# PULSAR CONVERSION KIT PRESSURE TO SUCTION



Clemco Industries Corp. • One Cable Car Drive, Washington MO Phone: (636) 239-4300 • Fax: (636) 239-0788 • Email: info@clemcoindustries.com www.clemcoindustries.com

## NOTICE TO PURCHASERS AND USERS OF OUR PRODUCTS AND THIS INFORMATIONAL MATERIAL

The products described in this material, and the information relating to those products, is intended for knowledgeable, experienced users of abrasive blasting equipment.

No representation is intended or made as to the suitability of the products described herein for any particular purpose or application. No representations are intended or made as to the efficiency, production rate, or the useful life of the products described herein. Any estimate regarding production rates or production finishes are the responsibility of the user and must be derived solely from the user's experience and expertise, and must not be based on information in this material.

The products described in this material may be combined by the user in a variety of ways for purposes determined solely by the user. No representations are intended or made as to the suitability or engineering balance of the combination of products determined by the user in his selection, nor as to the compliance with regulations or standard practice of such combinations of components or products.

It is the responsibility of the knowledgeable, experienced users of the products mentioned in this material to familiarize themselves with the appropriate laws, regulations and safe practices that apply to these products, equipment that is connected to these products, and materials that may be used with these products.

It is the responsibility of the user to insure that proper training of operators has been performed and a safe work environment is provided.

Our company is proud to provide a variety of products to the abrasive blasting industry, and we have confidence that the professionals in our industry will utilize their knowledge and expertise in the safe efficient use of these products.

## OWNER'S MANUAL

### 1.0 INTRODUCTION

1.1 Scope: These instructions cover the conversion of a Pulsar VI-P pressure cabinet to a Pulsar VI suction cabinet. These instructions explain the conversion process only. Use the Pulsar Suction Blast Cabinet Owners Manual included with the conversion kit, for set-up, operation, adjustments, maintenance, troubleshooting, replacement parts, and important information required for safe cabinet operation.

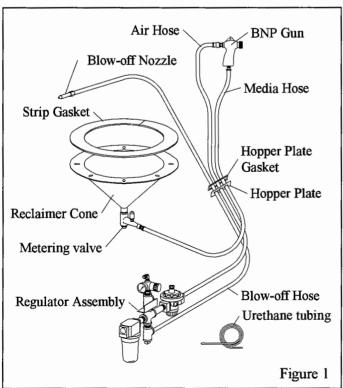
## **A** WARNING

To avoid serious injury, turn off the compressed air supply to the cabinet. Lock-out (Be certain the air supply is off and that it cannot be started while work is in process) and tag-out (Be certain the air supply is clearly marked to prevent re-starting while work is in process) the air supply, and drain the air line before proceeding.

#### 2.0 INSPECTION

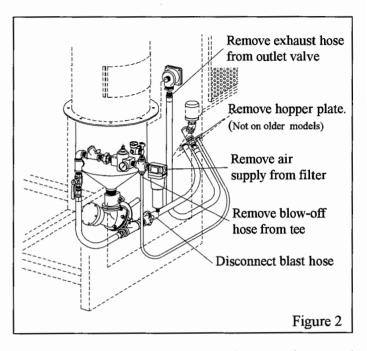
## 2.1 Component Checklist

**2.1.1** Make sure that all the conversion components are at hand. Ref. Figure 1.

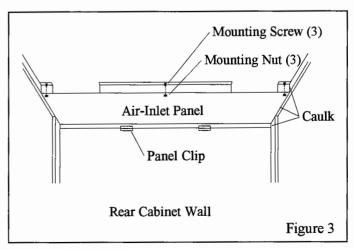


### 3.0 REMOVE PRESSURE COMPONENTS

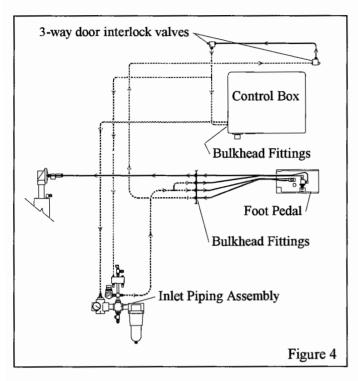
3.1 Remove hoses, as shown in Figure 2.



