Troubleshooting

7

Guide to Troubleshooting the hp designjet scanner

Is the Problem with the Printer or Scanner

If you encounter the following symptoms, the problem could be related to the **scanner**:

- System Error on the Touch Screen.
- LED's flashing on the Scanner Operator Panel.
- WIDEsystem error message.
- 1 vertical white, black or color line.

If you encounter the following symptoms, then perform an Image Preview and send a Test Print:

- Image Quality Problems.
- No Output.
- Output is not as expected.

If the Image preview fails, this points to a problem with the Scanner. If the Test Print fails, this points to a problem with the Printer.

Image Quality Problems

If you have Image Quality problems in any prints, try the following:

1   Print out a file already stored or print out a demo file.

2   Once the print is finished, insert it into the Scanner.

3   Once scanned, print out the scanned image.

- If the original print is the same as the copied print, then the problem is associated with the Printer.
- If the original print is NOT the same as the copied print, then the problem is associated with the Scanner.

Output Problems

If the output is not as you expected it to be, try the following:

- Check all the settings in the Software: Color Settings and Margins.
- Check media settings: Media profile (in software) and media loaded in the printer (front panel selection) should be the same.
- Perform Color Calibration (both Scanner and printer).
- Check the Preview Image.

If there is no output at all, then try the following:

- Check the connection between the Printer and the scanner.
- Check the selected settings: List, Collate, Scan to file...

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.

Using the SCANtest 6 Diagnostic Software

The purpose of the SCANtest 6 diagnostic software is to support the troubleshooting and adjustment of the Scanner.

When the SCANtest 6 diagnostic software has been started, the Scanner is switched ON in Test Mode, and the Diagnostic LED on the Operator Panel is turned ON.

Scanner Test Program Menu

- Test 1: Scanner Information
- Test 2: LED Test
- Test 3: Key Test
- Test 4: Original-Sensor Test
- Test 5: Lamp Test
- Test 6: Motor Test
- Test 7: Complete Hardware Test
- Test 9: Camera Adjustment
- Test 11: Stitching and Vertical Alignment
- Test 12: Adjust Y-Axis Scaling
- Test 13: Switch Scanner to Test Mode
- Test 20: Noise Test
- Test 21: Scan Dump
- Test 27: Camera Adjustment Wizard

If SCANtest 6 is started when the scanner is in Error Mode, the Error Code Number and a short description of the error will be displayed on the screen.

Test 1: Scanner Information

This test displays general information regarding the scanner. When executed, the test displays the following:

- Scanner Model:
- Firmware Release:
- Firmware Release Date:
- Firmware Build:
- FPGA Revision:
- FPGA Release Date:
- Boot Code Revision:
- Boot Code Release Date:
- Scanner ID Switch:
- SCSI ID:

Test 2: LED Test

This test checks the functionality of the LED Indicators on the Operator Panel. When the test is executed, all the LEDs are sequentially switched ON/OFF until Test 2 is terminated. If any of the LEDs fail, you will NOT get an error message, instead the LED will NOT switch ON or OFF. If the LED test fails, replace the Right Cover (which contains the Operator Panel).

Test 3: Key Test

This test checks the functionality of the Keys on the Operator Panel. When the test is executed, each key on the Operator Panel will turn an LED ON when pressed.

Key	LED
Forward and Reverse	Ready (Green)
Power	Wait (Yellow)

The only way to know if the test fails is by inspection, there is no error message that is displayed.

If the Key test fails, replace the Right Cover (which contains the Operator Panel).

Test 4: Original-Sensor Test

This test checks the functionality of the Media Sensors and the Media Thickness Detector.

When the test is executed, the following LEDs turn ON when one of the Media Sensors is activated, or when one or both Adjustment Sliders for Media Thickness are pulled out from Normal position:

Actuator	LED
Media Entry Sensor	Ready (Green)
Media Exit Sensor	Ready (Green)
Adjustment Slider for Media Thickness	Wait (Yellow)

To test the Adjustment Slider for Media Thickness (located on the Guide Plate), press the slider towards the center and the Wait LED switches On.

To test the Media Sensors, load a Sheet of media (A4) and the Ready LED switches ON and when you remove it the Ready LED switches OFF.

If the test fails (if any of the LEDs fail to switch ON), then the problem will be related to corresponding Sensor.

Test 5: Lamp Test

This test checks the functionality of the Lamp and associated electronics.

When the test is executed, a message on the screen will indicate whether the **Lamp** is turned ON or OFF (Lamp power is turned ON/OFF) and whether the **Light** is ON/OFF (Light is detected or not). The Lamp is delayed for approximately 2 seconds when switched ON.

Test 6: Motor Test

This test checks the functionality of the Stepper Motor and any associated electronics.

When the test is executed, a menu appears that allows you to select the motor speed and the motor direction.

If the Stepper Motor or the Driver Board fails to run when the test is executed, then the Stepper Motor should be replaced.

Test 7: Complete Hardware Test

This test checks the various functions of the Driver and Camera Boards.

Test 9: Camera Adjustment

You can also use Test 27 to adjust the camera because a wizard guides you through the complete process.

This test contains a Software Oscilloscope that allows you to check and adjust the CCD-Cameras. The following functions can be selected from the Test Program Menu.

- Uncorrected or Corrected Light Profile.
- Red, Green, or Blue Color Channel.
- Special Detail Views for Light Profile, Scan Width, and Vertical Positioning.
- Forward / Reverse controls for the Camera Motor.
- Save screen images.
- Print screen images.

The content of the Detail Views is marked on the upper overview window by red vertical lines. The continuous lines refer to the left Detail View and the dashed lines to the right Detail View.

