

Product: 2007 HP Designjet T1100/T1100ps/T610 Series Printer Service Repair Workshop Manual

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Service Manual

**HP Designjet
T1100/T1100ps/T610
Printer Series**



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WARNING

The procedures described in this manual are to be performed by HP-qualified service personnel only.

Electrical Shock Hazard

Serious shock hazard leading to death or injury may result if you do not take the following precautions:

- Ensure that the ac power outlet (mains) has a protective earth (ground) terminal.
- Disconnect the Printer from the power source prior to performing any maintenance.
- Prevent water or any other liquids from running onto electrical components or circuits, or through openings in the enclosure.

Electrostatic Discharge

Refer to the beginning of Chapter 4 of this manual, for precautions you should take to prevent damage to the Printer circuits from electrostatic discharge.

Safety Symbols

General definitions of safety symbols are given immediately after the table of contents.

WARNING

The Warning symbol calls attention to a procedure, practice, or the like, which, if not correctly performed or adhered to, could result in personal injury. Do not proceed beyond a Warning symbol until the indicated conditions are fully understood and met.

CAUTION

The Caution symbol calls attention to an operating procedure, practice, or the like, which, if not correctly performed or adhered to, could result in damage to or destruction of part or all of the product. Do not proceed beyond a Caution symbol until the indicated conditions are fully understood and met.

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T1100/T1100ps/T610

Table of Contents

- 1 Troubleshooting
- 2 System Error Codes
- 3 Ink Supplies Troubleshooting
- 4 Service Tests and Utilities
- 5 Service Calibrations
- 6 Print Quality
- 7 Parts and Diagrams
- 8 Removal and Installation
- 9 Preventive Maintenance

For information about Using this Manual, please refer to the next page.

Using this Manual

Purpose

This Service Manual contains information necessary to test, calibrate and service:

- HP designjet T1100 Printer 24 inch (Model Q6683A)
- HP designjet T1100 Printer 44 inch (Model Q6687A)
- HP designjet T1100ps Printer 24 inch (Model Q6684A)
- HP designjet T1100ps Printer 44 inch (Model Q6688A)
- HP designjet T610 Printer 24 inch (Model Q6711A)
- HP designjet T610 Printer 44 inch (Model Q6712A)

For information about using these printers, refer to the corresponding User and Quick Reference Guides.

Readership

The procedures described in this Service Manual are to be performed by HP Certified service personnel only.

Part Numbers

Part Numbers for Printer options, accessories and service parts are located in Chapter 7, Parts and Diagrams.

Conventions

A small arrow \Rightarrow indicates a link to other parts of the Service Manual where you can find information related to the topic you are consulting.

Troubleshooting

1

Introduction 1-2
Troubleshooting System Error Codes 1-2
Performing a Service Test on a failed Assembly 1-2
Performing the Necessary Service Calibrations 1-3
Solving Print Quality Problems 1-3
The Printer does not Power ON 1-3
The Printer Continuously Rejects Printheads 1-3
Cover Sensors are not Working 1-3
The Line Sensor has Problems Detecting Media 1-3
Banding at variable extreme environmental conditions 1-4
Worm marks on HP Coated media with light area fills 1-4
Solving Media-Handling Problems 1-5

Guide to Troubleshooting the Printer

Introduction

This chapter will guide you through the relevant steps to take when troubleshooting the printer.

Troubleshooting System Error Codes

Chapter 2, *System Error Codes* contains a list of system error codes and their respective descriptions and recommended corrective actions. Only try one recommended action at a time and check if the error code has disappeared.

If you have an error code which is not documented in this Service Manual or you have an error which you cannot resolve, then report the error to the HP Response Center or the nearest HP Support Office. When reporting the error, have the following information ready:

- Model and Serial Number of the printer.
- Which firmware revision the printer is using (See Note below). Check firmware in *Utilities / Statistics / Code rev.*
- The complete error number (See Note below).
- The Service Configuration Print.
- The Current configuration sheet.
- Which software application the customer is using (name, version, etc.).

When reporting the System Error Code, make sure that you supply the full Error Code and the firmware version. Without this information, HP Support Personnel cannot help you.

Performing a Service Test on a failed Assembly

If possible, always perform a Service Test on the component/assembly that you are about to replace, just to make sure that is the component/assembly that has failed.

If the test on that component/assembly passes, you should NOT replace it.

For information on the Service Tests and how to use them see Chapter 4, *Service Tests and Utilities*.

Performing the Necessary Service Calibrations

Is the printer calibrated correctly after replacing a component? For information on the Service Calibrations and how to use them see Chapter 5, *Service Calibrations*.

