

Service mode LED/LED+

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

2. Then calculate or read in the table which error you see.

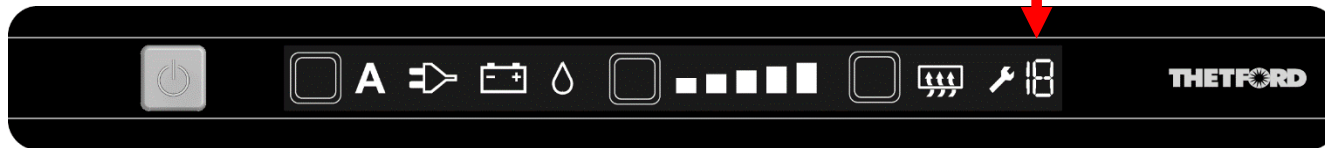


!!! Note : When supply voltage 12 VDC (low current voltage) is not available, no error code will be given. When 12 VDC is available the green power LED will be on. If battery pack is empty you can see a red light !!!

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

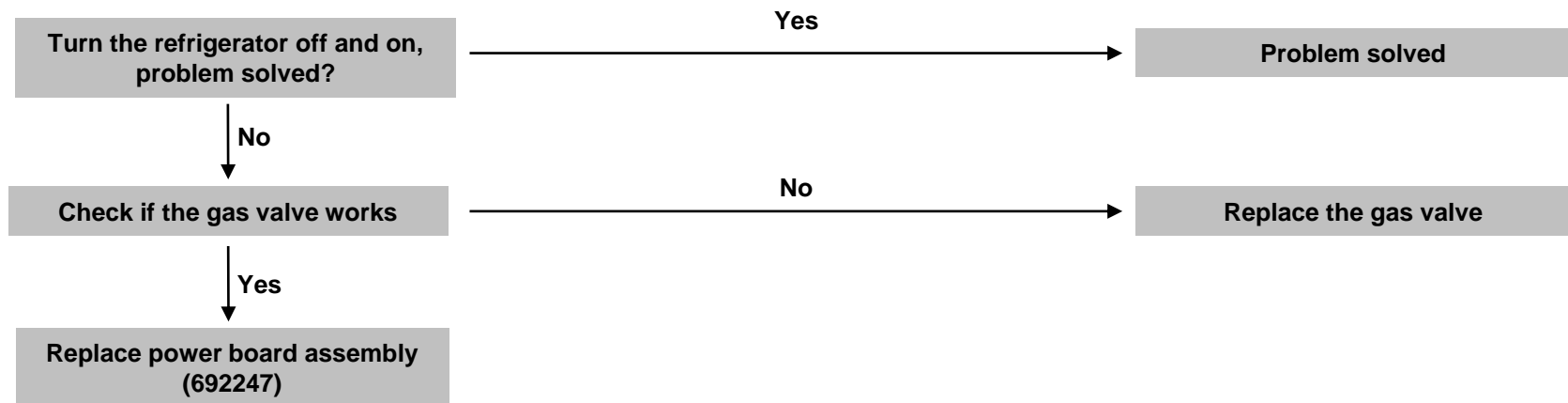
Service mode LCD

The error code will appear in the display over here.

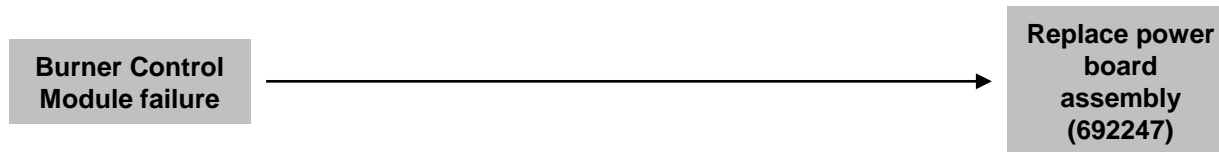


!!! Note : When supply voltage 12 VDC (low current voltage) is not available, no error code will be given. When 12VDC is available the green power LED will be on !!!

