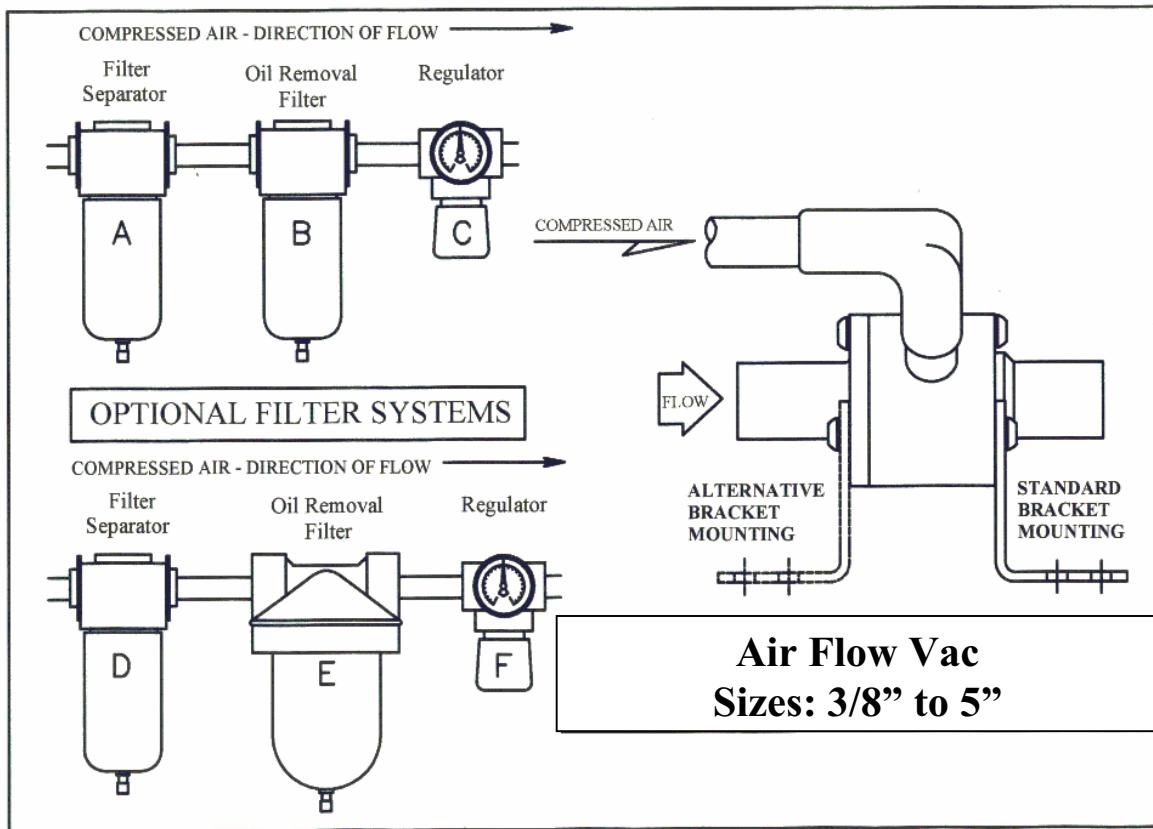


AIR FLOW VAC AIR OPERATED CONVEYOR INSTALLATION & MAINTENANCE



INSTALLATION AND SIZE OF COMPRESSED AIR LINES

Minimize the pressure loss to a Air Flow Vac air operated conveyor by keeping airline sizes adequately large.

For all Air Flow Vac air operated conveyor models use $\frac{1}{4}$ " pipe or $\frac{3}{8}$ " air hose runs up to 25 feet. For 50 foot runs, use $\frac{3}{8}$ " pipe or $\frac{1}{2}$ " hose and for runs over 50 feet, use $\frac{1}{2}$ " pipe or larger. Never use fittings that can be "restrictive" thereby starving the Air Flow Vacs of air and creating a large pressure loss in the airline.

CARE OF THE COMPRESSED AIR SUPPLY

Because Air Flow Vac air operated conveyors utilize a small "gap" for the air outlet, it is important to keep the air line free of moisture, oil and dirt. Air Flow Vac air operated conveyor can run maintenance free for many years using proper filtration

For water removal, a minimum 10 micron filter complete with an automatic (float type) drain is recommended. The diagram above (labelled A for small units and D for larger or a series of units) shows a typical installation for a water removal filter, optional oil removal filter and optional regulator. All filters should be sized to handle the total air flow of the Air Flow Vac air operated conveyors at the pressure they are set. If oil might be a concern, an oil removal filter (labelled B for small units and E for larger units) should be added as shown and have an automatic (float type) drain. Filters should be mounted near any Air Flow Vac air operated conveyor, typically within 10 to 15 feet.

USING THE AIR FLOW VAC AIR OPERATED CONVEYING SYSTEM, CONTROLLING FORCE, AND THE CONSERVATION OF AIR

Air Flow Vac air operated conveyor can be mounted by using a clamp or, mounting holes already on the mounting holes are normally located on the outlet side of the entrained airflow. However, the bolts may be removed and turned around to use the mounting holes on the inlet side instead. Mounting brackets are also available (as shown in the diagram) that can be attached to the mounting holes. For extra strength the bolts may be removed, and mounting brackets attached on both the inlet and outlet sides. Air Flow Vac air operated conveyors are manufactured in different sizes to be used with standard hose or tube. They perform best when hose or tube can be attached at both ends of the unit. Keep hose or tube straight, if possible, with bends minimized to keep backpressure at a minimum. Air Flow Vac air operated conveyors operate by having compressed air flow through the inlet into an annular plenum chamber where it is then injected through the centre using carefully directed nozzle openings. This airflow creates a vacuum at the inlet end that draw in material to “accelerate” its movement through the Air Flow Vac air operated conveyer. This allows it to be carried for long distances, either horizontal or vertical.

To decrease flow rates, a regulator (labelled C for small units and F for larger units or a series of systems) may be added and simply reduce the pressure to control the rate of flow required. For Greater distances in conveying and for faster rates of flow, the holes in the “flow generating unit” can be made larger with a drill by increasing the holes in 1/64” intervals and then testing for required effect each time.

CLEANING AND TROUBLESHOOTING

If the Air Flow Vac air operated conveyer does get clogged from contamination, simply dismantle the unit, clean, and re-assemble. When re -assembling, make sure that the holes of the “flow generating unit” point to the flow outlet end. At times a buildup of dirty film can occur on the throat of the unit due to vapor in the surrounding atmosphere. Clean this surface using a mild solvent and clean rag. To prevent contaminants from getting pushed back into the nozzle openings, do the cleaning with a small amount of compressed air passing through the Air Flow Vac air operated conveyer.

Certain factors can cause a reduction in flow or vacuum and thereby reducing the performance of an Air Flow Vac air operated conveyer. If the vacuum or flow seems to be below normal, install a pressure gage near the inlet of the Air Flow Vac air operated conveyer. If the pressure is low, it may be due to undersized airlines, perhaps restrictive fittings, or from clogged filter elements. These things should be checked, in particular the fittings used and the filter elements.

