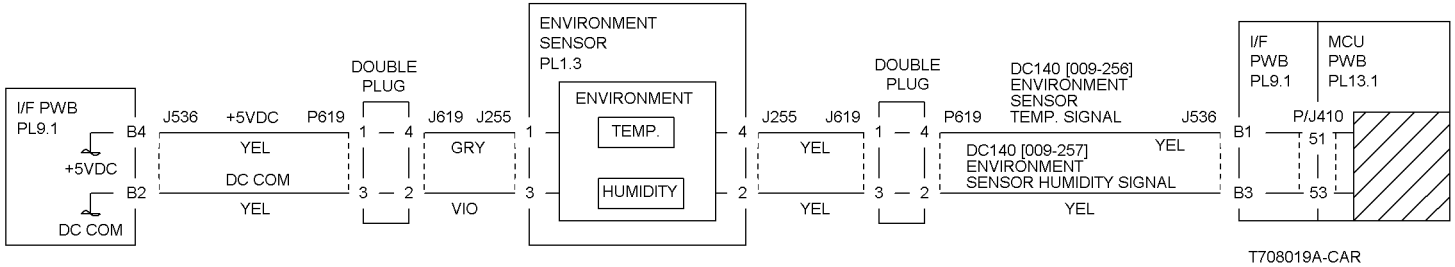


Figure 1 The Environmental Sensor

8-622 Regicon Data Overflow (A1 Patch X)

At A1 patch detection, the XSO correction setting value for either Y, M, C, or K exceeds the setting range (NVM value 0 to 472).

NOTE: *Status Code not displayed on UI. Machine operation continues.*

Procedure

Check the IBT Belt and Drum for a scratch or contamination. **The check is OK.**

Y **N**

Replace as required.

Perform DC685 Color Registration (ADJ 9.6).

8-623 Regicon Data Overflow (A2 Patch Y)

At A2 patch detection, the YSO correction setting value of either Y, M, C, or K exceeds the setting range (NVM value 0 to 474).

NOTE: *Status Code not displayed on UI. Machine operation continues.*

Procedure

Check the IBT Belt and Drum for a scratch or contamination. **The check is OK.**

Y **N**

Replace as required.

Perform DC685 Color Registration (ADJ 9.6).

8-624 Regicon Data Overflow (Patch Magnification)

MAG Adjusted Set Point of operation results for each of Y,M,C exceeded the set range (NVM value: 0~1432).

NOTE: *Status Code not displayed on UI. Machine operation continues.*

Procedure

Check the IBT Belt and Drum for a scratch or contamination. **The check is OK.**

Y **N**

Replace as required.

Go to ADJ 9.6 Color Registration dC685.

8-625 Regicon Sample Block (A1 Patch-rear)

At A1 (IN) patch detection, the number of the sample blocks does not reach the specified number.

NOTE: *Status Code not displayed on UI. Machine operation continues.*

Procedure

Check the IBT Belt and Drum for a scratch or contamination. **The check is OK.**

Y **N**

Replace as required.

Perform DC685 Color Registration (ADJ 9.6).

8-626 Regicon Sample Block (A1 Patch-front)

At A1 (OUT) patch detection, the number of the sample blocks does not reach the specified number.

NOTE: *Status Code not displayed on UI. Machine operation continues.*

Procedure

Check the IBT Belt and Drum for a scratch or contamination. **The check is OK.**

Y **N**

Replace as required.

Perform DC685 Color Registration (ADJ 9.6).

8-627 Regicon Sample Lateral (A1 Patch-rear)

At A1 (IN) patch detection, the Fast Scan scan position of CYAN color that is the standard for the rest is incorrect. (Against the MOB SENSOR, the center position of the CYAN pattern is shifted by ±500μm or more.)

NOTE: *Status Code not displayed on UI. Machine operation continues.*

Procedure

Check the IBT Belt and Drum for a scratch or contamination. **The check is OK.**

Y **N**

Replace as required.

Perform DC685 Color Registration (ADJ 9.6).

8-628 Regicon Sample Lateral (A1 Patch-front)

At A1 (OUT) patch detection, the scan position of CYAN color that is the standard for the rest is incorrect. (Against the MOB SENSOR, the center position of the CYAN pattern is shifted by ±500µm or more.?

NOTE: *Status Code not displayed on UI. Machine operation continues.*

Procedure

Check the IBT Belt and Drum for a scratch or contamination. **The check is OK.**

Y **N**

Replace as required.

Perform DC685 Color Registration (ADJ 9.6).

8-629 Regicon Skew (Patch Y)

During A1 Patch detection, skew deviation for Y exceeded tolerance.

NOTE: *Machine operation continues. Status Code not displayed on UI. Status Code logged in History.*

Initial Actions

Clean MOB Sensor.

Procedure

Check the IBT Belt and Drum for a scratch or contamination. **The check is OK.**

Y **N**

Replace as required.

Perform DC685 Color Registration (ADJ 9.6).

8-630 Regicon Skew (Patch M)

During A1 Patch detection, skew deviation for M exceeded tolerance.

NOTE: *Machine operation continues. Status Code not displayed on UI. Status Code logged in History.*

Initial Actions

Clean MOB Sensor.

Procedure

Check the IBT Belt and Drum for a scratch or contamination. **The check is OK.**

Y **N**

Replace as required.

Perform DC685 Color Registration (ADJ 9.6).

8-631 Regicon Skew (Patch K)

During A1 Patch detection, skew deviation for K exceeded tolerance.

NOTE: *Machine operation continues. Status Code not displayed on UI. Status Code logged in History.*

Initial Actions

Clean MOB Sensor.

Procedure

Check the IBT Belt and Drum for a scratch or contamination. **The check is OK.**

Y **N**

Replace as required.

Perform DC685 Color Registration (ADJ 9.6).

8-900 Static Jam

When the machine power is turned off then on before a paper path fault is cleared, an 8-900 fault will be displayed. A voltage drop or interruption can also cause this fault.

Initial Actions

- Check the entire paper path for paper or obstructions.
- Clean all the paper path sensors.
- Check the Fault History for the last paper path fault. Go to that paper path fault RAP.

Procedure

In sequence, enter the following dC330 codes:
Block and unblock each sensor

- 8-100 Tray 1 Mis-feed, (7-105).
- 8-106 Tray 2 Mis-feed, (7-110).
- 8-102 Tray 3 Mis-feed, (7-115).
- 8-103 Tray 4 Mis-feed, (7-119).
- 8-104 Registration Sensor, (8-175).
- 9-201 POB On Jam, (8-164)

The display for each code changes.

Y **N**

Go to the appropriate paper path fault RAP.

Check the machine input voltage, if the problem continues, replace the ESS PWB (PL 13.1).

9-342 2nd BTR Contact

The 2nd BTR did not reach the contact position.

Initial Actions

- Clean the 2nd BTR Retract Sensor and check for damage.
- Check the 2nd BTR transmission gears for breakage.

Procedure

In sequence, enter the following: dC330 [009-051] then dC330 [009-052]. **The 2nd BTR contacts and retracts.**

Y **N**

Go to OF 99-6 Motor Open RAP.

Go to OF 99-2 Transmissive Sensor RAP.

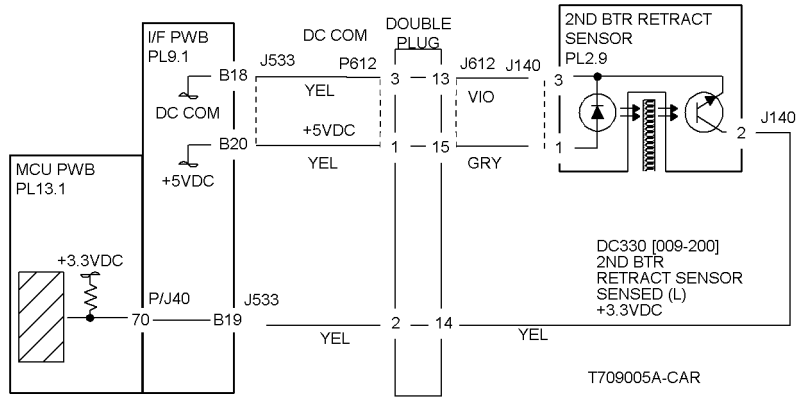


Figure 1 2ND BTR Retract Sensor

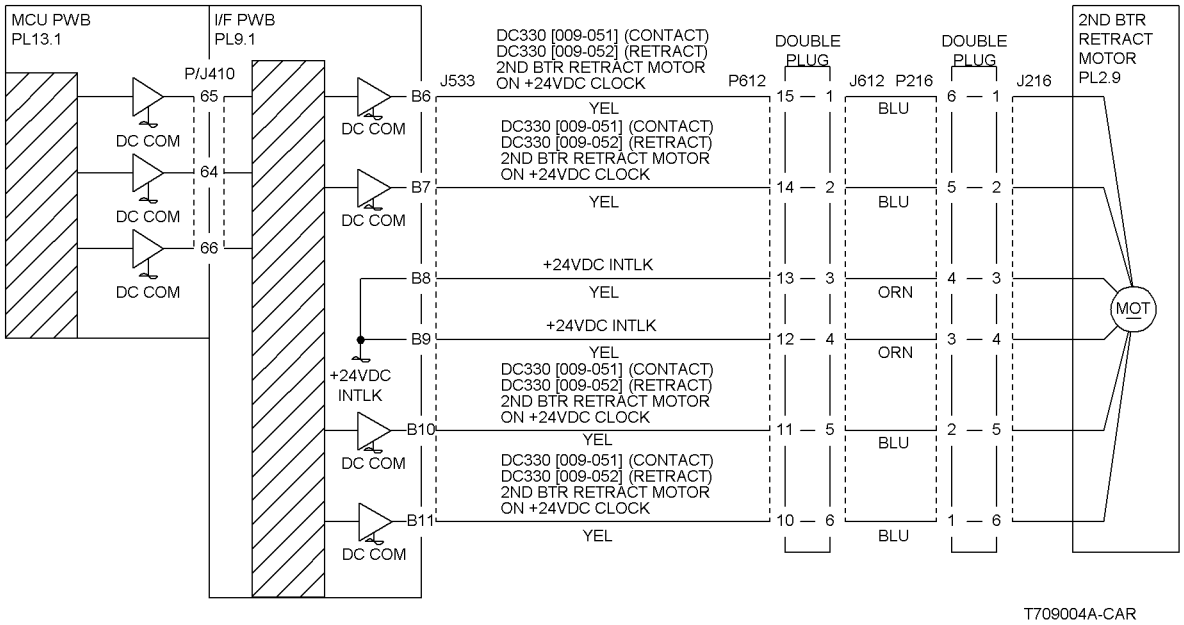


Figure 2 2ND BTR Retract Motor

9-343 2nd BTR Retract

The 2nd BTR did not reach the retract position.

Initial Actions

- Clean the 2nd BTR Retract Sensor and check for damage.
- Check the 2nd BTR transmission gears for breakage.

Procedure

In sequence, enter the following: dC330 [009-051] then dC330 [009-052]. **The 2BTR contacts and retracts.**

Y **N**

Go to OF 99-6 Motor Open RAP.

Go to OF 99-2 Transmissive Sensor RAP.

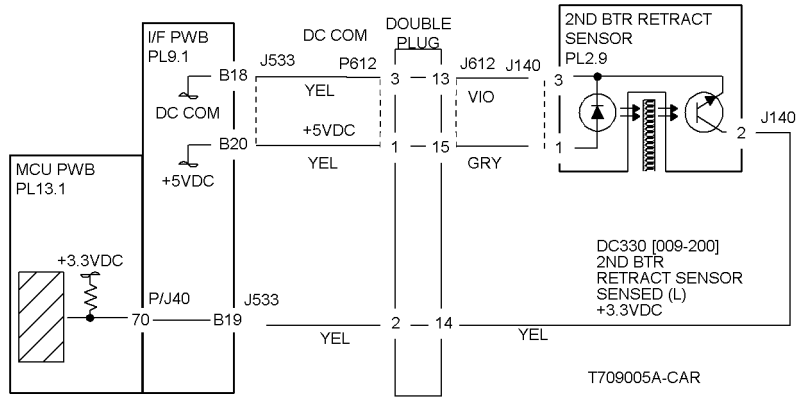


Figure 1 2ND BTR Retract Sensor

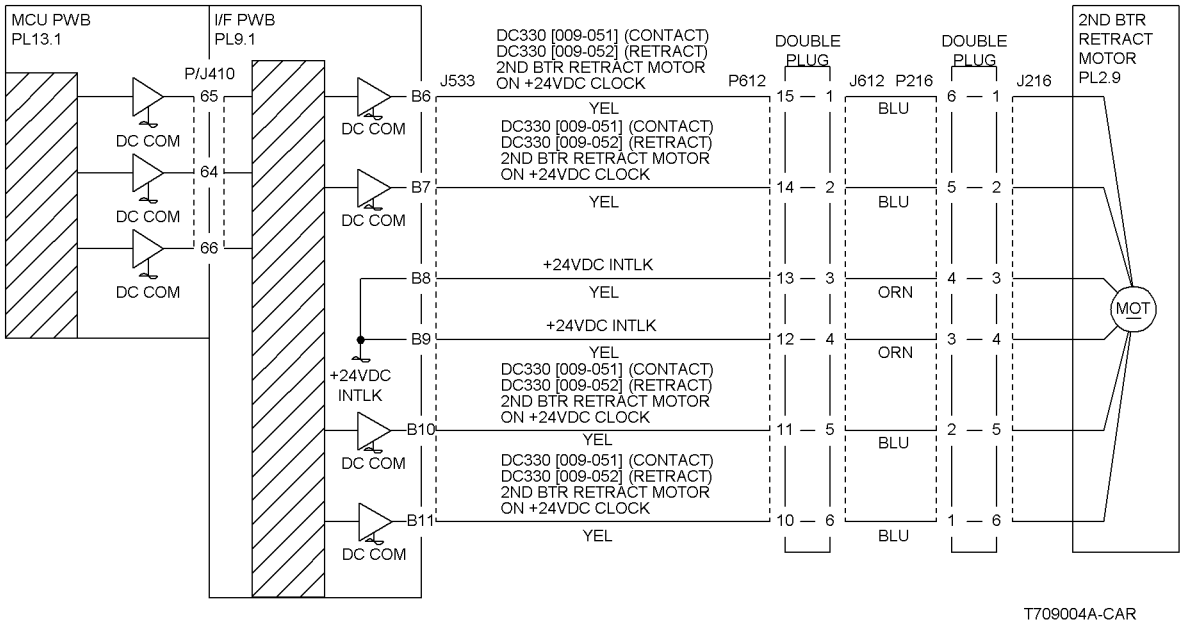


Figure 2 2ND BTR Retract Motor

9-348 1st BTR Contact

The 1st BTR did not reach the contact position.

Initial Actions

- Clean the 1st BTR Retract Sensor and check for damage
- Check the 1st BTR transmission gears for breakage

Procedure

In sequence, enter the following: dC330 [009-054] then dC330 [009-055]. **The 1st BTR contacts and retracts.**

Y **N**

Go to OF 99-6 Motor Open RAP.

Go to OF 99-2 Transmissive Sensor RAP.

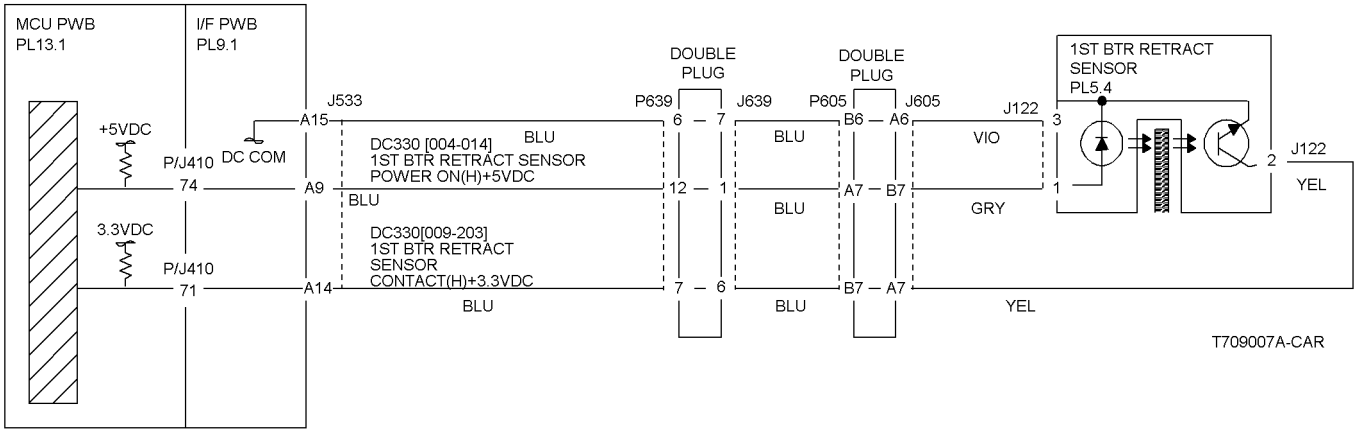


Figure 1 1ST BTR Retract Sensor

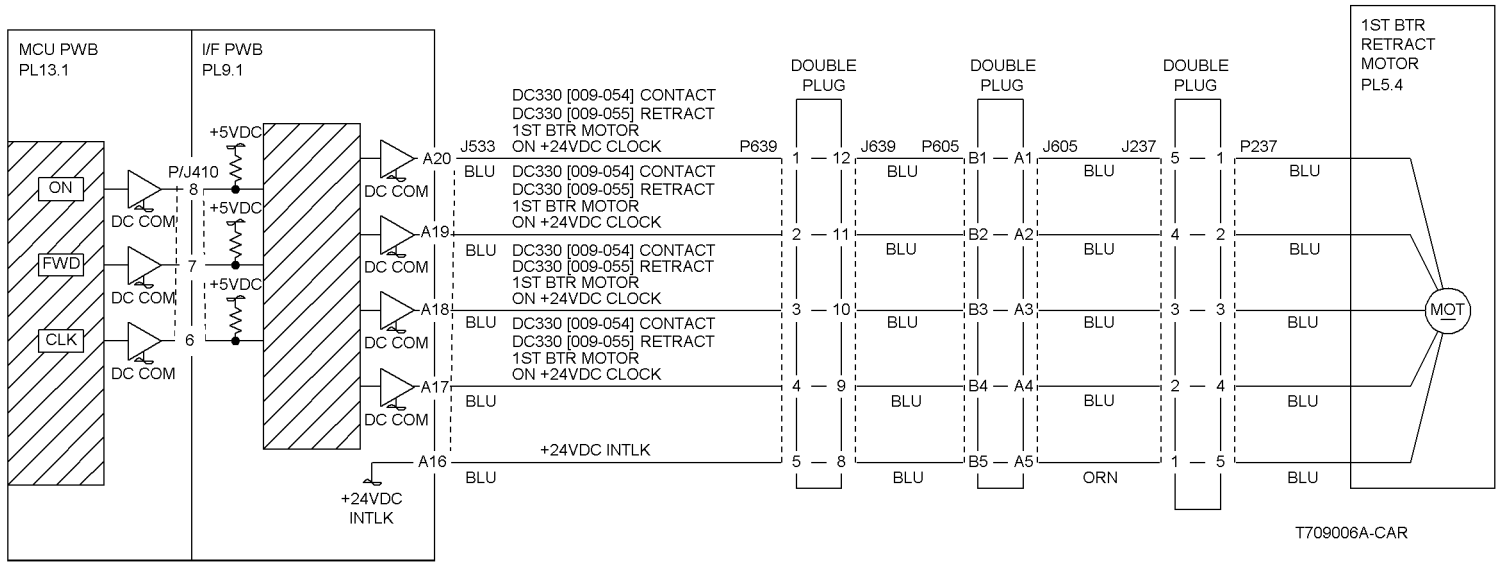


Figure 2 1ST BTR Retract Motor

9-349 1st BTR Retract

The 1st BTR did not reach the retract position.

Initial Actions

- Clean the 1st BTR Retract Sensor and check for damage
- Check the 1st BTR transmission gears for breakage

Procedure

In sequence, enter the following: dC330 [009-054] then dC330 [009-055]. **The 1st BTR contacts and retracts.**

Y **N**

Go to OF 99-6 Motor Open RAP.

Go to OF 99-2 Transmissive Sensor RAP.

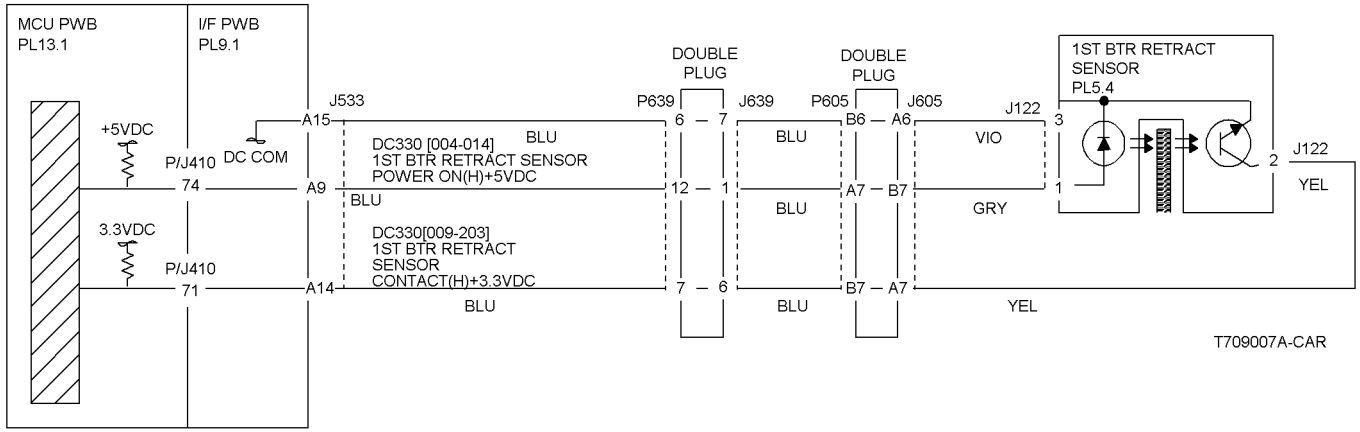


Figure 1 1ST BTR Retract Sensor

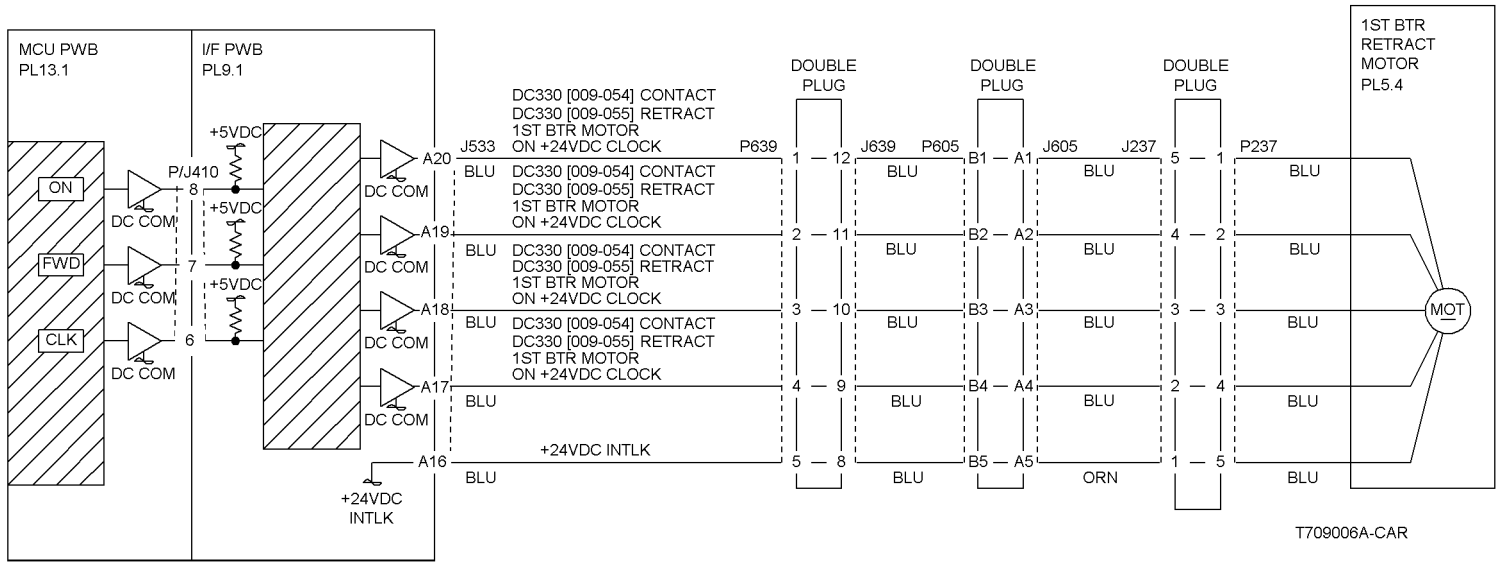


Figure 2 1ST BTR Retract Motor

9-350 IBT Home Sensor

The IBT Home Sensor detected the IBT position strip before the IBT Belt made a complete revolution.

Initial Actions

- Clean the IBT Home Sensor and check for damage
- Check the IBT drives for damage.

Procedure

Enter dC330 [004-002]. **The IBT Motor energizes.**

Y **N**

Go to OF 99-6 Motor Open RAP.

A

Enter dC330 [004-414] then enter dC330 [004-002]. **The display changes state.**

Y **N**

Go to OF 99-2 Transmissive Sensor RAP.

Enter dc330 [004-100] then enter dC330 [004-002]. **The display changes state.**

Y **N**

Check the wires and connectors. If the check is OK, replace the IBT Home Sensor (PL 5.4).

Replace the I/F PWB (PL 9.1). If the problem continues, replace the MCU PWB (PL 13.1).

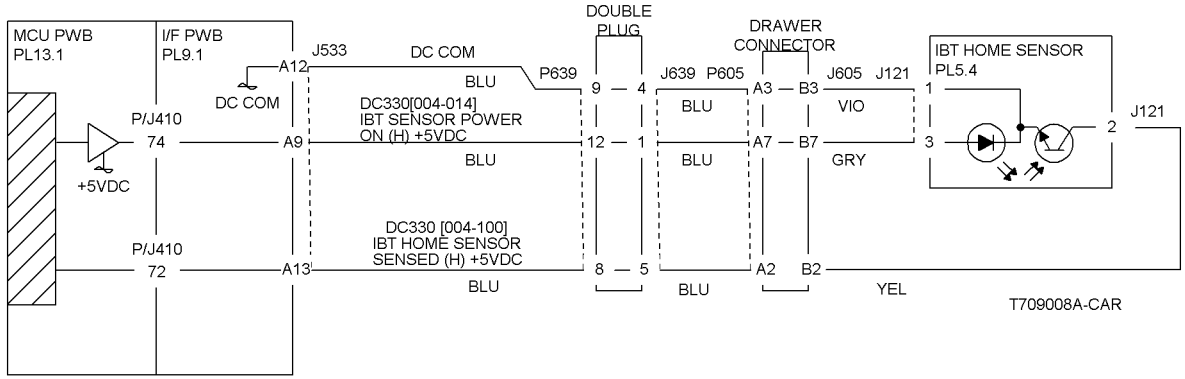


Figure 1 IBT Home Sensor

9-351 Drive Logic

The IBT Edge Sensor detected that the IBT Belt is not tracking correctly.

Initial Actions

- Check the IBT Edge Sensor for damage. Ensure that the actuator is touching the edge of the belt.
- Check the IBT steering drives for damage.

Procedure

Switch on the power. **There is +1VDC to +3VDC from P/J 533-A11 to GND.**

Y N

There is +5VDC measured between P/J533-A10 and P/J533-A9 on the I/F PWB.

Y N

Replace the MCU PWB (PL 13.1).

There is +5VDC from P/J 533-A11 on the I/F PWB to GND.

Y N

Check the connectors and wires. If the check is OK, replace the IBT Edge Sensor (PL 5.4). If the problem continues, replace the MCU PWB (PL 13.1).

Replace the IBT Sensor (PL 5.4).

Check the wires and connectors. If the check is OK, replace the I/F PWB (PL 9.1). If the problem continues, replace the MCU PWB (PL 13.1).

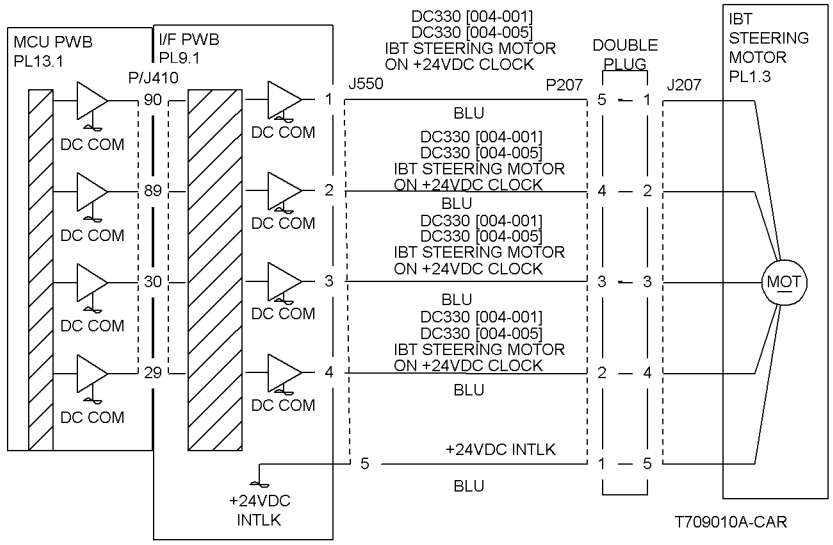


Figure 1 IBT Steering Motor

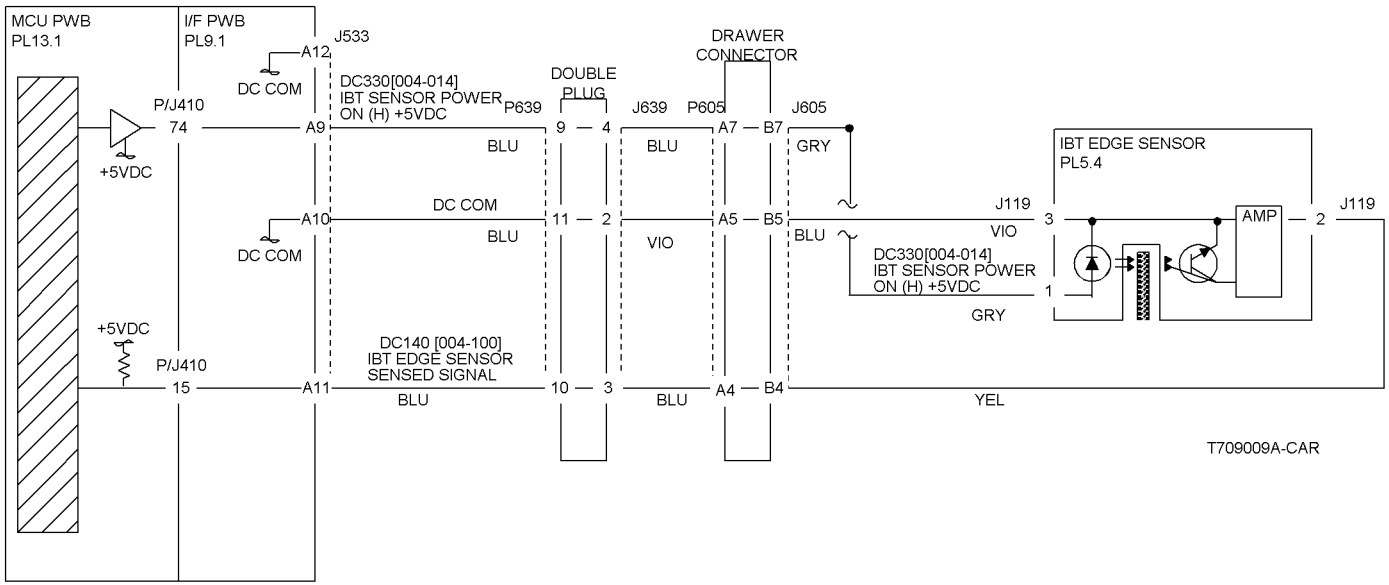


Figure 2 IBT Edge Sensor

9-358 Full Toner Sensor

The Full Toner Sensor detects a full toner condition.

Initial Actions

- Ensure that the Waste Toner Cartridge is not full.
- Check the sensor for toner contamination and foreign substances.

Procedure

Remove the Full Toner Sensor from the bottle. Enter dC330 [009-150]. Block and unblock the Full Toner Sensor (PL 4.1). **The display changes state.**

Y N

Go to OF 99-2 Transmissive Sensor RAP.

Replace the MCU PWB. (PL 13.1)

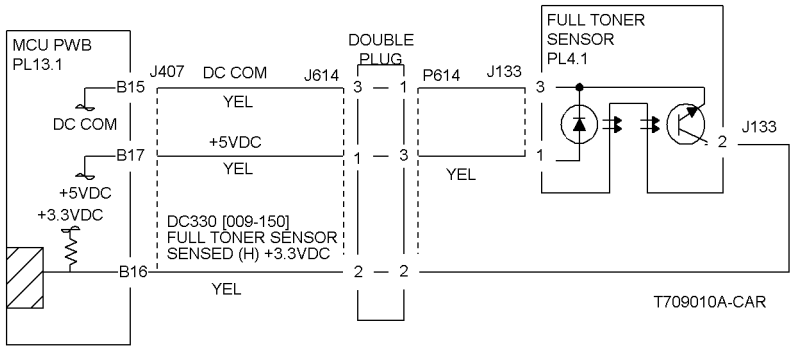


Figure 1 The Full Toner Sensor

9-360 Yellow Drum Cartridge Communication

A communication failure with the Yellow Drum Cartridge was detected.

Initial Actions

Check that the Yellow Drum Cartridge is seated correctly.

Procedure

Enter dC330 [009-151 Drum (Y) Data]. **The display is H.**

Y N

Check the wires and connectors. If the check is OK, replace the Yellow Drum Cartridge (refer to Section 6, Machine Consumables).

Replace the MCU PWB (PL 13.1).

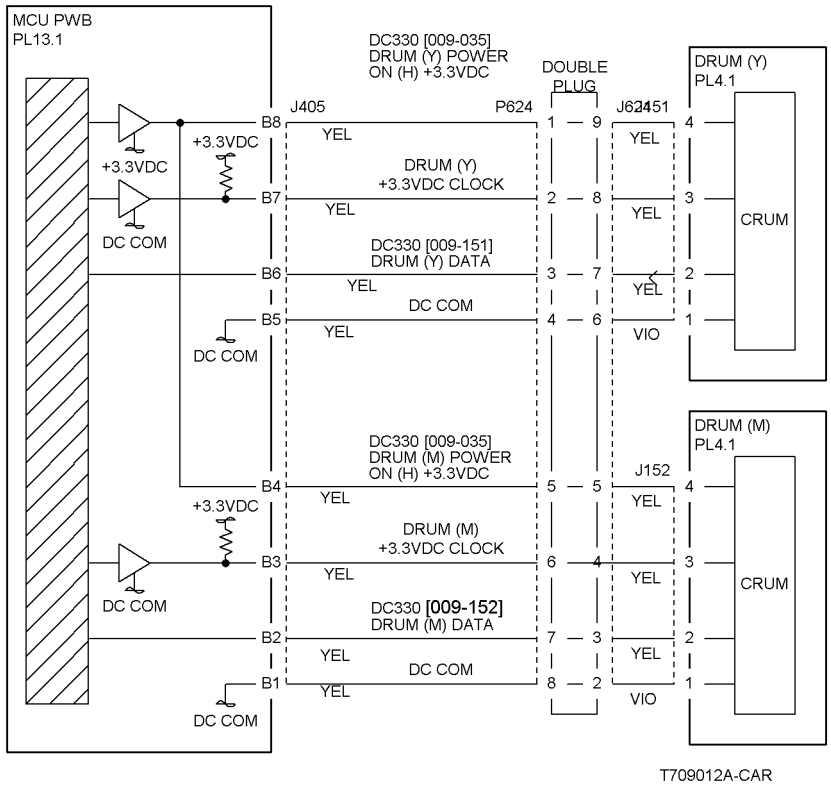


Figure 1 Drum Y Communication

9-361 Magenta Drum Cartridge Communication

A communication failure with Magenta Drum Cartridge was detected.

Initial Actions

Check that the Magenta Drum Cartridge is seated correctly.

Procedure

Enter dC330 [009-152, Drum (M) Data]. **The display is H.**

Y **N**

Check the wires and connectors. If the check is OK, replace the Magenta Drum Cartridge (refer to Section 6, Machine Consumables).

Replace the MCU PWB. (PL 13.1).

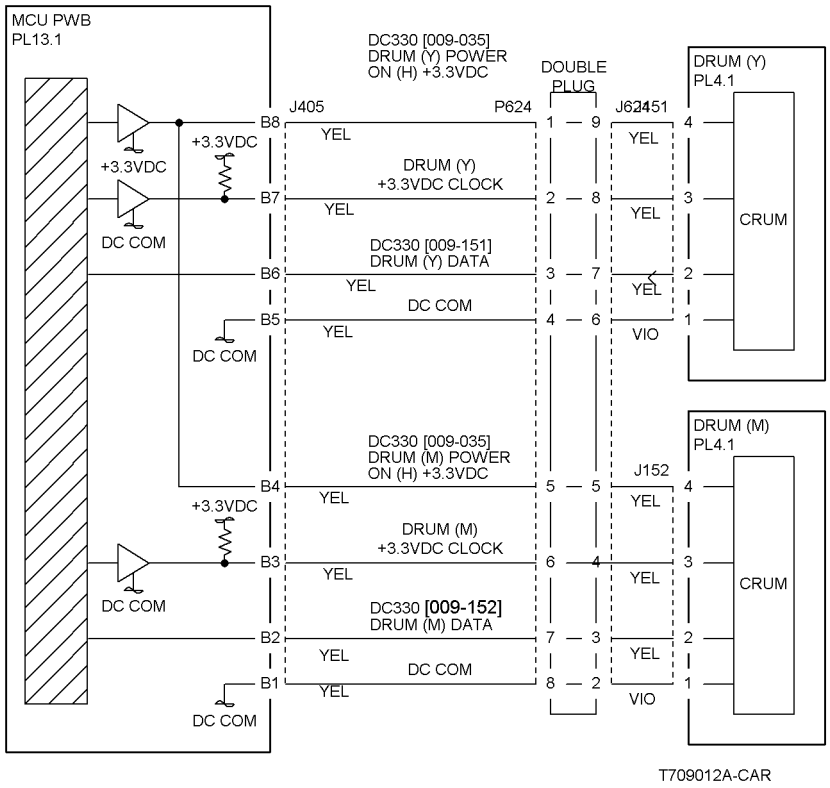


Figure 1 Drum M Communication

9-362 Cyan Drum Cartridge Communication

A communication failure with the Cyan Drum Cartridge was detected.

Initial Actions

Check that the Cyan Drum Cartridge is seated correctly.

Procedure

Enter dC330 [009-154, Drum (C) Data]. **The display is H.**

Y **N**

Check the wires and connectors. If the check is OK, replace the Cyan Drum Cartridge (refer to Section 6, Machine Consumables).

Replace the MCU PWB (PL 13.1).

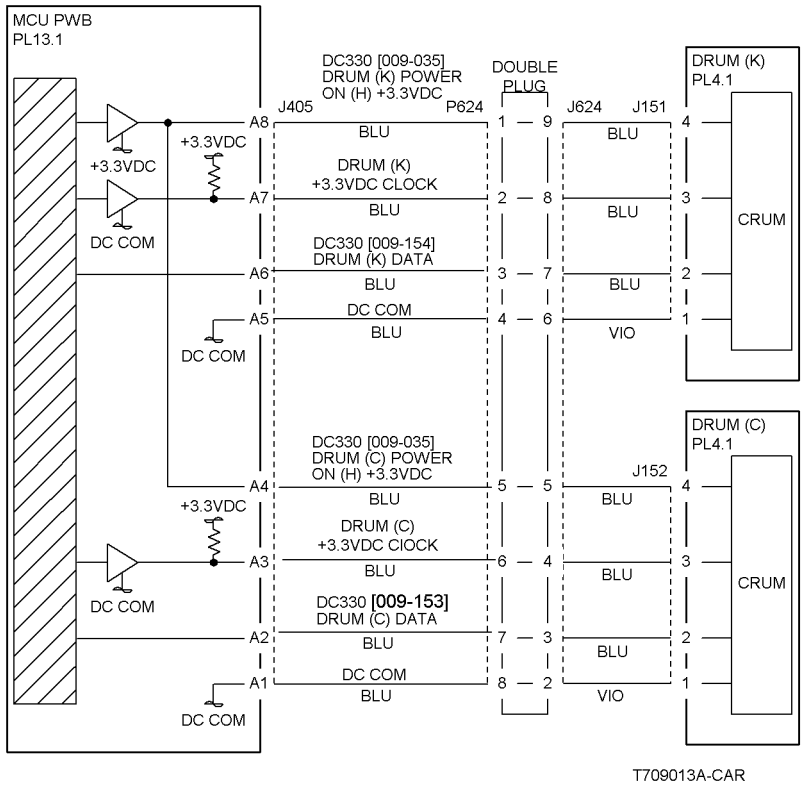


Figure 1 Drum C Communication

9-363 Black Drum Cartridge Communication

A communication failure with the Black Drum Cartridge was detected.

Initial Actions

Check that the Black Drum Cartridge is seated correctly.

Procedure

Enter dC330 [009-154, Drum (K) Data]. **The display is H.**

Y **N**

Check the wires and connectors. If the check is OK, replace the Black Drum Cartridge (refer to Section 6, Machine Consumables).

Replace the MCU PWB (PL 13.1).

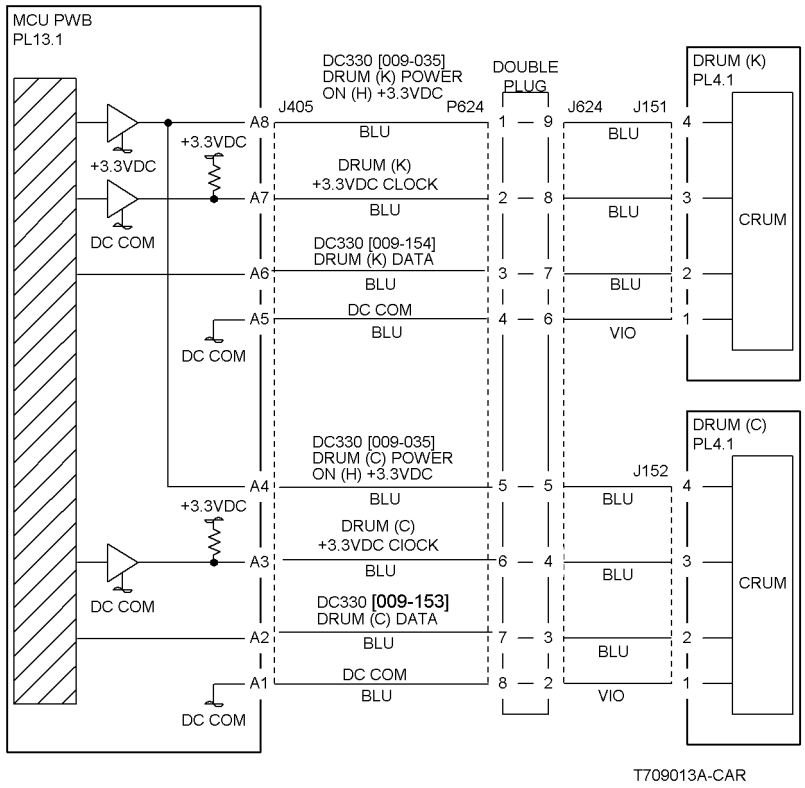


Figure 1 Drum K Communication

9-380 ATC Sensor (Y)

The ATC Sensor (Y) detects a low TC (toner concentration).

Initial Actions

- ï Check that Toner/Developer is present.
- ï Check the ATC Sensor (Y) for contamination. Ensure that the sensor is seated correctly.

Procedure

NOTE: *To clear this fault, enter dC131 and set the value of NVM location 752-110 to 0.*

Record the value in NVM location 752-324, then set the value to 1. Perform ADJ 9.3. After the measurement has completed, restore the value. **The ATC Sensor (Y) fail judgement is OK.**

Y **N**

Check the connector P/J 129. If the check is OK, replace the ATC Sensor (Y) (PL 6.2). If the problem continues, replace the MCU PWB (PL 13.1).

After checking that no failures are detected during normal operation, go to call close out.

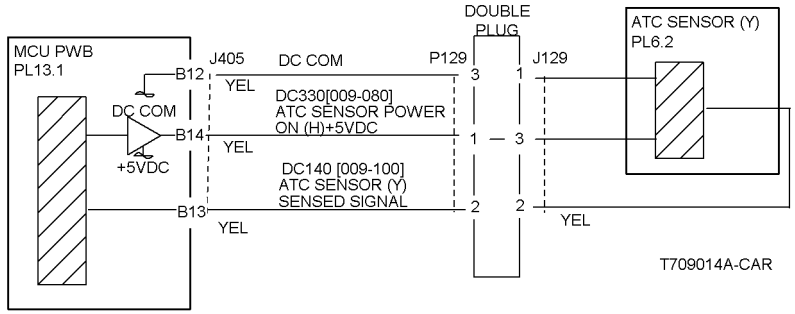


Figure 1 ATC Sensor CD

9-381 ATC Sensor (M)

The ATC Sensor (M) detects a low TC (toner concentration)

Initial Actions

- Check that Toner/Developer is present.
- Check the ATC Sensor (M) for contamination. Ensure that the sensor is seated correctly.

Procedure

NOTE: *To clear this fault, enter dC131 and set the value of NVM location 752-110 to 0.*

Record the value in NVM location 752-324, then set the value to 1. Perform ADJ 9.3. After the measurement has completed, restore the value. **The ATC Sensor (M) fail judgement is OK.**

Y **N**

Check the connector P/J130. If the check is OK, replace the ATC Sensor (M) (PL 6.2). If the problem continues, replace the MCU PWB (PL 13.1).

After checking that no failures are detected during normal operation, go to call close out.

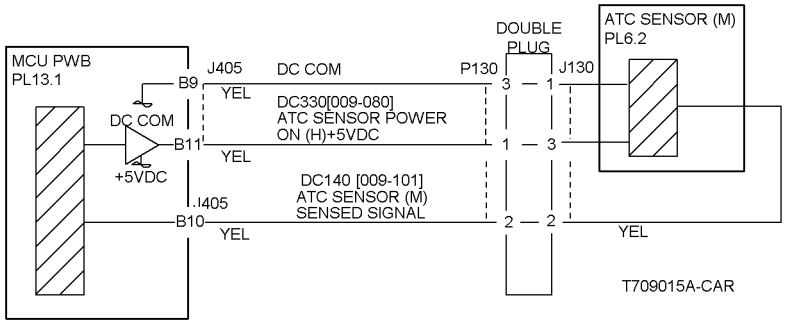


Figure 1 ATC Sensor M

9-382 ATC Sensor (C)

The ATC Sensor (C) detects a low TC (toner concentration)

Initial Actions

- Check that Toner/Developer is present.
- Check the ATC Sensor (C) for contamination. Ensure that the sensor is seated correctly.

Procedure

NOTE: *To clear this fault, enter dC131 and set the value of NVM location 752-110 to 0.*

Record the value in NVM location 752-324, then set the value to 1. Perform ADJ 9.3. After the measurement has completed, restore the value. **The ATC Sensor (C) fail judgement is OK.**

Y **N**

Check the connector P/J131. If the check is OK, replace the ATC Sensor (C) (PL 6.2). If the problem continues, replace the MCU PWB (PL 13.1).

After checking that no failures are detected during normal operation, go to call close out.

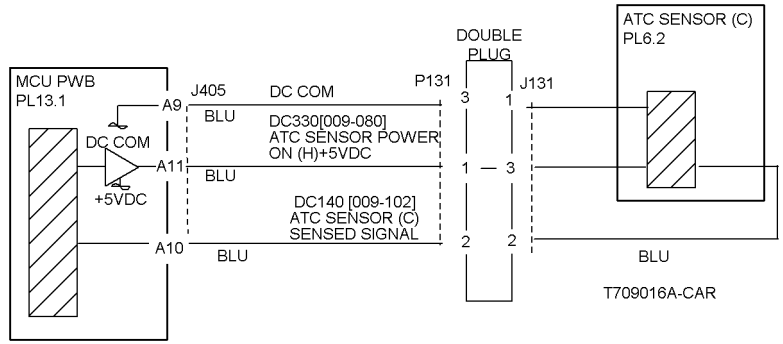


Figure 1 ATC Sensor C

9-383 ATC Sensor (K)

The ATC Sensor (K) detects an insufficient amount of developer material

Initial Actions

- Check that Toner/Developer is present.
- Check the ATC Sensor (K) for contamination. Ensure that the sensor is seated correctly.

Procedure

NOTE: *To clear this fault, enter dC131 and set the value of NVM location 752-110 to 0.*

Record the value in NVM location 752-324, then set the value to 1. Perform ADJ 9.3. After the measurement has completed, restore the value. **The ATC Sensor (K) Fail judgement is OK.**

Y N

Check the connector P/J132 If the check is OK, replace the ATC Sensor (K) (PL 6.2). If the problem continues, replace the MCU PWB (PL 13.1).

After checking that no failures are detected during normal operation, go to call close out.

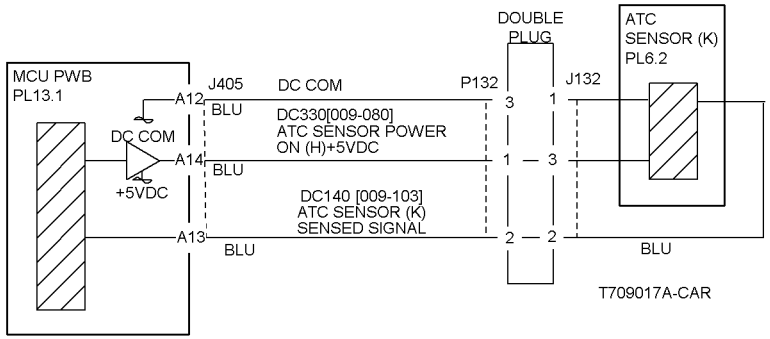


Figure 1 ATC Sensor K

9-390 New Toner Cartridge (K)

The New Cartridge Detect Switch (K) was not engaged to reset the Accumulative Dispense time NVM value to 0 when a new cartridge was installed.

Initial Actions

- Re-install the Toner Cartridge ensuring that the Dispense Motor and the Toner Cartridge is engaged.
- Check that the New/Old Detection Switch (metal part) at the rear of the Toner Cartridge is raised. If the New/Old Detection Switch is not raised, lift it up, then set NVM location 752-686 (Accumulative Dispense Time Value K) to 0.
- Check that the Dispense Motor is operating; check dC330 [009-004, Dispense Motor (K)].

Procedure

Disconnect P/J405 from the MCU PWB. **The fault has cleared.**

Y N

Replace the MCU PWB. (PL 13.1)

Remove the Toner Cartridge K and check the Dispense Motor Assembly for ware or damage.
Disconnect FS186/187 at both edges of the New Cartridge Detect Switch (K).
Check continuity at both edges of the New Cartridge Detect Switch (K). **There is continuity when the Switch is not engaged.**

Y N

Check the wire between the connector j405-A18 and the New Cartridge Detect Switch (K) FS187 for a short circuit to the frame.

Replace the New Cartridge Detect Switch (K). (PL 16.1)

9-391 New Toner Cartridge (C)

The New Cartridge Detect Switch (C) was not engaged to reset the Accumulative Dispense time NVM value to 0 when a new cartridge was installed.

Initial Actions

- Re-install the Toner Cartridge ensuring that the Dispense Motor and the Toner Cartridge is engaged.
- Check that the New/Old Detection Switch (metal part) at the rear of the Toner Cartridge is raised. If the New/Old Detection Switch is not raised, lift it up, then set the value of NVM location 752-685 (Accumulative Dispense Time Value C) to 0.
- Check that the Dispense Motor is operating; check dC330 [009-003, Dispense Motor (C)].

Procedure

Disconnect P/J504 from the MCU PWB. **The fault has cleared.**

Y N

Replace the MCU PWB. (PL 13.1)

Remove the Toner Cartridge C and check the Dispense Motor Assembly for ware or damage.
Disconnect FS185/185 at both edges of the New Cartridge Detect Switch (C).
Check continuity at both edges of the New Cartridge Detect Switch (C). **There is continuity when the Switch is not engaged.**

Y N

Check the wire between the connector J405-A17 and the New Cartridge Detect Switch (C) FS185 for a short circuit to the frame.

Replace the New Cartridge Detect Switch (C) (PL 6.1).

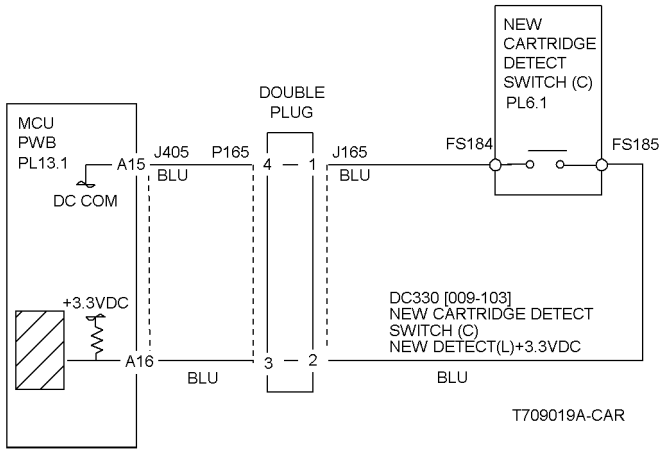


Figure 1 New Cartridge Detect Switch (C)

9-392 New Toner Cartridge (M)

When a new Toner Cartridge was installed, the level of the New Cartridge Detect Switch (M) remained L when it should be changed to H by the Dispenser Motor drive.

Initial Actions

- Re-install the Toner Cartridge ensuring that the Dispense Motor and the Toner Cartridge is engaged.
- Check that the New/Old Detection Switch (metal part) at the rear of the Toner Cartridge is raised. If the New/Old Detection Switch is not raised, lift it up, then set the value of NVM location 752-684 (Accumulative Dispense Time Value M) to 0.
- Check that the Dispense Motor is operating; check dC330 [009-002, Dispense Motor (M)].

Procedure

Disconnect P/J405 from the MCU PWB. **The fault has cleared.**

Y N

Replace the MCU PWB. (PL 13.1)

Remove the Toner Cartridge M and check the Dispense Motor Assembly for ware or damage.
Disconnect FS182/183 at both edges of the New Cartridge Detect Switch (M).
Check continuity at both edges of the New Cartridge Detect Switch (M). **There is continuity when the Switch is not engaged.**

Y N

Check the wire between the connector J405-B16 and the New Cartridge Detect Switch (M) FS183 for a short circuit to the frame.

Replace the New Cartridge Detect Switch (M) (PL 6.1).

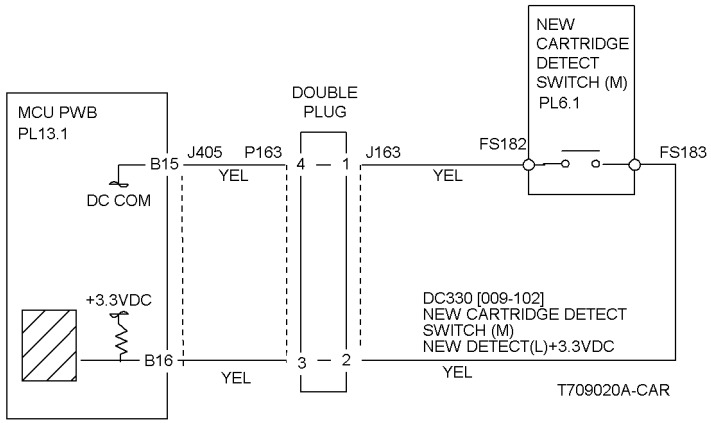


Figure 1 New Cartridge Detect Switch (M)

9-393 New Toner Cartridge (Y)

When a new Toner Cartridge was installed, the level of the New Cartridge Detect Switch (Y) remained L when it should be changed to H by the Dispense Motor drive.

Initial Actions

- Re-install the Toner Cartridge ensuring that the Dispense Motor and the Toner Cartridge is engaged.
- Check that the New/Old Detection Switch (metal part) at the rear of the Toner Cartridge is raised. If the New/Old Detection Switch is not raised, lift it up, then set the value of NVM location 752-683 (Accumulative Dispense Time Value Y) to 0.
- Check that the Dispense Motor is operating; check dC330 [009-001, Dispense Motor (C)].

Procedure

Disconnect P/J405 from the MCU PWB. **The fault has cleared.**

Y N

Replace the MCU PWB. (PL 13.1)

Remove the Toner Cartridge Y and check the Dispense Motor Assembly for ware or damage.
Disconnect FS180/181 at both edges of the New Cartridge Detect Switch (Y).
Check continuity at both edges of the New Cartridge Detect Switch (Y). **There is continuity when the Switch is not engaged.**

Y N

Check the wire between the connector J405-B18 and the New Cartridge Detect Switch (Y) FS181 for a short circuit to the frame.

Replace the New Cartridge Detect Switch (Y) (PL 6.1).

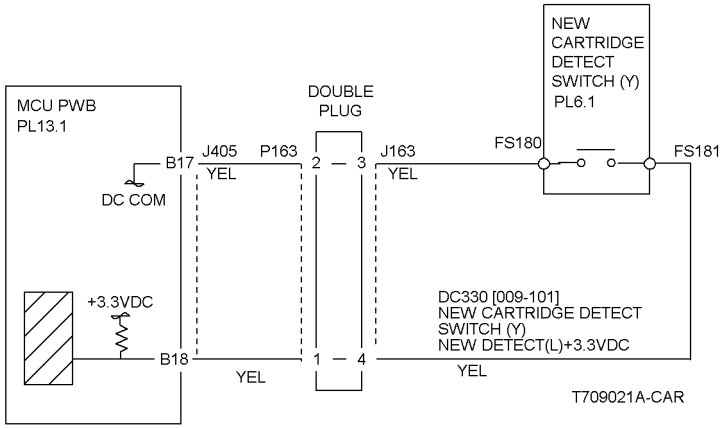


Figure 1 New Cartridge Detect Switch (Y)

9-408 Waste Toner Cartridge Near Full

The Waste Toner Cartridge is nearly full.

Initial Actions

Replace the Waste Toner Cartridge. Check the Full Toner Sensor for contaminants.

Procedure

Enter dC330 [009-150. Actuate and de-actuate the Full Toner Sensor (PL 4.1). **The display changes state.**

Y N

Go to OF 99-2 Transmissive Sensor RAP.

Replace the MCU PWB. (PL 13.1)

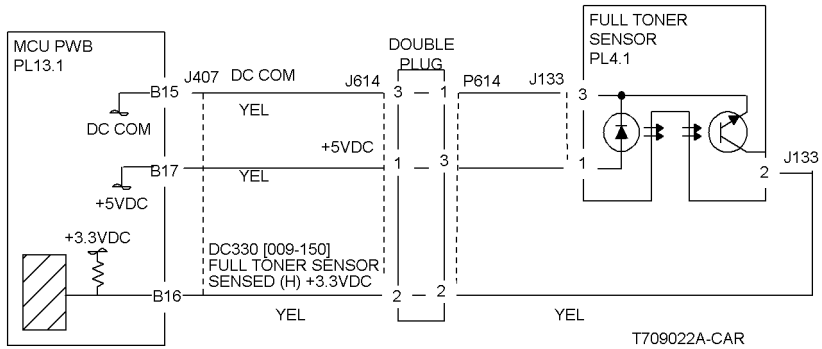


Figure 1 Full Toner Sensor

9-410 Toner Cartridge (Y) Near Empty

The Yellow Toner Cartridge is nearly empty/empty.

NOTE: *Continuous running of high density prints can temporarily deplete the toner supply.*

Initial Actions

- Ensure that there is toner and the toner is evenly distributed in the cartridge (Y).
- Check the ATC Sensor (Y) for blockage or contaminants.
- Check the drive system from the Developer Drive Motor to the Developer Housing (Y) for damage.

Procedure

Enter dC330 [009-001]. **The Toner Dispense Motor (Y) energizes (PL 6.1).**

Y **N**

Go to OF 99-6 Motor Open RAP.

Enter dC330 [009-014]. **The Developer Motor energizes (PL 1.1).**

Y **N**

Go to OF 99-6 Motor Open RAP.

Check ADJ 9.3. **The ATC Sensor (Y) fail judgement is OK.**

Y **N**

Go to the 9-380, ATC Sensor Failure RAP.

After checking that no failures are detected during normal operation, go to call closeout.

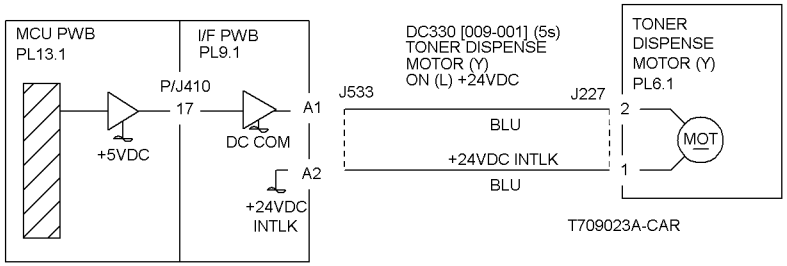


Figure 1 Toner Dispenser Motor Y

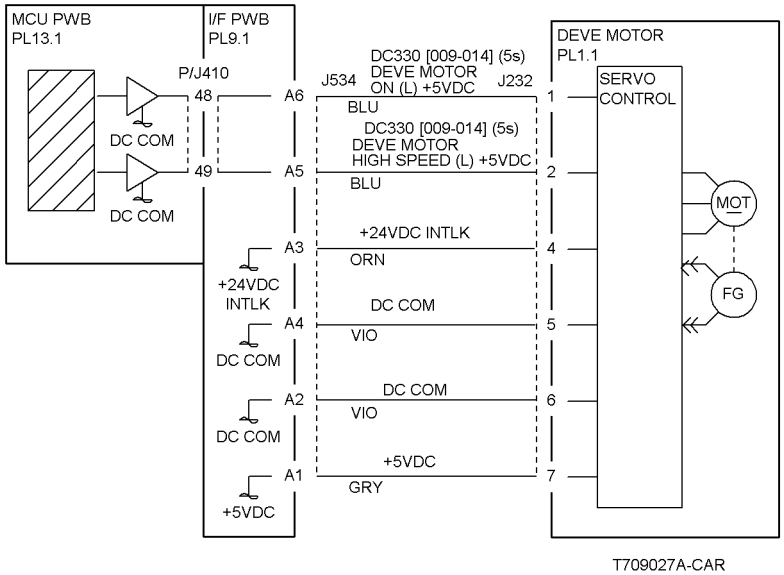


Figure 2 The Developer Motor

9-411 Toner Cartridge (M) Near Empty

The Yellow Toner Cartridge is nearly empty.

NOTE: *Continuous running of high density prints can temporarily deplete the toner supply.*

Initial Actions

- ï Ensure that there is toner and the toner is evenly distributed in the cartridge (M).
- ï Check the ATC Sensor (M) for blockage or contaminants.
- ï Check the drive system from the Developer Drive Motor to the Developer Housing (M) for damage.

Procedure

Enter dC330 [009-002]. **The Toner Dispense Motor (M) energizes (PL 6.1).**

Y N

Go to OF 99-6 Motor Open RAP.

Enter dC330 [009-014]. **The Developer Motor energizes (PL 1.1).**

Y N

Go to OF 99-6 Motor Open RAP.

Perform ADJ 9.3. **The ATC Sensor (M) fail judgement is OK.**

Y N

Go the 9-382 ATC Sensor Failure (M) RAP.

After checking that no failures are detected during normal operation, go to call closeout.

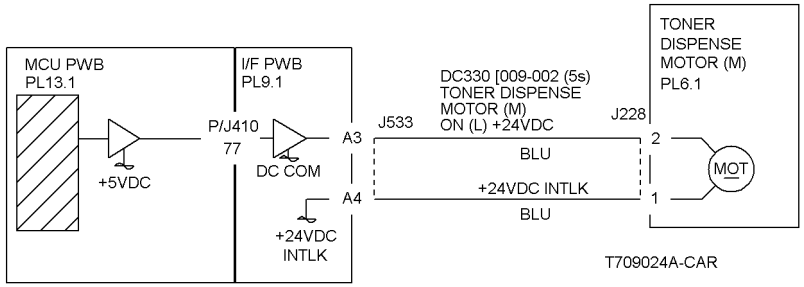


Figure 1 Toner Dispense Motor M

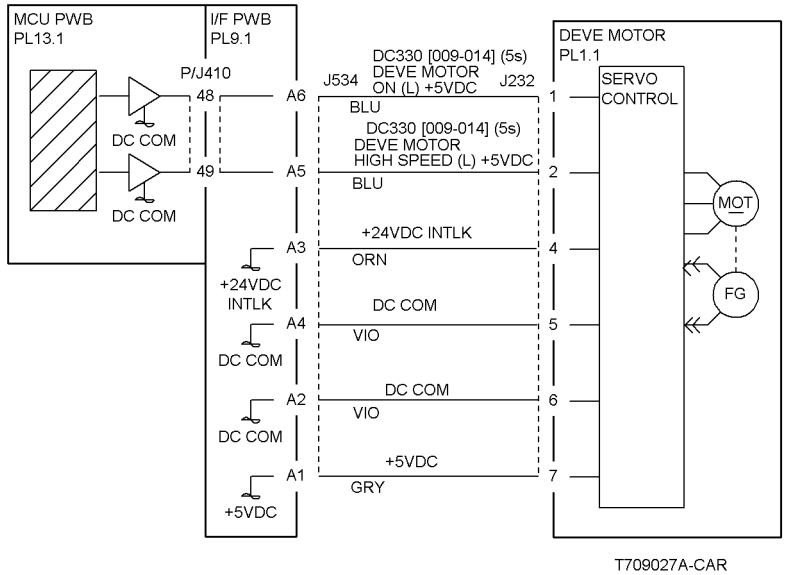


Figure 2 The Developer Motor

9-412 Toner Cartridge (C) Near Empty

The Cyan Toner Cartridge is nearly empty/empty.

NOTE: *Continuous running of high density prints can temporarily deplete the toner supply.*

Initial Actions

- Ensure that there is toner and the toner is evenly distributed in the cartridge (C).
- Check the ATC Sensor (C) for blockage or contaminants.
- Check the drive system from the Developer Drive Motor to the Developer Housing (C) for damage.

Procedure

Enter dC330 [009-003]. **The Toner Dispense Motor (C) energizes (PL 6.1).**

Y **N**

Go to OF 99-6 Motor Open RAP.

Enter dC330 [009-014]. **The Developer Motor energizes (PL 1.1).**

Y **N**

Go to OF 99-6 Motor Open RAP.

Perform ADJ 9.3. **The ATC Sensor (C) fail judgement is OK.**

Y **N**

Go the 9-383, ATC Sensor Failure (C) RAP.

After checking that no failures are detected during normal operation, go to call closeout.

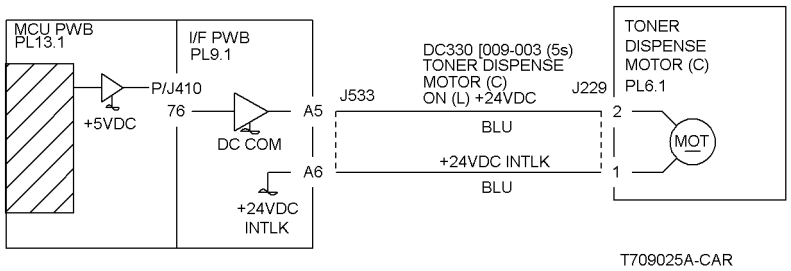


Figure 1 Toner Dispense Motor C

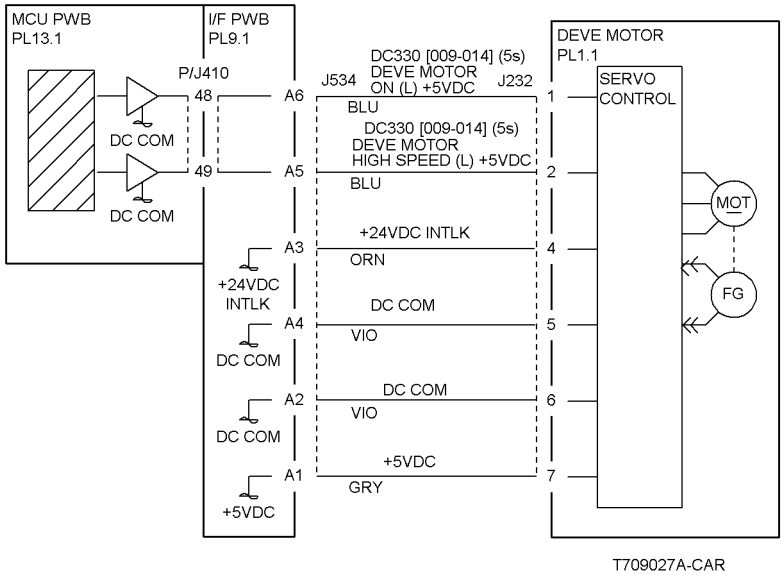


Figure 2 The Developer Motor

9-413 Toner Cartridge (K) Near Empty

The Black Toner Cartridge is nearly empty.

***NOTE:** Continuous running of high density prints can temporally deplete the toner supply.*

Initial Actions

- ï Ensure that there is toner and the toner is evenly distributed in the cartridge (K).
- ï Check the ATC Sensor (K) for blockage or contaminants.
- ï Check the drive system from the Main Drive Motor to the Developer Housing (K) for damage.

Procedure

Enter dC330 [009-004]. **The Toner Dispense Motor (K) energizes (PL 6.1).**

Y N

Go to OF 99-6 Motor Open RAP.

Enter dC330. Stack the codes [004-004, Main Motor] and [009-013, Dev. Clutch (K)]. **The Black Developer Assy. energizes (PL 1.1).**

Y N

Go to OF 99-6 Motor Open RAP (refer to BSD 4.1 and BSD 9.13 for circuit).

Check ADJ 9.3. **The ATC Sensor (K) fail judgement is OK.**

Y N

Go the 9-383, ATC Sensor Failure (K) RAP.

After checking that no failures are detected during normal operation, go to call closeout.

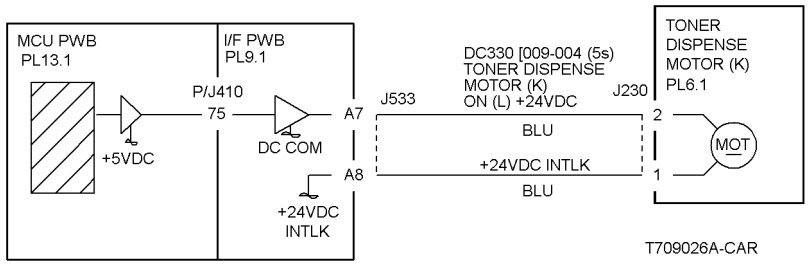


Figure 1 Toner Dispense Motor K

9-428 Change Drum Cartridge (K) Soon

The Drum Cartridge (K) needs to be replaced soon/reached end of life.

Procedure

Replace the Black Drum Cartridge (refer to Section 6, Machine Consumables). **The problem is corrected.**

Y N

Replace the MCU PWB (PL 13.1).

Return to Service Call Procedures.

9-429 Change Drum Cartridge (Y) Soon

The Drum Cartridge (Y) needs to be replaced soon.

Procedure

Replace the Yellow Drum Cartridge (refer to Section 6, Machine Consumables). **The problem is corrected.**

Y **N**

Replace the MCU PWB. (PL 13.1).

Return to Service Call Procedures.

9-430 Change Drum Cartridge (M) Soon

The Drum Cartridge (M) needs to be replaced soon.

Procedure

Replace the Magenta Drum Cartridge (refer to Section 6, Machine Consumables). **The problem is corrected.**

Y **N**

Replace the MCU PWB. (PL 13.1).

Return to Service Call Procedures.

9-431 Change Drum Cartridge (C) Soon

The Drum Cartridge (C) needs to be replaced soon.

Procedure

Replace the Cyan Drum Cartridge (refer to Section 6, Machine Consumables). **The problem is corrected.**

Y N

Replace the MCU PWB. (PL 13.1).

Return to Service Call Procedures.

9-654 ADC Sensor

The machine logic detected an ADC Sensor operation failure.

Procedure

Check ADJ 9.4. **The fail judgement of the ADC Sensor is OK.**

Y N

There is +5VDC from P/J 536-A13 on the I/F PWB to GND.

Y N

Check the wires and connectors. If the check is OK, replace the I/F PWB (PL 9.1). If the problem continues replace the MCU PWB (PL 13.1).

Enter dC330 [009-078. **The ADC Shutter Solenoid energized (PL 1.3).**

Y N

Check the wires and connectors. If the check is OK, replace the I/F PWB (PL 9.1). If the problem continues replace the MCU PWB (PL 13.1).

Enter dC330 [009-078. There is 0VDC from P/J 536-A8 on the I/F PWB to GND.

Y N

Check the wires and connectors. If the check is OK, replace the I/F PWB PL 9.1. If the problem continues replace the MCU PWB (PL 13.1).

Enter dC330 [009-079. The voltage from P/J 536-A6 to GND changed to 0VDC momentarily.

Y N

Check the wires and connectors. If the check is OK, replace the I/F PWB (PL 9.1). If the problem continues replace the MCU PWB (PL 13.1).

Check the wires and connectors. If the check is OK, replace the, replace the ADC Sensor Assembly (PL 1.3).

After checking that no failures are detected during normal operation, go to call closeout.

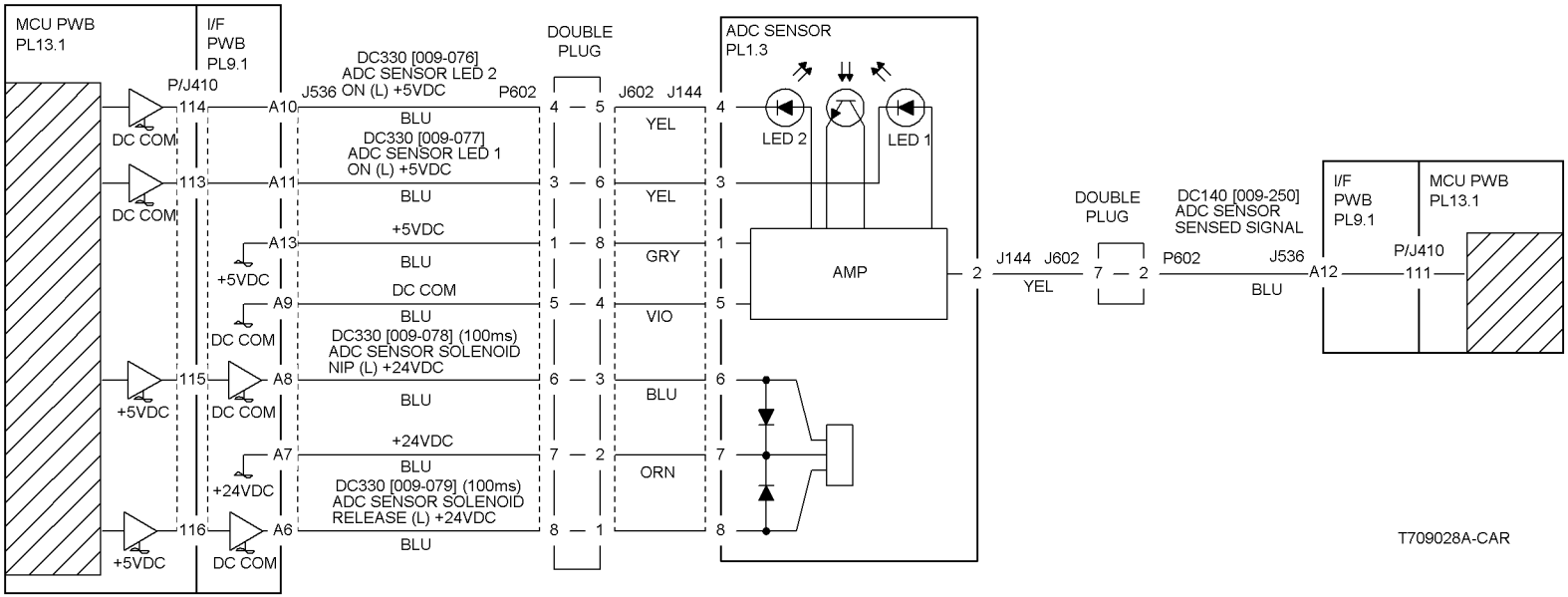


Figure 1 The ADC Sensor

9-660 Environment Sensor Temperature

An incorrect value was detected by the Environment Sensor (Temperature).

Procedure

There is 1 Ohm or less measured between the Environment Sensor P255-3 and P255-4

Y **N**

Replace the Environment Sensor (PL 1.3).

Replace the I/F PWB (PL 9.1) and MCU PWB (PL 13.1) in sequence.

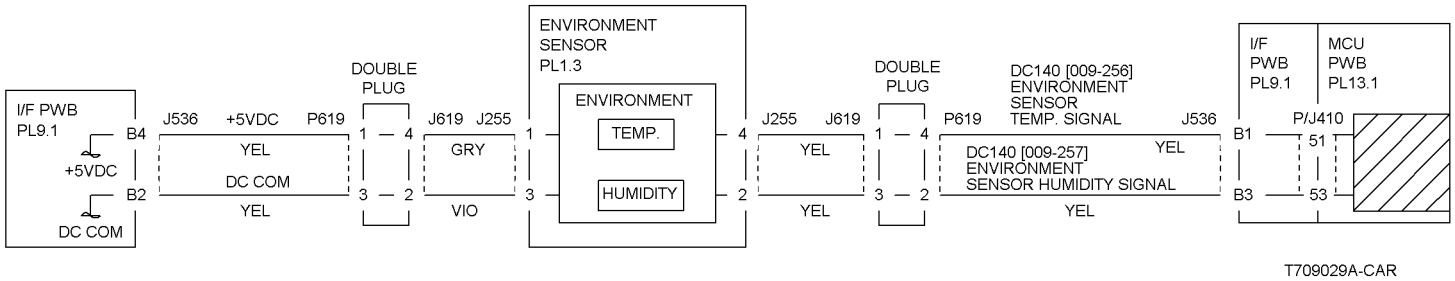


Figure 1 The Environment Sensor

9-661 Environment Sensor Humidity

An incorrect value was detected by the Environment Sensor (Humidity).

Procedure

There is +0.4VDC to +17VDC from P/J 536-B3 on the I/F PWB to GND.

Y N

There is +5VDC from P/J 536-B4 on the I/F PWB to GND.

A

A

Y N

Check the wires and connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Check for an open circuit and poor contact if the check is OK replace the Environment Sensor (PL1.3).

Replace the I/F PWB (PL 9.1). If the problem continues, replace the MCU PWB (PL 13.1).

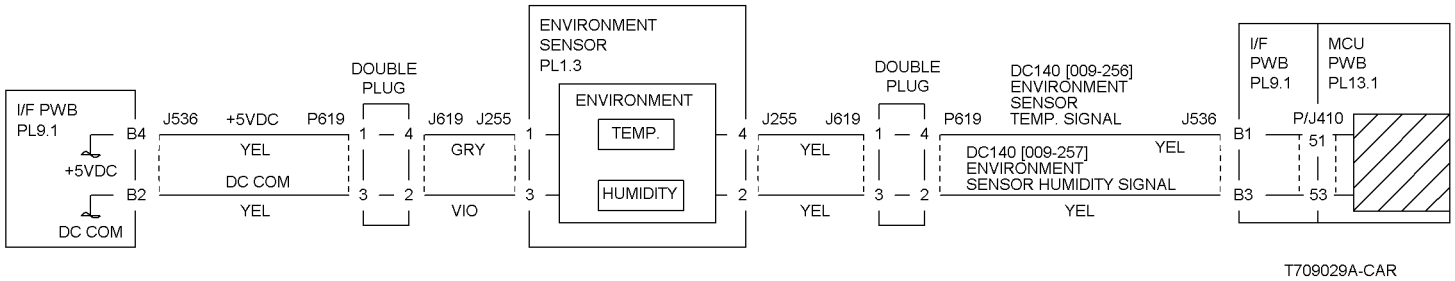


Figure 1 The Environment Sensor

9-670 New Toner Cartridge (K) Detected

The machine logic detected that the Toner Cartridge has been replaced. This is a message fault only.

Procedure

Switch the power off, then on. **The message fault clears.**

Y **N**

Go to the 9-390 RAP.

Return to Service Call Procedures.

9-671 New Toner Cartridge (C) Detected

The machine logic detected that the Toner Cartridge has been replaced. This is a message fault only.

Procedure

Switch the power off, then on. **The message fault clears.**

Y **N**

Go to the 9-391 RAP.

Return to Service Call Procedures.

9-672 New Toner Cartridge (M) Detected

The machine logic detected that the Toner Cartridge has been replaced. This is a message fault only.

Procedure

Switch the power off, then on. **The message fault clears.**

Y **N**

Go to the 9-392 RAP.

Return to Service Call Procedures.

9-673 New Toner Cartridge (Y) Detected

The machine logic detected that the Toner Cartridge has been replaced.This is a message fault only.

Procedure

Switch the power off, then on. **The message fault clears.**

Y **N**

Go to the 9-393 RAP.

Return to Service Call Procedures.

9-684 ADC Shutter

The machine logic detected an ADC Shutter operation failure.

Procedure

BSD 9.16, 9.31D

Enter dC330 [009-078]. **The ADC Shutter Solenoid energized.**

Y **N**

There is +24VDC from P/J 536-A7 on the I/F PWB to GND.

Y **N**

Check the wires and connectors. If the check is OK, replace the I/F PWB (PL 9.1). If the problem continues, replace the ADC Sensor (PL 1.3).

Enter dC330 [009-078]. There is 0VDC from P/J536-A8 on the I/F PWB to GND.

A

Y **N**

Check the wires and connectors. If the check is OK, replace the I/F PWB (PL 9.1). If the problem continues, replace the MCU PWB (PL 13.1). If the problem continues, replace the ADC Sensor (PL 1.3).

Enter dC330 [009-079]. The voltage from P/J 536-A6 on the I/F PWB to GND changed to 0VDC momentarily.

Y **N**

Check the wires and connectors. If the check is OK, replace the I/F PWB (PL 9.1). If the problem continues, replace the MCU PWB (PL 13.1). If the problem continues, replace the ADC Sensor (PL 1.3).

Check the wires and connectors. If the check is OK, replace the ADC Sensor (PL 1.3).

After checking that no failures are detected during normal operation, go to call closeout.

A

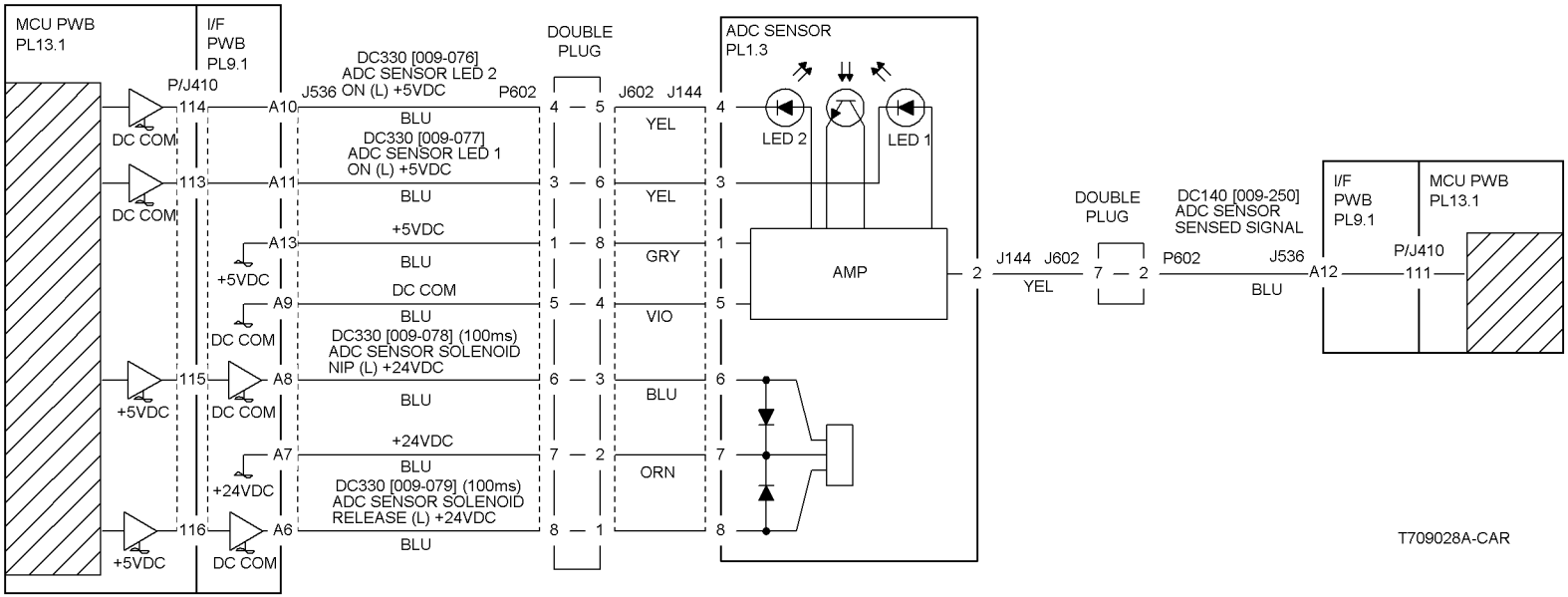


Figure 1 The ADC Sensor

9-910 Drum (Y) Type Mismatch

Drum Type Mismatch

Initial Actions

Ensure that the correct drum type is installed.

Procedure

Enter dC330 [009-151, Drum (Y) Data]. **The display is H.**

Y **N**

Check the wires and connectors. If the check is OK, replace the Yellow Drum Cartridge (refer to Section 6, Machine Consumables).

Replace the MCU PWB. (PL 13.1).

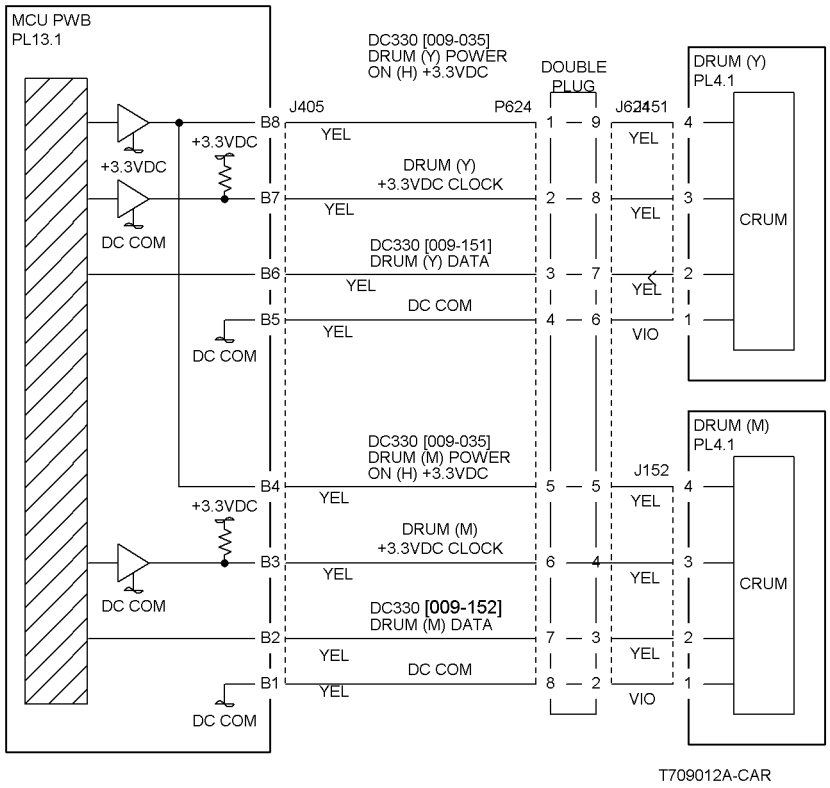


Figure 1 Drum Y Communication

9-911 Drum (M) Type Mismatch

Drum Type Mismatch

Initial Actions

Ensure that the correct drum type is installed.

Procedure

Enter dC330 [009-152 (Drum (M) Data]. **The display is H.**

Y **N**

Check the wires and connectors. If the check is OK, replace the Magenta Drum Cartridge (refer to Section 6, Machine Consumables).

Replace the MCU PWB. (PL 13.1).

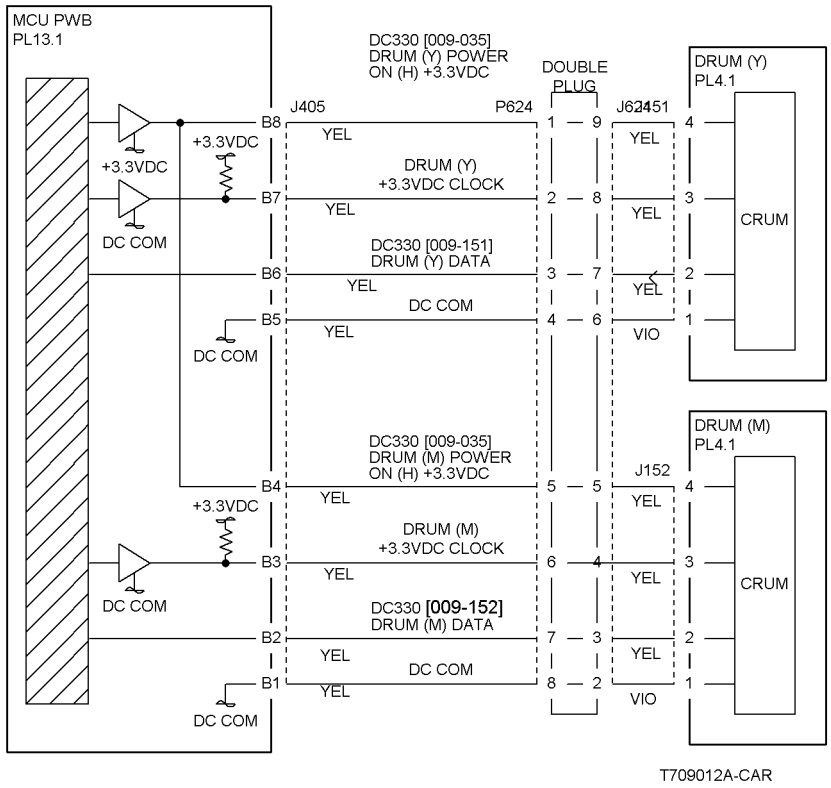


Figure 1 Drum M Communication

9-912 Drum (C) Type Mismatch

Drum Type Mismatch

Initial Actions

Ensure that the correct drum type is installed.

Procedure

Enter dC330 [009-153 (Drum (C) Data]. **The display is H.**

Y **N**

Check the wires and connectors. If the check is OK, replace the Cyan Drum Cartridge (refer to Section 6, Machine Consumables).

Replace the MCU PWB. (PL 13.1)

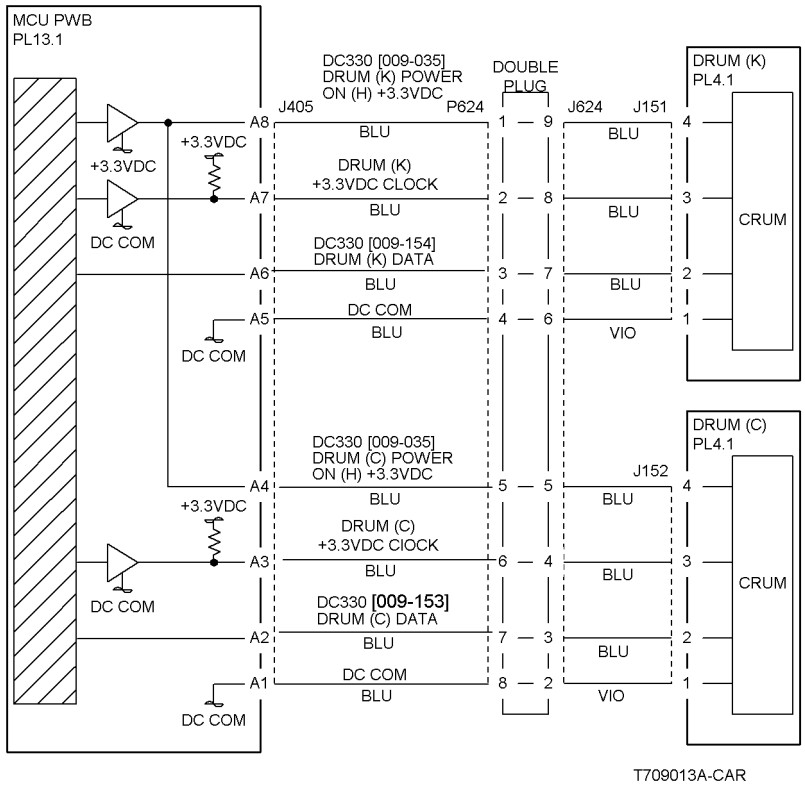


Figure 1 Drum C Communication

9-913 Drum (K) Type Mismatch

Drum Type Mismatch

Initial Actions

Ensure that the correct drum type is installed.

Procedure

Enter dC330 [009-154 (Drum (K) Data. **The display is H.**

Y **N**

Check the wires and connectors. If the check is OK, replace the Black Drum Cartridge (refer to Section 6, Machine Consumables).

Replace the MCU PWB. (PL 13.1)

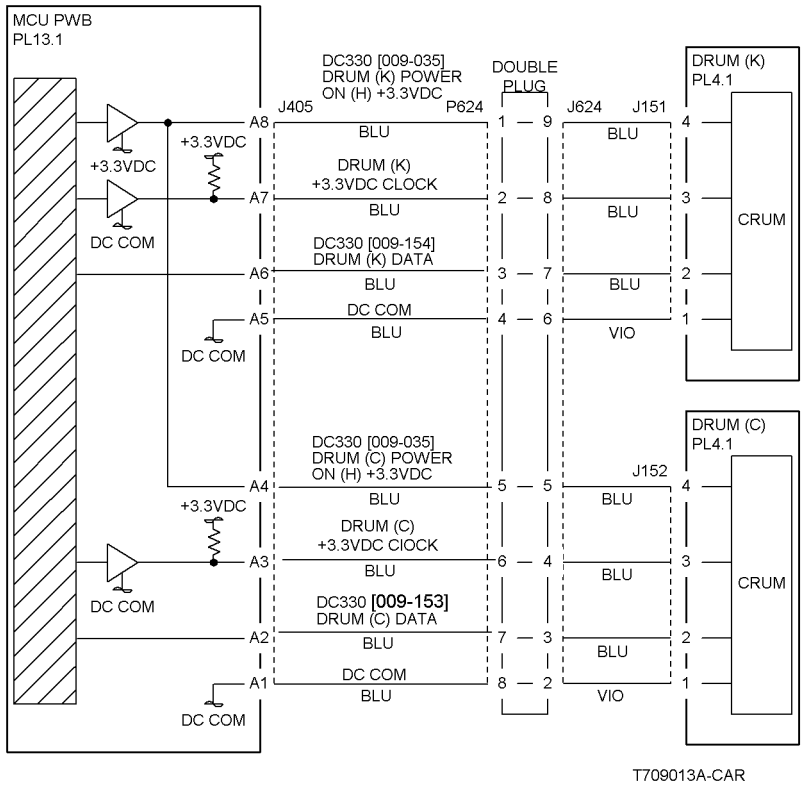


Figure 1 Drum C Communication

9-920 Toner Cartridge (Y) Empty

The Yellow Toner Cartridge is empty.

NOTE: *Continuous running of high density prints can temporarily deplete the toner supply.*

Initial Actions

- Ensure that there is toner and the toner is evenly distributed in the cartridge (Y).
- Check the ATC Sensor (Y) for blockage or contaminants.
- Check the drive system from the Developer Drive Motor to the Developer Housing (Y) for damage.

Procedure

Enter dC330 [009-001]. **The Toner Dispense Motor (Y) energizes (PL 6.1).**

Y **N**

Go to OF 99-6 Motor Open RAP.

Enter dC330 [009-014]. **The Developer Motor energizes (PL 1.1).**

Y **N**

Go to OF 99-6 Motor Open RAP.

Check ADJ 9.3. **The ATC Sensor (Y) fail judgement is OK (PL 6.2).**

Y **N**

Go the 9-380 ATC Sensor Failure (Y) RAP.

After checking that no failures are detected during normal operation, go to call closeout.

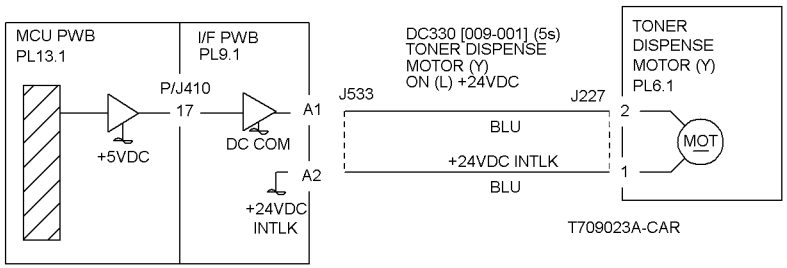


Figure 1 Toner Dispense Motor Y

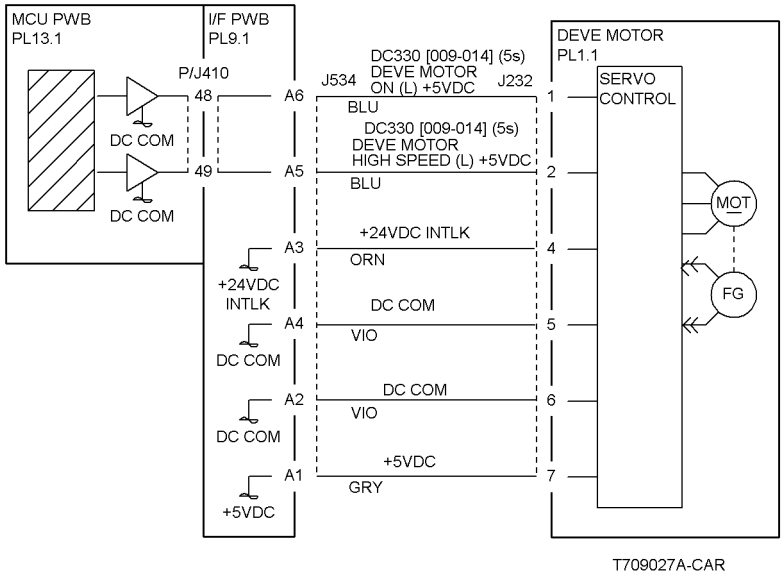


Figure 2 The Developer Motor

9-921 Toner Cartridge (M) Empty

The Yellow Toner Cartridge is empty.

NOTE: *Continuous running of high density prints can temporarily deplete the toner supply.*

Initial Actions

- ï Ensure that there is toner and the toner is evenly distributed in the cartridge (M).
- ï Check the ATC Sensor (M) for blockage or contaminants.
- ï Check the drive system from the Developer Drive Motor to the Developer Housing (M) for damage.

Procedure

Enter dC330 [009-002]. **The Toner Dispense Motor (M) energizes (PL 6.1).**

Y N

Go to OF 99-6 Motor Open RAP.

Enter dC330 [009-014]. **The Developer Motor energizes (PL.1.1).**

Y N

Go to OF 99-6 Motor Open RAP.

Check ADJ 9.3. **The ATC Sensor (M) fail judgement is OK.**

Y N

Go the 9-382 ATC Sensor Failure (M) RAP.

After checking that no failures are detected during normal operation, go to call closeout.

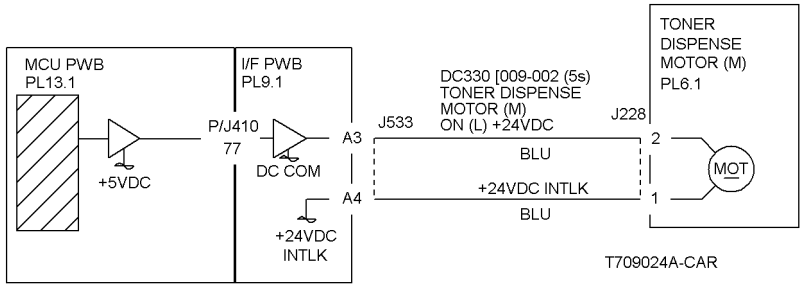


Figure 1 Toner Dispense Motor M

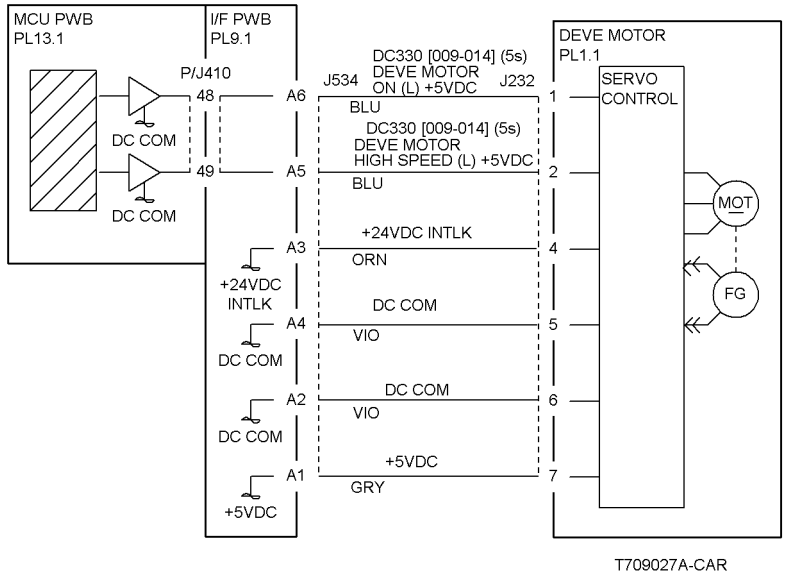


Figure 2 The Developer Motor

9-922 Toner Cartridge (C) Empty

The Cyan Toner Cartridge is empty.

NOTE: *Continuous running of high density prints can temporally deplete the toner supply.*

Initial Actions

- ï Ensure that there is toner and the toner is evenly distributed in the cartridge (C).
- ï Check the ATC Sensor (C) for blockage or contaminants.
- ï Check the drive system from the Developer Drive Motor to the Developer Housing (C) for damage.

Procedure

Enter dC330 [009-003]. **The Toner Dispense Motor (C) energizes (PL 6.1).**

Y N

Go to OF 99-6 Motor Open RAP.

Enter dC330 [009-014]. **The Developer Motor energizes (PL.1.1).**

Y N

Go to OF 99-6 Motor Open RAP.

Check ADJ 9.3. **The ATC Sensor (C) fail judgement is OK.**

Y N

Go the 9-383, ATC Sensor Failure (C) RAP.

After checking that no failures are detected during normal operation, go to call closeout.

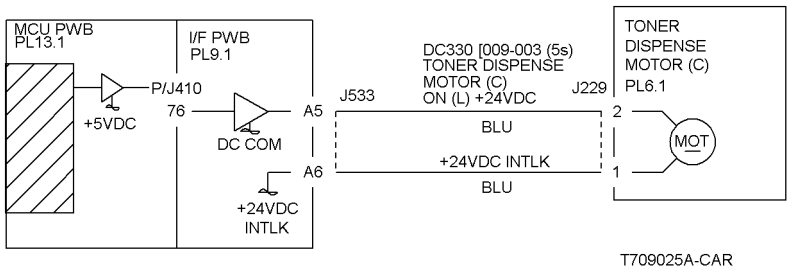


Figure 1 Toner Dispense Motor C

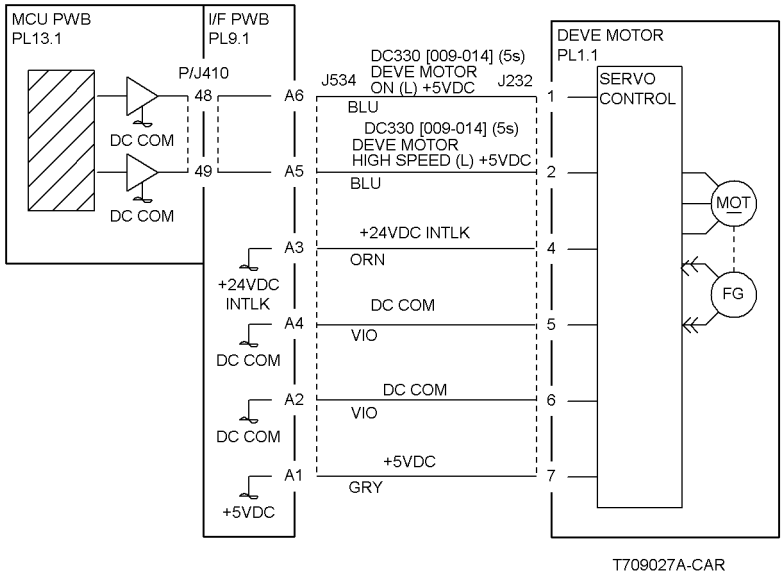


Figure 2 The Developer Motor

9-923 Toner Cartridge (K) Empty

The Black Toner Cartridge is empty.

NOTE: *Continuous running of high density prints can temporally deplete the toner supply.*

Initial Actions

- ï Ensure that there is toner and the toner is evenly distributed in the cartridge (K).
- ï Check the ATC Sensor (K) for blockage or contaminants.
- ï Check the drive system from the Main Drive Motor to the Developer Housing (K) for damage.

Procedure

Enter dC330 [009-004]. **The Toner Dispense Motor (K) energizes (PL 6.1).**

Y N

Go to OF 99-6 Motor Open RAP.

Enter dC330. Stack the codes [004-004, Main Motor] and [009-013, Dev, Clutch (K)]. **The Black Developer Assy. energizes (PL 1.1).**

Y N

Go to OF 99-6 Motor Open RAP (refer to BSD 4.1 and BSD 9.13 for circuit).

Check ADJ 9.3. **The ATC Sensor (K) fail judgement is OK (PL 6.2).**

Y N

Go the 9-383 ATC Sensor Failure (K) RAP.

After checking that no failures are detected during normal operation, go to call closeout.

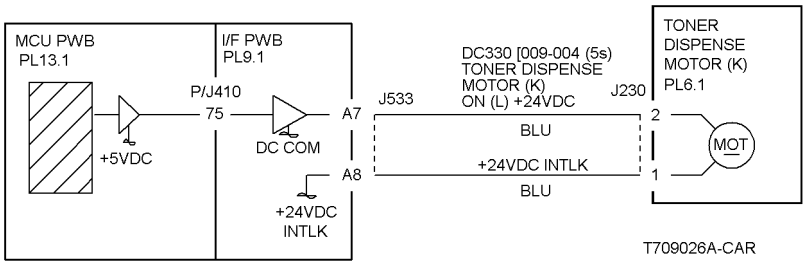


Figure 1 Toner Dispense Motor K

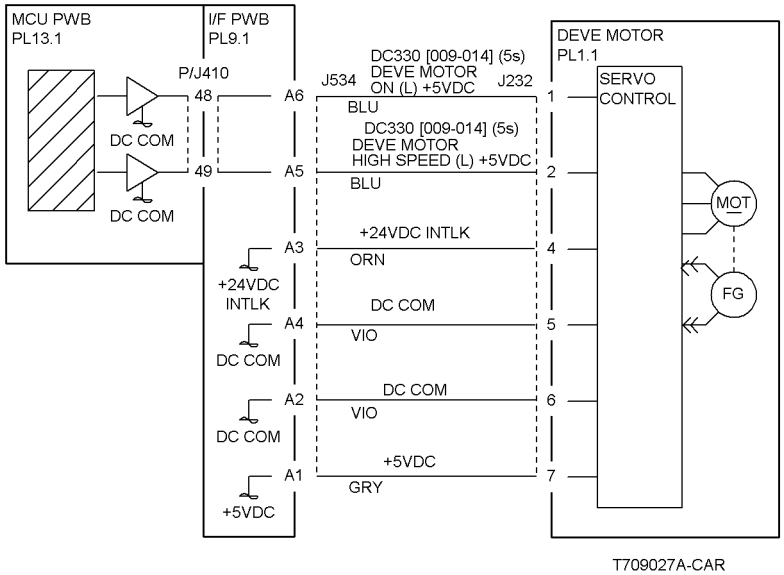


Figure 2 The Developer Motor

9-924 Waste Toner Cartridge Full

The Waste Toner Cartridge is full.

Initial Actions

Replace the Waste Toner Cartridge. Check the Full Toner Sensor for contaminants.

Procedure

Enter dC330 [009-150]. Actuate and de-actuate the Full Toner Sensor (PL 4.1) **The display changes state.**

Y N

Go to the OF 99-2 Transmissive Sensor RAP.

Replace the MCU PWB. (PL 13.1)

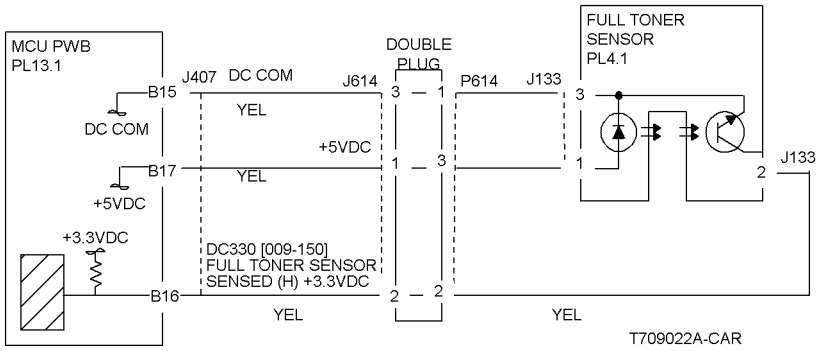


Figure 1 Full Toner Sensor

9-925 Waste Toner Cartridge Not Set

The Waste Toner Cartridge was not installed correctly

Initial Actions

Ensure that the Waste Toner Cartridge is installed correctly.

Procedure

There is +5VDC from P/J 535-A3 on the I/F PWB to GND.

Y N

There is +5VDC measured at FS135 on the Waste Toner Cartridge Interlock Switch.

Y N

Check the +5VDC circuit to the Waste Toner Cartridge Interlock Switch FS135.

There is +5VDC measured at FS143 on the Waste Toner Cartridge Interlock Switch.

Y N

Replace the Waste Toner Cartridge Interlock Switch (PL 4.1)

Check the wire between the Waste Toner Cartridge Interlock Switch FS134 and the I/F PWB P/J535-A3 for an open circuit or poor contact.

Check the connector P/J410 between the I/F PWB and the MCU PWB. If no problems are found, replace the MCU PWB. (PL 13.1)

If the problem persists, replace the I/F PWB. (PL 9.1)

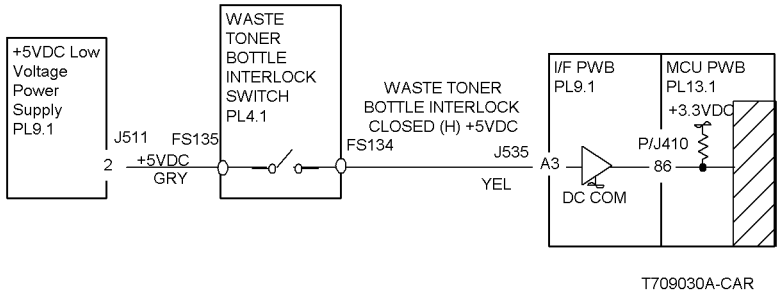


Figure 1 The Waste Toner Bottle Interlock Switch

9-926 Drum Cartridge (K) End Of Life

The Drum Cartridge (K) needs to be replaced.

Procedure

Replace the Black Drum Cartridge (refer to Section 6, Machine Consumables). **The problem is corrected.**

Y N

Replace the MCU PWB. (PL 13.1).

Return to Service Call Procedures.

9-927 Change Drum Cartridge (C) End Of Life

The Drum Cartridge (C) needs to be replaced.

Procedure

Replace the Cyan Drum Cartridge (refer to Section 6, Machine Consumables). **The problem is corrected.**

Y N

Replace the MCU PWB. (PL 13.1).

Return to Service Call Procedures.

9-928 Drum Cartridge (M) End Of Life

The Drum Cartridge (M) needs to be replaced.

Procedure

Replace the Magenta Drum Cartridge (refer to Section 6, Machine Consumables). **The problem is corrected.**

Y N

Replace the MCU PWB. (PL 13.1).

Return to Service Call Procedures.

9-929 Drum Cartridge (Y) End Of Life

The Drum Cartridge (Y) needs to be replaced.

Procedure

Replace the Yellow Drum Cartridge (refer to Section 6, Machine Consumables). **The problem is corrected.**

Y N

Replace the MCU PWB. (PL 13.1).

Return to Service Call Procedures.

9-930 Black Drum Cartridge Not Detected

The machine logic detected that Black Drum Cartridge is not installed.

Initial Actions

- Ensure Black Drum Cartridge is installed correctly.
- Switch the power off, then on.

Procedure

Swap Black Drum Cartridge with Drum (Y), (C) or (M). **The problem is corrected.**

Y N

Check that P/J-405 on the MCU PWB and P/J-622 are connected and the wires for an open or short. If the check is OK, replace the MCU PWB (PL 13.1). If the problem continues, replace the ESS PWB (PL 13.1).

Replace the defective Drum Cartridge (refer to Section 6, Machine Consumables).

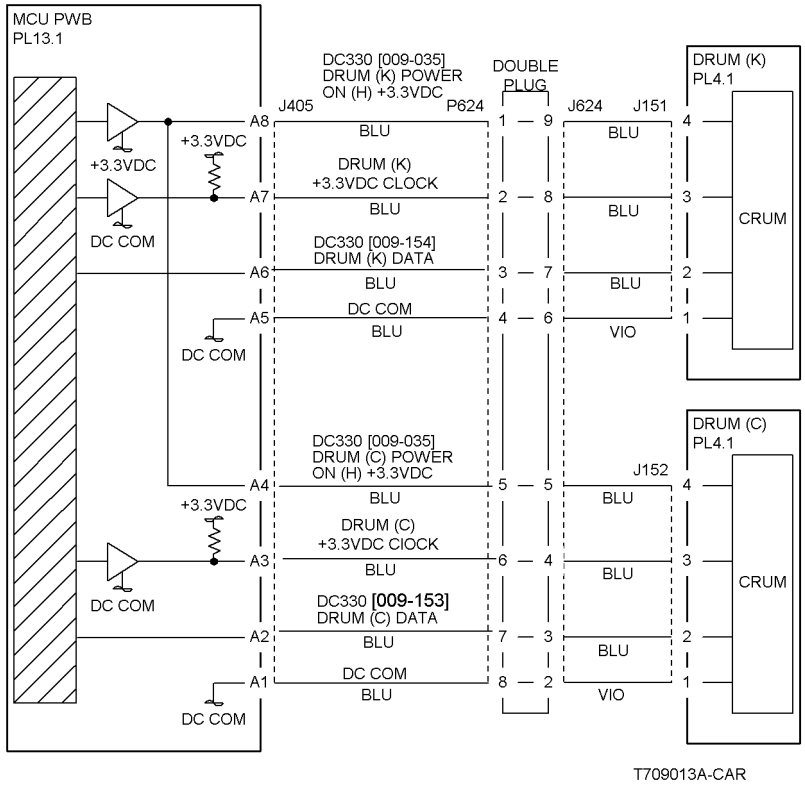


Figure 1 Drum C Communication

9-931 Cyan Drum Cartridge Not Detected

The machine logic detected that Cyan Drum Cartridge is not installed.

Initial Actions

- Ensure Cyan Drum Cartridge is installed correctly.
- Switch the power off, then on.

Procedure

Swap Cyan Drum Cartridge with Drum (Y), (K) or (M). **The problem is corrected.**

Y N

Check that P/J-405 on the MCU PWB and P/J-622 are connected and the wires for an open or short. If the check is OK, replace the MCU PWB (PL 13.1). If the problem continues, replace the ESS PWB (PL 13.1).

Replace the defective Drum Cartridge (refer to Section 6, Machine Consumables).

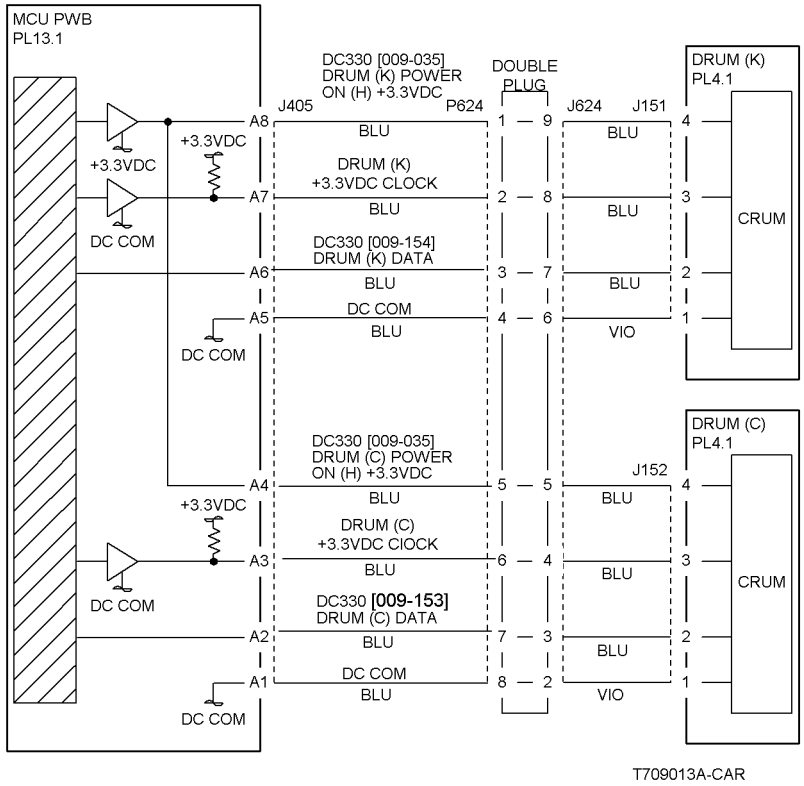


Figure 1 Drum C Communication

9-932 Magenta Drum Cartridge Not Detected

The machine logic detected that Magenta Drum Cartridge is not installed.

Initial Actions

- Ensure Magenta Drum Cartridge is installed correctly.
- Switch the power off, then on.

Procedure

Swap Magenta Drum Cartridge with Drum (Y), (C) or (K). **The problem is corrected.**

Y N

Check that P/J-405 on the MCU PWB and P/J-624 are connected and the wires for an open or short. If the check is OK, replace the MCU PWB (PL 13.1). If the problem continues, replace the ESS PWB (PL 13.1).

Replace the defective Drum Cartridge (refer to Section 6, Machine Consumables).

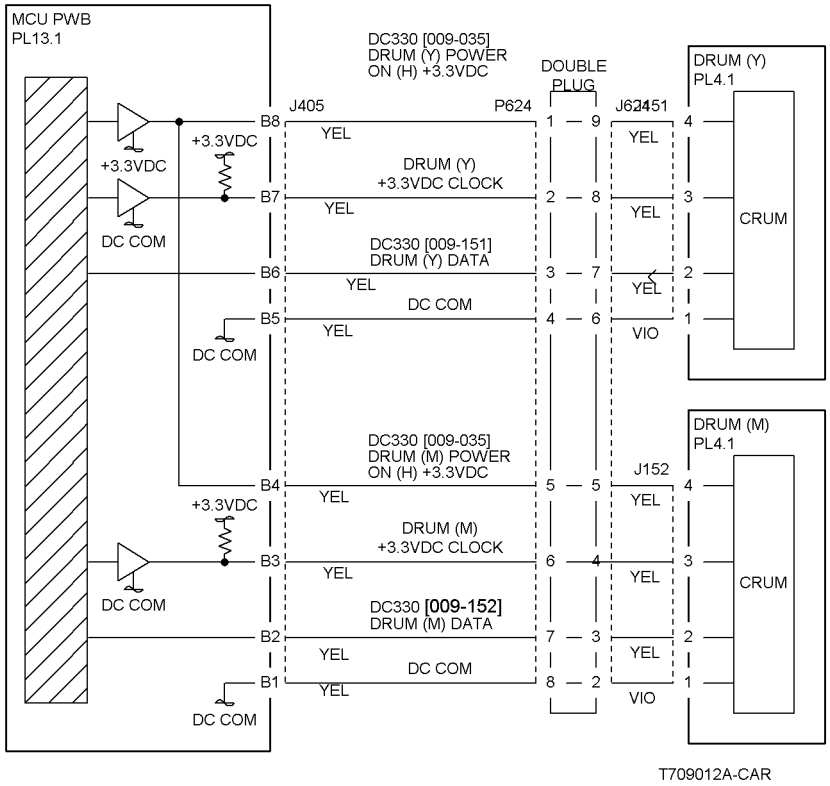


Figure 1 Drum M Communication

9-933 Yellow Drum Cartridge Not Detected

The machine logic detected that the Yellow Drum Cartridge is not installed.

Initial Actions

- Ensure Yellow Drum Cartridge is installed correctly.
- Switch the power off, then on.

Procedure

Swap Yellow Drum Cartridge with Drum (K), (C) or (M). **The problem is corrected.**

Y N

Check that P/J-405 on the MCU PWB and P/J-624 are connected and the wires for an open or short. If the check is OK, replace the MCU PWB (PL 13.1). If the problem continues, replace the ESS PWB (PL 13.1).

Replace the defective Drum Cartridge (refer to Section 6, Machine Consumables).

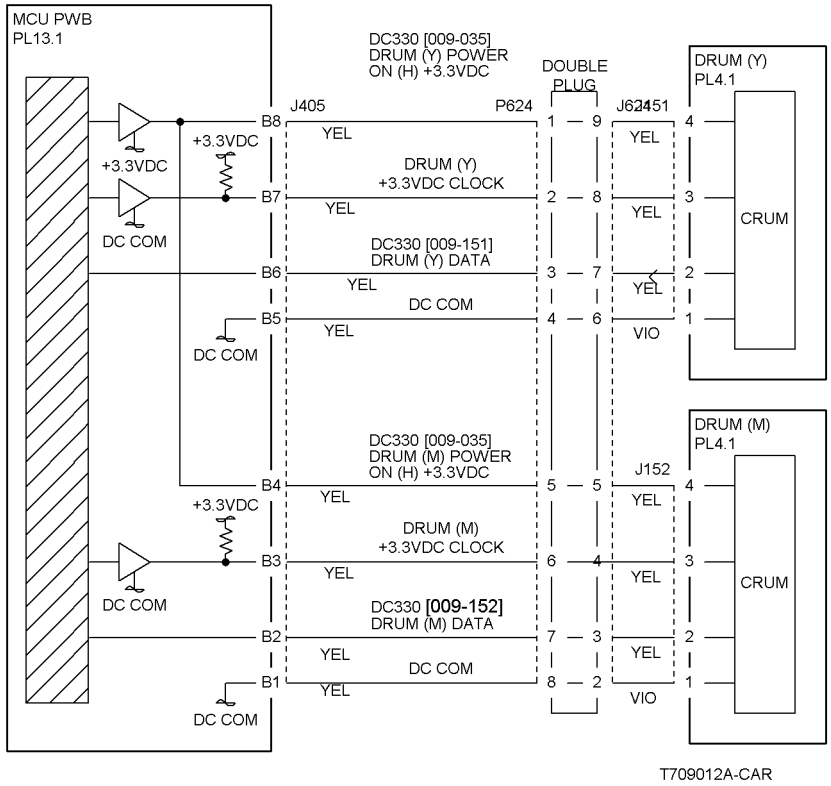


Figure 1 Drum Y Communication

10-105 Face Up Exit Sensor On

The Face Up Exit Sensor did not energize.

Initial Actions

- Check condition and specification of the paper supply.
- Check for obstructions in the paper feed path.
- Clean the Exit Roll and check for wear.
- Check the drive transmissions for damage or wear.

Procedure

Enter dC330 [010-103] and press Start. Block and unblock the Face Up Exit Sensor (PL 11.2). **The display changes state.**

Y N

Go to OF 99-2 Transmissive Sensor RAP.

Enter dC330 [010-101] and press Start. Actuate and de-actuate the Fuser Exit Switch (PL 2.8). **The display changes state.**

Y N

Go to OF 99-3 Switch RAP.

Enter dC330 [008-046] and press Start. **The Duplex Gate Solenoid energizes (PL 11.2).**

Y N

Go to the OF 99-4 Solenoid/Clutch RAP.

Enter dC330 [008-045] and press Start. **The Exit Gate Solenoid energizes (PL 11.2).**

Y N

Go to OF 99-4 Solenoid/Clutch RAP.

Check the wires and connectors. If the check is OK, replace the MCU PWB (PL 13.1).

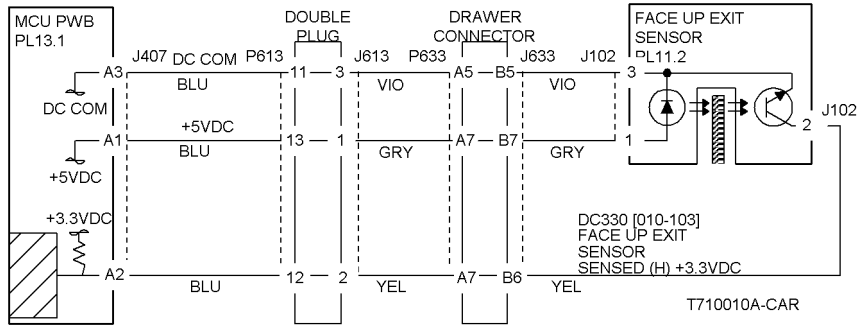


Figure 1 The Face Up Exit Sensor CD

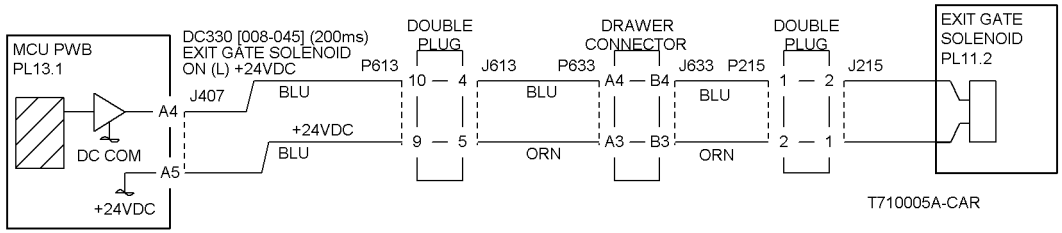


Figure 2 The Exit Gate Solenoid CD

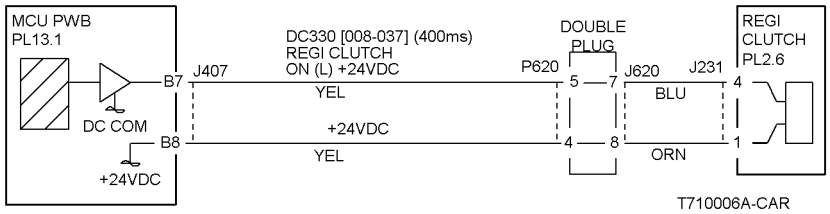


Figure 3 The Registration Clutch CD

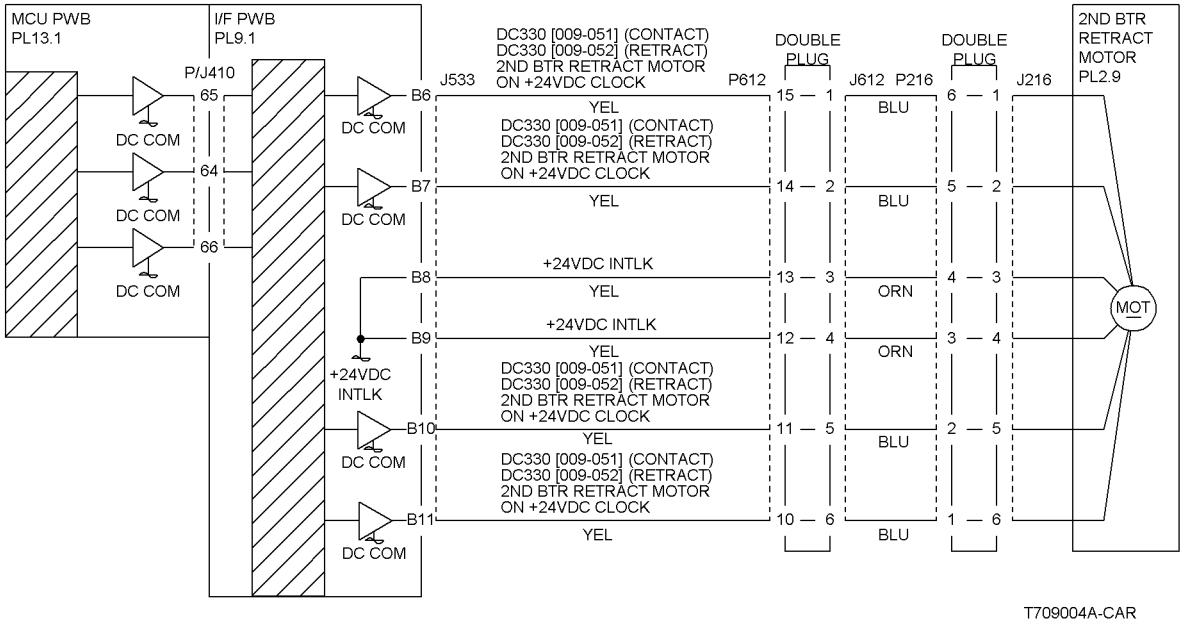


Figure 4 The 2ND BTR Retract Motor CD

10-106 Face Up Exit Sensor Off

The Face Up Exit Sensor did not de-energize.

Initial Actions

- Check condition and specification of the paper supply.
- Check for obstructions in the paper feed path.
- Clean the Fuser Exit Roll and check for wear.
- Check the drive transmissions for damage or wear.

Procedure

Enter dC330 [010-103] and press Start. Block and unblock the Face Up Exit Sensor (PL 11.2). **The display changes state.**

Y N

Go to OF 99-2 Transmissive Sensor RAP.

Check the wires and connectors. If the check is OK, replace the MCU PWB (PL 13.1).

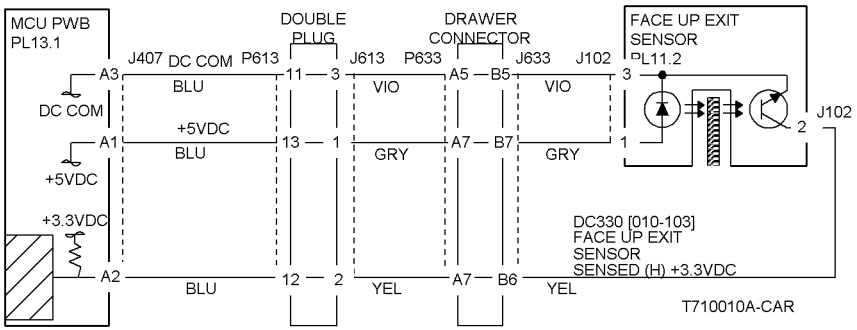


Figure 1 The Face Up Exit Sensor CD

10-110 Fuser Exit Switch On (Face Down/duplex)

The Fuser Exit Switch did not energize.

Initial Actions

- Check condition and specification of the paper supply.
- Check for obstructions in the paper feed path.
- Clean the Fuser Exit Roll and check for wear.
- Check the drive transmissions for damage or wear.

Procedure

Check the Fuser Stripper Fingers and Fuser Roll for dirt build up, wear or damage. The check is OK.

Y N

Clean or replace the Fuser Assembly (PL 7.1).

Enter dC330 [010-101] and press Start. **Actuate and de-actuate the Fuser Exit Switch (PL 2.8). The display changes state.**

Y N

Go to OF 99-3 Switch RAP.

Enter dC330 [008-045] and press Start. **The Exit Gate Solenoid energizes (PL 11.2).**

Y N

Go to OF 99-4 Solenoid/Clutch RAP] and press Start.

Enter dC330 [008-037] and press Start. **The Registration Clutch energizes (PL 2.6).**

Y N

Go to OF 99-4 Solenoid/Clutch RAP.

In sequence enter the following: dC330 [9-051] then dC330 [9-052] and press Start. **The 2nd BTR Retract Motor contacts and retracts (PL 2.9).**

Y N

Go to RAP 9-342 for a contact failure or go to 9-343 for a retract failure.

Check the wires and connectors. If the check is OK, replace the MCU PWB (PL 13.1).

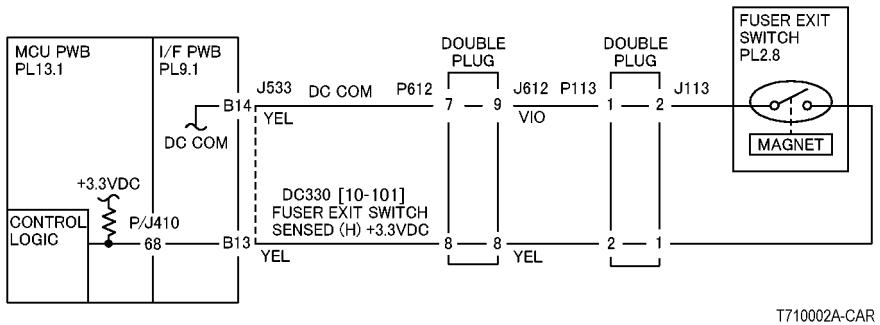


Figure 1 Fuser Exit Switch CD

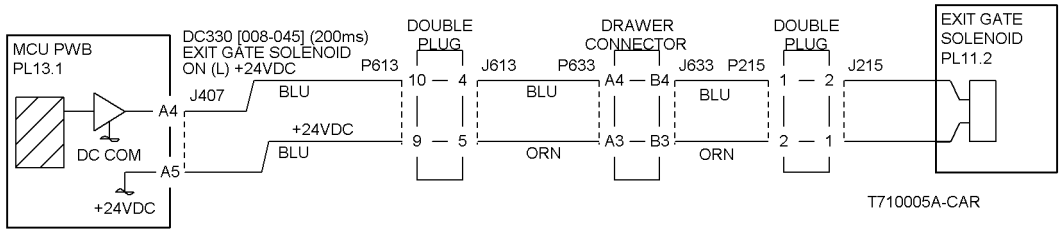


Figure 2 Exit Gate Solenoid CD

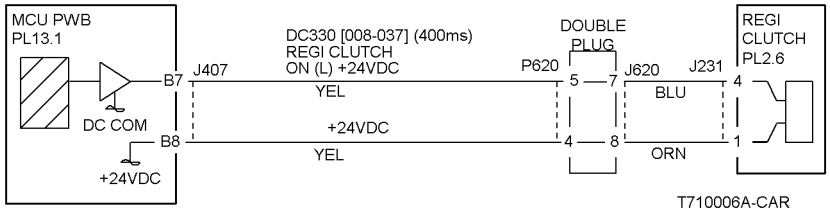


Figure 3 Registration Clutch CD

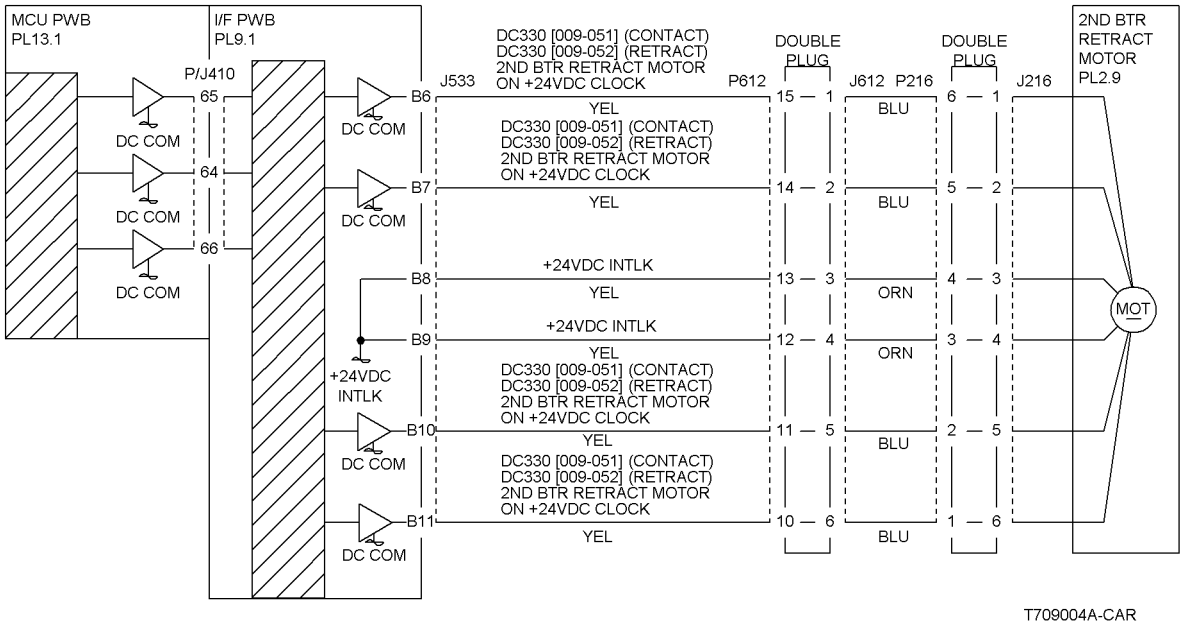


Figure 4 2ND BTR Retract Motor

10-111 Fuser Exit Switch Off (Face Down)

The Fuser Exit Switch did not de-energize.

Initial Actions

- Check condition and specification of the paper supply.
- Check for obstructions in the paper feed path.
- Clean the Fuser Exit Roll and check for wear.
- Check the drive transmissions for damage or wear.

Procedure

Check the Fuser Stripper Fingers and Fuser Roll for dirt build up, wear or damage. The check is OK.

Y N

Clean or replace the Fuser Assembly (PL 7.1).

Enter dC330 [010-101] and press Start. Actuate and de-actuate the Fuser Exit Switch (PL 2.8). **The display changes state.**

Y N

Go to OF 99-3 Switch RAP.

A

Enter dC330 [008-045] and press Start. **The Exit Gate Solenoid energizes (PL 11.2).**

Y N

Go to OF 99-4 Solenoid/Clutch RAP.

The switch and solenoid are operating correctly. If the problem continues, check the wires and connectors. If the check is OK, replace the MCU PWB (PL 13.1).

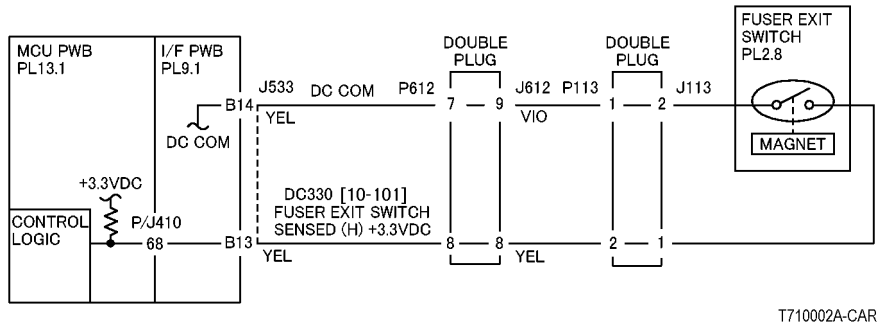


Figure 1 Fuser Exit Switch CD

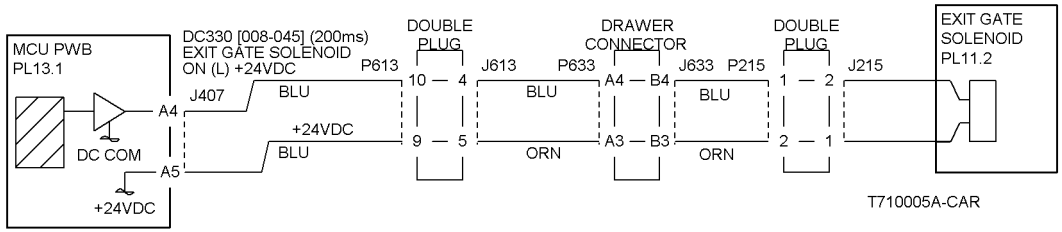


Figure 2 Exit Gate Solenoid CD

10-125 Duplex Wait Sensor On

The Duplex Wait Sensor did not energize

Initial Actions

- Check condition and specification of paper in Tray 2.
- Check the paper path for obstructions.
- Check for wear and clean the Duplex Drive Rolls.
- Check for wear and clean the Duplex Drive Rolls.
- Check the exit transmission gears for breakage and wear.

Procedure

Enter dC330 [008-105] and press Start. Block and unblock the Duplex Wait Sensor (PL 12.2). **The display changes state.**

Y N

Go to OF 99-1Reflective Sensor RAP.

Enter dC330 [008-003] and press Start. **The Duplex Motor energizes (PL 12.2).**

Y N

Go to OF 99-6 Motor RAP.

Enter dC330 [008-046] and press Start. **The Duplex Gate Solenoid energizes.**

Y N

Go to OF 99-4 Solenoid/Clutch RAP.

Enter dC330 [008-042] and press Start. **The Inverter Forward Clutch Energizes.**

Y N

Go to OF 99-4 Solenoid/Clutch RAP.

Enter dC330 [008-043] and press Start. **The Inverter Reverse Clutch Energizes.**

Y N

Go to OF 99-4 Solenoid/Clutch RAP.

The circuits are operating correctly, re-check the Drawer connector and the duplex mechanical drives. If the problem continues, check the wires and connectors. If the check is OK, replace the MCU PWB (PL 13.1).

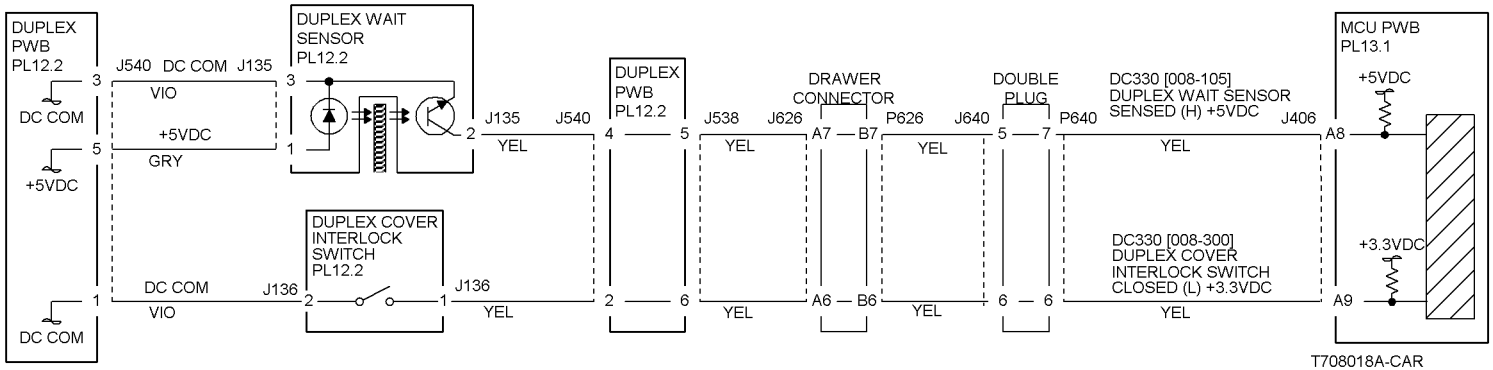


Figure 1 Duplex Wait Sensor CD

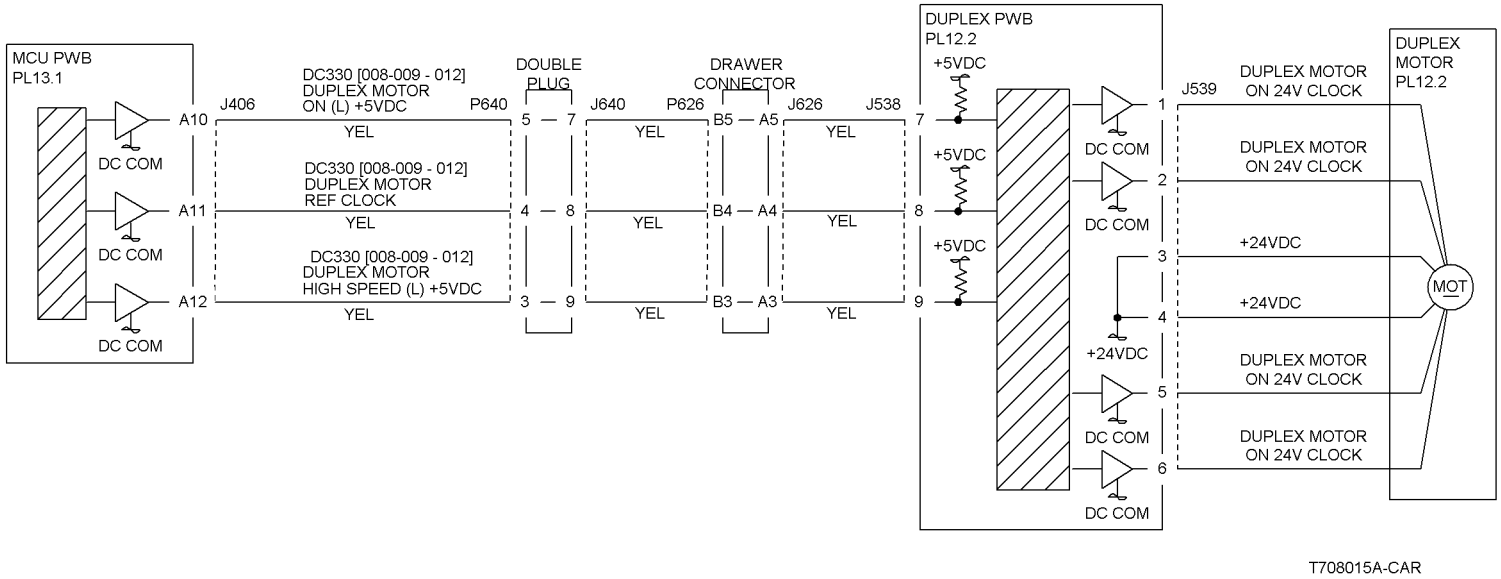


Figure 2 Duplex Motor CD

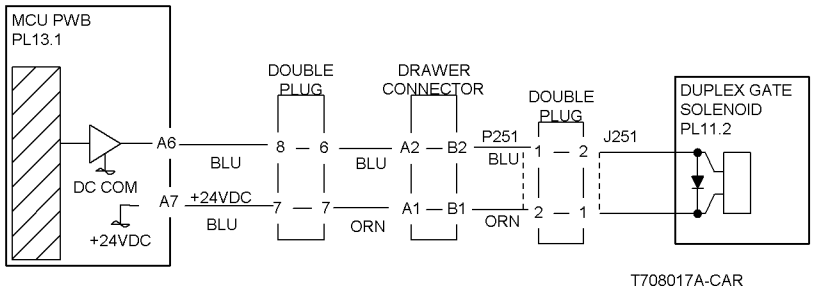


Figure 3 Duplex Exit Gate Solenoid

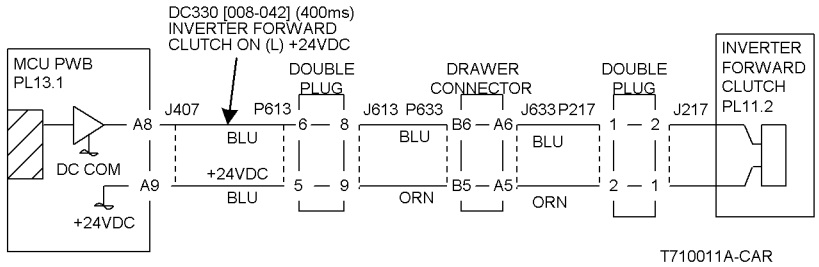


Figure 4 Inverter Forward Clutch CD

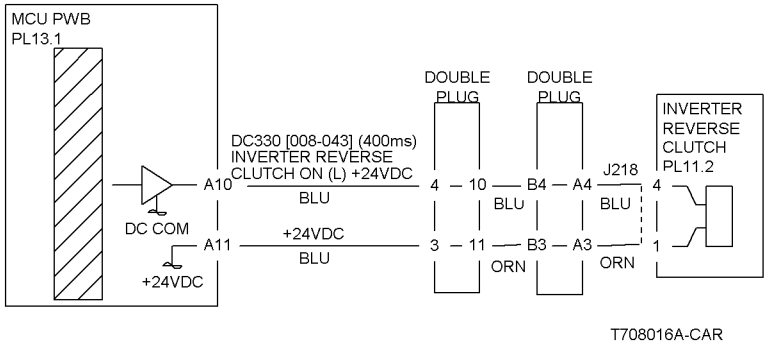


Figure 5 Inverter Reverse Clutch CD

10-348 Main Heater Over Heat

The Front Thermistor detected an overheat condition.

Procedure

NOTE: *To clear this fault, re-set the value of dC131 [744-003] to "0".*

Turn off the power, remove the Fuser Assembly. and allow it to cool down.
Measure the resistance between P/J600-4 and P/J600-6 on the Fuser Assembly.

The resistance is between 30 and 190 K Ohmís.

Y N

Check the Front Thermistor for an open circuit and poor contact. If the check is OK, replace the Sensor Assembly (PL 7.2).

Reinstall the Fuser Assembly, turn the power ON. Enter dC140 [010-100] and press Start. **The display value is between 678 and 699.**

Y N

Turn the power off. Check for an open or poor connection between P/J404-12 and P/J404-11on the MCU PWB PL 13.1. If the check is OK, replace the MCU PWB (PL 13.1).

There is +3.4VDC measured at P/J404-5 on the MCU PWB.

Y N

Replace the MCU PWB (PL 13.1).

Check the wires and connectors. If the check is OK, replace the AC Drive PWB (PL 9.2).

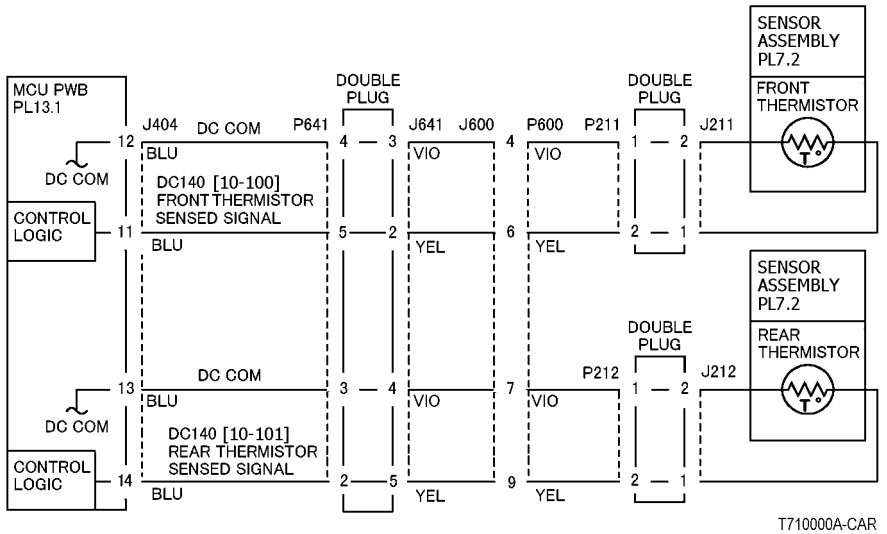


Figure 1 Fuser Front and Rear Thermistor CD

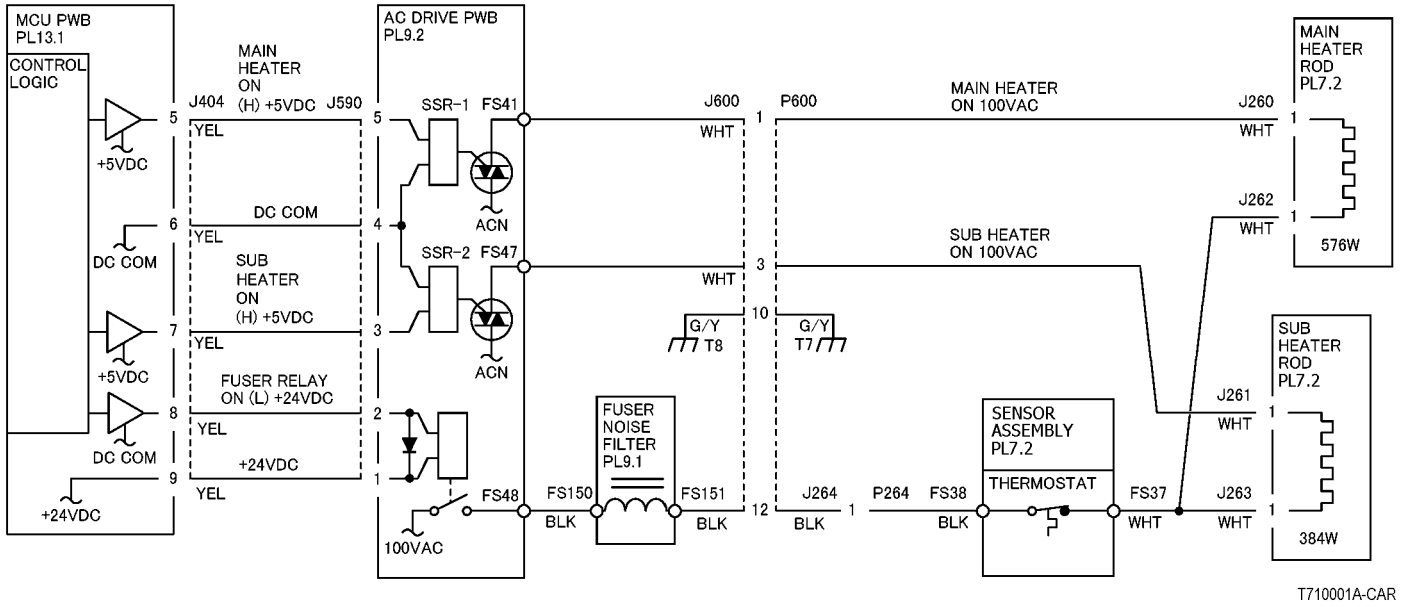


Figure 2 Fuser Main Heater and Sub Heater CD

10-349 Front Thermistor Open

The machine logic detected an open circuit in the Front Thermistor.

Procedure

Turn off the power, remove the Fuser Assembly, and allow it to cool down.
Measure the resistance between P/J600-4 and P/J600-6 on the Fuser Assembly. **The resistance is between 30 and 190 K Ohmís.**

Y N

Check the Front Thermistor for an open circuit and poor contact. If no problems are found, replace the Sensor Assembly (PL 7.1).

Reinstall the Fuser Assembly, turn the power on, enter dC140 [010-101] and press Start. **The display value is between 900 and 1000.**

Y N

Turn the power off. Check for an open or poor connection between P/J404-12 on the MCU PWB and P/J600-4 on the Fuser Assembly. If the check is OK, replace the MCU PWB (PL 13.1).

Replace the MCU PWB (PL 13.1).

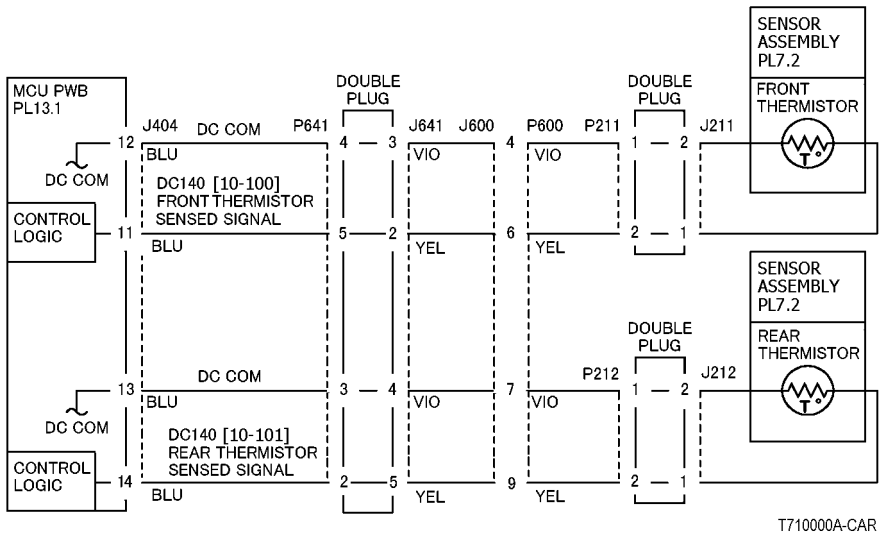


Figure 1 Fuser Front and Rear Thermistor CD

10-350 Sub Heater Over Heat

The Rear Thermistor detected an over heat condition.

Procedure

NOTE: *To clear this fault, re-set the value of dC131 [744-003] to "0".*

Turn off the power, remove the Fuser Assembly and allow it to cool down.
Measure the resistance between P/J600-7 and P/J600-9 on the Fuser Assembly.

The resistance is between 30 and 190 K Ohmís.

Y N

Check the Rear Thermistor for an open circuit and poor contact. If the check is OK, replace the Sensor Assembly (PL 7.2).

Reinstall the Fuser Assembly, turn the power ON. Enter dC140 [010-101] and press Start. **The display value is between 676 and 699.**

Y N

Turn the power off. Check for an open or poor connection between P/J404-14 and P/J404-13 on the MCU PWB (PL 13.1). If the check is OK, replace the MCU PWB (PL 13.1).

There is +3.4VDC measured at P/J404-7 on the MCU PWB (PL 13.1).

Y N

Replace the MCU PWB (PL 13.1).

A

A

Check the wires and connectors. If the check is OK, replace the AC Drive PWB (PL 9.2).

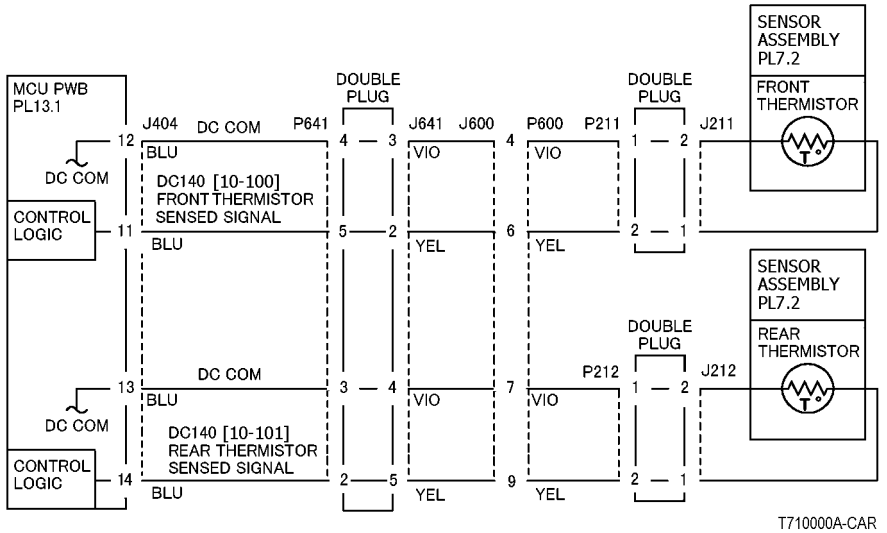


Figure 1 Fuser Front and Rear Thermistor CD

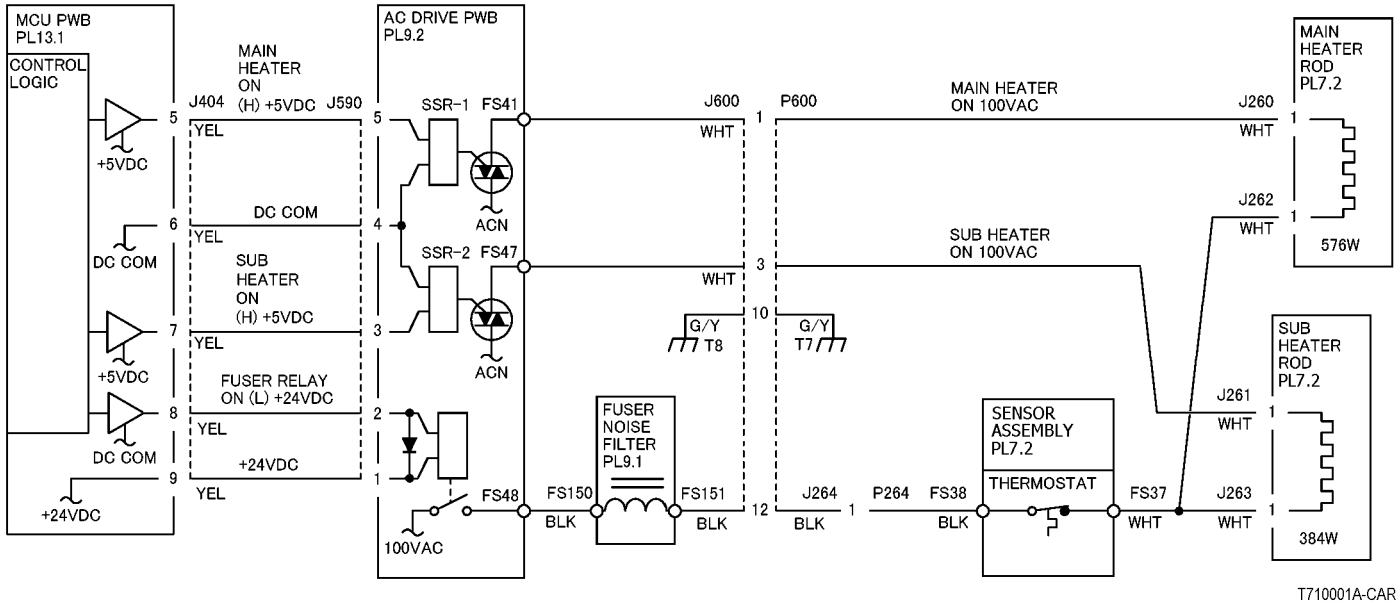


Figure 2 Fuser Main Heater and Sub Heater CD

10-351 Rear Thermistor Open

The machine logic detected an open circuit in the Rear Thermistor.

Procedure

Turn off the power, remove the Fuser Assembly and allow it to cool down.
Measure the resistance between P/J600-7 and P/J600-9 on the Fuser Assembly. **The resistance is between 30 and 190 K Ohmís.**

Y N

Check the Rear Thermistor for an open circuit and poor contact. If the check is OK, replace the Sensor Assembly (PL 7.2).

Reinstall the Fuser Assembly, turn the power on, enter dC140 [010-101] and press Start. **The display is between 678 and 699.**

Y N

Turn the power off. Check for an open or poor connection between P/J404-13 on the MCU PWB and P/J600-7on the Fuser Assembly. If the check is OK, replace the MCU PWB (PL 13.1).

Replace the MCU PWB (PL 13.1).

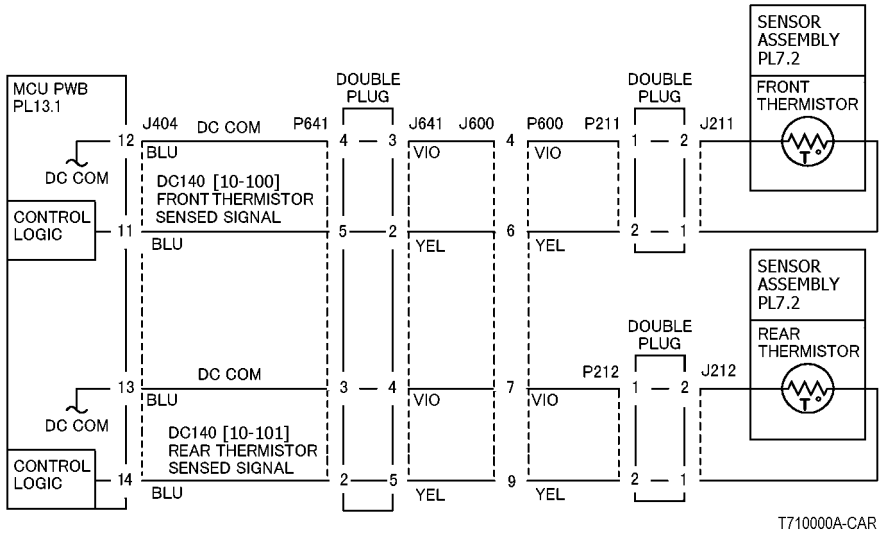


Figure 1 Fuser Front and Rear Thermistor CD

10-352 Main Heater Warm Up

The temperature did not reach the READY temperature within the specified time.

Procedure

Turn off the power, remove the Fuser Assembly. and allow it to cool down.
Measure the resistance between P/J600-4 and P/J600-6 on the Fuser Assembly.
The resistance is between 30 and 190 K Ohmís.

Y N

Check the Front Thermistor for an open circuit and poor contact. If the check is OK, replace the Sensor Assembly (PL 7.2).

Measure the resistance between P/J600-3 and P/J600-12 on the Fuser Assembly. **The resistance is 20 Ohmís or less.**

Y N

Replace the Fuser Assembly (PL 7.1).

Reinstall the Fuser Assembly, turn the power on, enter dC140 [010-100] and press Start. **The display is between 678 and 699.**

Y N

Turn the power off. Check for an open or poor connection between P/J404-12 on the MCU PWB and P/J600-6 on the Fuser Assembly. If the check is OK, replace the MCU PWB (PL 13.1).

There is Line Voltage measured at FS41 on the AC Drive PWB (PL 9.2).

Y N

There is +5VDC measured at P/J590-5 on the AC Drive PWB (PL 9.2).

Y N

Check the wires and connectors. If the check is OK, replace the MCU PWB (PL 13.1).

There is +24VDC measured at P/J590-1 on the AC Drive PWB (PL 9.2).

Y N

Check the wires and connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Replace the AC Drive PWB (PL 9.2).

Check the wires and connectors. If the check is OK, replace the Fuser Assembly (PL 7.1).

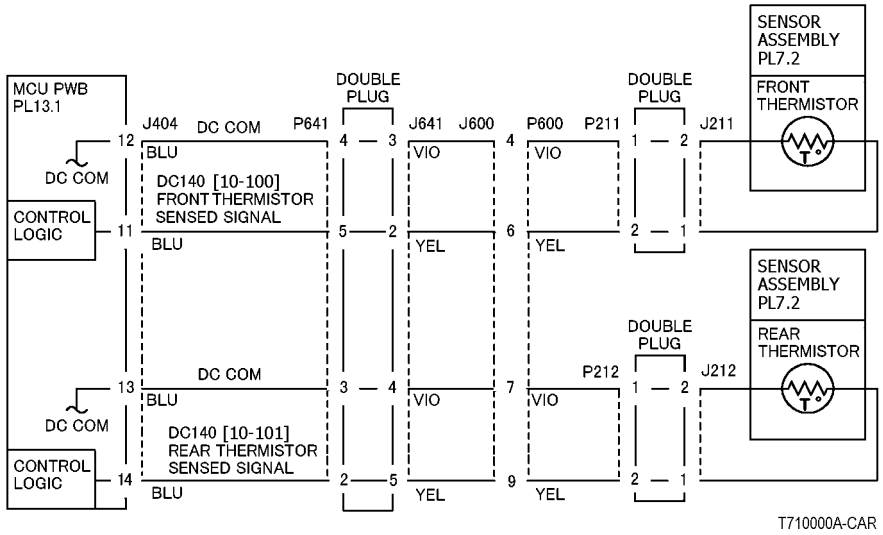


Figure 1 Fuser Front and Rear Thermistor CD

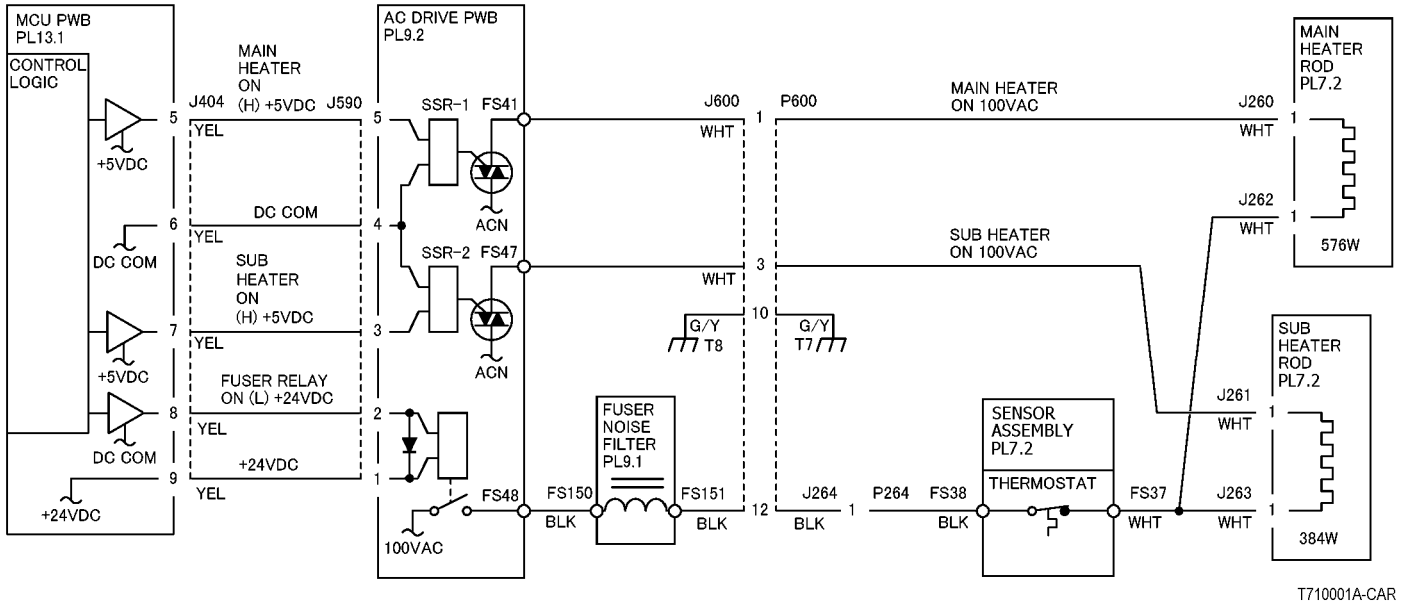


Figure 2 Fuser Main Heater and Sub Heater CD

10-353 Main Heater On Time

The Main Heater remained on for more than the specified time.

Procedure

Turn off the power, remove the Fuser Assembly. and allow it to cool down.
Measure the resistance between P/J600-4 and P/J600-6 on the Fuser Assembly.
The resistance is between 30 and 190 K Ohmís.

Y N

Check the Front Thermistor for an open circuit and poor contact. If the check is OK, replace the Sensor Assembly (PL 7.2).

Measure the resistance between P/J600-3 and P/J60012 on the Fuser Assembly. **The resistance is 20 Ohmís or less.**

Y N

Replace the Fuser Assembly (PL 7.2).

Reinstall the Fuser Assembly, turn the power on, enter dC140 [010-100]. **The display is between 676 and 699.**

Y N

Turn the power off. Check for an open or poor connection between P/J404-12 on the MCU PWB and P/J600-6 on the Fuser Assembly. If the check is OK, replace the MCU PWB (PL 13.1).

There is Line Voltage measured at FS41 on the AC Drive PWB (PL 9.2).

Y N

There is +5VDC measured at P/J590-5 on the AC Drive PWB (PL 9.2).

Y N

Check the wires and connectors. If the check is OK, replace the MCU PWB (PL 13.1).

There is +24VDC measured at P/J590-1 on the AC Drive PWB PL 9.2.

Y N

Check the wires and connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Replace the AC Drive PWB (PL 9.2).

Check the wires and connectors. If the check is OK, replace the Fuser Assembly (PL 7.1).

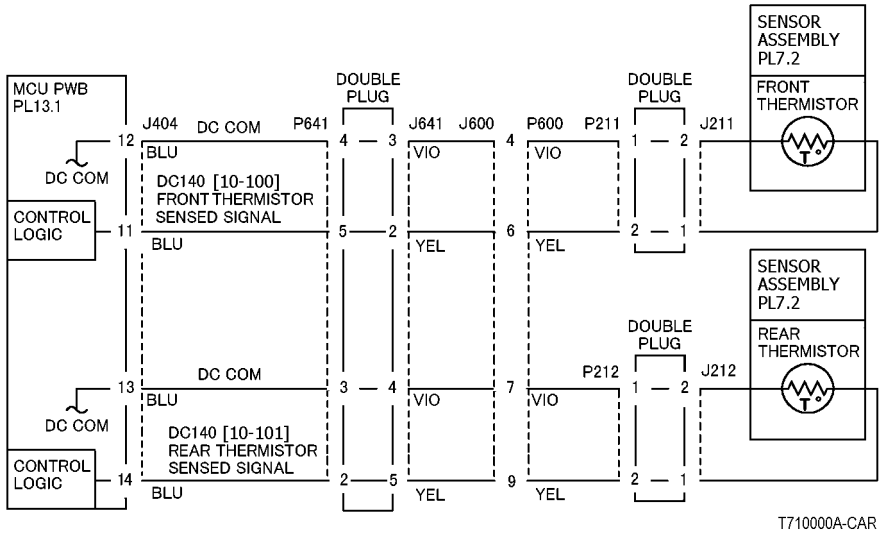


Figure 1 Fuser Front and Rear Thermistor CD

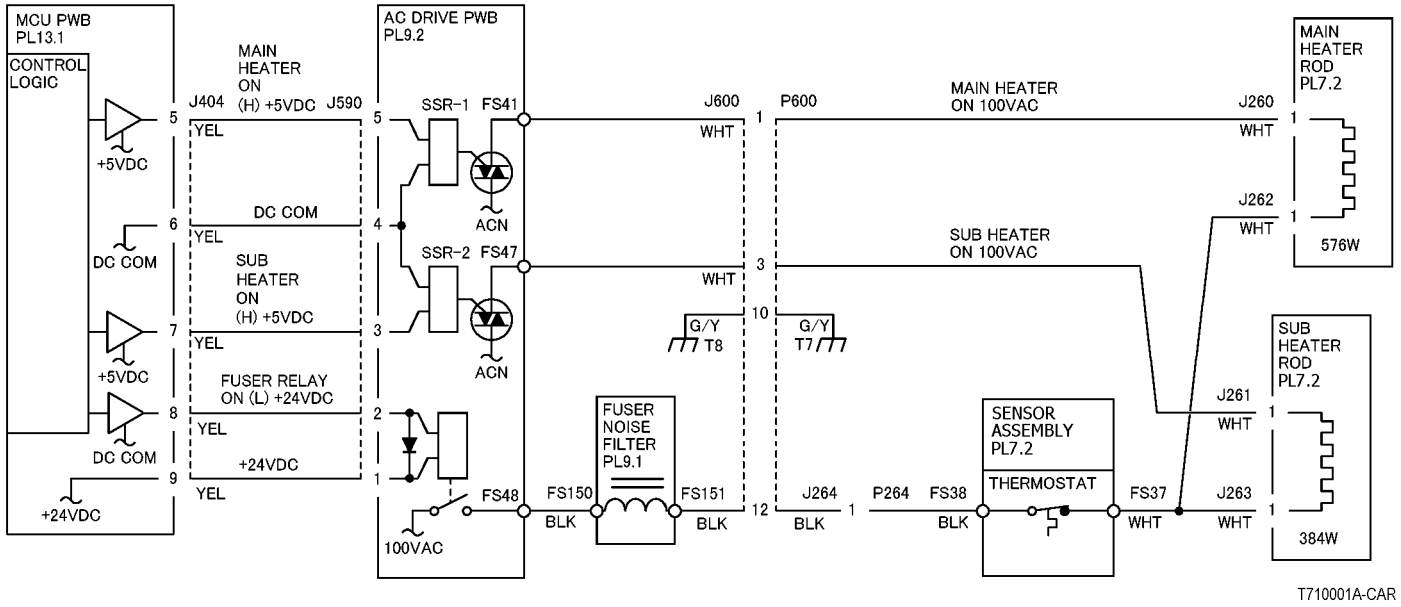


Figure 2 Fuser Main Heater and Sub Heater CD

10-354 Sub Heater Warm Up

The temperature did not reach the READY temperature.

Procedure

NOTE: *To clear this fault, re-set the value of dC131-744-003 to "0".*

Turn off the power, remove the Fuser Assembly. and allow it to cool down. Measure the resistance between P/J600-4 and P/J600-6 on the Fuser Assembly. **The resistance is between 30 and 190 K Ohmís.**

Y N

Check the Front Thermistor for an open circuit and poor contact. If the check is OK, replace the Sensor Assembly (PL 7.2).

Reinstall the Fuser Assembly, turn the power ON. Enter dC140 [010-100]. **The display value is between 678 and 699.**

Y N

Turn the power off. Check for an open or poor connection between P/J404-12 and P/J404-11on the MCU PWB PL 13.1. If the check is OK, replace the MCU PWB (PL 13.1).

There is +3.4VDC measured at P/J404-5 on the MCU PWB.

Y N

Replace the MCU PWB (PL 13.1).

A

A

Check the wires and connectors. If the check is OK, replace the AC Drive PWB (PL 9.2).

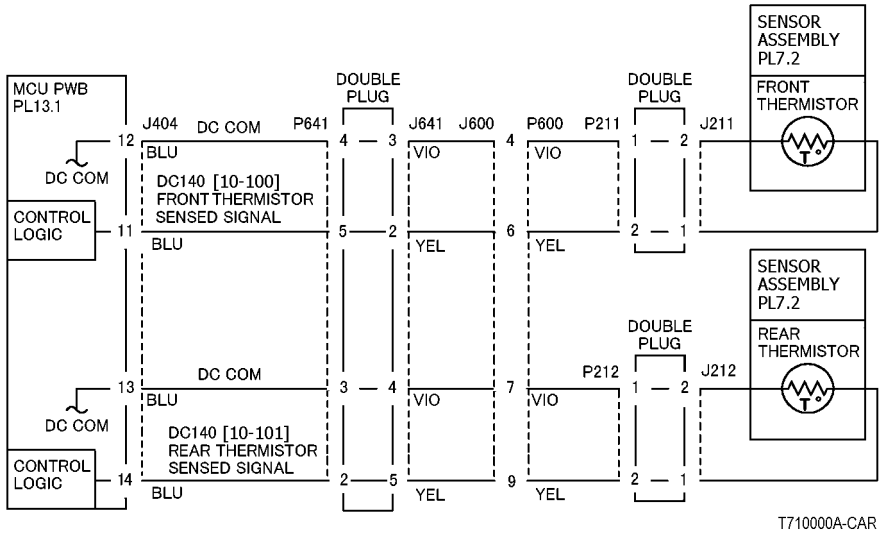


Figure 1 Fuser Front and Rear Thermistor CD

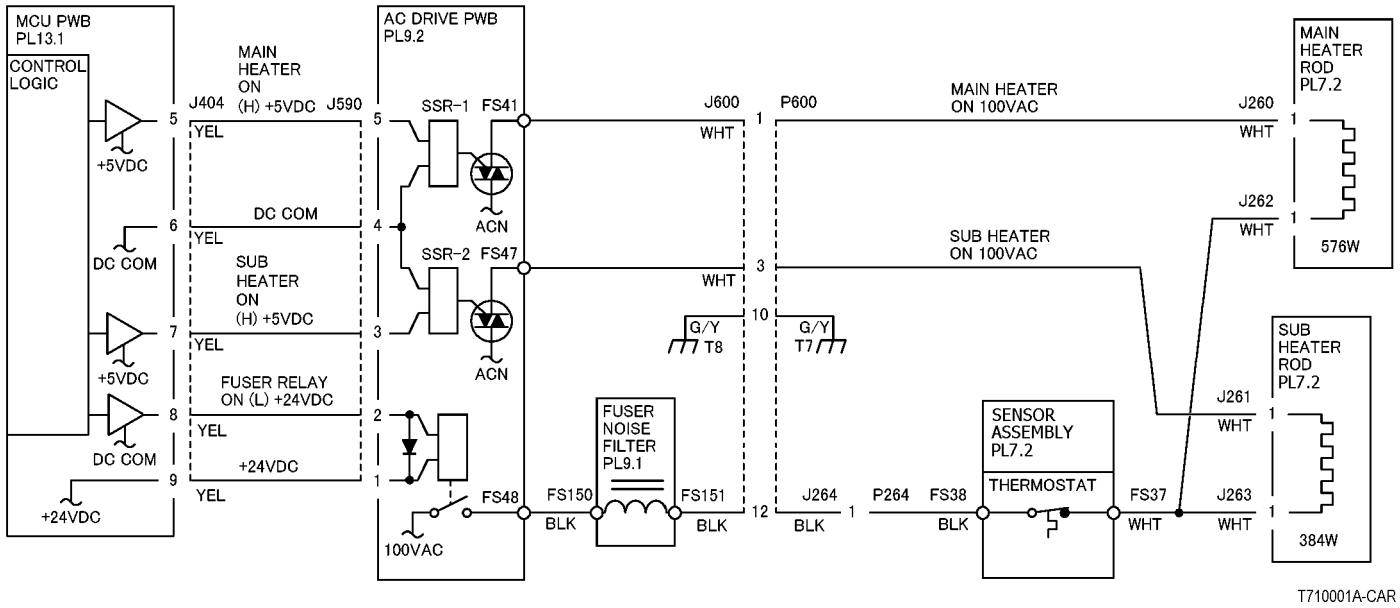


Figure 2 Fuser Main Heater and Sub Heater CD

10-356 Sub Heater On Time

The Sub Heater remained on for more than the specified time.

Procedure

Turn off the power, remove the Fuser Assembly. and allow it to cool down.

Measure the resistance between P/J600-7 and P/J600-9 on the Fuser Assembly. **The resistance is between 30 and 190 K Ohmís.**

Y N

Check the Rear Thermistor for an open circuit and poor contact. If the check is OK, replace the Sensor Assembly (PL 7.2).

Measure the resistance between P/J600-3 and P/J600-12 on the Fuser Assembly. **The resistance is 20 Ohmís or less.**

Y N

Replace the Fuser Assembly (PL 7.1).

Reinstall the Fuser Assembly, turn the power on, enter dC140 [010-101]. **The display is between 678 and 699.**

Y N

Turn the power off. Check for an open or poor connection between P/J404-13 on the MCU PWB and P/J600-7 on the Fuser Assembly. If the check is OK, replace the MCU PWB (PL 13.1).

There is Line Voltage measured at FS47 on the AC Drive PWB (PL 9.2).

Y N

There is +5VDC measured at P/J590-3 on the AC Drive PWB (PL 9.2).

Y N

Check the wires and connectors. If the check is OK, replace the MCU PWB (PL 13.1).

There is +24VDC measured at P/J590-1 on the AC Drive PWB (PL 9.2)

Y N

Check the wires and connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Replace the AC Drive PWB (PL 9.2).

Check the wires and connectors. If the check is OK, replace the Fuser Assembly (PL 7.1).

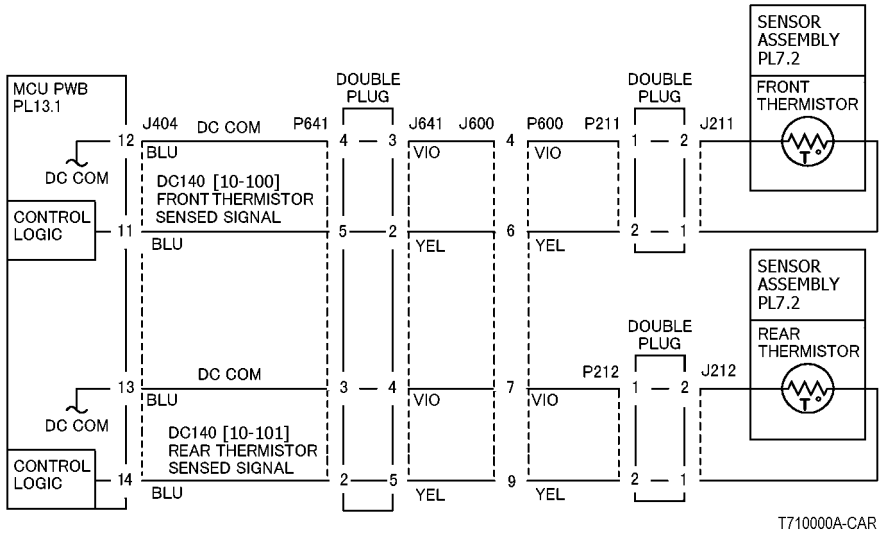


Figure 1 Fuser Front and Rear Thermistor CD

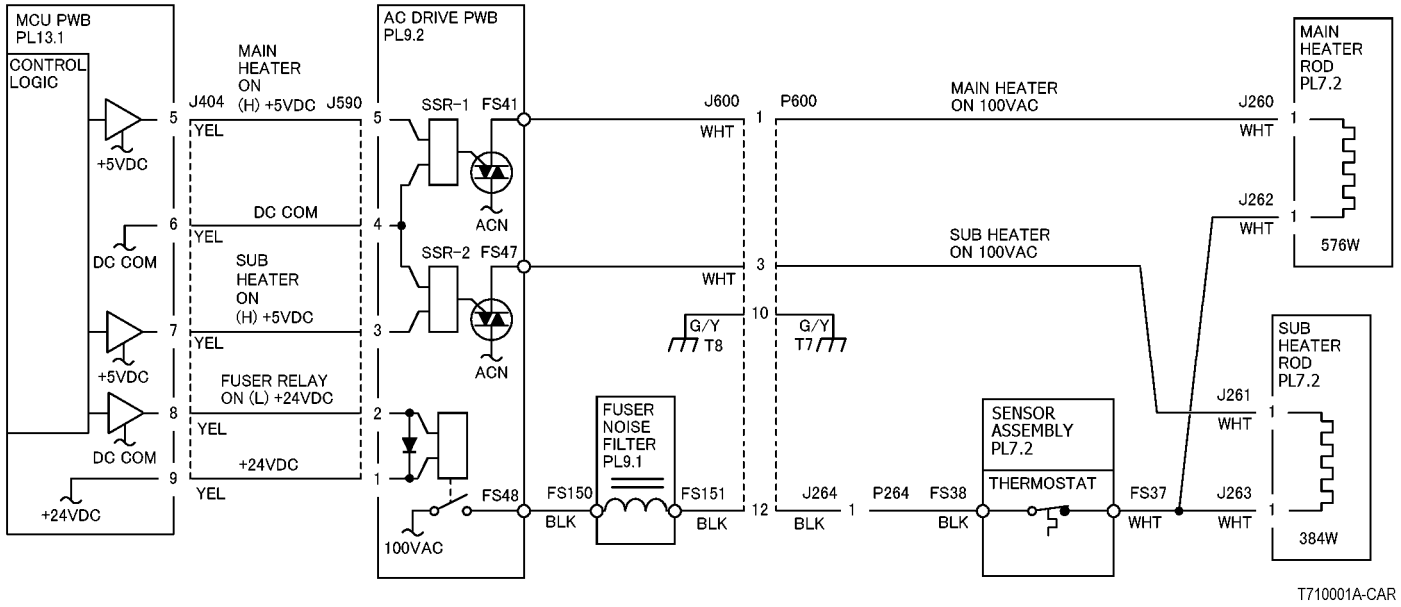


Figure 2 Fuser Main Heater and Sub Heater CD

10-398 Fan Lock

The machine logic detected a failure of the Fuser Fan, LVPS Fan or the Rear Fan.

Procedure

Enter dC330 [004-050]. **The Fuser Fan revolves at high speed.**

Y N

There is +24VDC measured at J222-4.

Y N

Check the wires and connectors. If the check is OK, replace the MCU PWB (PL 13.1).

With dC330 [004-050] entered, stack dC330 [004-200] and press Start. **The display is H.**

Y N

Check the wires and connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Replace the Fuser Fan (PL 8.1).

The Rear Fan revolves at high speed (PL 8.1).

Y N

There is +24VDC measured at J552-1.

Y N

Check the wires and connectors. If the check is OK, replace the MCU PWB (PL 13.1). If the problem continues replace the I/F PWB (PL 9.1).

With dC330 [004-050] entered, stack dC330 [004-200] and press Start. **The display is H.**

Y N

Check the wires and connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Replace the Rear Fan (PL 8.1).

The LVPS Fan revolves at high speed (PL 9.1).

Y N

There is +24VDC measured at J214-4.

Y N

Check the wires and connectors. If the check is OK, replace the MCU PWB (PL 13.1).

With dC330 [004-050] entered, stack dC330 [004-200] and press Start. **The display is H.**

Y N

Check the wires and connectors. If the check is OK, replace the MCU PWB (PL 13.1).

Replace the LVPS Fan (PL 9.1).

The Fans are operating correctly. If the problem continues replace the MCU PWB (PL 13.1).

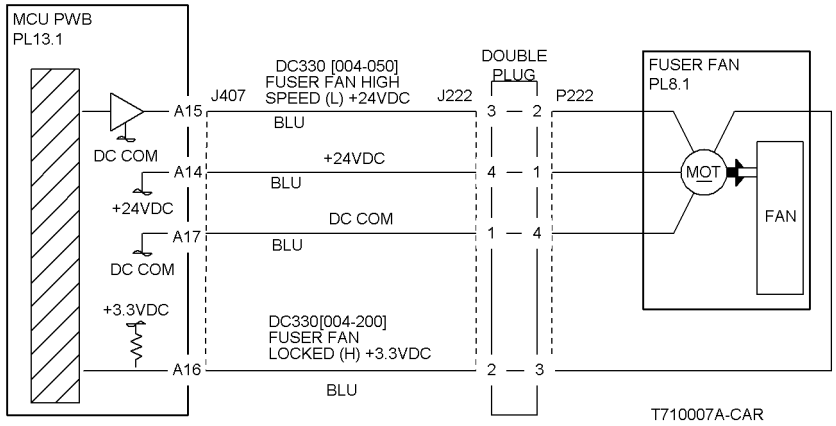


Figure 1 The Fuser Fan CD

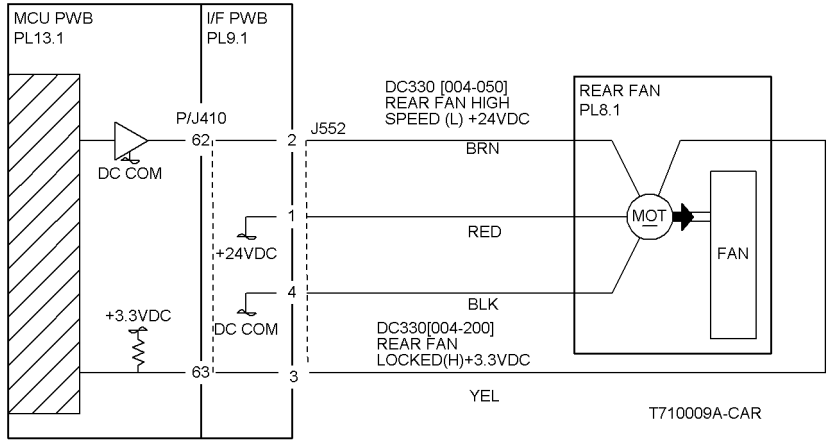


Figure 2 The Rear Fan CD

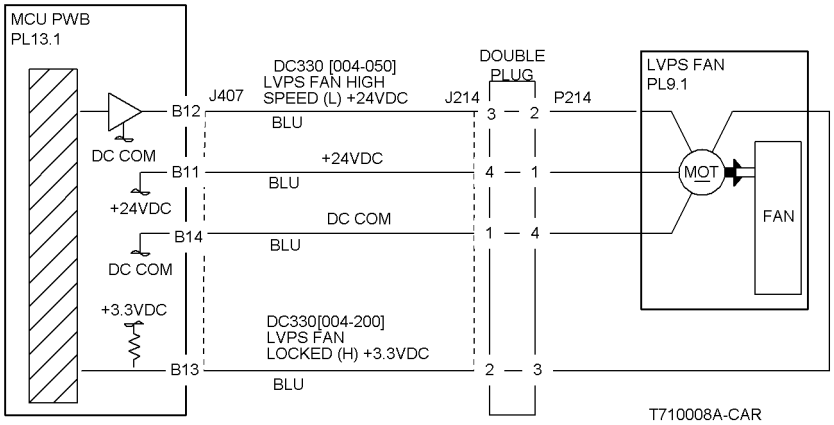


Figure 3 The LPVS Fan CD

10-420 Fuser Near End Of Life

Replace the Fuser Assembly in X copies.

Procedure

The Fuser Assembly was replaced.

Y N

Replace the Fuser Assembly (PL 7.2)

Run the dC135 [954-804]. **The initial value is 0.**

Y N

Replace the MCU PWB (PL 13.1).

Ensure that the LIFE setting value is 100K, turn power OFF/ON.
If the problem continues, replace the MCU PWB (PL 13.1).

10-421 Fuser End Of Life

Fuser at end of life.

Procedure

The Fuser Assembly was replaced.

Y N

Replace the Fuser Assembly (PL 7.2).

Run the dC135 [954-804]. **The initial value is 0.**

Y N

Replace the MCU PWB (PL 13.1).

Ensure that the LIFE setting value is 100K, turn power OFF/ON.
If the problem continues, replace the MCU PWB (PL 13.1).

12-100 H Transport Entrance Sensor On

The H Transport Entrance Sensor does not detect paper within the specific time after the Registration Clutch (in IOT) actuated.

Procedure

Enter dC330 [012-001] and press Start. **The Finisher Drive Motor energizes.**

Y N

Press Stop. Repair the drives as required (PL 17.7) for mechanical problems. If the drives are mechanically good, check the circuit of the Finisher Drive Motor (Figure 4). **+5 VDC is measured between J846-3 on the Finisher PWB and Finisher PWB Chassis (-).**

Y N

Check the wire between J846-3 on the Finisher PWB and J879-1 on the Finisher Drive Motor PWB.
If the wire is good, replace the Finisher Drive Motor (PL 17.7).

Press Start and check the voltage between J846-3 on the Finisher PWB and Finisher PWB Chassis (-). **Less than +1 VDC is measured.**

Y N

Replace the Finisher PWB (PL 17.3).

Check the voltage between J846-7 and -5 on the Finisher PWB and Finisher PWB Chassis (-). **+24 VDC is measured.**

Y N

Replace the Finisher PWB (PL 17.3).

Check the resistance between j846-11 and -9 on the Finisher PWB and Finisher PWB Chassis (-). **Less than 10 ohms is measured.**

Y N

Replace the Finisher PWB (PL 17.3).

Replace the Finisher Drive Motor (PL 17.3).

Enter dC330 [012-103] and press Start. Actuate and deactuate the H Transport Entrance Sensor. **The display changes.**

Y N

Repair the sensor as required (PL 17.4) for mechanical problems. If the sensor is mechanically good, check the circuit of the H Transport Entrance Sensor (Figure 2).

Enter dC330 [012-060 or 061] and press Start. **The gate changes position.**

Y N

Repair the gate as required (PL 17.4) for mechanical problems. If the gate linkage is mechanically good, check the circuit of the Gate In Solenoid (Figure 3).

Check the following:

- Paper path failure for burr and foreign substance.
- H-Transport Belt for contamination, wear and a drive failure
- Sensor Actuator for breakage

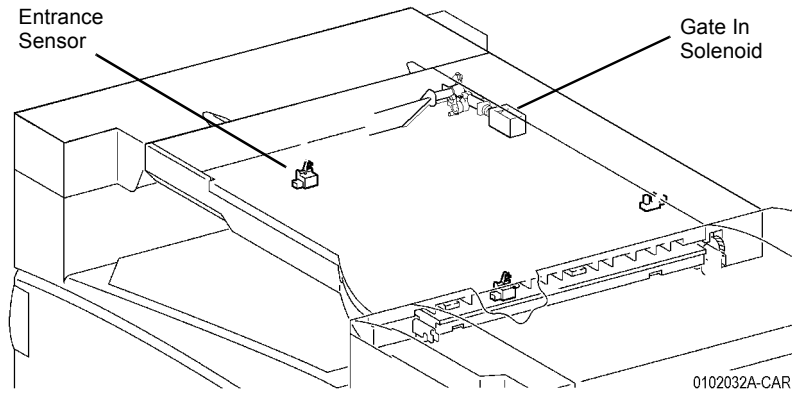


Figure 1 Component Location

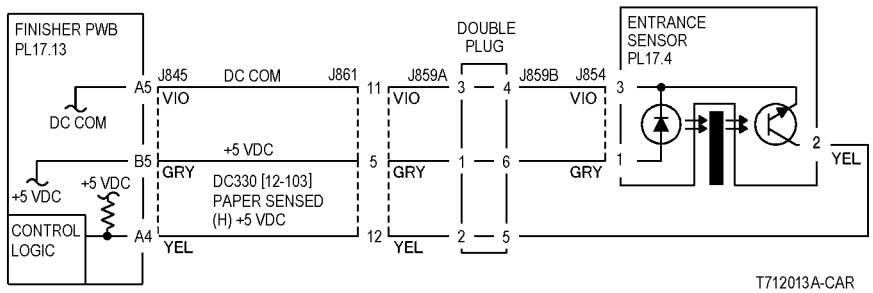


Figure 2 H Transport Entrance Sensor CD

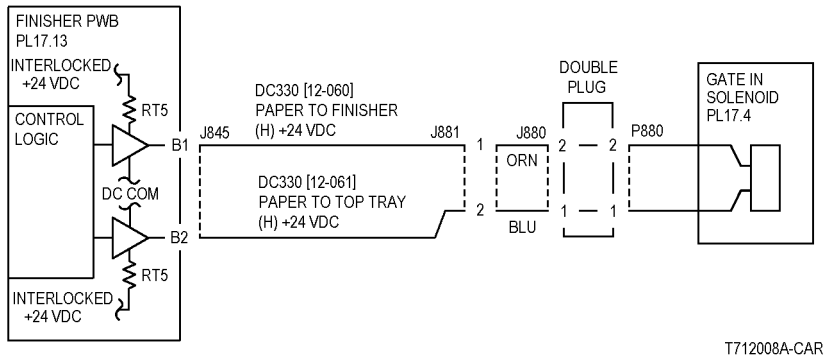


Figure 3 Gate In Solenoid CD

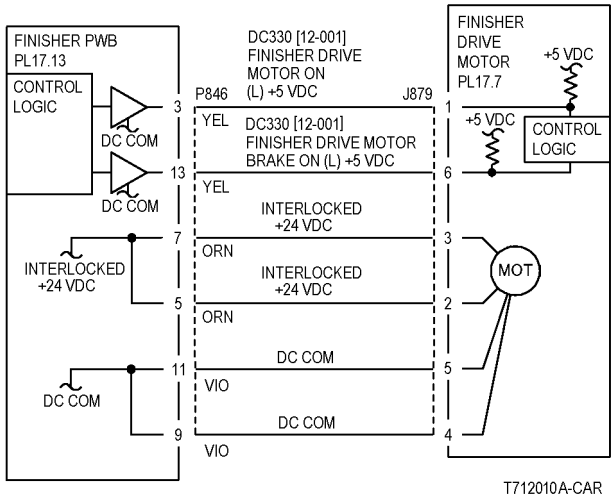


Figure 4 Finisher Drive Motor CD

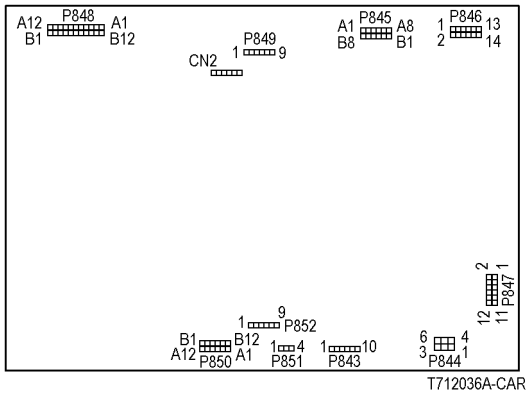


Figure 5 Finisher PWB

12-102 H Transport Entrance Sensor Off

Paper did not deactuate the H Transport Entrance Sensor.

Procedure

Open the H Transport. Check H Transport Belts, H Transport Belt Drive Rolls, and Guides on H Transport Cover for installation or damage problems. **The components are good.**

Y **N**

Repair as required (PL 17.3, PL 17.4).

Rerun the job. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Replace the H Transport Entrance Sensor for intermittent operation (PL 17.4).

NOTE: *If the sensor fails H, 12-901 is declared after power is switched on.*

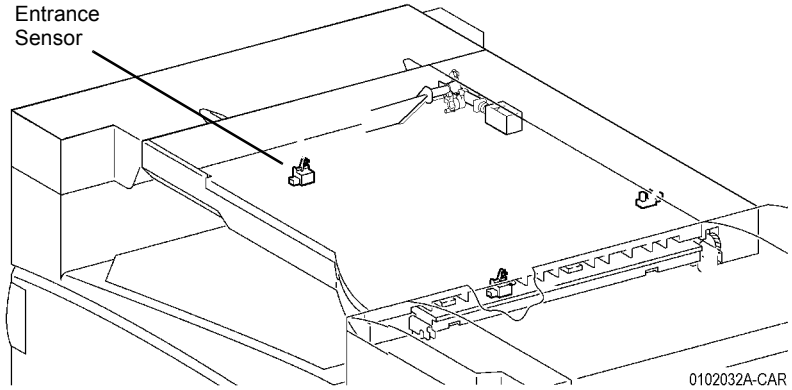


Figure 1 Component Location

12-104 H Transport Exit Sensor On

The H Transport Exit Sensor did not detect paper within the specific time after the H Transport Entrance Sensor has detected the paper. (The specified time differs depending on the paper size.)

Procedure

Enter dC330 [012-104] and press Start. Actuate and deactuate the H Transport Exit Sensor.
The display changes.

Y N

Repair the sensor as required (PL 17.4) for mechanical problems. If the sensor is mechanically good, check the circuit of the H Transport Exit Sensor (Figure 2).

Check H Transport Belts, H Transport Belt Drive Rolls, and Guides on H Transport Cover for installation or damage problems. Repair as required (PL 17.3, PL 17.4).

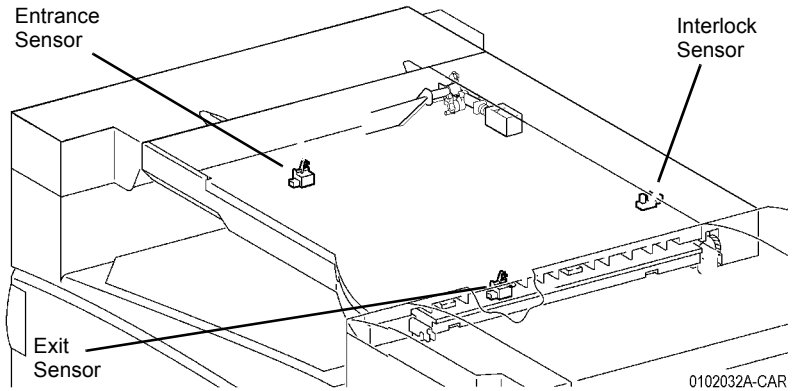


Figure 1 Component Location

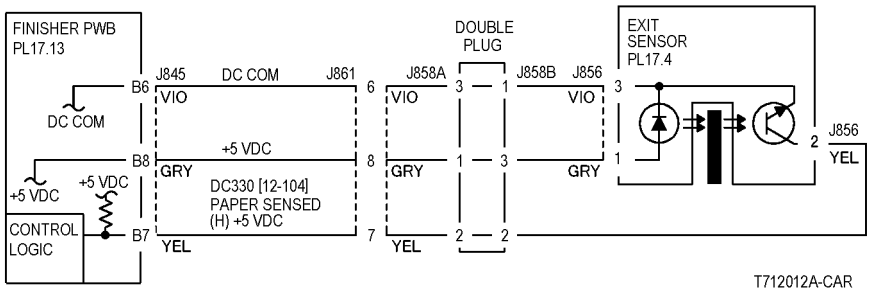


Figure 2 H Transport Exit Sensor CD

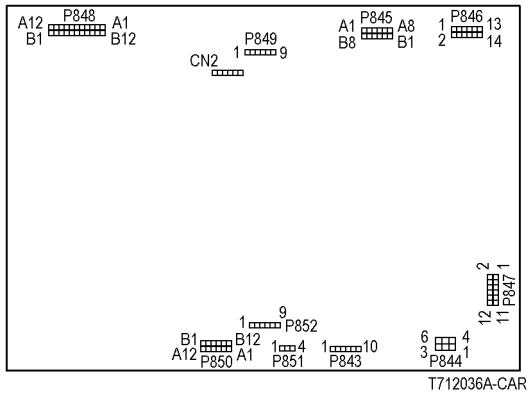


Figure 3 Finisher PWB

12-106 H Transport Exit Sensor Off

Paper did not deactuate the H Transport Exit Sensor.

Procedure

Enter dC330 [012-217] and press Start. Actuate and deactuate the Decurler Cam Home Sensor. **The display changes.**

Y N

Check the circuit of the Decurler Cam Home Sensor (Figure 2).

Enter dC330 [012-070] and press Start. **The Decurler Cam Clutch energizes.**

Y N

Check the circuit of the Decurler Cam Clutch (Figure 3).

Check the following:

- Paper path failure for burr and foreign substance.
- H Transport Belt Drive Roll for contamination, wear and a drive failure
- Drive Transmission Gear from the Finisher Drive Motor for wear and breakage
- H Transport and Finisher for a docking failure
- Decurler Roll/pinch Roll for a drive failure
- Compiler Entrance Roll for a drive failure

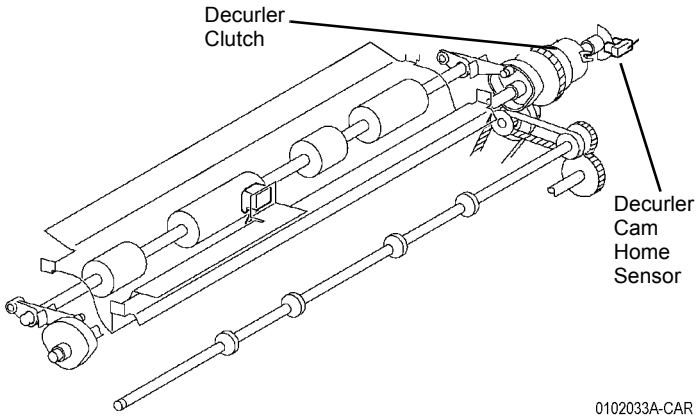


Figure 1 Component Location

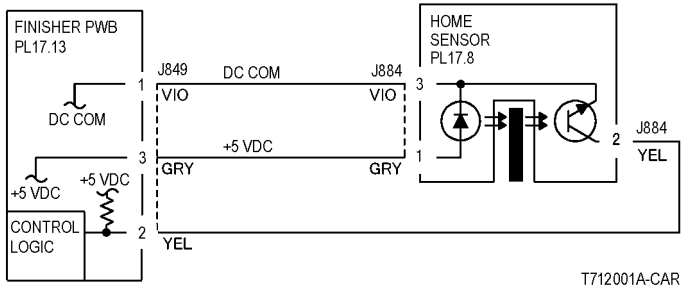


Figure 2 Decurler Cam Home Sensor CD

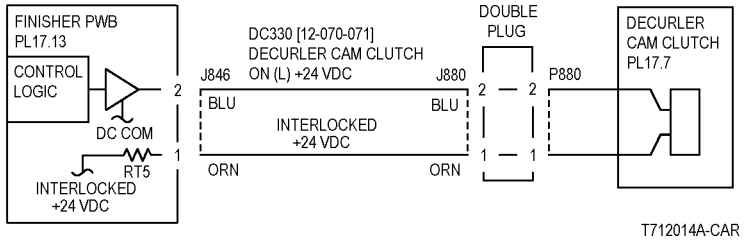


Figure 3 Decurler Cam Clutch CD

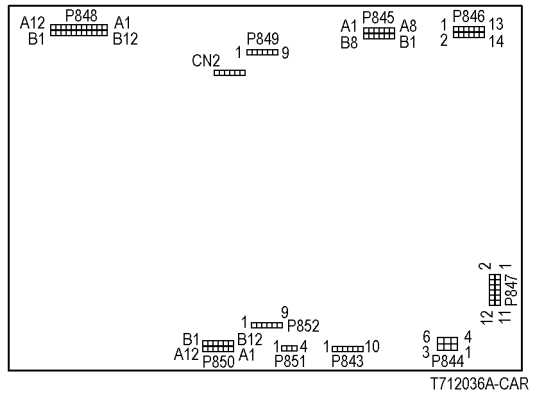


Figure 4 Finisher PWB

12-120 Compiler Entrance Sensor On

The Compiler Entrance Sensor did not detect paper.

Procedure

Enter dC330 [012-101] and press Start. Actuate and deactuate the Complier Entrance Sensor. **The display changes.**

Y **N**

Check the circuit of the Complier Entrance Sensor (Figure 2).

Check the following:

- Complier Entrance Sensor Actuator for breakage and bending
- Paper path failure for burr and foreign substance.
- Decurler Roll/pinch Roll for a drive failure
- Drive Transmission Gear from the Finisher Drive Motor for wear and breakage

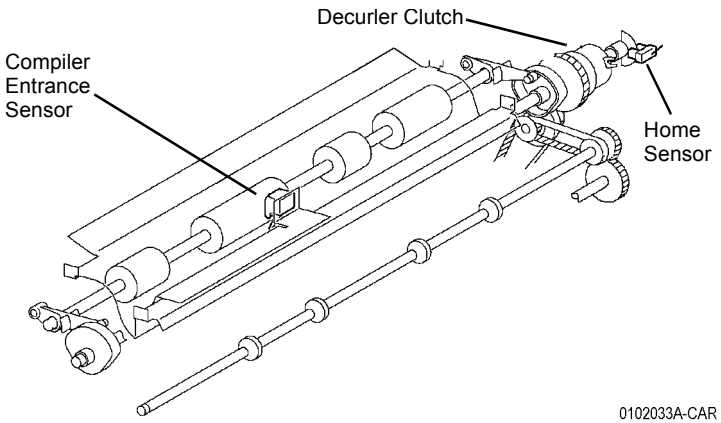


Figure 1 Component Location

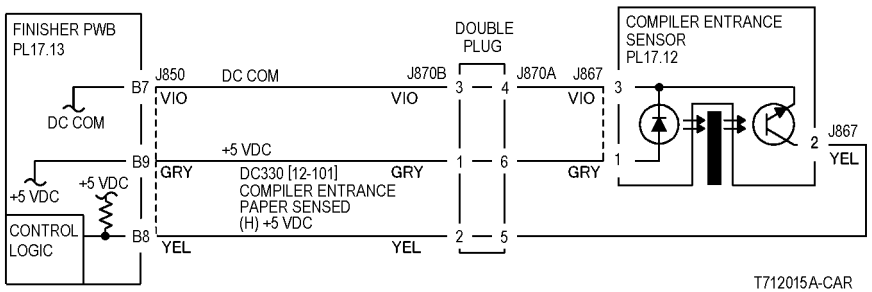


Figure 2 Compiler Entrance Sensor CD

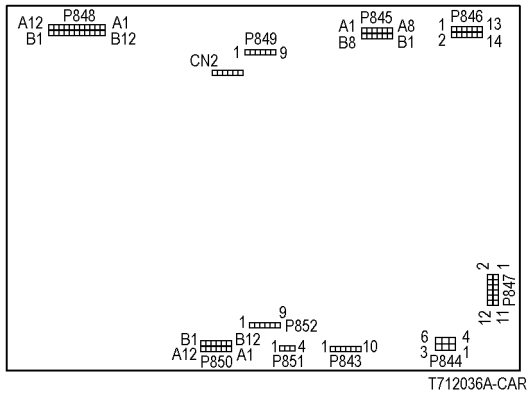


Figure 3 Finisher PWB

12-122 Compiler Entrance Sensor Off

Paper does not deactuate the Compiler Entrance Sensor.

Procedure

Make a copy and observe paper in the Compiler Tray. **The copy enters the Compiler Tray.**

Y N

There is a drives problem. Check the following:

- The paper path failure for burr and foreign substance.
- The Drive Transmission Gear from the Finisher Drive Motor for wear and breakage
- The Decurler Roll/pinch Roll for a drive failure
- The Compiler Entrance Roll for a drive failure

Repair the sensor as required (PL 17.4) for mechanical problems. If the sensor is mechanically good, replace the Compiler Entrance Sensor.

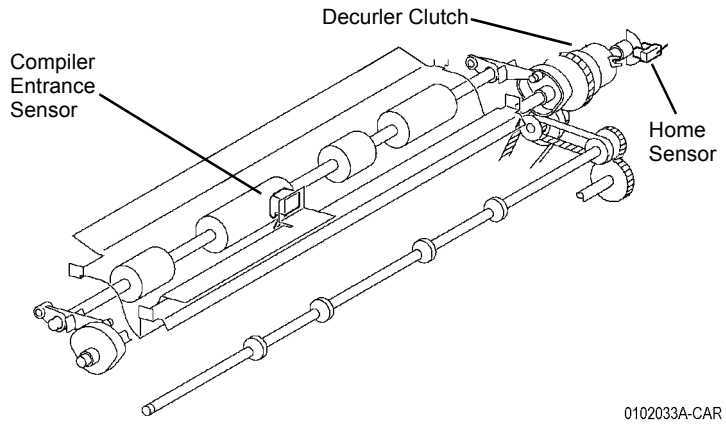


Figure 1 Component Location

12-170 Set Eject

The Compiler Paper Sensor did not deactuate after the Eject Motor energized.

Procedure

Enter dC330 [012-102] and press Start. Actuate and deactuate the Compiler Paper Sensor.
The display changes.

Y **N**

Repair the sensor as required (PL 17.10) for mechanical problems. If the sensor is mechanically good, check the circuit of the Compiler Paper Sensor (Figure 2).

Check the following:

- Eject Roll for contamination, wear and a drive failure
- Drive Transmission Gear from the Eject Motor for wear and breakage
- Eject Clamp for an up and down movement failure
- Stacker Tray for foreign substance

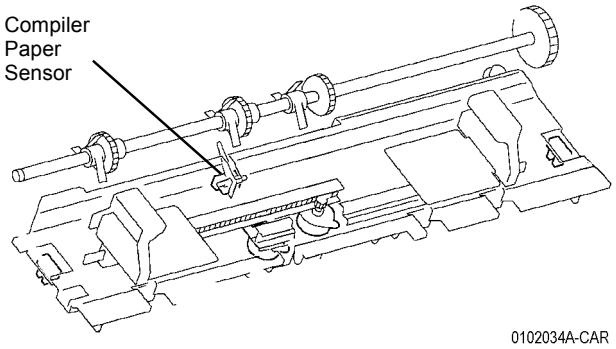


Figure 1 Component Location

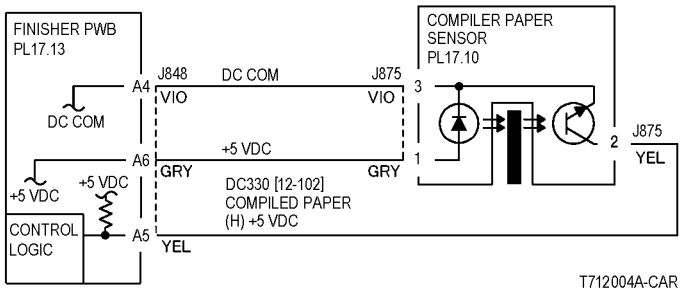


Figure 2 Compiler Paper Sensor CD

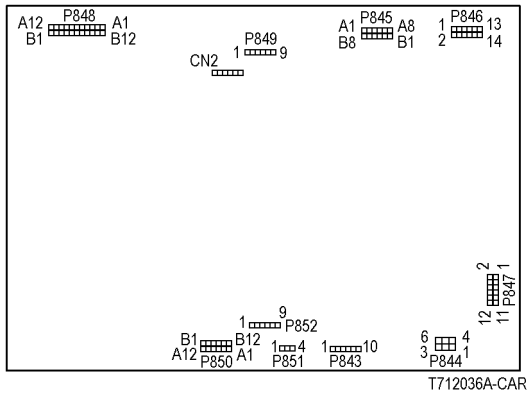


Figure 3 Finisher PWB

12-241 Staple Move Sensor On

- The Staple Move Sensor did not turn on within 2sec after the system has started to move to the Staple Position and the Staple Move Sensor has turned off.
- The Staple Move Sensor did not turn on after the move to the Staple Position has completed.

Procedure

The Staple Head move smoothly without any load.

Y N

Remove the cause of Staple Head not moving, such as rail breakage, drag, and gnawed gear.

Cheat the Front Cover Interlock Switch. Enter dC330 [012-224] and press Start. Actuate the Staple Move Sensor with paper. **The display changes.**

Y N

Repair the Staple Move Sensor using the Generic Transmissive Sensor RAP.

Enter dC330 [012-081] (front direction) or [12-083] (rear direction) and press Start. **The Staple Move Motor energized.**

Y N

+24 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).

Y N

Replace the Finisher PWB (PL 17.13).

Check the wire between the Finisher PWB p/j and the Stapler Move Motor p/j for an open circuit or poor contact.

If no problems are found, replace the Stapler Assembly (PL 17.9).

If the problem continues, replace the Finisher PWB (PL 17.13).

Replace the Finisher PWB (PL 17.13).

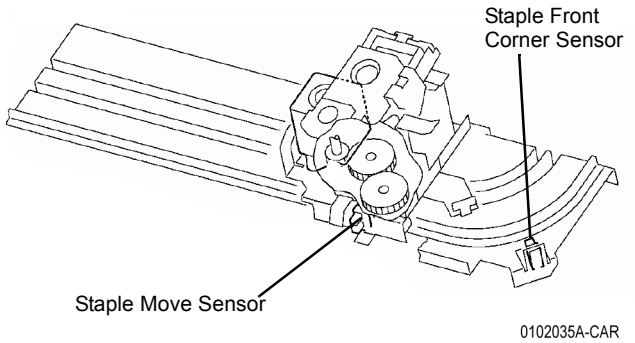


Figure 1 Component Location

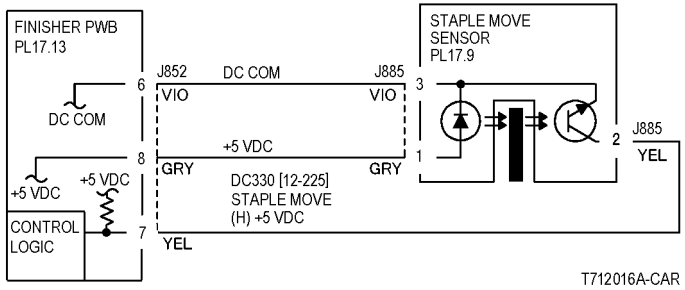


Figure 2 Stapler Move Sensor CD

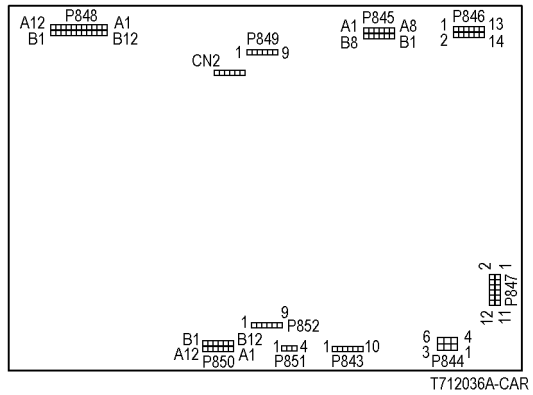


Figure 3 Finisher PWB

12-242 Staple Move Sensor Off

- The Staple Move Sensor did not turn off within 500ms after the move to the Staple Position has started.
- The Staple Move Sensor turned off after Staple Position has been fixed.
- The Staple Move Sensor did not turn off within 500ms after it has turned on when paper passed through the 1st position of the DUAL STAPLE at moving to the Rear Staple Position.

Procedure

Open the Finisher Front Cover. **Turn the Stapler Assembly manually.**

Y N

Remove the cause of Staple Head not moving, such as rail breakage, drag, and gnawed gear.

Cheat the Front Cover Interlock Switch.

Enter dC330 [12-224] and press Start. Actuate the Staple Move Sensor with paper. **The display changes.**

Y N

Repair the Staple Move Sensor using the Generic Transmissive Sensor RAP.

Enter dC330 [012-081] (front direction) or [12-083] (rear direction)and press Start. **The Staple Move Motor energized.**

Y N

+24 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).

Y N

Replace the Finisher PWB (PL 17.13)

Check the wire between the Finisher PWB p/j and the Stapler Move Motor p/j for an open circuit or poor contact.

If no problems are found, replace the Stapler Move Motor (PL 17.9).

If the problem continues, replace the Finisher PWB (PL 17.13)

Replace the Finisher PWB (PL 17.13)

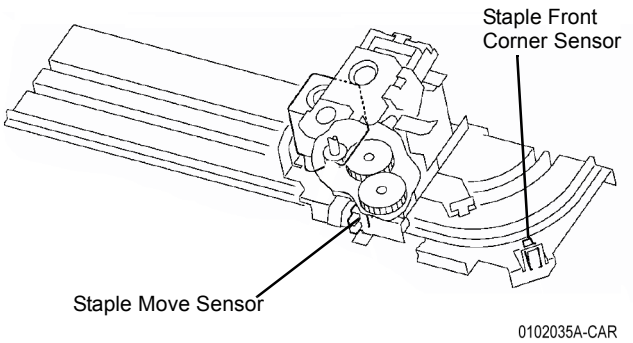


Figure 1 Component Location

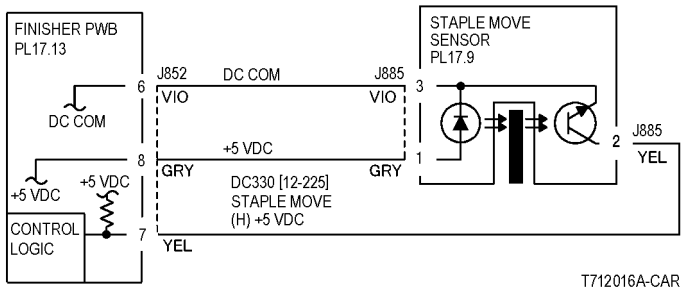


Figure 2 Stapler Move Sensor CD

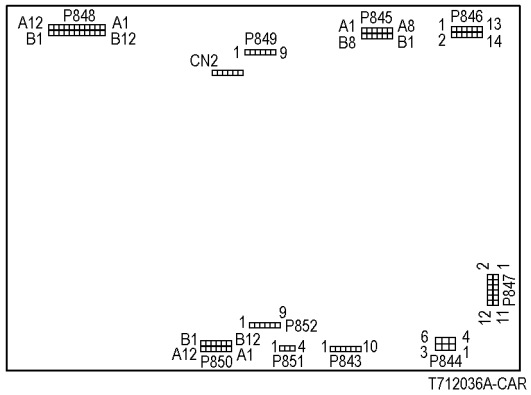


Figure 3 Finisher PWB

12-244 Staple Home Sensor

The Staple Head Home Sensor never turn on within 200ms after the STAPLER MOTOR started to revolve backward (open).

Procedure

Enter dC330 [012-207] and press Start. Turn the Staple Head Home Sensor on/off using paper. **The display changes.**

Y N

+5 VDC is measured between the Stapler Assembly p/j (+) and Finisher PWB Chassis (-).

Y N

+5 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).

Y N

Replace the Finisher PWB (PL 17.13).

Check the wire between the Finisher PWB p/j and the Stapler Assembly p/j for an open circuit or poor contact.

Turn the Staple Motor Gear manually in order not to interrupt the SENSOR. **+5 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).**

Y N

Switch off the power.
Pull out the on the Finisher PWB.
Turn on the power. **+5 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).**

Y N

Replace the Finisher PWB (PL 17.13).

Check the circuit between the p/j and the Stapler Assembly p/j for short circuit.

Block the sensor. **0 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).**

Y N

0 VDC is measured between the Stapler Assembly p/j (+) and Finisher PWB Chassis (-).

Y N

Replace the Stapler Assembly (PL 17.9).

Check the wire between the Stapler Assembly p/j and the Finisher PWB p/j for an open circuit or poor contact.

Replace the Finisher PWB (PL 17.13).

Enter dC330 [012-020] (CLOSE). **The STAPLE MOTOR energizes.**

Y N

With [12-020] running **+24 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).**

Y N

Replace the Finisher PWB (PL 17.13).

A B

Check conductivity of the following:

- Between the Finisher PWB p/j ~ Stapler Assembly p/j
- Between the Finisher PWB p/j ~ Stapler Assembly p/j
- Between the Finisher PWB p/j ~ Stapler Assembly p/j
- Between the Finisher PWB p/j ~ Stapler Assembly p/j

If no problems are found, replace the Stapler Assembly (PL 17.9).
If the problem continues, replace the Finisher PWB (PL 17.13).

Replace the Finisher PWB (PL 17.13).

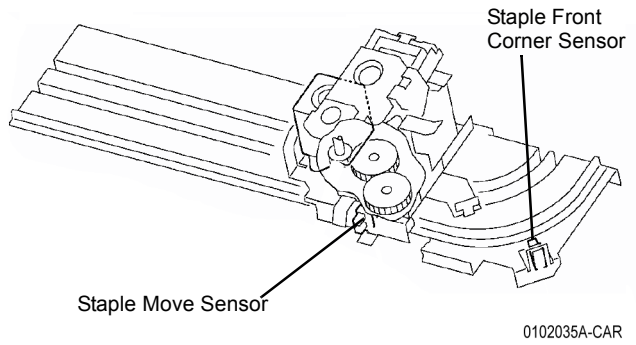


Figure 1 Component Location

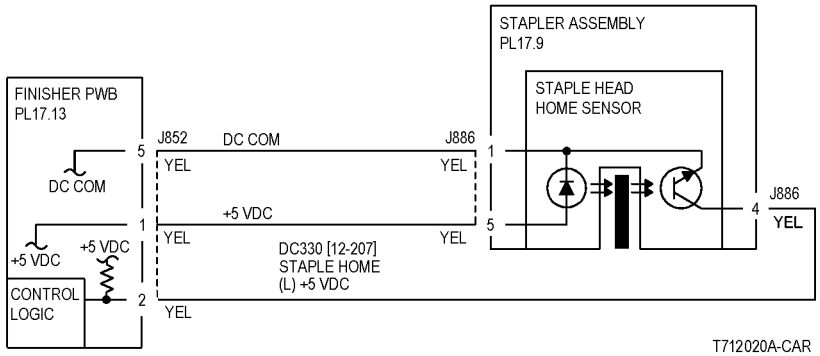


Figure 2 Staple Head Home Sensor

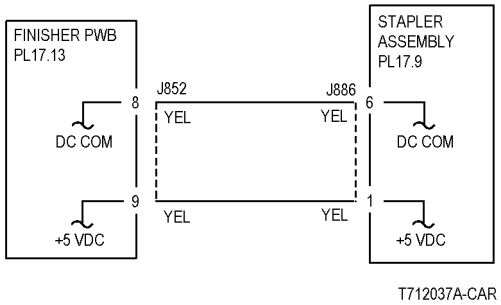


Figure 3 Stapler Assembly Logic Power CD

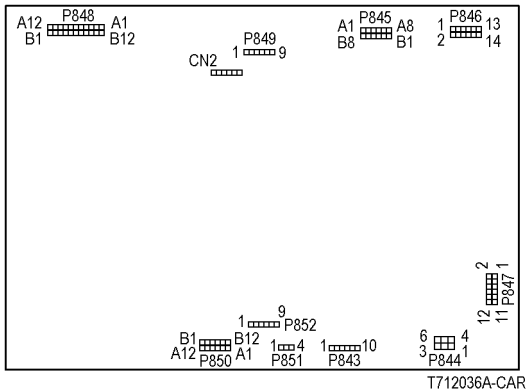


Figure 4 Finisher PWB

12-252 Front Tamper

- With the Front Tamper Home Sensor off the Front Tamper Home Sensor did not turn on within 800ms after move to the Front Tamper Home position has begun.
- With the Front Tamper Home Sensor on The Front Tamper Sensor did not turn off when the Front Tamper Home Sensor is deactuating.

Procedure

Enter dC330 [012-091] (front) or [12-094] (rear) and press Start. **The Front Tamper Guide moves.**

Y N

The Front Tamper Motor energized.

Y N

+24 VDC is measured between J848-B7 or B9 or B10 or B12 on the Finisher PWB and Finisher PWB Chassis (-).

Y N

+24 VDC is measured between J848-B8 or B11 on the Finisher PWB p/j (+) and Finisher PWB Chassis (-).

Y N

Replace the Finisher PWB (PL 17.13).

Check the wire between the Finisher PWB p/j and the Front Tamper Motor p/j for a short circuit, open circuit, or poor contact.
If the wires and connections are good, replace the Front Tamper Motor (PL 17.10).

Replace the Finisher PWB (PL 17.13).

Check the tamper mechanism for load or drive transmission failure (gear wear or breakage.).

Enter dC330 [012-216] and press Start.
Move the Front Tamper manually and turn the Front Tamper Home Sensor on/off. **The display changes.**

Y N

Check the Front Tamper Home Sensor using the Generic Transmissive Sensor RAP.

Replace the Finisher PWB (PL 17.13).

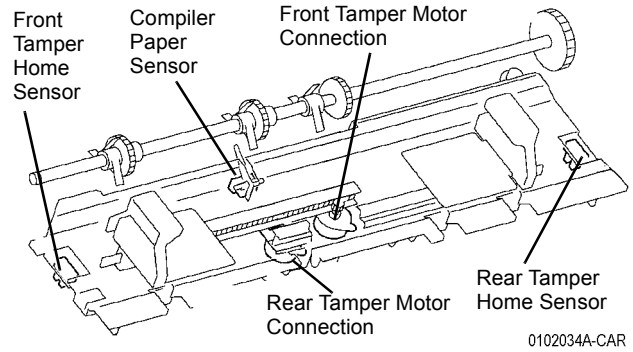


Figure 1 Component Location

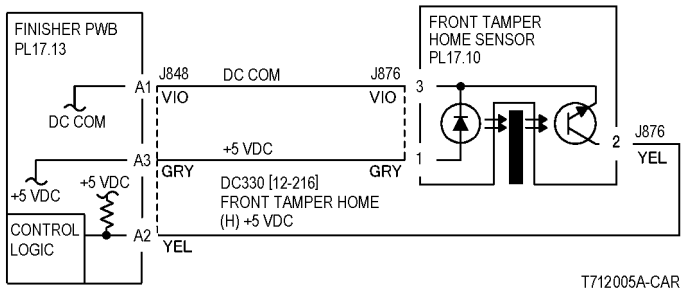


Figure 2 Front Tamper Home Sensor CD

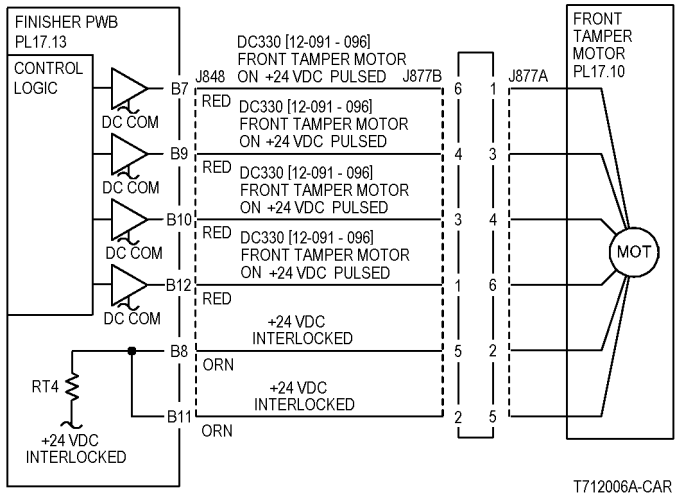


Figure 3 Front Tamper Motor CD

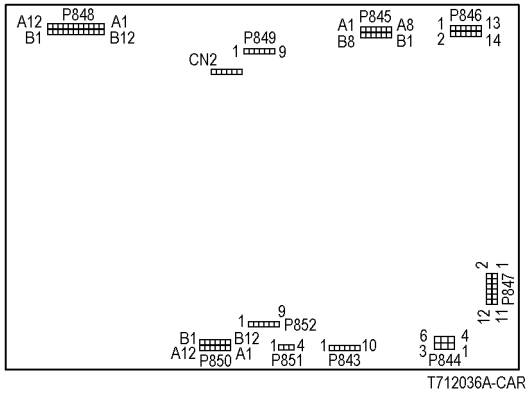


Figure 4 Finisher PWB

12-253 Rear Tamper

- With the Rear Tamper Home Sensor off The Rear Tamper Home Sensor did not turn on within 800ms after move to the Rear Tamper Home position has begun.
- With the Rear Tamper Home Sensor on: The Rear Tamper Home Sensor did not turn off when the Rear Tamper Home Sensor is deactuating.

Procedure

Enter dC330 [012-010] (front) or [12-013] (rear) and press Start. **The Rear Tamper Guide energizes.**

Y N

The Rear Tamper Motor energizes.

Y N

+24 VDC is measured between J848-B1 or B3 or B4 or B6 on the Finisher PWB and Finisher PWB Chassis (-).

Y N

+24 VDC is measured between J848-B2 or B5 on the Finisher PWB and Finisher PWB Chassis (-).

Y N

Replace the Finisher PWB (PL 17.13).

Check the wire between the Finisher PWB p/j and the Rear Tamper Motor p/j for a short circuit, open circuit, or poor contact.

If the wires and connections are good, replace the Front Tamper Motor (PL 17.10).

Replace the Finisher PWB (PL 17.13).

Check the tamper mechanism for load or drive transmission failure (gear wear or breakage).

Enter dC330 [012-212] and press Start. Move the Rear Tamper manually and turn the Rear Tamper Home Sensor on/off. **The display changes.**

Y N

Check the Rear Tamper Home Sensor using the Generic Transmissive Sensor RAP.

Replace the Finisher PWB (PL 17.13).

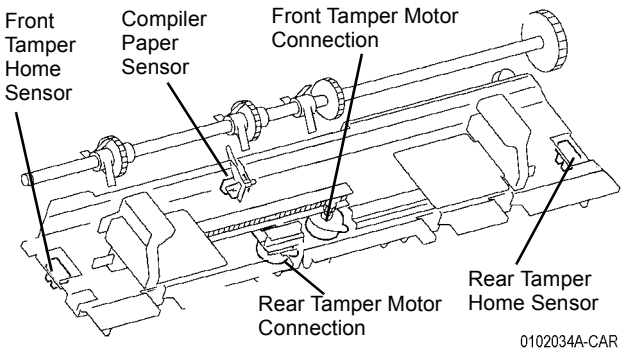


Figure 1 Component Location

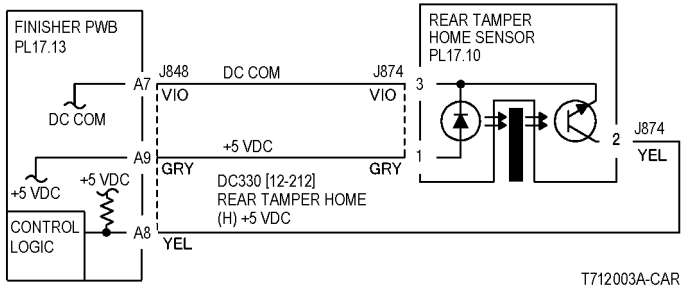


Figure 2 Rear Tamper Home Sensor CD

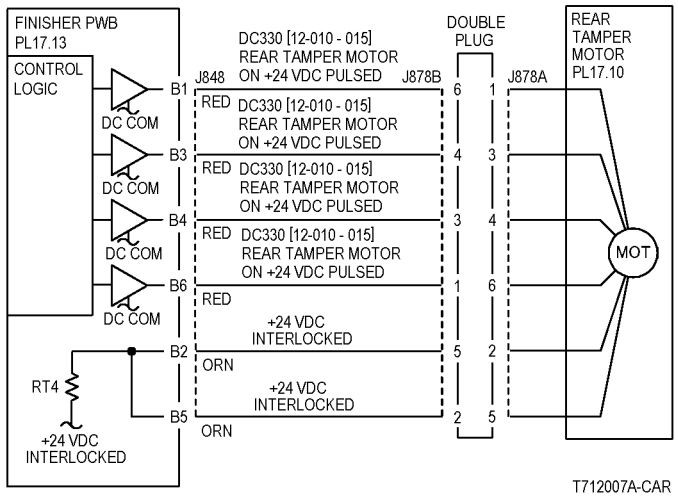


Figure 3 Rear Tamper Motor CD

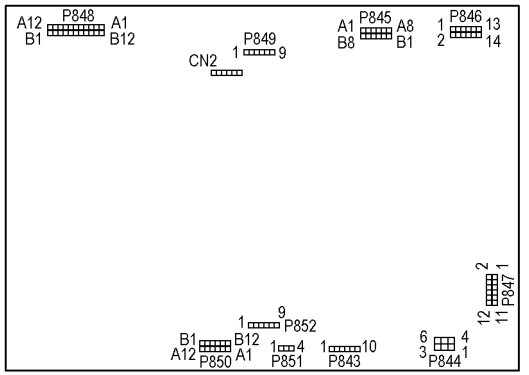


Figure 4 Finisher PWB

12-254 Stacker Tray

- The Stack Height Sensor did not detect that the tray went down within 500ms after the Stacker Tray lowered at initialization.
- The Stack Height Sensor did not detect that the tray went up within 5sec after the Stacker Tray lifted up.

Procedure

Check the Stack Height Sensor Actuator for disengagement, bending, and breakage.
Enter dC330 [012-201] and press Start. Manually turn the Stack Height Sensor Actuator to turn the Stack Height Sensor on/off. **The display changes.**

Y N

Check the Stack Height Sensor using the Generic Transmissive Sensor RAP.

Enter dC330 [012-050] (up) or [12-051] (down) and press Start. **The Stacker Tray moves.**

Y N

Stacker Motor energized.

Y N

With [12-050] (up) running. **+24VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).**

Y N

Replace the Finisher PWB (PL 17.13).

With [12-050] (up) running. **+24 VDC is measured between the Stacker Motor p/j (+) and Finisher PWB Chassis (-).**

Y N

Check the wire between the Finisher PWB p/j and the Stacker Motor p/j for an open circuit or poor contact.

With [12-050] (up) running **+24 VDC is measured between the Stacker Motor p/j (+) and Finisher PWB Chassis (-).**

Y N

Replace the Stacker Motor (PL 17.11).

Check the wire between the Finisher PWB p/j and the Stacker Motor p/j for an open circuit or poor contact.
If no problems are found, replace the Stacker Motor (PL 17.11).
If the problem continues, replace the Finisher PWB (PL 17.13).

Check the following:

- The Stacker Motor Gear for wear and damage
- The Stacker Tray for dragging and improper installation
- The Stacker Elevator Belt/rack/gear for wear and damage

Remove the other mechanical causes of the Stacker Tray not operating.

Replace the Finisher PWB (PL 17.13).

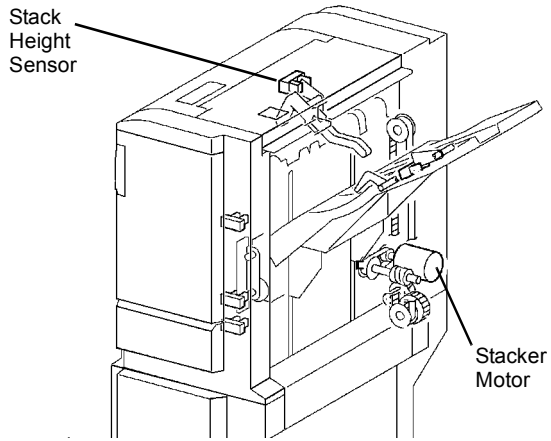


Figure 1 Component Location

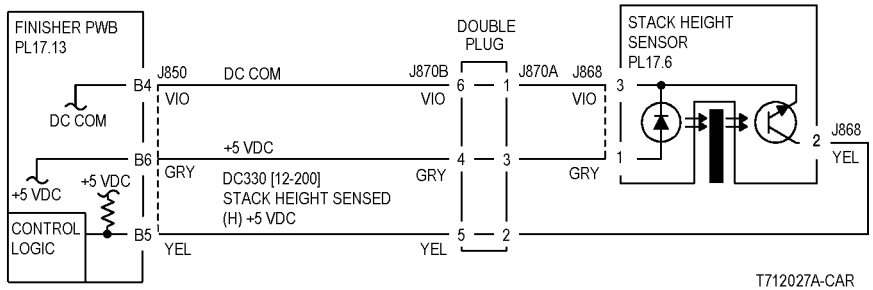


Figure 2 Stack Height Sensor

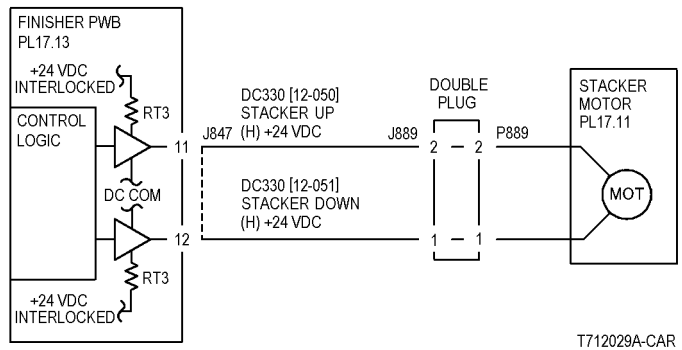


Figure 3 Stacker Motor CD

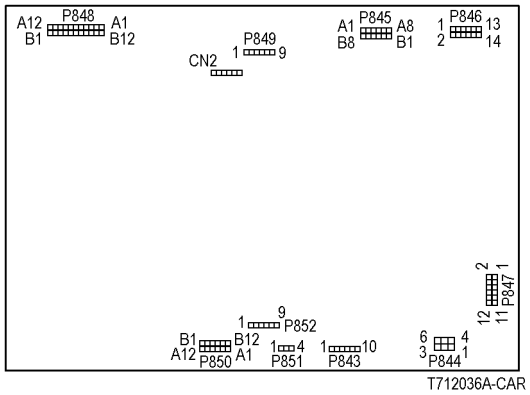


Figure 4 Finisher PWB

12-255 Stacker Tray Upper Limit

- The system detected that the Stacker Tray Upper Limit Sensor was turned on after the Stacker Tray had begun lifting up.
- The system detected that the Stacker Tray Upper Limit Sensor remained on when lowering down of the Stacker Tray has completed.

Procedure

Enter dC330 [012-202] and press Start. Actuate the Upper Limit Sensor. **The display changes.**

Y N

Check the Upper Limit Sensor using the Generic Transmissive Sensor RAP.

Enter dC330 [012-201] and press Start. Actuate the Stack Height Sensor. **The display changes.**

Y N

Check the Stack Height Sensor using the Generic Transmissive Sensor RAP.

Enter dC330 [012-051] (down) on and press Start. **The Stacker Tray moves.**

Y N

Stacker Motor energized.

Y N

With [12-050] (down) running **+24 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).**

Y N

Replace the Finisher PWB (PL 17.13).

Check conductivity of the following:

- Between the Finisher PWB p/j and the Stacker Motor p/j
- Between the Finisher PWB p/j and the Stacker Motor p/j

If no problems are found, replace the Stacker Motor (PL 17.11).
If the problem continues, replace the Finisher PWB (PL 17.13).

Check the following:

- The Stacker Motor Gear for wear and damage
- The Stacker Tray for dragging and improper installation
- The Stacker Elevator Belt/rack/gear for wear and damage

Remove the other mechanical causes of the Stacker Tray not operating.

Enter dC330 [012-050] (up) and press Start. **The Stacker Tray ascends.**

Y N

Stacker Motor energized.

Y N

With [12-050] (up) running **+24 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).**

Y N

Replace the Finisher PWB (PL 17.13).

Check conductivity of the following:

- Between the Finisher PWB p/j and the Stacker Motor p/j
- Between the Finisher PWB p/j and the Stacker Motor p/j

A B

If no problems are found, replace the Stacker Motor (PL 17.11).
If the problem continues, replace the Finisher PWB (PL 17.13).

Check the following:

- The Stacker Motor Gear for wear and damage
- The Stacker Tray for dragging and improper installation
- The Stacker Elevator Belt/rack/gear for wear and damage

Remove the other mechanical causes of the Stacker Tray not operating.

Replace the Finisher PWB (PL 17.13).

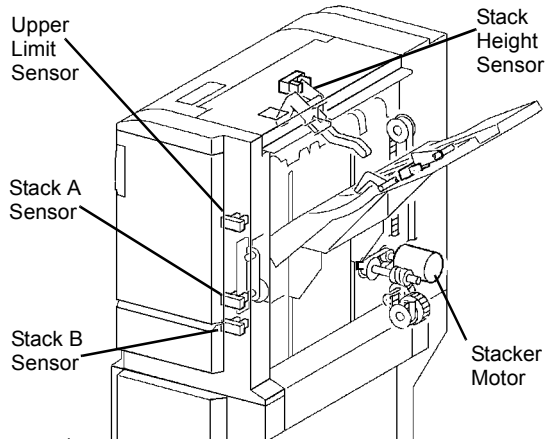


Figure 1 Component Location

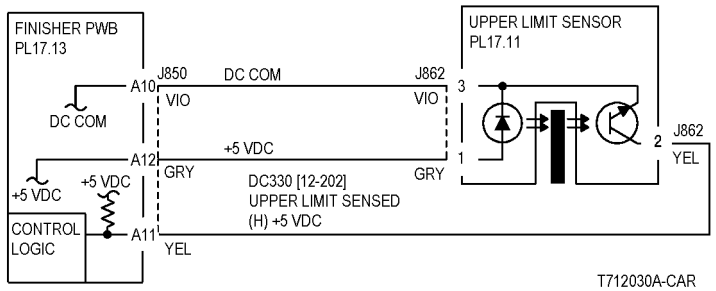


Figure 2 Upper Limit Sensor CD

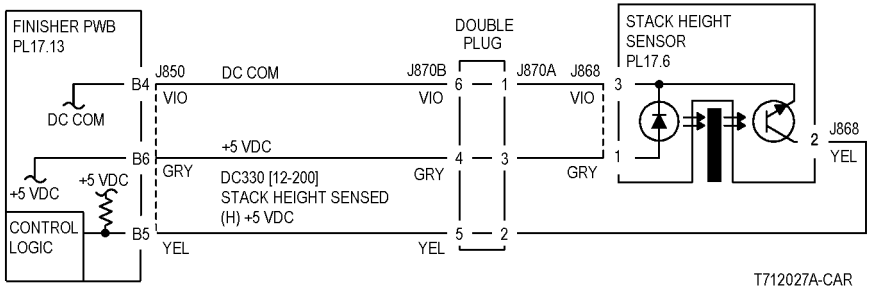


Figure 3 Stack Height Sensor

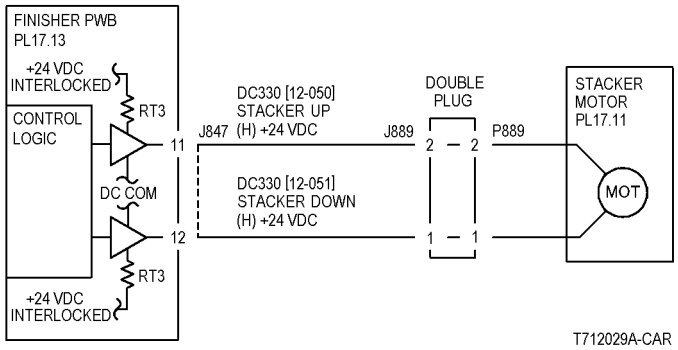


Figure 4 Stacker Motor CD

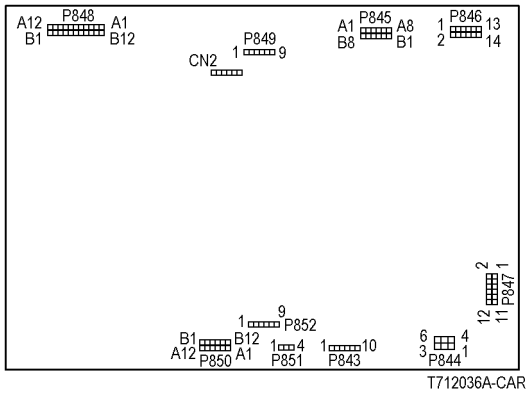


Figure 5 Finisher PWB

12-256 Staple Front Corner Sensor On

- The Stapler Front Corner Sensor does not turn on within 2sec after starting to move to Front Corner.
- The Stapler Front Corner Sensor remained on when starting to move to Front Corner.

Procedure

Open the Finisher Front Cover. Turn the Stapler Assembly manually. **The Staple Head moves smoothly without any load.**

Y N

Repair the cause of Staple Head not moving, such as rail breakage, drag, or damaged gear.

Enter dC330 [012-225] and press Start. Actuate the Staple Front Corner Sensor on/off. **The display changes.**

Y N

Check the Staple Front Corner Sensor using the Generic Transmissive Sensor RAP.

Cheat the Front Cover Interlock Switch.

Enter dC330 [012-081] (front direction) or [12-083] (rear direction) and press Start. **STAPLE MOVE MOTOR energized.**

Y N

+24 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).

Y N

Replace the Finisher PWB (PL 17.13).

Check the wire between the Finisher PWB p/j and the Stapler Move Motor p/j for an open circuit or poor contact.

If no problems are found, replace the Stapler Move Motor (PL 17.9).

If the problem continues, replace the Finisher PWB (PL 17.13).

Replace the Finisher PWB (PL 17.13).

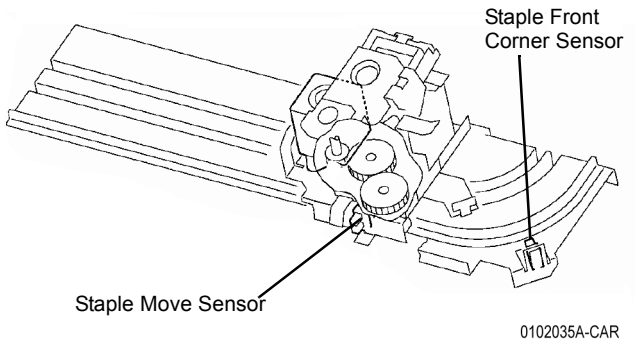


Figure 1 Component Location

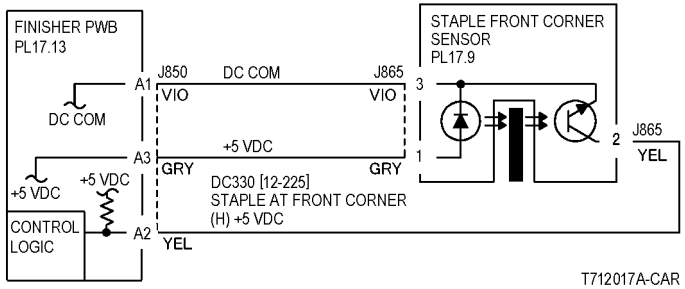


Figure 2 Stapler Front Corner Sensor CD

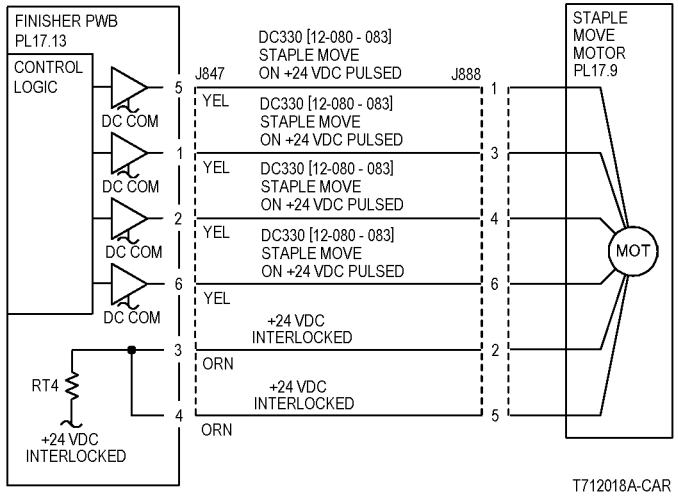


Figure 3 Stapler Move Motor CD

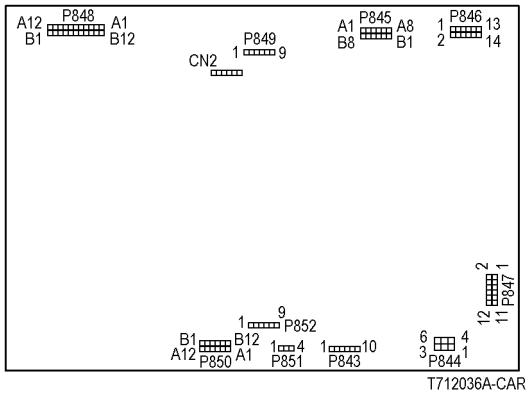


Figure 4 Finisher PWB

12-257 Staple Front Corner Sensor Off

- The Staple Front Corner Sensor does not turn off after the move from Front Corner has completed.
- The Staple Front Corner Sensor does not turn off within 200ms after starting to move from Front Corner.

Procedure

Open the Finisher Front Cover. Turn the Stapler Assembly manually. **The Staple Head moves smoothly without any load.**

Y N

Remove the cause of Staple Head not moving, such as rail breakage, drag, and gear damage.

Enter dC330 [012-225] and press Start. Actuate the Staple Front Corner Sensor. **The display changes.**

Y N

Check the Staple Front Corner Sensor using the Generic Transmissive Sensor RAP.

Cheat the Front Cover Interlock Switch.

Enter dC330 [012-081] (front) or [12-083] (rear) and press Start. **The Staple Move Motor energized**

Y N

+24 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).

Y N

Replace the Finisher PWB (PL 17.13).

Check the wire between the Finisher PWB p/j and the Stapler Move Motor p/j for an open circuit or poor contact.

If no problems are found, replace the Stapler Move Motor (PL 17.9).

If the problem continues, replace the Finisher PWB (PL 17.13).

Replace the Finisher PWB (PL 17.13).

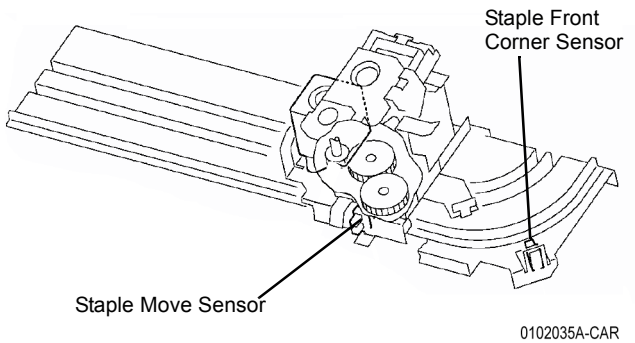


Figure 1 Component Location

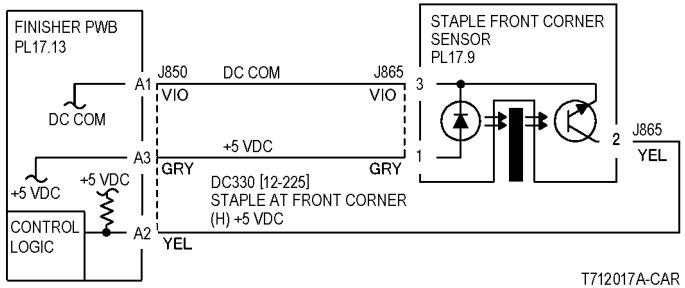


Figure 2 Stapler Front Corner Sensor CD

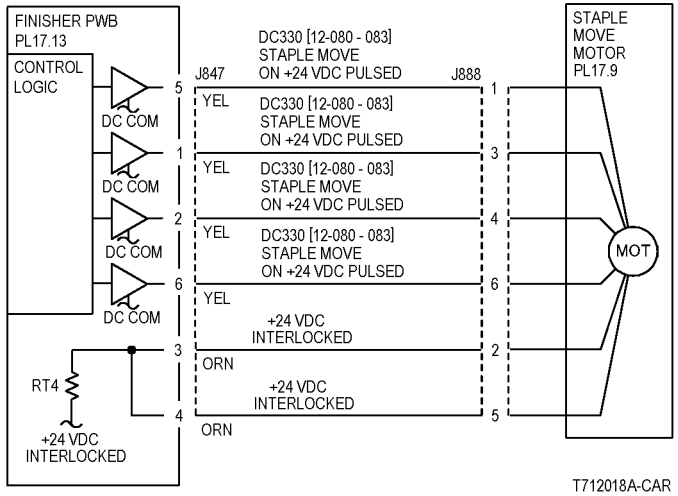


Figure 3 Stapler Move Motor CD

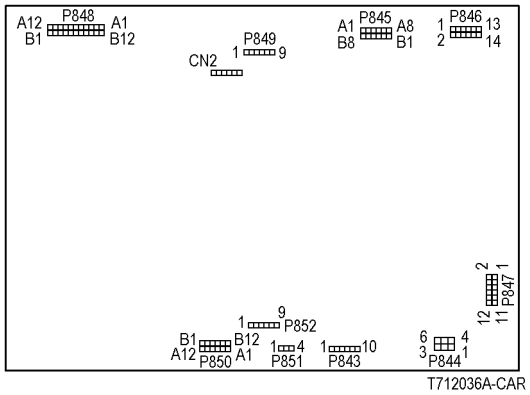


Figure 4 Finisher PWB

12-260 Eject Clamp Home Sensor On

The Eject Clamp Home Sensor does not turn on after the Eject Clamp up started.

Procedure

Remove the Eject Clamp Home Sensor bracket. (Leave the Connector plugged in)
Enter dC330 [012-210] and press Start. Actuate the Eject Clamp Home Sensor with a sheet of paper. **The display changes.**

Y N

Check the Eject Clamp Home Sensor using the Generic Transmissive Sensor RAP.

Restore the Sensor to the original state.
Enter dC330 [012-034] and press Start. **Eject Clamp moves up.**

Y N

Eject Motor energized.

Y N

+24 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).

Y N

Replace the Finisher PWB (PL 17.13).

Check the wire between the Finisher PWB p/j and the Eject Motor p/j for an open circuit or poor contact.
If no problems are found, replace the Eject Motor (PL 17.8).
If the problem continues, replace the Finisher PWB (PL 17.13).

Remove the other mechanical causes of the Eject Clamp not operating, such as wear or damage of the Gear, Belt, and Eject Cam.

Replace the Finisher PWB (PL 17.13).

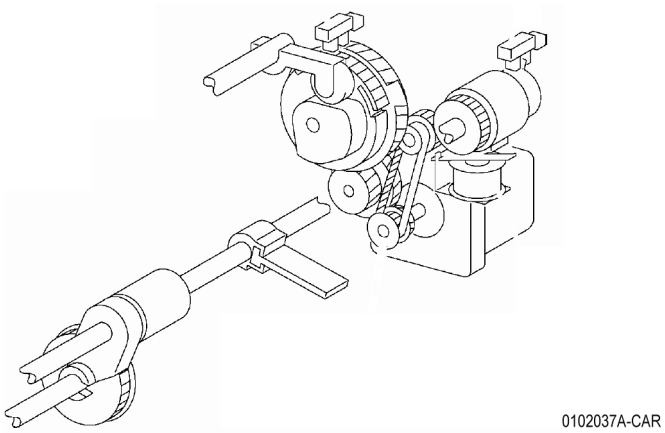


Figure 1 Component Location

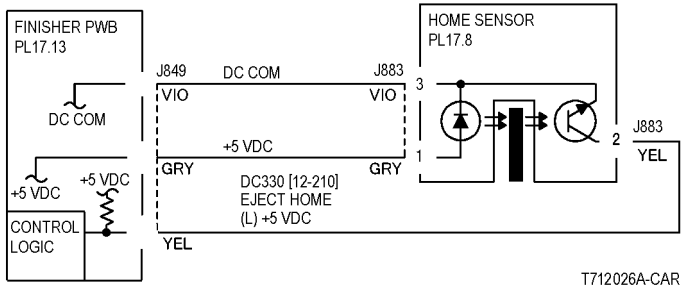


Figure 2 Eject Clamp Home Sensor

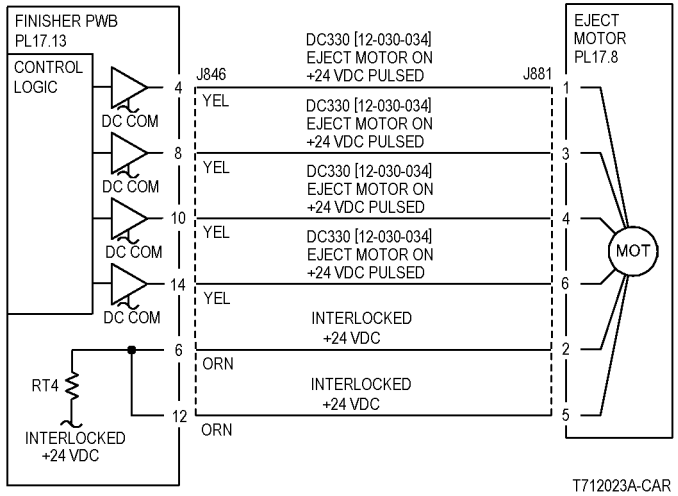


Figure 3 Eject Motor CD

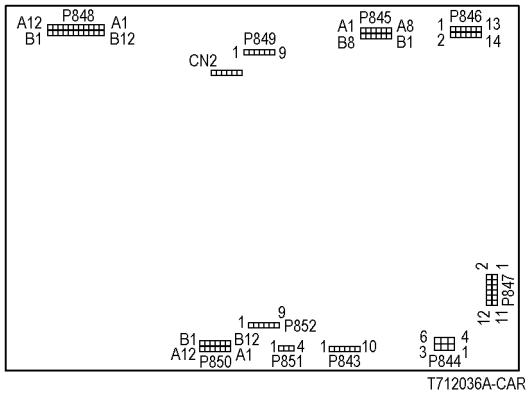


Figure 4 Finisher PWB

12-262 Eject Clamp Home Sensor Off

The Eject Clamp Home Sensor does not turn off within 200ms after the Eject Clamp DOWN has started.

Procedure

Remove the Eject Clamp Home Sensor bracket. (Leave the Connector plugged in)
Enter dC330 [012-210] and press Start. Actuate the Eject Clamp Home Sensor with a sheet of paper. **The display changes.**

Y N

Check the Eject Clamp Home Sensor using the Generic Transmissive Sensor RAP.

Restore the Sensor to the original state.
Enter dC330 [012-032] and press Start. **Elect Clamp moves down.**

Y N

The Eject Motor energized.

Y N

+24 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).

Y N

Replace the Finisher PWB (PL 17.13).

Check the wire between the Finisher PWB p/j and the Eject Motor p/j for an open circuit or poor contact.
If no problems are found, replace the Eject Motor (PL 17.8).
If the problem continues, replace the Finisher PWB (PL 17.13).

Remove the other mechanical causes of the Eject Clamp not operating, such as wear or damage of the Gear, Belt, and Eject Cam.

Replace the Finisher PWB (PL 17.13).

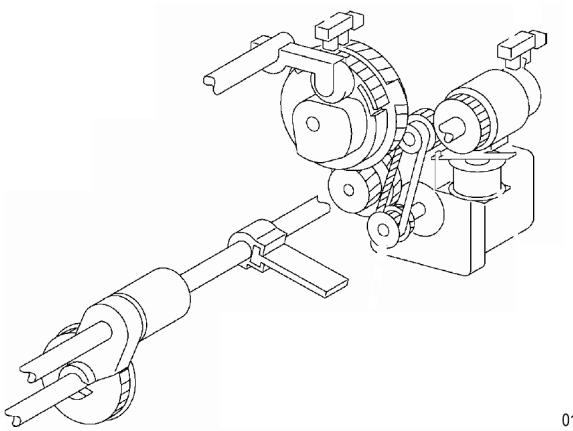


Figure 1 Component Location

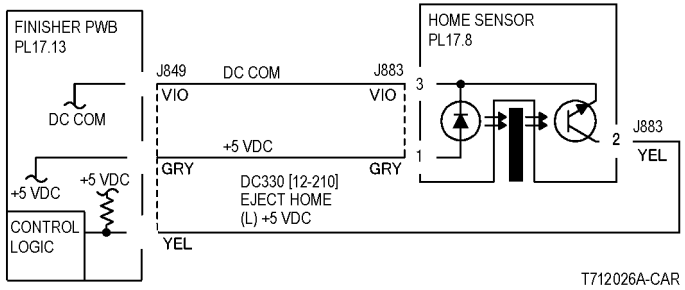


Figure 2 Eject Clamp Home Sensor

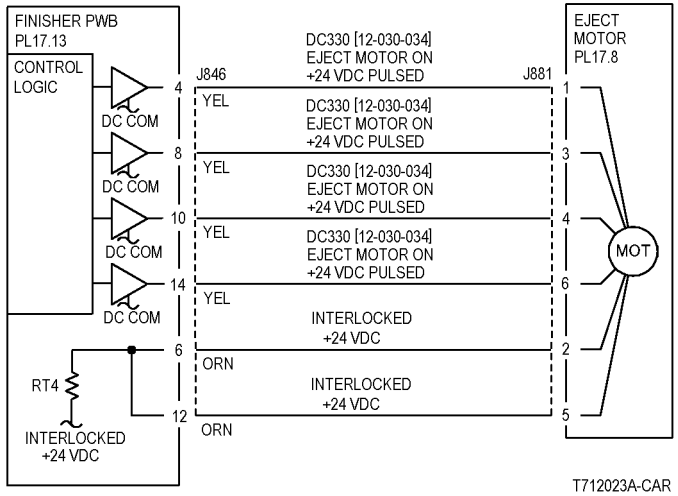


Figure 3 Eject Motor CD

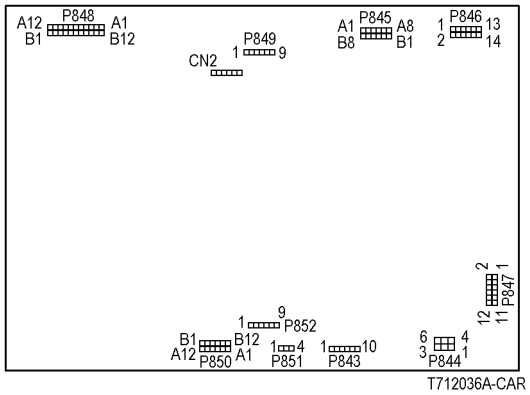


Figure 4 Finisher PWB

12-267 Decurler

The Decurler Cam Home Sensor did not actuate after the Decurler Cam Clutch energized.

Procedure

Open H Transport Cover and cheat the H Transport Cover Interlock Sensor (Figure 1). **The H Transport Belts rotate.**

Y N

Go to the 12-100 RAP.

Enter dC330 [012-217] and press Start. Rotate the Actuator and turn the Decurler Cam Home Sensor on/off. **The display changes.**

Y N

Check the Decurler Cam Home Sensor using the Generic Transmissive Sensor RAP.

Enter dC330 [012-070] and press Start. **The Decurler Cam Clutch energized.**

Y N

Check the Decurler Cam Clutch using the Solenoid/Clutch Open RAP.

Enter dC330 [012-071] and press Start. **The Decurler Cam rotates.**

Y N

Check the following:

- The Decurler Cam Clutch for slippage
- The Driver Gear for wear, a drive failure, and breakage
- The belt for disengagement, breakage, and improper tension

Remove the other mechanical causes of the Decurler Cam not operating.

Replace the Finisher PWB (PL 17.13).

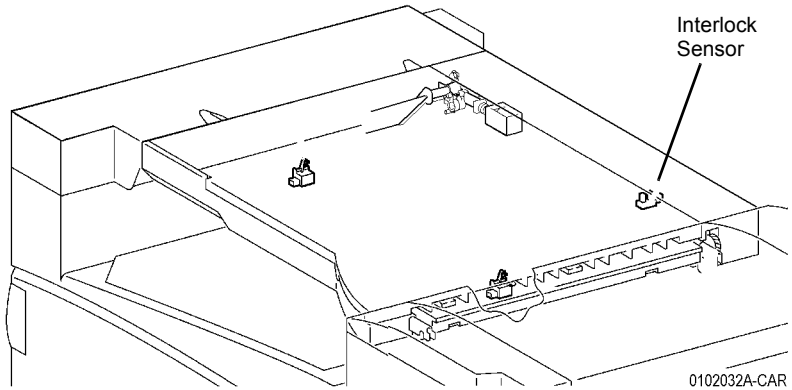


Figure 1 Component Location

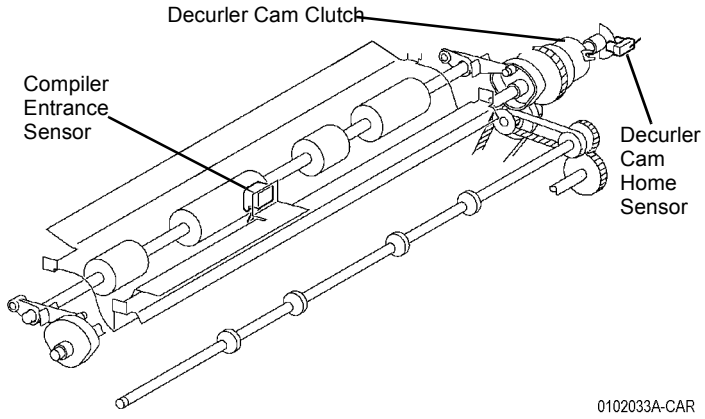


Figure 2 Component Location

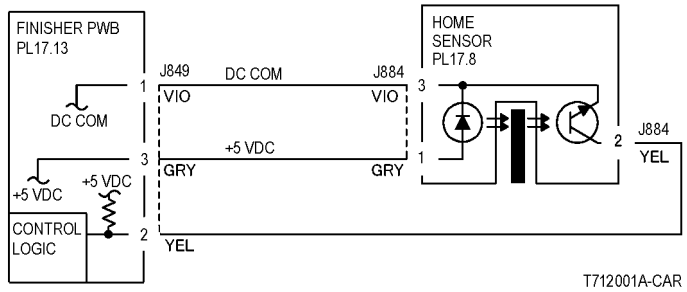


Figure 3 Decurler Cam Home Sensor CD

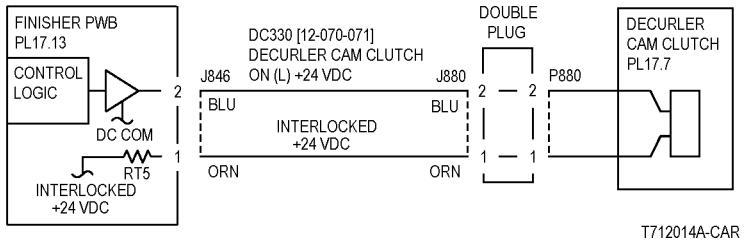


Figure 4 Decurler Cam Clutch CD

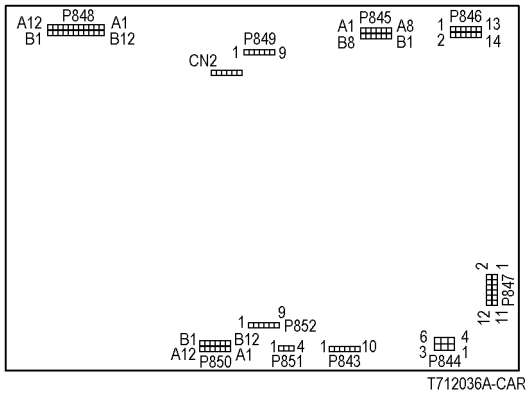


Figure 5 Finisher PWB

12-281 Set Clamp

The Set Clamp Home Sensor does not turn on within 200ms after the Set Clamp has started operation.

Procedure

Enter dC330 [012-211] and press Start. Rotate the Actuator and turn the Set Clamp Home Sensor on/off. **The display changes.**

Y N

Check the Set Clamp Home Sensor using the Generic Transmissive Sensor RAP.

Enter dC330 [012-040] and press Start. **The Set Clamp Solenoid energized.**

Y N

Check the Set Clamp Solenoid using the Generic Solenoid/Clutch Open RAP.

Enter [12-034] and press Start to energize Eject Clamp up or [12-032] to lower the Eject Clamp.

Enter dC330 [012-041] and press Start. **Has the Set Clamp rotated.**

Y N

Enter dC330 [012-030] and press Start. **The Eject Motor energized.**

Y N

+24 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).

Y N

Replace the Finisher PWB (PL 17.13).

Check the wire between the Finisher PWB p/j and the Eject Motor p/j for an open circuit or poor contact.

If no problems are found, replace the Eject Motor (PL 17.8).

If the problem continues, replace the Finisher PWB (PL 17.13).

Check the following:

- Eject Roll for wear and a drive failure (PL 17.8).
- Eject Shaft for wear and a drive failure (PL 17.8).
- Each Driver Gear for wear, a drive failure, and breakage (PL 17.8).
- Belt for disengagement, breakage, and improper tension (PL 17.8).

Replace the Finisher PWB (PL 17.13).

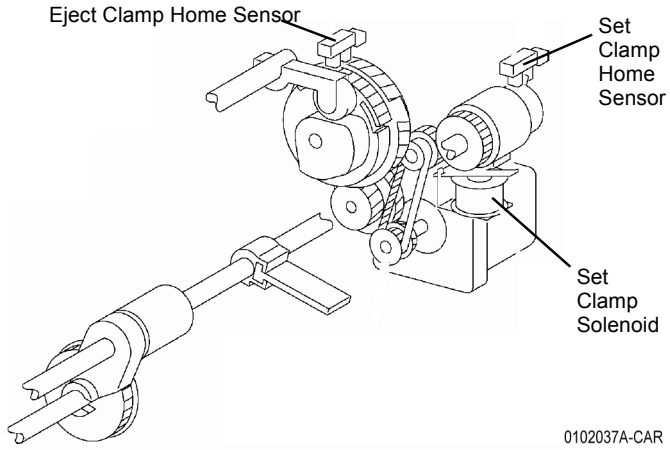


Figure 1 Component Location

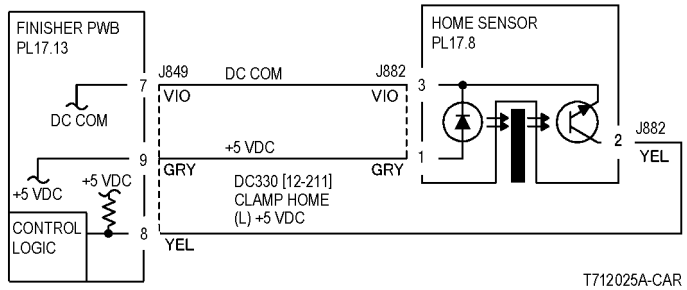


Figure 2 Set Clamp Home Sensor

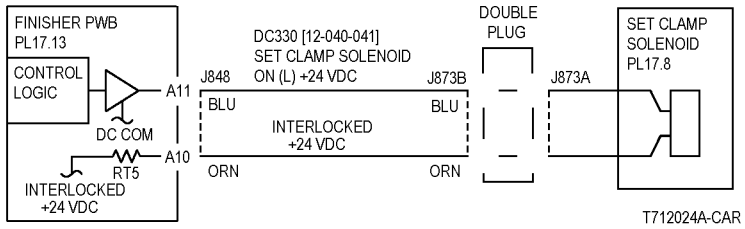


Figure 3 Set Clamp Solenoid

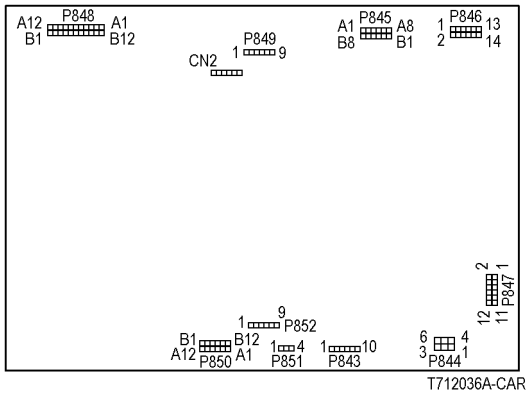


Figure 4 Finisher PWB

12-301 Top Cover Interlock

The Top Cover Interlock is open.

Procedure

Cheat the Top Cover Interlock Switch. **12-301 is cleared.**

Y N

+5 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).

Y N

Replace the Finisher PWB (PL 17.13).

+5 VDC is measured between the Top Cover Interlock Switch p/j (+) and Finisher PWB Chassis (-).

Y N

Check the wire between the Top Cover Interlock Switch p/j and the Finisher PWB p/j for an open circuit or poor contact.

+5 VDC is measured between the Top Cover Interlock Switch p/j (+) and Finisher PWB Chassis (-).

Y N

Replace the Top Cover Interlock Switch (PL 17.13).

Check the wire between the Finisher PWB p/j and the Top Cover Interlock Switch p/j for an open circuit or poor contact.

There is misalignment between the Top Cover and the Top Cover Interlock Switch.
Check the Top Cover for correct installation and the actuator for breakage or bending (PL 17.6).

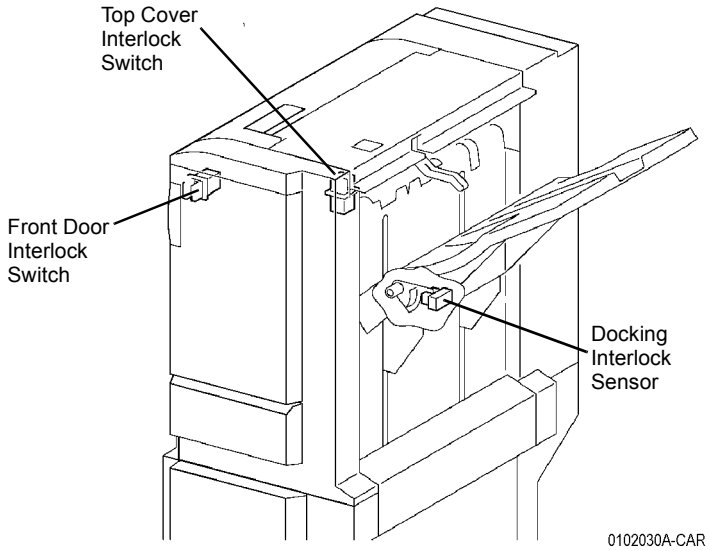


Figure 1 Component Location

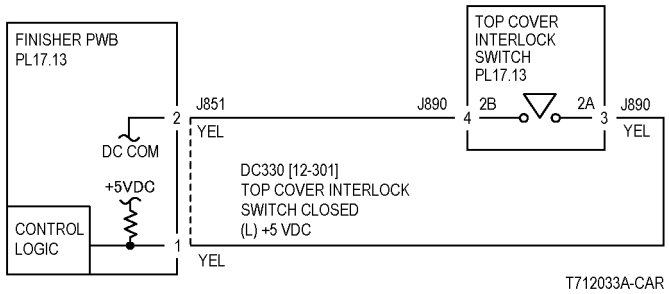


Figure 2 Top Cover Interlock Switch CD

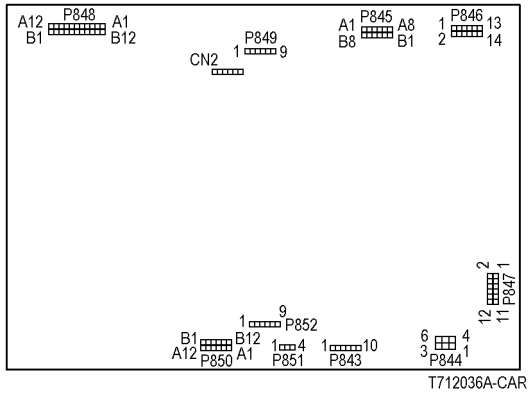


Figure 3 Finisher PWB

12-302 Front Door Interlock Open

The Front Door Interlock is open.

Procedure

Cheat the Front Door Interlock Switch. **Has the display of 012-302 been cleared.**

Y N

+5 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).

Y N

Replace the Finisher PWB (PL 17.13).

+5 VDC is measured between the Front Door Interlock Switch p/j (+) and Finisher PWB Chassis (-).

Y N

Check the wire between the Front Door Interlock Switch p/j and the Finisher PWB p/j for an open circuit or poor contact.

+5 VDC is measured between the Front Door Interlock Switch p/j (+) and Finisher PWB Chassis (-).

Y N

Replace the Front Door Interlock Switch (PL 17.13).

Check the wire between the Finisher PWB p/j and the Front Door Interlock Switch p/j for an open circuit or poor contact.

Mismatching between the Front Door and the Front Door Interlock Switch.
Check the Front Door and Front Cover for improper installation, the Actuator for breakage and bending, and the Magnet for improper mounting.

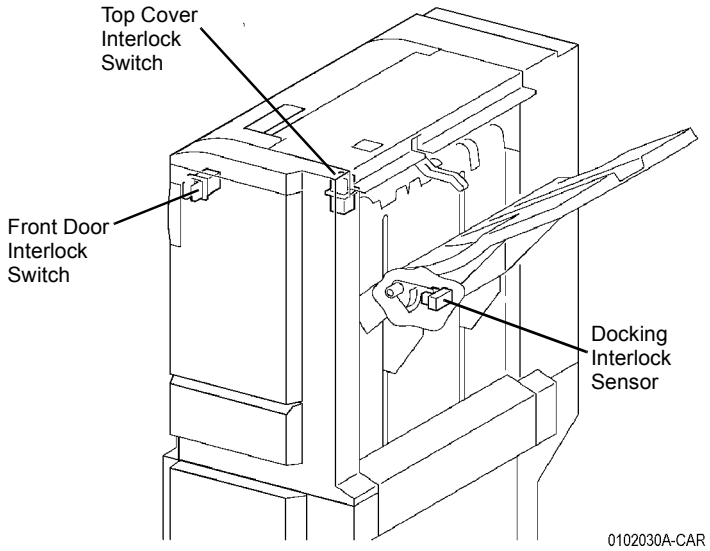


Figure 1 Component Location

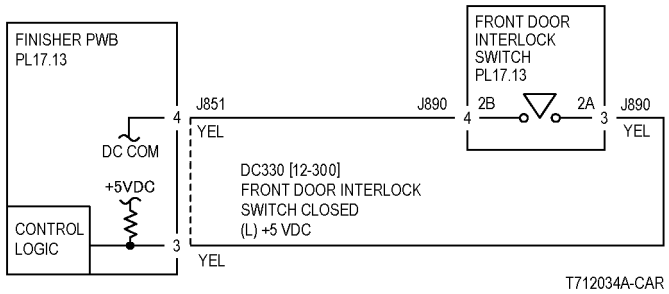


Figure 2 Front Door Interlock Switch CD

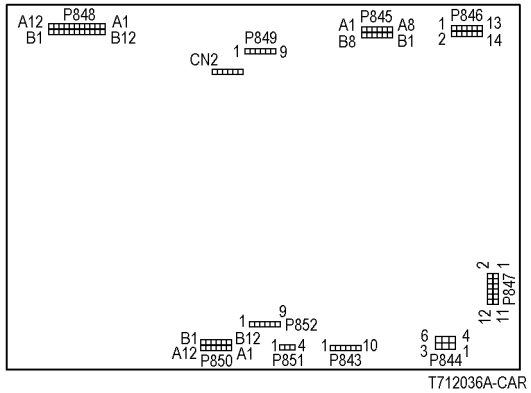


Figure 3 Finisher PWB

12-303 H Transport Interlock Open

The H Transport Interlock Sensor detected open.

Procedure

Block the H Transport Interlock Sensor with a sheet of paper. **Has the display of 012-303 been cleared.**

Y N

+5 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).

Y N

Replace the Finisher PWB (PL 17.13).

+5 VDC is measured between the H Transport Interlock Sensor p/j (+) and Finisher PWB Chassis (-).

Y N

Check the wire between the H Transport Interlock Sensor p/j and the Finisher PWB p/j for an open circuit or poor contact.

+5 VDC is measured between the H Transport Interlock Sensor p/j (+) and 3 (-).

Y N

Check the wire between the Finisher PWB p/j and the H Transport Interlock Sensor p/j and between the Finisher PWB p/j and H Transport Interlock Sensor p/j for an open circuit or poor contact.

If no problems are found, replace the Finisher PWB (PL 17.13).

Replace the H Transport Interlock Sensor (PL 17.4).

Mismatching between the H Transport Cover and the H Transport Interlock Sensor.

Check the H Transport Cover for improper installation, the Actuator for breakage and bending, and the Magnet for improper mounting.

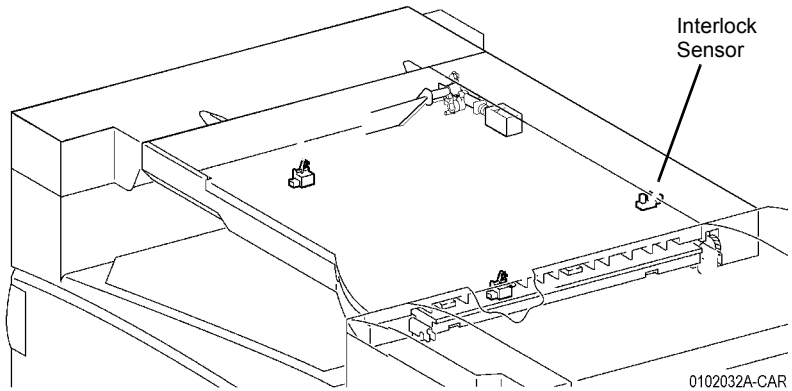


Figure 1 Component Location

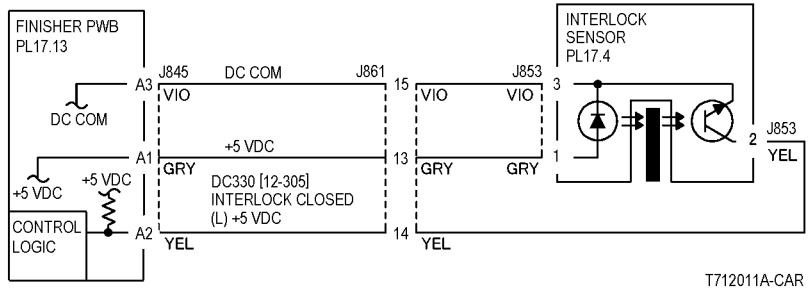


Figure 2 H Transport Interlock Sensor CD

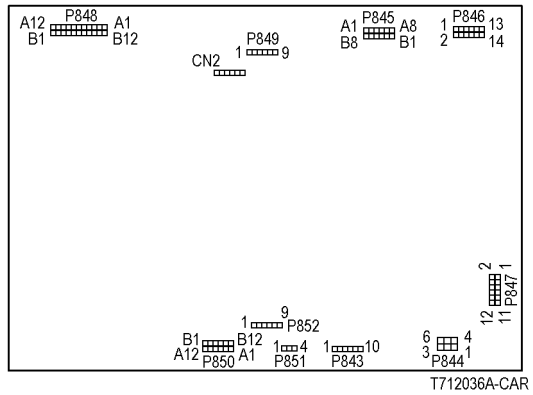


Figure 3 Finisher PWB

12-305 Docking Interlock Open

The Docking Interlock is open.

Procedure

Block the Docking Interlock Sensor with a sheet of paper. **Has the display of 012-305 been cleared.**

Y N

+5 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).

Y N

Replace the Finisher PWB (PL 17.13).

+5 VDC is measured between the Docking Interlock Sensor p/j (+) and Finisher PWB Chassis (-).

Y N

Check the wire between the Docking Interlock Sensor p/j and the Finisher PWB p/j for an open circuit or poor contact.

+5 VDC is measured between the Docking Interlock Sensor p/j (+) and 3 (-).

Y N

Check the wire between the Finisher PWB p/j and the Docking Interlock Sensor p/j and between the Finisher PWB p/j and Docking Interlock Sensor p/j for an open circuit or poor contact. If no problems are found, replace the Finisher PWB (PL 17.13).

Replace the Docking Interlock Sensor (PL 17.13).

Mismatching between the Actuator and the Docking Interlock Sensor. Check the Sensor for improper installation, the Actuator for breakage and bending, and the Finisher and the Main Processor for the docking failure.

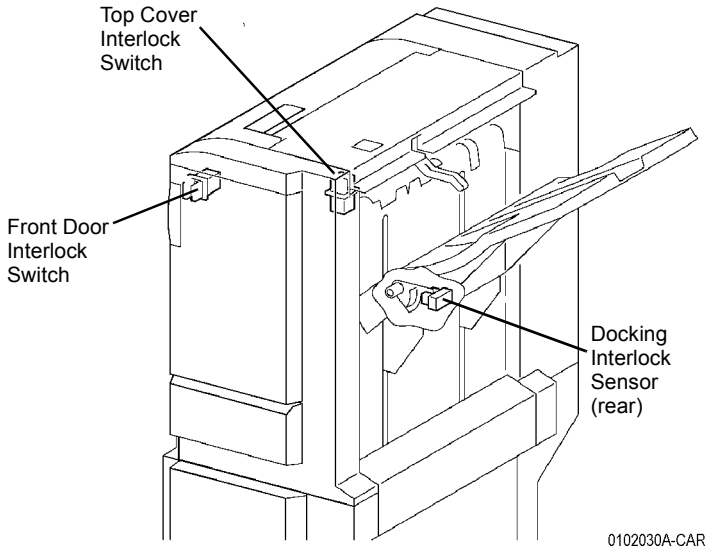


Figure 1 Component Location

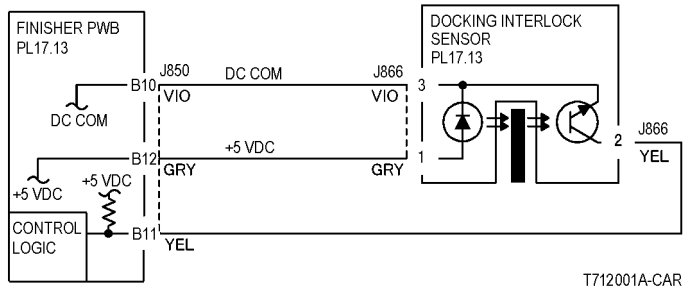


Figure 2 Docking Interlock Sensor CD

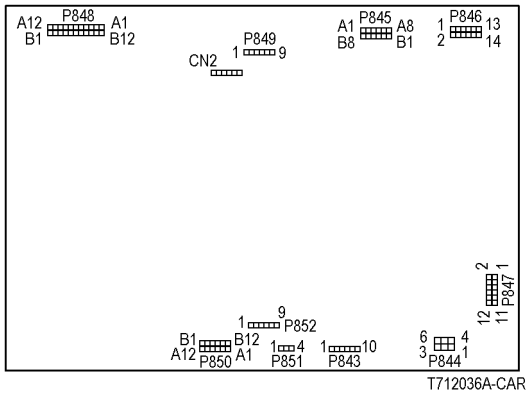


Figure 3 Finisher PWB

12-350 Finisher Communication

Communication cannot be established between the MCU PWB and the Finisher PWB.

Procedure

Switch the power off then on. **CR7 on the Finisher PWB is lit.**

Y N

+24 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).

Y N

Check the +24VDC circuit to the Finisher PWB p/j by referring to Chapter 7 Wiring Data (Finisher +24VDC-1)

Replace the Finisher PWB (PL 17.13).

Switch off the power.

Check conductivity of the following:

(Including the I/F)

- Between the MCU PWB p/j and the Finisher PWB p/j
- Between the MCU PWB p/j and the Finisher PWB p/j
- Between the MCU PWB p/j and the Finisher PWB p/j
- Between the MCU PWB p/j and the Finisher PWB p/j

Is the resistance 1 Ohm or less for all wires.

Y N

Check wires with more than 1 Ohm for an open circuit or poor contact.

Replace the following parts:

- Finisher PWB (PL 17.13).
- MCU PWB (PL 13.1).

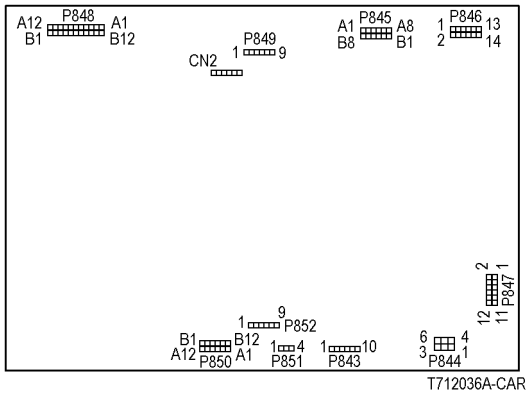


Figure 1 Finisher PWB

12-399 Staple Mode Logic

A paper size and staple mode that cannot be specified were specified.

Procedure

Reprogram job.

12-901 Power On H Transport Entrance Sensor

The H Transport Entrance Sensor detected a paper at power on, when all the interlock were closed, or at initialization.

Procedure

Check the following:

- The Actuator for return failure
- Enter dC330 [012-103] and press Start. Check only the signal wire of the sensor.
- Check that the power voltage at the customer site does not drop.

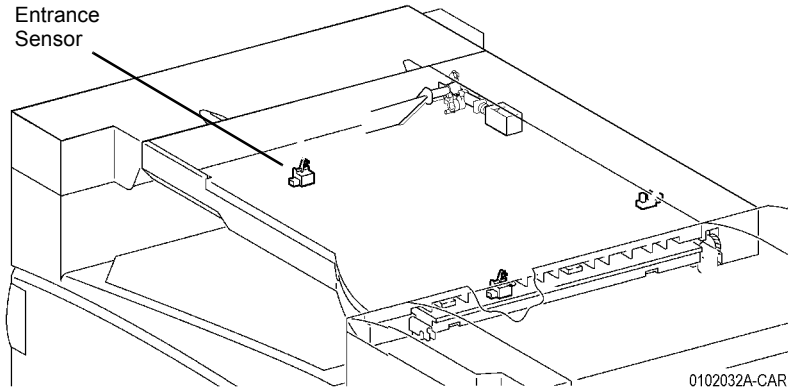


Figure 1 Component Location

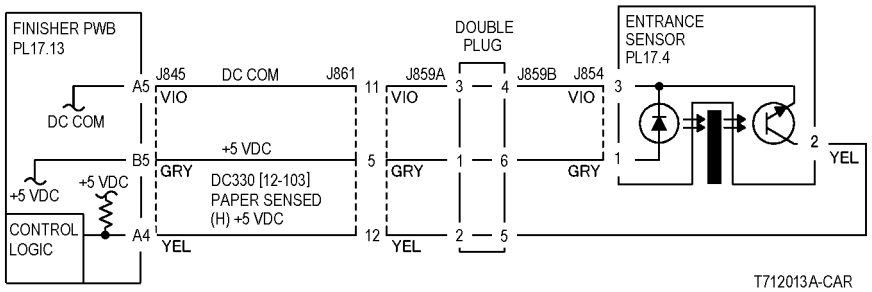


Figure 2 H Transport Entrance Sensor CD

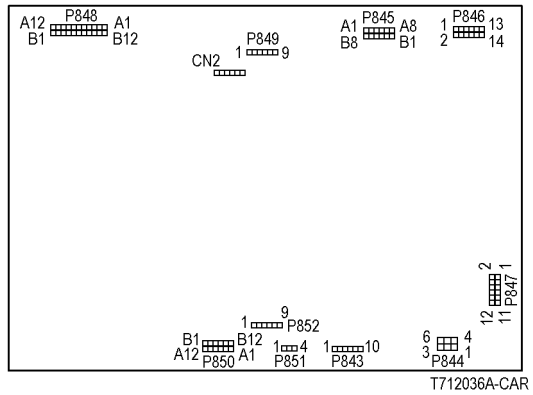


Figure 3 Finisher PWB

12-902 Power On H Transport Exit Sensor

The H Transport Exit Sensor detected a paper at power on, when all the INTERLOCK were closed, or at initialization.

Procedure

Check the following:

- The Actuator for return failure
- Enter dC330 [012-104] and press Start. Check only the signal wire of the sensor.
- Check that the power voltage at the customer site does not drop.

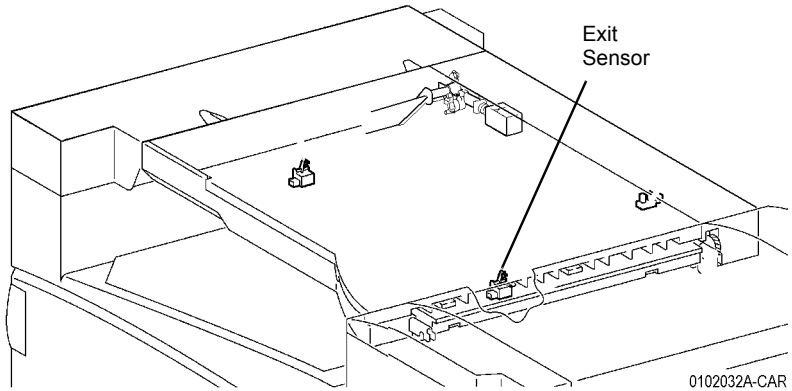


Figure 1 Component Location

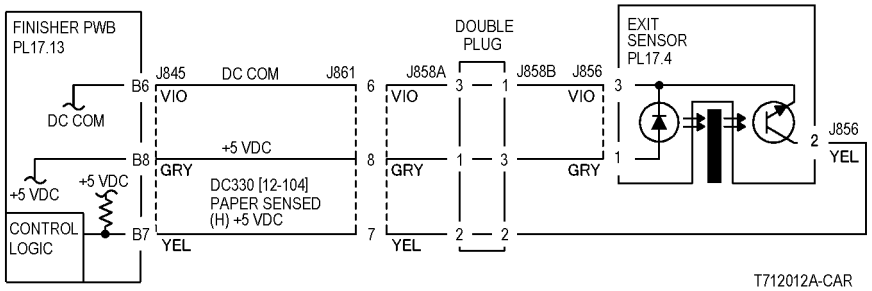


Figure 2 H Transport Sensor CD

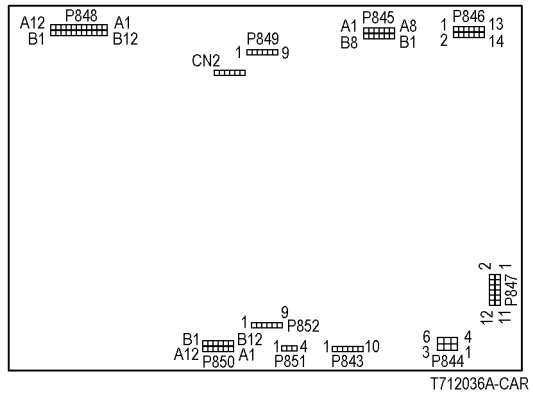


Figure 3 Finisher PWB

12-903 Power On Compiler Entrance Sensor

The Compiler Entrance Sensor detected a paper at power on, when all the INTERLOCK were closed, or at initialization.

Procedure

Check the following:

- The Actuator for return failure
- Enter dC330 [012-101] and press Start. Check only the signal wire of the sensor.
- Check that the power voltage at the customer site does not drop.

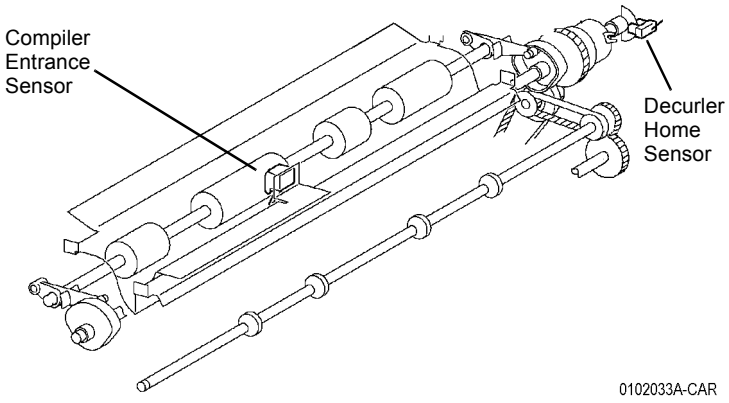


Figure 1 Component Location

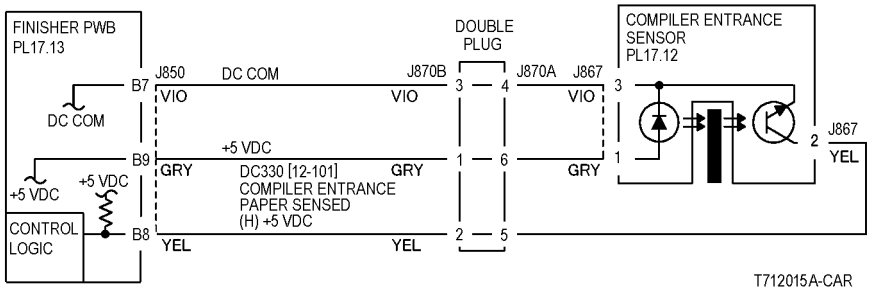


Figure 2 Compiler Entrance Sensor CD

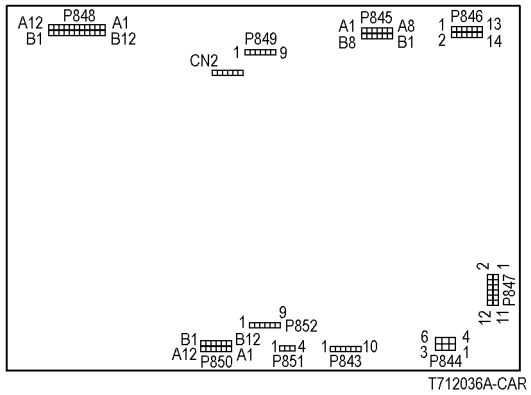


Figure 3 Finisher PWB

12-904 Power On Compiler Paper Sensor

- The Compiler Paper Sensor continues to detect paper when the paper was output automatically due to the power on initialization.
- The Compiler Paper Sensor detected paper with no history of paper output to the Compiler Tray when all the interlocks were closed.

