



Troubleshooting

IMPORTANT INFORMATION

DISCLAIMER

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Service mode LED+

1. To enter service mode, push 3 buttons simultaneously until binary code is visible

2. Then read out in the table which error you see

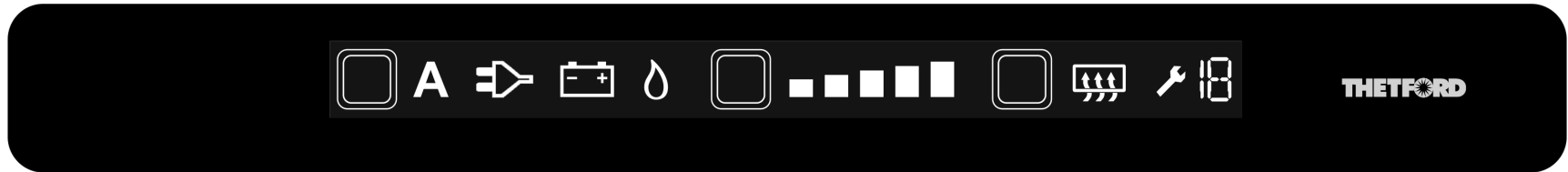


Readout Code - LED Display	Error Code
	No Error Code
	1
	2
	3
	4
	5
	6
	7
	8
	9
	10
	11
	12
	13

!!! Note : When supply voltage 12 VDC (low current voltage) is not available, no error code will be given. When 12 VDC is available the blue power LED will be on. If battery pack is empty you can see a red light !!!

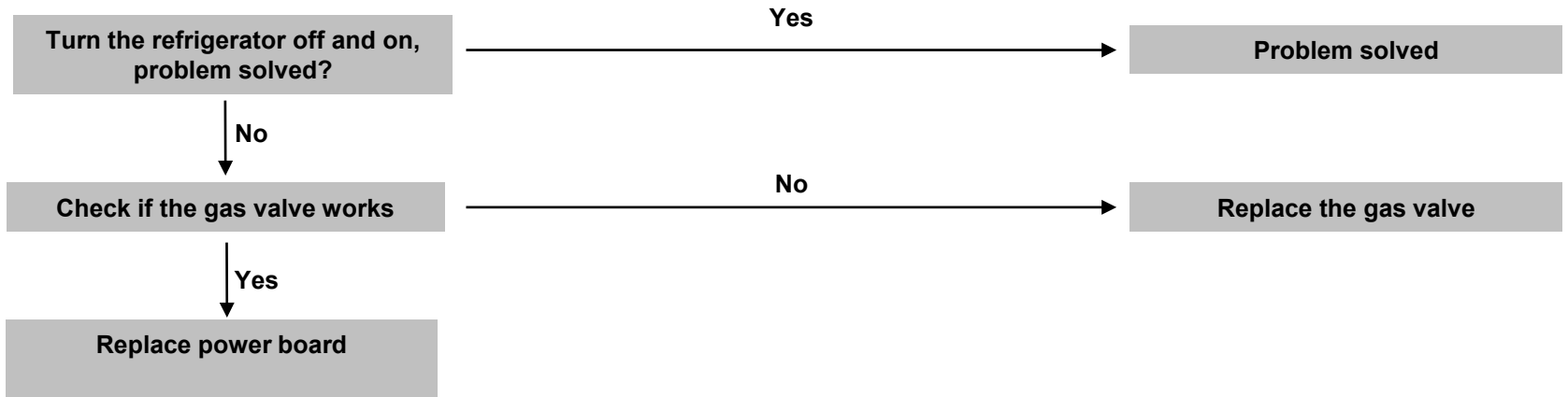
Service mode LCD

The error code will appear in the display over here.



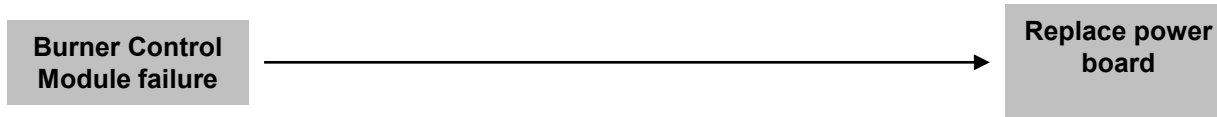
!!! Note : When supply voltage 12 VDC (low current voltage) is not available, no error code will be given. When 12VDC is available the blue power light will be on !!!

Error code 1: Senses flame when gas should be off



Troubleshooting

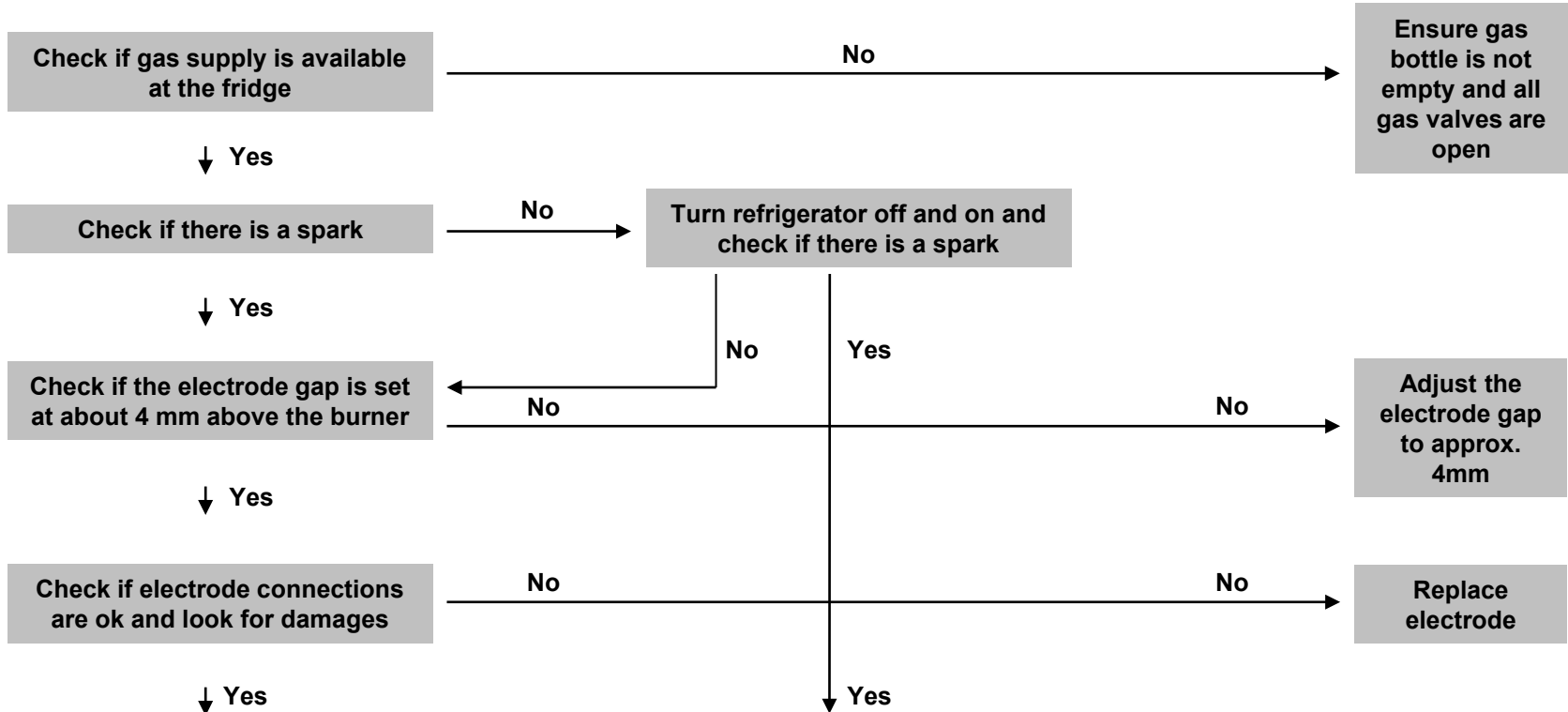
Error code 2: Burner control module returns incorrect feedback