Error code 1: Senses flame when gas should be off

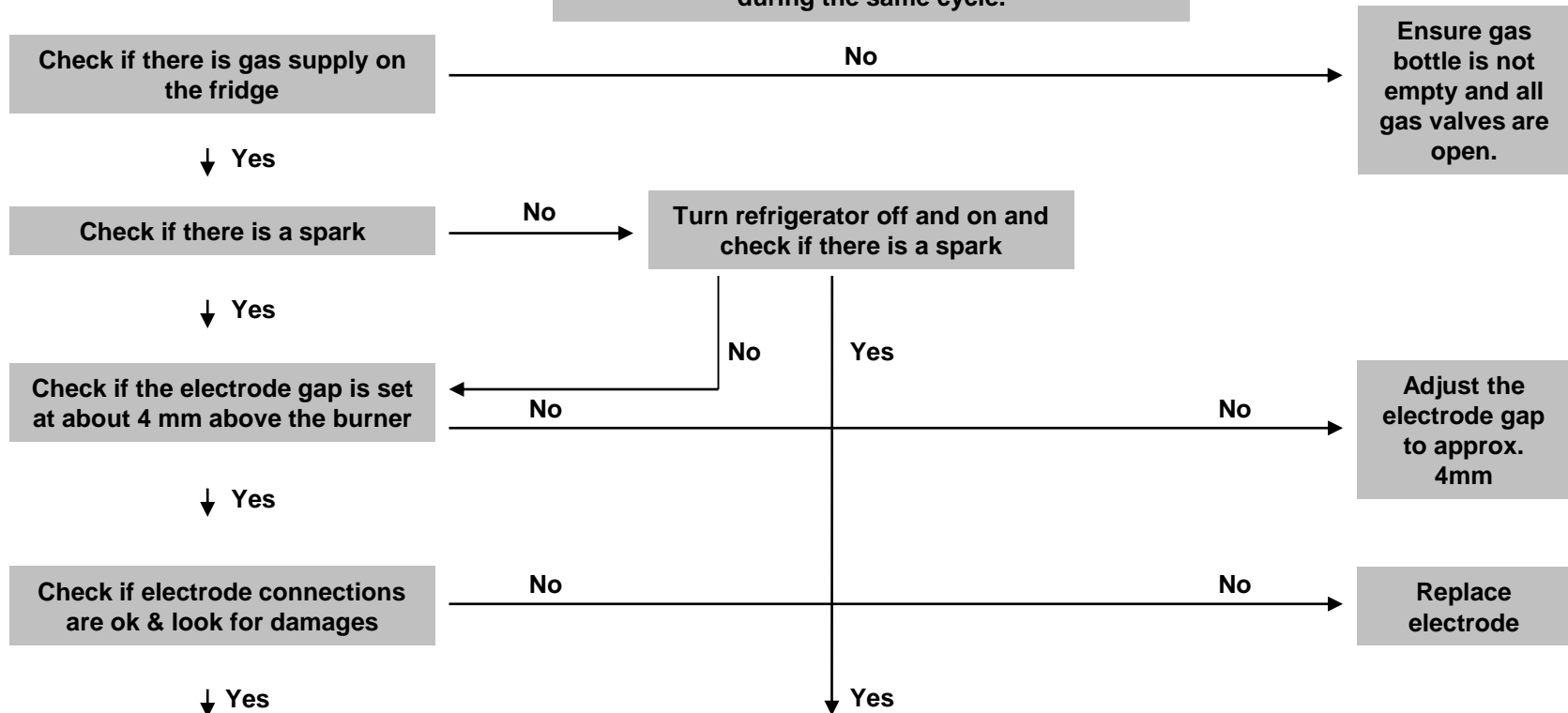


Error code 2: Burner control module returns incorrect feedback

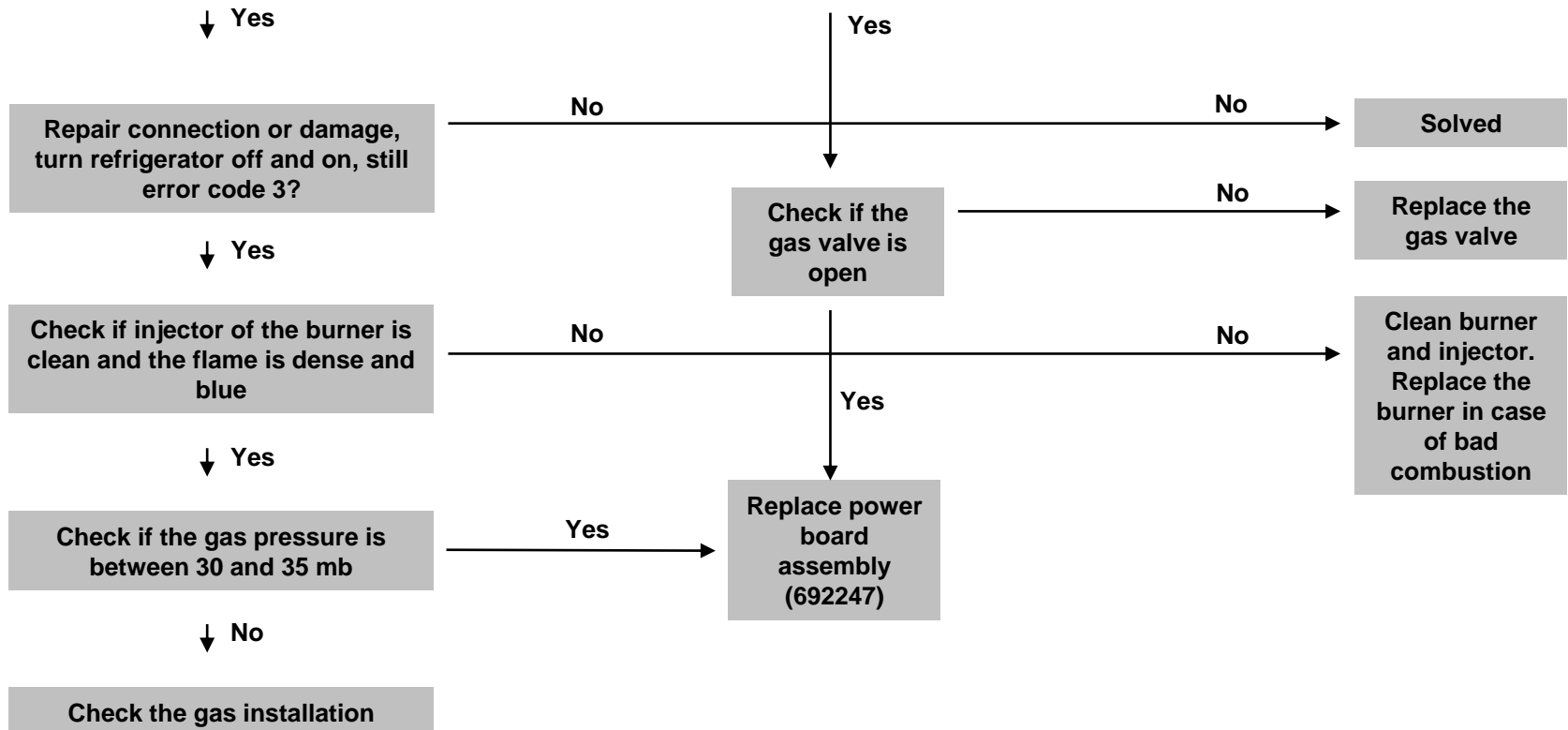


Error code 3: Gas lockout because flame fails to ignite within 30 sec.

