

Pneumatic Abrasive Cut-Off Conversion Kit Instructions

(Small Abrasive Blasters)

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SCHMIDT®



AXXIOM Manufacturing, Inc.
11927 S. Highway 6, Fresno, Texas 77545
800.231.2085 * 281.431.0581 * fax 281.431.1717

TOOLS REQUIRED:

- Combination wrench set
- Small adjustable wrench
- Allen wrench set
- Screw driver
- Knife or hose cutter



CONGRATULATIONS!

Congratulations on your purchase of the new & improved Schmidt Valve Conversion Kit, so advanced and improved that its features have been copyrighted. By purchasing this kit of original Schmidt® parts, you are acquiring an enhanced version of the industry's most popular and profit-generating valve conversion system to upgrade and super-power your blast pot. Delivered to you by the people who invented and brought you the MicroValve®, the MV2® valve, the Thompson® valve, the Thompson II® valve, and the ComboValve®. Schmidt is the name you know – the name you trust.

The Schmidt product line has stood the test of time delivering proven innovations and leading the industry. We know knowledgeable customers understand the difference between the genuine value of original Schmidt products and deceptive imitations. Insist upon Schmidt OEM parts and equipment from Axxiom. We are committed to continue our efforts in developing innovations that improve our existing product line, while introducing new products that assist you in improving your job productivity, worker safety, and compliance with the ever-changing environmental pressures. These are the products you can continue to rely upon.

Thank you for your investment in Schmidt quality and your support for the value we put behind the Schmidt product line.

Respectfully,

John Pirotte, President

On behalf of the people of Axxiom Manufacturing, Inc., the exclusive manufacturer of Schmidt abrasive blast equipment and parts.

Pneumatic Abrasive Cut-Off Conversion Installation Instructions



⚠ DANGER

The abrasive blaster is a Pressurized Vessel. All operators must completely read and understand all sections of the *Abrasive Blaster Operation and Maintenance Manual* before beginning the blast operation.

⚠ WARNING

Do Not attempt to install any portion of the conversion kit prior to confirming the vessel meets the requirements detailed below.

- Referenced Sections in bold below are in the *Abrasive Blaster Operation and Maintenance Manual* included in the conversion kit. Refer to this manual as needed.

Abrasive Blast Vessel requirements:

- Vessel must be a certified ASME pressure vessel. Confirm presence of the ASME nameplate Refer to Section 1.25.
- The vessel interior and exterior should be inspected before any work is performed. If any flaws such as wear, cracks, severe corrosion (pitting), or modifications to the pressure vessel are found, the vessel should be taken out of service until a certified agency certifies it as a valid vessel. Refer to Section 8.0 for inspection instructions.
- Vessel should be emptied and stripped of all existing external piping and controls.
- Pop up should be inspected for wear as well as alignment. Refer to Section 8.4.
- Handway assembly components should be inspected for wear. Refer to Section 6.3 for inspection and installation instructions.
- All threaded ports should be cleaned, free of corrosion, and in good condition.

Assembly Notes:

- All threaded connections require thread sealant supplied in kit.
- All threaded connections should engage 4 to 5 threads to ensure seal.