Procedure

Check the following:

- The Actuator for return failure
- Enter dC330 [012-102] and press Start. Check only the signal wire of the sensor.
- Check that the power voltage at the customer site does not drop.
- Replace Finisher PWB (PL 17.13).

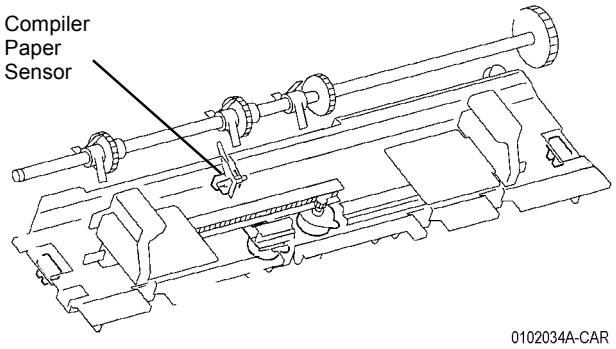


Figure 1 Component Location

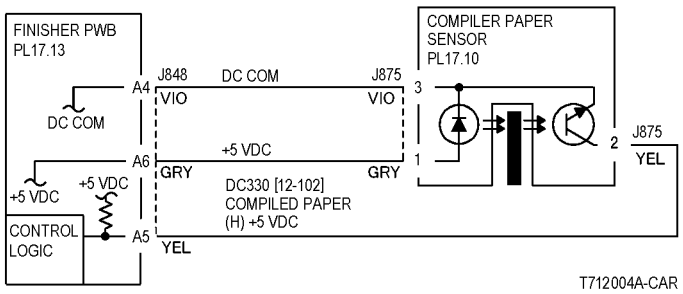


Figure 2 Compiler Paper Sensor CD

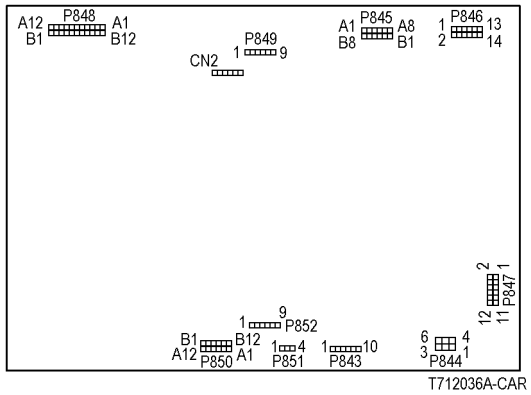


Figure 3 Finisher PWB

12-910 Staple Feed Ready

- At the staple preparation operation at initialization, the Staple Ready Sensor does not go to ready (L) status after 13 times of stapling operation.
- The Stapler Ready Sensor is turned off (H) just before the Staple.

Procedure

Remove the Stapler Assembly with a connector connected. Enter dC330 [012-209] and press Start. Actuate the Staple Ready Sensor. **The display changes.**

Y N

+5 VDC is measured between the Stapler Assembly p/j (+) and Finisher PWB Chassis (-).

Y N

+5 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).

Y N

Replace the Finisher PWB (PL 17.13).

Check the wire between the Finisher PWB p/j and the Stapler Assembly p/j for an open circuit or poor contact.

Pull out the cartridge. **+5 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).**

Y N

Switch off the power.
Pull out the on the Finisher PWB.
Turn on the power. **+5 VDC is measured between the Finisher PWB P852-3 (+) and Finisher PWB Chassis (-).**

Y N

Replace the Finisher PWB (PL 17.13).

Check the circuit between the p/j and the Stapler Assembly p/j for short circuit.

Load the cartridge. **0 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).**

Y N

0 VDC is measured between the Stapler Assembly p/j (+) and Finisher PWB Chassis (-).

Y N

Replace the Stapler Assembly (PL 17.9).

Check the wire between the Stapler Assembly p/j and the Finisher PWB p/j for an open circuit or poor contact.

Replace the Finisher PWB (PL 17.13).

Restore the Staple Head to the original status and cheat the Front Interlock Switch.
Enter dC330 [012-020] and press Start. **The STAPLE MOTOR energizes.**

Y N

With [12-020] running **+24 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).**

A

A

Y N

Replace the Finisher PWB (PL 17.13).

Check conductivity of the following:

- Between the Finisher PWB p/j ~ Stapler Assembly p/j
- Between the Finisher PWB p/j ~ Stapler Assembly p/j
- Between the Finisher PWB p/j ~ Stapler Assembly p/j
- Between the Finisher PWB p/j ~ Stapler Assembly p/j

If no problems are found, replace the Stapler Assembly (PL 17.9).
If the problem continues, replace the Finisher PWB (PL 17.13).

Switch off the power.
Remove the Stapler Assembly from the Finisher.
Turn the Staple Motor Gear manually. **The staple needles fed.**

Y N

Replace the Stapler Assembly (PL 17.9).

Replace the Finisher PWB (PL 17.13).

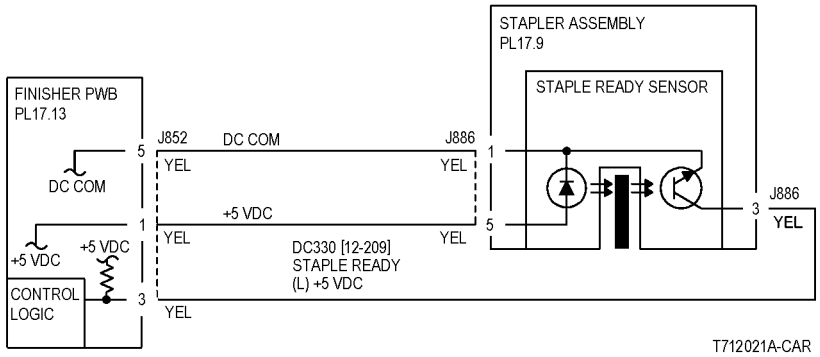


Figure 1 Staple Ready Sensor CD

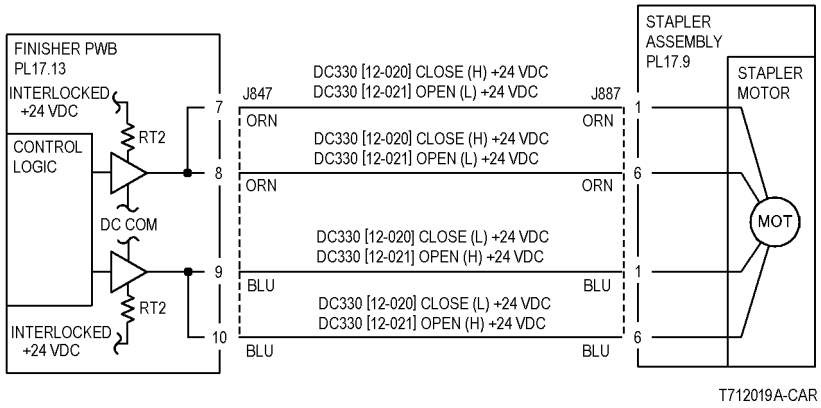


Figure 2 Staple Motor CD

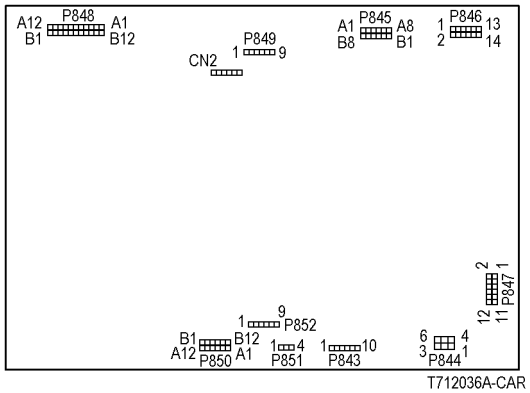


Figure 3 Finisher PWB

12-911 Stacker Lower Safety Warning

The Height Alignment was not successful within 250ms during Tray lowering while stacking.

Procedure

Check the following:

This Fault Code is an operation message. No need for servicing If the display of 012-911 has not been cleared after removing paper in the Stacker Tray, check the following:

- The Actuators of the Stack Height Sensor for dragging and return failure.
- Enter dC330 [012-201] and press Start. Check the circuit of the Sensor.

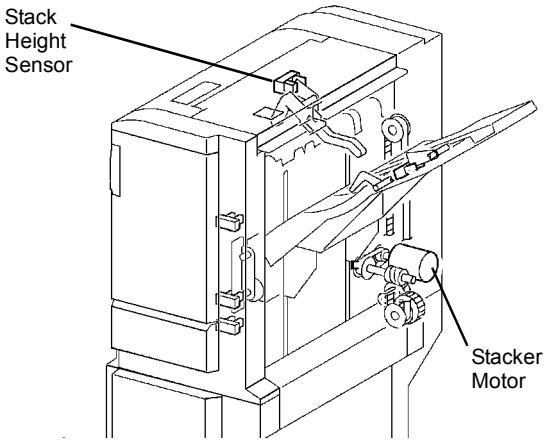


Figure 1 Component Location

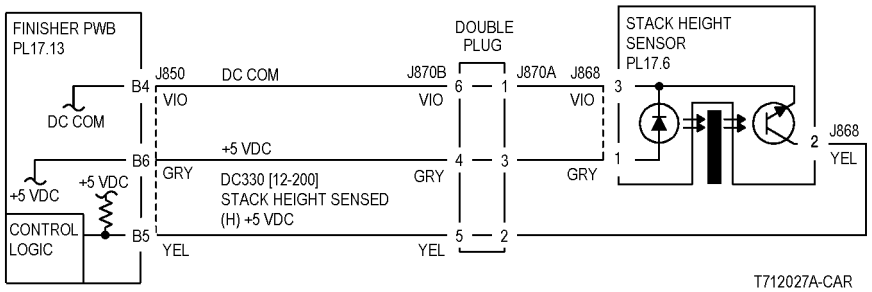


Figure 2 Stack Height Sensor

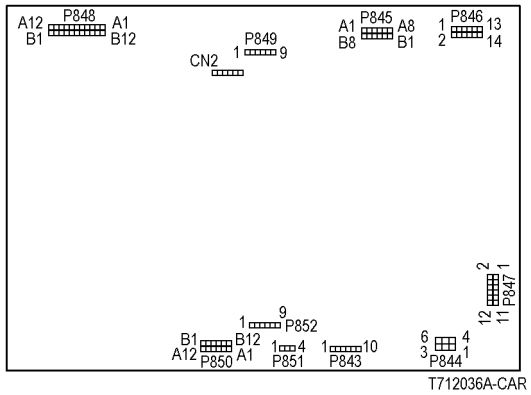


Figure 3 Finisher PWB

12-914 Stacker Tray Staple Set

The STAPLE SET count of the Stacker Tray exceeded 50 sets at the Staple Set Eject operation.

Procedure

Check the following:

This Fault Code is an operation message. No need for servicing If the display of 012-914 has not been cleared after removing the Staple Set, check the following:

- The Actuators of the Stack Paper Sensor for dragging and return failure.
- Enter dC330 [012-200] and press Start. Check the circuit of the Sensor.

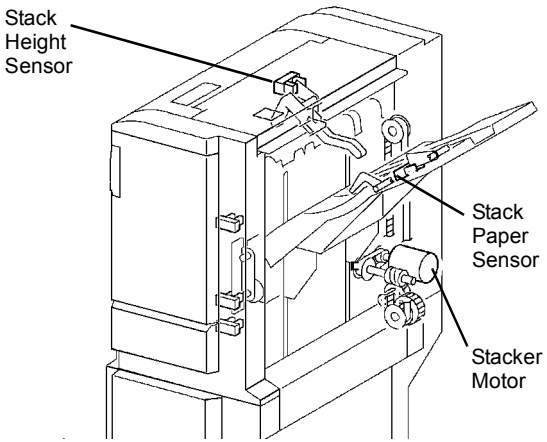


Figure 1 Component Location

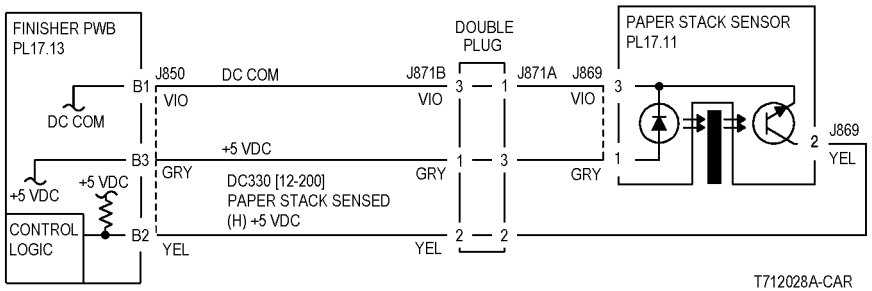


Figure 2 Stack Paper Sensor CD

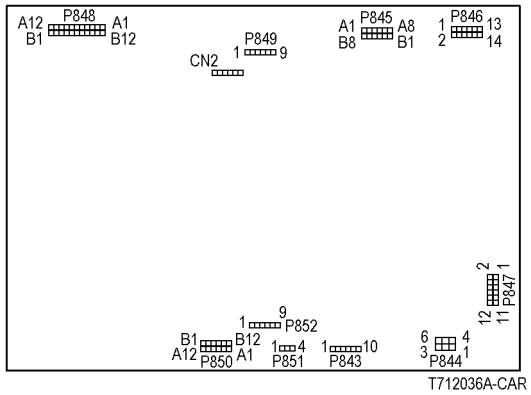


Figure 3 Finisher PWB

12-916 Stapling

The Staple Head Home Sensor turned on by the open operation while the Sensor failed to turn on (stapling was not available due to an error) after the Staple Head began to close.

Procedure

Enter dC330 [012-020] and press Start. **The STAPLE MOTOR energizes.**

Y N

Check conductivity of the following:

- Between the Finisher PWB p/j and the Staple Head p/j
- Between the Finisher PWB p/j and the Staple Head p/j
- Between the Finisher PWB p/j and the Staple Head p/j
- Between the Finisher PWB p/j and the Staple Head p/j

Is the resistance 1 Ohm or less for all wires.

Y N

Check wires with more than 1 Ohm for an open circuit or poor contact.

Replace the Stapler Assembly (PL 17.9).
If the problem continues, replace the Finisher PWB (PL 17.13).

Replace the Staple Head. Leave the Connector plugged in.
Turn the gear of the Staple Motor manually to make the Actuator interrupt the Staple Head Home Sensor. **+5 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).**

Y N

Replace the Finisher PWB (PL 17.13).

+5 VDC is measured between the Staple Head p/j (+) and Finisher PWB Chassis (-).

Y N

Check the wire between the Staple Head p/j and the Finisher PWB p/j for an open circuit or poor contact.

Check conductivity of the following:

- Between the Finisher PWB p/j and the Staple Head p/j
- Between the Finisher PWB p/j and the Staple Head p/j

Is the resistance 1 Ohm or less for both wires.

Y N

Check wires with more than 1 Ohm for an open circuit or poor contact.

Replace the Stapler Assembly (PL 17.9).
If the problem continues, replace the Finisher PWB (PL 17.13).

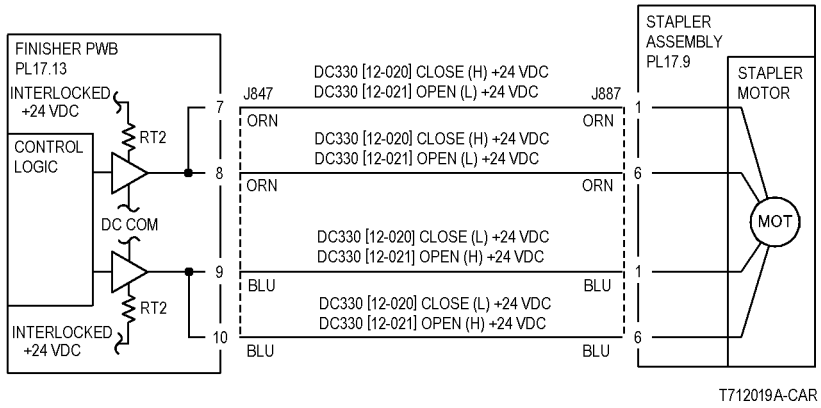


Figure 1 Stapler Motor CD

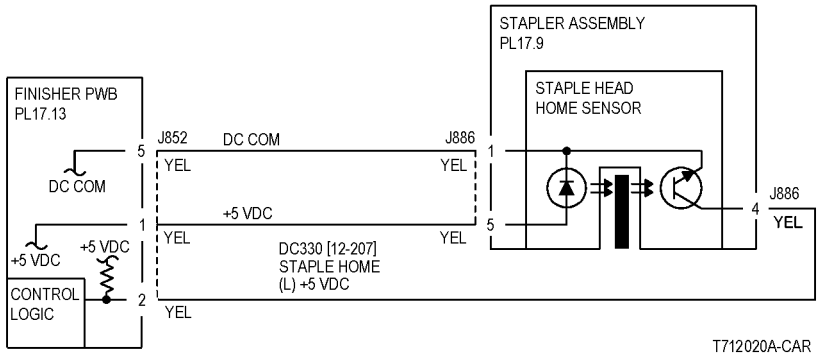


Figure 2 Staple Head Home Sensor

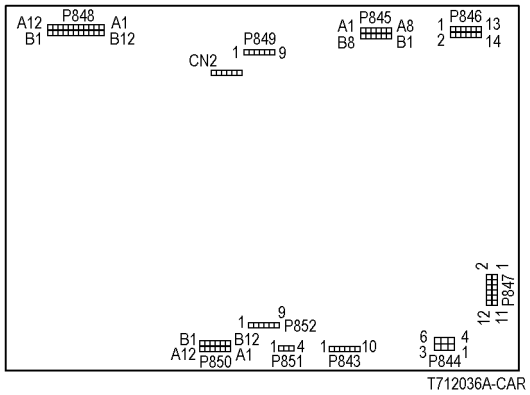


Figure 3 Finisher PWB

12-960 Stacker Tray Full Stack

- The system detected Small Size Paper full during the Stacker Tray Height Adjustment operation during lowering.
- The system detected Small Size Paper full during the Stacker Tray Height Adjustment operation (during lowering down) when the Big Size Paper is ejected.
- The Big Size Paper was ejected while the system already detected Big Size Paper FULL (HALF).

Procedure

Remove the Finisher Front Cover.

Enter dC330 [012-204] and press Start. Actuate the Stack A Sensor with a sheet of paper. **The display changes.**

Y N

Check the Stack A Sensor using the Generic Transmissive Sensor RAP.

Enter dC330 [012-205] and press Start. Actuate the Stack B Sensor with a sheet of paper. **The display changes.**

Y N

Check the Stack B Sensor using the Generic Transmissive Sensor RAP.

Enter dC330 [012-200] and press Start. Actuate the Actuator of the Stack Paper Sensor. **The display changes.**

Y N

Check the PAPER SENSOR using the Generic Transmissive Sensor RAP.

Enter dC330 [012-050] (up) or [12-051] (down) and press Start. **The Stacker Tray moves.**

Y N

The Stacker Motor energizes.

Y N

With [12-050] (up) running **+24 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).**

Y N

Replace the Finisher PWB (PL 17.13).

With [12-050] (up) running **+24 VDC is measured between the Stacker Motor p/j (+) and Finisher PWB Chassis (-).**

Y N

Check the wire between the Finisher PWB p/j and the Stacker Motor p/j for an open circuit or poor contact.

With [12-050] (up) running **+24 VDC is measured between the Stacker Motor p/j (+) and Finisher PWB Chassis (-).**

Y N

Replace the Stacker Motor (PL 17.9).

Check the wire between the Finisher PWB p/j and the Stacker Motor p/j for an open circuit or poor contact.
If no problems are found, replace the Finisher PWB (PL 17.13).
If the problem continues, replace the Stacker Motor (PL 17.11).

Check the following:

A

- The Stacker Motor Gear for wear and damage
- The Stacker Tray for dragging and improper installation
- The Stacker Elevator Belt/rack/gear for wear and damage

Remove the other mechanical causes of the Stacker Tray not operating.

Replace the Finisher PWB (PL 17.13).

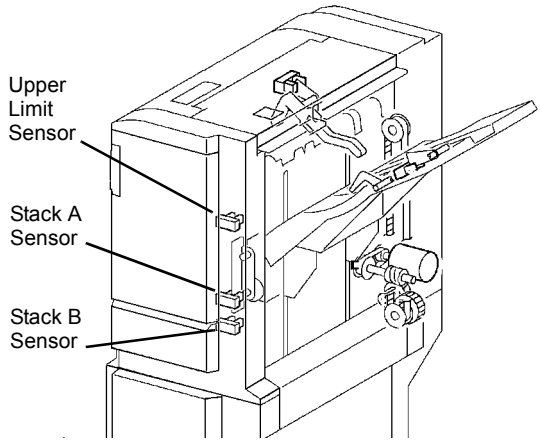


Figure 1 Component Location

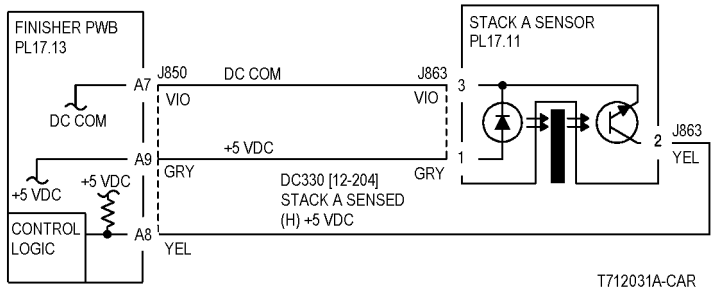


Figure 2 Stack A Sensor CD

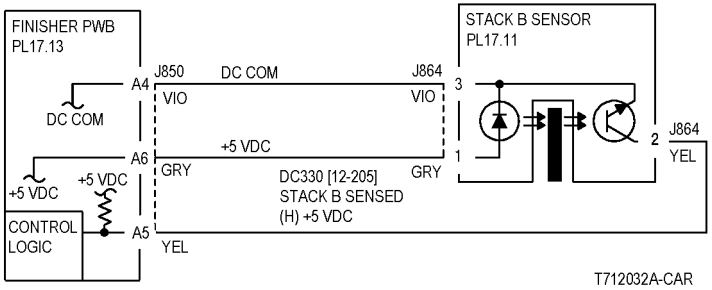


Figure 3 Stack B Sensor CD

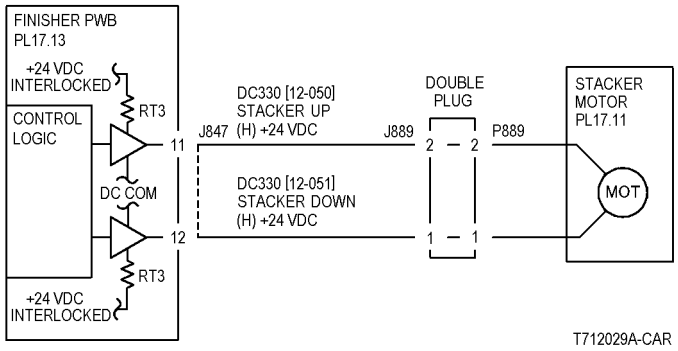


Figure 4 Stacker Motor CD

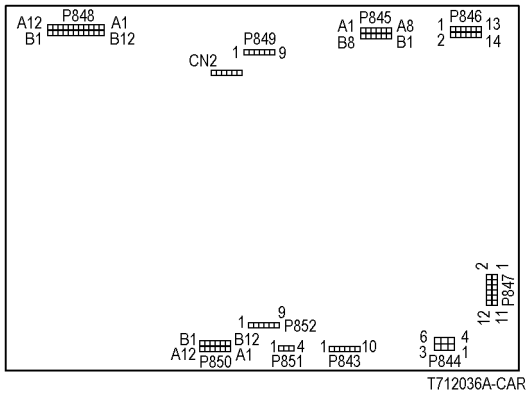


Figure 5 Finisher PWB

12-961 Mix Full Stack

- Compared to the maximum paper size that was loaded at the previous job, the paper size (either feed direction or width direction) of the next job is bigger.
- Staple mode has been changed while the width of the maximum paper size that was loaded at the previous job is less than 279.4mm.
- The maximum paper size that was loaded at the previous job is "unknown".

Procedure

Remove the Finisher Front Cover.

Enter dC330 [012-204] and press Start. Actuate the Stack A Sensor with a sheet of paper. **The display changes.**

Y N

Check the Stack A Sensor using the Generic Transmissive Sensor RAP.

Enter dC330 [012-205] and press Start. Actuate the Stack B Sensor with a sheet of paper. **The display changes.**

Y N

Check the Stack B Sensor using the Generic Transmissive Sensor RAP.

Enter dC330 [012-200] and press Start. Actuate the Actuator of the Stack Paper Sensor. **The display changes.**

Y N

Check the Paper SensoR using the Generic Transmissive Sensor RAP.

Enter dC330 [012-050] (up) or [12-051] (down) and press Start. **The Stacker Tray moves.**

Y N

The Stacker Motor energizes.

Y N

With [12-050] (up) running **+24 VDC is measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).**

Y N

Replace the Finisher PWB (PL 17.13).

With [12-050] (up) running **+24 VDC is measured between the Stacker Motor p/j (+) and Finisher PWB Chassis (-).**

Y N

Check the wire between the Finisher PWB p/j and the Stacker Motor p/j for an open circuit or poor contact.

With [12-050] (up) running **+24 VDC is measured between the Stacker Motor p/j (+) and Finisher PWB Chassis (-).**

Y N

Replace the Stacker Motor (PL 17.11).

Check the wire between the Finisher PWB p/j and the Stacker Motor p/j for an open circuit or poor contact.
If no problems are found, replace the Finisher PWB (PL 17.13).
If the problem continues, replace the Stacker Motor (PL 17.11).

Check the following:
Remove the other mechanical causes of the Stacker Tray not operating.

A

- The Stacker Motor Gear for wear and damage
- The Stacker Tray for dragging and improper installation
- The Stacker Elevator Belt/rack/gear for wear and damage

Replace the Finisher PWB (PL 17.13).

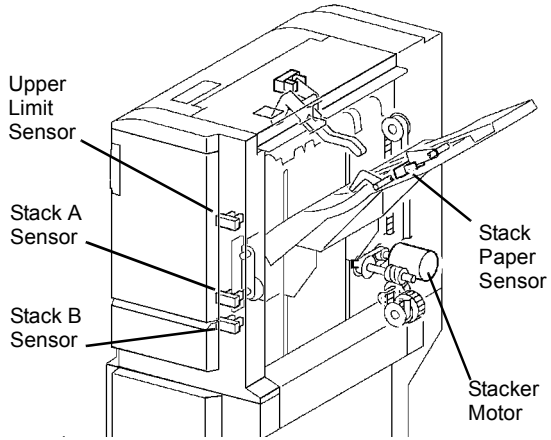


Figure 1 Component Location

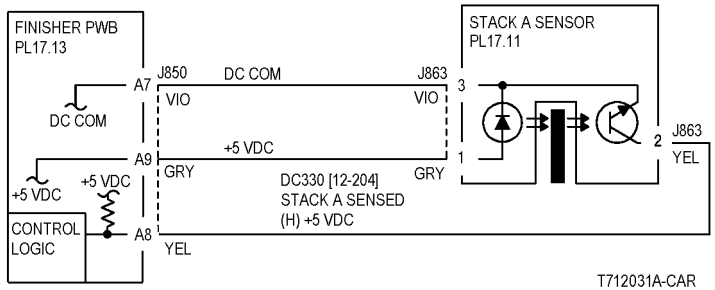


Figure 2 Stack A Sensor CD

A

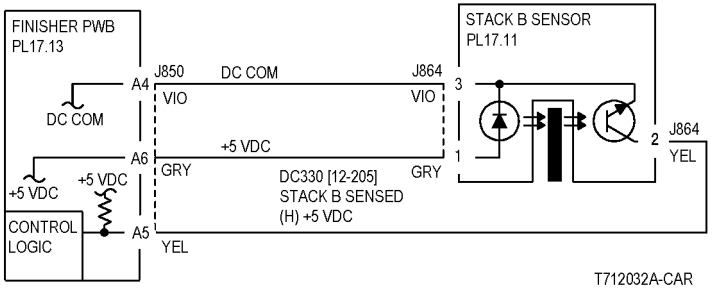


Figure 3 Stack B Sensor CD

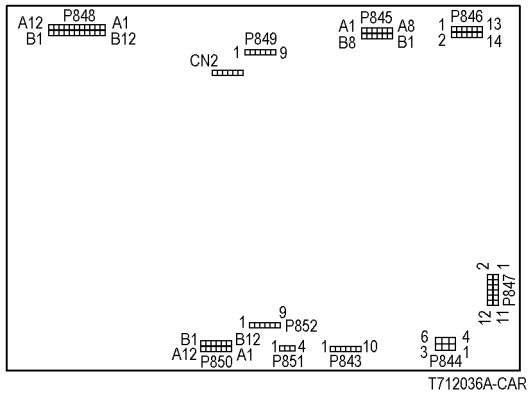


Figure 6 Finisher PWB

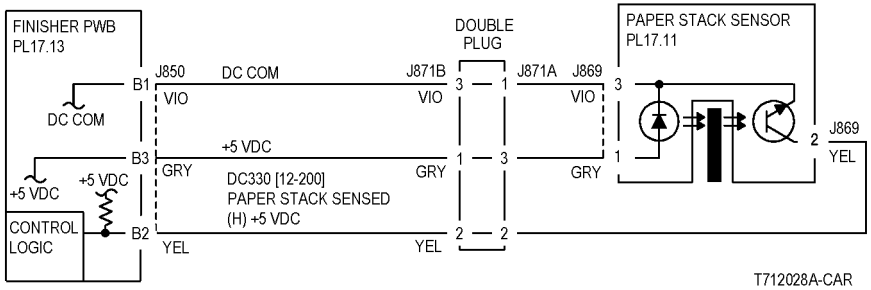


Figure 4 Stack Paper Sensor CD

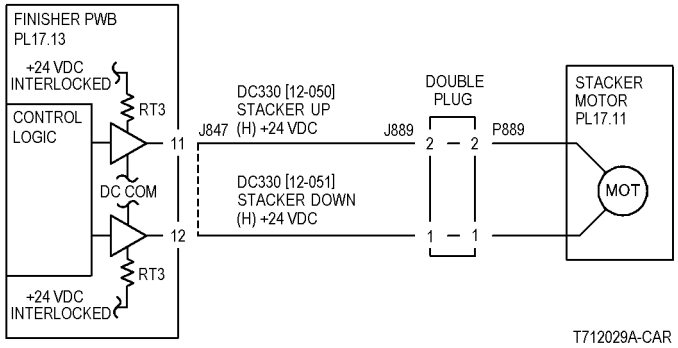


Figure 5 Stacker Motor CD

12-965 Staple Near Empty

- The Low Staple Switch detected Low Staple at Power On and Interlock Close.
- The Low Staple Switch detected Low Staple at Staple Head Close.

Procedure

Install a new Staple Cartridge loaded with staples. **+5VDC measured between the Finisher PWB p/j (+) and Finisher PWB Chassis (-).**

Y N

Replace the Finisher PWB (PL 17.13).

+5VDC measured between the Stapler Assembly p/j (+) and Finisher PWB Chassis (-).

Y N

Check the wire between the Stapler Assembly p/j and the Finisher PWB p/j for an open circuit or poor contact.

Check the wire between the Stapler Assembly p/j and the Finisher PWB p/j and between the Stapler Assembly p/j and Finisher PWB p/j for an open circuit or poor contact.
If no problems are found, replace the Stapler Assembly (PL 17.9).
If the problem continues, replace the Finisher PWB (PL 17.13).

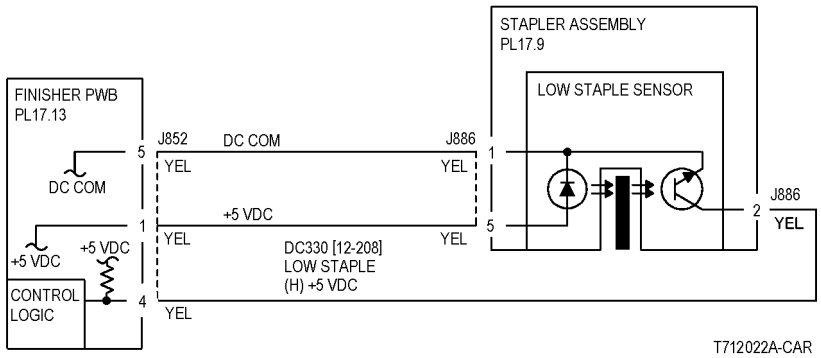


Figure 1 Low Staple Sensor CD

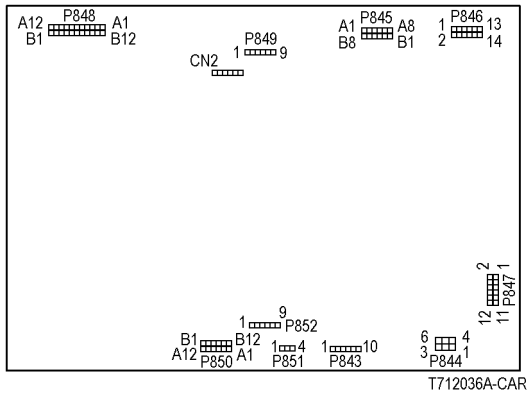


Figure 2 Finisher PWB

12-966 Scratch Sheet Compile

An abnormal paper (SCRATCH SHEET) is output to the COMPILER.

Procedure

This Fault Code is an operator message. No service required

12-969 IOT Top Tray Full

The Top Tray Full Sensor has detected FULL status for 10 sec continuously.

Procedure

Enter dC330 [012-215] and press Start. Move paper near the Top Tray Full Sensor, then away from it. **The display changes.**

Y **N**

Check the Top Tray Full Sensor using the Generic Reflective Sensor RAP.

Check the sensor for improper installation. If no problems are found, replace the Finisher PWB (PL 17.13).

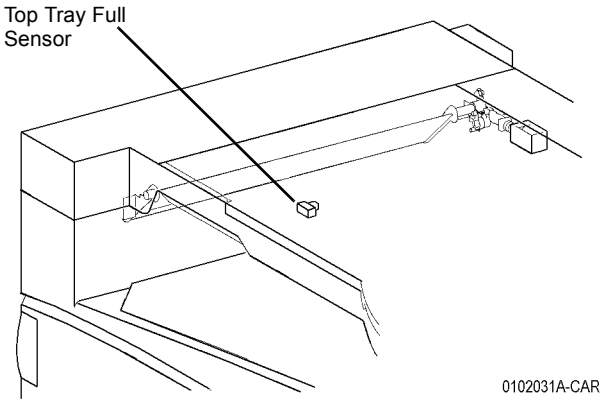


Figure 1 Component Location

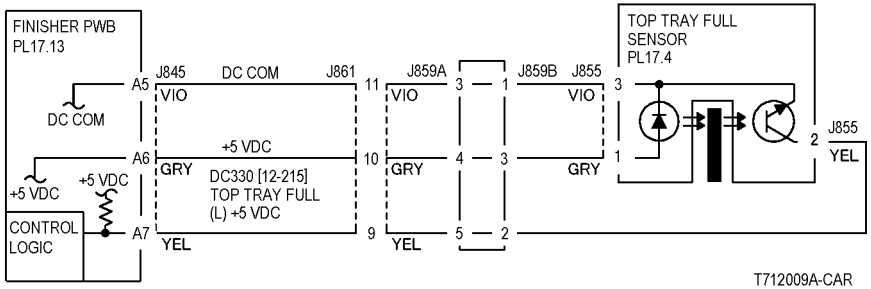


Figure 2 Top Tray Full Sensor CD

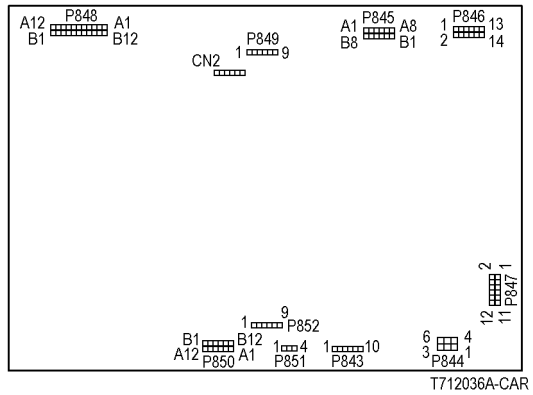


Figure 3 Finisher PWB

15-362 X Hard Failure

Communication Failure.

Procedure

Switch the power off then on. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Check the connectors on the IIT/IPS PWB (PL 18.3). If the check ia OK, replace the IIT/IPS PWB (PL 18.3).

15-367 X PIO Failure

Communication Failure.

Procedure

Switch the power off then on. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Check the connectors on the IIT/IPS PWB (PL 18.3). If the check ia OK, replace the IIT/IPS PWB (PL 18.3).

15-370 X PIO Initialization Failure 1

Communication Failure.

Procedure

Switch the power off then on. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Check the connectors on the IIT/IPS PWB (PL 18.3) and the ESS PWB (PL 13.1). If the check ia OK, replace the ESS PWB (PL 13.1). If the problem continues, replace the IIT/IPS PWB (PL 18.3).

15-371 X PIO Initialization Failure 2

Communication Failure.

Procedure

Switch the power off then on. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Check the connectors on the IIT/IPS PWB (PL 18.3) and the ESS PWB (PL 13.1). If the check ia OK, replace the ESS PWB (PL 13.1). If the problem continues, replace the IIT/IPS PWB (PL 18.3).

15-372 X PIO Initialization Failure 3

Communication Failure.

Procedure

Switch the power off then on. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Check the connectors on the IIT/IPS PWB (PL 18.3) and the ESS PWB (PL 13.1). If the check ia OK, replace the ESS PWB (PL 13.1). If the problem continues, replace the IIT/IPS PWB (PL 18.3).

15-375 X PIO Before Scan Failure

Communication Failure.

Procedure

Switch the power off then on. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Check the connectors on the IIT/IPS PWB (PL 18.3) and the ESS PWB (PL 13.1). If the check ia OK, replace the ESS PWB (PL 13.1). If the problem continues, replace the IIT/IPS PWB (PL 18.3).

15-376 X PIO Non-match Failure 1

Communication Failure.

Procedure

Switch the power off then on. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Check the connectors on the IIT/IPS PWB (PL 18.3) and the ESS PWB (PL 13.1). If the check ia OK, replace the ESS PWB (PL 13.1). If the problem continues, replace the IIT/IPS PWB (PL 18.3).

15-377 X PIO Non-match Failure 2

Communication Failure.

Procedure

Switch the power off then on. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Check the connectors on the IIT/IPS PWB (PL 18.3) and the ESS PWB (PL 13.1). If the check ia OK, replace the ESS PWB (PL 13.1). If the problem continues, replace the IIT/IPS PWB (PL 18.3).

15-380 CCD AGC

Automatic Gain Control (AGC) for CCD Channel 1 red failed.

Initial Actions

- Verify that Platen Glass is installed correctly.
- Verify that NVM 715-400 = 1

Procedure

NOTE: *Refer the BSD 6.1, 6.2 and 6.7 as required.*

Enter dC330 [6-002] and press Start. **The Exposure Lamp illuminates.**

Y N

Go to the 6-371 Exposure Lamp RAP.

The Exposure Lamp illumination is bright and steady.

Y N

Go to p/j722 and p/j724 on BSD 6.1 and check the wires for an open or short circuit.
Verify that j742 on the Lamp Ballast PWB and p/j724 on the IIT/IPS PWB are seated.
If the wires and connectors are good, replace the Exposure Lamp (PL 18.6).
If the problem continues, replace the Lamp Ballast PWB (PL 18.6).
If the problem continues, replace the IIT/IPS PWB (PL 18.3).

Remove the Platen Glass (REP 6.2). **The white reference strip on the bottom of the Platen Glass is clean and undamaged.**

Y N

Clean the white reference strip or replace the Platen Glass (PL 18.3).

Go to p/j721 on BSD 6.2 and check the flat cable on the IIT/IPS PWB and j741 on the CCD PWB for damage. Reseat the flat cable.
If the problem continues, replace the Lens Kit (PL 18.4).
If the problem continues, replace the IIT/IPS PWB (PL 18.3).

15-381 CCD AGC

Automatic Gain Control (AGC) for CCD Channel 2 red failed.

Initial Actions

- Verify that Platen Glass is installed correctly.
- Verify that NVM 715-400 = 1

Procedure

NOTE: *Refer the BSD 6.1, 6.2 and 6.7 as required.*

Enter dC330 [6-002] and press Start. **The Exposure Lamp illuminates.**

Y N

Go to the 6-371 Exposure Lamp RAP.

The Exposure Lamp illumination is bright and steady.

Y N

Go to p/j722 and p/j724 on BSD 6.1 and check the wires for an open or short circuit.
Verify that j742 on the Lamp Ballast PWB and p/j724 on the IIT/IPS PWB are seated.
If the wires and connectors are good, replace the Exposure Lamp (PL 18.6).
If the problem continues, replace the Lamp Ballast PWB (PL 18.6).
If the problem continues, replace the IIT/IPS PWB (PL 18.3).

Remove the Platen Glass (REP 6.2). **The white reference strip on the bottom of the Platen Glass is clean and undamaged.**

Y N

Clean the white reference strip or replace the Platen Glass (PL 18.3).

Go to p/j721 on BSD 6.2 and check the flat cable on the IIT/IPS PWB and j741 on the CCD PWB for damage. Reseat the flat cable.
If the problem continues, replace the Lens Kit (PL 18.4).
If the problem continues, replace the IIT/IPS PWB (PL 18.3).

15-382 CCD AGC

Automatic Gain Control (AGC) for CCD Channel 3 green failed.

Initial Actions

- Verify that Platen Glass is installed correctly.
- Verify that NVM 715-400 = 1

Procedure

NOTE: *Refer the BSD 6.1, 6.2 and 6.7 as required.*

Enter dC330 [6-002] and press Start. **The Exposure Lamp illuminates.**

Y N

Go to the 6-371 Exposure Lamp RAP.

The Exposure Lamp illumination is bright and steady.

Y N

Go to p/j722 and p/j724 on BSD 6.1 and check the wires for an open or short circuit.
Verify that j742 on the Lamp Ballast PWB and p/j724 on the IIT/IPS PWB are seated.
If the wires and connectors are good, replace the Exposure Lamp (PL 18.6).
If the problem continues, replace the Lamp Ballast PWB (PL 18.6).
If the problem continues, replace the IIT Driver PWB (PL 18.3).

Remove the Platen Glass (REP 6.2). **The white reference strip on the bottom of the Platen Glass is clean and undamaged.**

Y N

Clean the white reference strip or replace the Platen Glass (PL 18.3).

Go to p/j721 on BSD 6.2 and check the flat cable on the IIT/IPS PWB and j741 on the CCD PWB for damage. Reseat the flat cable.
If the problem continues, replace the Lens Kit (PL 18.4).
If the problem continues, replace the IIT/IPS PWB (PL 18.3).

15-383 CCD AGC

Automatic Gain Control (AGC) for CCD Channel 4 green failed.

Initial Actions

- Verify that Platen Glass is installed correctly.
- Verify that NVM 715-400 = 1

Procedure

NOTE: *Refer the BSD 6.1, 6.2 and 6.7 as required.*

Enter dC330 [6-002] and press Start. **The Exposure Lamp illuminates.**

Y N

Go to the 6-371 Exposure Lamp RAP.

The Exposure Lamp illumination is bright and steady.

Y N

Go to p/j722 and p/j724 on BSD 6.1 and check the wires for an open or short circuit.
Verify that j742 on the Lamp Ballast PWB and p/j724 on the IIT/IPS PWB are seated.
If the wires and connectors are good, replace the Exposure Lamp (PL 18.6).
If the problem continues, replace the Lamp Ballast PWB (PL 18.6).
If the problem continues, replace the IIT Driver PWB (PL 18.3).

Remove the Platen Glass (REP 6.2). **The white reference strip on the bottom of the Platen Glass is clean and undamaged.**

Y N

Clean the white reference strip or replace the Platen Glass (PL 18.3).

Go to p/j721 on BSD 6.2 and check the flat cable on the IIT/IPS PWB and j741 on the CCD PWB for damage. Reseat the flat cable.
If the problem continues, replace the Lens Kit (PL 18.4).
If the problem continues, replace the IIT/IPS PWB (PL 18.3).

15-384 CCD AGC

Automatic Gain Control (AGC) for CCD Channel 5 blue failed.

Initial Actions

- Verify that Platen Glass is installed correctly.
- Verify that NVM 715-400 = 1

Procedure

NOTE: *Refer the BSD 6.1, 6.2 and 6.7 as required.*

Enter dC330 [6-002] and press Start. **The Exposure Lamp illuminates.**

Y N

Go to the 6-371 Exposure Lamp RAP.

The Exposure Lamp illumination is bright and steady.

Y N

Go to p/j722 and p/j724 on BSD 6.1 and check the wires for an open or short circuit.
Verify that j742 on the Lamp Ballast PWB and p/j724 on the IIT/IPS PWB are seated.
If the wires and connectors are good, replace the Exposure Lamp (PL 18.6).
If the problem continues, replace the Lamp Ballast PWB (PL 18.6).
If the problem continues, replace the IIT Driver PWB (PL 18.3).

Remove the Platen Glass (REP 6.2). **The white reference strip on the bottom of the Platen Glass is clean and undamaged.**

Y N

Clean the white reference strip or replace the Platen Glass (PL 18.3).

Go to p/j721 on BSD 6.2 and check the flat cable on the IIT/IPS PWB and j741 on the CCD PWB for damage. Reseat the flat cable.
If the problem continues, replace the Lens Kit (PL 18.4).
If the problem continues, replace the IIT/IPS PWB (PL 18.3).

15-385 CCD AGC

Automatic Gain Control (AGC) for CCD Channel 6 blue failed.

Initial Actions

- Verify that Platen Glass is installed correctly.
- Verify that NVM 715-400 = 1

Procedure

NOTE: *Refer the BSD 6.1, 6.2 and 6.7 as required.*

Enter dC330 [6-002] and press Start. **The Exposure Lamp illuminates.**

Y N

Go to the 6-371 Exposure Lamp RAP.

The Exposure Lamp illumination is bright and steady.

Y N

Go to p/j722 and p/j724 on BSD 6.1 and check the wires for an open or short circuit.
Verify that j742 on the Lamp Ballast PWB and p/j724 on the IIT/IPS PWB are seated.
If the wires and connectors are good, replace the Exposure Lamp (PL 18.6).
If the problem continues, replace the Lamp Ballast PWB (PL 18.6).
If the problem continues, replace the IIT Driver PWB (PL 18.3).

Remove the Platen Glass (REP 6.2). **The white reference strip on the bottom of the Platen Glass is clean and undamaged.**

Y N

Clean the white reference strip or replace the Platen Glass (PL 18.3).

Go to p/j721 on BSD 6.2 and check the flat cable on the IIT/IPS PWB and j741 on the CCD PWB for damage. Reseat the flat cable.
If the problem continues, replace the Lens Kit (PL 18.4).
If the problem continues, replace the IIT/IPS PWB (PL 18.3).

15-790 X Detail Failure

Communication Failure.

Procedure

Switch the power off then on. **The problem continues.**

Y **N**

Check the connectors on the IIT/IPS PWB (PL 18.3). If the check ia OK, replace the IIT/IPS PWB (PL 18.3).

Return to Service Call Procedures.

16-311 Scanner

Scanner not detected during power up.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check connections between Scanner and IOT. Service as required (PL 18.3) (PL 18.4).

16-315 IIT Interface

IIT interface error.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Pivot down T5 T6 HVPS (REP 1.6) to access I/F PWB.
Check that connections on I/F PWB are secure.
If problem continues, replace I/F PWB (PL 9.1).

16-316 Page Memory

Page memory not detected.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check installation of Page Memory of the Scanner.

16-317 Page Memory

Page Memory error.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Replace the Page Memory of the Scanner.

16-318 Optional Page Memory

Optional page memory error.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Replace optional Page Memory of the Scanner.

16-450 SMB Host Name

PC of the same host name is duplicated on a network.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Change the host name.

16-452 IP Address Duplicated

PC of the same IP address exists on a network.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Change the IP address.

16-453 IP Address Acquisition

The IP address failed to be granted from the DHCP server.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Set the IP address.

16-454 Dynamic DNS Update

Dynamic DNS update failed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Again, switch power off then on

16-460 Full Status Detected

Full Status Detected at HD Access.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Again, switch power off then on

16-590 Read Error (Partition A)

A verify error occurred in the HD partition A at PC-Diag operation from PWS.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Set up the HD partition A and perform the verify test again.

16-591 Read Error (Partition B)

A verify error occurred in the HD partition B at PC-Diag operation from PWS.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Set up the HD partition B and perform the verify test again.

16-592 Read Error (Partition C)

A verify error occurred in the HD partition C at PC-Diag operation from PWS.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Set up the HD partition C and perform the verify test again.

16-593 Read Error (Partition D)

A verify error occurred in the HD partition D at PC-Diag operation from PWS.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Set up the HD partition D and perform the verify test again.

16-594 Read Error (Partition E)

A verify error occurred in the HD partition E at PC-Diag operation from PWS.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Set up the HD partition E and perform the verify test again.

16-595 Read Error (Partition H)

A verify error occurred in the HD partition H at PC-Diag operation from PWS.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Set up the HD partition H and perform the verify test again.

16-701 PLW Memory

An insufficient memory is detected while using the ART EX.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Decrease the resolution.

NOTE: *Decreasing the resolution may have affect of reducing the PLW memory.*

16-702 PLW Memory

System detected insufficient buffer for the print page that cannot be compressed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Decrease the resolution.

NOTE: *Decreasing the resolution may have affect of reducing the PLW memory.*

16-703 Email To Invalid Box

System detected an unopened or invalid Mailbox and aborted a job when receiving an Email.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Open the appropriate Mailbox.

Send an Email to a valid Mailbox.

16-704 Security Box

The system detected that a Mailbox was full (it exceeded the maximum number of documents per Box) and aborted a job. Full status was detected at HD access and a job was aborted.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Delete unwanted documents and retry the job.

16-705 Security Storage without HD

Registry for Secure Print has failed because Security Storage cannot be done due to no HD available.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check whether the HD is installed.
If the problem has occurred at installation, check whether the operations for Secure Print are correct.

16-706 Maximum User Number

The system detected that a job exceeded the maximum number of users for Secure and Proof Prints and aborted the job. Full status was detected at HD access and a job was aborted.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Delete unwanted documents/users and retry printing.

16-709 PLW Command

An ART EX Command error has occurred during PLW processing.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Cancel the job and execute the command again.

16-716 Spool TIFF Data

Unable to spool TIFF files because disk capacity is exceeded.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Install the HD or increase the capacity of the HD.

16-721 Other Errors

An error occurred during printing that is not defined.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Run the same job again to check the error status and ask Support G for help.

16-726 Decomposer Auto Judgement

Cannot switch decomposer; a print Language auto judgement error occurred.

Auto Judgement Error

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Fix and select the Decomposer from the Operation Panel or with a command.

16-728 TIFF Data

The data contains a Tag that is not set in the Image File Expansion Library.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Delete the unsupported Tag from the data and retry printing, etc.

16-729 TIFF Data

The specified settings exceed the upper limit of the valid number of colors and pixels.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Correct the valid range, etc.

16-730 ART Command

ART IV Command Invalid.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Delete the unsupported command from the data and retry printing.

16-731 TIFF Data

Invalid TIFF Data. The TIFF data is broken or cut halfway.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Resend the data, etc.

16-735 Job Template

The system tried to output the Job Template List while the Job Template was being updated.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Run the job again after the Job Template update has completed.

16-737 Server Read

Read error from the Job Template Pool Server

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check that "Authorization to read" is established for the storage destination server directory set as resource.

16-739 Job Template Path

The specified path of the Job Template Pool Server cannot be found.

Procedure

Switch power off then on. **The problem continues.**

Y N

Return to service call procedures.

Set the resource of the storage destination path from a client PC on the CentreWare.

16-740 Job Template Login

Job Template Server Login Error. Cannot log in to the Job Template Pool Server.

Procedure

Switch power off then on. **The problem continues.**

Y N

Return to service call procedures.

Set the log-in name and password in the Job Template file storage destination.
From some other PC connected to the network, check that you can log in with the above account.
Set the log-in name and password as a resource from the CentreWare client PC.

16-741 Job Template Connection

Cannot connect to the Job Template Pool Server.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Connect the cable from the M/C to a network correctly.
From the destination server, check that you can identify the M/C with "ping".
Perform the "ping" test on the destination server from .

From a client PC to check that the FTP connection to the destination server is possible.

16-742 HD File

File system was full when the Job Template was stored into the local HD.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Because the scanned images may exceed HD capacity, rerun the job.
If the problem continues, Initialize the HD.
If the problem continues, replace the HD (PL 13.1).

16-743 Job Template Installation

Job template pool server installation error or job template pool server setting failure

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Set the Spool Server related parameters again.

16-744 Job Template Address

The Job Template Pool Server address cannot be solved (Response to the DNS library error)

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check the connection to the DNS. Check that the Job Template Pool Server domain name is the one that has been registered in the DNS.

16-745 Job Template Definition

The Job Template Pool Server address cannot be solved (The DNS address is not set)

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Set the DNS address. Or set the Job Template Pool Server address by the IP address.

16-748 HD Full

Full status was detected at HD access and a job was aborted.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Retry printing after making more space of the HD capacity.

16-749 XJCL Syntax

Syntax error of the JCL command was detected.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Correct the command.

16-757 Auditron User

Invalid Auditron User

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Set a correct account and retry.

16-758 Auditron Function

An auditron function is disabled.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Consult the account administrator to add a right.
Set the new function that is allowed for that account and retry.

16-759 Auditron Limit

Auditron reached limit.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Consult the account administrator to set the number of copies, etc.

16-760 Decomposer

Error during decompose processing.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Resend the job. The execution environment/data check are required if the problem persists.

16-761 FIFO

Image Enlargement Error, FIFO EMPTY Error.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Print in fast print mode.
If problem continues, use print guarantee mode.

16-762 Decomposer

The print language is not installed or an unsupported function (print language, print utility, etc.) was required. The Decomposer specified with PJL or Auto SW is not installed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Fix and select the Decomposer from the Operation Panel or with a command.

16-763 Patch

Original patch does not exist.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Place the Auto Gradation Correction Chart correctly.

16-764 Server Transmission

SMTP Server Connection Error, result code: 421/451

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Retrieve emails in the Server HD. Restart the SMTP service.

16-765 Server Storage

SMTP Server HD Full, Result code: 452

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Retrieve emails in the Server HD. Rearrange the server capacity.

16-766 Server Storage

SMTP Server File System has a problem, result code: 552.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Contact the SMTP Server administrator. Rearrange the server capacity limit.

16-767 Mailbox

Mailbox not found, or no access. Email destination address Incorrect, result code: 550/551.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check the destination of the email.

16-768 Mail From Command

Mail From Command, Sending Address Incorrect, Login Error.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check the settings of the self-email address. Check whether it is a valid email address in the domain.

16-769 DSN Unsupported

SMTP Server Not Applicable to DSN

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Enable the ESMTP function of nearest SMTP Server. Or disable the Sending/Receiving Confirmation function when sending an email.

16-770 Template Processing

The system aborted a job due to insufficient HD capacity at Job Template processing.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Create free space for the HD capacity.

16-771 Scan Data Repository

The Scanned Data Repository Address cannot be solved. DNS Address is not set.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Set the DNS address. Or set the Scan Data Repository address by the IP address.

16-772 Scan Data Repository

The Scan Data Repository address cannot be solved (Response to the DNS library error)

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check the connection to the DNS. Or check that the Scanned Data Repository domain name is the one that has been registered in the DNS.

16-773 IP Address

Self-machine IP address invalid, DHCP Lease Expired.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check the DHCP environment. Set the fixed IP address for the self-machine.

16-774 HD Compression

HD Full at Compression type conversion

HD Full has occurred when the S-Formatter did the compression type conversion of the JBIG compressed images into the MH system (partition #1).

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Create free space for the HD capacity and retry.

16-775 HD Capacity

Image Conversion Error. Insufficient HD capacity is detected during image conversion process by S-Formatter.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Create free space for the HD capacity and retry.

16-776 Image Conversion

An error has occurred due to other causes than HD Access during image conversion process by S-Formatter.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform the operation again.

16-777 HD Access

The HD Access Error has occurred during image conversion process by S-Formatter.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Replace the HD (PL 13.1) and perform the operation again.

16-778 HD Capacity

The insufficient HD capacity was detected during scanned image conversion process by I-Formatter.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Create free space of the HD capacity and retry scanning.

16-779 Scan Image Conversion

An error has occurred due to other causes than HD Access during scanned image conversion process by I-Formatter.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Again, switch power off then on and perform the operation again.

16-780 HD Access

The HD Access Error has occurred during scanned image conversion process by I-Formatter.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Replace the HD (PL 13.1) and retry scanning.

16-781 Scan Server

Net Connection Error during Scanning. Connection to the Server cannot be established during Scan to Server file transfer operation.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Set "Sub-net Mask" and "Gateway" of the main processor correctly.
From the destination server, check that you can identify the M/C with "ping".
From a Windows95 or UNIX machine to check that the FTP connection to the destination server is possible.

16-782 Scan Server Login

Server Login Error during Scanning. Cannot log in to the Server during Scan to Server file transfer operation.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Set the log-in name and password in the destination server.
Make correct settings for the attributes of the Job Template file.
From a client PC, set the same account as the above as a resource in CW.

16-783 Server Path

Server Path Error at Scanning. The specified path cannot be found at Scan to Server file transfer operation.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Make correct settings for the attributes of the Job Template file.

16-784 Server Write

Write Error at Scanning. The Server cannot be written to at the Scan to Server file transfer.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check that there is "Write Authorization:" in the server directory.
Create free space on the server disk.

16-785 Server HD Full

Server File Full at Scanning. The Server File System became full during the Scan to Server file transfer.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check that there is "Write Authorization" in the server directory.
Create free space on the server disk.

16-786 HD Scan Write

Internal HD Write Error at Scanning. A temporary file cannot be written to the internal HD at the Scan to Server file transfer.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

HD may be filled with print jobs. Allow time and retry.
If the problem continues, format the HD.
If the problem continues, replace the HD (PL 13.1).

16-787 Job Template Syntax

This is a syntax error in the Job Template during Scan to Server operation and limited to the following cases (because of Redirector detection): Server IP Address Incorrect (IP Syntax Error)

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check the contents of the attributes (string RepositoryName) in the Job Template file.

16-788 Mailbox to PC

Retrieval Failed at Scan to PC (via Web Browser.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Improve the connection status to a network.
Check for problem such as duplicated IP addresses.

16-793 MF I/O HD Full

MFIO HD Full

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Insufficient Area of Hard Disk (MF I/O).

16-950 Tray 1 Empty

Tray 1 Empty

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Add paper.

16-951 Tray 2 Empty

Tray 2 Empty

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Add paper.

16-952 Tray 3 Empty

Tray 3 Empty

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Add paper.

16-953 Tray 4 Empty

Tray 4 Empty

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Add paper.

16-954 Tray 5 Empty

Tray 5 Empty

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Add paper.

16-958 Tray 5 Size

Tray 5 Size Mismatch

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Load proper paper in the tray.

16-959 Tray 1 Size

Tray 1 Size Mismatch

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Load proper paper in the tray.

16-960 Tray 2 Size

Size Mismatch Tray 2 Size Mismatch

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Load proper paper in the tray.

16-961 Tray 3 Size

Tray 3 Size Mismatch

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Load proper paper in the tray.

16-962 Tray 4 Size

Tray 4 Size Mismatch

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Load proper paper in the tray.

16-965 ATS/APS No Paper

APS/ATS NG No Paper.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Add paper.

16-966 ATS/APS No Destination

ATS/APS No Destination, other than No Paper.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Change the settings and replace the Trays.

16-981 Full HD

Full status was detected at HD access. Full status was not cleared even during waiting for timing. One or more pages are already stored.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Service actions depend on the operation specifications.
Again, switch power off then on.
If the problem continues, reload software.
If the problem continues, replace the HD (PL 13.1).

16-982 Full HD

Full status was detected at HD access. Full status was not cleared even during waiting for timing. No pages can be stored.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Again, switch power off then on.

102-200 Receive Buffer Overflow

The data received from the Controller exceeded the buffer amount of the destination in the Panel.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.
If the problem continues, replace the ESS PWB (PL 13.1)

102-201 Send Buffer Overflow

The data to be sent from the Panel exceeded the buffer amount of the destination in the Panel.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.
If the problem continues, replace the ESS PWB (PL 13.1)

102-202 Request Queue Full

The event that requires more than the processing capability for the request arising in the Panel has occurred.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.
If the problem continues, replace the ESS PWB (PL 13.1)

102-203 Send Request Queue Full Debug

Data cannot be sent from the Panel to the Controller.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

If the problem continues, replace the ESS PWB (PL 13.1)

102-204 SIO Parameter

Serial communication failure. Incorrect message size at SIO receiving request, or incorrect Mailbox ID when a message is sent.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-205 SIO Command

Serial communication failure. A command error has occurred at SIO receiving request.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-206 SIO Status

Serial communication failure. A header status error of the RX packet or a message status error of the RX packet has occurred.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-207 Communication Manager Target

Serial communication failure. Incorrect Mailbox value on the cm_send_msg statement, or the target is not SYS when receiving from SIO.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-208 Communication Manager Command

Serial communication failure. A command error has occurred when receiving from SIO.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-209 EVM Returns Wrong Value

Return value error from EVM. Panel-SW failure

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-310 Send Queue Full

Over the upper limit of the processing capability to send data from the Panel to the Controller.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-311 Receive Queue Full

The data received from the Controller exceeded the upper limit of the processing capability in the Panel.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-312 EVM Uses Wrong API

Illegal use of API by EVM.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-313 AS Uses Wrong API

Illegal use of API by AS

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-314 Wait Event Time Out

Time-Out of the event waiting timer. The response message from the Controller was not notified for a specified time.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-315 CTS Internal

CTS Internal Error

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-316 Send Request Queue Full SIO

Over the upper limit of the processing capability to send data from the Panel to the Controller.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-317 Receive Message Queue Full

The data received from the Controller exceeded the upper limit of the processing capability in the Panel.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-318 Receive Finish Queue Full

The data received from the Controller exceeded the upper limit of the processing capability in the Panel.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-319 Send with No ACK

Serial communication failure. Sending failure, ACK was not returned.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-320 Polling

Serial communication failure. Communication failure (polling error)

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-321 Send Message

Serial communication failure. Sending message error.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-322 Target

Serial communication failure. Target error.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-323 Address

Serial communication failure. Address error.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-324 Size

Serial communication failure. Size error

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-325 Object Creation

Object creation error. The specified object failed to be created due to a setting or specifying error on gm_create.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-326 Memory Overflow

Memory overflow. The memory in the GUAM exceeded the upper limit.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Expand the memory in the GUAM.
If the problem continues, perform re-installation of the software.

102-327 Button Overflow

Button overflow. The memory for the (synchronous display) button in the GUAM exceeded the upper limit.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Expand the memory for the button in the GUAM.
If the problem continues, perform re-installation of the software.

102-328 UI Internal with Out of Area

I/F failure in the UI. The coordination value out of the area of the displayed screen was detected (W x H = 640 x 240)

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check the D-RAM and ROM.
If the problem continues, perform re-installation of the software.

102-329 UI Internal with Invalid Coordinates

I/F failure in the UI. The coordination value that cannot be displayed was detected (X = 4 times number position)

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check the D-RAM and ROM.
If the problem continues, perform re-installation of the software.

102-330 Interface with Invalid Parameter LCD

Interface failure. Incorrect parameter was detected at the Drv. I/F between the DM and LCD.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check the D-RAM and ROM.
If the problem continues, perform re-installation of the software.

102-331 UI Internal with Invalid LED Request

I/F failure in the UI. The request for lighting up an incorrect LED was received.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check the D-RAM and ROM.
If the problem continues, perform re-installation of the software.

102-332 Interface with Invalid Parameter CP

Interface failure. Incorrect parameter was detected at the Drv. I/F between the DM and CP.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check the D-RAM and ROM.

If the problem continues, perform re-installation of the software.

102-333 Interface with Impossible Communication

Interface failure. Impossible communication with the Control Panel was detected. H/W connection failure in the Panel, or the internal connection was unable to be detected correctly.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-334 Interface with Receiving Error Key Code

Interface failure. Invalid Key Code was received from the Control Panel.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Repair/adjust the Control Panel (PL 18.2)

102-335 Interface with Receiving Invalid Coordinates

Interface failure. Invalid coordination value was received from the Control Panel with a parameter.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Repair/adjust the Control Panel (PL 18.2)

102-336 Interface DM - ACD Drv. I/F

Interface failure. Incorrect parameter was detected at the Drv. I/F between the DM and ACD.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check the D-RAM and ROM.
If the problem continues, perform re-installation of the software.
If the problem continues, replace the Control Panel (PL 18.2)

102-337 Frame Data Error with Invalid Data Type

Invalid frame data was detected. The incorrect value of the Data Type detected by Frame ID was detected.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check the D-RAM and ROM.
If the problem continues, perform re-installation of the software.
If the problem continues, replace the Control Panel (PL 18.2)

102-338 Frame Data Error Offset Address Out of Scope

Invalid frame data was detected. The Offset Address out of range was extracted from the Frame ID.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check the D-RAM and ROM. Replace the Control Panel (PL 18.2)
If the problem continues, perform re-installation of the software.

102-339 Display Request Code Invalid

Text Code failure. The system detected that the Code requested to be displayed was incorrect.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check the D-RAM and ROM. Replace the Control Panel (PL 18.2)
If the problem continues, perform re-installation of the software.

102-340 Interface GUAM - DM I/F

Interface failure. Incorrect parameter was detected at the I/F between the GUAM and DM.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Check the D-RAM and ROM. Replace the Control Panel (PL 18.2)
If the problem continues, perform re-installation of the software.

102-341 Event Queue Full

Event queue full

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.
If the problem continues, replace the Control Panel (PL 18.2)

102-342 Event Queue Empty

Event queue empty

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.
If the problem continues, replace the Control Panel (PL 18.2)

102-343 Invalid Class

Invalid class

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.
If the problem continues, replace the Control Panel (PL 18.2)

102-344 Invalid Type

Invalid type

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

If the problem continues, replace the Control Panel (PL 18.2)

102-345 Timer Queue Full

Timer queue full

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

If the problem continues, replace the Control Panel (PL 18.2)

102-346 Invalid Timer Number

Invalid timer number

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.
If the problem continues, replace the Control Panel (PL 18.2)

102-347 Undefined Trap

Undefined trap

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.
If the problem continues, replace the Control Panel (PL 18.2)

102-348 Command Access Exception

Exceptional command access

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

If the problem continues, replace the Control Panel (PL 18.2)

102-349 Invalid Command

Illegal command

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

If the problem continues, replace the Control Panel (PL 18.2)

102-350 Privilege Command

Privilege command

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

If the problem continues, replace the Control Panel (PL 18.2)

102-351 No FPU Exception

Exceptional FPU non-existence

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

If the problem continues, replace the Control Panel (PL 18.2)

102-352 Address Misalign

Address mis-alignment

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

If the problem continues, replace the Control Panel (PL 18.2)

102-353 Data Access Exception

Exceptional data access

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

If the problem continues, replace the Control Panel (PL 18.2)

102-354 Tag Overflow

Tag overflow

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

If the problem continues, replace the Control Panel (PL 18.2)

102-355 No Co Processor Exception

Exceptional Co Processor non-existence

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

If the problem continues, replace the Control Panel (PL 18.2)

102-356 Short of Area

Insufficient area

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.
If the problem continues, replace the Control Panel (PL 18.2)

102-357 Cancel Wait Status

Forced cancellation of the wait status

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.
If the problem continues, replace the Control Panel (PL 18.2)

102-358 Time Out

Time-Out

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.
If the problem continues, replace the Control Panel (PL 18.2)

102-359 Queue Overflow

Queue overflow

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Switch power off then on.

102-360 Context

Context error

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.
If the problem continues, replace the Control Panel (PL 18.2)

102-361 Object

Object error

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.
If the problem continues, replace the Control Panel (PL 18.2)

102-362 No Object

Object non-existence

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.
If the problem continues, replace the Control Panel (PL 18.2)

102-363 Invalid ID

Incorrect ID

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.
If the problem continues, replace the Control Panel (PL 18.2)

102-364 Parameter

Parameter error

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

If the problem continues, replace the Control Panel (PL 18.2)

102-365 Reserve Attribute

Reserve attribute

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

If the problem continues, replace the Control Panel (PL 18.2)

102-366 Reserve Function Code

Code number for reserve function

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.
If the problem continues, replace the Control Panel (PL 18.2)

102-367 Unsupported Function

Unsupported function

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.
If the problem continues, replace the Control Panel (PL 18.2)

102-368 Short of UI Memory

Insufficient memory, or connection failure

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

If the problem continues, replace the Control Panel (PL 18.2)

102-369 Invalid Interface Value

Invalid interface value. Panel-SW failure

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-370 Interface Length

Interface length failure. The parameter notified from the Controller was incorrect.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-371 Interface Parameter

Interface parameter failure. The parameter notified from the Controller was incorrect.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-372 Interface Sequence

Interface sequence failure. The initial command from the Controller was not notified for a specified time.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-373 Channel

Channel failure. The channel notified from the Controller was incorrect.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-374 Invalid User Job ID

Incorrect User Job ID. The Job ID parameter notified from the Controller was incorrect.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-375 Internal Resource

Internal resource failure. Panel-SW failure.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-376 Internal Memory

Internal memory failure. Panel-SW failure.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-377 UI Timer

Timer failure. Panel-SW failure

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-378 Interface Format

Interface format failure. The data format notified from the Controller was incorrect.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-379 Dispatch

Dispatch failure

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-380 Copy Interface

Copy interface failure

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-382 Scanner Interface

Scanner interface failure

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-383 Report Interface

Report interface failure

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-384 Server Access

Server access failure

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-385 Service Object Overflow

Service object overflow

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-386 Invalid Service Object

Invalid service object

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-387 Invalid Service Object Attribute

Invalid service object attribute

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-388 Attribute

Attribute Error

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-389 Argument

Argument Error

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-390 Job Parameter

Job parameter argument error

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-391 Job Actual Parameter

Job execution argument error

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Again, switch power off then on.

102-392 Auditron

Invalid Auditron

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-393 EP

Software failure

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-394 File Access

Invalid file access

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-395 NVM

NVM failure

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-396 FF

FF error

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-397 MGR

MGR error.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

102-398 Delay Release Queue Full

Delay release queue full.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.
If the problem continues, replace the Control Panel (PL 18.2)

102-399 Internal

Internal error.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the software.

If the problem continues, replace the Control Panel (PL 18.2)

103-203 Machine Code Failure

Product Number Failure (Not initialized).

Procedure

Turn the power OFF/ON. **The fault is cleared.**

Y N

CAUTION

ESS PWB and MCU PWB cannot be replaced at the same time.

Replace the ESS PWB (PL 13.1).
If the problem continues, replace the MCU PWB (PL 13.1)

Return to Service Call Procedures.

103-204 Serial Number Failure

Serial Number Failure (Not initialized).

Procedure

Turn the power OFF/ON. **The fault is cleared.**

Y N

CAUTION

ESS PWB and MCU PWB cannot be replaced at the same time.

Replace the ESS PWB (PL 13.1).
If the problem continues, replace the MCU PWB (PL 13.1)

Return to Service Call Procedures.

103-207 All Machine Codes Mismatch

At least one of the three Product codes are mismatched.

Procedure

Turn the power OFF/ON. **The fault is cleared.**

Y **N**

CAUTION

ESS PWB and MCU PWB cannot be replaced at the same time.

Replace the ESS PWB (PL 13.1).
If the problem continues, replace the MCU PWB (PL 13.1)

Return to Service Call Procedures.

103-208 All Serial Numbers Mismatch

At least one of the three Serial Numbers are mismatched.

Procedure

Turn the power OFF/ON. **The fault is cleared.**

Y **N**

Go to (GP 10).

Return to Service Call Procedures.

103-320 EEPROM Failure

A write error has occurred in the SEEPROM on the ESS PWB.

Procedure

Turn the power OFF/ON. **The fault is cleared.**

Y N

Replace the ESS PWB (PL 13.1).

Return to Service Call Procedures.

103-321 Backup SRAM Failure

A write error has occurred in the NVM on the ESS PWB.

Procedure

Turn the power OFF/ON. **The fault is cleared.**

Y N

Replace the ESS PWB (PL 13.1).

Return to Service Call Procedures.

103-330 ESS ROM DIMM #3 Check Failure

An ESS ROM DIMM #3 check failure was detected.

Procedure

Turn the power OFF/ON. **The fault is cleared.**

Y **N**

Remove and replace the ESS ROM DIMM #3.
If the problem continues, replace the ESS ROM DIMM #3

Return to Service Call Procedures.

103-331 ESS ROM DIMM #1 Not Found

The system detected that the ESS ROM DIMM #1 was not installed.

Procedure

Turn the power OFF/ON. **The fault is cleared.**

Y **N**

Remove and replace the ESS ROM DIMM #1.
If the problem continues, replace the ESS PWB (PL 13.1).

Return to Service Call Procedures.

103-332 ESS Standard ROM Error

An error was detected in the ESS built-in standard ROM.

Procedure

Turn the power OFF/ON. **The fault is cleared.**

Y **N**

Remove and replace the ESS built-in standard ROM.
If the problem continues, replace the ESS built-in standard ROM.

Return to Service Call Procedures.

103-333 ASIC Failure (Panther-t)

An error was detected in the Panther.

Procedure

Turn the power OFF/ON. **The fault is cleared.**

Y **N**

Replace the ESS PWB (PL 13.1).

Return to Service Call Procedures.

103-334 Standard Post Script Font ROM Error

An error was detected in the standard built-in Post Script Font ROM.

Procedure

Turn the power OFF/ON. **The fault is cleared.**

Y **N**

Replace the Post Script Font ROM (PL 13.1).

Return to Service Call Procedures.

103-335 Post Script Font ROM Not Found

Post Script Font ROM installation was detected.

Procedure

Turn the power OFF/ON. **The fault is cleared.**

Y **N**

Replace the Post Script Font ROM (PL 13.1).

Return to Service Call Procedures.

103-336 ESS RAM DIMM #3 W/r Check Failure

A failure was detected during Read/Write Check of the ESS RAM DIMM #3.

Procedure

Turn the power OFF/ON. **The fault is cleared.**

Y **N**

Remove and replace the ESS RAM DIMM #3.
If the problem continues, replace the ESS ROM DIMM #3

Return to Service Call Procedures.

103-337 ESS Standard RAM Error

An error was detected in the ESS built-in standard RAM.

Procedure

Turn the power OFF/ON. **The fault is cleared.**

Y **N**

Replace the ESS PWB (PL 13.1).

Return to Service Call Procedures.

103-338 Same Post Script Font ROMíS Found

The system detected that the same Post Script Font ROM was installed.

Procedure

Turn the power OFF/ON. **The fault is cleared.**

Y N

Install the appropriate Post Script Font ROM.
If the problem continues, replace the ESS PWB (PL 13.1).

Return to Service Call Procedures.

103-339 ROM DIMM Of Another Product Found

The system detected that the ROM DIMM for another machine was installed.

Procedure

Turn the power OFF/ON. **The fault is cleared.**

Y N

Install the appropriate ROM DIMM.
If the problem continues, replace the ESS PWB (PL 13.1).

Return to Service Call Procedures.

103-372 IOT Sc Soft Failure

IOT Controller software failure was detected.

Procedure

Turn the power OFF/ON. **The fault is cleared.**

Y **N**

Reinstall the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

Return to Service Call Procedures.

103-701 Changed Output Bin: Side To Center

The output tray was changed (Side Tray to Center Output Tray).

Procedure

No action required.

103-702 Changed Output Bin: Finisher To Center

The output tray was changed (Finisher Tray to Center Output Tray).

Procedure

No action required.

116-200 Main PWBA IC

An error was detected in the IC in the ESS PWB.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Replace the ESS PWB (PL 13.1).

116-201 HD

The HD was not booted due to a HD error detected on booting

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Run the HD Diag (DC355).
If the problem continues, replace the HD (PL 13.1)
If the problem continues, replace the ESS PWB (PL 13.1)

116-206 Timer

A timer error was detected.

Procedure

Replace the ESS PWB (PL 13.1).

116-207 Ethernet Board

A timer error was detected in the Ethernet board.

Procedure

This code is not supposed to occur.

116-209 ESS PS-1 ROM Check

A failure was detected when the ESS PS-1 ROM was checked.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Pull out and insert the PS-1 ROM (PL 13.1).
If the problem continues, replace PS-1 ROM (PL 13.1).

116-310 ESS PS-2 ROM Check

A failure was detected when the ESS PS-2 ROM was checked.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Pull out and insert the PS-2 ROM (PL 13.1).
If the problem continues, replace PS-2 ROM (PL 13.1).

116-311 ESS Font ROM DIMM #3 Check

A failure was detected when the ESS FONT ROM DIMM #3 was checked.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Pull out and insert the ESS FONT ROM DIMM #3.
If the problem continues, replace the ESS FONT ROM DIMM #3.

116-314 Ethernet Address

A Ethernet error was detected.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Switch power off then on.
If the problem continues, replace the ESS PWB (PL 13.1).

116-315 ESS RAM DIMM #1 W/R Check

A failure was detected during W/R of the ESS RAM DIMM #1.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Pull out and insert the ESS RAM DIMM #1.
If the problem continues, replace the ESS RAM DIMM #1.

116-316 ESS RAM DIMM #2 W/R Check

A failure was detected during W/R of the ESS RAM DIMM #2.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Pull out and insert the ESS RAM DIMM #2.
If the problem continues, replace the ESS RAM DIMM #2.

116-317 Standard ROM DIMM Check

An error was detected when the standard ROM DIMM was checked.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Pull out and insert the standard ROM DIMM.
If the problem continues, replace the standard ROM DIMM.

116-318 Option ROM DIMM Check

An error was detected when the optional ROM DIMM was checked.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Pull out and insert the optional ROM DIMM.
If the problem continues, replace the optional ROM DIMM.

116-319 Serial

There is no serial board at the serial board initialization failure.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Reinstall the serial board.

116-320 STREAMZ Soft

Fatal error of the STREAMZ. Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-321 System Soft

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-323 ESS NVRAM W/R Check

An error was detected at the W/R check of the NVM in the ESS PWB.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Replace the ESS PWB (PL 13.1).

116-324 Exception Error

CPU exceptional error.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to Service Call Procedures.

Replace the ESS PWB (PL 13.1).

116-325 Communication Error

+24 VDC enabled Communications failure.

Procedure

+24 VDC power is failed. **Status Code 102-319 is displayed after 116-325 is displayed.**

Y **N**

Preliminary information not available.

+24V LVPS is failed. Perform following:

- ï Remove Rear Cover (REP 14.2).
- ï Remove cover from +24V LVPS (PL 9.1).
- ï Disconnect P502 on +24V LVPS (Figure 1).

Check that power is switched off. Measure resistance of fuse on +24V LVPS. **Resistance is 1 ohm or less.**

Y **N**

Replace +24V LVPS (PL 9.1).

Switch on the power. Measure the AC voltage between the white and black wires in P2 on the +24 VDC. **110 or 220 VAC is measured.**

Y **N**

Go to the AC Power RAP.

Connect the black meter lead to DC COM or frame. Measure DC voltage at P505 on the +24 V LVPS (Figure 1). **Voltages are measured as shown.**

Y **N**

There is a problem with the +24 VDC enable circuit. Go to the +24 VDC Enable RAP.

Measure the DC voltage at P502 on the +24V LVPS (Figure 1). **Voltages are measured as shown.**

Y **N**

Replace the 24V LVPS (PL 9.1).

There is a short circuit in +24 VDC distribution. Go to the +24 VDC Short Circuit RAP.

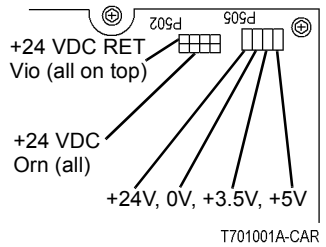


Figure 1 P502, P505 on +24V LVPS

116-326 ESS ROM DIMM #1 Flash

A failure was detected in the ESS ROM DIMM #1 Flash.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Pull out and insert the ESS ROM DIMM #1.
If the problem continues, replace the ESS ROM DIMM #1.

116-327 ESS ROM DIMM #2 Flash

A failure was detected in the ESS ROM DIMM #2 Flash.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Pull out and insert the ESS ROM DIMM #2.
If the problem continues, replace the ESS ROM DIMM #2.

116-328 L2 Cache

A L2 Cache failure was detected.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Replace the ESS PWB (PL 13.1).

116-329 Serial I/F Soft

The system call error related to the serial I/F was detected.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Again, switch the power off then on.

116-330 HD File System

The system detected that the an error has occurred or the HD was not formatted during HD check at power on.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Run the HD Diag (DC355).
If the problem continues, replace the HD (PL 13.1).
If the problem continues, replace the ESS PWB (PL 13.1).

116-332 Invalid Log Info

A failure related to log was detected.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

After removing the HD and switching power off then on. Install the HD again and turn the power on.
If the problem continues, run the HD Diag (DC355).
If the problem continues, replace the ESS PWB (PL 13.1).

116-333 LocalTalk Soft

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-335 MFIO HD

HD failure to be detected by MFIO

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Set up the HD.
If the problem continues, replace the HD (PL 13.1).
If the problem continues, replace the ESS PWB (PL 13.1).

116-336 Redirector HD

HD failure to be detected by Redirector

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Set up the HD.
If the problem continues, replace the HD (PL 13.1).
If the problem continues, replace the ESS PWB (PL 13.1).

116-337 Template HD Write Error

<Write error in obtaining JT>

An error has occurred when the Job Template was stored in the local HD.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Set up the HD.
If the problem continues, replace the HD (PL 13.1).
If the problem continues, replace the ESS PWB (PL 13.1).

116-340 Short of Memory

When the system detected that the memory was insufficient.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Add memory

Pull out PostScript option.

116-341 ROM DIMMs Mismatch

several invalid ROM DIMM versions that are installed The combination of the installed ROM DIMMs is invalid for use at the same time. When installing multiple ROM DIMMs, it is necessary to match the major version with the minor version.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Replace PS-1 and PS-2 ROM.

116-342 JT Monitor

Fatal errors to be detected by the JT monitor

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Replace the ESS PWB (PL 13.1).

116-344 MF IO

Fatal errors to be detected by MFIO

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Replace the ESS PWB (PL 13.1).

116-345 Token Ring Board

Token Ring Control IC Access error

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Again, switch power off then on. Return to service call procedures.

116-346 Formatter

Fatal errors to be detected by the Formatter were detected.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Replace the ESS PWB (PL 13.1).

116-348 Redirecter

Fatal errors to be detected by Redirecter

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Replace the ESS PWB (PL 13.1).

116-349 SIF on Calling Pflite Function

An error has occurred when calling the Pflite function with SIF.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Replace the ESS PWB (PL 13.1).

116-350 AppleTalk Soft

Overall fatal errors of the AppleTalk

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-351 EtherTalk Soft

Fatal error related to the EtherTalk

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-352 NetWare Soft

Fatal error related to the NetWare

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-353 lpd Soft

Fatal error related to the lpd

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-355 SNMP Agent Soft

Fatal error related to the SNMP Agent

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-356 EWS Soft

Fatal error related to the EWS

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-357 PS Soft

PS Fatal System Error

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Replace the ESS PWB (PL 13.1).

116-358 Salutation Soft

Fatal error related to the Salutation

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-359 PLW Soft

Fatal error in PLW

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-360 SMB Soft

Fatal error related to the SMB

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-361 Spool Fatal HD

Fatal error of the SPL HD

The spoolCont detected an error at HD access.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Run the HD Diag (DC355).
Replace the HD (PL 13.1).
If the problem continues, replace the ESS PWB (PL 13.1).

116-365 Spool Fatal

Fatal error of the SPL

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.

If the problem continues, replace the ESS PWB (PL 13.1).

116-366 Report Generator Soft

An operation failure of the Report Generator

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Replace the ESS PWB (PL 13.1).

116-367 Parallel I/F Soft

Overall fatal errors of the Parallel

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-368 Dump Print

Fatal error of DumpPrint

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-370 XJCL

Fatal error of XJCL

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-372 P-Formatter

Fatal error of P-Formatter

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Replace the ESS PWB (PL 13.1).

116-373 Dynamic DNS Soft

Fatal error related to DDNS

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Again, switch power off then on.

116-374 Auto Switch

Fatal error of Auto SW

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-375 I-Formatter

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Replace the ESS PWB (PL 13.1).

116-376 Port 9100 Software

[Detection Conditions] Port 9100 Software Fail

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Again, switch power off then on.

116-377 Video DMA

[Detection Conditions] Video DMA failure was detected.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Replace the ESS PWB (PL 13.1).

116-378 MCR Soft

Fatal error of MCR (Mail Contents Requester)

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Again, switch power off then on.

116-379 MCC Soft

Fatal error of MCC (Mail Contents Creator)

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Switch power off then on.

116-380 MF UI Cont Soft

Fatal error of MF UI cont

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-381 Data Link Layer Error between Cont and UI Panel

Controller - MF UI panel: Communication error on the Data Link layer

At the communication between the ESS and Panel, the ESS detected an initialization error of SCOPE, a message sending error, or retrieve error of the received data.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS or Panel software.
If the problem continues, replace the ESS PWB (PL 13.1).
If the problem continues, replace the Control Panel (PL 18.2).

116-382 Panel Application Layer Command Error on UI

Controller - MF UI panel: Command error at the application level

A necessary parameter was not sent from the Panel, an length error was detected in a variable parameter, or the confirmation message was not returned for a specified time after the request message had been sent to the Panel.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-388 No HD that Should Be

The necessary HD was not installed.

Though the system has the configuration requiring the installation of the HD (with Fax), it detected that the HD was not installed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Install the HD.

116-389 No Add-On RAM that Should Be

The necessary expansion RAM was not installed.

Though the system has the configuration requiring the installation of the expansion RAM (with the HD), it detected that the expansion RAM was not installed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Install the expansion RAM.

116-390 Standard ROM and NVM Version Mismatch

A mismatch of the versions between the standard ROM and NVM was detected.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Initialize the NVM by following the instructions on the LCD display.
(When the NVM is not to be initialized, use the standard ROM whose version is applicable.)

116-395 USB Soft

Fatal error related to USB

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-396 Mail IO Soft

Fatal error related to Mail IO

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-398 IPP Soft

Fatal error related to IPP

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-399 JME Soft

Fatal error related to JME

Due to an error during the software processing, the subsequent processes cannot be performed.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Perform re-installation of the ESS software.
If the problem continues, replace the ESS PWB (PL 13.1).

116-701 Execute forced separation of two sides

Due to insufficient memory, 2-Sided print is impossible.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Expand the memory or install the HD if the HD is not installed.

116-702 Perform printing by using a substitution font

[Detection Conditions] Printed with a substitution font.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Again, switch power off then on.

116-703 PS Interpret error

An error has occurred in language analysis

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Correct the job data.

116-710 HP-GL spool file overflows

[Detection Conditions] HP-GL/2 memory overflow

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Increase the HP-GL spool size. Or install the HD.

116-711 PLW form synthesis error

Synthesis is impossible because the size/orientation of the PLW form's drawing is different from that of the paper.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Select the paper with the size and orientation of the registered form.

116-712 Insufficient PLW form capacity

The PLW form/logo data cannot be registered because of the insufficient RAM or Hard Disk space.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Use the Operation Panel to check the registered forms/logos, and delete unnecessary ones. Or increase the allocated capacity of the RAM disk.

116-714 A HP-GL command error was detected

[Detection Conditions] HP-GL/2 command error

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Correct or remove the data in the print data that causes the error.

116-715 PLW form registry error

The PLW form data cannot be registered because of the restriction of the number of forms.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Use the Operation Panel to check the registered forms, and delete unnecessary ones. Or delete unnecessary forms.

116-718 PLW form synthesis error

The specified form is not registered.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Use a registered form, or register a necessary form.

116-737 Insufficient ART user defined area

The user defined data (external characters, patterns, etc.) cannot be registered because of insufficient RAM capacity.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Delete registered user defined data. Or increase the allocated capacity of the RAM.

116-738 Form synthesis error

Synthesis is impossible because the size/orientation of the form's drawing is different from that of the paper.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Select the paper with the size and orientation of the registered form.

116-739 Insufficient form/logo capacity

The form/logo data cannot be registered because of the insufficient RAM or Hard Disk space.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Use the Operation Panel to check the registered forms, and delete unnecessary ones. Or increase the allocated capacity of the RAM disk.

116-740 Value Calculation Error

The number calculated in the interpreter exceeded the limit value.

Procedure

Switch power off then on. **The problem continues.**

Y N

Return to service call procedures.

Remove the data that exceeds the limit value of the printer from the print data.

116-741 Form registry error

The form data cannot be registered because of the restriction of the number of forms.

Procedure

Switch power off then on. **The problem continues.**

Y N

Return to service call procedures.

Use the Operation Panel to check the registered forms, and delete unnecessary ones. Or delete unnecessary forms.

116-742 Logo registry error

The logo data cannot be registered because of the restriction of the number of logos.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Use the Operation Panel utility to check the registered logos, and delete unnecessary ones. Or delete unnecessary logos with the Print command.

116-743 Form/logo size overflow

The received data (forms/logos) indicating that forms/logos cannot be registered (due to insufficient area) exceeded the registered buffer size.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Increase the form registry area size from the Operation Panel. Or install the HD.

116-745 Art Command Error

The decomposer checks the syntax error and excess of each limit value at decomposing.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Correct the command.

Change the ART command where an error has occurred.

116-746 Form synthesis error

The specified form is not registered.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Use a registered form, or register a necessary form.

116-747 White page detected

After subtracting the paper margin from the valid coordinate area, the result of the calculation will be negative.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Again, switch power off then on. No actions required.

116-748 White page detected

[Detection Conditions] There is no drawing data in the page data.

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Again, switch power off then on. No actions required

116-780 Attached document failure of email to XXX

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Attached document failure of email to XXX

No actions required.

116-790 Printed without the stapler

Procedure

Switch power off then on. **The problem continues.**

Y **N**

Return to service call procedures.

Printed without the stapler

No actions required.

OF 1-1 +3.5 VDC

+3.5 VDC failure.

Procedure

Perform following:

- Remove Rear Cover (REP 14.2).
- Tilt out HVPS Chassis (REP 1.6).

Check that power is switched off. Measure resistance of fuse on +3.5V LVPS (Figure 1). **Resistance is 1 ohm or less.**

Y **N**

Replace +3.5V LVPS (PL 9.1).

Switch on the power. Measure the AC voltage between the white and black wires in p15 on the +3.5V LVPS (Figure 1). **110 or 220 VAC is measured.**

Y **N**

Go to the AC Power RAP.

Connect the black meter lead to DC COM or frame. Measure DC voltage at p510 on the +3.5 V LVPS (Figure 1). **Voltages are measured as shown.**

Y **N**

Replace the 3.5V LVPS (PL 9.1).

There is a short circuit in +3.5 VDC distribution. Go to the +3.5 VDC Short Circuit RAP.

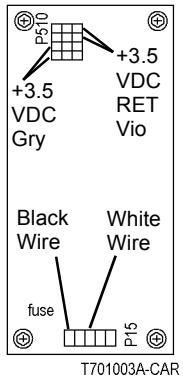


Figure 1 P15, P510 on +3.5V LVPS

OF 1-2 +5 VDC

+5 VDC failure.

Procedure

Perform following:

- Remove Rear Cover (REP 14.2).
- Tilt out HVPS Chassis (REP 1.6).

Check that power is switched off. Measure resistance of fuse on +5V LVPS (Figure 1). **Resistance is 1 ohm or less.**

Y **N**

Replace +5V LVPS (PL 9.1).

Switch on the power. Measure the AC voltage between the black and white wires in P16 on the +5V LVPS (Figure 1). **110 or 220 VAC is measured.**

Y **N**

Go to the AC Power RAP.

Measure the DC voltage at P511 on the +5V LVPS (Figure 1). **Voltages are measured as shown.**

Y **N**

Replace the +5V LVPS (PL 9.1).

There is a short circuit in +5 VDC distribution. Go to the +5 VDC Short Circuit RAP.

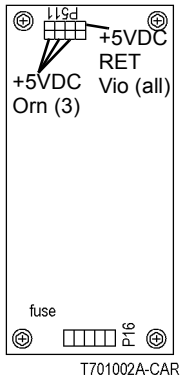


Figure 1 P16, P511 on +5V LVPS

OF 1-4 AC Power

AC Power Failure

Initial Actions

Check Circuit Breaker.

Procedure

110/220/240 VAC is measured between the Noise Filter PWB FS75 (+) and FS74 (-).

Y N

110/220/240 VAC is measured between the Circuit Breaker j72-1 (+) and j72-1 (-).

Y N

Disconnect power cord from power outlet. **The voltage of the power outlet is 110/220/240 VAC.**

Y N

Inform customer power is not available.

Check the Power Cord for an open circuit. If no problems are found, replace the Circuit Breaker (PL 9.2).

Check wire between Circuit Breaker j72 and Noise Filter PWB for an open circuit and poor contact.

110/220/240 VAC is measured between the Noise Filter PWB fs77 (+) and fs76 (-).

Y N

If the Circuit Protector on the Noise Filter PWB is tripped, reset it. If it is not tripped, replace the Noise Filter PWB (PL 9.2).

110/220/240 VAC is measured between the Main Power Switch FS57 (+) and Noise Filter PWB fs76 (-).

Y N

Check the wire between the MAIN POWER Switch and the NOISE FILTER PWB for an open circuit and poor contact.

110/220/240 VAC is measured between the Main Power Switch FS69 (+) and Noise Filter PWB fs76 (-).

Y N

Replace the Main Power Switch (PL 9.2).

100 (FX), 110 (TFX) or 220-240 (AP) VAC is measured between the AC Drive PWB fs40 (+) and the fs39 (-)?

Y N

Check the wire between the AC DRIVE PWB and the Main Power Switch for an open circuit and poor contact.

100 (FX), 110 (TFX) or 220-240 (AP) VAC is measured between the AC drive PWB j43-9 (+) and the j43-1 (-).

Y N

Replace the AC Drive PWB (PL 9.2).

Check the AC circuit distribution by referring to Chapter 7 Wiring Data.

OF 2-1 Dark / Blank Display

UI Display is dark or no text or graphics are visible.

Procedure

NOTE: *If a Status Code is displayed, go to status code RAP .*

Switch off the power. Listen to the cooling fans at the rear of the machine and switch on the power. **Cooling fans are audible either momentarily or continuously.**

Y **N**

There is a +5 VDC failure. Go to the +5 VDC RAP.

There is a +3.5 VDC failure. Go to the +3.5 VDC RAP

OF 99-1 Reflective Sensor

Procedure

Enter DC330[XXXX-XXX]. Block the Sensor with a blank sheet of paper. The display changed.

Y N

There is +5VDC measured between the sensor Pin 2 (+) and GND (-).

Y N

Check the wire between the sensor Pin 2 and the PWB Pin 8 for an open circuit or a poor contact. If the check is OK, replace the PWB

There is +5VDC measured between the sensor Pin 1 (+) and Pin 3.

Y N

There is +5VDC measured between the PWB Pin 4 (+) and Pin 5.

Y N

Replace the PWB.

Check the wire between the PWB Pin 4 and the sensor Pin 1 and between the PWB Pin 5 and the sensor Pin 3 for an open circuit or a poor contact.

Replace the sensor.

Remove the blank sheet of paper from the sensor. The display changed.

Y N

Remove the sensor connector. **The display changed.**

Y N

Check for a short circuit between the sensor Pin 2 and the PWB Pin 8. If the check is OK, replace the PWB.

Replace the sensor.

Replace the sensor.

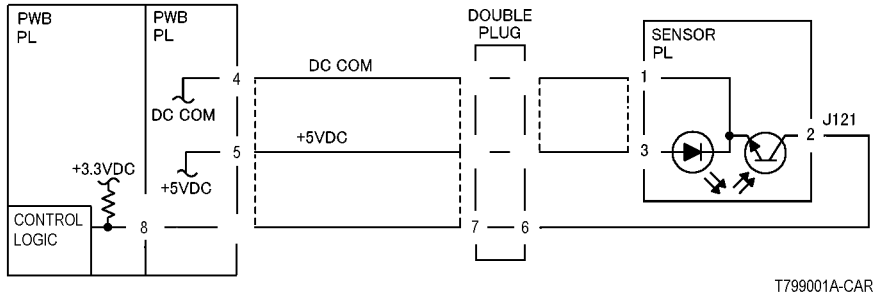


Figure 1 Reflective Sensor CD

OF 99-2 Transmissive Sensor

Procedure

Enter DC330 [XXX-XXX]. Block the Sensor. **The display changed.**

Y N

Remove the sensor connector. **The display changed.**

Y N

Check a short circuit between the sensor Pin 2 and the PWB Pin 8. If the check is OK, replace the PWB.

Replace the sensor.

Unblock the sensor. **The display changed.**

Y N

There is +5VDC measured between the sensor Pin 2 (+) and GND (-).

Y N

Check the wire between the sensor Pin 2 and the PWB Pin 8 for an open circuit or a poor contact. If the check is OK replace the PWB

There is +5VDC measured between the sensor Pin 1 (+) and Pin 3 (-).

Y N

Check the wire between the PWB Pin 4 and the sensor Pin 1 and between the PWB Pin 5 and the sensor Pin 3 for an open circuit and poor contact. If the check is OK, replace the PWB.

Replace the sensor.

Replace the sensor.

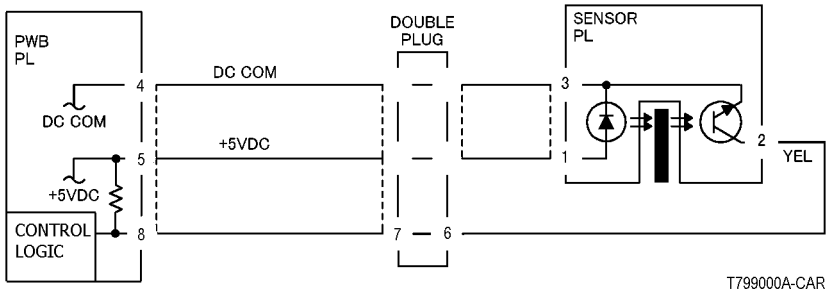


Figure 1 Transmissive Sensor CD

OF 99-3 Switch

Procedure

Enter DC330 [XXX-XXX]. Actuate the switch. **The display changed.**

Y N

There is +5VDC measured between Pin 2(+) of the Switch and GND(-).

Y N

Check the wire between the switch Pin 2 and the PWB Pin 3 for an open circuit and poor contact. If the check is OK, replace the PWB.

There is +5VDC measured between Pin 1(+) of the Switch and GND(-).

Y N

Replace the switch.

Check the wire between the PWB Pin 4 and the switch Pin 1 for an open circuit and poor contact. If the check is OK, replace the PWB.

De-actuate the switch. The display changed.

Y N

Remove the connector on the switch. The display changed.

Y N

Check for a short between the switch Pin 2 and the PWB Pin 3. If the check is OK, replace the PWB.

Replace the switch.

Replace the switch.

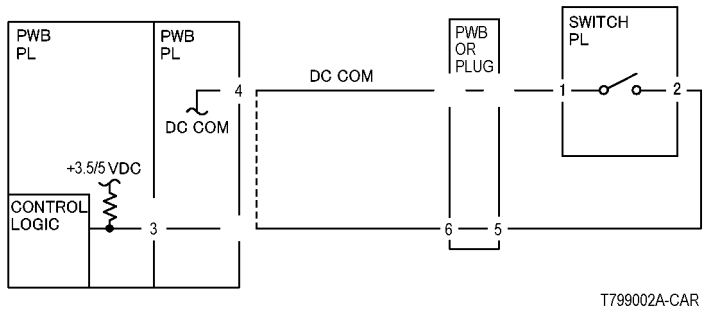


Figure 1 2003

OF 99-4 Solenoid / Clutch Open

Procedure

NOTE: *Before performing this RAP, ensure that there is no mechanical problem for the solenoid and clutch.*

Enter DC330 [XXX-XXX]. **There is +24VDC measured between the PWB Pin 3 (+) and GND (-).**

Y **N**

There is +24VDC measured between Pin 2(+) of the Solenoid/Clutch and GND(-).

Y **N**

There is +24VDC measured between Pin 1(+) of the Solenoid/Clutch and GND(-).

Y **N**

Check the wire between the PWB Pin 4 and the solenoid/clutch Pin 1 for an open circuit and poor contact. If the check is OK, replace the PWB

Replace the solenoid/clutch.

Check the wire for a short between the PWB Pin 3 and the solenoid/clutch Pin 2 for an open circuit or poor contact.

Replace the PWB.

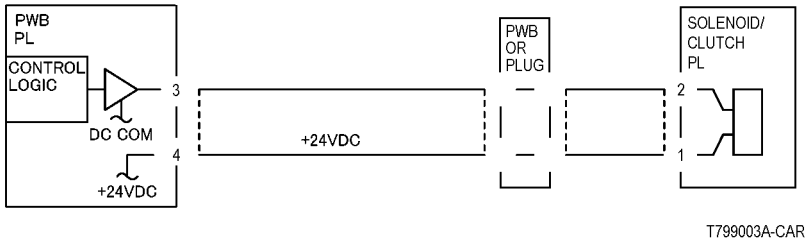


Figure 1 Solenoid/Clutch CD

OF 99-5 Solenoid / Clutch Shorted

Procedure

Turn off the power.

Remove the PWB connector. **There is 10 Ohmís or less measured between the connector Pin 3 and the frame.**

Y N

Replace the PWB.

Check for a short circuit to frame of the circuit between PWB Pin 3 and the solenoid/clutch Pin 2.

If the check is OK, replace the solenoid/clutch.

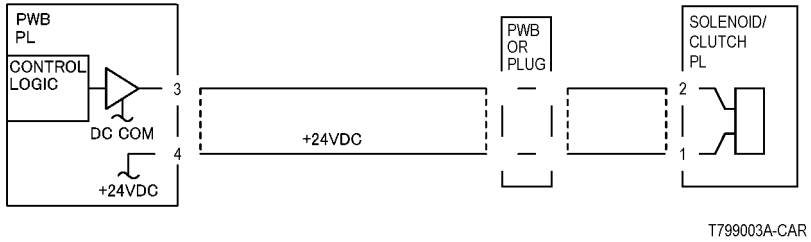


Figure 1 Solenoid/Clutch CD

OF 99-6 Motor Open

Procedure

NOTE: *Before performing this RAP, ensure that the motor is not locked or loaded*

Enter the DC330 [XXX-XXX].
There is +24VDC measured between Pin 3(+) of the PWB and GND(-).

Y **N**

- There is +24VDC measured between the Motor Pin 2(+) of the Motor and GND(-).
  - **Y** **N**
    - There is +24VDC measured between the Motor Pin 1(+) of the Motor and GND(-).
      - **Y** **N**
        - There is +24VDC measured between the PWB Pin 4(+) of the PWB and GND(-).
          - **Y** **N**
            - Replace the PWB.
          - Check the wire between the PWB Pin 4 and the Motor Pin 1 for an open circuit or poor contact.
        - Replace the motor.
    - Check the wire between the PWB Pin 3 and the MTOTR Pin 2 for an open circuit or poor contact.
- Replace the PWB.

OF 99-7 Motor On

Procedure

Turn off the power. Remove the PWB connector. There is 10 Ohmís or less measured between the connector Pin 3 and the frame.

Y **N**

Replace the PWB.

Check the wire between the connector Pin 3 and the motor Pin 2 for a short circuit.

If the check is OK, replace the motor.

OF 99-8 Nip / Release Solenoid Open

Procedure

NOTE: *Before performing this RAP, ensure that there is no (mechanical) operation failure for the solenoid.*

There is +24VDC measured between the Nip/Release Solenoid Pin 1 (+) and GND (-).

Y N

There is +24VDC measured between the PWB Pin 5 (+) and GND(-).

Y N

Check +24VDC inputs on the PWB. If the check is OK, replace the PWB.

Check the wire between the PWB Pin 5 and the **Nip/Release Solenoid** Pin 1 for an open circuit or poor contact.

Enter DC330 [XXX-XXX]. **There is +24VDC measured between the PWB Pin 4 (+) and GND(-).**

Y N

There is +24VDC measured between the Nip/Release Solenoid Pin 3 (+) and GND (-).

Y N

Replace the **Nip/Release Solenoid**.

Check the wire between the PWB Pin 4 and the **Nip/Release Solenoid** Pin 3 for an open circuit and poor contact.

Follow the following when the RELEASE caused a problem.

Go to the DC330 [XXX-XXX]. **There is +24VDC measured between the PWB Pin 6 (+) and GND(-).**

Y N

There is +24VDC measured between the Nip/Release Solenoid Pin 2 (+) and GND (-)

Y N

Replace the **Nip/Release Solenoid**.

Check the wire between the PWB Pin 6 and the **Nip/Release Solenoid** Pin 2 for an open circuit or poor contact.

Replace the PWB.

3 Image Quality

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IQ2 IIT Image Quality Entry RAP 3-4
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IQ1 IOT Image Quality Entry RAP

The purpose of this RAP is to serve as the entrance vehicle into the Image Quality RAPs section. All Image Quality RAPs must be accessed through this RAP.

The RAP will have you evaluate the copies made during the Call Flow procedure for image quality defects. It will refer you to the Image Quality Analysis RAPs, the Image Quality Defect section in order to diagnose and repair any image quality problems.

Initial Actions

Check for the presence of the defect in Copy mode and in Print mode. If the problem occurs in Copy mode only, go to the IQ2 RAP.

Procedure

Go to Table 1. Compare the prints for any of the listed defects. Perform the corrective action that is listed.

Table 1 Image Quality Defects

Defect	Description	Corrective Action
Background See Defect Sample ____.	Undesirable toner deposits on the copy or print. The toner deposits can be localized or may cover the entire copy or print. Depending on the density of the background, it is referred to as low, medium, high, or very high background. It may occur in all colors, single colors, or any combination of single colors.	Go to the IQ6 RAP
Color Misregistration See Defect Sample ____.	Multi-colored images that should be superimposed are offset. This offset may be in the process direction or perpendicular to process direction.	Go to the IQ8 RAP
Deletions Debris-Centered See Defect Sample ____. Nonuniform Streak See Defect Sample ____.	The undesirable absence of toner from the copy or print. This defect can show as white, light, or untrue colored areas on the copy or print. The most common example is a deletion caused by the ìtentingî of paper from mishandling or moisture, or by dents or defects in the Transfer Belt. ï Debris-Centered: Deletions in the areas surrounding toner agglomerates. ï Nonuniform Streak: A deletion in the form of a single streak that runs from the lead edge to the trail edge of the copy.	Go to the IQ7 RAP
High Frequency Bands See Defect Sample ____.	Repeating interval bands that are most noticeable in low density (20-30%) halftone areas of the copy. These bands run perpendicular to process direction.	Go to the IQ14 RAP
Irregular Streak in Process Direction See Defect Sample ____.	Streaks: Usually medium-width streaks of (or shifts in) color most noticeable in low density 20-30%) halftone areas of the copy. A deletion in the form of a single streak that runs from the lead edge to the trail edge of the copy.	Go to the IQ12 RAP
Low Image Density	A condition that results when too little toner of a single color or combination of colors is developed on the copy or print. This results in lighter copies or prints for the single-color toner or the color that results from the combination of color toners.	Go to the IQ3 RAP
Misregistration/Skew	The position and/or alignment of the image relative to the top edge and side edge of the paper is not within specification.	Go to the IQ9 RAP
Missing Colors	One or more of the primary colors are missing from the image.	
Mottle See Defect Sample ____.	Areas of solid, or high density coverage that are reproduced with a surface that resembles marble.	Go to the IQ15 RAP
Regular (repeating) Bands, Streaks, or Smears	A defect that repeats at an interval from14 to 264 mm, is most noticeable in low density (20-30%) halftone areas of the copy, and runs perpendicular to process direction. Lines and bands are generally uniform in shape from one end to the other. Streaks are generally shorter than lines and are of nonuniform width along their length. They may have a more ragged or fuzzy appearance than lines.	Go to the IQ14 RAP
Residual Image	A toner image that remains on the photoreceptor or Transfer Belt after cleaning. The next image is placed on top of the residual image and both images are transferred to the next copy.	Go to the IQ5 RAP
Spots	Generally circular in shape, these defects can be caused by an absence of toner in a desired area, or a deposit of toner in an undesired area	Go to the IQ16 RAP
Unfused prints	Image can be rubbed off with little or no pressure	Go to the IQ13 RAP
Wrinkled Image See Defect Sample ____.		Go to the IQ4 RAP

IQ2 IIT Image Quality Entry RAP

This RAP is for troubleshooting IIT (Scanner/ADF) problems only. Before proceeding, verify that the defect is present in Copy mode only. If the defect is present in Print mode, go to the IQ1 RAP.

Initial Actions

Clean the Lens, the top and bottom surface of the Platen Glass, and all Mirrors with Lens and Mirror Cleaner and a soft, lint-free cloth.

Procedure

Compare the defective copies with the descriptions listed in Table 1. Perform the corrective action listed for that defect.

Table 1

Defect	Corrective Action
Background	Clean the Platen Belt. Calibrate the IIT (ADJ 9.7).
Blurred or Streaked Copy	Ensure that the Platen Glass is installed correctly. Check/adjust the carriage alignment (ADJ 6.1).
R/E error	Check/adjust IIT magnification (ADJ 9.12).
Deletions	Clean the Lens, the top and bottom surface of the Platen Glass, and all Mirrors with Lens and Mirror Cleaner and a soft, lint-free cloth. If the problem persists, replace the Lens Kit (PL 18.4).
Misregistration/Skew	Go to the IQ9 RAP.
Moire Patterns in the image areas of the print that have the appearance of a screen or grid overlaying the image. The pattern may be uniform or nonuniform in area or shape.	ï Switch between photo modes to determine which mode minimizes the defect. ï Decrease the **Sharpness** level. ï Reduce or enlarge the copy slightly. ï Rotate the original on the platen by 90 degrees.
Newton Rings Repetitive, irregular-shaped marks that occur when making copies of glossy photographs. These marks are most noticeable in large low-density or highlight areas.	Clean the Document Glass Place a transparency between the document and the glass

IQ3 Low Image Density RAP

This RAP troubleshoots the causes of output images showing image density lower than specification

Initial Actions

- Clean the ROS windows
- Replace the paper in use with fresh, dry paper of the correct specification
- Determine if the Drum Cartridge or any of the Toner Cartridges are approaching end-of-life. Replace if necessary.
- Perform the Automatic Gradation procedure (refer to the User Guide). If this does not resolve the problem, continue with this RAP.

Procedure

Go to dC612. Print Test pattern??????. **The defect involves a single color.**

Y N

Go to dC612. Print Test pattern??????. Open the Front Door in the middle of the print job (approximately 7 seconds after selecting Start.). **There is a good toner image on the Transfer Belt.**

Y N

Go to the IQ21 RAP to check the Developer Bias. If this does not resolve the problem, go to the IQ20 RAP to check the 1st BTR bias.
If the problem continues, check the ROS for contamination of the windows or misalignment.

Check the 2nd BTR for damage or incorrect installation. Go to the IQ22 RAP to check the Backup Roll bias. If the problem continues, replace 2nd BTR Assembly (PL 7.1). If this does not resolve the problem, replace the Transfer Belt (PL 5.3).

Swap the affected Drum Cartridge with an adjacent unit. Print Test Pattern???. **The defect moved to the new color.**

Y N

Go to the IQ21 RAP to check the Developer Bias. If this does not resolve the problem, go to the IQ20 RAP to check the 1st BTR bias. If the problem continues, replace the Developer for the affected color (PL 6.2). If this does not resolve the problem, replace the ATC Sensor for the affected color (PL 6.2).

Replace the Drum Cartridge (see Machine Consumables in Section 6).

IQ4 Wrinkled Image RAP

Initial Actions

Procedure

TBD

IQ5 Residual Image (Ghosting) RAP

Initial Actions

- Check the end-of-life counter for the Drum Cartridge. If the unit is at or near end-of-life, replace the Drum Cartridge (see Machine Consumables in Section 6).

NOTE: *Some ghosting on transparencies is unavoidable.*

- If the problem occurs only with certain types of media, ensure that the media in use is within specification, and that the customer is aware of correct operation of print driver.
- If the distance between the intended image and the residual image has a fixed rate of repetition, go to the IQ14 RAP. Return to this procedure if the problem persists.

Procedure

The problem is with a single primary color

Y **N**

Remove the Fuser. Examine the Heat Roll and Pressure Roll for evidence of toner offsetting. **There is Toner adhering to the Heat Roll.**

Y **N**

Check for a residual image on the Transfer Belt. Repair or replace the IBT Cleaner (PL 5.3) as required.
Check the 2nd BTR for contamination. Clean/replace as required

Clean the Heat Roll. If the problem persists, replace the Fuser (PL 7.1).

Check the Erase Lamp for the affected color:

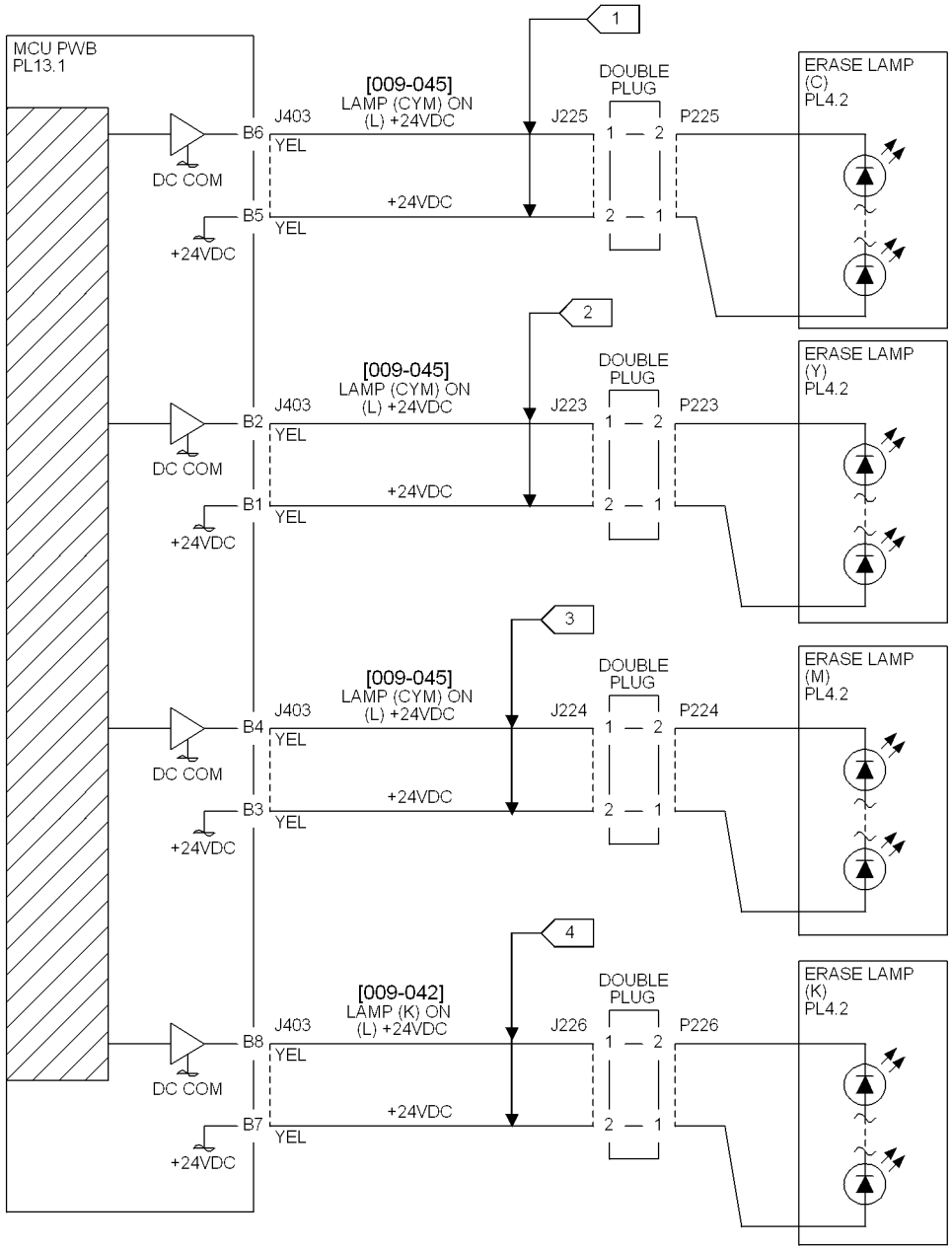
- Enter dC330 [009-045] (C, Y, or M), or [009-042] (K), as appropriate.
- Remove the Drum cartridge for the affected color.
- check for light along the mounting rail left side

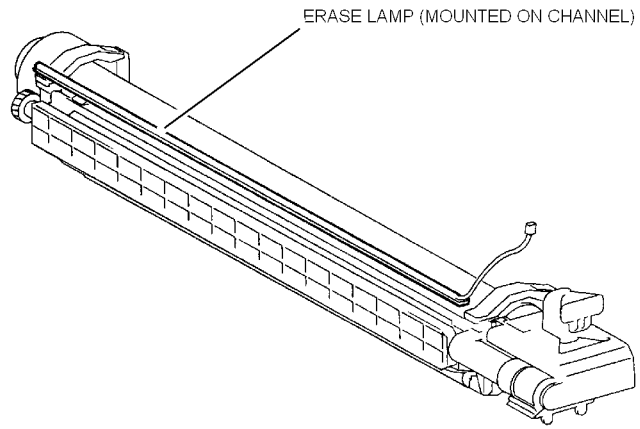
The Erase lamp is lit.

Y **N**

Go to Flag 1 (C), Flag 2 (Y), Flag 3 (M), or Flag 4 (K). Check for an open circuit. If the wires are OK, replace the Erase Lamp (PL 4.2) for the affected color. If the problem persists, Replace the MCU PWB (PL 13.1).

Go to the IQ21 RAP. Check for a short circuit in the Developer bias circuit of the affected color.





T-730000-A-CAR

Figure 1 IQ5 RAP Circuit Diagram

IQ6 IOT Background RAP

Initial Actions

NOTE: *Some background is unavoidable on certain media, such as heavyweight paper and transparencies. Ensure that the customer selects the correct settings on the UI and print driver.*

Perform Max Setup (ADJ 9.1). If this does not resolve the problem, continue with this RAP.

Procedure

The problem is Single Color Background.

Y N

Examine the face of the ADC Sensor. **The ADC Sensor is clean.**

Y N

Go to the 9-684 RAP to troubleshoot the ADC Sensor Solenoid.

Examine the Transfer Belt for excessive dirt, damage, or uncleaned toner. **The Belt is clean.**

Y N

Check the Belt Cleaner for damage or wear. Clean or replace as required.

WARNING

HIGH VOLTAGE!

Exercise care when making the voltage check in the following steps.

Enter dC140 [09-026]. Measure the voltage from P/J 580, pins 1, 3, 5, and 7. **The voltage is approximately -540 VDC on all pins.**

Y N

Go to the IQ21 RAP to troubleshoot the Developer bias circuit.

Replace the Transfer Belt (PL 5.3). If this does not resolve the problem, replace the 2nd BTR (PL 2.8). If the problem persists, replace the MCU PWB (PL 13.1).

The background is very high and even density, and covers the entire sheet (no edge erase.

Y N

Check the following:

- Check the end-of-life counter for the Toner Cartridge and Drum Cartridge for the affected color. Replace if at or near end-of-life (see Machine Consumables in Section 6).
- If the problem continues, examine the Developer Housing for the affected color. Check for toner bridging, uneven brush, or loose High Voltage terminals. Clean, repair, or replace as required (PL 6.2).

Go to the IQ23 RAP.

IQ7 Deletions RAP

Initial Actions

Reload the machine with fresh, dry paper of the correct specifications. If the problem occurs when using heavyweight paper, ensure that the correct selections are being made on the print driver. If the problem is not resolved, continue with this RAP.

NOTE: *Small white deletions with a sharp edge are usually caused by Fuser offsetting. Go to the IQ16 Spots RAP.*

Procedure

The problem is debris-centered deletions (small-area deletions surrounding a dark speck).

Y N

Enter dC612. Print a copy of the 20% coverage pattern for each color. **The defect is present for all colors.**

Y N

Make several prints of the Test Page (?????). **The defect is present in approximately the same location on all letter-size prints.**

Y N

Remove the Drum cartridge for the affected color. Check for light from the Erase Lamp along the mounting rail left side **The Erase lamp is lit.**

Y N

Examine the surface of the Drum Cartridge. Check for dents, scratches, or contamination such as fingerprints, etc. **The drum is free from damage.**

Y N

Clean or replace the Drum Cartridge as required (see Machine Consumables in Section 6).

Switch the affected Drum Cartridge with an adjacent unit. **The problem moves with the cartridge.**

Y N

Go to the IQ20 RAP and check Flags 1 through 3 for a loose, corroded, or damaged connection.
Replace the Developer (PL 6.2) for the affected color.

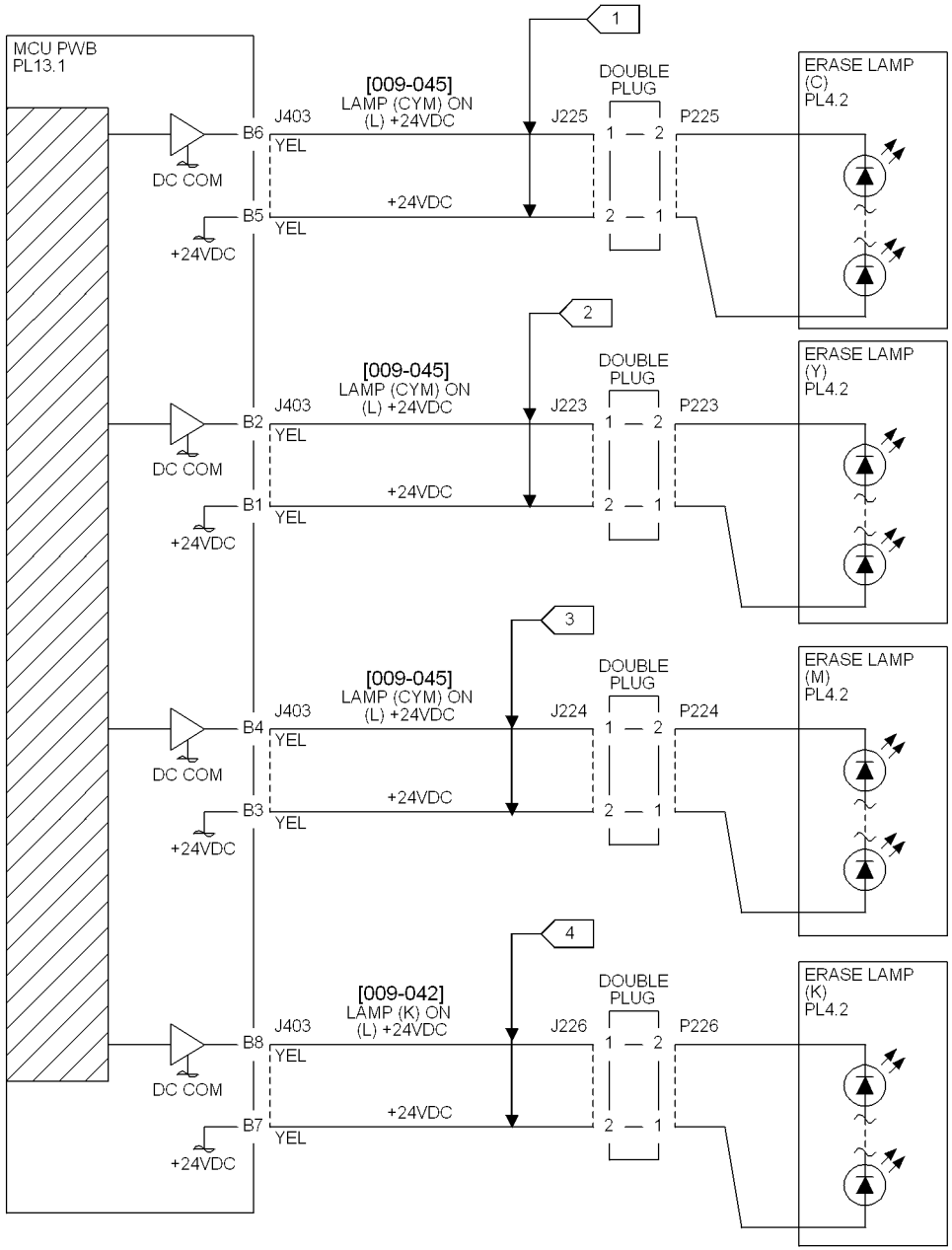
Replace the Drum Cartridge (see Machine Consumables in Section 6).

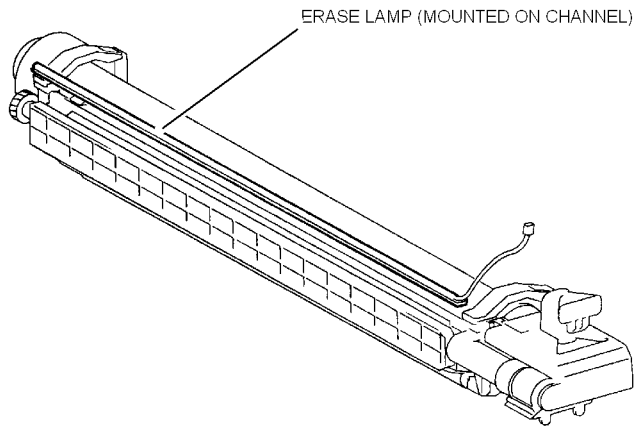
Go to Flag 1 (C), Flag 2 (Y), Flag 3 (M), or Flag 4 (K). Check for a short circuit. If the wires are OK, replace the Erase Lamp for the affected color. If the problem persists, Replace the MCU PWB (PL 13.1).

Remove the ROS. Examine the ROS windows for dirt or damage. Clean or replace as required PL 3.1).

Check the Transfer Belt (PL 5.3) for dirt, damage, or contamination. Clean/replace as required.
Check the 2nd BTR (PL 2.8) for damage or wear. Clean or replace if required.

Examine the spot in the center of the DCD. Replace the Developer (PL 6.2) and Toner Cartridge for the affected color. If the problem persists, replace the Developer Housing for the affected color (PL 6.2).





T-730000-A-CAR

Figure 1 IQ7 RAP Circuit Diagram

IQ8 Color-to-Color Misregistration RAP

Initial Actions

Adjust the color registration (ADJ 9.6). If the problem remains, continue with this procedure

Procedure

The problem involves a single color.

Y N

Check that the ROS is securely mounted and that the ROS window is not dirty or damaged. If the problem persists, replace the ROS (PL 3.1).

Check the mounting of the Developer Housing for the affected color. Ensure that it is installed correctly and that it is free from damage. Repair or replace as required (PL 6.2).

IQ9 Skew/Misregistration RAP

This RAP is used when Skew, System Registration, or Magnification are out of specification. For Color-to-Color-Misregistration, go to the IQ8 RAP.

Initial Actions

Load some new, dry 24 lb. 11X17/A3 Xerox COLOR Xpressions (NASG), or 90 GSM Colortech + (ESG) into each paper tray (use 8.5X11/A4 in Tray 1). Make 3 full color copies from each paper tray. Mark the appropriate paper tray on these copies.

Procedure

The problem is still present when using the proper paper.

Y N

Explain to the customer that new, dry, 24 lb. Xerox COLOR Xpressions (NASG), or 90 GSM Colortech + (ESG) paper is the specified paper for use in the DocuColor 1632/2240.

The problem occurs only in the Printer Mode

Y N

The defect occurs when the document is manually registered on the platen glass.

Y N

Ensure that the Document Transport Belt is clean. Check the Document Handler Adjustments (ADJ 5.1 through ADJ 5.7). If the problem continues, check the DADF drive rolls and pinch rolls for wear or glossing.

The problem is Skew

Y N

The problem is Misregistration

Y N

Adjust the IIT Vertical/Horizontal Magnification (ADJ 9.12) and the IOT Lead Edge/Side Edge Registration (ADJ 9.9).

Enter dC612. Select Pattern????. **Misregistration is present on the copy**

Y N

Adjust the IOT Lead Edge/Side Edge Registration (ADJ 9.9), then the IIT Lead Edge and Side Edge Registration (ADJ 9.10 and ADJ 9.11).

The defect occurred on copies from all five paper trays.

Y N

Check the IOT Lead Edge/Side Edge Registration (ADJ 9.9) for that tray.
Check the feeder for the affected tray for wear, slipping, damage, or contamination.

- Tray 1 Feeder (PL 2.4)
- Tray 2 Feeder (PL 16.7)
- Tray 3 Feeder (PL 16.9)
- Tray 4 Feeder (PL 16.11)
- Tray 5 Feed Assembly (PL 2.14)

Registration varies from copy to copy.

Y N

Go to ADJ 9.9, Lead/Side Edge Adjustment.

A B C

A B C

Check the components in the Registration Transport Assembly (PL 2.6) for wear, slipping, damage, or contamination. Clean/replace as required

The defect occurred on copies from all five paper trays.

Y N

Check the components in the Registration Transport Assembly (PL 2.6) for wear, slipping, damage, or contamination. Clean/replace as required

Check the IOT Lead Edge/Side Edge Registration (ADJ 9.9) for that tray.

Check the feeder for the affected tray for wear, slipping, damage, or contamination.

- Tray 1 Feeder (PL 2.4)
- Tray 2 Feeder (PL 16.7)
- Tray 3 Feeder (PL 16.9)
- Tray 4 Feeder (PL 16.11)
- Tray 5 Feed Assembly (PL 2.14)

TBD.

IQ12 Process Direction Bands, Streaks, and Smears RAP

Procedure

NOTE: *The repetition rate for Transfer Belt defects varies considerably, depending on paper size and mode of operation. The defect may appear as frequently as every 3rd sheet, or may only occur every 14 sheets.*

The defect occurs in approximately the same position on multiple prints.

Y N

If the defect occurs intermittently, examine the Developer Housings for evidence of toner clumping. If clumping is found, replace the Developer (PL 6.2). if this does not resolve the problem

The defect is a full-width (LE - TE) process direction deletion.

Y N

Remove the Fuser Assembly. Examine the Heat Roll for damage or contamination. Clean or replace as required (PL 7.1).

If the Fuser is OK, check the Developer Housing (PL 6.2). Repair or replace as required.

If the problem remains, replace the ROS (PL 3.1).

If the problem is related to a single color, replace the Drum Cartridge (see Machine Consumables in Section 6).

Enter dC612. Select Test Pattern 20% coverage pattern for all colors. **The defect is present for all colors.**

Y N

- Check the ROS window for damage or contamination. Clean or replace as required.
- Check Drum Cartridge for affected color. Check for damage or contamination to the BCR.
- Go to the IQ20 RAP to check the 1st BTR bias circuit for the affected color
- Replace the Developer (PL 6.2) for the affected color. Check the housing for damage or toner clumping.

Remove the IBT Cleaner (PL 5.3). Inspect the cleaning blade and Mylar seal for damage. Clean or replace as required.

If the IBT Cleaner is OK, check the Transfer Belt (PL 5.3) for damage or contamination. Ensure that there is no debris or loose wiring, etc. in contact with the belt. Clean or replace as required.

IQ13 Unfused Copy RAP

Initial Actions

Replace the paper in use with fresh, dry paper of the correct specification.

Ensure that the media being used matches the settings on the UI screen or print driver. Using the next heavier setting may resolve the problem.

If the Key Operator/Administrator has configured certain trays for a specific type of media, ensure that the specified media is actually loaded in those trays.

Procedure

Check the following:

- Check the Sensor Assembly (PL 7.2) for contamination or incorrect mounting. Clean, repair, or replace as required.
- Check the Fuser (PL 7.1) for damage, toner offsetting, paper wrap, or incorrect installation. Clean or replace as required.

IQ14 Repeating Bands, Streaks, Spots, and Smears RAP

Procedure

Measure the distance between the repeating defects. Locate the distance on the table below. Perform the indicated repair actions

Table 1 Repeating Defects

Repetition spacing	Component(s)	Repair Actions
<4 mm.	High Frequency Banding	Replace the ROS
28.3 mm.	Developer Mag Roll	Check Developer roll bias for floating or shorting out. Replace Developer Housing (PL 6.2) if required.
44 mm.	Drum Cartridge	Replace the Drum Cartridge (see Machine Consumables in Section 6).
84 mm.	Fuser Heat Roll	Remove the Fuser Assembly. Check the Heat Roll for damage (nicks, wear, or cuts) or contamination. Clean or replace as required (PL 7.1).
88 mm.	BTR 2 Backup Roll BTR 2 Roll	Check the 2nd BTR Assembly for damage or contamination. Clean, repair or replace as required (PL 2.8). Replace the Transfer Belt (PL 5.3).
94 mm.	Drum Cartridge Fuser	Single Color - Replace the Drum Cartridge (see Machine Consumables in Section 6). All Colors - Remove the Fuser Assembly. Check the Heat Roll for damage (nicks, wear, or cuts) or contamination. Clean or replace as required (PL 7.1).

IQ15 Mottle RAP

This RAP troubleshoots the causes of output images showing image density that varies from inboard to outboard edges, or randomly throughout the print.

Initial Actions

- Replace the paper in use with fresh, dry paper of the correct specification. Ensure that the loaded media matches the UI or print driver settings.
- Determine if the Drum Cartridge or any of the Toner Cartridges are approaching end-of-life. Replace if necessary.
- Perform Max Setup (ADJ 9.1). If this does not resolve the problem, continue with this RAP.

Procedure

Make a print of the Test Page (??????). **The defect involves a single color.**

Y N

Make a print of the Test Page. Open the Front Door when the lead edge of the print begins to protrude from the Fuser Exit nip. Open the Fuser and examine the partially-fused sheet. **The defect is present in both the fused and unfused portion of the sheet.**

Y N

Clean or replace the Fuser (PL 7.1).

Enter dC612. Make a print of Test Pattern???. As the print is being processed, open the Front Door. Examine the image on the Transfer Belt. **The image on the belt has acceptable density.**

Y N

Replace the Transfer Belt (PL 5.3).

Go to the IQ22 RAP to check 2nd BTR Backup Roll bias/contacts.
Clean/replace the 2nd BTR Assembly (PL 7.1).
If the problem continues, replace the Transfer Belt (PL 5.3).

Switch Drum Cartridges. **The problem moves with the cartridge.**

Y N

Check the following:

- Clean the HV contact for the developer in question.
- Replace the Toner Cartridge if not done previously.
- Replace the Developer (PL 6.2). Examine the housing for damage, wear, or contamination. If the problem persists, replace the ATC Sensor (PL 6.2).

Replace the Drum Cartridge (see Machine Consumables in Section 6).

IQ16 Spots RAP

Initial Actions

Ensure that the paper in use is fresh, dry, and within specification for weight and quality.

Check print driver and copier control panel settings to ensure the media is being un in the proper mode.

Compare the spots against the samples in the Image Quality Defects supplement. If the defect matches the Debris Centered Deletions sample, go to the IQ9 RAP.

Procedure

The defect occurs in Copy mode only.

Y N

The spots occur at a fixed interval on each print.

Y N

The spots occur in the same location on every letter size print.

Y N

NOTE: *The repetition rate for Transfer Belt defects varies considerably, depending on paper size and mode of operation. The defect may appear as frequently as every 3rd sheet, or may only occur every 14 sheets.*

The defect occurs in approximately the same position on multiple prints.

Y N

The problem is Fuser offset.

Y N

CAUTION

Do not use a vacuum cleaner or any solvents in the following step. Damage to the Belt Cleaner will result.

Remove the Belt Cleaner (REP 9.16). Carefully clean the cleaning blade and the Mylar shield with a soft brush or a lint free cloth. Brush away any accumulation of toner on the foam seal and the outside surfaces. Wipe the surface of the Transfer Belt with a lint free cloth. If the problem continues, replace the Belt Cleaner (PL 7.1).

Check the Fuser for dirt, damage, or toner buildup. Clean or replace as required (PL 7.1).

Check the Transfer Belt (PL 5.3) for dirt or damage. Clean or replace as required.

Check the Drum Cartridge for dirt or damage. Clean or replace as required ((see Machine Consumables in Section 6).

Go to the IQ14 RAP.

Ensure that the original is free from the defect.
Clean the Platen Glass and Lens.

Procedure

Y N

TBD - refer to Figure 1.

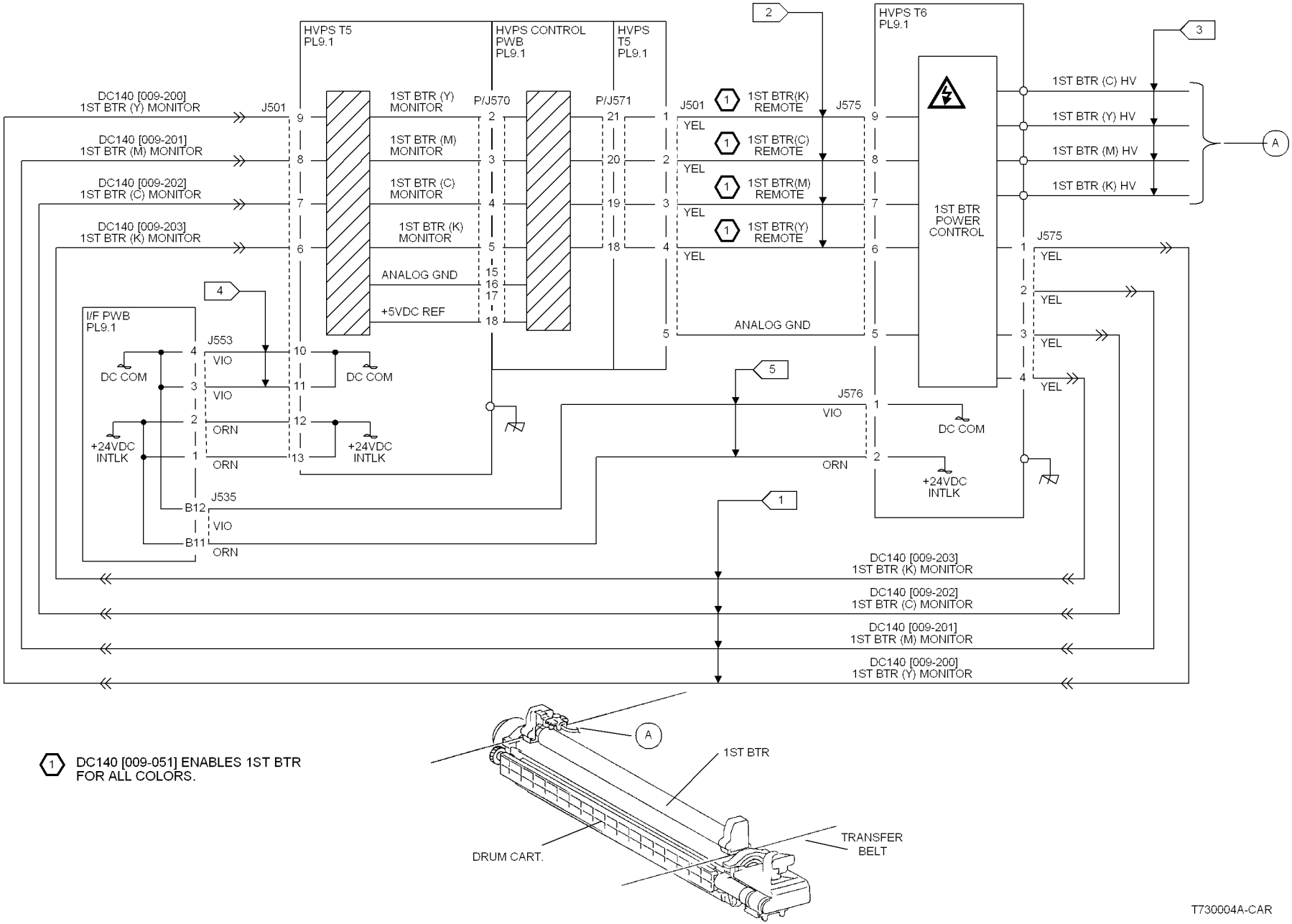


Figure 1 IQ20 RAP Circuit diagram

IQ21 Developer Bias RAP

Procedure

WARNING

HIGH VOLTAGE!

Exercise caution when performing the voltage checks in this procedure.

Enter dC140 [09-026]. Check the voltage at P/J 580 for the affected color(s). There should be approximately 370 VAC and -540 VDC (+/- 10%) present. **The voltages are within range.**

Y N

There is +24 VDC from J 501 pin 13 to J 501 pin 10 on the HVPS T5 PWB.

Y N

There is +24 VDC from J 553 pin 2 to J 553 pin 4 on the I/F PWB

Y N

Go the +24 VDC Wirenets to troubleshoot this problem.

Go to Flag 2. Check for an open circuit

Check that the HVPS Control PWB is seated correctly. If the problem continues, replace the HVPS T5 PWB (PL 9.1).

Go to Flag 1. Check for an open circuit or a short circuit to ground. Check P/J 580 and the HV terminals on the Developer Housing(s). for damage or loose connections. If the checks are good, return the RAP from which you came.

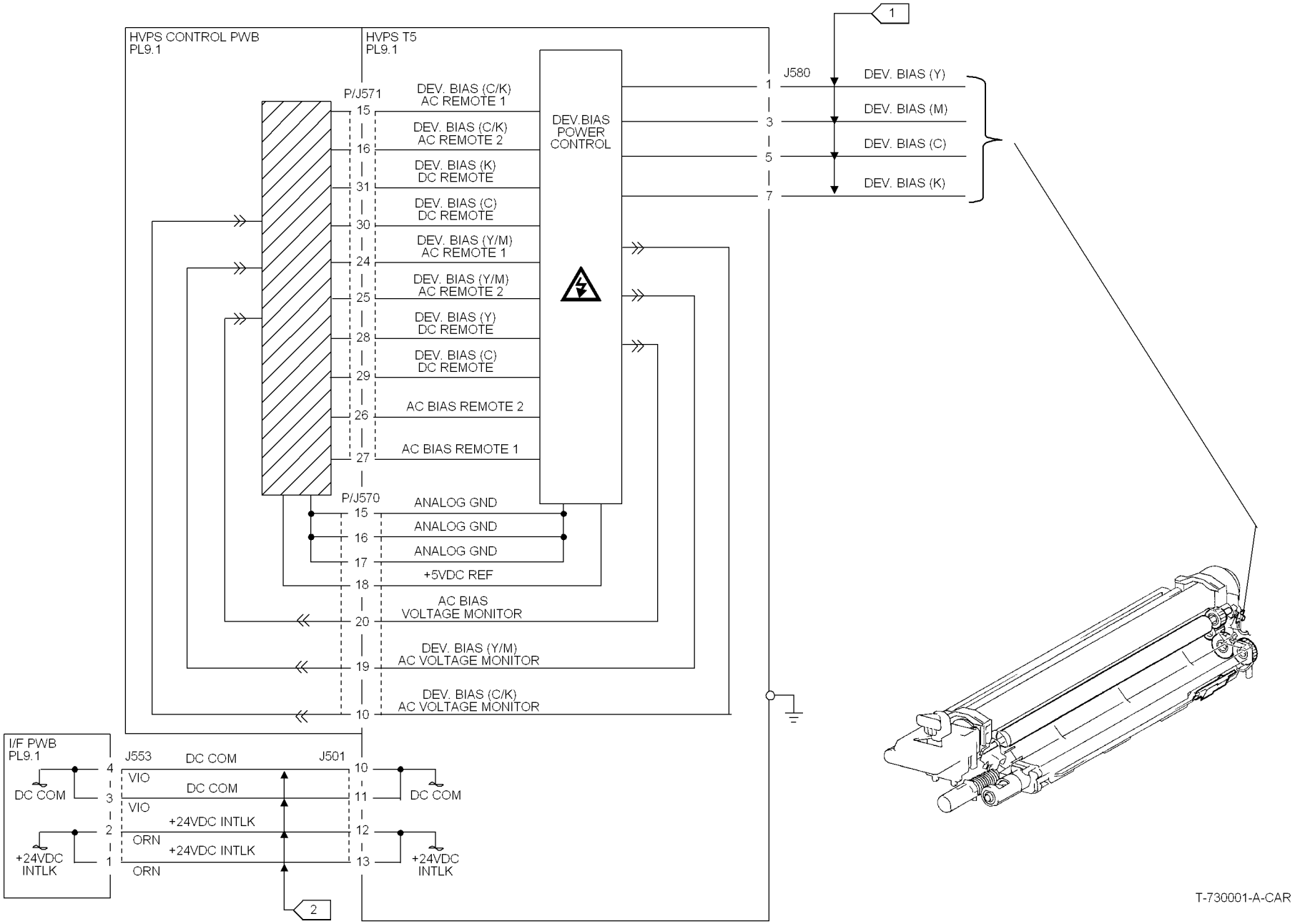


Figure 1 IQ21 RAP Circuit Diagram

IQ22 2nd BTR Checkout RAP

Procedure

Y **N**

TBD - refer to Figure 1.

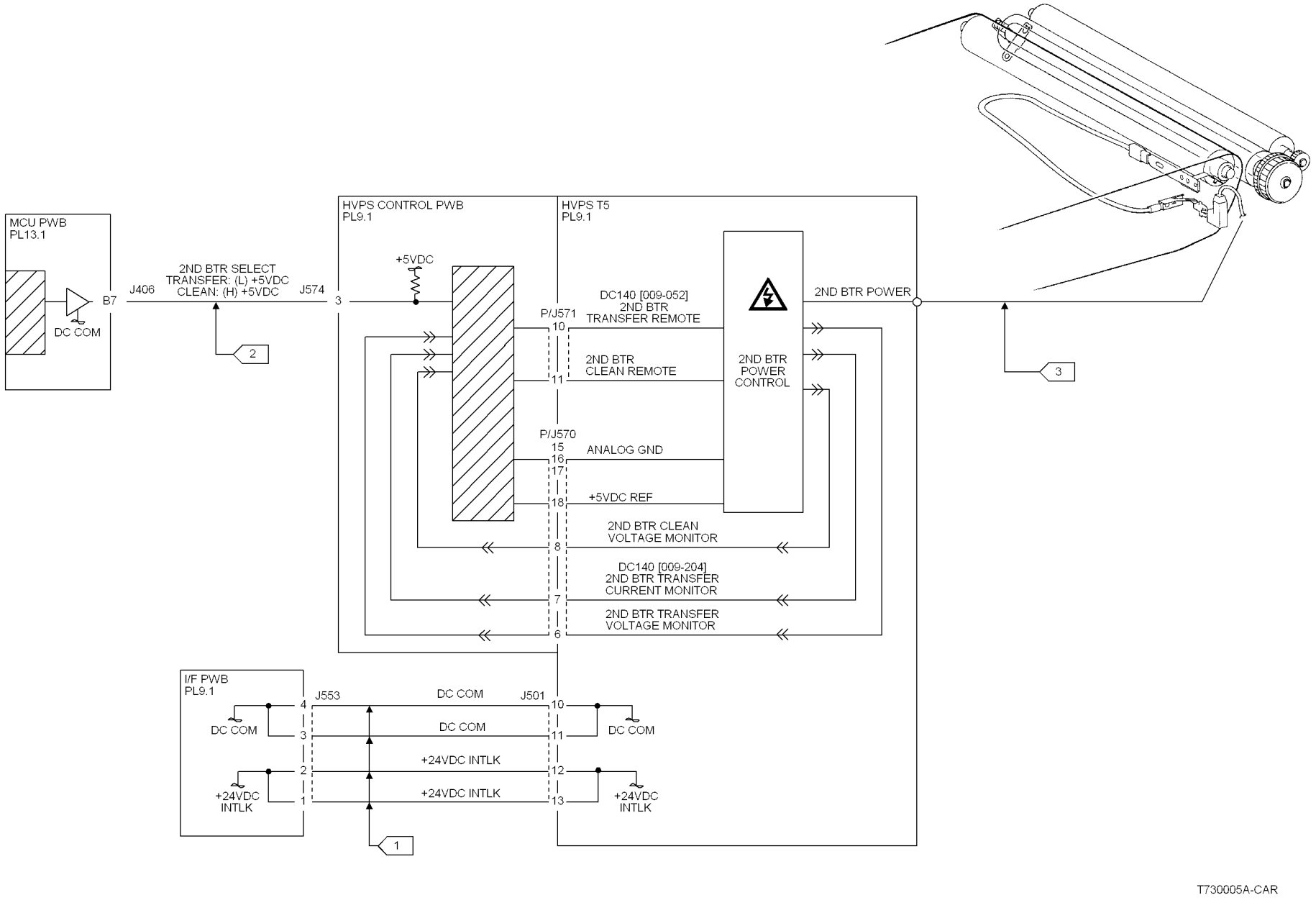


Figure 1 IQ22 RAP Circuit Diagram

IQ23 BCR Checkout RAP

Procedure

The problem is very high single-color background

Y **N**

TBD

A

A

Go to Flag 3. Check the wires associated with the problem color for an open circuit. If the wires are OK., check the HV outputs at P 581 for open circuits or loose contacts. If the problem persists, replace the Drum Cartridge for the affected color (see Machine Consumables in Section 6).

If this does not resolve the problem, replace the HVPS T7 PWB (PL 9.1).

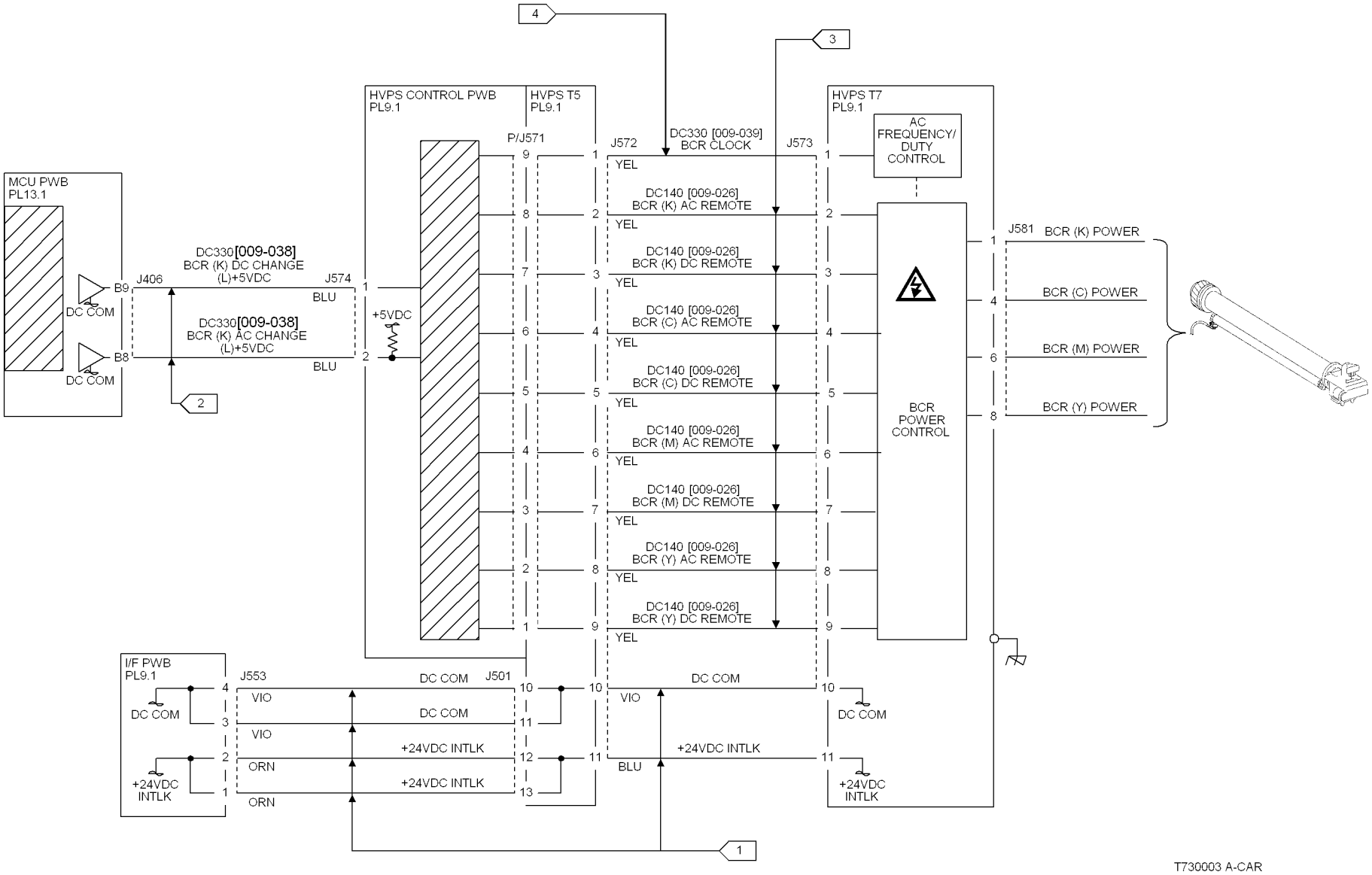


Figure 1 IQ23 RAP Circuit Diagram

Image Quality Specifications

The following steps are used to set up the machine for the purpose of making test pattern copies to judge output image color density, balance, and registration.

1. Set the following Customer Mode Settings to the positions listed:
   a. Output Color - Full Color
   b. Original Type - Photo & Text / Halftone
   c. Lighter/Darker - Auto Contrast
   d. Variable Color Balance - Normal
   e. Color Saturation - Normal
   f. Sharpness - Normal
2. Place the Color Test Pattern on the platen. Load 11î X 17 or A3 paper into Tray 1. Make a copy of the test pattern.
3. Compare the copy to the test pattern. Refer to Figure 2 and Table 1 for this evaluation.

Table 1 Color Specifications Check Locations

AREA (Fig. 1)	Check for the Following Results
A	Text Reproduction. Each of the seven sentences in this area are fully reproduced with no missing letters or portions of letters. The sentences are reproduced in Black, Cyan, Magenta, Yellow, Red, Green and Blue.
B	Color Registration. The patterns in location B should be properly registered to provide Black, Red, Green and Blue lines.
C	Front to Rear Density. The density of both the low density and high density bands should be uniform from front to rear. This can be tested by folding the copy in the center and comparing the front side of the copy to the rear side of the copy at location C. Both the high density and low density locations should exhibit even front to rear density.
D	Color Gradation. This area should exhibit a decreasing density of each of the colors from 100% density to 5% density. In a properly adjusted machine, the 10% patches should be visible and the 5% patches should be barely visible or not visible on the test pattern copy (except for the bottom row).
E	Routine Color. Location E represents three general tests for the machine to reproduce colors common to customer originals. Location A is a general skin tone test. Location B represents the color of grass or other common foliage. Location C represents the color of the sky.
F	Photo Gradation. Location F is not used for any copy quality evaluation on this product.
G	IIT Calibration Patches. These patches are scanned for IIT Calibration during the DC945 IIT Calibration portion of Max Setup.
H	100 Lines/Inch Image. A Moire defect will show on this image. Moire on a 100 Line/Inch image is within specification.
I	175 Lines/Inch Image. This image is used to test for Moire. Depending on the degree of the defect, moire seen on this image should be considered out of specification.

Registration and border deletions are checked using the Step Scales on the Geometric Test Pattern, an example of which is shown in Figure 1. All of the scales are 20mm in height, and are made up of four 5mm steps. Step 1 will be described as at the top of the Step Scale, and Step 4 will be described as at the bottom.

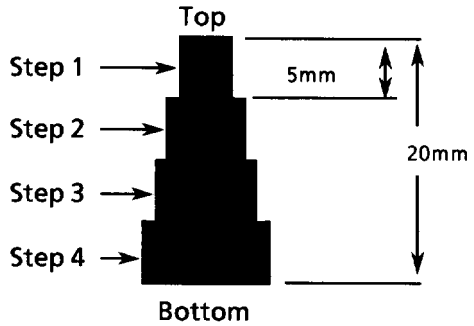


Figure 1 Step Scales

Each Step Scale is positioned for a particular paper size and orientation. Table 2 indicates the appropriate Step Scales to use for the various paper sizes, orientations and measurement locations.

Table 2 Geometric Checkout - Step Scale Data.

Paper Size	Orientation	To check:	Step Scales to use (refer to Figure 2)
11x17	SEF	Lead Edge Side Edge Trail Edge	LE1 through LE3 SE1 through SE4 (top); SE5 and SE8 (bottom) TE3
A3	SEF	Lead Edge Side Edge Trail Edge	LE 1 through LE3 SE1 through SE4 (top); SE6 and SE7 (bottom) TE4
8.5x11	SEF	Lead Edge Side Edge Trail Edge	LE 1 and LE2 SE1 through SE3 (top); SE9 (bottom) TE5
A4	LSEF	Lead Edge Side Edge Trail Edge	LE 1 and LE2 SE1 through SE3 (top); SE10 (bottom) TE6
8.5x11	LEF	Lead Edge Side Edge Trail Edge	LE1 through SE3 SE1 and 2 (bottom) SE6 and SE7 (top) TE 2
A4	LEF	Lead Edge Side Edge Trail Edge	LE1 through SE3 SE5 (top); SE1 and SE2 (bottom) TE1

1. Set the following Customer Mode Settings to the positions listed:
   ï Output Color - Full Color

- ï Original Type - Photo & Text / Halftone
- ï Lighter/Darker - Auto Contrast
- ï Color Saturation - Normal
- ï Variable Color Balance - Normal
- ï Sharpness - Normal

2. Place Test Pattern 82E8220 on the platen and 24# Xerox Color Xpressions 11 X 17 (USCO), or 90 GSM Colotech A3 (XL) paper in Tray 1. Make a copy of the test pattern.
3. Follow the directions in Table 3 to determine if the machine registration is within specification.

Table 3 Test Pattern Image Data Locations for Geometric Specifications

GEOMETRIC AREA	CHECK PERFORMED
Magnification	Locate the 300mm line running from near LE1 to the trail edge of the 1.8 lp ladder. Locate the 200mm line running from near LE1 to near LE3. Make a copy. The measurements should be:. ï Left to Right.: 300mm ±1.8mm ï Front to Rear: 200mm ±1.2mm
Resolution	Observing the targets on the test pattern copy at locations R1 through R8, the line pairs specified below are clearly visible for the magnification value indicated: ï 70%: 3.0 lp/mm ï 100% through 400%: 4.3 lp/mm
Lead Edge Registration	Measure from the lead edge of the paper to the top of Step 3 on the LE2 Step Scale. The measurement should be: ï Trays 1 through 4: 10mm ±1.5mm (±1.9mm for 2nd side of duplex job) ï Tray 5: 10mm ±2.2mm
Side Edge Registration	Measure from the side edge of the paper to the top of Step 3 on the SE2 and SE3 Step Scales. The distance should be within the following tolerance: ï Trays 1 through 4: 10mm ±2.0mm (±2.4mm for 2nd side of duplex job) ï Tray 5: 10mm ±2.4mm
Lead Edge Skew	For skew from front to rear, the distance from the lead edge of the paper to the targets at LE1 and LE3 are measured. The measurements must match each other to within the tolerance below. ï Trays 1 through 4: within ±1.5mm (±2.0mm for 2nd side of duplex job) ï Tray 5: within ±2.0mm
Side Edge Skew	For skew from left to right, the distance from the side edge of the paper to the targets at SE1 and SE4 are measured. They must match each other to within the tolerance below: ï Trays 1 through 4: within ±3.0mm (±4.0mm for 2nd side of duplex job) ï Tray 5: within ±4.0mm
Line Density	This parameter is measured on the two 0.7G Text Blocks on the test pattern copy. The machine should reproduce all of the characters shown in the block on the output copy.
Solid Reproduction	This specifies the desired standard for reproduction of solid gray images at 1.0 K. The 1.0 K blocks on the output copy should reproduce with minimal mottle or graininess.

Table 3 Test Pattern Image Data Locations for Geometric Specifications

GEOMETRIC AREA	CHECK PERFORMED
Low Contrast Reproduction	This specifies the desired standard for reproduction of low density images. The machine should reproduce all of the text in the 0.2 G Text Blocks on the output copy.
ROS Borders (Image Loss)	Measure from the lead edge of the paper at LE2, the side edge of the paper at SE2 and SE7, and the trail edge at TE4, to the top edge of the step scales in those locations. The measurements should conform to the following specifications: ï Lead Edge 4mm ± 1 mm ï Side Edges 2 mm ± 1 mm ï Trail Edge 2 mm ± 1 mm

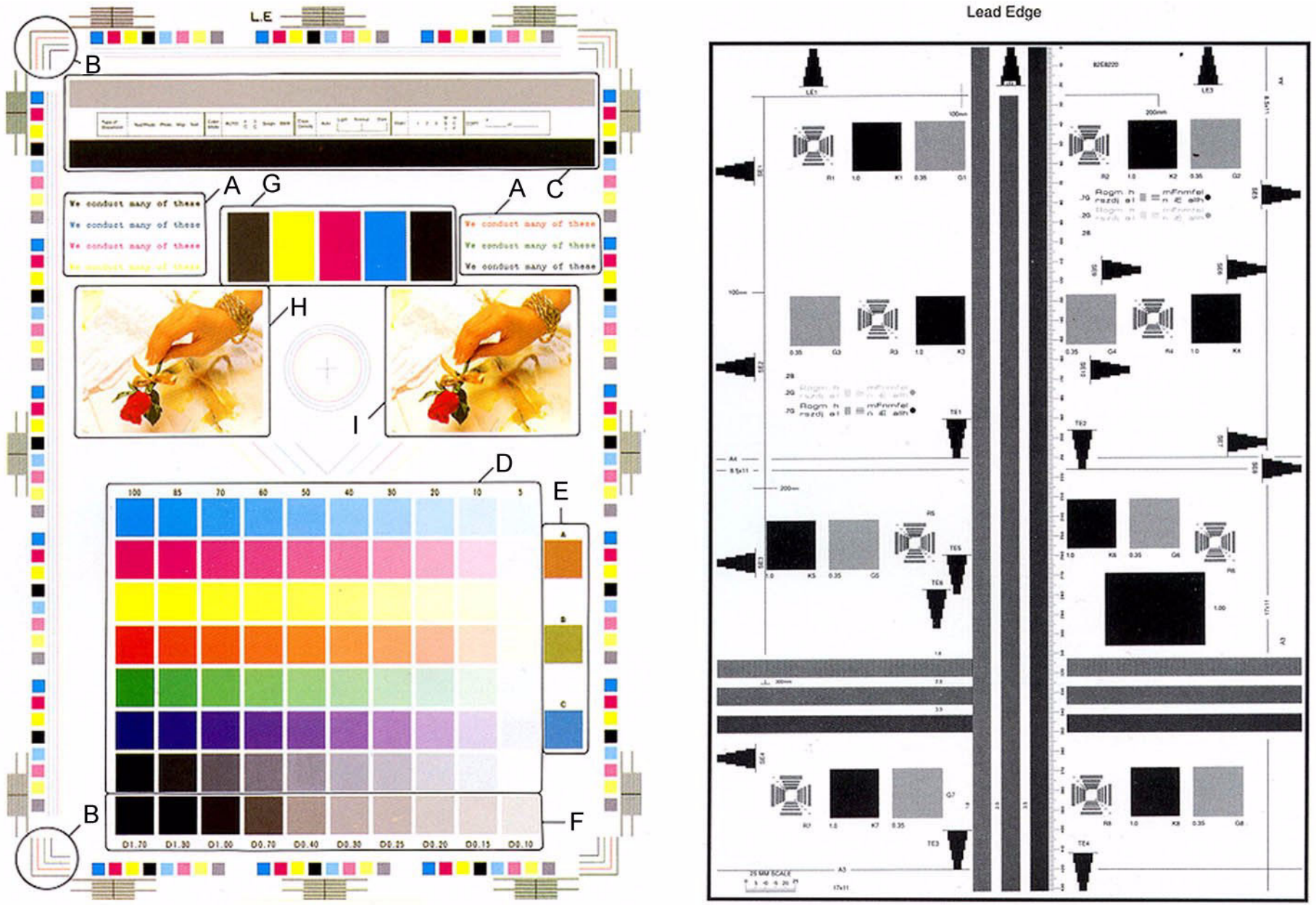


Figure 2 Color and Geometric Test Patterns

4 Repairs & Adjustments

REPAIRS

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REP 1.1 3.3/5 V LVPS Bracket

Parts List on PL 9.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

CAUTION

PWBís can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Remove Rear Cover (REP 14.2).
2. Remove High Voltage Power Supply Chassis (REP 1.6).
3. Release 6 harness clips.
4. Remove 3.3/5 VDC Power Supply Chassis (Figure 1).
   a. Disconnect Harness P/Jís (4).
   b. Loosen Lower Screws (2).
   c. Remove upper Screws (2) and remove 3.3/5 VDC Power Supply Chassis.

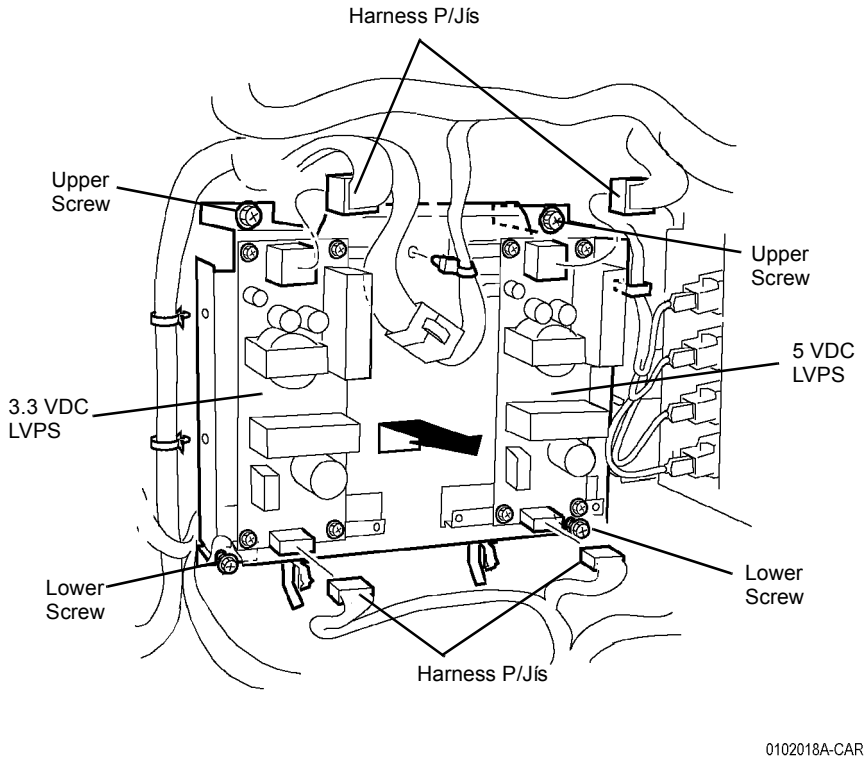


Figure 1 Removing 3.3/5 VDC Power Supply Chassis

REP 1.2 MCU PWB

Parts List on PL 13.1

Removal

1. If a new PWB will be installed, record NVM values for new PWB

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

2. Remove Right Cover (REP 14.3).
3. Remove Top Cover (REP 14.1).
4. Remove Rear Cover (REP 14.2).

CAUTION

PWBís can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

5. Remove ESS Chassis (REP 1.3).
6. Remove Screws and remove MCU PWB from ESS Chassis.

REP 1.3 ESS Chassis

Parts List on PL 13.1

Removal

1. If a new PWB will be installed, record NVM values for new PWB.

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

2. Remove Right Cover (REP 14.3).
3. Remove Top Cover (REP 14.1).
4. Remove Rear Cover (REP 14.2).

CAUTION

PWBís can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

5. Remove ESS PWB (REP 1.12).
6. Remove ESS Chassis (Figure 1).
   a. Push Harness Clips (2) down out of Chassis holes
   b. Disconnect Harness P/Jís (6).
   c. Disconnect Harness P/Jís (2).
   d. Disconnect Switch from Chassis.
   e. Loosen Screws (2) at front and remove Screws (2) at rear of machine.
   f. Lift outer end of Chassis to disconnect Hidden Connector and then remove Chassis.

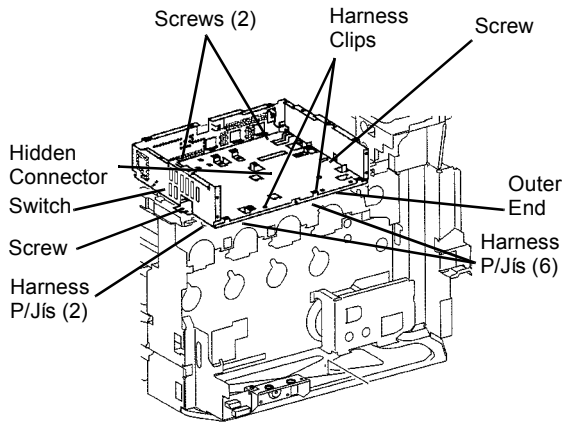


Figure 1 Removing ESS Chassis

Replacement

NOTE: *If the ESS PWB will be replaced with a new ESS PWB, discard the MAC ROM from the new ESS PWB and install the MAC ROM removed from the old ESS PWB.*

REP 1.4 3.3 V LVPS or 5 V LVPS

Parts List on PL 9.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

CAUTION

PWBís can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Remove Rear Cover (REP 14.2).
2. Remove High Voltage Power Supply Chassis (REP 1.6).
3. Remove appropriate LVPS (Figure 1).
   a. Disconnect appropriate Harness P/Jís (2).
   b. Remove appropriate Screws (4) and remove LVPS.

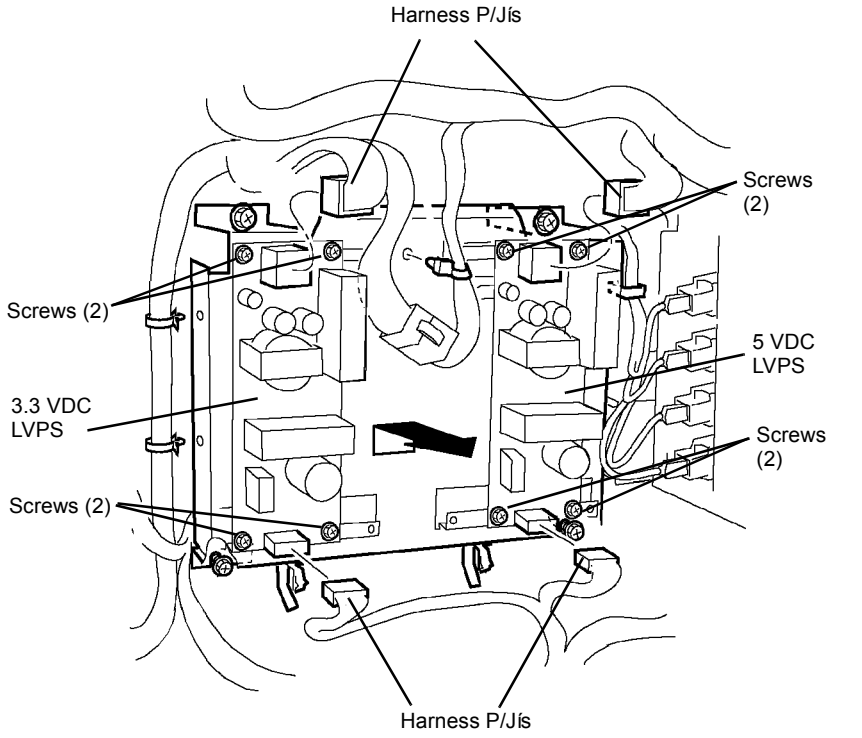


Figure 1 Removing LVPS

REP 1.5 24 V LVPS

Parts List on PL 9.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (REP 14.2).

CAUTION

PWBís can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

2. Remove 24 V LVPS (Figure 1).
   a. Disconnect Harness P/Jís (3).

CAUTION

5 screws with red marks secure LVPS to heat sink. Do not remove them.

   b. Loosen Screws (2) and remove LVPS.

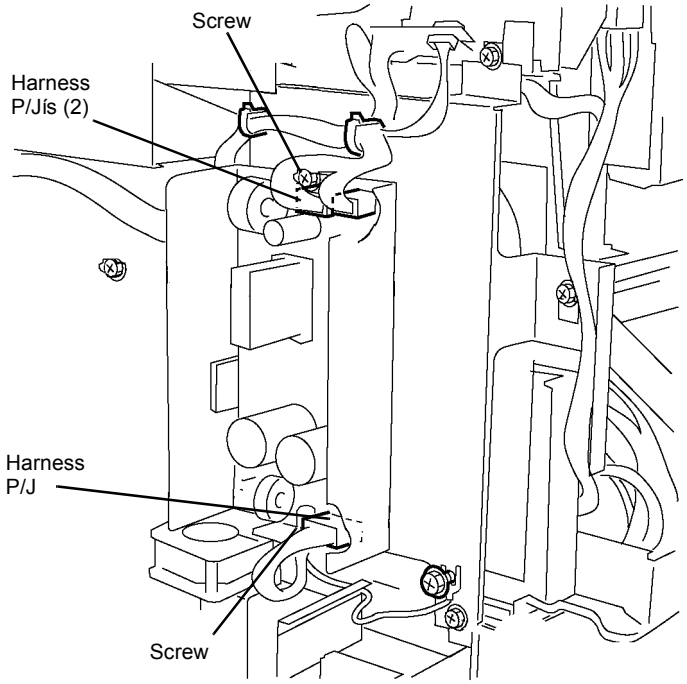


Figure 1 Removing 24 VDC Power Supply

REP 1.6 T5 T7 HVPS Chassis

Parts List on PL 9.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

CAUTION

HVPS can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

1. Remove Rear Cover (REP 14.2).
2. Remove High Voltage Power Supply Chassis (Figure 1).
   a. Loosen screw and disconnect Ground Wire.
   b. Disconnect Harness P/Jís (2). Do not disconnect Soldered Connection
   c. Disconnect High Voltage P/J (1).
   d. Disconnect High Voltage P/Jís (2).
   e. Remove Screws (3).
   f. Pivot HVPS down and engage stop strap with frame tab (not shown in figure).
   g. Disconnect High Voltage P/J (1) at bottom (not shown in figure).

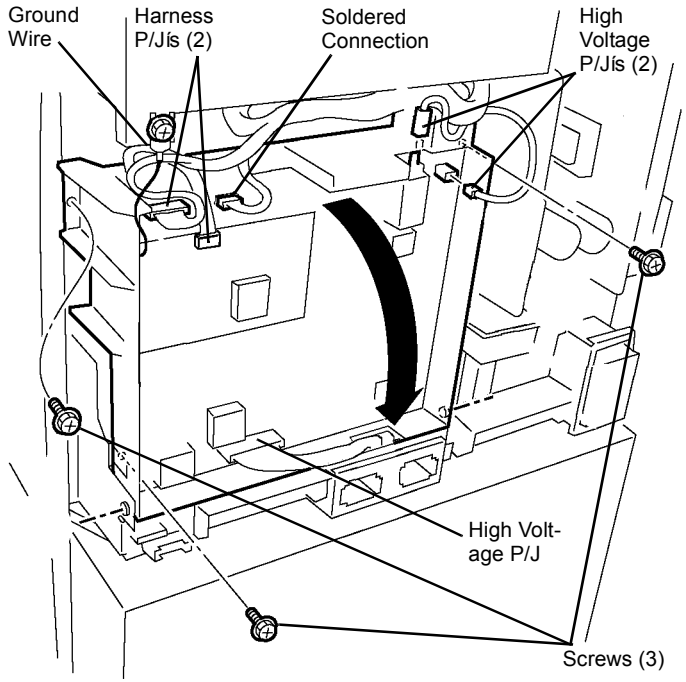


Figure 1 Removing High Voltage Power Supply

REP 1.7 T5 or T7 High Voltage Power Supplies

Parts List on PL 9.1

Removal

1. Perform NVRAM Save.

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

2. Remove Rear Cover (REP 14.2).

CAUTION

PWBís can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

3. Remove High Voltage Power Supply Chassis (REP 1.6).
4. Remove High Voltage Power Supplies from Chassis.
   - T5 HVPS (Detack/2nd BTR) is power supply toward machine rear.
   - T7 HVPS (Developer Bias and Charge) is power supply toward machine front.

REP 1.8 I/F (Interface) PWB

Parts List on PL 9.1

Removal

1. Perform NVRAM Save.

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

2. Remove Right Cover (REP 14.3).
3. Remove Top Cover (REP 14.1).
4. Remove Rear Cover (REP 14.2).
5. Pivot down T5 T7 HVPS Chassis (REP 1.6).

CAUTION

PWBís can be damaged by an electrostatic discharge. Observe all ESD procedures to avoid component damage.

6. Remove ESS Chassis (REP 1.3).
7. Remove Main PWB Interface PWB (Figure 1).
   a. Loosen Screws (2).
   b. Lift Main PWB Interface PWB until Harness P/Jís (11) can be disconnected.
   c. Remove Main PWB Interface PWB from chassis

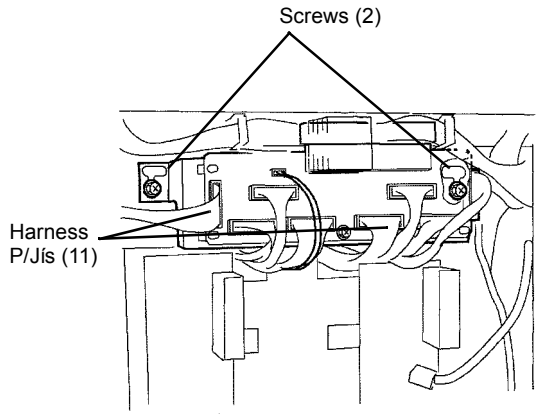


Figure 1 Removing Interface PWB

Replacement

Ensure Screws (2) are positioned in slots as shown before tightening Screws (2) (Figure 2).

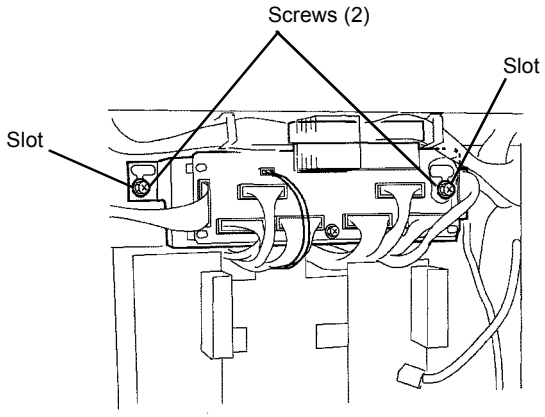


Figure 2 Installing Interface PWB

REP 1.9 24 V LVPS Bracket

Parts List on PL 9.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (REP 14.2).
2. Remove Upper Rear Left Cover (REP 14.4).
3. Remove 24 V LVPS (REP 1.5).
4. Remove 24 VDC LVPS Chassis (Figure 1).
   a. Remove Top Screw.
   b. Remove upper harnesses from Harness Clips (2).
   c. Disconnect Fan P/J and remove harness from Harness Clip.
   d. Loosen Screws (4).
   e. Remove 24 VDC LVPS Chassis.

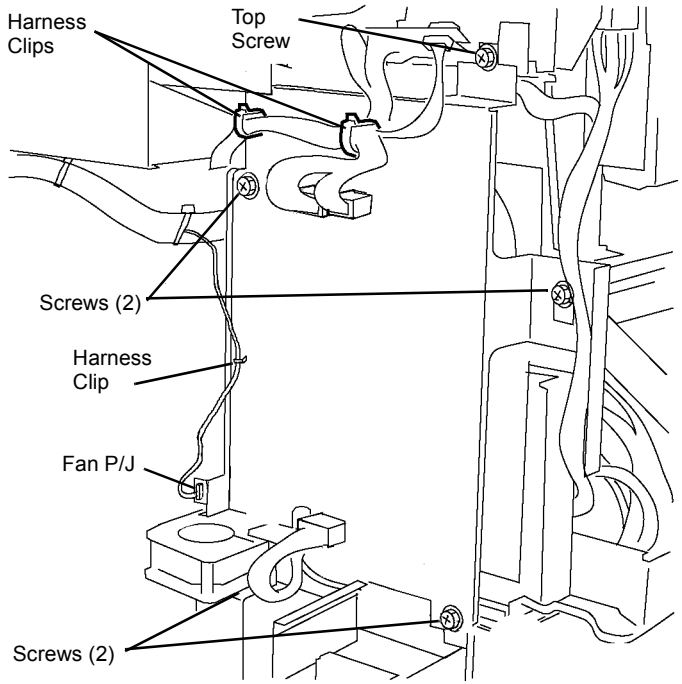


Figure 1 Removing 24 VDC LVPS Bracket Assembly

REP 1.10 HVPS T6

Parts List on PL 9.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (REP 14.2).
2. Remove 24 V LVPS (REP 1.5).
3. Remove 24 VDC LVPS Chassis (REP 1.9).
4. Remove HVPS T6 (Figure 1).
   a. Disconnect P/Jís (4).
   b. Disconnect Harness P/Jís (2).
   c. Remove Screws (2) and remove High Voltage Power Supply with chassis.
   d. Remove High Voltage Power Supply from chassis.

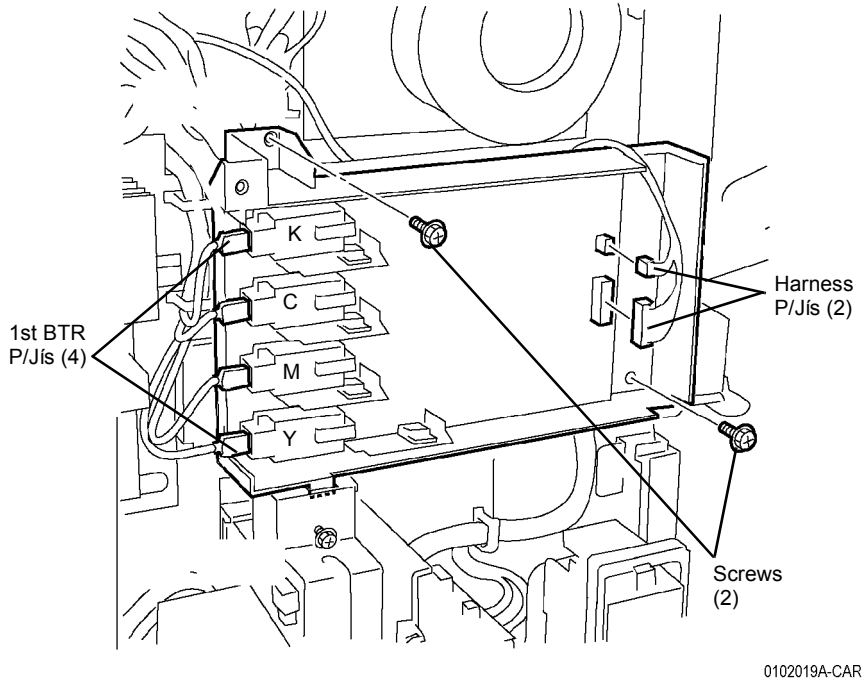


Figure 1 Removing HVPS T6

REP 1.11 AC Drive PWB

Parts List on PL 9.2

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (REP 14.2).
2. Remove 24 V LVPS (REP 1.5).
3. Remove 24 VDC LVPS Chassis (REP 1.9).
4. Remove HVPS T6 (REP 1.10).
5. Remove AC Drive PWB (Figure 1).
   a. Remove Screws (2) and Bracket.
   b. Carefully observe position of wiring harnesses and AC Wires for later reinstallation
   c. Disconnect AC Harness P/Jís (3) and AC Wires (6).
   d. Disconnect DC Harness P/Jís (2).
   e. Release harness from Harness Clip.
   f. Remove Mounting Screws (3)
   g. Disengage rear clip (not shown) and remove AC Drive PWB.

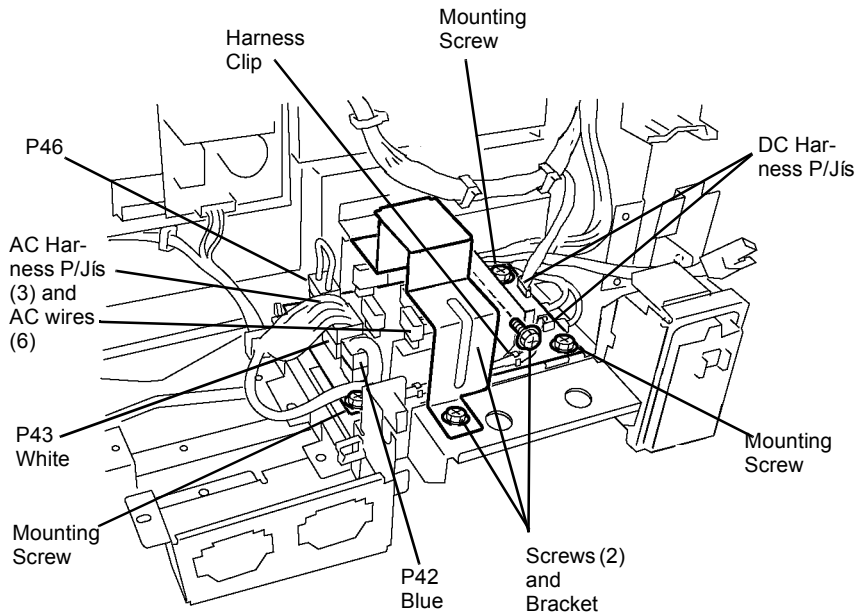


Figure 1 Removing AC Drive PWB

Replacement

CAUTION

Ensure White connector P43 and Blue connector is P42. Other connectors are different sizes to ensure correct connection.

REP 1.12 ESS PWB

Parts List on PL 13.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

CAUTION

The ESS PWB has a lithium battery. Dispose of the used battery following the manufacturers' instructions after replacing. Do not throw it away at customer's site.

1. Remove Right Cover (REP 14.3).
2. Remove Top Cover (REP 14.1).
3. Remove Rear Cover (REP 14.2).
4. Remove ESS Top Cover (PL 13.1).

CAUTION

Protect Hard Drive Harness. Hard Drive is mounted to ESS Top Cover. Hard Drive harness remains connected to ESS PWB while removing ESS Top Cover.

a. Remove screws (11) from ESS Top Cover.
b. Lift ESS Top Cover and place it upside down on Toner Cartridges.
c. Disconnect Hard Drive harness from ESS PWB.

NOTE: 5 mm tool may be required.

5. Remove ESS PWB (Figure 1).

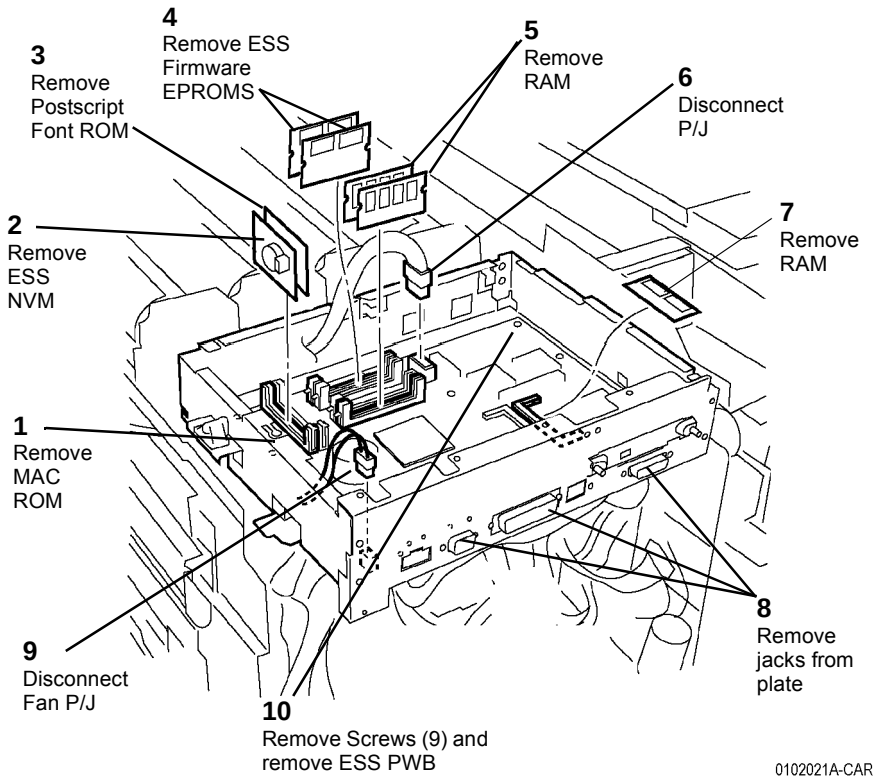


Figure 1 Removing ESS PWB

REP 1.13 ESS NVM PWB

Parts List on PL 13.1

Removal

1. Download ESS NVM values to machine floppy. If download is not possible, most recent NVM values will be downloaded during replacement step 3.

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

2. Remove Right Cover (REP 14.3).
3. Remove Top Cover (REP 14.1).
4. Remove Rear Cover (REP 14.2).
5. Remove ESS Top Cover (PL 13.1).

CAUTION

Protect Hard Drive Harness. Hard Drive is mounted to ESS Top Cover. Hard Drive harness remains connected to ESS PWB while removing ESS Top Cover.

a. Remove screws (11) from ESS Top Cover.

b. Lift ESS Top Cover and place it upside down on Toner Cartridges.

CAUTION

The ESS PWB has a lithium battery. Dispose of the used battery following the manufacturers' instructions after replacing. Do not throw it away at customer's site.

6. Remove the ESS NVM PWB (Figure 1).

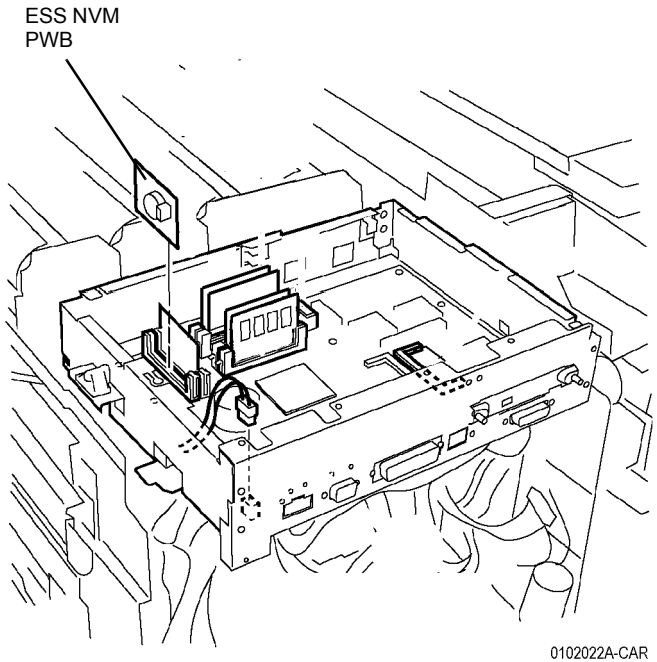


Figure 1 Removing the ESS NVM PWB

Replacement

1. Connect the PSW and enter DC132.
2. Match the Billing, following the steps of DC132.
3. Enter all the NVM values described in the NVM List that comes with the machine or download NVM values from machine floppy.

REP 4.1 Main Drive Motor Assembly

Parts List on PL 1.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Fuser Module (REP 10.1).
2. Remove Tray 5 (REP 7.1).
3. Remove Rear Cover (REP 14.2).
4. Remove 24 V LVPS (REP 1.5).
5. Remove 24 VDC LVPS Chassis (REP 1.9).
6. Remove Developer High Voltage Power Supply (REP 1.10).
7. Remove AC Drive PWB (REP 1.11).
8. Remove Main Drive Motor Assembly (Figure 1).
   a. Carefully observe position of wiring harnesses for later reinstallation
   b. Disconnect Harness P/Jís (5).
   c. Disconnect Harness P/Jís (3).
   d. Remove harness from Harness Clips (3).
   e. Disconnect HV Wire.

NOTE: *In next step, do not remove small round head screws that appear to secure Main Drive Motor Assembly to machine.*

   f. Remove Screws (5) and remove Main Drive Motor Assembly.

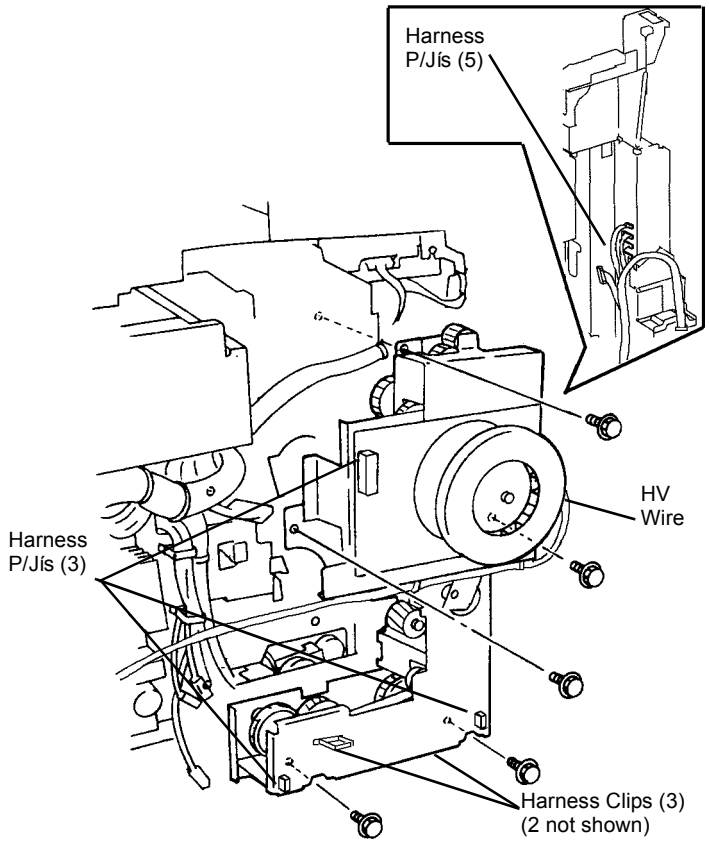


Figure 1 Removing Main Drive Motor

REP 4.2 IBT Motor

Parts List on PL 1.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (REP 14.2).
2. Pivot down High Voltage Power Supply Chassis (REP 1.6).
3. Remove Photoreceptor Module Drive Motor.
   a. Disconnect Cooling Fan P/J.
   b. Remove screws (2) and remove Cooling Fan.
   c. Disconnect Photoreceptor Module Drive Motor P/J.
   d. Remove Photoreceptor Module Drive Motor screws (3) and remove Photoreceptor Module Drive Motor.

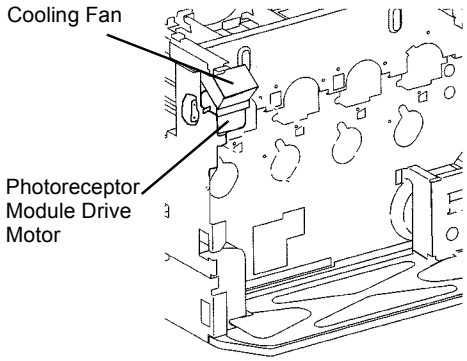


Figure 1 Removing Photoreceptor Module Drive Motor

REP 4.3 Developer Drive Motor

Parts List on PL 1.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (REP 14.2).
2. Remove High Voltage Power Supply Chassis (REP 1.6).

NOTE: *Step 3 can be omitted if Low Voltage Power Supply P/Jís are disconnected before performing step 4.*

3. Remove 3.3 VDC and 5 VDC Low Voltage Power Supply (REP 1.4).
4. Remove Chassis for 3.3 VDC and 5 VDC Low Voltage Power Supply.
   a. Release harnesses from harness clips (3).
   b. Remove screws (4) and remove Chassis.
5. Remove Developer Drive Module (Figure 1).
   a. Disconnect P/J.
   b. Remove harness from Harness Clip.
   c. Remove Screws (2) and remove Developer Drive Module.

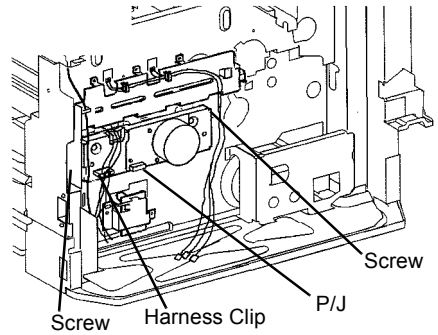


Figure 1 Removing Developer Drive Module

REP 4.4 Drum Motor Assembly

Parts List on PL 1.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Right Cover (REP 14.3).
2. Remove Top Cover (REP 14.1).
3. Remove Rear Cover (REP 14.2).

CAUTION

Machine problems will result from careless harness routing during reassembly. Carefully observe position of wiring harnesses for later reinstallation.

NOTE: *Step 6 can be omitted if Low Voltage Power Supply P/Jís are disconnected before performing step 7.*

4. Remove 24 V LVPS (REP 1.5).
5. Remove 24 VDC LVPS Chassis (REP 1.9).
6. Remove Control Chassis (REP 1.3).
7. Remove High Voltage Power Supply Chassis (REP 1.6).

NOTE: *In next step, do not disconnect P/Jís.*

8. Loosen Interface PWB chassis mounting screws (2) and move chassis up (REP 1.8).
9. Remove Photoreceptor Module Drive Motor (REP 4.2).
10. Remove Developer High Voltage Power Supply (REP 1.10).
11. Remove 3.3/5 VDC Power Supply Chassis (REP 1.1).
12. Remove Print Cartridge Drive Module (Figure 1).
    a. Release harness from Harness Clips (3)
    b. Remove screws (2) to release Connector from frame.
    c. Disconnect P/J.
    d. Remove Screws (8) and remove Print Cartridge Drive Module.

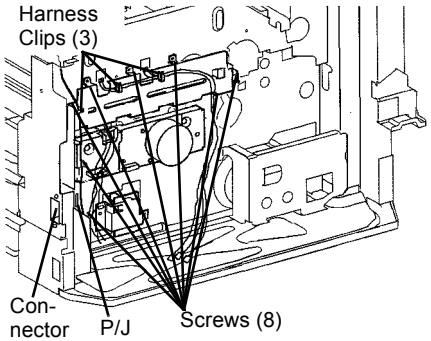


Figure 1 Removing Print Cartridge Drive Module

REP 5.1 DADF

Parts List on PL 20.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Disconnect connector (Figure 1).

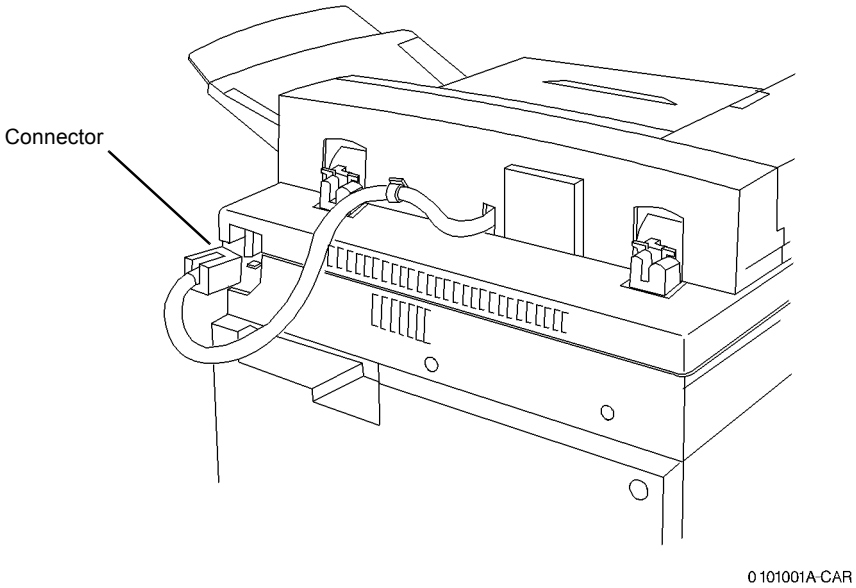


Figure 1 Disconnecting Connector

2. Remove Screws (2) and remove DADF (Figure 2).

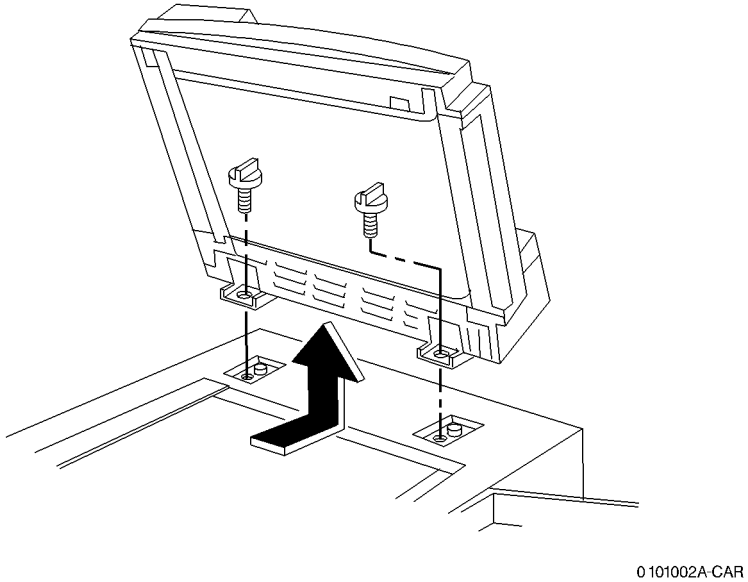


Figure 2 Removing DADF

Replacement

1. Check DADF Side Registration (ADJ 5.1).
   Check DADF Top Registration (ADJ 5.5).

REP 5.2 Registration Gate Solenoid

Parts List on PL 20.2

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Front Cover (PL 20.1).
2. Remove Registration Gate Solenoid (Figure 1).
   a. Disconnect connector.
   b. Release clamps (2) and remove wire.
   c. Loosen screws (2).
   d. Remove Registration Gate Solenoid.

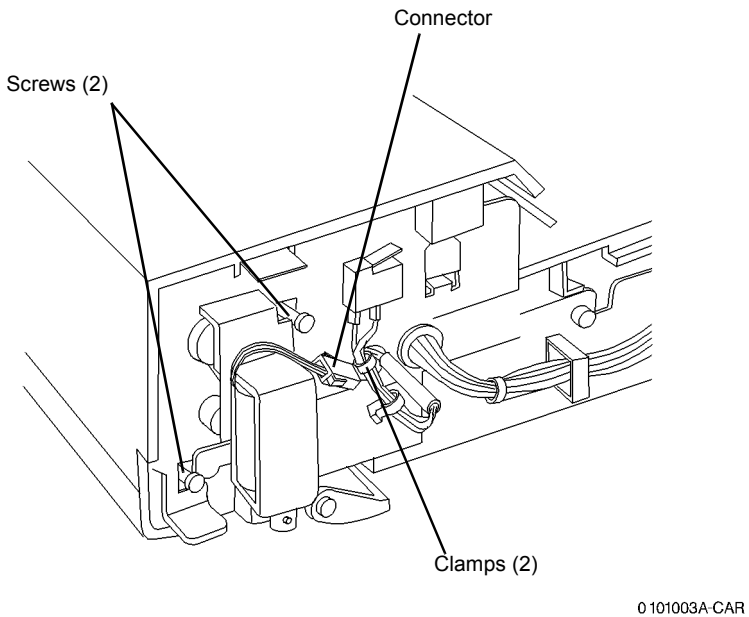


Figure 1 Removing Registration Gate Solenoid

REP 5.3 Left/Right Counterbalance

Parts List on PL 20.3

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove DADF (REP 5.1).
2. Remove Rear Cover (REP 5.18).
3. To remove Left Counterbalance, go to step 4.
   To remove Right Counterbalance, go to step 5.
4. Remove Left Counter Balance (Figure 1).
   a. Remove Screws (4).
   b. Remove Left Counterbalance.
   c. Mark counterbalance as Left.

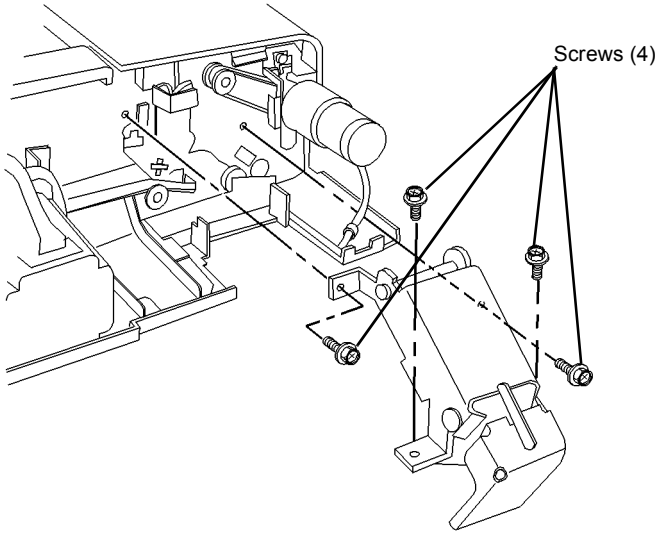


Figure 1 Removing Left Counterbalance

5. Remove Right Counterbalance (Figure 2).
   a. Remove Terminals (2).
   b. Remove Screws (4).
   c. Remove Right Counterbalance.
   d. Mark counterbalance as Right.

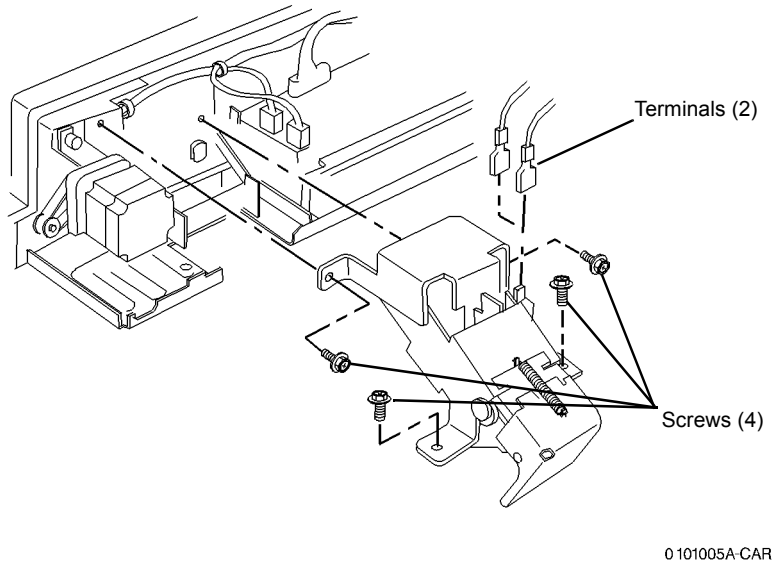


Figure 2 Removing Right Counterbalance

Replacement

1. If new counterbalances are installed, position as shown (Figure 3).
   If counterbalances are reinstalled, install according to marks made in steps 4c or 5d.

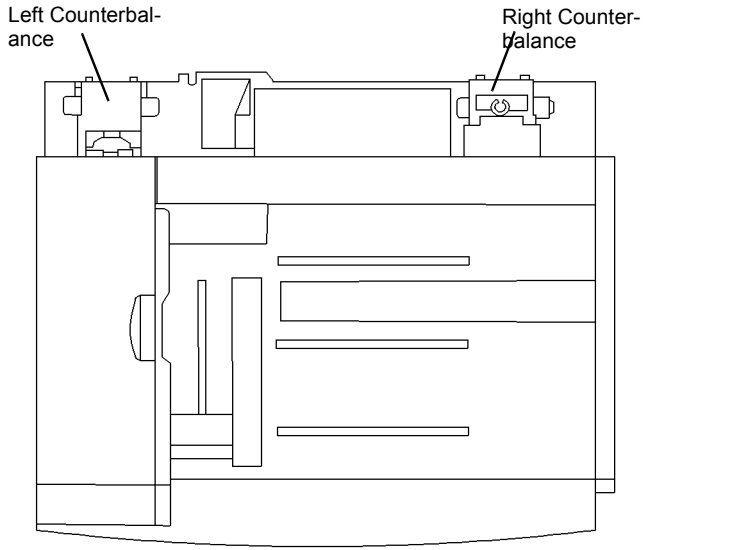


Figure 3 Install Left/Right Counterbalance

REP 5.4 DADF Control PWB

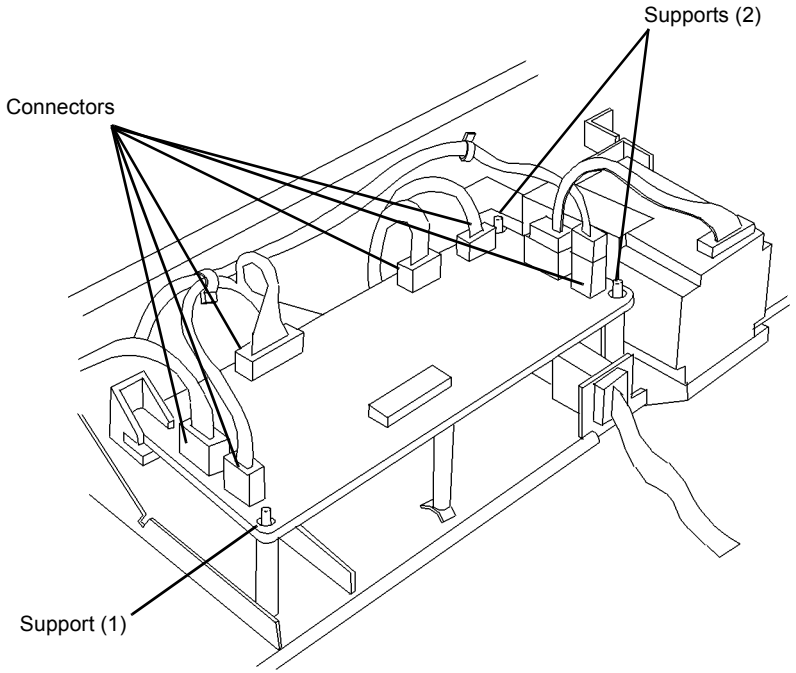
Parts List on PL PL 20.3

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (REP 5.18).
2. Remove DADF Control PWB (Figure1).
   a. Disconnect connectors (7).
   b. Remove DADF Control PWB from PWB supports (3).



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Figure 1 Removing DADF Control PWB

REP 5.5 Feed Motor Assembly

Parts List on PL 20.4

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (REP 5.18).
2. Remove Feed Motor Assembly (Figure 1).
   a. Disconnect connector.
   b. Release clamps (3) and remove harness.
   c. Loosen Screws (2).
   d. Remove Feed Motor Assembly.

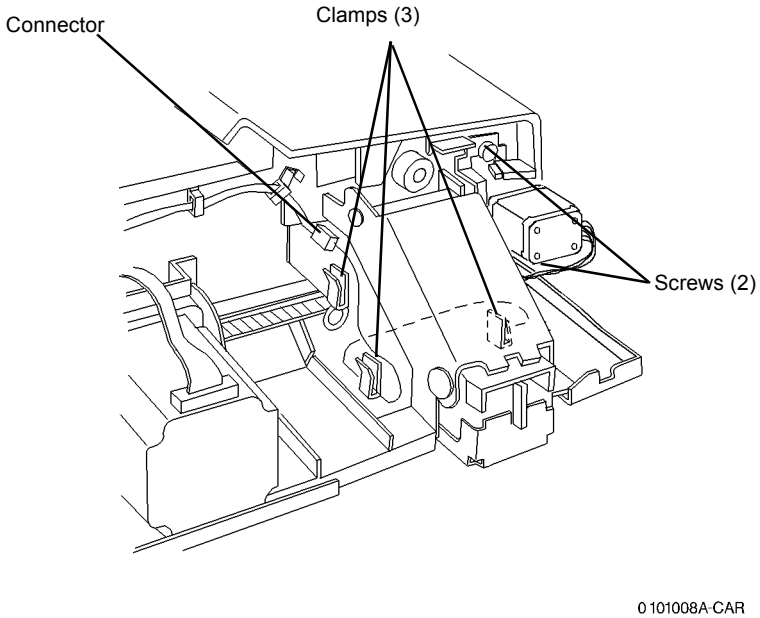


Figure 1 Removing Feed Motor Assembly

REP 5.6 Nudger Roll

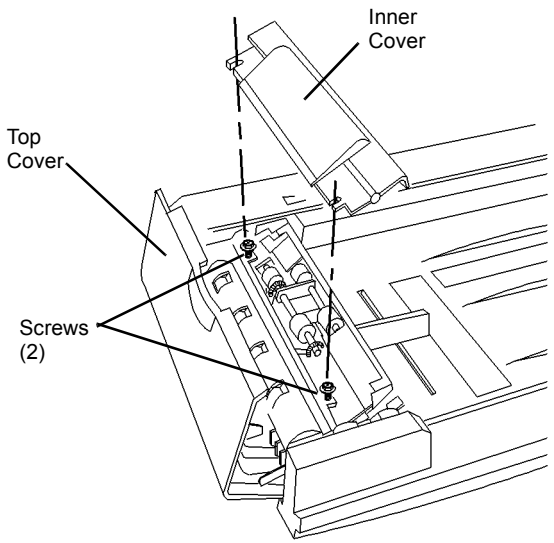
Parts List on PL 20.4

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

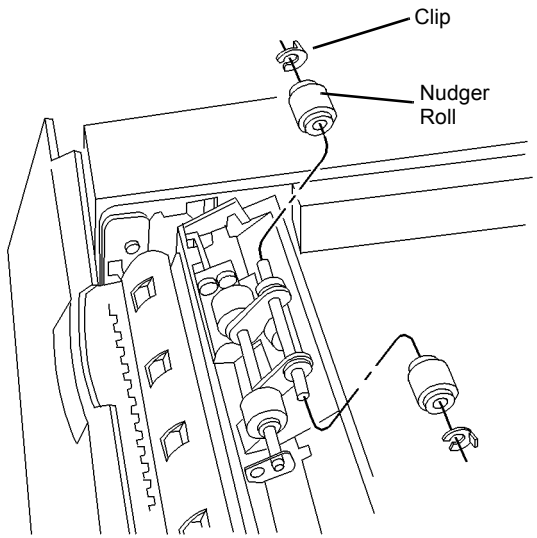
1. To install new Nudger Rolls, go to Feed Roll Assembly (REP 5.7) at this time and replace the Nudger Rolls and Feed Rolls as an assembly. Otherwise, continue below.
2. Open DADF Top Cover and remove Inner Cover (Figure 1).
   a. Open Top Cover.
   b. Loosen screws (2).
   c. Remove Inner Cover.



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Figure 1 Removing Inner Cover

3. Remove Nudger Rolls (Figure 2).
   a. Remove Clips (2).
   b. Remove Nudger Rolls (2).



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Figure 2 Remove Nudger Rolls

Replacement

NOTE: *Nudger Rolls rotate freely in direction of document movement.*

NOTE: *After replacing Nudger Roll, reset HFSI counter. Enter dC135 HFSI Counters Diag. Screen (NVM 005-80).*

NOTE: *Replace Feed Roll Assembly (REP 5.7).*

REP 5.7 Feed Roll Assembly

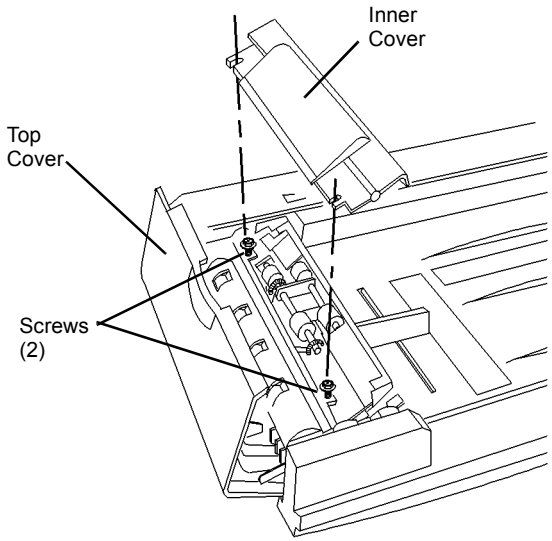
Parts List on PL 20.4

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

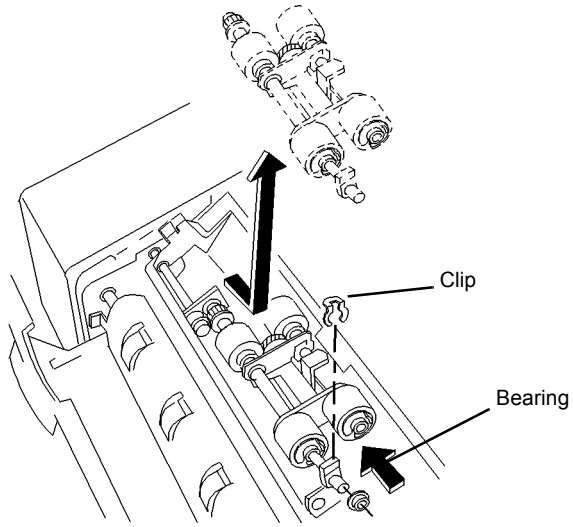
1. Open Top Cover and remove Inner Cover (Figure 1).
   a. Open Top Cover.
   b. Loosen screws (2).
   c. Remove Inner Cover.



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Figure 1 Removing Inner Cover

2. Remove Feed Roll Assembly (Figure 2).
   a. Remove clip.
   b. Slide bearing.
   c. Remove Feed Roll Assembly.



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Figure 2 Removing Feed Roll Assembly

Replacement

NOTE: *Feed Rolls rotate freely in direction of document movement.*

NOTE: *After replacing Feed Roll, reset HFSI counter. Enter dC135 HFSI Counters Diag. Screen (NVM 005-805).*

NOTE: *Feed Rolls and Nudger Rolls are replaced at same time.*

REP 5.8 Lower Chute Assembly

Parts List on PL 20.5

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Top Cover.
2. Remove following:
   a. Front Cover (PL 20.1).
   b. Entrance Tray (PL 20.1).
3. Remove Lower Chute Assembly (Figure 1).
   a. Open Document Feed Upper Chute.
   b. Loosen screws (2).
   c. Remove Lower Chute Assembly.

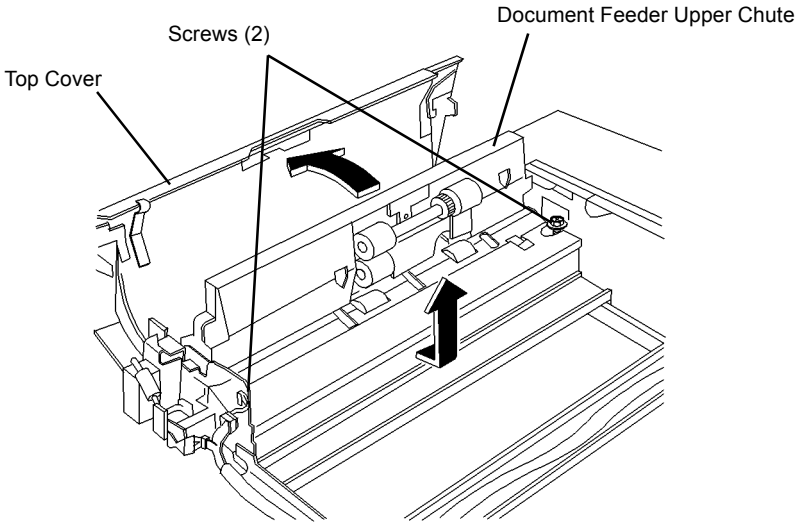


Figure 1 Removing Lower Chute Assembly

REP 5.9 Retard Roll

Parts List on PL 20.5

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Top Cover.
2. Remove following:
   a. Front Cover (PL 20.1).
   b. Entrance Tray (PL 20.1).
3. Remove Lower Chute Assembly (REP 5.8).
4. Remove Retard Roll (Figure 1).

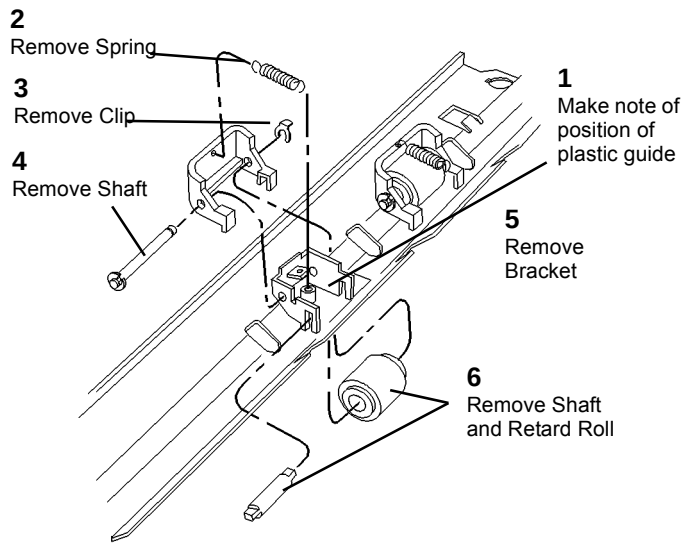


Figure 1 Removing Retard Roll

Replacement

CAUTION

While replacing Retard Roll, make sure that Retard Roll Plastic Guide is in correct position.

REP 5.10 Set Gate Solenoid Assembly

Parts List on PL 20.5

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Top Cover.
2. Remove following:
   a. Front Cover (PL 20.1).
   b. Entrance Tray (PL 20.1).
3. Remove Lower Chute Assembly (REP 5.8).
4. Remove Set Gate Solenoid Assembly (Figure 1).

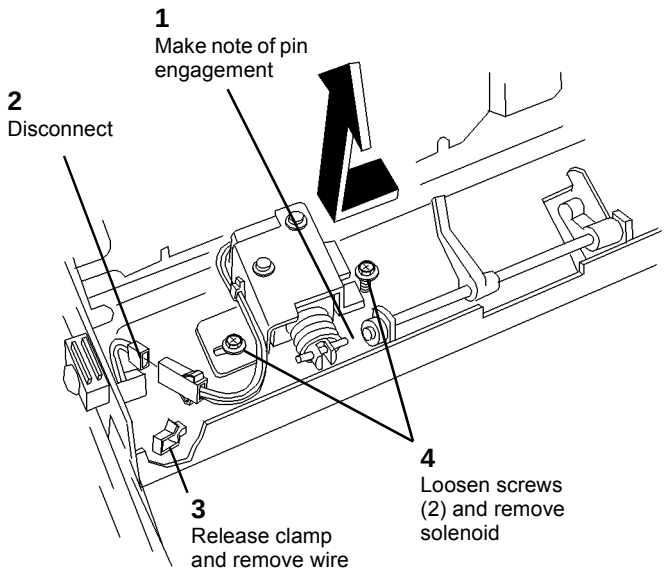


Figure 1 Removing Set Gate Solenoid Assembly

Replacement

1. Engage pin with slot (Figure 2).

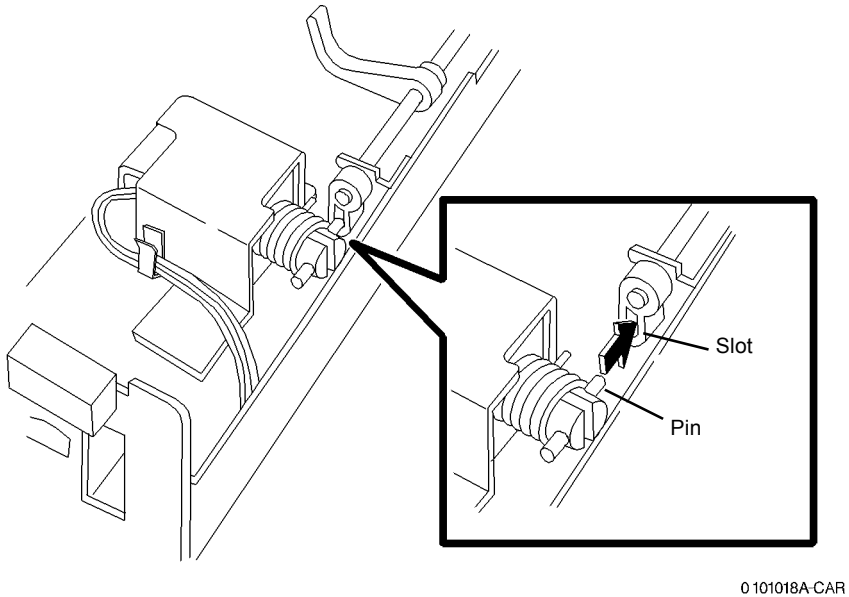


Figure 2 Engaging Pin with Slot

2. Install Set Gate Solenoid Assembly (Figure 3)

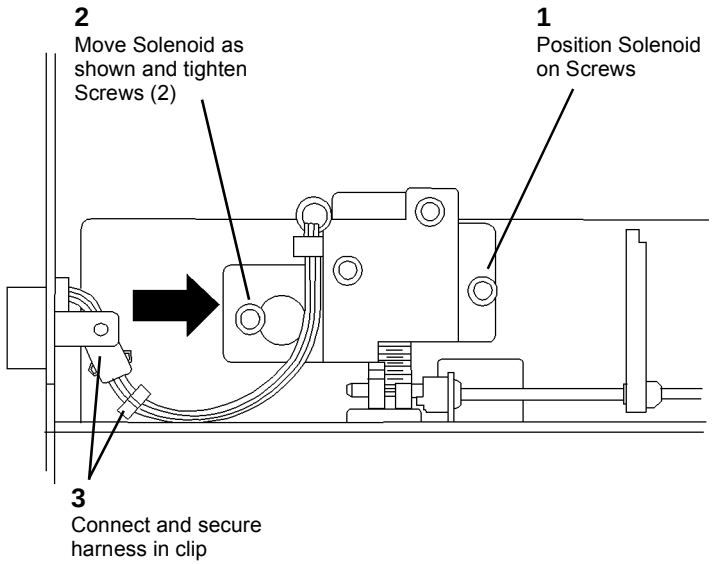


Figure 3 Installing Set Gate Solenoid Assembly

REP 5.11 Registration Sensor

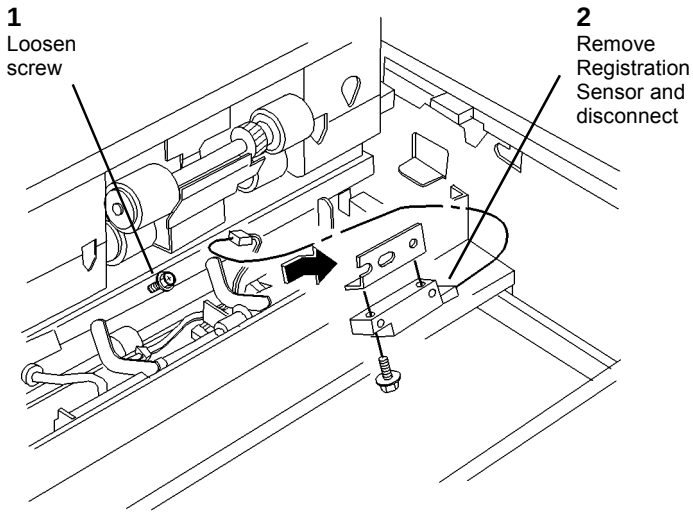
Parts List on PL 20.5

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Top Cover.
2. Remove following:
   a. Front Cover (PL 20.1).
   b. Entrance Tray (PL 20.1).
3. Remove Lower Chute Assembly (REP 5.8).
4. Disconnect P/J580 and remove Registration Sensor (Figure 1).

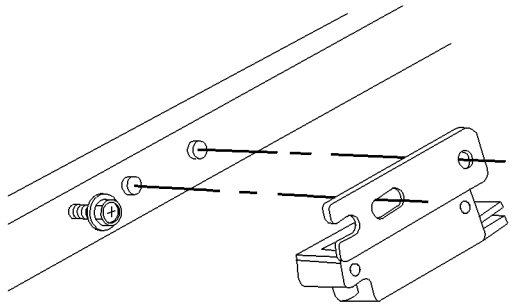


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Figure 1 Removing Registration Sensor

Replacement

1. When installing Registration Sensor align holes with bumps and tighten screw (Figure 2).



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Figure 2 Installing Registration Sensor

REP 5.12 Size Sensors 1/2 (Rear/Front)

Parts List on PL 20.5

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Top Cover.
2. Remove following:
   a. Front Cover (PL 20.1).
   b. Entrance Tray (PL 20.1).
3. Remove Lower Chute Assembly (REP 5.8).
4. Remove Set Gate Solenoid Assembly (REP 5.10).
5. Remove Size Sensors 1/2 (front/rear) (Figure 1).

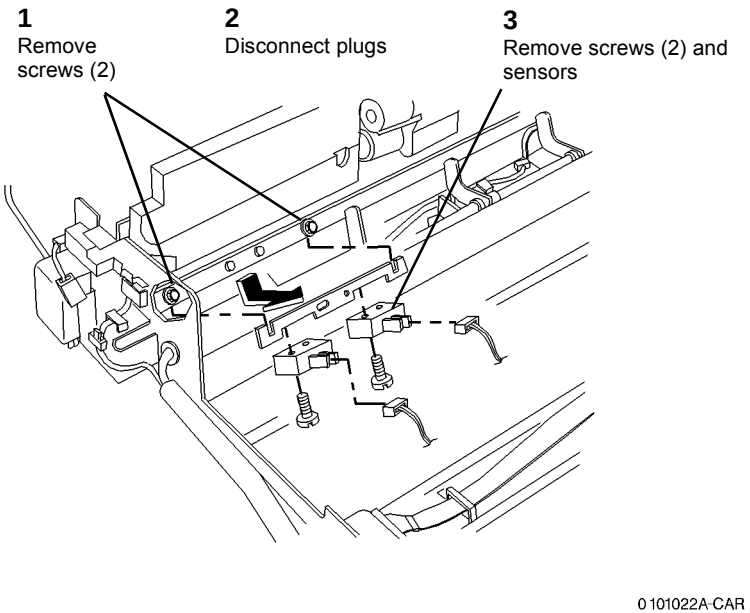


Figure 1 Removing Size Sensors 1/2

REP 5.13 DADF Belt Motor Assembly

Parts List on PL 20.6

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (REP 5.18).
2. Remove DADF Belt Motor Assembly (Figure 2).

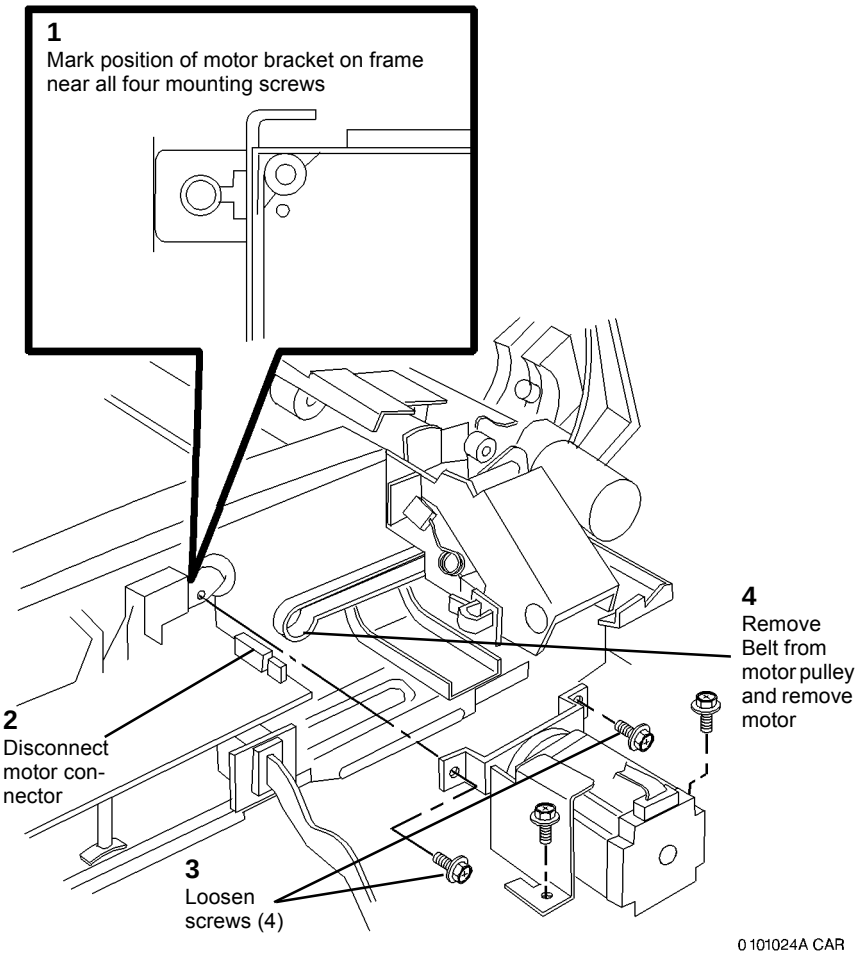


Figure 1 Removing DADF Belt Motor Assembly

Replacement

NOTE: *Align motor bracket with marks on frame before tightening screws.*

REP 5.14 Duplex Sensor

Parts List on PL 20.7

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove following:
   a. Front Cover (PL 20.1)
   b. Rear Cover (REP 5.18)
   c. Top Cover (PL 20.2)
2. Loosen screws (2) and remove Feed Motor from mounting (REP 5.5).
3. Remove Duplex Sensor (Figure 1).
   a. Remove screws (2).
   b. Lift Duplex Chute to disengage lower mounts.
   c. Lift rear end of Duplex Chute so that Duplex Sensor is visible. Harness remains connected.
   d. Remove screw and remove Duplex Sensor.

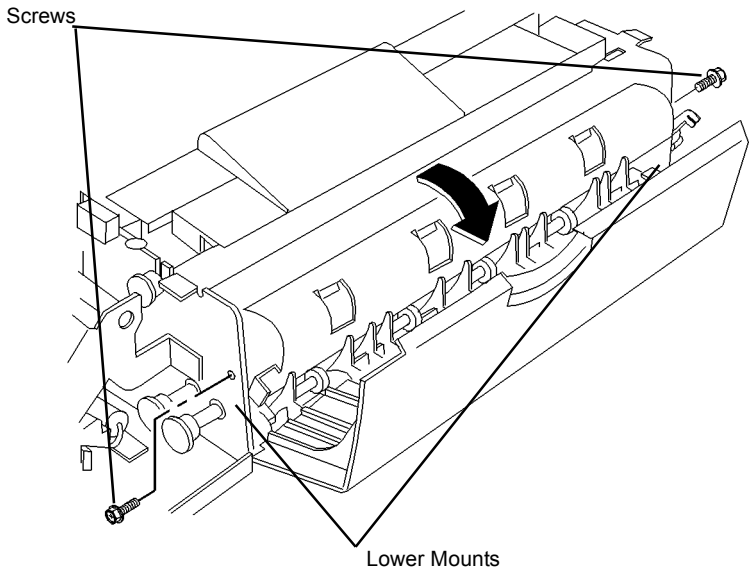


Figure 1 Removing Duplex Sensor

REP 5.15 Registration Pinch Roll

Parts List on PL 20.8

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

NOTE: *Do not damage or scratch surface of Registration Pinch Roll. (Scratches may cause skewing.)*

1. Remove following:
   a. Front Cover (PL 20.1)
   b. Rear Cover (REP 5.18).
   c. Registration Gate Solenoid (REP 5.2).
2. Remove Gate (Figure 1).

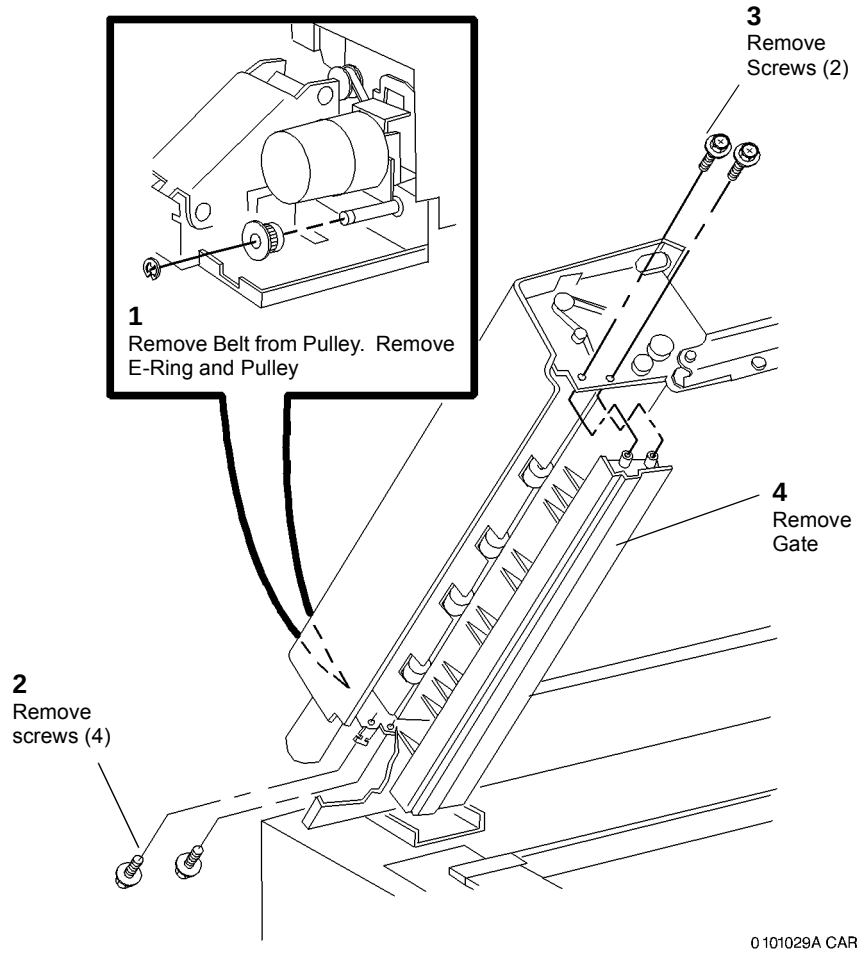


Figure 1 Removing Gate

3. Remove Gate (Figure 2).

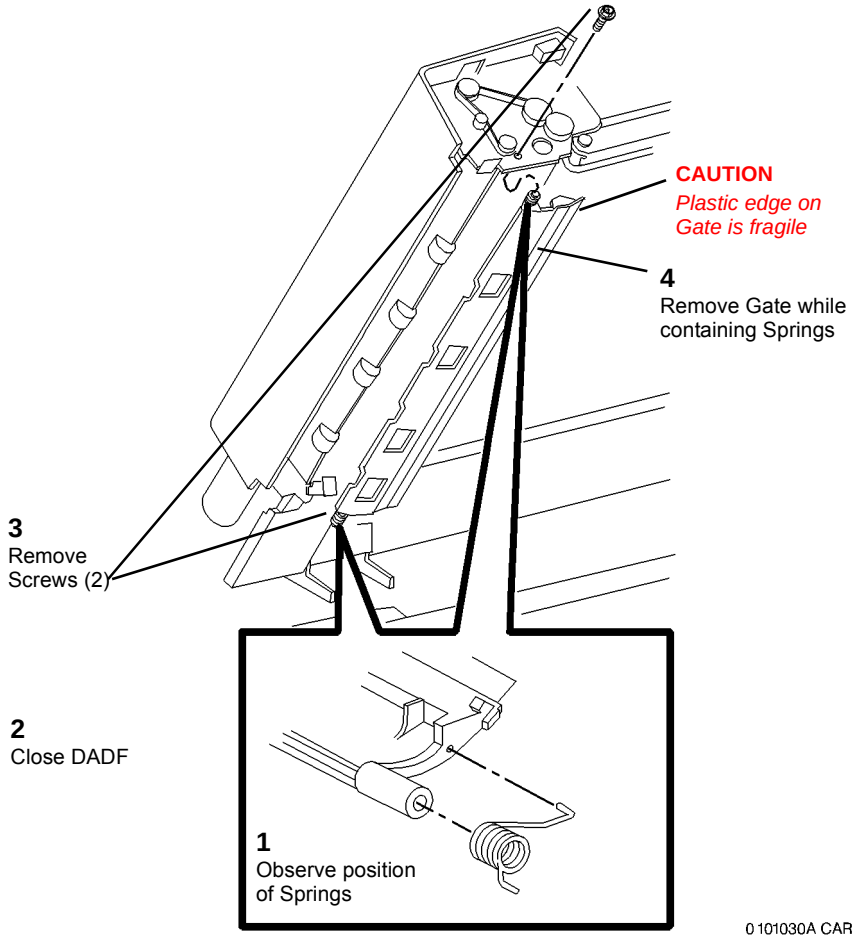


Figure 2 Removing Gate

4. Remove Registration Pinch Roll (Figure 3).

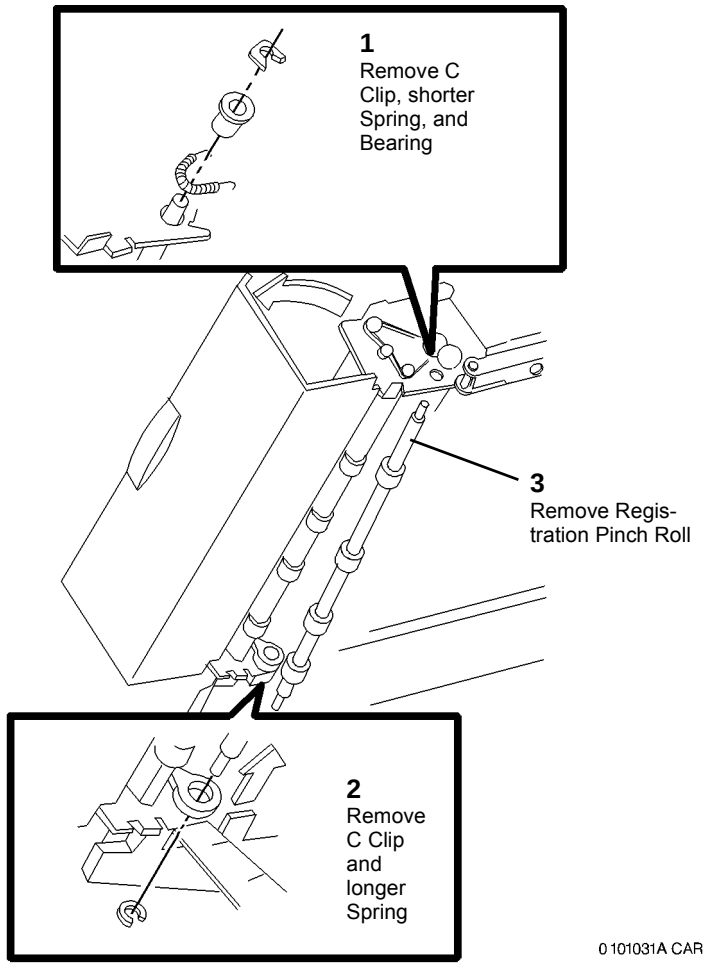


Figure 3 Removing Registration Pinch Roll

REP 5.16 Exit Motor Assembly

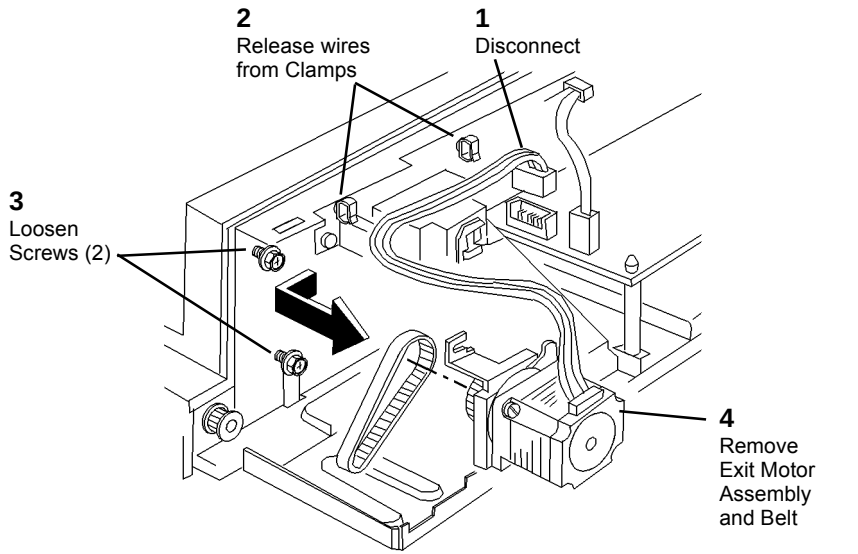
Parts List on PL 20.9

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (REP 5.18).
2. Remove Exit Motor Assembly (Figure 1).
   a. Disconnect connector.
   b. Release clamps (2) and remove wire.
   c. Loosen screws (2).
   d. Remove belt.
   e. Remove Exit Motor Assembly.

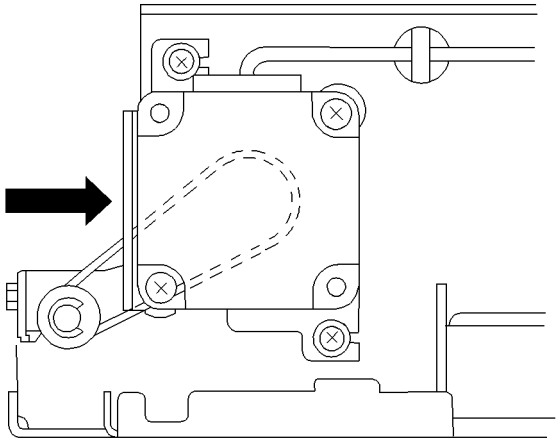


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Figure 1 Removing Exit Motor Assembly

Replacement

NOTE: *Belt should be tight but not stretched before tightening motor mounting screws* (Figure 2).



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Figure 2 Tightening Exit Motor Assembly Mounting Screws

REP 5.17 Document Transport

Parts List on PL 20.10

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Front Cover (PL 20.1).
2. Remove Document Transport (Figure 1).
   a. Loosen screws (3).

CAUTION

Document Handler rises quickly after lowering when Document Transport is removed.

   b. Support bottom of Document Transport and remove it by pulling up and off mounting screws.

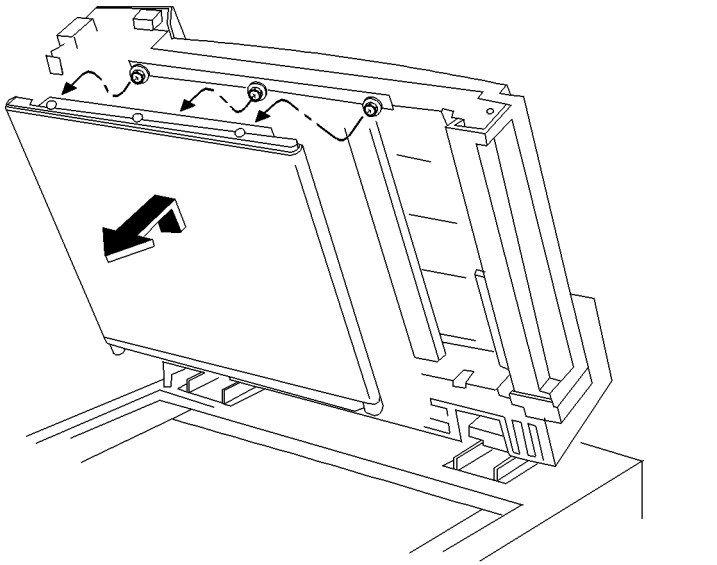


Figure 1 Removing Document Transport

REP 5.18 Rear Cover

Parts List on PL 20.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

CAUTION

LED harness breakage occurs if Rear Cover is removed without disconnecting LED plug

1. Loosen Screws (3) and remove Rear Cover enough to disconnect LED harness from DADF Control PWB.

REP 5.19 Platen Belt

Parts List on PL 20.10

Removal

WARNING

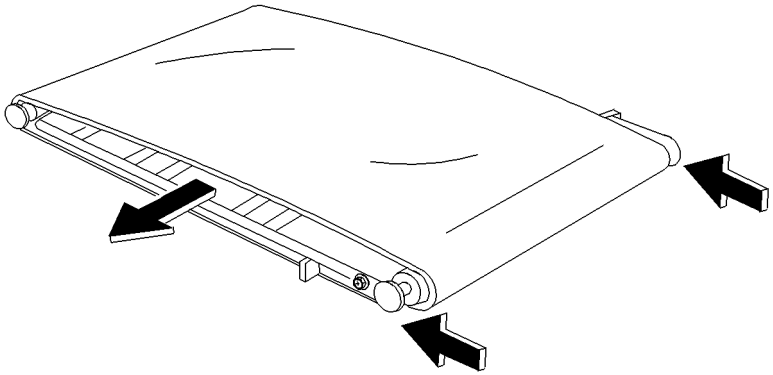
To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

NOTE: *After replacing Platen Belt, reset HFSI counter. Enter DC135 HFSI Counters Diag. Screen (NVM 005-805).*

WARNING

Switch off the power and disconnect power cord.

1. Remove Front Cover (PL 20.1).
2. Remove Document Transport (REP 5.17).
3. Remove Platen Belt (Figure 2).
   a. Loosen screws (2).
   b. Move shaft support in direction of arrow.
   c. Remove Platen Belt.

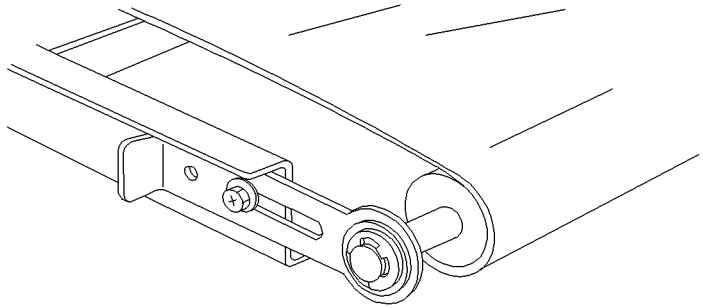


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Figure 1 Removing Platen Belt

Replacement

NOTE: *Lock shaft support by matching hole with frame's detent (Figure 3).*



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Figure 2 Lock shaft support

NOTE: *Make sure that both sides of Platen Belt are correctly set in pulley (Figure 4).*

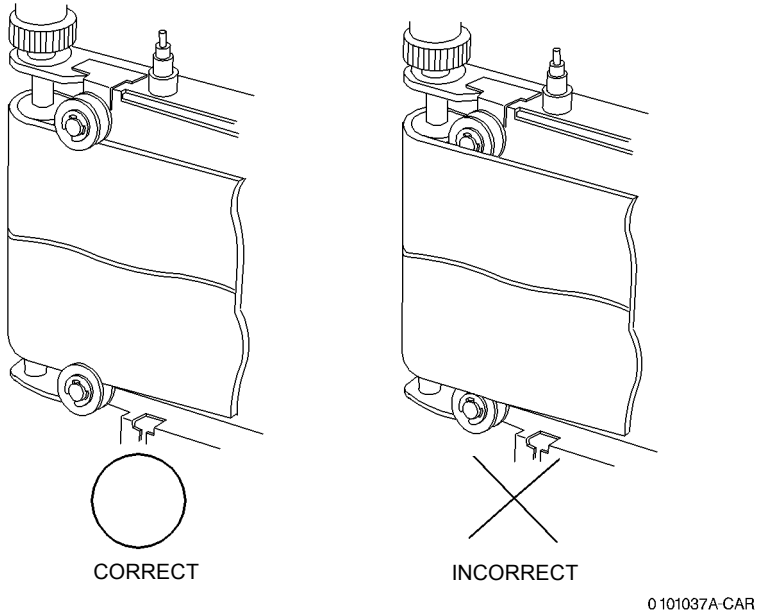


Figure 3 Install Platen Belt

1. Connect power cord and switch on power.
2. Enter DC330 [5-055]. Press START button and press the Stop button in 15 seconds. Check the belt position. If the belt has moved to either side,
3. Rotate Platen Belt for 15 seconds. Press STOP button. Check the Belt position. If the belt moved to either side, check the installation of the Shaft Supports.

REP 6.1 ROS

Parts List on PL 3.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Right Cover (REP 14.3).
2. Remove Rear Cover (REP 14.2).

CAUTION

Image quality defects result if covers on ROS cleaning openings are removed.

3. Remove ROS (Figure 1).
   a. Carefully observe position of wiring harness for later reinstallation.
   b. Remove Harness from Harness Clips.
   c. Disconnect Harness P/Jís (2).
   d. Remove Screws (2).
   e. Pull out ROS to remove it.

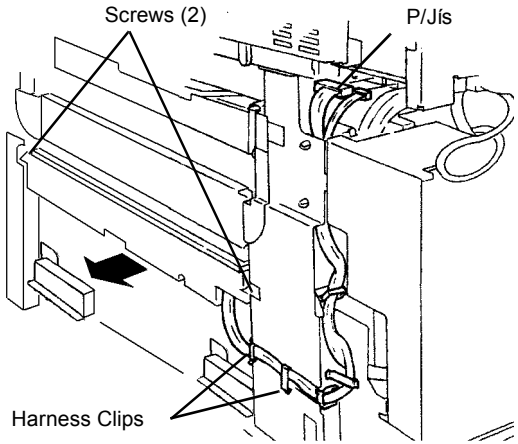


Figure 1 Removing ROS

Replacement

After machine reassembly perform following:

1. DC956 Belt Edge.
2. DC685 Color Registration Control (ADJ 9.6).

REP 6.2 Platen Glass

Parts List on PL 18.3

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open DADF.
2. Remove Platen Glass (Figure 1).

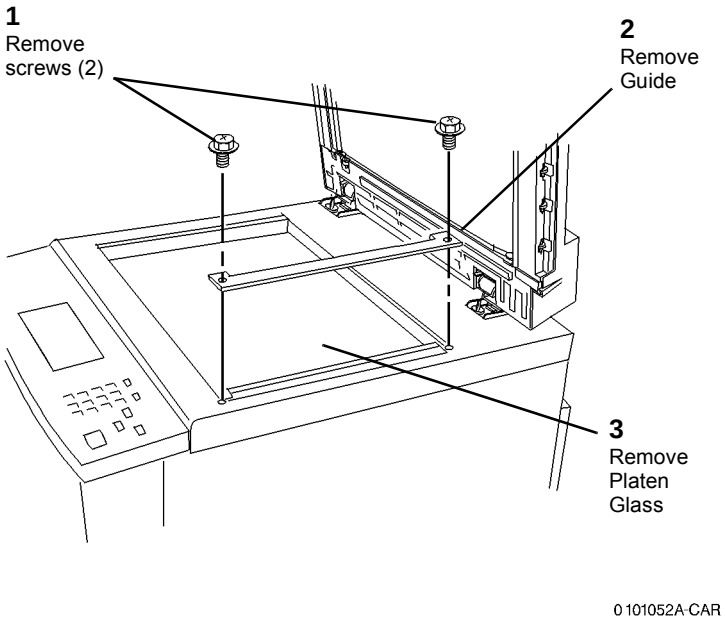


Figure 1 Removing Platen Glass

Replacement

NOTE: *Press Platen Glass in direction of arrow A; Press Right Side Plate in direction of arrow B (Figure 2).*

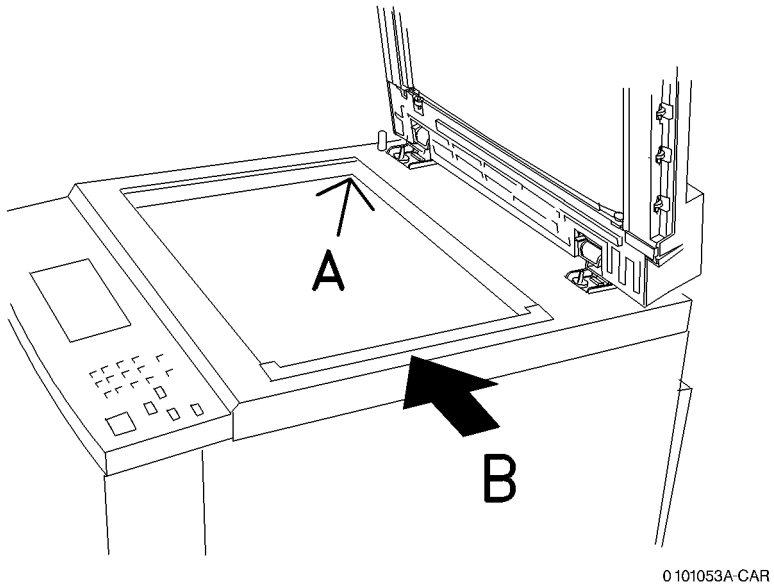


Figure 2 Positioning Platen Glass

REP 6.3 IIT Top Cover

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove DADF (REP 5.1).
2. Remove Screws (2) from top front of IIT Top Cover.
3. Loosen Screws (2) under Control Panel, each end.
4. Remove Screw from rear of IIT Top Cover, left side.
5. Remove Document Output Tray.
6. Remove Document Output Tray support bracket Screws (4) and Brackets (2).
7. Lift IIT Top Cover to access harness connectors (2). Disconnect P/Jís and remove IIT Top Cover.

REP 6.4 Lens Kit

Parts List on PL 18.4

Removal

1. Remove Platen Glass (REP 6.2).

CAUTION

In the following, do not remove any red screws.

2. Remove the Lens/CCD Chassis (Figure 1).
   a. Mark the position of the APS Sensor bracket.
   b. Remove the Screw (1) and the APS Sensor with bracket.
   c. Remove Lens Cover Screws (6) and Lens Cover.
   d. Disconnect CCD Connector (not shown).
   e. Remove Lens/CCD Chassis Screws (4) and remove Lens/CCD Chassis.

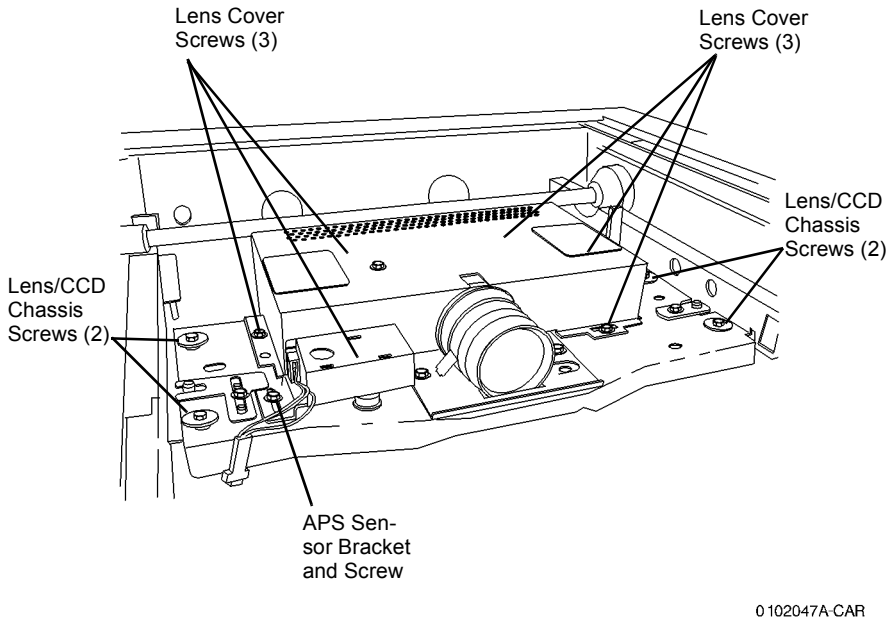


Figure 1 Removing Lens Cover

Replacement

NOTE: *Align APS Sensor with marks made in step 2a before tightning screw.*

NOTE: *Perform DC945 IIT Calibration (ADJ 9.7).*

REP 6.11 Carriage Cables

Parts List on PL 18.5

Removal

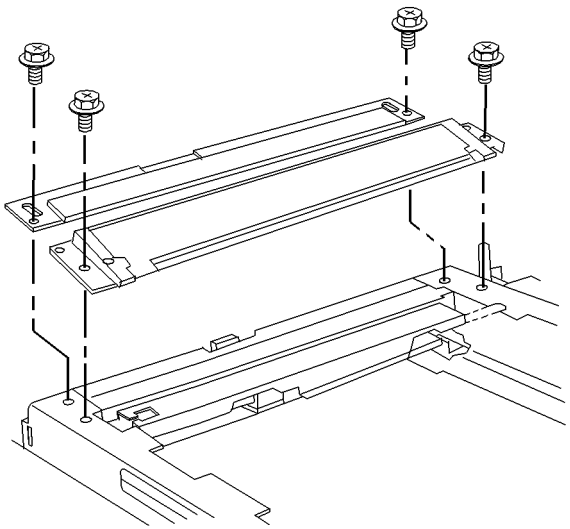
WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

NOTE: *This page describes how to remove Rear Carriage Cable.*

NOTE: *Do not replace both cables at same time. Remove front and rear cables separately.*

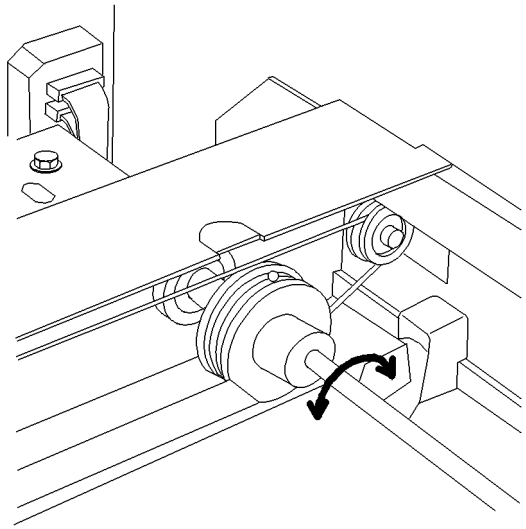
1. Remove DADF (REP 5.1).
2. Remove Platen Glass (REP 6.1).
3. Remove IIT Top Cover (REP 6.3).
4. DADF machines: Remove registration gate and plate (Figure 1).
   a. 1. Remove screws (2).
   b. 2. Remove Registration Gate.
   c. 3. Remove screws (2).
   d. 4. Remove plate.



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Figure 1 Removing Registration Gate and Plate

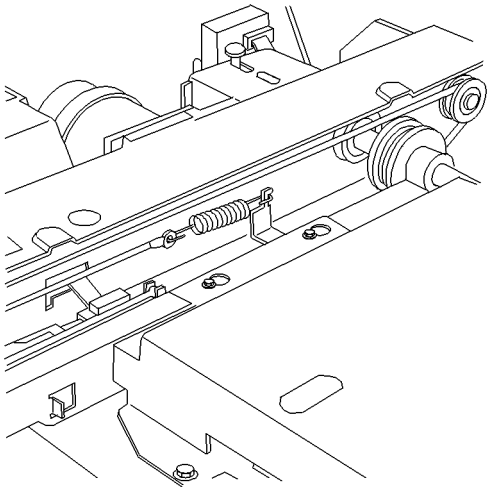
5. Remove Full Rate Carriage from IIT Frame (REP 6.14). Keep lamp wire harness connector connected.
6. Move Half Rate Carriage so that position of Carriage Cable Ball on Capstan is one of following: (Figure 2).
   - Two Carriage Cable Rolls in front and rear.
   - Carriage Cable Ball is directly above.



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Figure 2 Positioning Half Rate Carriage

7. Remove Carriage Cable (Figure 3).
   a. Remove spring.
   b. Separate spring and cable.
   c. Pull out ball from hole.
   d. Remove cable.

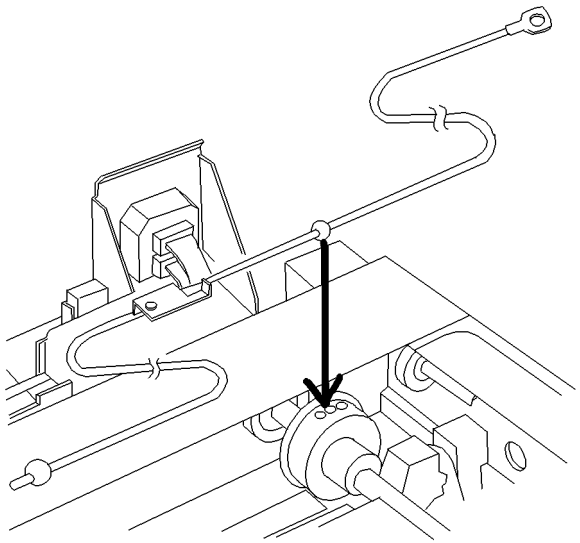


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Figure 3 Removing Carriage Cable

Replacement

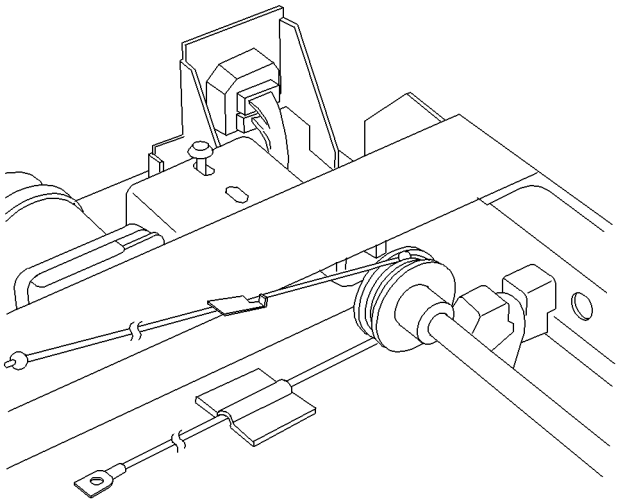
1. Wind Carriage Cable into pulley (Figure 4).
   a. Insert Carriage Cable Ball into groove of pulley.



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Figure 4 Winding Carriage Cable

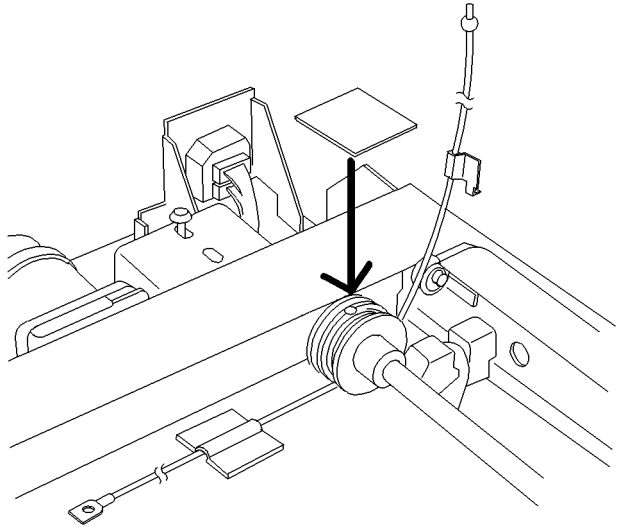
b. Wind cable (spring hook side) onto pulley for 2.5 turns. Tape and lock cable (on spring hook) on frame (Figure 5).



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Figure 5 Locking Cable

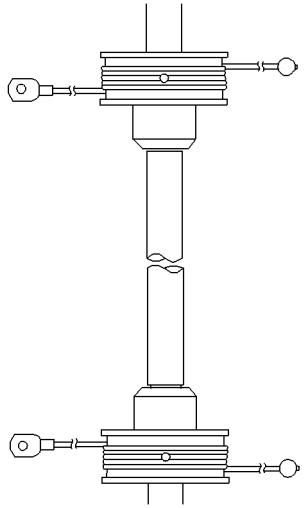
c. Wind cable (ball side) onto pulley for 2.4 turns. Tape and lock cable wound on pulley (Figure 6).



0101067A-CAR

Figure 6 Locking Cable

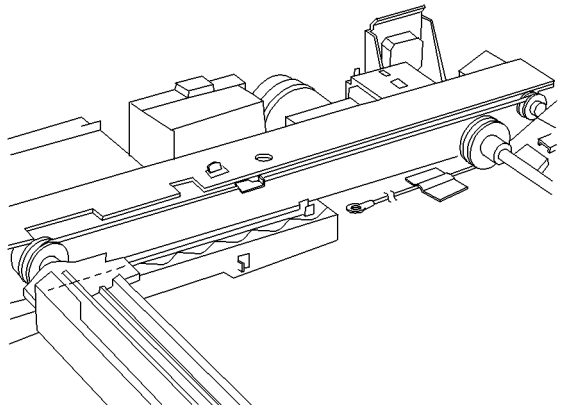
d. Check orientation of ends and number of carriage cable windings (front/rear) (Figure 7). Reconfigure as required.



0101068A-CAR

Figure 7 Carriage Cable Windings

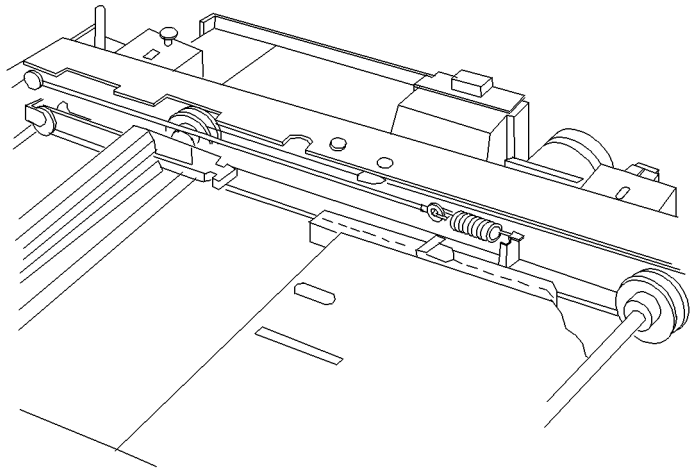
2. Install Carriage Cable (ball side) (Figure 8).
   a. Hook cable to pulley (from bottom to top).
   b. Hook cable to large pulley in Half Rate Carriage (from top to bottom).
   c. Insert ball into frame hole.



0101069A-CAR

Figure 8 Installing Carriage Cable (ball side)

3. Install Carriage Cable (spring hook side) (Figure 9).
   a. Hook cable to pulley (from bottom to top).
   b. Hook cable to small pulley in Half Rate Carriage (from bottom to top).
   c. Hook cable to stud (from bottom to top).
   d. Install spring on cable (spring hook side).
   e. Hook spring onto frame.
4. Remove tape from cable.
5. Install Full Rate Carriage in IIT Frame.
6. Adjust positions of Full Rate/Half Rate Carriages (ADJ 6.1).
7. Manually move Full Rate Carriage to make sure it moves smoothly.
8. Install remaining parts.



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Figure 9 Installing Carriage Cable (spring hook side)

REP 6.12 Carriage Motor

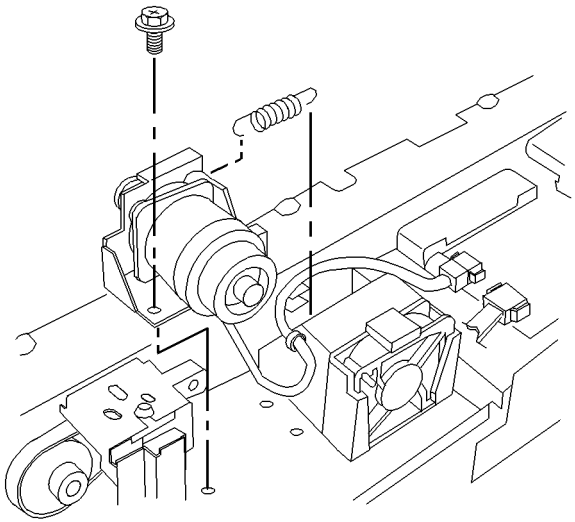
Parts List on PL 18.5

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove DADF (REP 5.1).
2. Remove Platen Glass (REP 6.2).
3. Remove IIT Top Cover (REP 6.3).
4. Remove Carriage Motor (Figure 1).
   a. Release clamps (2).
   b. Disconnect connector.
   c. Remove screws (3).
   d. Remove spring.
   e. Remove Carriage Motor.



0101071A-CAR

Figure 1 Removing Carriage Motor

REP 6.13 Exposure Lamp

Parts List on PL 18.6

Removal

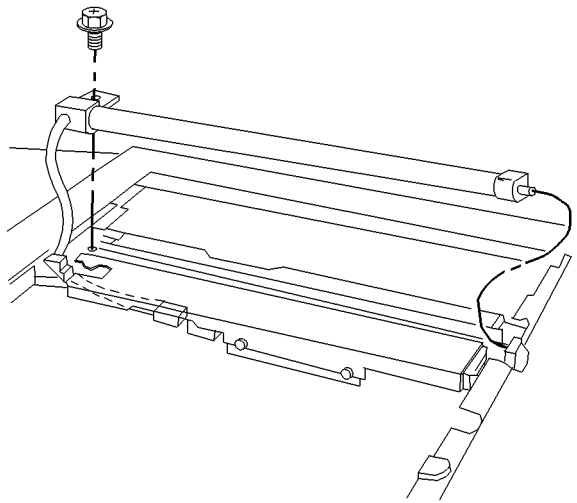
WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

CAUTION

Avoid touching exposure lamp with your bare hands during removal or installation. Oil from your hands will contaminate surface of lamp.

1. Open DADF (REP 5.1).
2. Remove Platen Glass (REP 6.2).
3. Move Full Rate Carriage to frame notch.
4. Remove Exposure Lamp (Figure 1).
   a. Disconnect connector.
   b. Remove screw.
   c. Remove Exposure Lamp.



0101072A-CAR

Figure 1 Removing Exposure Lamp

REP 6.14 Lamp Wire Harness

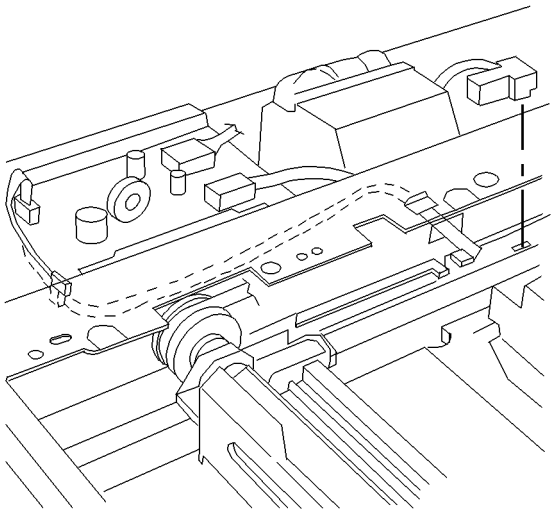
Parts List on PL 18.6

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

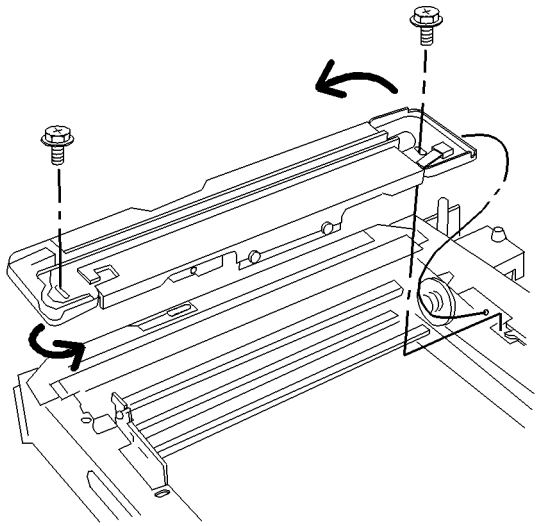
1. Remove DADF (REP 5.1).
2. Remove Platen Glass (REP 6.2).
3. Remove IIT Top Cover (REP 6.3).
4. Disconnect Lamp Wire Harness connector and release Clamp Hook (Figure 1).
   a. Disconnect connector.
   b. Release clamp.
   c. Remove clamp.
   d. Release hook.



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Figure 1 Disconnecting Lamp Wire Harness

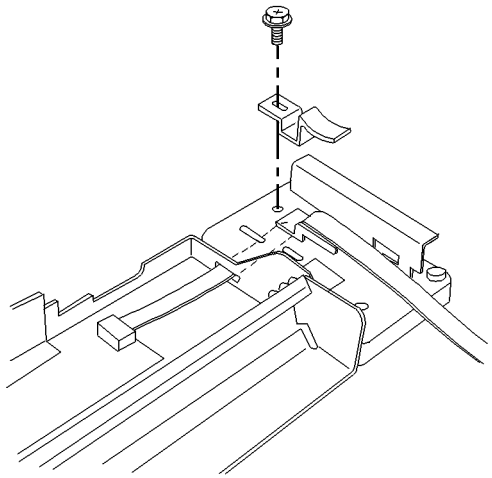
5. Remove Full Rate Carriage (Figure 2).
   a. Remove screws (2).
   b. Remove Full Rate Carriage.



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Figure 2 Removing Full Rate Carriage

6. Remove Lamp Wire Harness from Full Rate Carriage (Figure 3).
   a. Flip Full Rate Carriage.
   b. Remove screw.
   c. Remove guide.
   d. Disconnect connector.
   e. Remove Lamp Wire Harness.



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Figure 3 Removing Lamp Wire Harness

Replacement

NOTE: *After reinstalling parts, adjust positions of Full Rate/Half Rate Carriages (ADJ 6.1).*

REP 7.1 Tray 5

Parts List on PL 2.2

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (REP 14.2).
2. Remove Power Switch Cover (REP 14.6).
3. Remove Upper Rear Left Cover (REP 14.4).
4. Close Left Door Transport.
5. Remove Tray 5 (Figure 1).
   a. Observe position of harness for later reinstallation.
   b. Disconnect Tray 5 connector.
   c. Disconnect harness Clip from frame.
   d. Remove Screws (2).
   e. Pull out Tray 5 while applying a small amount of lifting force to right side.

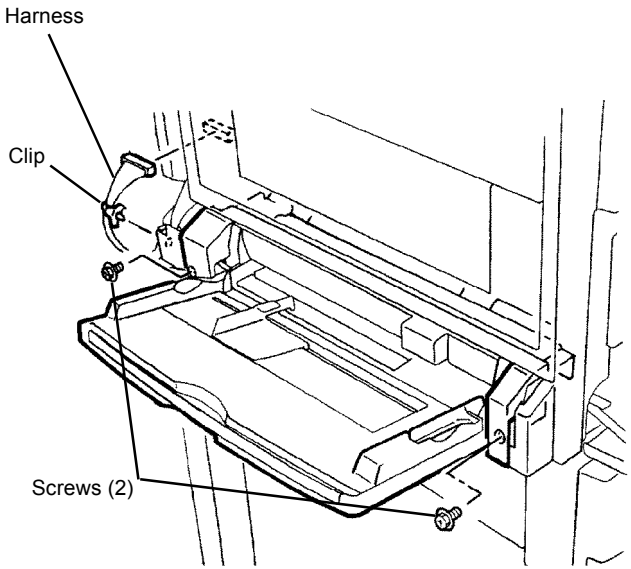


Figure 1 Removing Tray 5

Replacement

CAUTION

Duplex Paper Guide must be in up position before installing Tray 5.

1. Open Left Door Transport. Pivot and hold Duplex Paper Guide against Left Door Transport and then close Left Door Transport.
2. Install Tray 5.

REP 7.2 Tray 5 Feed Roll

Parts List on PL 2.14

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (REP 14.2).
2. Remove Power Switch Cover (REP 14.6).
3. Remove Upper Rear Left Cover (REP 14.4).
4. Close Left Door Transport.
5. Remove Tray 5 (REP 7.1).
6. Remove Chute (Figure 1).
   a. Remove Screws (3).
   b. Lift to remove Chute.

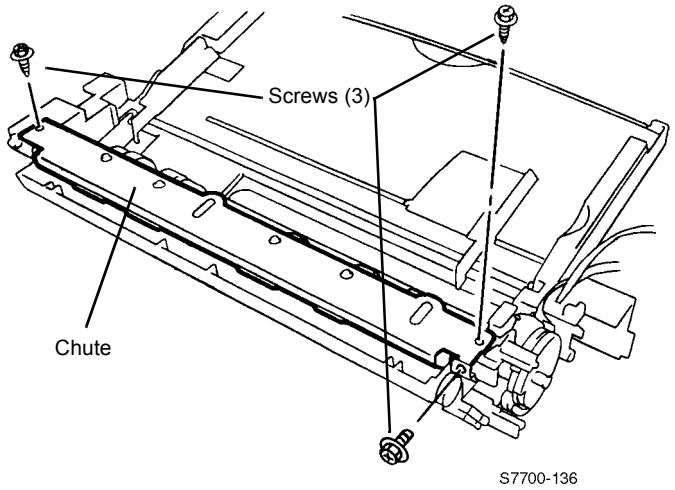


Figure 1 Removing Chute

7. Remove Feed Roll (Figure 2).
   a. Release Locking Tab from groove on shaft and slide Lock Roll away from Feed Roll.
   b. Slide Feed Roll to disengage drive pin and remove Feed Roll.

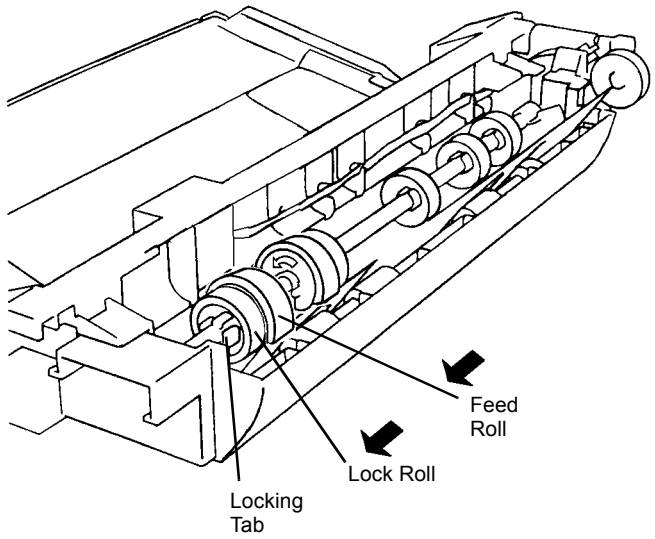


Figure 2 Removing Feed Roll

Replacement

Ensure Arrow is positioned as shown (Figure 3).

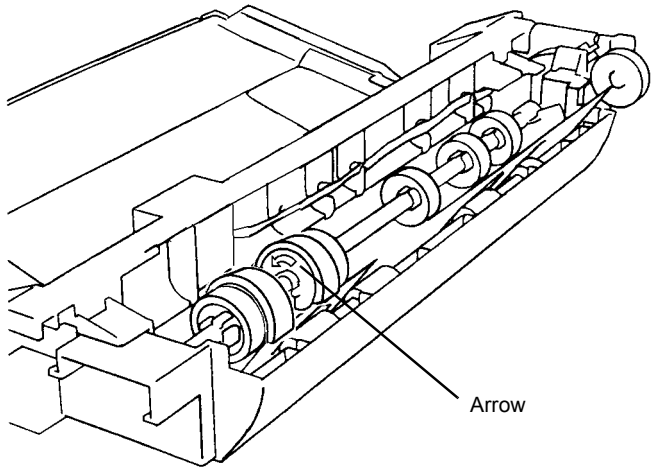


Figure 3 Installing Feed Roll

REP 7.3 Tray 1 Feeder

Parts List on PL 2.3

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Pull out Tray 1 to paper loading position.
2. Open Tray 1 Left Door.
3. Remove Tray 1 Feeder (Figure 1).

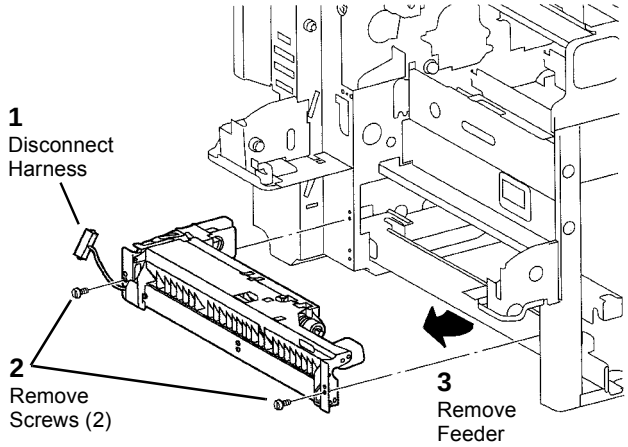


Figure 1 Removing Tray 1 Feeder

REP 7.4 Tray 1 Feed/Lift Motor

Parts List on PL 2.4

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Pull out Tray 1 to paper loading position.
2. Open Tray 1 Left Door.
3. Remove Tray 1 Feeder (REP 7.3).
4. Remove Tray 1 Feed Motor (Figure 1).

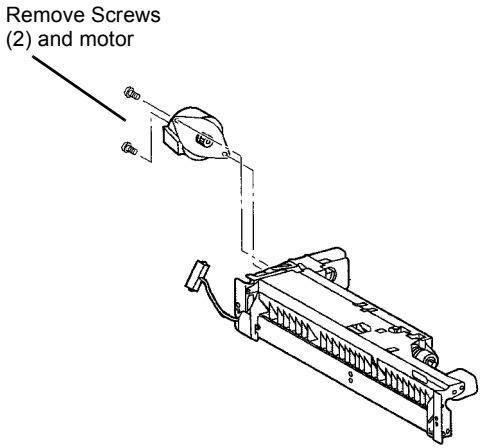


Figure 1 Removing Tray 1 Feed Motor

REP 7.5 Tray 1 Paper Size Sensor

Parts List on PL 2.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (REP 14.2).
2. Remove High Voltage Power Supply Chassis (REP 1.6).

NOTE: *Step 3 can be omitted if Low Voltage Power Supply P/Jís are disconnected before performing step 4.*

3. Remove 3.3 VDC and 5 VDC Low Voltage Power Supply (REP 1.4).
4. Remove Chassis for 3.3 VDC and 5 VDC Low Voltage Power Supply.
   a. Release harnesses from harness clips (3).
   b. Remove screws (4) and remove Chassis.
5. Remove Developer Drive Module (REP 4.3).
6. Remove Tray 1 Paper Size Switch (Figure 1).
   a. Disconnect P/J.
   b. Remove Screws (2) and remove Tray 1 Paper Size Switch.

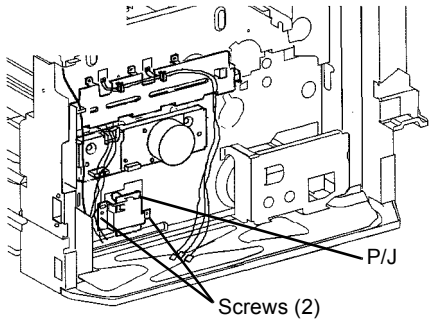


Figure 1 Removing Tray Paper Size Switch

REP 7.6 Tray 3

Parts List on PL 16.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open HCF Left Door.
2. Remove Tray 3 (Figure 1).
   a. Pull out Tray 3.
   b. Remove Screw.
   c. Pivot bottom of Tray Lock away from Tray 3 and pull out Tray 3 to remove it.

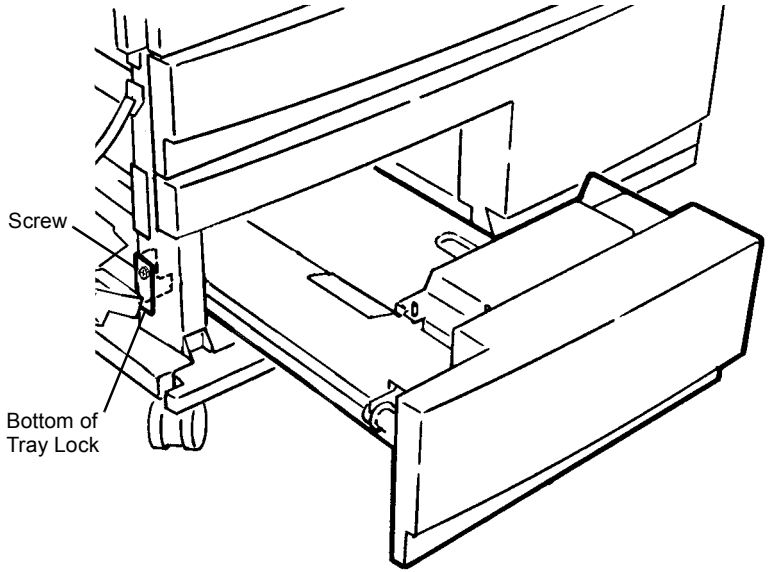


Figure 1 Removing Tray 3

REP 7.7 Tray 4

Parts List on PL 16.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Pull out Tray 4.
2. Remove Tray 4 (Figure 1).
   a. Pull out Tray 4.
   b. Remove Transport Screws (2).
   c. Remove Tray Lock Screws (2).
   d. Remove Tray Lock.
   e. Pull out Tray 4 to remove it.

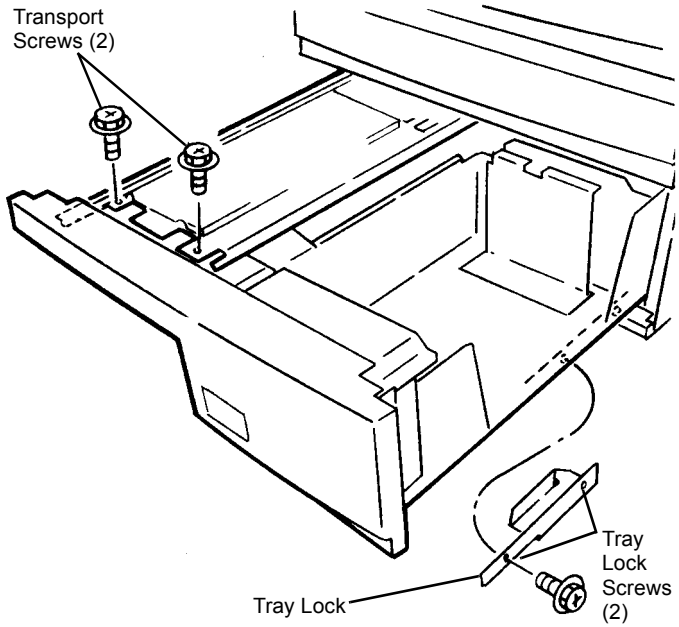


Figure 1 Removing Tray 4

REP 7.8 Tray 1

Parts List on PL 2.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Pull out Tray 1.
2. Lift end of tray to disengage lock on rail (not visible) and remove tray.

REP 7.9 Tray 2

Parts List on PL 16.2

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Pull out Tray 2.
2. Lift end of tray to disengage lock on rail (not visible) and remove tray.

REP 7.10 Tray 2 Feeder

Parts List on

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Pull out Tray 2.
2. Remove the Left Lower Cover. (PL 16.16)
3. Remove the Tray 2 Feeder (Figure 1).

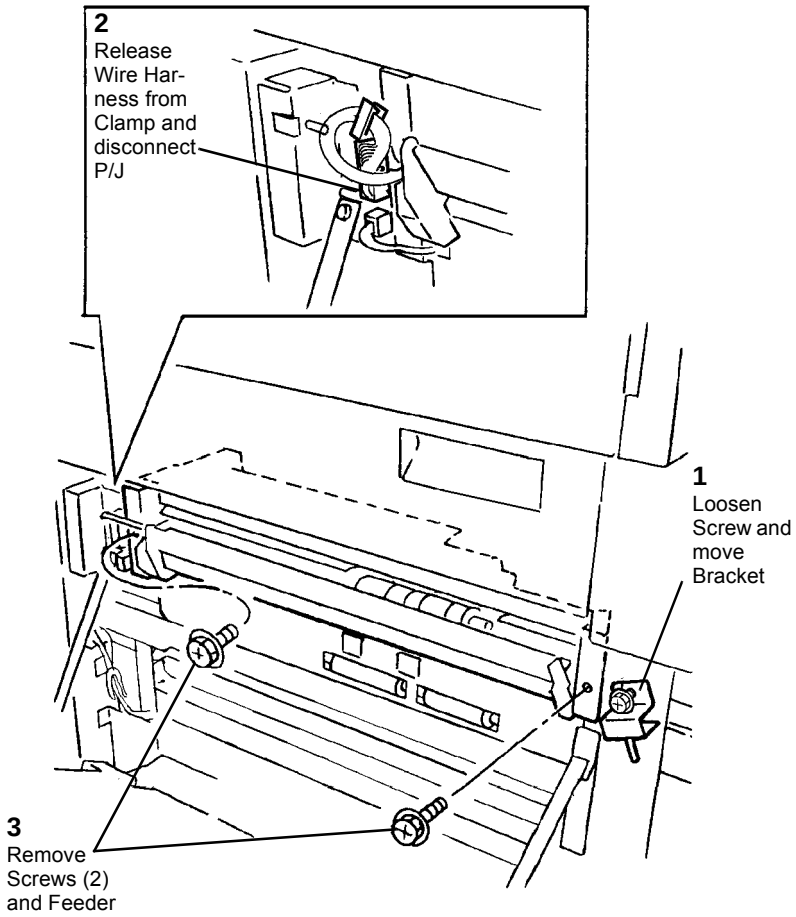


Figure 1 Removing the Tray 2 Feeder

REP 7.11 Tray 3 Feeder

Parts List on

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Tray 2.
2. Pull out Tray 3 and Tray 4.
3. Open the Left Cover.
4. Remove the Lower Chute.
5. Remove the Tray 3 Feeder Assembly (Figure 1).

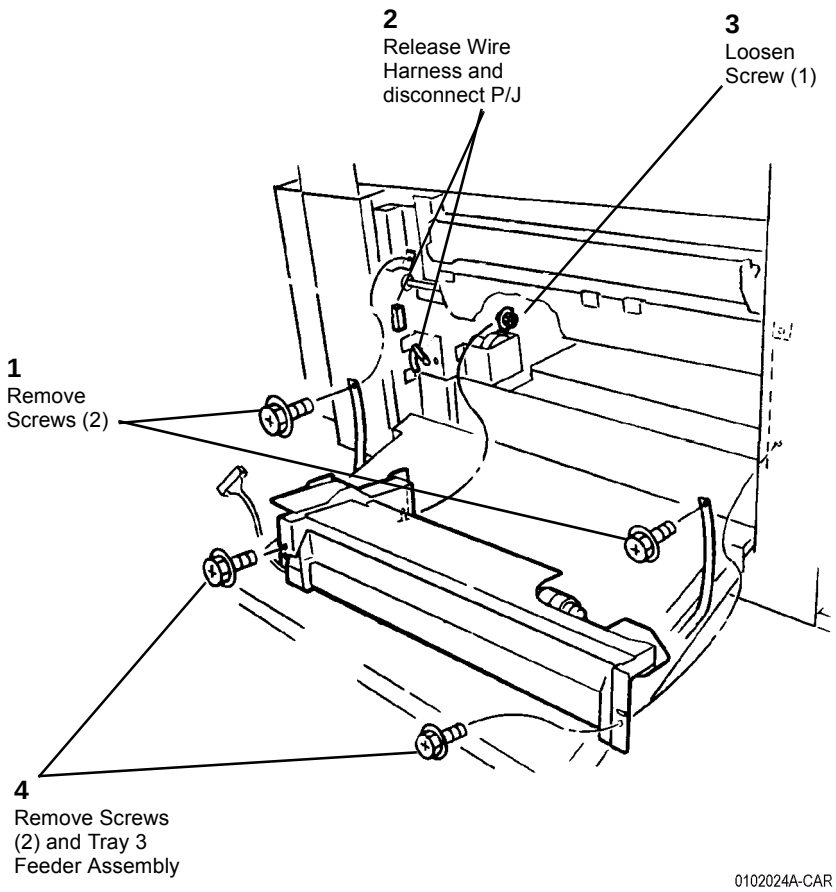


Figure 1 Removing the Tray 3 Feeder Assembly

6. Remove the Tray 3 Feeder from mounting bracket (Figure 2).

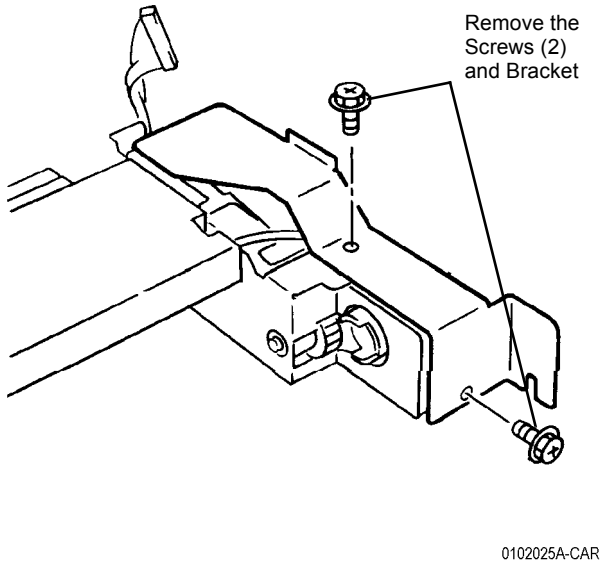


Figure 2 Removing Tray 3 Feeder from Bracket

REP 7.12 Tray 4 Feeder

Parts List on

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove the Tray 2.
2. Pull out the Tray 3/4.
3. Remove the Stud Bracket (Figure 1).