Note: comparing with the N3000 series the N3140 series try to ignite 3 times when there is no flame detection anymore, after it was detected before during the same cycle.

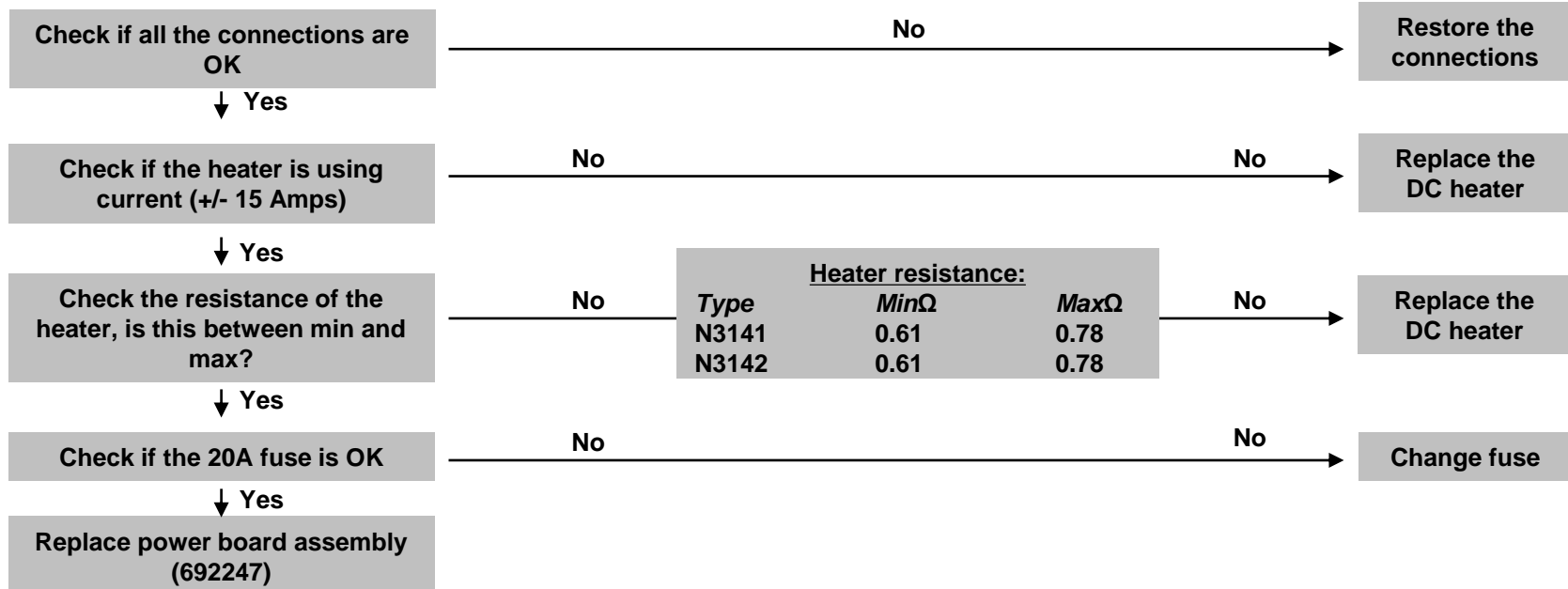


Error code 3: Gas lockout because flame fails to ignite within 30 sec.

