Tests Prints, Adjustments, and NVRAM Reset

Section Contents

Service Test Prints

There are two test prints stored in the printer that are primarily intended for service use. One is the Test Print that is accessible from the printer's Printable Pages Menu when you select **`Print Test Prints`**. The other is the Engine Test Print, which is stored in the Engine Logic Board and is accessible through the Engine Test Print menu in Service Diagnostics.

Test Print

This page of blocks, lines, patterns, and text provides an aid in evaluating the quality of printing and in making registration adjustments. The use of the Test Print in evaluating image quality is covered in detail in Image-Quality Checkout Procedures on page 3-41.

> *Note:* **Insure that Edge-to-edge printing is set to OFF in the PCL Job Defaults Menu before starting the Test Print. Otherwise, the image will be shifted left.**

The printer prints the Test Print in accordance with the defaults established in the `Job Defaults Menu`. To set the Job Defaults:

1. Select the `Printer Setup Menu` and press **OK**.
2. Select the `Job Defaults Menu` and press **OK**.
3. Select the print parameter that you want to set or change and press **OK**.
   In most cases, you are prompted to choose from several alternatives, such as choosing the input tray. In other cases, `Job Offset` for instance (if optional Stacker is installed), pressing **OK** toggles the setting from its current state, either from Off to On, or from On to Off. When you set the quantity, it is for a number of image pairs. When Duplexing is off, selecting a quantity of 5 prints ten single-sided prints. When duplexing is on, selecting a quantity of 5 prints five double-sided prints.
4. When you have finished setting all the parameters, scroll to `Exit` and press **OK** to return the printer to the Ready state.
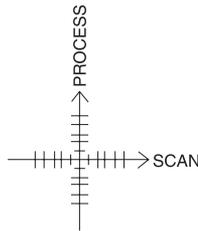
To print the Test Print:

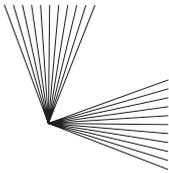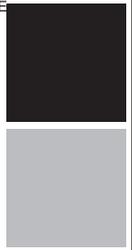1. Select `Printable Pages Menu` from the Main Menu and press **OK**.
2. Select `Print Test Prints` and press **OK**. The printer automatically prints two images.

> *Note:* **If you changed the print quantity, be sure to set it back to 1**
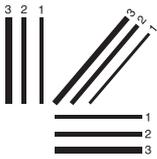
LEAD EDGE

Test Print
Phaser4400-011028-2-S
8.5x11 (SEF)

PROCESS

SCAN

We conduct many of
ever, these mail s
coverage. Would yo
your time to read
survey has been de
time and effort. T
test pattern, a qu
envelope are enclo

We conduct many of
ever, these mail s
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time and effort. T
test pattern, a qu
envelope are enclo
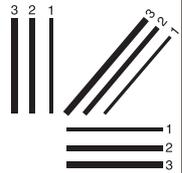
s4400_217

Engine Test Print

The Engine Test Print is stored on the Engine Logic Board and is used for checking the functionality of various print engine components and for making the registration adjustment.
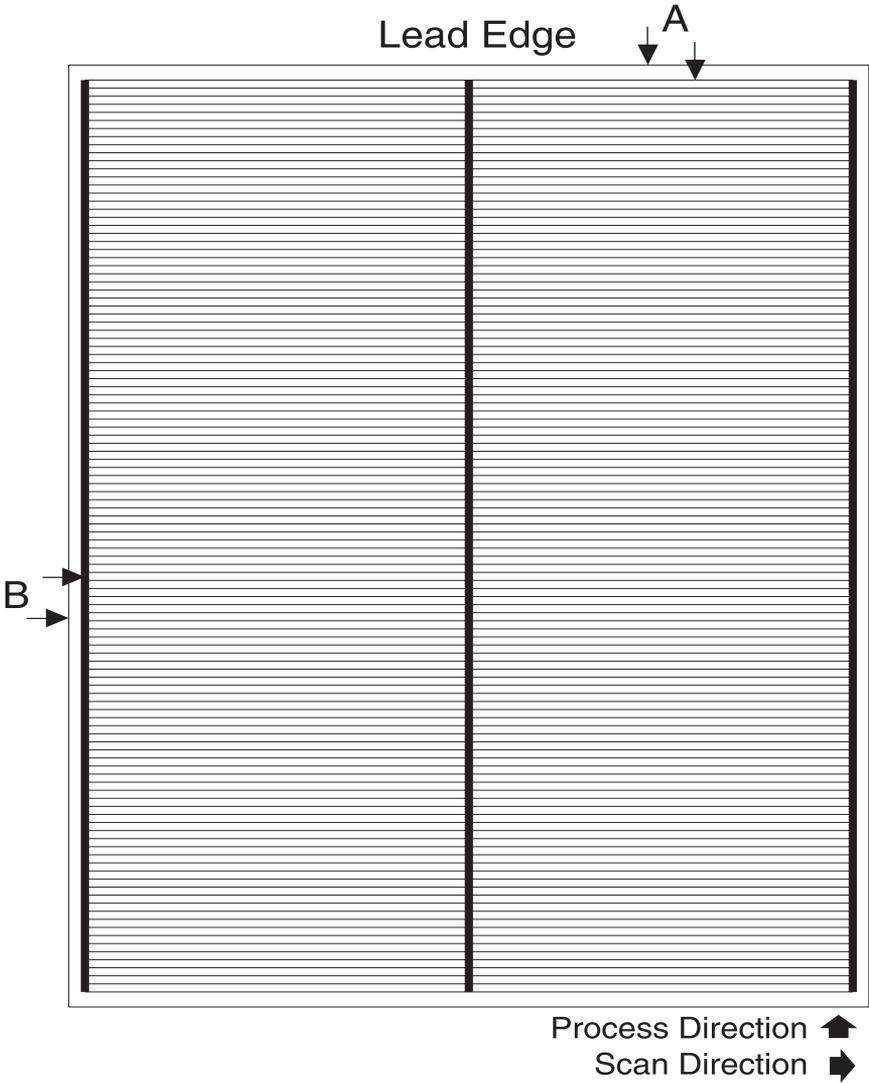
Adjustments

