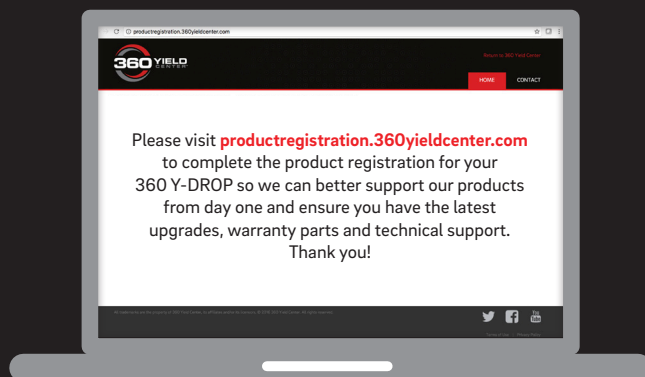




# INSTRUCTIONS 360 Y-DROP®

HAGIE ALUMINUM BOOM

## 360 Y-DROP® REGISTRATION





# INSTRUCTIONS

## 360 Y-DROP

### HAGIE ALUMINUM BOOM

#### ⊕ INTRODUCTION

- + Before beginning, it's important to know where each mounting bracket fits relative to the row spacing involved. The 360 Y-DROP unit should be precisely centered on the machine, as this is critical to the assembly of the system to the sprayer and for mounting the system to your sprayer boom. There are, however, many boom variations among all sprayer models. Your sprayer may not be identical to the model in the following steps of the guide, and the pictures may not exactly reflect your model. While these steps will help you install most of your 360 Y-DROP system, you may need to custom-fit some components with your particular boom.

#### ⊕ RECOMMENDED TOOLS

- + Ratchet wrench with 1/2" and 9/16" deep well sockets
- + 3/8" 12-point socket
- + 1/2" and 9/16" combination wrenches
- + #2 Phillips screwdriver (for the shield installation)

#### ⊕ TORQUE VALUES

- + Refer to these torque values when tightening all fasteners

+ 5/16" stainless	U-bolt	15 ft/lbs
+ 5/16" stainless	Set screw	15 ft/lbs
+ 3/8" carbon	U-bolt	35 ft/lbs
+ 5/16" carbon	U-bolt	30 ft/lbs
+ 5/16" carbon	Stop bolt	30 ft/lbs

#### ⊕ QUESTIONS

- + Call our Product Support team at 888-512-4890

## I. ESTABLISH DROP LOCATIONS

Figures 1 and 2

**Step 1** Locate the center of the machine and identify the location of all the drops. On the sprayer boom, mark where each riser mount will be located. This will ensure that the extension tubes will not interfere with the riser mounts.

Figure 3

**Step 2** For the primary boom; starting at the wing fold pivot pin, measure out and make marks at 30", 88", 148", 208" and 280" (all measurements are  $\pm 5$ "). Repeat for the other primary boom.

