



Welcome to

# **“Solutions for Current Laser Printer Failures”**

Presented by:

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&  
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## Overview

LPI receives approximately 900 support calls on a weekly basis and we have identified reoccurring, frequent, and specific issues.

### Topics Discussed:

- Technical Support Requests of some of the most common printer errors
- General Repair Procedures & Using Technical Support
- Troubleshooting Hints
- Question & Answer Session to follow



## Objective

- This course has been designed to assist technicians to properly identify and fix the most current common failures seen in the field.
- Laser Pros International Technical Support provides practical solutions as an extension of service for technicians.



## **Printer Models Discussed**

- HP LJ P2015
- HP LJ 2400 Series
- HP LJ P3005
- HP LJ 4200/4250/4300/4350 Series
- HP LJ 5Si/8000/8100/8150 Series
- HP LJ 9000/9050 Series
- HP LJ 4100 MFP/4101 MFP
- HP LJ 4345 MFP
- HP CLJ 3000/3600/3800
- HP CLJ 4500
- HP CLJ 4600/4650/5500/5550 Series

- **HP LJ P2015**

- Formatter failure
  - Paper jam error where printer engine cycles and engine test works properly

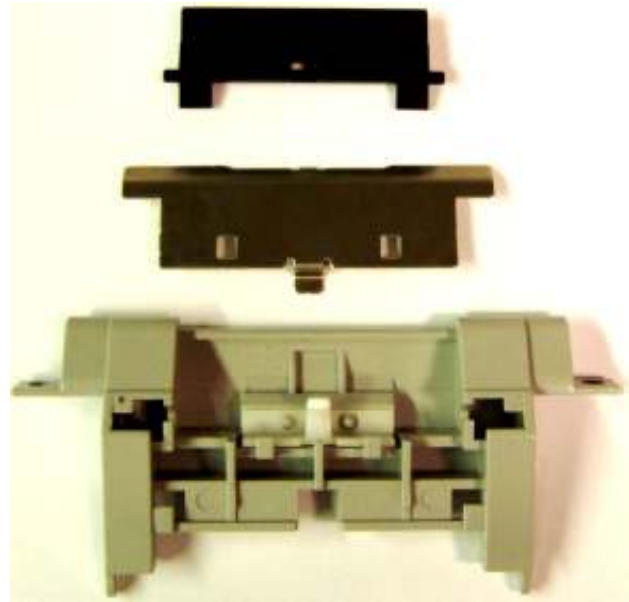
- **HP LJ 2400 Series**

- Grinding
  - Replace fuser drive assembly and three separate gears



- **HP LJ 2400 Series** *(Cont.)*

- Formatter failure
  - Blank display
  - Embedded network not functional
- Tray 3 separation pad not available
  - Must purchase tray 2 pad assembly and swap rubber pads





- **HP LJ P3005**

- Formatter failure
  - Dimm 0 error
  - Blank display
  - 49 error
  - Lock up on memory count or “initializing”
- Fuser motor failure
  - Will not spin at high speed and jams paper in the fuser
- Grinding
  - Replace fuser drive assembly

## **HP LJ 4200/4250/4300/4350 Series**

- **Entire Series**

- Printing ½ speed
  - Paper tray set to “custom” - check blue tab on right side of tray and set to “standard”
- 50.5 error
  - Incorrect fuser
    - Confirm the part numbers on the fuser frame

## HP LJ 4200/4250/4300/4350 Series

- **Entire Series** *(Cont.)*

- Tray lift failures - 60.2 and 60.3 errors
  - Lift assembly failure
    - Popping sound when lifting **with** error – tray position sensor fail
    - Popping sound when lifting **without** error – bent lift assembly mount or defective paper tray
- Swing plate wear out
  - Replace whole assembly and fuser gear versus gear replacement only



**Swing Plate Assembly**



**Fuser Pressure  
Roller Gear  
– New Style**



- **HP LJ 4250/4300/4350**
  - 59.4 error
    - Cartridge drive motor failure – can also be toner cartridge
  - A and B versions for accessories
    - A’s will not work with 4250/4350
    - B’s will work with entire series
- **HP LJ 4250/4350**
  - Network formatter failure
    - Embedded network not functional
  - Waiting for tray 2 to lift error
    - Stuck/bad paper width sensor (PS 109)
    - When sent a print job, printer hangs in “Processing Job”



## HP LJ 5Si/8000/8100/8150 Series

- **HP LJ 8000/8100/8150**
  - Paper jams only when duplexing
    - Can be duplexer or fuser
  - 55 or 55.A errors
    - Only with duplexer installed - can be duplexer or fuser
  - 13.20 Paper Jam (5Si 13.14) troubleshooting procedure
    - Disconnect cable J219 (PIU) to see if paper jam error clears
    - Disconnect cable J209 (registration sensor) to see if paper jam error clears
    - Remove top cover to inspect delivery assembly and flags for proper operation.
    - Replace switch sensor PCA



- **HP LJ 8100/8150**

- 50.1 error
  - 50/50 between fuser and low voltage power supply

- **HP LJ 8150**

- Formatter failure
  - Firmware and 32 MB OEM memory chip must be installed in first two slots (J5 and J10) in specific order for the printer to initialize