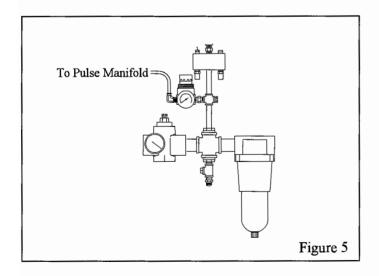
- 3.2 Remove the hopper plate, and remove hoses and muffler from inside the cabinet. The plate is not on older model cabinets.
- 3.3 From inside of the cabinet, remove the three air inlet panel mounting nuts, as shown in Figure 3.
- **3.4** Carefully cut the caulking on both ends of the air-inlet panel.
- 3.5 While using care not to bend the inlet panel, pull down on the front of the panel to loosen it from the cabinet ceiling. After it is loose from the ceiling, lift up on the back to detach it from the panel clips. Temporarily remove the panel from the cabinet.



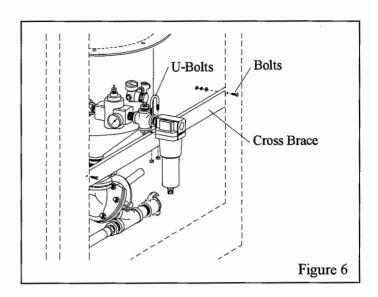
- 3.6 Remove all caulking residue from the panel and cabinet.
- 3.7 Remove all tubing shown as dashed lines in Figure 4.



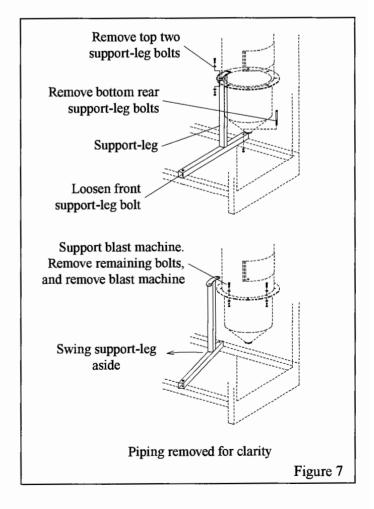
3.8 Remove the pulse manifold tubing from the regulator assembly, as shown in Figure 5. Place the tubing out of the way to prevent damage, as it will be reconnected later.



3.9 Remove the U bolt and two mounting bracket bolts securing the cross brace per Figure 6, and temporarily remove the cross brace.



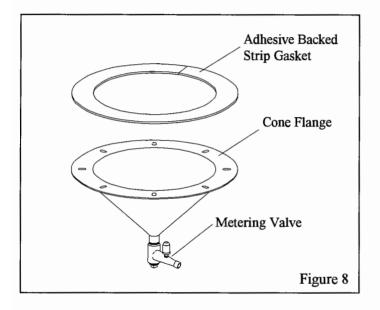
3.10 Remove the top two support-leg bolts (securing the leg to the machine flange). Remove the bottom rear support-leg bolt and loosen the front support-leg bolt, and swing the support-leg aside as shown in Figure 7.



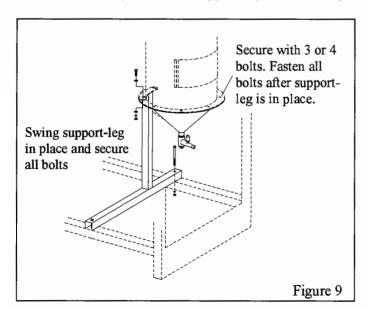
3.11 Support the bast machine and remove the remaining bolts securing the machine, and remove the machine.

## 4.0 INSTALL SUCTION COMPONENTS

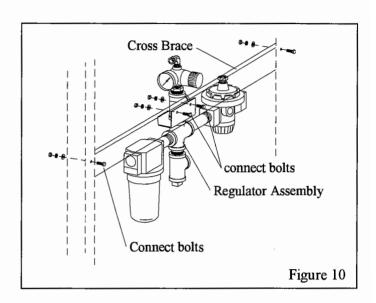
**4.1** Apply adhesive-backed strip gasket to the top of the flange on the reclaimer cone, and connect the metering valve to the bottom of the cone, as shown if Figure 8. Punch out an opening in the gasket at each bolt hole.