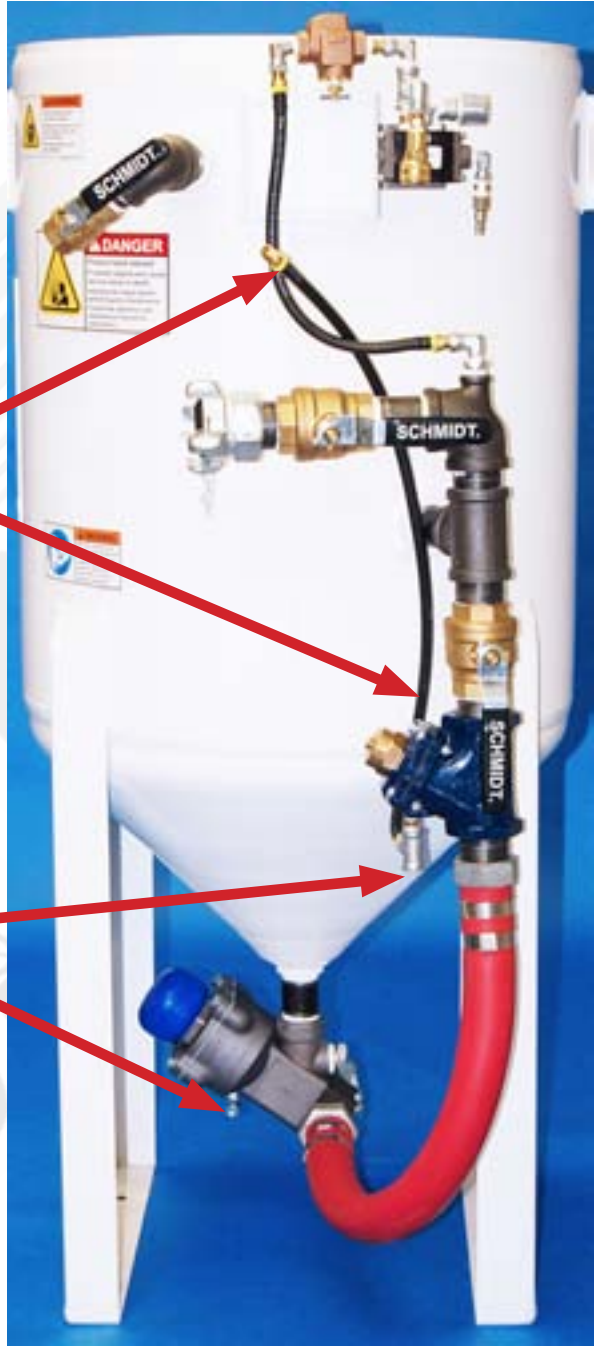




Step 1 Start by removing the Twinline hose assembly from the existing vessel.

Step 2 Disconnect push-on hose at bottom of control valve. This hose leads to the Auto Air Valve.

Step 3 Remove push-on hose from Auto Air Valve to TVII Valve.



Sub-kit A



Step 4 Install Sub-Kit A in bottom of existing control valve as shown below.



Sub-kit B

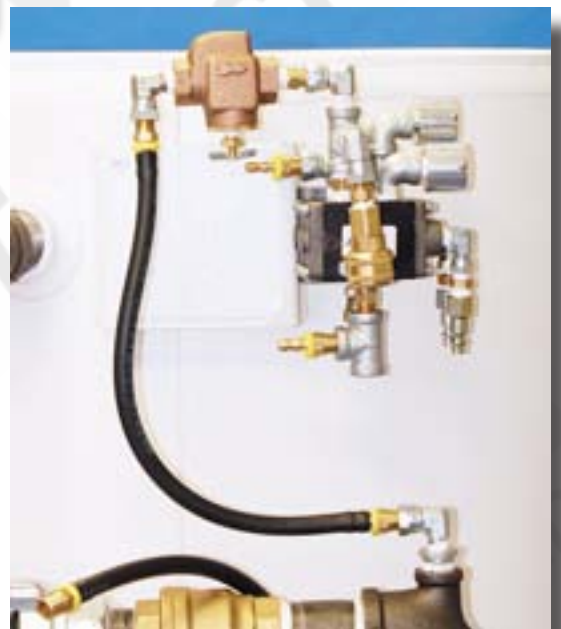


Step 5

Install additional control valve, Sub-Kit B, by stacking it behind existing control valve. Use long bolts provided to mount stacked valves back onto mounting bracket.



Sub-Kit B



Sub-Kit C



Step 6

Install 1/4" pipe plug, with pipe sealant provided, into 1/4" pipe tee on bottom of the Auto Air Valve.

Install push-on fitting into bottom of the TVII Valve.