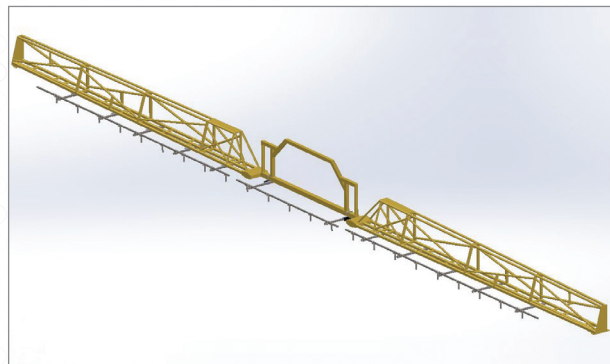


Figure 1

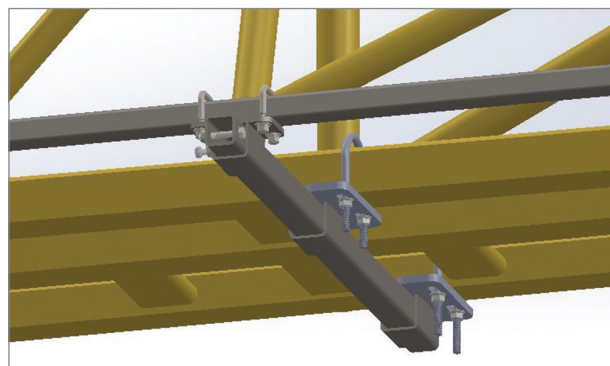


Figure 2

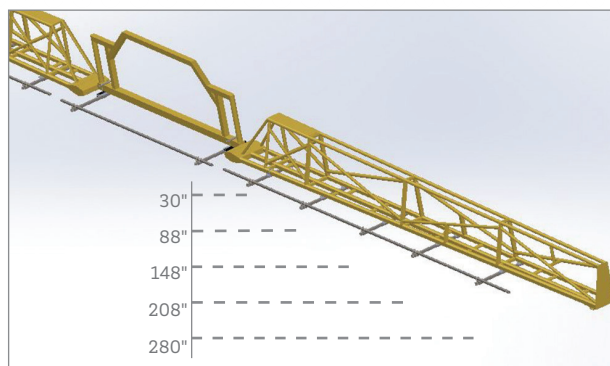


Figure 3

## II. INSTALL MOUNT ASSEMBLIES ON THE OEM PRIMARY BOOM

Figure 4

**Step 1** With the threads pointing down, install U-bolt (1) on the top of the OEM primary boom.

Bag AB

**Step 2** Install bracket assembly (2) and flange lock nut (3).

Hardware Kit D

Repeat Steps 1 and 2 for the other OEM mount bracket kit.

**Step 3** Install extension tube (4).

**Step 4** Install boom bracket (5) onto the extension tube.

**Step 5** Install square U-bolts (6), the 5/16" extra thick washers and the 5/16" nuts.

Hardware Kit A

**Step 6** Install stop bolts (7) at both the front and the rear of the extension tube.

Hardware Kit B

Figure 5

**Step 7** Install stainless steel set screw and jam nut assembly (1) onto the bracket assemblies.

Hardware Kit D

Repeat Steps 1-7 for the remaining mount assemblies on the OEM primary boom.

**NOTE:** If you are installing a system **wider than 60ft**, see next page for further instructions.

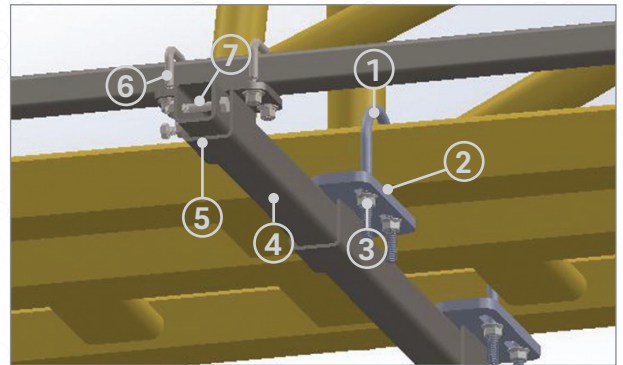


Figure 4

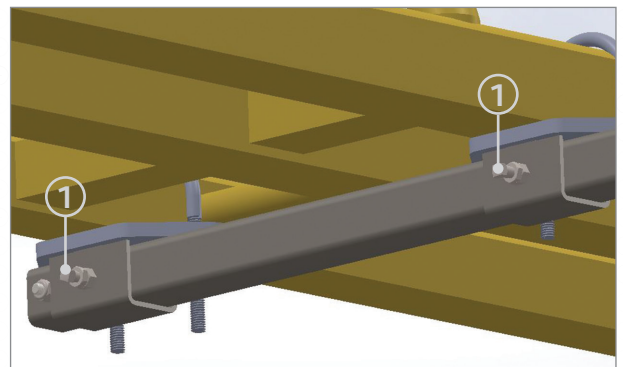


Figure 5

## II.

### INSTALL MOUNT ASSEMBLIES ON THE OEM PRIMARY BOOM (CONTINUED)

Figure 6

#### WIDE MOUNT KIT

If you are installing a system **wider than 60ft**, you will utilize the Hagie Wide Mount Kit (Part No. 417118). These parts are included if your system was ordered as a 70ft+ SMP.

Components are installed on your boom as shown in Figure 6: Hagie WideMount Extension Tube (1), Hagie Wide Mount Boom Bracket (2), and 3/8" Bolt and 3/8" Nut (3).