To perform the Camera Adjustment, refer to Chapter 5 of this Service Manual.

Test 11: Stitching and Vertical Alignment

This test is also included in the Scanner Maintenance Software.

This test performs Automatic Vertical Alignment and Horizontal Stitching.

Once the test has been started:
- Insert SM Calibration Sheet.
- Select Vertical Alignment to align the cameras.
- Select Horizontal Stitching to stitch the cameras.

The screen image can be saved or printed.

This test allows manual setting of the Stitch Values. The Stitch Values are stored in the Flash Memory on the Driver Board.

The Vertical Alignment may be adjusted manually by controlling the Camera Motor from the control field '<<dddd>>'. The two buttons marked '<<' respectively '>>' are used to start the motor and to determine the direction of rotation. When started, the motor runs for dddd mili-seconds as entered into the control field.

Test 12: Adjustment of Y-Axis Scaling

This test allows you to adjust the Y-Axis Scaling.

The scaling (dpi) in the mechanical scan direction (Y-Axis) depends on the speed of the stepper motor relative to the scanline Exposure Time. The default motor speed can be changed ± 1%, either from Test 12 or by using the 'Scanner Setup/Correction factor …' option of SW copying. The correction factor is stored in the Flash Memory on the Driver Board.

Test 13: Switch Scanner to Test Mode

This test allows you to switch the scanner back to Test Mode. Useful if the scanner gets out of Test Mode, e.g. if it has to be turned OFF/ON during troubleshooting.

Test 20: Noise Test

The purpose of this test is to detect and locate the possible cause (dust, dirt, scratches,..) of vertical lines running from top to bottom of the scanned image.

When the test is executed, it scans the White Calibration Area of the SM Calibration Sheet and displays, for each color channel, the graytone values of each separate pixel averaged over the scanned band.

The displayed image of the SM Calibration Sheet will be superimposed by low level noise caused by the CCD chip, and larger spikes most likely caused by dust, dirt, scratches, or similar defects on the Glass Plate. In rare cases, larger spikes may be caused by dust, dirt, or pixel faults on the CCD chip.

The positions of larger spikes are shown by the numbers (cm or inch units) opposite to the spikes. The numbers refer to the Sideload-ruler on the scanner. Larger spikes going downwards are often caused by dust, dirt, scratches, or similar defects on the Glass Plate and may be removed by cleaning the Glass Plate. Downward spikes often show up as darker vertical lines in the scanned image.

Larger spikes going upwards are often caused by dust or dirt present on the Glass Plate during the last calibration with Scanner Maintenance. These defects are memorized by the Light Profiles stored in the Flash Memory and can only be removed by cleaning of the Glass Plate followed by running Scanner Maintenance again. Upward spikes show up as very bright vertical lines in the scanned image.

White vertical lines in the scanned image may be found even if Noise Test shows a perfectly 'clean' scanner. In this case, the cause may be white dust or particles on the backside of the Glass Plate having the same color as the white background. In this case, the Light Profiles of SCANtest 6, Test 9 may show upwards going spikes when a dark original is placed in the scan-area.

Test 21: SCANdump

The purpose of this test is to create a file, SCANdump.con, which contains Light Profiles and other scanner data for diagnostics purposes.

When the test is executed, the file SCANdump.con will be placed in the directory c:\Temp\. The files contained in SCANdump.con may be unpacked by SCANview 6 by double clicking on SCANdump.con. The unpacked Light Profiles may be viewed by SCANview 6. If other files are included, use an appropriate reader or viewer.

The files are also placed as a button on the active desktop and is called SCANdump. The files can be stored on a disk and can be sent by e-mail.

Test 27: Camera Adjustment Wizard

This allows you to adjust the Camera using a wizard that guides you through the complete process. Use this test instead of Test 9 (whenever possible).

Cleaning the Scanning Area

When cleaning any part of the scanning area DO NOT use abrasives, acetone, benzene or fluids that contain these chemicals. Do not spray liquids directly onto the scanner glass plate or anywhere else in the scanner.

1 Turn the scanner power off.

2 Disconnect the scanner power cable.

3 Open the scanner cover by placing your fingers just inside the insertion slot and flip the cover upwards to expose the scan area.