Remember that certain Calibrations are required even if an Assembly has been disassembled to gain access to another Assembly or Component.

Solving Print Quality Problems

Whenever a Print Quality problem appears, it is advisable to print the Diagnostic Print to help diagnose the problem. The Diagnostic Print will help you differentiate between possible printhead errors and other problems such as incorrect front-panel selection, driver or RIP configuration or mechanical problems. For information on solving Print Quality problems see Chapter 6, *Print Quality*.

The Printer does not Power ON

- 1 Check that the power cord is connected correctly to the Printer and to the Power Socket.
- 2 Check that the Power Switch on the BACK of the Printer is in the ON position.
- 3 Check to see the LED on the Front Panel Power Switch are On.
- 4 Check that the Front-Panel Cable is correctly connected to the Electronics Module. Also make sure that the Front-Panel cable is not damaged.
- 5 Replace the Power Supply Unit ⇒ Page 8-144.

The Printer Continuously Rejects Printheads

- 1 Clean the flex contacts on the Printhead and in the Carriage Assembly using the Carriage Interconnect Wiper (Refer to Page 3-20) and try again.
- 2 If ALL the Printheads are rejected (the status message on the Front Panel does NOT show "OK" for ALL the Printheads) then perform the Electronic Module Test ⇒ Page 4-21.

Cover Sensors are not Working

- 1 Perform the Sensors Test ⇒ Page 4-31.
- 2 Check if the cable for the faulty sensor is not damaged and is connected correctly.
- 3 Replace the faulty Sensor.

The Line Sensor has Problems Detecting Media

- 1 Check the type of media that is being used since the Line sensor may have problems detecting transparent media or some types of Non-HP media. Try

loading white HP media in to the Printer and check if the Line sensor detects it.

- 2 The Line Sensor is not calibrated correctly. Perform the Line Sensor Calibration ⇒ Page 5-15.
- 3 The Line Sensor is damaged or faulty. Replace the Line Sensor ⇒ Page 8-115.

Troubleshooting Media Jams/Printhead Crashes

The failure modes "media jam" and "head crash" are grouped together because in many cases a media jam causes the media to lift up into the Carriage path and cause a Printhead crash, thus causing many media jam failures to be reported as head crashes.

- 1 Did the media jam occur when loading media?
 - If the client has had media jams, it is common for pieces of media to get stuck in the media path. Clear the media path.

When clearing a media jam, sometimes media is stuck in the paper path. To clear this, you must lift the Media Lever and insert thicker media into the paper path to push out the media that is still stuck there.

- 2 Is the customer using non-HP media?
 - The use of non-HP media can easily be the cause of media jams and head crashes (especially head crashes because HP media is specially formulated to avoid cockle, one of the primary causes of head crashes). If the media is not HP approved, advise the customer to use HP media and check to see if the problem is now solved.

Banding at variable extreme environmental conditions

Since the Accuracy Calibration has been done at normal environmental conditions, printing in extreme environmental conditions will cause banding because the advance of the Media Advance Roller does not correspond to the same conditions that the calibration was done in. To solve the problem, try the following:

Perform the Accuracy Calibration in the new environmental conditions (Refer to the User's Guide).

Worm marks on HP Coated media with light area fills

Light bands (S-shaped) in Paper axis direction where light area fills are printed, causing unacceptable Image Quality defect.

- Print the Service Configuration Print and check if the level of Humidity is very low (below 30%). Increasing humidity may help in reducing the

severity of the problem.

The media is causing the problem and NOT the Printer. Do not attempt to try and replace Printer parts to solve this problem.

Solving Media-Handling Problems

The Front Panel indicates that media is misaligned or incorrectly positioned

Roll media

- The roll may be loaded the wrong way. The paper should load over the roll toward you.
- Check that the paper is correctly loaded onto the spindle.
- The paper may be loaded at an angle. The right-hand edge must be aligned with the blue line on the Print Platen.

With 24 inch printers, ensure that the paper is wrapped tightly on the roll. This is a very important step to remember because if this is not done, the media may be loaded at an angle, causing the media to be rejected.

- Check that the Right Spindle Holder (rewinder included) is properly attached and screwed to the printer.

For 44 inch printers, the Rewinder, located on the Right Spindle Holder (rewinder included), should maintain proper back tension. If the Right Spindle Holder (rewinder included) is misaligned or not properly attached to the printer, the Rewinder will not function properly.

