S22 Troubleshooting

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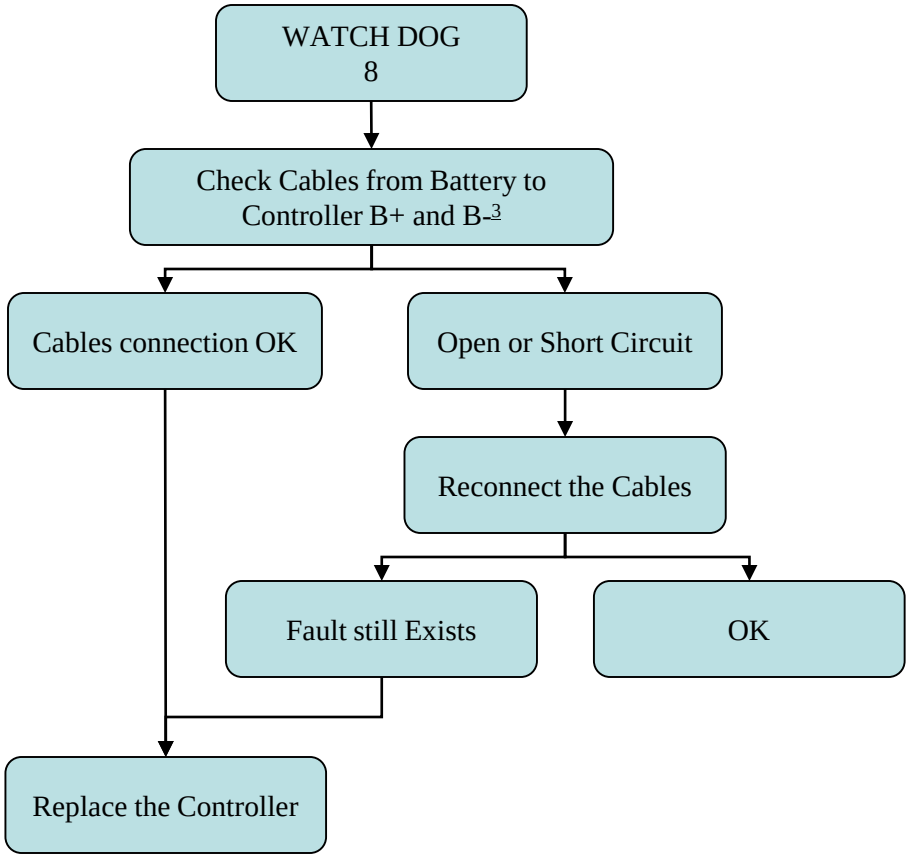
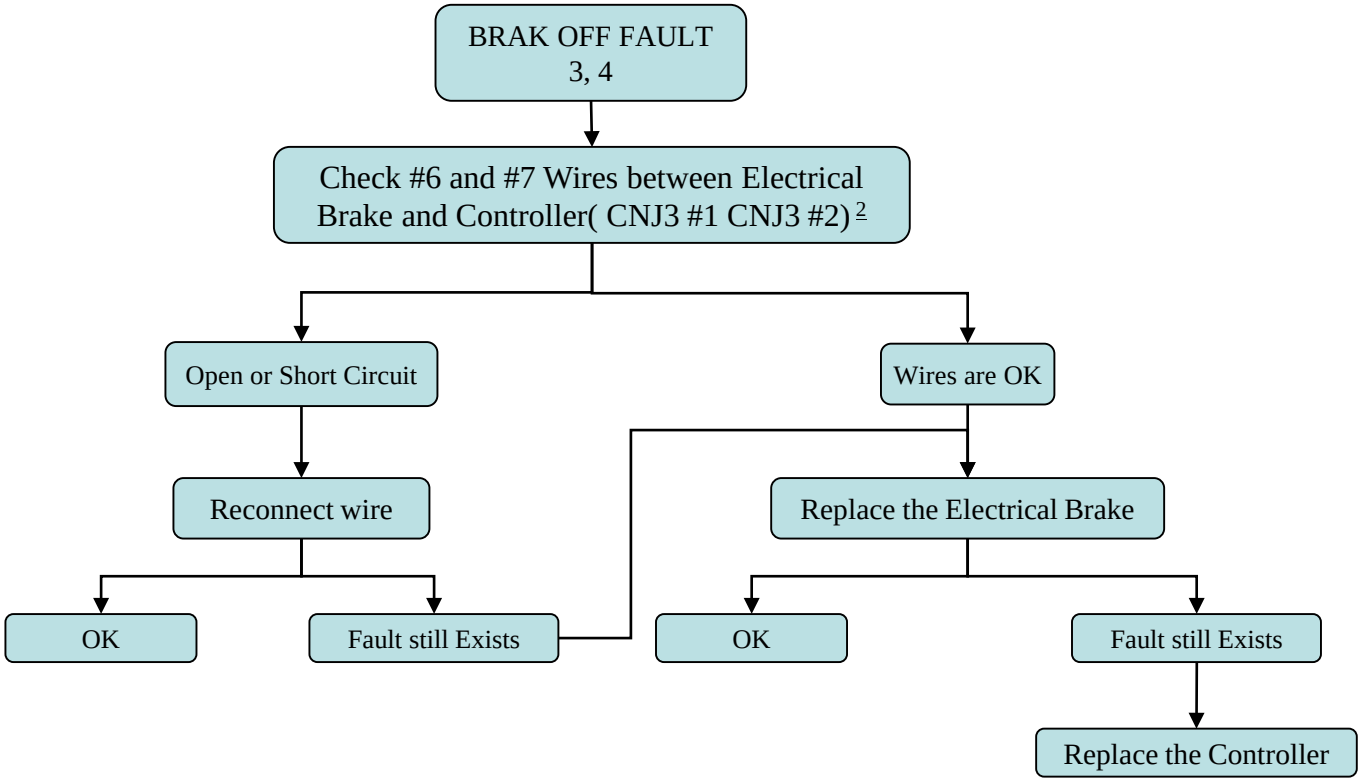
Appendix A: Check Wires and Cables detail ---------- Page 20

Main Controller

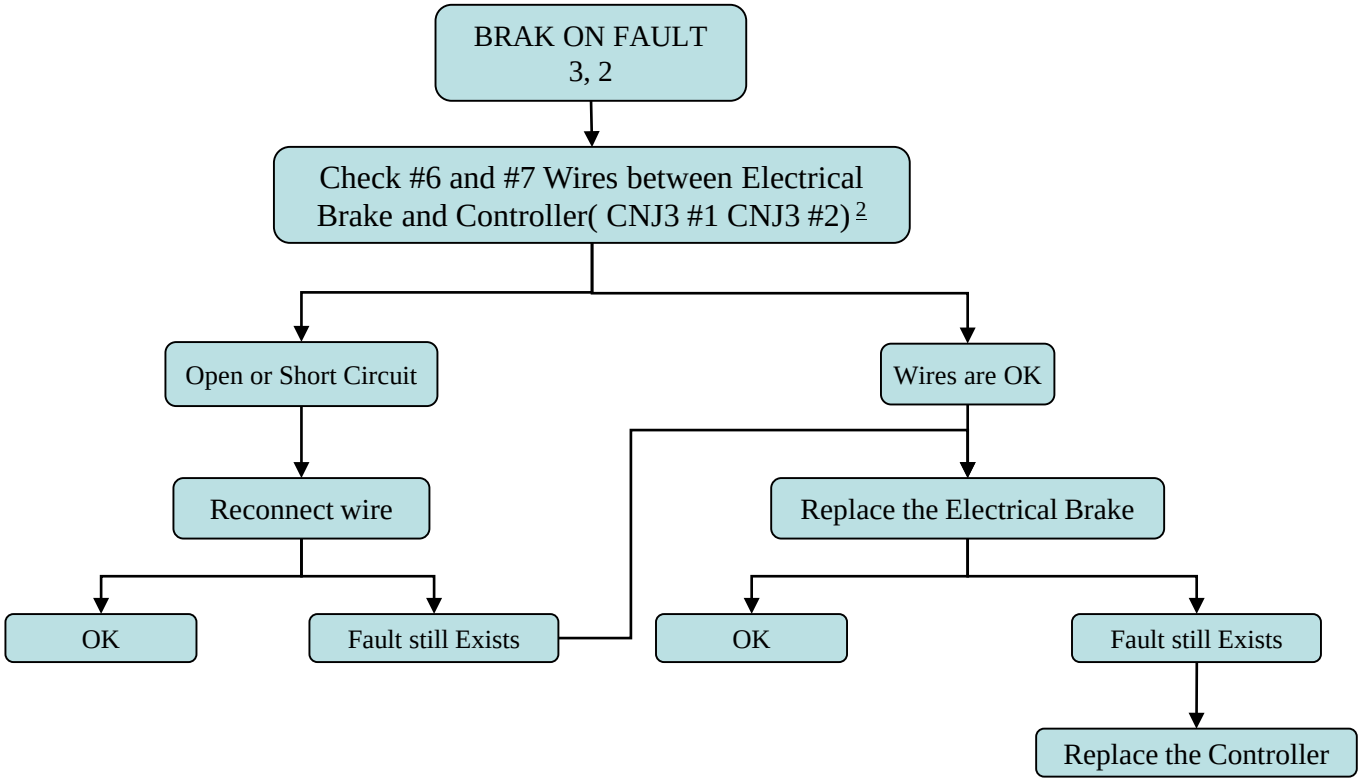
ALARM 4, 5 BATTERY DISCONNECT FAULT



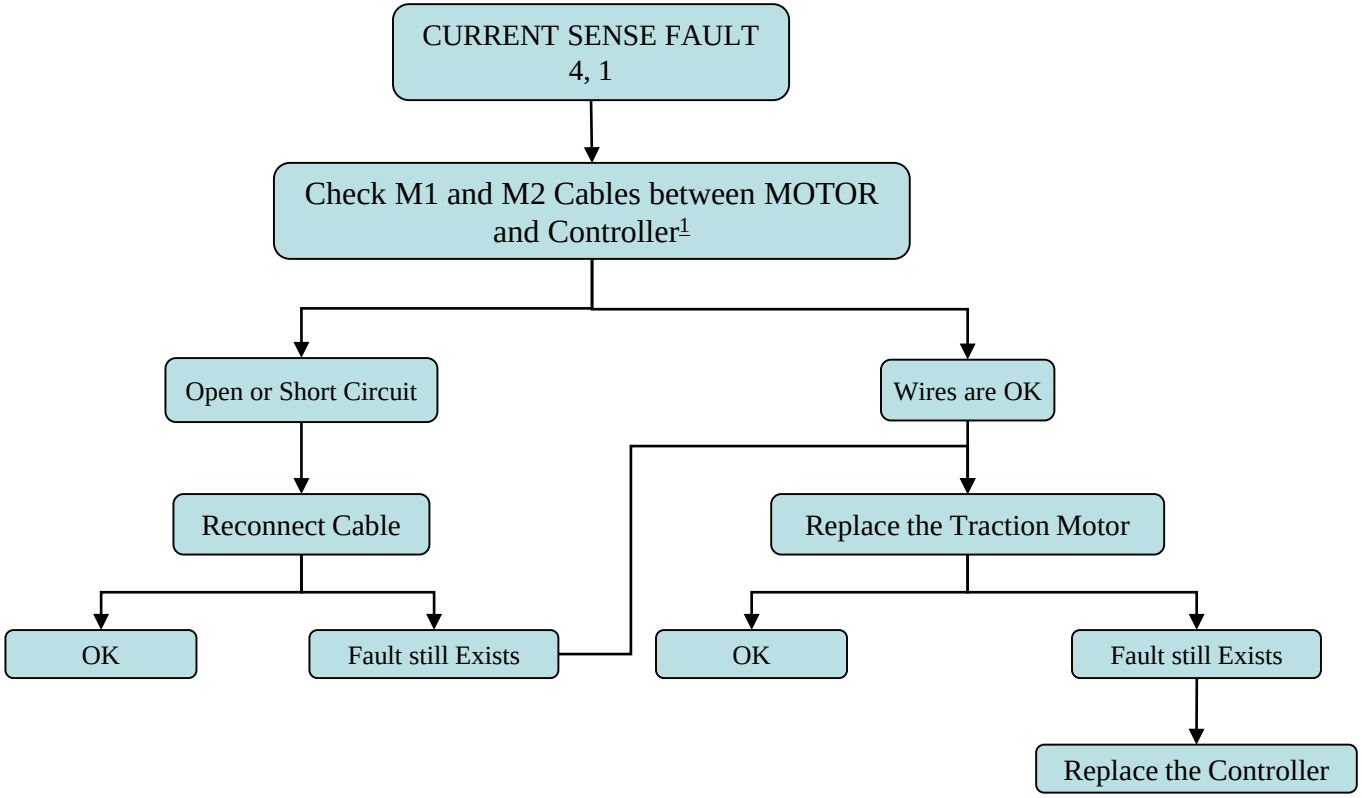
ALARM 3, 4 BRAKE OFF FAULT



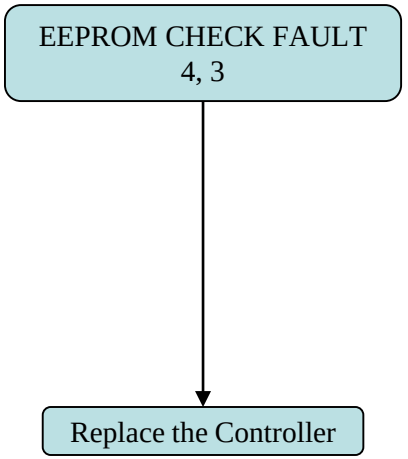
ALARM 3, 2 BRAKE ON FAULT



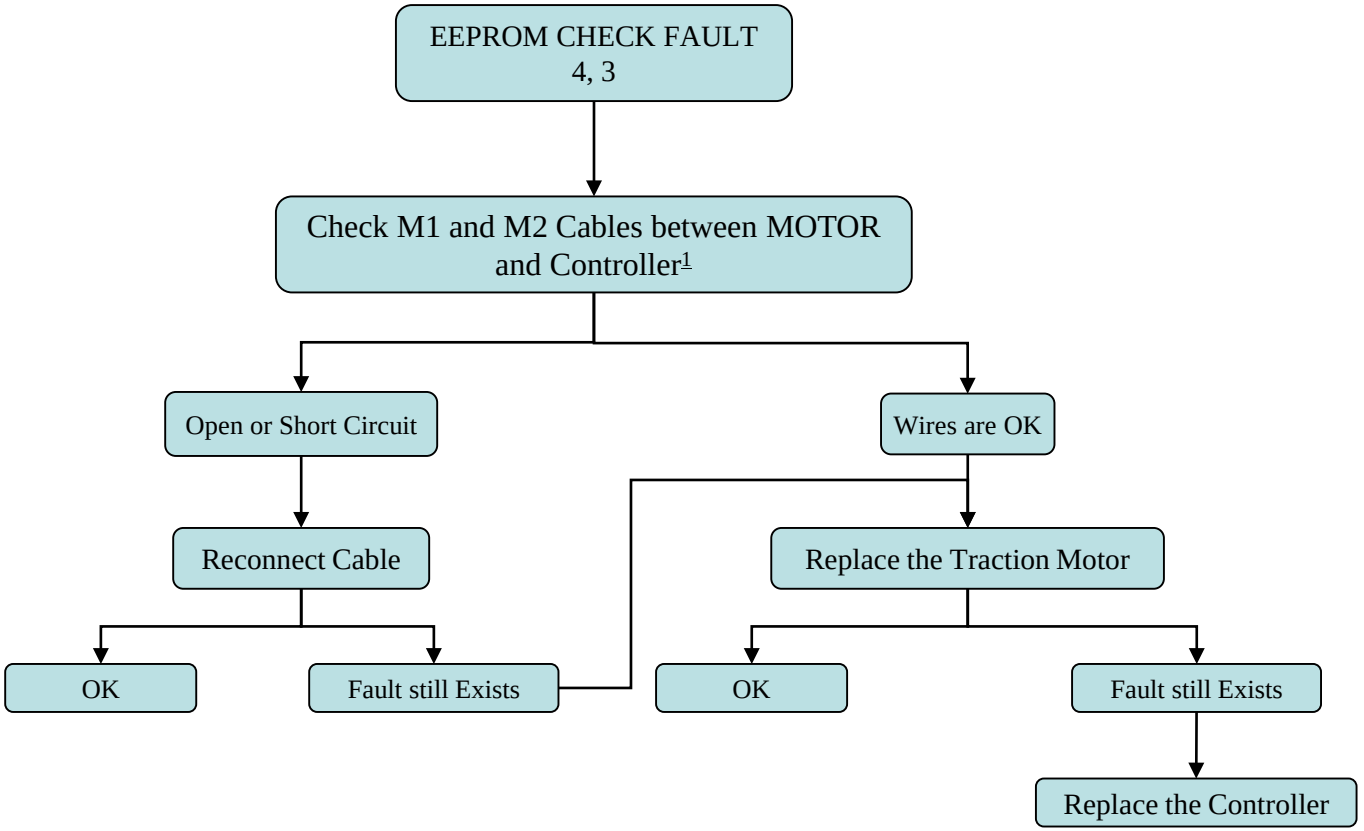
ALARM 4, 1 CURRENT SENSE FAULT



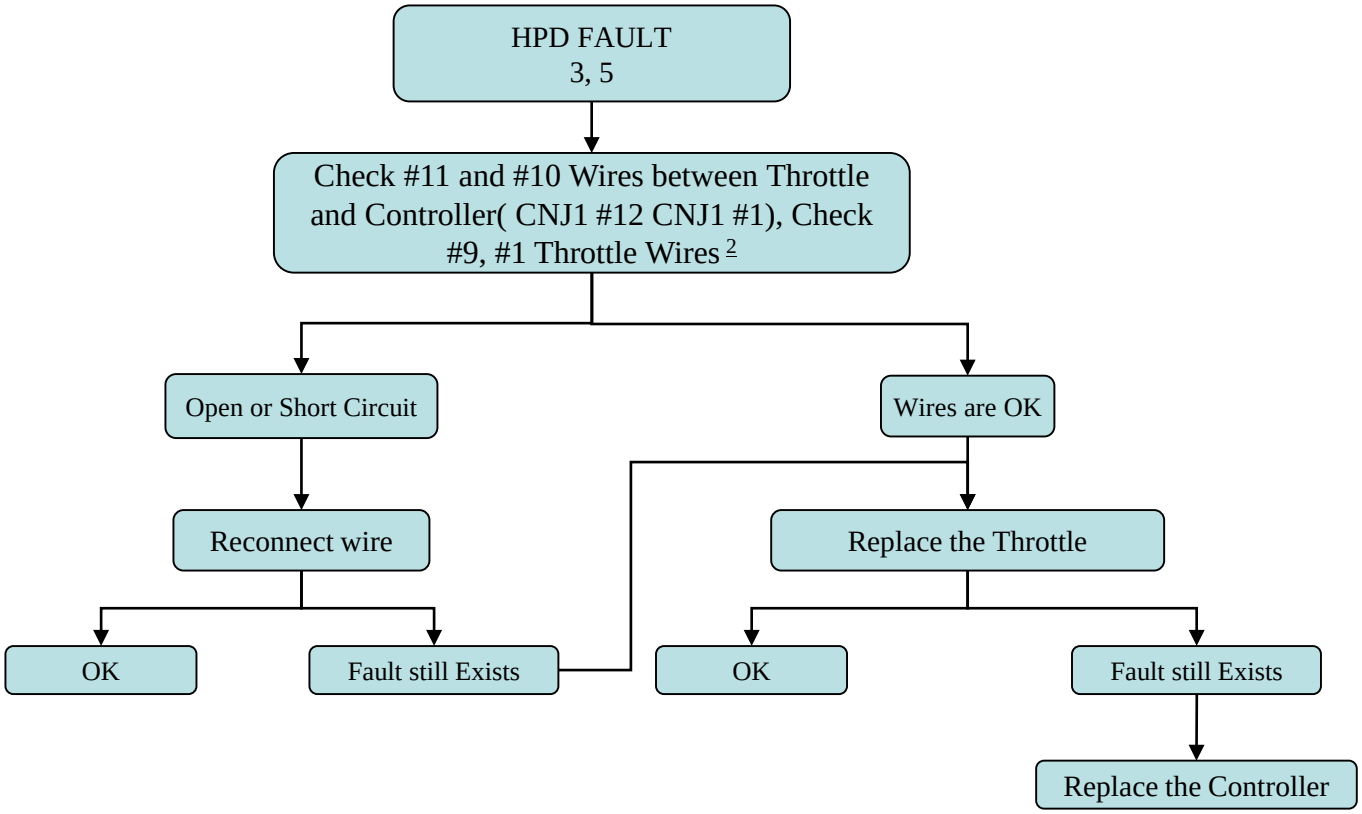
ALARM 4, 3 EEPROM CHECK FAULT



