

Installation Instructions for Quick Attach Firmer Tails – 140028, 140029, 140030, 140031

Compatible with Quick Attach Brackets 150087, 150088, and 150089

Note: All quick attach tails are capable of applying liquid, if liquid will not be applied through the tail skip to step 2.

1) Liquid Tubing Installation

- a) Locate the tail, ¼" tubing, liquid insert, and splitter (if applicable).
- b) Install the liquid insert into one end of the ¼" tubing. Refer to illustration 1.

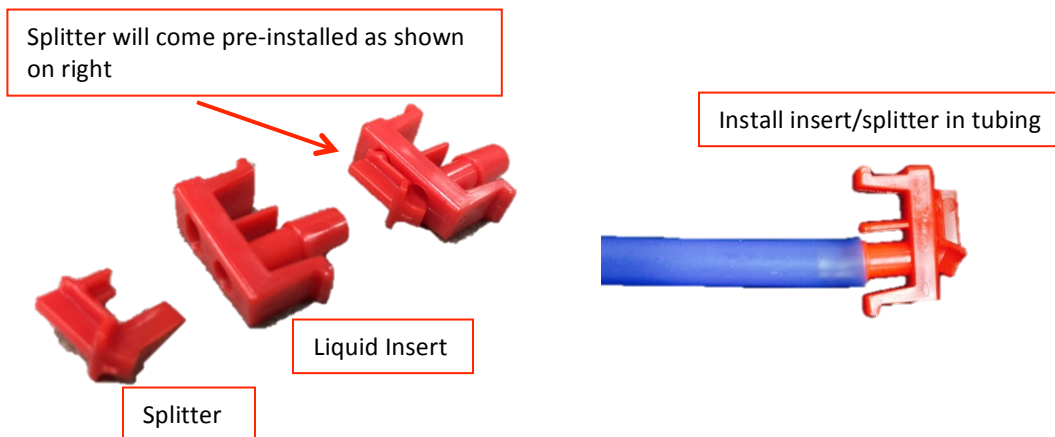


Illustration 1– Insert and splitter installed in tubing

- c) Slide the other end of the tubing through the opening at the bottom of the tail. Continue feeding the tubing up through the tail, securing it with the two molded hooks. Finish by sliding through the open hole at the top of the tail. Use the provided zip tie to secure the tubing to the firmer. Refer to Illustration 2.

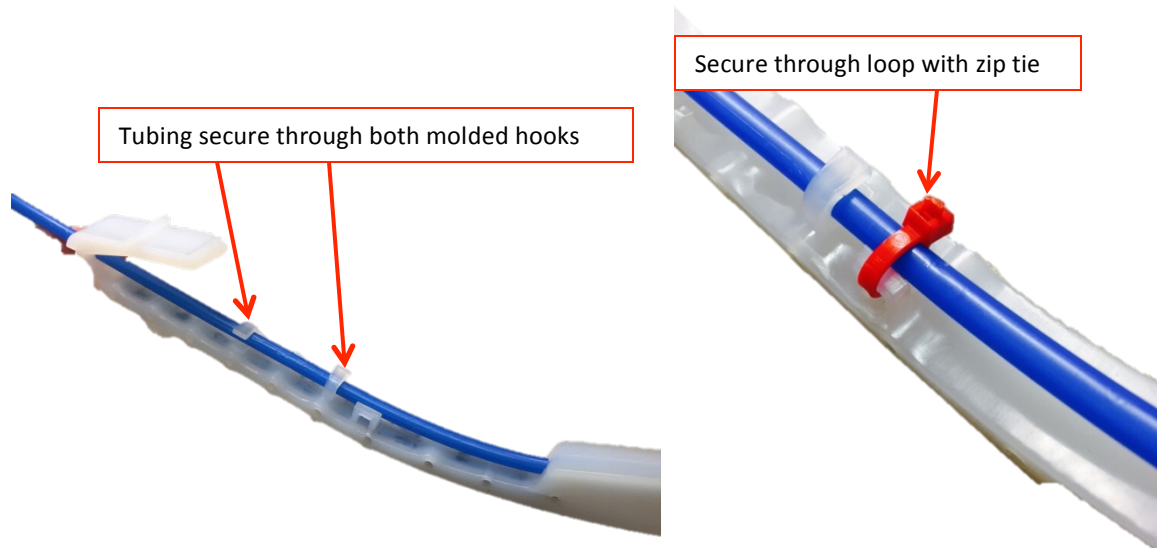


Illustration 2 – Tubing installed through firmer

- d) Snap the liquid insert into the open area at the bottom of the tail. Refer to illustration 3. To remove the liquid insert, push a small flat head screw driver (or similar tool) into one of the four small openings on the side of the tail and pry the insert out.

Note: Do not install the insert into the tail first and then attach the liquid tubing to the insert. There will not be sufficient leverage to install the tubing over the barb on the insert and the tubing will bind.

