

## ImageWriter: Troubleshooting a Repeatedly Blown Fuse

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TOPIC -----

My ImageWriter blew the 5 Amp fuse and had no line feed, carriage movement, or dot fire. When I replaced the fuse, and did a Self Test, the fuse blew again. What causes this, and how can I fix it?

DISCUSSION -----

Either the line feed or carriage stepper motor has shorted a winding, which causes the fuse to blow.

Follow these steps to check the line feed motor (Apple dot matrix printers and ImageWriters have the same stepper motors):

- 1) Remove the logic PCB, disconnect plug CN1 (line feed stepper motor connector for both DMP and ImageWriter).
- 2) Measure for approximately 10 ohms between the following pins with an ohmmeter: 6 to 2, 6 to 4, 5 to 1, and 5 to 3.
- 3) If any measurement is significantly less than 10 ohms, that probably means a winding shorted in the line feed motor and should be replaced. (The DMP's line feed stepper motor is not listed as a replacement part. However, the line feed stepper motor for the ImageWriter will also work for the DMP. ImageWriter line feed stepper motor part number is 699-0109).

Follow these steps to check the carriage motor:

- 1) Remove the logic PCB, disconnect plug CN3 (Carriage stepper motor connector for both DMP and ImageWriter).
- 2) Measure for approximately 65 ohms between the following pins with an ohmmeter: 6 to 2, 6 to 4, 5 to 1, and 5 to 3.
- 3) If any measurement is significantly less than 65 ohms, that probably

means a winding shorted in the line feed motor and should be replaced.

If both stepper motors check out OK, there is probably a short on the main PCB. Replace it.

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