

Water Cooled eDrive AIM Assembly Replacement Instructions

Summary

This technical note describes replacing the 86-101-40 assembly in the water cooled eDrive.

Scope

This technical note applies to water cooled eDrives.

Materials and Equipment

- Insulated Phillips screwdriver
- eDrive
- **86-101-40**
- Socket head screwdrivers 5/64" & 7/64"
- Nut Driver 7/16"

Contact NGCEO for assistance in obtaining any of these items.

Remove and Replace the AIM assembly

- 1. Turn off the eDrive.
- 2. Disconnect all electrical connections to the eDrive.
- 3. Purge any remaining coolant out of the eDrive
- 4. Remove the cover from the eDrive
- 5. Using a Phillips screwdriver, remove the 4 Phillips screws holding the plate onto the back of the eDrive around the coolant ports. See Figure 1 below.





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6. Using a 5/64 socket head screwdriver, remove the 3 socket head cap screws holding the black input and output power label onto the rear of the eDrive. Slide the plate off of the back of the eDrive. See Figure 2 below.

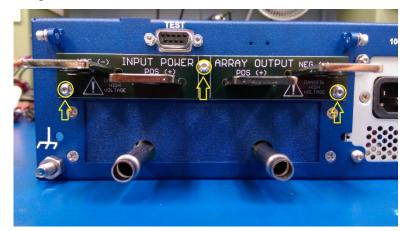


Figure 2: Remove 3 screws.

7. Disconnect the 6 connectors from the board. See Figure 3 below.

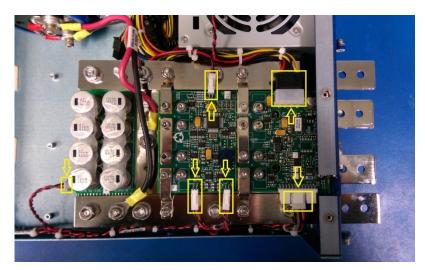


Figure 3: Disconnect 6 connectors.



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8. Using a 7/16 nut driver, disconnect the red and black wires that come from the capacitor to the board. See Figure 4 below.



Figure 4: Disconnect 2 wires from the board.



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9. Using a 7/64 socket head screwdriver, remove the 6 socket head cap screws holding the AIM assembly to the floor of the eDrive. See Figures 5 & 6 below.

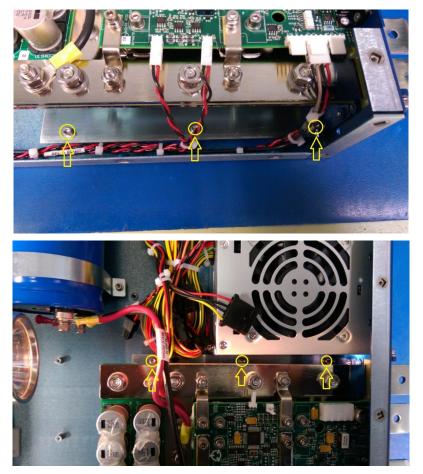


Figure 5 & 6: Remove 6 socket head cap screws

- 10. Slide the AIM assembly out toward the front of the eDrive.
- 11. Remove the blue plate off of the coolant ports.
- 12. Set the fault AIM aside.
- 13. Slide the blue plate onto the coolant ports of the new AIM.
- 14. Slide the AIM into the eDrive. Use care to align the coolant ports and the power lugs with the back of the eDrive.
- 15. Bolt the AIM assembly to the floor of the eDrive with the 6 socket head screws. See Figures 5 & 6.
- 16. Reconnect the wires from the capacitor to the board. See Figure 4.
- 17. Reconnect the 6 connectors to the board. See Figure 3. All connectors should be labeled.

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- 18. Reattach the black input and output power label onto the back of the eDrive. See Figure 2.
- 19. Reattach the blue panel back onto the eDrive around the coolant ports.
- 20. Replace the cover.
- 21. Attach cables.
- 22. Power eDrive and begin normal operation.