

D40 Troubleshooting



Index

Code	Name (Main Controller)	Page
8	WATCHDOG	7
13	EEPROM KO	8
16	AUX OUTPUT KO	12
17	LOGIC FAILURE #3	13
18	LOGIC FAILURE #2	14
19	LOGIC FAILURE #1	15
30	VMN LOW	16

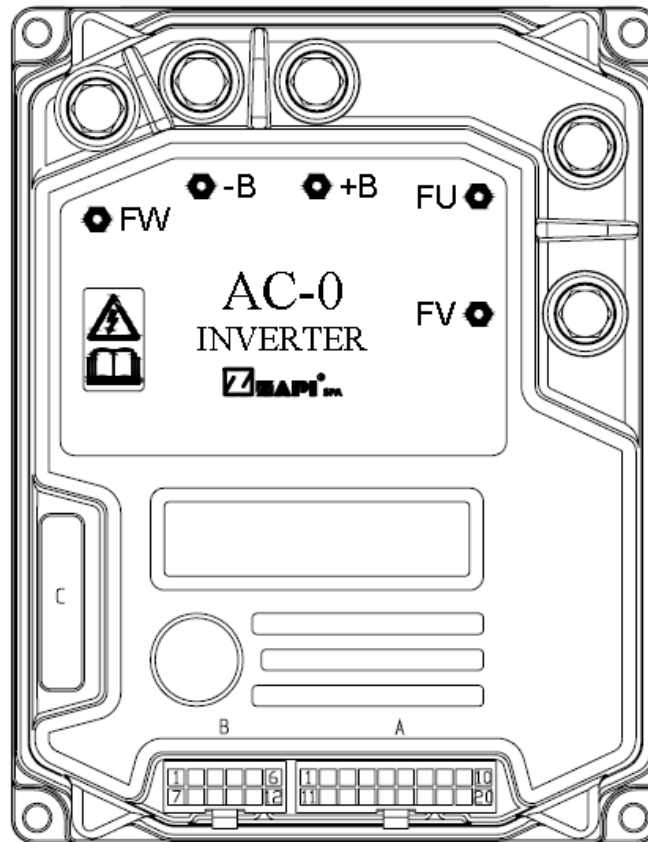
Code	Name (Main Controller)	Page
31	VMN HIGH	17
49	I=0 EVER	
53	STBY I HIGH	18
60	CAPACITOR CHARGE	19
61	HIGH TEMPERATURE	20
65	MOTOR TEMPERAT.	21
66	BATTERY LOW	22

Code	Name (Main Controller)	Page
72	SENSOR COILS KO	23
73	THERMIC SENS KO	24
74	DRIVER SHORTED	25
75	CONTACTOR DRIVER	26
76	COIL SHORTED	27
78	VACC NOT OK	30
79	INCORRECT START	31
80	FORW + BACK	35

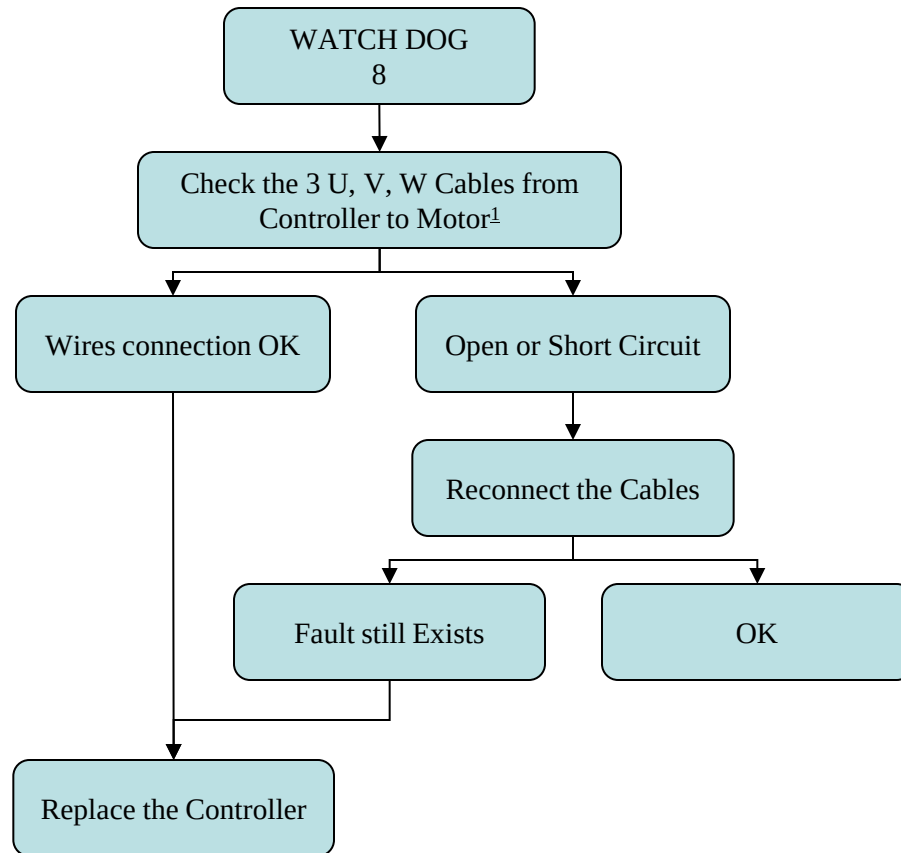
Code	Name (Main Controller)	Page
91	INPUT ERROR #2	38
92	INPUT ERROR #1	40
93	ERROR IV ERROR IW ERROR LUW ERROR LVW ERROR HUV ERROR HVW	41 42 43 44 45 46
94	CURRENT GAIN	47
96	ANALOG INPUT	48
97	OVERLOAD	49
99	CHECK UP NEEDED	50
	WRONG ZERO	54
	STOP TOP	55
	LIFT LOW ACTIVE	
	LIFT + LOWER	

Appendix A: Check Wires and Cables detail ----- Page 61

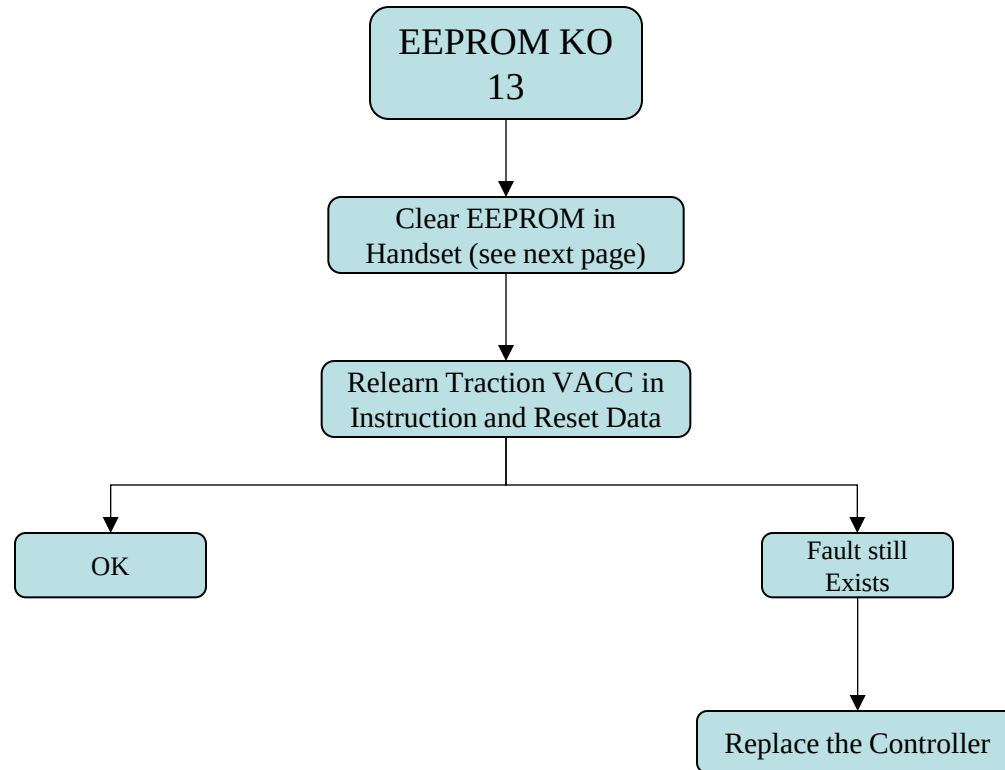
Main Controller



ALARM #8 on NODE #2 WATCH DOG



ALARM #13 on NODE #2 EEPROM KO



Clear EEPROM in Handset

Key on the truck, connect the flash connecting line. The Display will show:

Press  or  button until RS232 CONSOLE shows on the display

The Display will show :

Press OK to go into the Traction controller

The Display will show:

Cons AFG ZP021*



Cons AFG ZP021*
RS232 CONSOLE



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Press OK to go into the Main Menu

The Display will show:

Press  or  button until CLEAR EEPROM on the display

The Display will show:

Press OK to go into the CLEAR EEPROM function

The Display will ask:
ARE YOU SURE?

Press OK to CLEAR EEPROM



Main Menu



MAIN MENU
CLEAR EEPROM



ARE YOU SURE?
YES= OK NO=ESC



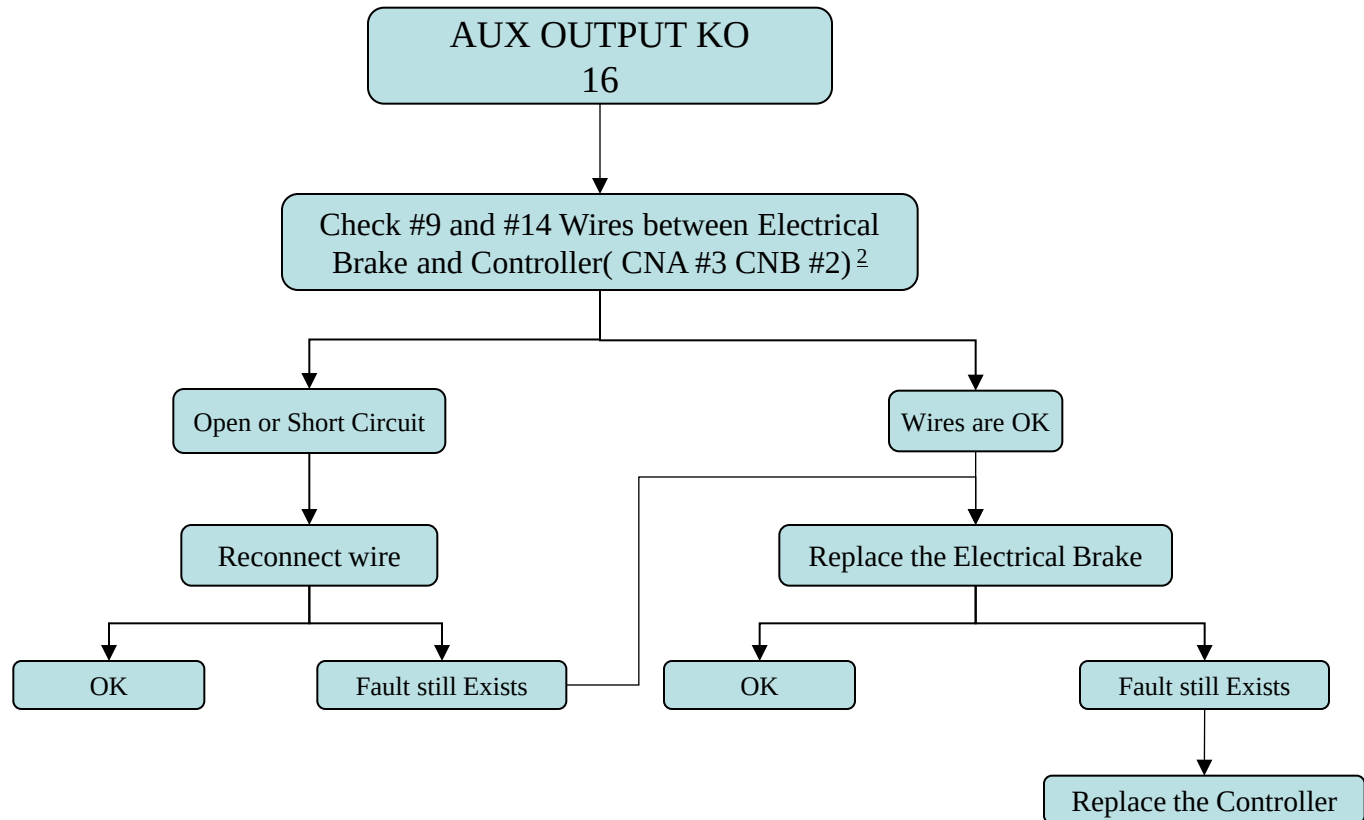
The display will show:

