INSTALLATION INSTRUCTIONS

C-SHANK TWIN BAND OPENERS

2110 Park Avenue Brandon, Manitoba, Canada R7B 0R9
Website: www.atomjet.com
Email: agriculture@atomjet.com
Phone: 1.204.728.8590
Fax: 1.204.726.5734
Toll Free: 1.800.573.5048

3/23/2022

IMPORTANT WARRANTY/GUARANTEE INFORMATION

DO NOT DESTROY

Any claims under the guarantee must be COMPLETED BY OCTOBER 31 IN THE YEAR OF PURCHASE to qualify for a full refund. To satisfy a claim, Atom-Jet Industries must be given the opportunity during the seeding season to rectify the problem or issue, if NOT THE GUARANTEE IS NULL AND VOID. Wear under normal use is not covered by warranty/guarantee.

To activate your warranty registration, scan this QR code using the application on your mobile device and fill out the online form. Upon receipt of the completed form, we will send you a free pair of Atom-Jet work gloves.

WARRANTY IS TO BE COMPLETED BY OCTOBER 31 IN THE YEAR OF PURCHASE. The openers will either be Replaced or Repaired during this period. If you need to return an opener for warranty, please enclose your name, the farm name, address, phone number with area code, dealer purchased from, number of openers purchased, and the date of purchase. Please enclose copy of original invoice. Inclusion of the information will significantly speed up your warranty claim.

Get a GOOD START

"IF SEEDING ISN'T DONE RIGHT, NOTHING ELSE MATTERS."

Before You Start

The opener is based on a 50° shank angle so shimming may be needed to correctly adjust the opener to the appropriate angle. CHECK YOUR DRILL AND DO NOT ASSUME THE MANUFACTURER'S INFORMATION IS ACCURATE. Atom-Jet reserves the right to refuse warranty if the shank angle is not within tolerances as shown below.

The stainless steel top is designed to adapt to all openers. Until you are sure of your requirements, DO NOT REMOVE any knock out parts.

Following these instructions will ensure the correct angle of the openers, proper placement of seed and fertilizer, and increase the longevity of the opener.

Verifying The Opener Angle Using an Angle Finder

Install a few openers on your drill, at least one for each rank. Use the following procedure to ensure correct installation.

