

# Service Tests and Utilities

# 4

Introduction	4-2
Diagnostics - Self Test	4-2
Service Tests (Diagnostics)	4-3
Entering the Service Tests Menu	4-4
1. Electronic Systems	4-5
2. EIO Card	4-10
3. Hard Disk Drive	4-12
4. Ink Pressure System	4-14
5. Scan Axis	4-16
6. Paper Axis	4-19
7. Drop Detector	4-21
Service Utilities	4-24
Entering the Service Utilities Menu	4-25
1. Tubes Purge	4-27
2. Release Info	4-31
3. Set Asian PS Fonts	4-32
4. Printer Model Type	4-34
5. Overdrive Cleaning	4-36
6. EEROM Utilities	4-37
7. Printhead Check	4-40
8. Mon. Mode Baud Sel.	4-41

## Introduction

This chapter explains how to use the built-in Service Tests and Service Utilities and what to do if any of the Service Tests fail. If possible, always perform a Service Test on the component that you are about to replace, just to make sure that is the component that has failed. If the test on that component passes, there is no need to replace it.

### Diagnostics - Self Test

#### Initialization Sequences

Whenever the Printer is switched ON, it automatically performs a series of internal self tests and mechanical initialization sequences. If any of the parts fail, a system error will appear and you should consult Chapter 2 - *System Error Codes*.

## Service Tests (Diagnostics)

The following is a list of all internal Service Tests available in the Printer. Instructions for entering the Service Tests menu are given on Page 4-4.

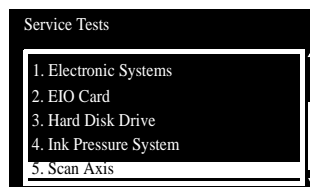
**The Service Tests work in a special Mode which does NOT require the full Initialization of the Printer. Therefore it is important that once you have finished with the Service Tests, you MUST power OFF the Printer and Power ON again before trying to print.**

- 1** Electronics System ⇒ Page 4-5  
The purpose of this test is to verify the operation of the:
  - Electronics Module.
  - DRAM.
  - Trailing Cable.
  - Carriage Assembly.
- 2** EIO Card ⇒ Page 4-10  
The purpose of this test is to verify the operation of the EIO Card.
- 3** Hard Disk Drive ⇒ Page 4-12  
The purpose of this test is to verify the operation of the Hard Disk Drive.
- 4** Ink Pressure System ⇒ Page 4-14  
The purpose of this test is to verify the operation of the:
  - Service Replaceable Kit (SRK).
  - Air Pressurization System (APS).
- 5** Scan Axis ⇒ Page 4-16  
The purpose of this test is to verify the operation of the Scan-Axis.
- 6** Paper Axis ⇒ Page 4-19  
The purpose of this test is to verify the operation of the Paper-Axis.
- 7** Drop Detector ⇒ Page 4-21  
The purpose of this test is to verify the operation of the Drop Detector.

## Entering the Service Tests Menu

**In order to enter the Service Utility Menu, please refer to the instructions on Page 4-25.**

- 1 Make sure the printer is switched OFF from the power switch on the front of the printer and **NOT** from the power switch on the back of the printer.
- 2 Hold the COLOR key down and switch the printer **ON** using the front power switch. Wait until the message "Initializing" is displayed on the front-panel before releasing the COLOR key.
- 3 Once inside the Service Tests Menu use the **Arrow** keys to scroll through the "Service Tests" selections.



- 4 Press the **Enter** key to begin a specific test when the required Service Test is highlighted.

**If the printer is not used for 3 minutes, the printer hangs and you must repeat the above steps to enter the Service Mode again.**

**In some cases a quick press of a button may not be recognized by the Printer. When pressing a button, be sure to press it deliberately and all the way to the bottom of its travel.**

**If the Printer hangs up during a test, switch the Printer OFF and restart from step 1.**

## 1. Electronic Systems

The purpose of this test is to verify the operation of the:

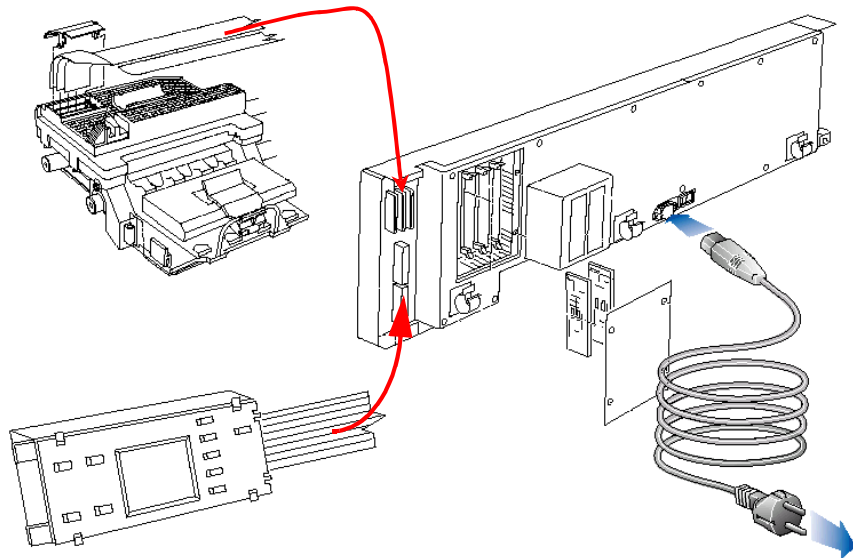
- Electronics Module.
- DRAM.
- Trailing Cable.
- Carriage Assembly.

**This test does not test the EIO Card or the Hard Disk Drive.**

**The Service Tests work in a special Mode which does NOT require the full Initialization of the Printer. Therefore it is important that once you have finished with the Service Test, you MUST power OFF the Printer and Power ON again before trying to print.**

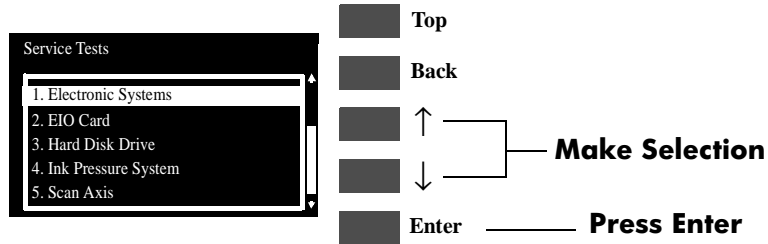
**IF POSSIBLE ALWAYS PERFORM THIS TEST BEFORE REPLACING THE ELECTRONICS MODULE, MAIN PCA TRAILING CABLE OR THE CARRIAGE ASSEMBLY. IF THIS TEST PASSES, DO NOT REPLACE THE ELECTRONICS MODULE, TRAILING CABLE OR THE CARRIAGE ASSEMBLY.**

**This test can be performed with just the Front Panel, Trailing Cable, Carriage, Electronics Module and the Power Cord connected together to isolate problems.**