Troubleshooting

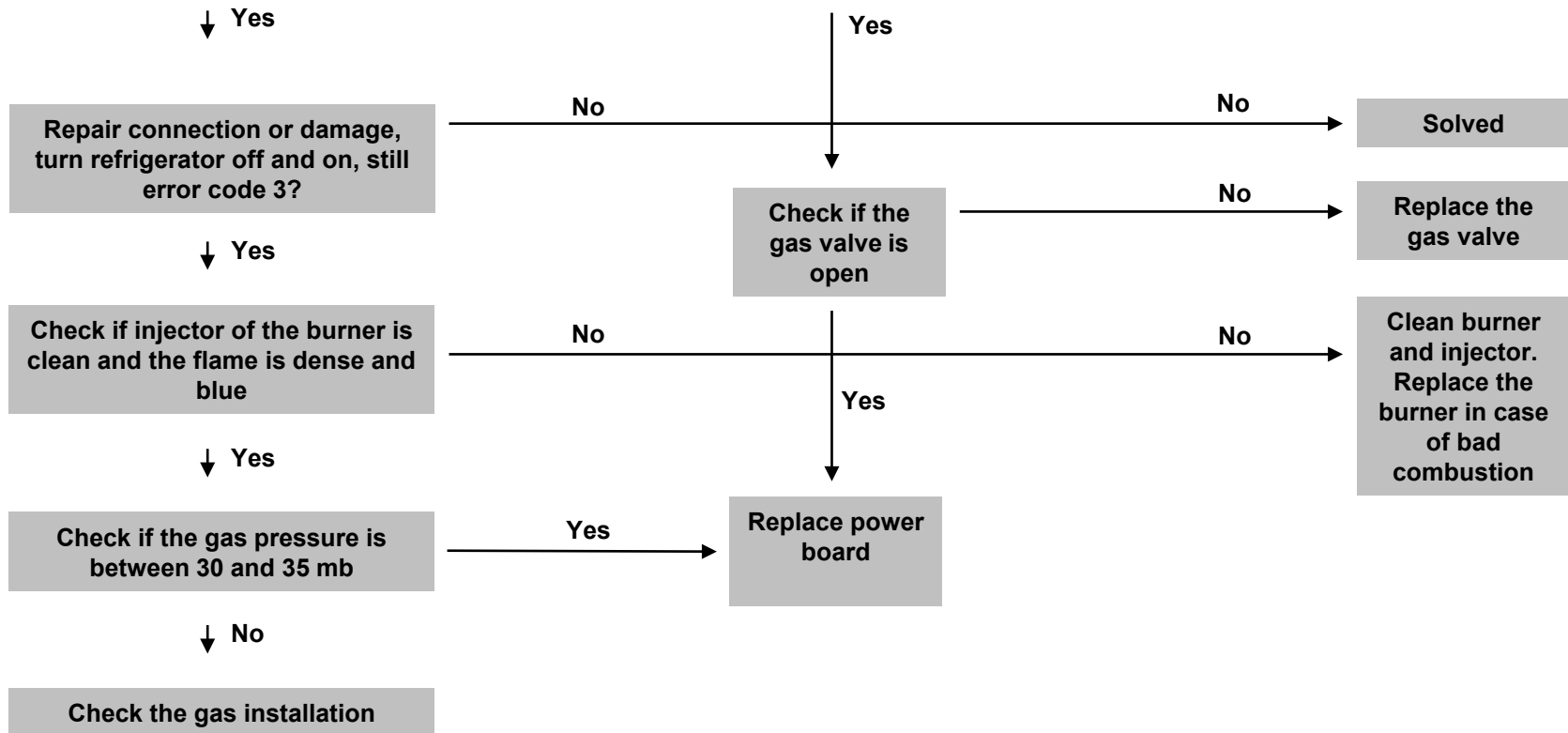
Error code 3: Gas lockout because flame fails to ignite within 30 sec.

Note: when there is no flame detection any more the refrigerator will try to ignite 3 times (only when it was detected before during the same cycle)



Troubleshooting

Error code 3: Gas lockout because flame fails to ignite within 30 sec.



Error code 4: DC heater is off when it should be on

!!! Note: put fridge off when measuring the impedance off the heater !!!

Check if all the connections are OK

No → Restore the connections

↓ Yes

Check if the 25A fuse is OK

No → Change fuse

↓ Yes

Check if the heater is using current +/- 17 A large fridges and +/- 12 A small fridges

No →

Heater resistance:		
Type	MinΩ	MaxΩ
N4080	0.98	1.08
N4090	0.98	1.08
N4097	0.98	1.08
N4100	0.98	1.08
N4104	0.98	1.08
N4108	0.98	1.08
N4112	0.98	1.08
N4141	0.67	0.74
N4142	0.67	0.74
N4145	0.67	0.74
N4150	0.67	0.74
N4170	0.67	0.74
N4175	0.67	0.74

No → Replace the DC heater

↓ Yes

Check the resistance of the heater, is this between min and max?