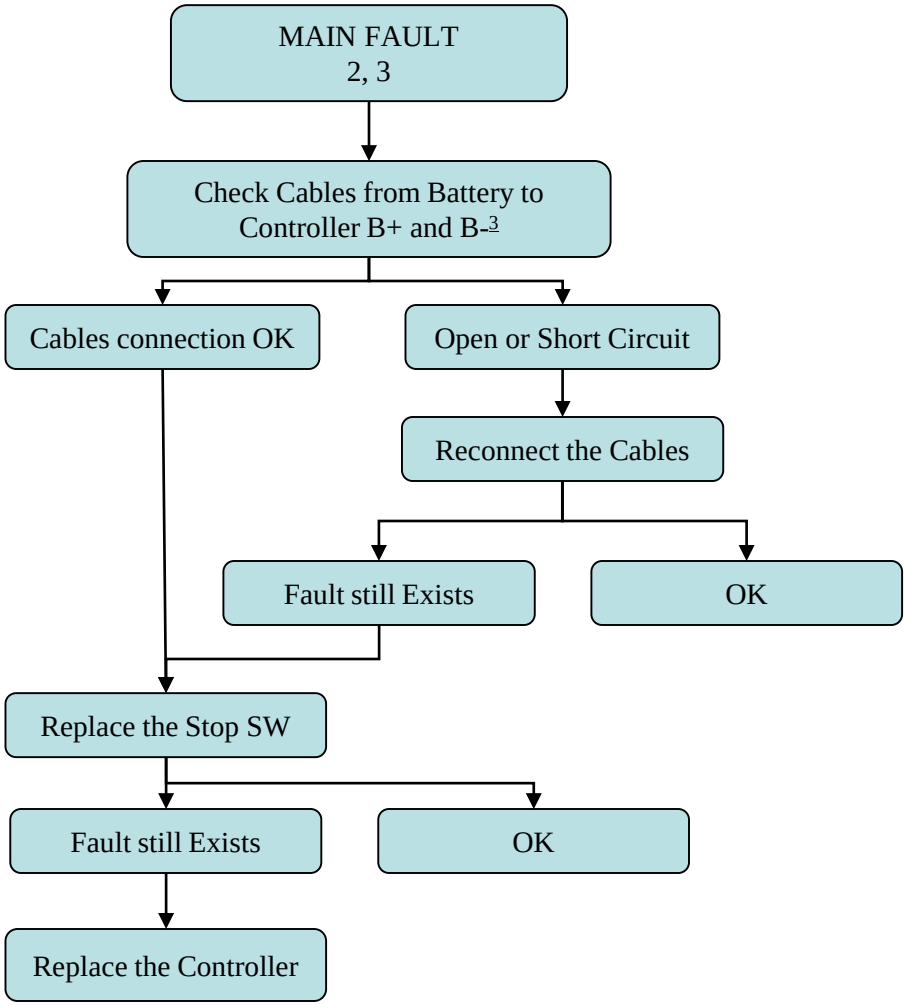
ALARM 4, 2 HARDWARE FAILSAFE



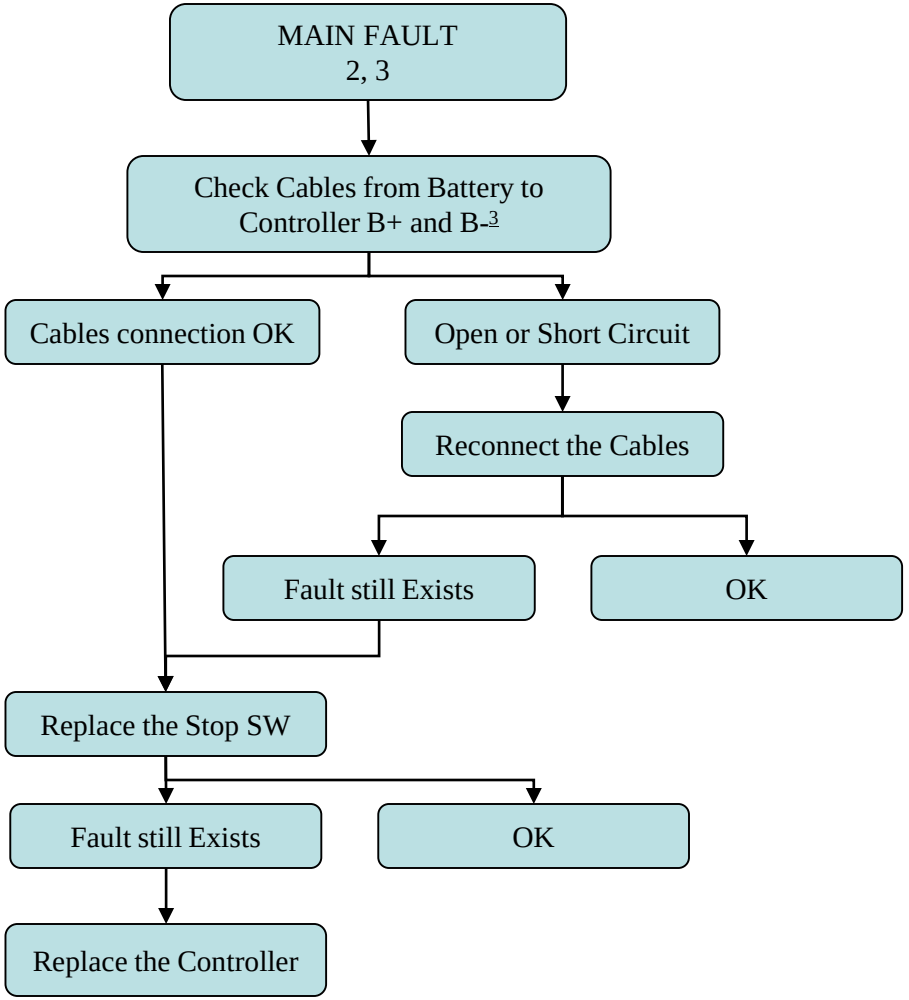
ALARM 3, 5 HPD FAULT



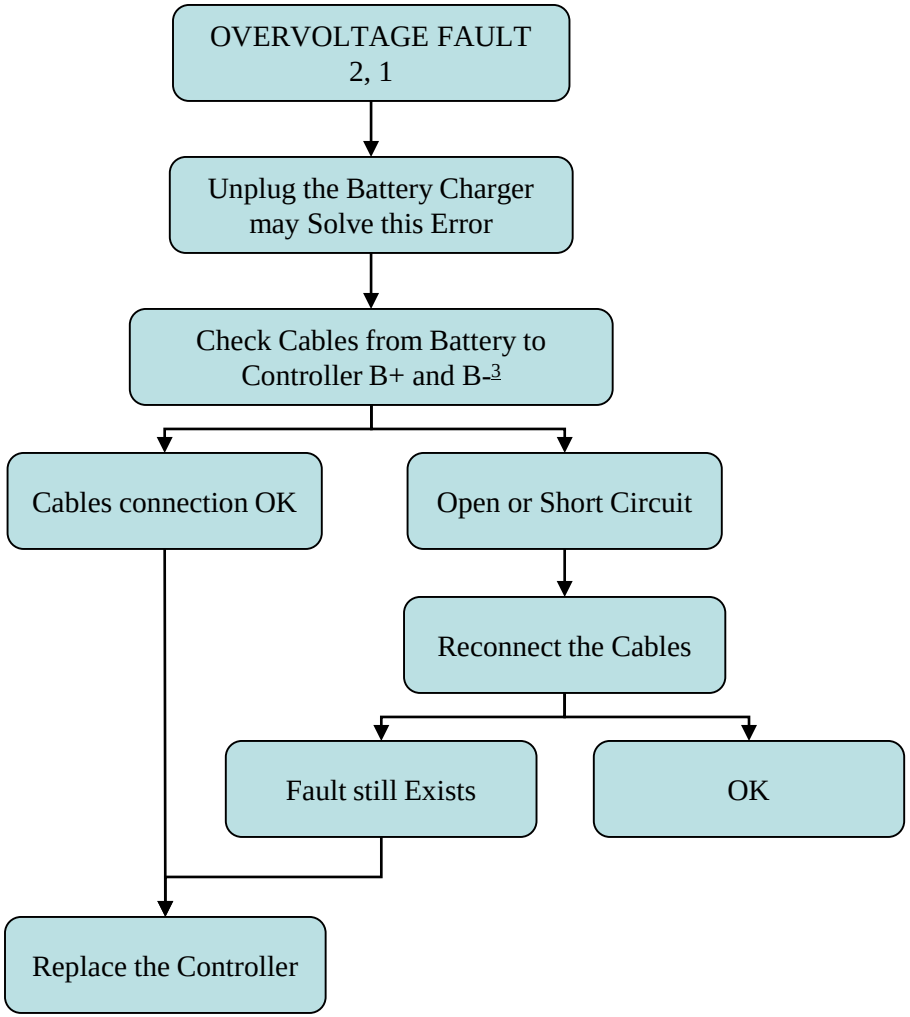
ALARM 2, 3 MAIN FAULT



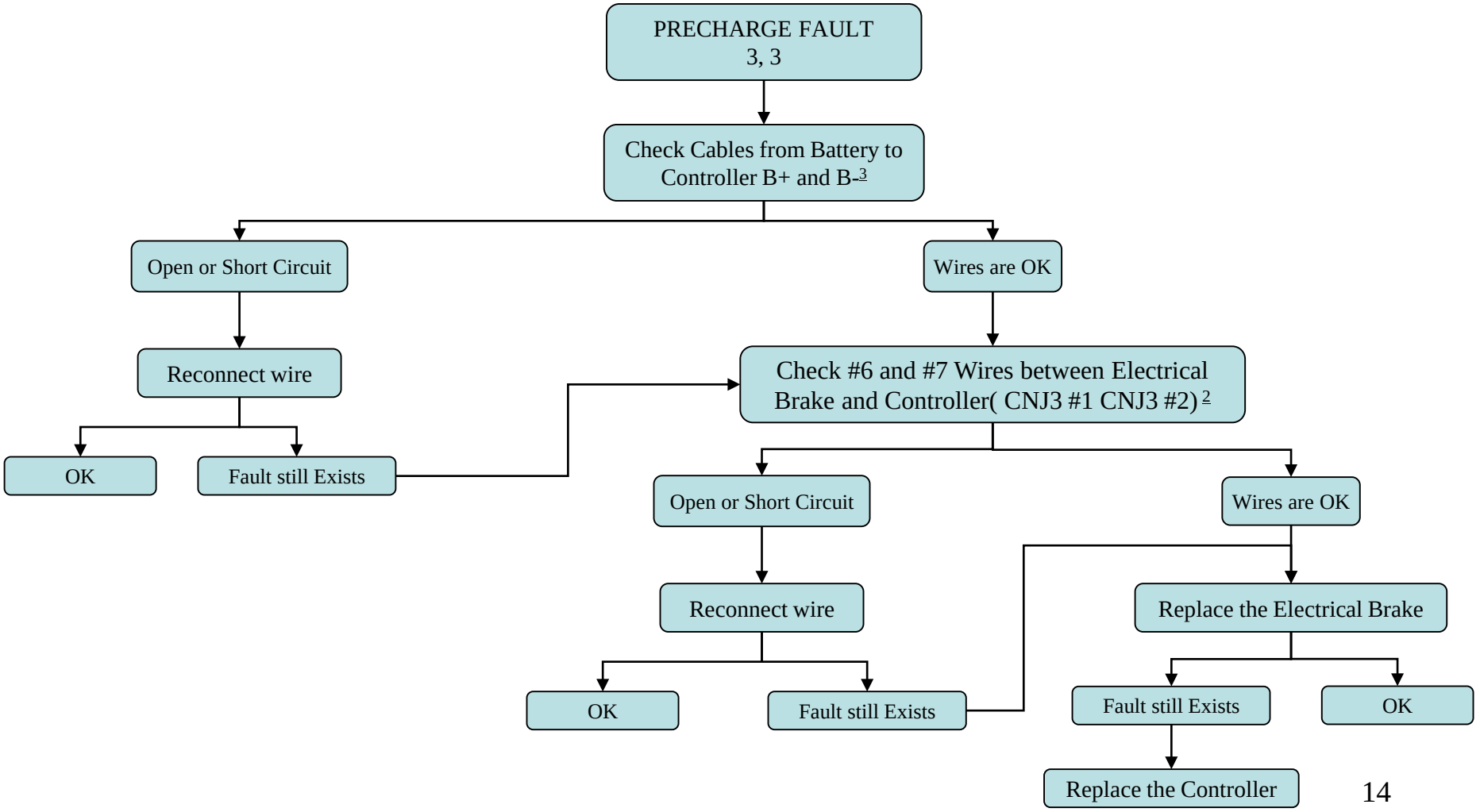
ALARM 2, 3 MAIN OFF FAULT



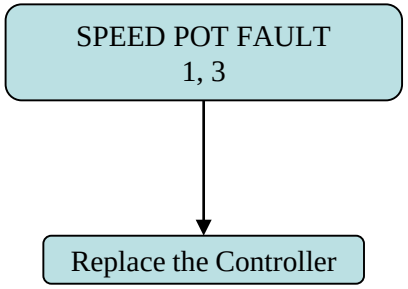
ALARM 2, 1 OVERVOLTAGE FAULT



