



INSTALLATION INSTRUCTIONS FOR THROUGH-THE-WALL VENTING COMPONENTS

These instructions apply for the installation of the venting duct including the outdoor vent terminal for the JWF307V “Through-The-Wall” Vented Oil Fired Water Heater.

The general installation instructions in the manual, No. 62662 for GSW Oil Fired Water Heaters apply, with the **exception** of the applicable section under “**Venting**” and the method for “**Air Adjustment**”.

The instructions contained herein must be followed in its place.

Refer to the following diagram for the identification of the vent components:
(Fig 1.)

NOTE: THE VENT COMPONENTS MUST BE USED AS SUPPLIED WITHOUT ANY ALTERATION.

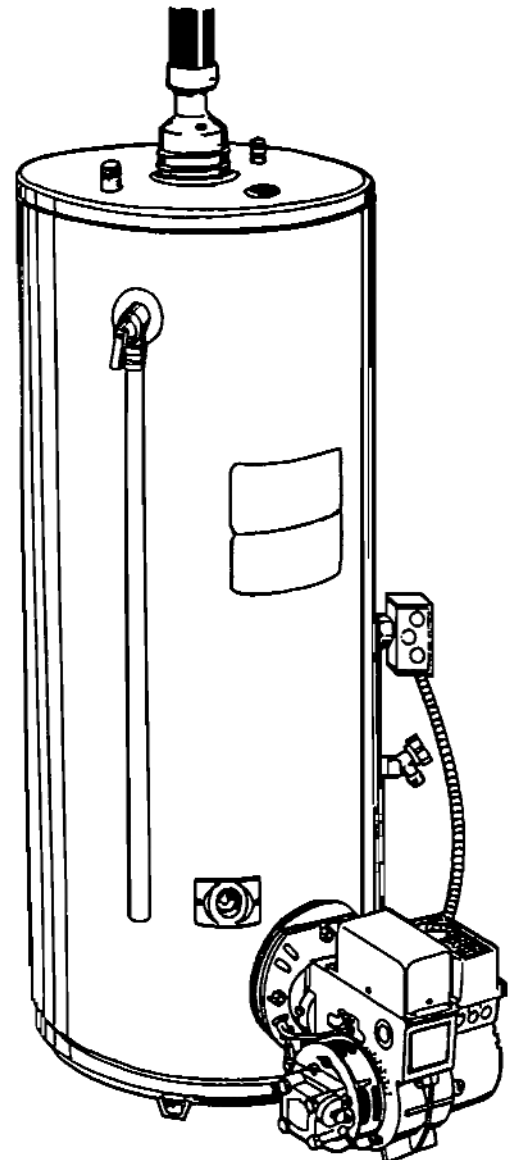
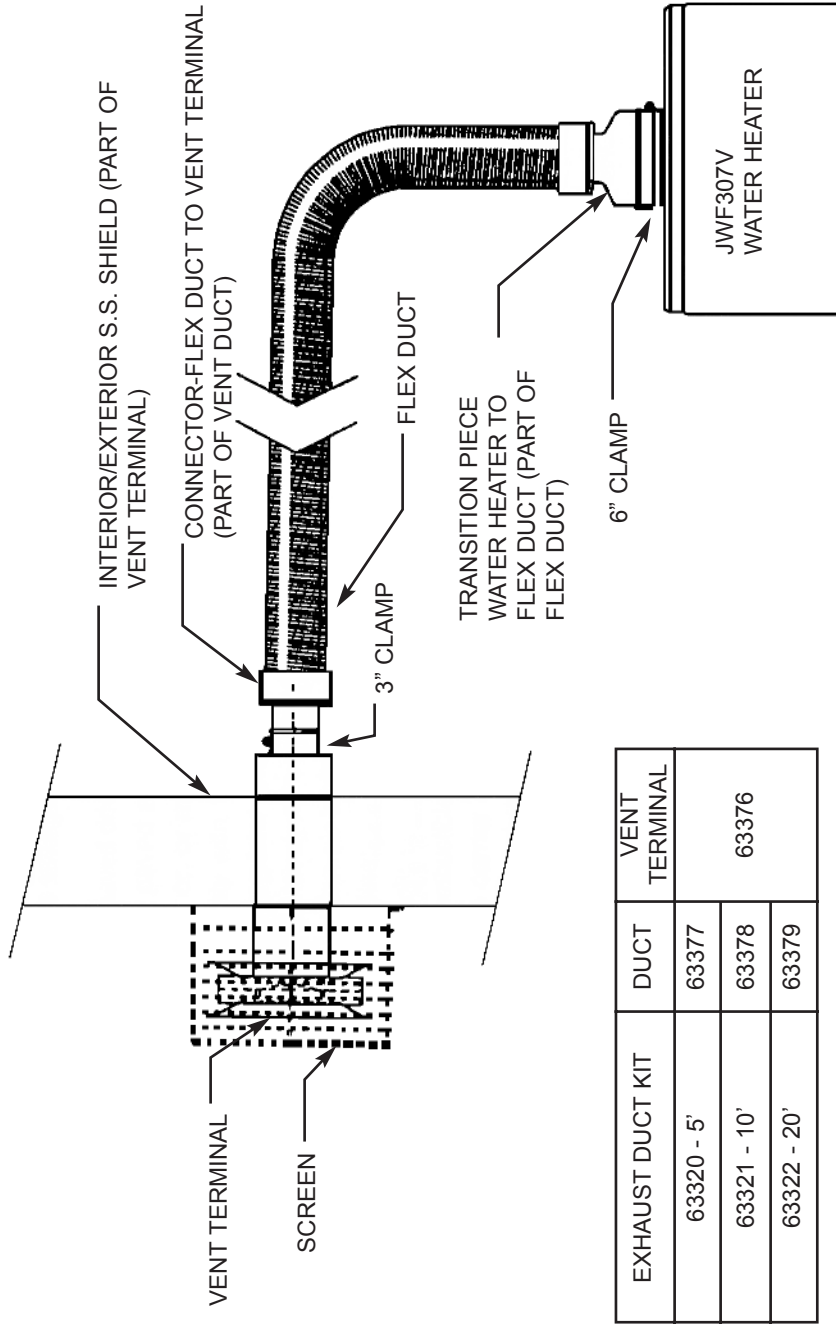