No →

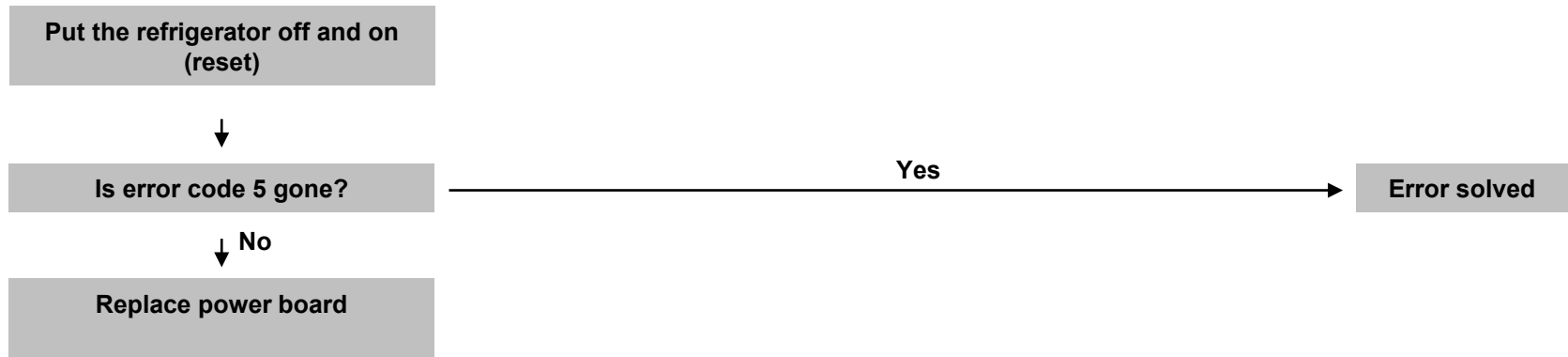
No → Replace the DC heater

↓ Yes

Replace power board

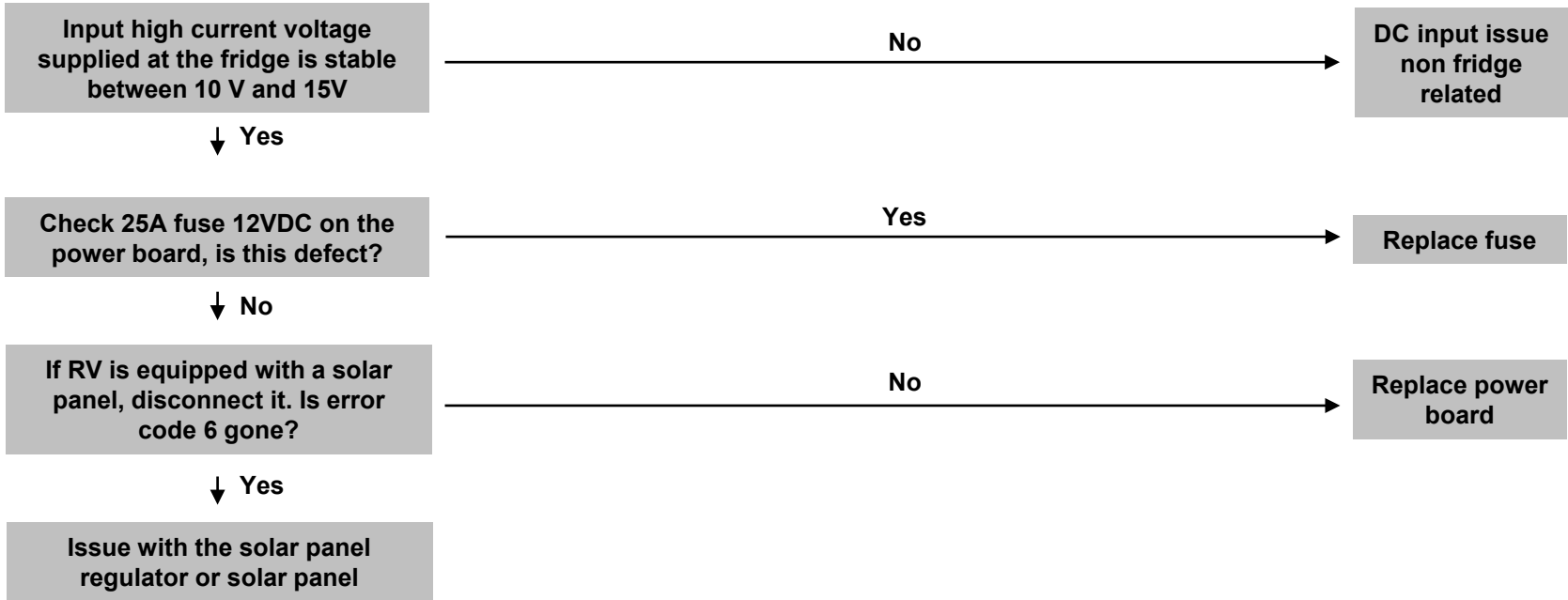
Troubleshooting

Error code 5: DC heater is ON when it should be OFF.



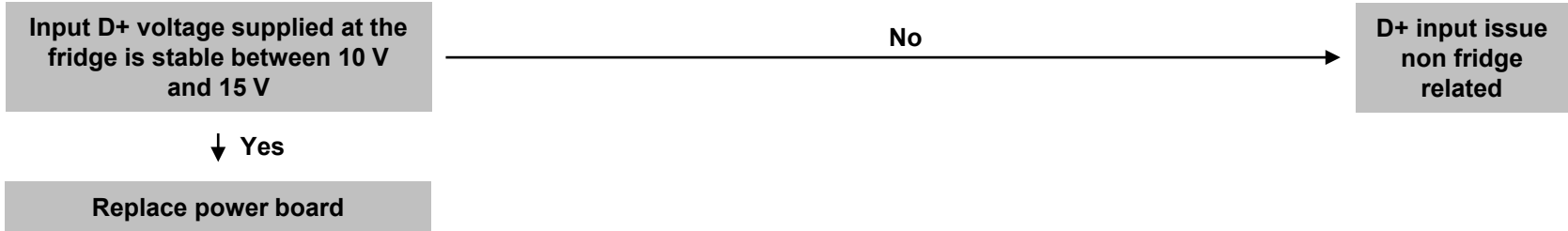
Troubleshooting Error code 6: DC high voltage is out of range (lower than 10 V or higher than 15 V)

!!! If DC mode has been selected manually, the refrigerator is not switching automatically to another source of energy when the engine is off !!!