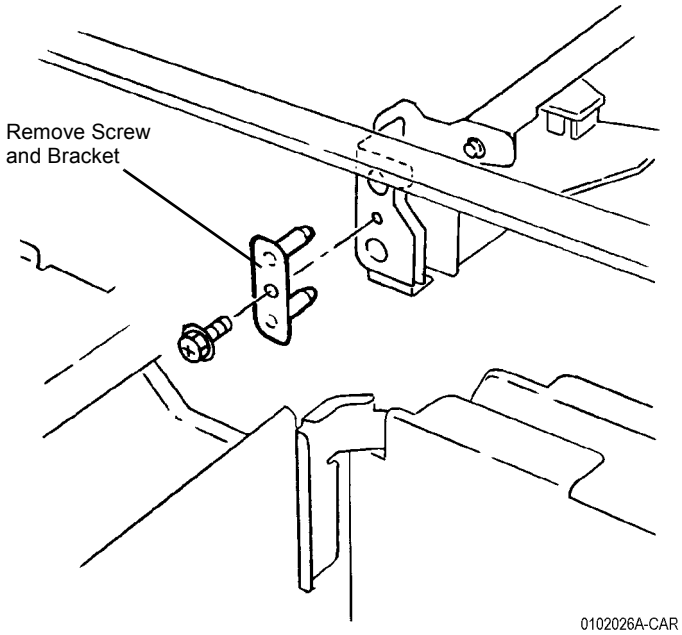


Figure 1 Removing Stud Bracket

4. Remove the Tray 4 Feeder Assembly (Figure 2).

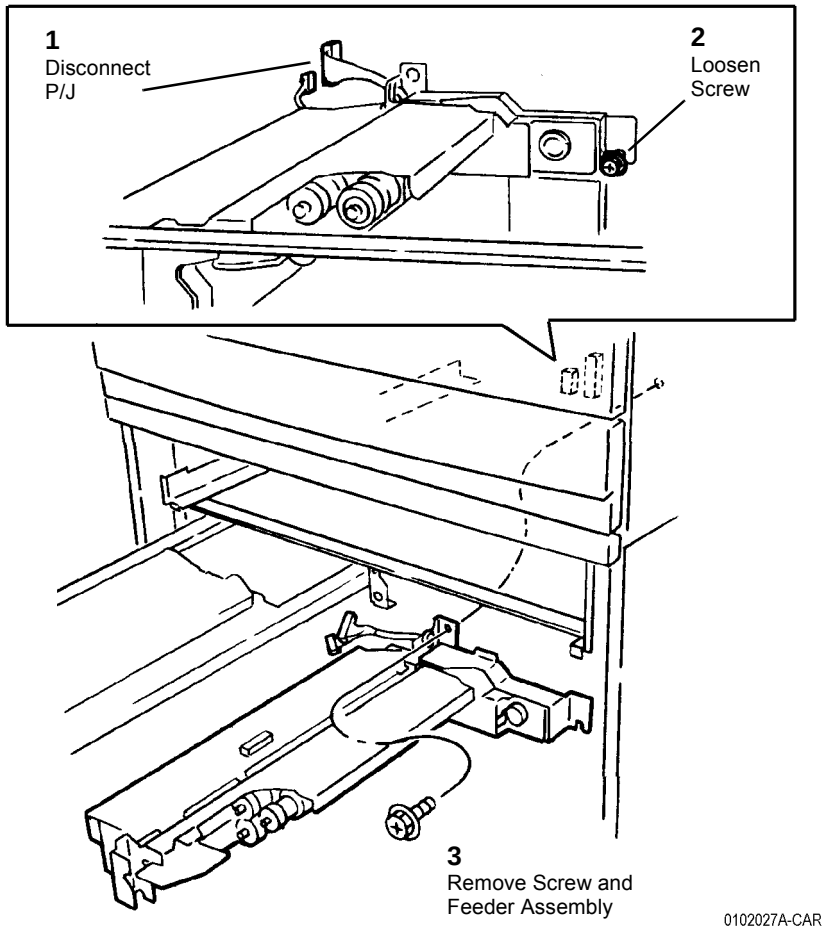


Figure 2 Removing the Tray 4 Feeder Assembly

5. Remove the Tray 4 Feeder Guides (Figure 3).

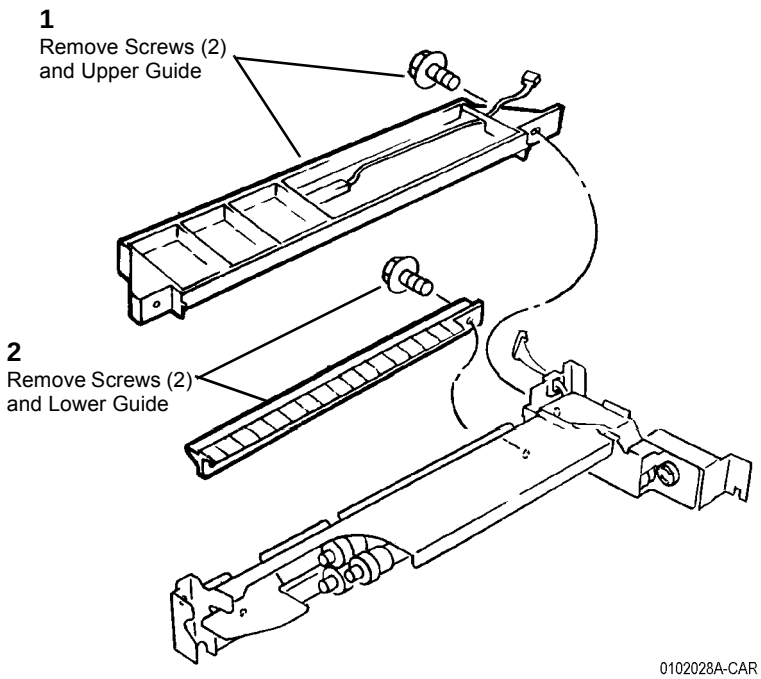


Figure 3 Removing the Guides

6. Remove Brackets from Tray 4 Feeder Assembly (Figure 4).

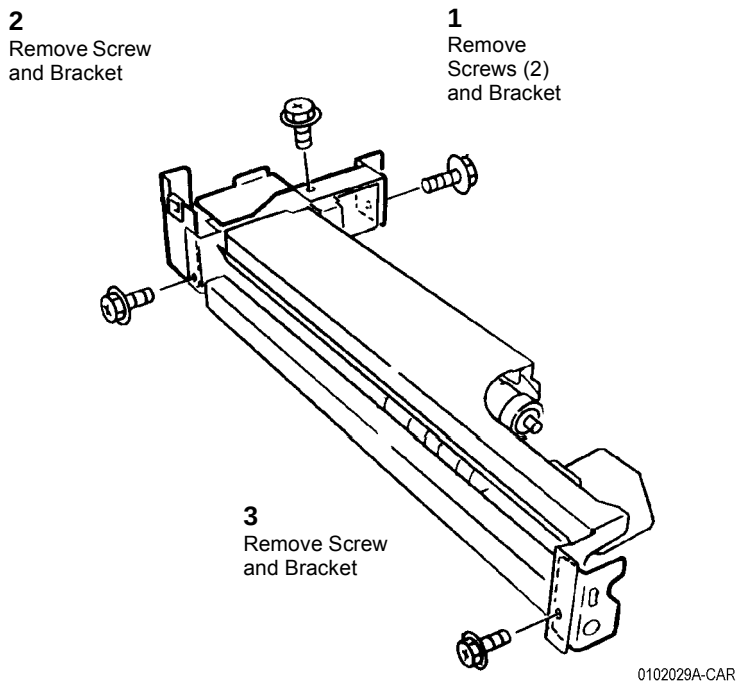


Figure 4 Removing the Brackets

REP 8.1 Left Cover Assembly

Parts List on PL 2.9

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (REP 14.2).
2. Remove Power Switch Cover (REP 14.6).
3. Remove Upper Rear Left Cover (REP 14.4).
4. Close Left Cover Assembly.
5. Remove Tray 5 (REP 7.1).
6. Remove Fuser Front Cover (REP 14.8).
7. Disconnect Electrical Connectors (3) (Figure 1).

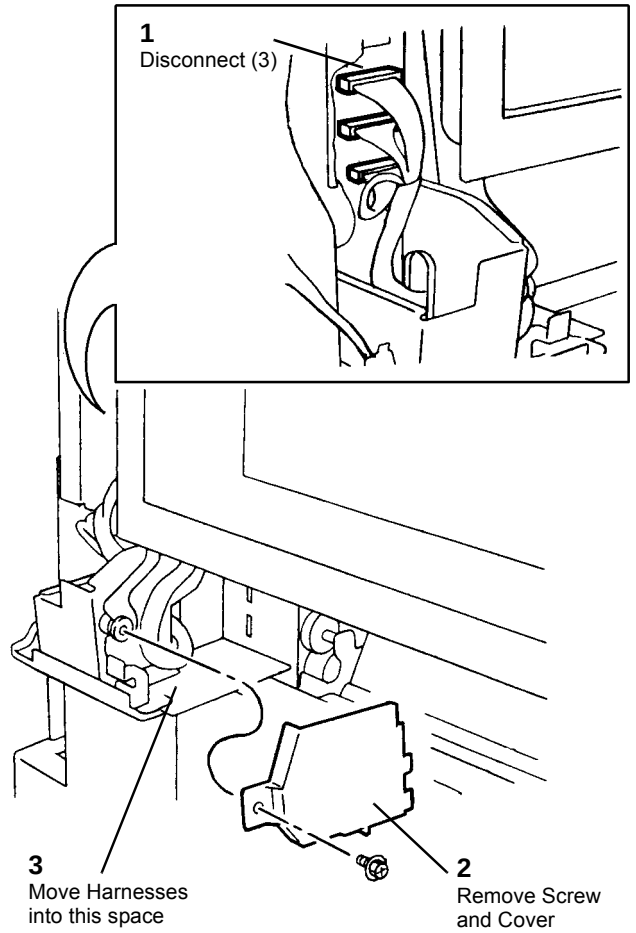


Figure 1 Disconnecting Electrical Connectors (3)

8. Remove Left Cover Assembly (Figure 2).

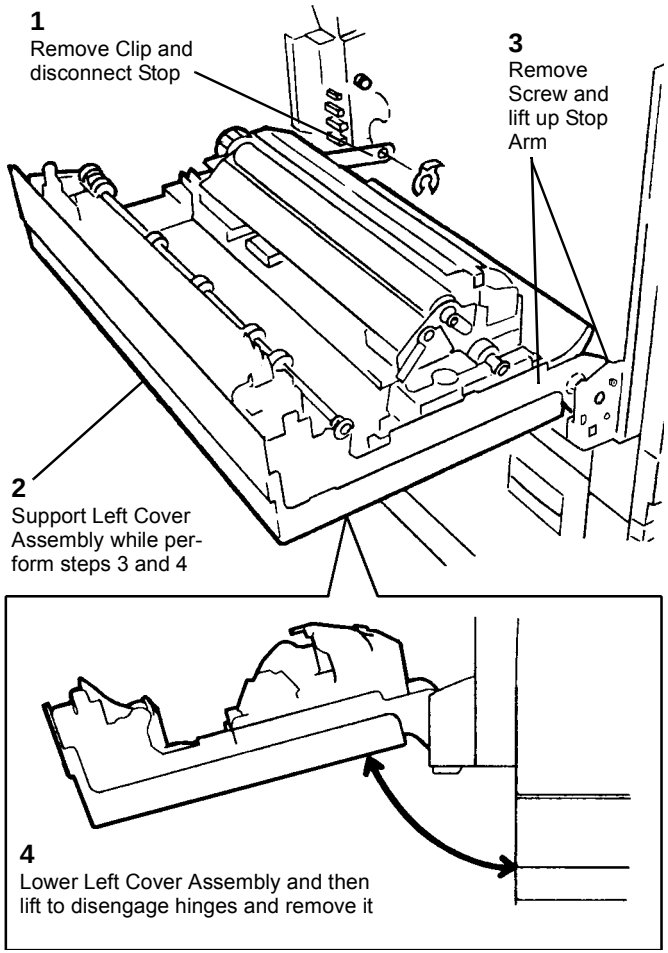


Figure 2 Removing Left Cover Assembly

Replacement

Install Left Cover Assembly on hinge pins, manually align marks on Motion Damper, then tip up transport to engage Motion Damper gears and connect stop arm on Stop Pin (Figure 3).

CAUTION

Before closing Left Cover Assembly to connect harness, hold up black plastic Duplex Baffle while closing transport.

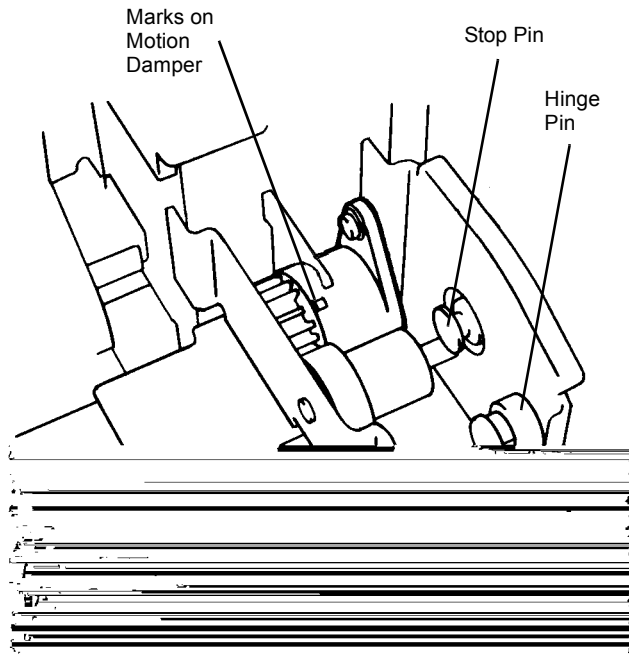


Figure 3 Aligning Marks on Motion Damper

REP 8.2 Duplex Chute

Parts List on PL 2.8

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (REP 14.2).
2. Remove Power Switch Cover (REP 14.6).
3. Remove Upper Rear Left Cover (REP 14.4).
4. Close Left Cover Assembly.
5. Remove Tray 5 (REP 7.1).
6. Open and close Left Cover Assembly to allow Duplex Paper Guide to swing down.
7. Swing Duplex Paper Guide back and forth while carefully pushing Duplex Paper Guide toward rear. Key in front hinge pin will enter hinge pin slot and front hinge pin will disengage hinge pin hole. Move Duplex Paper Guide toward front to disengage rear hinge pin.

Replacement

Install Left Cover Assembly on hinge pins, manually align marks on Motion Damper, then tip up transport to engage Motion Damper gears and connect stop arm on Stop Pin (Figure 3).

CAUTION

Before closing Left Cover Assembly to connect harness, hold up black plastic Duplex Baffle while closing transport.

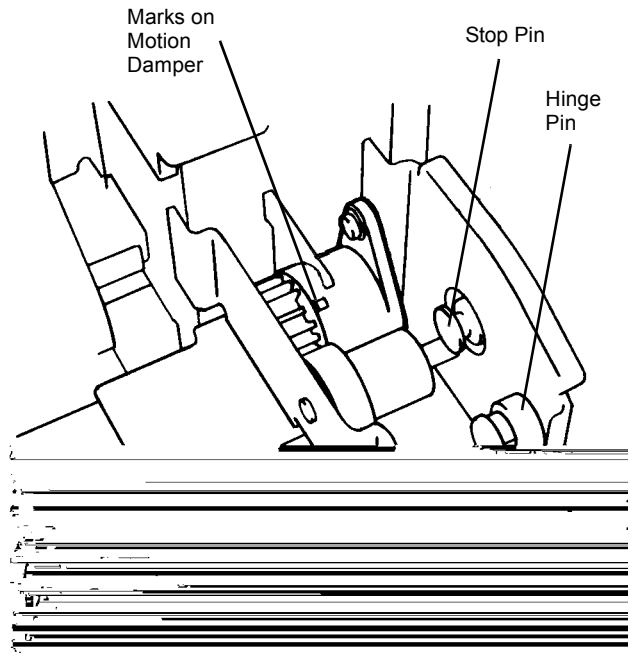


Figure 1 Aligning Marks on Motion Damper

REP 8.3 Duplex Transport Assembly

Parts List on PL 2.7

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Duplex Transport Assembly (Figure 1).
   a. Remove Clip and Left Upper Cover.
   b. Loosen Screws and remove Duplex Transport Assembly.

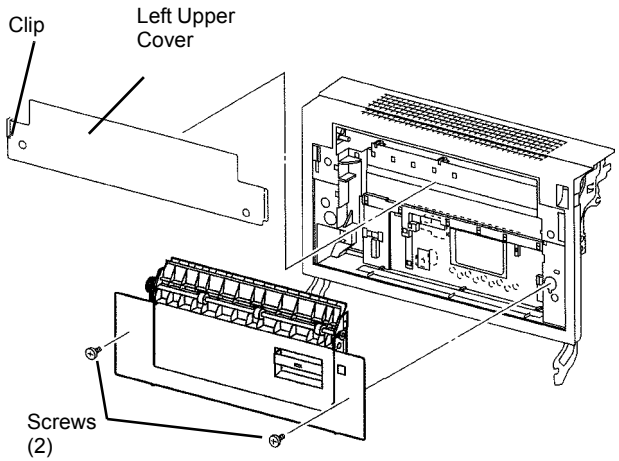


Figure 1 Removing Duplex Transport Assembly

Replacement

REP 8.5 Inverter Transport

Parts List on PL 11.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Left Cover Assembly.
2. Remove Inverter Transport (Figure 1).
   a. Remove E-rings (2), Bearings (2), and Transport Shaft.
   b. Remove Screws (2).
   c. Remove Inverter Transport.

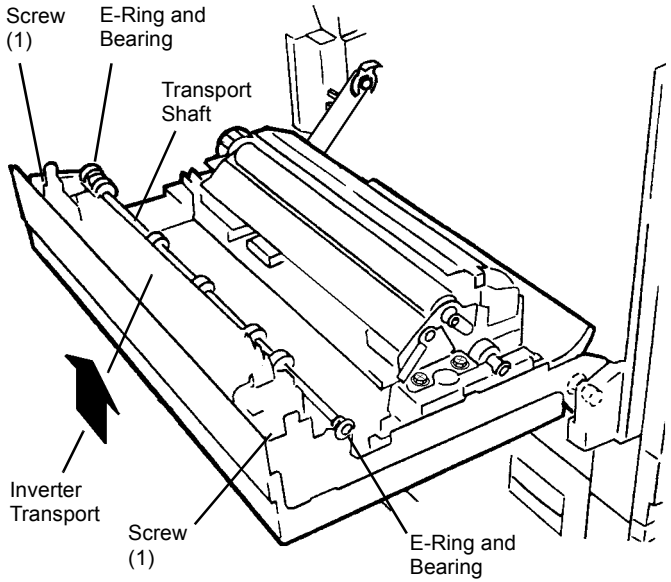


Figure 1 Removing Inverter Transport

REP 8.6 Registration Transport Assembly

Parts List on PL 2.6

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (REP 14.2).
2. Remove Power Switch Cover (REP 14.6).
3. Remove Upper Rear Left Cover (REP 14.4).
4. Close Left Cover Assembly.
5. Remove Tray 5 (REP 7.1).
6. Remove Left Cover Assembly (REP 8.1).
7. Remove Registration Transport Assembly (Figure 1).
   a. Observe position of harness for later reinstallation.
   b. Remove Screws (2).
   c. Pivot top of Registration Transport out and disconnect Harness.
   d. Lift to remove Registration Transport.

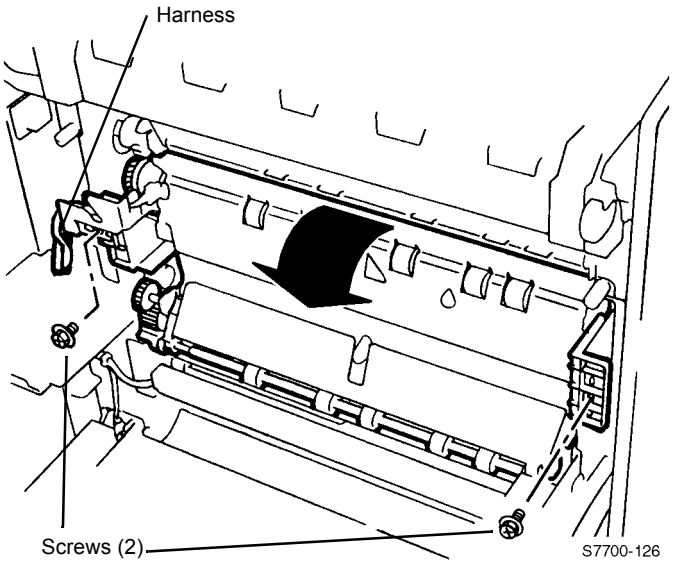


Figure 1 Removing Registration Transport Assembly

Replacement

NOTE: *bearing is equipped with two Anti-rotation Tabs. If one breaks during removal, install bearing so other tab is employed.*

NOTE: *Check that ground spring is pressing against Bronze bushing after installing it.*

REP 8.7 Exit Transport Assembly

Parts List on PL 2.10

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Remove Fuser Front Cover (REP 14.8).
3. Remove Rear Cover (REP 14.2).
4. Remove Power Switch Cover (REP 14.5).
5. Remove Exit Transport (Figure 1).
   a. Disconnect P/Jís (2).
   b. Remove Screws (3)
   c. Rotate Exit Transport slightly to disengage Tab and then lift to remove Exit Transport.

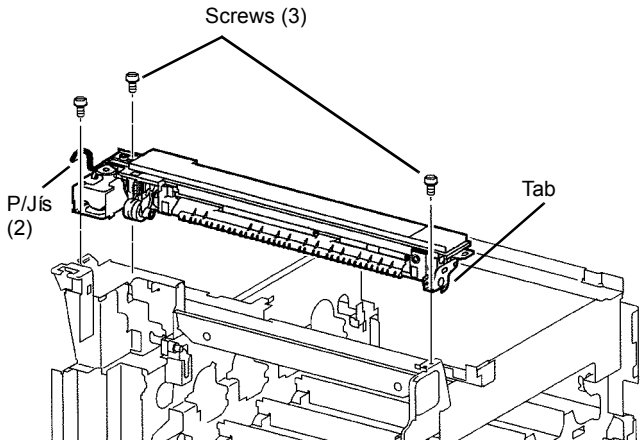


Figure 1 Removing Exit Transport

REP 9.1 Drum Cartridge

Parts List on PL 4.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Drum Cartridge.
   a. Open Left Cover Assembly.
   b. Open Front Cover.
   c. Actuate orange release and pull out Drum Cartridge.

CAUTION

Drum Cartridge photoreceptor damage is likely if Drum Cartridge is handled carelessly. This results in image quality defects. Use caution when Drum Cartridge is removed from machine.

   d. Place Drum Cartridge in a black bag.

REP 9.2 ROS Shutter Motor

Parts List on PL 8.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (REP 14.2).
2. Remove Power Switch Cover (REP 14.6).
3. Remove Upper Rear Left Cover (REP 14.4).
4. Close Left Cover Assembly.
5. Remove MSI Tray (REP 7.1).
6. Remove Left Cover Assembly (REP 8.1).
7. Remove Registration Transport (REP 8.6).
8. Remove Shutter Actuator(Figure 1).

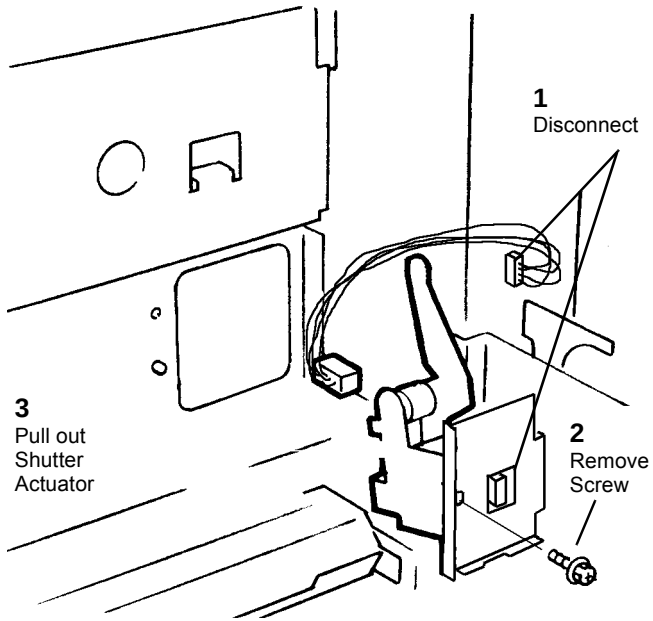


Figure 1 Removing Shutter Actuator

Replacement

Ensure solenoid arm engages

REP 9.3 Waste Toner Cartridge Cover

Parts List on PL 4.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Remove Waste Cartridge Cover (Figure 1).
   a. Open Waste Cartridge Cover.
   b. Remove Screw.
   c. Remove Waste Toner Cartridge Cover.

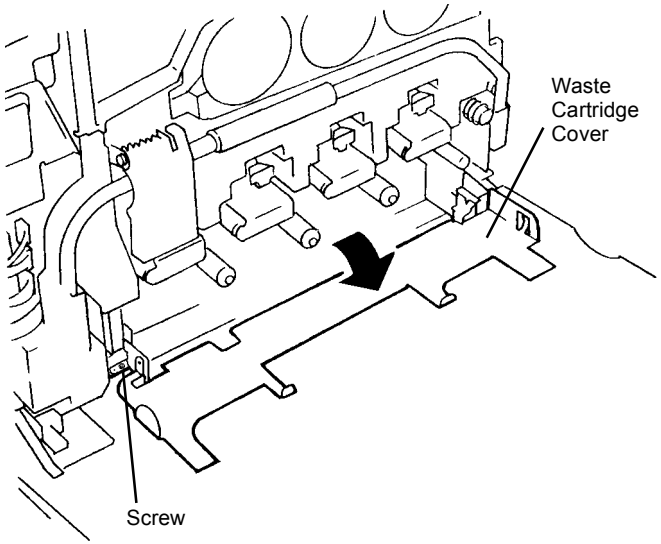


Figure 1 Removing Waste Toner Cartridge Cover

REP 9.4 Waste Toner Cartridge

Parts List on PL 4.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Remove Waste Cartridge (Figure 1).
   a. Open Waste Cartridge Cover.
   b. Release Lever and move half way down.
   c. Pull out to remove Waste Cartridge.

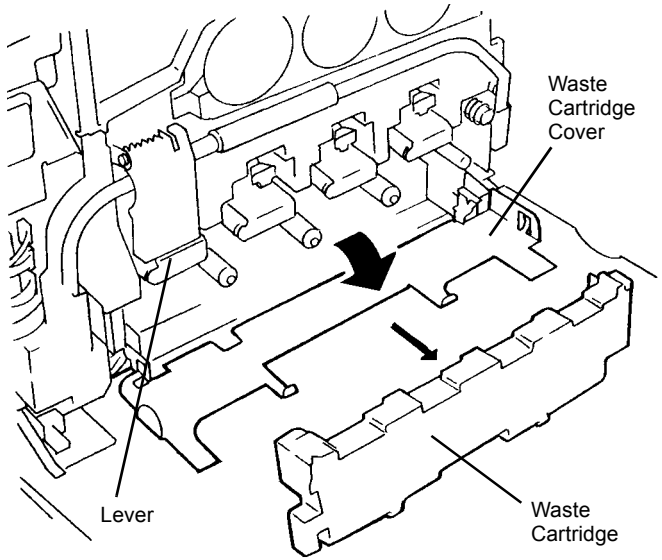


Figure 1 Removing Waste Cartridge

REP 9.5 Full Toner Sensor

Parts List on PL 4.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Remove Waste Cartridge (REP 9.4).
3. Remove Waste Cartridge Cover (REP 9.3).
4. Access Waste Cartridge Full Sensor (Figure 1).
   a. Lift Left End slightly and pull left to disengage Mounting Tabs.
   b. Rotate Sensor Support and remove. Left End harness connection limits movement.

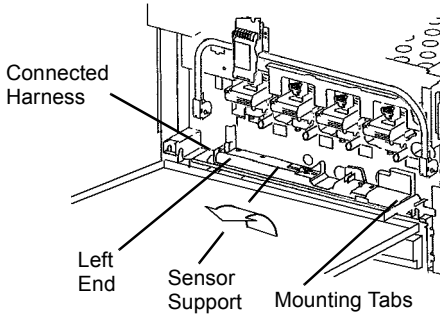


Figure 1 Accessing Waste Cartridge Full Sensor

5. Remove Waste Cartridge Full Sensor (Figure 2).
   a. Push against Sensor Head while releasing Locking Tabs.
   b. Disconnect sensor from harness.

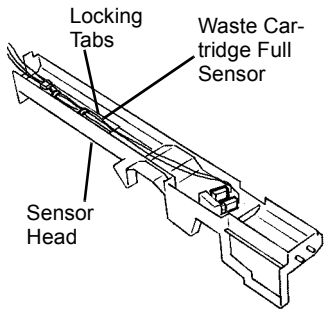


Figure 2 Removing Waste Cartridge Full Sensor

REP 9.6 Inner Cover

Parts List on PL 10.2

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Open Left Cover Assembly.
3. Remove Y, M, C, K, Drum.
4. Remove Fuser Front Cover (REP 14.8).
5. Release and move Xerographic Release Lever half way down.
6. Remove Dispenser Assembly Cover (Figure 1).
   a. Remove Screws (4).
   b. Remove Dispenser Assembly Cover.

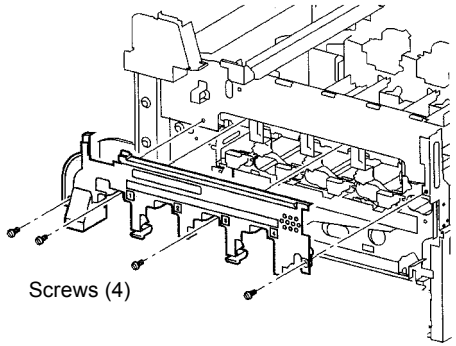


Figure 1 Removing Toner Transport Cover

REP 9.7 Toner Dispenser

Parts List on PL 6.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Remove Fuser Front Cover (REP 14.8).
3. Release and move Xerographic Release Lever half way down.
4. Remove Dispenser Assembly Cover (REP 9.6).
5. Remove Drum Cartridges as required.

CAUTION

Y must be removed first, followed in order by M, C, then K. They must be reinstalled in reverse order of removal, which is install K, C, M, and then Y.

6. Prepare to remove Toner Transport (Figure 1).
   a. Carefully pull out Toner Outlet Door while holding Housing back to shut off toner outlet.

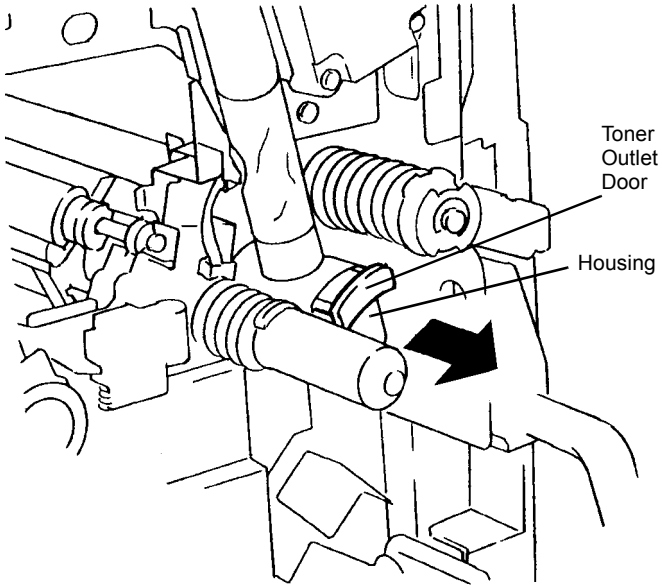


Figure 1 Closing Toner Outlet

7. Remove Toner Transport (Figure 2).
   a. Remove Screw,

CAUTION

Connection Tube may separate from upper or lower housing.

Agitator may disconnect if flex coupling is compressed enough so agitator hits inside bottom of lower housing

   b. Pull out Upper and Lower Housings together while ensuring flexible Connection Tube remains connected.

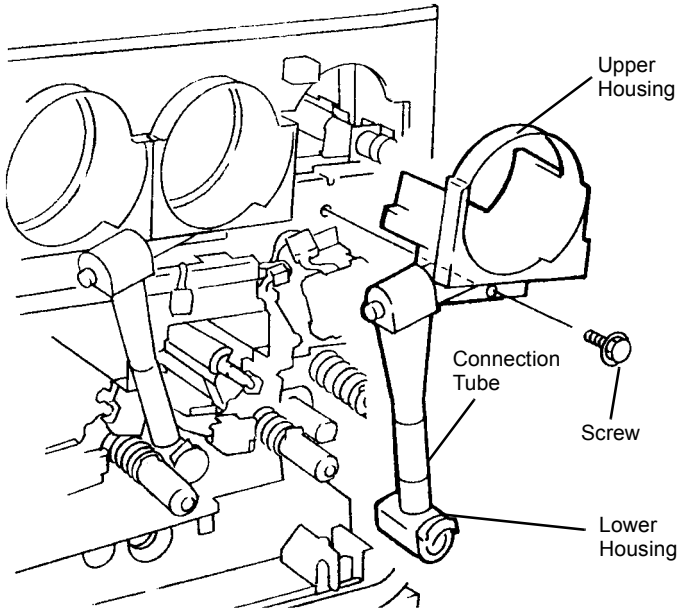


Figure 2 Removing Toner Transport

REP 9.8 Plate Assembly

Parts List on PL 4.2

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Front Cover (REP 14.7).
2. Remove Drum Cartridges.
3. Remove Waste Cartridge (REP 9.4).
4. Remove Waste Cartridge Cover (REP 9.3).
5. Remove Fuser Front Cover (REP 14.8).
6. Release and move Xerographic Release Lever half way down.
7. Remove Dispenser Assembly Cover (REP 9.6).
8. Remove all Dispenser Assemblies (REP 9.7).

CAUTION

Note position of harnesses. Correct harness routing is required for assembly.

NOTE: *In next step, do not remove sensor.*

9. Remove housing for Waste Cartridge Full Sensor (REP 9.5).
10. Disconnect Developer Housing Plugs, 4 large and 4 small (small not shown).
    Position wires straight out from machine. Wires remain stationary while removing Plate Assembly (Figure 1).

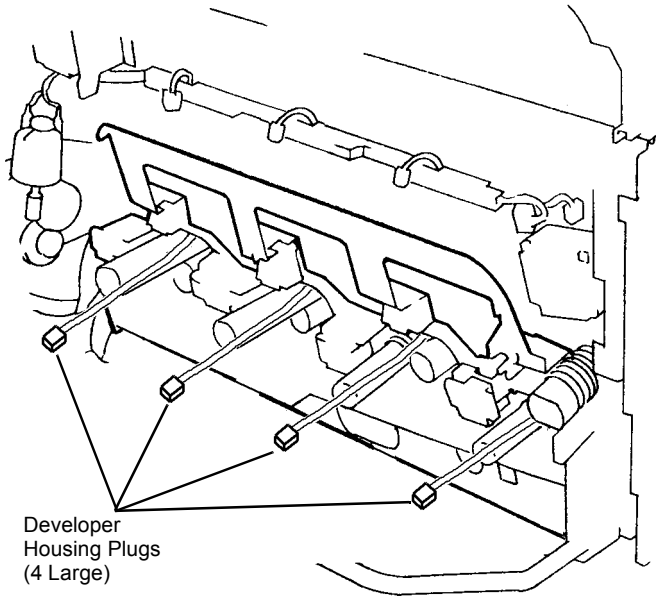


Figure 1 Disconnecting Developer Housing Plugs

11. Disconnect Developer Housing Harnesses (Figure 2).
    a. Open Harness Clip and remove harness from Clip.
    b. Disconnect Harness P/Jís (3).
    c. Remove Screw from Inner Left Harness Cover and remove cover.
    d. Remove Developer Housing Harnesses from additional harness clips (not shown, under Harness Cover).

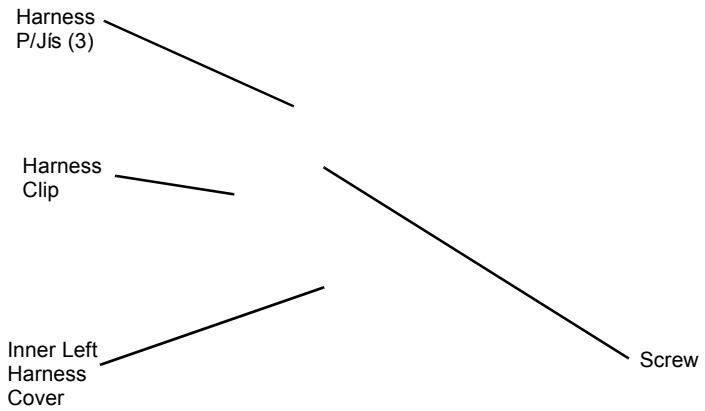


Figure 2 Disconnecting Developer Harnesses

12. Remove Plate Assembly (Figure 3).
    a. Remove Screws (6).
    b. Pull Plate Assembly toward front to remove it. Ensure harnesses are cared for.

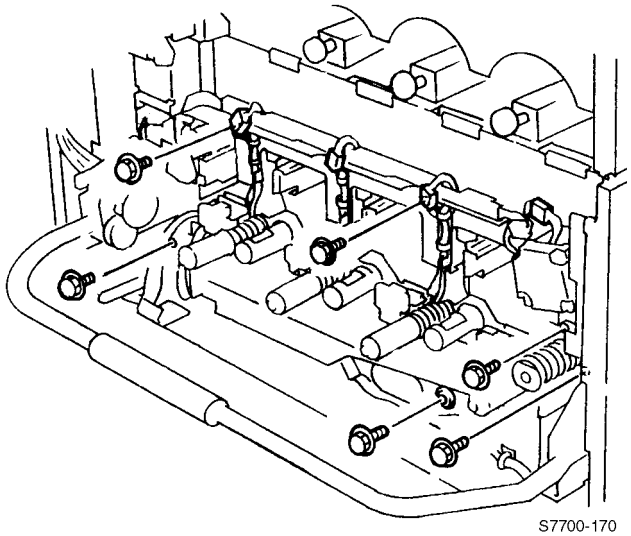


Figure 3 Removing Plate Assembly

REP 9.9 Developer Housing

Parts List on PL 6.2

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Front Cover (REP 14.7).
2. Remove Drum Cartridges.
3. Remove Waste Cartridge (REP 9.4).
4. Remove Waste Cartridge Cover (REP 9.3).
5. Remove Fuser Front Cover (REP 14.8).
6. Move Xerographic Release Lever up to a mid position.
7. Remove Dispenser Assembly Cover (REP 9.6).
8. Remove all Dispenser Assemblies (REP 9.7).

NOTE: *In next step, do not remove sensor.*

9. Remove housing for Waste Cartridge Full Sensor (REP 9.5).

NOTE: *In next step, it may not be necessary to disconnect harnesses for Plate Assembly (PL 4.2) to remove a developer housing.*

10. Remove Plate Assembly (REP 9.8).

CAUTION

IBT belt damage results when Developer Housing is removed carelessly.

11. Remove Developer Housing (Figure 1).

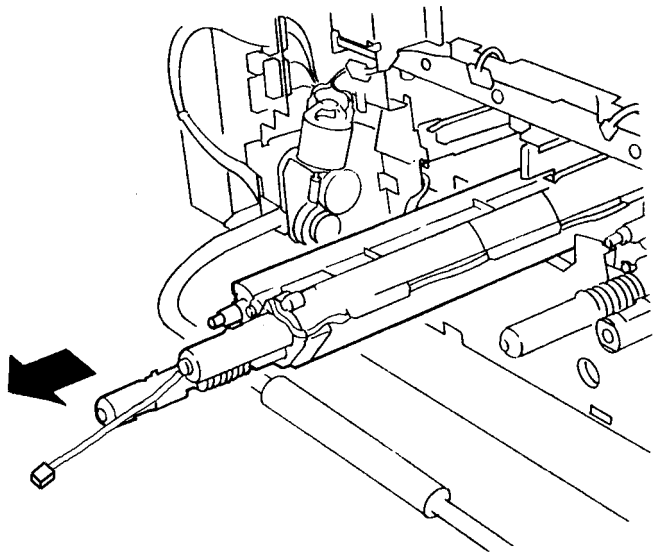


Figure 1 Removing Developer Housing

Replacement

NOTE: *If installing a new Developer Housing, go to step 1. If reinstalling existing developer housing, go to 5.*

1. Install new Developer (REP 9.10) as required.
2. *Remove ATC Sensor Setup Data Tag from new* Developer Housing. *On tag, highlight K, C, M, or Y as required for color of developer housing.* Tag will be installed during machine reassembly.

CAUTION

Image quality defects occur when ATC Sensor Data is mishandled in dC921.

3. During machine assembly, install *ATC Sensor Setup Data Tag as shown (*Figure 2*).*

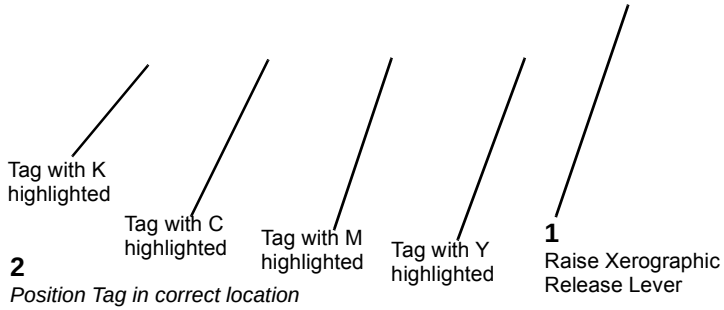


Figure 2 *Installing ATC Sensor Setup Data Tag*

4. Perform dC921 ATC Sensor Setup (ADJ 9.2).
5. While reinstalling Developer Housing ensure pin at rear of Developer Housing engages hole in rear frame of machine.

REP 9.10 Developer

Parts List on PL 6.2

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Front Cover (REP 14.7).
2. Remove Drum Cartridges.
3. Remove Waste Cartridge (REP 9.4).
4. Remove Waste Cartridge Cover (REP 9.3).
5. Remove Fuser Front Cover (REP 14.8).
6. Release and move Xerographic Release Lever half way down.
7. Remove Dispenser Assembly Cover (REP 9.6).
8. Remove all Dispenser Assemblies (REP 9.7).

NOTE: *In next step, do not remove sensor.*

9. Remove housing for Waste Cartridge Full Sensor (REP 9.5).

NOTE: *In next step, it may not be necessary to disconnect harnesses for Plate Assembly (PL 4.2) to remove a developer housing.*

10. Remove Plate Assembly (REP 9.8).
11. Remove Developer Housing (REP 9.9).
12. Remove Developer. (Figure 1).
    a. Carefully observe position of wiring harness for later reinstallation.

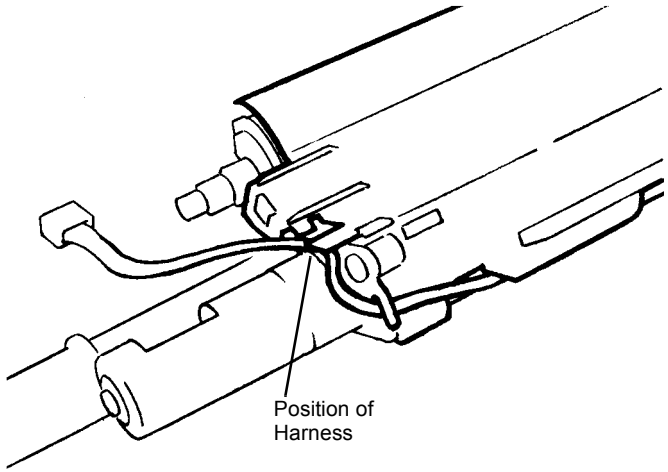


Figure 1 Observing position of Harness

b. Remove Housing Cover (Figure 2).

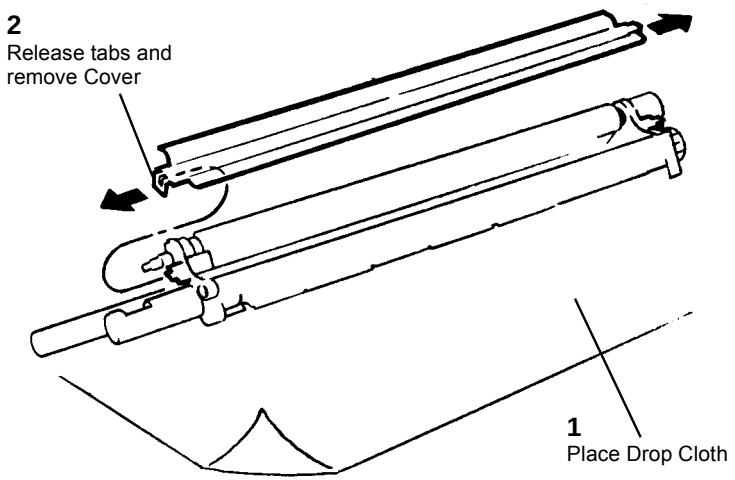


Figure 2 Removing Housing Cover

c. Rotate Drive Gear to remove Developer (Figure 3).

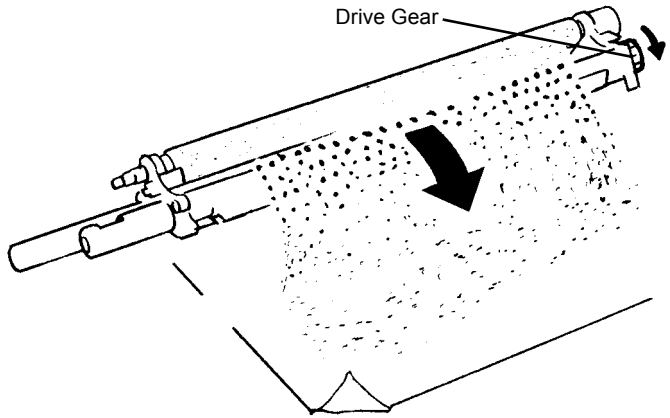


Figure 3 Removing Developer

Replacement

1. Rotate Drive Gear while installing new Developer (Figure 4).

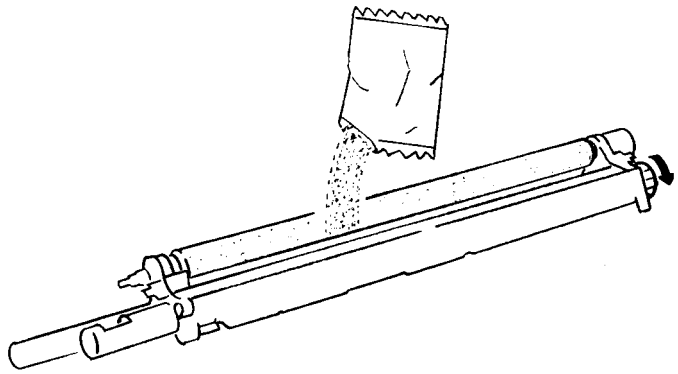


Figure 4 Installing Developer

2. Install Developer Housing.
   a. Ensure pin at rear of Developer Housing engages hole in rear frame of machine.
   b. Reassemble machine.
   c. Adjust ATC Sensor (ADJ).

REP 9.11 Toner Dispenser Base Assembly

Parts List on PL 6.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Remove Drum Cartridges.
3. Remove Fuser Front Cover (REP 14.8).
4. Release and move Xerographic Release Lever half way down.
5. Remove Dispenser Assembly Cover (REP 9.6).
6. Remove all Dispenser Assemblies (REP 9.7).
7. Remove Top Cover (REP 14.1).
8. Remove Right Cover (REP 14.3).
9. Remove Toner Dispense Module (Figure 1).
   a. Remove Screws (2).
   b. Carefully observe position of wiring harness for later reinstallation
   c. Disconnect motor connectors (4).
   d. Lift to remove Toner Dispense Module.

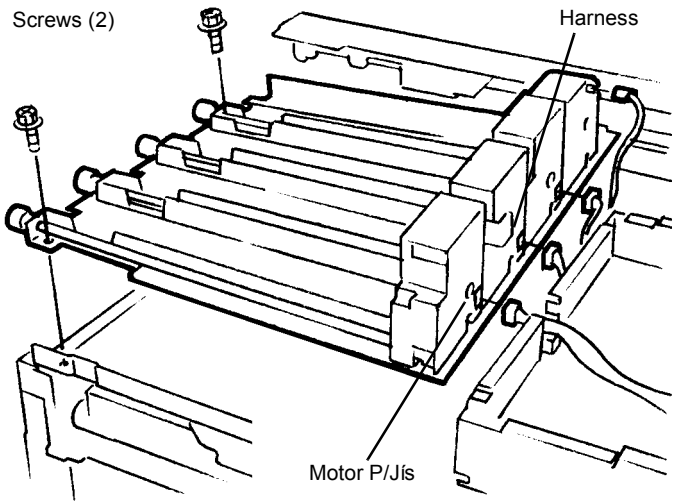


Figure 1 Removing Toner Dispense Module

REP 9.12 IBT Steering Drive Assembly

Parts List on PL 1.3

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Remove Fuser Front Cover (REP 14.8).
3. Release and move Xerographic Release Lever half way down.
4. Remove Dispenser Assembly Cover (REP 9.6).
5. Remove Steering Drive Motor (Figure 1).
   a. Disconnect Motor P/J.
   b. Remove Screws (3).
   c. Pull out to remove using care to avoid damage to steering gear.

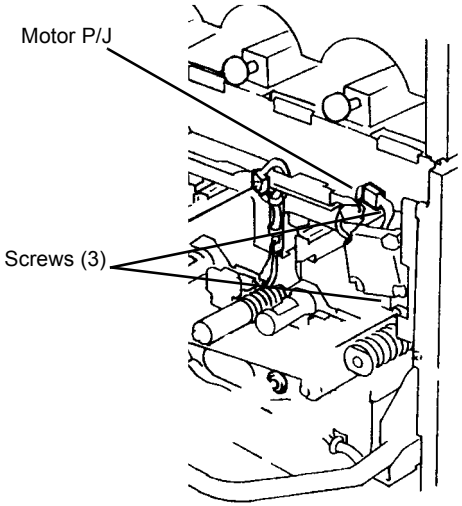


Figure 1 Removing Steering Drive Motor

REP 9.13 Agitator Motor Assembly

Parts List on PL 4.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Remove Waste Cartridge (REP 9.4).
3. Remove Fuser Front Cover (REP 14.8).
4. Release and move Xerographic Release Lever half way down.
5. Remove Dispenser Assembly Cover (REP 9.6).
6. Remove Waste Toner Agitator (Figure 1).
   a. Disconnect P/J.
   b. Remove Screws (2) and remove Waste Toner Agitator.

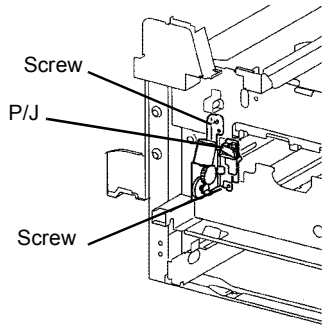


Figure 1 Removing Waste Toner Agitator

REP 9.14 MOB Sensor Assembly

Parts List on PL 1.3

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Remove Waste Cartridge (REP 9.4).
3. Remove Fuser Front Cover (REP 14.8).
4. Release and move Xerographic Release Lever half way down.
5. Remove Dispenser Assembly Cover (REP 9.6).
6. Remove Waste Toner Agitator (REP 9.13).
7. Remove MOB Sensor Assembly (Figure 1).
   a. Open Harness Clip and remove harness from Clip.
   b. Remove Screw and remove Inner Left Harness Cover.
   c. Disconnect Harness P/Jís (3)
   d. Remove MOB Sensor Assembly Harnesses (violet) from additional harness clips (not shown).
   e. Remove MOB Sensor Assembly Screw and pull out to remove MOB Sensor Assembly. Xerographic Release Lever must be down as shown.

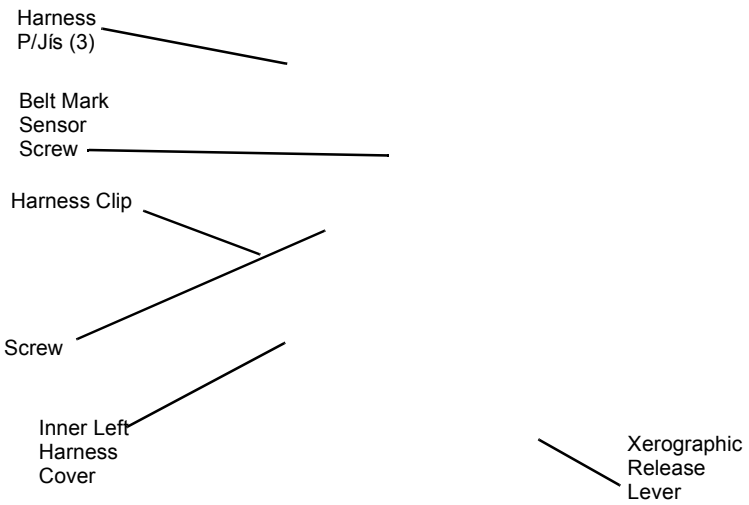


Figure 1 Removing MOB Sensor Assembly

REP 9.15 IBT Belt Assembly

Parts List on PL 5.2

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Release and move Xerographic Release Lever down.
3. Open Right Side Door.
4. Remove IBT Belt Assembly (Figure 1).
   a. Lift to release Slide Lock.
   b. Pull out IBT Unit to remove it. Use Handle to transport IBT Unit.
   c. Protect IBT Belt Assembly from direct light.

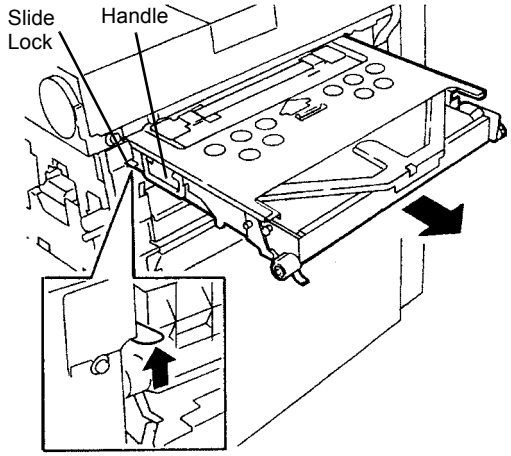


Figure 1 Removing IBT Belt Assembly

REP 9.16 IBT Cleaner Assembly

Parts List on PL 5.3

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Release and move Xerographic Release Lever down.
3. Remove Right Cover (REP 14.3).
4. Remove IBT Belt Assembly just enough to access Belt Cleaner (REP 9.15).

CAUTION

In next step, toner may spill out of Belt Cleaner if cleaner is handled carelessly.

5. Remove Screws and remove Belt Cleaner (Figure 2).

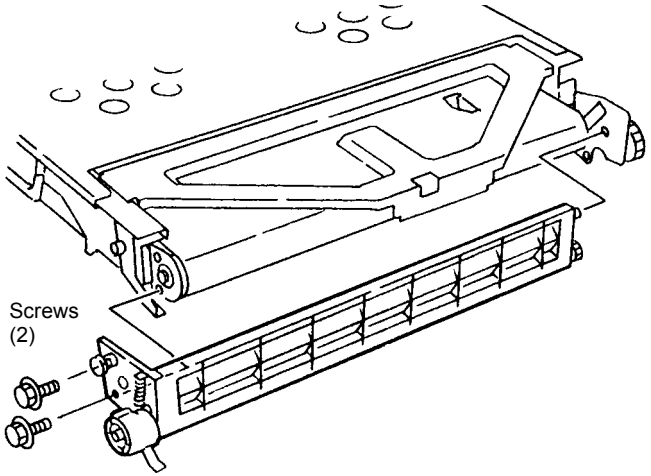


Figure 1 Removing IBT Cleaner Assembly

Replacement

Ensure both rear locating pins engage holes in IBT Belt Assembly frame during installation of IBT Cleaner Assembly.

REP 9.17 Auger Assembly

Parts List on PL 5.2

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Remove Waste Cartridge (REP 9.4).
3. Release and move Xerographic Release Lever down.
4. Remove Right Cover (REP 14.3).
5. Remove Belt Module (REP 9.15).
6. Move Xerographic Release Lever to up position.
7. Remove Waste Toner Agitator (Figure 1).
   a. Remove Screws (2).
   b. Move Waste Auger toward Bearing to disengage Cutout from Bearing.
   c. Remove Waste Auger.

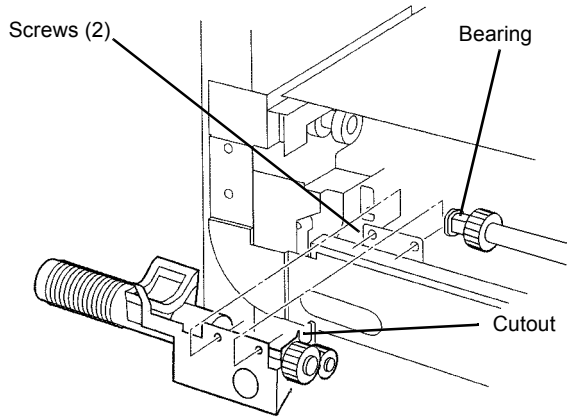


Figure 1 Removing Waste Toner Agitator

Replacement

Move Xerographic Release Lever to down position before reinstalling Belt Module.

REP 9.18 Lever

Parts List on PL 5.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Remove Fuser Front Cover (REP 14.8).
3. Remove Waste Cartridge (REP 9.4).
4. Remove Waste Cartridge Cover (REP 9.3).
5. Remove Inner Left Harness Cover (REP 14.10).
6. Release and move Xerographic Release Lever down.
7. Remove Drum Cartridges.
8. Remove Right Cover (REP 14.3).
9. Remove Belt Module (REP 9.15).
10. Remove Xerographic Release Lever (Figure 1).
    a. Remove Screw, Washer, and Hinge Pin.
    b. Remove E-Ring and Hinge Pin.
    c. Remove Xerographic Release Lever.

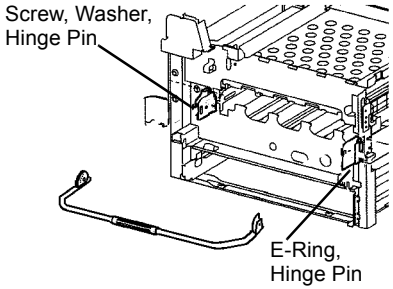


Figure 1 Removing Xerographic Release Lever

Replacement

Move Xerographic Release Lever to down position before reinstalling Belt Module.

REP 9.19 Left Hinge/Right Hinge

Parts List on PL 5.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Remove Fuser Front Cover (REP 14.8).
3. Remove Waste Cartridge (REP 9.4).
4. Remove Waste Cartridge Cover (REP 9.3).
5. Remove Inner Left Harness Cover (REP 14.10).
6. Release and move Xerographic Release Lever down.
7. Remove Drum Cartridges.
8. Remove Right Cover (REP 14.3).
9. Remove Belt Module (REP 9.15).
10. Remove Xerographic Release Lever (REP 9.18).
11. Remove Xerographic Release Lever Brackets (Figure 1).
    a. Remove Screws (2) and remove Bracket.
    b. Remove Screws (2) and remove Bracket.

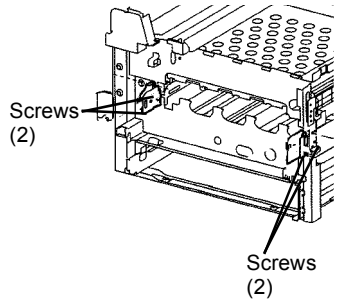


Figure 1 Removing Xerographic Release Lever

Replacement

Move Xerographic Release Lever to down position before reinstalling Belt Module.

REP 9.20 Right Lift Assembly

Parts List on PL 5.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Remove Fuser Front Cover (REP 14.8).
3. Remove Waste Cartridge (REP 9.4).
4. Remove Waste Cartridge Cover (REP 9.3).
5. Remove Inner Left Harness Cover (REP 14.10).
6. Release and move Xerographic Release Lever down.
7. Remove Drum Cartridges.
8. Remove Right Cover (REP 14.3).
9. Remove Belt Module (REP 9.15).
10. Remove Xerographic Release Lever (REP 9.18).
11. Remove Lift Bracket (Figure 1).
    a. Remove E-Rings (2) and Washers (2).
    b. Remove Screws (4) and remove Lift Bracket.
    c. Remove Bearings (2) and Washers (2).

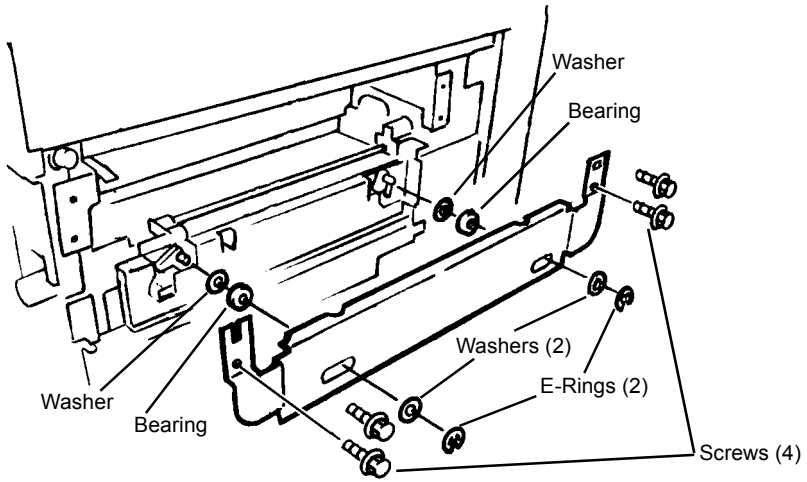


Figure 1 Removing Lift Bracket

12. Remove Right Xerographic Lift (Figure 2).
    a. Remove Auger Mounting Screws (2).
    b. Remove Lift Position Screw.
    c. Remove Secondary Position Screw.
    d. Remove Lower Screws (2).
    e. Remove Right Xerographic Lift.

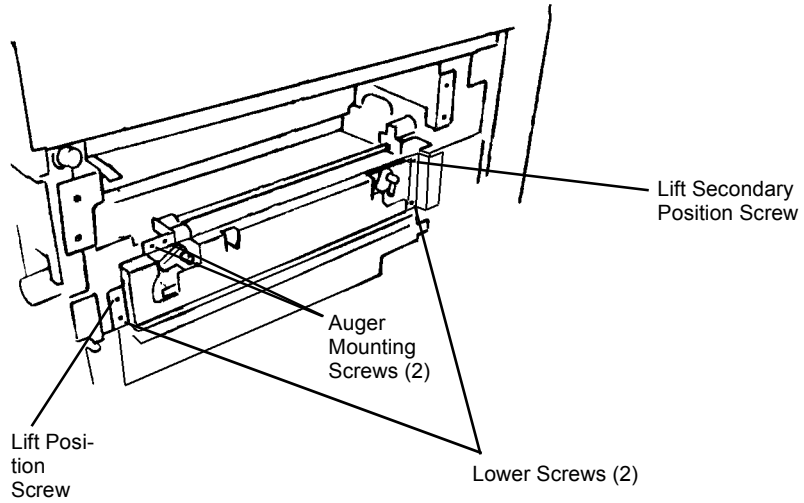


Figure 2 Removing Right Xerographic Lift

Replacement

Move Xerographic Release Lever to down position before reinstalling Belt Module.

REP 9.21 Left Lift Assembly

Parts List on PL 5.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Remove Fuser Front Cover (REP 14.8).
3. Remove Waste Cartridge (REP 9.4).
4. Remove Waste Cartridge Cover (REP 9.3).
5. Remove Inner Left Harness Cover (REP 14.10).
6. Release and move Xerographic Release Lever down.
7. Remove Drum Cartridges.
8. Remove Right Cover (REP 14.3).
9. Remove Belt Module (REP 9.15).
10. Remove Xerographic Release Lever (REP 9.18).
11. Remove Rear Cover (REP 14.2).
12. Remove Power Switch Cover (REP 14.6).
13. Remove Upper Rear Left Cover (REP 14.4).
14. Close Left Cover Assembly.
15. Remove MSI Tray (REP 7.1).
16. Remove Left Cover Assembly (REP 8.1).
17. Optional for improved visibility: Remove Fuser Module (REP 10.1).
18. Remove Registration Transport (REP 8.6).
19. Remove Dispenser Assembly Cover (REP 9.6).
20. Remove Waste Toner Agitator (REP 9.13).
21. Remove Belt Mark Sensor (REP 9.14).
22. Remove Left Xerographic Release Lever Bracket (REP 9.19).
23. Remove Front Cover (REP 14.7).
24. Remove K and C Toner Cartridges.
25. Remove K and C Dispenser Assembly (REP 9.7).

NOTE: *In next step, do not remove sensor from housing*

26. Remove housing for Waste Cartridge Full Sensor (REP 9.5).

NOTE: *In next step, it may not be necessary to disconnect harnesses for Plate Assembly (PL 4.2) to remove a developer housing.*

27. Remove Plate Assembly (REP 9.8).
28. Remove K and C Developer Housing (REP 9.9).
29. Remove Left Xerographic Lift (Figure 1).

NOTE: *In next step, use a magnet to capture E-Ring and Washer while removing them.*

a. From inside Developer Housing cavity, remove E-Ring and Washer from each end of Left Xerographic Lift.

b. Remove Screws (4).

c. Remove Left Xerographic Lift and maintain orientation to ensure Bearings (2) and Washers (2) do not fall off posts.

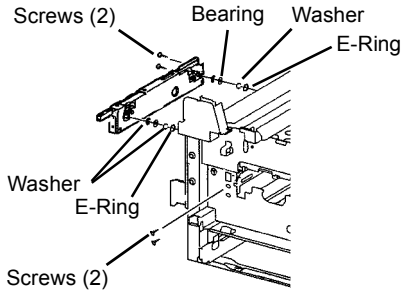


Figure 1 Removing Left Xerographic Lift

Replacement

1. Install Lift.
   a. Position Lift in frame.
   b. Raise or lower xerographic frame as required and push in or pull out Lift actuator as required to engage lift bearings with slots in xerographic frame.
   c. Install front top screw, then front bottom screw, then rear screws (2).
   d. Install washers (2) and e-rings (2).
2. Assemble remaining machine components.

REP 9.22 Transfer Belt

Parts List on PL 5.3

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

CAUTION

Cover Transfer Belt in a black bag.

NOTE: *Keep your hand off Transfer Belt.*

1. Remove IBT Belt Assembly (REP 9.15).
2. Remove IBT Cleaner Assembly (REP 9.16).
3. Remove Stand Plate (Figure 1).
   a. Remove Screw (2).
   b. Remove Stand Plate in direction of arrow.

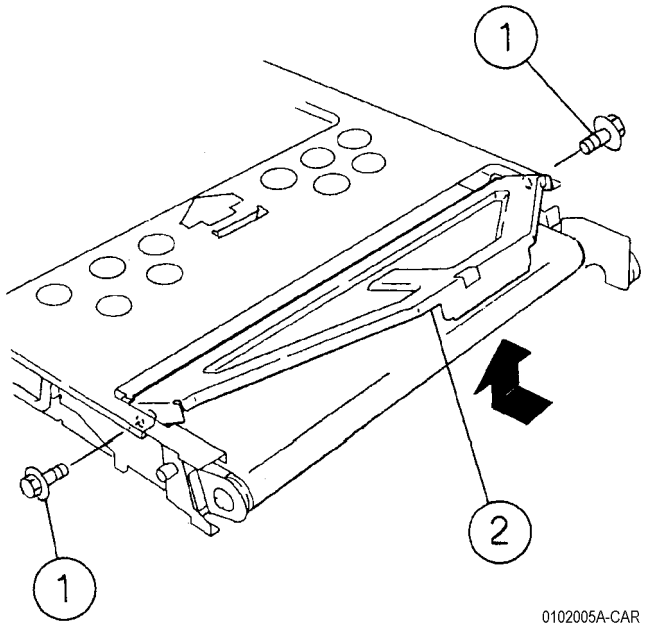


Figure 1 Removing Stand Plate

4. Remove Handle (Figure 2).

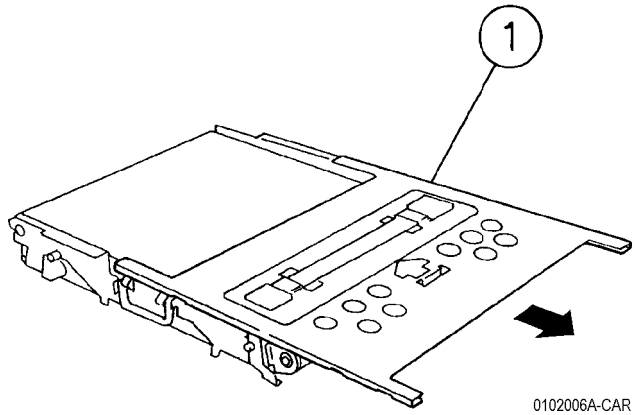


Figure 2 Removing Handle

5. Remove screws on both sides (Figure 3).

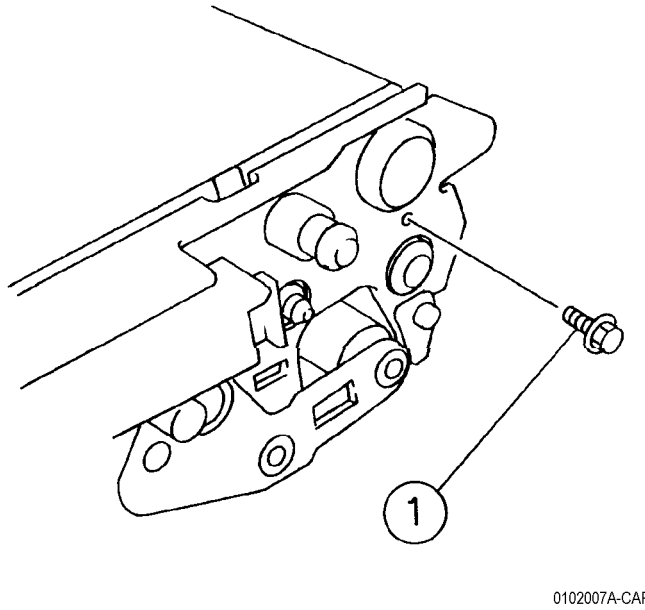
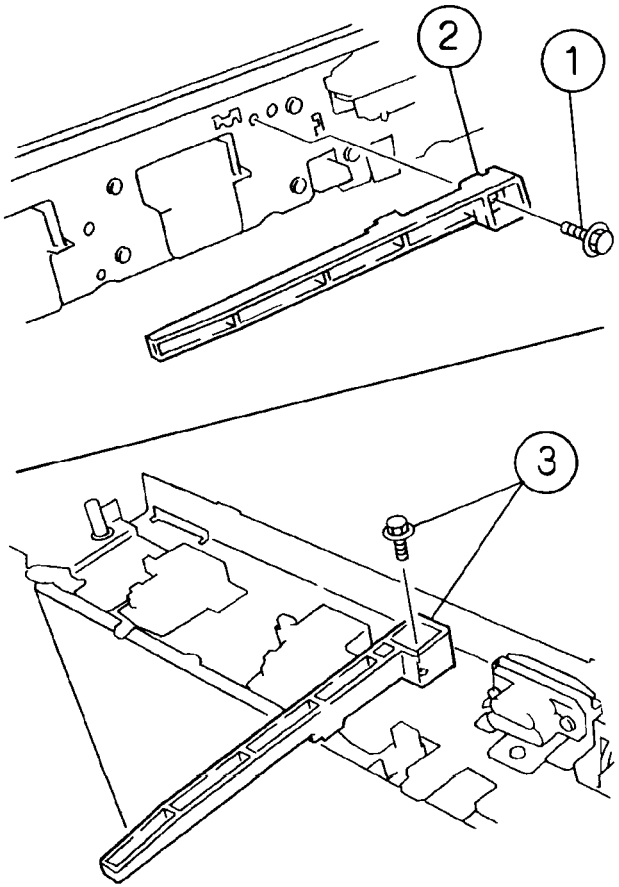


Figure 3 Removing Screws (both sides)

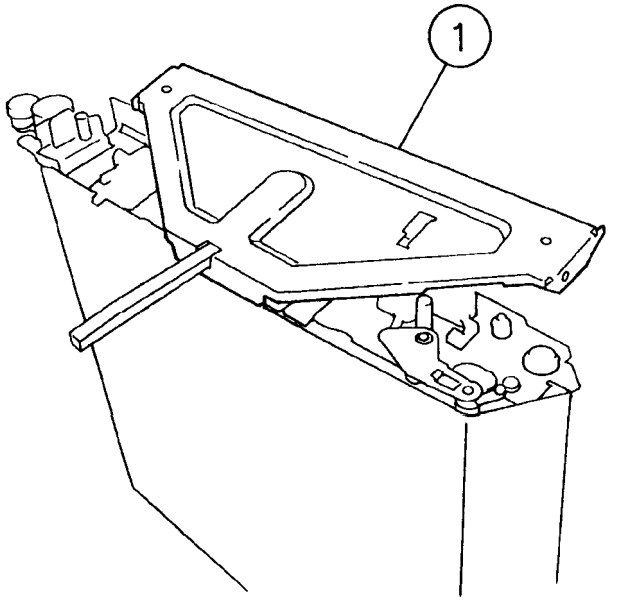
6. Position Latch (Figure 4)
   a. Remove Screw.
   b. Remove Latch.
   c. Fix Latch.



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Figure 4 Positioning Latch

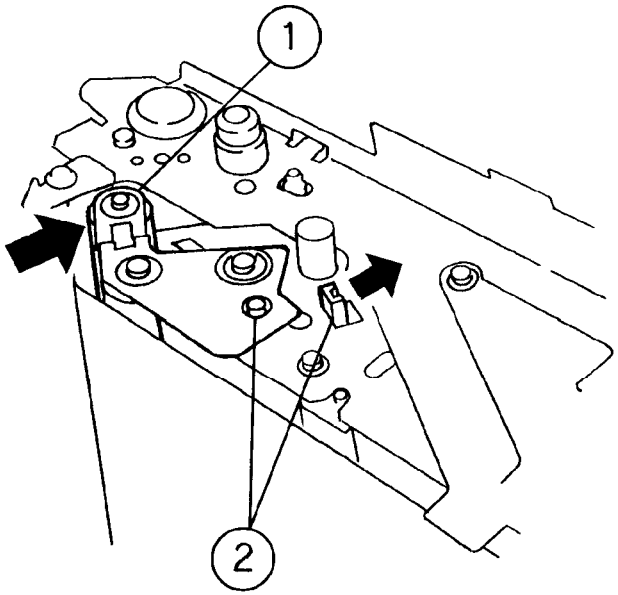
7. Install Stand Plate (Figure 5)
   a. Install Plate.



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Figure 5 Installing Stand Plate

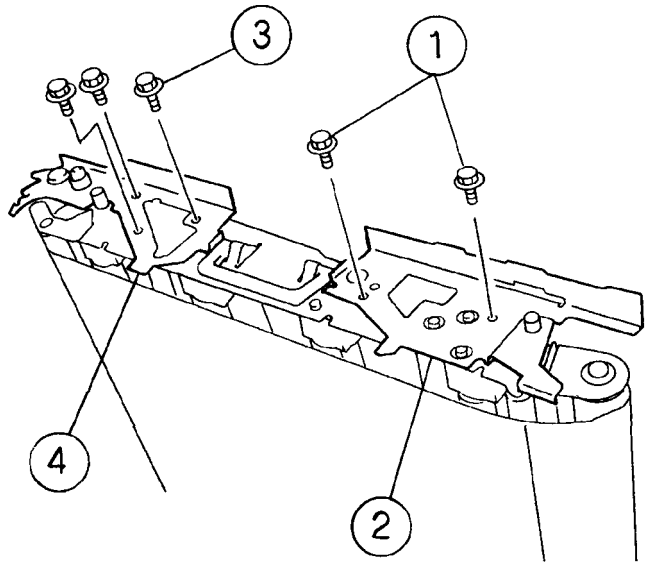
8. Place Stand Plate below and stand IBT Belt Assembly.
9. Relax tension of Belt on both sides (Figure 6)
   a. Push up Bracket.
   b. Push up Lever and hang Pin on Hole.



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Figure 6 Relaxing Belt Tension

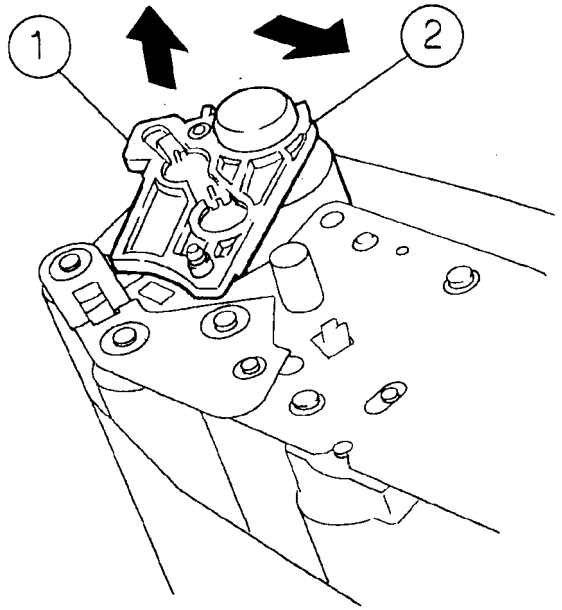
10. Remove Bracket (Figure 7)
    a. Remove Screw (2).
    b. Remove Bracket.
    c. Remove Screw (3).
    d. Remove Bracket.



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Figure 7 Removing Bracket

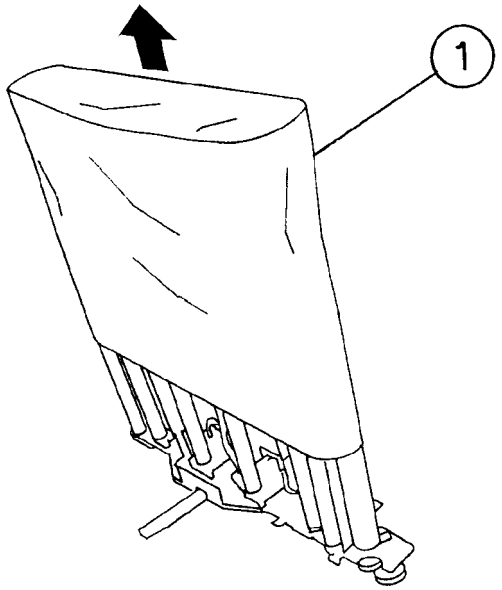
11. Pull out BUR ROLL Housing from Hole below and move it in arrow direction (Figure 8)
    a. Pull Housing.
    b. Turn Housing to move it.



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Figure 8 Pulling Out BUR Roll Housing

12. Remove Transfer Belt (Figure 9)



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Figure 9 Removing Transfer Belt

Replacement

1. Install Transfer Belt with Reflector at rear (Figure 10).

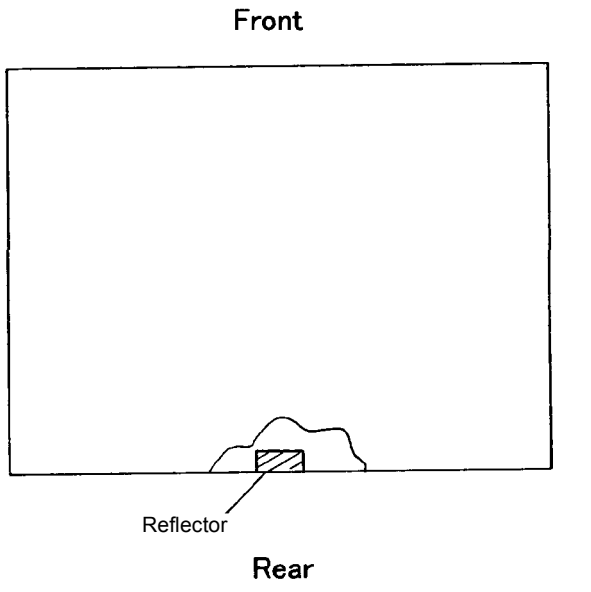


Figure 10 Installing Transfer Belt

2. After installing Transfer Belt, move it to center of IBT Frame (exposed parts of IBT Drive Roll are same at In and Out sides) (Figure 11).

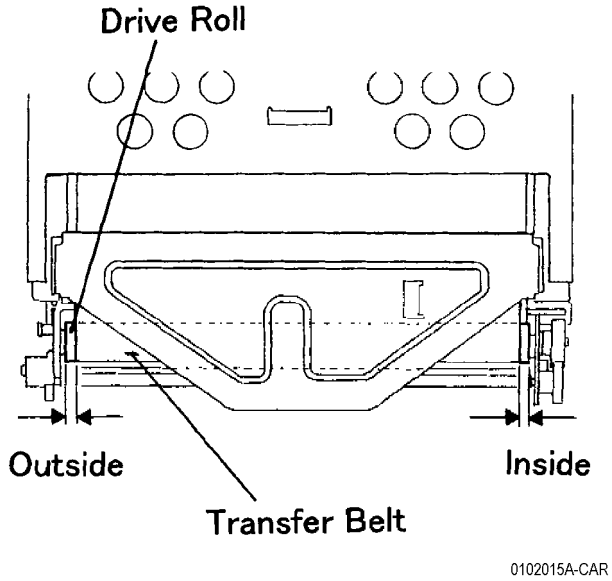
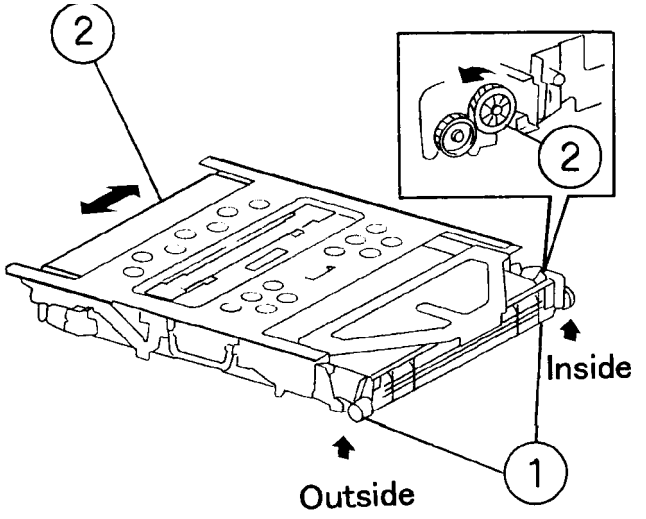


Figure 11 Positioning Transfer Belt

3. If Transfer Belt is skewed or wrinkled, perform following steps: (Figure 12)
   a. Relax tension of Belt.
   b. Rotate Gear in arrow direction and move Transfer Belt.



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Figure 12 Re-positioning Transfer Belt

REP 9.23 1st BTR Roll

Parts List on PL 5.4

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Release and move Xerographic Release Lever down.
3. Open Right Side Door.
4. Remove IBT Assembly (REP 9.15).
5. Remove Transfer Belt (REP 9.22).
6. Remove 1st BTR Roll (Figure 1).

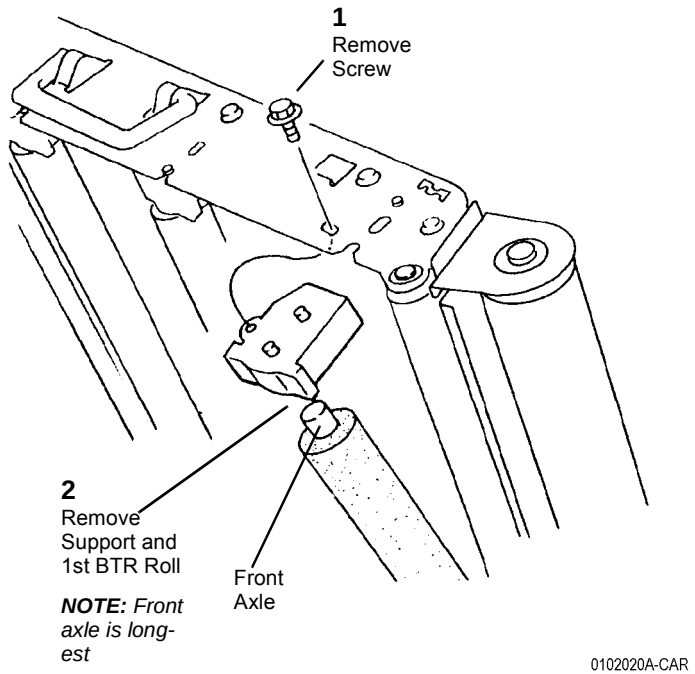


Figure 1 Removing 1st BTR Roll

REP 9.24 2nd BTR Roll

Parts List on PL 2.8

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove 2nd BTR (Figure 1).
   a. Open Left Cover Assembly.
   b. Remove Screws (4).
   c. Remove 2nd BTR with Support Brackets

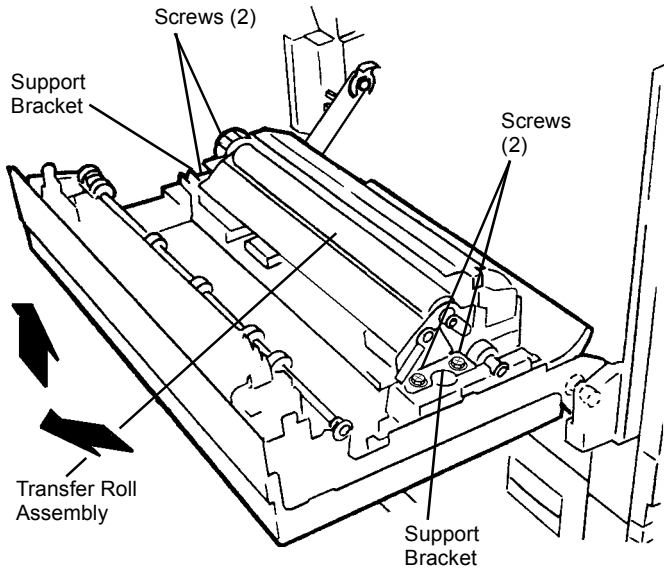


Figure 1 Removing 2nd BTR

REP 9.26 ATC Sensor

Parts List on PL 6.2

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Front Cover (REP 14.7).
2. Remove Drum Cartridges.
3. Remove Waste Cartridge (REP 9.4).
4. Remove Waste Cartridge Cover (REP 9.3).
5. Remove Fuser Front Cover (REP 14.8).
6. Release and move Xerographic Release Lever half way down.
7. Remove Dispenser Assembly Cover (REP 9.6).
8. Remove all Dispenser Assemblies (REP 9.7).

NOTE: *In next step, do not remove sensor.*

9. Remove housing for Waste Cartridge Full Sensor (REP 9.5).

NOTE: *In next step, it may not be necessary to disconnect harnesses for Plate Assembly (PL 4.2) to remove a developer housing.*

10. Remove Plate Assembly (REP 9.8).
11. Remove Developer Housing (REP 9.9).
12. Release Harness from Harness Clips (Figure 1).

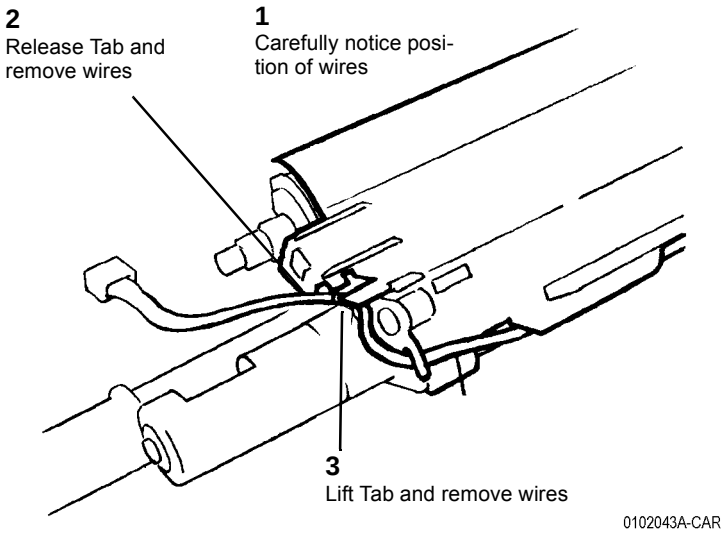


Figure 1 Removing Harness form Clips

13. Remove ATC Sensor (Figure 2).

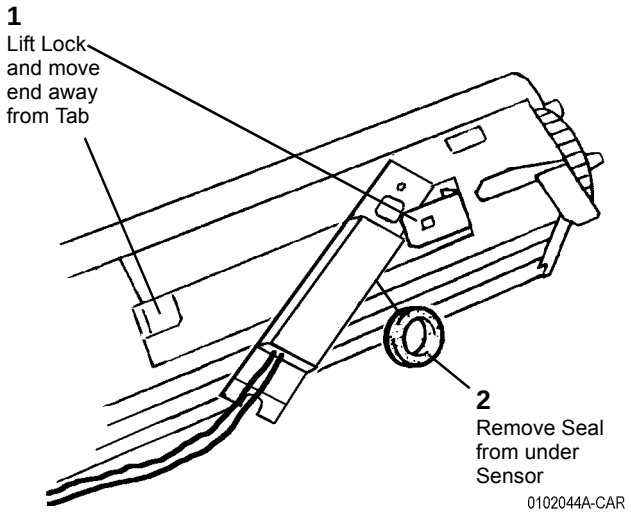


Figure 2 Removing ATC Sensor

Replacement

NOTE: *Remove ATC Sensor Setup Data Tag from new sensor. On tag, highlight K, C, M, or Y as required for color of developer housing. Raise* Xerographic Release Lever and *install Tag in position shown (Figure 3).*

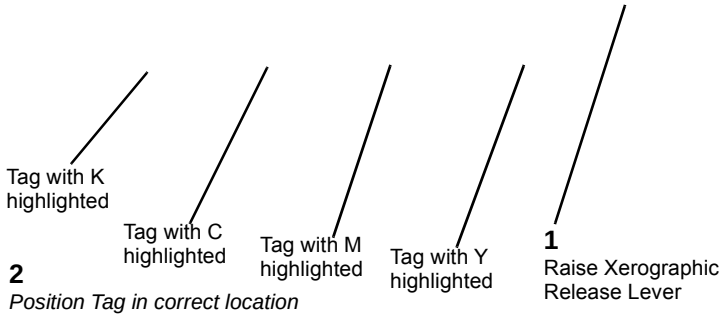


Figure 3 *Installing ATC Sensor Setup Data Tag*

NOTE: *Perform dC921 ATC Sensor Setup (ADJ 9.2).*

REP 9.27 Retract Shaft

Parts List on PL 5.4

Replacement

NOTE: *Cam and Flag must be aligned as shown, both on the same side (Figure 1).*

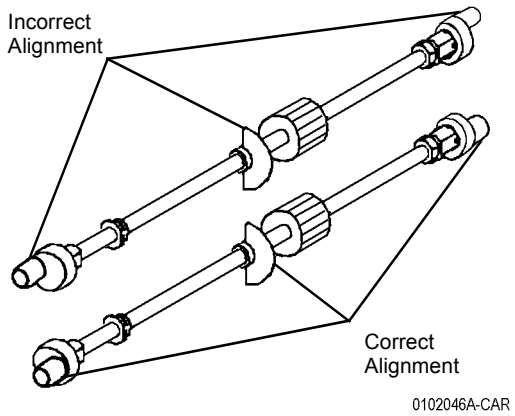


Figure 1 Cam and Flag Alignment

REP 10.1 Fuser

Parts List on PL 7.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

WARNING

Personal injury may result from grasping hot areas of Fuser Module. If a hot Fuser Module must be removed, grasp Fuser Module by black plastic frame component, shown in figure (Figure 1).

CAUTION

Damage to work surface may result if a hot Fuser Module is removed and positioned on an unprotected work surface. Place a hot fuser on ten sheets of paper.

1. Open Left Cover Assembly.
2. Remove Fuser Module (Figure 1).
   a. Loosen Screws (2). (PL 1.1)

WARNING

If machine was making copies within 30 minutes, Fuser Module is hot. Grasp Fuser Module using Grip Rings.

   b. Use Grip Rings to pull Fuser Module out.

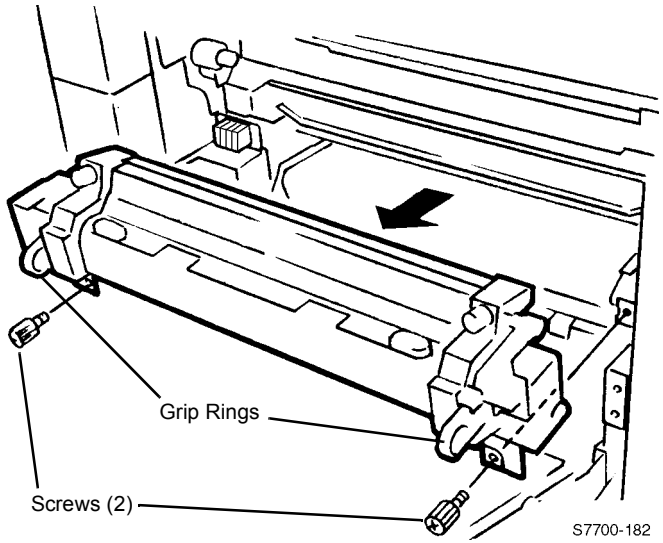


Figure 1 Removing Fuser Module

REP 10.2 Fuser Fan

Parts List on PL 8.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

WARNING

Personal injury may result from grasping hot areas of Fuser Module. If a hot Fuser Module must be removed, grasp Fuser Module by black plastic frame component, shown in figure (Figure 1).

CAUTION

Damage to work surface may result if a hot Fuser Module is removed and positioned on an unprotected work surface. Place a hot fuser on ten sheets of paper.

1. Open Front Cover.
2. Remove Right Cover (REP 14.3).
3. Remove Top Cover (REP 14.1).
4. Remove Rear Cover (REP 14.2).
5. Remove Fuser Cooling Fan (Figure 1).
   a. Disconnect P/J.
   b. Remove Screws (2) and lift to remove Fuser Cooling Fan.

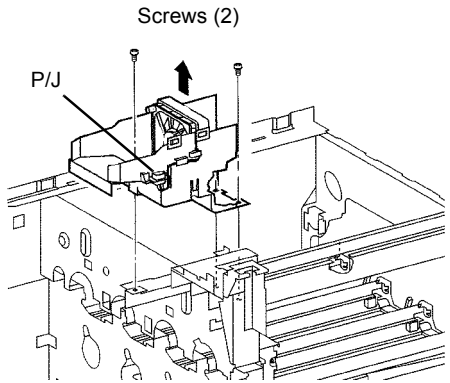


Figure 1 Removing Fuser Cooling Fan

REP 10.3 Main/Sub Heater Rod

Parts List on PL 7.2

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove the Fuser Assembly (REP 10.1).
2. Remove the following parts:
   - ï Front Cover (REP 14.7)
   - ï Handle (PL 7.2)
   - ï Rear Cover (PL 7.2)
   - ï Handle (PL 7.2)
3. Disconnect P/Jís (2) at rear of Fuser (Figure 1).

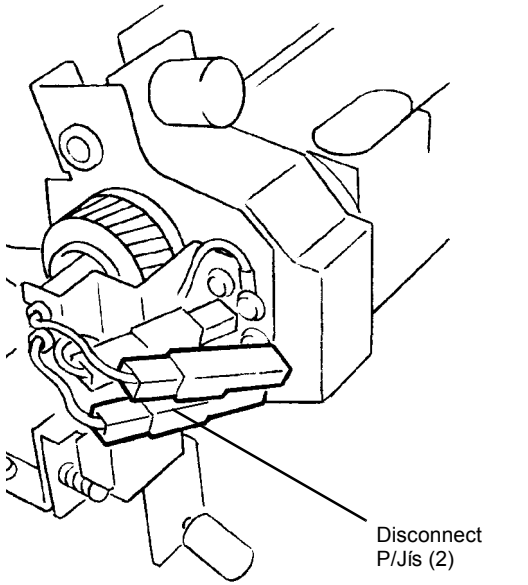


Figure 1 Disconnecting Connectors

4. Prepare Fuser at front (Figure 2).

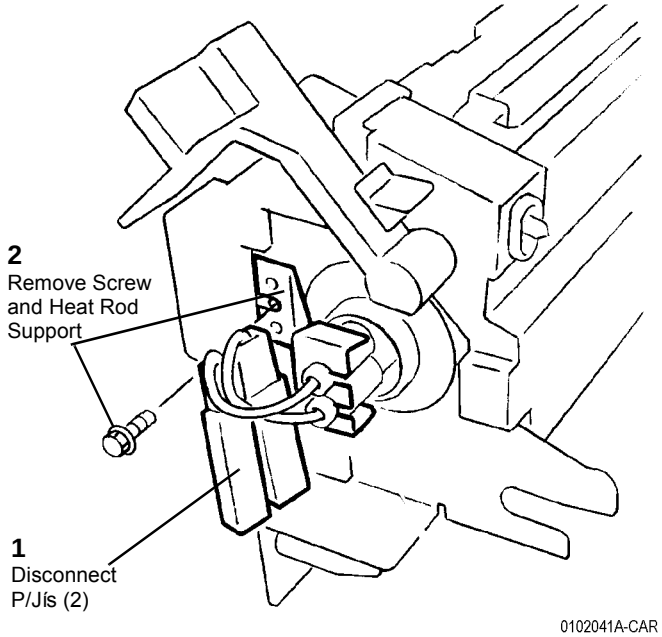


Figure 2 Preparing Fuser at Front

5. Remove Heater Rods (Figure 3).

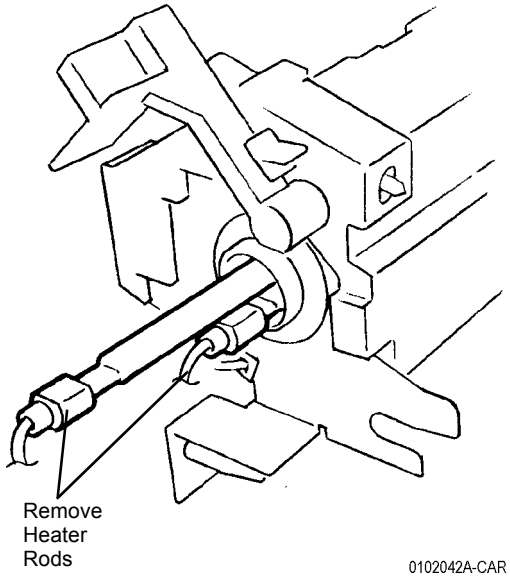


Figure 3 Removing Heater Rods

REP 12.1 H Transport Assembly

Parts List on PL 17.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Disconnect P/J (Figure 1).

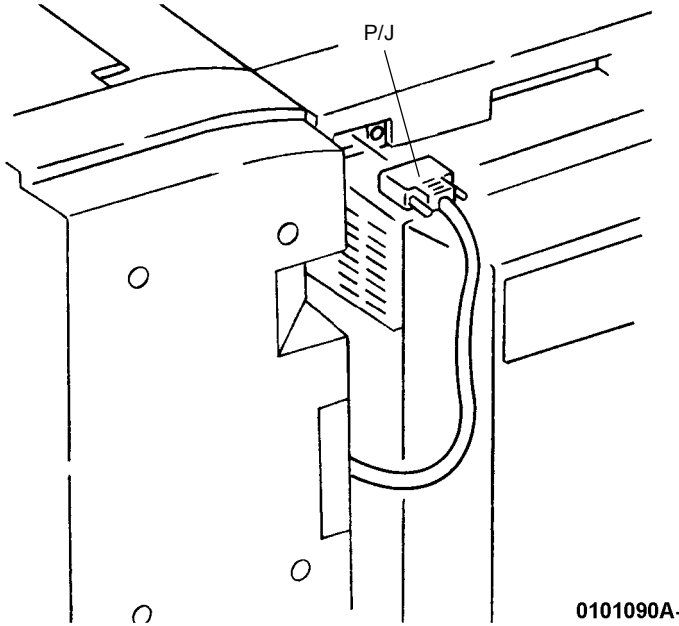


Figure 1 Disconnecting P/J

2. Disengage Hook (2) from the Stud on both sides and remove H Transport Assembly (Figure 2).

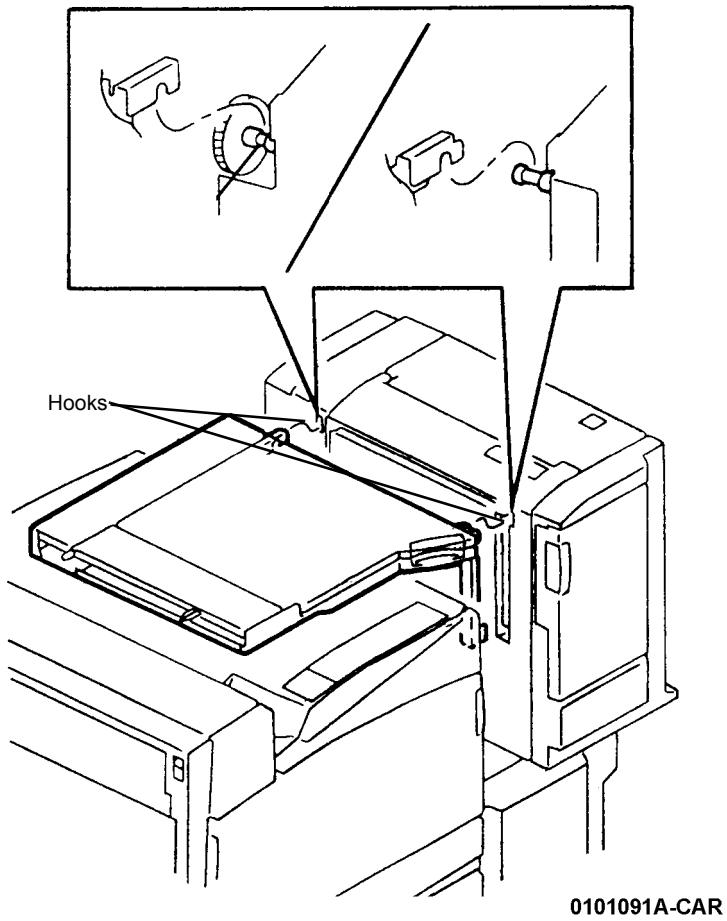


Figure 2 Removing H Transport

REP 12.2 H Transport Belt

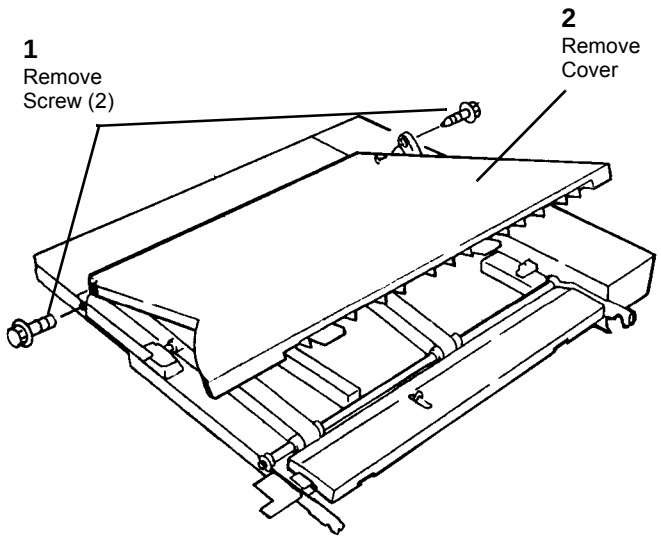
Parts List on PL 17.4

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

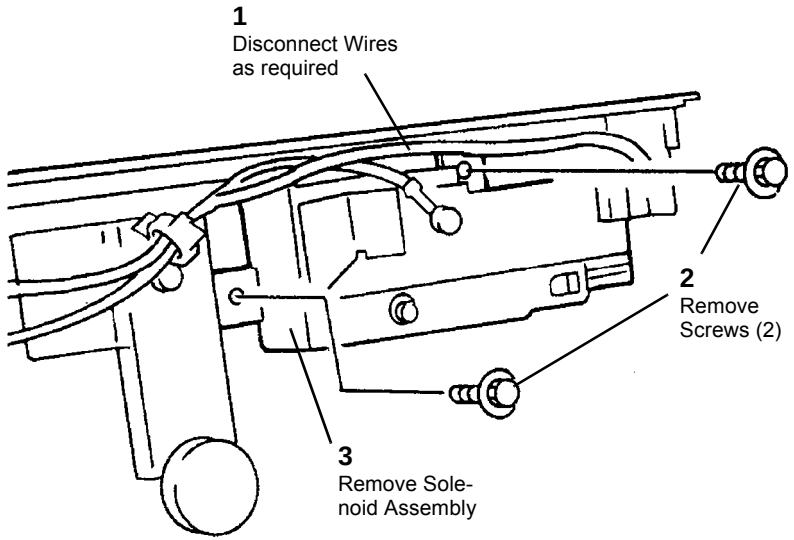
1. Remove the H Transport Assembly (REP 12.1).
2. Remove the following parts:
   a. H Transport Front Cover (PL 17.3)
   b. H Transport Rear Cover (PL 17.3)
   c. Stop (PL 17.3)
3. Remove the H Transport Cover (Figure 1).



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Figure 1 Removing the H Transport Cover

4. Remove the Gate In Solenoid Assembly (Figure 2).



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Figure 2 Removing the Gate In Solenoid Assembly

5. Remove the Entrance Upper Cover (Figure 3)

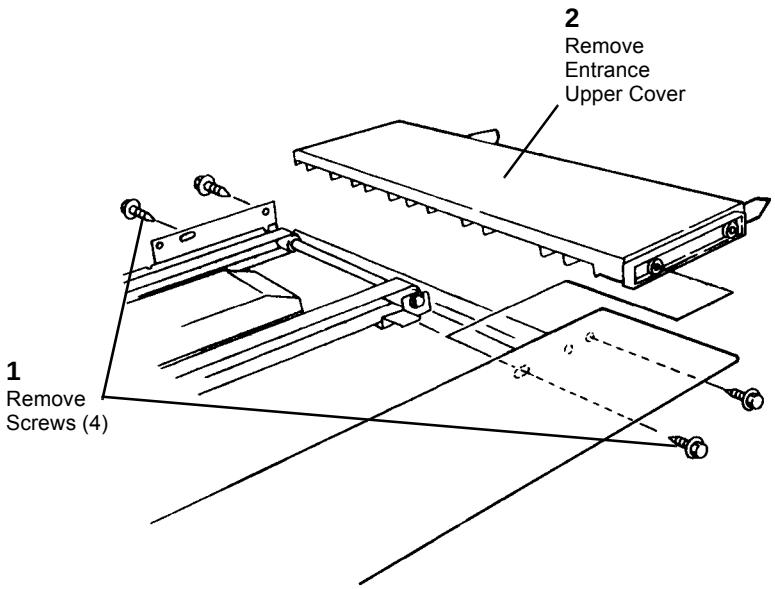


Figure 3 Removing the Entrance Upper Cover

6. Remove the input H Transport Roll (Figure 4).

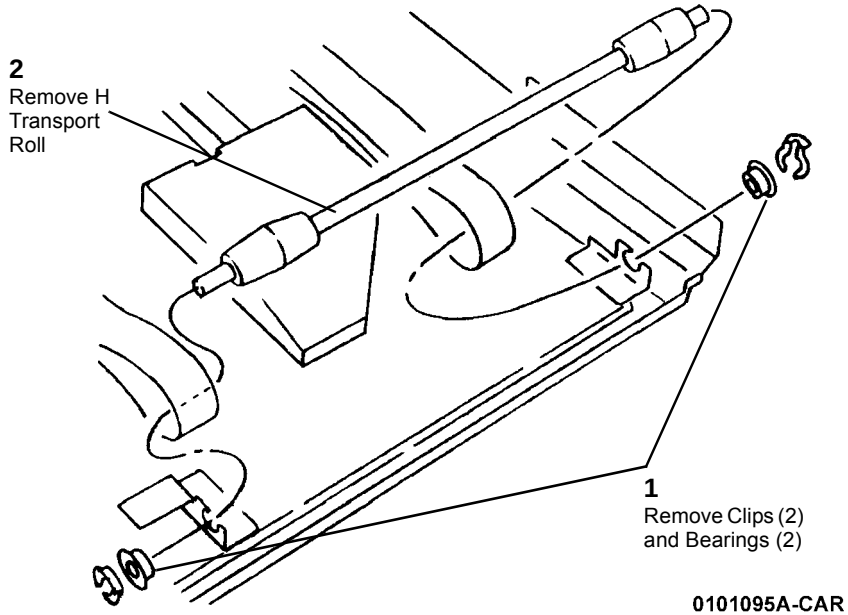


Figure 4 Removing the H Transport Roll

7. Remove the output H Transport Roll (Figure 5).

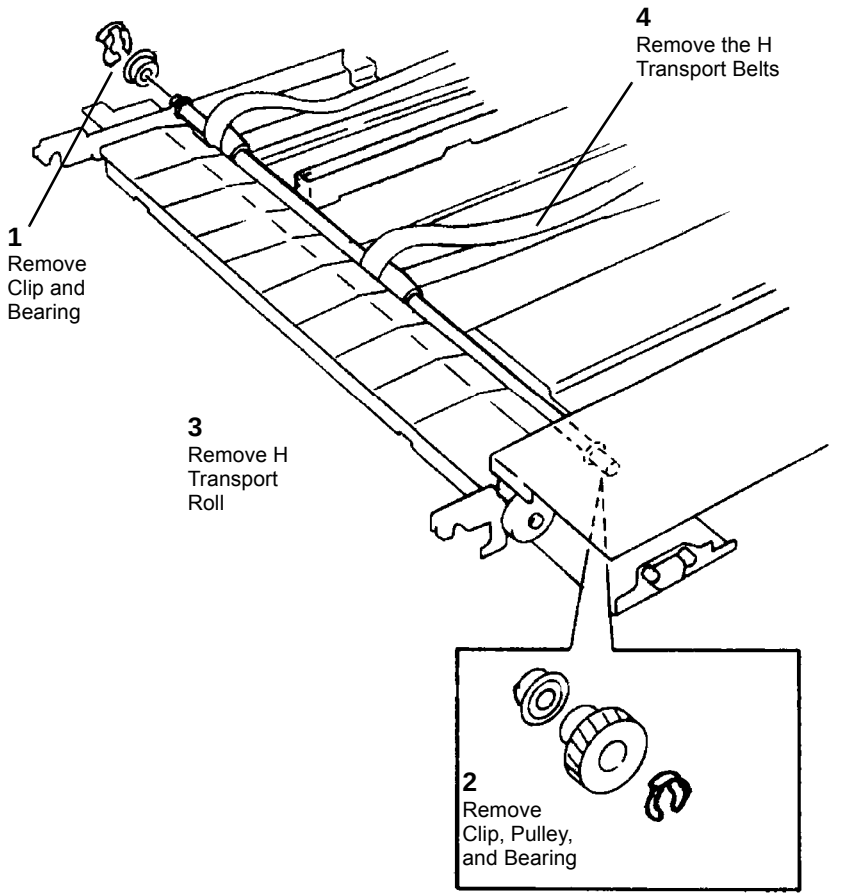


Figure 5 Removing the H Transport Roll

REP 12.3 Entrance Sensor

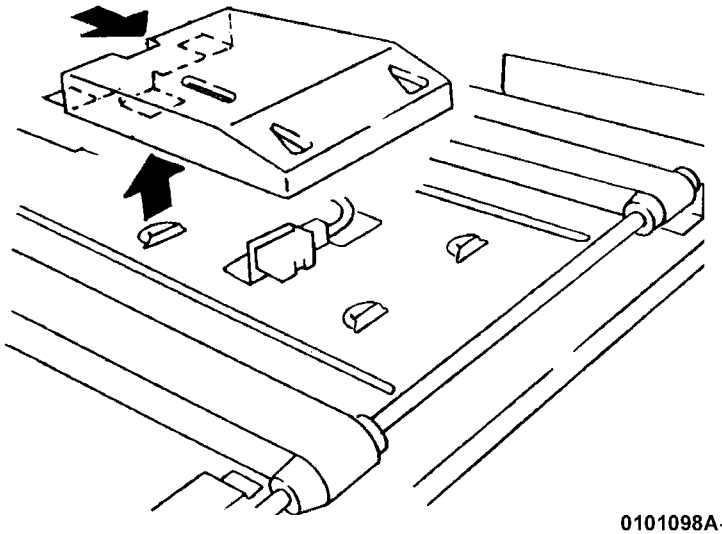
Parts List on PL 17.4

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

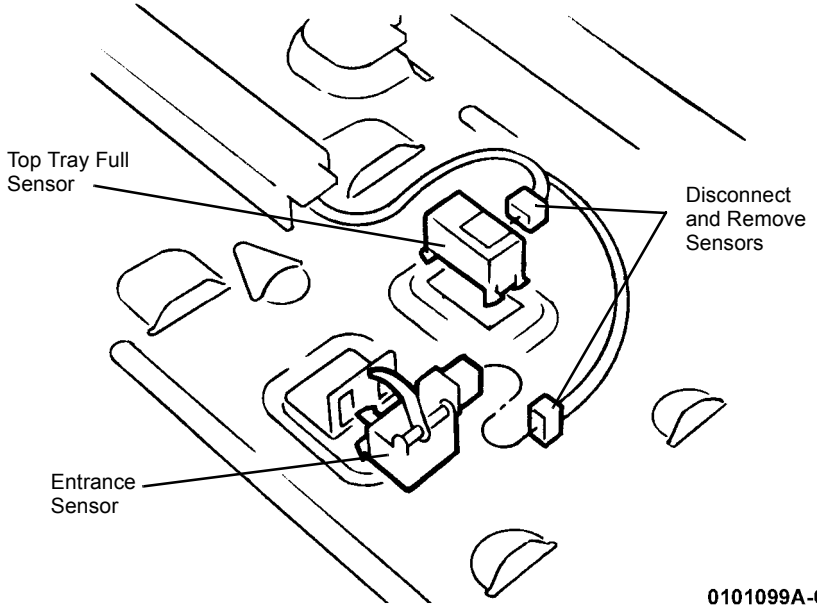
1. Remove the H Transport Assembly (REP 12.1).
2. Remove the following:
   a. H Transport Front Cover (PL 17.3)
   b. H Transport Rear Cover (PL 17.3)
   c. Stop (PL 17.3)
3. Remove the Entrance Upper Cover (REP 12.17).
4. Remove the Cover (Figure 1).
   a. Push up the hook (2).
   b. Remove the Cover, while moving it in the arrow direction.



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Figure 1 Removing the Cover

5. Remove the H Transport Entrance Sensor and Top Tray Full Sensor (Figure 2).



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Figure 2 Removing Entrance Sensor and Top Tray Full Sensor

REP 12.4 Finisher

Parts List on PL 17.5

Removal

CAUTION

Make sure to have two people to operate since the Finisher Unit weighs more than 16Kg.

When one person operates, detach the unit following the Steps after making it weigh less than 16Kg. Take extreme care to avoid lower back injury.

1. Separate IIT and IOT.
2. Remove the following parts:
   a. H Transport Assembly (REP 12.2)
   b. H Transport Front Cover (PL 17.3)
   c. H Transport Rear Cover (PL 17.3)
   d. Stacker Tray (PL 17.1)
   e. Right Lower Cover (PL 17.5)
3. Remove the Thumbscrews (2) (Figure 1).

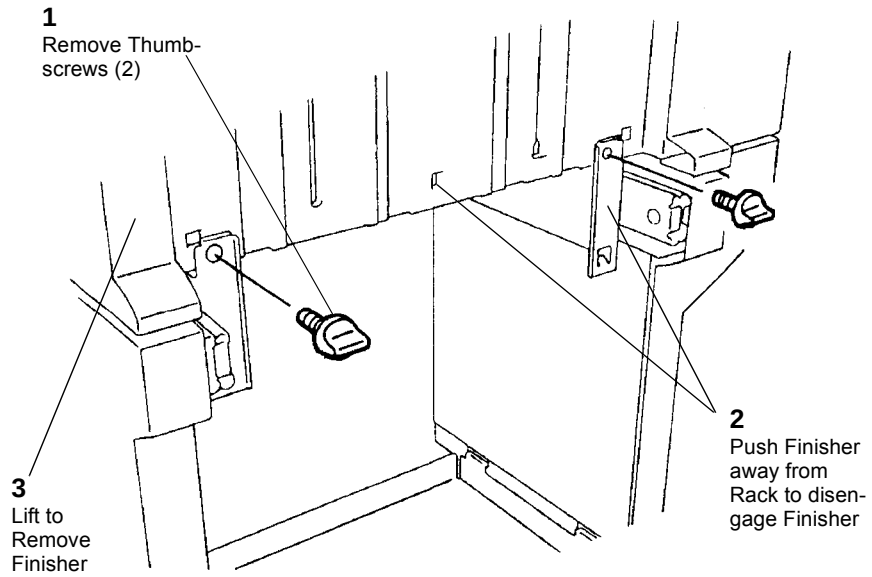


Figure 1 Removing Thumbscrews

4. Lift the Finisher from the Rack (Figure 2).

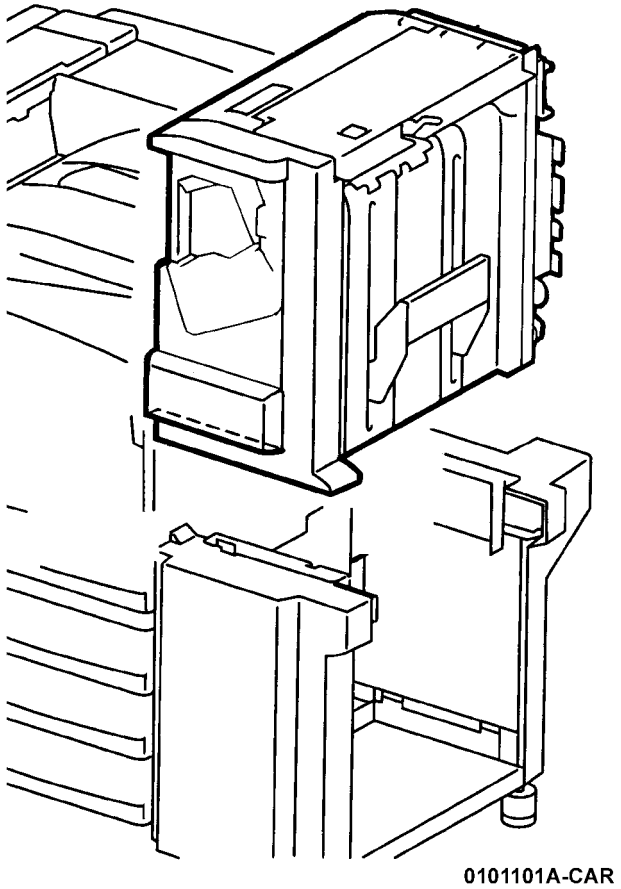


Figure 2 Removing Finisher from Rack

REP 12.5 Stack Height Sensor Assembly

Parts List on PL 17.6

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove the Links from the Top Cover Assembly (Figure 1).

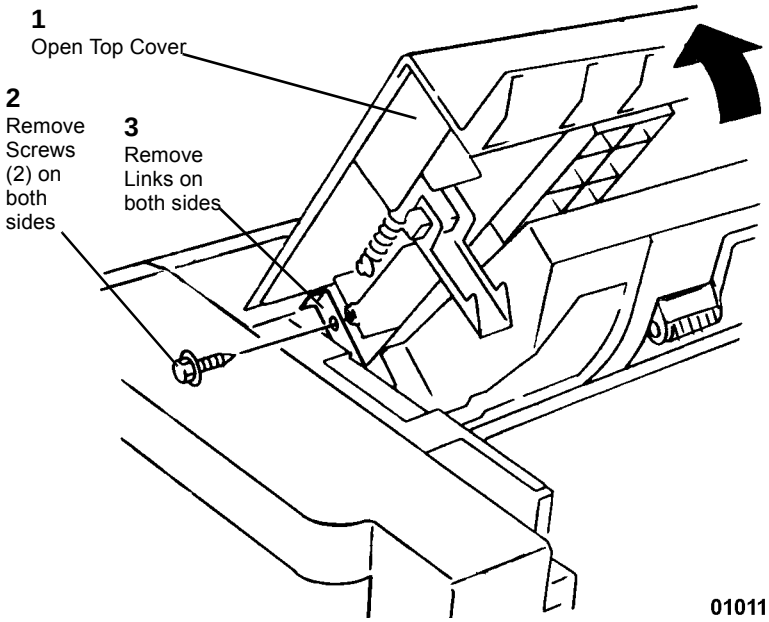


Figure 1 Removing Links from Top Cover Assembly

2. Remove the Stack Height Sensor Assembly (Figure 2).

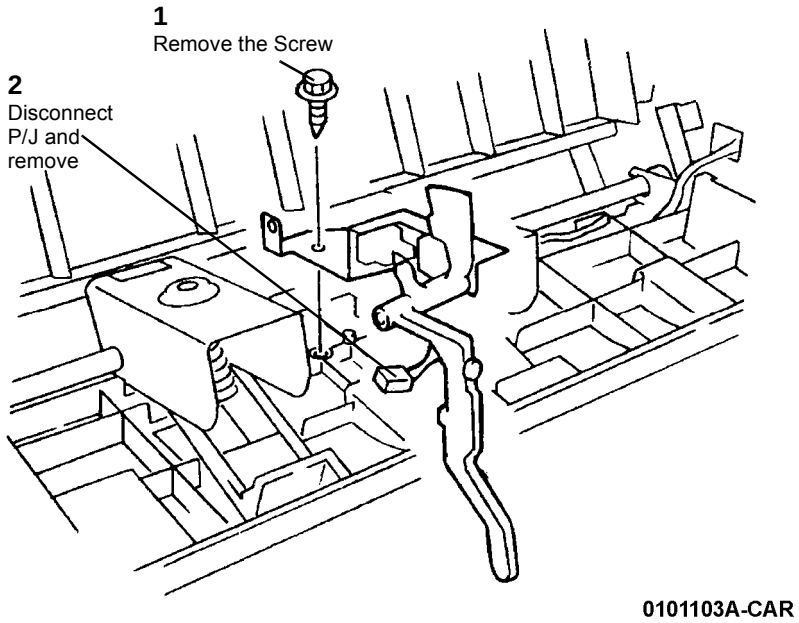


Figure 2 Removing Stack Height Sensor Assembly

REP 12.6 Eject Roll Assembly

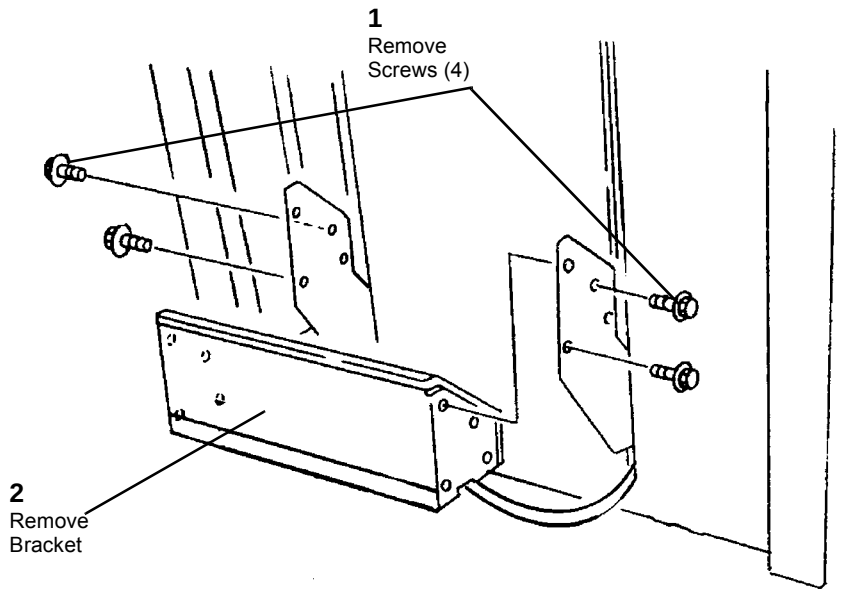
Parts List on PL 17.6

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

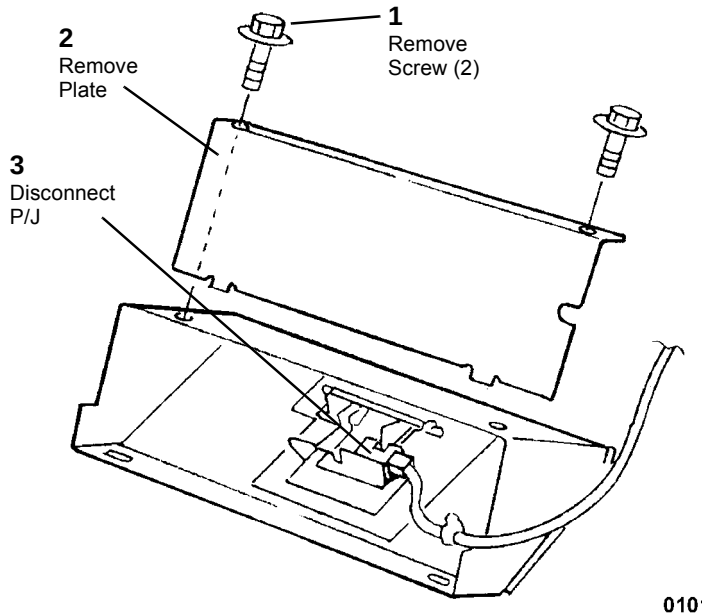
1. Remove the following parts:
   a. Rear Cover (PL 17.5)
   b. Stacker Tray (PL 17.1)
   c. Right Cover (PL 17.5)
   d. Front Cover (PL 17.5)
2. Remove the Bracket (Figure 1).



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Figure 1 Remove the Bracket

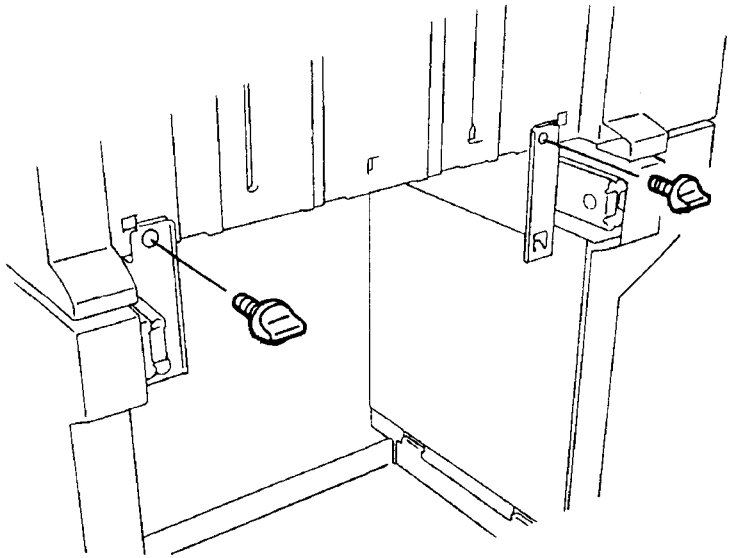
3. Disconnect P/J (Figure 2).



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Figure 2 Disconnecting P/J

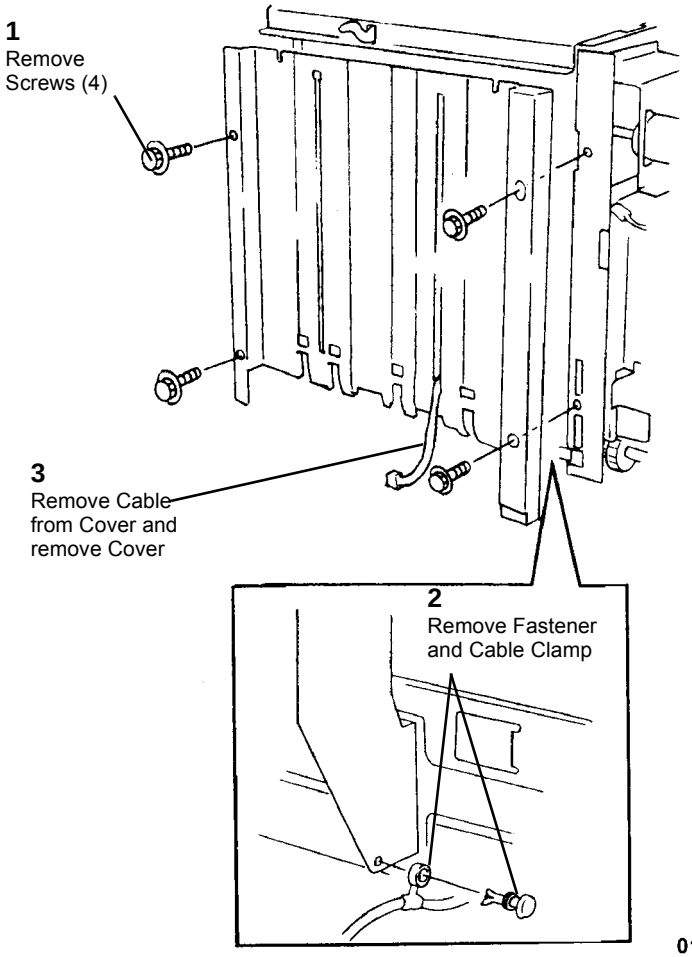
4. Remove the Thumbscrews (2) (Figure 3).



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Figure 3 Removing Thumbscrews

5. Remove the Tray Guide (Figure 4).



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Figure 4 Removing Tray Guide

6. Remove the Sensor (Figure 5).

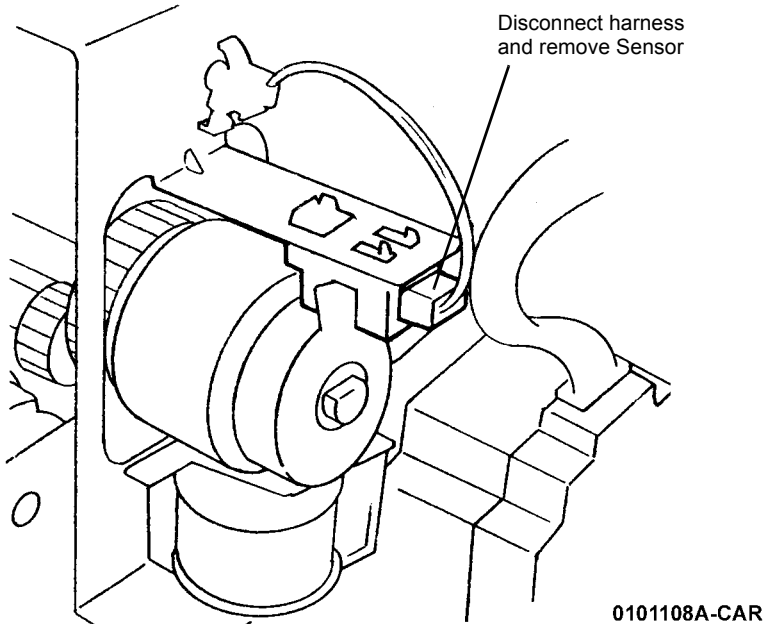


Figure 5 Remove Sensor

7. Remove Eject Roll (Figure 6).

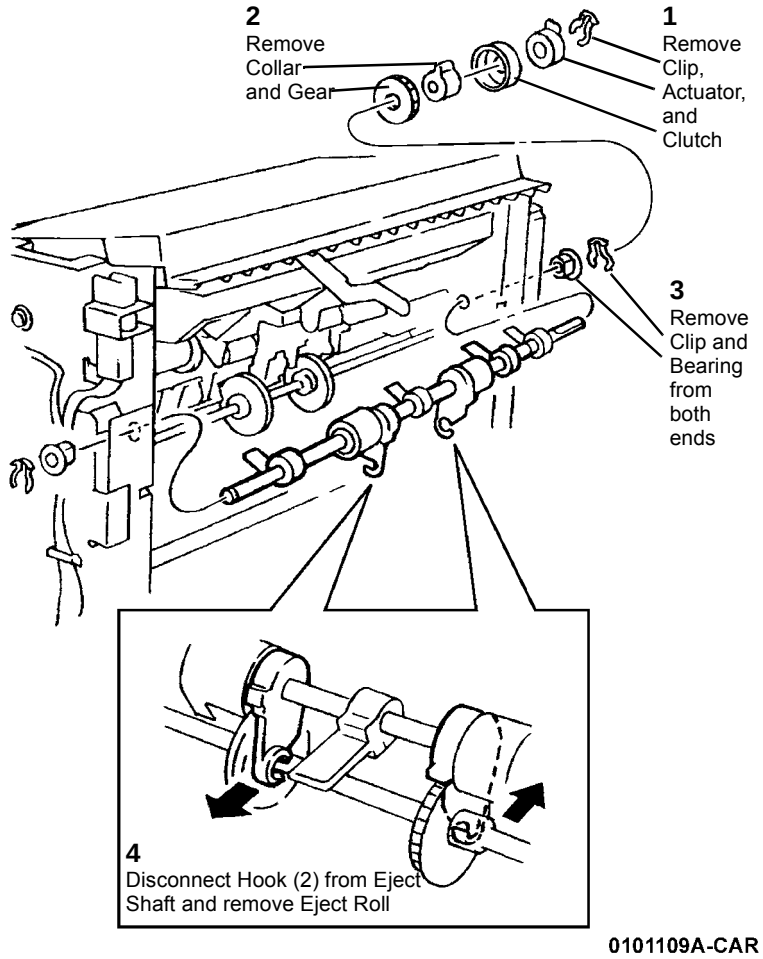


Figure 6 Removing Eject Roll

8. Remove Eject Shaft (Figure 7).

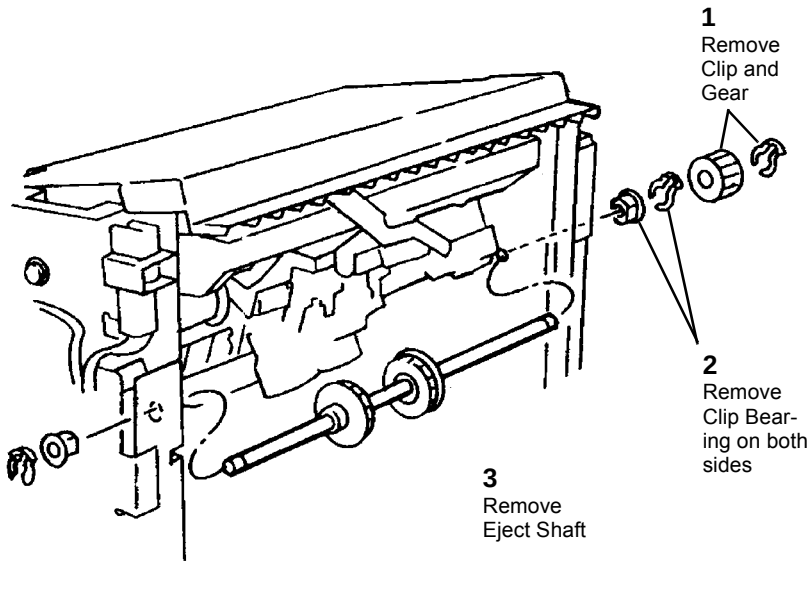


Figure 7 Removing Eject Shaft

Replacement

NOTE: *When replacing Feed Roll or Eject Shaft, replace them simultaneously.*

NOTE: *When installing the Clutch, ensure to insert the Stop into Clutch grooves (Figure 8).*

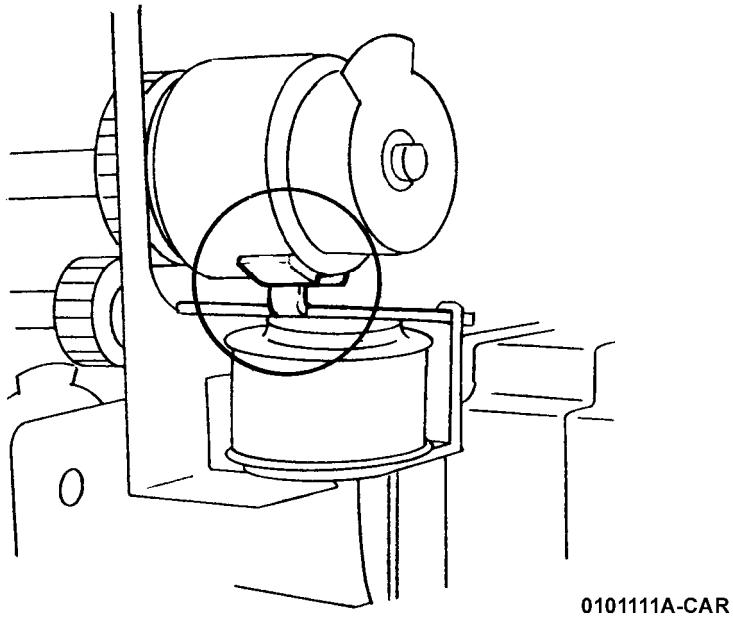


Figure 8 Inserting Stop into Clutch Grooves

REP 12.7 Decurler Roll

Parts List on PL 17.7

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove the following parts:
   a. Front Cover (PL 17.5)
   b. Rear Cover (PL 17.5)
   c. Top Cover (PL 17.5)
2. Remove the Arm (Figure 1).

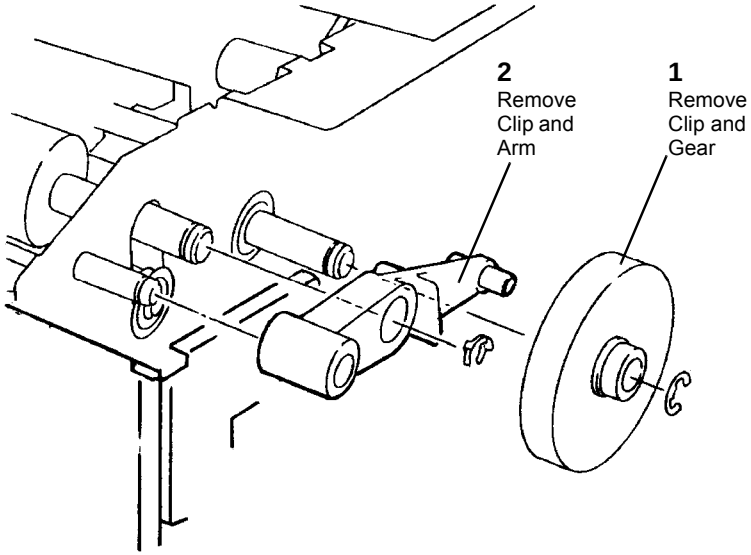


Figure 1 Removing the Arm

3. Remove the Decurler Roll (Figure 2).

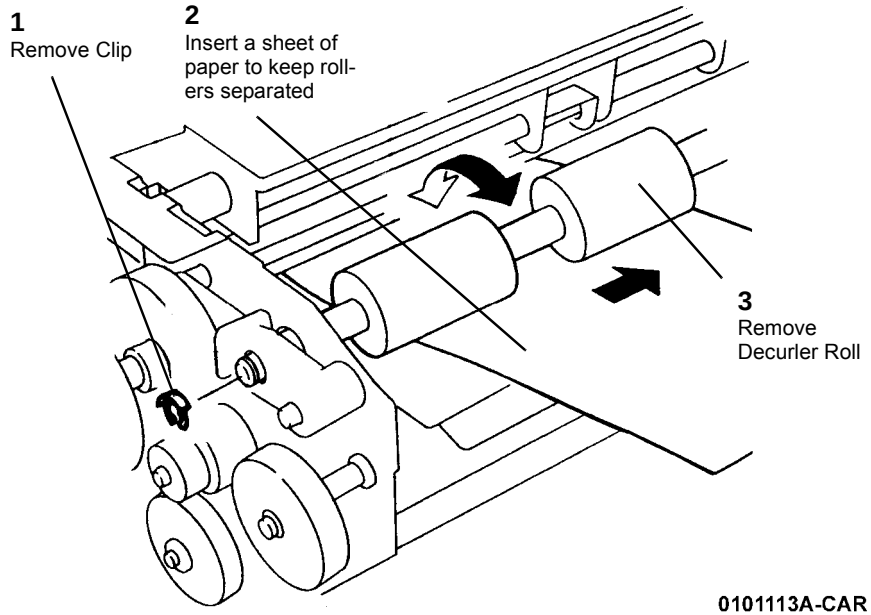


Figure 2 Removing the Decurler Roll

REP 12.8 Finisher Drive Motor

Parts List on PL 17.7

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove the Rear Cover (PL 17.14).
2. Remove the Finisher Drive Motor (Figure 1).

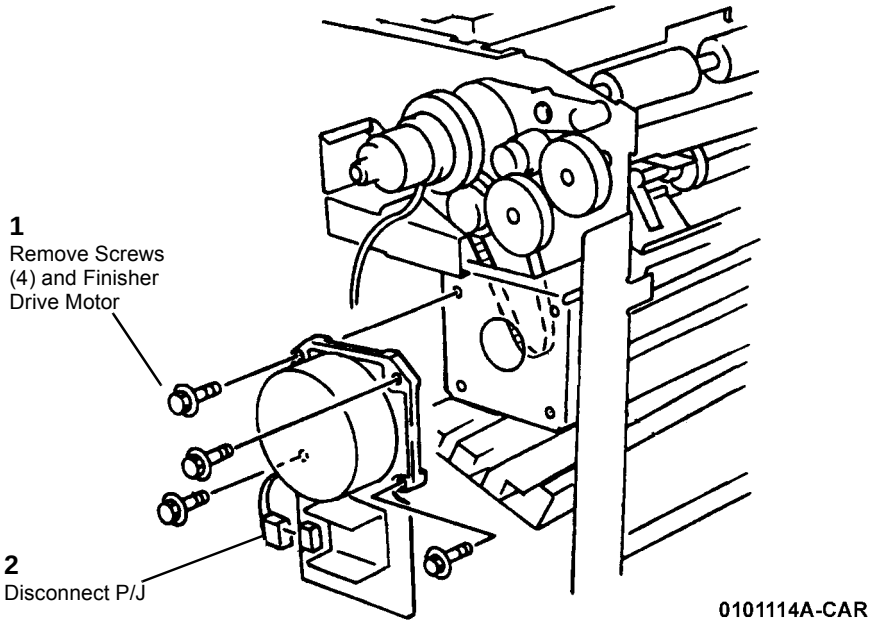


Figure 1 Removing the Finisher Drive Motor

Replacement

NOTE: *Hang the Belt to the Guide when installing the Drive Motor.*

REP 12.9 Belt

Parts List on PL 17.7

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove the Rear Cover (PL 17.5)
2. Rotate the Actuator (Figure 1).

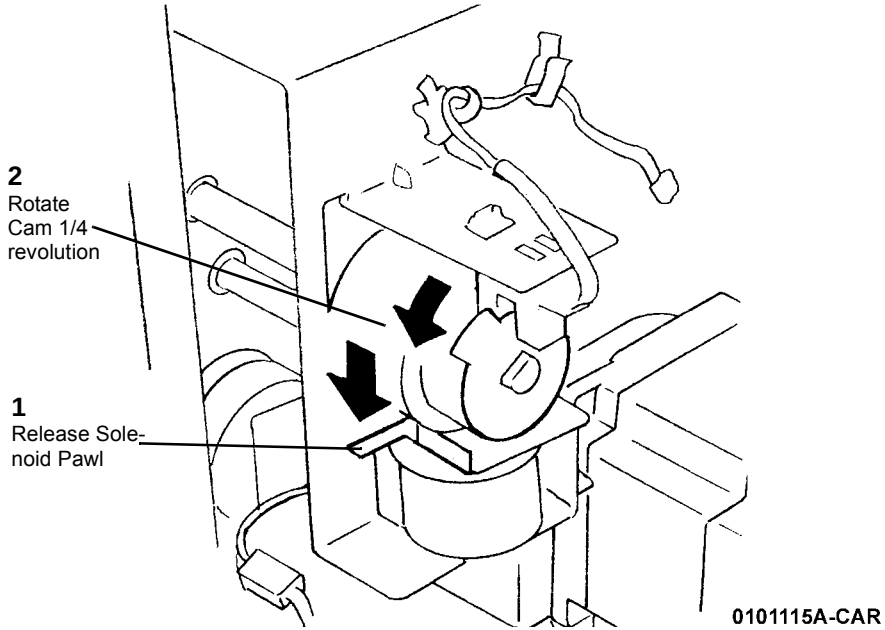


Figure 1 Rotate the Actuator

3. Release Harnesses (Figure 2).

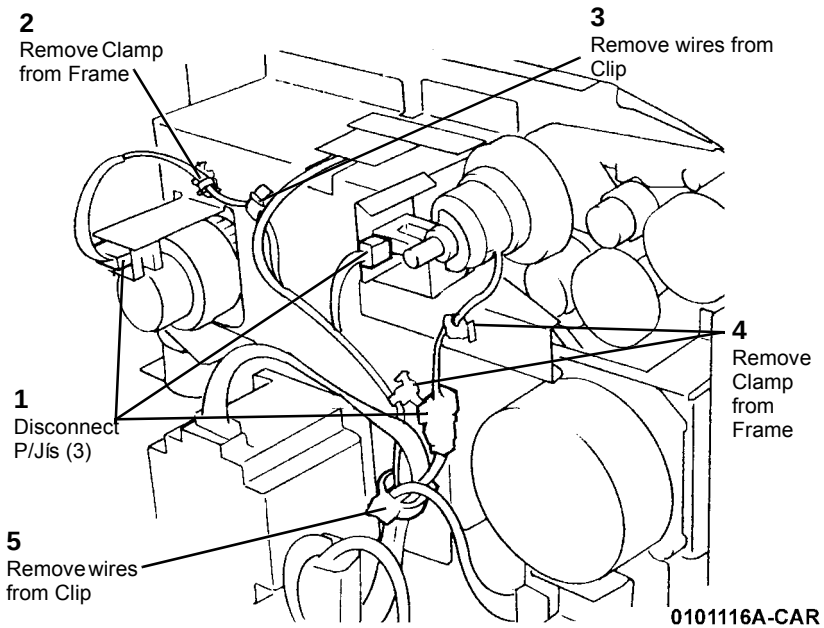


Figure 2 Releasing Harnesses

4. Remove the Cam Bracket Assembly (Figure 3).
   a. Remove the Screws (4).
   b. Remove the Cam Bracket Assembly.

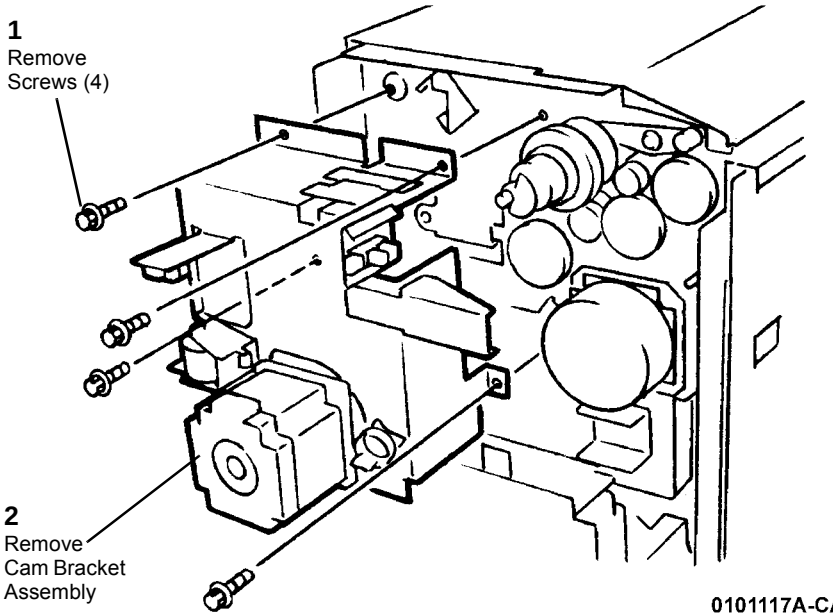


Figure 3 Removing the Cam Bracket Assembly

5. Remove the Belt (Figure 4).

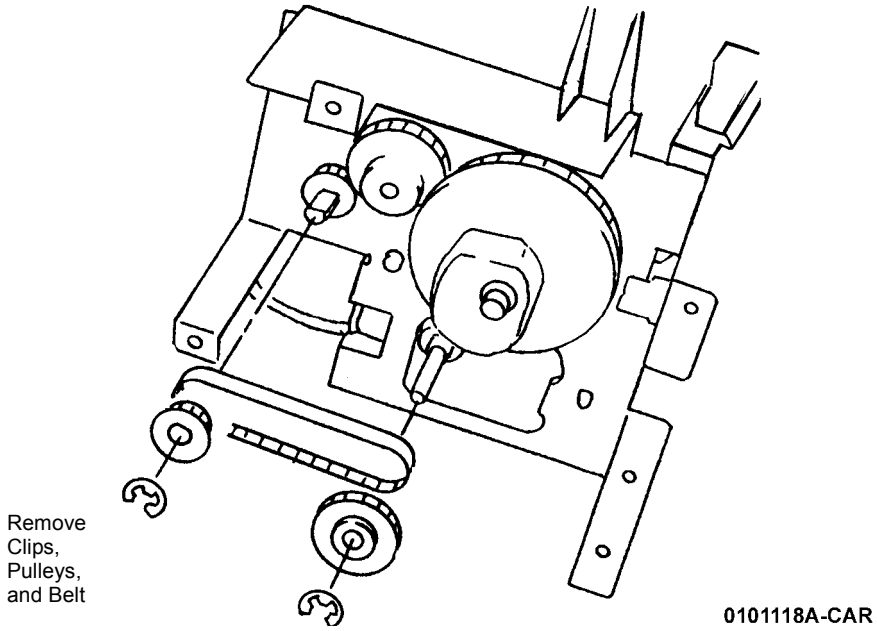


Figure 4 Removing the Belt

Replacement

NOTE: *During assembly, refer to Figure 5.*

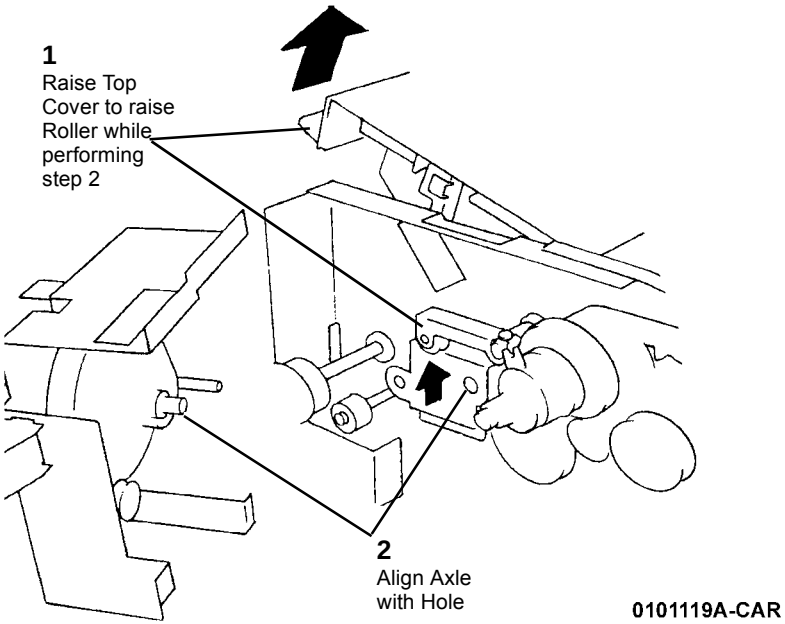


Figure 5 Inserting Axle of Cam Bracket Assembly into Hole

NOTE: *During assembly, refer to Figure 6.*

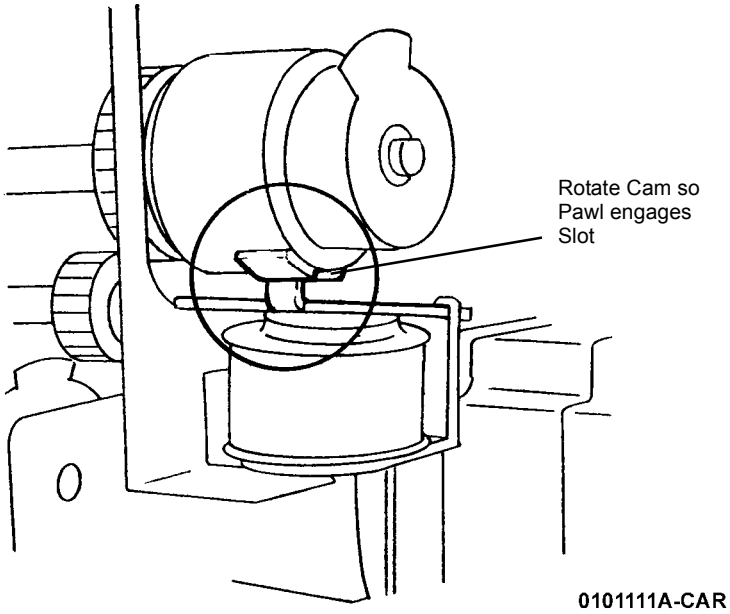


Figure 6 Engaging Pawl with Slot

REP 12.10 Rail

Parts List on PL 17.9

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove the following:
   a. Front Cover (PL 17.5)
   b. Rear Cover (PL 17.5)
2. Remove Harness from Stapler (Figure 1).

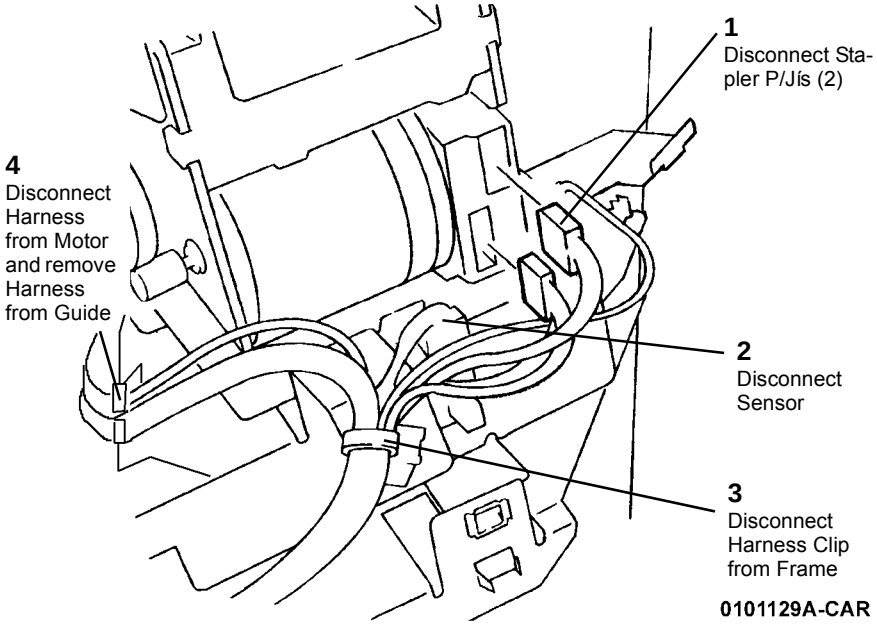


Figure 1 Removing Harness from Stapler

3. Remove Stapler Assembly (Figure 2).

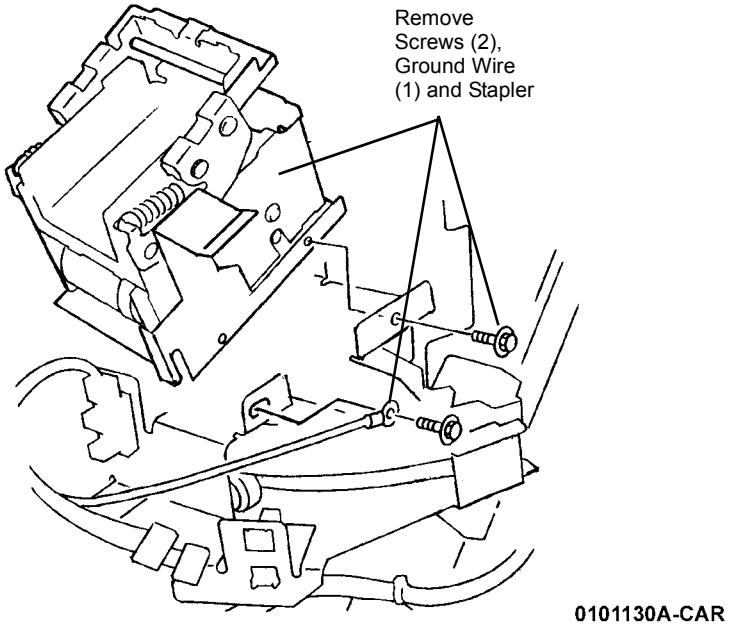


Figure 2 Removing Stapler Assembly

4. Remove the PWB Cover (Figure 3).

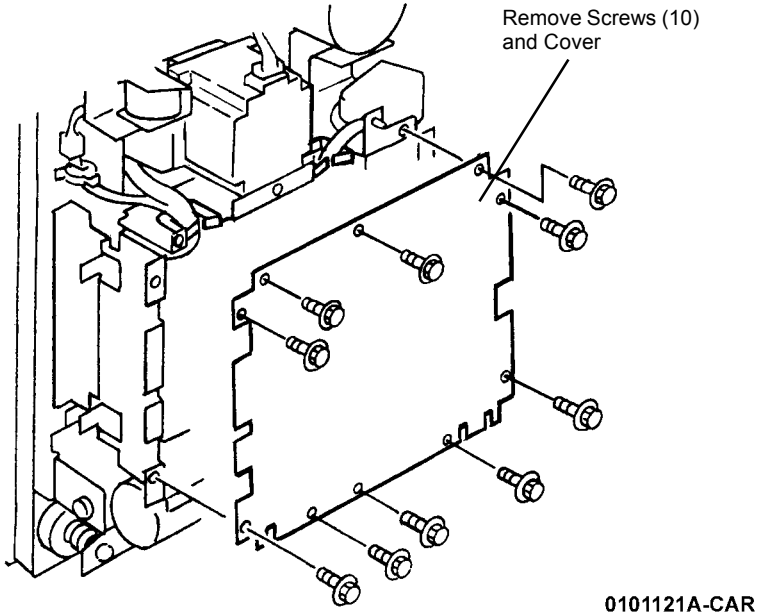


Figure 3 Removing the PWB Cover

5. Move the PWB Chassis down (Figure 4).

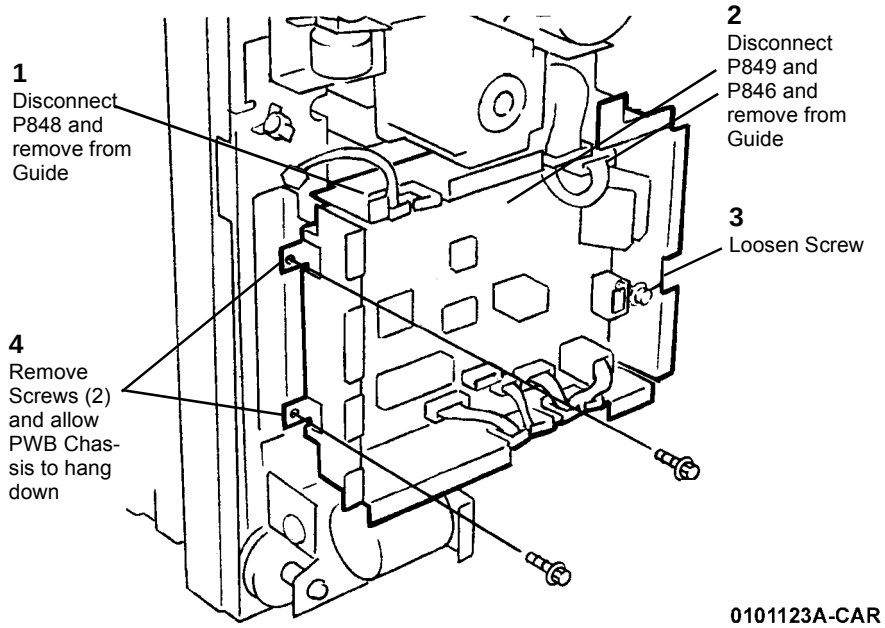


Figure 4 Moving PWB Chassis Down

6. Remove Rear Rail Mounting Screws (2) (Figure 5).

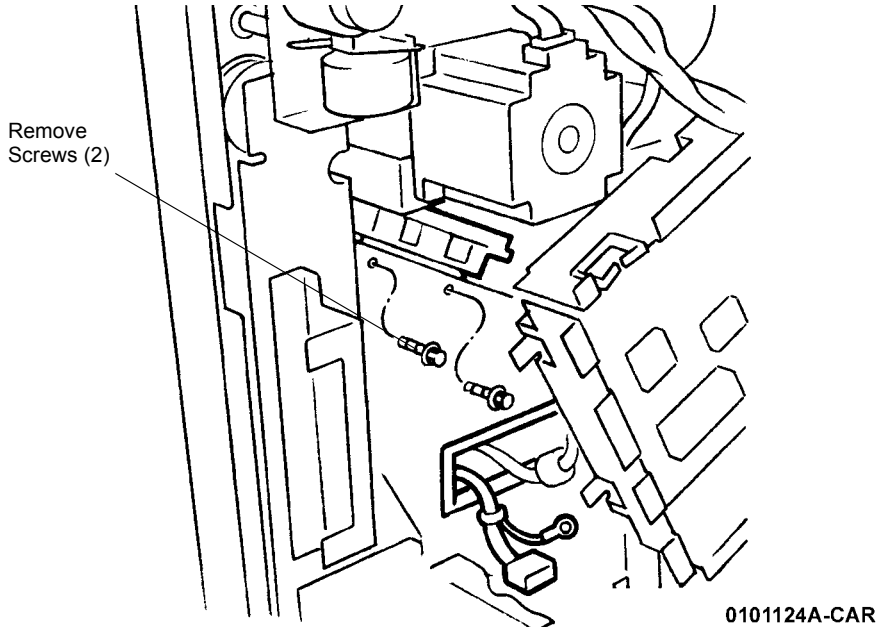


Figure 5 Removing Rear Rail Mounting Screws (2)

7. Remove Front Rail Mounting Screws (2) (Figure 6).

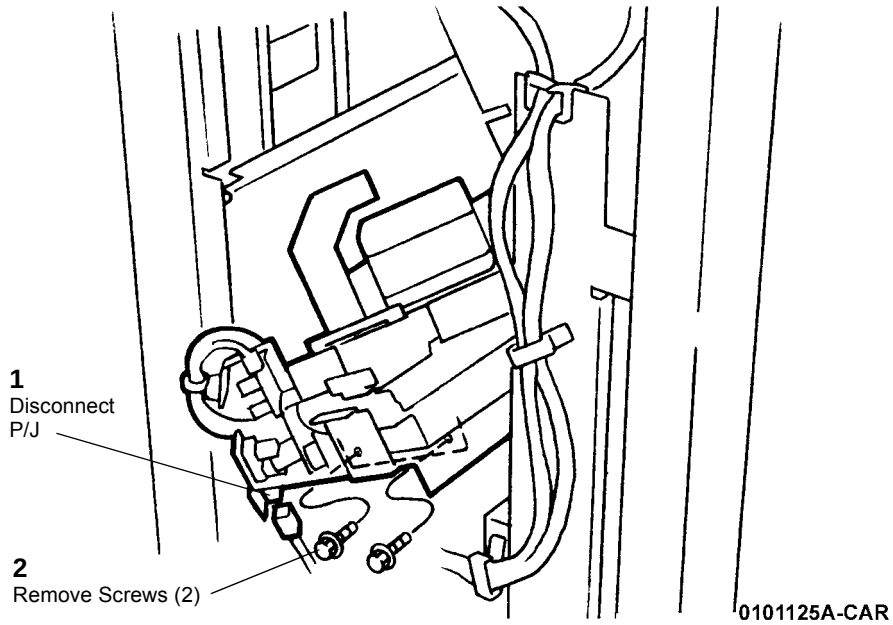
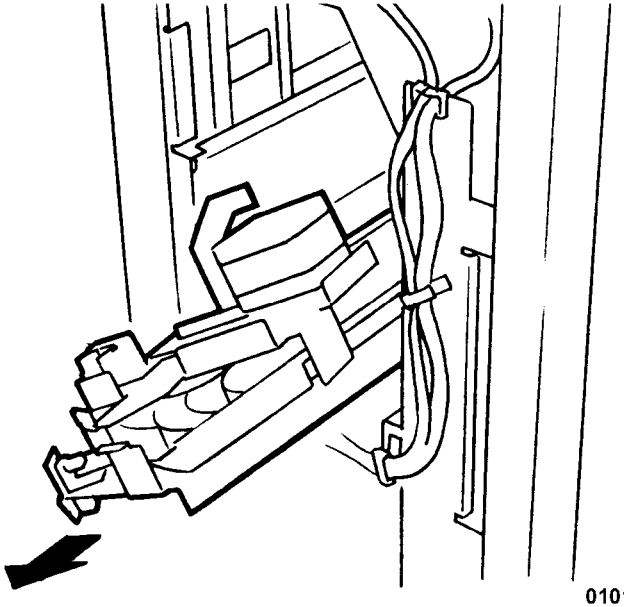


Figure 6 Removing Front Rail Mounting Screw

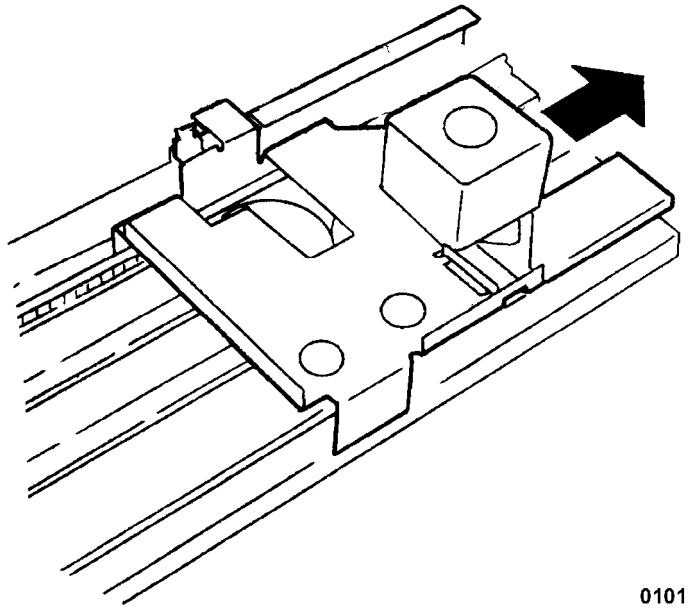
8. Remove the Rail Assembly (Figure 7).



0101126A-CAR

Figure 7 Removing Rail Assembly

9. Remove the Carriage Assembly (Figure 8).



0101127A-CAR

Figure 8 Removing the Carriage Assembly

10. Remove Screws (5) and remove Rail (Figure 9).

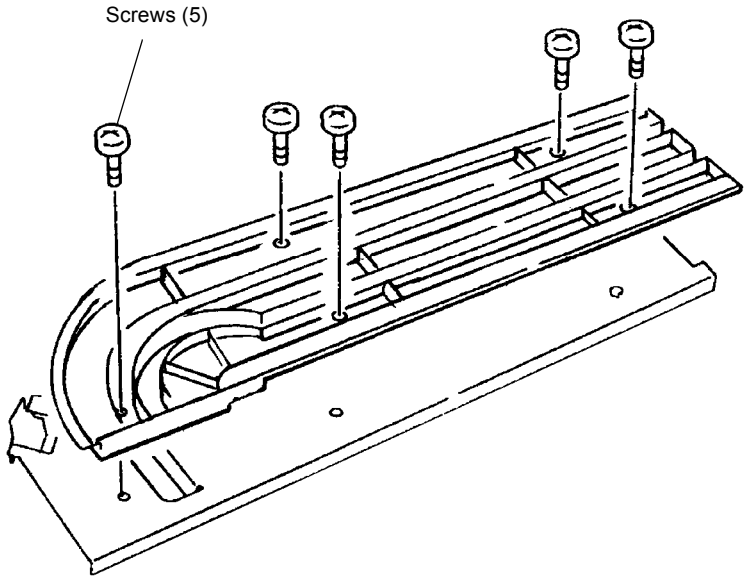


Figure 9 Removing Rail

REP 12.11 Stapler Assembly

Parts List on PL 17.9

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open the Front Cover.
2. Disconnect Stapler P/Jís (2) (Figure 1).

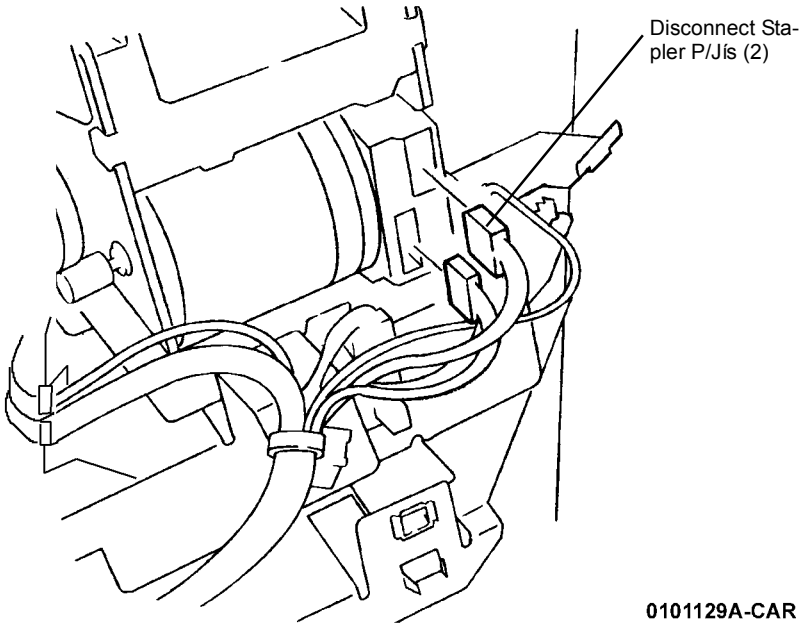


Figure 1 Disconnecting P/Jís

3. Remove the Stapler Assembly (Figure 2).

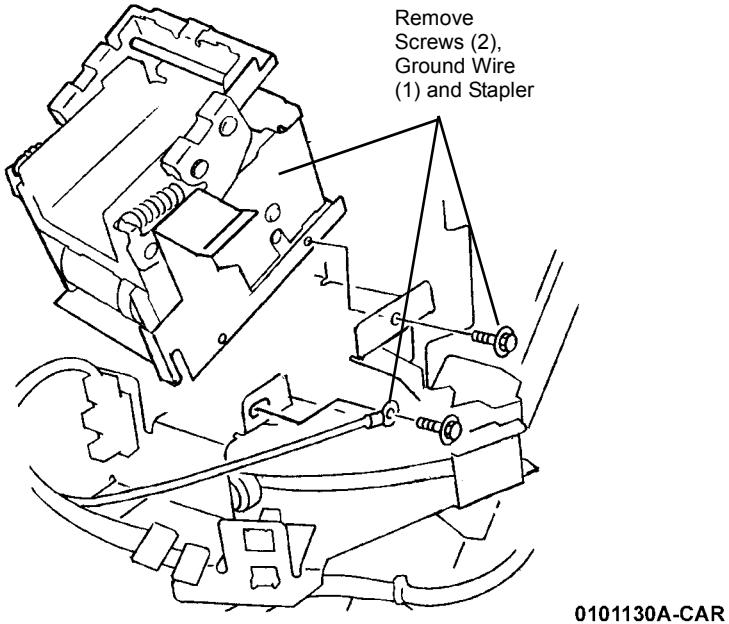


Figure 2 Removing Stapler Assembly

Replacement

NOTE: *Insert Stapler Assembly Tab into Slot (Figure 3).*

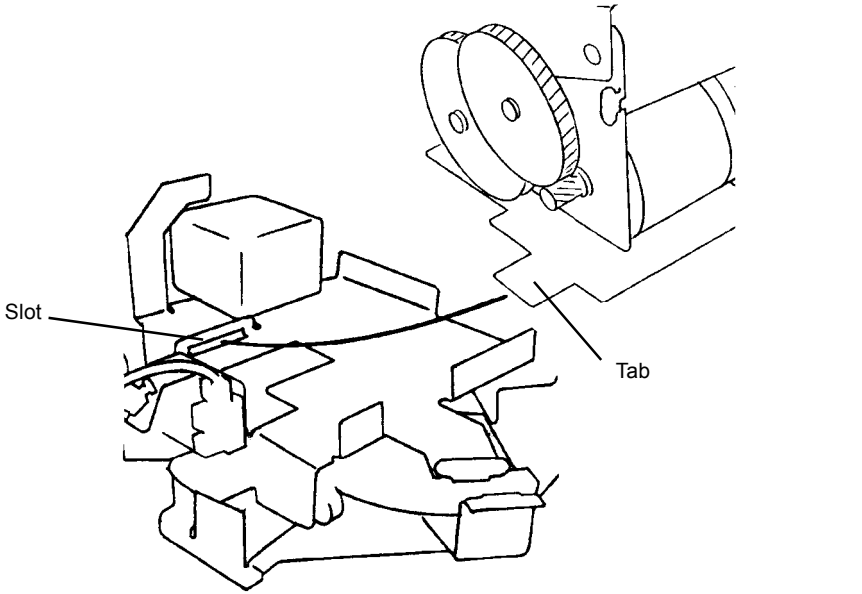


Figure 3 Inserting Tab into Slot

REP 12.12 Compiler Tray Assembly

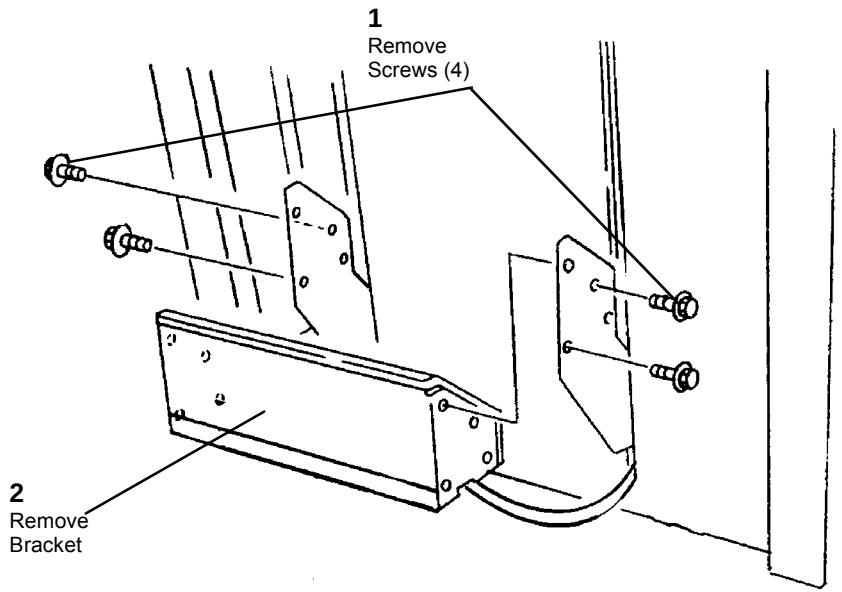
Parts List on PL 17.10

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

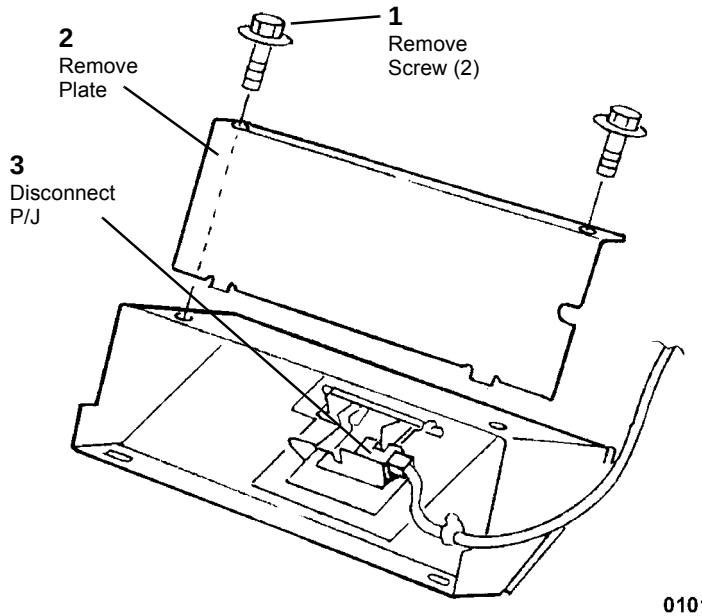
1. Remove the following parts:
   a. Rear Cover (PL 17.5)
   b. Stacker Tray (PL 17.1)
   c. Right Cover (PL 17.5)
   d. Front Cover (PL 17.5)
2. Remove the Bracket (Figure 1).



0101104A-CAR

Figure 1 Remove the Bracket

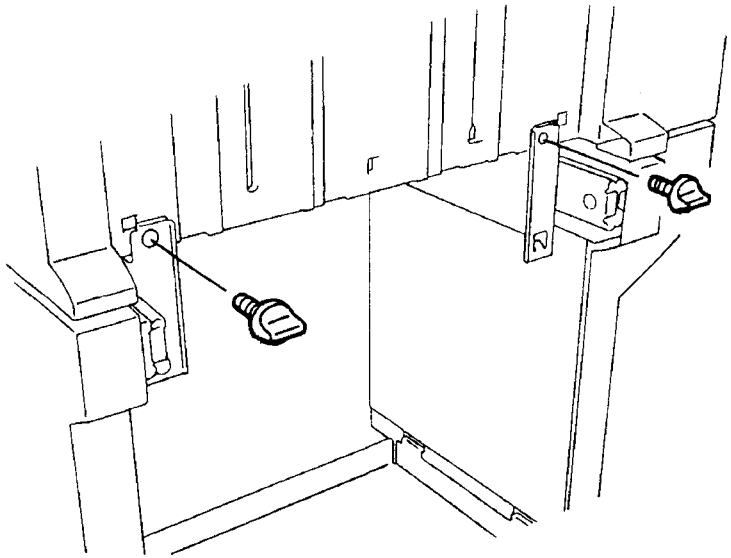
3. Disconnect P/J (Figure 2).



0101105A-CAR

Figure 2 Disconnecting P/J

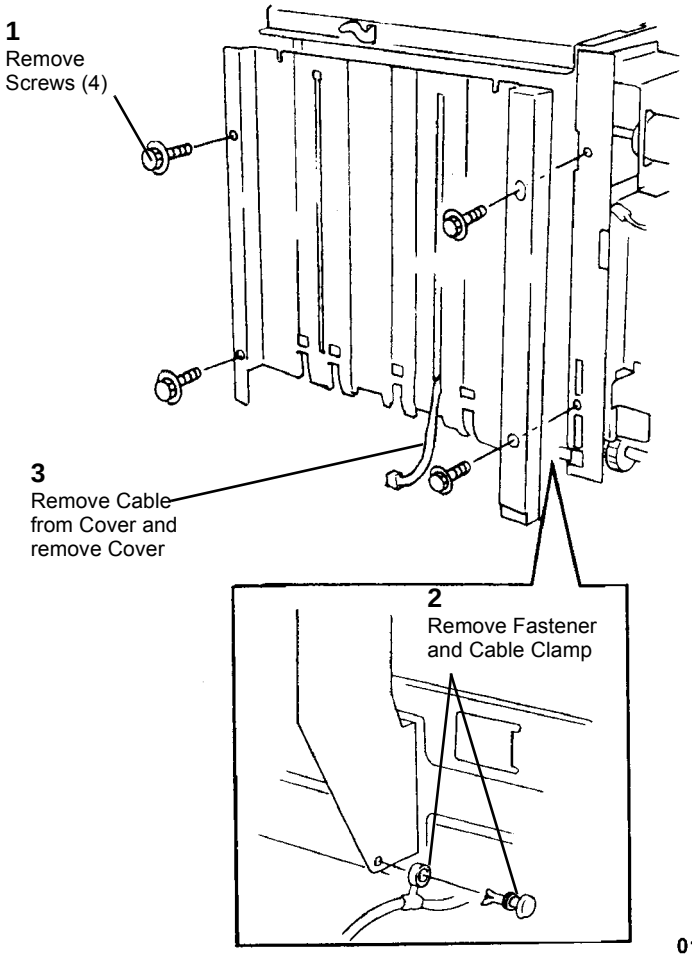
4. Remove Thumbscrews (2) (Figure 3).



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Figure 3 Removing Thumbscrews (2)

5. Remove the Tray Guide (Figure 4).



0101107A-CAR

Figure 4 Removing Tray Guide

6. Release Compiler Tray Harness (Figure 5).

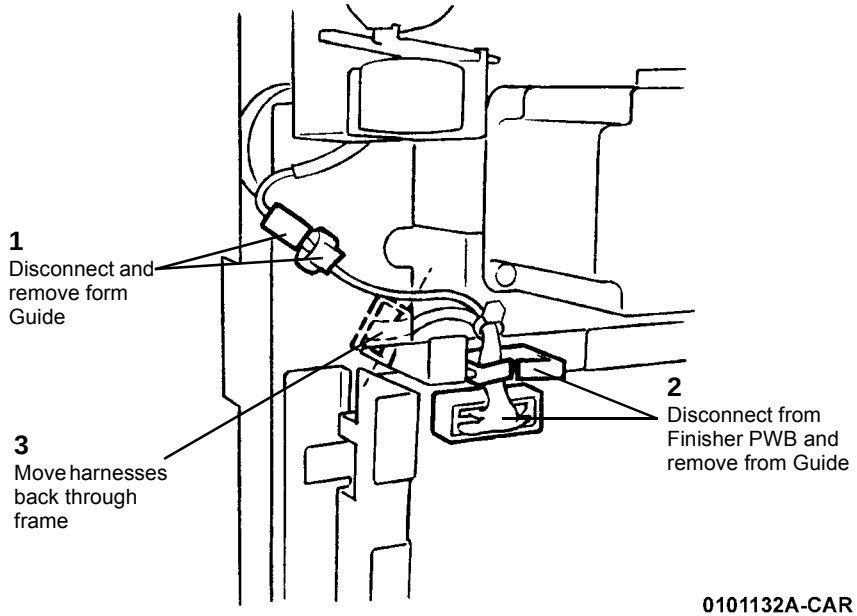


Figure 5 Releasing Compiler Tray Harness

7. Remove the Screw on the Inboard side (Figure 6).

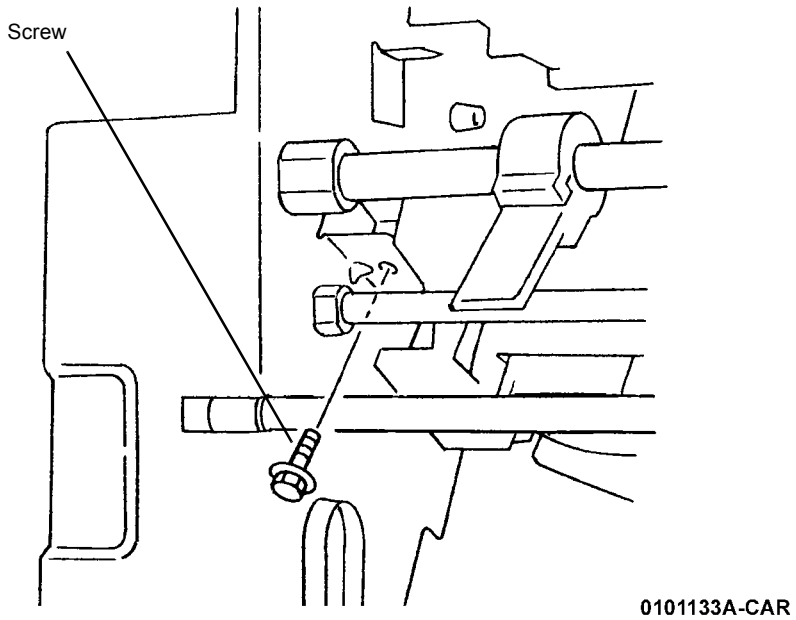


Figure 6 Removing Screw on Inboard Side

8. Remove the Compiler Tray Assembly (Figure 7).

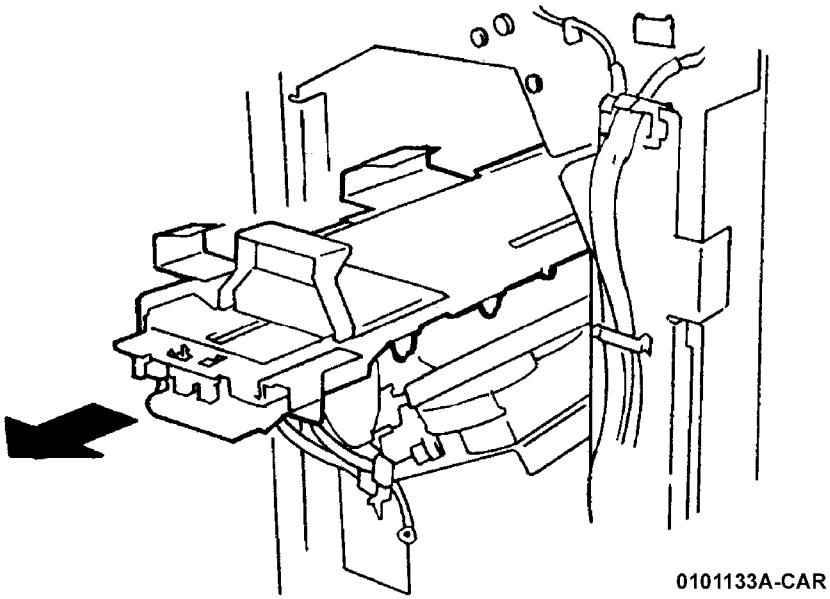


Figure 7 Removing Compiler Tray Assembly

REP 12.13 Stacker Motor Assembly

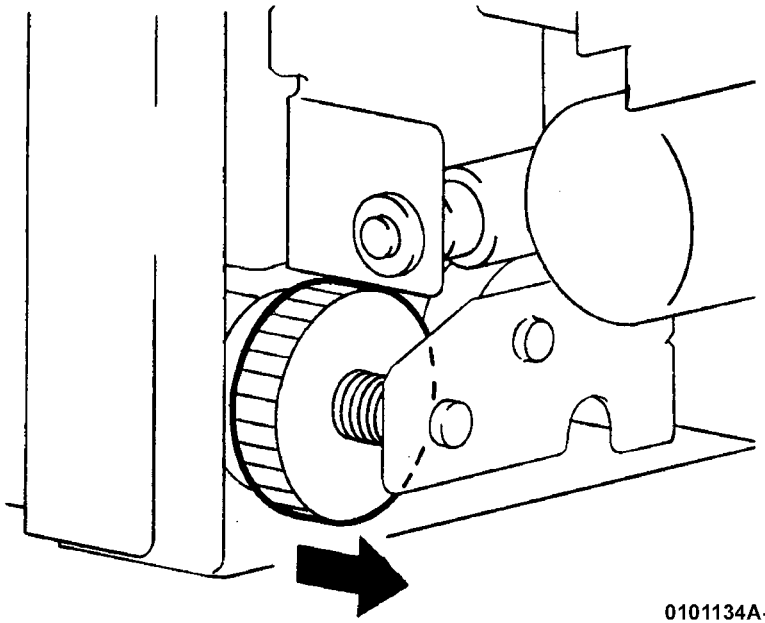
Parts List on PL 17.11

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

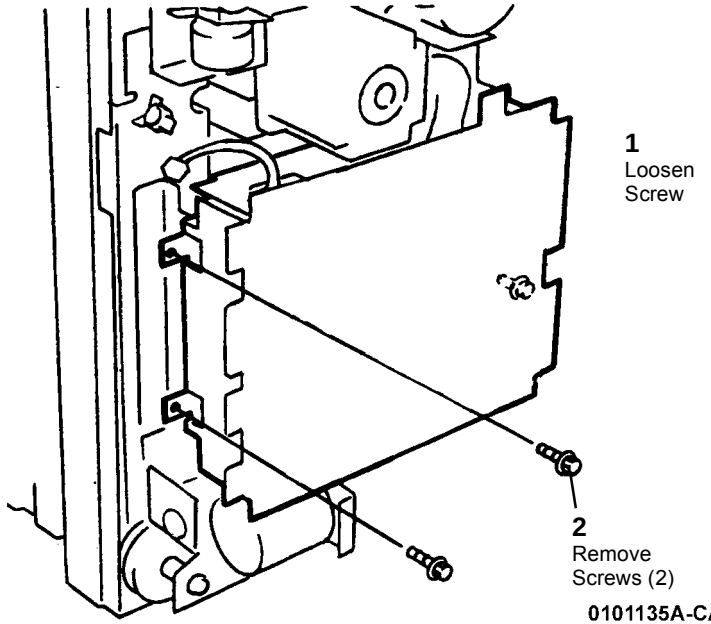
1. Remove the Rear Cover (PL 17.5)
2. Hold Stacker Tray and move Gear to lower the Stack Tray (Figure 1).



0101134A-CAR

Figure 1 Moving Gear to Lower Stack Tray

3. Remove the screws on PWB Chassis (Figure 2).



0101135A-CAR

Figure 2 Removing Screws on PWB Chassis

4. Remove the Stacker Motor Assembly (Figure 3).
   a. Remove the screws (3) while sliding the PWB Chassis upward.
   b. Slide the Gear.
   c. Remove the Stacker Motor Assembly.

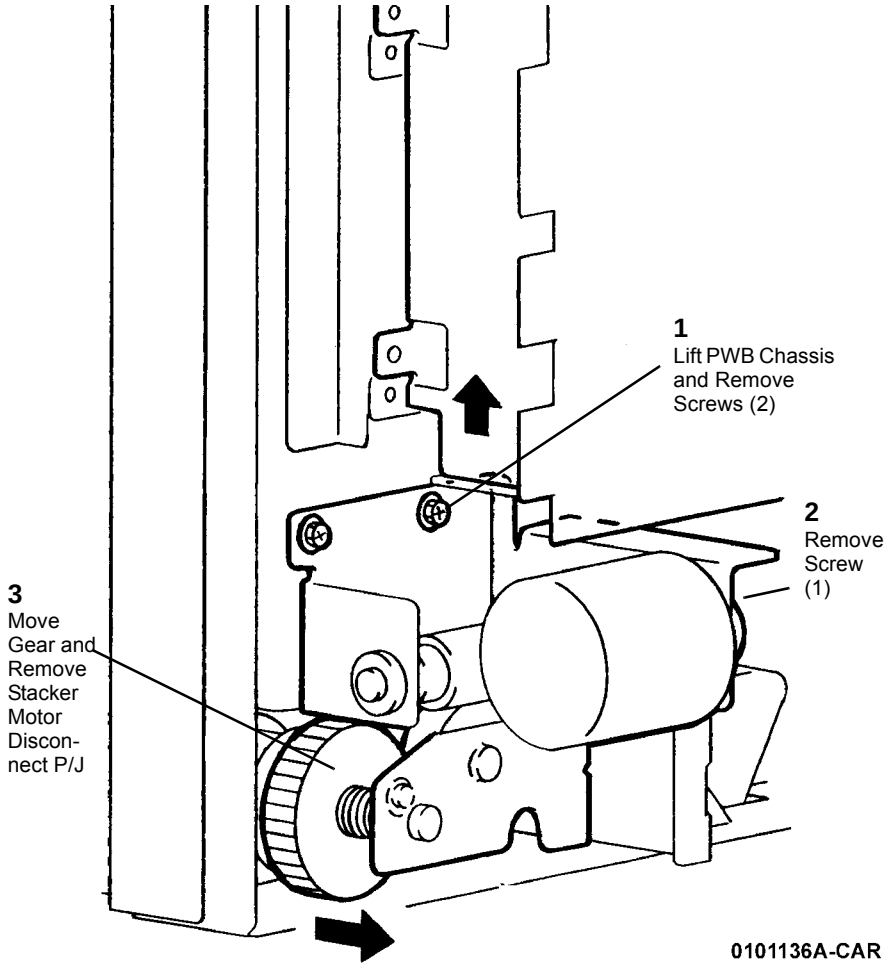


Figure 3 Removing Stacker Motor Assembly

REP 12.14 Front Elevator Bracket

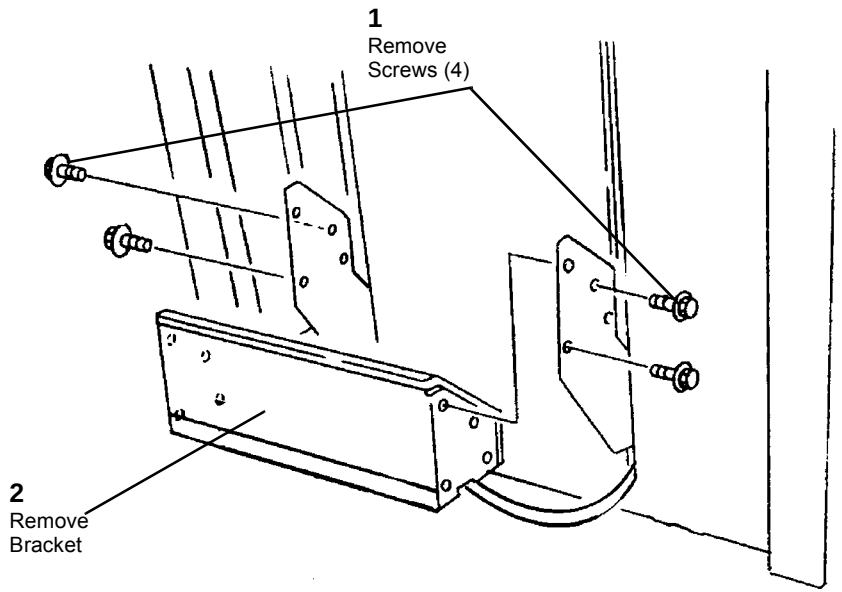
Parts List on PL 17.11

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

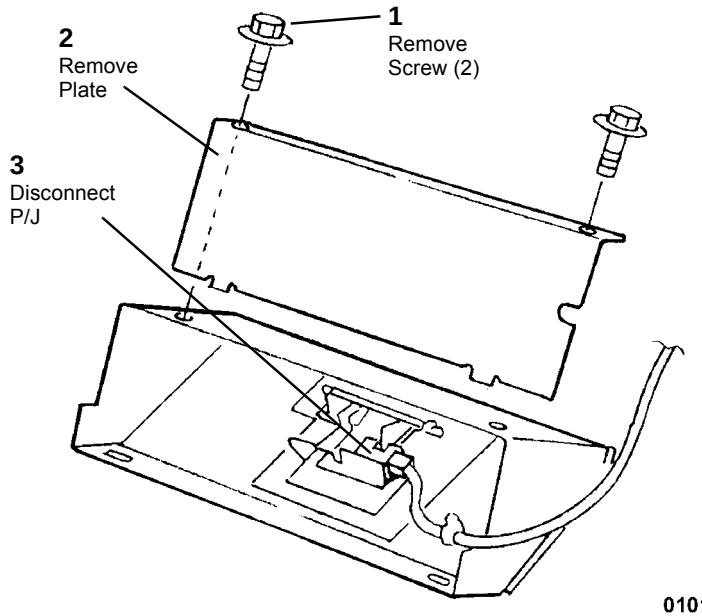
1. Remove the following parts:
   a. Rear Cover (PL 17.5)
   b. Stacker Tray (PL 17.1)
   c. Right Cover (PL 17.5)
   d. Front Cover (PL 17.5)
2. Remove the Bracket (Figure 1).



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Figure 1 Remove the Bracket

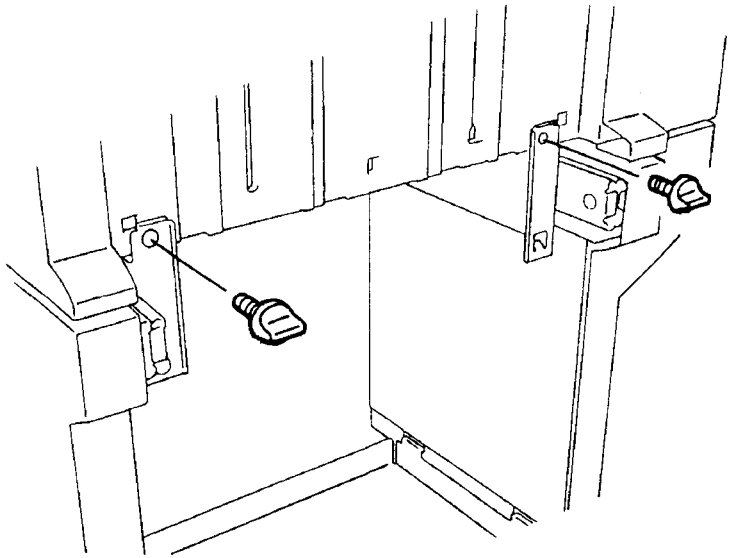
3. Disconnect P/J (Figure 2).



0101105A-CAR

Figure 2 Disconnecting P/J

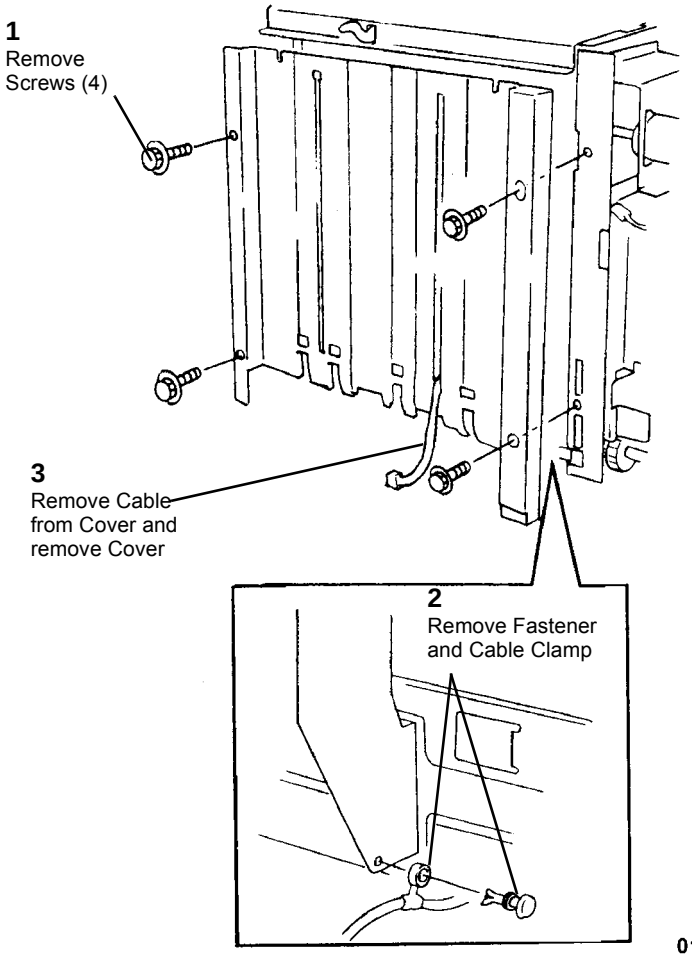
4. Remove the Thumbscrews (2) (Figure 3).



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Figure 3 Removing Thumbscrews

5. Remove the Tray Guide (Figure 4).



0101107A-CAR

Figure 4 Removing Tray Guide

6. Move PWB Chassis (Figure 5).

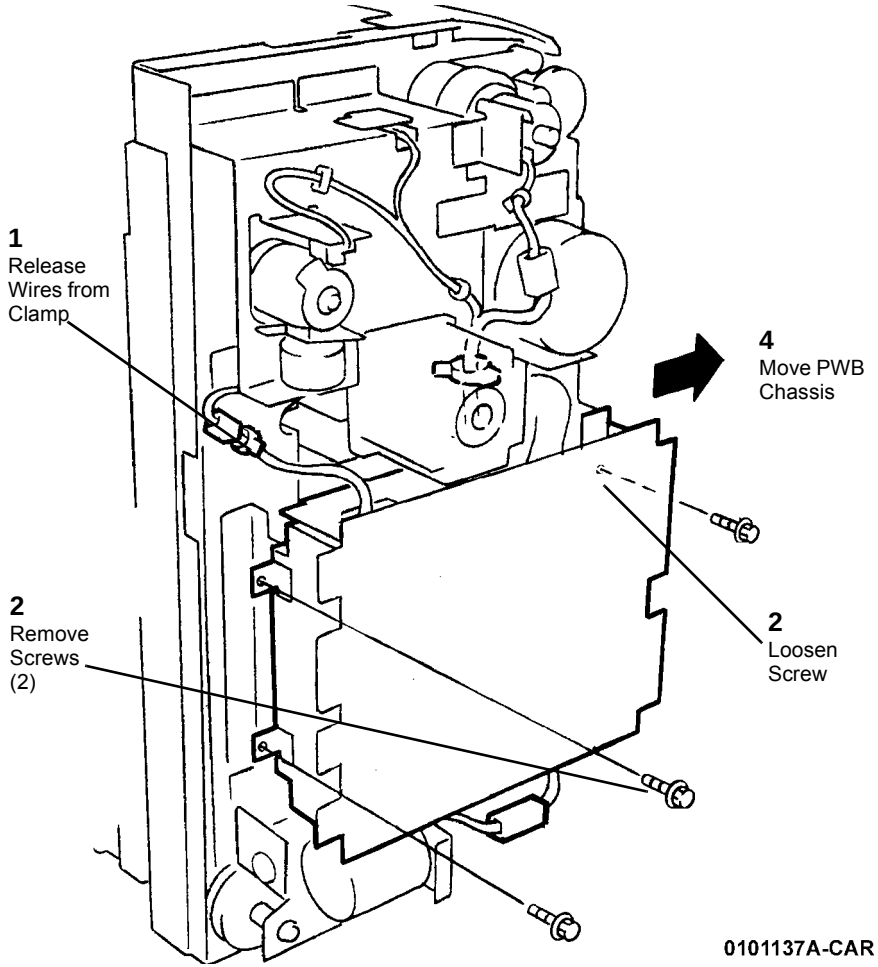


Figure 5 Moving PWB Chassis

7. Remove Front Elevator Bracket (Figure 6).

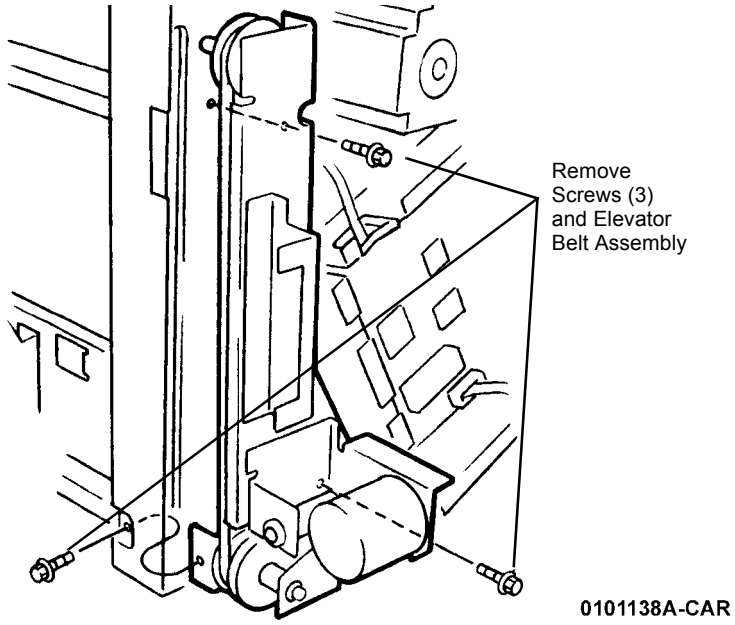


Figure 6 Removing Elevator Belt Assembly

REP 12.15 Paddle Gear Shaft

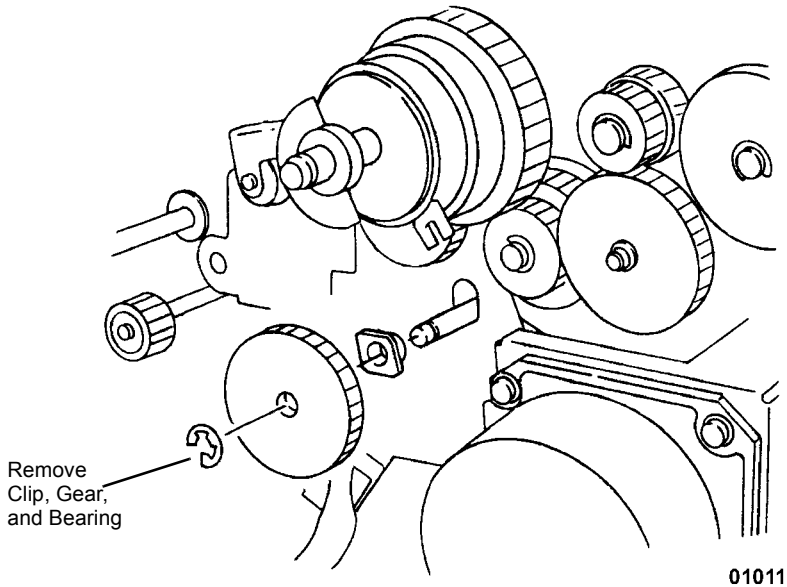
Parts List on PL 17.12

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

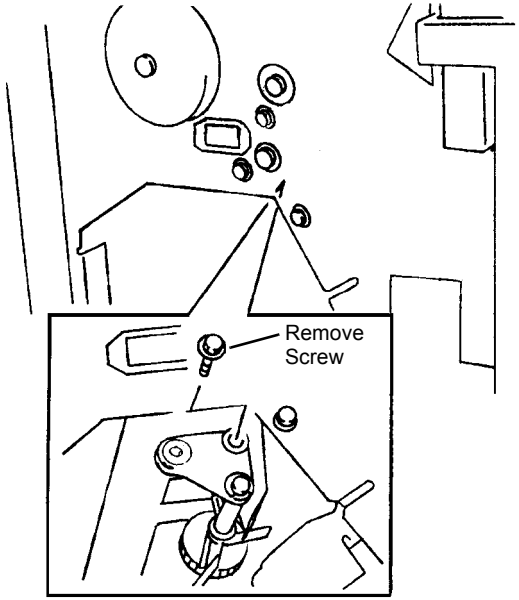
1. Remove the following parts:
   a. Stapler Assembly (REP 12.11).
   b. Rear Cover (PL 17.5).
2. Remove the Cam Bracket Assembly (REP 12.18).
3. Remove the Bearing (Figure 1).



0101139A-CAR

Figure 1 Removing Bearing

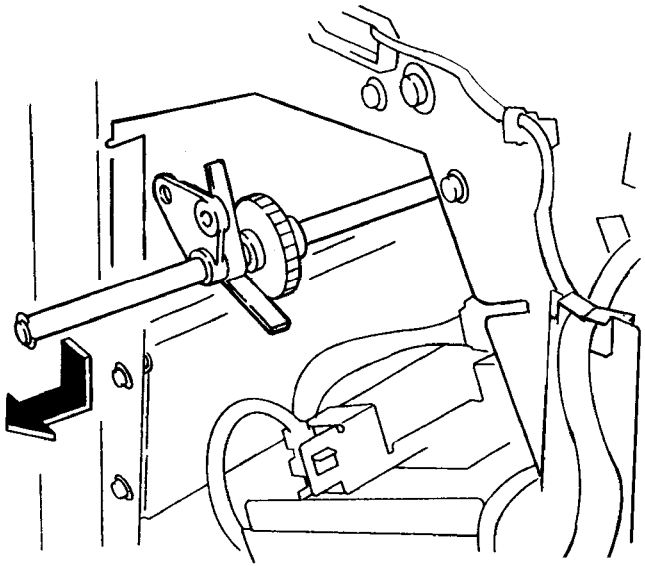
4. Remove Screw on Paddle Gear Shaft (Figure 2).



0101140A-CAR

Figure 2 Removing Screw on Paddle Gear Shaft

5. Remove the Paddle Gear Shaft (Figure 3).



0101141A-CAR

Figure 3 Removing Paddle Gear Shaft

REP 12.16 Finisher PWB

Parts List on PL 17.13

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (PL 17.5).
2. Remove the PWB Cover (Figure 1).

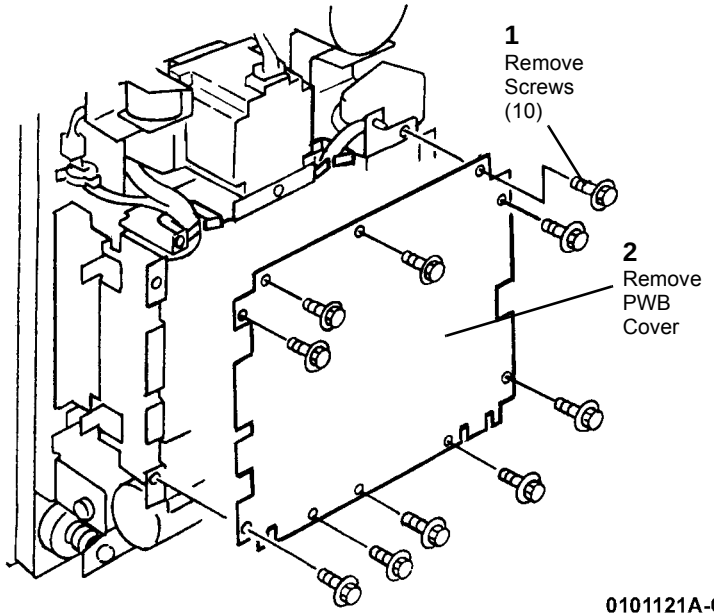


Figure 1 Removing PWB Cover

3. Disconnect P/Jís (Figure 2).

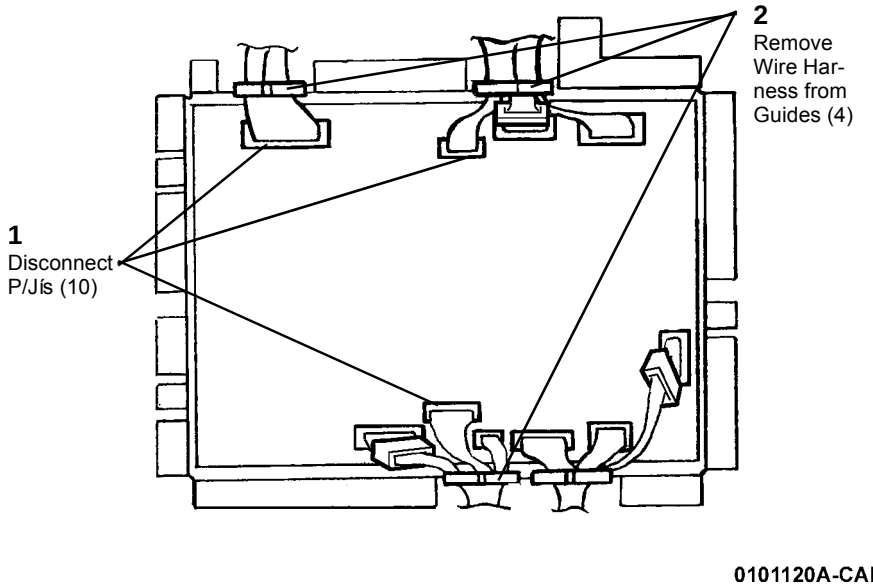


Figure 2 Disconnecting P/Jís

4. Remove the Finisher PWB (Figure 3).

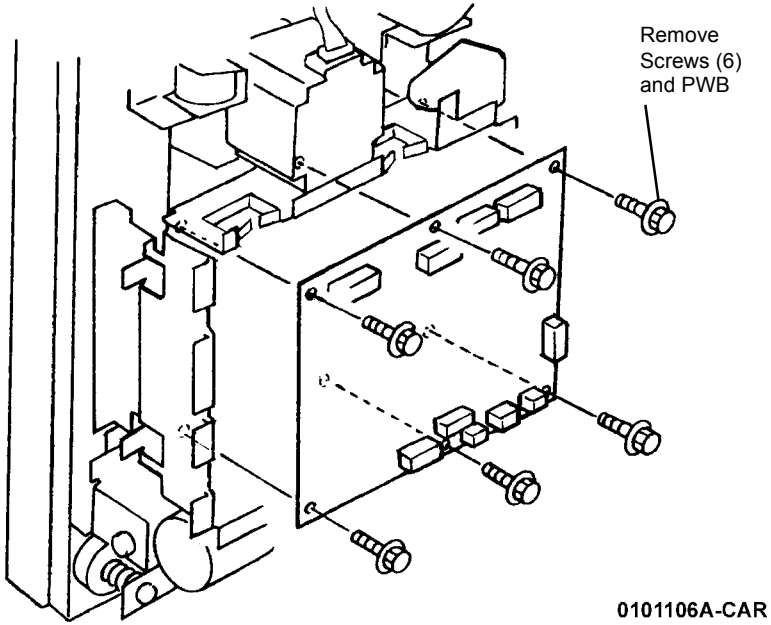


Figure 3 Removing Finisher PWB

Replacement

NOTE: *When installing, keep the Core (Figure 2) inside the PWB Box.*

REP 12.17 Entrance Upper Cover

Parts List on PL 17.3

Removal

1. Remove the H Transport Assembly (REP 12.1).
2. Remove the following:
   a. H Transport Front Cover (PL 17.3)
   b. H Transport Rear Cover (PL 17.3)
   c. Stop (PL 17.3)
3. Remove the H Transport Cover (Figure 1).

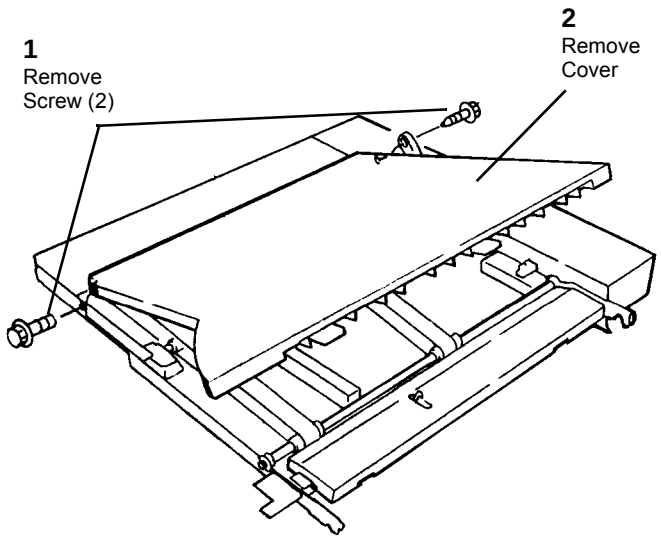


Figure 1 Removing the H Transport Cover

REP 12.18 Cam Bracket Assembly

Parts List on PL 17.8

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove the Rear Cover (PL 17.5)
2. Rotate the Actuator (Figure 1).

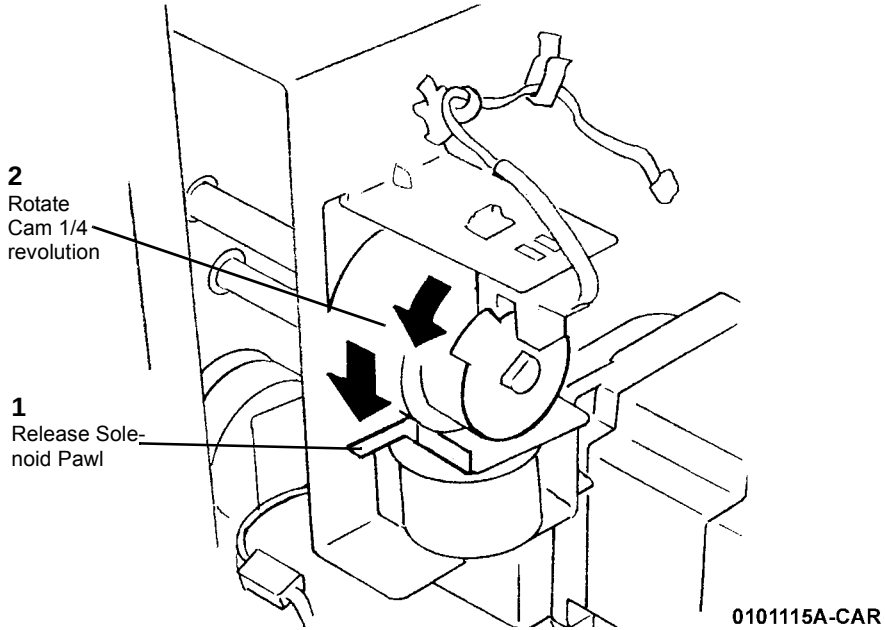


Figure 1 Rotate the Actuator

3. Release Harnesses (Figure 2).

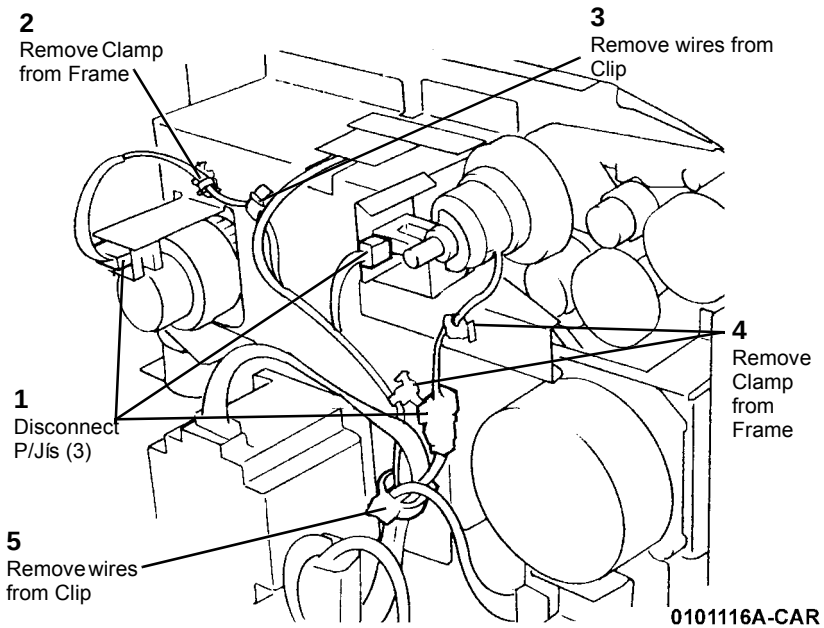


Figure 2 Releasing Harnesses

4. Remove the Cam Bracket Assembly (Figure 3).
   a. Remove the Screws (4).
   b. Remove the Cam Bracket Assembly.

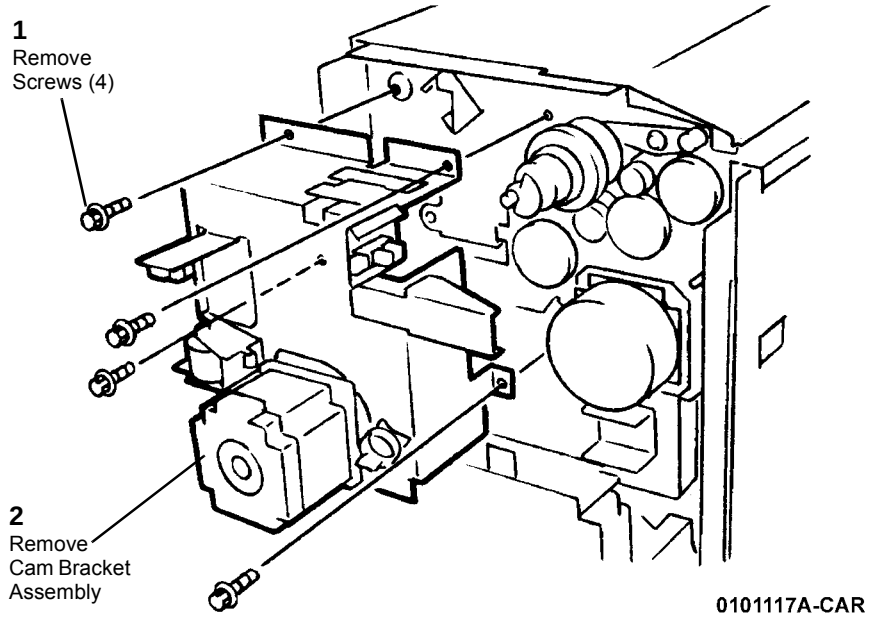


Figure 3 Removing the Cam Bracket Assembly

Replacement

NOTE: *During assembly, refer to Figure 4.*

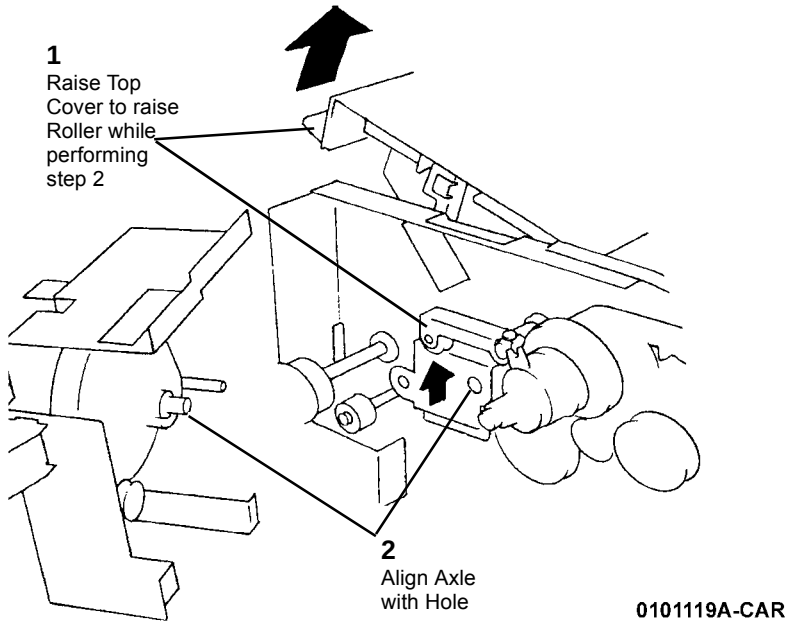


Figure 4 Inserting Axle of Cam Bracket Assembly into Hole

NOTE: *During assembly, refer to Figure 5.*

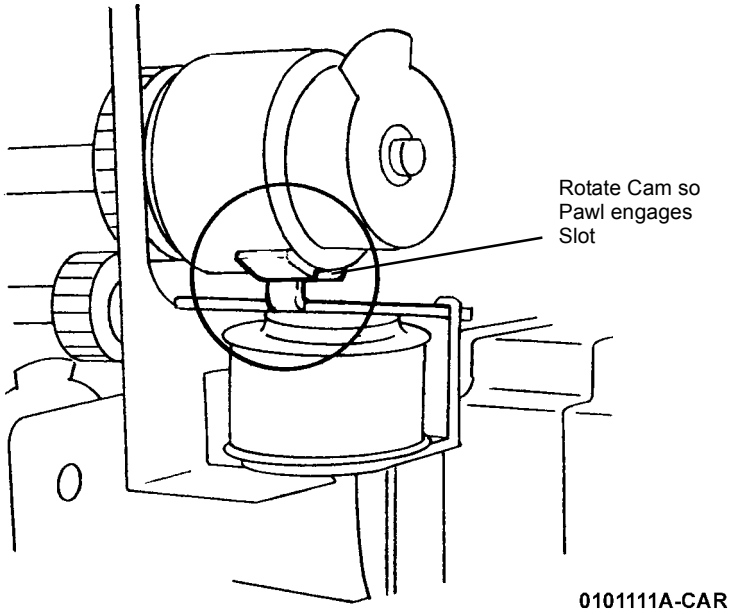


Figure 5 Engaging Pawl with Slot

REP 12.19 Finisher Rack Assembly

Parts List on PL 17.1

Removal

1. Remove Finisher (REP 12.4).
2. Loosen Feet (Figure 1).

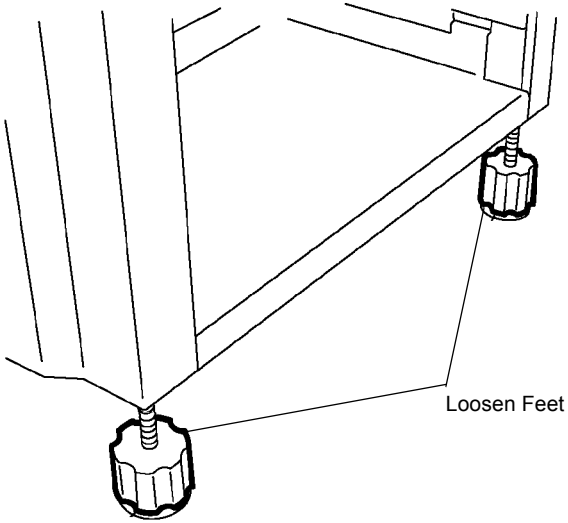


Figure 1 Loosening Feet

3. Remove Bottom Plate (Figure 2).

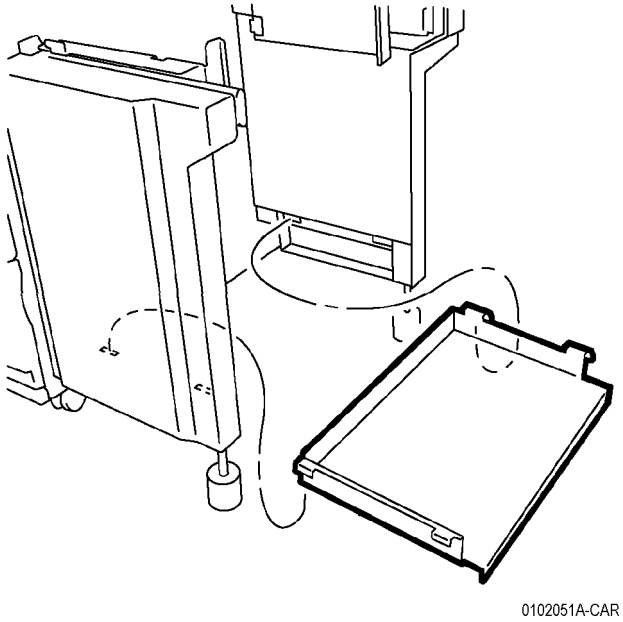


Figure 2 Removing Bottom Plate

4. Remove Rear Rack (Figure 3).

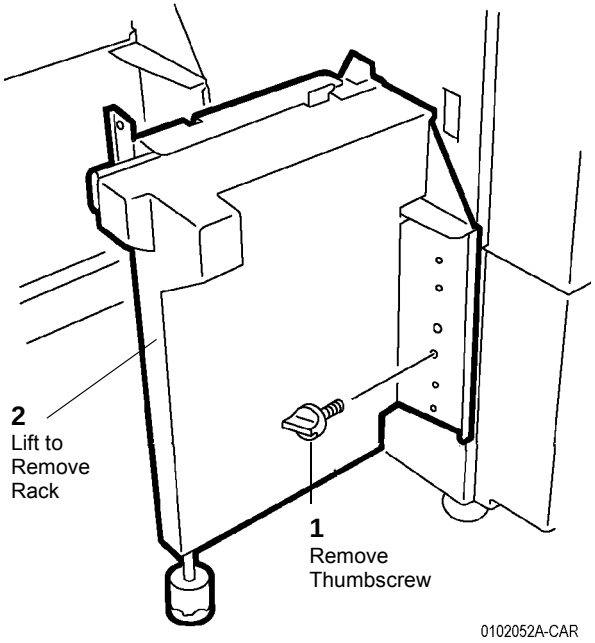


Figure 3 Removing Rear Rack

5. Remove Front Rack (Figure 4).

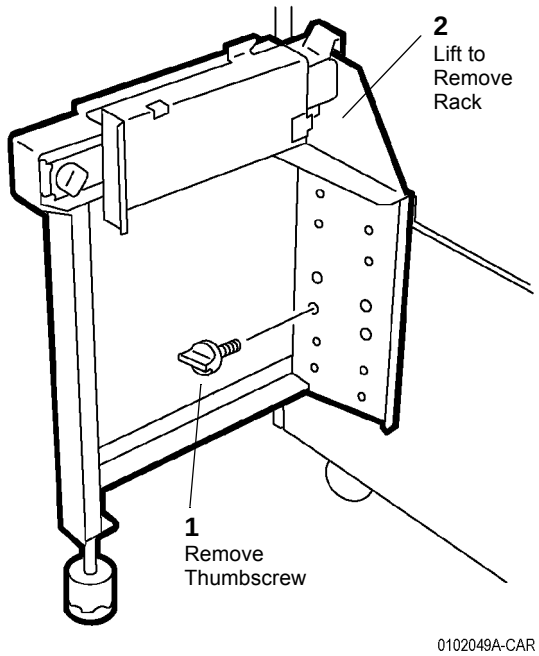


Figure 4 Removing Front Rack

REP 12.20 Lowering Stacker Tray

Parts List on PL 17.1

Purpose

If the need arises to lower the Stacker Tray quickly or without power applied perform following:

1. Remove Finisher Rear Cover (PL 17.5).
2. While holding the Stacker Tray, move the gear outward and the Stacker Tray is released (Figure 1).

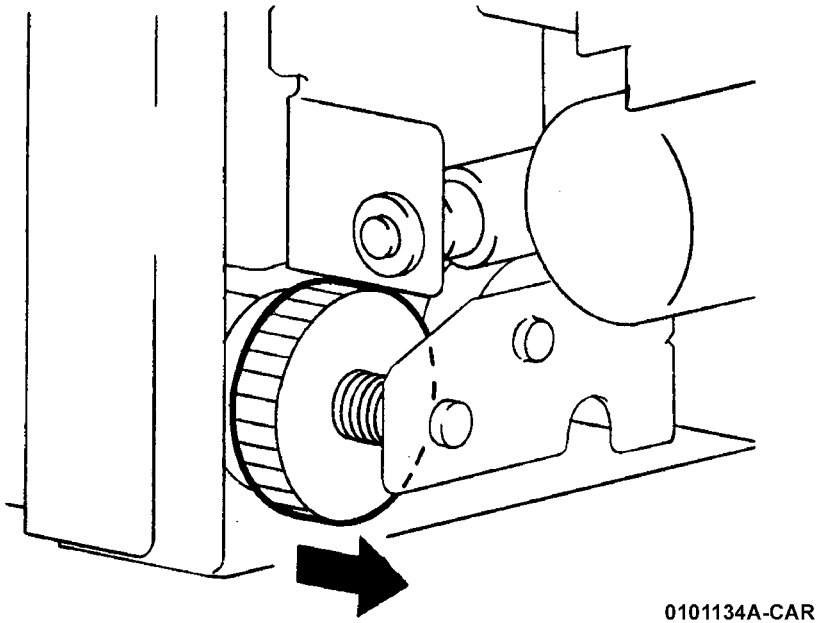


Figure 1 Moving Gear to Lower Stack Tray

REP 14.1 Top Cover

Parts List on PL 10.2

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Finisher H Transport (REP 12.1).
2. Remove Finisher (REP 12.4).
3. Remove Front and Rear Brackets (Figure 1).

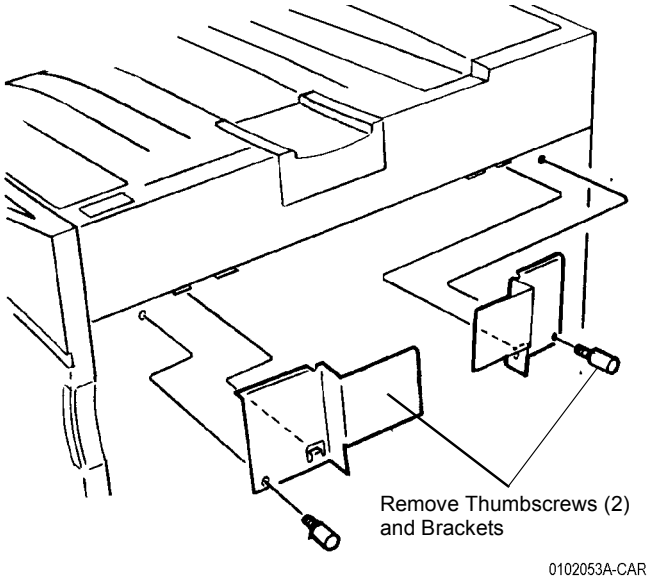


Figure 1 Removing Brackets

4. Remove Finisher Rack Assembly (REP 12.19).
5. Remove Gate Cover (Figure 2).

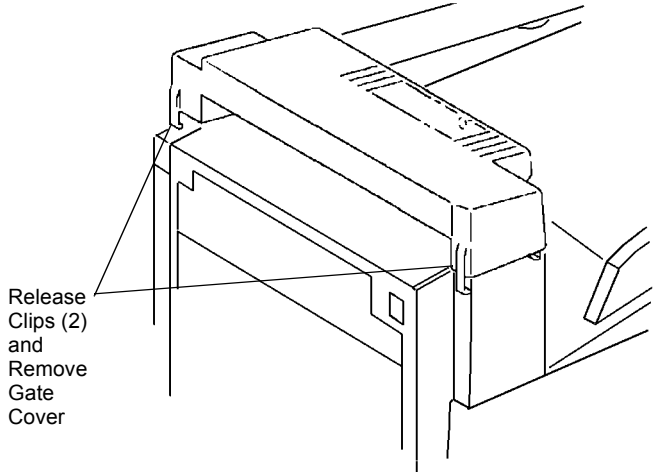


Figure 2 Removing Gate Cover

6. Remove Right Cover (REP 14.3).
7. Remove Top Cover (Figure 3).
   a. Open Front Cover.
   b. Remove Screws (3).
   c. Remove Top Cover.

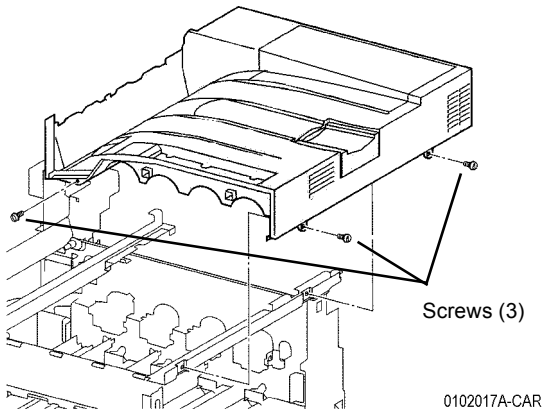


Figure 3 Removing Top Cover

REP 14.2 Rear Cover

Parts List on PL 10.3

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (Figure 1).
   a. If optional feeder is installed, open Harness Cover and disconnect Harnesses
   b. Remove Screws (4).
   c. Remove Rear Cover.

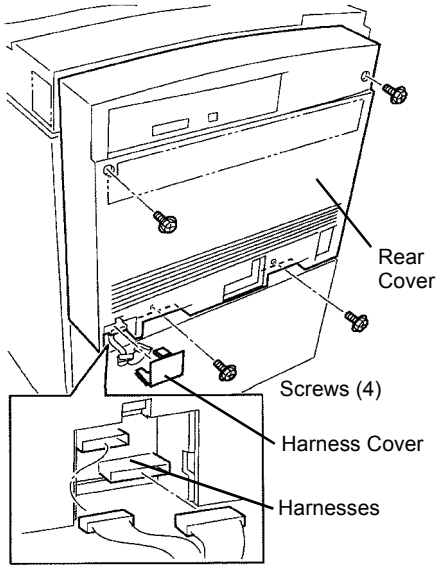


Figure 1 Removing Rear Cover

REP 14.3 Right Cover

Parts List on PL 10.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Remove Right Cover (Figure 1).
   a. Open Right Door.
   b. Remove Screws (3).
   c. Push cover down, or allow cover to drop slightly to release Hidden Tabs, then pull cover away and remove it.

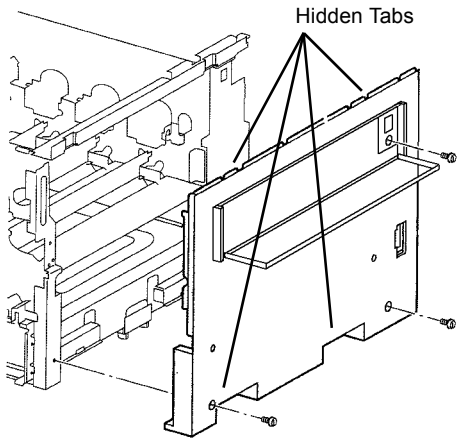


Figure 1 Removing Right Cover

REP 14.4 Rear Left Middle Cover

Parts List on PL 10.3

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (REP 14.2).
2. Open Left Cover Assembly.
3. Remove Power Switch Cover (REP 14.5).
4. Remove Upper Rear Left Cover (Figure 1).
   a. Remove Screw (1).
   b. Lift slightly to disengage hidden tab and remove Upper Rear Left Cover.

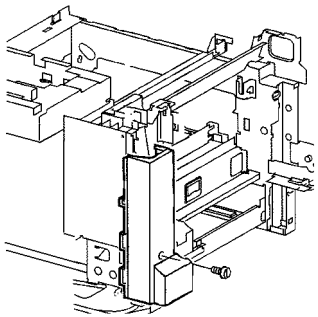


Figure 1 Removing Upper Rear Left Cover

REP 14.5 Rear Left Upper Cover

Parts List on PL 10.3

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Rear Cover (REP 14.2).
2. Open Left Cover Assembly.
3. Remove Power Switch Cover (Figure 1).
   a. Remove Screw (1).
   b. Push end of cover in direction shown to release Hidden Tabs (2).
   c. Pull up to release Hidden Tab (1) and remove Power Switch Cover.

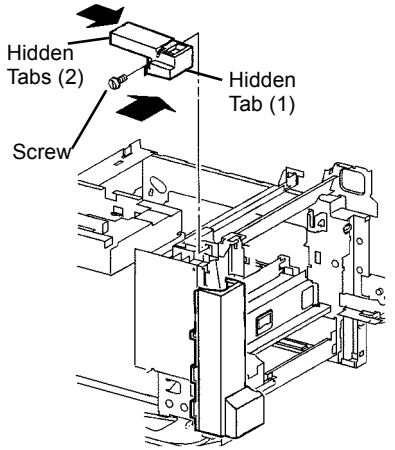


Figure 1 Removing Power Switch Cover

REP 14.6 Left Lower Cover Assembly

Parts List on PL 2.3

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Lower Left Cover (Figure).
   a. Open Left Lower Cover Assembly.
   b. Carefully observe position of wiring harness for later reinstallation.
   c. Disconnect harness connector and remove harness from harness guide.
   d. Use flat tipped screwdriver to pry out Pivot Lock.
   e. Remove Pivot Pin Sleeve.
   f. Remove Lower Left Cover.

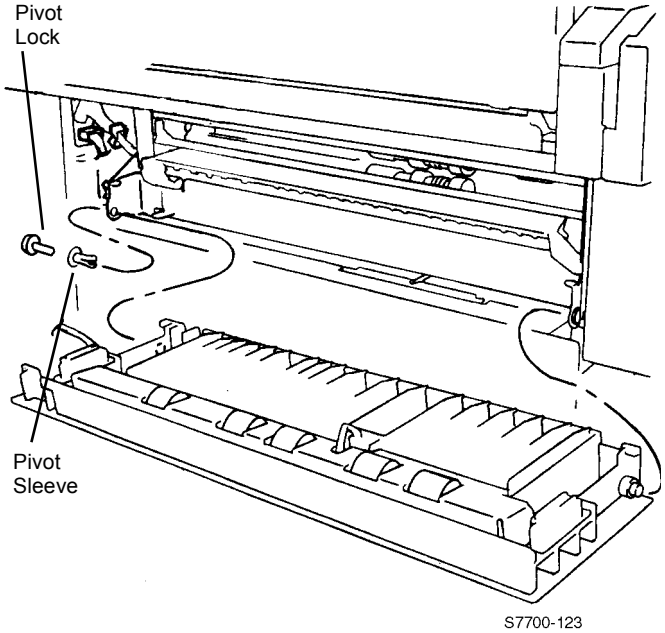


Figure 1 Removing Left Lower Cover Assembly

Replacement

NOTE: *Partially install Pivot Sleeve. Then install Left Lower Cover Assembly and push in Pivot Sleeve.*

REP 14.7 Cover Assembly

Parts List on PL 10.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Front Cover.
   a. Open Tray 1 approximately 100 mm for possible cover support.
   b. Open Front Cover.
   c. Remove screw to disconnect Support Strap from cover.
   d. Repeat c for other strap.
   e. Remove screws (2) on Hinge Pin Locks and remove hinge pin locks.
   f. Remove Front Cover.

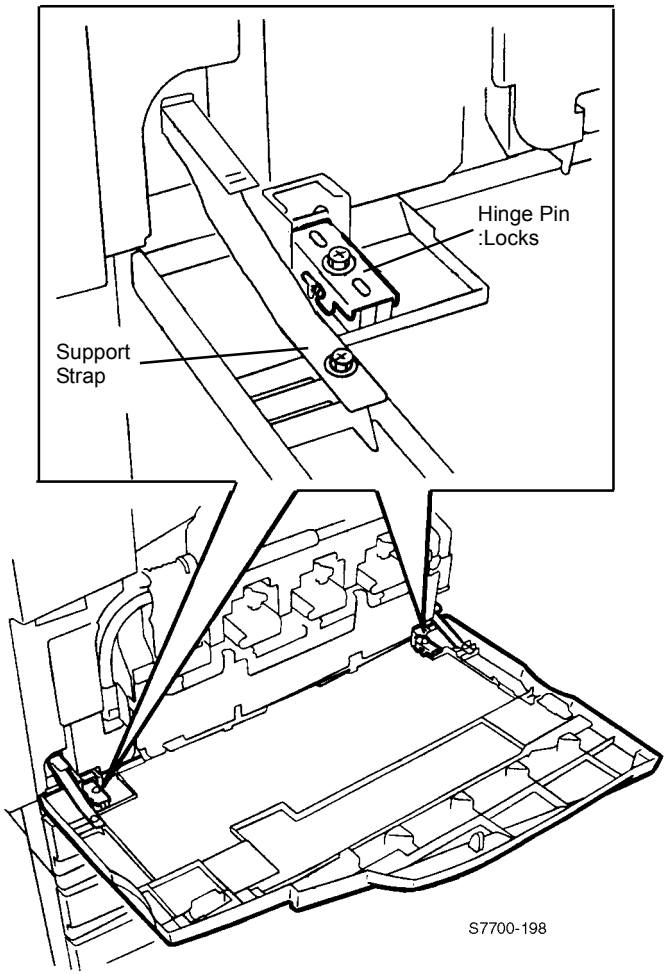


Figure 1 Removing Front Cover

REP 14.8 Fuser Cover

Parts List on PL 10.2

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Remove Fuser Cover (Figure).
   a. Remove Screws (2).
   b. Move cover up to release Hidden Tabs (3) and pull out to remove cover.

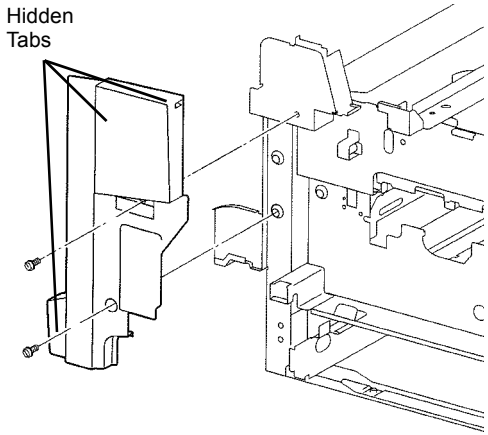


Figure 1 Removing Fuser Cover

REP 14.9 Rear Cover

Parts List on PL 16.16

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Thumbscrews (4).
2. Remove Screws (4) and remove Lower Rear Cover.

REP 14.10 Inner Cover

Parts List on PL 8.1

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Open Front Cover.
2. Remove Fuser Front Cover (REP 14.8).
3. Remove Waste Cartridge Cover (REP 9.3).
4. Remove Inner Cover (Figure 1).
   a. Open Harness Clip and remove harness from Clip.
   b. Remove Screw and remove Harness Cover.

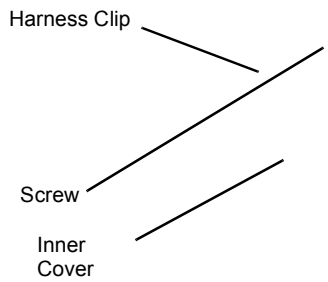


Figure 1 Removing Inner Cover

REP 14.11 Left Cover Assembly

Parts List on PL 16.13

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Lower Cover (REP 14.12).
2. Remove Left Cover Assembly (Figure 1).
   a. Remove Screws (2) and Straps (2) from frame.
   b. Remove Screw (1) and Pivot Support and remove Left Cover Assembly.

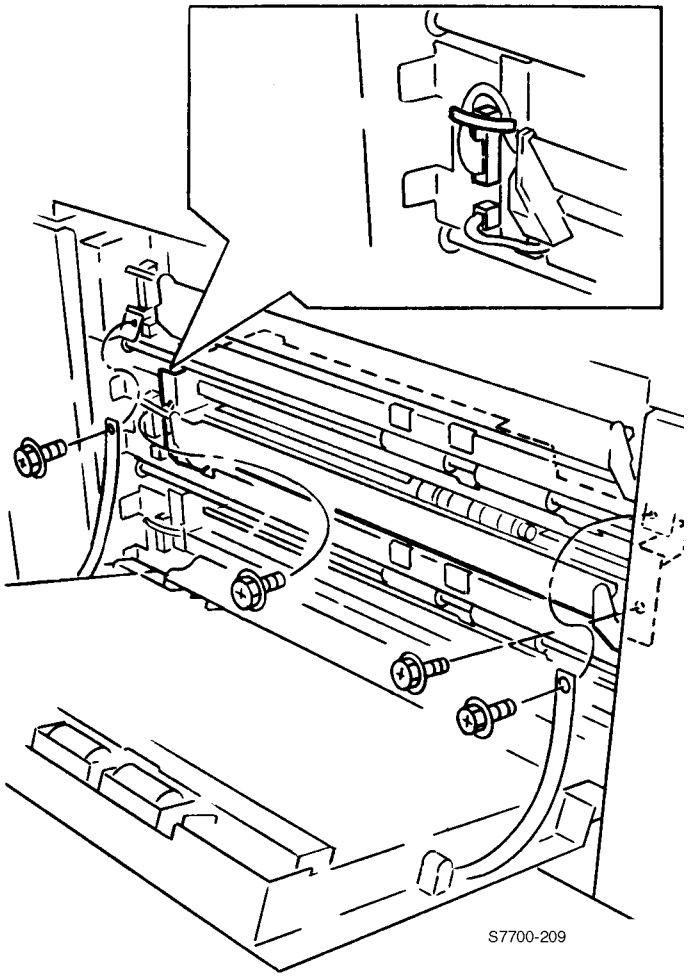


Figure 1 Removing Left Cover Assembly

REP 14.12 Lower Cover

Parts List on PL 16.16

Removal

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Lower Cover (Figure 1).
   a. Remove Screws (4).
   b. Open Left Cover Assembly.
   c. Remove Lower Cover.

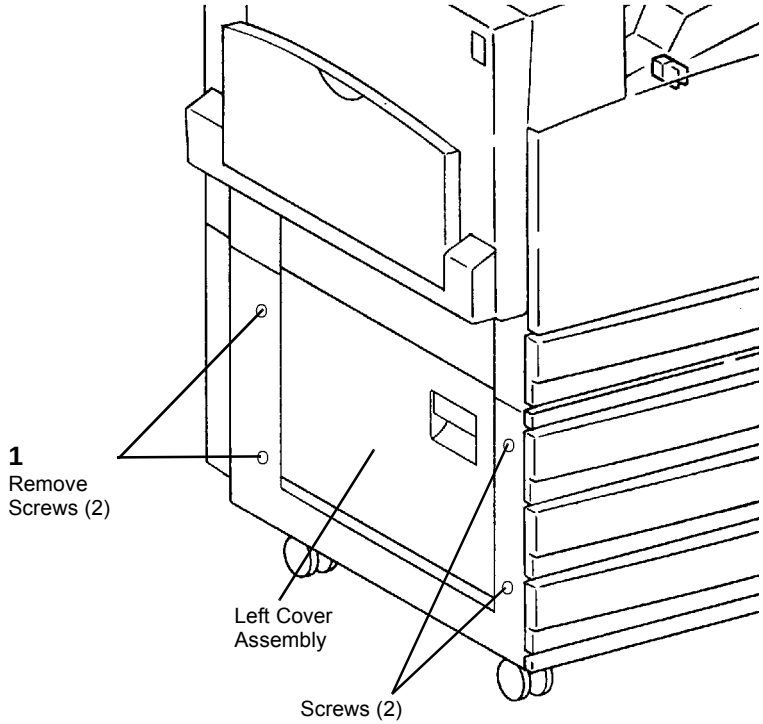


Figure 1 Removing Lower Cover

ADJ 5.1 DADF Side Registration

Purpose

Align image scanned from document with left side edge of paper.

Check

1. Make two copies from the Platen Glass to be used as DADF originals.
   a. Register Test Chart 82E8220 on Platen with side edge metrics SE1 through SE4 against rear registration guide.
   b. Select the following:
      ï 1 to 1 sided
      ï A3 or 11 x 17 Paper Supply
      ï 100% Reduce/Enlarge
      ï 2 Copies
   c. Press Start and write DADF Original 1 on first copy and DADF Original 2 on second copy.
2. Verify side edge registration of DADF Originals.
   a. On DADF Original 2 measure and record the distance between the side edge and the reference line and write A next to this measurement (Figure 1).
   b. Check that A is 10.0 ±0.5mm. If A is 10.0 ±0.5 mm, go to step 3.

      If A is not 10.0 ±0.5 mm, check both of the following and then return to the beginning of this procedure.
      i. DC129 IOT Lead Edge/Side Edge Registration (ADJ 9.9).
      ii. IIT Side Edge Registration (ADJ 9.11)

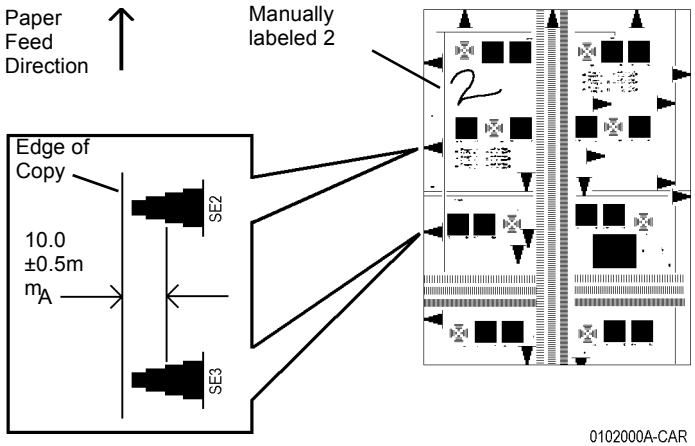


Figure 1 Verifying Side Edge Registration of DADF Originals

3. Check DADF Side Edge Registration for Side 1.
   a. Load both DADF Originals in DADF, 1 on top, with side edge metrics SE1 through SE4 against rear registration guide. Check that side guide touches documents.
   b. Select the following:
      ï 1 to 1-sided
      ï A3 or 11 x 17 Paper Supply
      ï 100% Reduce/Enlarge
      ï 2 Copies
   c. Press Start and discard the first copy.
   d. On side 1 of copy 2 measure and record the distance between the side edge and the reference line and write B next to this measurement (Figure 2).

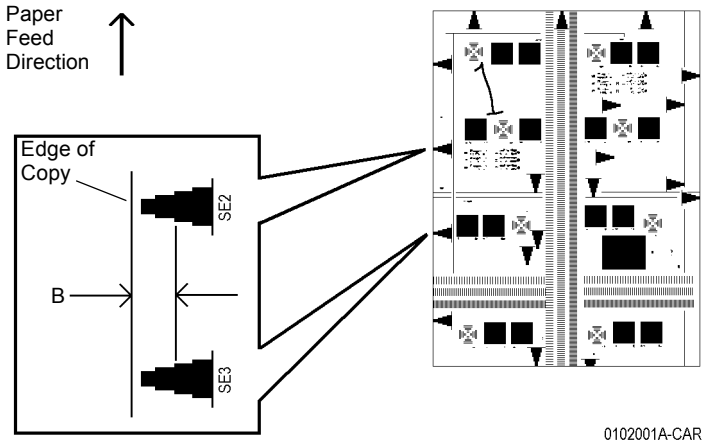


Figure 2 Checking Side Edge Registration of DADF

   e. Compare B to A. B must be within ±1.1 mm of A.

      If the difference between B and A is greater than 1.1 mm, go to step 1 of the adjustment.

      Otherwise go to step 4.
4. Check DADF Side Edge Registration for Side 2.
   a. Make a 2-sided test pattern.
      i. Load DADF originals 1 and 2 face up, 1 on top, with side edge metrics toward rear of DADF.
      ii. Select 1 to 2-sided and press Start to make the 2-sided test pattern
   b. Make test copies.
      i. Load 2-sided test pattern with side 1 edge metrics up and toward rear of DADF.
      ii. Select the following:
         ï 2 to 1 sided
         ï A3 or 11 x 17 Paper Supply
         ï 100% Reduce/Enlarge
         ï 1 Copy
      iii. Press the Start button.
   c. Check that side edge metrics are same distance from edge of paper for both copies.

      If the difference is greater than ±1.1 mm, go to step 2 of the adjustment.

      Otherwise DADF Side Registration is good.

Adjustment

1. Adjust Side 1 DADF Side Registration.
   a. Enter NVM Rear/Write (DC131) [715-015].

      NOTE: Increasing value moves side edge metrics SE1 through SE4 toward edge.

   b. If B is more than A, increase the NVM value (15 = approx. 1 mm).

      If B is less than A, decrease the NVM value (15 = approx. 1 mm).

   c. Check results of adjustment and adjust if required.
2. Adjust Side 2 DADF Side Registration.
   a. Enter NVM Rear/Write (DC131) [715-128].

      NOTE: Increasing value moves side edge metrics SE1 through SE4 toward edge.

   b. If copy 2 edge metric is farther away from edge than copy 1, increase the NVM value (15 = approx. 1 mm).

      If copy 2 edge metric is closer to edge than copy 1, decrease the NVM value (15 = approx. 1 mm).

   c. Check results of adjustment and adjust as required.

      NOTE: *2 to 2-sided or 2 to 1-sided must be selected to view a change in [715-128].* [715-128] produces no change in *1 to 2-sided copying*.

NOTE: *Total lead edge deviation for DADF is ±1.6 mm. Total lead edge deviation for IIt is* ±0.5 mm. This leaves ±1.1 mm for DADF when a copy paper test pattern is made for use in DADF.

ADJ 5.2 DADF Counterbalance

Purpose

Correct DADF opening and closing action.

Check

1. Check DADF opening and closing action.
   a. Raise DADF and check that it remains in fully raised position.
   b. Check that the DADF closes from a height of 100 ±50mm by its own weight without excessive noise (Figure 1).

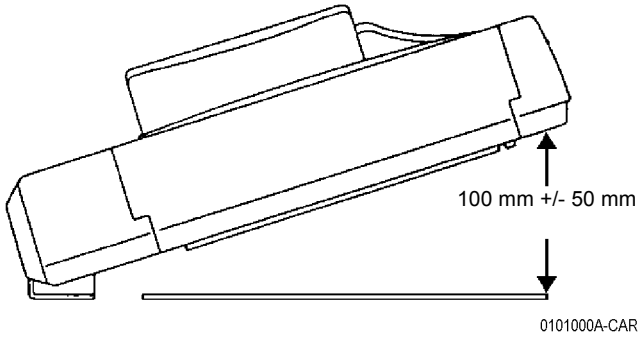


Figure 1 Checking DADF Height

Adjustment

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

CAUTION

When removing the Rear Cover, disconnect LED Connector on DADF PWB.

1. Remove the Rear Cover. (REP 5.18)
2. Adjust the Left Counterbalance (Figure 2).

   NOTE: *Rotate in A direction for stronger spring pressure*
   Rotate in B direction for weaker spring pressure

   a. Loosen the nut.
   b. Rotate the Set Screw for the adjustment.
   c. Tighten the nut.

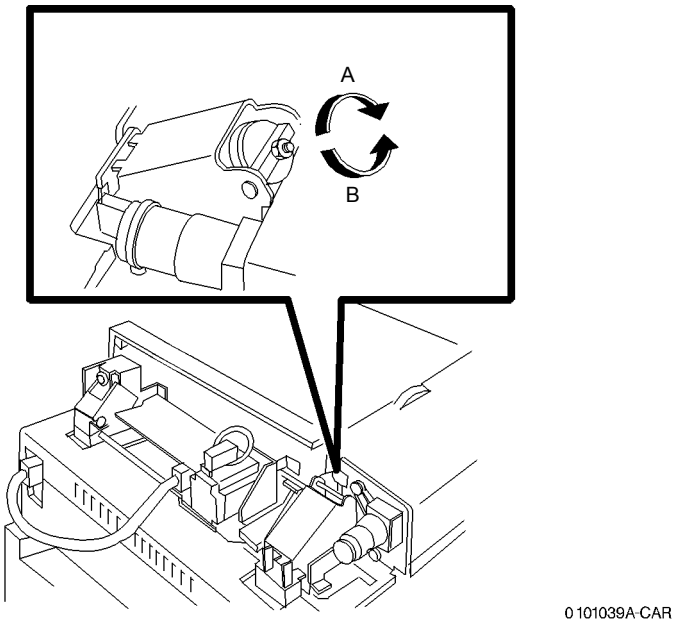


Figure 2 Adjusting Left Counterbalance

ADJ 5.3 DADF Parallelism

Purpose

Enable parallel Document placement and image scan.

Check

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Front Cover. (PL 20.1)
2. Remove Entrance Tray. (PL 20.1)
3. Remove the Document Transport. (REP 5.17)
4. Check DADF Parallelism.
   a. Manually hold down the DADF.
   b. Check that the distance between the DADF Rear Frame and the Rear Registration Edge is 20 ±1 mm (Figure 1).
   c. Perform the same check at the left end of the DADF.

   If 20 ±1 mm is not measured in each check, or the measurements are different, go to the adjustment.

   Otherwise DADF Parallelism is good.

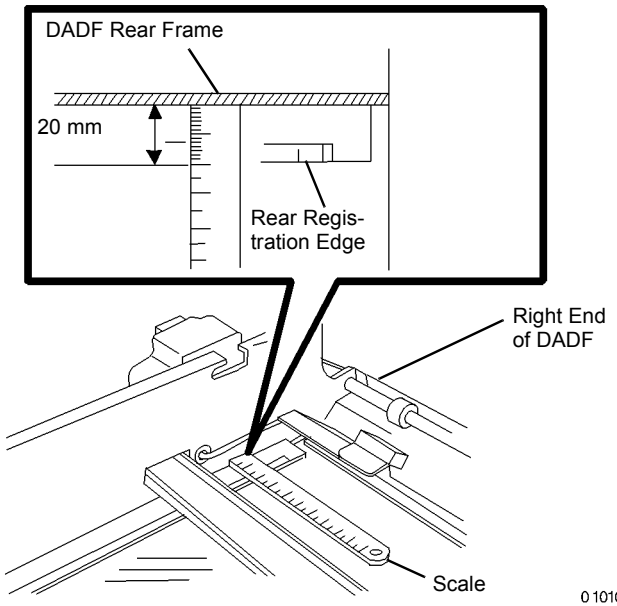


Figure 1 Checking DADF Parallelism

Adjustment

CAUTION

The DADF Parallelism must be made within ±1mm of the specified range.

CAUTION

When removing the Rear Cover, disconnect LED Connector on DADF PWB.

1. Remove Rear Cover (REP 5.18).
2. Adjust DADF Parallelism (Figure 2).

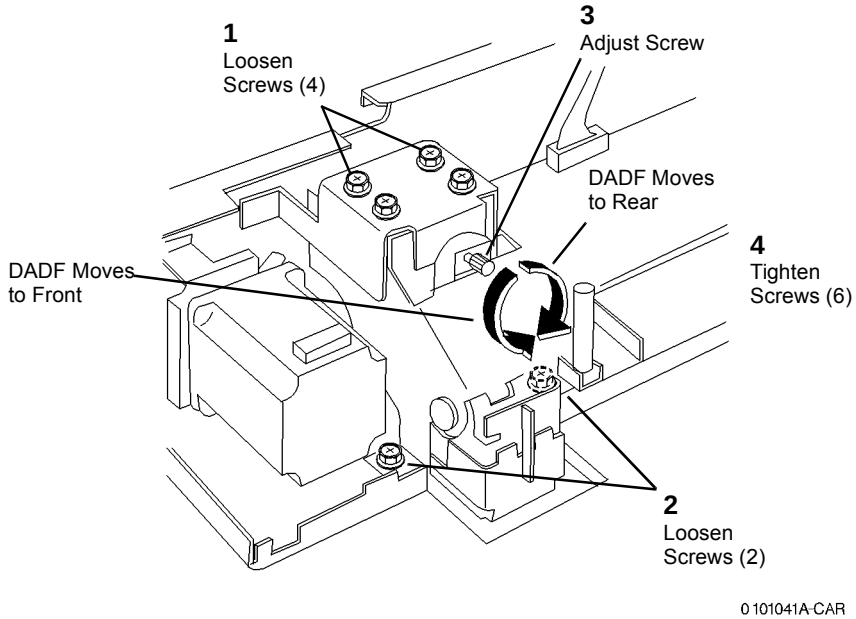


Figure 2 Adjusting DADF Parallelism

3. Adjust Left Counterbalance if required.
4. Repeat the check.

ADJ 5.4 Document Transport Height

Purpose

Enable document feed at the correct speed and free of skew.

Check

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Remove Front Cover (PL 20.1).
2. Entrance Tray (PL 20.1).
3. Check Document Transport Height (Figure 1).
   a. At left end of Document Transport, check that there is 24.5 ±0.3 mm between top of Document Transport Frame and Top of Rear Registration Edge.
   b. At Right end of Document Transport, check that there is 24.5 ±0.3 mm between top of Document Transport Frame and Top of Rear Registration Edge.
   c. If there is more or less than specified, perform the adjustment on the counterbalance for the side that is not in specification. Adjust both counterbalances if required.

   Otherwise, Document Transport Height is good.

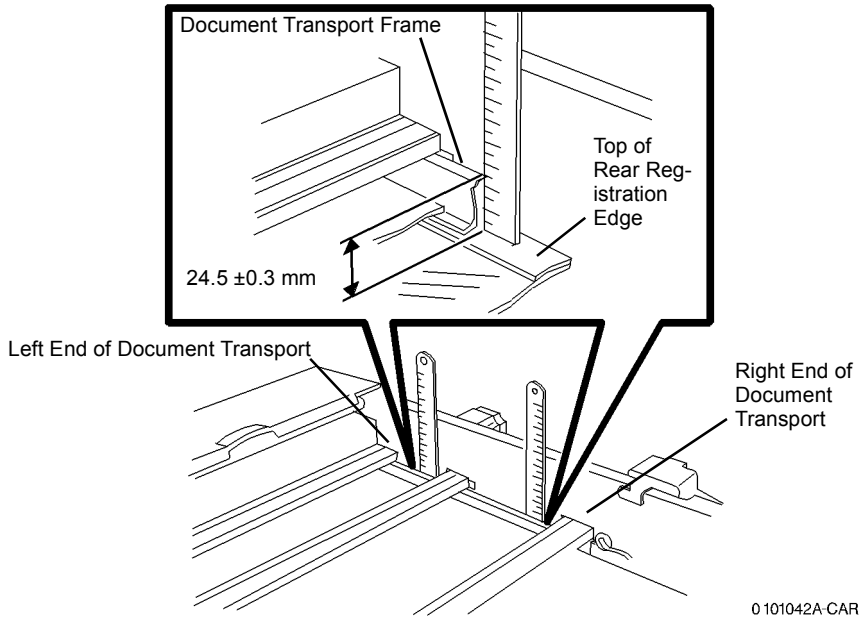


Figure 1 Checking Document Transport Height

Adjustment

CAUTION

When removing the Rear Cover, disconnect LED Connector on DADF PWB.

1. Remove Rear Cover (REP 5.18).
2. Raise DADF and loosen the Screws (2) (Figure 2).

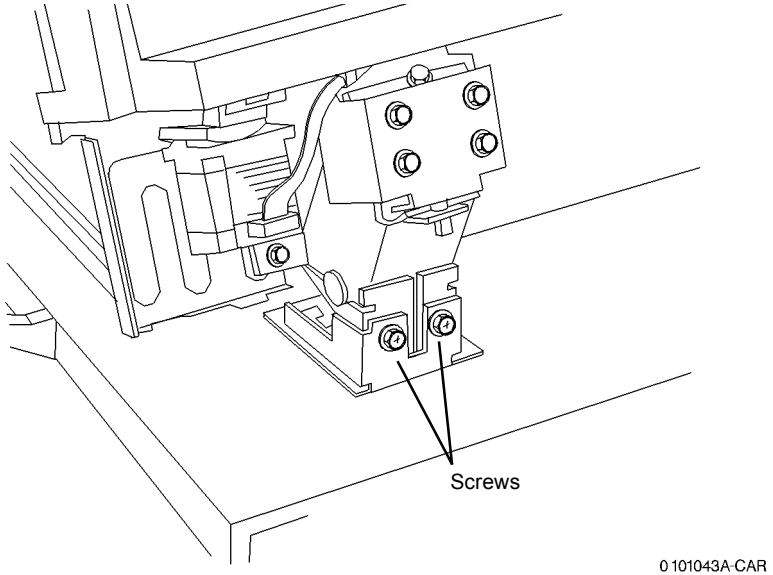


Figure 2 Loosening Screws

3. Adjust Document Transport Height (Figure 3).

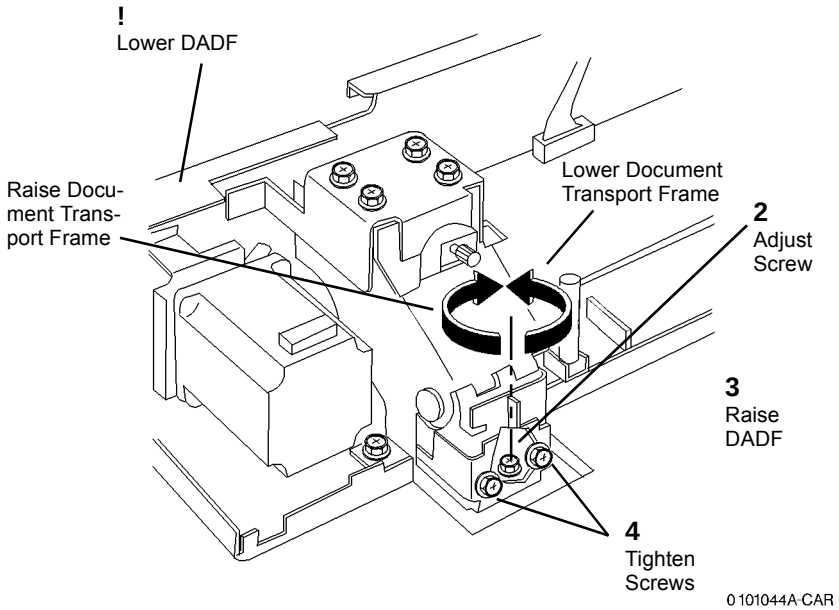


Figure 3 Adjusting Document Transport Height

4. Repeat check.

ADJ 5.5 DADF Top Registration

Purpose

Align image scanned from document with top edge of paper.

Check

1. Make two DADF originals.
   a. Register Test Chart 82E8220 on Platen with lead edge metrics LE1 through LE3 against left registration guide.
   b. Select the following:
      ï 1 to 1 sided
      ï A4 or 8.5 x 11 Long Edge Feed Paper Supply
      ï 100% Reduce/Enlarge
      ï 2 Copies
   c. Press Start and write DADF Original 1 on first copy and DADF Original 2 on second copy.
2. Verify top edge registration of DADF Originals.
   a. On copy 2 measure and record the distance between the top edge and the reference line and write A next to this measurement (Figure 1).
   b. Check that A is 10.0 ±0.5 mm. If A is 10.0 ±0.5 mm, go to step 3.

      If A is not 10.0 ±0.5 mm, check both of the following and then return to the beginning of this procedure.
      i. DC129 IOT Lead Edge/Side Edge Registration (ADJ 9.9).
      ii. IIT Side Edge Registration (ADJ 9.11)

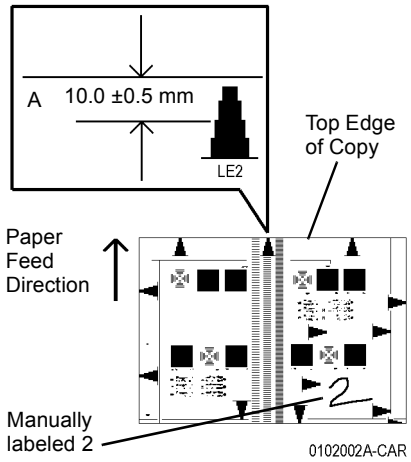


Figure 1 Verifying Top Edge Registration of DADF Originals

3. Check DADF Top Edge Registration for Side 1.
   a. Load both DADF Originals in DADF, 1 on top, with top edge metrics LE1 through LE3 toward right.
   b. Select the following:
      ï 1 to 1-sided
      ï A4 or 8.5 x 11 Long Edge Feed Paper Supply
      ï 100% Reduce/Enlarge
      ï 2 Copies
   c. Press Start and discard the first copy.
   d. On side 1 of copy 2 measure and record the distance between the top edge and the reference line and write B next to this measurement (Figure 2).

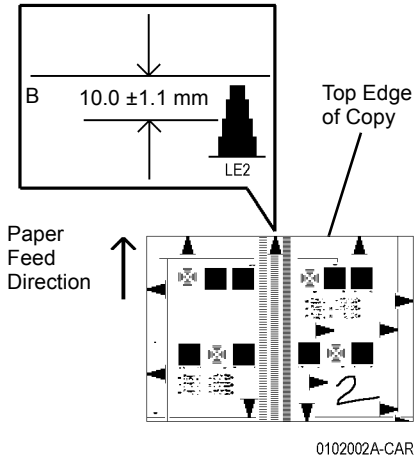


Figure 2 Checking Top Edge Registration of DADF

   e. Compare A to B . B must be within 0 ±1.1 mm of A.

      If the difference between A and B is greater than 1 mm, go to step 1 of the adjustment.

      Otherwise go to step 4.
4. Check DADF Side Edge Registration for Side 2.
   a. Make a 2-sided test pattern.
      i. Load DADF originals 1 and 2 face up, 1 on top, with top edge metrics toward right.
      ii. Select 1 to 2-sided and press Start to make the 2-sided test pattern
   b. Make test copies.
      i. Load 2-sided test pattern with side 1 edge metrics up and toward right of DADF.
      ii. Select the following:
         ï 2 to 1 sided and press Start.
         ï A4 or 8.5 x 11 Long Edge Feed Paper Supply
         ï 100% Reduce/Enlarge

ï 1 Copy

iii. Press the Start button.

c. Check that top edge metrics are same distance from edge of paper for both copies.

If the difference is greater than 1 mm, go to step 2 of the adjustment.

Otherwise DADF Side Registration is good.

Adjustment

1. Adjust Side 1 DADF Side Registration.
   a. Enter NVM Rear/Write (DC131) [710-005].

      NOTE: Increasing value moves lead edge metrics LE1 through LE3 toward edge.

   b. If B is more than A, increase the NVM value (5 = approx. 1 mm).

      If B is less than A, decrease the NVM value (5 = approx. 1 mm).

   c. Check results of adjustment and adjust if required.
2. Adjust Side 2 DADF Side Registration.
   a. Enter following NVM Rear/Write (DC131)

      [710-025] for B5 SEF or smaller

      [710-026] for B5 LEF, A4 SEF/LEF, 8.5x11 SEF/LEF

      [710-027] for 8.5 x 14, B4, A3, 11x17

      NOTE: Decreasing value moves lead edge metrics LE1 through LE3 toward edge.

   b. If copy 2 edge metric is farther away from edge than copy 1, decrease the NVM value (5 = approx. 1 mm).

      If copy 2 edge metric is closer to edge than copy 1, increase the NVM value (5 = approx. 1 mm).

   c. Check results of adjustment and adjust as required.

      NOTE: *2 to 2-sided or 2 to 1-sided must be selected to view A change in [710-02X]. [710-02X] produces no change in 1 to 2-sided copying*.

NOTE: *Total lead edge deviation for DADF is ±1.6 mm. Total lead edge deviation for IIt is* ±0.5 mm. This leaves ±1.1 mm for DADF when a copy paper test pattern is made for use in DADF.

ADJ 5.6 DADF Document Detection

Purpose

Preliminary-Enable document size sensing.

Check

dC927 Size Detection Automatic Correction

Perform this adjustment when the following operation is conducted:

- ï Replacing of the DADF ASSY.
- ï When an error is detected after replacing Registration Roll, Feed Roll, and Retard Roll.
- ï When an error is found on the size detection.

Scan three sheets of document continuously in the DADF. Comparing the Slow Scan length detected in the DADF with the standard value, correct the NVM data automatically. The NVM data subject to the correction is "Document Slow Scan size correction value in Non CVT Mode" (Chain Link No.710-003).

Documents for scanning differ depending on each market as below.

FX, XE/AP: A4LEF (Slow scan length accuracy (210.0mm ±0.7mm))

XC: 8.5"x11"LEF (Slow scan length accuracy (215.9mm ±0.7mm))

Adjustment

1. Enter dC 527.
2. Set three documents to be transported in the DADF.
   *Document sizes to be transported differ depending on each market.
   FX, XE/AP: A4LEF (Slow scan length accuracy (210.0mm ±0.7mm))
   XC: 8.5"x11"LEF (Slow scan length accuracy (215.9mm ±0.7mm))
3. When the [Enter] button is pressed, DADF starts pulling in the document and calculate the correction value. At this point, the [Entering] message appears.
4. The corresponding NVM data is updated and PSW screen indicates that the process has been completed
   Or, if this process becomes NG, the NVM data is not updated and the message telling that NG has occurred appears on the screen.
5. Pressing the [Exit] button completes the servicing.
   Specification on Result Confirmation
   The following result can be checked in the NVM Read after the process completes.

Table 1

Chain-Link	Indicated Data Name	Remarks
710-003	Document slow scan size correction value in Non CVT Mode	Setup Range=144~256 (Equivalent to ±56 Step [±10mm] <- Left 0.18mm/ Step) Initial value: 200 (But the factory adjustment value is set as the initial value.)

<Restrictions to Note>

- ï Once this process has started, it cannot be stopped (interrupted) half-way until it completes irrespective of success or failure.
- ï This process does not allow the fourth sheet onwards to be pulled in when documents of four or more sheets are set in the DADF.

NOTE: *If the result is NG after the adjustment, perform the process again.*

ADJ 5.7 DADF Non-standard Document Custom Registration

Purpose

Preliminary-Document sizes other than DADF detectable document size (non-standard size) are registered and transported as standard document size. Hence, special document sizes specified by a user can be transported.

Check

Document size detection is performed based on custom-registered data and the DADF process is performed by making the specified document sizes as scanning size. Only one custom-registration is available. If the registered data is valid, document size detection is performed, placing priority over the existing detection table.

Preparation:

1. Borrow the non-standard document to be custom- registered from the customer.
2. Check which direction (LEF or SEF) the customer wants to run in.
3. Check which paper size and direction the customer wants to make copies of.
4. Check the length of Fast Scan direction (X) and Slow Scan direction (Y) in Scale etc. of the borrowed document accurately and write them down.

Adjustment

1. Enter the UI Diag and change the NVM Read/Write.
2. Set the following NVM Data to be custom-registered detection.

   NOTE: *Set Fast Scan direction max. value - Fast Scan direction min. value are 200 or below. (within 20mm)*

   NOTE: *Set slow scan direction max. value - slow scan direction min. value are 200 or below. (within 20mm)*

   NOTE: *The following sizes cannot be entered in order to prevent mis-detection of the size sensor.*

   - *Fast Scan direction Max.:2190~2290*
   - *Fast Scan direction Min.:2810~2910*

   For the X and Y obtained at Preparation:

   - Set the 710-024 data to 1. (Have the custom-registration valid.)
   - Store (X+10) x 10 in the 710-018 data. (Set the Fast Scan direction Max. value)
   - Store (X-10) x 10 in the 710-019 data. (Set the Fast Scan direction Min. value)
   - Store (Y+10) x 10 in the 710-020 data. (Set the Slow scan direction Max. value)
   - Store (Y-10) x 10 in the 710-021 data. (Set the Slow scan direction Min. value)
   - Enter the 710-022 data. (Select the paper size that the customer specifies from the table below, and enter it.)
   - Enter the 710-023 data. (Select the paper direction that the customer specifies from the table below, and enter it.)

     Enter the 710-023 data. (Select the paper direction that the customer specifies from the table below, and enter it.)

     The following are information regarding the NVM entered above.

Table 1

Chain-Link	Indicated Data Name	Remarks
710-018	Fast Scan direction Max. value Note1)	Setup Range=1297~3070 Set by 0.1mm (initial value=2970)
710-019	Fast Scan direction Min. value Note1)	Setup Range=1297~3070 Set by 0.1mm (initial value=2970)
710-020	Slow Scan direction Max. value Note2)	Setup Range=1297~4418 Set by 0.1mm (initial value=2100)
710-021	Slow Scan direction Min. value Note2)	Setup Range=1297~4418 Set by 0.1mm (initial value=2100)
710-022	Specified paper code for custom-registration	03: 5.5 x 8.5 0.4: A5 05: B5 08: A4 09: 8x10 10: 8.5x11 11; 8.5x12.4 12: 8.5x13 13: 8.5x14 14: B4 15: A3 16: 11x17 17: 8K (267x388mm) 20: ILLEGAL SIZE (Initial Value=08)
710-023	Feed direction of document size	0: LEF, 1:SEF (Initial Value=0)

3. Check the settings of the NVM Data again.
4. Set the document that was custom-registered for the size detection table in the DADF and feed it. -> Check that the document size is detected as specified.

   NOTE: *Be careful with scan data image missing since the non-standard document size is handled as standard document size.*

ADJ 6.1 Full/Half Rate Carriage

Purpose

Establish Full Rate and Half Rate Carriage position.

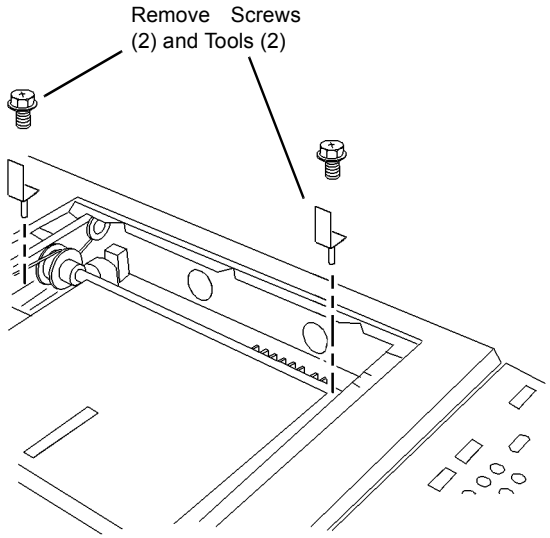
Check

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

NOTE: *The Half Rate Carriage is checked, and adjusted if required by repositioning a pulley. Then the Full Rate Carriage is checked, and adjusted if required by repositioning the carriage on the cable.*

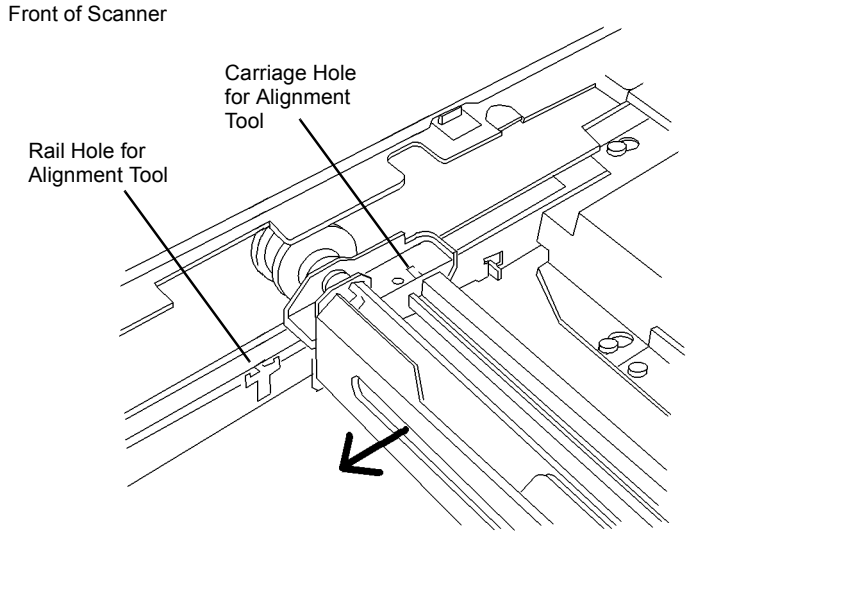
1. Remove Platen Glass (REP 6.2).
2. Remove Alignment Tools (2) from Storage (Figure 1).



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Figure 1 Removing Tools

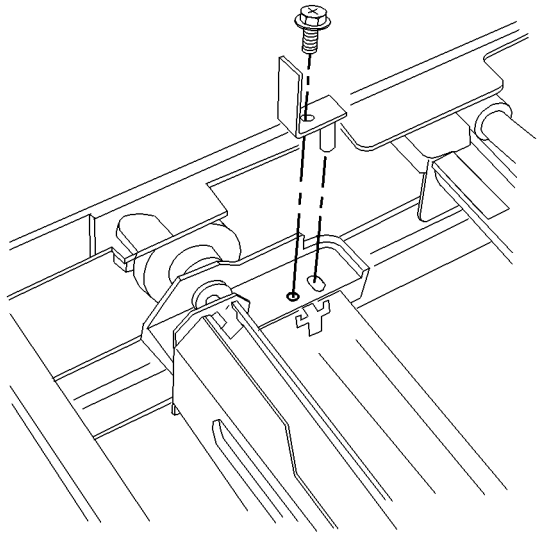
3. Align Half Rate Carriage with Rail Hole (Figure 2).
   a. Manually move Full Rate Carriage away from home position approximately 105 mm while observing Rail Tool Hole to align with Carriage Tool Hole in Half Rate Carriage.



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Figure 2 Aligning Half Rate Carriage with Rail Hole

4. Install Alignment Tool in front end of Half Rate Carriage (Figure 3).



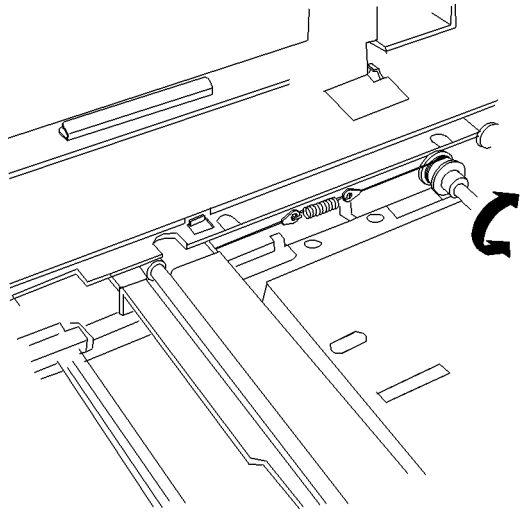
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Figure 3 Installing Alignment Tool in Front End of Half Rate Carriage

5. Check that tool will install in other end of carriage.

   If the tool installs, go to step 6.

   If tool does not install, loosen the Set Screw (2) and turn the pulley to align the tool holes with each other (Figure 4).



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Figure 4 Loosening the Set Screw (2)

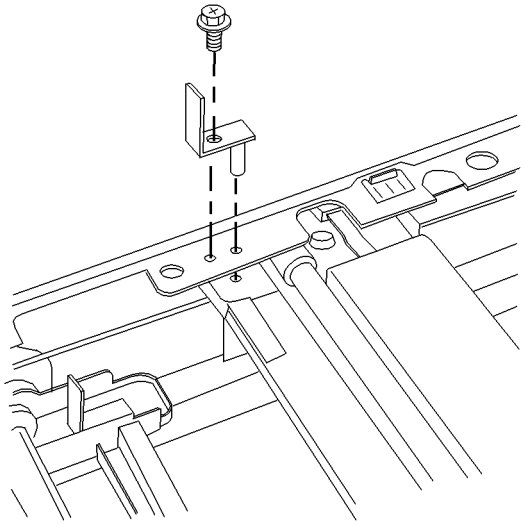
6. Check that Alignment Tool can be installed through frame into alignment hole in Full Rate Carriage (Figure 5).

   If Alignment Tool fits through frame hole into Full Rate Carriage Alignment Hole, perform the same check at the rear of the carriage.

   If the rear of the carriage is aligned, the check is good.

   If the rear of the carriage is not aligned, go to the adjustment.

   If Alignment Tool does not fit through frame hole into Full Rate Carriage Alignment Hole, go to the adjustment.



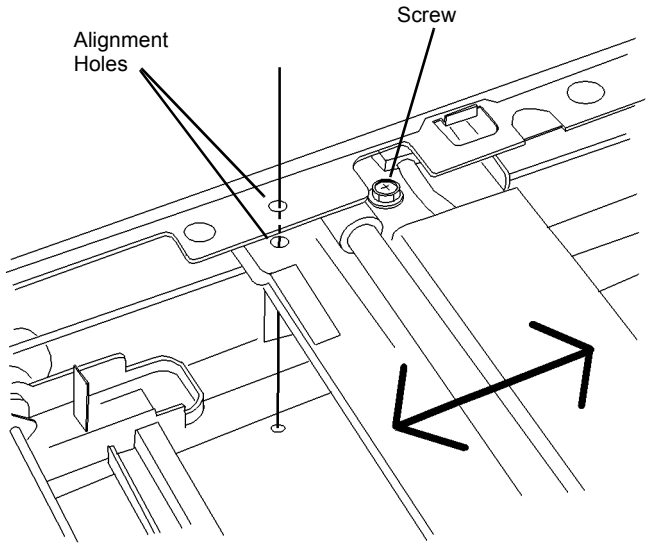
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Figure 5 Checking Alignment Tool in Full Rate Carriage

Adjustment

NOTE: Front of Full Rate Carriage shown. Adjustment steps are same for rear of Full Rate Carriage.

1. Adjust Full Rate Carriage (Figure 6).
   a. Loosen Screw.
   b. Move carriage so that Alignment Tool will drop into Alignment Holes.
   c. Tighten Screw.



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Figure 6 Adjust Full Rate Carriage

ADJ 9.1 Max Setup

Purpose

To conduct a check of the machine and set it up so that excellent copy quality can be consistently obtained by stabilizing the development potential and copy density.

Adjustment

Max Setup consists of 5 separate adjustments that should be performed in the following sequence:

1. ADJ 9.7, IIT Calibration (dC945)

NOTE: *Perform ADJ 9.2* ***only*** *when replacing the ATC Sensor or Developer Housing.*

2. ADJ 9.2, ATC Sensor Setup (dC921)
3. ADJ 9.3, TRC Control/Toner Density Setup (dC922)
4. ADJ 9.4, ADC Output (dC934)

NOTE: *Perform ADJ 9.5* ***only*** *when the customer requests.*

5. ADJ 9.5, Manual TRC Adjust (dC924)

ADJ 9.2 ATC Sensor Setup (dC921)

Purpose

NOTE: *This procedure should only be performed when the ATC Sensor or Developer Housing has been replaced, or when there is reason to believe that the calibration values in NVM are incorrect.*

To set the calibration values [ATC Correction Coefficient], [ATC Correction Offset] in NVM to calibrate the new ATC Sensor.

Adjustment

1. Connect the PWS to the machine and enter Diagnostic Mode (refer to Entering Diagnostic Mode using the PWS).
2. Under the **Adjustments** tab, select **Max Setup**.
3. Select the **TC/ATC Sensor** Setup tab.
4. Locate the ATC Sensor calibration code on the ATC Sensor. This is the 3-digit number in the 3rd line of text on the label (it will always start with a zero).
5. Enter the last 2 digits of this code into the appropriate column of the first row.
6. Select the **Read** button.
7. Proceed to ADJ 9.3, TRC Control/Toner Density Setup (dC922)

ADJ 9.3 TRC Control/Toner Density Setup (dC922)

Purpose

To check the output of ATC Sensor and to determine if TC Control performed normally.

Allows manual adjustment of TC if control is not functioning.

Check

1. Connect the PWS to the machine and enter Diagnostic Mode (refer to Entering Diagnostic Mode using the PWS).
2. Under the **Adjustments** tab, select **Max Setup**.
3. Select the **TRC Control** tab.
4. Load letter size paper (8.5 x 11 or A4) into Tray 1.
5. Select the **Start** button. The machine will read the output of the ATC Sensor and display the results in the row labeled **ATC Mean Detected Value**. If the routine is unable to read the ATC Sensor correctly, this fact will be displayed in the row labeled **ATC Sensor Fail Determination**.
6. If the row labeled **ATC Sensor Fail Determination** displays OK for all colors, continue with the check. If any color is not OK, go to the appropriate RAP (9-380 for yellow, 9-381 for magenta,09-382 for cyan, or 9-383 for black) to fix the problem before continuing with this procedure.
7. Compare the data in the row labeled **ATC Mean Detected Value** with the data in the row labeled **ATC Control Environment Correction Standard**. If the measured value for any color is more than 50 bits higher or lower than the target (correction standard) value, perform the Adjustment.
8. If the Check is OK, proceed to ADJ 9.4, ADC Output Check.

Adjustment

The **Tone Judge** window in the upper right portion of the screen shows the result of the ATC Sensor read. Perform the following steps to adjust the toner density.

1. Select **Run**. The control logic will automatically tone up or tone down each color per the display.
2. When the tone up/down cycle is complete, select **Start** to re-run the check.

NOTE: *It is not necessary to repeat the tone up/down procedure until the match is exact.*

3. Repeat steps 2 and 3 until the **ATC Mean Detected Value** is within 50 bits of the **ATC Control Environment Correction Standard** for all colors.
4. Proceed to ADJ 9.4, ADC Output Check.

ADJ 9.4 ADC Output Check (dC934)

Purpose

- To check the following functions
- ADC (2 gradation) patch for Potential Control on the IBT
- ADC Sensor output
- Laser Diode light output

Check

1. Connect the PWS to the machine and enter Diagnostic Mode (refer to Entering Diagnostic Mode using the PWS).
2. Under the **Adjustments** tab, select **Max Setup**.
3. Select the **ADC AGC Setup** tab.
4. Select the **Start** button. The machine will read the output of the ADC Sensor, The Laser Diode, and Developer bias, and display the results on the screen.
5. Check for unsatisfactory results:
   - If a fault code is declared, go to the RAP for that code. Resolve the problem, then repeat the Check.
   - If **ADC Shutter Fail** is NG go to the 9-654 RAP and troubleshoot the shutter solenoid circuits
   - If **ADC Sensor Fail** is NG go to the 9-654 RAP and troubleshoot the sensor circuits.

ADJ 9.5 TRC Adjust (dC924)

Purpose

CAUTION

Perform this adjustment only to correct a strong customer complaint. Altering the setpoints will affect both Print and Copy modes. Also, there is quite a bit of overlap among the low, medium, and high densities. For these reasons, it is recommended that this procedure not be used unless absolutely necessary.

To adjust image quality (TRC) to meet the user's preference, by increasing or decreasing the center value of gradation correction for each (YMCK) color, in low density, medium density, and high density ranges.

Adjustment

1. Connect the PWS to the machine and enter Diagnostic Mode (refer to Entering Diagnostic Mode using the PWS).
2. Under the **Adjustments** tab, select **Max Setup**.
3. Select the **TRC Adjust** tab.
4. Type in the desired value; the default is 128, and the range is from 0 to 255. the results on the screen.
5. Select **Save**.
6. Perform a Temporary Call Closeout, then switch the machine power off then on
7. Make 2 prints or copies; the changes are not implemented until the 2nd print is made.
8. Repeat steps 4 through 7 until the customer is satisfied with the image quality.

ADJ 9.6 Color Registration (dC685)

Purpose

To establish correct horizontal and vertical positioning of the four primary color images

The procedure consists of the following steps, which must be performed in the listed sequence:

1. **Belt Edge Learn** - to align the Transfer Belt positioning system.
2. **Fine Skew Setup** - automatically performs horizontal and vertical alignment, and reports any skew in the various images caused by ROS misalignment. This skew must be corrected through manual adjustment
3. **IN/OUT Setup** - automatically performs magnification adjustment so that scan lines are the same length for all four colors. Also checks for skew.
4. **Center Setup** - Aligns the midpoints of scan lines for all colors, for magnification balance.

There is also a **Rough Skew Setup** for cases where the skew is outside the measurement parameters of the Fine Skew test.

This procedure is required if any of the following occur:

- ROS removal
- NVM Initialization
- An Image Quality RAP directed performance of this procedure.

Check

NOTE: *Excessive toner on the Transfer Belt will prevent completion of the adjustment. Make sure that there are no Image Quality problems, and that the IBT Cleaner is functioning correctly. Resolve any Image Quality problems before attempting this adjustment.*

1. Open the Front door and cheat the interlock.
2. Connect the PWS to the machine and enter Diagnostic Mode (refer to Entering Diagnostic Mode using the PWS).
3. Under the **Adjustments** tab, select **RegiCon**.

Set the Belt Edge Alignment

1. Select the **Belt Edge Learn Mode** tab.
2. Select the **Edge Learn Mode** button.
3. Select **Start**.
4. If Edge Learn fails, check:
   - Installation of IBT Belt Assembly (REP 9.15).
   - Installation of IBT Edge Sensor (PL 5.4).
   - Installation of IBT Home Sensor (PL 5.4).

   Perform Edge Learn again. If it fails, replace the IBT Edge Sensor (PL 5.4).

   If it fails again, replace IBT Home Sensor (PL 5.4).
5. When Edge Learn is successful, select the **RegiCon Setup Cycle (dC685)** tab.

Check the Fine Skew Setup

1. Select the **Skew (Fine) Setup** button.
2. Select **Start**.
3. Check the **Judgement** window. If NG is displayed, perform the Rough Skew Setup then repeat the Fine Skew check.
4. If **OK** is displayed in the **Judgement** window, check the **Skew Correction** row in the **Skew Values** window. If a value greater than 1 is displayed for any color, perform the Adjustment, then perform the IN/OUT Setup check.

Check the IN/OUT Setup

1. Select the **IN/OUT Setup** button.
2. Select **Start**
3. Check the **Judgement** window. If NG is displayed, perform the Adjustment, then perform the Center Registration check
4. If IN/OUT Setup is **OK**, check the Center Registration.

Check the Center Registration

1. Remove the Waste Toner Cartridge.
2. Move MOB sensor to the center position (Figure 1).

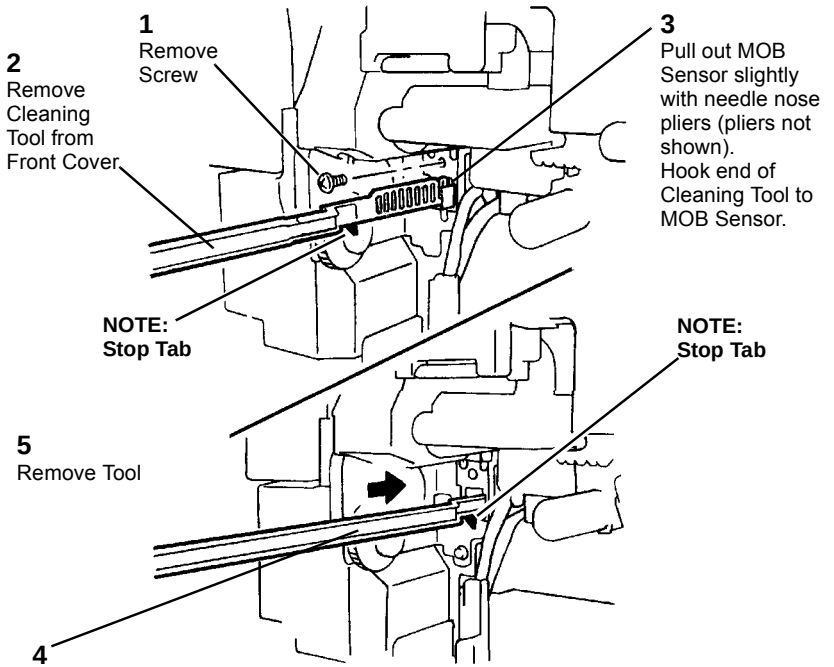


Figure 1 Moving MOB Sensor to Center Position

3. Reinstall the Waste Toner Cartridge.

4. Select the **Center Setup** button.
5. Select **Start**.

CAUTION

Make sure not to hook the wiring harness when moving the MOB Sensor.

6. If Center Setup is OK, dC685 is complete. Use the Cleaning Tool to pull the MOB Sensor back to the original position, and fasten the screw.

   If Center Setup fails, ensure MOB Sensor is positioned to the rear. Go back to step 1 of the Center check.

Check the Rough Skew Setup

1. Select the **Skew (Rough) Setup** button.
2. Select **Start**.
3. Check the **Judgement** window. If NG is displayed, there is a problem with the ROS, the IBT Assembly, or the MOB Sensor.
4. If **OK** is displayed in the **Judgement** window, check the **Skew Correction** row in the **Skew Values** window. If a value greater than 1 is displayed for any color, perform the Adjustment, then repeat the Fine Skew Setup check.

Adjustment

1. In the **Skew Values** window, record the value for each color in the **Skew Correction** row. This is the required number of rotations of the adjustment screw.

WARNING

To avoid exposure to laser light, reinstall the Waste Cartridge before attempting to recheck the adjustment.

2. Remove the Waste Toner Cartridge (REP 9.4).
3. For each color, rotate the appropriate (CYMK) adjustment screw (Figure 2) in + (CW), or - (CCW) direction the number of clicks recorded in step 1.

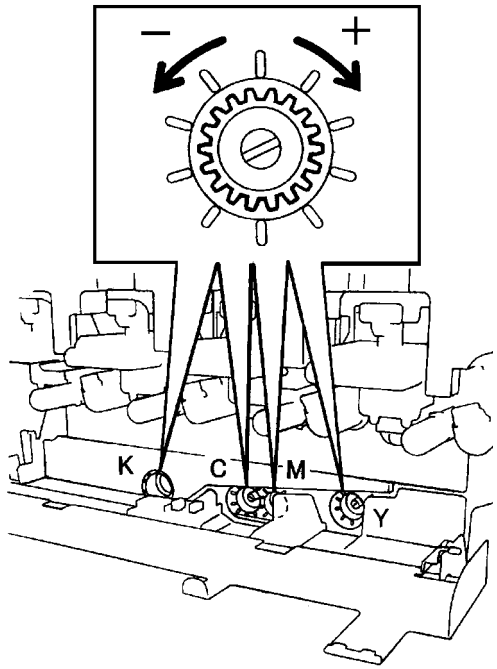


Figure 2 Adjusting Skew

4. Reinstall Waste Toner Cartridge (REP 9.4).

Check IOT Lead Edge/Side Edge (ADJ 9.9) after performing this adjustment.

ADJ 9.7 IIT Calibration (dC945)

Purpose

- To calculate and set up the White Reference Correction Coefficient.
- To correct the IIT sensitivity dispersion (CCD Calibration).
- Adjust the light axis correction data when replacing the Lens unit.

Adjustment

1. Clean the Optics:
   a. Switch off the power and allow the Exposure Lamp to cool off.
   b. Using the optical Cleaning Cloth, clean the front and rear of the Document Glass, Document Cover, White Reference Strip, Reflector, and Mirror.
   c. Clean the Exposure Lamp with a clean cloth and Film Remover.
   d. Clean the Lens with Lens and Mirror Cleaner and lint free cloth.
2. Connect the PWS to the machine and enter Diagnostic Mode (refer to Entering Diagnostic Mode using the PWS).
3. Under the **Adjustments** tab, select **Max Setup**.
4. Select the **IIT Calibration** tab.
5. Select the **White Reference Adjustment** button.
6. Press **Start**.
7. Follow the instructions on the PWS screen, then select OK.
8. Select the **Read** button.
9. The setup values are displayed on the **White Reference Setup Value** screen.
10. When White Reference setup is done, select the CCD Calibration button.
11. Press **Start**.
12. Follow the instructions on the screen, then select OK.
13. The obtained data is displayed in the **b* Calibration Coefficients** window.
14. Select [Close] to return to the Color Image Quality Adjustment screen.

NOTE: *Do not select Optical Axis Calibration unless replacing the Lens Kit (PL 18.4). Refer to REP 6.4.*

ADJ 9.8 Hard Disk Diagnostics/Setup (dC355)

Purpose

CAUTION

This procedure does not work as described in the current tool; the spec is being rewritten. This description is an attempt to document the new spec. DO NOT USE.

To perform the diagnostics in the hard disk and setup (initialization) of each partition.

NOTE: *Perform this procedure only after the customer's approval is obtained. Check what kind of data are stored in each partition according to the list below since some partitions store fonts etc. that the customer has installed.*

NOTE: *Setup function is only available from customer's mode or UI-Diag mode in Partition A.*

Adjustment

1. Connect the PWS to the machine and enter Diagnostic Mode (refer to Entering Diagnostic Mode using the PWS).
2. Under the **Diagnostics** tab, select **System Test**.
3. Select the **Hard Disk Diag. Program** tab.
4. Select the appropriate **Partition** (see Table 1.)

Table 1 Partition Content

Display of appropriate hard disk column	Size (GB)	Stored information and usages
MP All	All	All the items in Partition 1~6
MP Partition 1 (a)	2.0	Font, Form/Logo, SMB Folder (Config. txt, driver), Job Template
MP Partition 2 (b)	2.0	Printing range
MP Partition 3 (c)	1.2	Scan, Report, Mailbox, Security - Print
MP Partition 4 (d)	2.0	PLD, Others
MP Partition 5 (e)	2.0	Copying range
MP Partition 6 (f)	0.5	Spool Cont Control Information, Log

5. Select the Diag Type (see Table 2).

Table 2

Work Item	Details
Setup	Initialize the file system. It is required when the management data of the file system corrupts and when read errors occur.
Hard Disk Test Read Verify)	Perform the Read verify diagnostics of all the sectors in designated partitions. Sector numbers where a read error is occurring will appear.
Troubleshooting	Perform the hard disk ROM check and controller diagnostics.
Trouble Prediction	Perform the SMART (Self-monitoring analysis and reporting technology) to predict latent troubles on the hard disk.

6. Press **Start**.

ADJ 9.9 IOT Registration Series (dC129)

Purpose

The purpose is to adjust the position of the printed image on the page. This is done by changing the value in the appropriate NVM location in dC129. This controls where the ROS writes the image.

Introduction

This series consists of 4 procedures:

- Lead Edge Registration (Trays 1-4)
- Side Edge Registration (Trays 1-5)
- Duplex (Side 2) Registration
- Lead Edge Registration for Tray 5

All procedures must be checked.

Lead Edge Registration (Paper Trays 1 - 4)

Purpose

To correctly set the lead edge of the image in relation to the edge of the paper. There is one lead edge setting for Trays 1 - 4.

Check

1. Connect the PWS to the machine and enter Diagnostic Mode (refer to Entering Diagnostic Mode using the PWS). Select dC129 from the **DC Quick** menu
2. Load Tray 1 with the largest paper used by the customer.
3. Select **ALL** in the **Lead Edge** column.
4. Press the **Start** button on the screen. As the prints are made, mark each to indicate the lead edge.
5. Take the third pattern that was printed and measure from the lead edge to point ëAí on Figure 1 (the intersection of the 7th line from the left edge and the first line from the lead edge).

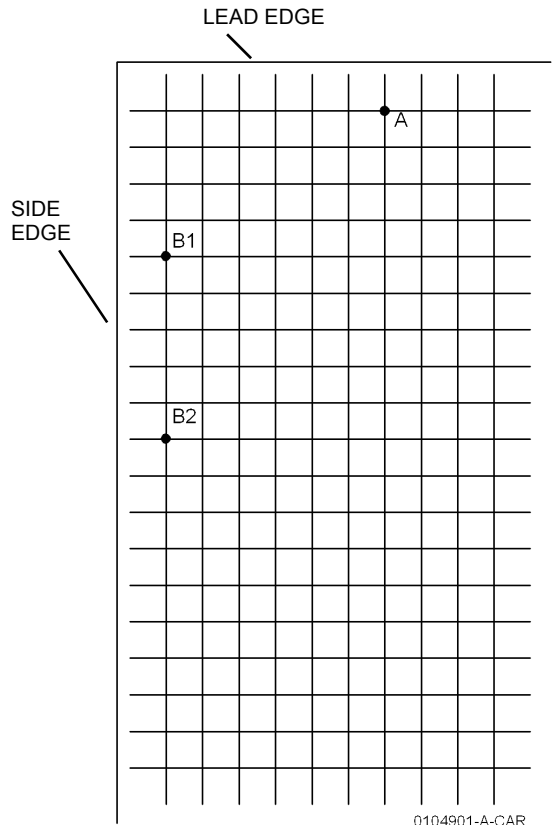


Figure 1 Measurement points

6. If the measured value is not 21.6mm±0.5, perform the Adjustment.

Adjustment

1. Use the Right and Left Arrow buttons to move the image toward or away from the lead edge of the paper. Each click on the button moves the image 0.25mm. The cumulative amount of shift is indicated in the **Lead Reg.** box.
2. After adjusting the registration, click **Set Adjust Value**.