A graphic of a properly installed Rewinder can be found on page 8-74, *Right Spindle Holder (rewinder included)*. To further diagnose problems with the Rewinder, Refer to Page 4-34.

Sheet media

- Always load sheet media using the Rear Input Tray. Do NOT load the media as you would load roll media.
- It must be loaded with the right-hand edge against the blue line on the Print Platen.
- The media may be crumpled or warped or may have irregular edges.
- If hand-cut media is used, the edges may not form a right-angle or they may be rough. If possible, hand-cut media should not be used. Only purchased sheet media should be used in the Printer.
- If you have problems with paper jams, check that the Overdrive is not obstructed by bits of paper or using the Turn Drive Roller Service Utility ⇒ Page 4-58.

Check that the Right Spindle Holder (rewinder included) is properly attached and screwed to the printer.

For 44 inch printers, the Rewinder, located on the Right Spindle Holder (rewinder included), should maintain proper back tension. If the Right

Spindle Holder (rewinder included) is misaligned or not properly attached to the printer, the Rewinder will not function properly.

To further diagnose problems with the Rewinder, Refer to Page 4-34.



System Error Codes

2

- Introduction 2-2
- Continuable and Non-Continuable Error Codes 2-2
- System Error Code Brief Descriptions 2-3
- System Error Codes - Full Descriptions 2-7

Introduction

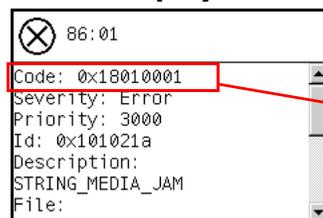
System error codes are hexa-decimal based numbers generally caused by internal system errors. The following pages contain a list of system error codes and their respective descriptions and recommended corrective actions. Only try one recommended action at a time and check if the error code has disappeared.

If you have an error code which is not documented in this Service Manual or you have an error which you cannot resolve, then report the error to the HP Response Center or the nearest HP Support Office. When reporting the error, have the following information ready:

- Model and Serial Number of the printer.
- Which firmware revision the printer is using (See Note below). Check firmware in *Setup Menu / Information Menu / Show Printer Information*.
- The complete error number (See Note below).
- The Service Configuration Print.
- The Current configuration sheet.
- Which software application the customer is using (name, version, etc.).

When reporting the System Error Code, make sure that you supply the full Internal Error Code and the firmware version. Without this information, HP Support Personnel cannot help you. To view the Internal Error Code, hold the UP key and press the CANCEL key at the same when the System Error.

Code is displayed on the Front Panel.



This is the code definition required when escalating a problem

Continuable and Non-Continuable Error Codes

Some of the Error Codes are continuable, which means you can press **OK** on the front-panel and continue working with the Printer. Non-Continuable Error Codes do not allow you to continue working with the Printer, in this case power the Printer OFF and ON again and see if the System Error disappears. If the Error Code reappears, then the Printer requires an on-site visit in order to resolve the problem.

Even though the customer can continue working with a Continuable Error Code, an on-site visit should still be planned to troubleshoot the problem.

System Error Code Brief Descriptions

Reading a System Error Code

System Error Codes explain which component/system is failing and what action should be taken to resolve the problem.

System Error Codes are displayed directly on the front panel (but can also be seen on the Information Page) and have been defined in the format **XX.YZ.** or **XX.n:YZ.m.**

- **XX:** Can be a malfunctioning subsystem or process (2 digits).
- **n:** Subsystem or process Index (if more than one used in the product) - Optional.
 - e.g. Identify the Ink Supply (color and number).
- **Y:** Who should perform the action (1 digit) - (0 for User or 1 for Service Engineer).
- **Z:** Action to perform (1 digit).

System Error Code Table

The following table explains the **XX** part of the System Error Code or Warning:

Code	Component/System
01.0	Main PCA/Electronics module
01.1	Add-on Electronics module (printmech)
01.2	Print Mech PCA
02.1	Carriage PCA
02.2	Carriage PCA
03	Power supply
05.1	Fan of the Formatter
06	Formatter
08	Front panel
11	Trailing cable
12.n	Carriage flex circuit n to pens
21	Service station
21.1	Service station
22.0	Bongo error BPS0 (ISS Left)
22.1	Bongo error BPS1 (ISSLeft)
24	Tube assembly (IDS)
26.n	Ink Cartridge (color = n)
27	Printhead error
31	Cutter