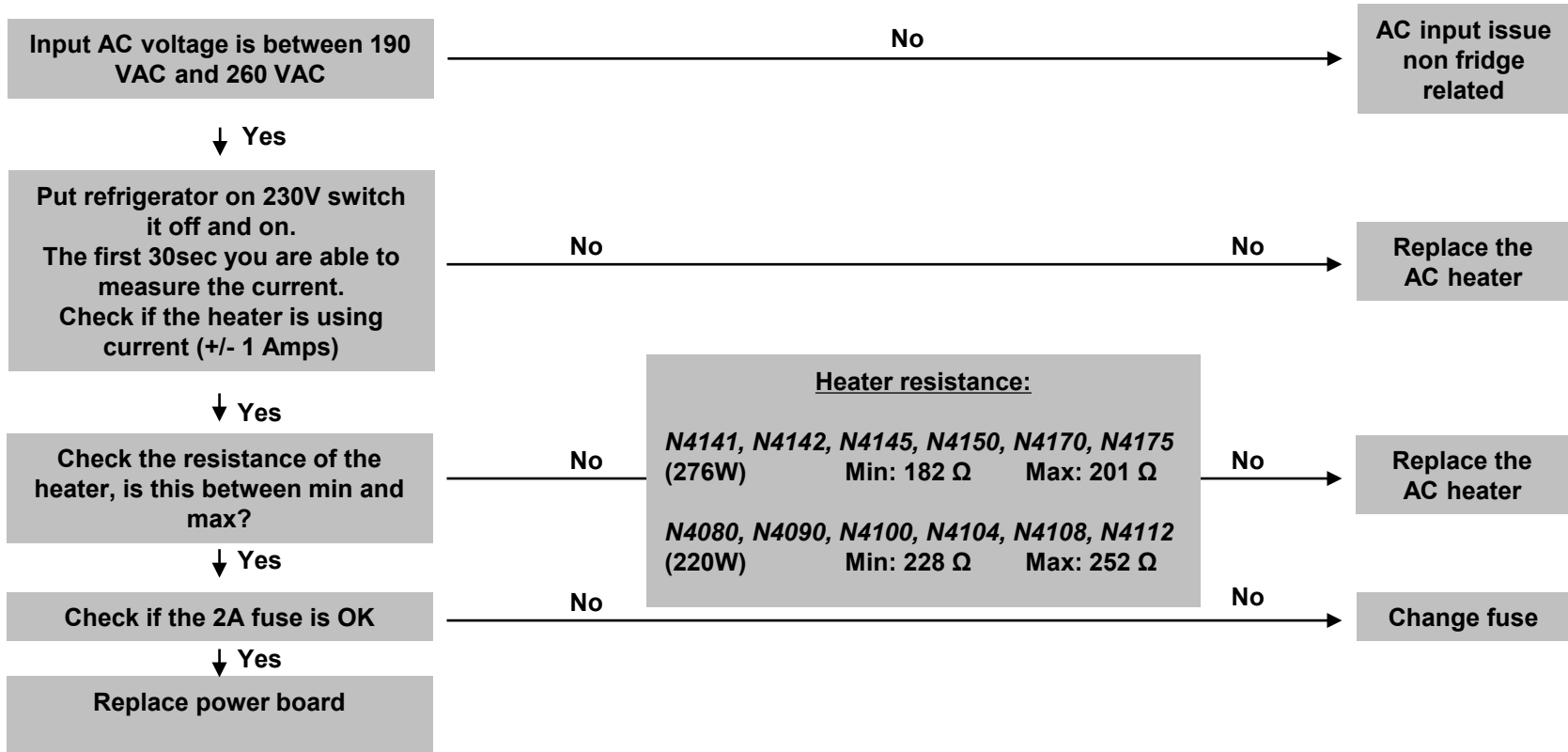
Error code 7: No “engine run” signal is present and control is in Manual DC mode.

!!! To know if D+ polarity is good, select manually DC mode and engine off. If no error code occurs, that means that the D+ input is reversed. Ensure power supply is capable to supply correct amperage !!!



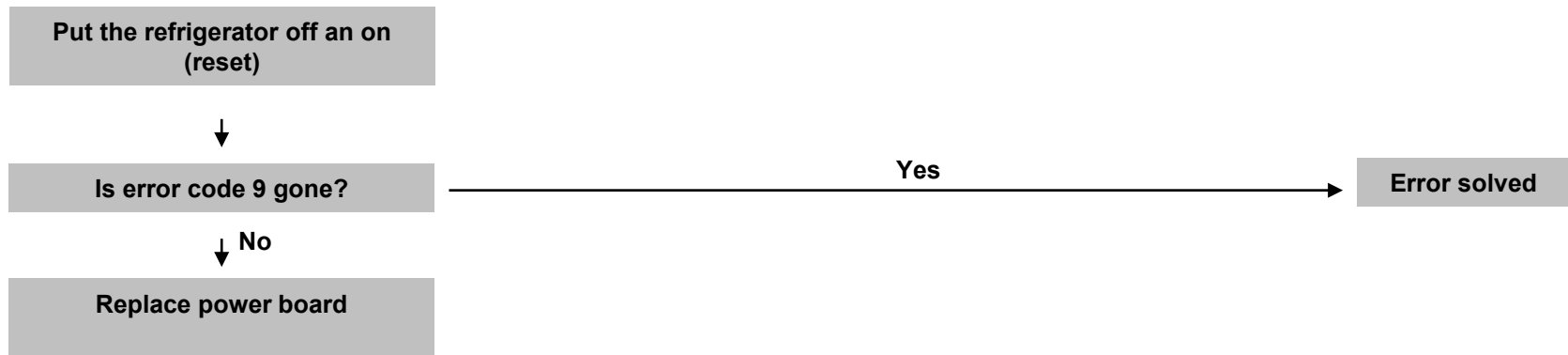
Troubleshooting Error code 8: AC heater current is measured to be 75% below nominal current.

!!!Note: put fridge off when measuring resistance off the heater!!!