Figure 1



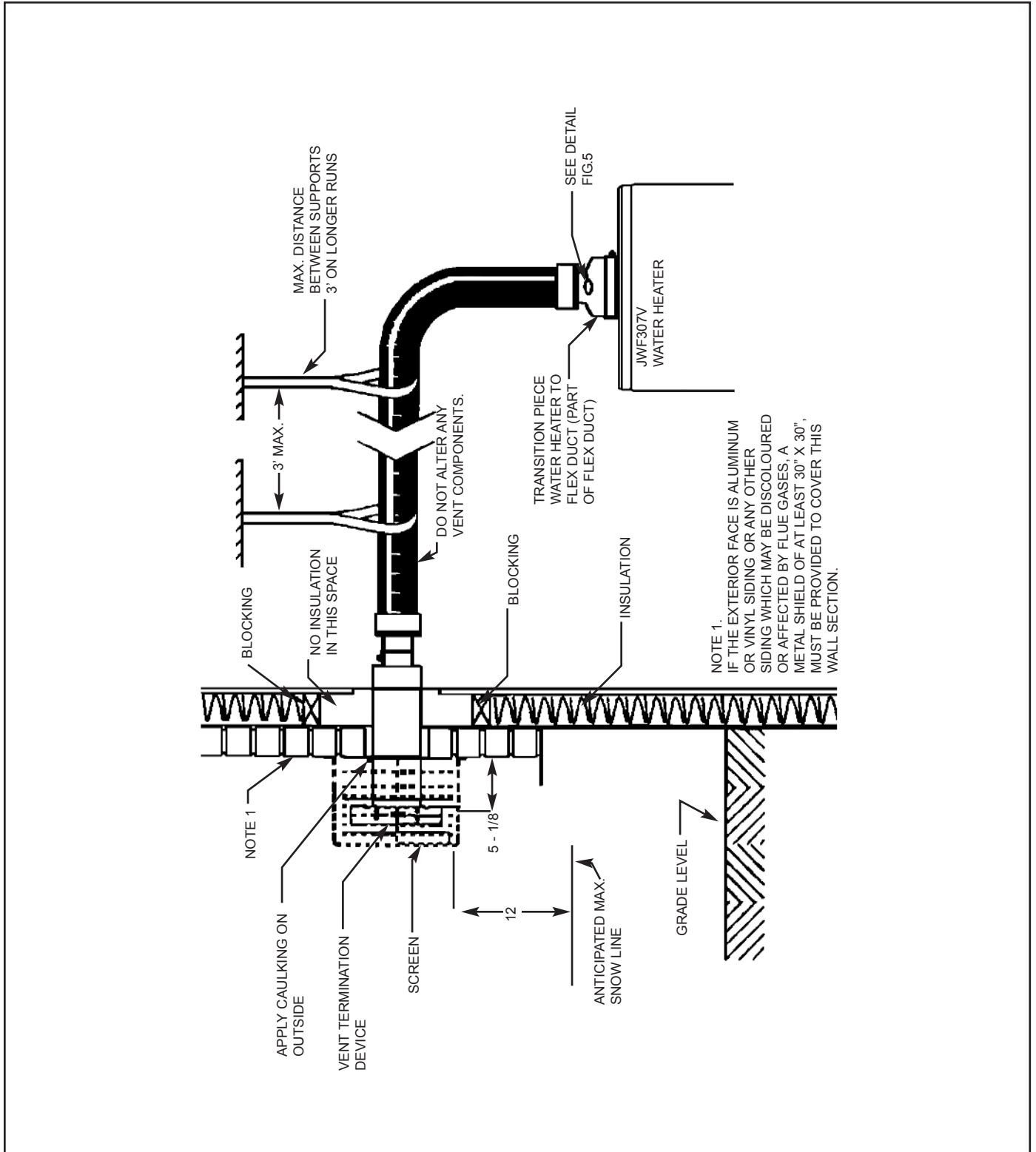
EXHAUST DUCT KIT	DUCT	VENT TERMINAL
63320 - 5'	63377	63376
63321 - 10'	63378	
63322 - 20'	63379	

LOCATION: (See Figure 2)

Locate the water heater as close as possible to an exterior wall to minimize the length of flex duct required. However, the minimum length available is 5 feet

and under no circumstances must any component be altered. Consider the direction of predominant winds and the possible snow accumulation against that side of the building.

