## EF Series Direct Spark - ICON HD

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<th>Error Code</th>
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| 4          | Low flame sense signal                          | Check micro amps                                                                | 1) Flame sensor  
2) Control board |
| 6          | Flame sensed out of normal sequence             | 1) Control board  
2) Flame sensor  
Inspect flame sensor/wire |
| 23         | Flame detected before ignition                   | 1) Control board  
2) Flame sensor  
Verify if flame is present  
Inspect flame sensor/wire |
| 24         | Flame detected after heating cycle              | 1) Control board  
2) Flame sensor  
Verify if flame is present  
Inspect flame sensor/wire  
Is gas valve powered by 24V?  
Inspect flame sensor/wire |
| 29         | Pressure switch failed to close                  | 1) Pressure switch  
2) Control board  
Verify if pressure switch is open  
Check for condensation blockage  
Check for vent restriction |
| 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 |
| 63         | Ignition failure                                | 1) Burner  
2) Spark rod  
3) Control board  
Verify ignition sequence  
Clean spark rod  
Clean flame sensor |
| 64         | Electronics failure                             | 1) Control board  
2) Display  
3) Spark rod  
Verify all electrical connections  
Check wire connections/ground |
| 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 vent restrictions  
Check for grounding connections  
Check inlet and manifold gas pressure