4 Remove the Guide Plate by pressing down on the Plate as you pull the left and right sliders towards the scanner's center until the metal safety buttons on each side of the scanner, pop up.
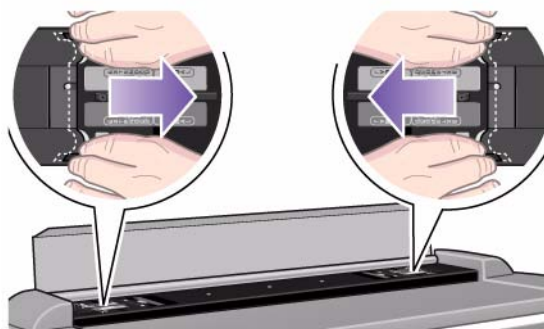
5 Use the two handles to lift out the Guide Plate.
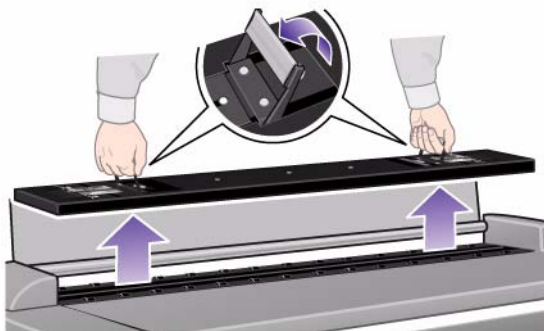
6 Gently wipe the Glass Plate. Clean the glass with a lint-free cloth and a mild, streak-free, glass cleaner.
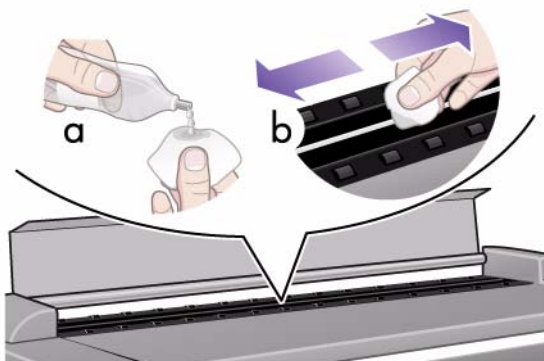
7 Dry the glass completely using a separate clean, dry lint-free cloth like the one provided with the maintenance kit.
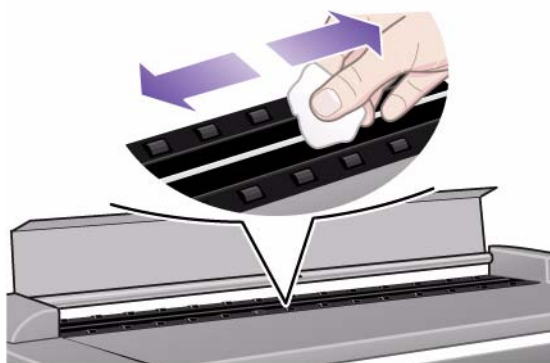
8 Turn the Guide Plate, that was removed in step 5, upside down.

9 Clean the white background assembly. Wipe the white metal area with a lint-free cloth and a mild, streak-free, glass cleaner.
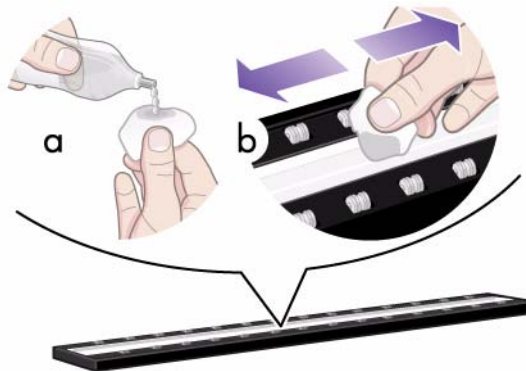
10 Clean the platen rollers. Wipe the rollers with a lint-free cloth and a mild, streak-free, glass cleaner.
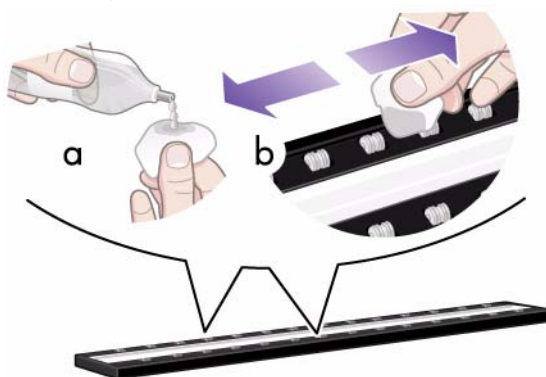
11 Dry the platen and rollers completely using a separate clean, dry lint-free cloth.
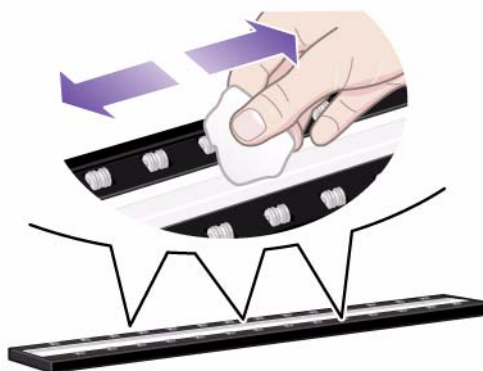
12 Replace the Guide Plate.
- Lift the Guide Plate into its original position.
- Press down on the metal safety buttons while pulling the slider towards the center of the scanner to let the two sliders move back and lock the Plate into place.
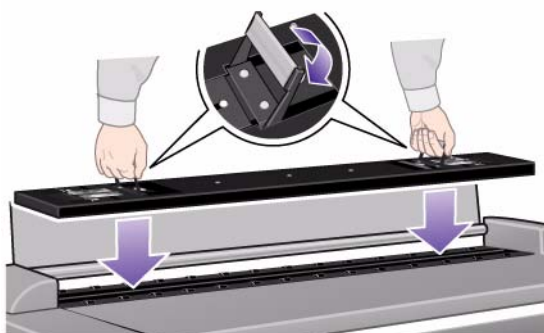
13 Close the scanner cover.

Adjusting the Driver Board

You must adjust the Driver Board when a brand new Lamp has been installed. DO NOT adjust the Driver Board if the Lamp has been in use for some time since it would impact the color adjustments negatively. You must also adjust the Driver Board after reinstalling the Driver Board or the Lamp Sensor.

If you replace the Driver Board, you MUST ALSO replace the Lamp at the same time.

Adjust the Driver Board as follows:

1. Switch the scanner ON and leave for at least 30 minutes.

2. Turn P2 Counter-Clockwise until LED 3 switches OFF (LED 4 should be ON).

3. Slowly turn P2 Clockwise until LED 3 switches ON.

If P2 is turned further Clockwise, LED 4 will eventually turn OFF. If both LED's are ON, the lamp driver is within the acceptable working range. If either of the LED's is OFF, the lamp driver should be adjusted.