Code	Component/System
38	Output Tray
41	Paper-axis motor
41.1	Paper-axis motor
42	Scan-axis motor
44	Aerosol fan
45	Rewinder
47	Star wheel motor
48	PPS mechanism
51	Window Sensor
52	Drop detector
55	Line sensor
56	Drive roller analog encoder sensor
61	Error job
62	PC Interface
63	Input/output through LAN card
64	Input/output through USB port
65	Input/output (not known what port)
66	Input/output (not known what port)
67	Input/output through FireWire port
68	Loss of engine counters tracking
71	Memory management
71.19	PrintMech PCA/Formatter
72	Firmware error
73	Servo
74	Firmware upgrade
74.1	Media Profile Update
75.1	Preventive Maintenance kit #1
75.2	Preventive Maintenance kit #2
75.3	Preventive Maintenance kit #3
75.4	Preventive Maintenance kit #4
76	Disk Full
77	Web access application
78	Borderless
78.1	Media Settings
79	Assertion (uncontrolled FW error)
79.1	Recoverable Firmware Error
81	Media advance
81.1	Media advance

Code	Component/System
84	Roll Feed
85	Media-axis encoder reading
86	Carriage Movement
87	Scan-axis encoder reading
93	Ink Pumping
94	Color calibration
94.1	Profiler
95	Printhead alignment
97	Paper advance calibration

Corrective Actions Table

The following table explains the **YZ** part of the System Error Code or Warning:

Code	Recovery Action	Response
00	Replace	Possible for customer to perform action
01	Reseat/Reconnect/Clean/Adjust (manually)	
02	Calibrate/Adjust (using Automatic Process)	
03	Power OFF and Restart the Printer	
04	Upgrade System Firmware	
05	Upgrade Driver or Computer Software	
06	Add Accessory	
07	Escalate	
08	Send Plot Again	
09	Wrong Part Installed	

Code	Recovery Action	Response
10	Replace	hp qualified personnel assistance required
11	Reseat/Reconnect/Clean/Adjust (manually)	
12	Calibrate/Adjust (using Automatic Process)	
13	Power OFF	
14	Upgrade System Firmware	
15	Upgrade Driver or Computer Software	
16	Add Accessory	
17	Escalate	
18	Send Plot Again	
19	Wrong Part Installed	

System Error Codes - Full Descriptions

This section describes each of the system error codes and warnings that could be encountered while using the printer and provides the remedial action required to solve the problem detected.

Only replace one component at a time and check if the error has gone before replacing another component. Using this procedure you will be able to determine exactly which component failed.

System Error: 01.0:YZ

Problem Description: HCI queue does not end after 2 seconds.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- If the System Error continues, replace the Formatter ⇒ Page 8-140.
- If the System Error continues, replace the Main PCA ⇒ Page 8-144.

System Error: 01.1:YZ

Problem Description: NVM backup: not found, read, write or read back error.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- If the System Error continues, replace the Main PCA ⇒ Page 8-144.
- If the System Error continues, replace the Formatter ⇒ Page 8-140.

System Error: 01.2:YZ

Problem Description: Print Mech PCA fault or NVM backup failure.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- If the System Error continues, replace the PrintMech PCA ⇒ Page 8-66.

System Error: 02.1:YZ

Problem Description: Encoder seems to be wrong.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Check that the Trailing Cable is not damaged.
- Check that the Trailing Cable is correctly connected between the Main

PCA and Carriage PCA.

- If the System Error continues, replace the Trailing Cable. ⇒ Page 8-88.
- If the System Error continues, replace the Carriage PCA ⇒ Page 8-125.
- If the System Error continues, replace the Main PCA. ⇒ Page 8-141.

System Error: 02.2:YZ

Problem Description: Problem with the Carriage PCA.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Check that the Trailing Cable is not damaged.
- Check that the Trailing Cable is correctly connected between the Main PCA and Carriage PCA.
- If the System Error continues, replace the Trailing Cable. ⇒ Page 8-88.
- If the System Error continues, replace the Carriage PCA ⇒ Page 8-125..
- If the System Error continues, replace the Main PCA. ⇒ Page 8-141.
- If the System Error continues, replace the Formatter ⇒ Page 8-140.

System Error: 03:YZ

Problem Description: Problem with Power Supply Unit.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Perform the Electronics Module Test Diagnostic to troubleshoot the problem further ⇒ Page 4-21.
- If the System Error continues, replace the Power Supply Unit (PSU) ⇒ Page 8-144.

System Error: 05.1:YZ

Problem Description: CPU Fan is stopped or burnt.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Replace the Power Supply Unit (PSU) ⇒ Page 8-144.
- If the System Error continues, replace the Main PCA ⇒ Page 8-144.