Figure 2



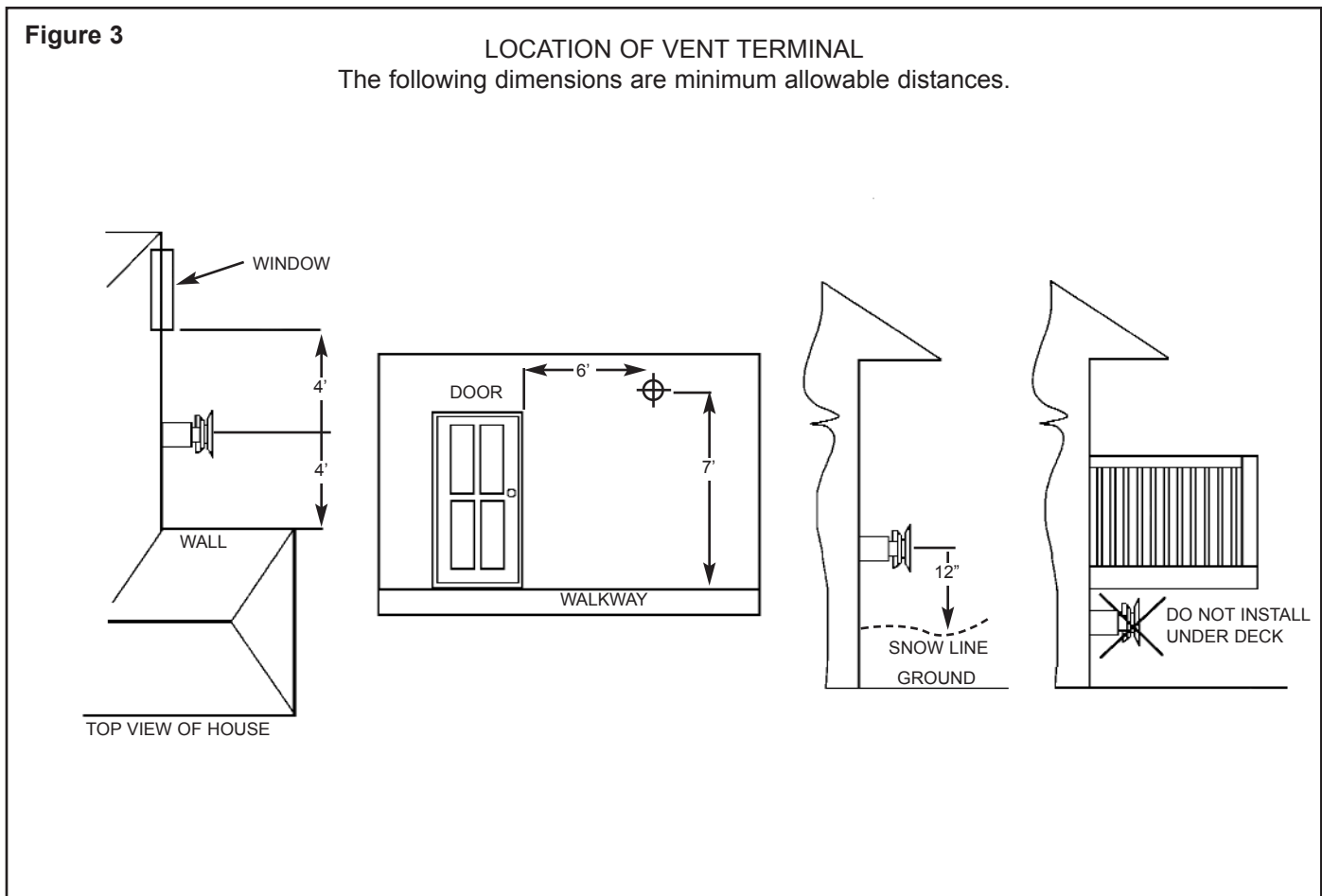
The vent terminal must have sufficient clearance from ground level so that it will not be buried in snow. The location of the vent terminal must also meet the regulations of the "Installation Code for Oil Burning Equipment" CAN/CSA-B 139-M91, section 4.3.2.2 (also see Figure 3)

A vent shall not terminate:

- (a) directly above a paved sidewalk or a paved driveway that is located between two buildings, and that serves both buildings;
- (b) less than 2.13m (7ft.) above any paved sidewalk or any paved driveway;
- (c) within 1.8m (6ft.) of a window, door, or mechanical air supply inlet to any building, including soffit openings;
- (d) above a gas meter/regular assembly within 1 m (3ft.) horizontally of the vertical centerline of the regulator;
- (e) within 1.8 m (6ft.) of any gas service regulator vent outlet or within 1m (3ft.) of an oil tank vent or an oil tank fill inlet;

- (f) less than 0.3 m (1ft.) above grade level;
- (g) within 1.8 m (6 ft.) of any combustion air inlet, unless the appliance is otherwise certified;
- (h) within 1.8m (6 ft.) of the property line;
- (i) underneath a veranda, porch or deck;
- (j) so that the flue gases are directed at combustible material or any openings of surroundings buildings that are within 1.8 m (6 ft.)
- (k) less than 1m (3 ft.) from an inside corner or an L-shaped structure;
- (l) so that the bottom of the vent termination opening is less than 0.3m (1ft.) above any surface that may support snow, ice or debris;
- (m) so that the flue gases are directed towards brick-work, siding or other construction, in such a manner that may cause damage from the heat or condensate from the flue gases.

Do not locate the vent terminal near shrubs or garden plants since the hot flue gases may stunt or kill any growth.



DETAILED INSTRUCTIONS

Drill or cut an opening through the exterior wall and fasten the vent terminal as shown in figure 4.

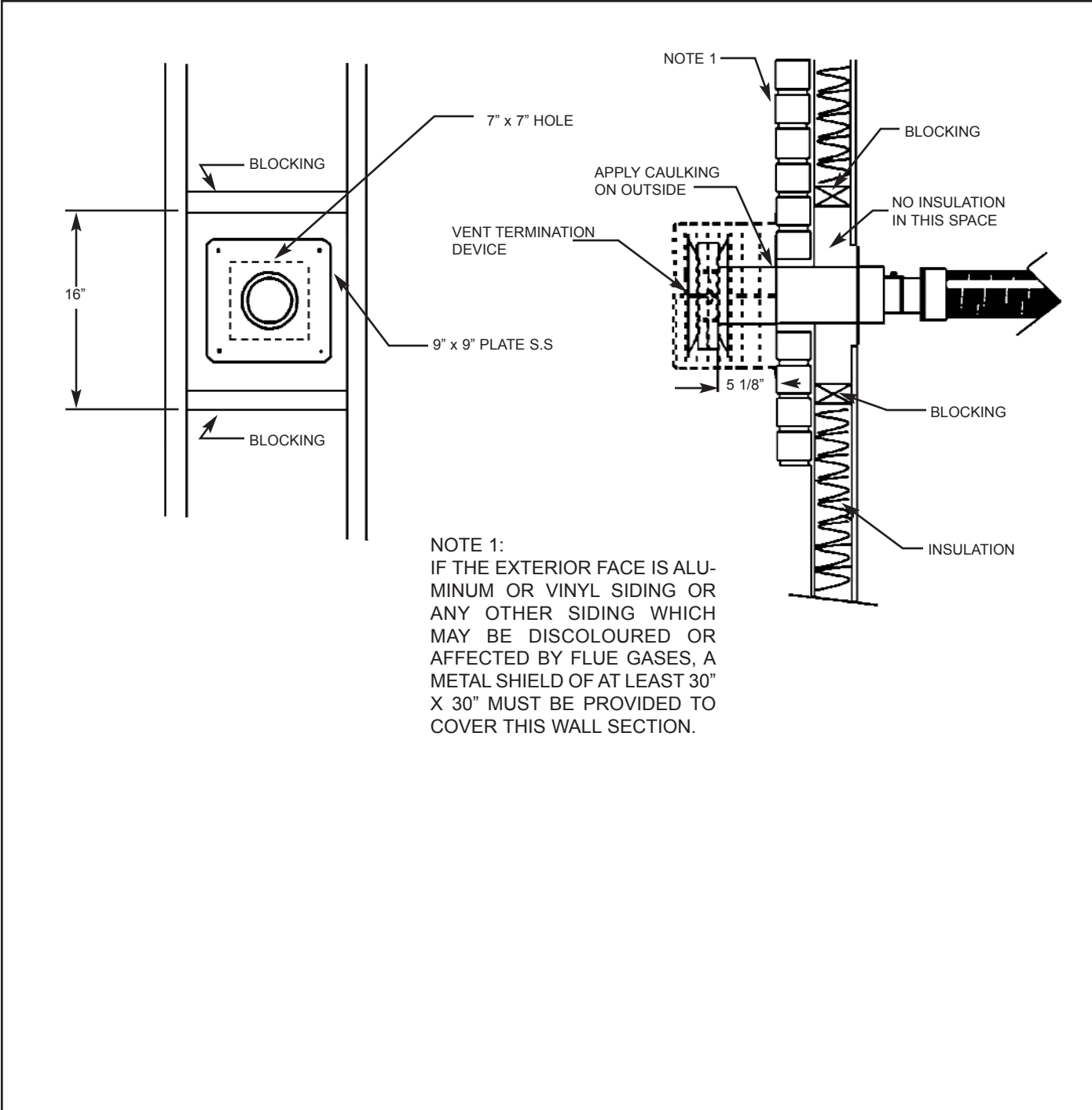
Push the vent terminal from the outside through the wall and fasten the outer shield with the 4 screws provided.