Registration

Check

This procedure checks the printer registration in the horizontal (scan) direction and the vertical (process) direction for both simplex and duplex printing. If any registration measurement does not meet specification, perform the adjustment procedure on page 4-6.

1. Enter Service Diagnostics and select **`Engine Test Print`** and press **OK**.
2. Scroll to **`Input Tray`** and press **OK**.
3. Press the **Down** or **Up** keys to select the input source that requires verification and press **OK**.
4. Scroll to **`Print Quantity`** and press **OK**.
5. Select a quantity of 5.

   *Note: Use the **OK** key to move the highlight over the digit you want to change. Use the **Up** and **Down** keys to change the value of the digit. When you have changed each digit so that the quantity is correct, press the **Back** key to enter the selection.*

6. Scroll to **`Print Test Pattern`** and press **OK** to print an Engine Test Pattern.

   Note: The measurement should be made on two consecutive test patterns from the input source.

7. Measure the distance from the lead edge of the paper to the first horizontal line (measurement A in the figure on page 4-4). The measurement should be 4 mm ±2 mm.
8. Measure the distance from the left edge of the paper to the edge of the thick vertical line. The measurement should be 5 mm ±2 mm.
9. Repeat steps 2 through 8 for each input source.

To test the duplex registration, continue with step 10.

10. From the Engine Test Print menu, scroll to **`Duplex`** and press **OK**.
11. Set Duplex to **`On`** and press **OK** to save the setting.

    *Note: If Duplex is Off, press the **Down** key to change it to On, and if Duplex is On, press the **Down** key to change it to Off.*

12. Repeat steps 2 through 8 for each input source. Check the registration for the duplexed prints.

Adjustment

1. Enter Service Diagnostics and select **`Engine NVRAM Adjustments`**.
2. Scroll to the process adjustment (**`Tray [#] Proc Direction`**) or scan adjustment (**`Tray [#] Scan Direction`**) for the desired tray and press **OK**.
3. Use the **Up** or **Down** keys to set the new value. (Each increment of change equals 0.5mm.)

> *Note:*   *In the scan direction, increasing the value moves the image to the right and decreasing the value moves the image to the left. In the process direction, increasing the value moves the image toward the trail edge and decreasing the value moves the image towards the lead edge.*

4. Press **OK** to save the setting.
5. Press the **Back** key, then scroll to **`Engine Test Print`** and press **OK.** Scroll to **`Print Test Pattern`** to print an Engine Test Pattern.
6. Measure the distance from the lead edge of the paper to the first horizontal line (measurement A in the figure). The measurement should be 4 mm ±2 mm.
7. Measure the distance from the left edge of the paper to the edge of the thick vertical line. The measurement should be 5 mm ±2 mm.
8. Repeat steps 1 through 7 until correct measurements are achieved.
9. Perform Registration (Side-to-Side) on page 3-47 and Registration (Lead Edge-to-Trail Edge) on page 3-48. Repeat this adjustment procedure if the results are incorrect.