System Error: 06:YZ

Problem Description: Main NVM failure - not detected, read/write failed or readback error.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the

Power cord. Reconnect the power cord and power On the Printer.

- If the System Error continues, replace the Formatter ⇒ Page 8-140.

System Error: 08:YZ

Problem Description: Problem with the Front Panel.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Check that the Front Panel interface cable is not damaged and is correctly connected between the Main PCA and the Front Panel.
- Check that the memory module in the Formatter is installed correctly.
- Check that the connections between the Formatter, the Formatter and the Formatter are not damaged and are correctly connected.
- Check that the Printer has the latest Firmware version. If not, update the Firmware to the latest version.
- If the System Error continues, replace the Main PCA ⇒ Page 8-144.
- If the System Error continues, replace the Formatter ⇒ Page 8-140.
- If the System Error continues, replace the Front Panel ⇒ Page 8-43.

System Error: 11:YZ

Problem Description: Trailing Cable does not seem to be detected.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Check that the Trailing Cable is not damaged.
- Check that the Trailing Cable is correctly connected between the Main PCA and Carriage PCA.
- If the System Error continues, replace the Formatter ⇒ Page 8-140.
- If the System Error continues, replace the Main PCA ⇒ Page 8-144.
- If the System Error continues, replace the Carriage PCA ⇒ Page 8-125.

System Error: 12.n:YZ

Problem Description: Carriage & PCA Main doesn't detect pens.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Check that the Trailing Cable is not damaged.
- Check that the Trailing Cable is correctly connected between the Main PCA and Carriage PCA.
- Check that the Printhead has not failed and is not erroneous.
- Check that the Flex circuit contacts and Printhead contacts are clean.

- If the System Error continues, replace the Carriage PCA ⇒ Page 8-125.
- If the System Error continues, replace the Main PCA ⇒ Page 8-144.

System Error: 21:YZ

Problem Description: Fail moving Service Station.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Check the Primer Tubes. Reconnect the power cord and power On the Printer.
- Make sure that the Service Station path is clear. Remove any visible obstacles (e.g. screws, plastic parts, etc...) restricting the movement of the Service Station.
- Perform the Service Station diagnostic test to troubleshoot the problem further ⇒ Page 4-42.
- If the System Error continues, replace the Service Station ⇒ Page 8-55.
- If the System Error continues, replace the PrintMech PCA ⇒ Page 8-66.

System Error: 21.1:YZ

Problem Description: Service Station servo shutdown.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Check the Primer Tubes. Reconnect the power cord and power On the Printer.
- Perform the Service Station diagnostic test to troubleshoot the problem further ⇒ Page 4-42.
- If the System Error continues, replace the Service Station ⇒ Page 8-55.
- If the System Error continues, replace the PrintMech PCA ⇒ Page 8-66.

System Error: 22.0:YZ

Problem Description: ISS Left BPS0 error.(Supplies 0, 1, 2).

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Check that the cables between the Left Ink Supply Station and Main PCA the are not damaged and are correctly connected.
- Perform the Ink Delivery System diagnostic test to troubleshoot the problem further ⇒ Page 4-36.
- If the System Error continues, replace the Left Ink Supply Station ⇒ Page 8-130.
- If the System Error continues, replace the Main PCA ⇒ Page 8-144.
- If the System Error continues, replace the Formatter ⇒ Page 8-140.

System Error: 22.1:YZ

Problem Description: ISS Left BPS1 error.(Supplies 3, 4, 5).

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Check that the cables between the Left Ink Supply Station and Main PCA the are not damaged and are correctly connected.
- Perform the Ink Delivery System diagnostic test to troubleshoot the problem further ⇒ Page 4-36.
- If the System Error continues, replace the Left Ink Supply Station ⇒ Page 8-130.
- If the System Error continues, replace the Main PCA ⇒ Page 8-144.
- If the System Error continues, replace the Formatter ⇒ Page 8-140.

System Error: 24:YZ

Problem Description: Ink Setup failure(Ink Delivery System (IDS) Tubes purge failed).

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Try purging the Ink Supply Tubes again once the Printer has been restarted.
- Install new Cartridges in the printer and try purging the Ink Supply Tubes again.

System Error: 26.n:YZ (color = n)

Problem Description: Order of Ink Supplies incorrect.

Corrective Action: Try the following:

- Remove the Ink Supply Cartridges and check that they are the correct ones for this printer and are in the proper order.
- Check that the Printer has the latest firmware. If not, update the firmware to the latest version.

System Error: 27:YZ

Problem Description: An error has occurred in Printhead detection.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Remove the Printheads from the Carriage Assembly and reinsert them.
- Replace the Printheads.
- Replace the Carriage Cover (Flex Circuit) ⇒ Page 8-120.

