

# ACCESSORY KIT INSTALLATION INSTRUCTIONS

## 4000 SERIES ROOF JACK

### GENERAL

#### **▲WARNING**

*These instructions are intended for use by qualified individuals specially trained and experienced in installation of this type of equipment and related system components.*

*Carefully follow all instructions and warnings in this instruction. Failure to follow these instructions and the instructions provided with the furnace can result in fire, asphyxiation, or explosion.*

The 4000 Series Roof Jack is used on furnaces only when listed on the appliance rating plate, including CGAT, COAS, COAT, DGAA, DGAH, DGAM, DGAT, DGPA, DGPH, DGPT and DLAS furnaces.

The following accessories may be used with the 4000 Series Roof Jack:

- 4084-6541 - Exterior Roof Jack Extension
- 7680B6541 - Exterior Roof Jack Extension
- 7900A6111 - Interior Roof Jack Extension, 11"
- 7900A6171 - Interior Roof Jack Extension, 17"

An Exterior Roof Jack Extension is recommended when the furnace is installed in a region where snow accumulation on the roof exceeds 7" or in H.U.D. Snow Load Zones.

#### **▲WARNING**

*Combustion air inlet must remain unobstructed to allow adequate combustion air supply. A blocked air inlet can result in fire, asphyxiation, or explosion.*

Roof Jacks with removable crowns must use the Crown Assembly provided with the Roof Jack or Crown Assembly 4000-6941/A. Follow instructions provided with the Crown assembly for proper installation.

The Accessory Ceiling Ring (7660-2841) may be used to meet fire stop requirements mandated by the local authority having jurisdiction. Acceptable fire stop methods may also be provided by the manufactured housing manufacturer or by the installer.

### PRE-INSTALLATION

#### Replacement Furnace

1. Proceed to "Verify correct Roof Jack" if furnace is installed in a new home or as a replacement for a damaged Roof Jack.
2. Inspect existing Roof Jack. Remove existing Roof Jack if any of the following conditions exist:
  - a. Roof Jack series is not listed on the furnace rating plate.
  - b. Roof Jack is damaged, tilted, crooked, or shows deterioration.
  - c. Roof Jack centerline does not align with new furnace flue centerline. Verify correct Roof Jack See Steps 1-2 below.
  - d. Roof Jack extension does not match requirements for new furnace. See "Verify correct Roof Jack", Steps 3-5 below.
  - e. A second roof, roofcap or addition has been added to the original roof.

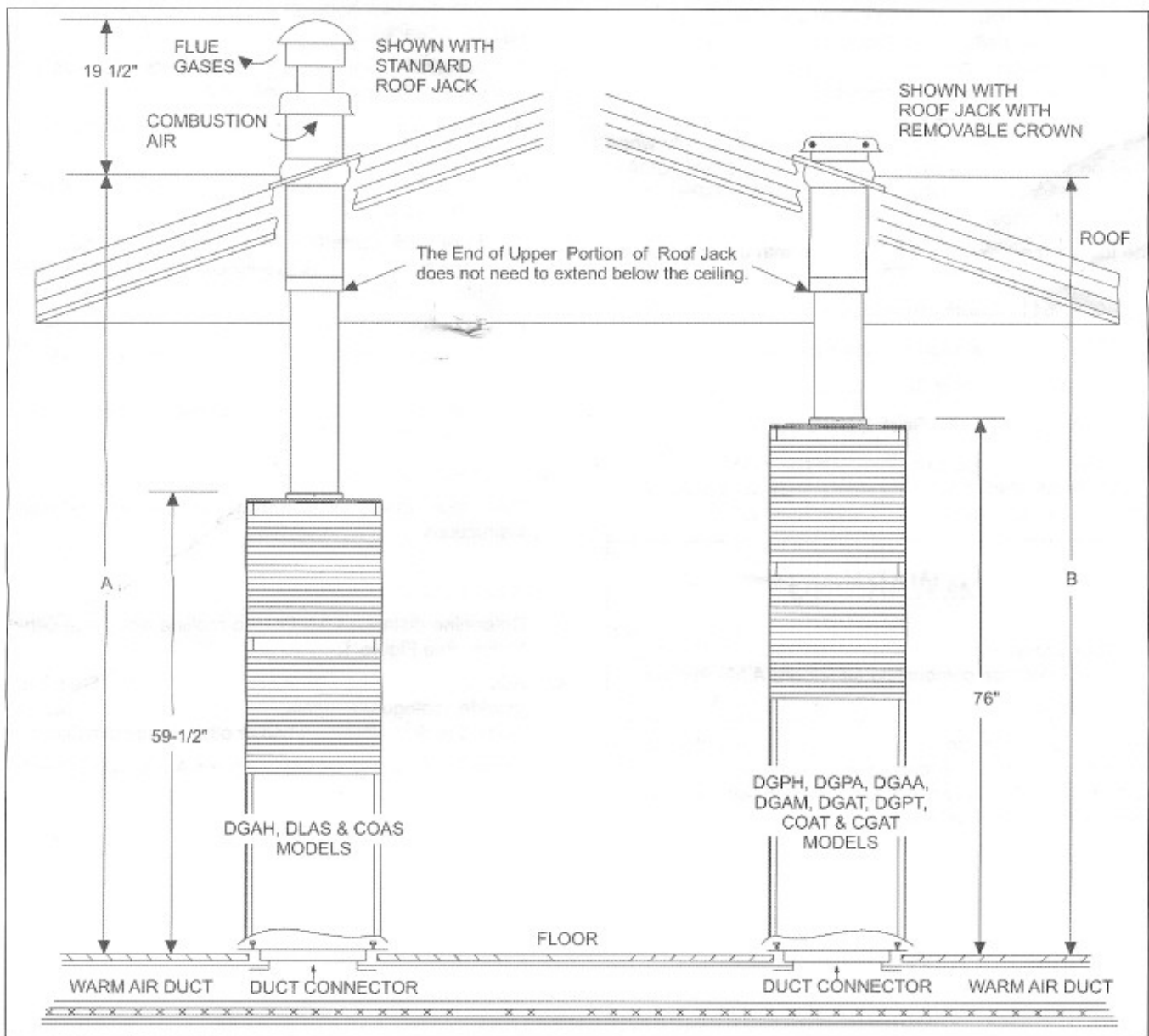
#### Verify correct Roof Jack

1. Determine furnace location. Refer to furnace installation instructions.
2. Determine Roof Jack centerline. Refer to furnace installation instructions.
3. Determine distance from floor to roofline along flue centerline. See Figure 1.
4. Add additional 1-1/2" to distance measured in Step 3 to provide safeguard against Roof Jack being pulled upward during transportation or other stress conditions.
5. Select Roof Jack based on dimension A or B. See Table 1.

**Table 1: ROOF JACK**

SWIVEL FLASHING ADJUSTS FROM 0/12 TO 5/12 PITCH	SLANT FLASHING 3/12 PITCH	INSTALLATION DIMENSIONS	
		"A" ADJUSTABLE HEIGHT 59-1/2" CASING	"B" ADJUSTABLE HEIGHT 76" CASING
<b>STANDARD ROOF JACK</b>			
4000-7101/C	4000-6101/A	70" to 79"	86" to 95"
4000-7121/C	4000-6121/A	75" to 86"	91" to 102"
4000-7141/C	4000-6141/A	83" to 104"	99" to 120"
4084-7141*			
4000-7151/C	4000-6151/A	90" to 116"	106" to 132"
4084-7151*			
<b>ROOF JACK WITH REMOVABLE CROWN</b>			
4000-7171/C	4000-6171/A	127" to 157"	143" to 173"
4000-8161/C	4000-9161/A	85" to 101"	101" to 117"
4000-8181/C	4000-9181/A	99" to 129"	115" to 145"

\* Available in Canada Only.



**FIGURE 1 - ROOF JACK**

## INSTALLATION

### Install Roof Jack

1. Install furnace. Refer to furnace installation instructions. Provide protection for Vent Connector and Air-Intake Connector from damage and debris.
2. Mark Roof Jack centerline on ceiling. Cut a 5" radius (10" diameter) hole through ceiling.
3. Mark Roof Jack centerline on roof. Cut oblong hole through roof.
4. Insert Roof Jack through roof opening. Do not secure Roof Jack to roof.

### Connect Roof Jack to Furnace

1. CGAT, COAS and COAT furnace only. install Flue Shield inside Vent Connector. Push Flue Shield down until in contact with the built-in stop inside the Vent Connector. See Figure 2.