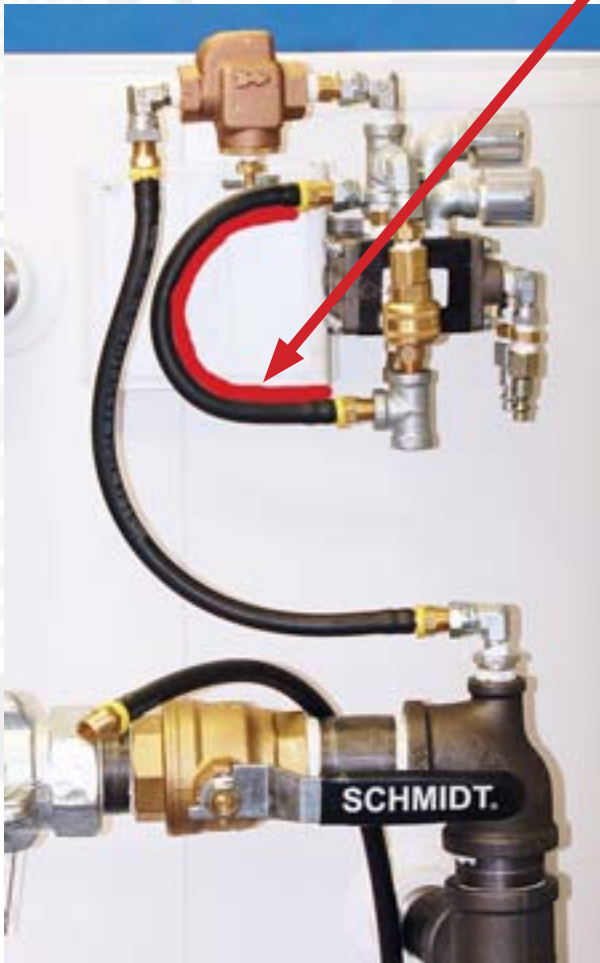


Sub-Kit D



Step 7

Install push-on hose from the bottom of front control valve to the top of the rear control valve.





Step 8

Install push-on hose from the bottom of the rear control valve to the Thompson Valve II push-on fitting.

NOTE: Secure push-on hose with tie-wraps, without pinching hose.



Step 9

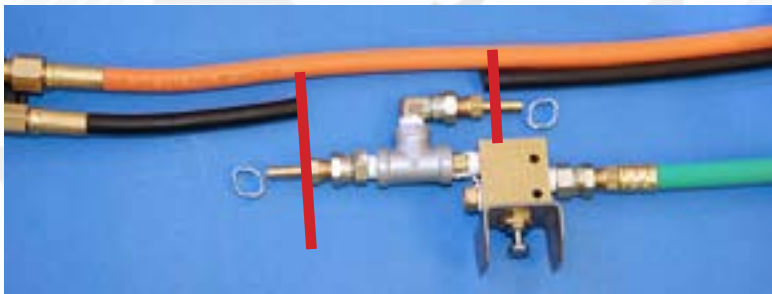
Attach existing push-on hose from the Auto Air Valve into the bottom of the front Control Valve.

NOTE: Use supplied tie-wraps to secure push-on hose along its path without squeezing hose.

Sub-kit E



Step 10 Lay existing Twinline beside Sub-Kit E.



Step 11 Cut Twinline black hose as shown, creating a gap large enough to fit valve assembly into the gap.

NOTE: Position the cut and valve in a place comfortable for the operator.

Step 12 Install Abrasive Cut-Off switch with clamps provided.





Step 13 Connect green hose to the quick- connect fitting on the rear Control Valve.

Step 14 Attach orange hose and black hose to the quick-connect fittings on the front Control Valve.



Step 15 Conversion is complete and the unit is ready for testing.

After completing test, attach deadman Twinline, and Abrasive Cut-Off Valve to the blast hose with clamps provided.

NOTE: Do Not fill vessel with any abrasive prior to testing by following the Testing Procedures included.

⚠ WARNING

Do Not operate the abrasive blaster prior to testing per the Testing Procedures included.



Pneumatic ACO Testing Procedures

⚠ DANGER

The abrasive blaster is a Pressurized Vessel. All operators must completely read and understand all sections of the *Abrasive Blaster Operation and Maintenance Manual* before beginning the blast operation.

