This kit is designed for the 1600 model barrier gate operators only. For cold weather climates where temperatures routinely drop below 40°F (4°C). A built-in thermostat will automatically control the temperature inside operator housing.

**High Voltage AC Input Power for the 1600 Barrier Gate Operator with a Heater**

**DO NOT** use the “high voltage wire size and distance requirements” table in the Installation/Owner’s manuals to determine the high voltage AC input power wire size and distance requirements for the barrier gate operator because of a much greater current draw when using the heater. Use the table below to determine the wire size and distances for your chosen barrier gate operator when a heater is installed. EACH operator should have a “Dedicated” circuit breaker at the power source.

If the high voltage AC input power wiring is greater than the maximum distance shown, it is recommended that a service feeder be installed. When large gauge wire is used, a separate junction box must be installed for the operator connection. Wire run distances are based on NEC guidelines for copper wire allowing a maximum 3% voltage drop on the line. The calculated distance was then further reduced by 10% to allow for other loses in the system. **Never** run low voltage rated wire insulation in the same conduit as high voltage rated wire insulation.

**High voltage AC input wire size and distance requirements for a 1600 with a heater.**

<table>
<thead>
<tr>
<th>Model</th>
<th>Horsepower</th>
<th>Volts</th>
<th>Operator and Heater Amps</th>
<th>Wire Size / Distance in Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>12 AWG</td>
<td>10 AWG</td>
</tr>
<tr>
<td>1/2 HP</td>
<td>9.0</td>
<td>105</td>
<td>175</td>
<td>290</td>
</tr>
<tr>
<td></td>
<td>4.6</td>
<td>420</td>
<td>675</td>
<td>1125</td>
</tr>
<tr>
<td></td>
<td>2.4</td>
<td>1615</td>
<td>2585</td>
<td>4310</td>
</tr>
<tr>
<td>1 HP</td>
<td>13.0</td>
<td>70</td>
<td>120</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>6.5</td>
<td>295</td>
<td>475</td>
<td>795</td>
</tr>
<tr>
<td></td>
<td>3.3</td>
<td>1175</td>
<td>1880</td>
<td>3136</td>
</tr>
</tbody>
</table>

In bi-parting (dual) barrier gate applications, high voltage AC input power is required for EACH 1600 operator with heater.
Installation of Heater

Kit Includes: Heater / mounting plate, 2 locknuts, 5 wire ties, 3 double stick wire tie mounts, and 2 plastic wire restrainers.

1. Shut off ALL power to operator.
   Turn off the DC convenience open power switch on certain operator models first then shut off the AC input power to the operator from the circuit breaker.

2. Route heater wires as shown.
   Use supplied wire stays and existing wire restrainers.

3. Mount Heater
   Locate existing threaded studs in operator. Heater MUST be mounted on mounting plate. Place the 2 supplied washers between the operator wall and the mounting plate to create an air gap.

   **CAUTION:** Heat will be transferred to the outside wall of the operator if NO air gap exists between the heater and the inside wall of the operator.

4. Power Connection
   Connect the heater power wires according to operator AC power type.

   **DANGER:** HIGH VOLTAGE!

   **115 VAC Models**
   **230 VAC/460 VAC Models**

5. Heater Switch
   **AUTO** - Normal setting. Automatically turns the heater ON when the temperature drops below 40°F inside the operator, and turns the heater OFF when the temperature rises above 40°F inside the operator.

   **OFF** - Turns the heater off.

   **ON** - Turns the heater on continuously. The heater will become VERY HOT when running continuously.