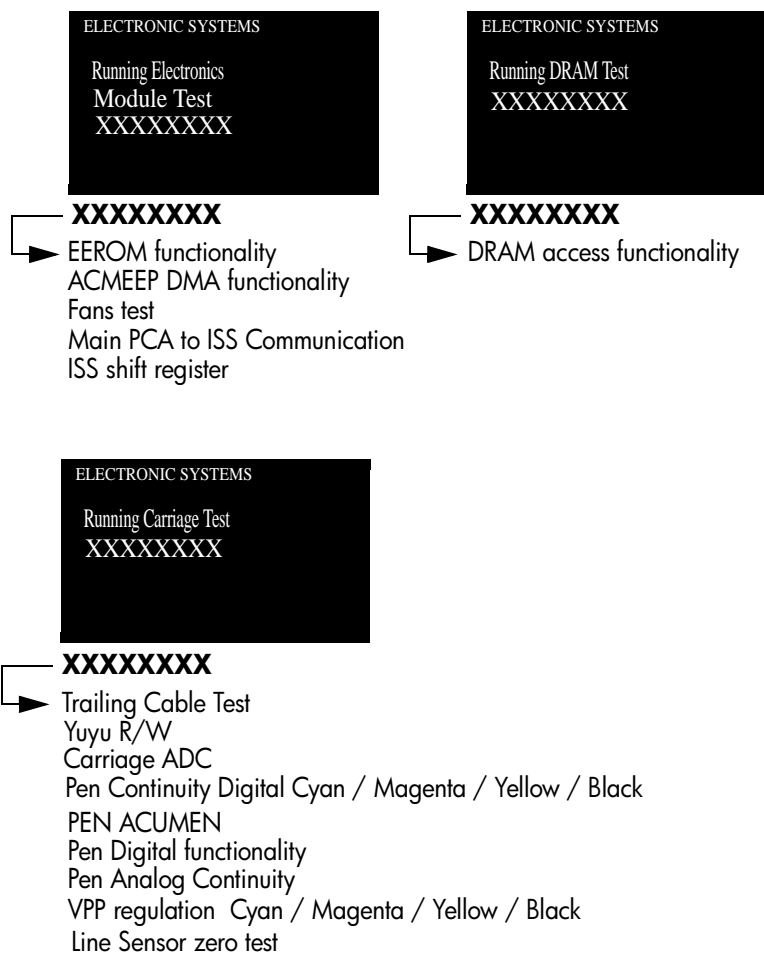


Perform the Electronic Systems test as follows:

- 1 In the Service Tests submenu, scroll to "1. Electronic Systems" and press **Enter**.



- 2 The test will start and the following sequence of messages will appear on the front panel:



- 3 If the test passes, then the following message will appear on the front panel:

```

ELECTRONIC SYSTEMS

Tests passed
FW: A.00.13
PS: 6.0A77R
DIMM1: EDO 32MB 60ns
DIMM2: EDO 16 MB 60ns
  
```

**IF THIS TEST PASSES, DO NOT REPLACE THE ELECTRONICS MODULE, MAIN PCA, TRAILING CABLE OR THE CARRIAGE ASSEMBLY.**

- 4 If the test fails.

### Electronics Failure

If there is a problem with the components within the Electronics module then the following message will appear on the front panel:

```

ELECTRONIC SYSTEMS

Possible Failure on:
1. Electronics Module

Code: 00XXXX:0000XX
  
```

**In this case, replace the Main PCA (designjet 1050c plus/1055cm plus only) ⇒ Page 8-31 or replace the Electronics Module (designjet 1050c/1055cm only) ⇒ Page 8-25.**

### DRAM Test Failure

If there is a problem with the DRAM then the following message will appear on the front panel:

```

ELECTRONIC SYSTEMS

Possible Failure on:
1. DRAM DIMMs
2. Electronics Module

Code: 00XXXX:0000XX
  
```

**In this case, try one of the following:**

- 1 Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reseat the DRAM DIMMs (Memory Modules), reconnect the power cord and power On the Printer. Perform the Electronic Systems Test again.
- 2 If the Test fails again, switch the Power OFF, disconnect the power cord and Replace the DRAM DIMMs (Memory Modules). Reconnect the power cord and power On the Printer and perform the test again.
- 3 Replace the Main PCA (**designjet 1050c plus/1055cm plus only**) ⇒ Page 8-31 **or** replace the Electronics Module (**designjet 1050c/1055cm only**) ⇒ Page 8-25.

### Trailing Cable Failure

If there is a problem with the Trailing Cable then the following message will appear on the front panel:

#### ELECTRONIC SYSTEMS

Possible Failure on:

1. Trailing Cable
2. Carriage
3. Electronics Module

Code: 00XXXX:0000XX

**In this case,** try one of the following:

- 1 *Make sure that the Trailing Cable is connected correctly.*
- 2 *Power OFF the Printer and connect a new Trailing Cable to the Carriage and the Electronics Module (without removing the old Trailing Cable from the Printer). Perform this test again and if the test FAILS, then DO NOT replace the trailing cable. If the test PASSES, replace the Trailing Cable ⇒ Page 8-47.*
- 3 *Power OFF the Printer and connect a new Carriage Assembly to the Trailing Cable (without removing the old Carriage Assembly from the Printer). Perform this test again and if the test FAILS, then DO NOT replace the Carriage Assembly. If the test PASSES, replace the Carriage Assembly ⇒ Page 8-52.*
- 4 *Power OFF the Printer and connect a new Electronics Module to the Trailing Cable (without removing the old Electronics Module from the Printer). Perform this test again and if the test FAILS, then DO NOT replace the Electronics Module or Main PCA. If the test PASSES, replace the Main PCA (**designjet 1050c plus/1055cm plus only**) ⇒ Page 8-31 **or** replace the Electronics Module (**designjet 1050c/1055cm only**) ⇒ Page 8-25.*

**Only replace one component at a time and try the Service Test again before replacing another component. Using this procedure you will be able to determine exactly which component failed.**

## Carriage Test Failure

If there is a problem with the Carriage and any related parts then the following message will appear on the front panel:

### ELECTRONIC SYSTEMS

#### Possible Failure on:

1. Printhead CYMK
2. Trailing/Carriage
3. Electronics Module

Code: 00XXXX:0000XX

**In this case,** try one of the following:

- 1 Remove the Printheads and clean the Carriage and Printhead flex circuits using the Carriage Interconnect Wiper ⇒ Page 3-16. Reinstall the Printheads and try the test again.
- 2 If the test fails again, replace the Printheads.
- 3 Make sure that the Trailing Cable is connected correctly to the Carriage Assembly and to the Electronics Module.
- 4 Power OFF the Printer and connect a new Trailing Cable to the Carriage and the Electronics Module (without removing the old Trailing Cable from the Printer). Perform this test again and if the test FAILS, then DO NOT replace the trailing cable. If the test PASSES, replace the Trailing Cable ⇒ Page 8-47.
- 5 Power OFF the Printer and connect a new Carriage Assembly to the Trailing Cable (without removing the old Carriage Assembly from the Printer). Perform this test again and if the test FAILS, then DO NOT replace the Carriage Assembly. If the test PASSES, replace the Carriage Assembly ⇒ Page 8-52.
- 6 Power OFF the Printer and connect a new Electronics Module to the Trailing Cable (without removing the old Electronics Module from the Printer). Perform this test again and if the test FAILS, then DO NOT replace the Electronics Module or Main PCA. If the test PASSES, replace the Main PCA (**designjet 1050c plus/1055cm plus only**) ⇒ Page 8-31 **or** replace the Electronics Module (**designjet 1050c/1055cm only**) ⇒ Page 8-25.

**Only replace one component at a time and try the Service Test again before replacing another component. Using this procedure you will be able to determine exactly which component failed.**

## 2. EIO Card

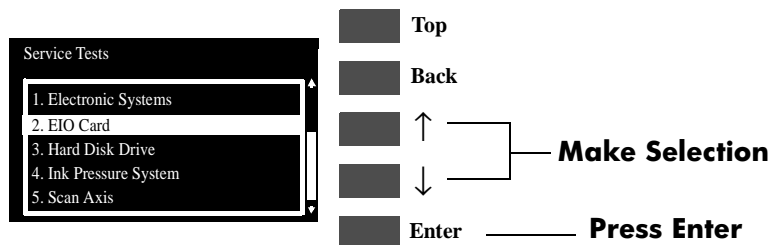
The purpose of this test is to verify the operation of the EIO Card.

**IF POSSIBLE ALWAYS PERFORM THIS TEST BEFORE REPLACING THE EIO CARD. IF THIS TEST PASSES, DO NOT REPLACE THE EIO CARD.**

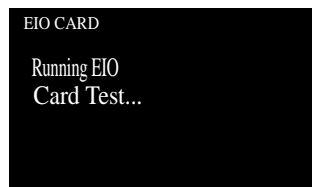
**The Service Tests work in a special Mode which does NOT require the full Initialization of the Printer. Therefore it is important that once you have finished with the Service Test, you MUST power OFF the Printer and Power ON again before trying to print.**

Perform the EIO Card test as follows:

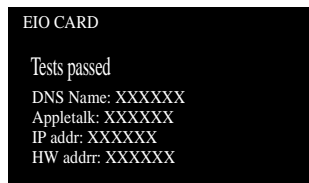
- 1 In the Service Tests submenu, scroll to "2. EIO Card" and press **Enter**.



