

**FIELD INSTALLATION OF
MAIN CONTROL BOARD (A1)****BACKGROUND**

The "A1" Main Control Board (factory p/n EN5031-00) is the "brain" of the ATEvo Series microprocessor-controlled float battery charger. Use care when replacing this component.

For greater visual detail, see also ATEvo Field Service Instruction Drawing (p/n [JD5077-00](#)).

SAFETY

⚠ WARNING *High voltages appear at several points inside the ATEvo. Use extreme caution when working inside the enclosure. Do not attempt to work inside ATEvo unless you are a qualified technician or electrician.*

Disconnect and lock out all power from ATEvo before starting to remove or replace any internal components. Turn off (open) both front panel circuit breakers (CB1/CB2). Remove ac power at the distribution panel upstream from the ATEvo. Disconnect the battery from the DC Output Circuit Breaker (CB2+/-).

Wait several minutes to allow voltages in electrolytic filter capacitors (A7/C1/C2) to bleed off.

NOTICE *Printed circuit boards are sensitive to damage from static discharges. Leave replacement pcbs in their anti-static bags until they are ready to be installed. Ground yourself with a wrist strap before handling boards. Always handle boards by their edges.*

PROCEDURE

1. Confirm the front panel ac input (CB1) and dc output (CB2) circuit breakers are *off* (open).
2. Open the hinged ATEvo front panel (door).
3. The square Main Control Board (A1) is mounted to the inside surface of the door on four (4) plastic standoffs, and one (1) metal ground stud.
4. Remove optional user wiring, if present, various pc board (A1, A2, A4, etc.) terminals (TB#).
5. Remove the ribbon cable from lower-right edge of the Main Control Board (A1).
6. Remove the nut from the grounding stud on lower-left corner of the board.
7. Compress the tab on each standoff, and pull the board toward you until it clears all standoffs.

NOTICE *If any optional serial communications boards are present (these would be located along the left side of the Main Control Board), they must be removed along with the Main Board as a complete assembly. To do so, compress the standoffs on each board and pull board toward you until it clears the standoffs.*

8. Remove the new (replacement) "A1" Main Control Board (p/n EN5031-00) from the anti-static bag, holding it from its edges.
9. Mount the new board onto the inside surface of the front panel door with same orientation.
10. Push the board onto the standoffs, and confirm it is fully seated on all four (4).
11. Reinstall the nut onto the grounding stud, on the lower left corner of the board.
12. Reconnect the ribbon cable at the lower-right edge.
13. Replace any user wiring to various pc board terminals.
14. Restart ATEvo. Field replacement of the Main Control Board (A1) is **complete!**

NOTICE *Replacement ATEvo Main Control Boards (A1) **must** be recalibrated. Run the Hindle Health Test to check the dc voltmeter accuracy. If installation's parameters (float voltage, etc.) are different from ATEvo factory preset values, these values will need to be re-entered or restored via SD memory card. See Service Instruction ([JD5072-00](#)).*