

# VAC-U-GUN™ INSTALLATION & MAINTENANCE



#### **COMPRESSED AIR LINE SIZES**

Compressed air lines should be sized to hold pressure drops to a minimum. Compressed air hose (not included) should be 1/4" I.D. up to 10' (3m) long, 3/8" I.D. hose up to 25' (7.6m) long. Do not use restrictive fittings such as quick connects. They can "starve" the Vac-u-Gun by causing excessive line pressure drop.

#### COMPRESSED AIR SUPPLY

For best performance, use line pressure up to 100 PSIG (6.9 BAR, 689 kPa). With proper filtration and separation of dirt, moisture and oil from the compressed air supply, the Vac-u-Gun will operate for years with no maintenance required. Maximum pressure is 250 PSIG (17.2 BAR, 1.72 MPa).

Use a 10 micron filter separator on the compressed air supply (Model 9001 Automatic Drain Filter not included). To prevent problems associated with oil, use an oil removal filter (Model 9005 Oil Removal Filter not included.) The oil removal filter should be used downstream from the automatic drain filter separator. Filters should be close to the Vac-u-Gun, within 10 to 15' (3 to 4.6m) is best.

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). Flow should be minimum 24 SCFM (680 SLPM).
- AUTO DRAIN FILTER SEPARATORS Must be rated for a supply pressure of 250 PSIG (17.2 BAR, 1.72 MPa) and have 5 micron filtration. Flow should be minimum 24 SCFM (680 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. Flow should be minimum 24 SCFM (680 SLPM).

#### **USING THE VAC-U-GUN**

#### CAUTION!

Connect a hose or bag to the knurled nut, when used for suction, to avoid possible injury.

WARNING: <u>Do not use with any material that can create an explosive mixture.</u>

#### **USING THE VAC-U-GUN**

It is a good idea to become familiar with the internal nozzle ring. This nozzle ring determines which end of the gun produces a suction, and which end produces blowoff. To change the flow direction, unscrew the knurled nut and remove the nozzle ring. Reinstall the nozzle ring so the holes point toward the end you want the air to exhaust from. (There is an "O"-ring on each end of the nozzle ring).

For conveying dust, chips, smoke or small parts, a hose may be attached to either or both ends of the Vac-u-Gun.

## **HOW THE VAC-U-GUN WORKS**

The Vac-u-Gun uses compressed air as a power source and has no moving parts. The compressed air (primary air) exhausts through a series of holes to produce jets of high velocity air. These jets of air give up velocity to induce mass flow of surrounding air (secondary air) in large volumes. This secondary air is pulled through one end (vacuum end), mixes with the primary air, then exhausts from the other end giving a concentrated blast.

#### **TROUBLESHOOTING & MAINTENANCE**

If there is reduced suction or blowoff force from the Vac-u-Gun, check the pressure by installing a gauge at the compressed air inlet of the Vac-u-Gun. 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 techelp@exair.com. Call (513) 671-3322 for outside the US and Canada.

## **CLEANING**

If contaminants have clogged the Vac-u-Gun, inspect the unit by disassembling. The Vac-u-Gun consists of three component parts, the gun body, an internal nozzle ring and a knurled cap which holds the ring in place. Inspect each part for dirt contamination and a possible oil film on the nozzle ring.

Clean each part with a mild cleaning or degreasing solvent and a rag. Reassemble the Vac-u-Gun, making sure there is an "O"-ring on each end of the nozzle ring. It is also important to note the direction of the nozzle holes as this will determine which end produces a suction.

Always clean the vacuum hose and attachments after every use.



If routine cleaning does not solve your performance problems, please contact:

#### YOUR INFO HERE:

Company Name FAX: Telephone Email:

Website: