



**THREADED LINE VAC™ INSTALLATION & MAINTENANCE**

<b>A C C E S S O R I E S</b>	<p><b>Compressed Air Supply</b></p> <p><b>Model 9008 Regulator</b></p> <p><b>Model 9001 Filter Separator</b>      <b>Model 9005 Oil Removal Filter</b></p> <p>For Models: 140038 - 140150 141038 - 141150 HT141075-HT141150</p>	<b>T H R E A D E D  L I N E  V A C</b>	<table border="1"> <thead> <tr> <th>INLET SIZE</th> <th>MODEL</th> </tr> </thead> <tbody> <tr> <td>1/8 NPT</td> <td>140038, 140050, 141038, 141050</td> </tr> <tr> <td>1/4 NPT</td> <td>140075, 140100, 140125, 141075, 141100, 141125</td> </tr> <tr> <td>1/4 NPT</td> <td>141075-316, 141100-316, 141125-316</td> </tr> <tr> <td>1/4 NPT</td> <td>HT141075, HT141100, HT141125</td> </tr> <tr> <td>1/4 NPT</td> <td>HT141075-316, HT141100-316, HT141125-316</td> </tr> <tr> <td>3/8 NPT</td> <td>140150, 140200, 140250, 141150, 141200, 141250</td> </tr> <tr> <td>3/8 NPT</td> <td>141150-316, 141200-316, 141250-316</td> </tr> <tr> <td>3/8 NPT</td> <td>HT141150, HT141200, HT141250</td> </tr> <tr> <td>3/8 NPT</td> <td>HT141150-316, HT141200-316, HT141250-316</td> </tr> <tr> <td>1/2 NPT</td> <td>140300, 141300, HT141300</td> </tr> <tr> <td>1/2 NPT</td> <td>141300-316, HT141300-316</td> </tr> </tbody> </table>	INLET SIZE	MODEL	1/8 NPT	140038, 140050, 141038, 141050	1/4 NPT	140075, 140100, 140125, 141075, 141100, 141125	1/4 NPT	141075-316, 141100-316, 141125-316	1/4 NPT	HT141075, HT141100, HT141125	1/4 NPT	HT141075-316, HT141100-316, HT141125-316	3/8 NPT	140150, 140200, 140250, 141150, 141200, 141250	3/8 NPT	141150-316, 141200-316, 141250-316	3/8 NPT	HT141150, HT141200, HT141250	3/8 NPT	HT141150-316, HT141200-316, HT141250-316	1/2 NPT	140300, 141300, HT141300	1/2 NPT	141300-316, HT141300-316
	INLET SIZE		MODEL																								
	1/8 NPT		140038, 140050, 141038, 141050																								
1/4 NPT	140075, 140100, 140125, 141075, 141100, 141125																										
1/4 NPT	141075-316, 141100-316, 141125-316																										
1/4 NPT	HT141075, HT141100, HT141125																										
1/4 NPT	HT141075-316, HT141100-316, HT141125-316																										
3/8 NPT	140150, 140200, 140250, 141150, 141200, 141250																										
3/8 NPT	141150-316, 141200-316, 141250-316																										
3/8 NPT	HT141150, HT141200, HT141250																										
3/8 NPT	HT141150-316, HT141200-316, HT141250-316																										
1/2 NPT	140300, 141300, HT141300																										
1/2 NPT	141300-316, HT141300-316																										
<p><b>Compressed Air Supply</b></p> <p><b>Model 9008 Regulator</b></p> <p><b>Model 9001 Filter Separator</b>      <b>Model 9006 Oil Removal Filter</b></p> <p>For Models 140200, 141200 and HT141200</p>	<p><b>Airflow</b></p> <p>(mounting bracket available, included with kits only)</p>																										
<p><b>Compressed Air Supply</b></p> <p><b>Model 9033 Regulator</b></p> <p><b>Model 9032 Filter Separator</b>      <b>Model 9006 Oil Removal Filter</b></p> <p>For Models 140250, 141250 and HT141250</p>	<p><b>Compressed Air Supply</b></p> <p><b>Model 9009 Regulator</b></p> <p><b>Model 9002 Filter Separator</b>      <b>Model 9006 Oil Removal Filter</b></p> <p>For Models 140300, 141300 and HT141300</p>																										

**COMPRESSED AIR LINE SIZES**

For aluminum models 140038 – 140300, stainless steel models 141038 -141300 and high temperature models HT141075-HT141300, use 1/4" pipe or 3/8" hose for runs up to 25' (7.6m) long. For runs up to 50' (15.2m), use 3/8" pipe or 1/2" hose and for runs over 50' (15.2m), use 1/2" pipe or larger. For larger Threaded Line Vac models use 1/2" pipe or larger. Do not use restrictive fittings or undersized lines that can “starve” the Threaded Line Vac by causing excessive line pressure drop.

**COMPRESSED AIR SUPPLY**

With proper filtration and separation of dirt, moisture and oil from the compressed air supply, the Threaded Line Vac will operate for years with no maintenance required.

Use a 10 micron or smaller filter separator on the compressed air supply (Model 9001 Automatic Drain Filter Separator for Models 140038-140200, 141038-141200 and HT141075-HT141200; Model 9032 Automatic Drain Filter Separator for Models 140250, 141250 and HT141250; and Model 9002 Automatic Drain Filter Separator for Models 140300, 141300 and HT141300).

To prevent problems associated with oil, use an oil removal filter (Model 9005 Oil Removal Filter for Models 140038-140150, 141038-141150, and HT141075-HT141150; Model 9006 Oil Removal Filter for Models 140200-140300, 141200-141300 and HT141200-HT141300). The oil removal filter should be used downstream from the automatic drain filter separator. Filters should be used close to each Threaded Line Vac, within 10' to 15' (3 to 4.6m) is best.

