



PARTS ON DEMAND LIMITED

## TECH TIPS June 2003



600 DPI  
Resolution Enhancement



**PRINTER PARTS**



**PRINTER REPAIRS**



**PRINTER TRAINING**

**PRINTER MANUALS**

**PRINTER TECH SUPPORT**

**This Issue Contains:**

- Ohming out fusers
- HP2100 Service Errors
- Printer Specifications for Lexmark 4069-610



LEXMARK™

Canon

## HP2100 Service errors

A Service Error is when the top three lights are on.

Control Panel layout		Off	On	Blinking
Attention (top)	Red Light	0	1	BLINKING
Ready	Green Light	0	1	BLINKING
Go	Green Light	0	1	BLINKING

For the secondary:- Press and hold the “GO” and “JOB CANCEL” button and refer to the table below for results.

Lights Description	Error Desc.	Error #	Status Code
Attention (ON)	Engine Error	55	40055
a) Check connections between the engine board and the intermediate board.			
b) Replace the engine board.			
c) Replace the Intermediate board.			
Ready (ON)	Scanner Error	52	40052
a) Reseat the laser assembly cables.			
b) Replace the laser scanner assembly.			
Go (ON)	Beam Detect	51	40051
a) Reseat the laser assembly cables.			
b) Replace the laser scanner assembly.			
Attention & Ready (ON)	Scan Motor Error	57	40057
a) Reseat the cable between the laser assembly and the intermediate board.			
b) Replace the laser scanner assembly.			
Ready & Go (ON)	Fuser Error	50	40050
a) Reseat fuser cables.			
b) Replace fuser.			
c) Replace engine board.			
Attention & Go & Ready (ON)	RAM / ROM		
a) Replace the formatter.			
Attention (BLINKING)	Fan Error	58	40058
a) Reseat the cable between the fan and the intermediate board.			
b) Replace the fan.			
c) Replace the engine board.			
Ready (BLINKING)	NVRAM	68	
a) Replace the formatter.			
Go (BLINKING)	Scan Buffer	64	40064
a) Cycle power.			
b) Replace formatter.			
Attention & Ready (BLINKING)	Dynamic RAM	65	40065
a) Replace formatter.			
Attention & Go (BLINKING)	Misc. Hardware	67	40067
a) Check all I/O connections			

### Parts on Demand Limited.

36 Shaddock Street  
Eden Terrace  
PO Box 8176  
Symonds Street  
AUCKLAND  
NEW ZEALAND

Phone: +64 9 309-3137

Fax: +64 9 309-3353

Email [support@partsondemand.co.nz](mailto:support@partsondemand.co.nz)



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## **Lexmark 4069 610**

**Model** Lexmark 4059-010

DPI	1200 X 1200
Printer Speed	15 PPM First page out 12 Seconds
Processor	133MHz
Duty Cycle	65,000 pages per month

### **SPECIFICATIONS**

Height	Width	Depth	Weight
340mm	400mm	498mm	19.1Kg

### **ACCESSORY / OPTIONS**

Memory 4Mb	99A1752	8Mb	99A1753
16Mb	99A1754	32Mb	99A1755
64Mb	99A1756	128Mb	99A1773
Duplex (500)	56P0555		
Duplex (250)	99A1146		
Tray 500 Sheet	56P0556		
Envelop Feeder	99A1145		
Network	12G1696	10Base2/10Base T	
	12G1695	10/100 Ethernet	

### **FREQUENTLY USED PARTS**

Controller (RIP) Board	99A1954	Engine Board	56P0584
Fan	99A0803	Fuser	99A1661
Gear Box with Motor	99A1543	Output Assy (250)	99A1586
Print Head / Scanner	99A1526	Pickup Assy (250)	99A1056
Roller Pickup	99A0070	Roller Transfer	99A1015
Roller Pickup MP	99A0076	Roller Charge	99A1017
PSU LV	99A1640		
PSU HV	99A1823	PSU HV Service "B"	99A1863
Sep Pad	99A0083		