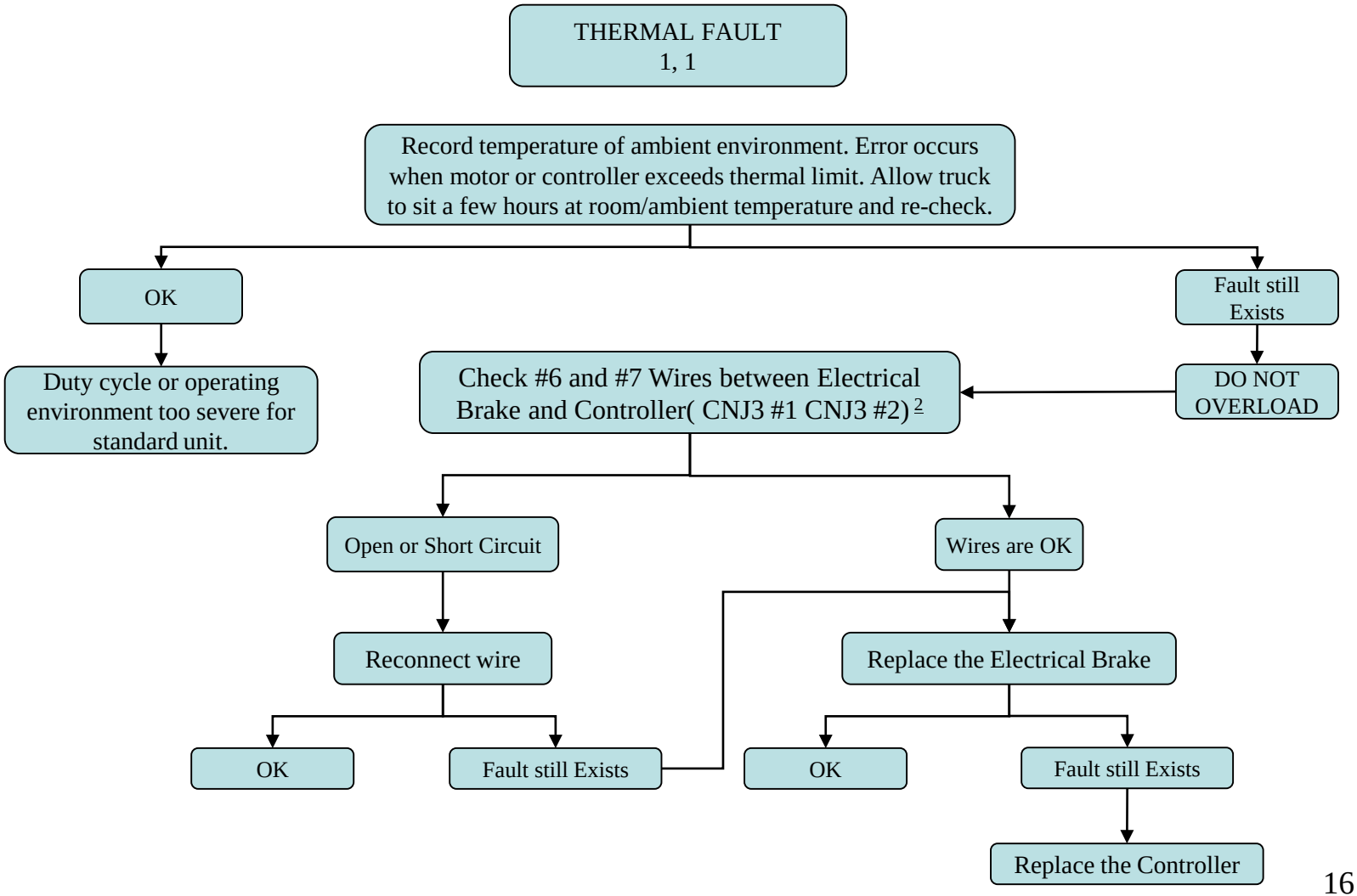
ALARM 3, 3 PRECHARGE FAULT



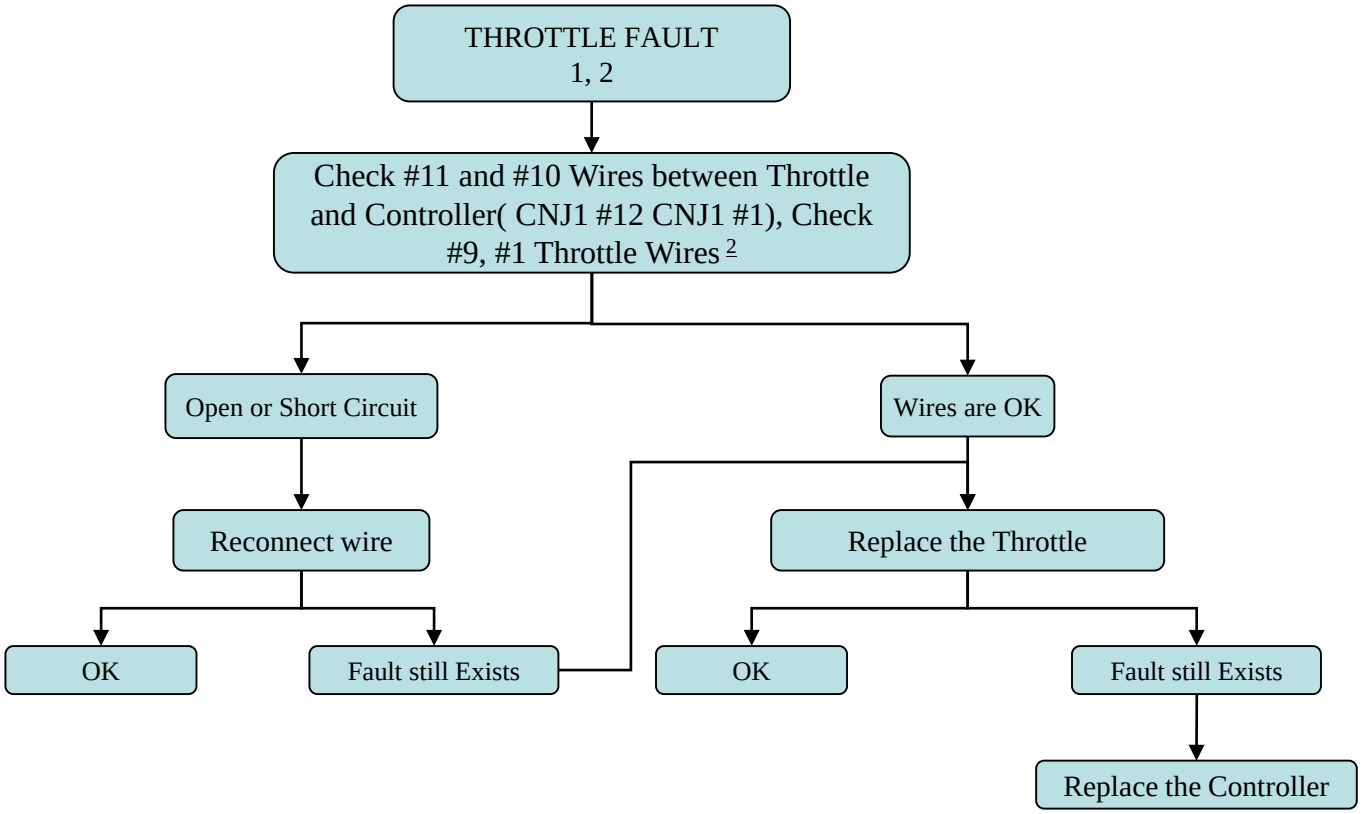
ALARM 1, 3 SPEED POT FAULT



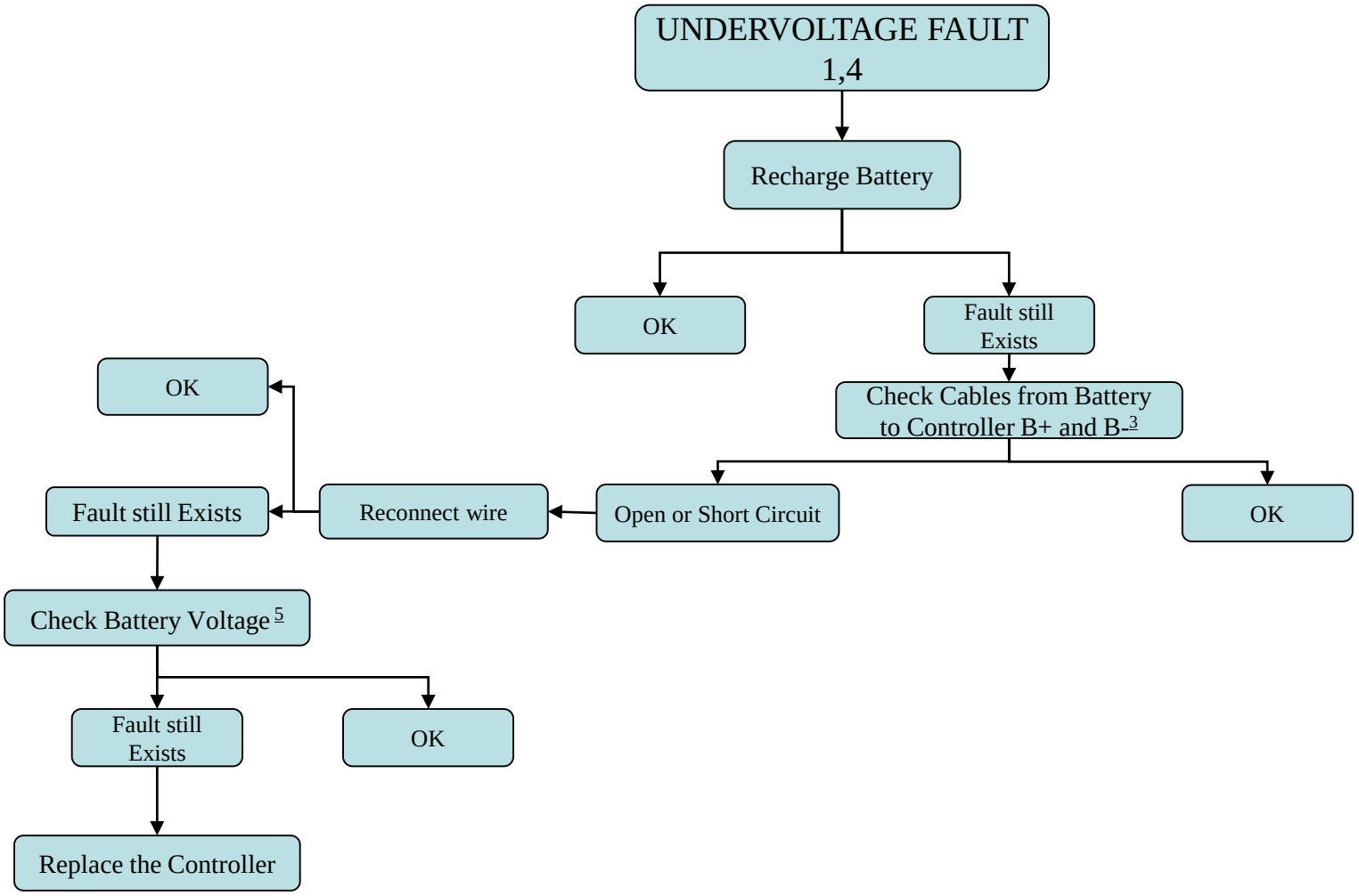
ALARM 1, 1 THERMAL FAULT



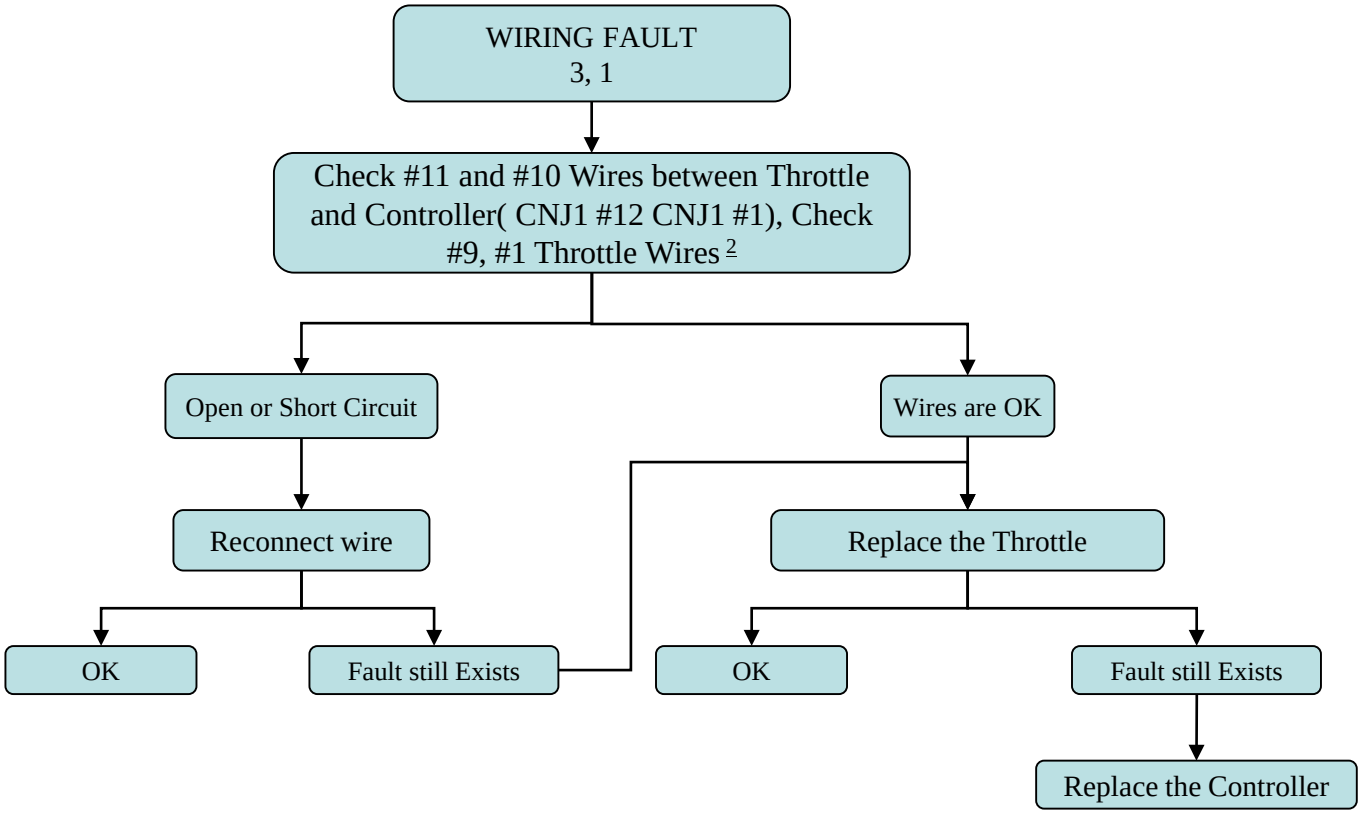
ALARM 1, 2 THROTTLE FAULT



ALARM 1,4 UNDERVOLTAGE FAULT

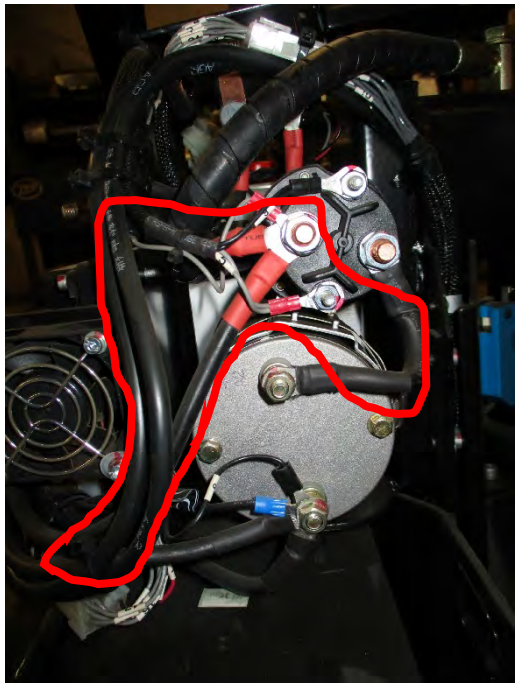


ALARM 3, 1 WIRING FAULT