NOTE: *Changes made to the NVM for LE registration are not implemented unless the machine exits Diagnostic Mode.*

3. Go to the **Service Exit** tab and select **Temporary Closeout**.
4. After the machine reboots and is ready to copy, reconnect the PWS.
5. Select **Start**.
6. Repeat the check/adjustment until the specifications are met.
7. Select **Save [LR]** to save the new NVM settings.
8. Proceed to **Side Edge Registration for Paper Trays 1 - 5**.

Side Edge Registration for Paper Trays 1 - 5

Purpose

NOTE: *Each Paper Tray has a separate setting for side edge registration.*

To correctly position the side edge of the image in relation to the outboard edge of the paper.

Check

1. Check that paper is loaded in all trays, and that the paper guides are adjusted correctly. For Tray 1 and Tray 2, use 11 x 17 in. or A3 paper if available.
2. Select **Tray 1** in the **Side Edge** column.
3. Press the **Start** button on the screen. As the prints are made, mark each to indicate the lead edge.

   NOTE: *Print All prints from each tray in numerical sequence from Tray 1 through Tray 6 (HCF - if installed). Make sure to keep the sheets in the correct sequence.*

4. Take the third pattern that was printed and measure the following: perform the Adjustment for that tray.

   For paper larger than letter size: from the intersection between the 1st line from the left top edge and the 10th line from the lead edge of the paper (point ëB2í on Figure 1).

   For paper letter size (A4/8.5 x 11) or smaller: from the intersection between the 1st line from the left top edge and the 5th line from the lead edge of the paper (point ëB1í on Figure 1).
5. If the measured value is not 21.6mm±0.5, perform the Adjustment.
6. If the measurement is within specifications, repeat the Check for Trays 2 - 5. Perform the Adjustment for any tray that is not within specifications.
7. If all trays are within specifications, proceed to **Duplex (Side 2) Registration**.

Adjustment

1. Select the paper tray to be adjusted from the **Side Edge** column.
2. Use the Up and Down Arrow buttons to move the image toward or away from the outboard edge of the paper. Each click on the button moves the image 0.21 mm. The cumulative amount of shift is indicated in the **Side Reg.** box.
3. After adjusting the registration, click **Set Adjust Value**.
4. Select **Start**.
5. Repeat the check/adjustment until the specifications are met.
6. Select **Save [SR]** to save the new NVM settings.
7. Repeat steps 1 through 6 for each tray that requires adjustment.
8. Proceed to **Duplex (Side 2) Registration**.

Duplex (Side 2) Registration

Purpose

The purpose of this procedure is to correctly position the lead edge and side edge of the image in relation to the edge of the paper.

Check

1. Ensure that Paper Tray 1 contains paper and that the paper guides are adjusted correctly. If available, load the tray with 11 x 17 in. or A3 paper.
2. Select **Duplex (Side 2)** in the **Lead Edge** column.

NOTE: *Side 2 will be face down in the output tray.*

3. Press the **Start** button on the screen. As the prints are made, mark each to indicate the lead edge.
4. **Check Lead Edge**:

   Check the Side 2 Lead Edge Registration (Figure 1). If the measured value is not 21.6mm±0.5, perform the Adjustment.
5. **Check Side Edge**:

   Check the Side Edge Registration (Figure 1). If the measured value is not 21.6mm±0.5, perform the Adjustment.

Adjustment

Duplex Lead Edge:

1. Use the Right and Left Arrow buttons to move the image toward or away from the lead edge of the paper. Each click on the button moves the image 0.25mm. The cumulative amount of shift is indicated in the **Lead Reg.** box.
2. After adjusting the registration, click **Set Adjust Value**.

NOTE: *Changes made to the NVM for LE registration are not implemented unless the machine exits Diagnostic Mode.*

3. Go to the **Service Exit** tab and select **Temporary Closeout**.
4. After the machine reboots and is ready to copy, reconnect the PWS
5. Select **Start**.
6. Repeat the check/adjustment until the specifications are met.
7. Select **Save [LR]** to save the new NVM settings.

Duplex Side Edge:

1. Select **Duplex (Side 2)** in the **Side Edge** column
2. Use the Up and Down Arrow buttons to move the image toward or away from the outboard edge of the paper. Each click on the button moves the image 0.21mm. The cumulative amount of shift is indicated in the **Side Reg.** box.
3. After adjusting the registration, click **Set Adjust Value**.
4. Select **Start**.
5. Repeat the check/adjustment until the specifications are met.
6. Select **Save [SR]** to save the new NVM settings.

Lead Edge Registration for Tray 5 (MSI)

Purpose

NOTE: *There are three settings for Tray 5 Lead Edge; one for standard weight paper, one for heavyweight stock, and one for extra-heavyweight stock.*

To correctly set the lead edge of the image in relation to the edge of the paper.

Check

1. Load Tray 5 with the largest standard weight paper used by the customer.
2. Select **Tray 5 (MSI)** in the **Lead Edge** column.
3. Press the **Start** button on the screen. As the prints are made, mark each to indicate the lead edge.
4. Take the third pattern that was printed and measure from the lead edge to point ëAí on Figure 1 (the intersection of the 7th line from the left edge and the first line from the lead edge).
5. If the measured value is not 21.6mm±0.5, perform the Adjustment.
6. If the customer uses heavyweight or extra-heavyweight stock, load Tray 5 with the stock. Select Tray 5 (HW) or Tray 5 (XHW), as appropriate. Repeat the check.

Adjustment

1. Use the Right and Left Arrow buttons to move the image toward or away from the lead edge of the paper. Each click on the button moves the image 0.25mm. The cumulative amount of shift is indicated in the **Lead Reg.** box.
2. After adjusting the registration, click **Set Adjust Value**.

NOTE: *Changes made to the NVM for LE registration are not implemented unless the machine exits Diagnostic Mode.*

3. Go to the **Service Exit** tab and select **Temporary Closeout**.
4. After the machine reboots and is ready to copy, reconnect the PWS.
5. Select **Start**.
6. Repeat the check/adjustment until the specifications are met.
7. Select **Save [LR]** to save the new NVM settings.

ADJ 9.10 IIT Lead Edge Registration

Purpose

To adjust the IIT scan timing in the Slow Scan direction and to correct the copy position.

Check

CAUTION

Perform this adjustment only if absolutely required; the IIT Lead Edge Registration affects the precision of the document size detection.

NOTE: *Before performing this procedure, make sure that the IOT Lead Edge Registration is correct. Refer to ADJ 9.9, IOT Side/Lead Edge Registration.*

1. Place the Geometric Test Pattern on the Platen Glass correctly and make a copy with the following settings:
   - Copy Mode: Black
   - Paper Size: 11 x 17 in or A3
   - Magnification: 100%
   - No. of Copies: 2
2. On the 2nd copy, check that the distance from the lead edge to the top of Step 3 on the LE2 scale is 10.0mm +/- 2.1mm (Figure 1).

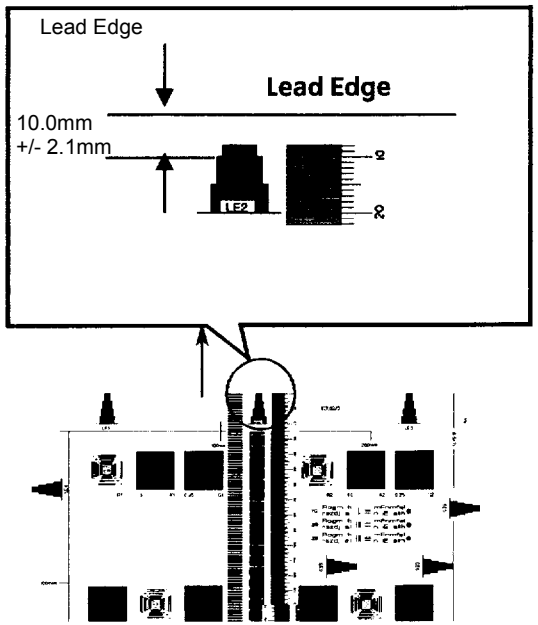


Figure 1 Checking IIT Side Registration

3. If the value is not within the specified range, Perform the Adjustment:

Adjustment

1. Enter dC131 [715-301].
2. Change the value:
   - ï Each bit represents 0.036 mm
   - ï Increase the value to move the image toward the lead edge.
   - ï Decrease the value to move the image away from the lead edge.

ADJ 9.11 IIT Side Edge Registration

Purpose

To adjust the IIT scan timing in the Fast Scan direction and to correct the copy position.

Check

CAUTION

Perform this adjustment only if absolutely required; the IIT Lead Edge Registration affects the precision of the document size detection.

NOTE: *Before performing this procedure, make sure that the IOT Side Edge Registration is correct. (Refer to ADJ 9.9, IOT Side/Lead Edge Registration.)*

1. Load 11 x 17 in. or A3 paper into Tray 2.
2. Place the Geometric Test Pattern on the Platen Glass correctly and make a copy with the following settings:
   - ï Copy Mode: Black
   - ï Paper Tray: Tray 2
   - ï Magnification: 100%
   - ï No. of Copies: 2
3. On the 2nd copy, check that the distance from the lead edge to the top of Step 3 on the SE2 and SE3 scales is 10.0mm +/- 1.6mm (Figure 1).

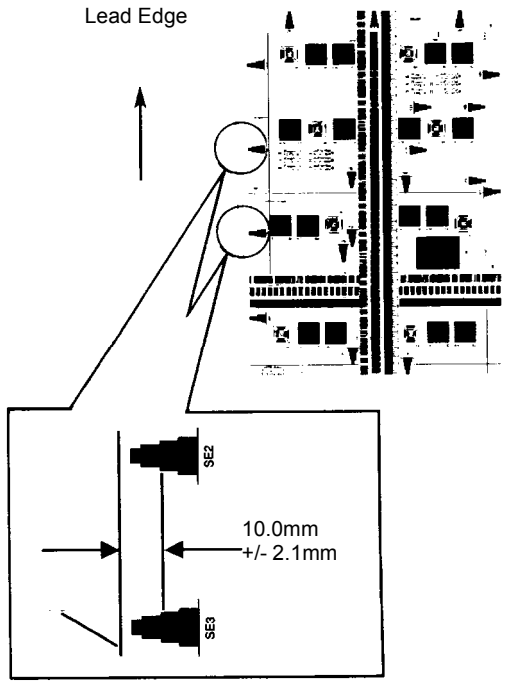


Figure 1 Checking IIT Side Edge Registration

4. If the value is not within the specified range, perform the Adjustment:

Adjustment

Purpose

1. Enter dC131 [715-014].
2. Change the value:
   - Each bit represents 0.036 mm
   - Increase the value to move the image toward the edge.
   - Decrease the value to move the image away from the edge.

ADJ 9.12 IIT Vertical/Horizontal Magnification

Purpose

To correct the horizontal (fast scan)/vertical (slow scan) magnification ratio for a 100% copy.

Check

CAUTION

Perform this procedure only if absolutely required; changing IIT magnification may adversely affect resolution due to ASIC shift, and may cause a color shift.

NOTE: *Before performing this procedure, make sure that the IOT horizontal/vertical magnification ratios are correct.*

1. Place the Geometric Test Pattern on the Platen Glass and make a copy using the following copy mode settings:
   - Copy Mode: Black
   - Document Type: Text/Photo
   - Paper: 11 x17 in. or A3
   - Magnification: 100%
   - No. of Copies: 2
2. Check the 2nd copy for the following:
3. **Check horizontal magnification** (Figure 1):

   Measure the 200mm line running from near LE1 to near LE3. If the dimension is not 200mm ±1mm, perform the Adjustment.

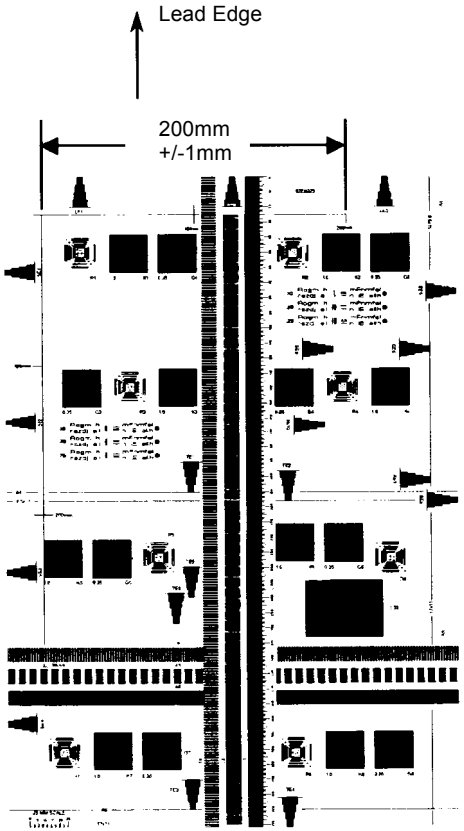


Figure 1 Checking Horizontal Magnification

4. **Check vertical magnification** (Figure 2):

   Measure the 300mm line running from near LE1 to the trail edge of the 1.8lp ladder. If the dimension is not 300mm ±1.5mm, perform the Adjustment.

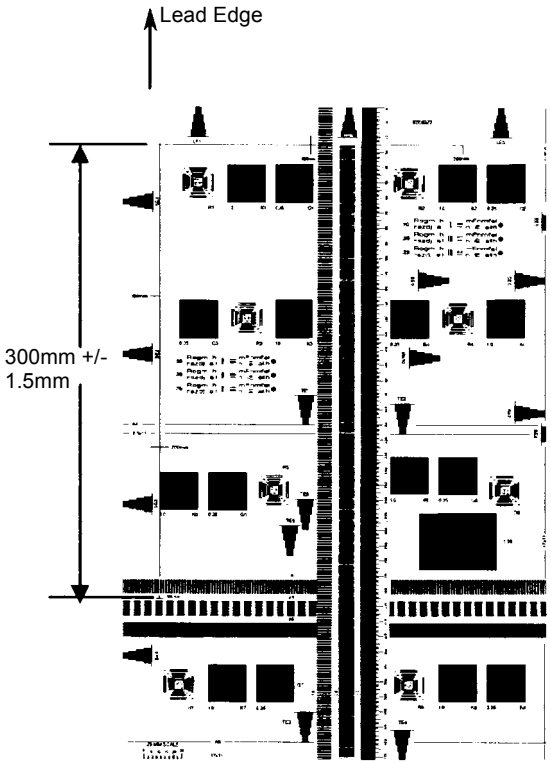


Figure 2 Checking Vertical Magnification

Adjustment

1. **Horizontal Magnification Adjustment**
   - ï Enter dC131 [715-234]
   - ï Each bit represents 0.1% change:
     Increase the value to lengthen the line
     Decrease the value to shorten the line
2. Vertical Magnification Adjustment
   - ï Enter dC131 [715-302]
   - ï Each bit represents 0.1% change:
     Increase the value to lengthen the line
     Decrease the value to shorten the line

ADJ 9.13 UI Display Calibration

Purpose

Adjust the display by making the buttons on the display correspond to the Touch Panel, so that users can correctly select the content indicated on the display.

Perform this adjustment when UI PWB or the Control Panel are replaced.

Adjustment

NOTE: *Use the touch pen for the adjustment as it is installed in the UI Control Panel of the machine. A tapered substitute can be replaced if the pen has been lost. In this case, care should be taken not to have the UI surface scratched.*

1. Switch off the power and remove the Control Panel Cover.
2. Remove the Touch Pen (Figure 1).

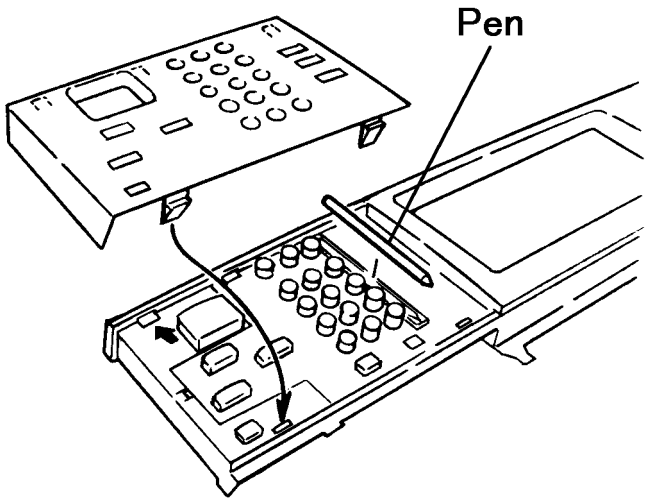


Figure 1 Accessing the Touch Pen

3. Switch on the power while simultaneously holding down the numerical keys **0**, **1**, and **3** on the Control Panel.

   Calibration Screen 1 will be displayed (Figure 2).

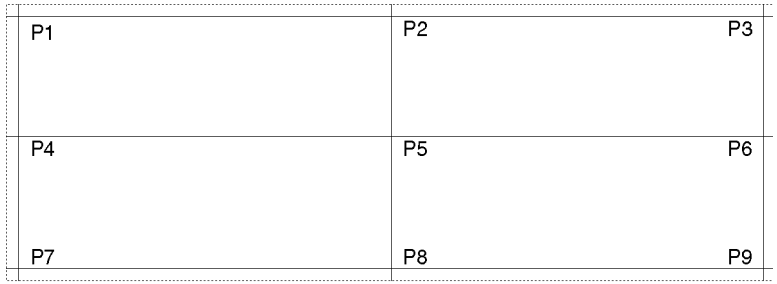


Figure 2 Calibration Screen 1

4. In numeric sequence (P 1 to P 9), touch the intersections of the vertical and horizontal lines with the touch pen. A message is displayed on the screen after each touch.

   After pressing down all the buttons, the machine will calculate the deviation and the correction value on the coordinates. This automatic calculation takes about 0.1 second.
5. Calibration Screen 2 will be displayed (Figure 3).
6. Apply the adjusting pen to each of the four line intersections. A black square should appear at the point of contact, and a beep should sound.
   - If four beeps are heard, adjustment is OK.
   - If you donít hear four beeps, repeat the adjustment from step 3.



Figure 3 Adjustment Screen #2

7. Switch off the power. Restore the pen to its original place and reinstall the Control Panel Cover.

ADJ 9.14 Inboard/Outboard Density

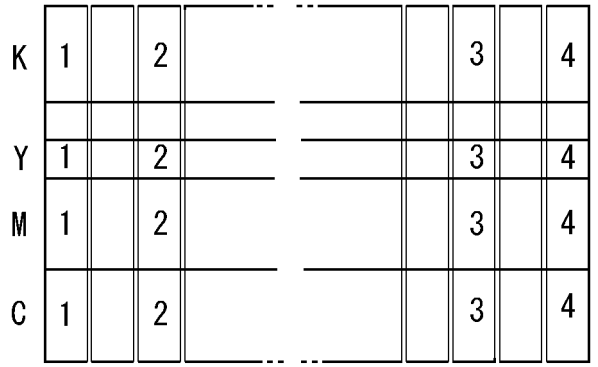
Purpose

To perform the ROS In/Out light quantity correction with this adjustment, when IN/Out densities are different but the parameters other than ROS light quantity judges that all is normal.

Adjustment

1. Enter dC612.
2. Select the Test Pattern in the modes as shown below and print out the test pattern.
   - ï Pattern name: Binary highlight PG LUT: C-TRA On IOT ON
     (Pattern No 13??? 25?)
   - ï Color Mode: 4C
   - ï Cin (%): 20%
   - ï Number of prints: 1
   - ï Tray: Tray 1/A4LEF
   - ï Resolution: Not specified
   - ï Binary ED screen
   - ï Print: single mode
3. Select the pattern that has the same inclination on the four check points in the test pattern from the 20 patterns below.

   Write down the Pattern number. (Vertical axis shows density, and horizontal axis shows width direction in the pattern)



0104903-A-CAR

Figure 1 Check Point

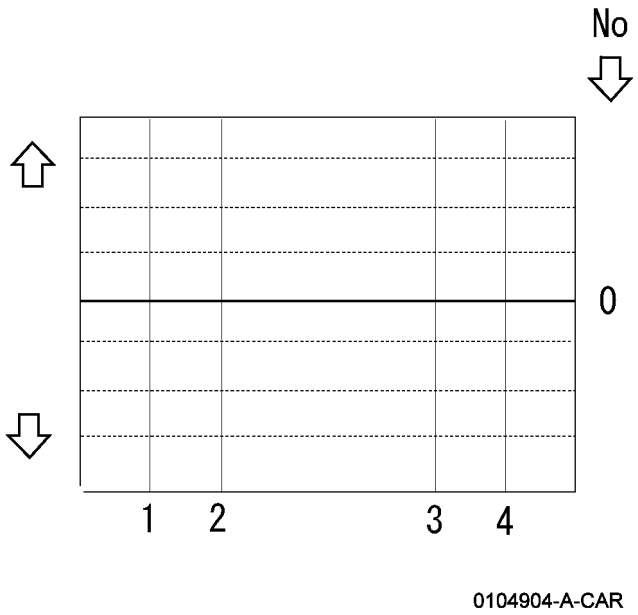


Figure 2 Standard Pattern: Pattern 0

<Group 1: when the patterns become darker along the rear> (Fig. 3)

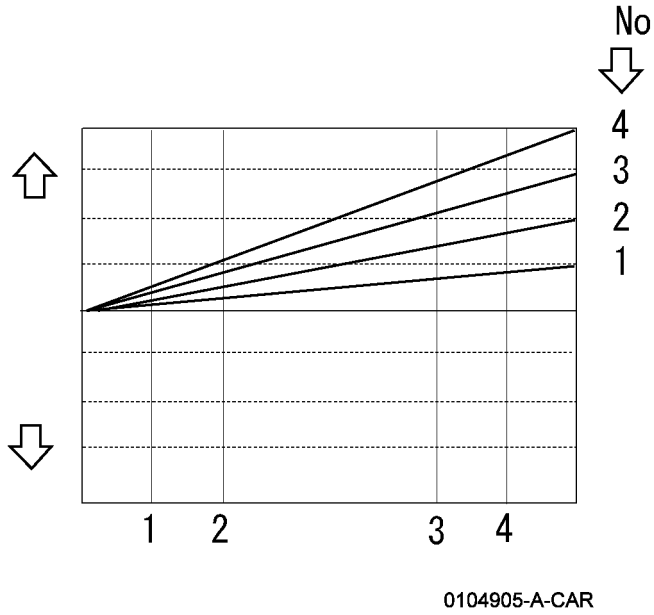


Figure 3 Group 1

<Group 2: when the patterns become darker along the front> (Fig. 4)

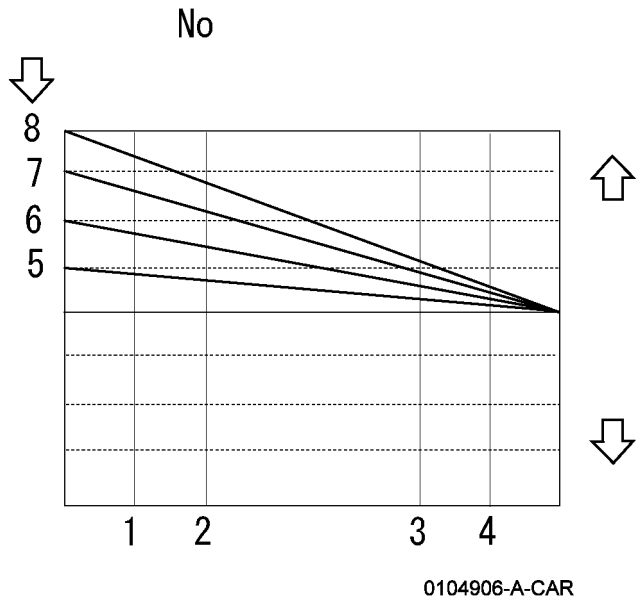


Figure 4 Group 2

Group 3: when the patterns are dark/light for only both edges. (Fig. 5)

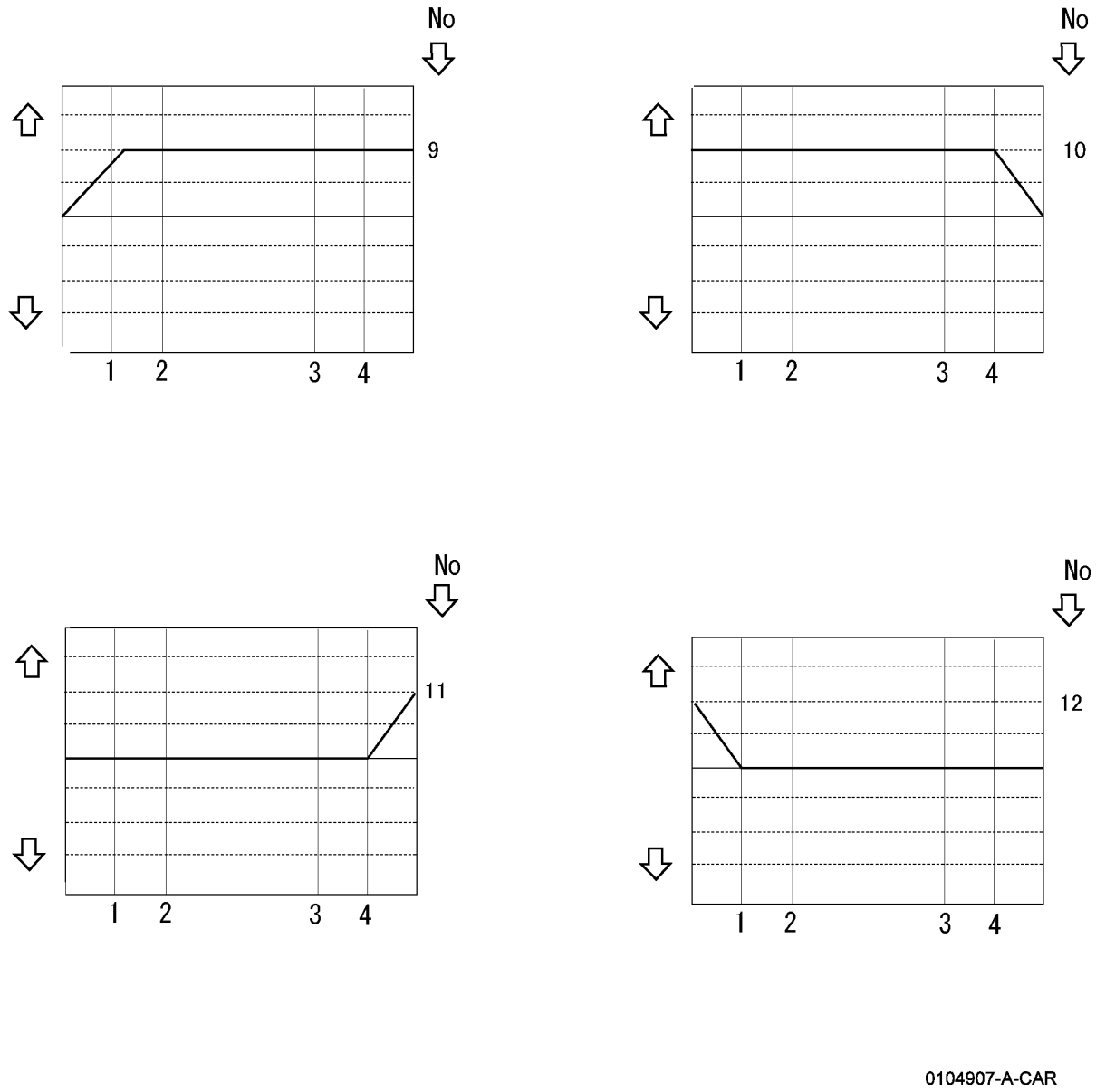


Figure 5 Group 3

<Group 4: when the patterns are dark only in the center areas> (Fig. 6)

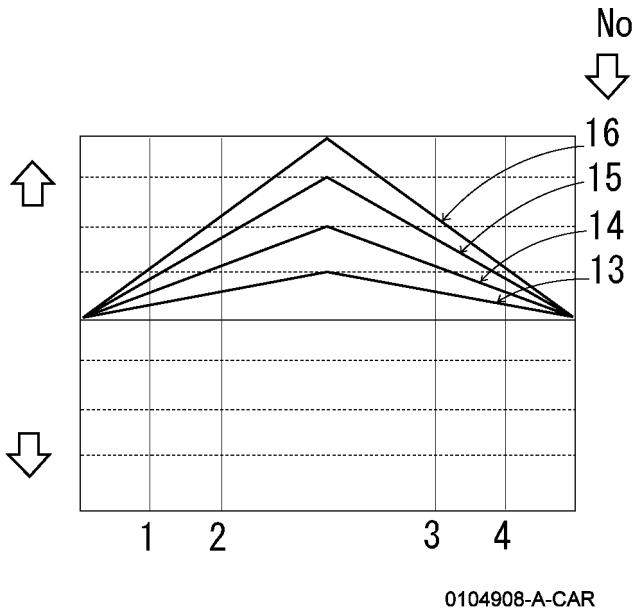


Figure 6 Group 4

<Group 5: when the patterns are light only in the center areas> (Fig. 7)

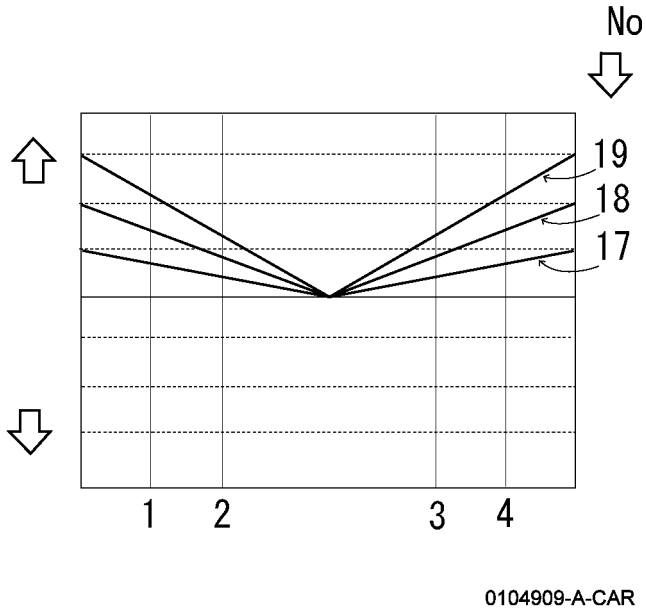


Figure 7 Group 5

4. Select a pattern and change the following NVM corresponding to the pattern.

   NOTE: *Do NOT use the value other than the recommended values below as the NVM value.*

   The In/Out density adjustment is available by changing the 6 NVM below.

Table 1

Chain/Link no.	NVM names
[753-801]	Legible Adjustment (Yellow)
[753-802]	Legible Adjustment (Magenta)
[753-803]	Legible Adjustment (Cyan)
[753-804]	Legible Adjustment (Black)
[753-805]	InOut Pattern setting (Yellow)
[753-806]	InOut Pattern setting (Magenta)
[753-807]	InOut Pattern setting (Cyan)
[753-808]	InOut Pattern setting (Black)

Table 2 Pattern No. 0~9

Pattern # NVM	0	1	2	3	4	5	6	7	8	9
[753-801]	1024	973	922	870	819	1024	1024	1024	1024	922
[753-802]	1024	973	922	870	819	1024	1024	1024	1024	922
[753-803]	1024	1024	1024	1024	1024	973	922	870	819	1024
[753-804]	1024	1024	1024	1024	1024	973	922	870	819	1024
[753-805]	0	1	2	3	4	5	6	7	8	9
[753-806]	0	1	2	3	4	5	6	7	8	9
[753-807]	0	1	2	3	4	5	6	7	8	9
[753-808]	0	1	2	3	4	5	6	7	8	9

Table 3 Pattern No. 10~9

Pattern # NVM	10	11	12	13	14	15	16	17	18	19
[753-801]	1024	922	1024	1024	1024	1024	1024	973	922	870
[753-802]	1024	922	1024	1024	1024	1024	1024	973	922	870
[753-803]	922	1024	922	1024	1024	1024	1024	973	922	870
[753-804]	922	1024	922	1024	1024	1024	1024	973	922	870
[753-805]	10	11	12	13	14	15	16	17	18	19
[753-806]	10	11	12	13	14	15	16	17	18	19
[753-807]	10	11	12	13	14	15	16	17	18	19
[753-808]	10	11	12	13	14	15	16	17	18	19

Reference Information

The correct light quantity value in ROS is normally 1024. If the value is decreased by 5%, the light quantity decreases too.

Hence, entering the 5 stages of light quantity correction value by 5% is possible as below.

1024: Correct ROS Light Quantity Value

973: Light quantity value of 5% down

922: Light quantity value of 10% down

870: Light quantity value of 15% down

919: Light quantity value of 20% down

5. Take test patterns again with the Step 2 mode after changing.
6. Repeat Steps 3~5 until the density distribution that the client requests can be obtained.
7. Check the condition using the customer's samples. (Or ask the customer to print out the sample from the same file and check the density on it.)

NOTE: *Be careful in servicing because tone jump trouble may occur if the adjustment is corrected drastically. The tone jump is a noticeable difference in the midstream of gradations when the gradations etc. are printed out.*

NOTE: *When copying, borrow the document or sample that the clients has complained about. (To show the adjustment result after the adjustment)*

ADJ 12.1 Finisher Alignment

Purpose

Align IOT copy output with entrance to Finisher H Transport.

Adjustment

WARNING

To avoid personal injury or shock, do not perform repair or adjustment activities with the power switch on or electrical power applied to the machine.

1. Ensure H Transport is set correctly (Figure 1) and (Figure 2).

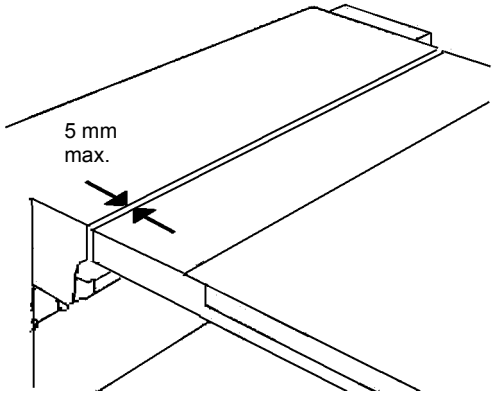


Figure 1 H Transport Clearance

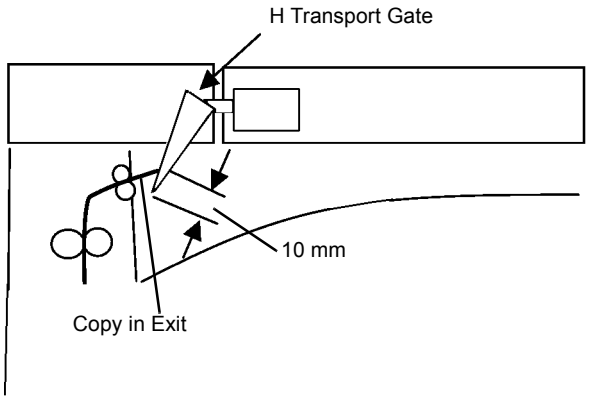


Figure 2 H Transport Gate Clearance

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Introduction

Overview

The Parts List section identifies all part numbers and the corresponding location of all spared subsystem components.

Organization

Parts Lists

Each item number in the part number listing corresponds to an item number in the related illustration. All the parts in a given subsystem of the machine will be located in the same illustration or in a series of associated illustrations.

Electrical Connectors and Fasteners

This section contains the illustrations and descriptions of the plugs, jacks, and fasteners used in the machine. A part number listing of the connectors is included.

Common Hardware

The common hardware is listed in alphabetical order by the letter or letters used to identify each item in the part number listing and in the illustrations. Dimensions are in millimetres unless otherwise identified.

Part Number Index

This index lists all the spared parts in the machine in numerical order. Each number is followed by a reference to the parts list on which the part may be found.

Other Information

Abbreviations

Abbreviations are used in the parts lists and the exploded view illustrations to provide information in a limited amount of space. The following abbreviations are used in this manual:

Table 1

Abbreviation	Meaning
A3	297 x 594 Millimetres
A4	210 x 297 Millimetres
A5	148 x 210 Millimetres
AD	Auto Duplex
AWG	American Wire Gauge
EMI	Electro Magnetic Induction
GB	Gigabyte
KB	Kilobyte
MB	Megabyte
MM	Millimetres
MOD	Magneto Optical Drive
NOHAD	Noise Ozone Heat Air Dirt
PL	Parts List
P/O	Part of
R/E	Reduction/Enlargement
REF:	Refer to
SCSI	Small Computer Systems Interface
W/	With
W/O	Without

Table 2

	Operating Companies
Abbreviation	**Meaning**
AO	Americas Operations
NASG - US	North American Solutions Group - US
NASG - Canada	North American Solutions Group - Canada
XE	Xerox Europe

Symbology

Symbology used in the Parts List section is identified in the Symbology section.

Service Procedure Referencing

If a part or assembly has an associated repair or adjustment procedure, the procedure number will be listed at the end of the part description in the parts lists e.g. (REP 5.1, ADJ 5.3)

Subsystem Information

Use of the Term "Assembly"

The term "assembly" will be used for items in the part number listing that include other itemized parts in the part number listing. When the word "assembly" is found in the part number listing, there will be a corresponding item number on the illustrations followed by a bracket and a listing of the contents of the assembly.

Brackets

A bracket is used when an assembly or kit is spared, but is not shown in the illustration. The item number of the assembly or kit precedes the bracket; the item numbers of the piece parts follow the bracket.

Tag

The notation "W/Tag" in the parts description indicates that the part configuration has been updated. Check the change Tag index in the General Information section of the Service Data for the name and purpose of the modification.

In some cases, a part or assembly may be spared in two versions: with the Tag and without the Tag. In those cases, use whichever part is appropriate for the configuration of the machine on which the part is to be installed. If the machine does not have a particular Tag and the only replacement part available is listed as “W/Tag,” install the Tag kit or all of the piece parts. The Change Tag Index tells you which kit or piece parts you need.

Whenever you install a Tag kit or all the piece parts that make up a Tag, mark the appropriate number on the Tag matrix.

Symbology

A Tag number within a circle pointing to an item number shows that the part has been changed by the tag number within the circle (Figure 1). Information on the modification is in the Change Tag Index.

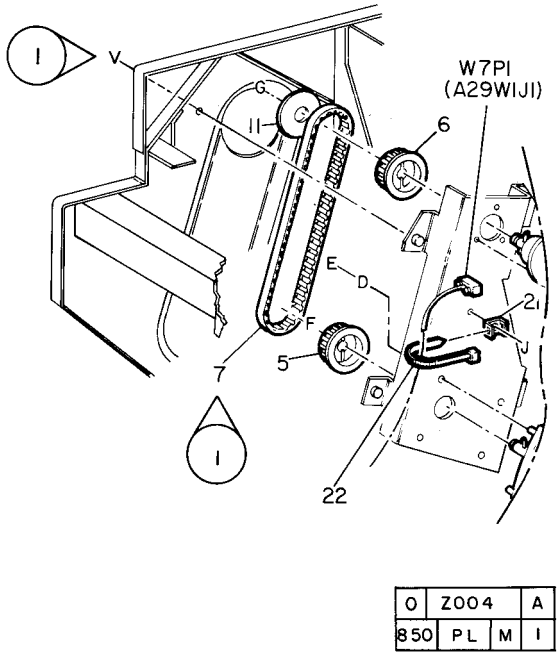


Figure 1 With Tag Symbol

A Tag number within a circle having a shaded bar and pointing to an item number shows that the configuration of the part shown is the configuration before the part was changed by the Tag number within the circle (Figure 2).

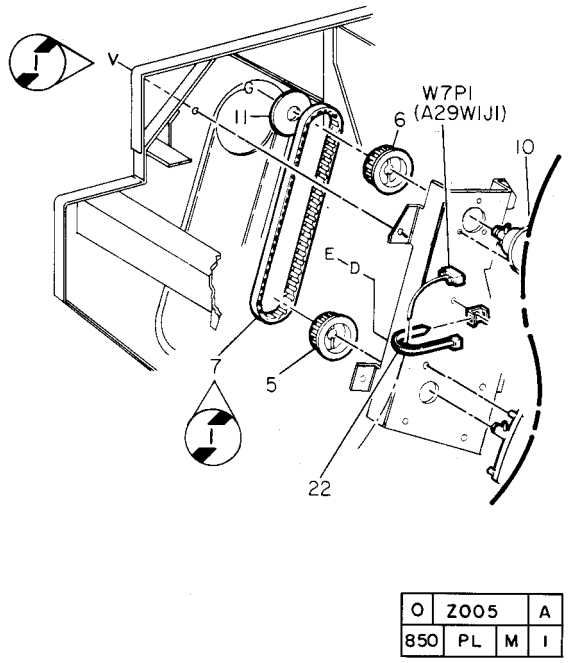


Figure 2 Without Tag Symbol

A tag number within a circle with no apex shows that the entire drawing has been changed by the tag number within the circle (Figure 3). Information on the modification is in the Change Tag Index.

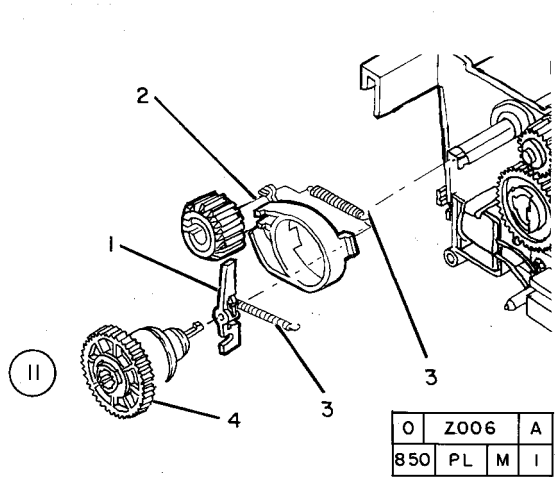


Figure 3 Entire Drawing With Tag Symbol

A tag number within a circle with no apex and having a shaded bar shows that the entire drawing was the configuration before being changed by the tag number within the circle (Figure 4).

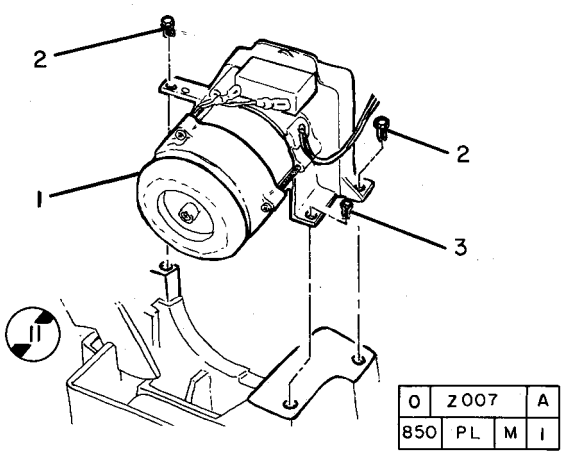
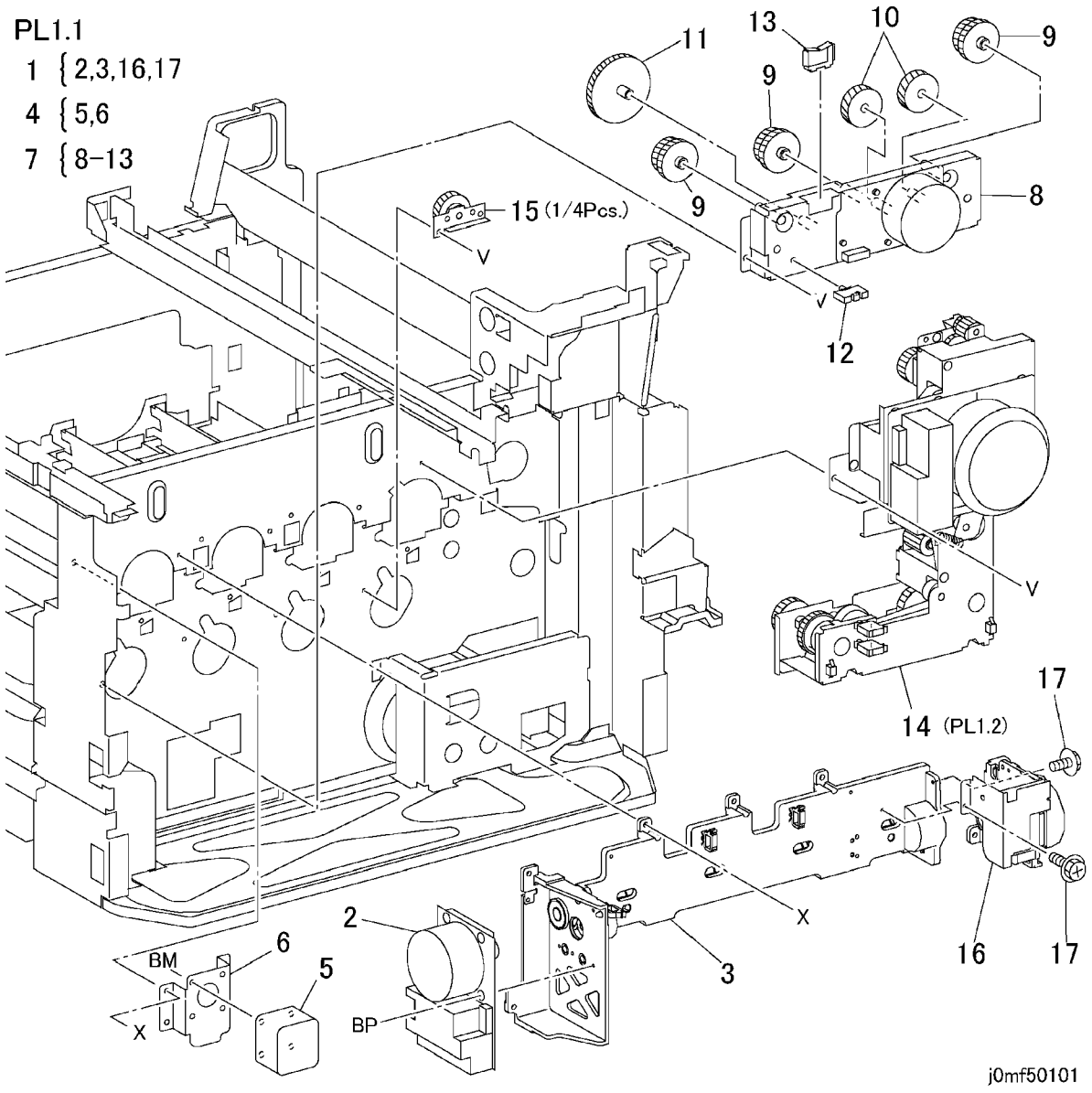


Figure 4 Entire Drawing Without Tag Symbol

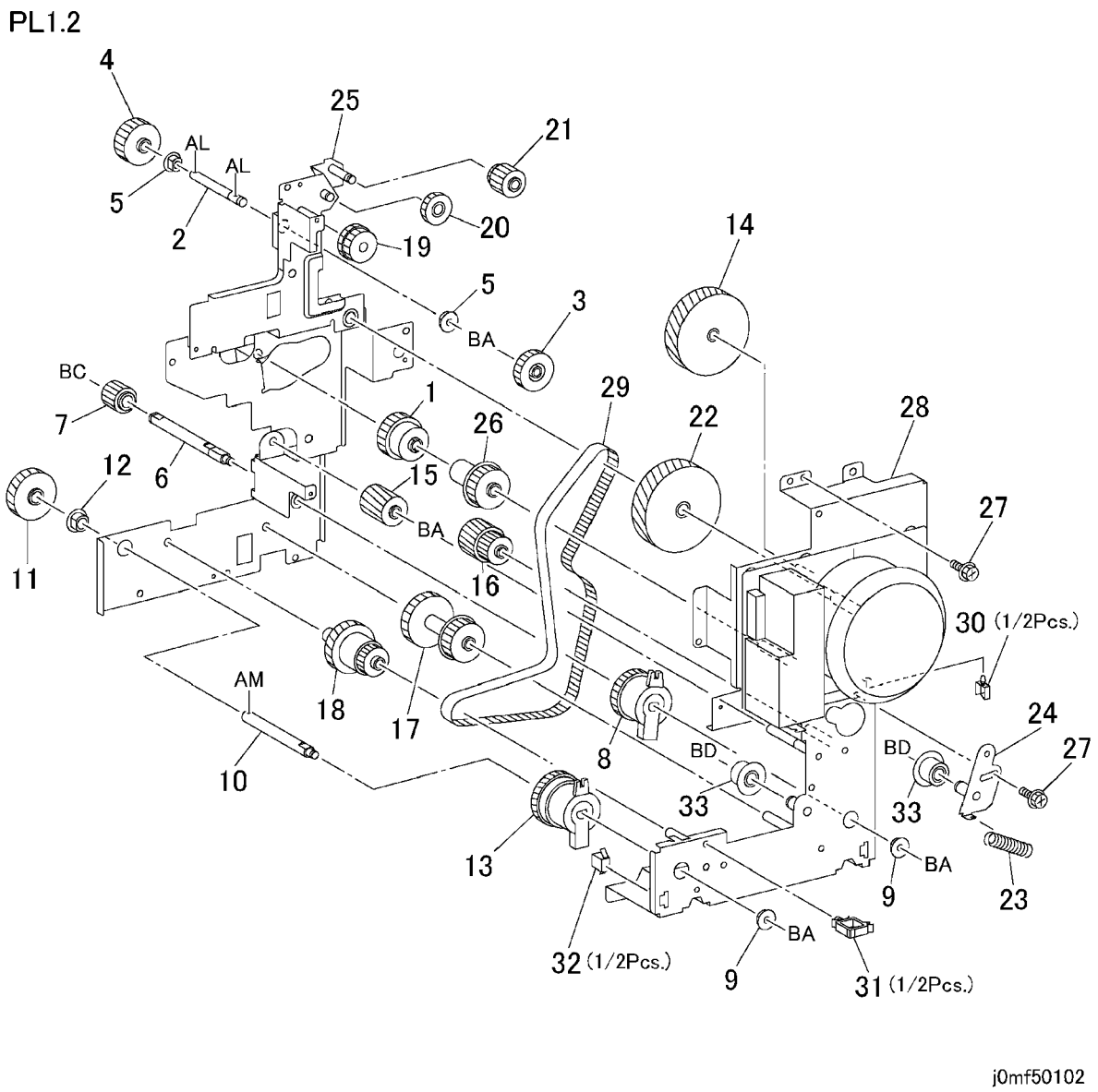
PL 1.1 Drive Unit

Item	Part	Description
1	007K85750	Drum Motor Assembly (REP 4.4)
2	–	Drum Motor (P/O PL 1.1 Item 1)
3	–	Gear Bracket (P/O PL 1.1 Item 1)
4	007K87110	IBT Motor Assembly (REP 4.2)
5	–	IBT Motor (P/O PL 1.1 Item 4)
6	–	Gear Bracket (P/O PL 1.1 Item 4)
7	007K86400	Developer Drive Motor Assembly (REP 4.3)
8	–	Developer Drive Motor (P/O PL 1.1 Item 7)
9	–	Gear (47/38T) (P/O PL 1.1 Item 7)
10	–	Gear (51/25T) (P/O PL 1.1 Item 7)
11	–	Gear (P/O PL 1.1 Item 7) (76T)
12	–	Clamp (P/O PL 1.1 Item 7)
13	–	Edge Saddle (P/O PL 1.1 Item 7)
14	007K86920	Main Drive Motor Assembly (REP 4.1)
15	007K87220	Developer Gear
16	–	Drum Motor (K) (P/O PL 1.1 Item 1)
17	–	Screw (P/O PL 1.1 Item 1)



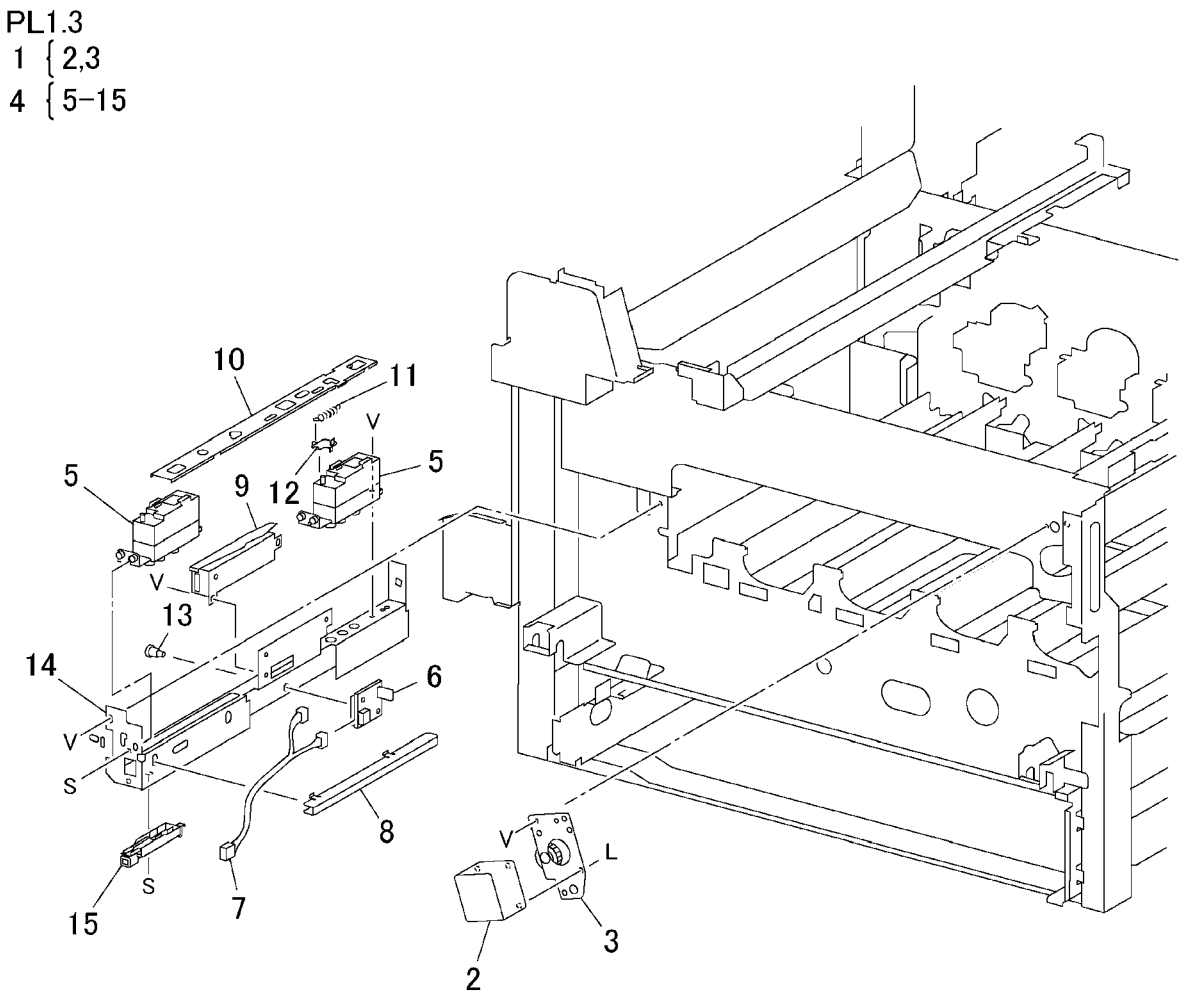
PL 1.2 Main Drive Motor Assembly

Item	Part	Description
1	–	Friction Clutch (Not Spared)
2	–	Shaft (Not Spared)
3	–	Gear (32T) (Not Spared)
4	–	Gear (28T) (Not Spared)
5	–	Bearing (Not Spared)
6	–	Shaft (Not Spared)
7	–	Gear (20T) (Not Spared)
8	121K22470	Takeaway Clutch
9	–	Bearing (Not Spared)
10	–	Shaft (Not Spared)
11	–	Gear (39T) (Not Spared)
12	–	Bearing (Not Spared)
13	121K23270	Developer K Clutch
14	–	Gear (69/27T) (Not Spared)
15	–	Gear (23T) (Not Spared)
16	–	Gear (28/22T) (Not Spared)
17	–	Gear (45/30T) (Not Spared)
18	–	Gear (41/21T) (Not Spared)
19	–	Gear (24/20T) (Not Spared)
20	–	Gear (19T) (Not Spared)
21	–	Gear (18T) (Not Spared)
22	–	Gear (73/23T) (Not Spared)
23	–	Spring (Not Spared)
24	–	Tension Bracket (Not Spared)
25	–	Bracket (Not Spared)
26	–	Pulley (Not Spared)
27	–	Screw (Not Spared)
28	–	Main Motor (Not Spared)
29	–	Belt (Not Spared)
30	–	Clamp (Not Spared)
31	–	Clamp (Not Spared)
32	–	Connector (Not Spared)
33	–	Pulley (Not Spared)



PL 1.3 IBT Steering Motor and MOB Sensor

Item	Part	Description
1	007K85580	IBT Steering Motor Assembly (REP 9.12)
2	–	IBT Steering Motor (P/O PL 1.3 Item 1)
3	–	Plate (P/O PL 1.3 Item 1)
4	130K60865	MOB Sensor Assembly (REP 9.14,ADJ 9.6)
5	–	MOB Sensor (P/O PL 1.3 Item 4)
6	–	Environment Sensor (P/O PL 1.3 Item 4)
7	–	Wire Harness (P/O PL 1.3 Item 4)
8	–	Cover (P/O PL 1.3 Item 4)
9	–	ADC Sensor (P/O PL 1.3 Item 4)
10	–	Shutter (P/O PL 1.3 Item 4)
11	–	Spring (P/O PL 1.3 Item 4)
12	–	Link (P/O PL 1.3 Item 4)
13	–	Spacer (P/O PL 1.3 Item 4)
14	–	MOB Bracket (P/O PL 1.3 Item 4)
15	–	Slide (P/O PL 1.3 Item 4)

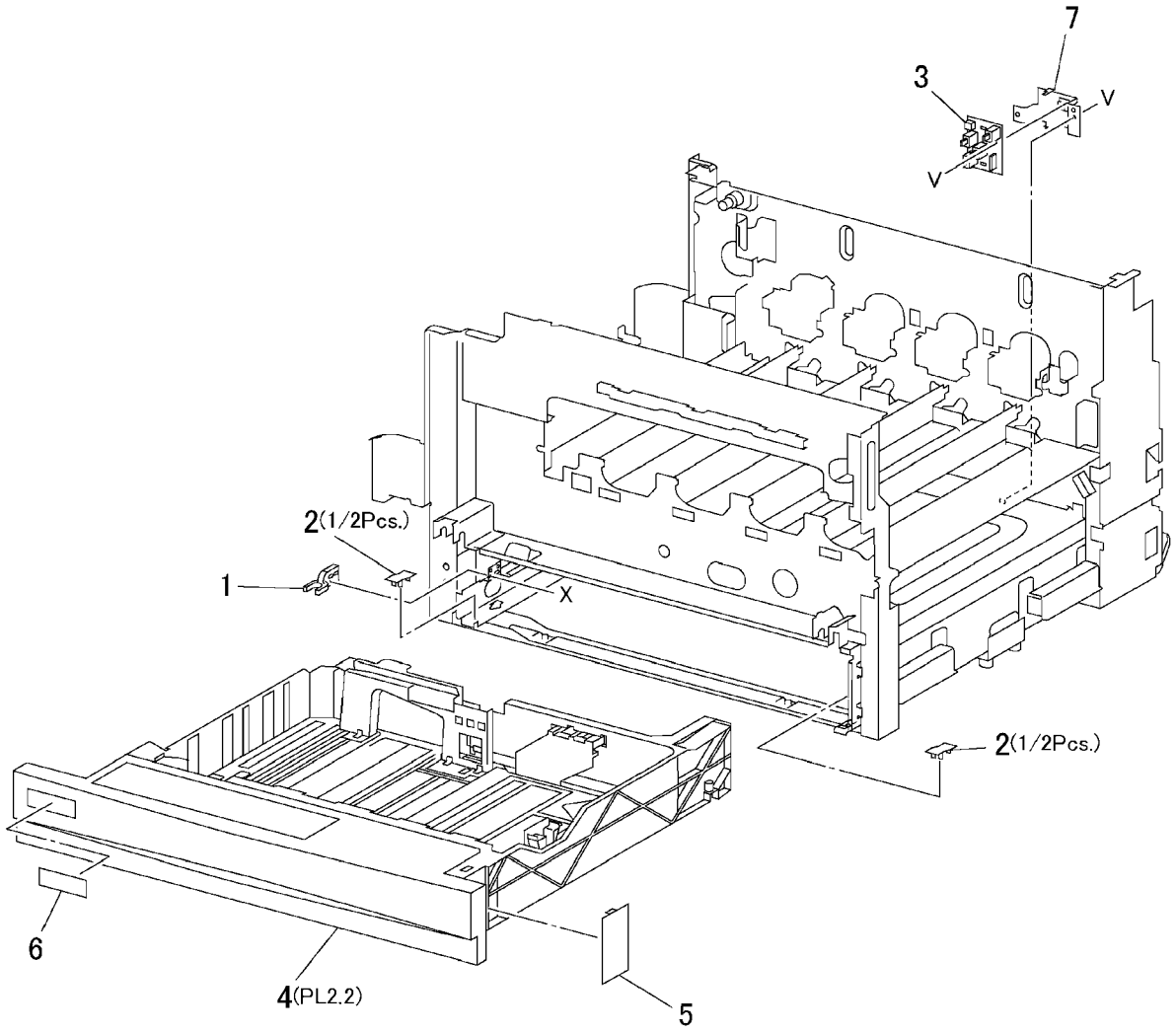


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PL 2.1 Tray 1: 1 of 2

Item	Part	Description
1	003E23672	Stop
2	014E42850	Spacer
3	110K08541	Tray 1 Paper Size Sensor (REP 7.5)
4	050K48170	Tray 1 (REP 7.8)
5	–	Cover (Not Spared)
6	892E41110	Label (1)
7	–	Bracket (Not Spared)

PL2.1

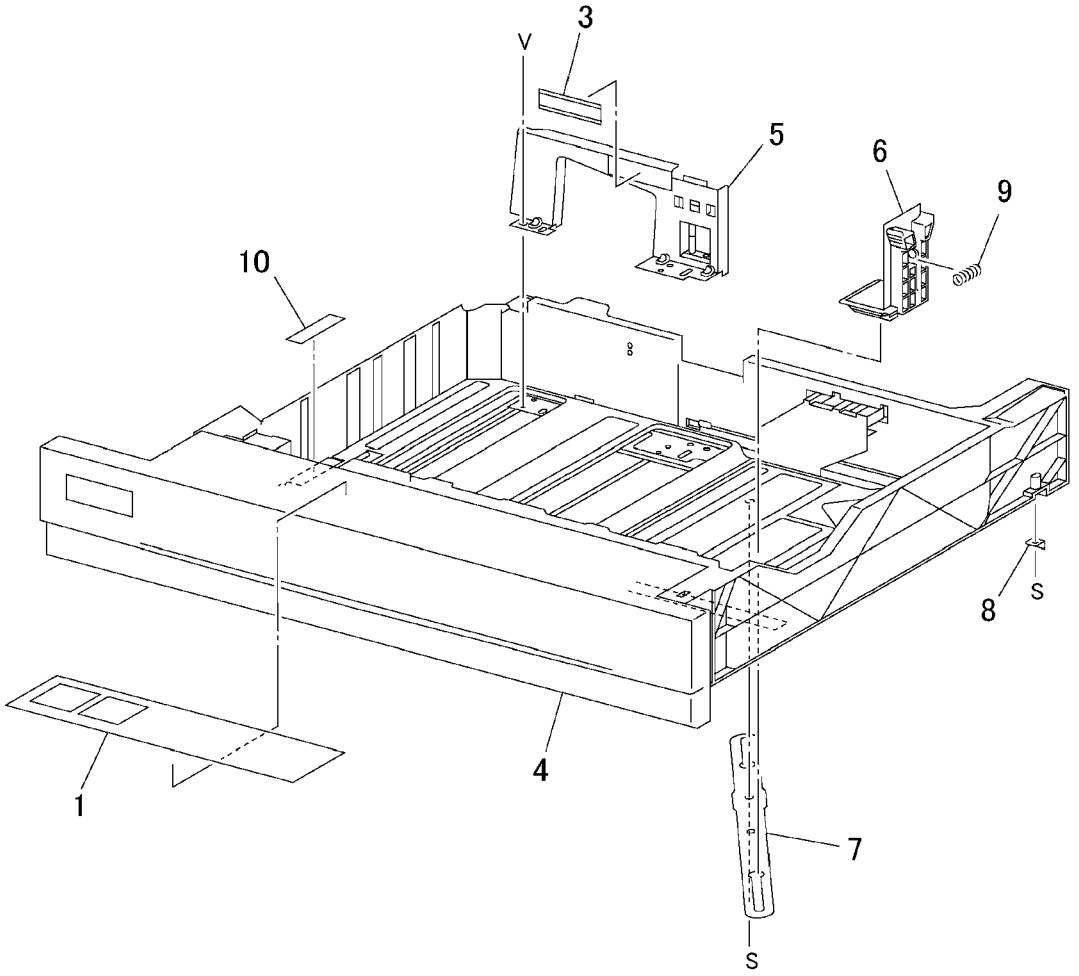


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PL 2.2 Tray 1: 2 of 2

Item	Part	Description
1	892E13310	Instruction Label
3	–	Max Label (Not Spared)
4	–	Tray (Not Spared)
5	–	Side Guide (Not Spared)
6	–	End Guide (Not Spared)
7	–	Link (Not Spared)
8	–	Stop (Not Spared)
9	–	Spring (Not Spared)
10	–	Pad (Not Spared)

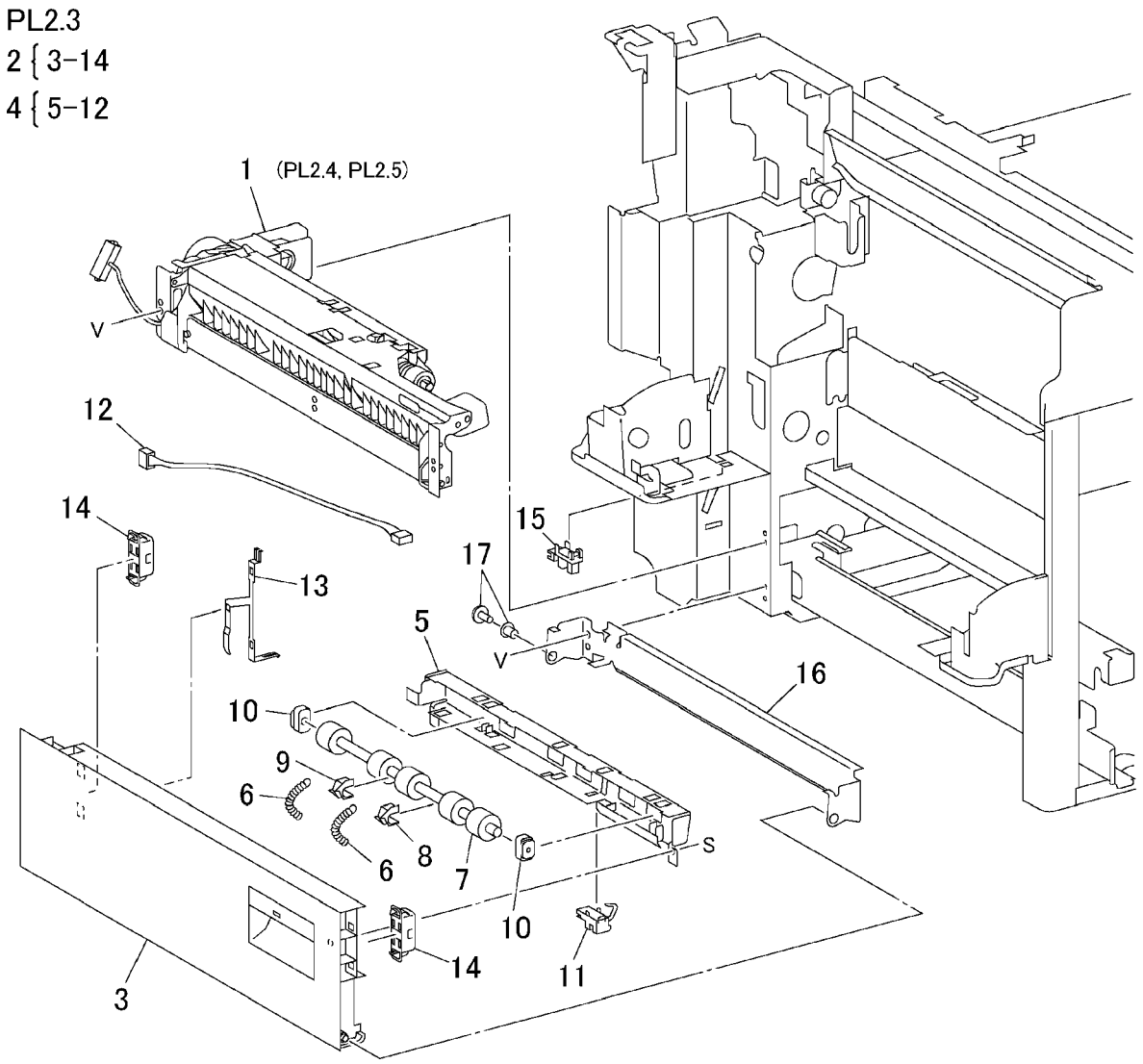
PL2.2



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PL 2.3 Tray 1 Feeder and Left Lower Cover Assembly

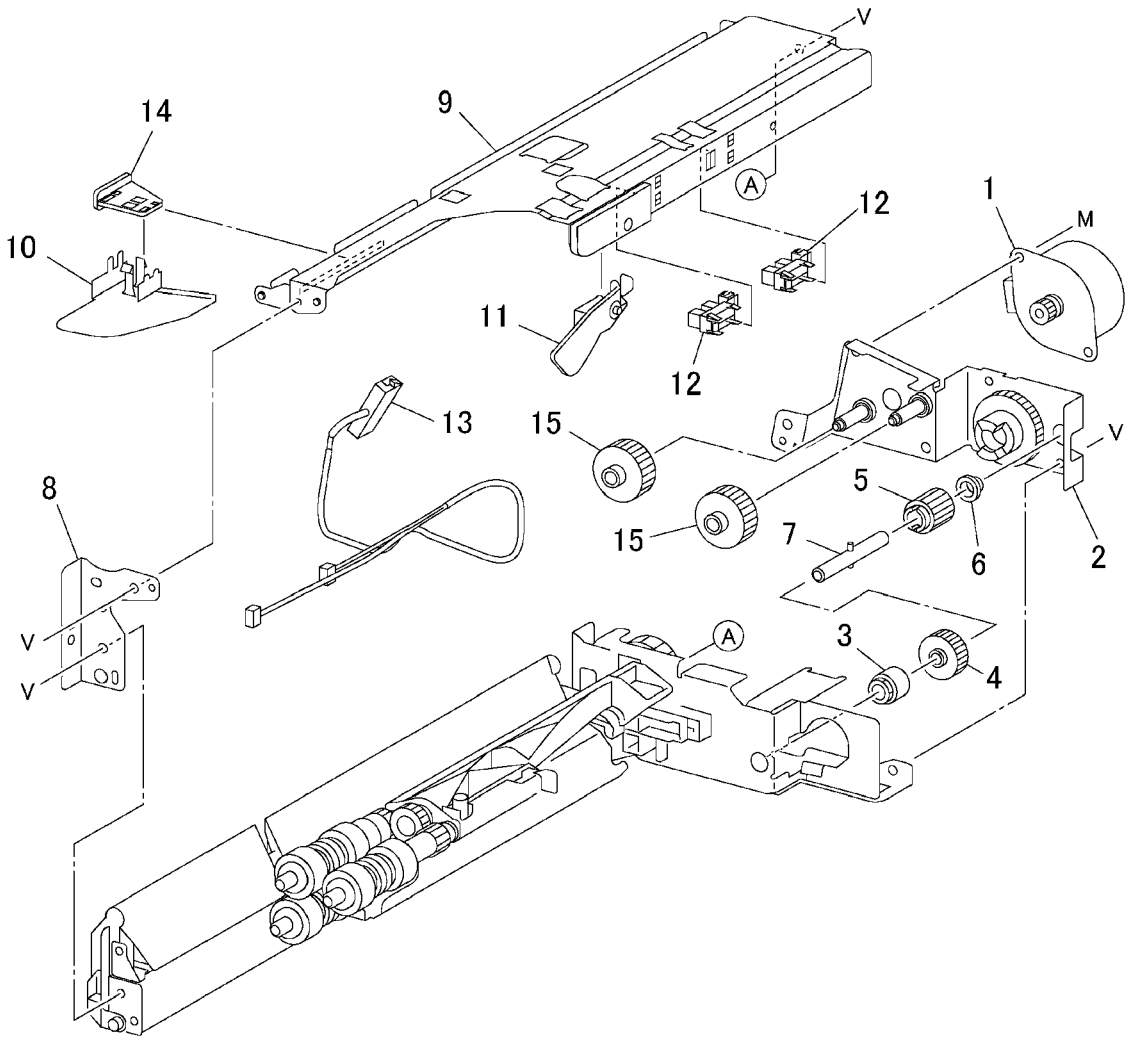
Item	Part	Description
1	059K15573	Tray 1 Feeder (REP 7.3)
2	802K13193	Left Lower Cover Assembly (REP 14.6)
3	–	Left Lower Cover (P/O PL 2.3 Item 2)
4	–	Pinch Roll (P/O PL 2.3 Item 2)
5	–	Bracket (P/O PL 2.3 Item 2)
6	–	Spring (P/O PL 2.3 Item 2)
7	–	Pinch Roll (P/O PL 2.3 Item 2)
8	–	Bearing (P/O PL 2.3 Item 2)
9	–	Bearing (P/O PL 2.3 Item 2)
10	–	Bearing (P/O PL 2.3 Item 2)
11	130K60851	Tray 1 Feedout Sensor
12	–	Wire Harness (P/O PL 2.3 Item 2)
13	–	Ground Plate (P/O PL 2.3 Item 2)
14	–	Magnet (P/O PL 2.3 Item 2)
15	130E82190	LH Lower Cover Interlock Switch
16	–	Bracket (Not Spared)
17	029E31600	Rivet



PL 2.4 Tray 1 Feeder: 1 of 2

Item	Part	Description
1	127K23230	Tray 1 Feed/Lift Motor (REP 7.4)
2	–	Bracket (Not Spared)
3	005K83081	One-way Clutch
4	007K85730	One-way Gear
5	–	Gear (13T) (Not Spared)
6	–	Bearing (Not Spared)
7	–	Shaft (Not Spared)
8	–	Front Frame (Not Spared)
9	–	Upper Frame (Not Spared)
10	–	Front Chute (Not Spared)
11	–	Actuator (Not Spared)
12	130E82190	Tray 1 Level / No Paper Sensor
13	–	Wire Harness (Not Spared)
14	–	Support (Not Spared)
15	–	Gear (15T) (Not Spared)

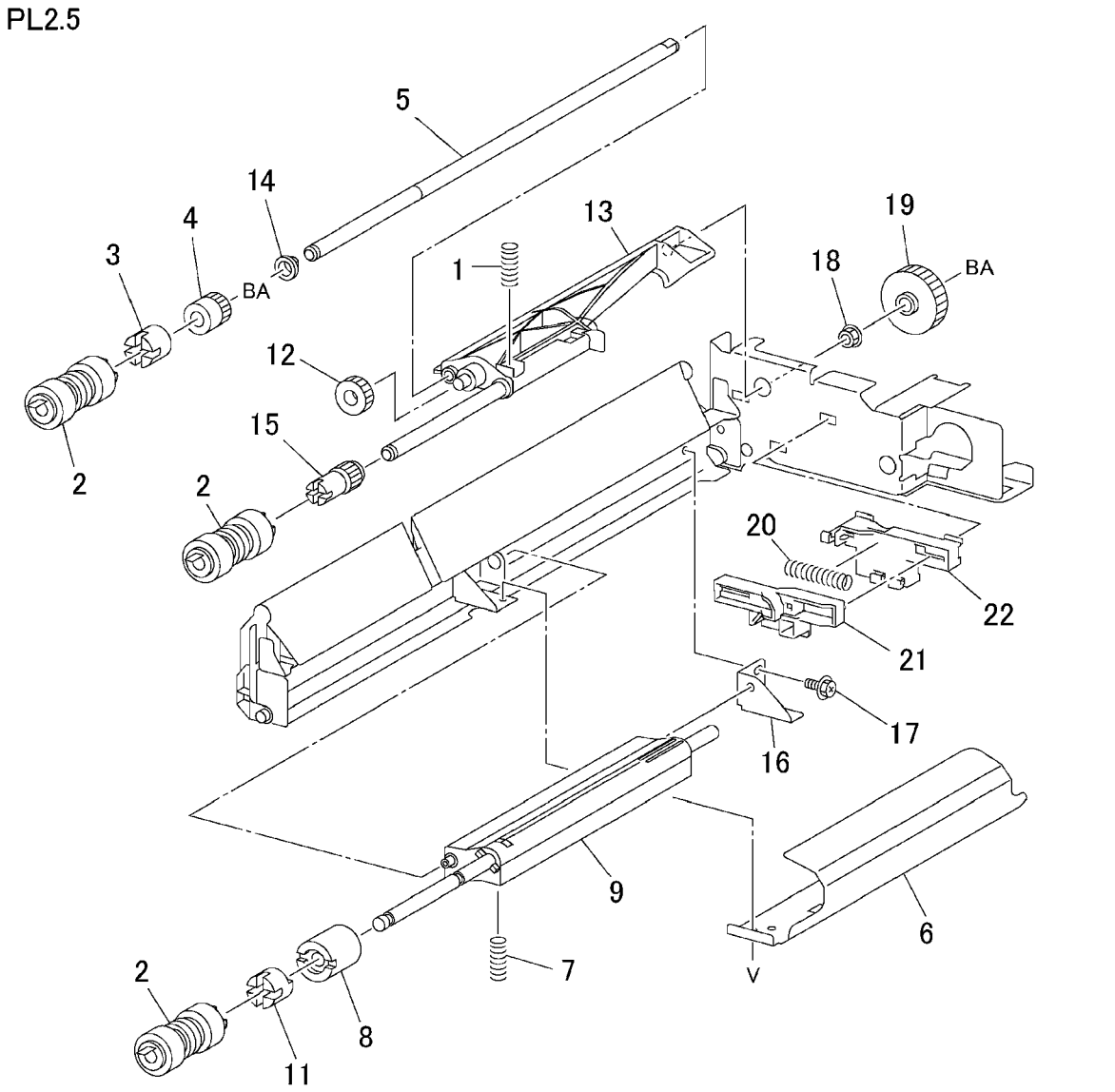
PL2.4



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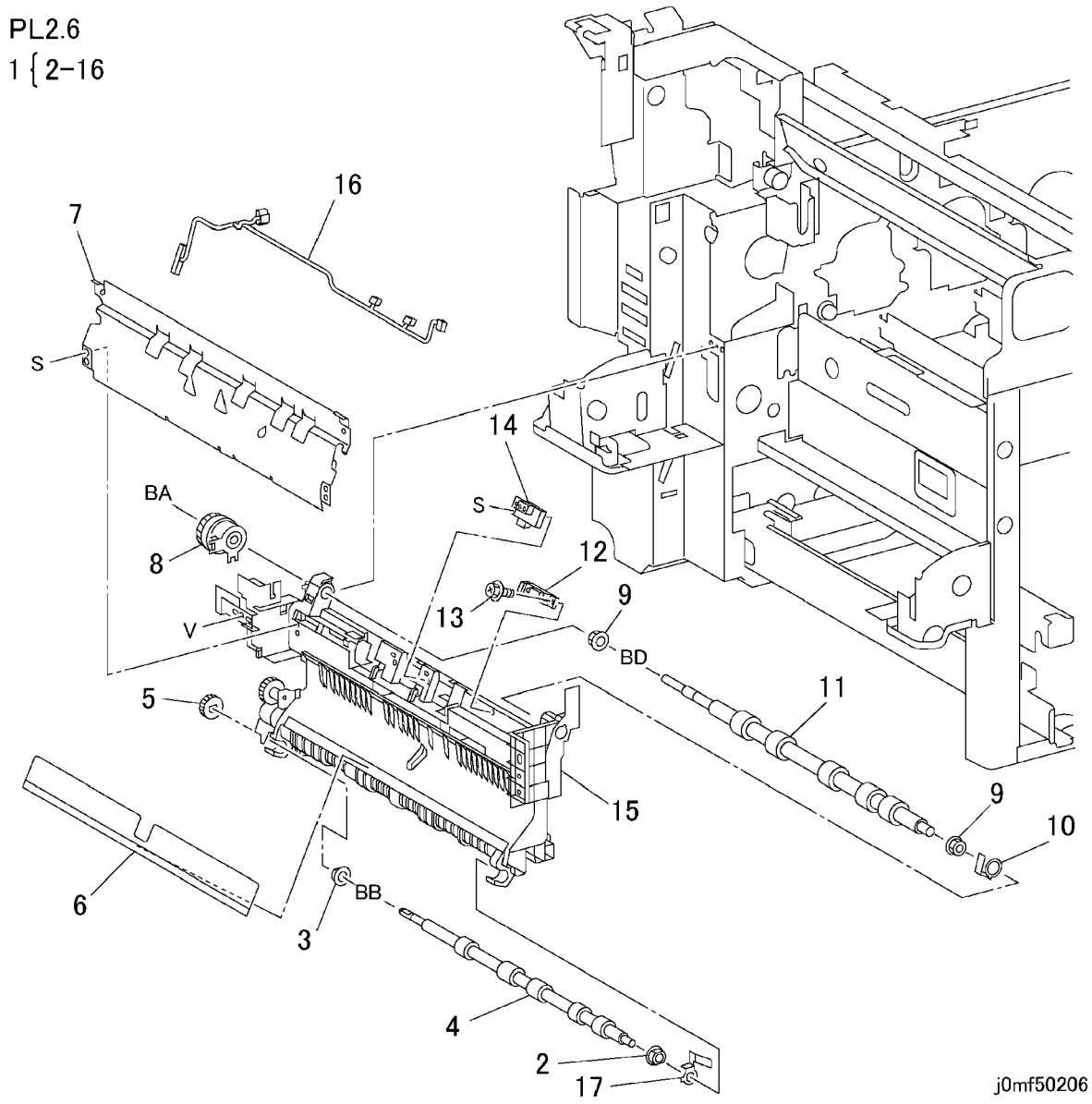
PL 2.5 Tray 1 Feeder: 2 of 2

Item	Part	Description
1	–	Spring (Not Spared)
2	600K78460	Roll Kit (3 Rolls/Kit)
3	005K05890	One-way Clutch
4	–	Gear (Not Spared)
5	–	Shaft (Not Spared)
6	–	Chute (Not Spared)
7	–	Spring (Not Spared)
8	–	Friction Clutch (Not Spared)
9	–	Support (Not Spared)
11	–	Spacer (Not Spared)
12	–	Gear (31T) (Not Spared)
13	–	Support (Not Spared)
14	–	Bearing (Not Spared)
15	–	Gear (Not Spared)
16	–	Support (Not Spared)
17	–	Screw (Not Spared)
18	–	Bearing (Not Spared)
19	–	Gear (35T) (Not Spared)
20	–	Spring (Not Spared)
21	–	Lever (Not Spared)
22	–	Holder (Not Spared)



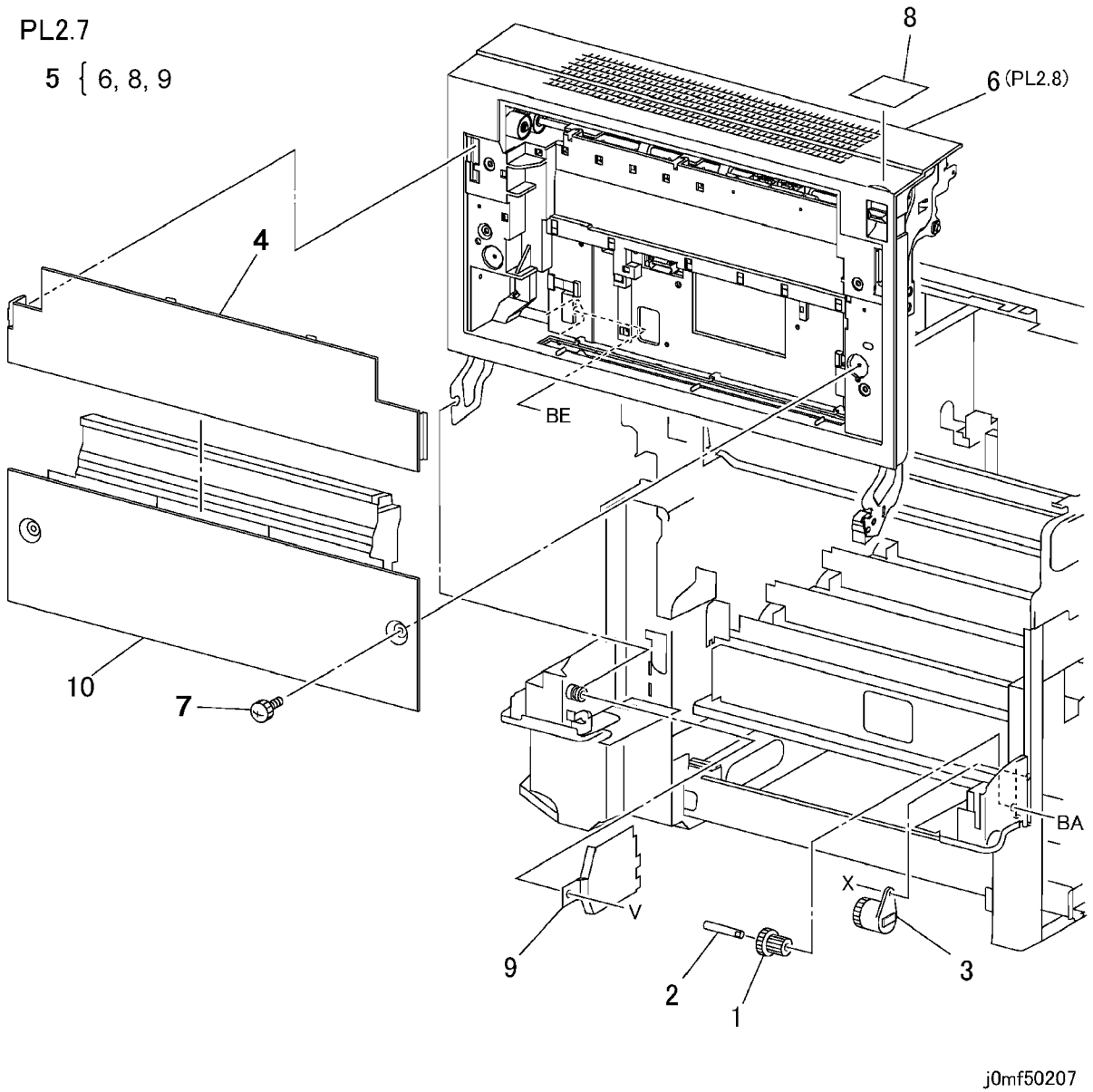
PL 2.6 Registration Transport

Item	Part	Description
1	059K24661	Registration Transport Assembly (REP 8.6)
2	–	Bearing (P/O PL 2.6 Item 1)
3	–	Bearing (P/O PL 2.6 Item 1)
4	–	Takeaway Roll (P/O PL 2.6 Item 1)
5	–	Gear (22T) (P/O PL 2.6 Item 1)
6	–	Paper Guide (P/O PL 2.6 Item 1)
7	–	Registration Chute (P/O PL 2.6 Item 1)
8	121K22220	Registration Clutch
9	–	Bearing (P/O PL 2.6 Item 1)
10	–	Ground Plate (P/O PL 2.6 Item 1)
11	–	Registration Roll (P/O PL 2.6 Item 1)
12	130E82650	Registration Sensor
13	–	Screw (P/O PL 2.6 Item 1)
14	160K46290	OHP Sensor
15	–	Registration Support (P/O PL 2.6 Item 1)
16	–	Wire Harness (P/O PL 2.6 Item 1)
17	–	Ground Plate (Not Spared)



PL 2.7 Left Cover Unit

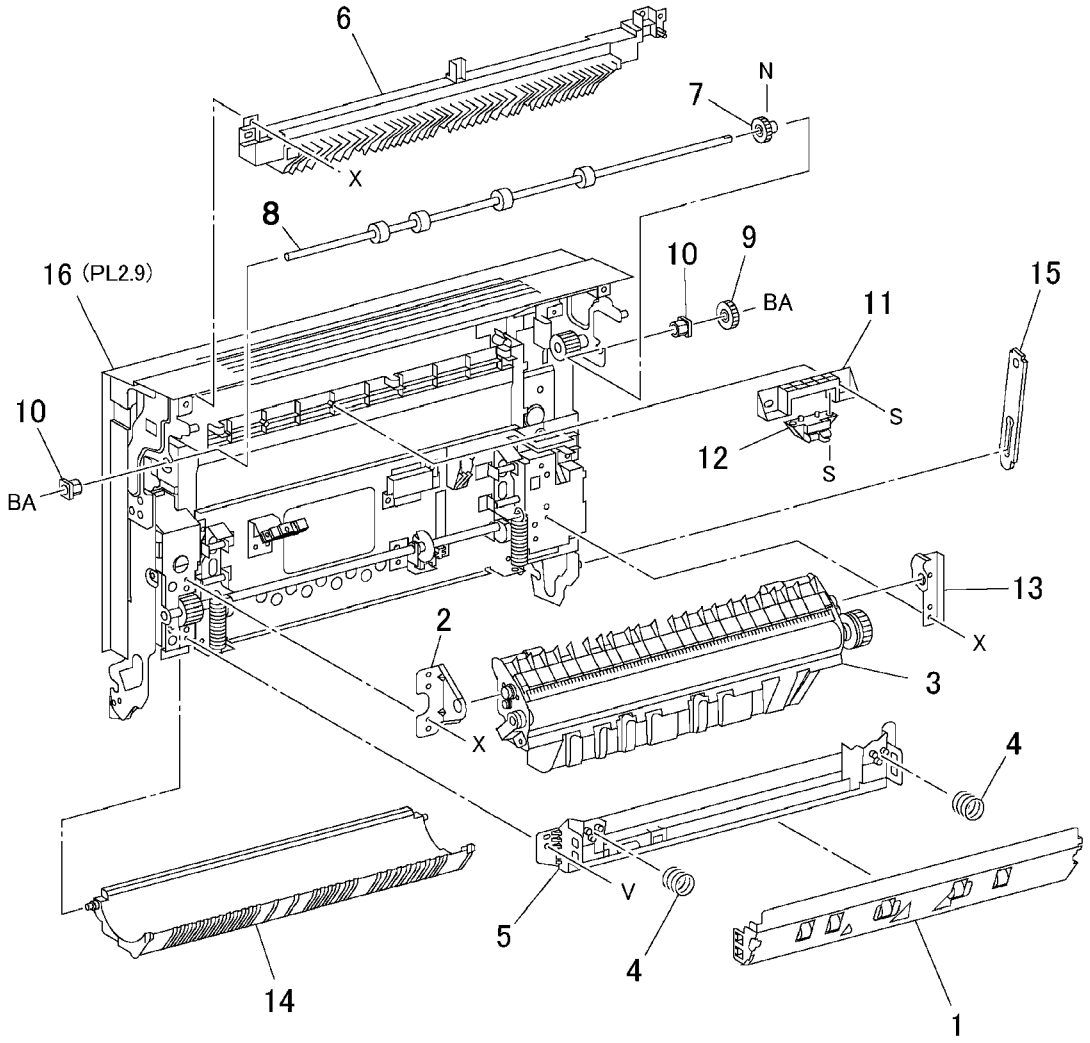
Item	Part	Description
1	007E64740	Damper Gear (11/23T)
2	–	Stud (Not Spared)
3	004E11831	Damper (White)
4	–	Left Upper Cover (Not Spared)
5	802K45490	Left Cover Assembly
6	–	Left Cover (P/O PL 2.7 Item 5)
7	–	Screw (Not Spared)
8	–	Label (P/O PL 2.7 Item 5)
9	–	Cover (P/O PL 2.7 Item 5)
10	–	Left Cover (Not Spared)



PL 2.8 Left Cover Assembly: 1 of 2

Item	Part	Description
1	054K22410	Registration Chute
2	–	Holder (Not Spared)
3	604K07070	2nd BTR (REP 8.1)
4	809E29620	Spring
5	015K48381	Support
6	054E16330	Exit Chute
7	007E62630	Gear (22T)
8	059K15611	Exit Roll
9	007E75201	Gear
10	–	Bearing (Not Spared)
11	–	Holder (Not Spared)
12	110K10650	Fuser Exit Switch
13	–	Holder (Not Spared)
14	054K16130	Duplex Chute (REP 8.2)
15	–	Stop (Not Spared)
16	–	Left Cover (Not Spared)

PL2.8



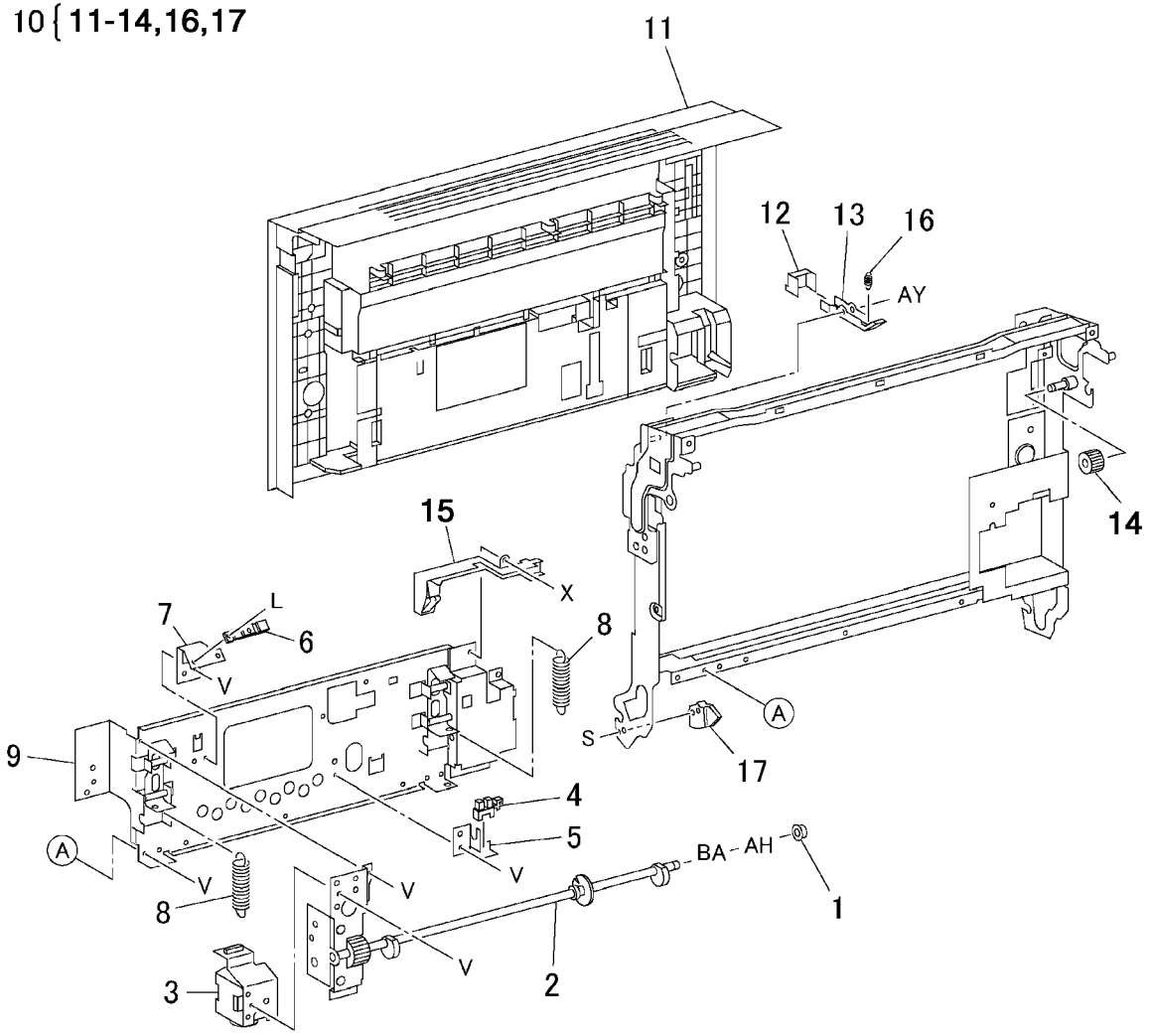
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PL 2.9 Left Cover Assembly: 2 of 2

Item	Part	Description
1	–	Bearing (Not Spared)
2	007K85522	Gear
3	127K29511	2nd BTR Retract Motor
4	130E82190	2nd BTR Retract Sensor
5	–	Bracket (Not Spared)
6	130E84300	POB Sensor
7	–	Bracket (Not Spared)
8	–	Spring (Not Spared)
9	–	Bracket (Not Spared)
10	802K27073	Left Cover Assembly (REP 8.1)
11	–	Left Cover (P/O PL 2.9 Item 10)
12	–	Lever (P/O PL 2.9 Item 10)
13	–	Bracket (P/O PL 2.9 Item 10)
14	–	Gear (21T) (P/O PL 2.9 Item 10)
15	–	Connector Assembly
16	–	Spring (P/O PL 2.9 Item 10)
17	007K86931	Damper Gear (45T)

PL2.9

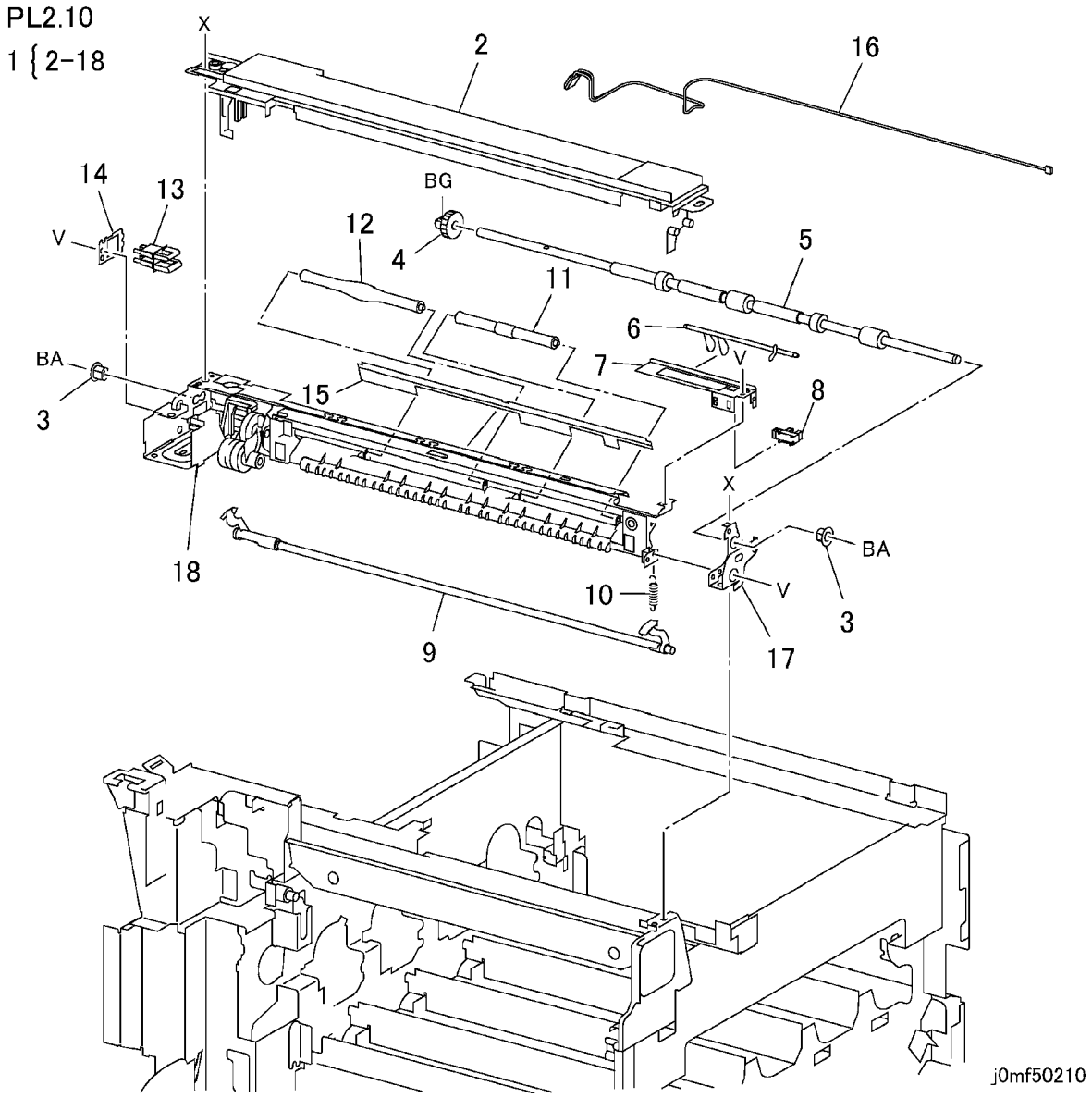
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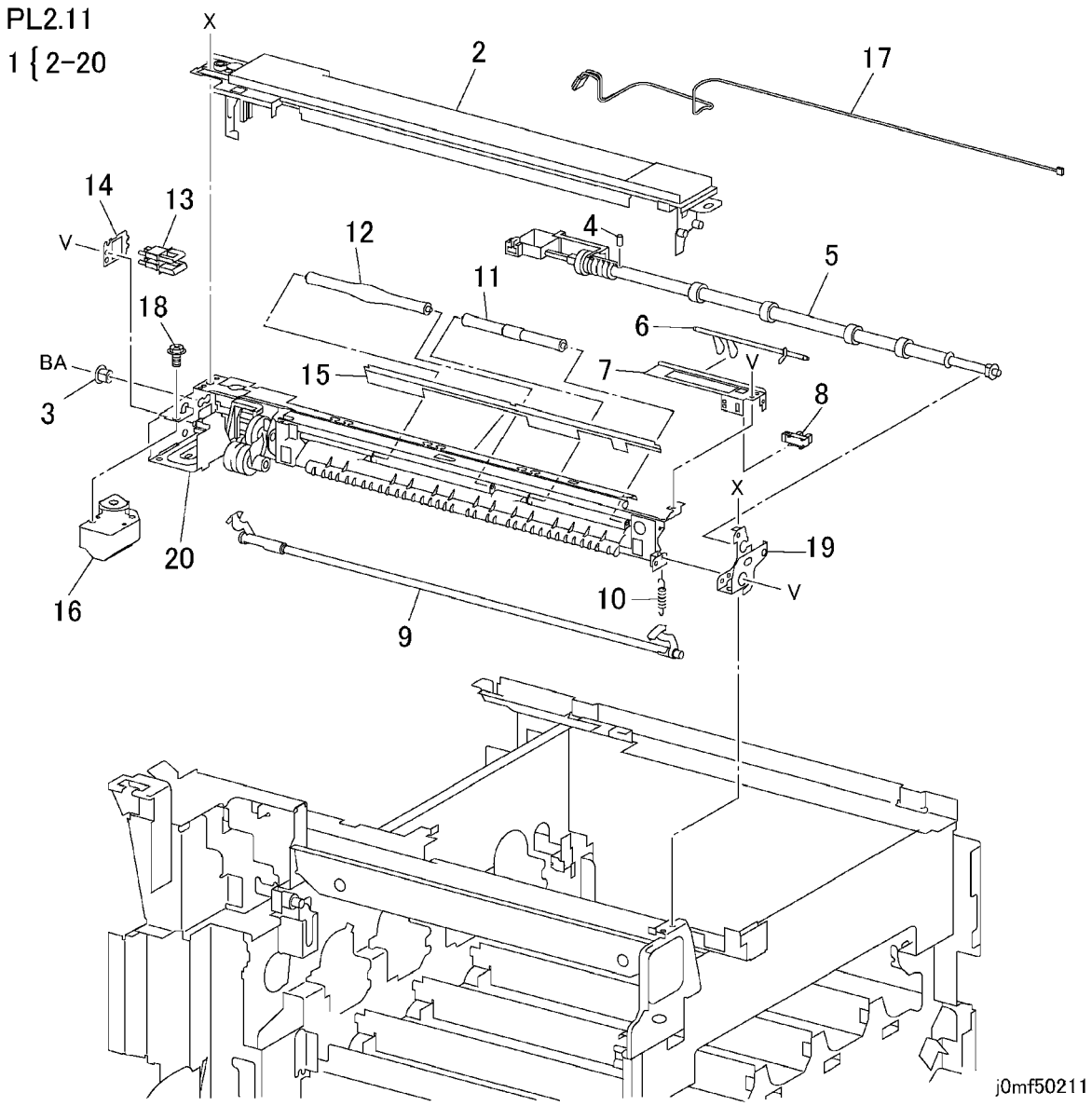
PL 2.10 Exit Transport Assembly

Item	Part	Description
1	–	Exit Transport (Not Spared)
2	–	Exit Transport Cover (Not Spared)
3	–	Bearing (Not Spared)
4	–	Gear (20T) (Not Spared)
5	–	Exit Roll (Not Spared)
6	–	Actuator (Not Spared)
7	–	Bracket (Not Spared)
8	130E82190	Full Paper Stack Sensor
9	–	Latch (Not Spared)
10	–	Spring (Not Spared)
11	–	Pinch Roll (Not Spared)
12	–	Pinch Roll (Not Spared)
13	–	LH Cover Interlock Switch (Not Spared)
14	–	Bracket (Not Spared)
15	–	Static Eliminator (Not Spared)
16	–	Wire Harness (Not Spared)
17	–	Front Bracket (Not Spared)
18	–	Frame (Not Spared)



PL 2.11 Exit Transport Assembly (OCT)

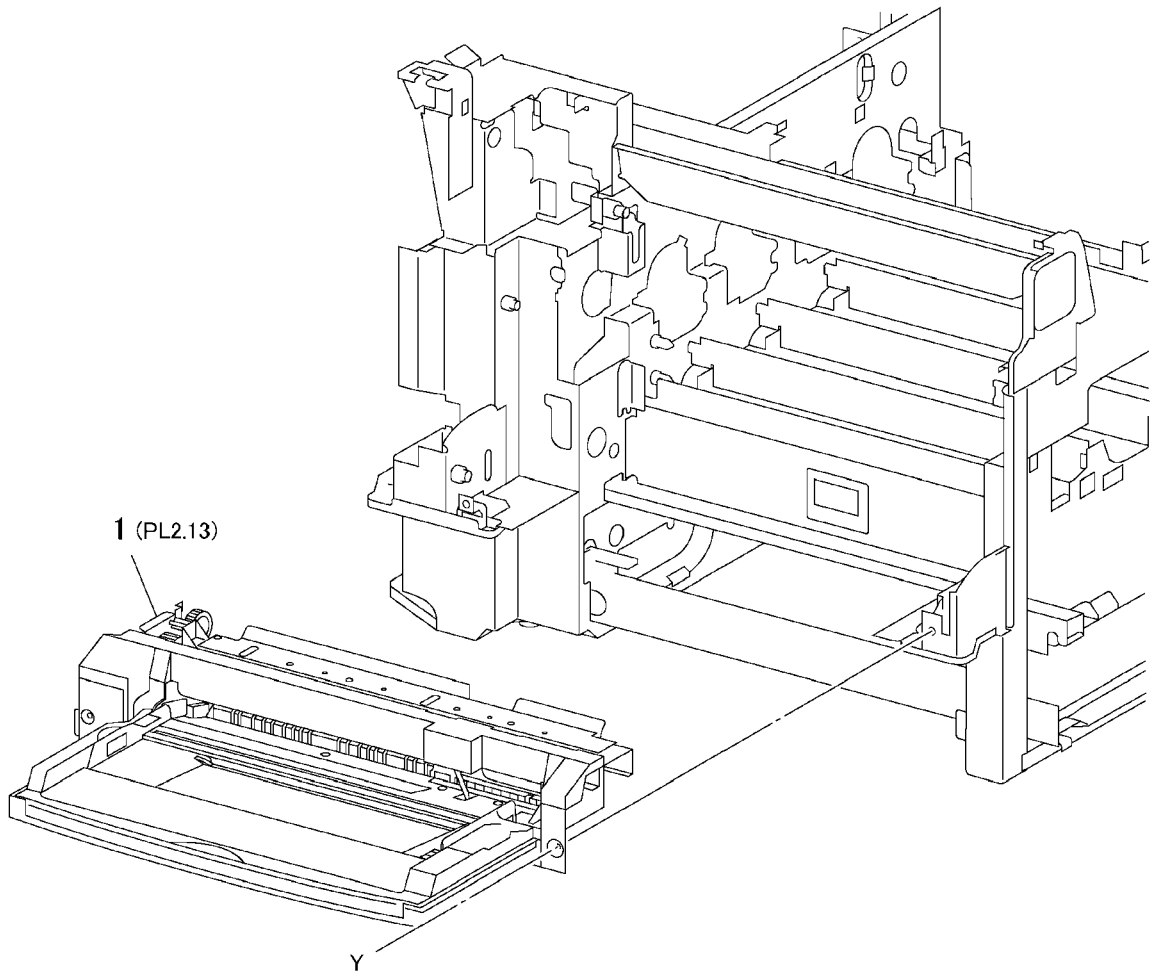
Item	Part	Description
1	059K24690	Exit Transport Assembly (REP 8.7)
2	–	Exit Transport Cover (Part of Item 1)
3	–	Bearing (Part of Item 1)
4	–	Pin (Part of Item 1)
5	–	Exit Roll (Part of Item 1)
6	120E18160	Actuator
7	–	Bracket (Part of Item 1)
8	130E82190	Full Paper Stack Sensor
9	–	Latch (Part of Item 1)
10	–	Spring (Part of Item 1)
11	–	Pinch Roll (Part of Item 1)
12	–	Pinch Roll (Part of Item 1)
13	–	LH Cover Interlock Switch (Part of Item 1)
14	–	Bracket (Part of Item 1)
15	–	Static Eliminator (Part of Item 1)
16	–	Offset Motor (Part of Item 1)
17	–	Wire Harness (Part of Item 1)
18	–	Screw (Part of Item 1)
19	–	Front Bracket (Part of Item 1)
20	–	Frame (Part of Item 1)



PL 2.12 Tray 5: 1 of 2

Item	Part	Description
1	059K24801	Tray 5 (REP 7.1)

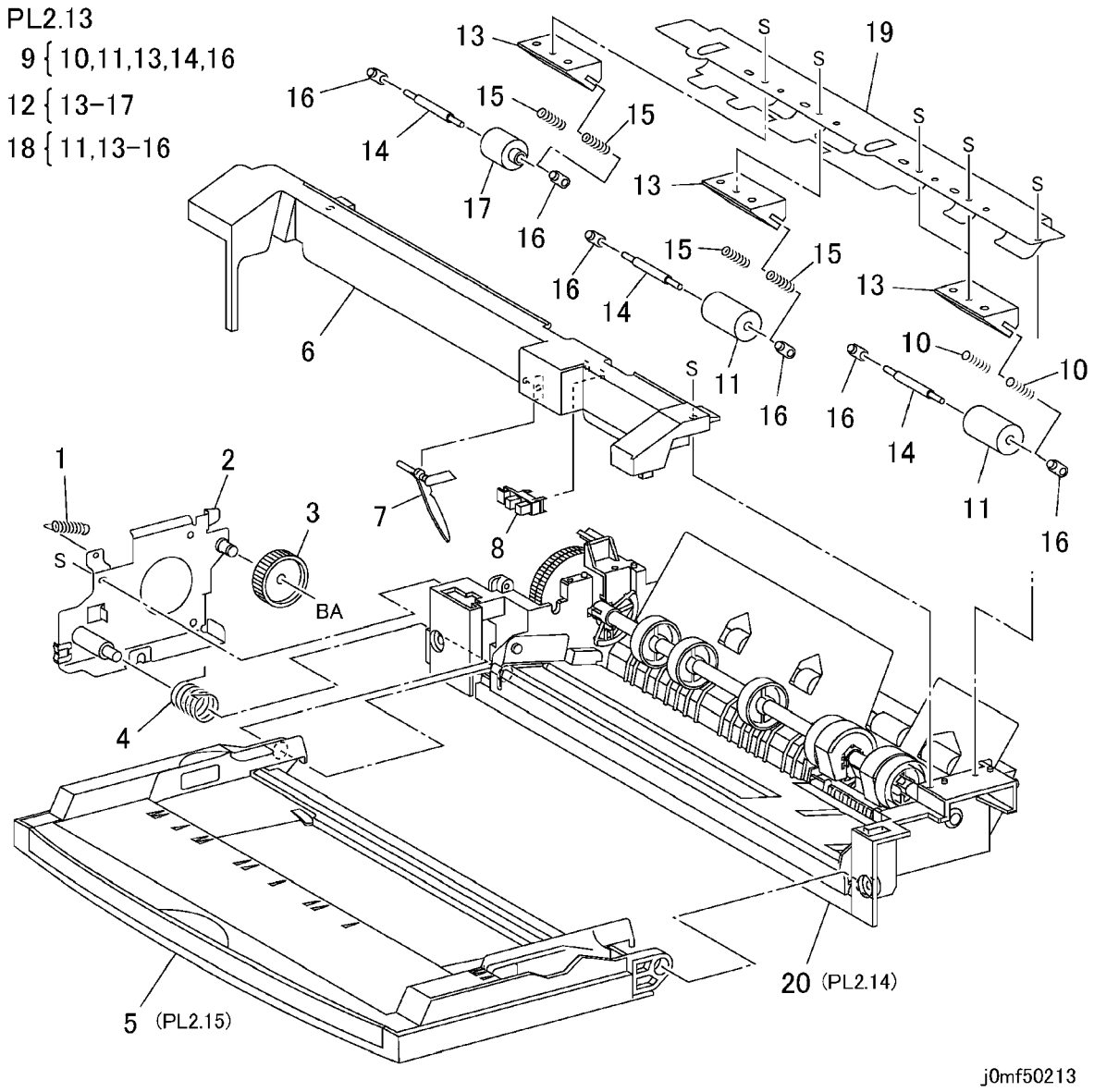
PL2.12



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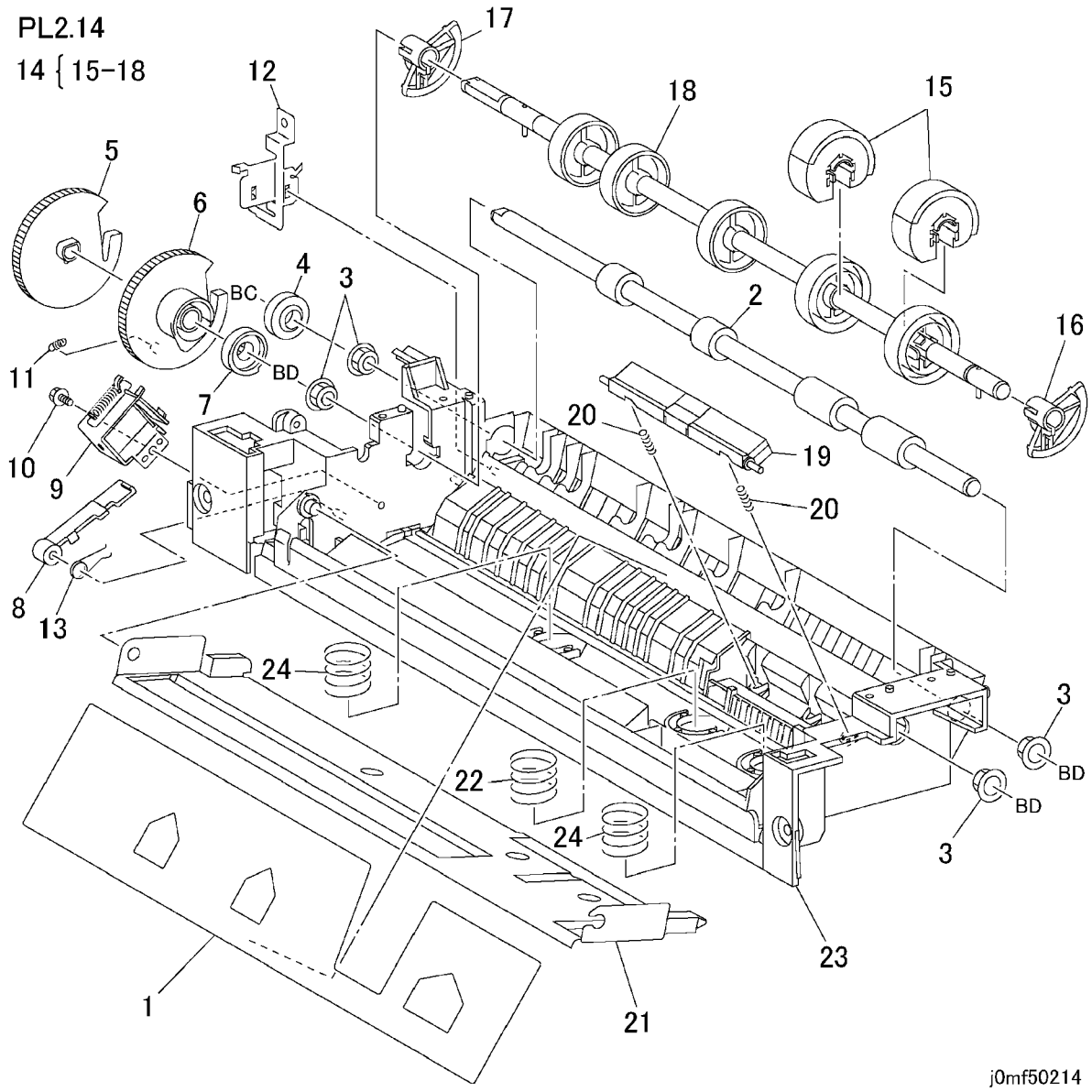
PL 2.13 Tray 5: 2 of 2

Item	Part	Description
1	–	Spring (Not Spared)
2	–	Bracket (Not Spared)
3	–	Gear (Not Spared)
4	–	Spring (Not Spared)
5	050K48181	Tray 5 Assembly
6	–	Upper Frame (Not Spared)
7	120E11971	Actuator
8	130E82190	Tray 5 No Paper Sensor
9	–	Pinch Roll Assembly (Not Spared)
10	–	Spring (Not Spared)
11	–	Pinch Roll 1/2 (Not Spared)
12	–	Pinch Roll 3 (Not Spared)
13	–	Guide (Not Spared)
14	–	Shaft (Not Spared)
15	–	Spring (Not Spared)
16	–	Spacer (Not Spared)
17	–	Pinch Roll 3 (Not Spared)
18	–	Pinch Roll 2 (Not Spared)
19	–	Chute (Not Spared)
20	–	Tray 5 Feed Assembly (Not Spared)



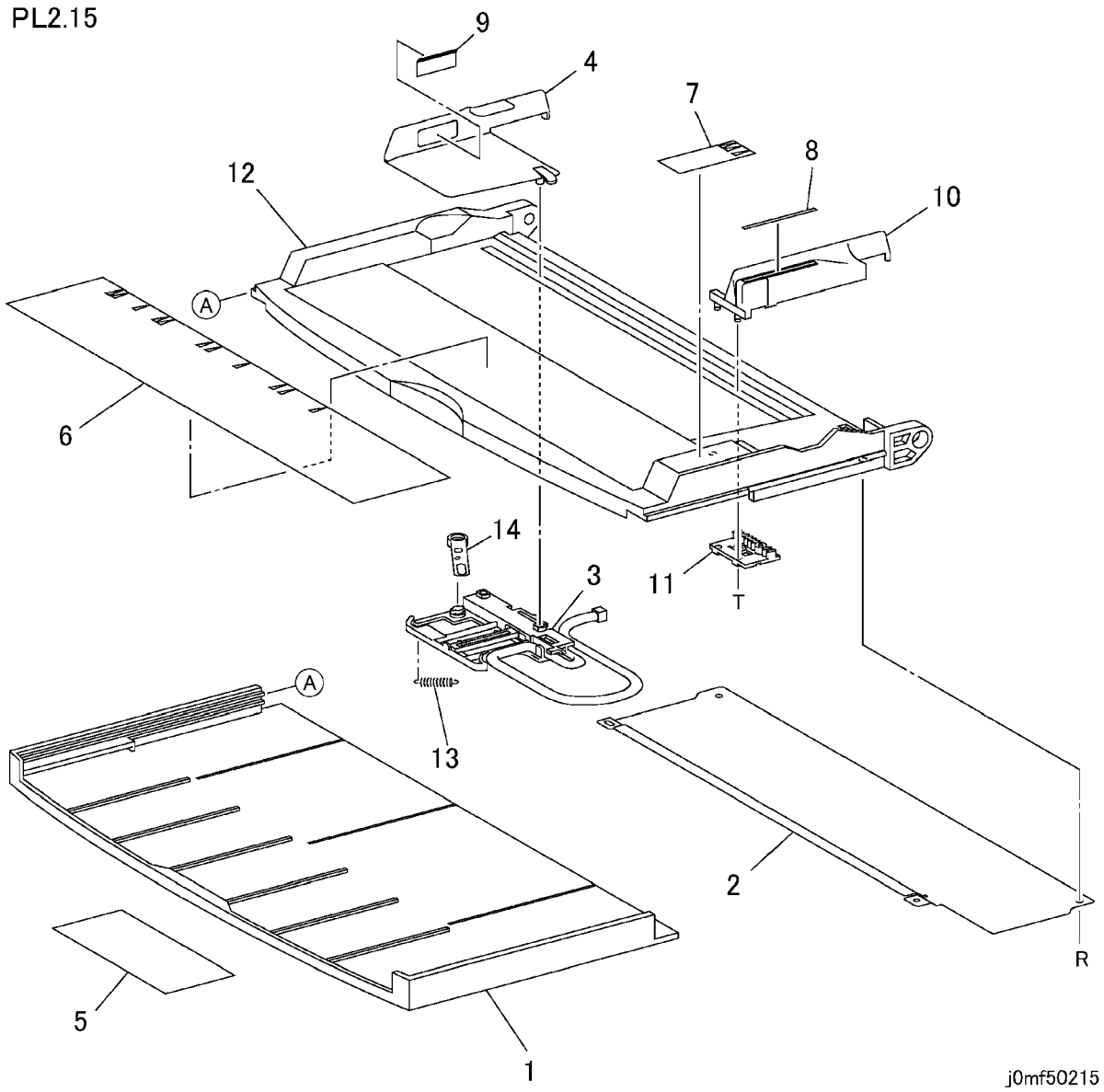
PL 2.14 Tray 5 Feed Assembly

Item	Part	Description
1	038E23560	Paper Guide
2	–	Takeaway Roll (Not Spared)
3	–	Bearing (Not Spared)
4	–	Gear (Not Spared)
5	–	Pick-up Gear (Not Spared)
6	–	Cam Gear (Not Spared)
7	–	Stop Lever (Not Spared)
8	–	Gear Lever (Not Spared)
9	121E87830	Tray 5 Feed Solenoid
10	–	Screw (Not Spared)
11	–	Spring (Not Spared)
12	–	Ground Plate (Not Spared)
13	–	Spring (Not Spared)
14	059K24020	Feed Roll Assembly
15	059K24010	Feed Roll (REP 7.2)
16	–	Cam (P/O PL 2.14 Item 14)
17	–	Cam (P/O PL 2.14 Item 14)
18	–	Shaft (P/O PL 2.14 Item 14)
19	019K97130	Retard Pad
20	–	Spring (Not Spared)
21	–	Bottom Plate (Not Spared)
22	–	Spring (Not Spared)
23	–	Lower Frame (Not Spared)
24	–	Spring (Not Spared)



PL 2.15 Tray Assembly

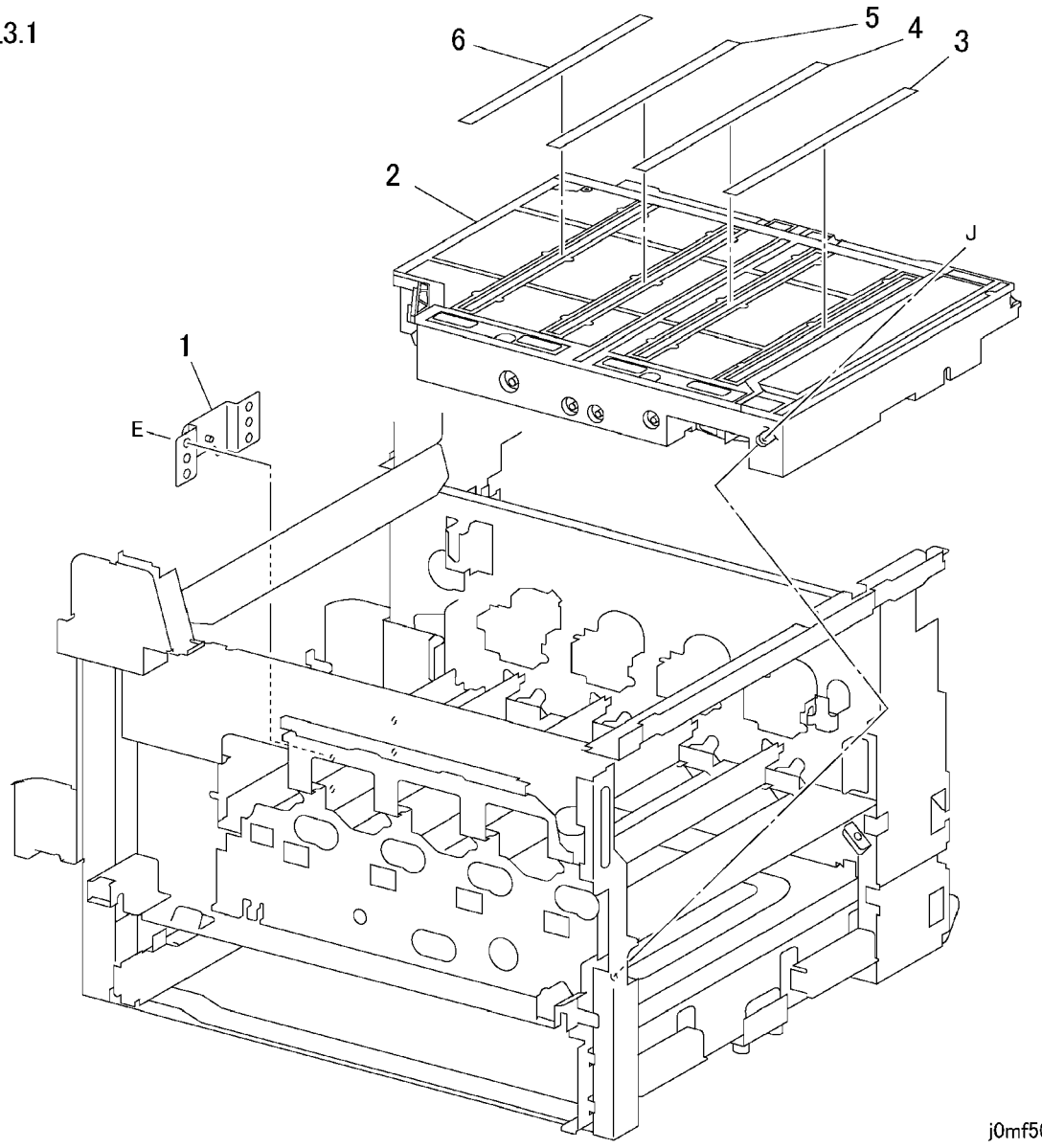
Item	Part	Description
1	–	Lower Tray (Not Spared)
2	–	Cover (Not Spared)
3	–	Paper Size Sensor (Not Spared)
4	–	Side Guide (Not Spared)
5	–	Attention Label (Not Spared)
6	–	Instruction Label (Not Spared)
7	–	Label (Not Spared)
8	–	Label (Not Spared)
9	–	Max Label (Not Spared)
10	–	Registration Guide (Not Spared)
11	–	Holder (Not Spared)
12	–	Tray (Not Spared)
13	–	Spring (Not Spared)
14	–	Link (Not Spared)



PL 3.1 ROS Assembly

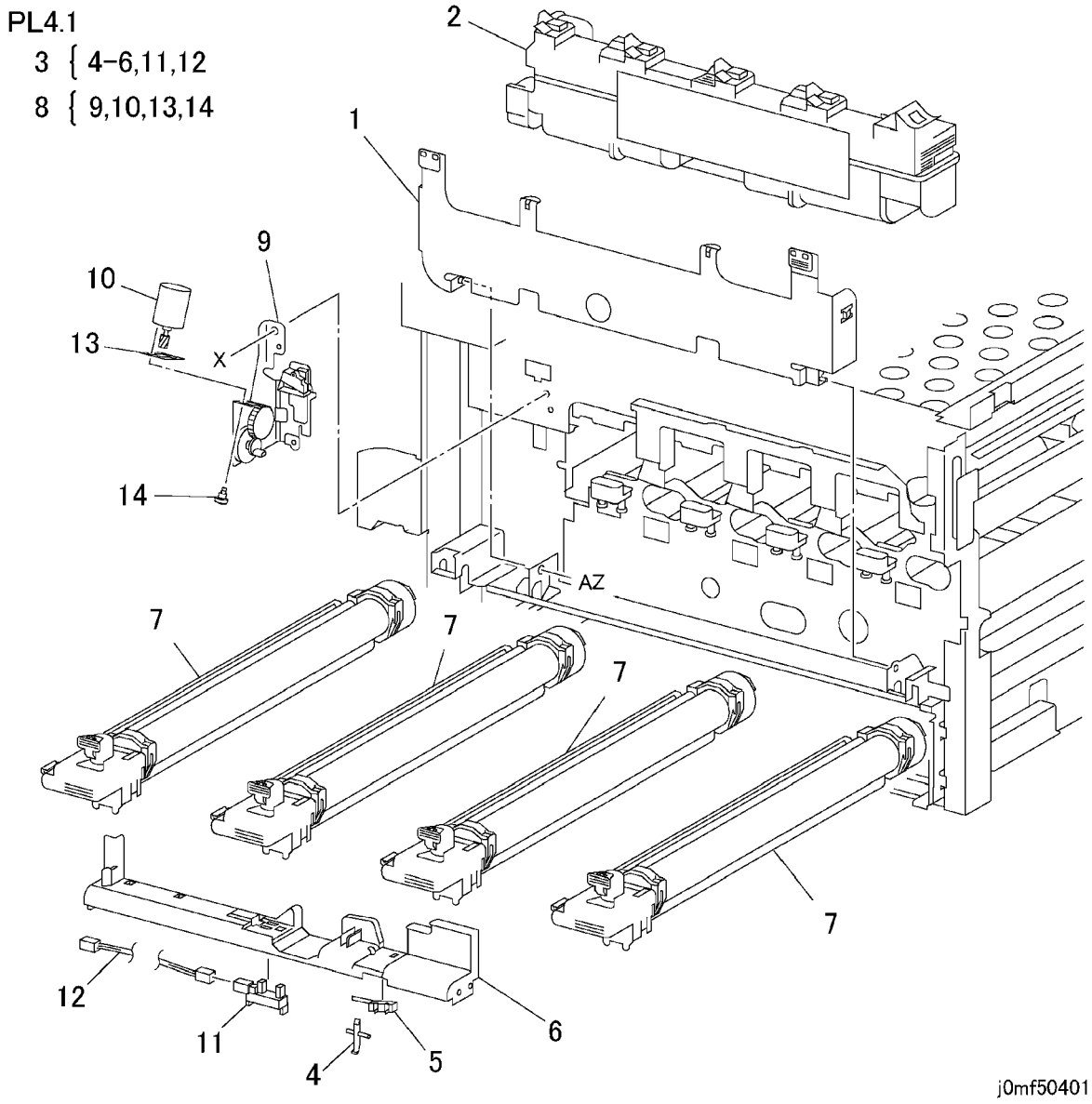
Item	Part	Description
1	–	Bracket (Not Spared)
2	062K10881	ROS (REP 6.1,ADJ 9.6)
3	–	Seal Glass (Y) (Not Spared)
4	–	Seal Glass (M) (Not Spared)
5	–	Seal Glass (C) (Not Spared)
6	–	Seal Glass (K) (Not Spared)

PL3.1



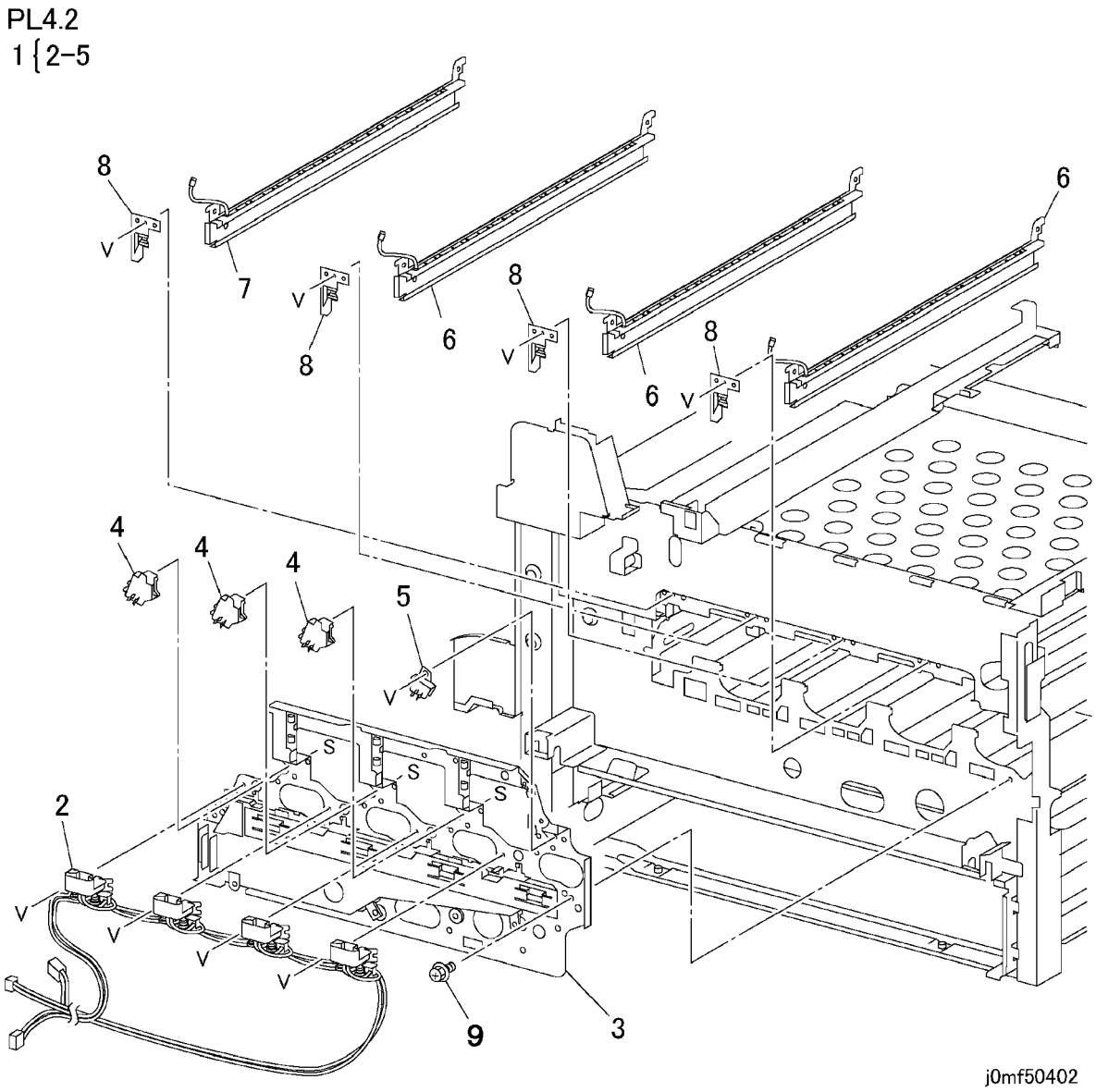
PL 4.1 Xerographic Module: 1 of 2

Item	Part	Description
1	802K47090	Waste Toner Cartridge Cover (REP 9.3)
2	–	Waste Toner Cartridge (Not Spared) (REP 9.4)
3	003K86121	Sensor Holder Assembly
4	–	Lever (P/O PL 4.1 Item 3)
5	–	Waste Toner Cartridge Interlock Switch (P/O PL 4.1 Item 3)
6	–	Holder (P/O PL 4.1 Item 3)
7	–	Drum Cartridge (Not Spared) (REP 9.1)
8	127K29242	Agitator Motor Assembly (REP 9.13)
9	–	Bracket (P/O PL 4.1 Item 8)
10	–	Agitator Motor (P/O PL 4.1 Item 8)
11	130E91010	Full Toner Sensor (REP 9.5)
12	–	Wire Harness (P/O PL 4.1 Item 3)
13	–	Damper (P/O PL 4.1 Item 8)
14	–	Screw (P/O PL 4.1 Item 8)



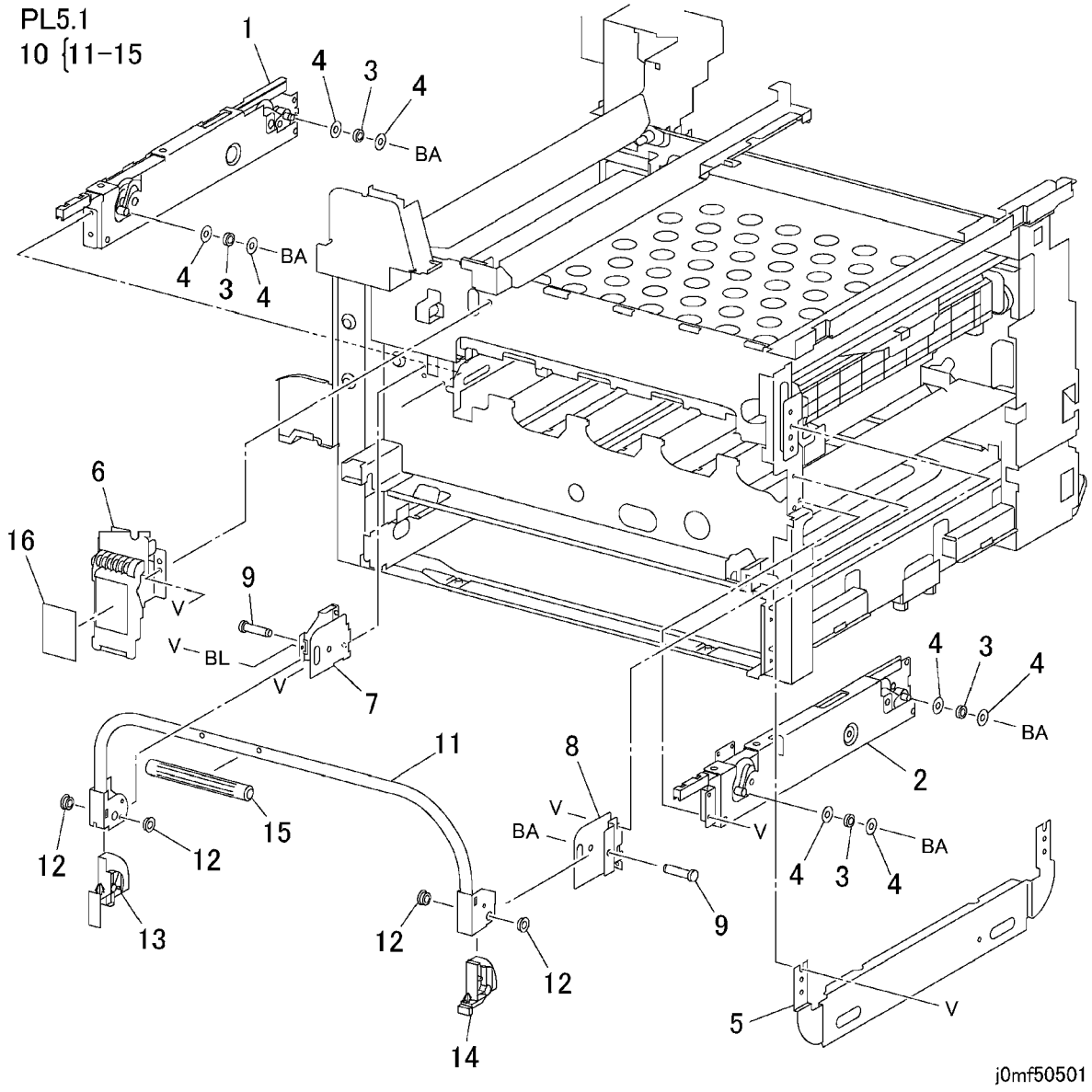
PL 4.2 Xerographic Module: 2 of 2

Item	Part	Description
1	015K52320	Plate Assembly (REP 9.8)
2	–	Wire Harness (P/O PL 4.2 Item 1)
3	–	Xero PLate (P/O PL 4.2 Item 1)
4	–	Block (M, C, K) (P/O PL 4.2 Item 1)
5	–	Block (Y) (P/O PL 4.2 Item 1)
6	122K93330	Erase Lamp w/Rail (Y, M, C)
7	122K93340	Erase Lamp w/Rail (K)
8	–	Bracket (Not Spared)
9	–	Screw (Not Spared)



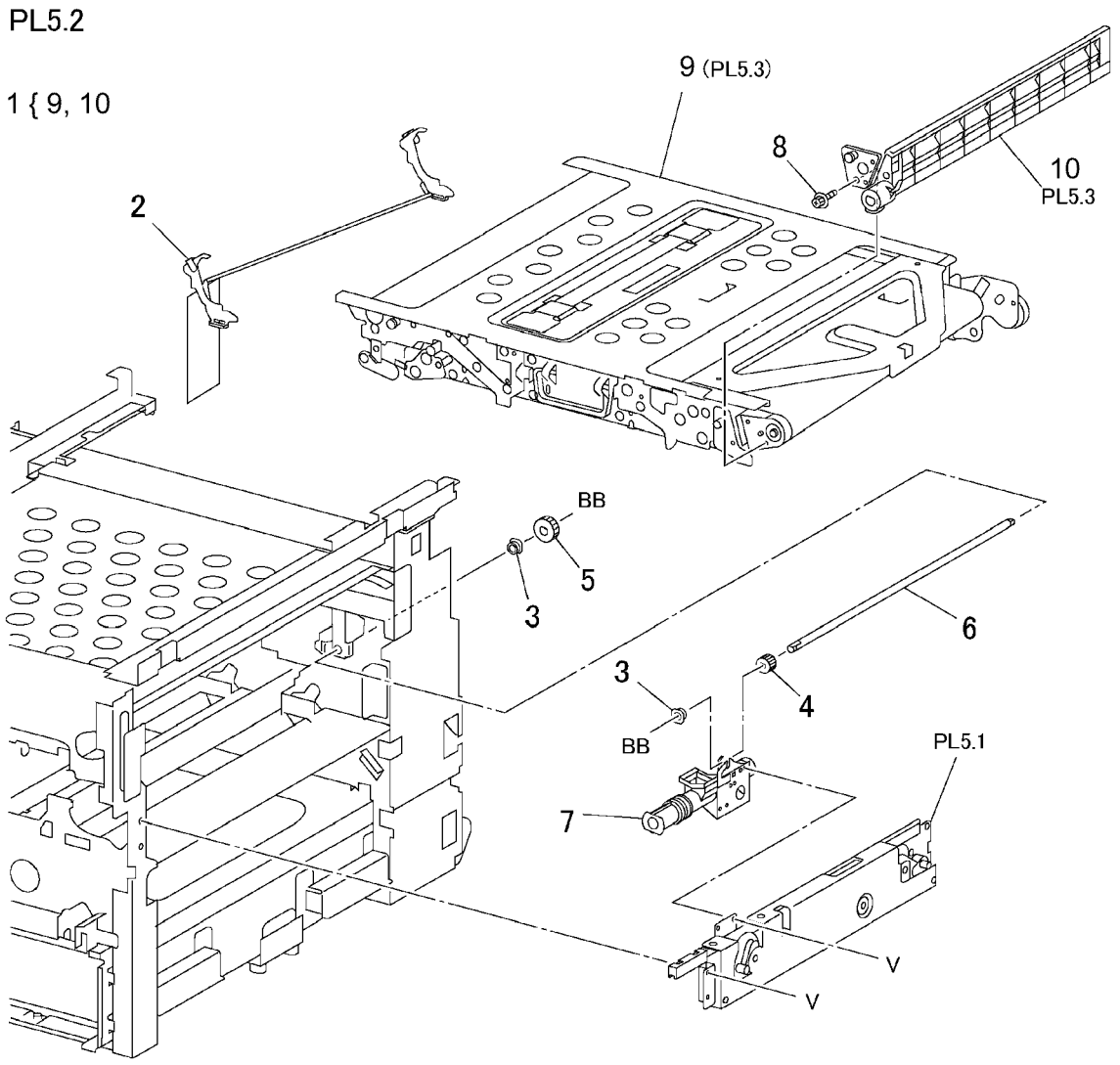
PL 5.1 Lift Unit

Item	Part	Description
1	001K70542	Left Lift Assembly (REP 9.21)
2	001K70551	Right Lift Assembly (REP 9.20)
3	–	Bearing (Not Spared)
4	–	Washer (Not Spared)
5	–	Plate (Not Spared)
6	003K12680	Latch Assembly
7	003E52290	Left Hinge (REP 9.19)
8	003E52300	Right Hinge (REP 9.19)
9	006E71740	Shaft
10	011K94970	Lever Assembly
11	–	Lever (P/O PL 5.1 Item 10) (REP 9.18)
12	–	Bearing (P/O PL 5.1 Item 10)
13	–	Left Cap (P/O PL 5.1 Item 10)
14	–	Right Cap (P/O PL 5.1 Item 10)
15	–	Grip (P/O PL 5.1 Item 10)
16	–	Label (Not Spared)



PL 5.2 IBT Unit

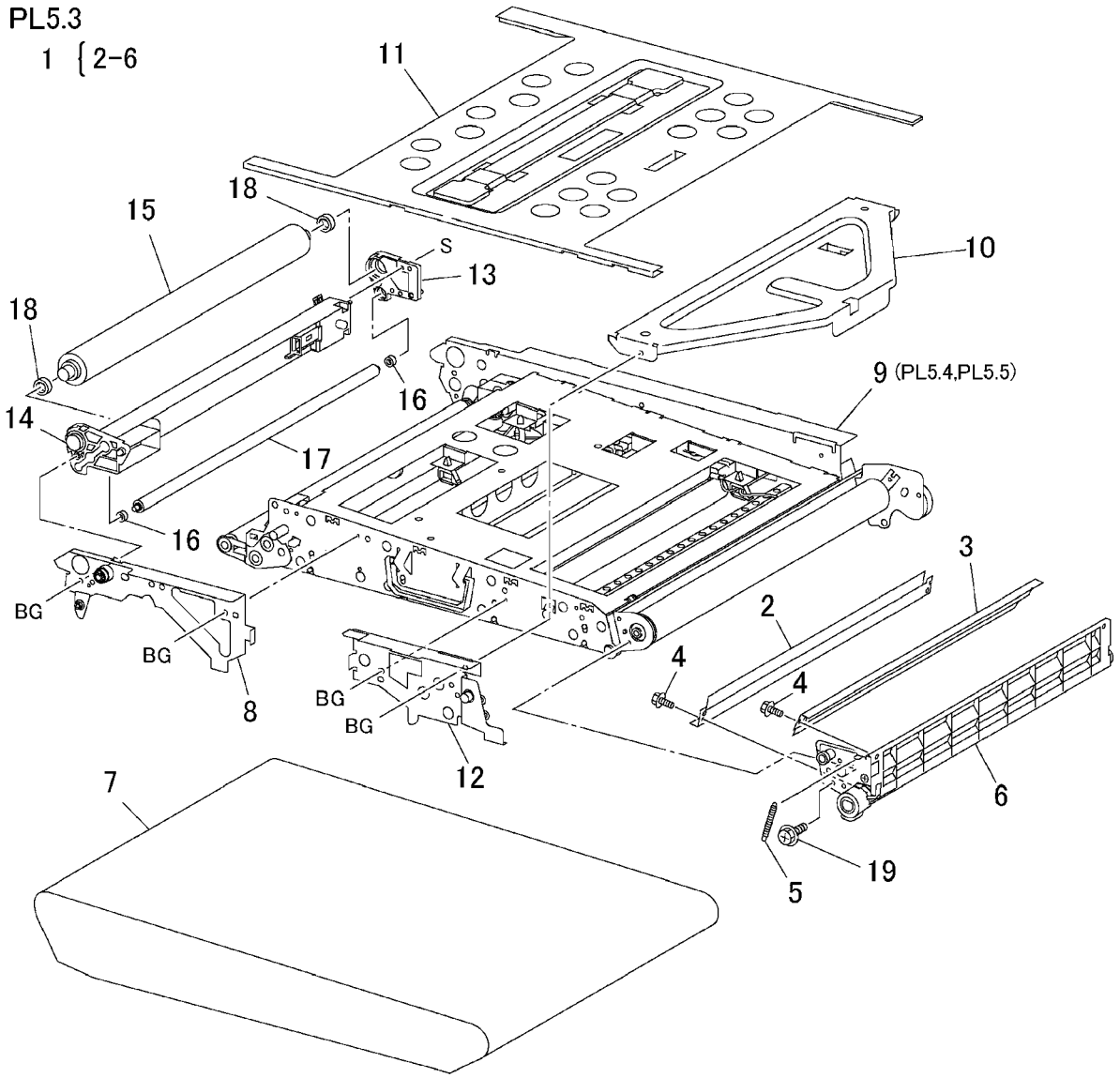
Item	Part	Description
1	604K07050	IBT Belt Assembly (REP 9.15,ADJ 9.6)
2	003K12650	Removal Support
3	–	Bearing (Not Spared)
4	007E61910	Gear (14T)
5	007E61890	Gear (18T)
6	–	Shaft (Not Spared)
7	802K12950	Auger Assembly (REP 9.17)
8	–	Screw (Not Spared)
9	–	IBT Belt Assembly (P/O PL 5.2 Item 1)
10	604K07060	IBT Belt Cleaner Assembly



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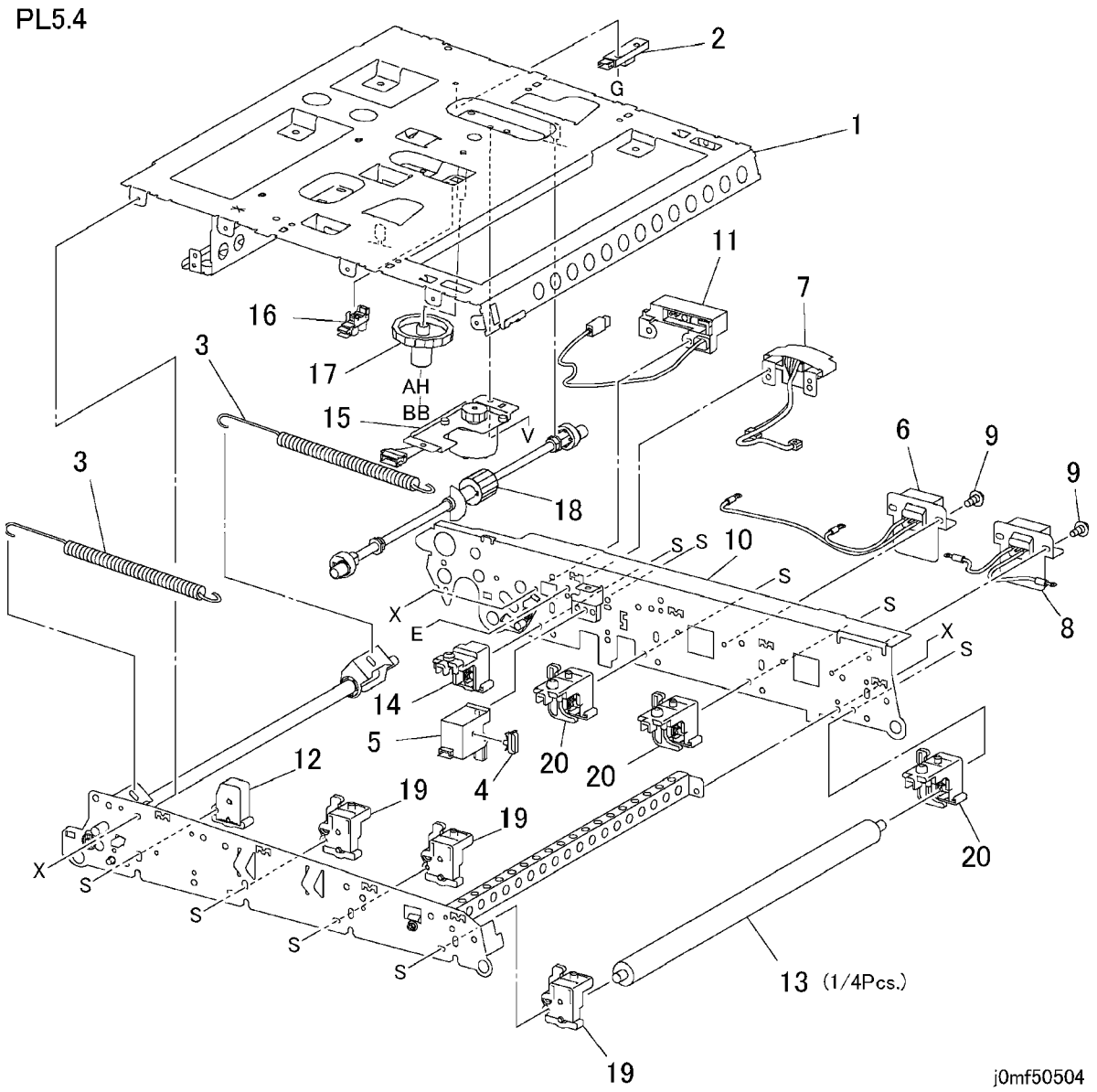
PL 5.3 IBT Belt Assembly

Item	Part	Description
1	–	IBT Belt Cleaner Assembly (P/O PL 5.2 Item 1) (REP 9.16)
2	–	Blade (P/O PL 5.3 Item 1)
3	–	Seal (P/O PL 5.3 Item 1)
4	–	Screw (P/O PL 5.3 Item 1)
5	–	Spring (P/O PL 5.3 Item 1)
6	–	Housing (P/O PL 5.3 Item 1)
7	064K91451	Transfer Belt (ADJ 9.6)
8	–	Support (P/O PL 5.2 Item 9)
9	–	IBT Frame (P/O PL 5.2 Item 9)
10	–	Right Handle (P/O PL 5.2 Item 9)
11	–	Left Handle (P/O PL 5.2 Item 9)
12	–	Bracket (P/O PL 5.2 Item 9)
13	–	Housing (P/O PL 5.2 Item 9)
14	–	Housing (P/O PL 5.2 Item 9)
15	059K23150	Backup Roll
16	–	Bearing (P/O PL 5.2 Item 9)
17	–	Pre Roll (P/O PL 5.2 Item 9)
18	013E18980	Bearing
19	–	Screw (P/O PL 5.2 Item 1)



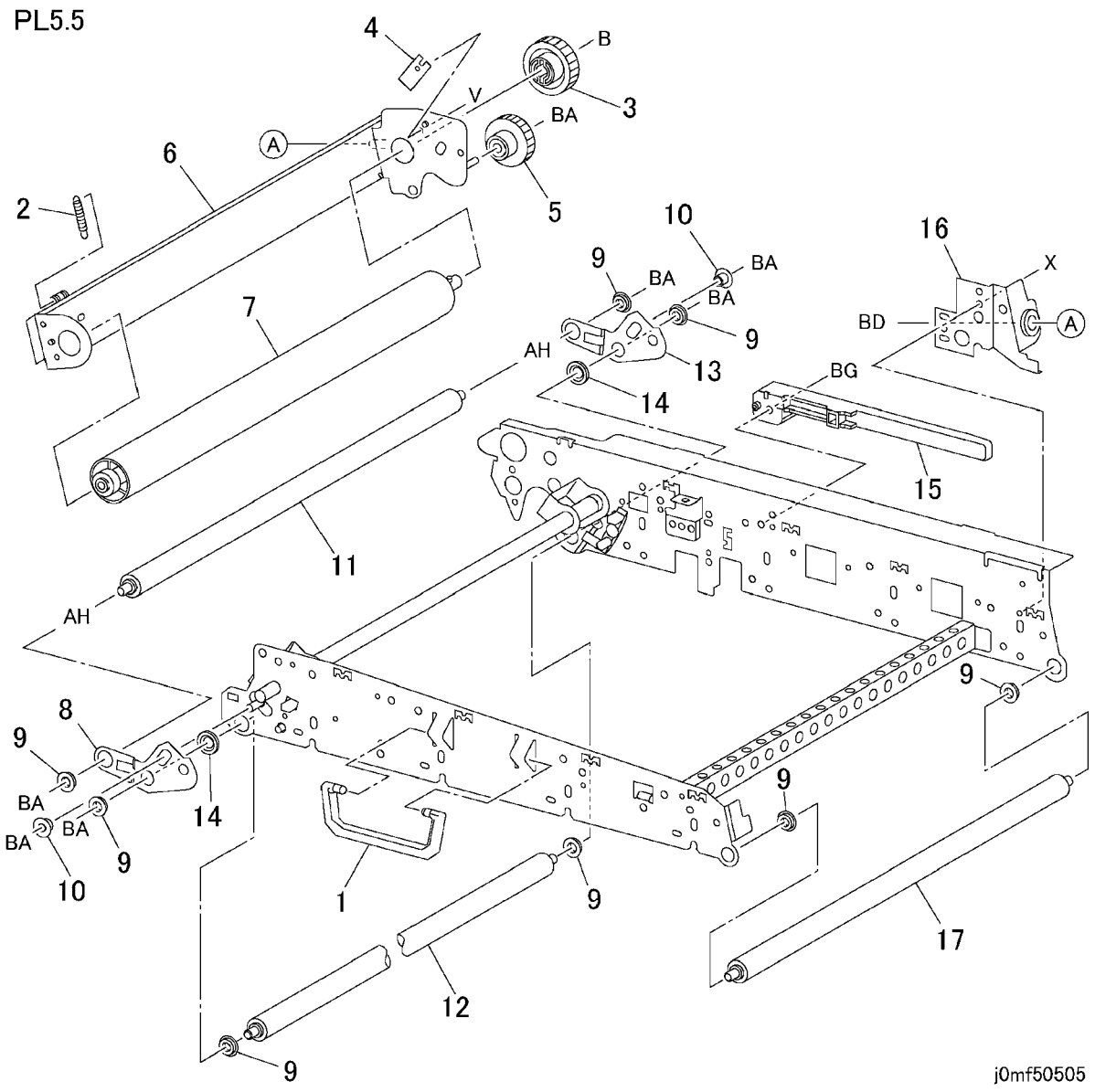
PL 5.4 IBT Frame Assembly: 1 of 2

Item	Part	Description
1	–	Frame (Not Spared)
2	130E84270	IBT Home Sensor (ADJ 9.6)
3	–	Spring (Not Spared)
4	–	Clamp (Not Spared)
5	130K60830	IBT Edge Sensor (ADJ 9.6)
6	162K56020	Connector (C, K)
7	–	Connector (Not Spared)
8	162K61090	Connector (Y, M)
9	–	Screw (Not Spared)
10	–	Rear Frame (Not Spared)
11	–	Connector (Not Spared)
12	019K98200	Front Holder
13	059K21260	1st BTR Roll
14	019K98190	Rear Holder
15	127K33950	Retract Motor
16	130E82190	Retract Sensor
17	–	Worm Gear (Not Spared)
18	–	Retract Shaft (Not Spared)
19	019K97550	Front Holder
20	019K97540	Rear Holder



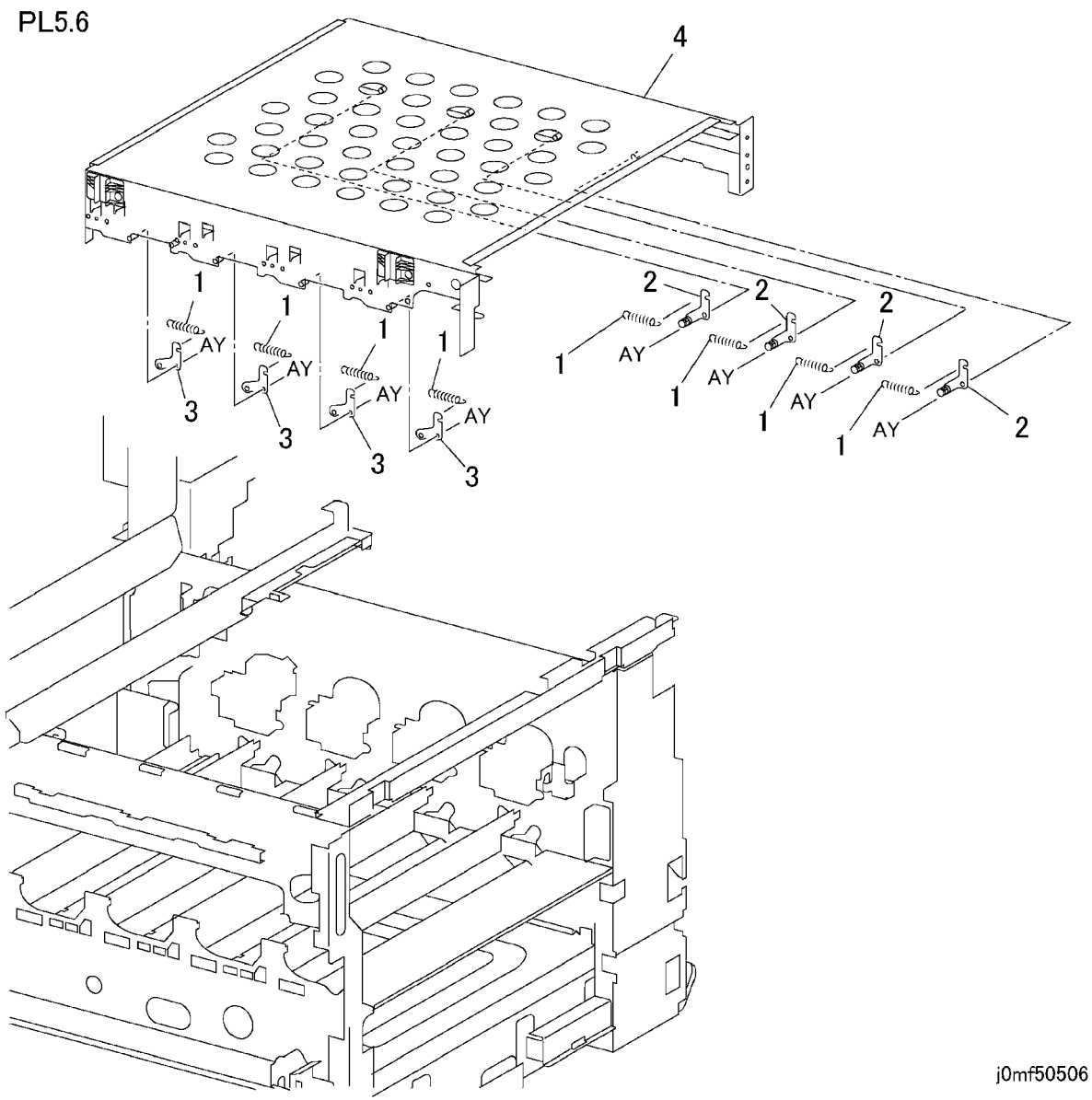
PL 5.5 IBT Frame Assembly: 2 of 2

Item	Part	Description
1	–	Handle (Not Spared)
2	–	Spring (Not Spared)
3	–	Gear (Not Spared)
4	–	Plate (Not Spared)
5	–	Gear (Not Spared)
6	–	Bracket (Not Spared)
7	–	Top Roll (Not Spared)
8	–	Front Bracket (Not Spared)
9	–	Bearing (Not Spared)
10	–	Bearing (Not Spared)
11	–	Roll (Not Spared)
12	–	Roll (Not Spared)
13	–	Rear Bracket (Not Spared)
14	–	Collar (Not Spared)
15	–	Latch (Not Spared)
16	–	Bracket (Not Spared)
17	–	Roll (Not Spared)



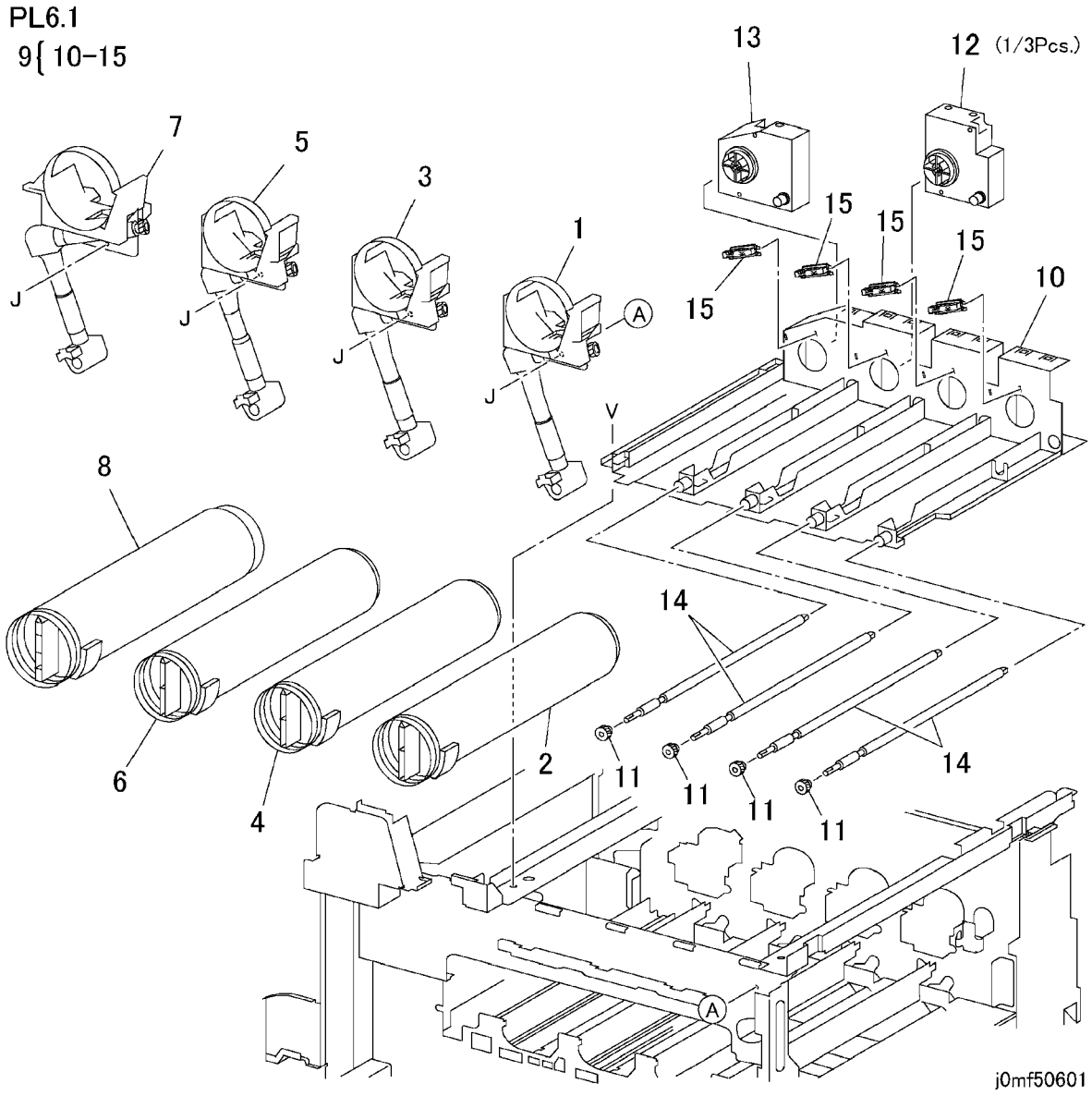
PL 5.6 IBT Elevator

Item	Part	Description
1	809E26330	Spring
2	015K49480	Rear Plunger
3	015K49310	Front Plunger
4	–	Frame (Not Spared)



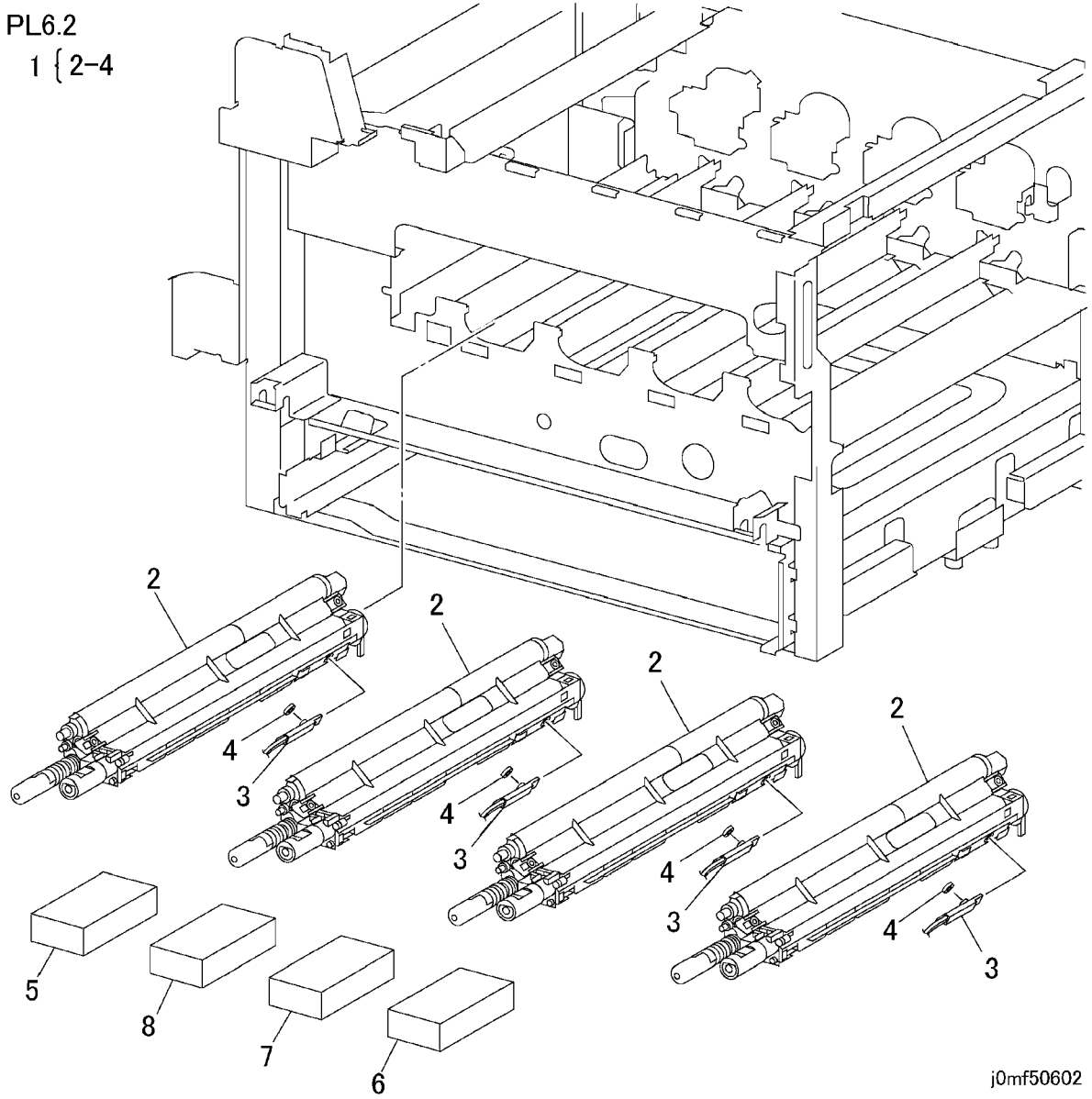
PL 6.1 Developer Unit: 1 of 2

Item	Part	Description
1	802K45910	Toner Dispenser (Y) (REP 9.7)
2	–	Toner Cartridge (Not Spared)
3	802K45920	Toner Dispenser (M) (REP 9.7)
4	–	Toner Cartridge (Not Spared)
5	802K45930	Toner Dispenser (C) (REP 9.7)
6	–	Toner Cartridge (Not Spared)
7	802K45940	Toner Dispenser (K) (REP 9.7)
8	–	Toner Cartridge (Not Spared)
9	802K33090	Toner Dispenser Base Assembly (REP 9.11)
10	–	Toner Dispenser Base (P/O PL 6.1 Item 9)
11	–	Gear (P/O PL 6.1 Item 9)
12	127K33930	Toner Dispenser Motor (Y, M, C)
13	127K33940	Toner Dispenser Motor (K)
14	–	Shaft (P/O PL 6.1 Item 9)
15	116K90810	New Cartridge Detect Switch



PL 6.2 Developer Unit: 2 of 2

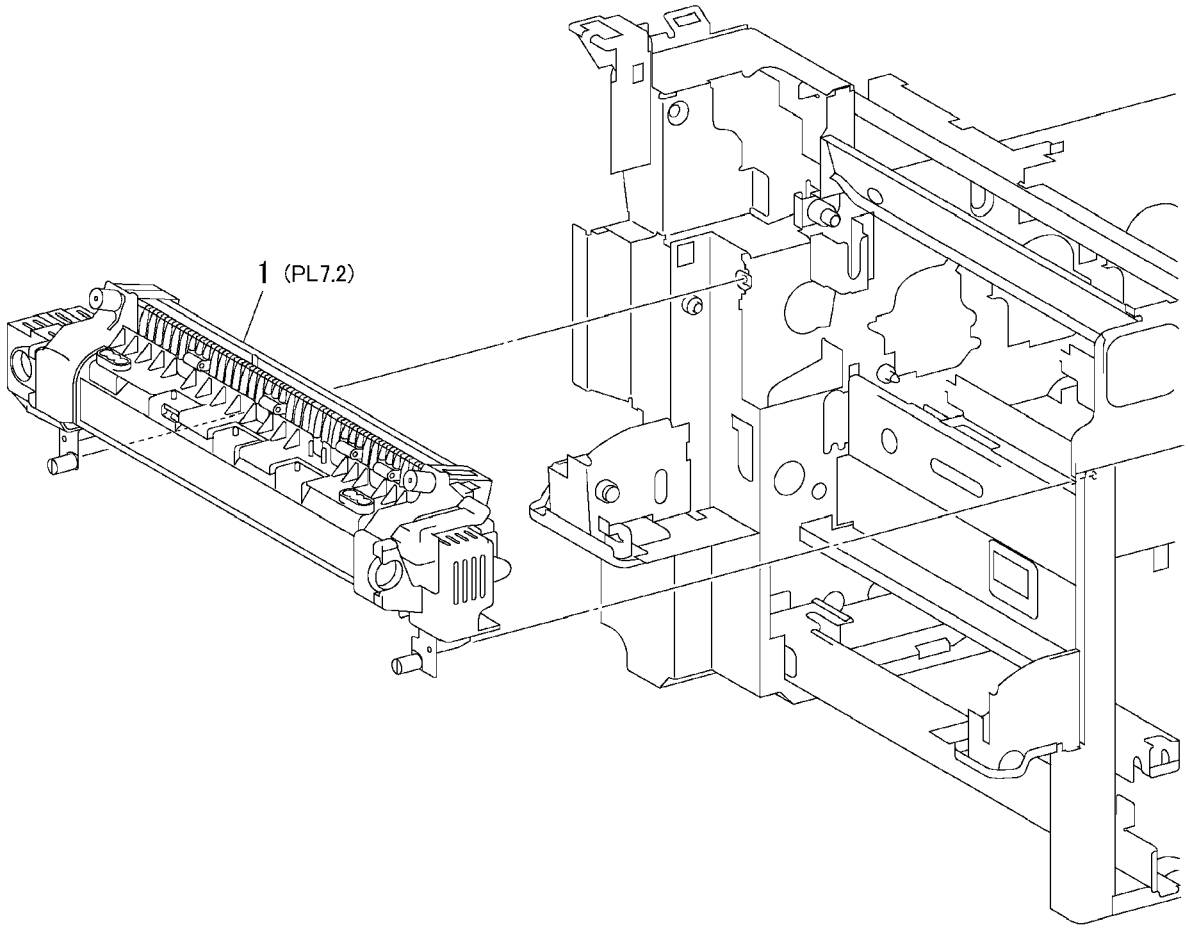
Item	Part	Description
1	802K28891	Developer Housing (Y, M, K, C) (REP 9.9,ADJ 9.1)
2	–	Developer Housing (P/O PL 6.2 Item 1)
3	130K63000	ATC Sensor (Y, M, K, C) (ADJ 9.1)
4	035E65010	Seal
5	604K07520	Developer (K) (REP 9.10,ADJ 9.1)
6	604K07490	Developer (Y) (REP 9.10,ADJ 9.1)
7	604K07500	Developer (M) (REP 9.10,ADJ 9.1)
8	604K07510	Developer (C) (REP 9.10,ADJ 9.1)



PL 7.1 Fuser Assembly: 1 of 2

Item	Part	Description
1	126K14890	Fuser (220V) (REP 10.1)
–	126K13940	Fuser (120V) (REP 10.1)

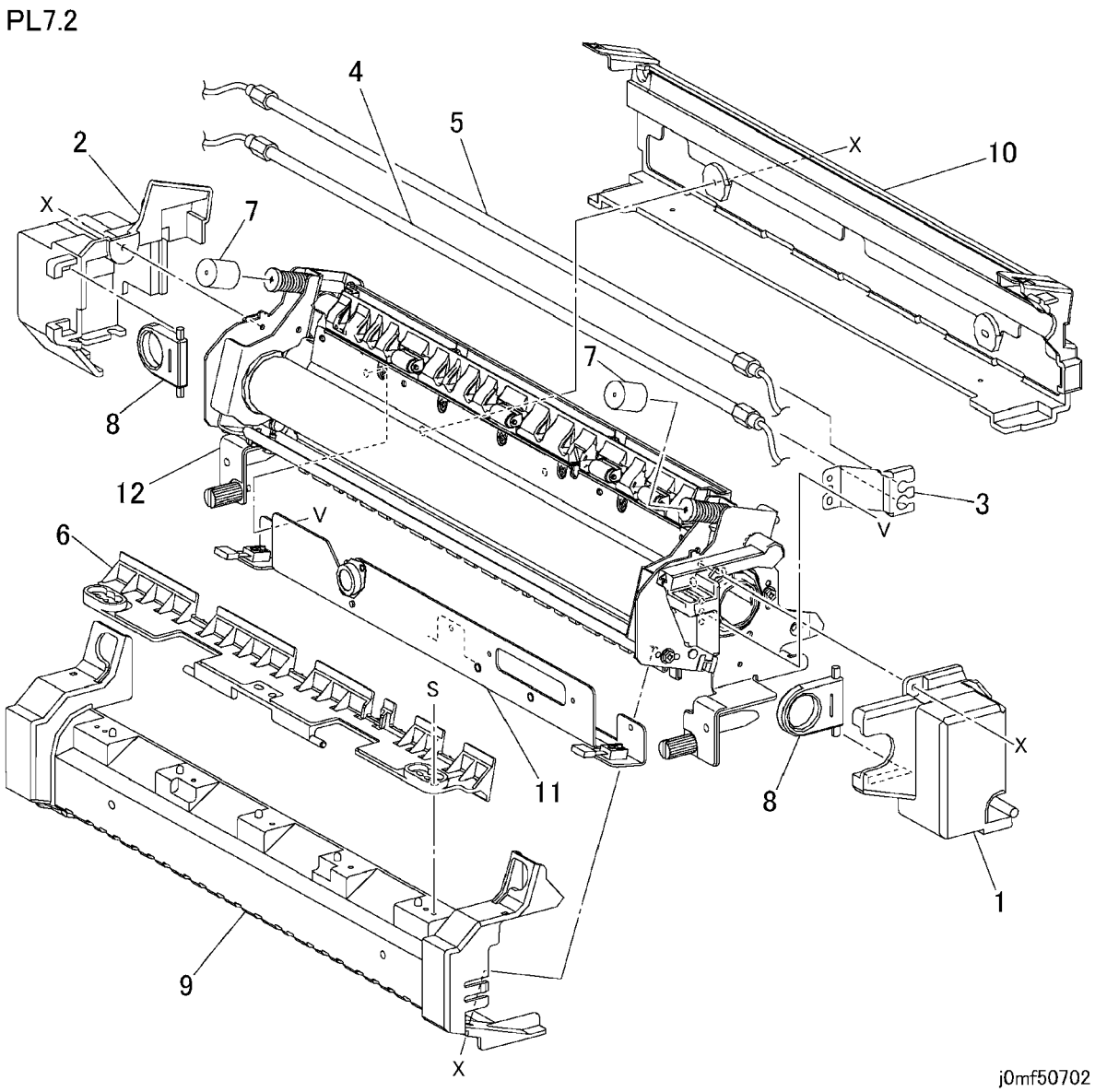
PL7.1



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PL 7.2 Fuser Assembly: 2 of 2

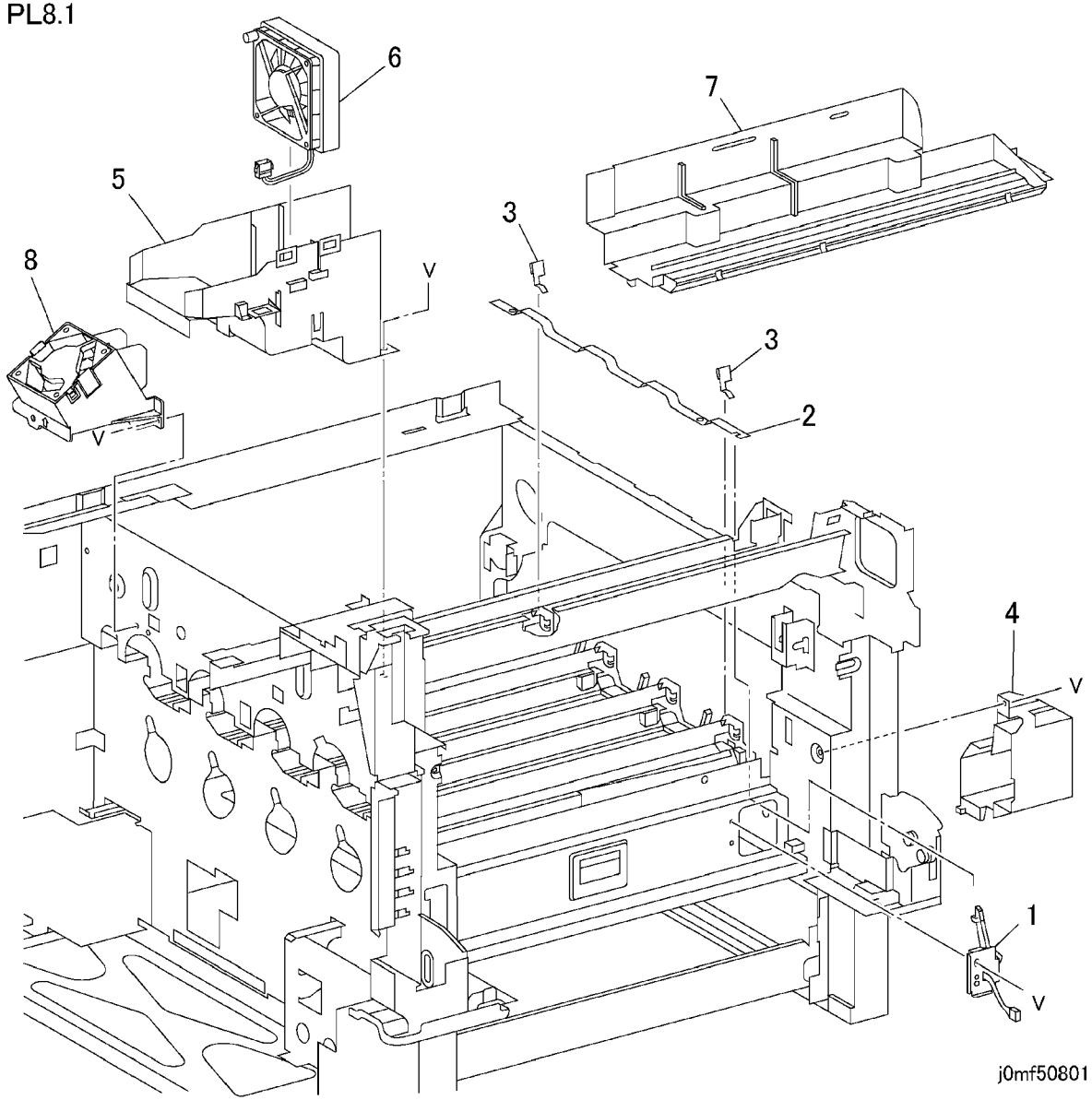
Item	Part	Description
1	–	Front Cover (Not Spared)
2	–	Rear Cover (Not Spared)
3	–	Front Lamp Bracket (Not Spared)
4	126K13950	Main Heater Rod (110V)
–	126K13980	Main Heater Rod (220V)
5	126K13990	Sup Heater Rod (220V)
–	126K13960	Sup Heater Rod (110V)
6	–	Exit Chute (Not Spared)
7	–	Cap (Not Spared)
8	–	Handle (Not Spared)
9	–	Upper Cover (Not Spared)
10	–	Lower Cover (Not Spared)
11	130K61020	Sensor Assembly
12	–	Fuser (Not Spared)



PL 8.1 Air System

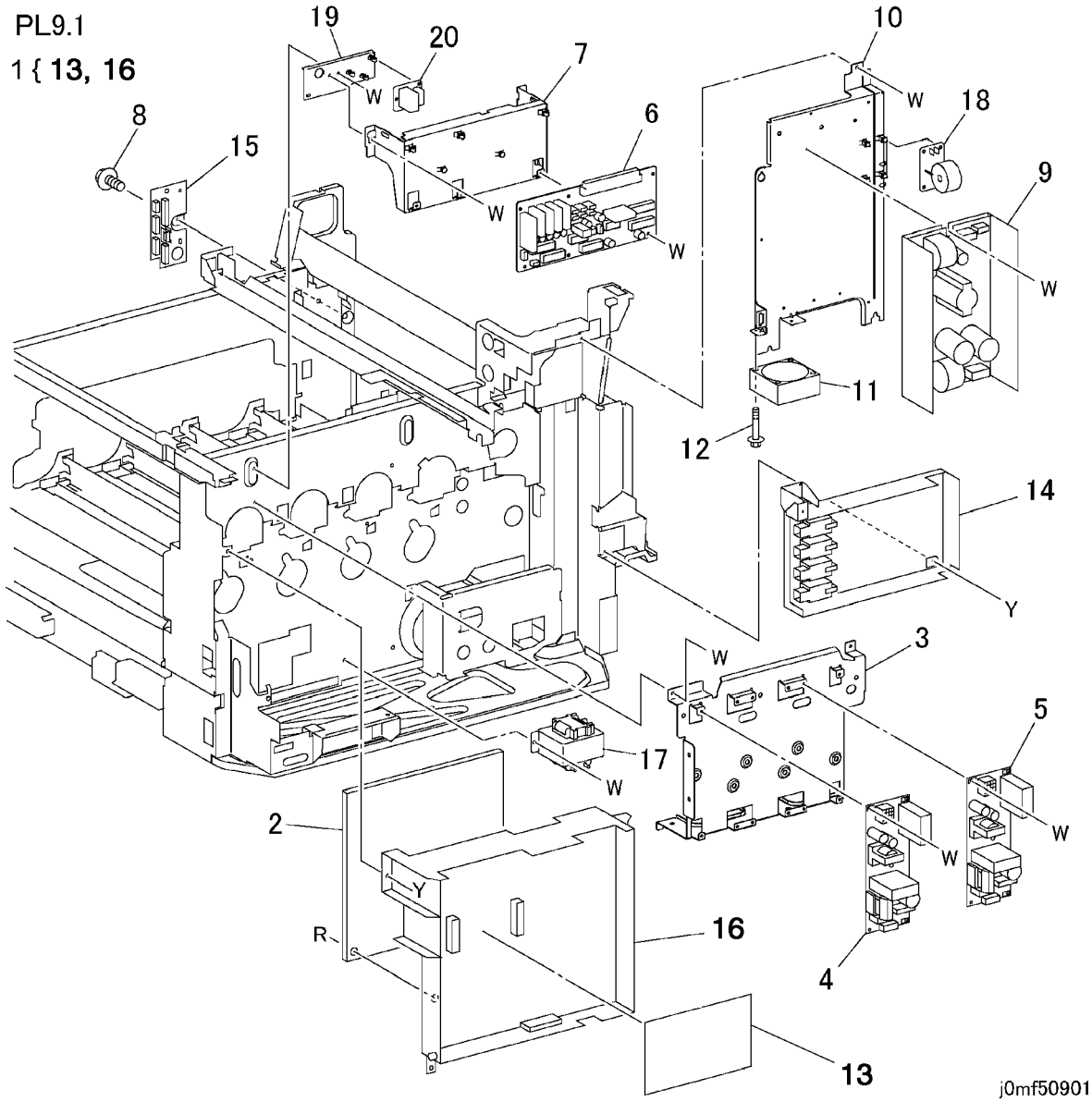
Item	Part	Description
1	127K32730	ROS Shutter Motor (REP 9.2)
2	–	Link (Not Spared)
3	–	Spring (Not Spared)
4	–	Inner Cover (Not Spared) (REP 14.10)
5	–	Duct (Not Spared)
6	127K29340	Fuser Fan (REP 10.2)
7	–	Duct (Not Spared)
8	127K36640	ROS Fan

PL8.1



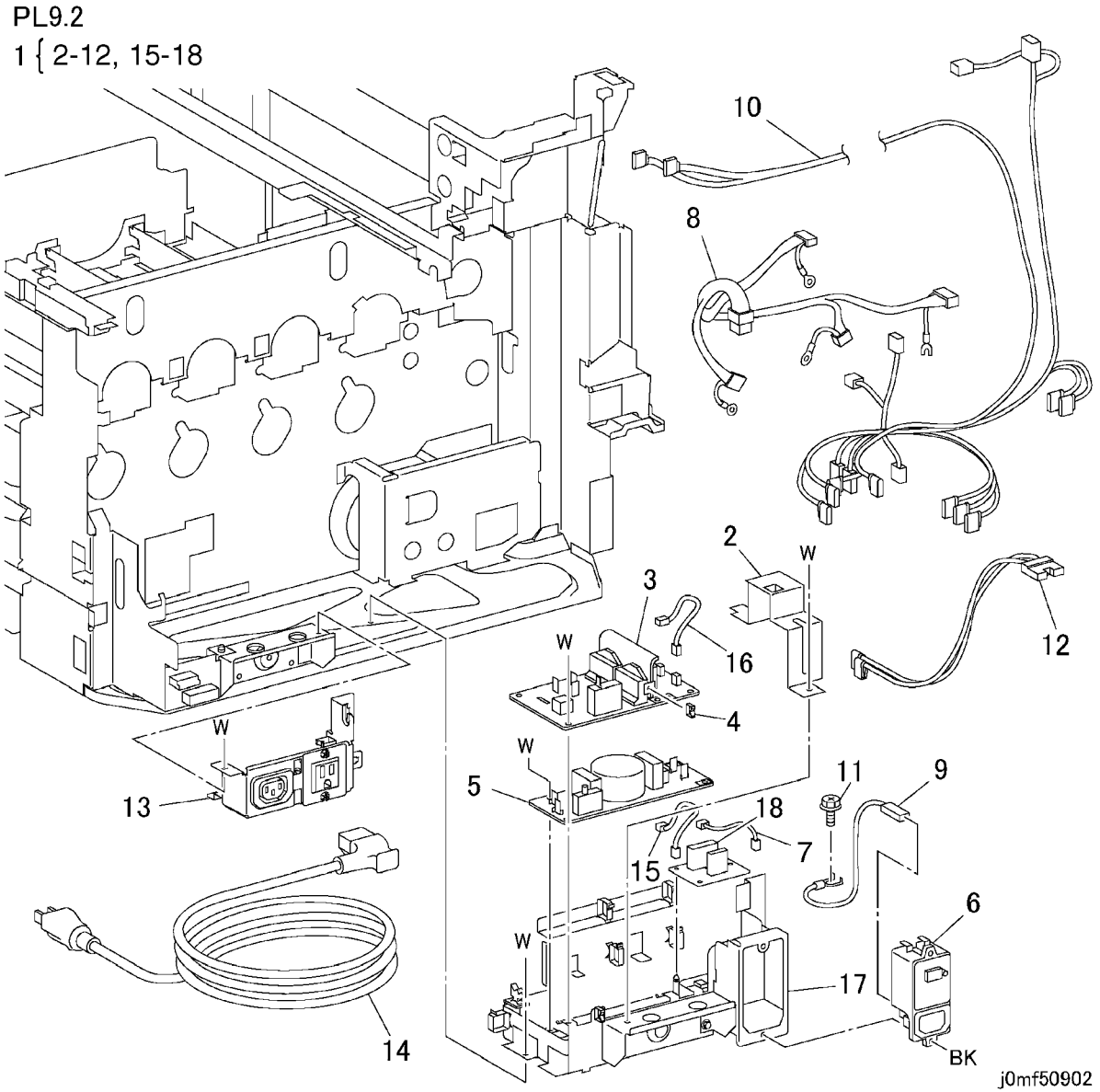
PL 9.1 Electrical Components: 1 of 3

Item	Part	Description
1	105K18771	HVPS (T5) (REP 1.6 REP 1.7)
2	105E09980	HVPS (T7) (REP 1.6 REP 1.7)
3	–	LVPS Bracket (Not Spared) (REP 1.1)
4	105E11130	3.3V LVPS (110V) (REP 1.4)
–	105E09810	3.3V LVPS (220V) (REP 1.4)
5	105E09820	5V LVPS (110V) (REP 1.4)
–	105E09830	5V LVPS (220V) (REP 1.4)
6	160K76802	Interface PWB (REP 1.8)
7	–	LVPS Bracket (Not Spared) (REP 1.9)
8	–	Screw (Not Spared)
9	105E09760	24V LVPS (220V) (REP 1.5)
–	105K18641	24V LVPS (110V) (REP 1.5)
10	–	Bracket (Not Spared) (REP 1.9)
11	127K29330	LVPS Fan
12	–	Screw (Not Spared)
13	–	HVPS Control PWB (P/O PL 9.1 Item 1)
14	105E09970	HVPS (T6) (REP 1.10)
15	–	Connector Chassis (Not Spared)
16	–	T5/T7 HVPS Chassis (P/O PL 9.1 Item 1)
17	103E27220	Resistor (220V)
–	104E93610	Choke Coil (110V)
18	160K84400	Fuser Noise Filter
19	–	Plate (Not Spared)
20	160K87730	Interlock Relay PWB



PL 9.2 Electrical Components: 2 of 3

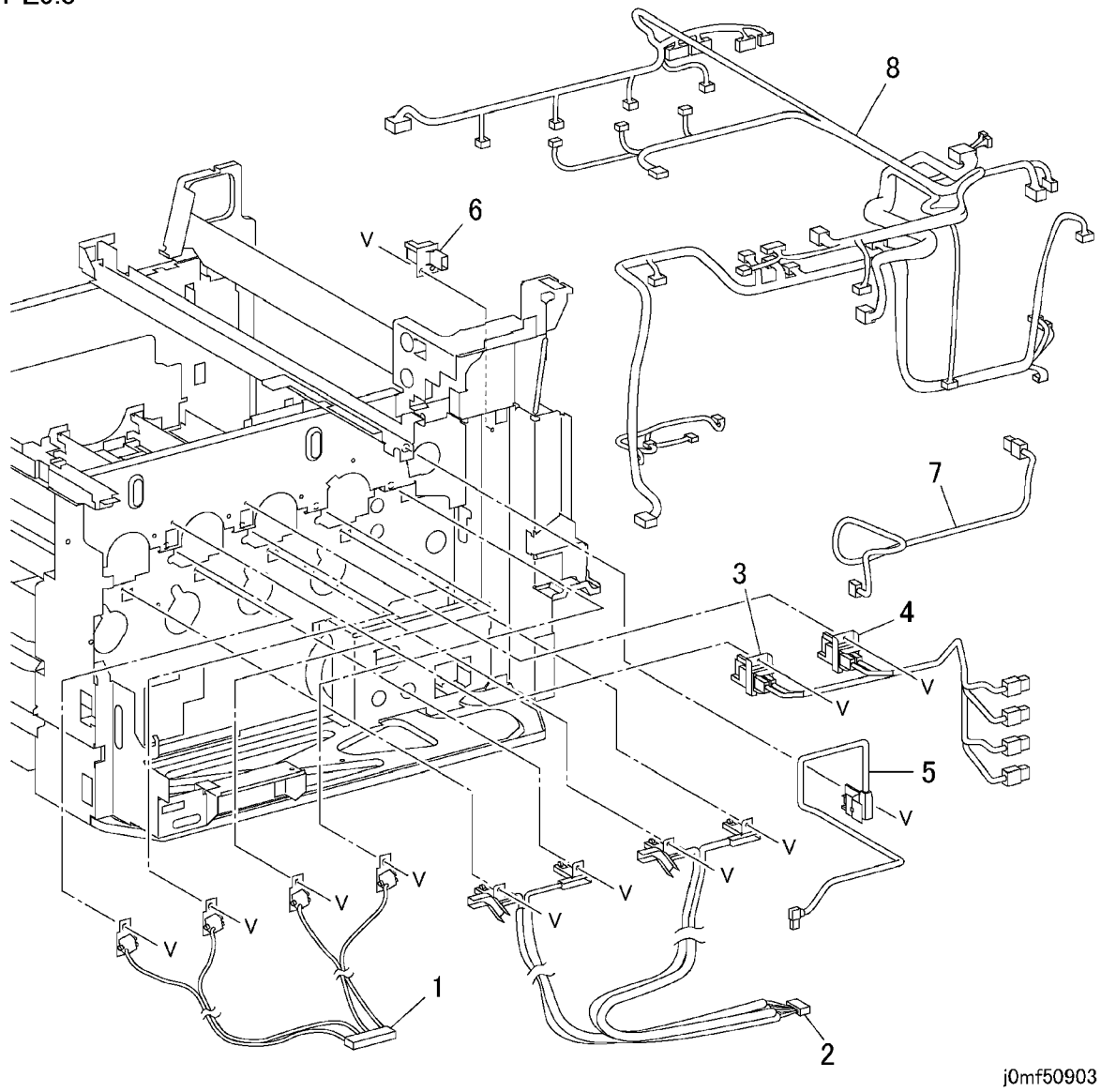
Item	Part	Description
1	101K38980	AC Power Chassis Assembly (220V)
–	101K38810	AC Power Chassis Assembly (110V)
2	–	Bracket (P/O PL 9.2 Item 1)
3	160K84820	AC Drive PWB (220V) (REP 1.11)
–	160K76770	AC Drive PWB (110V) (REP 1.11)
4	–	Clamp (P/O PL 9.2 Item 1)
5	160K84800	Noise Filter PWB (220V)
–	160K76760	Noise Filter PWB (110V)
6	908W01200	GFI Breaker
7	962K08820	Wire Harness
8	–	Wire Harness (P/O PL 9.2 Item 1)
9	–	Wire Harness (P/O PL 9.2 Item 1)
10	–	Wire Harness (P/O PL 9.2 Item 1)
11	–	Screw (P/O PL 9.2 Item 1)
12	–	Wire Harness (P/O PL 9.2 Item 1)
13	074K94320	Outlet Panel
14	917W00723	Power Cord (110V)
–	117E94370	Power Cord (220V)
15	162K69330	Wire Harness
16	–	Wire Harness (P/O PL 9.2 Item 1)
17	–	AC Power Chassis (P/O PL 9.2 Item 1)
18	160K77201	Delay PWB



PL 9.3 Electrical Components: 3 of 3

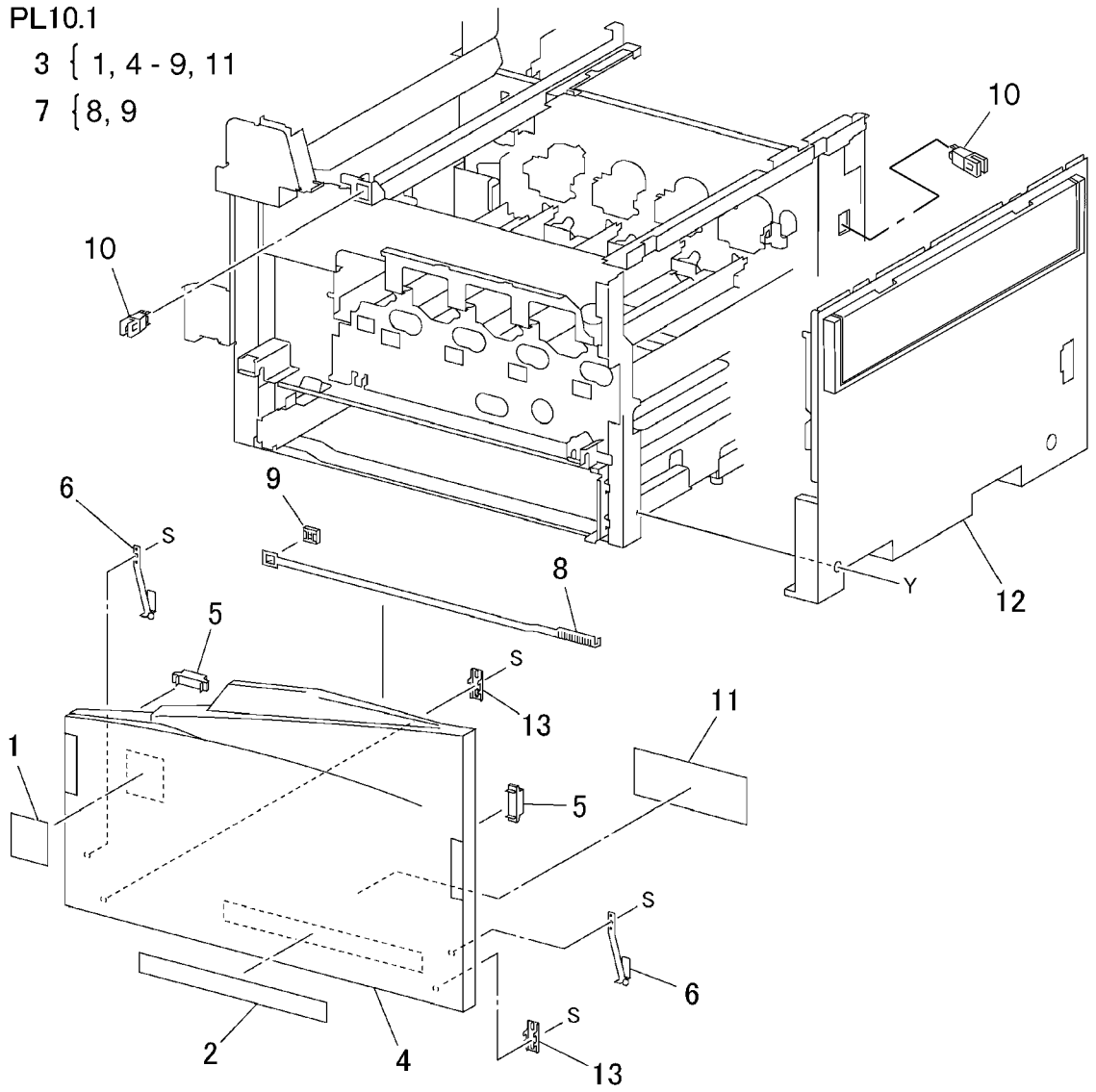
Item	Part	Description
1	014K81604	Developer Block
2	162K62110	Wire Harness
3	162K55941	Wire Harness (Y, M)
4	162K55971	Wire Harness (C, K)
5	162K56000	2nd Wire Harness
6	113K82310	DTS Connector
7	162K56031	DTS Wire Harness
8	962K09800	DC Wire Harness

PL9.3



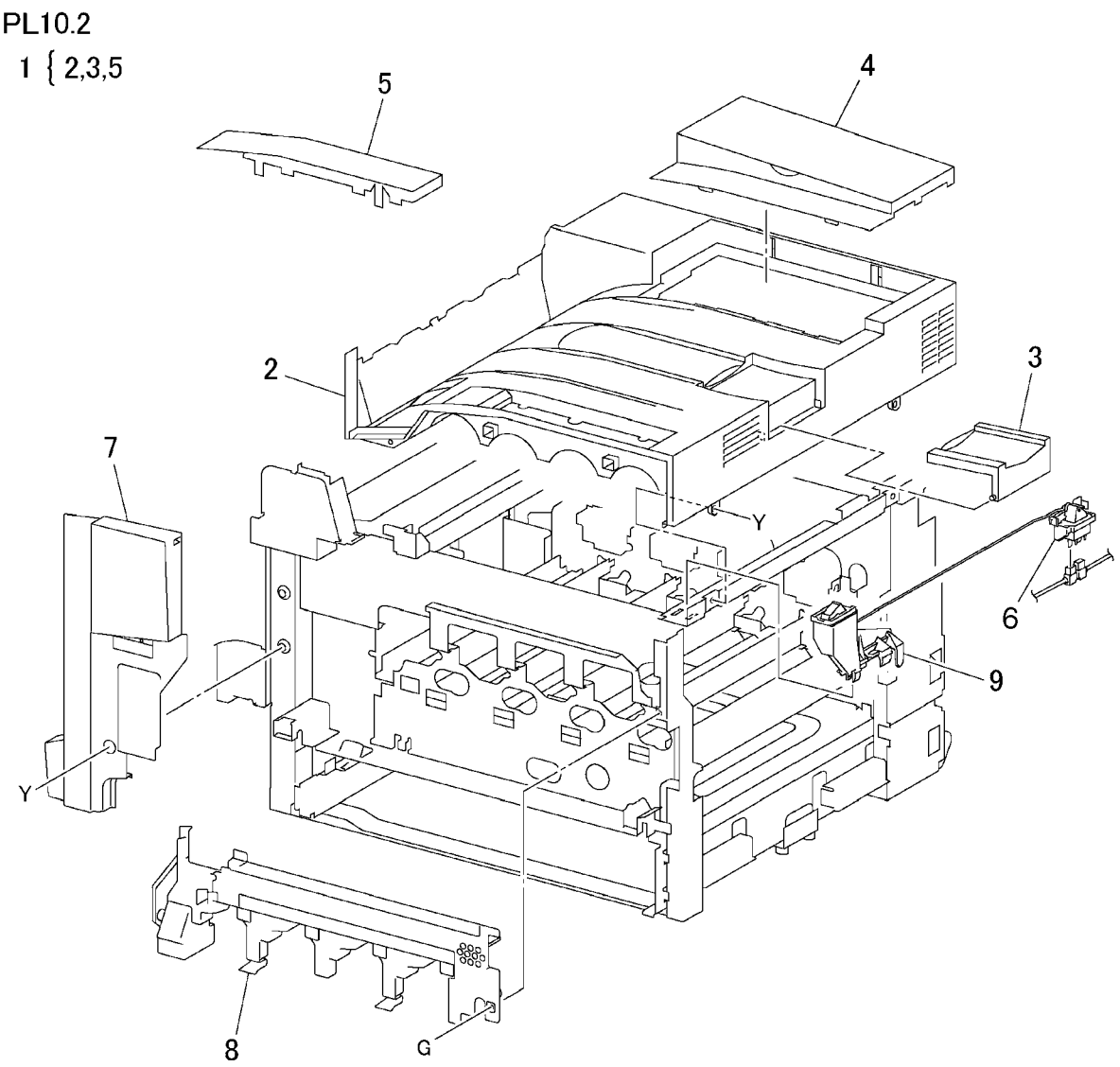
PL 10.1 Front Cover

Item	Part	Description
1	891E75951	Logo Plate
2	892E78280	Name Plate (16/32)
–	892E78290	Name Plate (22/40)
3	802K46050	Front Cover Assembly (REP 14.7)
4	–	Front Cover (P/O PL 10.1 Item 3)
5	–	Magnet (P/O PL 10.1 Item 3)
6	–	Strip (P/O PL 10.1 Item 3)
7	042K91990	Rod Cleaner Assembly
8	–	Rod Cleaner (P/O PL 10.1 Item 7)
9	–	Cleaner Base (P/O PL 10.1 Item 7)
10	110E94770	Front Interlock Switch, Right Interlock Switch
11	–	Label (P/O PL 10.1 Item 3)
12	802K46060	Right Cover (REP 14.3)
13	–	Hinge (Not Spared)



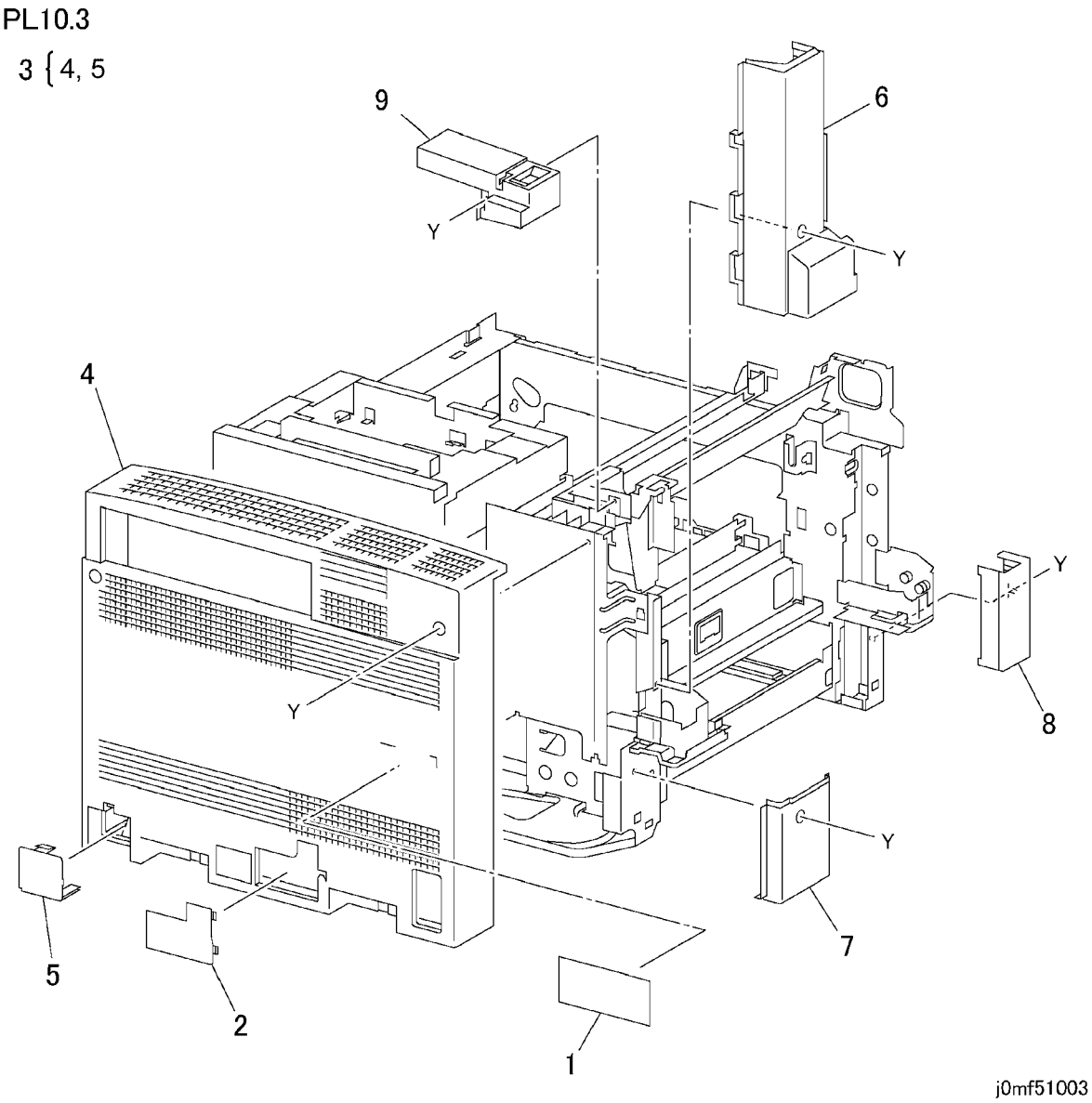
PL 10.2 Top Covers and Inner Covers

Item	Part	Description
1	802K29610	Top Cover Assembly (REP 14.1)
2	–	Top Cover (P/O PL 10.2 Item 1)
3	–	Stop (P/O PL 10.2 Item 1)
4	802E12400	Connector Cover
5	–	Panel (P/O PL 10.2 Item 1)
6	110K11211	Main Power Switch
7	802E12430	Fuser Cover (REP 14.8)
8	802K45710	Inner Cover (REP 9.6)
9	012K94260	Link



PL 10.3 Rear Cover

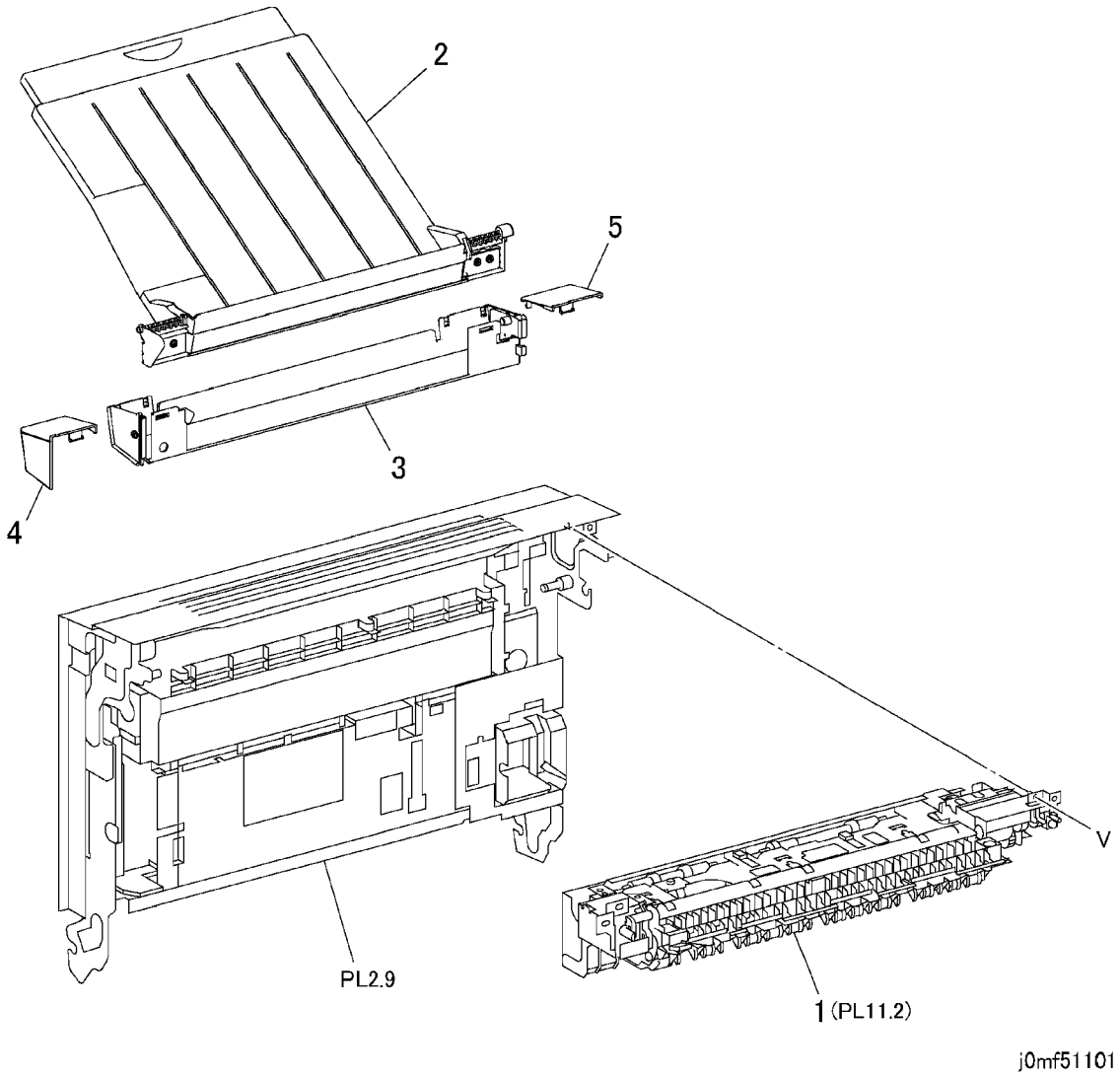
Item	Part	Description
1	–	Data Plate (Not Spared)
2	802E12480	Blind Cover
3	802K28110	Rear Cover Assembly
4	–	Rear Cover (P/O PL 10.3 Item 3) (REP 14.2)
5	802E12490	Blind Cover
6	802E12500	Rear Left Middle Cover (REP 14.4)
7	–	Rear Left Lower Cover (Not Spared)
8	–	Front Left Cover (Not Spared)
9	802E27860	Rear Left Upper Cover (REP 14.5)



PL 11.1 Inverter Transport: 1 of 2

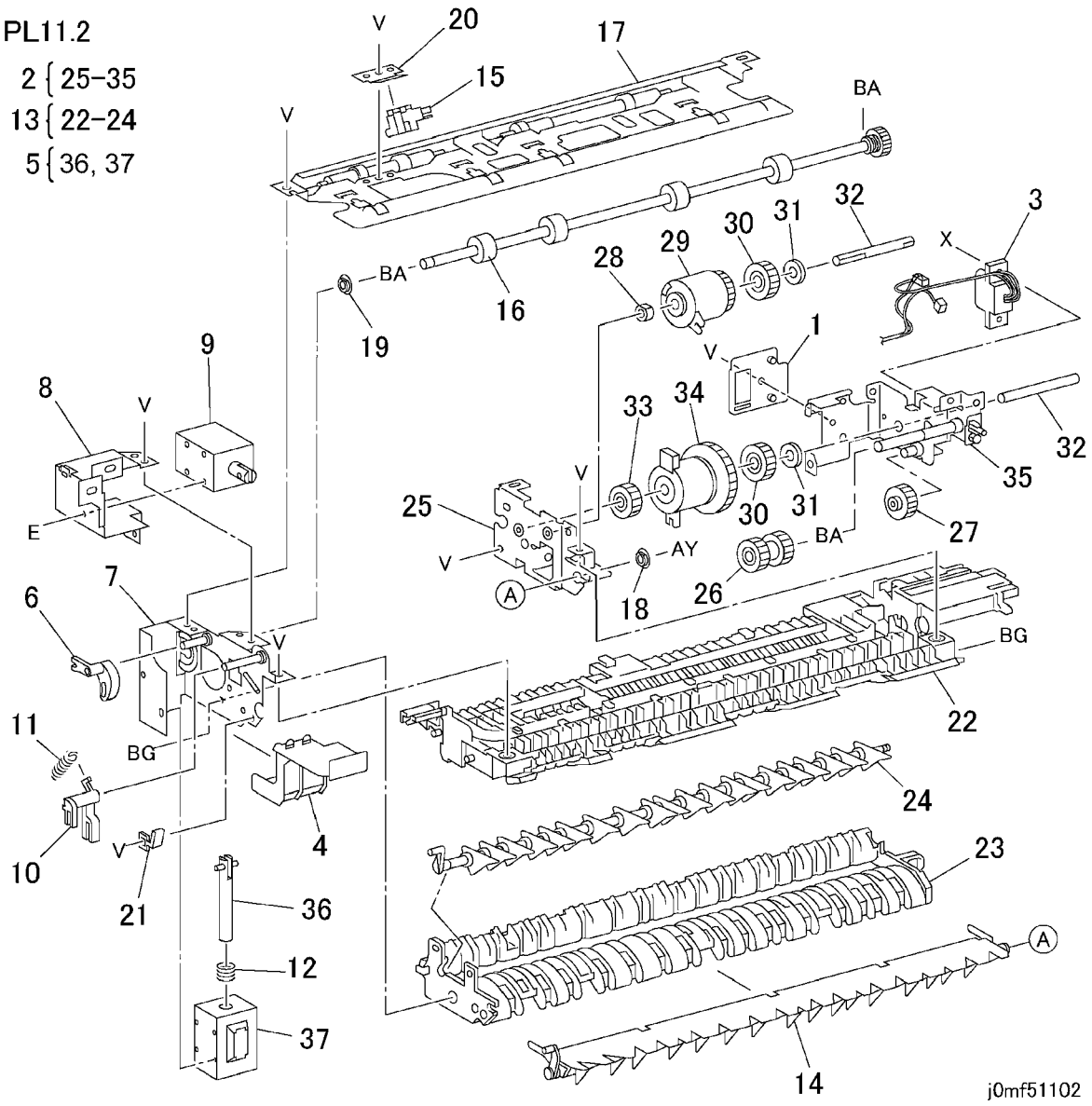
Item	Part	Description
1	059K16742	Inverter Transport (REP 8.5)
2	–	Face-up Tray (Not Spared)
3	–	Cover (Not Spared)
4	–	Front Cover (Not Spared)
5	–	Rear Cover (Not Spared)

PL11.1



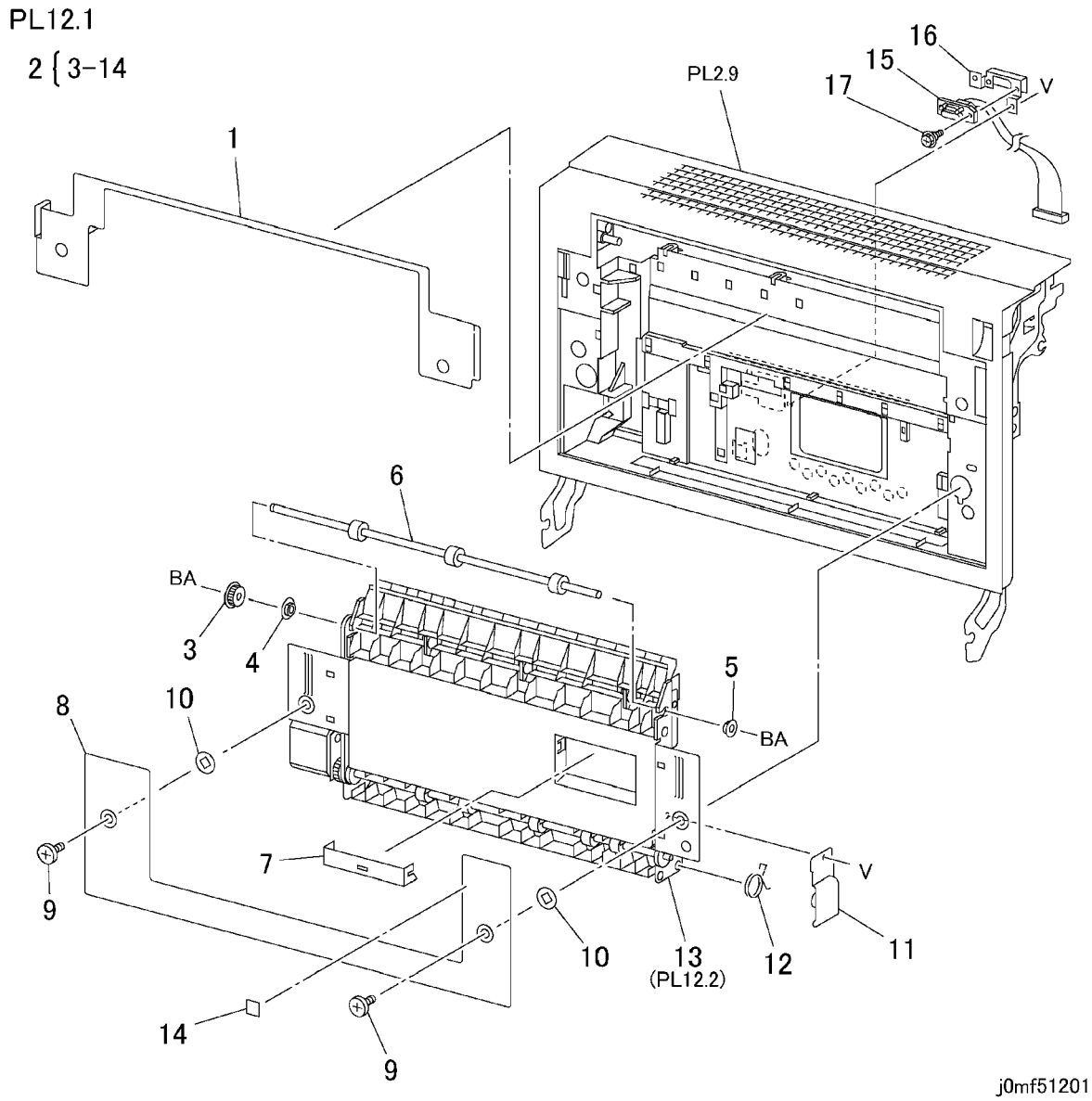
PL 11.2 Inverter Transport: 2 of 2

Item	Part	Description
1	–	Cover (Not Spared)
2	015K45802	Clutch Assembly
3	–	Wire Harness (Not Spared)
4	–	Bracket (Not Spared)
5	121K23560	Duplex Gate Solenoid
6	–	Link (Not Spared)
7	–	Bracket (Not Spared)
8	–	Bracket (Not Spared)
9	121K82870	Exit Gate Solenoid
10	–	Link (Not Spared)
11	–	Spring (Not Spared)
12	–	Spring (Not Spared)
13	054K17241	Inverter Chute Assembly
14	054K17252	Exit Gate
15	130K93230	Face-up Sensor
16	059K16750	Roll
17	–	Pinch Roll Assembly (Not Spared)
18	–	Bearing (Not Spared)
19	–	Bearing (Not Spared)
20	–	Bracket (Not Spared)
21	–	Holder (Not Spared)
22	–	Upper Chute (P/O PL 11.2 Item 13)
23	–	Lower Chute (P/O PL 11.2 Item 13)
24	–	Duplex Gate (P/O PL 11.2 Item 13)
25	–	Bracket (P/O PL 11.2 Item 2)
26	–	Gear (P/O PL 11.2 Item 2)
27	–	Gear (P/O PL 11.2 Item 2)
28	–	Spacer (P/O PL 11.2 Item 2)
29	121K22860	Forward Clutch
30	–	Gear (23T) (P/O PL 11.2 Item 2)
31	–	Bearing (P/O PL 11.2 Item 2)
32	–	Shaft (P/O PL 11.2 Item 2)
33	–	Gear (23T) (P/O PL 11.2 Item 2)
34	121K22870	Reverse Clutch
35	011E10711	Interlock Actuator
36	–	Plunger (P/O PL 11.2 Item 5)
37	–	Linear Solenoid (P/O PL 11.2 Item 5)



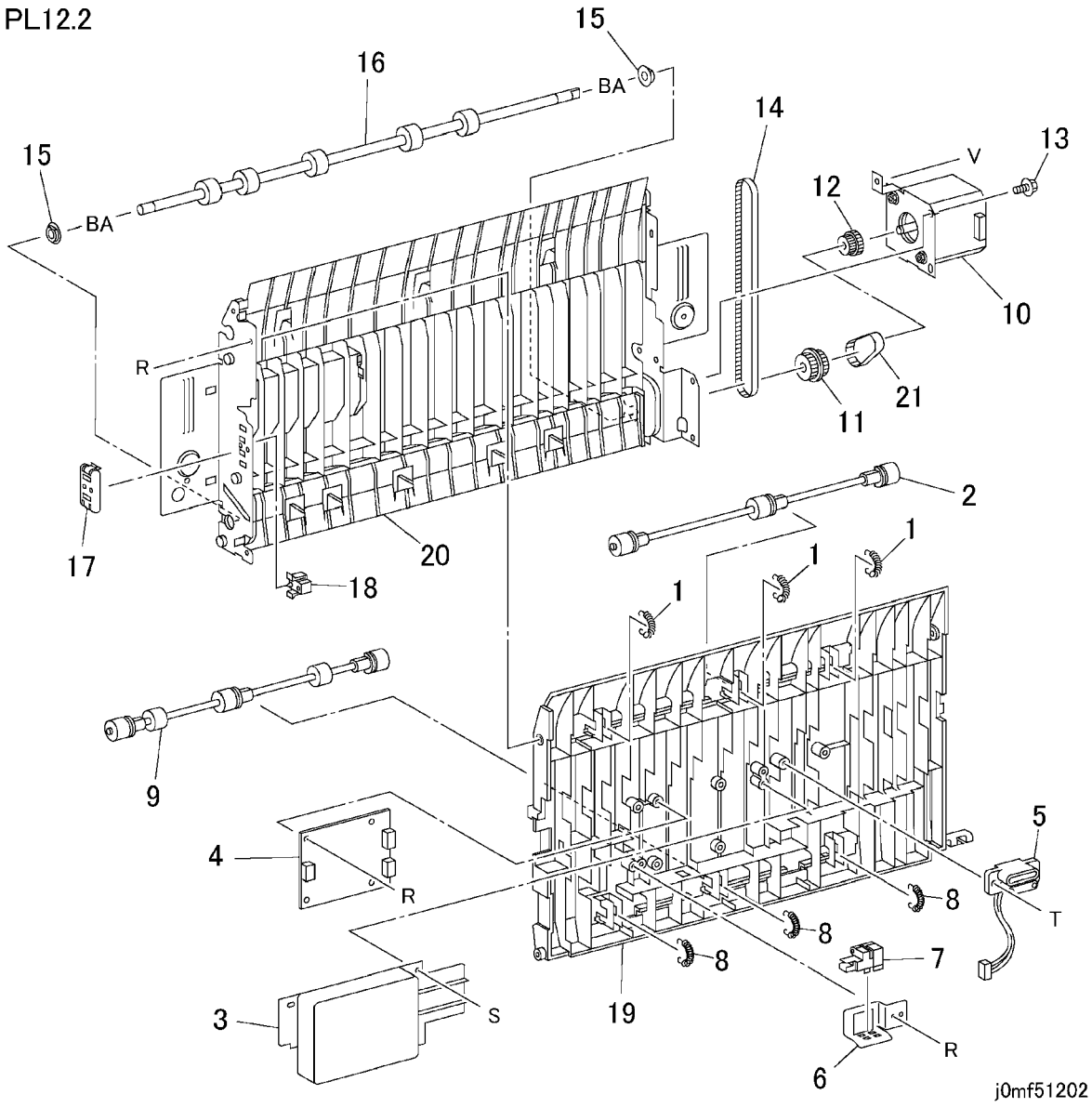
PL 12.1 Duplex Transport Assembly: 1 of 2

Item	Part	Description
1	–	Duplex Transport Upper Cover (Not Spared)
2	059K18714	Duplex Transport Assembly (REP 8.3)
3	–	One-way Pulley (P/O PL 12.1 Item 2)
4	–	Bearing (P/O PL 12.1 Item 2)
5	–	Bearing (P/O PL 12.1 Item 2)
6	059K23960	Duplex Transport Roll
7	–	Handle (P/O PL 12.1 Item 2)
8	–	Lower Cover (P/O PL 12.1 Item 2)
9	–	Screw (P/O PL 12.1 Item 2)
10	–	Nylon Washer (P/O PL 12.1 Item 2)
11	–	Cover (P/O PL 12.1 Item 2)
12	–	Spring (P/O PL 12.1 Item 2)
13	–	Duplex Transport (P/O PL 12.1 Item 2)
14	–	Label (P/O PL 12.1 Item 2)
15	–	Wire Harness (Not Spared)
16	–	Bracket (Not Spared)
17	–	Screw (Not Spared)



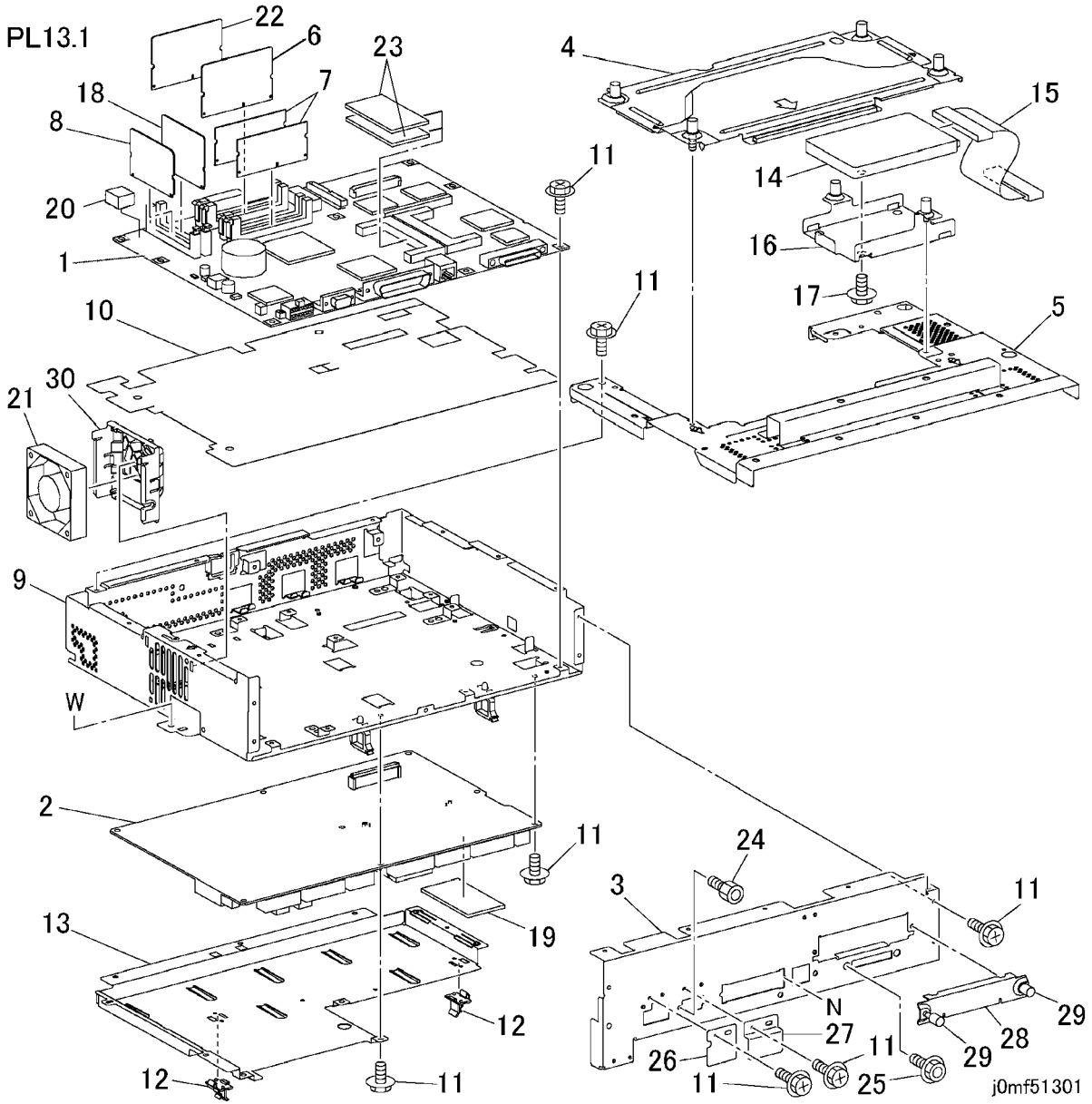
PL 12.2 Duplex Transport Assembly: 2 of 2

Item	Part	Description
1	–	Spring (Not Spared)
2	022K33920	Pinch Roll
3	–	Cover (Not Spared)
4	160K66860	Duplex Transport PWB
5	–	Wire Harness (Not Spared)
6	–	Bracket (Not Spared)
7	130K61250	Duplex Transport Wait Sensor
8	–	Spring (Not Spared)
9	059K23980	Pinch Roll
10	127K29930	Duplex Transport Motor
11	–	Pulley (20/21T) (Not Spared)
12	–	Pulley (16T) (Not Spared)
13	–	Screw (Not Spared)
14	–	Belt (Not Spared)
15	–	Bearing (Not Spared)
16	059K23970	Wait Roll
17	–	Cover (Not Spared)
18	–	Interlock Switch (Not Spared)
19	–	Inner Chute (Not Spared)
20	–	Outer Chute (Not Spared)
21	–	Belt (Not Spared)



PL 13.1 ESS

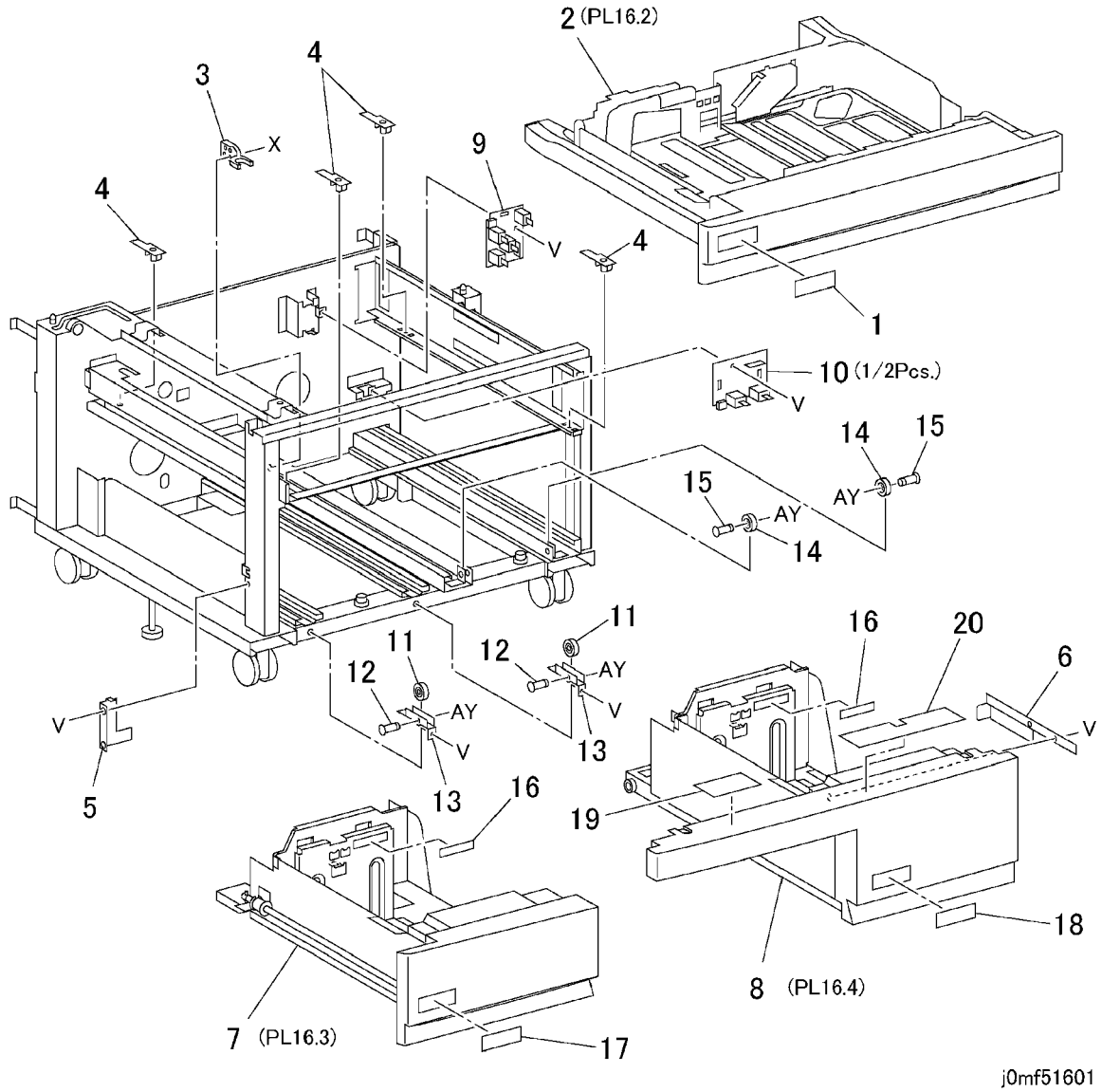
Item	Part	Description
1	160K74231	ESS PWB
2	160K90840	MCU PWB (REP 1.2)
3	–	Rear Panel (Not Spared)
4	–	DIMM Cover (Not Spared)
5	–	Top Cover (Not Spared)
6	537K62680	PS-2 ROM
7	133K22400	SDRAM 256MB
8	160K82222	ESS NVM PWB
9	–	ESS Chassis (Not Spared) (REP 1.3)
10	–	Seal (Not Spared)
11	–	Screw (Not Spared)
12	–	Support (Not Spared)
13	–	Cover (Not Spared)
14	121K27751	HDD (ADJ 9.8)
15	962K08641	HDD Harness Assembly
16	–	Bracket (Not Spared)
17	–	Screw (Not Spared)
18	538K94570	Font ROM
19	160K76650	MCU NVM PWB
20	537K61180	MAC ROM
21	127K32920	ESS Fan
22	537K62670	PS-1 ROM
23	133K21100	SDRAM 64MB
–	133K21200	SDRAM 128MB
24	–	Screw (Not Spared)
25	–	Screw (Not Spared)
26	–	Blind Panel (Not Spared)
27	–	Blind Panel (Not Spared)
28	–	Option Panel (Not Spared)
29	–	Screw (Not Spared)
30	–	Fan Guard (Not Spared)



PL 16.1 Tray 2/3/4 Assembly

Item	Part	Description
1	891E49060	Label (Tray 2)
2	050K48170	Tray 2 (REP 7.9)
3	003E23672	Stop
4	014E42850	Spacer
5	–	Tray 3 Stop (Not Spared)
6	–	Tray 4 Stop (Not Spared)
7	050K43130	Tray 3 (REP 7.6)
8	050K43120	Tray 4 (REP 7.7)
9	110K08541	Tray 2 Paper Size Switch
10	110K10880	Tray 3/4 Paper Size Switch
11	059E95930	Roll
12	–	Shaft (Not Spared)
13	–	Bracket (Not Spared)
14	–	Roll (Not Spared)
15	–	Shaft (Not Spared)
16	–	Max Label (Not Spared)
17	891E49510	Label (Tray 3)
18	891E49520	Label (Tray 4)
19	892E28491	Label
20	–	Instruction Label (Not Spared)

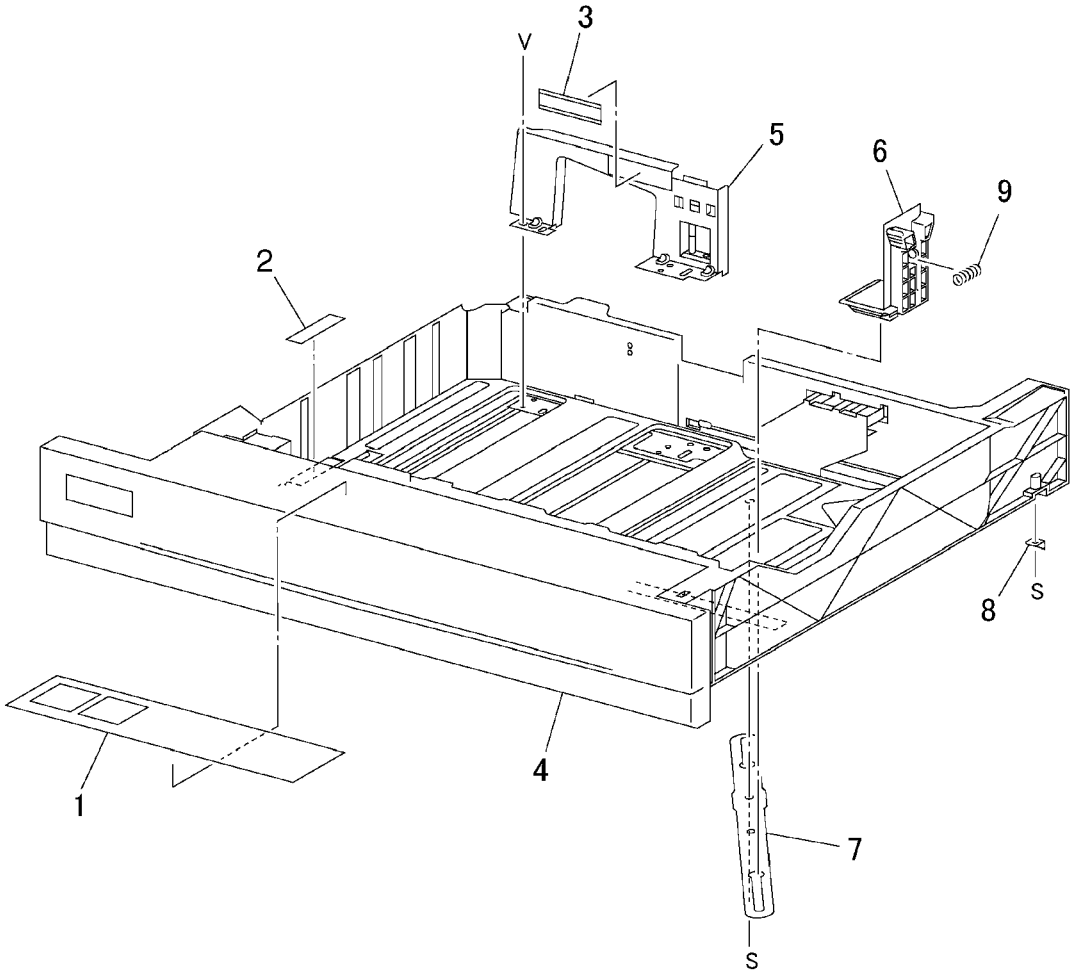
PL16.1



PL 16.2 Tray 2

Item	Part	Description
1	892E74500	Instruction Label
2	–	Pad (Not Spared)
3	–	Max Label (Not Spared)
4	–	Tray (Not Spared)
5	–	Side Guide (Not Spared)
6	–	End Guide (Not Spared)
7	–	Link (Not Spared)
8	–	Stop (Not Spared)
9	–	Spring (Not Spared)

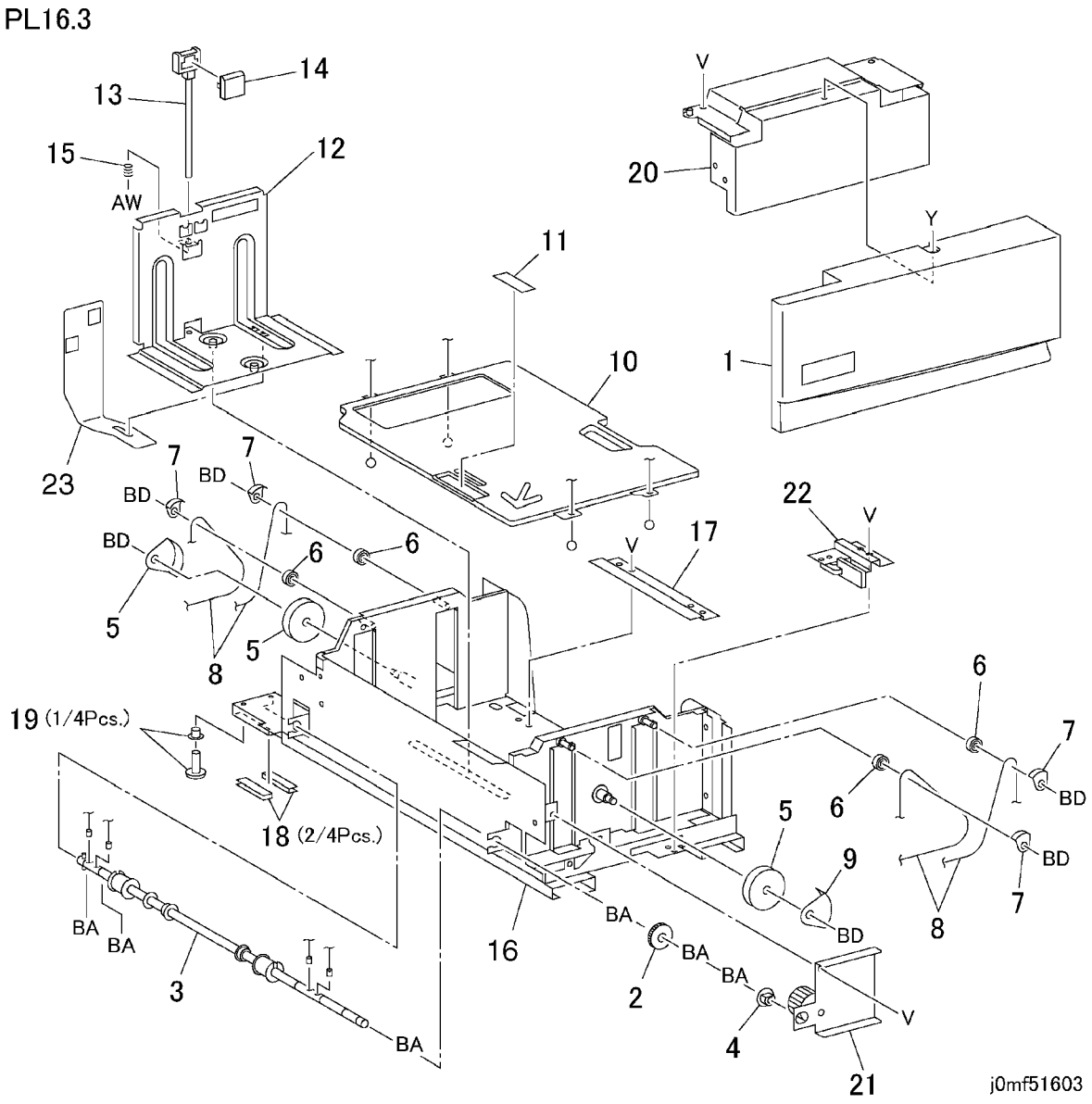
PL16.2



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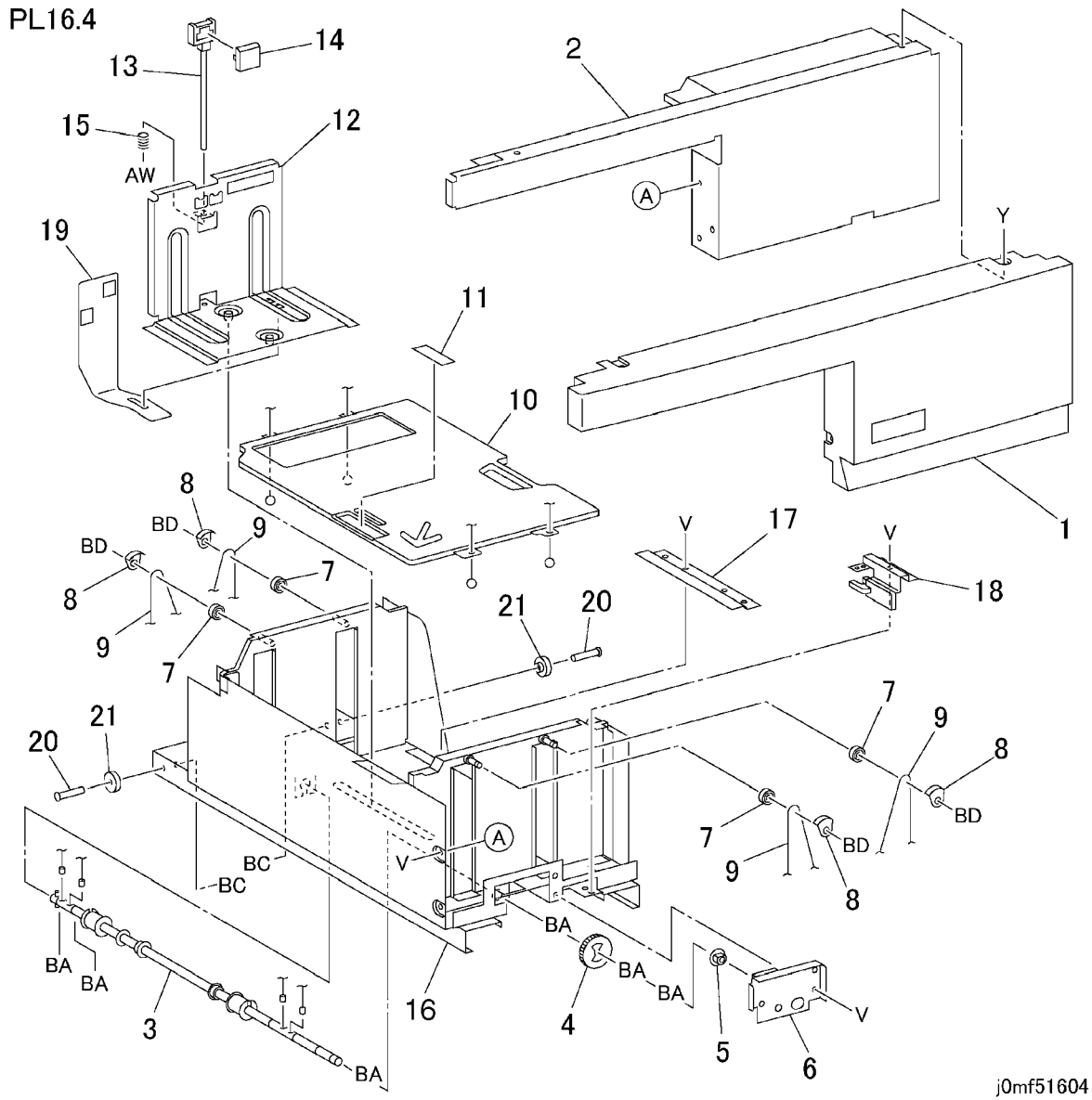
PL 16.3 Tray 3

Item	Part	Description
1	802E23990	Tray 3 Cover
2	–	Pulley (Not Spared)
3	–	Lift Shaft (Not Spared)
4	–	Bearing (Not Spared)
5	–	Pulley (Not Spared)
6	–	Pulley (Not Spared)
7	–	Cable Guide (Not Spared)
8	020E93120	Tray Cable
9	–	Cable Guide (Not Spared)
10	–	Bottom Plate (Not Spared)
11	–	Pad (Not Spared)
12	–	Side Guide (Not Spared)
13	–	Knob (Not Spared)
14	–	Knob (Not Spared)
15	009E26970	Spring
16	–	Frame (Not Spared)
17	–	Bracket (Not Spared)
18	–	Spacer (Not Spared)
19	–	Spacer (Not Spared)
20	–	Bracket (Not Spared)
21	–	Brake (Not Spared)
22	–	Latch (Not Spared)
23	–	Actuator (Not Spared)



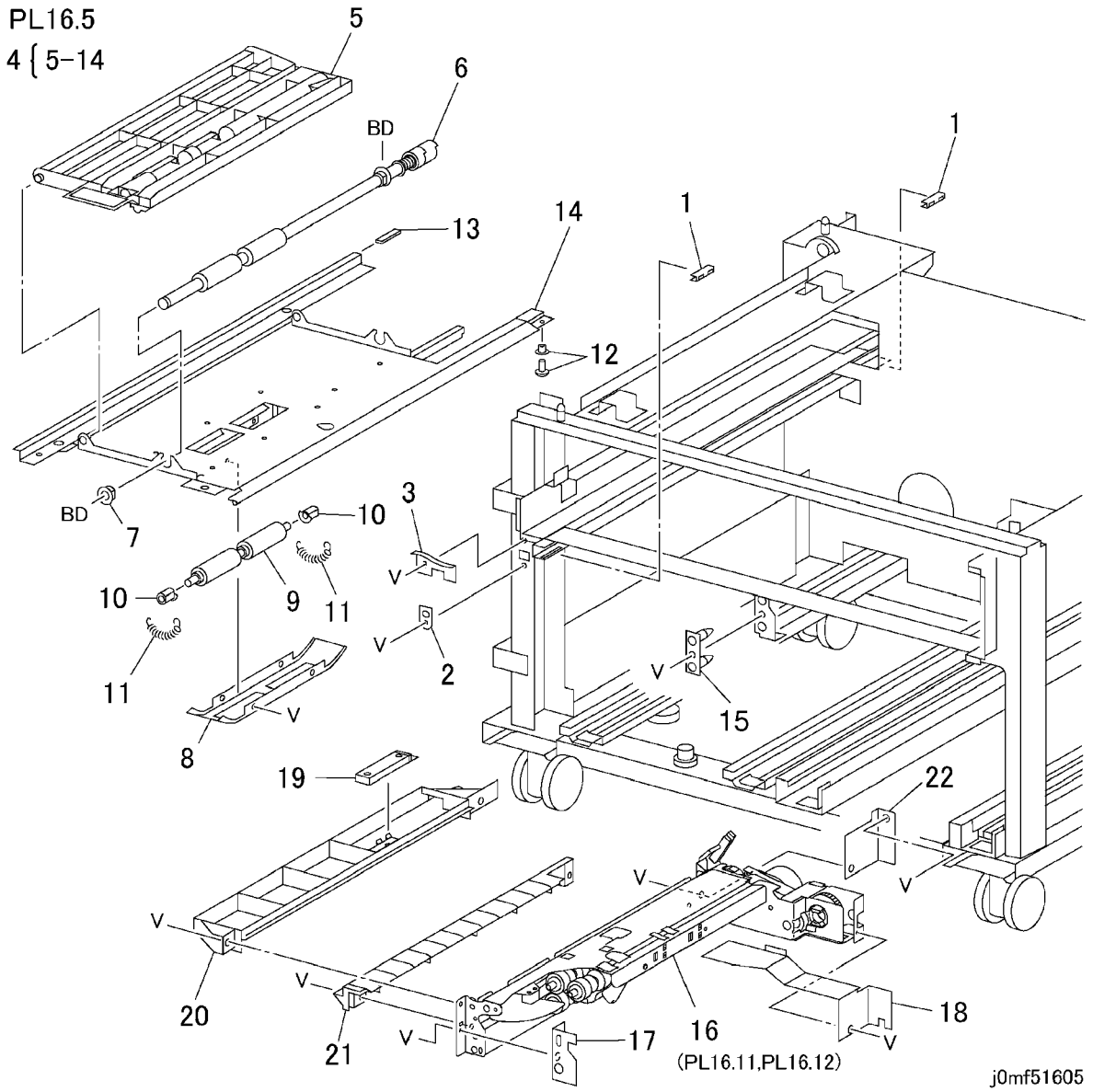
PL 16.4 Tray 4

Item	Part	Description
1	802E23980	Tray 4 Cover
2	–	Tray Front Frame (Not Spared)
3	–	Lift Shaft (Not Spared)
4	–	Lift Gear (Not Spared)
5	–	Bearing (Not Spared)
6	–	Brake (Not Spared)
7	–	Pulley (Not Spared)
8	–	Cable Guide (Not Spared)
9	012E10070	Tray Cable
10	–	Bottom Plate (Not Spared)
11	–	Pad (Not Spared)
12	–	Side Guide (Not Spared)
13	–	Knob (Not Spared)
14	–	Knob (Not Spared)
15	009E26970	Spring
16	–	Tray Frame (Not Spared)
17	–	Bracket (Not Spared)
18	–	Latch (Not Spared)
19	–	Actuator (Not Spared)
20	–	Shaft (Not Spared)
21	059E95920	Roll



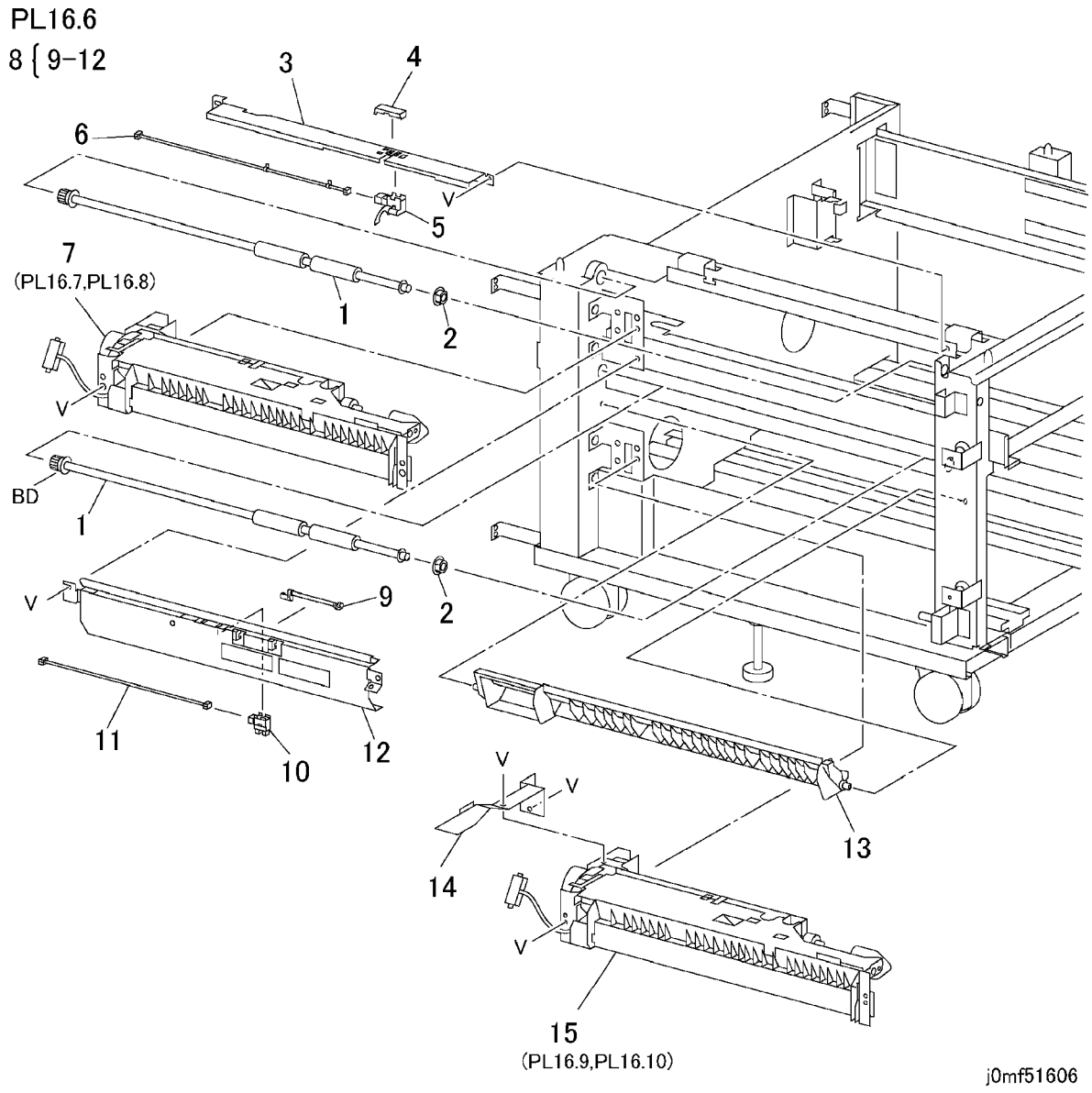
PL 16.5 Paper Feeder: 1 of 2

Item	Part	Description
1	–	Spacer (Not Spared)
2	–	Guide (Not Spared)
3	–	Stop (Not Spared)
4	059K21790	Tray 4 Transport Assembly
5	–	Upper Chute (P/O PL 16.5 Item 4)
6	–	Takeaway Roll (P/O PL 16.5 Item 4)
7	–	Bearing (P/O PL 16.5 Item 4)
8	–	Cover (P/O PL 16.5 Item 4)
9	–	Pinch Roll (P/O PL 16.5 Item 4)
10	–	Bearing (P/O PL 16.5 Item 4)
11	–	Spring (P/O PL 16.5 Item 4)
12	–	Spacer (P/O PL 16.5 Item 4)
13	–	Spacer (P/O PL 16.5 Item 4)
14	–	Lower Chute (P/O PL 16.5 Item 4)
15	–	Bracket (Not Spared)
16	059K18283	Tray 4 Feeder
17	–	Bracket (Not Spared)
18	–	Bracket (Not Spared)
19	130E82650	Tray 4 Feedout Sensor
20	054E18540	Upper Chute
21	054E18530	Lower Chute
22	–	Bracket (Not Spared)



PL 16.6 Paper Feeder: 2 of 2

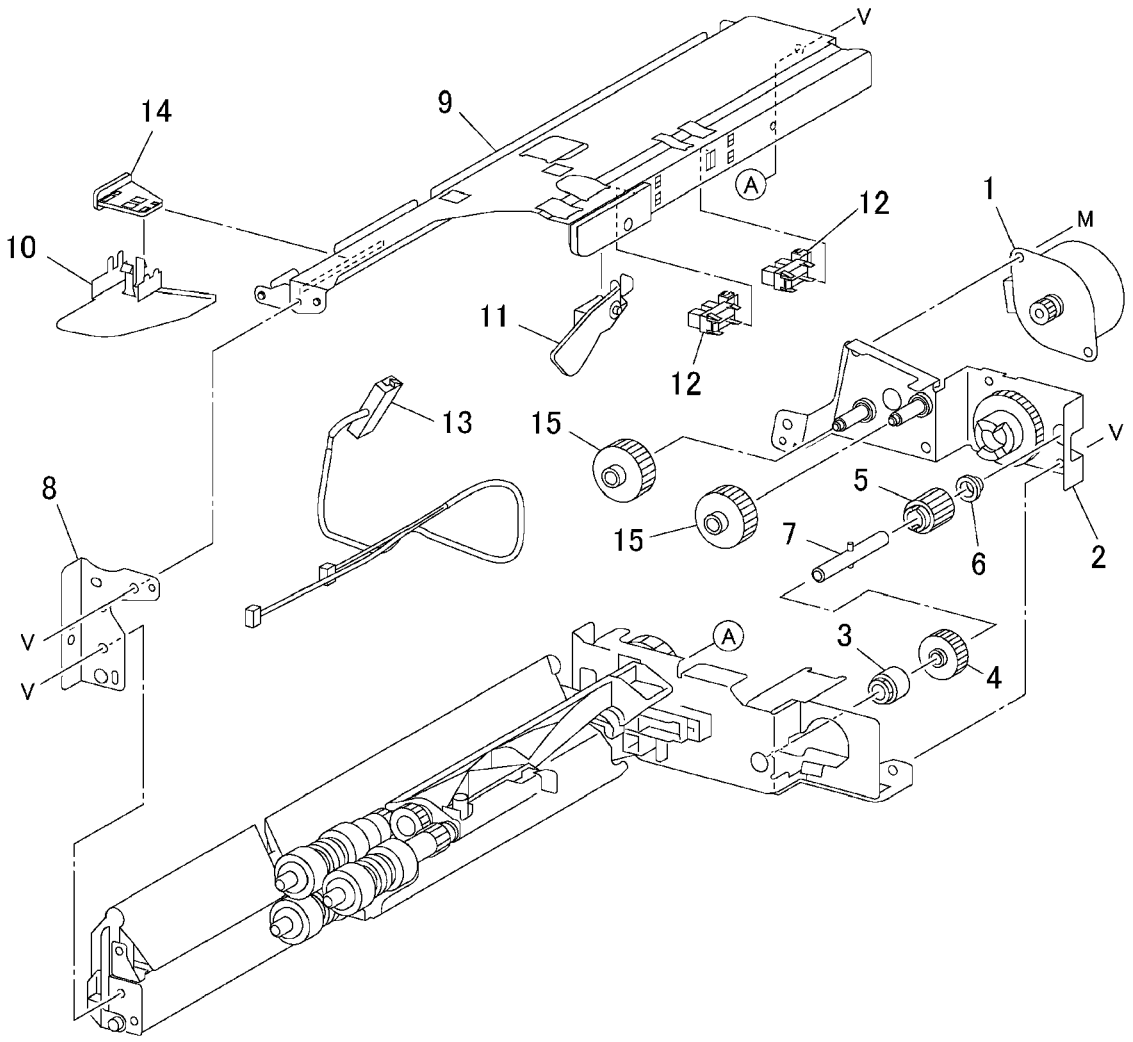
Item	Part	Description
1	059K18900	Takeaway Roll
2	–	Bearing (Not Spared)
3	–	Chute (Not Spared)
4	–	Cover (Not Spared)
5	130K61510	Takeaway Sensor
6	162K62810	Wire Harness
7	059K15573	Tray 2 Feeder
8	054K18270	Chute Assembly
9	–	Actuator (P/O PL 16.6 Item 8)
10	130E81600	Tray 3 Feedout Sensor
11	–	Wire Harness (P/O PL 16.6 Item 8)
12	–	Chute (P/O PL 16.6 Item 8)
13	054E18520	Lower Chute
14	–	Bracket (Not Spared)
15	–	Tray 3 Feeder (Not Spared)



PL 16.7 Tray 2 Feeder: 1 of 2

Item	Part	Description
1	127K23230	Tray 2 Feed/Lift Motor
2	–	Bracket (Not Spared)
3	005K83081	One-way Clutch
4	007K85730	One-way Gear
5	–	Gear (13T) (Not Spared)
6	–	Bearing (Not Spared)
7	–	Shaft (Not Spared)
8	–	Front Frame (Not Spared)
9	–	Upper Frame (Not Spared)
10	–	Front Chute (Not Spared)
11	–	Actuator (Not Spared)
12	130E82190	Tray 2 Level Sensor
13	–	Wire Harness (Not Spared)
14	–	Support (Not Spared)
15	–	Gear (29T) (Not Spared)

PL16.7

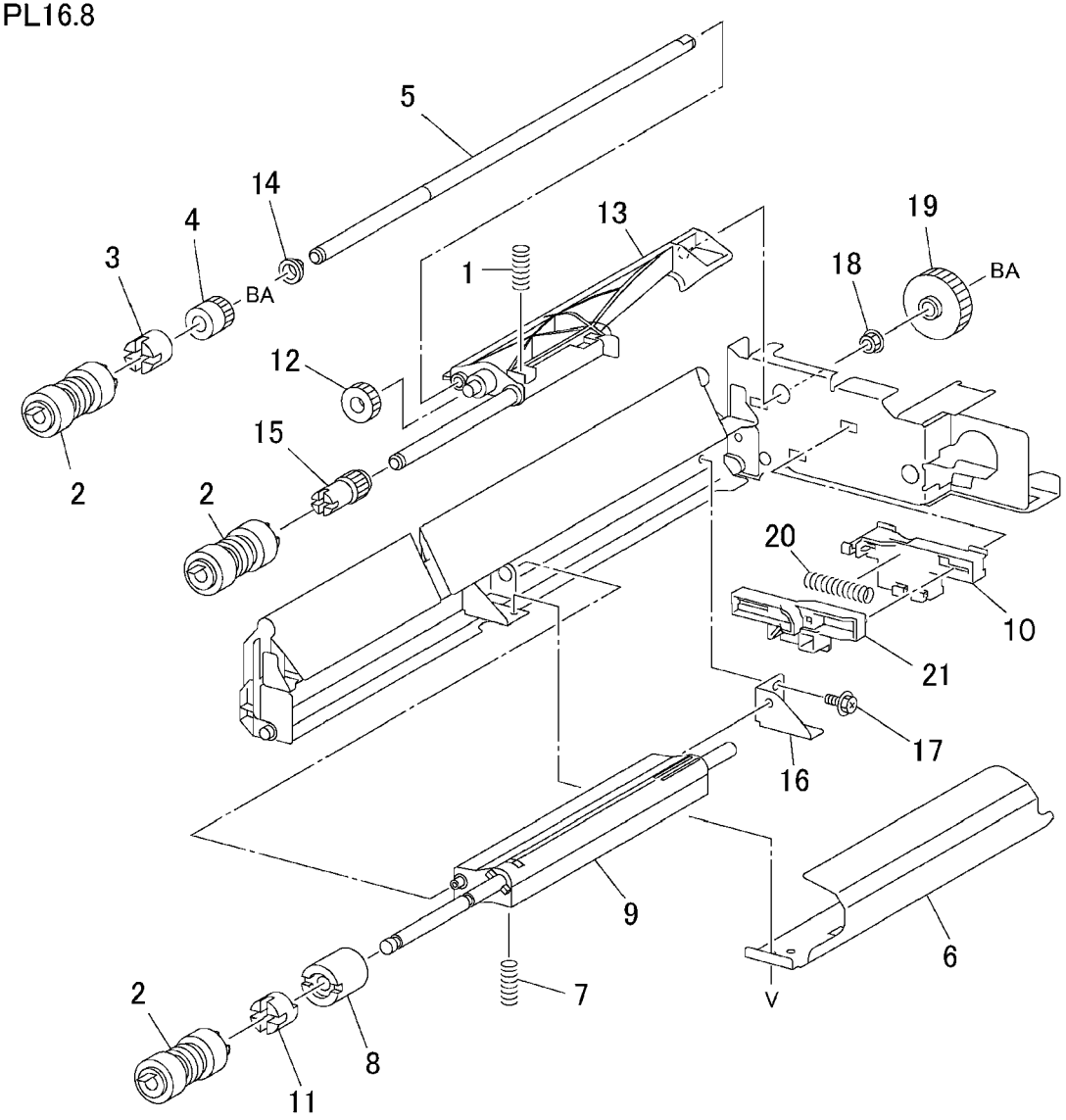


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PL 16.8 Tray 2 Feeder: 2 of 2

Item	Part	Description
1	–	Spring (Not Spared)
2	600K78460	Roll Kit (3 Rolls/Kit)
3	005K05890	One-way Clutch
4	–	Gear (Not Spared)
5	–	Shaft (Not Spared)
6	–	Chute (Not Spared)
7	–	Spring (Not Spared)
8	–	Friction Clutch (Not Spared)
9	–	Support (Not Spared)
10	–	Holder (Not Spared)
11	–	Spacer (Not Spared)
12	–	Gear (31T) (Not Spared)
13	–	Support (Not Spared)
14	–	Bearing (Not Spared)
15	–	Gear (Not Spared)
16	–	Support (Not Spared)
17	–	Screw (Not Spared)
18	–	Bearing (Not Spared)
19	–	Gear (35T) (Not Spared)
20	–	Spring (Not Spared)
21	–	Lever (Not Spared)

PL16.8

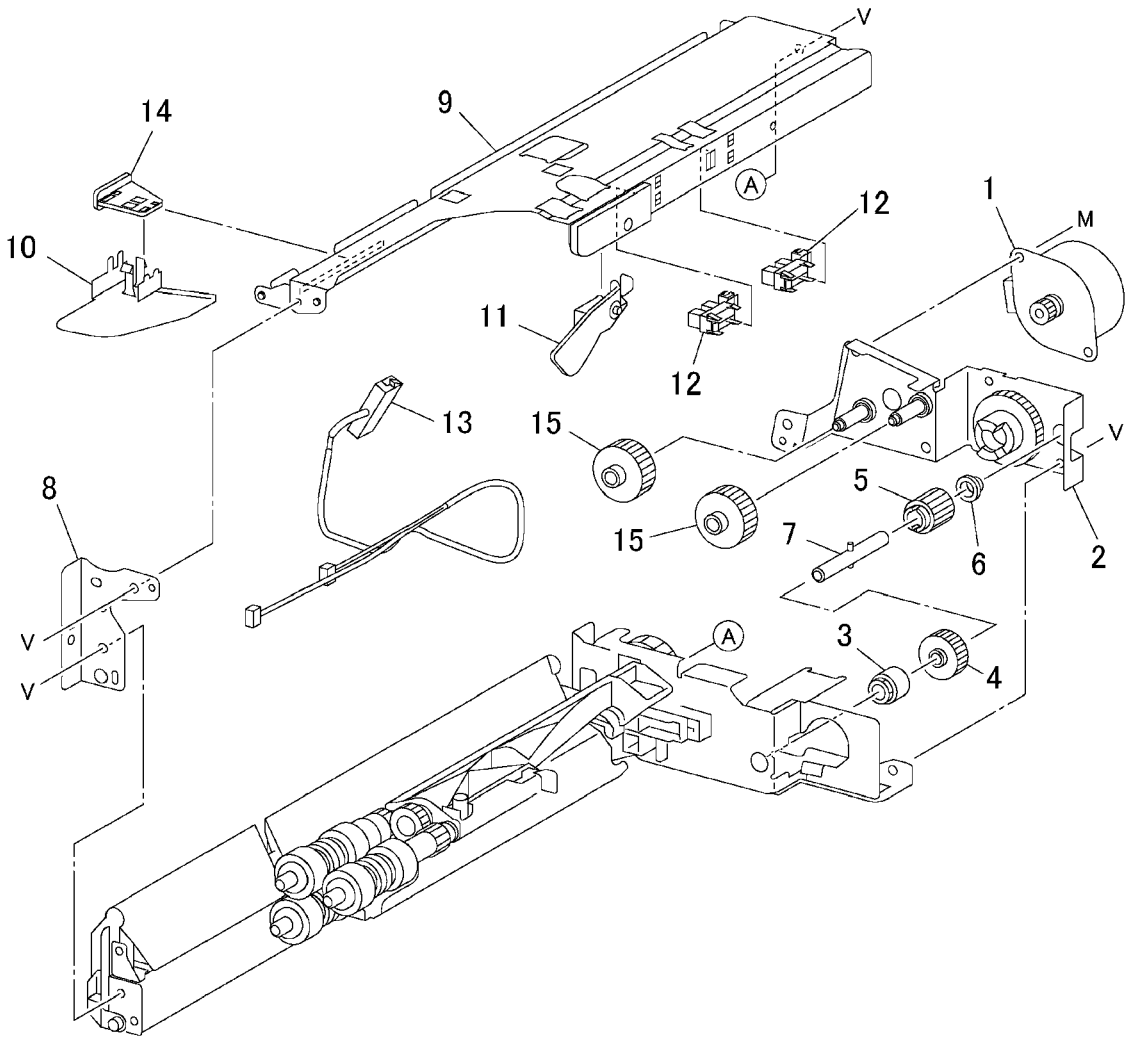


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PL 16.9 Tray 3 Feeder: 1 of 2

Item	Part	Description
1	127K23230	Tray 3 Feed/Lift Motor
2	–	Bracket (Not Spared)
3	005K83081	One-way Clutch
4	007K85730	One-way Gear
5	–	Gear (13T) (Not Spared)
6	–	Bearing (Not Spared)
7	–	Shaft (Not Spared)
8	–	Front Frame (Not Spared)
9	–	Upper Frame (Not Spared)
10	–	Front Chute (Not Spared)
11	–	Actuator (Not Spared)
12	130E82190	Tray 3 Level/No Paper Sensor
13	–	Wire Harness (Not Spared)
14	–	Support (Not Spared)
15	–	Gear (29T) (Not Spared)

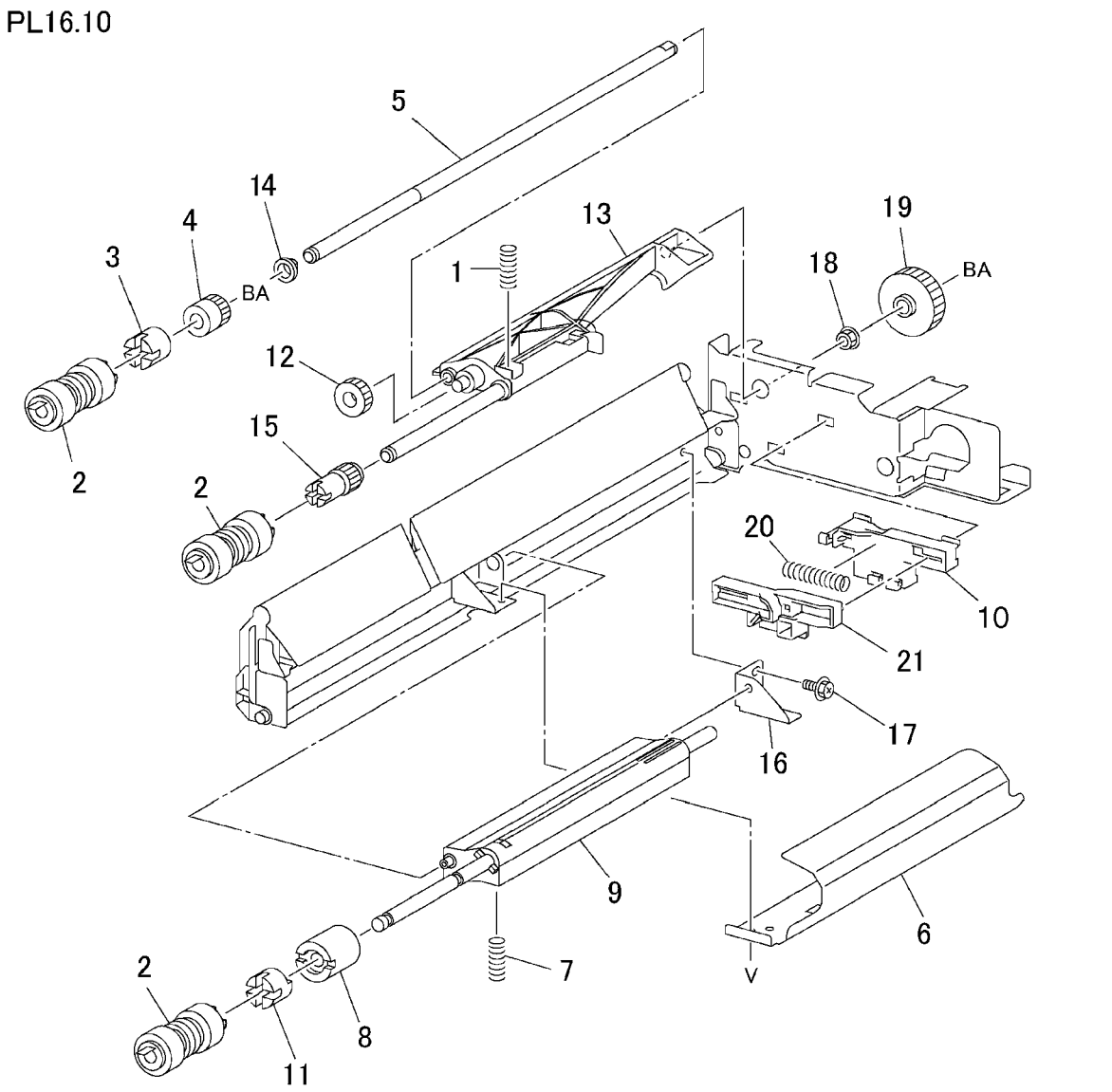
PL16.9



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PL 16.10 Tray 3 Feeder: 2 of 2

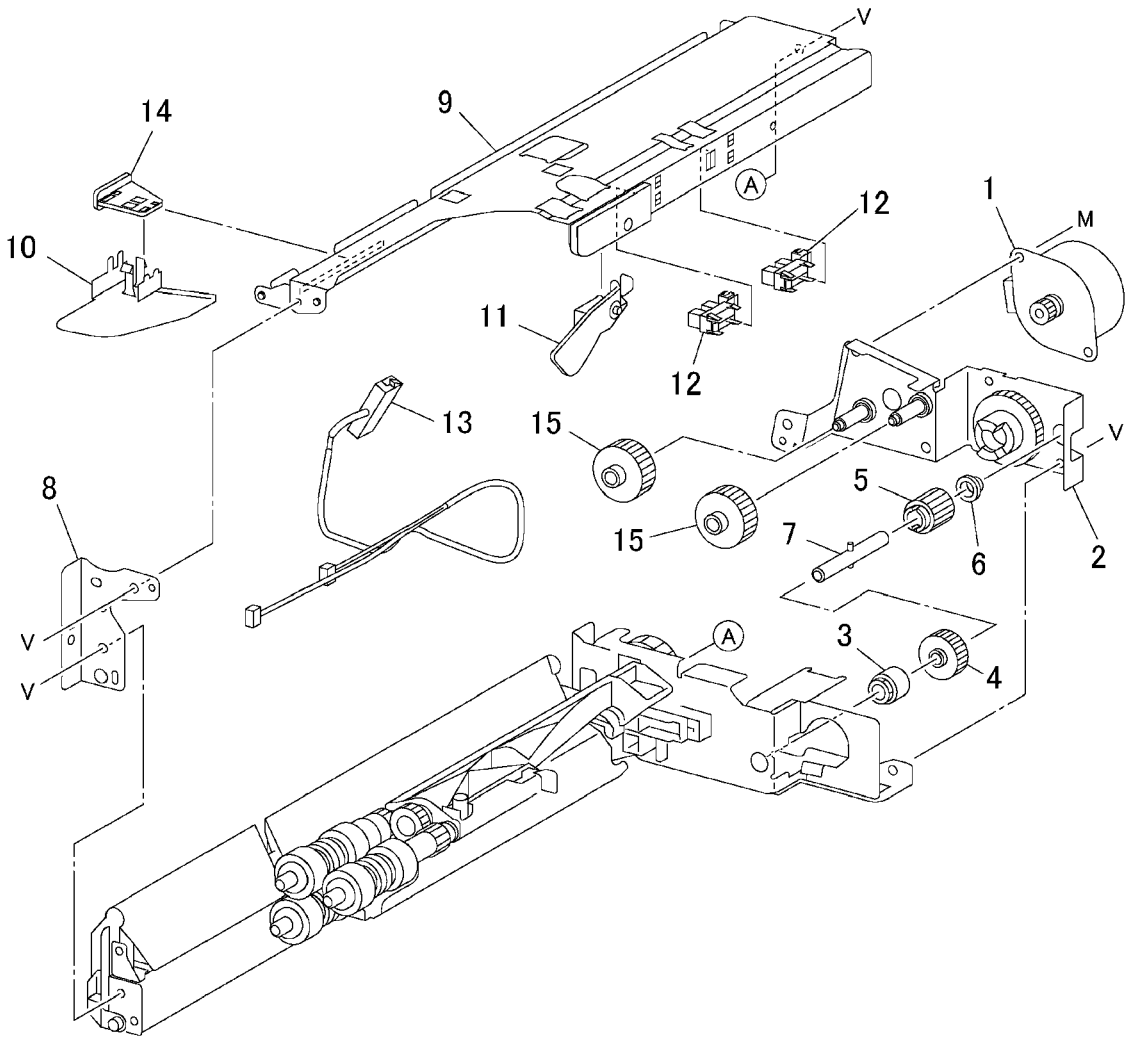
Item	Part	Description
1	–	Spring (Not Spared)
2	600K78460	Roll Kit (3 Rolls/Kit)
3	005K05890	One-way Clutch
4	–	Gear (Not Spared)
5	–	Shaft (Not Spared)
6	–	Chute (Not Spared)
7	–	Spring (Not Spared)
8	–	Friction Clutch (Not Spared)
9	–	Support (Not Spared)
10	–	Holder (Not Spared)
11	–	Spacer (Not Spared)
12	–	Gear (31T) (Not Spared)
13	–	Support (Not Spared)
14	–	Bearing (Not Spared)
15	–	Gear (Not Spared)
16	–	Support (Not Spared)
17	–	Screw (Not Spared)
18	–	Bearing (Not Spared)
19	–	Gear (35T) (Not Spared)
20	–	Spring (Not Spared)
21	–	Lever (Not Spared)



PL 16.11 Tray 4 Feeder: 1 of 2

Item	Part	Description
1	127K23230	Tray 4 Feed/Lift Motor
2	–	Bracket (Not Spared)
3	005K83081	One-way Clutch
4	007K85730	One-way Gear
5	–	Gear (13T) (Not Spared)
6	–	Bearing (Not Spared)
7	–	Shaft (Not Spared)
8	–	Front Frame (Not Spared)
9	–	Upper Frame (Not Spared)
10	–	Front Chute (Not Spared)
11	–	Actuator (Not Spared)
12	130E82190	Tray 4 Level/No Paper Sensor
13	162K56590	Wire Harness
14	–	Support (Not Spared)
15	–	Gear (29T) (Not Spared)

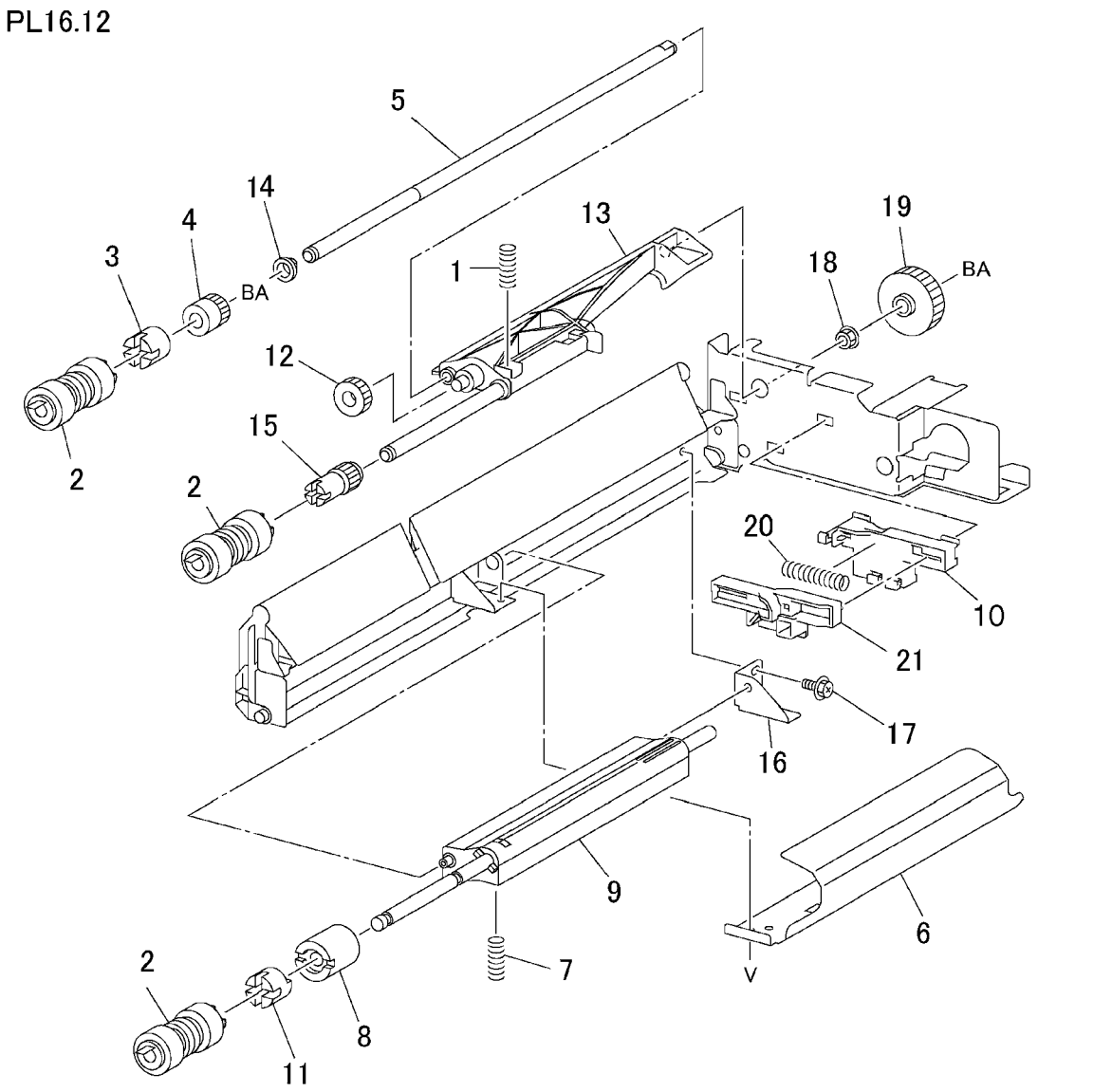
PL16.11



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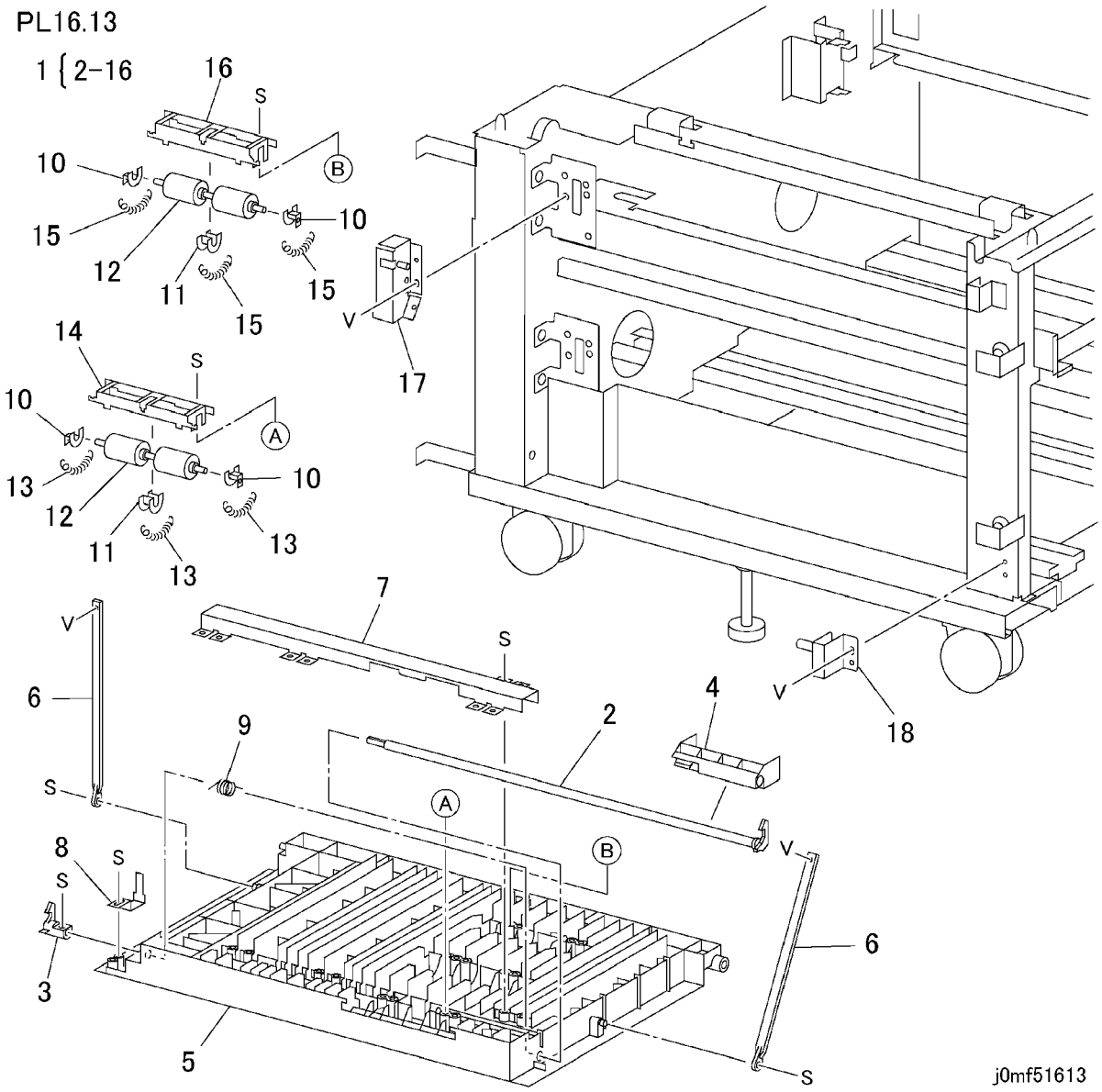
PL 16.12 Tray 4 Feeder: 2 of 2

Item	Part	Description
1	–	Spring (Not Spared)
2	600K78460	Roll Kit (3 Rolls/Kit)
3	005K05890	One-way Clutch
4	–	Gear (Not Spared)
5	–	Shaft (Not Spared)
6	–	Chute (Not Spared)
7	–	Spring (Not Spared)
8	–	Friction Clutch (Not Spared)
9	–	Support (Not Spared)
10	–	Holder (Not Spared)
11	–	Spacer (Not Spared)
12	–	Gear (31T) (Not Spared)
13	–	Support (Not Spared)
14	–	Bearing (Not Spared)
15	–	Gear (Not Spared)
16	–	Support (Not Spared)
17	–	Screw (Not Spared)
18	–	Bearing (Not Spared)
19	–	Gear (35T) (Not Spared)
20	–	Spring (Not Spared)
21	–	Lever (Not Spared)



PL 16.13 Left Cover Assembly

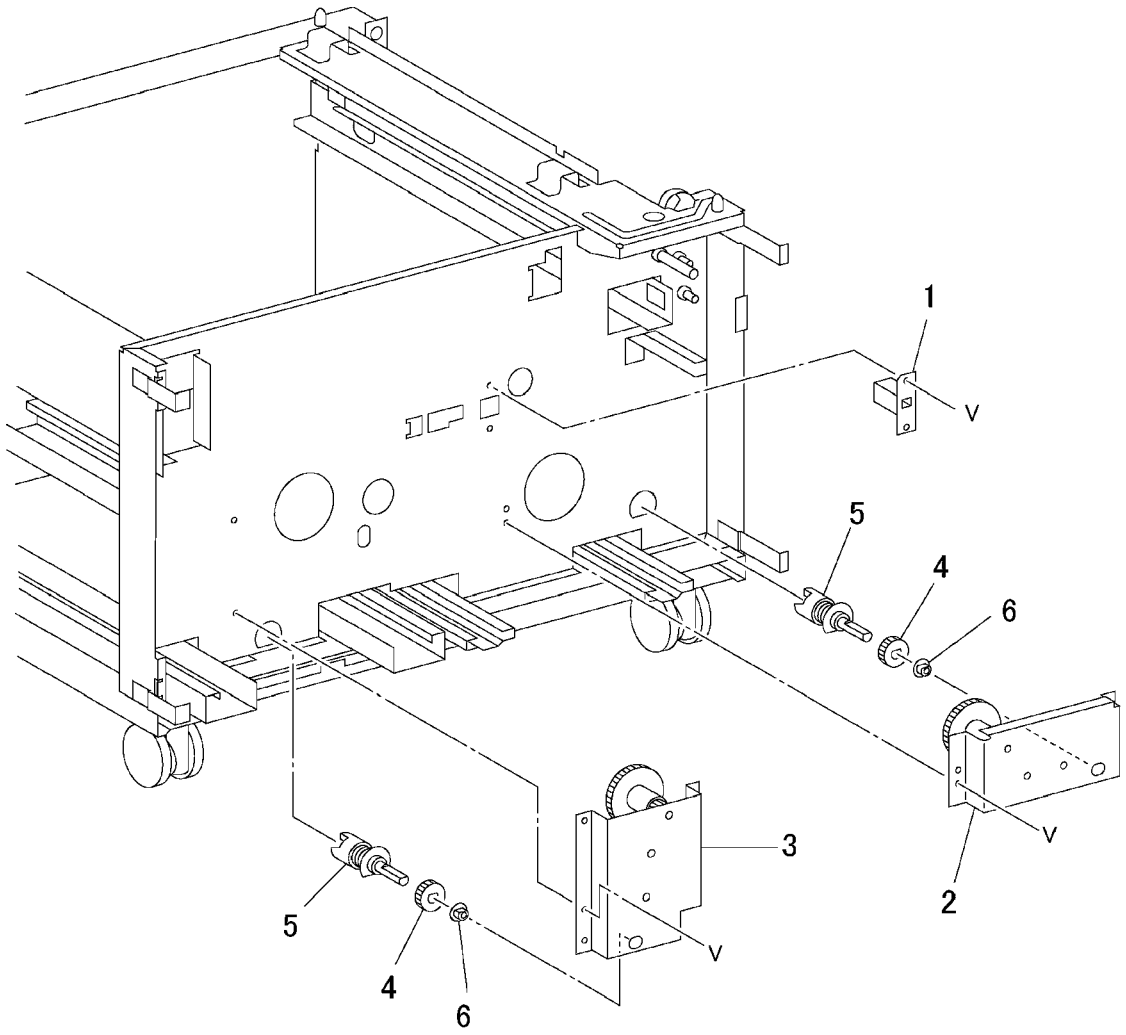
Item	Part	Description
1	802K25731	Left Cover Assembly (REP 14.11)
2	003E53700	Shaft
3	003E53710	Hook
4	011E10800	Handle
5	–	Left Cover (P/O PL 16.13 Item 1)
6	–	Support (P/O PL 16.13 Item 1)
7	–	Chute (P/O PL 16.13 Item 1)
8	–	Actuator (P/O PL 16.13 Item 1)
9	–	Spring (P/O PL 16.13 Item 1)
10	–	Bearing (P/O PL 16.13 Item 1)
11	–	Bearing (P/O PL 16.13 Item 1)
12	–	Pinch Roll (P/O PL 16.13 Item 1)
13	809E28960	Spring
14	–	Bracket (P/O PL 16.13 Item 1)
15	809E28980	Spring
16	–	Bracket (P/O PL 16.13 Item 1)
17	015K49470	Interlock Switch
18	–	Bracket (Not Spared)



PL 16.14 Tray 3/4 Lift Gear Assembly

Item	Part	Description
1	–	Transport Guide
2	015K49460	Gear Assembly (Tray 3)
3	015K49450	Gear Assembly (Tray 4)
4	007E66080	Lift Gear
5	011K96790	Coupling
6	–	Bearing

