



Outside Air Adapter Installation Instructions for the Resolute Acclaim

The Outside Air Adapter for the Resolute Acclaim channels air for combustion directly from outside the home to the stove. This can improve the comfort level of the home by reducing the uncontrolled infiltration of outside air, and can improve stove performance in extremely tight homes by increasing the combustion air supply.

The procedure requires three steps: Installing the Adapter, Modifying the Bottom Heat Shield and Connecting to the Air Supply.

Materials Provided:

- (1) Outside air duct flange
- (1) Outside air duct body
- (2) Phillips pan head sheet metal screws, #10 x 1/2"
- (4) 2" (50mm) heat shield spacers

Tools Required:

- 5/16" (8mm) wrench
- Combination square
- Phillips screwdriver, less than 6" (150mm) in length
- Tape measure or ruler
- Tin snips
- Flat File
- Hammer
- Mirror
- Drop light or flashlight
- Work gloves
- Protective eyewear
- 2" x 4" x 20" wood scrap (2)

Installing the Adapter

Using a light and mirror to see the bottom plate of the stove enables you to install the outside air adapter without tipping the stove on its back.

Before you begin, adjust the round adapter flange if necessary to accommodate your outside air source. It is secured to the adapter body with two phillips sheet metal screws, and can be positioned for either rear or bottom air entry.

Also, before you begin, elevate the stove if it has the optional 4" legs. With assistance, lift one side of the Acclaim and slide a piece of 20" (500 mm) wood under the legs; repeat for the other side. Make sure the stove legs are positioned securely.

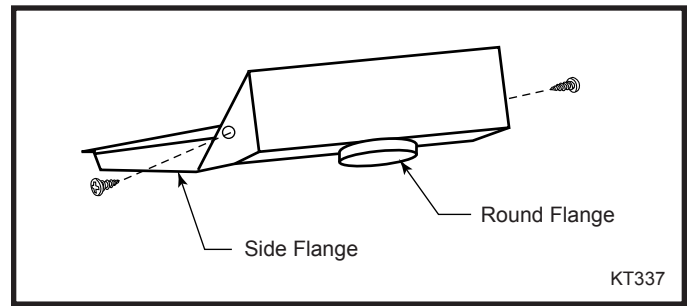


Fig. 1 Adapter assembly for bottom air entry.

Procedure

1. Remove the bottom and rear heat shield if either or both have been installed. Removing the rear heat shield simplifies the installation, while the bottom shield must be modified to accommodate the adapter. Shields must be replaced once the installation of the adapter is complete.
2. Place the mirror face up under the middle of the ash drop, and place drop light or flashlight under the rear of the stove. Locate the two silver-colored phillips machine screws in the ash drop, approximately 3" (75 mm) in from the ash drop sides, and 2" (51 mm) in from the rear. Remove the screws.
3. Place the outside air adapter in position against the ash drop, and align the holes in the left and right flanges of the adapter with the holes in the ash drop bottom. Secure the adapter to the bottom of the ash drop with the two Phillips machine screws.

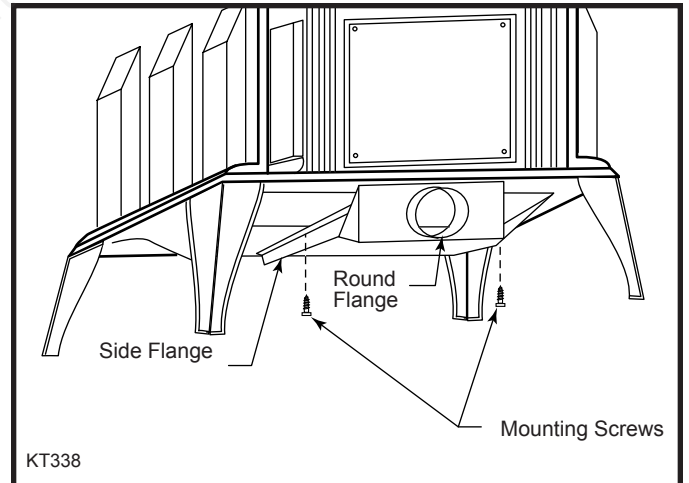


Fig. 2 Adapter installed for rear air entry.

Modifying the Bottom Heat Shield

The bottom heat shield must be modified to use the outside air adapter. Because the cut surfaces of sheet metal are extremely sharp, wear protective eyewear and work gloves while cutting the shield. (You will find the modification easier if you use special metal working tools such as right- and left-cut tin snips. Straight tin snips may be used, but will not leave as clean an edge.)

Procedure

1. Measure in from the left and right corners of the rear shield flange $2\frac{7}{8}$ " (72 mm) and mark these two spots as shown in Figure 3.