Seal around the perimeter of the outer shield with caulking material which has a temperature rating of at

least 75° C (167° F). Note: a silicone type of caulking is recommended.

From the inside the home, place the second shield around the tube of the vent terminal and fasten it with the 4 screws provided. Tighten the gear clamp securely. This completes the installation of the vent terminal.

Figure 4



Maintain clearances to Combustible material (2" x 4" or 2" x 6" framing) as per Table 1. Note: if the flex duct is to be located between joists, the spacers provided **must be used** to maintain clearances to combustible material.

Inside the home, attach the smaller end of the flex duct to the vent terminal. Use the 3" band clamp with the gasket attached (inside the clamp). The edges of the band clamp must engage both beads (the one on the vent terminal and on the flex duct) so that the gasket straddles the joint.

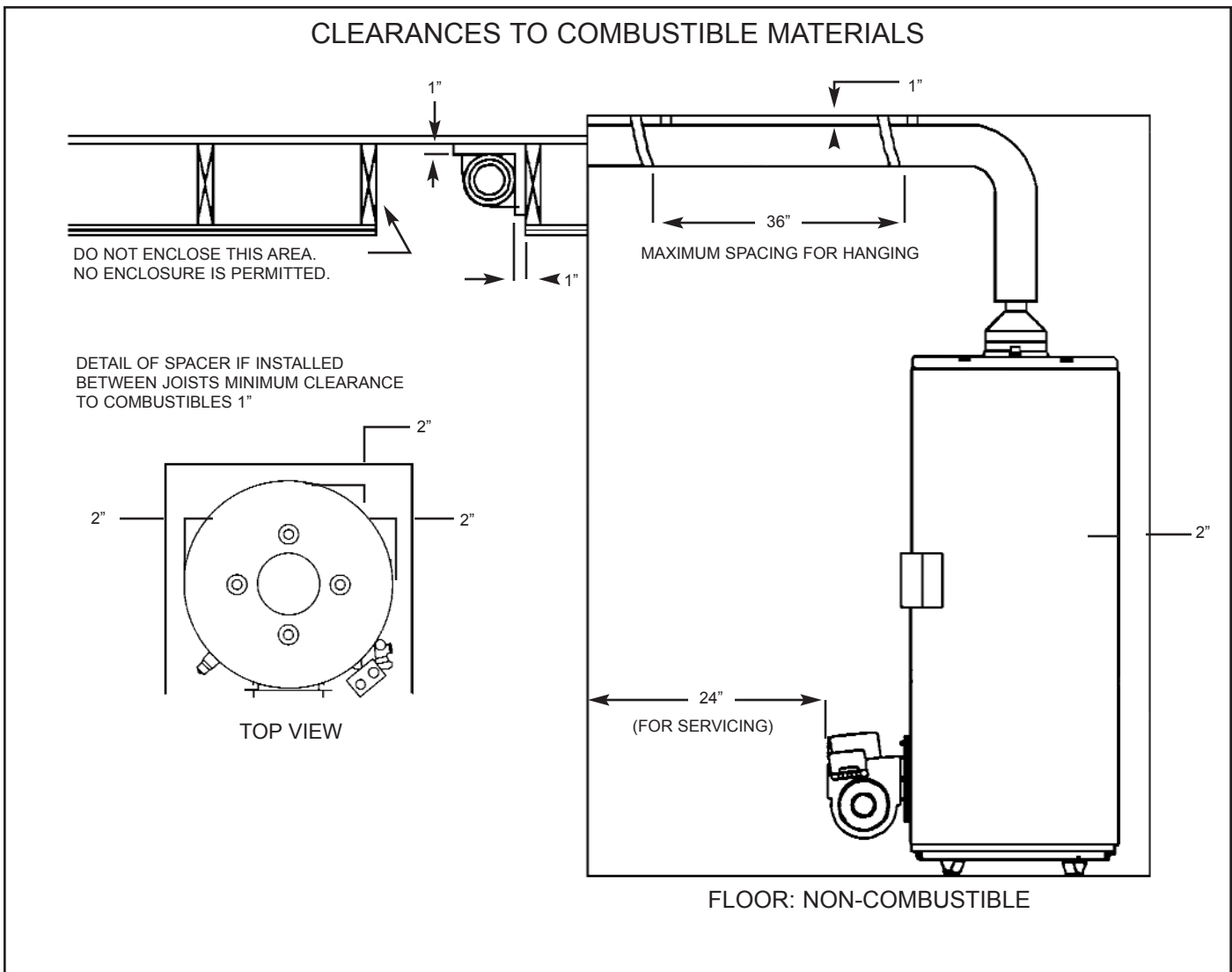
Run the flex duct to the water heater. All bends should be as generous as possible. Avoid sharp bends. Do not kink the duct.

