

# ***INSTALLATION INSTRUCTIONS***

## **MORRIS MAXIM PAIRED ROW OPENERS**



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## **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.

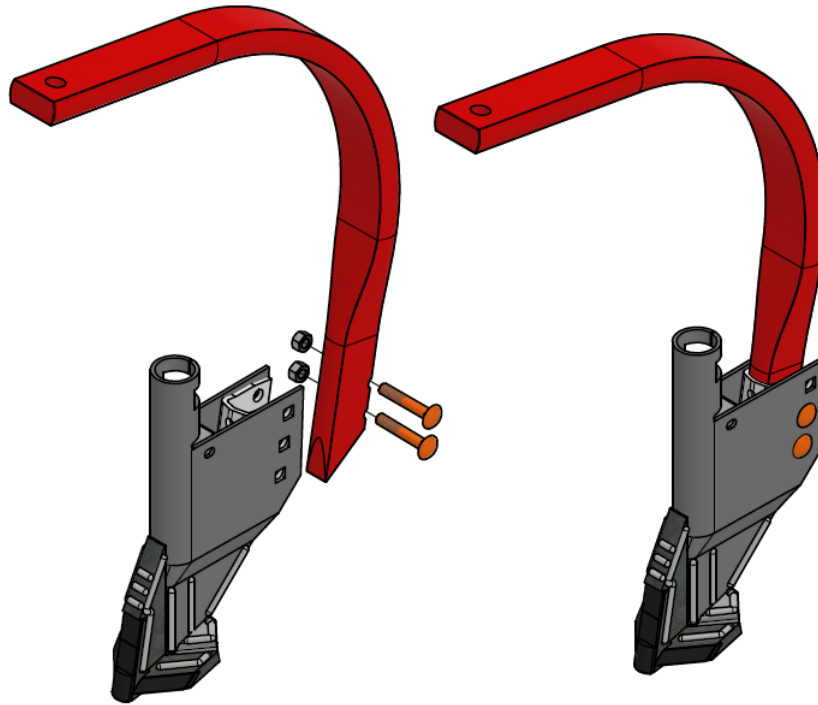


WARRANTY IS TO BE COMPLETED BY OCTOBER 31 IN THE YEAR OF PURCHASE. The openers will either be Replaced or Repaired during this period. If you need to return an opener for warranty, please enclose your name, the farm name, address, phone number with area code, dealer purchased from, number of openers 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."

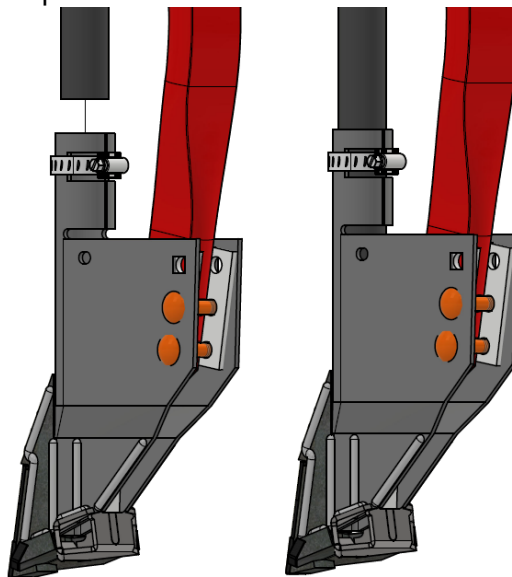
## Opener Installation

- 1) Bolt openers to shank using the provided  $\frac{3}{8}$ " X  $2\frac{1}{4}$ " carriage bolts and locknuts. Use the bottom two holes on the opener to mount to the shank.



*Figure 1: Bolt opener to shank*

- 2) Install the seed hose into the opener to where the opener narrows. Secure the hose with the supplied #20 hose clamp.