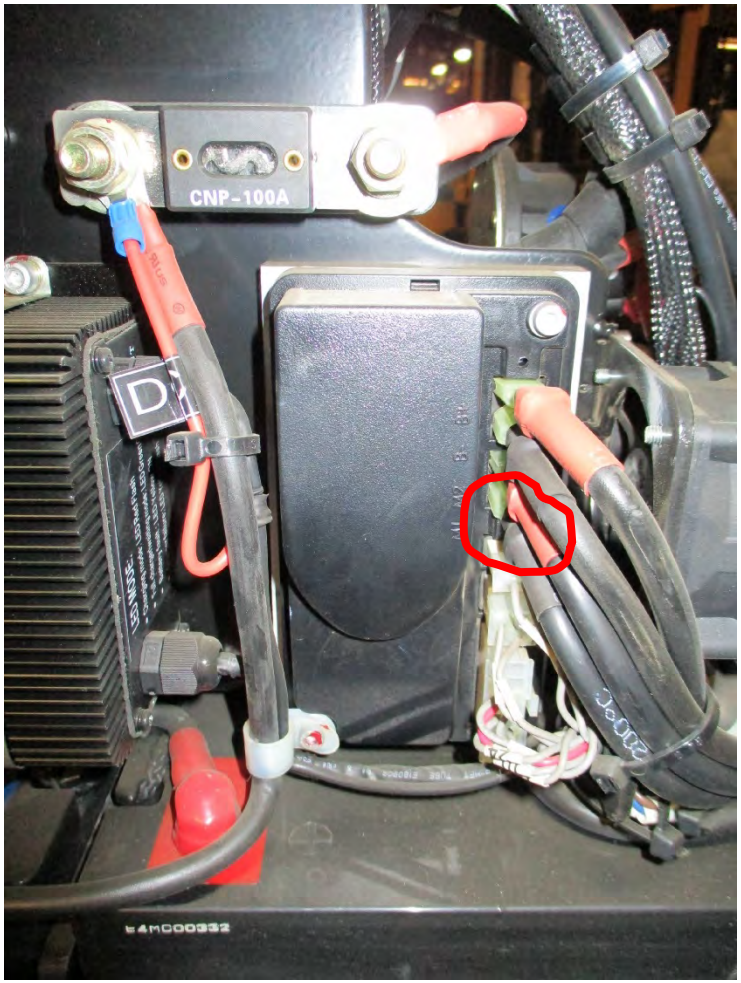


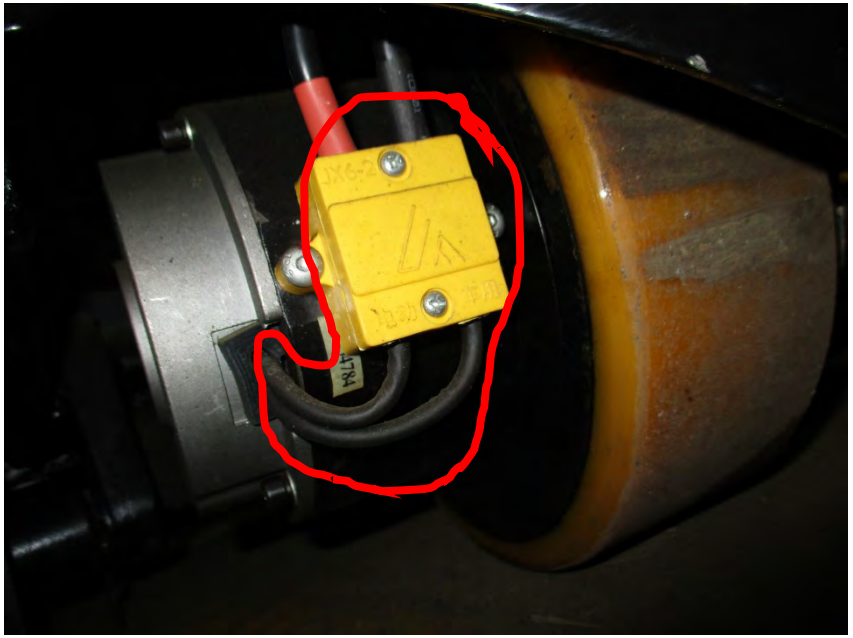
Appendix A

1. Check if cables are opened or shorted. A shorted cable means the cable jacketing is damaged and it is shorting to another cable or it is in contact with a metal object like the frame. An open cable means one of the inside metal wires are cut/damaged. If you are not sure, pleasure measure the