

# Heating Application Kit Instructions for 75F / 76F / 100F Models

Part # (8100P-049)

## STOP! Follow these instructions or warranty will be void!

### WARNING

This installation shall be done by a qualified service agency in accordance with these instructions, all applicable codes, and requirements of the authority having jurisdiction. Failure to follow these instructions could result in substantial property damage, severe personal injury, or death.

#### Installation Must Comply With:

Local, state, provincial, and national codes, laws, regulations, and ordinances.

#### Included with Kit:

One (1) Combination Inlet and Drain Valve  
One (1) Heat Application Return Connector  
One (1) 3/4" X 3" NPT Brass Nipple  
One (1) 3/4" Brass Tee  
Instructions

#### Tools Required (Not Included):

Crescent and Pipe Wrenches  
Teflon Pipe Tape and Pipe Thread Sealant

#### Preparing for Installation:

1. DO NOT power or fill the water heater with water. The kit SHOULD BE INSTALLED BEFORE powering or filling the water heater.

If the water heater IS powered and/or filled with water, turn off power to the water heater, and valve it off to isolate it from the system. Then drain the water heater.

### WARNING

Do not proceed with the installation if the water heater remains powered or filled with water.

Water drained from the water heater may be scalding hot. Take precautions to avoid scalding when draining the water heater.

Wait until the water heater has had sufficient time to cool before proceeding with installation.

Failure to follow these instructions could result in substantial property damage, serious personal injury, or death.

2. Locate the drain valve on the water heater. Remove the drain valve by hand.

3. Use two wrenches to remove the temperature and pressure relief valve from the water heater - one wrench to remove the valve; the other to hold the connector in place.

### CAUTION

Failure to use two wrenches when removing the temperature and pressure relief valve could result in damage to the water heater. Such damages are not covered by product warranty.

#### Installing the Kit:

1. Use thread tape and pipe sealant to install the combination inlet and drain valve (1) into the heat application return connector (2). This procedure can be started by hand, and finished with wrenches. See Figure 1 for the completed assembly (6).

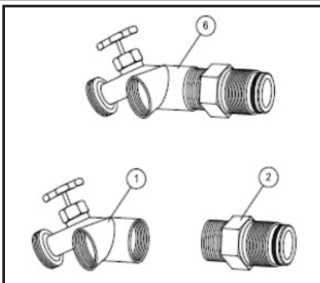


Figure 1 - Inlet and Drain Valve

2. Install the combination inlet and drain valve into the water heater. This procedure should be started and completed by hand. See Figure 2.



Figure 2 - Installed Combination Inlet and Drain Valve

3. Use thread tape and pipe sealant to install the brass nipple (3) to the 3/4" brass tee (4). See Figure 3. Then use thread tape and pipe sealant to install the removed temperature and pressure relief valve into the tee. These procedures can be started by hand and finished with wrenches. See Figure 4 for the completed assembly (5).

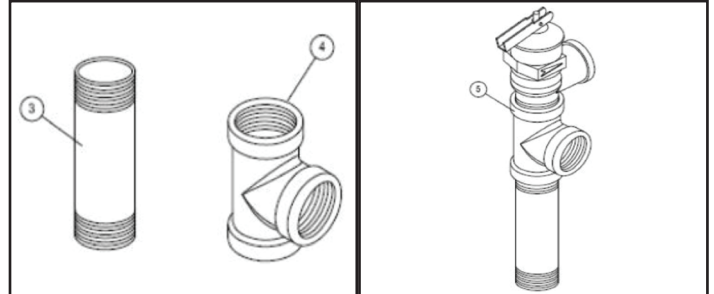


Figure 3 - Brass Nipple and Tee      Figure 4 - Completed Assembly

4. Use thread tape and pipe sealant to install the completed assembly (5) into the outlet connection. This procedure can be started by hand. Use two wrenches to finish the installation - one wrench to tighten the assembly; the other to keep the connector from moving. See Figure 5.

### CAUTION

Failure to use two wrenches when installing the assembly could result in damage to the water heater. Such damages are not covered by product warranty.