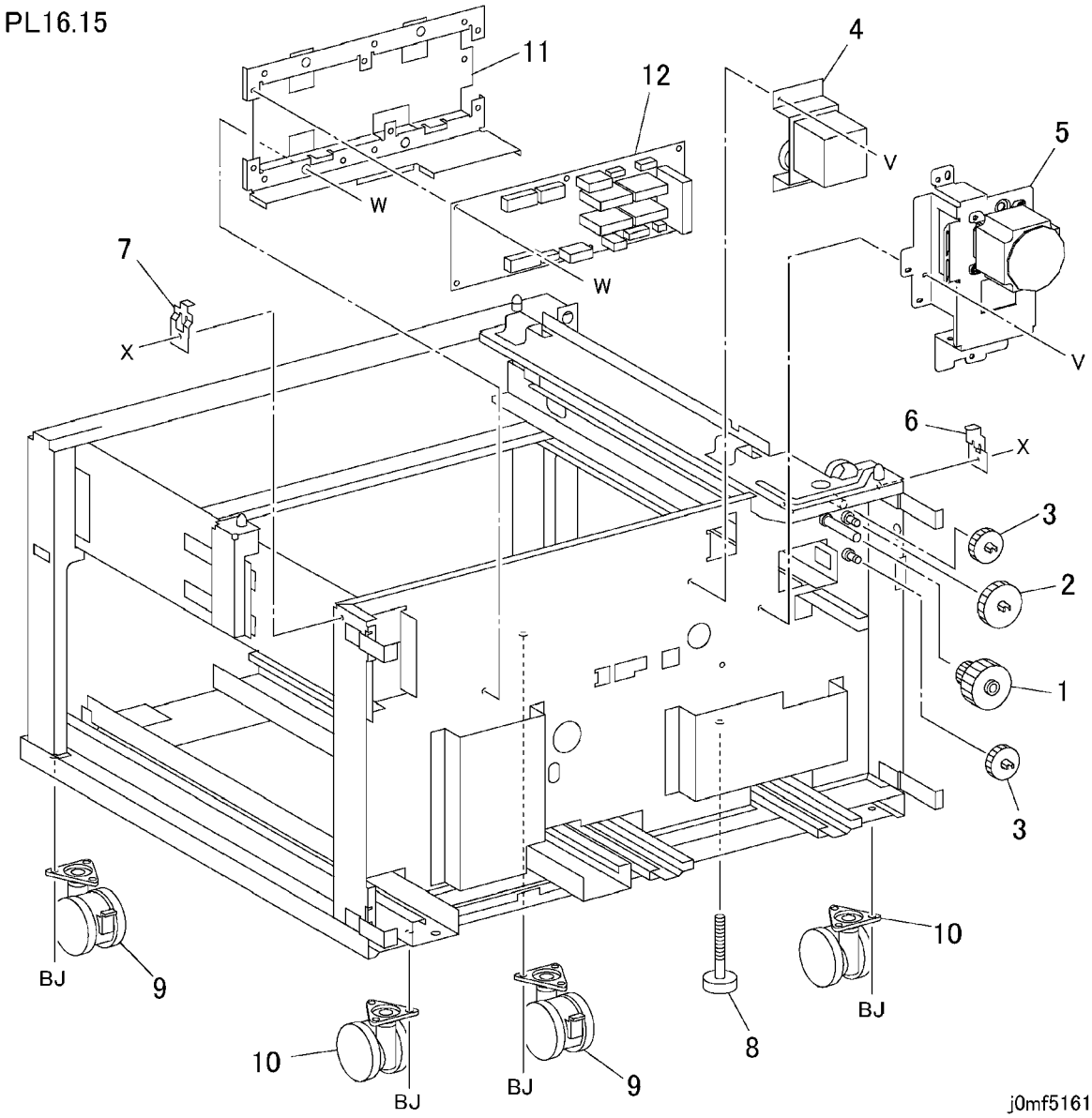
PL16.14



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PL 16.15 Electrical Components and Casters

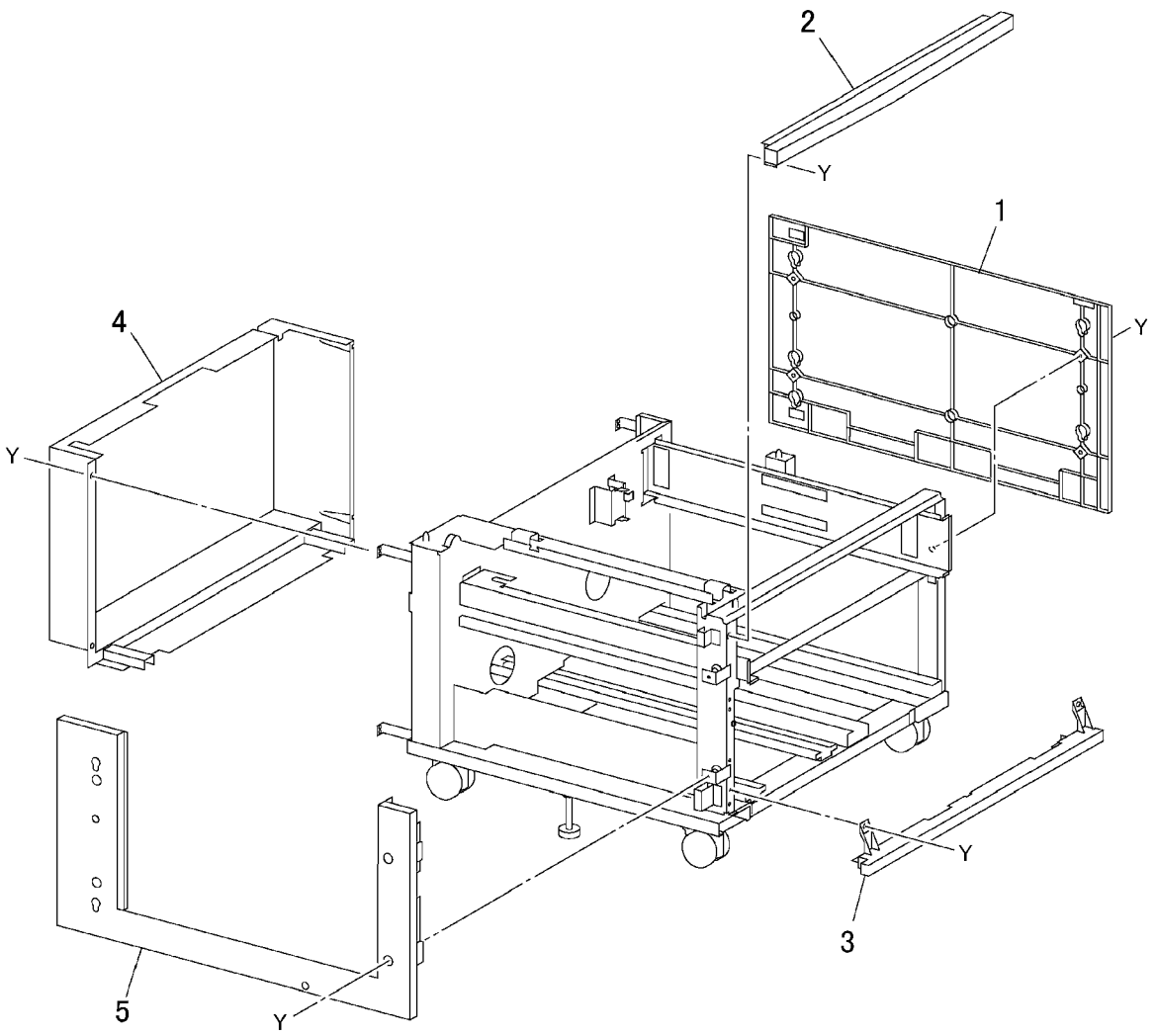
Item	Part	Description
1	007E66060	Gear (23/46T)
2	007E66070	Gear (46T)
3	007E66050	Gear (33T)
4	127K31840	Takeaway Motor 2
5	127K36020	Takeaway Motor 1
6	–	Left Coupling (Not Spared)
7	–	Right Coupling (Not Spared)
8	–	Foot (Not Spared)
9	017K92350	Caster
10	017K92360	Caster
11	–	Bracket (Not Spared)
12	160K85980	Tray Module PWB



PL 16.16 Covers

Item	Part	Description
1	–	Right Cover (Not Spared)
2	802E23950	Front Upper Cover
3	802E23960	Front Lower Cover
4	802K36580	Rear Cover (REP 14.9)
5	802E23930	Left Lower Cover (REP 14.12)

PL16.16

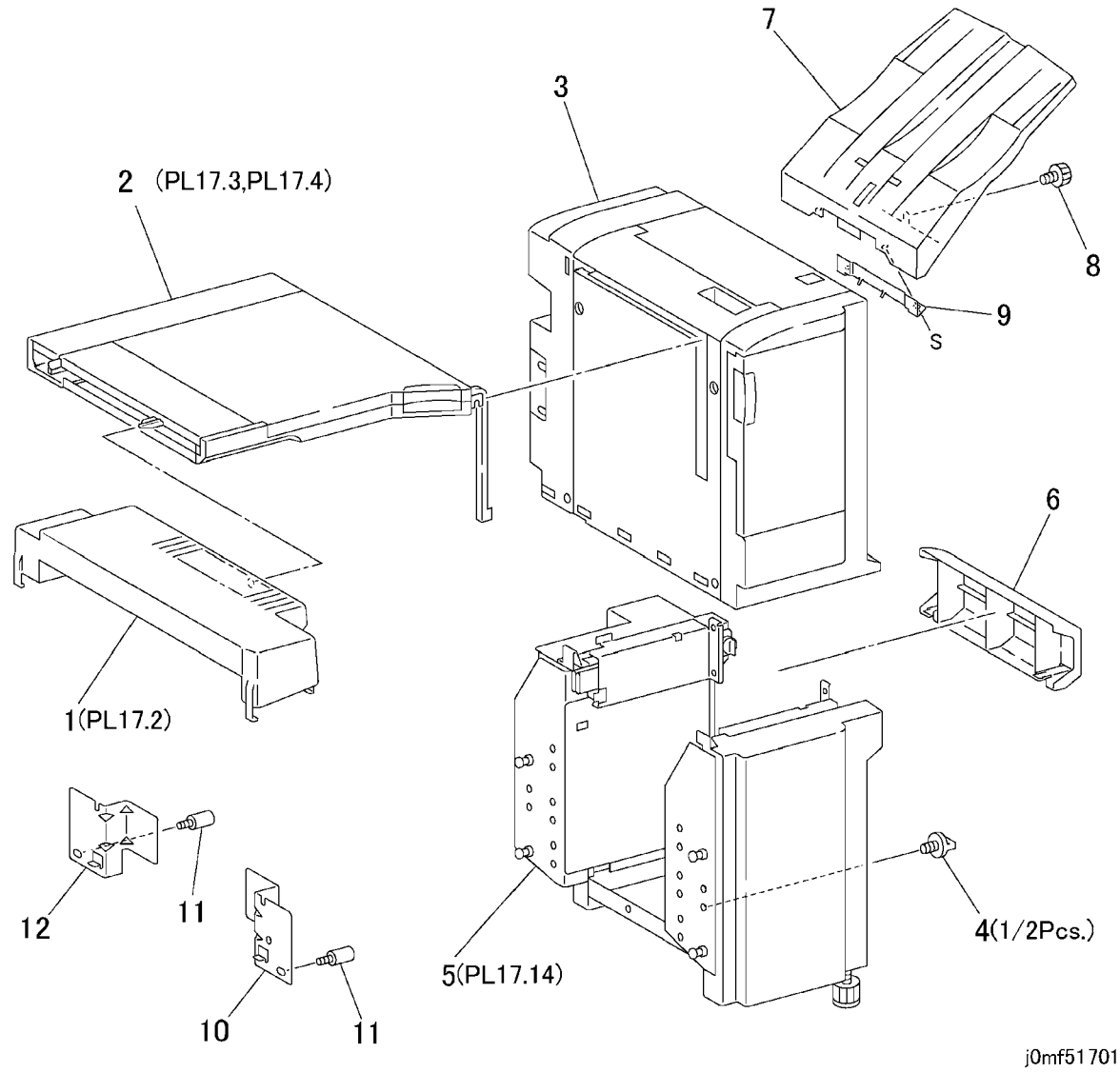


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PL 17.1 Finisher

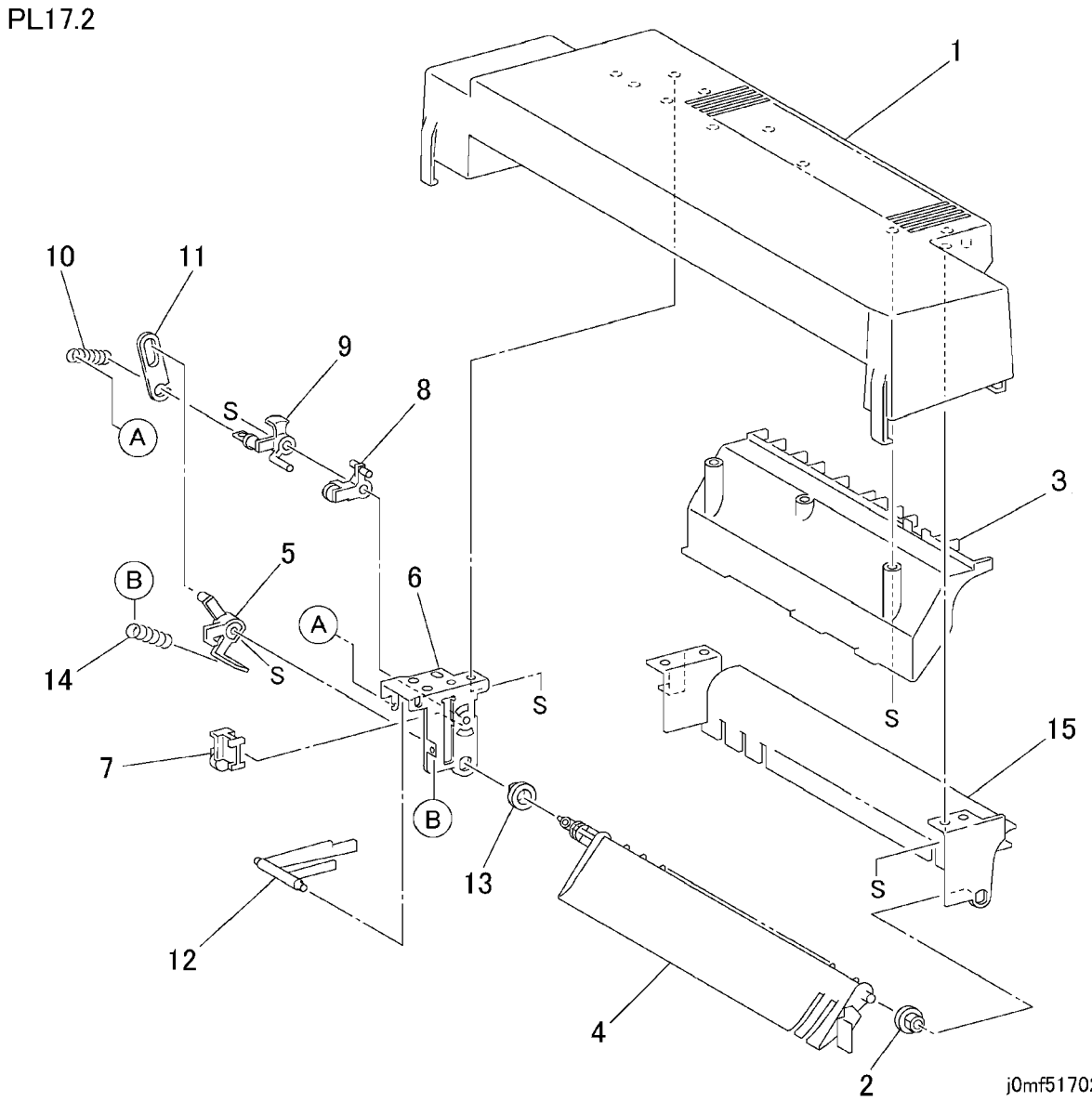
Item	Part	Description
1	802K36650	Gate Assembly
2	801K02480	H-Transport Assembly (REP 12.1)
3	–	Stapler Finisher (Not Spared)
4	003K12090	Thumbscrew
5	–	Rack Assembly (Not Spared) (REP 12.19)
6	–	Right Cover (Not Spared)
7	–	Stacker Tray (Not Spared) (REP 12.20)
8	026E93560	Screw
9	–	Bracket (Not Spared)
10	–	Front Bracket (Not Spared)
11	–	Stud Screw (Not Spared)
12	–	Rear Bracket (Not Spared)

PL17.1



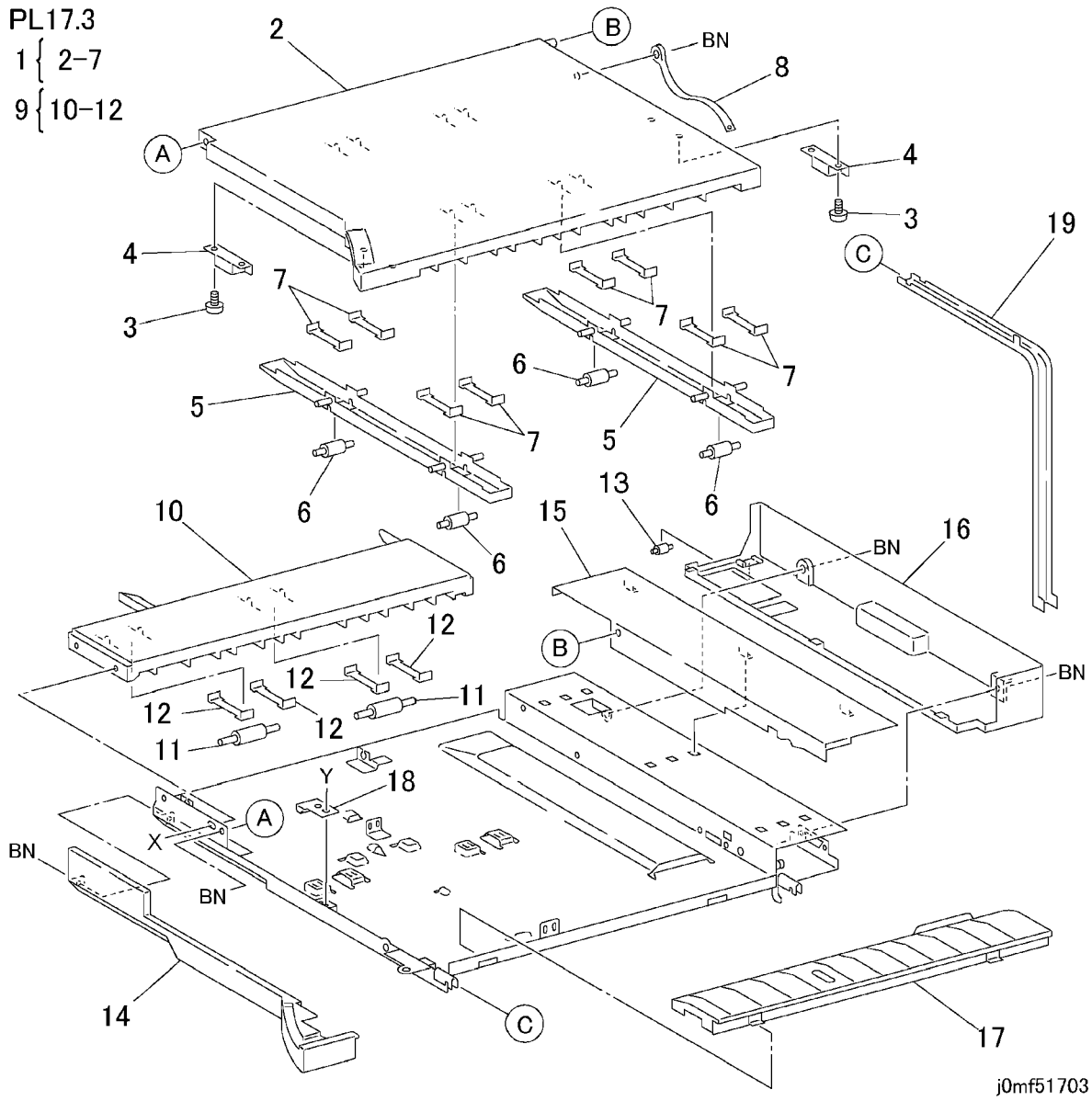
PL 17.2 Gate Assembly

Item	Part	Description
1	–	Gate Cover (Not Spared)
2	–	Bearing (Not Spared)
3	–	Chute (Not Spared)
4	–	In Gate (Not Spared)
5	–	In Gate Lever (Not Spared)
6	–	Gate Bracket (Not Spared)
7	–	Link Assembly (Not Spared)
8	–	Lever Assembly (Not Spared)
9	–	Lever (Not Spared)
10	–	Spring (Not Spared)
11	–	Gate Link (Not Spared)
12	120E20700	Actuator
13	–	Bearing (Not Spared)
14	–	Spring (Not Spared)
15	–	Exit Chute (Not Spared)



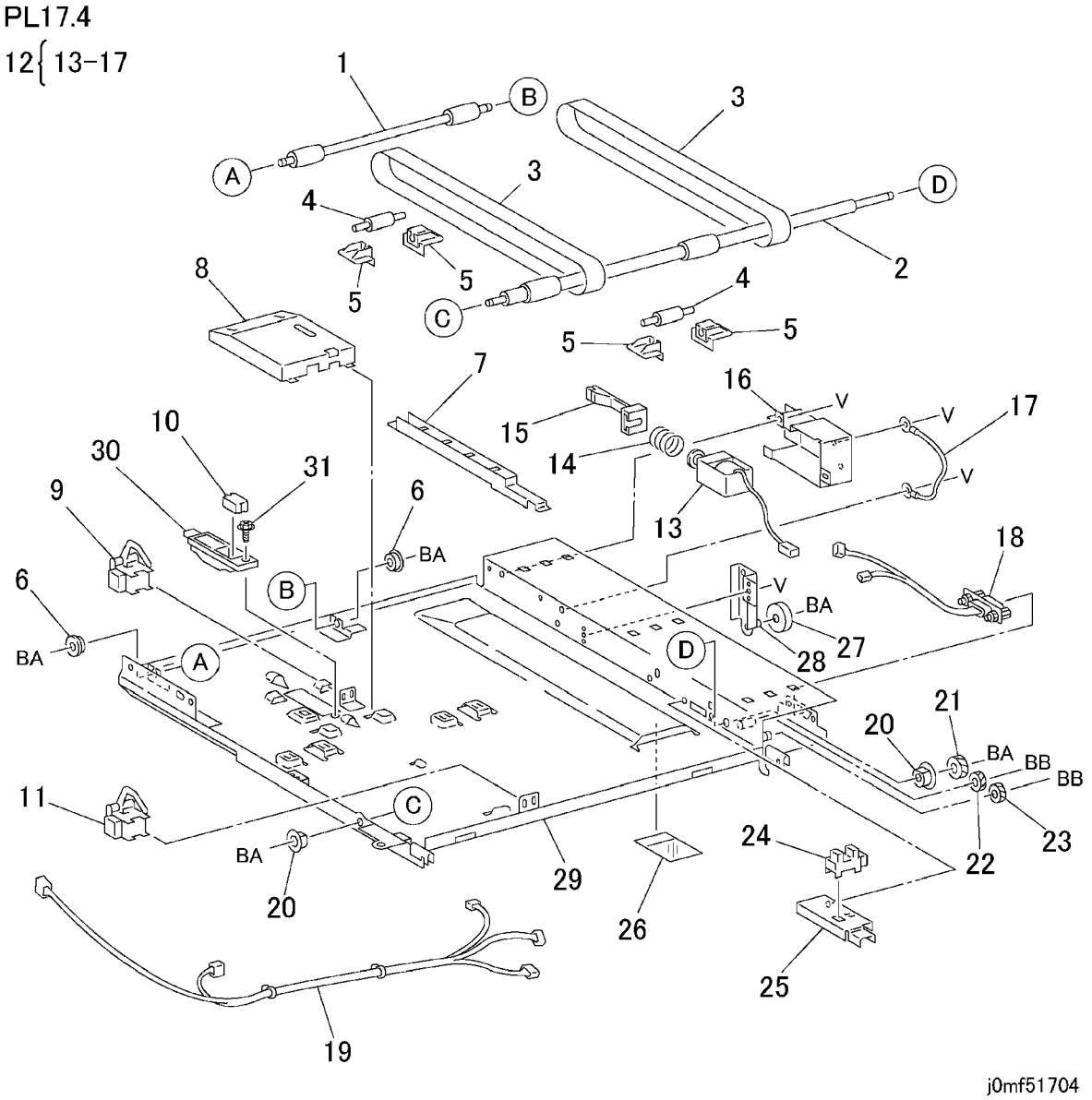
PL 17.3 H-Transport Assembly: 1 of 2

Item	Part	Description
1	802K28600	H-Transport Cover Assembly
2	–	H-Transport Cover (P/O PL 17.3 Item 1)
3	–	Screw (P/O PL 17.3 Item 1)
4	121E91450	Magnet
5	–	Guide (P/O PL 17.3 Item 1)
6	–	Roll (P/O PL 17.3 Item 1)
7	–	Spring Plate (P/O PL 17.3 Item 1)
8	–	Stop (Not Spared)
9	802K28590	Entrance Upper Cover Assembly
10	–	Entrance Upper Cover (P/O PL 17.3 Item 9)
11	–	Roll (P/O PL 17.3 Item 9)
12	–	Spring Plate (P/O PL 17.3 Item 9)
13	–	Roll (Not Spared)
14	–	Front Cover (Not Spared)
15	–	Upper Rear Cover (Not Spared)
16	–	Rear Cover (Not Spared)
17	–	Exit Guide (Not Spared)
18	–	Stop (Not Spared)
19	–	Support (Not Spared)



PL 17.4 H-Transport Assembly: 2 of 2

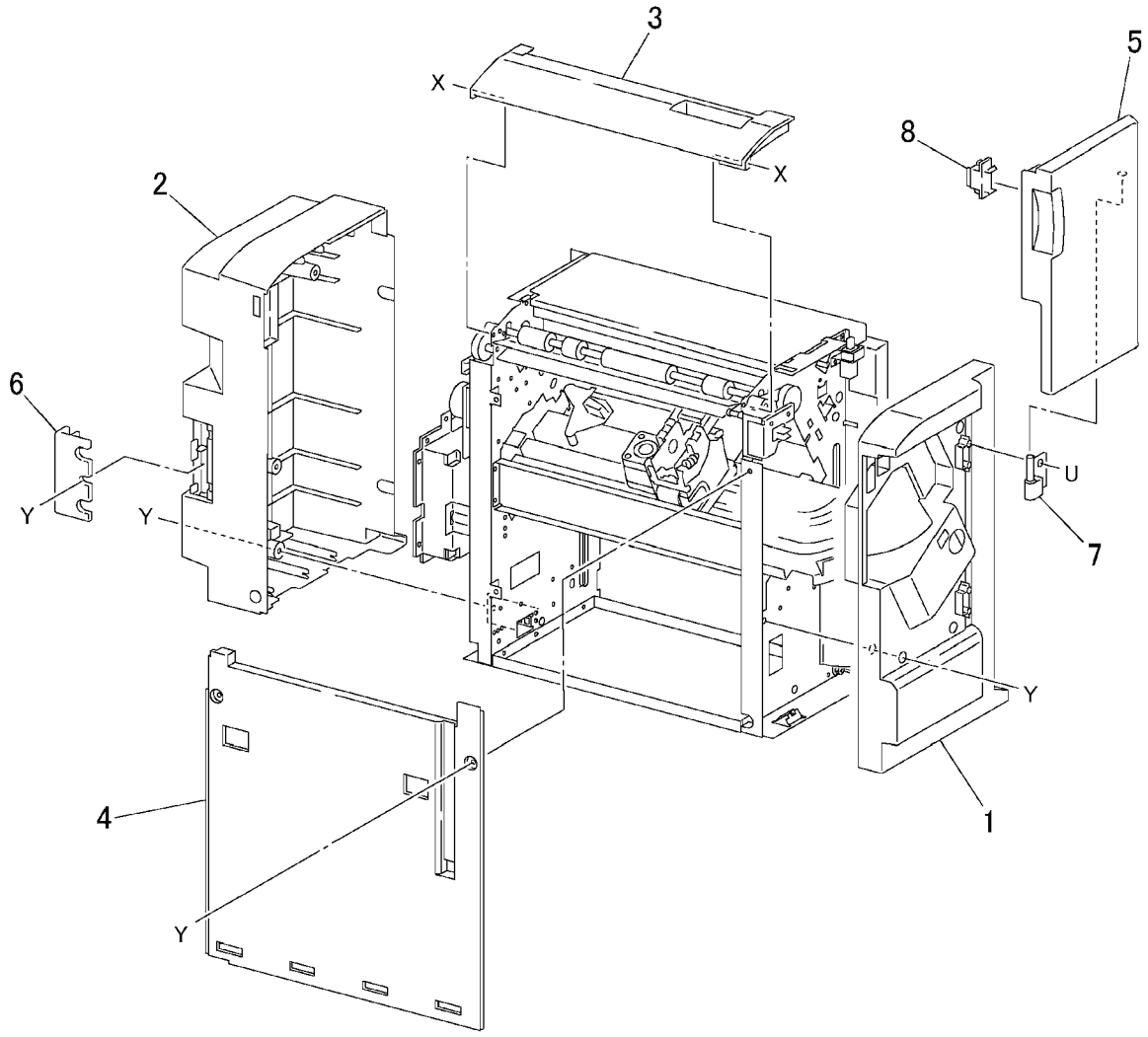
Item	Part	Description
1	–	H-Transport Roll (In) (Not Spared)
2	–	H-Transport Roll (Out) (Not Spared)
3	023E20020	H-Transport Belt (REP 12.2)
4	–	Roll (Not Spared)
5	–	Support (Not Spared)
6	–	Bearing (Not Spared)
7	802E30150	Harness Guide
8	802E30140	Cover
9	130K93360	Entrance Sensor (REP 12.3)
10	130E82970	Top Tray Full Sensor
11	130K62360	Exit Sensor
12	802K28580	Gate In Solenoid Assembly
13	–	Gate In Solenoid (P/O PL 17.4 Item 12)
14	–	Spring (P/O PL 17.4 Item 12)
15	–	LInk (P/O PL 17.4 Item 12)
16	–	Cover (P/O PL 17.4 Item 12)
17	–	Ground Wire (P/O PL 17.4 Item 12)
18	162K69070	Wire Harness
19	162K69060	Wire Harness
20	–	Bearing (Not Spared)
21	007E67850	Gear (37T)
22	007E67860	Gear (30T)
23	007E67870	Gear (26T)
24	130E82540	Interlock Sensor
25	–	Bracket (Not Spared)
26	038E24650	Paper Guide
27	022E88210	Roll
28	–	Bracket (Not Spared)
29	–	Frame (Not Spared)
30	–	Bracket (Not Spared)
31	–	Screw (Not Spared)



PL 17.5 Covers

Item	Part	Description
1	802E28560	Front Cover
2	802E28520	Rear Cover
3	802E28530	Top Cover
4	802E28540	Left Cover
5	802E28550	Front Cover Door
6	802E28570	Left Panel
7	–	Hinge (Not Spared)
8	121E88470	Magnet

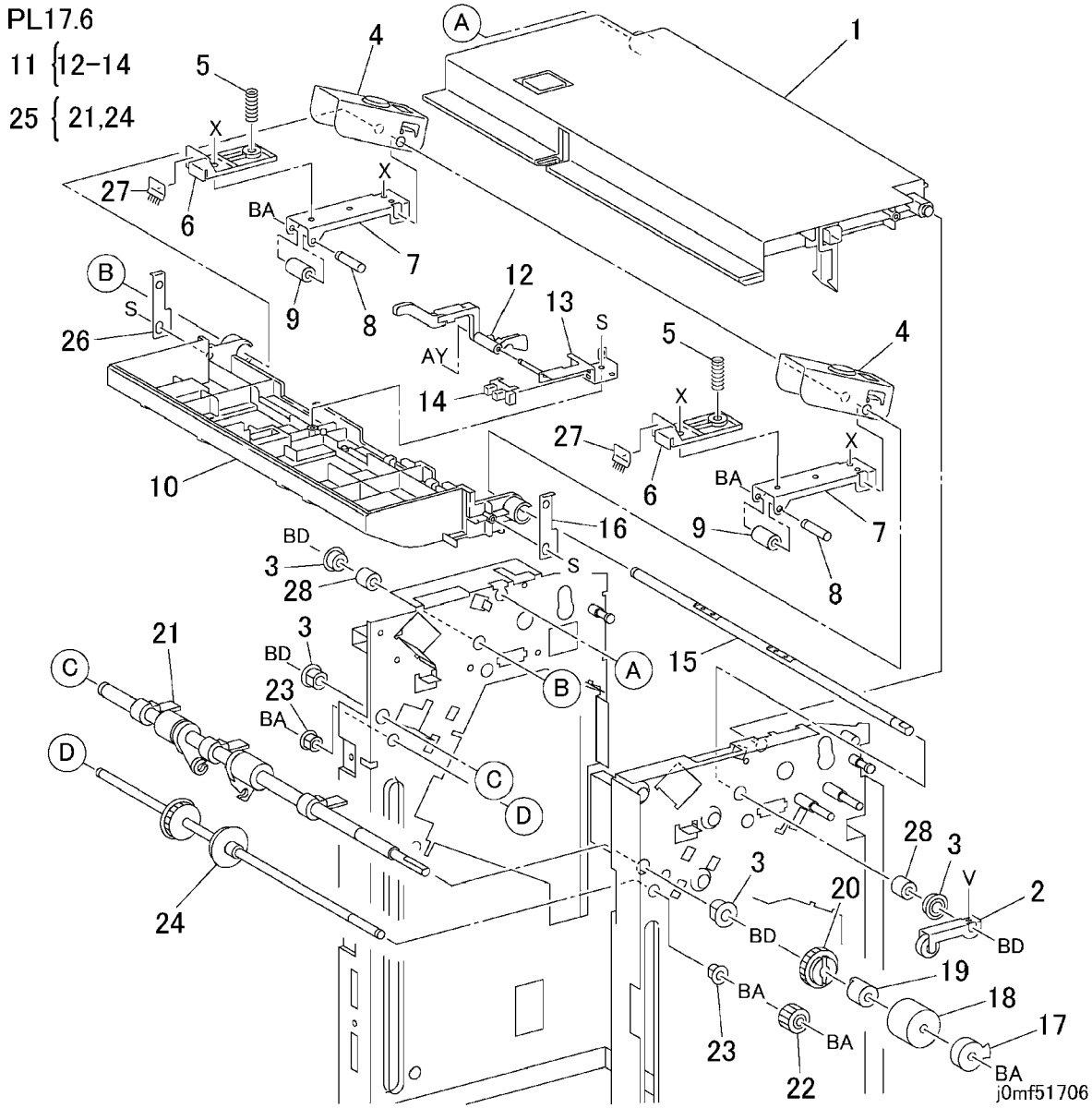
PL17.5



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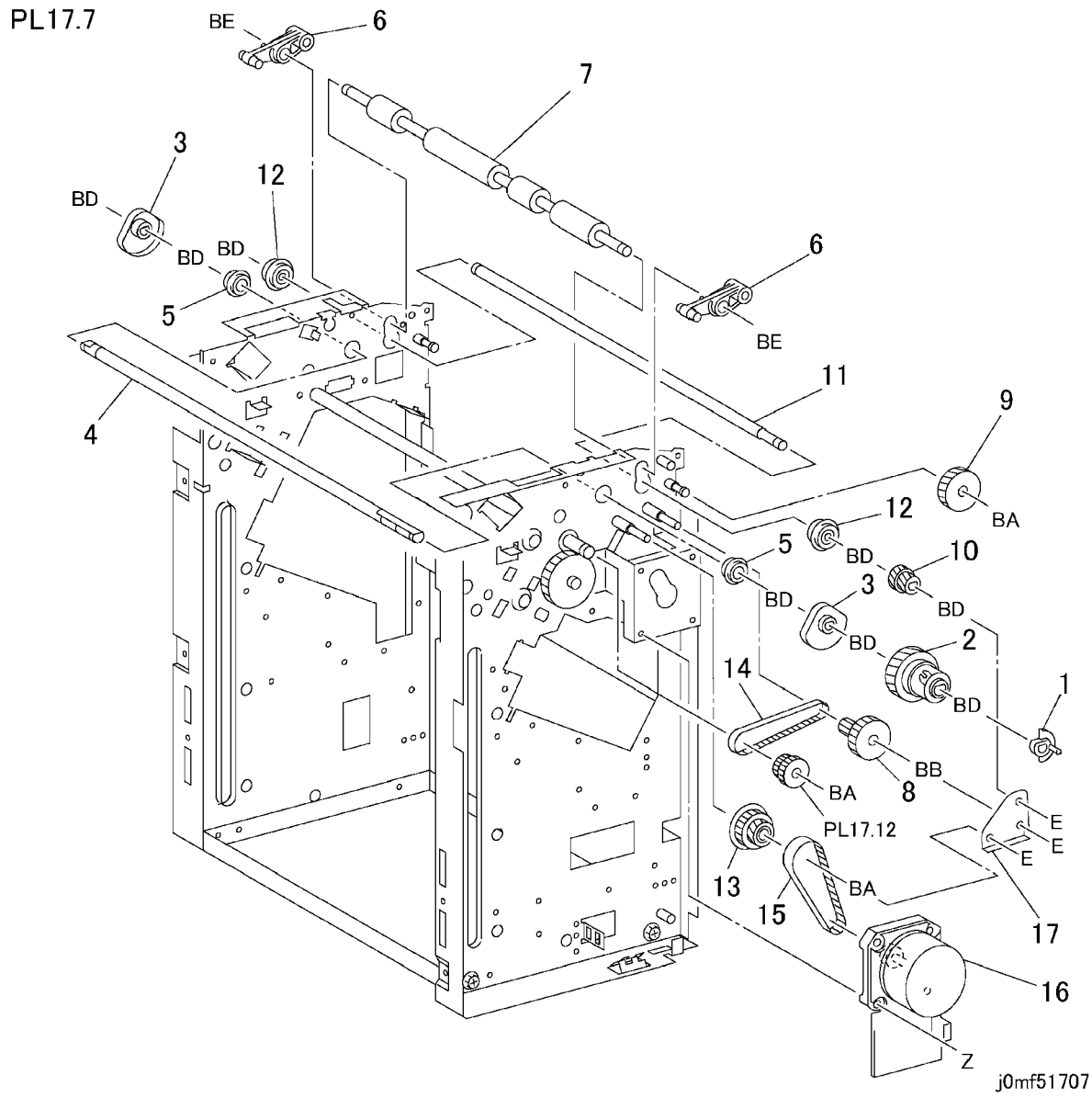
PL 17.6 Top Cover and Eject Roll

Item	Part	Description
1	802K28570	Top Cover
2	–	Arm (Not Spared)
3	–	Bearing (Not Spared)
4	–	Bracket (Not Spared)
5	–	Spring (Not Spared)
6	830E81670	Support
7	–	Bracket (Not Spared)
8	–	Shaft (Not Spared)
9	022K62610	Eject Pinch Roll
10	–	Eject Chute (Not Spared)
11	130K61920	Stack Height Sensor Assembly (REP 12.5)
12	–	Actuator (P/O PL 17.6 Item 11)
13	–	Bracket (P/O PL 17.6 Item 11)
14	130E82530	Stack Height Sensor
15	–	Shaft (Not Spared)
16	–	Link (Not Spared)
17	120E20970	Actuator
18	005E16220	Clutch
19	005E16510	Collar
20	007E67760	Gear (28Z)
21	–	Eject Roll (P/O PL 17.6 Item 25)
22	007K86910	Gear (20T)
23	013E20240	Bearing
24	–	Eject Shaft (P/O PL 17.6 Item 25)
25	006K21730	Eject Roll Assembly (REP 12.6)
26	–	Link (Not Spared)
27	–	Static Eliminator (Not Spared)
28	–	Collar (Not Spared)



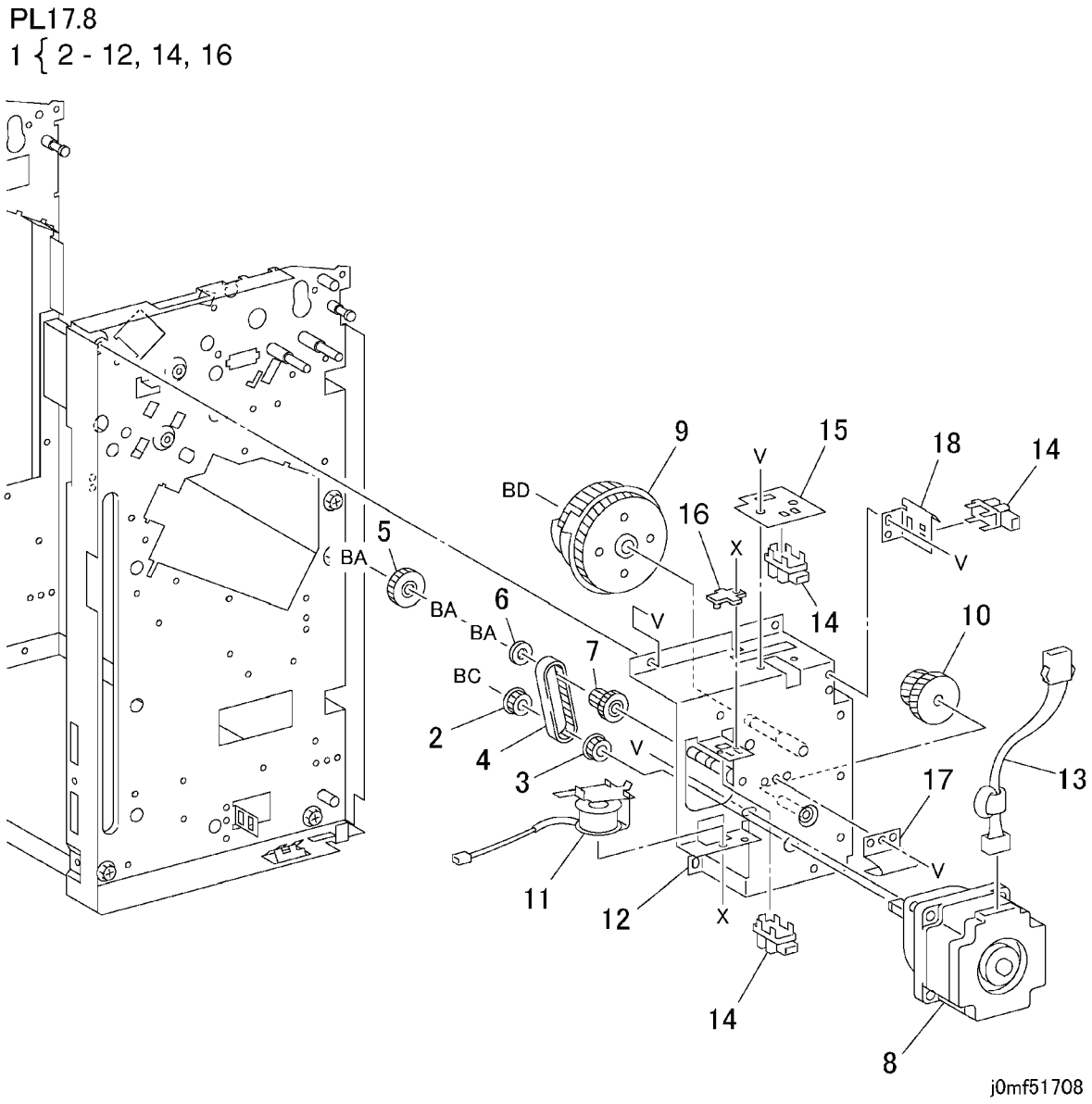
PL 17.7 Paper Transportation: 1 of 2

Item	Part	Description
1	120E20690	Actuator
2	121K24610	Decurler Cam Clutch
3	008E94070	Cam
4	–	Shaft (Not Spared)
5	–	Bearing (Not Spared)
6	031E94030	Arm
7	059K20210	Decurler Roll (REP 12.7)
8	007E67740	Gear (40Z/20T)
9	007E67750	Gear (40Z)
10	007E72090	Gear (18Z/21T)
11	–	Shaft (Not Spared)
12	–	Bearing (Not Spared)
13	007E67730	Gear (23Z/52T)
14	023E20160	Belt (REP 12.9)
15	423W29655	Belt
16	127K32840	Finisher Drive Motor (REP 12.8)
17	–	Bracket (Not Spared)



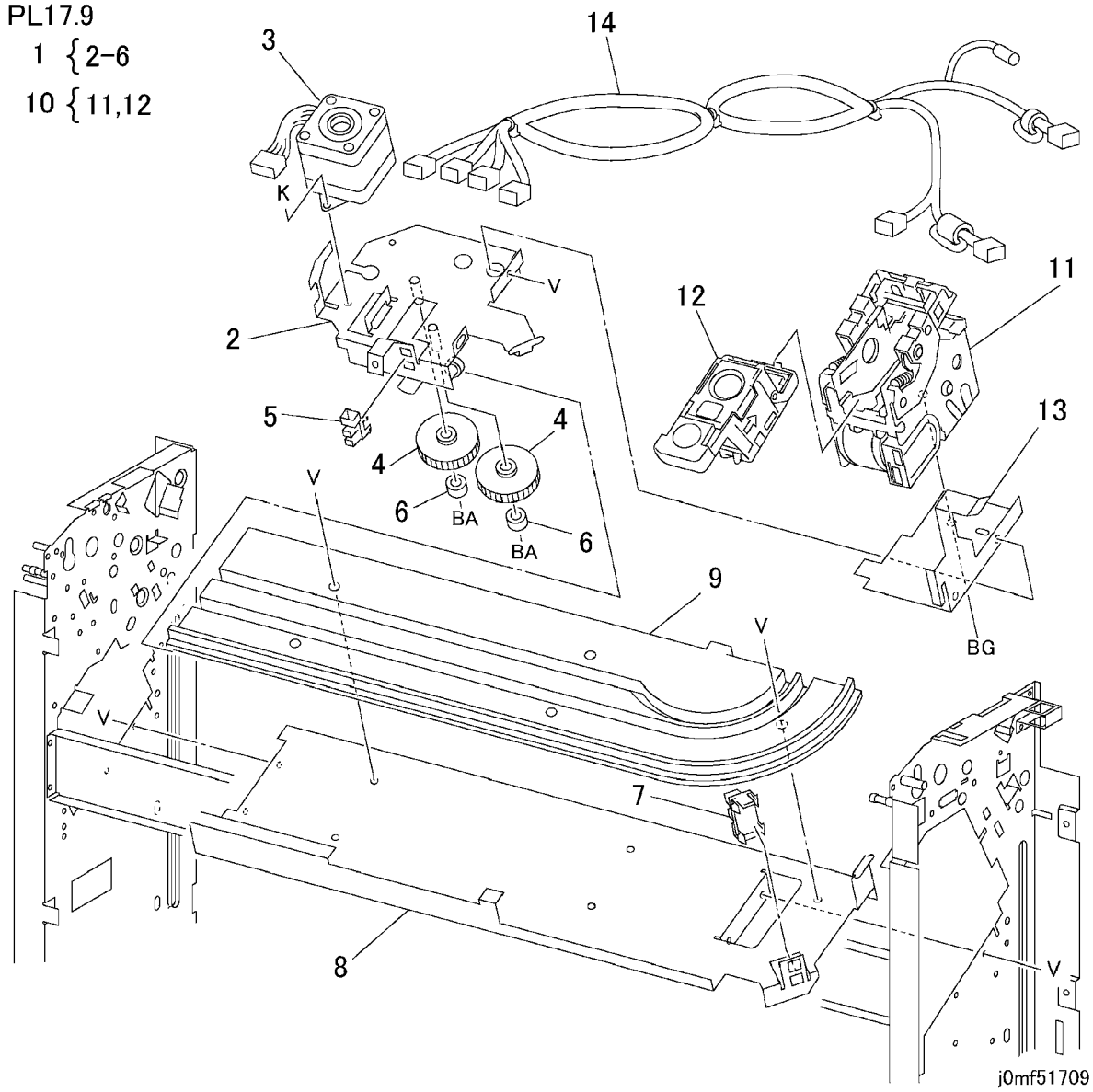
PL 17.8 Paper Transportation: 2 of 2

Item	Part	Description
1	015K52280	Cam Bracket Assembly
2	020E34970	Pulley
3	007E67780	Gear (15Z)
4	423W28054	Belt
5	007E67810	Gear (30Z)
6	–	Collar (P/O PL 17.8 Item 1)
7	007E67790	Gear Pulley
8	127K32870	Eject Motor
9	007E67800	Cam Gear
10	007E67770	Gear (42Z/27Z)
11	121K24620	Set Clamp Solenoid
12	–	Bracket (P/O PL 17.8 Item 1)
13	–	Wire Harness (Not Spared)
14	130E82540	Home Sensor
15	–	Plate (Not Spared)
16	–	Stop (P/O PL 17.8 Item 1)
17	–	Spring (Not Spared)
18	–	Bracket (Not Spared)



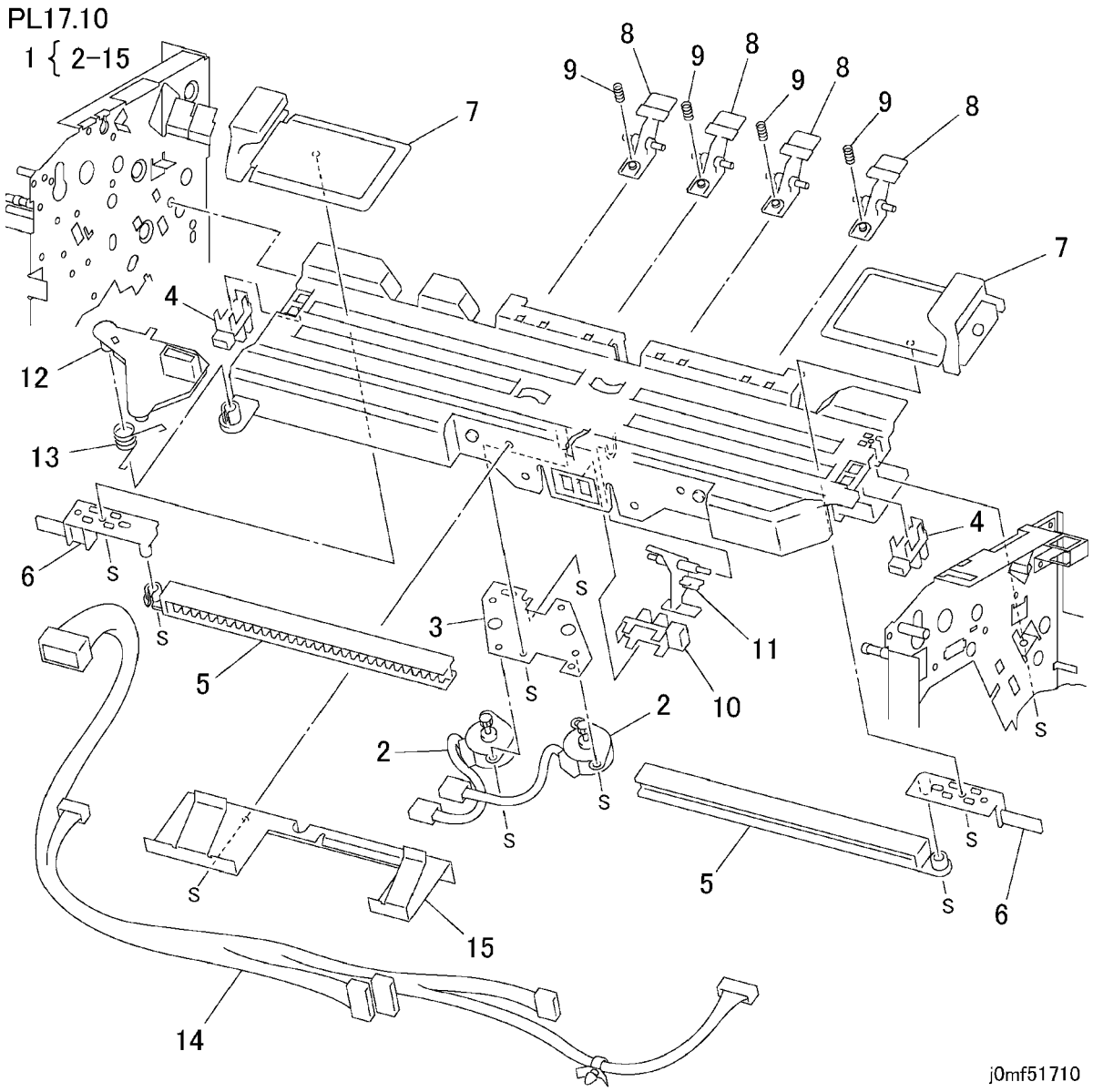
PL 17.9 Stapler Unit

Item	Part	Description
1	041K94260	Carriage Assembly
2	–	Bracket (P/O PL 17.9 Item 1)
3	127K32860	Staple Move Motor
4	–	Gear (P/O PL 17.9 Item 1)
5	130E82530	Staple Sensor
6	–	Roll (P/O PL 17.9 Item 1)
7	–	Staple Front Corner Sensor (Not Spared)
8	–	Plate (Not Spared)
9	001E59600	Rail (REP 12.10)
10	029K91990	Stapler Assembly (REP 12.11)
11	–	Stapler (P/O PL 17.9 Item 10)
12	–	Cartridge (P/O PL 17.9 Item 10)
13	–	Bracket (Not Spared)
14	962K07440	Stapler Harness



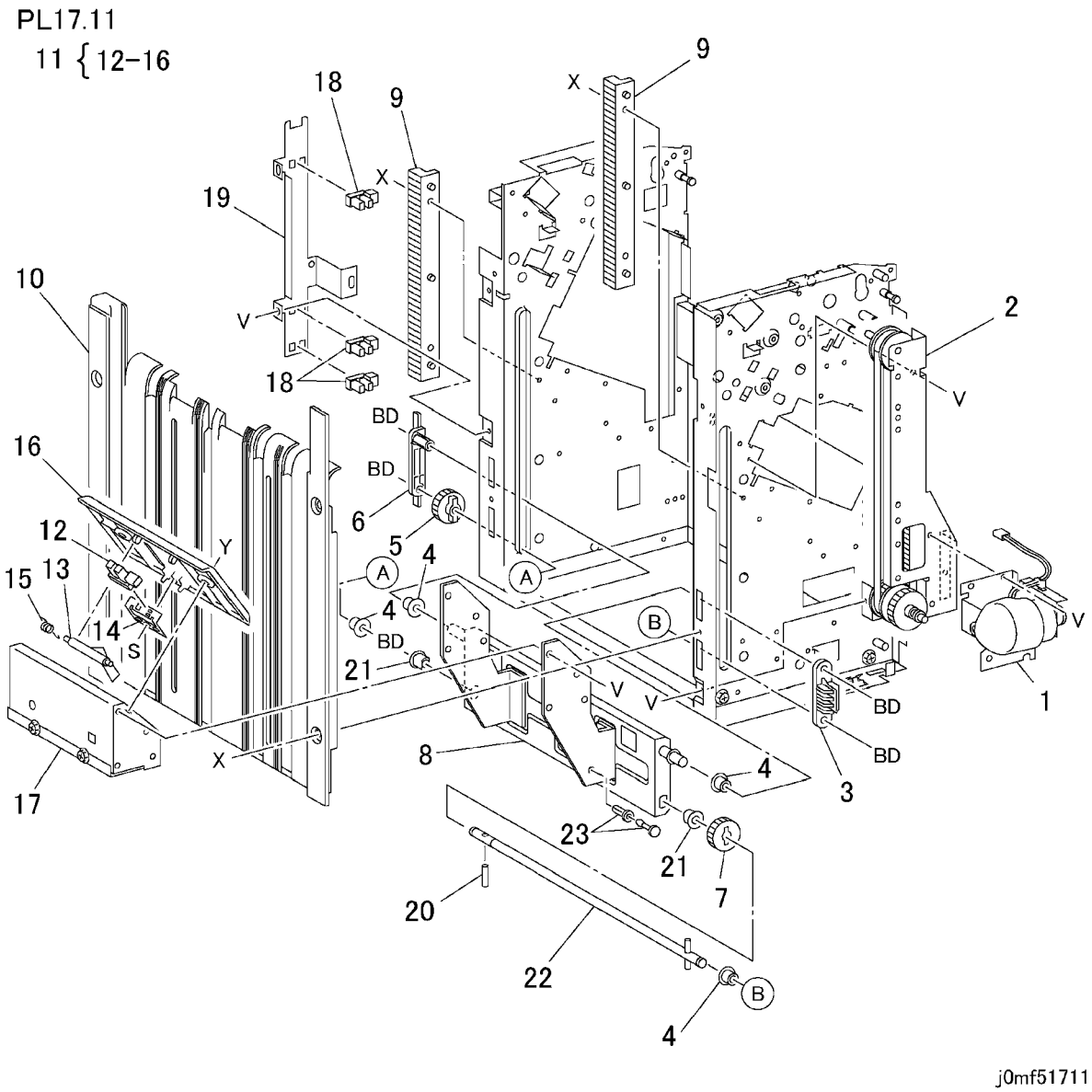
PL 17.10 Compiler Tray Assembly

Item	Part	Description
1	050K43880	Compiler Tray Assembly (REP 12.12)
2	127K32850	Front/Rear Tamper Motor
3	–	Plate (P/O PL 17.10 Item 1)
4	130E82530	Front/Rear Tamper Home Sensor
5	–	Rack (P/O PL 17.10 Item 1)
6	–	Actuator (P/O PL 17.10 Item 1)
7	–	Tamper (P/O PL 17.10 Item 1)
8	–	Finger (P/O PL 17.10 Item 1)
9	–	Spring (P/O PL 17.10 Item 1)
10	130E82540	Compiler Paper Sensor
11	–	Actuator (P/O PL 17.10 Item 1)
12	038E24410	Paper Guide
13	809E33600	Spring
14	–	Wire Harness (P/O PL 17.10 Item 1)
15	–	End Guide (P/O PL 17.10 Item 1)



PL 17.11 Elevator

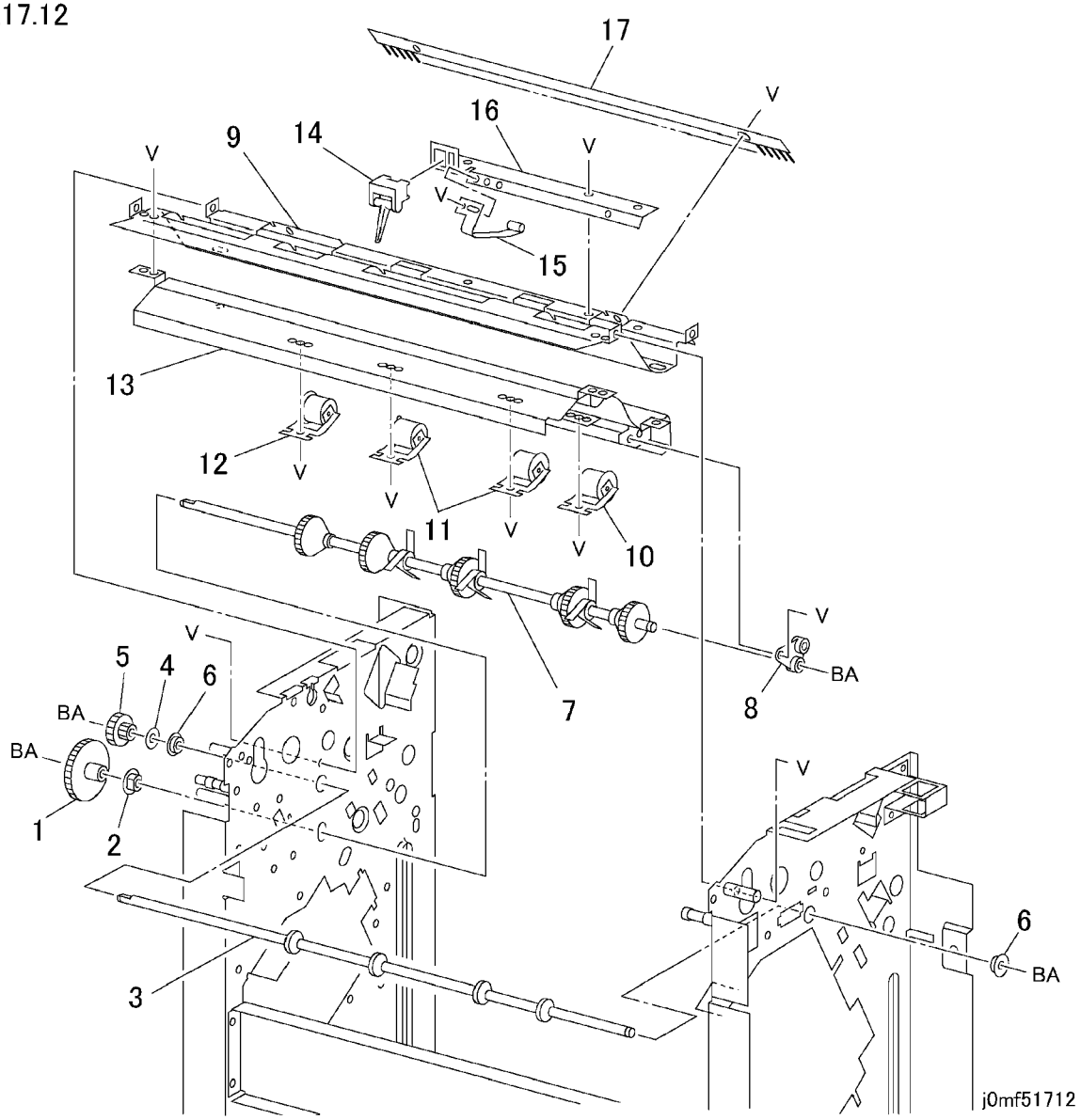
Item	Part	Description
1	127K33420	Stacker Motor Assembly (REP 12.13)
2	015K50680	Front Elevator Bracket (REP 12.14)
3	019E50340	Clamp
4	–	Bearing (Not Spared)
5	007E67830	Rear Gear
6	–	Actuator (Not Spared)
7	007E67840	Front Gear
8	–	Bracket (Not Spared)
9	007E67820	Rack
10	–	Tray Guide (Not Spared)
11	015K51640	Paper Stack Sensor Assembly
12	130E82530	Sensor
13	–	Actuator (P/O PL 17.11 Item 11)
14	–	Bracket (P/O PL 17.11 Item 11)
15	–	Spring (P/O PL 17.11 Item 11)
16	–	Cover (P/O PL 17.11 Item 11)
17	–	Bracket (Not Spared)
18	–	Sensor (Not Spared)
19	–	Bracket (Not Spared)
20	–	Pin (Not Spared)
21	–	Bearing (Not Spared)
22	–	Shaft (Not Spared)
23	–	Rivet (Not Spared)



PL 17.12 Exit Assembly

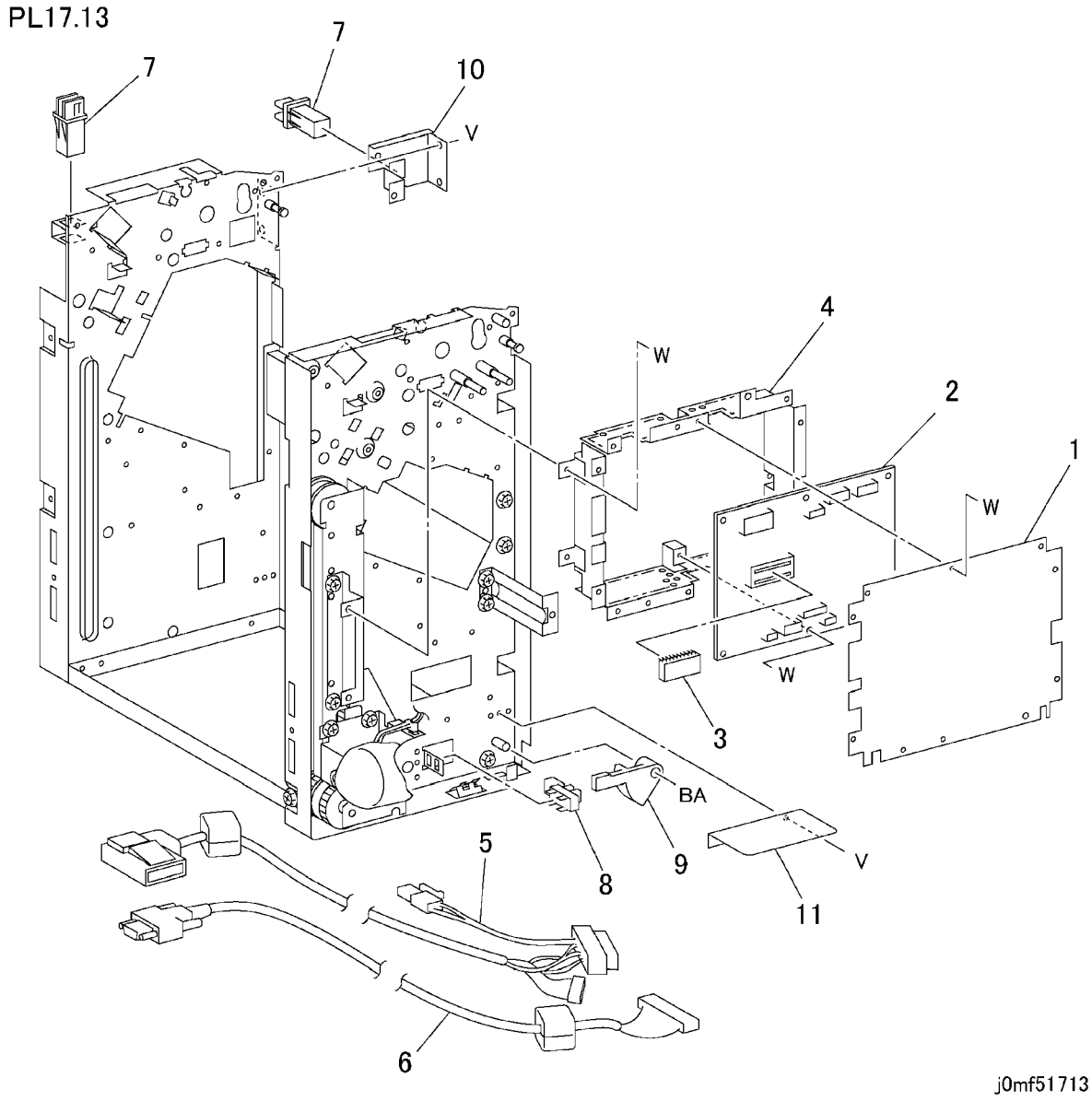
Item	Part	Description
1	007E72080	Gear (48Z)
2	–	Bearing (Not Spared)
3	006K21720	Exit Shaft
4	–	Collar (Not Spared)
5	007E72070	Gear (32Z/18T)
6	–	Bearing (Not Spared)
7	006K21970	Paddle Gear Shaft (REP 12.15)
8	013E20250	Paddle Bearing
9	–	Lower Exit Chute (Not Spared)
10	022K65880	Pinch Roll
11	–	Pinch Roll (Not Spared)
12	–	Pinch Roll (Not Spared)
13	–	Upper Exit Chute (Not Spared)
14	130K94740	Compiler Entrance Sensor
15	–	Spring Plate (Not Spared)
16	–	Bracket (Not Spared)
17	105E11320	Static Eliminator

PL17.12



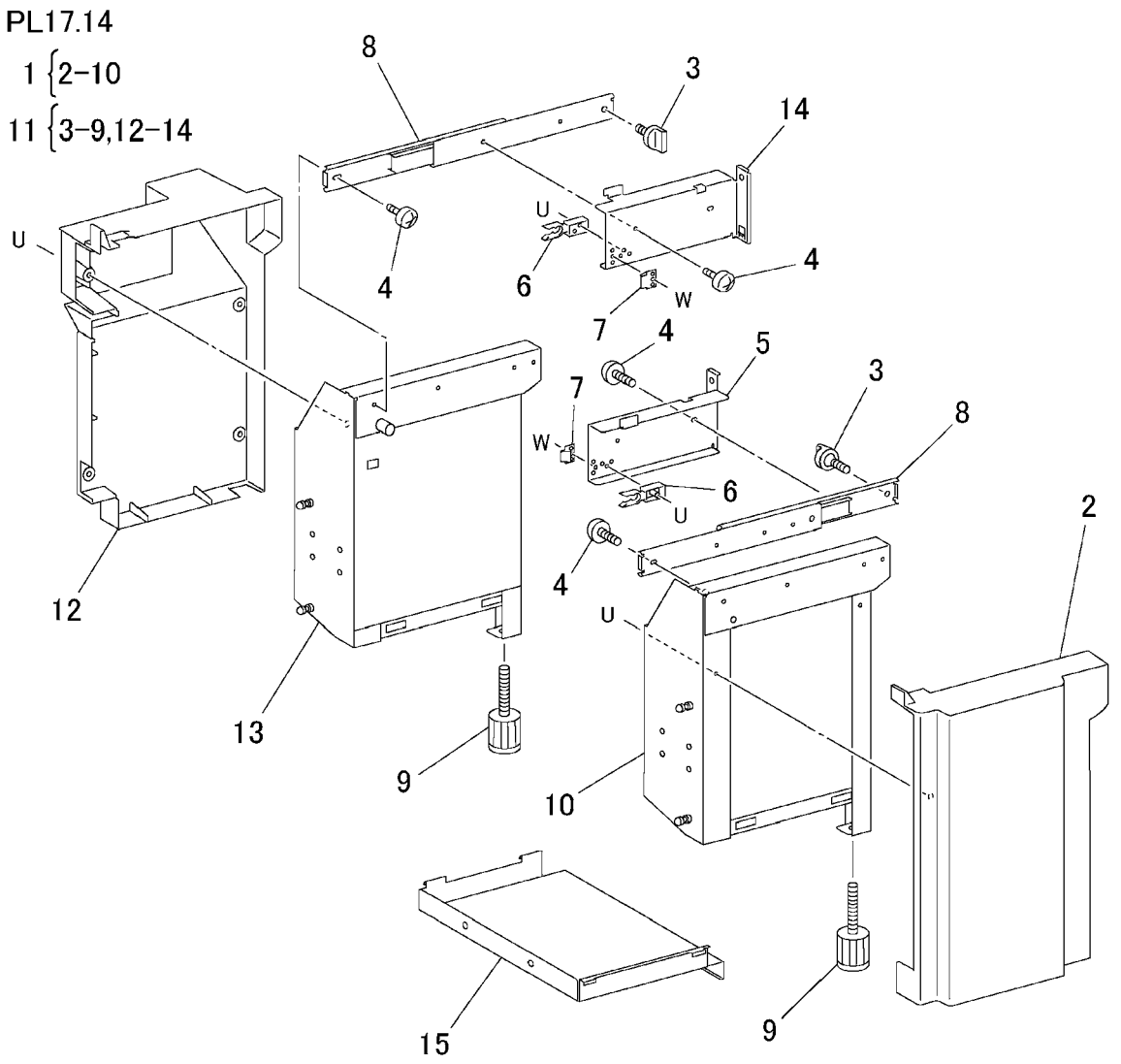
PL 17.13 Electrical Components

Item	Part	Description
1	–	PWB Cover (Not Spared)
2	160K76660	Finisher PWB (REP 12.16)
3	537K64070	ROM
4	–	PWB Bracket (Not Spared)
5	962K10120	DC Harness
6	962K10130	Cable
7	110E97990	Top Cover/Front Door Interlock Switch
8	130E82530	Docking Interlock Switch
9	–	Spring Plate (Not Spared)
10	–	Bracket (Not Spared)
11	–	Plate (Not Spared)



PL 17.14 Rack Assembly

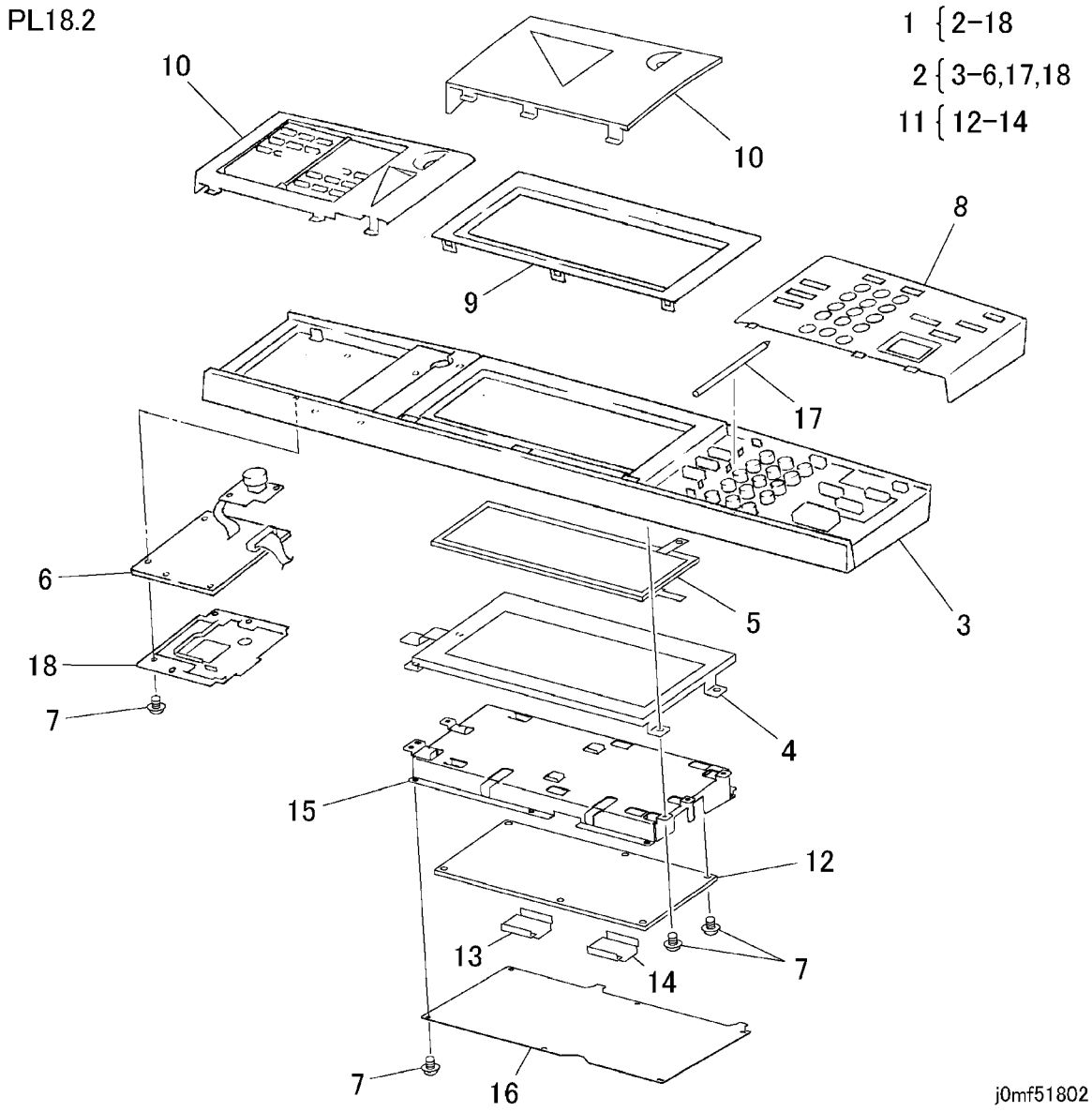
Item	Part	Description
1	802K36660	Front Rack Assembly
2	–	Front Cover (P/O PL 17.14 Item 1)
3	003K12090	Knob Screw
4	–	Screw (P/O PL 17.14 Item 1,PL 17.14 Item 11)
5	–	Bracket (P/O PL 17.14 Item 1,PL 17.14 Item 11)
6	–	Stop (P/O PL 17.14 Item 1,PL 17.14 Item 11)
7	–	Spring Plate (P/O PL 17.14 Item 1,PL 17.14 Item 11)
8	001E60050	Rail
9	017E94660	Foot
10	–	Front Rack (P/O PL 17.14 Item 1)
11	802K36670	Rear Rack Assembly
12	–	Rear Cover (P/O PL 17.14 Item 11)
13	–	Rear Rack (P/O PL 17.14 Item 11)
14	–	Bracket (P/O PL 17.14 Item 11)
15	015E77040	Bottom Plate



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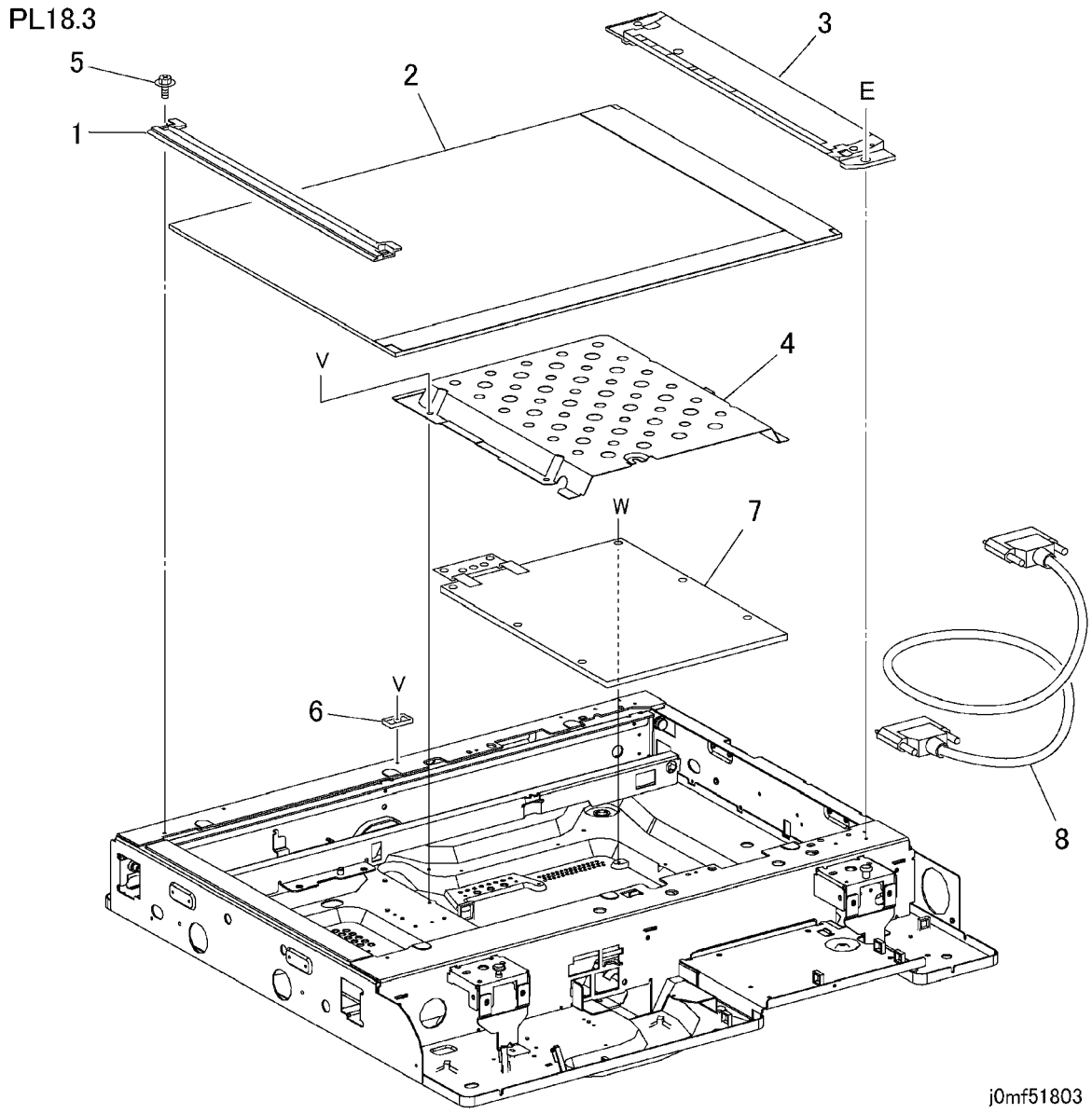
PL 18.2 Control Panel

Item	Part	Description
1	802K46022	Control Panel Assembly
2	–	Control Panel Housing (P/O PL 18.2 Item 1)
3	–	Panel Housing (P/O PL 18.2 Item 1)
4	123K94020	Display
5	110K11100	Touch Panel (ADJ 9.13)
6	160K75800	VR PWB (ADJ 9.13)
7	–	Screw (P/O PL 18.2 Item 1)
8	–	Right Panel (P/O PL 18.2 Item 1)
9	–	Center Panel (P/O PL 18.2 Item 1)
10	802E32860	One-touch Panel
11	160K77367	UI PWB Assembly (ADJ 9.13)
12	–	UI PWB Base (P/O PL 18.2 Item 1,PL 18.2 Item 11)
13	–	ROM (P/O PL 18.2 Item 11)
14	–	ROM (P/O PL 18.2 Item 11)
15	–	Bracket (P/O PL 18.2 Item 1)
16	–	Plate (P/O PL 18.2 Item 1)
17	–	Adjust Pen (P/O PL 18.2 Item 1)
18	–	Bracket (P/O PL 18.2 Item 1)



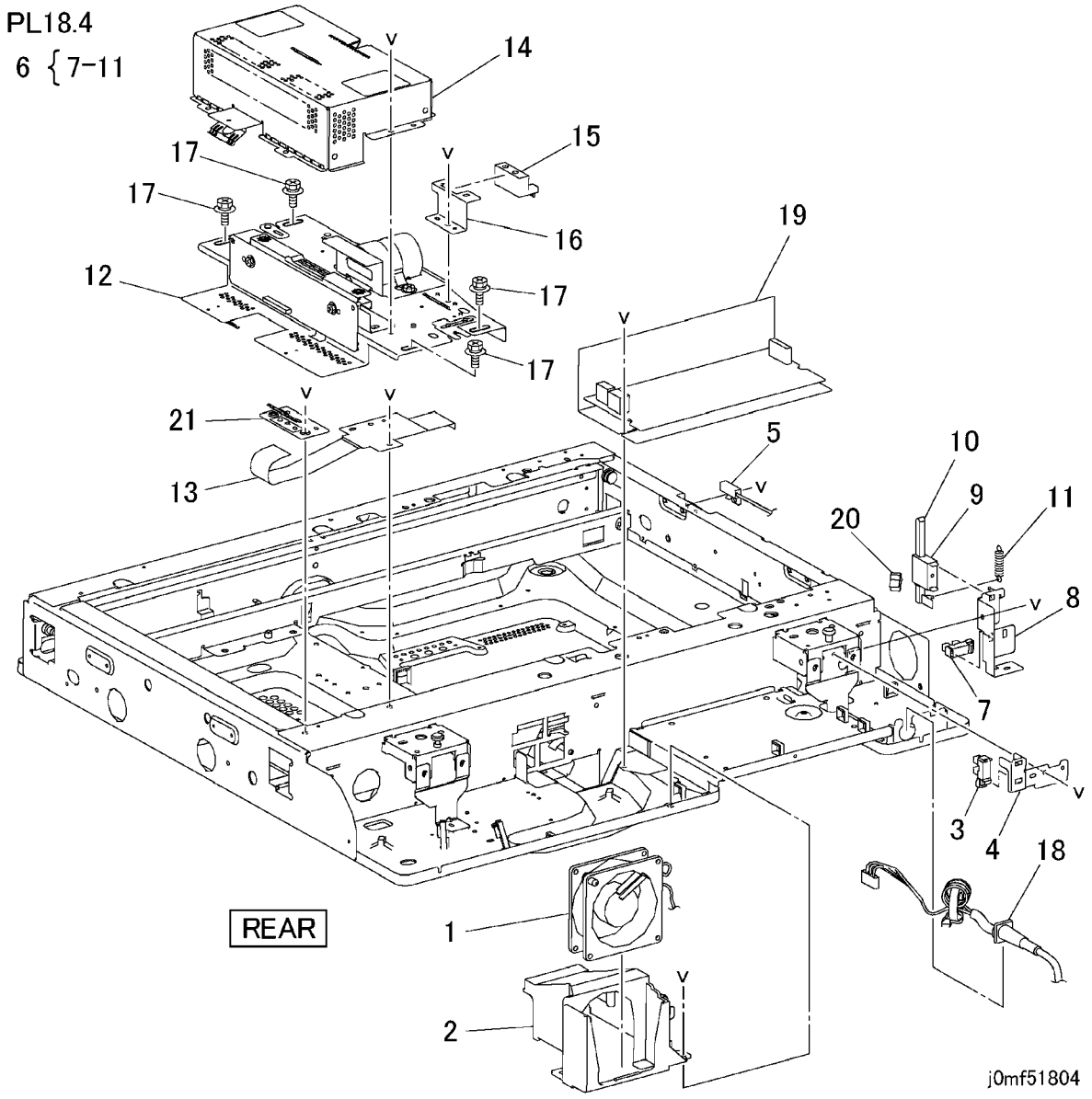
PL 18.3 Platen Glass

Item	Part	Description
1	–	Right Side Plate (Not Spared)
2	090K92820	Platen Glass (REP 6.2)
3	050K43070	Registration Gate
4	–	IPS Cover (Not Spared)
5	–	Screw (Not Spared)
6	068E10210	Platen Glass Support
7	160K66429	ITT/IPS PWB
8	117E20840	Cable



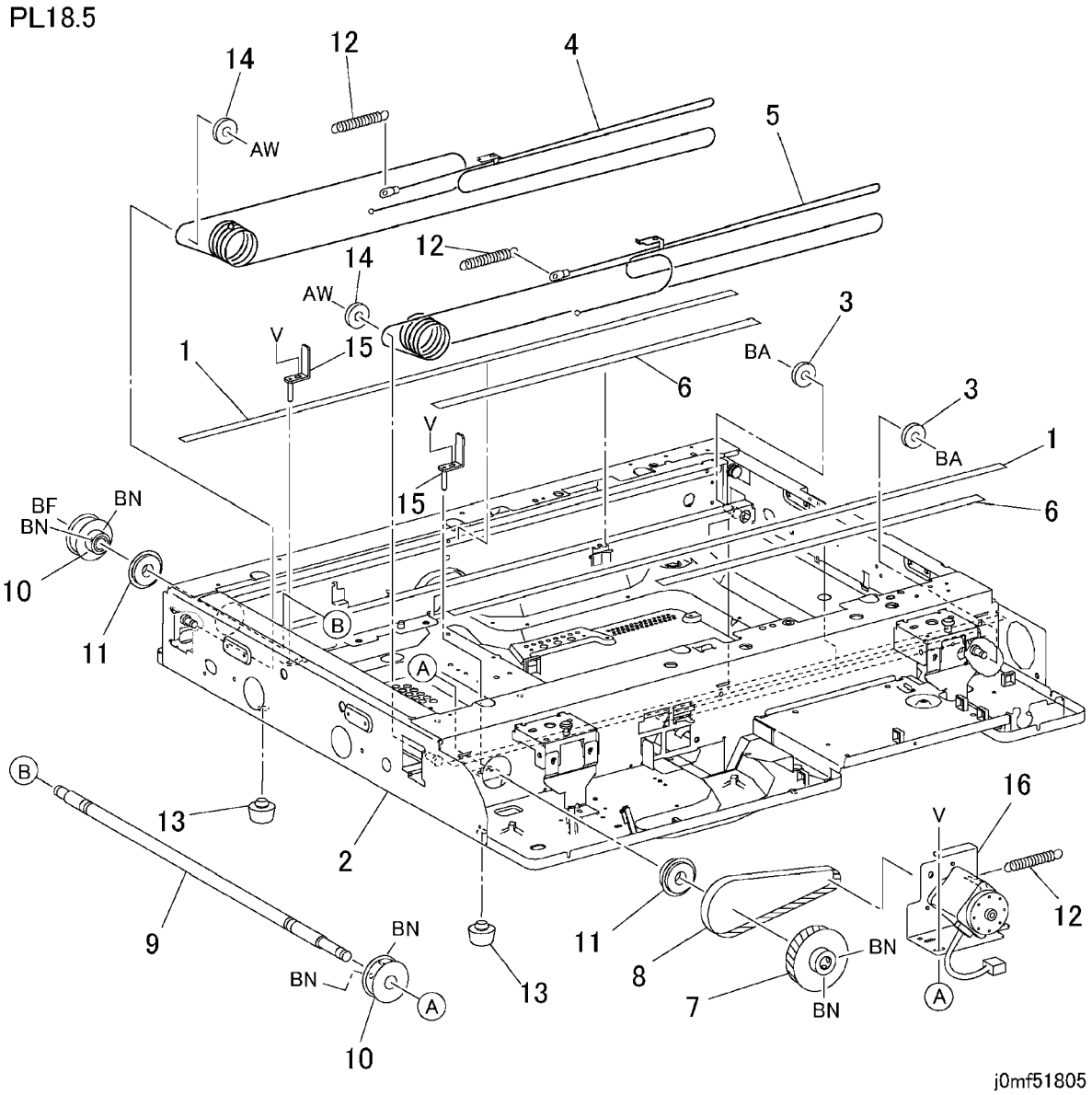
PL 18.4 CCD PWB, Sensor

Item	Part	Description
1	127K33160	IPS Fan
2	–	Bracket (Not Spared)
3	130K62000	IIT Registration Sensor
4	–	Bracket (Not Spared)
5	110K08471	Platen Open Switch
6	130K62580	Platen Angle Sensor Assembly
7	107E08680	Platen Angle Sensor
8	–	Bracket (P/O PL 18.4 Item 6)
9	–	Support (P/O PL 18.4 Item 6)
10	–	Actuator (P/O PL 18.4 Item 6)
11	009E55450	Spring
12	604K05330	Lens Kit (Kit contains CCD PWB and Lens Assembly) (REP 6.4) (ADJ 9.7)
13	117K30960	CCD Flat Cable
14	–	Lens Cover (Not Spared)
15	–	APS Sensor (Not Spared)
16	–	Bracket (Not Spared)
17	–	Screw (Not Spared)
18	962K05910	AC Harness (220V)
–	962K05900	AC Harness (120V)
19	105E10480	IIT LVPS (100V)
–	105E10650	IIT LVPS (220V)
20	019E49830	Clamp
21	–	Plate (Not Spared)



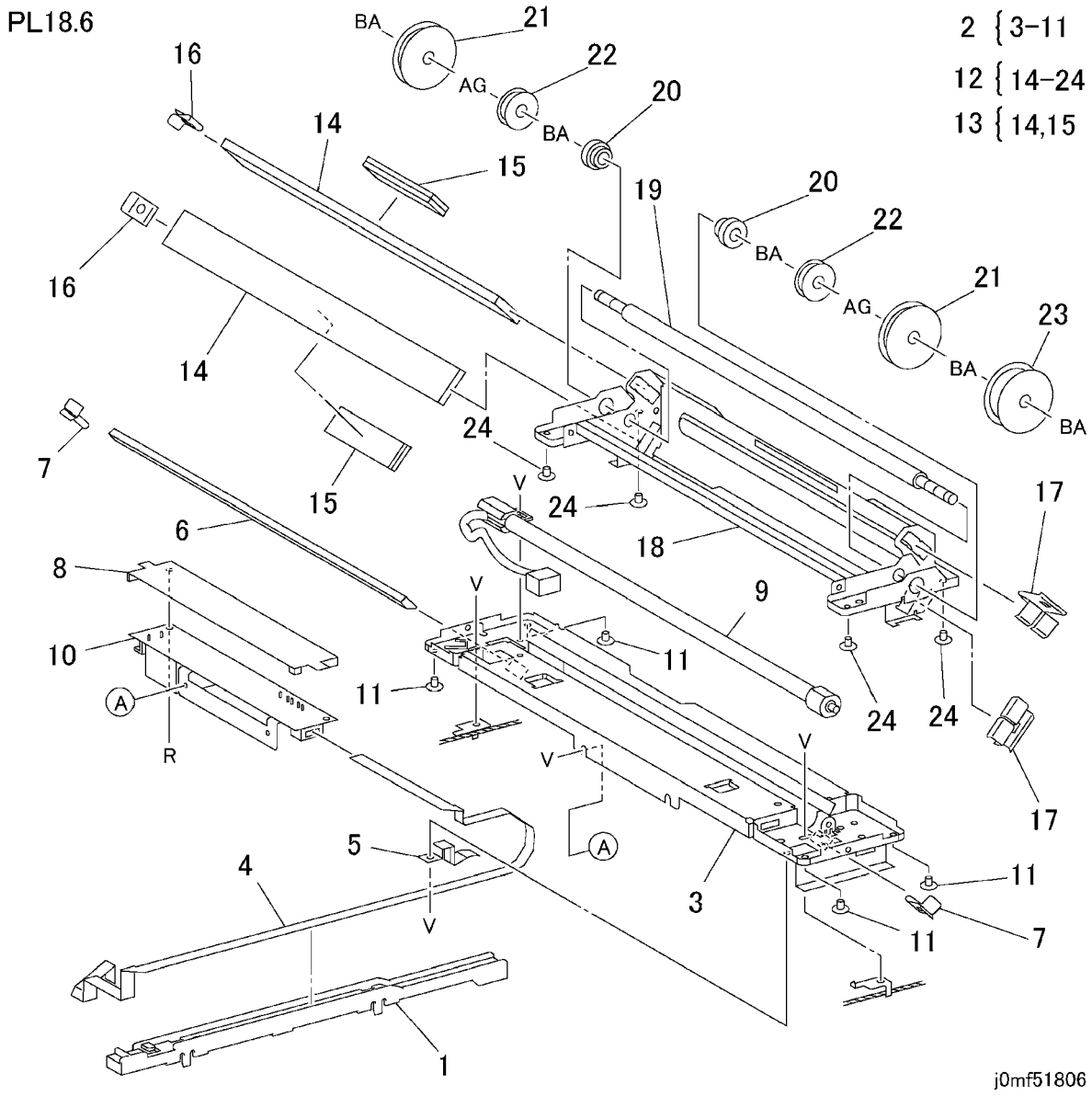
PL 18.5 Carriage Cable/ Motor

Item	Part	Description
1	063E94040	Tape
2	–	Frame (Not Spared)
3	020E99590	Pulley
4	012K94110	Front Carriage Cable (REP 6.11)
5	012K94120	Rear Carriage Cable (REP 6.11)
6	063E94050	Tape
7	020E32740	Timing Pulley
8	023E19300	Belt
9	–	Capstan Shaft (Not Spared)
10	020E25090	Capstan Pulley
11	413W10950	Bearing
12	009E62830	Spring
13	017E92060	Foot
14	–	Pulley (Not Spared)
15	–	Stop Bracket (Not Spared)
16	127K32140	Carriage Motor (REP 6.12)



PL 18.6 Full/Half Rate Carriage

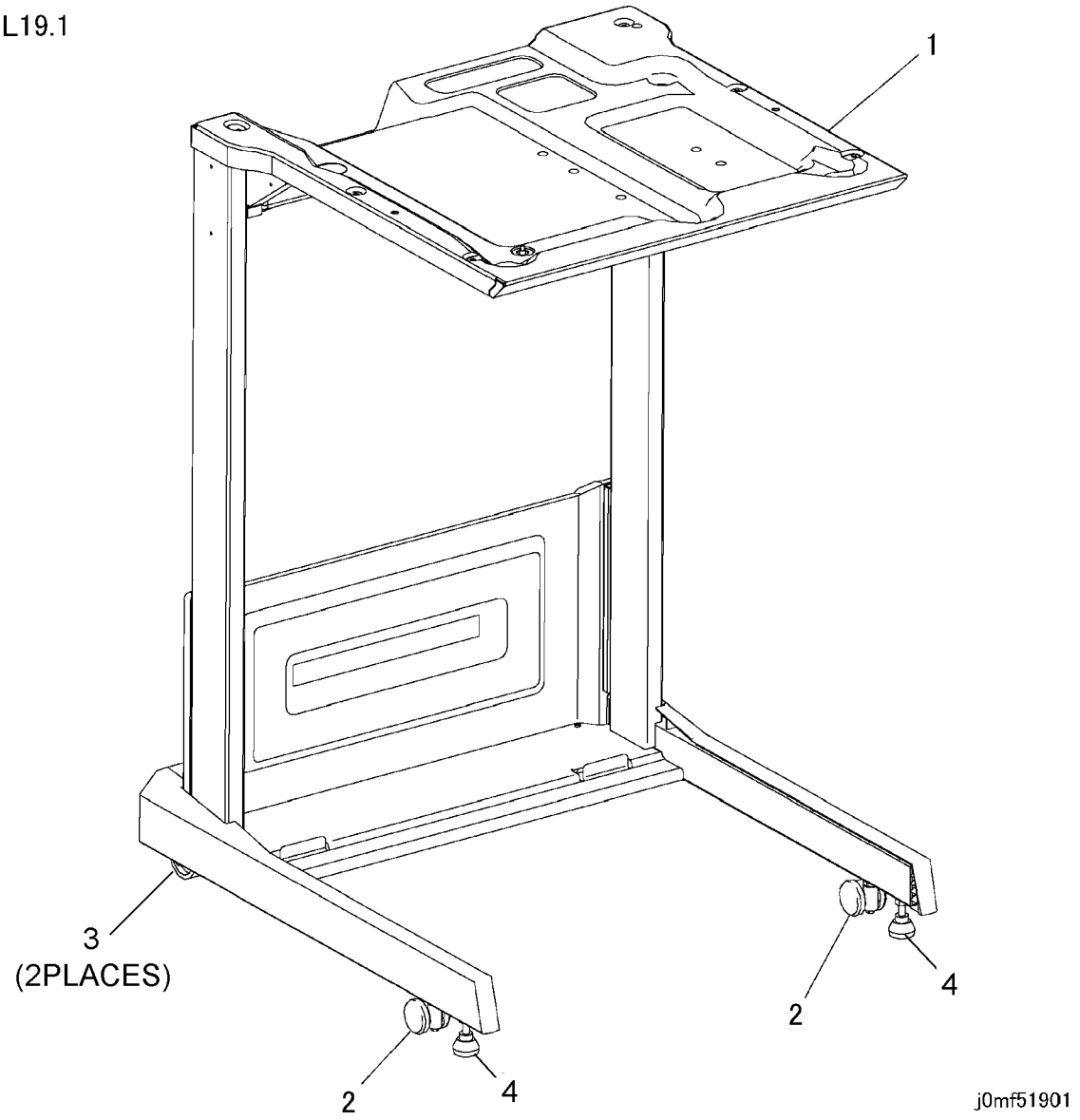
Item	Part	Description
1	–	Harness Guard (Not Spared)
2	041K94050	Full-Rate Carriage Assembly (ADJ 6.1)
3	–	Full-Rate Carriage (P/O PL 18.6 Item 2)
4	117E19780	Lamp Wire Harness (REP 6.14)
5	–	No 1 Motor (P/O PL 18.6 Item 2)
6	062E10040	No 1 Mirror
7	019E50400	Clip
8	118E12090	Insulator
9	122E92030	Exposure Lamp (REP 6.13)
10	105E10510	Lamp Ballast PWB
11	–	Pad (P/O PL 18.6 Item 2)
12	041K94271	Half-Rate Carriage Assembly (ADJ 6.1)
13	062K10730	No 2 and No 3 Mirror
14	–	No 2, No 3 Mirror (P/O PL 18.6 Item 2,PL 18.6 Item 13)
15	–	Damper (P/O PL 18.6 Item 2,PL 18.6 Item 13)
16	–	Single Clip (P/O PL 18.6 Item 12)
17	809E09110	Clip
18	–	Half-Rate Carriage (P/O PL 18.6 Item 12)
19	–	Shaft (P/O PL 18.6 Item 12)
20	004E06560	Damper Bearing
21	–	Pulley (P/O PL 18.6 Item 12)
22	020K94970	Pulley
23	–	Harness Pulley (P/O PL 18.6 Item 12)
24	019E49470	Pad



PL 19.1 Rack

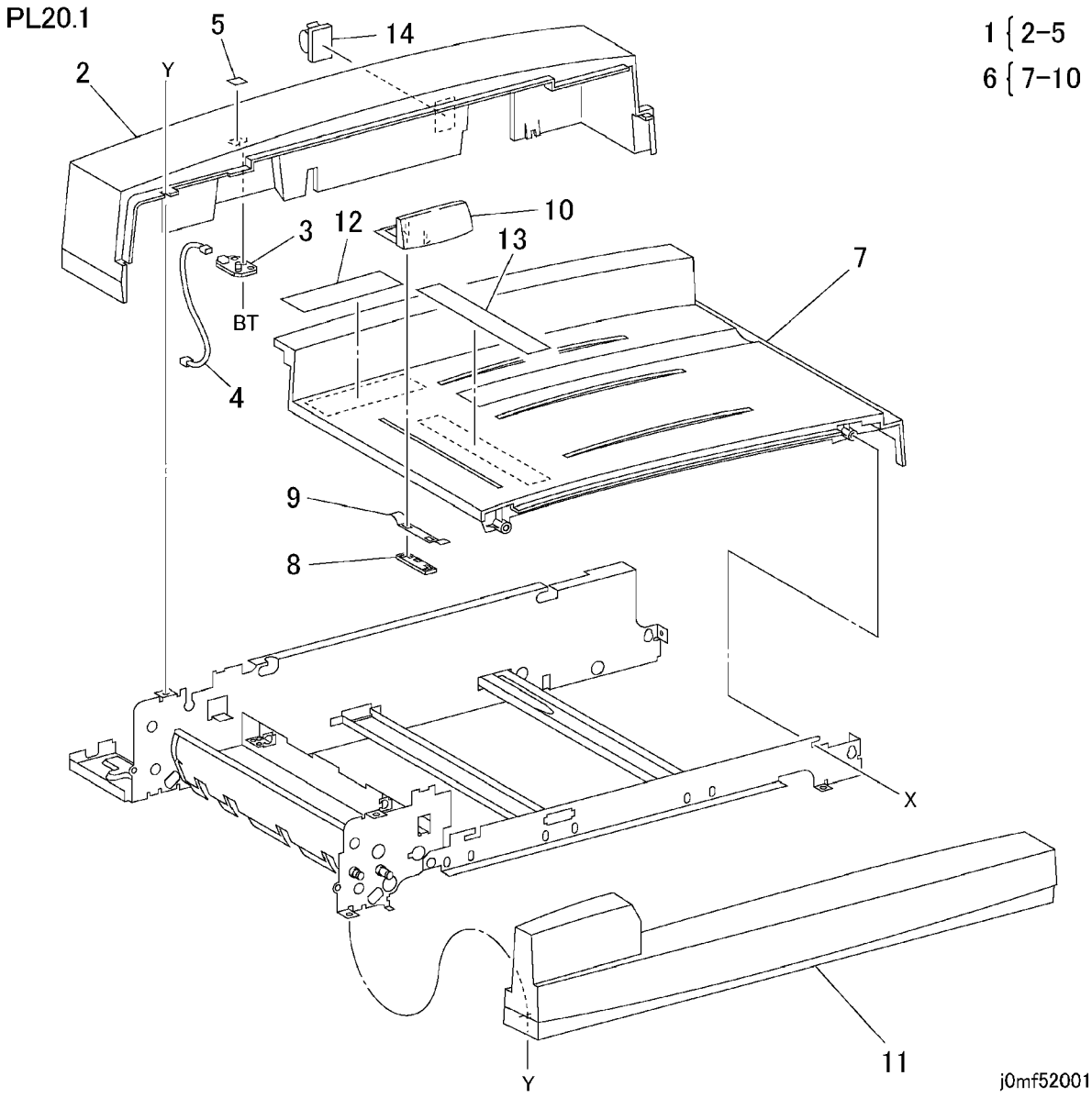
Item	Part	Description
1	–	Rack (Not Spared)
2	017E94710	Swivel Caster
3	017E94730	Stationary Caster
4	017E94700	Foot

PL19.1



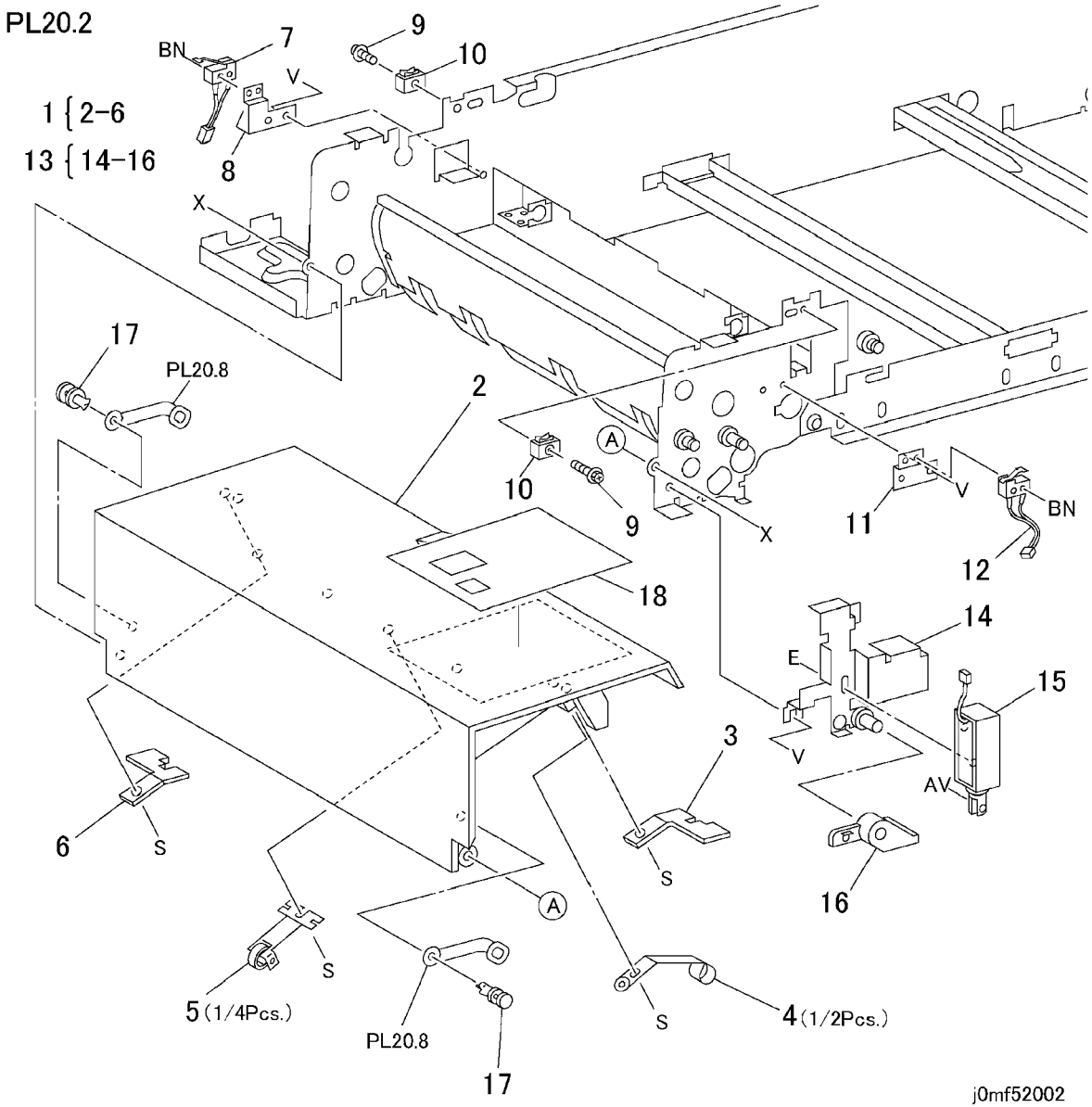
PL 20.1 Front/Rear Cover, Entrance Tray

Item	Part	Description
1	048K76180	Rear Cover Assembly (REP 5.18)
2	–	Rear Cover (P/O PL 20.1 Item 1)
3	140K60480	LED PWB
4	–	Wire Harness (P/O PL 20.1 Item 1)
5	891E65180	Label (Display)
6	050K36410	Entrance Tray Assembly
7	–	Entrance Tray (P/O PL 20.1 Item 6)
8	–	Plate (P/O PL 20.1 Item 6)
9	009E26870	Spring Plate
10	032K93800	Document Guide
11	048E64200	Front Cover
12	–	Label (Not Spared)
13	891E65210	Size Label
14	–	Clamp (Not Spared)



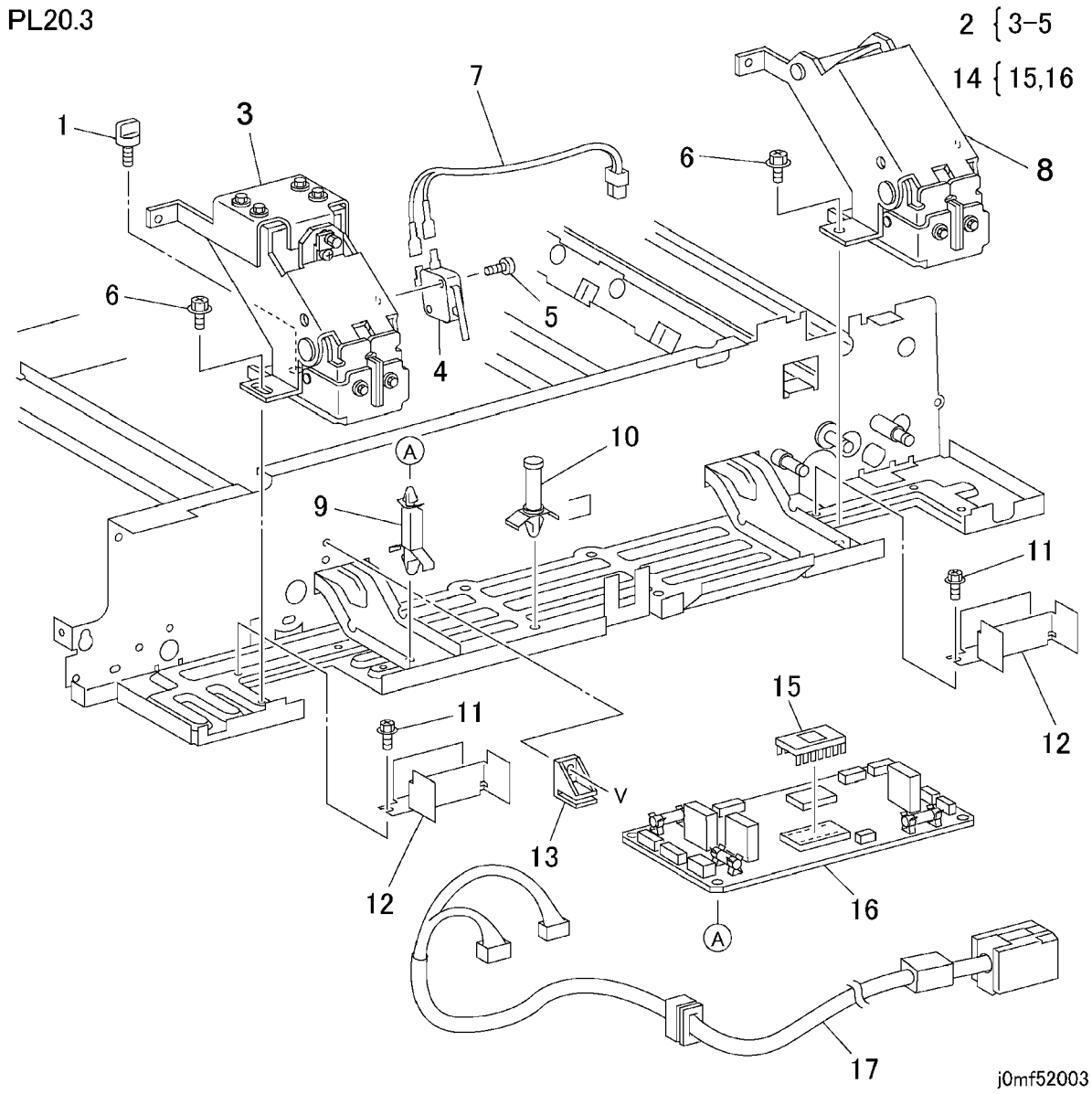
PL 20.2 Top Cover, Registration Gate Solenoid

Item	Part	Description
1	054K13621	Top Cover Assembly
2	–	Top Cover (P/O PL 20.2 Item 1)
3	015E48890	Front Magnet Plate
4	809E11130	Spring
5	059K11880	Pinch Roll
6	015E48900	Front Magnet Plate
7	110K07850	Top Cover Interlock Switch (Rear)
8	–	Bracket (Not Spared)
9	–	Screw (Not Spared)
10	121K93870	Magnet
11	–	Bracket (Not Spared)
12	110K07870	Top Cover Interlock Switch (Front)
13	121K22710	Registration Gate Solenoid Assembly (REP 5.2)
14	–	Bracket (P/O PL 20.2 Item 13)
15	–	Registration Gate Solenoid (P/O PL 20.2 Item 13)
16	–	Registration Arm (P/O PL 20.2 Item 13)
17	019E93510	Push Rivet
18	–	Label (Not Spared)



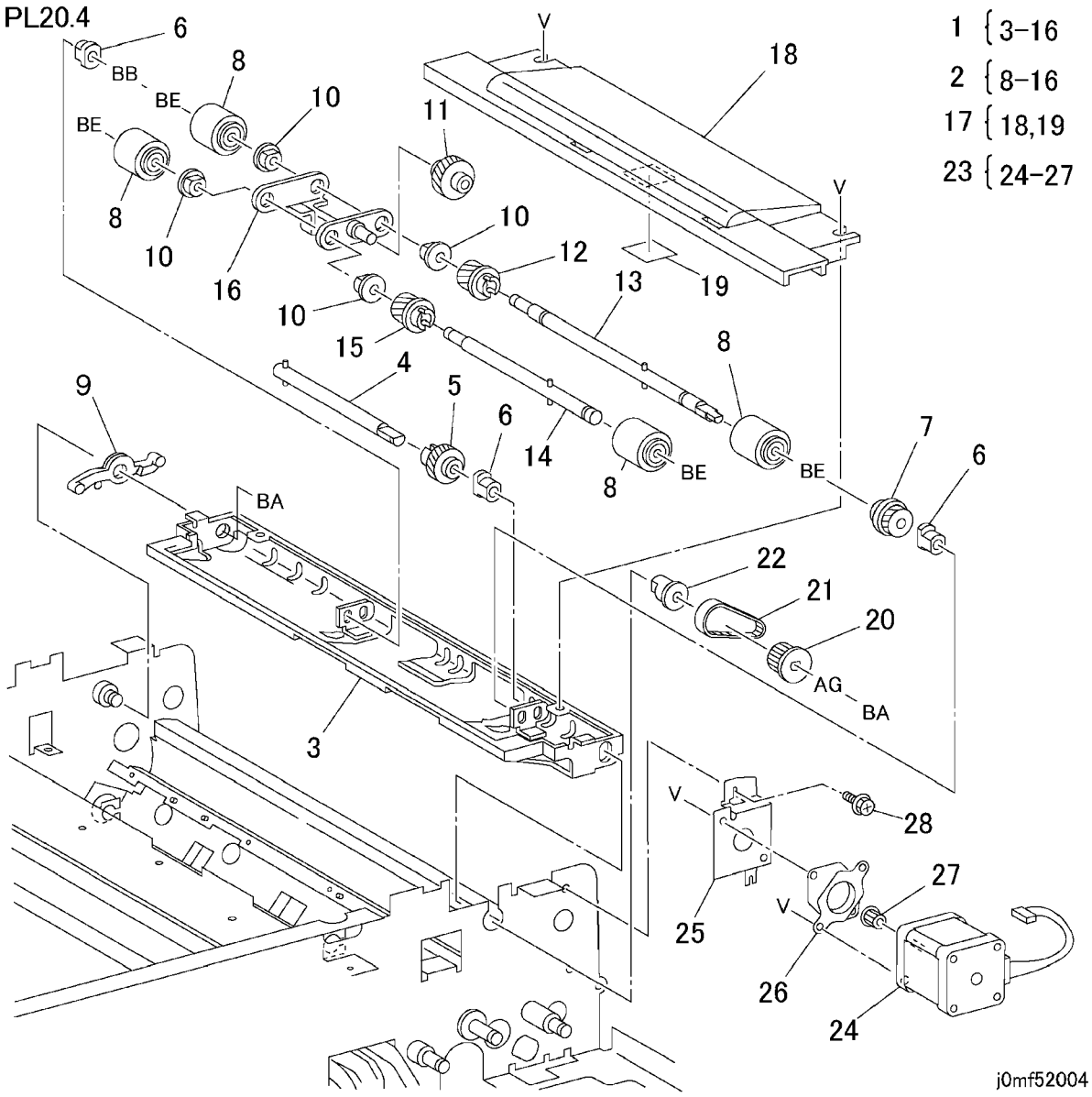
PL 20.3 Counterbalance, DADF Control PWB

Item	Part	Description
1	003K91881	Thumbscrew
2	036K91431	Right Counterbalance (REP 5.3)
3	–	Counterbalance (P/O PL 20.3 Item 2) (ADJ 5.2 ADJ 5.3 ADJ 5.4)
4	–	DADF Interlock Switch (P/O PL 20.3 Item 2)
5	–	Screw (P/O PL 20.3 Item 2)
6	–	Screw (Not Spared)
7	–	Wire Harness (Not Spared)
8	036K91420	Left Counterbalance (REP 5.3,ADJ 5.2 ADJ 5.3 ADJ 5.4)
9	–	PWB Support (Not Spared)
10	–	PWB Support (Not Spared)
11	–	Screw (Not Spared)
12	–	Safety Bracket (Not Spared)
13	–	PWB Support (Not Spared)
14	160K83080	DADF Control PWB Assembly (W/ROM) (REP 5.4)
15	–	ROM (P/O PL 20.3 Item 14)
16	–	DADF Control PWB (P/O PL 20.3 Item 14)
17	162K64340	Wire Harness



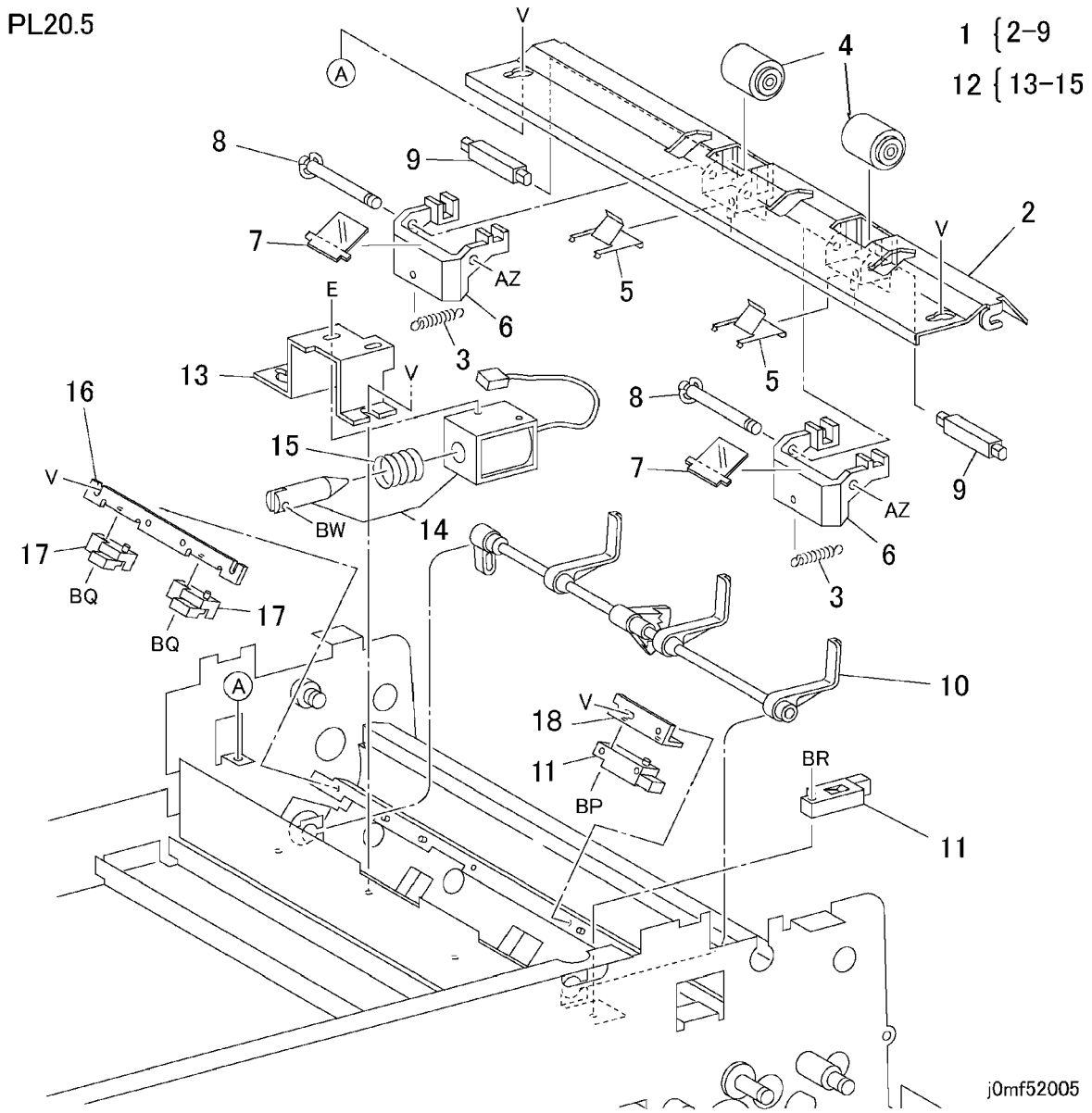
PL 20.4 Document Feed Chute (Upper), Feed Motor

Item	Part	Description
1	054K13600	Document Feed Upper Chute Assembly
2	059K11840	Feed Roll Assembly
3	–	Upper Baffle (P/O PL 20.4 Item 1)
4	–	Drive Shaft (P/O PL 20.4 Item 1)
5	–	Gear (P/O PL 20.4 Item 1)
6	013E92760	Bearing
7	–	Gear (P/O PL 20.4 Item 1)
8	600K90370	Roll Kit (2 Rolls/Kit) (REP 5.6 REP 5.7)
9	012E09750	Link
10	413W77359	Bearing
11	–	Gear (P/O PL 20.4 Item 1,PL 20.4 Item 2)
12	–	Gear (P/O PL 20.4 Item 1,PL 20.4 Item 2)
13	–	Feed Shaft (P/O PL 20.4 Item 1,PL 20.4 Item 2)
14	–	Nudger Shaft (P/O PL 20.4 Item 1,PL 20.4 Item 2)
15	–	Gear (P/O PL 20.4 Item 1,PL 20.4 Item 2)
16	–	Housing (P/O PL 20.4 Item 1,PL 20.4 Item 2)
17	802K08320	Inner Cover Assembly
18	–	Inner Cover (P/O PL 20.4 Item 17)
19	–	Pad (P/O PL 20.4 Item 17)
20	–	Pulley (Not Spared)
21	023E20000	Belt
22	–	Bearing (Not Spared)
23	127K32680	Feed Motor Assembly (REP 5.5)
24	–	Feed Motor (P/O PL 20.4 Item 23)
25	–	Motor Bracket (P/O PL 20.4 Item 23)
26	–	Damper (P/O PL 20.4 Item 23)
27	–	Pulley (P/O PL 20.4 Item 23)
28	–	Screw (Not Spared)



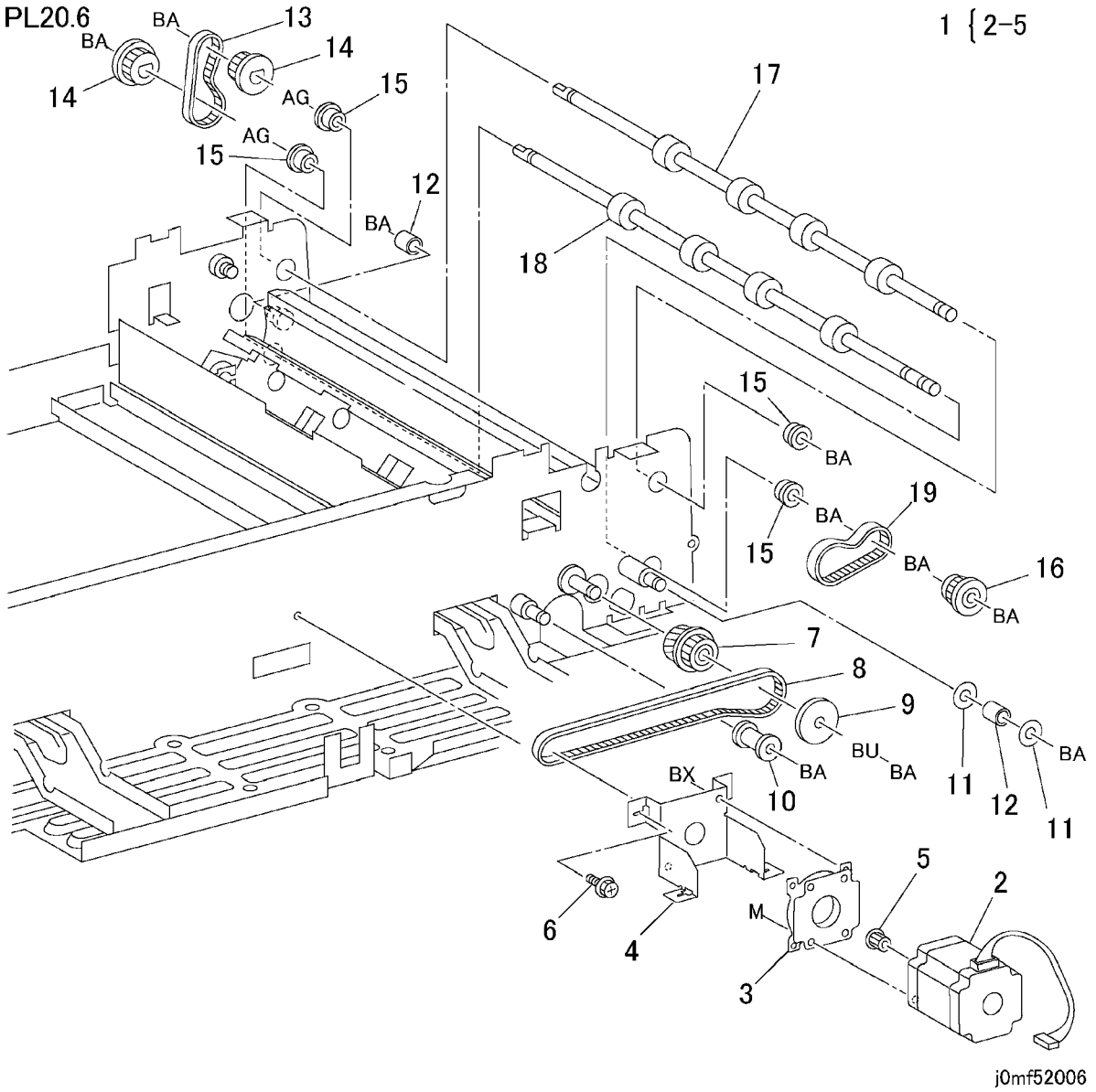
PL 20.5 Document Feed Chute (Lower)

Item	Part	Description
1	054K18780	Lower Chute Assembly (REP 5.8)
2	–	Lower Chute (P/O PL 20.5 Item 1)
3	–	Spring (P/O PL 20.5 Item 1)
4	059K19720	Retard Roll (REP 5.9)
5	–	Spring Plate (P/O PL 20.5 Item 1)
6	–	Arm (P/O PL 20.5 Item 1)
7	055K19260	Guard
8	–	Arm Shaft (P/O PL 20.5 Item 1)
9	–	Retard Shaft (P/O PL 20.5 Item 1)
10	–	Set Gate (Not Spared)
11	130K60600	Document Sensor, Registration Sensor (REP 5.11)
12	121K22690	Set Gate Solenoid Assembly (REP 5.10)
13	–	Bracket (P/O PL 20.5 Item 12)
14	–	Set Gate Solenoid (P/O PL 20.5 Item 12)
15	–	Spring (P/O PL 20.5 Item 12)
16	–	Bracket (Not Spared)
17	130E80890	Size Sensor 1 (Rear), Size Sensor 2 (Front) (REP 5.12)
18	–	Bracket (Not Spared)



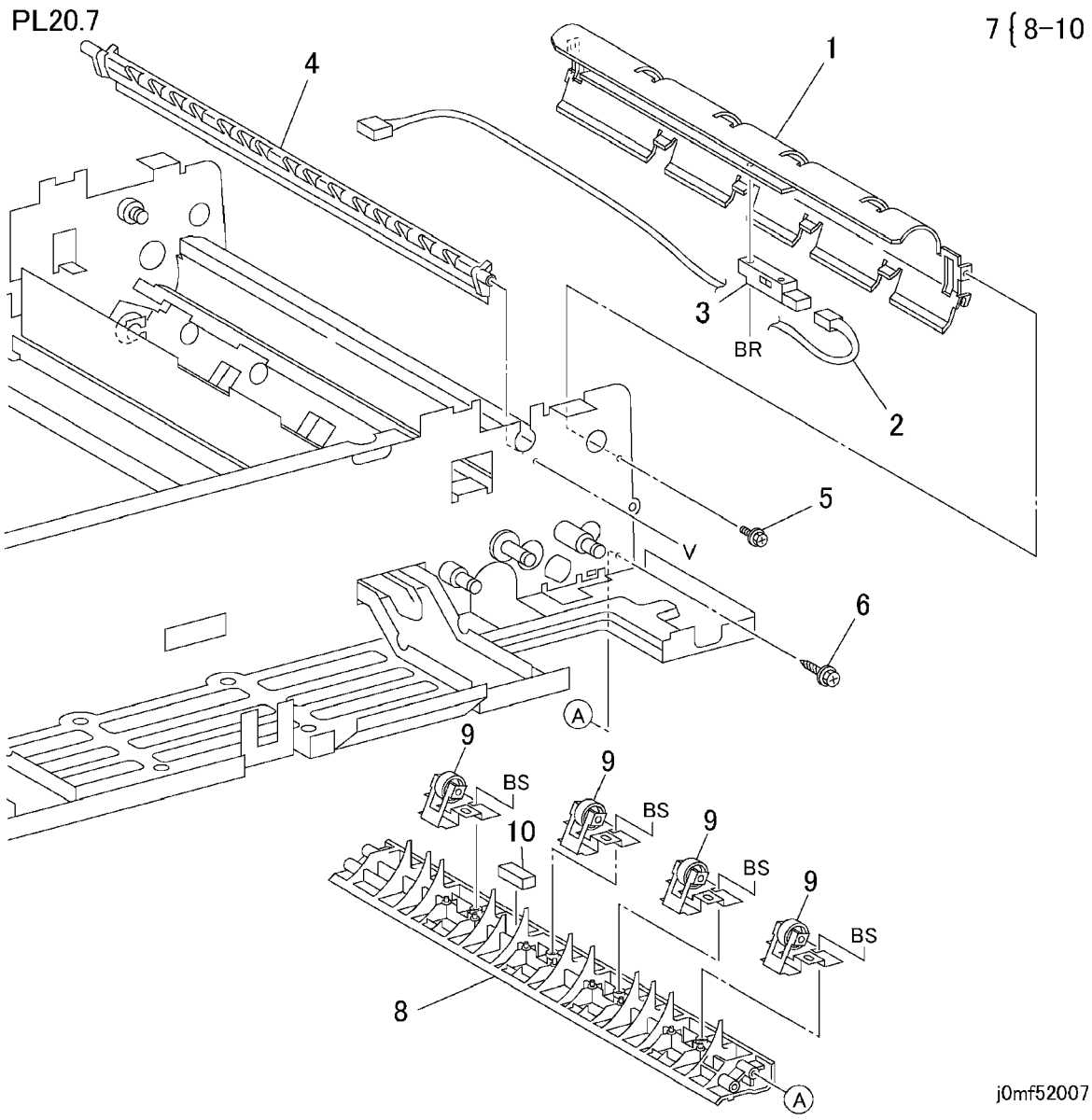
PL 20.6 DADF Belt Motor, Duplex Roll

Item	Part	Description
1	127K32690	DADF Belt Motor Assembly (REP 5.13)
2	–	DADF Belt Motor (P/O PL 20.6 Item 1)
3	–	Damper (P/O PL 20.6 Item 1)
4	–	Bracket (P/O PL 20.6 Item 1)
5	–	Pulley (P/O PL 20.6 Item 1)
6	–	Screw (Not Spared)
7	007K86700	Gear Pulley
8	023E19990	Belt
9	–	Spacer (Not Spared)
10	–	Tension Roll (Not Spared)
11	–	Spacer (Not Spared)
12	–	Tension Roll (Not Spared)
13	023E20010	Belt
14	020E21050	Pulley
15	–	Bearing (Not Spared)
16	020K91230	Pulley
17	022K37080	Upper Duplex Roll
18	022K37070	Lower Duplex Roll
19	023E12230	Belt



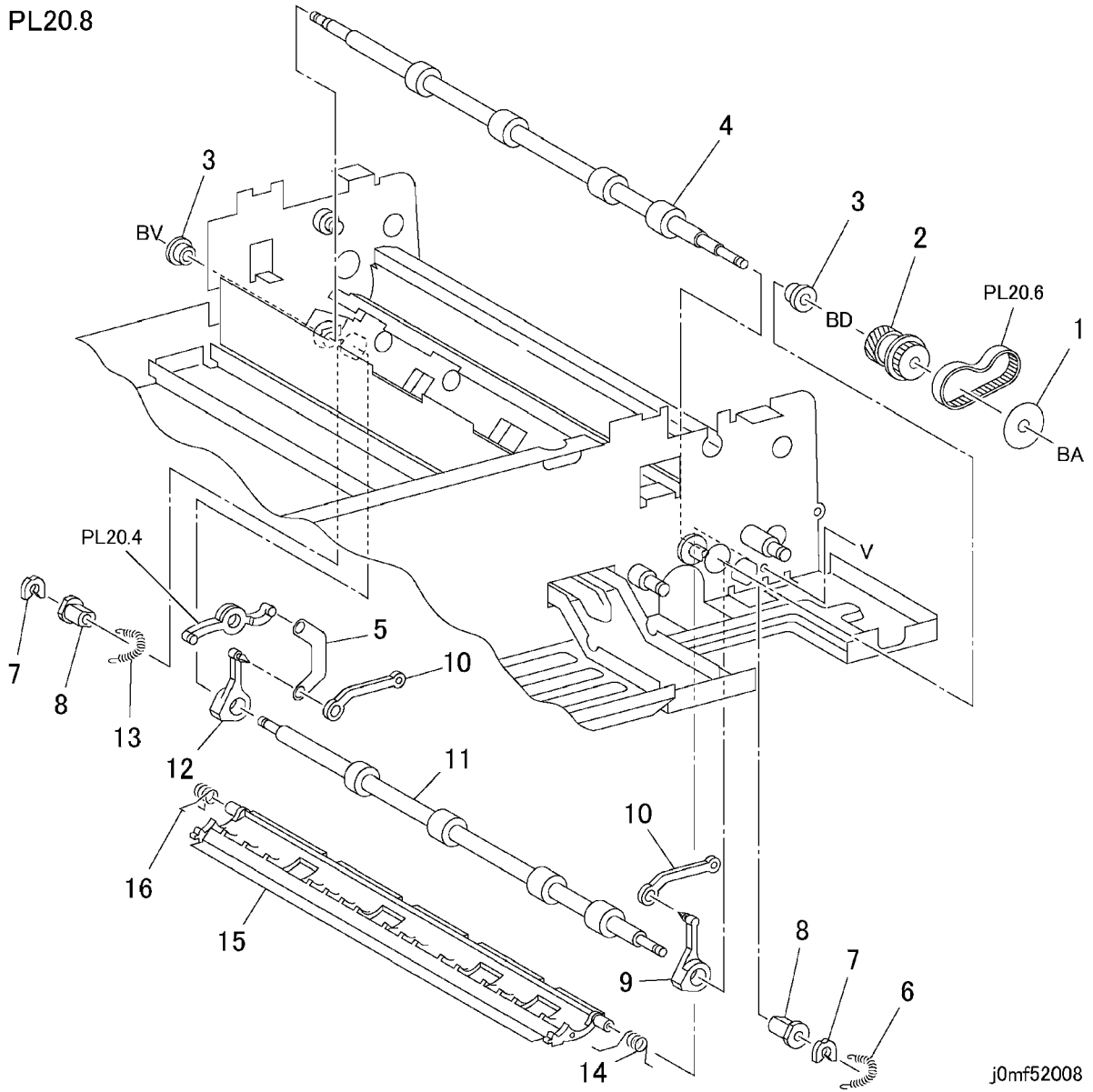
PL 20.7 Duplex Chute

Item	Part	Description
1	–	Duplex Chute (Not Spared)
2	–	Wire Harness (Not Spared)
3	130K60600	Duplex Sensor (REP 5.14)
4	050K46690	Gate
5	–	Screw (Not Spared)
6	–	Screw (Not Spared)
7	054K18790	Lower Chute Assembly
8	–	Lower Chute (P/O PL 20.7 Item 7)
9	–	Pinch Roll (P/O PL 20.7 Item 7)
10	121E90640	Open Switch Magnet



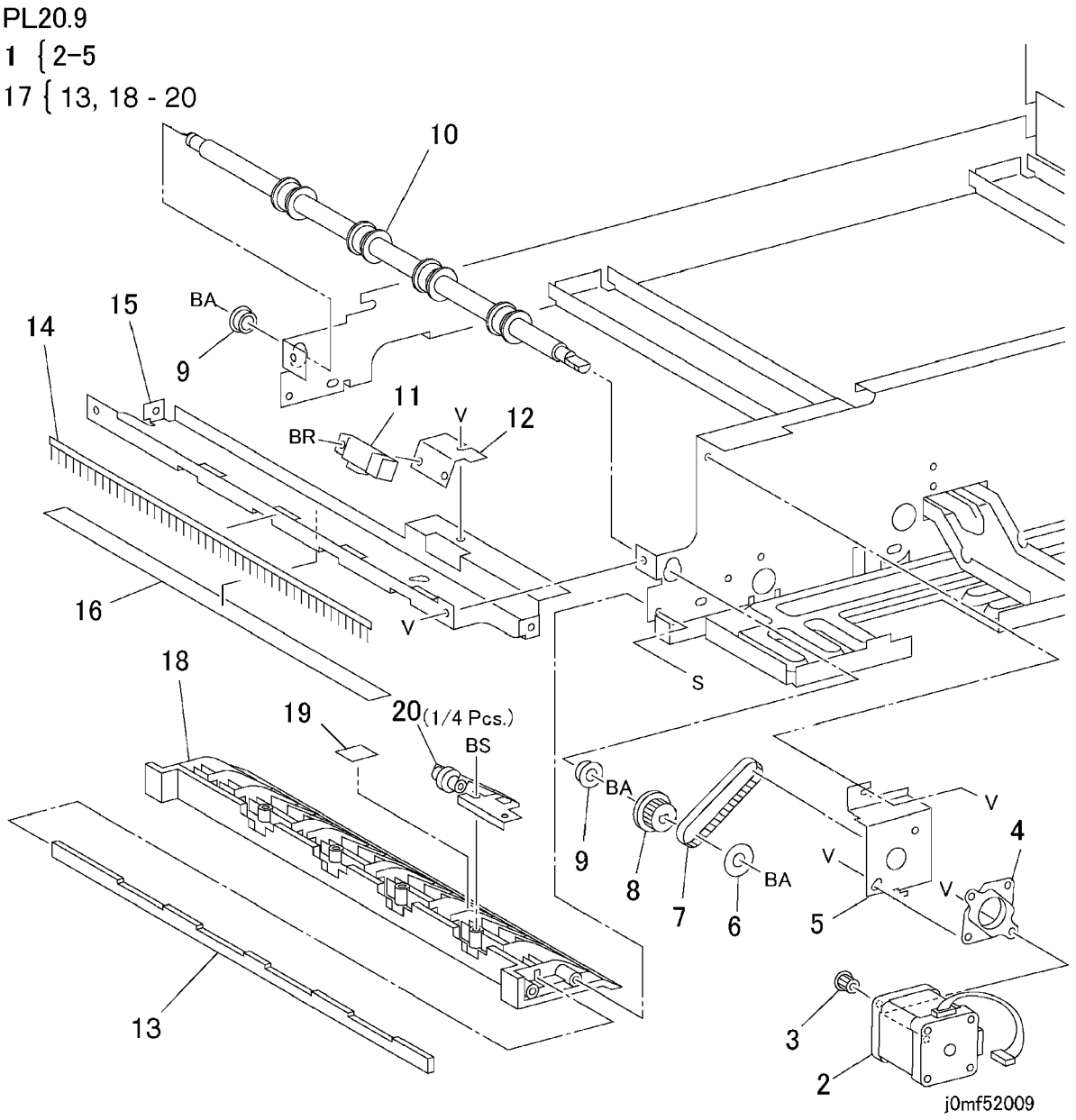
PL 20.8 Registration Roll

Item	Part	Description
1	–	Spacer (Not Spared)
2	007K81120	Gear Pulley
3	–	Bearing (Not Spared)
4	059K19750	Registration Roll
5	012E09760	Link
6	809E04210	Rear Spring
7	005E80250	Clip
8	013E94561	Bearing
9	008E90941	Rear Cam
10	012E91960	Link
11	022K38040	Registration Pinch Roll (REP 5.15)
12	008E90931	Front Cam
13	809E04220	Front Spring
14	009E28570	Spring
15	050K46690	Gate
16	009E28560	Spring



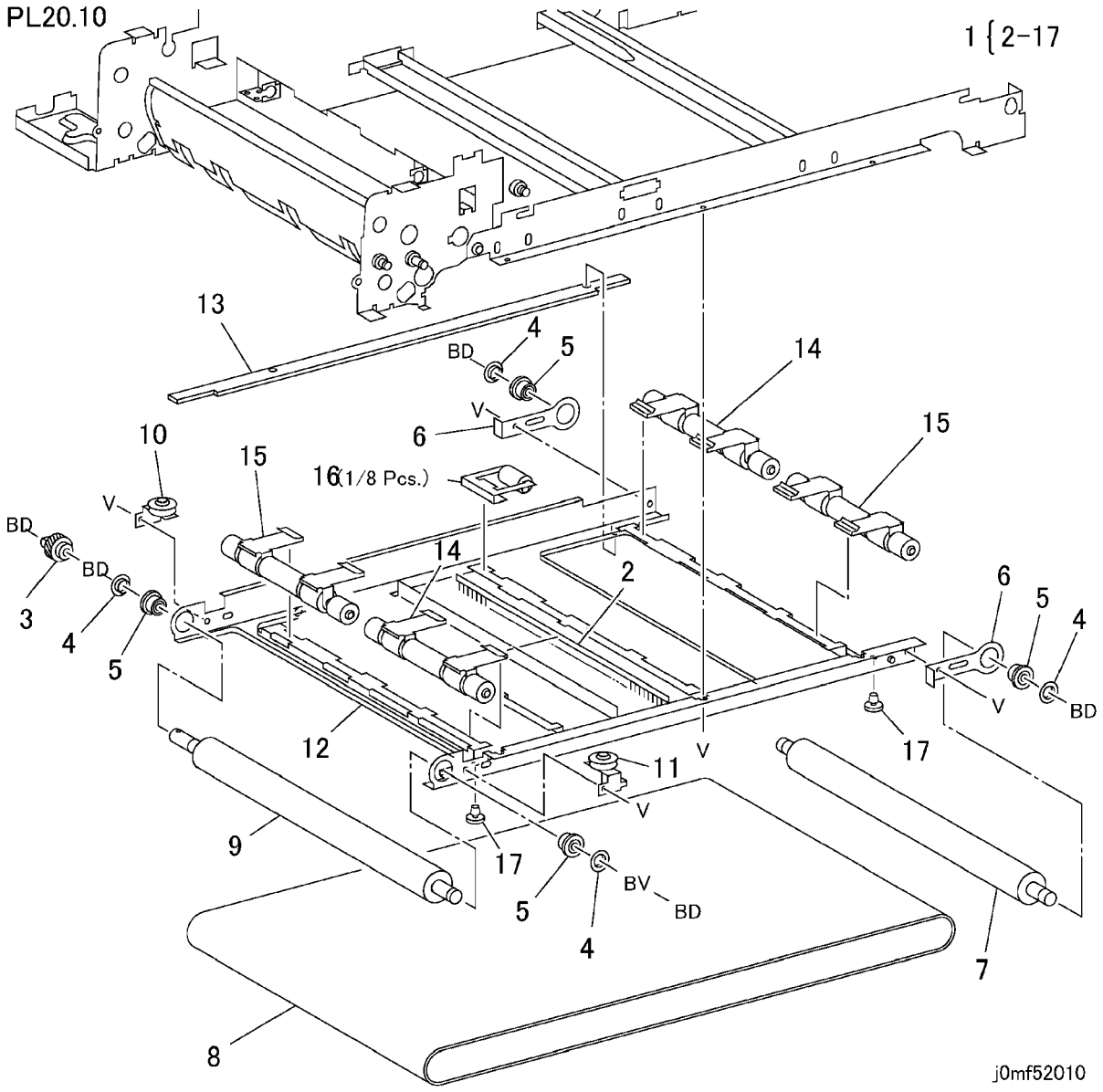
PL 20.9 Exit Motor/Chute

Item	Part	Description
1	127K32640	Exit Motor Assembly (REP 5.16)
2	–	Exit Motor (P/O PL 20.9 Item 1)
3	–	Pulley (P/O PL 20.9 Item 1)
4	–	Damper (P/O PL 20.9 Item 1)
5	–	Bracket (P/O PL 20.9 Item 1)
6	–	Spacer (Not Spared)
7	023E20000	Belt
8	020E93230	Pulley
9	–	Bearing (Not Spared)
10	059K11860	Exit Roll
11	130K60600	DADF Exit Sensor
12	–	Bracket (Not Spared)
13	–	Plate (P/O PL 20.9 Item 17)
14	105E06910	Static Eliminator
15	–	Exit Upper Chute (Not Spared)
16	055K26060	Document Guard
17	054K13081	Lower Exit Chute
18	–	Exit Lower Chute (P/O PL 20.9 Item 17)
19	–	Sensor Pad (P/O PL 20.9 Item 17)
20	059K11821	Pinch Roll



PL 20.10 Document Transport, Platen Belt

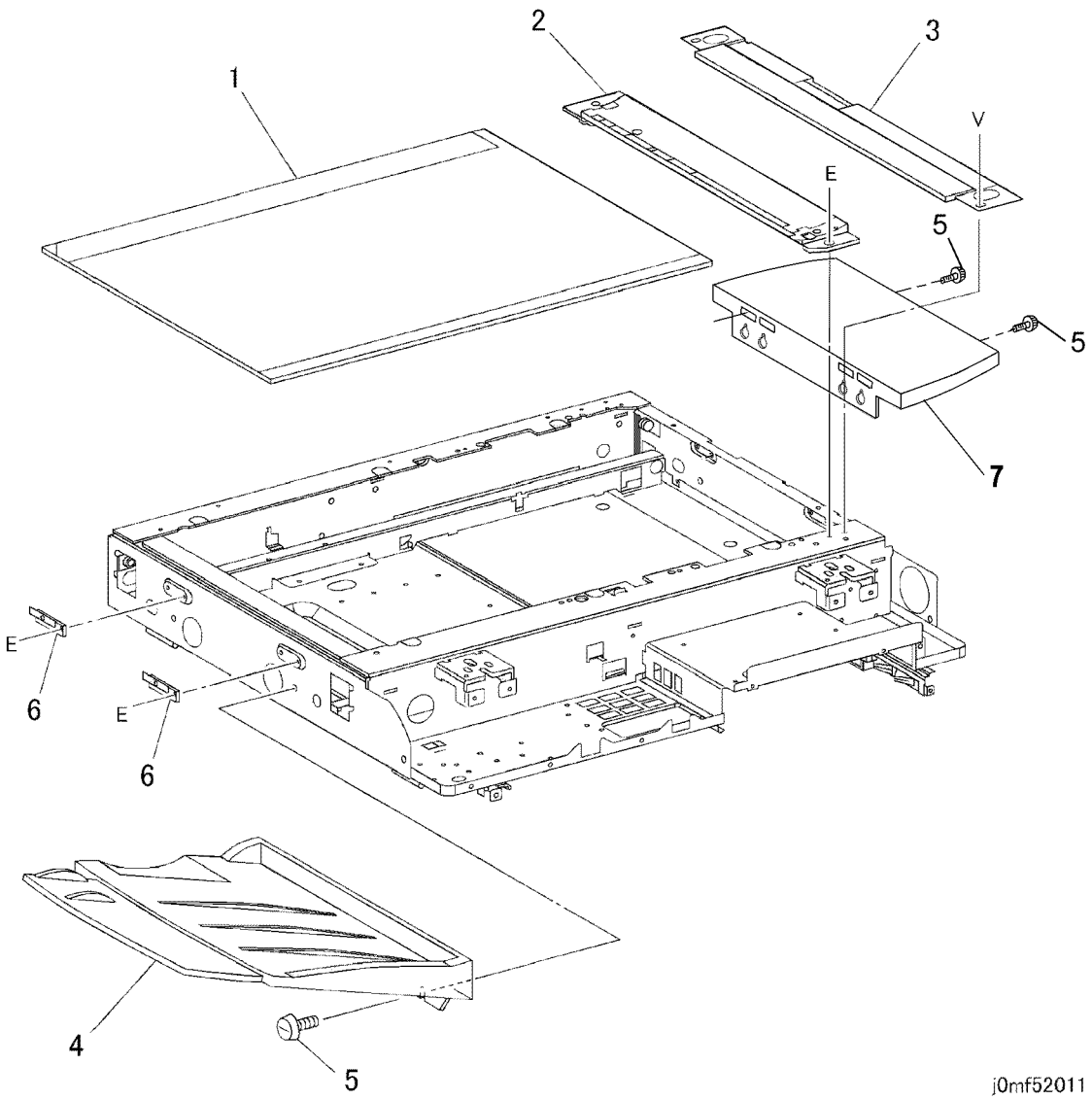
Item	Part	Description
1	–	Document Transport (Not Spared) (REP 5.17)
2	–	Static Eliminator (Not Spared)
3	007E66340	Gear
4	–	Collar (Not Spared)
5	013E80970	Bearing
6	049E91070	Tension Plate
7	022K39710	Idler Roll
8	023E15690	Platen Belt (REP 5.19)
9	–	Drive Roll (Not Spared)
10	–	Belt Guide (Not Spared)
11	–	Belt Guide (Not Spared)
12	–	Transport Frame (Not Spared)
13	–	Deflector (Not Spared)
14	–	Pinch Roll (Not Spared)
15	–	Pinch Roll (Not Spared)
16	–	Pinch Roll (Not Spared)
17	–	Damper (Not Spared)



PL 20.11 Platen Glass, Registration Gate, Exit Tray

Item	Part	Description
1	090K92820	Platen Glass (REP 6.2)
2	050K43070	Registration Gate
3	015K83700	Plate
4	673K51382	Exit Tray
5	003E43840	Thumbscrew
6	830E17490	Bracket
7	050E88440	Wing Tray

PL20.11



Common Hardware

Item	Part	Description
A	112W27651	Screw (M3x6)
B	112W27659	Screw (M3x6)
C	112W27851	Screw (M3x8)
D	112W28451	Screw (M3x14)
E	113W20457	Screw (M3x4)
F	113W20651	Screw (M3x6)
G	113W20857	Screw (M3x8)
H	113W21057	Screw (M3x10)
J	113W21657	Screw (M3x16)
K	113W27451	Screw (M3x4)
L	113W27551	Screw (M3x5)
M	113W27651	Screw (M3x6)
N	113W27851	Screw (M3x8)
P	113W28051	Screw (M3x10)
Q	113W28851	Screw (M3x20)
R	153W17655	Thread-forming Screw (M3x6)
S	153W17855	Thread-forming Screw (M3x8)
T	153W18055	Thread-forming Screw (M3x10)
U	153W27855	Thread-forming Screw (M3x8)
V	158W27655	Screw (M3x6)
W	158W27663	Screw (M3x6)
X	158W27855	Screw (M3x8)
Y	158W27863	Screw (M3x8)
Z	158W28255	Screw (m3x12)
AA	158W35855	Screw (M4x8)
AB	220W21250	Flange Nut (M3)
AC	251W24251	Washer (4)
AD	251W24450	Washer (4)
AE	252W24250	Nylon Washer (4)
AF	252W26450	Nylon Washer (5)
AG	252W27350	Nylon Washer (6)
AH	252W27450	Nylon Washer (6)
AJ	252W29450	Nylon Washer (8)
AK	271W16050	Dowel Pin (2x10)
AL	271W28250	Dowel Pin (3x12)
AM	271W28650	Dowel Pin (3x16)
AN	271W28950	Dowel Pin (3x22)
AP	271W36850	Dowel Pin (4x20)
AQ	285W15651	Spring Pin (2x6)
AR	285W15851	Spring Pin (2x8)
AS	285W16251	Spring Pin (2x12)
AT	285W28051	Spring Pin (3x10)
AU	285W28251	Spring Pin (3x12)
AV	285W28651	Spring Pin (3x16)
AW	354W15251	E-Clip (2)
AX	354W19251	E-Clip (2.5)
AY	354W21251	E-Clip (3)
AZ	354W21254	K-Clip (3)
BA	354W24251	E-Clip (4)
BB	354W24254	K-Clip (4)
BC	354W26251	E-Clip (5)
BD	354W27251	E-Clip (6)
BE	354W27254	K-Clip (6)
BF	354W29251	E-Clip (8)
BG	113W20657	Screw (M3x6)
BH	113W16051	Screw (M2x10)
BJ	158W45055	Screw (M5x10)
BK	158W36355	Screw (M4x12)
BL	251W24451	Washer (4)
BM	113W20557	Screw (M3x5)
BN	113W15851	Screw
BP	113W28056	Screw (M3x10)
BQ	113W28251	Screw (M3x12)
BR	113W28256	Screw (M3x12)
BS	153W27650	Thread-forming Screw (M3x6)
BT	153W27850	Thread-forming Screw (M3x8)
BU	252W27250	Nylon Washer (6)
BV	252W29350	Nylon Washer (8)
BW	285W29151	Spring Pin (3x25)
BX	158W35655	Screw (M4x6)

Part Number Index

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001E59600	PL 17.9
001E60050	PL 17.14
001K70542	PL 5.1
001K70551	PL 5.1
003K12090	PL 17.1
	PL 17.14
003K12650	PL 5.2
003K12680	PL 5.1
003E23672	PL 16.1
	PL 2.1
003E43840	PL 20.11
003E52290	PL 5.1
003E52300	PL 5.1
003E53700	PL 16.13
003E53710	PL 16.13
003K86121	PL 4.1
003K91881	PL 20.3
004E06560	PL 18.6
004E11831	PL 2.7
005K05890	PL 16.10
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	PL 2.5
	PL 16.12
005E16220	PL 17.6
005E16510	PL 17.6
005E80250	PL 20.8
005K83081	PL 16.11
	PL 16.7
	PL 16.9
	PL 2.4
006K21720	PL 17.12
006K21730	PL 17.6
006K21970	PL 17.12
006E71740	PL 5.1
007E61890	PL 5.2
007E61910	PL 5.2
007E62630	PL 2.8
007E64740	PL 2.7
007E66050	PL 16.15

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007E66060	PL 16.15
007E66070	PL 16.15
007E66080	PL 16.14
007E66340	PL 20.10
007E67730	PL 17.7
007E67740	PL 17.7
007E67750	PL 17.7
007E67760	PL 17.6
007E67770	PL 17.8
007E67780	PL 17.8
007E67790	PL 17.8
007E67800	PL 17.8
007E67810	PL 17.8
007E67820	PL 17.11
007E67830	PL 17.11
007E67840	PL 17.11
007E67850	PL 17.4
007E67860	PL 17.4
007E67870	PL 17.4
007E72070	PL 17.12
007E72080	PL 17.12
007E72090	PL 17.7
007E75201	PL 2.8
007K81120	PL 20.8
007K85522	PL 2.9
007K85580	PL 1.3
007K85730	PL 16.11
	PL 2.4
	PL 16.9
	PL 16.7
007K85750	PL 1.1
007K86400	PL 1.1
007K86700	PL 20.6
007K86910	PL 17.6
007K86920	PL 1.1
007K86931	PL 2.9
007K87110	PL 1.1
007K87220	PL 1.1
008E90931	PL 20.8
008E90941	PL 20.8
008E94070	PL 17.7

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009E26870	PL 20.1
009E26970	PL 16.3
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009E28560	PL 20.8
009E28570	PL 20.8
009E55450	PL 18.4
009E62830	PL 18.5
011E10711	PL 11.2
011E10800	PL 16.13
011K94970	PL 5.1
011K96790	PL 16.14
012E09750	PL 20.4
012E09760	PL 20.8
012E10070	PL 16.4
012E91960	PL 20.8
012K94110	PL 18.5
012K94120	PL 18.5
012K94260	PL 10.2
013E18980	PL 5.3
013E20240	PL 17.6
013E20250	PL 17.12
013E80970	PL 20.10
013E92760	PL 20.4
013E94561	PL 20.8
014E42850	PL 16.1
	PL 2.1
014K81604	PL 9.3
015K45802	PL 11.2
015K48381	PL 2.8
015E48890	PL 20.2
015E48900	PL 20.2
015K49310	PL 5.6
015K49450	PL 16.14
015K49460	PL 16.14
015K49470	PL 16.13
015K49480	PL 5.6
015K50680	PL 17.11
015K51640	PL 17.11
015K52280	PL 17.8
015K52320	PL 4.2
015E77040	PL 17.14

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017E92060	PL 18.5
017K92350	PL 16.15
017K92360	PL 16.15
017E94660	PL 17.14
017E94700	PL 19.1
017E94710	PL 19.1
017E94730	PL 19.1
019E49470	PL 18.6
019E49830	PL 18.4
019E50340	PL 17.11
019E50400	PL 18.6
019E93510	PL 20.2
019K97130	PL 2.14
019K97540	PL 5.4
019K97550	PL 5.4
019K98190	PL 5.4
019K98200	PL 5.4
020E21050	PL 20.6
020E25090	PL 18.5
020E32740	PL 18.5
020E34970	PL 17.8
020K91230	PL 20.6
020E93120	PL 16.3
020E93230	PL 20.9
020K94970	PL 18.6
020E99590	PL 18.5
022K33920	PL 12.2
022K37070	PL 20.6
022K37080	PL 20.6
022K38040	PL 20.8
022K39710	PL 20.10
022K62610	PL 17.6
022K65880	PL 17.12
022E88210	PL 17.4
023E12230	PL 20.6
023E15690	PL 20.10
023E19300	PL 18.5
023E19990	PL 20.6
023E20000	PL 20.4
	PL 20.9

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023E20010	PL 20.6
023E20020	PL 17.4
023E20160	PL 17.7
026E93560	PL 17.1
029E31600	PL 2.3
029K91990	PL 17.9
031E94030	PL 17.7
032K93800	PL 20.1
035E65010	PL 6.2
036K91420	PL 20.3
036K91431	PL 20.3
038E23560	PL 2.14
038E24410	PL 17.10
038E24650	PL 17.4
041K94050	PL 18.6
041K94260	PL 17.9
041K94271	PL 18.6
042K91990	PL 10.1
048E64200	PL 20.1
048K76180	PL 20.1
049E91070	PL 20.10
050K36410	PL 20.1
050K43070	PL 18.3
	PL 20.11
050K43120	PL 16.1
050K43130	PL 16.1
050K43880	PL 17.10
050K46690	PL 20.7
	PL 20.8
050K48170	PL 16.1
	PL 2.1
050K48181	PL 2.13
050E88440	PL 20.11
054K13081	PL 20.9
054K13600	PL 20.4
054K13621	PL 20.2
054K16130	PL 2.8
054E16330	PL 2.8
054K17241	PL 11.2
054K17252	PL 11.2
054K18270	PL 16.6

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054E18520	PL 16.6
054E18530	PL 16.5
054E18540	PL 16.5
054K18780	PL 20.5
054K18790	PL 20.7
054K22410	PL 2.8
055K19260	PL 20.5
055K26060	PL 20.9
059K11821	PL 20.9
059K11840	PL 20.4
059K11860	PL 20.9
059K11880	PL 20.2
059K15573	PL 16.6
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059K15611	PL 2.8
059K16742	PL 11.1
059K16750	PL 11.2
059K18283	PL 16.5
059K18714	PL 12.1
059K18900	PL 16.6
059K19720	PL 20.5
059K19750	PL 20.8
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059K21260	PL 5.4
059K21790	PL 16.5
059K23150	PL 5.3
059K23960	PL 12.1
059K23970	PL 12.2
059K23980	PL 12.2
059K24010	PL 2.14
059K24020	PL 2.14
059K24661	PL 2.6
059K24690	PL 2.11
059K24801	PL 2.12
059E95920	PL 16.4
059E95930	PL 16.1
062E10040	PL 18.6
062K10730	PL 18.6
062K10881	PL 3.1
063E94040	PL 18.5
063E94050	PL 18.5

Table 1 Part Number Index

Part Number	Part List
064K91451	PL 5.3
068E10210	PL 18.3
074K94320	PL 9.2
090K92820	PL 18.3
	PL 20.11
101K38810	PL 9.2
101K38980	PL 9.2
103E27220	PL 9.1
104E93610	PL 9.1
105E06910	PL 20.9
105E09760	PL 9.1
105E09810	PL 9.1
105E09820	PL 9.1
105E09830	PL 9.1
105E09970	PL 9.1
105E09980	PL 9.1
105E10480	PL 18.4
105E10510	PL 18.6
105E10650	PL 18.4
105E11130	PL 9.1
105E11320	PL 17.12
105K18641	PL 9.1
105K18771	PL 9.1
107E08680	PL 18.4
110K07850	PL 20.2
110K07870	PL 20.2
110K08471	PL 18.4
110K08541	PL 16.1
	PL 2.1
110K10650	PL 2.8
110K10880	PL 16.1
110K11100	PL 18.2
110K11211	PL 10.2
110E94770	PL 10.1
110E97990	PL 17.13
113K82310	PL 9.3
116K90810	PL 6.1
117E19780	PL 18.6
117E20840	PL 18.3
117K30960	PL 18.4
117E94370	PL 9.2

Table 1 Part Number Index

Part Number	Part List
118E12090	PL 18.6
120E11971	PL 2.13
120E18160	PL 2.11
120E20690	PL 17.7
120E20700	PL 17.2
120E20970	PL 17.6
121K22220	PL 2.6
121K22470	PL 1.2
121K22690	PL 20.5
121K22710	PL 20.2
121K22860	PL 11.2
121K22870	PL 11.2
121K23270	PL 1.2
121K23560	PL 11.2
121K24610	PL 17.7
121K24620	PL 17.8
121K27751	PL 13.1
121K82870	PL 11.2
121E87830	PL 2.14
121E88470	PL 17.5
121E90640	PL 20.7
121E91450	PL 17.3
121K93870	PL 20.2
122E92030	PL 18.6
122K93330	PL 4.2
122K93340	PL 4.2
123K94020	PL 18.2
126K13940	PL 7.1
126K13950	PL 7.2
126K13960	PL 7.2
126K13980	PL 7.2
126K13990	PL 7.2
126K14890	PL 7.1
127K23230	PL 16.11
	PL 16.9
	PL 2.4
	PL 16.7
127K29242	PL 4.1
127K29330	PL 9.1
127K29340	PL 8.1
127K29511	PL 2.9

Table 1 Part Number Index

Part Number	Part List
127K29930	PL 12.2
127K31840	PL 16.15
127K32140	PL 18.5
127K32640	PL 20.9
127K32680	PL 20.4
127K32690	PL 20.6
127K32730	PL 8.1
127K32840	PL 17.7
127K32850	PL 17.10
127K32860	PL 17.9
127K32870	PL 17.8
127K32920	PL 13.1
127K33160	PL 18.4
127K33420	PL 17.11
127K33930	PL 6.1
127K33940	PL 6.1
127K33950	PL 5.4
127K36020	PL 16.15
127K36640	PL 8.1
130K60600	PL 20.5
	PL 20.9
	PL 20.7
130K60830	PL 5.4
130K60851	PL 2.3
130K60865	PL 1.3
130K61020	PL 7.2
130K61250	PL 12.2
130K61510	PL 16.6
130K61920	PL 17.6
130K62000	PL 18.4
130K62360	PL 17.4
130K62580	PL 18.4
130K63000	PL 6.2
130E80890	PL 20.5
130E81600	PL 16.6
130E82190	PL 16.11
	PL 2.3
	PL 2.9
	PL 5.4
	PL 2.4
	PL 2.13

Table 1 Part Number Index

Part Number	Part List
	PL 16.9
	PL 16.7
	PL 2.11
	PL 2.10
130E82530	PL 17.10
	PL 17.6
	PL 17.9
	PL 17.11
	PL 17.13
130E82540	PL 17.10
	PL 17.8
	PL 17.4
130E82650	PL 16.5
	PL 2.6
130E82970	PL 17.4
130E84270	PL 5.4
130E84300	PL 2.9
130E91010	PL 4.1
130K93230	PL 11.2
130K93360	PL 17.4
130K94740	PL 17.12
133K21100	PL 13.1
133K21200	PL 13.1
133K22400	PL 13.1
140K60480	PL 20.1
160K46290	PL 2.6
160K66429	PL 18.3
160K66860	PL 12.2
160K74231	PL 13.1
160K75800	PL 18.2
160K76650	PL 13.1
160K76660	PL 17.13
160K76760	PL 9.2
160K76770	PL 9.2
160K76802	PL 9.1
160K77201	PL 9.2
160K77367	PL 18.2
160K82222	PL 13.1
160K83080	PL 20.3
160K84400	PL 9.1
160K84800	PL 9.2

Table 1 Part Number Index

Part Number	Part List
160K84820	PL 9.2
160K85980	PL 16.15
160K87730	PL 9.1
160K90840	PL 13.1
162K55941	PL 9.3
162K55971	PL 9.3
162K56000	PL 9.3
162K56020	PL 5.4
162K56031	PL 9.3
162K56590	PL 16.11
162K61090	PL 5.4
162K62110	PL 9.3
162K62810	PL 16.6
162K64340	PL 20.3
162K69060	PL 17.4
162K69070	PL 17.4
162K69330	PL 9.2
413W10950	PL 18.5
413W77359	PL 20.4
423W28054	PL 17.8
423W29655	PL 17.7
537K61180	PL 13.1
537K62670	PL 13.1
537K62680	PL 13.1
537K64070	PL 17.13
538K94570	PL 13.1
600K78460	PL 16.10
	PL 2.5
	PL 16.8
	PL 16.12
600K90370	PL 20.4
604K05330	PL 18.4
604K07050	PL 5.2
604K07060	PL 5.2
604K07070	PL 2.8
604K07490	PL 6.2
604K07500	PL 6.2
604K07510	PL 6.2
604K07520	PL 6.2
673K51382	PL 20.11
801K02480	PL 17.1

Table 1 Part Number Index

Part Number	Part List
802K08320	PL 20.4
802E12400	PL 10.2
802E12430	PL 10.2
802E12480	PL 10.3
802E12490	PL 10.3
802E12500	PL 10.3
802K12950	PL 5.2
802K13193	PL 2.3
802E23930	PL 16.16
802E23950	PL 16.16
802E23960	PL 16.16
802E23980	PL 16.4
802E23990	PL 16.3
802K25731	PL 16.13
802K27073	PL 2.9
802E27860	PL 10.3
802K28110	PL 10.3
802E28520	PL 17.5
802E28530	PL 17.5
802E28540	PL 17.5
802E28550	PL 17.5
802E28560	PL 17.5
802E28570	PL 17.5
802K28570	PL 17.6
802K28580	PL 17.4
802K28590	PL 17.3
802K28600	PL 17.3
802K28891	PL 6.2
802K29610	PL 10.2
802E30140	PL 17.4
802E30150	PL 17.4
802E32860	PL 18.2
802K33090	PL 6.1
802K36580	PL 16.16
802K36650	PL 17.1
802K36660	PL 17.14
802K36670	PL 17.14
802K45490	PL 2.7
802K45710	PL 10.2
802K45910	PL 6.1
802K45920	PL 6.1

Table 1 Part Number Index

Part Number	Part List
802K45930	PL 6.1
802K45940	PL 6.1
802K46022	PL 18.2
802K46050	PL 10.1
802K46060	PL 10.1
802K47090	PL 4.1
809E04210	PL 20.8
809E04220	PL 20.8
809E09110	PL 18.6
809E11130	PL 20.2
809E26330	PL 5.6
809E28960	PL 16.13
809E28980	PL 16.13
809E29620	PL 2.8
809E33600	PL 17.10
830E17490	PL 20.11
830E81670	PL 17.6
891E49060	PL 16.1
891E49510	PL 16.1
891E49520	PL 16.1
891E65180	PL 20.1
891E65210	PL 20.1
891E75951	PL 10.1
892E13310	PL 2.2
892E28491	PL 16.1
892E41110	PL 2.1
892E74500	PL 16.2
892E78280	PL 10.1
892E78290	PL 10.1
908W01200	PL 9.2
917W00723	PL 9.2
962K05900	PL 18.4
962K05910	PL 18.4
962K07440	PL 17.9
962K08641	PL 13.1
962K08820	PL 9.2
962K09800	PL 9.3
962K10120	PL 17.13
962K10130	PL 17.13

6 General Procedures & Information

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Entering Diagnostic Mode using the PWS

Procedure

The following procedure describe how to enter the Diagnostics Mode with the PWS.

1. Inform the customer that the machine will be undergoing service and will not be available. (Copy jobs and local print jobs will be stopped).
2. Disconnect the machine from the customer network.
3. Connect the Portable Work Station (PWS) to the machine (Figure 1).

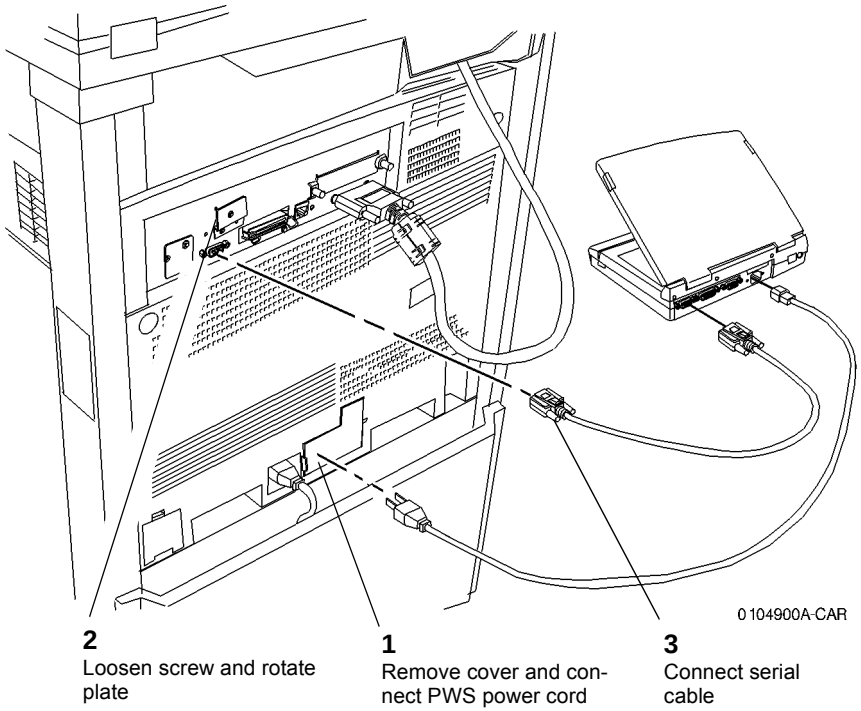


Figure 1 Connecting the PWS

4. Switch on the PWS.
5. Make sure the machine is not copying or printing. The machine UI should display **Ready to Copy** when there are no pending jobs.
6. At the PWS, enter the **GSNLock Password** and select **OK**.
7. From the Start menu in the lower left corner, select Programs\Xerox Applications\DC 1632 PWS Tools.

NOTE: *The PWS cannot connect to the machine if it is in Power Save mode. Ensure that the machine indicates* ***Ready to Copy*** *before launching the PWS Tools.*

8. The **Diagnostics Tool screen** will display.
   a. Select **Use Local DB** from the **Diagnostics Tool screen**. The **PWS Diagnostic Service Entry Window** displays.
   b. While the machine is connected to the PWS, the machine UI will display the message, **Connecting to the Machine**.
9. When the tool starts obtaining machine data, that data is displayed on the Service Entry Screen. When the system has obtained the machine data, it displays **Complete** at the upper left corner of the Service Entry Screen.

   The data listed in Table 1 will be displayed.

Table 1 Machine Data displayed at Service Entry

Heading	Contents	Description
Machine Data	Product Code	Displays a code allocated to each machine to identify the machine.
	Serial Number	Displays a 6-digit number (0-9) allocated to each machine type to identify the machine.
	Total Copies	Displays the total number of copies/prints
	Copies Since Last Call	Displays the total number of copies/prints since the last CSE visit (complete closeout).
	Software Version	Displays current IOT S/W Version
Non-Zero Jams	ID, Description, Occurrences	Displays the Jams that have occurred since the last complete closeout.
HFSI Requiring Replacement	ID, Description, Threshold, Count.	Displays the component(s) (HFSI) that has exceeded the life Threshold).
Faults in Progress (Current Faults)	ID, Description, Primary	Displays current (active) faults in the machine.

10. If communication is lost between the PWS and the machine, click **Reconnect** from the main file menu.
11. To exit the Diagnostic Mode:
    a. Select the **Service Exit Tab**.
    b. Click on the appropriate close-out buttons:
       - **Complete Closeout**
       - **Temporary Closeout**
    c. After the PWS has disconnected from the machine, select **Exit PWS** to close the tool.

UI Diagnostic Mode

Diagnostic routines are mainly instructed/executed through the PWS. The UI Diagnostic mode tis provided for simple tasks that do not require connection with the PWS.

Procedure

Access the UI Diagnostic mode by following the procedures below.

Entering the UI Diagnostic mode

1. At the Control Panel, press and hold the **0** key for 5 seconds, then press the **Start** button while still pressing the 0 key.

   The **CE Mode - Password Entry** screen will appear.
2. Enter the Access Number (6789) and press **Confirm**.

   The colors on the display will be reversed to indicate that the mode has changed to the UI Diagnostic mode.

Accessing Diagnostic routines

1. Press the **Access** button on the Control Panel
2. Press the **System Settings** button on the display
3. Press the **Common Settings** button on the display
4. Press the **Diagnostics** button on the display
5. The following dC routines can be accessed from the UI screen
   a. DC301 NVM Initialization

      - Select the subsystem to be initialized and press the Start button on the display. Refer to dC301 for details.

   b. DC355 Hard Disk Initialization

      - Only Partition A can be initialized. For full initialization, refer to ADJ 9.8.

   c. DC131 NVM Read/Write

      - follow the instructions on the screen. If one or more NVM locations is changed, the machine will reboot upon exit. Refer to dC131 for details.

Printing Service Reports

1. To access Service reports, follow the **Entering the UI Diagnostic mode** procedure.
2. After entering the Access Number, press the **Machine Status** button on the Control Panel.
3. Select the **Billing Meter/Print Reports** tab on the display.
4. Press the **Print Reports/List** button.
5. Press the **CE** button
6. The following reports can be printed.
   a. Debug Log
   b. HFSI Report
   c. Jam Report
   d. Shutdown Report
   e. Fail Report

Exiting UI Diagnostic mode

CAUTION

Ensure that the machine is not inadvertently left in UI Diagnostic Mode.

There are three ways to exit from the UI Diagnostic mode.

- Switch the power off and on.
- perform the following:
  - Press **Close** to exit any of the service screens that were opened.
  - When the **System Settings** screen is displayed, press Exit
  - When the reversed-color Copy Mode screen is displayed, press the **Start** button while the **0** key is pressed.
- If the **Restart** button is displayed in the screen, pressing the button will restart the operation and exit from the mode.

DC Quick (CODE Number LIST)

Once in the Service Mode, dC Routines can be selected by dC Number or by selecting the appropriate tabs starting at the Service Entry Screen.

Procedure

1. Enter the **Diagnostic Mode**. Refer to Entering Diagnostic Mode using the PWS.
2. Using the DC Quick pull-down menu (upper-right side of Diagnostics Service Entry Screen), select the desired dC routine.

   Table 1 is a complete list of dC Routines that are available from the DC Quick pull-down menu.

Table 1 dC Routines

dC Number	Name	Description
100	Service Entry Screen	1. Displays the Service Routine Tabs. 2. Lists Active Faults 3. Lists the item names of the HFSIs that exceeded life expectancy. 4. Lists the jams that have occurred since the last Call Closeout. 5. Displays IOT S/W Version.
118	Jam Counter	Displays the following: Number of jam events since the last Complete Closeout (performed in Service Exit) to the current Number of jams.
120	Fail Counters	Displays the following: Number of Fault events after the last Complete Closeout (performed in Service Exit) to the current copy count.
122	Shut-down History	1. Displays the history in three categories: Document Jam, Paper Jam and Other Fault. 2. Displays the most recent 40 Faults (without categorizing)
129	Automatic Setting: Adjust System Registration	The IOT lead registration and side registration are matched.
131	NVM access: Read/Write NVM	You can reference or set/change the NVM data.
132	Set Machine Serial Number. Read Billing Meter Information	If you have replaced the PWB that has a Machine Serial Number, check the PWB and set the Machine Serial Number. Reads Billing Meter Information for the following: ï MCU PWB ï ESS PWB ï ESS NVM PWB
135	Service Data HFSI Counter	Displays the regular part replacement life expectancy (threshold) and current value (usage). You can change the replacement life expectancy to a preset value in the PWS database and reset the current value.
140	Component Check: Analog Monitor	Monitor the analog values of the sensors (A/D conversion) while operating the components (e.g., C.C). You can temporarily change the output value.
188	Service Mode Exit Screen	Displays the requirements for exit from the Service Mode.
301	NVM access: NVM initialization	Initiates NVM Data initialization
305	System Test: Component Operation Check UI Component Check	Checks the UI Screen and Component Panel Button operation.
330	Component Check: Component Control	Displays the instructions and results of the Input Component Check and Output Component Check 1. You can monitor each Input Component or check the operation of each Output Component. 2. You can simultaneously check multiple Input Components and Output Components up to 11 total.
351	NVM Background Processing	1. Saves and restores values of all NVM in PWS dC131 database. ***NOTE:*** *Background Read must complete prior to saving.* 2. Start and Stop background NVM Read. 3. Saves/restores machine settings. Saves NVM values listed: 4. Resets all HFSI.
355	HDD Diagnostics	Perform maintenance on HDD.
361	NVM access: Save/Restore NVM	Saves the machine NVM data in the PWS. Restores the machine NVM data (stored in the PWS) back to the machine.

Table 1 dC Routines

dC Number	Name	Description
371	Configuration Page	Allows viewing of current software version and Market Place setting, Machine Configuration, Output Device(s), Accessories, Tray 1 Paper Size setting, Feature Config., and Input Device. These settings can be changed to align with the machine configuration.
612	Color Test Pattern Print	1. Outputs a test pattern to identify a copy quality problem. 2. Generates a test pattern from the Pattern Generator in the machine.
685	Regicon	Color Registration/Skew setup
921	ATC Calibration	Enter ATC Sensor Calibration code into NVM.
922	TRC Control/Toner Density Adjustment	Measure the grayscale patch by the ADC sensor. Make the LUT for IOT TRC correction.
924	TRC Adjustment	Manually fine adjust each color (low/mid/high density) in PG.
934	ADC/AGC Setup	Execute automatic adjustment of the ADC Sensor Gain.
945	IIT calibration	1. Calculate and set the white reference compensation coefficient. 2. Correct the IIT sensitivity variation.
956	Belt Edge Learn	Set up the Belt Edge Sensor.

dC100 Service Entry

When entering Diagnostics, this routine allows you to view faults in progress, Non-Zero Jams and HFSI items requiring replacement. Service entry allows you to view product information, such as:

- Product Code
- Machine Serial Number
- Total Copies
- Copies since Last Call
- IOT Software Version

Procedure

1. Enter the **Diagnostic Mode**. Refer to Entering Diagnostic Mode using the PWS.
2. Check the **HFSI Requiring Replacement**.
3. Check the **Non-Zero Jams**. Jams that have occurred since the last service exit with the Complete Closeout option selected. Check for any Jams that have a high number of occurrences.
4. Check the **Faults In Progress**. If any faults in progress are displayed, troubleshoot accordingly.
5. Select the **Refresh** button to have the PWS request and receive the latest information on Total Copies, Copies Since Last Call, Non-Zero Jams or HFSI Requiring Replacement.

dC118 Jam Counter

Purpose

Displays the number of occurrences of Jams from time of previous Complete Closeout on service exit until present.

NOTE: *This procedure does not count jams detected while in the Service Mode.*

Procedure

1. Enter the **Diagnostic Mode**. Refer to Entering Diagnostic Mode using the PWS.
2. Select **Maintenance** on the Service Entry Screen.
3. Select the **Jam Counters (dC 118)**.
4. The screen displays all jam-related fault codes, and the number of times that the fault has occurred since the last time the **Complete Closeout** option was selected when exiting Diagnostic Mode.
5. The following subsets of data are selectable:
   - ï All Jams
     - This is the default. All jam-related faults are listed
   - ï DADF Jams
     - Selecting this tab lists only the DADF jam codes.
   - ï Paper Jams
     - Selecting this tab lists only the paper supply and paper feeding jam codes.
   - ï Non-Zero Jams
     - Selecting this tab lists only those jam codes that have had at least one occurrence since the last time the **Complete Closeout** option was selected.

dC120 Fail Counter

Purpose

Displays the number of occurrences of each fault since the last Service Exit with the Complete Closeout option selected.

NOTE:

- ï *The machine does not count the faults detected while in the Service Mode.*
- ï *The machine does not count interlock open detected faults while the Main Processor is stopped.*

Procedure

1. Enter the **Diagnostic Mode**. Refer to Entering Diagnostic Mode using the PWS.
2. Select **Maintenance** on the Service Entry Screen.
3. Select the **Fail Counters (dC120)** tab.
4. The screen displays all fault codes that have occurred since the last time the **Complete Closeout** option was selected when exiting Diagnostic Mode.

   The codes are listed in ascending order; to list in descending order, click on **ID** in the table header.

   If machine data was previously saved to diskette, and Diagnostic Mode was entered with the **Read From Diskettes** option selected, the previous fault history #Occurrence will display in the P1 column. If this same procedure was performed previously, the fault history #Occurrence will display in P2, then P3, up to columns P7.
5. The following subsets of data are selectable:
   - ï All Faults
   - ï DADF Faults
   - ï System faults
   - ï Xero Faults

dC122 Shutdown History

Purpose

To display the Last 40 Faults (History).

NOTE:

1. *fault detected while in Service Mode are not counted.*
2. *An Interlock open while the machine is stopped is not counted.*
3. *If multiple faults occurred in the machine, the primary fault is recorded.*

Procedure

1. Enter the **Diagnostic Mode**. Refer to Entering Diagnostic Mode using the PWS.
2. Select the **Diagnostics Tab**.
3. Select the **Shutdown Hist (dC122)** tab.
4. The system displays the faults that occurred in Customer Mode since the last service call closeout, up to a maximum of 40 faults.
5. The information in the lower right corner of the screen (Input, Original, Paper, Tray, Output) reflects the fault highlighted in the Table.
6. The following subsets of data are available:
   - **Last 40 Faults History** (default screen).
     - displays the 40 newest faults and lists copy count when each occurred.
   - **Last 40 Faults Occurrences**
     - displays the 40 newest faults and lists the number of occurrences.
   - **DADF Jams**
     - displays the 40 newest DADF jams and lists copy count when each occurred.
   - **Paper Jams**
     - displays the 40 newest paper jams and lists copy count when each occurred.
   - **Fail**
     - displays the 40 newest non-jam faults and lists copy count when each occurred.
7. To clear the shutdown history, select **Complete Closeout** in the Service Mode Exit screen (dC188). Exiting from the Service Mode clears all data in the Shut-Down History.

dC129 System Registration Setup

Purpose

Performs the Lead Registration and Side Registration adjustments by looking at the output of the built-in Test Pattern.

NOTE: *For details on the dC129 System Registration adjustment, see ADJ 9.9 IOT Registration Series (dC129).*

dC131 NVM Read/Write

Purpose

Reads, sets or changes the NVM data.

Procedure

Module Selection

1. Enter the **Diagnostic Mode**. Refer to Entering Diagnostic Mode using the PWS.
2. Select **Adjustments** in the Service Entry Screen.
3. The system displays one of the Read/Write Screens. dC131 NVM Read/Write is the default screen.
4. Select a **Sub-System** from the Vertical Left Tab List. The default tab is **All**.

Table 1 Module Selection

Module item	Chain number allocation
All	700 - 999
UI/Tools	700, 720
IISS	715
Config/System	719, 740
Xfer	746
RegiCon	760
PHM	742
DADF	710
Xero	751
Drives / Output	741, 764
ProCon	752
Developer	762
Fuser	744
Other	755, 769
Errors (number of errors)	Displays and NVM outside of the ranges listed in the PWS database.
Changed (number pending change)	Displays any with new value entered in the New column, but not written yet.

Reading NVM

1. Select an **ID** from the Sub-System Table, then click **Read NVM**, or double click on the line **ID** and the value will be read in the **Value** column.

   The **Range Check** column will fill in.

Writing NVM

1. To change a value, enter a new value in the **New** column and press **Enter**.
2. When a new value is entered, the **Changed** tab will turn green. The number in parentheses count the number of pending NVM values. Clicking this tab will show a list of all the changed values. These locations can be written individually or as a block from this tab, or can be canceled.
3. Select **Write NVM**.
   a. If the input value is valid (within the range), the system writes the new NVM value in the NVM location in the machine.
   b. If the input value is invalid, the system displays the following message in the information screen, The **given NVM value is out of range. NVM was not changed**.
   c. If the NVM cannot be changed (Write protected NVM), the system displays the following message, **The specified NVM is read only**.
4. When the system writes the new value in the specified NVM code, the value is updated in the **New** box and reduces the count in the Changed Tab.

Table 1 Chain 700

Chain-Link	Name	Default	Range	Description
700-006	Configuration	-	0x00~0x08	[P, SP, CSP, CFSP] Set up at factory production. It allocates bits in the following P(rinter), F(ax), C(opy), S(can). P = 0x01, F = 0x02, C = 0x04, S = 0x08.
700-073	Page Memory Size	-	64*1024*1024~256*1024*1024	bytes (Auto Setting)
700-075	ART User Buffer Size	32KB	32*1024~2048*1024	32KB~2048KB (32KB interval)
700-076	PostScript Buffer Size		8*1024*1024~32*1024*1024	Color machine = [8 MB~32 MB] B/W machine = [4.5 MB~32 MB] (0.25 MB interval)
700-078	Form Buffer Size	128 KB	128*1024~2048*1024	128 KB~2048 KB
700-080	HPGL/Auto Layout Buffer Size	64 KB	64*1024~5120*1024	64 KB~5120 KB (32 KB interval)
700-081	Parallel Buffer Size	64KB	-	64 KB~1 MB (32 KB interval)
700-082	TBD	256KB	64*1024~1*1024*1024	64 KB~1 MB (32 KB interval)
700-083	Lpd Buffer Size	256KB	64*1024~1*1024*1024	64 KB~1 MB (32 KB interval)
700-084	NetWare Buffer Size	256KB	64*1024~1*1024*1024	64 KB~1 MB (32 KB interval)
700-085	AppleTalk Buffer Size	256KB	-	64 KB~1 MB (32 KB interval)
700-086	SMB Buffer Size	256KB	64*1024~1*1024*1024	64 KB~1 MB (32 KB interval)
700-087	IPP Buffer Size	256KB	64*1024~1*1024*1024	64 KB~1 MB (32 KB interval)
700-088	Salutation Buffer Size	256KB	-	64 KB~1 MB (32 KB interval)
700-089	HDD Status	-	-2~0	0 = Yes, -1 = Error, -2 = No (Auto Detect)
700-120	Time Zone	540	-	Displays the Time difference from GMT. E.g. Japan = 540, Hawaii = -600
700-124	Auto Clear Timer	1min	0~240	MF = 0, 1~4 = [Disable (0), 1~4min] (in increments of 1min) P = 0, 1~30 = [Disable (0), 1~30min] (in increments of 1min)
700-125	Job Cancel Timer	10min	0~5940	0 = Disable 240~5940 = 4~99min (in increments of 1min)
700-126	Operating Timer	10sec	0~240	0 = Disable 1~240 = [1~240sec] (in increments of 1sec)
700-127	Job End Timer	6sec	0~240	0 = Disable 1~240 = [1~240sec] (in increments of 1sec)
700-128	Scanning Timer	4sec	1~20	1~20 = [1~20sec (1sec unit)
700-129	LowPower Mode Timer	15	6~240	6~240 = [6~240min (in increments of 1min)]
700-130	Sleep Mode Timer	60min	15~240	15~240 = [15~240min (in increments of 1min)]
700-131	Sleep Mode Available	1	[Setup Range] =	0 = Disable, 1 = Enable

Table 1 Chain 700

Chain-Link	Name	Default	Range	Description
700-132	Operation Panel OK Beep	2	0~3	0 = Off, 1 = Low volume, 2 = Medium volume, 3 = High volume
700-133	Operation Panel NG Beep	2	0~3	0 = Off, 1 = Low volume, 2 = Medium volume, 3 = High volume
700-134	Job Complete Beep with Copy	2	0~3	0 = Off, 1 = Low volume, 2 = Medium volume, 3 = High volume
700-135	Job Complete Beep without Copy	2	0~3	0 = Off, 1 = Low volume, 2 = Medium volume, 3 = High volume
700-136	Abnormal Warning Beep	2	0~3	0 = Off, 1 = Low volume, 2 = Medium volume, 3 = High volume
700-137	Job Incomplete Beep	2	0~3	0 = Off, 1 = Low volume, 2 = Medium volume, 3 = High volume
700-138	Ready Beep	2	0~3	0 = Off, 1 = Low volume, 2 = Medium volume, 3 = High volume
700-139	Toner Empty Warning Beep	2	0~3	0 = Off, 1 = Low volume, 2 = Medium volume, 3 = High volume
700-140	Bell Tone	2	0~3	0 = Off, 1 = Low volume, 2 = Medium volume, 3 = High volume
700-141	Line Monitor Tone	2	0~3	1 = Low volume, 2 = Medium volume, 3 = High volume
700-144	Auto Log Print Flag	0	0~1	0 = OFF 1 = ON
700-145	Report Duplex Print	0	0~1	0 = OFF 1 = ON
700-146	Mail Box Receive Report	ON	0~1	0 = OFF 1 = ON
700-147	Protocol Monitor Output Control	0	0~2	0= When instructed 1= When error occurs 2= When normal
700-151	Transmission Report on Error Output Control	1	0~2	[0=OFF, 1=ON, 2=Output at normal]
700-152	User Abort Transmission Report Output Control	0	0~1	0= Do not output 1= Output
700-153	TBD	0	0~1	0 = Do not register 1 = Register
700-164	Language	Japanese	[Setup Range] 1	1 = Japanese, 2 = English, 3 = French, 4 = German, 5 = Italian, 6 = Spanish, 7 = Portuguese, 8 = Russian, 9 = Chinese, 10 = Korean, 11 = Thai, 12 = Vietnamese, 13 = Taiwanese
700-165	Country Code	0=Undefined	-	0=Undefined, 840 =USA, 124=Canada, 076=Brazil, 3=Latin America -> Cannot be assigned 826=UK, 276=Germany, 380=Italy, 250=France, 724=Spain, 528=Holland, 756=Swiss, 752=Sweden, 056=Belgium, 040=Austria, 620=Portugal, 246=Finland, 208=Denmark
700-166	Territory	-	[Setup Range] =	1=FX, 2=XC, 3=XE, 4=AP
700-169	Print Priority	48	18~48	48 = Priority 0 (low), 38 = Priority 1, 28 = Priority 2, 18 = Priority 3 (high), Default = Priority 0 (48)
700-170	Copy Priority	Priority 1 (38)	18~48	48 = Priority 0 (low), 38 = Priority 1, 28 = Priority 2, 18 = Priority 3 (high), Default = Priority 0 (38)
700-171	KO Tools Entry Password	NULL	-	ASCII '0'~'9'. 4 ~12 digits.
700-172	TBD	-	-	"6789" Fixed value
700-175	Transaction Report Display point	0	0~1	0= Displays lead edge in 40 digits 1= Displays rear edge in 40 digits
700-197	Max. Job Numbers	60002>90	90~3000	Set up 90 (min.)~3000 (max.) in increments of 1. 02>30~3000
700-198	TBD	1	0~1	1 = Permit, 0 = Prohibits
700-207	TBD	-	-	0 = Not valid, 1 = Valid
700-301	SEEPROM Serial# (1st digit)	-	-	Alphanumerics (ASCII)
700-302	SEEPROM Serial# (2nd digit)	-	-	Alphanumerics (ASCII)
700-303	SEEPROM Serial# (3rd digit)	-	-	Alphanumerics (ASCII)
700-304	SEEPROM Serial# (4th digit)	-	-	Alphanumerics (ASCII)
700-305	SEEPROM Serial# (5th digit)	-	-	Alphanumerics (ASCII)
700-306	SEEPROM Serial# (6th digit)	-	-	Alphanumerics (ASCII)
700-307	SEEPROM Serial# (7th digit)	-	-	Alphanumerics (ASCII)
700-308	SEEPROM Serial# (8th digit)	-	-	Alphanumerics (ASCII)

Table 1 Chain 700

Chain-Link	Name	Default	Range	Description
700-309	SEEPROM Serial# (9th digit)	-	-	Alphanumerics (ASCII)
700-310	SEEPROM Serial# (10th digit)	-	-	Alphanumerics (ASCII)
700-311	Battery Backup SRAM Serial # (1st digit)	-	-	Alphanumerics (ASCII)
700-312	Battery Backup SRAM Serial # (2nd digit)	-	-	Alphanumerics (ASCII)
700-313	Battery Backup SRAM Serial # (3rd digit)	-	-	Alphanumerics (ASCII)
700-314	Battery Backup SRAM Serial # (4th digit)	-	-	Alphanumerics (ASCII)
700-315	Battery Backup SRAM Serial # (5th digit)	-	-	Alphanumerics (ASCII)
700-316	Battery Backup SRAM Serial # (6th digit)	-	-	Alphanumerics (ASCII)
700-317	Battery Backup SRAM Serial # (7th digit)	-	-	Alphanumerics (ASCII)
700-318	Battery Backup SRAM Serial # (8th digit)	-	-	Alphanumerics (ASCII)
700-319	Battery Backup SRAM Serial # (9th digit)	-	-	Alphanumerics (ASCII)
700-320	Battery Backup SRAM Serial # (10th digit)	-	-	Alphanumerics (ASCII)
700-321	SEEPROM Product # (1st digit)	-	-	Alphanumeric (ASCII)
700-322	SEEPROM Product # (2nd digit)	-	-	Alphanumeric (ASCII)
700-323	SEEPROM Product # (3rd digit)	-	-	Alphanumeric (ASCII)
700-324	SEEPROM Product #(4th digit)	-	-	Alphanumeric (ASCII)
700-325	Battery Backup SRAM Product # (1st digit)	-	-	Alphanumeric (ASCII)
700-326	Battery Backup SRAM Product # (2nd digit)	-	-	Alphanumeric (ASCII)
700-327	Battery Backup SRAM Product # (3rd digit)	-	-	Alphanumeric (ASCII)
700-328	Battery Backup SRAM Product # (4th digit)	-	-	Alphanumeric (ASCII)
700-329	SEEPROM Product Code (1st digit)	-	-	Alphanumerics (ASCII)
700-330	SSEEPROM Product Code (2nd digit)	-	-	Alphanumerics (ASCII)
700-331	SEEPROM Product Code (3rd digit)	-	-	Alphanumerics (ASCII)
700-332	SEEPROM Product Code (4th digit)	-	-	Alphanumerics (ASCII)
700-333	SEEPROM Product Code (5th digit)	-	-	Alphanumerics (ASCII)
700-334	SEEPROM Product Code (6th digit)	-	-	Alphanumerics (ASCII)
700-335	SEEPROM Product Code (7th digit)	-	-	Alphanumerics (ASCII)
700-336	SEEPROM Product Code (8th digit)	-	-	Alphanumerics (ASCII)

Table 1 Chain 700

Chain-Link	Name	Default	Range	Description
700-337	Configuration (info. On SEEPROM)	-	-	[P, SP, CSP, CFSP (C)] Set at factory. It allocates bits in the following into P(rinter), F(ax), C(opy), S(can) respectively and display it in that disjunction. P = 0x01, F = 0x02, C = 0x04, S = 0x08
700-338	Territory (SEEPROM)	-	1~4	1=FX, 2=XC, 3=XE, 4=AP
700-339	IOT ROM Major version	-	-	(Auto Setting)
700-340	IOT ROM Minor version	-	-	(Auto Setting)
700-341	IOT ROM Revision version	-	-	(Auto Setting)
700-342	Sys Main ROM Major	-	-	(Auto Setting)
700-343	Sys Main ROM Minor	-	-	(Auto Setting)
700-344	Sys Main ROM Revision	-	-	(Auto Setting)
700-348	IIT ROM Major	-	-	(Auto Setting)
700-349	IIT ROM Minor	-	-	(Auto Setting)
700-350	IIT ROM Revision	-	-	(Auto Setting)
700-351	DADF ROM Major	-	-	(Auto Setting)
700-352	DADF ROM Minor	-	-	(Auto Setting)
700-353	DADF ROM Revision	-	-	(Auto Setting)
700-354	UI Frame ROM Major	-	-	(Auto Setting)
700-355	UI Frame ROM Minor	-	-	(Auto Setting)
700-356	UI Frame ROM Revision	-	-	(Auto Setting)
700-357	UI control ROM Major	-	-	(Auto Setting)
700-358	UI control ROM Minor	-	-	(Auto Setting)
700-359	UI control ROM Revision	-	-	(Auto Setting)
700-360	Product Code (1st digit)	-	-	Alphanumerics (ASCII)
700-361	Product Code (2nd digit)	-	-	Alphanumerics (ASCII)
700-362	Product Code (3rd digit)	-	-	Alphanumerics (ASCII)
700-363	Product Code (4th digit)	-	-	Alphanumerics (ASCII)
700-364	Product Code (5th digit)	-	-	Alphanumerics (ASCII)
700-365	Product Code (6th digit)	-	-	Alphanumerics (ASCII)
700-366	Product Code (7th digit)	-	-	Alphanumerics (ASCII)
700-367	Product Code (8th digit)	-	-	Alphanumerics (ASCII)
700-368	Lpd Buffer Size (Memory Spool)	1MB (1*1024*1024)	512*1024~32*1024*1024	Memory Spool = [512 KB~32 MB] (256 KB interval)

710-xxx DADF NVM List

Table 2 Chain 710

Chain-Link	Name	Default	Range	Description
710-001	ADF Fail Bypass	0	0~1	0 = Bypass ON 1 = Bypass OFF
710-002	JAM Bypass	0	0~1	0 = Bypass ON 1 = Bypass OFF
710-005	Regi Sensor Off to Belt Motor Slow-down Step (Non CVT Mode)	250	217~283	No. of Steps after the Regi Sensor turned Off and until the Belt Motor started to reduce speed in the Non CVT Mode. Lead Regi Adjustment Value = 5 +/-5mm

Table 2 Chain 710

Chain-Link	Name	Default	Range	Description
710-006	DupMode RegiSensor On to Belt Mot. Slowdown Step (Non CVT Mode)	44	19~69	[Description] = No. of Steps after the Regi Sensor turned On and until the Belt Motor started to reduce speed in the Non CVT Mode (Reverse & Reverse Output Loop) Regi Roll Loop Adjustment Value at Reverse & Reverse Output = 4 +/-5mm
710-012	8.5x11"LEF Threshold	2093	1993~2193	Threshold to separated the size detection of 8.5x11"LEF and 8x10"LEF.
710-013	B5SEF/8x10"SEF Switching	0	0~1	0 = B5SEF(FX/XE/AP), 1 = 8x10"SEF(XC)
710-014	11x15"SEF/8K Switching (for AP market)	0	0~1	11x15"SEF, 1 = 8K
710-018	FS MAX value	2970	1297~3070	For customized registration of DADF Document Size Detection Decurler
710-019	FS MIN value	2970	1297~3070	For customized registration of DADF Document Size Detection Decurler
710-020	SS MAX value	2100	1297~4418	For customized registration of DADF Document Size Detection Decurler
710-021	SS MIN value	2100	1297~4418	For customized registration of DADF Document Size Detection Decurler
710-022	Document Size	8	3~20	For customized registration of DADF Document Size Detection Decurler
710-023	Document Process Direction	0	0~1	For customized registration of DADF Document Size Detection Decurler
710-024	DADF Doc Size Detection Table	0	0~1	For customized registration of DADF Document Size Detection Decurler
710-025	S Size Side2 Lead Regi Adjust	250	217~283	Side 2 Lead Regi Correction Value of S Size document. Unit = Step (S Size = 131.7mm~158.0mm in Slow Scan Direction)
710-026	M Size Side2 Lead Regi Adjust	250	217~283	Side 2 Lead Regi Correction Value of M Size document. Unit = Step (M Size = 158.1mm~245.9mm in Slow Scan Direction)
710-027	L Size Side2 Lead Regi Adjust	250	217~283	Side 2 Lead Regi Correction Value of L Size document. Unit = Step (L Size = 246.0mm~460.0mm in Slow Scan Direction)
710-800	ADF Static Jam Count Total (No Sensor Sensed Jam)	0	0~65535	Cumulative Jam Counter (Write not permitted)
710-801	ADF Static Jam Count Since Reset (No Sensor)	0	0~65535	Cumulative Jam Counter at the previous clearing (Write not permitted)
710-802	ADF Document Input Sensor Static Jam Count Total	0	0~65535	Cumulative Jam Counter (Write not permitted)
710-803	ADF DocInput SNR Static Jam Count Since Reset	0	0~65535	Cumulative Jam Counter at the previous clearing (Write not permitted)
710-804	ADF Registration Sensor Static Jam Count Total	0	0~65535	Cumulative Jam Counter (Write not permitted)
710-805	ADF Regi Sensor Static Jam Count Since Reset	0	0~65535	Cumulative Jam Counter at the previous clearing (Write not permitted)
710-806	ADF Exit Sensor Static Jam Count Total	0	0~65535	Cumulative Jam Counter (Write not permitted)
710-807	ADF Exit Sensor Static Jam Count Since Reset	0	0~65535	Cumulative Jam Counter at the previous clearing (Write not permitted)
710-808	ADF Duplex Sensor Static Jam Count Total	0	0~65535	Cumulative Jam Counter (Write not permitted)
710-809	ADF Duplex Sensor Static Jam Count Since Reset	0	0~65535	Cumulative Jam Counter at the previous clearing (Write not permitted)
710-810	ADF Regi SNR On NonInvert Dynamic-Jam Count Total	0	0~65535	Cumulative Jam Counter (Write not permitted)
710-811	ADF Regi SNR On Dynamic Jam Count Since Reset	0	0~65535	Cumulative Jam Counter at the previous clearing (Write not permitted)

Table 2 Chain 710

Chain-Link	Name	Default	Range	Description
710-812	ADF RegiSNR Off NonInvert Dynamic-Jam Count Total	0	0~65535	Cumulative Jam Counter (Write not permitted)
710-813	ADF Regi SNR Off Dynamic Jam Count Since Reset	0	0~65535	Cumulative Jam Counter at the previous clearing (Write not permitted)
710-814	ADF Regi SNR On Dynamic Jam Count Total (invert)	0	0~65535	Cumulative Jam Counter (Write not permitted)
710-815	ADF RegiSNROn DynamicJamCount Since Reset (invert)	0	0~65535	Cumulative Jam Counter at the previous clearing (Write not permitted)
710-816	ADF Regi SNR Off Dynamic Jam Count Total (invert)	0	0~65535	Cumulative Jam Counter (Write not permitted)
710-817	ADF RegiSNROffDynamicJamCount Since Reset (invert)	0	0~65535	Cumulative Jam Counter at the previous clearing (Write not permitted)
710-818	ADF Exit Sensor On Dynamic Jam Count Total	0	0~65535	Cumulative Jam Counter (Write not permitted)
710-819	ADF Exit Sensor On Dynamic Jam Count Since Reset	0	0~65535	Cumulative Jam Counter at the previous clearing (Write not permitted)
710-820	ADF Exit Sensor Off Dynamic Jam Count Total	0	0~65535	Cumulative Jam Counter (Write not permitted)
710-821	ADF Exit Sensor Off DynamicJam Count Since Reset	0	0~65535	Cumulative Jam Counter at the previous clearing (Write not permitted)
710-822	Size Mismatch Jam Count Total	0	0~65535	Cumulative Jam Counter (Write not permitted)
710-823	Size Mismatch Jam Count Since Reset	0	0~65535	Cumulative Jam Counter at the previous clearing (Write not permitted)
710-900	Feed Life Count (upper digits)	36	0~65535	Feed Count Replacement Life (Upper digits) (Write not permitted)
710-901	Feed Life Count (lower digits)	40704	0~65535	Feed Count Replacement Life (Lower digits) (Write not permitted)

715-xxx IIT NVM List

Table 3 Chain 715

Chain-Link	Name	Default	Range	Description
715-001	PreIPS Fail Bypass	0	0~1	0 = Fail Bypass is not available, 1 = Fail Bypass is available
715-004	ACS Detection Level	2	0~4	Level 0 (judged from Black and White)~Level 4 (judged from Color)
715-014	PRadjF	120	0~240	Fast Scan Direction Regi Correction Value (Dot) Adjustment at factory. VLSS=PROMVLSS+PRadjF -120 - Shift Amount
715-015	DADF FS Offset	71	0~150	Fast Scan Offset Value (Dot) when DADF is used. VLSS=PROMVLSS+PRadjF -120 +DADF Offset- Shift Amount, Adjustment at factory. (DUP Side can be used too)
715-016	Side Registration Shift (-)	0	0~256	For VLSS=PROMVLSS+PRadjF - 120 - Shift Amount and (Dot) Regi adjustments.
715-017	COSAC FS1x5 Filter	0	0~1	0 = OFF, 1 = ON (Moire reduction)
715-018	COSAC Special Feature (Setting range is TBD)	0	0~2047	bit 0 -> 0 = Normal, 1 = LSWIDE LineSync Active large width bit 1 -> 0 = Normal, 1 = AGOC Cancel, Manual Setup from NVM-AGCP, AOCP. bit 2 -> 0 = Normal, 1 = Forward revolution output (ONPF=0)
715-051	AOCerr	0	0~255	No. of times the AOC flow has ended in an abnormal way.
715-080	Pshad (1)	148	115~255	Red W-Ref Correction Coefficient Adjustment at factory.
715-081	Pshad (2)	158	115~255	Green W-Ref Correction Coefficient Adjustment at factory.
715-082	Pshad (3)	165	115~255	Blue W-Ref Correction Coefficient Adjustment at factory.

Table 3 Chain 715

Chain-Link	Name	Default	Range	Description
715-083	Pshad (4)	65	0~127	Red W-Ref Correction Coefficient P Paper Adjustment at factory.
715-084	Pshad (5)	72	0~127	Green W-Ref Correction Coefficient P Paper Adjustment at factory.
715-085	Pshad (6)	69	0~127	Blue W-Ref Correction Coefficient P Paper Adjustment at factory.
715-113	A6/Postcard Detection	0	0~1	0 = A6 Document, 1 = Postcard Document (XC 0 = Postcard, 1 = A6)
715-114	A4S/8.5in Detection 1	0	0~1	0 = A4 Fixed (Other than XC), Letter Fixed (XC), 1 = Can be changed by Area Switching 2
715-115	A4S/8.5in Detection 2	3	0~6	0 = 210mm(A4S)~6 = 216mm(8.5")
715-116	Original detection table for special paper	0	0~2	0 = Do not use special table 1 = A Series (A4L when APS is Off, and A3S when APS is On) 2 = Inch Series (Letter LEF when APS is Off, and 11x17" when APS is On)
715-128	DADF FS Offset (side 2)	71	01~50	Fast Scan Offset value (Dot) on IPS at DADF DUP Side 2. VLSS=PROMVLSS+PRadjF - 50 +DADF Offset Side 2 Adjustment at factory.
715-138	Document Size Detection	0	0~1	0 = Detection by 4 Registers, 1 = Detection by 3 Registers (Contamination Countermeasure)
715-139	B5/8x10" Detection	0	0~1	B5/8x10" Switching (Default 0 = B5 Detection, 1 = 8x10" Detection)
715-140	8K Detection	0	0~1	8K detection specification (Default 0 = Do not detect, 1 = Detect)
715-141	8.5x13"/8.5x14" Detection	0	0~1	8.5x13"/8.5x14" Detection Switching Specification in AP/XE markets.
715-142	NutAngleF	990	0~1980	Front NUT Revolution Angle (990~1980 = Right revolution angle, 0~990 = Left revolution angle)
715-143	NutAngleR	990	0~1980	Rear NUT Revolution Angle (990~1980 = Right revolution angle, 0~990 = Left revolution angle)
715-200	External Area of FS Sampling	255	0~511	Speed Priority AE/Fast Scan direction undetected area
715-204	Maximum Sampling Value of Back-ground color	90	0~255	Speed Priority AE/Sampling Upper Limit/BMAX
715-205	Initial Background color Value	0	0~255	Speed Priority AE/Background level initial value/INIT
715-208	Line to Fix Variation	48	0~255	Speed Priority AE/Slow Scan variation fixed position/NCON
715-212	Background Color Suppression mode for BW	2	0~2	Speed Priority AE/Suppression Mode Setup in B/W 0 = Register, 1 = Fixed, 2 = Vary
715-213	Background Color Suppression mode for Color	0	0~2	Speed Priority AE/Suppression Mode Setup in Color 0 = Register, 1 = Fixed, 2 = Vary
715-214	Undercolor Data for BW	0	0~255	Speed Priority AE/Fixed background color data in B/W Register Mode
715-215	Undercolor Data for Color	0	0~255	Speed Priority AE/Fixed background color data in Color Register Mode
715-218	Gamma Data for BW	1	0~2	AE GAMMA Data in B/W mode 0 = GMD=2, 1 = GMD=3, 2 = GMD=5
715-219	Gamma Data for Color	1	0~2	AE GAMMA Data in Color mode 0 = GMD=2, 1 = GMD=3, 2 = GMD=5
715-220	Color Balance Default = Y/Low density	4	0~8	Default Color Balance Adjustment Level Y Color Low density
715-221	Color Balance Default = Y/Medium density	4	0~8	Default Color Balance Adjustment Level Y Color Medium density
715-222	Color Balance Default = Y/High density	4	0~8	Default Color Balance Adjustment Level Y Color High density
715-223	Color Balance Default = M/Low density	4	0~8	Default Color Balance Adjustment Level M Color Low density
715-224	Color Balance Default = M/Medium density	4	0~8	Default Color Balance Adjustment Level M Color Medium density
715-225	Color Balance Default = M/High den-sity	4	0~8	Default Color Balance Adjustment Level M Color High density
715-226	Color Balance Default = C/Low density	4	0~8	Default Color Balance Adjustment Level C Color Low density
715-227	Color Balance Default = C/Medium density	4	0~8	Default Color Balance Adjustment Level C Color Medium density
715-228	Color Balance Default = C/High density	4	0~8	Default Color Balance Adjustment Level C Color High density

Table 3 Chain 715

Chain-Link	Name	Default	Range	Description
715-229	Color Balance Default = K/Low density	4	0~8	Default Color Balance Adjustment Level K Color Low density
715-230	Color Balance Default = K/Medium density	4	0~8	Default Color Balance Adjustment Level K Color Medium density
715-231	Color Balance Default = K/high density	4	0~8	Default Color Balance Adjustment Level K Color High density
715-232	Photo reproduction level	1	0~2	0 = Above Text, 1 = Normal, 2 = Above Photo
715-233	Text/Photo separation level	2	0~4	0 = Above Text, 1 = Slightly above text, 2 = Normal, 3 = Slightly above photo, 4 = Above Photo
715-234	FS Magnification Adjustment	50	0~100	Magnification fine adjustment in Fast Scan direction. Specified in units between range of 0~100. The value indicates the magnification adjustment with 0= -5%, 50= 0% and 100= 5% at ±5% (0.1% unit) (Adjustment at factory.)
715-237	Normal Density Text (BW Copy)	128	0~256	B/W COPY Text Normal Density Adjustment
715-238	High Density Text (BW Copy)	128	0~256	B/W COPY Text Darker 3 Density Adjustment
715-239	Normal Density Text (Scan)	128	0~256	Scan Text Normal Density Adjustment
715-240	High Density Text (Scan)	128	0~256	Scan Text Darker 3 Density Adjustment
715-241	SS Not Detect Area for Platen model (Real Time AE)	38	0~65535	Slow Scan Non-detection area Setup value at Real Time AE for platen model.
715-242	SS Not Detect Area for DADF model DADF mode (Real Time AE)	38	0~65535	Slow Scan Non-detection area Setup value at Real Time AE for DADF model platen job.
715-243	SS Not Detect Area for DADF model Platen mode (Real Time AE)	38	0~65535	Slow Scan Non-detection area Setup value at Real Time AE for DADF model DADF job.
715-244	B/W-Offset for Text/Image Platen mode (Real Time AE)	10	0~255	For AE OFFSET data Platen text/photo in B/W model
715-245	B/W-Offset for Text Platen mode (Real Time AE)	10	0~255	For AE OFFSET data Platen text in B/W model
715-246	B/W-Offset for Map Platen mode (Real Time AE)	10	0~255	For AE OFFSET data Platen map in B/W model
715-247	B/W-Offset for Text/Image DADF Single Side mode (Real Time AE)	13	0~255	For AE OFFSET data DADF Single Side Document text/photo in B/W model
715-248	B/W-Offset for Text DADF Single Side mode(Real Time AE)	15	0~255	For AE OFFSET data DADF Single Side Document text in B/W model
715-249	B/W-Offset for Map DADF Single Side mode Real Time AE)	13	0~255	For AE OFFSET data DADF Single Side Document map in B/W model
715-250	B/W-Offset for Text/Image DADF Duplex Side mode (Real Time AE)	17	0~255	For AE OFFSET data DADF Duplex Side Document text/photo in B/W model
715-251	B/W-Offset for Text DADF Duplex Side mode (Real Time AE)	17	0~255	For AE OFFSET data DADF Duplex Side Document text in B/W model
715-252	B/W-Offset for Map DADF Duplex Side mode (Real Time AE)	17	0~255	For AE OFFSET data DADF Duplex Side Document map in B/W model
715-253	Color-Offset for Text/Image Platen mode (Real Time AE)	15	0~255	For AE OFFSET data Platen text/photo in Color model
715-254	Color-Offset for Text Platen mode (Real Time AE)	15	0~255	For AE OFFSET data Platen text in Color model
715-255	Color-Offset for Text Platen mode (Real Time AE)	15	0~255	For AE OFFSET data Platen map in Color model

Table 3 Chain 715

Chain-Link	Name	Default	Range	Description
715-256	Color-Offset for Text/Image DADF Single Side mode (Real Time AE)	17	0~255	For AE OFFSET data DADF Single Side Document text/photo in Color model
715-257	Color-Offset for Text DADF Single Side mode (Real Time AE)	18	0~255	For AE OFFSET data DADF Single Side Document text in Color model
715-258	Color-Offset for Map DADF Single Side mode (Real Time AE)	17	0~255	For AE OFFSET data DADF Single Side Document map in Color model
715-259	Color-Offset for Text/Image DADF Duplex Side mode (Real Time AE)	17	0~255	For AE OFFSET data DADF Duplex Side Document text/photo in Color model
715-260	Color-Offset for Text DADF Duplex Side mode (Real Time AE)	18	0~255	For AE OFFSET data DADF Duplex Side Document text in Color model
715-261	Color-Offset for Map DADF Duplex Side mode (Real Time AE)	17	0~255	For AE OFFSET data DADF Duplex Side Document map in Color model
715-300	IIT Fail Bypass	0	0~1	0 = Fail Bypass is not available, 1 = Fail Bypass is available
715-301	SS Registration Adjustment	100	16~184	Slow Scan Direction Regi Correction Value (0.036mm/step) Adjustment at factory.
715-302	SS Magnification Adjustment	50	44~56	Slow Scan direction Magnification Correction Value (0.1%/step) Adjustment at factory.
715-400	Platen/ADF	0	0~1	0 = Platen model 1 = ADF model Adjustment at factory.
715-401	AGOC Timing	15	0~29	Time between Power ON/Energy Saver recovery and AGOC (min.) (0 = Timer not available)
715-800	IIISS/ADF Communication Fail Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-801	IISS/ADF Communication Fail Count Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-802	IIISS RAM CHECK Failure Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-803	IISS RAM CHECK Failure Count Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-804	EEPROM Failure Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-805	EEPROM Failure Count Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-806	Fan Failure Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-807	Fan Failure Count Since Reset	0	0~065535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-808	Scan Carriage Position Fail Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-809	Scan Carriage Position Fail Count Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-810	Scan CRG Init Regi SNR Fail Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-811	Scan CRG Init Regi Sensor Fail Count Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-812	PreIPS (X) Recognition Fail Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-813	PreIPS (X) Recognition Fail Count Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-814	Lamp Failure Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-815	Lamp Failure Count Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)

Table 3 Chain 715

Chain-Link	Name	Default	Range	Description
715-816	CRG Over Run Fail Count Overall Total (Scan End)	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-817	CRG Over Run Fail Count Since Reset (Scan End)	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-818	CRG Over Run Fail Count Overall Total (Home End)	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-819	CRG Over Run Fail Count Since Reset (Home End)	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-820	CRG INIT Motor Driver Fail Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-821	CRG INIT Motor Driver Fail Count Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-822	Platen AGC Channel 1 Fail Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-823	Platen AGC Channel 1 Fail Count Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-824	Platen AGC Channel 2 Fail Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-825	Platen AGC Channel 2 Fail Count Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-826	Platen AGC Channel 3 Fail Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-827	Platen AGC Channel 3 Fail Count Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-828	Platen AGC Channel 4 Fail Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-829	Platen AGC Channel 4 Fail Count Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-830	Platen AGC Channel 5 Fail Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-831	Platen AGC Channel 5 Fail Count Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-832	Platen AGC Channel 6 Fail Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-833	Platen AGC Channel 6 Fail Count Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-834	Platen AOC Channel 1 Fail Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-835	Platen AOC Channel 1 Fail Count Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-836	Platen AOC Channel 2 Fail Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-837	Platen AOC Channel 2 Fail Count Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)

Table 3 Chain 715

Chain-Link	Name	Default	Range	Description
715-838	Platen AOC Channel 3 Fail Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-839	Platen AOC Channel 3 Fail Count Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-840	Platen AOC Channel 4 Fail Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-841	Platen AOC Channel 4 Fail Count Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-842	Platen AOC Channel 5 Fail Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-843	Platen AOC Channel 5 Fail Count Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-844	Platen AOC Channel 6 Fail Count Overall Total	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-845	Platen AOC Channel 6 Fail Count Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-854	Original Size Sensor Failure Total Count	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-855	Original Size Sensor Failures Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-856	IIT Memory Hot Line Failure Total Count	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-857	IIT Memory Hot Line Failures Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-858	DADF RAM CHECK Failure Total Count	0	0~65535	Cumulative Fail Counter (Write not permitted)
715-859	DADF RAM CHECK Failures Since Reset	0	0~65535	Cumulative Fail Counter at the previous clearing (Write not permitted)
715-900	Scan Life Count (upper digits)	36	0~65535	Scan Count Replacement Life (Upper Level) (Write not permitted)
715-901	Scan Life Count (lower digits)	40704	0~65535	Scan Count Replacement Life (Lower Level) (Write not permitted)

719--xxx IIT/DADF Software NVM List

Table 4 Chain 719

Chain-Link	Name	Default	Range	Description
719-001	Version No. (Upper level)	0	0~65535	Indicates the IISS Version No.
719-002	Market Information	0	0~3	FX=0, AP=1, XC=2, XE=3
719-003	A4/Letter	1	0~3	Basic unit of document size. For A4 = bit0=1, letter = bit=1 *Checking of range is not performed.
719-004	ADF Version No.	0	0~65535	Indicates the ADF Version No.
719-005	IISS Major Version	0	0~65535	IISS Major Version No.
719-006	IISS Minor Version	0	0~65535	IISS Minor Version No.
719-007	IISS Revision Version	0	0~65535	IISS Revision Version No.
719-008	IISS Patch Version	0	0~65535	IISS Patch Version No.

Table 4 Chain 719

Chain-Link	Name	Default	Range	Description
719-010	ADF Major Version	0	0~65535	ADF Major Version No.
719-011	ADF Minor Version	0	0~65535	ADF Minor Version No.
719-012	ADF Revision Version	0	0~65535	ADF Revision Version No.
719-013	ADF Patch Version	0	0~65535	ADF Patch Version No.

720-xxx ESS Meter/Counter NVM List

Table 5 Chain 720

Chain-Link	Name	Default	Range	Description
720-002	Billing	PFV BILL-ING TYPE1	1~6	1 = Billing1, 2 = Billing2, 3 = Billing3, 4 = Billing4, 5 = Billing5, 6 = Billing6
720-003	Master Print-Full Color	-	0~1999999	0~1,999,999
720-004	Master Print-Color1	-	0~1999999	0~1,999,999
720-005	Master Print-Color2	-	0~1999999	0~1,999,999
720-006	Master Print-B&W	-	0~1999999	0~1,999,999
720-012	Backup1 Print-Full Color	-	0~1999999	0~1,999,999
720-013	Backup1 Print-Color1	-	0~1999999	0~1,999,999
720-014	Backup1 Print-Color2	-	0~1999999	0~1,999,999
720-015	Backup1 Print-B&W	-	0~1999999	0~1,999,999
720-040	[PSW Display] Group	0	0~999999999999	0~999999999999 (0 means not set up)
720-041	TBD	0	0~999999999999	0~999999999999 (0 means not set up)
720-042	TBD	0	0~3	0 = FreeAccess, 1 = Color Only, 2 = B&W Only, 3 = Cannot be used
720-043	TBD	0	0~3	0 = FreeAccess, 1 = Color Only, 2 = B&W Only, 3 = Cannot be used
720-044	Group C Mode to use	0	0~3	0 = FreeAccess, 1 = Color Only, 2 = B&W Only, 3 = Cannot be used

740--xxx IOT Manager NVM List

Table 6 Chain 740

Chain-Link	Name	Default	Range	Description
740-024	RegiCon Request Flag	0	0~255	0 = Performed, 1 = Not performed
740-025	Edge Check Request Flag	0	0~255	0 = Performed, 1 = Not performed
740-026	ProCon Request Flag	0	0~255	0 = Performed, 1 = Not performed

741--xxx Drive NVM List

Table 7 Chain 741

Chain-Link	Name	Default	Range	Description
741-054	NVM_PR_MOT_HIGH_PULSE (PR (Drum) Motor Speed Fine Adjustment (Standard)	23	0~40	Performs fine adjustment of Drum Speed at Standard Speed. Increases the Drum Speed by +1 (approx. 0.05%) with respect to the initial value. Decreases the Drum Speed by -1 (approx. 0.05%).
741-055	NVM_PR_MOT_LOW_PULSE (PR (Drum) Motor Speed Fine Adjustment (Heavy Weight /Transparency)	23	0~40	Fine adjusts the Drum Speed at half speed. Increases the Drum Speed by +1 (approx. 0.05%) with respect to the initial value. Decreases the Drum Speed by -1 (approx. 0.05%).
741-056	Belt Home Fail Too Long Counter	0	0~3	It is necessary to reset the No. of Occurrence of Belt Home Fail Too Long to 3.
741-057	NoPaperRun Mode SW	0	0~2	0 = Normal NoPaperRun 1 = MainMotor Stop 2 = Main/Dev. Motor Stop
741-068	NVM_PR_MOT_DOUBLE_PULSE (PR (Drum) Motor Speed Fine Adjustment (Double Speed)	22	0~40	Fine adjusts the Drum Speed at double speed. Increases the Drum Speed by +1 (approx. 0.05%) with respect to the initial value. Decreases the Drum Speed by -1 (approx. 0.05%).

742--xxx Paper Handling NVM List

Table 8 Chain 742

Chain-Link	Name	Default	Range	Description
742-001	Invert Clutch CW Off Timing	82	0~163 (1bit= 2.4462ms)	Paper inversion position adjustment (P Speed) default=2300ms
742-002	Invert Clutch CW Off Timing (MF-1)	106	0~259 (1bit= 1.31136ms)	Paper inversion position adjustment (Double Speed)
742-006	RegiLoopLengthAjust (Tray Standard Paper)	41	0~81 (1bit= 2.4462ms)	Regi Loop Length Adjustment (P Speed) for Standard Paper from Tray. Default=260ms
742-007	RegiLoopLengthAjust (Tray Standard Paper) (MF)	41	0~81 (1bit= 1.31136ms)	Regi Loop Length Adjustment (Double Speed) for Standard Paper from Tray
742-009	RegiLoopLengthAjust (Tray 5 Standard Paper)	41	0~81	Regi Loop Length Adjustment (P Speed) for Standard Paper from Tray 5 (1bit= 2.4462ms)
742-011	RegiLoopLengthAjust (Tray 5 Standard Paper) (MF)	41	0~81 (1bit= 1.322ms)	Regi Loop Length Adjustment (Double Speed) for Standard Paper from MSI
742-013	RegiLoopLengthAjust (Tray 5 Heavy2 Paper)	41	0~81 (1bit= 4.8924ms)	Regi Loop Length Adjustment (Half Speed) for Heavy Weight Paper from MSI. Default=221ms
742-014	RegiLoopLengthAjust (DUP) (2sheets of paper)	41	0~81 (1bit= 2.4462ms)	Regi Loop Length Adjustment (P Speed) from Dup (Feeding length Letter-LEF and Shorter) Default=157ms
742-015	RegiLoopLengthAjust (DUP) (MF)	76	0~152 (1bit= 1.31136ms)	Regi Loop Length Adjustment (Double Speed) from Dup
742-016	T/A Clutch On Timing (From Regi Start)	20	8~32 (1bit= 2.4462ms)	Synchronize adjustment to be same as Regi Clutch at Regi Start (-30~30ms) Default=0ms
742-017	Dup On Timing (From Regi Start)	20	0~40 (1bit= 2.4462ms)	Synchronize adjustment to be same as Regi Clutch at Regi Start (P Speed). Default=373ms
742-018	Full Stack Paper Sensing Condition	2	1~12 (1bit= 5sec)	Full Stack Detection Condition (5~60sec).
742-019	Full Stack Paper Cancel Condition	1	1~30 (1bit= 1sec)	Full Stack Cancel Condition (1~30sec)
742-020	Feed Start Timing (MSI)	41	0~82 (1bit= 2.4462ms)	Feed Start Timing Adjustment from Pitch (P Speed) (850~1050ms). Default=950ms

Table 8 Chain 742

Chain-Link	Name	Default	Range	Description
742-021	Feed Start Timing (MSI) (MF)	150	0~300 (1bit= 1.31136ms)	Feed Start Timing Adjustment from Pitch (Double Speed) (100~500ms)
742-022	Feed Motor Off Timing	10	0~35 (1bit= 10ms)	Feed Motor Off Timing Adjustment from T/A Nip
742-023	Regi Clutch Off Timing	41	0~81 (1bit= 2.4462ms)	Adjusts the time between the paper rear edge has passes the Regi Sensor and the Regi Clutch Turns Off (P Speed) (90~290ms). Default=190ms
742-024	Regi Clutch Off Timing (MF)	76	0~152 (1bit= 1.31136ms)	Adjusts the time between the paper rear edge has passes the Regi Sensor and the Regi Clutch Turns Off (Double Speed)
742-025	ADJUST SIDE REGI (ALL)	25	0~50 (1bit= 0.211mm)	Side Regi Adjustment (ALL, Offset value)
742-026	ADJUST SIDE REGI (MSI)	20	0~50 (1bit= 0.211mm)	Side Regi Adjustment (MSI)
742-027	ADJUST SIDE REGI (Dup)	22	0~50 (1bit= 0.211mm)	Side Regi Adjustment (Dup)
742-028	ADJUST LEAD REGI (ALL)	20	0~40 (1bit= 0.2544mm)	Lead Regi Adjustment (ALL, Offset value)
742-029	ADJUST LEAD REGI (Tray)	12	0~40 (1bit= 0.2544mm)	Lead Regi Adjustment (P Speed) from Tray
742-030	ADJUST LEAD REGI (Tray)	20	0~40 (1bit= 0.2544mm)	Lead Regi Adjustment (Double Speed) from Tray
742-031	ADJUST LEAD REGI (MSI) (Standard Paper)	11	0~40 (1bit= 0.2544mm)	Lead Regi Adjustment (P Speed) Standard Paper from Tray 5
742-032	ADJUST LEAD REGI (MSI) (Standard Paper)	20	0~40 (1bit= 0.2544mm)	Lead Regi Adjustment (Double Speed) Standard Paper from MSI
742-033	ADJUST LEAD REGI (MSI) (Heavy1)	20	0~40 (1bit= 0.2544mm)	Lead Regi Adjustment (P Speed) Heavy Weight Paper 1 from Tray 5
742-034	ADJUST LEAD REGI (MSI) (Heavy2)	20	0~40 (1bit= 0.2544mm)	Lead Regi Adjustment (Half Speed) Heavy Weight Paper 2 from Tray 5
742-035	ADJUST LEAD REGI (MSI) (Heavy Paper1)	20	0~40 (1bit= 0.2544mm)	Lead Regi Adjustment (Half Speed) Heavy Weight Paper 1 from Tray 5
742-036	ADJUST LEAD REGI (MSI) (Heavy Paper2)	20	0~40 (1bit= 0.2544mm)	Lead Regi Adjustment (Half Speed) Heavy Weight Paper 2 from Tray 5
742-037	ADJUST LEAD REGI (Dup)	11	0~40 (1bit= 0.2544mm)	Lead Regi Adjustment (P Speed) (Side2)
742-038	ADJUST LEAD REGI (Dup)	20	0~40 (1bit= 0.2544mm)	Lead Regi Adjustment (Double Speed) (Side2)
742-039	Jam Bypass	0	0~255	0 = Normal Mode 255 = Jam Bypass
742-040	OCT Start Timing (Offset)	42	0~202 (1bit= 2.4462ms)	OCT (Offset) Start Timing Adjustment (P Speed)
742-041	OCT Start Timing (Offset)	42	0~202 (1bit= 1.31136ms)	OCT (Offset) Start Timing Adjustment (Double Speed)
742-046	Face Up Tray Condition	0	0~1	Face Up Tray Present 0 = No 1 = Yes
742-047	OCT Start Timing (Home)	17	0~112 (1bit= 2.4462ms)	OCT (Home) Start Timing Adjustment (P Speed)

Table 8 Chain 742

Chain-Link	Name	Default	Range	Description
742-048	OHP Sheet Sensing Condition	1	0~1	Transparency Detection 1 = Detect 0 = Does not detect
742-049	Tray 5 Side Guide Min Data	972	927~1017 (1bit= 1mm)	Saves the Tray 5 Size Detection Min Value
742-050	Tray 5 Side Guide Max Data	52	7~97 (1bit= 1mm)	Saves the Tray 5 Size Detection Max Value
742-051	FEED START TIMING 1Tray	82 (450ms)	0~163 (1bit= 2.4462ms)	Adjusts the time between Pitch (Standard Signal IOT) and FEED Starts (250~650ms).
742-052	FEED START TIMING 1Tray	82	0~163 (1bit= 1.31136ms)	
742-053	ADJUST SIDE REGI 1Tray	22	0~50 (1bit= 0.211mm)	SIDE REGI Adjustment for each TRAY
742-054	PAPER THE REST 1Tray	0	0~4000	Saves the Cumulative LIFT UP Time from TRAY insertion (For remaining detection calculation as=A).
742-055	PRE T/A START TIMING 3TM-1	74	0~115 (1bit= 2.4462ms)	Adjusts the Time between PRE T/A Starts and Standard Signal (IOT) (303~803ms)
742-056	PRE T/A START TIMING 3TM-2	74	0~115 (1bit= 2.4462ms)	Adjusts the Time between PRE T/A Starts and Standard Signal (IOT) (365~865ms)
742-057	PRE T/A START TIMING 3TM-3	74	0~115 (1bit= 2.4462ms)	Adjusts the Time between PRE T/A Starts and Standard Signal (IOT) (429~929ms)
742-058	PRE T/A START TIMING TTM-1	10	0~16 (1bit= 2.4462ms)	Adjusts the Time between PRE T/A Starts and Standard Signal (IOT)
742-059	PRE T/A START TIMING TTM-2	74	0~115 (1bit= 2.4462ms)	Adjusts the Time between PRE T/A Starts and Standard Signal (IOT) (457~957ms)
742-060	PRE T/A START TIMING TTM-3	74	0~115 (1bit= 2.4462ms)	Adjusts the Time between PRE T/A Starts and Standard Signal (IOT) (431~931ms)
742-061	PRE T/A START TIMING 1TM-1	102	0~204 (1bit= 2.4462ms)	Adjusts the Time between PRE T/A Starts and Standard Signal (IOT) (303~803ms). Default=553ms
742-062	ADJUST PRE FEED POSITION 3TM-1	0	0~40 (1bit= 10ms)	Adjust the Time between the FEED OUT SNR ON and the FEED MOT OFF (0~400ms).
742-063	ADJUST PRE FEED POSITION 3TM-2	0	0~40 (1bit= 10ms)	Adjust the Time between the FEED OUT SNR ON and the FEED MOT OFF (0~400ms).
742-064	ADJUST PRE FEED POSITION 3TM-3	0	0~40 (1bit= 10ms)	Adjust the Time between the FEED OUT SNR ON and the FEED MOT OFF (0~400ms).
742-065	ADJUST PRE FEED POSITION TTM-1	0	0~40 (1bit= 10ms)	Adjust the Time between the FEED OUT SNR ON and the FEED MOT OFF (0~400ms).
742-066	ADJUST PRE FEED POSITION TTM-2	0	0~40 (1bit= 10ms)	Adjust the Time between the FEED OUT SNR ON and the FEED MOT OFF (0~400ms).
742-067	ADJUST PRE FEED POSITION TTM-3	37	10~50 (1bit= 10ms)	Adjust the Time between the FEED OUT SNR ON and the FEED MOT OFF (100~500ms). Default=370ms
742-068	ADJUST PRE FEED POSITION 1TM-1	0	0~40 (1bit= 10ms)	Adjust the Time between the FEED OUT SNR ON and the FEED MOT OFF (0~400ms).
742-069	MAIN FEED START TIMING 3TM-1	20	0~44 (1bit= 10ms)	Adjust the Time between the MAIN FEED Starts and the PRE T/A (330~830ms).
742-070	MAIN FEED START TIMING 3TM-2	20	0~44 (1bit= 10ms)	Adjust the Time between the MAIN FEED Starts and the PRE T/A (570~1070ms).

Table 8 Chain 742

Chain-Link	Name	Default	Range	Description
742-071	MAIN FEED START TIMING 3TM-3	20	0~44 (1bit= 10ms)	Adjust the Time between the MAIN FEED Starts and the PRE T/A (810~1310ms).
742-072	MAIN FEED START TIMING TTM-1	20	0~44 (1bit= 10ms)	Adjust the Time between the MAIN FEED Starts and the PRE T/A (330~830ms).
742-073	MAIN FEED START TIMING TTM-2	20	0~44 (1bit= 10ms)	Adjust the Time between the MAIN FEED Starts and the PRE T/A (780~1280ms).
742-074	MAIN FEED START TIMING TTM-3	20	0~44 (1bit= 10ms)	Adjust the Time between the MAIN FEED Starts and the PRE T/A (1410~1910ms).
742-075	MAIN FEED START TIMING 1TM-1	25	0~50 (1bit= 10ms)	Adjust the Time between the MAIN FEED Starts and the PRE T/A (330~830ms).Default=580ms
742-076	ADJUST SIDE REGI 2Tray	20	0~50 (1bit= 0.211mm)	SIDE REGI adjustment of 2TRAY
742-077	ADJUST SIDE REGI 3Tray	20	0~50 (1bit= 0.211mm)	SIDE REGI adjustment of 3TRAY
742-078	ADJUST SIDE REGI 4Tray	20	0~50 (1bit= 0.211mm)	SIDE REGI adjustment of 4TRAY
742-079	ADJUST SIDE REGI TrayModuleAll	25	0~50 (1bit= 0.211mm)	SIDE REGI adjustment of 2, 3, 4TRAY (Batch adjustment)
742-080	PAPER THE REST 3TM-1	0	0~4000	Saves the Cumulative LIFT UP Time from TRAY insertion (For remaining detection calculation as=A).
742-081	PAPER THE REST 3TM-2	0	0~4000	Saves the Cumulative LIFT UP Time from TRAY insertion (For remaining detection calculation as=A).
742-082	PAPER THE REST 3TM-3	0	0~4000	Saves the Cumulative LIFT UP Time from TRAY insertion (For remaining detection calculation as=A).
742-083	PAPER THE REST TTM-1	0	0~4000	Saves the Cumulative LIFT UP Time from TRAY insertion (For remaining detection calculation as=A).
742-084	PAPER THE REST TTM-2	0	0~12000	Saves the Cumulative LIFT UP Time from TRAY insertion (For remaining detection calculation as=A).
742-085	PAPER THE REST TTM-3	0	0~15000	Saves the Cumulative LIFT UP Time from TRAY insertion (For remaining detection calculation as=A).
742-086	PAPER THE REST 1TM-1	0	0~4000	Saves the Cumulative LIFT UP Time from TRAY insertion (For remaining detection calculation as=A).
742-087	OCT Condition	1	0~1	0 = Not available, 1 = Available
742-088	Dup On Timing (From Regi Start)	20	0~40 (1bit= 1.31136ms)	Synchronize adjustment to be same as the Regi Clutch at Regi Start (Double Speed)
742-089	OCT Start Timing (Home)	17	0~112 (1bit= 1.31136ms)	OCT (Home) Start Timing Adjustment (Double Speed)
742-093	PRE T/A START TIMING 3TM-1	139	0~215 (1bit= 1.31136ms)	Adjusts the Time between PRE T/A Starts and Standard Signal (IOT) (303~803ms)
742-094	PRE T/A START TIMING 3TM-2	139	0~215 (1bit= 1.31136ms)	Adjusts the Time between PRE T/A Starts and Standard Signal (IOT) (365~865ms)
742-095	PRE T/A START TIMING 3TM-3	139	0~215 (1bit= 1.31136ms)	Adjusts the Time between PRE T/A Starts and Standard Signal (IOT) (429~929ms)
742-096	PRE T/A START TIMING TTM-2	139	0~215 (1bit= 1.31136ms)	Adjusts the Time between PRE T/A Starts and Standard Signal (IOT) (457~957ms)
742-097	PRE T/A START TIMING TTM-3	139	0~215 (1bit= 1.31136ms)	Adjusts the Time between PRE T/A Starts and Standard Signal (IOT) (431~931ms)
742-098	MAIN FEED START TIMING 3TM-1	38	0~83 (1bit= 1.31136ms)	Adjust the Time between the MAIN FEED Starts and the PRE T/A (330~830ms).
742-099	MAIN FEED START TIMING 3TM-2	38	0~83 (1bit= 1.31136ms)	Adjust the Time between the MAIN FEED Starts and the PRE T/A (570~1070ms).

Table 8 Chain 742

Chain-Link	Name	Default	Range	Description
742-100	MAIN FEED START TIMING 3TM-3	38	0~83 (1bit= 1.31136ms)	Adjust the Time between the MAIN FEED Starts and the PRE T/A (810~1310ms).
742-101	MAIN FEED START TIMING TTM-2	38	0~83 (1bit= 1.31136ms)	Adjust the Time between the MAIN FEED Starts and the PRE T/A (780~1280ms).
742-102	MAIN FEED START TIMING TTM-3	38	0~83 (1bit= 1.31136ms)	Adjust the Time between the MAIN FEED Starts and the PRE T/A (1410~1910ms).
742-103	Select A/B or INCH (SMH Auto Detect)	0	0~1	0 = A/B series, 1 = Inch series
742-104	Select 2ndBTR Cleaning (SMH Auto Detect)	1	0~1	0 = No, 1 = Yes
742-105	RegiLoopLengthAjust (DUP) (a sheet of paper)	41	0~81 (1bit= 2.4462ms)	Lead Regi Length Adjustment (P Speed) from Dup (Feeding Length Letter-LEF and longer)Default=157ms
742-106	PRE T/A START TIMING 3TM-1 (Half)	37	0~58 (1bit= 4.8924ms)	Adjusts the Time between PRE T/A Starts and Standard Signal (IOT) (303~803ms)
742-107	PRE T/A START TIMING 3TM-2 (Half)	37	0~58 (1bit= 4.8924ms)	Adjusts the Time between PRE T/A Starts and Standard Signal (IOT) (365~865ms)
742-108	PRE T/A START TIMING 3TM-3 (Half)	37	0~58 (1bit= 4.8924ms)	Adjusts the Time between PRE T/A Starts and Standard Signal (IOT) (429~929ms)
742-109	PRE T/A START TIMING TTM-2 (Half)	37	0~58 (1bit= 4.8924ms)	Adjusts the Time between PRE T/A Starts and Standard Signal (IOT) (457~957ms)
742-110	PRE T/A START TIMING TTM-3 (Half)	37	0~58 (1bit= 4.8924ms)	Adjusts the Time between PRE T/A Starts and Standard Signal (IOT) (431~931ms)
742-111	MAIN FEED START TIMING 3TM-1 (Half)	10	0~22 (1bit= 4.8924ms)	Adjust the Time between the MAIN FEED Starts and the PRE T/A (330~830ms).
742-112	MAIN FEED START TIMING 3TM-2 (Half)	10	0~22 (1bit= 4.8924ms)	Adjust the Time between the MAIN FEED Starts and the PRE T/A (570~1070ms).
742-113	MAIN FEED START TIMING 3TM-3 (Half)	10	0~22 (1bit= 4.8924ms)	Adjust the Time between the MAIN FEED Starts and the PRE T/A (810~1310ms).
742-114	MAIN FEED START TIMING TTM-2 (Half)	10	0~22 (1bit= 4.8924ms)	Adjust the Time between the MAIN FEED Starts and the PRE T/A (780~1280ms).
742-115	MAIN FEED START TIMING TTM-3 (Half)	10	0~22 (1bit= 4.8924ms)	Adjust the Time between the MAIN FEED Starts and the PRE T/A (1410~1910ms).

744--xxx User NVM List

Table 9 Chain 744

Chain-Link	Name	Default	Range	Description
744-001	STS-1 CONT TEMP in Low PWR Mode	80	0~160 (1 bit=1 deg. C)	Main-Lamp temperature control in Low-Power Mode. Setting the default as 0 Degrees Celsius is same as Fuser-Off. It is necessary for high temperature for recovery Time Claim.
744-002	STS-2 CONT TEMP in Low PWR Mode	80	0~160 (1 bit=1 deg. C)	Sub-Lamp temperature control in Low-Power Mode. Setting the default as 0 Degrees Celsius is same as Fuser-Off. It is necessary for high temperature for recovery Time Claim.
744-003	UM status by High Temperature Error Detection	0	0~2	0 (Normal) or 1 (STS-1 High Temperature Error Detection) or 2 (STS-2 High Temperature Error Detection).UM Status occurs when either STS-1 or STS-2 High Temperature Error Detection is detected. Once this occurs, UM cannot be canceled unless this NVM value is changed to 0 by entering the Diag Mode in the Interlock-Open status of the M/C-Front Cover.

Table 9 Chain 744

Chain-Link	Name	Default	Range	Description
744-004	STS-2 High-TEMP-Not-Ready TEMP	220	150~250 (1 bit=1 deg.C)	Once the STS-2 reaches High Temperature Not-Ready Temperature, the Fuser is moved to sagging status. This is because when continuous Run is performed for A5SEF and below, Temperature Distribution Control would fail.
744-005	STS-1 Ready Temperature	150	100~150 (1 bit=1 deg.C)	For an appropriate distribution of [Ready to copy] Temperature.
744-006	STS-2 Ready Temperature	127	100~150 (1 bit=1 deg.C)	For an appropriate distribution of [Ready to copy] Temperature.
744-007	STS-1 Stand-by Temperature	160	100~200 (1 bit=1 deg.C)	For an appropriate distribution of Standby Temperature.
744-008	STS-2 Stand-by Temperature	160	100~200 (1 bit=1 deg.C)	For an appropriate distribution of Standby Temperature.
744-051	Environment Temperature Correction	3	0~5	Environment dependent correction coefficient for level of fusing. Temperature AD value shift amount when the environment temperature varies 1 Degrees Celsius from 20 Degrees Celsius. Corrects the target temperature of Ready temperature/Standby temperature/RUN. Both STS-1 and STS-2 have the same temperature. Corrects between 10 ~ 20 Degrees Celsius. Correction is not performed outside this range. 0 = No 1 = 0.2 Degrees Celsius/Environment Temperature (Maximum 2 Degrees Celsius) 2 = 0.4 Degrees Celsius/Environment Temperature (Maximum 4 Degrees Celsius) 3 = 0.6 Degrees Celsius/Environment Temperature (Maximum 6 Degrees Celsius) 4 = 0.8 Degrees Celsius/Environment Temperature (Maximum 8 Degrees Celsius) 5 = 1.0 Degrees Celsius/Environment Temperature (Maximum 10 Degrees Celsius)
744-052	STS-1 Low TEMP Not-Ready TEMP	125	100~150 (1 bit=1 deg.C)	Once the STS-1 reaches Low Temperature Not-Ready Temperature, the Fuser is moved to sagging status to avoid poor fusing.
744-053	STS-2 Low TEMP Not-Ready TEMP	125	100~150 (1 bit=1 deg.C)	Once the STS-2 reaches Low Temperature Not-Ready Temperature, the Fuser is moved to sagging status to avoid poor fusing.
744-054	HFSI Counter Index	0	0~5	For HFSI Counter Symmetry
744-085	Plain Paper S Setting Temperature	5	0~5	0 = Light Weight paper (55~63gsm) 1 = Plain paper (64~70gsm) 2 = Plain paper (71~80gsm) 3 = Bond (81~89gsm) 4 = Bond (90~98gsm) 5 = Bond (99~105gsm)
744-196	Plain Paper S Setting Temperature	2	0~2	0 = Light Weight paper (55~63gsm) 1 = Plain paper (64~80gsm) 2 = Bond (81~105gsm)
744-197	104 OHP Pitch Adjustment Value	0	0~10 (1 count=1 pitch)	OHP Blocking Measures; It prevents OHP Blocking by lowering the PPM with increase of Pitch. A4LEF = PPM=66/(4+NVM value) A4SEF = PPM=66/(5+NMV value)
744-198	52 OHP Pitch Adjustment Value	1	0~10 (1 count=1 pitch)	OHP Blocking Measures; It prevents OHP Blocking by lowering the PPM with increase of Pitch. A4LEF = PPM=33/(3+NVM value) A4SEF = PPM=33/(4+NVM value)

746--xxx Zero Transfer NVM List

Table 10 Chain 746

Chain-Link	Name	Default	Range	Description
746-006	2nd Resistance detection calculation results	245	102~921 (1bit= -4.888V)	Measures the resistance of the Secondary Transfer part composed of 2nd BTR and Backup Roll at printable -1000V and display the voltage at Secondary Transfer corresponding that resistance. Secondary Transfer Voltage=245x-4.888=-1200V (Display range = 500V~- 4500V)
746-007	Final output value (Voltage value)	17	0~1023 (1bit= 1M Ohm)	Measures and displays the resistance of the Secondary Transfer part composed of 2nd BTR and Backup Roll at printable -1000V. (Display range = 0~1023M Ohm)
746-009	Calculation results of Absolute Humidity	9	0~200	Displays the absolute humidity calculated from the relative humidity and relative temperature. (Absolute Humidity=(5.375-0.077*Temperature+0.027*Temperature 2)*Humidity/100)

Table 10 Chain 746

Chain-Link	Name	Default	Range	Description
746-012	2nd Output	368	0~921 (1bit= -4.888V)	For Component Control (0~- 4500V)
746-013	DTS Output	818	0~818 (1bit= -3.666V)	For Component Control (0~- 3000V)
746-017	Resistance detection calculation results Y	51	31~255 (1bit= 0.196µA)	Displays the output current corresponding to the resistance of the Primary Transfer part calculated from the voltage measured at fixed current (10 µA) in Y Color 1ST BTR.
746-018	Resistance detection calculation results M	51	31~255 (1bit= 0.196µA)	Displays the output current corresponding to the resistance of the Primary Transfer part calculated from the voltage measured at fixed current (10 µA) in M Color 1ST BTR.
746-019	Resistance detection calculation results C	51	31~255 (1bit= 0.196µA)	Displays the output current corresponding to the resistance of the Primary Transfer part calculated from the voltage measured at fixed current (10 µA) in C Color 1ST BTR.
746-020	Resistance detection calculation results K	102	25~459 (1bit= 0.196µA)	Displays the output current corresponding to the resistance of the Primary Transfer part calculated from the voltage measured at fixed current (10 µA) in K Color 1ST BTR.
746-021	1ST BTR Output Remote Normal-speed Y	86	0~200 (1bit= 1%)	For primary transfer output adjustment of Y Color at FC104mmsec. Displays the multiplication value in primary transfer current of 746-017. ex., At 100 = Primary Transfer Current=14 µAx1.0=10 µA; At 150 = Primary Transfer Current=14 µAx1.5=21 µA
746-022	1ST BTR Output Remote Normal-speed M	86	0~200 (1bit= 1%)	For primary transfer output adjustment of M Color at FC104mmsec. Displays the multiplication value in primary transfer current of 746-018. ex., At 100 = Primary Transfer Current=14 µAx1.0=10 µA; At 150 = Primary Transfer Current=14 µAx1.5=21 µA
746-023	1ST BTR Output Remote Normal-speed C	86	0~200 (1bit= 1%)	For primary transfer output adjustment of C Color at FC104mmsec. Displays the multiplication value in primary transfer current of 746-019. ex., At 100 = Primary Transfer Current=14 µAx1.0=10 µA; At 150 = Primary Transfer Current=14 µAx1.5=21 µA
746-024	1ST BTR Output Remote Normal-speed K	86	0~200 (1bit= 1%)	For primary transfer output adjustment of K Color at FC104mmsec. Displays the multiplication value in primary transfer current of 746-020. ex., At 100 = Primary Transfer Current=14 µAx1.0=10 µA; At 150 = Primary Transfer Current=14 µAx1.5=21 µA
746-025	1ST BTR Output Remote Half-speed FC Y	36	0~200 (1bit= 1%)	For primary transfer output adjustment of Y Color at FC52mmsec. Displays the multiplication value in primary transfer current of 746-017. ex., @ 50 = Primary Transfer Current=14 µAx0.5=7 µA
746-026	1ST BTR Output Remote Half-speed FC M	36	0~200 (1bit= 1%)	For primary transfer output adjustment of M Color at FC52mmsec. Displays the multiplication value in primary transfer current of 746-018. ex., At 50 = Primary Transfer Current=14 µAx0.5=7 µA
746-027	1ST BTR Output Remote Half-speed FC C	36	0~200 (1bit= 1%)	For primary transfer output adjustment of C Color at FC52mmsec. Displays the multiplication value in primary transfer current of 746-197. ex., At 50 = Primary Transfer Current=14 µAx0.5=7 µA
746-028	1ST BTR Output Remote Half-speed FC K	36	0~200 (1bit= 1%)	For primary transfer output adjustment of K Color at FC52mmsec. Displays the multiplication value in primary transfer current of 746-020. ex., At 50 = Primary Transfer Current=14 µAx0.5=7 µA
746-029	1ST BTR Output Remote Twice-speed BW K	186	0~255 (1bit= 1%)	For primary transfer output adjustment of K Color at BW 194mmsec. Displays the multiplication value in primary transfer current of 746-020
746-030	1ST BTR Output Remote Normal-speed BW K	100	0~200 (1bit= 1%)	For primary transfer output adjustment of K Color at BW 104mmsec. Displays the multiplication value in primary transfer current of 746-020
746-031	1ST BTR Output Remote Half-speed BW K	36	0~200 (1bit= 1%)	For primary transfer output adjustment of K Color at BW 52mmsec. Displays the multiplication value in primary transfer current of 746-020
746-032	1ST BTR Present Output Y	51	31~255 (1bit= 0.196µA)	Displays the Resistance Detection Calculation results * remote.
746-033	1ST BTR Present Output M	51	31~255 (1bit= 0.196µA)	Displays the Resistance Detection Calculation results * remote.
746-034	1ST BTR Present Output C	51	31~255 (1bit= 0.196µA)	Displays the Resistance Detection Calculation results * remote.

Table 10 Chain 746

Chain-Link	Name	Default	Range	Description
746-035	1ST BTR Present Output K	102	25~459 (1bit= 0.196μA)	Displays the Resistance Detection Calculation results * remote.
746-059	Remote for Plain paper A Side1 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Plain paper A side 1. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-060	Remote for Plain paper B Side1 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Plain paper B side 1. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-061	Remote for Plain paper C Side1 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Plain paper C side 1. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-062	Remote for Plain paper D/E Side1 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Plain paper D/E side 1. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-063	Remote for Plain paper F/G Side1 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Plain paper F/G side 1
746-064	Remote for Plain paper S Side1 (Output Duty)	100	0~200 (1bit= 1%)	Secondary Transfer output adjustment of Plain paper S side 1. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-065	Remote for Label stock Side1 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Label side 1 Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-066	Remote for Thin paper Side1 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Thin paper side 1. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-067	Remote for Heavyweight paper1 Side1 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Heavy Weight paper 1 side 1. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-068	Remote for Heavyweight paper2 Side1 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Heavy Weight paper 2 side 1. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-069	Remote for Postcard Side1 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Postcard side 1. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-070	Remote for Envelope Side1 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Envelope side 1. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-071	Remote for MLT-faced Postcard Side1 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of MLT-faced Postcard side 1. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-072	Remote for Transparency Side1 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Transparency side 1. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-073	Remote for Tack Film Side1 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Tack Film side 1. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-074	Remote for Heavyweight coat paper1 Side1 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Coated paper 1 side 1. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-075	Remote for Heavyweight coat paper2 Side1 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Coat paper 2 side 1. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-076	Remote for Plain paper A Side2 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Plain paper A side 2. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-077	Remote for Plain paper B Side2 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Plain paper B side 2. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-078	Remote for Plain paper C Side2 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Plain paper C side 2. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-079	Remote for Plain paper D/E Side2 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Plain paper D/E side 2. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.

Table 10 Chain 746

Chain-Link	Name	Default	Range	Description
746-080	Remote for Plain paper F/G Side2 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Plain paper F/G side 2. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-081	Remote for Plain paper S Side2 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Plain paper S side 2. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-082	Remote for Heavyweight paper1 Side2 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Heavy Weight paper 1 side 2. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-083	Remote for Heavyweight paper2 Side2 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Heavy Weight paper 2 side 2. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-084	Remote for Postcard Side2 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Postcard side 2. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-085	Remote for Envelope Side2 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Envelope side 2. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-086	Remote for MLT-faced Postcard Side2 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of MLT-faced Postcard side 2. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-087	Remote for Heavyweight coat paper1 Side2 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Coat paper 1 side 2. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-088	Remote for Heavyweight coat paper2 Side2 (Output Duty)	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Coat paper 2 side 2. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-089	2ND BTR Present Output	245	102~921 (1bit= -4.888V)	Ideographication of (- 500V~- 4500V) Resistance Detection Calculation results x remote.
746-090	Plain paper S Control NVM1 (FC Side1)	0	0~6	0 = Control -S-1 (FCside1 secondary transfer output for paper according to P paper) 1 = Control -S-2 (FCside1 secondary transfer output for paper according to recycle paper) 2 = Control -S-3 (FCside1 secondary transfer output for paper according to poor surface smoothness of 4024 20lb) 3 = Control -S-4 (FCside1 secondary transfer output for paper according to poor surface smoothness of 4024 24lb) 4 = Control -S-5 (FCside1 secondary transfer output for paper applicable to the 4 items described above) 5 = Control -S-6 (FCside1 secondary transfer output based on the secondary transfer coefficient stored in the undisclosed NVM of 746-304~355 in this case)
746-091	Plain paper S Control NVM1 (BW Side1)	0	0~1	0 = Control -S-7 (For BW side 1 of Plain paper A~G) 1 = Control -S-8 (For BW side 1 of paper applicable to the above)
746-092	Plain paper S Control NVM1 (FC Side2)	0	0~5	1 = Control -S-9 (FCside2 secondary transfer output for P paper) 1 = Control -S-10 (FCside2 secondary transfer output for recycle paper) 2 = Control -S-11 (FCside2 secondary transfer output for 4024 20lb) 3 = Control -S-12 (FCside2 secondary transfer output for of 4024 24lb) 4 = Control -S-13 (FCside2 secondary transfer output for paper applicable to the 4 items described above) 5 = Control -S-14 (FCside2 secondary transfer output based on the secondary transfer coefficient stored in the undisclosed NVM of 746-356~407 in this case)
746-408	Output Remote for DTS normal-speed Side1	0	0~100 (1bit= 1%)	Displays the multiplication value by DTS output adjustment
746-409	Output Remote for DTS normal-speed Side2	50	0~100 (1bit= 1%)	Displays the multiplication value by DTS output adjustment
746-410	Output Remote for DTS half-speed Side1	100	0~100 (1bit= 1%)	Displays the multiplication value by DTS output adjustment
746-411	Output Remote for DTS half-speed Side2	100	0~100 (1bit= 1%)	Displays the multiplication value by DTS output adjustment
746-412	Output Remote for DTS twice-speed Side1	0	0~100 (1bit= 1%)	Displays the multiplication value by DTS output adjustment

Table 10 Chain 746

Chain-Link	Name	Default	Range	Description
746-413	Output Remote for DTS twice-speed Side2	50	0~100 (1bit= 1%)	Displays the multiplication value by DTS output adjustment
746-423	Toner Band Width (in process direction)	3	0~22 (1bit= 1mm)	For adjustment of Toner Band Width in process direction
746-424	Toner Band Width (in axial direction)	137	0~137 (1bit= 1mm)	For adjustment of Toner Band Width in axial direction
746-425	Toner Band Density	60	10~100 (1bit= 1%)	For adjustment of Toner Band Density
746-959	2nd CLN MINUS BIAS OUTPUT (for Environment no.0, 1, 2, 3)	123	102~921 (1bit= -4.888V)	For 2ND BTR Cleaning Bias setup for each environment The resistance detection result of remote cannot be reflected
746-960	2nd CLN MINUS BIAS OUTPUT (for Environment no.4)	123	102~921 (1bit= -4.888V)	For 2ND BTR Cleaning Bias setup for each environment. The resistance detection result of remote cannot be reflected
746-961	2nd CLN MINUS BIAS OUTPUT (for Environment no.5, 6)	123	102~921 (1bit= -4.888V)	For 2ND BTR Cleaning Bias setup for each environment. The resistance detection result of remote cannot be reflected
746-962	2nd CLN MINUS BIAS OUTPUT (for Environment no.7, 8, 9)	123	102~921 (1bit= -4.888V)	For 2ND BTR Cleaning Bias setup for each environment. The resistance detection result of remote cannot be reflected
746-963	Y offset distance	16	0~16 (1bit= 1ms)	Distance of 0ms~39ms between Drum contact and 1ST BTR
746-964	M offset distance	16	0~16 (1bit= 1ms)	Distance of 0ms~39ms between Drum contact and 1ST BTR
746-965	C offset distance	16	0~16 (1bit= 1ms)	Distance of 0ms~39ms between Drum contact and 1ST BTR
746-966	K offset distance	16	0~16 (1bit= 1ms)	Distance of 0ms~39ms between Drum contact and 1ST BTR
746-967	1st BTR Vmonitor Y	36	4~178 (1bit= 28.01V)	Displays the voltage at primary transfer resistance detection (100~5000V)
746-968	1st BTR Vmonitor M	36	4~178 (1bit= 28.01V)	Displays the voltage at primary transfer resistance detection (100~5000V)
746-969	1st BTR Vmonitor C	36	4~178 (1bit= 28.01V)	Displays the voltage at primary transfer resistance detection (100~5000V)
746-970	1st BTR Vmonitor K	36	4~178 (1bit= 28.01V)	Displays the voltage at primary transfer resistance detection (100~5000V)
746-971	Remote for Plain paper A ~G Normal speed BW Side1	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Plain paper A ~G 104mmsec side1 BW. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-972	Remote for Plain paper A ~G twice speed BW Side1	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Plain paper A ~G 194mmsec side1 BW. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-973	Remote for Plain paper A ~G Normal speed BW Side2	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Plain paper A ~G 104mmsec side2 BW. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-974	Remote for Plain paper A ~G twice speed BW Side2	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Plain paper A ~G 194mmsec side2 BW. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-975	Remote for Plain paper S Normal speed BW Side1	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Plain paper S 104mmsec side1 BW. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-976	Remote for Plain paper S twice speed BW Side1	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Plain paper S 194mmsec side1 BW. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-977	Remote for Plain paper S Normal speed BW Side2	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Plain paper S 104mmsec side2 BW. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.
746-978	Remote for Plain paper S twice speed BW Side2	100	0~200 (1bit= 1%)	For Secondary Transfer output adjustment of Plain paper S 194mmsec side2 BW. Displays the multiplication value in secondary transfer resistance calculation result of 746-006.

Table 10 Chain 746

Chain-Link	Name	Default	Range	Description
746-979	Delay Time for 1stBTR Home Positioning	300	0~6000 (1bit= 0.1sec)	Delay Time 0~10min
746-980	Selection heavyweight paper1	0	0~1	0 = Secondary Transfer Voltage for Heavy Weight Paper 1. 1 = Secondary Transfer Voltage for Heavy Weight Paper Coat Paper 1
746-981	Selection heavyweight paper2	0	0~1	0 = Secondary Transfer Voltage for Heavy Weight Paper 2. 1 = Secondary Transfer Voltage for Heavy Weight Paper Coat Paper 2

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Table 11 Chain 751

Chain-Link	Name	Default	Range	Description
751-052	BCR Charge Compensate mode (SW)	0	0~3	Charge Correction 0 = Performs Wear & Environment Correction (Default) 1 = Disables Charge Correction 2 = Performs Environment CorrectiON. ONly 3 = Performs Wear CorrectiON. ONly
751-053	BCR VM temperature & humidity compensate mode (SW)	0	0, 1	Vmid Factor Environment Correction 0 = Execute 1 = Disable
751-132	BOTTLE FULL Counter Print (Max Value)	900	0~65535	Max Setup Value of EMP Counter Print (1 Count=1print)
751-133	BOTTLE FULL (Flag)	0	0~2	0 = Empty 1 = NEAR FULL 2 = FULL
751-134	BOTTLE NOT POSITION (Flag)	0	0, 1	Availability of the Toner Waster Bottle (0 = Bottle set 1 = No bottle)
751-135	Print Volume (Counter)	0	0~65535	Total count of No. of Prints (1 Count=1 sheet)
751-136	BOTTLE FULL Counter Dispense (Max Value)	500	0~65535	Max Setup Value of EMP Counter Dispense (1 Count=1sec)
751-137	Dispense Time Count (4Color Counter)	0	0~65535	Total Count of 4 Colors Dispense Time
751-138	BOTTLE SNS MODE (SW)	0	0~2	Specifies the Count method until BOTTLE FULL 0 = Auto(Print&Dispense) 1 = Only No. of Prints 2 = Only Dispense time
751-159	BCR CLN Trigger (SW)	3	0~3	Selection SW for Trigger types to operate the BCR CLN 0 = CV COUNT 1 = DRUM CYCLE COUNT 2 = PIXEL COUNT 3 = PV Count+ Pixel Count+DRUM Cycle
751-160	CV COUNT TOTAL (Counter)	0	0~65535	Each Cumulative ERU by Billing Count (1 Count=1pv)
751-161	DRUM CYCLE COUNT TOTAL	0	0~65535	Cumulative DRUM Cycle (1 Count=10cycle)
751-162	PIXEL COUNT TOTAL (Counter)	0	0~10000000	Cumulative K Color Pixel Count. Units of 1 step is based on the ICDC Control Pixel Count (1 Count=1dot/1 gradation)
751-163	BCR CLN CV Count Limit Value (Limiter)	25	0~255	Threshold in operating BCR CLN (Operation after reaching this value) (1 Count=100pv)
751-164	BCR CLN Cycle Count Limit Value (Limiter)	50	0~255	Threshold in operating BCR CLN (Operation after reaching this value) (1 Count=1k cycle)
751-165	BCR CLN Pixel Count Limit Value (Limiter)	50	0~255	Operating threshold for BCR CLN. (1 Count=(1dot/1 gradation)/10K)
751-167	BCR Cleaning Count	0	0~1000	Reads the No. of BCR CLN Operations. (1 Count=1 time)
751-168	CRU Type	0	0~255	01h = P/SP (Domestic FX brand) 02h = MF (Domestic FX brand) 03h = P (FJ Company OEM) 04h = P (JDL Company OEM) 05h = P (IBM Company OEM) 06h-0Fh = Reserve (Domestic FX brand) 10h = P(OPBFX brand) 11h-1Fh = Reserve (OPB brand) 20h-FFH = Reserve (From now, assigns in MN/OEM when necessary) 30h-3Fh = FXAP
751-177	P/R Life Warning (Limiter)	265	0~500	Warning value of Drum Cartridge (All engine common) (1 Count=1kCy)

Table 11 Chain 751

Chain-Link	Name	Default	Range	Description
751-178	P/R Life End of Life (Limiter)	280	0~500	End of Life value of Drum Cartridge (All engine common) (1 Count=1kCy)
751-200	#Y_BCR DC corrected VH value	620	0~1023	VH Output Value of #Y Engine after Correction (All Speed common) (1 Count=-1.173V)
751-201	#M_BCR DC corrected VH value	620	0~1023	VH Output Value of #M Engine after Correction (All Speed common) (1 Count=-1.173V)
751-202	#C_BCR DC corrected VH value	620	0~1023	VH Output Value of #C Engine after Correction (All Speed common) (1 Count=-1.173V)
751-203	#K_BCR DC corrected VH value	620	0~1023	VH Output Value of #K Engine after Correction (All Speed common) (1 Count=-1.173V)

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Table 12 Chain 752

Chain-Link	Name	Default	Range	Description
752-027	Vdark Average	0	0~1023	ADC average detected value at expansion LED OFF.
752-028	Vref Average	0	0~1023	ADC average detected value of reference board reflection at expansiON. ON.
752-029	Vcln Average	0	0~1023	ADC average detected value of belt reflection at expansiON. ON.
752-030	Diffusion Vcln Average	0	0~1023	ADC average detected value of Belt reflection Light at diffusiON. ON.
752-031	Vpatch Average [Y] [CinA]	0	0~1023	ADC average detected value of CinA (low Cin) Patch.
752-032	Vpatch Average [M] [CinA]	0	0~1023	ADC average detected value of CinA (low Cin) Patch.
752-033	Vpatch Average [C] [CinA]	0	0~1023	ADC average detected value of CinA (low Cin) Patch.
752-034	Vpatch Average [K] [CinA]	0	0~1023	ADC average detected value of CinA (low Cin) Patch.
752-035	Vpatch Average [Y] [CinB]	0	0~1023	ADC average detected value of CinB (high Cin) Patch.
752-036	Vpatch Average [M] [CinB]	0	0~1023	ADC average detected value of CinB (high Cin) Patch.
752-037	Vpatch Average [C] [CinB]	0	0~1023	ADC average detected value of CinB (high Cin) Patch.
752-038	Vpatch Average [K] [CinB]	0	0~1023	ADC average detected value of CinB (high Cin) Patch.
752-050	Fail ADC Sensor	0	0~1	ADC Sensor Fail
752-051	Fail ADC Shutter	0	0~1	ADC Shutter Fail
752-052	Fail ADC Patch [Y]	0	0~1	ADC Patch Fail
752-053	Fail ADC Patch [M]	0	0~1	ADC Patch Fail
752-054	Fail ADC Patch [C]	0	0~1	ADC Patch Fail
752-055	Fail ADC Patch [K]	0	0~1	ADC Patch Fail
752-056	Diffusion Correction Factor	350	0~1023	Diffusion Output Standardization factor
752-057	RADC Target [Y]	415	0~1023	RADC Control Density Target Value
752-058	RADC Target [M]	360	0~1023	RADC Control Density Target Value
752-059	RADC Target [C]	355	0~1023	RADC Control Density Target Value
752-060	RADC Target [K]	310	0~1023	RADC Control Density Target Value
752-061	RADC Average [Y]	400	0~1023	RADC shift average value
752-062	RADC Average [M]	370	0~1023	RADC shift average value
752-063	RADC Average [C]	338	0~1023	RADC shift average value
752-064	RADC Average [K]	380	0~1023	RADC shift average value
752-069	ATC Correction Factor [Y]	1000	0~4095	ATC Sensor Sensitivity Correction Factor
752-070	ATC Correction Factor [Y]	1000	0~4095	ATC Sensor Sensitivity Correction Factor
752-071	ATC Correction Factor [Y]	1000	0~4095	ATC Sensor Sensitivity Correction Factor
752-072	ATC Correction Factor [Y]	1000	0~4095	ATC Sensor Sensitivity Correction Factor

Table 12 Chain 752

Chain-Link	Name	Default	Range	Description
752-073	ATC Correction Offset [Y]	10000	8976~11023	ATC Sensor Sensitivity Correction Offset
752-074	ATC Correction Offset [M]	10000	8976~11023	ATC Sensor Sensitivity Correction Offset
752-075	ATC Correction Offset [C]	10000	8976~11023	ATC Sensor Sensitivity Correction Offset
752-076	ATC Correction Offset [K]	10000	8976~11023	ATC Sensor Sensitivity Correction Offset
752-081	ATC Average [Y]	0	0~1023	ATC Average detected value after sensor sensitivity correction
752-082	ATC Average [M]	0	0~1023	ATC Average detected value after sensor sensitivity correction
752-083	ATC Average [C]	0	0~1023	ATC Average detected value after sensor sensitivity correction
752-084	ATC Average [K]	0	0~1023	ATC Average detected value after sensor sensitivity correction
752-089	ATC Fluctuation [Y]	0	0~1023	ATC Fluctuation Range detected value after sensor sensitivity correction
752-090	ATC Fluctuation [M]	0	0~1023	ATC Fluctuation Range detected value after sensor sensitivity correction
752-091	ATC Fluctuation [C]	0	0~1023	ATC Fluctuation Range detected value after sensor sensitivity correction
752-092	ATC Fluctuation [K]	0	0~1023	ATC Fluctuation Range detected value after sensor sensitivity correction
752-109	Number of Continuous ATC Fails [Y]	0	0~255	No. of Continuous ATC Fails
752-110	Number of Continuous ATC Fails [M]	0	0~255	No. of Continuous ATC Fails
752-111	Number of Continuous ATC Fails [C]	0	0~255	No. of Continuous ATC Fails
752-112	Number of Continuous ATC Fails [K]	0	0~255	No. of Continuous ATC Fails
752-114	Warn ATC Max & Min [Y]	0	0~2	ATC Upper and Lower Limits Warning (0 = Normal, 1 = ATC Output low HiTC, 2 = ATC Output high LowTC)
752-115	Warn ATC Max & Min [M]	0	0~2	ATC Upper and Lower Limits Warning (0 = Normal, 1 = ATC Output low HiTC, 2 = ATC Output high LowTC)
752-116	Warn ATC Max & Min [C]	0	0~2	ATC Upper and Lower Limits Warning (0 = Normal, 1 = ATC Output low HiTC, 2 = ATC Output high LowTC)
752-117	Warn ATC Max & Min [K]	0	0~2	ATC Upper and Lower Limits Warning (0 = Normal, 1 = ATC Output low HiTC, 2 = ATC Output high LowTC)
752-118	Warn ATC Fluctuation Max & Min [Y]	0	0~2	ATC Fluctuation Range Lower Limit Warning (0 = Normal, 1 = To little fluctuation)
752-119	Warn ATC Fluctuation Max & Min [M]	0	0~2	ATC Fluctuation Range Lower Limit Warning (0 = Normal, 1 = To little fluctuation)
752-120	Warn ATC Fluctuation Max & Min [C]	0	0~2	ATC Fluctuation Range Lower Limit Warning (0 = Normal, 1 = To little fluctuation)
752-121	Warn ATC Fluctuation Max & Min [K]	0	0~2	ATC Fluctuation Range Lower Limit Warning (0 = Normal, 1 = To little fluctuation)
752-122	Fail ATC Patch [Y]	0	0~1	ATC Sensor Fail
752-123	Fail ATC Sensor [M]	0	0~1	ATC Sensor Fail
752-124	Fail ATC Sensor [C]	0	0~1	ATC Sensor Fail
752-125	Fail ATC Sensor [K]	0	0~1	ATC Sensor Fail
752-130	Set ATC Control Nominal Value [0] [Y]	628	0~1023	ATC Control Nominal Value before environment/deterioration correction as center setup
752-131	Set ATC Control Nominal Value [0] [M]	628	0~1023	ATC Control Nominal Value before environment/deterioration correction as center setup
752-132	Set ATC Control Nominal Value [0] [C]	628	0~1023	ATC Control Nominal Value before environment/deterioration correction as center setup
752-133	Set ATC Control Nominal Value [0] [K]	643	0~1023	ATC Control Nominal Value before environment/deterioration correction as center setup
752-134	Set ATC Control Nominal Value [1] [Y]	668	0~1023	ATC Control Nominal Value before environment/deterioration correction as center setup
752-135	Set ATC Control Nominal Value [1] [M]	668	0~1023	ATC Control Nominal Value before environment/deterioration correction as center setup
752-136	Set ATC Control Nominal Value [1] [C]	668	0~1023	ATC Control Nominal Value before environment/deterioration correction as center setup
752-137	Set ATC Control Nominal Value [1] [K]	683	0~1023	[ATC Control Nominal Value before environment/deterioration correction as center setup
752-138	Set ATC Control Nominal Value [2] [K]	603	0~1023	ATC Control Nominal Value before environment/deterioration correction as center setup
752-156	ATC Control Nominal Value [Y]	500	0~1023	[Set ATC Control Nominal Value]+[ATC Environment Correction Value]+[ATC Deterioration Correction Value]+[ATC Nominal Value OFFSET]
752-157	ATC Control Nominal Value [M]	500	0~1023	[Set ATC Control Nominal Value]+[ATC Environment Correction Value]+[ATC Deterioration Correction Value]+[ATC Nominal Value OFFSET]

Table 12 Chain 752

Chain-Link	Name	Default	Range	Description
752-158	ATC Control Nominal Value [C]	500	0~1023	[Set ATC Control Nominal Value]+[ATC Environment Correction Value]+[ATC Deterioration Correction Value]+[ATC Nominal Value OFFSET]
752-159	ATC Control Nominal Value [K]	500	0~1023	[Set ATC Control Nominal Value]+[ATC Environment Correction Value]+[ATC Deterioration Correction Value]+[ATC Nominal Value OFFSET]
752-162	Temp Average	100	80~200	Temperature average value after converting the temperature sensor output to temperature (80 = -20 Degree Celsius, 100 = 0 Degree Celsius, 200 = 100 Degree Celsius)
752-163	Humidity Average	0	0~100	Humidity average value after converting the humidity sensor output to humidity
752-176	Fail Environment SNR TEMP	0	0~1	[Detection relation (Temperature/Humidity)] Temperature Sensor Fail (Fixed as [Standard Temperature])
752-177	Fail Environment SNR Humidity	0	0~1	[Detection relation (Temperature/Humidity)] Temperature Sensor Fail (Fixed as [Standard Temperature])
752-324	SW_DispMode	0	0~2	Dispense method changing SW (0=ATC+ICDC, 1=ICDC, 2=Timer Disp)
752-357	Timer Disp time [Y]	5	0~250	Timer Disp Setup Time
752-358	Timer Disp time [M]	5	0~250	Timer Disp Setup Time
752-359	Timer Disp time [C]	5	0~250	Timer Disp Setup Time
752-360	Timer Disp time [K]	5	0~250	Timer Disp Setup Time
752-369	SW Potential Control ON/OFF	0	0~1	0 = Controls LD Light Quantity 1 = Fixed LD Light Quantity
752-371	LD Light qty. when Potential Control is OFF [Y]	300	0~1023	LD Light Quantity Value when Potential Control is OFF.
752-372	LD Light qty when Potential Control is OFF [M]	300	0~1023	LD Light Quantity Value when Potential Control is OFF.
752-373	LD Light qty when Potential Control is OFF [C]	300	0~1023	LD Light Quantity Value when Potential Control is OFF.
752-374	LD Light qty when Potential Control is OFF [K]	300	0~1023	LD Light Quantity Value when Potential Control is OFF.
752-375	Ideal LD light qty [Y]	450	0~1023	LD Light Quantity Ideal Value Calculated from Delta LD Light Quantity.
752-376	Ideal LD light qty [M]	450	0~1023	LD Light Quantity Ideal Value Calculated from Delta LD Light Quantity.
752-377	Ideal LD light qty [C]	450	0~1023	LD Light Quantity Ideal Value Calculated from Delta LD Light Quantity.
752-378	Ideal LD light qty [K]	400	0~1023	LD Light Quantity Ideal Value Calculated from Delta LD Light Quantity.
752-394	Change in Lim_d_LD Light qty on Job-start	40	0~1023	Limit of Delta LD Light Quantity Feedback at Job Start.
752-395	Change in Lim_d_LD Light qty on Job & Jobend	20	0~1023	Limit of Delta LD Light Quantity Feedback at Job End/during Job.
752-396	Change in Lim_d_LD Light qty on Ton-erRecovery	200	0~1023	Limit of Delta LD Light Quantity Feedback at recovery.
752-397	Change in Lim_d_LD Light qty on Job-start (CL)	40	0~1023	Limit of Delta LD Light Quantity Feedback at Job Start (YMC Color differences considered)
752-398	Change in Lim_d_LD Light qty on Job & Jobend (CL)	20	0~1023	Limit of Delta LD Light Quantity Feedback at Job End/during Job (YMC Color differences considered)
752-439	Warn LD light amount Setting [Y]	0	0~1	Warning when the LD Light Quantity reached Upper or Lower Limit.
752-440	Warn LD light amount Setting [M]	0	0~1	Warning when the LD Light Quantity reached Upper or Lower Limit.
752-441	Warn LD light amount Setting [C]	0	0~1	Warning when the LD Light Quantity reached Upper or Lower Limit.
752-442	Warn LD light amount Setting [K]	0	0~1	Warning when the LD Light Quantity reached Upper or Lower Limit.
752-453	VBias [Y]	887	0~1023	DC VBias value
752-454	VBias [M]	887	0~1023	DC VBias value

Table 12 Chain 752

Chain-Link	Name	Default	Range	Description
752-455	VBias [C]	887	0~1023	DC VBias value
752-456	VBias [K]	887	0~1023	DC VBias value
752-474	Flag Empty Detection Status [Y]	0	0~3	Flag of Empty status (0 = Normal 1 = In Empty Count 2 = Near Empty 3 = End)
752-475	Flag Empty Detection Status [M]	0	0~3	Flag of Empty status (0 = Normal 1 = In Empty Count 2 = Near Empty 3 = End)
752-476	Flag Empty Detection Status [C]	0	0~3	Flag of Empty status (0 = Normal 1 = In Empty Count 2 = Near Empty 3 = End)
752-477	Flag Empty Detection Status [K]	0	0~3	Flag of Empty status (0 = Normal 1 = In Empty Count 2 = Near Empty 3 = End)
752-496	Nominal value for NEAR Detection [Y]	625	0~32767	Count threshold for Near Detection
752-497	Nominal value for NEAR Detection [M]	625	0~32767	Count threshold for Near Detection
752-498	Nominal value for NEAR Detection [C]	625	0~32767	Count threshold for Near Detection
752-499	Nominal value for NEAR Detection [K]	625	0~32767	Count threshold for Near Detection
752-784	Fail Disp Unusual [Y]	0	0~1	Fail when new Toner Cartridge is installed and the Disp Motor Drive did not shift from new to old. 0 = Normal; 1 = Error
752-785	Fail Disp Unusual [M]	0	0~1	Fail when new Toner Cartridge is installed and the Disp Motor Drive did not shift from new to old. 0 = Normal; 1 = Error
752-786	Fail Disp Unusual [C]	0	0~1	Fail when new Toner Cartridge is installed and the Disp Motor Drive did not shift from new to old. 0 = Normal 1 = Error
752-787	Fail Disp Unusual [K]	0	0~1	Fail when new Toner Cartridge is installed and the Disp Motor Drive did not shift from new to old. 0 = Normal 1 = Error
752-788	Min PV Threshold	3	0~255	Minimum PV from Near empty to empty (M/Cstop)
752-804	DispTime Totalizing value for age Correction [Y]	0	0~4294967295	Cumulative dispense time for deterioration correction of ATC Control nominal value. Set to 0 at replacement of Developer.
752-805	DispTime Totalizing value for age Correction [M]	0	0~4294967295	Cumulative dispense time for deterioration correction of ATC Control nominal value. Set to 0 at replacement of Developer.
752-806	DispTime Totalizing value for age Correction [C]	0	0~4294967295	Cumulative dispense time for deterioration correction of ATC Control nominal value. Set to 0 at replacement of Developer.
752-807	DispTime Totalizing value for age Correction [K]	0	0~4294967295	Cumulative dispense time for deterioration correction of ATC Control nominal value. Set to 0 at replacement of Developer.
752-814	Pre Near EMP Factor	80	0~255	Factor correcting [Near Detection Nominal Value] after Pre Near is displayed.

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Table 13 Chain 753

Chain-Link	Name	Default	Range	Description
753-001	ADC Tone Correction Switch	0	0~1	[2P TRC] 2 Patch ADC Gradation CorrectiON. ON/Off Switch (0=On, 1=Off)
753-002	IOT Manual ADJ LUT Switch	0	0~1	[2P TRC] IOT Manual Adjustment LUT On/Off Switch (0=On, 1=Off)
753-004	P LUTCin [K] [E]	1	0~255	[2P TRC] P LUTCin (fixed number) when the Delta LUT is calculated.
753-005	P LUTCin [K] [C]	34	0~255	[2P TRC] P LUTCin (fixed number) when the Delta LUT is calculated.
753-006	P LUTCin [K] [A]	77	0~255	[2P TRC] P LUTCin (fixed number) when the Delta LUT is calculated.
753-007	P LUTCin [K] [B]	134	0~255	[2P TRC] P LUTCin (fixed number) when the Delta LUT is calculated.
753-008	P LUTCin [K] [D]	255	0~255	[2P TRC] P LUTCin (fixed number) when the Delta LUT is calculated.
753-009	P LUTCin [Color] [E]	1	0~255	[2P TRC] P LUTCin (fixed number) when the Delta LUT is calculated.
753-010	P LUTCin [Color] [C]	51	0~255	[2P TRC] P LUTCin (fixed number) when the Delta LUT is calculated.

Table 13 Chain 753

Chain-Link	Name	Default	Range	Description
753-011	P LUTCin [Color] [A]	102	0~255	[2P TRC] P LUTCin (fixed number) when the Delta LUT is calculated.
753-012	P LUTCin [Color] [B]	204	0~255	[2P TRC] P LUTCin (fixed number) when the Delta LUT is calculated.
753-013	P LUTCin [Color] [D]	255	0~255	[2P TRC] P LUTCin (fixed number) when the Delta LUT is calculated.
753-014	Patch Cin [Y] [CinA]	102	0~255	[2P TRC] = 2P Patch Cin (Value is changed by the gradation correction result). (Change factor from MF) Changes name from [TRC Patch Cin in Job]
753-015	Patch Cin [M] [CinA]	102	0~255	[2P TRC] = 2P Patch Cin (Value is changed by the gradation correction result). (Change factor from MF) Changes name from [TRC Patch Cin in Job]
753-016	Patch Cin [C] [CinA]	102	0~255	[2P TRC] = 2P Patch Cin (Value is changed by the gradation correction result). (Change factor from MF) Changes name from [TRC Patch Cin in Job]
753-017	Patch Cin [K] [CinA]	77	0~255	[2P TRC] = 2P Patch Cin (Value is changed by the gradation correction result). (Change factor from MF) Changes name from [TRC Patch Cin in Job]
753-018	Patch Cin [Y] [CinB]	204	0~255	[2P TRC] = 2P Patch Cin (Value is changed by the gradation correction result). (Change factor from MF) Changes name from [TRC Patch Cin in Job]
753-019	Patch Cin [M] [CinB]	204	0~255	[2P TRC] = 2P Patch Cin (Value is changed by the gradation correction result). (Change factor from MF) Changes name from [TRC Patch Cin in Job]
753-020	Patch Cin [C] [CinB]	204	0~255	[2P TRC] = 2P Patch Cin (Value is changed by the gradation correction result). (Change factor from MF) Changes name from [TRC Patch Cin in Job]
753-021	Patch Cin [K] [CinB]	134	0~255	[2P TRC] = 2P Patch Cin (Value is changed by the gradation correction result). (Change factor from MF) Changes name from [TRC Patch Cin in Job]
753-022	TRC Target RADC [Y] [A]	780	0~1023	[2P TRC] Target RADC for Gradation Correction
753-023	TRC Target RADC [Y] [B]	415	0~1023	[2P TRC] Target RADC for Gradation Correction
753-024	TRC Target RADC [M] [A]	740	0~1023	[2P TRC] Target RADC for Gradation Correction
753-025	TRC Target RADC [M] [B]	360	0~1023	[2P TRC] Target RADC for Gradation Correction
753-026	TRC Target RADC [C] [A]	725	0~1023	[2P TRC] Target RADC for Gradation Correction
753-027	TRC Target RADC [C] [B]	355	0~1023	[2P TRC] Target RADC for Gradation Correction
753-028	TRC Target RADC [K] [A]	730	0~1023	[2P TRC] Target RADC for Gradation Correction
753-029	TRC Target RADC [K] [B]	310	0~1023	[2P TRC] Target RADC for Gradation Correction
753-030	TRC Current RADC [Y] [A]	780	0~1023	[2P TRC] Current RADC for Gradation Correction
753-031	TRC Current RADC [Y] [B]	415	0~1023	[2P TRC] Current RADC for Gradation Correction
753-032	TRC Current RADC [M] [A]	740	0~1023	[2P TRC] Current RADC for Gradation Correction
753-033	TRC Current RADC [M] [B]	360	0~1023	[2P TRC] Current RADC for Gradation Correction
753-034	TRC Current RADC [C] [A]	725	0~1023	[2P TRC] Current RADC for Gradation Correction
753-035	TRC Current RADC [C] [B]	355	0~1023	[2P TRC] Current RADC for Gradation Correction
753-036	TRC Current RADC [K] [A]	730	0~1023	[2P TRC] Current RADC for Gradation Correction
753-037	TRC Current RADC [K] [B]	310	0~1023	[2P TRC] Current RADC for Gradation Correction
753-801	Legible Y	1024	0~2047	Legible Adjustment (Y)
753-802	Legible M	1024	0~2047	Legible Adjustment (M)
753-803	Legible C	1024	0~2047	Legible Adjustment (C)
753-804	Legible K	1024	0~2047	Legible Adjustment (K)
753-805	Pattern Y	0	0~19	InOut Pattern Setup (Y)
753-806	Pattern M	0	0~19	InOut Pattern Setup (M)
753-807	Pattern C	0	0~19	InOut Pattern Setup (C)

Table 13 Chain 753

Chain-Link	Name	Default	Range	Description
753-808	Pattern K	0	0~19	InOut Pattern Setup (K)

755-xxx CRUM NVM List

Table 14 Chain 755

Chain-Link	Name	Default	Range	Description
755-001	#Y_Drum Life Count - kCy	0	0~3000 (1bit= 1Kcycle)	To determine Drum Life
755-002	#Y_Drum Cycle Count - Total	0	0~6M (5B8D80h) (1bit= 0.1cycle)	Total P/R Cumulative No. of Rotations [To detect Life]
755-003	DC Drum Cycle Count	0	0~6M (5B8D80h) (1bit= 0.1cycle)	DC Charged l P/R Cumulative No. of Rotations [To detect Life]
755-004	AC Drum Cycle Count	0	0~6M (5B8D80h) (1bit= 0.1cycle)	AC Charged l P/R Cumulative No. of Rotations [To detect Life]
755-005	Print Count - Color	0	0~100K (186A0h)	Accumulates the No. of Prints for FC Job.
755-006	Print Count - Black	0	0~100K (186A0h)	Accumulates the No. of Prints for BW Job.
755-007	#Y_Print Count - Full Color, A4L only	0	0~20000K (1312D00h) (1bit= 100/A4.1 sheet)	Accumulates the No. of Prints - A4LEF for FC Job.
755-008	#Y_Print Count - Black, A4L only	0	0~20000K (1312D00h)	Accumulates the No. of Prints - A4LEF for BW Job.
755-009	#Y_Shutdown Count - Full Color	0	0~65535 (FFFFh)	Accumulates the No. of ShutDowns during FC Job.
755-010	#Y_Shutdown Count - Black	0	0~65535 (FFFFh)	Accumulates the No. of ShutDowns during BW Job.
755-011	#Y_Setup Count - Full Color	0	0~65535 (FFFFh)	Accumulates the No. of Setups immediately after FC Job.
755-012	#Y_Setup Count - Black	0	0~65535 (FFFFh)	Accumulates the No. of Setups immediately after BW Job.
755-013	#Y_First Install - Year	0	0~99 (63h)	Writes the date info when the first job was performed.
755-014	#Y_First Install - Month	0	0~12 (Ch)	Writes the date info when the first job was performed.
755-015	#Y_First Install - Day	0	0~31 (1Fh)	Writes the date info when the first job was performed.
755-016	#Y_First install, Part#1	0	0~65535 (FFFFh)	Records the M/C Serial No. when the CRU was first installed.
755-017	#Y_First install, Part#2	0	0~65535 (FFFFh)	Records the M/C Serial No. when the CRU was first installed.
755-018	#Y_Last install, Part#1	0	0~65535 (FFFFh)	Records the M/C (2nd time onwards) Serial No. when the CRU was last installed.
755-019	#Y_Last install, Part#2	0	0~65535 (FFFFh)	Records the M/C (2nd time onwards) Serial No. when the CRU was last installed.
755-020	#Y_Machine Serial No. - Write count	0	0~65535 (FFFFh)	Accumulates the No. of M/C into which CRU is installed.
755-022	#Y_CRU TYPE	CRU Type	0~255 (FFh)	CRU Type is recorded.
755-028	#M_Drum Life Count - kCy	0	0~3000 (BB8h)	To determine Drum Life
755-029	M_Drum Cycle Count - Total	0	0~6M (5B8D80h) (1bit= 0.1cycle)	Total P/R Cumulative No. of Rotations [To detect Life]
755-030	#M_DC Drum Cycle Count	0	0~6M (5B8D80h) (1bit= 0.1cycle)	DC Charged l P/R Cumulative No. of Rotations [To detect Life]
755-031	#M_AC Drum Cycle Count	0	0~6M (5B8D80h) (1bit= 0.1cycle)	AC Charged l P/R Cumulative No. of Rotations [To detect Life]

Table 14 Chain 755

Chain-Link	Name	Default	Range	Description
755-032	#M_Print Count - Color	0	0~100K (186A0h)	Accumulates the No. of Prints for FC Job.
755-033	#M_Print Count - Black	0	0~100K (186A0h)	Accumulates the No. of Prints for BW Job.
755-034	#M_Print Count - Full Color, A4L only	0	0~20000K (1312D00h) (1bit= 100/A4.1 sheet)	Accumulates the No. of Prints - A4LEF for FC Job.
755-035	#M_Print Count - Black, A4L only	0	0~20000K (1312D00h) (1bit= 100/A4.1 sheet)	Accumulates the No. of Prints - A4LEF for BW Job.
755-036	#M_Shutdown Count - Full Color	0	0~65535 (FFFFh)	[Description] =
755-037	#M_Shutdown Count - Black	0	0~65535 (FFFFh)	[Description] =
755-038	#M_Setup Count - Full Color	0	0~65535 (FFFFh)	Accumulates the No. of Setups immediately after FC Job.
755-039	#M_Setup Count - Black	0	0~65535 (FFFFh)	Accumulates the No. of Setups immediately after BW Job.
755-040	#M_First Install - Year	0	0~99 (63h)	Writes the date info when the first job was performed.
755-041	#M_First Install - Month	0	0~12 (Ch)	Writes the date info when the first job was performed.
755-042	#M_First Install - Day	0	0~31 (1Fh)	Writes the date info when the first job was performed.
755-043	#M_First install, Part#1	0	0~65535 (FFFFh)	Records the M/C Serial No. when the CRU was first installed.
755-044	#M_First install, Part#2	0	0~65535 (FFFFh)	Records the M/C Serial No. when the CRU was first installed.
755-045	#M_Last install, Part#1	0	0~65535 (FFFFh)	Records the M/C (2nd time onwards) Serial No. when the CRU was last installed.
755-046	#M_Last install, Part#2	0	0~65535 (FFFFh)	Records the M/C (2nd time onwards) Serial No. when the CRU was last installed.
755-047	#M_Machine Serial No. - Write count	0	0~65535 (FFFFh)	Accumulates the No. of M/C into which CRU is installed.
755-049	#M_CRU TYPE	CRU Type	0~255 (FFh)	CRU Type is recorded.
755-055	#C_Drum Life Count - kCy	0	0~3000 (BB8h)	To determine Drum Life
755-056	#C_Drum Cycle Count - Total	0	0~6M (5B8D80h) (1bit= 0.1cycle)	Total P/R Cumulative No. of Rotations [To detect Life]
755-057	#C_DC Drum Cycle Count	0	0~6M (5B8D80h) (1bit= 0.1cycle)	DC Charged I P/R Cumulative No. of Rotations [To detect Life]
755-058	#C_AC Drum Cycle Count	0	0~6M (5B8D80h) (1bit= 0.1cycle)	AC Charged I P/R Cumulative No. of Rotations [To detect Life]
755-059	#C_Print Count - Color	0	0~100K (186A0h)	Accumulates the No. of Prints for FC Job.
755-060	#C_Print Count - Black	0	0~100K (186A0h)	Accumulates the No. of Prints for BW Job.
755-061	#C_Print Count - Full Color, A4L only	0	0~20000K (1312D00h) (1bit= 100/A4.1 sheet)	Accumulates the No. of Prints - A4LEF for FC Job.
755-062	#C_Print Count - Black, A4L only	0	0~20000K (1312D00h) (1bit= 100/A4.1 sheet)	Accumulates the No. of Prints - A4LEF for BW Job.
755-063	#C_Shutdown Count - Full Color	0	0~65535 (FFFFh)	[Description] =
755-064	#C_Shutdown Count - Black	0	0~65535 (FFFFh)	[Description] =
755-065	#C_Setup Count - Full Color	0	0~65535 (FFFFh)	Accumulates the No. of Setups immediately after FC Job.
755-066	#C_Setup Count - Black	0	0~65535 (FFFFh)	Accumulates the No. of Setups immediately after BW Job.
755-067	#C_First Install - Year	0	0~99 (63h)	Writes the date info when the first job was performed.
755-068	#C_First Install - Month	0	0~12 (Ch)	Writes the date info when the first job was performed.

Table 14 Chain 755

Chain-Link	Name	Default	Range	Description
755-069	#C_First Install - Day	0	0~31 (1Fh)	Writes the date info when the first job was performed.
755-070	#C_First install, Part#1	0	0~65535 (FFFFh)	Records the M/C Serial No. when the CRU was first installed.
755-071	#C_First install, Part#2	0	0~65535 (FFFFh)	Records the M/C Serial No. when the CRU was first installed.
755-072	#C_Last install, Part#1	0	0~65535 (FFFFh)	Records the M/C (2nd time onwards) Serial No. when the CRU was last installed.
755-073	#C_Last install, Part#2	0	0~65535 (FFFFh)	Records the M/C (2nd time onwards) Serial No. when the CRU was last installed.
755-074	#C_Machine Serial No. - Write count	0	0~65535 (FFFFh)	Accumulates the No. of M/C into which CRU is installed.
755-076	#C_CRU TYPE	CRU Type	0~255 (FFh)	CRU Type is recorded.
755-082	#K_Drum Life Count - kCy	0	0~3000 (BB8h)	To determine Drum Life
755-083	#K_Drum Cycle Count - Total	0	0~6M (5B8D80h) (1bit= 0.1cycle)	Total P/R Cumulative No. of Rotations [To detect Life]
755-084	#K_DC Drum Cycle Count	0	0~6M (5B8D80h) (1bit= 0.1cycle)	DC Charged I P/R Cumulative No. of Rotations [To detect Life]
755-085	#K_AC Drum Cycle Count	0	0~6M (5B8D80h) (1bit= 0.1cycle)	AC Charged I P/R Cumulative No. of Rotations [To detect Life]
755-086	#K_Print Count - Color	0	0~100K (186A0h)	Accumulates the No. of Prints for FC Job.
755-087	#K_Print Count - Black	0	0~100K (186A0h)	Accumulates the No. of Prints for BW Job.
755-088	#K_Print Count - Full Color, A4L only	0	0~20000K (1312D00h) (1bit= 100/A4.1 sheet)	Accumulates the No. of Prints - A4LEF for FC Job.
755-089	#K_Print Count - Black, A4L only	0	0~20000K (1312D00h) (1bit= 100/A4.1 sheet)	Accumulates the No. of Prints - A4LEF for BW Job.
755-090	#K_Shutdown Count - Full Color	0	0~65535 (FFFFh)	
755-091	#K_Shutdown Count - Black	0	0~65535 (FFFFh)	
755-092	#K_Setup Count - Full Color	0	0~65535 (FFFFh)	Accumulates the No. of Setups immediately after FC Job.
755-093	#K_Setup Count - Black	0	0~65535 (FFFFh)	Accumulates the No. of Setups immediately after BW Job.
755-094	#K_First Install - Year	0	0~99 (63h)	Writes the date info when the first job was performed.
755-095	#K_First Install - Month	0	0~12 (Ch)	Writes the date info when the first job was performed.
755-096	#K_First Install - Day	0	0~31 (1Fh)	Writes the date info when the first job was performed.
755-097	#K_First install, Part#1	0	0~65535 (FFFFh)	Records the M/C Serial No. when the CRU was first installed.
755-098	#K_First install, Part#2	0	0~65535 (FFFFh)	Records the M/C Serial No. when the CRU was first installed.
755-099	#K_Last install, Part#1	0	0~65535 (FFFFh)	Records the M/C (2nd time onwards) Serial No. when the CRU was last installed.
755-100	#K_Last install, Part#2	0	0~65535 (FFFFh)	Records the M/C (2nd time onwards) Serial No. when the CRU was last installed.
755-101	#K_Machine Serial No. - Write count	0	0~65535 (FFFFh)	Accumulates the No. of M/C into which CRU is installed.
755-103	#K_CRU TYPE	CRU Type	0~255 (FFh)	CRU Type is recorded.