⚠ DANGER

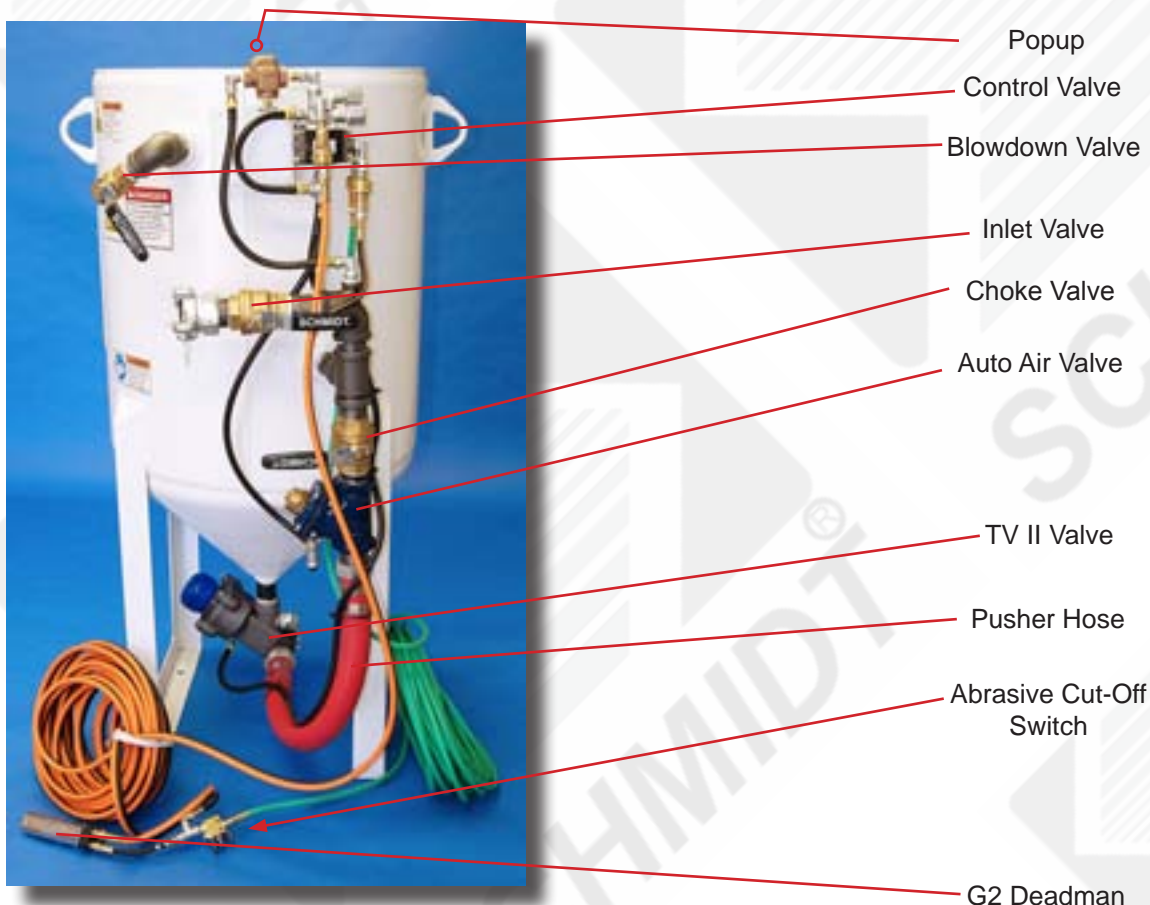
Failure to follow the procedures below could result in serious injury or death. Refer to Section 6.0 of the *Abrasive Blaster Operation and Maintenance Manual* for pre-operation procedures.

⚠ DANGER

The Abrasive Blaster is a pressurized vessel. Propelled objects will cause serious injury or death. Depressurize vessel before performing any maintenance. See Section 6.2 of the *Abrasive Blaster Operation and Maintenance Manual* for depressurizing procedure.

Test Notes:

- Referenced Sections detailed below are in the *Abrasive Blaster Operation and Maintenance Manual* included in the conversion kit. Refer to this manual as needed.
- Do Not fill vessel with any abrasive prior to testing.
- Before performing these test procedures, make certain the air inlet hose and blast hose are properly attached. Refer to Section 6.1.
- Have an assistant hold the blast hose and nozzle during the test procedures.