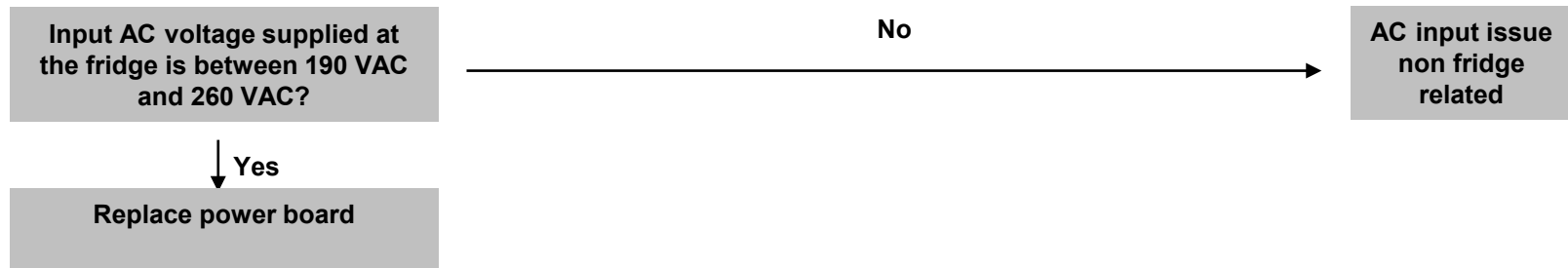


Troubleshooting

Error code 9: AC heater is ON when it should be OFF

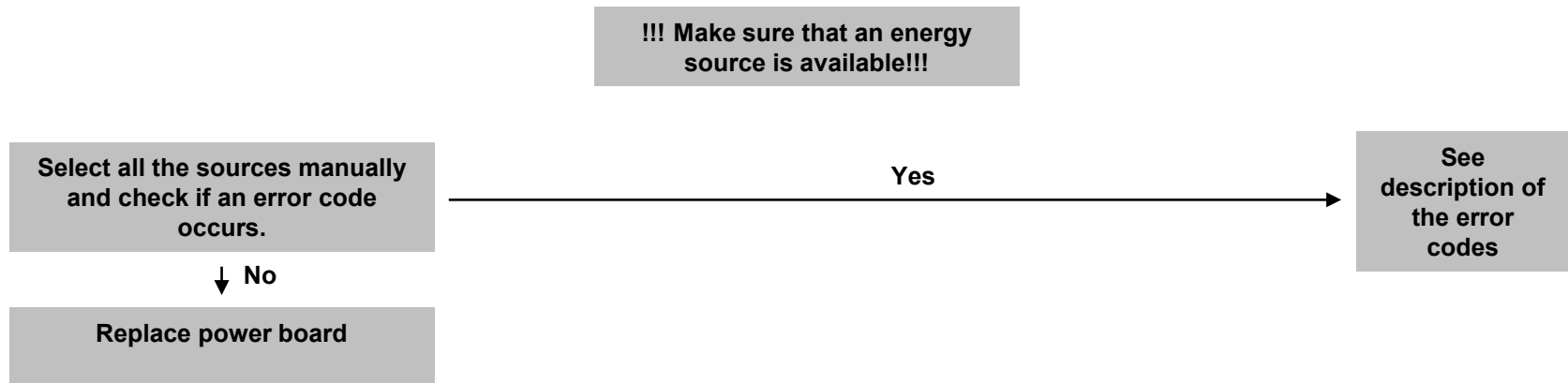


Error code 10: AC mains supply is out of range

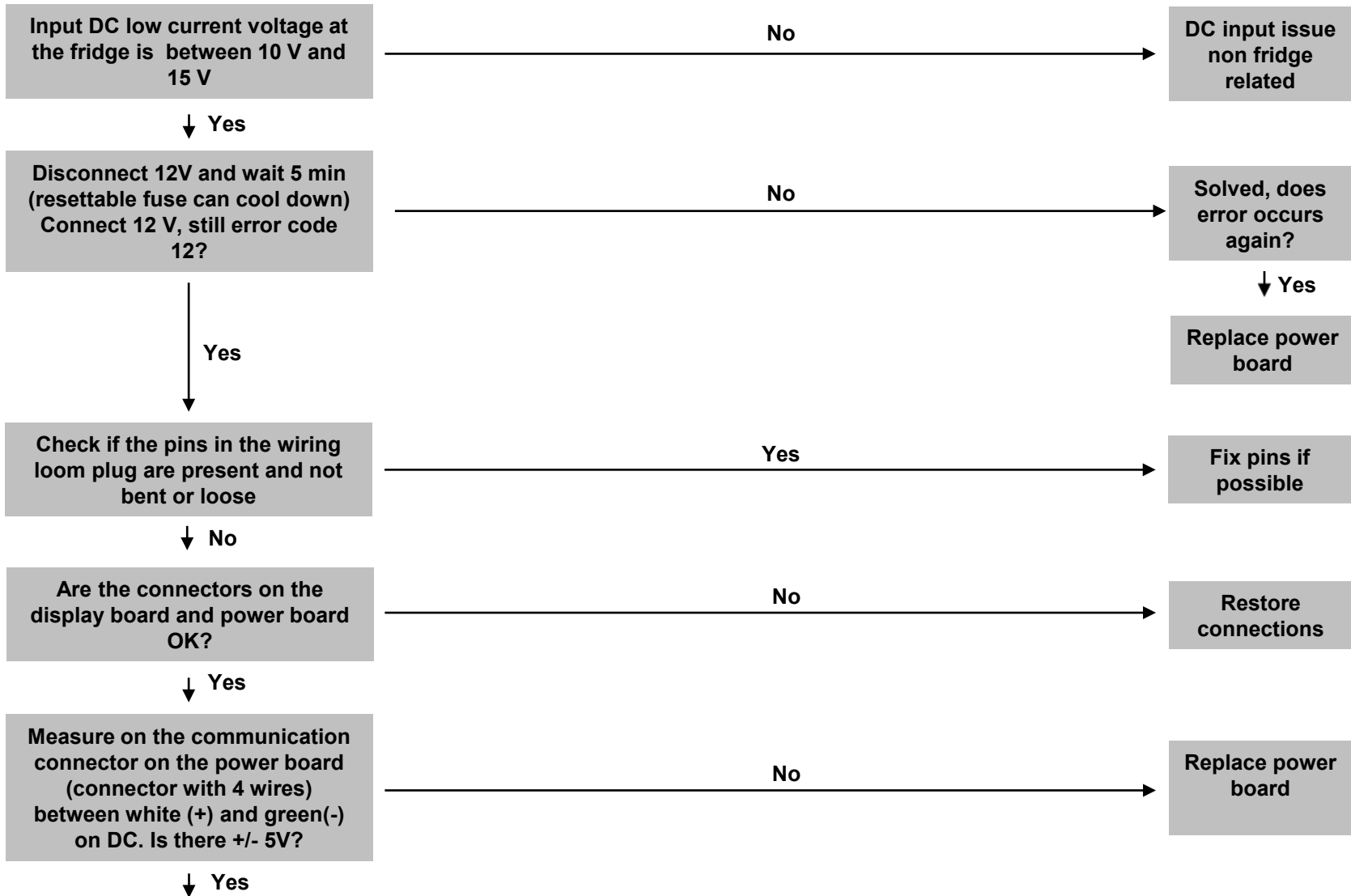


Troubleshooting

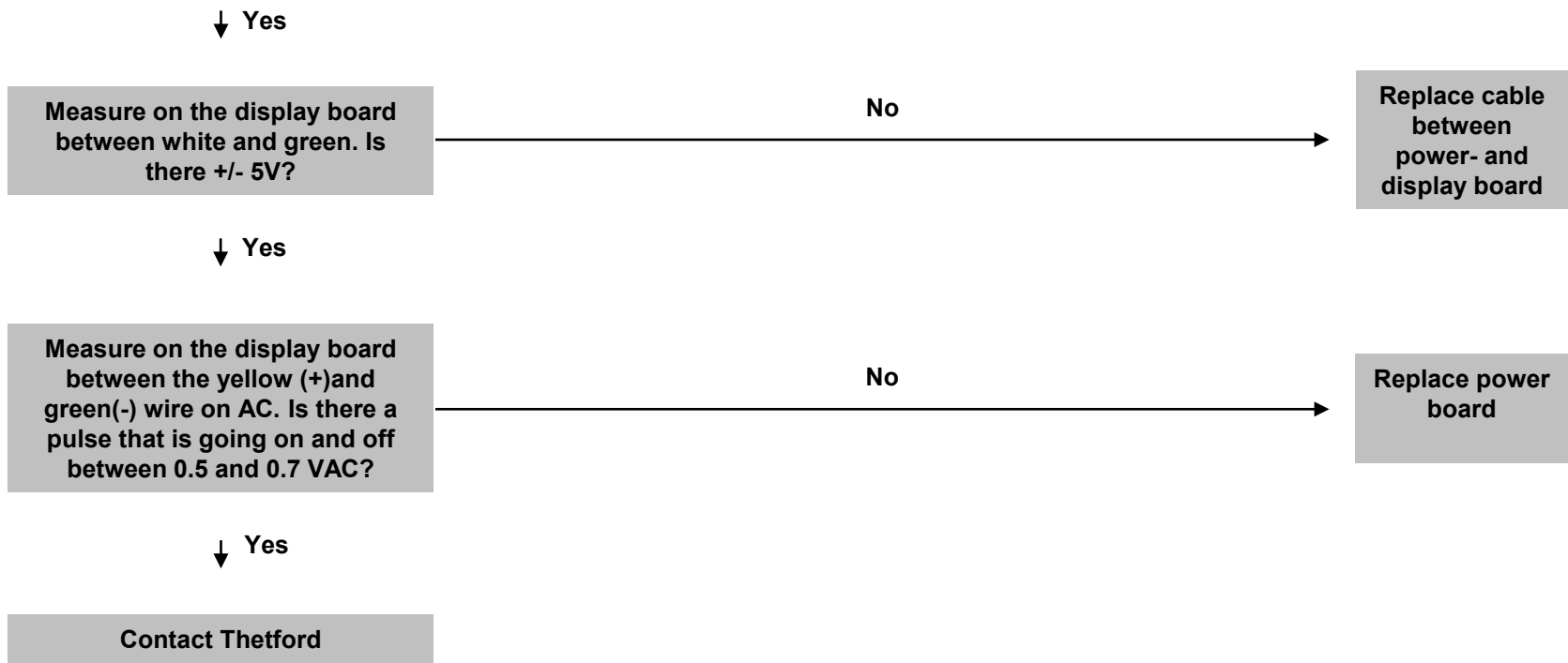
Error code 11: No energy source is available and control is in AUTO mode