Table 15 Chain 760

Chain-Link	Name	Default	Range	Description
760-006	Block	3	0~4	Threshold of pattern valid no. of Blocks. Fail occurs if the value is not corrected below the Threshold.
760-007	Y-MAG	716	0~1432	Adjusts the Fast Scan direction image 100% magnification by switching the average frequency of each ROS Video lock. (4 Colors/Correction Resolution Ability = 1/4 Pixel unit)
760-008	M-MAG	716	0~1432	Adjusts the Fast Scan direction image 100% magnification by switching the average frequency of each ROS Video lock. (4 Colors/Correction Resolution Ability = 1/4 Pixel unit)
760-009	C-MAG	716	0~1432	Adjusts the Fast Scan direction image 100% magnification by switching the average frequency of each ROS Video lock. (4 Colors/Correction Resolution Ability = 1/4 Pixel unit)
760-010	K-MAG	716	0~1432	Adjusts the Fast Scan direction image 100% magnification by switching the average frequency of each ROS Video lock. (4 Colors/Correction Resolution Ability = 1/4 Pixel unit)
760-011	Y-BAL	421	0~842	Adjusts the Left Right Magnification with respect to Fast Scan direction image center by changing the slant of ROS Video Lock Sweep. (4 Colors/Correction Resolution Ability = 1/8 Pixel unit)
760-012	M-BAL	421	0~842	Adjusts the Left Right Magnification with respect to Fast Scan direction image center by changing the slant of ROS Video Lock Sweep. (4 Colors/Correction Resolution Ability = 1/8 Pixel unit)
760-013	C-BAL	421	0~842	Adjusts the Left Right Magnification with respect to Fast Scan direction image center by changing the slant of ROS Video Lock Sweep. (4 Colors/Correction Resolution Ability = 1/8 Pixel unit)
760-014	K-BAL	421	0~842	Adjusts the Left Right Magnification with respect to Fast Scan direction image center by changing the slant of ROS Video Lock Sweep. (4 Colors/Correction Resolution Ability = 1/8 Pixel unit)
760-015	Y-Skew misregistration	500	0~1000	100=1 rotation. 500 and above=CW direction, Below 500=CCW direction
760-016	M-Skew misregistration	500	0~1000	100=1 rotation. 500 and above=CW direction, Below 500=CCW direction
760-017	C-Skew misregistration	500	0~1000	100=1 rotation. 500 and above=CW direction, Below 500=CCW direction
760-018	K-Skew misregistration	500	0~1000	100=1 rotation. 500 and above=CW direction, Below 500=CCW direction
760-019	Y-XSO	236	0~472	Adjusts the Fast Scan direction write start position by the No. of Video Locks from SOS Signal. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-020	M-XSO	236	0~472	Adjusts the Fast Scan direction write start position by the No. of Video Locks from SOS Signal. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-021	C-XSO	236	0~472	Adjusts the Fast Scan direction write start position by the No. of Video Locks from SOS Signal. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-022	K-XSO	236	0~472	Adjusts the Fast Scan direction write start position by the No. of Video Locks from SOS Signal. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-023	Y-YSO	237	0~474	Adjusts the Slow Scan direction write start position by the No. of LS Signal Counts from the ROS/Image/Patch Start Signal. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-024	M-YSO	237	0~474	Adjusts the Slow Scan direction write start position by the No. of LS Signal Counts from the ROS/Image/Patch Start Signal. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-025	C-YSO	237	0~474	Adjusts the Slow Scan direction write start position by the No. of LS Signal Counts from the ROS/Image/Patch Start Signal. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-026	K-YSO	237	0~474	Adjusts the Slow Scan direction write start position by the No. of LS Signal Counts from the ROS/Image/Patch Start Signal. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-027	Regi Con/Circum. Length Correction implement SW	3	0~3	For check during servicing etc. 0 = Does not perform Regi Control nor Circumference Length Correction 1 = Performs Regi Control, does not perform Circumference Length Correction 2 = Does not perform Regi Control, performs Circumference Length Correction 3 = Performs Regi Control and Circumference Length Correction
760-028	RC Start Temp	40	10~250	Threshold of (Normal) Regi Control Implementation Temperature difference. Value on the left is 10 times of the Temperature. (0.1 Degree Celsius interval)

Table 15 Chain 760

Chain-Link	Name	Default	Range	Description
760-029	OLRC implementation SW	1	0~1	0 = Does not perform OLRegi Control 1 = Performs OLRegi Control
760-030	Y-OLRC Start Temp	30	10~100	Threshold of Yellow Open Loop Regi Control Implementation Temperature difference. Value on the left is 10 times of the Temperature. (0.1 Degree Celsius interval)
760-031	M-OLRC Start Temp	30	10~100	Threshold of Magenta Open Loop Regi Control Implementation Temperature difference. Value on the left is 10 times of the Temperature. (0.1 Degree Celsius interval)
760-032	K-OLRC Start Temp	30	10~100	Threshold of Black Open Loop Regi Control Implementation Temperature difference. Value on the left is 10 times of the Temperature. (0.1 Degree Celsius interval)
760-035	Aok (for Diag Regi Con)	20	1~24	Threshold of No. of valid Blocks of fine adjustment pattern at Diag Regi Control (DC685). NG occurs if the value is out corrected below the Threshold.
760-036	Aok (for normal Regi Con)	8	1~12	Threshold of No. of valid Blocks of fine adjustment pattern at Normal Regi Control. NG occurs if the value is out corrected below the Threshold.
760-037	LEDset-IN-A	2	0~2	MOB LED ON/OFF and Light Quantity Step at IN side. 0 = Off 1 = Low 2 = High
760-038	LEDset-IN-B	2	0~2	MOB LED ON/OFF and Light Quantity Step at IN side.0 = Off 1 = Low 2 = High
760-043	LEDset-OUT-A	2	0~2	MOB LED ON/OFF and Light Quantity Step at OUT side. 0 = Off 1 = Low 2 = High
760-044	LEDset-OUT-B	2	0~2	MOB LED ON/OFF and Light Quantity Step at OUT side 0 = Off 1 = Low 2 = High
760-049	Y-XBI	0	0~3	Adjusts the Fast Scan direction write start position by Switching the Video Lock position phase from SOS Signal. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-050	M-XBI	0	0~3	Adjusts the Fast Scan direction write start position by Switching the Video Lock position phase from SOS Signal. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-051	C-XBI	0	0~3	Adjusts the Fast Scan direction write start position by Switching the Video Lock position phase from SOS Signal. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-052	K-XBI	0	0~3	Adjusts the Fast Scan direction write start position by Switching the Video Lock position phase from SOS Signal. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-053	Y-OLXSO	10	0~20	The normal Regi Control cycle, separately adjusts the Fast Scan direction write start position by the No. of Video Locks from SOS signal in an Open Loop, from the temperature detection result. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-054	M-OLXSO	10	0~20	The normal Regi Control cycle, separately adjusts the Fast Scan direction write start position by the No. of Video Locks from SOS signal in an Open Loop, from the temperature detection result. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-055	C-OLXSO	10	0~20	The normal Regi Control cycle separately adjusts the Fast Scan direction write start position by the No. of Video Locks from SOS signal in an Open Loop, from the temperature detection result. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-056	K-OLXSO	10	0~20	The normal Regi Control cycle, separately adjusts the Fast Scan direction write start position by the No. of Video Locks from SOS signal in an Open Loop, from the temperature detection result. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-057	Y-OLXBI	0	0~3	The normal Regi Control cycle, separately adjusts the Fast Scan direction write start position by replacing the Video Locks phase from SOS signal in an Open Loop, from the temperature detection result. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-058	M-OLXBI	0	0~3	The normal Regi Control cycle, separately adjusts the Fast Scan direction write start position by replacing the Video Locks phase from SOS signal in an Open Loop, from the temperature detection result. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-059	O-OLXBI	0	0~3	The normal Regi Control cycle, separately adjusts the Fast Scan direction write start position by replacing the Video Locks phase from SOS signal in an Open Loop, from the temperature detection result. (4 Colors/Correction Resolution Ability = 1 Pixel unit)

Table 15 Chain 760

Chain-Link	Name	Default	Range	Description
760-060	K-OLXBI	0	0~3	The normal Regi Control cycle, separately adjusts the Fast Scan direction write start position by replacing the Video Locks phase from SOS signal in an Open Loop, from the temperature detection result. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-061	Y-OLYSO	4	0~20	The normal Regi Control cycle, separately adjusts the Slow Scan direction write start position by the LS signal No. of Counts from the ROS Image/Patch start signal in an Open Loop from the Temperature detection result. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-062	M-OLYSO	10	0~20	The normal Regi Control cycle, separately adjusts the Slow Scan direction write start position by the LS signal No. of Counts from the ROS Image/Patch start signal in an Open Loop from the Temperature detection result. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-063	C-OLYSO	10	0~20	The normal Regi Control cycle, separately adjusts the Slow Scan direction write start position by the LS signal No. of Counts from the ROS Image/Patch start signal in an Open Loop from the Temperature detection result. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-064	K-OLYSO	10	0~20	The normal Regi Control cycle, separately adjusts the Slow Scan direction write start position by the LS signal No. of Counts from the ROS Image/Patch start signal in an Open Loop from the Temperature detection result. (4 Colors/Correction Resolution Ability = 1 Pixel unit)
760-065	Y-OLMAG	100	0~200	The normal Regi Control separately adjusts the Fast Scan direction image 100% magnification by switching the average frequency of each ROS Video Lock in an Open Loop from the Temperature detection result. (4 Colors/ Correction Resolution Ability = 1/4 Pixel unit)
760-066	M-OLMAG	100	0~200	The normal Regi Control separately adjusts the Fast Scan direction image 100% magnification by switching the average frequency of each ROS Video Lock in an Open Loop from the Temperature detection result. (4 Colors/ Correction Resolution Ability = 1/4 Pixel unit)
760-067	C-OLMAG	100	0~200	The normal Regi Control separately adjusts the Fast Scan direction image 100% magnification by switching the average frequency of each ROS Video Lock in an Open Loop from the Temperature detection result. (4 Colors/ Correction Resolution Ability = 1/4 Pixel unit)
760-068	K-OLMAG	100	0~200	The normal Regi Control separately adjusts the Fast Scan direction image 100% magnification by switching the average frequency of each ROS Video Lock in an Open Loop from the Temperature detection result. (4 Colors/ Correction Resolution Ability = 1/4 Pixel unit)
760-070	Y-LD light volume at last RegiCon	0	0~1023	LD Light Quantity when Regi Control is performed.
760-071	M-LD light volume at last RegiCon	0	0~1023	LD Light Quantity when Regi Control is performed.
760-072	C-LD light volume at last RegiCon	0	0~1023	LD Light Quantity when Regi Control is performed.
760-073	K-LD light volume at last RegiCon	0	0~1023	LD Light Quantity when Regi Control is performed.
760-074	Y-XSO after LD light volume change	236	0~472	XSO value after correction based on the LD Light Quantity variation
760-075	M-XSO after LD light volume change	236	0~472	XSO value after correction based on the LD Light Quantity variation
760-076	C-XSO after LD light volume change	236	0~472	XSO value after correction based on the LD Light Quantity variation
760-077	K-XSO after LD light volume change	236	0~472	XSO value after correction based on the LD Light Quantity variation
760-078	Y-XBI after LD light volume change	0	0~3	XBI value after correction based on the LD Light Quantity variation
760-079	M-XBI after LD light volume change	0	0~3	XBI value after correction based on the LD Light Quantity variation
760-080	C-XBI after LD light volume change	0	0~3	XBI value after correction based on the LD Light Quantity variation
760-081	K-XBI after LD light volume change	0	0~3	XBI value after correction based on the LD Light Quantity variation

Table 16 Chain 762

Chain-Link	Name	Default	Range	Description
762-002	#YMC Normal VM1 value	351	0~1023 (1bit= -0.684V)	Vm1 Developer DC energized voltage at YMC Color/Normal speed (104mm/s)
762-008	#YM_DB AC Normal Vp-p value	600	0~1023 (1bit= 1.491Vpp)	AC peak to peak energized voltage at YM Color/Normal speed.
762-012	#K_DB DC Normal Vm1 value	351	0~1023 (1bit= -0.684V)	Vm1 Developer DC energized voltage at K Color/Normal speed (104mm/s)
762-013	#CK_DB AC Normal Vp-p value	600	0~1023 (1bit= 1.491Vpp)	AC peak to peak energized voltage at CK Color/Normal speed.
762-018	#YMC_DB DC Half-speed Vm1 value	351	0~1023 (1bit= -0.684V)	Vm1 Developer DC energized voltage at YMC Color/Half speed (52mm/s)
762-024	#YM_DB AC Half-speed Vp-p value	600	0~1023 (1bit= 1.491Vpp)	AC peak to peak energized voltage at YM Color/Half speed.
762-028	#K_DB DC Half-speed Vm1 value	351	0~1023 (1bit= -0.684V)	Vm1 Developer DC energized voltage at K Color/Half speed (52mm/s)
762-029	#CK_DB AC Half-speed Vp-p value	600	0~1023 (1bit= 1.491Vpp)	AC peak to peak energized voltage at CK Color/Half speed.
762-043	Pixel/Drum rotation threshold for Deve-Band	20	0~65535	A standard value (Cumulative No. of Pixels/Drum Rotations) for creation DeveBand.
762-044	Cumulative ICDC_Band_Value_Y	0	0~409600	Y Color Cumulative Pixels
762-045	Cumulative ICDC_Band_Value_M	0	0~409600	M Color Cumulative Pixels
762-046	Cumulative ICDC_Band_Value_C	0	0~409600	C Color Cumulative Pixels
762-047	Cumulative ICDC_Band_Value_K	0	0~409600	K Color Cumulative Pixels
762-053	#YM_DB AC Normal Frequency	60	0~127	AC Energized Voltage Frequency at YM Color Normal Speed
762-054	#YM_DB AC Normal Output Phase value	65	0~127	AC Energized Voltage Phase Value at YM Color Normal Speed
762-059	#CK_DB AC Normal Frequency	60	0~127	AC Energized Voltage Frequency at CK Color Normal Speed
762-060	#CK_DB AC Normal Output Phase value	65	0~127	AC Energized Voltage Phase Value at CK Color Normal Speed
762-064	#YM_DB AC Half-speed Frequency	60	0~127	AC Energized Voltage Frequency at YM Color Half Speed
762-065	YM_DB AC Half-speed Output Phase value	65	0~127	AC Energized Voltage Phase Value at YM Color Half Speed
762-070	#CK_DB AC Half-speed Frequency	60	0~127	AC Energized Voltage Frequency at CK Color Half Speed
762-071	#CK_DB AC Half-speed Output Phase value	65	0~127	AC Energized Voltage Phase Value at CK Color Half Speed
762-081	#Y_DB DC VB1 ON Normal Timing	110	0~255 (1bit= 2.4462ms)	Rising timing from Vm1 to VB1 at Y Color Normal Speed.
762-082	#M_DB DC VB1 ON Normal Timing	110	0~255 (1bit= 2.4462ms)	Rising timing from Vm1 to VB1 at M Color Normal Speed.
762-083	#C_DB DC VB1 ON Normal Timing	110	0~255	Rising timing from Vm1 to VB1 at C Color Normal Speed. (1bit= 2.4462ms)
762-084	#K_DB DC VB1 ON Normal Timing	102	0~255	Rising timing from Vm1 to VB1 at K Color Normal Speed. (1bit= 2.4462ms)
762-089	#Y_DB DC VB OFF Normal Timing	90	0~255	Falling timing from VB to VB2 at Y Color Normal Speed. (1bit= 2.4462ms)

Table 16 Chain 762

Chain-Link	Name	Default	Range	Description
762-090	#M_DB DC VB OFF Normal Timing	90	0~255	Falling timing from VB to VB2 at M Color Normal Speed. (1bit= 2.4462ms)
762-091	#C_DB DC VB OFF Normal Timing	90	0~255	Falling timing from VB to VB2 at C Color Normal Speed. (1bit= 2.4462ms)
762-092	#K_DB DC VB OFF Normal Timing	82	0~255	Falling timing from VB to VB2 at K Color Normal Speed. (1bit= 2.4462ms)
762-093	#YM_DB AC ON Normal Timing	110	0~255	AC Voltage Energized timing at YM Color Normal Speed. (1bit= 2.4462ms)
762-094	#CK_DB AC ON Normal Timing	110	0~255	AC Voltage Energized timing at CK Color Normal Speed. (1bit= 2.4462ms)
762-095	#YM_DB AC OFF Normal Timing	118	0~255	AC Voltage off timing at YM Color Normal Speed. (1bit= 2.4462ms)
762-096	#CK_DB AC OFF Normal Timing	118	0~255	AC Voltage Off timing at CK Color Normal Speed.
762-105	#Y_DB DC VB1 ON Half-speed Timing	104	0~255 (1bit= 4.8924ms)	Rising timing from Vm1 to VB1 at Y Color Half Speed.
762-106	#M_DB DC VB1 ON Half-speed Timing	104	0~255 (1bit= 4.8924ms)	Rising timing from Vm1 to VB1 at M Color Half Speed.
762-107	#C_DB DC VB1 ON Half-speed Timing	104	0~255 (1bit= 4.8924ms)	Rising timing from Vm1 to VB1 at C Color Half Speed.
762-108	#K_DB DC VB1 ON Half-speed Timing	94	0~255 (1bit= 4.8924ms)	Rising timing from Vm1 to VB1 at K Color Half Speed.
762-113	#Y_DB DC VB OFF Half-speed Timing	92	0~255 (1bit= 4.8924ms)	Falling timing from VB to VB2 at Y Color Half Speed.
762-114	#M_DB DC VB OFF Half-speed Timing	92	0~255 (1bit= 4.8924ms)	Falling timing from VB to VB2 at M Color Half Speed.
762-115	#C_DB DC VB OFF Half-speed Timing	92	0~255 (1bit= 4.8924ms)	Falling timing from VB to VB2 at C Color Half Speed.
762-116	#K_DB DC VB OFF Half-speed Timing	88	0~255 (1bit= 4.8924ms)	Falling timing from VB to VB2 at K Color Half Speed.
762-117	#YM_ DB AC ON Half-speed Timing	110	0~255 (1bit= 4.8924ms)	AC Voltage Energized timing at YM Color Half Speed.
762-118	#CK_ DB AC ON Half-speed Timing	110	0~255 (1bit= 4.8924ms)	AC Voltage Energized timing at CK Color Half Speed.
762-119	#YM_ DB AC OFF Half-speed Timing	108	0~255 (1bit= 4.8924ms)	AC Voltage off timing at YM Color Half Speed.
762-120	#CK_ DB AC OFF Half-speed Timing	108	0~255 (1bit= 4.8924ms)	AC Voltage off timing at CK Color Half Speed.
762-121	#YMC_Deve MOT ON Normal Timing	184	0~255	Color Developer during motor rising timing at Normal Speed. (1bit= 2.4462ms)
762-122	#YMC_Deve MOT OFF Normal Timing	303	0~1023	Color Developer during motor falling timing at Normal Speed. (1bit= 2.4462ms)
762-123	#YMC_Deve MOT ON Half-speed Timing	184	0~255 (1bit= 4.8924ms)	Color Developer during motor rising timing at Half Speed.
762-124	#YMC_Deve MOT OFF Half-speed Timing	303	0~1023 (1bit= 4.8924ms)	Color Developer during motor falling timing at Half Speed.
762-134	#K_Deve C/L ON Normal Timing	164	0~255	K Color Developer during clutch rising timing at Normal Speed. (1bit= 2.4462ms)
762-135	#K_Deve C/L OFF Normal Timing	531	0~1023	K Color Developer during clutch falling timing at Normal Speed. (1bit= 2.4462ms)
762-136	#K_Deve C/L ON Half-speed Timing	164	0~255 (1bit= 4.8924ms)	K Color Developer during clutch rising timing at Half Speed.
762-137	#K_Deve C/L OFF Half-speed Timing	531	0~1023 (1bit= 4.8924ms)	K Color Developer during clutch falling timing at Half Speed.

Table 16 Chain 762

Chain-Link	Name	Default	Range	Description
762-173	#Y_DB DC VB ON Normal Timing	370	0~1023	Rising timing from VB3 to VB at Y Color Normal Speed. (1bit= 2.4462ms)
762-174	#M_DB DC VB ON Normal Timing	370	0~1023	Rising timing from VB3 to VB at M Color Normal Speed. (1bit= 2.4462ms)
762-175	#C_DB DC VB ON Normal Timing	370	0~1023	Rising timing from VB3 to VB at C Color Normal Speed. (1bit= 2.4462ms)
762-176	#K_DB DC VB ON Normal Timing	370	0~1023	Rising timing from VB3 to VB at K Color Normal Speed. (1bit= 2.4462ms)
762-177	#Y_DB DC VB ON Half-speed Timing	370	0~1023 (1bit= 4.8924ms)	Rising timing from VB3 to VB at Y Color Half Speed.
762-178	#M_DB DC VB ON Half-speed Timing	370	0~1023 (1bit= 4.8924ms)	Rising timing from VB3 to VB at M Color Half Speed.
762-179	#C_DB DC VB ON Half-speed Timing	370	0~1023 (1bit= 4.8924ms)	Rising timing from VB3 to VB at C Color Half Speed.
762-180	#K_DB DC VB ON Half-speed Timing	370	0~1023 (1bit= 4.8924ms)	Rising timing from VB3 to VB at K Color Half Speed.
762-185	#YMC_DB DC Normal VB3 Value	877	0~1023 (1bit= -0.684V)	VB3 Developer DC Energized Voltage value of YMC Color/Normal Speed.
762-186	#K_DB DC Normal VB3 Value	877	0~1023 (1bit= -0.684V)	VB3 Developer DC Energized Voltage value of K Color/Normal Speed.
762-187	#YMC_DB DC Half-speed VB3 Value	877	0~1023 (1bit= -0.684V)	VB3 Developer DC Energized Voltage value of YMC Color/Half Speed.
762-188	#K_DB DC Half-speed VB3 Value	877	0~1023 (1bit= -0.684V)	VB3 Developer DC Energized Voltage value of K Color/Half Speed.
762-190	#4DB DC Hi-speed VM1 Value	351	0~1023 (1bit= -0.684V)	Vm1 Developer DC Energized Voltage value at K Color/High Speed.
762-194	#K_DB DC Hi-speed VM3 Value	877	0~1023 (1bit= -0.684V)	VB3 Developer DC Energized Voltage value at K Color/High Speed.
762-195	#K_DB DC Vm0 ON Hi-speed Timing	107	0~255 (1bit= 1.3114ms)	Rising timing from 0v to Vm0 at K Color/High Speed.
762-196	#K_DB DC Vm1 OFF Hi-speed Timing	99	0~255 (1bit= 1.3114ms)	Falling timing from Vm1 to Vm0 at K Color/High Speed.
762-197	#K_DB DC VB1 ON Hi-speed Timing	130	0~255 (1bit= 1.3114ms)	Rising timing from Vm1 to VB1 at K Color/High Speed.
762-202	#K_DB DC VB OFF Hi-speed Timing	91	0~255 (1bit= 1.3114ms)	Falling timing from VB to VB2 at K Color/High Speed.
762-203	#CK_DB AC ON Hi-speed Timing	137	0~255 (1bit= 1.3114ms)	AC Voltage Energized timing at CK Color High Speed.
762-204	#CK_DB AC OFF Hi-speed Timing	137	0~255 (1bit= 1.3114ms)	AC Voltage off timing at CK Color High Speed.
762-210	#K_DB DC VB ON Hi-speed Timing	370	0~1023 (1bit= 1.3114ms)	Rising timing from VB3 to VB at K Color/High Speed.
762-211	#1, 2DB AC Target Value at 1200dpi	600	0~1023 (1bit= 1.491V)	AC peak to peak energized voltage at YM Color 1200dpi/Normal Speed Setup
762-213	#3, 4DB AC Target Value at 1200dpi	600	0~1023 (1bit= 1.491V)	AC peak to peak energized voltage at CK Color 1200dpi/Normal Speed Setup
762-215	#1, 2DB AC Target Value at 1200dpi/ Half-speed	600	0~1023 (1bit= 1.491V)	AC peak to peak energized voltage at YM Color 1200dpi/Half Speed Setup

Table 16 Chain 762

Chain-Link	Name	Default	Range	Description
762-217	#3, 4DB AC Target Value at 1200dpi/ Half-speed	600	0~1023 (1bit= 1.491V)	AC peak to peak energized voltage at CK Color 1200dpi/Half Speed Setup
762-219	toner_band_width_YMC	10	0~30	Xero/Deve band width Setup value at YMC Color
762-220	toner_band_width_K	10	0~30	Xero/Deve band width Setup value at K Color
762-221	toner_band_density_Half-speed_YMC	153	0~255 (1bit= 0.3922%)	Half Speed Xero/Deve band density setup value at YMC Color
762-222	toner_band_density_Half-speed_K	153	0~255 (1bit= 0.3922%)	Half Speed Xero/Deve band density setup value at K Color
762-223	toner_band_density_Normal_YMC	153	0~255 (1bit= 0.3922%)	Normal Speed Xero/Deve band density setup value at YMC Color
762-224	toner_band_density_Normal_K	153	0~255 (1bit= 0.3922%)	Normal Speed Xero/Deve band density setup value at K Color
762-225	toner_band_density_Hi-speed_YMC	51	0~255 (1bit= 0.3922%)	High Speed Xero/Deve band density setup value at YMC Color
762-226	toner_band_density_Hi-speed_K	153	0~255 (1bit= 0.3922%)	High Speed Xero/Deve band density setup value at K Color
762-228	#YM_DB AC Hi-speed Vp-p Value	600	0~1023 (1bit= 1.491Vpp)	AC peak to peak energized voltage at YM Color High Speed.
762-229	#CK_DB AC Hi-speed Vp-p Value	600	0~1023 (1bit= 1.491Vpp)	AC peak to peak energized voltage at CK Color High Speed.
762-231	#YM_DB AC Hi-speed Frequency	60	0~127	AC energized voltage frequency at YM Color High Speed.
762-232	#YM_DB AC Hi-speed Output Phase Value	65	0~127	AC energized voltage phase value at YM Color High Speed.
762-233	#CK_DB AC Hi-speed Frequency	60	0~127	AC energized voltage frequency at CM Color High Speed.
762-234	#CK_DB AC Hi-speed Output Phase Value	65	0~127	AC energized voltage phase value at CK Color High Speed.
762-236	#Y_DB DC Hi-speed Vm1 Value	351	0~1023 (1bit= -0.684V)	Vm1 Developer DC Energized Voltage value at Y Color High Speed.
762-237	#M_DB DC Hi-speed Vm1 Value	351	0~1023 (1bit= -0.684V)	Vm1 Developer DC Energized Voltage value at M Color High Speed.
762-238	#C_DB DC Hi-speed Vm1 Value	351	0~1023 (1bit= -0.684V)	Vm1 Developer DC Energized Voltage value at C Color High Speed.
762-239	#Y_DB DC Hi-speed VB3 Value	877	0~1023 (1bit= -0.684V)	VB3 Developer DC Energized Voltage value at Y Color High Speed.
762-240	M_DB DC Hi-speed VB3 Value	877	0~1023 (1bit= -0.684V)	VB3 Developer DC Energized Voltage value at M Color High Speed.
762-241	#C_DB DC Hi-speed VB3 Value	877	0~1023 (1bit= -0.684V)	VB3 Developer DC Energized Voltage value at C Color High Speed.
762-242	#Y_DB DC Vm0 ON Hi-speed Timing	366	0~2000 (1bit= 1.3114ms)	Rising timing from 0v to Vm0 at Y Color High Speed.
762-243	#M_DB DC Vm0 ON Hi-speed Timing	366	0~2000 (1bit= 1.3114ms)	Rising timing from 0v to Vm0 at M Color High Speed.
762-244	#C_DB DC Vm0 ON Hi-speed Timing	366	0~2000 (1bit= 1.3114ms)	Rising timing from 0v to Vm0 at C Color High Speed.

Table 16 Chain 762

Chain-Link	Name	Default	Range	Description
762-245	#Y_DB DC Vm1 OFF Hi-speed Timing	366	0~2000 (1bit= 1.3114ms)	Falling timing from Vm1 to Vm0 at Y Color High Speed.
762-246	#M_DB DC Vm1 OFF Hi-speed Timing	366	0~2000 (1bit= 1.3114ms)	Falling timing from Vm1 to Vm0 at M Color High Speed.
762-247	#C_DB DC Vm1 OFF Hi-speed Timing	366	0~2000 (1bit= 1.3114ms)	Falling timing from Vm1 to Vm0 at C Color High Speed.
762-248	#Y_DB DC VB1 ON Hi-speed Timing	366	0~2000 (1bit= 1.3114ms)	Rising timing from Vm1 to VB1 at Y Color High Speed.
762-249	#M_DB DC VB1 ON Hi-speed Timing	366	0~2000 (1bit= 1.3114ms)	Rising timing from Vm1 to VB1 at M Color High Speed.
762-250	#C_DB DC VB1 ON Hi-speed Timing	366	0~2000 (1bit= 1.3114ms)	Rising timing from Vm1 to VB1 at C Color High Speed.
762-251	#Y_DB DC VB OFF Hi-speed Timing	366	0~2000 (1bit= 1.3114ms)	Falling timing from VB to VB2 at Y Color High Speed.
762-252	#M_DB DC VB OFF Hi-speed Timing	366	0~2000 (1bit= 1.3114ms)	Falling timing from VB to VB2 at M Color High Speed.
762-253	#C_DB DC VB OFF Hi-speed Timing	366	0~2000 (1bit= 1.3114ms)	Falling timing from VB to VB2 at C Color High Speed.
762-254	#YM_DB AC ON Hi-speed Timing	366	0~2000 (1bit= 1.3114ms)	AC Voltage Energized timing at YM Color High Speed.
762-255	#YM_DB AC OFF Hi-speed Timing	366	0~2000 (1bit= 1.3114ms)	AC Voltage off timing at YM Color High Speed.
762-256	#Y_DB DC VB ON Hi-speed Timing	1382	0~2000 (1bit= 1.3114ms)	Rising timing from VB3 to VB at Y Color High Speed.
762-257	#M_DB DC VB ON Hi-speed Timing	1382	0~2000 (1bit= 1.3114ms)	Rising timing from VB3 to VB at M Color High Speed.
762-258	#C_DB DC VB ON Hi-speed Timing	1382	0~2000 (1bit= 1.3114ms)	Rising timing from VB3 to VB at C Color High Speed.
762-259	FPOT DB Vm0 ON Normal Timing	110	0~255 (1bit= 2.4462ms)	Rising timing from 0v to Vm0 at K Color FPOT.
762-260	FPOT DB Vm0 ON Hi-speed Timing	110	0~255 (1bit= 1.3114ms)	Rising timing from 0v to Vm0 at K Color FPOT.
762-261	FPOT DB AC ON Normal Timing	110	0~255	AC Voltage Energized timing at FPOT Normal Speed. (1bit= 2.4462ms)
762-262	FPOT DB AC ON Hi-speed Timing	110	0~255 (1bit= 1.3114ms)	AC Voltage Energized timing at FPOT High Speed.

764-xxx Output (Finisher) NVM List

Table 17 Chain 764

Chain-Link	Name	Default	Range	Description
764-001	Mix Stack	0	0~1	0 = Disable 1 = Enable
764-002	Set Count	50	10~100	Maximum No. of sets allowed
764-003	Unstaple Compile Sheet Count (Small Size)	50	10~100	No. of Small Size paper compiled.

Table 17 Chain 764

Chain-Link	Name	Default	Range	Description
764-004	Maximum Compile Sheet Count	50	10~100	No. of paper compiled.
764-005	Sheet Width of Last Ejected Sheet	65535	0~65535	Width of last ejected sheet on the Stacker. Rewrites in Sleep Mode
764-006	Sheet Length of Last Ejected Sheet	65535	0~65535	Length of last ejected sheet on the Stacker. Rewrites in Sleep Mode
764-007	Sheet Width of Maximum Size Sheet	65535	0~65535	Maximum paper size (Width) output to the Stacker. Rewrites in Sleep Mode
764-008	Sheet Length of Maximum Size Sheet	65535	0~65535	Maximum paper size (Length) output to the Stacker. Rewrites in Sleep Mode
764-009	Number Of Ejected Staple Set	0	0~255	No. of Stapled Sets output. Rewrites in Sleep Mode
764-010	Mix Sensor Level Indicate	0	0~1	MixSensor ON/OFF. Rewrites in Sleep Mode
764-011	Staple Mode of Last Set	255	0~255	Staple Mode of last set. Rewrites in Sleep Mode
764-012	Sleep Mode Recovery Indicate	0	0~1	Indication of entry into the Sleep Mode at IOT Recovery. Rewrites in Sleep Mode
764-013	Unstaple Compile Sheet Count (Large Size)	25	10~100	No. of Large Size paper compiled.

770-xxx ESS IO Port/Protocol Setting NVM List

Table 18 Chain 770

Chain-Link	Name	Default	Range	Description
770-001	Parallel Port Enable	Enable	0~1	0 = Stop 1 = Start Up
770-002	Parallel Print ModeType	Auto	1~23	1 = Auto, 14 = Dump, 15 = ART, 16 = PLW, 3 = HPGL2, 8 = ESCP, 5 = PostScript, 10 = TIFF (AP version 1 = Auto, 2 = PCL6, 5 = PostScript
770-003	Parallel PJL Switch	ON	FALSE~TRUE	0 = OFF 1 = ON
770-004	Parallel Adobe Protocol	Standard	0~2	0 = Standard 1 = Binary 2 = TBCP
770-005	Parallel Auto Feed Time	6 (30sec)	1~255	1-255 (5-1275 sec)
770-006	Parallel Input Prime	ON	0~1	0 = OFF 1 = ON
770-007	Parallel COMM Mode	ON	0~1	0 = ON 1 = OFF
770-009	TBD	0	0~1	0 = IEEE P1284 1 = Centronics
770-010	Ethernet Transfer Rate	Auto	-	0x7F = Auto, 2 = 100BASE-TX, 1 = 10BASE-T
770-030	NetWare Frame Type	Auto	-	255 = Auto 2 = Ethernet II 4 = Ethernet SNAP 3 = Ethernet 802.2 1 = Ethernet 802.3 6 = Token SNAP 5 = Token 802.5
770-040	EtherTalk Port Enable	Disable	0~1	0 = Disable 1 = Enable
770-041	EtherTalk Print Type	Post-Script	-	PostScript
770-042	EtherTalk JCL Enable is EtherTalk PJL Enable for AP	ON	FALSE~TRUE	0 = OFF 1 = ON
770-050	Netware Port Enable	Stop	-	0 = Stop 1 = Start Up
770-051	Netware Print Mode Type	Auto	-	1 = Auto, 16 = ART, 17 = PLW, 3 = HPGL2, 8 = ESCP, 5 = PostScript, 10 = TIFF, 23 = Dump (AP Version 1 = Auto, 2 = PCL6, 5 = PostScript)
770-052	Netware JCL Enable is Netware PJL Enable for AP	ON	FALSE~TRUE	0 = Cannot be used 1 = Can be used
770-053	NetWare TBCP Valid	None	FALSE~TRUE	0 = None 1 = TBCP
770-054	NetWare Trans. Protocol	IPX/SPX	-	1 = IPX/SPX, 2 = TCP/IP, 3 = both
770-060	Lpd Port Enable	Start Up	-	0 = Stop 1 = Start Up

Table 18 Chain 770

Chain-Link	Name	Default	Range	Description
770-061	Lpd Print Mode Type	Auto	-	1 = Auto, 16 = ART, 17 = PLW, 3 = HPGL2, 8 = ESCP, 5 = PostScript, 10 = TIFF, 23 = Dump (AP Version 1 = Auto, 2 = PCL6, 5 = PostScript)
770-062	Lpd JCL Enable is Lpd PJL Enable for AP	ON	FALSE~TRUE	0 = OFF 1 = ON
770-063	TBCP Valid Flag	None	FALSE~TRUE	0 = None 1 = TBCP
770-064	Lpd Spool Mode	Non Spool	-	0 = Non Spool 1 = Spool
770-065	Lpd Time-out	16sec	-	2~3600sec (Setup range = 2~65,535)
770-070	Lpd Address Limitation	No	-	1 = Yes 0 = No
770-071	lpd Valid IP Address 1	0.0.0.0	-	00000000~FFFFFFFF
770-072	lpd Valid IP Address 2	0.0.0.0	-	00000000~FFFFFFFF
770-073	lpd Valid IP Address 3	0.0.0.0	-	00000000~FFFFFFFF
770-074	lpd Valid IP Address 4	0.0.0.0	-	00000000~FFFFFFFF
770-075	lpd Valid IP Address 5	0.0.0.0	-	00000000~FFFFFFFF
770-080	SMB Port Enable	Start Up	0~1	0 = Stop 1 = Start Up
770-081	SMB Print Mode Type	Auto	-	1 = Auto, 16 = ART, 17 = PLW, 3 = HPGL2, 8 = ESCP, 5 = PostScript, 10 = TIFF, 23 = Dump (AP Version 1 = Auto, 2 = PCL6, 5 = PostScript)
770-082	SMB JCL Enable is SMB PJL Enable for AP	ON	FALSE~TRUE	0 = OFF 1 = ON
770-083	SMB TBCP Valid Flag	None	FALSE~TRUE	0 = None 1 = TBCP
770-084	SMB Spool Mode	Non Spool	-	0 = Non Spool 1 = Spool
770-085	SMB Transport Protocol	both	-	2 = TCP/IP, 4 = NetBeui, 6 = both
770-090	IPP Port Enable	Stop	0~1	0 = Stop 1 = Start Up
770-091	IPP Print Mode Type	Auto	-	1 = Auto, 16 = ART, 17 = PLW, 3 = HPGL2, 8 = ESCP, 5 = PostScript, 10 = TIFF, 23 = Dump (AP Version 1 = Auto, 2 = PCL6, 5 = PostScript)
770-092	IPP JCL Enable is IPP PJL Enable for AP	ON	FALSE~TRUE	0 = OFF 1 = ON
770-093	IPP TBCP Valid Flag	None	FALSE~TRUE	0 = None 1 = TBCP
770-094	Acl Authorization	OFF (none)	-	0 = OFF 1 = ON
770-095	Use DNS Name	On	FALSE~TRUE	On, Off
770-097	Port no.	80	0~9999	0, 80, any one value between 8000~9999
770-098	IPP Spool Mode	Non Spool	-	0 = Non Spool 1 = Spool
770-099	Time Out	60	0~65535	0~65535 [Sec]
770-100	DHCP Mode	DHCP	-	0x10 = Manual, 4 = BOOTP, 2 = DHCP, 1 = RARP
770-101	IP Address	0.0.0.0	0x00000000~0xFFFFFFFF	00000000~FFFFFFFF
770-102	Subnet Mask	0.0.0.0	0x00000000~0xFFFFFFFF	00000000~FFFFFFFF
770-103	Gateway Address	0.0.0.0	0x00000000~0xFFFFFFFF	00000000~FFFFFFFF

Table 18 Chain 770

Chain-Link	Name	Default	Range	Description
770-110	DNS Auto Config.	DHCP	0~1	0x10 = Manual Setting, 0x02 = DHCP
770-112	DNS Domain Name	NULL	[Setup Range] =	DNS Domain Name (Normally, it is within 255 characters including the "." (dot) at the end which is not displayed)
770-120	TBD	DHCP	[Setup Range] =	0x10 = Manual Setting, 0x02 = DHCP
770-121	TBD	0.0.0.0	[Setup Range] =	00000000~FFFFFFFF
770-123	TBD	0.0.0.0	0x00000000~0xFFFFFFFF	00000000~FFFFFFFF
770-130	Agent Port Enable	Start Up	0~1	0 = Stop 1 = Start Up
770-131	Agent Transport Flag	UDP	-	0 = both OFF, 1 = IPX, 2 = UDP, 3 = both ON
770-133	Agent Community Name	NULL	-	JISX0201 Character Code 12 Characters (Replace to "fxSystemMgr" on the PDU) Agent Community Name 1 ~ Agent Community Name 10
770-140	EWS Port Enable	Start Up	0~1	0 = Stop 1 = Start Up
770-150	Salutation Port Enable	Stop	0~1	0 = Stop 1 = Start Up
770-160	MFIO Port Enable	Stop	0~1	0 = Stop 1 = Start Up
770-166	HTTP Max Session	5	-	1~10
770-190	Mail Service Start/Stop	1	0~1	1 = Start Up, 0 = Stop
770-191	Address of Mail Sender	NULLR	[Setup Range] =	Maximum 128 ASCII characters (types include alphanumerics, [@] [. (period)] [+] [-] [=] [_ (underscore)] [/] [<] [>]). Format = username@domain.name
770-202	SMTP Mail Server IP Address	0.0.0.0	0x00000000~0xFFFFFFFF	00000000~FFFFFFFF

780-xxx ESS Print Frame Setting NVM List

Table 19 Chain 780

Chain-Link	Name	Default	Range	Description
780-013	Paper Type for Tray 1	22	[Setup Range] =	22 = Bond 1 = Plain Paper 14 = Recycled Paper 23~27 = Custom Paper 1~5
780-014	Paper Type for Tray 2	22	[Setup Range] =	22 = Bond 1 = Plain Paper 14 = Recycled Paper 23~27 = Custom Paper 1~5
780-015	Paper Type for Tray 3	22	[Setup Range] =	22 = Bond 1 = Plain Paper 14 = Recycled Paper 23~27 = Custom Paper 1~5
780-016	Paper Type for Tray 4	22	[Setup Range] =	22 = Bond 1 = Plain Paper 14 = Recycled Paper 23~27 = Custom Paper 1~5
780-018	Paper Type for SMH	22	[Setup Range] =	22 = Bond 1 = Plain Paper 14 = Recycled Paper 23~27 = Custom Paper 1~5
780-019	User Define = Name of Types 1 Paper	NULL	[Setup Range] =	Maximum 24 characters of ASCII (M/N)
780-020	User Define = Name of Types 2 Paper	NULL	[Setup Range] =	Maximum 24 characters of ASCII (M/N)
780-021	User Define = Name of Types 3 Paper	NULL	[Setup Range] =	Maximum 24 characters of ASCII (M/N)
780-022	User Define = Name of Types 4 Paper	NULL	[Setup Range] =	Maximum 24 characters of ASCII (M/N)
780-023	User Define = Name of Types 5 Paper	NULL	[Setup Range] =	Maximum 24 characters of ASCII (M/N)
780-025	Image Quality Control Category = Bond paper	0x02	0x01~0x80	0x01 = Plain Paper A (J paper/JD paper/J Coat paper/CX28lb equivalent) 0x02 = Plain Paper B (P paper/C2 paper equivalent) 0x04 = Plain Paper C (WR100/Green100 equivalent) 0x08 = Plain Paper D (4024-20lb/Askul equivalent (Normal)) 0x10 = Plain Paper E (4024-20lb/Askul equivalent (gradation emphasis)), 0x20 = Plain Paper F (4024-24lb equivalent (Normal)) 0x40 = Plain Paper G

Table 19 Chain 780

Chain-Link	Name	Default	Range	Description
780-026	Image Quality Control Category = Plain Paper	0x02	0x01~0x80	0x01 = Plain Paper A (J paper/JD paper/J Coat paper/CX28lb equivalent) 0x02 = Plain Paper B (P paper/C2 paper equivalent) 0x04 = Plain Paper C (WR100/Green100 equivalent) 0x08 = Plain Paper D (4024-20lb/Askul equivalent (Normal)) 0x10 = Plain Paper E (4024-20lb/Askul equivalent (gradation emphasis)), 0x20 = Plain Paper F (4024-24lb equivalent (Normal)) 0x40 = Plain Paper G
780-027	Image Quality Control Category = Recycle Paper	0x04	0x01~0x80	0x01 = Plain Paper A (J paper/JD paper/J Coat paper/CX28lb equivalent) 0x02 = Plain Paper B (P paper/C2 paper equivalent) 0x04 = Plain Paper C (WR100/Green100 equivalent) 0x08 = Plain Paper D (4024-20lb/Askul equivalent (Normal)) 0x10 = Plain Paper E (4024-20lb/Askul equivalent (gradation emphasis)), 0x20 = Plain Paper F (4024-24lb equivalent (Normal)) 0x40 = Plain Paper G
780-028	Image Quality Control Category = Custom Paper 1	0x02	0x01~0x80	0x01 = Plain Paper A (J paper/JD paper/J Coat paper/CX28lb equivalent) 0x02 = Plain Paper B (P paper/C2 paper equivalent) 0x04 = Plain Paper C (WR100/Green100 equivalent) 0x08 = Plain Paper D (4024-20lb/Askul equivalent (Normal)) 0x10 = Plain Paper E (4024-20lb/Askul equivalent (gradation emphasis)), 0x20 = Plain Paper F (4024-24lb equivalent (Normal)) 0x40 = Plain Paper G
780-029	Image Quality Control Category = Custom Paper 2	0x02	0x01~0x80	0x01 = Plain Paper A (J paper/JD paper/J Coat paper/CX28lb equivalent) 0x02 = Plain Paper B (P paper/C2 paper equivalent) 0x04 = Plain Paper C (WR100/Green100 equivalent) 0x08 = Plain Paper D (4024-20lb/Askul equivalent (Normal)) 0x10 = Plain Paper E (4024-20lb/Askul equivalent (gradation emphasis)), 0x20 = Plain Paper F (4024-24lb equivalent (Normal)) 0x40 = Plain Paper G
780-030	Image Quality Control Category = Custom Paper 3	0x02	0x01~0x80	0x01 = Plain Paper A (J paper/JD paper/J Coat paper/CX28lb equivalent) 0x02 = Plain Paper B (P paper/C2 paper equivalent) 0x04 = Plain Paper C (WR100/Green100 equivalent) 0x08 = Plain Paper D (4024-20lb/Askul equivalent (Normal)) 0x10 = Plain Paper E (4024-20lb/Askul equivalent (gradation emphasis)), 0x20 = Plain Paper F (4024-24lb equivalent (Normal)) 0x40 = Plain Paper G
780-031	Image Quality Control Category = Custom Paper 4	0x02	0x01~0x80	0x01 = Plain Paper A (J paper/JD paper/J Coat paper/CX28lb equivalent) 0x02 = Plain Paper B (P paper/C2 paper equivalent) 0x04 = Plain Paper C (WR100/Green100 equivalent) 0x08 = Plain Paper D (4024-20lb/Askul equivalent (Normal)) 0x10 = Plain Paper E (4024-20lb/Askul equivalent (gradation emphasis)), 0x20 = Plain Paper F (4024-24lb equivalent (Normal)) 0x40 = Plain Paper G
780-032	Image Quality Control Category = Custom Paper 5	0x02	0x01~0x80	0x01 = Plain Paper A (J paper/JD paper/J Coat paper/CX28lb equivalent) 0x02 = Plain Paper B (P paper/C2 paper equivalent) 0x04 = Plain Paper C (WR100/Green100 equivalent) 0x08 = Plain Paper D (4024-20lb/Askul equivalent (Normal)) 0x10 = Plain Paper E (4024-20lb/Askul equivalent (gradation emphasis)), 0x20 = Plain Paper F (4024-24lb equivalent (Normal)) 0x40 = Plain Paper G
780-050	Paper Type Priority = Bond Paper	3	0x01~0xff	1~8 = 1~8 X = 0xff 0 = X (According to priority not controlled by APS/ATS) Repetition allowed
780-051	Paper Type Priority = Plain Paper	1	0x01~0xff	1~8 = 1~8 X = 0xff 0 = X (According to priority not controlled by APS/ATS) Repetition allowed
780-052	Paper Type Priority = Recycle Paper	2	0x01~0xff	1~8 = 1~8 X = 0xff 0 = X (According to priority not controlled by APS/ATS) Repetition allowed
780-053	Paper Type Priority = Custom Paper 1	X	0x01~0xff	1~8 = 1~8 X = 0xff 0 = X (According to priority not controlled by APS/ATS) Repetition allowed
780-054	Paper Type Priority = Custom Paper 2	X	0x01~0xff	1~8 = 1~8 X = 0xff 0 = X (According to priority not controlled by APS/ATS) Repetition allowed
780-055	Paper Type Priority = Custom Paper 3	X	0x01~0xff	1~8 = 1~8 X = 0xff 0 = X (According to priority not controlled by APS/ATS) Repetition allowed
780-056	Paper Type Priority = Custom Paper 4	X	0x01~0xff	1~8 = 1~8 X = 0xff 0 = X (According to priority not controlled by APS/ATS) Repetition allowed
780-057	Paper Type Priority = Custom Paper 5	X	0x01~0xff	1~8 = 1~8 X = 0xff 0 = X (According to priority not controlled by APS/ATS) Repetition allowed
780-060	Tray 1 Priority	1	1~4	The priority follows the number; 1 is the highest priority. Repetition not allowed.
780-061	Tray 2 Priority	2	1~4	The priority follows the number; 1 is the highest priority. Repetition not allowed.
780-062	Tray 3 Priority	3	1~4	The priority follows the number; 1 is the highest priority. Repetition not allowed.
780-063	Tray 4 Priority	4	1~4	The priority follows the number; 1 is the highest priority. Repetition not allowed.
780-066	Edge Erase Adjustment value (Lead Edge)	4.0	40~50	4.0~5.0mm (0.1mm unit)
780-067	Edge Erase Adjustment value (Trail Edge)	2.0	20~30	2.0~3.0mm (0.1mm unit)

Table 19 Chain 780

Chain-Link	Name	Default	Range	Description
780-068	Edge Erase Adjustment value (Side)	2.0	10~30	1.0~3.0mm (0.1mm unit)
780-069	Image Enhancement MC Setting	1	0~1	0 = OFF 1 = ON
780-072	Offset operation of Center Tray	1	0~2	0 = Offset Off 1 = Offset Per Set 2 = Offset Per Job
780-073	Offset operation of Finisher Tray	1	0~2	0 = Offset Off 1 = Offset Per Set 2 = Offset Per Job

790-xxx ESS Panel Display Setting NVM List

Table 20 Chain 790

Chain-Link	Name	Default	Range	Description
790-001	Startup Display Setting	0	0~2	0= Features Programming Screen 1= Job Management Screen 2= Machine Status Screen
790-002	Function Setup Startup Display	1	0~3	0= Menu 1= Copy 3= Scanner
790-004	Toner Near Empty advance notification	1	0~1	0= No display 1= Display
790-050	Pre Set Tray 1	1	1~5	1= Tray 1 2= Tray 2 3= Tray 3 4= Tray 4 5= SMH
790-051	Pre Set Tray 2	2	1~5	1= Tray 1 2= Tray 2 3= Tray 3 4= Tray 4 5= SMH
790-052	Pre Set Tray 3	3	1~5	1= Tray 1 2= Tray 2 3= Tray 3 4= Tray 4 5= SMH
790-060	Pre Set Magnification 1	1	1~7	1~7= Fixed Magnification 1~7
790-061	Pre Set Magnification 2	2	1~7	1~7= Fixed Magnification 1~7
790-070	Default Tray Setting in Copy Mode	0	0~5	0 = Auto 1= Tray 1 2= Tray 2 3= Tray 3 4= Tray 4 5= SMH
790-071	Tray at Auto Cancellation	1		1= Tray 1 2= Tray 2 3= Tray 3 4= Tray 4
790-072	Default Magnification Setting in Copy Mode	0	0~8	0=100% 1~7= Fixed Magnification 1~Fixed Magnification 7 8= Auto
790-073	Fixed Magnification 1 Setting	3	1~18	1 =25.0, 2 =35.3, 3 =50.0, 4 =57.7, 5 =61.2 6 =64.7, 7 =70.7, 8 =81.6, 9 =86.6 10 =115.4, 11 =122.5, 12 =129.4 13 =141.4, 14 =163.2, 15 =173.2 16 =200.0, 17 =282.8, 18 =400.0%
790-074	Fixed Magnification 2 Setting	7	1~18	1 =25.0, 2 =35.3, 3 =50.0, 4 =57.7, 5 =61.2 6 =64.7, 7 =70.7, 8 =81.6, 9 =86.6 10 =115.4, 11 =122.5, 12 =129.4 13 =141.4, 14 =163.2, 15 =173.2 16 =200.0, 17 =282.8, 18 =400.0%
790-075	Fixed Magnification 3 Setting	8	1~18	1 =25.0, 2 =35.3, 3 =50.0, 4 =57.7, 5 =61.2 6 =64.7, 7 =70.7, 8 =81.6, 9 =86.6 10 =115.4, 11 =122.5, 12 =129.4 13 =141.4, 14 =163.2, 15 =173.2 16 =200.0, 17 =282.8, 18 =400.0%
790-076	Fixed Magnification 4 Setting	9	1~18	1 =25.0, 2 =35.3, 3 =50.0, 4 =57.7, 5 =61.2 6 =64.7, 7 =70.7, 8 =81.6, 9 =86.6 10 =115.4, 11 =122.5, 12 =129.4 13 =141.4, 14 =163.2, 15 =173.2 16 =200.0, 17 =282.8, 18 =400.0%
790-077	Fixed Magnification 5 Setting	10	1~18	1 =25.0, 2 =35.3, 3 =50.0, 4 =57.7, 5 =61.2 6 =64.7, 7 =70.7, 8 =81.6, 9 =86.6 10 =115.4, 11 =122.5, 12 =129.4 13 =141.4, 14 =163.2, 15 =173.2 16 =200.0, 17 =282.8, 18 =400.0%
790-078	Fixed Magnification 6 Setting	11	1~18	1 =25.0, 2 =35.3, 3 =50.0, 4 =57.7, 5 =61.2 6 =64.7, 7 =70.7, 8 =81.6, 9 =86.6 10 =115.4, 11 =122.5, 12 =129.4 13 =141.4, 14 =163.2, 15 =173.2 16 =200.0, 17 =282.8, 18 =400.0%
790-079	Fixed Magnification 7 Setting	13	1~18	1 =25.0, 2 =35.3, 3 =50.0, 4 =57.7, 5 =61.2 6 =64.7, 7 =70.7, 8 =81.6, 9 =86.6 10 =115.4, 11 =122.5, 12 =129.4 13 =141.4, 14 =163.2, 15 =173.2 16 =200.0, 17 =282.8, 18 =400.0%
790-090	Default Color Mode	0	0~5	0= OFF 1= Auto 2= B/W 3= 4 Colors 4= Single Color 5= Dual Color
790-091	Default Single Color Selection	1	0~12	
790-092	Default Dual Color Selection (Achromatic Color)	0	0~12	1~6= Fixed Registered Color 1~6 7~12= User Registered Color 1~6
790-093	Default Dual Color Selection (Chromatic Color)	1	0~12	1~6= Fixed Registered Color 1~6 7~12= User Registered Color 1~6

Table 20 Chain 790

Chain-Link	Name	Default	Range	Description
790-094	Default B/W Document Type	0	0~9	0= Text, 1= Text/Photo (Print), 2= Text/Photo (Photo Paper), 3= Text/Photo (Copy Document), 4= Photo (Print), 5= Photo (Photo Paper), 6= Photo (Copy Document)
790-096	Default 4 Color/Auto Document Type	1	0~9	0= Text, 1= Text/Photo (Print), 2= Text/Photo (Photo Paper), 3= Text/Photo (Copy Document), 4= Photo (Print), 5= Photo (Photo Paper), 6= Photo (Copy Document) 7= Map, 8= Highlighted Originals, 9= Inkjet Originals
790-097	Default Background Color Removal	1	0~1	0= OFF, 1= ON
790-098	Default Density Adjustment	3	0~6	0= Lighter 3, 1= Lighter 2, 2= Lighter 1, 3= Normal, 4= Darker 1, 5= Darker 2, 6= Darker 3
790-100	Default Color Balance (Y= Low Density)	0	0~6	0~6= -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3)
790-101	Default Color Balance (Y= Medium Density)	0	0~6	0~6= -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3)
790-102	Default Color Balance (Y= High Density)	0	0~6	0~6= -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3)
790-103	Default Color Balance (M= Low Density)	0	0~6	0~6= -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3)
790-104	Default Color Balance (M= Medium Density)	0	0~6	0~6= -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3)
790-105	Default Color Balance (M= High Density)	0	0~6	0~6= -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3)
790-106	Default Color Balance (C= Low Density)	0	0~6	0~6= -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3)
790-107	Default Color Balance (C= Medium Density)	0	0~6	0~6= -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3)
790-108	Default Color Balance (C= High Density)	0	0~6	0~6= -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3)
790-109	Default Color Balance (K= Low Density)	0	0~6	0~6= -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3)
790-110	Default Color Balance (K= Medium Density)	0	0~6	0~6= -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3)
790-111	Default Color Balance (K= High Density)	0	0~6	0~6= -3~3 (Lighter 3, Lighter 2, Lighter 1, Normal, Darker 1, Darker 2, Darker 3)
790-120	Default Color Shift	2	0~4	0= -20 Degrees, 1= -10 Degrees, 2= 0 Degrees, 3= +10 Degrees, 4= +20 Degrees
790-121	Default Color Saturation	2	0~4	0= Stronger 2 (Higher), 1= Stronger 1 (High), 2= Normal, 3= Softer 1 (Low), 4= Softer 2 (Lower)
790-122	Default Sharpness	2	0~4	0= Sharper, 1= Sharp, 2= Normal, 3= Soft, 4= Softer
790-123	Default Contrast	2	0~4	0= Stronger 2, 1= Stronger 1, 2= Normal, 3= Softer 1, 4= Softer 2
790-124	Default Center/Corner Shift Position (Side1)	0	0~10	0= Off, 1= Center, 2= Upper Right, 3= Lower Right, 4= Upper Left, 5= Lower Left, 6= Upper Center, 7= Lower Center, 8= Left Center, 9= Right Center
790-125	Default Center/Corner Shift Position (Side2)	10	0~10	0= Off, 1= Center, 2= Upper Right, 3= Lower Right, 4= Upper Left, 5= Lower Left, 6= Upper Center, 7= Lower Center, 8= Left Center, 9= Right Center, 10= Symmetry position with Side 1
790-126	Default Top and Bottom Edge Erase	5 (mm)	0~50	0 (mm)~50 (mm) increments of 1mm
790-127	Default Left and Right Edge Erase	5 (mm)	0~50	0 (mm)~50 (mm) increments of 1mm
790-128	Default Center Erase	0 (mm)	0~50	0 (mm)~50 (mm) increments of 1mm
790-129	Rotation Default Setting	1	0~2	0= Always Enabled 1= Enabled only at APS/AMS 2= Always Disabled
790-130	Image Orientation Default Setting	0	0~2	0= Auto, 1= Portrait document Left, 2= Portrait document Right

Table 20 Chain 790

Chain-Link	Name	Default	Range	Description
790-131	Fixed Size 1 of Copy Document Size Input	13	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-132	Fixed Size 2 of Copy Document Size Input	10	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-133	Fixed Size 3 of Copy Document Size Input	11	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-134	Fixed Size 4 of Copy Document Size Input	6	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-135	Fixed Size 5 of Copy Document Size Input	7	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-136	Fixed Size 6 of Copy Document Size Input	12	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-137	Fixed Size 7 of Copy Document Size Input	8	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-138	Fixed Size 8 of Copy Document Size Input	9	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-139	Fixed Size 9 of Copy Document Size Input	11x17SEF	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-140	Fixed Size 10 of Copy Document Size Input	17	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-141	Fixed Size 11 of Copy Document Size Input	18	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-180	Default [Document Orientation] in Copy Mode	0	0~1	0= Head to Top, 1= Head to Left
790-181	Duplex feature default setting	0	0~3	0= OFF (1 to 1 Sided), 1= 1 to 2 Sided, 2= 2 to 1 Sided,3= 2 to 2 Sided
790-182	Default Collate Mode in Copy Mode	0	0~2	0= Auto, 1= Collated, 2= Uncollated
790-183	Default Output Tray in Copy Mode	0	0~2	0= Center Tray 1= Side Tray 2= Finisher Tray * Options that are not installed cannot be selected.
790-186	Default Communication Mode	2	0~6	1= G4 Auto, 2= G3 Auto, 3= International Communication (Communication Speed is below 4800bps) 4= G3 5 = G3 (ECM) 6 = G3 (ECM) - Forced4800
790-187	Default Density (Scan Density)	3	0~6	0= Lighter 3, 1= Lighter 2, 2= Lighter 1, 3= Normal, 4= Darker 1, 5= Darker 2, 6= Darker 3
790-188	Default Image Quality (Document Type)	0	0~2	0=Text, 1=Photo, 2=Text/Photo
790-189	Default Resolution (Scan Resolution)	0	0~3	0= Normal, 1= High Quality (200x200), 2= High Quality (400x400), 3= High Quality (600x600)
790-190	Default Monitor Print	OFF	0~1	0= OFF 1= ON

Table 20 Chain 790

Chain-Link	Name	Default	Range	Description
790-192	Default Sender Records	ON	0~1	0= OFF 1= ON
790-193	Default display starting number of Receiver List	1	1~500	1~500
790-194	Default Mixed Size	OFF	0~1	0= OFF 1= ON
790-195	Default Receive Mode	0	0~1	0= Auto Receive, 1= Manual Receive
790-222	Default Mixed Size	0	0~1	0= OFF 1= ON
790-223	Default Color Mode	2	0~2	0= Full Color, 1= Grey Color, 2= B/W Binary
790-224	Default Document Type	0	0~2	0= Text, 1= Text/Photo, 2= Photo
790-225	Default Resolution	200dpi	0~3	0= 200dpi, 1= 300dpi, 2= 400dpi, 3= 600dpi
790-226	Default Top and Bottom Edge Erase	2 (mm)	0~50	0 (mm)~50 (mm) increments of 1mm
790-227	Default Left and Right Edge Erase	2 (mm)	0~50	0 (mm)~50 (mm) increments of 1mm
790-228	Default Center Erase	0 (mm)	0~50	0 (mm)~50 (mm) increments of 1mm
790-229	Default Density/Brightness Adjustment (Using data common to Density, Brightness)	3	0~6	0= Brightness (Density) 3, 1= Brightness (Density) 2, 2= Brightness (Density) 1, 3= Normal, 4= Brightness (Density) -1, 5= Brightness (Density) -2, 6= Brightness (Density) -3
790-230	Default Contrast Adjustment	2	0~4	0= Stronger 2, 1= Stronger 1, 2= Normal, 3= Softer 1, 4= Softer 2
790-231	Fixed Size 1 of Scan Document Size Input	A3SEF	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-232	Fixed Size 2 of Scan Document Size Input	A4SEF	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-233	Fixed Size 3 of Scan Document Size Input	A4LEF	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-234	Fixed Size 4 of Scan Document Size Input	A5SEF	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-235	Fixed Size 5 of Scan Document Size Input	B4SEF	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-236	Fixed Size 6 of Scan Document Size Input	B5SEF	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-237	Fixed Size 7 of Scan Document Size Input	11x17SEF	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-238	Fixed Size 8 of Scan Document Size Input	8.5x11SEF	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-239	Fixed Size 9 of Scan Document Size Input	8.5x11LEF	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF

Table 20 Chain 790

Chain-Link	Name	Default	Range	Description
790-240	Fixed Size 10 of Scan Document Size Input	5x7 (Photo 2L Size)	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-241	Fixed Size 11 of Scan Document Size Input	3.5x5 (Photo L Size)	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-250	Fixed Size 1 Fast Scan	NULL	15~297	15~297mm
790-251	Fixed Size 1 Slow Scan	NULL	15~432	15~432mm
790-252	Fixed Size 2 Fast Scan	NULL	15~297	15~297mm
790-253	Fixed Size 2 Slow Scan	NULL	15~432	15~432mm
790-254	Fixed Size 3 Fast Scan	NULL	15~297	15~297mm
790-255	Fixed Size 3 Slow Scan	NULL	15~432	15~432mm
790-256	Fixed Size 4 Fast Scan	NULL	15~297	15~297mm
790-257	Fixed Size 4 Slow Scan	NULL	15~432	15~432mm
790-258	Fixed Size 5 Fast Scan	NULL	15~297	15~297mm
790-259	Fixed Size 5 Slow Scan	NULL	15~432	15~432mm
790-260	Fixed Size 6 Fast Scan	NULL	15~297	15~297mm
790-261	Fixed Size 6 Slow Scan	NULL	15~432	15~432mm
790-262	Fixed Size 7 Fast Scan	NULL	15~297	15~297mm
790-263	Fixed Size 7 Slow Scan	NULL	15~432	15~432mm
790-264	Fixed Size 8 Fast Scan	NULL	15~297	15~297mm
790-265	Fixed Size 8 Slow Scan	NULL	15~432	15~432mm
790-266	Fixed Size 9 Fast Scan	NULL	15~297	15~297mm
790-267	Fixed Size 9 Slow Scan	NULL	15~432	15~432mm
790-268	Fixed Size 10 Fast Scan	NULL	15~297	15~297mm
790-269	Fixed Size 10 Slow Scan	NULL	15~432	15~432mm
790-270	Fixed Size 11 Fast Scan	NULL	15~297	15~297mm
790-271	Fixed Size 11 Slow Scan	NULL	15~432	15~432mm
790-272	Default [Document Orientation] in SCAN Mode	0	0~1	0= Head to Top, 1= Head to Left
790-273	Default 1 setting of SCAN Fixed magnification	50.0%	0~18	1 =25.0, 2 =35.3, 3 =50.0, 4 =57.7, 5 =61.2 6 =64.7, 7 =70.7, 8 =81.6, 9 =86.6 10 =115.4, 11 =122.5, 12 =129.4 13 =141.4, 14 =163.2, 15 =173.2 16 =200.0, 17 =282.8, 18 =400.0%
790-274	Default 2 setting of SCAN Fixed magnification	70.7%	0~18	1 =25.0, 2 =35.3, 3 =50.0, 4 =57.7, 5 =61.2 6 =64.7, 7 =70.7, 8 =81.6, 9 =86.6 10 =115.4, 11 =122.5, 12 =129.4 13 =141.4, 14 =163.2, 15 =173.2 16 =200.0, 17 =282.8, 18 =400.0%
790-275	Default 3 setting of SCAN Fixed magnification	81.6%	0~18	1 =25.0, 2 =35.3, 3 =50.0, 4 =57.7, 5 =61.2 6 =64.7, 7 =70.7, 8 =81.6, 9 =86.6 10 =115.4, 11 =122.5, 12 =129.4 13 =141.4, 14 =163.2, 15 =173.2 16 =200.0, 17 =282.8, 18 =400.0%
790-276	Default 4 setting of SCAN Fixed magnification	86.6%	0~18	1 =25.0, 2 =35.3, 3 =50.0, 4 =57.7, 5 =61.2 6 =64.7, 7 =70.7, 8 =81.6, 9 =86.6 10 =115.4, 11 =122.5, 12 =129.4 13 =141.4, 14 =163.2, 15 =173.2 16 =200.0, 17 =282.8, 18 =400.0%
790-277	Default 5 setting of SCAN Fixed magnification	115.4%	0~18	1 =25.0, 2 =35.3, 3 =50.0, 4 =57.7, 5 =61.2 6 =64.7, 7 =70.7, 8 =81.6, 9 =86.6 10 =115.4, 11 =122.5, 12 =129.4 13 =141.4, 14 =163.2, 15 =173.2 16 =200.0, 17 =282.8, 18 =400.0%
790-278	Default 6 setting of SCAN Fixed magnification	122.4%	0~18	1 =25.0, 2 =35.3, 3 =50.0, 4 =57.7, 5 =61.2 6 =64.7, 7 =70.7, 8 =81.6, 9 =86.6 10 =115.4, 11 =122.5, 12 =129.4 13 =141.4, 14 =163.2, 15 =173.2 16 =200.0, 17 =282.8, 18 =400.0%

Table 20 Chain 790

Chain-Link	Name	Default	Range	Description
790-279	Default 7 setting of SCAN Fixed magnification	141.4%	0~18	1 =25.0, 2 =35.3, 3 =50.0, 4 =57.7, 5 =61.2 6 =64.7, 7 =70.7, 8 =81.6, 9 =86.6 10 =115.4, 11 =122.5, 12 =129.4 13 =141.4, 14 =163.2, 15 =173.2 16 =200.0, 17 =282.8, 18 =400.0%
790-280	Output Size 1	A3SEF	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-281	Output Size 2	A4SEF	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-282	Output Size 3	A4LEF	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-283	Output Size 4	A5SEF	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-284	Output Size 5	B4SEF	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-285	Output Size 6	B5SEF	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-286	Output Size 7	11x17SEF	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-287	Output Size 8	8.5x11SEF	1~50	1 = Postcard, 2 = A6SEF, 3 = A6LEF, 4 = B6SEF, 5 = B6LEF, 6 = A5SEF, 7 = A5LEF, 8 = B5SEF, 9 = B5LEF, 10 = A4SEF, 11 = A4LEF, 12 = B4SEF, 13 = A3SEF, 14 = Postcard (4x6), 15 = 5.5x8.5SEF, 16 = 5.5x8.5LEF, 17 = 8.5x11SEF, 18 = 8.5x11LEF
790-288	Default Background Color Removal in SCAN Mode	0	0~1	0= OFF, 1= ON
790-290	Basic Screen Preset Magnification 1	2	1~7	1~7= Fixed Magnification 1~7
790-291	Basic Screen Preset Magnification 2	4	1~7	1~7= Fixed Magnification 1~7
790-292	Basic Screen Preset Magnification 3	7	1~7	1~7= Fixed Magnification 1~7

800-xxx ESS Print Service Setting

Table 21 Chain 800

Chain/Link	Name	Default	Range	Description
800-001	APS Job Recovery Method	6	-	6 = Displays add paper (SPS Off), 5 = Uses a larger paper size (no adjustment), 2 = Uses a nearest paper size (no adjustment), 7 = Only Oceans2 uses a substitution. (Abort) =
800-006	Expand Print Mode	Normal	-	1 = Normal, 2 = Expand

Table 22 Chain 810

Chain/Link	Name	Default	Range	Description
810-002	Y Component	"80%"	0~128	"0%"~"100%", 1/128% unit (0~128)
810-003	M Component	"100%"	0~128	"0%"~"100%", 1/128% unit (0~128)
810-004	C Component	"0%"	0~128	"0%"~"100%", 1/128% unit (0~128)
810-005	Y Component	"92%"	0~128	"0%"~"100%", 1/128% unit (0~128)
810-006	M Component	"0%"	0~128	"0%"~"100%", 1/128% unit (0~128)
810-007	C Component	"100%"	0~128	"0%"~"100%", 1/128% unit (0~128)
810-008	Y Component	"0%"	0~128	"0%"~"100%", 1/128% unit (0~128)
810-009	M Component	"80%"	0~128	"0%"~"100%", 1/128% unit (0~128)
810-010	C Component	"100%"	0~128	"0%"~"100%", 1/128% unit (0~128)
810-011	Y Component	"100%"	0~128	"0%"~"100%", 1/128% unit (0~128)
810-012	M Component	"0%"	0~128	"0%"~"100%", 1/128% unit (0~128)
810-013	C Component	"0%"	0~128	"0%"~"100%", 1/128% unit (0~128)
810-014	Y Component	"0%"	0~128	"0%"~"100%", 1/128% unit (0~128)
810-015	M Component	"100%"	0~128	"0%"~"100%", 1/128% unit (0~128)
810-016	C Component	"0%"	0~128	"0%"~"100%", 1/128% unit (0~128)
810-017	Y Component	"0%"	0~128	"0%"~"100%", 1/128% unit (0~128)
810-018	M Component	"0%"	0~128	"0%"~"100%", 1/128% unit (0~128)
810-019	C Component	"100%"	0~128	"0%"~"100%", 1/128% unit (0~128)
810-020	Y Component	0	0~128	"0%"~"100%", 1/128% unit (0~128)
810-021	M Component	0	0~128	"0%"~"100%", 1/128% unit (0~128)
810-022	C Component	0	0~128	"0%"~"100%", 1/128% unit (0~128)
810-023	Y Component	0	0~128	"0%"~"100%", 1/128% unit (0~128)
810-024	M Component	0	0~128	"0%"~"100%", 1/128% unit (0~128)
810-025	C Component	0	0~128	"0%"~"100%", 1/128% unit (0~128)
810-026	Y Component	0	0~128	"0%"~"100%", 1/128% unit (0~128)
810-027	M Component	0	0~128	"0%"~"100%", 1/128% unit (0~128)
810-028	C Component	0	0~128	"0%"~"100%", 1/128% unit (0~128)
810-029	Y Component	0	0~128	"0%"~"100%", 1/128% unit (0~128)
810-030	M Component	0	0~128	"0%"~"100%", 1/128% unit (0~128)
810-031	C Component	0	0~128	"0%"~"100%", 1/128% unit (0~128)
810-032	Y Component	0	0~128	"0%"~"100%", 1/128% unit (0~128)
810-033	M Component	0	0~128	"0%"~"100%", 1/128% unit (0~128)
810-034	C Component	0	0~128	"0%"~"100%", 1/128% unit (0~128)
810-035	Y Component	0	0~128	"0%"~"100%", 1/128% unit (0~128)
810-036	M Component	0	0~128	"0%"~"100%", 1/128% unit (0~128)
810-037	C Component	0	0~128	"0%"~"100%", 1/128% unit (0~128)
810-038	Background Suppression	"No"	0~1	"Yes", "No"
810-039	Density Adjustment	"Lighter 1"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"

Table 22 Chain 810

Chain/Link	Name	Default	Range	Description
810-040	Color Balance (Y = Low Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-041	Color Balance (Y = Medium Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-042	Color Balance (Y = High Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-043	Color Balance (M = Low Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-044	Color Balance (M = Medium Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-045	Color Balance (M = High Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-046	Color Balance (C = Low Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-047	Color Balance (C = Medium Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-048	Color Balance (C = High Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-049	Color Balance (K = Low Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-050	Color Balance (K = Medium Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-051	Color Balance (K = High Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-052	Color Shift	"0 Degrees "	0~4	"-20 Degrees", "-10 Degrees", "0 Degrees", "+10 Degrees", "+20 Degrees"
810-053	Color Saturation	"Higher 2"	0~4	"Higher 2", "Higher 1", "Normal", "Lower 1", "Lower 2"
810-054	Sharpness	"Normal"	0~4	"Sharper 2", "Sharper 1", "Normal", "Softer 1", "Softer 2"
810-055	Contrast	"Normal"	0~4	"Stronger 2", "Stronger 1", "Normal", "Softer 1", "Softer 2"
810-056	Background Suppression	"Off"	0~1	"On", "Off"
810-057	Density Adjustment	"Darker 1"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-058	Color Balance (Y = Low Density)	"Lighter 3"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3
810-059	Color Balance (Y = Medium Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-060	Color Balance (Y = High Density)	"Darker 3"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-061	Color Balance (M = Low Density)	"Lighter 3"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-062	Color Balance (M = Medium Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-063	Color Balance (M = High Density)	"Darker 3"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-064	Color Balance (C = Low Density)	"Lighter 3"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-065	Color Balance (C = Medium Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-066	Color Balance (C = High Density)	"Darker 3"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-067	Color Balance (K = Low Density)	"Lighter 3"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-068	Color Balance (K = Medium Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-069	Color Balance (K = High Density)	"Darker 3"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"

Table 22 Chain 810

Chain/Link	Name	Default	Range	Description
810-070	Color Shift	"0 Degrees"	0~4	"-20 Degrees", "-10 Degrees", "0 Degrees", "+10 Degrees", "+20 Degrees"
810-071	Color Saturation	"Higher 1"	0~4	"Higher 2", "Higher 1", "Normal", "Lower 1", "Lower 2"
810-072	Sharpness	"Sharper 2"	0~4	"Sharper 2", "Sharper 1", "Normal", "Softer 1", "Softer 2"
810-073	Contrast	"Stron-ger 2"	0~4	"Stronger 2", "Stronger 1", "Normal", "Softer 1", "Softer 2"
810-074	Background Suppression	"On"	0~1	"On", "Off"
810-075	Density Adjustment	"Normal"	0~6	"Lighter 3", "Lighter2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-076	Color Balance (Y = Low Density)	"Lighter 2"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-077	Color Balance (Y = Medium Density)	"Lighter 2"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-078	Color Balance (Y = High Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-079	Color Balance (M = Low Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-080	Color Balance (M = Medium Density)	"Darker 1"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-081	Color Balance (M = High Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-082	Color Balance (C = Low Density)	"Lighter 3"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-083	Color Balance (C = Medium Density)	"Lighter 3"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-084	Color Balance (C = High Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-085	Color Balance (K = Low Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-086	Color Balance (K = Medium Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-087	Color Balance (K = High Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-088	Color Shift	"0 Degrees"	0~4	"-20 Degrees", "-10 Degrees", "0 Degrees", "+10 Degrees", "+20 Degrees"
810-089	Color Saturation	"Normal"	0~4	"Higher 2", "Higher 1", "Normal", "Lower 1", "Lower 2"
810-090	Sharpness	"Normal"	0~4	"Sharper 2", "Sharper 1", "Normal", "Softer 1", "Softer 2"
810-091	Contrast	"Normal"	0~4	"Stronger 2", "Stronger 1", "Normal", "Softer 1", "Softer 2"
810-092	Background Suppression	"On"	0~1	"On", "Off"
810-093	Density Adjustment	"Normal"	0~6	"Lighter 3", "Lighter2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-094	Color Balance (Y = Low Density)	"Lighter 3"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-095	Color Balance (Y = Medium Density)	"Lighter 3"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-096	Color Balance (Y = High Density)	"Lighter 2"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"

Table 22 Chain 810

Chain/Link	Name	Default	Range	Description
810-097	Color Balance (M = Low Density)	"Lighter 3"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-098	Color Balance (M = Medium Density)	"Lighter 3"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-099	Color Balance (M = High Density)	"Lighter 2"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-100	Color Balance (C = Low Density)	"Darker 1"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-101	Color Balance (C = Medium Density)	"Darker 2"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-102	Color Balance (C = High Density)	"Darker 2"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-103	Color Balance (K = Low Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-104	Color Balance (K = Medium Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-105	Color Balance (K = High Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-106	Color Shift	"0 Degrees"	0~4	"-20 Degrees", "-10 Degrees", "0 Degrees", "+10 Degrees", "+20 Degrees"
810-107	Color Saturation	"Normal"	0~4	"Higher 2", "Higher 1", "Normal", "Lower 1", "Lower 2"
810-108	Sharpness	"Normal"	0~4	"Sharper 2", "Sharper 1", "Normal", "Softer 1", "Softer 2"
810-109	Contrast	"Normal"	0~4	"Stronger 2", "Stronger 1", "Normal", "Softer 1", "Softer 2"
810-110	Background Suppression	"On"	0~1	"On", "Off"
810-111	Density Adjustment	"Normal"	0~6	"Lighter 3", "Lighter2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-112	Color Balance (Y = Low Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-113	Color Balance (Y = Medium Density)	"Lighter 3"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-114	Color Balance (Y = High Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-115	Color Balance (M = Low Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-116	Color Balance (M = Medium Density)	"Lighter 3"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-117	Color Balance (M = High Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-118	Color Balance (C = Low Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-119	Color Balance (C = Medium Density)	"Lighter 3"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-120	Color Balance (C = High Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-121	Color Balance (K = Low Density)	"Normal"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-122	Color Balance (K = Medium Density)	"Lighter 3"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-123	Color Balance (K = High Density)	"Darker 2"	0~6	"Lighter 3", "Lighter 2", "Lighter 1", "Normal", "Darker 1", "Darker 2", "Darker 3"
810-124	Color Shift	"0 Degrees"	0~4	"-20 Degrees", "-10 Degrees", "0 Degrees", "+10 Degrees", "+20 Degrees"

Table 22 Chain 810

Chain/Link	Name	Default	Range	Description
810-125	Color Saturation	"Normal"	0~4	"Higher 2", "Higher 1", "Normal", "Lower 1", "Lower 2"
810-126	Sharpness	"Normal"	0~4	"Sharper 2", "Sharper 1", "Normal", "Softer 1", "Softer 2"
810-127	Contrast	"Sharper 1"	0~4	"Stronger 2", "Stronger 1", "Normal", "Softer 1", "Softer 2"
810-128	Operation when Memory Overflow occurs	0	0~1	0 = Stop, 1 = Print
810-129	Max. No. of Copy Sheets accumulated	999	1~999	1-999 = [1~999 pages]
810-130	Build Job Setup Menu Display	No dis-play	0~1	0 = No display 1 = Display

840-xxx ESS Scan Setting NVM List

Table 23 Chain 840

Chain/Link	Name	Default	Range	Description
840-001	SCAN Feature Setting	0	0~1	0 = Enable1 = Disable
840-002	[NVM Name] = (Scan Illegal Operation)	1	0~1	0 = Discards the stored document 1 = Validates the stored document
840-003	Maximum No. of Storage	999	1~999	1~999 sheets
840-004	Brightness 3 Setting	TBD	0~200	0~200 = [-100~100]
840-005	Brightness 2 Setting	TBD	0~200	0~200 = [-100~100]
840-006	Brightness 1 Setting	TBD	0~200	0~200 = [-100~100]
840-007	Brightness -1 Setting	TBD	0~200	0~200 = [-100~100]
840-008	Brightness -2 Setting	TBD	0~200	0~200 = [-100~100]
840-009	Brightness -3 Setting	TBD	0~200	0~200 = [-100~100]
840-010	Brightest Setting	TBD	0~200	0~200 = [-100~100]
840-011	Brighter Setting	TBD	0~200	0~200 = [-100~100]
840-012	Softer Setting	TBD	0~200	0~200 = [-100~100]
840-013	Softest Setting	TBD	0~200	0~200 = [-100~100]
840-019	RGB Color Space	0	0~1	[Standard Color Space] = 0 [Device Color Space] = 1

870-xxx ESS Diagnosis Setting NVM List

Table 24 Chain 870

Chain/Link	Name	Default	Range	Description
870-001	TBD	Normal	-	Normal, Diag (Auto setting)
870-010	XERO = CRU #1 PR Wear previous value	-	-	0~99999999
870-011	XERO = CRU #2 PR Wear previous value	-	-	0~99999999
870-012	XERO = CRU #3 PR Wear previous value	-	-	0~99999999
870-013	XERO = CRU #4 PR Wear previous value	-	-	0~99999999

Table 24 Chain 870

Chain/Link	Name	Default	Range	Description
870-014	XERO = #1CRU WARNING previous value	-	-	0~99999999
870-015	XERO = #1DRUM Total CYCLE previous value	-	-	0~99999999
870-016	XERO = #2DRUM Total CYCLE previous value	-	-	0~99999999
870-017	XERO = #3DRUM Total CYCLE previous value	-	-	0~99999999
870-018	XERO = #4DRUM Total CYCLE previous value	-	-	0~99999999
870-019	XERO = #1DRUM DC CYCLE previous value	-	-	0~99999999
870-020	XERO = #2DRUM DC CYCLE previous value	-	-	0~99999999
870-021	XERO = #3DRUM DC CYCLE previous value	-	-	0~99999999
870-022	XERO = #4DRUM DC CYCLE previous value	-	-	0~99999999
870-023	XERO = #1DRUM AC CYCLE previous value	-	-	0~99999999
870-024	XERO = #2DRUM AC CYCLE previous value	-	-	0~99999999
870-025	XERO = #3DRUM AC CYCLE previous value	-	-	0~99999999
870-026	XERO = #4DRUM AC CYCLE previous value	-	-	0~99999999
870-027	Xfer = IBT Belt (IMPS) previous value	-	-	0~99999999
870-028	Xfer = IBT Belt (CYCLE) previous value	-	-	0~99999999
870-029	Xfer = 1st BTR previous value	-	-	0~99999999
870-030	Xfer = Back Up Roll previous value	-	-	0~99999999
870-031	Xfer = 2nd BTR Unit previous value	-	-	0~99999999
870-032	Xfer = Bearing BTR previous value	-	-	0~99999999
870-033	Xfer = Trim within Transfer Module previous value	-	-	0~99999999
870-034	Xfer = Belt Cleaner Blade previous value	-	-	0~99999999
870-035	Xfer = BBelt Cleaner Film Seal previous value	-	-	0~99999999
870-036	PH = 1Tray NMBR of Feeds previous value	-	-	0~99999999
870-037	PH = Tray 5 NMBR of Feeds previous value	-	-	0~99999999

Table 24 Chain 870

Chain/Link	Name	Default	Range	Description
870-038	PH = 3TM 2Tray NMBR of Feeds previous value	-	-	0~99999999
870-039	PH = 3TM 3Tray NMBR of Feeds previous value	-	-	0~99999999
870-040	PH = 3TM 4Tray NMBR of Feeds previous value	-	-	0~99999999
870-041	PH = 1TM 2Tray NMBR of Feeds previous value	-	-	0~99999999
870-042	PH = TTM 2Tray NMBR of Feeds previous value	-	-	0~99999999
870-043	PH = TTM 3Tray NMBR of Feeds previous value	-	-	0~99999999
870-044	PH = TTM 4Tray NMBR of Feeds previous value	-	-	0~99999999
870-045	PV (CV) Counter for FILTER Life previous value	-	-	0~99999999

900-xxx ESS Tag-Matrix NVM List

Table 25 Chain 900

Chain/Link	Name	Default	Range	Description
900-001	Tag 1V	0	0~1	Tag Information 1V
900-002	Tag 2V	0	0~1	Tag Information 2V [0 = OFF, 1 = ON]
900-003	Tag 3V	0	0~1	Tag Information 3V [0 = OFF, 1 = ON]
900-004	Tag 4V	0	0~1	Tag Information 4V [0 = OFF, 1 = ON]
900-005	Tag 5V	0	0~1	Tag Information 5V [0 = OFF, 1 = ON]
900-006	Tag 6V	0	0~1	Tag Information 6V [0 = OFF, 1 = ON]
900-007	Tag 7V	0	0~1	Tag Information 7V [0 = OFF, 1 = ON]
900-008	Tag 8V	0	0~1	Tag Information 8V [0 = OFF, 1 = ON]
900-009	Tag 9V	0	0~1	Tag Information 9V [0 = OFF, 1 = ON]
900-010	Tag 10V	0	0~1	Tag Information 10V [0 = OFF, 1 = ON]
900-011	Tag 11V	0	0~1	Tag Information 11V [0 = OFF, 1 = ON]
900-012	Tag 12V	0	0~1	Tag Information 12V [0 = OFF, 1 = ON]
900-013	Tag 13V	0	0~1	Tag Information 13V [0 = OFF, 1 = ON]
900-014	Tag 14V	0	0~1	Tag Information 14V [0 = OFF, 1 = ON]
900-015	Tag 15V	0	0~1	Tag Information 15V [0 = OFF, 1 = ON]
900-016	Tag 16V	0	0~1	Tag Information 16V [0 = OFF, 1 = ON]
900-017	Tag 17V	0	0~1	Tag Information 17V [0 = OFF, 1 = ON]
900-018	Tag 18V	0	0~1	Tag Information 18V [0 = OFF, 1 = ON]
900-019	Tag 19V	0	0~1	Tag Information 19V [0 = OFF, 1 = ON]
900-020	Tag 20V	0	0~1	Tag Information 20V [0 = OFF, 1 = ON]
900-021	Tag 21V	0	0~1	Tag Information 21V [0 = OFF, 1 = ON]

Table 25 Chain 900

Chain/Link	Name	Default	Range	Description
900-022	Tag 22V	0	0~1	Tag Information 22V [0 = OFF, 1 = ON]
900-023	Tag 23V	0	0~1	Tag Information 23V [0 = OFF, 1 = ON]
900-024	Tag 24V	0	0~1	Tag Information 24V [0 = OFF, 1 = ON]
900-025	Tag 25V	0	0~1	Tag Information 25V [0 = OFF, 1 = ON]
900-026	Tag 26V	0	0~1	Tag Information 26V [0 = OFF, 1 = ON]
900-027	Tag 27V	0	0~1	Tag Information 27V [0 = OFF, 1 = ON]
900-028	Tag 28V	0	0~1	Tag Information 28V [0 = OFF, 1 = ON]
900-029	Tag 29V	0	0~1	Tag Information 29V [0 = OFF, 1 = ON]
900-030	Tag 30V	0	0~1	Tag Information 30V [0 = OFF, 1 = ON]
900-031	Tag 31V	0	0~1	Tag Information 31V [0 = OFF, 1 = ON]
900-032	Tag 32V	0	0~1	Tag Information 32V [0 = OFF, 1 = ON]

dC132 Serial Number/Billing Meter Synchronization

Purpose

Checks the Billing Meters and sets the Machine Serial Number when fault 103-208 occurs. This routine also reads the Billing Meters and can be accessed at any time for this purpose.

Procedure

CAUTION

Failure to comply with the board replacement procedure in GP 10 Replacing Billing PWBs, could result in catastrophic NVM corruption.

Follow the procedure described in GP 10 Replacing Billing PWBs.

dC135 HFSI Counters

Purpose

This routine displays the service life (Threshold) and the current value (count) of the periodic replacement parts. Replacement life change, and current value resets are possible.

Procedure

1. Enter the **Diagnostic Mode**. Refer to Entering Diagnostic Mode using the PWS.
2. Select **Maintenance** on the **Service Entry** Screen. The **All Jams** screen displays as the default screen.
3. Select **HFSI Counters (dC135)** tab on the Maintenance screen.
4. The **HFSI Counters** screen displays the replacement life (Threshold) and the current value (count) of the periodic replacement parts. Two vertical tabs allow display of all HFSI counters, or only those counters that are over threshold.
5. Refer to Detailed Maintenance Activities in Section 1. Perform the listed Service Action for all HSFI counters that are at or near threshold.
6. To reset the count after replacing the parts, select the appropriate HFSI item, then select the **Reset Counter** button.

dC140 Analog Monitor

Purpose

Monitors the analog values of the A/D converter sensors by driving each component (e.g.;, C.C). Temporary change of output values is possible. Output component check is also possible.

Procedure

1. Enter the **Diagnostic Mode**. Refer to Entering Diagnostic Mode using the PWS.
2. Select the **Analog Monitor (dC140) tab** in the **Diagnostics Screen**.
3. The system displays the Analog Monitor Screen.
   a. The system displays the analog output component names and the analog input component names with the Chain Link Numbers (ID column) in the table in the order of Chain Link number.
   b. The status of all output components show **Disabled**. The **Level** columns are blank.
4. To run an output component check:
   a. Select a **component to check**.
   b. Select **Start** in the output component check.
   c. The output component in the machine is switched on.
   d. The PWS changes the output component status to **Enable**.
   e. **Turn ON** another component to check the output component in the machine.

   NOTE: *If the component has a runtime restriction, the component is switched on for that period and automatically switched off.*

   NOTE: *Some components cannot be turned on at the same time another component is turned on. If you turn on a component, the first component turned on will be automatically turned off.*

   NOTE: *If the component cannot be automatically turned off, the following message appears:!* ***Cannot check the component. Stop another output component****.*

Check Multiple Components

1. To check multiple components simultaneously, repeat Step 5a through 5e.
2. To stop the check, select **Stop** while the component is selected, or select **Stop All** which switches off all output components.

   NOTE: *The output component is switched OFF. The status shows* ***Disabled****.*

Changing Output Levels

1. If you temporarily change the output level, you can check the output component by using the [+] or [-] to increment/decrement the output level by 1.
2. Select the component whose output level you want to change. Select [+] to increment or [-] to decrement.
3. Increment or decrement the output level by 1. The new output level is input into the system and the Analog Monitor shows the new output level in the Level column. If the output level entered is out of the range, the Information screen shows the following message:! **Invalid value. Enter again**. (A value that is out of the range is a value that is higher than the upper limit or lower than the lower limit defined by the machine.)

dC188 Exiting from Service Mode

Procedure

1. Enter the **Diagnostic Mode**. Refer to Entering Diagnostic Mode using the PWS.
2. Select the **Service Exit** Tab on the Screen.
3. The Service Exit Screen (dC188) displays.
4. The exit options are:
   - Complete Closeout
   - Temporary Closeout

   NOTE: *Selecting* ***Complete Closeout*** *resets the Shutdown History (dC122), Fault Counter (dC120), Jam Counters (dC118) and the numbers of copies since the last call.*

5. Select **Complete Closeout** or **Temporary Closeout**. The machine reboots. The UI message **Ready to Copy** displays.

   NOTE: *Selecting* ***Temporary Closeout*** *exits from the Service Mode without resetting the Shutdown History (dC122), Fault Counter (dC120), Jam Counter (dC118), and the number of copies since last call.*

6. Select.
7. Select **Exit PWS** to close from the PWS diagnostic tool even if the PWS has been disconnected from the machine.
8. After Exit PWS is selected, the following message will display, **Would you like to copy Machine Data to the a:drive? Yes or No**.
   - If **Yes** is selected, insert a diskette into a:drive and the PWS will write Machine Data to a:drive and the diagnostic tool will close.
   - If **No** is selected the diagnostic tool will close.

   NOTE: *If the PWS is disconnected from the machine after the machine entered the Service Mode, the PWS and the machine do not automatically exit from the Service Mode. If the machine is disconnected from the PWS,* ***Power-OFF/ON*** *to exit from the Service Mode.*

dC301 NVM Initialization

Purpose

This procedure may be needed when the machine cannot recover for some unknown reasons, including problems such as producing blank copies/prints, Xerographic CRUs not recognized, continuously giving system fault, etc.

Initial Actions to be taken:

Obtain all of the following information:

- ï Disconnect any Foreign Interface Devices prior to performing this procedure.
- ï NVM Value Factory Setting Report (Typically it is located in the Tray 1 pocket)
- ï Any Customer Setting Auditron Account from the System Administrator
- ï Any setting changes (specifically NVM settings) shown on the machineís service log.
- ï Any Customer Settings in the Tools Mode.

Procedure

1. TBD.

Table 1 NVM Initialization

Name	Description
IOT	The following NVM locations will be initialized: ï Chain 740 - links 020 through 419 ï Chain 741 - All ï Chain 742 - links 055 through 079 ï Chain 744 - All ï Chain 746 - All ï Chain 753 - All ï Chain 751 - All except links 168 and 364 ï Chain 760 - All ï Chain 762 - All ï Chain 764 - All
IIT/IPS	The following NVM locations will be initialized: ï Chain 715 - links 001 through 017

Table 1 NVM Initialization

Name	Description
SYS-System	The following NVM locations will be initialized: ï Chain 700 - links 006, 065 through 070, 088, 116, 122, 127, 128, 147, 164 through 166, 174, 176 through 181, 197, 208 ï Chain 701 - links 912, 917, 924, 929 ï Chain 720 -link 002 ï Chain 730 - links 00 through 006 ï Chain 770 - links 124, 203 ï Chain 780 - links 065 through 068 ï Chain 785 - links 008, 009 ï Chain 790 - links 003, 004, 099 ï Chain 801 - links 104, 204, 304, 404, 504, 604, 704, 804, 904 ï Chain 802 - links 004, 104, 204, 304, 404, 504, 604, 704, 804, 904 ï Chain 803 - link 004 ï Chain 810 - links 002 through 019, 038 through 127 ï Chain 820 - links 003, 007 through 009, 017 through 019, 024, 026, 027, 029 ï Chain 823 - links 001 through 005, 008 through 011, 030 through 047 ï Chain 830 - links 001 through 004, 084, 085 ï Chain 850 - links 001 through 004, 007, 009 through 012, 015 ï Chain 860 - links 009, 013, 020, 025, 031, 032
SYS-User	All user settable NVM locations in the following chains will be reset: Chains 700, 780, 785, 790, 800, 801, 802, 803, 804, 805, 806, 810, 820, 823, 830, 840
All	All of the above-listed NVM locations will be reset.

dC305 UI Component Check

Purpose

Checks the operations of the UI Screen and Control Panel buttons.

Procedure

1. Enter the **Diagnostic Mode**. Refer to Entering Diagnostic Mode using the PWS.
2. Select the **Diagnostics** Tab in the Service Entry Screen.
3. Select the **System Test** Tab in the Diagnostics Screen. The System Test Screen displays. The UI Component Check dC305 is the default screen.
4. Select **Start**. The following message displays, **Perform the UI Component Check on the Machine. When complete, select Stop**.
5. Select **OK**.
6. Touch the **UI Screen** in a different locations. The highlighted point moves to the new location.
7. All LEDs should be illuminated when the dC305 Touch Screen Test is displayed. Select **Stop** to Turn-OFF all LEDs.
8. Select **Stop** on the Component Check Screen.
9. The Touch Screen Test Screen on the machine UI closes.

dC330 Component Control

Purpose

The purpose of the dC330 Component Control is to display the logic state of input signals and to energize output components.

NOTE: *Refer to Table 1 for a list of all Input Components listed by Chain/Link ID number. Refer to Table 2 for a list of all Output Components listed by Chain/Link ID number.*

Procedure

1. Enter the **Diagnostic Mode**. Refer to Entering Diagnostic Mode using the PWS.
2. Select the **Diagnostics Tab** on the Service Entry Screen.
3. Select **Component Control** (dC330) on the Diagnostic Entry Screen.
4. The dC330 Screen is displayed. The display indicates the following:
   - Input/Output Components
   - ID Number (chain/function order)
   - Active Stack (including ID and state of component)

   NOTE: *The Component Control Codes can be selected in categories by their related system, such as: Processor, System, Sorter / OCT / Mailbox, Finisher, DADF, HCF and ITT.*
5. Activate the desired component code by double clicking on the Chain/Link ID number or by clicking once on the Chain/Link ID number then selecting the **Start Button**. The IDís will display in the Active Stack.
6. Press the **Stop** button or **double click** the active component in the active stack box to end the test. The ID and Active Stack components are removed from the Active Stack box.

Stacking Component Codes

1. To stack several codes, select the first code and press **Start**, then select the next code and press **Start**. Continue to enter up to eleven codes.
2. The selected ID appears in the ID column of the Active Stack box and the state changes to Run; H or L as applicable.
3. Stop a highlighted component by pressing **Stop** or double click the active component in the Active Stack Box
4. To switch Off all components and clear the screen, press **Stop All**.

NOTE: *Components that are currently running are shaded in Green. Components that have been run are shaded in Yellow.*

NOTE: *When exiting dc330, the machine resets and communication between the PWS and the machine is momentarily lost. The PWS will reconnect automatically.*

Table 1 Input Component Control Codes

Code	Name	Description
001-300	INTLK_1	High when Open is detected. ON: High
001-301	INTLK_2	High when Open is detected. ON: High
001-302	LH LOW I/L SW	High when Open is detected. ON: High
001-304	LH 3TM I/L SW	Low when Open is detected. ON: Low

Table 1 Input Component Control Codes

Code	Name	Description
001-306	INTLK_3	High when Open is detected. ON: High
004-100	Belt Home Sensor	[Operation Description]: IBT is not at Home Position. Open circuit. It is necessary to operate IBT 5V ON. ON: High
004-101	Drum Motor YMC Fail Detection	PR (Drum) Motor YMC Failure ON: High
004-102	Drum Motor K Fail Detection	PR (Drum) Motor K Failure ON: High
004-200	FAN_LOCK_FAIL	Fan rotation is stopped ON: FAIL
005-102	Document Sensor	No paper detected by Document Sensor ON: High
005-110	Regi Sensor (DADF)	Paper detected by Regi Sensor ON: Low
005-115	Exit Sensor	Paper detected by Exit Sensor ON: Low
005-119	Dup Sensor	Paper detected by Dup Sensor ON: Low
005-150	#1 Size Sensor	No paper detected by #1 Size Sensor ON: High
005-151	#2 Size Sensor	No paper detected by #2 Size Sensor ON: High
005-201	Exchange from IISS	Document Exchange InstructiON. ON from IISS ON: Low
005-300	Platen I/L Switch	Platen Cover Open ON: High
005-301	Top Cover I/L Switch	Top Cover Inter Lock Open ON: High
006-160	Polygon Motor Ready Signal	Regular rotation of Polygon Motor ON: Low
006-201	Sheet Abort	Document Regist ON: Low
006-212	IIT Regi Sensor	Deactuation of Regi Sensor ON: Low
006-240	ADF Exist	DADF is not installed ON: High
006-251	APS Sensor1	Document is detected ON: APS SNR1: Low, APS ON: High
006-253	APS Sensor3	Document is detected ON: APS SNR3: Low, APS ON: High
006-272	PM-0	Flash Memory writing is not in progress ON: Inside PWBA
006-281	IPS Fan Fail	High when FAN failure is detected. ON: High
006-300	Platen I/L Switch	Low when Platen closed. ON: Low
006-301	Angle Sensor	Low when Platen closed. ON: Low
007-100	#1Tray Size SW1	ON: AN value
007-101	#1Tray Size SW2	ON: AN value
007-102	#1Tray Size SW3	ON: AN value
007-103	#1Tray Size SW4	ON: AN value
007-104	#2Tray Size SW1	ON: AN value
007-105	#2Tray Size SW2	ON: AN value
007-106	#2Tray Size SW3	ON: AN value
007-107	#2Tray Size SW4	ON: AN value
007-108	#3Tray Size SW1	ON: AN value
007-109	#3Tray Size SW2	ON: AN value

Table 1 Input Component Control Codes

Code	Name	Description
007-110	#3Tray Size SW3	ON: AN value
007-111	#3Tray Size SW4	ON: AN value
007-112	#4Tray Size SW1	ON: AN value
007-113	#4Tray Size SW2	ON: AN value
007-114	#4Tray Size SW3	ON: AN value
007-115	#4Tray Size SW4	ON: AN value
007-116	#1Level Sensor	Lift Up ON: High
007-117	#2Level Sensor	Lift Up ON: High
007-118	#3Level Sensor	Lift Up ON: High
007-119	#4Level Sensor	Lift Up ON: High
007-120	#1Nopaper Sensor	No paper ON: High
007-121	#2Nopaper Sensor	No paper ON: High
007-122	#3Nopaper Sensor	No paper ON: High
007-123	#4Nopaper Sensor	No paper ON: High
007-125	SMH No paper Sensor	No paper ON: High
007-128	Face Up Tray Detect	Low when Tray is installed ON: Low
008-100	#1Feed Out Sensor	Paper detected ON: High
008-102	#3Feed Out Sensor	Paper detected ON: High
008-103	#4Feed Out Sensor	Paper detected ON: High
008-104	Regi Sensor	No paperON: Low
008-105	Dup Wait Sensor	Paper detected ON: High
008-106	T/A Sensor	Paper detected ON: High
008-107	TTM Path Sensor1	Paper detected
008-108	TTM Path Sensor2	Paper detected
008-109	OHP Sensor#L	ON: Low
008-110	OHP Sensor#R	ON: Low
008-300	DUP Open Switch	ON: High
009-101	Toner_Y New	CRU Connection of color is open (The CRU in use is present, or it is not present) ON: Low=new, High=old
009-102	Toner_M New	CRU Connection of color is open (The CRU in use is present, or it is not present) ON: Low=new, High=old
009-103	Toner_C New	CRU Connection of color is open (The CRU in use is present, or it is not present) ON: Low=new, High=old
009-104	Toner_K New	CRU Connection of color is open (The CRU in use is present, or it is not present) ON: Low=new, High=old
009-150	TNR FULL SNR	ON: High
009-151	#Y_CRU detect	CRU is installed
009-152	#M_CRU detect	CRU is installed

Table 1 Input Component Control Codes

Code	Name	Description
009-153	#C_CRU detect	CRU is installed
009-154	#K_CRU detect	CRU is installed
009-200	2nd BTR Retract Sensor	RetractiON. ON: Low
009-201	POB Sensor	Paper detected ON: Low
009-203	1st BTR Retract Sensor	RetractiON. ON: Low
010-101	Fuser Exit	Paper detected ON: High
010-102	Full Paper Stack Sensor	NotFull ON: Low
010-103	Face Up Exit Sensor	Paper detected ON: High
012-100	IOT Regi Clutch	Clutch OFF ON: High
012-101	Compiler Tray Exit Sensor	Paper detected ON: High
012-102	Compiler Paper Sensor	Paper detected ON: High
012-103	H-Tra Ent. Sensor	Paper detected ON: High
012-104	H-Tra Exit Sensor	Paper detected ON: High
012-200	Stacker Paper Sensor	Paper detected ON: High
012-201	Stacker Height Sensor	Higher than the detection surface ON: High
012-202	Stacker Upper Limit Sensor	Upper Limit position. ON: High
012-204	Stacker Stack A Sensor	Non-transmissive position. ON: High
012-205	Stacker Stack B Sensor	Non-transmissive position. ON: High
012-207	[PWS Display] Staple Head Home Sensor	Not at Home position. ON: High
012-208	Low Staple Switch	Low Staple ON: High
012-209	[PSW Display] Staple Ready Sensor	Not at Ready position. ON: High
012-210	Eject Clamp Home Sensor	Not at Home Position (Roller is DOWN) ON: High
012-211	Set Clamp Home Sensor	Not at Home Position (transmissive) ON: High
012-212	Rear Tamper Home Sensor	Home position. ON: High
012-215	H-Tra IOT Full Paper Sensor	No paper ON: High
012-216	Front Tamper Home Sensor	Home position. ON: High
012-217	Decurler Cam Position Sensor	Not at Home Position (transmissive) ON: High
012-224	Stapler Move Sensor	Non-transmissive position. ON: High
012-225	Stapler Front Corner Sensor	Front Corner position. ON: High
012-300	Front Cover Interlock Switch	Open ON: High
012-301	Top Cover Interlock Switch	Open ON: High
012-302	Docking Interlock Sensor	Docking release ON: High
012-305	H-Tra Interlock Sensor	Open ON: High

Table 2 Output Component Control Codes

Code	Name	Description	Conflicts
004-001	Steering Motor	Reswitch the Steering Cam to Home position. ONce and operate it at half cycle after that.	004-005
004-002	IBT Motor (104mm/sec)	Operate with the IBT unit removed. The Belt might be damaged since the Belt Work Control is not performed.	004-012, 004-013
004-004	Main Motor (104mm/sec)	Rotate at medium speed. Operate the motor with the 2nd BTR nipped, or the LH Cover opened. Otherwise, the 2nd BTR might damage the teeth.	004-007, 004-008
004-005	Steering Motor Home Position	ON: Low	004-001
004-007	Main Motor (52mm/sec)	Rotate at half speed. Operate the motor with the 2nd BTR nipped, or the LH Cover opened. Otherwise, the 2nd BTR might damage the teeth.	004-004, 004-008
004-008	Main Motor (194mm/sec)	Rotate at double speed. Operate the motor with the 2nd BTR nipped, or the LH Cover opened. Otherwise, the 2nd BTR might damage the teeth.	004-004, 004-007
004-012	IBT Motor (52mm/sec)	Rotate at half speed. Operate with the IBT unit removed. The Belt might be damaged since the Belt Work Control is not performed.	004-012, 004-013
004-013	IBT Motor (194mm/sec)	Rotate at double speed. Operate with the IBT unit removed. The Belt might be damaged since the Belt Work Control is not performed.	004-002, 004-012
004-014	IBT_5V ON	ON: High	-
004-050	Fuser Fan, LV Fan and Rear Fan Rotation High speed	Rotate the FUSER FAN, LV FAN and REAR FAN at high speed. (Rotation is Low at Power ON)	-
005-011	Set Gate Solenoid Open	Turn Set Gate Open ON (Towards bottom of Nudger Roll) for 5sec -> Auto OFF	-
005-012	Set Gate Solenoid Close	Turn Set Gate Close ON (Towards bottom of Nudger Roll) for 5sec -> Auto OFF	-
005-040	Feed Mot.	DADF Feed Motor for 2sec -> Auto OFF	-
005-055	Belt Motor Non CVT Mode (CW)	Rotate the DADF Belt Motor forward.	005-056
005-056	Belt Motor Non CVT Mode (CCW)	Rotate the DADF Belt Motor backward.	005-055
005-075	Regi Gate Solenoid	Push the Regi Gate with the Arm to turn it ON for 5sec -> Auto OFF	-

Table 2 Output Component Control Codes

Code	Name	Description	Conflicts
005-081	Exit Motor Non CVT Mode	Operate the DADF Exit Motor	-
005-083	Doc Ready	switch ON the Doc Ready signal.	-
005-084	Doc Set LED	switch ON the DOC SET LED	-
006-002	IIT Exposure Lamp	switch the Lamp ON for 180sec -> Auto OFF	-
006-004	IPS Cooling Fan (Low speed)	After operating the IPS Cooling Fan at high speed for 5sec, operate it at low speed. ON: FAN ON: 24V, FAN Slow: L->H (About 13V)	-
006-005	IIT Scan Motor (Scan)	More it 50mm from current position in Scan direction -> Auto OFF	006-006
006-006	IIT Scan Motor (Return)	More it 50mm from current position in Return direction -> Auto OFF	006-005
006-014	IPS Cooling Fan (High speed)	Operate the IPS Cooling Fan at high speed.	-
006-030	LD ON Enable Signal (concurrently for 4 colors)	[Operation Description]:	-
006-031	Polygon Motor Start Signal	[Operation Description]:	-
006-086	IIT Image Area	IMG-AREA Signal Output ON: P727 LVDS (Differential) High	-
006-091	Exchange To ADF	Turn ON the document exchange command signal to the DADF	-
007-003	SMH FEED Clutch	[Operation Description]:	-
007-004	HOTLINE_TRAY	Not used.	-
008-001	#1Feed Motor (Fwd)	Feed (Rotate #1Feed Motor in paper feed direction at 200mm/sec)	8-002
008-002	#1Feed Motor (Rev)	It turns OFF automatically 6sec after LiftUp has started, or when the Level Snr detected LiftUp. LiftUp cannot be performed when the Level Snr should detect LiftUp.	8-001
008-003	#2Feed Motor (Fwd)	Feed (Turn #2Feed Motor On in paper feed direction at 192mm/sec)	8-004
008-004	#2Feed Motor (Rev)	It turns OFF automatically 6sec after LiftUp has started, or when the Level Snr detected LiftUp. LiftUp cannot be performed when the Level Snr should detect LiftUp.	8-003
008-005	#3Feed Motor (Fwd)	Feed (Turn #3Feed Motor On in paper feed direction at 192mm/sec)	
008-006	#3Feed Motor (Rev)	It turns OFF automatically 6sec after LiftUp has started, or when the Level Snr detected LiftUp. LiftUp cannot be performed when the Level Snr should detect LiftUp.	8-005

Table 2 Output Component Control Codes

Code	Name	Description	Conflicts
008-007	#4Feed Motor (Fwd)	Feed (Turn #4Feed Motor On in paper feed direction at 192mm/sec)	8-008
008-008	#4Feed Motor (Rev)	It turns OFF automatically 6sec after LiftUp has started, or when the Level Snr detected LiftUp. LiftUp cannot be performed when the Level Snr should detect LiftUp.	8-007
008-009	Dup Motor (200.1mm/sec)	Start operation. Turns OFF automatically at 1000msec.	8-010, 011, 012, 053, 054, 055, 056
008-010	Dup Motor (104mm/sec)	Start operation. Turns OFF automatically at 1000msec.	8-009, 011, 012, 053, 054, 055, 056
008-011	Dup Motor (200.1mm/sec) Long	[Operation Description]:	8-009, 010, 012, 053, 054, 055, 056
008-012	Dup Motor (104mm/sec) Long	[Operation Description]:	8-009, 010,011, 053, 054, 055, 056
008-021	3TM TA Motor (52mm/sec)	Start operation. Turns OFF automatically at 1000msec.	8-022, 023, 024, 025, 026, 027, 028
008-022	3TM TA Motor (104mm/sec)	Start operation. Turns OFF automatically at 1000msec.	8-021, 023, 024, 025, 026, 027, 028
008-023	3TM TA Motor (192mm/sec)	Start operation. Turns OFF automatically at 1000msec.	8-021, 022, 024, 025, 026, 027, 028
008-024	3TM TA Motor (370mm/sec)	Start operation. Turns OFF automatically at 1000msec.	8-021, 022, 023, 025, 026, 027, 028
008-025	3TM TA Motor (52mm/sec) Long	[Operation Description]:	8-021, 022, 023, 024, 026, 027, 028
008-026	3TM TA Motor (104mm/sec) Long	[Operation Description]:	8-021, 022, 023, 024, 025, 027, 028
008-027	3TM TA Motor (192mm/sec) Long	[Operation Description]:	8-021, 022, 023, 024, 025, 026, 028
008-028	3TM TA Motor (370mm/sec) Long	[Operation Description]:	8-021, 022, 023, 024, 025, 026, 027
008-029	TTM TA Motor (52mm/sec)	Start operation. Turns OFF automatically at 1000msec.	8-030, 031, 032, 033, 034, 035, 036

Table 2 Output Component Control Codes

Code	Name	Description	Conflicts
008-030	TTM TA Motor (104mm/sec)	Start operation. Turns OFF automatically at 1000msec.	8-029, 031, 032, 033, 034, 035, 036
008-031	TTM TA Motor (192mm/sec)	Start operation. Turns OFF automatically at 1000msec.	8-029, 030, 032, 033, 034, 035, 036
008-032	TTM TA Motor (370mm/sec)	Start operation. Turns OFF automatically at 1000msec.	8-029, 030, 031, 033, 034, 035, 036
008-033	TTM TA Motor (52mm/sec) Long	[Operation Description]:	8-029, 030, 031, 032, 034, 035, 036
008-034	TTM TA Motor (104mm/sec) Long	[Operation Description]:	8-029, 030, 031, 032, 033, 035, 036
008-035	TTM TA Motor (192mm/sec) Long	[Operation Description]:	8-029, 030, 031, 032, 033, 034, 036
008-036	TTM TA Motor (370mm/sec) Long	[Operation Description]:	8-029, 030, 031, 032, 033, 034, 035
008-037	Regi Clutch	Turns ON. Turns OFF automatically at 400msec.	None
008-038	#1TA Clutch	Turns ON. Turns OFF automatically at 400msec.	None
008-042	Invert Clutch CW	Turns ON in output direction. Turns OFF automatically at 400msec.	None
008-043	Invert Clutch CCW	Turns ON in Invert direction. Turns OFF automatically at 400msec.	None
008-045	Exit Gate Solenoid	Turns ON in output direction. Turns OFF automatically at 200msec.	None
008-046	Dup Gate Solenoid	Turns ON in Face Up direction. Turns OFF automatically at 200msec.	None
008-047	TTM TM Motor2 (370mm/sec)	Start operation. Turns OFF automatically at 1000msec.	None
008-048	TTM TM Motor2 (370mm/sec) Long	[Operation Description]:	None
008-049	MOB2LED_CHNG	MOB SNR2 LED Light quantity switching signal, Light quantity UP (increase voltage) at PORT H. ON: ANA Output LED2 Light quantity UP	None
008-050	OB2LED_ON	MOB SNR2 LED ON. ON: ANA output	None

Table 2 Output Component Control Codes

Code	Name	Description	Conflicts
008-051	MOB1LED_CHNG	MOB SNR1 LED Light quantity switching signal, Light quantity UP (increase voltage) at PORT H. ON: ANA Output LED1 Light quantity UP	None
008-052	MOB1LED_ON	MOB SNR1 LED ON. ON: ANA output	None
008-053	Dup Motor (373.2mm/sec)	Start operation. Turns OFF automatically at 1000msec.	8-009, 010, 011, 012, 054, 055, 056
008-054	Dup Motor (194mm/sec)	Start operation. Turns OFF automatically at 1000msec.	8-009, 010, 011, 012, 053, 055, 056
008-055	Dup Motor (373.2mm/sec) Long	[Operation Description]:	8-009, 010, 011, 012, 053, 054, 056
008-056	Dup Motor (194mm/sec) Long	[Operation Description]:	8-009, 010, 011, 012, 053, 054, 055
009-001	#Y_Disp MOT_Y	Y Color Disp. MOT turns ON, and turns OFF automatically after 5sec.	-
009-002	#M_Disp MOT	M Color Disp. MOT turns ON, and turns OFF automatically after 5sec.	-
009-003	#C_Disp MOT	C Color Disp. MOT turns ON, and turns OFF automatically after 5sec.	-
009-004	#K_Disp MOT	K Color Disp. MOT turns ON, and turns OFF automatically after 5sec.	-
009-005	#Y_DB DC	Y Color Developer Bias DC Component Output	-
009-006	#M_DB DC	M Color Developer Bias DC Component Output	-
009-007	#C_DB DC	C Color Developer Bias DC Component Output	-
009-008	#K_DB DC	K Color Developer Bias DC Component Output	-
009-009	#YM_DB AC	YM Color Developer Bias AC Component Output	-
009-012	#CK_DB AC	CK Color Developer Bias AC Component Output	-
009-013	Deve_CL	The clutch for driving K Color turns ON, and turns OFF automatically after 5sec.	-
009-014	Deve_MOT Normal-speed	The MOT for driving Color turns ON at normal speed and turns OFF automatically after 5sec.	9-16
009-016	Deve_MOT Half-speed	The MOT for driving Color turns ON at higher speed and turns OFF automatically after 5sec.	9-14

Table 2 Output Component Control Codes

Code	Name	Description	Conflicts
009-026	#Y_BCR DC	High voltage output value of BCR DC_Y. ON: PWM	9-30
009-027	#M_BCR DC	High voltage output value of BCR DC_M. ON: PWM	9-31
009-028	#C_BCR DC	High voltage output value of BCR DC_C. ON: PWM	9-32
009-029	#K_BCR DC	High voltage output value of BCR DC_K. ON: PWM	9-33
009-030	#Y_BCR AC	High voltage output value of BCR AC_Y. ON: PWM	9-26
009-031	#M_BCR AC	High voltage output value of BCR AC_M	9-27
009-032	#C_BCR AC	High voltage output value of BCR AC_C	9-28
009-033	#K_BCR AC	High voltage output value of BCR AC_K	9-29
009-034	[PSW Display] AGT MOT	AGITATOR MOT ON	
009-035	CRUM PWR	Power ON of CRUM-YMCK	
009-038	BCR ACDC K CHG	[Operation Description]: DEVE_AC_K changes at connector terminals trailing.	
009-039	BCRAC Clock	Frequency signal common to BCR AC All Colors.	
009-040	ROS Shutter Close	ROS Shutter: Rotates in Close direction (Brush: Contact direction).	9-41
009-041	ROS Shutter Open	ROS Shutter: Rotates in Open direction (Brush: Retract direction). ON: HHH	9-40
009-042	#K_Erase Lamp 104mm/s	K ERASE LAMP lit.	9-43, 9-44
009-043	#K_Erase Lamp 52mm/s	Not in use	9-42, 9-44
009-044	#K_Erase Lamp 194mm/s	Not in use	9-42, 9-43
009-045	#YMC_Erase Lamp 104mm/s	YMC ERASE LAMP lit.	9-46
009-046	#YMC_Erase Lamp 52mm/s	Not in use	9-45
009-051	2nd BTR Contact	Driving of BTR2RETMOT. Turns OFF 800ms after the Retract SNR detected the Contact Position (High).	-
009-052	2nd BTR Retract	Turns OFF 60ms after the Retract SNR detected the Retract Position (Low).	-
009-053	De Tack Saw HV	Turn on DTS HV.	-
009-054	1st BTR Contact	Turns OFF 100ms after the Retract SNR detected the Contact Position (High).	-
009-055	1st BTR Retract	Turns OFF 100ms after the Retract SNR detected the Retract Position (Low).	-

Table 2 Output Component Control Codes

Code	Name	Description	Conflicts
009-076	Specular reflection LED	When the Specular Reflection LED of ADC SNR turns ON and YMC density is detected.	-
009-077	Diffusion reflection LED	When the Diffusion Reflection LED of ADC SNR turns ON and K density is detected.	-
009-078	ADC Sensor Shutter Open	Turns OFF automatically after 100msec.	9-79
009-079	ADC Sensor Shutter Close	Turns OFF automatically after 100msec.	9-78
009-080	ATC Sensor 5V ON	5V Power supply to ATC SNR.	-
010-001	OCT Motor (CW)	Turns ON forward and turns OFF automatically at 150msec.	010-002
010-002	OCT Motor (CCW)	Turns ON reverse and turns OFF automatically at 150msec.	010-001
012-001	Main Drive Motor On/Off	[Operation Description]:	12-71
012-010	Rear Tamper Motor Low Front On/Off	Turns OFF automatically after 100pulses.	12-11, 12-12, 12-13, 12-14, 12-15
012-011	Rear Tamper Motor Middle Front On/Off	Turns OFF automatically after 100pulses.	12-10, 12-12, 12-13, 12-14, 12-15
012-012	Rear Tamper Motor High Front On/Off	Turns OFF automatically after 100pulses.	12-10, 12-11, 12-13, 12-14, 12-15
012-013	Rear Tamper Motor Low Rear On/Off	Turns OFF automatically after 100pulses.	12-10, 12-11, 12-12, 12-14, 12-15
012-014	Rear Tamper Motor Middle Rear On/Off	Turns OFF automatically after 100pulses.	12-10, 12-11, 12-12, 12-13, 12-15
012-015	Rear Tamper Motor High Rear On/Off	Turns OFF automatically after 100pulses.	12-10, 12-11, 12-12, 12-13, 12-14
012-020	Staple Motor Close On/Off	Stops at Home Position.	12-21
012-021	Stapler Motor Reverse	Turns OFF automatically after 110msec.	12-20
012-030	Eject Motor FORWARD On/Off	Turns OFF automatically after 2000pulses.	12-31, 12-32, 12-33, 12-34, 12-41
012-031	Eject Motor Reverse On/Off	Turns OFF automatically after 2000pulses.	12-30, 12-32, 12-33, 12-34, 12-4

Table 2 Output Component Control Codes

Code	Name	Description	Conflicts
012-032	Eject Clamp Low Down	Turns OFF automatically at 702pulses after the Eject Home Snr detected Home Position.	12-30, 12-31, 12-33, 12-34, 12-41
012-033	Eject Clamp Middle Down	Turns OFF automatically at 365pulses after the Eject Home Snr detected Home Position.	12-30, 12-31, 12-32, 12-34, 12-41
012-034	Eject Clamp UP	Turns OFF automatically at 46pulses after the Eject Home Snr detected Home Position.	12-30, 12-31, 12-32, 12-33, 12-41
012-040	Set Clamp Paddle Solenoid	Turns OFF automatically after 1000msec.	12-41
012-041	Set Clamp Paddle Rev	Turns OFF automatically at Mot: 583pulses and Sol: 200msec.	12-30, 12-31, 12-32, 12-33, 12-34, 12-40
012-050	Stacker Motor UP On/Off	Turns OFF automatically after 500msec.	12-51
012-051	Stacker Motor Down On/Off	[Operation Description]:	12-50
012-060	H-Tra Gate In Solenoid Open	Turns OFF automatically after 200msec.	12-61
012-061	H-Tra Gate In Solenoid Close	Turns OFF automatically after 200msec.	12-60
012-070	Decurler Cam Clutch On	Turns OFF automatically after 1000msec.	12-71
012-071	Decurler Penetration Change	Turns OFF automatically after the Decurler Home Snr detected On. (Stops when the Home Snr detected ON -> OFF or OFF -> ON by turning ON Decurler Cam Clutch 500ms after driving the Main Drive Motor.)	12-1, 12-70
012-080	Stapler Move Motor High Front On/Off	Turns OFF automatically at 250pulses.	12-81, 12-82, 12-83
012-081	Stapler Move Motor Low Font On/Off	Turns OFF automatically at 250pulses.	12-80, 12-82, 12-83
012-082	Stapler Move Motor High Rear On/Off	Turns OFF automatically at 250pulses.	12-80, 12-81, 12-83
012-083	Stapler Move Motor Low Rear On/Off	Turns OFF automatically at 250pulses.	12-80, 12-81, 12-82
012-091	Front Tamper Motor Low Front On/Off	Turns OFF automatically at 100pulses.	12-92, 12-93, 12-94, 12-95, 12-96
012-092	Front Tamper Motor Middle Front On/Off	Turns OFF automatically at 100pulses.	12-91, 12-93, 12-94, 12-95, 12-96

Table 2 Output Component Control Codes

Code	Name	Description	Conflicts
012-093	Front Tamper Motor High Front On/Off	Turns OFF automatically at 100pulses.	12-91, 12-92, 12-94, 12-95, 12-96
012-094	Front Tamper Motor Low Rear On/Off	Turns OFF automatically at 100pulses.	12-91, 12-92, 12-93, 12-95, 12-96
012-095	Front Tamper Motor Middle Rear On/Off	Turns OFF automatically at 100pulses.	12-91, 12-92, 12-93, 12-94, 12-96
012-096	Front Tamper Motor High Rear On/Off	Turns OFF automatically at 100pulses.	12-91, 12-92, 12-93, 12-94, 12-95

dC351 NVM Background Processing

Purpose

Consists of 5 subroutines:

- **Machine Settings** - This routine saves the current machine settings or restores the previously-saved machine settings.
- Manufacturing NVM - This routine automatically loads a region-specific set of values into NVM.
- **Dust Off Reset** - This routine sets all HFSI counters to zero.

NOTE: *The following subroutines are intended for engineering/manufacturing use. They should not be performed as part of normal repair or maintenance unless you are specifically directed.*

- NVM Background Read - This routine polls all NVM locations in the machine, and stores the values in the diagnostic tool database.
- **Save / Restore NVM** - This routine saves current NVM settings or to restore previously saved NVM settings

Procedure

1. Enter the **Diagnostic Mode**. Refer to Entering Diagnostic Mode using the PWS.
2. Select the **Adjustments** tab.
3. Select the **NVM Init, S/R** tab.
4. Select the **NVM Background Processing (dC351)** tab.

Machine Settings

1. Press the **Save Machine Settings** button to record the values of approximately 320 NVM locations containing data unique to a specific machine. The data is saved in on the PWS hard drive. The data will remain available until the PWS is connected to a different machine.

   To make a permanent record of machine settings, perform the following:

   a. Go to dC188. Select **Temporary Call Closeout**, then exit the PWS tool.

   b. When the PWS displays the message **Would you like to copy Machine Data to the a: drive? Yes or No**, select **Yes** and insert a diskette. The PWS will write Machine Data to the diskette and the diagnostic tool will close.

   c. Restart the PWS tool and select **Read from Floppy** on the opening screen. This loads the data from the diskette into the PWS tool database, but does not load data into the machine NVM.
2. To load previously saved machine settings into NVM, press the **Restore Machine Settings** button.

Manufacturing NVM

This routine is intended primarily for initial setup prior to shipment to a customer location, but it can be used to restore machine setting to their as-delivered state. This may be necessary if the NVM was initialized without saving machine settings, or in the case of a 103-208 fault code

1. Select the market region for the installation.
2. Press the **Batch Write NVM** button.

Save/Restore NVM

1. Press the **Background Read** button. This will read all locations in the dC 131 database. This will require approximately 20 minutes to complete.

CAUTION

The NVM data is saved in RAM only. If the PWS Tools program is closed or if the PWs is switched off, the data will be lost.

2. Press the **Save Current NVM Settings** button. This will store the NVM data is the PWS memory.

CAUTION

If the PWS is disconnected from the machine during NVM Restore, ALL NVM data may be lost

3. To load the saved data into the machine NVM, press the **Restore Saved NVM Settings** button. This will require approximately 20 minutes to complete, and must not be interrupted.

dC355 Hard Disk Diagnostic Program

Purpose

NOTE: *For details on dC355 Hard Disk Diagnostic Program, see Adjustments: ADJ 9.8.*

dC371 Configuration Page

Purpose

Allows easy viewing and set-up of machine configuration.

Procedure

1. Enter the **Diagnostic Mode**. Refer to Entering Diagnostic Mode using the PWS.
2. Select **Adjustments** on the Service Entry Screen.
3. Select **NVM Init, S/R** (the default screen).
4. Select **Configuration Page (dC371)**. The Configuration Page Screen is displayed.
5. Make selections on the screen from the following categories:
   a. **Market Place**
      - ï XC (NASG)
      - ï XE (ESG)
      - ï FX
      - ï FX / AP

   b. **Machine Config**
      - ï Digital Copier
      - ï Copier / Printer
      - ï Copier / Printer / Scanner
      - ï Printer with UI

   c. Output Device(s)
      - ï Simple Catch Tray
      - ï Ofssetting Catch Tray
      - ï Finisher

   d. Input Device
      - ï DADF
      - ï Platen Only
6. Select **Save** to save the options or select **Reset** to reset the default settings back to original options prior to entering Configuration Page (dC371).

dC612 Color Test Pattern Print

Purpose

Prints the test patterns in the machine, to help identify Image Quality problems.

Procedure

1. Enter the **Diagnostic Mode**. Refer to Entering Diagnostic Mode using the PWS.
2. Select **Diagnostics** in the Service Entry Screen.
3. Select **Test Pattern (dc612)**.
   a. To print a Test Pattern, select **Image Process System**:
      i. Select the **Pattern Number** from the menu.
      ii. Select the **Paper Tray**.
      iii. Set the **number of prints** to output in the Print Count Box and select **Start**.
   b. To print the Image Output Test Pattern, select **Image Output System**.
      i. Image Output System
      ii. Paper (Simplex/Duplex)
      iii. Paper Tray/Size
      iv. Paper Type
      v. Screen Type
      vi. Color Mode
      vii. Set the number of prints to output and select **Start**.

Test Patterns

CAUTION

The patterns currently displayed do not match the descriptions in the table. The correct pattern number/descriptions are TBD.

For details on the test pattern generation location and output path, see Table 1:

Table 1 Test Patterns

Pattern #	Pattern Name	Overview	Purpose	Location
1	ROS Check	Seal Glass Cleaning Guide: 20% Half Tone Full Band Width KCMRY Fast Scan direction Stripe Pattern	The engine where defect has occurred can be determined as an output sheet contains Seal Glass smearing. -> To determine defect engine	IOT
2	Halftone (IOT)	Seal Glass Cleaning Guide: 20% Half Tone Full Band Width Full Half Tone. Select the density from Cin=0~100.	Defect can be detected/evaluated (streaks, uneven density, banding)	IOT
3	Grid 1dot	(For separating troubles) 512 dot Pitch Grid Pattern with 1 dot width	- Around Alignment and Color Regi - Secondary Transfer part magnification failure	IOT
4	Fast Scan 8 Gradation	(For separating troubles) Fast Scan direction 8 Gradation Pattern	For development. For ASIC debug.	IOT
5	A1 Patch	Forms a bi-axial near the IN and OUT edges in full color. (Chevron Pattern) At normal Regi Control cycle: Approx. half cycle of IBT Belt (2 sheets of A4 continuous) At Diag Regi Control cycle: Approx. 1 cycle of IBT Belt (1: 4 sheets of A4 continuous)	For Color Regi adjustment in Diag DC685-1 (Skew Fine Setup) and DC685-2 (In/Out Setup) during JOB, at beginning of JOB and end of JOB. Also, for Color Regi reading in DC681 and DC684.	Controller
6	A2 Patch	Forms a 1 axial near CNT for approx. 1 cycle (1: 4 sheets of A4 continuous) of IBT Belt in full color. (Chevron Pattern)	For Color Regi adjustment in Diag DC685-3 (Center Setup)	Controller
7	B1 Patch	Forms a bi-axial near the IN and OUT edges for approx. 1 cycle (1: 4 sheets of A4 continuous) in full color. ("<" pattern)	For Color Regi rough adjustment in Diag DC685-1 (Skew Fine Setup) and 685-4 (Skew Rough Setup).	Controller
8	B2 Patch	Forms a 1 axial near CNT for approx. 1 cycle (1: 4 sheets of A4 continuous) of IBT Belt in full color. ("<" pattern)	For Color Regi adjustment in Diag DC685-3 (Center Setup)	Controller
9	C Patch	Forms a three-axle IN/CNT/OUT in approx. 1 cycle (1: 4 sheets of A4 continuous) of IBT Belt in single color C. (Chevron Pattern)	For Diag DC683 (to check Sensor, Cyan and position shift).	Controller
10	Binary/Auto Gradation Correction PG (For Printer) LUT: C-TRA OFF IOT OFF	(For gradation correction) Gradation pattern for gradation correction for printing LUT: C-TRA OFF IOT OFF	To output during Auto Gradation Correction. For checking CTRACS feature. The same pattern as this output pattern is even output in the CTRACS feature (Reads the output pattern by IIT and sets up the color reproducibility) inside the Tools (opened to customer). The test pattern here is able to check the setup effects of the Printer feature.	Controller

Table 1 Test Patterns

Pattern #	Pattern Name	Overview	Purpose	Location
11	Binary/Auto Gradation Correction PG (For Printer) LUT: C-TRA OFF IOT ON	(For gradation correction) Gradation pattern for gradation correction for printing LUT: C-TRA OFF IOT ON	To output during Auto Gradation Correction. For checking CTRACS feature. The same pattern as this output pattern is even output in the CTRACS feature (Reads the output pattern by IIT and sets up the color reproducibility) inside the Tools (opened to customer). The test pattern here is able to check the setup effects of the Printer feature.	Controller
12	Binary/Auto Gradation Correction PG (For Printer) LUT: C-TRA OFF IOT OFF	(For gradation correction) Gradation pattern for gradation correction for printing LUT: C-TRA OFF IOT OFF	To output during Auto Gradation Correction. For checking CTRACS feature. The same pattern as this output pattern is even output in the CTRACS feature (Reads the output pattern by IIT and sets up the color reproducibility) inside the Tools (opened to customer). The test pattern here is able to check the setup effects of the Printer feature.	Controller
13	Binary/Auto Gradation Correction PG (For Printer) LUT: C-TRA ON IOT ON	(For gradation correction) Gradation pattern for gradation correction for printing LUT: C-TRA ON IOT ON	To output during Auto Gradation Correction. For checking CTRACS feature. The same pattern as this output pattern is even output in the CTRACS feature (Reads the output pattern by IIT and sets up the color reproducibility) inside the Tools (opened to customer). The test pattern here is able to check the setup effects of the Printer feature.	Controller
14	Binary/Auto Gradation Correction PG (For Copy) LUT: C-TRA OFF IOT OFF	(For gradation correction) Gradation pattern for gradation correction for copying LUT: C-TRA OFF IOT OFF	To output during Auto Gradation Correction. For checking CTRACS feature. Same as 10. The test pattern here is able to check the setup effects of the Copy feature.	IPS
15	Binary/Auto Gradation Correction PG (For Copy) LUT: C-TRA OFF IOT ON	(For gradation correction) Gradation pattern for gradation correction for copying LUT: C-TRA OFF IOT ON	To output during Auto Gradation Correction. For checking CTRACS feature. Same as 10. The test pattern here is able to check the setup effects of the Copy feature.	IPS
16	Binary/Auto Gradation Correction PG (For Copy) LUT: C-TRA ON IOT OFF	(For gradation correction) Gradation pattern for gradation correction for copying LUT: C-TRA ON IOT OFF	To output during Auto Gradation Correction. For checking CTRACS feature. Same as 10. The test pattern here is able to check the setup effects of the Copy feature.	IPS
17	Binary/Auto Gradation Correction PG (For Copy) LUT: C-TRA ON IOT ON	(For gradation correction) Gradation pattern for gradation correction for copying LUT: C-TRA ON IOT ON	To output during Auto Gradation Correction. For checking CTRACS feature. Same as 10. The test pattern here is able to check the setup effects of the Copy feature.	IPS
18	Binary/Process Control LUT: C-TRA OFF IOT OFF	(Density adjustment, gradation check) Gradation pattern for density adjustment LUT: C-TRA OFF IOT OFF	The Primary color/Secondary color/Tertiary color gradation reproducibility can be checked by crossing over to entire gradation. For checking TRC.	IPS
19	Binary/Process Control LUT: C-TRA OFF IOT ON	(Density adjustment, gradation check) Gradation pattern for density adjustment LUT: C-TRA OFF IOT ON	The Primary color/Secondary color/Tertiary color gradation reproducibility can be checked by crossing over to entire gradation. For checking TRC.	IPS
20	Binary/Process Control LUT: C-TRA ON IOT ON	(Density adjustment, gradation check) Gradation pattern for density adjustment LUT: C-TRA ON IOT OFF	The Primary color/Secondary color/Tertiary color gradation reproducibility can be checked by crossing over to entire gradation. For checking TRC.	IPS
21	Binary/Process Control LUT: C-TRA ON IOT ON	(Density adjustment, gradation check) Gradation pattern for density adjustment LUT: C-TRA ON IOT ON	The Primary color/Secondary color/Tertiary color gradation reproducibility can be checked by crossing over to entire gradation. For checking TRC.	IPS

Table 1 Test Patterns

Pattern #	Pattern Name	Overview	Purpose	Location
22	Binary/Highlight PG LUT: C-TRA OFF IOT OFF	(Highlight gradation check) Gradation pattern for highlight adjustment LUT: C-TRA OFF IOT OFF	In the gradation reproducibility of Primary color/Secondary color/ Tertiary color, the highlight parts easily varied can be checked in details. For checking TRC.	IPS
23	Binary/Highlight PG LUT: C-TRA OFF IOT ON	(Highlight gradation check) Gradation pattern for highlight adjustment LUT: C-TRA OFF IOT ON	In the gradation reproducibility of Primary color/Secondary color/ Tertiary color, the highlight parts easily varied can be checked in details. For checking TRC.	IPS
24	Binary/Highlight PG LUT: C-TRA ON IOT OFF	(Highlight gradation check) Gradation pattern for highlight adjustment LUT: C-TRA ON IOT OFF	In the gradation reproducibility of Primary color/Secondary color/ Tertiary color, the highlight parts easily varied can be checked in details. For checking TRC.	IPS
25	Binary/Highlight PG LUT: C-TRA ON IOT ON	(Highlight gradation check) Gradation pattern for highlight adjustment LUT: C-TRA ON IOT ON	In the gradation reproducibility of Primary color/Secondary color/ Tertiary color, the highlight parts easily varied can be checked in details. For checking TRC.	IPS
26	IIT/FS Incre/Gradation	(For separating troubles) Fast Scan direction gradation YMC process BK pattern	For development. Determine the defect locations when IPS defect and ASIC poor installation etc. has occurred.	IPS
27	IIT/SS Incre/Gradation	(For separating troubles) Slow Scan direction gradation YMC process BK pattern	For development. Determine the defect locations when IPS defect and ASIC poor installation etc. has occurred.	IPS
28	Shading Data Output	(For separating troubles) Shading RAM data output pattern	For development. Determine the defect locations when IPS defect and ASIC poor installation etc. has occurred.	IPS
29	COSAC Count Mode/ YMCK Vertical Stripe	(For separating troubles) 10.84mm width YMCK Vertical Stripe Pattern	For separating troubles. It determines the defective locations when an error image was output. Normal: Pre IPS Asic onwards can be determined as normal.	IPS
30	COSAC Count Mode/8 Gradation Patch	(For separating troubles) 21.67x10.84mm 8 Gradation Patch Pattern	For development. Determine the defect locations when IPS defect and ASIC poor installation etc. has occurred.	IPS
31	COSAC Solid PG ALL AAh	(For development) Entire Solid Data Pattern.	For development. Determine the defect locations when IPS defect and ASIC poor installation etc. has occurred.	IPS
32	AES L* Pass Check	(For separating troubles) 32.51mm Grey + 10.84mm White, Vertical Stripe Pattern.	For development. Determine the defect locations when IPS defect and ASIC poor installation etc. has occurred.	IPS
33	VIPER Grid/4C	(For development) 10.84mm Grid Pattern.	For development. Determine the defect locations when IPS defect and ASIC poor installation etc. has occurred.	IPS
34	VIPER Grid/BW	(For development) 10.84mm Grid Pattern.	For development. Determine the defect locations when IPS defect and ASIC poor installation etc. has occurred.	IPS
35	FSRE Count Mode/ Grid	(For separating troubles) 5.42mm YMCK Grid Pattern.	For separating troubles. It determines the defective locations when an error image was output. Normal: Pre IPS Asic onwards can be determined as normal.	IPS
36	FSRE Count Mode/ Slanting Grid	(For separating troubles)5.42mm YMCK Slanting Grid Pattern.	For development. Determine the defect locations when IPS defect and ASIC poor installation etc. has occurred.	IPS

Table 1 Test Patterns

Pattern #	Pattern Name	Overview	Purpose	Location
37	VIPER Fixed Pattern Output/BW Binary	(For separating troubles) Connection between IPS-Controller CHK Entire 2dot width Horizontal Ladder Pattern.	For development. Determine the defect locations when IPS defect and ASIC poor installation etc. has occurred.	IPS
38	VIPER Fixed Pattern Output/4C Binary	(For separating troubles) Entire 2dot width Horizontal Ladder Pattern.	For development. Determine the defect locations when IPS defect and ASIC poor installation etc. has occurred.	IPS
39	TAG Fixed Binary COPY-1	(For development) TAG='0' Fixed COPY.	For development. Determine the defect locations when IPS defect and ASIC poor installation etc. has occurred.	IPS
40	TAG Fixed Binary COPY-2	(For development) TAG='1' Fixed COPY.	For development. Determine the defect locations when IPS defect and ASIC poor installation etc. has occurred.	IPS

dC685 Color Registration

Purpose

NOTE: *For details on dC685 Color Registration, see Adjustments Section 4: ADJ 9.6.*

dC921 TC/ATC Sensor Setup

Purpose

NOTE: *For details on dC921 TC/ATC Sensor Setup, see Adjustments Section 4: ADJ 9.2.*

dC922 TRC Control

Purpose

NOTE: *For details on dC922 TRC Control, see Adjustments Section 4: ADH 9.3 dC922 TRC Control Adjustment.*

dC924 TRC Adjust

Purpose

To manually fine adjust the low/medium/high densities (TRC) for each color.

NOTE: *For details on TRC Adjust, see Adjustments Section 4: ADJ 9.5.*

dC929 Max Setup

Purpose

NOTE: *For the execution sequence of the Max Setup Functions, see Adjustments Section 4: ADJ 9.1.*

dC934 ADC/AGC Setup

Purpose

Automatically adjusts the ADC Sensor Gain.

NOTE: *For details on dC934 ADC/AGC Setup, see Adjustment Section 4: ADJ 9.4.*

dC945 IIT Calibration

Purpose

Functional details:

- Computes and sets the White Reference Correction Coefficient.
- Corrects the IIT Sensitivity Dispersion.

NOTE: *For details on dC945 IIT Calibration, see Adjustments Section 4: ADJ 9.7.*

dC956 Belt Edge Learn Mode

Purpose

NOTE: *For details on dC956 Belt Edge Learn Mode, see Adjustments Section 4: ADJ 9.6.*

GP 1 Network Printing Simulation

Description

This procedure details a method of troubleshooting network printing problems.

Procedure

[name?? - NextGen PWS Tool release???] includes an LPR Spooler application [Xerox TCP/IP Port Monitor - name???]. Install/Launch this application [instructions??]

Creating a printer on the PWS

1. Click the Windows **Start** button
2. Select **Settings**, then **Printers**
3. Select **Add Printer**
4. On the **Add Printer Wizard** screen, click **Next**
5. Click Have Disk. Print Drivers can be found on:
   - ï [Customer CD - name?? -path??]
   - ï [S/W upgrade CD - name?? - path??]
   - ï latest driver can also be downloaded from the Xerox website
6. Insert the CD and locate the driver [filename??]. Click OK
7. When the **Add Printer Wizard** asks the port you want to use, select LPT1: then click **Next**
8. On the next screen, enter a name for the printer. Do not set this printer as the default.
9. Select **No** when asked if you want to print a test page, then click **Finish**.

Configuring the printer port

1. In the **Printers** folder, right-click on the new printer and select **Properties**.
2. Click **Add Port**
3. In the Add Port screen, click **Other**, then select **Xerox TCP/IP Port** and click **OK**.
4. Enter the name and IP address for the [DC1632/2240] then click **Next**.
5. Select **Custom**, then **Setup**
6. Setup<<<???? then **Next**.
7. Click **Finish** to close the Wizard and return to the **Properties** screen.
8. Click Apply to save the port configuration.

Configuring the print driver

1. In the **Properties** screen, select the **Printer** tab. Select the appropriate configuration items.
2. In the **Properties** screen, select the **Configuration** tab.
3. Select **Custom Paper Size**. In the **Units** box, select **Inches**.
4. Click OK to return to the **Properties** screen. Select the **Paper/Output** tab. Set the [???] to 8.5 x 11.î
5. Click Apply to save the print driver configuration.
6. A simple test of the printing function can be performed by selecting the **General** tab then clicking **Print Test Page**.

GP 4 Intermittent Problem RAP

The purpose of this RAP is to provide guidance for resolving an intermittent problem. This is not an exact procedure, but a set of recommended actions that use the resources of the service manual to help locate the cause of an intermittent problem.

Procedure

1. Check the service log. Recent service actions may provide information about the problem. For example, a component that was recently replaced to correct another problem may be the cause of the new intermittent problem.
2. Run the machine in a mode that vigorously exercises the function that is suspected. The machine may fail more frequently or may fail completely under these conditions. Look for signs of failure or abnormal operation.

   An intermittent problem can usually be associated with a RAP, since when it does fail, it results in a fault code, a jam code, or some other observable symptom.
3. Using the RAP that is associated with the symptom of the intermittent problem, examine all of the components that are referenced in the RAP. Look for:
   - ï contamination, such as a feed roller that has a build up of dirt or toner
   - ï wear, such as gear teeth that are rounded or have excessive backlash
   - ï HFSI, even if they are not near or have not exceeded the SPEC LIFE or COPY COUNT value
   - ï wires chafing against components of the machine, especially against moving components
   - ï misaligned, misadjusted, or incorrectly installed components
   - ï slow or slipping clutches; slow or binding solenoids
   - ï damaged components
   - ï excessive heat, or symptoms of excessive heat, such as the discoloration of a component
   - ï loose cables or wires
4. Using the RAP that is associated with the symptom of the intermittent problem, perform all of the adjustments for the components or functions that are referenced in the RAP. Check to ensure that the adjustment can be made and that there is an adequate range of adjustment, and that it can be set to or near the nominal value. Any abnormality that is observed may be an indication of the cause of the problem. For example, a component can be adjusted to the nominal value, but it is at the limit of the adjustment range. This is not normal and may be an indication of the cause of the problem.
5. Operate all of the components in the appropriate RAP that is associated with the symptom of the intermittent problem with DC330 Component Control. Observe the components for any symptoms of abnormal operation, such as a hesitation, or an unusual sound.
6. Check that the AC and DC power are within specification.
7. Get technical advice or assistance when it is appropriate. This will depend upon the situation and the established local procedures.
8. Examine the components that are not in the RAP, but are associated with the function that is failing. Refer to the BSDs. Look for:
   - ï contamination, such as a feed roller that has a build up of dirt or toner
   - ï wear, such as gear teeth that are rounded or have excessive backlash
   - ï HFSI, even if they are not near or have not exceeded the SPEC LIFE or COPY COUNT value

- ï wires chafing against components of the machine, especially against moving components
- ï misaligned, misadjusted, or incorrectly installed components
- ï slow or slipping clutches; slow or binding solenoids
- ï damaged components
- ï excessive heat, or symptoms of excessive heat, such as the discoloration of a component
- ï loose cables or wires

9. Perform the adjustments for the components that are not in the RAP, but are associated with the function that is failing. Refer to the BSDs. Check to ensure that the adjustment CAN BE MADE and that there is an adequate range of adjustment, and that it can be set to or near the nominal value. Any abnormality that is observed may be an indication of the cause of the problem. For example, a component can be adjusted to the nominal value, but it is at the limit of the adjustment range. This is not normal and may be an indication of the cause of the problem
10. Operate all of the components that are not in the RAP, but are associated with the function that is failing with DC330 Component Control Refer to the BSDs. Observe the components for any symptoms of abnormal operation, such as a hesitation, or an unusual sound.
11. Replace any components or consumables that are known to be a frequent cause of the problem. When doing this, consider the cost and time required. If the suspected item is inexpensive, can be installed quickly, and has a high probability of resolving the problem, then it is reasonable to replace it.
12. Leave an accurate and detailed record of your actions in the service log. Describe what you have observed, what actions you took, and the recommended next steps.

GP 10 Replacing Billing PWBs

Description

This procedure is used to maintain serial number and billing data integrity when Billing PWBs must be replaced.

Procedure

CAUTION

*To maintain the integrity of the serial number and billing data never replace all three PWBs at once. If any of the following billing data PWBs needs replacing, replace them **ONE PWB AT A TIME**, according to this procedure:*

- ï *ESS PWB (PL 9.1).*
- ï *MCU PWB (PL 9.1).*
- ï *ESS NVM PWB (PL 9.1).*

1. Connect the PWS. Select dC132 in the DC Quick Pull-down menu.
2. Compare the serial numbers displayed for the three PWBs with the serial number on the data plate. Note any that do not agree.

***NOTE:** If any of the following conditions exist, escalate the call to Field engineering or the NTC:*

- ï *The displayed serial numbers match each other but do not match the data plate.*
- ï *Two or more numbers do not agree with the data plate and the third number*
- ï *The displayed numbers are all different.*

3. If one serial number does not match the others, the **Set Serial Number** button will become active. Click on the button. A series of pop-up windows will open. Follow the instructions on the screen to synchronize the serial numbers.

CAUTION

*To maintain the integrity of the serial number and billing data never replace all three PWBs at once. Replacing all three PWBs at once will cause unrecoverable NVM corruption. If a PWB needs replacing, only replace **ONE AT A TIME**. If the problem is not resolved, reinstall the original PWB and renter the serial number before attempting to replace a different PWB.*

4. If any PWB will not synchronize, replace that PWB and re-synchronize.

GP 12 Printing Reports

Description

This procedure describes how to print a Configuration Report. Printing Configuration Reports can help you troubleshoot and configure the Printer.

Procedure

1. Press the **Machine Status** button on the Control Panel.
2. Select the **Billing Meter/Print Report** tab on the display.
3. Press the **Print Report/List** button.
4. Select the **Copy Mode Settings** button.
5. Select the **Settings List** button.
6. Press the **Start** button.

The following reports can be printed from the UI Diagnostic Mode:

1. Debug Log
2. HFSI Report
3. Jam Report
4. Shutdown Report
5. Fail Report

Space Requirements

Space requirements are shown in Figure 1 (without Finisher) and Figure 2 (with Finisher).

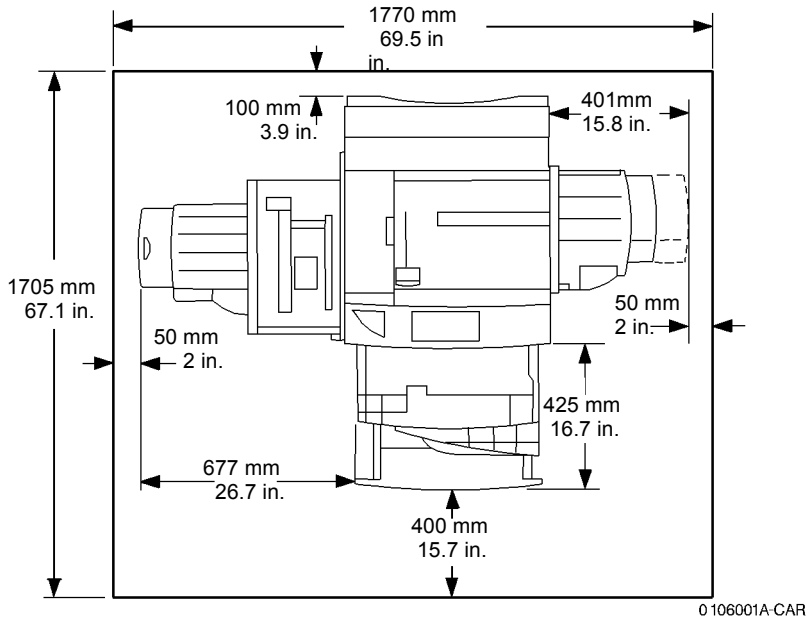


Figure 1 Space Requirement w/out Finisher

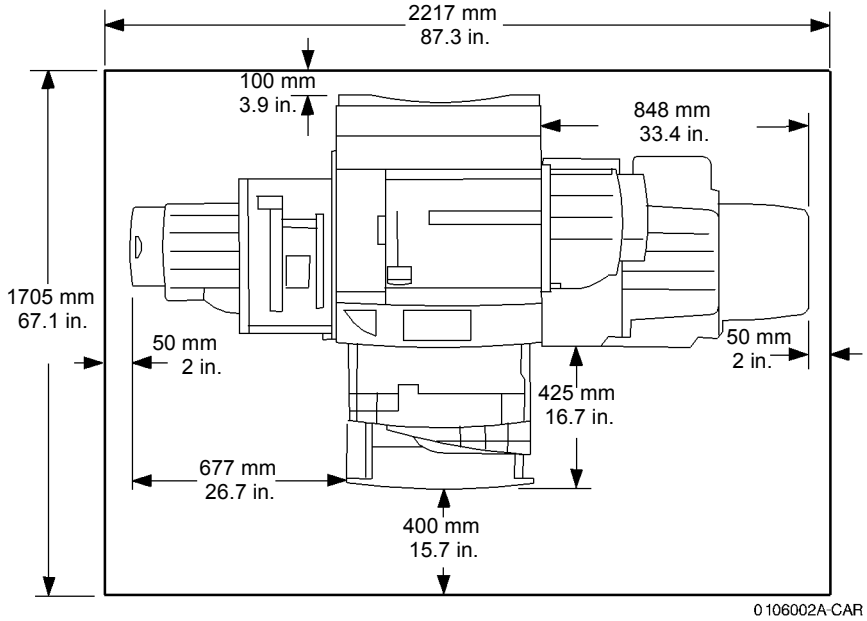


Figure 2 Space Requirement w/Finisher

Paper Specifications

Table 1 Paper Specifications

Specification	Paper Trays 1 - 4	Tray 5 (MSI)
Paper Sizes	Trays 1 & 2 ï Min: A5 SEF (148 x 210 mm) ï Max: A3/11 x 17 in. Trays 3 & 4 ï A4, 8.5 x 11 in., and B5 ï LEF only	Paper ï Min: 100 x 140 mm (post-card) ï Max: 305 x 483 mm/12 x 19 in. Envelopes ï Min: 98 x 190 mm (Monarch 7 3/4 size)
Paper Weights	Optimum: 24 lb/90 gsm Range: 64 - 105 gsm	Range: 55 - 220 gsm
Capacities 20 lb (80 gsm)	3040 sheets total: ï Tray 1: 520 sheets ï Tray 2: 520 sheets ï Tray 3: 867 sheets ï Tray 4: 1133 sheets	100 sheets

Product Specs.

Table 1 Product Specifications TBD - sample table

Document Size: Document Glass	5.5î x 8.5î (A5) LEF to 11î x 17î SEF (A3)
R/E Capability: Metric	Variable Percentages: 50% to 200% Preset Percentages: 50%, 70%, 100%, 141%, & 200%
R/E Capability: Inches	Variable Percentages: 50% to 200% Preset Percentages: 50%, 78%, 100%, 129%, & 200%
Copy/Print Rate	TBD copies / minute 8.5î x 11î (A4) 17 copies / minute 8.5î x 11î (A4)
Output Tray Capacity	100 sheets maximum
First Copy Output Time	8.5î x 11î (A4): 6 seconds, Tray 1
Warm Up Time	less than 45 seconds
Machine Weight	80 lb. / 36.3 kg Stand: 46 lbs. / 20.9 kg Tray 2: 14 lbs. / 6.4 kg

Power Requirements

- Single phase (two wires plus ground)
- 110 - 127 VAC/60 Hz (99 - 135 VAC, 55 to 62 Hz)
- 220 - 240 VAC/50 Hz (198 to 255 VAC, 48.5 to 51.5 Hz)

Power Consumption (5 minute average)

- Machine Running: TBD watts (maximum)
- Standby: TBD watts
- Power Saver: TBD watts
- Low Power: TBD watts

Environmental Data and Requirements

Ambient Temperature and Humidity requirement:

- Minimum: 10∫ C/50∫F at 15% humidity
- Maximum: 35∫ C/99∫F at 85% humidity

Heat Output (5 minute average)

- Machine Running Maximum: 1537 BTU/Hr.
- Standby Ready: 341 BTU/Hr.
- Power Saver: 198 BTU/Hr.
- Low Power: 150 BTU/Hr.

Common Tools

Table 1 Common Tools

Description	Part Number
Screw Driver (-) 3 x 50	600T40205
Screw Driver (+) 6 x 100	600T1989
Screw Driver (+) NO.1	499T356
Stubby Driver (+) (-)	600T40210
Screw Driver (=) 100MM	499T355
Spanner and Wrench 5.5 x 5.5	600T40501
Spanner and Wrench 7x 7	600T40502
Hex Key Set	600T02002
Box Driver 5.5MM	600T1988
Side Cutting Nipper	600T40903
Round Nose Pliers	600T40901
Digital Multi-meter Set	600T2020
Interlock Cheater	600T91616
Silver Scale 150MM	600T41503
CE Tool Case	600T1901
Magnetic Screw Pick-up Tool	600T41911
Scriber Tool	600T41913
Magnetic pickup	600T41911
Loupe	600T42008
Flash Light	600T1824
Brush	600T41901
Tester Lead Wire (red)	600T 9583
Tester Lead Wire (black)	600T2030

Product Tools and Test Patterns

Table 1 Tools and Test Patterns

Description	Part Number
Color Test Pattern	82E13030
Geometric Test Pattern	82E8220
HVPS test probe (1/10X)	600T1653
HVPS test probe adapter	600T1996
Copy Paper Carrying Case	600T1999
Copy Paper Zip Lock Bag	600T2000
Xerox Color Xpressions Plus 24# 11×17 in,	
Colotech Plus - 90 gsm - A3	
Service and Machine NVM Log	700P97436
Serial Cable	600T2058
Parallel Printer Cable	117E19340
PWS power cord adapter	600T2018
L Probe	600T02177

Cleaning Materials

Table 1 Cleaning Materials

Description	NASG Part Number	ESG Part Number
Cleaning fluid (8oz., Formula A)	43P48	8R90034
Film remover (8 oz.)	43P45	8R90176
Lens/mirror cleaner	43P81	8R90178
Lint-free (white) cleaning cloth	19P3025	19P3025
Lint-free Optics cleaning cloth	499T90417	499T90417
Cleaning towels	35P3191	600S4372
Drop cloth	35P1737	35P1737
Cotton Swab	35P2162	35P2162

Machine Consumables

Table 1 Consumables

Name	Part Number
Drum Cartridge	13R586
Cyan Toner Cartridge	6R1123
Magenta Toner Cartridge	6R1124
Yellow Toner Cartridge	6R1125
Black Toner Cartridge	6R1122
Waste Toner Bottle	8R12903
Staple Cartridge	8R12915

Glossary of Terms

Table 1

Term	Description
A3	Paper size 297 millimeters (11.69 inches) x 420 millimeters (16.54 inches).
A4	Paper size 210 millimeters (8.27 inches) x 297 millimeters (11.69 inches).
AC	Alternating Current is type of current available at power source for machine.
ACT	Advanced Customer Training: A course that teaches customers to perform some of service that is normally performed by Xerox Service Representative.
A/D	Analog to Digital refers to conversion of signal
ADJ	Adjustment Procedure
Bit	Binary digit, either 1 or 0, representing an electrical state.
CCD	Charge Coupled Device (Photoelectric Converter)
CD	Circuit Diagram
Chip	An Integrated Circuit (IC) (see Firmware)
CRU	Customer Replaceable Unit
DC	Direct Current is type of power for machine components. Machine converts AC power from power source to DC power.
DMM	Digital Multimeter is generic name for meter that measures voltage, current, or electrical resistance.
EME	Electromagnetic Emissions are emitted from machine during normal operation and power of these emissions are reduced by machine design features.
EPS	External Print Server
ESD	Electrostatic Discharge. A transfer of charge between bodies at different electrostatic potential.
ESU	Electrostatic Set Up
FIRM-WARE	A Chip loaded with software identified by date or revision.
GFD	Ground Fault Device
GND	Ground
HFSI	High Frequency Service Item
HVPS	High Voltage Power Supply
Hz	Hertz (Cycles per second)
IQ	Image Quality
KC	1000 copies
LCD	Liquid Crystal Display
LE	Lead Edge of copy or print paper, with reference to definition of term TE
LED	Light Emitting Diode
LEF	Long Edge Feed
LVPS	Low Voltage Power Supply
MF	Multi-Function
MN	Multinational
NIC	Network Interface Card
NVM	Non Volatile Memory

Table 1

Term	Description
OEM	Original equipment manufacturer
OGM	On-going Maintenance
PC	Personal Computer
PCM	Power and Control Module also referred to as Electronic Control System Module
PL	Parts List
PO	Part of (Assembly Name)
PWB	Printed Wiring Board
PWS	Portable Workstation for Service
PJ	Plug Jack (electrical connections)
RAM	Random Access Memory
RAP	Repair Analysis Procedure for diagnosis of machine status codes and abnormal conditions
R/E	Reduction/Enlargement refers to features selection or components that enable reduction or enlargement
REP	Repair Procedure for disassembly and reassembly of component on machine
RIS	Raster Input Scanner
ROM	Read Only Memory
ROS	Raster Output Scanner - Device that transfers digitally processed image, using laser light, to photoreceptor.
SAD	Solid Area Density
SCP	Service Call Procedure
SEF	Short Edge Feed
Self-test	An automatic process that is used to check Control Logic circuitry. Any fault that is detected during self-test is displayed by fault code or by LEDs on PWB.
SIMM	Single Inline Memory Module used to increase printing capacity
Simplex	Single sided copies
TE	Trail Edge of copy or print paper, with reference to definition of term LE
UM	Unscheduled Maintenance
UI	User Interface
USB	Universal Serial Bus
W/	With - indicates machine condition where specified condition is present
W/O	Without - indicates machine condition where specified condition is not present
XBRA	Xerox Brazil
XLA	Xerox Latin America
XMEX	Xerox Mexico

7 Wiring Data

Plug/Jack Locations

Plug/Jack Locations 7-3

Wirenets

Wirenets 7-43

BSDs

Chain 01 Main Power 7-75
Chain 02 Mode selection 7-85
Chain 03 Printer Connection 7-87
Chain 04 Main Drive 7-97
Chain 05 Document Handler 7-99
Chain 06 7-106
Chain 07 7-124
Chain 08 Paper Registration 7-135
Chain 09 Xerographic 7-141
Chain 10 Fuser and Output 7-178
Chain 12Finisher 7-186
Chain 16 ESS 7-199

Plug/Jack Locations

How to use the Plug/Jack Location List

The Plug/Jack Location List below is provided to locate plugs, jacks, or other terminating devices. Locate the desired termination device in the first column (Plug/Jack Number) of the list. Refer to the second column (Figure Number) to determine the figure number of the electrical termination device. Refer to the (Item Number) column to determine the item number in the adjacent Figure Number column. The fourth column supplies the title of the Figure.

Table 1 Plug / Jack Location List

Plug / Jack Number	Figure Number	Item Number	Figure Title
2	Figure 12	8	HVPS T5, T7, +24V LVPS
15A	Figure 16	19	I/F PWB, MAIN Motor, LVPS T2
16	Figure 16	16	I/F PWB, MAIN Motor, LVPS T2
42	Figure 18	10	AC Drive PWB, Noise Filter PWB, Delay PWB
43	Figure 18	11	AC Drive PWB, Noise Filter PWB, Delay PWB
46	Figure 18	1	AC Drive PWB, Noise Filter PWB, Delay PWB
J70	Figure 18	12	AC Drive PWB, Noise Filter PWB, Delay PWB
72	Figure 12	9	HVPS T5, T7, +24V LVPS
102	Figure 3	1	Inverter Transport Assembly
103	Figure 8	4	MSI Unit
104	Figure 7	3	Exit Transport Assembly
106	Figure 19	3	Left Lower Assembly, Tray 1 Feeder
108	Figure 19	2	Left Lower Assembly, Tray 1 Feeder
109	Figure 5	4	Registration Transport Assembly
111	Figure 3	14	Inverter Transport Assembly
113	Figure 3	8	Inverter Transport Assembly
115	Figure 17	10	Developer Motor, Tray 1 Size Switch
116	Figure 2	3	MOB Sensor Assembly
117	Figure 2	1	MOB Sensor Assembly
119	Figure 11	5	IBT Belt Assembly
121	Figure 11	4	IBT Belt Assembly
122	Figure 11	2	IBT Belt Assembly
125	Figure 19	7	Left Lower Assembly, Tray 1 Feeder
129	Figure 1	10	Xerographic
130	Figure 1	9	Xerographic
131	Figure 1	7	Xerographic
132	Figure 1	5	Xerographic

Table 1 Plug / Jack Location List

Plug / Jack Number	Figure Number	Item Number	Figure Title
133	Figure 1	16	Xerographic
135	Figure 4	5	Duplex Transport Assembly
136	Figure 4	6	Duplex Transport Assembly
140	Figure 3	12	Inverter Transport Assembly
144	Figure 2	2	MOB Sensor Assembly
150	Figure 19	4	Left Lower Assembly, Tray 1 Feeder
151	Figure 1	12	Xerographic
152	Figure 1	15	Xerographic
153	Figure 1	19	Xerographic
154	Figure 1	17	Xerographic
155	Figure 5	3	Registration Transport Assembly
163	Figure 9	11	Toner Dispense Motor, Main Switch
165	Figure 9	8	Toner Dispense Motor, Main Switch
171	Figure 1	4	Xerographic
172	Figure 7	2	Exit Transport Assembly
173	Figure 13	9	Outlet Panel Assembly, Fuser PWB
203	Figure 16	10	I/F PWB, MAIN Motor, LVPS T2
205	Figure 19	1	Left Lower Assembly, Tray 1 Feeder
207	Figure 1	11	Xerographic
208	Figure 16	24	I/F PWB, MAIN Motor, LVPS T2
210	Figure 16	22	I/F PWB, MAIN Motor, LVPS T2
211	Figure 6	8	Fuser Assembly
212	Figure 6	11	Fuser Assembly
214	Figure 12	11	HVPS T5, T7, +24V LVPS
215	Figure 3	5	Inverter Transport Assembly
216	Figure 3	15	Inverter Transport Assembly
217	Figure 3	4	Inverter Transport Assembly
218	Figure 3	2	Inverter Transport Assembly
219	Figure 3	3	Inverter Transport Assembly
220	Figure 7	4	Exit Transport Assembly
221	Figure 17	7	Developer Motor, Tray 1 Size Switch
222	Figure 7	1	Exit Transport Assembly
223	Figure 1	8	Xerographic
224	Figure 1	6	Xerographic
225	Figure 1	3	Xerographic
226	Figure 1	20	Xerographic
227	Figure 9	17	Toner Dispense Motor, Main Switch
228	Figure 9	12	Toner Dispense Motor, Main Switch
229	Figure 9	10	Toner Dispense Motor, Main Switch

Table 1 Plug / Jack Location List

Plug / Jack Number	Figure Number	Item Number	Figure Title
230	Figure 9	9	Toner Dispense Motor, Main Switch
231	Figure 5	5	Registration Transport Assembly
232	Figure 17	9	Developer Motor, Tray 1 Size Switch
233	Figure 1	2	Xerographic
234	Figure 17	1	Developer Motor, Tray 1 Size Switch
235	Figure 17	2	Developer Motor, Tray 1 Size Switch
237	Figure 11	3	IBT Belt Assembly
240	Figure 5	2	Registration Transport Assembly
251	Figure 3	6	Inverter Transport Assembly
255	Figure 2	4	MOB Sensor Assembly
260	Figure 6	5	Fuser Assembly
261	Figure 6	6	Fuser Assembly
262	Figure 6	3	Fuser Assembly
263	Figure 6	4	Fuser Assembly
264	Figure 6	9	Fuser Assembly
265	Figure 8	2	TRAY 5
288	Figure 9	18	Toner Dispense Motor, Main Switch
300	Figure 14	5	ESS assembly
310	Figure 14	18	ESS assembly
311	Figure 14	6	ESS assembly
J332	Figure 14	1	ESS assembly
333	Figure 14	3	ESS assembly
J335	Figure 14	19	ESS assembly
336	Figure 14	12	ESS assembly
337	Figure 14	8	ESS assembly
338	Figure 14	20	ESS assembly
J340	Figure 14	15	ESS assembly
J341	Figure 14	16	ESS assembly
J342	Figure 14	17	ESS assembly
J343	Figure 14	18	ESS assembly
344	Figure 14	14	ESS assembly
P347	Figure 14	11	ESS assembly
400	Figure 15	8	MCU-MF PWB
401	Figure 15	11	MCU-MF PWB
402	Figure 15	12	MCU-MF PWB
403	Figure 15	2	MCU-MF PWB
404	Figure 15	4	MCU-MF PWB
405	Figure 15	5	MCU-MF PWB
406	Figure 15	6	MCU-MF PWB

Table 1 Plug / Jack Location List

Plug / Jack Number	Figure Number	Item Number	Figure Title
407	Figure 15	3	MCU-MF PWB
J410	Figure 15	10	MCU-MF PWB
P410	Figure 16	4	I/F PWB, MAIN Motor, LVPS T2
J460	Figure 14	7	ESS assembly
P460	Figure 15	1	MCU-MF PWB
J496	Figure 15	9	MCU-MF PWB
498	Figure 15	7	MCU-MF PWB
501	Figure 12	19	HVPS T5, T7, +24V LVPS
502	Figure 12	6	HVPS T5, T7, +24V LVPS
505	Figure 12	7	HVPS T5, T7, +24V LVPS
510	Figure 16	23	I/F PWB, MAIN Motor, LVPS T2
510B	Figure 16	18	I/F PWB, MAIN Motor, LVPS T2
511	Figure 16	15	I/F PWB, MAIN Motor, LVPS T2
514	Figure 10	3	ROS Assembly
515	Figure 10	2	ROS Assembly
516	Figure 10	7	ROS Assembly
517	Figure 10	8	ROS Assembly
518	Figure 10	9	ROS Assembly
526	Figure 10	5	ROS Assembly
527	Figure 10	1	ROS Assembly
528	Figure 10	6	ROS Assembly
529	Figure 10	4	ROS Assembly
530	Figure 16	13	I/F PWB, MAIN Motor, LVPS T2
531	Figure 16	7	I/F PWB, MAIN Motor, LVPS T2
532	Figure 16	14	I/F PWB, MAIN Motor, LVPS T2
533	Figure 16	1	I/F PWB, MAIN Motor, LVPS T2
534	Figure 16	9	I/F PWB, MAIN Motor, LVPS T2
535	Figure 16	20	I/F PWB, MAIN Motor, LVPS T2
536	Figure 16	8	I/F PWB, MAIN Motor, LVPS T2
538	Figure 4	1	Duplex Transport Assembly
539	Figure 4	3	Duplex Transport Assembly
540	Figure 4	4	Duplex Transport Assembly
541	Figure 23	14	TT Module (rear)
546	Figure 23	1	TT Module (rear)
547	Figure 23	4	TT Module (rear)
548	Figure 23	15	TT Module (rear)
549	Figure 23	13	TT Module (rear)
550	Figure 16	3	I/F PWB, MAIN Motor, LVPS T2
550	Figure 26	5	DADF (2 of 2)

Table 1 Plug / Jack Location List

Plug / Jack Number	Figure Number	Item Number	Figure Title
551	Figure 16	25	I/F PWB, MAIN Motor, LVPS T2
551	Figure 26	4	DADF (2 of 2)
552	Figure 16	26	I/F PWB, MAIN Motor, LVPS T2
552	Figure 23	6	TT Module (rear)
553	Figure 16	17	I/F PWB, MAIN Motor, LVPS T2
553	Figure 23	10	TT Module (rear)
554	Figure 23	11	TT Module (rear)
555	Figure 23	5	TT Module (rear)
557	Figure 23	2	TT Module (rear)
561	Figure 23	12	TT Module (rear)
564	Figure 23	3	TT Module (rear)
568	Figure 16	2	I/F PWB, MAIN Motor, LVPS T2
569	Figure 16	27	I/F PWB, MAIN Motor, LVPS T2
570	Figure 12	4	HVPS T5, T7, +24V LVPS
571	Figure 12	17	HVPS T5, T7, +24V LVPS
572	Figure 12	3	HVPS T5, T7, +24V LVPS
573	Figure 12	1	HVPS T5, T7, +24V LVPS
574	Figure 12	18	HVPS T5, T7, +24V LVPS
575	Figure 16	12	I/F PWB, MAIN Motor, LVPS T2
576	Figure 16	11	I/F PWB, MAIN Motor, LVPS T2
580	Figure 12	14	HVPS T5, T7, +24V LVPS
580	Figure 25	8	DADF (1 of 2)
581	Figure 12	2	HVPS T5, T7, +24V LVPS
581	Figure 25	9	DADF (1 of 2)
582	Figure 25	6	DADF (1 of 2)
583	Figure 25	5	DADF (1 of 2)
585	Figure 25	4	DADF (1 of 2)
586	Figure 25	11	DADF (1 of 2)
587	Figure 25	1	DADF (1 of 2)
588	Figure 26	6	DADF (2 of 2)
589	Figure 26	2	DADF (2 of 2)
590	Figure 18	5	AC Drive PWB, Noise Filter PWB, Delay PWB
590	Figure 26	7	DADF (2 of 2)
591	Figure 25	2	DADF (1 of 2)
592	Figure 18	6	AC Drive PWB, Noise Filter PWB, Delay PWB
592	Figure 26	1	DADF (2 of 2)

Table 1 Plug / Jack Location List

Plug / Jack Number	Figure Number	Item Number	Figure Title
593	Figure 18	14	AC Drive PWB, Noise Filter PWB, Delay PWB
594	Figure 26	9	DADF (2 of 2)
595	Figure 26	10	DADF (2 of 2)
596	Figure 26	13	DADF (2 of 2)
597	Figure 26	8	DADF (2 of 2)
598	Figure 26	11	DADF (2 of 2)
599	Figure 26	3	DADF (2 of 2)
J600	Figure 5	1	Registration Transport Assembly
P600	Figure 6	10	Fuser Assembly
600	Figure 26	12	DADF (2 of 2)
602	Figure 1	24	Xerographic
605	Figure 11	1	IBT Belt Assembly
608	Figure 1	25	Xerographic
J610	Figure 8	1	MSI Unit
P610	Figure 17	3	Developer Motor, Tray 1 Size Switch
611	Figure 7	5	Exit Transport Assembly
J612	Figure 3	9	Inverter Transport Assembly
P612	Figure 17	3	Developer Motor, Tray 1 Size Switch
J613	Figure 3	10	Inverter Transport Assembly
P613	Figure 17	5	Developer Motor, Tray 1 Size Switch
614	Figure 1	18	Xerographic
617	Figure 19	6	Left Lower Assembly, Tray 1 Feeder
619	Figure 1	1	Xerographic
620	Figure 5	6	Registration Transport Assembly
622	Figure 1	22	Xerographic
623	Figure 19	5	Left Lower Assembly, Tray 1 Feeder
624	Figure 1	21	Xerographic
P626	Figure 3	13	Inverter Transport Assembly
J626	Figure 4	2	Duplex Transport Assembly
631	Figure 1	23	Xerographic
J633	Figure 3	3	Inverter Transport Assembly
P633	Figure 3	7	Inverter Transport Assembly
639	Figure 16	5	I/F PWB, MAIN Motor, LVPS T2
J640	Figure 3	11	Inverter Transport Assembly
P640	Figure 17	6	Developer Motor, Tray 1 Size Switch
641	Figure 16	6	I/F PWB, MAIN Motor, LVPS T2
646	Figure 17	8	Developer Motor, Tray 1 Size Switch
668	Figure 12	15	HVPS T5, T7, +24V LVPS

Table 1 Plug / Jack Location List

Plug / Jack Number	Figure Number	Item Number	Figure Title
669	Figure 12	16	HVPS T5, T7, +24V LVPS
670	Figure 20	9	TT Module (Tray 2,3 feeder)
672	Figure 20	7	TT Module (Tray 2,3 feeder)
674	Figure 23	9	TT Module (rear)
700	Figure 28	5	IIT (rear)
702	Figure 28	3	IIT (rear)
705	Figure 28	4	IIT (rear)
J711	Figure 27	8	IIT (front)
P711	Figure 24	10	Control Panel
J712	Figure 27	7	IIT (front)
P712	Figure 24	9	Control Panel
713	Figure 24	5	Control Panel
714	Figure 24	4	Control Panel
715	Figure 24	11	Control Panel
720	Figure 27	3	IIT (front)
721	Figure 27	9	IIT (front)
722	Figure 27	5	IIT (front)
724	Figure 27	2	IIT (front)
725	Figure 27	10	IIT (front)
726	Figure 27	1	IIT (front)
727	Figure 28	9	IIT (rear)
734	Figure 28	7	IIT (rear)
735	Figure 28	6	IIT (rear)
736	Figure 28	8	IIT (rear)
737	Figure 27	4	IIT (front)
738	Figure 28	10	IIT (rear)
739	Figure 28	2	IIT (rear)
741	Figure 27	6	IIT (front)
742	Figure 27	12	IIT (front)
746	Figure 27	11	IIT (front)
747	Figure 27	4	IIT (front)
J750	Figure 28	1	IIT (Rear)
P750	Figure 25	10	DADF (1 0f 2)
765	Figure 25	7	DADF (1 0f 2)
769	Figure 25	3	DADF (1 0f 2)
J800	Figure 31	8	Finisher (rear) (1 0f 2)
P800	Figure 16	21	I/F PWB, MAIN Motor, LVPS T2
801	Figure 12	5	HVPS T5, T7, +24V LVPS
814	Figure 20	5	TT Module (Tray 2,3 feeder)

Table 1 Plug / Jack Location List

Plug / Jack Number	Figure Number	Item Number	Figure Title
815	Figure 20	4	TT Module (Tray 2,3 feeder)
816	Figure 22	5	TT Module (Tray 2,3,4, Paper Size Switch)
818	Figure 20	5	TT Module (Tray 2,3 feeder)
819	Figure 20	4	TT Module (Tray 2,3 feeder)
820	Figure 22	3	TT Module (Tray 2,3,4, Paper Size Switch)
821	Figure 20	6	TT Module (Tray 2,3 feeder)
822	Figure 21	1	TT Module (Tray 2,3 feeder)
823	Figure 21	2	TT Module (Tray 2,3 feeder)
824	Figure 22	3	TT Module (Tray 2,3,4, Paper Size Switch)
825	Figure 21	3	TT Module (Tray 2,3 feeder)
826	Figure 23	7	TT Module (rear)
827	Figure 20	3	TT Module (Tray 2,3 feeder)
828	Figure 20	3	TT Module (Tray 2,3 feeder)
829	Figure 21	4	TT Module (Tray 2,3 feeder)
841	Figure 20	8	TT Module (Tray 2,3 feeder)
842	Figure 23	8	TT Module (rear)
843	Figure 32	9	Finisher PWB
844	Figure 32	8	Finisher PWB
845	Figure 32	5	Finisher PWB
846	Figure 32	6	Finisher PWB
847	Figure 32	7	Finisher PWB
848	Figure 32	3	Finisher PWB
849	Figure 32	4	Finisher PWB
850	Figure 32	12	Finisher PWB
851	Figure 32	10	Finisher PWB
852	Figure 32	11	Finisher PWB
853	Figure 29	4	H-Transport Assembly
854	Figure 29	2	H-Transport Assembly
855	Figure 29	1	H-Transport Assembly
856	Figure 29	8	H-Transport Assembly
858	Figure 29	5	H-Transport Assembly
859	Figure 29	6	H-Transport Assembly
860	Figure 29	3	H-Transport Assembly
861	Figure 29	7	H-Transport Assembly
862	Figure 30	7	Tamper Unit, Staple Unit
863	Figure 30	11	Tamper Unit, Staple Unit

Table 1 Plug / Jack Location List

Plug / Jack Number	Figure Number	Item Number	Figure Title
864	Figure 30	12	Tamper Unit, Staple Unit
865	Figure 30	14	Tamper Unit, Staple Unit
866	Figure 31	9	Finisher (rear) (1 0f 2)
867	Figure 31	2	Finisher (rear) (1 0f 2)
868	Figure 31	1	Finisher (rear) (1 0f 2)
869	Figure 31	12	Finisher (rear) (1 0f 2)
870	Figure 30	13	Tamper Unit, Staple Unit
871	Figure 30	16	Tamper Unit, Staple Unit
873	Figure 31	10	Finisher (rear) (1 0f 2)
874	Figure 30	1	Tamper Unit, Staple Unit
875	Figure 30	3	Tamper Unit, Staple Unit
876	Figure 30	2	Tamper Unit, Staple Unit
877	Figure 30	5	Tamper Unit, Staple Unit
878	Figure 30	4	Tamper Unit, Staple Unit
879	Figure 31	7	Finisher (rear) (1 0f 2)
880	Figure 31	5	Finisher (rear) (1 0f 2)
881	Figure 31	6	Finisher (rear) (1 0f 2)
882	Figure 31	11	Finisher (rear) (1 0f 2)
883	Figure 31	3	Finisher (rear) (1 0f 2)
884	Figure 31	4	Finisher (rear) (1 0f 2)
885	Figure 30	10	Tamper Unit, Staple Unit
886	Figure 30	8	Tamper Unit, Staple Unit
887	Figure 30	9	Tamper Unit, Staple Unit
888	Figure 30	15	Tamper Unit, Staple Unit
889	Figure 32	2	Finisher PWB
890	Figure 30	6	Tamper Unit, Staple Unit
891	Figure 30	17	Tamper Unit, Staple Unit
892	Figure 32	1	Finisher PWB
J903	Figure 12	13	HVPS T5, T7, +24V LVPS
J925	Figure 12	12	HVPS T5, T7, +24V LVPS
J4401	Figure 14	11	ESS assembly
J4500	Figure 14	9	ESS assembly
4510	Figure 14	10	ESS assembly
CN1	Figure 24	8	Control Panel
CN2	Figure 24	7	Control Panel
CN5	Figure 24	6	Control Panel
CN9	Figure 24	1	Control Panel
CN10	Figure 24	13	Control Panel
CN11	Figure 24	2	Control Panel

Table 1 Plug / Jack Location List

Plug / Jack Number	Figure Number	Item Number	Figure Title
CN12	Figure 24	3	Control Panel
CN13	Figure 24	14	Control Panel
FS37	Figure 6	2	Fuser Assembly
FS38	Figure 6	1	Fuser Assembly
FS39	Figure 18	3	AC Drive PWB, Noise Filter PWB, Delay PWB
FS40	Figure 18	2	AC Drive PWB, Noise Filter PWB, Delay PWB
FS41	Figure 18	4	AC Drive PWB, Noise Filter PWB, Delay PWB
FS45	Figure 18	9	AC Drive PWB, Noise Filter PWB, Delay PWB
FS47	Figure 18	7	AC Drive PWB, Noise Filter PWB, Delay PWB
FS48	Figure 18	8	AC Drive PWB, Noise Filter PWB, Delay PWB
FS51	Figure 12	10	HVPS T5, T7, +24V LVPS
FS56	Figure 9	14	Toner Dispense Motor (Y,M,C,K), Main Switch
FS57	Figure 9	13	Toner Dispense Motor (Y,M,C,K), Main Switch
FS61	Figure 18	16	AC Drive PWB, Noise Filter PWB, Delay PWB
FS62	Figure 18	15	AC Drive PWB, Noise Filter PWB, Delay PWB
FS68	Figure 9	15	Toner Dispense Motor (Y,M,C,K), Main Switch
FS69	Figure 9	16	Toner Dispense Motor (Y,M,C,K), Main Switch
FS76	Figure 18	13	AC Drive PWB, Noise Filter PWB, Delay PWB
FS77	Figure 18	17	AC Drive PWB, Noise Filter PWB, Delay PWB
FS78	Figure 13	4	Outlet Panel Assembly, Fuser PWB
FS79	Figure 13	3	Outlet Panel Assembly, Fuser PWB
FS80	Figure 13	8	Outlet Panel Assembly, Fuser PWB
FS81	Figure 13	5	Outlet Panel Assembly, Fuser PWB
FS82	Figure 13	7	Outlet Panel Assembly, Fuser PWB
FS83	Figure 13	6	Outlet Panel Assembly, Fuser PWB
FS90	Figure 18	18	AC Drive PWB, Noise Filter PWB, Delay PWB

Table 1 Plug / Jack Location List

Plug / Jack Number	Figure Number	Item Number	Figure Title
FS134	Figure 1	13	Xerographic
FS135	Figure 1	14	Xerographic
FS150	Figure 13	2	Outlet Panel Assembly, Fuser PWB
FS151	Figure 13	1	Outlet Panel Assembly, Fuser PWB
FS180	Figure 9	19	Toner Dispense Motor (Y,M,C,K), Main Switch
FS181	Figure 9	1	Toner Dispense Motor (Y,M,C,K), Main Switch
FS182	Figure 9	2	Toner Dispense Motor (Y,M,C,K), Main Switch
FS183	Figure 9	3	Toner Dispense Motor (Y,M,C,K), Main Switch
FS184	Figure 9	4	Toner Dispense Motor (Y,M,C,K), Main Switch
FS185	Figure 9	5	Toner Dispense Motor (Y,M,C,K), Main Switch
FS186	Figure 9	6	Toner Dispense Motor (Y,M,C,K), Main Switch
FS187	Figure 9	7	Toner Dispense Motor (Y,M,C,K), Main Switch
FS812	Figure 20	1	TT Module (Tray 2,3 feeder)
FS813	Figure 20	2	TT Module (Tray 2,3 feeder)
LCD CN1	Figure 24	12	Control Panel

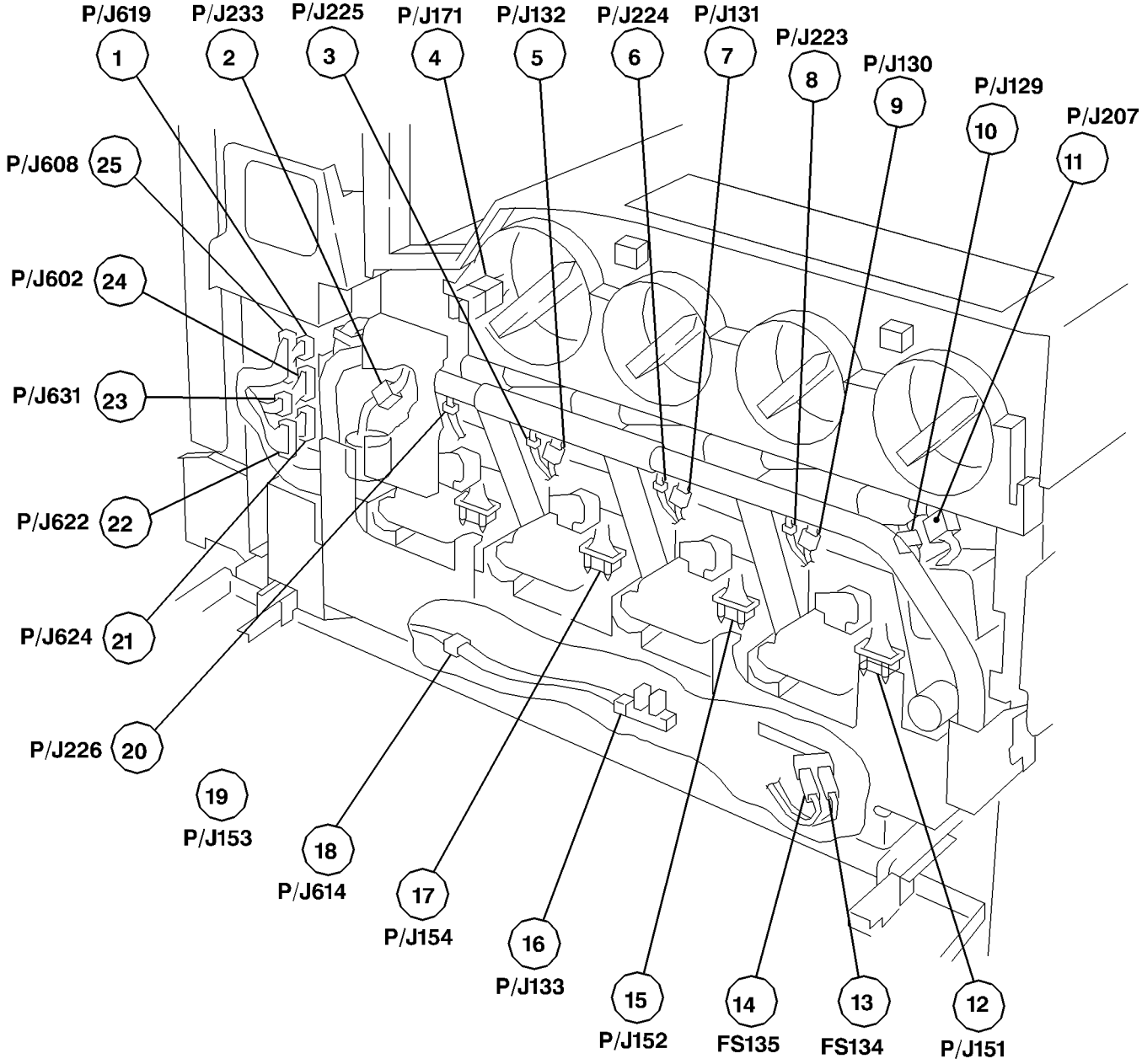

P/J619
1
P/J233
2
P/J225
3
P/J171
4
P/J132
5
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P/J614
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P/J154
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P/J133
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P/J152
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FS135
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FS134
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P/J151
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Figure 1 Xerographics

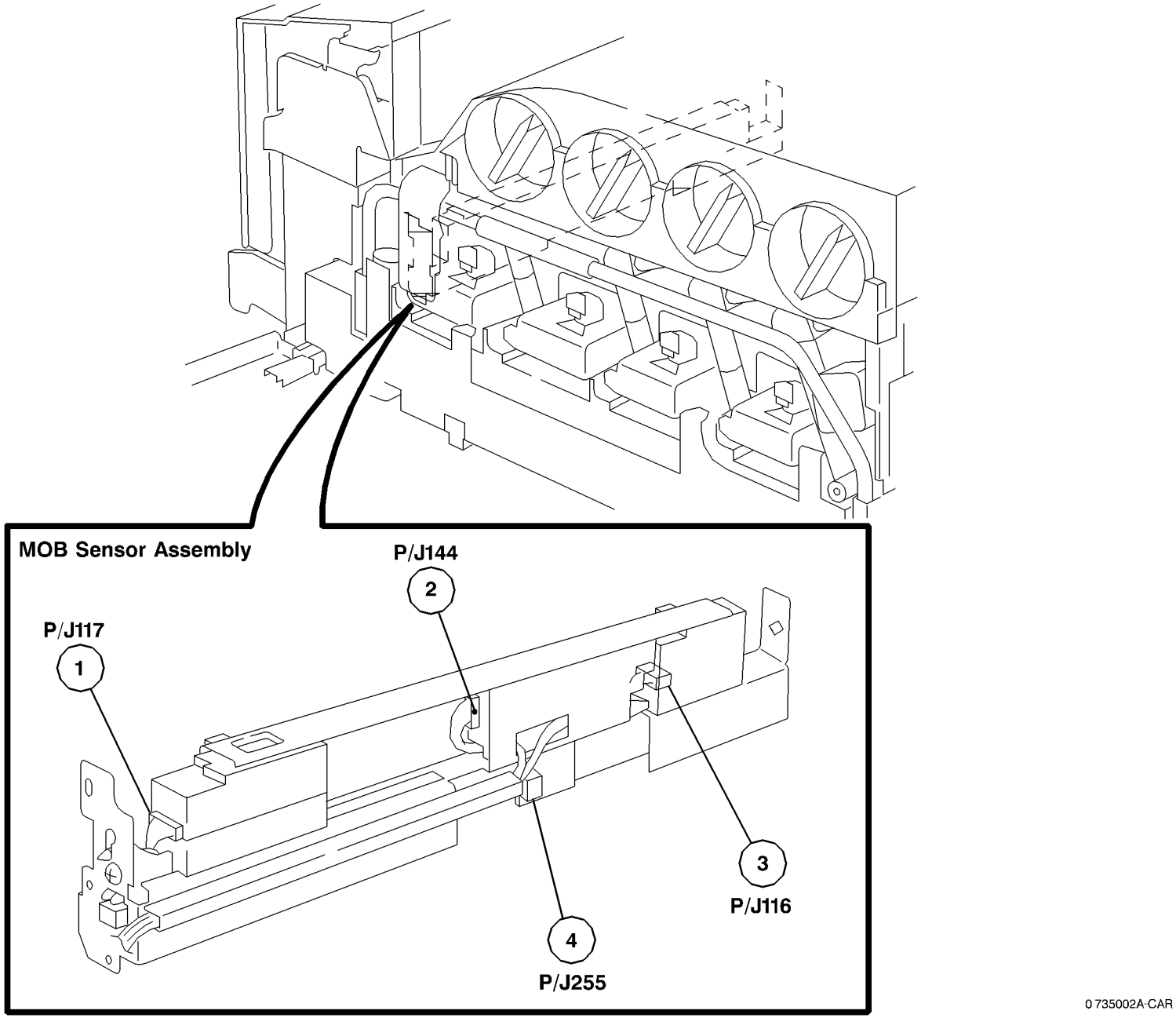


Figure 2 MOB Sensor Assembly

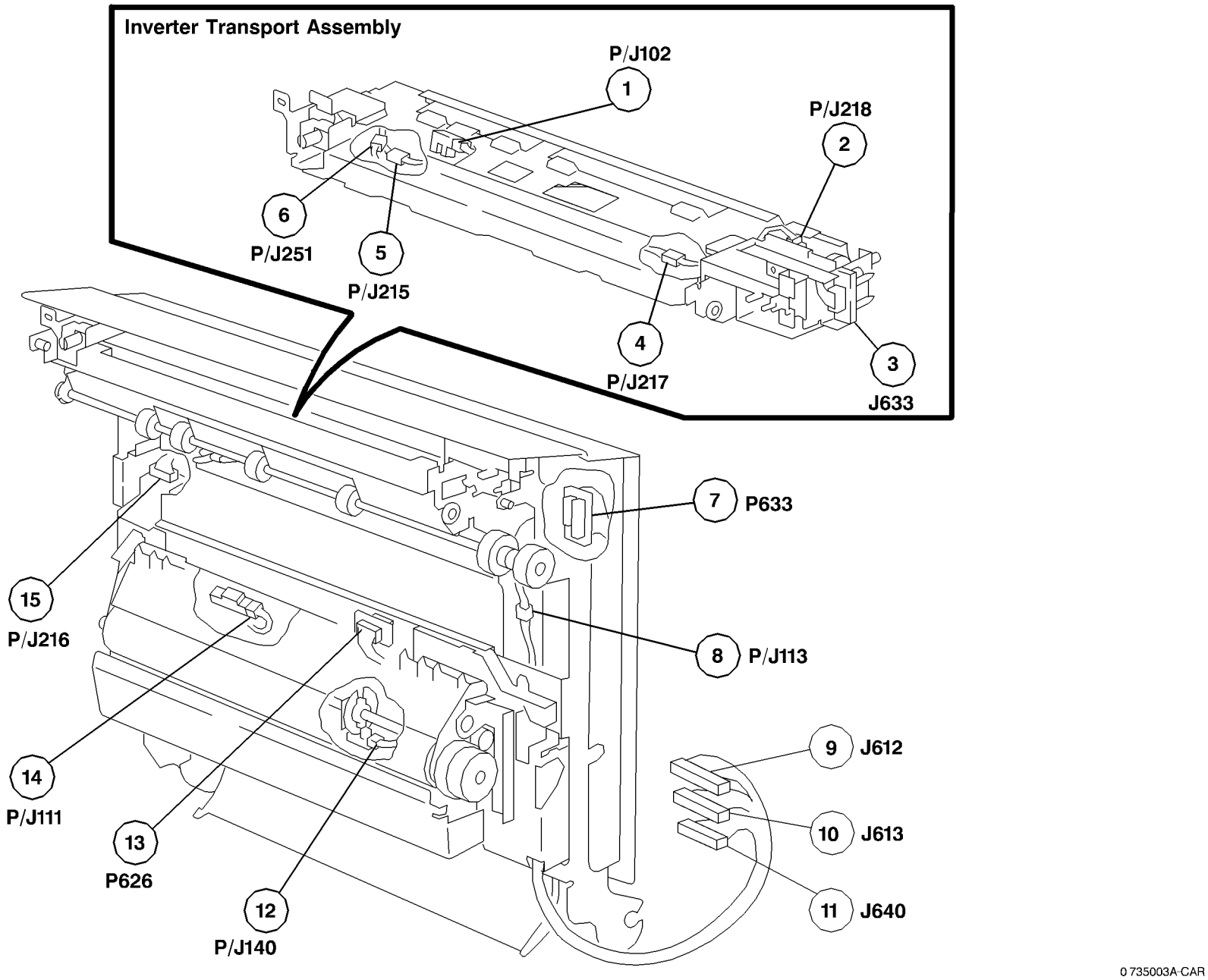


Figure 3 Inverter transport Assembly

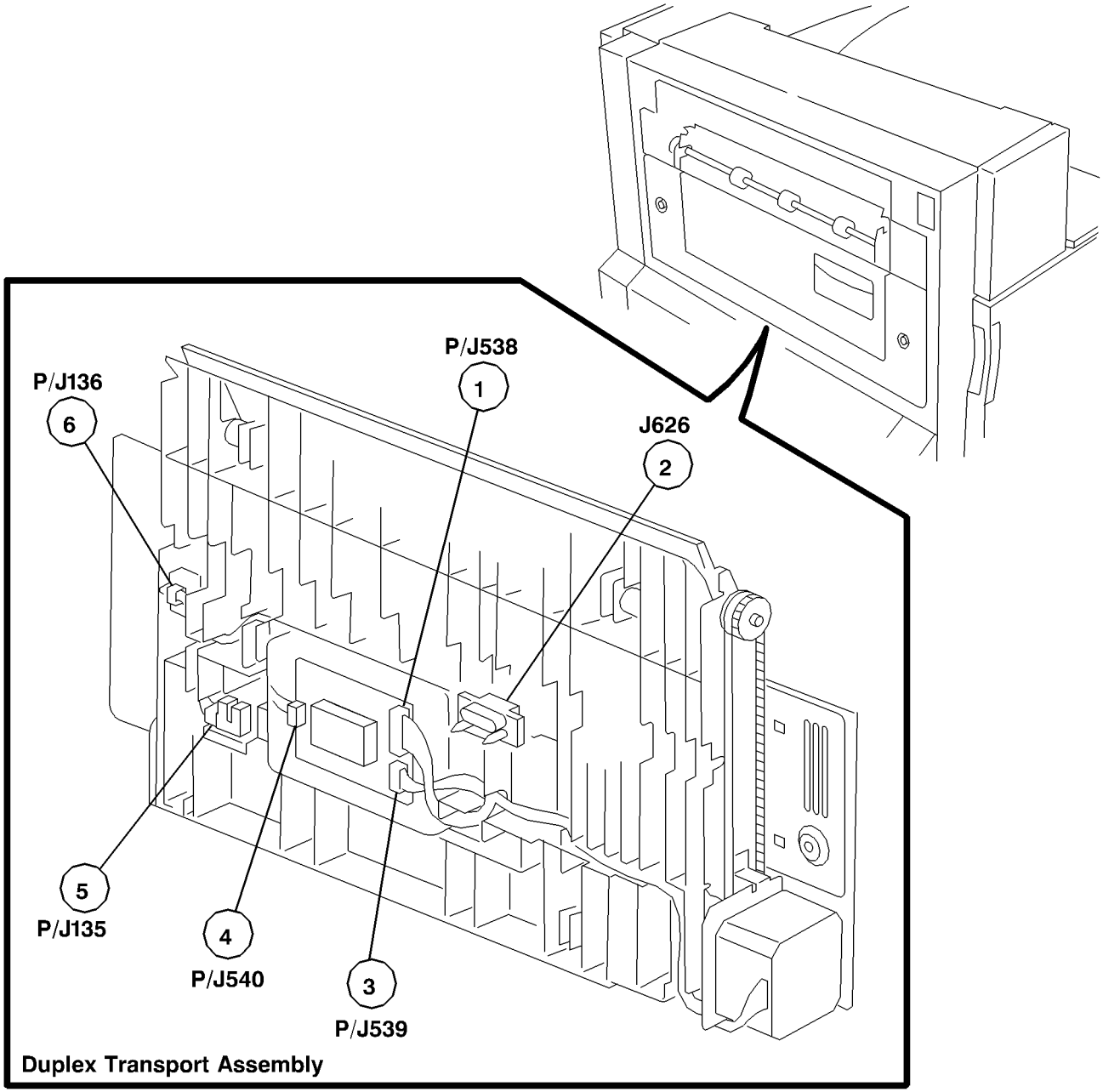


Figure 4 Duplex Transport Assembly

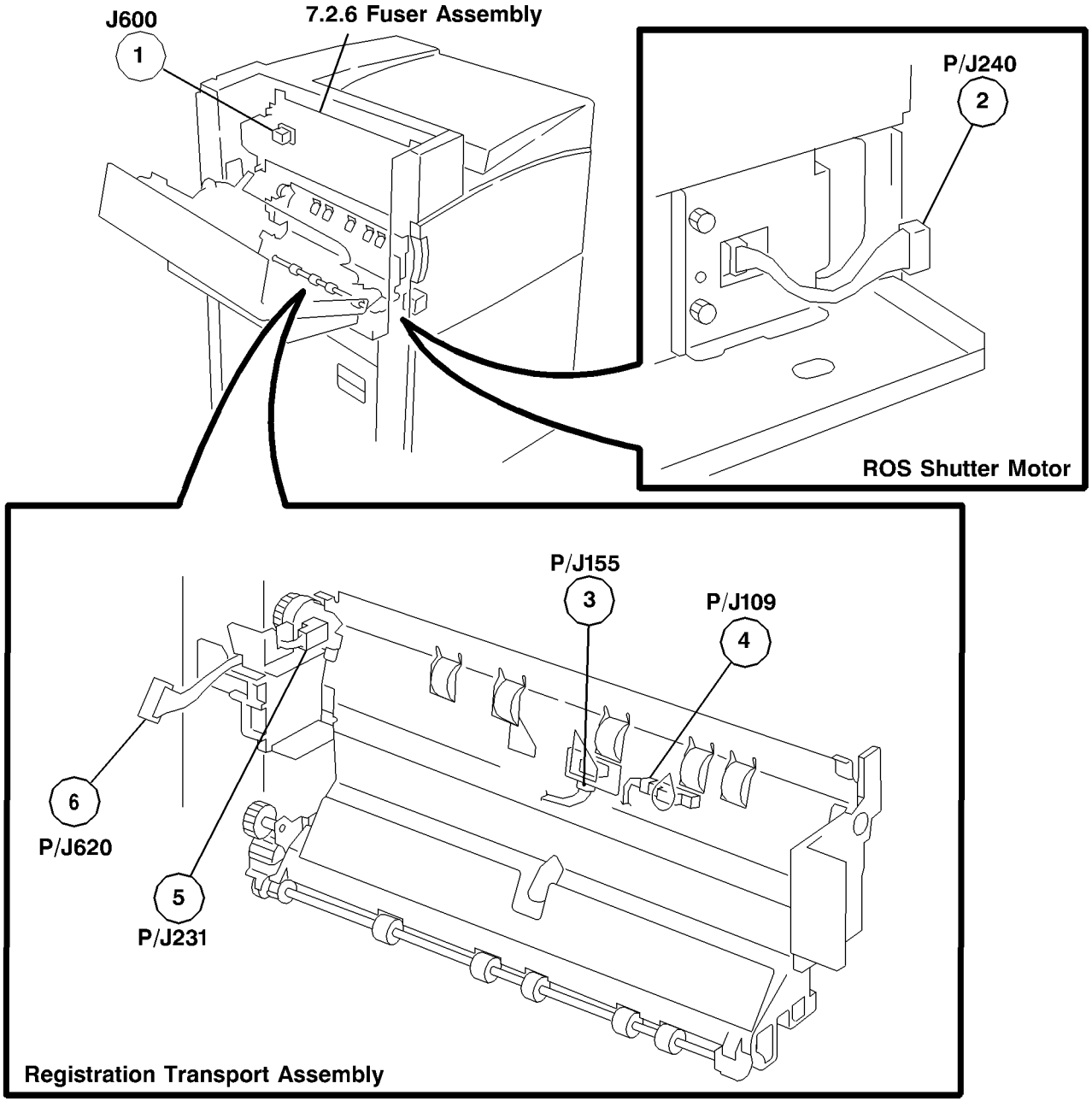


Figure 5 Registration Transport Assembly

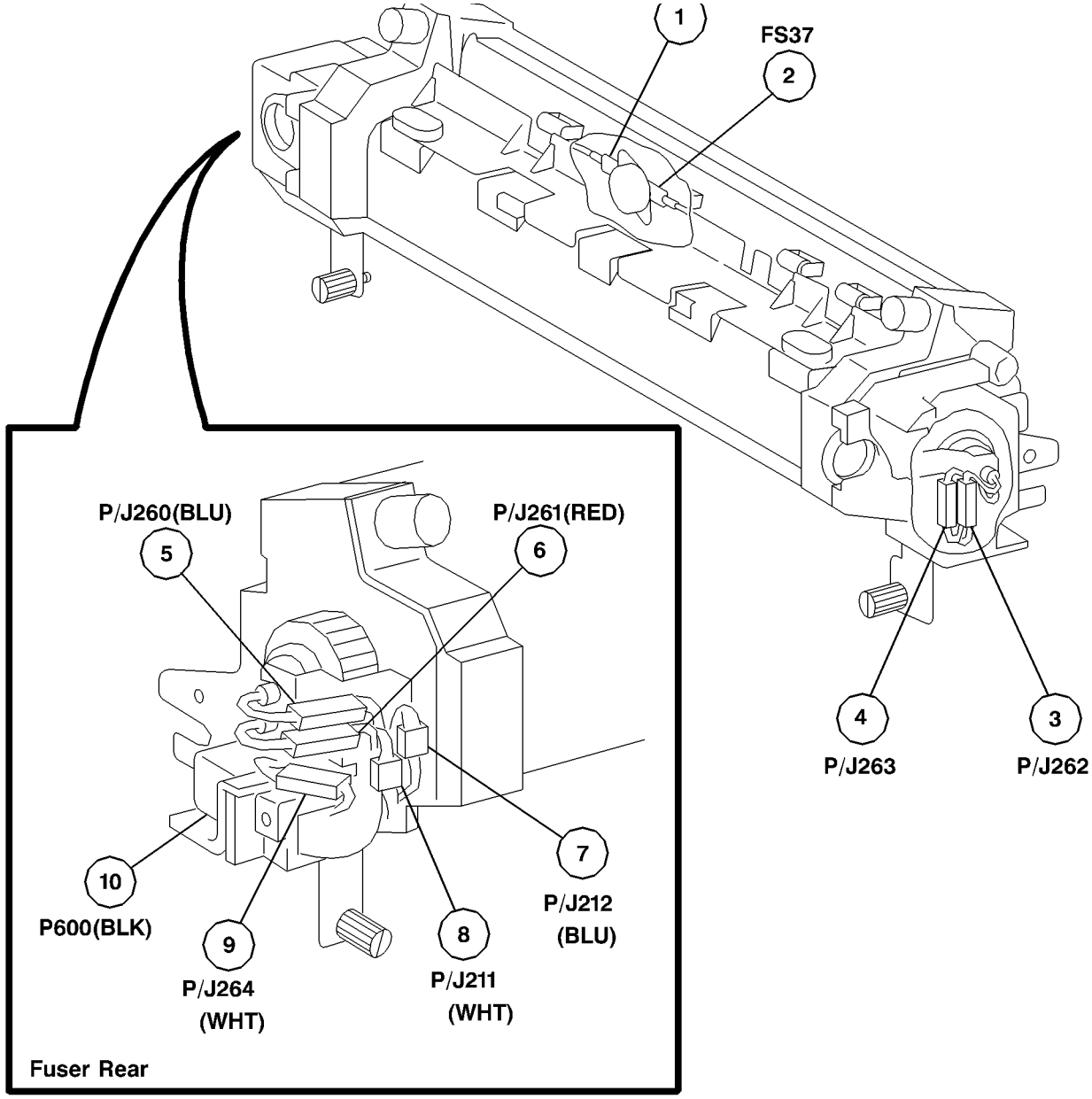


Figure 6 Fuser Assembly

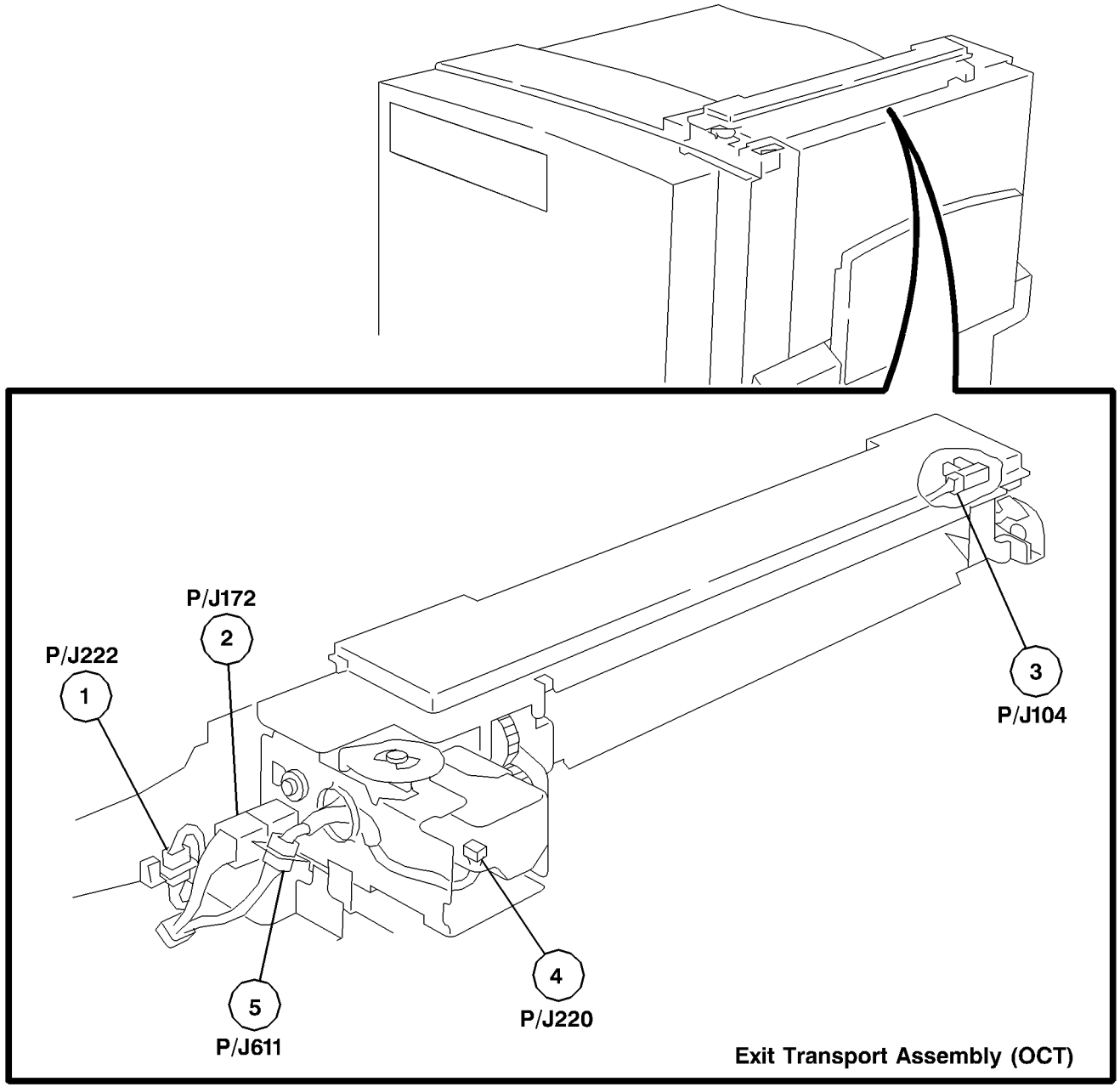


Figure 7 Exit Transport Assembly (OCT)

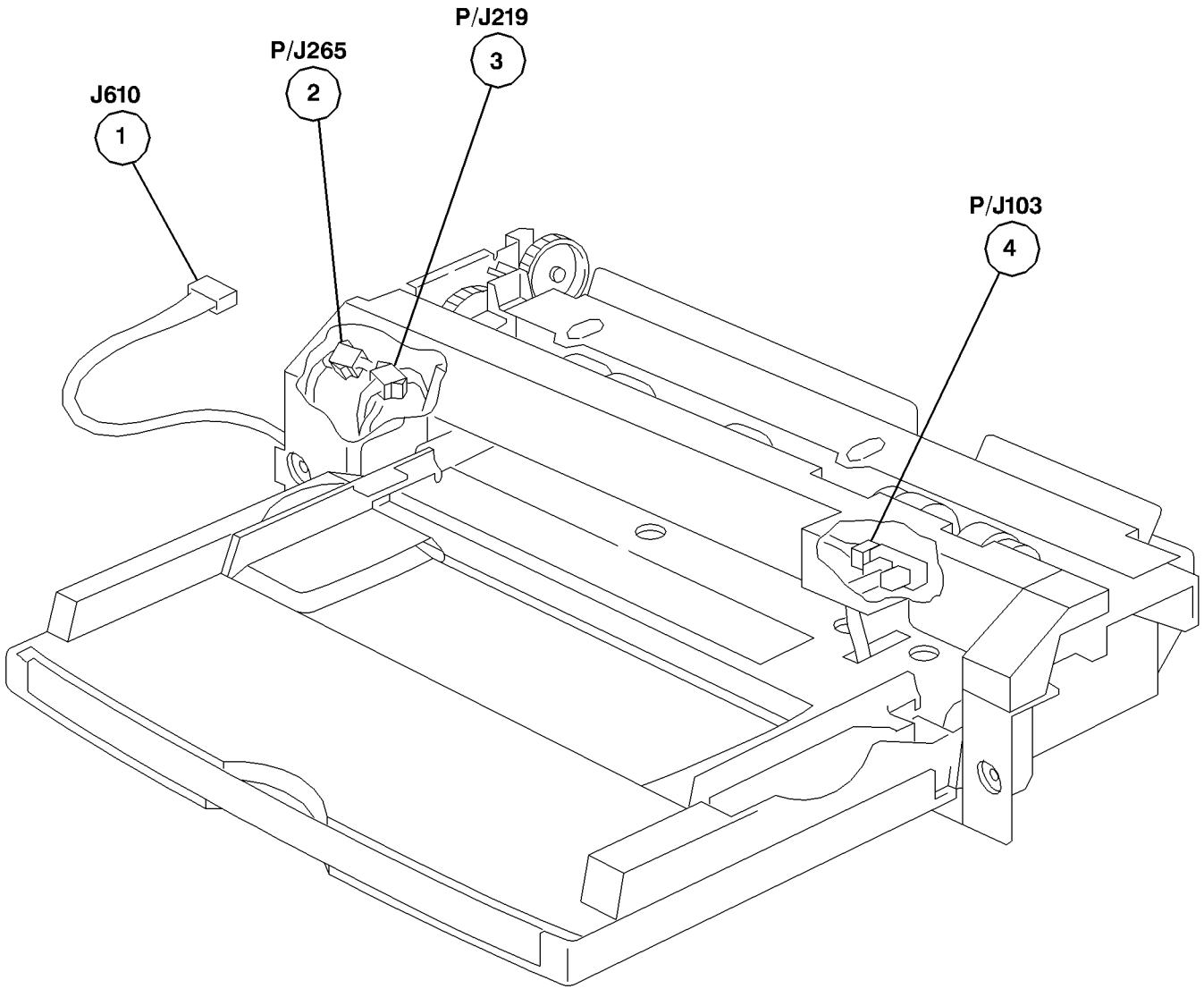


Figure 8 TRAY 5

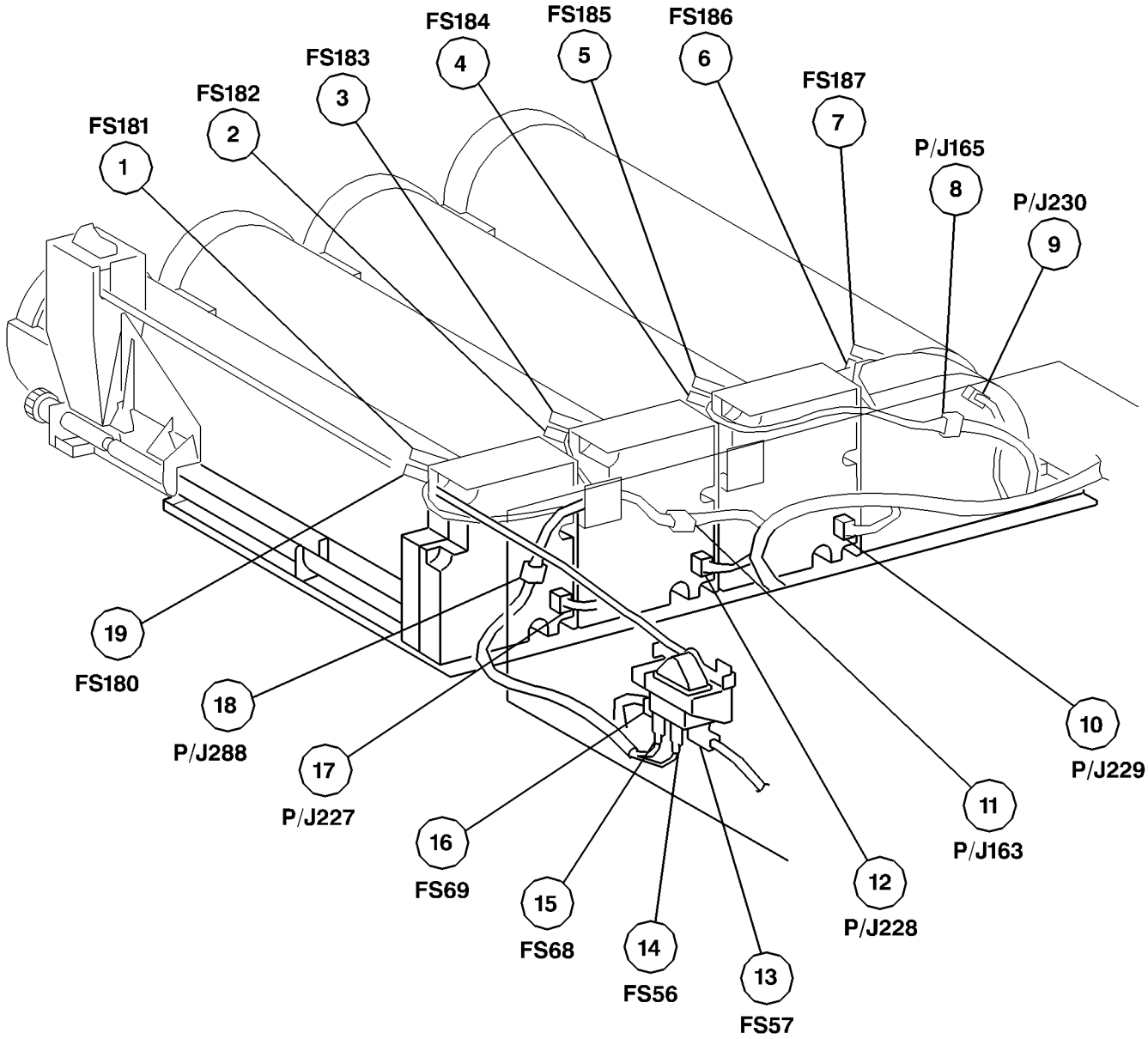


Figure 9 Toner Dispense Motor (Y,M,C,K), Main Switch

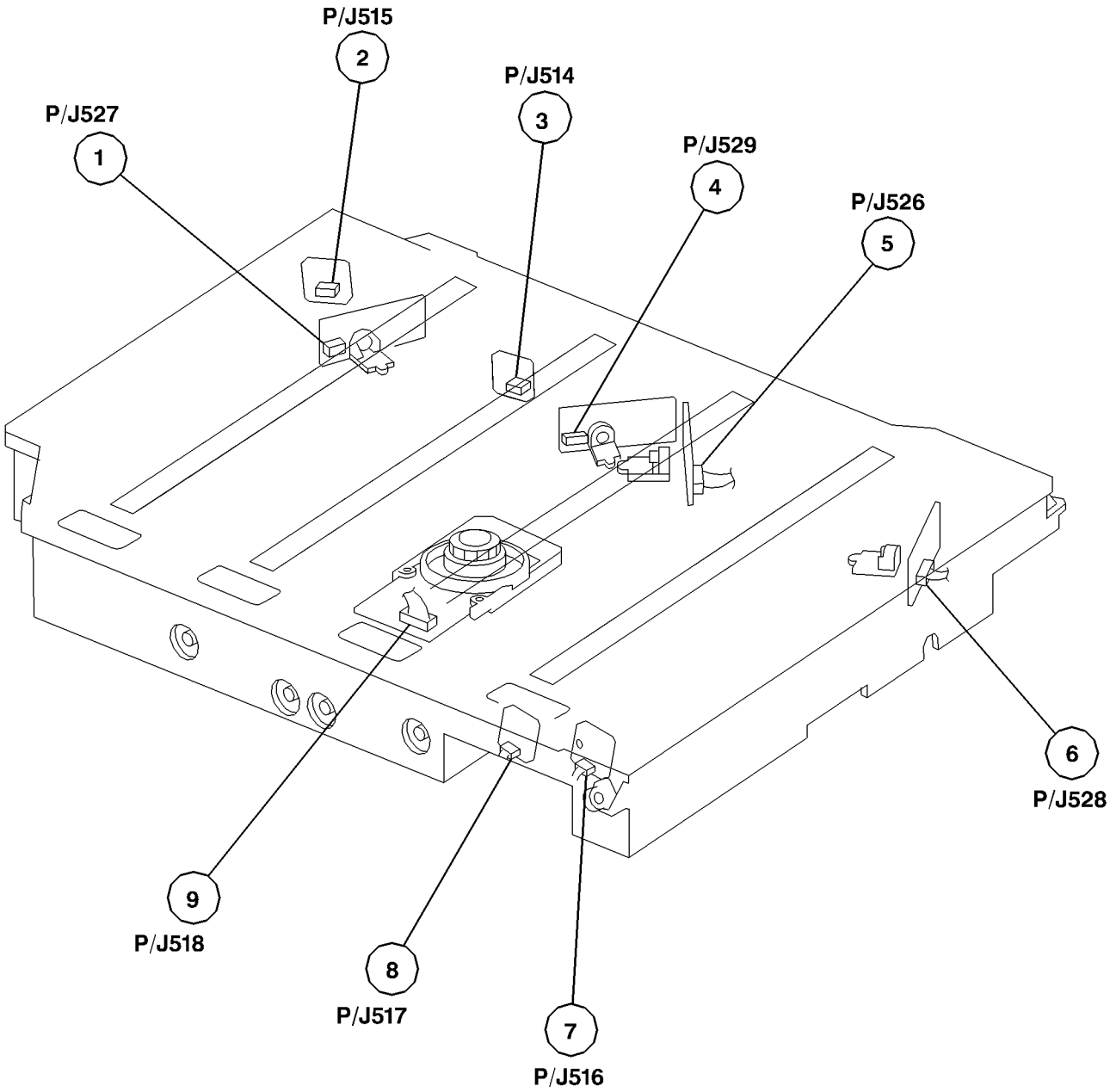
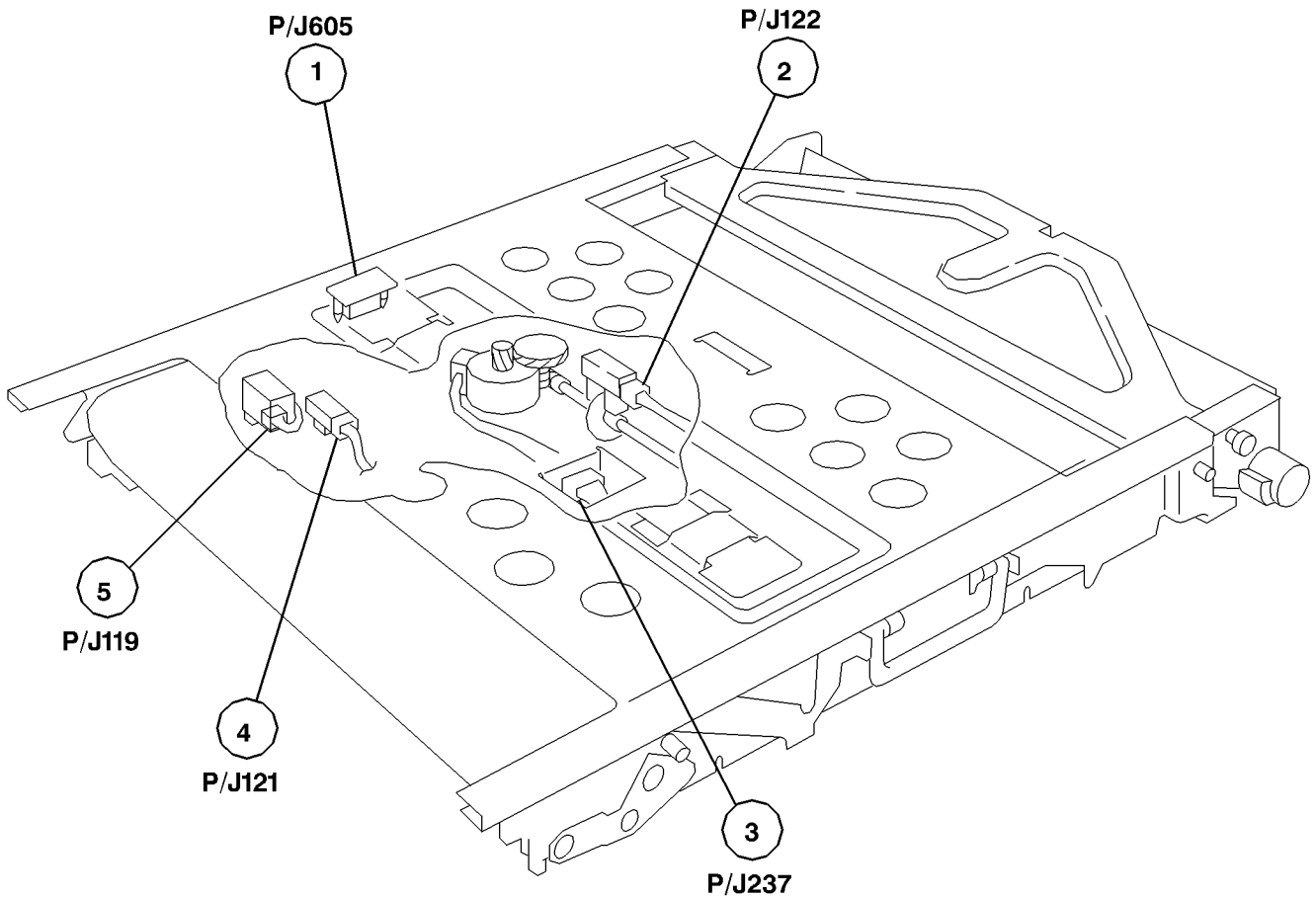


Figure 10 ROS Assembly



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Figure 11 IBT Belt Assembly

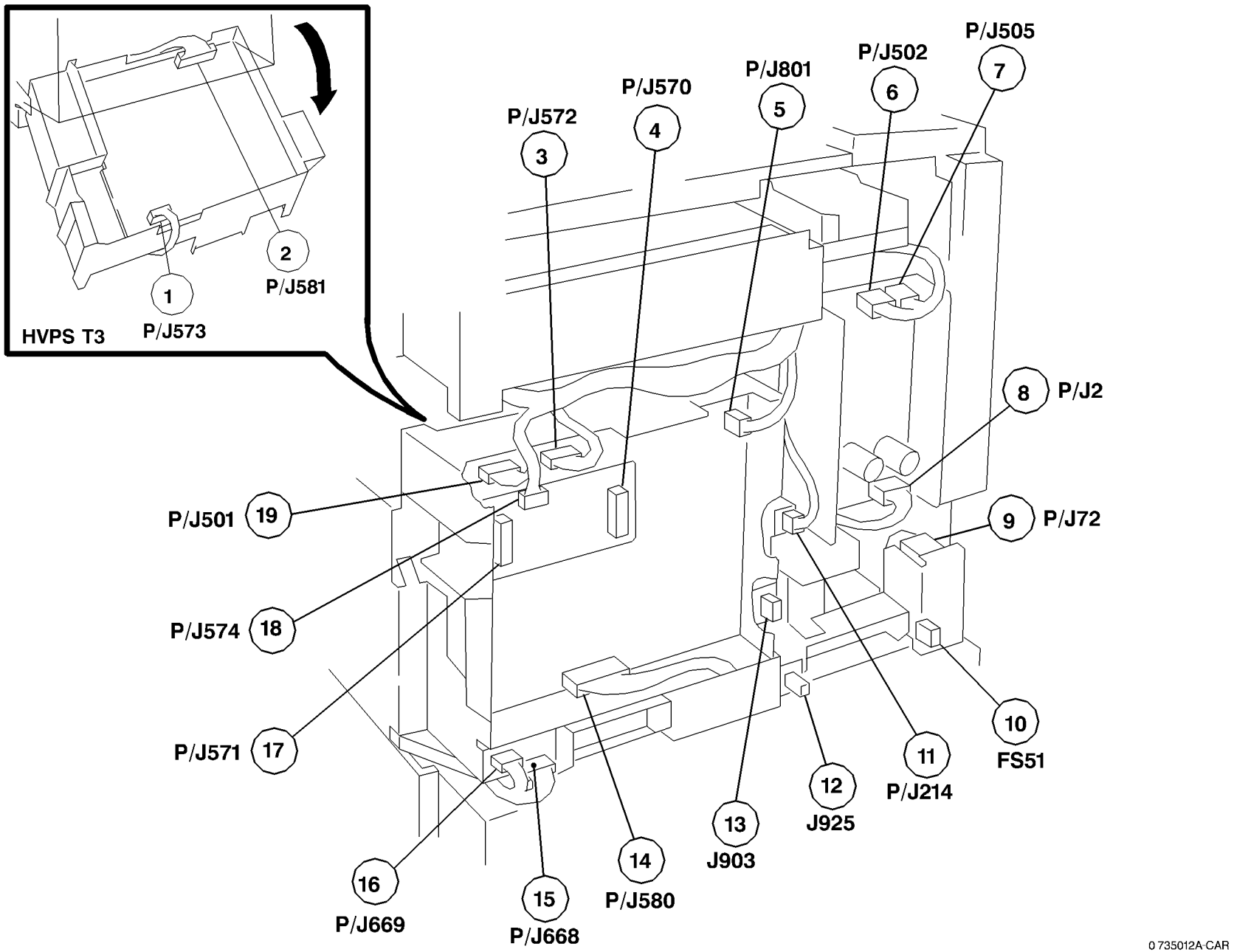


Figure 12 HVPS T5, T7, +24V LVPS

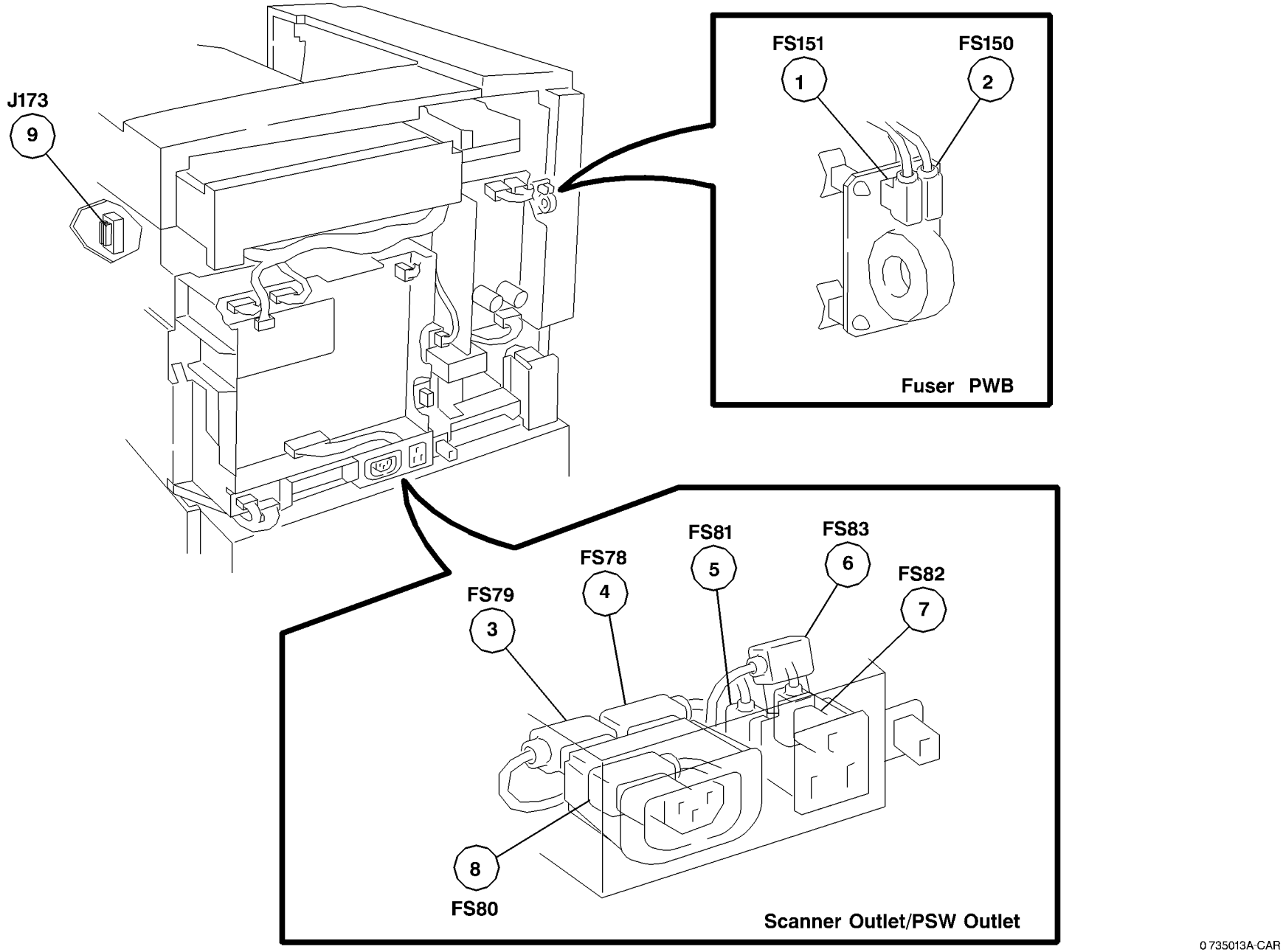


Figure 13 Outlet Panel Assembly, Fuser PWB

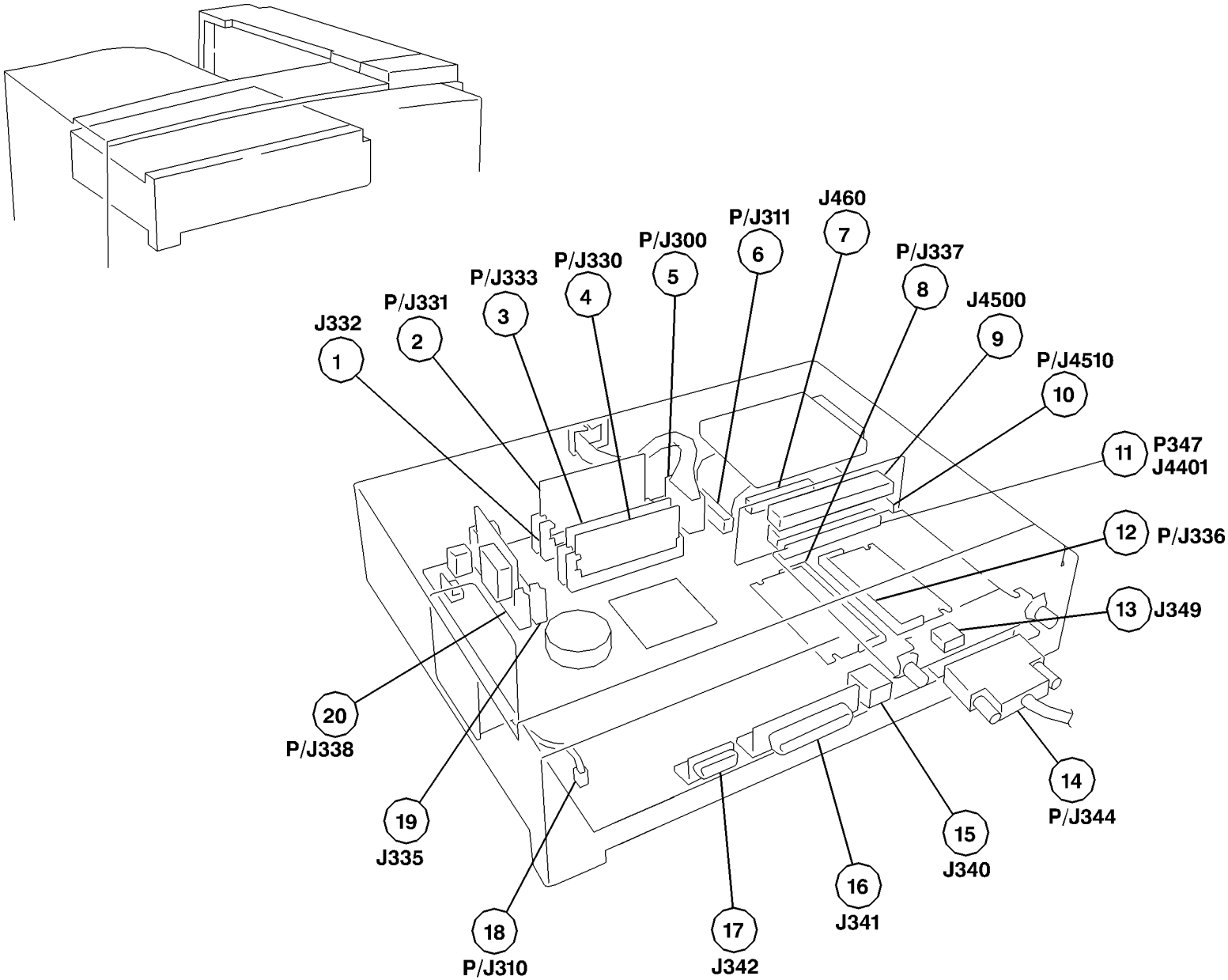


Figure 14 ESS Assembly

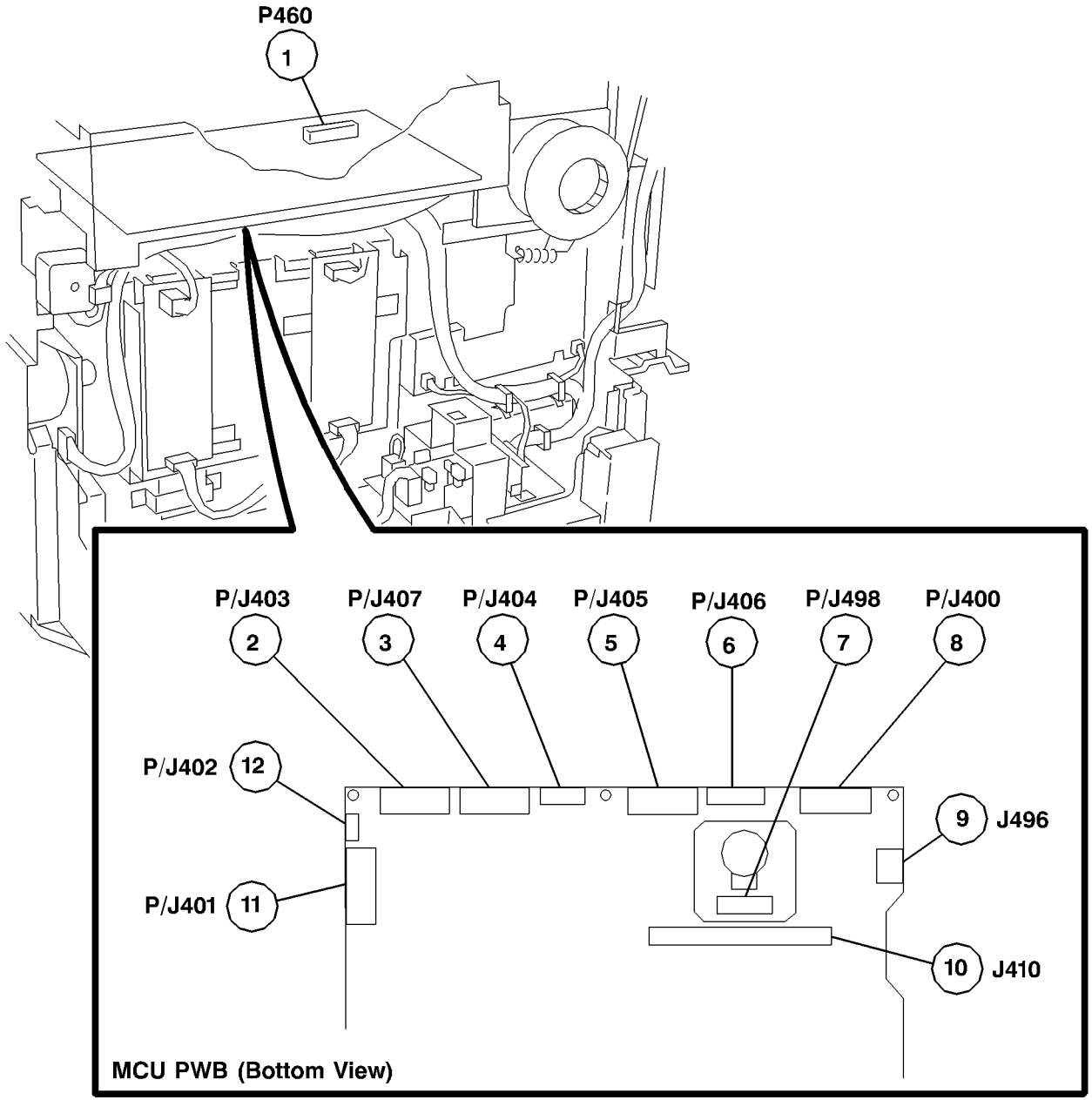


Figure 15 MCU-MF PWB

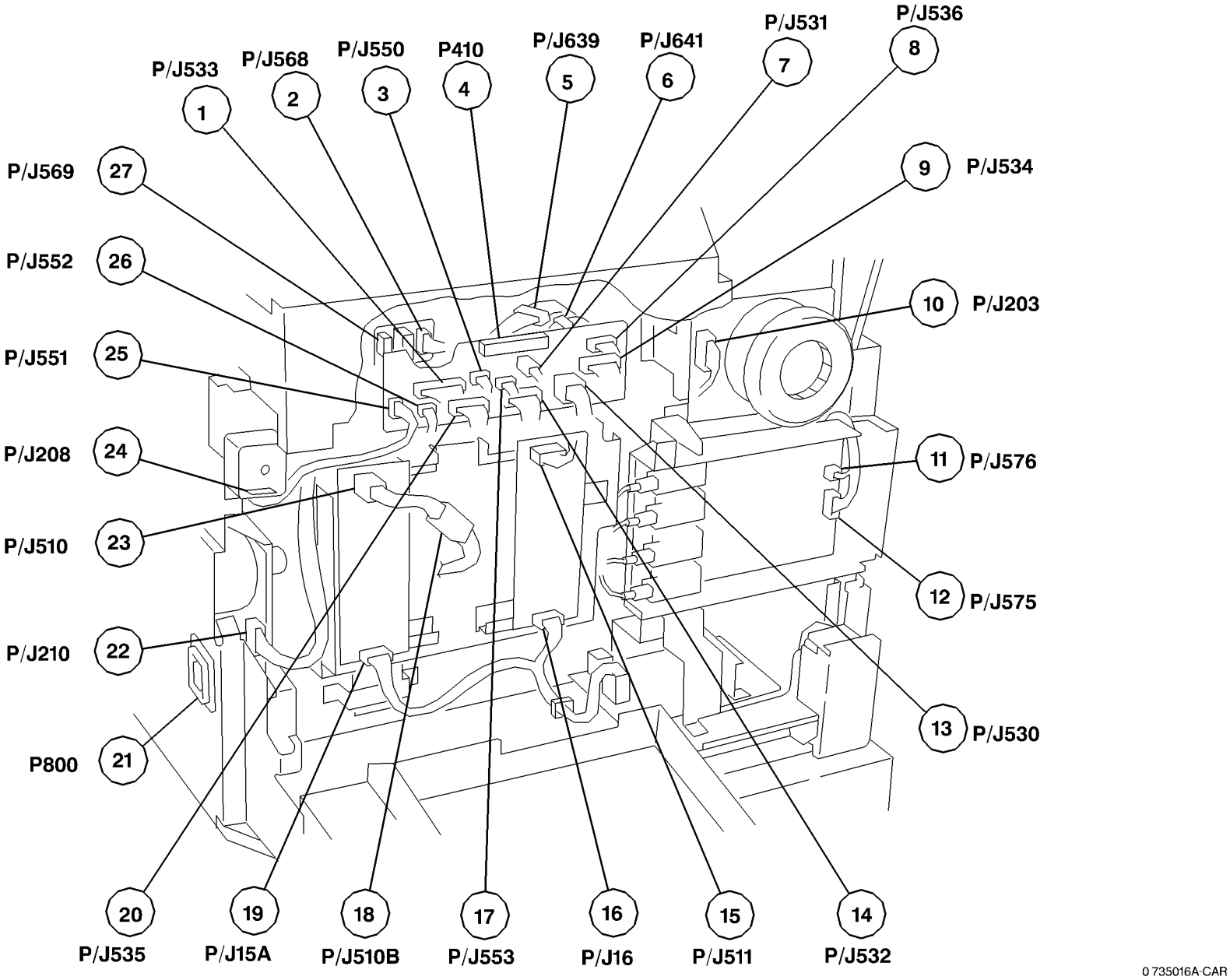


Figure 16 I/F PWB, Main Motor, LVPS T2

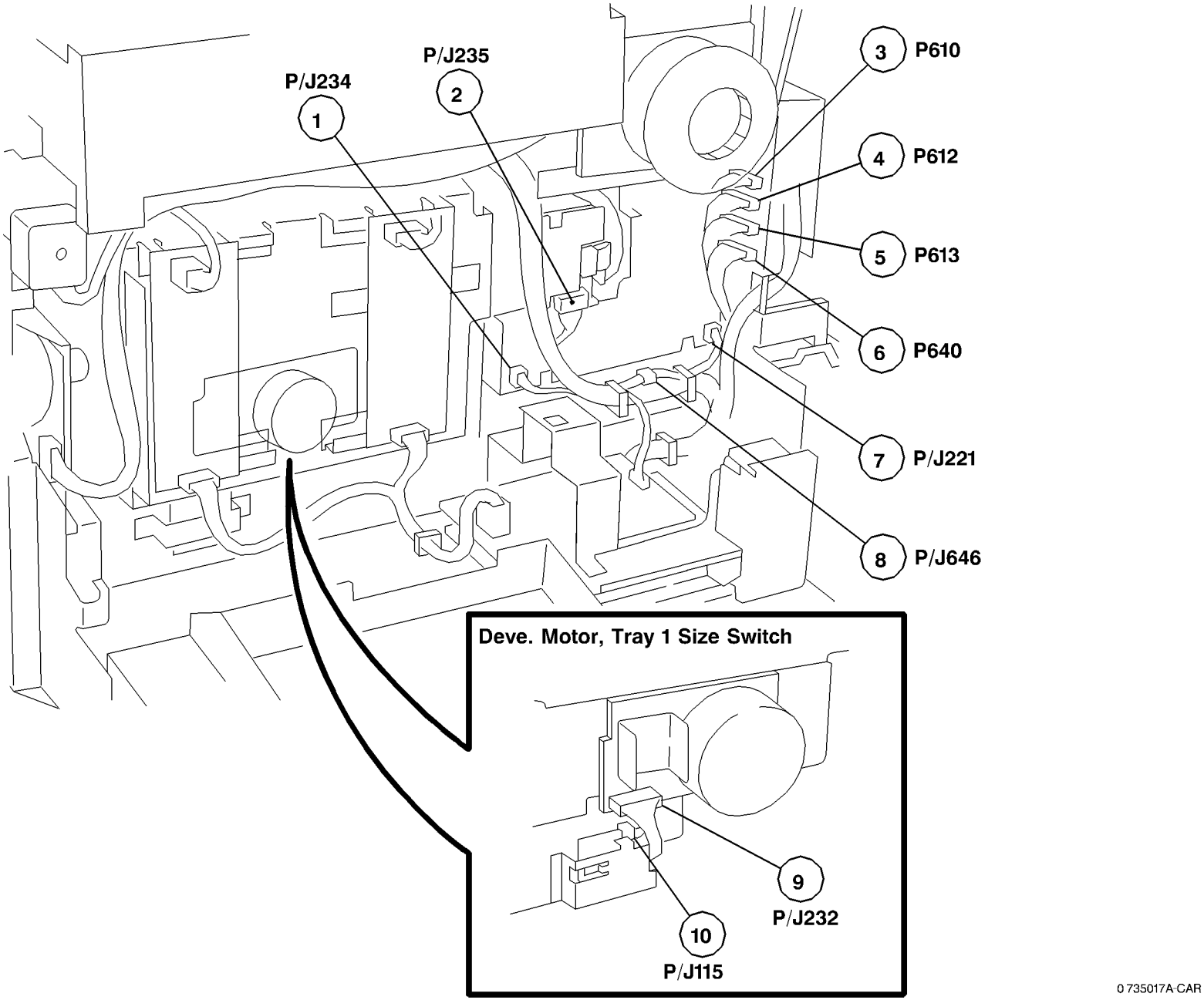


Figure 17 Developer Motor, Tray 1 Size Switch

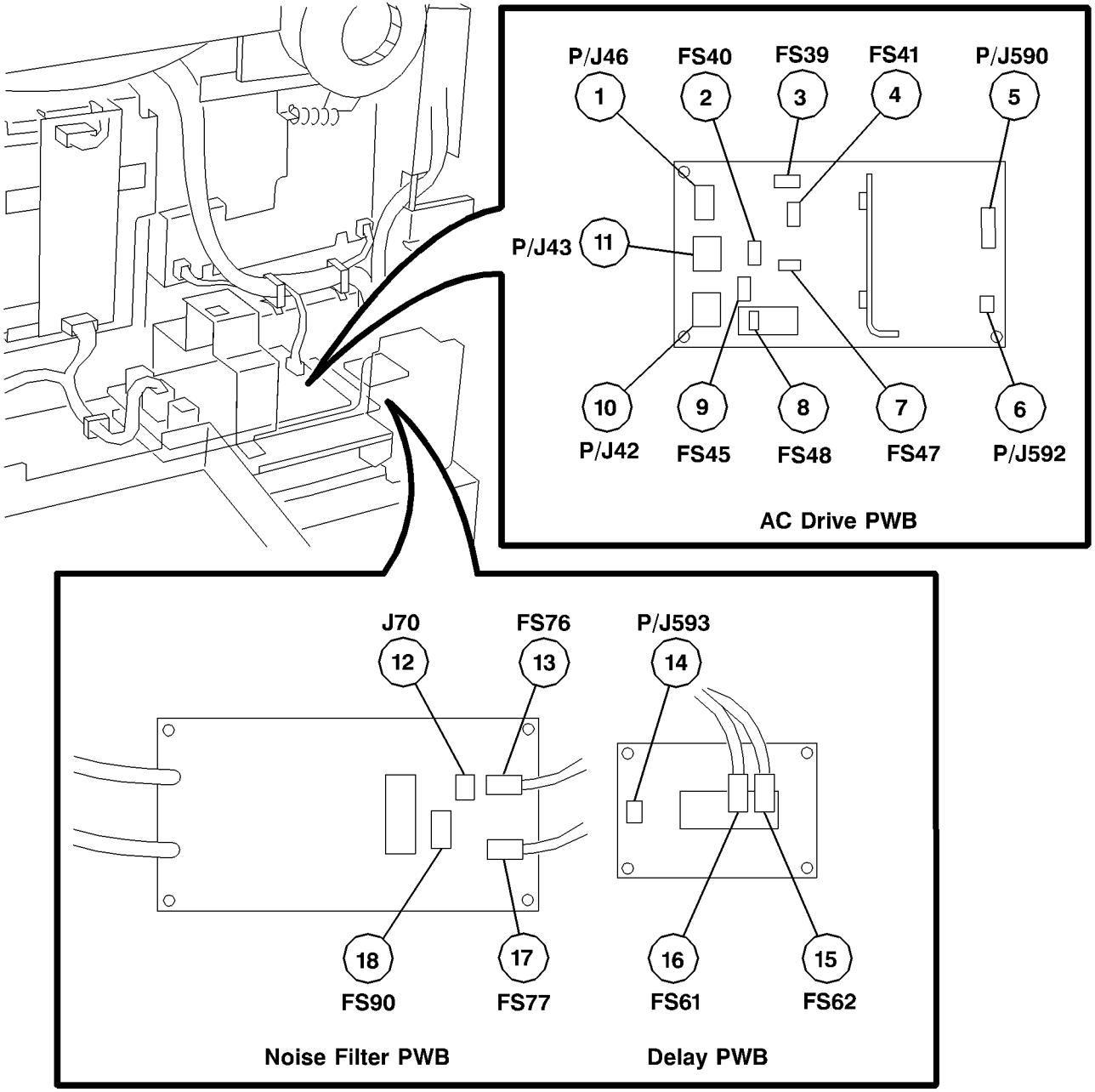


Figure 18 AC Drive PWB, Noise Filter PWB, Delay PWB

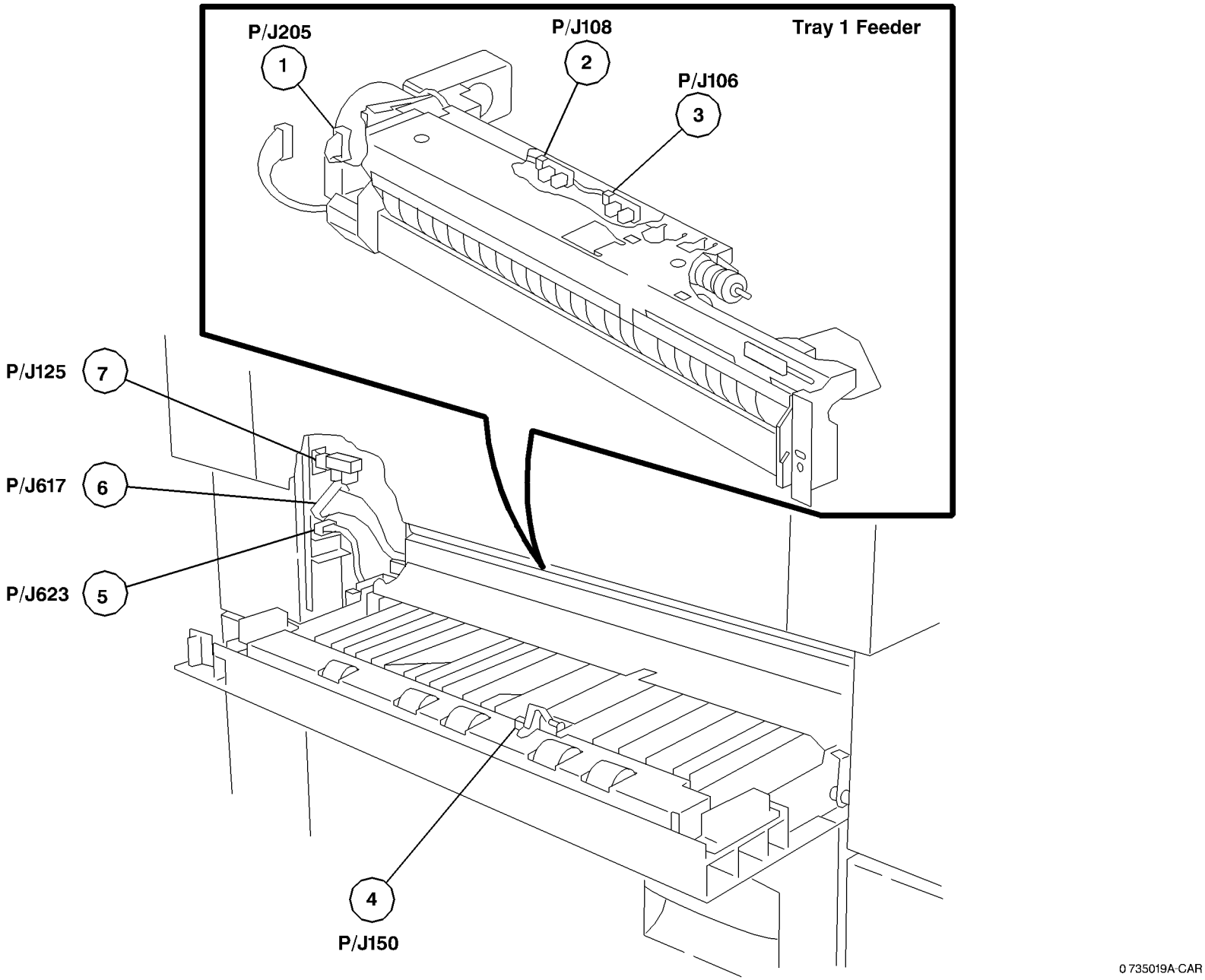


Figure 19 Left Lower Assembly, Tray 1 Feeder

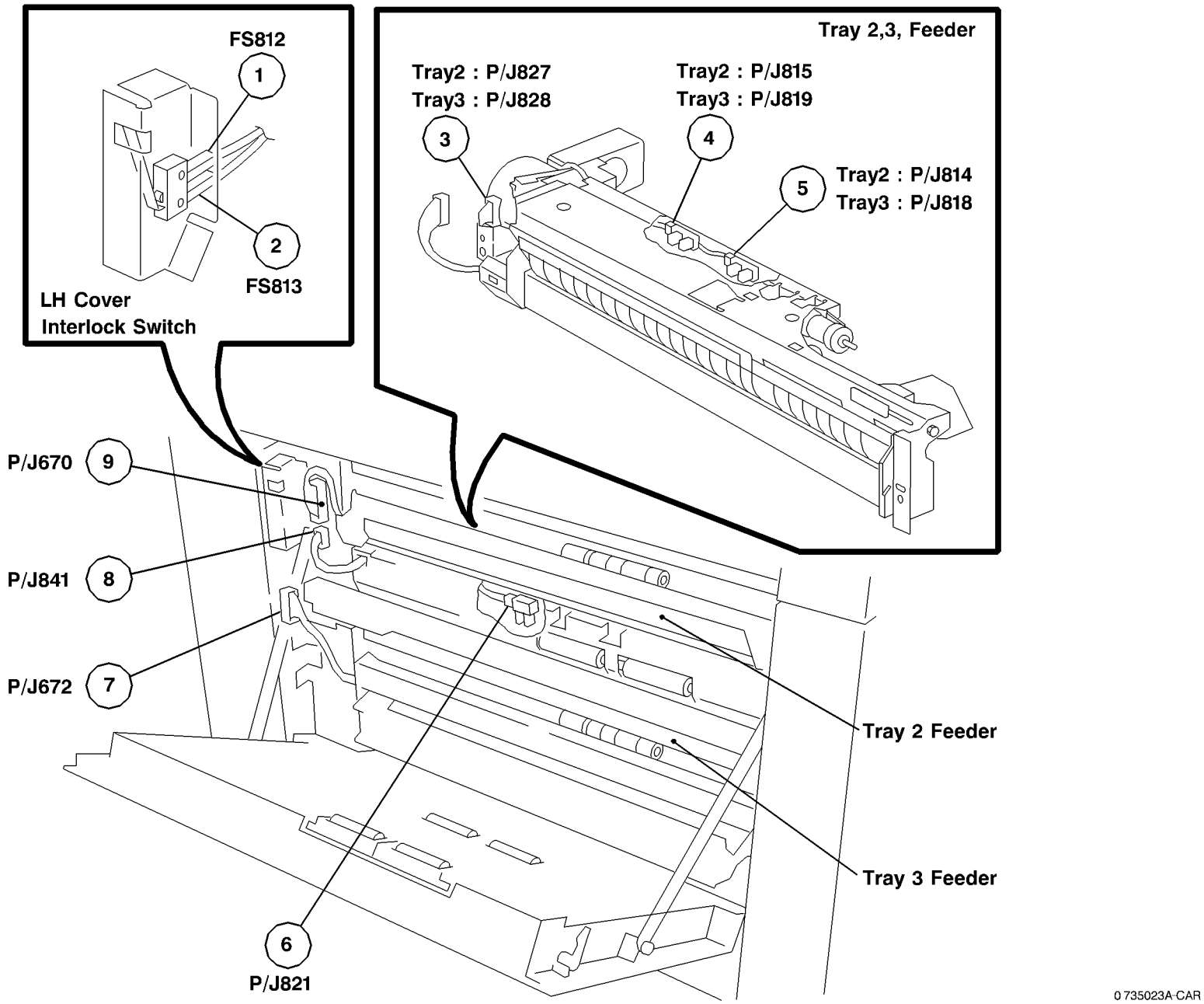


Figure 20 TT Module (Tray 2, 3 feeder)

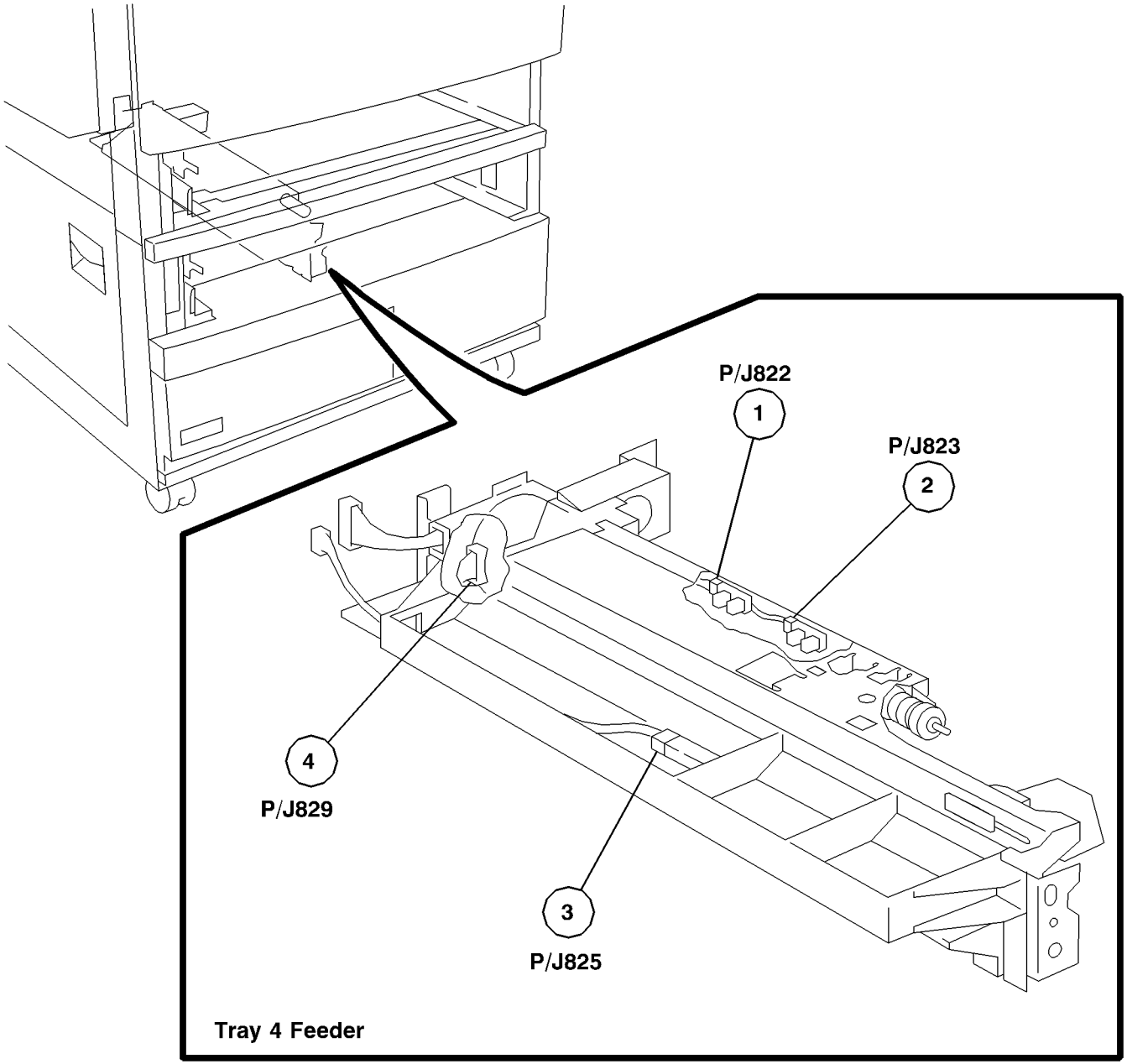


Figure 21 TT Module (Tray 4 Feeder)

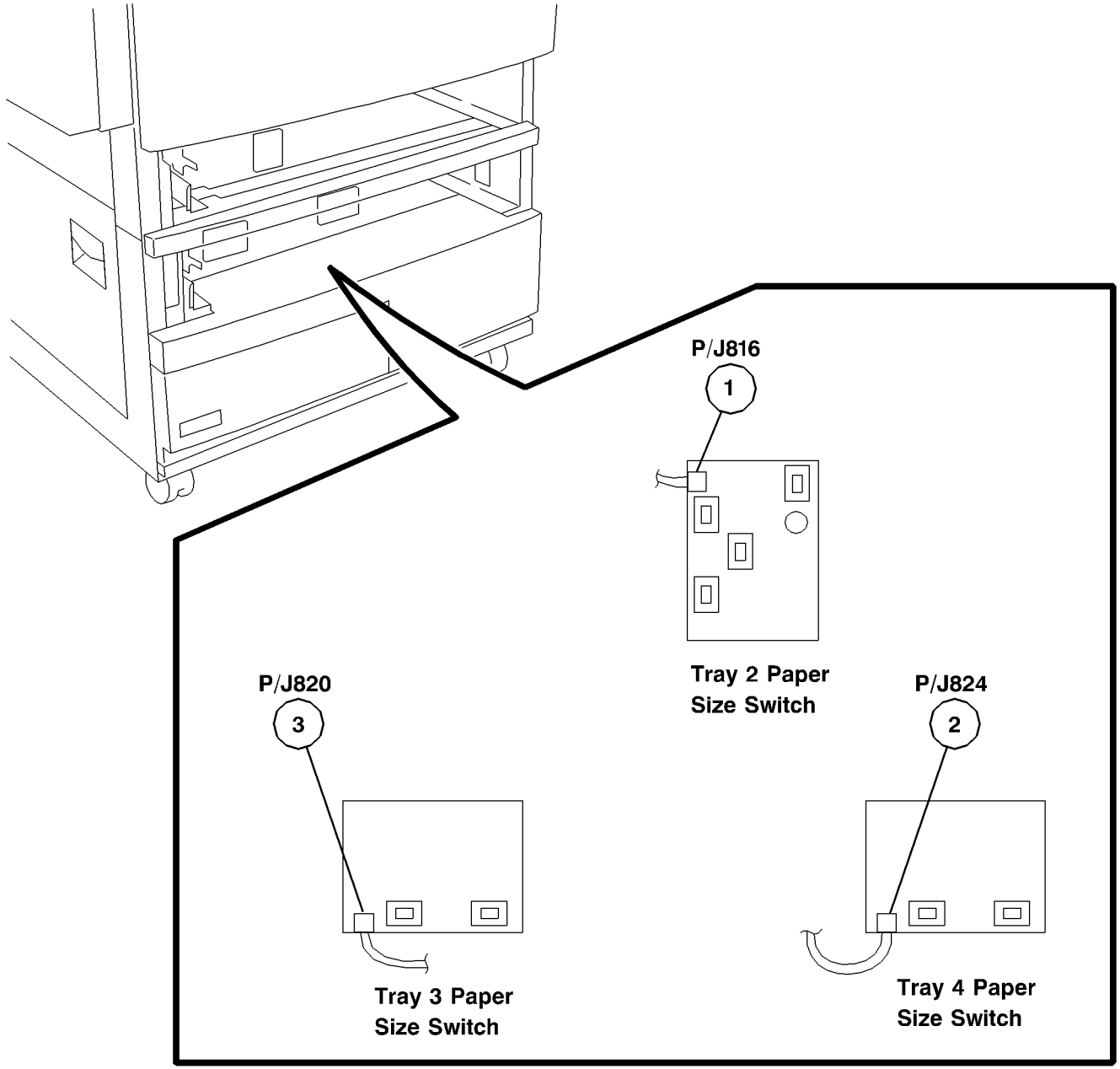


Figure 22 TT Module (Tray 2,3,4 Paper Size Switches)

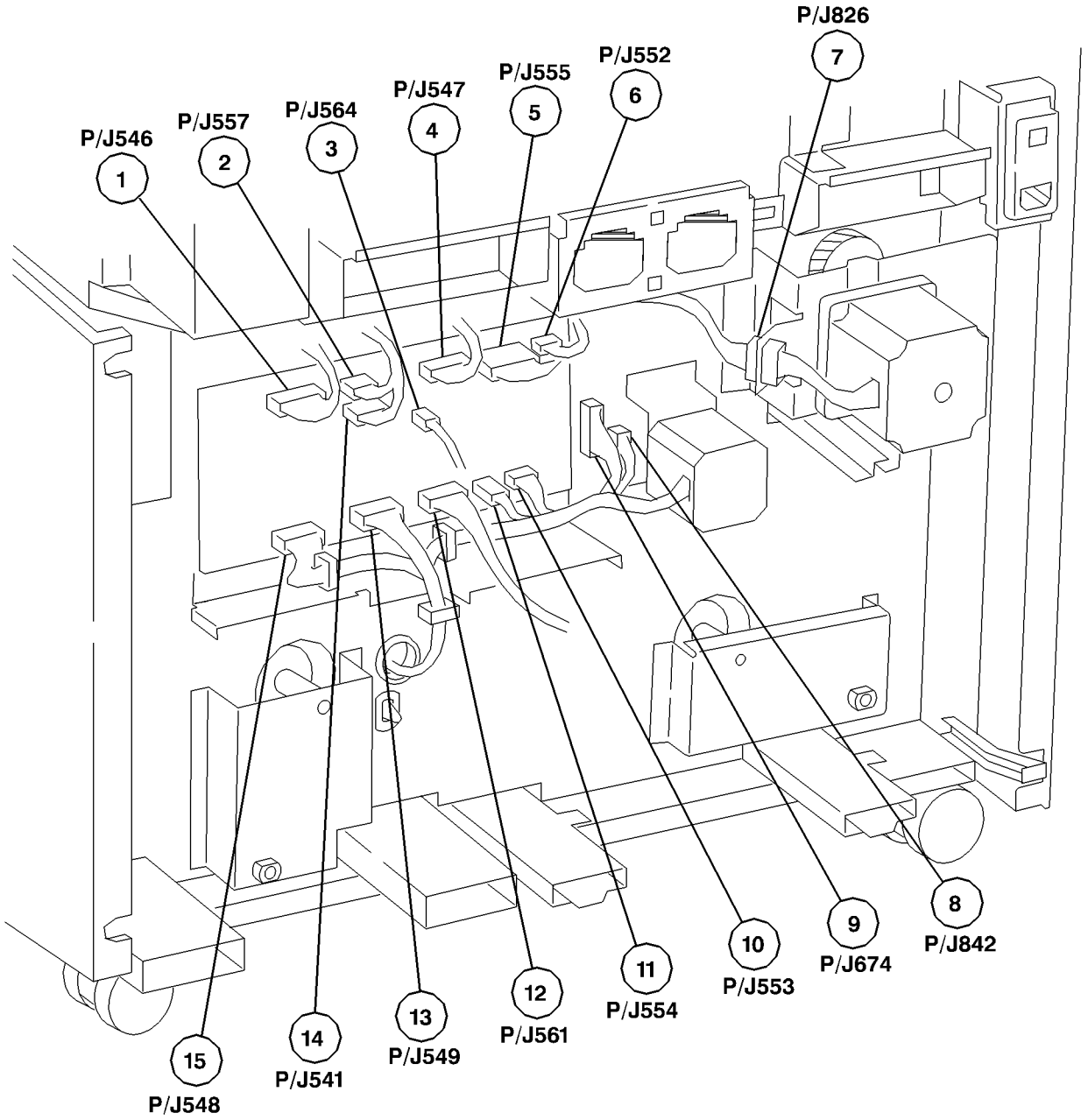


Figure 23 TT Module (rear)

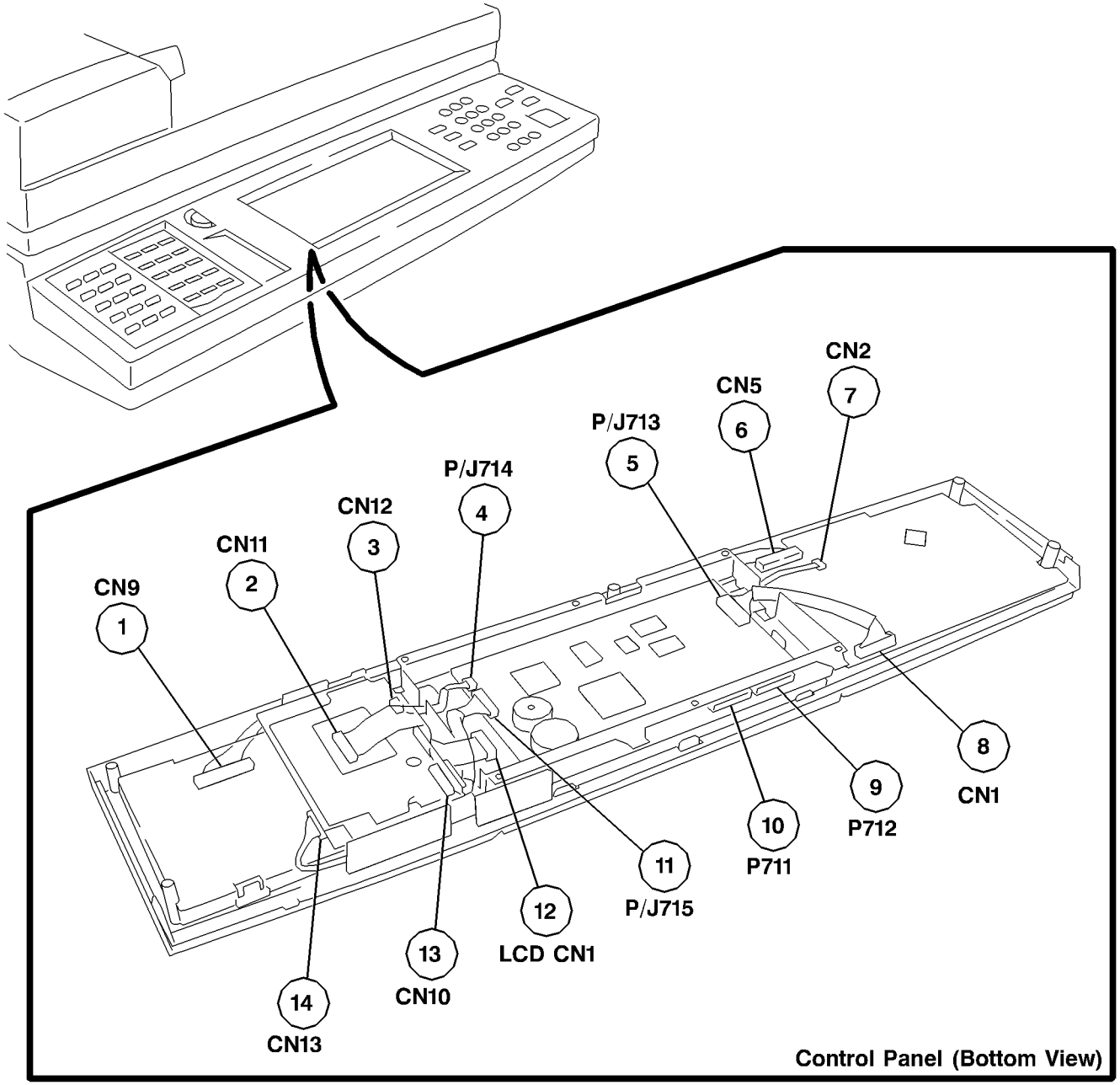


Figure 24 Control Panel

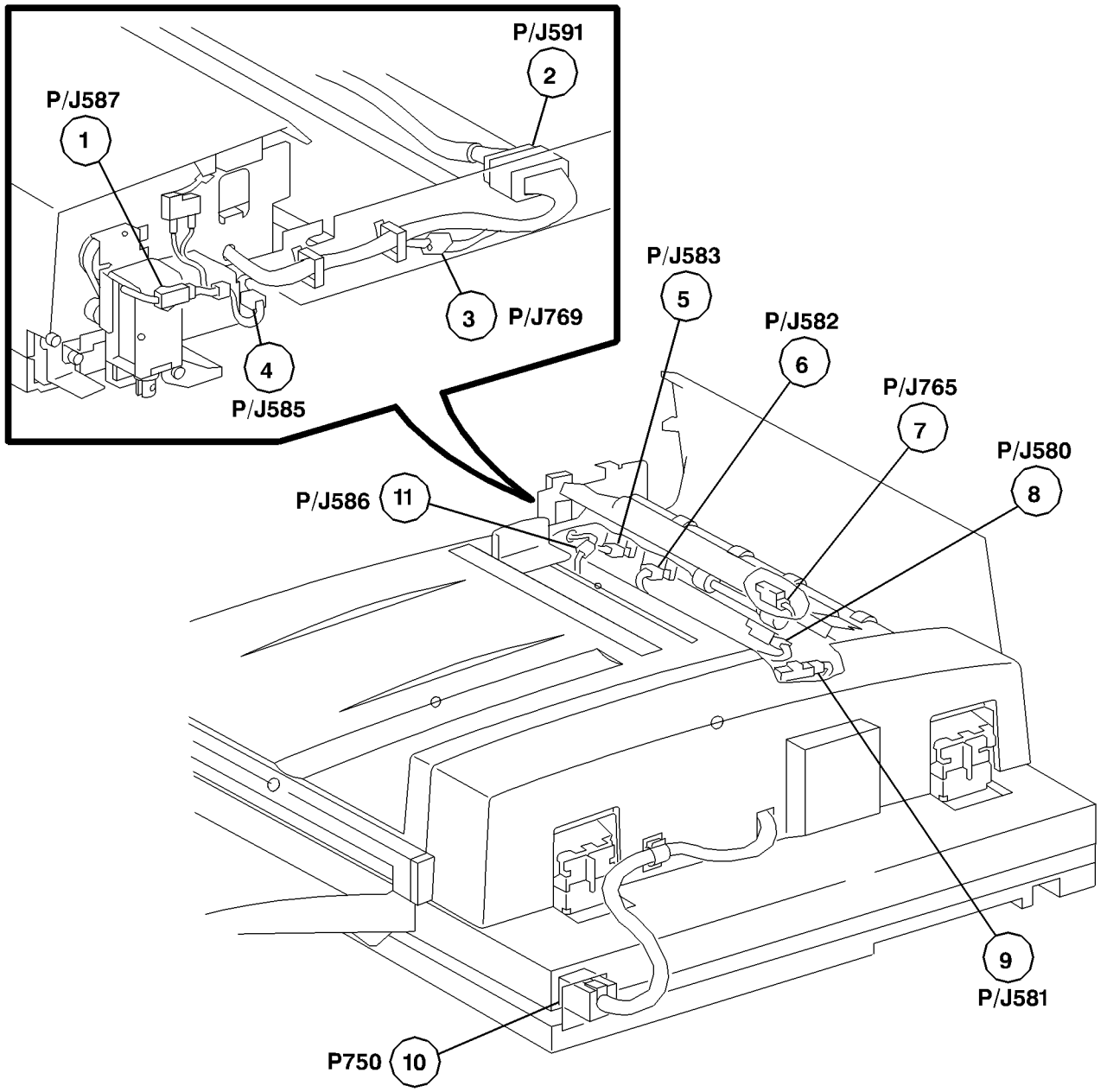


Figure 25 DADF (1 of 2)

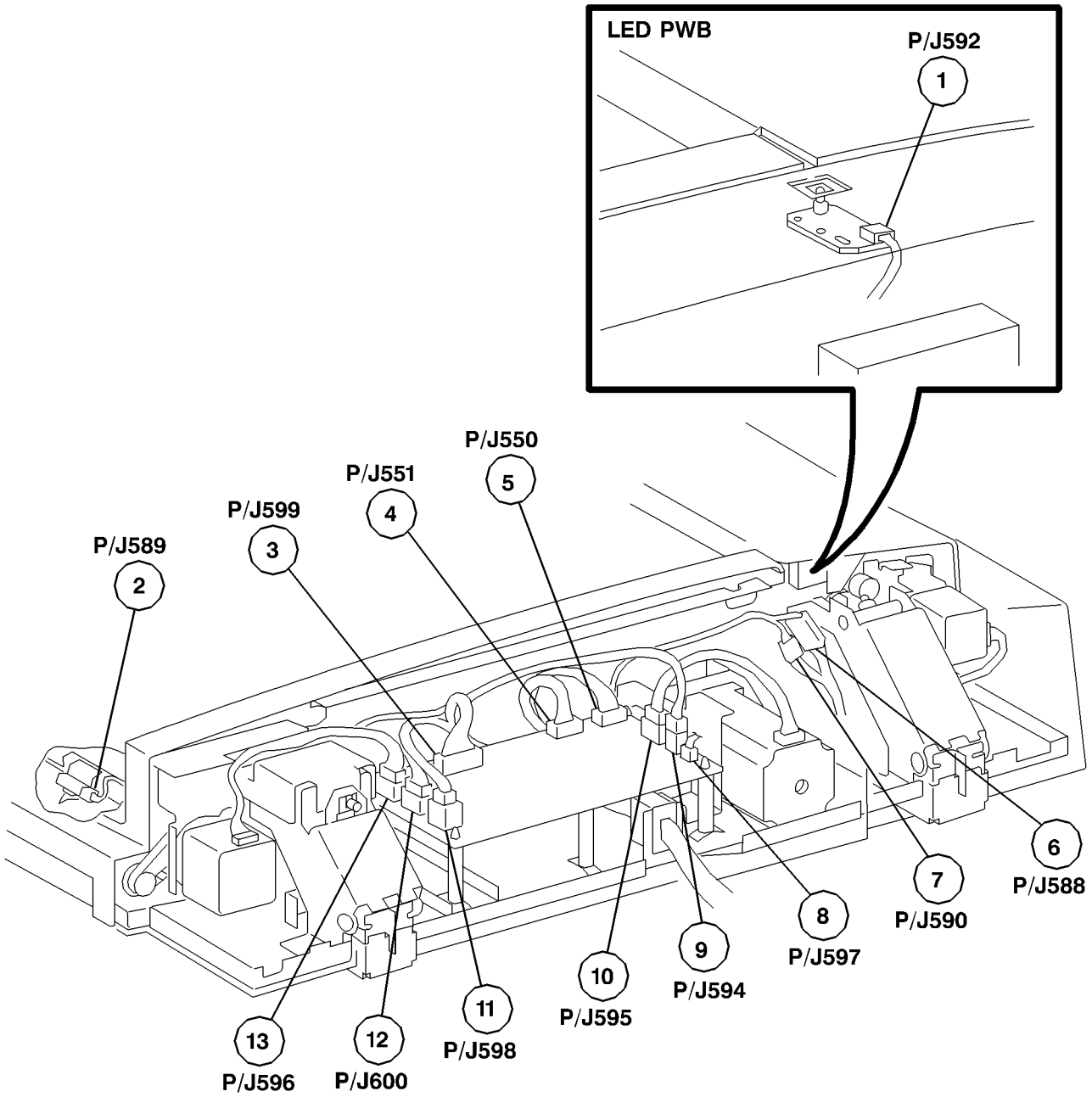


Figure 26 DADF (2 0f 2)

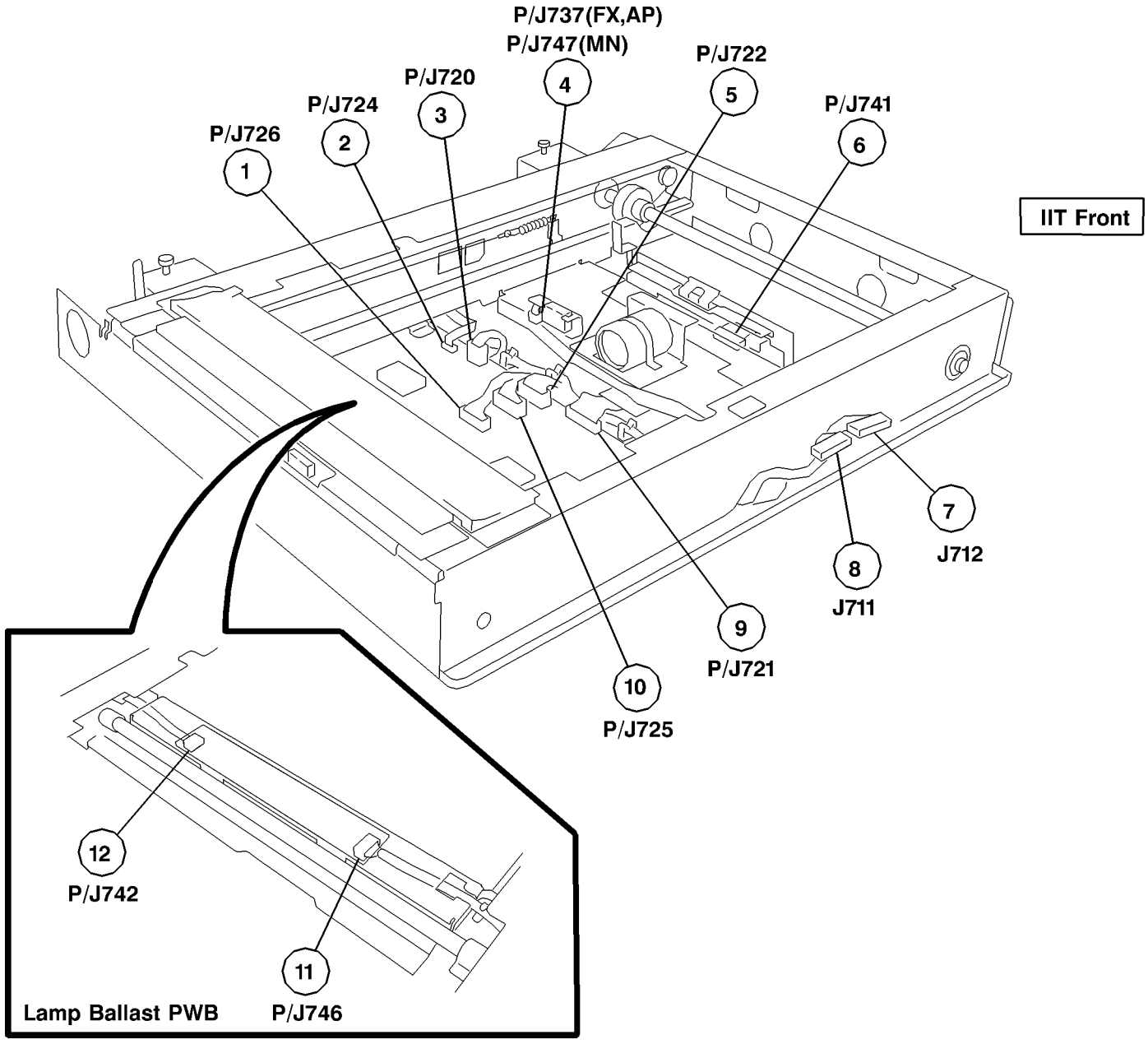


Figure 27 IIT (front)

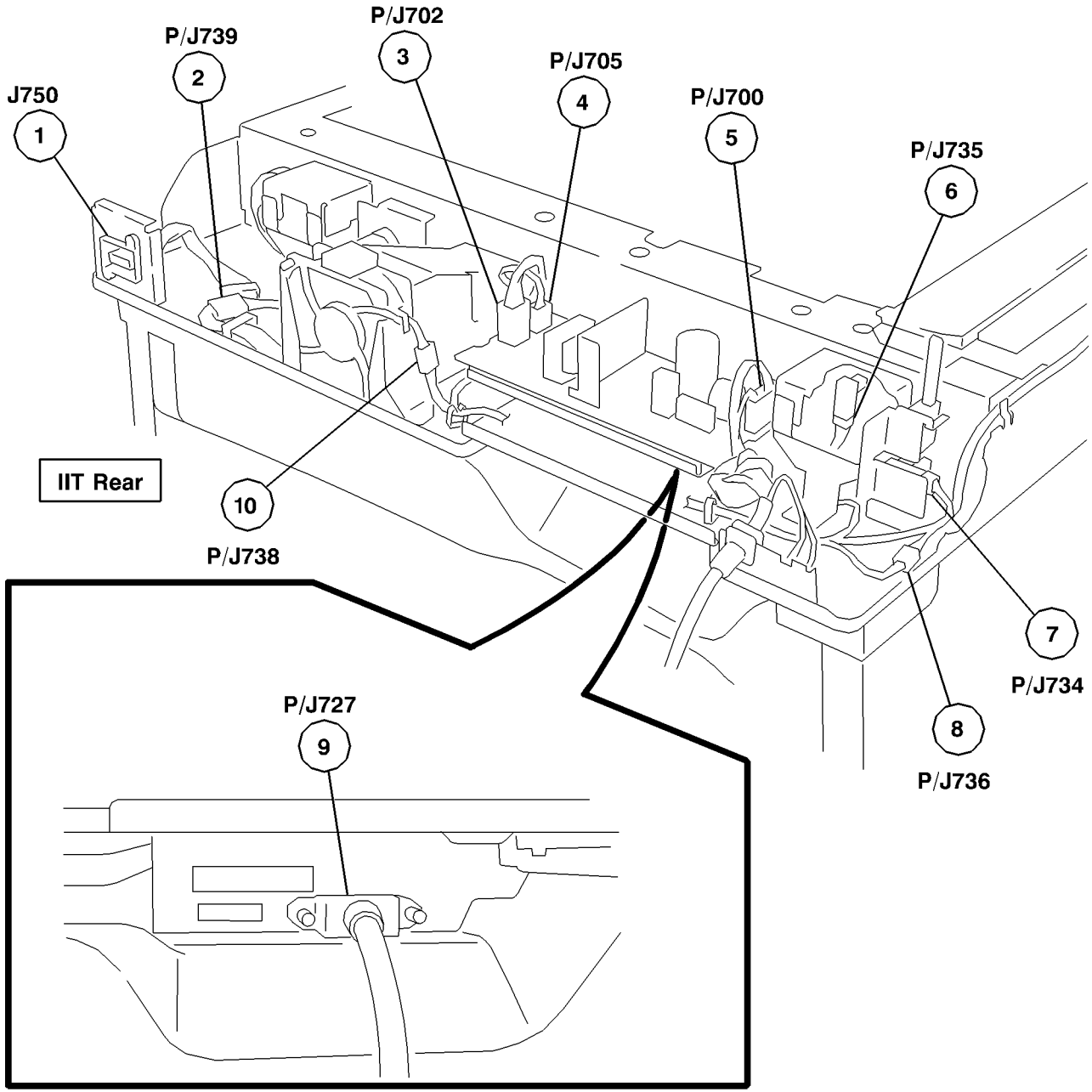
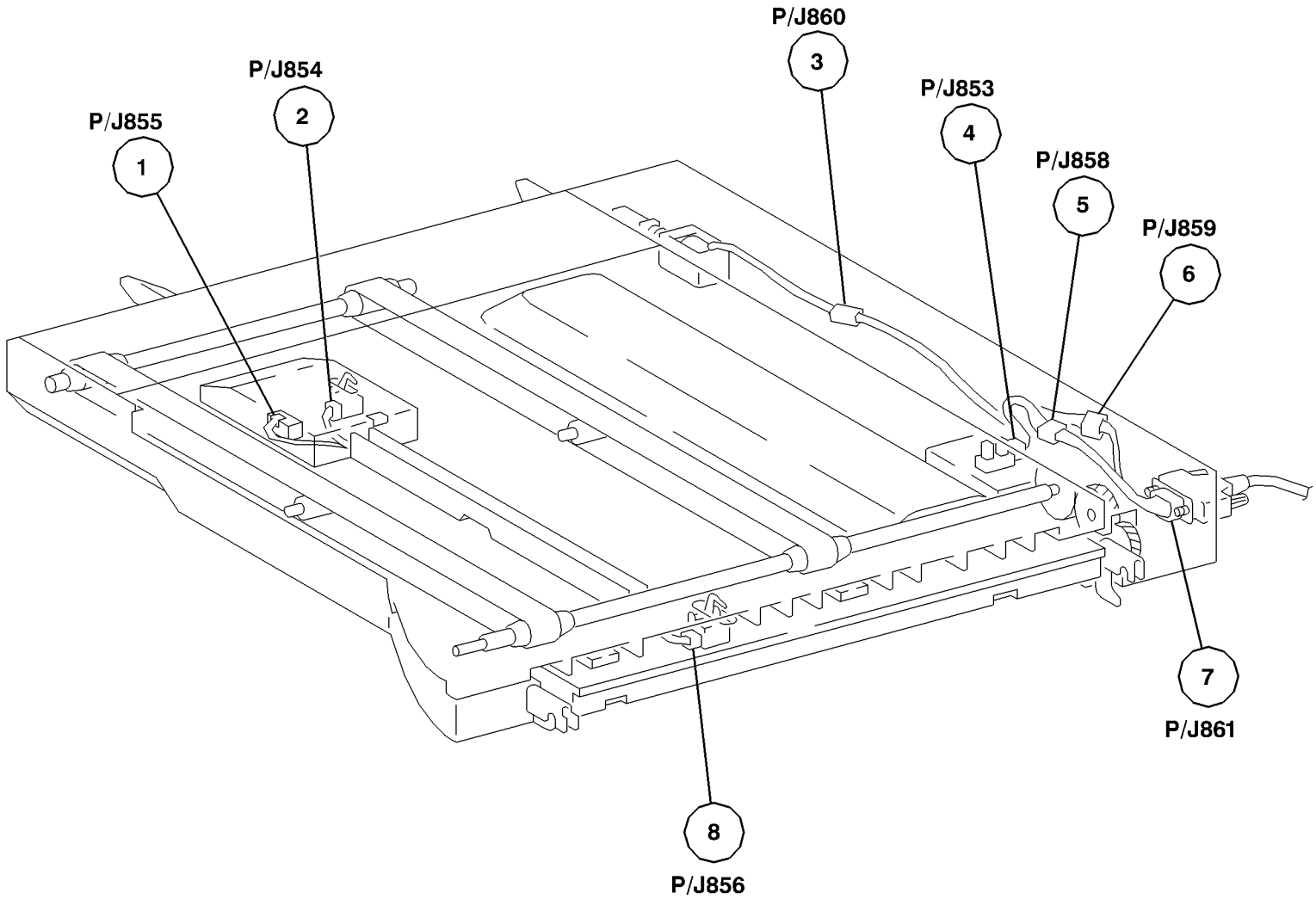


Figure 28 IIT (rear)



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Figure 29 H - Transport Assembly

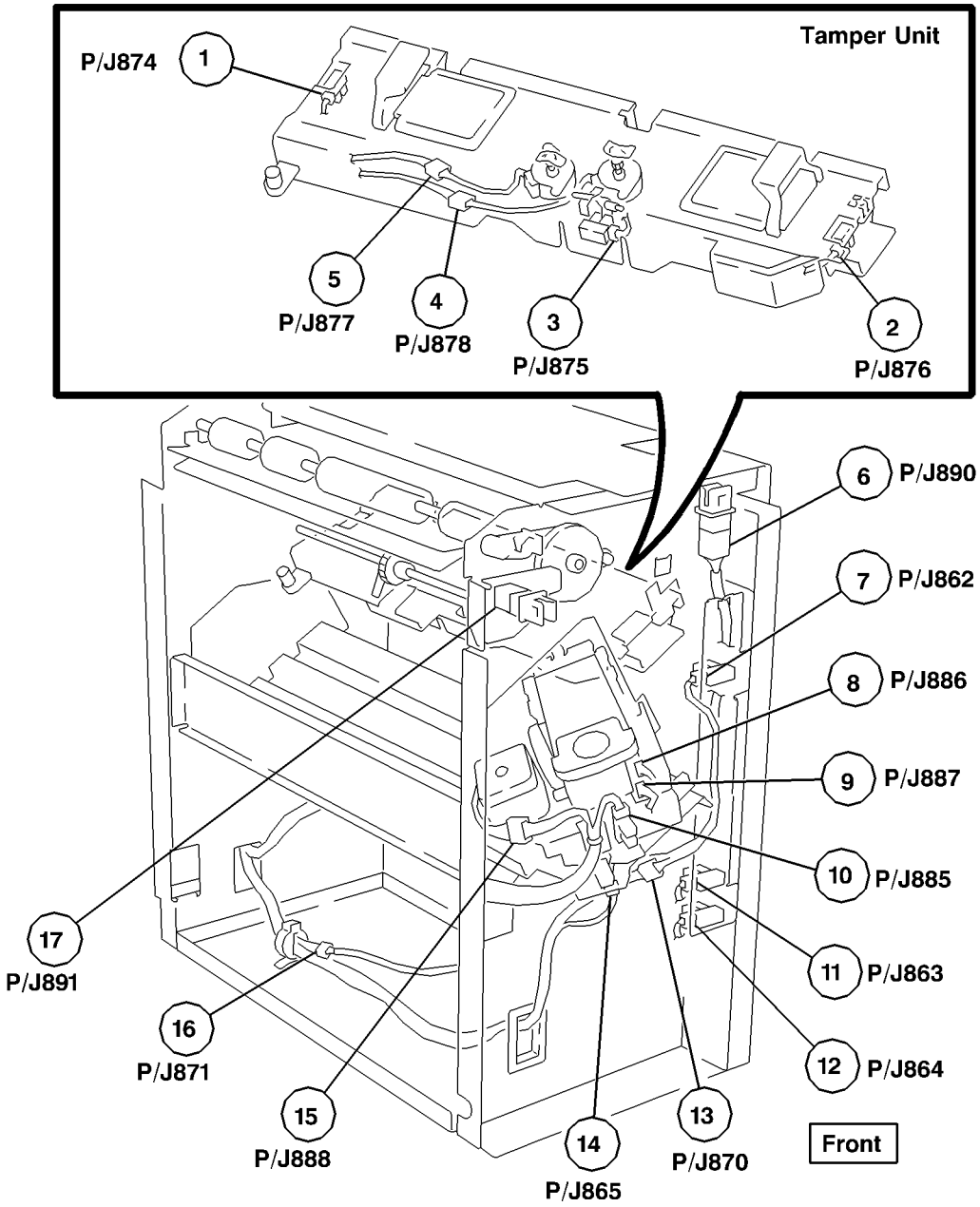


Figure 30 Tamper Unit, Staple Unit

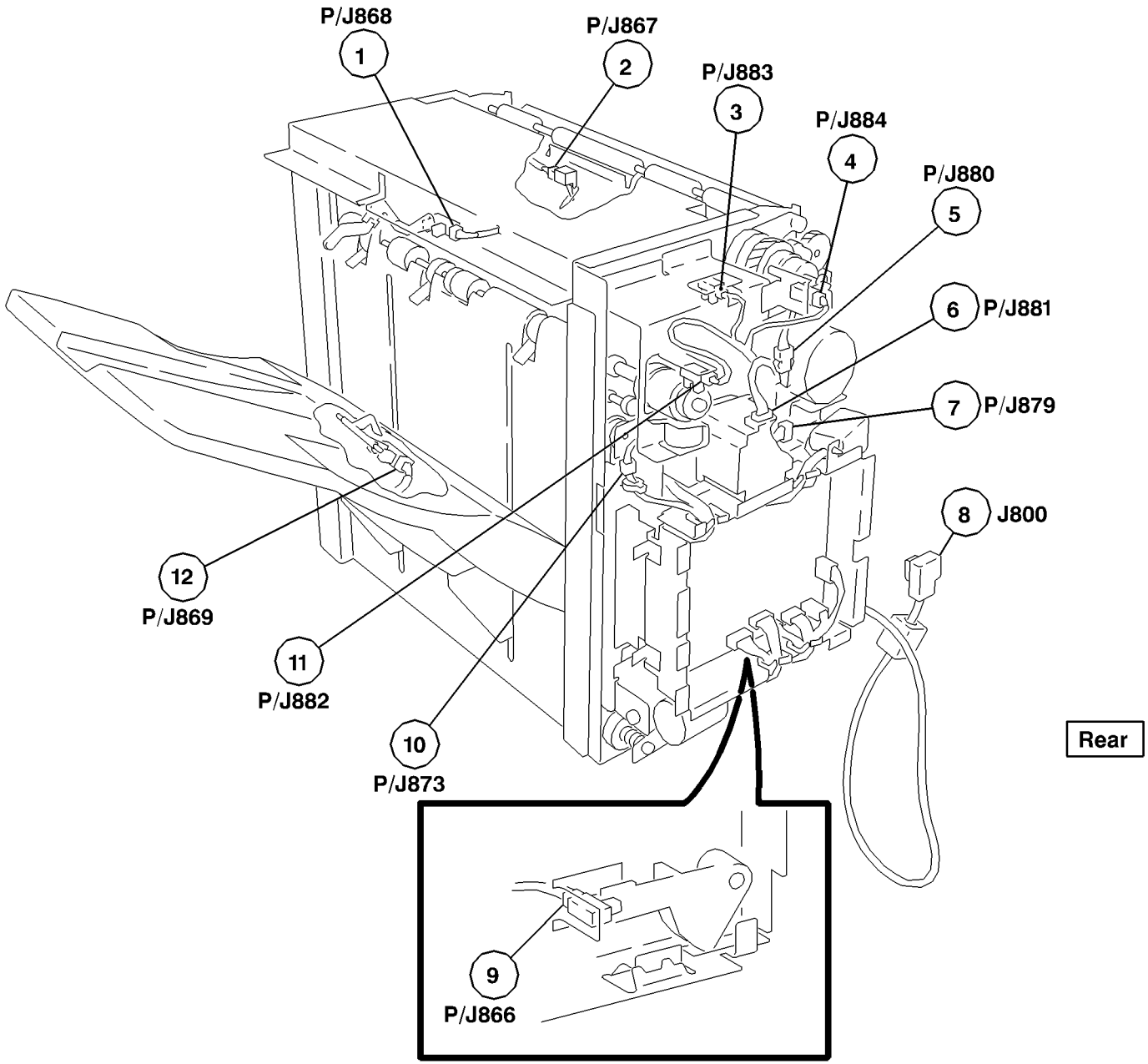


Figure 31 Finisher (rear) (1 0f 2)