Fuser Temperature

Four temperature ranges, listed in the Fuser Temperatures table, are available for each paper type supported by the printer. The default fuser temperature for each paper type is listed in the Fuser Configuration Defaults table. To set the fuser temperature:

1. Select **`Menus | Printer Setup Menu | Tray Setup Menu | Fuser Configuration Menu`**.
2. Select **`Set Temperature for [paper type]`**.
3. Select a temperature from the four available (you must scroll up to see Extra High) and press **OK**.

Fuser Temperatures

Temperature Setting	Low	Medium	High	Extra High
Temperature Range	197 - 203°C	197 - 206°C	209°C	210 - 215°C
	354 - 365°F	354 - 371°F	376°F	378 - 387°F

Fuser Configuration Defaults

Plain	Letterhead	Labels	Colored Paper	Card Stock	Envelope	Special
Medium	Medium	High	Medium	High	High	Medium

Resetting NVRAM

Resetting NVRAM returns all the Image Processor Board NVRAM-stored parameters to their factory default values. You can reset the PostScript NVRAM using the Customer Menu, the Service Diagnostics Menu, or the Front Panel Shortcut.

Customer Menu Resets

Resetting job defaults

Resetting the job defaults resets the paper source, print-quality mode, 2-sided printing, and image smoothing to their default values.

1. From the Main Menu, highlight **`Print Setup Menu`** and press **OK**.
2. Highlight **`Job Defaults Menu`** and press **OK**.
3. Scroll to **`Reset Job Defaults`** and press **OK**.
4. Select **`Reset Job Defaults NOW`** and press **OK** to reset the job defaults.

Resetting Printer setup values to default

Resetting the Printer setup values resets the job defaults, front panel language, Intelligent ready, MPT Tray setup, Tray 1 -3 setup, startup page, front panel intensity, front panel contrast, PostScript error information and energy star to their default values.

1. From the Main Menu, select **`Printer Setup Menu`** and press **OK**.
2. Select **`Reset Printer Setup Menu`** and press **OK**.
3. Select **`Reset Printer Setup NOW`** and press **OK**.

Resetting Connection Setup Values to Default

Resetting the connection setup values resets the TCP/IP address, TCP/IP address menu settings (gateway, broadcast, etc.), CentreWare IS, EtherTalk, NetWare, set IPX frame type, IPP and Ethernet speed to their default values.

1. From the Main Menu, select **`Connection Setup Menu`** and press **OK**.
2. Select **`Reset Connection Setup`** and press **OK**.
3. Select **`Reset Connection Setup NOW`** and press **OK**.

Caution	**Make note of the current network settings or print a configuration page to preserve the customers current network settings prior to resetting the network setup to factory default values.**

Resetting All Printer Default Settings (PostScript NVRAM)

Resetting the NVRAM restores all printer values stored in the IP controller NVRAM including network, printer setup, job defaults, and margin to their factory default values. The print counts and the Adobe firmware serial number are not affected by this reset.

1. From the Main Menu, scroll to **Support Menu** and press **OK**.
2. Scroll to **Service Tools Menu** and press **OK**.
3. **Reset NVRAM** is highlighted — press **OK**.
4. Highlight **Reset NVRAM** and **Reset Printer NOW** and press **OK** to reset all the settings to their factory default values.

Fuser Reset

The Fuser Reset procedure restarts the counter that tracks Fuser life. The procedure must be performed following installation of the Maintenance Kit. To perform the fuser reset:

1. From the Main Menu, scroll to **Supplies Info Menu** and press **OK**.
2. Scroll to **Reset Fuser Life** and press **OK**.
3. **Reset NVRAM** is highlighted — press **OK**.
4. Highlight **Reset NVRAM** and **Reset Printer NOW** and press **OK** to reset all the settings to their factory default values.

Select **Menus | Supplies Info Menu | Reset Fuser Life | Reset Fuser Life NOW**.

Service Diagnostics Resets

Resetting the NVRAM restores all printer values stored in the Image Processor controller NVRAM including network, printer setup, job defaults, and margin to their factory default values.

1. Enter Service Diagnostics.
2. Scroll to **NVRAM Access** and press **OK**.
3. **PostScript NVRAM Reset** is highlighted — press **OK**.
4. When "Resetting NVRAM! Are you sure?" is displayed, highlight **Yes** and press **OK**.

The printer now exits Service Diagnostics and reboots. While booting, NVRAM is reset.

Front Panel Shortcut Reset

The following front panel shortcut can be used to reset PostScript NVRAM

Mode	Press this selection at power-on
Reset PostScript NVRAM	**BACK+OK** **When "Password" appears, press UP + DOWN keys within 2 seconds.**

Print Engine NVRAM

There is no single reset for the Print Engine NVRAM.