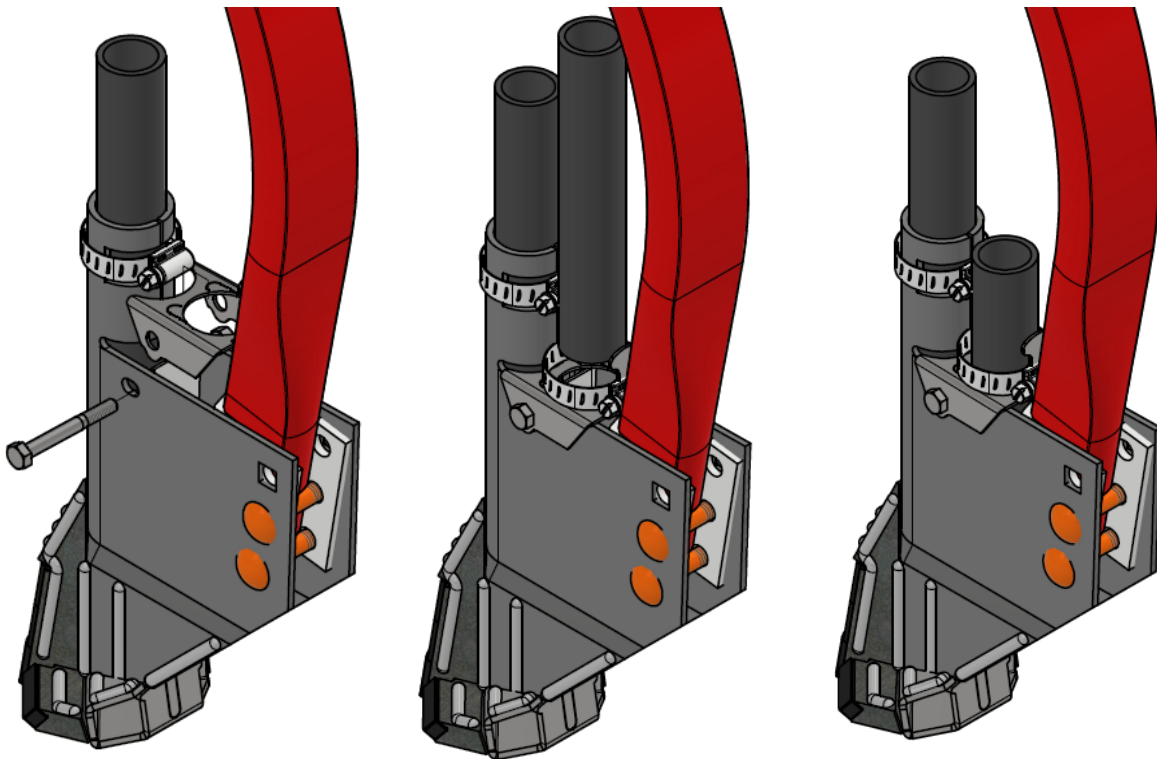


*Figure 2: Install seed tube*

Our openers are designed to allow hoses of different diameters. Hose bushings will be required for  $\frac{3}{4}$ " ID hoses. Short pieces of delivery hose sliced vertically and slipped over the delivery hose make good bushings. If desired, a bushing can be purchased through Atom-Jet: part OP-CB15 TUBE SPACER.