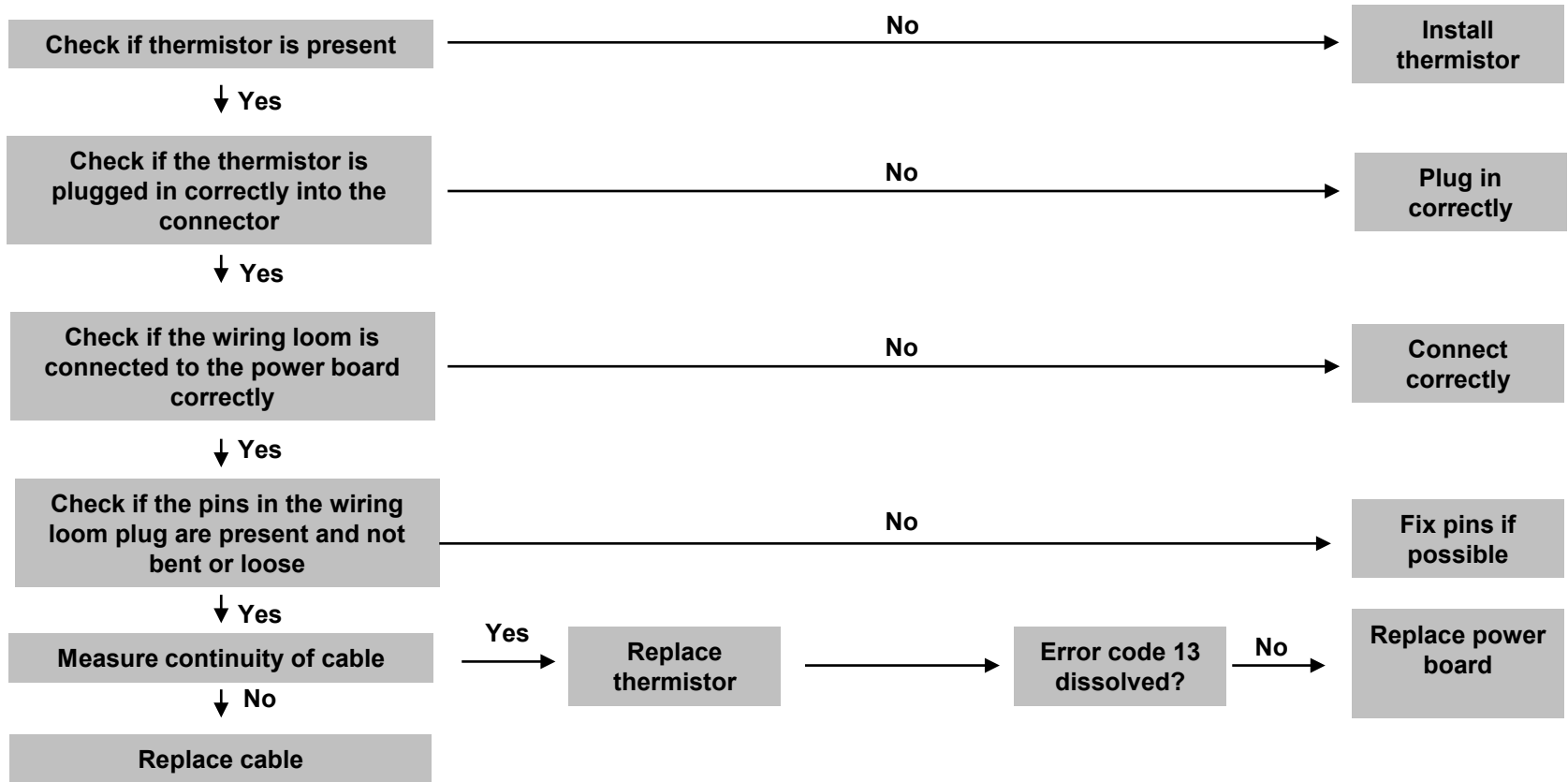
Troubleshooting Error code 12: Display board and power board lose communication with each other.



Troubleshooting Error code 12: Display board and power board lose communication with each other