The Threaded Line Vac is designed to use normal shop air supplies up to 100 PSIG (6.9 BAR, 689 kPa). For infinite control of flow and force, pressure may be regulated (Model 9008 Pressure Regulator for Models 140038-140200, 141038-141200 and HT141038-HT141200; Model 9033 Pressure Regulator for Models 140250, 141250 and HT141250; and Model 9009 Pressure Regulator for Models 140300, 141300 and HT141300). Maximum pressure is 250 PSIG (17.2 BAR, 1.72 MPa).

If air preparation units other than EXAIR models are being used, please note the following:

- **PRESSURE REGULATORS** – Must be pressure relieving and rated for a supply pressure of 250 PSIG (17.2 BAR, 1.72 MPa). Suggested operating pressure is 5-125 PSIG (0.3-8.6 BAR, 34-862 kPa). For models 2" (51mm) and under, flow

should be minimum 50 SCFM (1416 SLPM). For models over 2" (51mm) and up to 3" (76mm), flow should be minimum 90 SCFM (2549 SLPM).

- **AUTO DRAIN FILTER SEPARATORS** – Must be rated for a supply pressure of 250 PSIG (17.2 BAR, 1.72 MPa) and have 25 micron filtration. For models 2" (51mm) and under, flow should be minimum 50 SCFM (1416 SLPM). For models over 2" (51mm) and up to 3" (76mm), flow should be minimum 90 SCFM (2549 SLPM).
- **OIL REMOVAL FILTERS** – Must be rated for a supply pressure of 250 PSIG (17.2 BAR, 1.72 MPa) and have 0.03 micron filtration. For models 2" (51mm) and under, flow should be minimum 50 SCFM (1416 SLPM). For models over 2" (51mm) and up to 3" (76mm), flow should be minimum 90 SCFM (2549 SLPM).

### **USING THE THREADED LINE VAC**

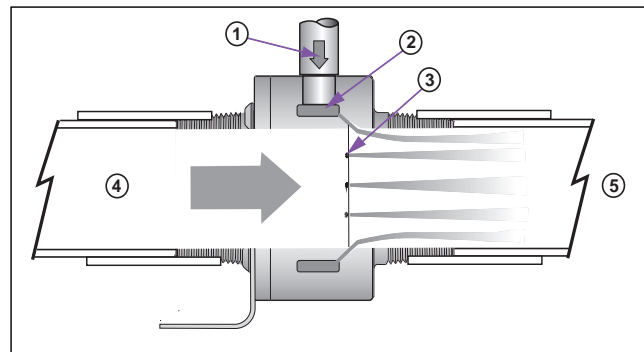
Optional mounting brackets are available for the Threaded Line Vac (included with kits only). In some cases, the Threaded Line Vac will be supported by the compressed air supply pipe or conveying pipe.

Threaded Line Vac units are made in various sizes to be used with standard NPT pipe and associated couplers. They perform best when mounted near the suction point. Pipe can be attached to both ends of the unit. Pipe should be straight when possible and bends minimized to reduce back pressure. If bends are necessary, use long sweep elbows.

**WARNING: Do not use with any material that can create an explosive mixture.**

### **HOW THE THREADED LINE VAC WORKS**

Compressed air flows through the inlet (1) into an annular plenum chamber (2). It is then injected into the throat through directed nozzles (3). These jets of air create a vacuum at the intake (4) which draws material in and accelerates it through the unit (5) at long vertical or horizontal distances.



### **ADJUSTING THE THREADED LINE VAC**

The flow generators have a series of holes that convey the material. Conveying speed can be controlled with a pressure regulator. For greater speeds and conveying distances, the generator holes can be made larger with a drill (disassembly required - see "Cleaning"). It is recommended that all hole diameters be increased in 1/64" (.40mm) intervals and tested.

### **TROUBLESHOOTING & MAINTENANCE**

**If There Is A Reduction In Flow Or Vacuum From The Threaded Line Vac**, check the pressure by installing a gauge at the compressed air inlet of the Threaded Line Vac. Large pressure drops are possible due to undersized lines, restrictive fittings and clogged filter elements.

**For replacement or repair filter and regulator parts, contact EXAIR at 1-800-903-9247 or [techhelp@exair.com](mailto:techhelp@exair.com). Call (513) 671-3322 for outside the US and Canada.**

### **CLEANING**

If contaminants have clogged the Threaded Line Vac, remove all screws to disassemble the unit. Inspect each part for dirt contamination and a possible oil film on the flow generator. Clean each part and reassemble. The Threaded Line Vac consists of a body, a flow generator, two O-rings and a cap that holds the flow generator in place. The screws that hold the assembly together are on the intake side of the unit. When reassembling, the small holes of the flow generator should point to the exhaust end.

Occasionally, there is a buildup which occurs in the throat of the Threaded Line Vac as a result of vapors in the atmosphere. Clean the surface with a solvent and a clean rag. To prevent contaminants from getting pushed back into the generator holes, perform this procedure with a small amount of compressed air passing through the Threaded Line Vac.

If you have any questions or problems, please contact an EXAIR Application Engineer at:

Toll Free: 1-800-903-9247 (U.S. & Canada)  
 Telephone: 513 671-3322 outside of U.S. & Canada  
 Toll Free Fax: 866-329-3924 (U.S. & Canada)  
 FAX: 513 671-3363 outside of U.S. & Canada  
 E-mail: [techhelp@exair.com](mailto:techhelp@exair.com)  
 Website: [www.exair.com](http://www.exair.com)

For more information about this product, visit  
 "Frequently Asked Questions" at [www.exair.com](http://www.exair.com)  
**FAQ at [www.EXAIR.com](http://www.EXAIR.com)**