### Installation for Granular Fertilizer

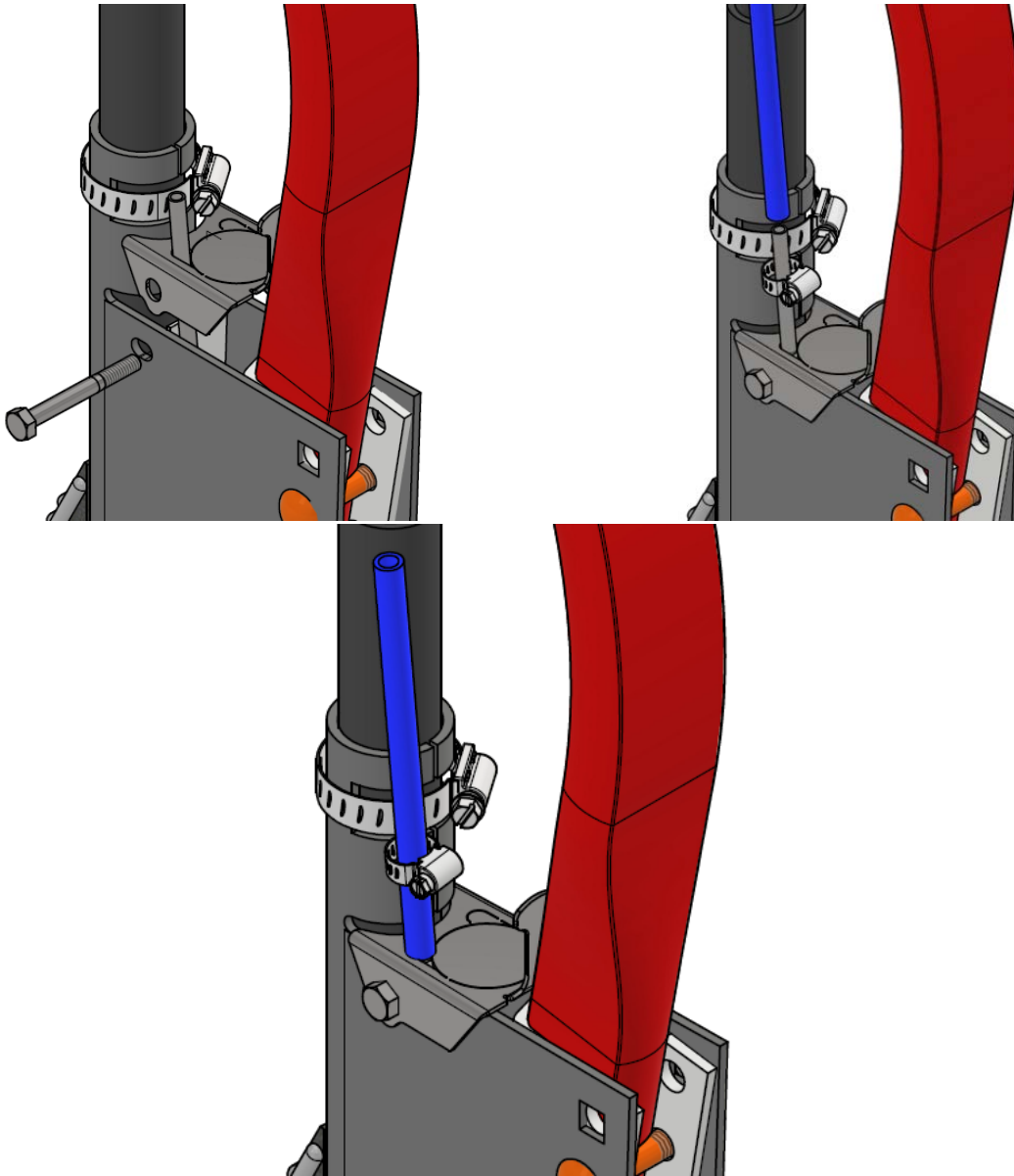
Install opener top using provided  $\frac{1}{4}$ " x 2  $\frac{1}{4}$ " bolt and lock nut. Remove knock outs from the large hole in the opener top. Fold the hose retainer tab up into place (shown in Figure 4) and loosely slip the supplied #20 hose clamp over hose retainer tab. Insert the rear hose down into the opener to the point where the opener narrows. This ensures product will not escape past the divider to the front chamber. Secure the hose with the #20 hose clamp.



*Figure 3: Install opener top and rear dry hose*

### Installation for Liquid Fertilizer

Remove one of the small knock-outs for the liquid top and slip the liquid tube through it. Install the opener top with the provided  $\frac{1}{4}$ " x 2  $\frac{1}{4}$ " bolt and locknut. Install and clamp the liquid fertilizer line to the opener with the #4 hose clamp. To prevent dislodging of the line, zip tie the liquid hose to the seed hose and drill frame.