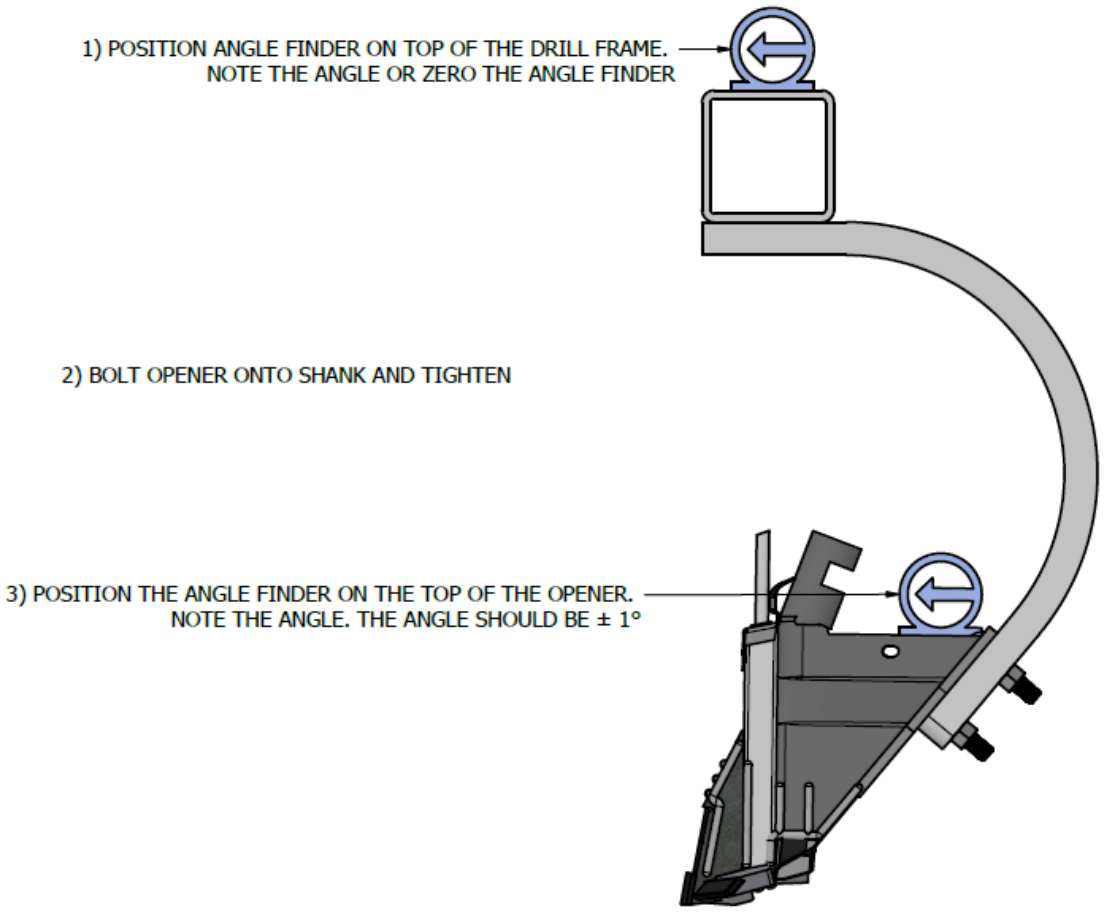


Figure 1: Angle measurement procedure

Install the rest of the openers shimmed as shown above. Sight down the ranks of your drill and adjust openers that appear to be out of position with the properly installed openers. Shims can be purchased from Atom-Jet to correct the opener angle. Figure 2 on the next page shows which shims are needed and their part numbers.

Most John Deere 737 and 1820 drills require a shim (Part # ZT-CZNJ00) on the bottom hole of the opener to set the correct angle. Without the shim, the opener will be set at the incorrect angle (53°-54°).

Shanks that measure 47° should be shimmed with the part shown below (ZT-CZNK00) on the top bolt hole.

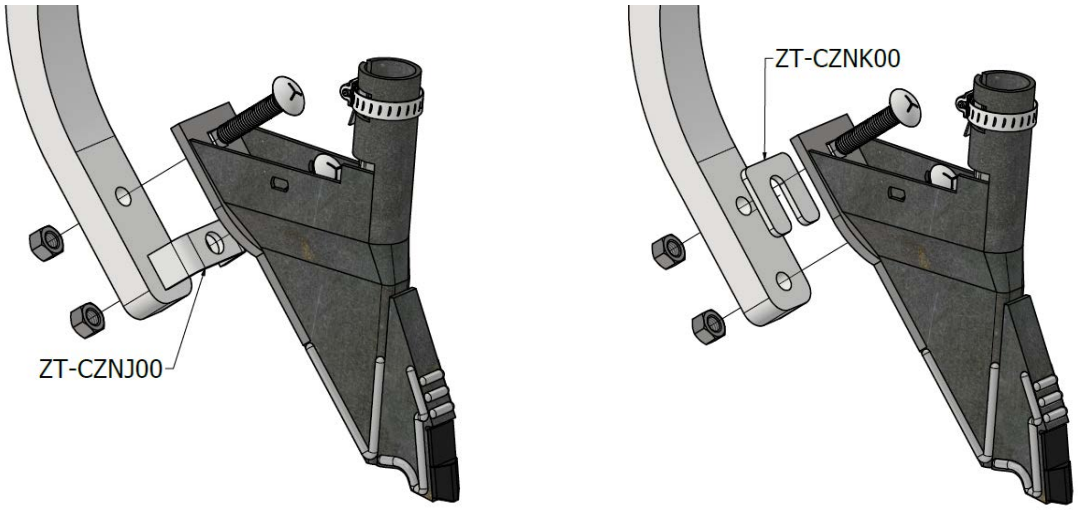


Figure 2: Shims to correct opener angle

Opener Installation

Bolt openers to shank using the supplied carriage bolts, washers, and nuts, remembering to check the shank angle as described above. Install openers with the seed port oriented to the center of the drill (see Figure 4).

