

# INSTRUCTIONS FOR INSTALLING THE ABRASIVE REGULATOR 2 on OMAX MACHINES

What you will need

13762 – Abrasive regulator II

13968 - Abrasive regulator II install kit for Omax

### 13968 Installation Kit Components

The AccuStream Abrasive Regulator 2 install kit #13968 contains the following parts:

5635K42 - (100') 5/32" OD, .106" ID tubing

**51495K212** – (1) 1/8" NPTF Male x 5/32" tube, 90 deg swivel

**51495K182** – (2) 1/8" NPTF Male x 5/32" tube straight

**5779K118** – (1) 1/2" NPT male x 3/8" tube straight

51495K189 - (1) 1/4" NPTF male x 3/16" tube straight

**5195T62** – (6') 3/16" OD x 1/8" ID clear polyurethane tubing

#### Location

The Metering Regulator can be mounted to the Z-axis or the Y-axis carriage over the cutting head at up to 6' (feet) from the floor level. This should be high enough to keep the regulator out of the spray-back area from the cutting head and within reach for adjusting the abrasive flow rate. Mounting the regulator on the backside of the Y-axis carriage can keep it out of direct spray-back from the cutting head and is preferred if it is still within easy reach of the operator.



**NOTE:** Use the over-all height of the assembled regulator to determine the amount of space needed before mounting.

View of AS Abrasive Regulator Mounted on an Omax Manual Z-Axis Machine





Front View with (2) air-lines, Top Abrasive Inlet Line, and Abrasive Feed Line to Max Jet 5 Cutting Head.



## **Attaching the Regulator to the Machine**



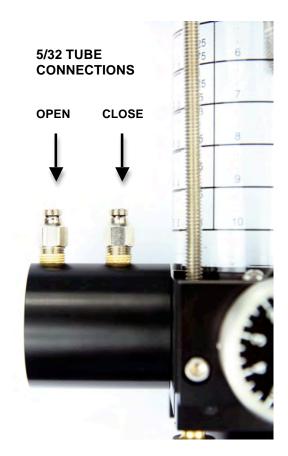
**NOTE:** Determine where you will be mounting the Accustream Abrasive Regulator and make sure you have all the hardware necessary. Including: custom brackets, bolts, t-slot nuts, etc.

- 1. **Remove** the existing regulator.
- Remove the two screws that attach the mounting plate to the regulator. Use the
  mounting plate to position and drill mounting holes on the machine. NOTE: The holes
  on the mounting plate are positioned 2.5 inches (63.5 mm) on center from each other
  and counter bored for .25 (6.35 mm) Cap screws.
- 3. **Reassemble** the back mounting plate to the regulator.
- 4. **Remove** the bottom adapter from the regulator and thread the rear tie rod upward so that there is access to mount the regulator to the machine. Use ½" (6 mm bolt) cap screws for mounting the regulator.
- 5. Re-thread the tie rods back into their original locations.
- 6. **Screw** in the 1/2" npt x 3/8" tube fitting into the female end of the street elbow.
- 7. **Determine** if the abrasive feed hose and the air hose to the feeder are long enough to reach the new mounting location for the Accustream Abrasive Regulator. If not, you may need a tube coupling and additional abrasive tube (Not Included).
- 8. **Attach** the air tube to the "**open**" port on the Accustream abrasive regulator and attach the abrasive feed tube to the tube fitting on the Accustream abrasive inlet.



# **Connecting the Abrasive Regulator II**

- 1. Turn off air and power to the machine if not already off and open the back of the omax controller.
- 2. Locate the air solenoid valve that is controlling the regulator. It will have one tube fitting and one plug on it, however it might not be the only one this way. If necessary you can turn the power and air back on with the tube disconnected then manually cycle the abrasive on and off. When the abrasive is on air should come out of the tube fitting.
- 3. Once you have located the abrasive solenoid remove the 1/8" npt plug and replace it with either a 90 degree or straight fitting 1/8" npt x 5/32" tube, both are included in the installation kit.
- 4. Feed new air-line through your cable and tube routing features on your machine into the controller and connect it to the new tube fitting. Next run the air-line through any cable carriers or cable management trays until you reach the location of the abrasive regulator.



- 5. Determine which cutting head you are using. If you are using an Accustream Dialine or A2 cutting head you can simply connect the 3/8" poly tube from the outlet of the abrasive regulator to the inlet of the cutting head. If you are using a M-Jet 5 cutting head you will need to replace the fitting on the outlet of the abrasive regulator and put the 1/2" npt x 3/16" tube fitting in place. Next you can connect the 3/16" tube from the abrasive regulator to the inlet of the cutting head.
- 6. If you wish to test the abrasive regulator remove the tube from the outlet of the regulator and manually cycle the abrasive on and off at the omax controller.



**NOTE:** You may need to change your delays between abrasive on and cutting head on to reduce or increase them slightly to accommodate change in mounting locations.



View of AS Regulator with (2) 1/8" NPT Male Thread x 5/32" OD Tube Fittings for air cylinder and (1) 3/8" NPT Male Thread x 3/16" OD Tube Fitting for abrasive delivery.



View of 5/32" OD Air Line Tubing Feeding Actuating Air Valve.



View of 1/2" NPT Abrasive Inlet Fittings with 3/8" OD Abrasive Inlet Tubing.



View of Air Solenoid with 1/8" NPTF Male Thread (90 Degrees) x 5/32" OD Tube Fitting, (2) Fittings Required.

**NOTE:** Your controller may look different from the picture shown.

