## Troubleshooting

### ICON Troubleshooting Guide

<table>
<thead>
<tr>
<th>LED Status</th>
<th>Control Status</th>
<th>Probable Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>None (LED not on or flashing)</td>
<td>Electrical power not present.</td>
<td>Control power switch in “OFF” position. Supply voltage interrupted.</td>
</tr>
<tr>
<td>One short flash every four seconds</td>
<td>Stand-by mode, Thermostat is satisfied (no faults).</td>
<td>Temperature demand is satisfied (no call for heat).</td>
</tr>
<tr>
<td>Alternates bright and dim (Heartbeat)</td>
<td>Thermostat calling for heat (no fault).</td>
<td>Tank temperature below set point of thermostat.</td>
</tr>
</tbody>
</table>
| Short flash once every second | Weak pilot signal on last call for heat. | 1. Unstable pilot.  
2. Pilot tube block or restricted.  
3. Oxidation build up on pilot electrode.  
4. Wire damage to pilot assembly or bad connection at gas valve. |
| Short flash once every two seconds | Idle remote command off | 1. Control put in idle or Sabbath mode from accessory module. |
| Two flashes, three second pause | Pressure switch not working-closed position. | 1. Pressure switch tubing kinked or blocked.  
2. Blocked pressure tap on switch.  
3. Faulty pressure switch. |
| Three flashes, three second pause | Pressure switch or blower temperature switch not working-open position. | 1. Vent blockage or improper vent configuration.  
2. Pressure switch tubing kinked or blocked.  
3. Blower not spinning up to speed.  
4. Vent temperature too high  
5. Faulty pressure switch or vent limit switch. |
| Four flashes, three second pause | Excessive tank temperature. System must be reset. | 1. Excessive sediment  
2. Hot water entering the tank from another source in the potable loop.  
3. Faulty gas valve. |
| Five flashes, three second pause | False pilot flame present. | 1. Pilot valve stuck in open position. |
| Six flashes-one flash, three second pause (Soft lockout) | Failed to light pilot. System auto resets after 5 minutes. | 1. Unstable pilot.  
2. Pilot tube blocked or restricted.  
3. Oxidation build up on pilot electrode.  
4. Wire damage to pilot assembly or bad connection at gas valve. |

### Troubleshooting continued

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| Six flashes-two flashes, three second pause (Soft lockout) | Pressure switch or blower temperature switch opened during burner operation. System auto resets after 5 minutes. | 1. Pressure switch tubing kinked or blocked.  
2. Vent blockage or improper vent configuration.  
3. Vent termination being affected by windy conditions.  
4. Blower not spinning up to speed.  
5. Vent temperature too high  
6. Faulty pressure switch or blower temp. switch. |
| Six flashes-three flashes, three second pause (Soft lockout) | Pilot flame extinguished. System resets after 5 minutes. | 1. Unstable pilot.  
2. Pilot tube blocked or restricted.  
3. Oxidation build up on pilot electrode.  
4. Wire damage to pilot assembly or bad connection at gas valve.  
5. Insufficient combustion air. |
|----------------------------------------------------------|--------------------------------------------------------|-----------------------------------|
| Seven flashes, three second pause                        | Flammable vapor sensor fault detected, see warning label | 1. Flammable vapor present  
2. Flammable vapor sensor exposed to excessive moisture  
3. Flammable vapor sensor exposed to extreme ambient temp |
| Eight flashes-one flash, three second pause               | Flammable vapor sensor out of specification. Possible short. | 1. Flammable vapor sensor out of specification  
2. Possible short |
| Eight flashes, two flashes, three second pause            | Temperature sensor fault                                | 1. Damage to sensor or wire in control's well.  
2. Control's sensor resistance out of range.  
3. Replace Control. |
| Eight flashes-three flashes, three second pause           | Electronics fault detected                             | 1. Verify control is not wet or physically damaged  
2. Reset control on/off switch.  
3. Replace electronic module if 8-3 error persists |
| Eight flashes-four flashes, three second pause            | Gas valve fault detected                                | 1. Verify control is not wet or physically damaged  
2. Reset control on/off switch.  
3. Replace gas control if 8-4 error persists |