IMPORTANT INFORMATION

DISCLAIMER

Thetford recommends and strongly advises users to engage the services of a qualified and licensed professional for the installation, maintenance, repair, or any other servicing needs associated with the product. The user understands and assumes full responsibility for hiring a professional with the requisite skills, knowledge, and qualifications to service your product. This includes, but is not limited to, tasks such as installation, repairs, modifications, or any other service required. Thetford disclaims any and all liability for any damages, losses, injuries, or other adverse consequences that may result from the user's failure to hire a qualified professional for the servicing of your product. The user acknowledges the importance of ensuring that the hired professional adheres to industry standards, guidelines, and local regulations applicable to the servicing of your product. Thetford is not responsible for the actions, omissions, or negligence of the hired professional. The user agrees to indemnify and hold harmless Thetford from any claims, liabilities, damages, costs, or expenses, including legal fees, arising from the user's decision to hire, or not hire, a professional for the servicing of the product. By using your product, the user affirms that they have read, understood, and voluntarily agreed to this disclaimer.

Service mode LED

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

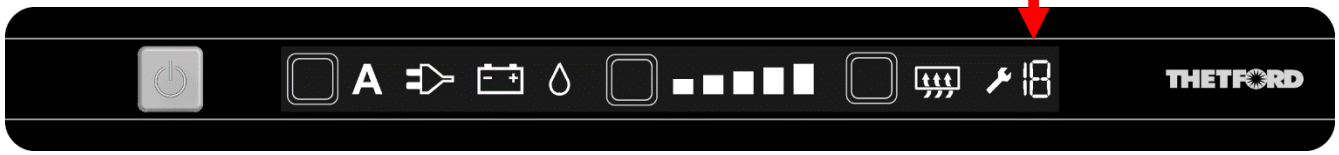
2. Then calculate or read in the table which error you see.

!!! 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

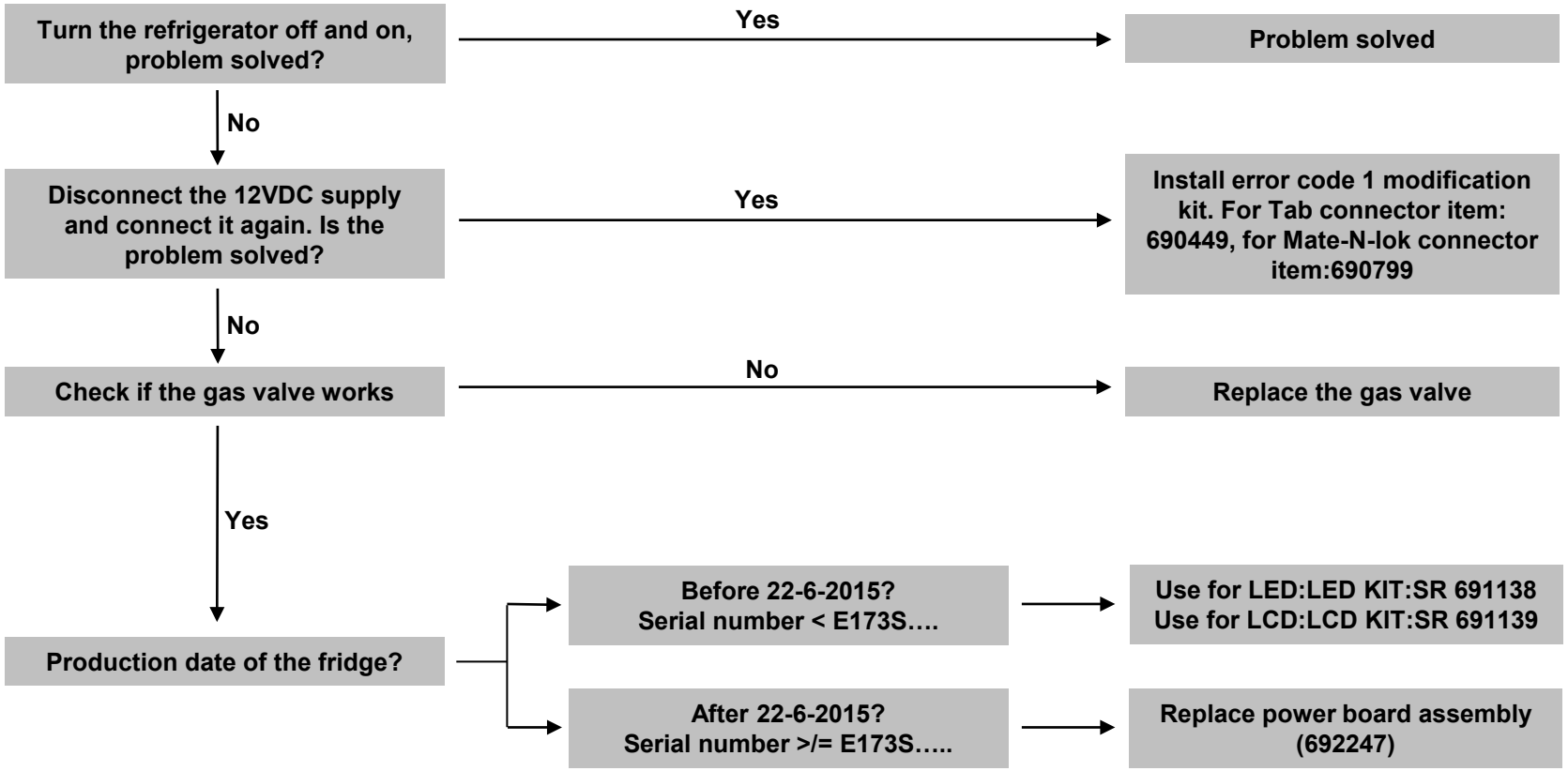
The error code will appear in the display over here.



