ATevo Series Battery Charger Service Procedure



FIELD INSTALLATION OF AUXILIARY I/O BOARD

SAFETY

⚠ WARNING

Before starting work, disconnect and lock out all external ac and dc power sources to the ATevo.



NOTICE

Turning off (open) the front panel ac input (CB1) and dc output (CB2) circuit breakers does not isolate live voltages inside the ATevo enclosure.



Wait several minutes to allow internal voltage potentials in filter caps (A7/C1/C2) to dissipate.

PREPARATION

- 1. Shut down ATevo, by opening ac input (CB1) and dc output (CB2) front panel breakers.
- 2. ② Lock out ac input feed from ATevo.
- 3. OLock out dc bus / battery from ATevo.
- 4. Wait several minutes to allow internal voltages in filter caps (A7/C1/C2) to dissipate.
- 5. Identify ATevo enclosure style, and appropriate service instruction drawing:
 - Style-5054 wall-mount (small) **JD5025-51**
 - Style-5070 floor-mount (~ 38in H x 20in W) <u>JD5025-52</u> (most models)
 - Style-5070 floor-mount (~ 38in H x 20in W) <u>JD5025-53</u> (1PH 75A only)
 - Style-5030 floor-mount (~ 54in H x 30in W) JD5025-54
 - Style-163 floor-mount (~62in H x 42in W) **JD5025-54**
 - Style-198 floor-mount (~80in H x 56in W) JD5025-54
- 6. See Section 2.2 of the ATevo *Operating & Service Instructions* for necessary steps to follow when accessing internal components within the battery charger.
- 7. Open ATevo front panel door, and remove acrylic safety shield.
- 8. Remove and secure any user dc bus / battery wiring from the dc output breaker (CB2+/-).
- 9. \(\triangle \text{Using a multimeter, carefuly verify that all power sources inside ATevo are at zero.}\)
- 10. Identify the location and arrangement of the Auxiliary I/O Board (A4) inside ATevo.
- 11. Refer to the specific drawing (**JD5025-5#**) listed above, per ATevo enclosure style.

REMOVAL

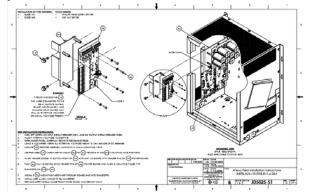
- 12. **A WARNING** Wires connected to Relay Outputs (A4-TB4), Binary Inputs (A4-TB1), and Analog Inputs (A4-TB3) may still have wetting voltages or signal voltages present.
- 13. Analog Inputs terminals (A4-TB3) and Binary Inputs terminals (A4-TB1) are removable. If any wires are present on these terminals, pull the terminal blocks out of their sockets.
- 14. Remove wires connected to the Relay terminal block (A4-TB4).
- 15. Remove screws that mount the Auxiliary I/O Board (A2).
- 16. For smaller models, remove the Aux I/O Board (A4) from the left-side Rectifier Assembly.
- 17. For larger models, remove the Aux I/O Board (A4) from the right-side Power Board (A2).
- 18. Note orientation of Aux I/O Board (A4) while removing.

INSTALLATION

- 19. Carefully insert new (replacement) Auxiliary I/O Board (A4) into ATevo, matching orientation of older one just removed.
- 20. Push Auxiliary I/O Board (A4) onto header pins of Power Board (A2).
- 21. Align mounting holes with standoffs.
- 22. Reintall mounting screws through board, and into standoffs.
- 23. Reinstall any user wiring to the new Auxiliary I/O Board (A4) by inserting the removable terminal blocks, removed in Step 13 above, into their appropriate sockets.
- 24. Check your work before proceeding.
- 25. Confirm all connections are correct, secure, and tight.
- 26. Replace safety shield, close front panel door.
- 27. Re-energive ATevo by closing ac input circuit breaker (CB1) first.
- 28. Follow with, by closing the dc output circuit breaker (CB2) second.
- 29. Field Installation of the ATevo Auxiliary I/O Board (A4) is now *complete*!

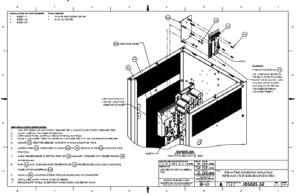
DRAWINGS

Style-5054 - wall-mount (small)



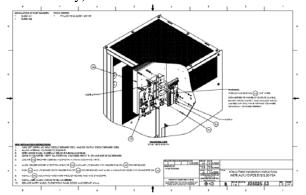
http://www.atseries.net/PDFs/JD5025-51.pdf

Style-5070 - floor-mount (~ 38in H x 20in W) (most models)



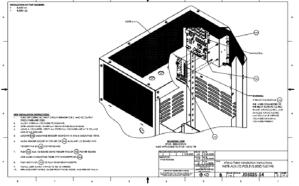
http://www.atseries.net/PDFs/JD5025-52.pdf

Style-5070 - floor-mount (~ 38in H x 20in W) (1PH 75A only)



http://www.atseries.net/PDFs/JD5025-53.pdf

Style-5030 - floor-mount (~ 54in H x 30in W) Style-163 - floor-mount (~62in H x 42in W) Style-198 - floor-mount (~80in H x 56in W)



http://www.atseries.net/PDFs/JD5025-54.pdf



(http://www.atseries.net/PDFs/JD5025-50.pdf)