

KGARP0301B14
KGARP0301B17
KGARP0301B21
KGARP0301B24

Return Air Base Accessory

Installation Instruction

NOTE: Please read these instructions completely before attempting installation.

SAFETY CONSIDERATIONS

Installing and servicing heating equipment can be hazardous due to gas and electrical components. **Only trained and qualified personnel should install, repair, or service heating equipment.** Untrained personnel can perform basic maintenance functions such as cleaning and replacing air filters. All other operations must be performed by trained service personnel. When working on heating equipment, observe precautions in literature, on tags, and on labels attached to or shipped with unit and other safety precautions that may apply.

These instructions cover the minimum requirements and conform to existing national standards and safety codes. In some instances, these instructions exceed certain local codes and ordinances, especially those that may not have kept up with changing residential construction practices. We require these instructions as a minimum for a safe installation.

Wear safety glasses and work gloves. Have a fire extinguisher available during start-up and adjustment procedures and service calls.

Recognize safety information. This is the safety-alert symbol . When you see this symbol on the furnace and in instructions or manuals, be alert to the potential for personal injury.

Understand the signal words DANGER, WARNING, and CAUTION. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies a hazard which **could** result in personal injury or death. CAUTION is used to identify unsafe practices which **may** result in minor personal

injury or product and property damage. NOTE is used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

INTRODUCTION

This instruction covers the installation of Return Air Kit for 35-in. (889 mm) tall condensing gas furnaces and 33 1/3-in. (847 mm) tall mid-efficiency furnaces. The bases are matched to specific furnace cabinet widths. The base can be used to provide side and bottom return air connections to any furnace installed in the upflow position without requiring a floor penetration. The 21 and 24 base is also used to mount a 20-in. (508 mm) or 24-in. (610 mm) media cabinet to the side of a 21-in. (533 mm) or 24 1/2-in. (622 mm) wide furnace without the use of a transition.



WARNING

ELECTRICAL SHOCK HAZARD

Failure to follow this warning could result in personal injury or death.

Before installing, modifying, or servicing system, main electrical disconnect switch must be in the OFF position. There may be more than 1 disconnect switch. Lock out and tag switch with a suitable warning label.

DESCRIPTION AND USAGE

The following kits are matched to the widths of the furnaces shown in Table 1 below:

Table 1 – Kit Usage

KIT PART NUMBER	USED WITH FURNACE WIDTHS	HEIGHT OF BASE
KGARP0301B14	14 ³ / ₁₆ inch wide	4 inch
KGARP0301B17	17 ¹ / ₂ inch wide	4 inch
KGARP0301B21	21 inch wide	4 inch
KGARP0301B24	24 ¹ / ₂ inch wide	8 inch

The kit comes in two pieces with screws to attach the assembly together and secure it to the furnace. The kit utilizes the existing bottom return air closure panel from the furnace as the bottom closure of the return air base.. It is best to assemble the kit on the furnace to optimize fit-up of the base to the furnace.

INSTALLATION

NOTE: The installation will require the use of the factory-supplied bottom enclosure panel for the furnace. Do not discard this panel.

To install the Return Air kit, perform the following steps. See Fig 1.



CAUTION

CUT HAZARD

Failure to follow this caution may result in personal injury.

Sheet metal parts may have sharp edges or burrs. Use care and wear appropriate protective clothing and gloves when handling parts and servicing furnaces.

1. Remove the upper and lower doors.
2. Remove the loose parts bag and any other materials shipped inside the furnace.
3. Invert the furnace.
4. Remove the 4 screws that secure the bottom plate to the furnace casing.
5. Slide the bottom closure pan out of the furnace.
6. Re-install the bottom plate to the furnace casing with the 4 screws.
7. Align the flanged opening of the rear section of the base on the bottom opening of the furnace.
8. Secure the base to furnace casing.
9. Set the bottom closure panel on the return air base, embossed side toward blower assembly.
10. Slide the bottom closure panel to the back of the furnace so the back flange of the base goes underneath the flange of the return air base. The side flanges of the bottom closure panel should be resting on top of the return air base.