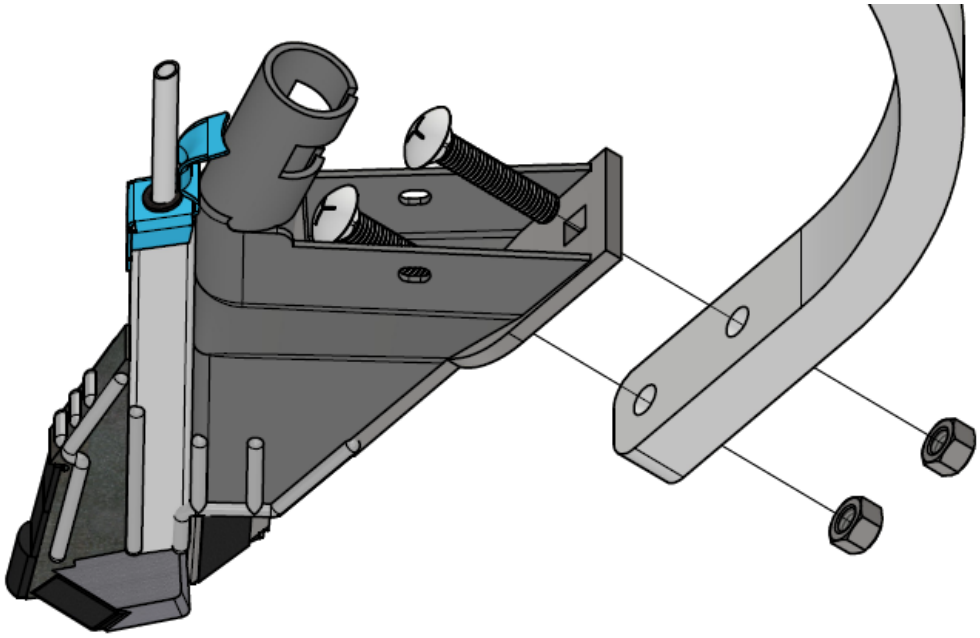


Figure 3: Bolt opener to shank

Twin band openers must be installed with the seed ports oriented to the center of the drill. The seed port is shown in Figure 4.

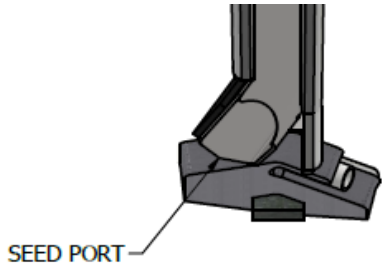
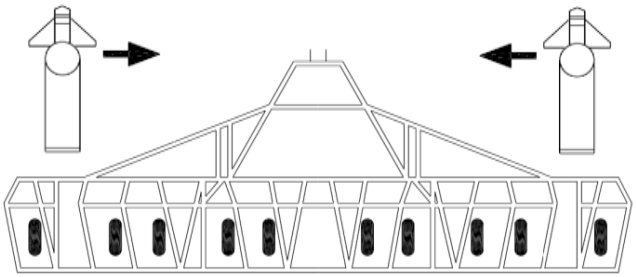


Figure 4: Seed port for "left" opener

Determine the orientation facing direction of travel. A left opener will have the seed port on the left side. Facing the direction of travel, a left opener will install on the right side of the drill. In Figure 5, the arrows represent the orientation of the seed port.

Right opener is mounted on the left side of the drill



Left opener is mounted on the right side of the drill

Figure 5: Opener orientation

Twin Band Hose Installation

If you are using a single shoot seed and dry set up, follow these steps:

1) DO NOT REMOVE knock outs from the top.
2) Install top using 2 ½" x ¼" bolt.
3) Insert dry hose into opener to where the opener narrows. Secure with the #20 hose clamp.

