

Installation Instructions

Vertical Wall Mount Air Handler

These instructions are primarily intended to assist qualified individuals experienced in the proper installation of heating and/or air conditioning appliances. Some local codes require licensed installation/service personnel for this type equipment. All installations must be in accordance with these instructions and with all applicable national and local codes and standards.

Before beginning the installation, read these instructions thoroughly and follow all warnings and cautions in the instructions and on the unit. When performing brazing operations have a fire extinguisher readily available and use a quenching cloth and brazing shield.

Improper installation, service, adjustment, or maintenance can cause fire, electrical shock or other conditions which may result in personal injury or property damage. Unless otherwise noted in these instructions, only factory authorized kits or accessories may be used when modifying this product.

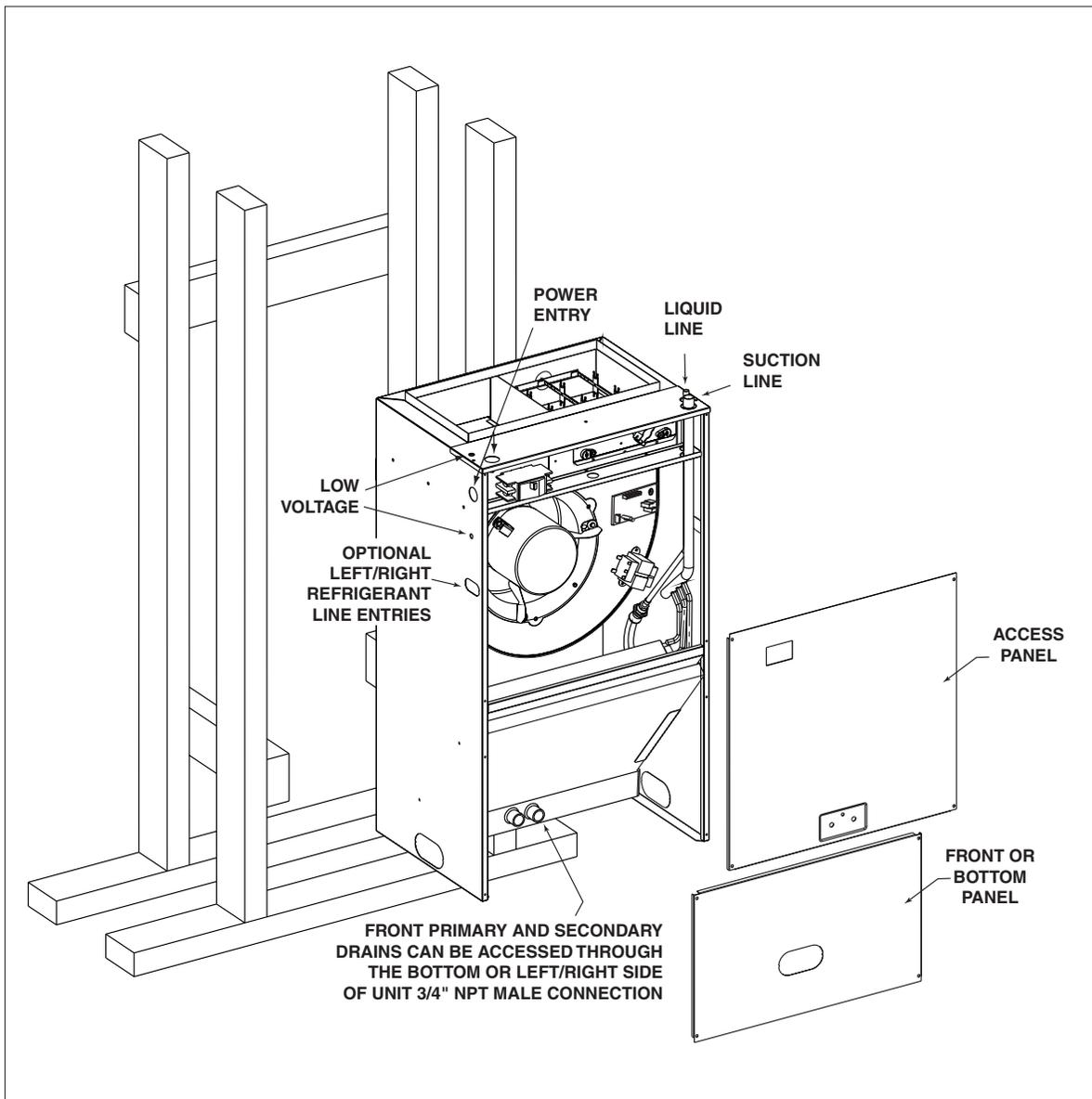


Figure 1.