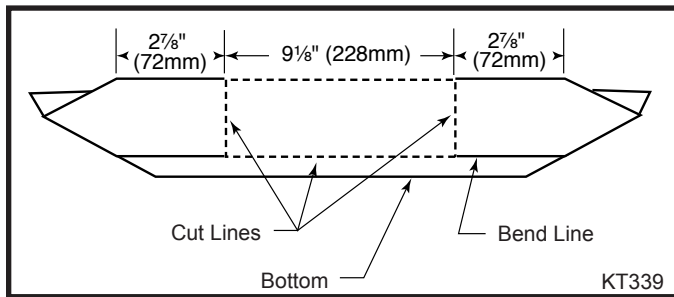


Fig. 3 Rear view of bottom heat shield.

2. Using a combination square, draw lines from these marks down to the bend in the flange. It is $4\frac{3}{8}$ " (110 mm) from the edge of the flange to the bend.

3. Check your measurements. The resulting rectangle of sheet metal to be removed should measure $9\frac{1}{8}$ " x $4\frac{3}{8}$ " (228 mm x 110 mm).

4. Using tin snips, cut to the bend line.

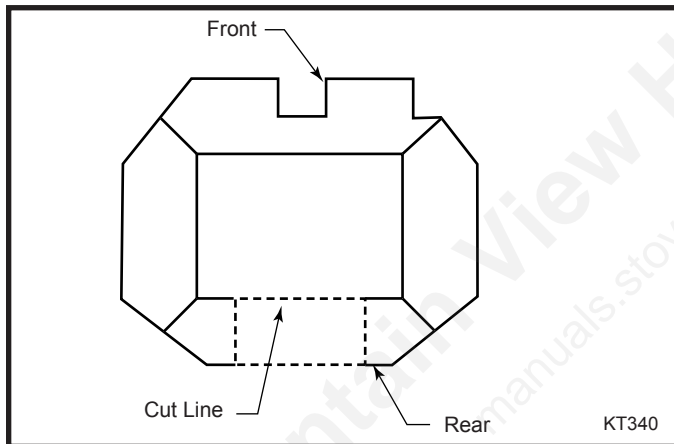


Fig. 4 Top view of bottom heat shield.

5. Place the heat shield on a work bench, with the bottom down, so that the bend line is directly over the edge of the bench. Using a hammer, tap along the line to form a 90° bend in the piece relative to the rear flange.

6. Cut the rectangle along the bend line, and remove it from the heat shield.

7. Smooth any rough edges with a flat file.

8. Using the 2" (51 mm) heat shield spacers that were supplied with the adapter kit, install the bottom heat shield. Install the rear heat shield if it was removed previously or if you are installing one for the first time.

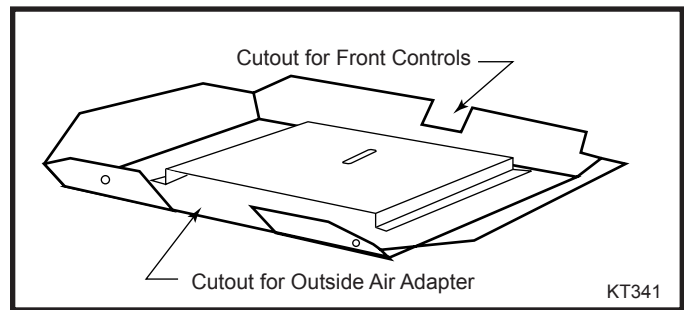


Fig. 5 A bottom heat shield with the cutout for the outside air adapter complete.

Connecting to the Air Supply

The round flange of the adapter must be connected to a 3" (75 mm) diameter duct that is noncombustible for the first 36" (910 mm). Adhere to the following guidelines when designing your outside air system.

- The air duct should be no longer than 20 feet (6 m) with a maximum of three elbows and should terminate at an outside air source. A butterfly valve should be positioned in the duct so that the incoming air can be shut off when not in use.
- Do not terminate the duct in a garage, attic, basement or near another fuel-fed appliance.
- No portion of the outside air duct, including the inlet, may be higher than the primary air ports of the stove.
- The air inlet must be covered by a wire mesh screen with openings not larger than $\frac{1}{4}$ " x $\frac{1}{4}$ " (6 mm x 6 mm) to prevent rodents from entering from outside.

Procedure

Secure the air duct to the round flange with two or three sheet metal screws.

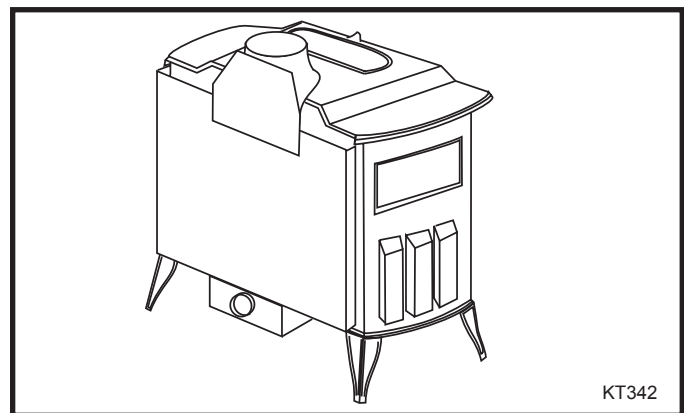


Fig. 6 The Resolute Acclaim with outside air adapter and rear heat shields installed.

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