



Application Note

Modem Power Supply Replacement Procedure for CDM-600 & CDM-550/550T



IMPORTANT

This document applies to the CDM-600 and CDM-550/550T modems only. Contact Comtech EF Data Customer Support for additional information.

Power Supply Tools Needed

Tools

- 1 #2 Phillips Screwdriver
- 2 Soldering Iron
- 3 Solder
- 4 Tweezers
- 5 Grounding strap

Parts Required

PARTS

Power Supply Assembly	PL/9971-1, Rev. D
3mm mounting screws (2 each)	HW/M3X4FHP
4-40 ground screw	HW/SEM440X1/4PH
100 μ F surface-mount capacitor (for CDM-600 only)	CP/SMTANT10V107
10 Ω surface-mount resistor (for CDM-600 only)	RS/121001

Modem Power Supply Replacement Procedure for CDM-600

Step

Procedure

- 1 Remove power to the modem. Remove all cables from the rear of the modem.



Remove all power from unit before proceeding. High Current AC and DC are present inside. Failure to remove all power may cause serious injury. Use proper ESD measures.

- 2 Remove the machine screws located on top and remove the cover from the chassis.

Step	Procedure
3	Locate the old power supply (may be Shindengen FYX600/61G or PL/9971-1, Revision A, B, or C). Remove both AC input and DC output connectors, and ground wire from the old power supply.
4	Remove and discard the two machine screws that secure the shield bracket (from underneath the modem) to the chassis. Remove and discard the bracket from the modem.
5	Remove and discard the two machine screws that secure the power supply (from underneath the modem) to the chassis and then remove the old power supply.



Do not apply power to the supply without proper loading (0.2A min.) or connection to the modem. Failure to follow this direction may cause damage to the modem when connected to the supply.

- 6 Place the new power supply assembly (PL/9971-1, Revision D) in the modem and secure it using the two new shorter screws (HW/M3X4FHP).



Use only the supplied screws for attaching the power supply to the modem. Incorrect screws may cause damage to the power supply.

- 7 Connect the ground wire to the power supply by using the screw in the location near the ground spade on the power supply. See Figure 1.

- 8 Connect the AC input and DC output connectors to the power supply.



Connectors must be correctly aligned and fully seated onto board and power supply.

- 9 Locate the capacitor at C485 and inductor at L94 on the PL/0424 IF modem card. See Figure 2.

- 10 Replace the existing capacitor with the new 100 μ F part and the inductor with the new 10 Ω resistor.



Check for proper polarity orientation when installing the capacitor.

- 11 Re-install the cover to the chassis and secure it using the attaching screws.

- 12 Apply power to the unit and verify that the unit operates correctly.

