Rinnai

All Gas Continuous Flow

ERROR CODES

Error code	Fault	Action
-	Noticeable Reduction in Water Flow	Inlet water filter needs to be cleaned.
03	Power interruption during Bathfill. Water will not flow when power restored.	1. Turn off all hot water taps. 2. Press the ON/OFF button on a controller twice.
05	By-Pass Flow Control Failure.	1. Check resistance values of the by-pass flow control. 2. Replace By-Pass flow control device.
10	Air Supply or Exhaust Blockage.	1. Check internal air filter is clean with no obstructions (Indoor Water Heaters Only) 2. Check High Altitude setting if installed in alpine areas 3. Check Combustion air and Exhaust vents are not blocked and approved venting materials are being used. (Indoor Water Heaters Only) 4. Check vent length is within limits. (Indoor Water Heaters Only) 5. Check fan for debris and ensure wheel turns freely. 6. Verify check valve is not stuck between fan casing and burner body.
	Condensate Pipe Blockage.	1. Check condensate line is not blocked. 2. Check for proper slope of drain pipe. 3. Ensure condensate drain pipe is not frozen up.

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Error code	Fault	Action
11	"No ignition. Unit stops without flame igniting."	1. Check gas supply. 2. Check gas type and inlet gas pressure. 3. Bleed all air from gas lines. 4. Check flame rod wire is connected. 5. Check igniter is operational. 6. Check gas valves for open or short circuits. 7. Verify gas orifice is correct. 8. Check earth wire lead. 9. Verify parameters setting. 10. Check burner blockage or burner mesh damage. 11. Check gas switching venturi no blockage or damage.
12	Flame Failure / Low Gas Flow / Earth Leakage.	1. Check gas supply 2. Check gas type and inlet gas pressure. 3. Bleed all air from gas lines. 4. Check flame rod wire is connected. 5. Check igniter is operational. 6. Check gas valves for open or short circuits. 7. Verify gas orifice is correct. 8. Check earth wire lead. 9. Verify parameters setting. 10. Check burner blockage or burner mesh damage. 11. Check gas switching venturi no blockage or damage 12. Check fan for debris and ensure wheel turns freely. 13. Check water flow control.
14	Thermal fuse &/or overheat switch activated. Unit operates, then stops.	1. Check thermal fuse 2. Check overheat switch IMPORTANT- If thermal fuse or overheat switch is faulty: a. Check heat exchanger for damage, check hot spots on heat exchanger surface indicating blockage due to scale. b. Confirm “Gas Type” and “Combustion” settings. c. Confirm test point pressure.

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Error code	Fault	Action
15	Venturi Control Failure.	1. Check the Venturi motor is operating correctly. 2. Check gas valve connection and measure resistance of gas valve. 3. Ensure gas valve is getting voltage when unit is trying to fire up. 4. Replace gas valve assembly. 5. Check fan motor for operation, if not, replace fan motor. 6. Clear diagnostic code by resetting the main power supply to the water heater.
16	Over Temperature Warning. Unit operates, then stops. (Safety Shut- down – 95°C Lockout Thermistor)	1. Confirm “Gas Type” and “Combustion” settings. 2. Confirm test point pressure. 3. Check gas valves. 4. Check water flow sensor. 5. Check water flow servo. 6. Check heat exchanger outlet temperature thermistor 7. Check hot water outlet temperature thermistor. 8. Check for restrictions in air flow around the vent terminal. 9. Check fan for operation. 10. Check for blockage in the combustion chamber and exhaust piping. 11. Check for blockage in the heat exchanger. 12. Replace gas valve assembly.
17	Venturi Blockage.	1. Check Venturi isn’t blocked. 2. Replace Venturi and gas valve assembly.
19	Electrical Earth Check Fault.	Check earthing of temperature fuses, water flow servo and sensor, outlet temperature TH and water controller cable.
21	Data Transfer Error or Incorrect Dipswitch setting detected	1. Check the data transfer process has been completed. 2. Ensure all parameters were properly set. 3. If Data Transfer Error still happen, manually set all parameters per commissioning instruction. 4. Check Dipswitch settings.
25	Neutraliser tank sensor fault	Check Neutraliser tank electrode

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Error code	Fault	Action
32	Outgoing Water Temperature Sensor Failure.	1. Check sensor wiring for damage. 2. Measure resistance of sensor. 3. Replace sensor.
33	Heat Exchanger Thermistor Failure	1. Check sensor wiring for damage. 2. Check resistance of sensor. 3. Replace sensor.
34	Combustion Air Temperature Sensor fault.	Check combustion air temperature sensor fault.
38	Exhaust Temperature Thermistor Failure.	1. Check sensor wiring for damage. 2. Check resistance of sensor. 3. Replace sensor.
41	Frost Protection Thermistor Failure.	1. Check sensor wiring for damage. 2. Measure resistance of sensor. 3. Replace sensor.
51	Inlet Thermistor Failure.	1. Check sensor wiring for damage. 2. Measure resistance of sensor. 3. Replace sensor.
52	Gas Valve Failure.	1. Check flame rod and wire for damage. 2. Check gas valve wiring. 3. Check gas solenoid valve for open or short circuit. 4. Ensure gas valve is getting voltage when unit is trying to fire up. 5. Ensure fan motor is getting voltage when unit is trying to fire up. 6. Check fan motor for proper operation. 7. Replace gas valve assembly.
54	High Exhaust Gas Temperature.	1. Ensure inlet water temperature is not too high. 2. Check for blockage of flue system. 3. Check for blockage on heat exchanger fins. 4. Ensure unit was properly converted, if gas type has been changed. 5. Check heat exchanger for damage, check hot spots on heat exchanger surface indicating blockage due to scale.

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Error code	Fault	Action
55	(SS) Service Soon Indicator	1. Error code 55 is a time-based service indicator reminder the period for which is set during installation refer to “Menu 03: Service Soon Reminder” on page 30 for details. 2. When displayed error code 55 indicates that the set service period has elapsed. 3. To reset service soon reminder code 55, press the On/ Off button 5 times.
61	Combustion Fan Failure.	1. Check the motor wire harness for loose or damaged connections. 2. Measure resistance of motor wire harness. 3. Ensure the combustion fan spins freely. 4. Replace fan motor.
65	"Water Flow Control Failure. (Does not stop flow properly)”	1. Measure resistance values of the water flow control. 2. The water flow control valve has failed to close during the bath fill function. Immediately turn off the water and discontinue the bath fill function.
66	Bypass Flow Control Fault	Check bypass flow control device.
70	PCB Failure.	1. Check all wiring harness and connections. 2. Replace PCB.
71	Gas Solenoid Valve Failure.	1. Check gas control wire is not loose or damaged. 2. Check heater circuit is not grounded. 3. Replace PCB.
72	Flame rod circuit error. (Unit does not operate)	1. Check flame rod and wire for damage. 2. Verify heat exchanger is not leaking. 3. Replace flame rod. 4. Replace PCB.
92	Neutrlaiser life warning	Change Neutrlaiser
LC	Scale build-up inside the heat exchanger.	Check and flush the heat exchanger.

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Error code	Fault	Action
5E	(SE) Cascade Connection Failure.	With cascade connections on commercial units, the primary unit's display will flash between 5E and the selected set temperature when an error code is displayed on any secondary unit.