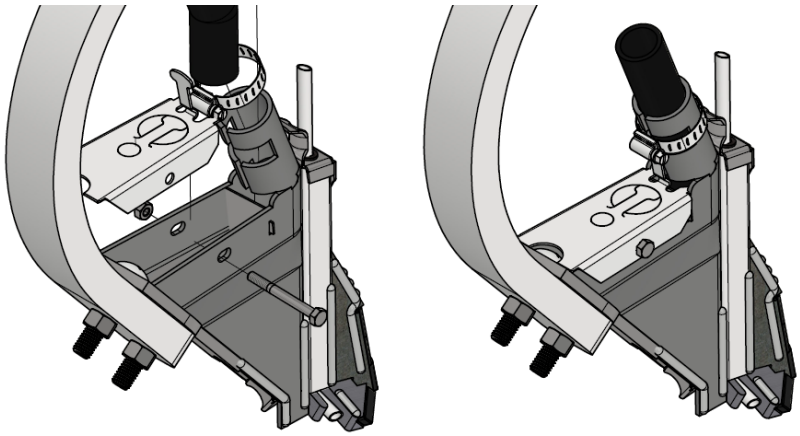


Figure 6: Install dry tube and top for single shoot set up

If you are using a double shoot seed and dry set up, follow these steps:

1) Install top using 2 ½" x ¼" bolt.
2) Remove knock outs and fold tab up into place from large dry hose section. DO NOT REMOVE small knock out.
3) Insert dry hoses to where the opener narrows. Secure with #20 hose clamps.

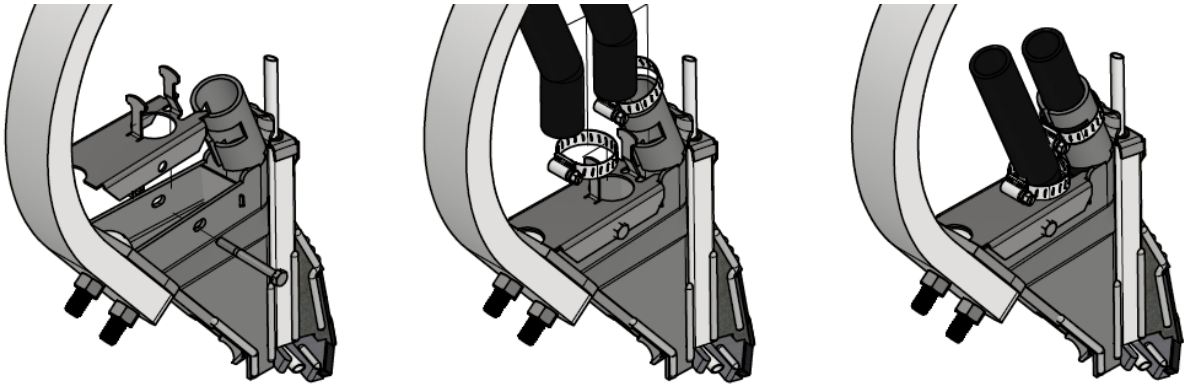


Figure 7: Install top and tubes for double shoot set up

NH3 Line Installation

Install the NH3 line based on the size of hose on the tool. This instruction set gives installation steps for tube sizes of ⅜", ½", ¼", and for MaxQuip systems.

⅜" Hose Installation

Slide line directly over the stainless steel tube and secure with the #6 hose clamp.

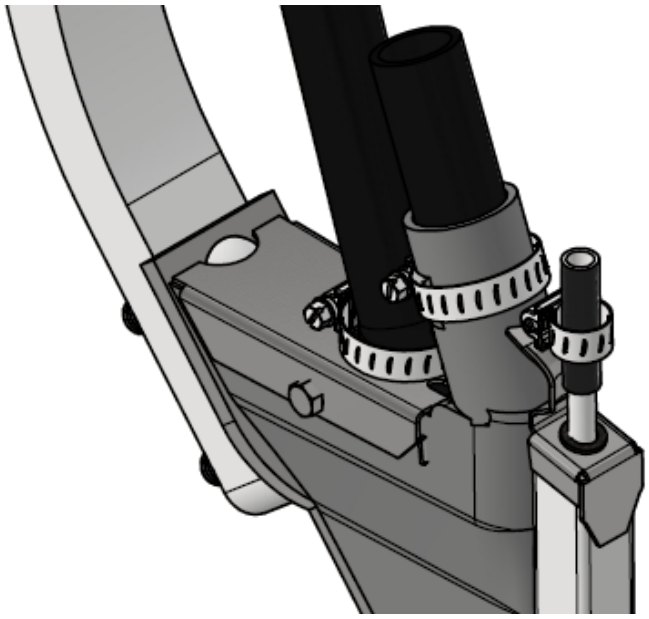


Figure 8: Install ⅜" NH3 line

½” Hose Installation

Slide the supplied sleeve over the stainless steel tube and then slide the ½” line over the sleeve. Secure with the #6 hose clamp.