- 2 The test will start and the following message will appear on the front panel:



- 3 If the test passes, then the following message will appear on the front panel:



**IF THIS TEST PASSES, DO NOT REPLACE THE EIO CARD.**

If there is a problem with the EIO Card then the test will fail and the following message will appear on the front panel:

EIO CARD

Possible Failure on:

1. EIO CARD
2. Electronics Module

Code: 00XXXX:0000XX

In this case, to resolve the problem, try the following:

- 1 Switch the printer OFF. Remove the external Hard Disk Drive (if installed) and reinstall the EIO Card making sure it installed correctly by pushing it firmly inwards and checking that the two installation screws are completely tightened. Switch the printer ON again and repeat the EIO Card Test. If the EIO Card Test fails again then replace the EIO card.
- 2 If the EIO Card Test passed after removing the external Hard Disk Drive, then switch the Printer OFF and reinstall the external Hard Disk Drive, making sure that the two installation screws are completely tightened. Switch the Printer ON again and repeat the EIO Card Test. If the EIO Card Test fails, then the external Hard Disk Drive could be faulty. Replace the external Hard Disk Drive.
- 3 If the EIO Card Test continues to fail after replacing the EIO card or the external Hard Disk Drive, then replace the Main PCA (**designjet 1050c plus/1055cm plus only**) ⇒ Page 8-31 **or** replace the Electronics Module (**designjet 1050c/1055cm only**) ⇒ Page 8-25.

**Only replace one component at a time and try the Service Test again before replacing another component. Using this procedure you will be able to determine exactly which component failed.**

### 3. Hard Disk Drive

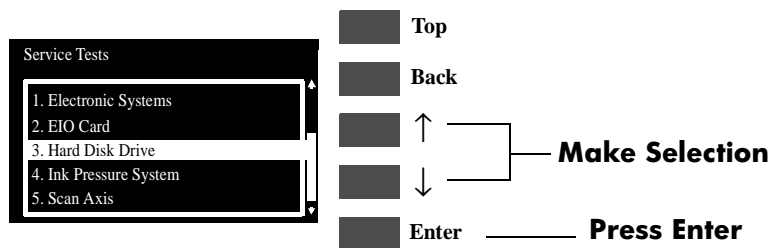
The purpose of this test is to verify the operation of the Hard Disk Drive.

**IF POSSIBLE ALWAYS PERFORM THIS TEST BEFORE REPLACING THE HARD DISK DRIVE. IF THIS TEST PASSES, DO NOT REPLACE THE HARD DISK DRIVE.**

**The Service Tests work in a special Mode which does NOT require the full Initialization of the Printer. Therefore it is important that once you have finished with the Service Test, you MUST power OFF the Printer and Power ON again before trying to print.**

Perform the Hard Disk Drive test as follows:

- 1 In the Service Tests submenu, scroll to "3. Hard Disk Drive" and press **Enter**.



- 2 The test will start and the following message will appear on the front panel:



- 3 If the test passes, then the following message will appear on the front panel:



**IF THIS TEST PASSES, DO NOT REPLACE THE HARD DISK DRIVE.**

If there is a problem with the Hard Disk Drive then the test will fail and the following message will appear on the front panel:



HARD DISK DRIVE

Possible Failure on:

1. HDD
2. Electronics Module

Code: 00XXXX:0000XX

**Check that the Hard Disk Drive is actually installed before starting to troubleshoot. If the Hard Disk Drive is NOT installed, the test will of course always fail.**

In this case, to resolve the problem, try the following:

- 1 Switch the printer OFF. Remove the EIO Card (if installed) and reinstall the Hard Disk Drive making sure it installed correctly by pushing it firmly inwards and checking that the two installation screws are completely tightened. Switch the printer ON again and repeat the Hard Disk Drive Test. If the Hard Disk Drive Test fails again then replace the Hard Disk Drive.
- 2 If the Hard Disk Drive Test passed after removing the EIO Card, then switch the Printer OFF and reinstall the EIO Card, making sure that the two installation screws are completely tightened. Switch the Printer ON again and repeat the Hard Disk Drive Test. If the Hard Disk Drive Test fails, then the EIO Card could be faulty. Replace the EIO Card.
- 3 If the Hard Disk Drive Test continues to fail after replacing the EIO card or the Hard Disk Drive, then replace the Electronics Module ⇒ Page 8-31.

**Only replace one component at a time and try the Service Test again before replacing another component. Using this procedure you will be able to determine exactly which component failed.**

## 4. Ink Pressure System

The purpose of this test is to verify the operation of the:

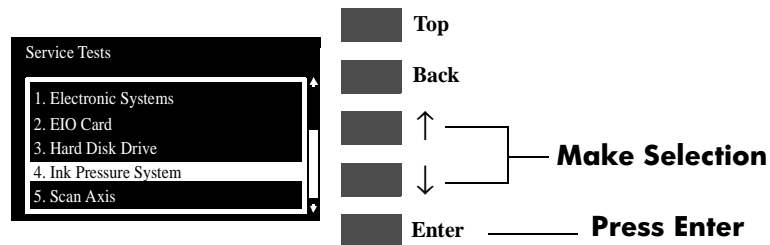
- Tubes System.
- Air Pressurization System (APS).

**IF POSSIBLE ALWAYS PERFORM THIS TEST BEFORE REPLACING THE TUBES SYSTEM OR THE APS. IF THIS TEST PASSES, DO NOT REPLACE THE TUBES SYSTEM OR THE APS.**

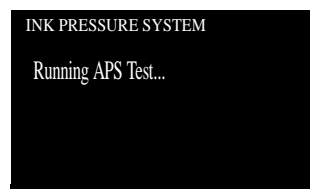
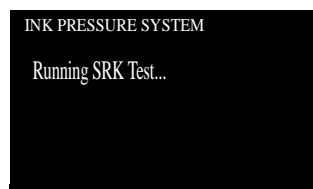
**The Service Tests work in a special Mode which does NOT require the full Initialization of the Printer. Therefore it is important that once you have finished with the Service Test, you MUST power OFF the Printer and Power ON again before trying to print.**

Perform the Ink Pressure System test as follows:

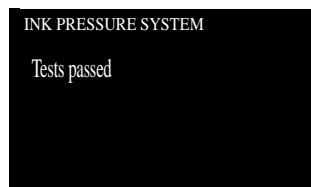
- 1 In the Service Tests submenu, scroll to "4. Ink Pressure System" and press **Enter**.



- 2 The test will start and the following sequence of messages will appear on the front panel:



- 3 If the test passes, then the following message will appear on the front panel:



**IF THIS TEST PASSES, DO NOT REPLACE THE TUBES SYSTEM OR THE APS.**

#### 4 If the test fails.

##### Tubes System Failure

If there is a problem with the Tubes System then the following message will appear on the front panel:

```

INK PRESSURE SYSTEM

Possible Failure on:
1. Ink Cartridge CMYK
2. Tubes
3. Electronics Module

Code: 00XXXX:0000XX

```

**In this case,** try one of the following:

- 1 Replace ALL the Ink Cartridges.
- 2 Replace the complete Tubes System ⇒ Page 8-61.
- 3 Replace the Main PCA (**designjet 1050c plus/1055cm plus only**) ⇒ Page 8-31 **or** replace the Electronics Module (**designjet 1050c/1055cm only**) ⇒ Page 8-25.

