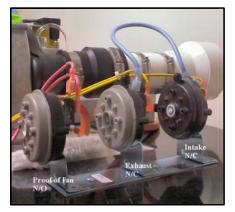


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A08 Fault Code – GHE Spiderfire With A25/A26 fault codes

A08 is now the fault code for "the POF Switch has changed state for 5 seconds during heating cycle." Effective February 2014, we are now able to distinguish the blower motor from the venting fault codes.



That means during the heating cycle, the POF (proof of fan) opened and stayed open for 5 seconds or more. A continuity check would confirm if the normally open switch is permanently damaged and closed shut. While this is a NO switch, during heating it should be in the closed state.

Positive 0.48"w.c. is the setting on the POF. The fan runs at a lower speed during pre-purge and creates enough pressure at that lower speed to close the switch (anywhere from .6 to 1"). Once it goes to heating, the fan speed increases, thereby increasing the pressure on the switch. Typically you will see pressures anywhere from (+) 2.0-4.0" on the switch at high fire.

If the switch closed at low fan speed, it will surely stay closed at higher fan speed during the heating cycle.

A25 is still the code for incorrect state for POF switch during pre-purge and A26 for post purge.

Two things will cause the Proof of Fan (POF) switch to be closed during initializing and pre-purge and display A25 fault code.

1.) A switch that is stuck closed. The continuity check will confirm if it is closed with the blower running.

2.) A switch that closed during initializing because the blower came on as soon as power was applied.....rather than waiting until pre-purge to come on in display. This can be caused by a bad board

timer or bad blower not responding to the control board commands.

If the switch fails to close during pre-purge it displays an A25 fault code. The most likely causes are:

- Insufficient pressure on the switch,
- Bad connection with the wires
- Bad proof of fan switch

Causes of insufficient blower pressure:

- Disconnected or cracked tube; tube plugged into the wrong port on burner/blower; blocked tube, blocked pressure port on burner
- slow fan speed
- restricted intake vent
- ... and on pre-upgraded models missing test port cap.

The gold test for insufficient pressure is to plug a manometer into the POF tube from burner.

- 1. Cycle water heater and look for Pre-Purge in the display window.
- 2. Check pre-purge pressure.
- 3. Do you get .51 during pre-purge? (range is .48, +/- .03)
- 4. Yes unit appears to operate normally
- 5. No If no, start investigating with the tubing



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