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

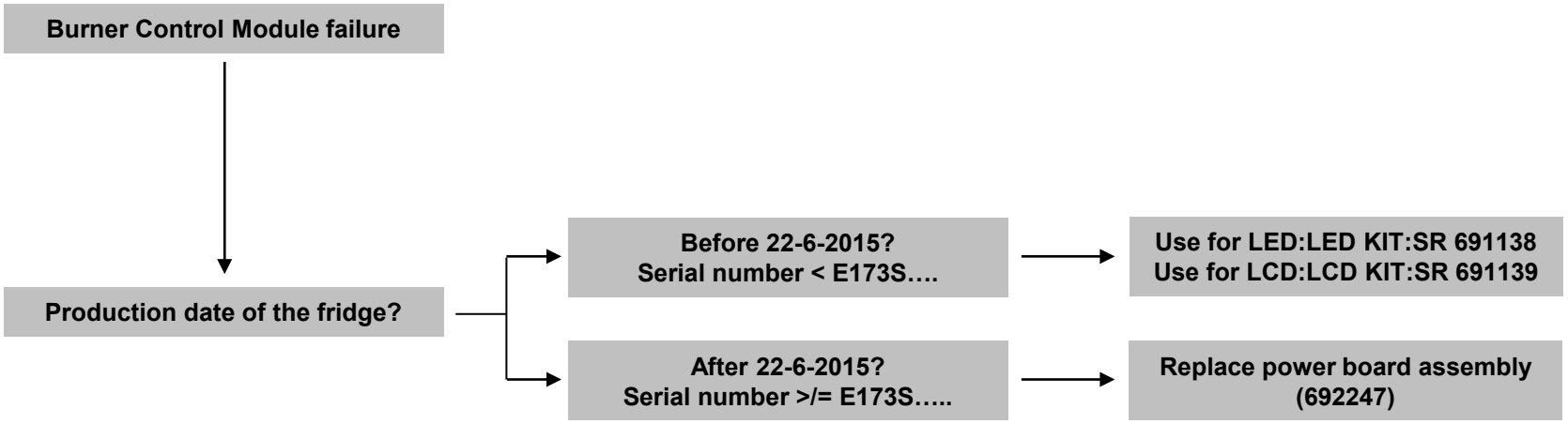
Troubleshooting

Error code 1: Senses flame when gas should be off



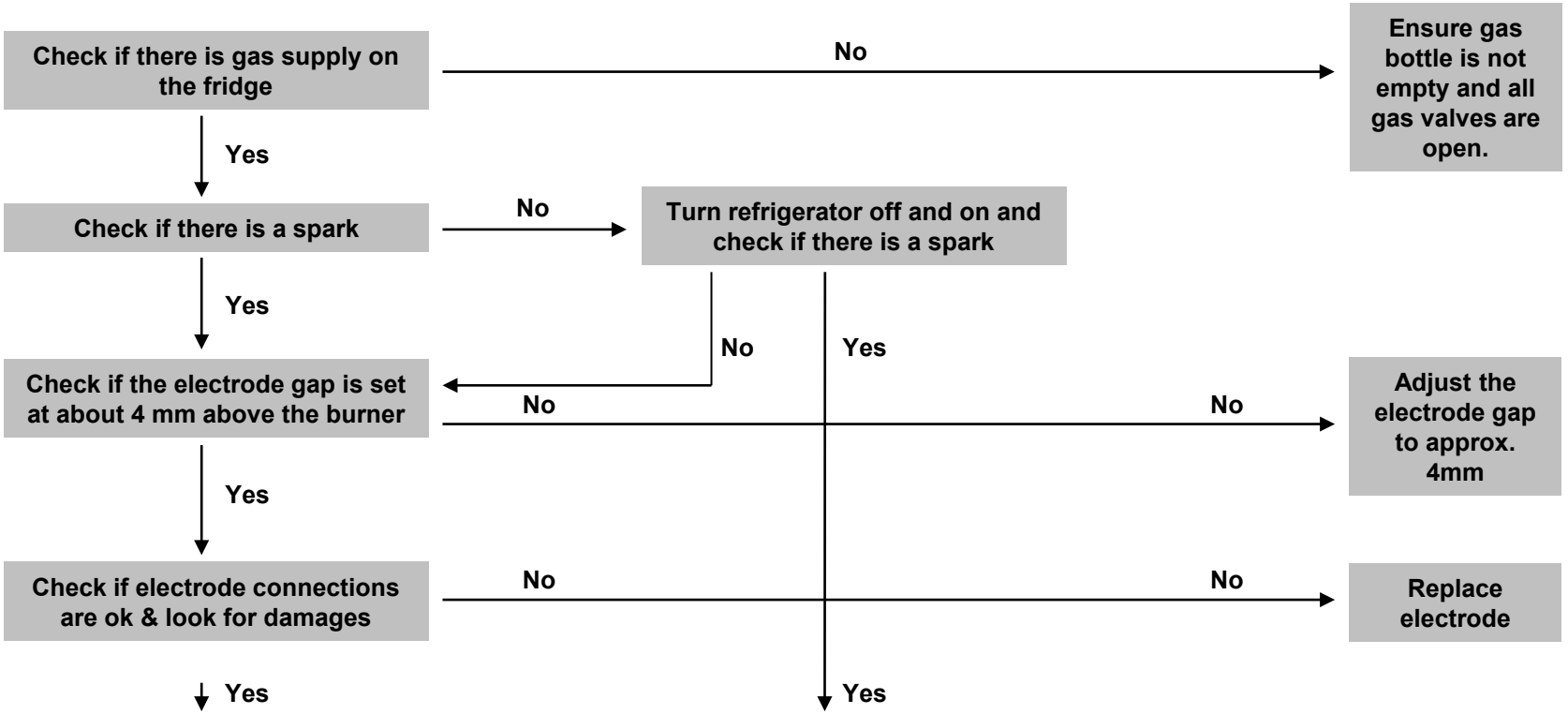
Troubleshooting

Error code 2: Burner control module returns incorrect feedback.