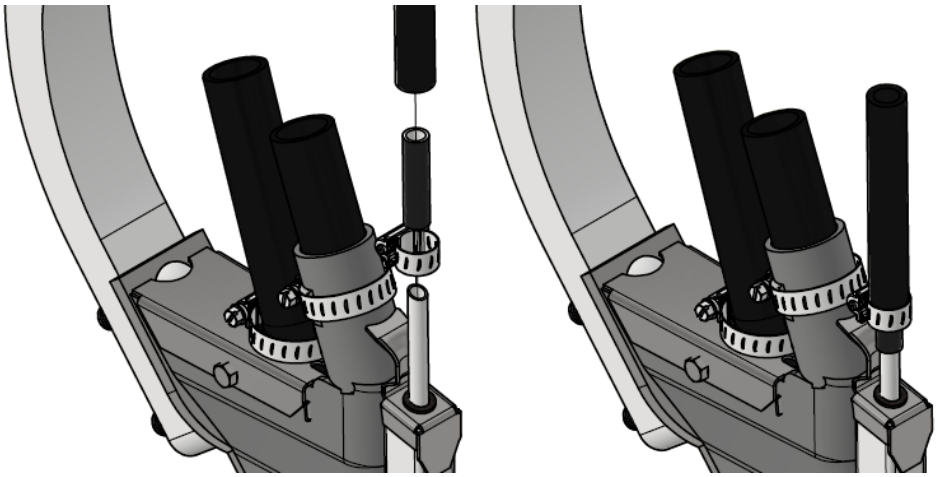


Figure 9: Install ½” NH3 line

¼” Hose Installation

Insert ¼” OD hose through 2” of underground quality heat shrink. Then push the ¼” NH3 tube through the stainless steel NH3 tube until it reaches the bottom end of the tube.

Using a torch (not a heat gun), warm up the heat shrink to seal the point where the ¼” NH3 tube enters the stainless steel tube. Be careful not to overheat the NH3 tube to the point where the heat shrink collapses the tube.

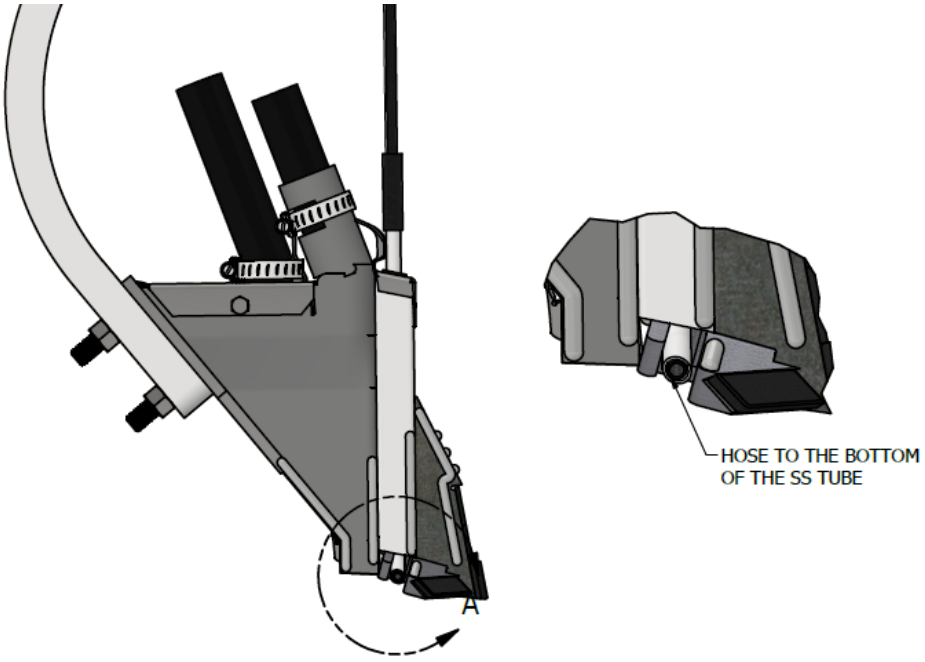


Figure 10: Install ¼” NH3 line

The heat shrink can be loosened on the stainless steel tube by turning it with a pair of pliers. It can be removed if an opener change is required.