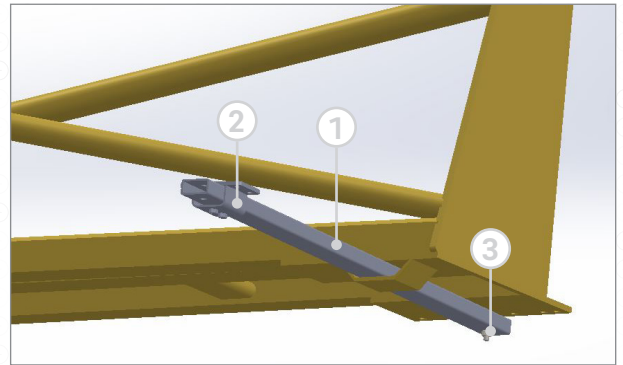


Figure 6

### III.

## INSTALL CENTER SECTION SQUARE TUBE

Figure 7

### Step 1

Place 8" top plate (1) on top of the center section and install two 7.5" bolts (2) with 3/8" washers and carriage bolts (3). Note the carriage bolt at the rear of the boom will need to be set in place on the 14" top plate before it is installed in Step 2.

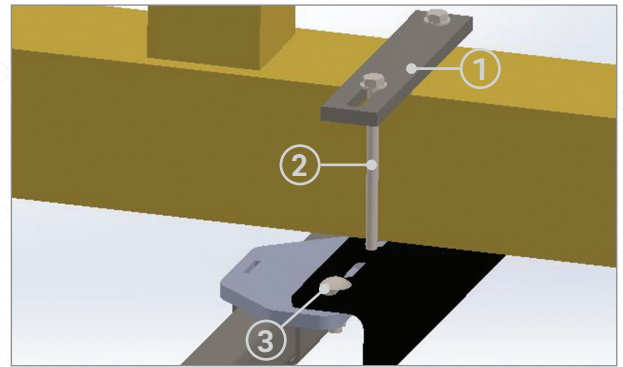


Figure 7

Figure 8

### Step 2

Place 14" top plate (1) and bracket assemblies (2) into position, then install four 3/8" flange nuts (3).

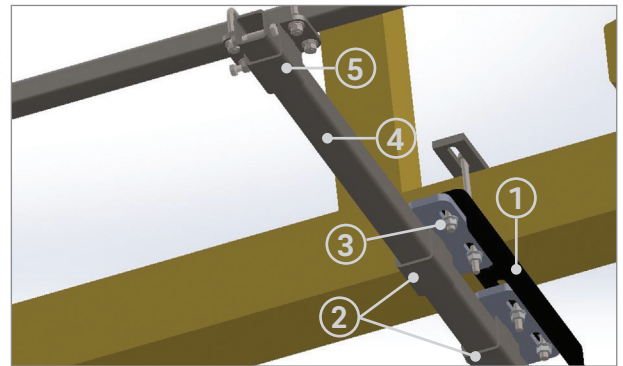


Figure 8

### Step 3

Install extension tube (4) onto bracket assembly (2).

### Step 4

Install boom bracket (5).

Figure 9

### Step 5

Install stainless steel set screw and jam nut assembly (1).

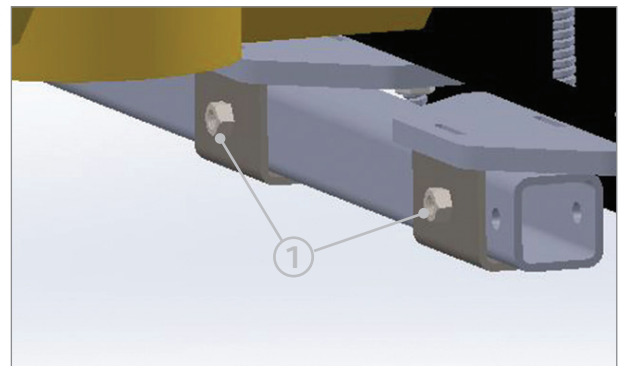


Figure 9

**NOTE:** When installing the center section on the Hagie Aluminum Boom, the guard that protects the wet boom may deflect slightly; however, this will not affect performance.

IV.

## INSTALL YOKE ASSEMBLIES ON THE CENTER SECTION

Figures 10 and 11

- Step 1** With the U-bolt pointing down, install the yoke mount (1) and flange nuts to upper boom section.
- Step 2** With the square U-bolt threads pointing up and using the extra thick washer and Nylock nut, install yoke mount (2) to the 360 Y-DROP boom section.
- Step 3** Using pins, install the yoke straps (3) between the upper boom and 360 Y-DROP boom. Using the flange nuts, tighten the 1-1/4" carriage bolts.

Repeat Steps 1-3 for the other yoke on the center section.