- Replace the Carriage PCA ⇒ Page 8-125.
- Replace the Formatter ⇒ Page 8-140.

System Error: 29.n:YZ

Problem Description: An error has occurred in Printhead detection.

- Corrective Action:** Try the following:
- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
 - Remove the Printheads from the Carriage Assembly and reinsert them.
 - Replace the Printheads.
 - Replace the Carriage Cover (Flex Circuit) ⇒ Page 8-120.
 - Replace the Carriage PCA ⇒ Page 8-125.
 - Replace the Formatter ⇒ Page 8-140.

System Error: 31:YZ

Problem Description: An error has been detected with the cutter.

- Corrective Action:** Try the following:
- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
 - Check the Cutter Assembly for blockage or any other obvious problems.
 - Replace the Cutter Assembly ⇒ Page 8-38.

System Error: 38:YZ

Problem Description: An error has been detected with the Media Output Tray.

- Corrective Action:** Try the following:
- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
 - Check the Media Output Assembly for blockage or any other obvious problems.
 - Replace the Media Output Assembly ⇒ Page 8-13.

System Error: 41:YZ

Problem Description: Electrical fault or current limit in Media-Axis Motor.

- Corrective Action:** Try the following:
- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
 - Open the Window and check for any visible obstacles restricting the movement of the Media Advance Roller. If there is a wrinkled mass of media inside the paper path, lift the Pinch wheels (using Media Lever) and clear the obstruction.
 - Perform the Paper Drive diagnostic test to troubleshoot the problem further

⇒ Page 4-18.

- If the printer has a 44 inch scan axis (and a Rewinder), perform the Rewinder diagnostic test to troubleshoot the problem further ⇒ Page 4-34.
- Check that the Media Advance Drive cable is not damaged and is correctly connected to the Main PCA.
- Replace the Media Advance Drive ⇒ Page 8-155.
- If the System Error continues, replace the Main PCA ⇒ Page 8-144.

System Error: **41.1:YZ**

Problem Description: Electrical fault or current limit in Media-Axis Motor.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Open the Window and check for any visible obstacles restricting the movement of the Media Advance Roller. If there is a wrinkled mass of media inside the paper path, lift the Pinch wheels (using Media Lever) and clear the obstruction.
- Perform the Paper Drive diagnostic test to troubleshoot the problem further ⇒ Page 4-18.
- If the printer has a 44 inch scan axis (and a Rewinder), perform the Rewinder diagnostic test to troubleshoot the problem further ⇒ Page 4-34.
- Check that the Media Advance Drive cable is not damaged and is correctly connected to the Main PCA.
- Replace the Media Advance Drive ⇒ Page 8-155.
- If the System Error continues, replace the Main PCA ⇒ Page 8-144.

System Error: **42:YZ**

Problem Description: Electrical fault or current limit in Scan-Axis Motor..

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Open the Window and check for any visible obstacles restricting the movement of the Media Advance Roller. If there is a wrinkled mass of media inside the paper path, lift the Pinch wheels (using Media Lever) and clear the obstruction.
- Perform the Scan Axis diagnostic test to troubleshoot the problem further ⇒ Page 4-6.
- Check that the Scan-Axis Motor cable is not damaged and is correctly connected to the PrintMech PCA.
- Replace the Scan-Axis Motor ⇒ Page 8-109.
- If the System Error continues, replace the PrintMech PCA ⇒ Page 8-66.

System Error: 44:YZ

Problem Description: Fan Electrical fault, or not connected..

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Check that the Aerosol Fan cable is not damaged and is correctly connected to the PrintMech PCA
- Replace the Aerosol Fan Assembly ⇒ Page 8-60.
- If the System Error continues, replace the PrintMech PCA ⇒ Page 8-66.

System Error: 45:YZ

Problem Description: An error with the Rewinder System has been detected.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Check that the Rewinder cable is not damaged and is correctly connected to the PrintMech PCA.
- Check that the Right Spindle Holder (rewinder included) is correctly attached to and aligned with the Right Cover.
- Perform the Rewinder diagnostic test to troubleshoot the problem further ⇒ Page 4-34.
- Replace the Right Spindle Holder (rewinder included) ⇒ Page 8-74.
- If the System Error continues, replace the PrintMech PCA ⇒ Page 8-66.

System Error: 47:YZ

Problem Description: Star wheels motor error..

