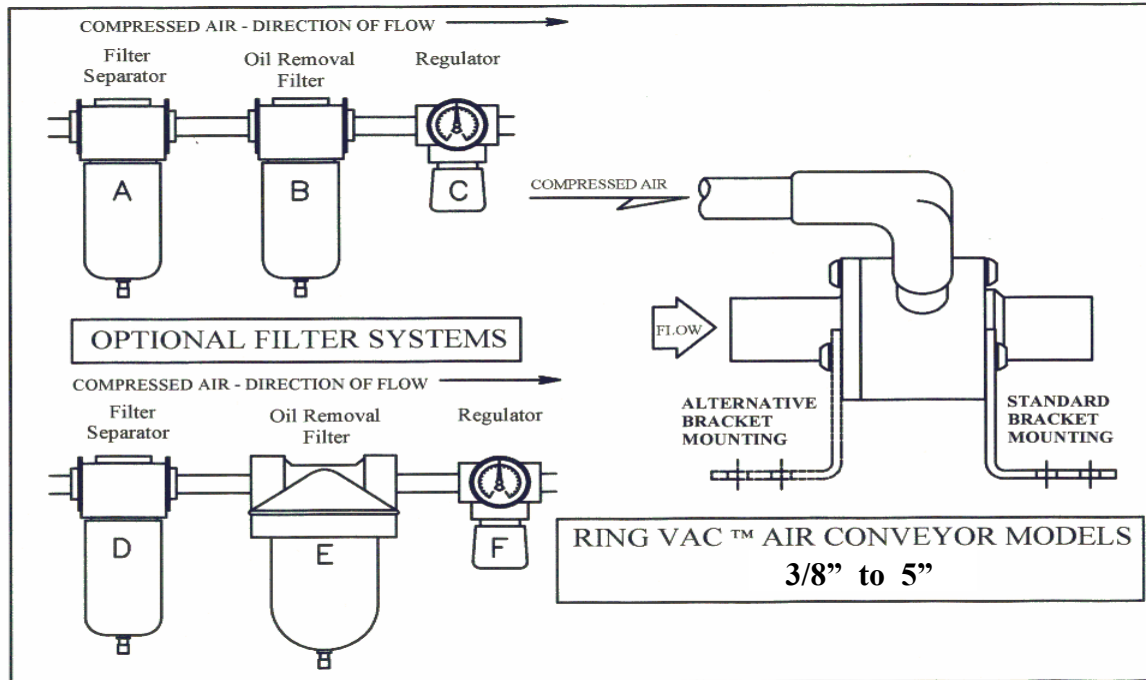


## RING VAC™ AIR OPERATED CONVEYOR INSTALLATION & MAINTENANCE



### INSTALLATION AND SIZE OF COMPRESSED AIR LINES

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

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

### CARE OF THE COMPRESSED AIR SUPPLY

Because Ring Vac™ air operated conveyers utilize a small "gap" for the air outlet, it is important to keep the air line free of moisture, oil and dirt. Ring 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 Ring Vac™ air operated conveyers at the pressure they will be used. If oil could be a concern, an oil removal filter (labelled B for small units and E for larger units or series f units) should be added as shown and also have an automatic (float type) drain. Filters should be mounted near any Ring Vac™ air operated conveyor, typically within 10 to 15 feet.

## **USING THE RING VAC™ AIR OPERATED CONVEYING SYSTEM, CONTROLLING FORCE, AND THE CONSERVATION OF AIR**

The Ring Vac air operated conveyer can be mounted by using a clamp, or securing an optional mounting bracket using the mounting holes already on the units. The mounting holes are normally located on the air outlet side of the unit. Bolts located on the opposite side that secures the cap and body may also be removed and the mounting bracket utilized there by reassembling the bolts to the device. Mounting brackets may be used at both ends for extra strength. RingVac™ air operated conveyers 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. Ring Vac™ air operated conveyers 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 Ring 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 Ring 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. Sometimes a build up of a 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 Ring Vac™ air operated conveyer .

Certain factors can cause a reduction in flow or vacuum and thereby reducing the performance of a Ring Vac™ air operated conveyer. If the vacuum or flow seems to be below normal, install a pressure gage near the inlet of the Ring 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.



For further support, please contact:

**NEX FLOW AIR PRODUCTS CORP.**

**toll free tel: (877) 797-2777 Fax: (877) 797-2660**

**web site: [www.nexflow.com](http://www.nexflow.com) E-Mail: [sales@nexflow.com](mailto:sales@nexflow.com)**

**International tel: (416) 410-1313 Fax: (416) 410-1806**