Support longer horizontal runs. Maximum spacing must not exceed 3 feet. See Figure 2.

Installation Clearances and Clearances to Combustible Materials:	
Heater Sides and Rear	2"
Front of Heater	24" (Access for servicing)
Above Heater	24"
To vent Duct - Horizontal	Above and one side - 1" other side 6"
Floor	Below Duct- open to room non combustible

If the flex duct is run between ceiling joists, the spacers as provided must be used. See the details in illustration Figure 5.

Figure 5



To attach the flex duct to the water heater see Figure 6.

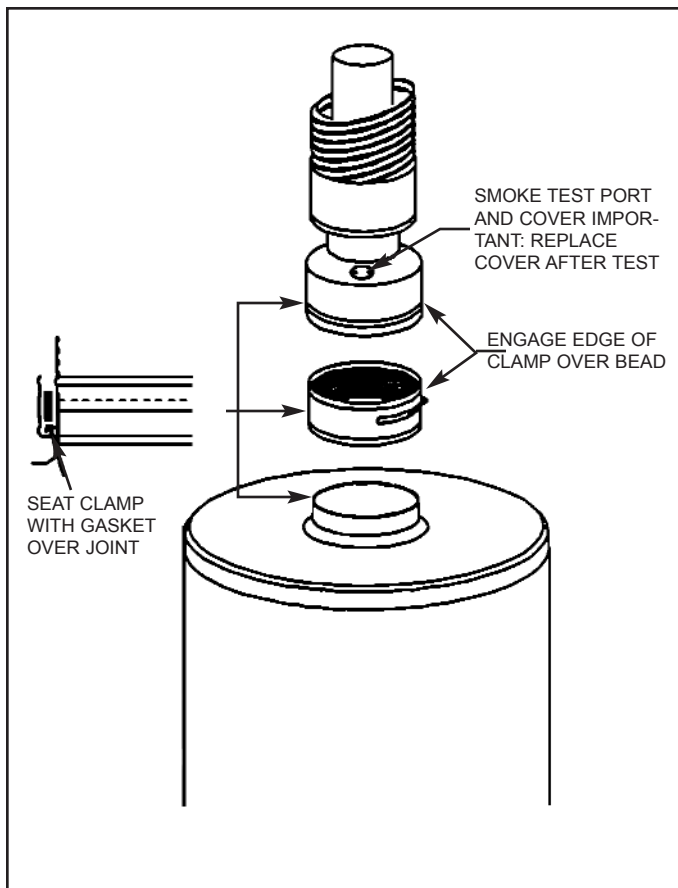
1. Place the band clamp around the transition piece (6" diameter) of the flex duct.
2. Slide the transition piece over the water heater flue outlet.
3. Leave a gap of approximately 5/8" to 3/4" between the edge of the transition piece and the water heater casing top.
4. Slide the band clamp down so that the gasket straddles the edge of the transition piece. The crimp of the clamp must engage the bead on the transition piece.
5. Tighten the gear clamp.

INITIAL START-UP

The burner is equipped with pre-purge and post-purge control. The pre-purge is set for a timing of 15 seconds, +5 seconds, -0 seconds. The post-purge is set for 3 minutes.

After the burner has started to fire, allow the heater to operate for 10 to 15 minutes (from a cold start).

Figure 6



Take a smoke reading. An opening for smoke readings is provided in the transition piece of the duct (Figure 7).

The smoke must be adjusted to a maximum of # 1 smoke. With an adjustment of #1 smoke, the overfire **pressure** should be between .20" and .25" W.C. Take care to replace the sealing screw in the overfire pressure test port to prevent flue gas from escaping from the combustion zone into the home. (Figure 8).

TEST FOR LEAKS

With the heater still running, test around the band clamp at the flue connection of the heater for leaks. Use a smoke pencil or similar device. Make sure the clamp is tight and no flue gases escape at this point.

Repeat the procedure at the connection between the flex duct and the vent terminal (inside the house). If leakage is detected, it may be due to misplaced clamps over the joint. Please repair all leaks.

NOTE: The gasketing material is a special high temperature Teflon. **DO NOT SUBSTITUTE.** If more gasketing is required for repair it can be obtained from this company. See page 7 for replacement parts.