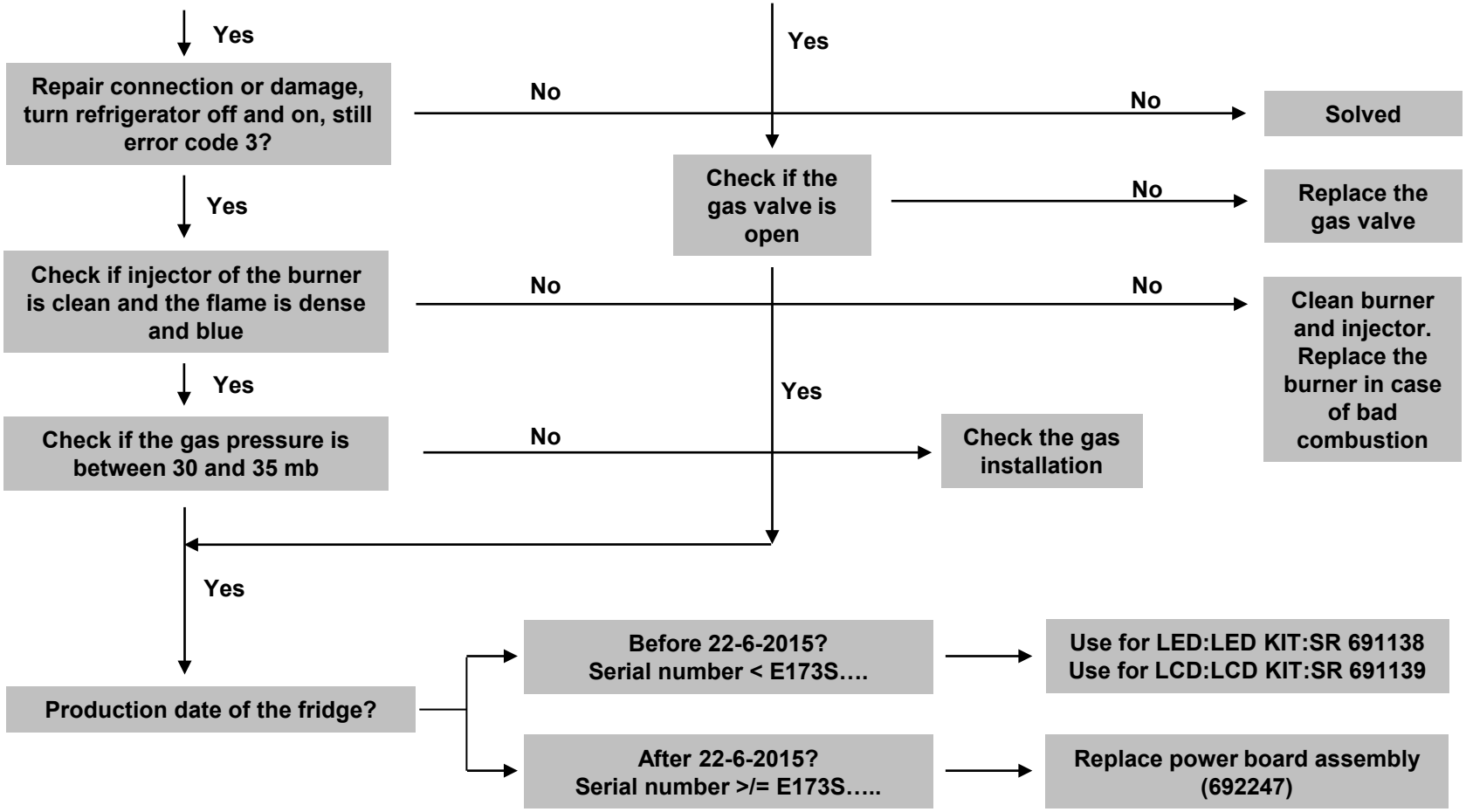
Troubleshooting

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



Troubleshooting

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



Troubleshooting

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 heater is using current (+/- 15 A large fridges and +/- 11 A small fridges)

No → **Replace the DC heater**

Yes ↓

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

No → **Replace the DC heater**

Yes ↓

Check if the 20A fuse is OK

No → **Change fuse**

Yes ↓

Production date of the fridge?

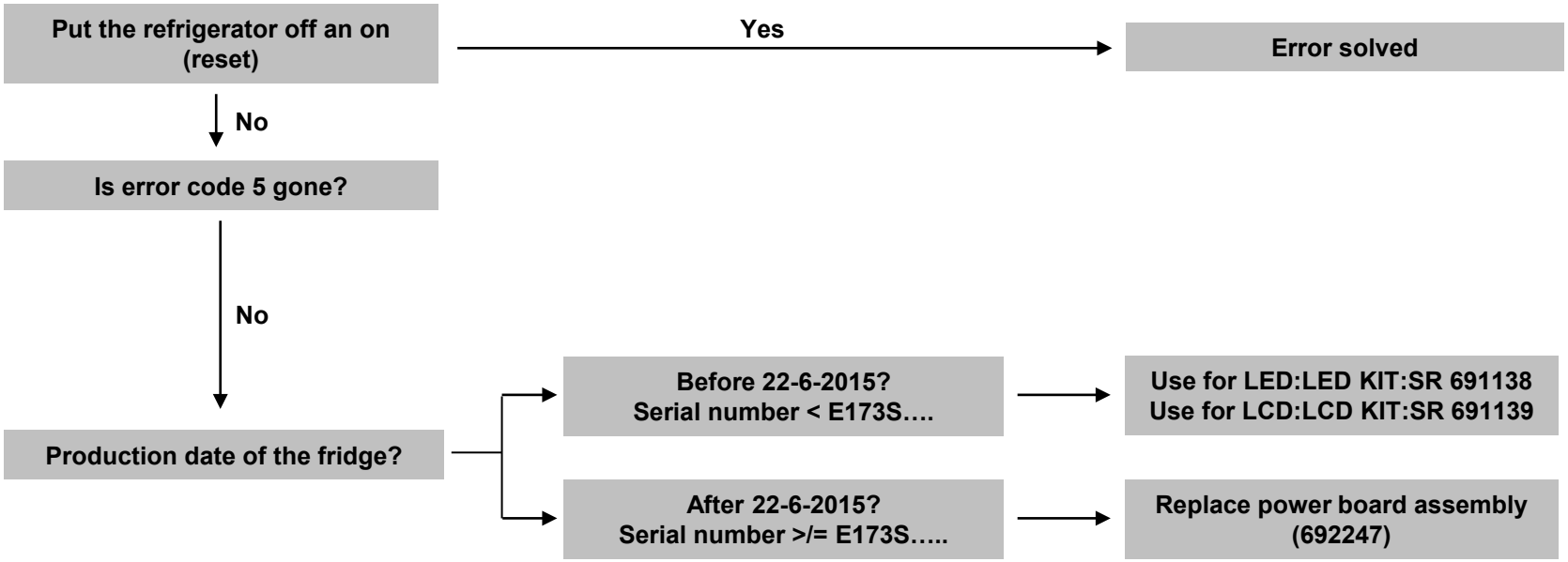
- **Before 22-6-2015? Serial number < E173S….** → **Use for LED:LED KIT:SR 691138 Use for LCD:LCD KIT:SR 691139**
- **After 22-6-2015? Serial number >/= E173S…..** → **Replace power board assembly (692247)**

Heater resistance:

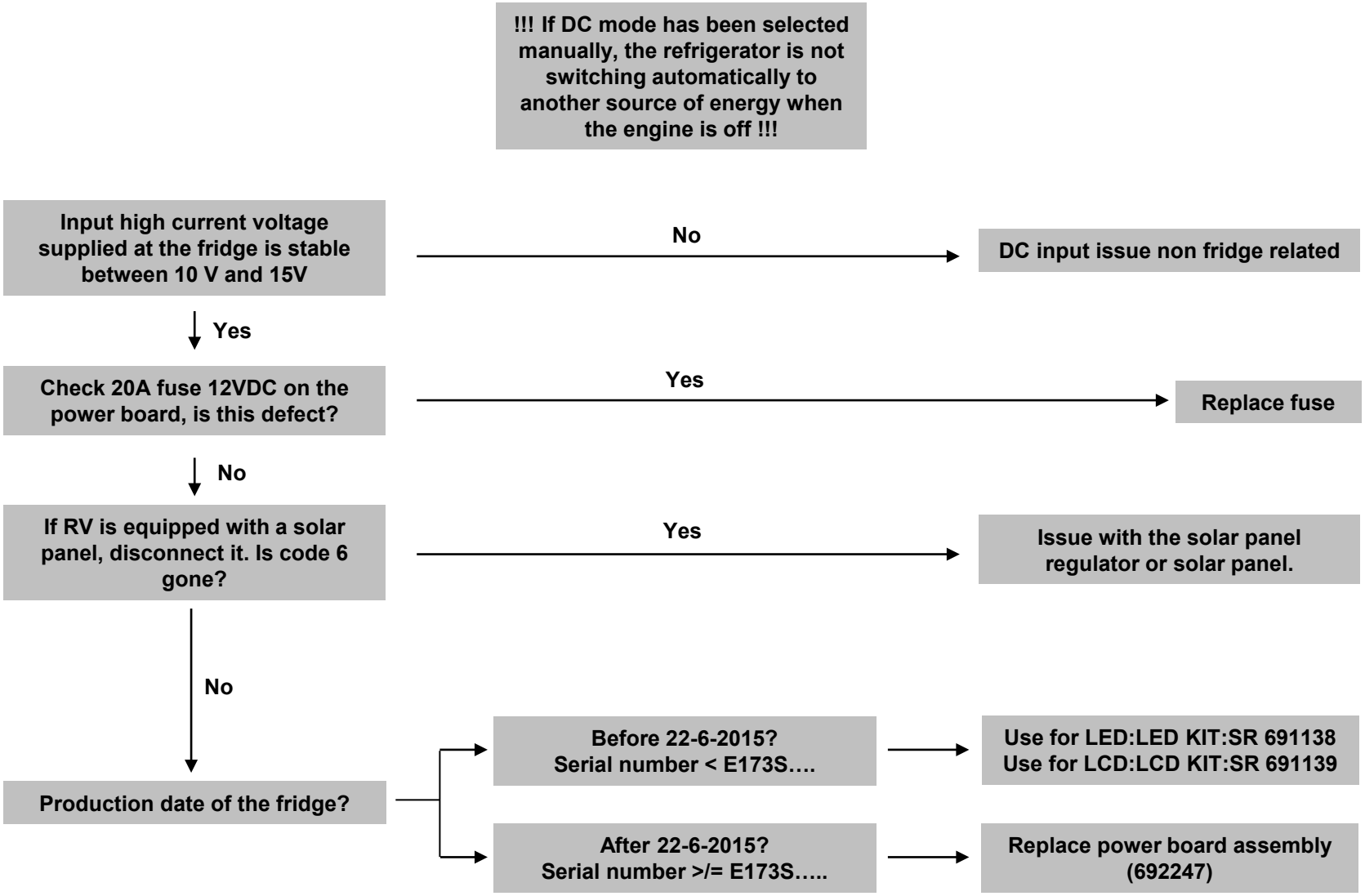
Type	*MinΩ*	*MaxΩ*
N3080	0.90	1.16
N3090	0.90	1.16
N3100	0.90	1.16
N3104	0.90	1.16
N3108	0.90	1.16
N3112	0.90	1.16
N3115	0.90	1.16
N3145	0.67	0.86
N3150	0.67	0.86
N3175	0.67	0.86