The correct voltages are:

- P3 until TP12 = 10mV±10mV
- P4 until TP13 = 10mV±10mV
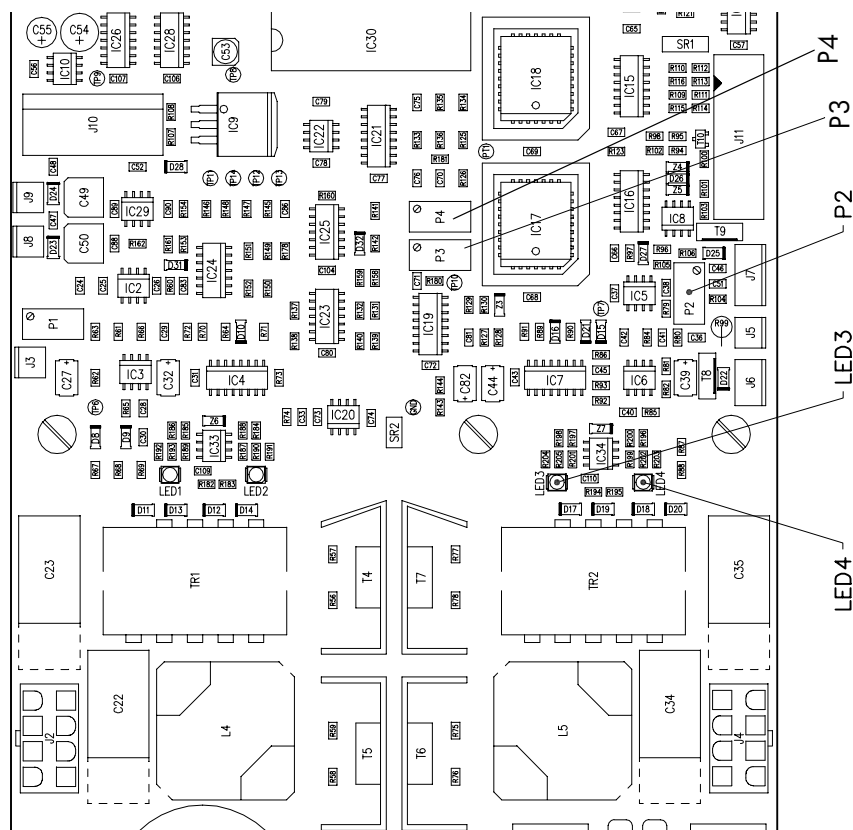
Vertical Line(s) Problem

A dust particle on the glass plate can produce a vertical white or black line. To make sure that the line is caused by dust, preview the image and inspect the preview using the viewing section buttons. To solve the problem, try the following:

■ Perform Scanner Maintenance: Cleaning and Camera Alignment.

Firmware Related Errors

If you have any firmware related errors, try the following:

■ Upgrade the Firmware.

Stepper Motor Does Not Work

If the Stepper Motor does not work, try the following:

■ Use **Test 6: Motor Test** to check the functionality of the Stepper Motor.
■ Replace the Driver Board.
■ Replace the Stepper Motor.

Lamp Does Not Work

If the Lamp does not work, check that the Driver Board is connected to the Power Supply Unit. Also check the Lamp Sensor and the Driver Board since these two parts work together with the Lamp.

Problem with the Rollers

If there is a skewing problem and replacing the Guide Plate does not solve the problem, then the problem maybe with the Rollers. In this case, replace the Rollers.

Media Loading Problems

If it not possible to load media or if there are media loading problems, try the following:

■ Check the Original Sensor (green LED when loading media) or use **Test 4: Original-Sensor Test** to check the functionality of the sensor.
■ Use **Test 6: Motor Test** to check the functionality of the Stepper Motor.

Fan Problems

If the Fan is not working then try the following:

■ Check the Fan to make sure that it is connected correctly.
■ If the Fan is connected correctly, then replace the Driver Board or the Fan.
■ If the Fan and Driver Board are working correctly, the problem could be related to the NTC Sensor.

Horizontal Banding Problem

If the tracking mechanism can not adjust the light, horizontal banding will appear on the images. To solve the problem, try the following:

- Test the Printer to make sure that it is printing correctly.
- Adjust the Driver Board (it can only be adjusted if the Lamp is **NEW**): Make sure both LEDs are ON. If both LEDs are **not** ON, then check that the Lamp is ON. If the Lamp is OFF, then replace the Lamp or the Driver Board. If the Lamp is ON, then replace the Driver Board or Lamp Sensor.

Dust on Glass Plate

If there is dust on the glass plate, try the following:

- Run **Test 20: Noise Test** to find the dust on the glass plate.
- Perform Scanner Maintenance: Cleaning and Camera Alignment.

Problems with the Software

If there are problems with the Software, try the following:

- Use the Recovery CD.
- After using the Recovery CD, setup the system on the network again (if necessary).
- If after using the Recovery CD the problem continues, then try running the Recovery CD again but this time use the option C and D drive.

Troubleshooting Tips

1 First record whether the problem is with the printer, scanner or the Touch Screen.

2 Make sure that the scanning area is completely clean.

3 **Test 20: Noise Test** can help you to find where the scanning area is dirty.

4 The SCAN dump files can help understand the light profile of the affected scanner.

5 Remember, in order to cancel when copying, press the Cancel button on the Touch Screen **and** the Cancel button on the printer.

Troubleshooting Guide - Update

The following guide will help you find a solution to some typical problems that some customers may experience. The problems (**P#**) that can be done by the customer are marked **C**, and the problems that need an intervention by a Support Technician are marked **T**.