## **HP LJ 9000/9050 Series**

- **HP LJ 9000/9050**

- Registration failure
  - Seizes or wears out - can also ruin main drive

- **HP LJ 9000**

- Intermittent 13.20 paper jams
  - DC Controller needs revision 18 or higher



- **HP LJ 4100 MFP/4101 MFP**
  - Hard drive failure
    - 49 errors or trouble with scanning or faxing
      - Try firmware upgrade first
      - Replace hard drive
      - Upgrade firmware after hard drive is replaced versus disk initialization
    - Defects when using ADF versus flatbed
      - Mylar strip becomes worn and must be replaced
      - Obstruction on strip of glass on left side of main scanner glass
  
- **HP LJ 4345 MFP**
  - Power supply failure
    - No power
    - Light display or no backlight
  - Control panel failure
    - Touch screen will not work correctly
    - Lines through display
    - Completely dead
  - Swing plate failure
    - Same as 4200 series



- **HP LJ 4345 MFP (Cont.)**
  - Defects when using ADF versus flatbed
    - Mylar strip becomes worn and must be replaced
    - Obstruction on strip of glass on left side of main scanner glass.
  - Hard drive failure
    - 49 error
    - Disk not found, fax and scan disabled message
  
- **HP CLJ 3000/3600/3800**
  - Toner cartridge locks will break
    - Replace kit of four



**\*\* *Follow instructions carefully when re-installing drive assembly* \*\***



- **HP CLJ 4500**

- ITB drawer failures
  - Reinstall transfer belt message
  - Close middle front door message
  - Paper jams in registration area
- Continuous blank pages
  - Replace transfer belt
- Light print on either right or left side
  - Transfer roller not seated properly
  - Broken ITB lift spring

## **HP CLJ 4600/4650/5500/5550 Series**

- **Entire Series**

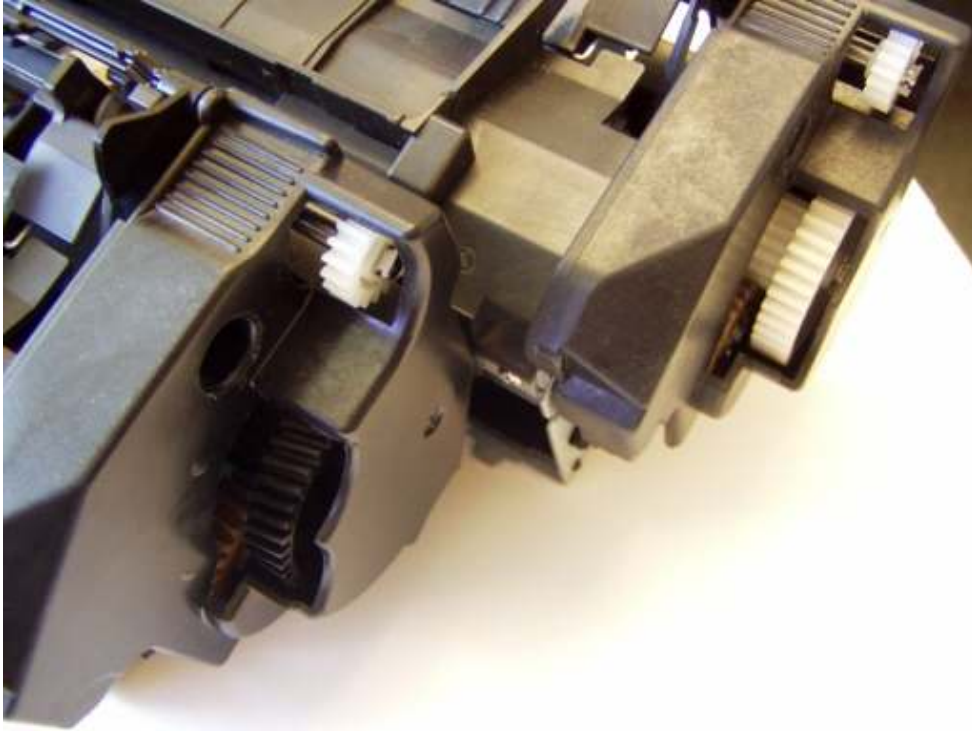
- Blank pages
  - Disengaging arm strip out



## HP CLJ 4600/4650/5500/5550 Series

- **Entire Series** (*Cont.*)

- 50.4 error
  - Incorrect fuser
    - 4600 and 5500 drive gears have straight teeth while 4650 and 5550 have helix (angled) teeth





- **HP CLJ 4600**
  - Fuser power supply
    - No power – trip circuit breakers
  - Magenta purge
    - DC controller revision under 6D
    - Defective cartridge
  
- **HP CLJ 4650/5550**
  - Firmware module failure
    - Common issue: no display or 49 error
  
- **HP CLJ 5500/5550**
  - Weak cartridge shutter linkage
    - Must remove left cover to identify broken part



## 49.xx Error

- The 49.xx error is an error recognized by the printer's formatter and/or firmware. This error occurs when a type of information received by the printer is not understood, too complex, using a certain language, detail, or command not supported by the printer. Out of confusion the printer generates the 49 error.