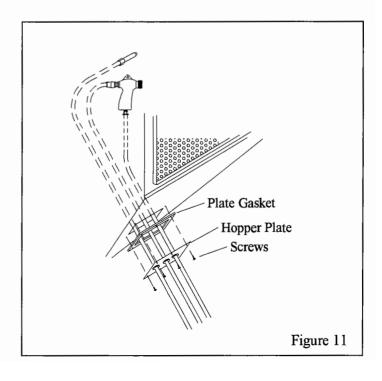
- **4.2** Position the cone under the reclaimer as shown in Figure 9, and secure with three or four bolts.
- **4.3** Swing the support-leg into place under the flange and fasten all flange bolts and support-leg bolts securely.

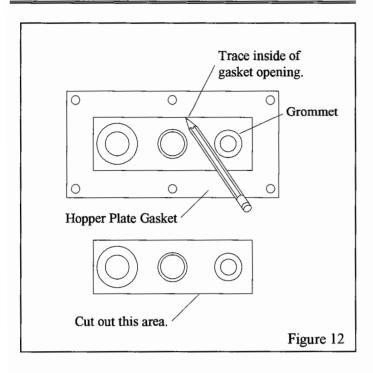


**4.4** Install the cross brace, and connect the regulator assembly to the inside of the brace, as shown in Figure 10.

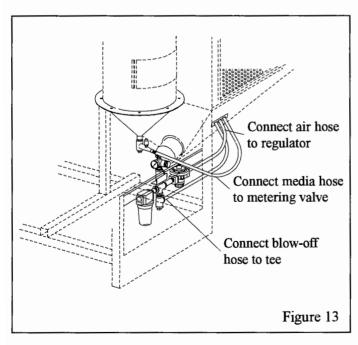


4.5 Run the media hose, air hose, and blow-off hose through the hopper plate, plate gasket and cabinet hopper cut-out, and through the cut-out in the grate, as shown in Figure 11. Use self drilling screws to attach the plate and gasket to the hopper. NOTE: Older cabinets do not have a hopper plate cutout in the hopper, the hoses go through grommets in the hopper. Use the hopper plate gasket as a template, placed over the grommets and trace the gasket opening onto the hopper, as shown if Figure 12. Cut out an opening around the tracing.

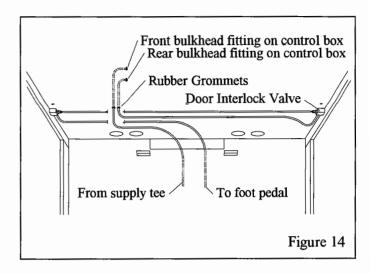




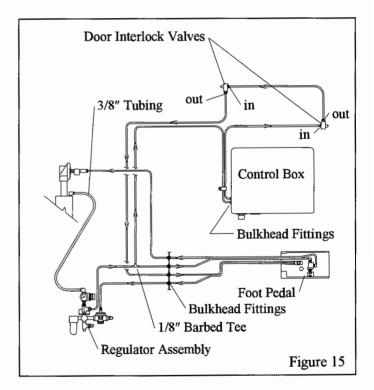
- **4.6** Refer to Figure 13 and connect hoses as follows:
- 1. Connect the BNP gun air hose to the regulator outlet.
- 2. Connect the clear media hose to the metering valve.
- 3. Connect the blow-off hose to the compatible fitting on the inlet piping tee.



4.7 Using existing 1/8" tubing and 1/8" tubing supplied with the conversion kit, connect the air logic per the illustration in Figure 14 and the schematic in Figure 15.



**4.8** Connect the 3/8" pulse manifold tubing to the pulse regulator, as shown in Figure 15.



- 4.9 Replace the air inlet panel, and caulk the ends.
- **4.10** The conversion is complete, refer to the Pulsar Suction Blast Cabinet Owners Manual included with the conversion kit, for air connection and operating procedures.