

READ AND SAVE THESE INSTRUCTIONS

CARNES®

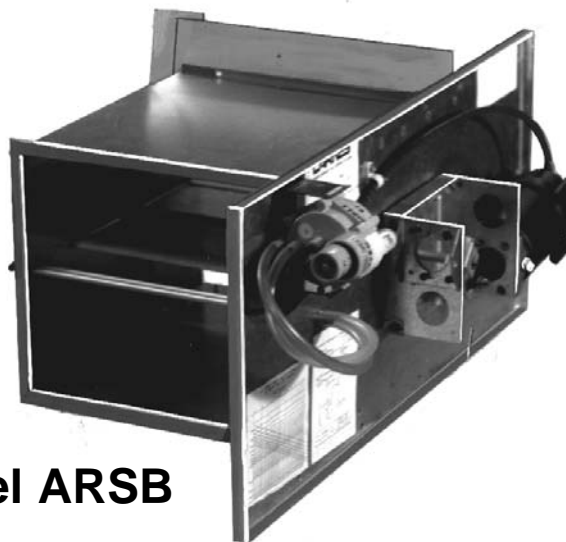
**INSTALLATION and OPERATION MANUAL
VAV RETROFIT
Models ARRE and ARSB**

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HIGH and LOW VELOCITY UNITS



Model ARRE



Model ARSB

INSPECT UNIT

UNPACKING AND INSPECTION

1. Open shipping carton and check for concealed shipping damage. Report damage immediately to the carrier that delivered the shipment.
2. Inspect the unit for loose or missing components.
3. Optional accessories may be packed within the unit or in the same shipping carton

INSTALLATION

GENERAL

1. Each VAV unit and accessory is shipped with an identification label showing the Carnes order number, unit item number from the order, unit model number, maximum and minimum CFM Setting on terminal units with pressure independent control options, and unit tagging (or mark).

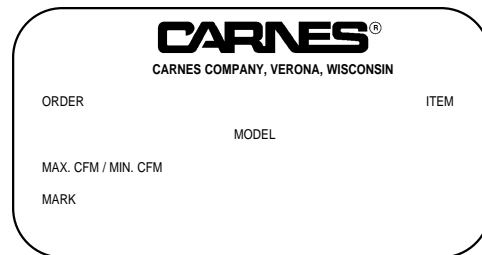
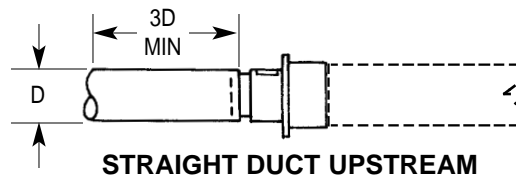
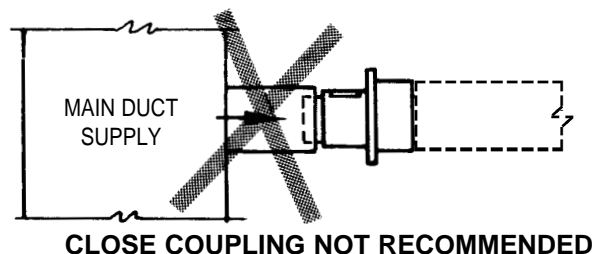


Figure 1



1. The diameter of the inlet duct in inches must be equal to the listed size of the ARRE Terminal Unit, e.g., a duct diameter that measures six (6) inches must be fitted to a unit Size 06.
2. The control unit must be mounted such that the velocity sensor is at the inlet of the terminal unit, upstream of the damper blade.
3. It is preferred that the installer attempt to obtain a minimum of three (3) inlet diameters of straight duct ahead of the terminal unit inlet to achieve optimum control accuracy. (Figure 1)

Figure 2



NOTE: Close coupling the terminal unit inlet to the side of the main duct is not recommended. (Figure 2)

4. Remove the section of duct equal to the length of the ARRE terminal unit as specified in the Dimensional Data *plus* 1/4" for working room. (Figure 3)
5. Facing the ARRE Terminal Unit inlet, mount the terminal unit in a horizontal level position.
6. Insert the inlet of the ARRE Terminal Unit into the upstream duct and secure the outlet end to the downstream duct with a collar (field supplied) or, in the case of flex duct, with tie bands and duct tape provided by others, or as prescribed by the job specifications. (Figure 4).