**Only replace one component at a time and try the Service Test again before replacing another component. Using this procedure you will be able to determine exactly which component failed.**

##### APS Test Failure

If there is a problem with the APS then the following message will appear on the front panel:

```

INK PRESSURE SYSTEM

Possible Failure on:
1. APS
2. Electronics Module

Code: 00XXXX:0000XX

```

**In this case,** try one of the following:

- 1 Check all the cables of the APS and make sure they are correctly connected and are NOT damaged.
- 2 Check all the tubes of the APS and make sure they are NOT pinched or damaged.
- 3 Replace ALL the Ink Cartridges.
- 4 Replace the complete APS ⇒ Page 8-20.
- 5 Replace the Main PCA (**designjet 1050c plus/1055cm plus only**) ⇒ Page 8-31 **or** replace the Electronics Module (**designjet 1050c/1055cm only**) ⇒ Page 8-25.

**Only replace one component at a time and try the Service Test again before replacing another component. Using this procedure you will be able to determine exactly which component failed.**

## 5. Scan Axis

The purpose of this test is to verify the operation of the Scan Axis Motor.

You must perform the Scan-Axis Test after:

- Scan-Axis Assemblies are disassembled or replaced.
- Carriage is disassembled or replaced.
- Electronics Module or Main PCA is replaced.
- Tubes System is disassembled or replaced.

**ALL THE COVER SENSORS ARE DISABLED WHEN IN THE SERVICE TESTS MENU. IF THE CARRIAGE IS MOVING IT WILL NOT STOP IF THE WINDOW IS OPENED, SO BE VERY CAREFUL NOT TO PUT YOUR HANDS INSIDE.**

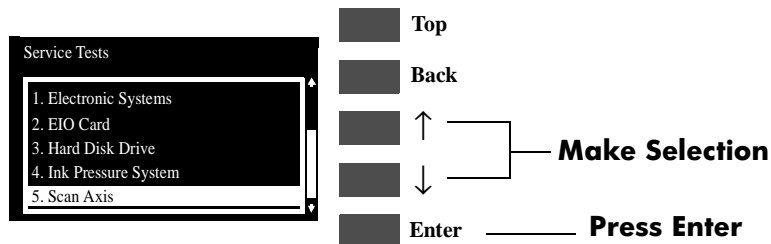
**IF POSSIBLE ALWAYS PERFORM THIS TEST BEFORE REPLACING THE SCAN AXIS MOTOR. IF THIS TEST PASSES, DO NOT REPLACE THE SCAN AXIS MOTOR.**

**The Service Tests work in a special Mode which does NOT require the full Initialization of the Printer. Therefore it is important that once you have finished with the Service Test, you MUST power OFF the Printer and Power ON again before trying to print.**

Perform the Scan Axis test as follows:

**Perform this test with the Printheads and the Tubes System installed in order to get values that can be compared correctly.**

- 1 In the Service Tests submenu, scroll to "5. Scan Axis" and press **Enter**.



- 2 The test will start and the following message will appear on the front panel:

```
SCAN AXIS

Running Scan
Axis Test...
(takes 2mn...)
```

- 3 Once the test is completed, the following message will appear on the front panel:

```
SCAN AXIS FORWARD

Avg PWM: XXX
Max PWM: XXX
Stabilizat Dist: XXXX
Avg speed offset: XXX
STD speed offset: XXX
```

- 4 Press **Enter** and the following message will appear on the front panel:

```
SCAN AXIS BACKWARDS

Avg PWM: XXX
Max PWM: XXX
Stabilizat Dist: XXXX
Avg speed offset: XXX
STD speed offset: XXX
```

To check if the values displayed after the test are within the limits, refer to the following table:

	Scan-Axis Forward		Scan-Axis Backwards	
	Normal	Maximum	Normal	Maximum
<b>Avg. PWM</b>	165	185	-165	-185
<b>Max. PWM</b>	220	240	220	240
<b>Stabilize Dist.</b>	1800	2400	1800	2400
<b>Avg. Speed offset</b>	2.4	10	2.4	10
<b>STD Speed offset</b>	4.4	10	4.4	10

*If the values obtained in the test are less than the Maximum values in the previous table, then the test has passed.*

*If the values obtained in the test are greater than the Maximum values in the previous table, then the test has failed. To resolve the problem, try the following:*

- 1** *Clean the Slider Rods and Apply Oil along the complete axis of the Slider Rods. After applying the Oil, perform the test again.*
- 2** *Check that the Encoder Strip is clean. If necessary, clean Encoder Strip using a damp cloth.*
- 3** *Check that the Tubes System is installed correctly.*
- 4** *Check that the Carriage Belt and pulleys are installed correctly.*
- 5** *Replace the Scan-Axis Motor ⇒ Page 8-41.*

## 6. Paper Axis

The purpose of this test is to verify the operation of the Paper Axis Motor.

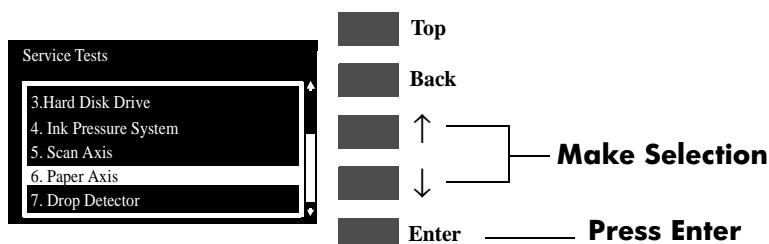
**IF POSSIBLE ALWAYS PERFORM THIS TEST BEFORE REPLACING THE PAPER AXIS MOTOR. IF THIS TEST PASSES, DO NOT REPLACE THE PAPER AXIS MOTOR.**

**The Service Tests work in a special Mode which does NOT require the full Initialization of the Printer. Therefore it is important that once you have finished with the Service Test, you MUST power OFF the Printer and Power ON again before trying to print.**

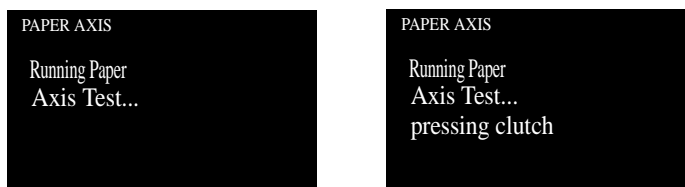
Perform the Paper Axis test as follows:

**Make sure you perform this test with NO media loaded.**

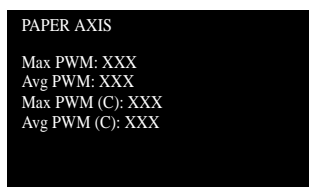
- 1 In the Service Tests submenu, scroll to "6. Paper Axis" and press **Enter**.



- 2 The test will start and the following messages will appear on the front panel:



- 3 Once the test is completed, the following message will appear on the front panel:



*If the values of the Max. PWM is less than 95 and the Avg. PWM is less than 85, then the test has passed.*

*If the values of the Max. PWM is more than 95 and the Avg. PWM is more than 85, then the test has failed. To resolve the problem, try the following:*

- 1** *Open the Window and check for any visible obstacles restricting the movement of the Drive Roller or the Overdrive Assembly.*
- 2** *Replace the Paper-Axis Motor ⇒ Page 8-12.*

*If the values of the Max. PWM is less than 95 and the Avg. PWM is less than 85, but the values of the Max. PWM(C) is more than 100 and the Avg. PWM(C) is more than 90 then the test has failed. To resolve the problem, try the following:*

- 1** *Replace the Overdrive Assembly ⇒ Page 8-72.*

## 7. Drop Detector

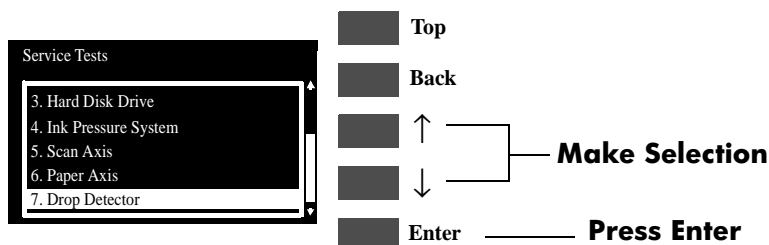
The purpose of this test is to verify the operation of the Drop Detector.

