DOMESTIC HOT WATER SENSOR KIT
INSTRUCTIONS FOR CHB-100, CHB-130, CHB-150
Kit #550002958

Kit installation shall be completed by qualified agency.

**WARNING**
Fire, explosion, asphyxiation and electrical shock hazard. Improper installation could result in death or serious injury. Read this instruction and understand all requirements, including requirements of authority having jurisdiction, before beginning installation. Installation not complete until appliance operation verified per Installation, Operation & Maintenance Manual provided with boiler.

Sensor can be used on a standard Indirect Hot Water tank. When it is connected to the boiler, sensor will control Indirect Tank temperature.

1. Follow instructions To TURN OFF GAS TO APPLIANCE found on Operating Instructions label on boiler or in Installation, Operation & Maintenance Manual. Verify all electrical power to boiler is turned off.

**WARNING**
Electrical shock hazard. Turn OFF electrical power supply at service panel.

2. Remove front jacket.

**WARNING**
Burn hazard. Verify heat exchanger has cooled or use appropriate personal protection equipment.

3. Before inserting sensor into Indirect tank well, thoroughly coat sensor with Thermopaste supplied with sensor kit.
4. Slide sensor into well until it bottoms out. See figure 1.
5. Secure sensor wire to well with included clip. See Figures 1 and 2.
6. Route sensor wire to boiler low voltage terminal block. Remove the two resistors on terminals 7 & 8 of 8-pin terminal strip, item #155. See Figure 4 - wiring diagram.
8. Secure sensor wire.
9. Restore power to boiler. Boiler will automatically recognize the sensor.


13. Install front cover.

**DOMESTIC HOT WATER SENSOR KIT**

<table>
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<tr>
<th>DESCRIPTION</th>
<th>PART #</th>
<th>QTY</th>
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<tbody>
<tr>
<td>DHW Tank Sensor</td>
<td>-</td>
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<tr>
<td>Clip</td>
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<td>1</td>
</tr>
<tr>
<td>Thermopaste</td>
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**Figure 4 - Wiring Diagram**

*Remove both resistors. Wire sensor to 7 and 8.*

**Key**

- 16 Modulating fan
- 32 Heating circulating pump
- 42 DHW temperature sensor (see kit)
- 44 Gas valve
- 47 Modulation Regulator (24V)
- 72 Room thermostat (field sourced)
- 81 Ignition/detection electrode
- 114 Water pressure switch
- 138 Optional Outdoor Sensor (field sourced)
- 155 Optional Indirect Tank Sensor (See parts list)
- 278 Double sensor (Safety + Heating)
- 297 Air pressure transducer
- 370 Low Water Cutoff (LWCO) - (field sourced)

**NOTICE**

*Important:

- Before connecting the room thermostat, remove jumper on terminal block. (Key 72)
- Before connecting optional Indirect Tank Sensor, remove two resistors. (Key 155)
- Before connecting the Low Water Cutoff, remove the jumper on terminal block. (Key 370)

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Figure 5 - Low Voltage Terminal Strip, CHB-130 Shown

Figure 6 - Low Voltage Terminal Strip Removed from Boiler, CHB-130 Shown

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<thead>
<tr>
<th>Temperature Deg F</th>
<th>Resistance in Ohms</th>
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<tbody>
<tr>
<td>32</td>
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