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
1	Copy problem	The colors on one side of the copy does not correspond to the colors on the other side of the copy	1	Have you cleaned and calibrated your scanner recently?	No	C	Camera differences - The scanner needs to be cleaned and calibrated (refer to P22 and P23)
					Yes		Refer to Q2
			2	Have you upgraded the scanner firmware to the latest version?	No	C	Upgrade scanner firmware to latest version (from system version 2.5, use the Update System CD)
					Yes		Refer to Q3
			3	Have you upgraded the system software to the latest version?	No	C	Upgrade system software (use Update System CD)
					Yes	T	Cameras need adjusting or the Camera Board replacing

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
2	Copy problem	I get thin lines of wrong colors in my copy	1	Are the lines vertical and also present in your preview?	Yes	C	The scanner needs to be cleaned and calibrated (refer to P22 and P23)
					No		Refer to Q2
			2	Are the lines horizontal and equally spaced?	Yes	C	Check printheads by starting printhead test on Printer. By using the built-in test print function in the Designjet Scan Copy application, you can also get an idea whether the Printer is performing OK
					No		Refer to Q3
			3	Are the lines horizontal, but irregular (maybe only 1 line)?	Yes	C	The lines could be caused by a data error. Upgrade scanner firmware and system software
					No		Refer to Q4
			4	Do you have a great number of regular spaced lines very close to each other and restricted to one side (1 camera) only?	Yes	T	You have a camera error. Replace Camera Board

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
3	Copy problem	I get thick lines of slightly wrong colors in my copy	1	Are the lines vertical and also present in your preview?	Yes	C	The scanner needs to be cleaned and calibrated (refer to P22 and P23)
					No		Refer to Q2
			2	Are the lines horizontal and equally spaced?	Yes	C	Check printheads by starting printhead test on Printer. By using the built-in test print function in the Designjet Scan Copy application, you can also get an idea whether the Printer is performing OK
					No		Refer to P2

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
4	Copy problem	Some colors are not the same when I compare the master print with the copy	1	Is the scanner clean and calibrated?	No	C	Refer to P1. Clean and calibrate the scanner (refer to P22 and P23)
					Yes		Refer to Q2
			2	Do you use the correct media profile for the actual media?	No	C	If you are using e.g. Glossy Media for this copy, the media profile selected should also be for Glossy Media. Best results are obtained by making your own media profiles
					Yes		Refer to Q3
			3	Is the media profile valid?	No	C	Create a new media profile (refer to P24)
					Yes		Refer to Q4
			4	Is the option 'Ink Printer Original' set in accordance with your original?	No	C	If original was printed using an Inkjet Printer, set this option (refer to P25)
					Yes		Refer to Q5
			5	Is the media you are printing on the same type as the original?	No	C	e.g. Use Glossy Media to reproduce a Glossy original
					Yes	C	Create a new media profile (refer to P24)

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
5	Copy problem	Only a part of the master print is being copied	1	Are you scanning a thick original?	Yes	C	Uncheck extended media handling box in scanner settings (using extended media will load the original between both entry and exit rollers before scanning - this means that you will not have the start of the thick original scanned. Also the scan speed will be slower, and no "back-ups"/reversing is allowed while scanning)
					No		Refer to Q2
			2	Have you selected 'Auto size'?	Yes	C	The scanner needs to be cleaned (refer to P22)
					No		Refer to Q3
			3	Is the length too short and the width OK?	Yes	C	The problem may be with the Printer (not able to print close to the edges) or Panel PC (Hard Disk is full). To check Hard Disk space, use windows explorer and look at partition D:
					No	C	Check that the margins that are set are not too big. Also check Scanner Media Offsets

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
6	System Error	What should I do when the program hangs?	1	Are you running a copy job?	Yes	C	Making a copy takes a lot of resources according to the settings. Wait till the copy is done before performing another action
					No		Refer to Q2
			2	Are you trying to run more than one scanner application at the same time?	Yes	C	You can only run one application at the same time. Please close either the Scanner Maintenance application or the copier software
					No	C	Restart the system. If the problem keeps coming back, please run the System Recovery (refer to P12)

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
7	File problem	When I scan to file, the file is very big	1	Are you scanning in color?	Yes	C	Scanning large drawings will generate very big files. An A0 color drawing scanned at 300 dpi will generate a file size of approx. 3 Gigabytes when scanned in an uncompressed format. In order to reduce file size, select Tiff - pack bits as format. You can reduce size even more by selecting JPEG format, but this format will reduce picture quality
					No		Refer to Q2
			2	Are you scanning in gray tones?	Yes	C	Scanning large drawings will generate big files. An A0 gray tone drawing scanned at 300 dpi will generate a file size of approx. 300 Mbytes when scanned in an uncompressed format. In order to reduce file size, select Tiff - pack bits as format. You can reduce size even more by selecting JPEG format, but this format will reduce picture quality
					No		In order to reduce file size on scanned B/W drawings, select Tiff group 4 compression

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
8	File problem	When I scan to file my application cannot read the file	1	Did you get an error message when creating the file?	Yes	C	Check that you have enough disk space and scan to file again, choosing Tiff uncompressed as format
					No	C	We only recommend to use the built-in viewer for file viewing. Large format drawing files may not load correctly in other viewers due to file size. Try to scan a smaller original (A4)

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
9	Copy problem	Which setting will give me the best result when copying?	-		-	C	See section about media profile (P4). Use copy quality best. Choose the correct Type of original ("Map" for maps, "Photo" for photos, etc). Eventually go to Original Setup to fine adjust colors and sharpening. (See also system help for more details - button with "?" symbol)