### **When 49 errors occurs:**

- **Disconnect network cable/Check print cue**
  - Power cycle the printer and see if the error reoccurs. If not, the error may have been caused by a print job that was too complex or using a certain graphic not supported or recognized by the printer.
- **Delete current printer driver**
  - Download the most current driver available on HP's website to eliminate the possibility of the driver being corrupt.
- **Remove the network card**
  - Turn machine off, remove network card, and turn machine back on. If error goes away with the card removed, it is likely a defective card.
- **Remove hard drive**
  - If applicable, remove hard drive – if error clears, the hard drive may be defective.
- **Remove any additional memory**
  - Printers that have memory Dimm in addition to the firmware do not remove.
- **Cold reset machine**
- When the above steps are completed, and error continues, the firmware Dimm may need to be flashed which would upgrade or possibly fix any flaws unique to the Dimm. If the firmware Dimm has been upgraded or replaced and the 49 error persists, the formatter would need to be replaced.
- Not all printers have a firmware or ROM (Read Only Memory) Dimm. On older models the firmware is internal to the formatter to where the formatter may need to be replaced. Some printers have a firmware Dimm but it may not be Flash ROM in which it can't be upgraded or flashed to where the firmware Dimm would need to be replaced. Most of the newer models have the flash ROM and can be upgraded or flashed through a free download available on HP's website.
- The firmware is responsible for giving the formatter or enabling most of its capabilities such as recognizing certain fonts, details, and graphics in which the firmware determines the types of information the formatter can recognize and process.



# **General Repair Procedures and Using Technical Support Hotlines**



- **Using technical support hotlines and online support**
  - Gather as much information about the printer problem as possible.
    - Configuration page, event log, menu map, error codes. Be sure to run all input trays.
  - If machine is unfamiliar, contact your favorite technical support provider prior to going onsite to fully investigate the issue.
  - Please remember technical support advice is only as good as the information you provide.



- **Helpful troubleshooting hints**

- Always isolate printer from host system before beginning your troubleshooting steps.
- Simplify printer by removing all extras attached such as network card, optional sheet feeders, or other installed options.
- Use engine test when applicable.
- Cold reset feature can be very effective in resolving printer problems.
  - *Note: Never cold reset a printer with the Jet Direct card installed. It will reset/change the IP address.*



### Parts List

<b>HP LJ 2015</b>			<b>(pg. 5)</b>		<b>HP LJ 9000</b>		<b>(pg. 11)</b>	
Formatter	Network	Q7805-60001	Registration	RG5-5663				
	Base	Q6507-61005	Main Drive	RG5-5656				
<b>HP LJ 2400</b>			<b>(pg. 5)</b>		DC Controller		RG5-5778	
Formatter	Network	Q6507-61005	<b>HP LJ 4100 MFP</b>			<b>(pg. 12)</b>		
	Base	Q6508-61005	Hard Drive	J6073-61051				
Fuser Drive Assembly & Gears			RM1-1500K	<b>HP LJ 4345 MFP</b>			<b>(pg. 13)</b>	
<b>HP LJ 3005</b>			<b>(pg. 7)</b>		Power Supply		RM1-1041	
Formatter	Network	Q7848-61003	Control Panel	Q3942-61040				
	Base	Q7847-61003	Mylar Kit	PF2288K050NI				
Fuser			RM1-3740	Hard Drive		J6073-61051		
Fuser Drive			RM1-3746	Mylar Strip		RB2-8793		
<b>HP LJ 4200 Series</b>			<b>(pg. 7)</b>		<b>HP CLJ 3000</b>		<b>(pg. 13)</b>	
4200 Fuser			RM1-0013	Lock Kit		Q5982-67925		
4300 Fuser			RM1-0101	<b>HP CLJ 4500</b>			<b>(pg. 14)</b>	
4250/4350 Fuser			RM1-1082	ITB Drawer		RG5-5120		
Swing Plate			RM1-0043	Transfer Belt		C4196A		
4250/4350 Formatter		Network	Q6505-69009	ITB Spring		RS5-2733		
4300 Cartridge Motor			RH7-1576	<b>HP CLJ 4600/5500</b>			<b>(pg. 15)</b>	
Lift Assy 4200/4300			RM1-0033	4600 Disengaging Arm		RG2-8239		
Lift Assy 4250/4350			RM1-1074	5500 Disengaging Arm		RG5-6742		
Paper Tray			RM1-1088	4600 Fuser		RG5-6493		
<b>HP LJ 8100</b>			<b>(pg. 10)</b>		4650 Fuser		RG5-7450	
Fuser			RG5-6532	5500 Fuser		RG5-6468		
Duplexer			C4782	5550 Fuser		RG5-7691		
Switch Sensor PCA			RG5-1846	4600 Fuser Power Supply		RG5-6399		
Low Voltage Power Supply			RG5-4357	4600 DC Controller		RG5-6391		
Photo Sensor			WG8-5624	4650 CFM		Q7725-67958		
8150 Formatter			C4265-69001	5550 CFM		Q7725-67974		