EEPROM CLEARED!
KEY OFF, PLEASE

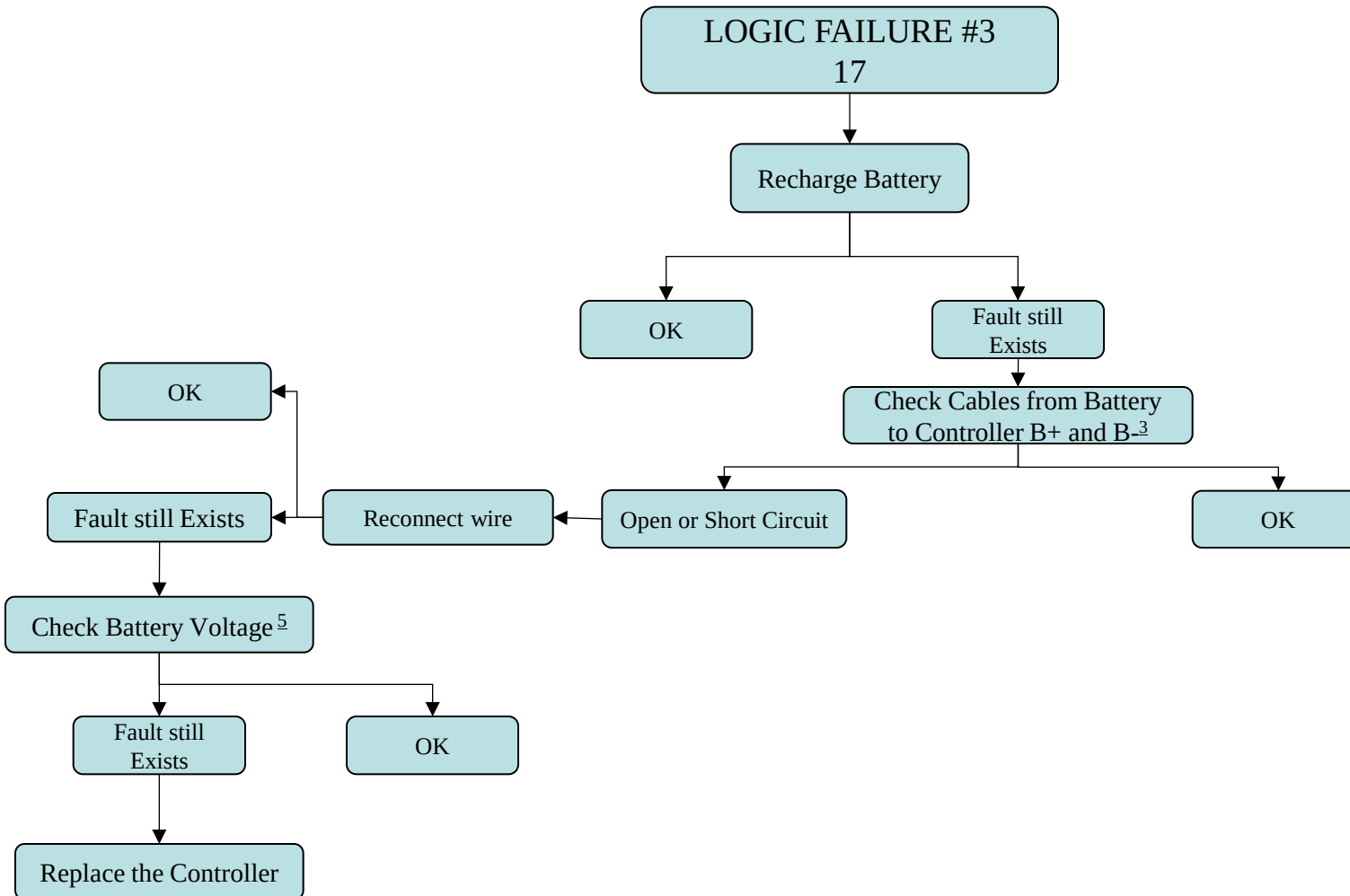
Rekey truck, and restart handset



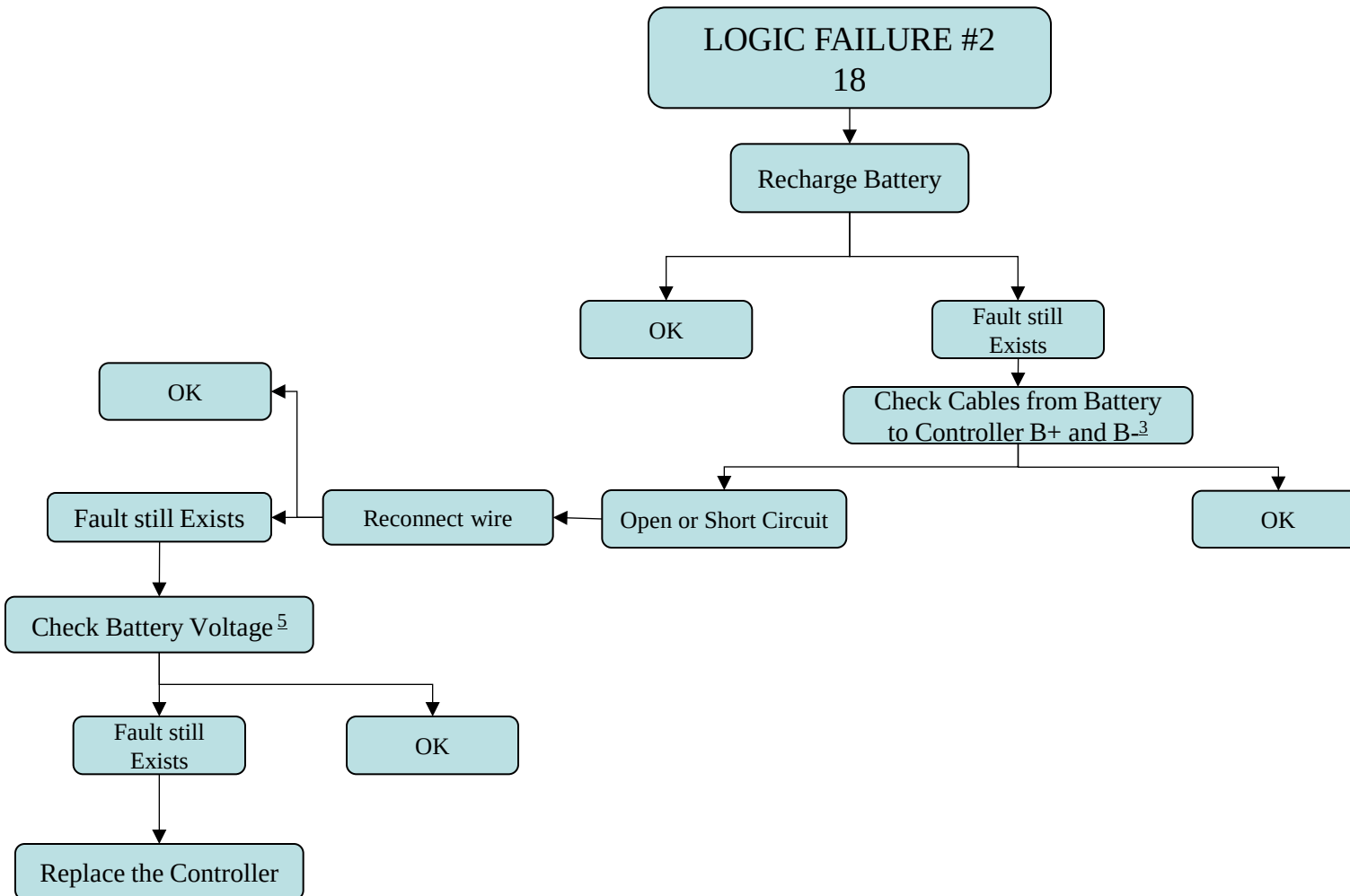
ALARM #16 on NODE #2 AUX OUTPUT KO



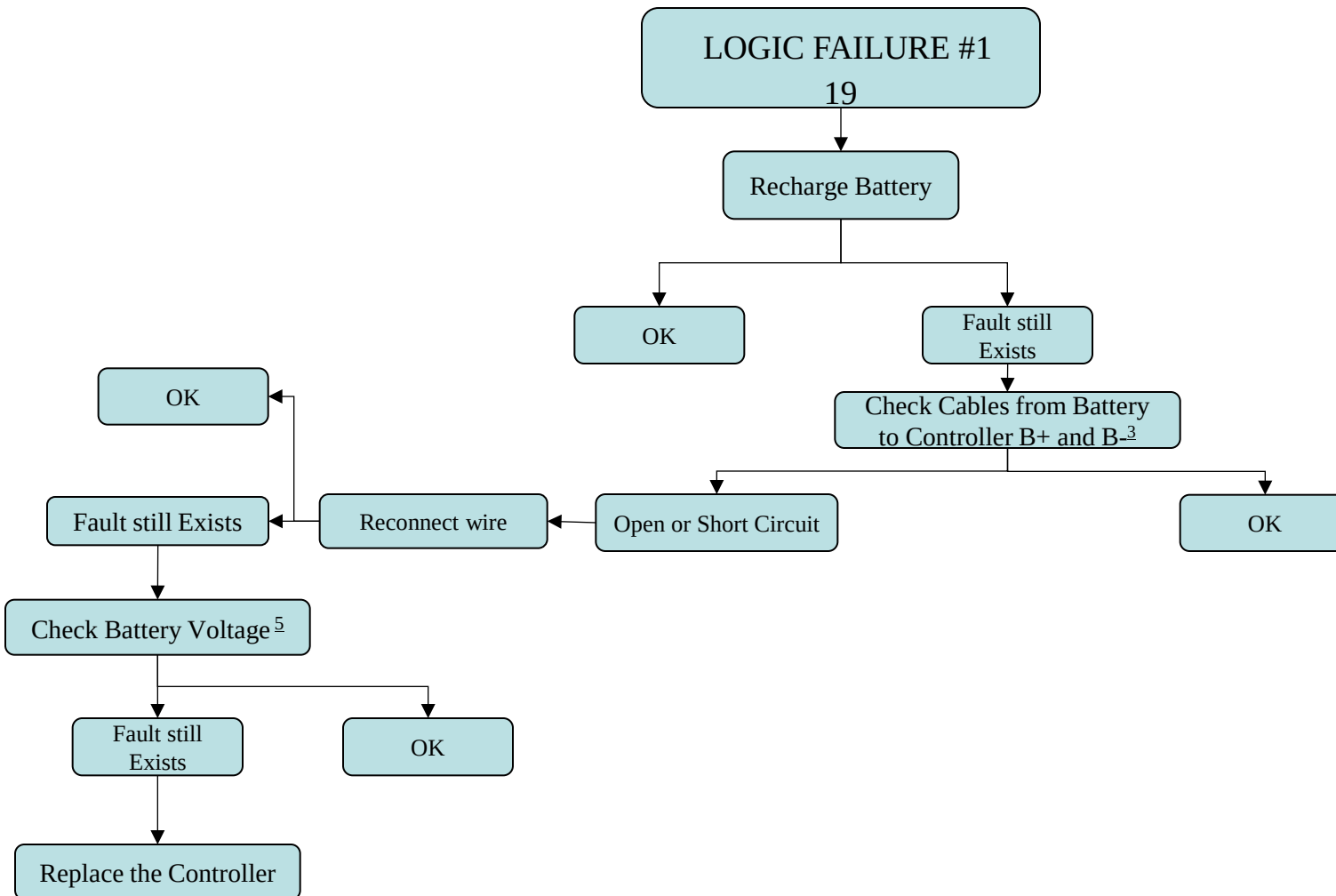
ALARM #17 on NODE #2 LOGIC FAILURE #3



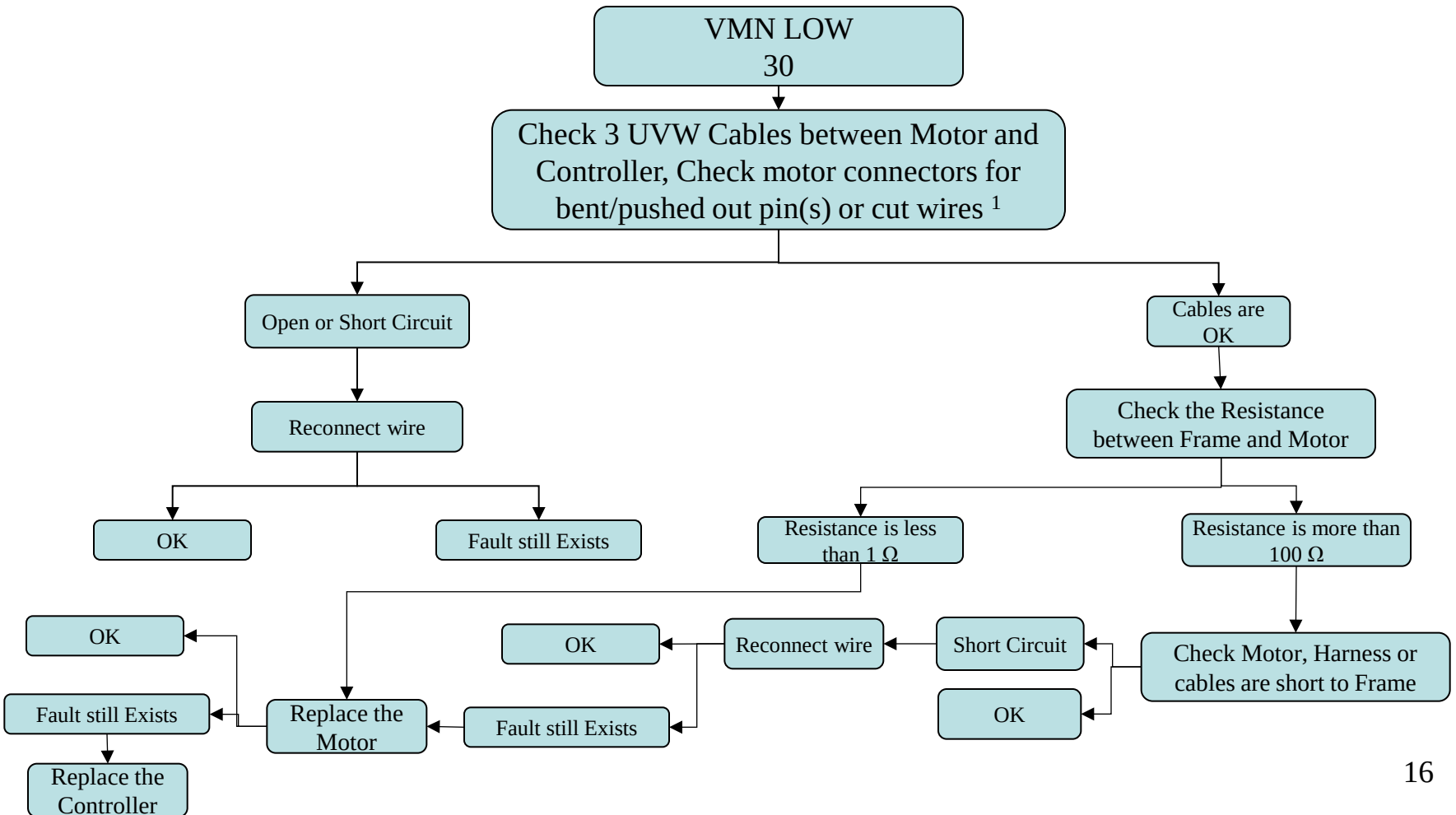
ALARM #18 on NODE #2 LOGIC FAILURE #2



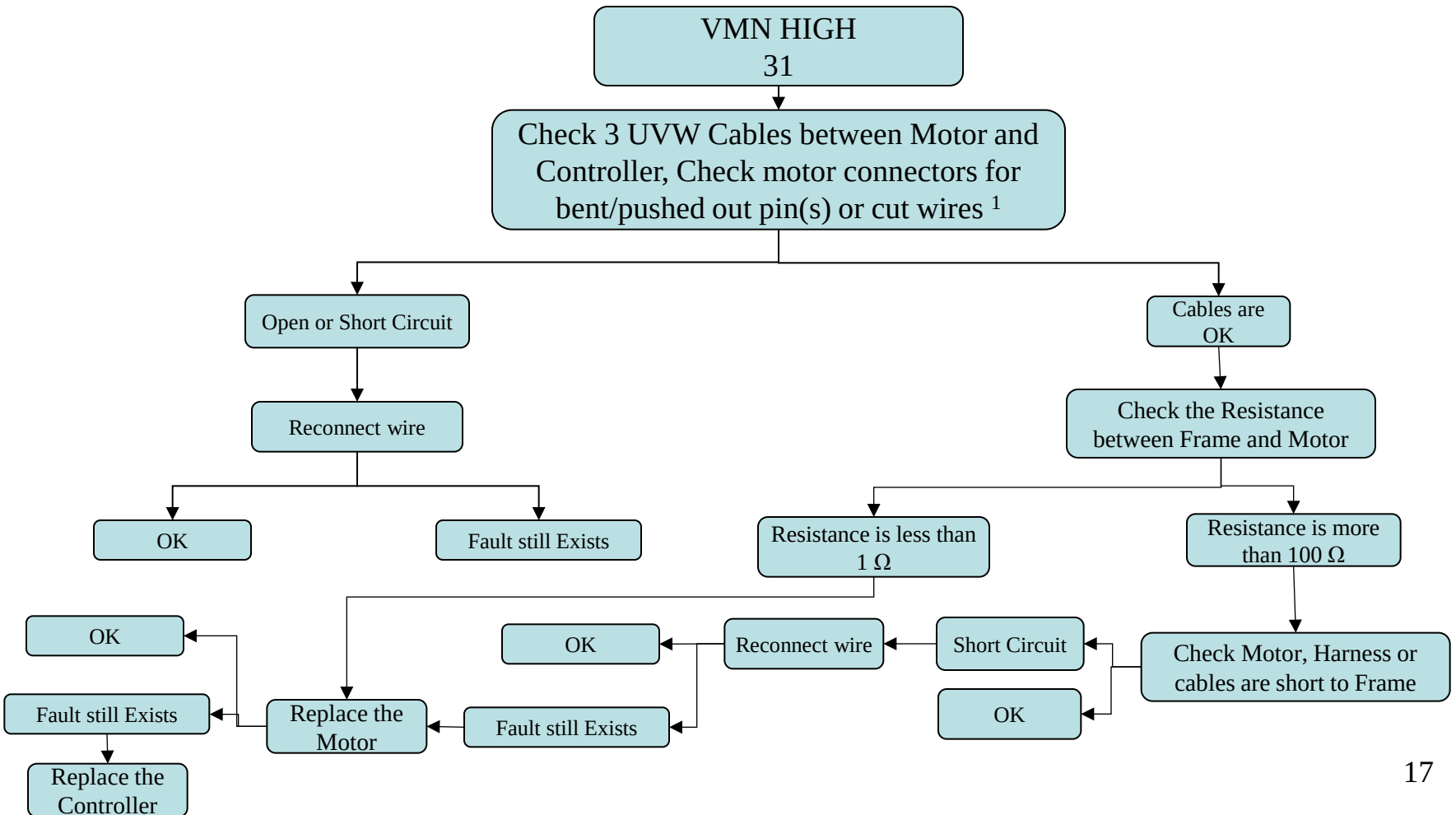
ALARM #19 on NODE #2 LOGIC FAILURE #1



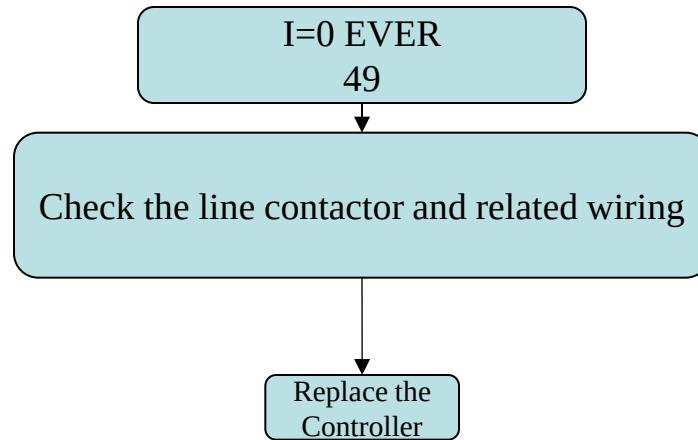
ALARM #30 on NODE #2 VMN LOW



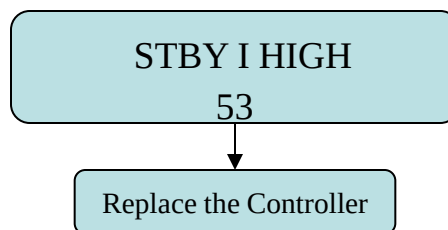
ALARM #31 on NODE #2 VMN HIGH



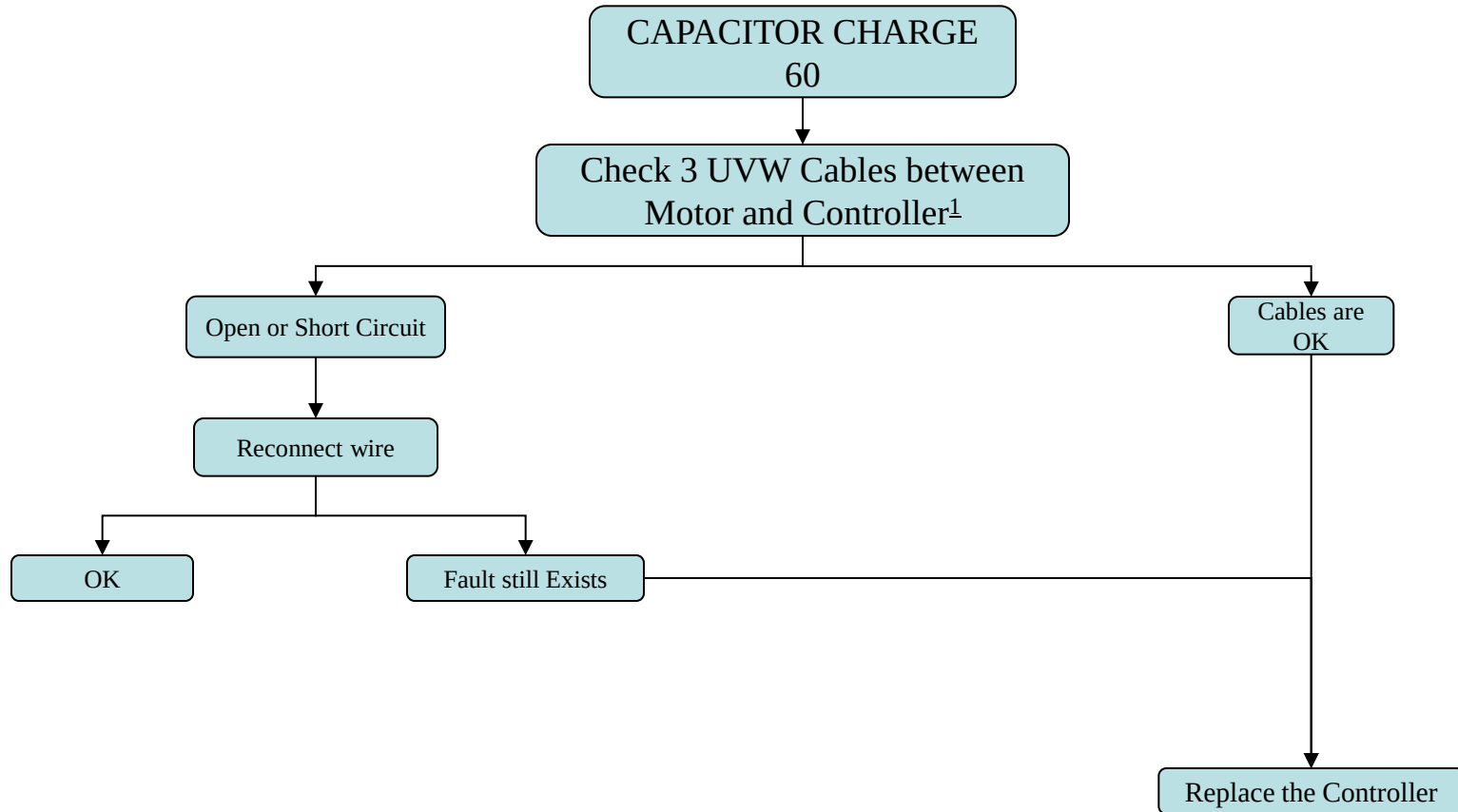
ALARM #49 on NODE #2, I=0 EVER



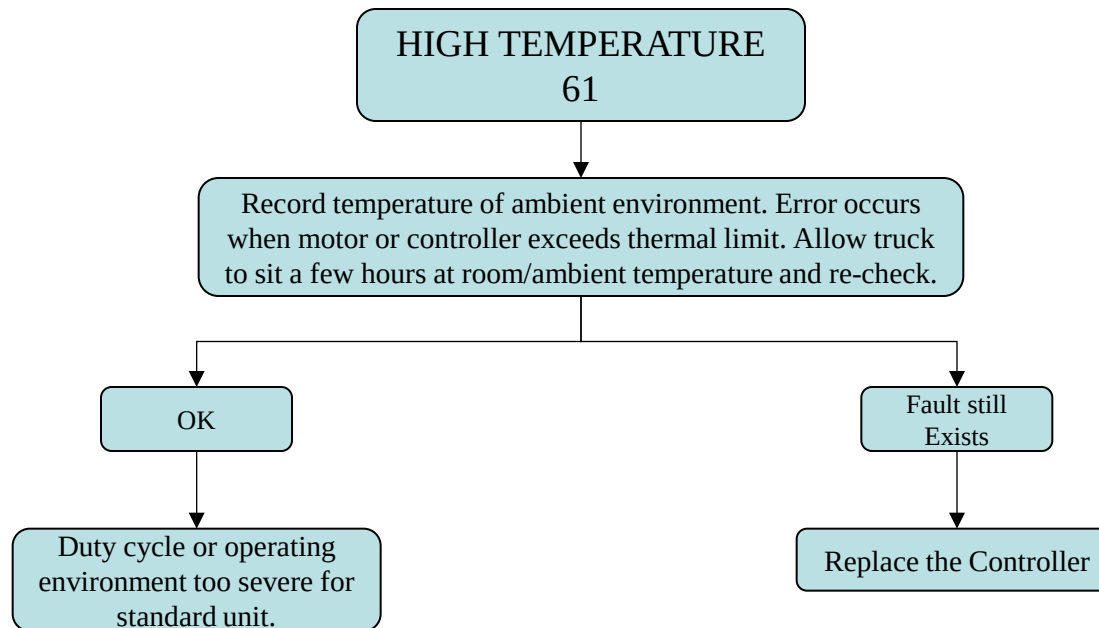
ALARM #53 on NODE #2 STBY I HIGH



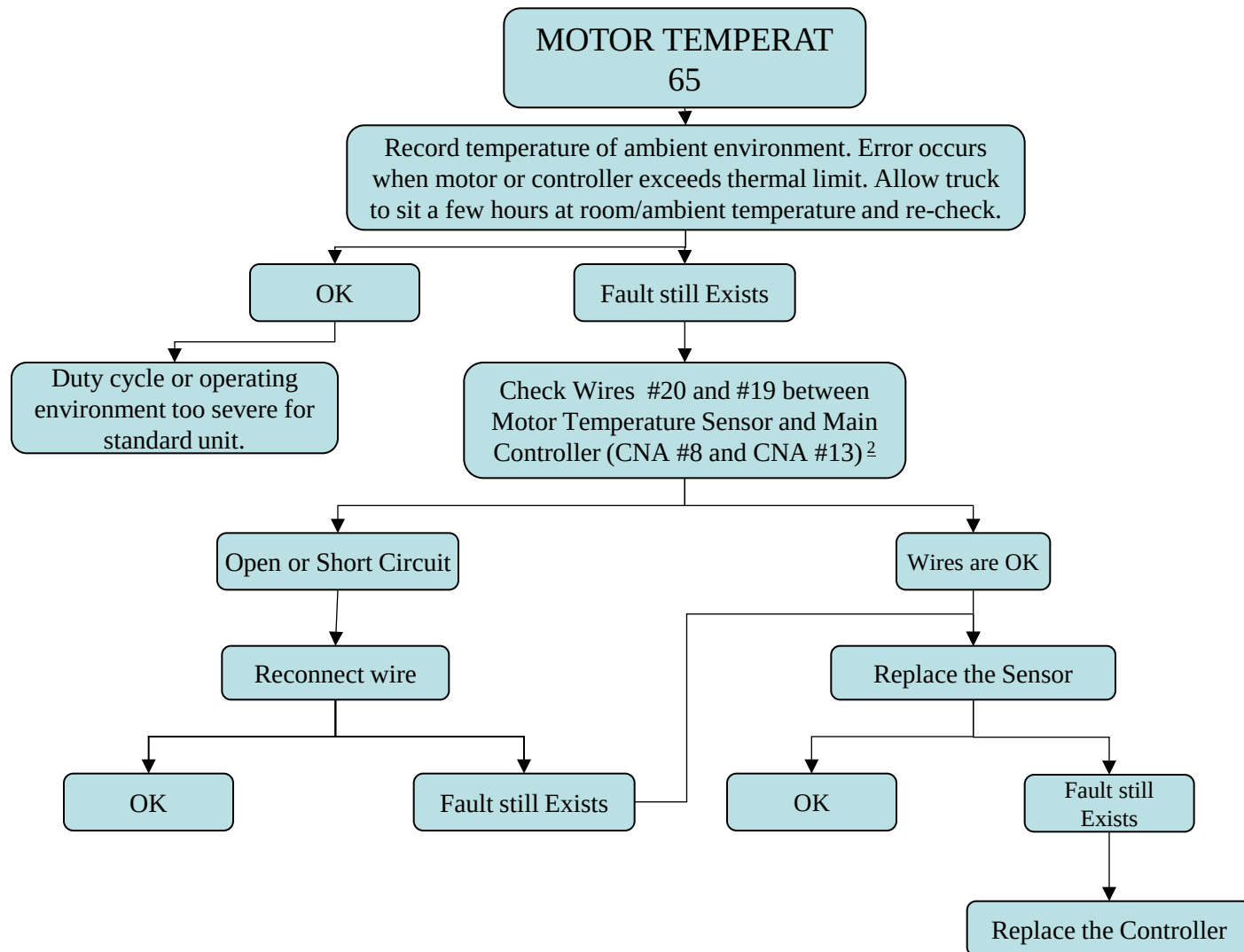
ALARM #60 on NODE #2 CAPACITOR CHARGE



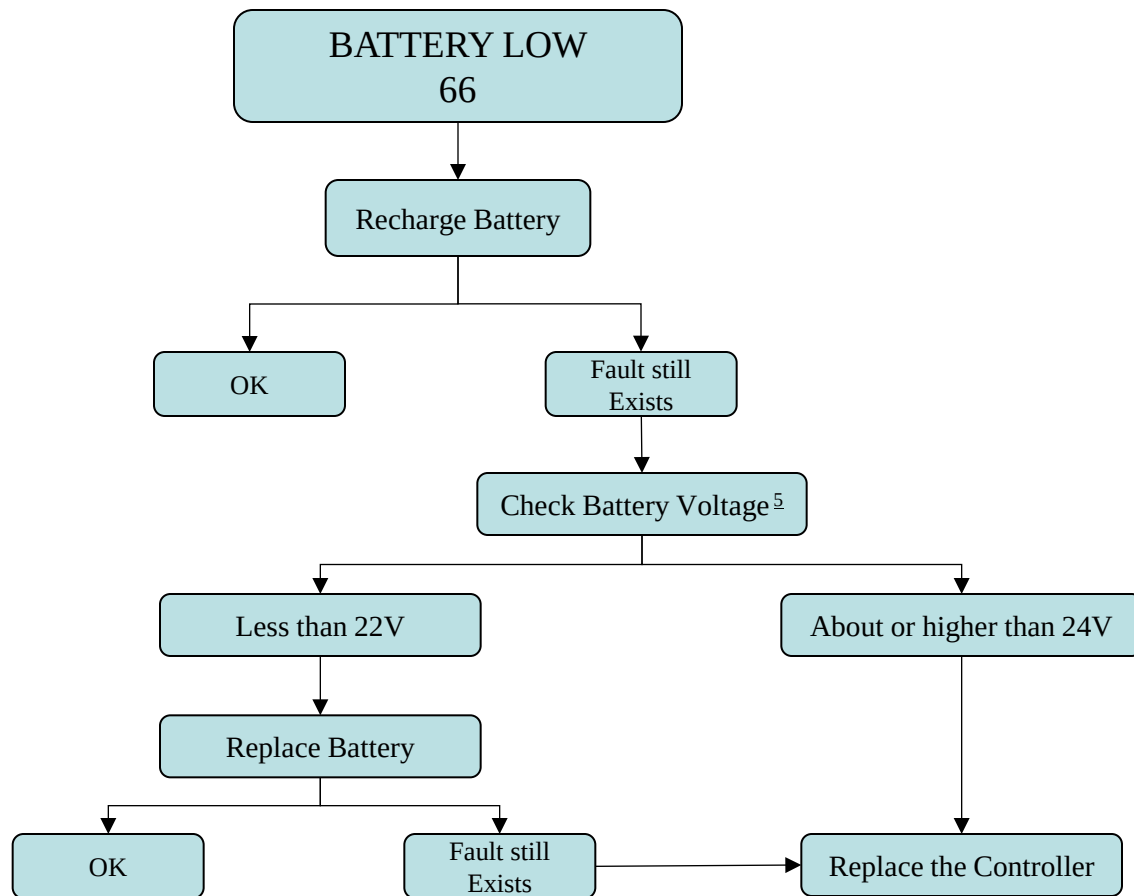