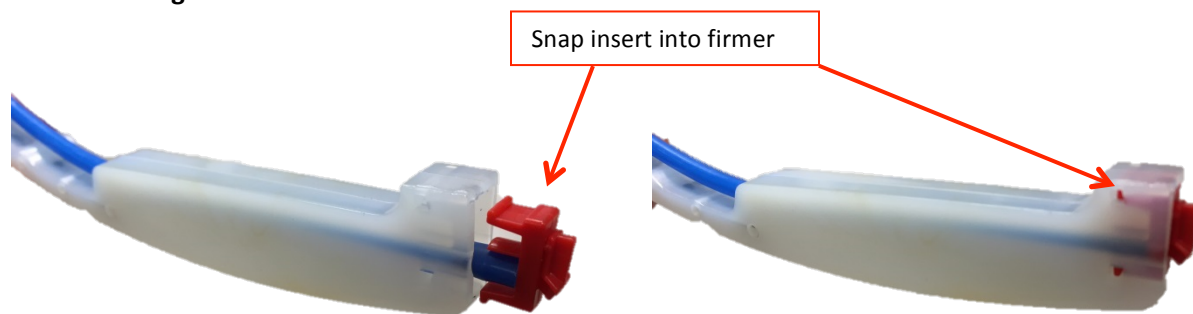


Illustration 3 – Insert installed in firmer

- e) The splitter comes pre-installed in the liquid insert. If not utilizing the splitter it will need to be removed.
 f) Use the 2" long splice to connect the firmer liquid tubing to the liquid supply line from the manifold.

2) Tail Installation and Removal

- a) Insert the tail into the rear opening on the quick attach bracket. A snap should be heard when fully installed. Pull on the tail to make sure it is securely installed. Refer to illustration 4.

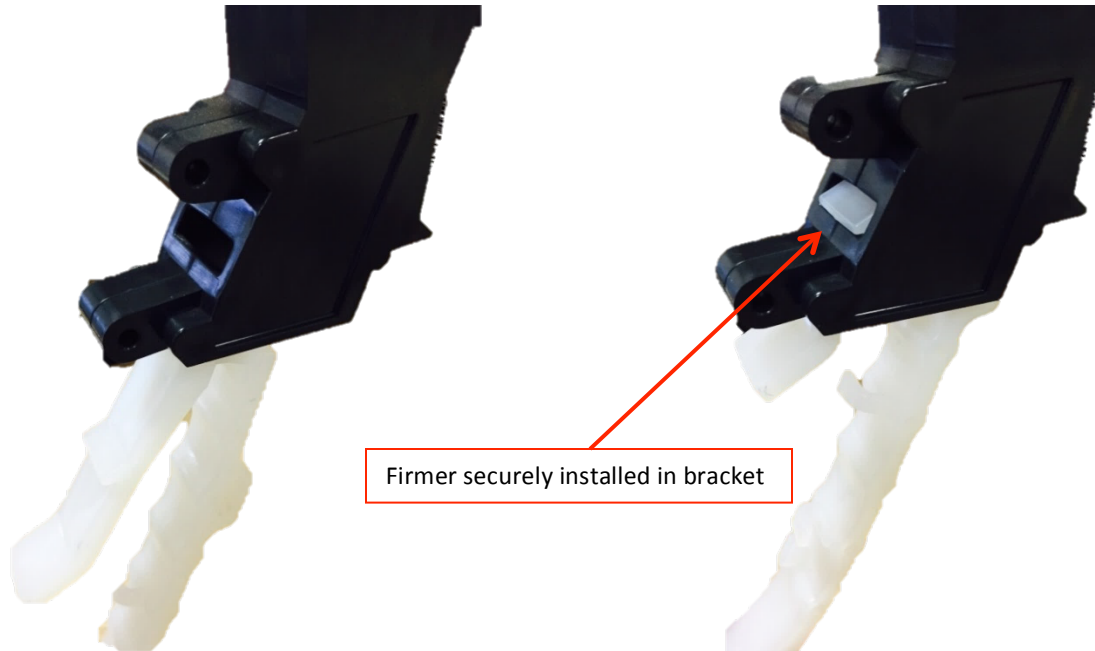


Illustration 4 – Firmer installed in bracket

b) To remove the tail, simply depress the tab on the tail and pull down and out of the bracket.

There are four versions of quick attach tails available. Refer to the table below for part number and description.

Part Number	Description
140028	Quick Attach Keeton Tail – Low Profile
140029	Quick Attach Keeton Tail – Standard Profile
140030	Quick Attach Keeton Tail – Low Profile High Force (Over-Molded Steel)
140031	Quick Attach Keeton Tail – Standard Profile High Force (Over-Molded Steel)

The quick attach firmer tails do not have the ability to adjust the tension. For users that wear-out tail tension faster than tail material wears down, an over-molded steel tail should be used. The high force tails do not necessarily provide more force or tension, but will provide a more consistent tension over the life of the tail.

As noted above, all quick attach tails have the ability to apply liquid. The new splitter has a larger diameter and can apply much higher rates than the previous splitter model.

- **An in-line orifice must be installed on each row to regulate flow to each row**
- **Orifice sizes should be determined by calibrating the planter and utilizing manufacturer’s charts and calculators for target application rate**

Note: Backing up without the planter fully raised can result in damage to the firmer.
To prolong tension, the firmers should be stored not touching the ground between planting seasons.