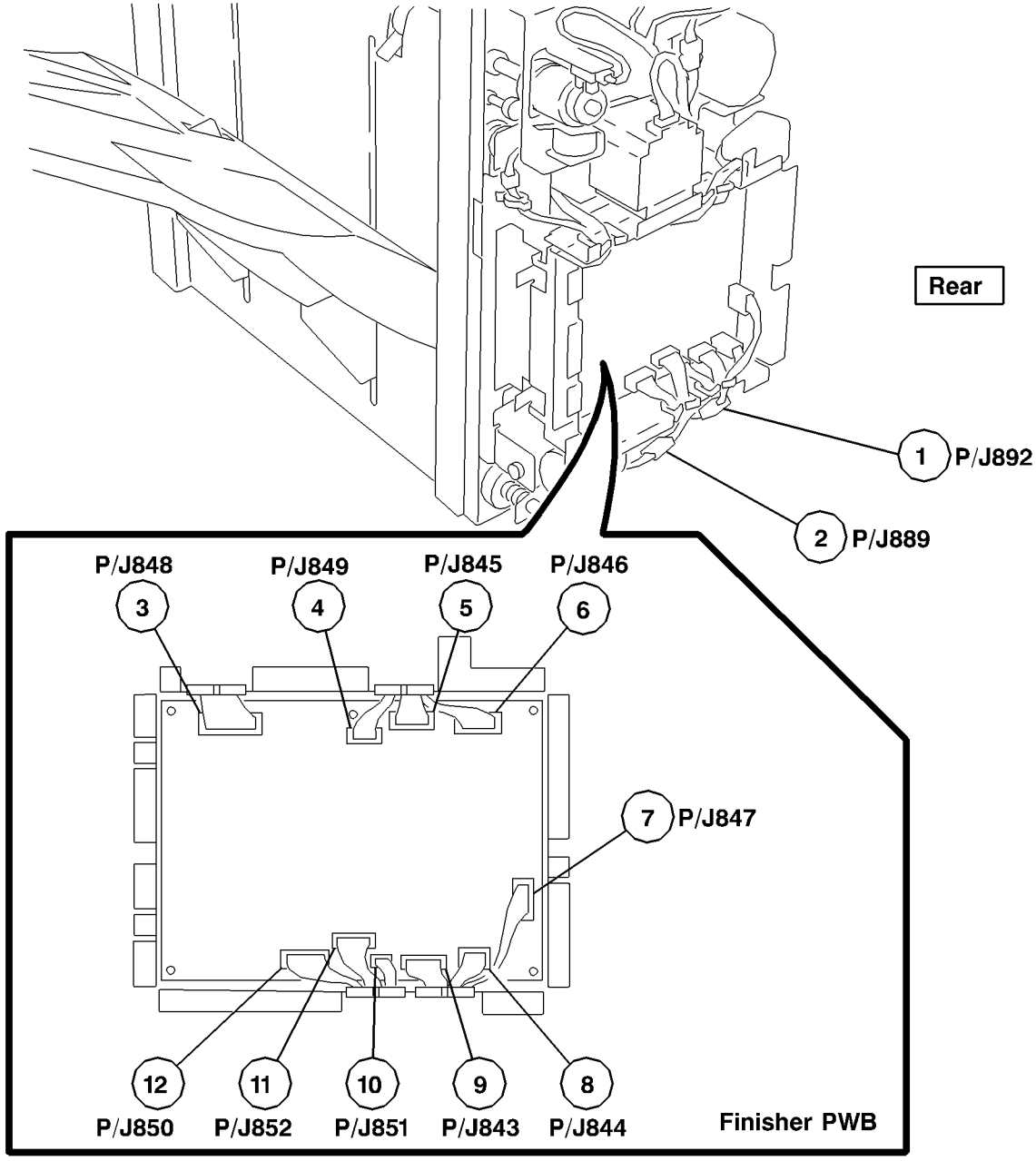


Figure 32 Finisher PWB

ACH

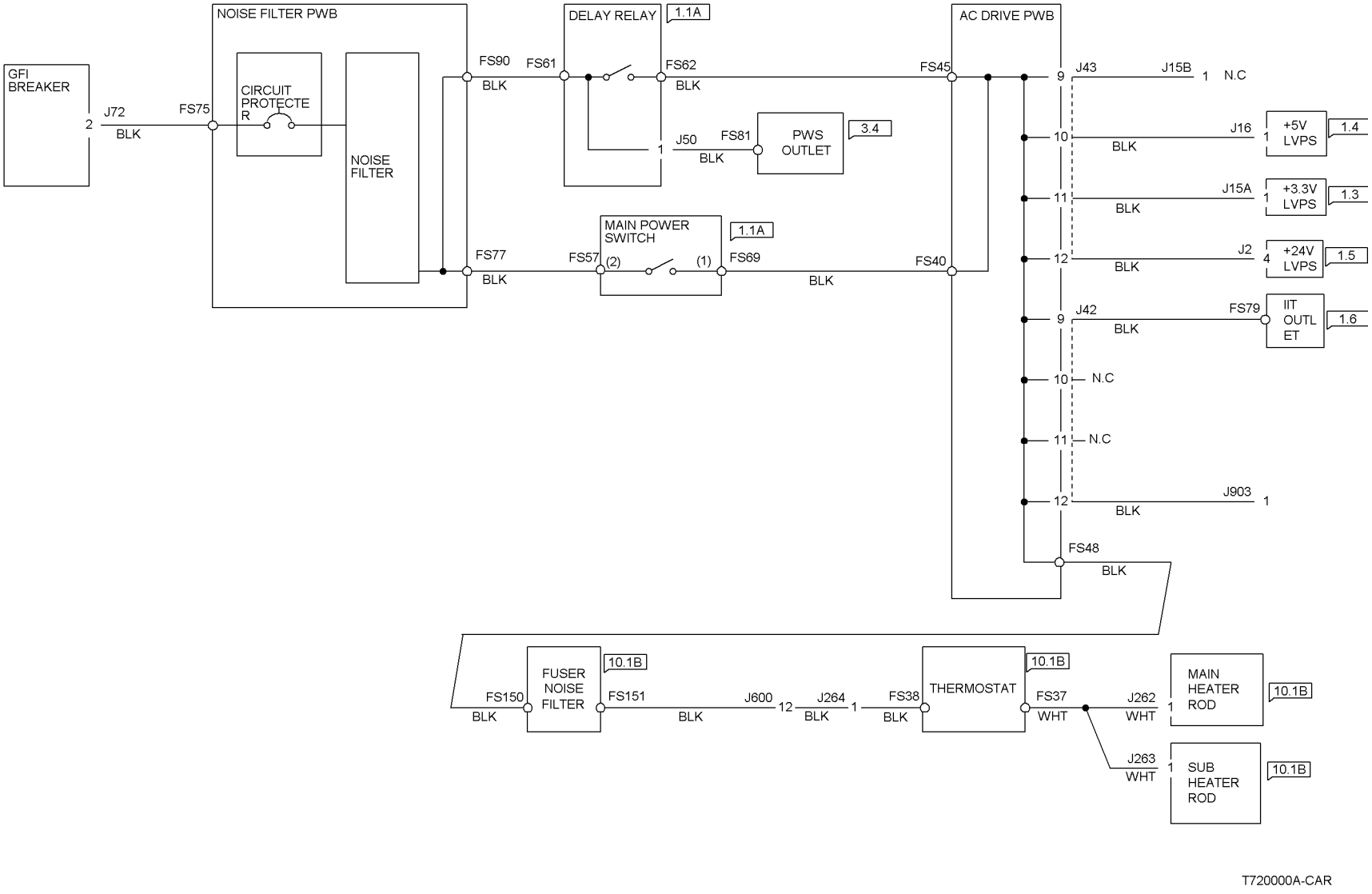


Figure 1 ACH Wirenet

ACN

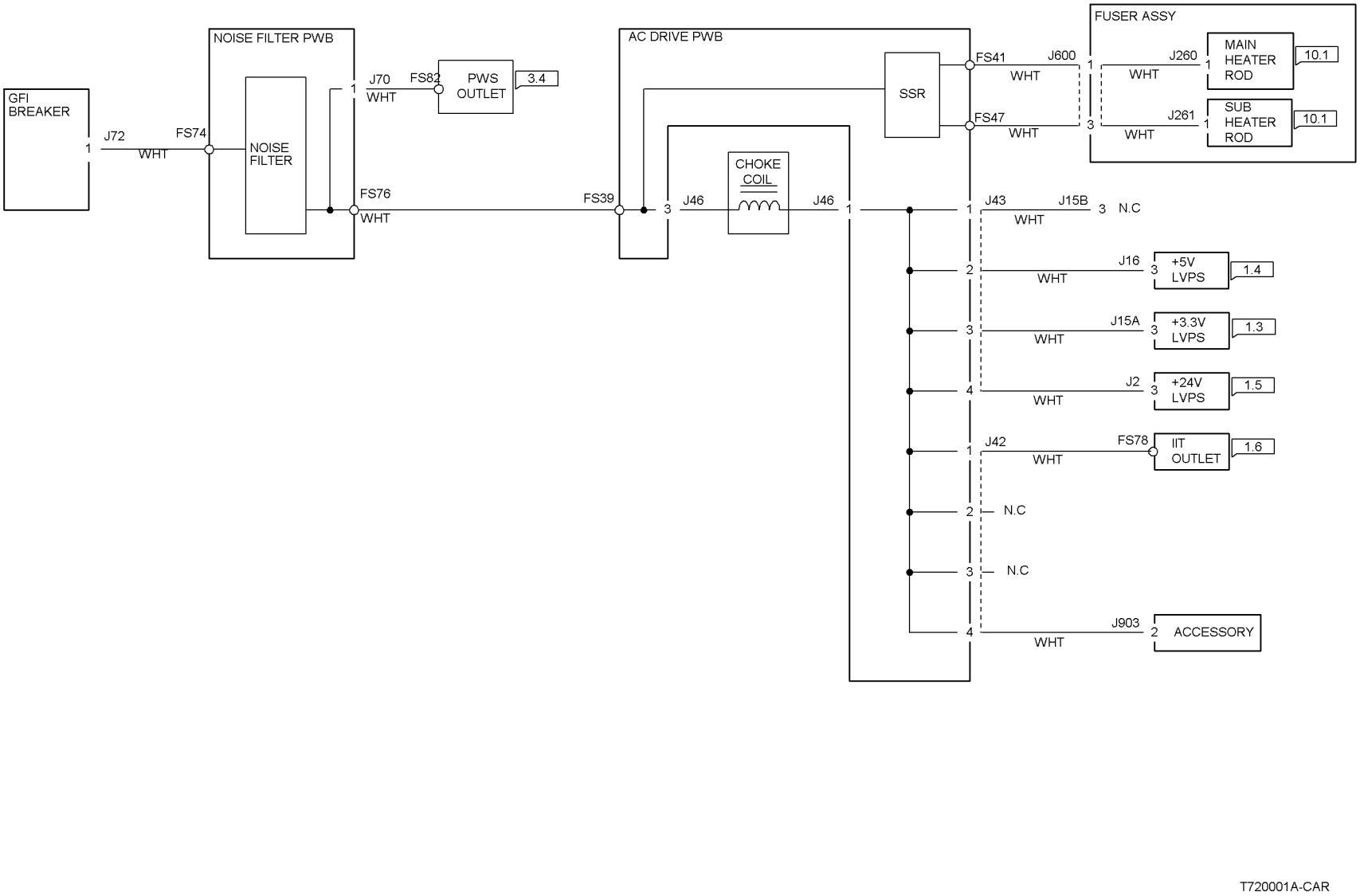


Figure 2 ACN Wirenet

+3.3VDC

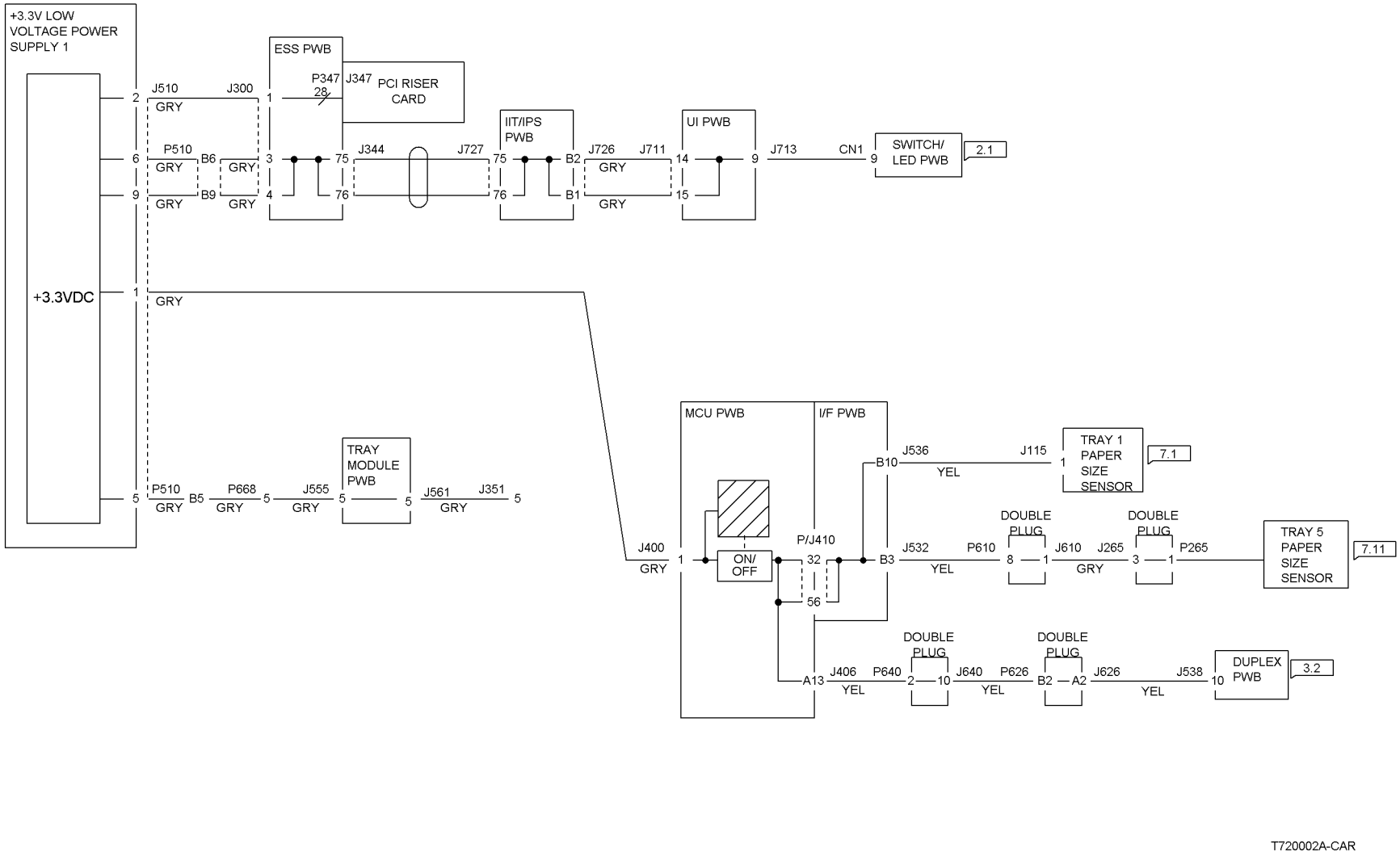


Figure 3 +3.3VDC Wirenet

3.3V RTN

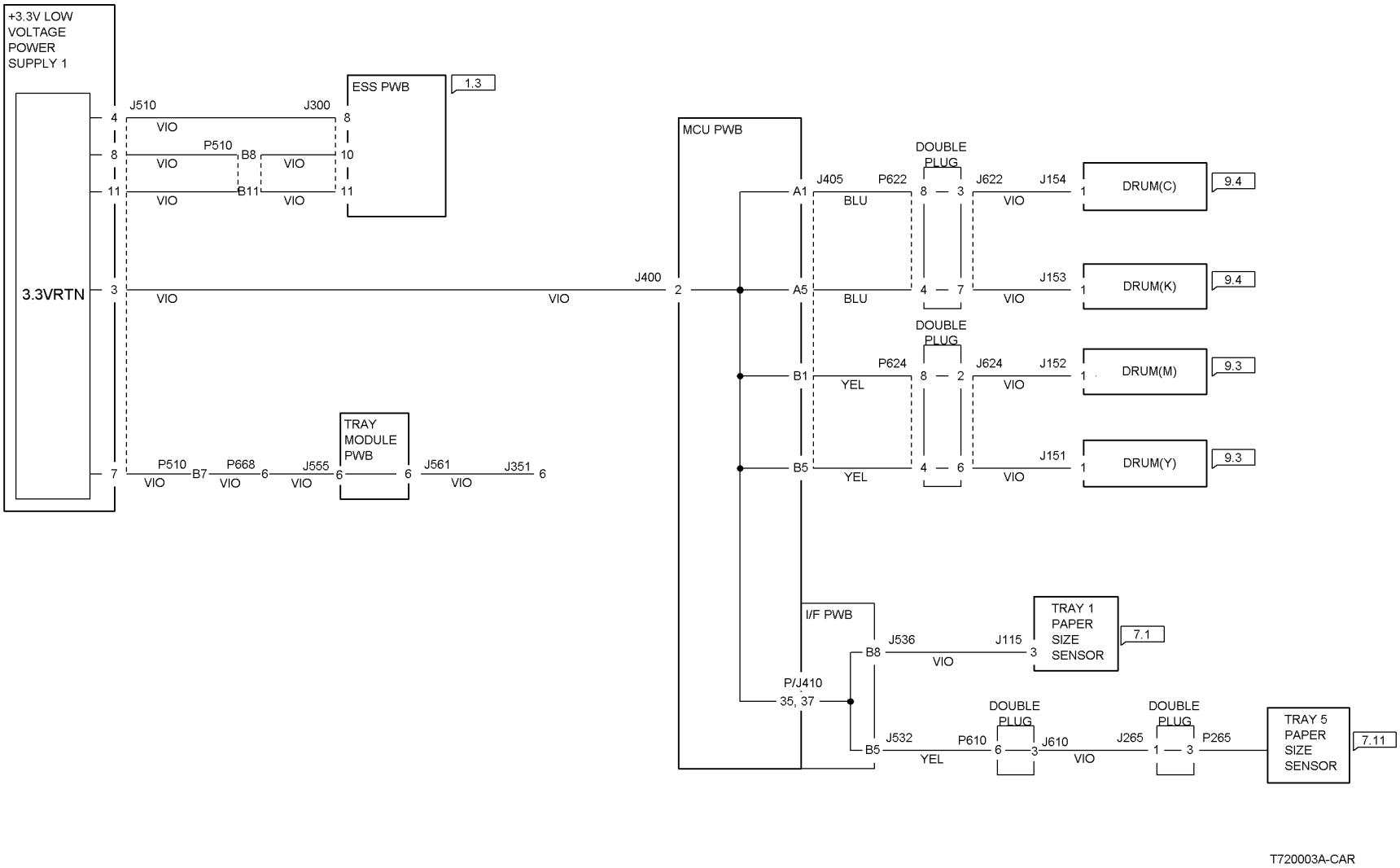


Figure 4 3.3V RTN Wirenet

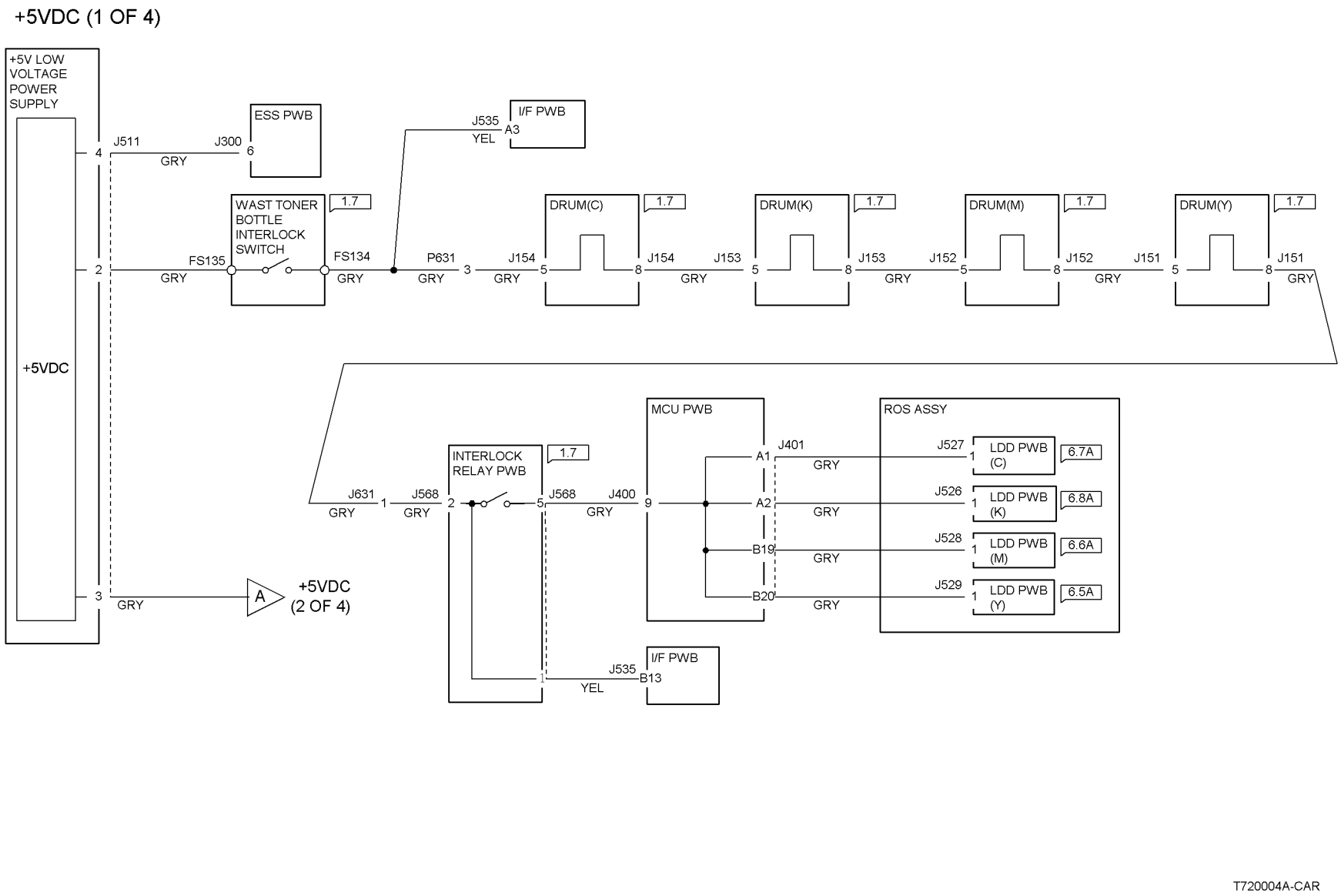


Figure 5 +5.5VDC (1 of 4) Wirenet

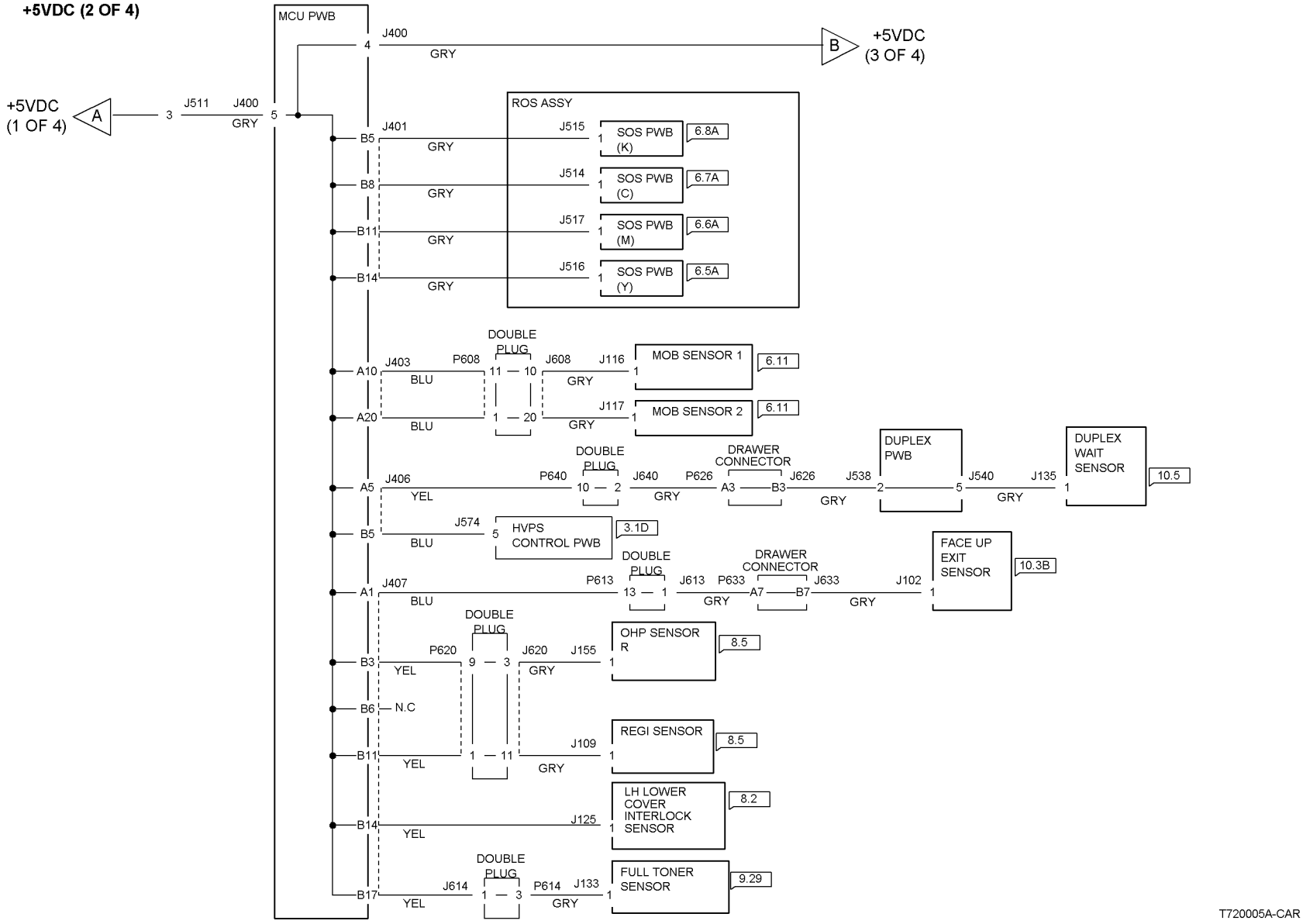


Figure 6 +5.5VDC (2 of 4) Wirenet

+5VDC (3 of 4)

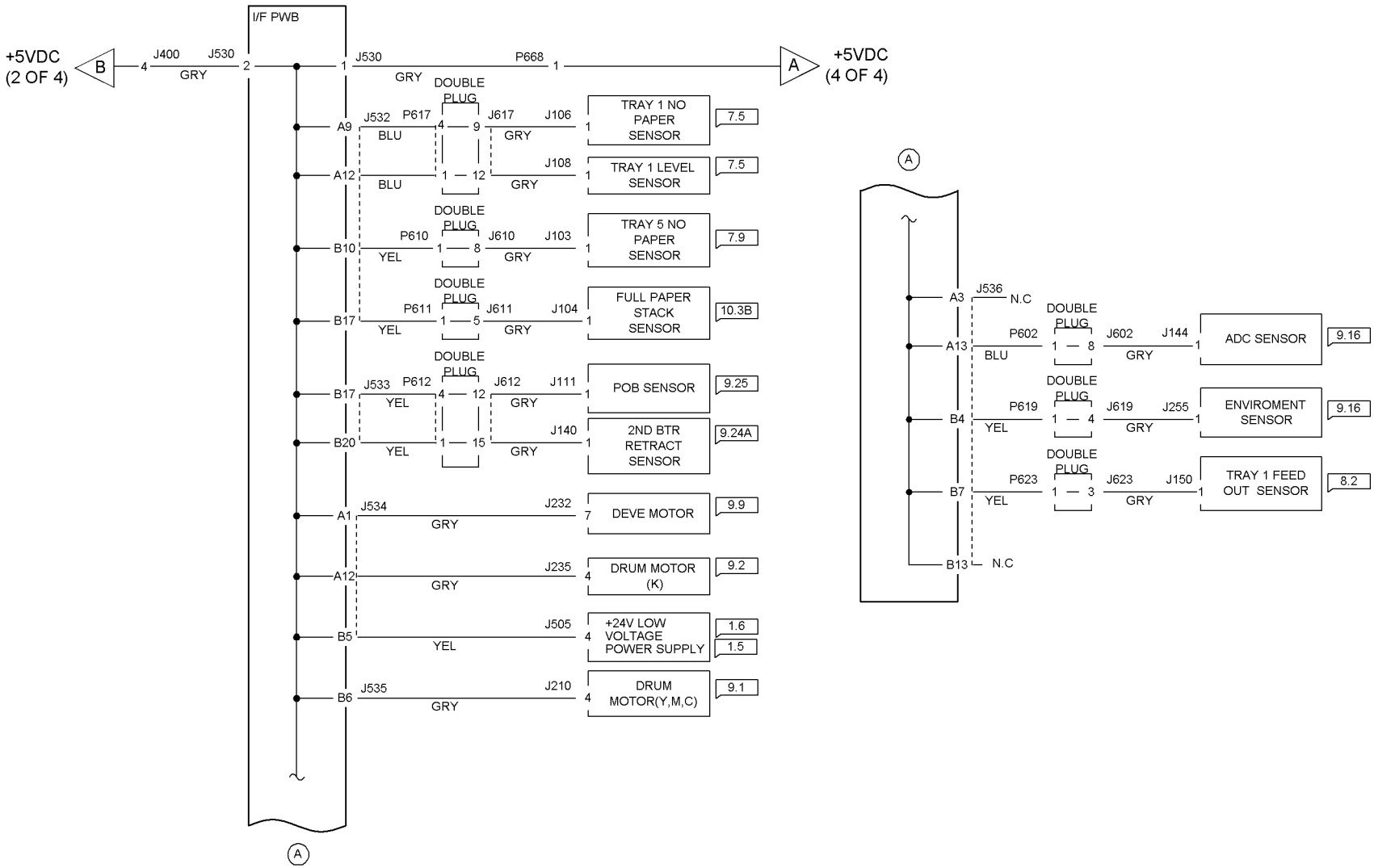


Figure 7 +5.5VDC (3 of 4) Wirenet

+5VDC (4of 4)

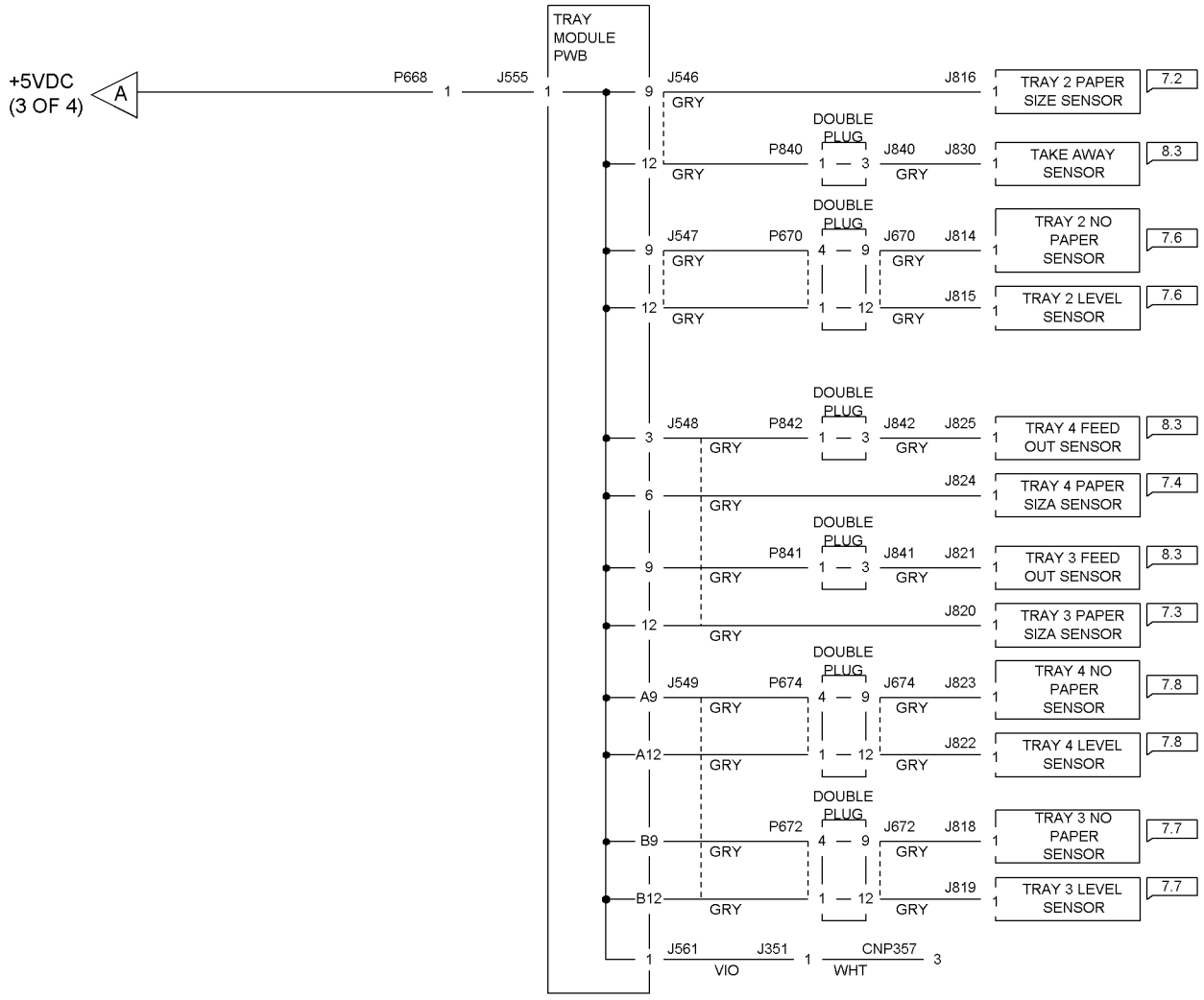


Figure 8 +5.5VDC (4 of 4) Wirenet

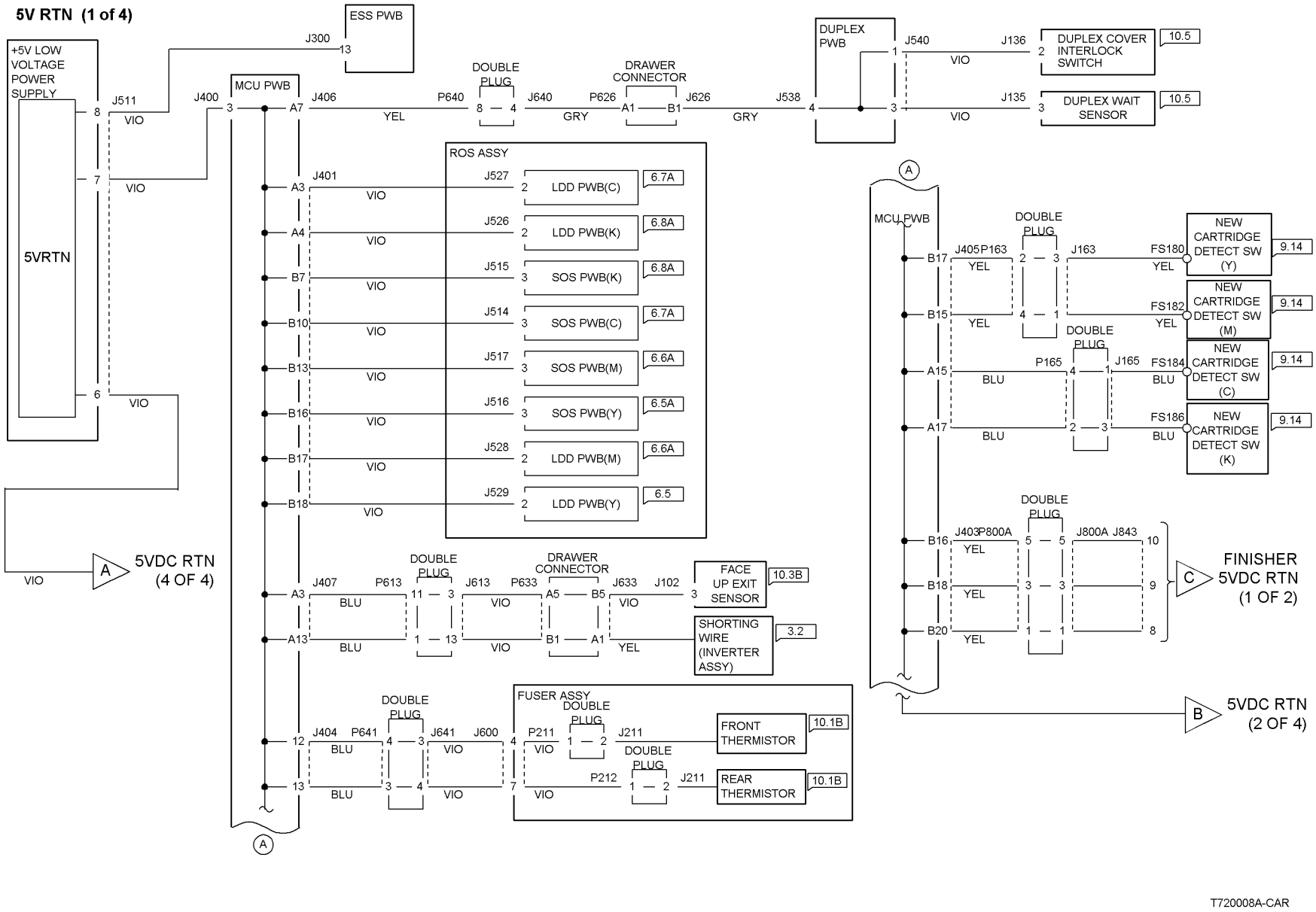


Figure 9 5V RTN (1 of 4) Wirenet

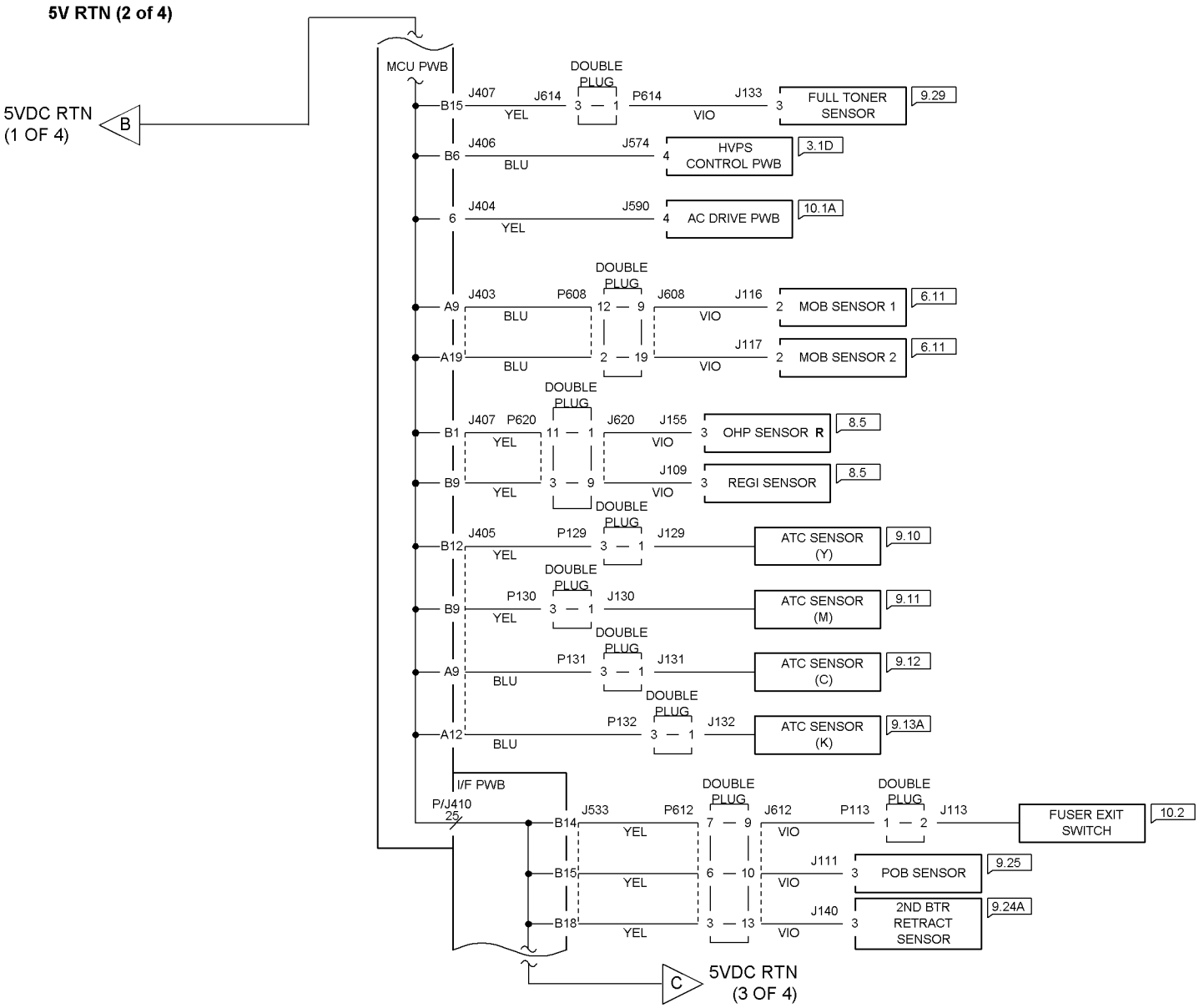


Figure 10 5V RTN (2 of 4) Wirenet

5V RTN (3 of 4)

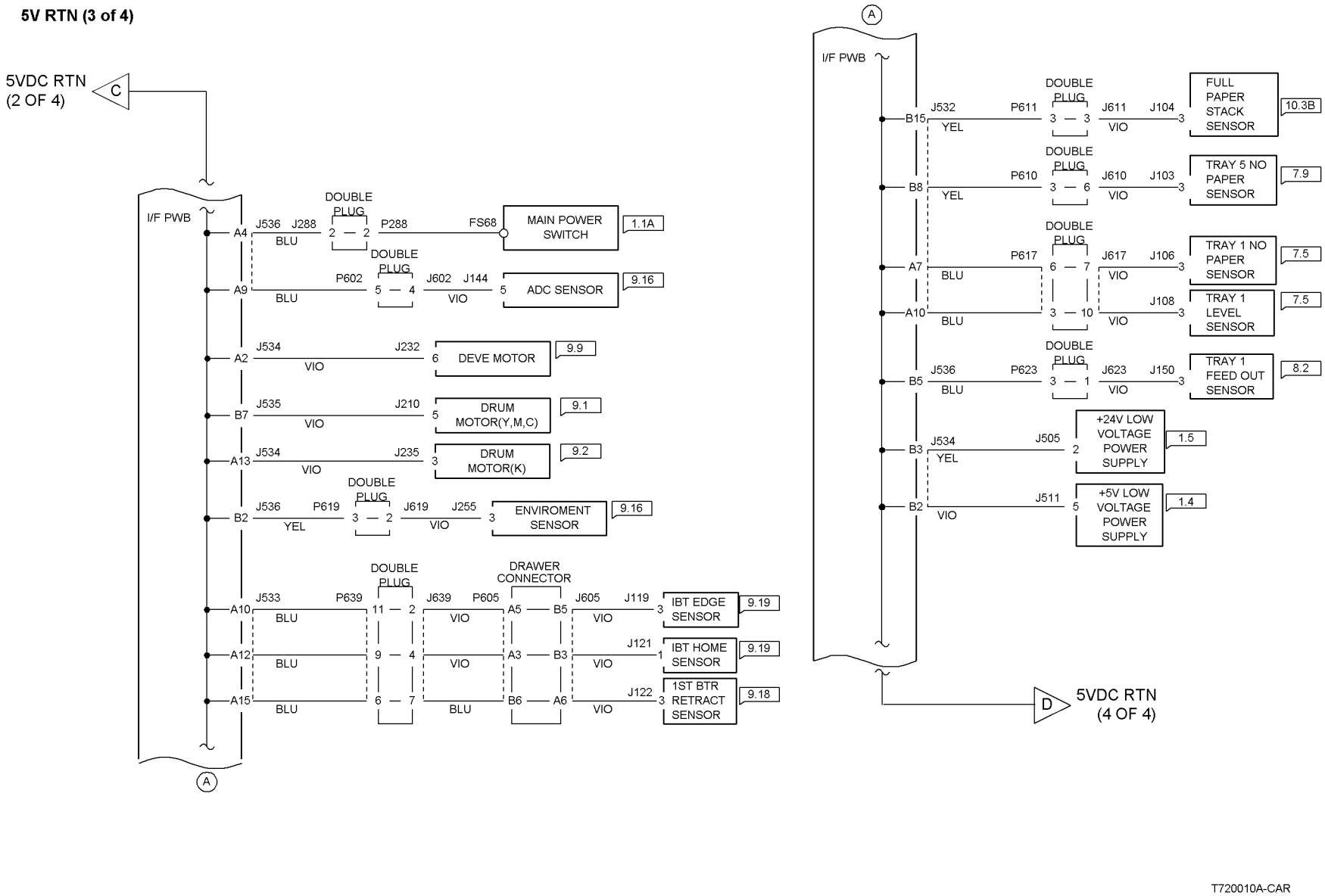


Figure 11 5V RTN (3 of 4) Wirenet

5V RTN (4 of 4)

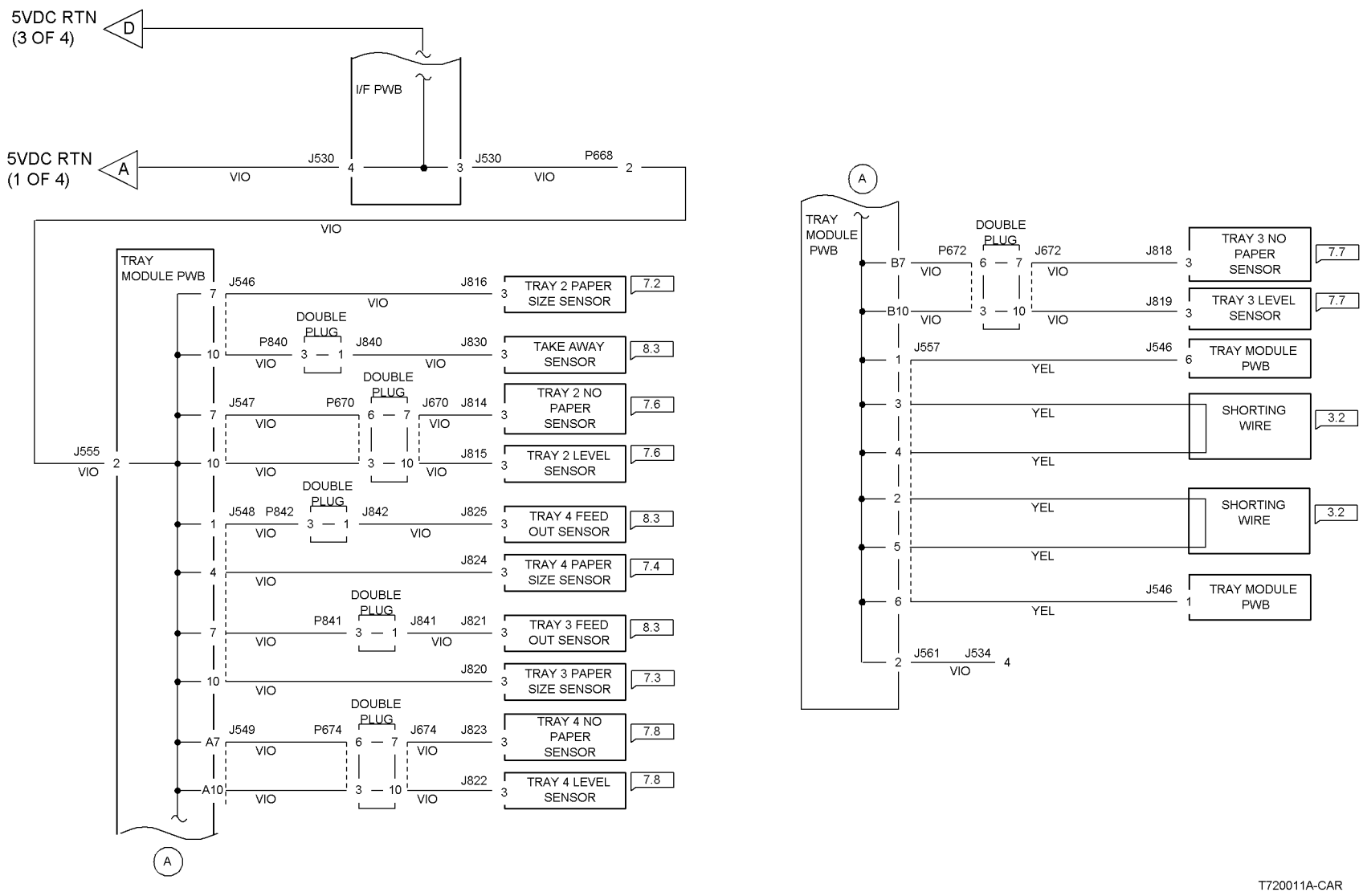


Figure 12 5V RTN (4 of 4) Wirenet

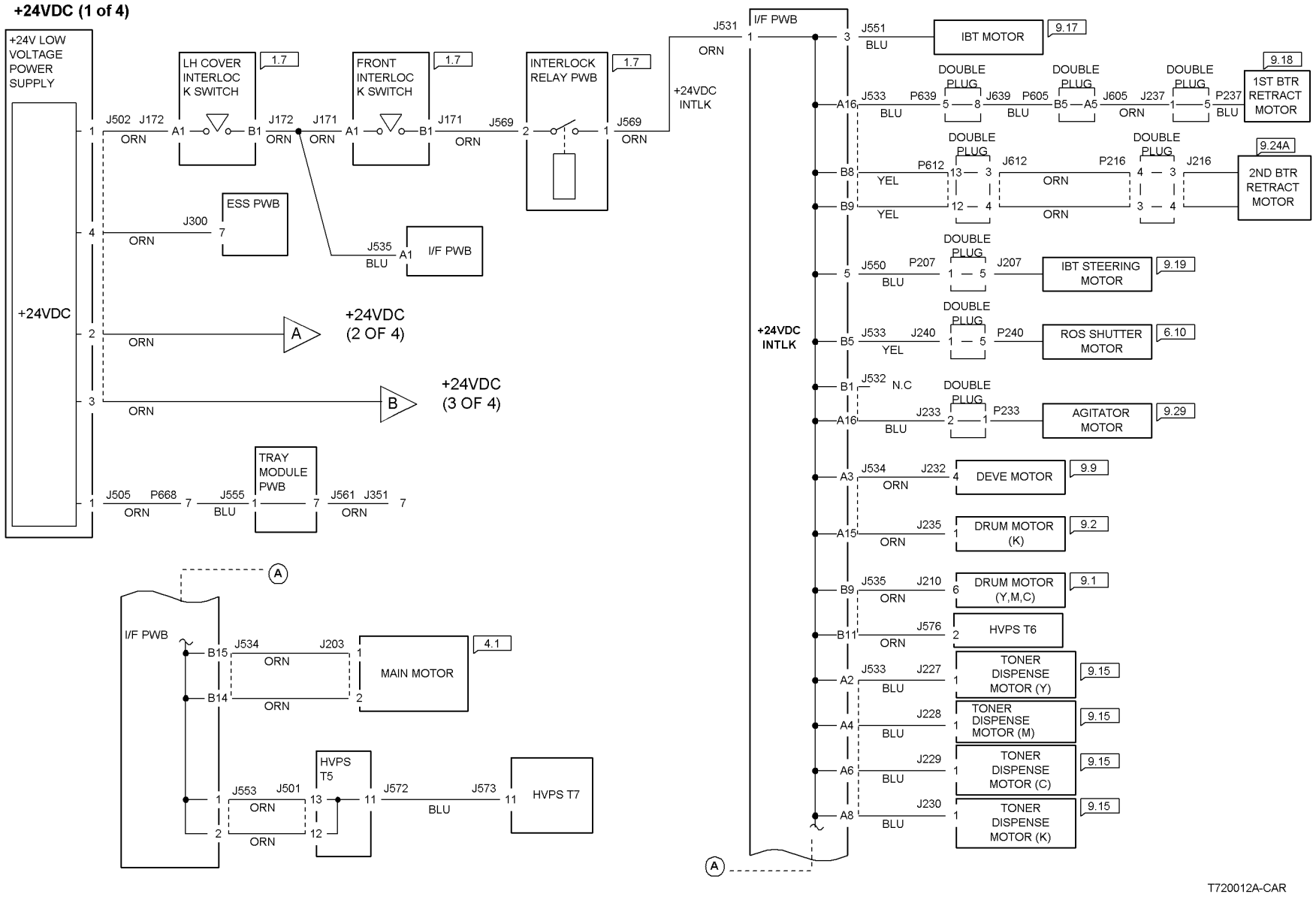
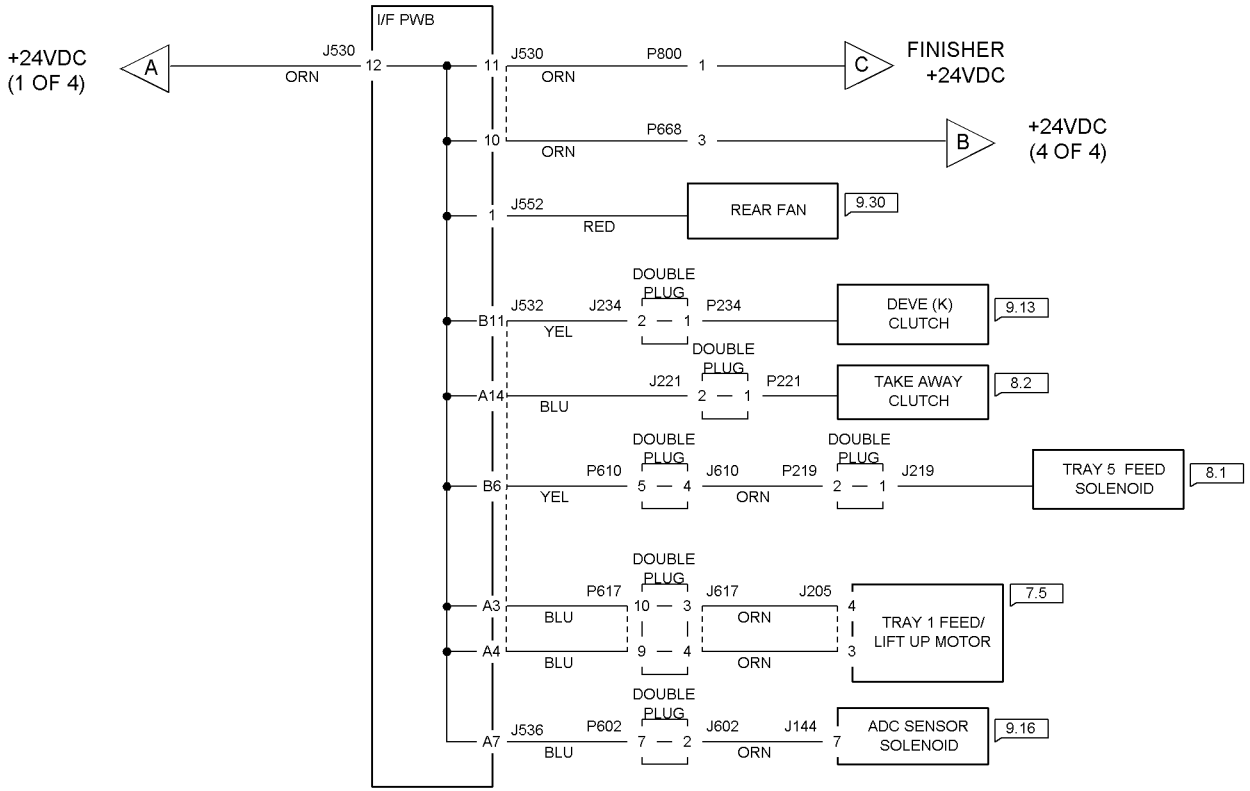


Figure 13 +24VDC (1 of 4)

+24VDC (2 OF 4)



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Figure 14 +24VDC (2 of 4)

+24VDC (3 of 4)

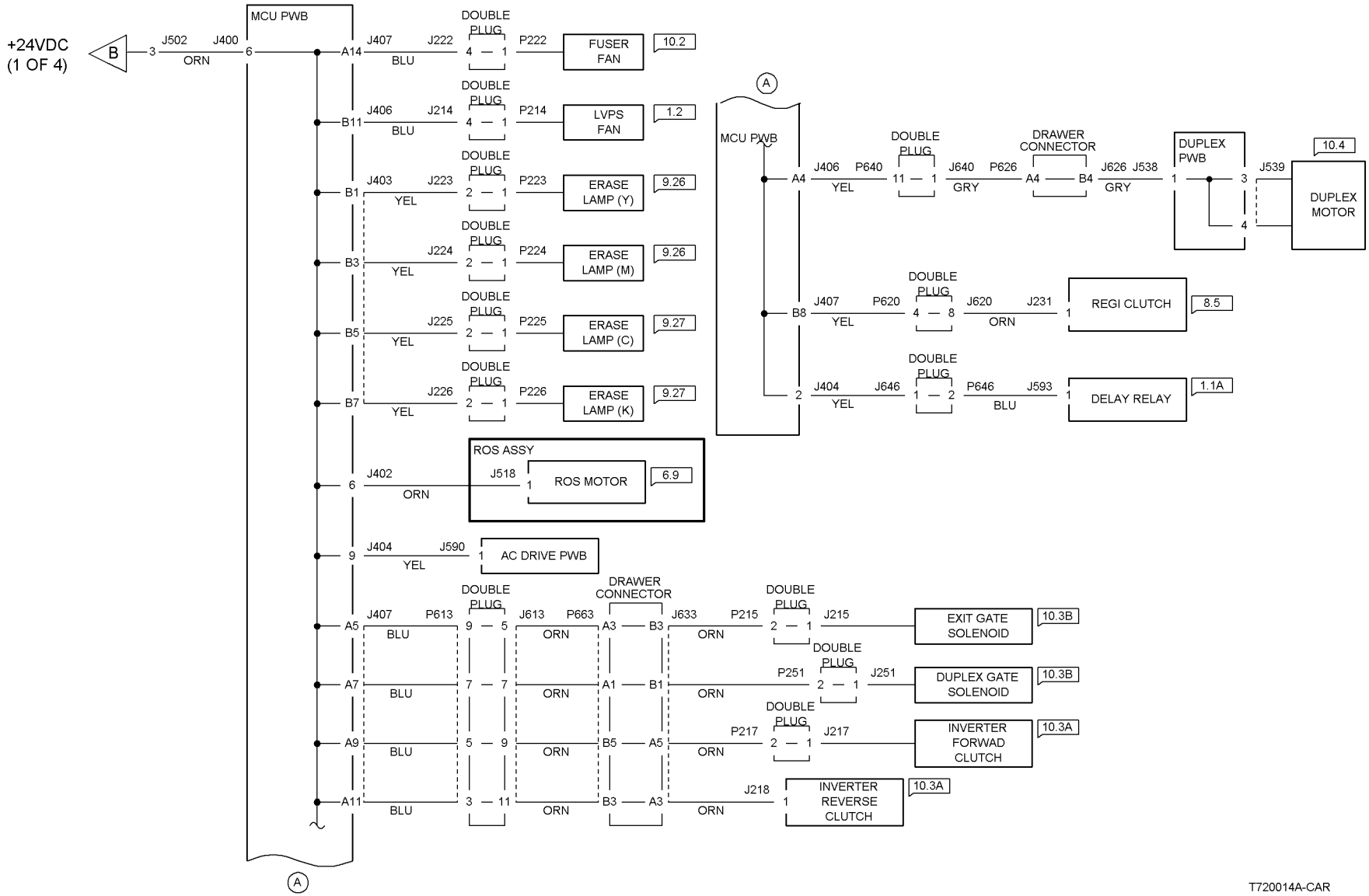
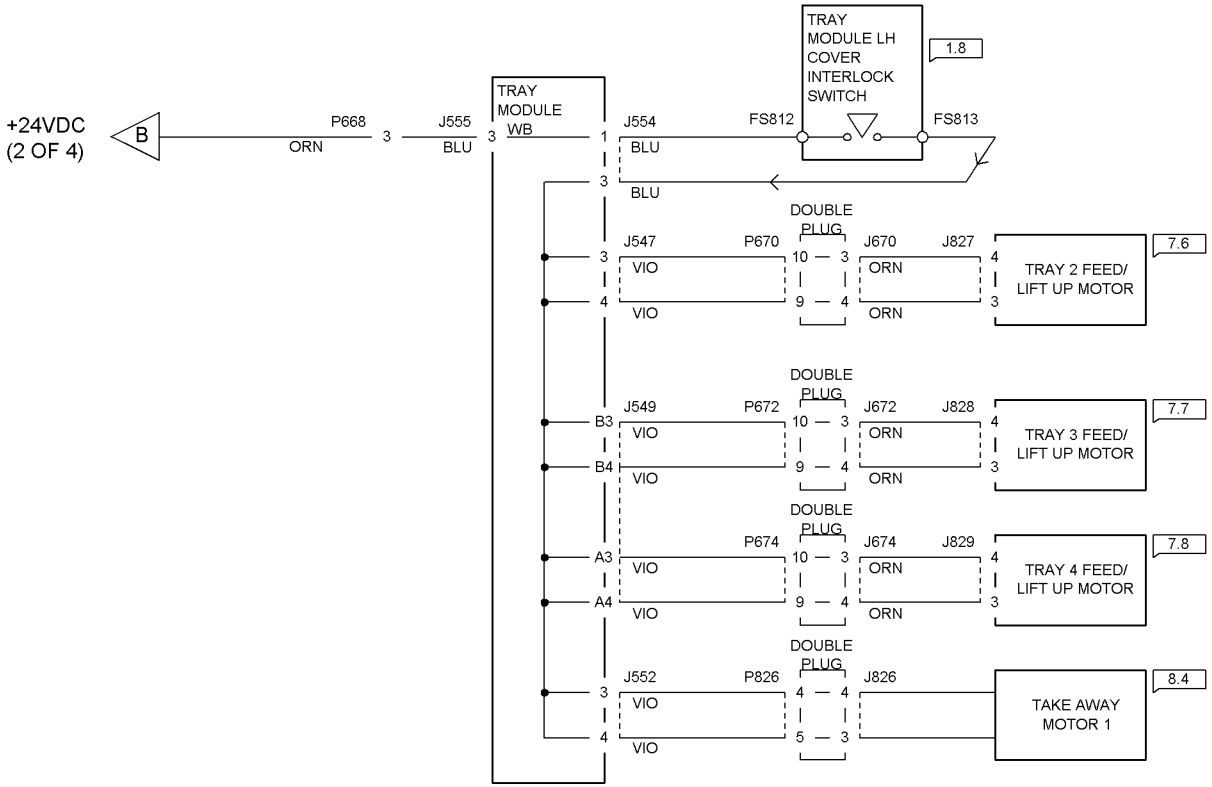


Figure 15 +24VDC (3 of 4)

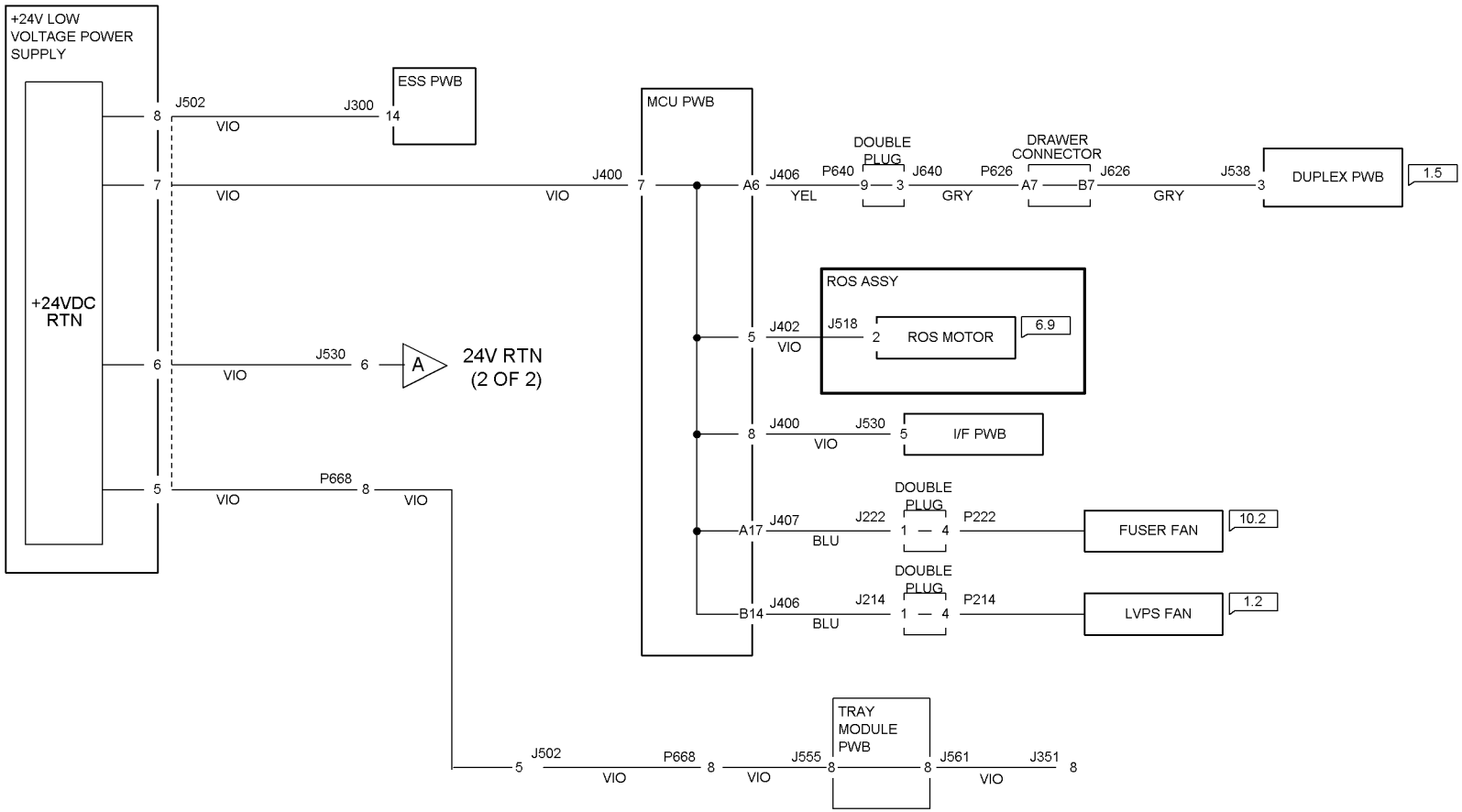
+24VDC (4 of 4)



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Figure 16 +24VDC (4 of 4)

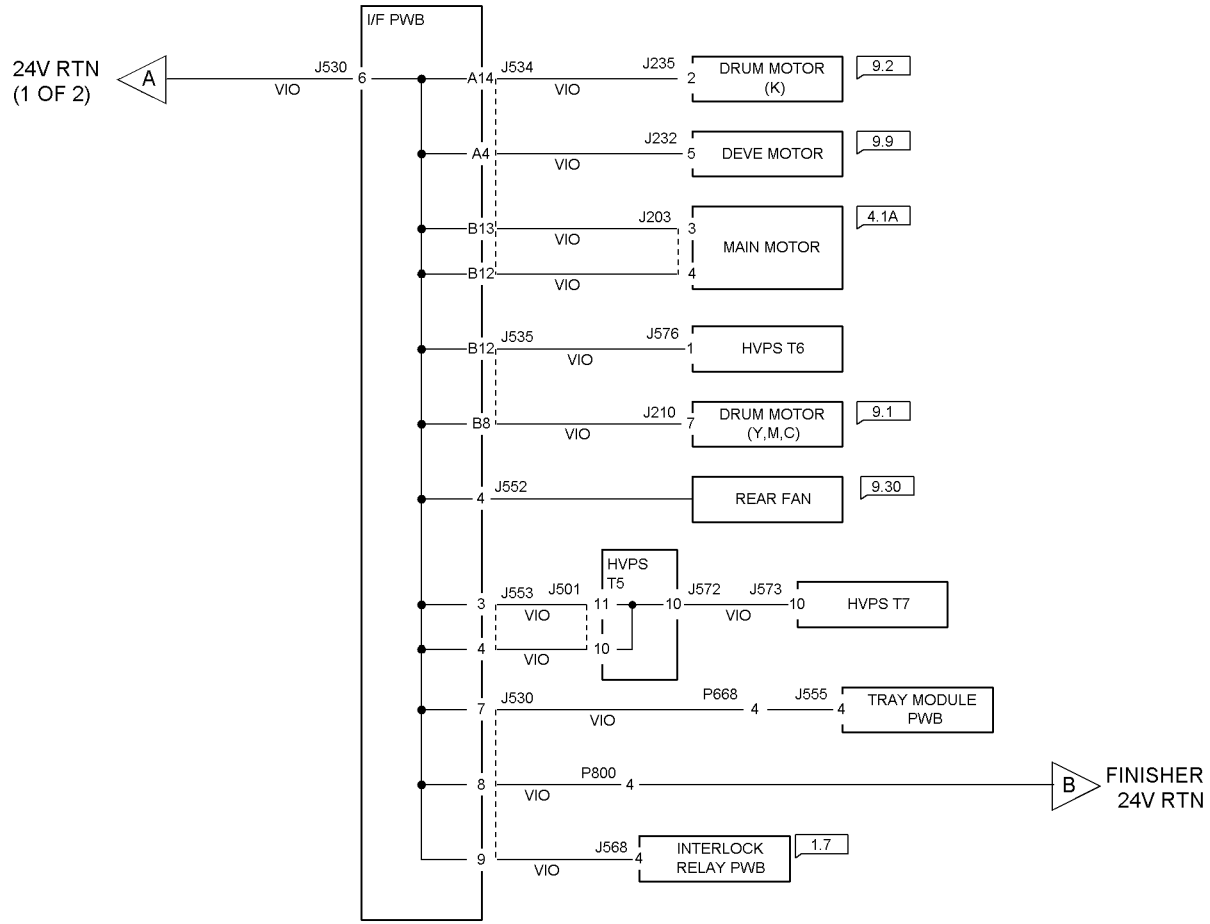
24V RTN (1 of 2)



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Figure 17 24V RTN (1 of 4)

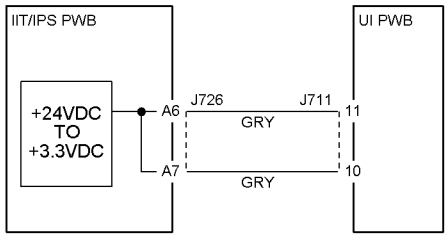
24V RTN (2 0f 2)



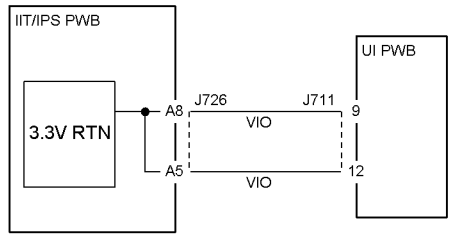
T720017A-CAR

Figure 18 24V RTN (2 of 4)

IIT +3.3VDC



IIT DC COM (3.3V RTN)



T720018A-CAR

Figure 19 IIT +3.3VDC & 3.3V RTN Wirenets

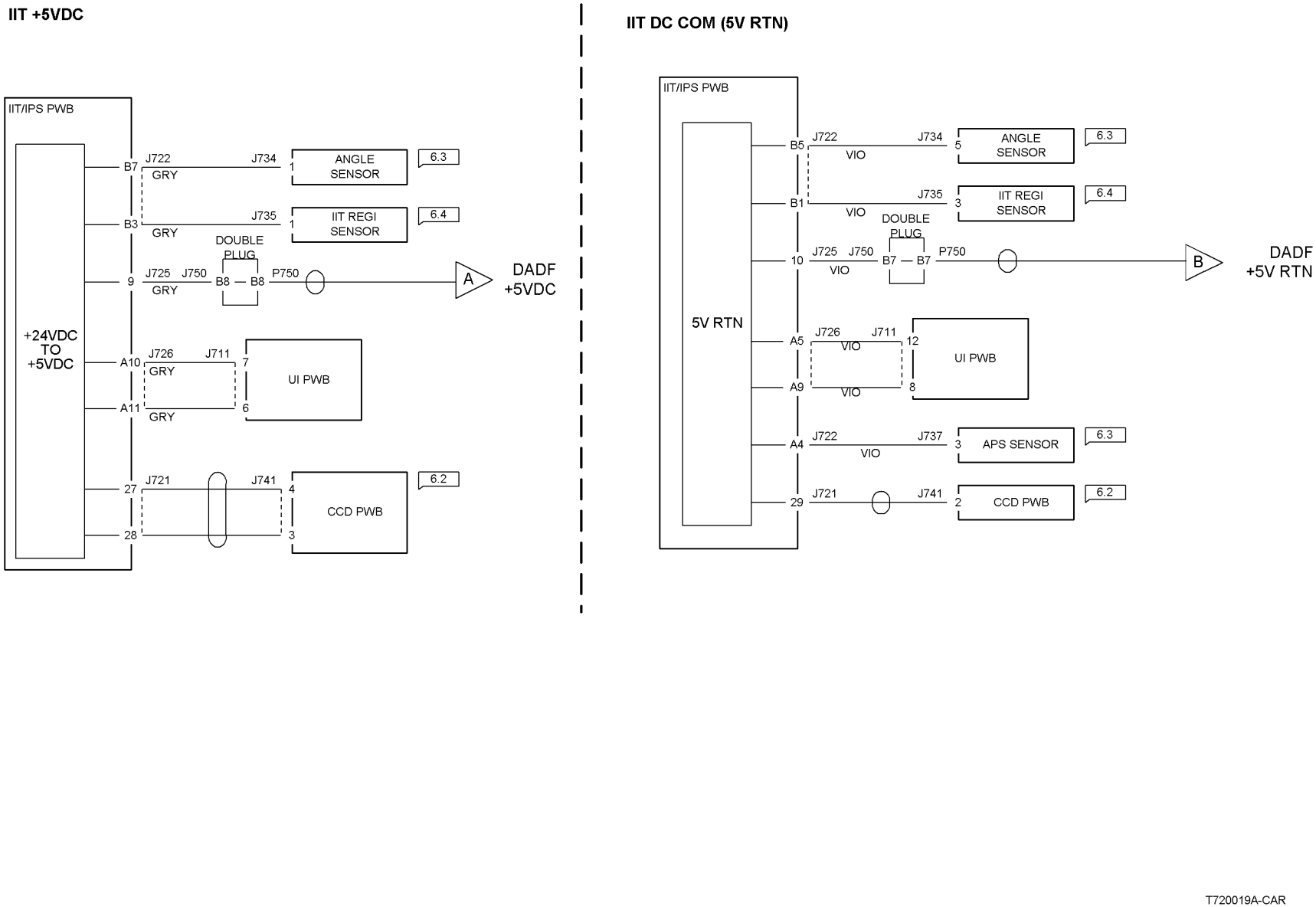
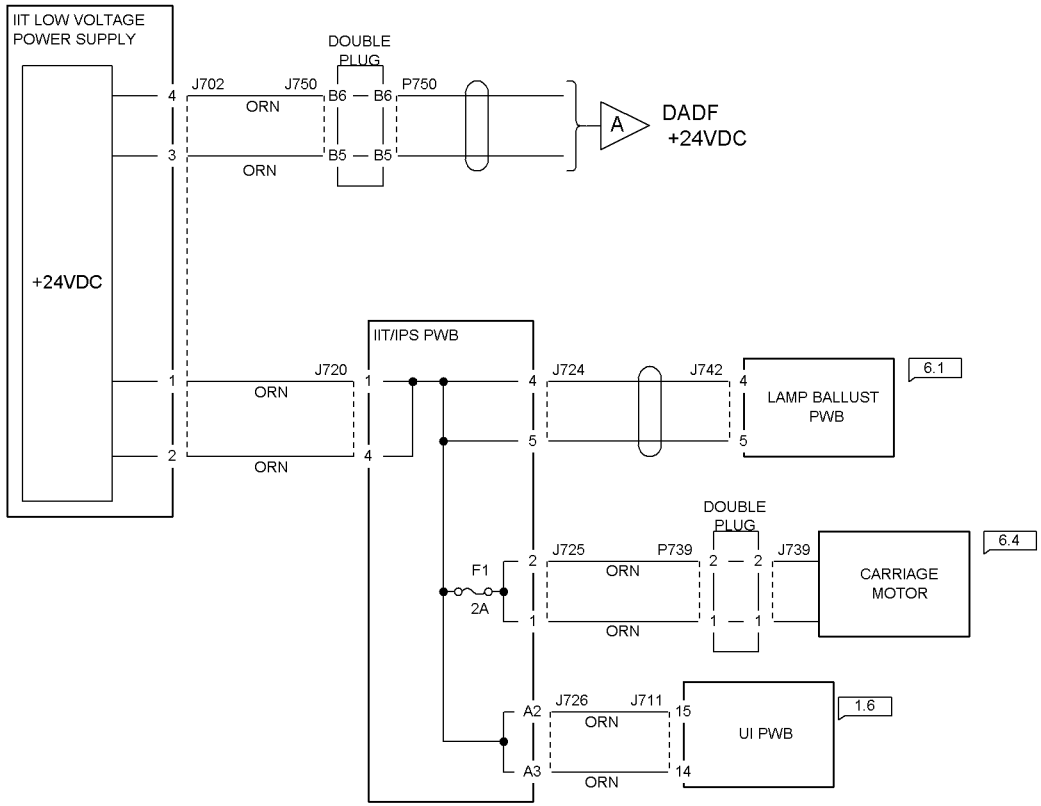


Figure 20 IIT +5VDC & 5V RTN Wirenets

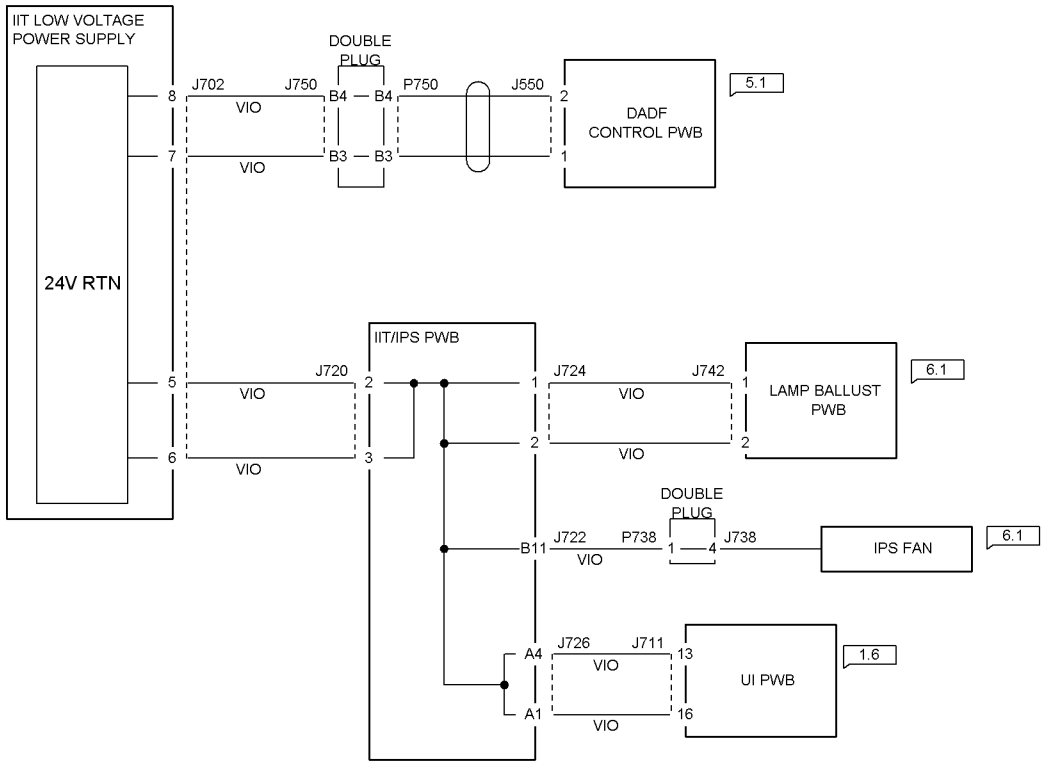
IIT +24VDC



T720020A-CAR

Figure 21 IIT +24VDC Wirenet

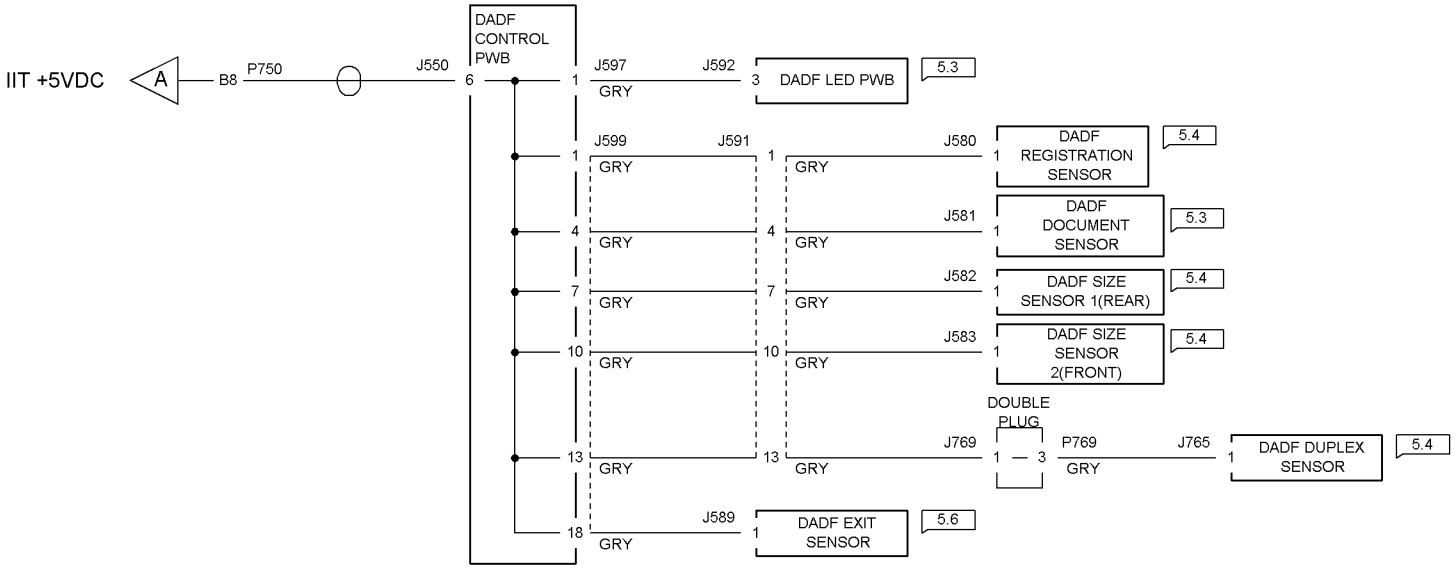
IIT DC COM (24V RTN)



T720021A-CAR

Figure 22 IIT 24V RTN

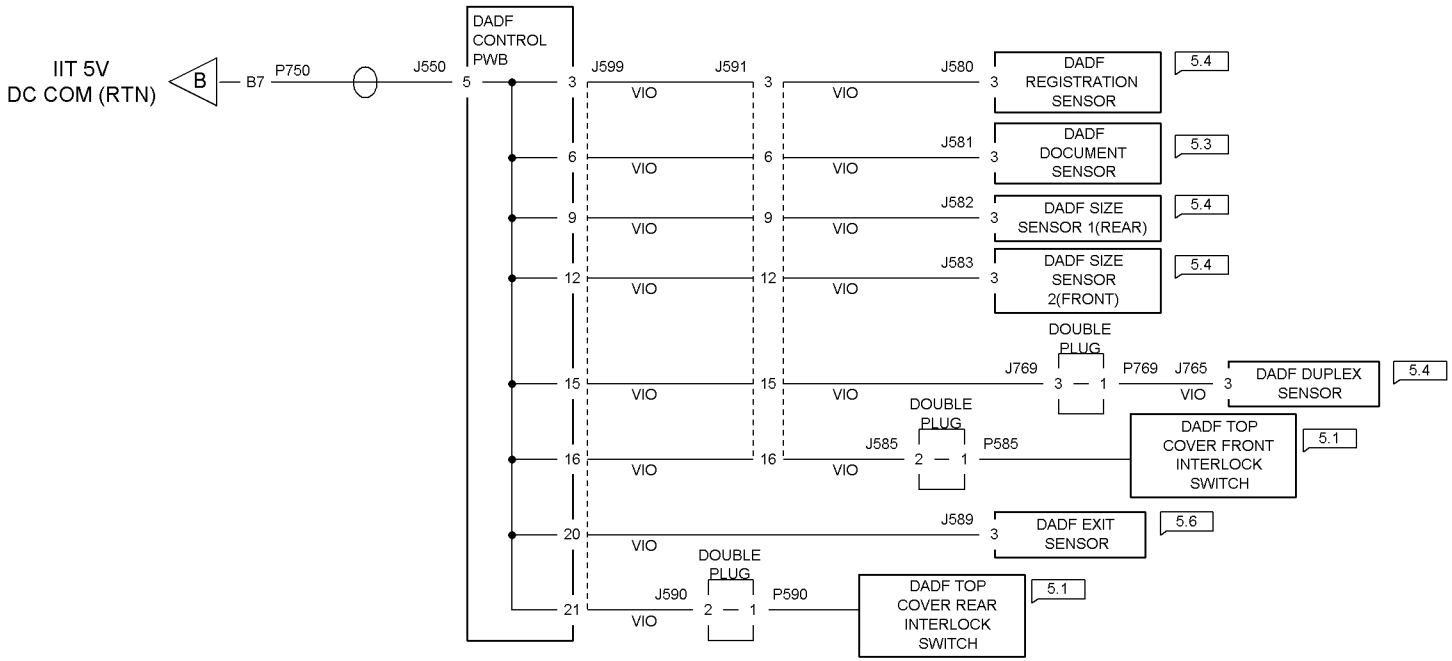
DADF +5VDC



T720022A-CAR

Figure 23 DADF +5VDC Wirenet

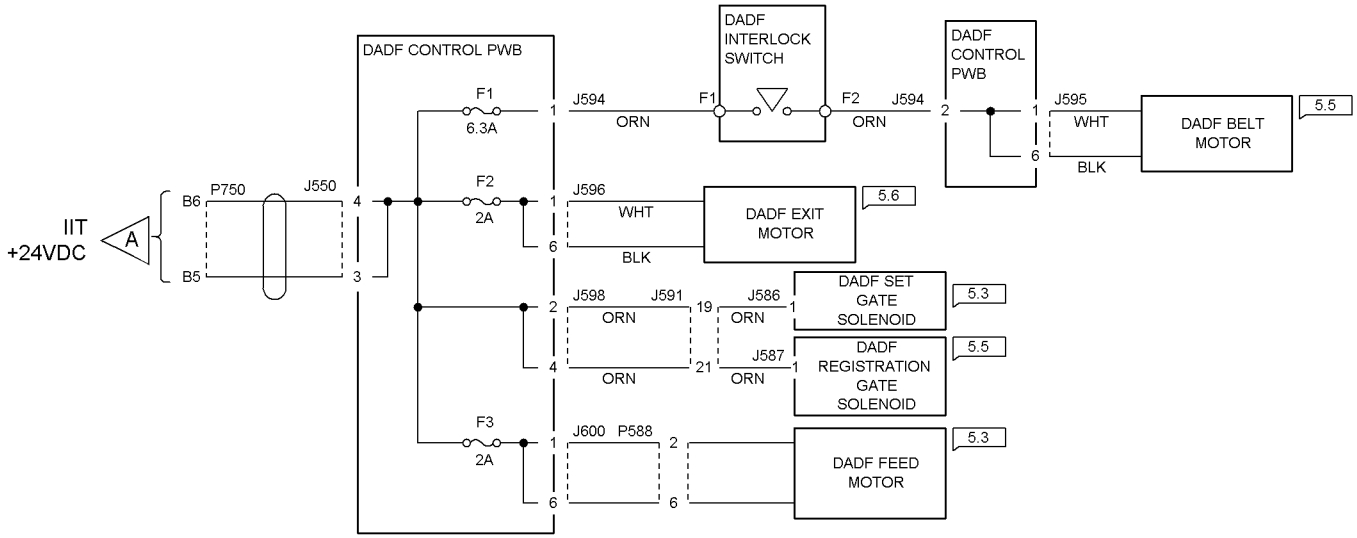
DADF DC COM (5V RTN)



T720023A-CAR

Figure 24 DADF 5V RTN

DADF +24VDC



T720024A-CAR

Figure 25 DADF +24VDC Wirenet

FINISHER +5VDC(1 0f 2)

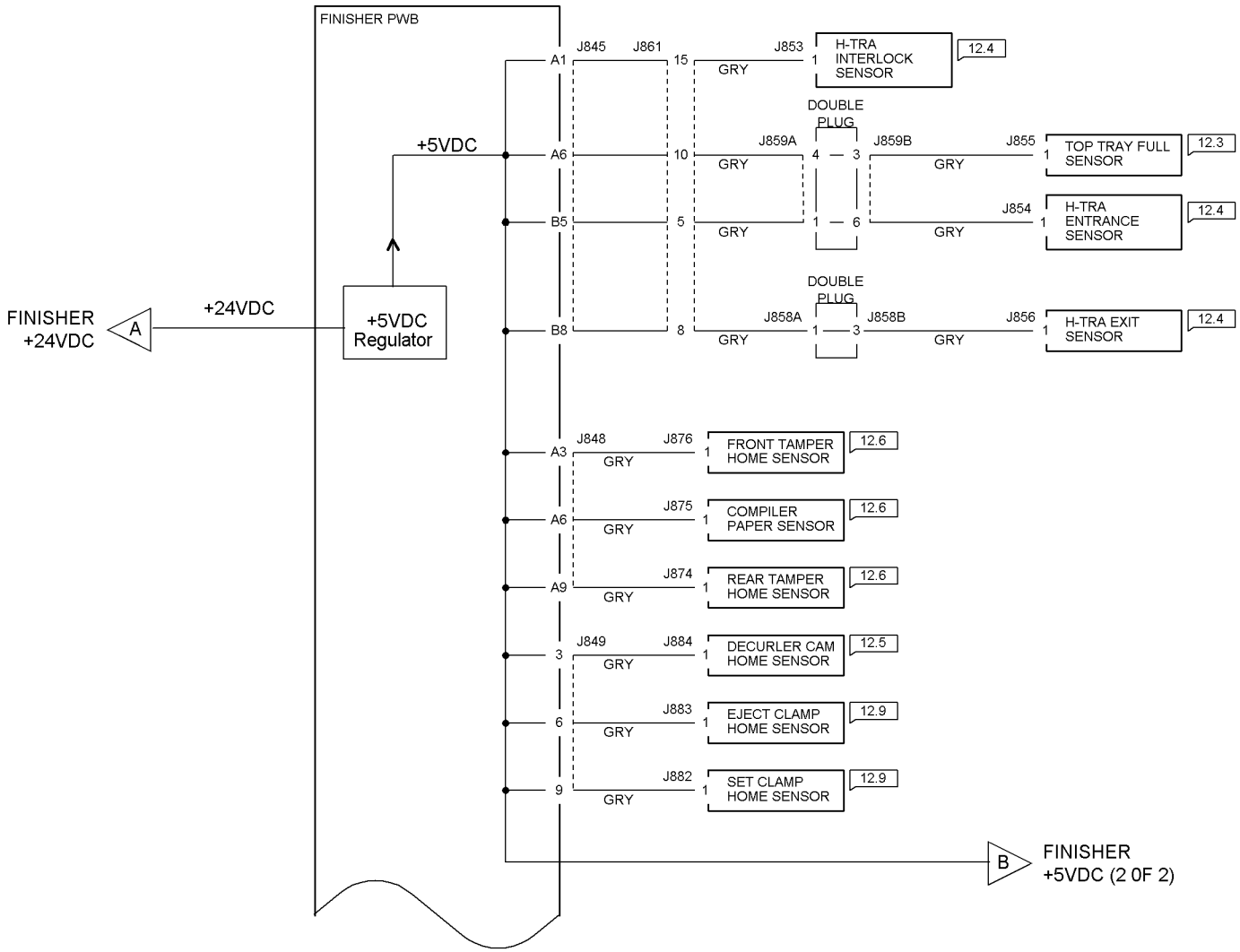
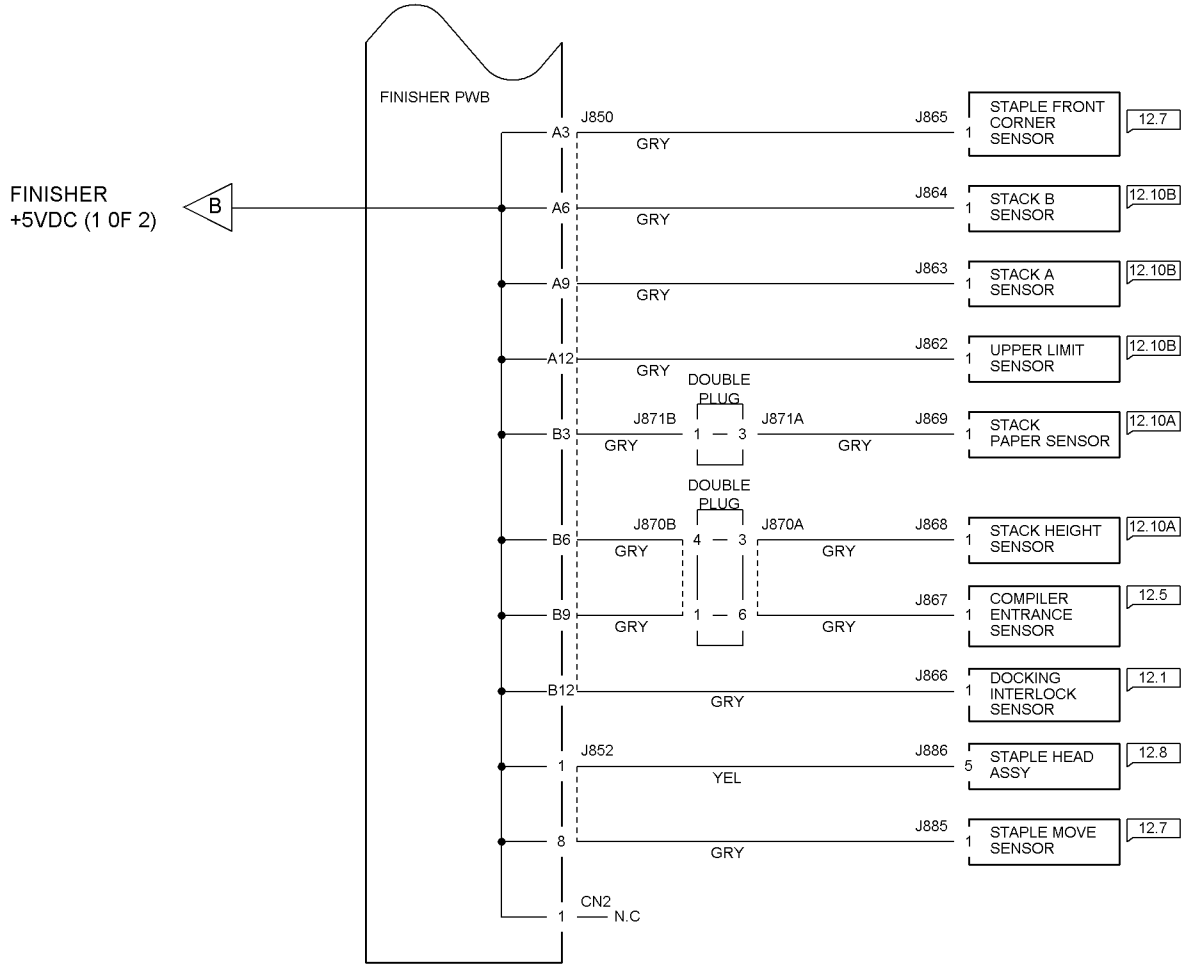


Figure 26 finisher +5VDC (1 of 2) Wirenet

FINISHER +5VDC (2 of 2)



T720026A-CAR

Figure 27 +5VDC (2 of 2) Wirenet

FINISHER 5V RTN (1 of 2)

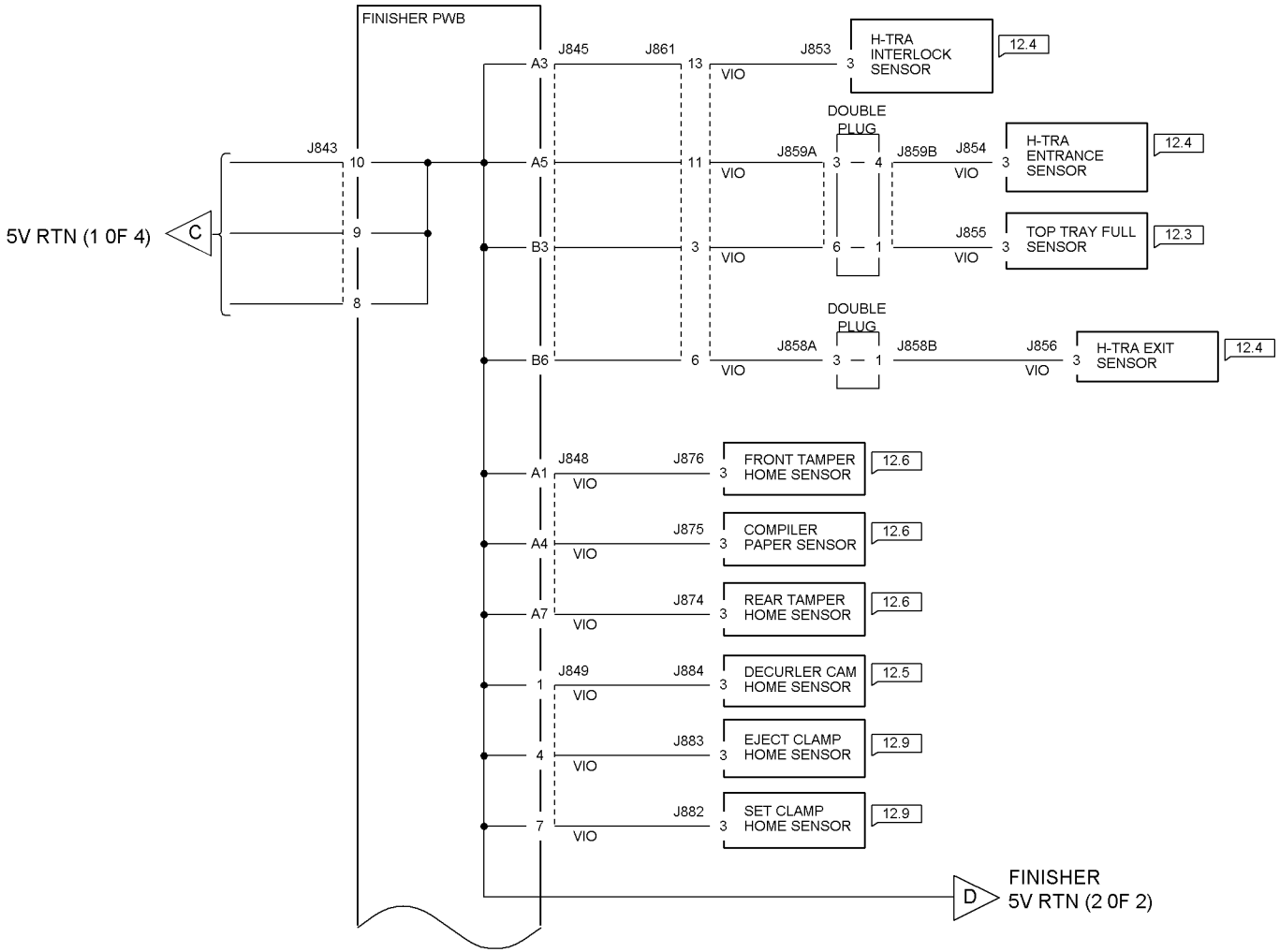


Figure 28 5V RTN (1 of 2) Wirenet

FINISHER 5V RTN (2 0f 2)

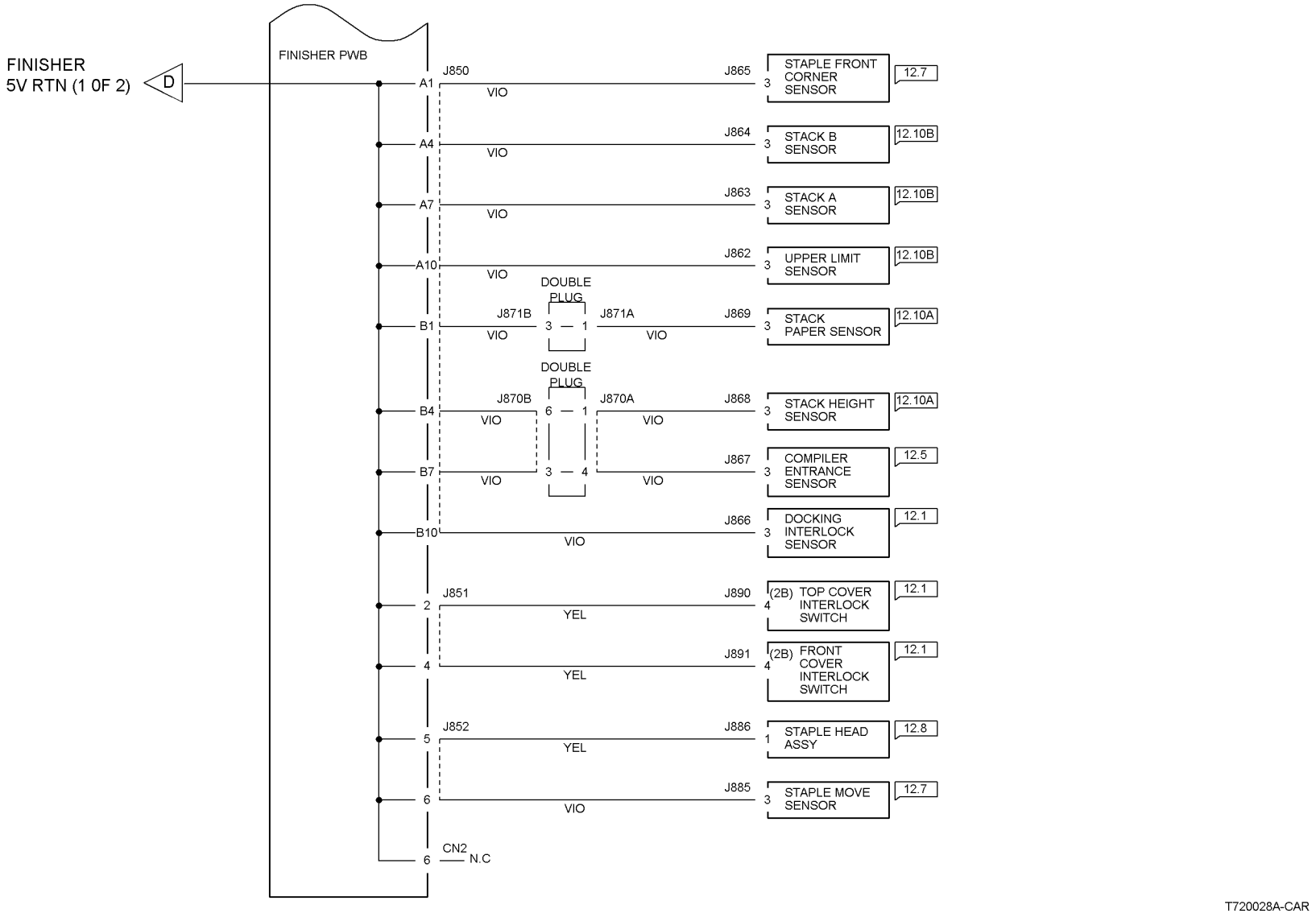


Figure 29 5V RTN (2 of 2) Wirenet

FINISHER +24VDC

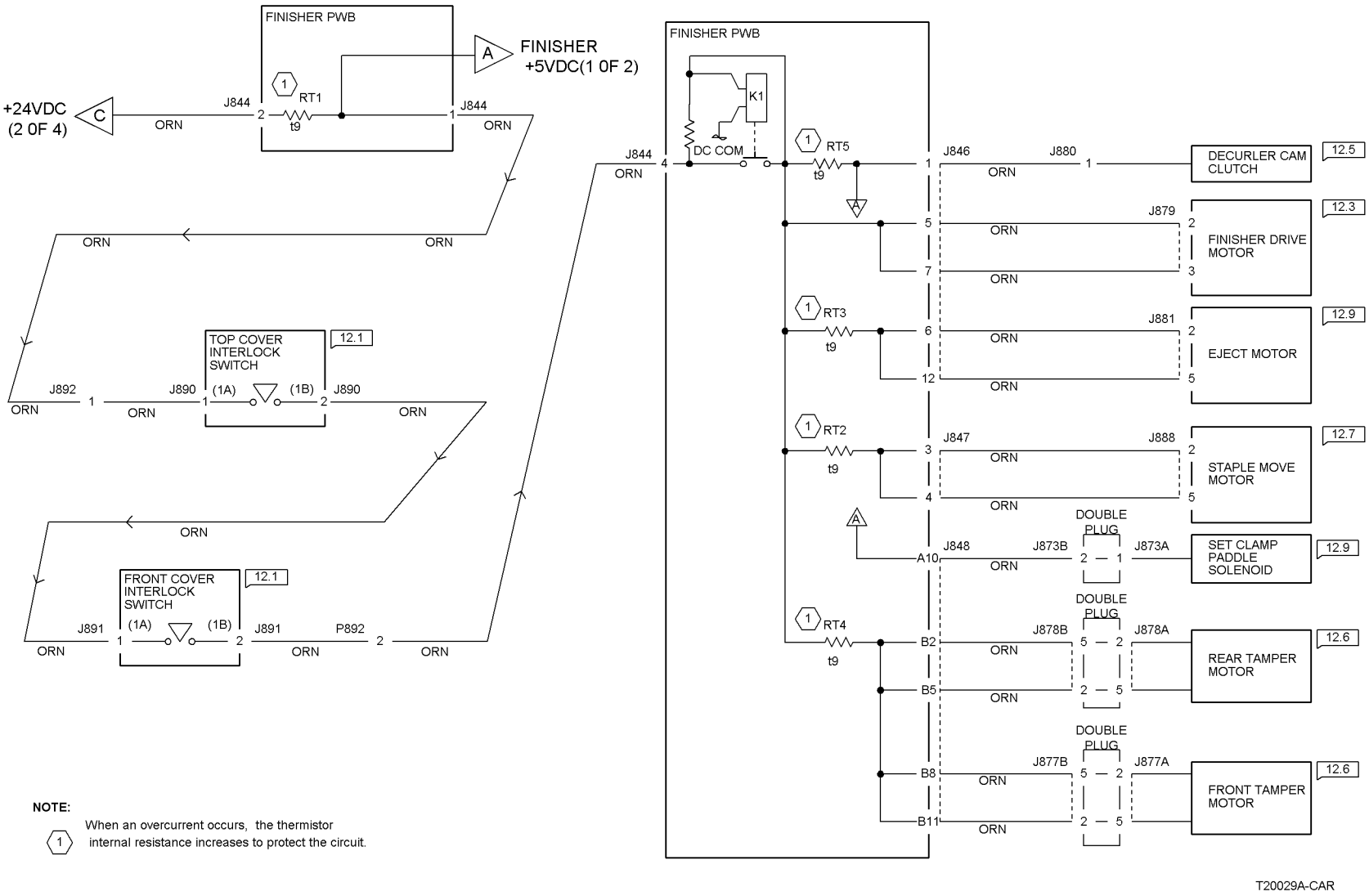
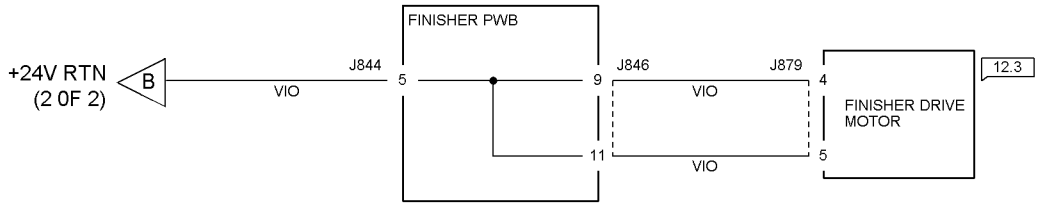


Figure 30 Finisher +24VDC Wirenet

FINISHER DC COM (24V RTN)



T720030A-CAR

Figure 31 Finisher 24V RTN Wirenet

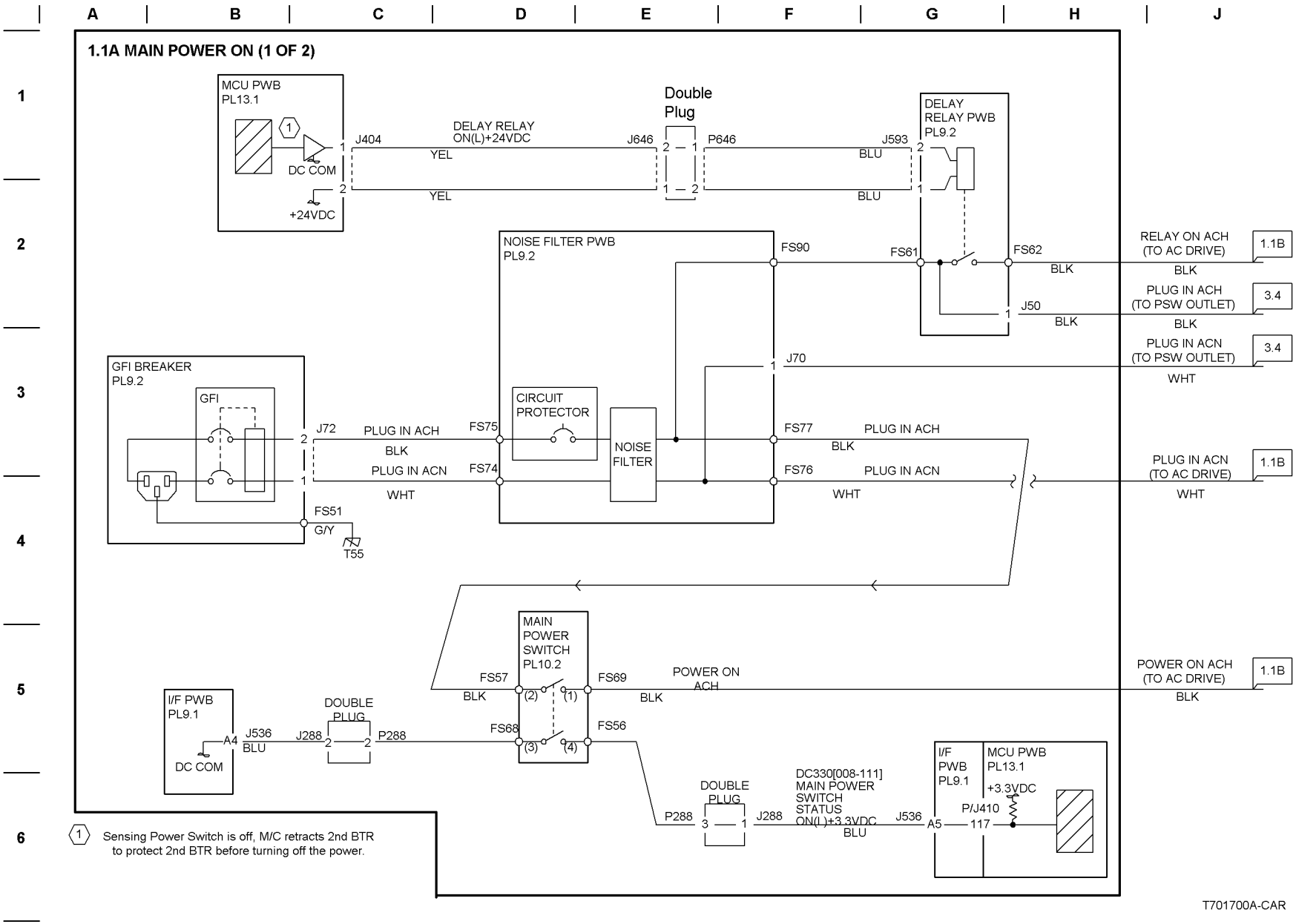


Figure 1 1.1B Main Power On (2 0f2)

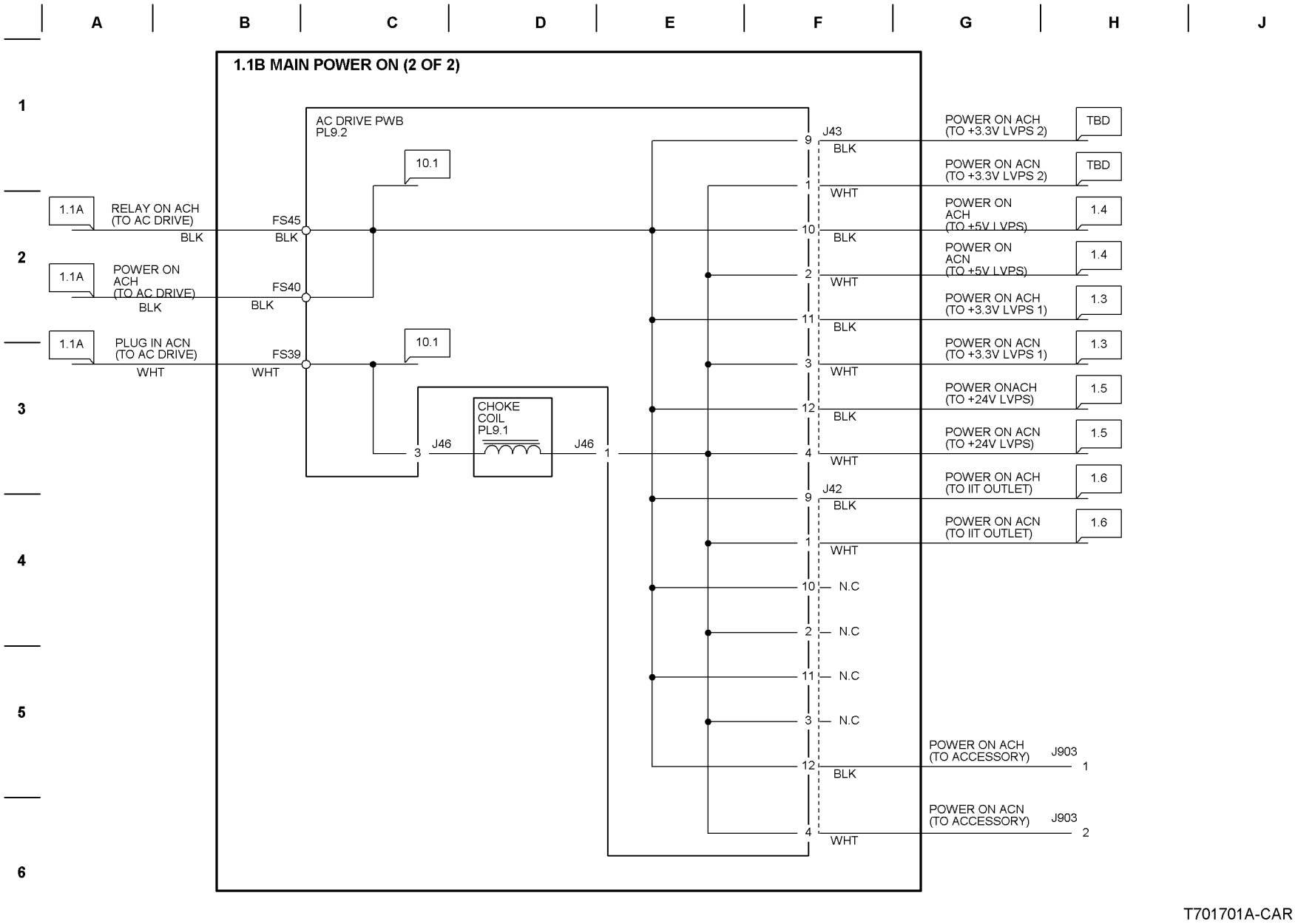
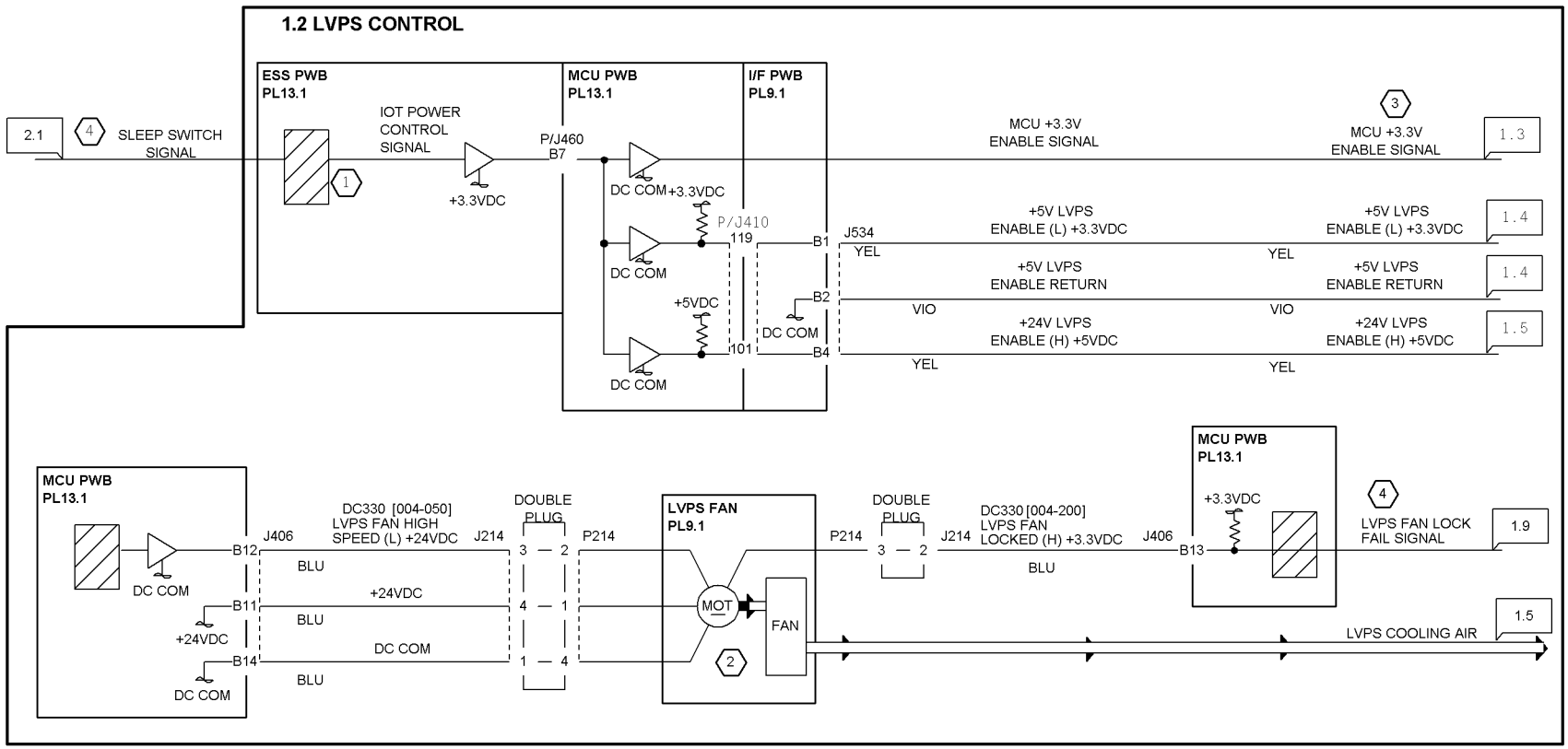


Figure 2 Main Power On (2 of 2)

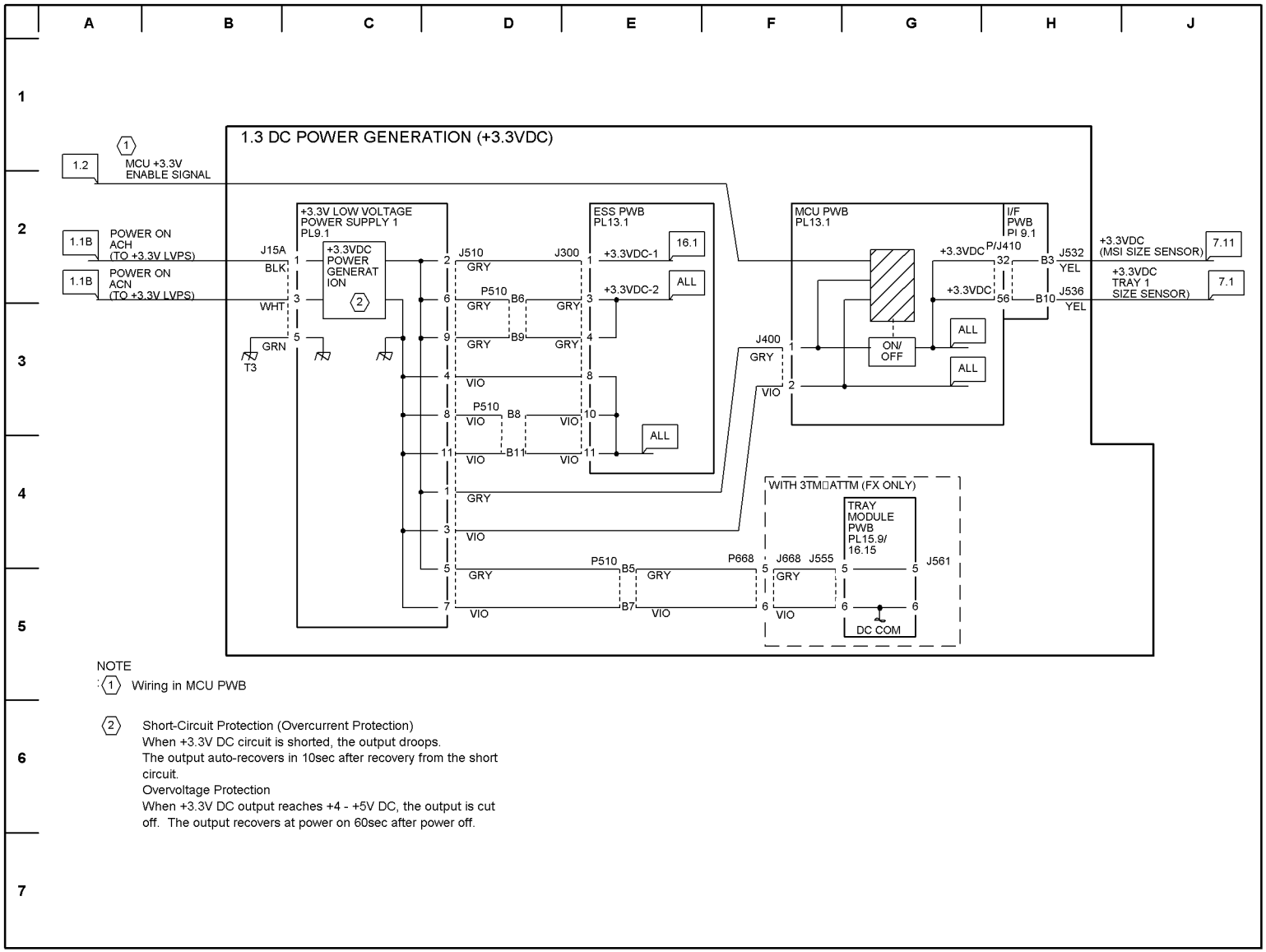


NOTE:

1. In Sleep Mode, M/C turns off the +5V LVPS and +24V LVPS Enable signal to cut off the +5V DC and +24V DC output.
   In Sleep Mode, though +3.3V LVPS remains on, +3.3V DC supplied to either of the PWBs is cut off to part of ESS PWB and all the parts of MCU PWB. (See CH 1.3.)
2. LVPS Fan starts low-speed rotation at power on and keeps it with M/C on standby.
   LVPS Fan starts high-speed rotation at Main Motor On and transits to low-speed rotation 15sec (adjustable in NVM) after Main Motor Off.
   In Sleep Mode, LVPS Fan stops rotating because +24V DC is cut off.
3. Wiring in MCU PWB
4. Virtual Line

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Figure 3 LVPS Control



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Figure 4 DC Power Generation (+3.3VDC)

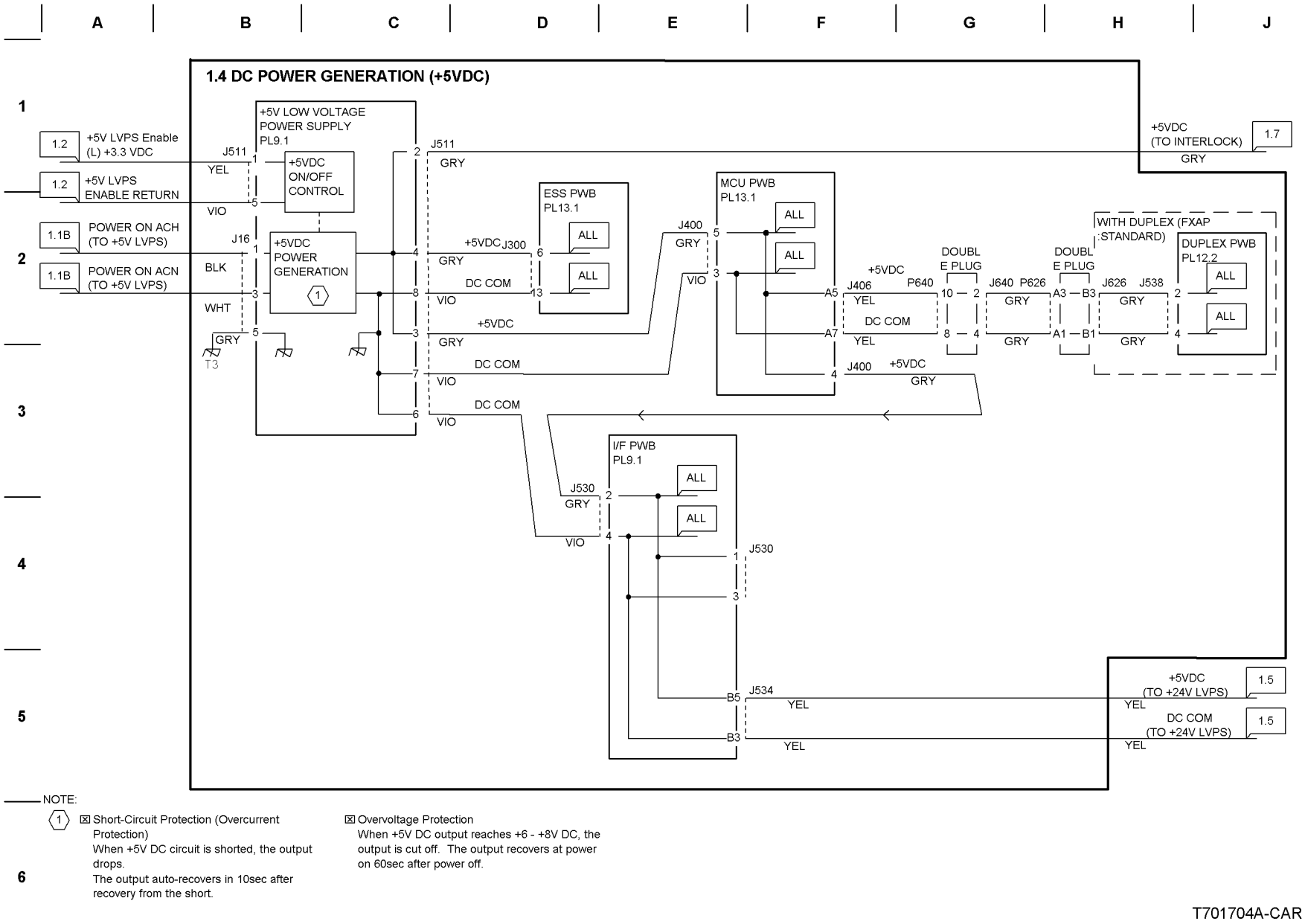


Figure 5 DC Power Generation

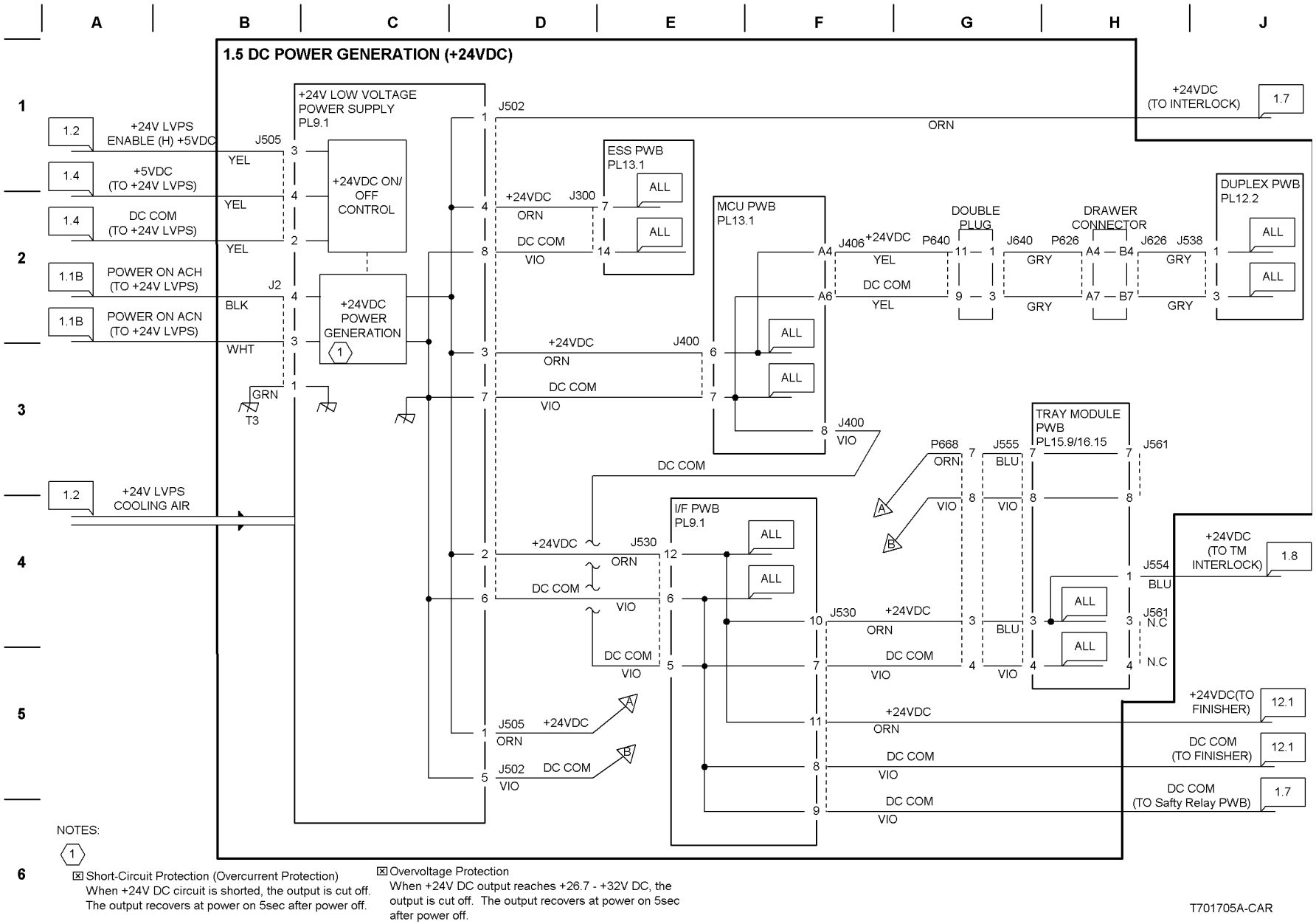


Figure 6 DC Power generation (+24VDC)

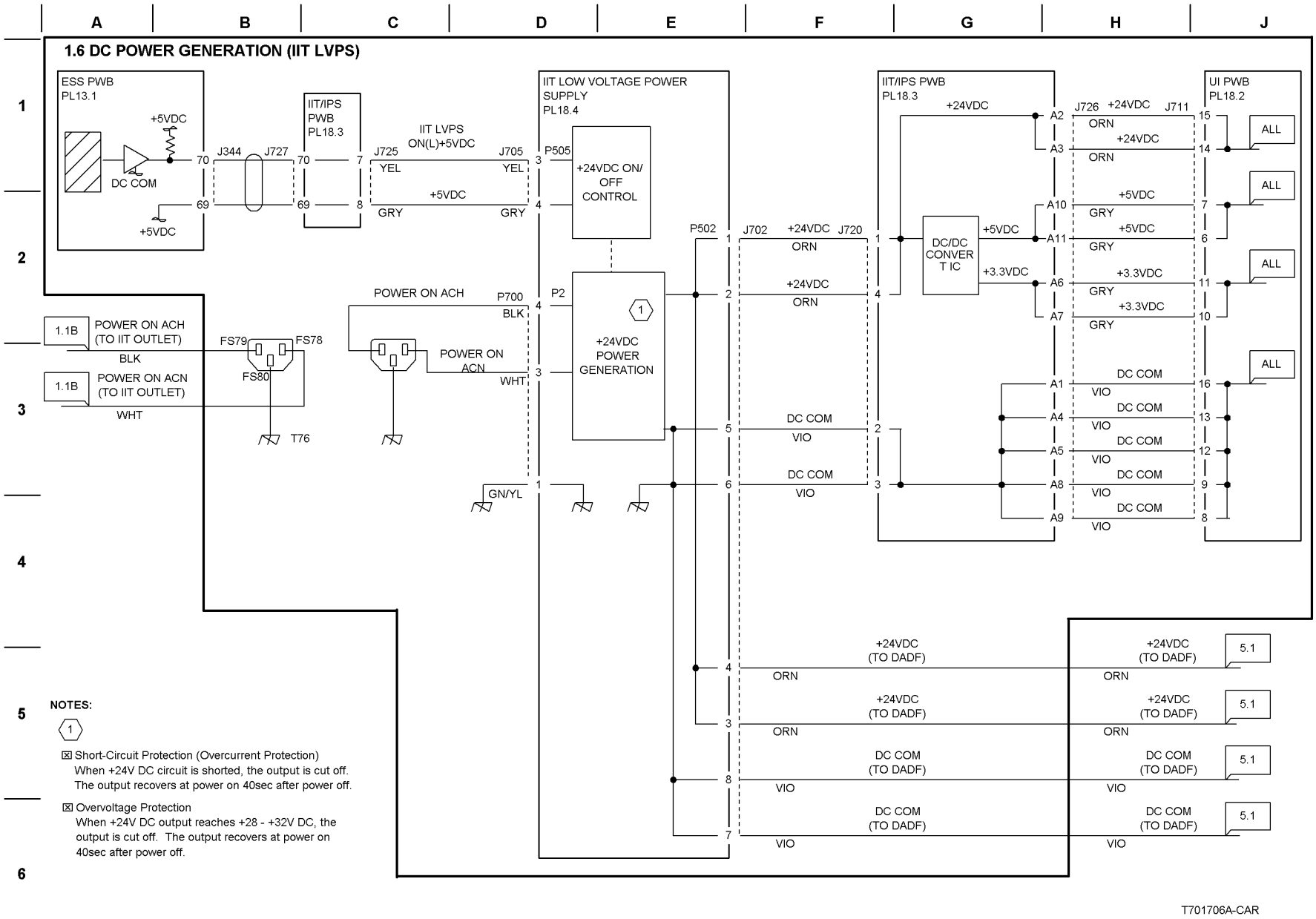


Figure 7 DC Power Generation (IIT LVPS)

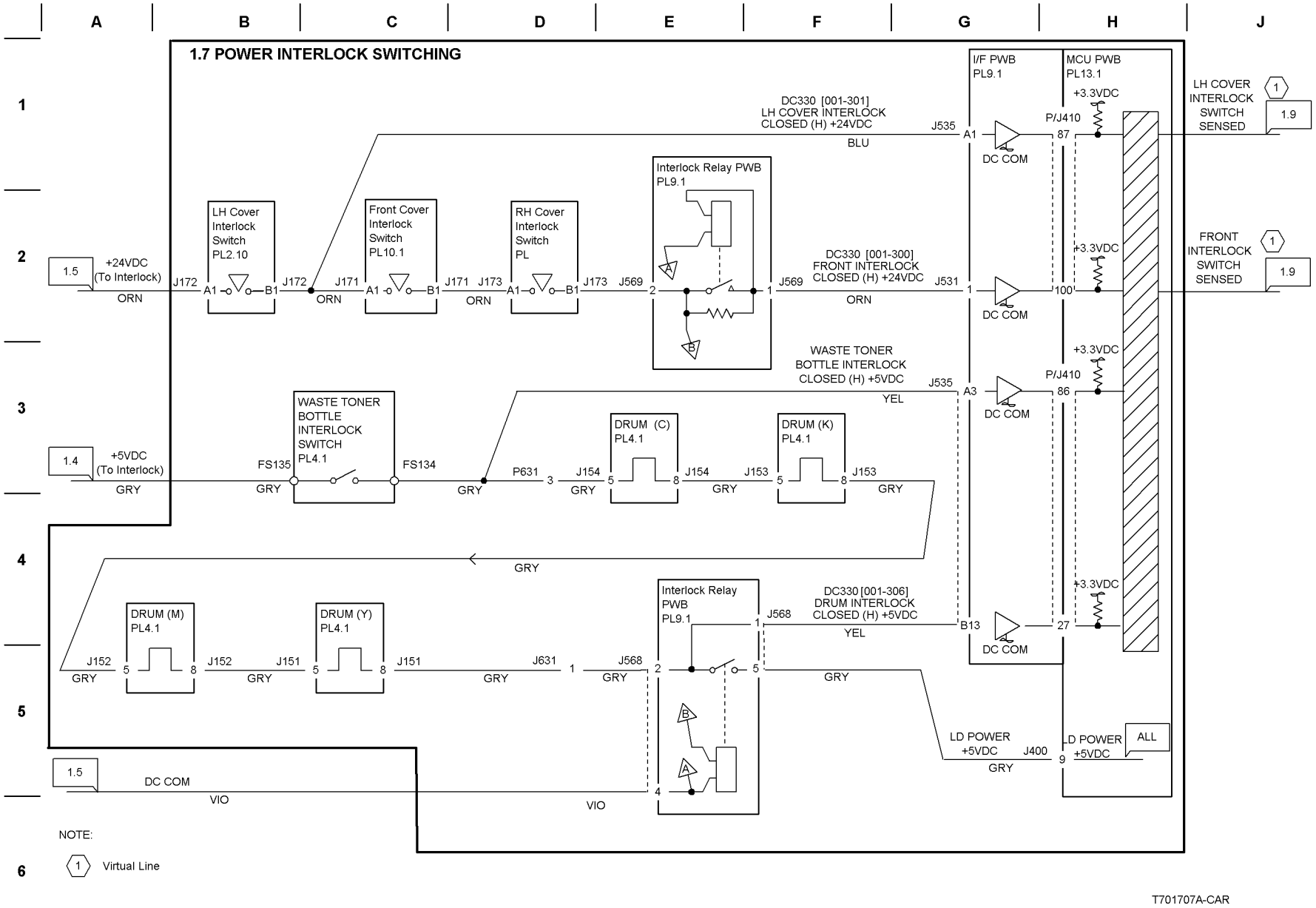


Figure 8 Power Interlock Switching

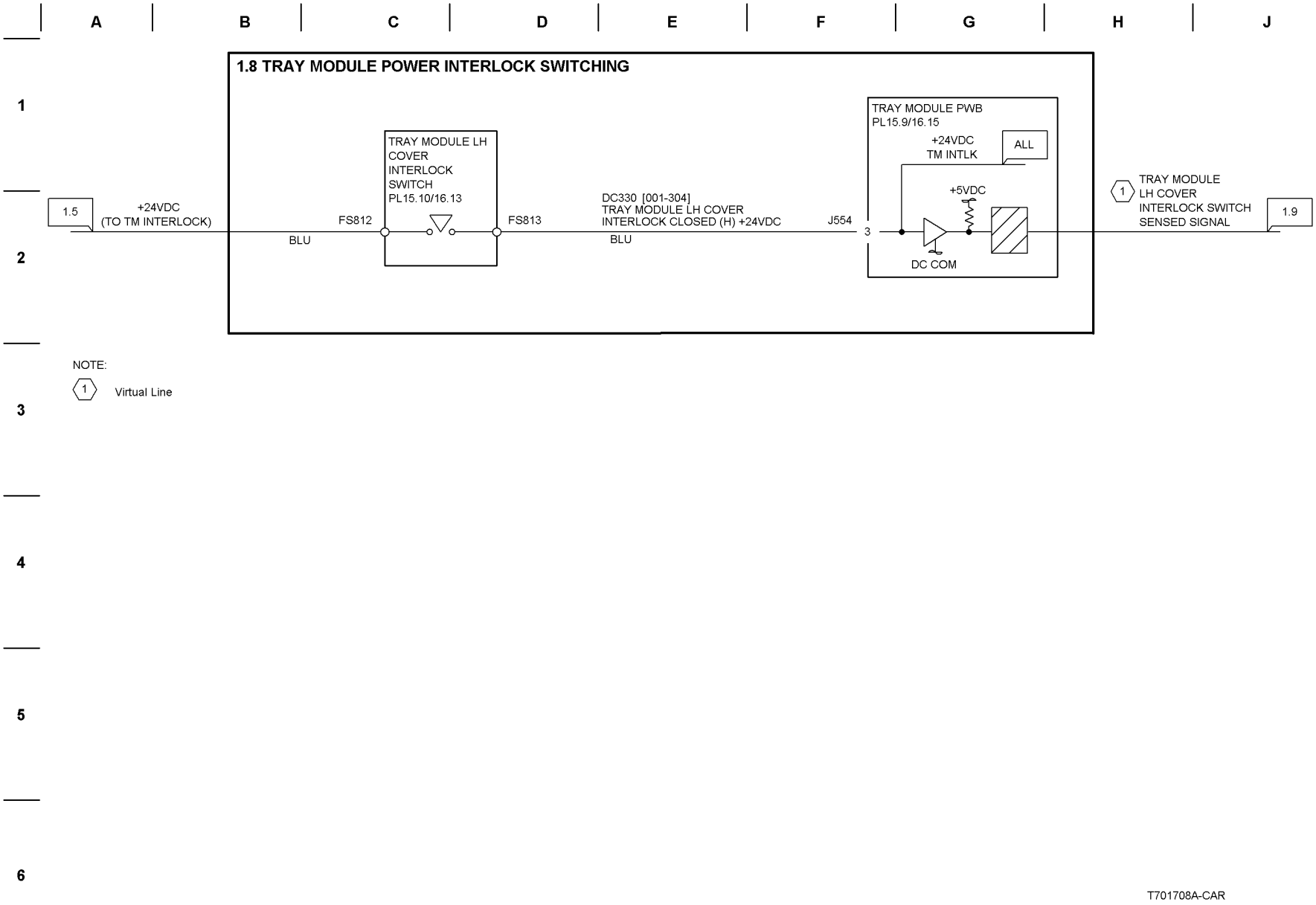


Figure 9 Tray Module Power Interlock Switching

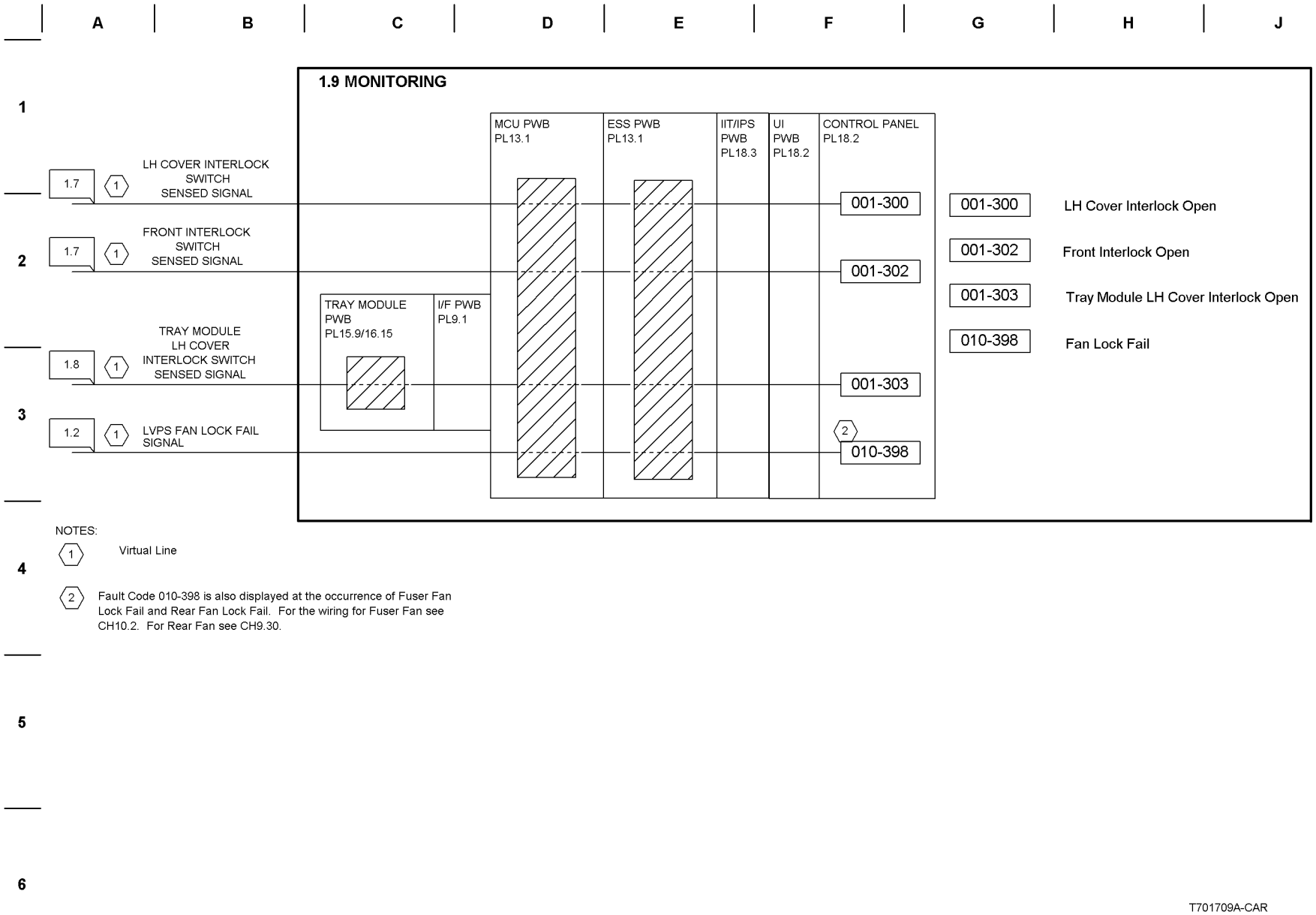


Figure 10 Monitoring

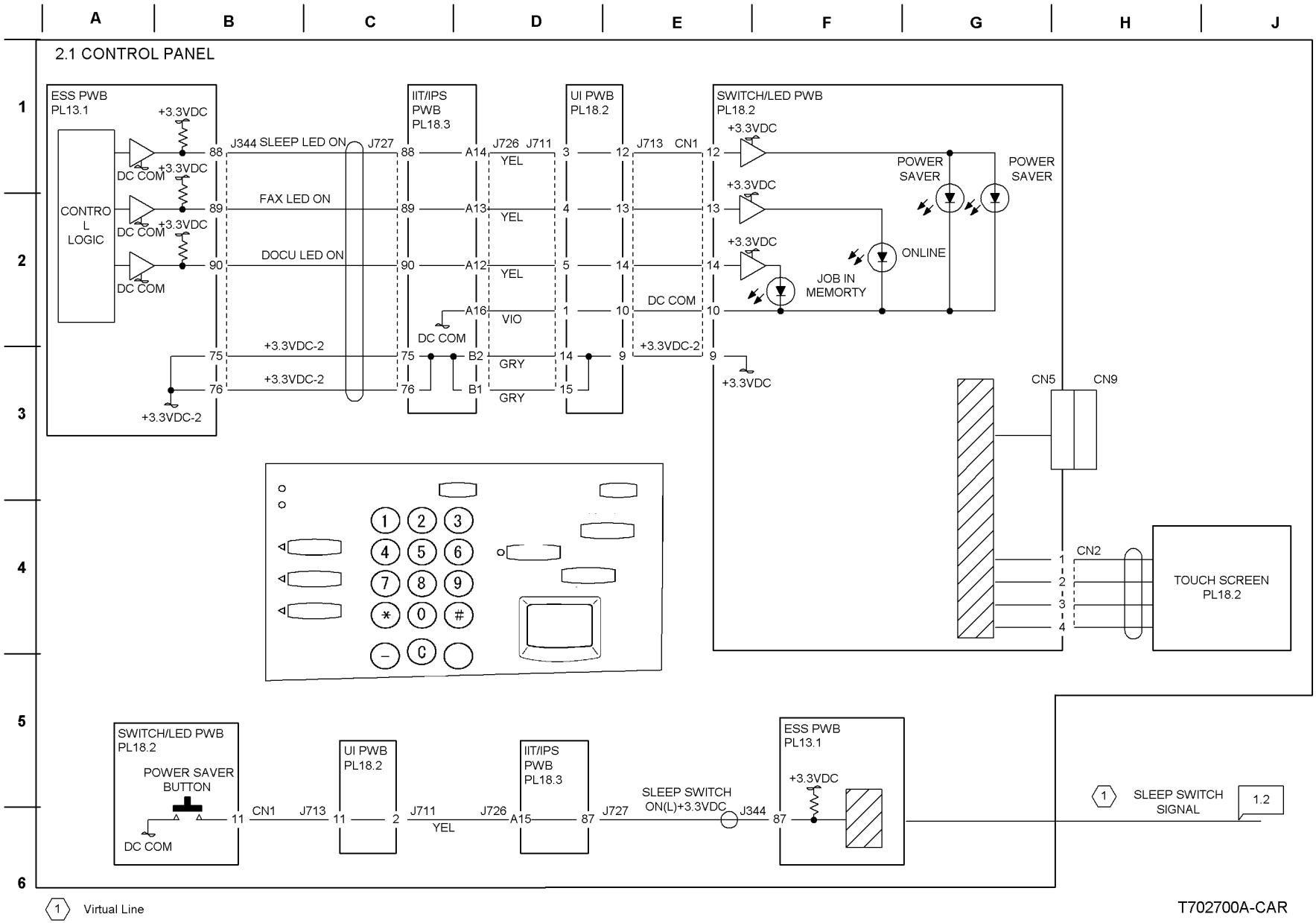
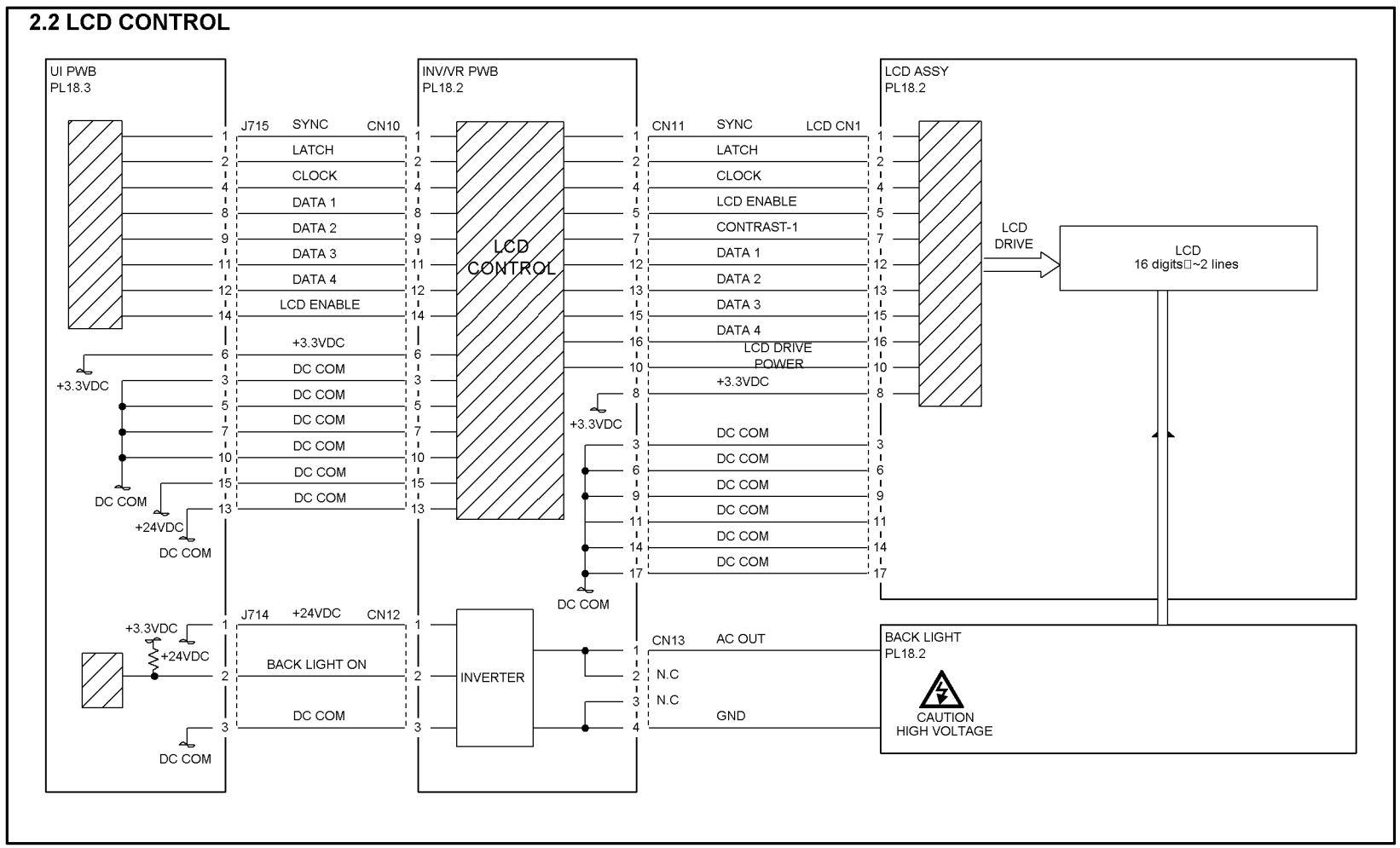


Figure 1 Control Panel



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Figure 2 LCD Control

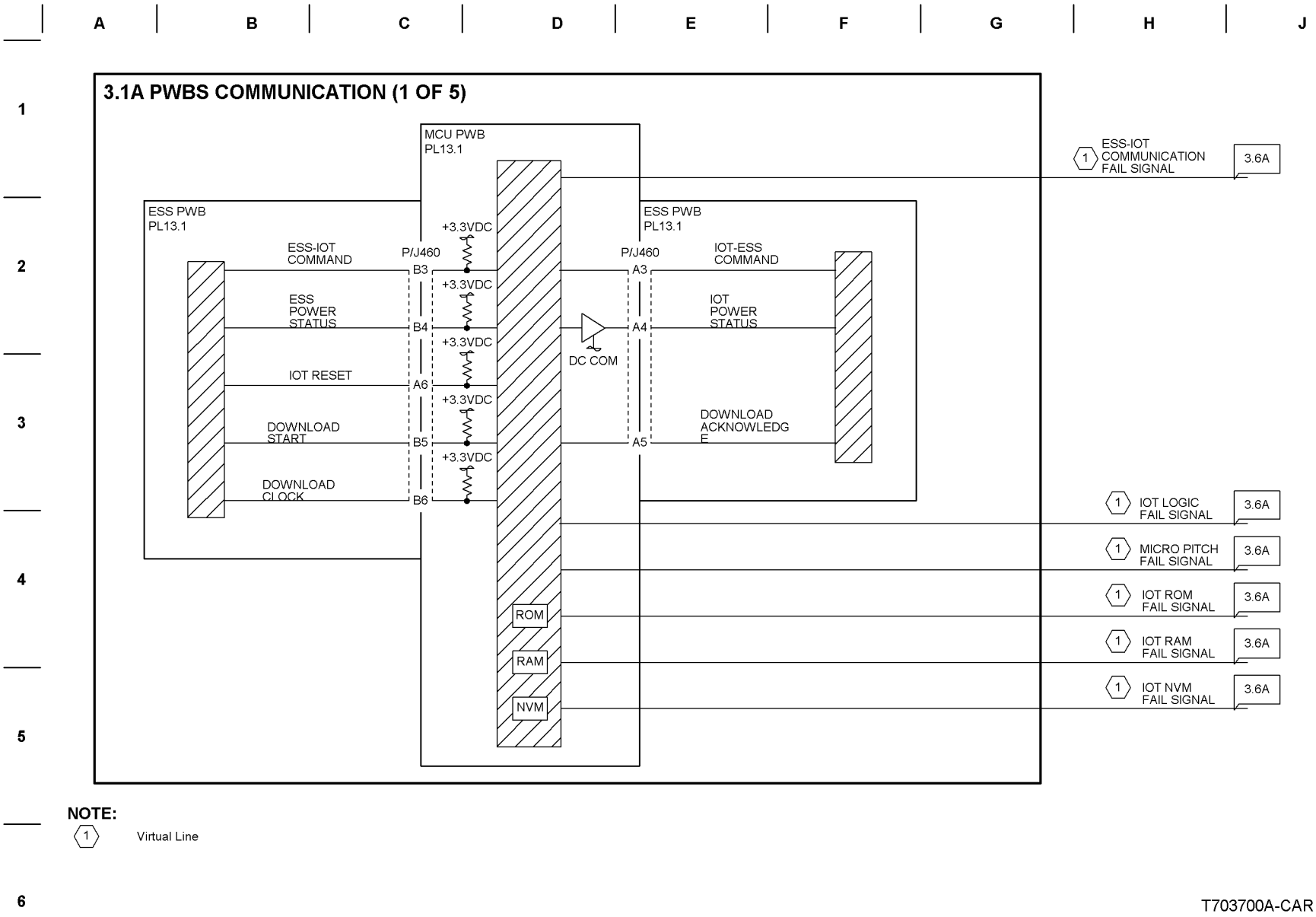


Figure 1 PWBs Communication

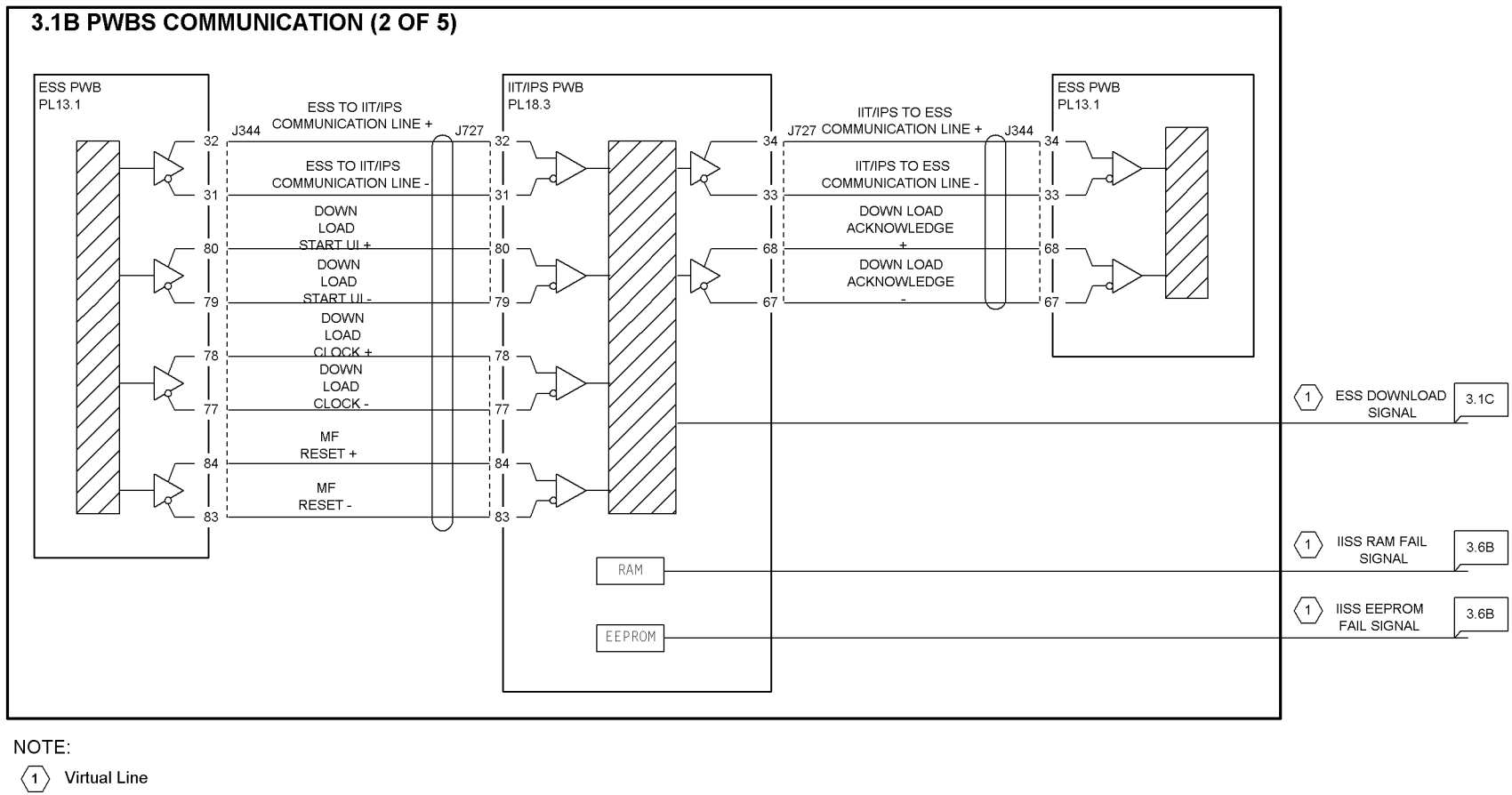


Figure 2 PWB Communication (2 0f 5)

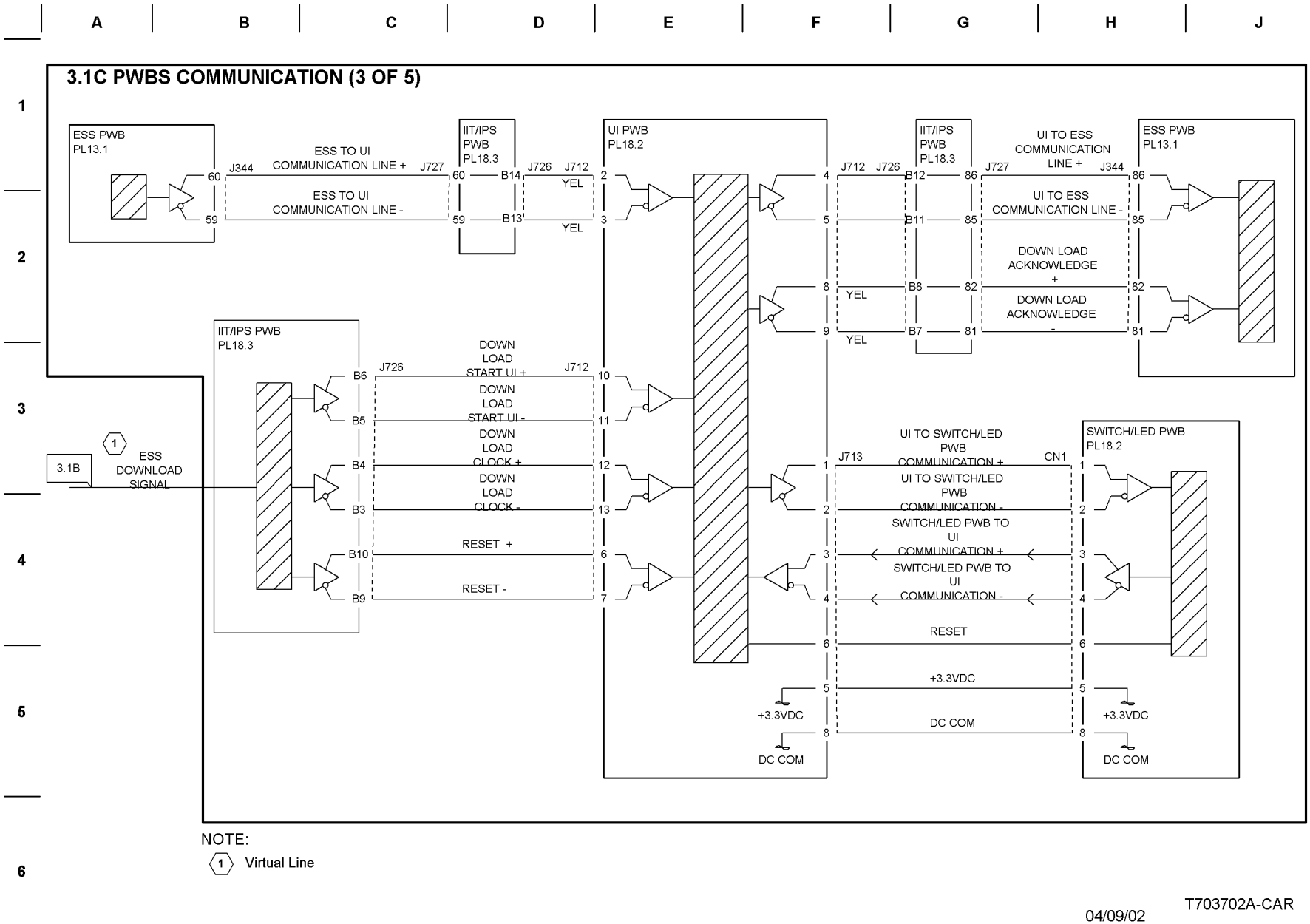


Figure 3 PWB Communication (3 0f 5)

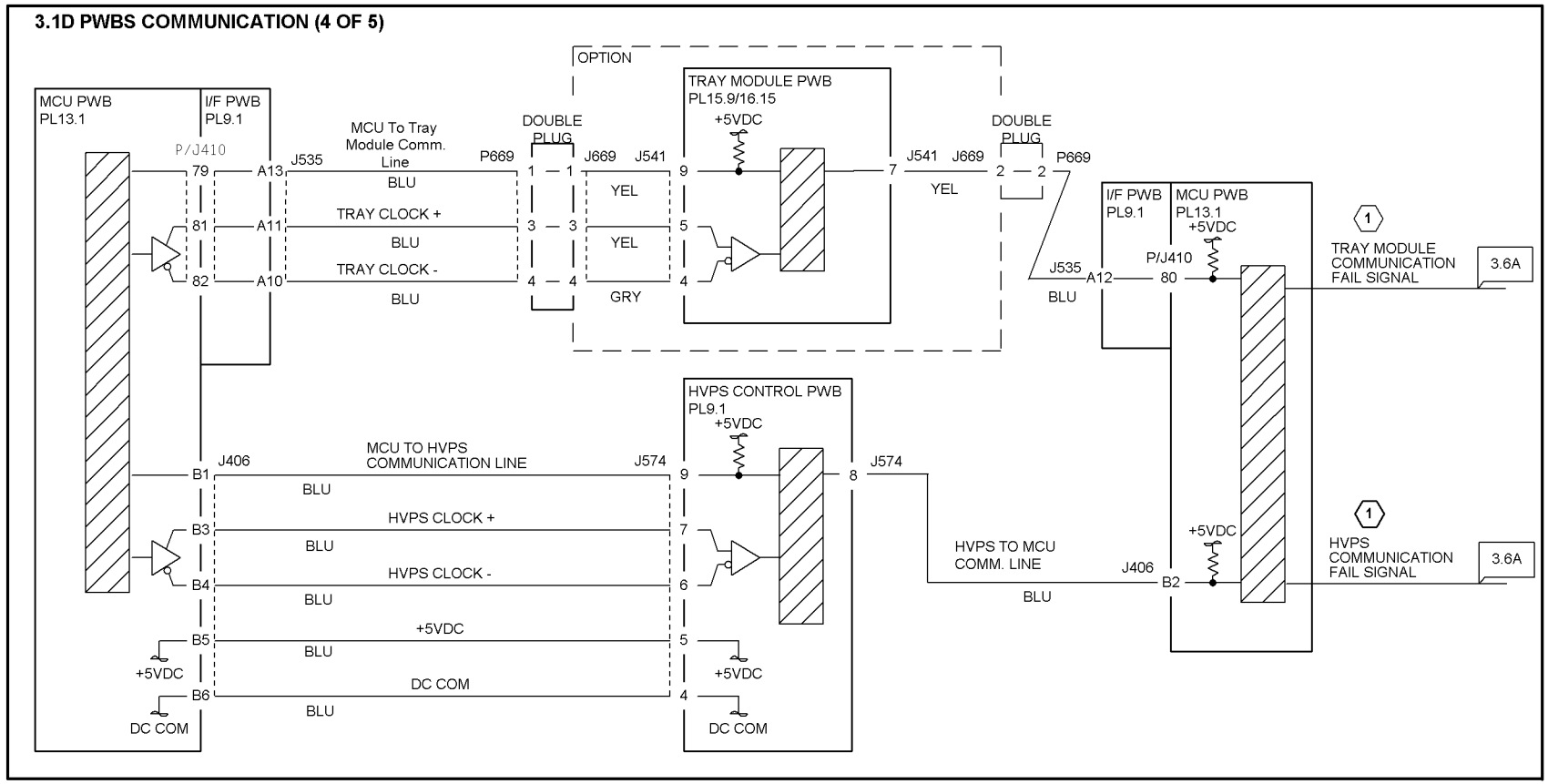


Figure 4 PWB Communication (4 0f 5)

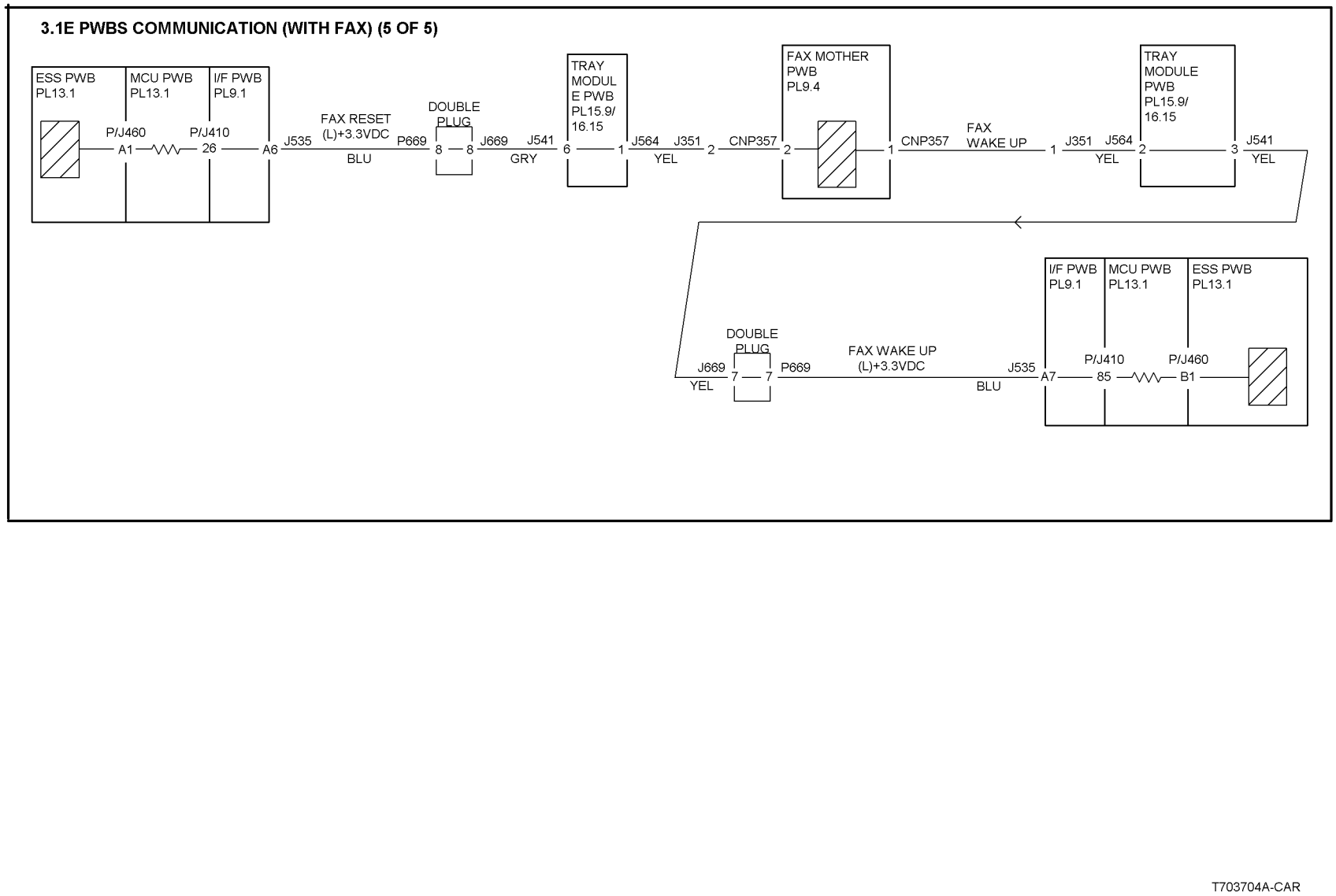
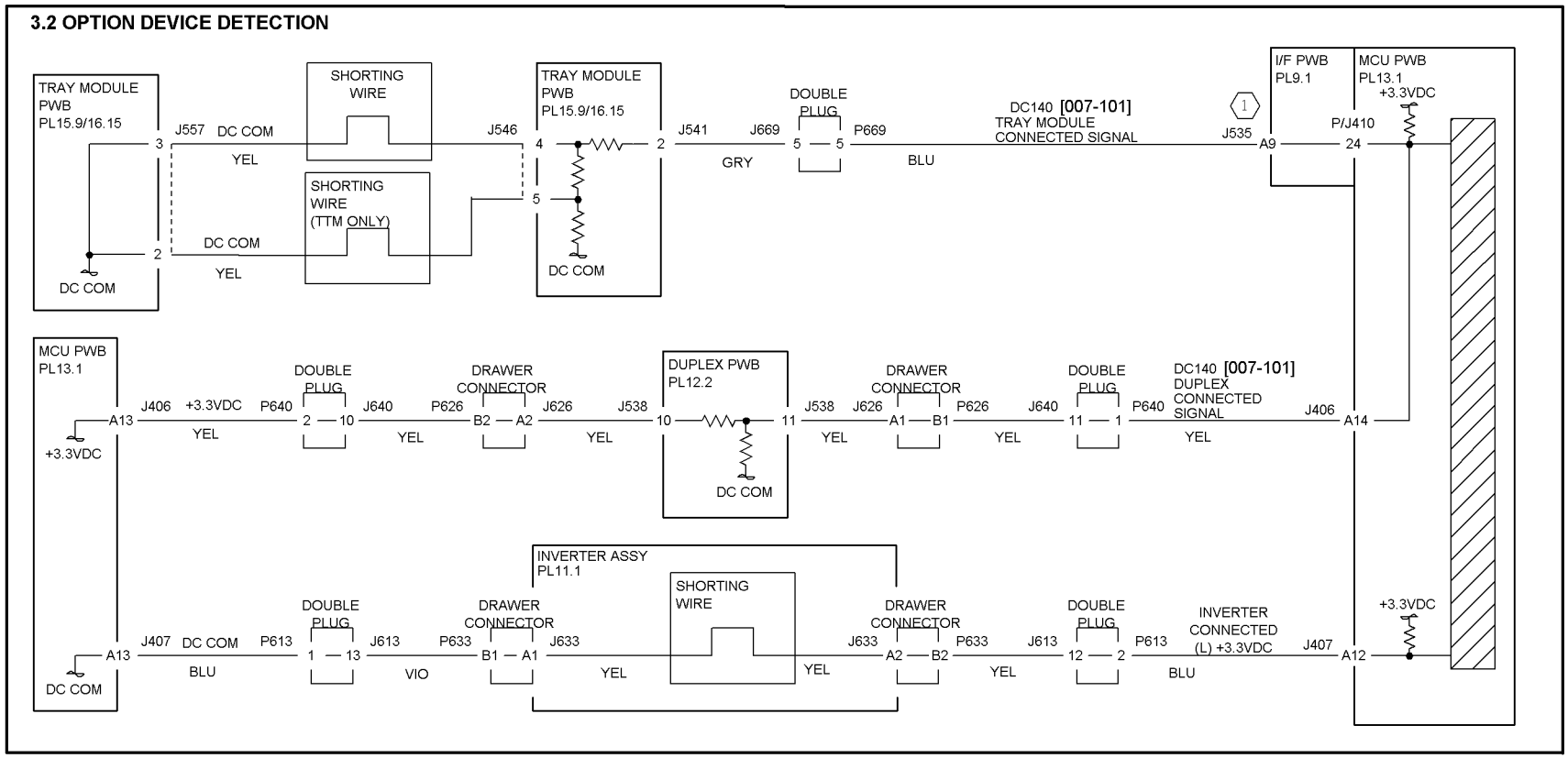


Figure 5 PWB Communication (4 0f 5)



NOTE:

(1) Tray Module and Availability of Duplex are sensed according to voltage corresponding to combined resistance of Tray Module PWB and Duplex PWB.

TTM	Duplex	Voltage(V) (J535-A9)	AD DC140 [007-101]
O	O	2.53	727- 810

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Figure 6 Option Device Detection

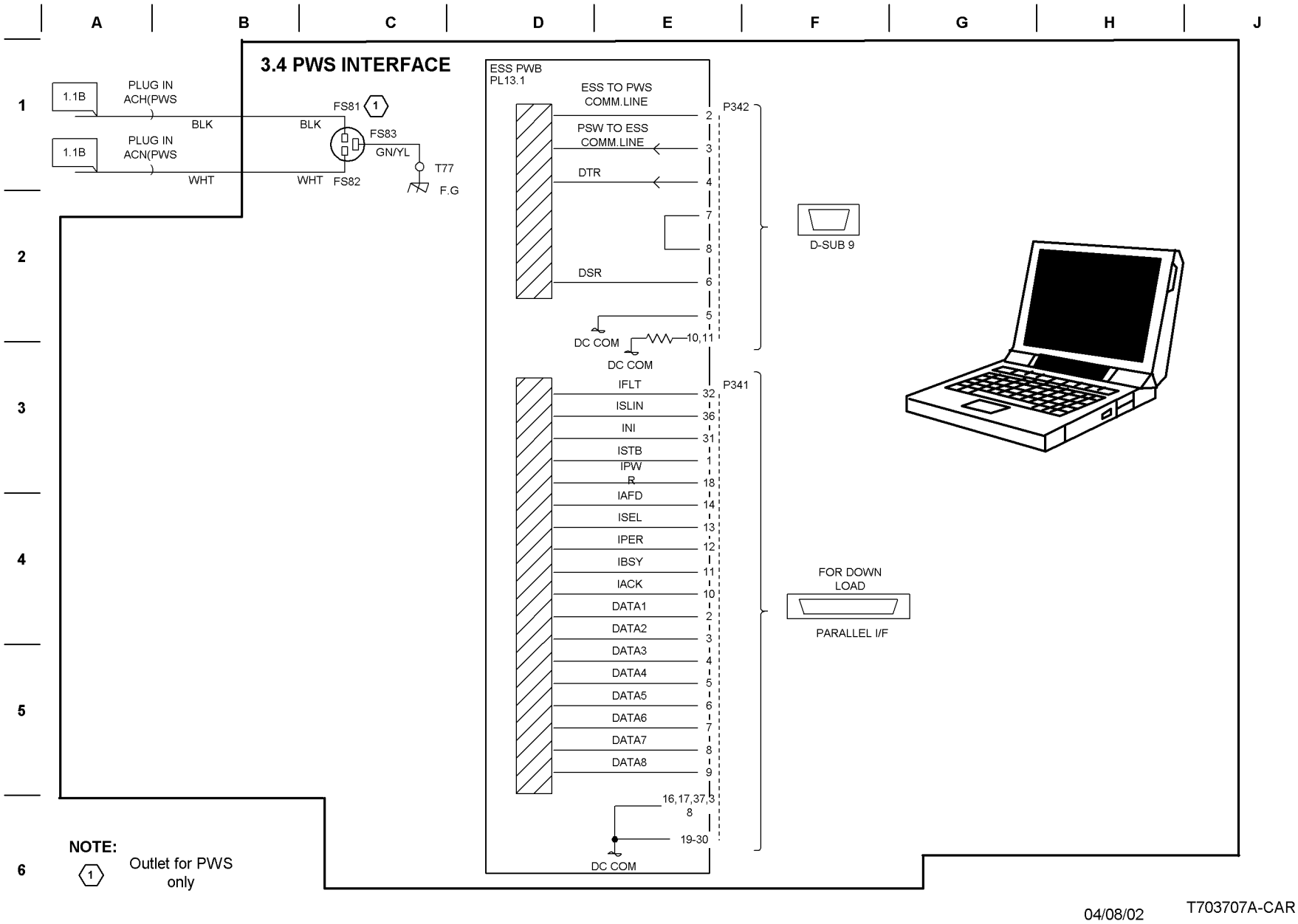


Figure 7 PWS Interface

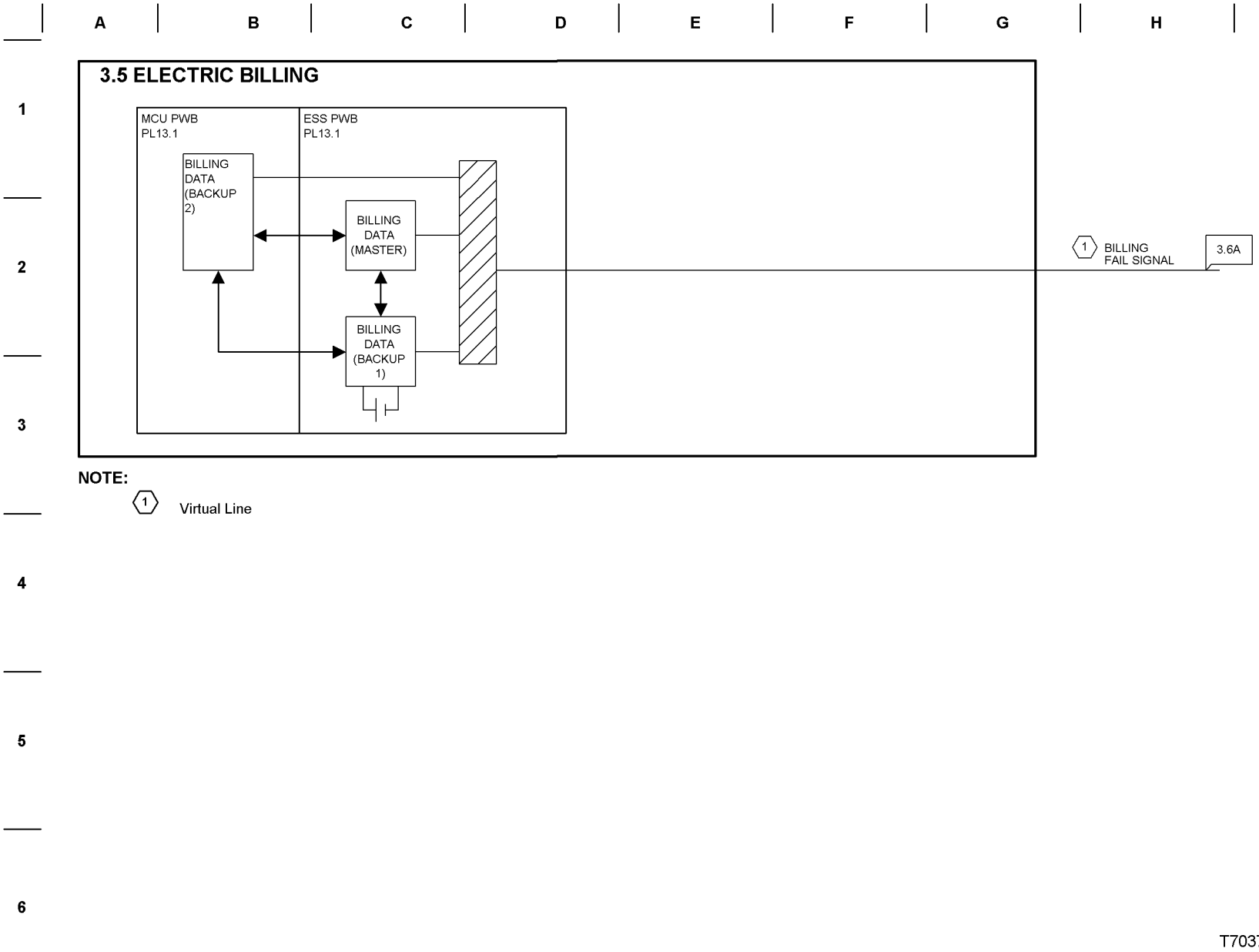


Figure 8 Billing

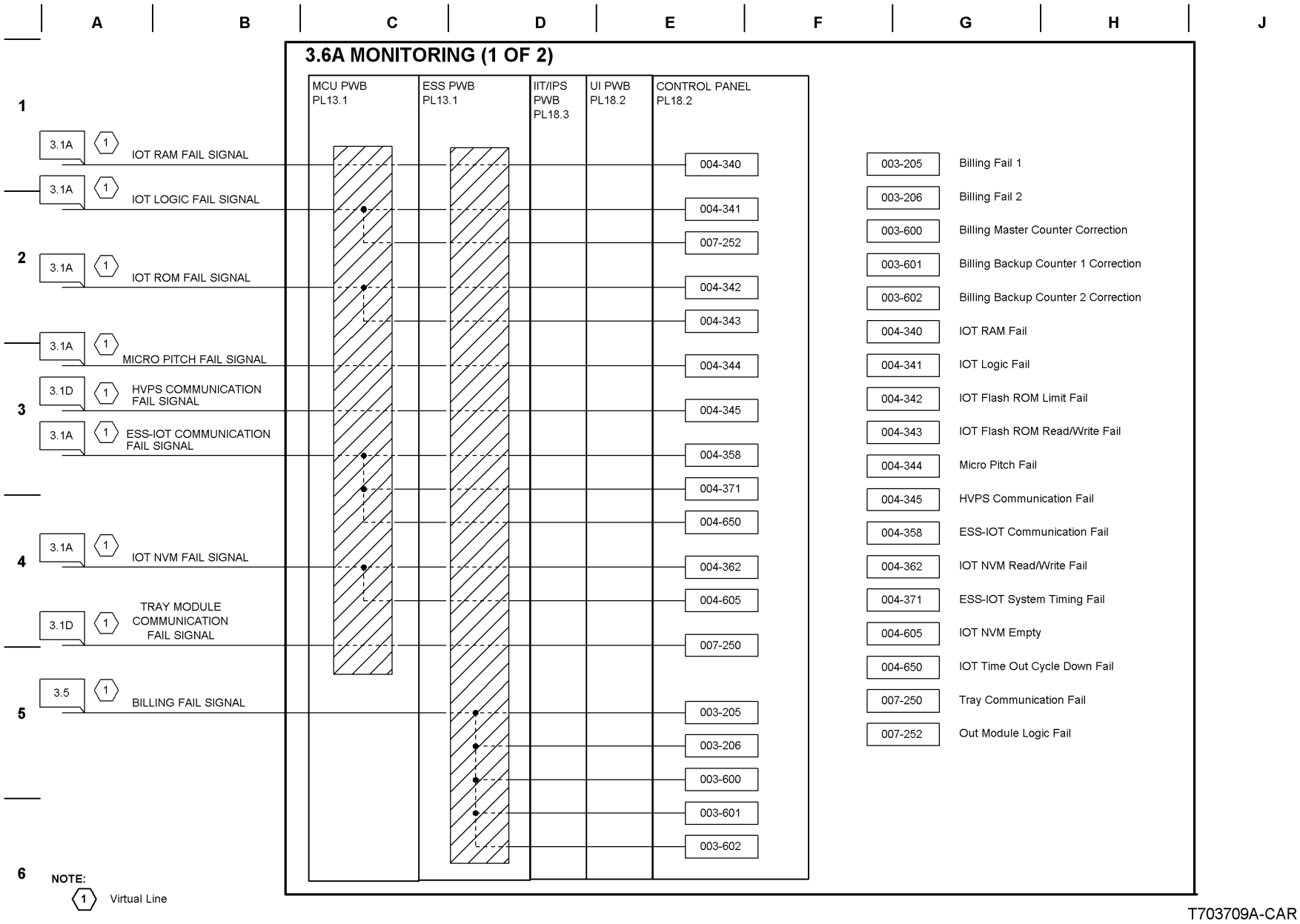


Figure 9 Monitoring

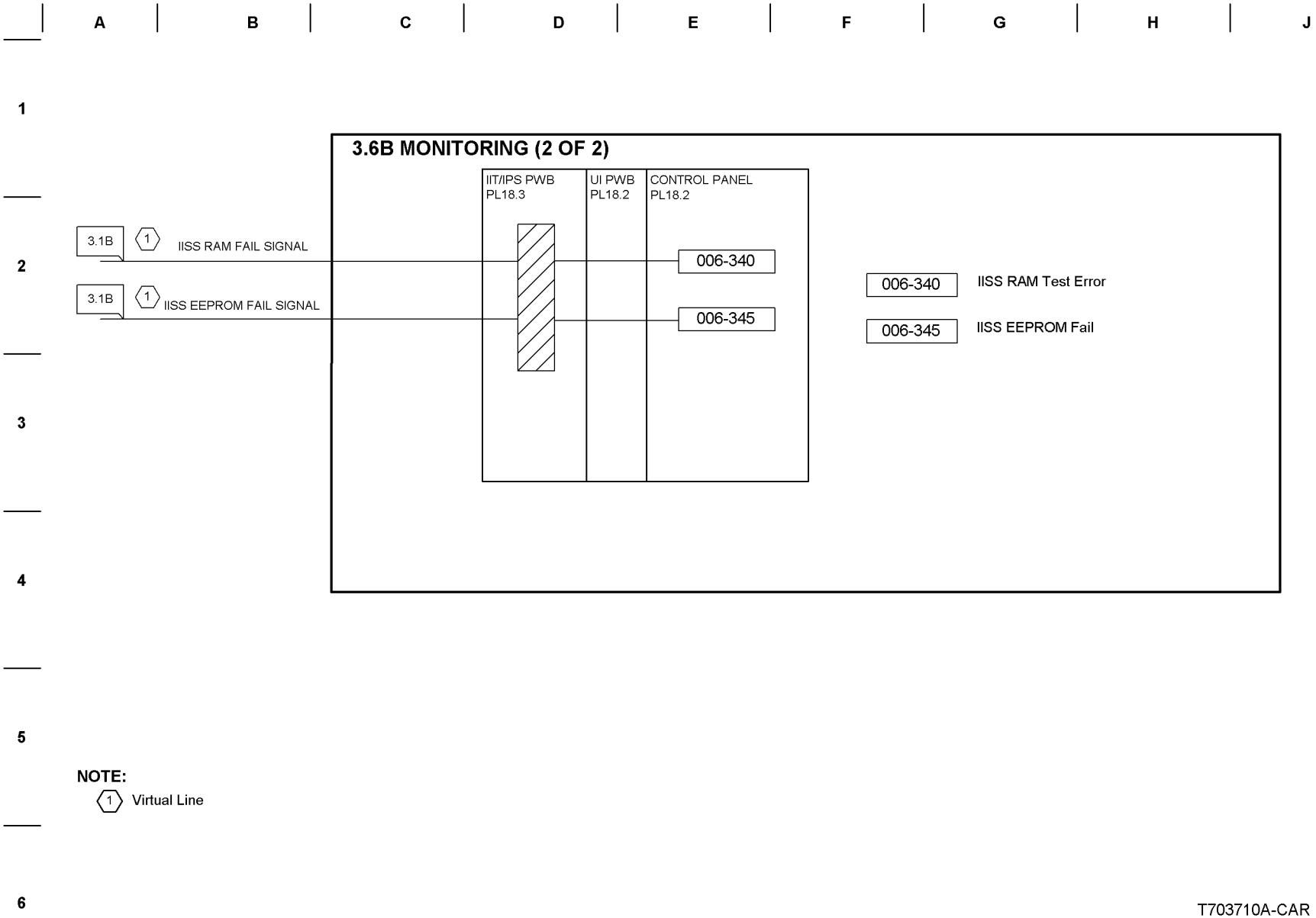


Figure 10 Monitoring (2 of 2)

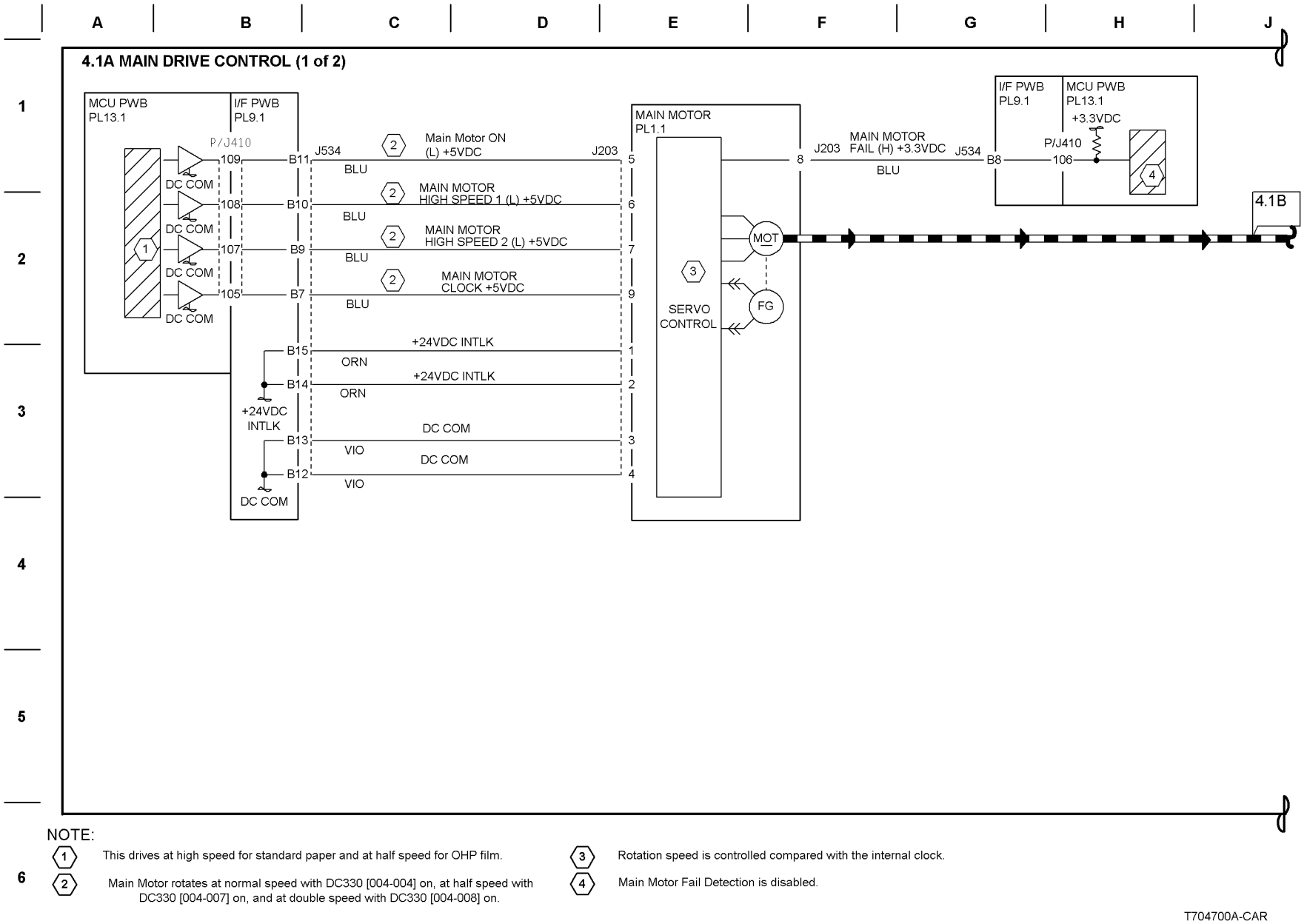


Figure 1 Main Drive (1 of 2)

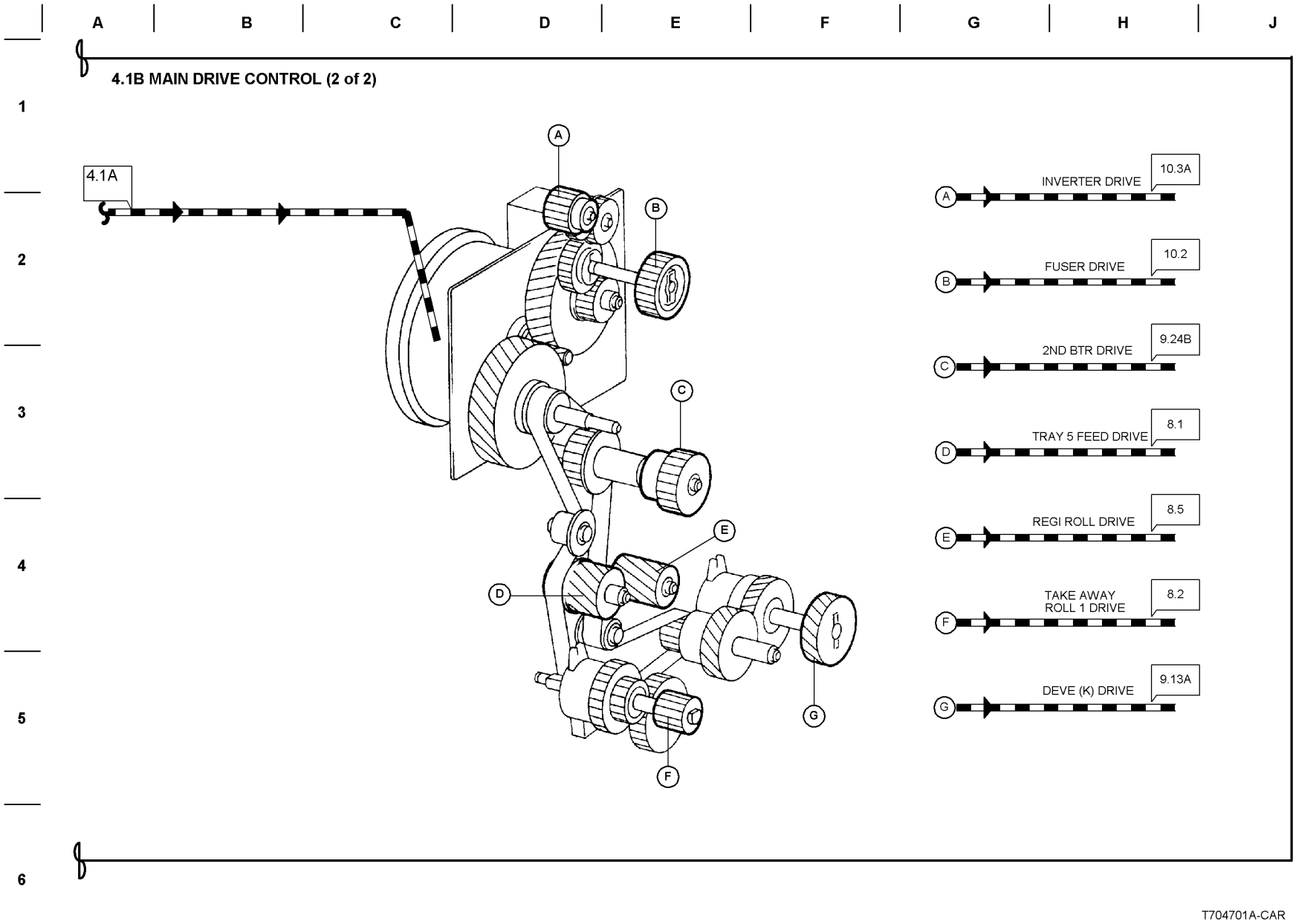


Figure 2 Main Drive (2 of 2)

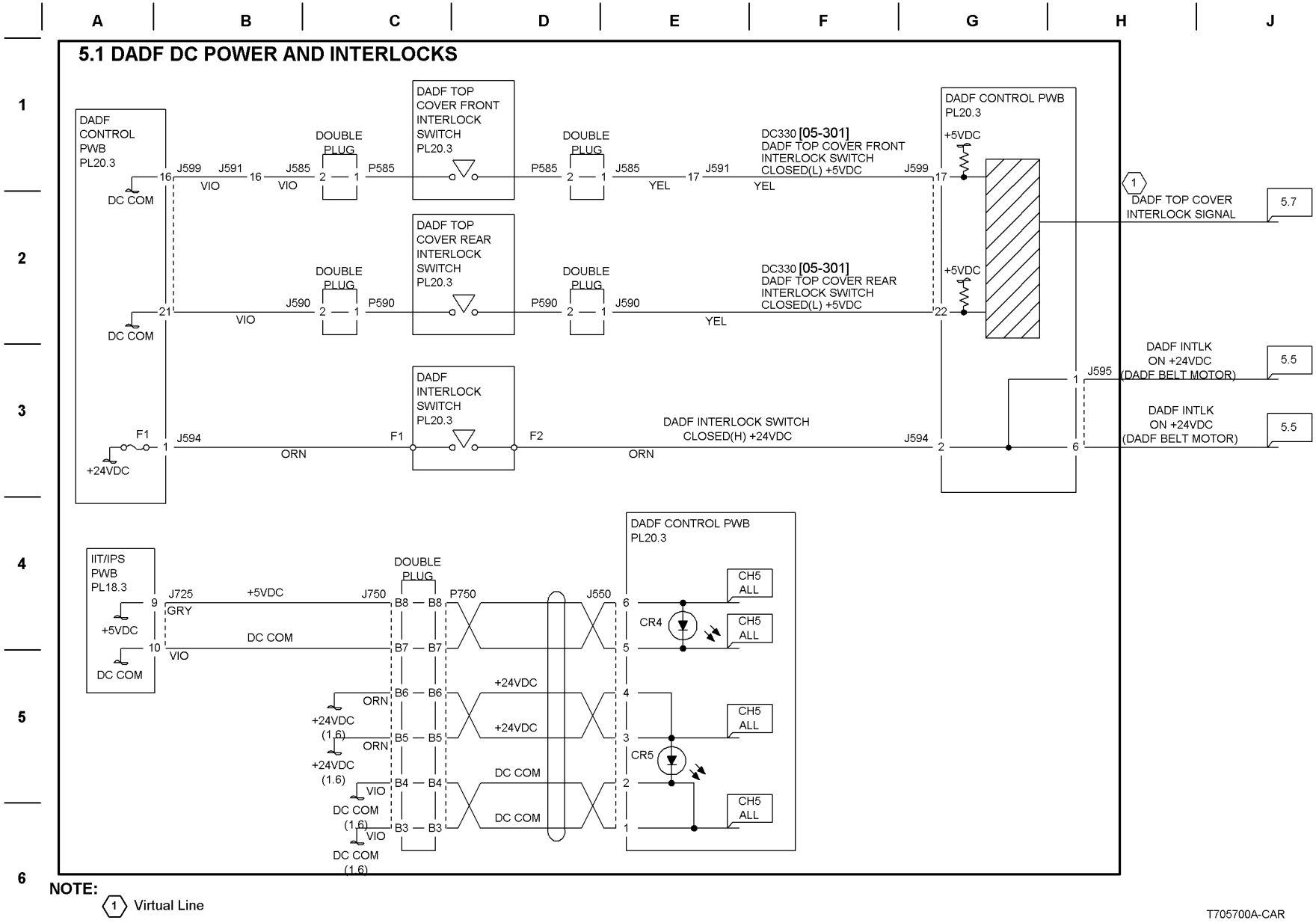


Figure 1 DADF DC Power and Interlocks

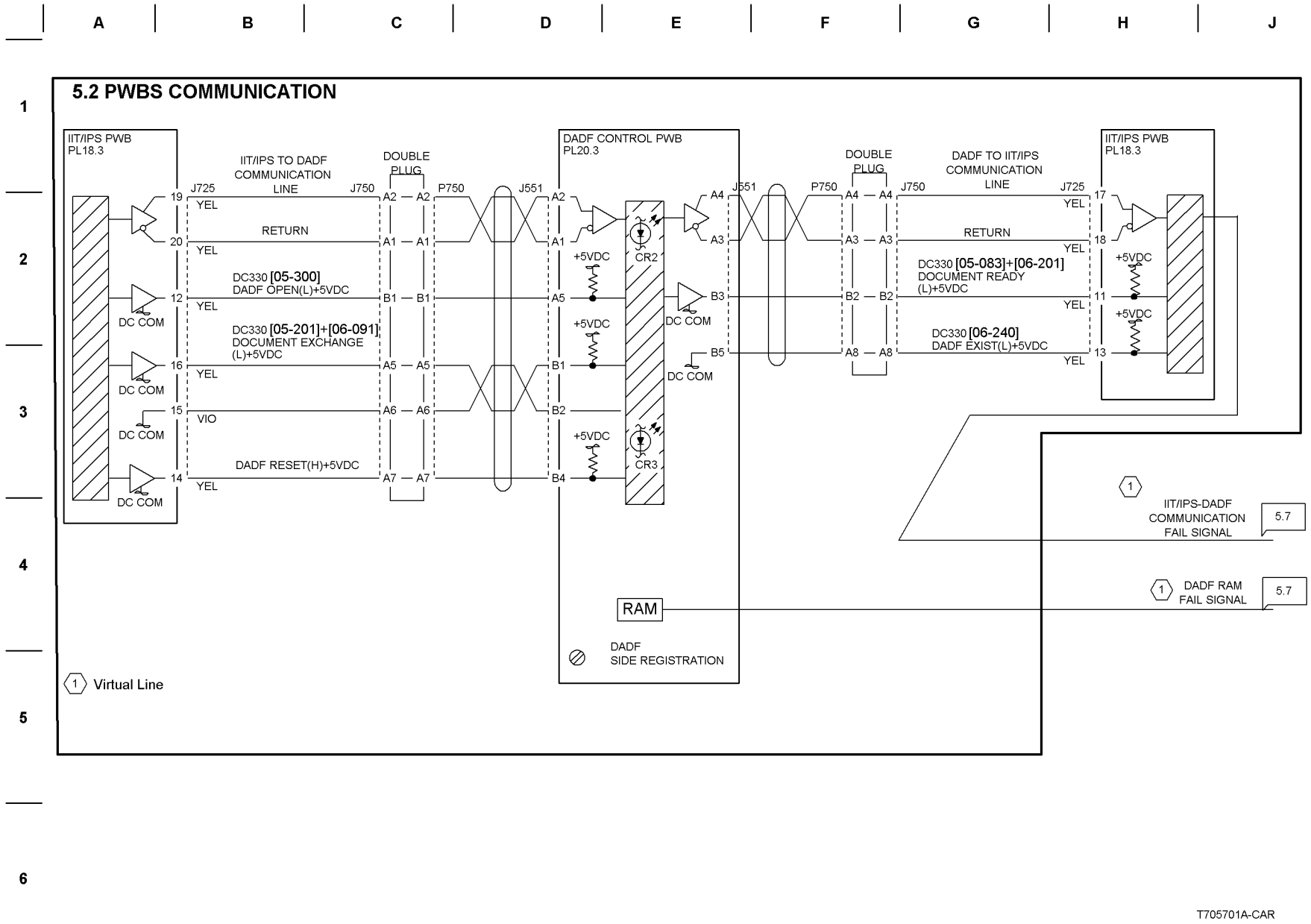


Figure 2 PWB Communications (1 0f 2)

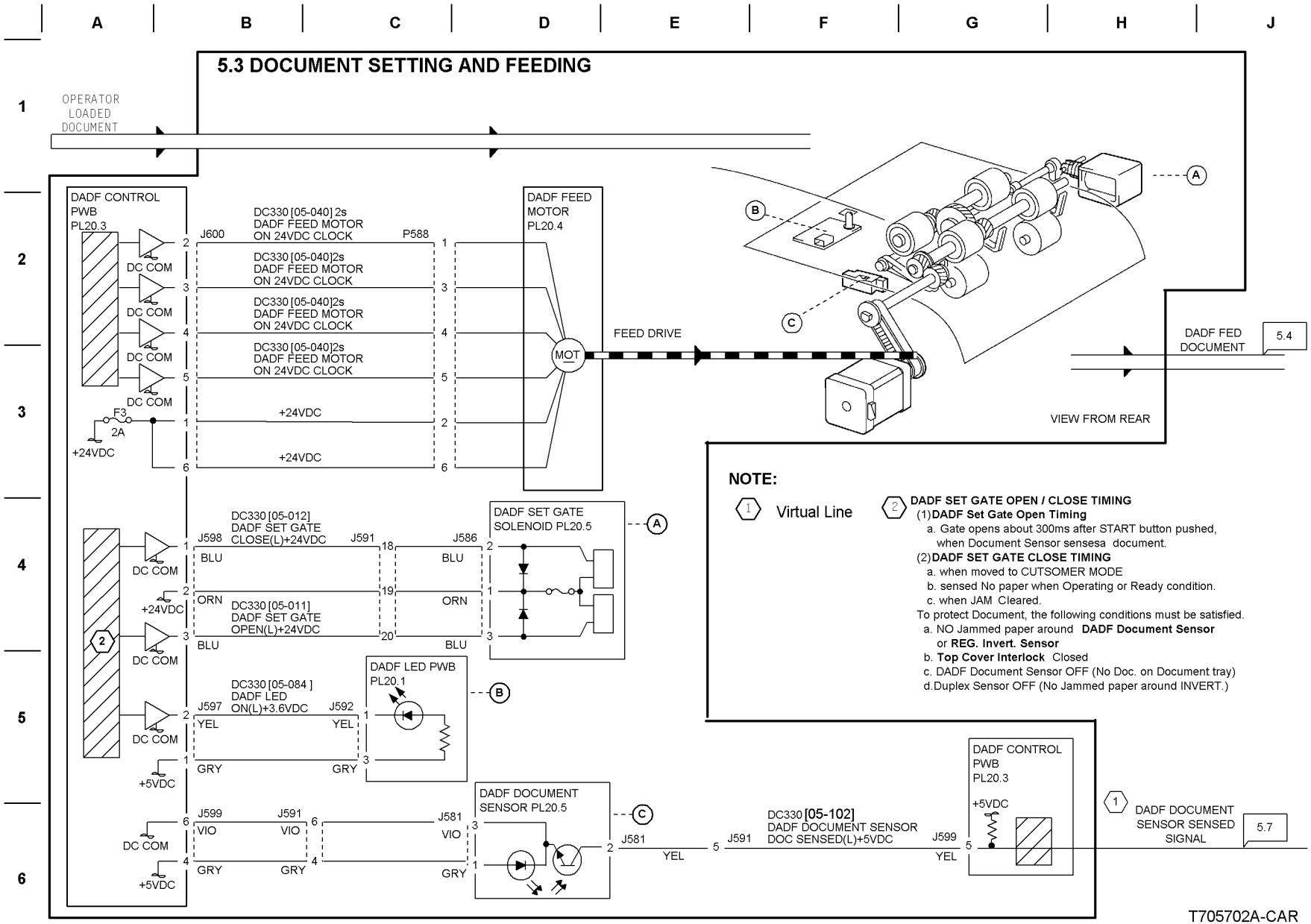


Figure 3 Document Setting and Feeding

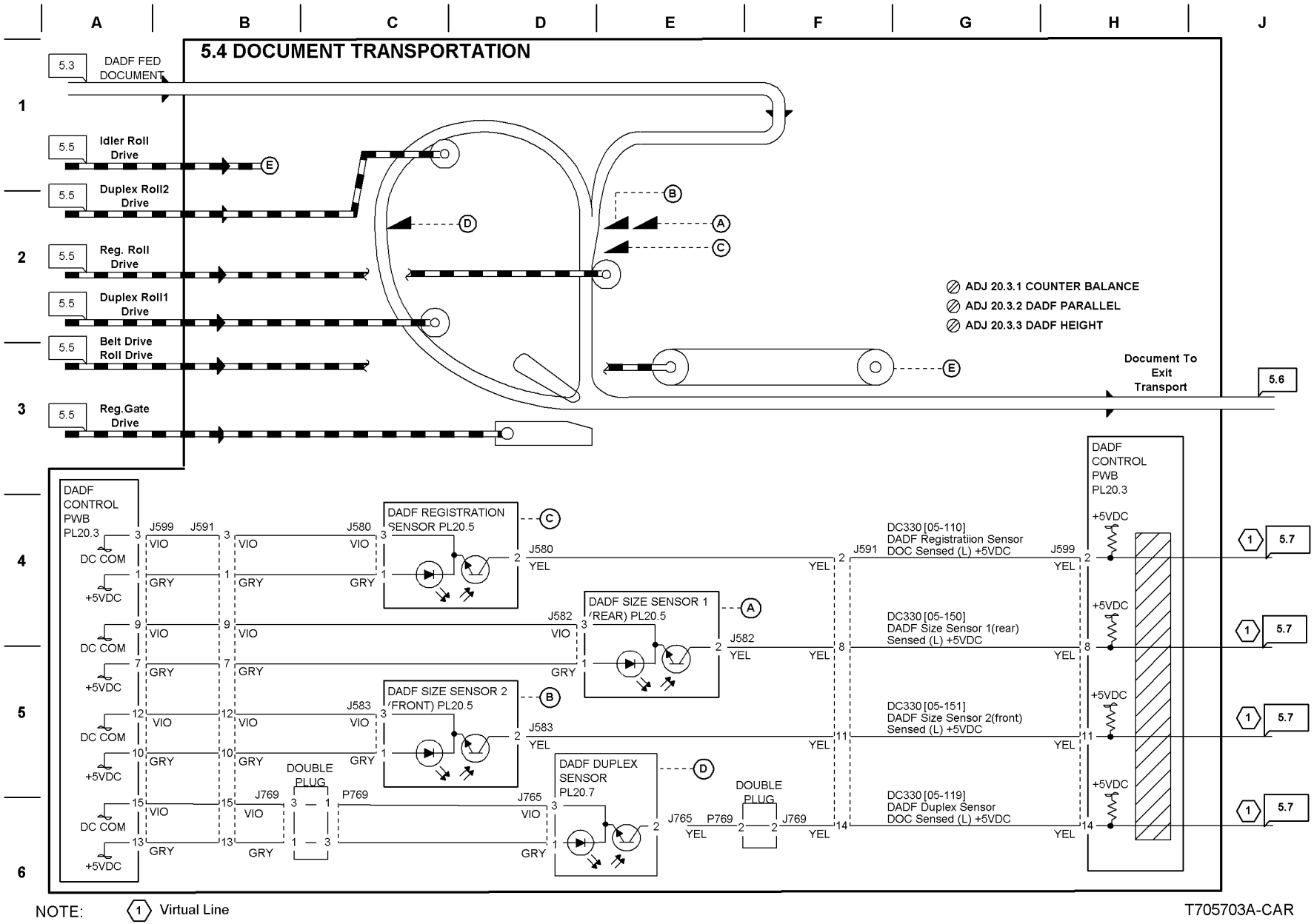


Figure 4 Document Transportation

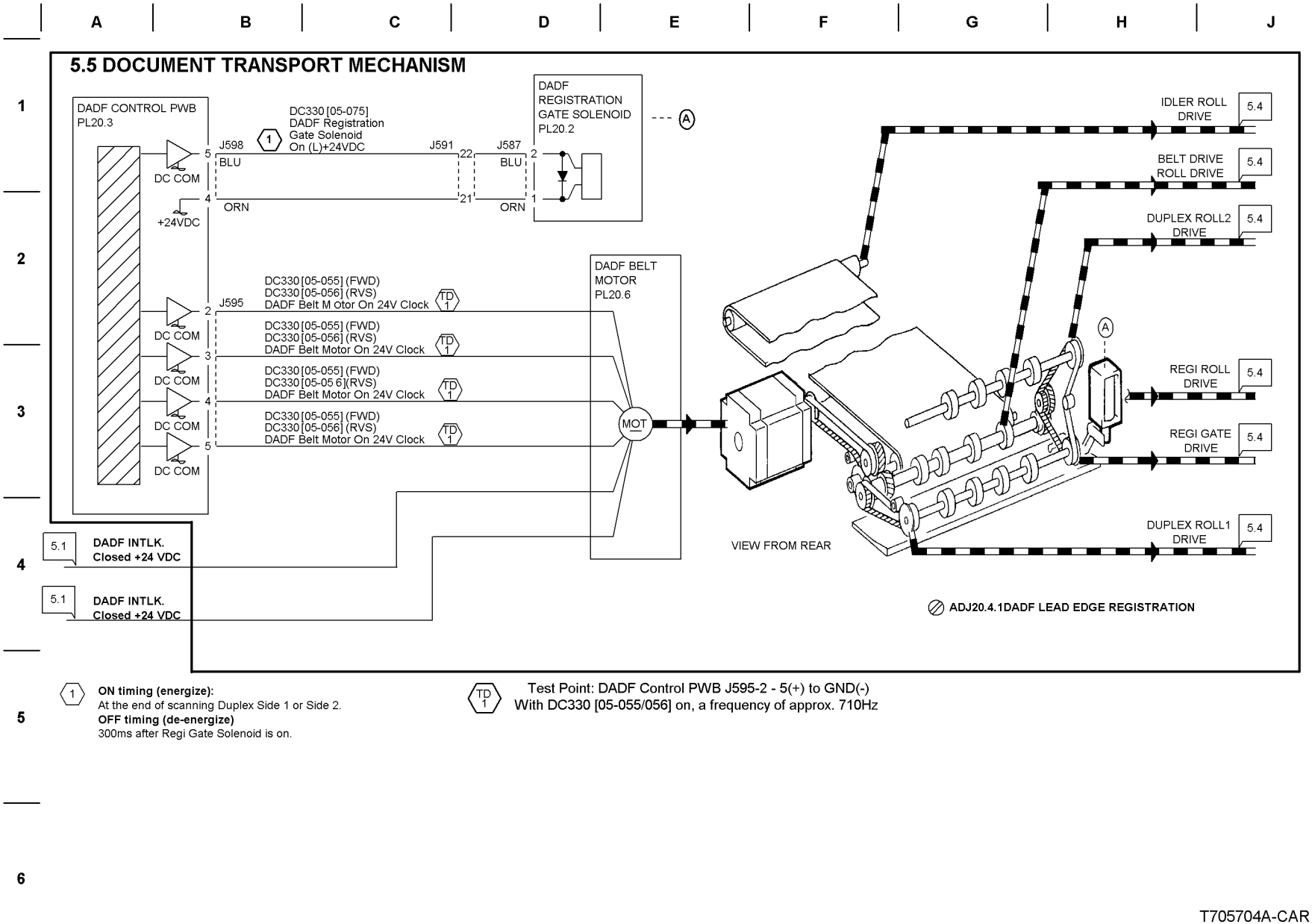


Figure 5 Document transport

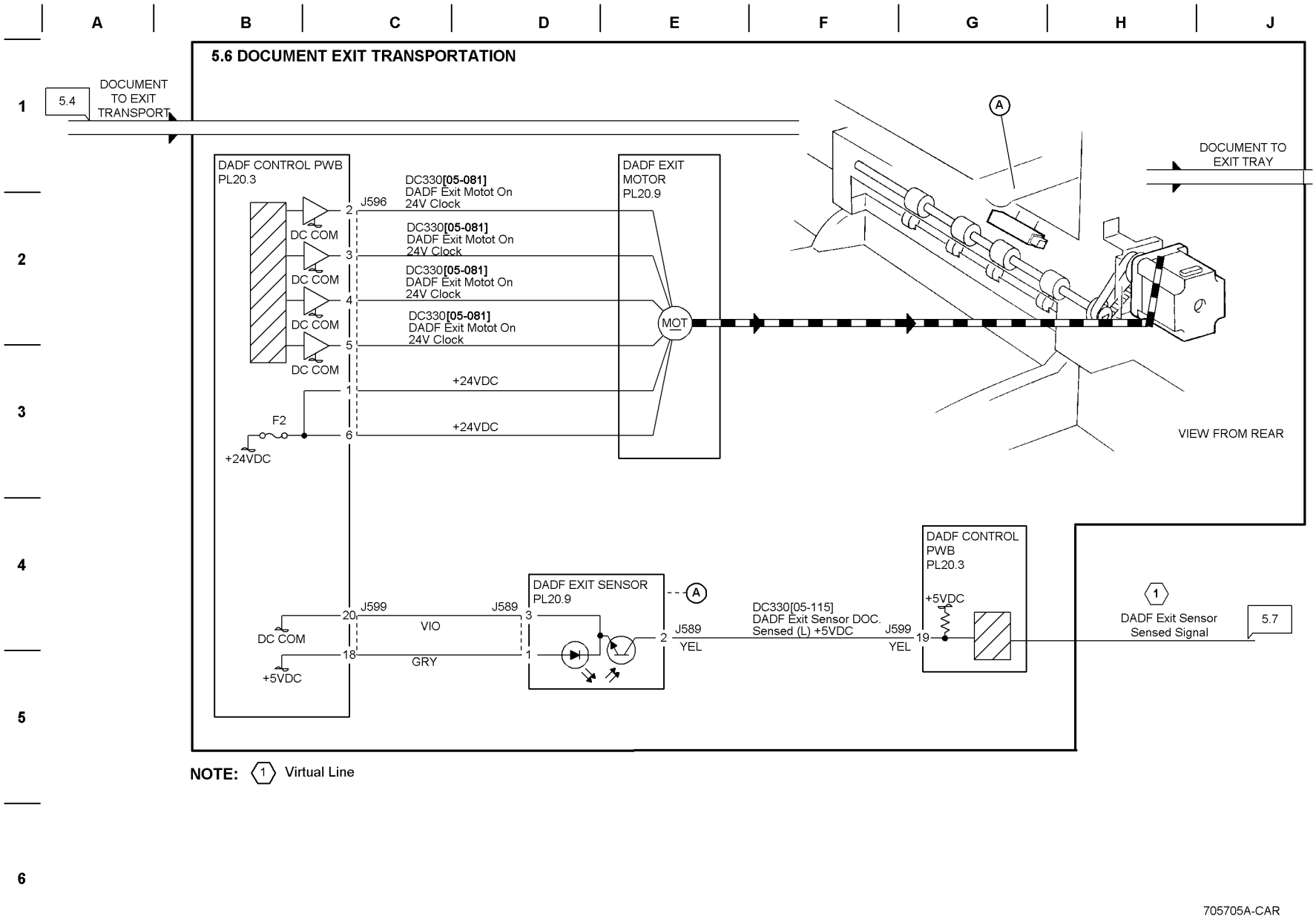


Figure 6 Document Exit transportation

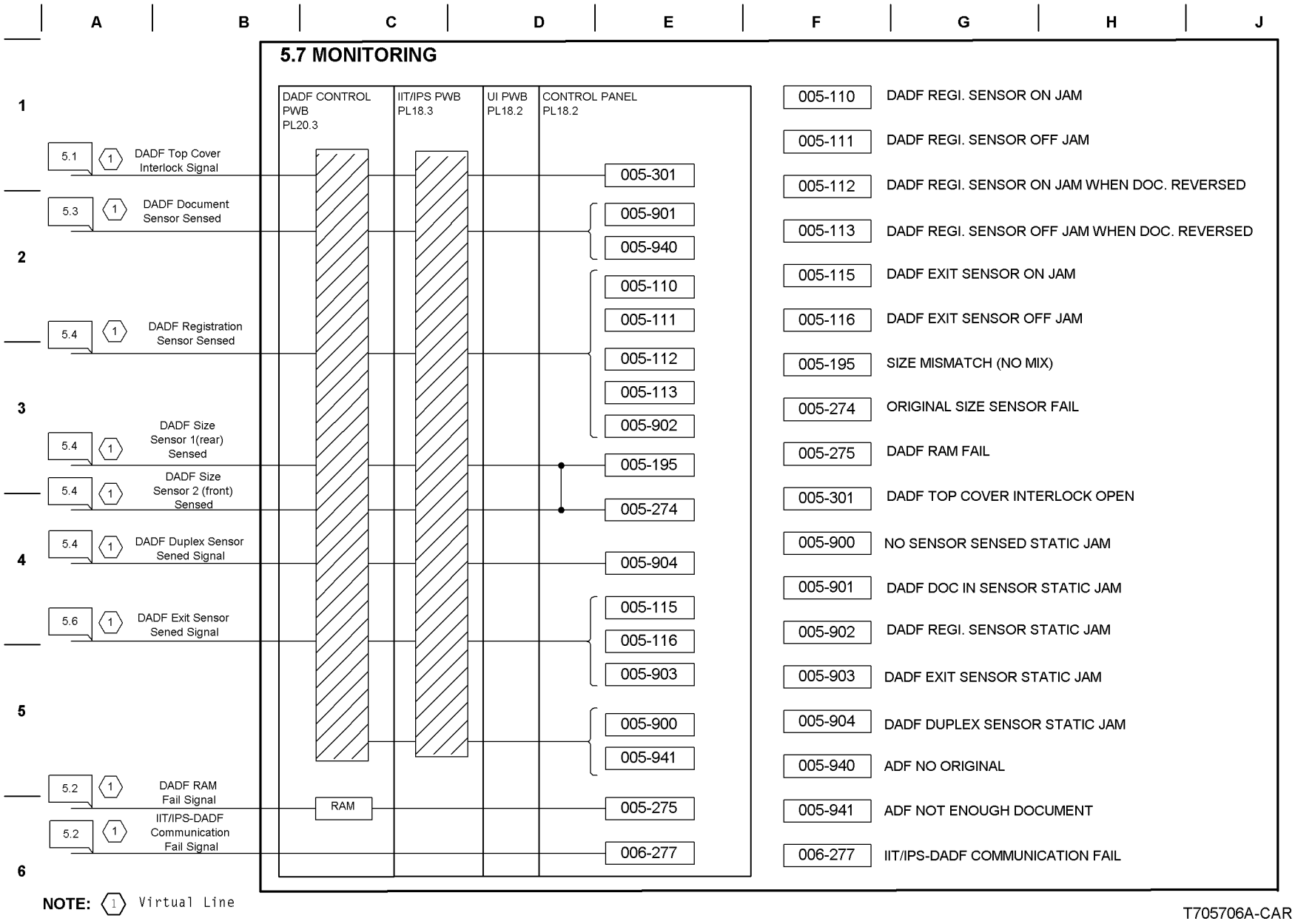
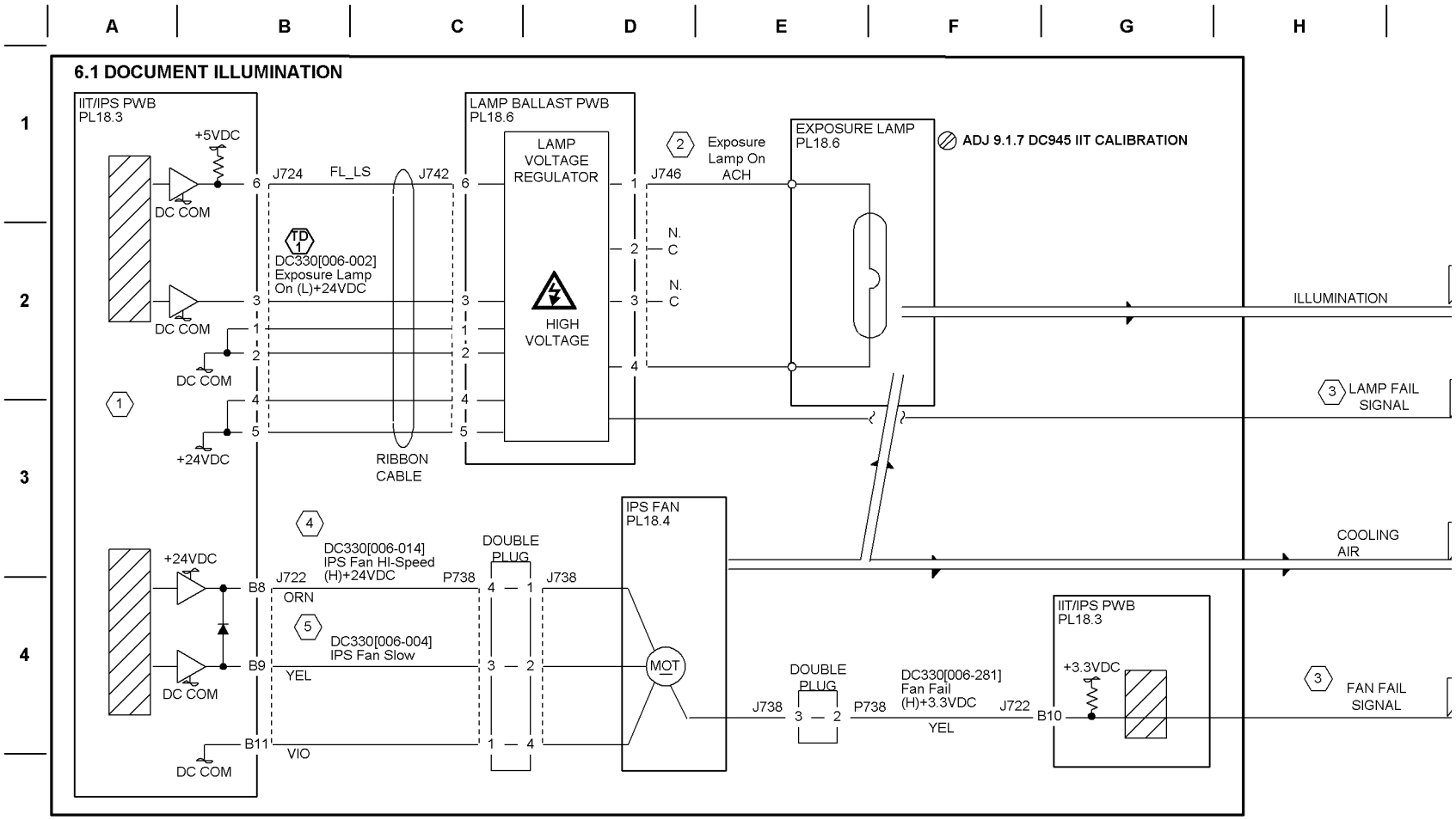


Figure 7 DADF Monitoring



NOTES:

Exposure Lamp ON/OFF Timing

1.ON timing

a. When performing AGC/AOC/Shading Correction (in initialization)
b.15 min after POWER ON.
c. When a document is sensed (by Platen Angle Sensor).
d. At the start of scanning a doc. (synch with the transfer of Carriage from the size detection position)
e. When performing White Variation Correction before starting to scan a doc.
f. 30 or more min before the next scan in the same job.
g. At the end of a job 2 hours after power on, and afterwards, at the end of jobs at 2-hour intervals.

2. 2. OFF timing

a. At the end of AGC/AOC/Shading Correction (in initialization)

2 Don't use tester for the measurement of high voltage.

3 Virtual Line

4 Rotates at low speed in DC330 [006-004].

5 5 Rotates at high speed in DC330 [006-014].

TD 1 Test Point of IIT Drive PWB J724-3 (+) GND)
With DC330 [06-002] on, approx. +7.8VDC

Figure 1 Document Illumination

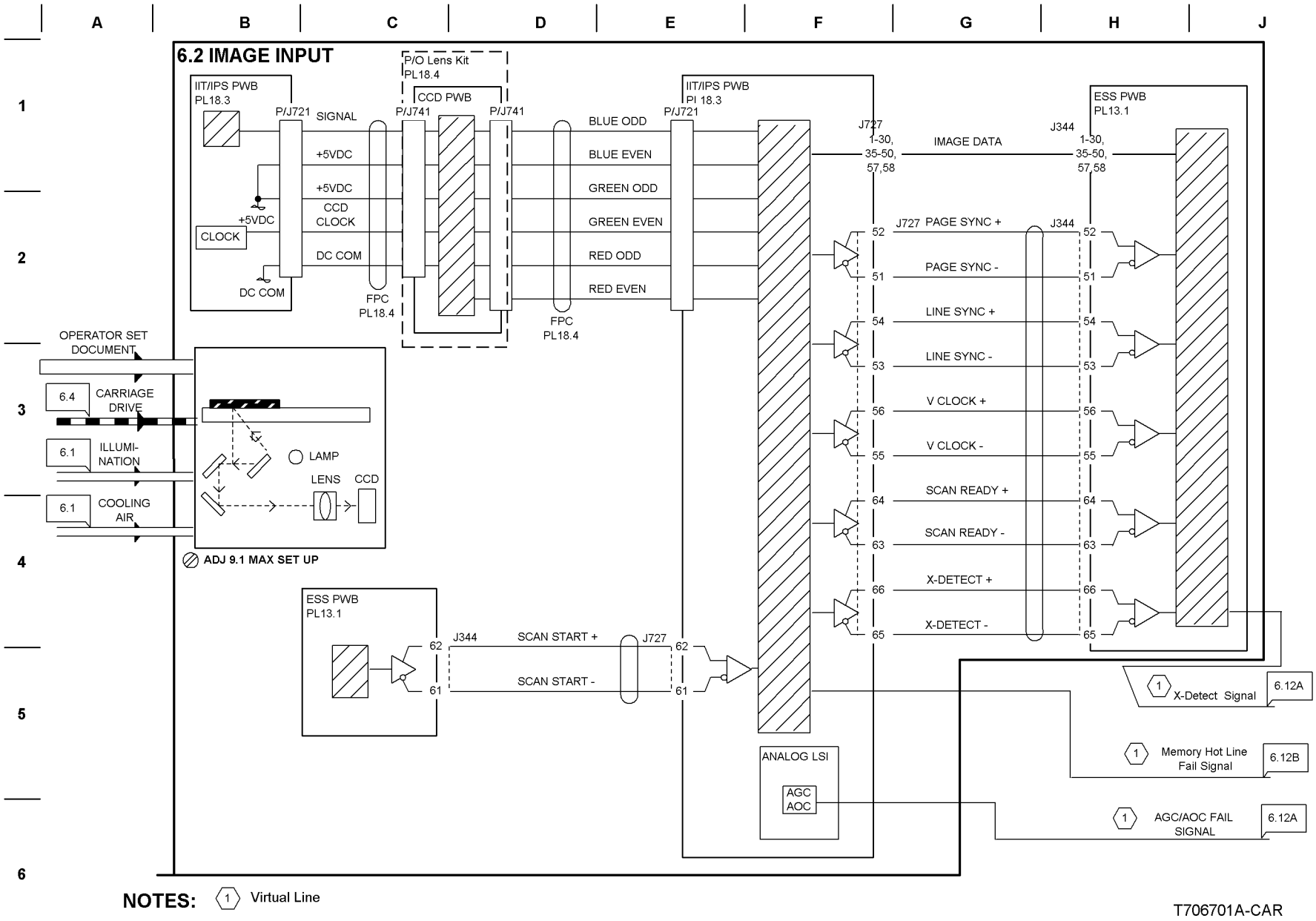


Figure 2 Image Input

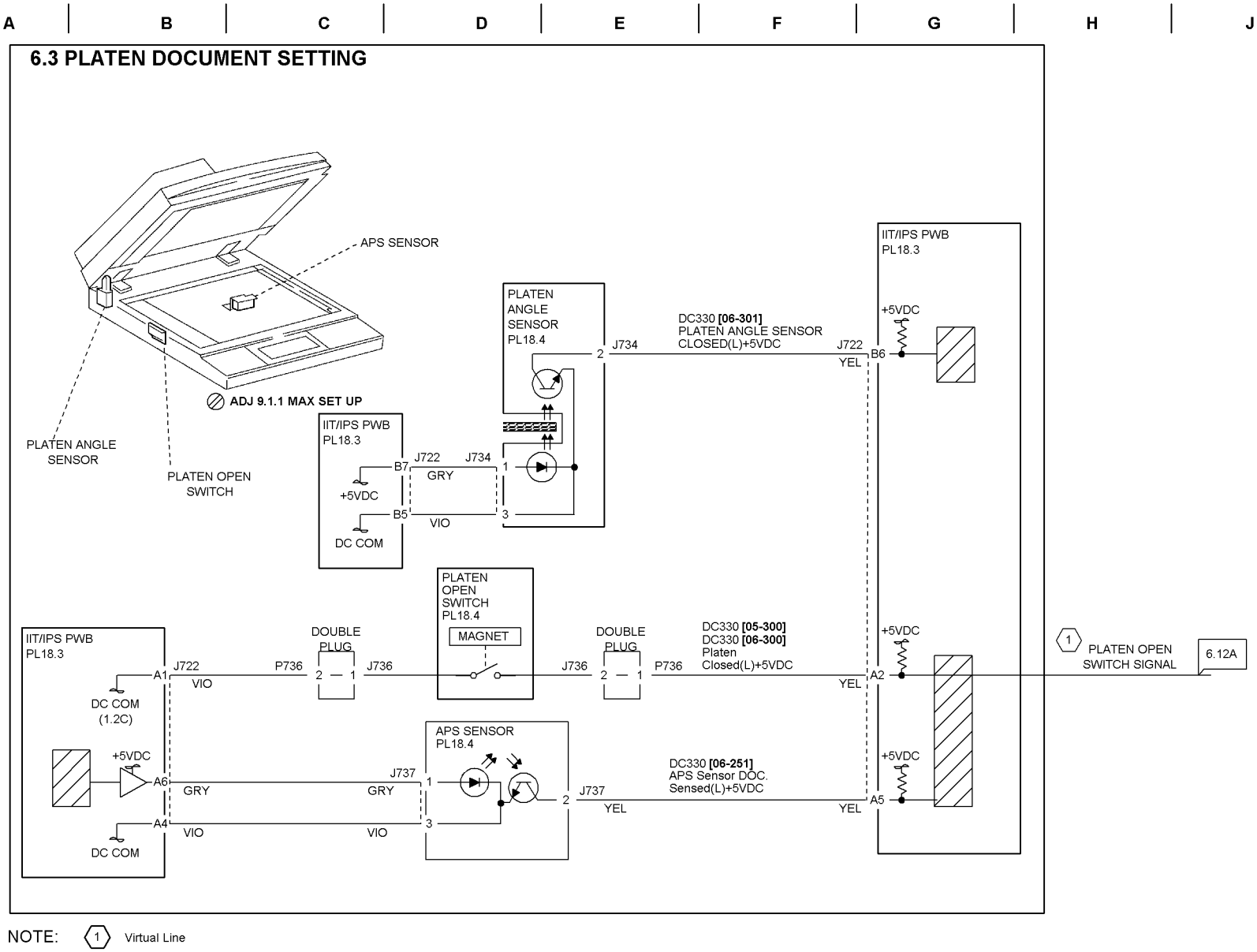


Figure 3 Platen Document Setting

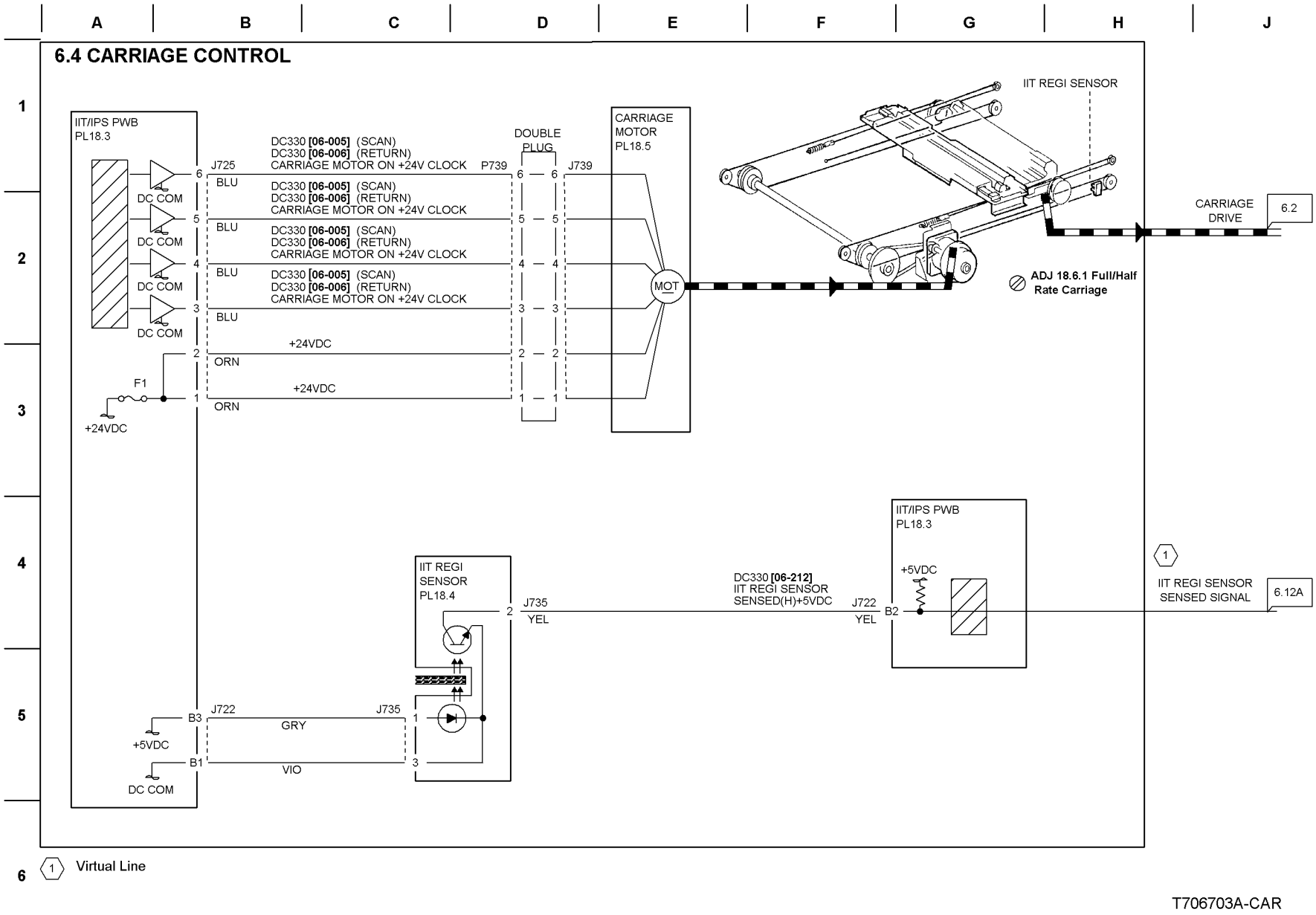


Figure 4 Carriage Control

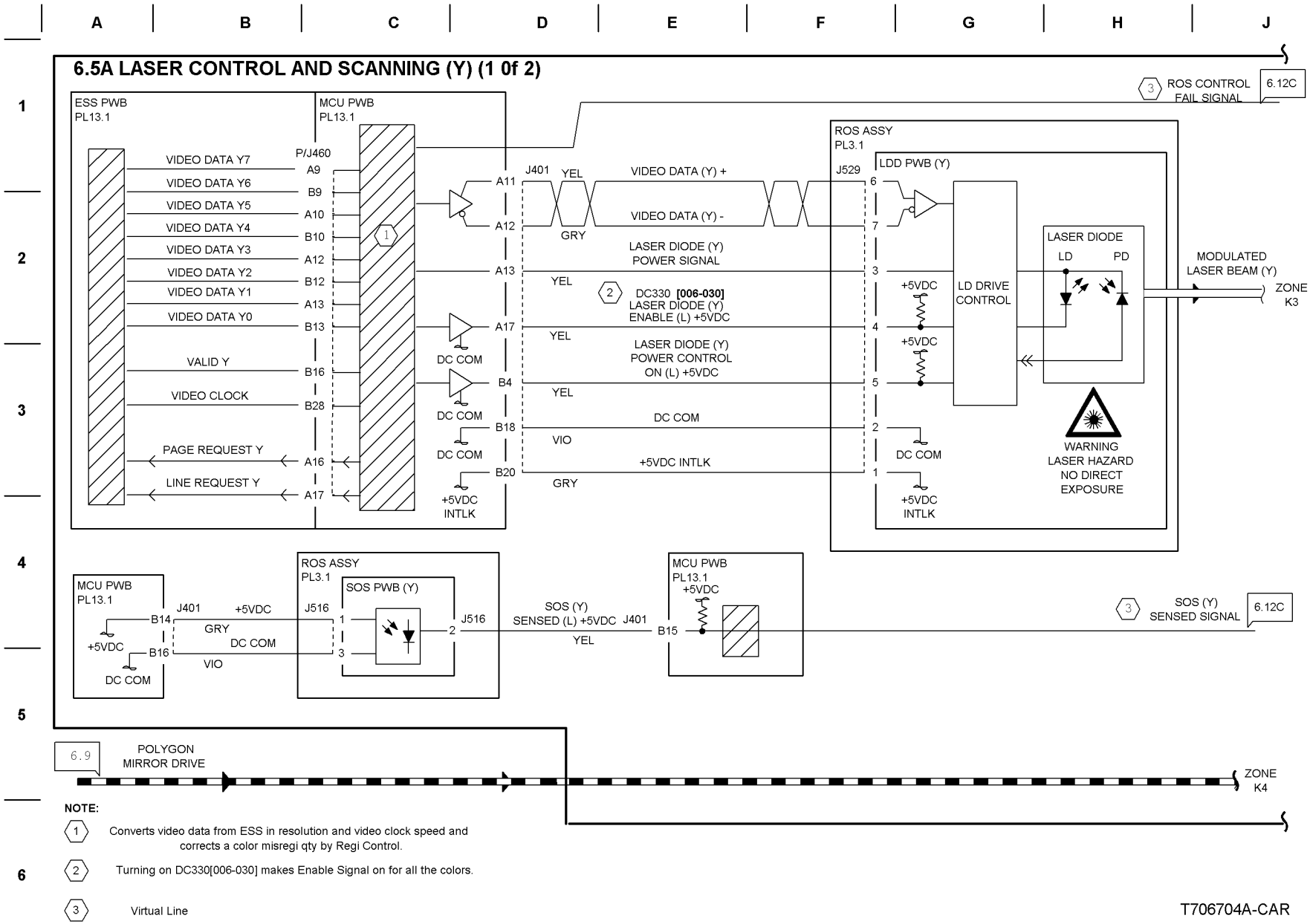


Figure 5 Laser Control and Scanning (Y) (1 0f 2)

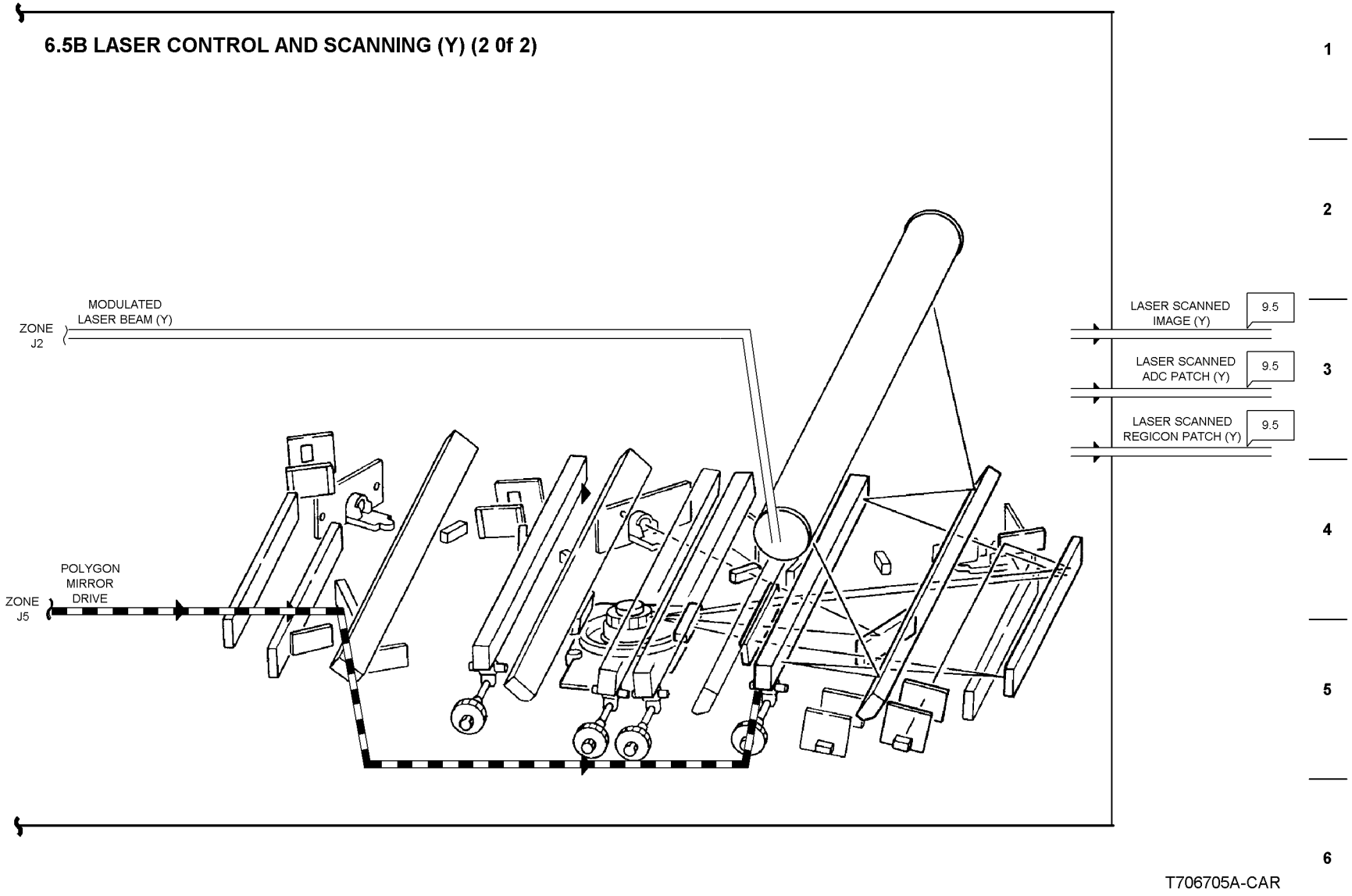


Figure 6 Laser Control and Scanning (Y) (2 0f 2)

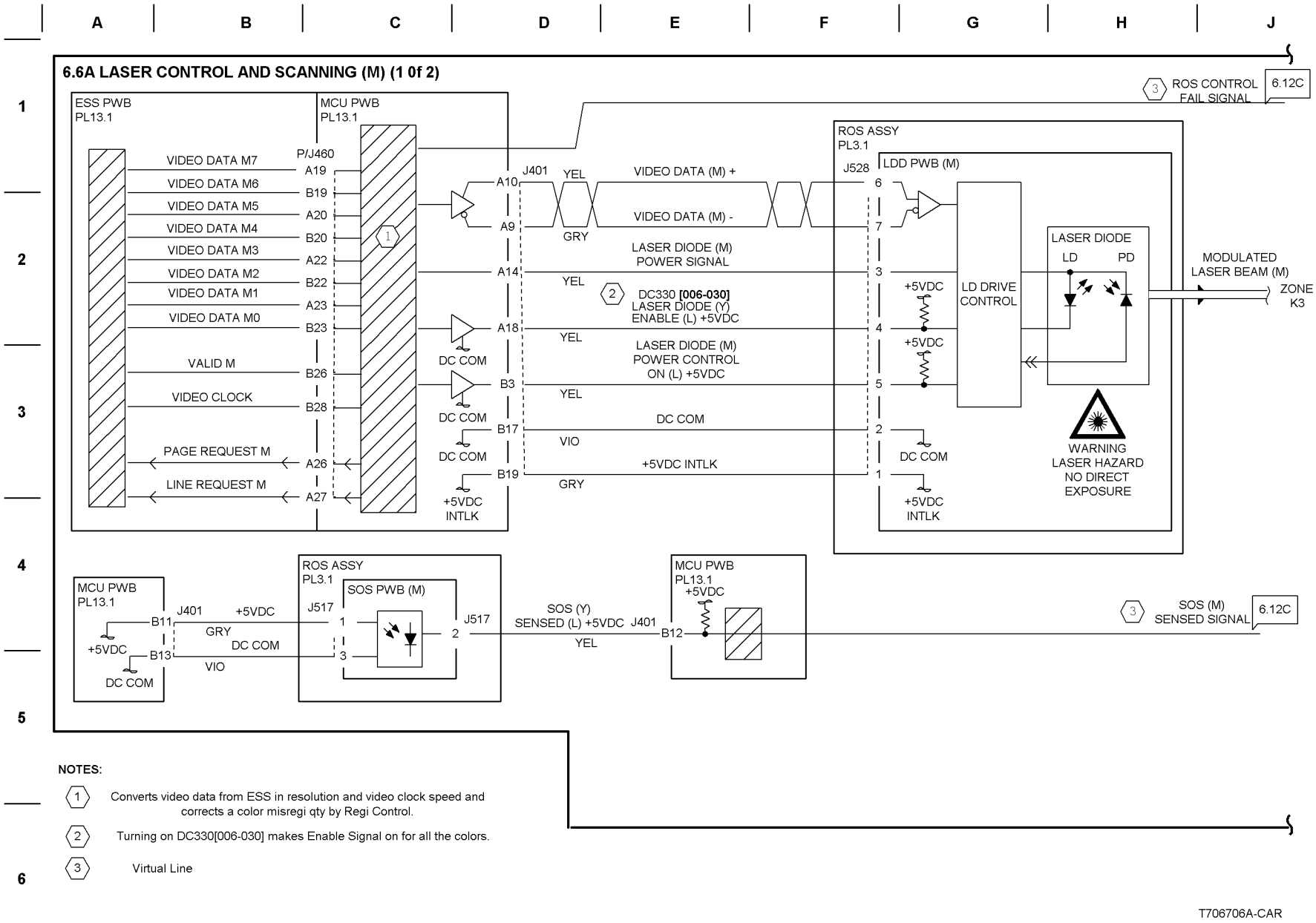


Figure 7 Laser Control and Scanning (M) (1 0f 2)

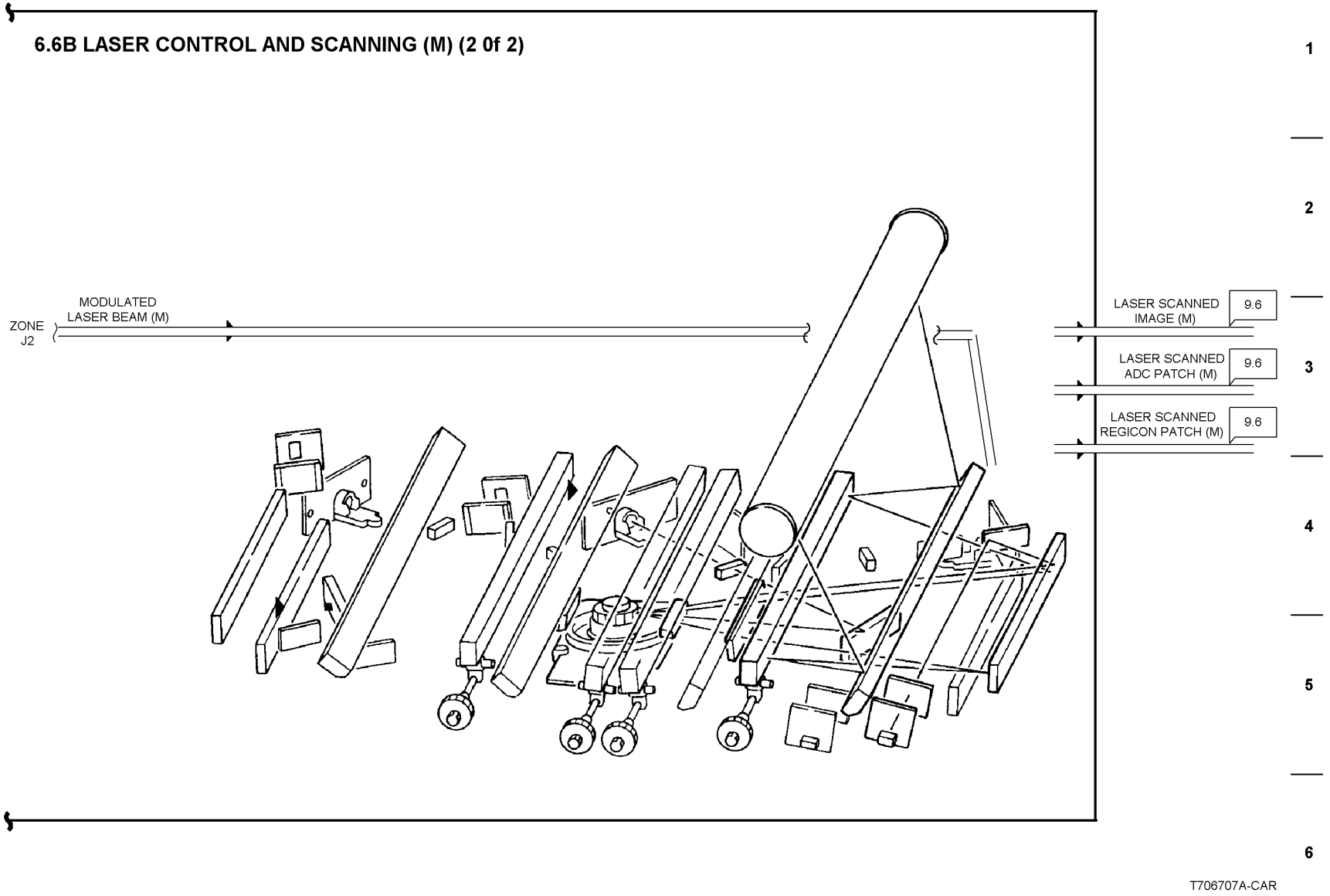


Figure 8 Laser Control and Scanning (M) (2 0f 2)

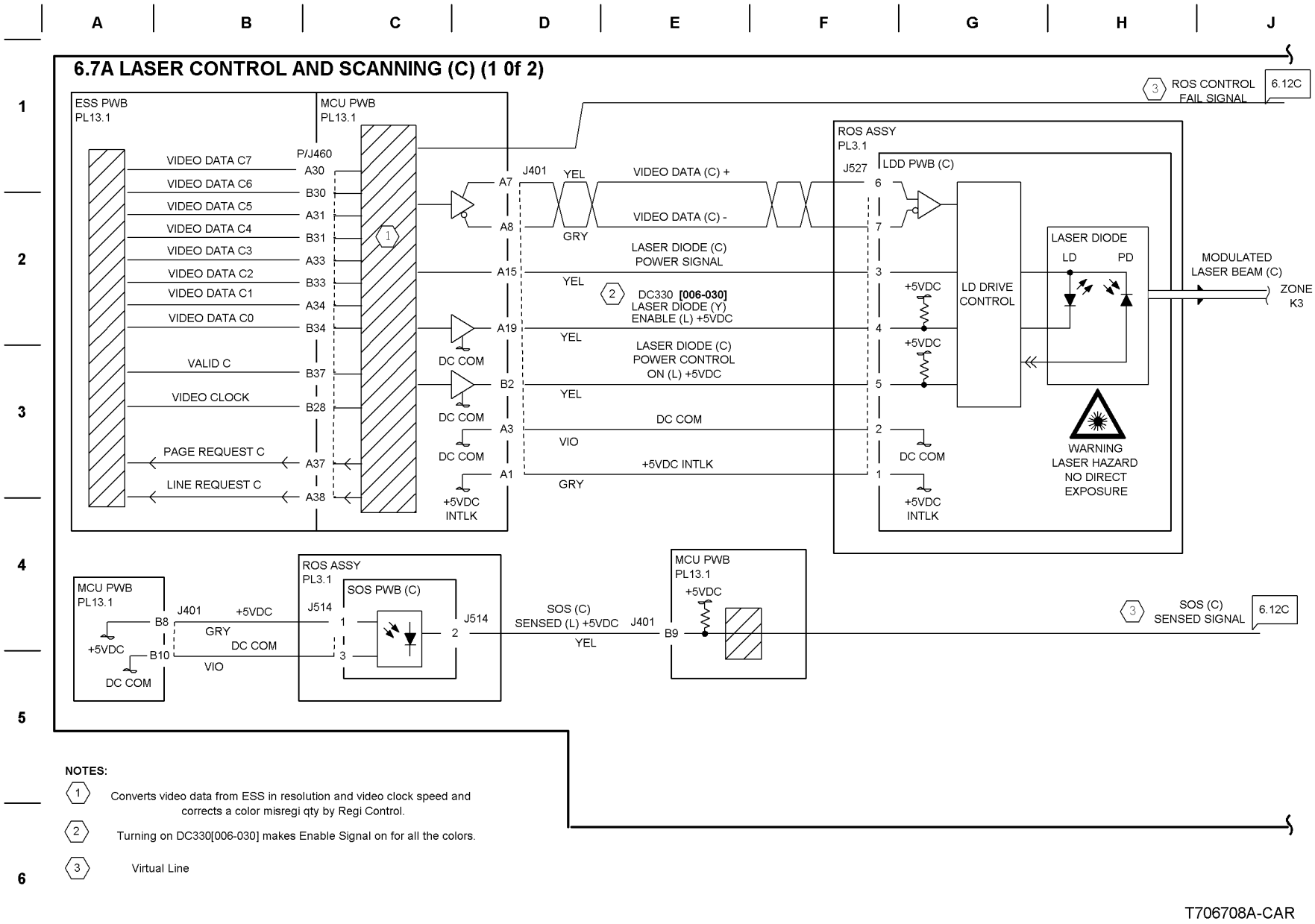


Figure 9 Laser Control and Scanning (C) (1 0f 2)

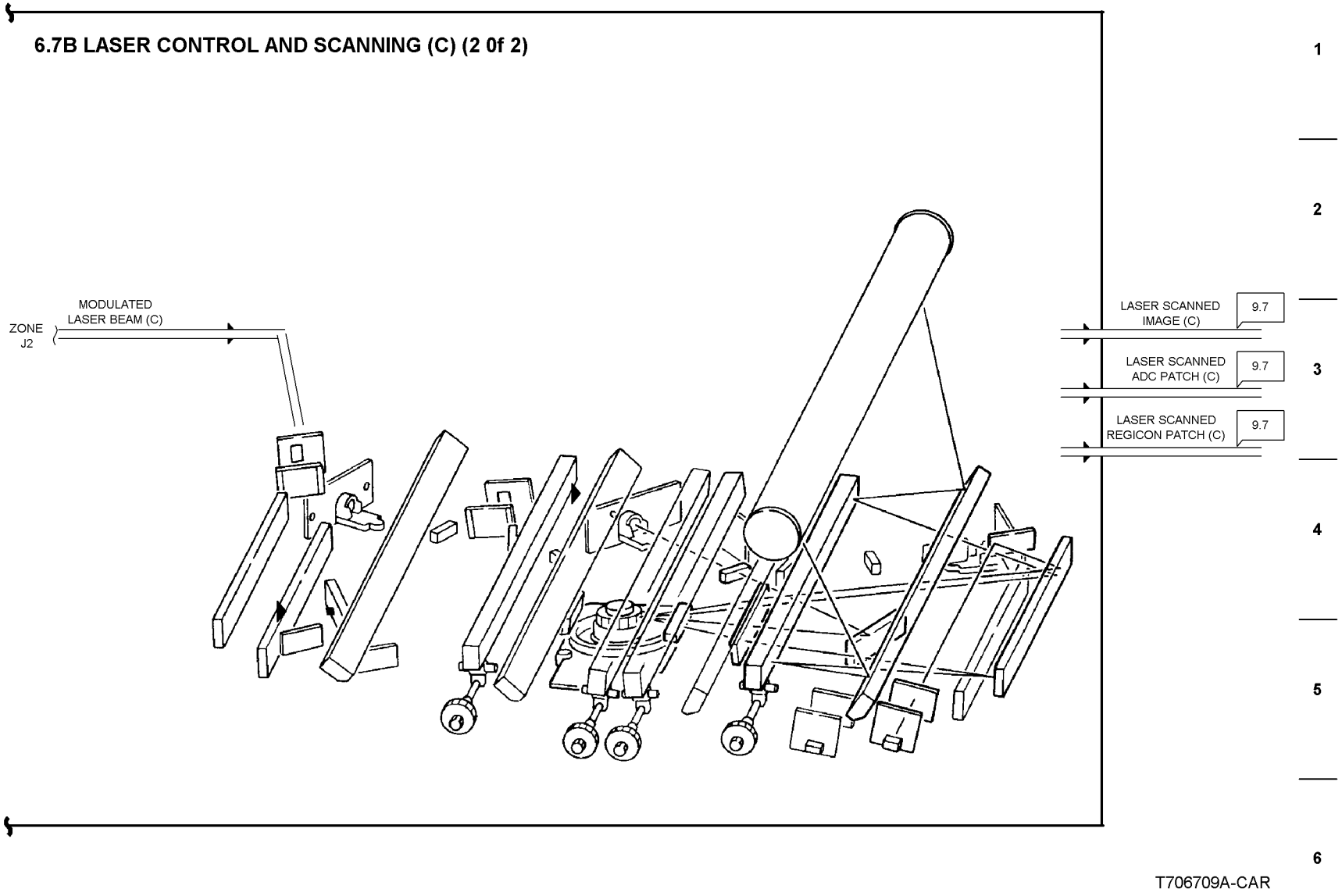


Figure 10 Laser Control and Scanning (C) (2 0f 2)

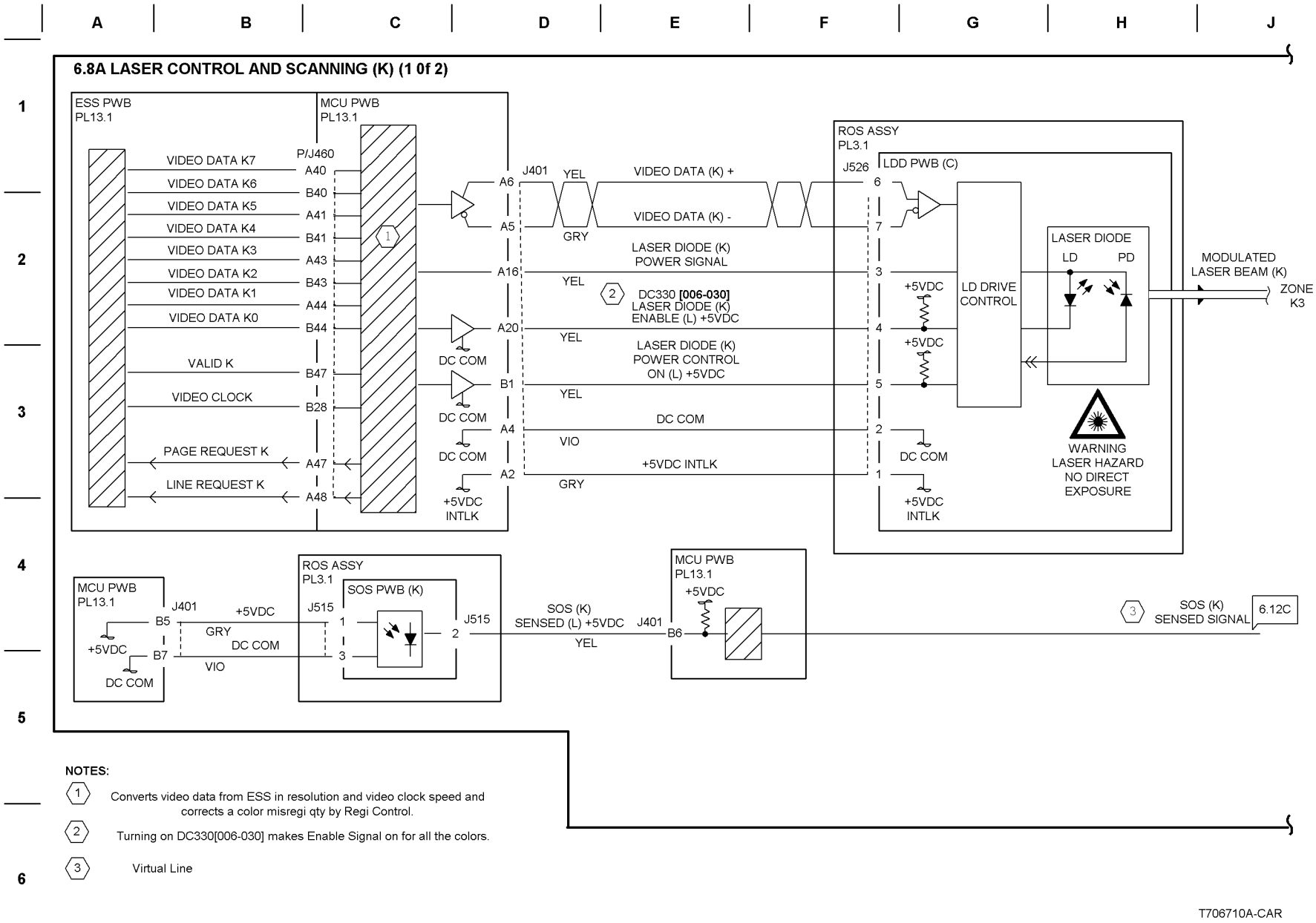


Figure 11 Laser Control and Scanning (K) (1 0f 2)

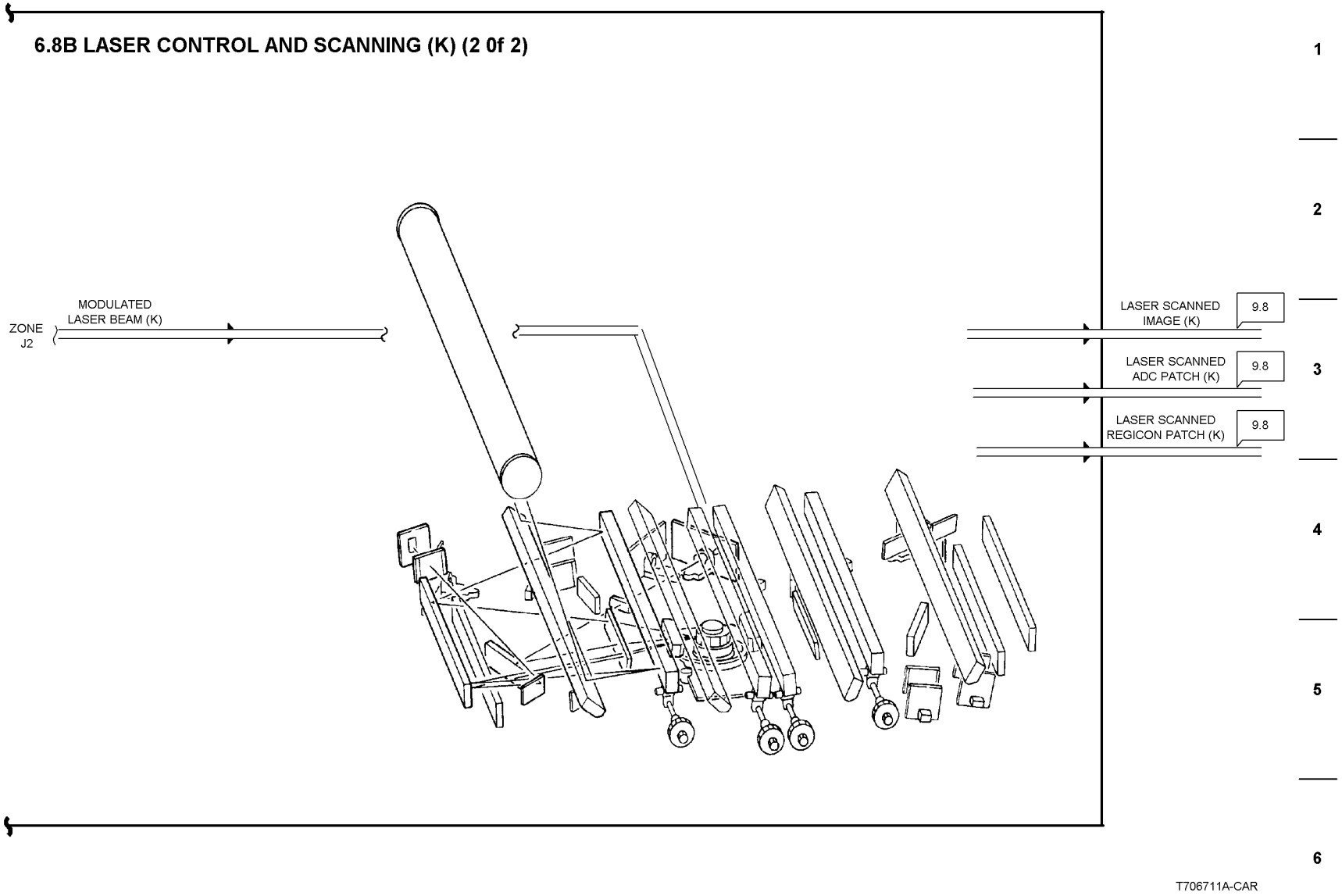


Figure 12 Laser Control and Scanning (K) (2 0f 2)

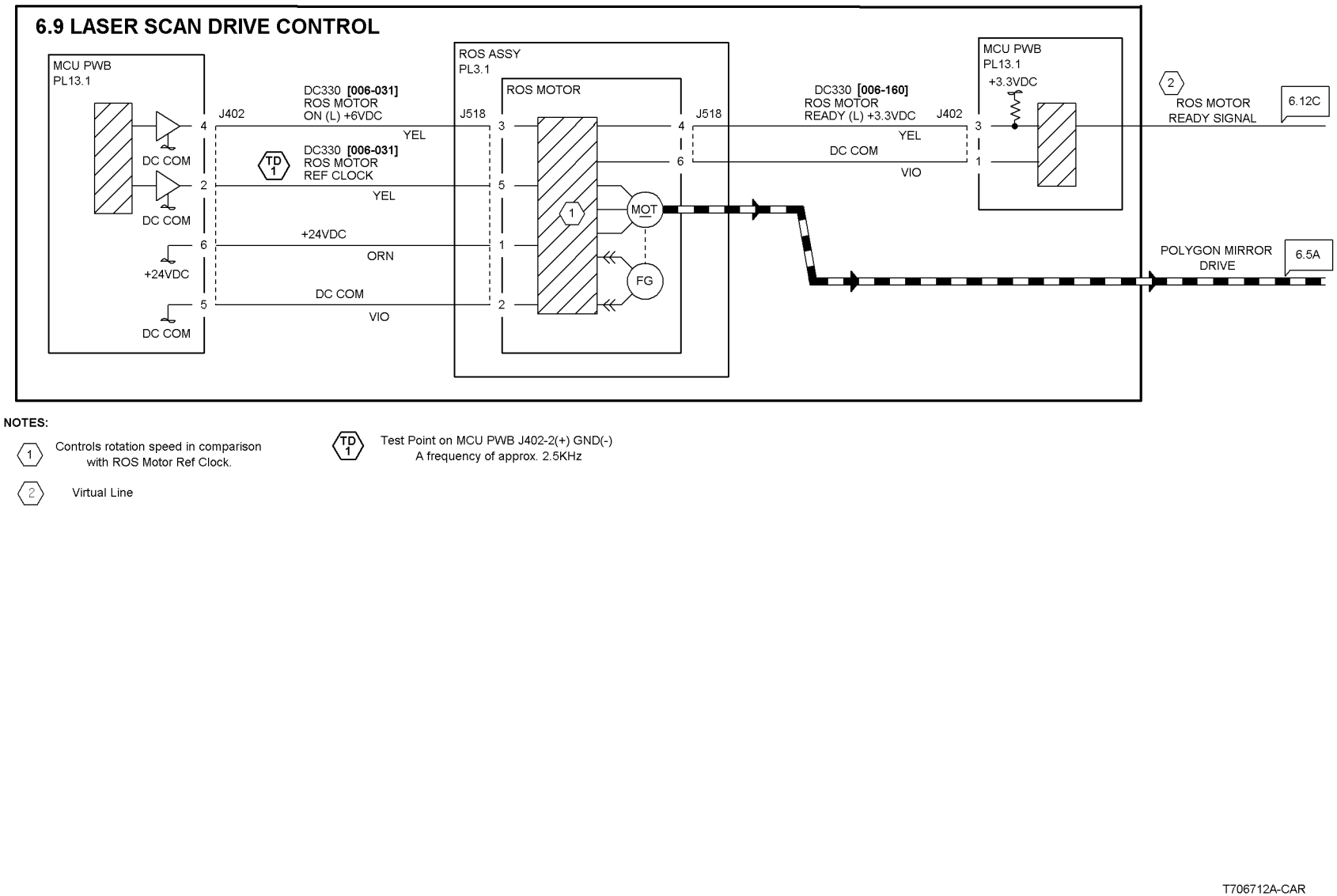


Figure 13 Laser Scan drive Control

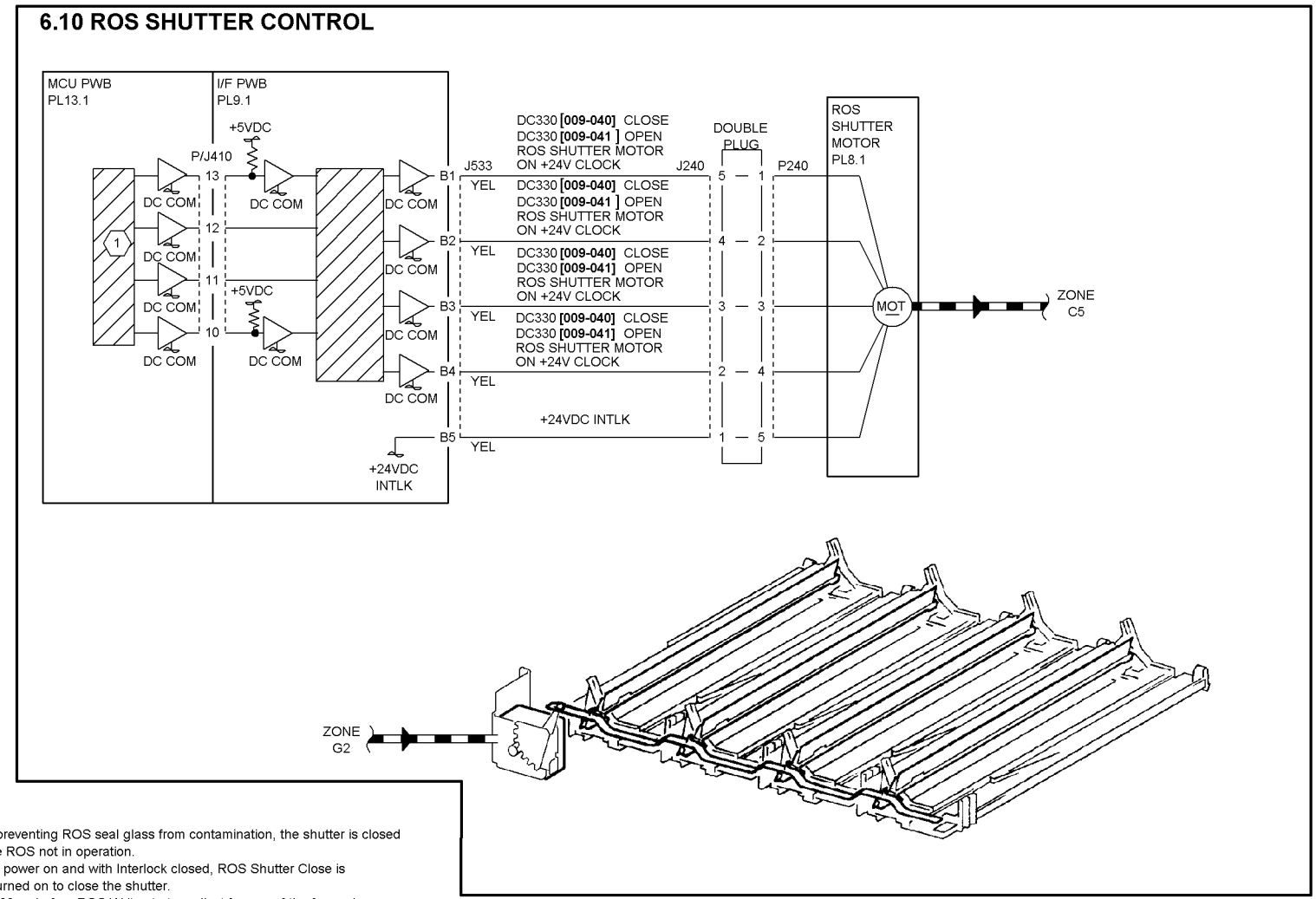


Figure 14 Ross Shutter Control

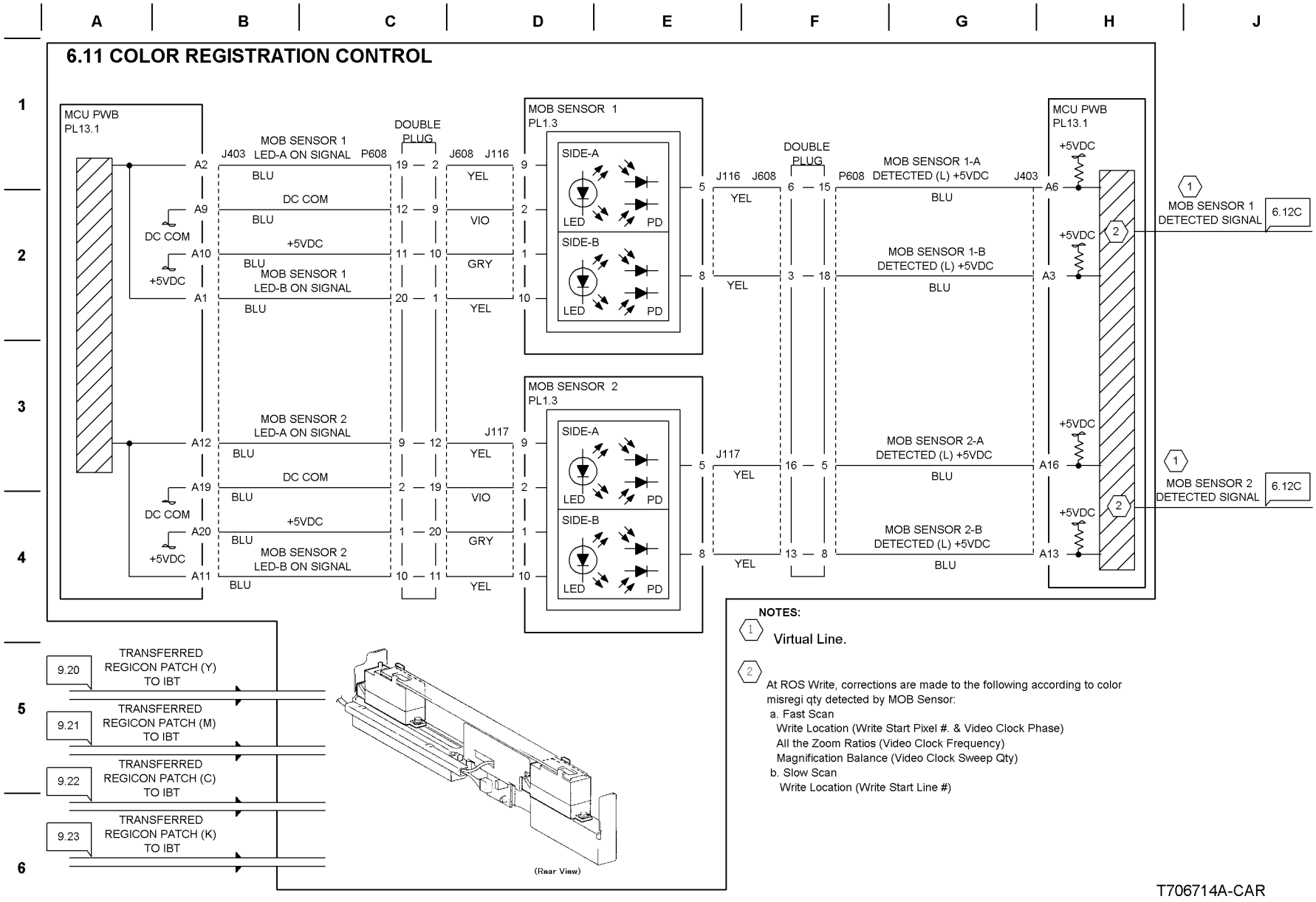


Figure 15 Color Registration Control

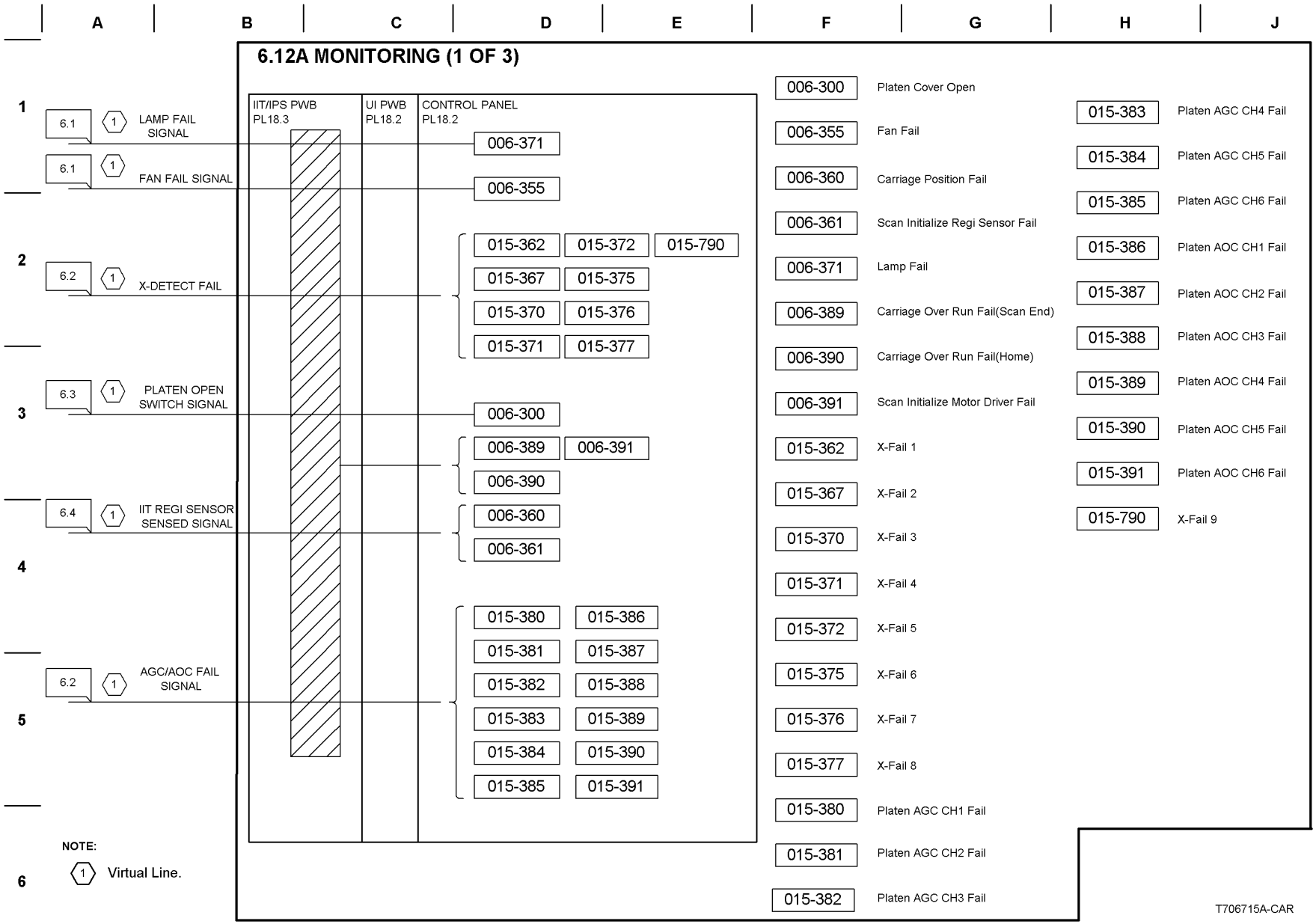


Figure 16 Image Monitoring (1 0f 3)

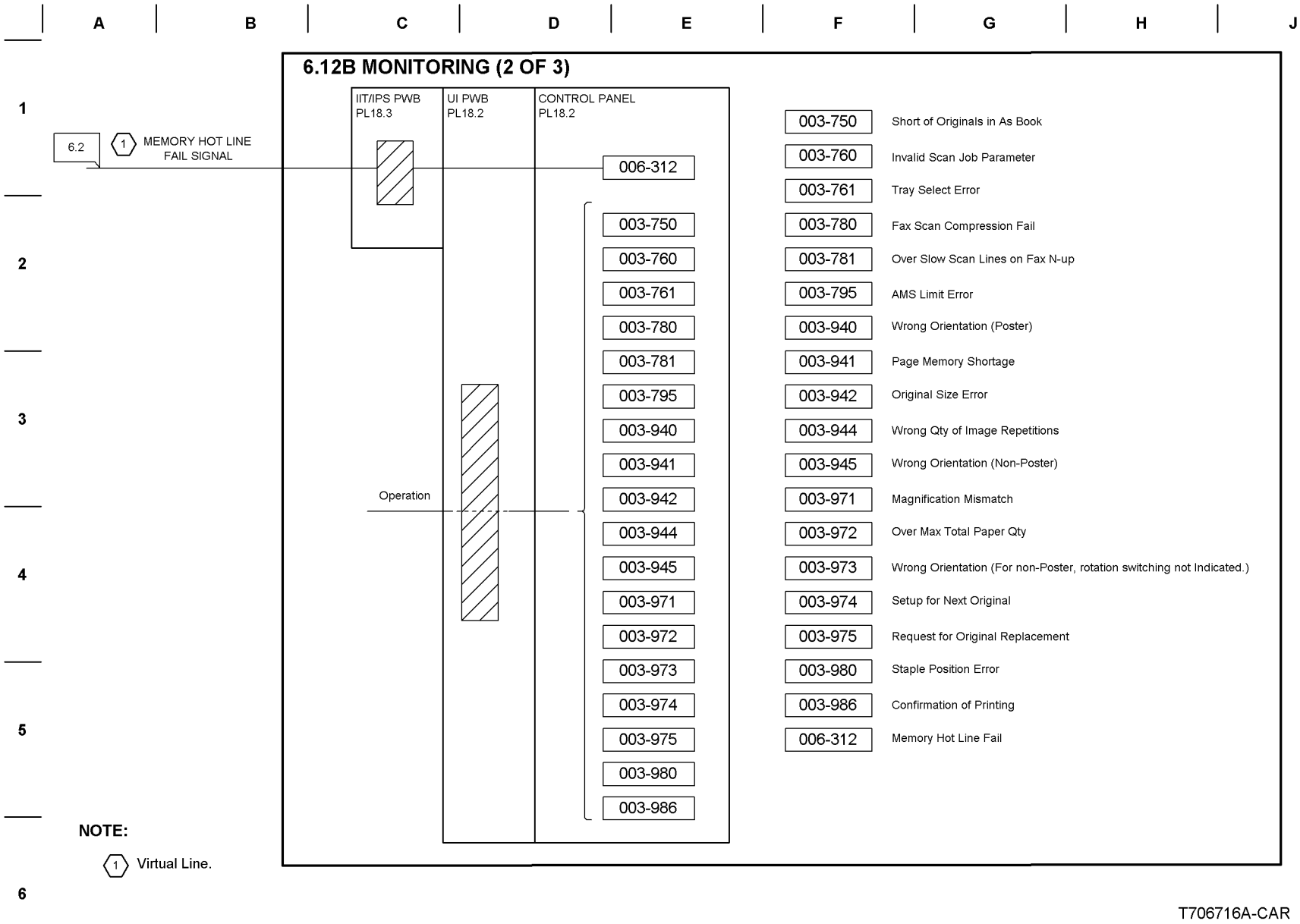


Figure 17 Image Monitoring (2 0f 3)

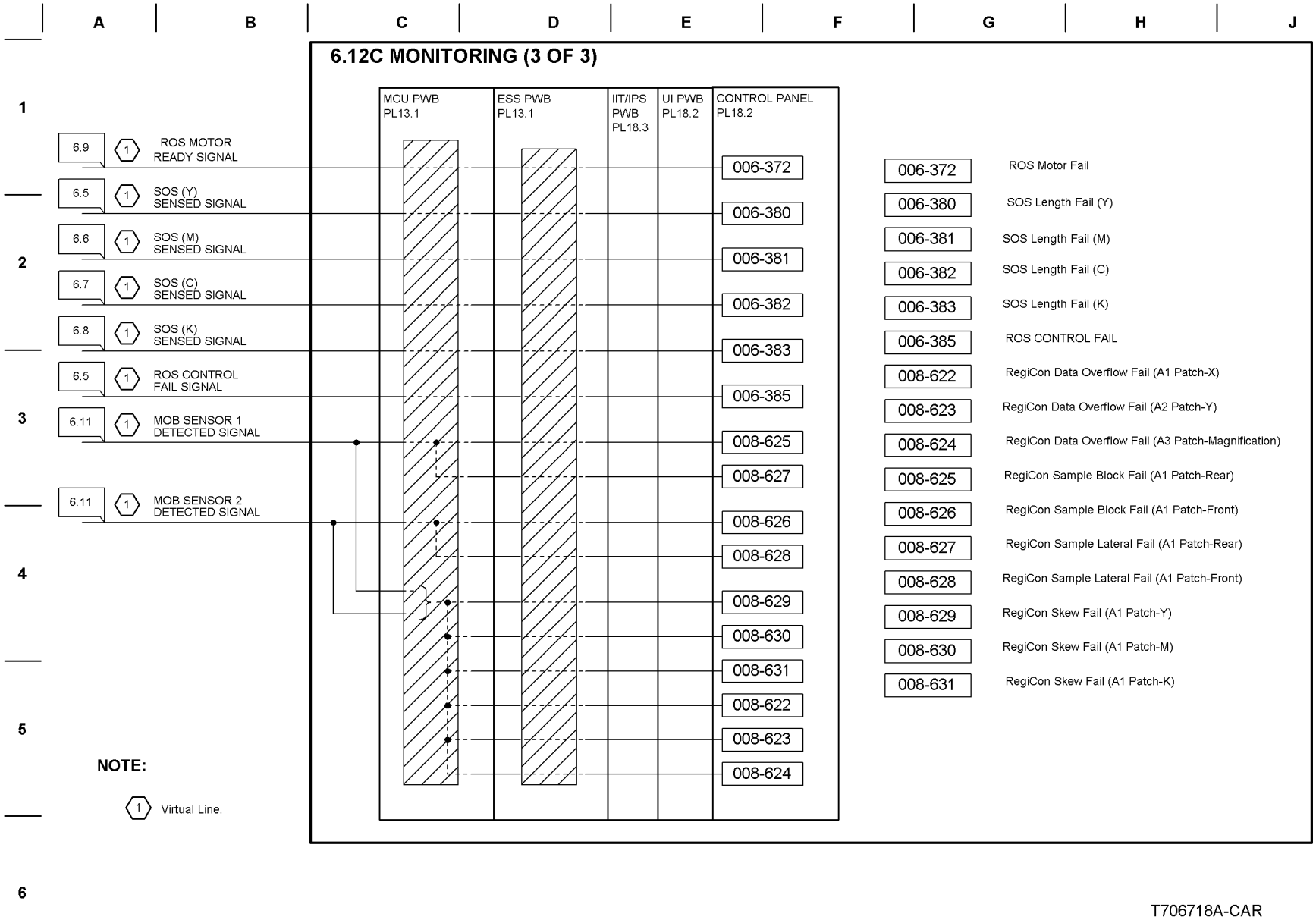
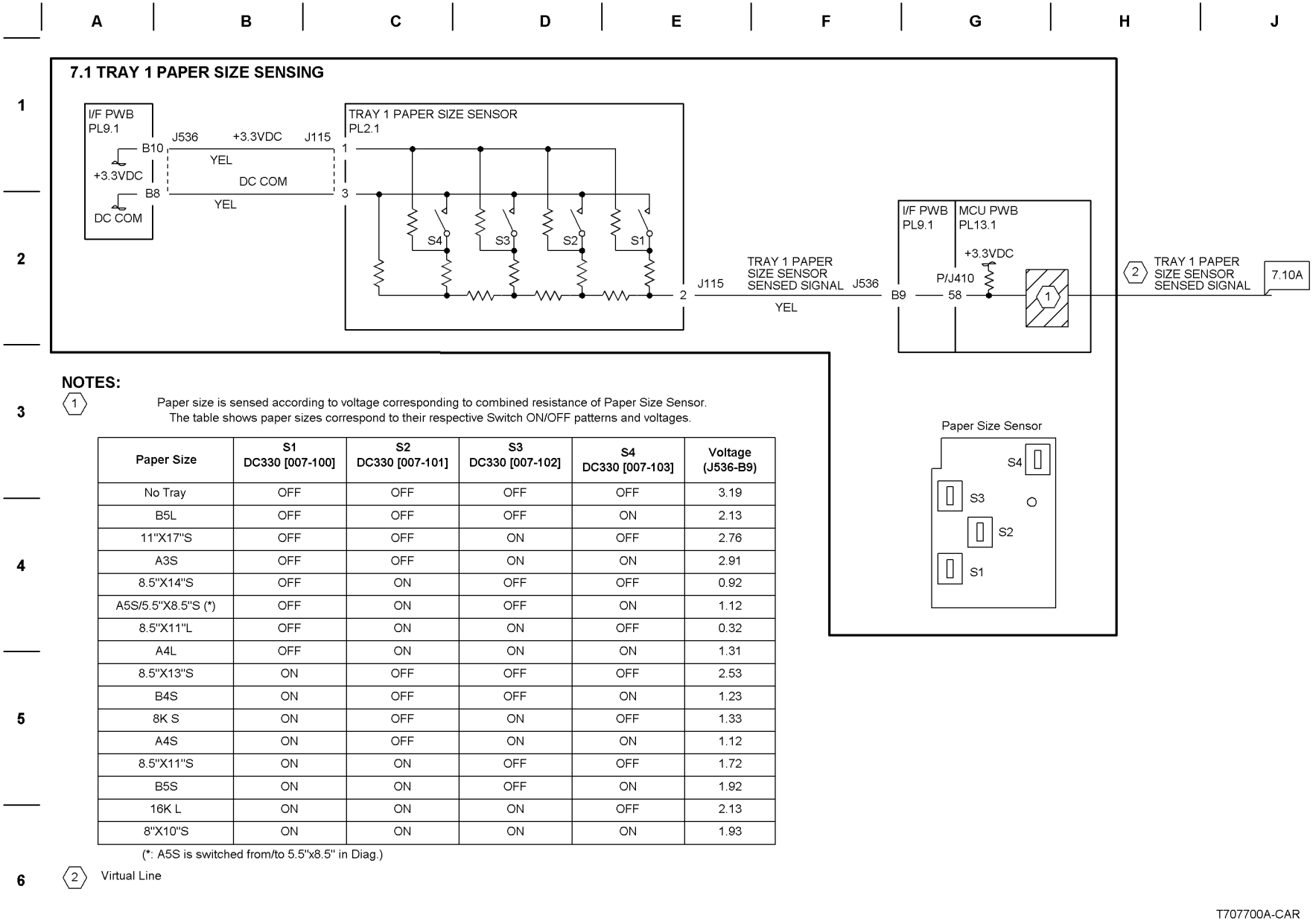


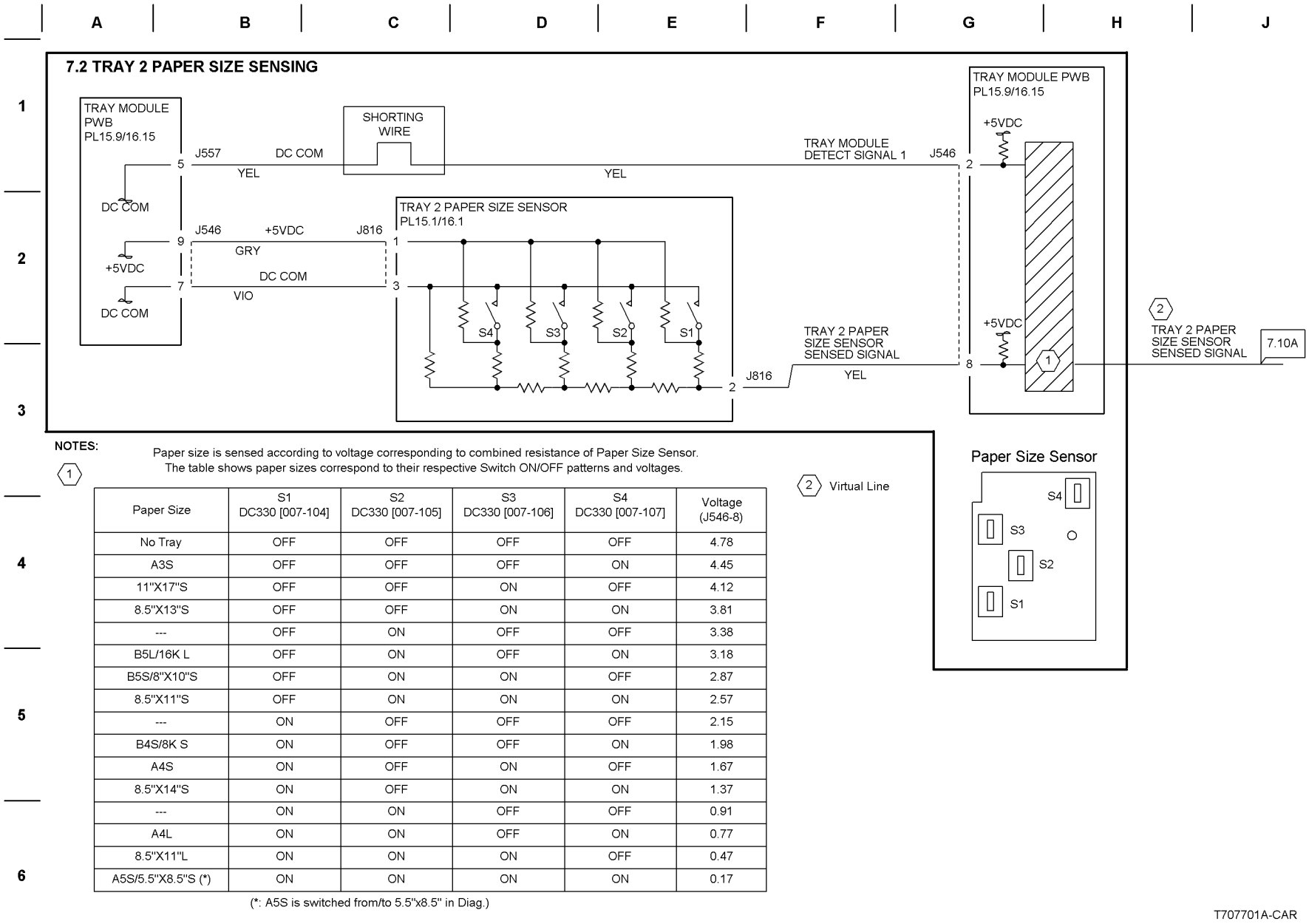
Figure 18 Image Monitoring (3 0f 3)



Paper Size	S1 DC330 [007-100]	S2 DC330 [007-101]	S3 DC330 [007-102]	S4 DC330 [007-103]	Voltage (J536-B9)
No Tray	OFF	OFF	OFF	OFF	3.19
B5L	OFF	OFF	OFF	ON	2.13
11"X17"S	OFF	OFF	ON	OFF	2.76
A3S	OFF	OFF	ON	ON	2.91
8.5"X14"S	OFF	ON	OFF	OFF	0.92
A5S/5.5"X8.5"S (*)	OFF	ON	OFF	ON	1.12
8.5"X11"L	OFF	ON	ON	OFF	0.32
A4L	OFF	ON	ON	ON	1.31
8.5"X13"S	ON	OFF	OFF	OFF	2.53
B4S	ON	OFF	OFF	ON	1.23
8K S	ON	OFF	ON	OFF	1.33
A4S	ON	OFF	ON	ON	1.12
8.5"X11"S	ON	ON	OFF	OFF	1.72
B5S	ON	ON	OFF	ON	1.92
16K L	ON	ON	ON	OFF	2.13
8"X10"S	ON	ON	ON	ON	1.93

(*: A5S is switched from/to 5.5"x8.5" in Diag.)