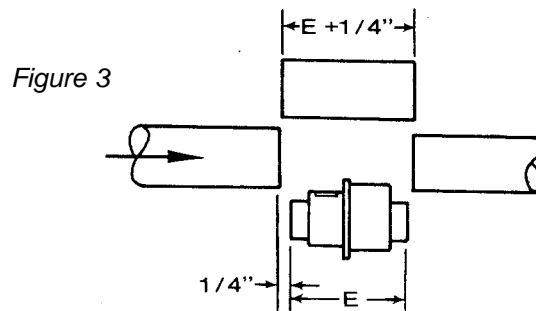
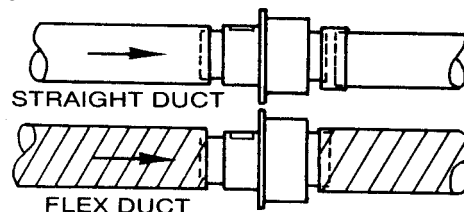


Figure 4



7. The ARRE Terminal unit may be provided with optional hanger brackets suitable for supporting the terminal unit by wire hangers or threaded rod.
8. Strap hangers may be used for supporting the terminal units when hanger brackets are not provided.

CAUTION: Do not install hangers so as to impair the movement or performance of control components.

MODEL ARSB

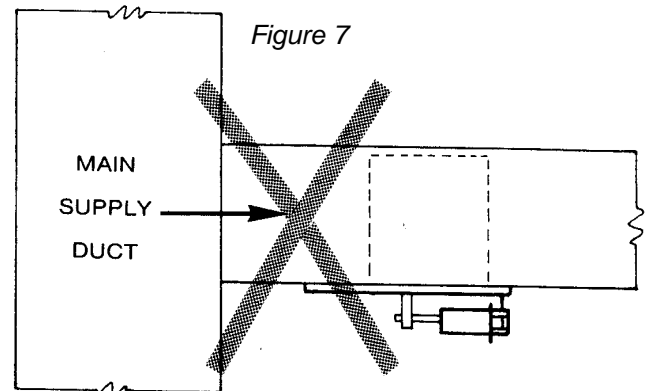
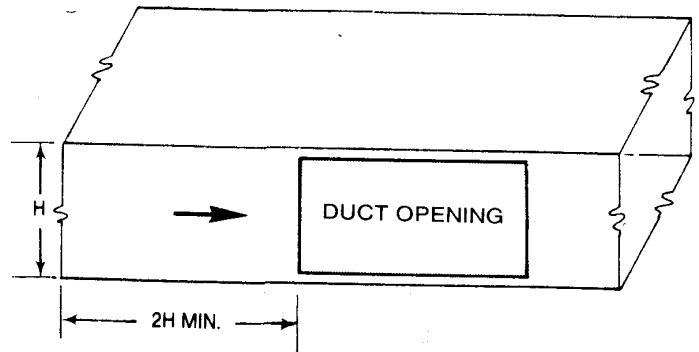
MOUNTING THE ARSB (Side Mount Slide-In) Terminal Unit.

1. The inside duct dimensions (Width x Height) must be used when specifying unit size. Be sure to allow for duct insulation.
2. It is preferred that the installer attempt to obtain a minimum of two (2) duct heights of straight duct ahead of the terminal unit inlet to achieve optimum control accuracy. (Figure 6)

3. A panel should be cut and removed from either side of the duct equal in size as specified from the dimensional data. (Figure 6)
4. Close coupling the ARSB Terminal Unit inlet to the side of the main supply duct is not recommended. (Figure 7)

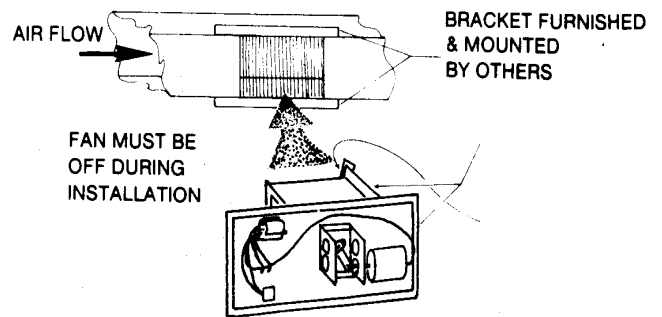
5. With the velocity sensor facing upstream, slide the ARSB in a horizontal level position into the duct opening. (Figure 8)
6. Mount the ARSB in a horizontal position using the duct mounting holes in the side plate. It may be necessary to install an upper and/or lower flange to the duct (provided and installed by others) to facilitate mounting the ARSB Terminal Unit. (Figure 8)

Figure 6



CLOSE COUPLING NOT RECOMMENDED

Figure 8



UNIT MUST BE MOUNTED HORIZONTAL