Figure 7

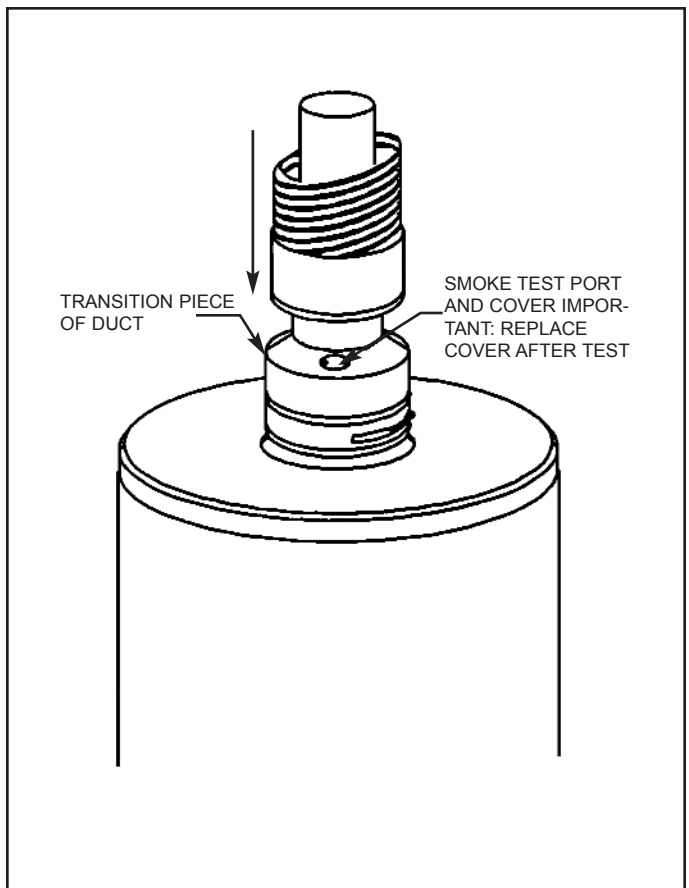
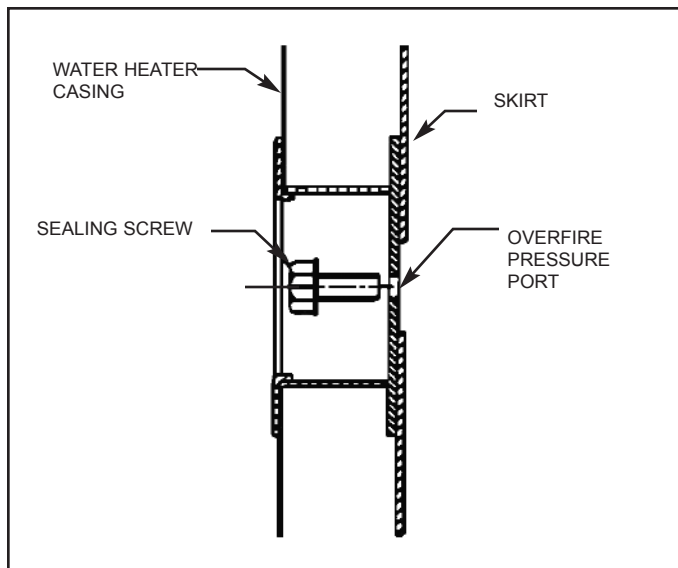


Figure 8



REPLACEMENT PARTS

63376	Termination Device
63377	Flex Duct and Transition 5' Long
63378	Flex Duct and Transition 10' Long
63379	Flex Duct and Transition 20' Long
63386	Termination Screen
63400	Clamp 3" Complete with Gasket
63401	Clamp 6" Complete with Gasket

IF YOU CAN SMELL FLUE GASES IN THE HOME, IT IS A SIGN OF LEAKAGE SOMEWHERE IN THE FLUE SYSTEM. CHECK FOR LEAKAGE AT ALL JOINTS OF THE FLEX DUCT (AT THE HEATER CONNECTION AND THE VENT TERMINAL). MAKE SURE THE SMOKE SAMPLING PORT IS SEALED WITH THE COVER AND GASKET (Figure 7).

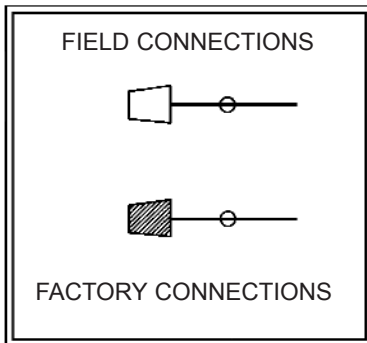
ANNUAL INSPECTION

Once a year inspect all vent joints for leakage as described in the section under "Initial Setup". Inspect the outside vent terminal and remove any debris which may have accumulated.