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
10	Copy Problem	Nesting feature is not working	1	Is the correct printer selected?	No	C	Select the correct Printer
					Yes		Refer to Q2
			2	Is the Hard Disk close to being full?	Yes	C	Free up some space, or try to run a nesting job with only 2 or 3 small pictures. If that works refer to P27
					No	C	Make sure that Nesting is set: Select: |Output| Layout|Nesting|optimized|

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
11	Network Problem	I cannot access the system from the network	1	Is the PC connected to the network?	Yes	C	Do basic network troubleshooting
					No	C	Connect the PC to the Network
			2	Is the web server-FTP server enabled in the system?	Yes	C	Go into the ISS manager and restart the server
					No	C	Go into the ISS manager and enable the web/FTP server

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
12	Recovery	How and when is the Recovery CD used?	-	-	-	C	The recovery CD is used if the system needs to be reinstalled. Insert the CD in to the PC and reboot the system

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
13	Scanner Calibration Problem	Scanner Maintenance did not succeed	1	Did any error occur when performing the Scanner Maintenance?	Yes	C	Refer to Q2
					No	C	Clean the scanner and then run Scanner Maintenance again (refer to P22 and P23). If that does not help, refer to Q5
			2	Error: "Basic calibration was performed. but failed to stitch scanner" or "Could not find horizontal line" or "Could not read bar lines" or "Could not recognize the scanned IT8 picture"	Yes	C	Clean the scanner and then run Scanner Maintenance again (refer to P22 and P23). If that does not help, refer to Q5
					No		Refer to Q3
			3	Error: "Sheet not recognized"	Yes	C	Reinsert calibration sheet correctly and run Scanner Maintenance again. If that does not help, refer to Q5
					No		Refer to Q4
			4	Error: "No movement in camera position has been detected during vertical camera alignment"	Yes	T	Please check camera. Run Camera Adjustment Wizard (CAW)
					No		Refer to Q5
			5	Have you upgraded the scanner firmware to the latest version?	No	C	Upgrade scanner firmware to latest version (from system version 2.5, use the Update System CD). Clean the scanner and then run Scanner Maintenance again (refer to P22 and P23)
					Yes		Refer to Q6
			6	Have you upgraded the system software to the latest version?	No	C	Upgrade system software (use Update System CD). Clean the scanner and then run Scanner Maintenance again (refer to P22 and P23)
					Yes	T	Please check camera. Run Camera Adjustment Wizard (CAW)

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
14	Copy problem	The Collate Copy function does not work	1	Is your Hard Disk close to full?	Yes	C	Free up some space, or try to run a collate job with a smaller picture. If that works, refer to P27
					No	C	Follow the step by step instructions in the online manual under "Collate Copy"

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
15	Copy problem	The lines are not accurate	1	Are the lines wavy and irregular?	Yes	C/T	C: The original could be curled or crumpled. Try Straightening it (in case of very irregular waves there could be a mechanical problem with the scanner). **T**: check motor and belt drive tension according to TSM
					No		Refer to Q2
			2	Are the lines not sharp?	Yes	C/T	**C**: Are you using the correct copy method? Try sharpening. If sharpness is different between Cameras, you may have a Focus Problem. **T**: Check focus of cameras with Focus Adjustment Pattern
					No		Refer to Q3
			3	Are the lines broken and the errors situated in a vertical column between 2 columns?	Yes	C	You might have a visible stitching error (refer to P26)
					No	C	Check the dpi. In the case of too low resolution, jagged diagonal lines will appear

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
16	System error	I cannot install my application on the system	-	-	-	C	The copy system is only meant to handle the factory installed software and applications. The system is unsupported if you choose to install other software

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
17	Copy Problem	One side of the preview is black	1	Have you upgraded the scanner firmware to the latest version?	No	C	Upgrade scanner firmware to latest version (from system version 2.5, use the Update System CD)
					Yes		Refer to Q2
			2	Have you upgraded the system software to the latest version?	No	C	Upgrade system software (use Update System CD)
					Yes	T	Most likely a Camera Error. Run Camera Adjustment Wizard. Replace the Camera Board if necessary

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
18	Updating	How do I update the system?	-	-	-	C	Insert the HP Update CD in to the CD drive and press "Upgrade system"

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
19	Start-up Problem	The system does not power up	1	Is the system is dead, that is, no LEDs on the scanner are ON, PPC screen is black, and no fan-noise is heard?	Yes	C	1 - Check that all power switches on the equipment are ON 2 - Check if there is power at the wall outlet 3 - Check power cables between wall outlet and the individual units.
					No		Refer to Q2
			2	Does PPC start with the normal initial screen?	Yes	C	Refer to Q5
					No		Refer to Q3
			3	Does PPC start normally, but the software does not work?	Yes	C	Run Recover Disk
					No		Refer to Q4
			4	Is the PPC dead, that is, no fan noise, and no screen image?	Yes	T	Replace the PPC
					No		Refer to Q5
			5	Is the Scanner dead, that is, no fan noise and no LEDs lit?	No		Refer to Q6
					Yes	T	Check, and if necessary replace: 1 - Power Supply Unit 2 - Driver Board
			6	Does the scanner hang-up with all LEDs ON?	Yes	T	Try the following: 1 - Erase parameter block 2 - Update the firmware 3 - Replace the Main Board
					No		Refer to P21

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
20	Mechanical Problem	I cannot load the original	1	Please try to load a new piece of A4 paper at the center of the scanner. Does this paper load?	Yes	C	You have a problem with your original. Please check that paper edges are not bent or curled in any way
					No		Refer to Q2
			2	Can paper be loaded by pressing the "Forward" key?	Yes	C	Refer to Q3
					No	T	Try replacing the following: 1 - Driver Board 2 - Power Supply Unit 3 - Feed Motor 4 - Main Board
			3	Does the Ready LED turn ON when activating Original Sensor (insert paper)?	No	T	Check, and if necessary replace: 1 - Original Sensors 2 - Main Board