Troubleshooting

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

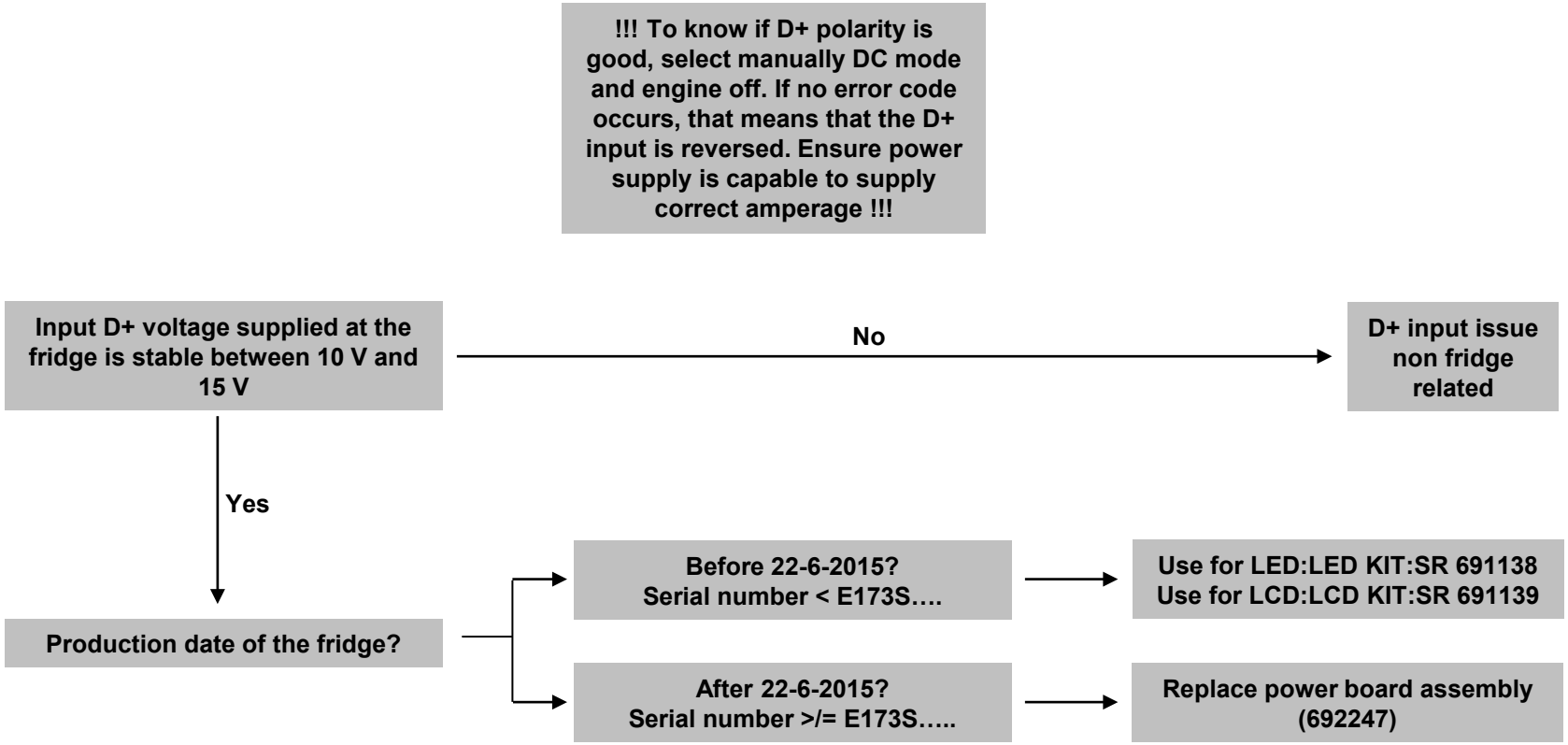


Troubleshooting Error code 6: DC high voltage is out of range (lower than 10 V or higher than 15 V)



Troubleshooting

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



Troubleshooting

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!!!

Input AC voltage is between 190 VAC and 260 VAC

- No → **AC input issue non fridge related**
- Yes ↓

Check if the fuse is OK
Before 3-3-2014 = *4A*
Serial number < E062R1000006
After 3-3-2014 = *2A*

- No → **Change fuse**
- Yes ↓

Check if the heater is using current (+/- 1 A Large fridges +/- 0.7 A Small fridges)

- No → **Replace the AC heater**
- Yes ↓

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

- No → **Replace the AC heater**
- Yes ↓

Heater resistance:

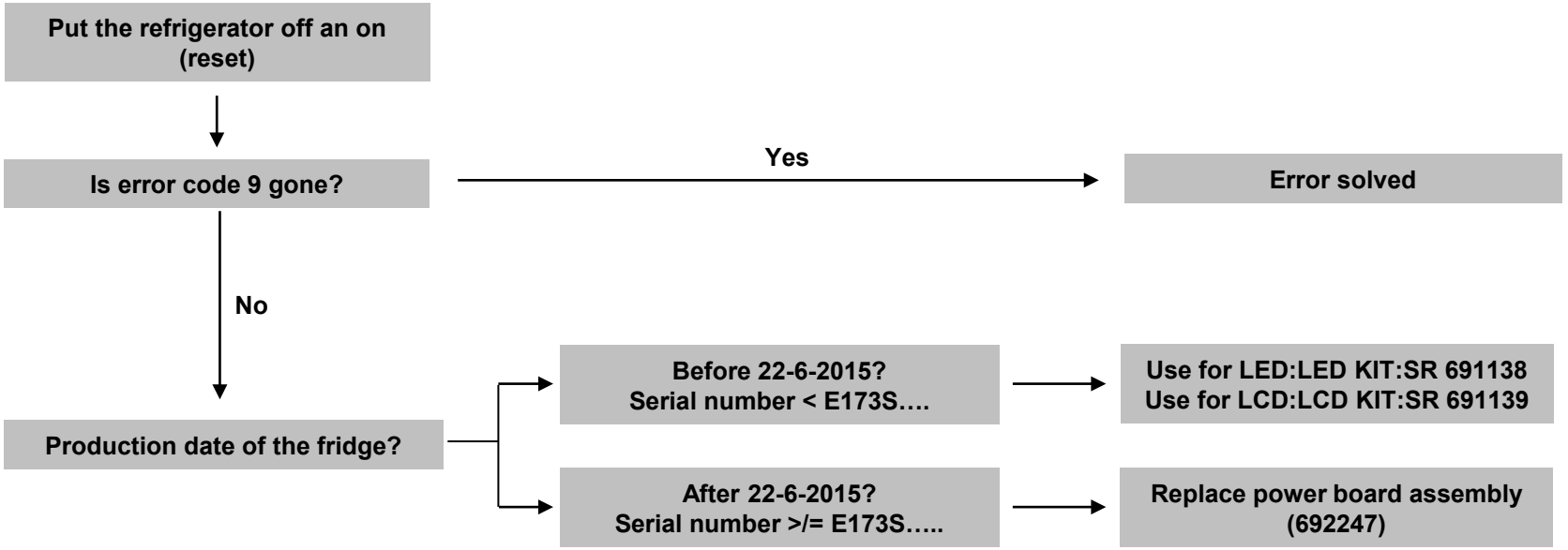
Type	*Min*Ω	*Max*Ω
N3080	302	389
N3090	302	389
N3100	302	389
N3104	302	389
N3108	302	389
N3112	302	389
N3115	302	389
N3145	210	270
N3150	210	270
N3175	210	270

Production date of the fridge?

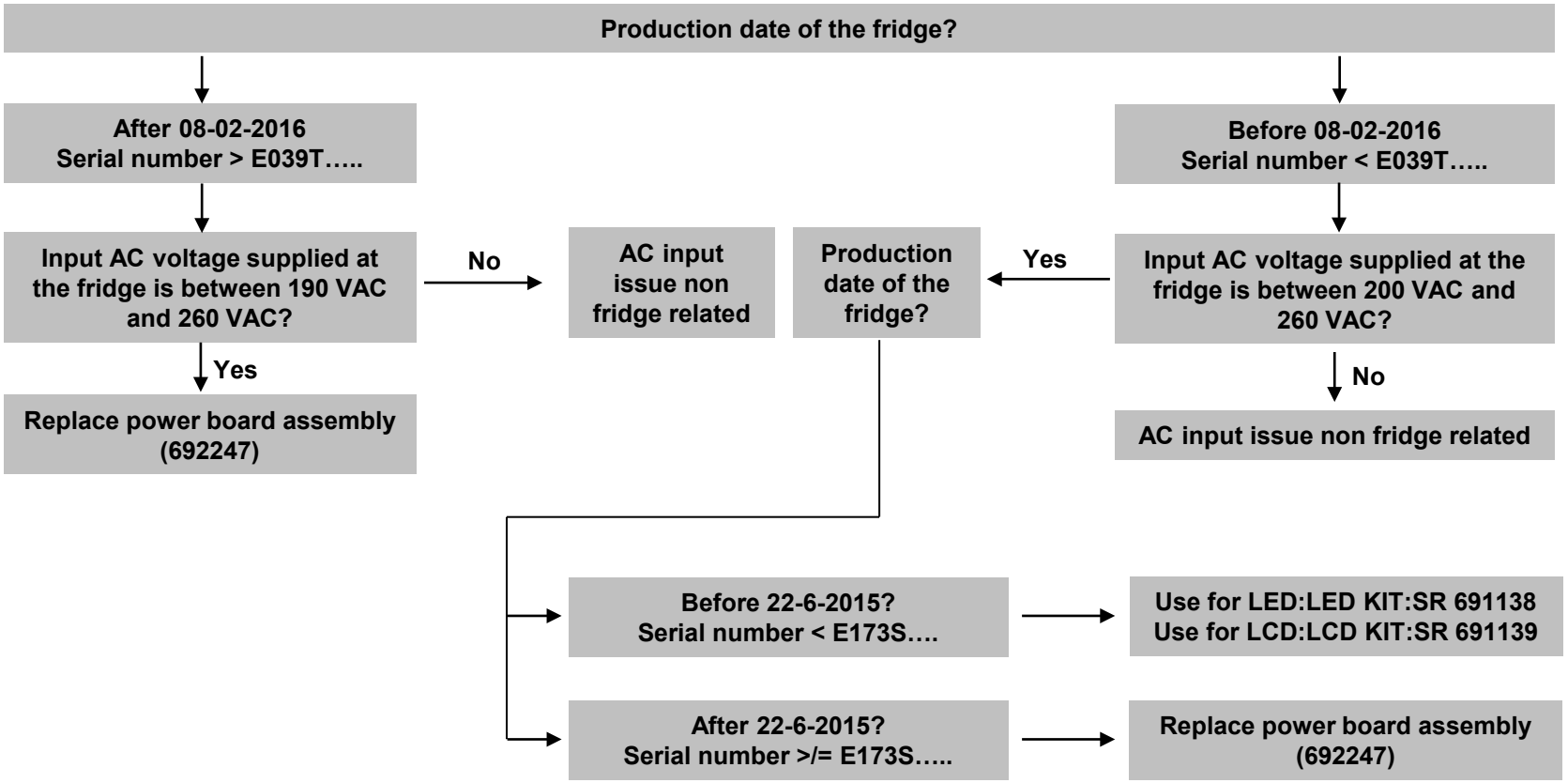
- **Before 22-6-2015?**
  Serial number < E173S…. → **Use for LED:LED KIT:SR 691138**
  Use for LCD:LCD KIT:SR 691139
- **After 22-6-2015?**
  Serial number >/= E173S….. → **Replace power board assembly (692247)**