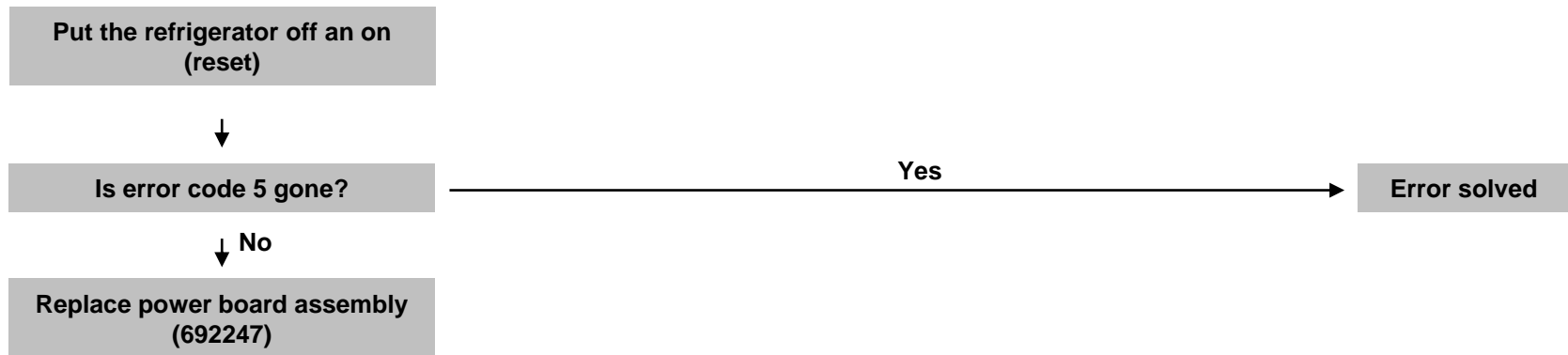


Error code 4: DC heater is off when it should be on

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

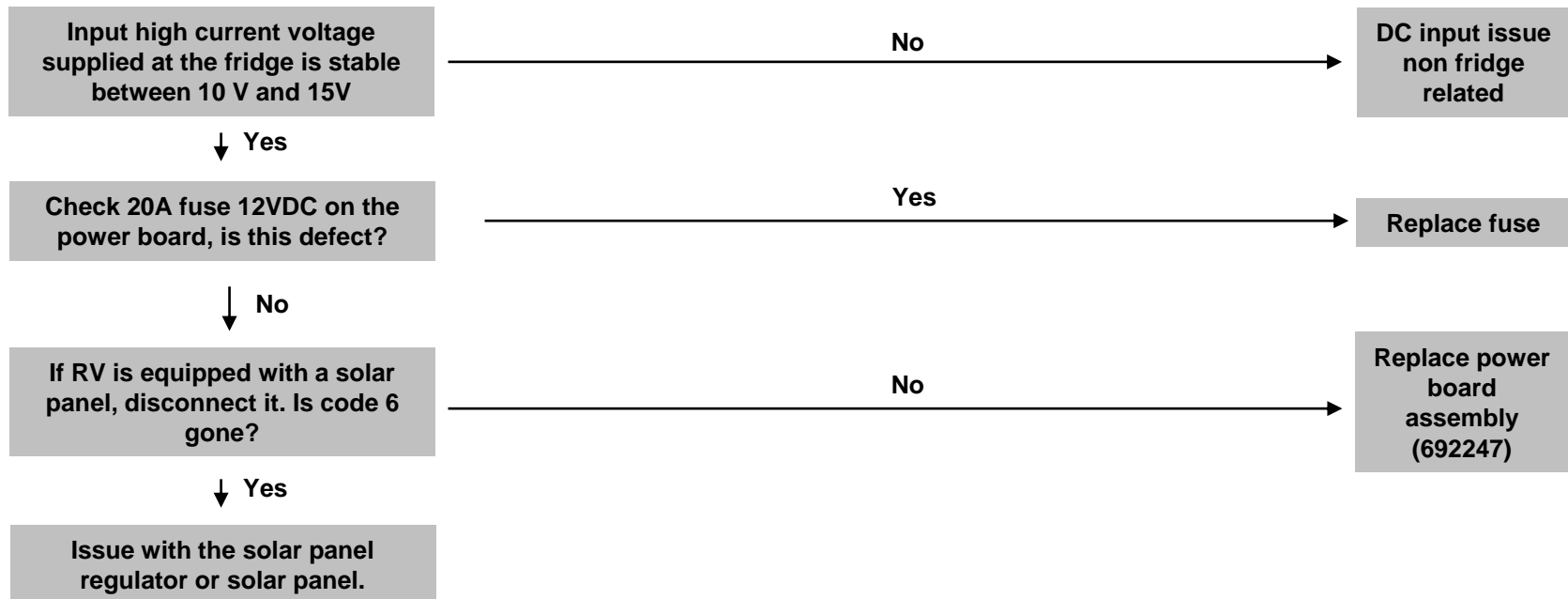


Error code 5: DC heater is ON when it should be OFF



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 !!!