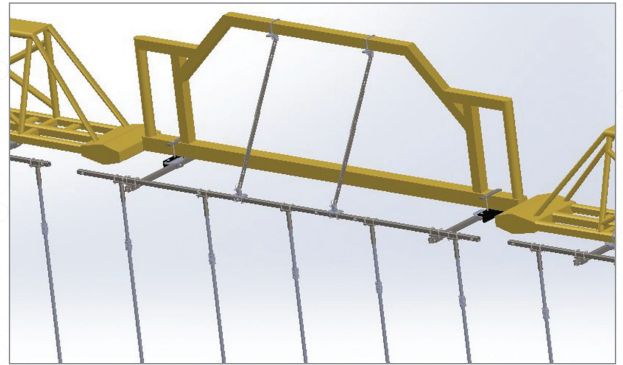


Figure 10

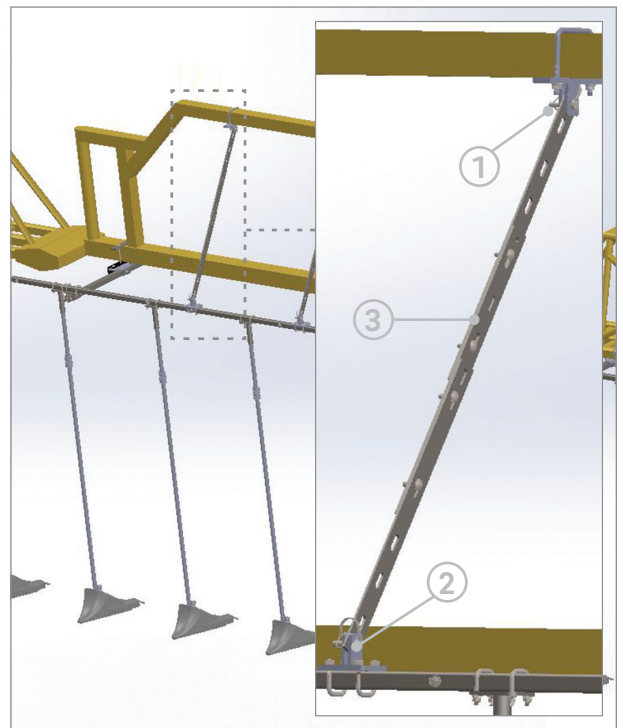


Figure 11



V.

## INSTALL 360 Y-DROP BOOM

Figure 12

**Step 1** Assemble 5' boom sections (1) using the 8" boom connectors (2) and the supplied hardware.

Hardware Bag CC

**Step 2** Repeat Step 1 as needed in order to assemble the entire 360 Y-DROP boom.

**Step 3** Set the 360 Y-DROP boom assembly onto boom bracket (3).

Repeat Steps 1 -3 for the remaining boom assemblies.



**CAUTION:** The 360 Y-DROP boom assembly may weigh up to 150 lbs. (68 kg). Exercise caution and enlist help for this process.

Figure 13

**Step 4** In order to span the full length of the center section 360 Y-DROP boom, you will need to cut and drill one of the 5' boom sections to 1'. Mount this 1' section between two full 5' boom sections. Drill a 7/16" through hole centered 2" from the outside edge.

Figures 14 and 15

**Step 5** Install square U-bolt (1), the 5/16" extra thick washers, and the 5/16" nuts over the 360 Y-DROP boom (2).

Hardware Kit A

**Step 6** Install stop bolt (3) at both the front and the rear of the extension tube. Repeat for remaining stop bolts.

Hardware Kit B

**Step 7** Install stainless steel set screw and jam nut assembly (4). See Figure 11 for detail. Repeat for the remaining mount assemblies on the primary boom.

