



FV Sensor SP20172/ Low Resistance

REASON:

The installed FV sensor features a resistance level that is below the minimum set point of the gas valve. This results in valve lock-out that can only be corrected via installation of a sensor with a minimum resistance level above 11k Ω

SERVICE ACTION REQUIRED:

If given an FV sensor error for any FV sensor (SP20172):

1. Using a multimeter to check resistance, remove the sensor from its bracket on the base ring of the water heater and disconnect both wires to the sensor.
2. Take a resistance reading between the two wiring terminals of the FV sensor and note the resistance value.
3. **If the resistance reads under 11k ohms or above 45k ohms, the FV sensor should be considered suspect and replaced.**

NOTE: When checking resistance of the sensor, check with wires attached to sensor with sensor unplugged from the valve. If you get an invalid reading, then check across sensor only.

- If wires and sensor check are valid, then proceed to next steps of troubleshooting. Sensor is not defective.
- If wire harness or sensor checks are invalid, then replace appropriate part.