**IF POSSIBLE ALWAYS PERFORM THIS TEST BEFORE REPLACING THE DROP DETECTOR. IF THIS TEST PASSES, DO NOT REPLACE THE DROP DETECTOR.**

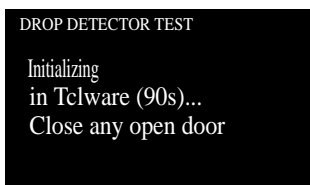
**The Service Tests work in a special Mode which does NOT require the full Initialization of the Printer. Therefore it is important that once you have finished with the Service Test, you MUST power OFF the Printer and Power ON again before trying to print.**

Perform the Drop Detector test as follows:

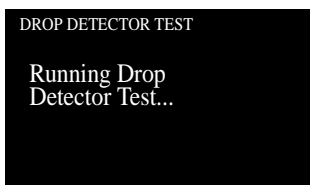
- 1 In the Service Tests submenu, scroll to "7. Drop Detector" and press **Enter**.



- 2 The test will start to initialize and the following message will appear on the front panel:

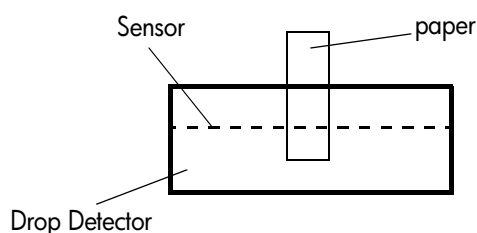


- 3 After initialization, the test will start and the following message will appear on the front panel:



**In the following step, make sure you do not drop the piece of paper inside the Drop Detector.**

- 4 When the following message appears, open the Window and insert a thin piece of paper inside the Drop Detector in order to block it. Press any Front Panel key once the Drop Detector is blocked.



Block the Drop Detector  
and press a FP key  
when it is blocked

- 5 When the following message appears, remove the piece of paper from inside the Drop Detector and close the Window. Press any Front Panel key once the Window is closed.

Unblock Drop Detector  
close the window  
and press a FP key  
to continue

- 6 The Printer will test the Drop Detector and the following message will appear on the front panel:

DROP DETECTOR TEST  
  
Running Drop  
Detector Test, ghost d

- 7 If the test passes, then the following message will appear on the front panel:

DROP DETECTOR  
  
BLOCKED DD: PASS  
GHOST DROPS: PASS

**IF THIS TEST PASSES, DO NOT REPLACE THE DROP DETECTOR.**

If there is a problem with the Drop Detector then the following message will appear on the front panel:



DROP DETECTOR  
Blocked DD: Fail  
Code: 00XXXX:0000XX

In this case, to resolve the problem, try the following:

- 1 Check that the Drop Detector Cable is NOT broken or damaged.
- 2 Check that the Drop Detector cable is correctly connected to the Service Station Cable.
- 3 Check that the Service Station Cable is NOT broken or damaged.
- 4 Remove the Drop Detector and make sure that there are no obstacles inside which are blocking the sensor.
- 5 Replace the Drop Detector Assembly ⇒ Page 8-10.
- 6 If the test continues to fail, replace the Main PCA (**designjet 1050c plus/1055cm plus only**) ⇒ Page 8-31 **or** replace the Electronics Module (**designjet 1050c/1055cm only**) ⇒ Page 8-25.

**Only replace one component at a time and try the Service Test again before replacing another component. Using this procedure you will be able to determine exactly which component failed.**

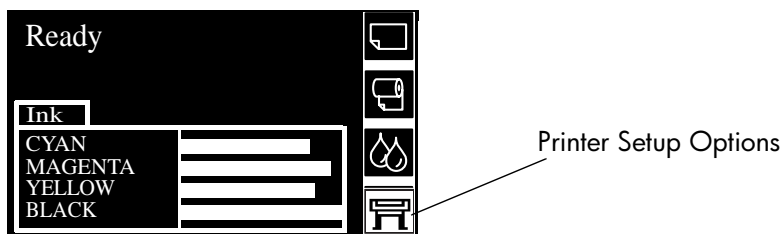
## Service Utilities

The following is a list of all internal Service Utilities available in the Printers. Instructions for entering the Service Utilities menu are given on Page 4-25.

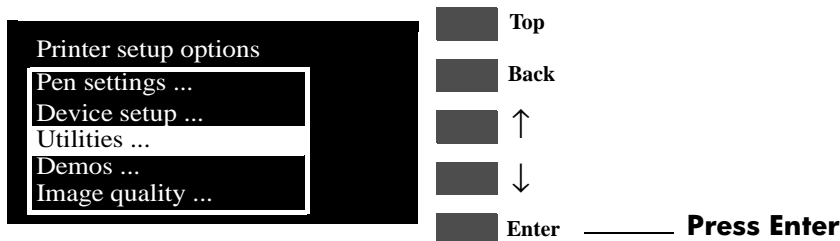
- 1** Tubes Purge ⇒ Page 4-27  
The purpose of this Service Utility is to Prime the Tubes when a new Tubes System has been installed.
- 2** Release Info ⇒ Page 4-31  
This Service Utility provides information on the current Firmware version.
- 3** Set Asian PS Font ⇒ Page 4-32  
The purpose of this Service Utility is to set the Asian Fonts after replacing the Hard Disk Drive.
- 4** Printer Model Type ⇒ Page 4-34  
The purpose of this Service Utility is to set the correct Printer Model.
- 5** Overdrive Cleaning ⇒ Page 4-36  
The purpose of this Service Utility is to rotate the Overdrive in order to clean it.
- 6** EEROM Utilities ⇒ Page 4-37  
The purpose of this Service Utility is to either clear the EEROM or to test it.
- 7** Printhead Check ⇒ Page 4-40  
This Service Utility allows you to have the Printhead checking facility ON or OFF.
- 8** Mon. Mode Baud Sel. ⇒ Page 4-41  
This Service Utility allows you to change the Baudrate of the Serial Port.

## Entering the Service Utilities Menu

- Once the message "Ready" is displayed on the front-panel, scroll to the "Printer Setup Options" icon and press the **Enter** key.



- Once inside the "Printer Setup Options" menu, use the **Arrow** keys to scroll to the "Utilities" menu display and press the **Enter** key.

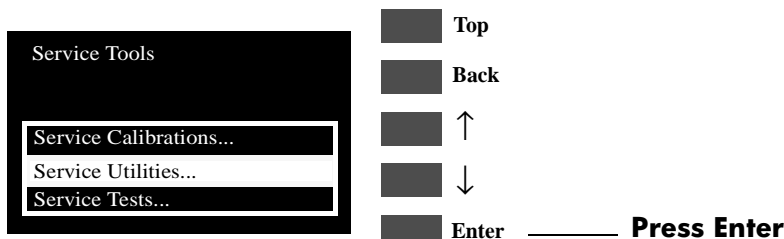


**Make sure that you are in the Full menu mode (Utilities / Menu / Full) because otherwise you will not be able to access the "Service Tools" submenu.**

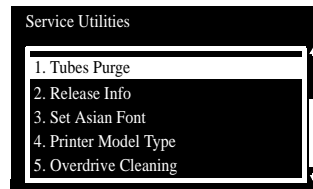
- Once inside the "Utilities" menu, press the **UP** and **Enter** keys together. You are now in the **Service Tools** Menu.



- Use the **Arrow** keys to scroll to the "Service Utilities" menu and press the **Enter** key.



- 5 Use the **Arrow** keys to scroll through the "Service Utilities" selections.



- 6 Press the **Enter** key to begin a specific operation when the required Service Utility is highlighted.

