FOR THE PRO

QUICK SERVICE GUIDE
SERVICE MANUAL SUPPLEMENT

iTEC International Technical Excellence Center

TTW/ PDX / GXTW (Pre ICON System)
*Serial date code "KA" (July 2007 - January 2013)**

Error Code	Definition	Service Action	Possible Parts Needed
No LED	No power to the unit or switch is off	Turn heater on Verify 120 volts present at outlet	1) None
One short flash every four seconds	Stand by mode / unit up to temp.	None	1) None
Bright / dim alternating LED	Thermostat calling for heat	None	1) None
Short flash once every second	Weak pilot signal on last call for heat	Inspect and clean pilot assembly Check continuity on flame sensor/ spark wire	1) Pilot assembly 2) Gas valve
Two flashes and three second pause	Pressure switch not working - closed position	Inspect pressure switch tubing and ports Bypass pressure switch & temp switch for testing	1) Pressure switch 2) Temp switch
Three flashes and 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 and three second pause	High tank temperature	Check temp probe ohms - compare with sensor temp chart	1) Thermowell 2) Gas valve
Five flashes and 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 and three second pause	Pilot failed to light	Inspect and clean pilot, check connection at gas valve Verify gas flow	1) Pilot assembly 2) Gas valve
Six Flashes - two flashes and three second pause	Pressure switch / temperature 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 Verify gas valve stuck open - replace valve	1) Pilot assembly 2) Gas valve
Seven flashes	Flammable vapor sensor 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 - three flashes, three second pause	Thermowell sensor damaged or unplugged Gas valve electronics fault	Check temp probe ohms - compare with sensor temp chart Reset gas valve, If problem persists replace gas valve	1) Thermowell and 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

*If serial is at or near this date please contact Technical Support to verify control generation. Always check the manufacture date using the For The Pro® Contractor app or at bradfordwhite.com