

## SERVICE MANUAL SUPPLEMENT – QUICK SERVICE GUIDE

### EF SERIES DIRECT SPARK - ICON HD

Error Code	Definition	Service Action	Possible Parts Needed
4	Low flame sense signal	Check micro amps	1) Flame sensor 2) Control board
6	Flame sensed out of normal sequence	Verify if flame is present Inspect flame sensor/wire	1) Control board 2) Flame sensor
23	Flame detected before ignition	Verify if flame is present Verify blower turns off Inspect flame sensor/wire	1) Control board 2) Flame sensor
24	Flame detected after heating cycle	Verify if flame is present Verify blower turns off Is gas valve powered by 24V? Inspect flame sensor/wire	1) Control board 2) Flame sensor
29	Pressure switch failed to close	Verify if pressure switch is open Check for condensation blockage Check for vent restriction	1) Pressure switch 2) Control board
32	Temp sensor fault	Measure resistance of temp sensor	1) Temp sensor 2) Control board
57	Spark rod shorted to ground	Check spark rod	1) Spark rod
58	Power supply problem (line voltage)	Verify proper supply voltage, grounding/polarity	1) None
59	Line voltage too low or high	Verify dedicated circuit is being used	1) Transformer
61	DC voltage unstable	Verify transformer output is 22-27 Vac	1) Control board 2) Transformer
62	Ignition failure	Verify ignition sequence Clean spark rod Clean flame sensor	1) Burner 2) Spark rod 3) Control board
63	Ignition failure	Verify ignition sequence Clean spark rod Clean flame sensor	1) Burner 2) Spark rod 3) Control board
64	Electronics failure	Verify all electrical connections Check wire connections/ground	1) Control board 2) Display 3) Spark rod
65	High water temperature (200F)	Measure resistance of temp sensor	1) Temp sensor

**NOTE:** No display check primary/secondary voltage  
 Check all wire connections      Check inlet and manifold gas pressure  
 Check vent restrictions          Check for grounding connections