

FIELD INSTALLATION OF COPPER GROUND BUS BAR ASSEMBLY (EI0195-0#)

BACKGROUND

The Copper Ground Bus Bar Assembly (**EI0195-0#**) is a standard option for the AT Series Float Battery Chargers. Its purpose is to provide the user with a large, easily accessible contact point inside the battery charger that is physically (and electrically) connected to the enclosure "chassis ground". This connection should also have a similar connection to "earth ground".

The option contains one (1) large copper bus bar and one (1) CU-AL box type lug, which features a compression type connector. The copper bar and lug are both sized to accommodate wire gauges appropriate for the dc output current rating of the AT Series battery charger. The field kit should also feature a *new* data nameplate decal, and *this* instruction sheet (**JD5037-00**).

PREPARATION

Identify the AT Series Battery Charger enclosure *type*, Ground Bus Bar assembly part number, and corresponding mounting location:

Battery Charger Line	Enclosure Type	Assembly p/n	Mounting Location
AT10.1 Group I (Single Phase Input, 6-25 Adc)	Style-586 Style-594	EI0195-00	on TB1 I/O panel
AT10.1 Group II (Single Phase Input, 30-100 Adc)	Style-5017 Style-5018	EI0195-02	on TB1 I/O panel
AT30 (Three Phase Input, 25-100 Adc)	Style-5018	EI0195-02	on TB1 I/O panel
AT30 (Three Phase Input, 100-1000 Adc)	Style-5030 Style-163 Style-198	EI0195-03	at bottom base of enclosure

SAFETY



DISCONNECT ALL AC AND DC POWER SOURCES FROM THE BATTERY CHARGER BEFORE PROCEEDING. ONLY QUALIFIED SERVICE TECHNICIANS SHOULD PERFORM THIS PROCEDURE. FOLLOW THE SITE AND YOUR EMPLOYER'S STANDARD SAFETY PROCEDURES.



OPENING CIRCUIT BREAKERS DOES NOT REMOVE ALL DANGEROUS VOLTAGES FROM INSIDE THE CHARGER. AFTER AC AND DC POWER ARE REMOVED, VERIFY THAT DC FILTER CAPACITORS (C1 AND/OR C2) ARE DISCHARGED BEFORE PROCEEDING.

PROCEDURE

1. Turn OFF (open) the ac input circuit breaker (CB1), and dc output circuit breaker (CB2).
2. Allow internal voltages to dissipate.
3. Open the battery charger's front panel (door).
4. Remove the Plexiglas safety shield (if supplied).
5. Locate the user I/O panel (TB1).
6. Check with a voltmeter for any internal voltages.

PROCEDURE (Style-586/594/5017/5018)

7. Open the AT10.1/AT30 Series Battery Charger Operating & Service Instructions manual.
8. Turn to the Internal Component Layout Drawings in Appendix C.
9. Identify the drawing that depicts your AT Series Battery Charger.

Battery Charger Line	Enclosure Type	Internal Component Layout Drawing
AT10.1 Group I (Single Phase Input, 6-25 Adc)	Style-586 Style-594	JE5027-99
AT10.1 Group II (Single Phase Input, 30-100 Adc)	Style-5017 Style-5018	JE5028-99 JE5028-99
AT30 (Three Phase Input, 25-100 Adc)	Style-5018	JE5088-99

10. Remove the two (2) sets of mounting hardware from the I/O panel (TB1).
11. Slide the copper ground bus bar assembly onto the ZPS stud terminals as shown.
12. Make sure special "star" washers are applied for proper grounding of copper bus to chassis.
13. Replace the two (2) sets of mounting hardware onto the I/O panel and tighten securely.

PROCEDURE (Style-5030/163/198)

7. Open the AT30 Series Battery Charger Operating & Service Instructions manual.
8. Turn to the Internal Component Layout Drawings in Appendix C.
9. Identify the drawing that depicts your AT30 Series Battery Charger.

Battery Charger Line	Enclosure Type	Internal Component Layout Drawing
AT30 (Three Phase Input, 25-100 Adc)	Style-5030 Style-163 Style-198	JE5089-99 JE5098-99 JE5099-99

10. Locate the two (2) pre-fab mounting holes at the bottom panel of the enclosure.
11. Insert stud hardware from bottom holes of enclosure, up into bus bar assembly.
12. Make sure special "star" washers are applied for proper grounding of copper bus to chassis.
13. Fasten studs to chassis, then bus bar to studs using supplied hardware, and tighten securely.

FINISHING PROCEDURE

14. Check your work.
15. Make sure special "star" washers are applied for proper grounding of copper bus to chassis.
16. Make sure all connections are tight.
17. *Connect user "ground" connections to CU-AL compression lug on copper bus as needed.*
18. Replace the Plexiglas safety shield (if supplied).
19. Close the battery charger's front panel (door).
20. Turn on (close) the charger's dc output circuit breaker (CB2) **first**.
21. Turn on (close) the charger's ac input circuit breaker (CB1) **second**.
22. Peel off the AT Series Battery Charger data nameplate decal.
23. Apply the **new** Charger data nameplate decal in place, featuring the corrected model number.
24. The AT Series Battery Charger Ground Bus Bar assembly is now properly installed.