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
21	Error Code	I get an Error Code, what do I do?	-	-	-	-	Re-power the system, and check if the error code reappears. If it does, refer to Q1
			1	Have you upgraded the scanner firmware to the latest version?	No	C	Upgrade scanner firmware to latest version (from system version 2.5, use the Update System CD)
					Yes		Refer to Q2
			2	Have you upgraded the system software to the latest version?	No	C	Upgrade system software (use Update System CD). Check if Error Codes reappears. If it does, refer to P21a

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
21a	Error Code	I still get an error code, what do I do?		Does the Diagnostic LED (and, in some cases also other LEDs) blink?	Yes	C	Lower Original Guide to Normal position, start Preview Scan to obtain an Error Code or check if WIDEsystem gives an Error Code
		Error Code 30-xxx		Have you cleaned the white background and glass plate, and performed Scanner Maintenance?	Yes	T	Check Camera Adjustment. If necessary, replace the Camera Board
					No	C	Refer to P22 and P23
		Error Code 32-xxx		Have you cleaned the white background and glass plate, and performed Scanner Maintenance?	Yes	T	Try the following: 1 - Upgrade the firmware 2 - Check the Stitching Wire 3 - Check Camera Adjustment 4 - Replace Main Board
					No	C	Refer to P22 and P23
		Error Code 40-xxx	1	Does the Lamp light up?	No	T	Try replacing the following: 1 - Lamp 2 - Driver Board 3 - Main Board
					Yes		Refer to Q2
			2	Have you cleaned the white background and glass plate, and performed Scanner Maintenance?	Yes		Refer to Q3
					No	C	Refer to P22 and P23
			3	Is it Error Code 40-136, 138 or 174-187?	Yes	T	Replace Lamp
					No	T	Replace Camera Boards

Problem	Q#	Question	Yes/No	C/T	Solution
Error Code 50-xxx	1	Is it Error Code 50-17 to 50-99?	Yes	C	Refer to Q2
		Is it Error Code 50-100 to 50-217	No	T	Try the following: 1 - Erase parameter block 2 - Update the firmware 3 - Run Scanner Maintenance 4 - Replace the Main Board
	2	Have you performed Scanner Maintenance?	No	C	Refer to P22 and P23
			Yes	T	Replace Main Board

Problem	Q#	Question	Yes/No	C/T	Solution
Error Code 60-xxx	1	Is it Error Code 60-xxx	Yes	T	Replace Interface Board

	Problem	Q#	Question	Yes/No	C/T	Solution
	"No scanner found"	1	Does the scanner start normally?	No	C	Refer to P21
				Yes	C	Refer to Q2
		2	Are the interface cables (USB or FireWire) properly connected to the scanner and the PPC?	Yes	C	Refer to Q3
		3	Have you ran the Rescue Disk?	Yes	T	1 - Replace Interface Cable 2 - Replace Interface Board

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
22	Cleaning	How do I clean the scanner?	-	-	-	C	Clean the Glass Plate on both sides with mild detergent, and wipe thoroughly with a lint-free cloth until dry. Check for scratches. Deep scratches on the glass plate or background platen means replacement of the part

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
23	Color Calibration	How do I color calibrate the scanner?	1	Do you have the correct and "as new" scanner maintenance sheet for the scanner?	Yes	C	Clean scanner (refer to P22). Insert the scanner maintenance sheet. Start scanner maintenance. The process is automatic and will also include stitching.
					No	C	Get Correct/New Scanner Maintenance Sheet

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
24	Media Validation	What is media validation? How do I validate?	-	-	-	C	Feature from system version 2.4.3: If the validate feature is chosen, a new color patch sheet is printed and can be scanned for validation. In this way it can be determined whether the produced color map has passed

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
25	Ink Printer Original	What is Ink Printer Original?	-	-	-	C	Feature from system version 2.5. When the original has been printed on an Inkjet printer this option should be checked

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
26	Visible stitching Errors	What is a visible stitching error?	-	-	-	C	A visible stitching error appears typically as a column of broken lines between 2 cameras. Normally it can be solved by running Scanner Maintenance, which will perform an automatic stitching adjustment. With some curled or creased/crumpled originals it is necessary to straighten out the original to prevent it from lifting from the glass plate. With thick originals it can be necessary to adjust the stitching (stitching used for thick originals only, set this in scanner setup). A visible stitching error should not be confused with the error message "Error 32 - Could not stitch Camera A and B"

P#	Category	Problem	Q#	Question	Yes/No	C/T	Solution
27	Checking Hard Disk space	How do I check and free up hard disk space on the Panel PC?	-	-	-	C	Press start button on taskbar, and start windows explorer (If DesignJet Scan copy application is running, press exit first to get access to the taskbar). Once in Windows explorer, inspect available hard disk space on drive D:. Delete unnecessary files in folder "Images" and in any custom subfolders you may have created

Preventive Maintenance Kit for HP DesignJet Scanners

The purpose of any scheduled Preventive Maintenance is to prevent any failures in the scanner, ensuring a good performance during the life of the product.

■ Level of Scanner Usage - Normal usage means the scanner lamp is ON 8 hours per day and 250 days per year. Under normal usage conditions, it will be approximately 2 years before the scanner will need any preventive maintenance. If the scanner is used more than the normal usage conditions, then it will need preventive maintenance much more frequently.

One of the Lamp counters is assigned to counting the number of hours that the Lamp is ON. When the scanner exceeds 4000 hours, the Panel PC will display the message "**Maintenance Advised**".

