6V DC-to-DC Power Supply Installation Instructions

PN 97474

The 6-volt DC-to-DC power supply, PN 97474, uses a DC power source of 9–36VDC to provide +/- 6VDC power to the 720i, 820i or 920i CPU board. This is a 25 Watt power supply, suitable to power the indicator and (16) 350 ohm load cells. Use with option cards should be evaluated for total current draw.



Figure 1. 6V DC-to-DC Power Supply Board

Use the following procedure to replace and install the DC to DC power supply in the 920i indicator.

Installation Notes

- AC-powered indicators retrofit with a DC power supply must also replace the indicator serial tag. Consult factory for more information.
- The DC power supply fits the 25 Watt Power Supply bracket. The 65 Watt bracket used in the 920i Panel Mount, Deep and Wall mount must be modified or replaced.
- DC power wiring to the indicator should be 18 AWG to 14 AWG for all conductors.
- For mobile applications, earth ground should be terminated to the vehicle chassis.



G Disconnect power before removing indicator backplate

1. Place indicator face down on an antistatic work mat and remove screws that hold the backplate to the enclosure body.





Location of power supply inside 920i enclosure

Figure 2. Location of Power Supply

- 2. Strip back the outer jacket on both ends of the power cord by 3".
- 3. Strip the wire insulation on DC power supply 1/4" on all ends, Figure 3.



Figure 3. Tinned Wire Ends

- 4. Tin the end of the wires to prevent fraying as shown in Figure 3.
- 5. Install cable and cord grip by running it through the enclosure, Figure 4.



Figure 4. Install Power Cord into Enclosure



6. Connect the ground wire that comes from the cable to the ground lug on the indicator. Attach the red and black wires coming from the cable to the power supply board. Proper wire connections are shown in Table 1.



Figure 5. Install + and - Voltage Wire and Connect Ground Wire

Wire Color	Signal	
Blue	Ground	
Red	+V	
Black	-V	

Table 1.	Wiring	to Power	Supply
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7. Carefully align the power supply to existing location and use screws provided to secure the power supply to the enclosure.



Figure 6. Plug in the DC Output Side of Power Supply to 920i CPU Board

8. Carefully plug in the +/- 6 VDC output side of the power supply to the CPU board. It's location is noted in Figure 6.

9. Once installing the power supply is complete, position the backplate over the enclosure and reinstall the backplate screws. Use the torque pattern shown in Figure 7 to prevent distorting the backplate gasket. Torque screws to 15 in-lb (1.7 N-m).



Figure 7. Backplate Torque

10. Torqued screws may become less tight as the gasket is compressed during torque pattern, therefore a second torque is required using the same pattern and torque value.

Specifications

Input Voltage9–36 VDCOutput Voltage+6V (CN2, pin1), -6V (CN2, pin 4)Output CurrentUp to 2.08ARated Power25W



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