Ignition Failure

An ignition failure error occurs when the flame sense rod does not detect flame. This could be because there is no flame or simply because the flame sensor rod doesn't see it.

- Clear the fault by pressing disable, then enable
- Watch the display
- When the gas valve icon appears, look through the sight glass for a brief blue flame.
- If you see a brief blue flame, but the flame sense rod doesn't detect it, you'll get an ignition failure error.
- Check the flame sensing rod
- Make sure the connections are clean and tight
- Remove the flame rod and clean with steel wool
- Check the insulator for soot or damage
- Replace the flame rod if necessary
- If you don't see a brief blue flame when the gas valve icon appears, that could mean an issue with the supply gas pressure.
- Make sure the gas valve electrical connections are clean and tight
- You'll need a gas pressure gauge or manometer for this next test
- Shut off the gas supply
- Set the enable/disable switch to disable
- Open the needle valve inside the gas supply pressure test port one full turn only. Attach the hose from your gas gauge or manometer.
- Turn the gas supply back on and press enable.
- Purge gas by disconnecting tube from manometer or gas gauge and reconnecting to eliminate spike in pressure reading.
- When the gas valve icon appears on the display, you should see a pressure drop at the gas supply—at least a half inch drop. If you don't see any pressure drop, the gas valve is not opening.

- Run the test again, this time looking for 24 volts ac on the gas valve connector on the control board at the exact moment the gas valve icon appears on the display. If you get 24 volts ac, replace the gas valve. If you don't get 24 volts ac, replace the control board. Remember that you are only going to get 24 volts ac on the gas valve connector on the control board when the gas valve icon appears on the display and when you have an ignition failure, that's only going to be for two or three seconds.
- Also check for restrictions in the heat exchanger such as a blocked condensate drain.
- If the unit passes all these tests, contact commercial technical support.

Enable/Disable Switch

The enable disable switch is located right below the display. It must be in the enable position to allow the water heater to operate. It is not an on/off switch and does not turn off power to the control board. Press disable to prevent the unit from operating or press enable to allow the water heater to operate. The enable disable switch is separate from the enable disable circuit which is often connected to a timer or a building management system.