Input D+ voltage supplied at the fridge is stable between 10 V and 15 V

↓ Yes

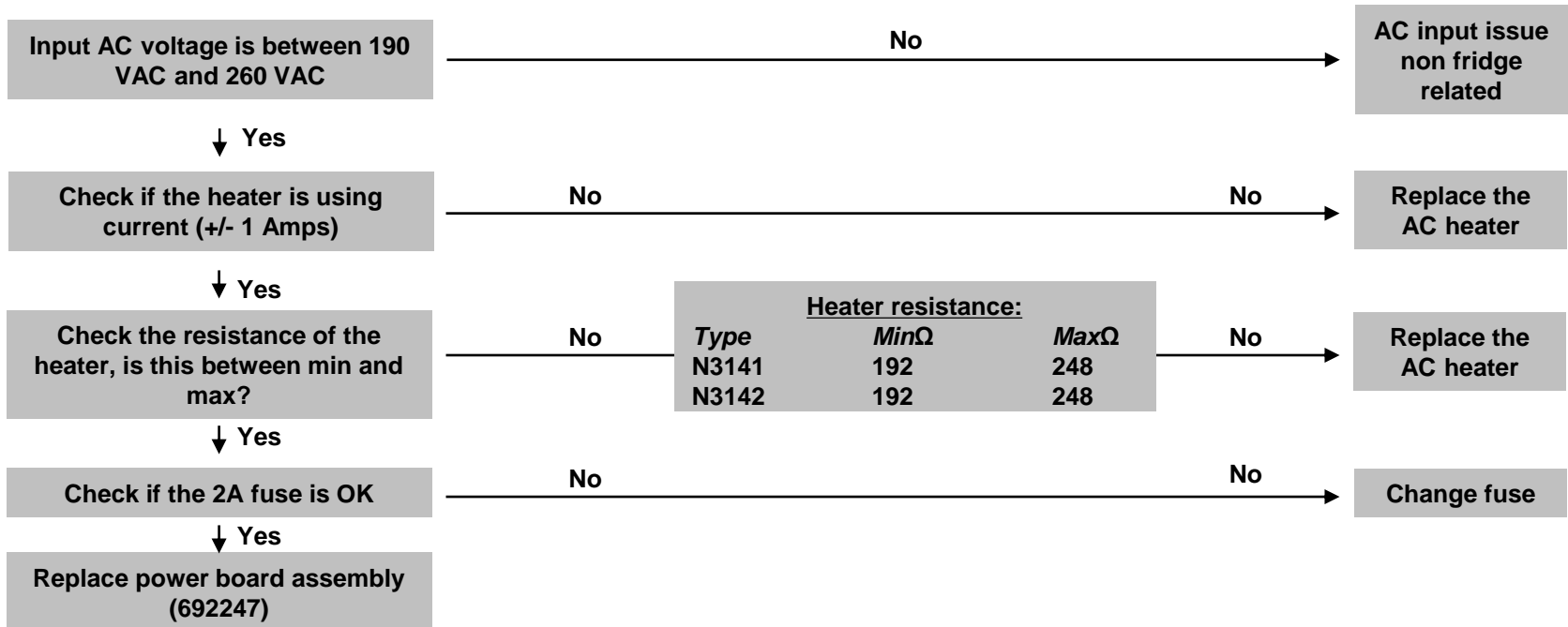
Replace power board assembly (692247)

No

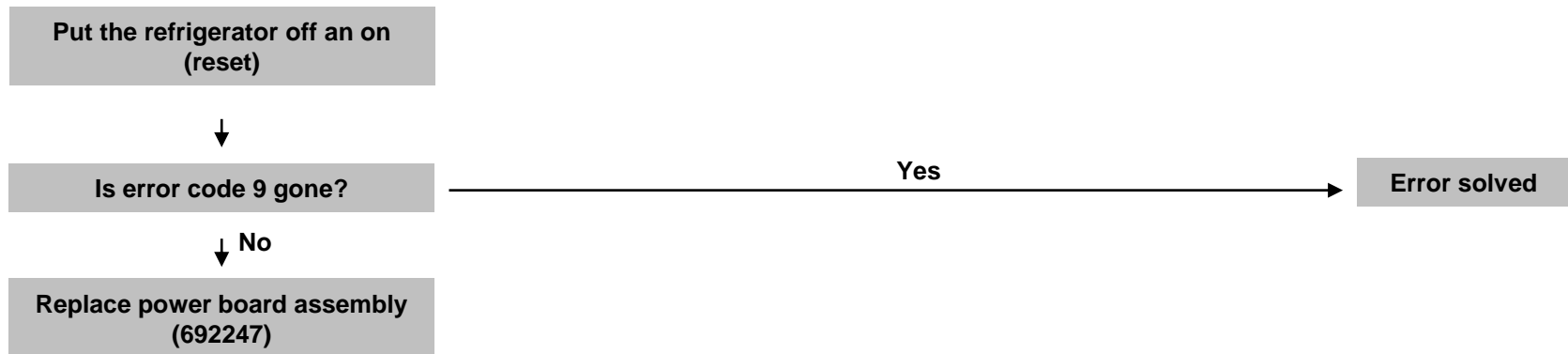
D+ input issue non fridge related

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

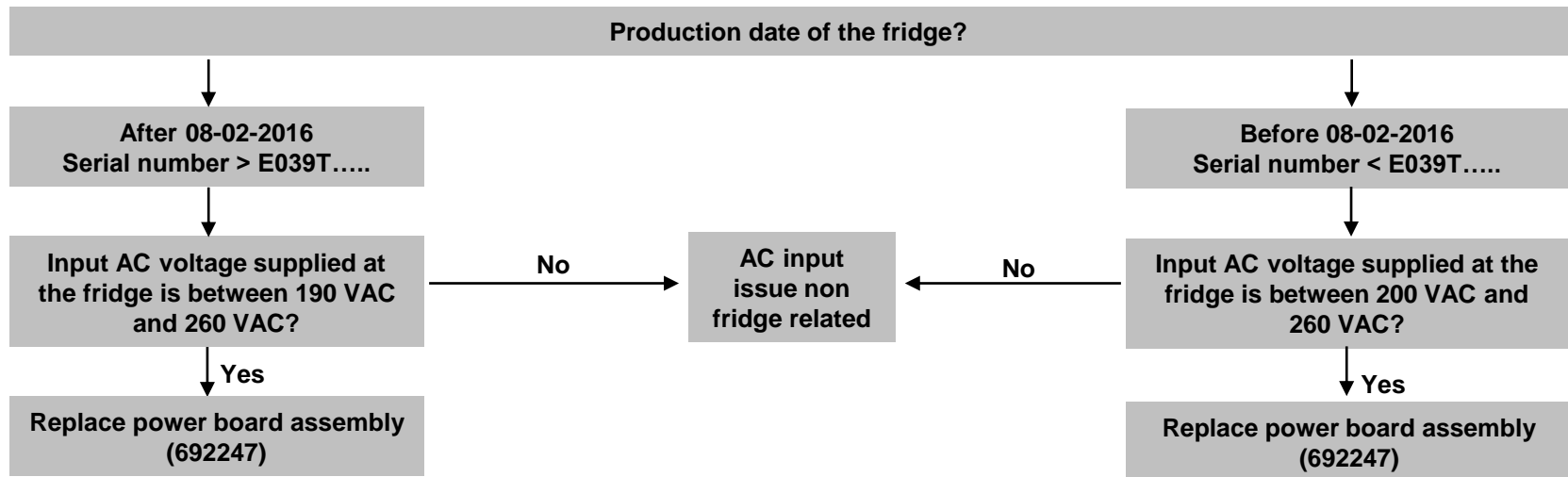
!!!Note: put fridge off when measuring resistance off the heater!!!



