Inkjet Solutions
Technical Support

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H652 Printer Startup and Shutdown Procedures

Description: This document describes the procedures for H652 Printer Start-up and Shutdown.

Affected Printers: H652

H652 Printer Startup and Shutdown Procedures

This document describes the procedures for the H652 Printer Startup and Shutdown.

Before Starting (Title Headings)

Follow the instructions in this section prior to starting the procedure.

- For safety concerns, please read and understand the EFI Ink Jet Printer Safety Guide located at http://inkjet.support.efi.com/index.php.prior to attempting any service work on your printer.
- Verify you have all the parts and software to complete this procedure.

Procedural Overview (Title Headings)

The following provides an overview of the content of this Customer Advisory Bulletin (CAB).

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1.0 Printer Startup and Shutdown Procedures

There are six basic conditions from which the printer will need to be started. The sections below outline the possible conditions that the printer may be left in when it is not being used. Each of the startup conditions is dependent on the previous condition of the printer.

1.1 Night Time Sleep/ Morning Startup

1.1.1 Night Time Preparation

Follow these steps at the completion of the day's work.

1. Power **OFF** the UV lamps and allow them to cool.
2. Power **OFF** the media vacuum blower.

   Note: Optional- Turn off the computer monitor, but leave the computer running.
3. Leave the printer powered **ON**.

1.1.2 Morning Startup

Follow these steps at the beginning of each workday.

1. Power **ON** the computer monitor if it is turned off.
2. Power **ON** the UV lamps. Set them to HIGH Power and let them warm for two minutes.
3. Perform a three to five second purge.

   Note: Longer purges are usually not necessary.
4. Sweep the heads using the sweep icon on the **Test Printer Toolbar** shown in **Figure 1**.
5. Load scrap media and perform a nozzle check.
6. If the nozzle check is not normal, perform a five to ten second purge.
7. Perform a sweep on the heads.
   A. Perform a nozzle check. If the nozzle check is not normal, the heads may need additional cleaning. Bleed the heads if needed, using **FTP-00327 Bleeding/Purging Air**, which can be accessed at **http://www.vuteksupport.com/doc.php?doc=1760**.

1.2 Printer Shutdown and Cold/Warm Start – Short Time

It may be necessary to power off the printer for short periods of time to perform maintenance.

Caution! Power off the printer only when necessary.

1.2.1 Printer Shutdown

1. Power **OFF** the UV lamps and allow them to cool for approximately two minutes.
2. Power **OFF** the media vacuum blower using the Foot Pedal.
3. Ensure the GUI has been closed.
4. If the printer will be powered off for more than 60 seconds, turn **OFF** both the CMYK and White air valves located on the top left side of the carriage. This will prevent the ink from dripping from the heads while the power is off.

Note: If power will be left off for longer time periods, additional startup steps will be required.

5. Power **OFF** the printer by activating an E-Stop and turning OFF the main breaker switches.
6. Turn **OFF** the dual breaker at the rear of the printer.
7. The printer is now powered **OFF**.

Note: Optional- Turn off the computer and monitor or restart the computer as needed.

1.2.2 Printer Power Up

1. If the computer and monitor are powered off, power the monitor **ON** first, then power **ON** the computer. Allow the computer to reboot completely before moving to the next step.
2. Make sure the top of the printer does not have items placed on it, and that all personnel are aware that the printer will be restarted.
3. Check that the E-Stop switches are not engaged. If they are, release them.
4. Turn **ON** the Main printer breaker located at the rear of the printer.
5. Press the large green button located under the right side of the printer to engage the safety relay. This will energize the printer.
6. If the CMYK and White air valves were previously turned off, turn the black air valves to the **ON** position.

Note: If the printer has been turned off for more than a few minutes, air may need to be bled from the print heads. Refer to **FTP-00327 Bleeding/Purging Air**.

7. Verify that the computer can communicate with the printer using the steps below.
   A. Open the **Test Printer Toolbar** in the GUI. See **Figure 1**.

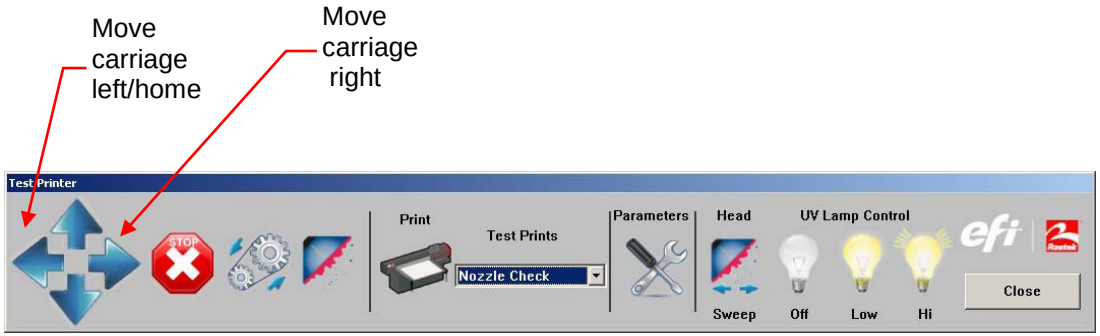

Figure 1: Test Printer Toolbar

   B. Click on the right-pointing blue arrow in the **Test Printer Toolbar** to move the carriage to the right.
   C. Click on the left-pointing blue arrow in the **Test Printer Toolbar** to return the carriage to the home position.
   D. Check that the head temperatures are rising toward the desired idle head temperatures of 36.5°C to 38°C.
8. Purge the heads using the steps below.
   A. If the printer has been powered off for less than two minutes, perform a three to five second purge.
   B. If the printer has been powered off for more than two minutes, it is recommended that a ten-second purge be used.
9. Sweep the heads.
10. The printer is now ready to perform a nozzle check print.