Troubleshooting

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

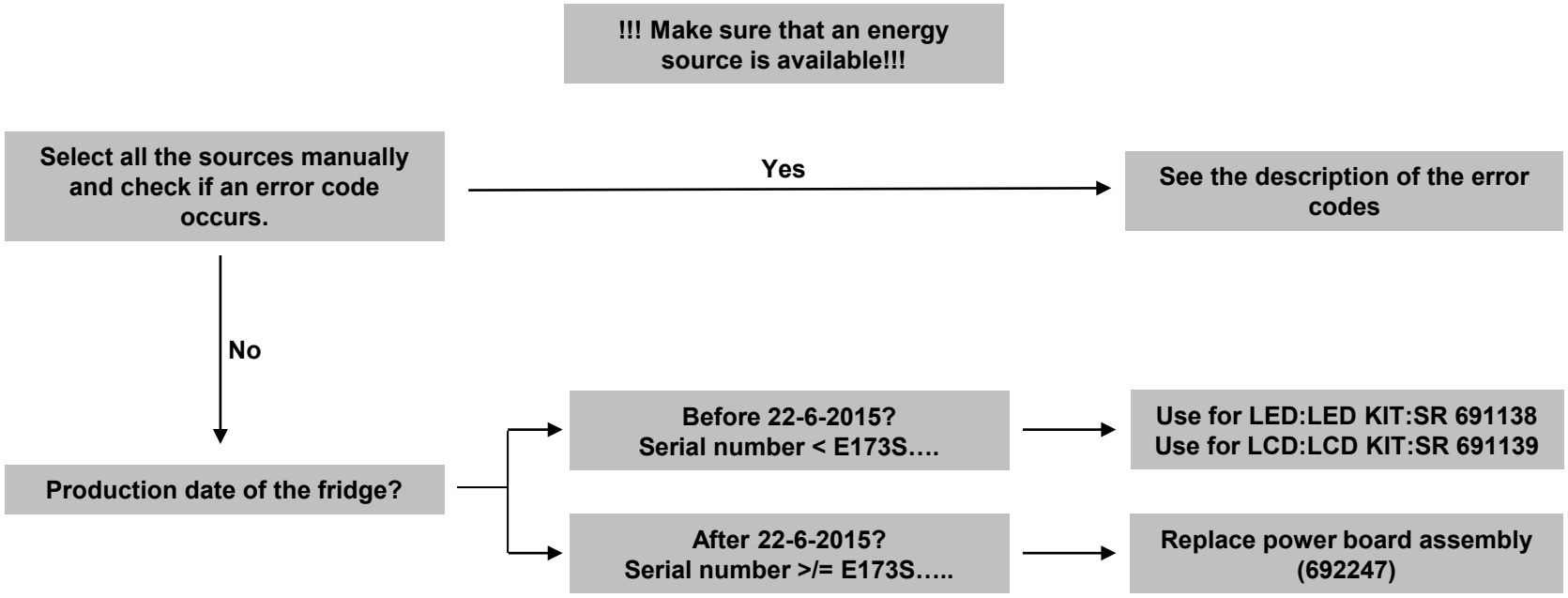


Error code 10: AC mains supply is out of range



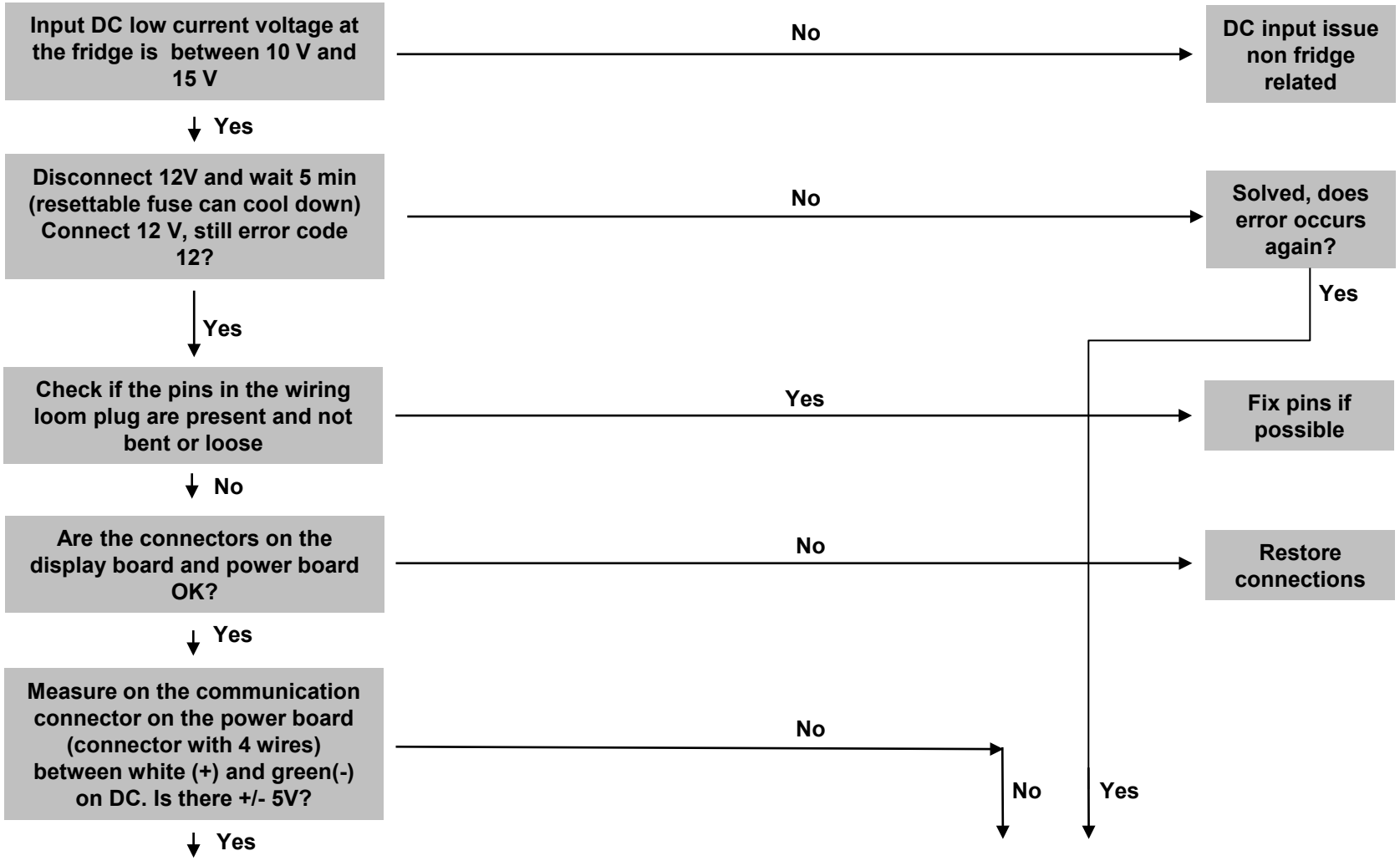
Troubleshooting

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