resistance of the individual wire or cable. If the resistance is more than 1 ohm, it is open.

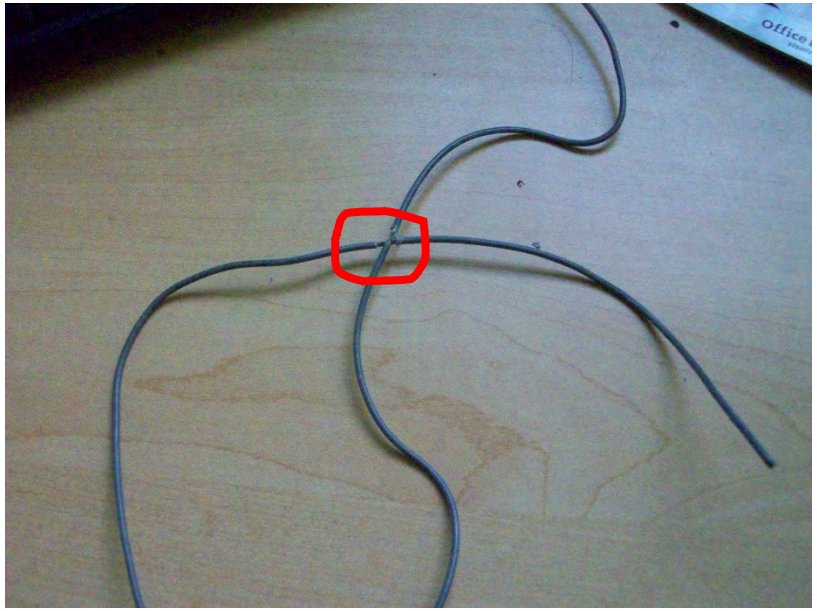


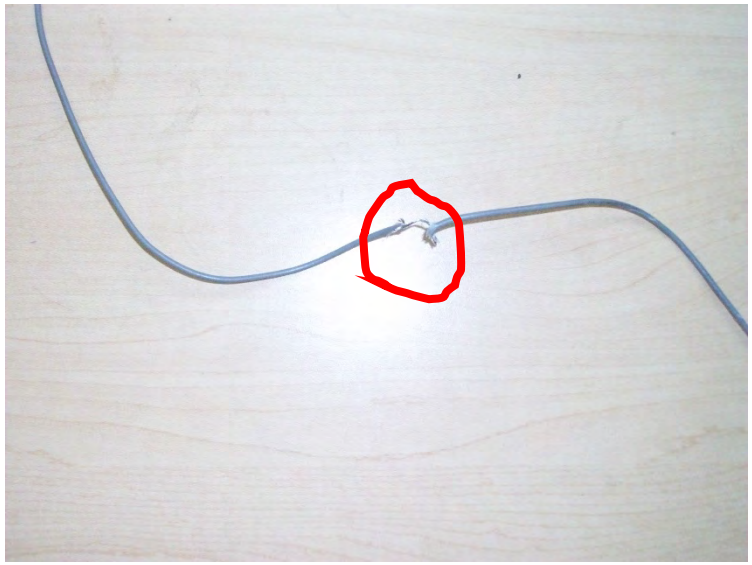
Check the connection points of the motor cables, and controller cables. Check the cable terminals for burn marks. Check if hardware is loose or burned. Ensure connections re tightened properly.