**If the printer is not used for 3 minutes, the printer exits out of the Service Utilities Menu and you must repeat the above steps to enter Service Utilities again.**

**In some cases a quick press of a button may not be recognized by the Printer. When pressing a button, be sure to press it deliberately and all the way to the bottom of its travel.**

**If the Printer hangs up during an operation, switch the Printer OFF and restart from step 1.**

## 1. Tubes Purge

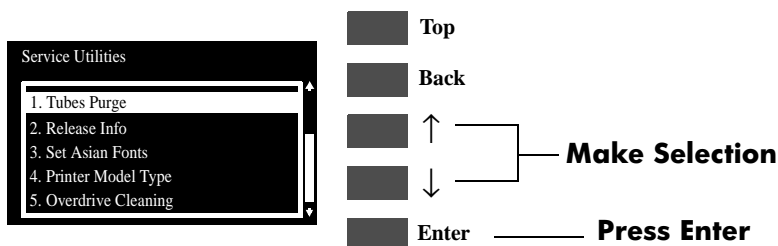
The purpose of this Service Utility is to Prime the Tubes when a new Tubes System has been installed.

**ALWAYS PERFORM THE TUBES PURGE AFTER REPLACING THE TUBES SYSTEM.**

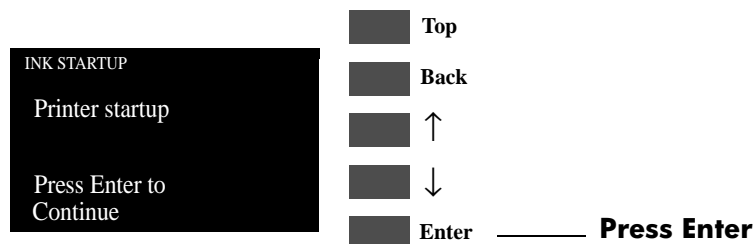
**Make sure that there is enough ink remaining in the Ink Cartridges before starting to prime the tubes. If there is not enough ink remaining, you will get a warning message.**

Perform the Tubes Purge as follows:

- 1 In the Service Utilities submenu, scroll to "1. Tubes Purge" and press **Enter**.



- 2 The Printer will begin to startup and in order to continue, press **Enter**.



- 3 The following message will be displayed on the front panel while the printer accesses the printheads.




- 4** When the following message is displayed, lift the window and remove ALL the Printheads from the carriage. Install the Setup Printheads into the carriage.



INK STARTUP  
Lift window to  
install SETUP  
printheads

- 5** Once all the Setup Printheads are installed, the following message will appear on the front panel. Close the carriage cover and close the window.



INK STARTUP  
All SETUP printheads  
are OK. Close cover  
and window to  
continue

- 6** The following messages will be displayed on the front panel while the printer accesses and then stores the printheads.

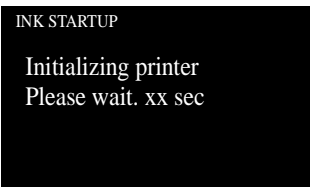


INK STARTUP  
Accessing Printheads



INK STARTUP  
Storing Printheads

- 7** The printer will then begin to purge the tubes system.



INK STARTUP  
Initializing printer  
Please wait. xx sec

- 8** Once the tubes system is purged, the following message will be displayed. Lift the window and remove ALL the Setup Printheads from the carriage and install the previously removed printing Printheads into the carriage.

INK STARTUP

Lift window to  
replace SETUP  
printheads

- 9** Once all the Printheads are installed, the following message will appear on the front panel. Close the carriage cover and close the window.

INK STARTUP

All printheads  
are OK. Close cover  
and window to  
continue

- 10** Open the right cover and make sure the Printhead Cleaners are installed in the Service Station.

INK STARTUP

Open right cover  
and install printhead  
cleaners

- 11** If media is not loaded, the following message appears on the front panel and you must load media into the Printer.

INK STARTUP

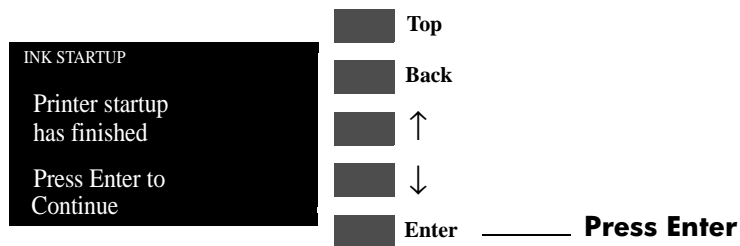
Load paper for  
calibration

- 12** The Printer will start to print the Printhead Alignment Pattern and the following message will be displayed on the front panel:

INK STARTUP

Aligning printheads  
Approximate  
time remaining  
x min xx sec

- 13** Once the Printhead Alignment is completed, the following message will be displayed on the front panel:



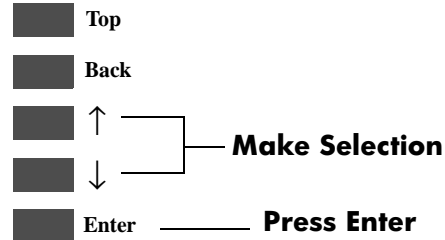
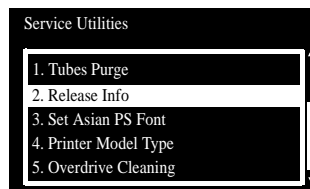
**Since you have replaced the Tubes System, make sure that you perform the Calibrations Backup (⇒ Page 5-19) in order to backup the EEROM Data from the Electronics Module. Make sure you select "Tubes Replaced" when performing the Calibrations Backup.**

## 2. Release Info

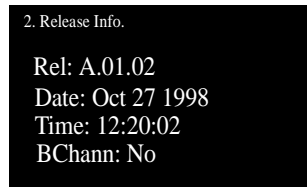
This Service Utility provides information on the current Firmware version.

Check the Release Info as follows:

- 1 In the Service Utilities submenu, scroll to "2. Release Info" and press **Enter**.



- 2 The Printer will display the Firmware information. An example is shown below.



### 3. Set Asian PS Fonts

The purpose of this Service Utility is to select the Asian Fonts after replacing the Electronics Module.

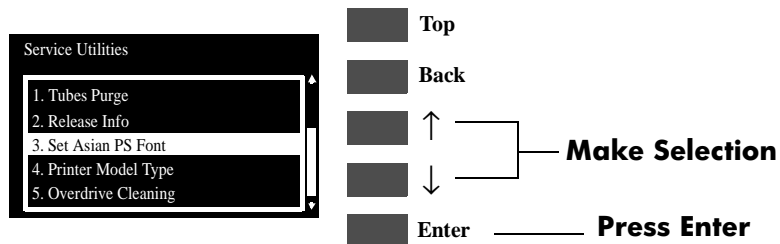
**ALWAYS SET THE ASIAN FONTS AFTER REPLACING THE ELECTRONICS MODULE.**

**If the customer is not using any internal Asian PS Fonts, then this Service Utility is not necessary.**

**ONCE AN ASIAN FONT IS SET, YOU CAN NOT RETURN BACK TO THE ROMAN FONTS.**

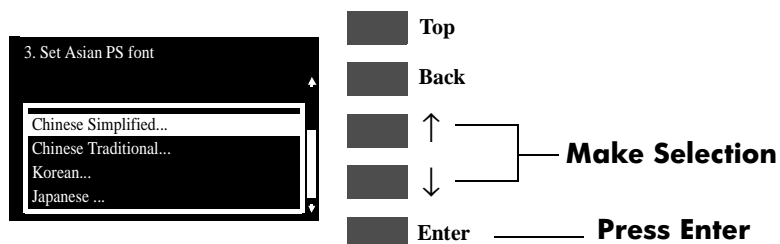
Set the Asian PS Font as follows:

- 1 In the Service Utilities submenu, scroll to "3. Set Asian PS Font" and press **Enter**.