1. INSTALLATION

Units are designed to be installed either recessed into a wall or hanging in a vertical “upflow” position. If units are recessed in a wall, attachment to the framing studs are through the inside of the front flange. Airhandlers are provided with an offset hanging bracket attached to the rear of the cabinet for hanging applications.

Units have a bottom and/or front return. Discard bottom access panel in bottom of unit or attach to the front of the unit below the top service panel if installed in a bottom return application. If installed in a front return application, the bottom access panel with insulation can also be removed and discarded.

Units are equipped with primary and secondary drains and both drains must be trapped. Failure to install a trap could result in condensation overflowing the drain pan resulting in substantial water damage to the nearby area.

Note: If you intend to install this unit with a louvered door the unit must be mounted flush or behind front edge of finished wall.

2. REFRIGERANT TUBING CONNECTIONS

Note: Do not remove seals from the coil until tubing connections are ready to be made. See the instructions packaged with the condensing unit for the correct procedure for connection of the refrigerant lines.

Note: The air handler coil does not contain a refrigerant charge. Reference installation instructions included with outdoor unit for information regarding the refrigerant charge included in the outdoor unit.

The restrictor employed in these air handlers has been sized for use with the most popularly matched A/C outdoor unit. The restrictor size in the coil as shipped from the factory is listed on the air handler rating plate. Check that the restrictor orifice size provided with the air handler is correct for the outdoor unit being applied. If the restrictor orifice size is incorrect it should be replaced as follows:

1. Loosen the distributor body halves by applying two wrenches and turning the assembly nut counterclockwise.

2. When separated insert a light-gauge wire hook between the distributor body and the restrictor orifice and carefully remove the restrictor orifice being careful not to scratch either part.
3. Insert the new restrictor orifice in the distributor body.
4. After installing the orifice in the distributor body, re-attach the assembly nut to the distributor body and tighten it to 10-12 ft/lbs of torque. If no torque wrench is available, hand tighten and then tighten an additional 1/4 turn.
5. Check the assembly for leaks after refrigerant pressure is applied.



WARNING:

To avoid the risk of electric shock, personal injury or death, disconnect all electrical power to the unit before performing any maintenance or service.

3. ELECTRICAL WIRING

General— Electrical power wiring must be made in accordance with all applicable local codes and ordinances, and with the current revision of the National Electric Code (ANSI/NFPA 70). If any of the original wire as supplied with the unit must be replaced, it must be replaced with wire material having the same gauge and temperature rating. Use a separate branch electrical circuit for this unit. See the unit wiring label for proper high and low voltage wiring.

208/240 volt units are shipped from the factory wired for 240 volt transformer operation. For 208 volt operation, remove the lead from the transformer terminal marked 240v and connect it to the terminal marked 208v.

Provide power supply for the unit in accordance with the unit wiring diagram and the unit rating plate. Use copper wire only for the line voltage power supply to this unit.

Check all factory wiring per the unit wiring diagram and inspect the factory wiring connections to be sure none were loosened in transit or installation.

Refer to Figure 2 for typical low voltage system wiring.

