

Fault Code	Fault Cause	Troubleshooting
10	Voltage too high <15 (12V) >29 (24V)	A) Check Voltage at the battery B) Check Voltage at the heater
11	Voltage too low <10.2 (12V) >20.5 (24V)	A) Check Voltage at the battery B) Check Voltage at the heater C) Charge Battery
13	Second start failure	A) Check there is sufficient fuel in the fuel tank (or you have a positive supply), there are no blockages, and that the fuel filter is clean B) Check that nothing is blocking the air inlet or exhaust pipes
12	Software overheating	A) Check coolant level - If necessary, refill once cooled and re-start heater
14	Overheating	
15	Overheat lock (10 time starting Failure)	B) Check whether the water pump is working
17	Overheating hardware	
20	Glow pin broken circuit	A) Clean the glow plug of any carbon build-up
21	Glow pin short circuit	B) Change glow pin C) Change controller
30	Fan rotation speed is too high	A) Change controller
31	Broken circuit in the air motor	A) Check that the fan wheel is not rubbing B) Change the air motor
32	Short circuit in the air motor	C) Change Controller
33	Fan rotation speed is too low	A) Check if the voltage of the heater is too low B) Check if the fan wheel is rubbing C) Change Controller
38	Matrix heater broken circuit	A) Check matrix heater motor
39	Matrix heater short circuit	
41	Water Pump broken circuit	A) Check the water pipe for kinks and blockages
42	Water pump short circuit	B) Replace water pump
47	Fuel pump short circuit	A) Ensure the fuel pump lead is correctly installed
48	Fuel Pump broken circuit	B) Change fuel pump C) Change controller
50	Starting Lock (see 13)	A) See 13
51	Temperature of the flame sensor is too high	A) Wait for flame sensor to cool and re-start B) Change flame sensor (normal temperature resistance >1Ω)
52	Flame out three times (See 13)	A) See 13
60	Temperature sensor broken circuit	A) Check temperature sensor (normal temperature resistance is about 10Ω)
61	Temperature sensor short circuit	B) Change temperature sensor
64	Flame sensor broken circuit	A) Check flame sensor (normal temperature resistance is about 0.8Ω)
65	Flame sensor short circuited	B) Change flame sensor
71	Overheat sensor broken circuit	A) Check overheat sensor (power off protection switch) B) Change overheat sensor
72	Overheat sensor short circuit	C) Change controller
99	Invalid fault information	A) Change controller
D3	Maintenance Reminder	A) Clean carbon build-up inside the heater