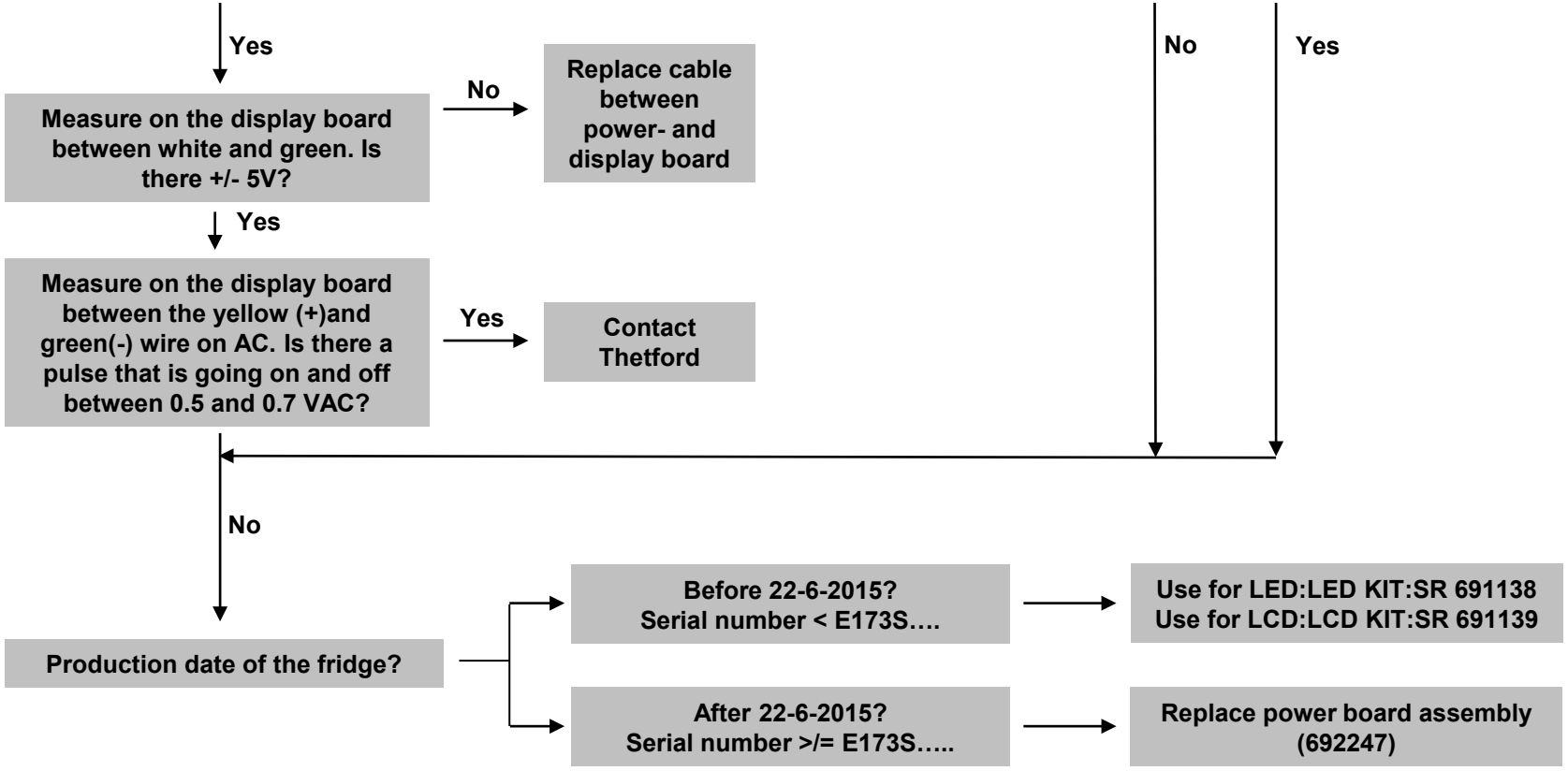
Troubleshooting

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



Troubleshooting

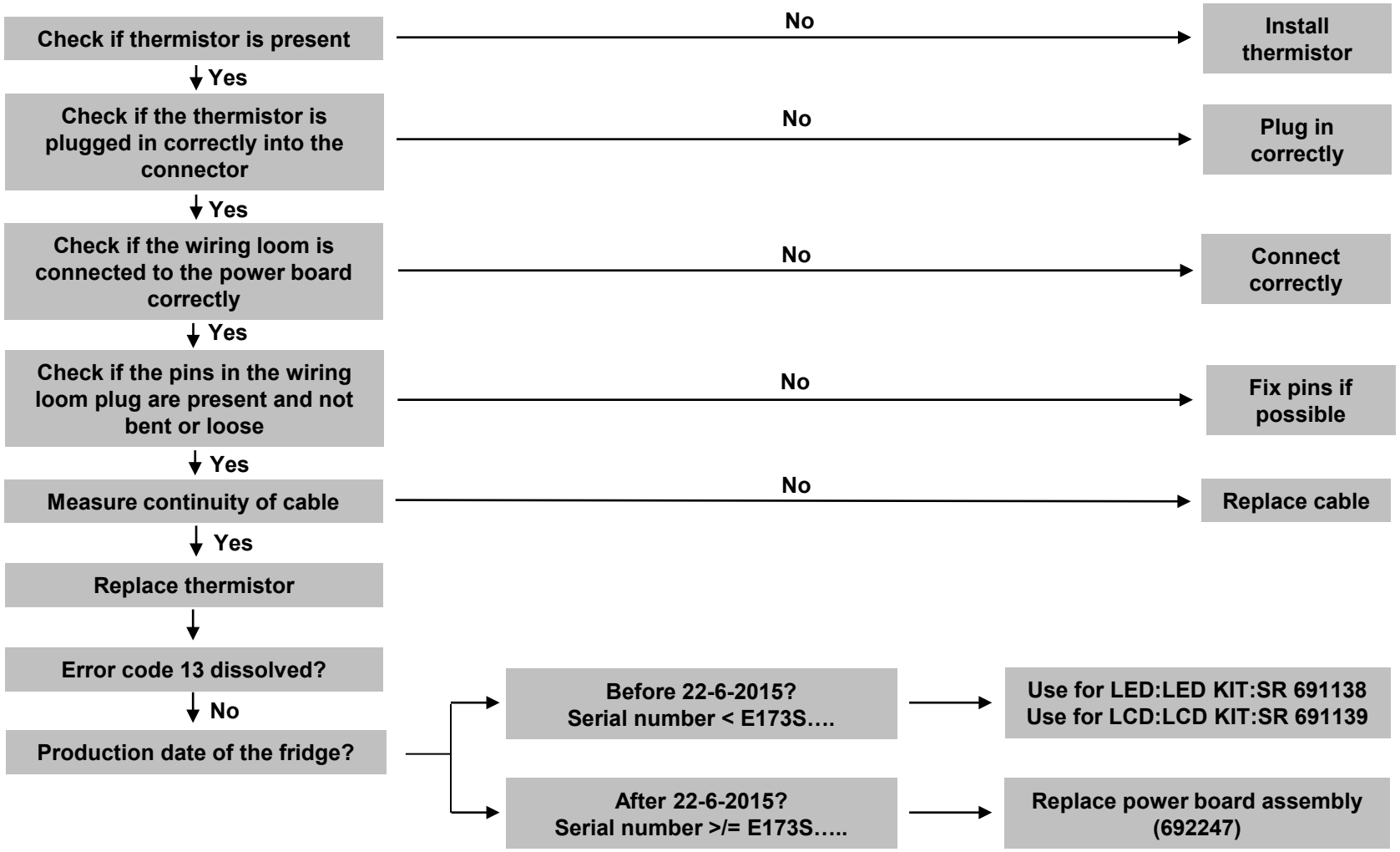
Error code 12: Display board and power board lose communication with each other.



