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.