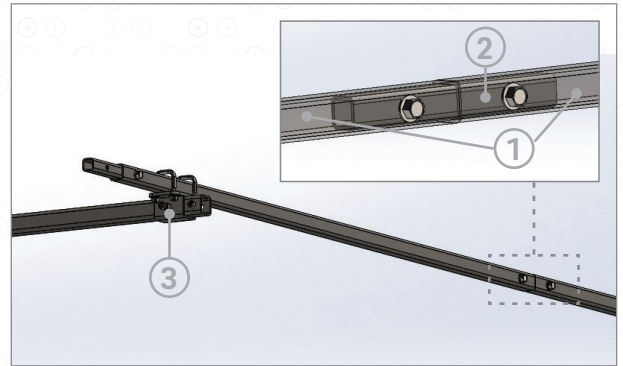


Figure 12



Figure 13

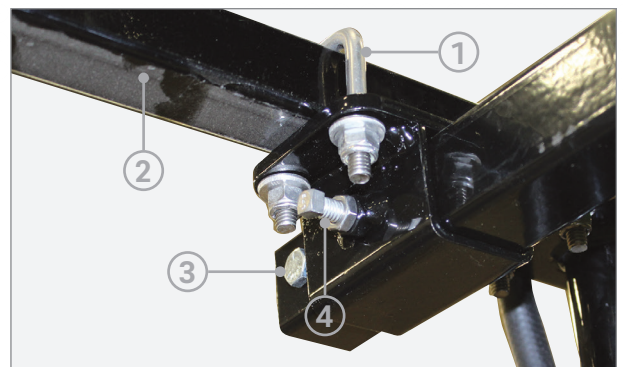


Figure 14

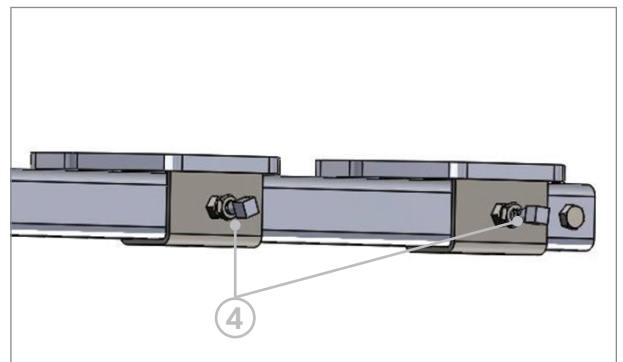


Figure 15



VI.

## INSTALL BREAKAWAY ASSEMBLY - ONE PIECE

Figure 16

**Step 1** Install breakaway assembly - one piece (1) using the square U-bolts (2) and the extra thick washer and Nylock nut. Repeat for the remaining breakaway assemblies - one piece.

Hardware Kit C

Figure 17

Figure 17 may show more or fewer mounts than your installation. The alignment and quantity of the mounts will depend on your row spacing.

Figure 18

**Step 2** Install riser tube assembly (1) into the breakaway assembly - one piece (2).

**Step 3** Install pin (3).

Repeat Steps 2 and 3 for the remaining riser tube assemblies.

**NOTE:** Included in most sprayer mount packages are standard riser mounts to be used when primary booms are folded and in transport mode. These standard riser mounts should be mounted in locations that allow you to relocate the drops away from potential tire interference. See "Install Riser Mounts Without Breakaway Assemblies" section on next page for more instructions.