The DesignJet CC800PS will NOT show the "Maintenance Advised" message if software version 2.6.4 is NOT installed. The previous software versions did not include the Lamp counter.

Once the Maintenance Advised message is displayed, you must use the Preventive Maintenance Kit to replace the most worn parts of the scanner.

The Preventive Maintenance Kit part number is Q1261-60060 and it consists of the following:

■ Fluorescent Lamp - P/N Q1261-60027
■ Glass Plate - P/N Q1261-60010
■ White Background Assembly - P/N Q1278-60018
■ Fan Filter - No PN available for HP (not a current Service Part)

After replacing these parts, you will need to perform some procedures to ensure that the scanner functions correctly:

■ Driver Board Calibration
■ Accurate Cleaning (if the scanner is in a very dirty place or it is dirty itself, then the mirrors should also be cleaned)
■ Scanner Calibration
■ Reset the Lamp Counter

The lamp counter can be reset using the Panel PC. The password that you will be requested in order to reset the counter is "bigcoco".

Cleaning the Scanning Area

The following parts must be cleaned using a soft lint-free cloth and a mild, streak-free, cleaning detergent. Alternatively, the parts may be cleaned without the use of cleaning detergents by using a damp micro-fibre cleaning cloth (soak the cloth with water and wring until damp):

■ White Background Plate on the Original Guide Plate
■ Both sides of the Glass Plate. Be careful not to push the Stitching Wire (located under the Glass Plate) out of position. Do NOT use solvents, as this may dissolve the paint used for the black masks on the Glass Plate.

■ The Mirrors. It is necessary to remove the Mirror Chassis to get access to the Mirrors for cleaning. The Camera Adjustment must be checked and if necessary readjusted after the replacement of the Mirror Chassis.

The Mirrors are normally "Out of Focus" so therefore small dust particles on the Mirrors will NOT deteriorate the scanning result.

■ The Feed Rollers. These may be cleaned with a damp micro-fibre cleaning cloth.

Once all these procedures have been completed, the scanner will be ready to work correctly.

Panel PC (Touch Screen) Problems

The following problems are related to the Panel PC and it's related components.

After Powering ON the System Does Not Start

1 Check to see if the Keyboard Indicator light is turned On:
   ■ If No: The system is not properly connected to the Power Supply. Check for any loose connections.
   ■ If Yes: Check if there is a non-bootable Disk in the Floppy Disk Drive.
      – Remove the Diskette from the FDD and restart the Panel PC
      – The Operating System may be suffering from unrecoverable damage. Perform a recovery using the Recovery CD.

2 If the Panel PC still doesn't work, then replace the Main Board in the Panel PC (P/N Q1278-60034).

The System is Unable to Boot from the Hard Disk Drive (HDD)

1 In the BIOS setup select Standard CMOS Features and check if the IDE detection method is set to AUTO (password to access the BIOS is *bigcoco*)?
   ■ If Yes: In Advanced BIOS features, set HDD to first boot device.
   ■ If No: Choose auto for all IDE detection.

2 Check if HDD can be detected in the boot-up system configuration table:
   ■ If Yes: check the boot up files in HDD, recover it if necessary.
   ■ If No: replace HDD (P/N Q1278-60032).

The CD-ROM Indicator Light is Off When Powering Up and the Screen Shows no Message of any CD-ROM Installed

1 Check for CD-ROM auto detection in the BIOS setup (password to access the BIOS is *bigcoco*):
   ■ Select standard CMOS features, set all IDE detections (i.e. Primary master, Primary slave, secondary master, secondary slave) to AUTO.

2 Reconnect the cable between the CD-ROM and the Main Board

3 First replace the cable, and if that fails, replace the CD-ROM Drive.

The Floppy Disk Drive Indicator Light is Off

1 Check that the type of Floppy Disk Drive (FDD) is correct in the BIOS features setup (1.44Mb 3.5")

2 Reconnect the cable between the FDD and the Main Board.

3 Make sure the power input to FDD is correctly connected.

4 If the problem continues, replace the FDD (P/N Q1278-60035).

The Touch Screen Function Fails to Work

1 Turn off the system and power on again.

2 The default setting for touch screen is using COM4. Make sure that COM 4 is NOT assigned to any other application.

3 Is the cursor responding at all?
- If Yes: This may be due to faulty calibration. Try performing the calibration program again.
- If No: The driver may not have been installed properly. Perform a recovery using the Recovery CD.

4 If the problem continues, replace the Touch Screen (P/N Q1278-60043)

No Power Output from Power Supply Unit

1 Replace the Power Supply Unit (P/N Q1278-60044)

SDRAM Not Detected and There is a Beeping Sound When Powering On

1 Re-install the SDRAM Memory Module and check if this solves the problem:
- If Yes: There was a poor connection between the Main Board and the SDRAM Memory Module.
- If No: Replace the SDRAM Memory Module (P/N Q1278-60042).

The PCA/ISA Bus Card is Not Working

1 Check if the PCA/ISA riser board is installed correctly.

2 If possible, try installing the PCI/ISA bus card in to another computer and check if it works there:
- If Yes: Re-install the PCI/ISA bus card in to the Panel PC.
- If No: Check the IRQ & IO address setting.

3 Replace the PCI/ISA bus card (P/N Q1278-60048).

The Fan is Not Running When the Panel PC is ON

1 Check if the CPU fan cable is connected properly. Reconnect the cable if necessary.

2 If possible, try installing the CPU Fan in to another computer and check if it works there:
- If Yes: Re-install the CPU Fan in to the Panel PC.
- If No: check +12V fan power, if +12V is OK then replace CPU fan.