### **RESET MAINTENANCE COUNT**

1. Press and hold [Select] and [Return] buttons and power on the printer
2. Press [Go] Config menu appears
3. Scroll through until "Reset Maint Count" is displayed
4. Press [Select] twice to reset.
5. Power off the printer, count to 10 and then power back on

### **SERVICE MODE**

1. Hold down [Go] and [Return] while turning on the printer.
2. Release buttons when "Performing Self Test" is displayed

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Authorized Spare Parts Supplier

**LEXMARK**





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## Ohming Out Fusers

One of the most common errors in laser printers, next to paper jams, is the fuser temperature error. Depending on which brand of printer you are working with, problems with fuser temperature will yield one of the following errors:

- Most HP printers - “50 SERVICE”
- Most Lexmark printers - 920-925 error codes

### Why the Error Occurs

These errors occur when the upper fuser roller is unable to reach or maintain a fairly narrow temperature range—hot enough to fuse toner to paper, but not so hot as to scorch the paper. To achieve a temperature in this range, the printer monitors the fuser temperature and applies power to the fuser’s heating element as needed.

### What Causes the Error

You can usually find the cause of the error in the following places:

- Fuser - This is the most common cause, usually due to a burned-out heating element or lamp.
- Monitoring/control circuit (DC controller or engine board)
- Power supply

### How to Test the Fuser

Fortunately, most bad fusers can be detected by measuring the heating element (or lamp) and the thermistor—the temperature- sensing element—with an ohmmeter.

We will show you the most popular fusers, where to take the measurements, and what readings to expect. The second part will be next month.

### Some general tips:

1. For safety and for accurate measurements, the printer must be powered off and the fuser removed from the printer before taking measurements. While you have the fuser out of the printer, also inspect its rollers, gears, etc. for wear.
2. The fuser should be at room temperature for accurate measurements. If the unit is at a lower or higher temperature, the thermistor reading may differ from the values given. If measuring a hot fuser, give it time to cool off before taking measurements.
3. Most fusers are available in several versions to accommodate different line voltages (110V, 220V, and in some cases, 100V for Japan). Thermistor readings should be in the same range for all versions of a given fuser, but the resistance of the heating element or lamp will vary with the rated line voltage.

Many printers have timing circuits to allow the printer time to recover after a fuser temperature error, which is a necessary safety feature if the error involved overheating. For this reason, whenever you get this error, the printer should be left turned off for at least fifteen minutes before attempting to power it up again. Otherwise, you will still get the error, even though you may have fixed the original problem.

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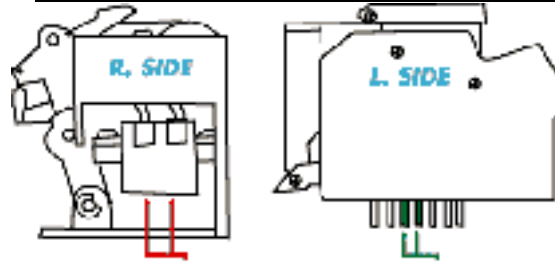
Authorized Spare Parts Provider





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### HP11, HP11D, HP111, HP11D



