Rheem RUUD Richmond EcoSense Paloma

What? It's not working again?

Troubleshoot resources for homeowner
http://waterheatertimer.org/Troubleshoot-Rheem-Tankless-water-heater.html

Paloma Electronic Series Error Codes

Paloma Electronic Tankless Water Heater Error Codes
http://www.palomastore.com/paloma_error_codes.html

PalomaStore.com

Sales: 1-800-689-8687 Service: 1-800-432-8373

Code	Fault	Remedy
00	1 Hour Continuous Combustion	Close all hot water taps to reset unit. Turn off, or remove circulation pumps (unit is not designed for continuous operation with circulation systems).
05	Imperfect Combustion Alarm	Clean air inlet filter. Clean combustion air fan. Clean heat exhanger fins. Check for adequate combustion air ventilation openings and clean if necessary. Check vent system for partial blockage and correct as necessary.
10	Air Supply or Exhaust Blockage	Check all vent components for proper connections. Check that nothing is blocking the flue inlet or exhaust. Ensure proper venting materials were used. Ensure condensation collar was installed correctly. Ensure heat exchanger fins, fan, and air intake are not blocked.
11	No Ignition	Ensure you have gas to the appliance. Ensure gas type and pressure are correct. Bleed all air from gas lines. Ensure gas line, meter, and regulator are sized properly. Ensure appliance is properly grounded. Check gas solenoid valves for open or short circuits. Ensure igniter is operational. Check igniter wiring harness for damage.
12	Flame Failure	Ensure you have gas to the appliance. Ensure gas type and pressure are correct. Bleed all air from gas lines. Ensure flame rod wire is connected. Check flame rod for carbon build-up. Ensure gas line, meter, and regulator are sized properly. Ensure appliance is properly

		grounded. Check gas solenoid valves for open or short circuits. Check power supply for loose connections. Check power supply for proper voltage and voltage drops. Disconnect remote control. Disconnect and re-connect all wiring harnesses on unit and PC board. Ensure proper venting material was installed. Ensure condensation collar was installed properly. Ensure maximum vertical vent length does not exceed allowable limits. Ensure maximimum horizontal vent length does not exceed allowable limits.
14	Overheat Wrap Fault	Ensure high fire and low fire manifold pressures are correct. Check gas type of unit and ensure it matches gas type being used. Check heat exchanger for cracks and/or separations. Ohm out safety circuit. Check for improper conversion of product. Check for restrictions in air flow around unit and vent termination. Check for foreign materials in combustion chamber and/or exhaust venting.
15	Boiling Safety Device	Check for closed water inlet valve and/or restrictions in cold water inlet pipe (must be fully open). Check for clogged heat exchanger (scale build-up). On commercial water heater, lower setpoint temperature below 180 °F at high altitude.
16	Over Temperature Warning	Check for clogged heat exchanger. Check for restrictions in air flow around unit and vent termination. Check for foreign materials in combustion chamber and/or exhaust venting.

21	Malfunction of Air Intake Filter Switch	Ensure air filter door is properly seated. Ensure front panel is properly installed.
24	Malfunction of Operational Switch	Press max button on PCB to reset. Press min button on PCB to reset. Replace PCB.
29	Heat Exchanger Outlet Temperature Too Low	Clean heat exchanger air inlet.
31	Water Inlet Temperature Sensor Fault	Check sensor wiring for damage. Ohm out sensor. Check and clean scale from sensor. Replace sensor.
33	Outgoing Water Temperature Sensor Fault	Check sensor wiring for damage. Ohm out sensor. Check and clean scale from sensor. Replace sensor.
34	Combustion Air Temperature Sensor Fault	Check sensor wiring for damage. Ohm out sensor. Check and clean sensor. Ensure fan blade is tight on motor shaft and in good condition. Check for restrictions in air flow around unit and vent termination. Replace sensor.
35	Improper Thermistor Connections	Check that all thermistors are connected to proper connections on PCB.
51	Gas Inlet Solenoid Fault	Check gas inlet solenoid valve wiring harness for loose or damaged terminals. Ohm out solenoid valve.
52	Modulating Solenoid Valve Fault	Check modulating gas solenoid valve wiring harness for loose or damaged terminals. Ohm out solenoid valve.
61	Combustion Fan Failure	Ensure fan motor turns freely (motor will operate with a small ammount of restriction). Check wiring harness to motor for loose or damaged terminals. Ohm out motor windings.

71	Gas Inlet Solenoid Valve Control Fault	Check gas inlet solenoid valve wiring harness for loose or damaged terminals. Ohm out solenoid valve. Replace PCB.
72	Flame Sensing Device Fault	Ensure flame rod is touching flame when unit fires. Check inside burner chamber for foreign material blocking flame at flame rod. Check all wiring to flame rod for damage. Check flame rod for proper voltage. Remove flame rod and check for carbon build-up and clean with sandpaper. Replace flame rod.
76	Communication Fault with Remote Control	Check remote control wiring for loose or damaged connections. Bypass remote control cable by connection remote directly to remote control terminals on PCB (replace cable if found to be faulty). Replace remote control. Replace PCB.
79	Fan Motor Current Fault	Ensure fan motor turns freely (motor will operate with a small ammount of restriction). Check fan motor for proper voltage. Replace fan motor. Replace PCB.
80,81	Gas Cut-off Failure	Ohm out all solenoid valves. Check voltage of all flame rods. Replace gas control valve.
82	Gas Type Data Failure	Program PCB for proper gas type.
99	Blocked Flue Fault	Clean any blockage in heat exchanger, combustion fan, inlet filter, and exhaust venting.
No Code	Nothing happens when water is flowing through unit	Ensure unit is connected to proper power supply and circuit breakers are on. Ensure power supply fuses are not blown. Clean water inlet filter. Ensure you have at least the minimum flow rate required for unit to fire. Check for pipe dope inside water flow control turbine. On new installations, ensure hot and cold water lines are not crossed. Check for bleed over (Close cold water supply valve to water heater. Open hot water taps at fixtures. If water flows steadily from hot water taps, there is bleed over in the system.).