Slide a short piece of ½" NH3 tube (approximately 24", not supplied) over the heat shrink to provide protection for the ¼" line. Secure the protective tube to the opener with the supplied hose clamp.

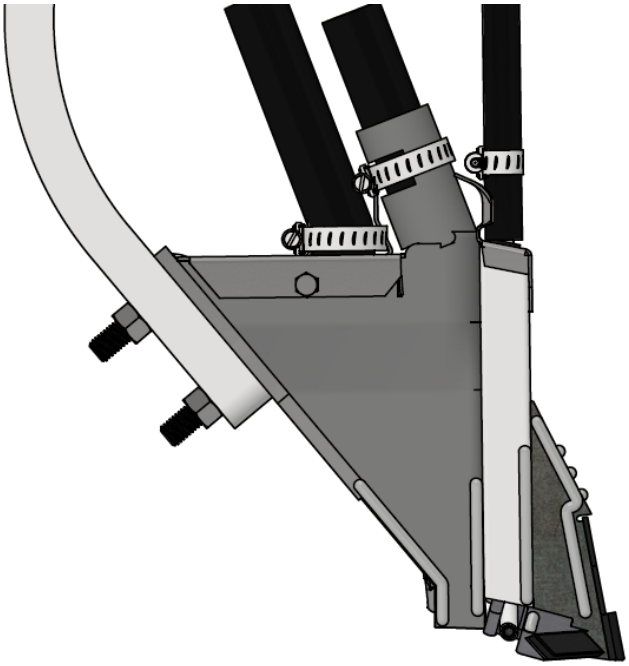


Figure 11: Installed protective tube

MaxQuip System Installation

1) Insert MaxQuip line through the hose crimp and slide over small MaxQuip tube.
2) Crimp line to MaxQuip tube with crimping tool (Tool and crimps available through MaxQuip).

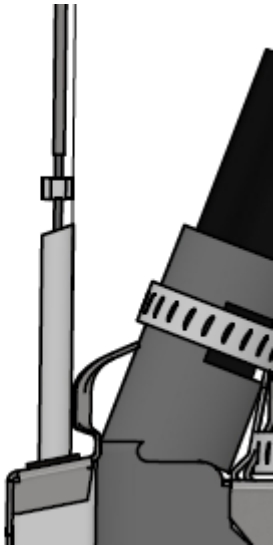


Figure 12: Install MaxQuip NH3 line

3) Slide ½" protective NH3 tube (not supplied) over MaxQuip connection.
4) Open the #6 hose clamp and wrap around both the stainless steel cap, the hose, and the protective cover to the opener.