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Check that the Starwheel Assembly cable is not damaged and is correctly connected to Main PCA.
- Open the Window and check for any visible obstacles restricting the movement of the Starwheel Assembly, then clear the obstruction.
- Perform the Scan Axis Starwheel diagnostic test to troubleshoot the problem further ⇒ Page 4-7.
- Replace the Starwheel Motor ⇒ Page 8-177.
- If the System Error continues, replace the Main PCA ⇒ Page 8-144.

System Error: 48:YZ

Problem Description: PPS system failure.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Check that the Pen to Paper Space (PPS) Solenoid cable is not damaged and is correctly connected to the PrintMech PCA.
- Perform the Scan Axis PSS diagnostic test to troubleshoot the problem further ⇒ Page 4-9.
- Replace the Pen to Paper Space (PPS) Solenoid ⇒ Page 8-68.
- If the System Error continues, replace the PrintMech PCA ⇒ Page 8-66.

System Error: 51:YZ

Problem Description: Window Sensor failure.

Corrective Action: Try the following:

- Check that the Window Position Sensor cable is not damaged and is correctly connected to the PrintMech PCA.
- Perform the Sensors Test to troubleshoot the problem further ⇒ Page 4-31.
- Replace the Window Position Sensor ⇒ Page 8-49.

System Error: 52:YZ

Problem Description: The printer has detected a problem with the Drop Detector.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Check that the Drop Detector cable is not damaged and is correctly connected to the PrintMech PCA.
- Check that the Service Station cable is not damaged and is correctly connected to the PrintMech PCA.
- Replace the Drop Detector ⇒ Page 8-59.
- Reset the Calibration Flag of the Drop Detector ⇒ Page 5-12.
- If the System Error continues, replace the PrintMech PCA ⇒ Page 8-66.
- If the System Error continues, replace the Formatter ⇒ Page 8-140.

System Error: 55:YZ

Problem Description: Problem with the Line Sensor. The printer has detected a failure to access Line Sensor EEPROM).

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Perform the Carriage Test to troubleshoot the problem further ⇒ Page 4-26
- Check the Line Sensor connections to the Carriage PCA.
- Replace the Line Sensor ⇒ Page 8-115.
- If the System Error continues, replace the Carriage PCA ⇒ Page 8-125.

System Error: 56:YZ

Problem Description: Drive roller analog encoder sensor fail or calibration failed.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Perform the Media Path Test to troubleshoot the problem further ⇒ Page 4-18.
- Replace the Encoder Disk and Encoder Sensor ⇒ Page 8-152.
- If the System Error continues, replace the Main PCA ⇒ Page 8-144.

System Error: 58:YZ

Problem Description: The Line Sensor of the printer is not functioning correctly. Either the Line Sensor shutter has failed to open, there is a failure to communicate with the Line Sensor, the Line Sensor is not calibrated correctly, or the firmware is not compatible with the Line Sensor.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the power cord. Reconnect the power cord and power On the Printer.
- Perform the Line Sensor calibration.
- Check that the Printer has the latest Firmware version. If not, update the Firmware to the latest version.
- Perform the Carriage Test to troubleshoot the problem further ⇒ Page 4-26.
- If the System Error continues, replace the Line Sensor ⇒ Page 8-115.

System Error: 61:YZ

Problem Description: The file format is incorrect and the Printer cannot process the job.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Check the graphic language setting of the Printer (Refer to the User's Guide).
- Resend the file to the printer.
- Check that the Printer has the latest Firmware version. If not, update the Firmware to the latest version.
- The PostScript™ fonts are missing. Upgrading the Firmware will re-install the fonts.
- The file cannot be printed because it is password protected. Resend the file without password protection.

System Error: 62:YZ**Problem Description:** PC Interface**Corrective Action:** Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Get the latest version of the firmware.

System Error: 63:YZ**Problem Description:** Input/Output problem through the Network Card.**Corrective Action:** Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Check that the Network cable is correctly connected to the Formatter.
- Check that the Printer has the latest Firmware version. If not, update the Firmware to the latest version.
- If the System Error continues, replace the Formatter ⇒ Page 8-140.
- If the System Error continues, replace the Main PCA ⇒ Page 8-144.

System Error: 64:YZ**Problem Description:** Input/Output problem through the USB Port.**Corrective Action:** Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Check that the USB cable is correctly connected to the Printer.
- Check that the Printer has the latest Firmware version. If not, update the Firmware to the latest version.
- If the System Error continues, replace the Formatter ⇒ Page 8-140.
- If the System Error continues, replace the Main PCA ⇒ Page 8-144.

