



La MARCHÉ®

REVERSE POLARITY PROTECTION CIRCUIT
OPTION 217

The Reverse Polarity Protection Circuit serves to prevent the user from damaging the charger by connecting a battery to the charger in reverse.

The circuit consists of a diode, a fuse and a Light Emitting Diode (LED). The diode and the LED are wired as to be reversed biased across the output of the charger. Under normal operating conditions the Reverse Polarity LED will be off. If the DC Breaker is closed when a reverse battery condition is present the diode will be forward biased and conducting. This will cause a short circuit across the output of the charger causing high current which will cause the fuse and/or DC Breaker to open. The Reverse Polarity LED will illuminate.

The following sequence should be observed when the charger and battery are put in service:

- 1) Turn "OFF" AC Breaker and DC Breaker in the battery charger.
- 2) Connect the positive battery terminal to the "POS" terminal in the battery charger and the negative battery terminal to the "NEG" terminal in the battery charger.
- 3) Check to see if Reverse Polarity LED is illuminated.
- 4) If YES, Check the Reverse Polarity fuse. Recheck the connections at the "POS" and "NEG" output terminals of the charger. Do this by checking both visually and by using a voltmeter to determine polarity. Disconnect the battery and reconnect it observing the proper polarity.
- 5) If Reverse Polarity LED is not illuminated: - Turn on AC Breaker and, after about one minute, turn on DC Breaker in the battery charger.

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