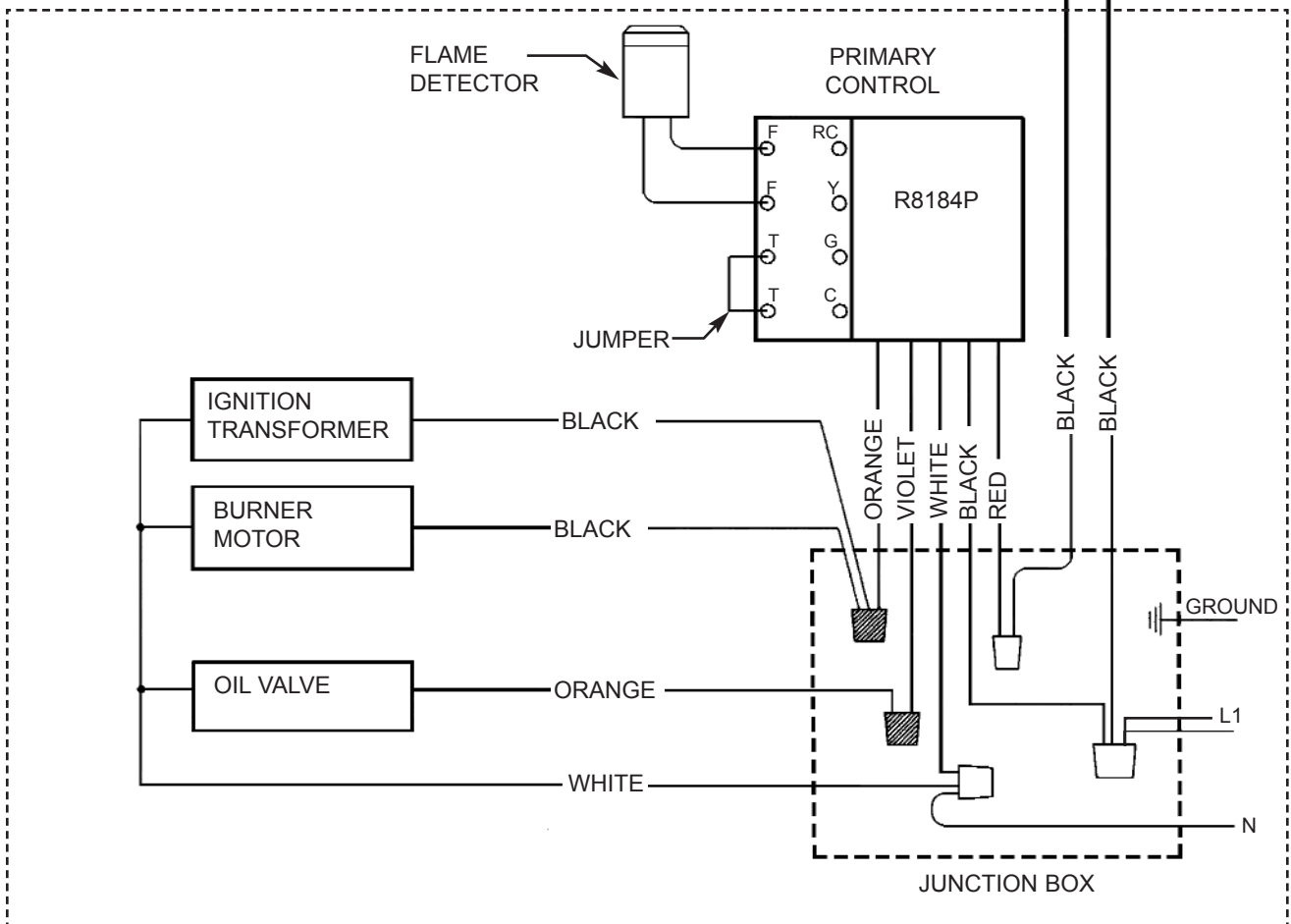
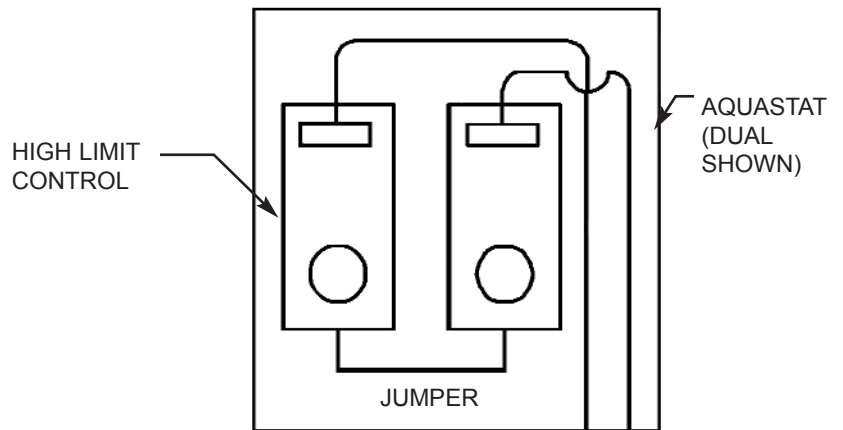
Perform a combustion test and overfire test as described in the same section.

Repair all leaks as required and make the necessary burner adjustments to obtain the prescribed smoke readings at the maximum overfire pressure.

Replace leaking band clamps with new ones as required.



AQUASTATS:
 DUAL MODEL# L4081A-1155
 SINGLE MODEL # 11B76-1



**WIRING DIAGRAM FOR JWF307V
 HONEYWELL R8184P OIL PRIMARY CONTROL**