ALARM #61 on NODE #2 HIGH TEMPERATURE



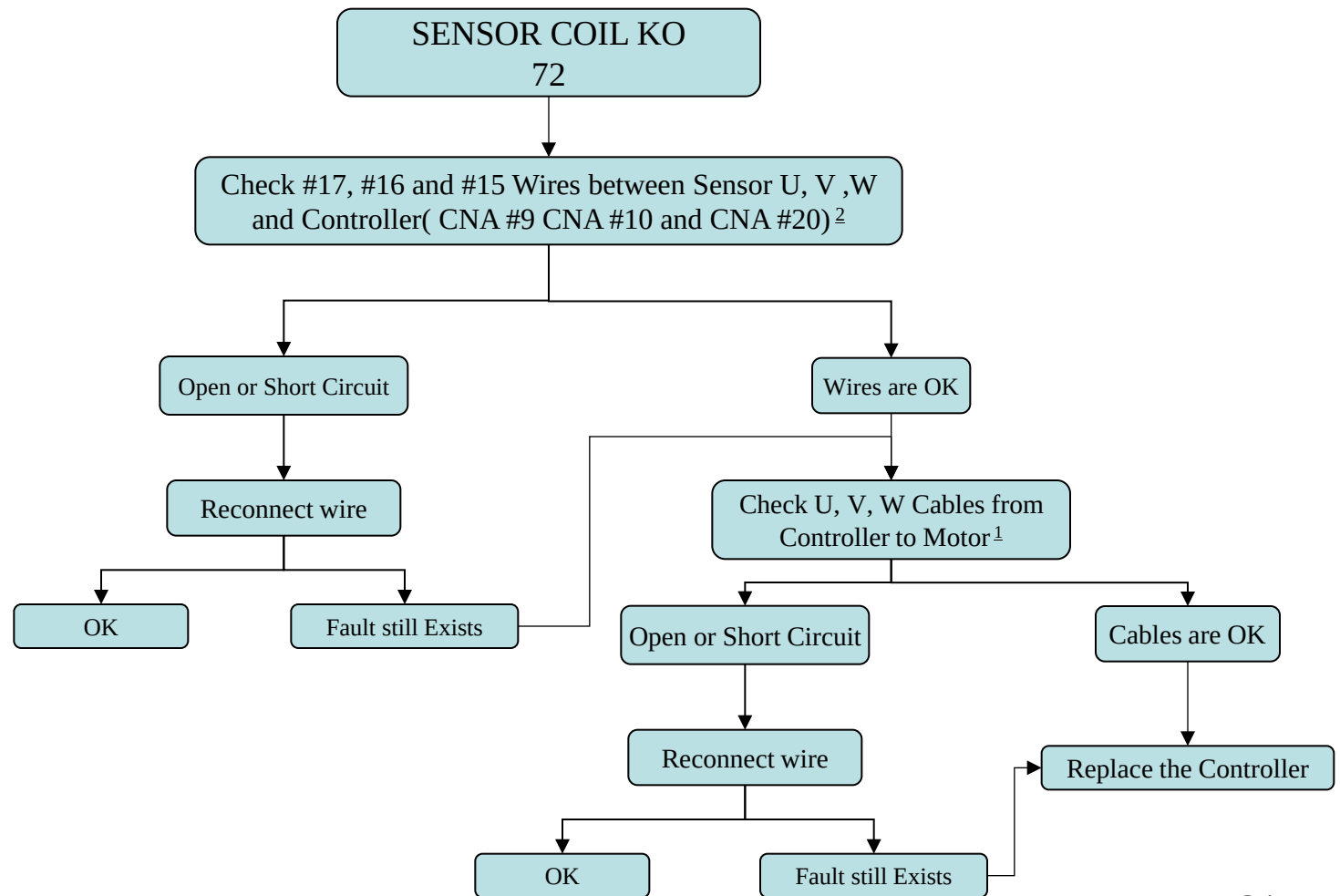
ALARM #65 on NODE #2 MOTOR TEMPERAT



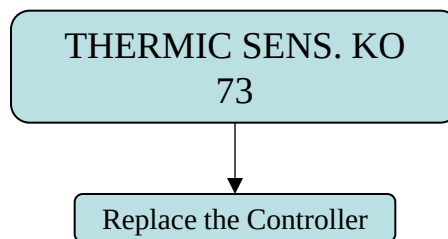
ALARM #66 on NODE #2 BATTERY LOW



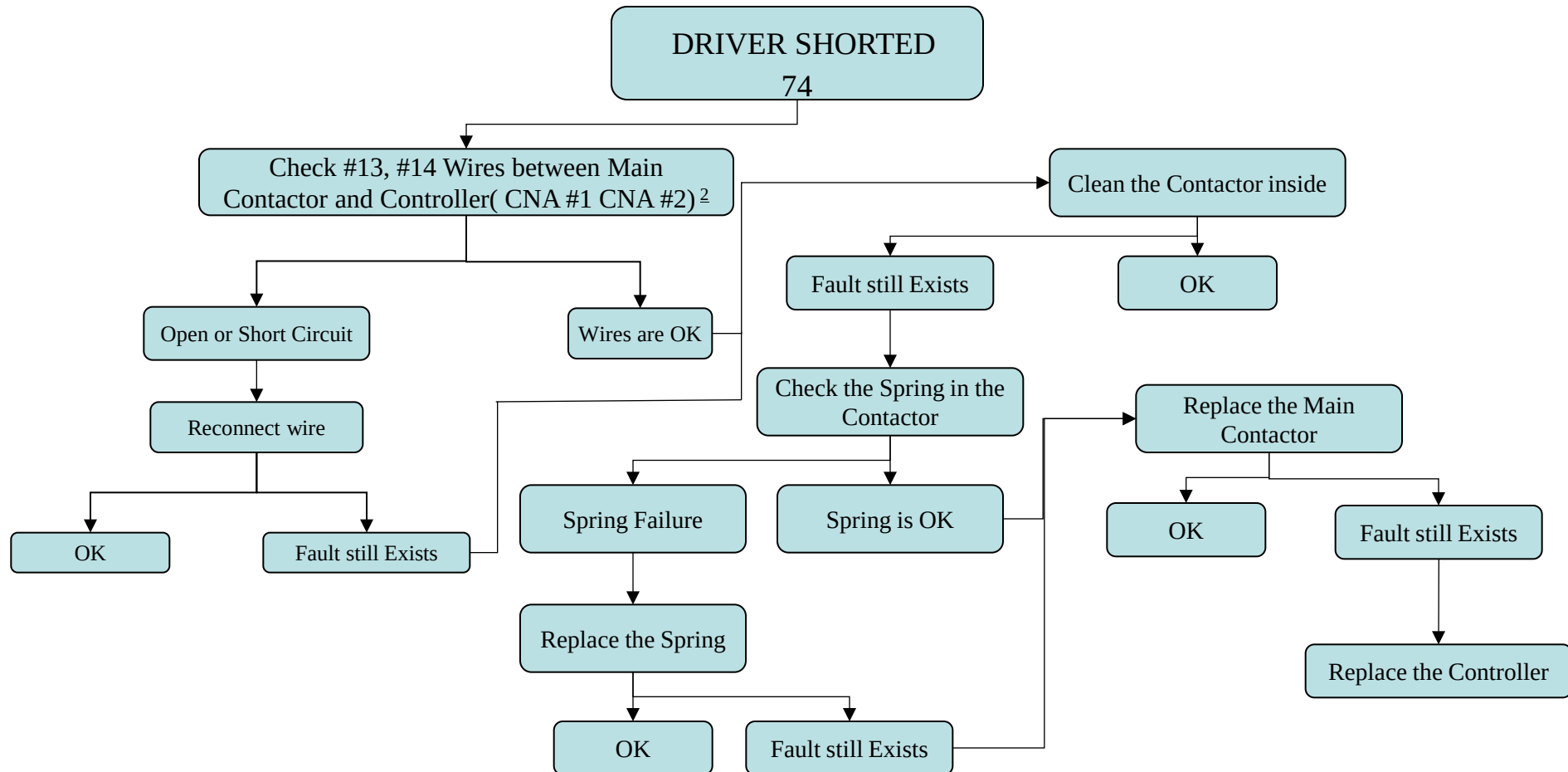
ALARM #72 on NODE #2 SENSOR COIL KO



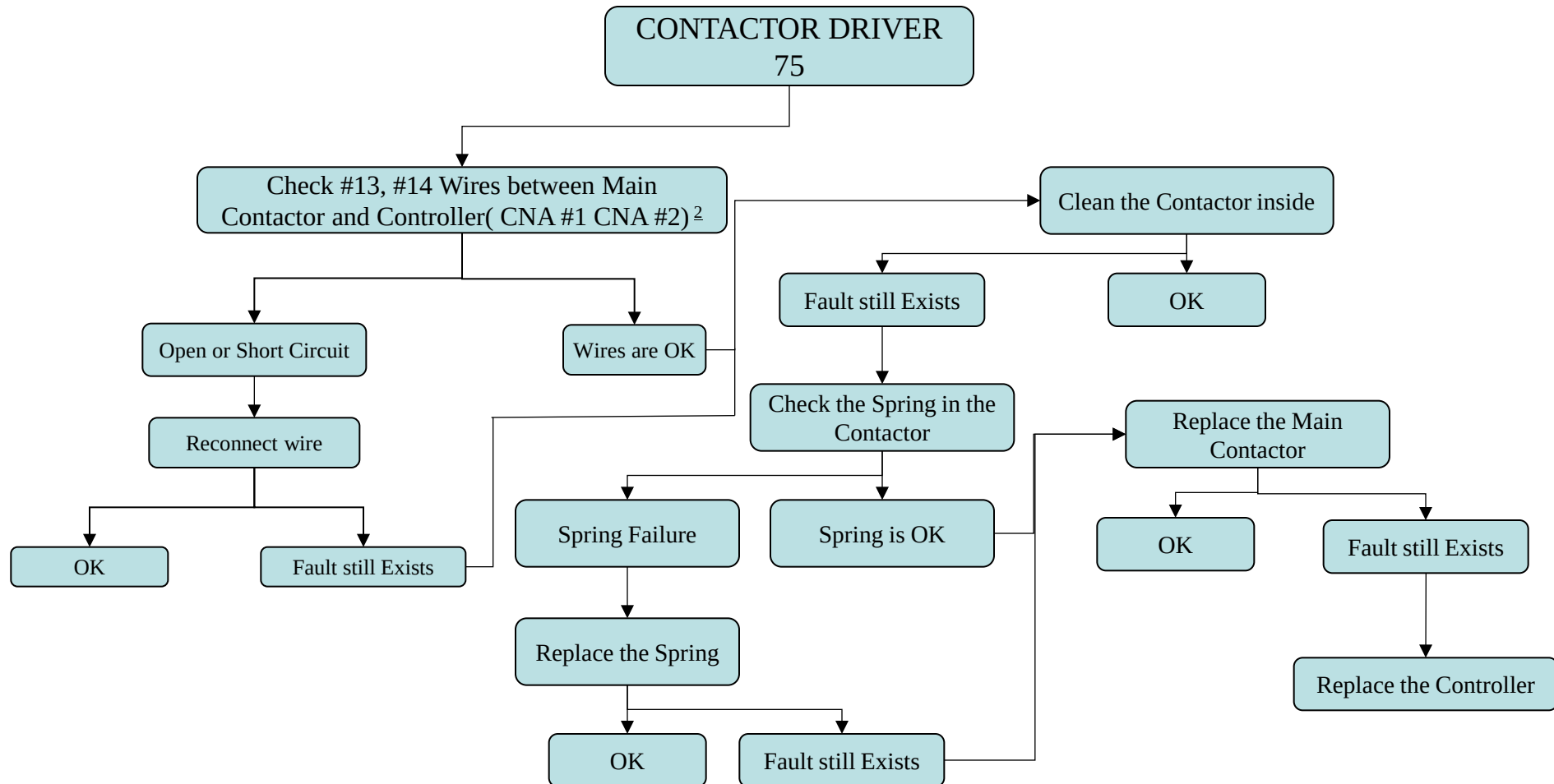
ALARM #73 on NODE #2 THERMIC SENS. KO



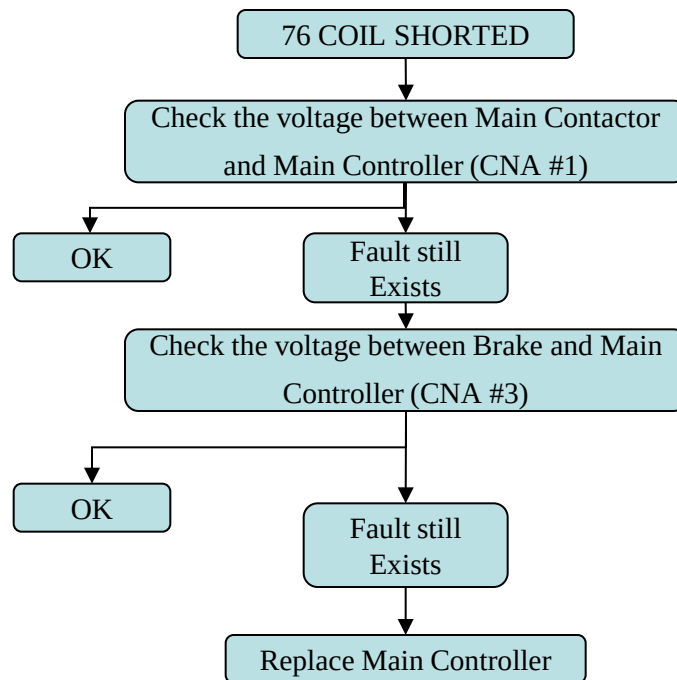
ALARM #74 on NODE #2 DRIVER SHORTED

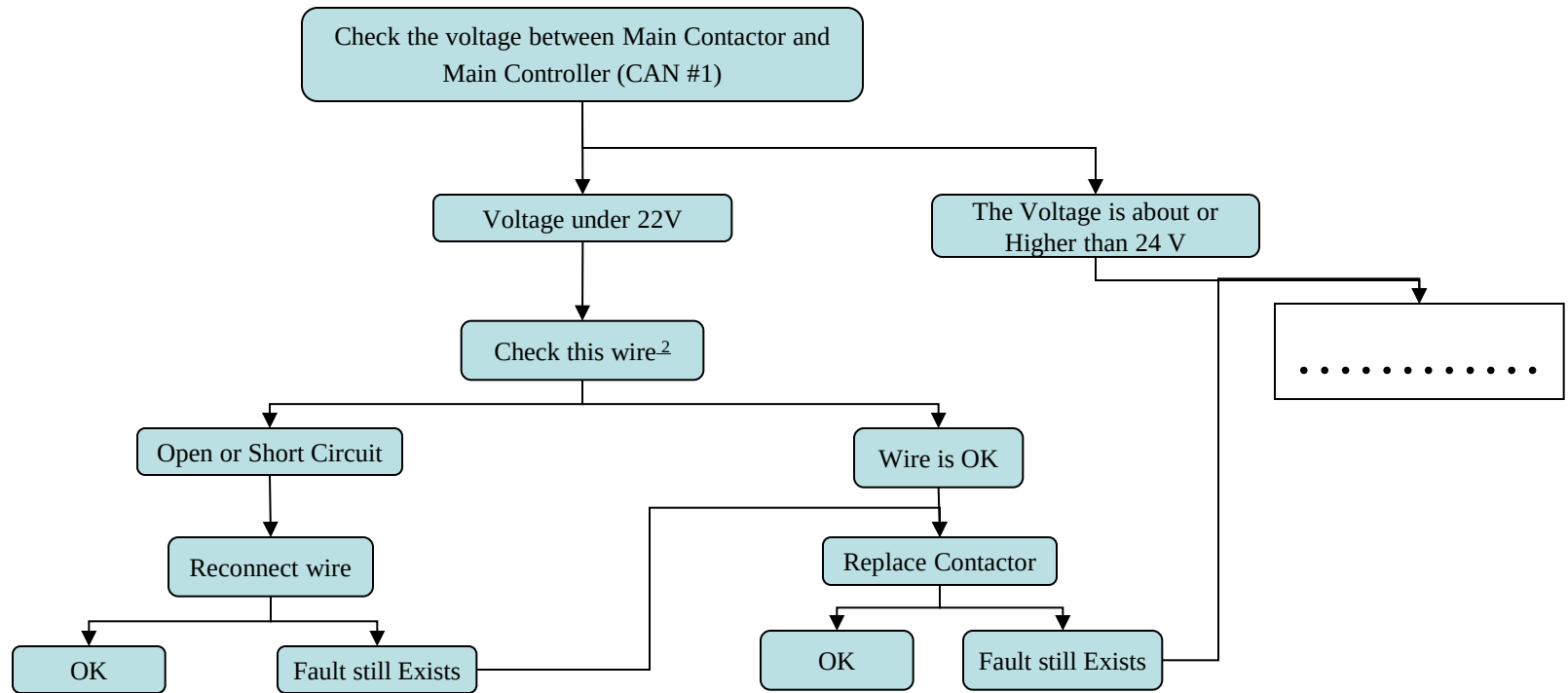


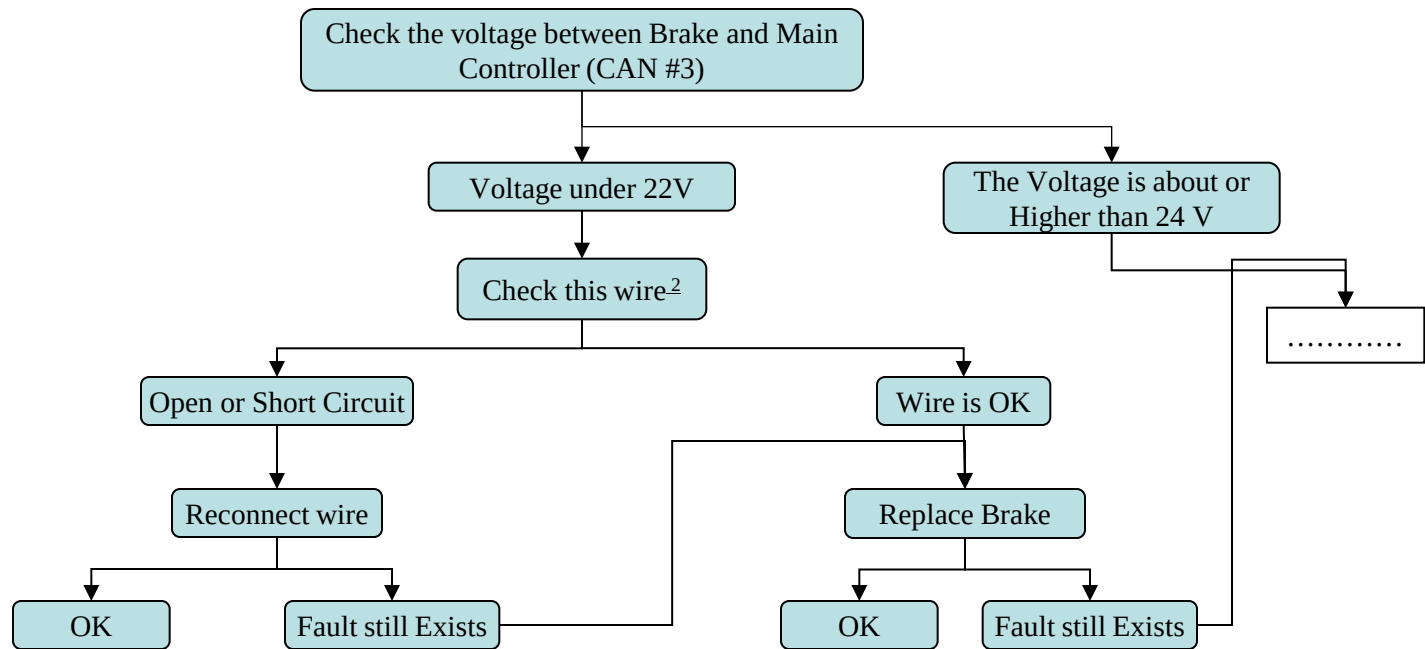
ALARM #75 on NODE #2 CONTACTOR DRIVER



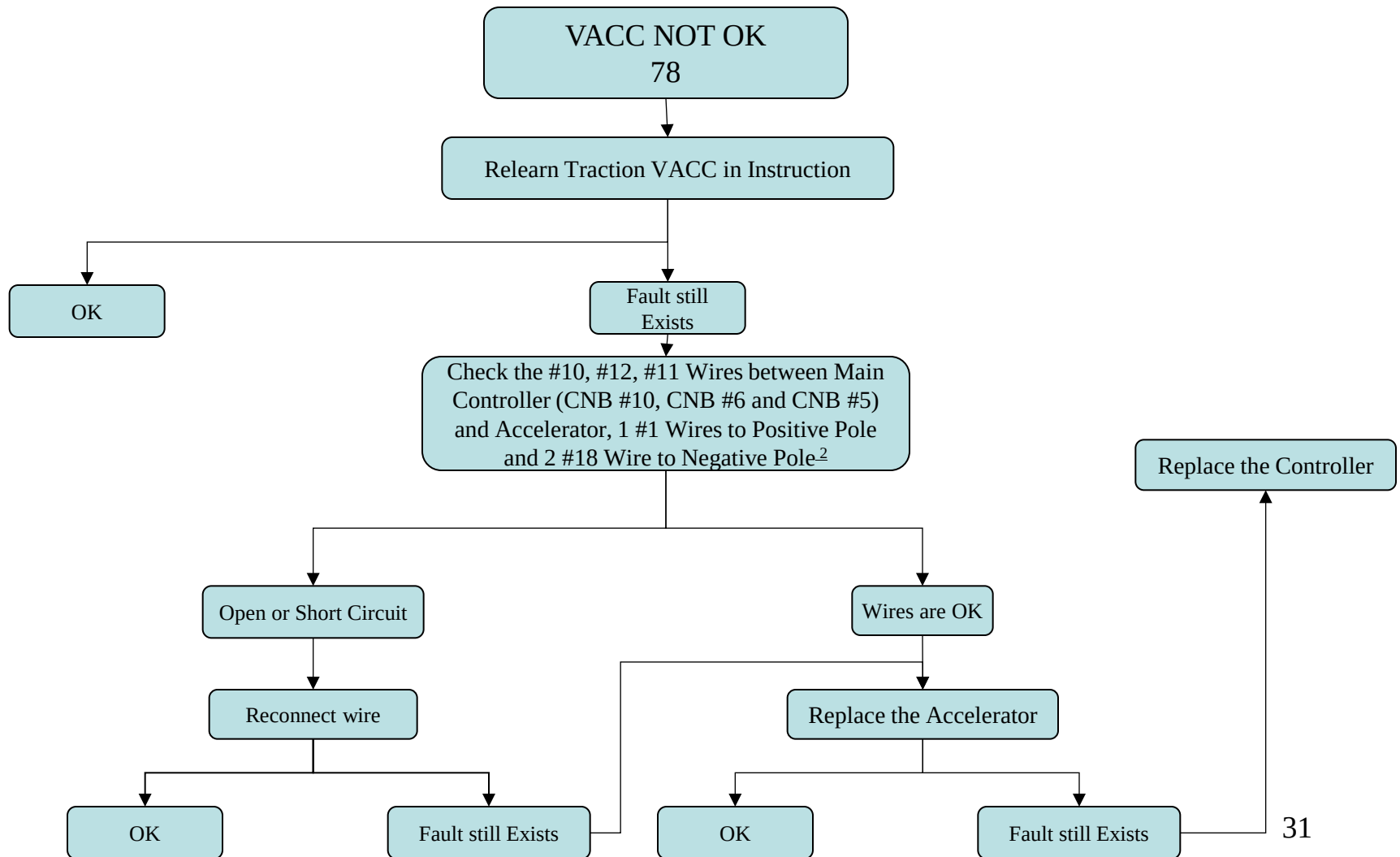
ALARM #76 on NODE #2 COIL SHORTED



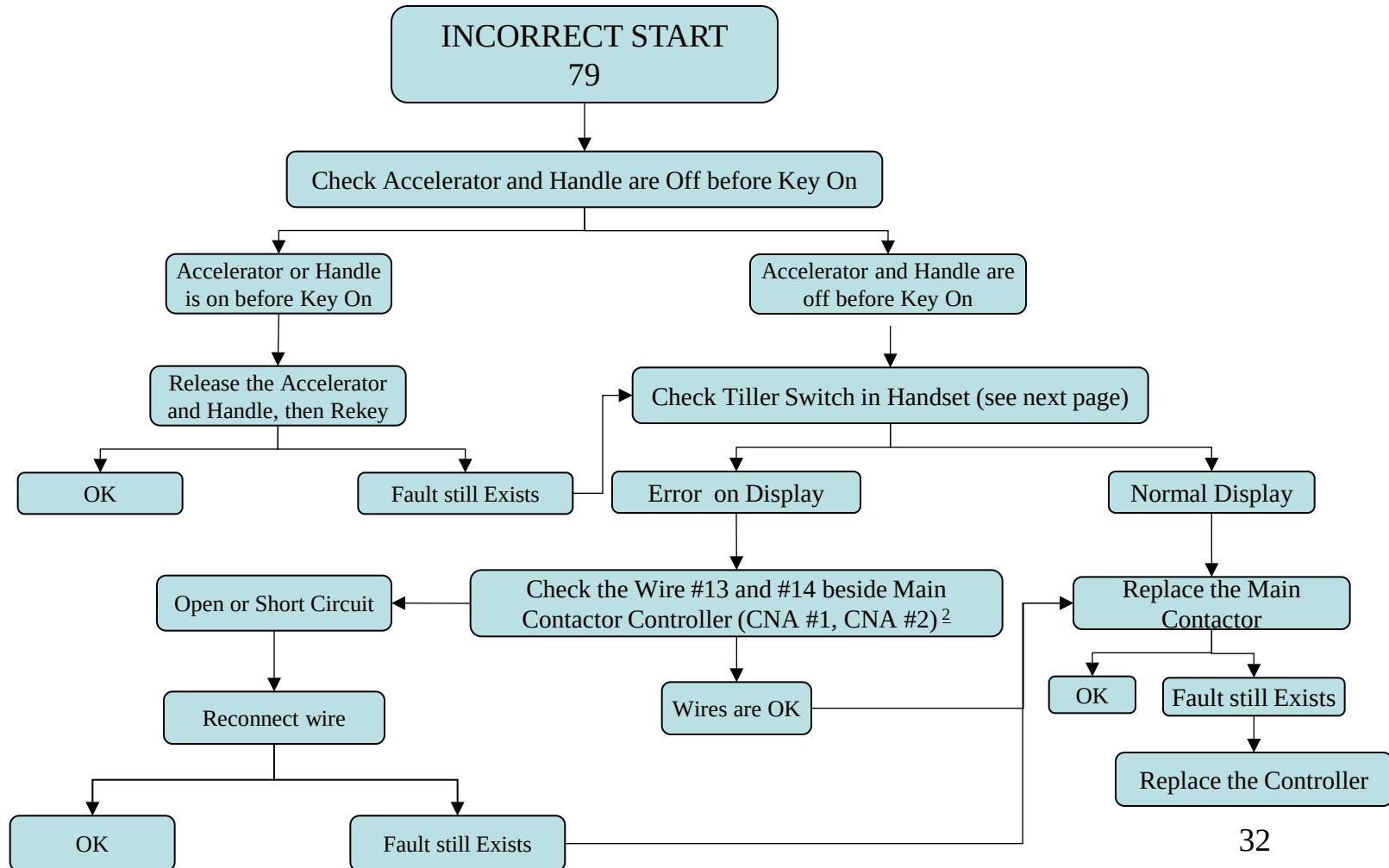




ALARM #78 on NODE #2 VACC NOT OK



ALARM #79 on NODE #2 INCORRECT START



Check Tiller Switch in Handset