11. Position the front section of the return base on the front of the larger section of the return air base. The front edge of the bottom closure panel should be underneath the front section of the return air base.
12. Secure the return air base sections together with sheet metal screws.
13. Secure the front section of the return air base to the casing with sheet metal screws inserted through the tabs of the front section.
14. If necessary, seal the bottom closure pan to the casing with code approved tape or mastic. Allow mastic to dry before inverting the furnace.

Cutting the return air opening:

NOTE: Media Cabinet or other air filtration devices may not have the same opening dimensions as marked on the furnace casing and return air base. Always measure and mark the opening in the furnace casing and return air base prior to cutting the furnace casing and return air base. Do not cut outside the return air openings in the furnace casing or the dimples in the return air base.

1. Select the side of the furnace and base to be cut out and lay the furnace on the opposite side. See Fig 1.
2. Verify the Media Cabinet or other air filtration device matches the marked openings in the casing and return air base. Re-mark if necessary.
3. Mark the required opening in the furnace casing.
4. Locate the 8 dimples in the side of the return air base.
5. Mark the opening in the return air base between each set of four dimples. There will be a strip of metal left between each opening in the base.
6. Cut the return openings in the casing and return air base.
7. Attach the Media Cabinet or other air filtration device to the return air opening and base per the instructions included with Media Cabinet or other air filtration device. See Fig 2.
8. If necessary, seal the Media Cabinet or other air filtration device to the casing with code approved tape or mastic. Allow mastic to dry before inverting the furnace.

Complete the installation of the furnace per the furnace Installation Instructions.

