

**FIELD INSTALLATION & INSTRUCTIONS
FORCED LOAD SHARING OPTION (EJ0133-00)****MATERIALS REQUIRED**

1. two (2) EJ0144-00 Parallel Load Sharing PC Board (A6)
2. one (1) EH0603-00 Parallel Load Sharing Signal Wire Harness
3. two (2) toggle switch (SW10)
4. two (2) RC0005-02 Parallel Load Sharing Interconnection Terminal Block (TB4)
5. one (1) connector contact for SCR/SCRF Series Main Control Module (SO1)
6. two (1) dc interconnection power cabling (user-supplied)

TOOLS REQUIRED

1. digital dc voltmeter or multi-meter
2. standard hand tools
3. wire crimpers, cutters and stripper

INSTALLATION PROCEDURE

1. Disconnect and lock out all ac and dc power sources from each battery charger. Remove all jewelry before starting work on the inside of the chargers. Make sure that all internal storage capacitors (C1 and/or C2) are discharged before starting work.
2. Install the Force Load Sharing PC board (A6) on the mounting brackets provided, using 6-32 hardware. Some component mounting panels feature pre-drilled holes provided near the Control Module (A1). Otherwise choose a suitable location and transfer drill for the mounting holes.
3. Install the toggle switch (SW10) in the front instrument panel. Most panels are pre-drilled to accept the switch. Drill a 1/2-in hole where available if one does not exist.
4. Install signal terminal block (TB4) in an accessible location near A6. Leave sufficient space on both sides of TB4 for easy wiring. Use 8-32 mounting hardware.
5. For option wiring, refer to the Schematic (EJ0133-00, Sheet 1 of 2) and Connection Diagram (Sheet 2 of 2). Note that the AMP connector contact supplied is inserted in position 9 of the control module connector (SO1) for single phase chargers, and position 4 for three phase chargers. Use #18 or 20 AWG wire for all internal connections in each charger. Connect A6, SW10, TB4, and the single wire to connector SO1, according to the schematic and connection diagram.
6. Interconnect the signal terminal blocks (TB4) of the two (2) chargers using the supplied 4-conductor wire harness. If a longer interconnection cable is required, construct a cable using #16 AWG wire, observing the terminal numbering requirements.
7. Reconnect the two (2) chargers to the dc load/battery.
8. Reconnect the ac supply voltage to each charger, making sure that the phase relationship is the same to each charger.
9. This completes the installation of the Parallel Load Sharing option.
10. The circuit boards supplied by the factory have been pre-calibrated, but field adjustment may be required to ensure load sharing within 2%. If this is required, follow the **ADJUSTMENT PROCEDURE** on Sheet 2 of 2, starting with step 8.

ADJUSTMENT PROCEDURE

NOTICE For the following procedure, assume that the left-hand charger is “Charger A.”

1. Turn ON charger A. Be sure that a stable load is connected, and that the battery (if connected) has stabilized at the float voltage. If possible, the load should be near the maximum system load expected during normal operation.
2. Turn OFF SW10, load share switch on the front panel.
3. Set the charger to the Float mode, and adjust the output voltage to the specified value.
4. Turn ON SW10.
5. Adjust R13 on A6 (the Parallel Load Sharing PC Board) to restore the float voltage to the value set in step 3.
6. Turn OFF SW10.
7. Set the charger to the Equalize mode, and adjust the output voltage to the specified value.
8. Turn ON SW10. Return the charger to the Float mode.
9. Turn OFF charger A, and turn ON charger B. Repeat steps 2 through 8 on charger B.
10. Turn ON charger A. Both chargers should now be ON.
11. Read the output voltage and observe the output current from each charger (a few minutes may be required for the system to stabilize at the float voltage).
12. If the output voltage is low (lower than the specified float voltage), adjust R13 on A6 in the charger with the lower output current to increase its output current.
13. If the output voltage is high (higher than the specified float voltage), adjust R13 on A6 in the charger with the higher output current to decrease its output current.
14. Repeat steps 12 and 13 until the output voltage is at the specified float voltage and output current A is equal to output current B.
15. This completes the field adjustment of the Parallel Load Sharing option.

PARTS AVAILABILITY

ITEM	REFERENCE DESIGNATOR	FACTORY PART NO.
Parallel Load Share PC Board	A6	EJ0144-00
Terminal Block (4-position)	TB4	RC0005-02
Toggle Switch	SW10	RD0001-00
Cable Assembly	n/a	EH0603-00