Figure 5 - Assembly Installed on Water Heater

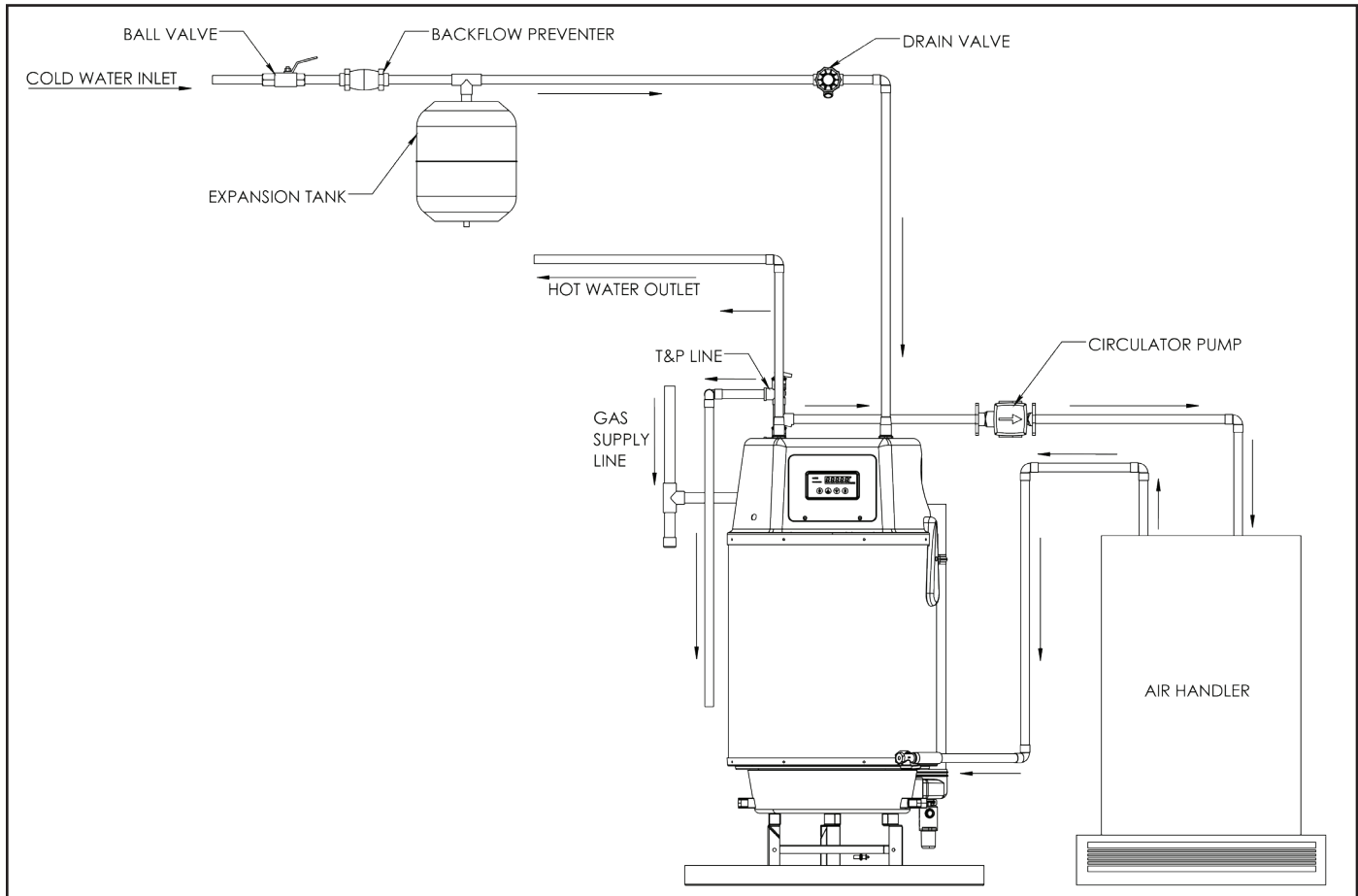
#### Starting the Water Heater:

1. Finish installing the water heater piping and fill and purge as described in the water heater installation manual. See Figure 6, following page. Repair any leaks before continuing.

### WARNING

The water heater must be full of water before it is powered. Failure to ensure the water heater is full of water could result in substantial property damage, serious personal injury, or death.

2. Power the water heater.
3. Observe water heater operation for 15 minutes to ensure proper operation. Use the water heater installation manual to troubleshoot any errors that occur.



**Figure 6 - Water Heater with Air Handler and Multiple Outlets**

**NOTES:**

1. The Heating Application Kit (Part # 8100P-049, not included with the water heater) **MUST BE** installed when using an air handler. Failure to install the Heating Application Kit when using the water heater for heating applications **WILL VOID** product warranty.
2. Minimum pipe size should match connection size. Upsize pipe accordingly if greater flow is required.
3. A thermal expansion tank suitable for potable water must be sized and installed within this piping system between the backflow preventer and the cold water inlet.
4. All circulators should have an integral flow check.
5. Drains and check valve between water heater and piping will assist in purging air from system.
6. These drawings are meant to demonstrate system piping only. The installer is responsible for all equipment and detailing required by local codes. In Massachusetts, you must install a vacuum relief valve per 248 CMR.
7. Always shut off power to the water heater or isolate the heater from the system if **ANY** plumbing work is to be done. Running the water heater without water will result in dry-firing.
8. Thermostatic mixing valve should be set 5°F below the maximum stored tank temperature setpoint. For example: 125°F stored tank temperature setpoint = 120°F thermostatic mixing valve setpoint.

**NOTE:** These drawings are meant to show system piping concept only. Installer is responsible for all equipment and detailing required by local codes.

**NOTES FOR AIR HANDLER APPLICATION:**

1. MASSACHUSETTS STATE PLUMBING CODE REQUIRES A DISTANCE NO GREATER THAN 50 FEET FROM THE WATER HEATER TO THE FAN COIL IN THE AIR HANDLER.
  2. MASSACHUSETTS STATE PLUMBING CODE REQUIRES AN ELECTRONICALLY TIMED CIRCULATOR PUMP TO ACTIVATE EVERY SIX HOURS FOR 60 SECONDS. THIS CIRCULATOR IS REQUIRED TO BE BRONZE OR STAINLESS.
  3. ALL WATER PIPING MUST BE INSULATED.
  4. YOU MUST INSTALL A VACUUM RELIEF VALVE PER 248 CMR.
- NOTE: THIS DRAWING IS MEANT TO DEMONSTRATE SYSTEM PIPING ONLY. THE INSTALLER IS RESPONSIBLE FOR ALL EQUIPMENT AND DETAILING REQUIRED BY LOCAL CODES.