THETFORD

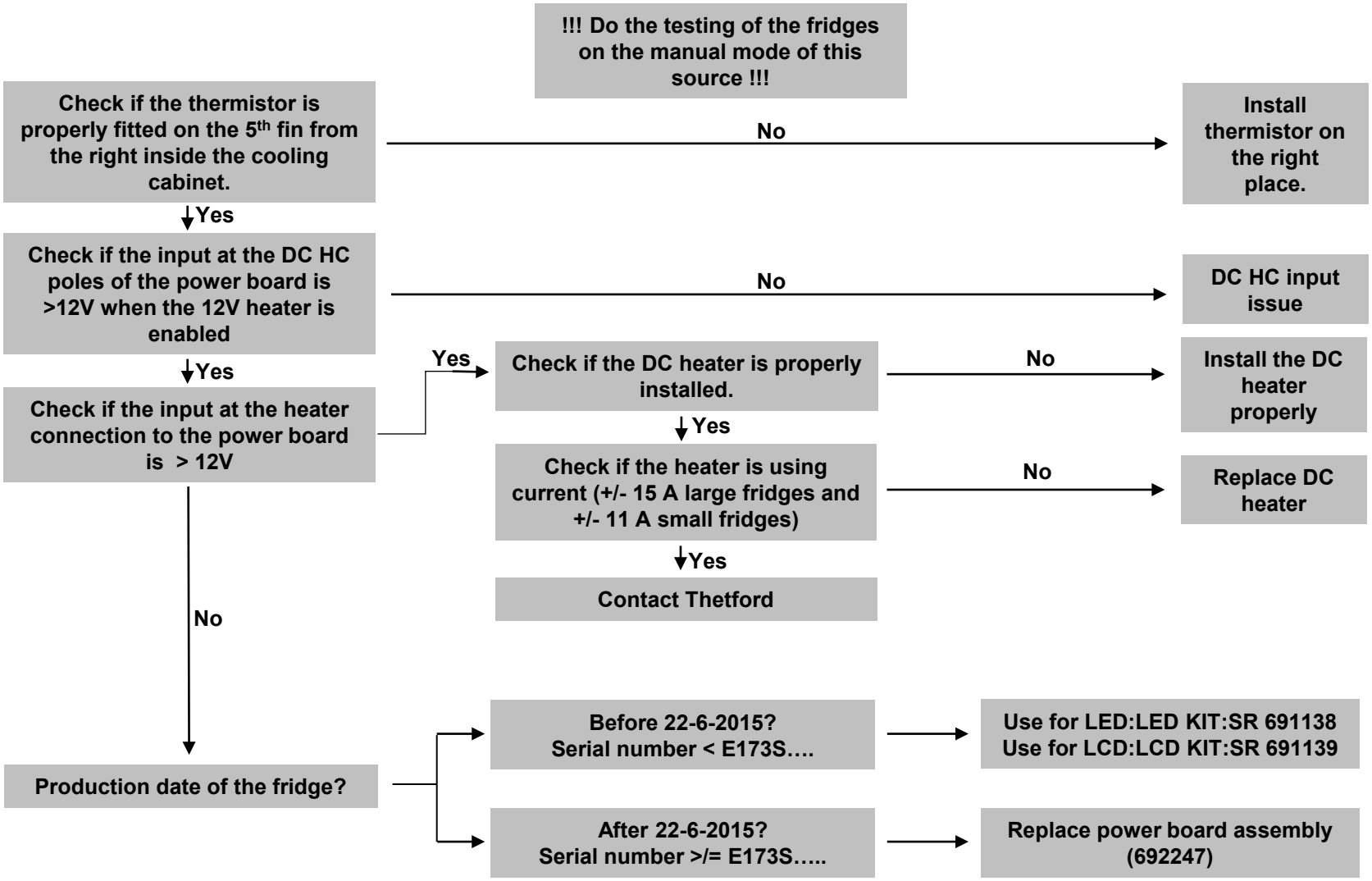
Troubleshooting

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

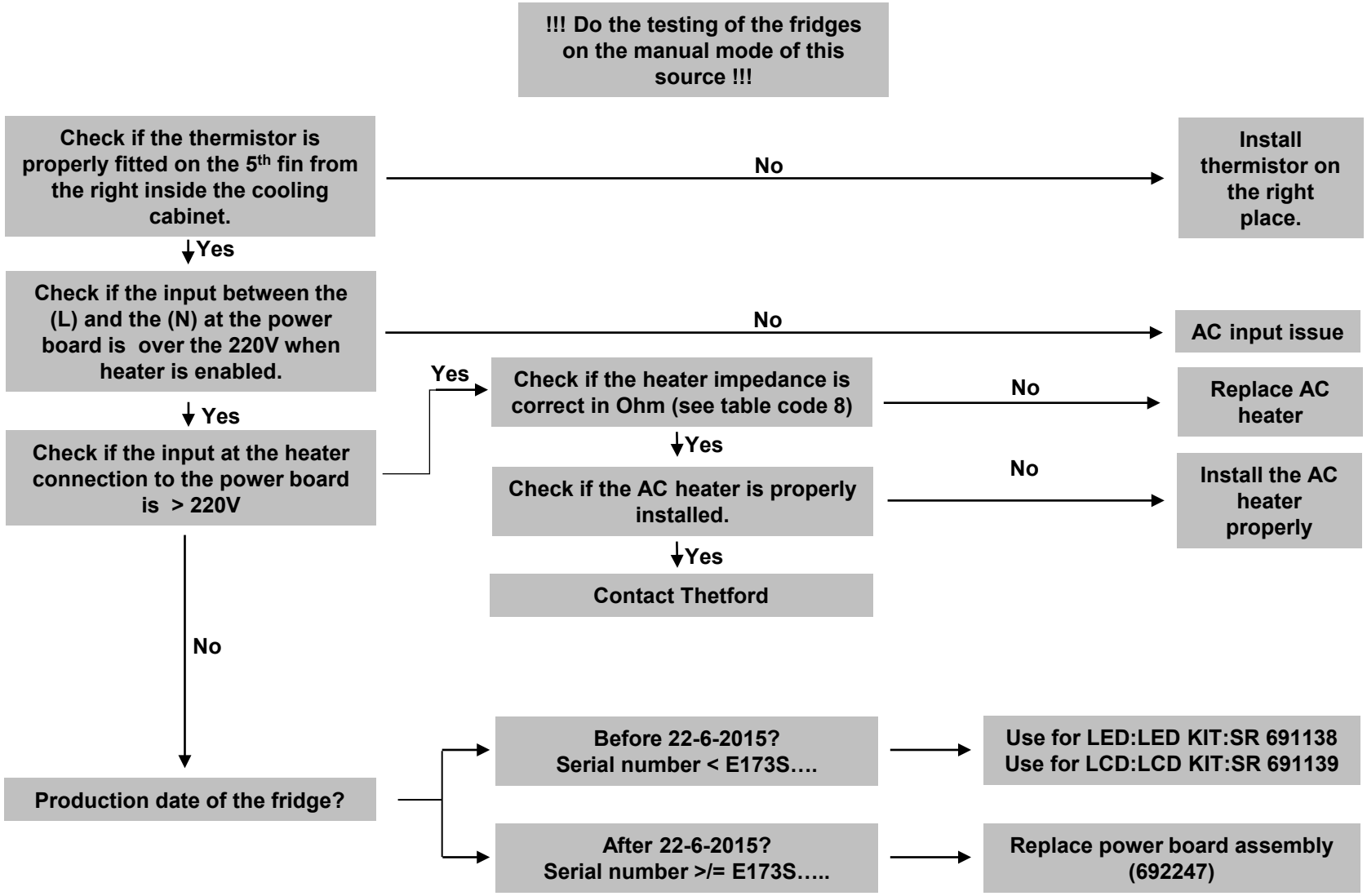


Troubleshooting

Inadequate performance on 12 VDC source and no error code.



Troubleshooting Inadequate performance on 230 V source and no error code.



Troubleshooting

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