**INSTRUCTIONAL INSTRUCTIONS**

**NEW CONSTRUCTION VACUUM DUCT AND WALL INLET VALVE INSTALLATION**

Valve Brackets for Wall Inlet Valves

1. Locate the first valve bracket at a point the farthest distance from the power unit. From this location select additional valve locations. Each location should allow vacuuming in all corners of the room with the air vac hoses. Remember walls and furniture can shorten the distance serviceability of the valve so be sure to locate inlets with furniture and walls in mind.

2. Nail the valve bracket to the wall studs 12" to 15" above the floor, usually the same distance from the floor as electrical wall outlets. Alternate wall bracket configurations are possible.

**Vacuum Duct System**

1. After the valve brackets are nailed in place, drill a 2-1/2" diameter hole in the header plate directly above each valve bracket. Cement a RISER tube from the valve bracket, extending the tube through the hole in the header plate for each valve.

2. Start from the farthest valve bracket, lay tubing (cut to length), ending at the ceiling joint and work toward the power unit location. All sweep fittings must curve in the direction of air flow. Connect all risers from valve brackets to the main duct line using either 90° Sweep Tee Fittings (VM160) or 90° Sweep Fittings (VM163). Cement all duct connections at the time of installation. There can be no air leaks in the duct systems. Testing of vacuum integrity with wall inlet valves installed is highly recommended. Vacuum leaks will affect system performance.

**Low Voltage Vacuum Control Wiring**

- Note: the use of wall guards (VM116) and plastic guards (VM196) are highly recommended to protect the wall valve brackets and vacuum duct system during construction.

1. Low voltage control wires (Low Voltage Vacuum Control Wiring) are run to a central vacuum control panel, accessible from inside the roof to drill holes for the vacuum duct. Requirements are the same as in new construction. Wall inlet valve locations based on the ground floor must be in the room. All wiring must be done in parallel. All wall inlet valve locations should be accessible from inside the roof.

2. Secure the fitting to the horizontal main line ducts with tape or quick clips (VM450), but do not tape to the riser cable. When the installation is ready for trim-out, connect the wiring to the wall inlets (VM195) ready for the inlet valve (VM104).

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Overhead Vacuum Duct Installation (continued)

6 Secure the inlet valve to the vacuum body with the two provided inlet valve screws.
7 Repeat steps for each wall inlet valve location.

Underslab Duct Installation

In homes with a pier and beam foundation or basement, either the overhead or an underslab installation can be made. Sometimes, an underslab installation is easier in an existing home, especially if the roof has a low pitch and clearances in the attic adds to the installation problem. Under the floor installation also eliminates encountering fire blocks in the wall. Shorter risers are also utilized, eliminating the longer tube drop from the attic.

1 Vacuum tubing should be secured to floor joist with perforated nailing strips or通过对讲。
2 Generally, follow the overhead installation steps, but from below the floor, to install each wall inlet valve.

Alternate Vacuum Duct Riser Installation

An effective technique highly suitable for many types of construction with adequate working room inside the attic is to make drops to the wall inlet valves through the ceiling, then route the tube through the wall at inlet level for the hose valve on the opposite side of the wall. If this method is used, the drop from the inside of the attic to the vacuum riser can be made in the corner of a closet, utility room, etc. where the tubing is not visible or not objectionable.

System Testing

The AirVac central vacuum system should be tested for good suction throughout the system. Use a vacuum gauge (VM181) at each wall inlet valve location to measure the vacuum suction.

Troubleshooting

NOTE: NO USER SERVICEABLE PARTS INSIDE, DO NOT LUBRICATE MOTOR.

1 Be sure the unit is plugged into a working AC outlet.
2 Push breaker reset button on the power unit.
3 Check for obstructions in the hose, tools, or vacuum lines.
4 Check that all wall valves are closed.
5 Check for any ruptures or breaks in the vacuum duct system.
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7 Check for any ruptures or breaks in the vacuum duct system.
8 Be sure that the inlet plug is inserted into the unused power unit intake port.
9 Push down the RESET button for 7 seconds to reset the bag indicator.
10 Check for obstructions in the hose, tools, or vacuum lines.
11 Check for any ruptures or breaks in the vacuum duct system.
12 Be sure the unit’s power switch is off.
13 Plug the line cord into the AC receptacle.
14 Using a small screwdriver or other object, press down on the wire in the wire lock on the control wire connector (top rear of motor head) while inserting the wire into the connector. Release the wire lock while holding the wire in. Repeat with the other wire and the other hole. Polarity is not important, either wire can be connected to either hole.

Troubleshooting Tip

If the unit will not turn on, check the circuit breaker and/or fuse to make sure it is not tripped or blown.

5 Power Unit Installation

Power Unit Mounting and Pre-assembly.

This AirVac power unit is packaged and disassembled in a nested configuration which reduces the size of the shipping carton and allows for much smaller shelf space requirements than previous AirVac models. The power unit must be assembled during installation.

1 Carefully remove the nested vacuum from the box.
2 Separate each of the nested parts and place them gently on the floor.
3 Refer to the parts identification figure below to familiarize yourself with each part.

5 Power Unit Electrical

Low Voltage Control Wire Connection

1 Strip 1/8" of insulation from the low voltage control wire (28-30 AWG). The electrical outlet must match the voltage of the air unit. If the unit is to be installed in a living area, it should be installed on a wall away from any traffic pattern where the tubing is not visible or objectionable.

In-wall Installation

1 Determine the mounting location for the power unit. Be sure clearances dimensions are followed. The power unit must be secured with the #4 self-tapping screw.
2 Place the vacuum body on the wall as shown in the figure.
3 Check for obstructions in the hose, tools, or vacuum lines.
4 Be sure that the inlet plug is inserted into the unused power unit intake port.
5 Push down the RESET button for 7 seconds to reset the bag indicator.
6 Check that all wall valves are closed.
7 Check that all gaskets on wall valves are sealed.
8 Check to see if debris bucket or bag (Platinum Series only) needs emptying.
9 Check for obstructions in the hose, tools, or vacuum lines.
10 Check for any ruptures or breaks in the vacuum duct system.
11 If you are unable to resolve the operational problems, please contact AirVac technical support at 1-800-421-1857.

Limited Warranty

This limited warranty is in lieu of all other warranties, expressed or implied, including any warranties of merchantability or fitness for a particular purpose. Linear LLC reserves the right to modify this warranty. NO USER SERVICEABLE PARTS INSIDE. DO NOT LUBRICATE MOTOR. THE MOTOR FAILS TO OPERATE.

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