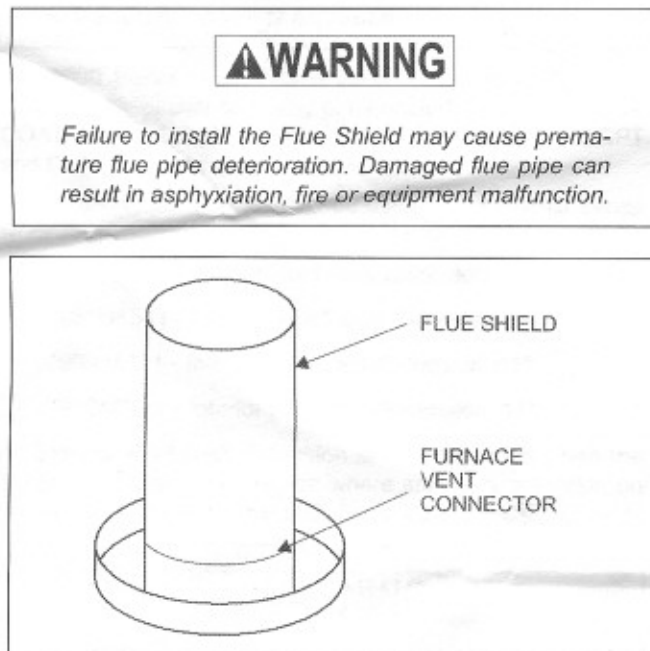


FIGURE 2 - Flue Shield Installation

2. Verify gasket is around outside of Air-Intake Connector. Install new gasket if missing or damaged.

3. Pull the Roof Jack's telescoping section down onto furnace. Fully engage Roof Jack onto Vent Connector and Air-Intake Connector and compress gasket. See Figure 3. Refer to Interior Roof Jack Extension installation instructions, if applicable.
4. Align holes in Roof Jack and Air-Intake Connector. Secure Roof Jack to furnace using #10 x 1/2 - 1-1/2" Type AB or Type B sheet metal screw.

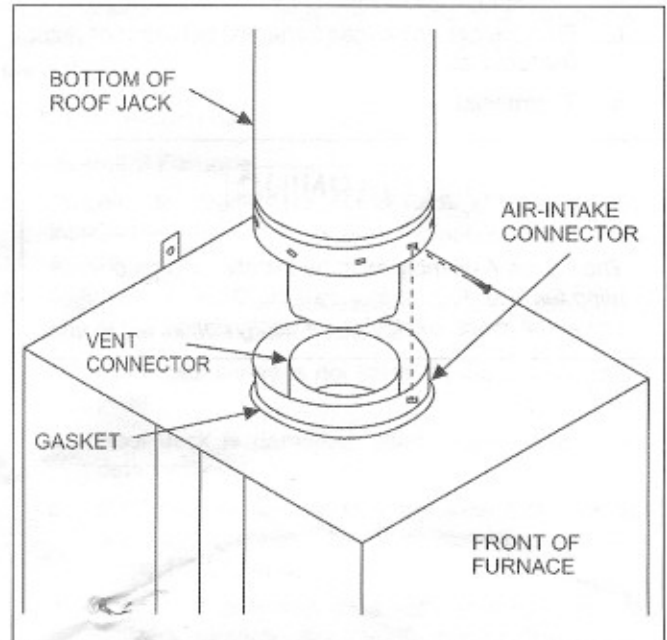


FIGURE 3 - Roof Jack Attachment to Furnace

### Secure Roof Jack to Roof

1. Apply caulk or other sealant to underside of Roof Jack flashing.
2. Locate Roof Jack such that pipes are plumb.
3. Secure Roof Jack flashing with nails, screws or staples.
4. Install roofing material over Roof Jack flashing.
5. Seal Roof Jack swivel joint with silicone sealant or other sealant suitable for local weather conditions. Not required for Roof Jacks with fixed slant flashing.

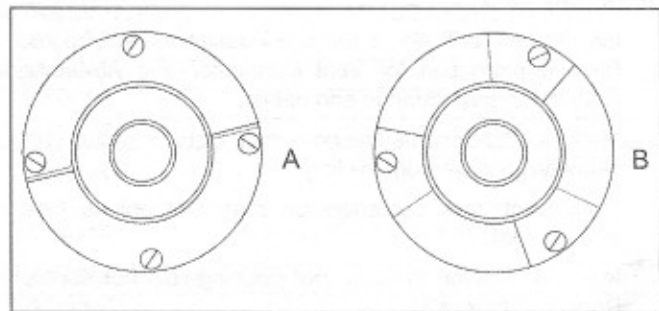
**Complete Installation, as required.**

1. Install Exterior Roof Jack Extension, if applicable. Refer to installation instructions provided with Exterior Roof Jack Extension.
2. Install Crown Assembly, if applicable. Refer to installation instructions provided with Crown Assembly. If Crown Assembly is not installed, attach warning tags provided with Roof Jack to:
  - a. Fuel supply connection to the home.
  - b. Furnace gas valve (gas furnaces) or burner oil pump (oil furnaces).
  - c. Thermostat

**▲WARNING**

*The Crown Assembly must be installed before operating furnace. Failure to install the Crown Assembly can result in fire, explosion, or asphyxiation.*

3. Install Ceiling Ring. See Figure 4. Use three (3) sections of the Ceiling Ring to provide closer clearance around Roof Jack.



**FIGURE 4 - Ceiling Ring**

4. Place these instructions in the Customer Envelope provided with the furnace.