⚠ WARNING

Airborne particles and loud noise hazards from blowdown exhaust air can cause serious injury and loss of hearing. Wear approved eye and ear protection. Stay clear of blowdown air path. **DO NOT** place hands or other body parts in the blowdown air path. Make sure no personnel are in the blowdown air path.

Testing the Pop Up for proper operation:

- Close inlet valve.
- Close blowdown valve.
- Close choke valve.
- Turn supply air on.
- Open inlet valve ¼ turn.
- The pop up should seal immediately upon contact with the pop up gasket. If leakage occurs, pop up should be checked for alignment or wear. Refer to Section 8.4 inspection instructions.
- Close inlet valve.
- Open blowdown valve to depressurize vessel. Refer to Section 6.2.
- Once the vessel depressurizes, the pop up should fall by itself. If the pop up sticks in the closed position, it should be checked for alignment. Refer to Section 8.4 for inspection instructions.
- Repeat this process 3 to 4 times for assurance.

Testing the Control Valves:

- Close blowdown valve.
- **CRITICAL:** Leave choke valve closed for this procedure
- Open inlet valve to pressurize vessel.
- With forefinger and thumb, pinch push-on hose on the bottom of the front control valve.
- Engage deadman, you should feel the air pressure in the hose pushing your fingers apart.
- Release deadman, you should feel the pressure in the hose release.
- Repeat this process 3 to 4 times for assurance.
- Depress deadman and hold
- With forefinger and thumb, pinch push-on hose on the bottom of the rear control valve.
- Activate Abrasive Cut-Off Switch; you should feel the air pressure in the hose pushing your fingers apart.
- Deactivate Abrasive Cut-Off Switch; you should feel the pressure release.
- Repeat this process 3 to 4 times for assurance.

Testing of Auto Air Valve:

- Completely close the TVII valve by turning the knob clockwise until it bottoms.
- Open choke valve.
- **CRITICAL:** Have an assistant hold the blast hose and nozzle during this test procedure.
- Engage deadman.
- Auto Air Valve should open and allow air into pusher hose.
- Release deadman.
- Auto Air Valve should close, stopping flow of air into pusher hose.
- Repeat this process 3 to 4 times for assurance.

Testing of TVII Valve:

- CRITICAL: Close choke valve for this procedure.
- Completely open the TVII valve by turning the knob counterclockwise 8 turns.
- CRITICAL: Have an assistant hold the blast hose and nozzle during this test procedure.
- Engage deadman.
- Activate Abrasive Cut-Off Switch. There should be air coming out of blast nozzle.
- Deactivate Abrasive Cut-Off Switch. Air should stop coming out of nozzle.
- Repeat this process 3 to 4 times for assurance.
- Release deadman.

Testing Equipment for Leaks:

- Open choke valve.
- Completely close the TVII valve by turning the knob clockwise until it bottoms.
- CRITICAL: Have an assistant hold the blast hose and nozzle during this test procedure.
- Engage deadman.
- Wrap hands around all piping and hose connections checking for leaks.
- Check handway gasket for leaks. Refer to Section 6.3 for inspection and installation instructions.
- Close inlet ball valve.
- Open blowdown valve to depressurize vessel. Refer to Section 6.2.
- Repair any leaks that are found. Re-test for leaks.

WARNING

Airborne particles and loud noise hazards from blowdown exhaust air can cause serious injury and loss of hearing. Wear approved eye and ear protection. Stay clear of blowdown air path. DO NOT place hands or other body parts in the blowdown air path. Make sure no personnel are in the blowdown air path.

Should any problems arise during these test procedures refer to Section 11.0 of the *Abrasive Blaster Operation and Maintenance Manual* for troubleshooting procedures.

This completes the testing procedure. The vessel is ready to be put into production.

DANGER

Do Not operate the abrasive blaster prior to performing all the pre-operation procedures detailed in Section 6.0 of the *Abrasive Blaster Operation and Maintenance Manual*.