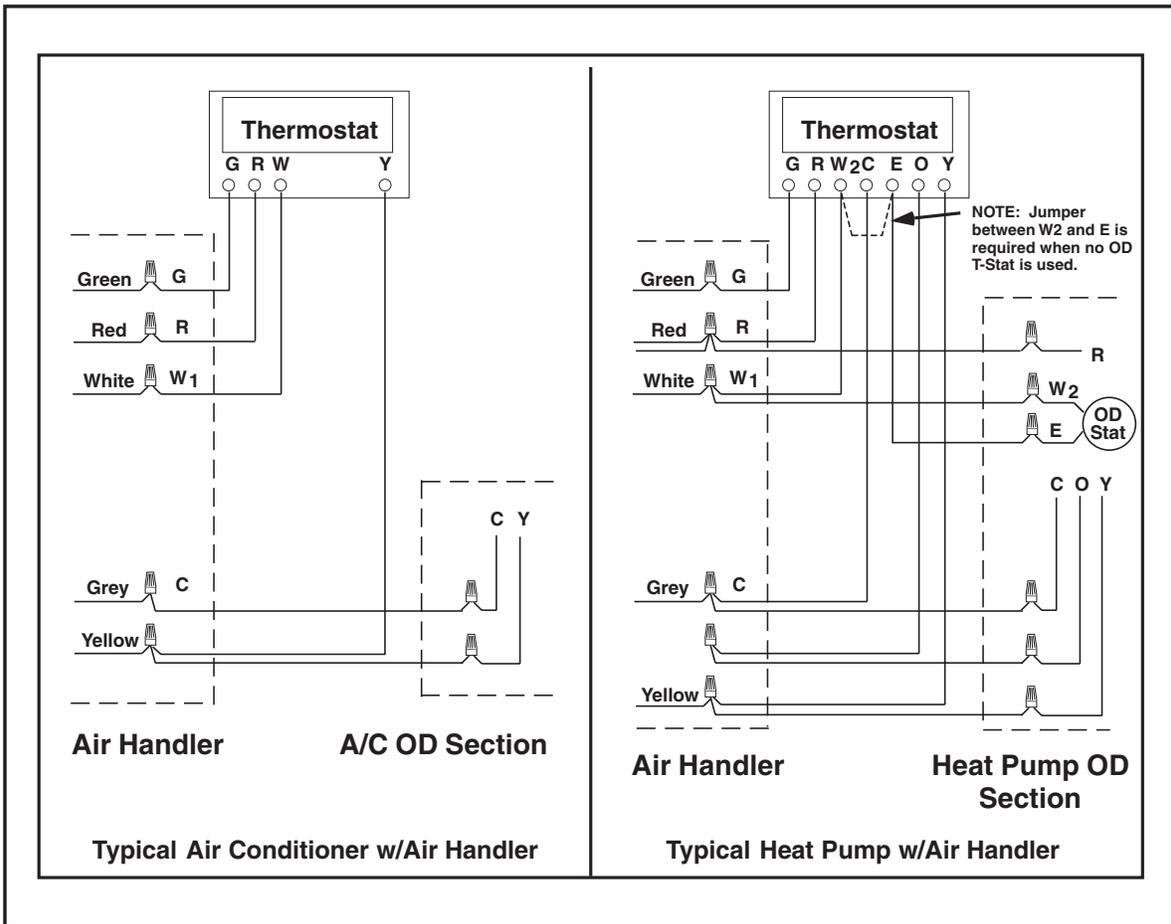


Figure 2. Typical Air Conditioning and Heat Pump System Connections



CAUTION:

Make sure all doors are installed before restoring power to the unit.

4. START-UP AND ADJUSTMENT

Selecting Proper Blower Speed for Multi-Speed Units — The blower speed is preset at the factory for operation at the same speed for heating and cooling. For optimum system performance and comfort, it may be necessary to change the factory set speed. To change the blower speed, disconnect all electrical power to the unit and remove the upper door. Remove the black wire from the blower motor terminal.

Connect the black wire to the desired blower speed marked on the terminal block of the blower motor. Terminal 5 = Hi speed, terminal 4 = Med Hi speed, terminal 3 = Med speed, terminal 2 = Med Low speed, terminal 1 = Low speed.

Replace the upper door and secure it to the unit. Restore power to the unit.

Selecting Blower Speed for Fan Only Operation — Units are equipped with the capability of selectable fan only blower speeds. To change the factory set blower speed, disconnect all electrical power to the unit and remove the upper door. Remove the green wire from the blower motor terminal. Connect the green wire to the desired blower speed marked on the terminal block of the blower motor. Terminal 5 = Hi speed, terminal 4 = Med Hi speed, terminal 3 = Med speed, terminal 2 = Med low speed, terminal 1 = Low speed.

Replace the upper door and secure it to the unit. Restore power to the unit.

5. CARE AND MAINTENANCE

General — For continued high performance, and to minimize the risk of equipment failure, it is essential that periodic maintenance be performed on this equipment. The ability to properly perform maintenance on this equipment requires certain mechanical skills and tools. If you do not possess these skills, contact your dealer for maintenance. Consult your local dealer as to the availability of a maintenance contract.

Do not store any of the following on, or in contact with, the unit: Rags, brooms, vacuum cleaners, or other cleaning tools, spray or aerosol cans, soap powders, bleaches, waxes, cleaning compounds, plastics or plastic containers, paper bags or other paper products, gasoline, kerosene, cigarette lighter fluid, dry cleaning fluids, paint thinners, or other volatile fluids.

Proper maintenance is most important to achieve the best performance from an air handler. At a minimum, this maintenance should include the following items.

1. Inspect and clean or replace the air filter at the beginning of each heating and cooling season, or more frequently as required.
2. Inspect the cooling coil, drain pan, and condensate drain at the beginning of each cooling season for cleanliness. Clean these components as necessary using a mild detergent and water. Flush the coil, drain pan, and condensate drain after cleaning to remove all detergent. Use caution when cleaning these components so that the insulation does not become wet.
3. Inspect the blower motor and wheel for cleanliness at the beginning of each heating and cooling season. Clean the motor as necessary.
4. Inspect electrical connections for tightness at the beginning of each heating and cooling season. Service as necessary.

INSTALLER:

**PLEASE LEAVE THESE
INSTALLATION INSTRUCTIONS
WITH THE HOMEOWNER**