CDM-600 Modem Power Supply Replacement Procedure

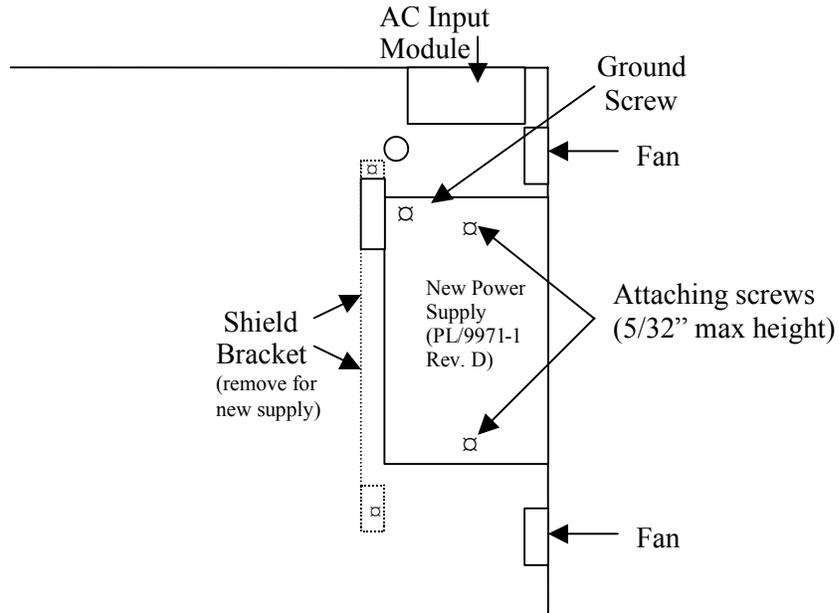


Figure 1

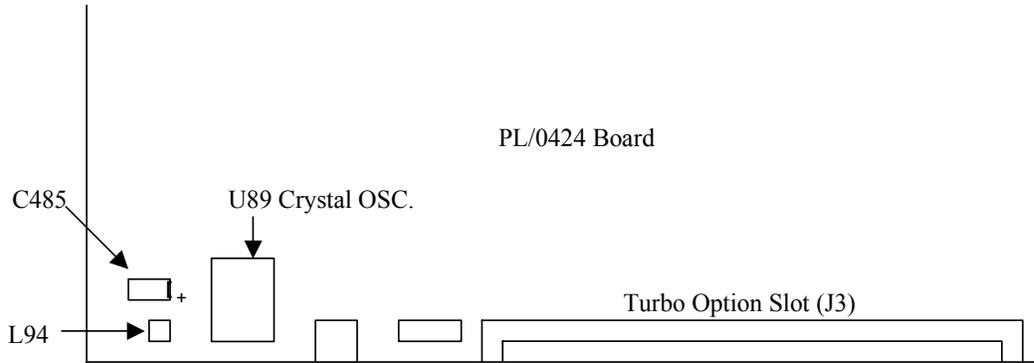


Figure 2

Modem Power Supply Replacement Procedure for CDM-550/550T

Step	Procedure
1	Remove power to the modem. Remove all cables from the rear of the modem.
	Remove all power from unit before proceeding. High Current AC and DC are present inside. Failure to remove all power may cause serious injury. Use proper ESD measures.
2	Remove the machine screws located on top and remove the cover from the chassis.
3	Locate the old power supply (may be Shindengen FYX600/61G or PL/9971-1, Revision A, B, or C). Remove both AC input and DC output connectors, and ground wire from the old power supply.
4	Remove and discard the two machine screws that secure the power supply (from underneath the modem) to the chassis and then remove the old power supply.
	Do not apply power to the supply without proper loading (0.2A min.) or connection to the modem. Failure to follow this direction may cause damage to modem when connected to the supply.
5	Place the new power supply assembly (PL/9971-1, Revision D) in the modem and secure it using the two new shorter screws (HW/M3X4FHP).
	Use only the supplied screws for attaching the power supply to the modem. Incorrect screws may cause damage to the power supply.

Step	Procedure
6	Connect the ground wire to the power supply by using the screw in the location near the ground spade on the power supply. See Figure 3.

CDM-550/550T Modem Power Supply Replacement Procedure

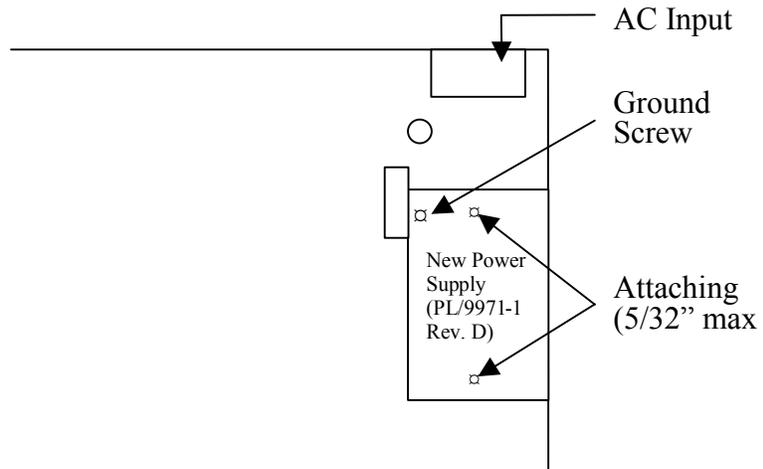


Figure 3

- 7 Connect the AC input and DC output connectors to the power supply.



Connectors must be correctly aligned and fully seated onto board and power supply.

- 8 Re-install the cover to the chassis and secure it using attaching screws.
- 9 Apply power and verify that the unit operates correctly.

If you experience a problem, or have any questions, contact Comtech EF Data Customer Support for assistance:

Comtech EF Data Customer Support
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