Figure 1 Tray 1 Paper Size Sensing

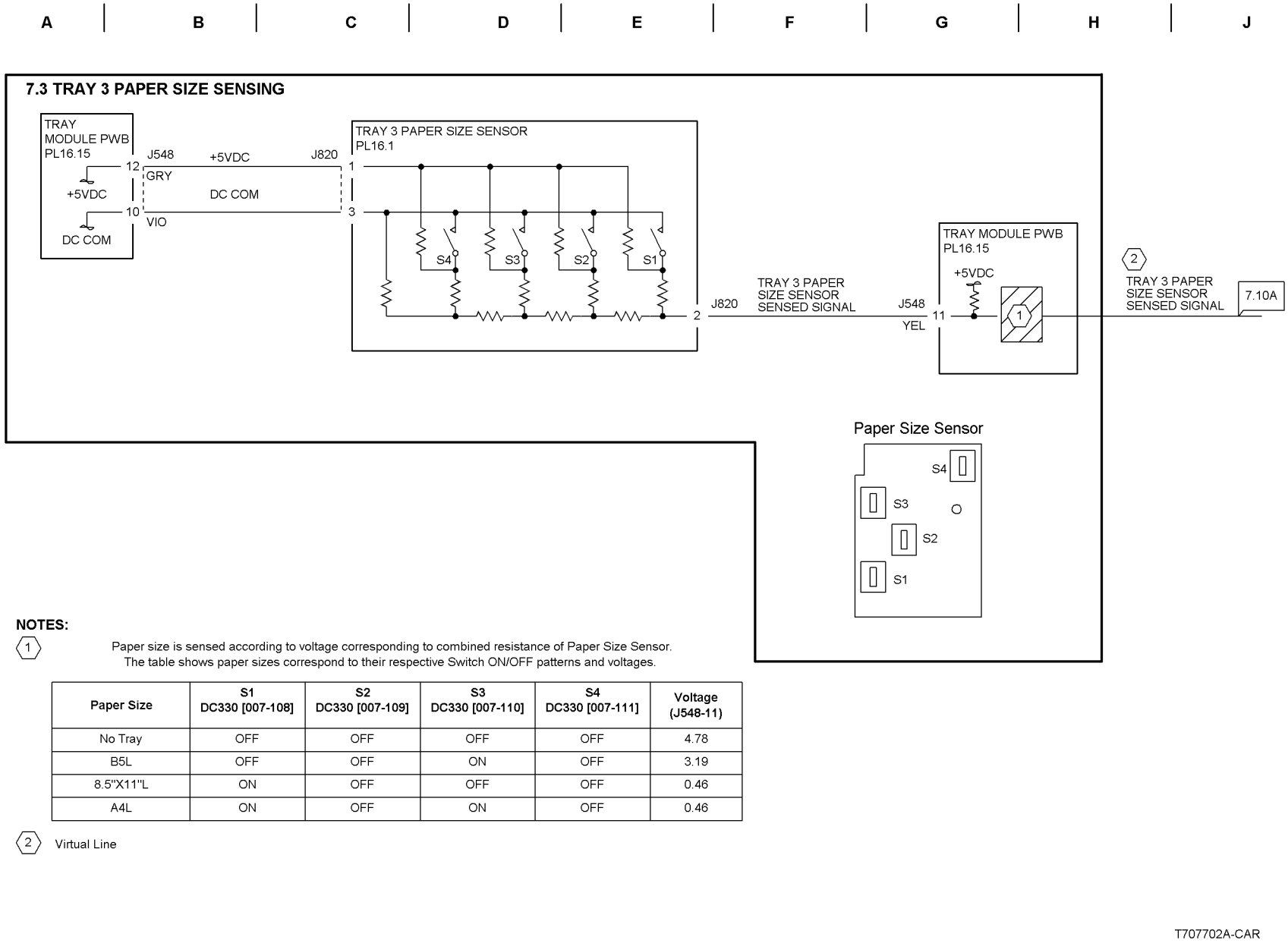


Paper Size	S1 DC330 [007-104]	S2 DC330 [007-105]	S3 DC330 [007-106]	S4 DC330 [007-107]	Voltage (J546-8)
No Tray	OFF	OFF	OFF	OFF	4.78
A3S	OFF	OFF	OFF	ON	4.45
11"X17"S	OFF	OFF	ON	OFF	4.12
8.5"X13"S	OFF	OFF	ON	ON	3.81
---	OFF	ON	OFF	OFF	3.38
B5L/16K L	OFF	ON	OFF	ON	3.18
B5S/8"X10"S	OFF	ON	ON	OFF	2.87
8.5"X11"S	OFF	ON	ON	ON	2.57
---	ON	OFF	OFF	OFF	2.15
B4S/8K S	ON	OFF	OFF	ON	1.98
A4S	ON	OFF	ON	OFF	1.67
8.5"X14"S	ON	OFF	ON	ON	1.37
---	ON	ON	OFF	OFF	0.91
A4L	ON	ON	OFF	ON	0.77
8.5"X11"L	ON	ON	ON	OFF	0.47
A5S/5.5"X8.5"S (*)	ON	ON	ON	ON	0.17

(*: A5S is switched from/to 5.5"x8.5" in Diag.)

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Figure 2 Tray 2 Paper Size Sensing



NOTES:

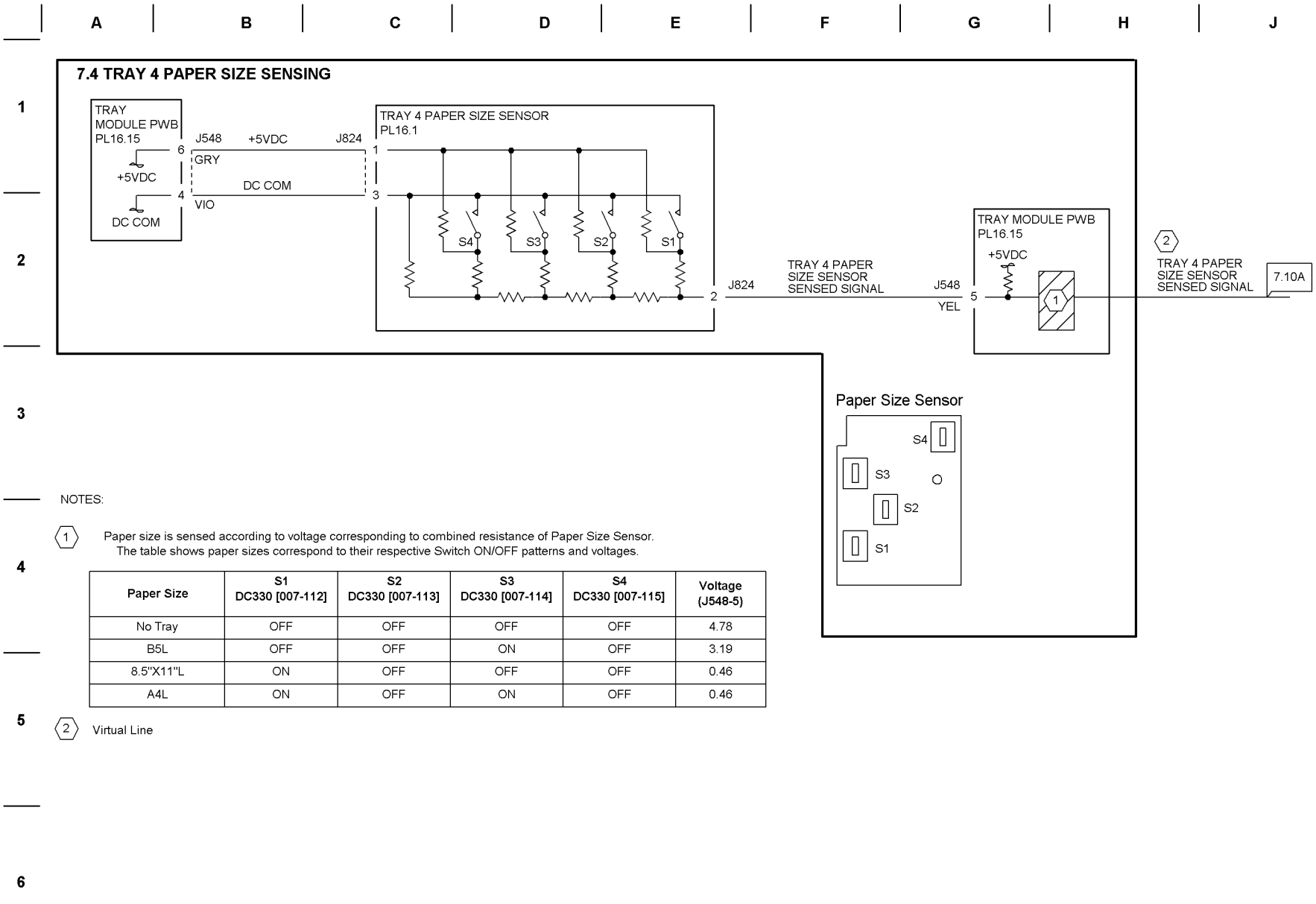
(1) Paper size is sensed according to voltage corresponding to combined resistance of Paper Size Sensor. The table shows paper sizes correspond to their respective Switch ON/OFF patterns and voltages.

Paper Size	S1 DC330 [007-108]	S2 DC330 [007-109]	S3 DC330 [007-110]	S4 DC330 [007-111]	Voltage (J548-11)
No Tray	OFF	OFF	OFF	OFF	4.78
B5L	OFF	OFF	ON	OFF	3.19
8.5"X11"L	ON	OFF	OFF	OFF	0.46
A4L	ON	OFF	ON	OFF	0.46

(2) Virtual Line

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Figure 3 Tray 3 Paper Size Sensing



NOTES:

(1) Paper size is sensed according to voltage corresponding to combined resistance of Paper Size Sensor. The table shows paper sizes correspond to their respective Switch ON/OFF patterns and voltages.

Paper Size	S1 DC330 [007-112]	S2 DC330 [007-113]	S3 DC330 [007-114]	S4 DC330 [007-115]	Voltage (J548-5)
No Tray	OFF	OFF	OFF	OFF	4.78
B5L	OFF	OFF	ON	OFF	3.19
8.5"X11"L	ON	OFF	OFF	OFF	0.46
A4L	ON	OFF	ON	OFF	0.46

(2) Virtual Line

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Figure 4 Tray 4 Paper Size Sensing

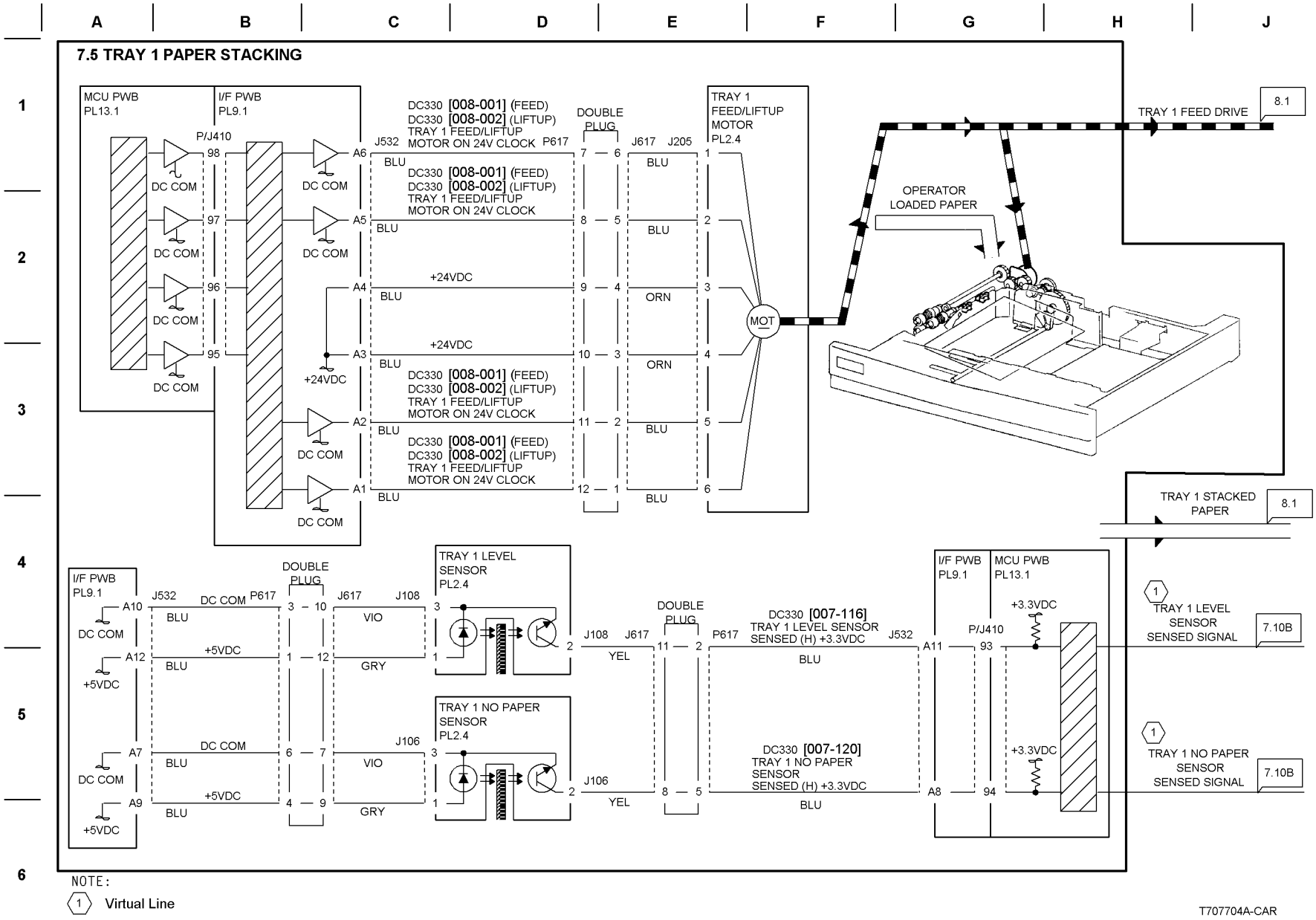


Figure 5 Tray 1 Paper Stacking

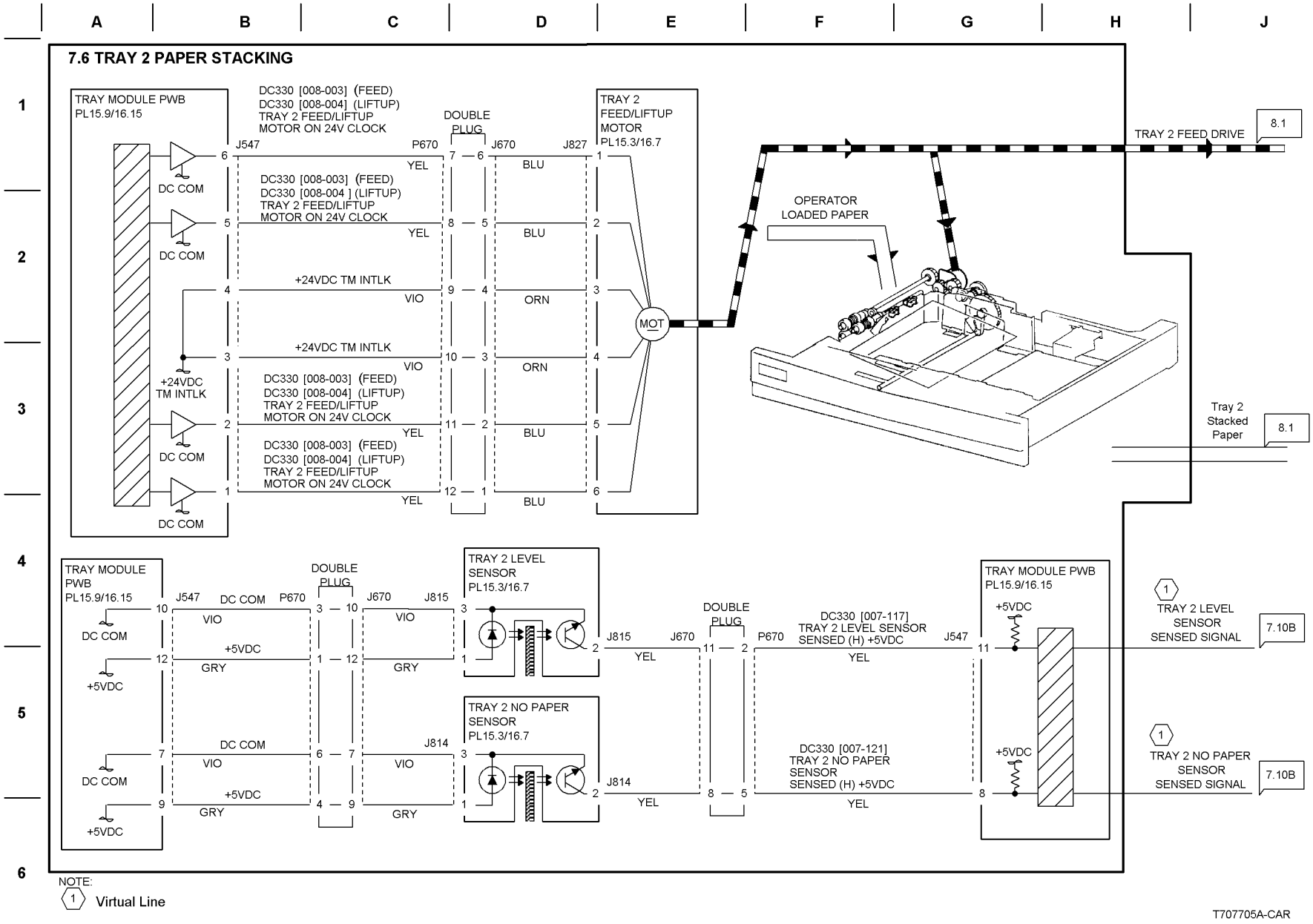


Figure 6 Tray 2 Paper Stacking

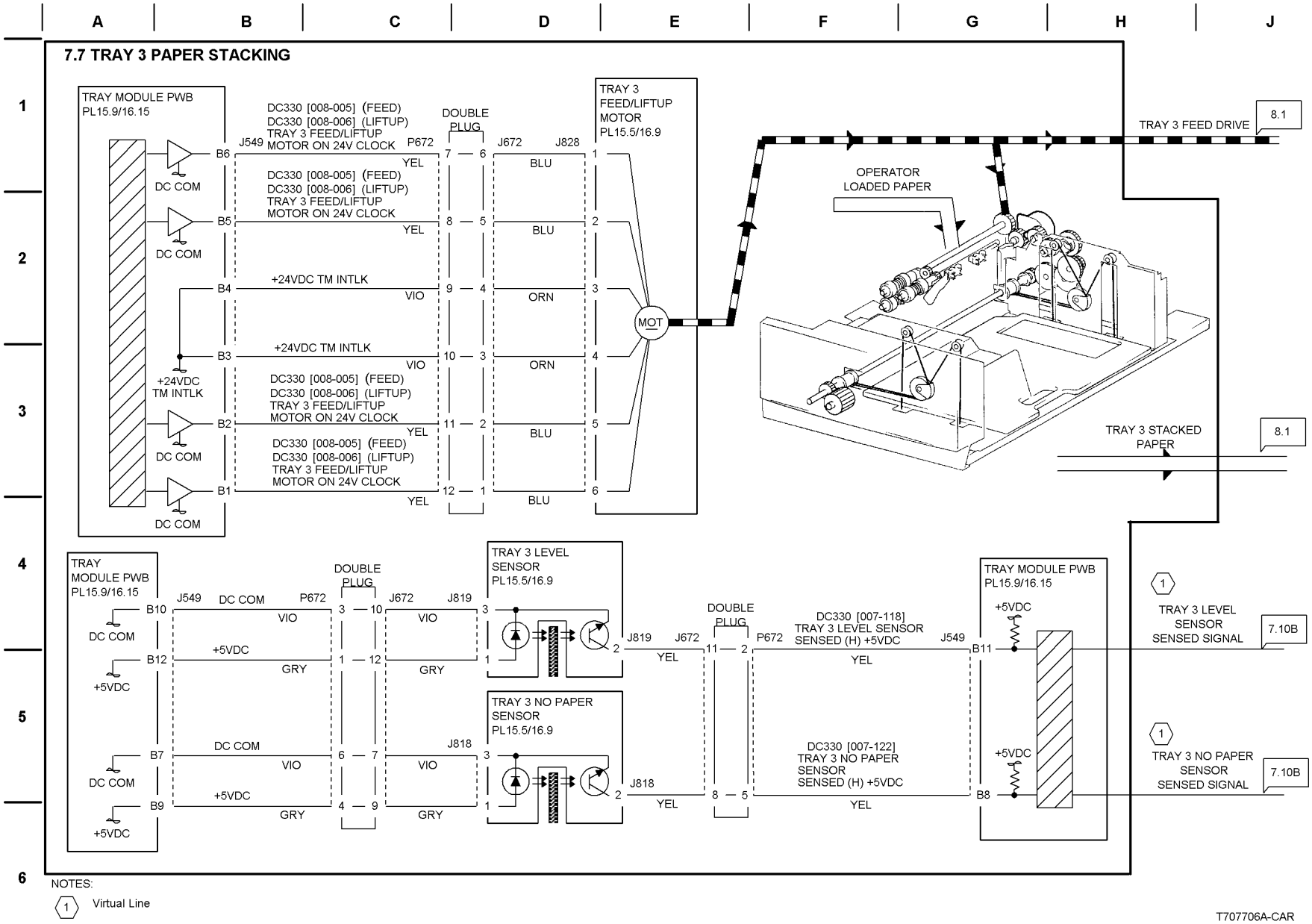


Figure 7 Tray 3 Paper Stacking

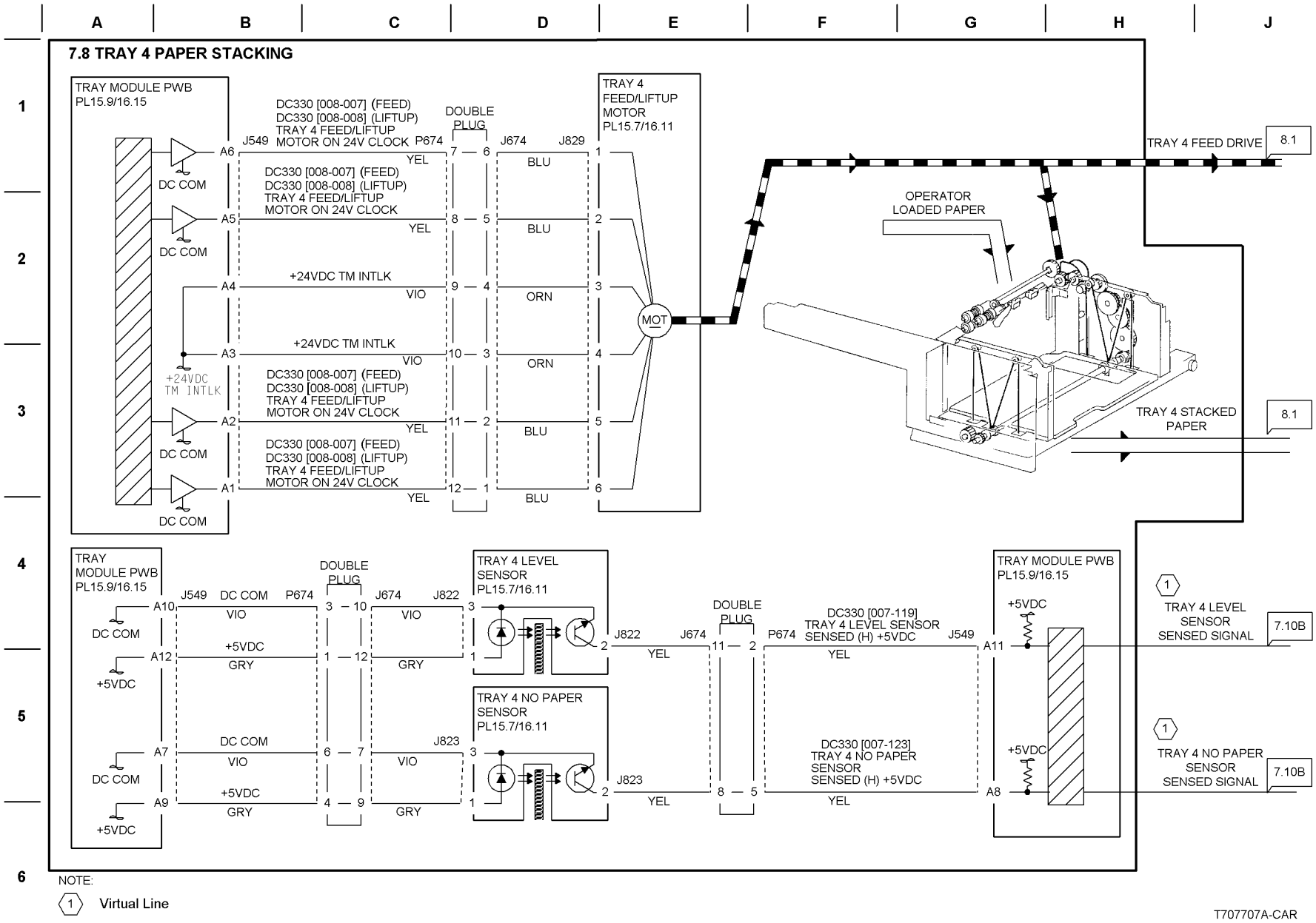
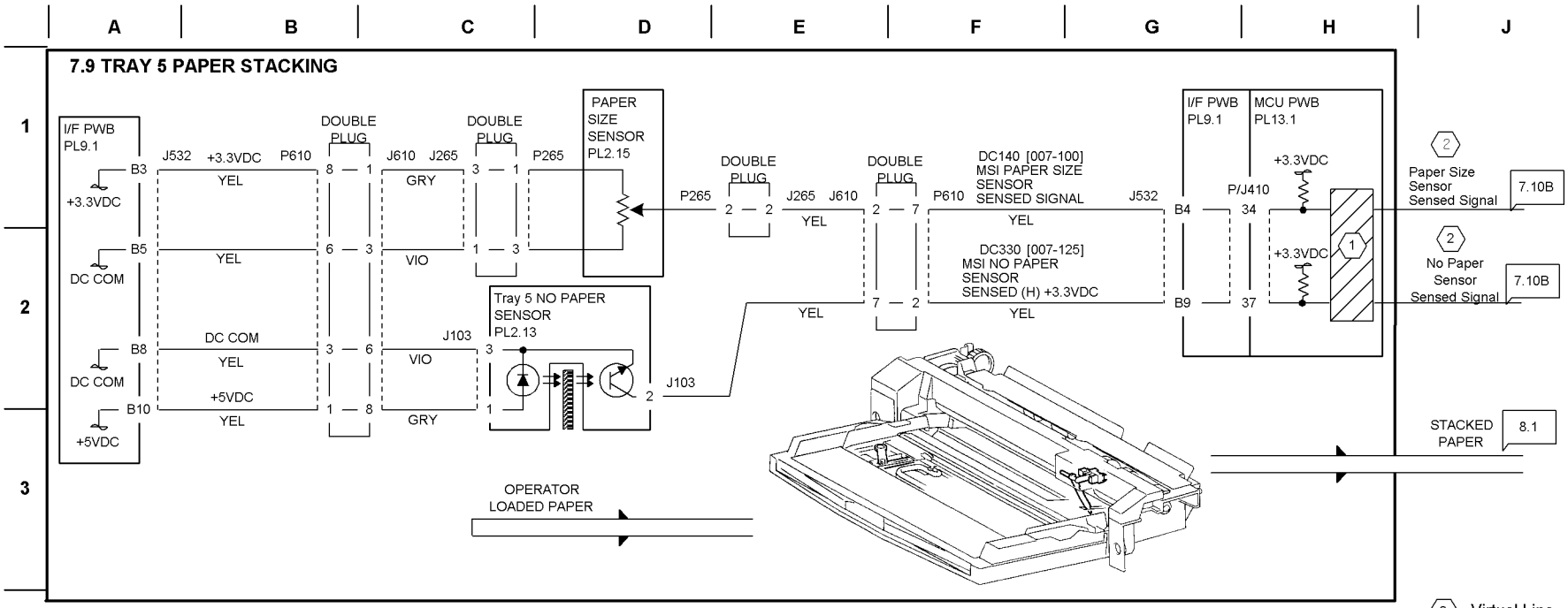


Figure 8 Tray 4 Paper Stacking



NOTE:

(1) Paper width (size in Fast Scan direction) is sensed according to voltage corresponding to resistance of MSI Paper Size Sensor. The table shows paper sizes (widths) correspond to their respective voltages.

Paper Size	Voltage (J535-A8)	AD Value DC140 [007-100]
Post Card S	3.315	971
A6S	3.064	949
B6S	2.736	848
5.5"X8.5"S	2.569	796
A5S	2.451	759
B5S	1.967	609
A5L	1.568	486
A4S		
8.5"X11"S	1.484	460
8.5"X12.4"S		
8.5"X13"S		
8.5"X14"S		

Paper Size	Voltage (J535-A8)	AD Value DC140 [007-100]
8"X10"L	0.941	291
B5L	0.899	278
B4S		
16K L	0.756	234
8K S		
8.5"X11"L	0.580	189
11"X17"S		
A4L	0.329	101
A3S		
12"X18"S	0.273	84
12.6"X18"S	0.165	51

Ref Paper length (size in Slow Scan direction) is sensed according to time from Regi Clutch ON to the time paper passes Regi Sensor. The table shows paper sizes (lengths) correspond to their respective times.

Paper Size	Duration (ms)
Post Card S	1278.8
A6S	
B6S	1605.8
5.5"X8.5"S	1931.7
A5S	1875.0
B5S	2326.9
A5L	1278.8
A4S	2711.5
8.5"X11"S	2542.3
8.5"X12.4"S	2884.6
8.5"X13"S	3030.8
8.5"X14"S	3275.0

Paper Size	Duration(ms)
8"X10"L	1809.6
B5L	1605.8
B4S	3355.8
16K L	1721.2
8K S	3596.2
8.5"X11"L	1931.7
11"X17"S	4007.7
A4L	1875.0
A3S	3894.2
12"X18"S	4251.9
12.6"X18"S	

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Figure 9 Tray 5 Paper Stacking

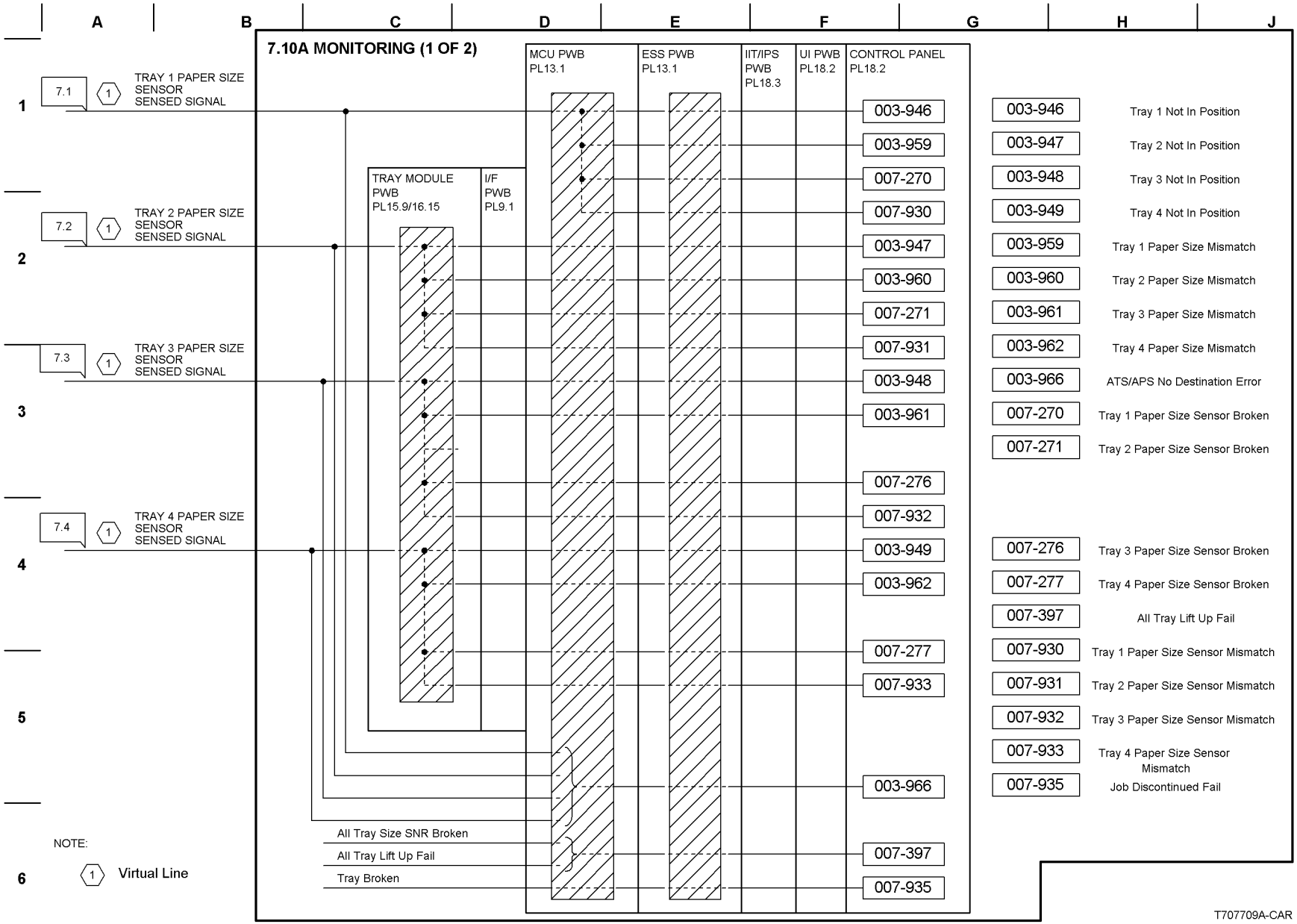


Figure 10 Paper Feed Monitoring (1 0f 2)

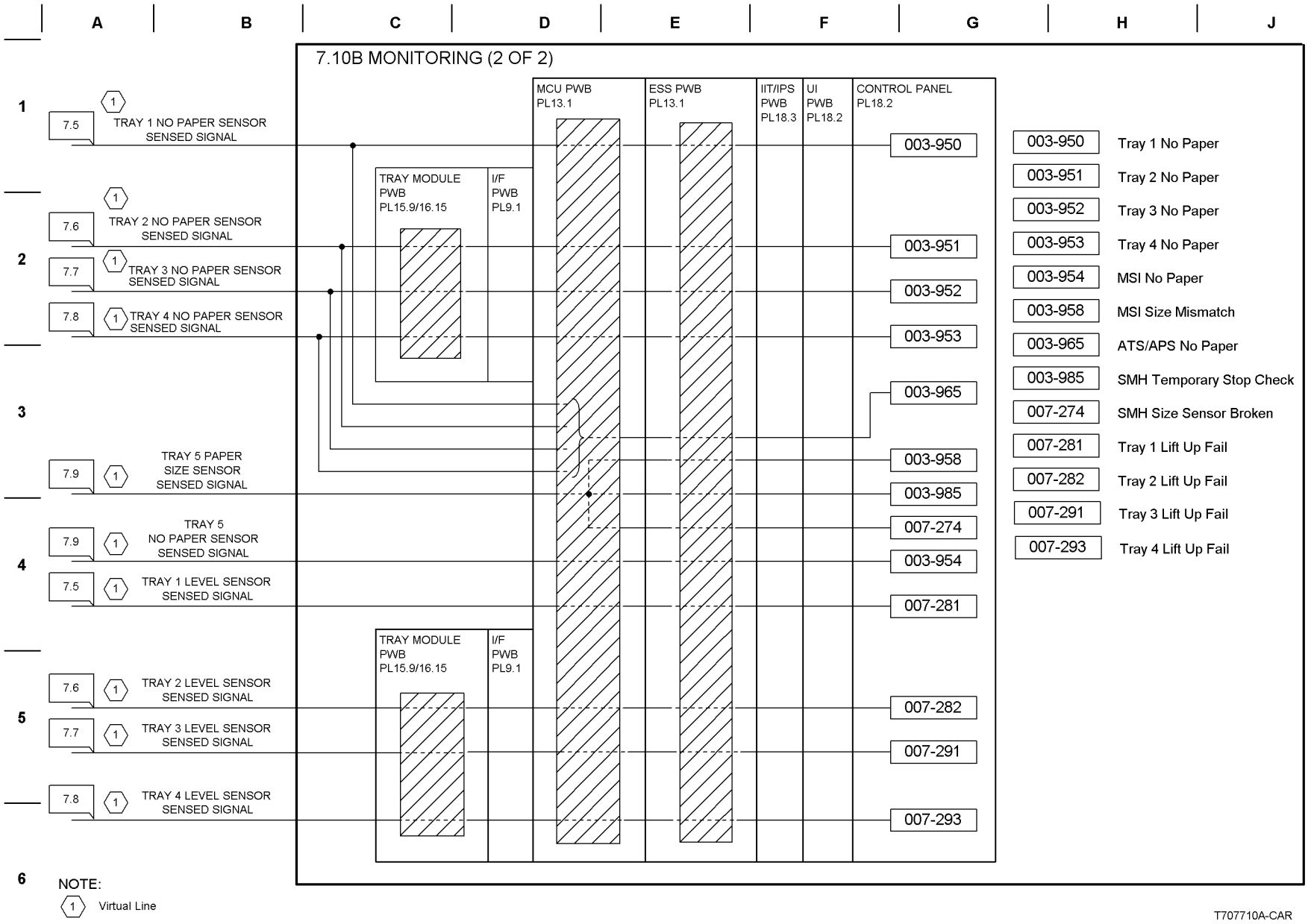


Figure 11 Paper Feed Monitoring (2 0f 2)

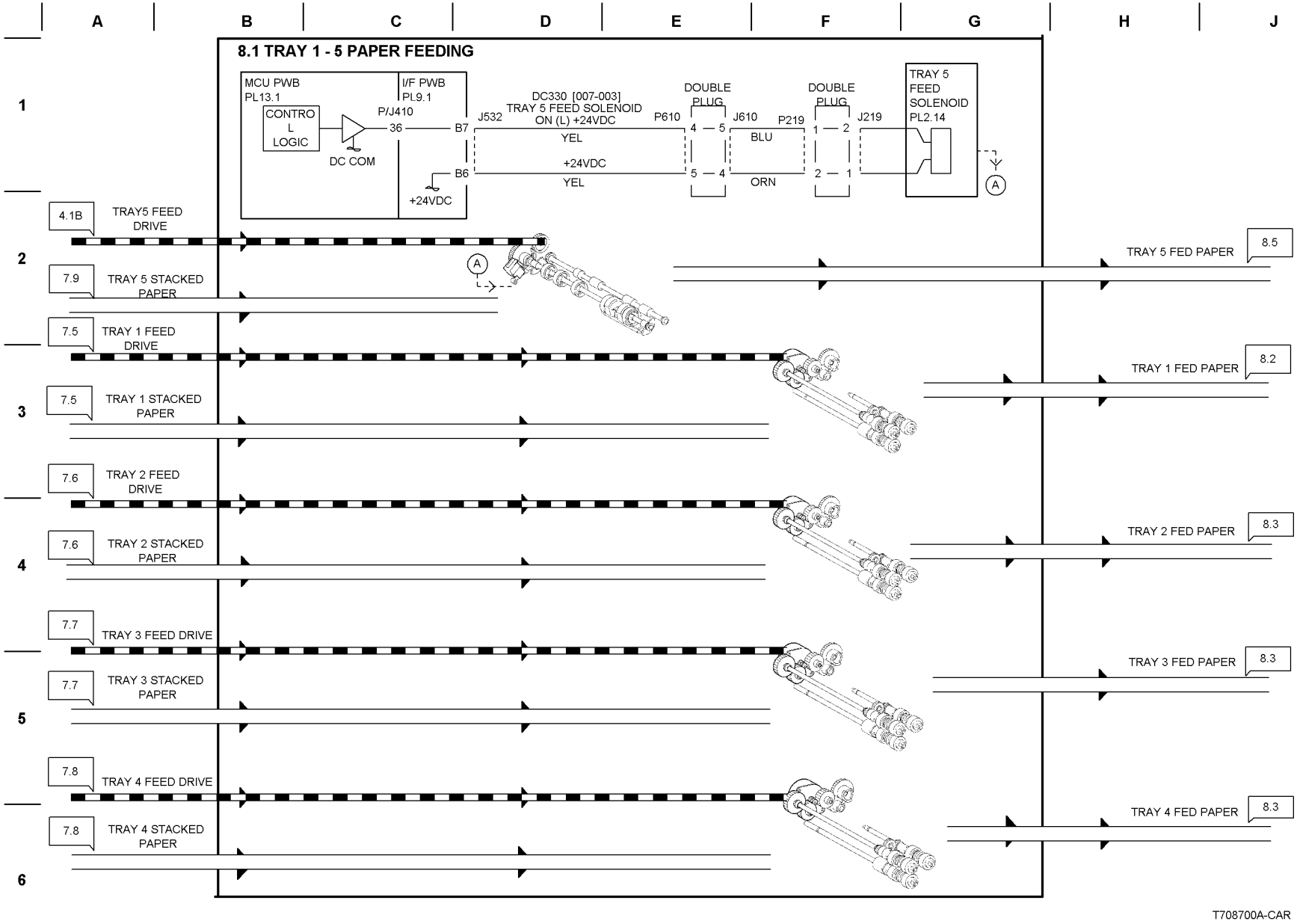


Figure 1 Tray 1 - 5 Paper Feeding

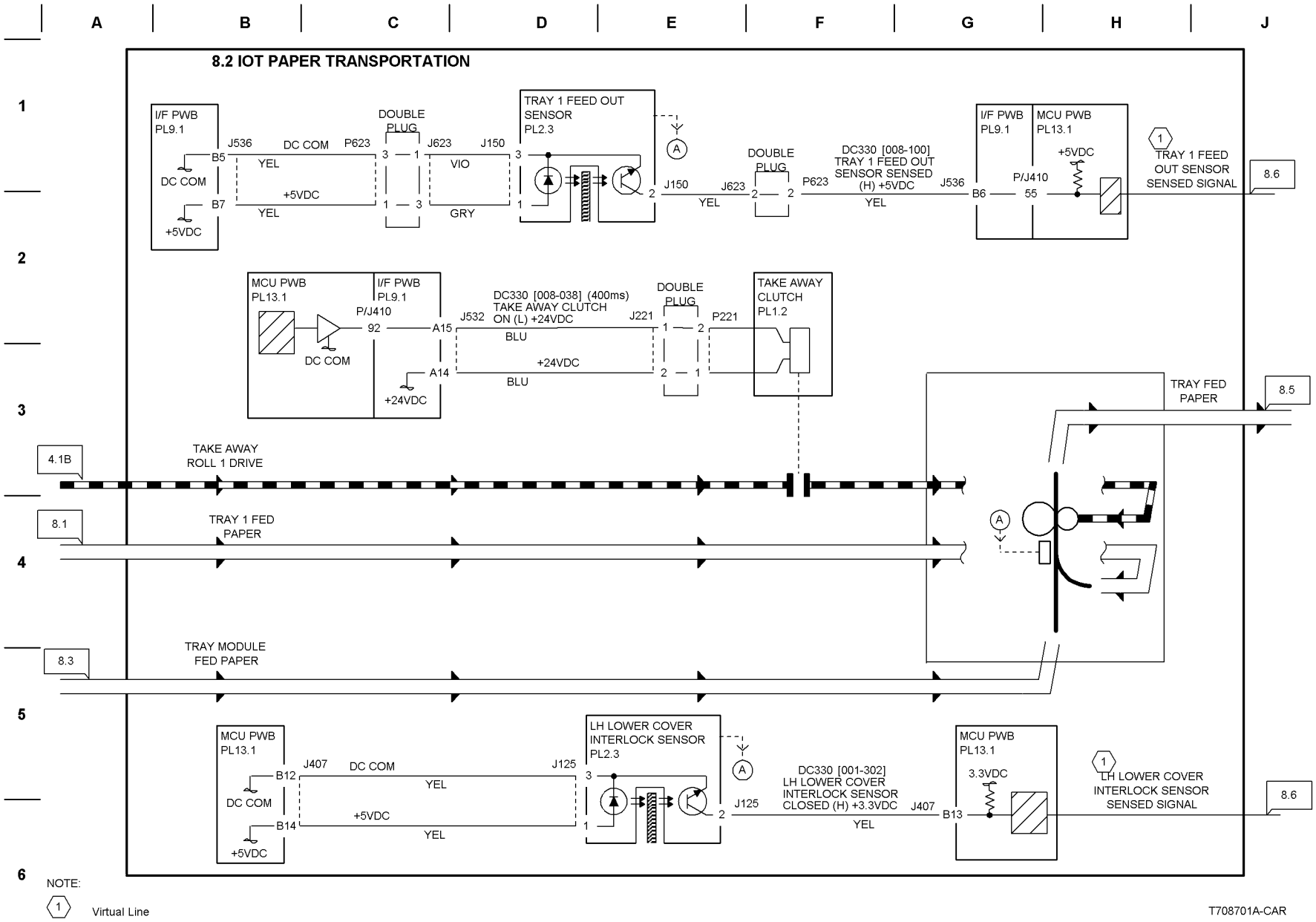


Figure 2 IOT Paper Transportation

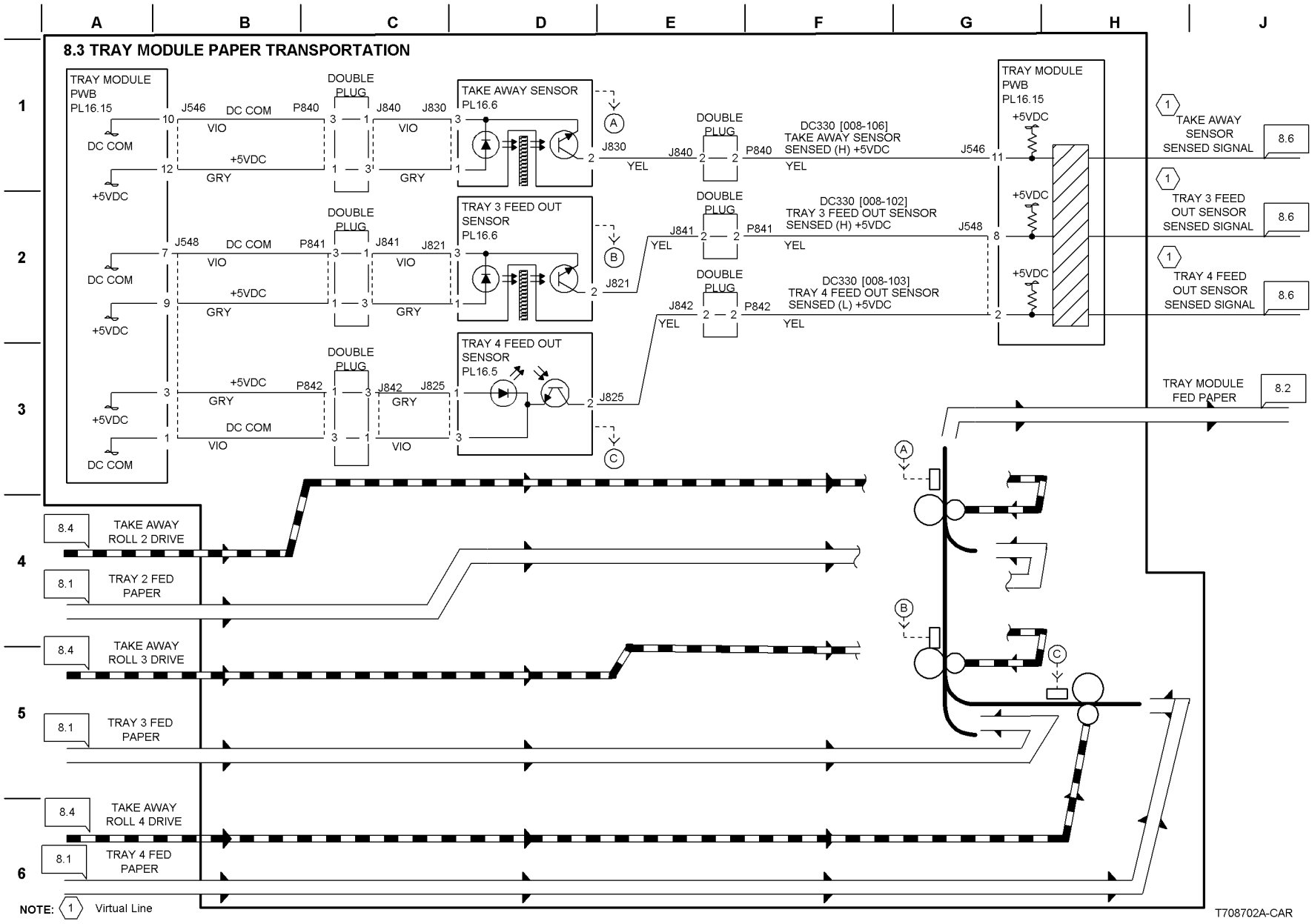
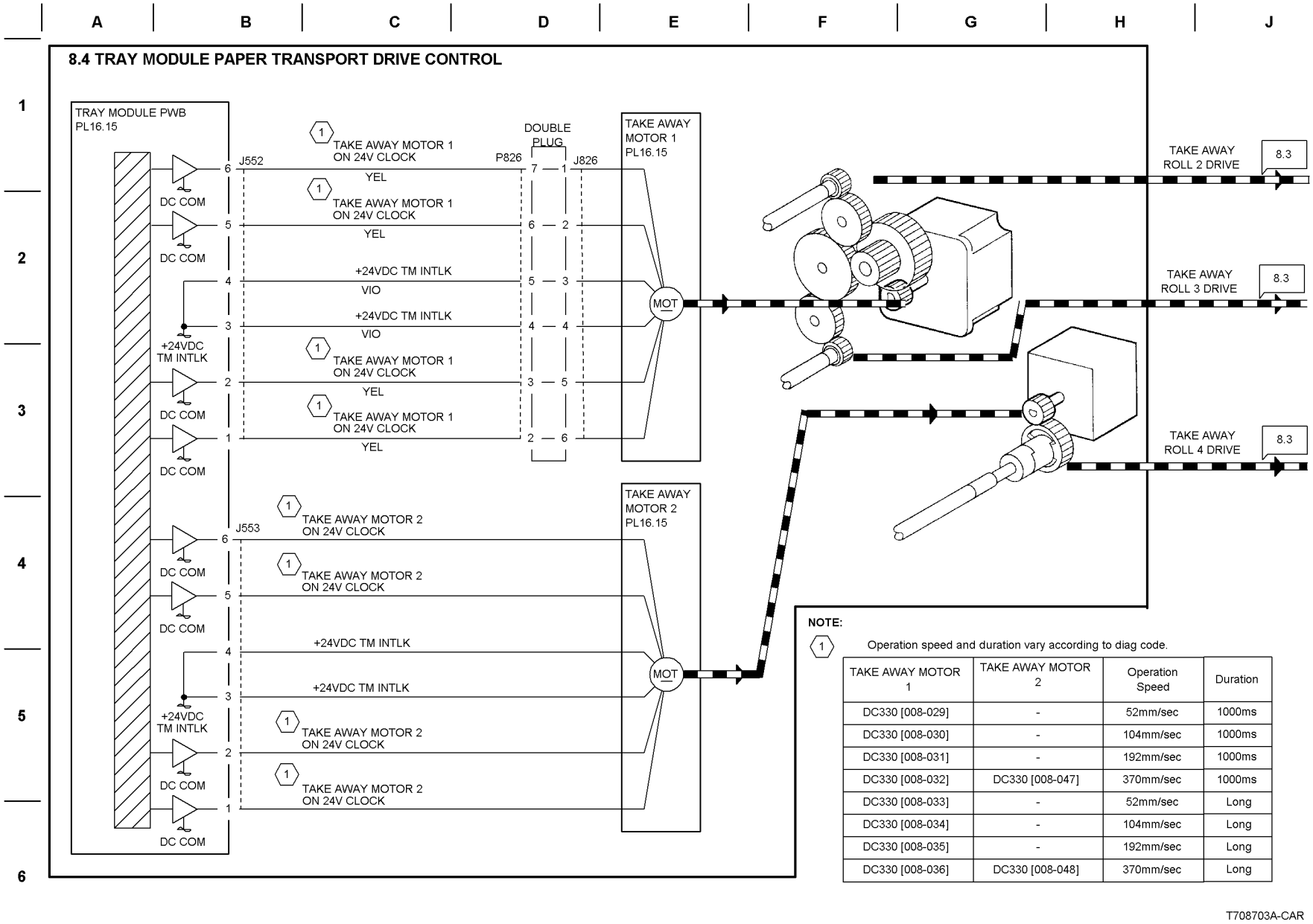


Figure 3 Tray Module Paper transportation



TAKE AWAY MOTOR 1	TAKE AWAY MOTOR 2	Operation Speed	Duration
DC330 [008-029]	-	52mm/sec	1000ms
DC330 [008-030]	-	104mm/sec	1000ms
DC330 [008-031]	-	192mm/sec	1000ms
DC330 [008-032]	DC330 [008-047]	370mm/sec	1000ms
DC330 [008-033]	-	52mm/sec	Long
DC330 [008-034]	-	104mm/sec	Long
DC330 [008-035]	-	192mm/sec	Long
DC330 [008-036]	DC330 [008-048]	370mm/sec	Long

Figure 4 Tray Module Paper Transportation Drive Control

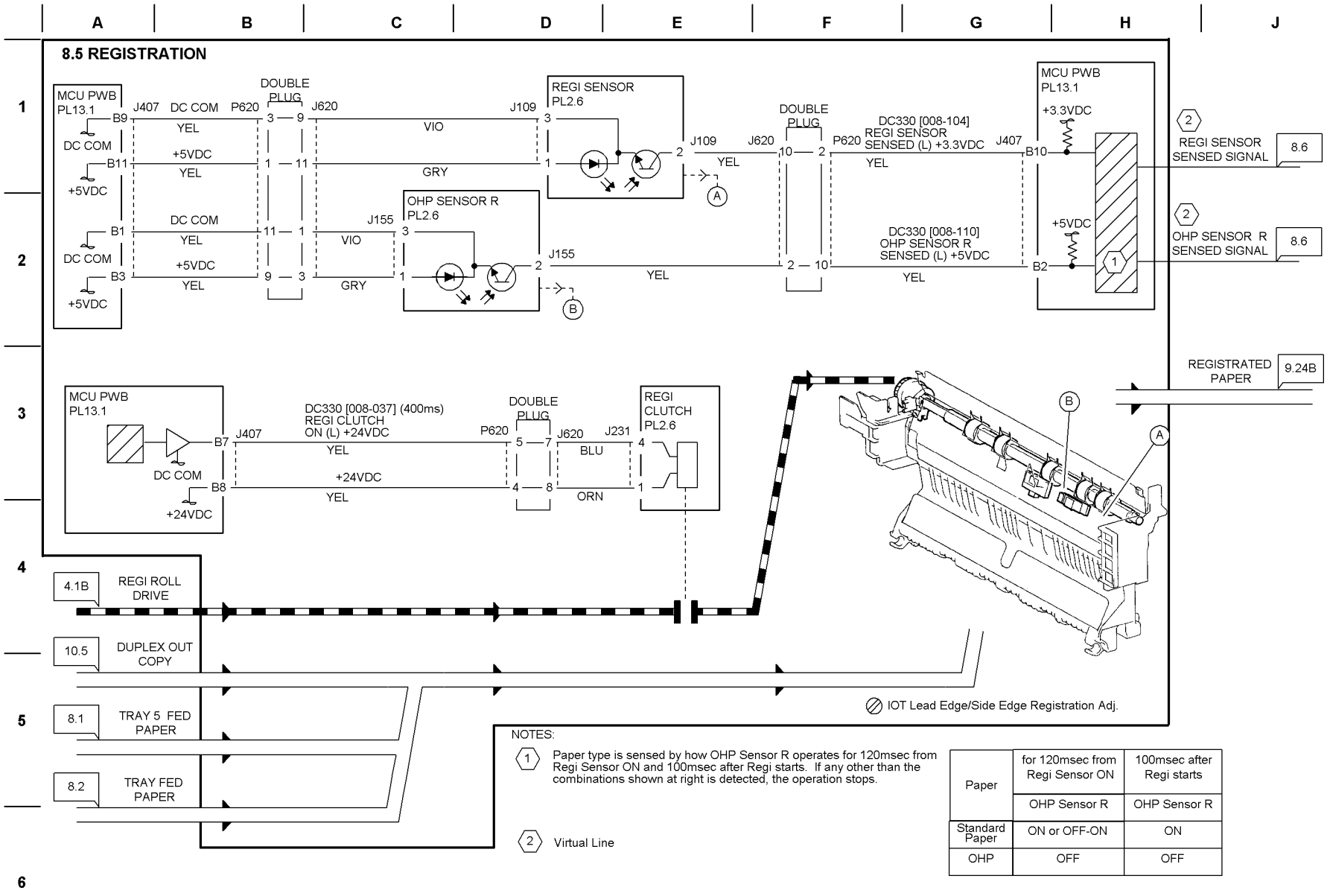


Figure 5 Registration

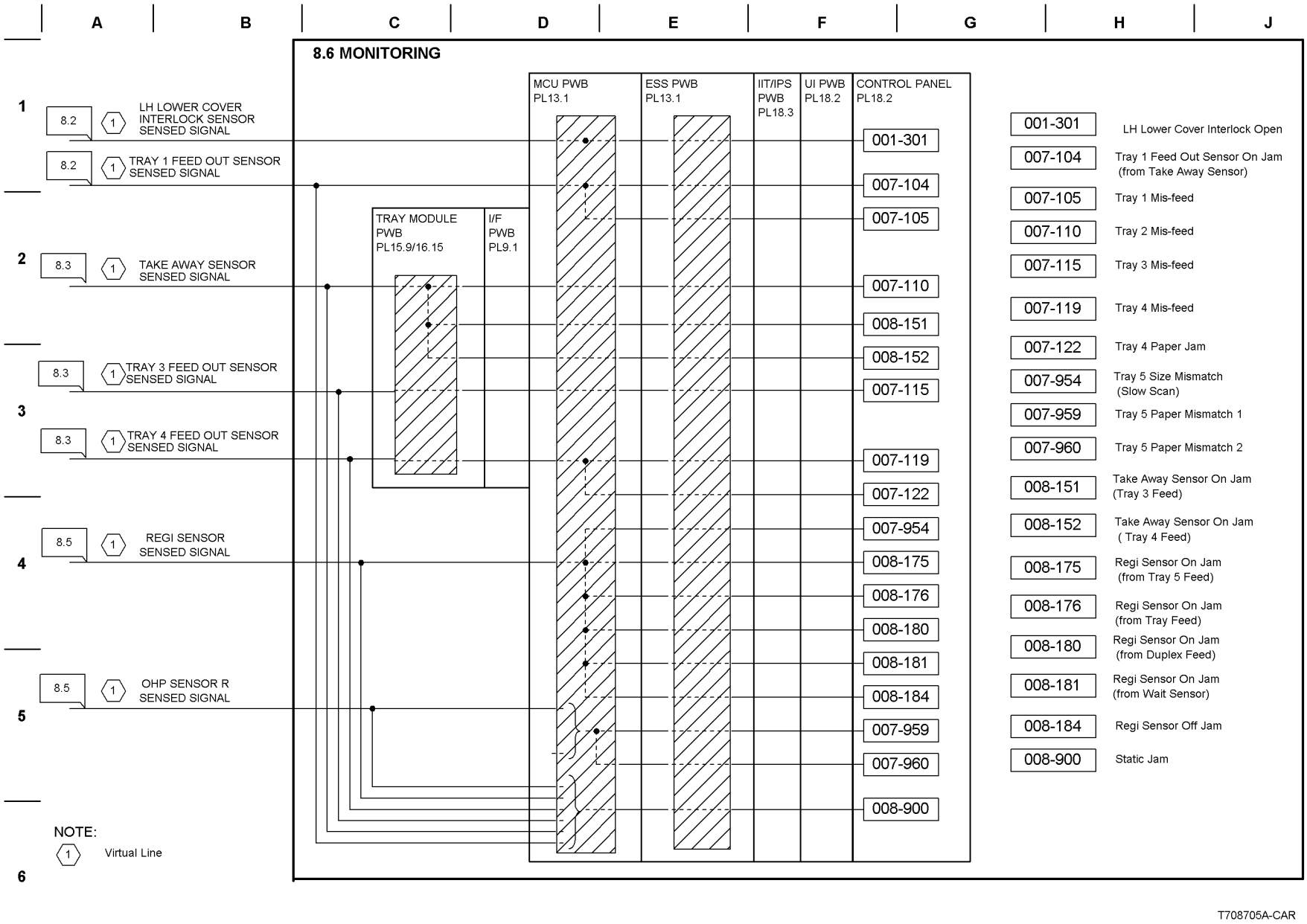


Figure 6 Monitoring

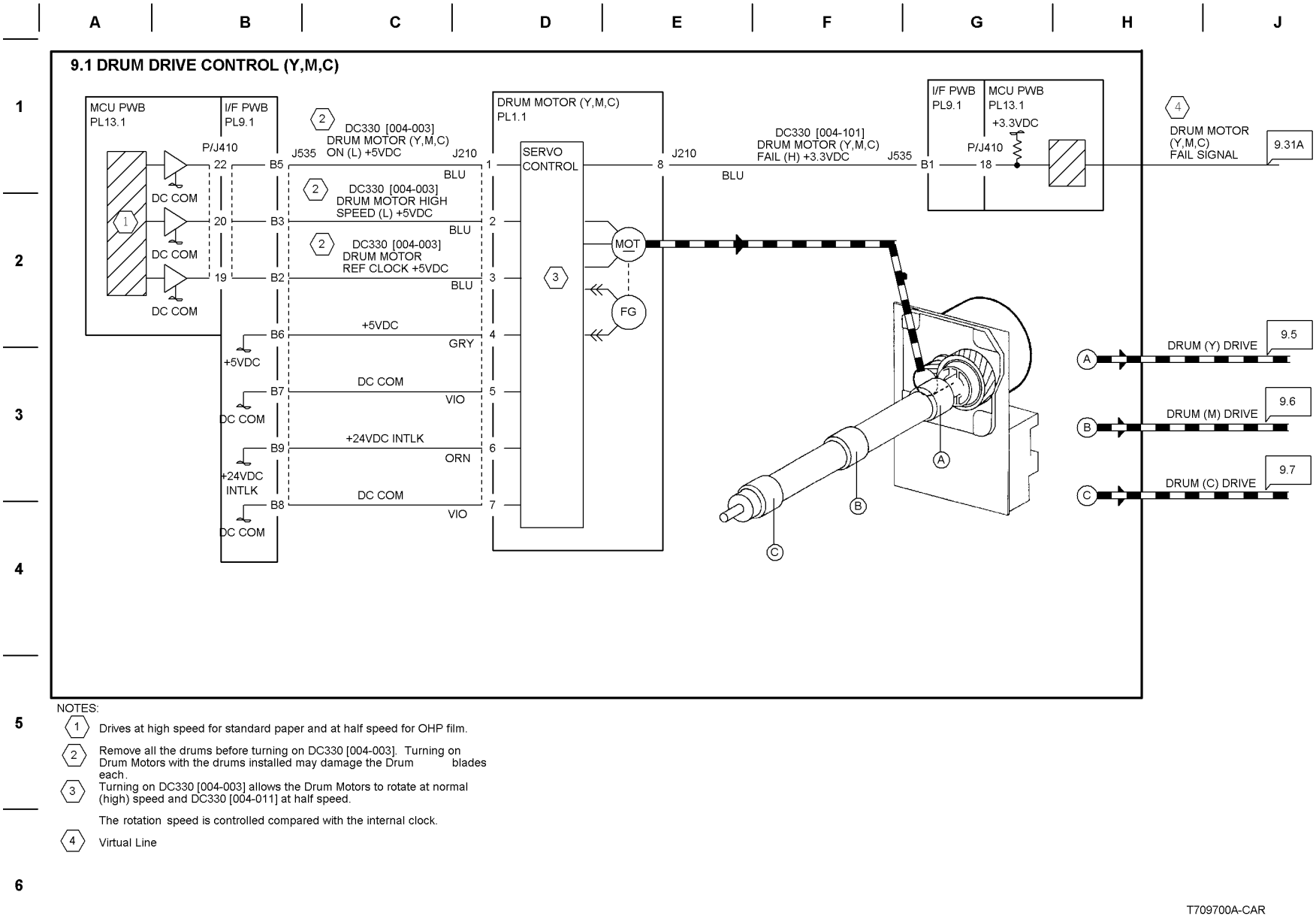
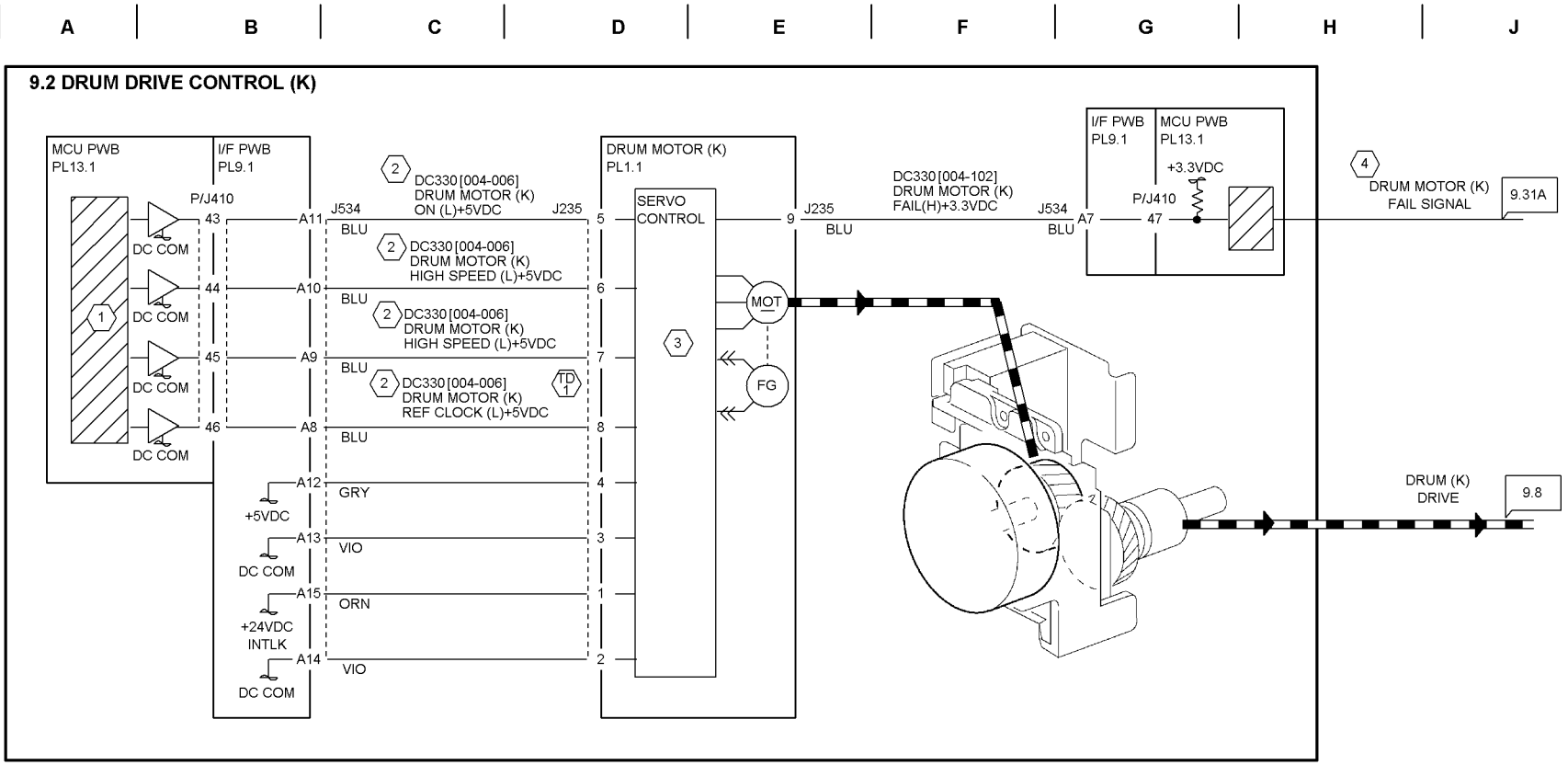


Figure 1 Drum Drive Control (Y, M, C)

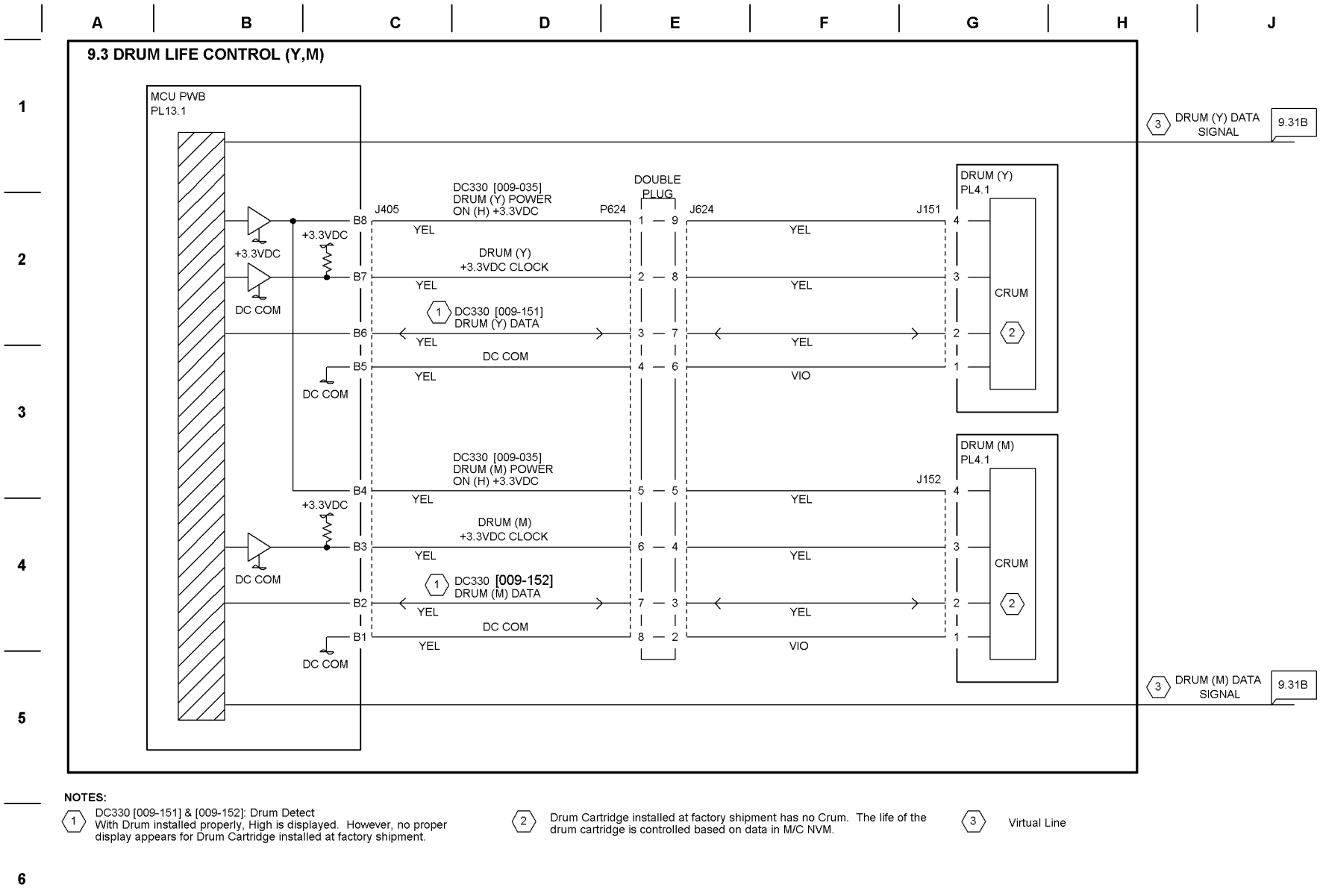


NOTES:

1. Drives at high speed for standard paper and at half speed for OHP film.
2. Remove Drum K before turning on DC330 [004-006]. Turning on Drum Motor with the drum installed may damage the Drum blade. Turning on DC330 [004-006] allows the Drum Motor to rotate at normal (high) speed, DC330 [004-009] at half speed, and DC330 [004-010] at double speed.
3. The rotation speed is controlled in comparison with the internal clock.
4. Virtual Line

TD 1 Test Point: MCU PWB J407-B3(+) to GND(-) A frequency of approx. 1.285KHz

Figure 2 Drum Drive Control (K)

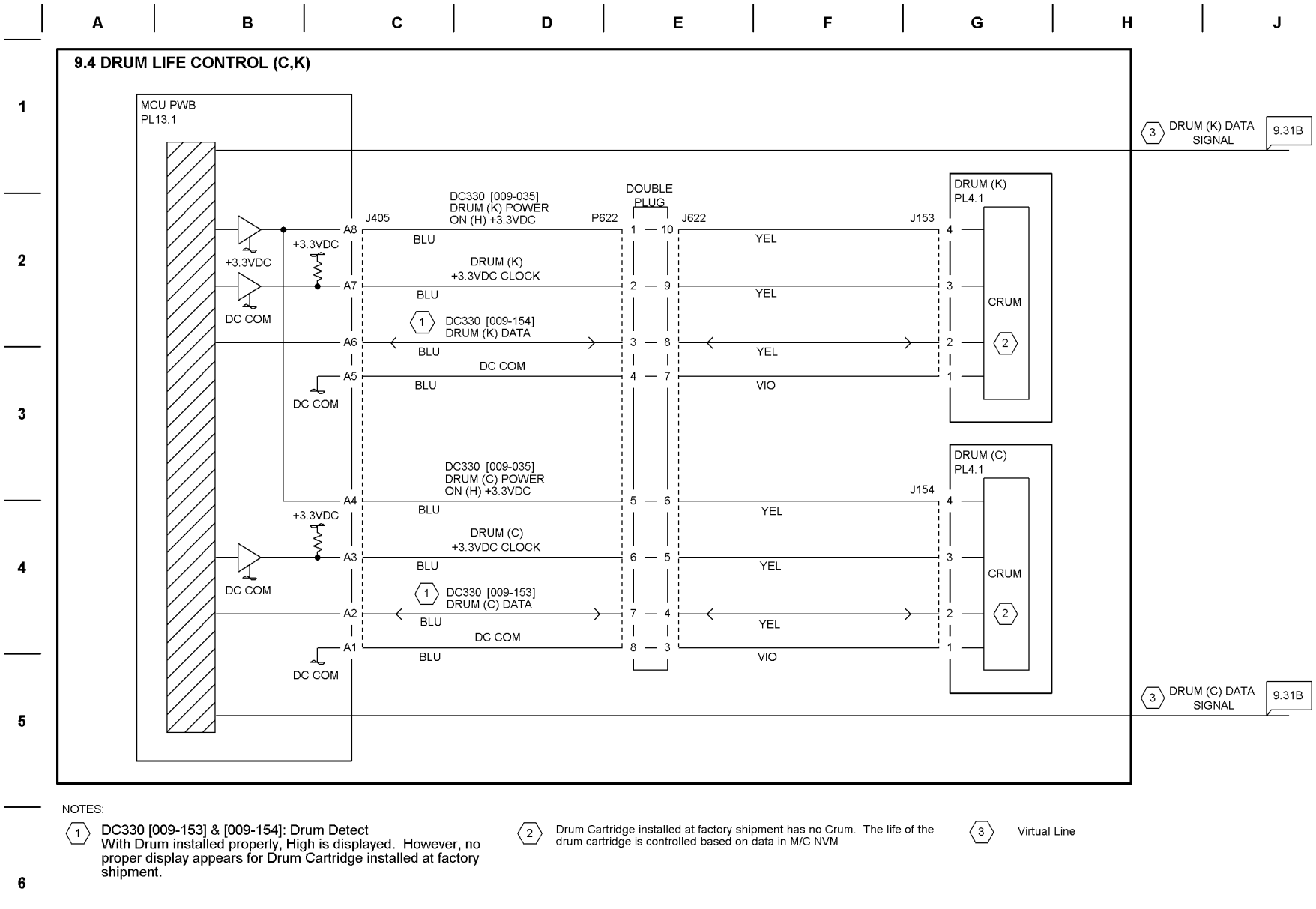


NOTES:

1. DC330 [009-151] & [009-152]: Drum Detect
   With Drum installed properly, High is displayed. However, no proper display appears for Drum Cartridge installed at factory shipment.
2. Drum Cartridge installed at factory shipment has no Crum. The life of the drum cartridge is controlled based on data in M/C NVM.
3. Virtual Line

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Figure 3 Drum Life Control (Y,M)



NOTES:

1. DC330 [009-153] & [009-154]: Drum Detect
   With Drum installed properly, High is displayed. However, no proper display appears for Drum Cartridge installed at factory shipment.
2. Drum Cartridge installed at factory shipment has no Crum. The life of the drum cartridge is controlled based on data in M/C NVM
3. Virtual Line

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Figure 4 Drum Life Control (C,K)

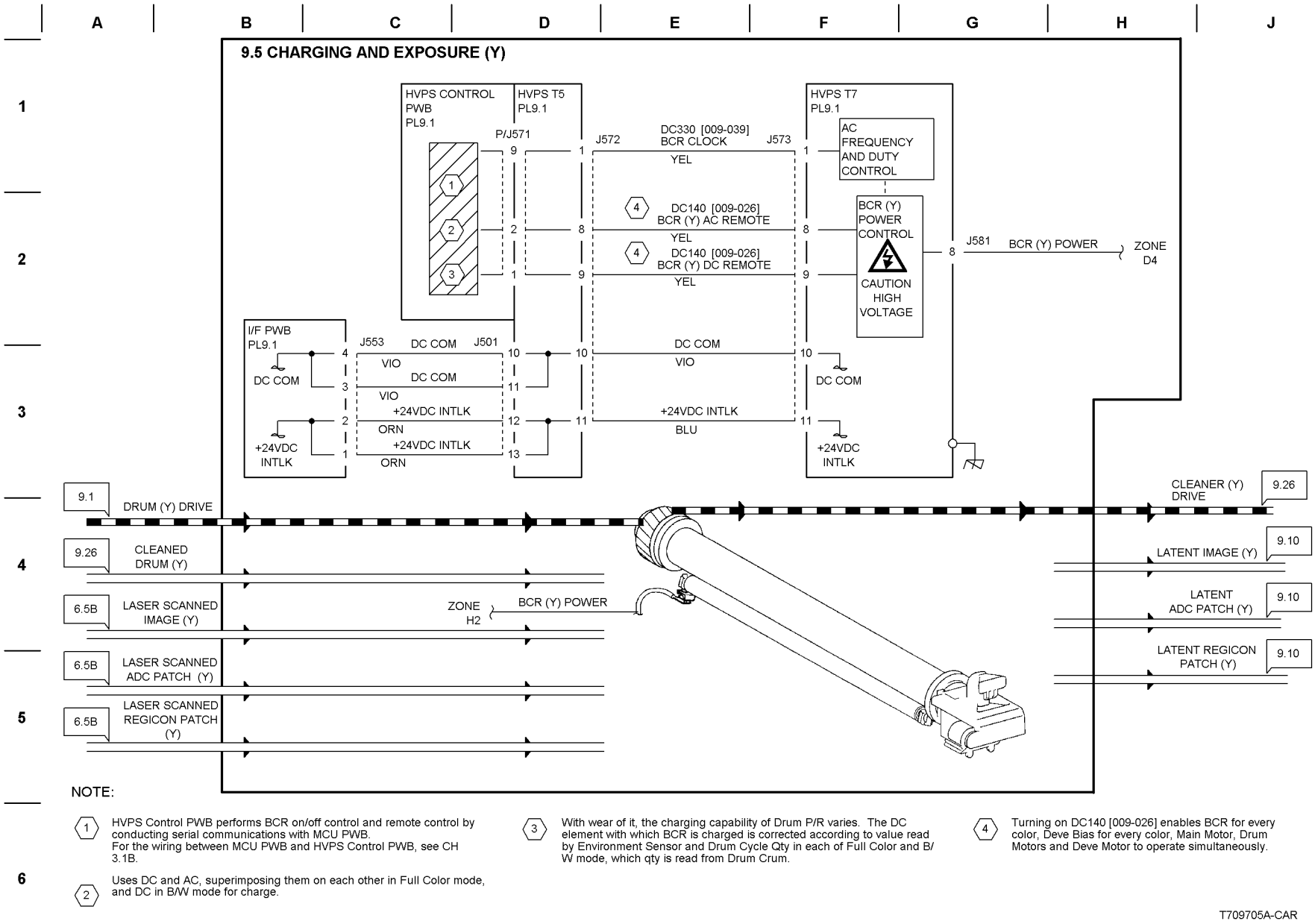
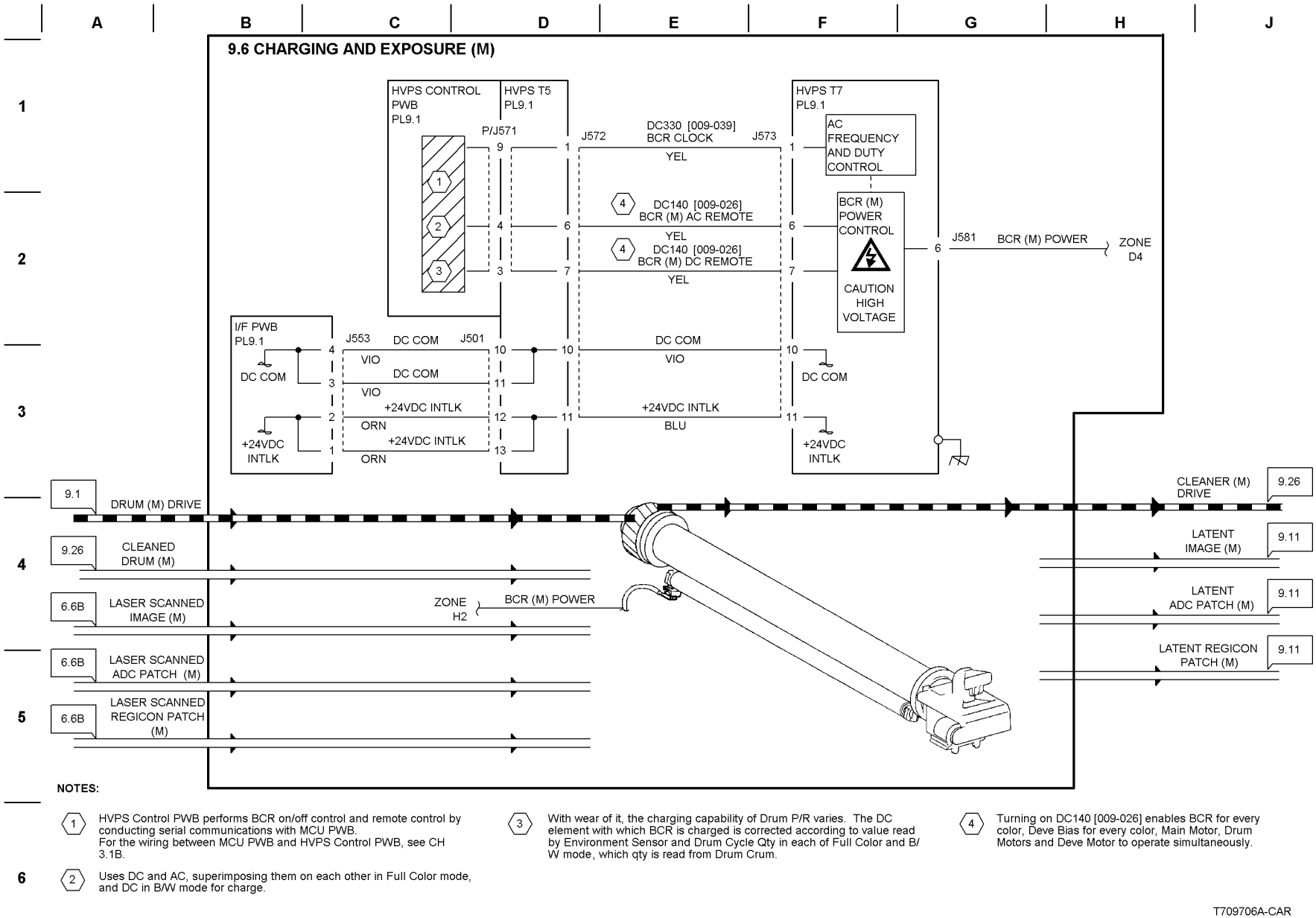


Figure 5 Charging and Exposure (Y)



NOTES:

1. HVPS Control PWB performs BCR on/off control and remote control by conducting serial communications with MCU PWB. For the wiring between MCU PWB and HVPS Control PWB, see CH 3.1B.
2. Uses DC and AC, superimposing them on each other in Full Color mode, and DC in B/W mode for charge.
3. With wear of it, the charging capability of Drum P/R varies. The DC element with which BCR is charged is corrected according to value read by Environment Sensor and Drum Cycle Qty in each of Full Color and B/W mode, which qty is read from Drum Crum.
4. Turning on DC140 [009-026] enables BCR for every color, Deve Bias for every color, Main Motor, Drum Motors and Deve Motor to operate simultaneously.

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Figure 6 Charging and Exposure (M)

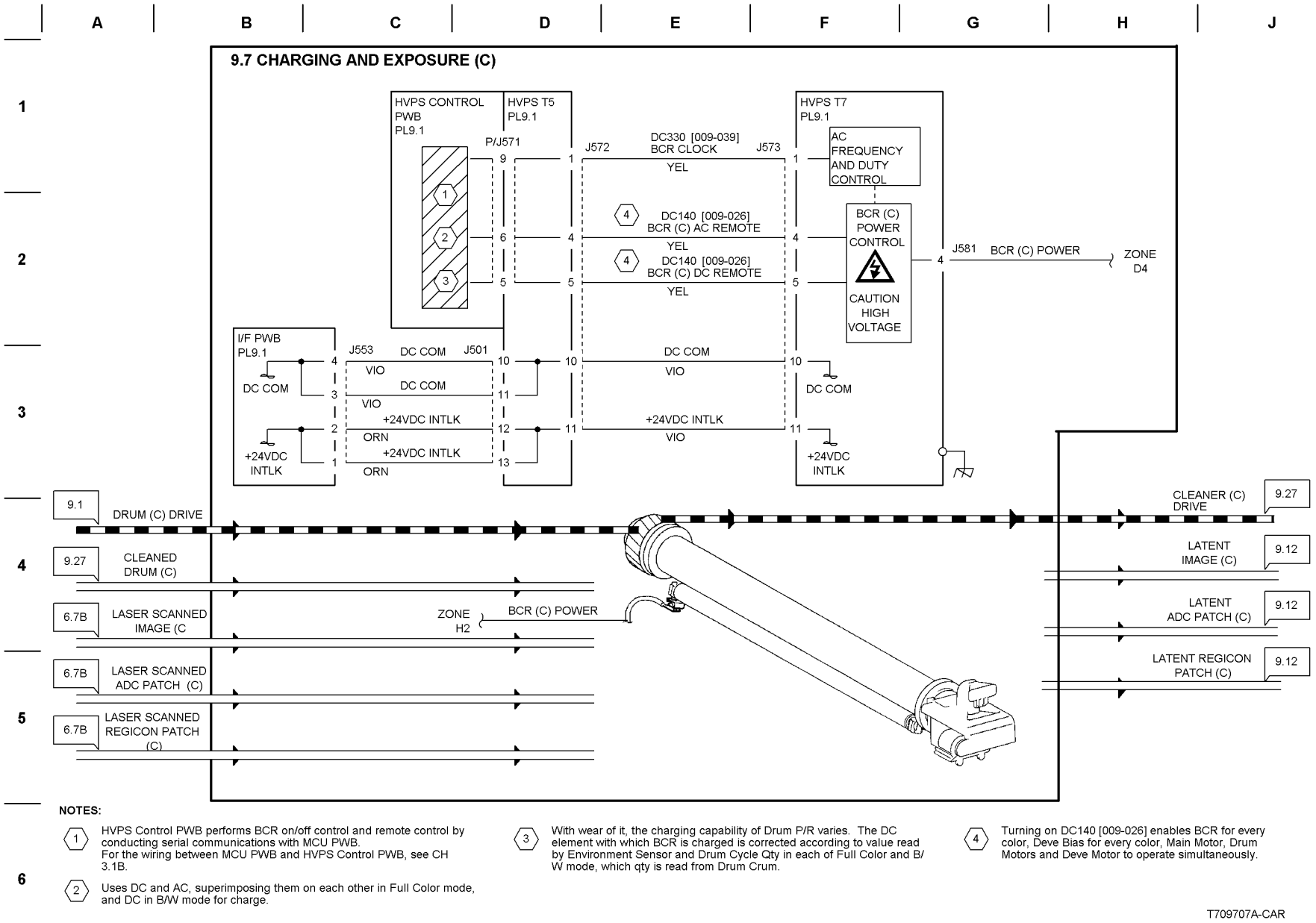


Figure 7 Charging and Exposure (C)

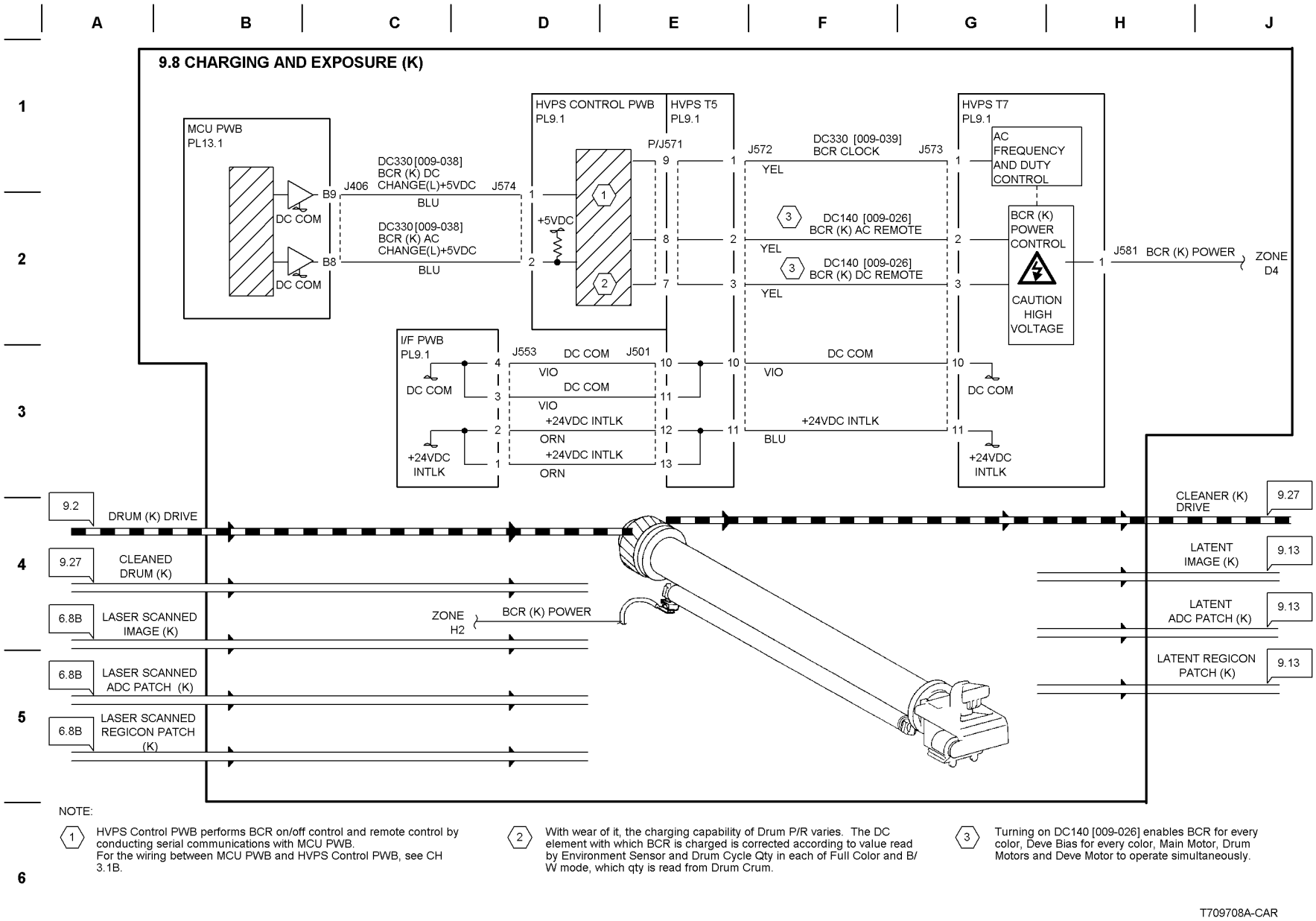
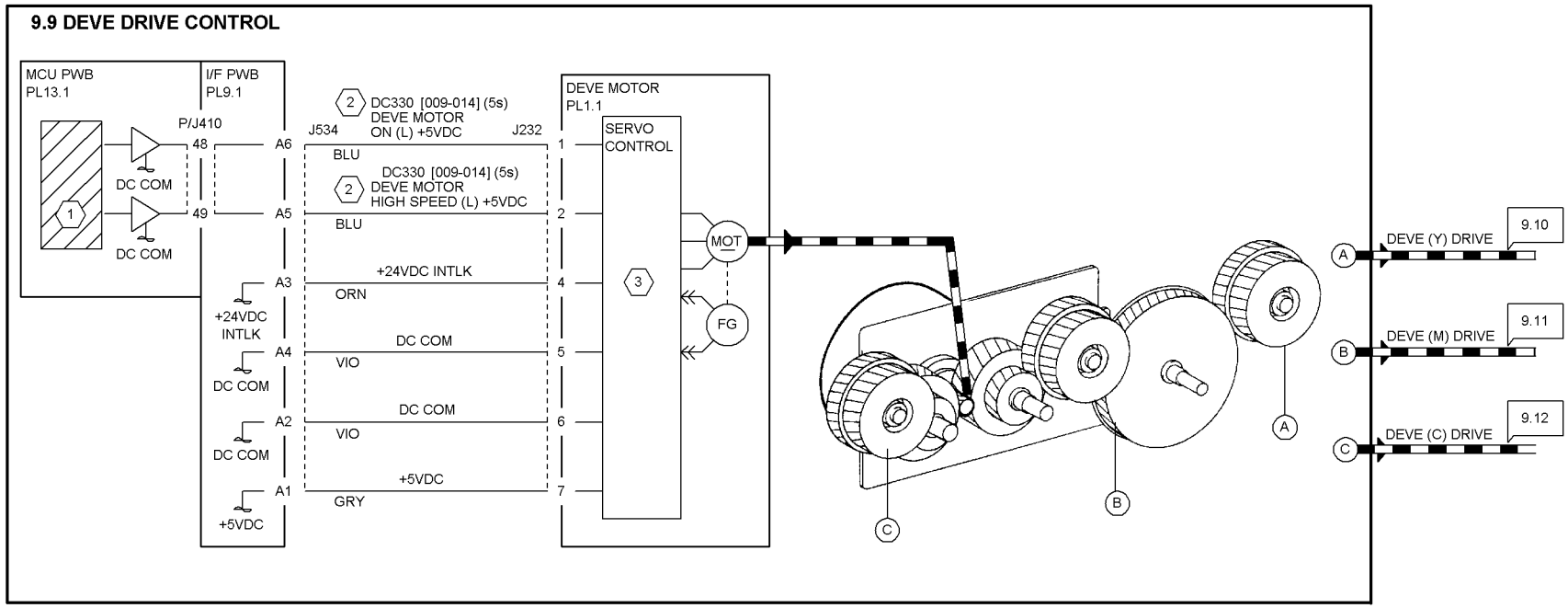


Figure 8 Charging and Exposure (K)



NOTES:

1. Drives at high speed for standard paper and at half speed for thick paper and OHP film.
2. Turning on DC330 [009-014] allows Deve Motor to rotate at normal (high) speed and DC330 [009-016] at half speed.
3. The rotation speed is controlled compared with the internal clock.

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Figure 9 DEVE Drive Control

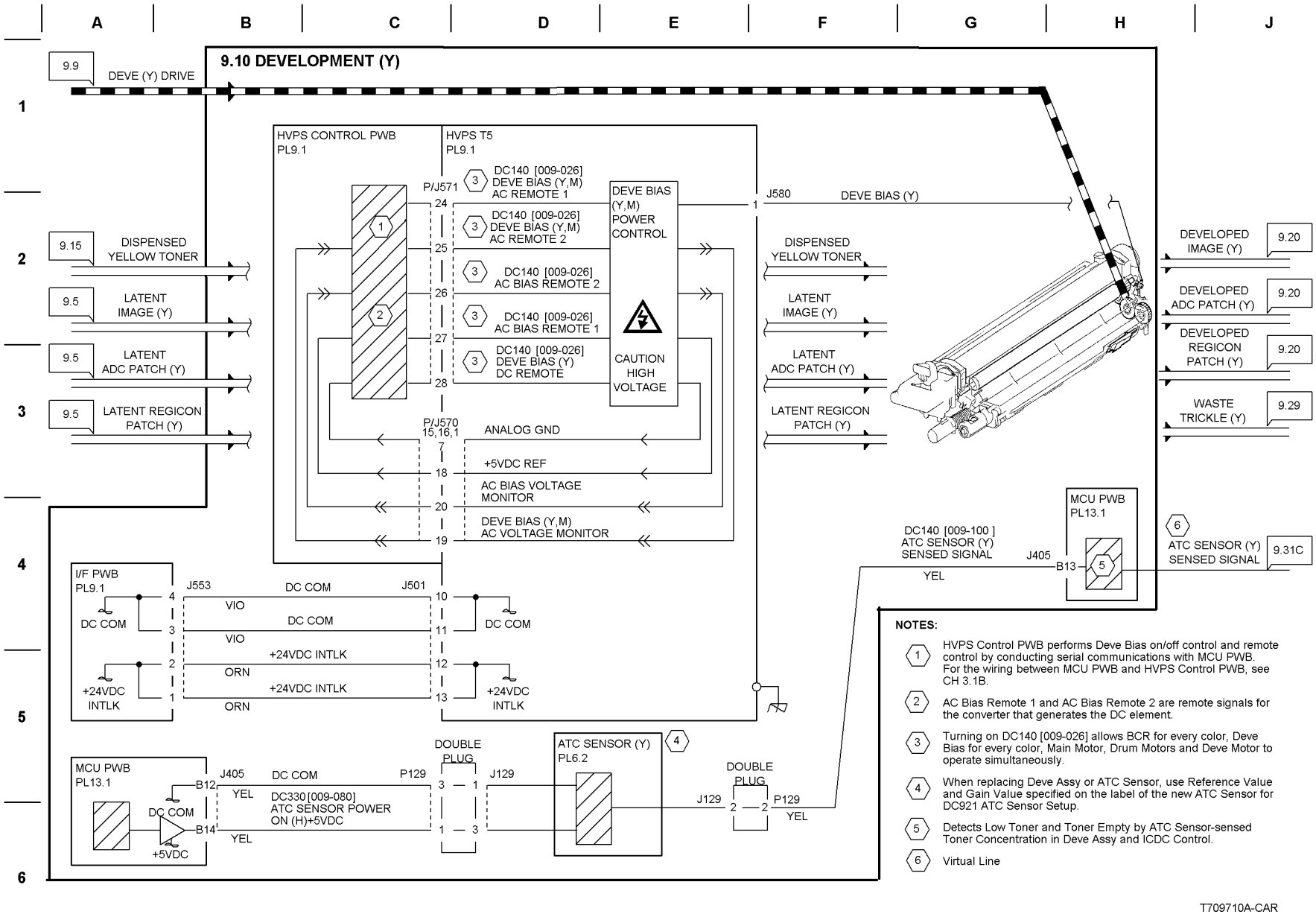


Figure 10 Development (Y)

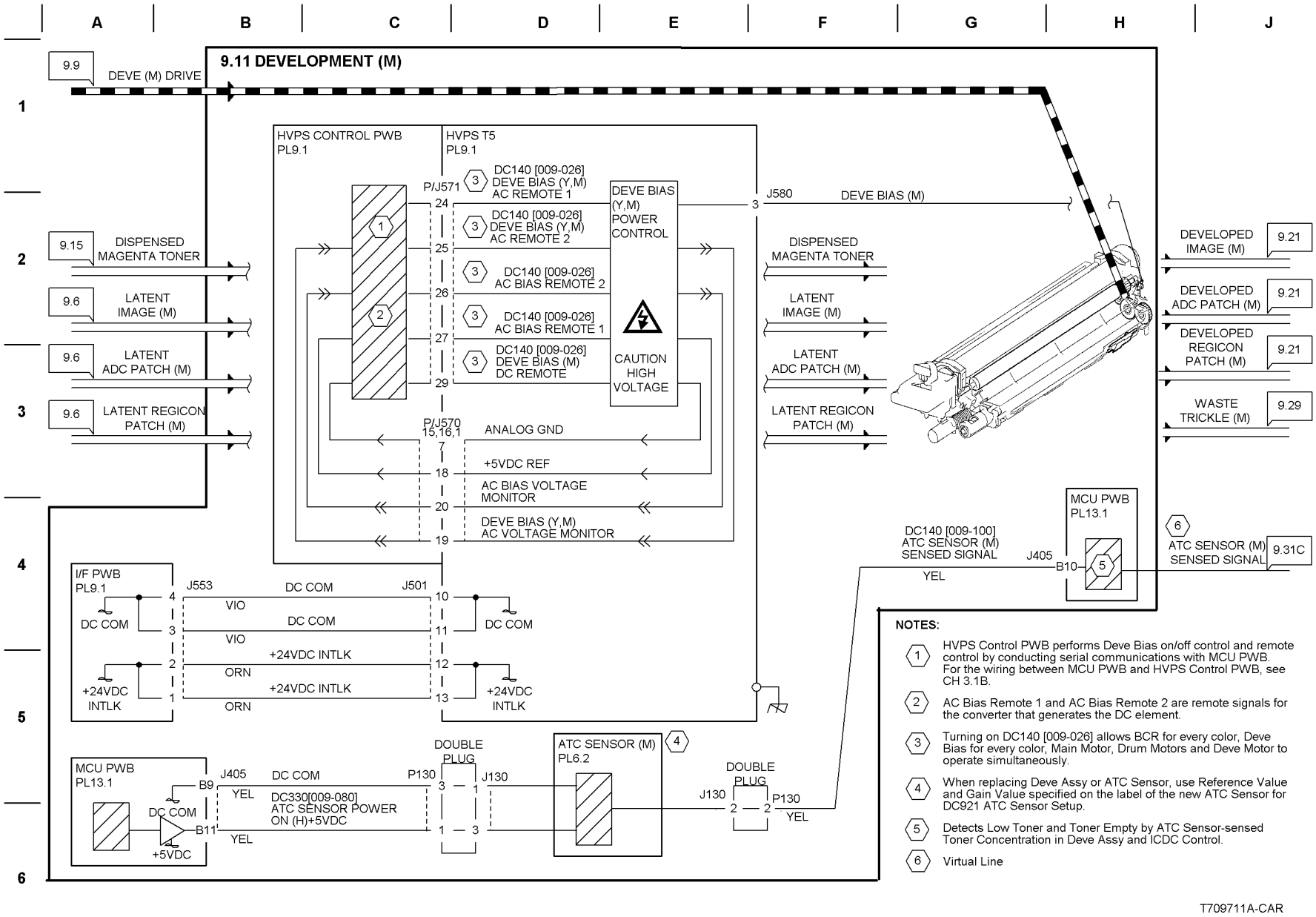


Figure 11 Development (M)

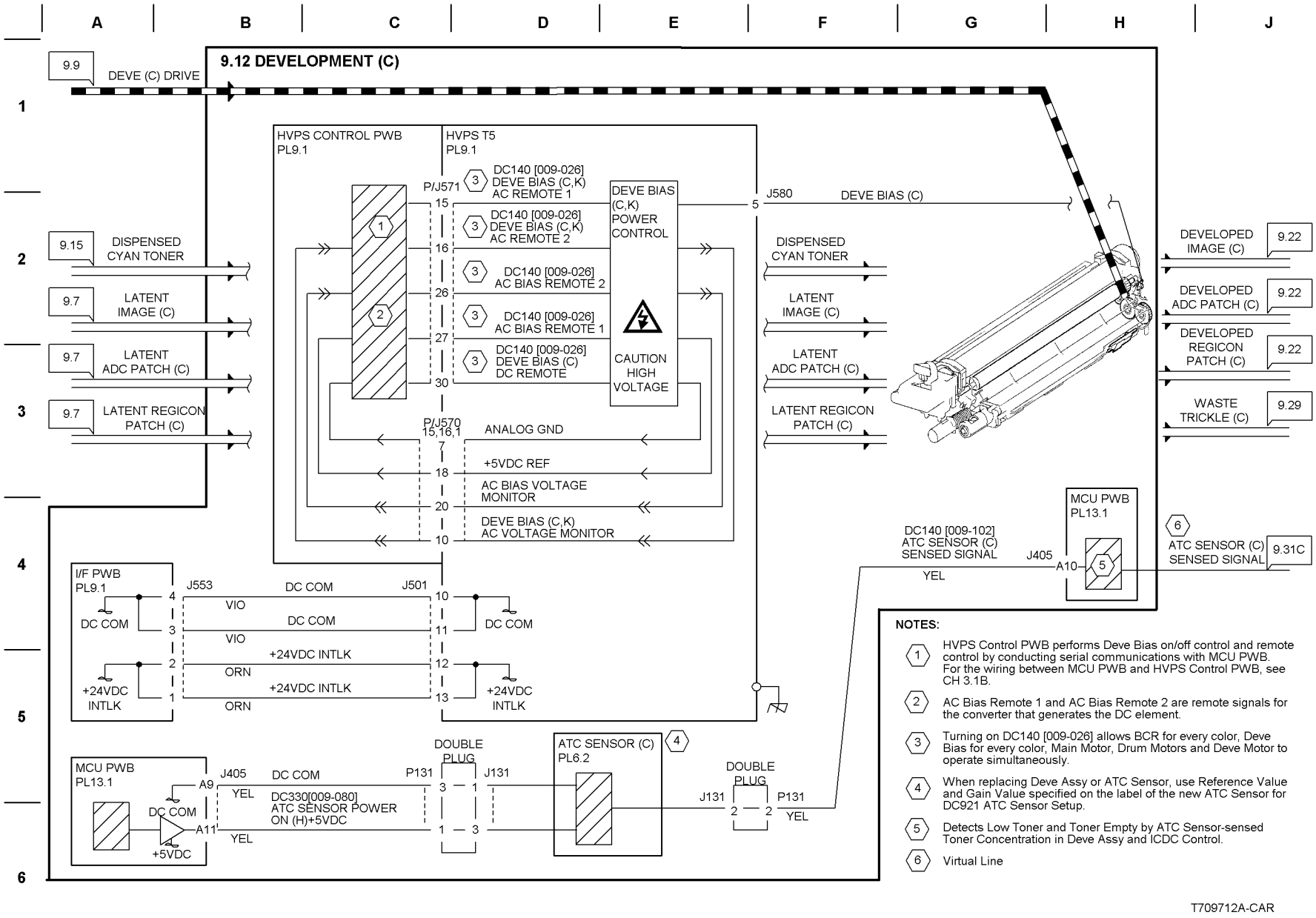


Figure 12 Development (C)

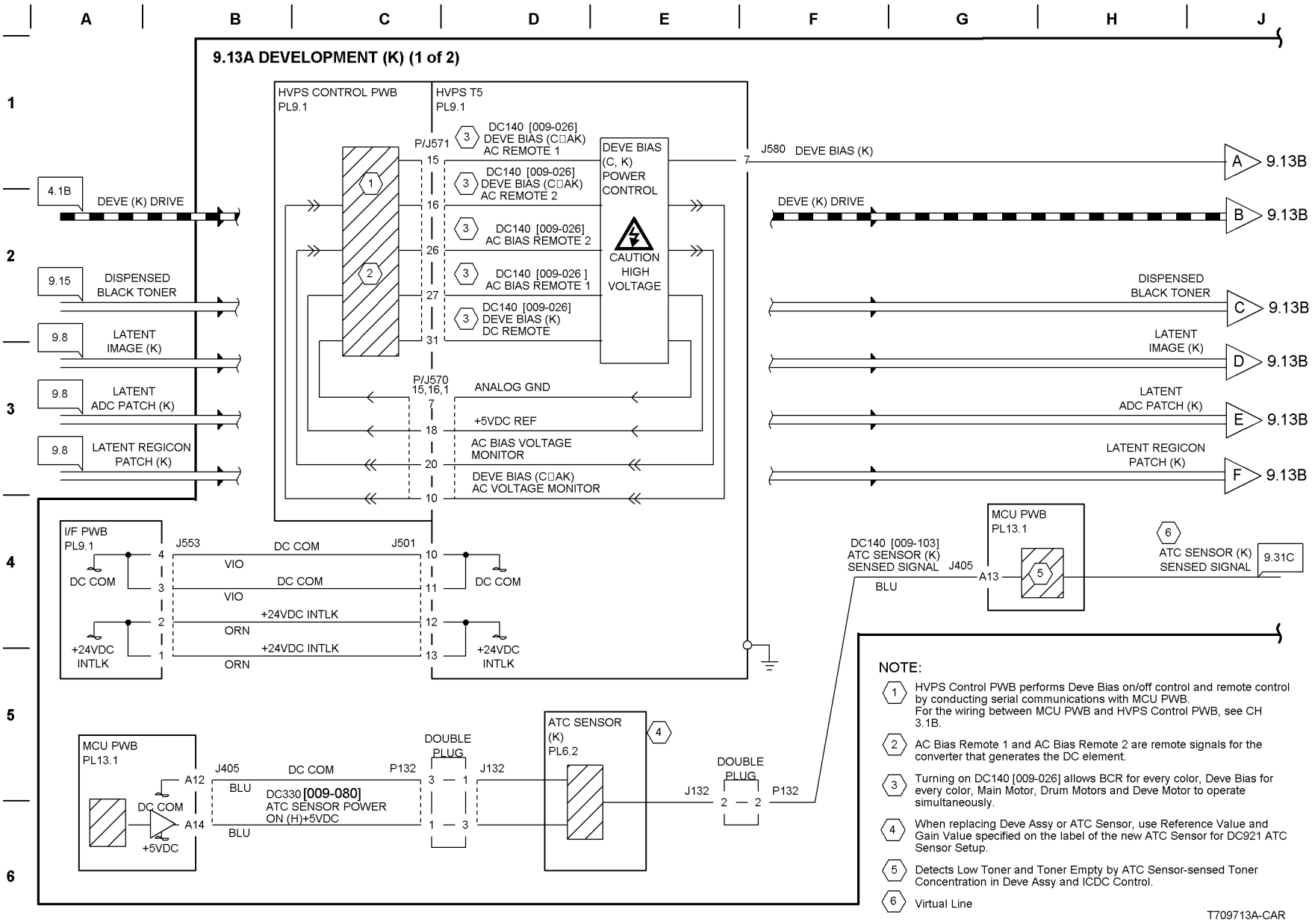


Figure 13 Development (K) (1 of 2)

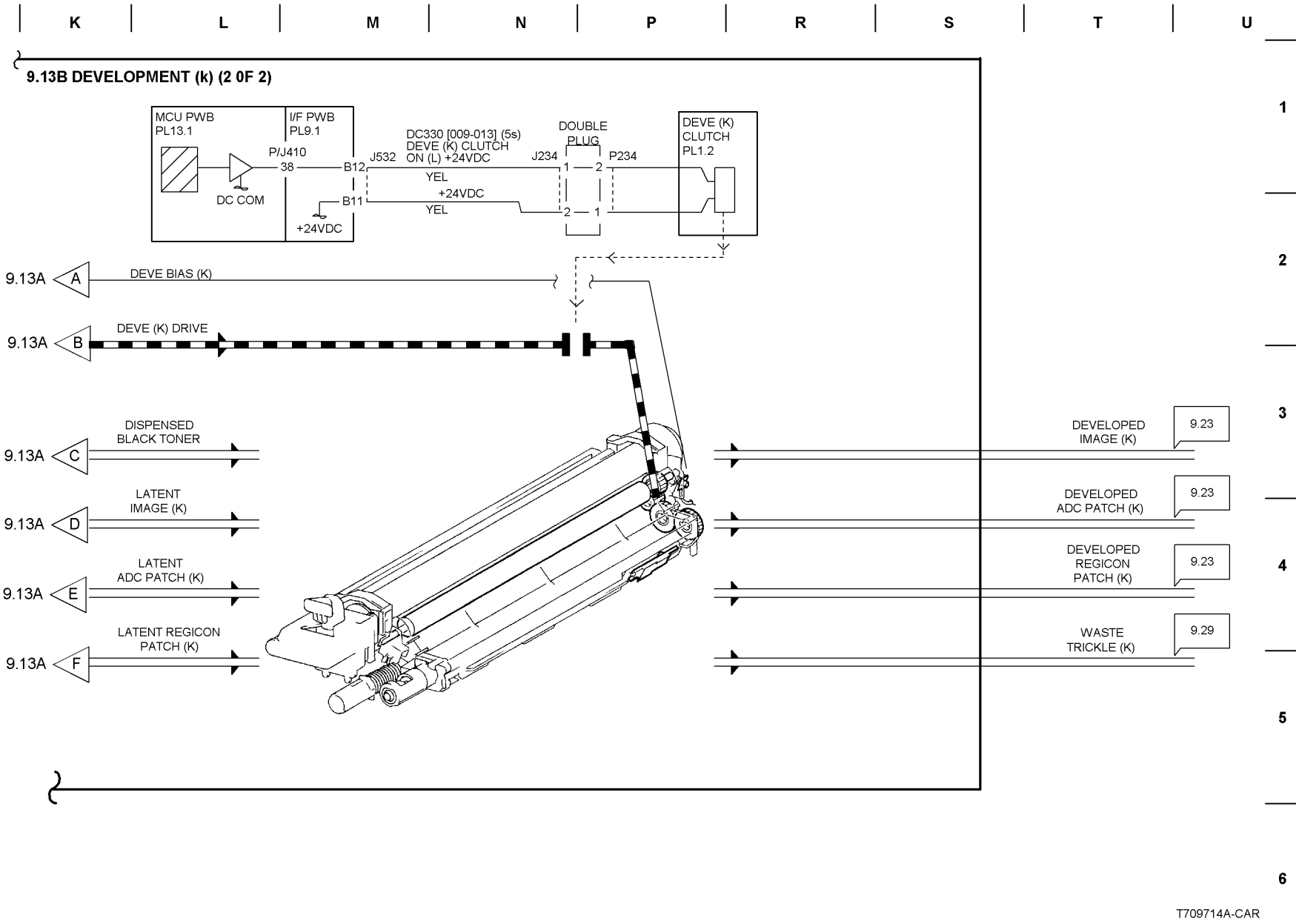


Figure 14 Development (K) (2 of 2)

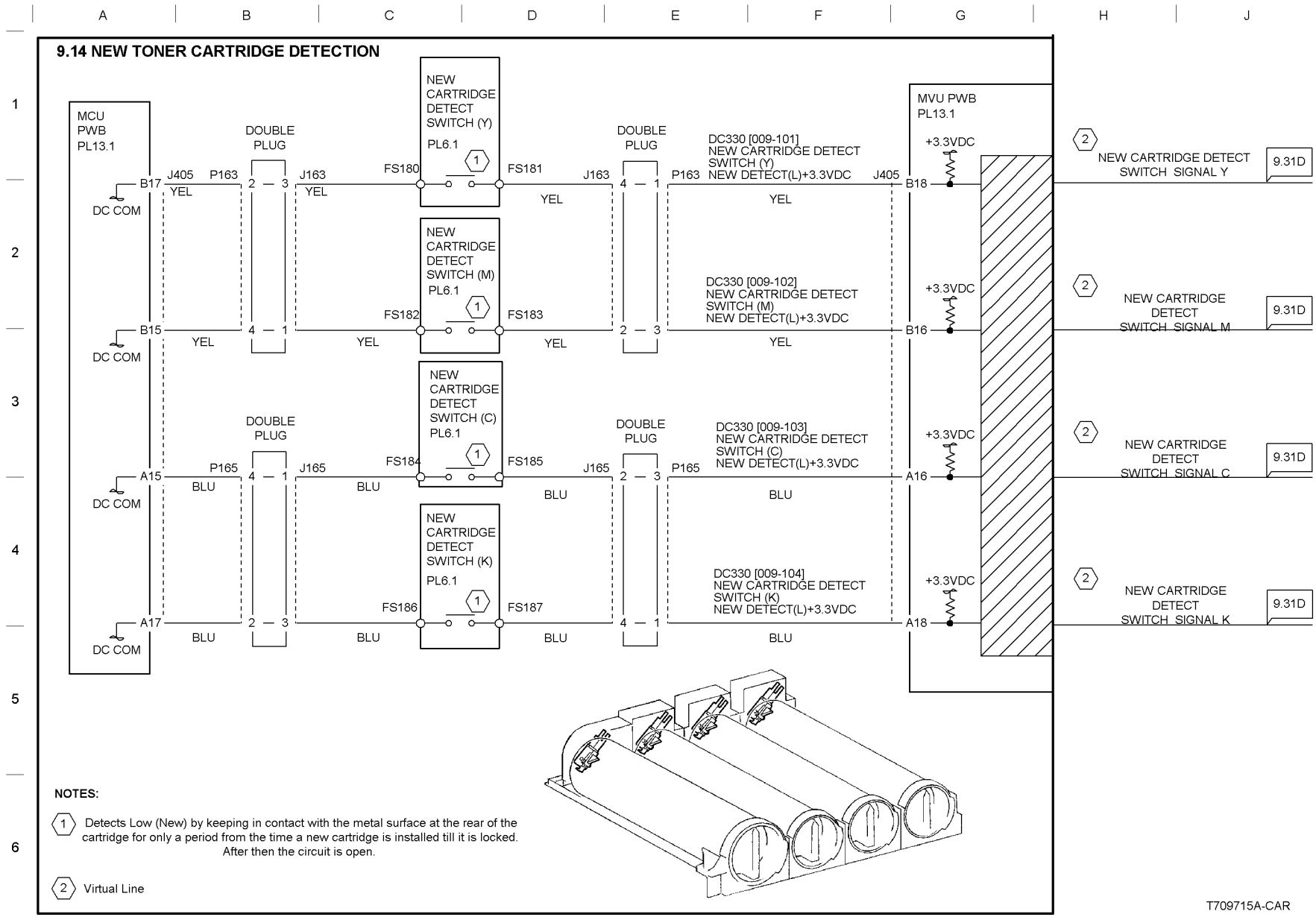


Figure 15 New Toner Cartridge Detection

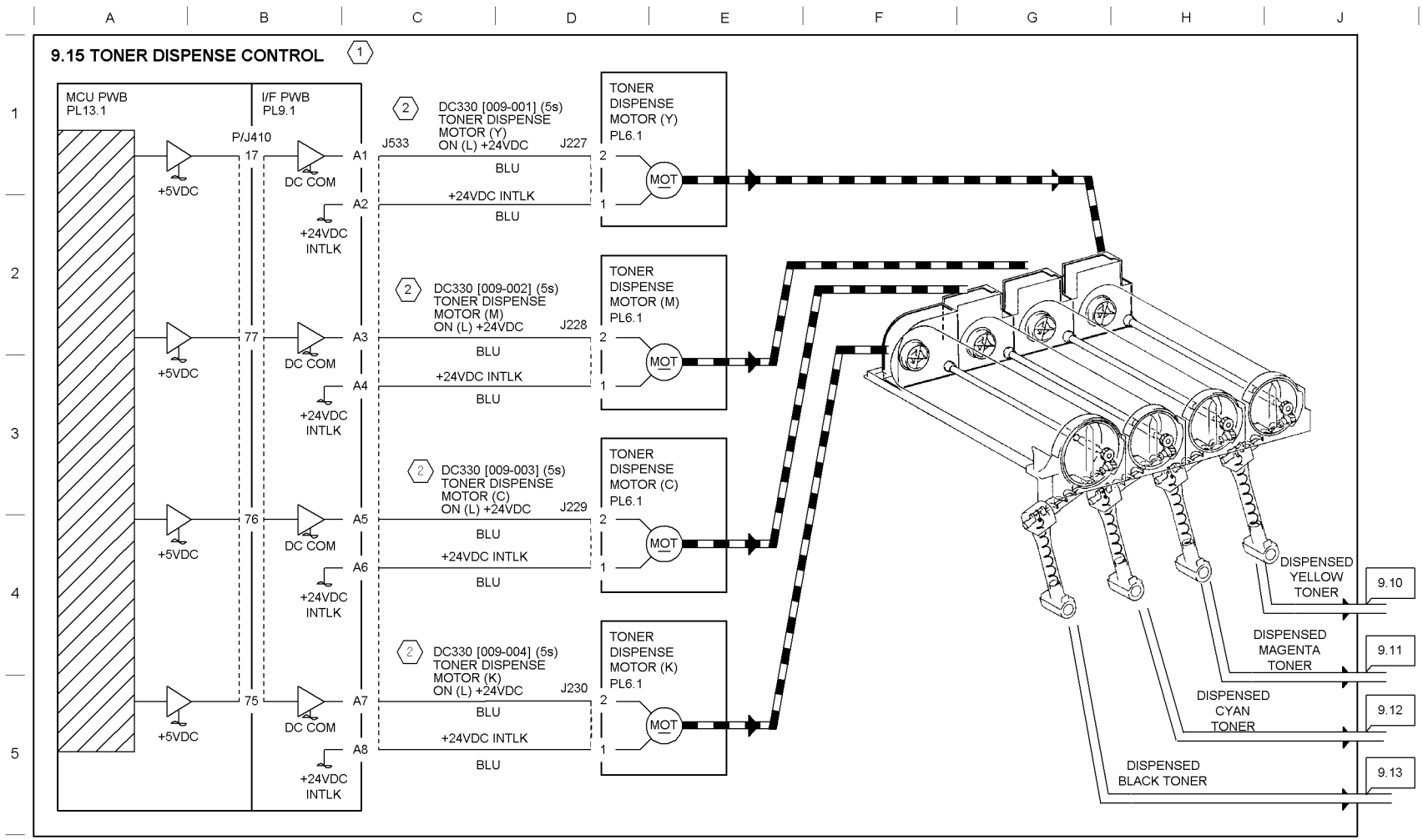


Figure 16 Toner Dispense Control

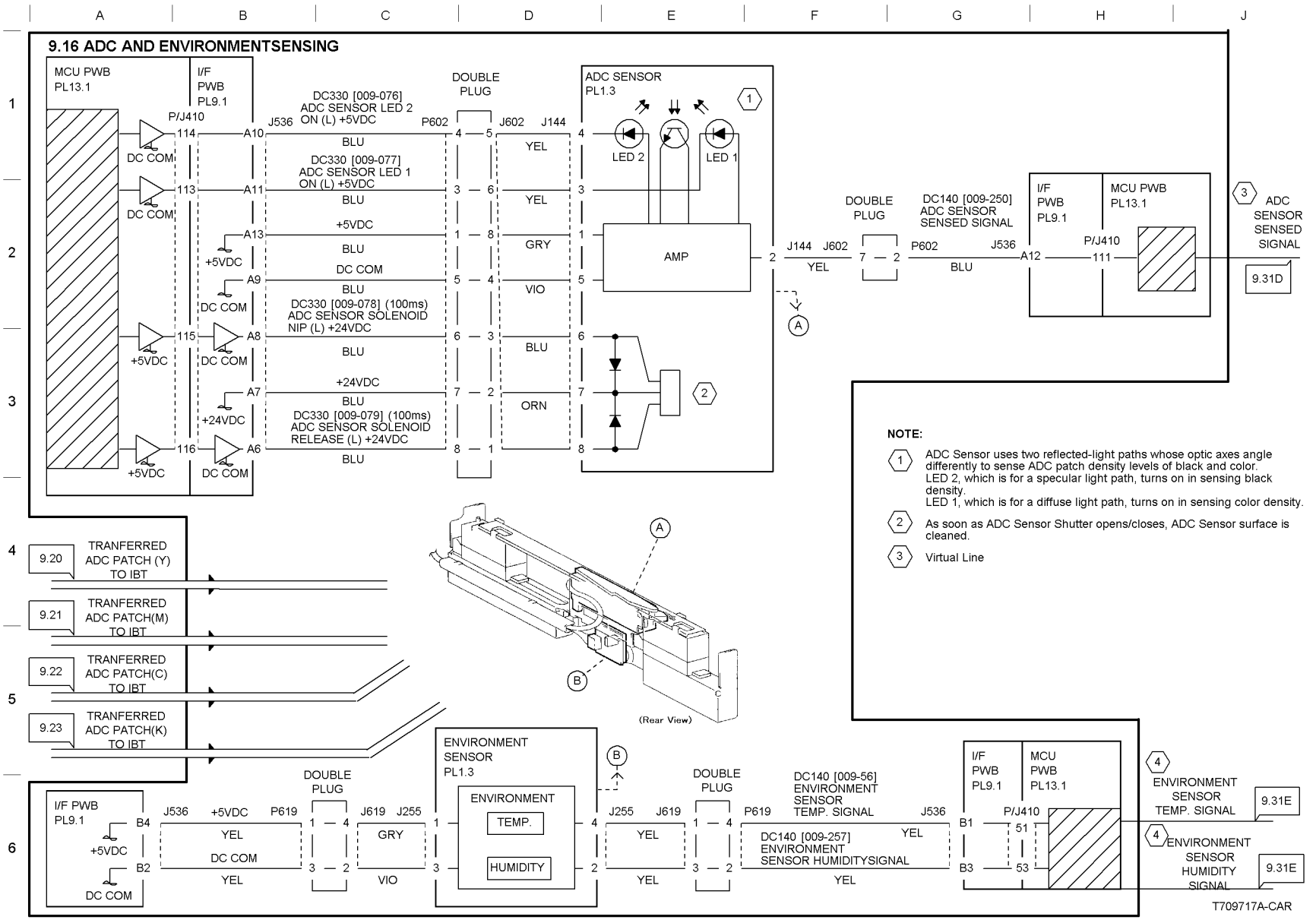
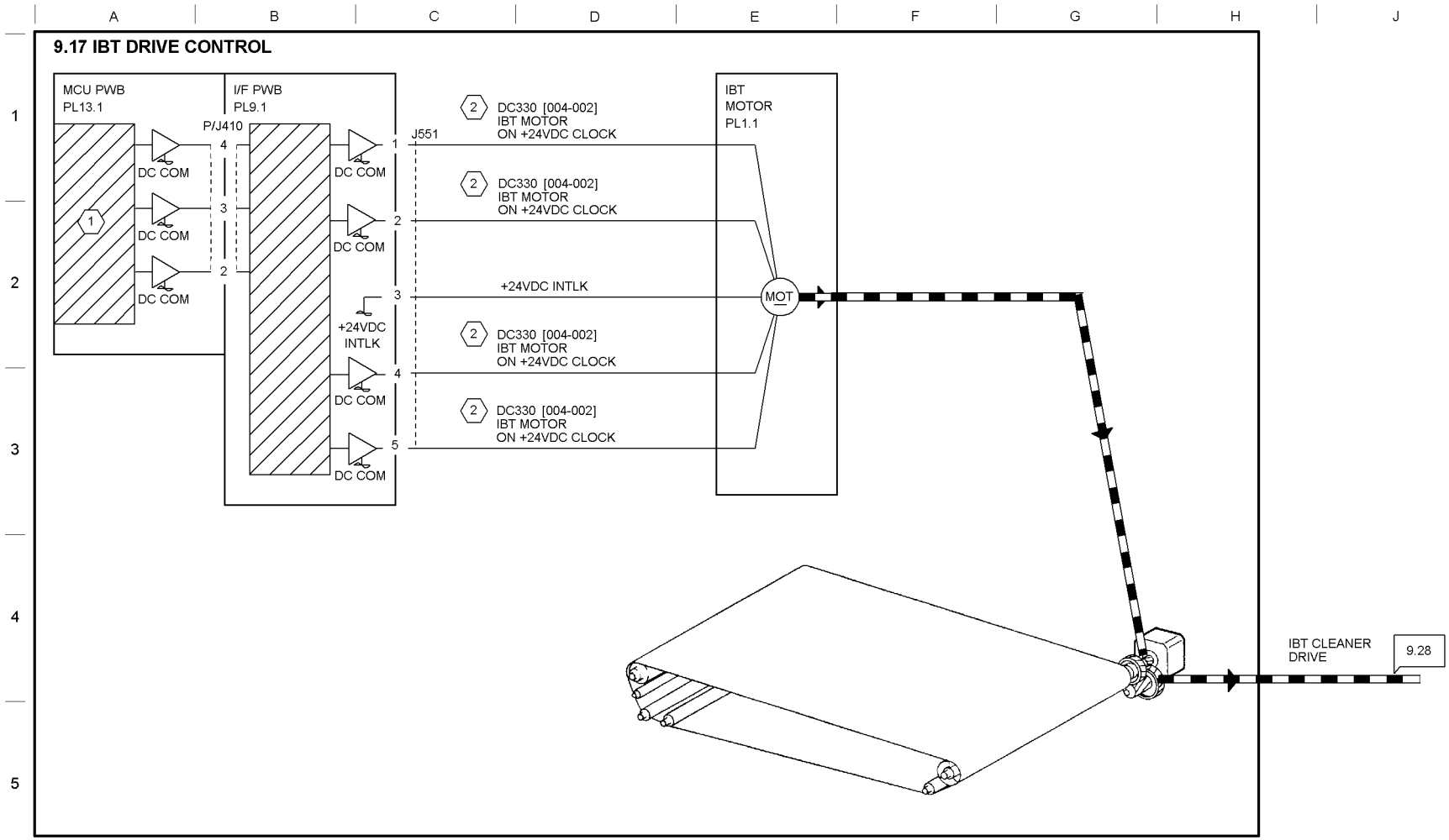


Figure 17 ADC and Environment Sensing



NOTE:

(1) Drives at high speed for standard paper and at half speed for OHP film.

(2) Lift up IBT Assy before turning on DC330 [004-002]. Turning on IBT Motor without lifting it up may damage IBT.
Turning DC330 [004-002] allows IBT Motor to rotate at normal speed, DC330 [004-012] at half speed and DC330 [004-013] at double speed.

Figure 18 IBT Drive Control

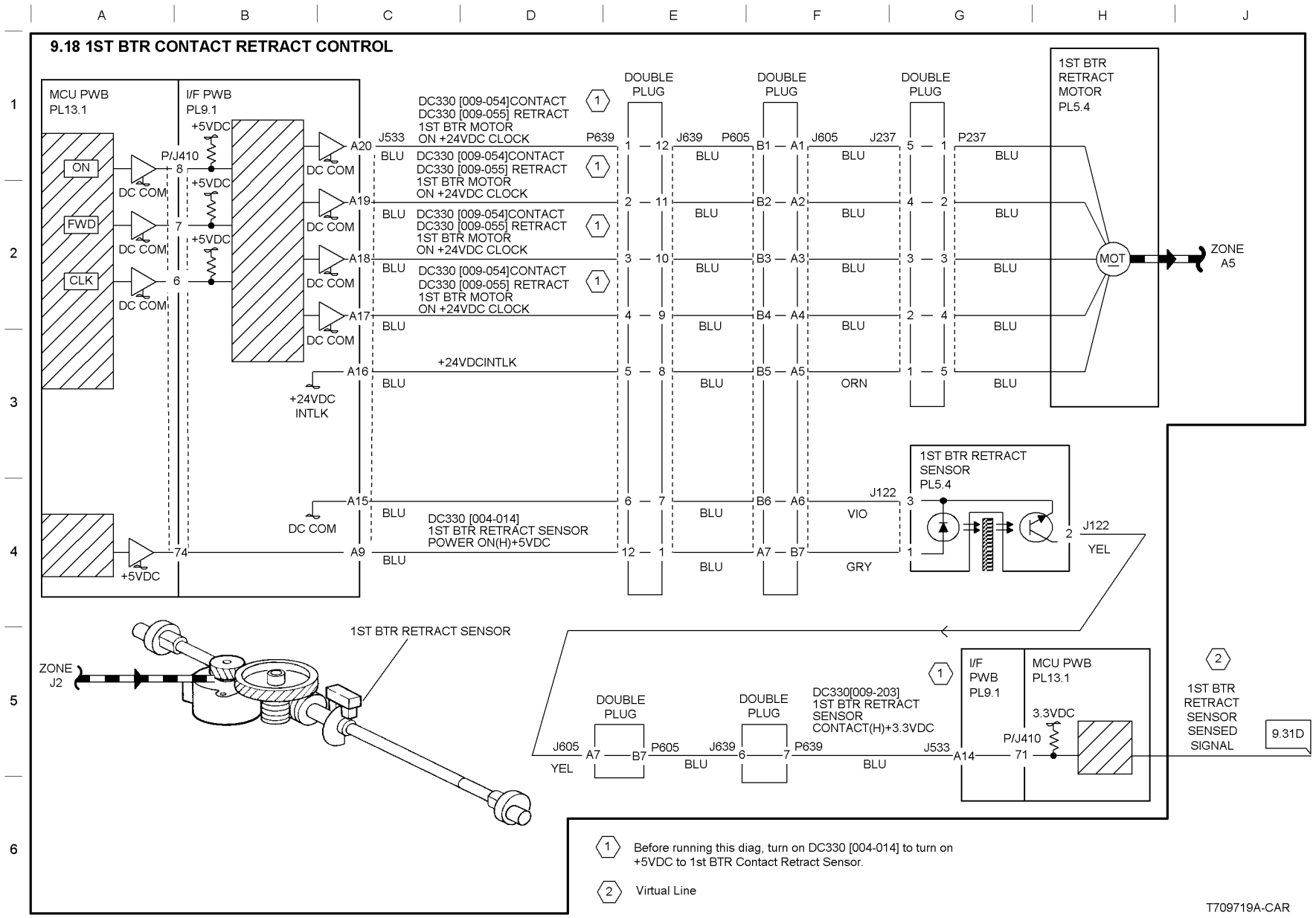


Figure 19 1ST BTR Contact Retract Control

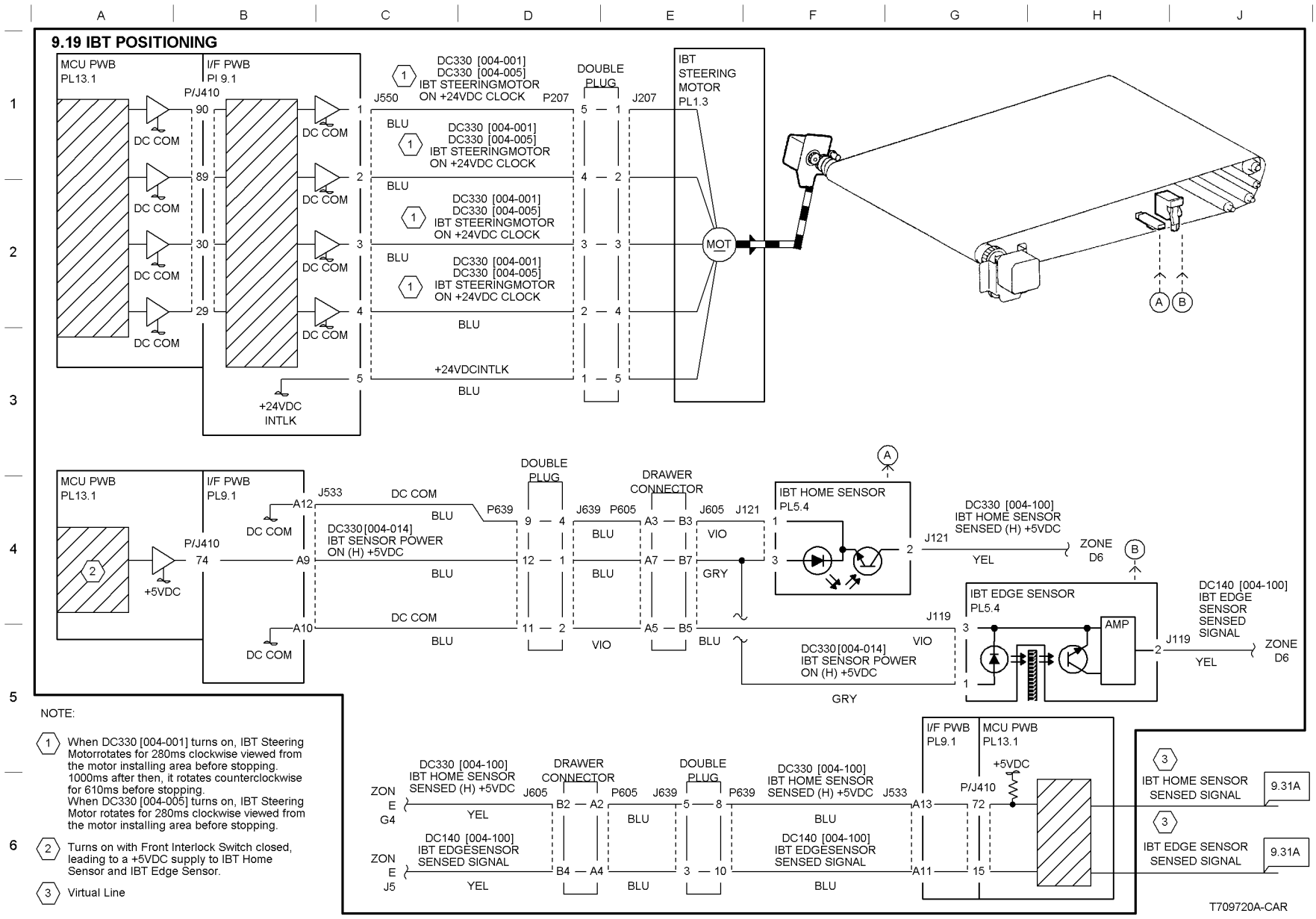


Figure 20 IBT Positioning

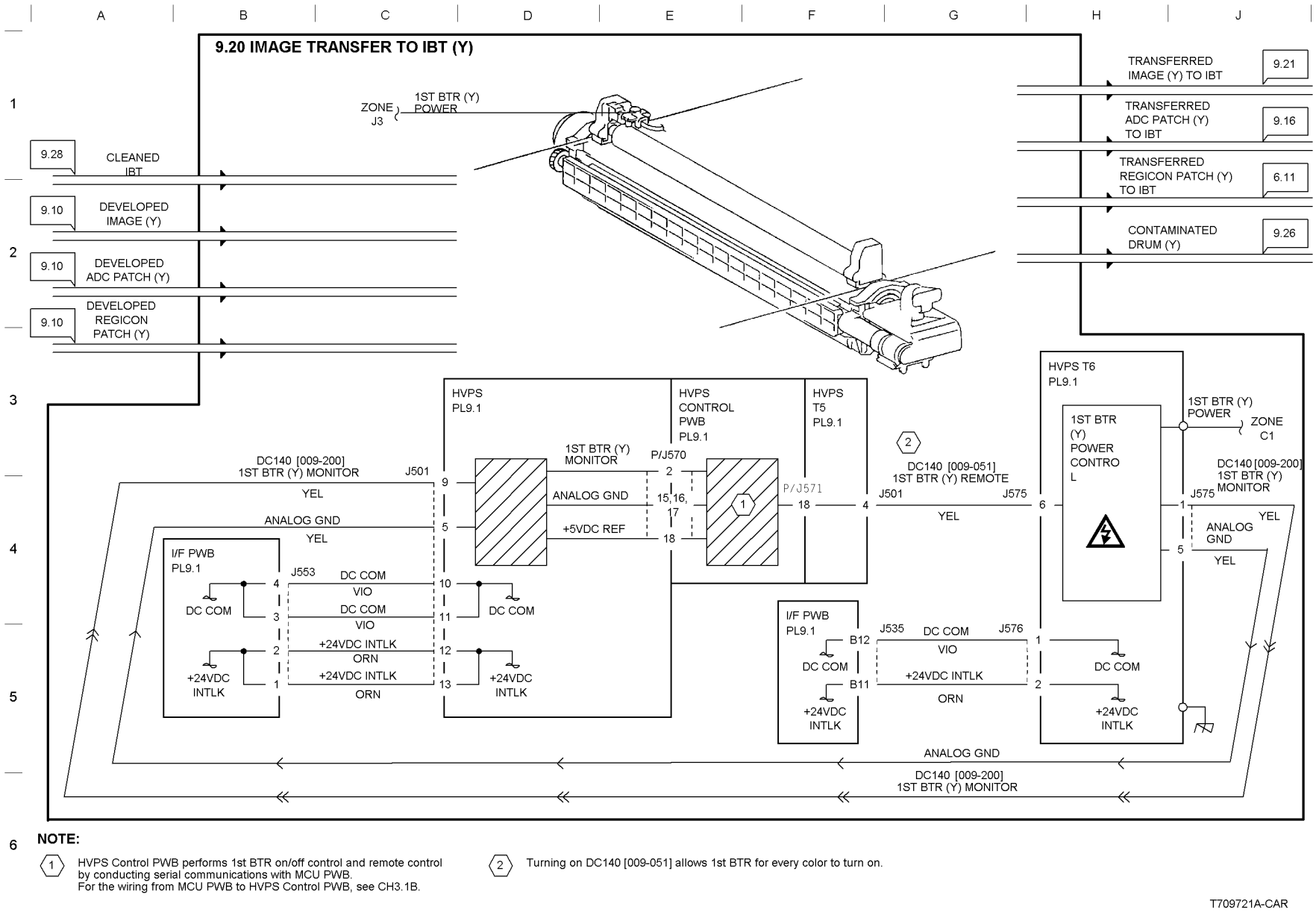
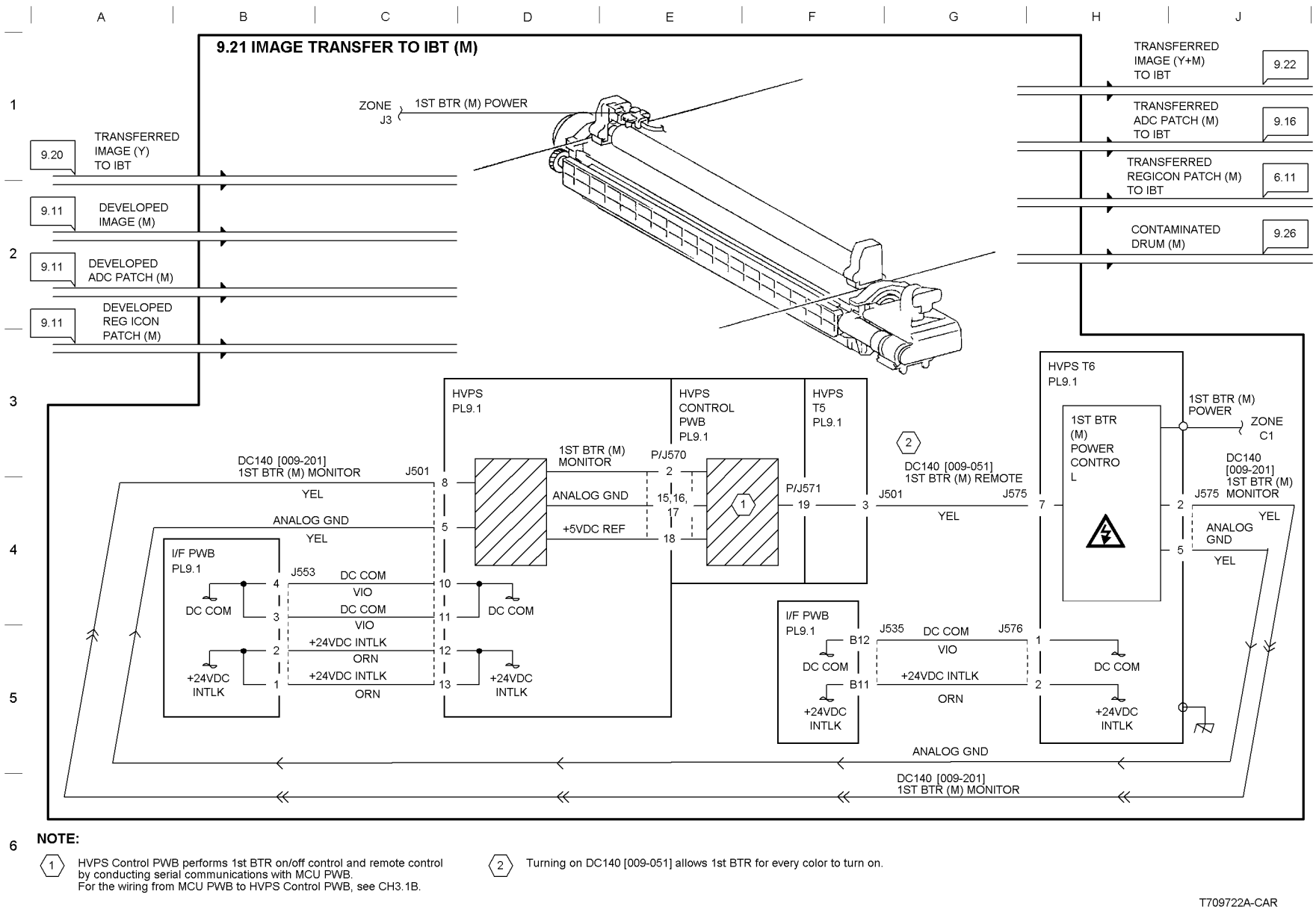


Figure 21 Image transfer To IBT (Y)



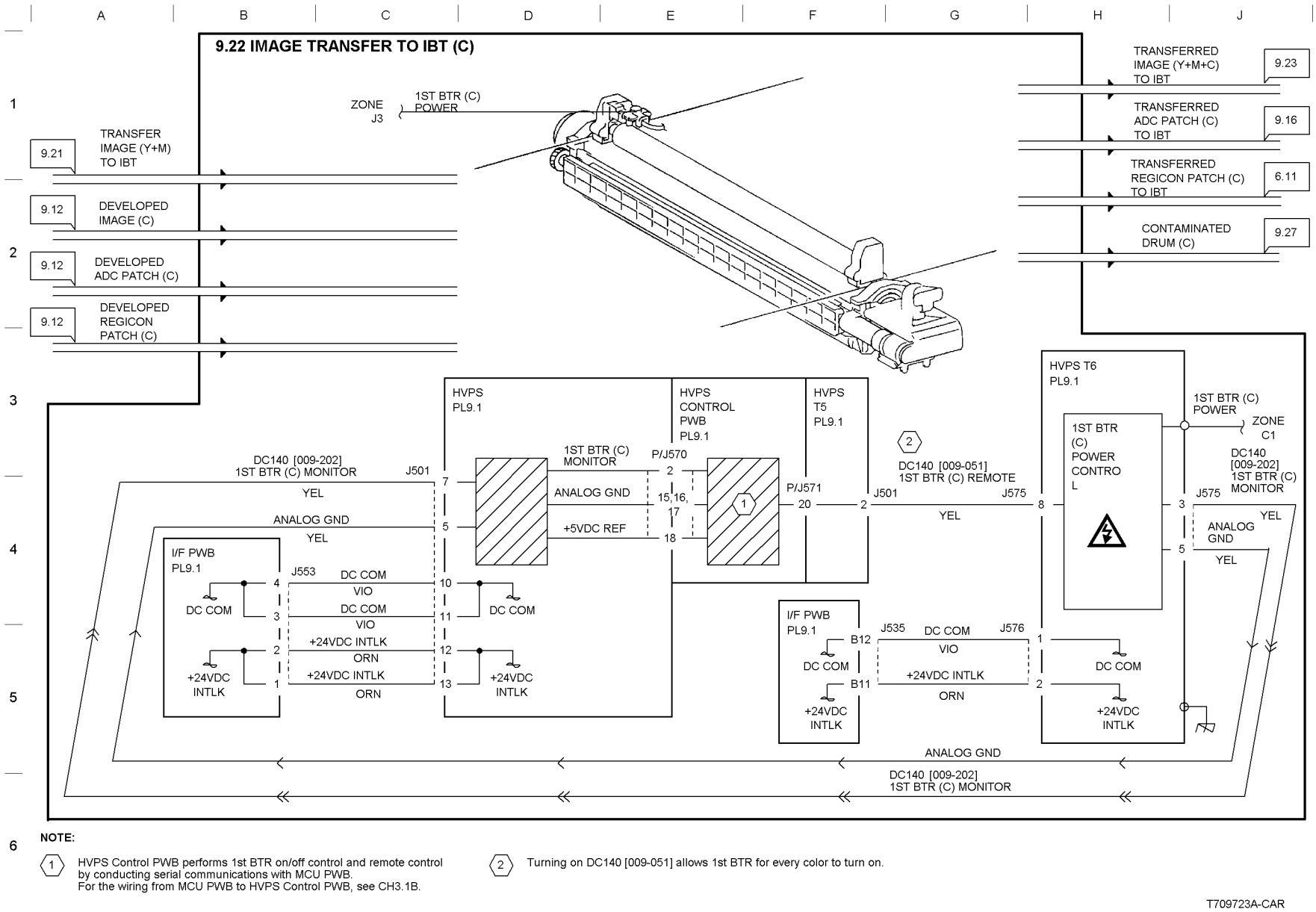
NOTE:

(1) HVPS Control PWB performs 1st BTR on/off control and remote control by conducting serial communications with MCU PWB.
For the wiring from MCU PWB to HVPS Control PWB, see CH3.1B.

(2) Turning on DC140 [009-051] allows 1st BTR for every color to turn on.

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Figure 22 Image Transfer To IBT (M)

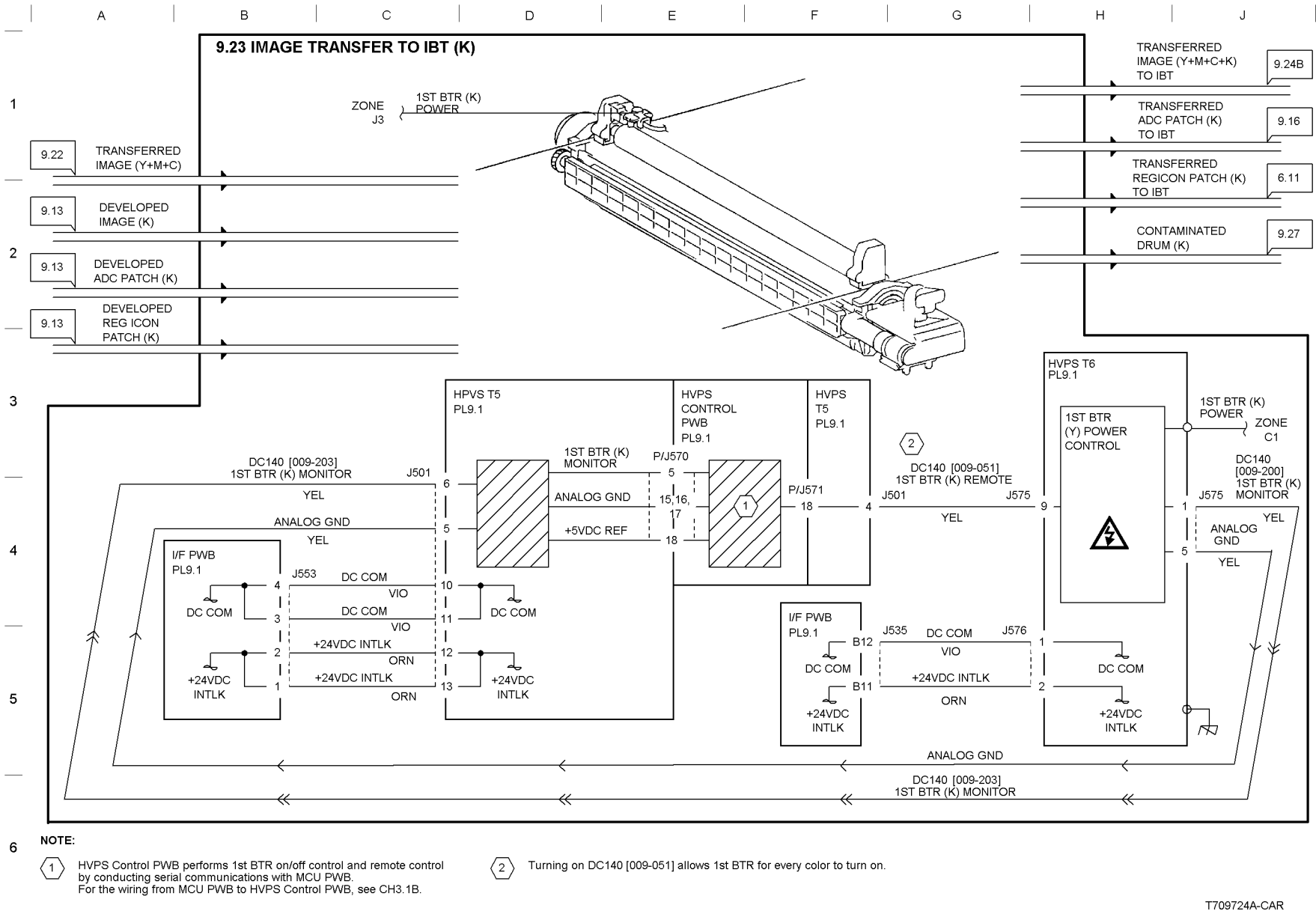


NOTE:

(1) HVPS Control PWB performs 1st BTR on/off control and remote control by conducting serial communications with MCU PWB. For the wiring from MCU PWB to HVPS Control PWB, see CH3.1B.

(2) Turning on DC140 [009-051] allows 1st BTR for every color to turn on.

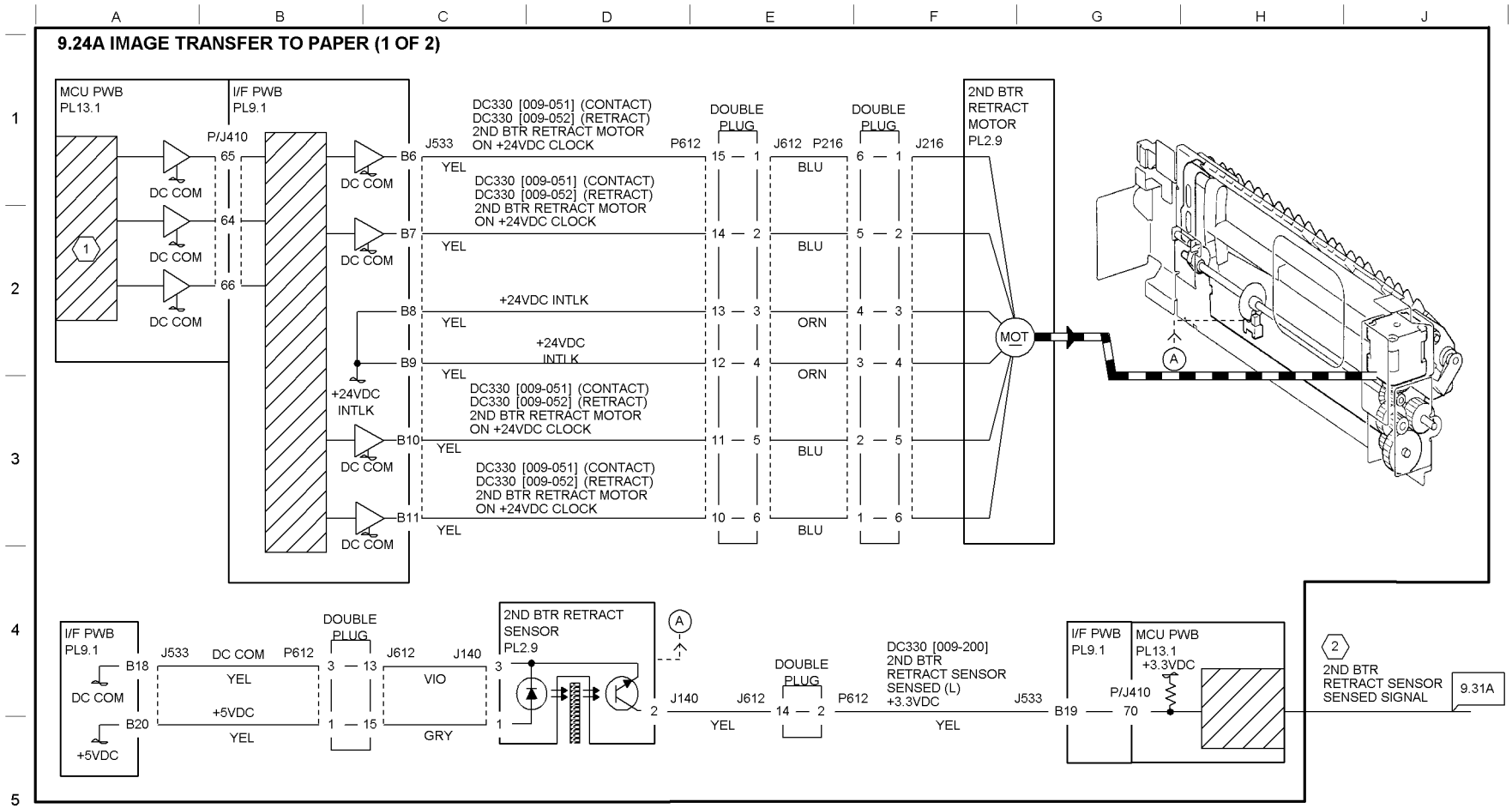
Figure 23 Image Transfer To IBT (C)



NOTE:

1. HVPS Control PWB performs 1st BTR on/off control and remote control by conducting serial communications with MCU PWB. For the wiring from MCU PWB to HVPS Control PWB, see CH3.1B.
2. Turning on DC140 [009-051] allows 1st BTR for every color to turn on.

Figure 24 Image Transfer To IBT (K)



NOTE:

1. 2nd BTR contacts at power on, and retracts 5hrs (adjustable in NVM) after power off or IBT stops, or when M/C shuts down.
2. Virtual Line

Figure 25 Image transfer To Paper (1 of 2)

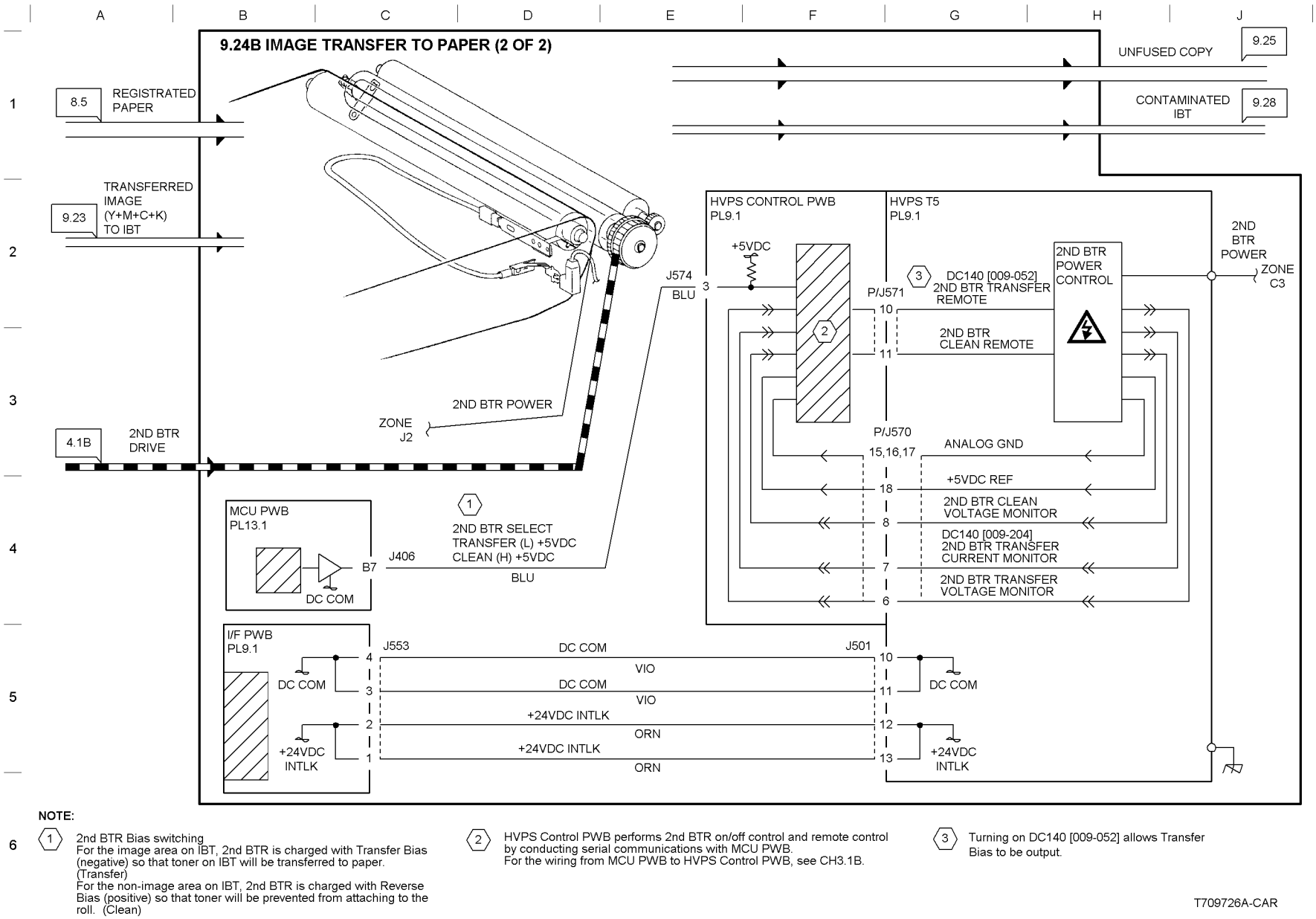
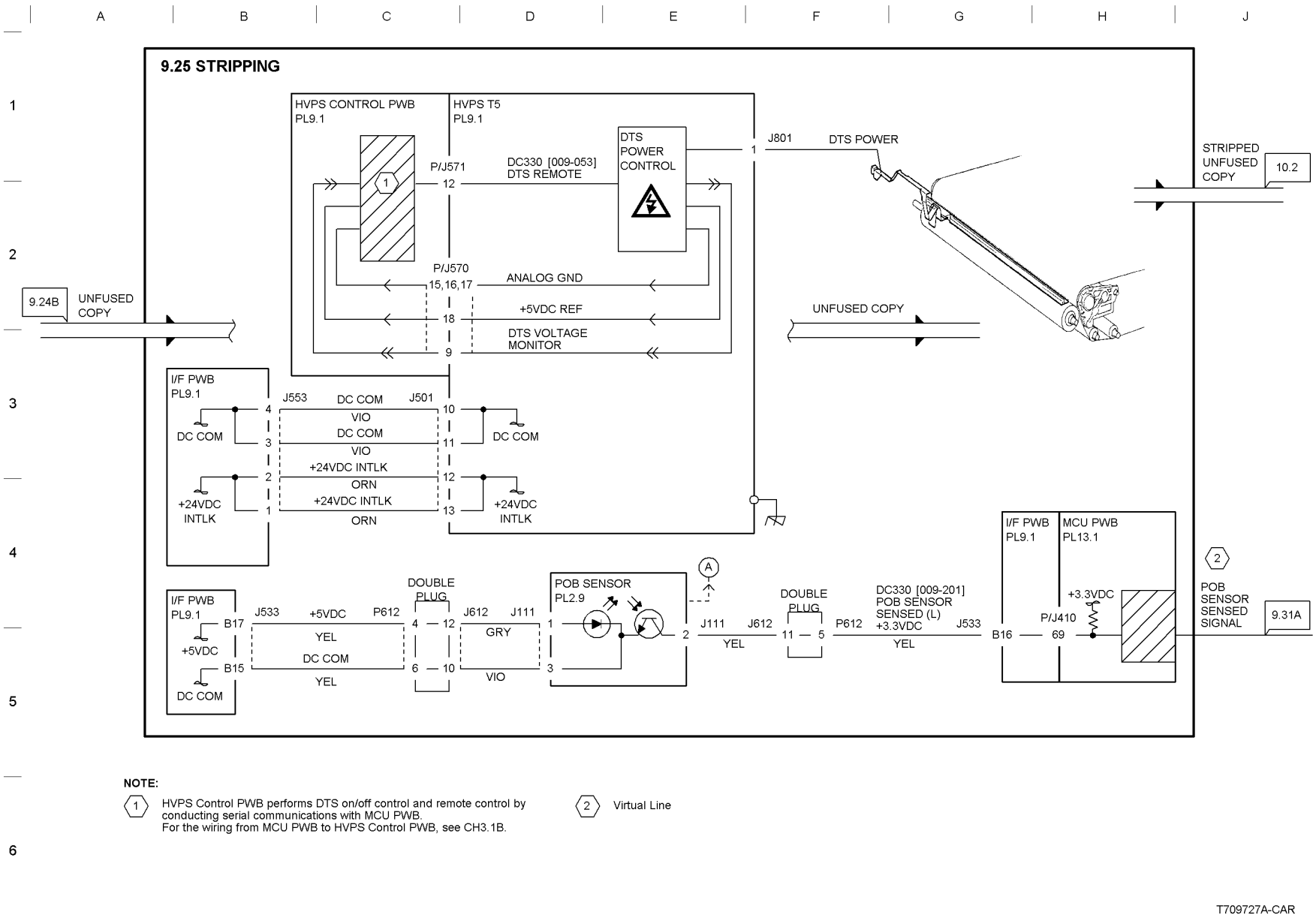


Figure 26 Image transfer To Paper (2 of 2)



NOTE:

1. HVPS Control PWB performs DTS on/off control and remote control by conducting serial communications with MCU PWB.
   For the wiring from MCU PWB to HVPS Control PWB, see CH3.1B.

2. Virtual Line

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Figure 27 Stripping

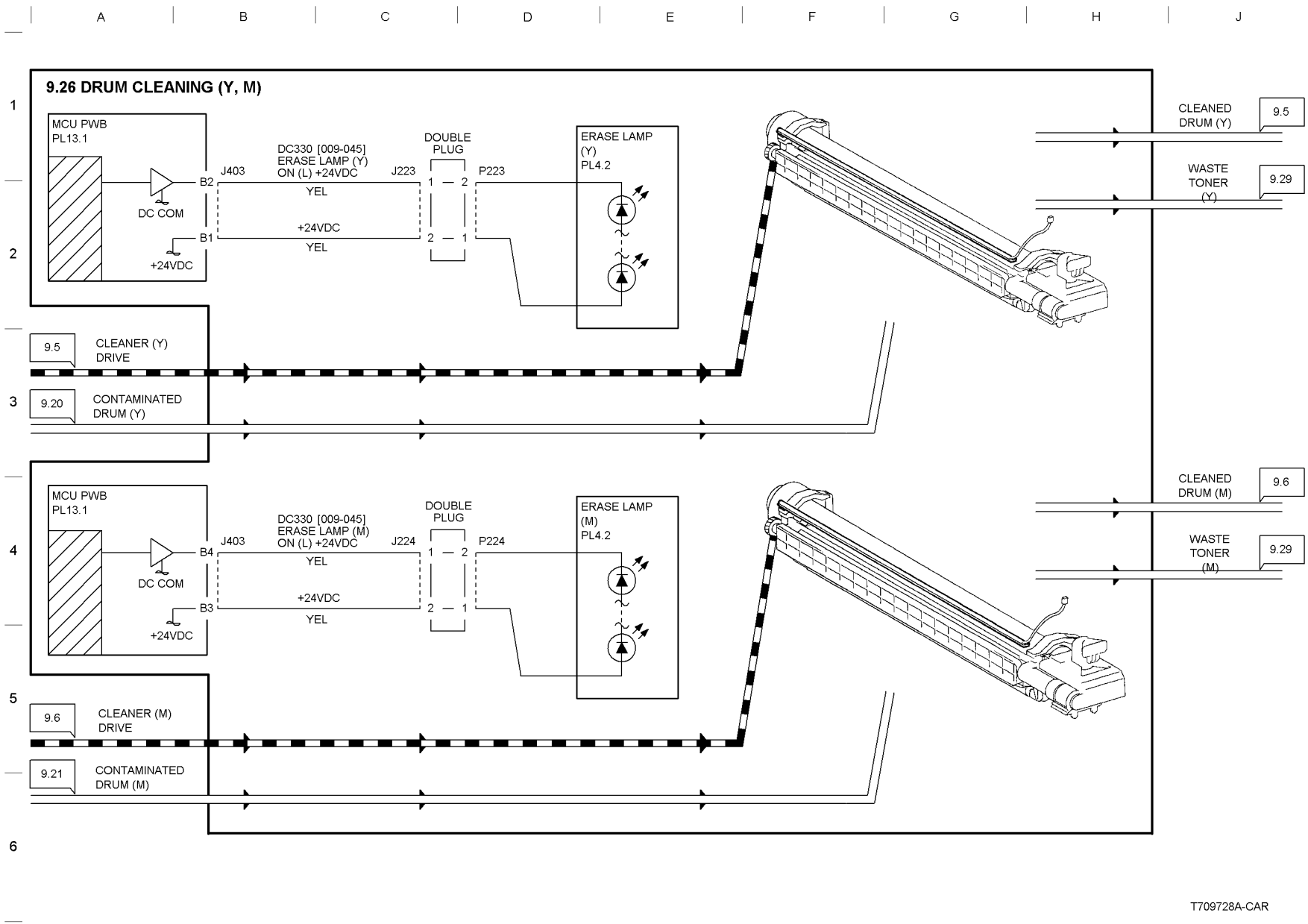


Figure 28 Drum Cleaning (Y,M)

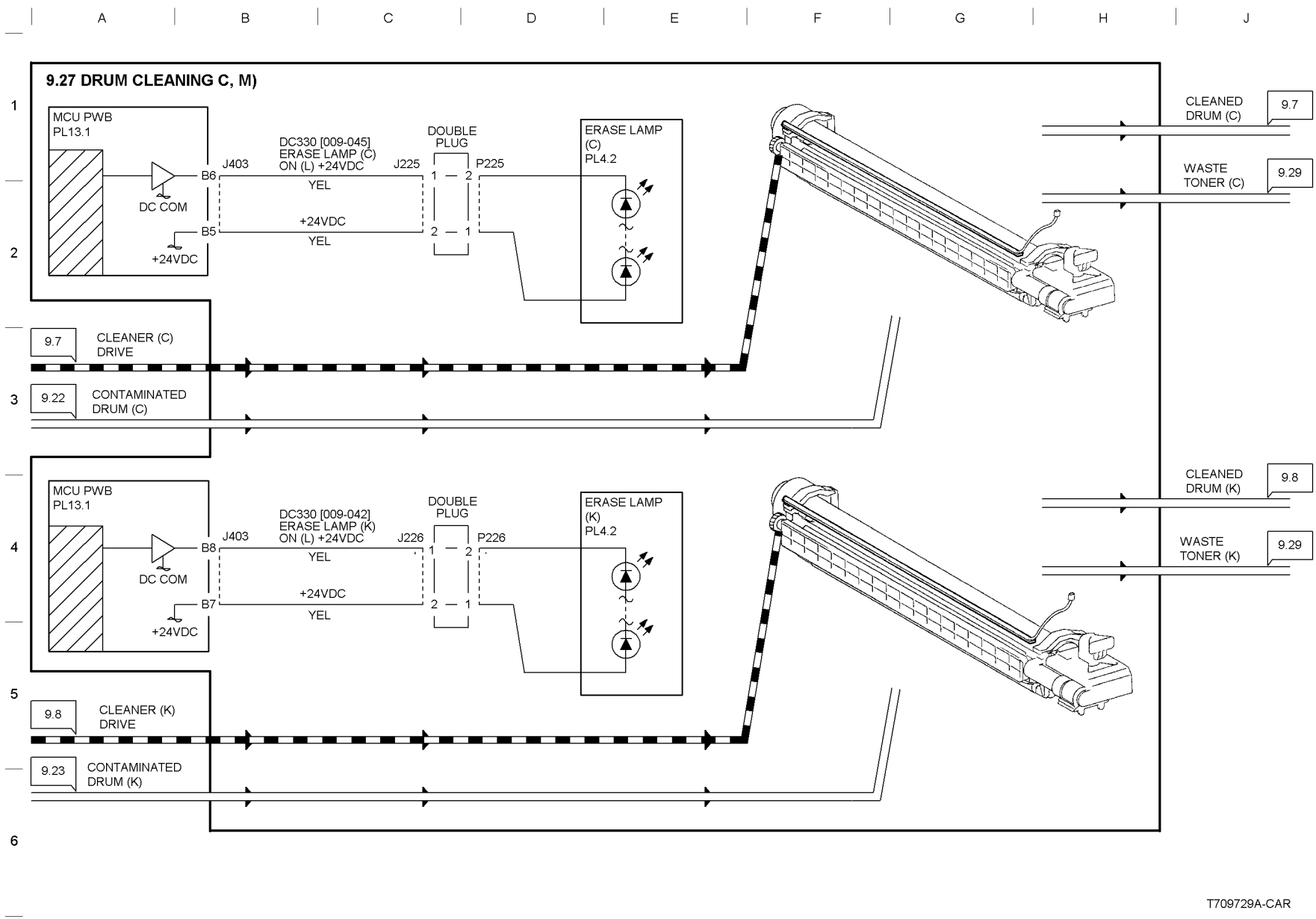


Figure 29 Drum Cleaning (C,K)

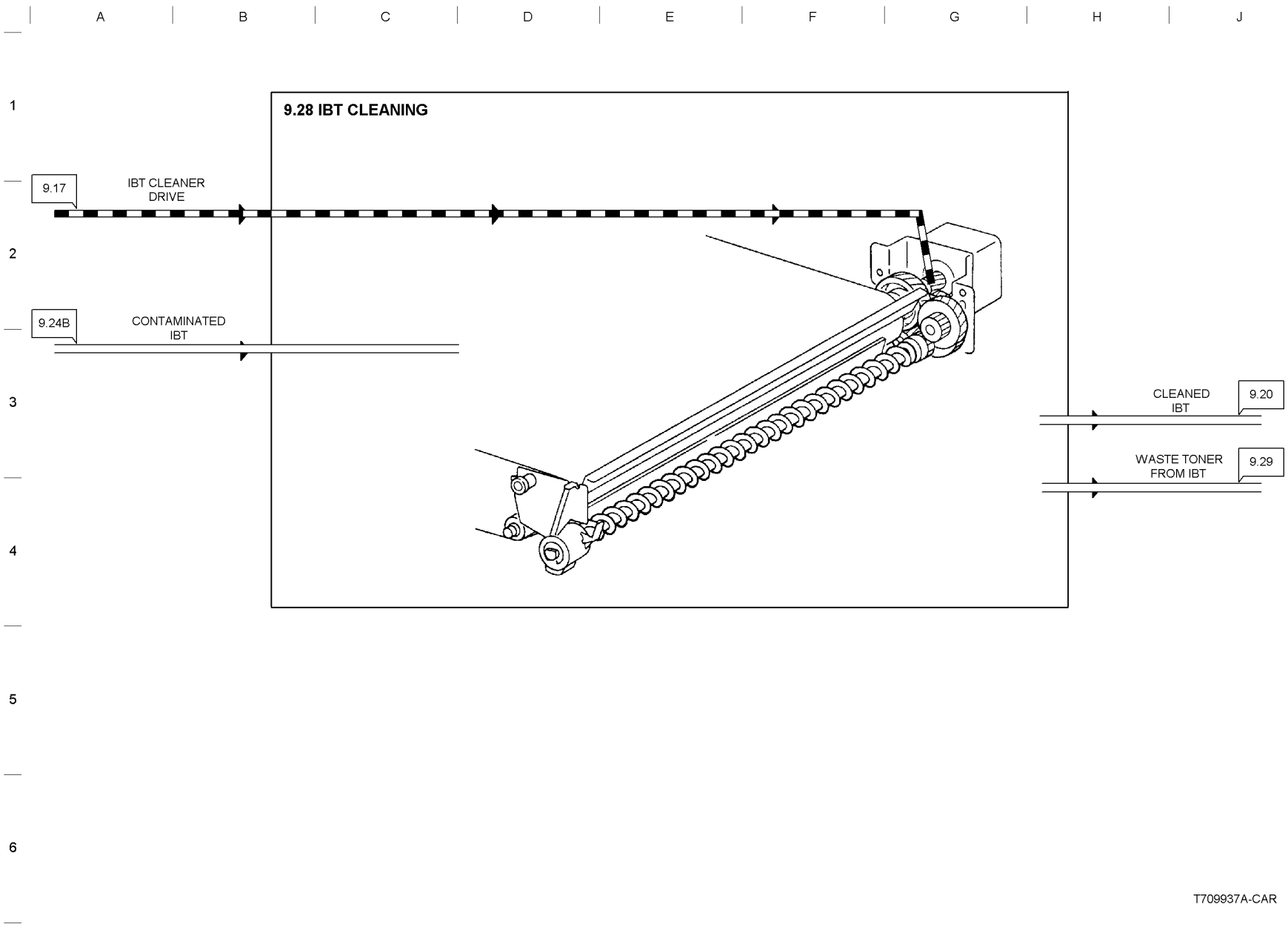


Figure 30 IBT Cleaning

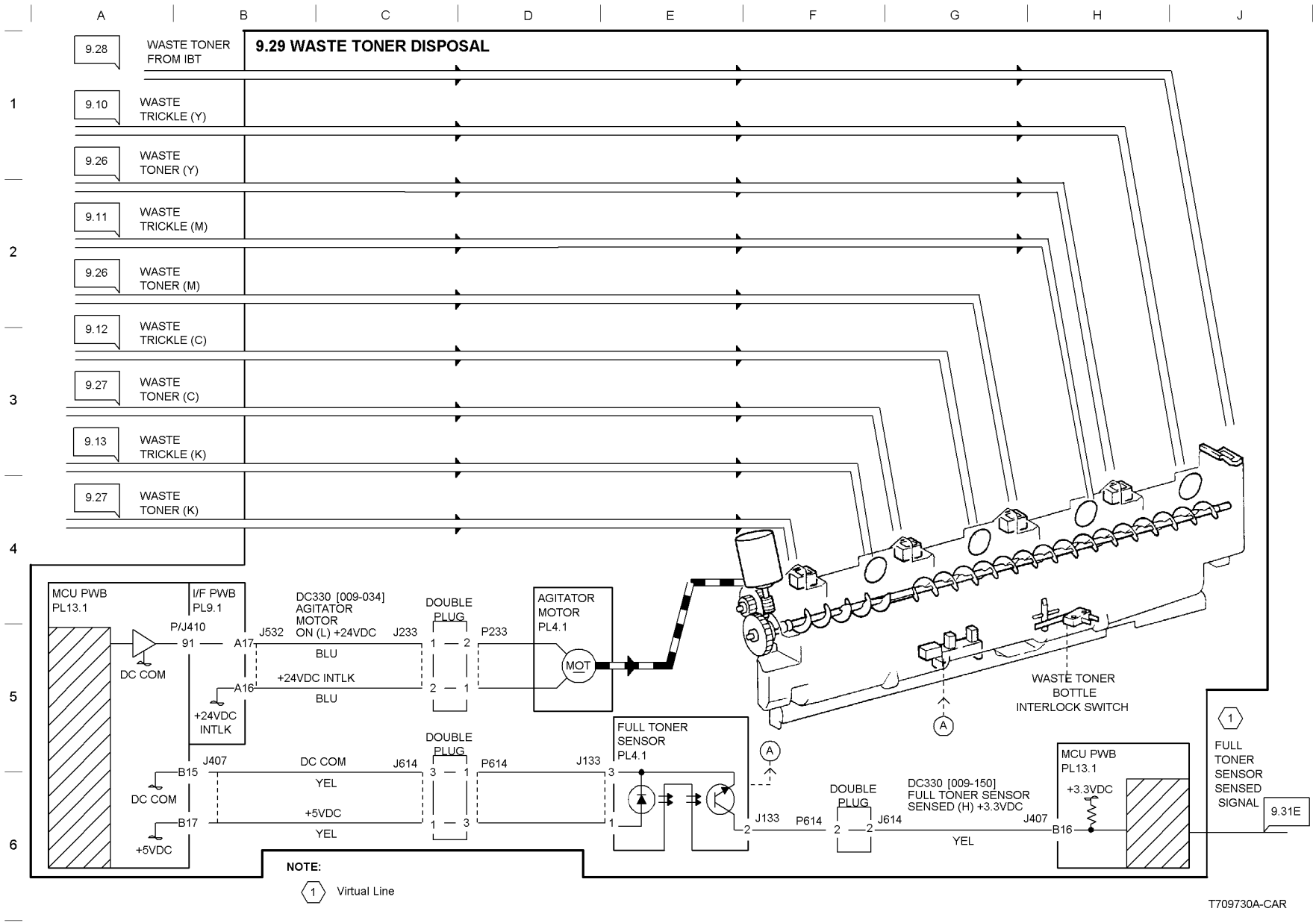
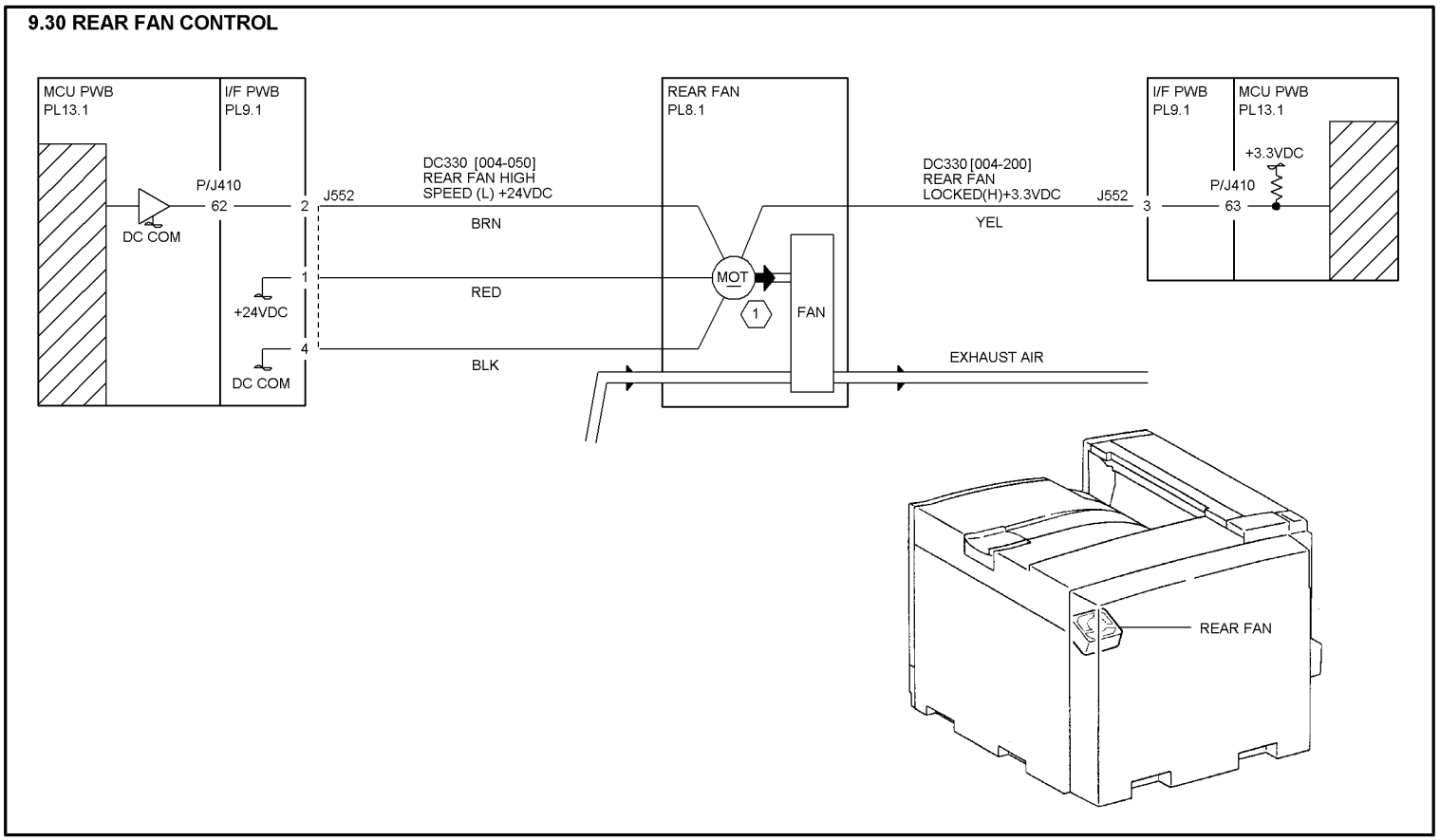


Figure 31 Waste Toner Disposal



NOTE:

(1) Rear Fan starts low-speed rotation at power on and keeps it with M/C on standby.
Rear Fan starts high-speed rotation at Main Motor On and transits to low-speed rotation 15sec (adjustable in NVM) after Main Motor Off.
In Sleep mode, the Fan stops rotating because +24VDC is cut off.

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Figure 32 Rear Fan Control

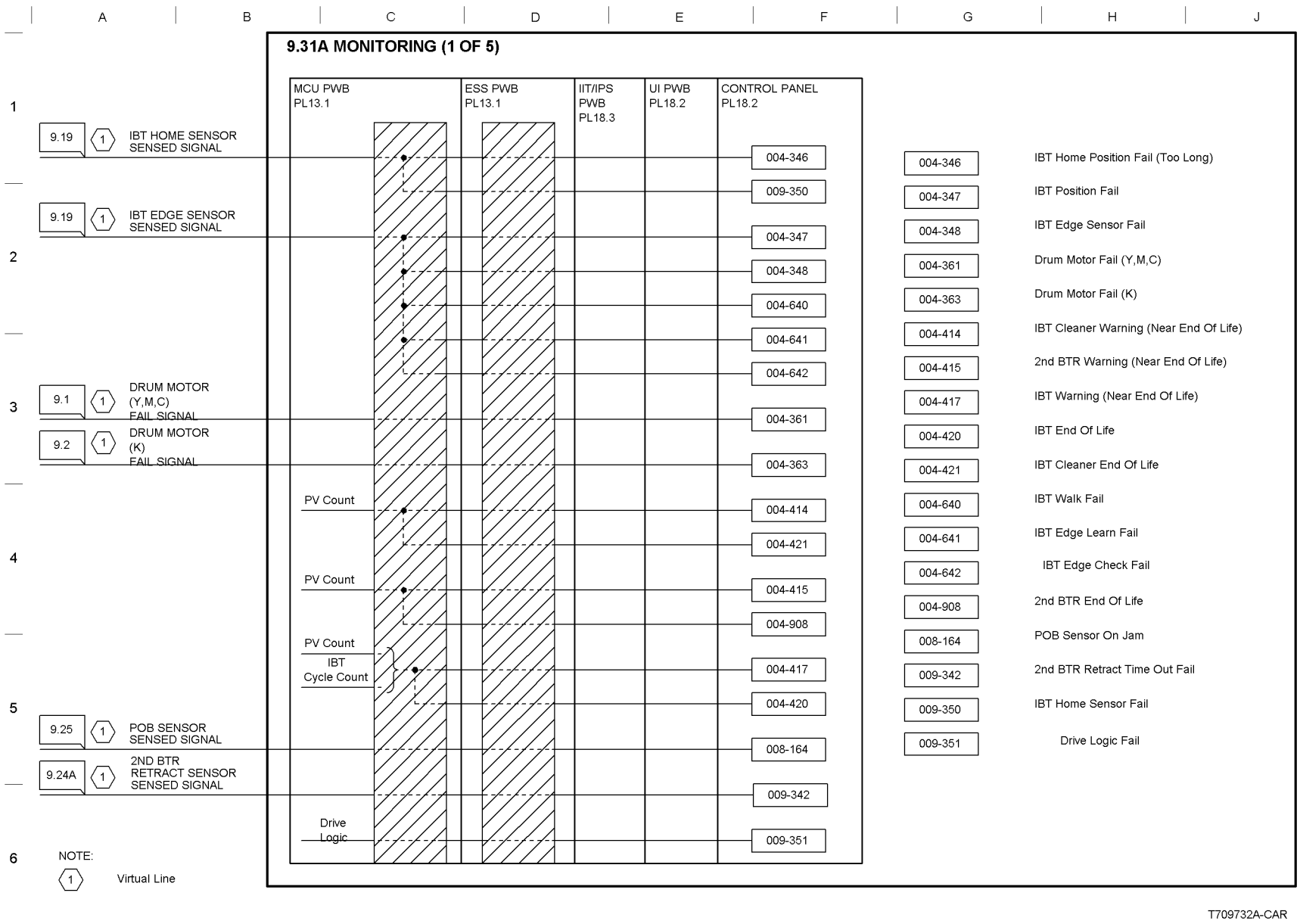


Figure 33 Monitoring (1 of 5)

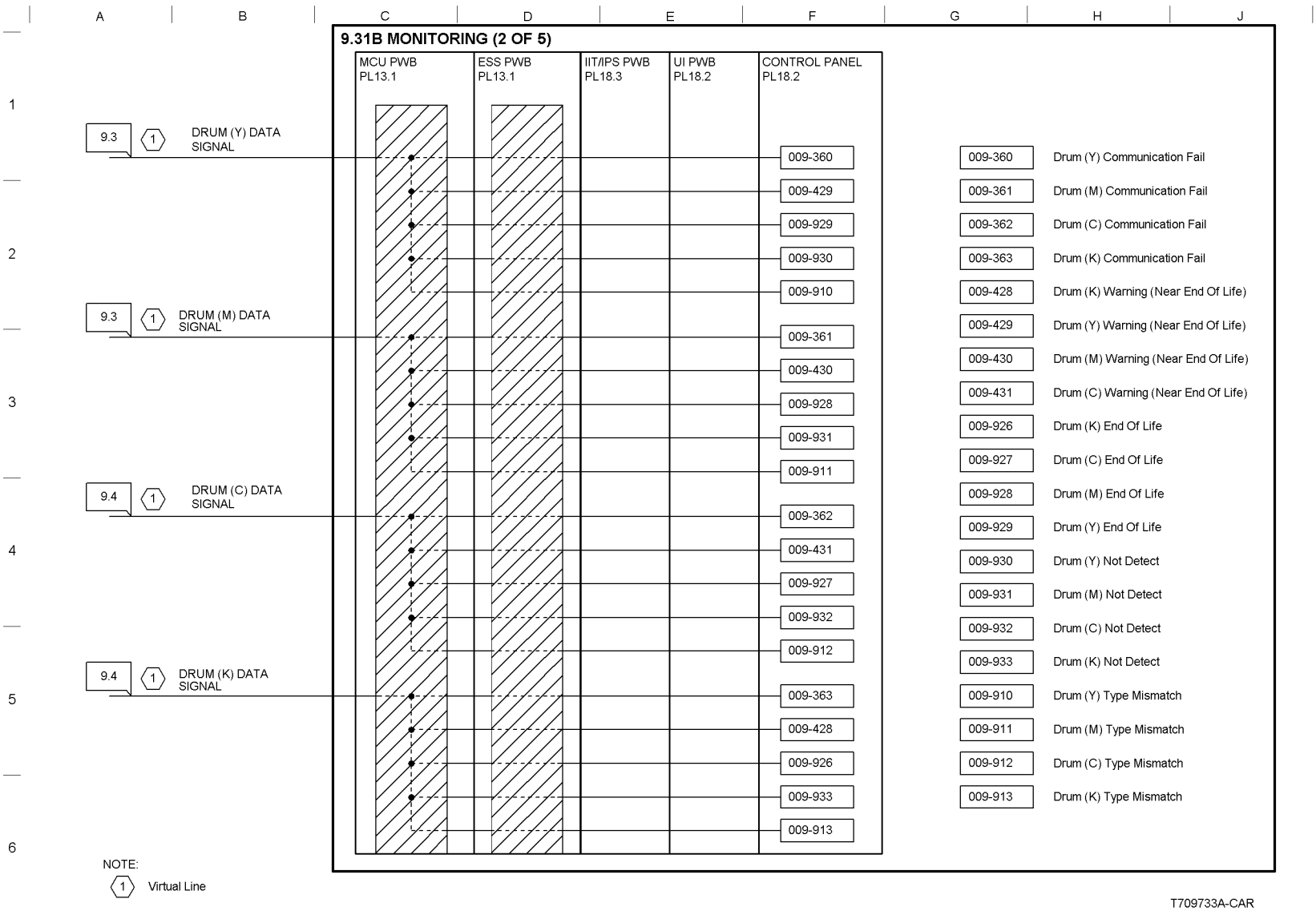


Figure 34 Monitoring (2 of 5)

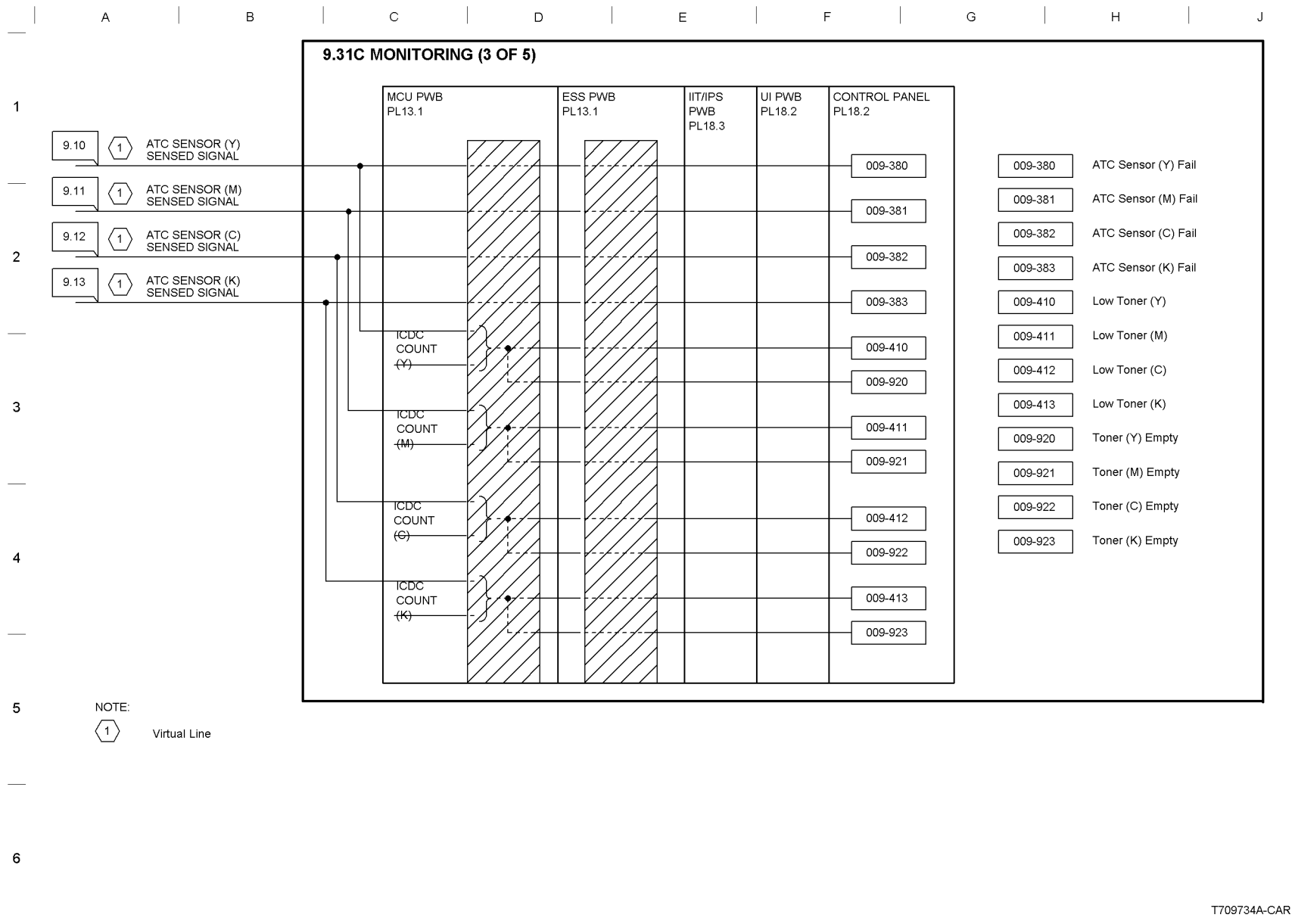


Figure 35 Monitoring (3 of 5)

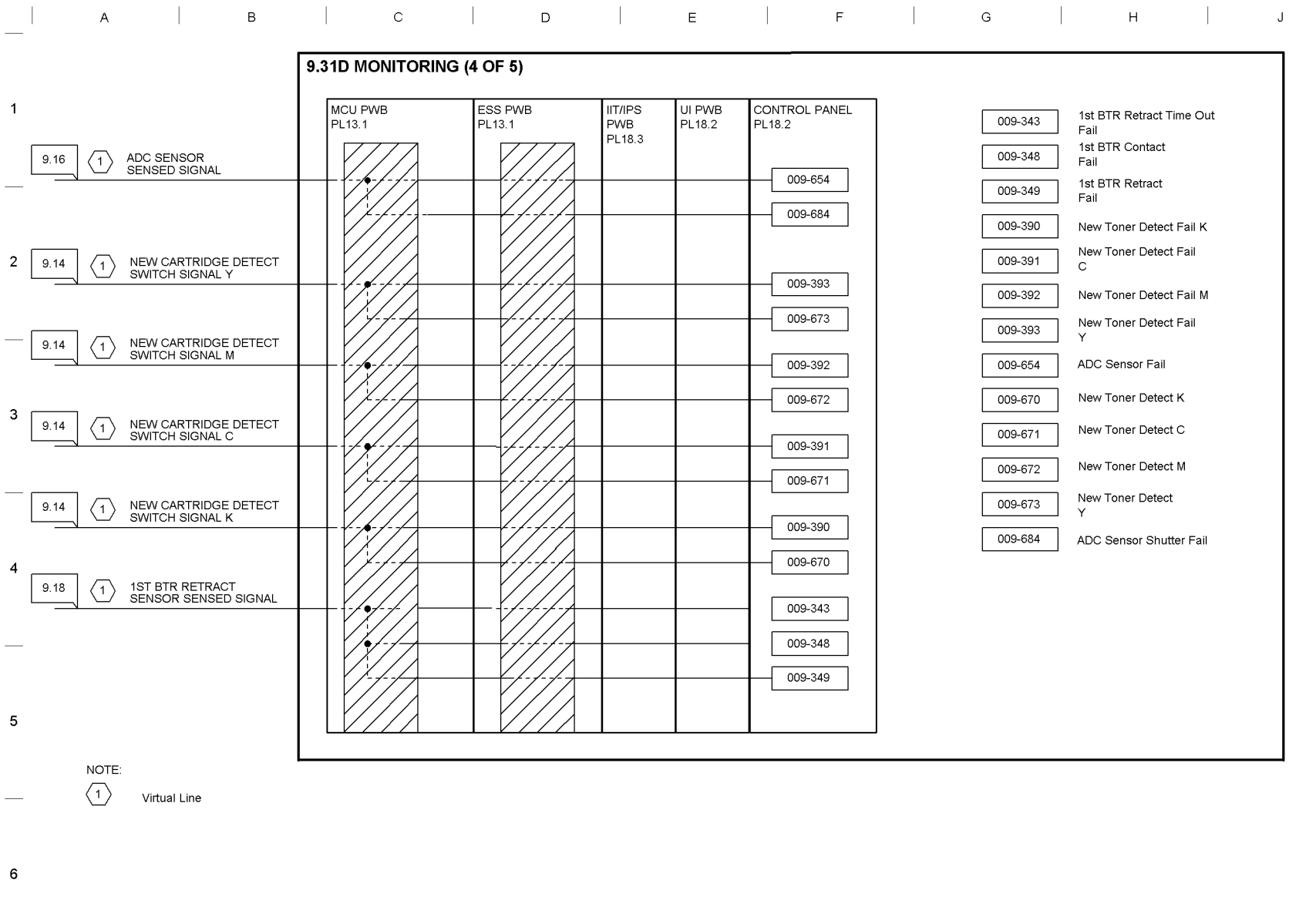


Figure 36 Monitoring (4 of 5)

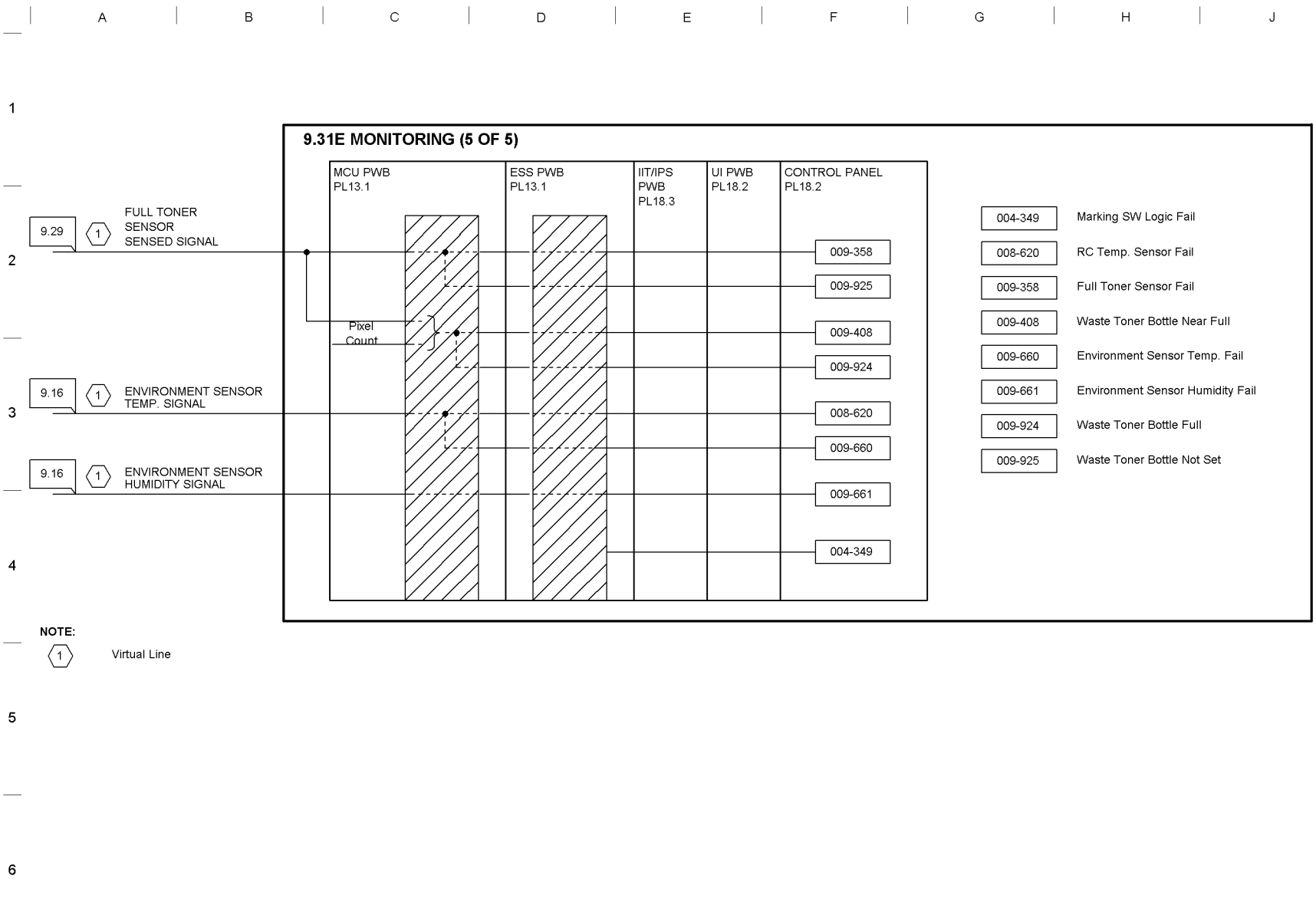
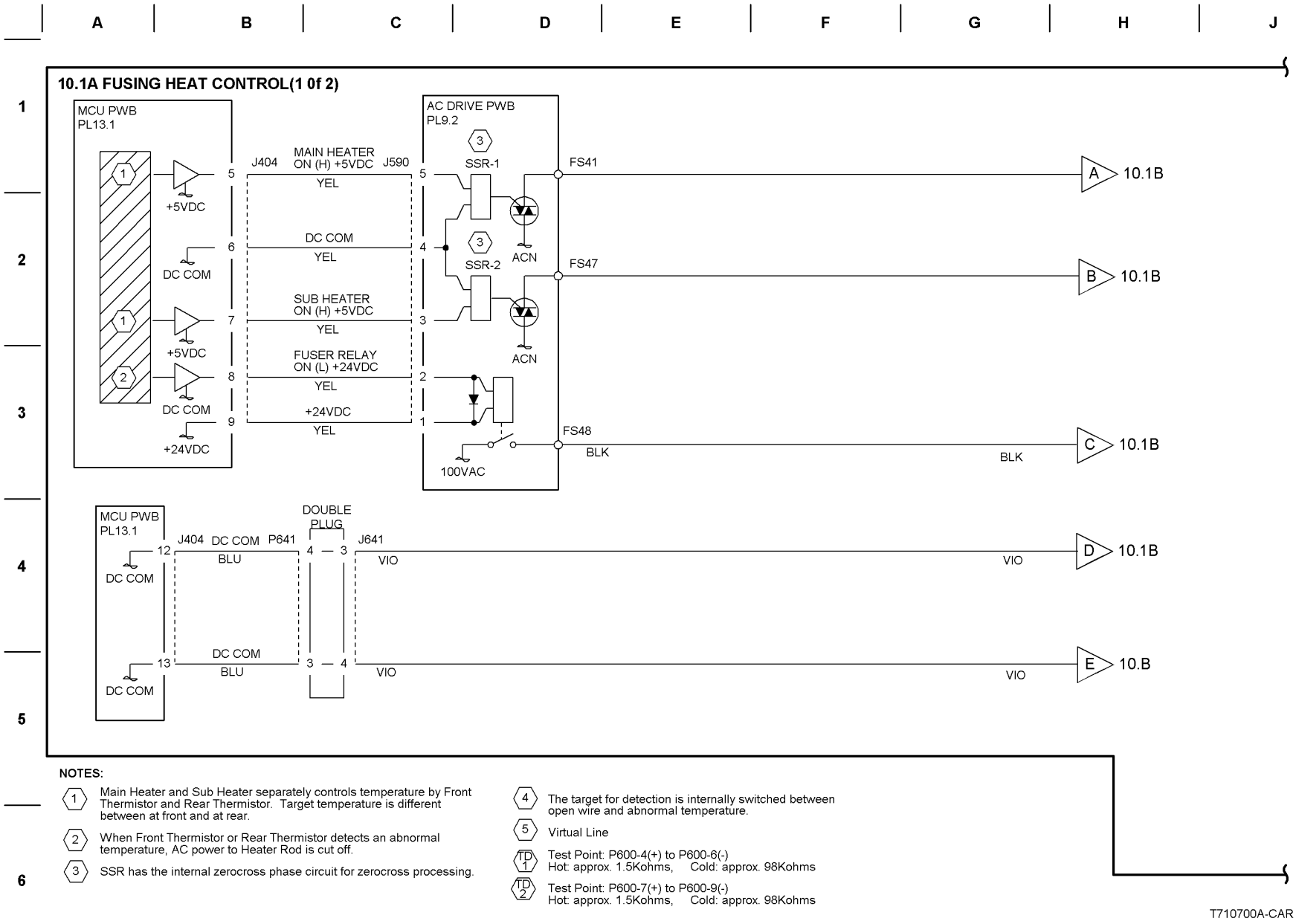


Figure 37 Monitoring (5 of 5)

Chain 10 Fuser and Output



NOTES:

1. Main Heater and Sub Heater separately controls temperature by Front Thermistor and Rear Thermistor. Target temperature is different between at front and at rear.
2. When Front Thermistor or Rear Thermistor detects an abnormal temperature, AC power to Heater Rod is cut off.
3. SSR has the internal zerocross phase circuit for zerocross processing.
4. The target for detection is internally switched between open wire and abnormal temperature.
5. Virtual Line
- TD 1: Test Point: P600-4(+) to P600-6(-) Hot: approx. 1.5Kohms, Cold: approx. 98Kohms
- TD 2: Test Point: P600-7(+) to P600-9(-) Hot: approx. 1.5Kohms, Cold: approx. 98Kohms

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Figure 1 Fusing Heat Control (1 of 2)

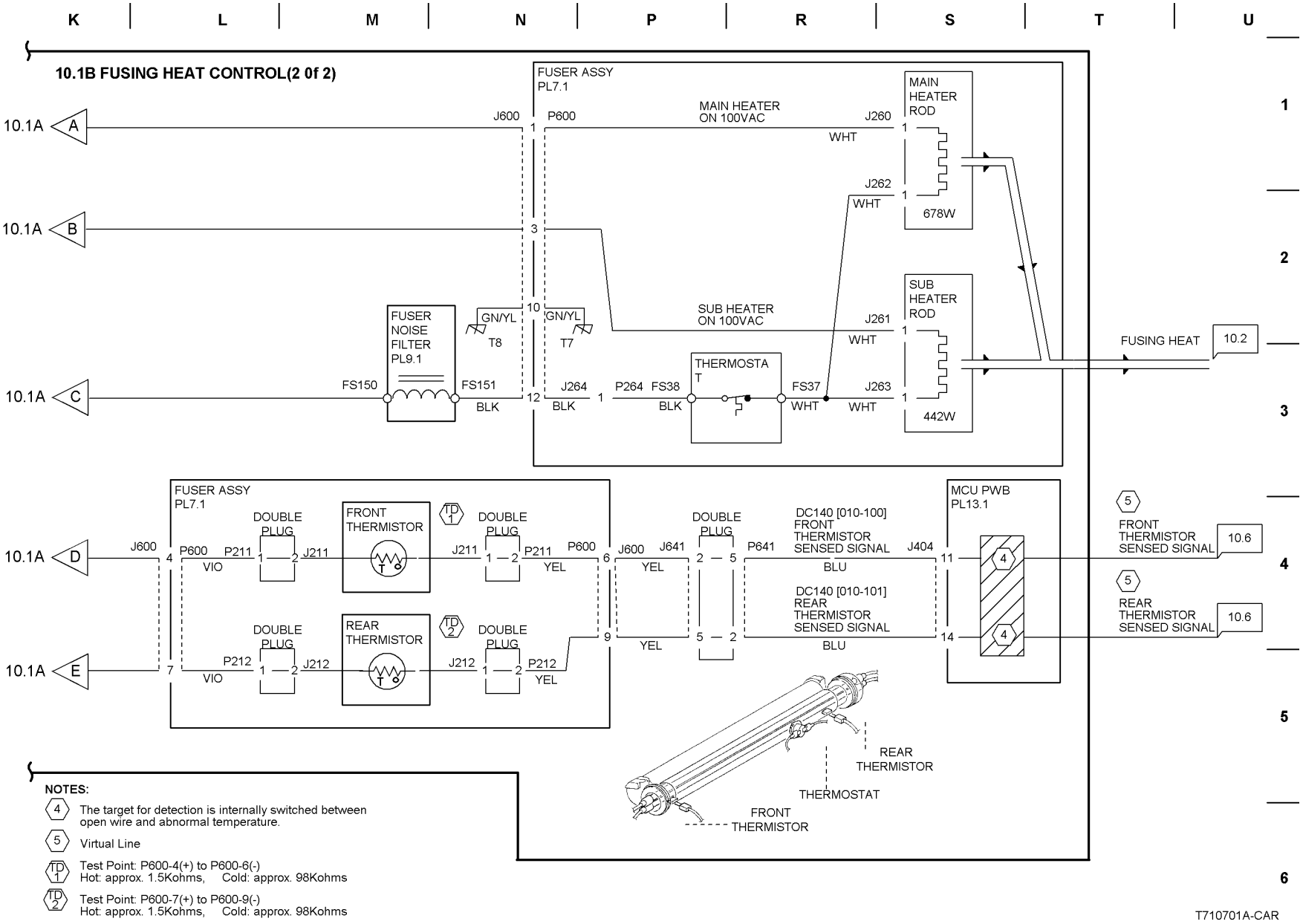
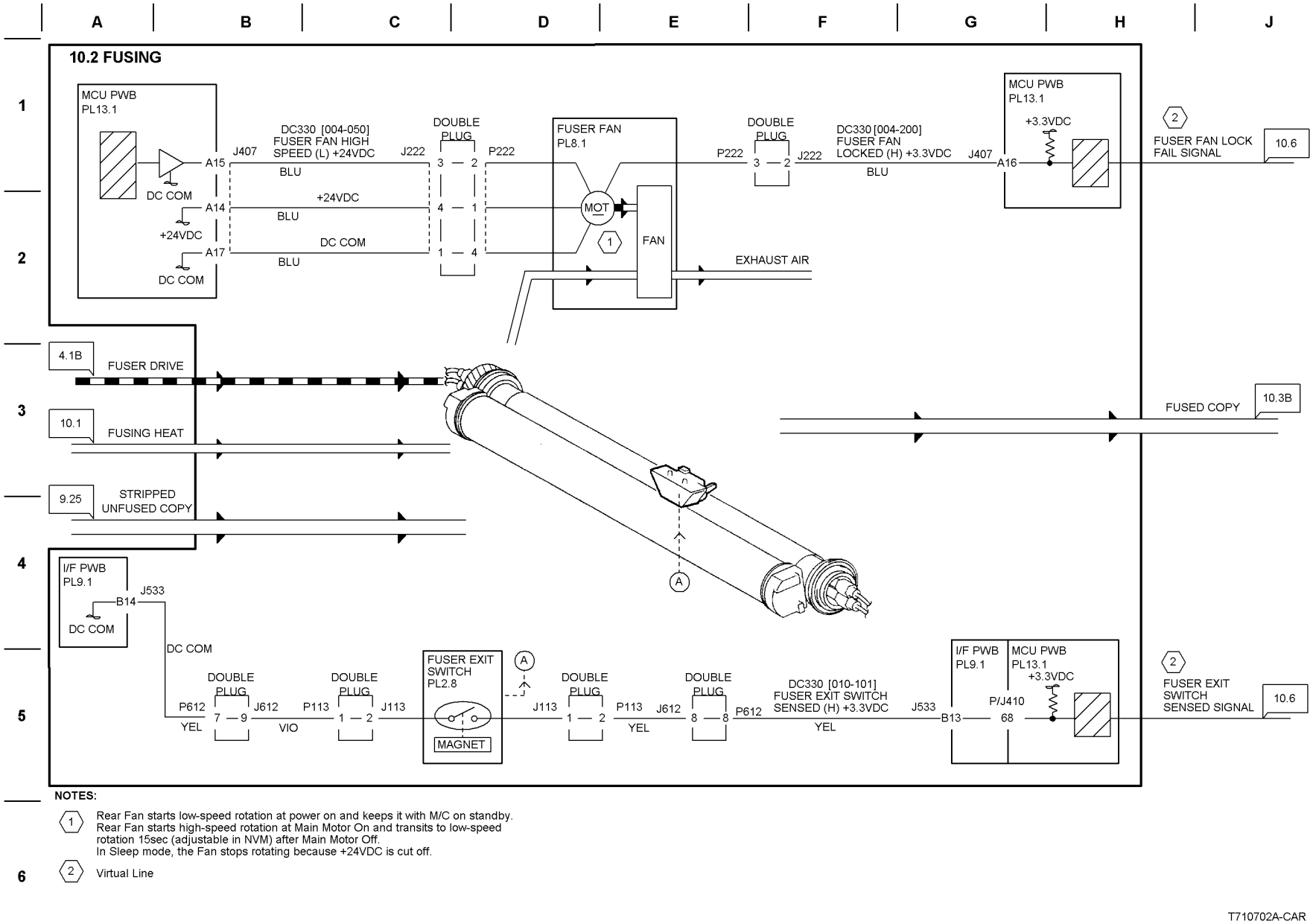


Figure 2 Fusing Heat Control (2 of 2)



NOTES:

1. Rear Fan starts low-speed rotation at power on and keeps it with M/C on standby. Rear Fan starts high-speed rotation at Main Motor On and transits to low-speed rotation 15sec (adjustable in NVM) after Main Motor Off. In Sleep mode, the Fan stops rotating because +24VDC is cut off.
2. Virtual Line

Figure 3 Fusing

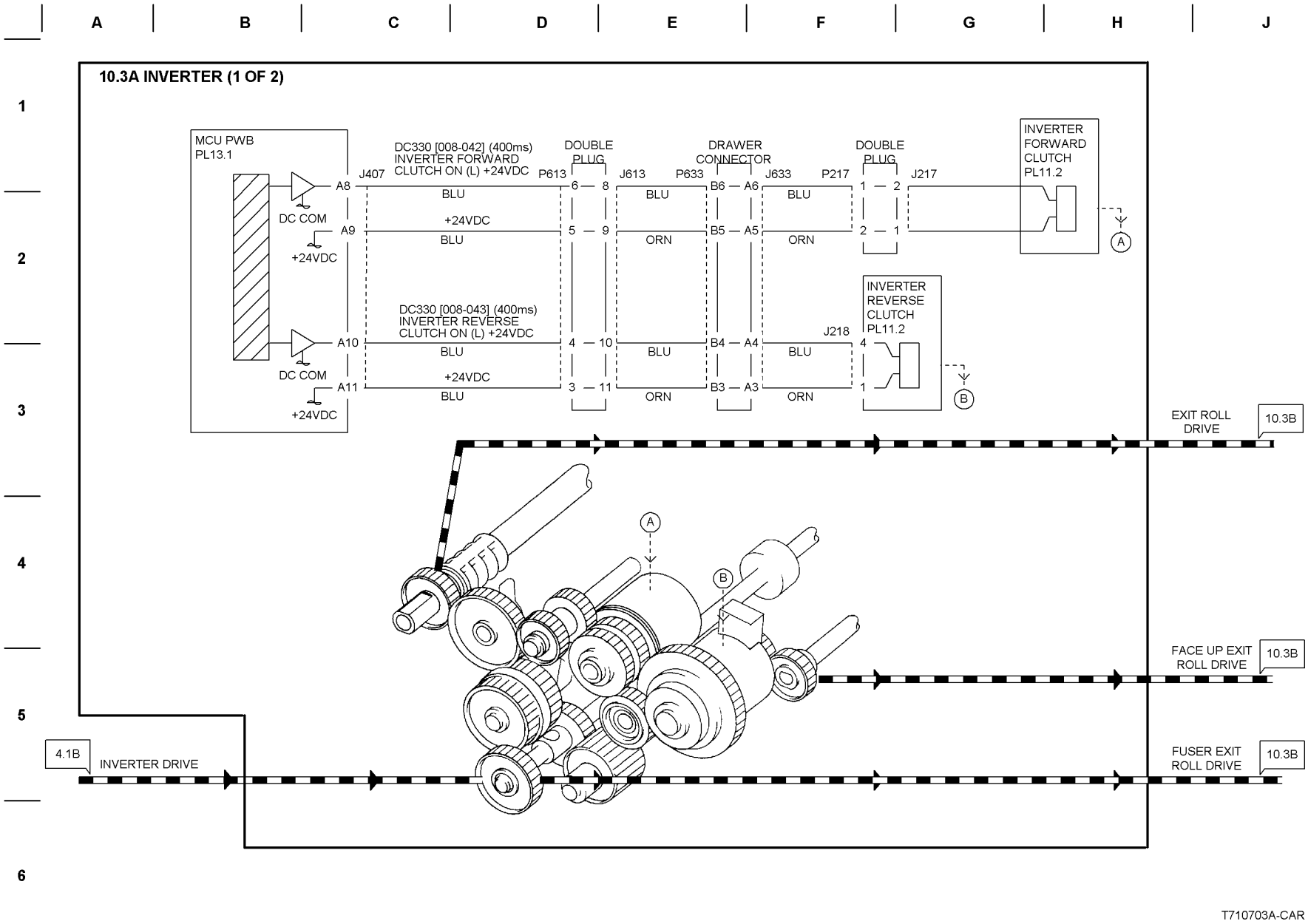


Figure 4 Inverter (1 of 2)

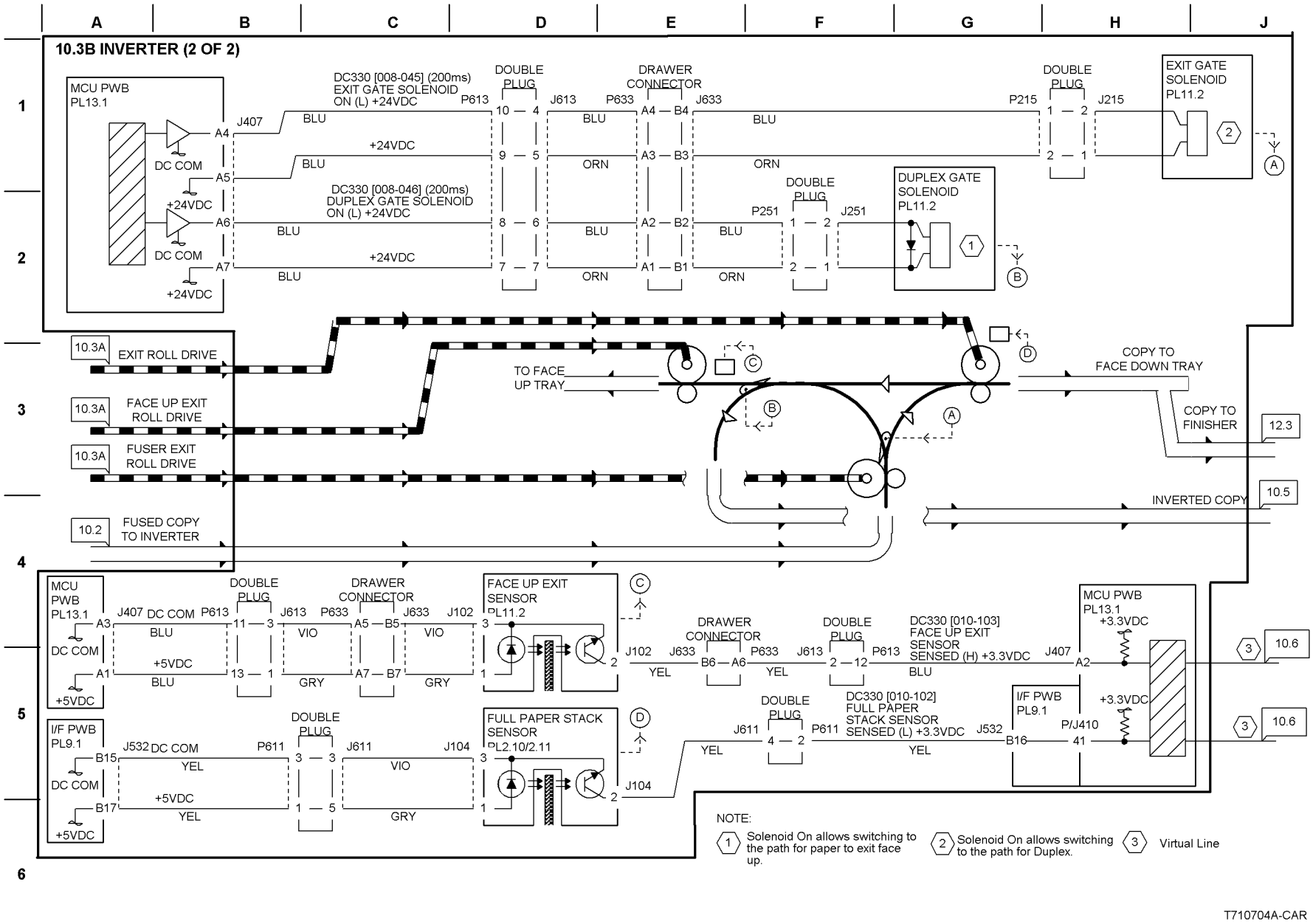
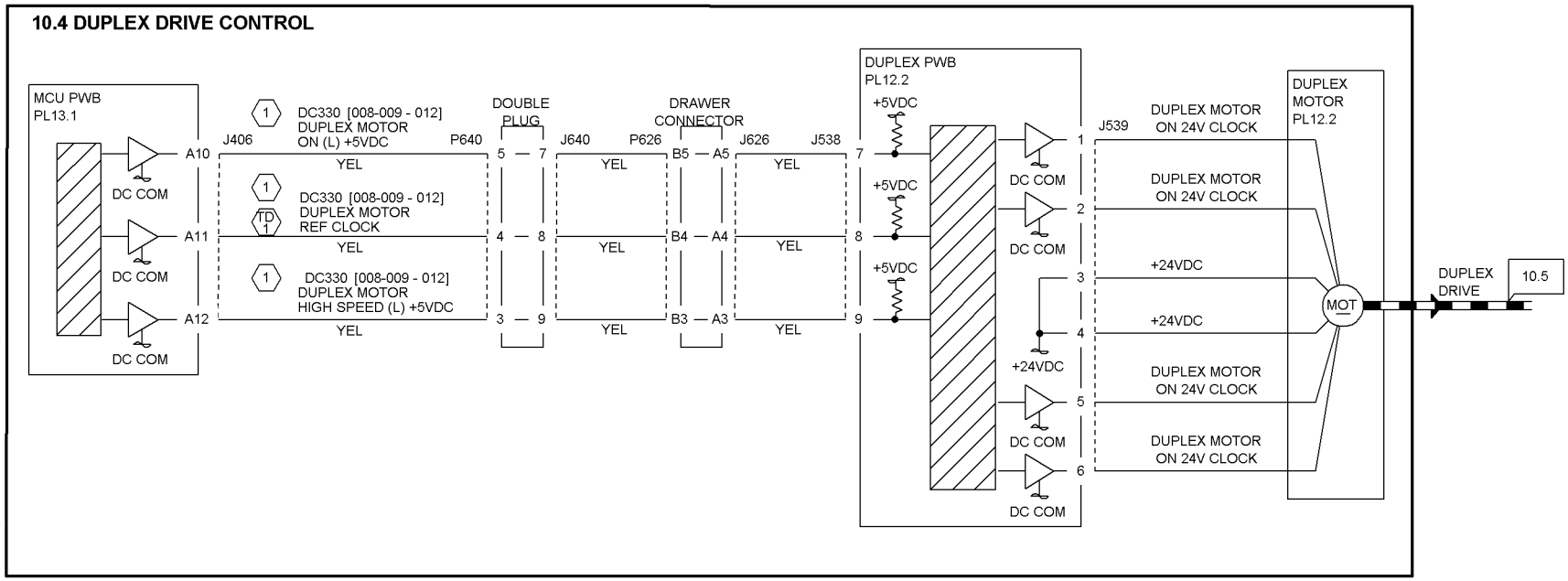


Figure 5 Inverter (2 of 2)



NOTE:

1 Operation speed and duration vary according to diag code.

DUPLEX MOTOR	Operation Speed	Operation duration
DC330 [008-009]	200mm/sec	1000ms
DC330 [008-010]	104mm/sec	1000ms
DC330 [008-011]	200mm/sec	Long
DC330 [008-012]	104mm/sec	Long

TD 1 Test Point: P600-4(+) to P600-6(-) a frequency of approx. 2.1KHz

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Figure 6 Duplex Drive Control

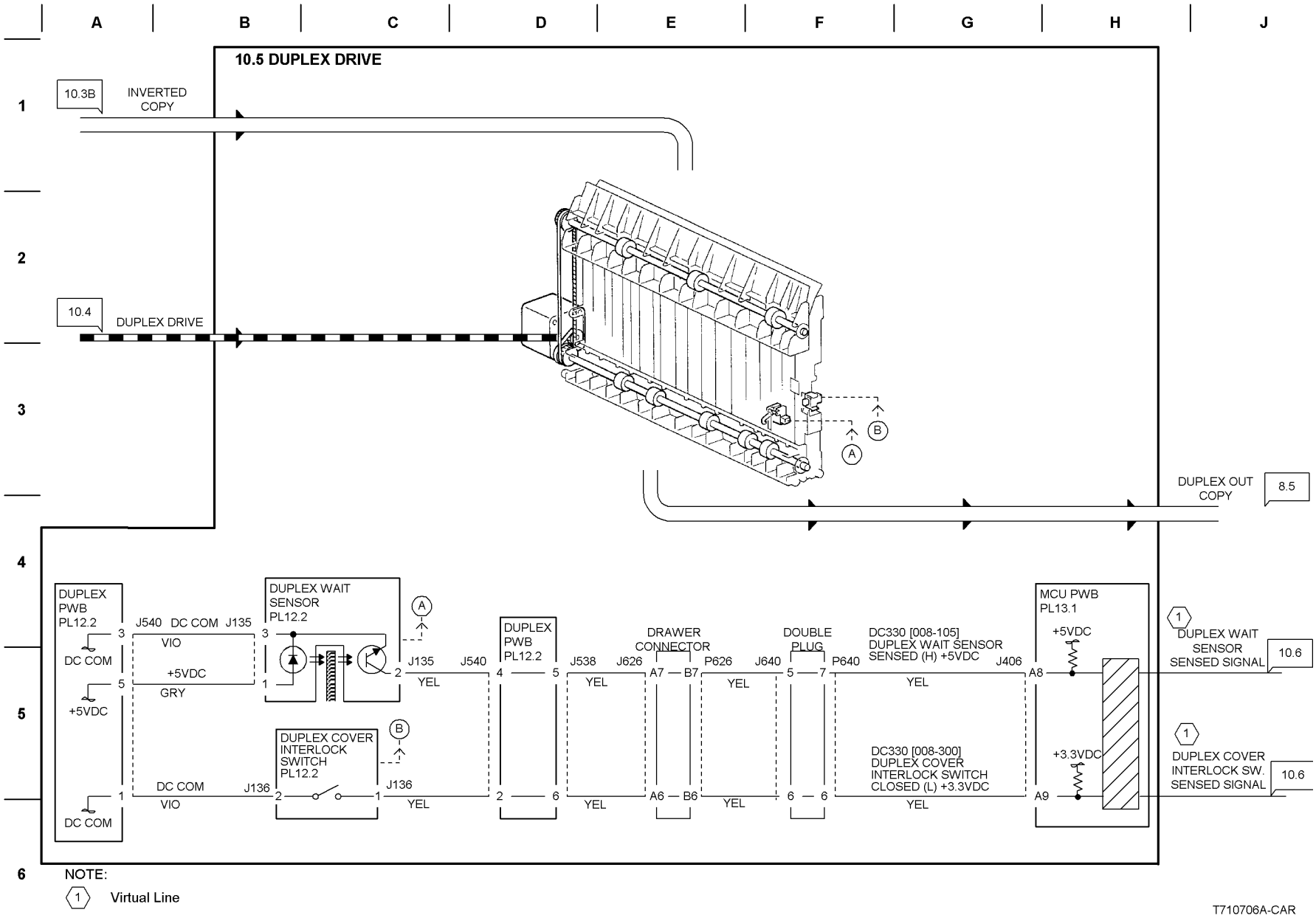


Figure 7 Duplex Drive

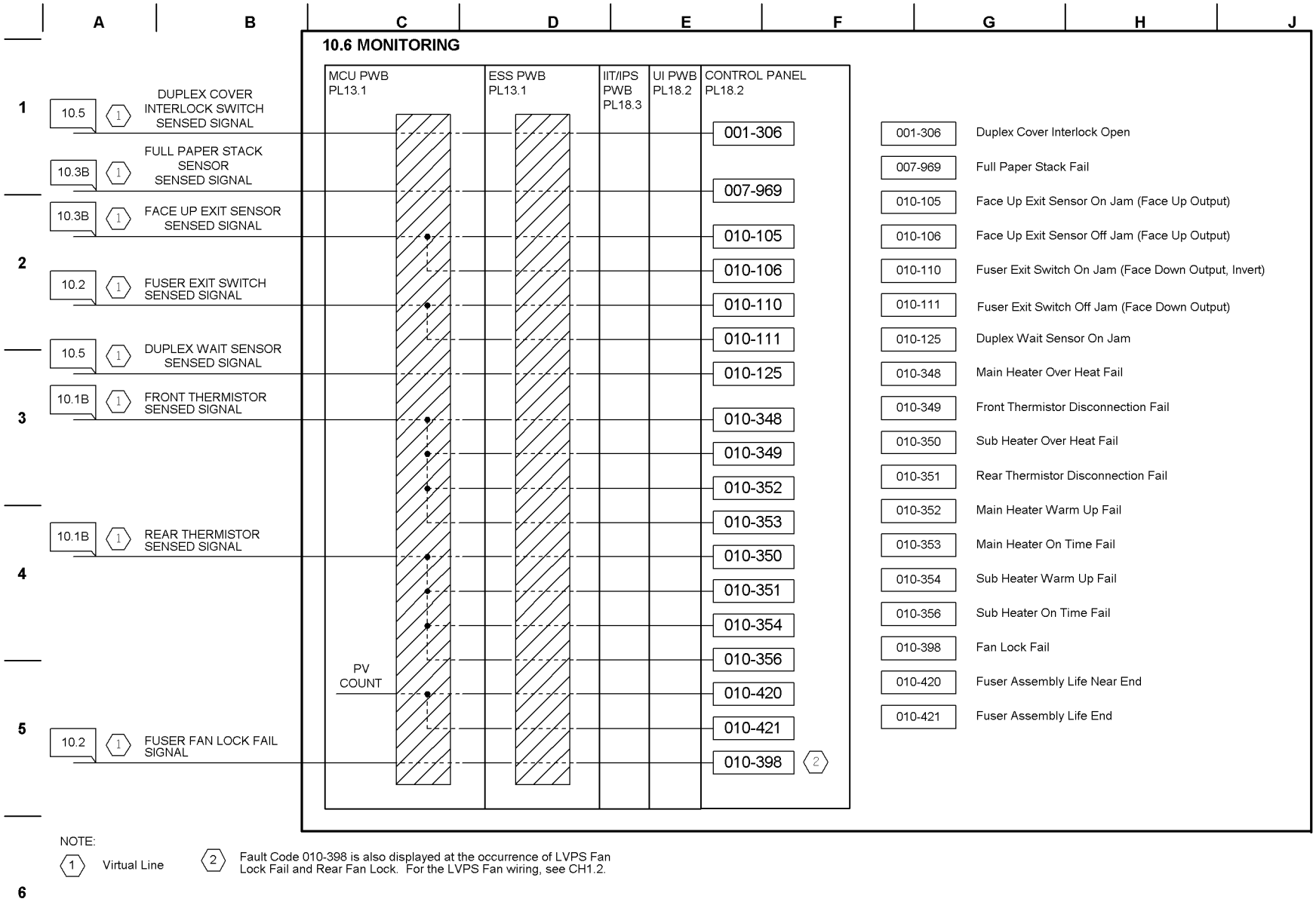


Figure 8 Monitoring

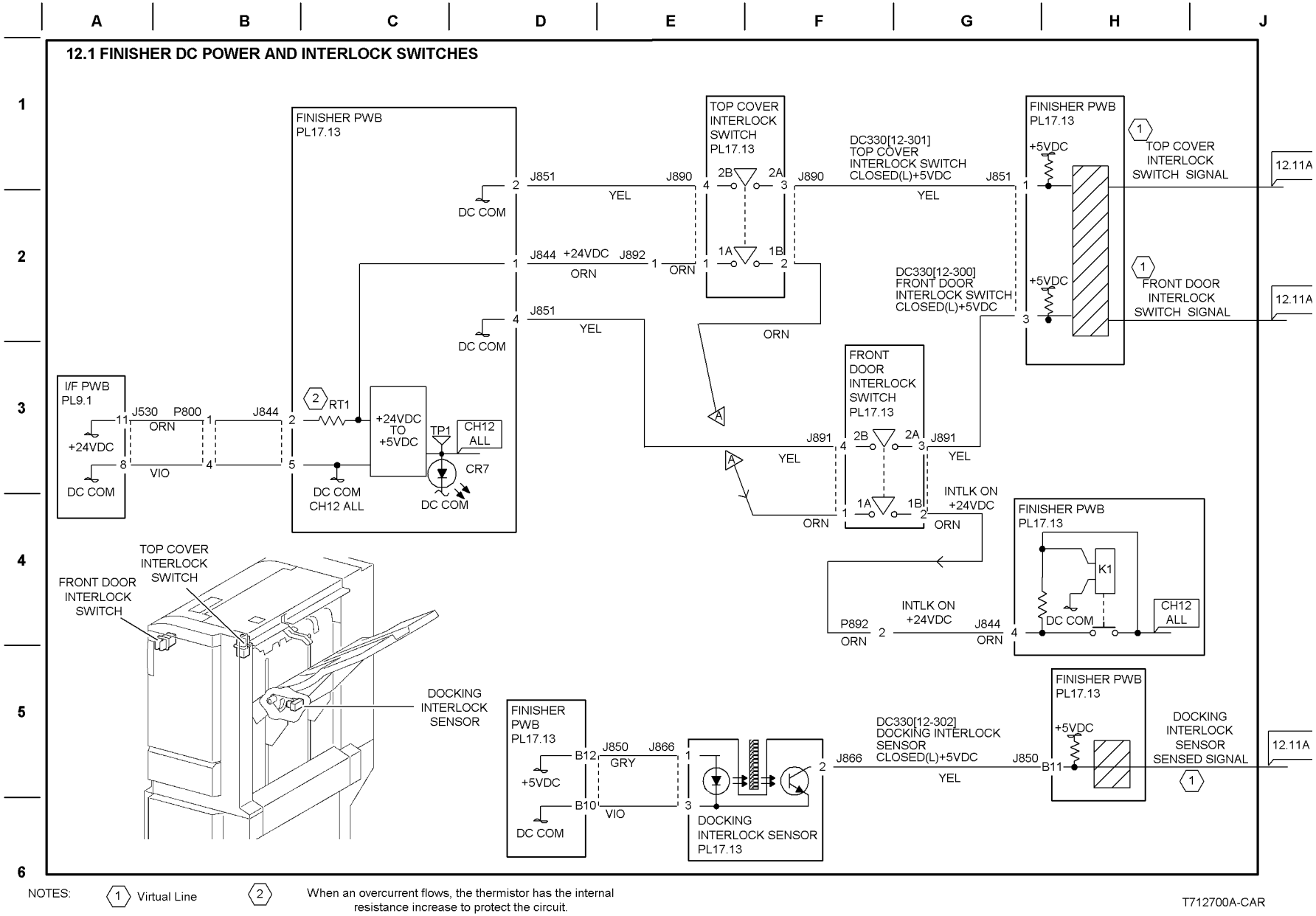


Figure 1 DC Power and Interlocks

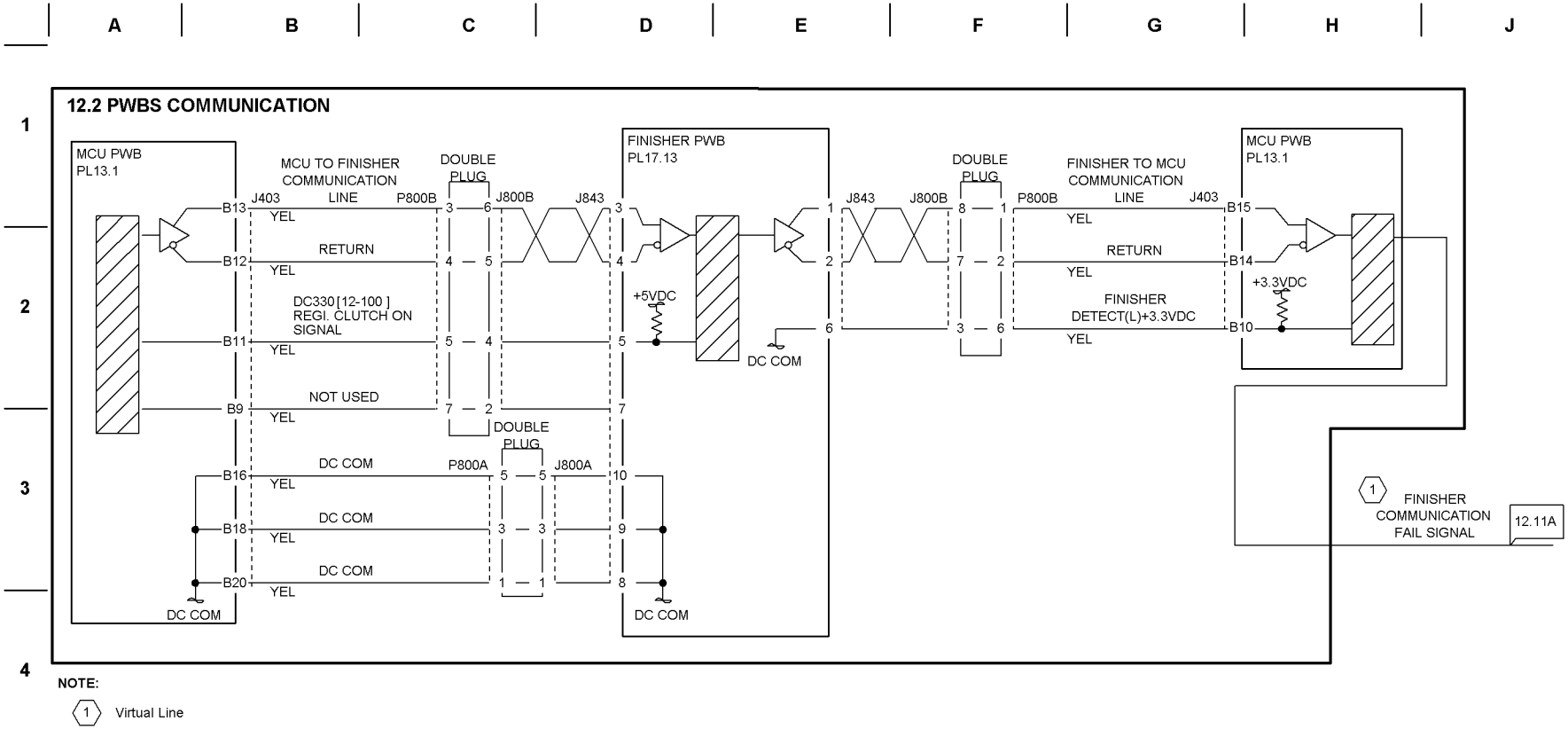


Figure 2 PWBS Communications

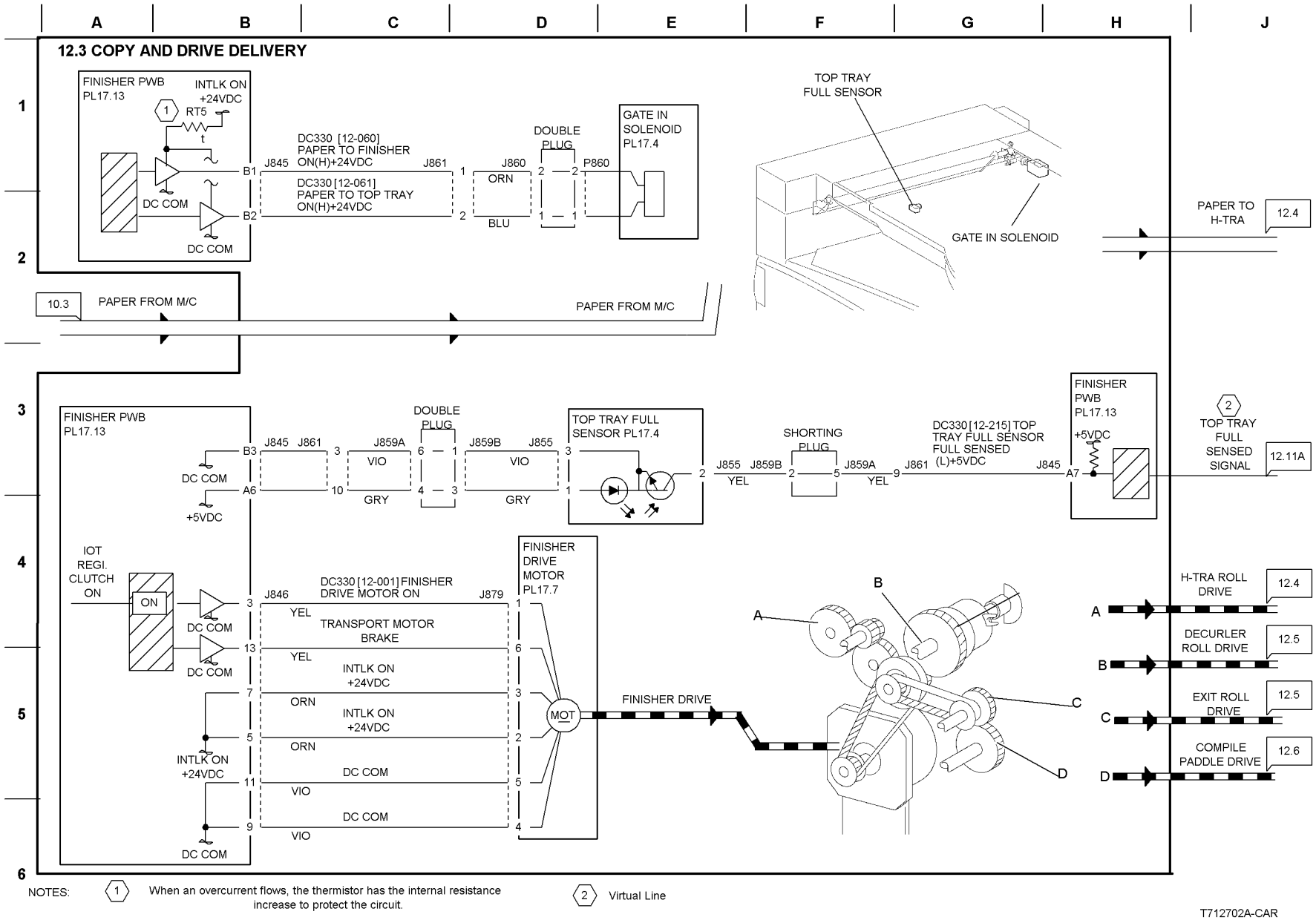


Figure 3 Copy and Drive Delivery

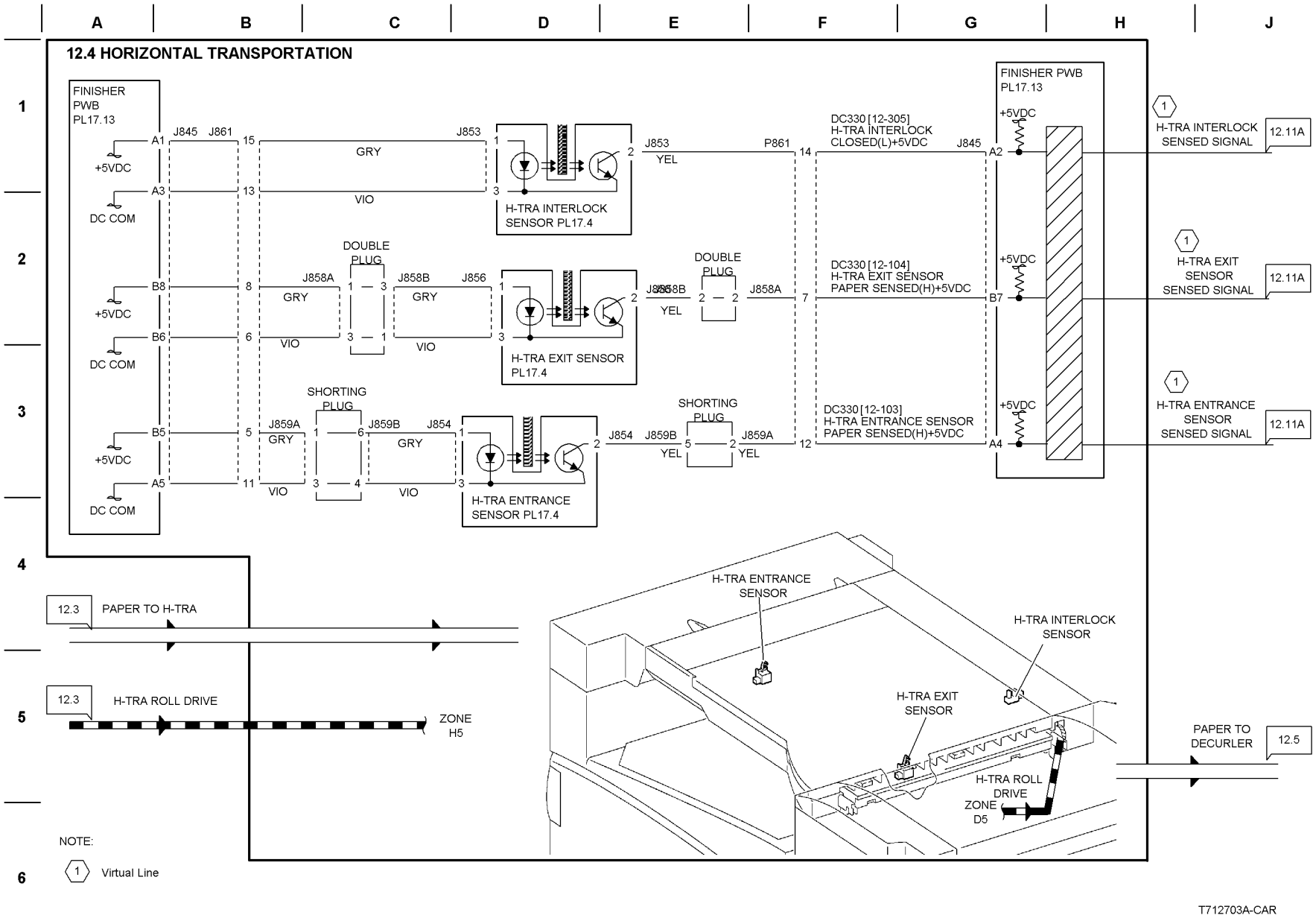


Figure 4 Horizontal Transportation

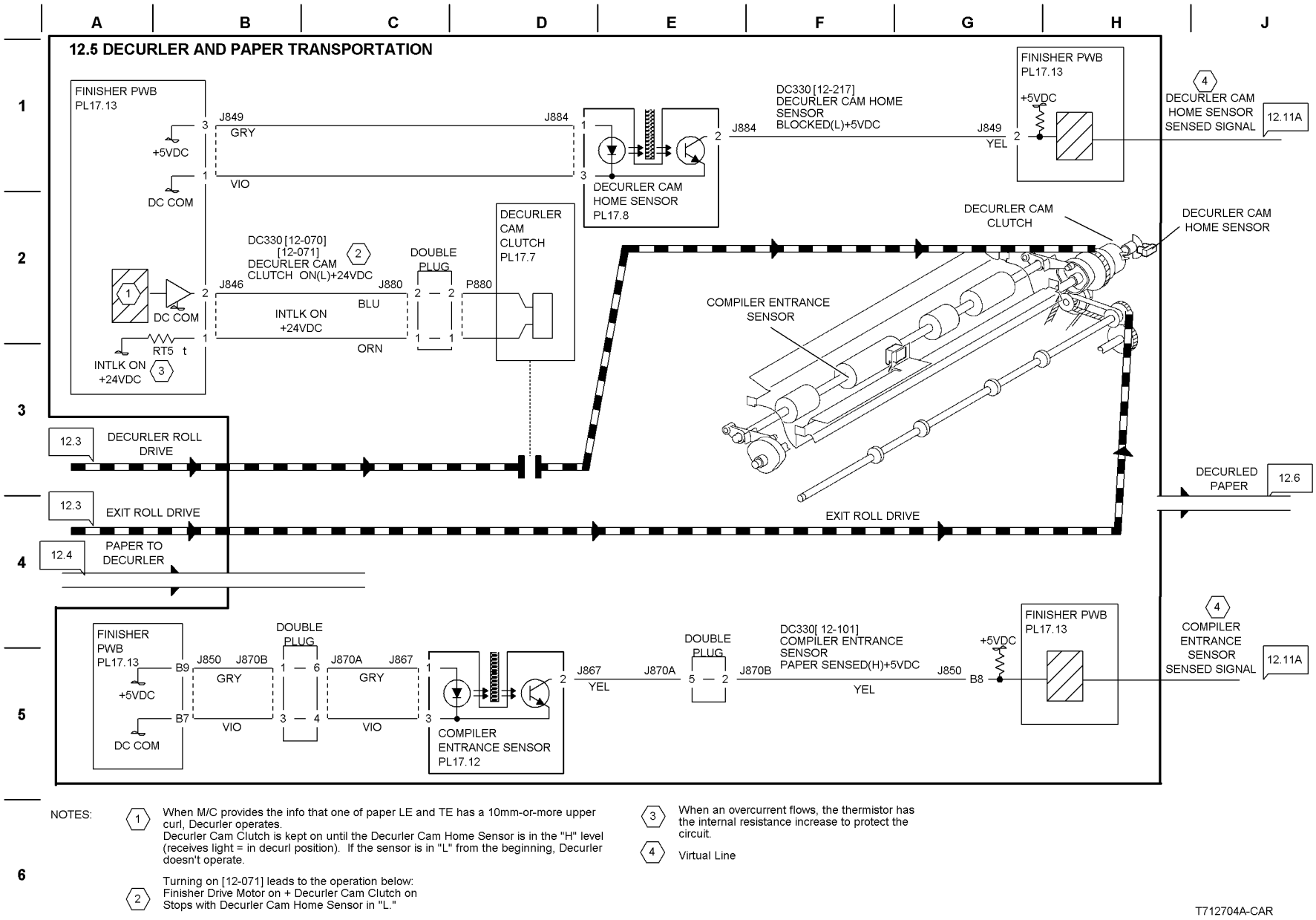


Figure 5 Decurler and Paper Transportation

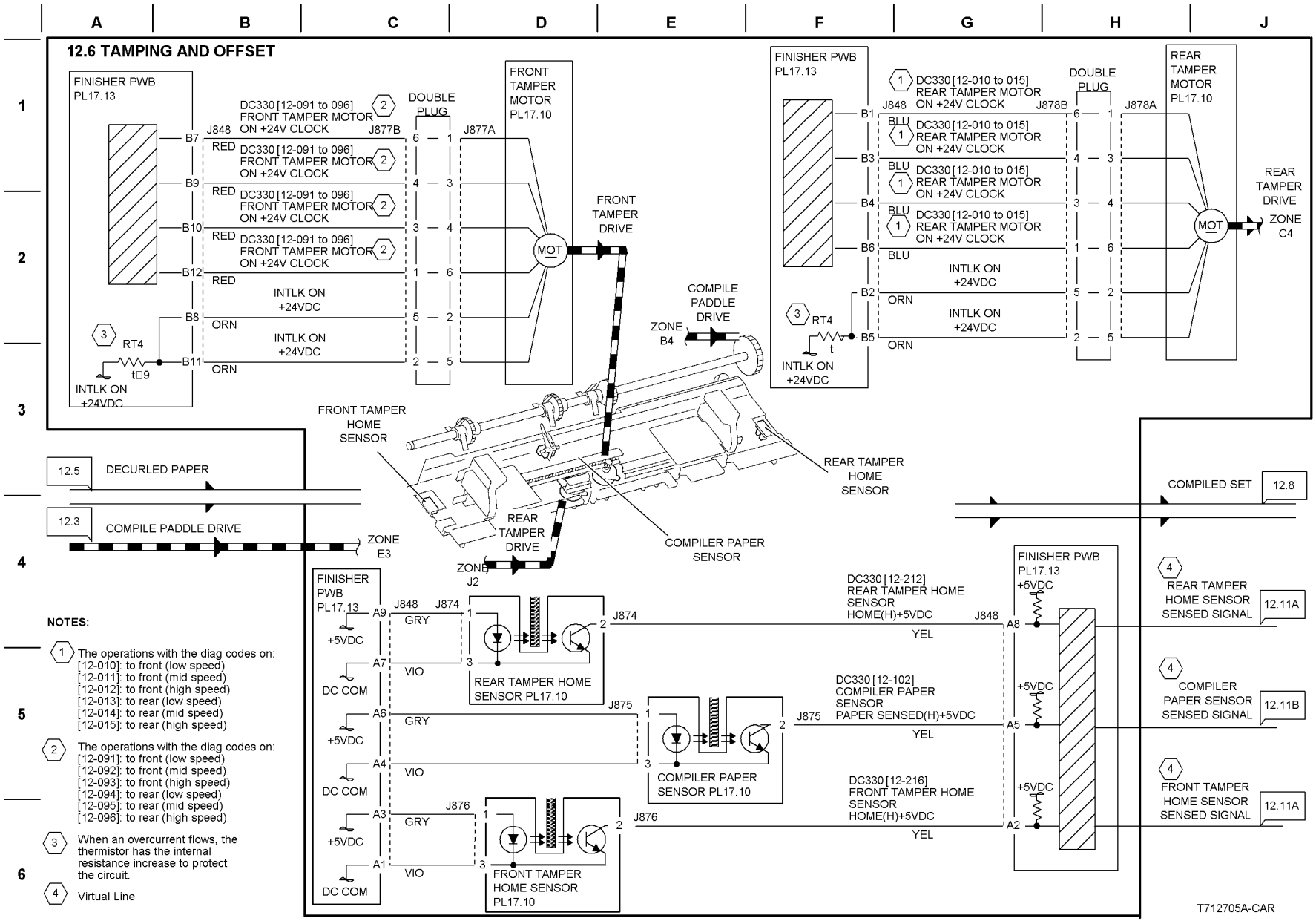
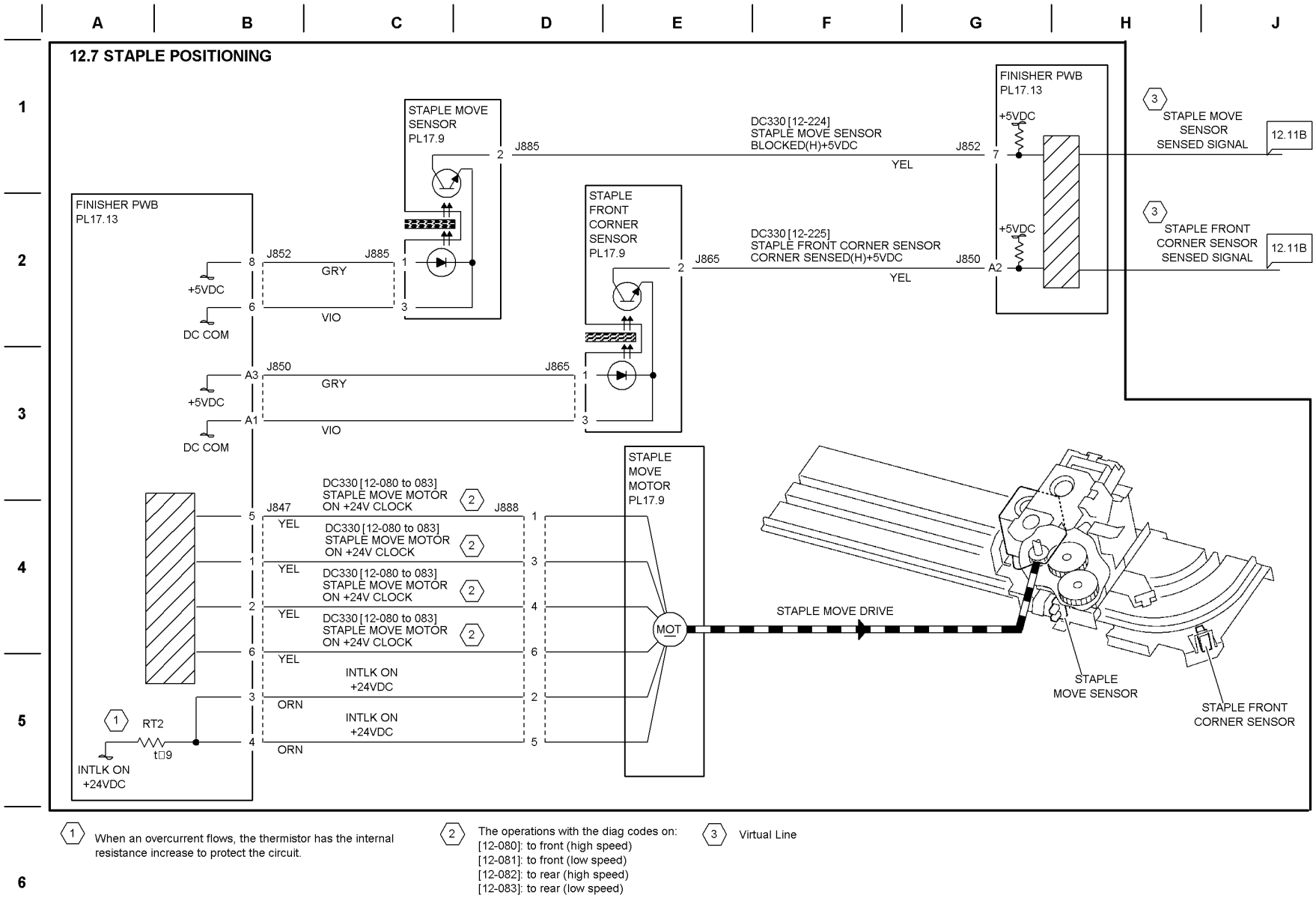


Figure 6 Tamping and Offset



1 When an overcurrent flows, the thermistor has the internal resistance increase to protect the circuit.

2 The operations with the diag codes on:
[12-080]: to front (high speed)
[12-081]: to front (low speed)
[12-082]: to rear (high speed)
[12-083]: to rear (low speed)

3 Virtual Line

Figure 7 Staple Positioning

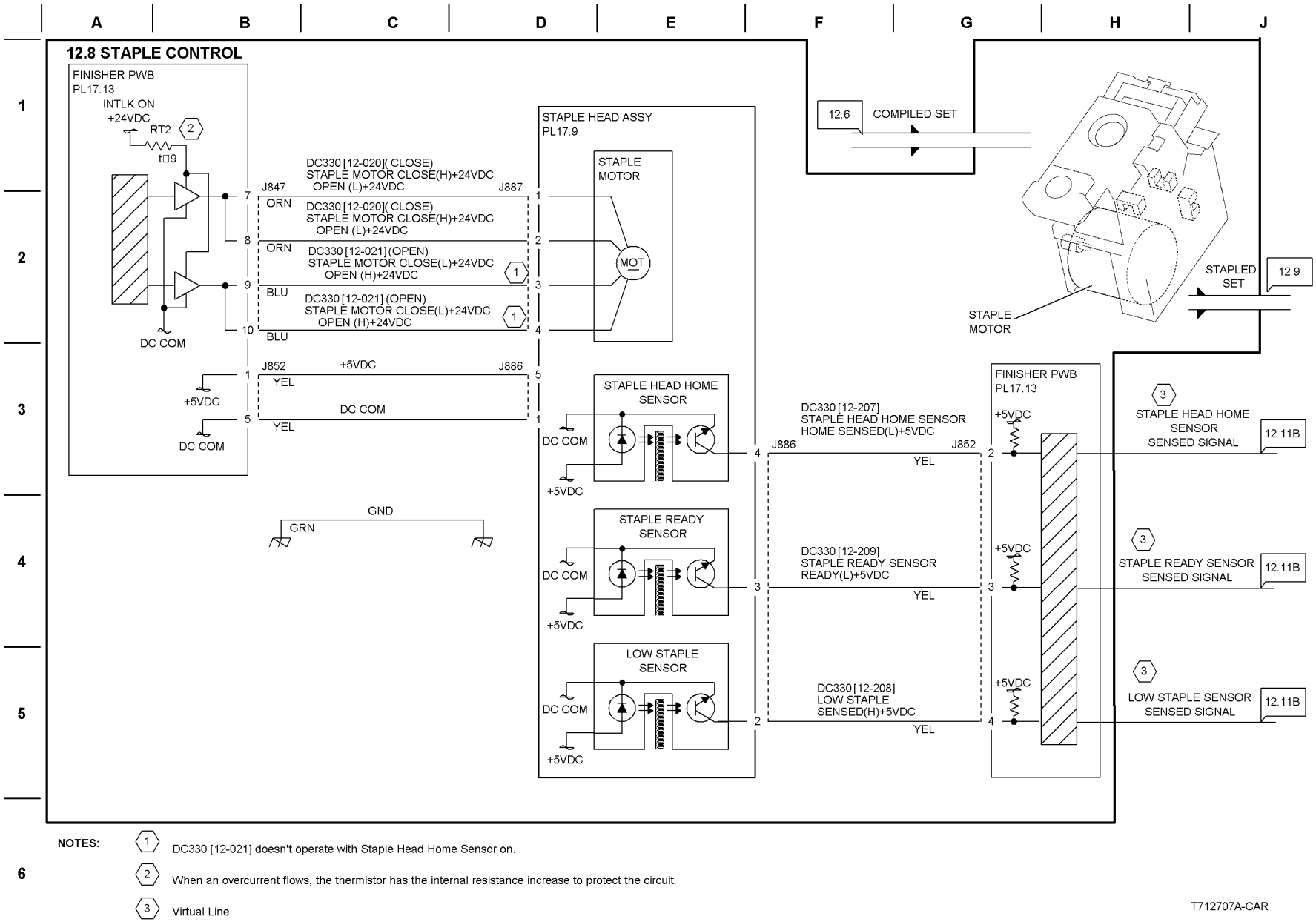


Figure 8 Staple Control

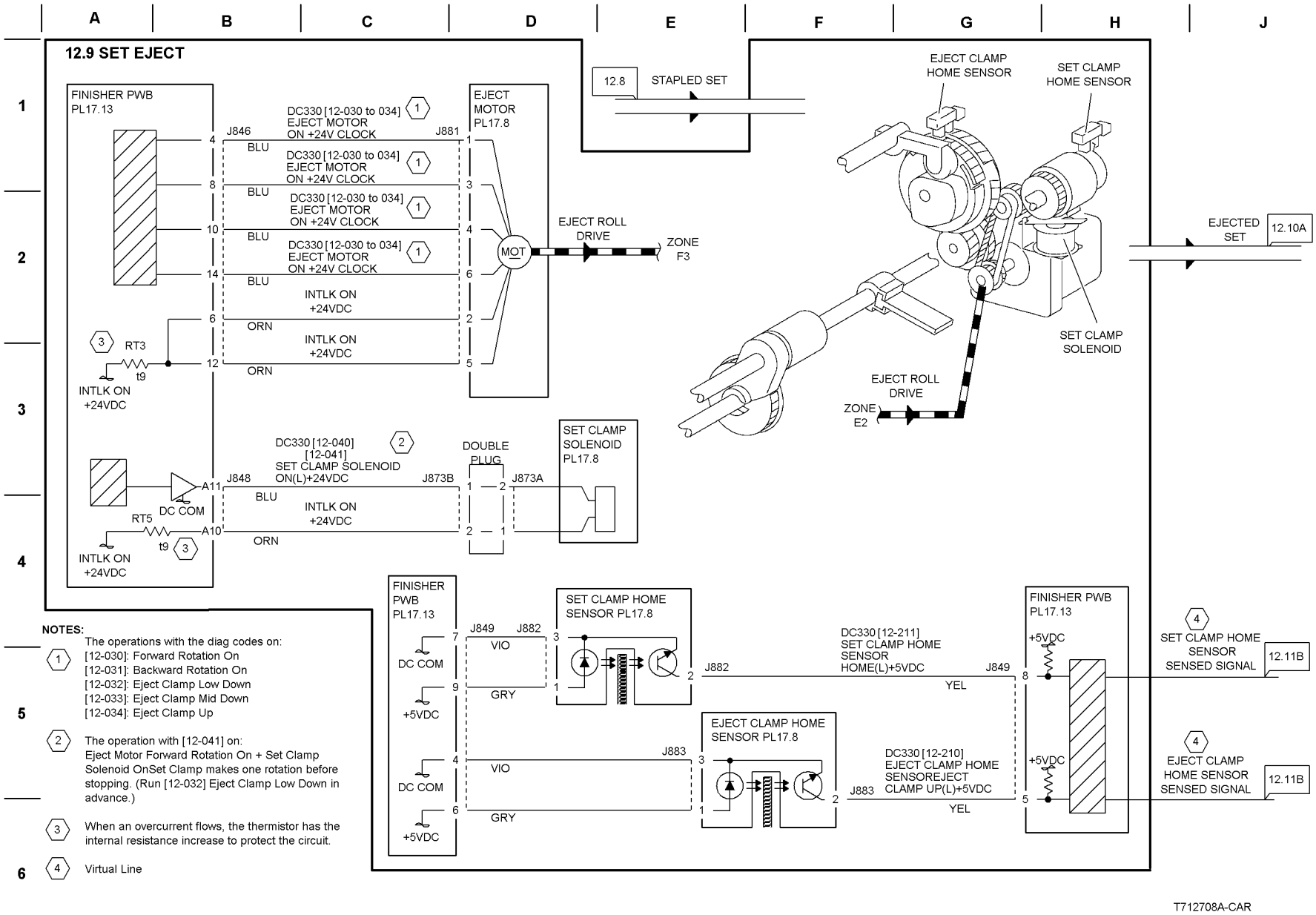


Figure 9 Set Eject

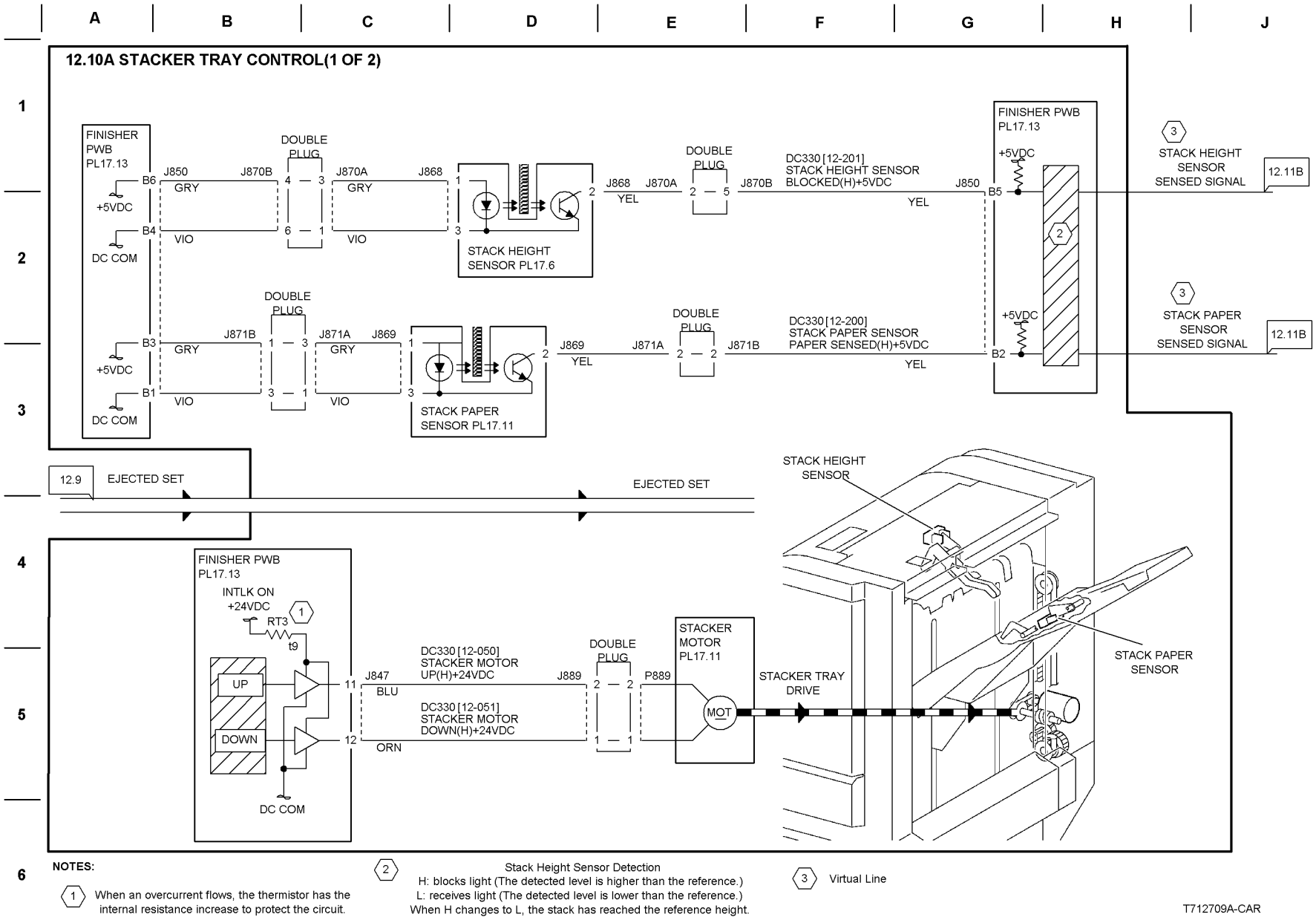


Figure 10 stacker Tray Control (1 of 2)

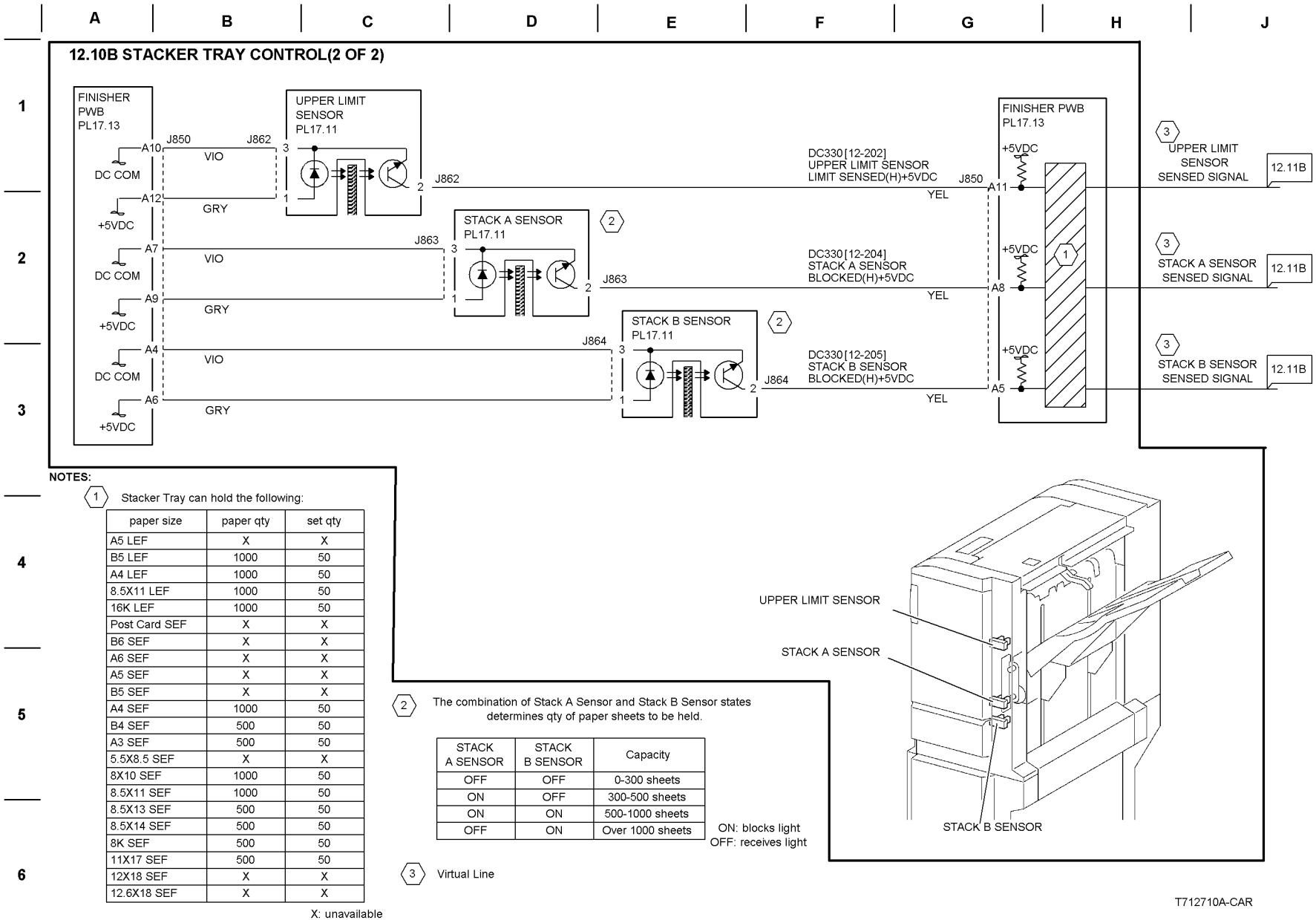


Figure 11 Stacker Tray Control (2 of 2)

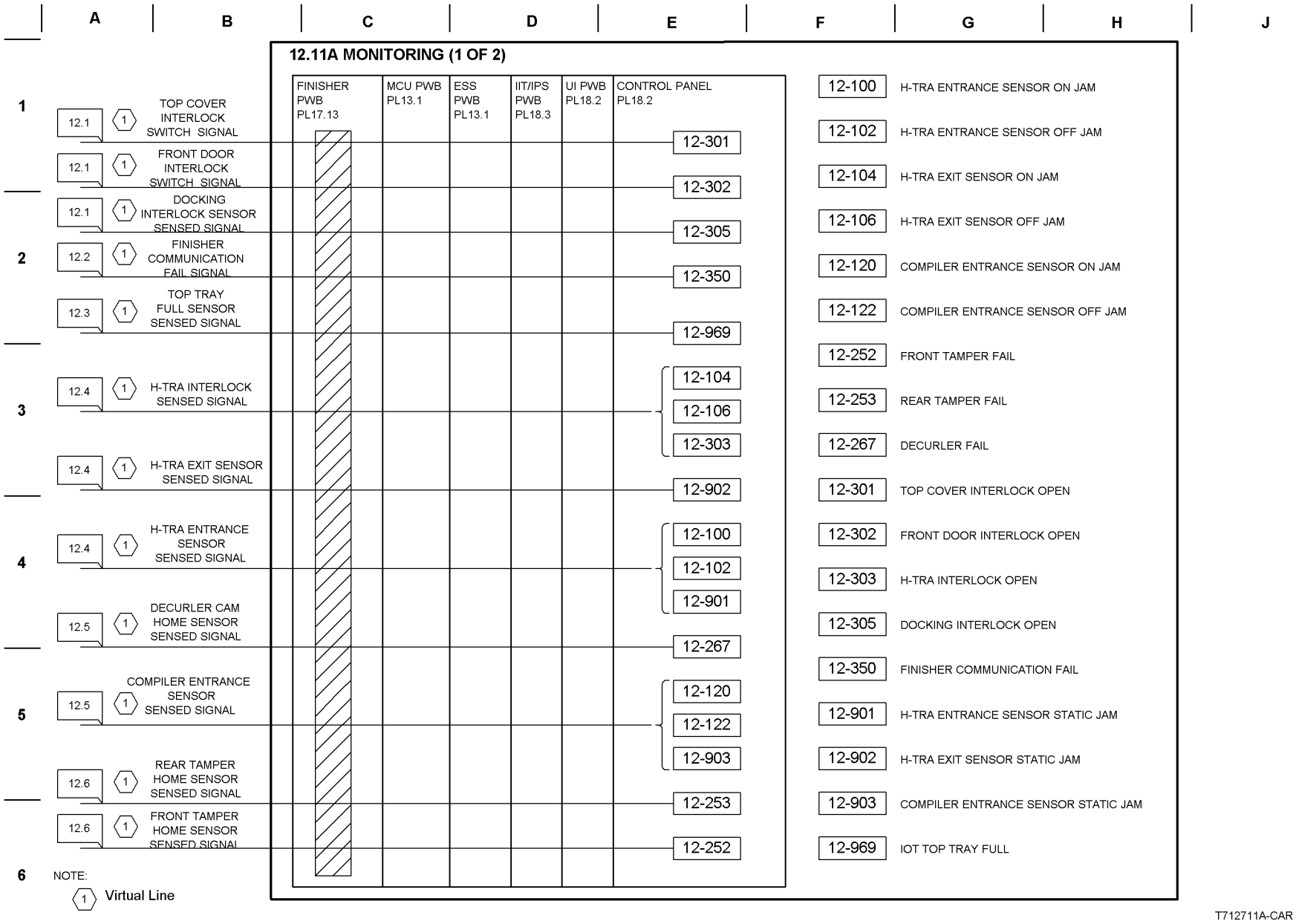


Figure 12 Monitoring (1 0f 2)

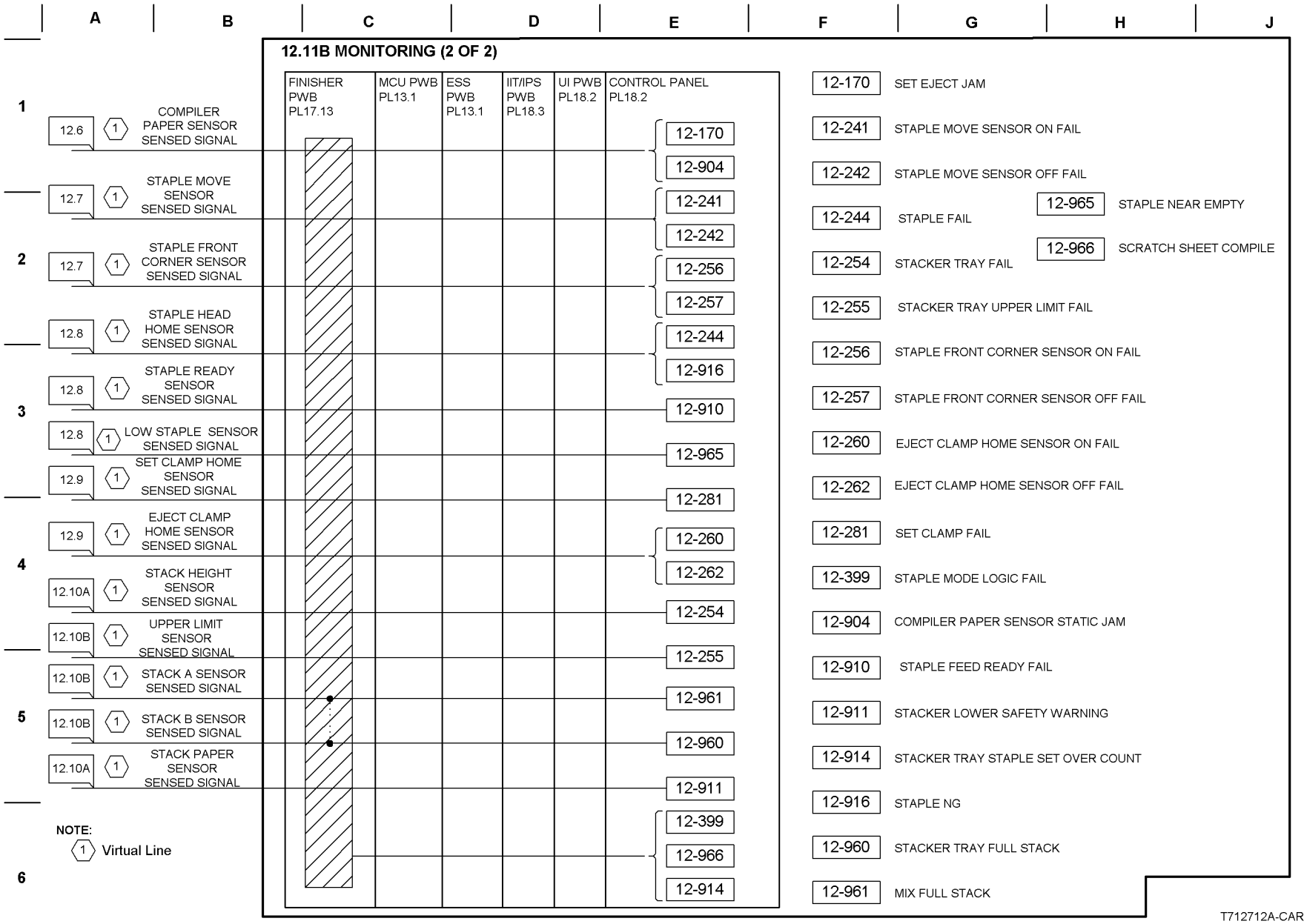


Figure 13 Monitoring (2 0f 2)

Chain 16 ESS

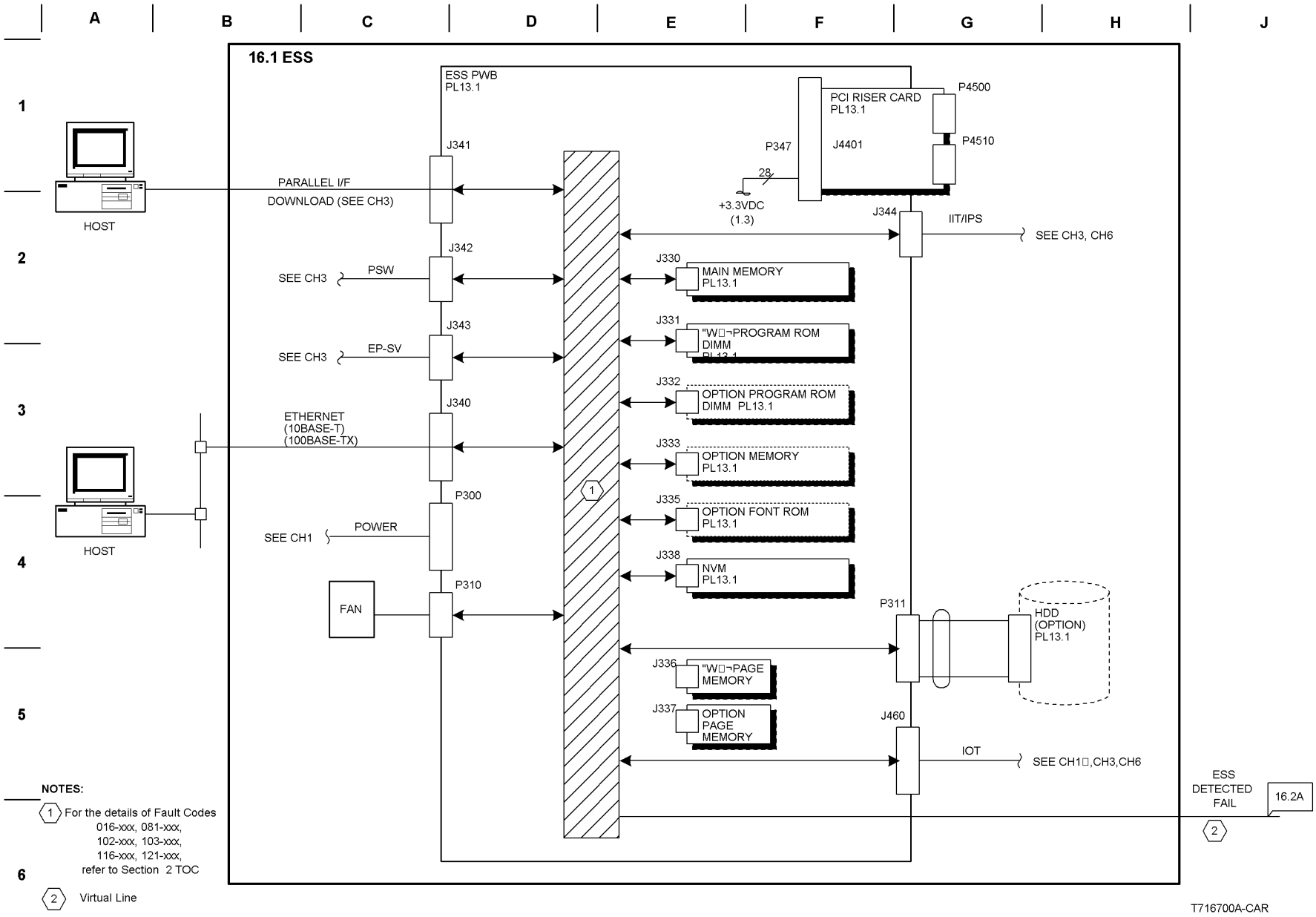


Figure 1 ESS PWB

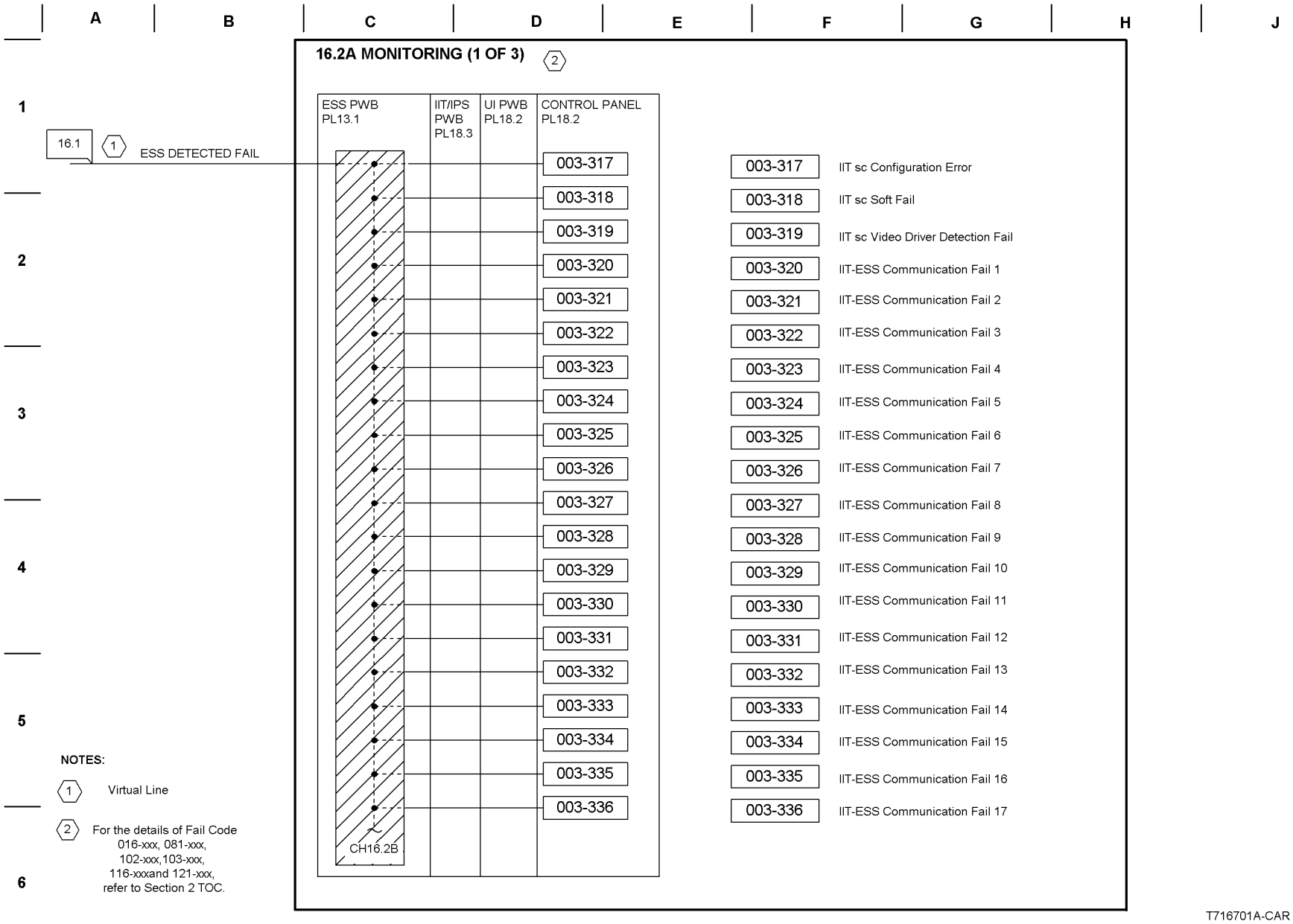


Figure 2 ESS Monitoring (1 of 3)

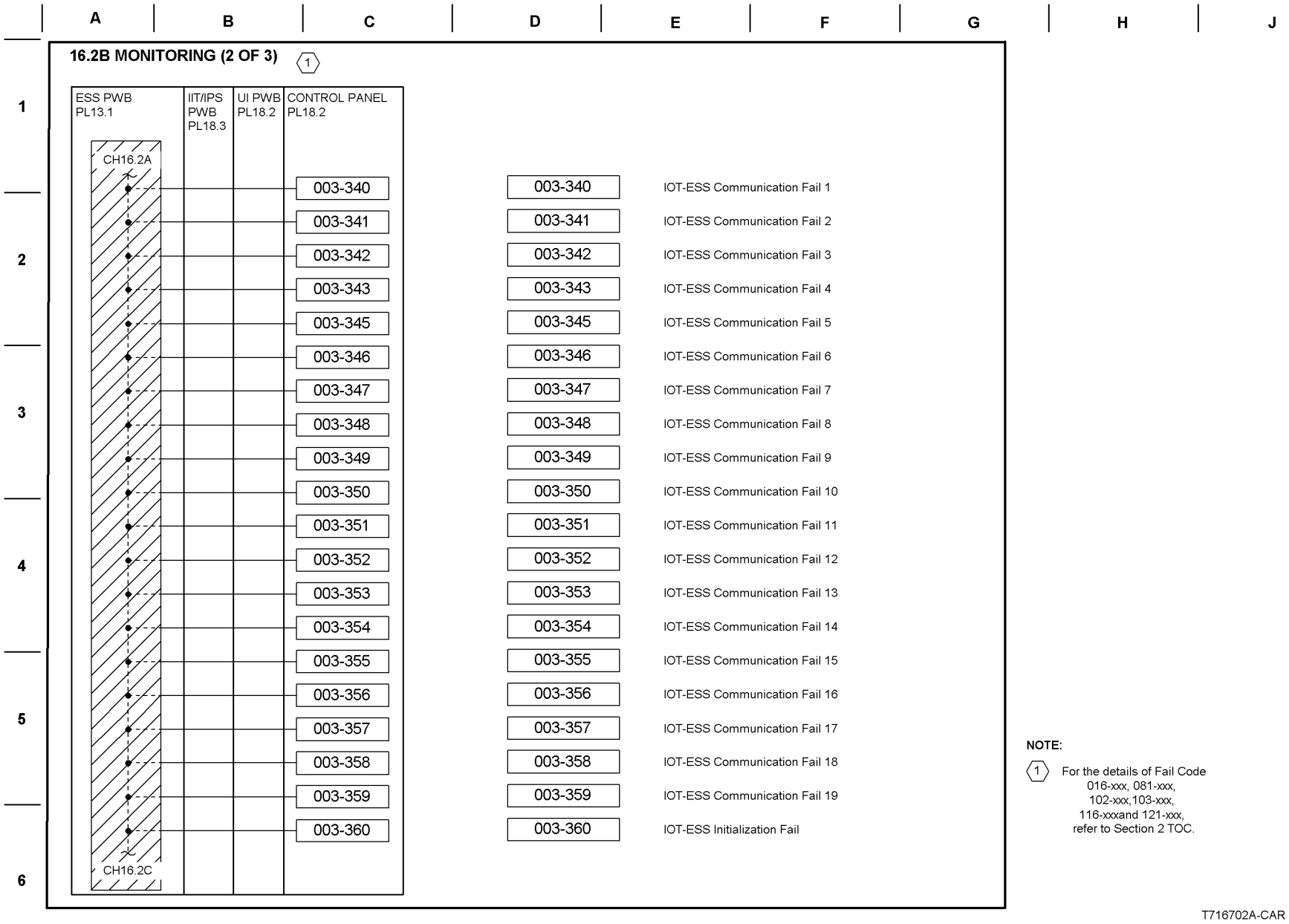
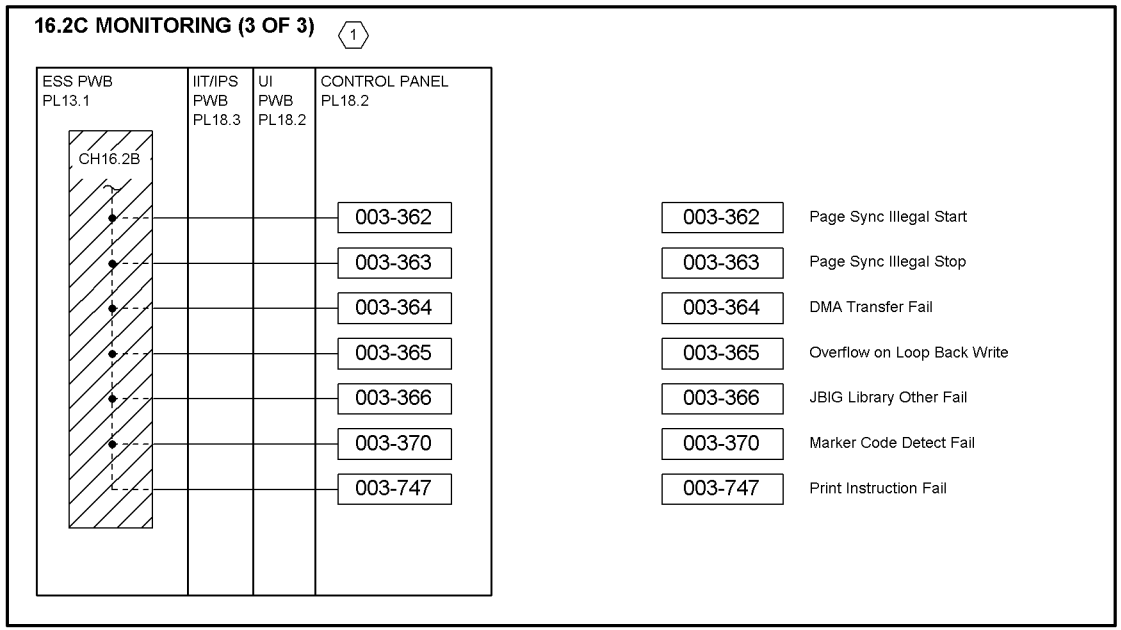


Figure 3 ESS Monitoring (2 of 3)



NOTE:

1. For the details of Fail Code 016-xxx, 081-xxx, 102-xxx, 103-xxx, 116-xxxand 121-xxx, refer to Section 2 TOC.

T716703A-CAR

Figure 4 ESS Monitoring (3 of 3)