



# CE

# AIR STIK™ WINDOW BLOWOFF INSTALLATION & MAINTENANCE



### **COMPRESSED AIR LINE SIZES**

The Air Stik Window Blowoff requires 3/8" hose for runs up to 25' (7.6m) long. For runs up to 50' (15.2m), use 1/2" hose. Do not use restrictive fittings or undersized lines that can "starve" the Air Stik 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 Air Stik Window Blowoff will operate for years with no maintenance required. Use a 10 micron or smaller filter separator on the compressed air supply (Model 9004 Automatic Drain Filter Separator).

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 used close to the Air Stik, within 10 to 15' (3 to 4.6m) is best.

The Air Stik Window Blowoff is designed to use normal shop air supplies up to 100 PSIG (6.9 BAR). For infinite control of flow and force, pressure may be regulated (Model 9008 Pressure Regulator). 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). 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).



Review the dimensions of the Air Stik to determine if there is proper clearance between the sliding door and the frame of your machine.



Strong peel and stick adhesive bonds the unit to the glass

#### **MOUNTING THE AIR STIK**

It is extremely important that the elbow and reducer shown above are installed before mounting the Air Stik to the window. It is also important that the mounting surface of the glass be cleaned of any contaminants, coolants or oil film. An industrial glass cleaner should be used (not included). Once the surface of the glass is clean, use an alcohol pad (provided) to remove any residue from the surface of the glass where the Air Stik will be mounted. For best results, mount the Air Stik just above eye level of the machine operator

Prior to mounting the Air Stik, be sure there is enough clearance for it to clear the machine frame when the door is fully opened. With the screws at the top, peel off the paper to expose the adhesive and press the Air Stik firmly against the window glass. This strong adhesive forms a quick bond that can withstand the splashing coolant. For operation of the Air Stik, it is necessary to supply compressed air to it.

#### For Closed Top Machines

For closed top machines it is necessary to drill through the sheet metal of the machine. A bulkhead fitting is provided that permits the compressed air supply hose to be attached to the machine. Since the valve for turning the Air Stik on and off is located at the bulkhead fitting, you will want to mount it in a convenient location. It is important to locate any safety interlocks or wires so you do not drill through them. Use a 25/32" bit to drill a hole through the sheet metal. Place the bulkhead fitting through the sheet metal and tighten it firmly in place from the inside of the machine with the washer and retaining nut. Connect the coiled air hose provided with the kit to the bulkhead fitting and the Air Stik. Next, thread the manual valve into the bulkhead fitting on the outside of the door. Connect your supply air hose to the manual valve.

#### For Open Top Machines

For open top machines, EXAIR supplies an alternate version of the Air Stik System. This package includes a magnetic base for mounting the on-off valve. Find a convenient location for the magnetic base, making sure not to position it where the magnet might have an effect on relays or CRT displays. Next, connect the coiled air hose provided to the Air Stik and the other end to the manual valve on the magnetic base. Connect your air supply to one of the inlets on the magnetic base.

The Air Stik is now ready for operation.

As coolant hits the window of the machine, the operator can adjust the shutoff valve to control the air velocity, increasing it when there is a high volume of coolant on the window. An optional solenoid valve can be wired into the machine control to limit the operation to only those times when coolant is being used, or actuated by using a special code in the program. A Model 9040 Foot Pedal is available if hands-free operation is desired.

#### AIR STIK SPECIFICATIONS

Pressure		Air	
Supply		Consumption	
PSIG	BAR	SCFM	SLPM
80	5.5	20	577

#### **INSTALLING OTHER SHIMS**

The Air Stik is supplied with a .002" (.05mm) thick shim. In the event that the coolant flow is extremely heavy, the air flow through the Stik can be increased by adding additional shims to the Air Stik. To do this, remove the four screws holding the Air Stik together. Carefully install the additional shim and reinstall the screws. This will increase the air gap opening as well as the flow, force and air consumption.

#### **TROUBLESHOOTING & MAINTENANCE**

If there is a reduction in flow or force from the Air Stik, check the air pressure by installing a gauge at the manual valve inlet of the Air Stik. 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**

With the air supply off, disconnect the polyflow tubing from the Air Stik. If contaminants have clogged the Air Stik, inspect the unit by disassembling. After removing the four screws, inspect all internal surfaces for dirt contamination, a possible oil film, or buildup of coolant. Clean each part and reassemble.

# Warning: Compressed air must be turned off before opening the door on the CNC to prevent airborne coolant from contacting the machine operator.

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: techelp@exair.com Website: www.exair.com