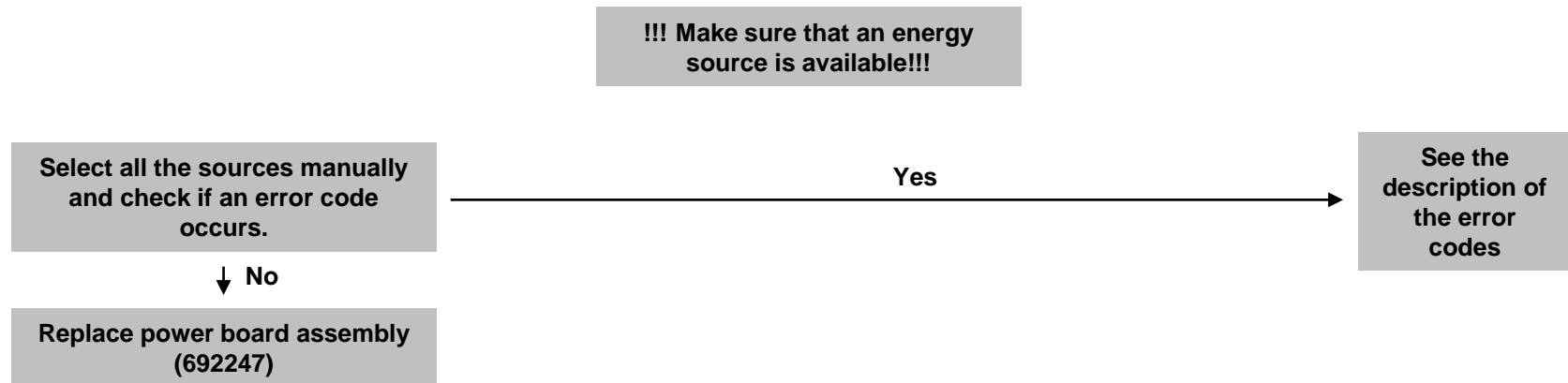
Error code 9: AC heater is ON when it should be OFF



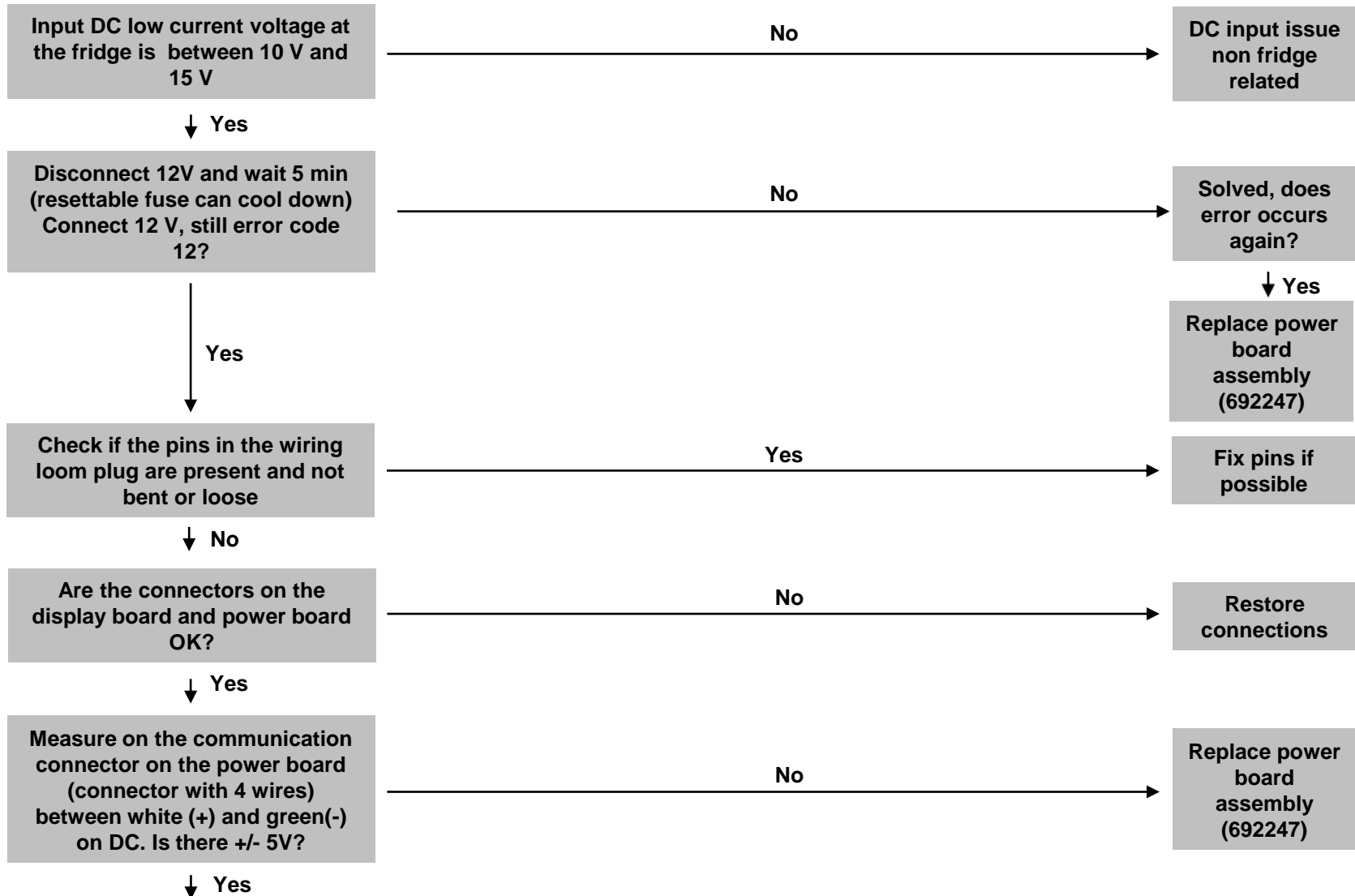
Error code 10: AC mains supply is out of range



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



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



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

↓ Yes

Measure on the display board
between white and green. Is
there +/- 5V?

No →

Replace cable
between
power- and
display board

↓ Yes

Measure on the display board
between the yellow (+) and
green (-) wire on AC. Is there a
pulse that is going on and off
between 0.5 and 0.7 VAC?

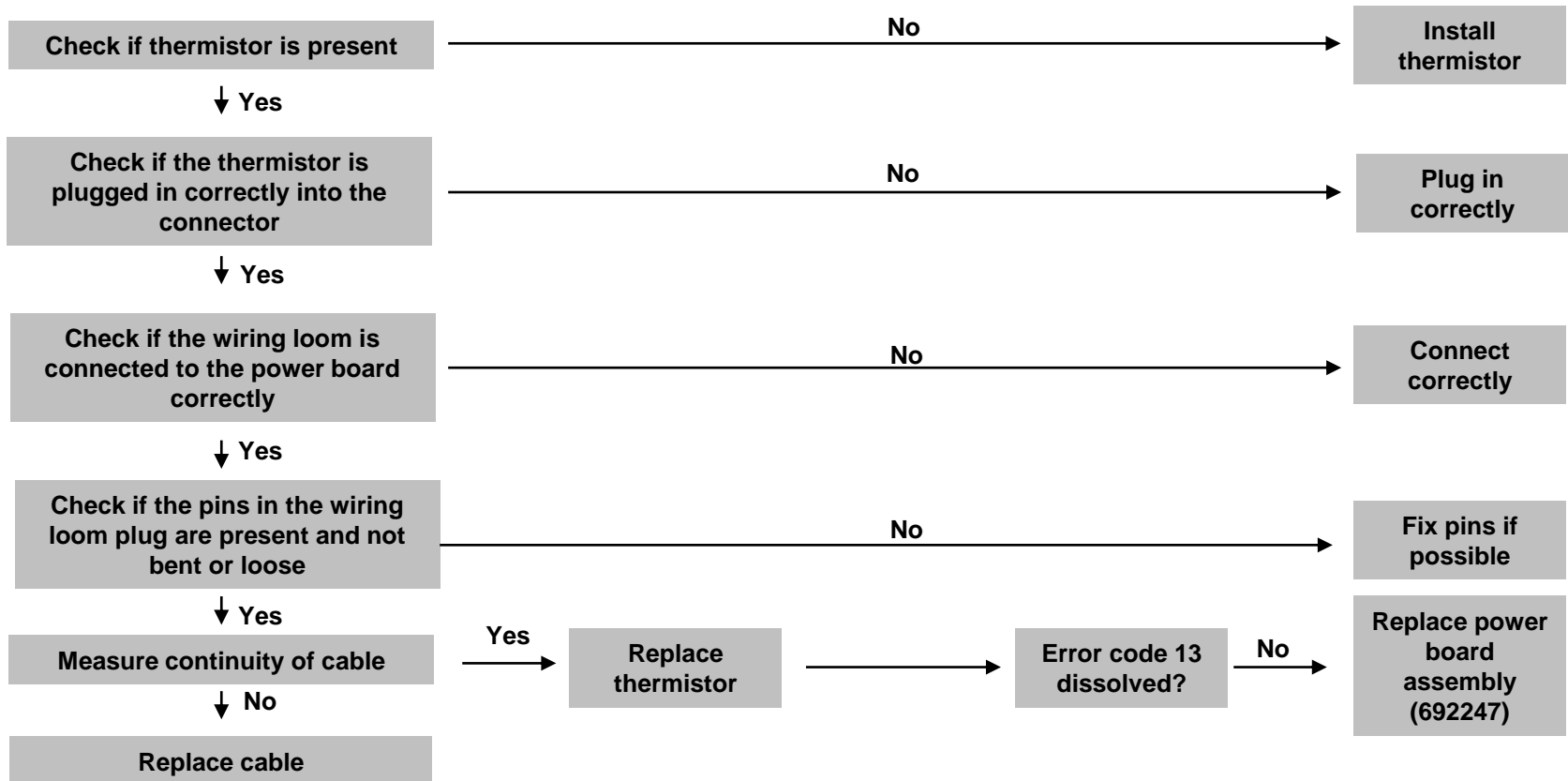
No →

Replace power
board
assembly
(692247)

↓ Yes

Contact Thetford

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 !!!