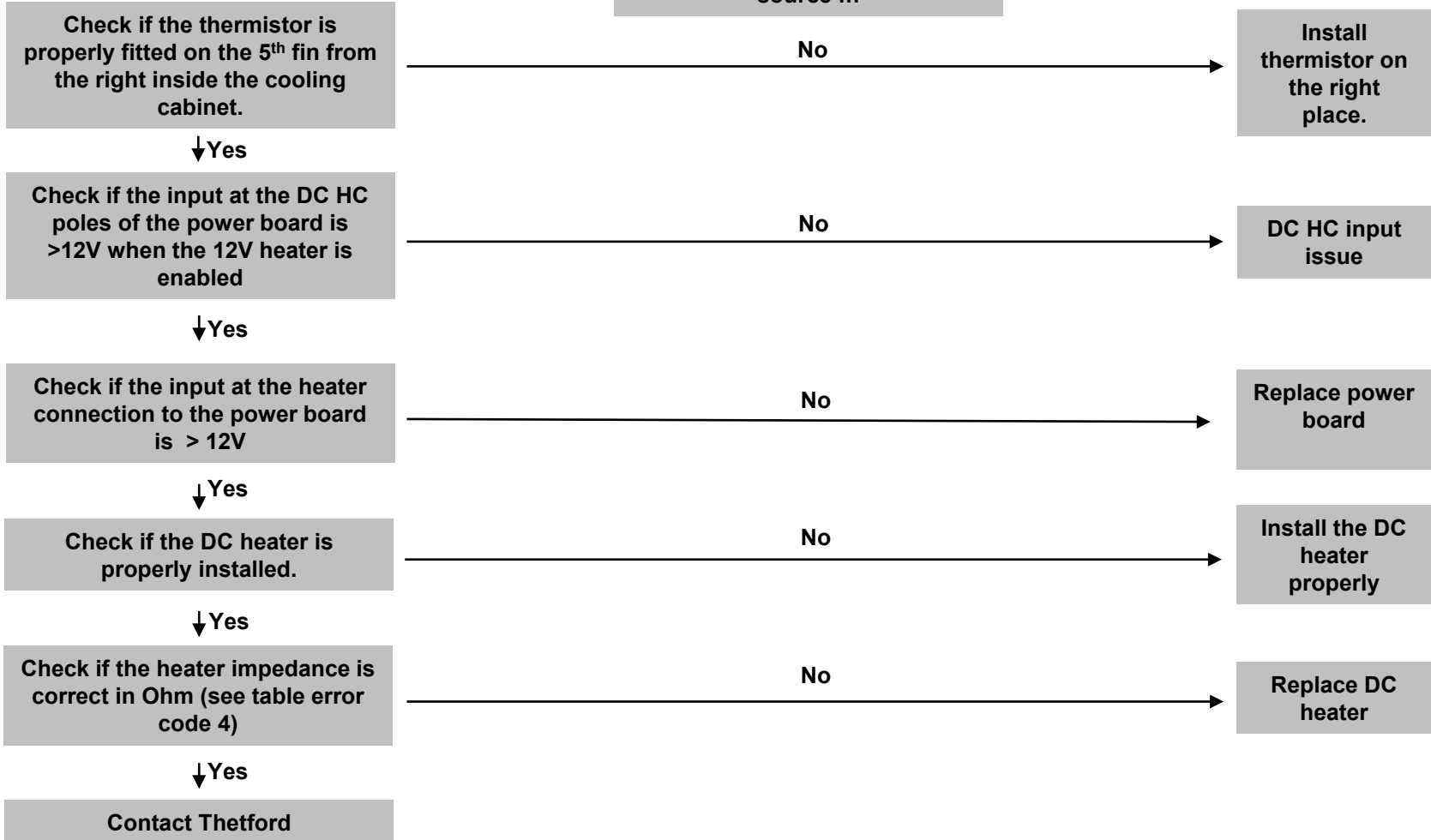


Error code 13: Thermistor fails; control automatically switches to Backup Operation System



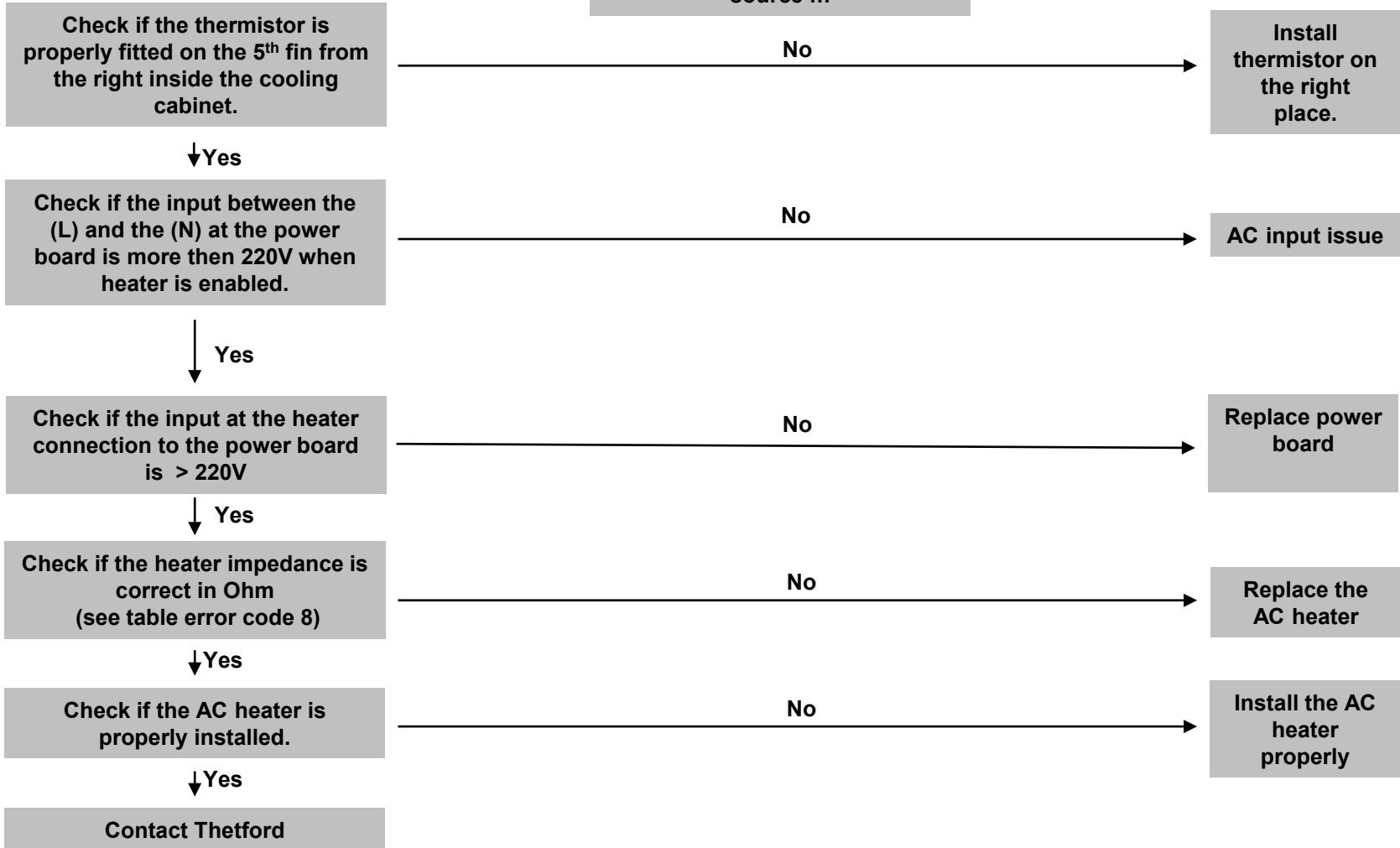
Inadequate performance on 12 VDC source and no error code

!!! Do the testing of the fridges on the manual mode of this source !!!