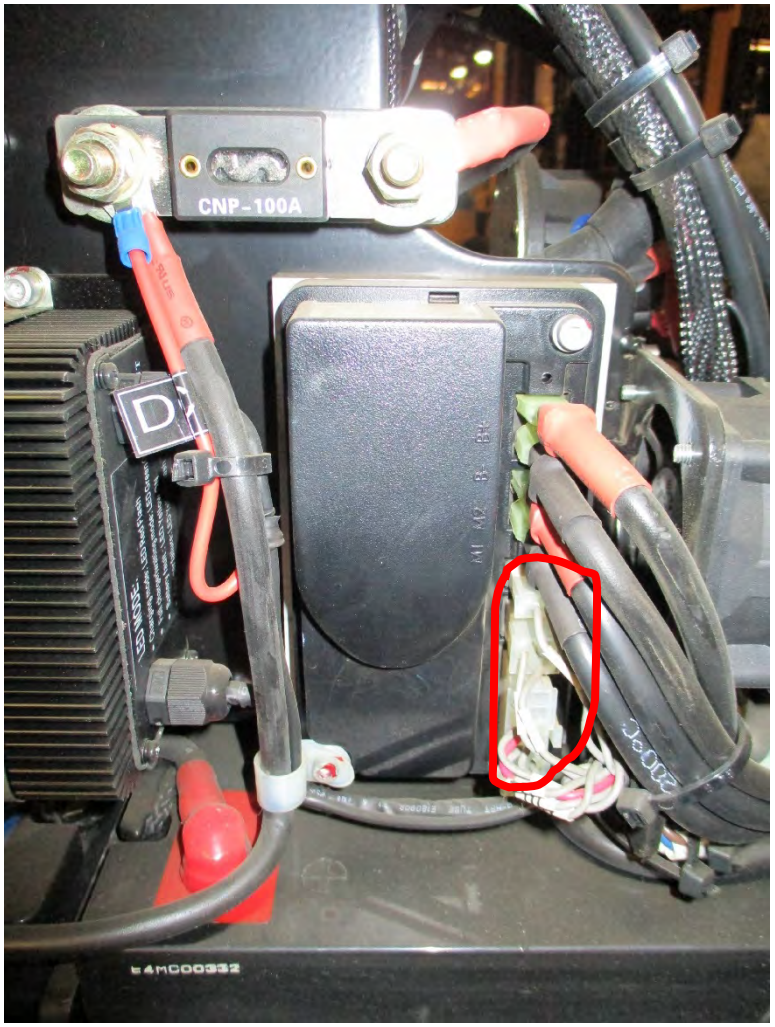


2. Check if cables are opened or shorted. A shorted cable means the cable jacketing is damaged and it is shorting to another cable or it is in contact with a metal object like the frame. An open cable means one of the inside metal wires are cut/damaged. If you are not sure, pleasure measure the resistance of the individual wire or cable. If the resistance is more than 1 ohm, it is open.



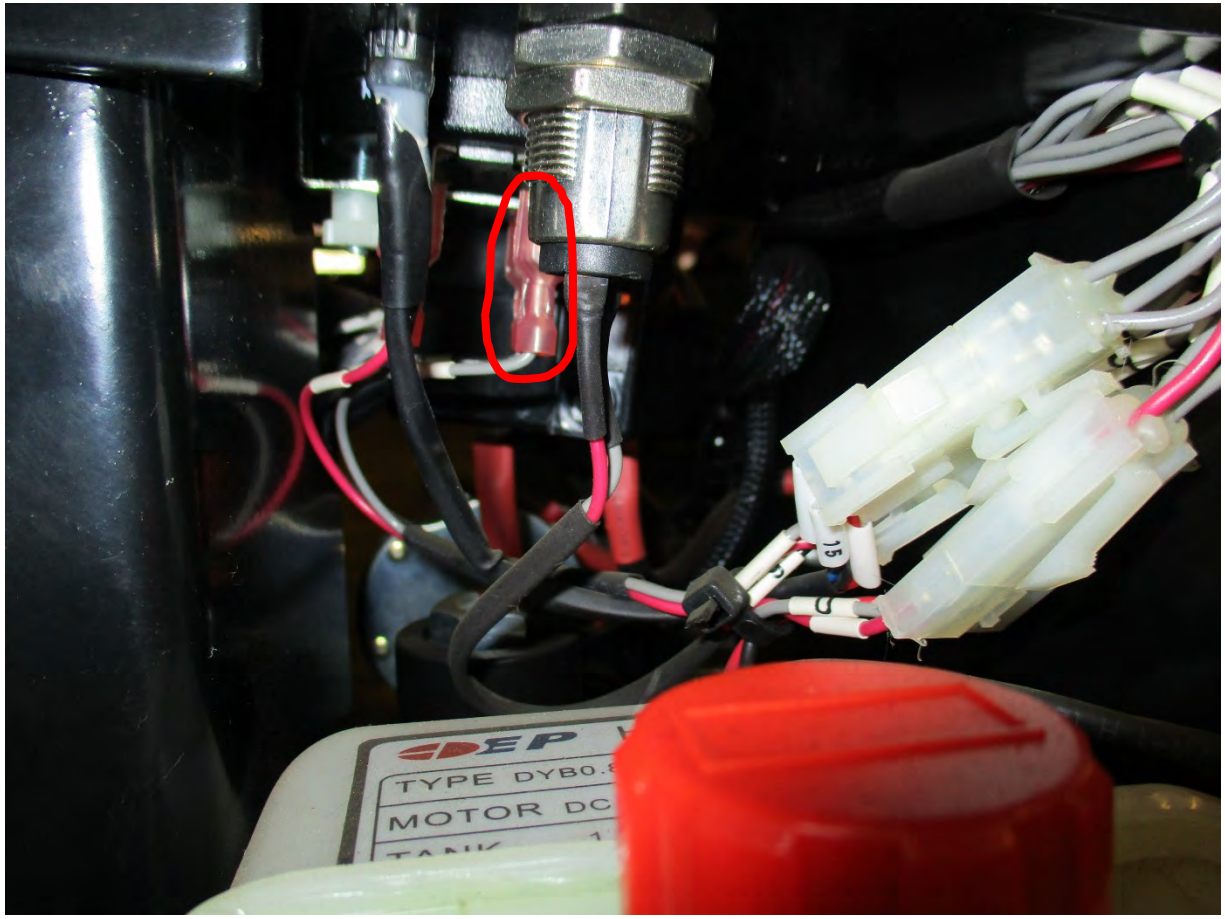


Check the connectors and pins on the Controller. Ensure connector locks are not damaged and no pins are broken or pushed out of the connector. Ensure no wires at pin terminations are cut/damaged



Check the connections between Controller wires and switches/sensors. Ensure wires are not cut or damaged.

Check if connectors are loose or burned (such as the 2 pin connectors on the Main Contact). Ensure the parts are properly tightened.



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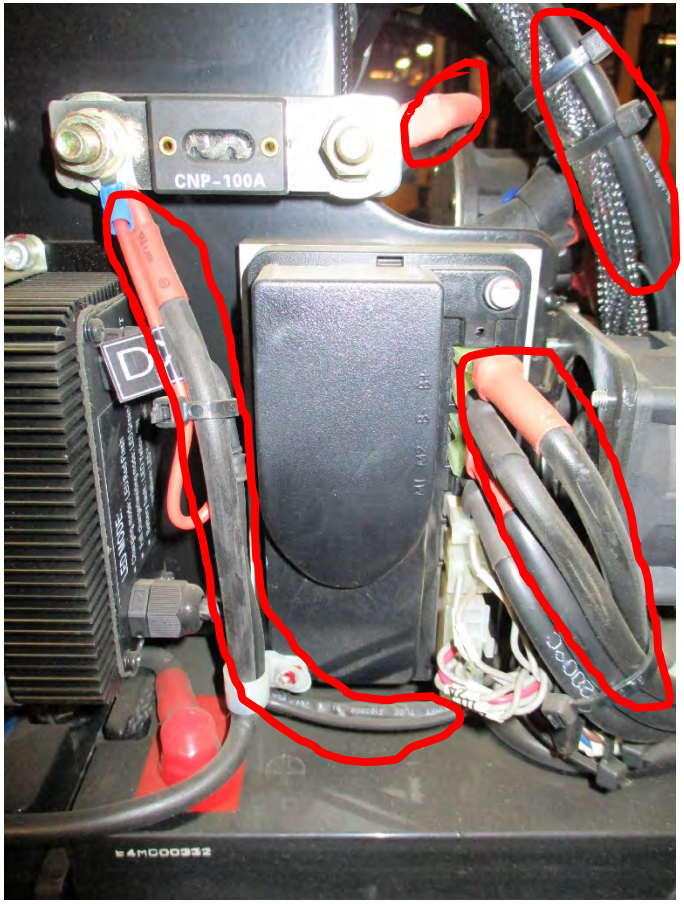
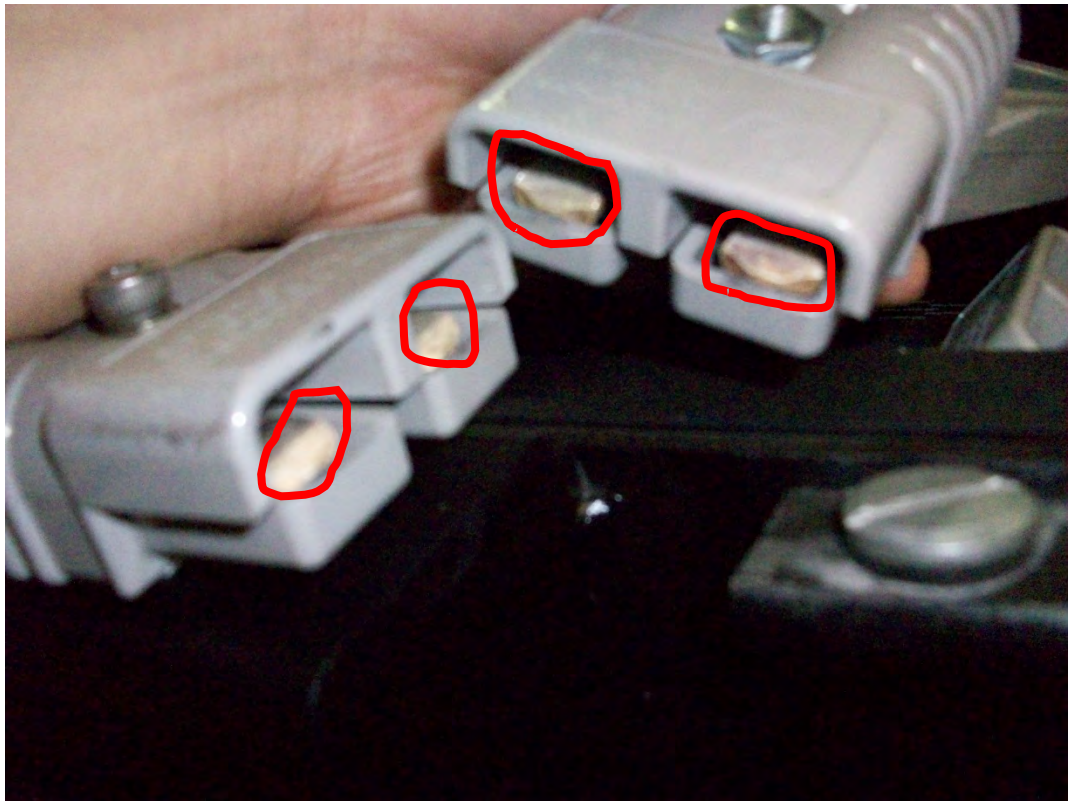
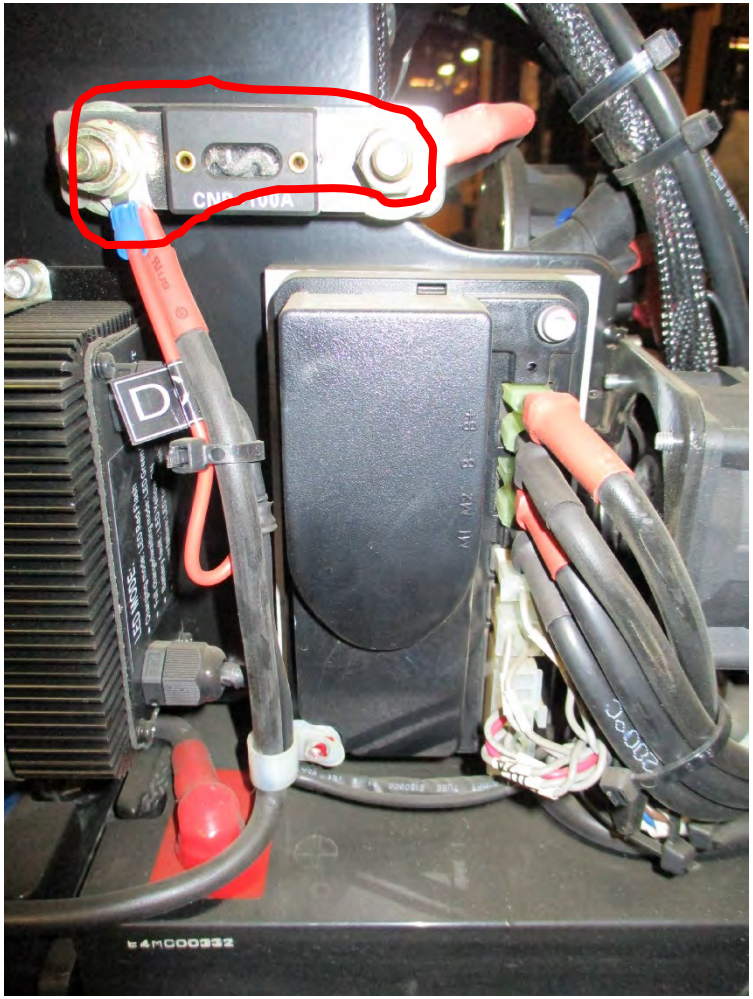