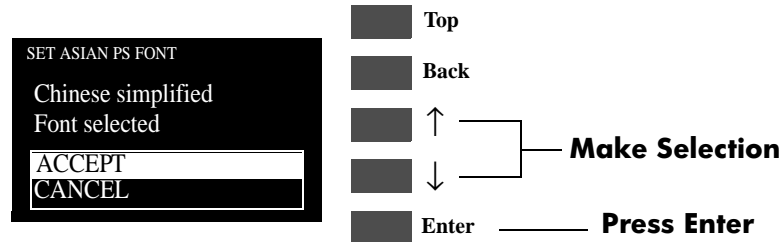


**Make sure you select the correct Asian PS font. Once the first PostScript file has been received by the Printer, the rest of the Asian PS fonts will be deleted from the Electronics Module and there will be no way to recover them.**

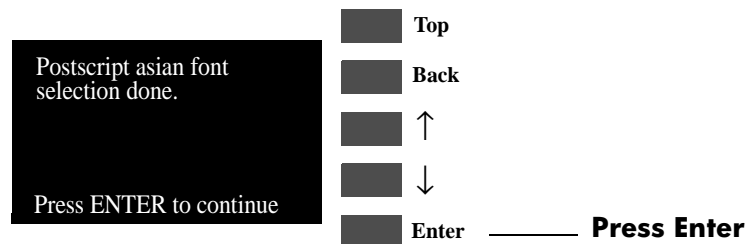
- 2 A list of ALL the Asian PS Fonts will be displayed and you must select the font that you require. Use the **Up** and **Down** arrow keys and press **Enter** once the selection has been made.



- 3** The following message will be displayed on the front panel asking you to confirm the selection. Select **ACCEPT** if you want to continue with your selection, or select **CANCEL** if you want to cancel it. Press **Enter** once the selection has been made.



- 4** Once the Font selection has been made, the following message will be displayed on the front panel:



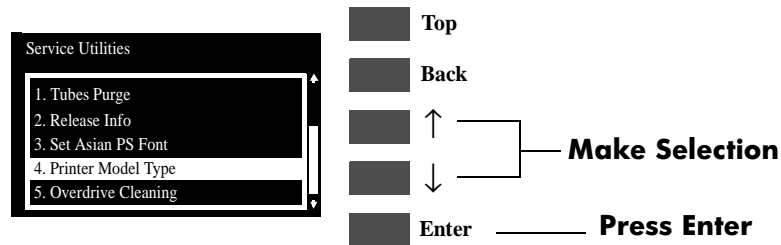
## 4. Printer Model Type

The purpose of this Service Utility is to set the correct Printer Model.

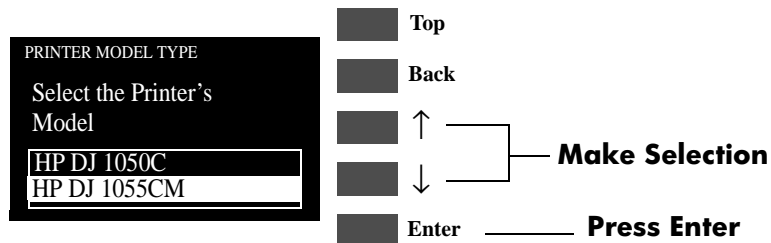
**The Printer Model Type only needs to be set when both the Tubes System and the Electronics Module have been replaced at the same time.**

Set the Printer Model Type as follows:

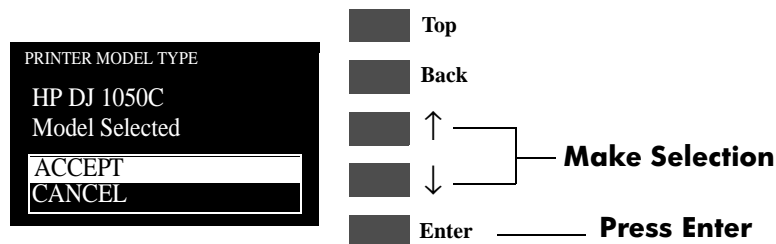
- 1 In the Service Utilities submenu, scroll to "4. Printer Model Type" and press **Enter**.



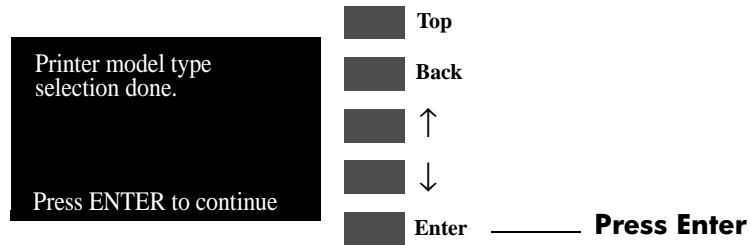
- 2 When the following message appears on the front panel, you must select which Printer Model you would like to set. Select either the HP DJ 1050C or the HP DJ 1055CM and press **Enter**.



- 3 The following message will appear asking you to confirm the selection. Select **ACCEPT** if you want to set the Printer Model (selected in the previous step), or select **CANCEL** if you want to cancel the selection. Press **Enter** once the selection has been made.



- 4** Once the Model Type selection has been made, the following message will be displayed on the front panel:



- 5** Print the Service Configuration Print (⇒ Page 1-17) and check if the Printer Model Type has been set correctly.

## 5. Overdrive Cleaning

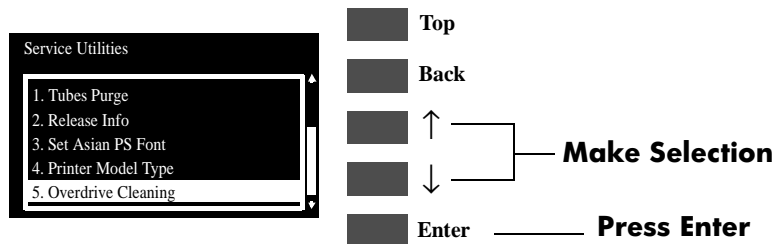
The purpose of this Service Utility is to rotate the Overdrive, Drive Roller and Roller Mark in order to clean them.

**REMOVE THE MEDIA BEFORE PERFORMING THIS OPERATION.**

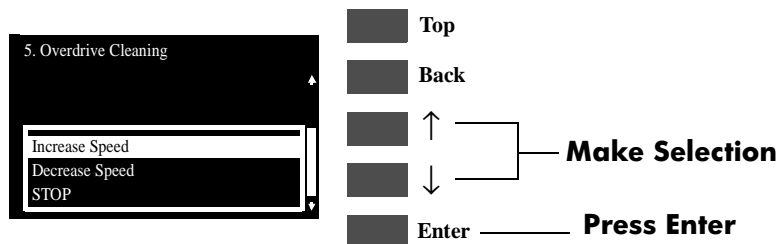
**OPEN THE WINDOW OF THE PRINTER AND ACTIVATE THE WINDOW SENSOR (USING A PIECE OF PAPER) BEFORE PERFORMING THIS SERVICE UTILITY.**

Perform the Overdrive Cleaning utility as follows:

- 1 In the Service Utilities submenu, scroll to "5. Overdrive Cleaning" and press **Enter**.



- 2 When the following message appears on the front panel, use the **Up** and **Down** arrow keys to select either to increase or decrease the speed. Press ENTER when the selection has been made and the speed will either increase or decrease depending on your selection.



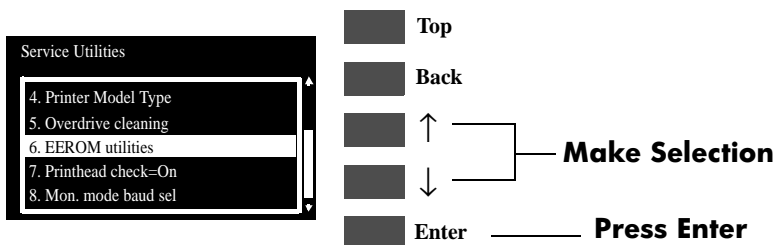
- 3 Refer to the Cleaning Instructions on Page 9-3.
- 4 To stop the Overdrive, select "STOP" and press ENTER.