Check if the thermistor is properly fitted on the 5th fin from the right inside the cooling cabinet.

No

Install thermistor on the right place.

↓Yes

Check if the input at the DC HC poles of the power board is >12V when the 12V heater is enabled

No

DC HC input issue

↓Yes

Check if the input at the heater connection to the power board is > 12V

No

Replace power board assembly (692247)

↓Yes

Check if the heater impedance is correct in Ohm (see table error code 4)

No

Replace DC heater

↓Yes

Check if the DC heater is properly installed.

No

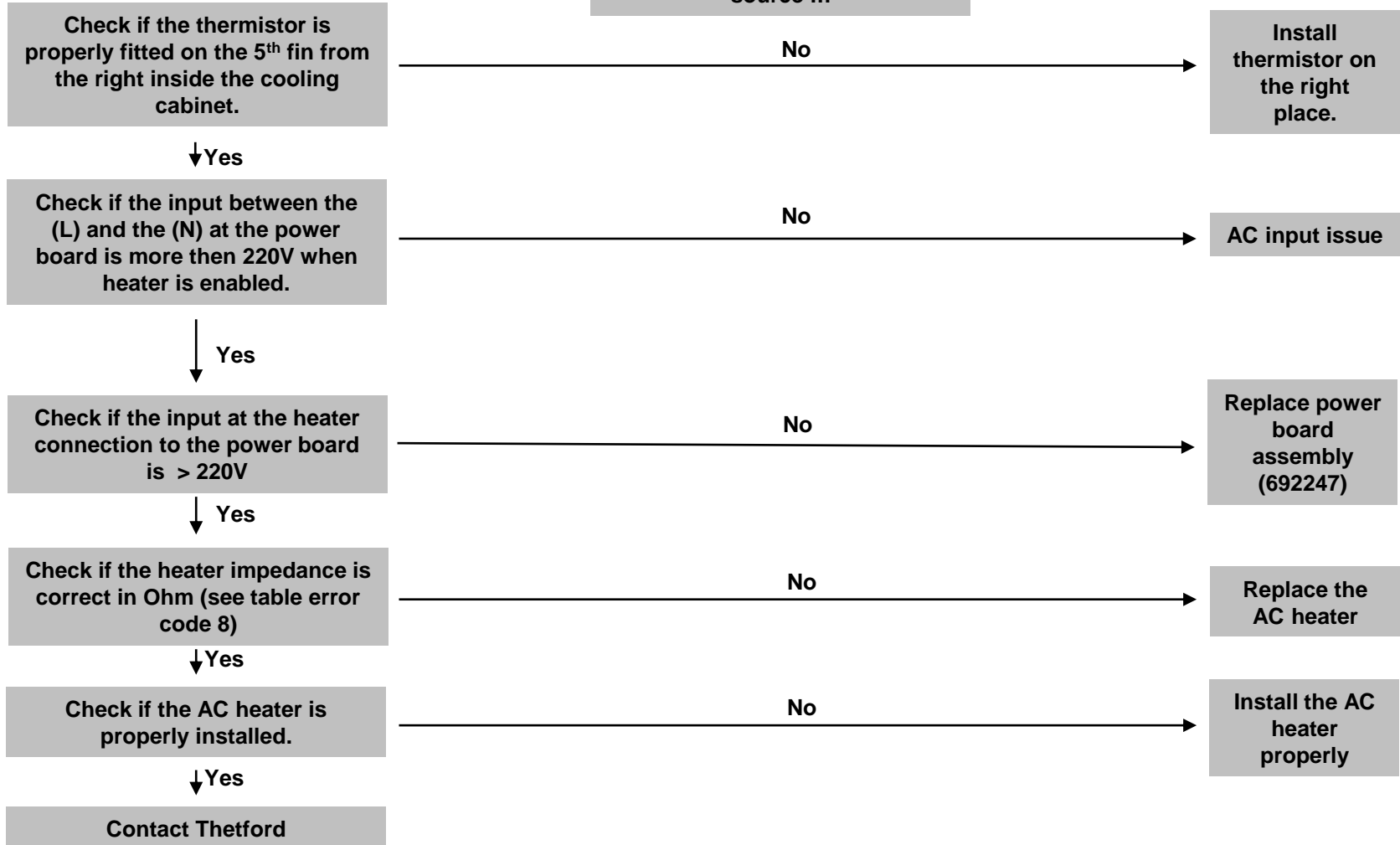
Install the DC heater properly

↓Yes

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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

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

Injector of the burner is clean.
Flame is dense and blue. Gas pressure is between 30 and 35mb

No

Clean the burner or replace the burner in case of bad combustion. And check pressure.

↓ Yes

Check if the thermistor is properly fitted on the 5th fin from the right inside the cooling cabinet.

No

Install thermistor on the right place.

↓ Yes

Check if the flame diffuser is in the pipe.

No

Install a flame diffuser.

↓ Yes

Check if the burner is aligned properly in front of the pipe.

No

Align burner

↓ Yes

Contact Thetford

Appendix: Wiring diagram