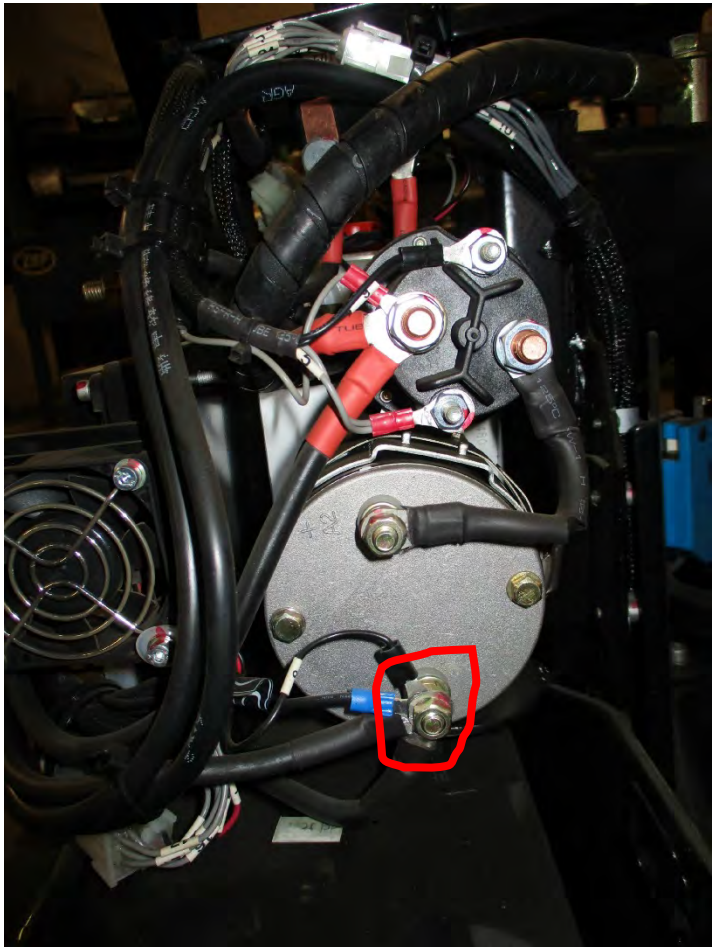
Check the Connectors between Battery and truck to see if they fit loose or are burned (Concentrate on the inside of the connector). If they do not fit correctly, replace cable lugs and/or connector housing to correct the issue.



Check if the fuses are blown out or not.

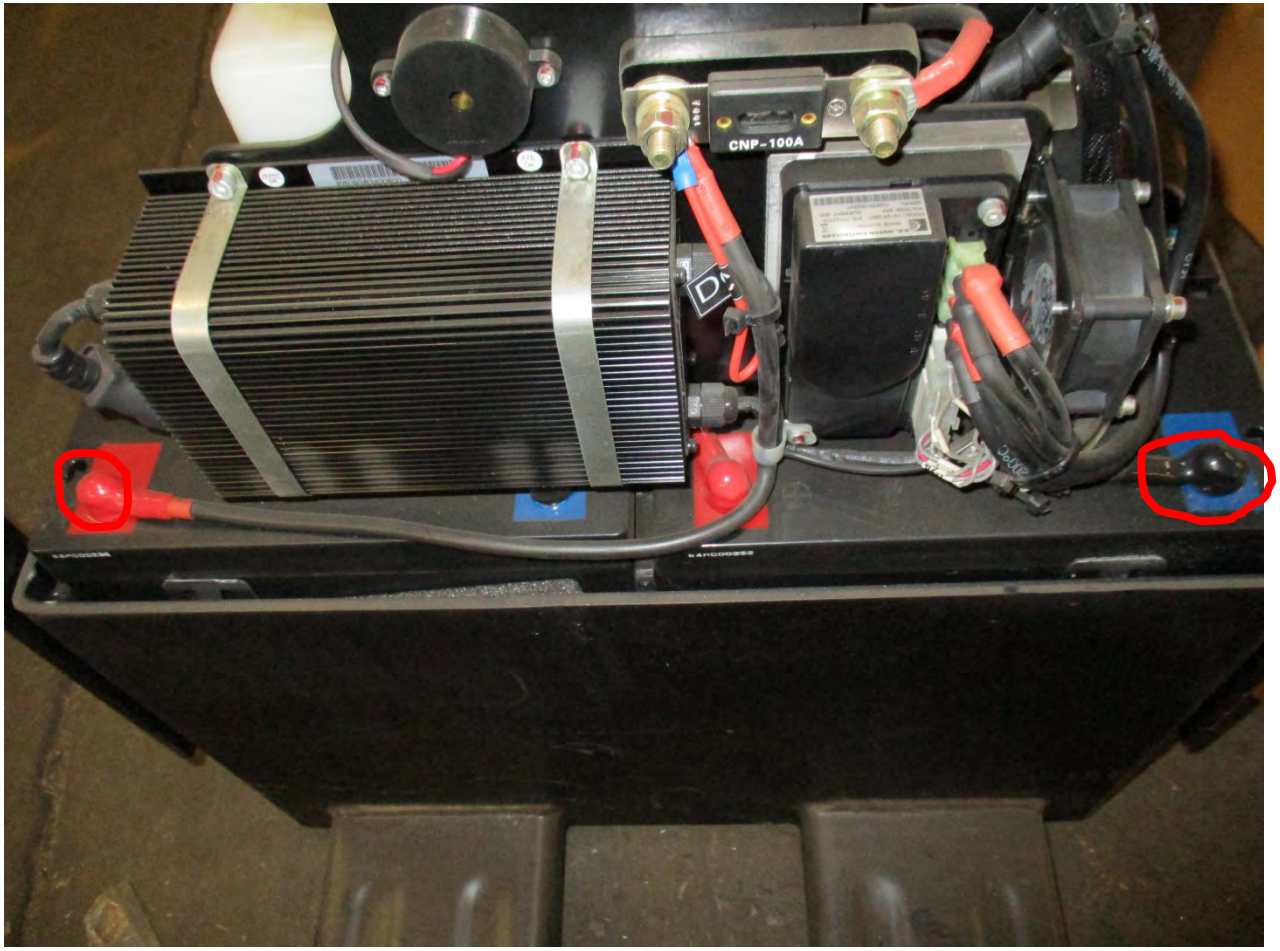


4. Check the voltage from the wire you want to check to the Controller negative (red circled).



5. Open the battery case.

Check the no load battery voltage for every battery.



- Check the load voltage when the truck is lifting empty.
- Then check the load voltage when the truck is lifting with a load (red circled load, load should be no more than 200 pound). If the no load voltage less than 11V, or the voltage difference between the empty lifting and loaded lifting is more than 5V. Please replace battery.