

## SERVICE MANUAL SUPPLEMENT – QUICK SERVICE GUIDE FOR PV-SERIES, PDV-SERIES, AND RG\*F-SERIES PRODUCTS

### POWER VENT, POWER DIRECT VENT, & FAN ASSISTED WATER HEATERS - ICON

Error Code	Definition	Service Action	Possible Parts Needed
No LED	No power to the unit or switch is off	Turn power on Verify 120 volts present at outlet	None
One short flash every four seconds	Standby mode / unit up to temp	None	None
Bright/dim alternating LED	Thermostat calling for heat	None	None
Short flash once every second	Weak pilot signal on last call for heat	Inspect and clean pilot assembly Check continuity on flame sensor	1) Pilot assembly 2) Gas valve
Two flashes three second pause	Pressure switch not working - closed position	Inspect pressure switch tubing and ports Bypass pressure switch & temp switch for testing Measure vacuum on pressure switch	1) Pressure switch 2) Temp switch
Three flashes three second pause	Pressure switch or temp switch stuck open	Check vent for blockage Verify blower spinning up to speed Measure vacuum on pressure switch Inspect pressure switch tubing and ports Bypass pressure switch & temp switch for testing	1) Pressure switch 2) Temp switch 3) Blower assembly 4) Gas valve
Four flashes three second pause	High tank temperature	Check temp probe ohms - compare with sensor temp chart	1) Thermowell 2) Gas valve
Five flashes three second pause	False pilot flame sensed Pilot valve stuck open	Check for flame sensor short to ground Gas valve stuck open - replace valve	1) Pilot assembly 2) Gas valve
Six flashes - one flash, three second pause	Pilot failed to light	Inspect and clean pilot Verify gas flow Check connection at gas valve	1) Pilot assembly 2) Gas valve
Six flashes - two flashes, three second pause	Pressure switch or temp switch opened during operation	Check vent for blockage Measure vacuum on pressure switch Verify blower spinning up to speed Bypass pressure switch & temp switch for testing	1) Pressure switch 2) Temp switch 3) Blower assembly
Six flashes - three flashes, three second pause	Pilot flame extinguished	Inspect and clean pilot Check connection at gas valve	1) Pilot assembly 2) Gas valve
Six flashes - four flashes, three second pause	False pilot flame sensed Pilot valve stuck open	Check for flame sensor short to ground Gas valve stuck open - replace valve	1) Pilot assembly 2) Gas valve
Seven flashes	Flammable vapor sensor/simulated resistive device fault	Verify resistance is between 3.0 - 48 KOhms Verify no flammable vapors present Check sensor harness	1) Flammable vapor sensor 2) Harness
Eight flashes - one flash, three second pause	Flammable vapor sensor out of spec, possible short	Verify resistance is between 3.0 - 48 KOhms Verify no flammable vapors present Check sensor harness	1) Flammable vapor sensor 2) Harness 3) Gas valve
Eight flashes - two flashes, three second pause	Thermowell sensor damaged or unplugged	Check temp probe ohms - compare with sensor temp chart	1) Gas valve
Eight flashes - three flashes, three second pause	Gas valve electronics fault	Reset gas valve; if problem persists replace gas valve	1) Gas valve
Eight flashes - four flashes, three second pause	Gas valve fault detected	Reset gas valve; if problem persists replace gas valve	1) Gas valve

**NOTE:** Check all wire connections  
 Check gas inlet and manifold gas pressure  
 Check for grounding connections