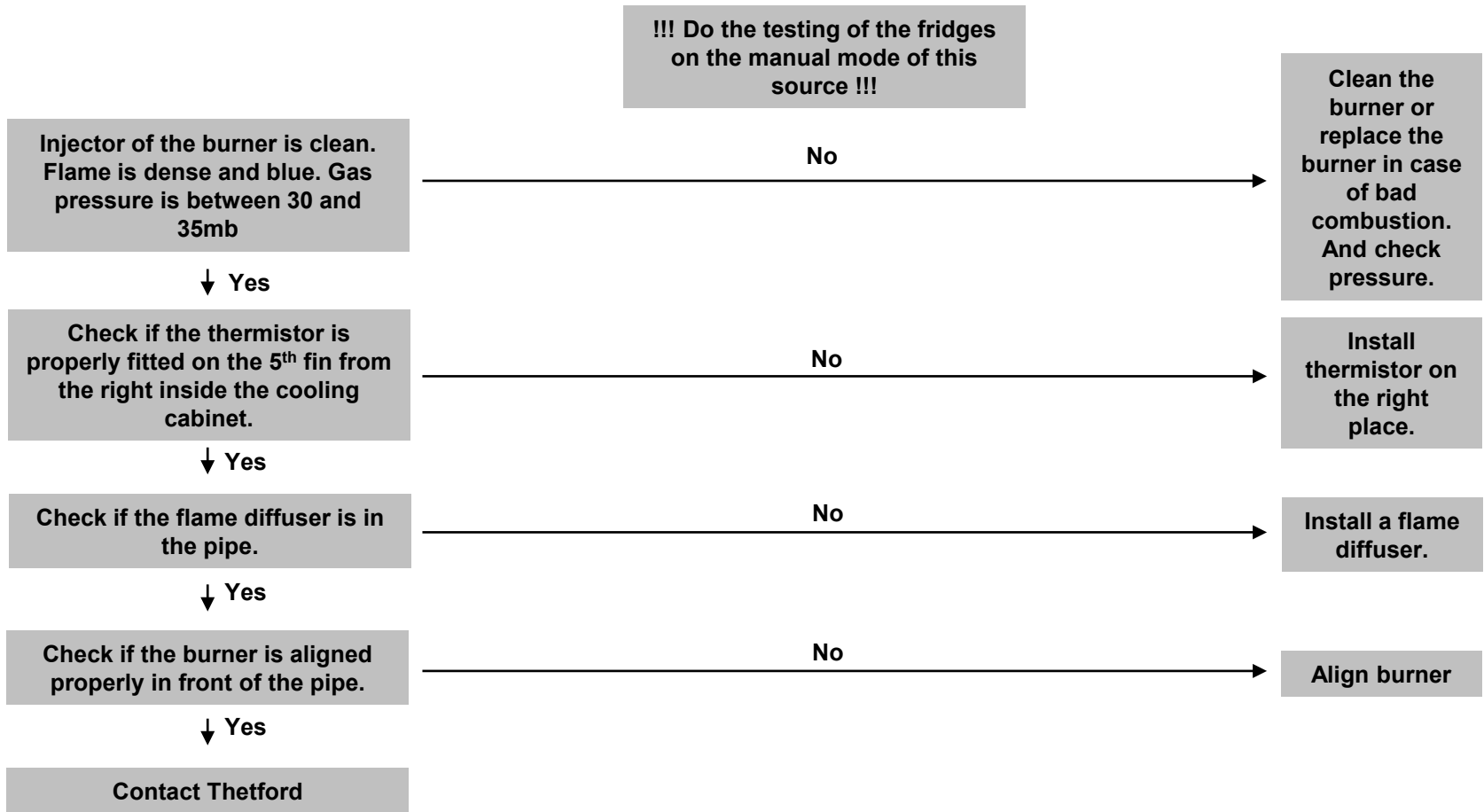


Troubleshooting inadequate performance on 230 V source and no error code

!!! Do the testing of the fridges on the manual mode of this source !!!



Inadequate performance on gas source and no error code

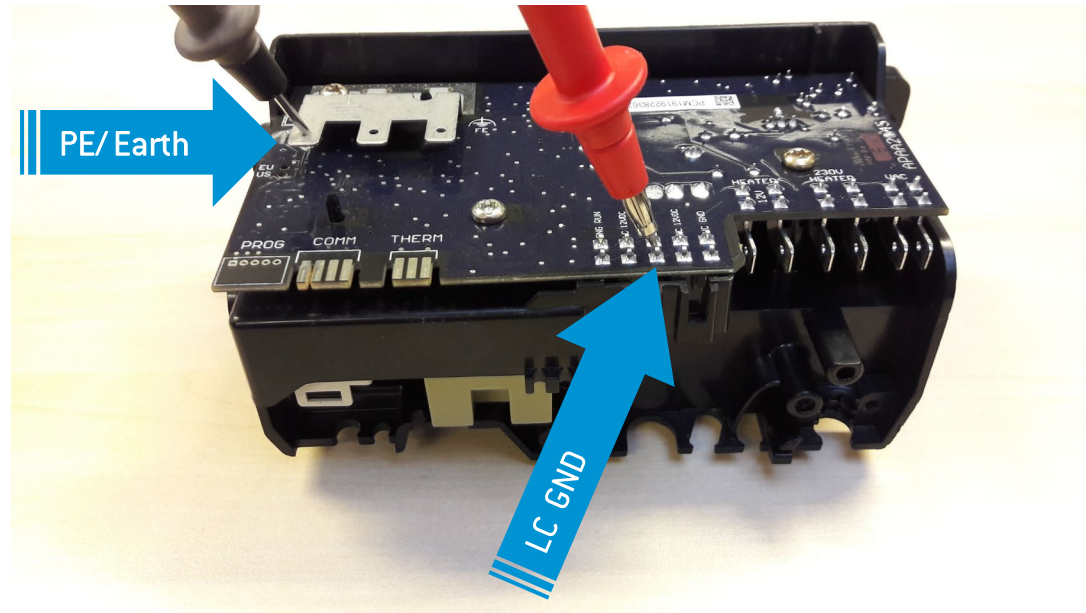
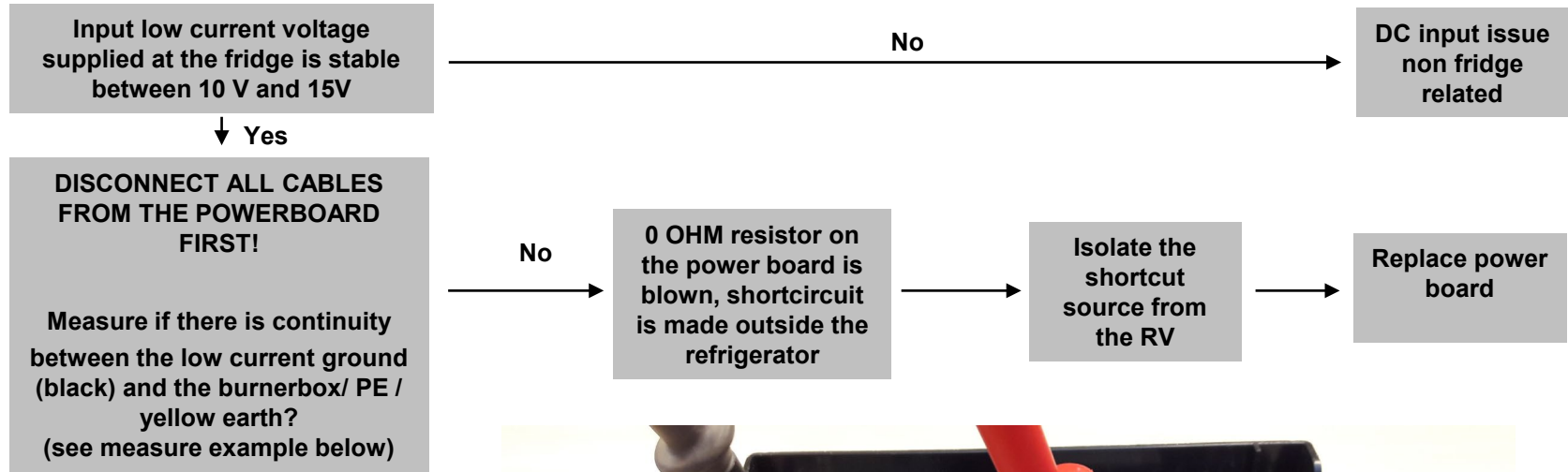


No error code:

Troubleshooting

Display is black and won't turn on when holding the power button

for minimal 5 seconds



Appendix: Wiring diagram