Note: Remember to power on the media vacuum blower on when it is needed.

1.3 E-Stop Condition and Reboot

Emergency stops are installed at each end of the H652 printer.

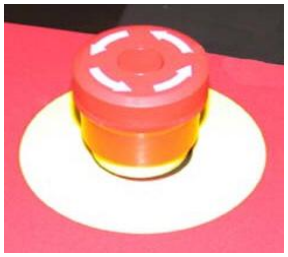

Figure 2: E-Stop switch

1.3.1 Activating E-Stop

*To activate an E-Stop, press any red E-Stop knob (see **Figure 2**) down. This will shut off power to all printer systems.*

1.3.2 Restarting After E-Stop

Perform the steps below to restart the printer after an E-Stop.

1. Check that the heads are at temperature, or are climbing toward the correct idle head temperature .
2. Purge the heads for five to ten seconds.
3. Bleed and purge the heads.
4. Sweep the heads.
5. Load test media.
    A. Turn on media vacuum switch.
    B. Load and gap the media properly.
    C. Perform a nozzle check.

1.4 Power Outages

If power outages occur frequently at the printer site, it is advisable to install a UPS system. The UPS system must be installed on the main power to the printer and must be cable of providing 205VAC to 235VAC, 20Amps, 50/60Hz for a period of time.

1.4.1 Power Outage During Printing

1. Turn the CMYK and White negative pressure valves to the **OFF** position.
2. Reposition the carriage over the maintenance station, making sure that the carriage is positioned properly at the carriage home position.
3. Turn **OFF** the printer main breaker.

1.4.2 Power Outage While Printer is Idle and Attended

1. Turn **OFF** both the CMYK and White air valves.
2. Power **OFF** the media vacuum switch and the printer main breaker.

1.4.3 Power Outage While Printer is Idle and Unattended

*If a power outage occurs while the printer is idle and unattended, the printer may drip some ink into the maintenance tray. Turn **OFF** the printer main breaker.*

1.4.4 Returning the Printer to Full Operation After a Power Outage

To return the printer to full operation after a power outage while unattended, perform the steps below.

1. If the printer was attended during a **short power outage (less than 30 minutes)**, perform the steps below.
    A. Reboot the computer.
    B. Power **ON** the printer main circuit breaker.
    C. Power **ON** the system power switch.
    D. Purge the heads for three to five seconds.
    E. Sweep the heads.
    F. Properly load the media and gap the carriage.

G. Perform a nozzle check and inspect.

2. If the printer was attended during an **outage of more than 30 minutes**, perform the steps below.

   A. Reboot the computer.

   B. Turn on the printer main circuit breaker.

   C. Turn on the system power switch.

   D. Purge the heads for five to ten seconds.

   E. If the ink has drained out of the heads during the power outage, it will be necessary to bleed the heads of air. Follow the head bleeding procedure for each color.

   F. After completing the bleed procedure, purge the heads for 3 to 5 seconds.

   G. Sweep the heads.

   H. Properly load the media, and properly gap the carriage.

   I. Perform a nozzle check.

3. If the power outage occurred while the printer was unattended and the air valves were open, ink will have drained from the heads. Perform the steps below.

   A. Reboot the computer.

   B. Power **ON** the printer main circuit breaker.

   C. Power **ON** the system power switch.

   D. Purge the heads for five to ten seconds

   E. Purge the heads again for five to ten seconds. Check that ink is dripping from all the heads.

   F. Since the ink will have drained out of the heads during the power outage, it will be necessary to bleed the heads of air. Follow **FTP-00327 Bleeding/Purging Air** to purge air from print heads for each color.

   G. After completing the bleed procedure, purge the heads for three to five seconds

   H. Sweep the heads.

   I. Properly load the media, and properly gap the carriage.

   J. Perform a nozzle check.

1.5 Short and Long Term Printer Storage

1. Power the printer **OFF**.
2. Flush all print heads.
3. Turn off the CMYK and White valves on top of the carriage. See **Figure 3**.

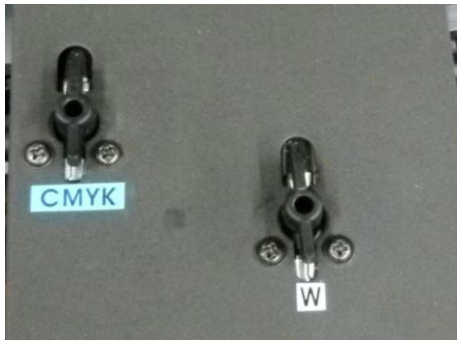

Figure 3: CMYK and White valves on top of carriage

4. Cut a section of foam core to 11x17 and cover it with lint free cloth. Sprinkle with flush solution.
5. Lift the carriage and place the foam core section under the print heads.
6. Lower the carriage where the print heads make contact with the foam core.

Note: Do not put too much pressure on the foam.