## 6. EEROM Utilities

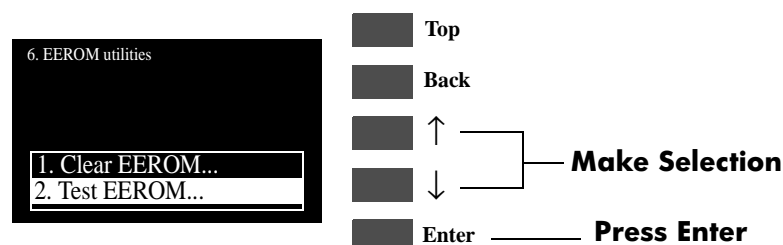
The purpose of this Service Utility is to either clear the EEROM in the Electronics Module or to test it.

Perform the Clear/Test EEROM utility as follows:

- 1 In the Service Utilities submenu, scroll to "6. EEROM Utilities" and press **Enter**.

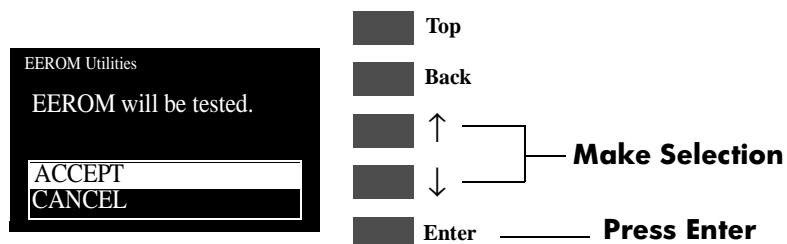


- 2 When the following message appears on the front panel, you must select whether you would like to either test the EEROM or clear it. Press **ENTER** once you have made your selection.




### If you want to Test the EEROM

- a If you want to test the EEROM, then you should select "Test EEROM" and press ENTER. The following message will appear asking you to confirm the selection. Select **ACCEPT** if you want to continue, or select **CANCEL** if you want to cancel the test. Press **Enter** once the selection has been made.



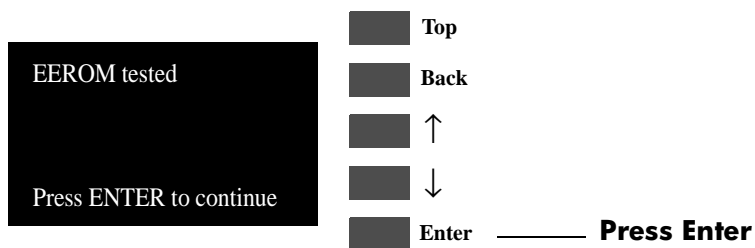
- b** If you decided to continue with the test then the following message will appear on the front panel and you should wait until the test has been performed.



Testing EEROM.  
Please wait.

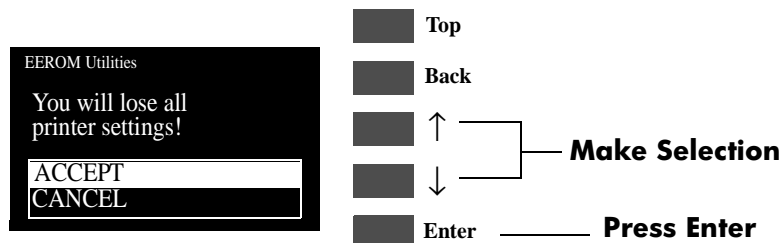
**DO NOT POWER OFF THE PRINTER WHILE THE TEST IS BEING PERFORMED BECAUSE THIS COULD DAMAGE THE ELECTRONICS MODULE.**

- c** Once the test has been completed, the following message will be displayed on the front panel.



### If you want to Clear the EEROM

- a** If you want to clear the EEROM, then you should select "Clear EEROM" and press ENTER. The following message will appear asking you to confirm the selection. Select **ACCEPT** if you want to continue, or select **CANCEL** if you want to cancel the operation. Press **Enter** once the selection has been made.



- b** If you decided to continue with clearing the EEROM, then the following message will appear on the front panel and you should wait until the EEROM has been cleared.

Clearing EEROM.  
Please wait.

**DO NOT POWER OFF THE PRINTER WHILE THE EEROM IS BEING CLEARED BECAUSE THIS COULD DAMAGE THE ELECTRONICS MODULE.**

- c** Once the EEROM has been cleared, the following message will be displayed on the front panel.

EEROM cleared

Press ENTER to continue

Top

Back

↑

↓

Enter **Press Enter**

- d** In order to recover the calibrations information, perform the Calibrations Backup (⇒ Page 5-19).
- e** Also, if necessary, set the Asian PS Fonts (⇒ Page 4-32), selecting the Asian PS font that was set before clearing the EEROM.

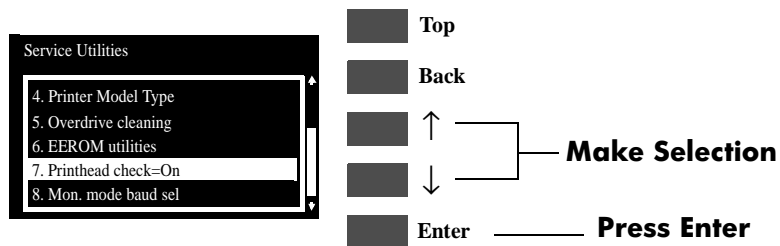
## 7. Printhead Check

This Service Utility allows you to have the Printhead checking facility ON or OFF.

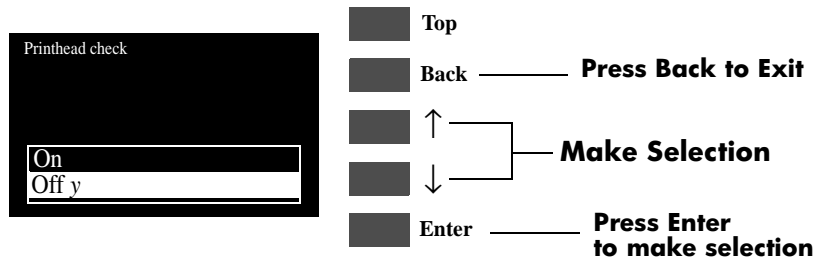
**ALWAYS HAVE PRINthead CHECK ON. IF PRINthead CHECK IS TURNED OFF, AUTOMATIC PRINthead CLEANING PROCEDURES WILL NOT WORK PROPERLY, SHORTENING PRINthead LIFE. ALSO BY TURNING OFF PRINthead CHECK, PRINT QUALITY MAY BE LOWER BECAUSE THE PRINTER WILL NOT USE THE ERROR HIDING CAPABILITIES.**

Turn the Printhead Check ON or OFF as follows:

- 1 In the Service Utilities submenu, scroll to "7. Printhead Check" and press **Enter**.



- 2 When the following message appears on the front panel, you must select whether you would like to turn the Printhead Check ON or OFF. Press **ENTER** once you have made your selection and a little symbol will be displayed next to your selection.



## 8. Mon. Mode Baud Sel.

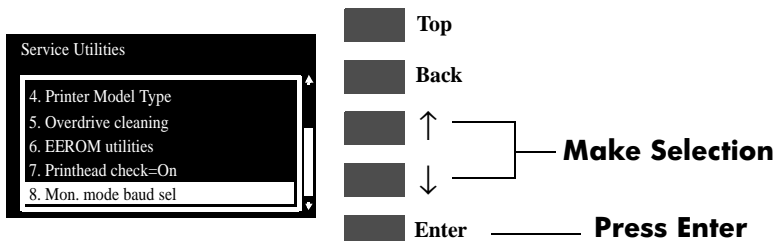
This Service Utility allows you to change the Baudrate of the Serial Port.

**hp desingjets 1050c plus and 1055c plus do not have a serial port.**

**The default Baudrate for serial communication is 19200.**

Change the Baudrate as follows:

- 1 In the Service Utilities submenu, scroll to "8. Mon. Mode Baud Sel." and press **Enter**.



- 2 When the following message appears on the front panel, you must select the Baudrate setting using the **Up** and **Down** arrow keys. Press **ENTER** once you have made your selection.