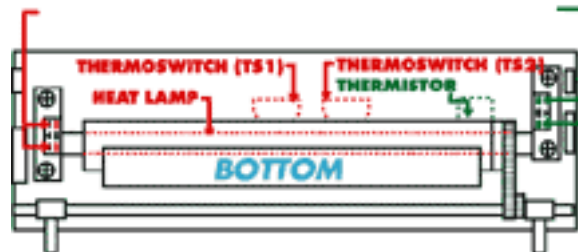
Thermoswitch 8.0 Ohm

Thermistor 1.1 to 1.7 Ohm

### HP11P, HP11P

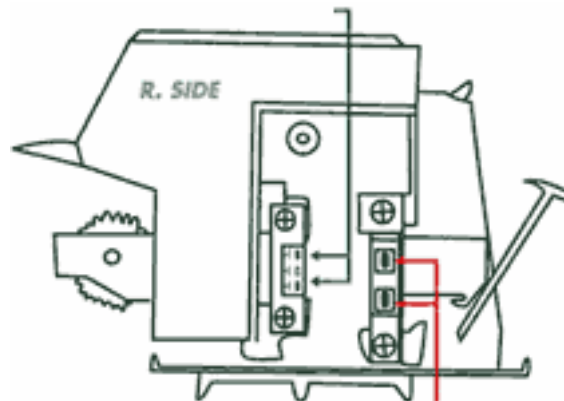
Thermoswitch 14.0 Ohm

Thermistor 180K to 290K Ohm



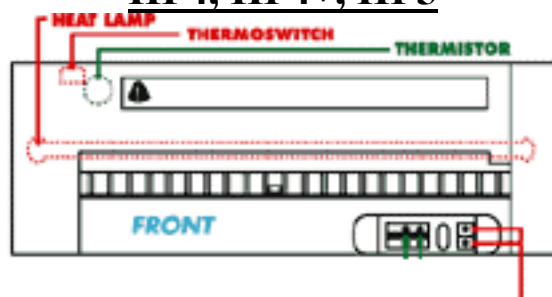
### HP11Si, HP4Si

Thermistor 230K to 280K Ohm



Thermoswitch 8.0 Ohm

### HP4, HP4+, HP5



Thermistor 180K to 280K Ohm

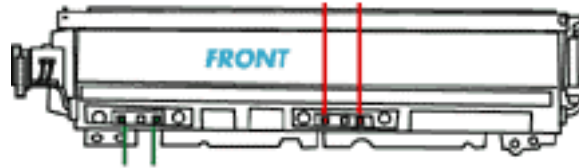
Thermoswitch 8.0 Ohm



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## HP4L, HP4P, HP5P, HP6P

Thermoswitch 116.0 Ohm



Thermistor 440K Ohm

## HP4V

Thermistor 180K to 290K Ohm



Thermoswitch 14.0 Ohm

## HP5L, HP6L, HP3100



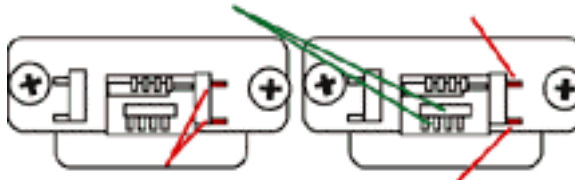
Thermistor 440K Ohm

Thermoswitch 116.0 Ohm

## HP5Si, HP8000

Thermistor 150K to 290K Ohm

Main Lamp Thermoswitch 12.0 Ohm



Thermoswitch 12.0 Ohm  
Electrically the same

Secondary Lamp Thermoswitch 12.0 Ohm



## POD Policy

### **RMA- RETURN MERCHANDISE AUTHORIZATION**

- An RMA number assigned by POD must be put on the outside and inside of your returned product package for adequate identification. Products returned without a valid RMA number will be refused at POD.
- The customers RMA number is valid only for 30 calendar days from date of issue.

### **EXCHANGE ITEMS**

- Products must be:
  - 1) Returned within the specified date on the Exchange Docket.
  - 2) Repairable, no alterations, or missing parts.
  - 3) Be an exact equivalent of the part shipped out.

### **RETURNED PROCESS**

- On receipt of RMA and Exchange parts POD will inspect it to confirm that it is:
  - 1) The correct part returned.
  - 2) Eligible for product return.
- If not, then POD will have the option of:
  - 1) Returning it with an explanation
  - 2) Providing no refund for a RMA
  - 3) Not accepting the part as an Exchange unit.

### **RESTOCKING FEE**

- POD at its discretion may charge a restocking fee to recover costs in processing and re-testing goods returned. A minimum fee of \$20.00 may be applicable.

### **MISCELLANEOUS**

- Manuals, rollers and special order items are not returnable.
- POD is not responsible for damages incurred in transit.
- The customer is responsible for return shipping.
- All products must be returned within the allocated time issued by POD.

### **WARRANTY PERIOD**

- New products carry the Original Manufacturer Warranty.
- Exchange Units carry a 90 day warranty.

These policies are to be read in conjunction with PODs Terms and Conditions.

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0800 22-55-05

Fax +64 9 309-3353

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