Key on the truck, connect the flash connecting line. The Display will show:

Press  or  button until RS232 CONSOLE shows on the display

The Display will show :

Press OK to go into the Traction controller

The Display will show:

Cons AFG ZP021*



Cons AFG ZP021*
RS232 CONSOLE



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Press OK to go into the Main Menu

The Display will show:

Press  or  button until TEST shows on the display

The Display will show:

Press OK to go into the TEST function

The Display will show:

Press  or  button until HANDLE/ SEAT SW shows on the display



Main Menu



MAIN MENU
TEST



TEST



The display will show:

Pull Handle and Push the accelerator
and hold on

The display will show:

When finished , press and hold
power button for 3s to turn off the
Console

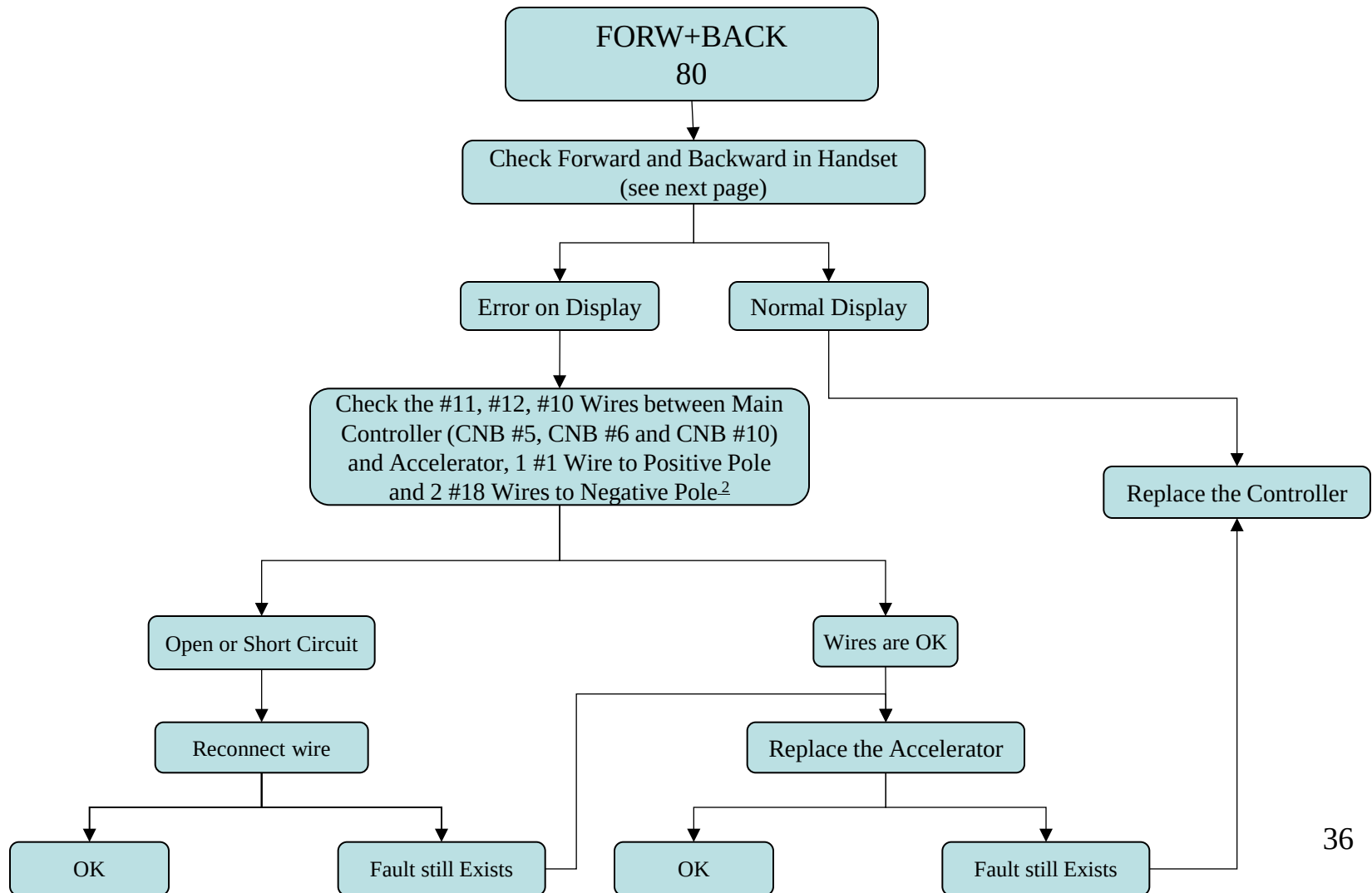
HANDLE/ SEAT SW OFF



HANDLE/ SEAT SW ON



ALARM #80 on NODE #2 FORW+BACK



Check Forward and Backward in Handset

Key on the truck, connect the flash connecting line. The Display will show:

Press  or  button until RS232 CONSOLE shows on the display

The Display will show :

Press OK to go into the Traction controller

The Display will show:

Cons AFG ZP021*



Cons AFG ZP021*
RS232 CONSOLE



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24V 150A 0H

Press OK to go into the Main Menu

The Display will show:

Press  or  button until TEST shows on the display

The Display will show:

Press OK to go into the TEST function

The Display will show:

Press  or  button until FORWARD shows on the display



Main Menu



MAIN MENU
TEST



TEST



The display will show:

Push the accelerator forward and hold on

The display will show:

Repeat step for reverse direction

When finished , press and hold power button for 3s to turn off the Console

FORWARD OFF

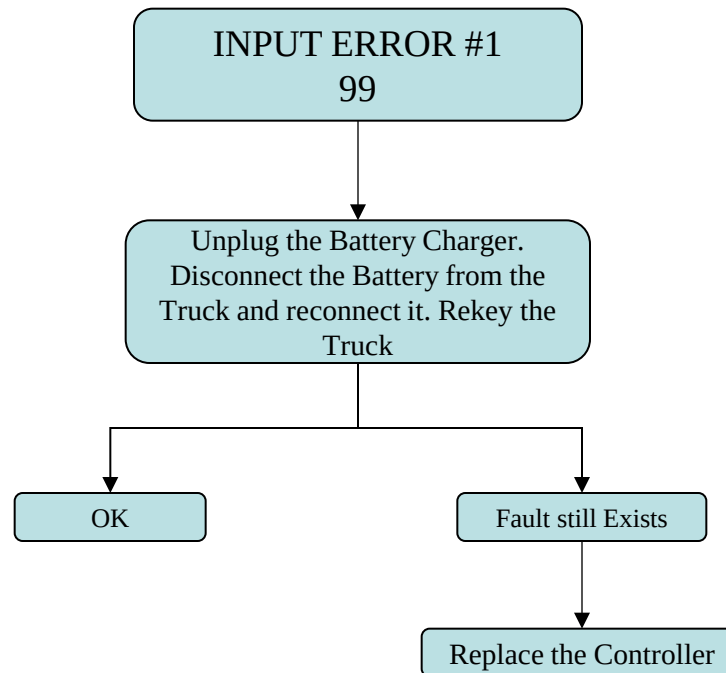


FORWARD ON

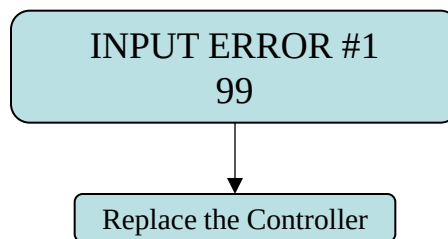
BACKWARD OFF
BACKWARD ON



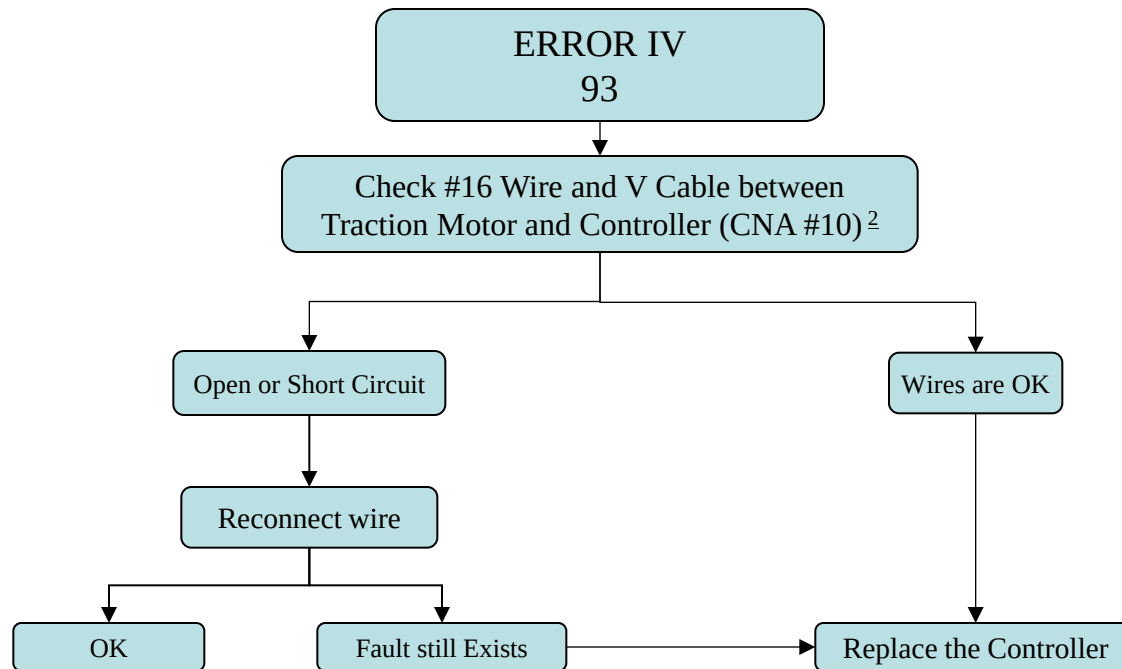
ALARM #91 on NODE #2 INPUT ERROR #2



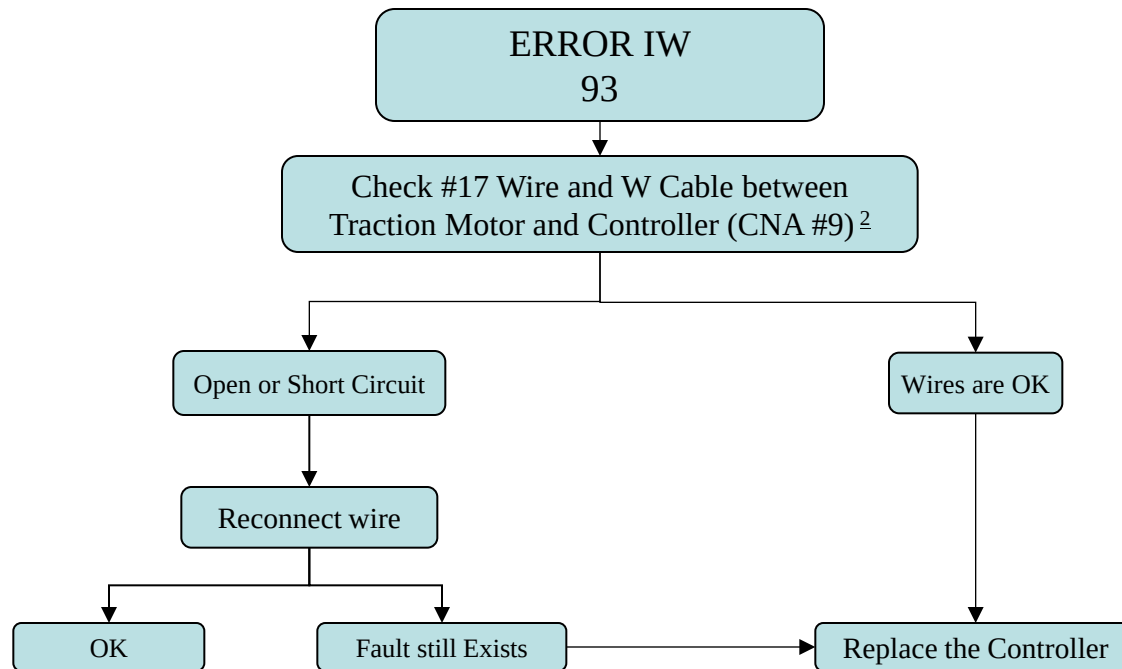
ALARM #92 on NODE #2 INPUT ERROR #1



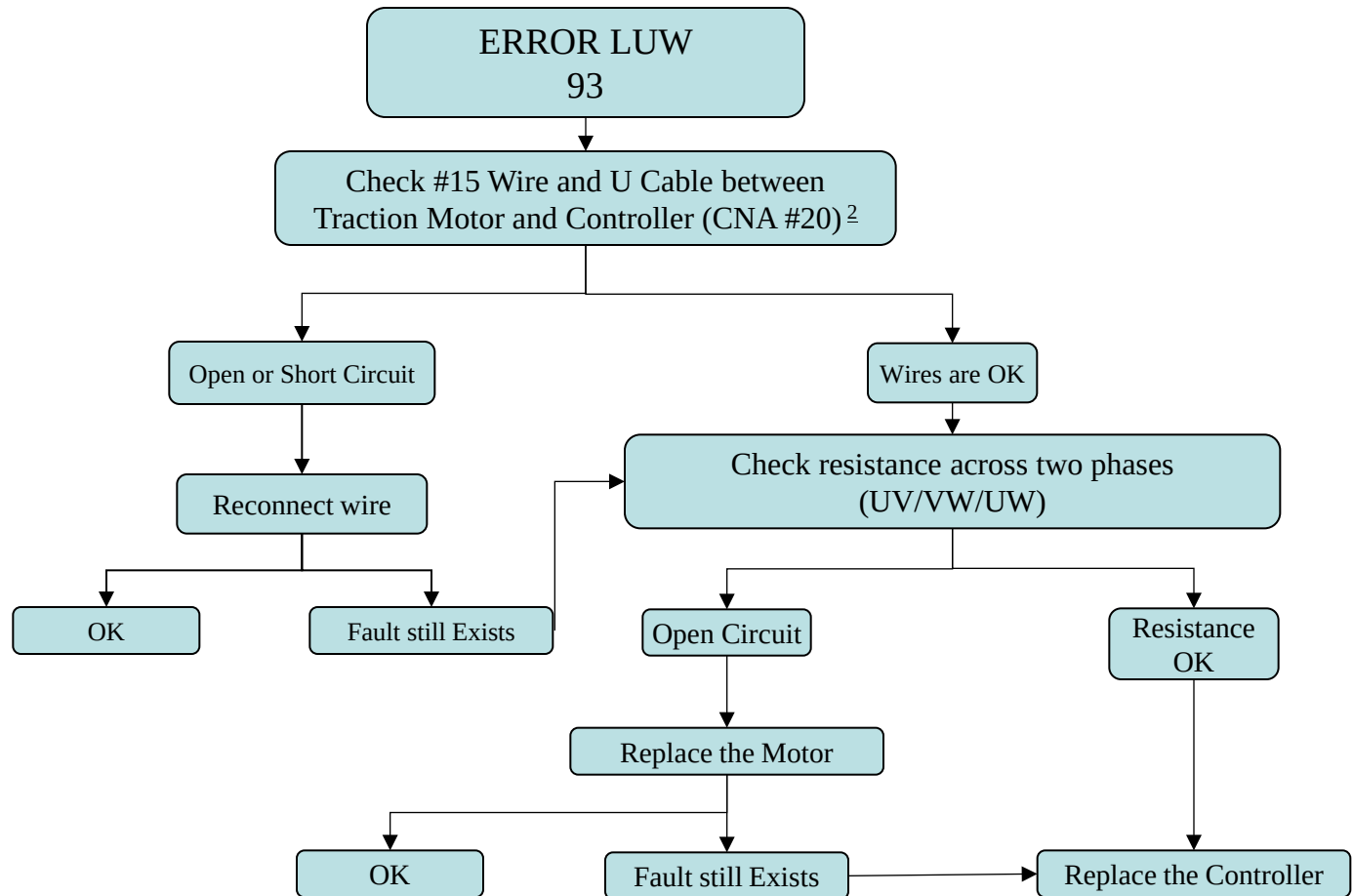
ALARM #93 on NODE #2 ERROR IV



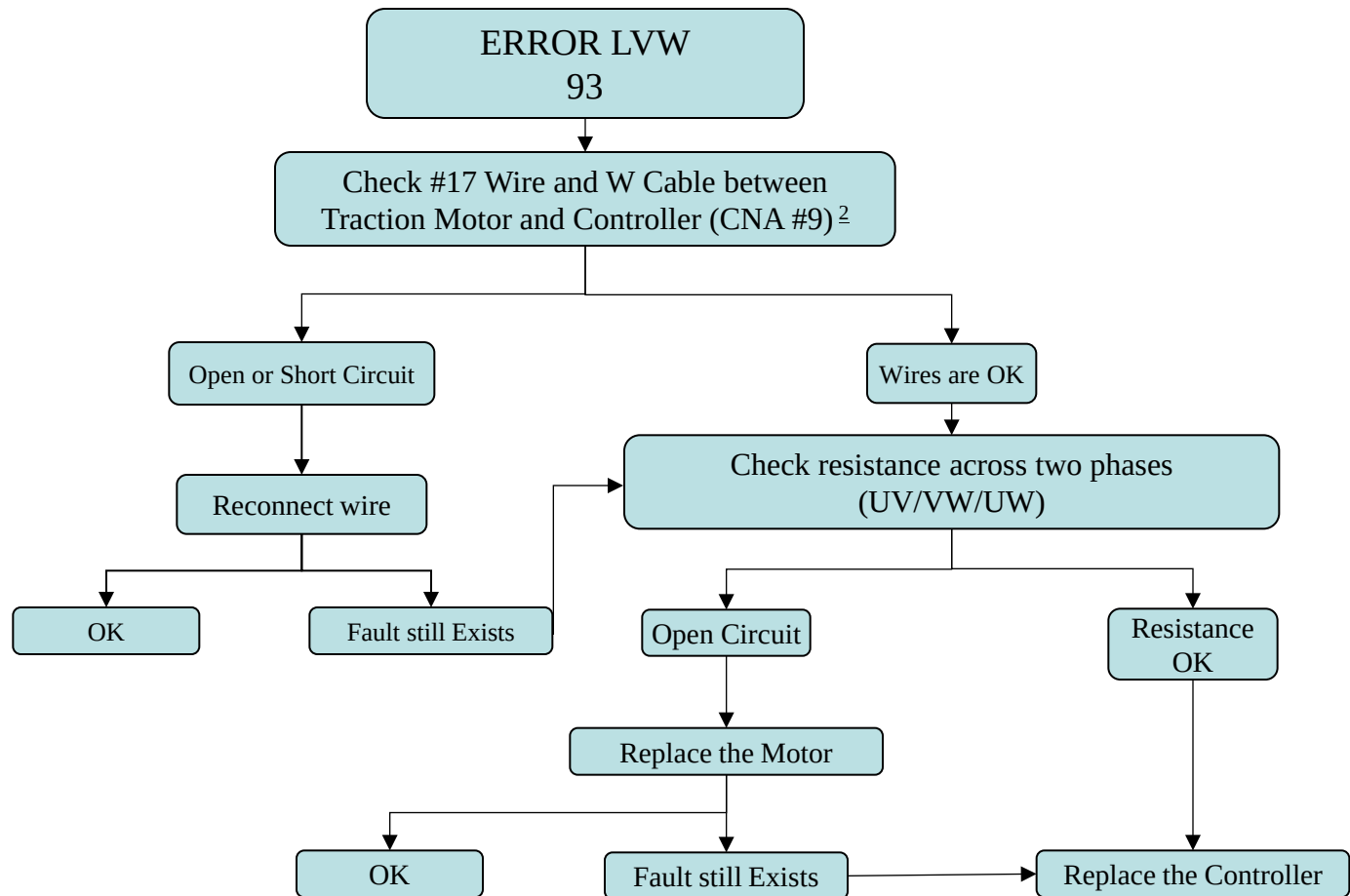
ALARM #93 on NODE #2 ERROR IW



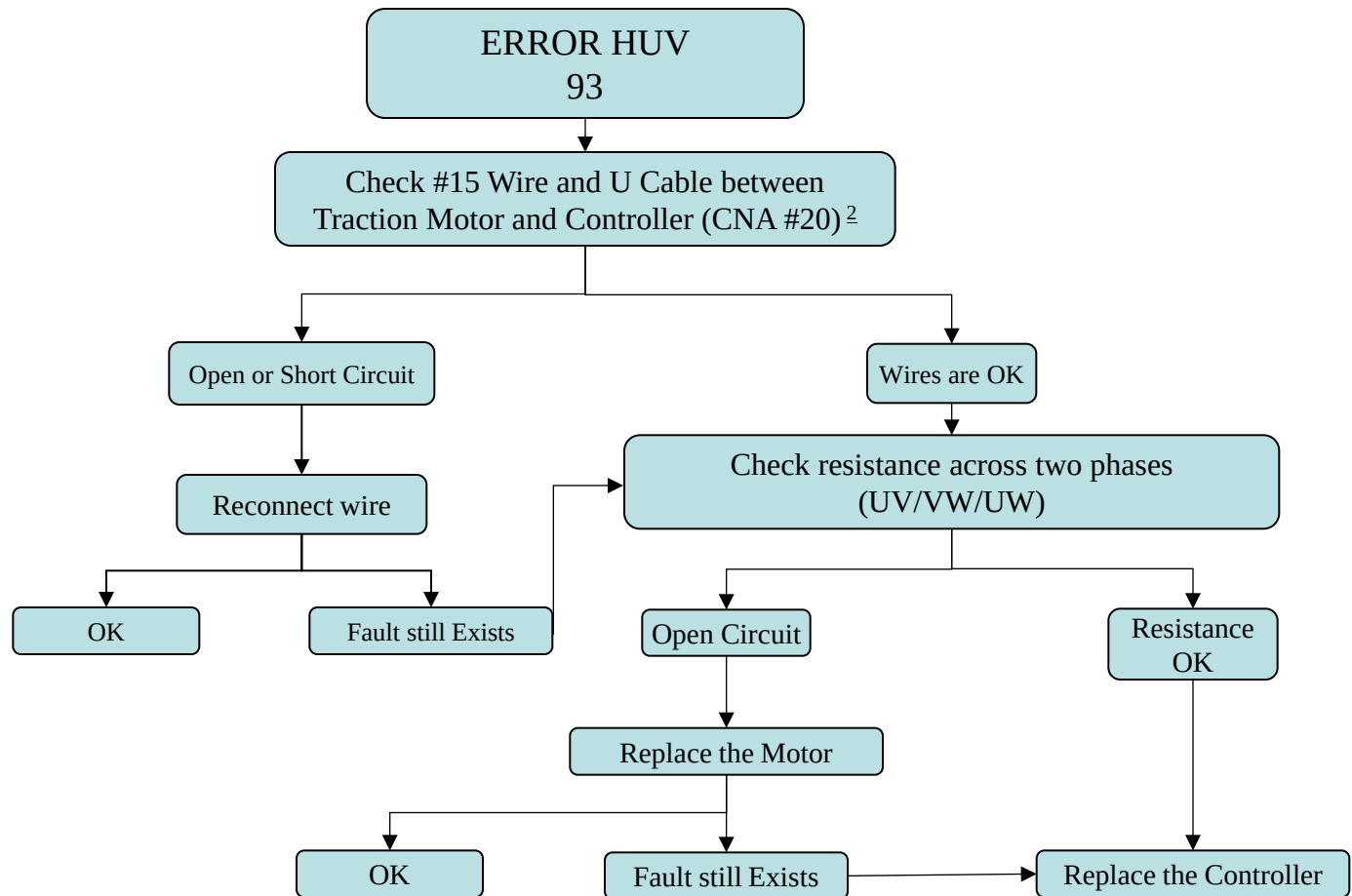
ALARM #93 on NODE #2 ERROR LUW



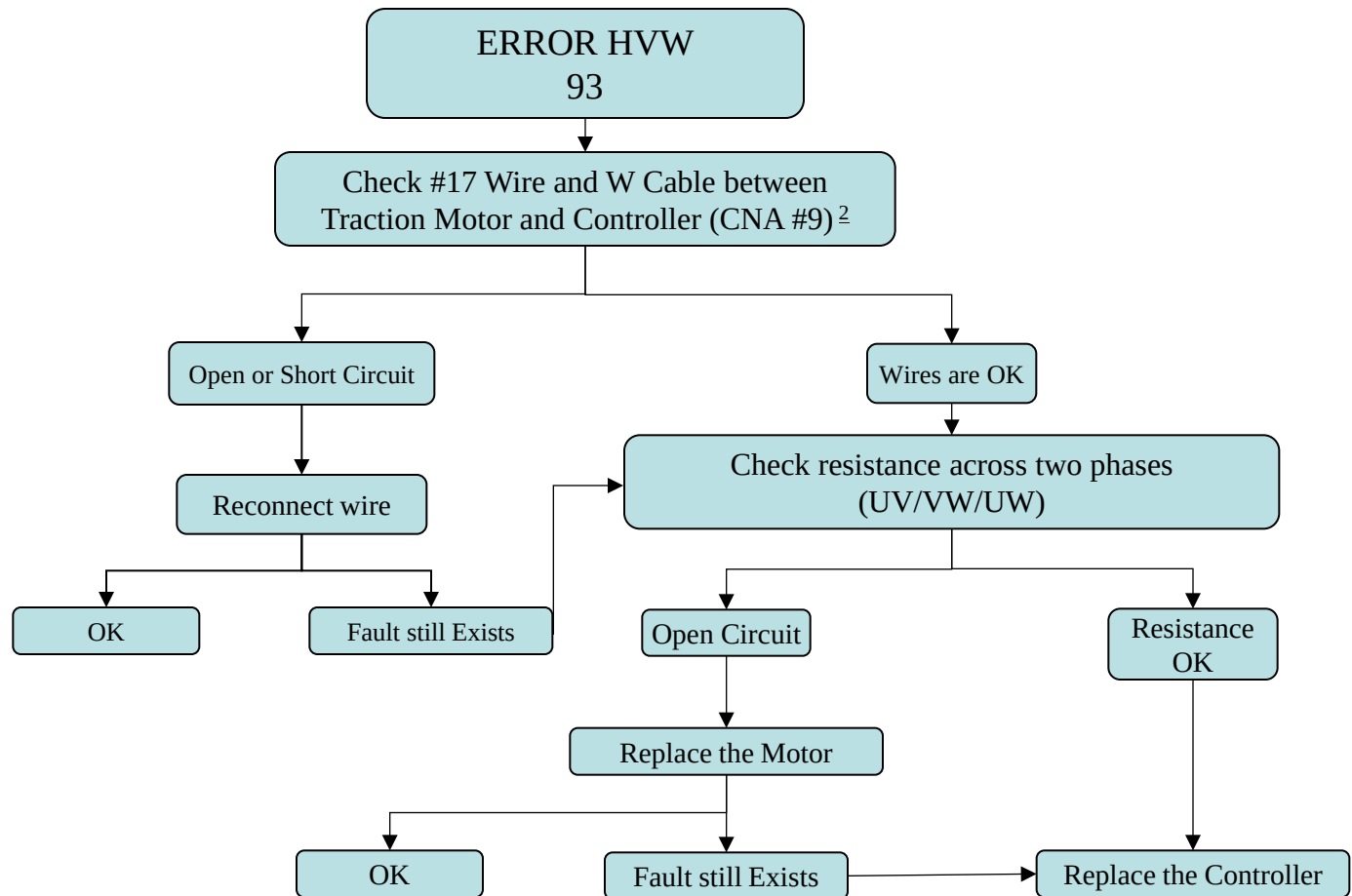
ALARM #93 on NODE #2 ERROR LVW



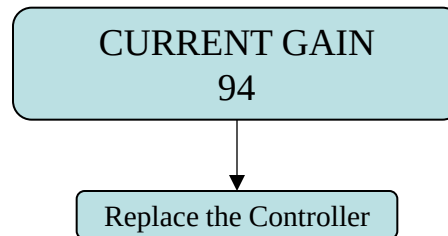
ALARM #93 on NODE #2 ERROR HUV



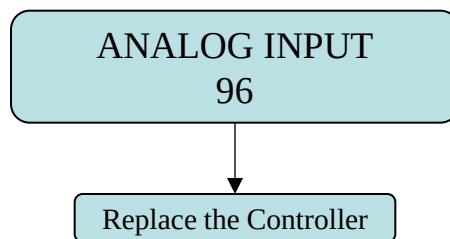
ALARM #93 on NODE #2 ERROR HVW



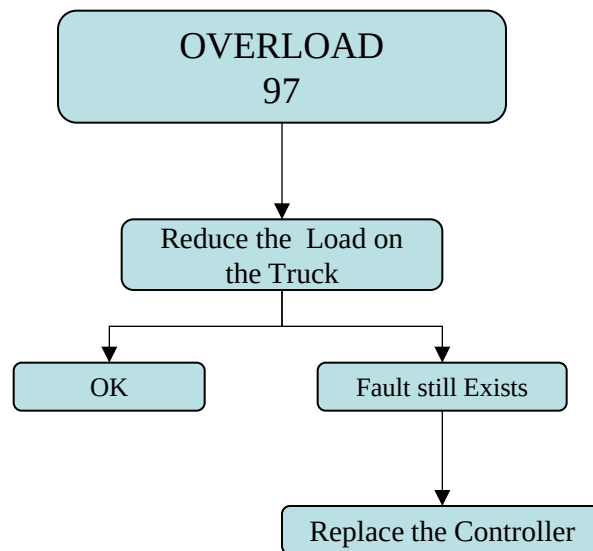
ALARM #94 on NODE #2 CURRENT GAIN



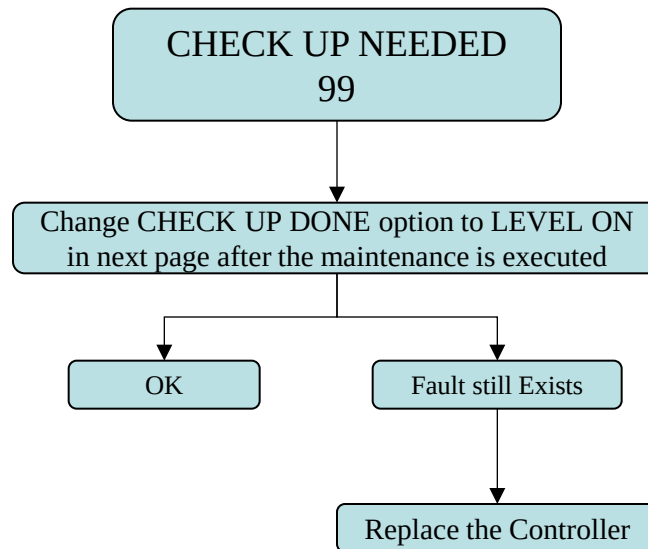
ALARM #96 on NODE #2 ANALOG INPUT



ALARM #97 on NODE #2 OVERLOAD



ALARM #99 on NODE #2 CHECK UP NEEDED



Check UP in Handset

Key on the truck, connect the flash connecting line. The Display will show:

Press  or  button until RS232 CONSOLE shows on the display

The Display will show :

Press OK to go into the Traction controller

The Display will show:

Cons AFG ZP021*



Cons AFG ZP021*
RS232 CONSOLE



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Press OK to go into the Main Menu

The Display will show:

Press  or  button until ADJUSTMENT shows on the display

The Display will show:

Press OK to go into the ADJUSTMENT function

The Display will show:

Press  or  button until CHECK UP DONE shows on the display



Main Menu



MAIN MENU
ADJUSTMENT



ADJUSTMENT



The display will show:

Push , or  To select ON

The display will show:

When finished , press and hold power button for 3s to turn off the Console, and rekey the truck

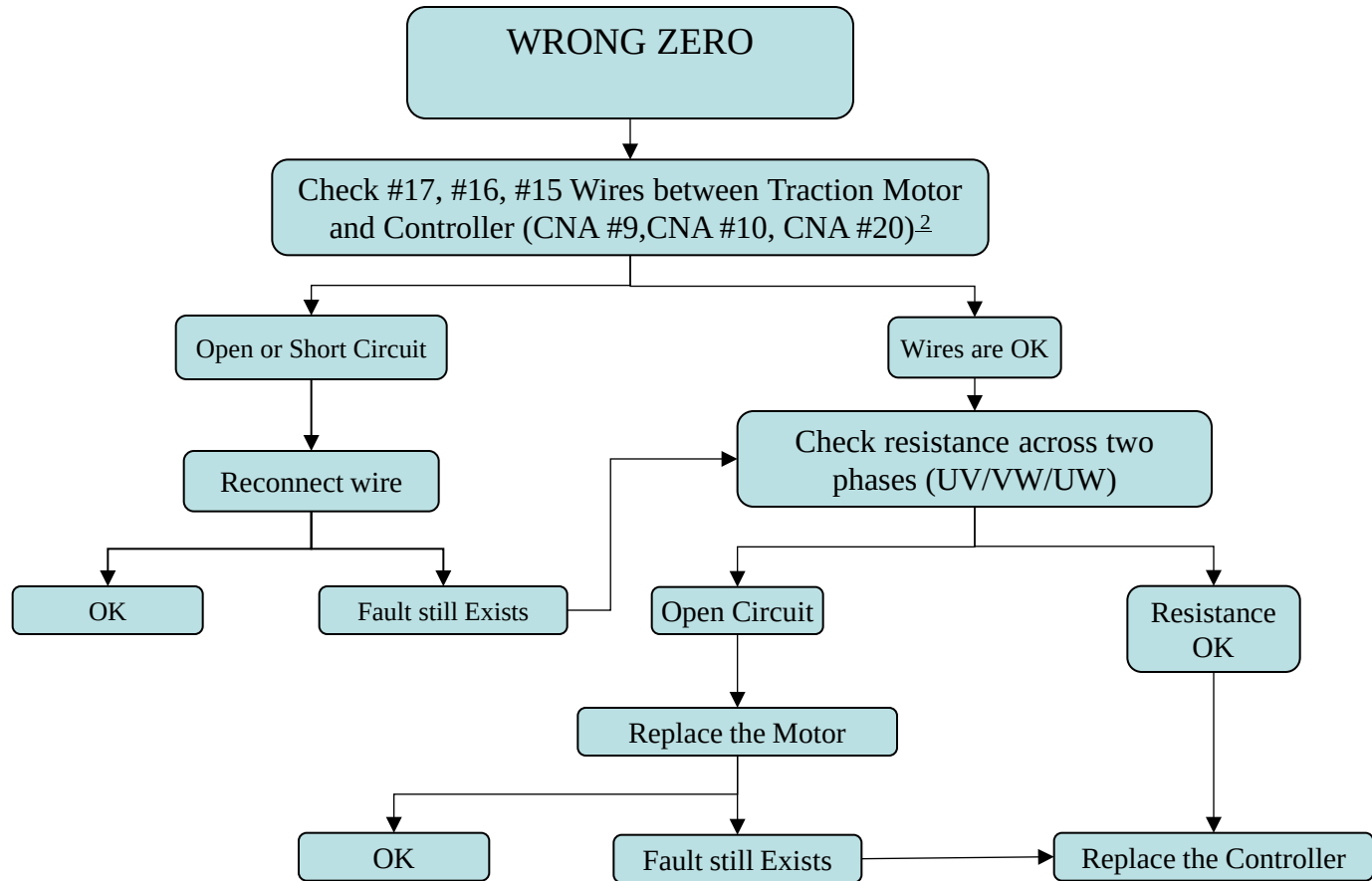
CHECK UP DONE OFF



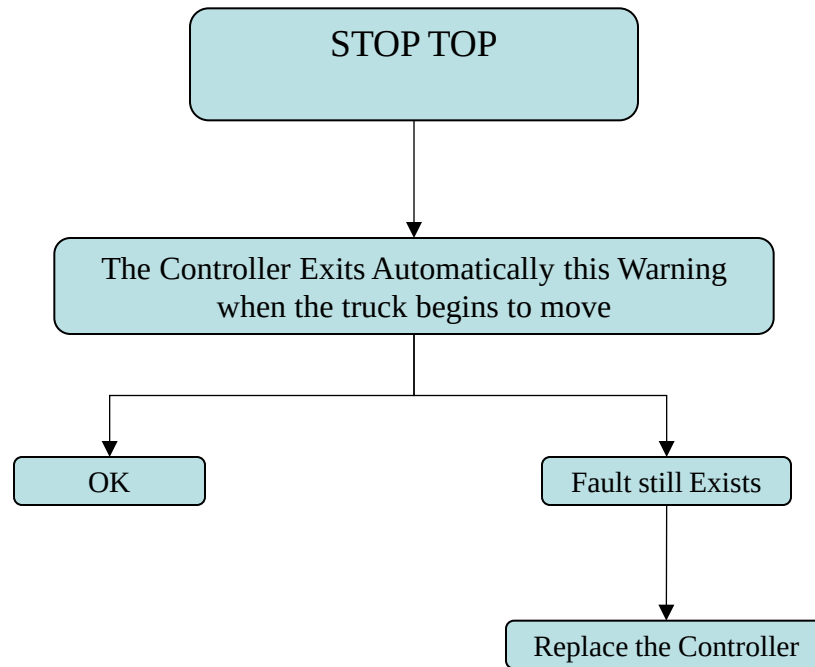
CHECK UP DONE ON



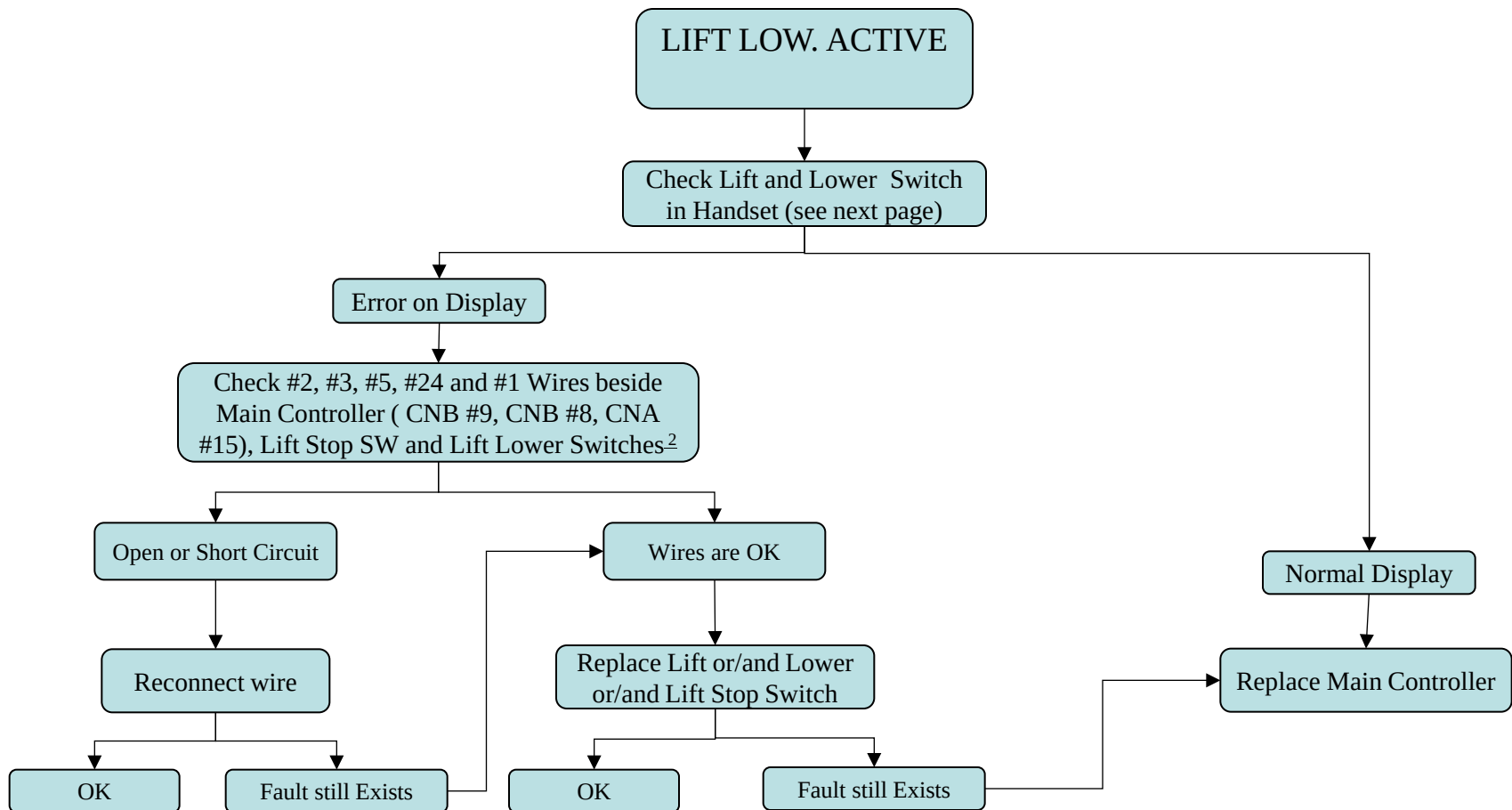
ALARM on NODE #2 WRONG ZERO



ALARM on NODE #2 STOP TOP



ALARM on NODE #2 LIFT LOW. ACTIVE



Check Lift and Lower Switch in Handset

Key on the truck, connect the flash connecting line. The Display will show:

Press  or  button until RS232 CONSOLE shows on the display

The Display will show :

Press OK to go into the Traction controller

The Display will show:

Cons AFG ZP021*



Cons AFG ZP021*
RS232 CONSOLE



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24V 150A 0H

Press OK to go into the Main Menu

The Display will show:

Press  or  button until TEST shows on the display

The Display will show:

Press OK to go into the TEST function

The Display will show:

Press  or  button until LIFT SW shows on the display



Main Menu



MAIN MENU
TEST



TEST



The display will show:

LIFT SW OFF

Pull Handle and Press the Lift Switch
and hold on

The display will show:

LIFT SW ON

Repeat Step for Lower Switch:

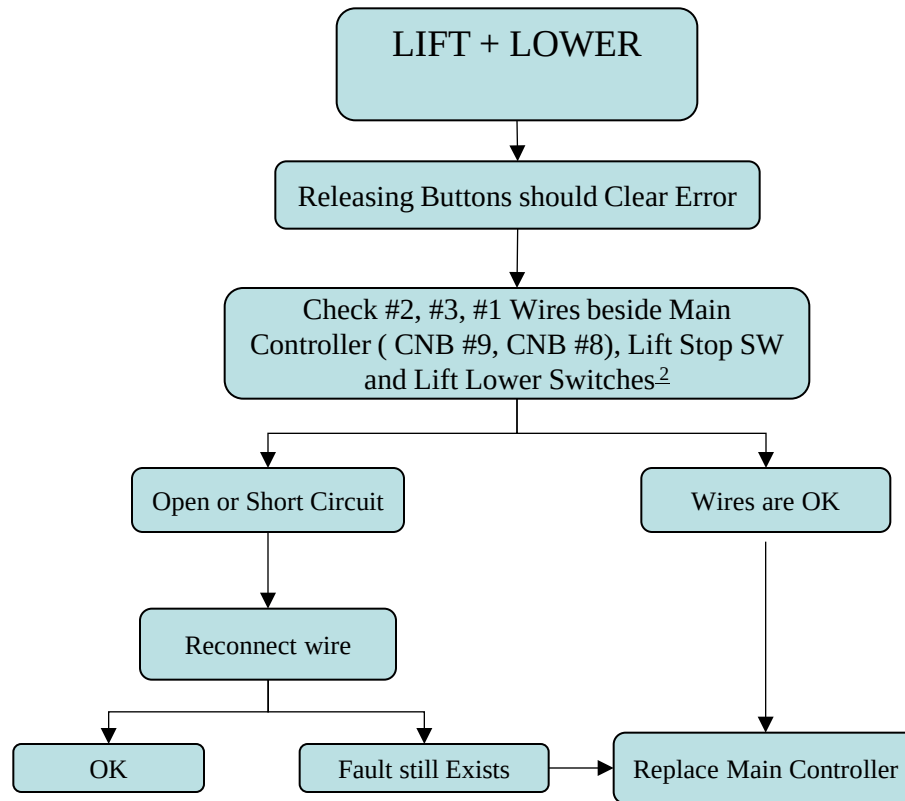
LOWER SW OFF

LOWER SW ON

When finished , press and hold
power button for 3s to turn off the
Console

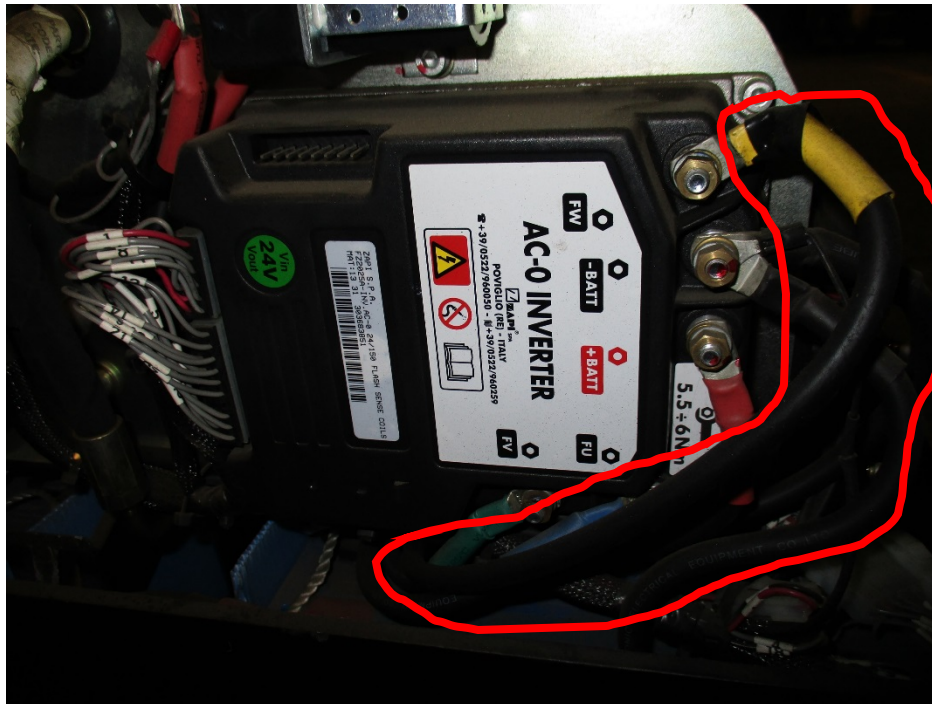


ALARM on NODE #2 LIFT + LOWER

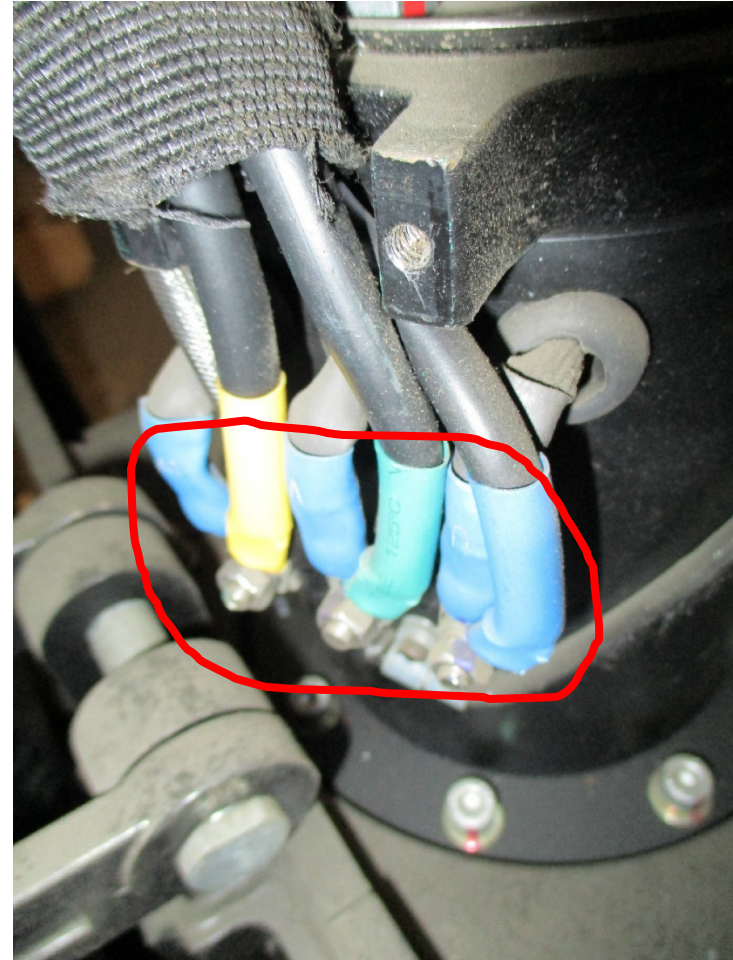
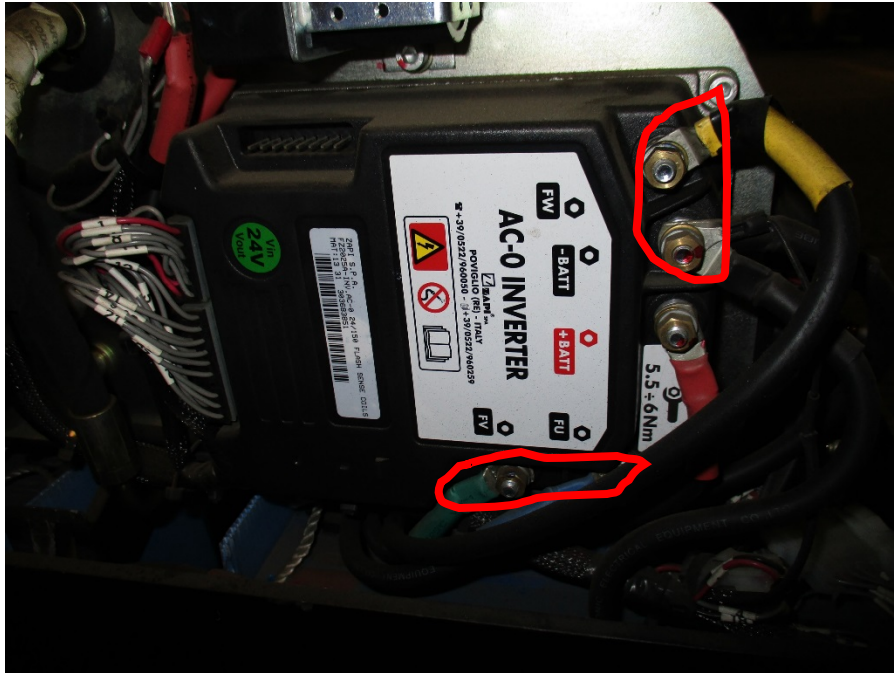


Appendix A

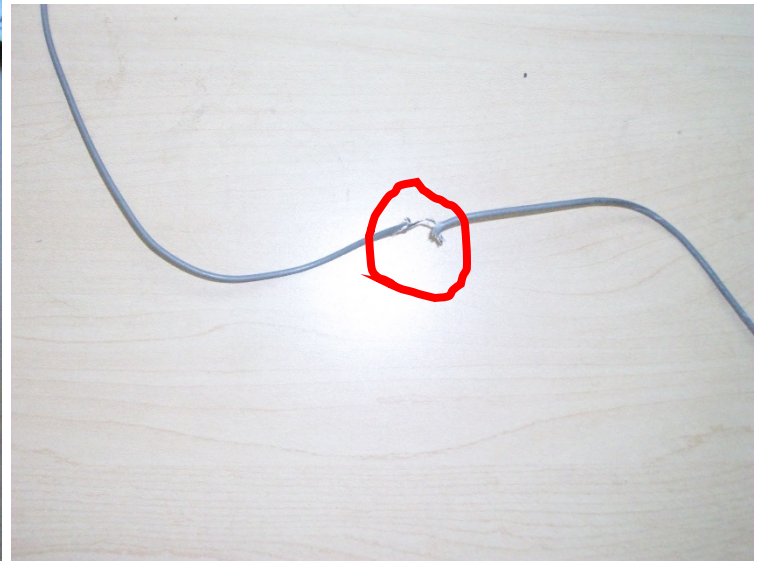
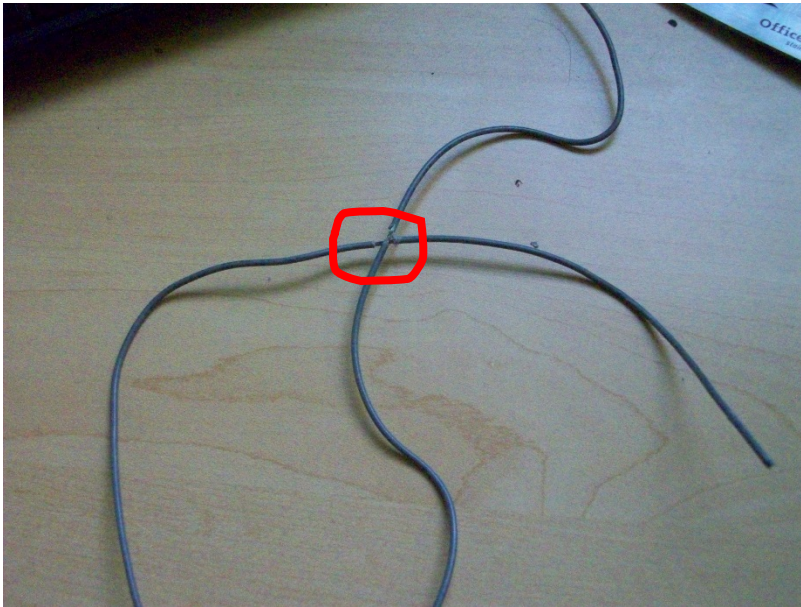
1. Check if cables are opened or shorted. A shorted cable means the cable jacketing is damaged and it is shorting to another cable or it is in contact with a metal object like the frame. An open cable means one of the inside metal wires are cut/damaged. If you are not sure, please measure the resistance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



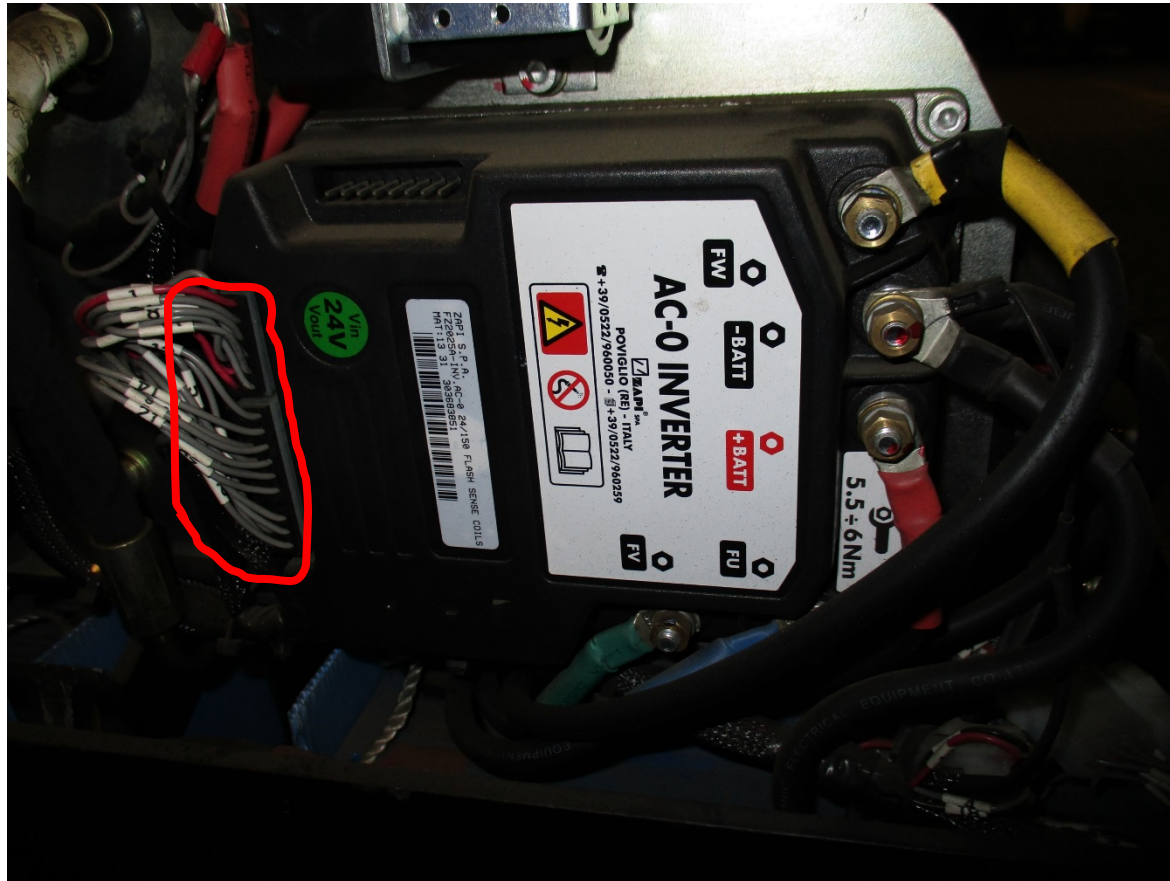
Check the connection points of the motor cables, and controller cables. Check the cable terminals for burn marks. Check if hardware is loose or burned. Ensure connections are tightened properly.



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, please 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



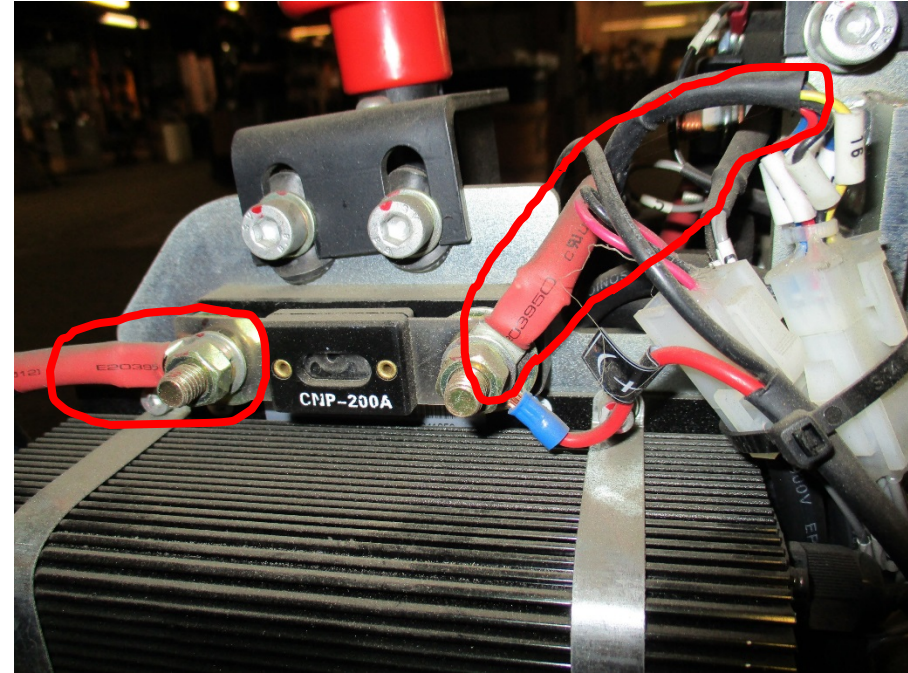
Check the connections between Controller wires and switches/sensors. Ensure wires are not cut or damaged.



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



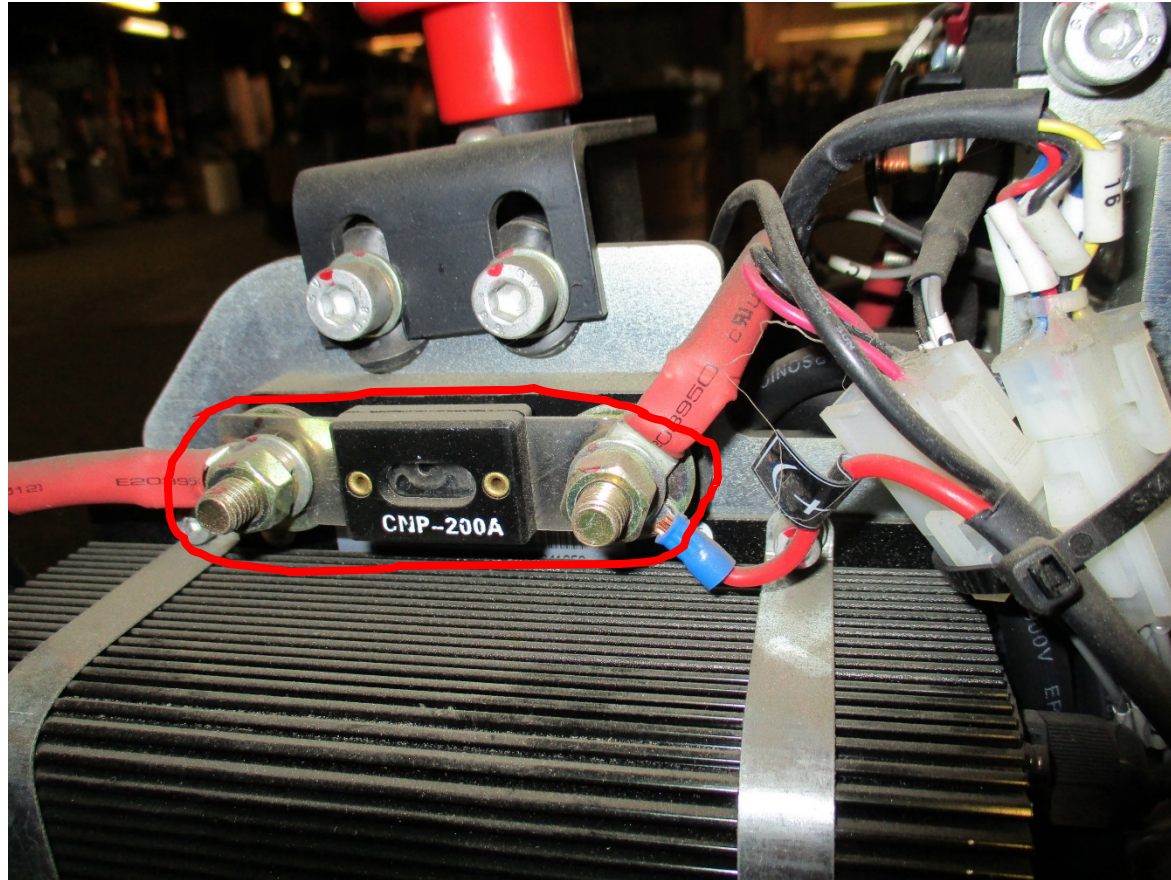
3. Check if cables are opened or shorted. A shorted cable means the cable jacketing is damaged and it is shorting to another cable or it is in contact with a metal object like the frame. An open cable means one of the inside metal wires are cut/damaged. If you are not sure, please measure the resistance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



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.

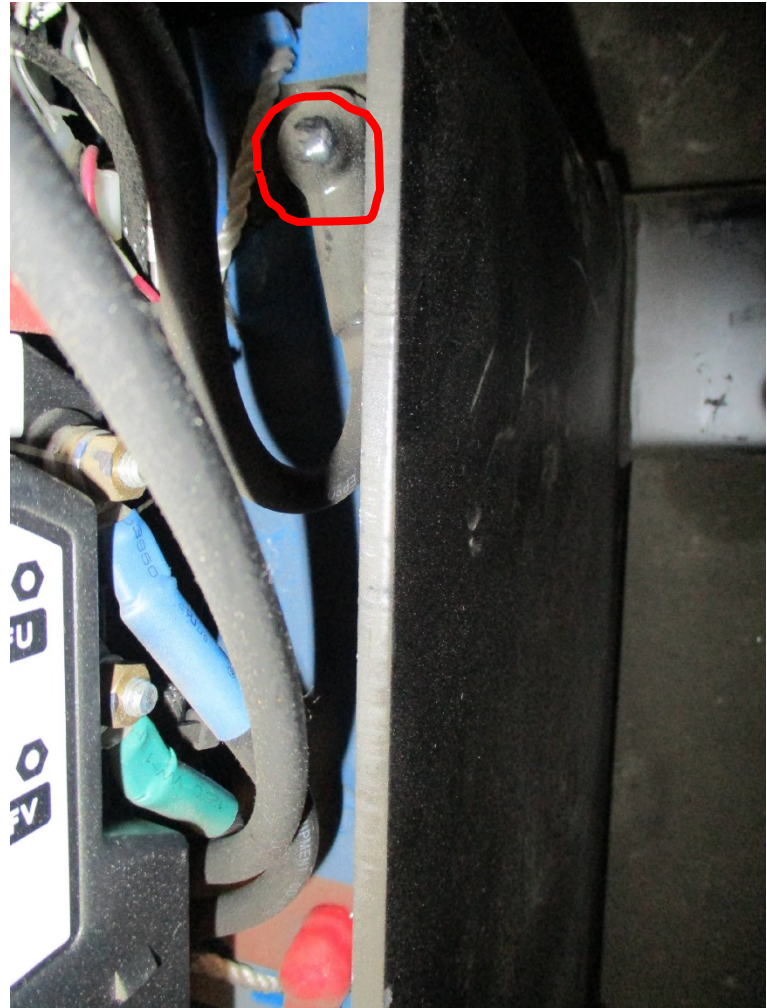


Check if the fuses are blown out or not.





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 2000 pound). If the voltage difference between the empty lifting and loaded lifting is more than 5V. Please replace battery.