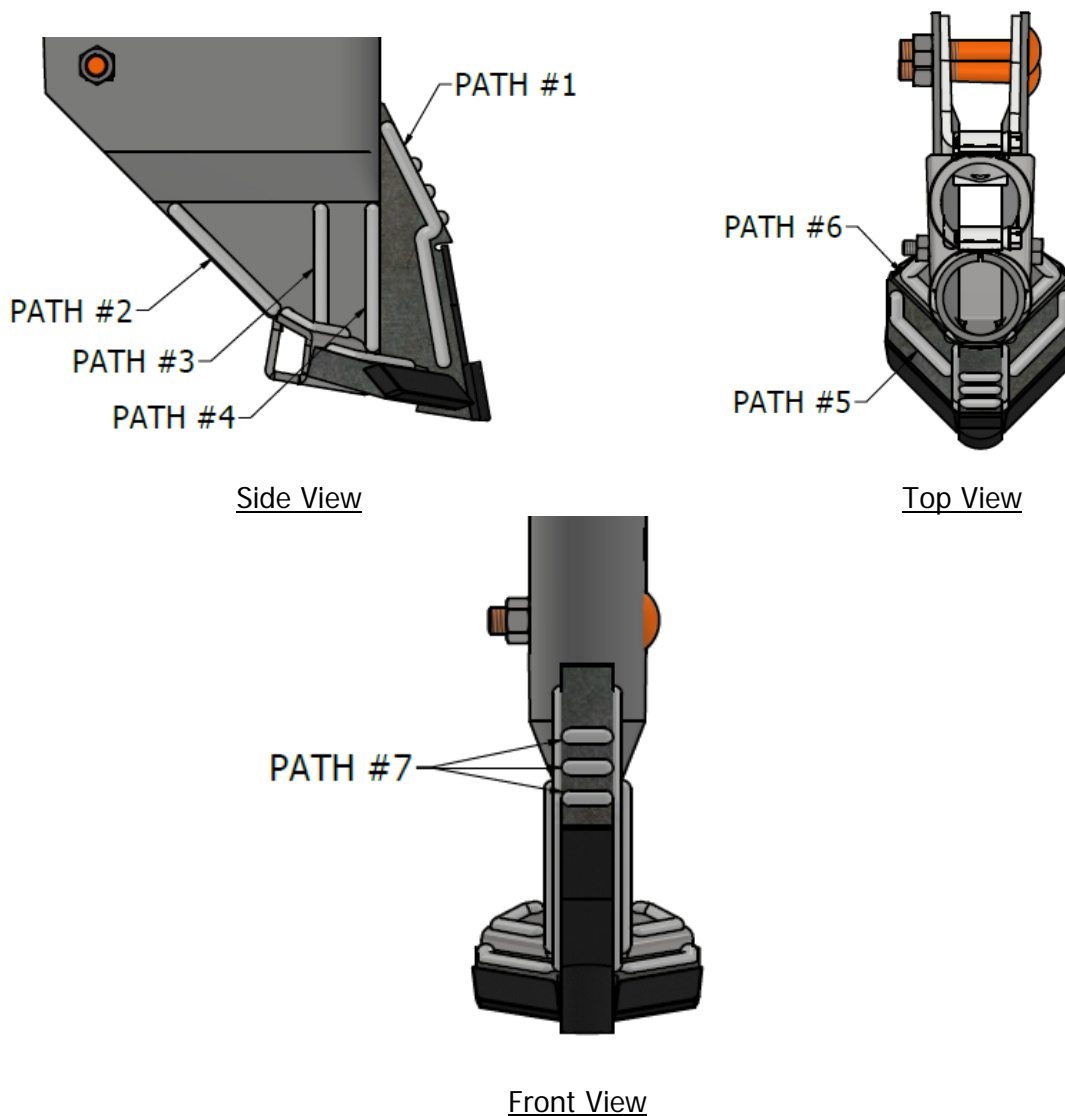
*Figure 4: Install liquid fertilizer tube*

## 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 below. Hard surface welding sticks and hard surface wire can be purchased through your local welding supply store.

## Hard Surfacing



One of the reasons we chose steel to build our openers is the ease with which they can be maintained. The following steps are for re-building the hard surface weld beads:

- 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 these steps:
  - a. Starting  $\frac{1}{8}$ " away from the carbide, do PATH #1 on all openers.
  - b. Then, do PATHS #2 to #4 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. Next, hold the opener so the wing is flat. Starting  $\frac{1}{8}$ " from the carbide, do PATHS #5 and #6 on the wing and paired row cup.
  - d. Turn the openers over and repeat PATHS #1 to #6 on the other side.
  - e. Finally, hold the opener so the point is facing up. Starting  $\frac{1}{8}$ " away from the carbide, do the PATH #7 on all openers.
- 3) Atom-Jet Industries regularly performs this process for many customers. Call today for a quote at 1-800-573-5048.