System Error: 65:YZ**Problem Description:** Memory Driver Internal I/O error, I/O Socket Manager Internal I/O error.**Corrective Action:** Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Check that the unknown port cable is correctly connected to the Printer.
- Check that the Printer has the latest Firmware version. If not, update the Firmware to the latest version.
- If the System Error continues, replace the Formatter ⇒ Page 8-140.
- If the System Error continues, replace the Main PCA ⇒ Page 8-144.

System Error: 66:YZ

Problem Description: Cannot print file on current paper type. The paper type has changed since the file was sent, so the file cannot be printed on the paper type currently loaded.

Corrective Action: Try the following:

- Resend the file to be printed on the current paper type.
- Change the paper type to the type that was loaded when the file was originally sent.

System Error: 67:YZ

Problem Description: Input/Output problem through a Firewire Port.

Corrective Action: Try the following:

- Check that the firewire cable is correctly connected to the Printer.
- Check that the Printer has the latest Firmware version. If not, update the Firmware to the latest version.
- If the System Error continues, replace the Main PCA ⇒ Page 8-144.

System Error: 68:YZ

Problem Description: Loss of engine counters tracking.

Corrective Action: Try the following:

- Reboot the printer. The printer will continue to function correctly, but the life counters will not continue counting until you restart the printer.

System Error: 71:YZ

Problem Description: Out of memory failure.

Corrective Action: Try the following:

- It is recommended that you remove any unnecessary files from the Hard Disk Drive of the Formatter using the Web Server.

System Error: 71:19

Problem Description: Default Serial Number found in the main and backup NVM. It seems that both the Print Mech PCA and Hard Disk Drive have been replaced together.

Corrective Action: Try the following:

- Perform the “Error 71:19 Recovery” Service Utility ⇒ Page 4-51.

You MUST NEVER replace both the Formatter and the PrintMech PCA at the same time. If both parts need to be replaced, you MUST first replace one part and then power ON the Printer until it completely initializes. Then you can power OFF the Printer and replace the other part.

System Error: 72:YZ

Problem Description: Generic Firmware error.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Check that the Printer has the latest Firmware version. If not, update the Firmware to the latest version.

System Error: 73:YZ

Problem Description: Servo Error.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Check that the Printer has the latest Firmware version. If not, update the Firmware to the latest version.
- Perform the Scan Axis Test to troubleshoot the problem further ⇒ Page 4-6.
- If the System Error continues, perform the Media Drive diagnostic test to troubleshoot the problem further ⇒ Page 4-18.

System Error: 74:YZ

Problem Description: Error uploading firmware update file.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Make sure the connection between the computer and the printer is functioning properly.
- Try to update the Firmware again.

System Error: 74.1:YZ

Problem Description: Error uploading media profile update file.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord. Reconnect the power cord and power On the Printer.
- Make sure the connection between the computer and the printer is functioning properly.
- Try to upload the media profile update file again.

System Error: 75.1:YZ

Problem Description: Preventive Maintenance Kit #1 counter active (Scan Axis Components ,Ink Supply Tubes, Trailing Cable, Carriage).

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord.
- Change the Belt Assembly, the Scan-Axis Motor, the Ink Supply Tubes, Carriage Assembly (this does not include the Carriage PCA but it does include the Trailing Cable).
You should change Preventive Maintenance Kit #1. Refer to Page 7-24.
- Once the parts have been changed, use the Service Menu to reset the counters that affect PMKit #1.
- Change the Trailing Cable with Preventive Maintenance Kit # 4.
Once the parts have been changed, use the Service Menu to reset the counters that affect PMKit #4.

System Error: 75.2:YZ

Problem Description: Preventive Maintenance Kit #2 counter active.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord.
- Change the Service Station
You should change Preventive Maintenance Kit #2. Refer to Page 7-24.
- Once the parts have been changed, use the Service Menu to reset the counters that affect PMKit #2. See 4. *Reset Life Counters*, Page 4-63.

System Error: 75.3:YZ

Problem Description: Preventive Maintenance Kit #3 counter active (Cutter Assembly).

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord.
- Change the Cutter Assembly using Preventive Maintenance Kit #3. Refer to Page 7-24. Note that the PMkit is the same as the Cutter Assembly.
- Once the parts have been changed, use the Service Menu to reset the counters that affect PMKit #3.

System Error: 75.4:YZ

Problem Description: Preventive Maintenance Kit #4 counter active.

Corrective Action: Try the following:

- Switch the Power OFF from the back of the Printer and disconnect the Power cord.
- Change the Trailing Cable using Preventive Maintenance Kit #4. Refer to