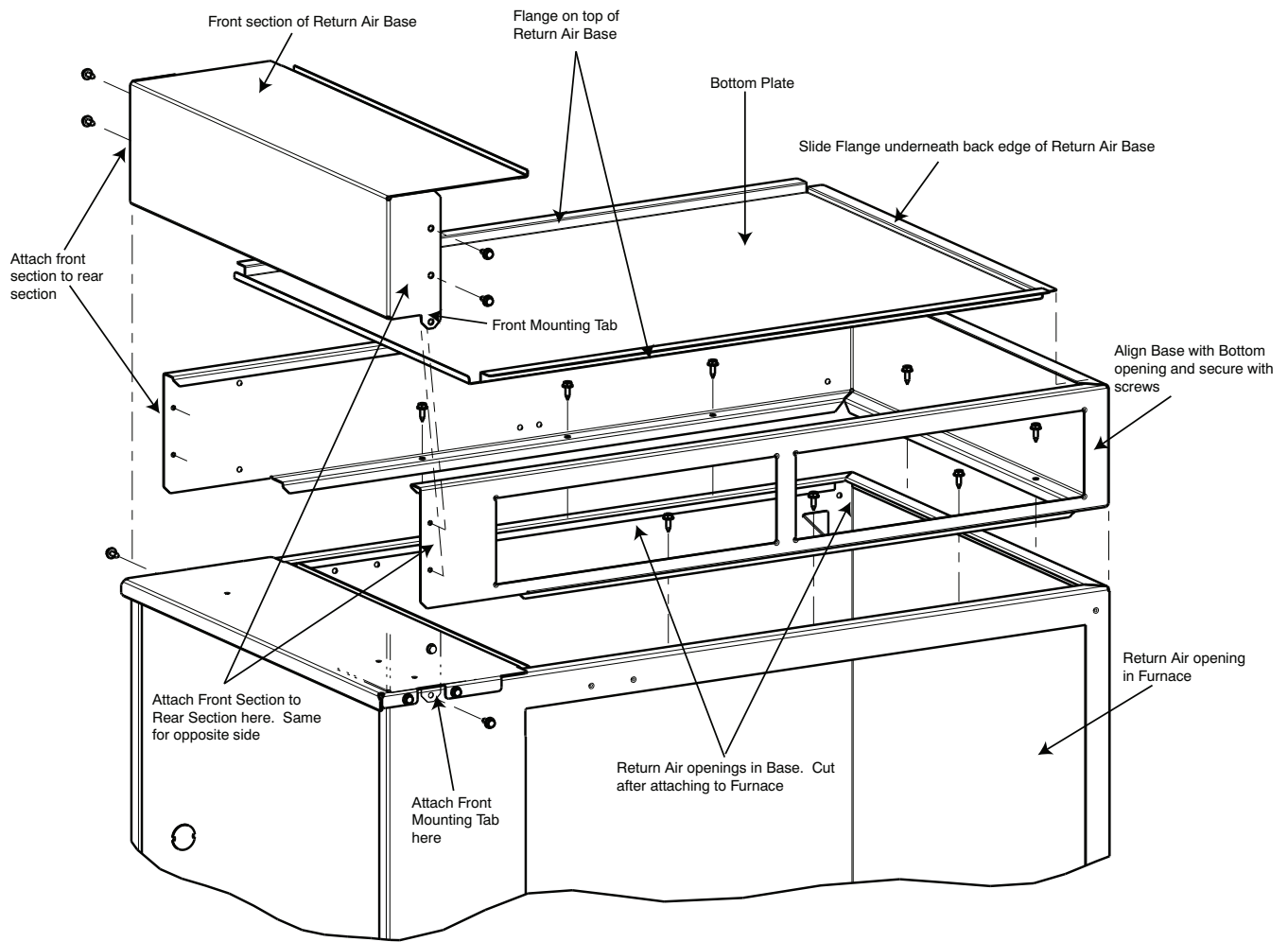


Fig. 1 - Return air base Assembly

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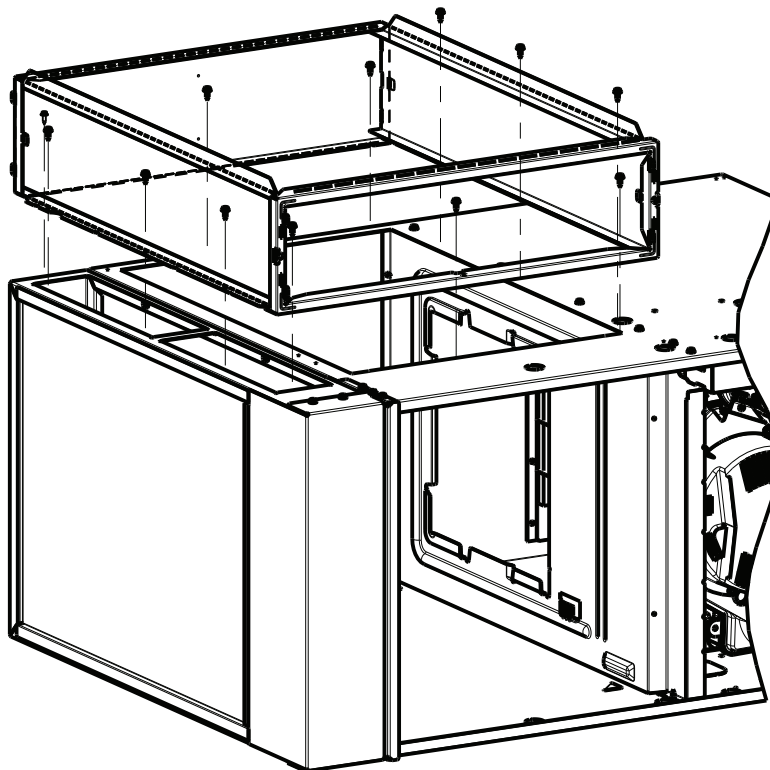


Fig. 2 - Attach Media Cabinet

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