

**FIELD INSTALLATION OF DC CIRCUIT BREAKER (CB2) - STYLE CD2****REFERENCE DOCUMENTATION**

- 1A) Electrical Schematic Diagram (**JE5076-00**) - Single Phase Input
- 1B) Electrical Schematic Diagram (**JE5078-00**) - Three Phase Input
- 2) Hole Pattern Drawing (**FN0041-00**)

**REFERENCE NOMENCLATURE**

- 1) AC Circuit Breaker (**CB1**)
- 2) DC Circuit Breaker (**CB2**)
- 3) Main DC Fuse (**F1**) - positive leg
- 4) Redundant DC Fuse (**F2**) - negative leg
- 5) DC Voltmeter (**M2**)
- 6) DC Output Terminal Block (**TB2**)

**MATERIALS REQUIRED**

- 1) 2-pole CD2 style DC Circuit Breaker (**CB2**)
- 2) spare wire and ring terminals (supplied by user - properly gauged)

**TOOLS REQUIRED**

- 1) standard hand tools
- 2) wire cutter, stripper & crimpers

**PROCEDURE**

- 1) Remove all watches and jewelry. Disconnect all AC and DC power sources from the battery charger before installing the DC Circuit Breaker. Discharge all internal capacitors are before starting work inside the charger.
- 2) Check the trip rating of the supplied DC Circuit Breaker against the battery charger DC output current rating, listed on the battery charger data nameplate. The DC Circuit Breaker trip rating should be approximately 1.5 times the DC output current rating.
- 3) Locate a convenient position on the door or front panel of the battery charger to mount the new DC Circuit Breaker (**CB2**). The DC breaker is normally located vertically in line with (and to the right of) the AC Circuit Breaker (**CB1**). Make sure there is sufficient clearance behind the panel or door (when closed) for the breaker housing before drilling any mounting holes. Transfer drill or punch the cut-out and mounting holes, according to hole pattern (**FN0041-00**).
- 4) Install the DC Circuit Breaker using the supplied 6-32 hardware. Remove the wire that connects the main DC Fuse (**F1**) to **TB2(+)**, and the wire that connects the redundant DC Fuse (**F2**) to **TB2(-)**.
- 5) Refer to the Electrical Schematic Diagram (**JE5076-00/ JE5078-00**). Wire the top terminal of one pole of the breaker to **F1**, and the bottom terminal of the same pole to **TB2(+)**. Wire the top terminal of the other pole to **F2** and the bottom terminal of the same pole to **TB2(-)**. When the DC Circuit Breaker is installed, the redundant DC Fuse (**F2**) may be removed if desired, by wiring to the terminal of the **F2** fuse-holder on the **CHARGER SIDE** of the fuse. The main DC Fuse (**F1**) is not to be removed or defeated.
- 6) Check the wiring carefully against the Electrical Schematic Diagram. Reconnect the battery and make sure the DC Voltmeter (**M2**) indicates the proper battery voltage **WITH THE DC BREAKER OPEN**. Close the DC Circuit Breaker and return the battery charger to operation.

**PARTS AVAILABILITY**

Consult the factory for the proper DC Circuit Breaker trip rating and part availability for your charger model.