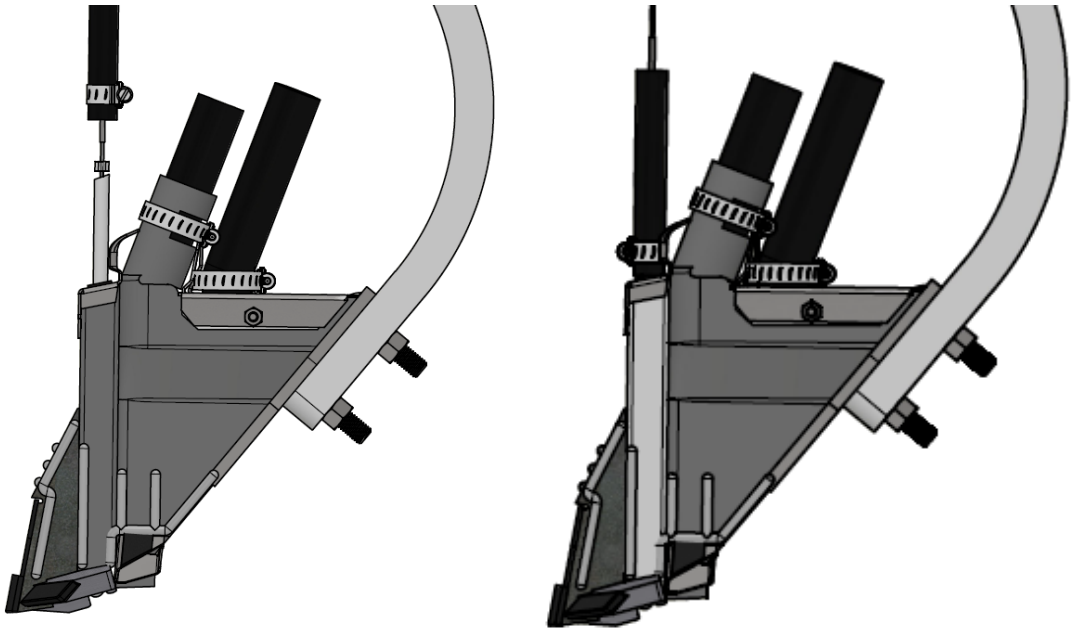


Figure 13: Install protective cover over MaxQuip line

Opener Maintenance

Atom Jet openers are designed to be tough, durable and reliable in all soil conditions. To extend the life of your openers even further, follow these steps:

1) Exchange openers from the wheel tracks with other areas of the drill or cultivator.
2) Maintain hard surfacing on the openers by building up the areas that were hard surfaced at the factory. Detailed instructions on how to do this are shown on the next page. Hard surface welding sticks and hard surface wire can be purchased through your local welding supply store.

Hard Surfacing

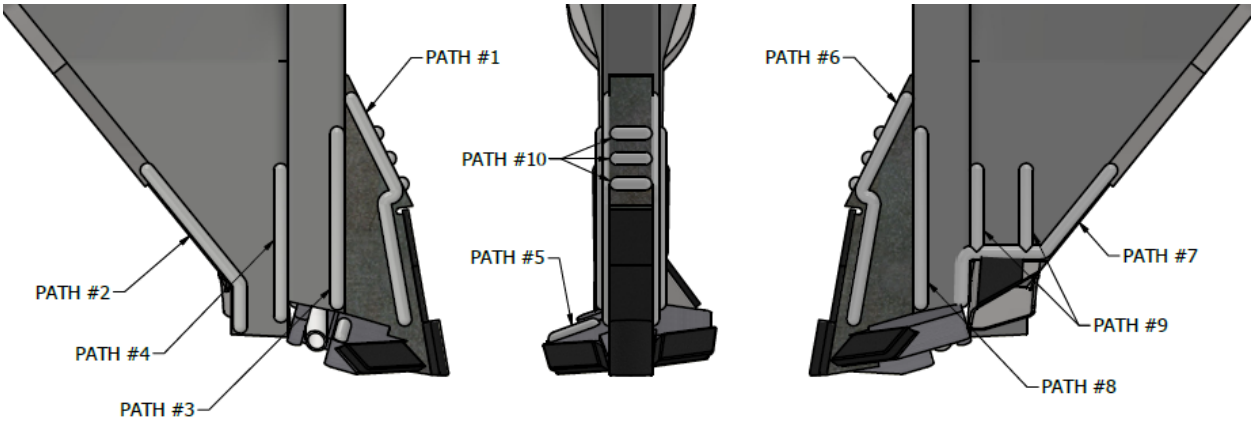


Figure 14: Hard surface paths

One of the reasons we chose steel to build our openers is the ease with which they can be maintained by rebuilding the hard surface welds. Here is the process for rebuilding the welds:

1) Maintain the hard surfacing on the openers by building up the areas we have hard surfaced in the factory. Clean off the openers and work on at least ten openers at a time. The idea is to minimize the heat build-up in the opener, preventing any damage to the carbide.
2) Follow this order:
    a. Starting ⅛" away from the carbide, do PATH #1 on all openers.
    b. Next, do PATH #2 on the skirting of all openers. It may help to clamp a piece of steel inside the boot plate to give backing to the weld and to act as a heat sink.
    c. Then, do PATH #3 on the tube shield.
    d. Now, do PATH #4 on the skirting, flowing the same method at PATH #2.
    e. Rotate the opener so the wing is flat and starting ⅛" away from the carbide, do PATH #5.
    f. Next, turn the openers over and do PATHS #6 to #9 following the same method as the first side.
    g. Finally, starting ⅛" away from the carbide, do PATH #10 on all openers.
3) Atom-Jet Industries regularly performs this process for many customers. Call today for a quote at 1-800-573-5048.