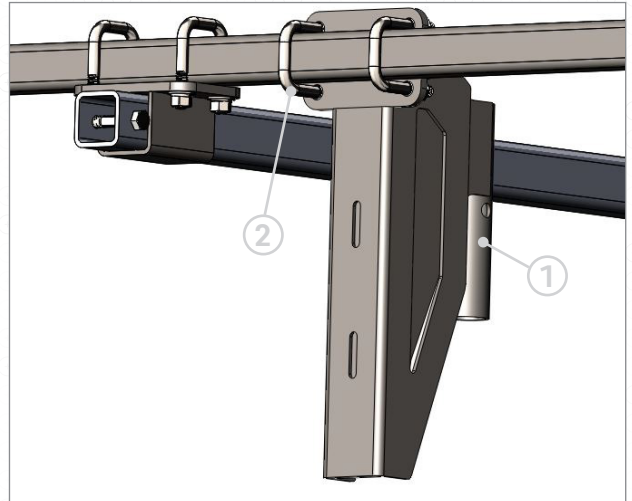


Figure 16

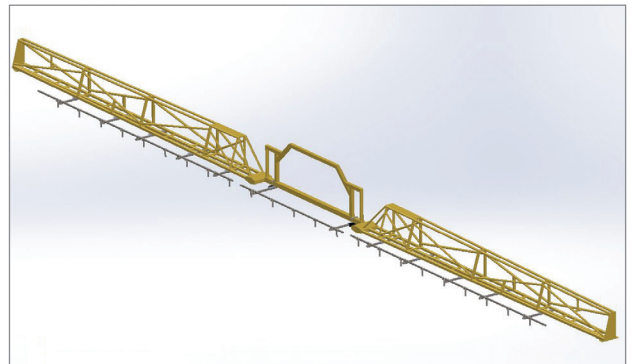


Figure 17

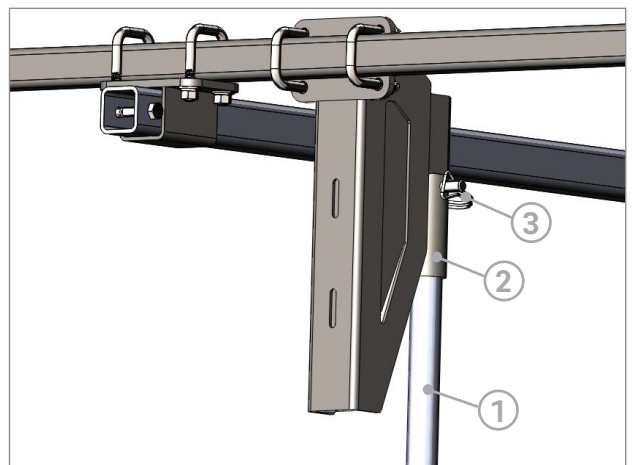


Figure 18

VI.

## INSTALL RISER MOUNTS WITHOUT BREAKAWAY ASSEMBLIES (OPTIONAL)

Figure 19

**Step 1** Install riser mount (1) using the square U-bolts (2) and the extra thick washer and Nylock nut. Repeat for the remaining riser mounts.

Hardware Kit C

Figure 20

Figure 20 may show more or fewer riser mounts than your installation. The alignment and quantity of the riser mounts will depend on your row spacing.

Figure 21

**Step 2** Install riser tube assembly (1) into the riser mount (2).

**Step 3** Install pin (3).

Repeat Steps 2 and 3 for the remaining riser tube assemblies.

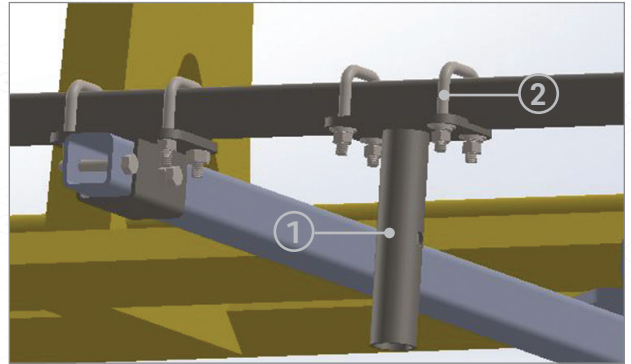


Figure 19

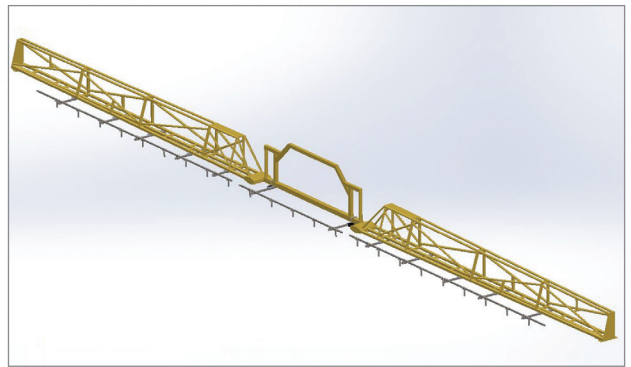


Figure 20

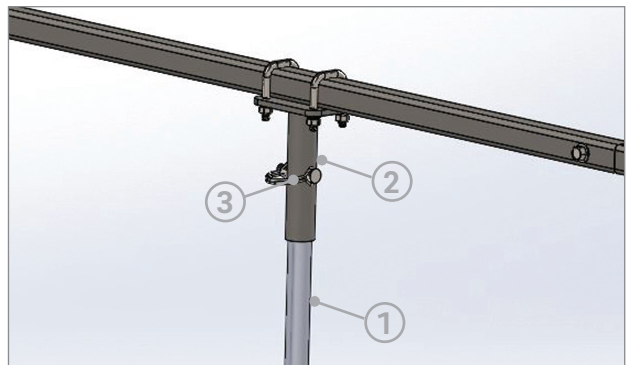


Figure 21

VI.

## INSTALL SHIELDS AND RISER HOSES

Figure 22

**Step 1** Install shield (1) onto riser tube (2).

Figure 23

**Step 2** Install base unit (1) onto riser tube (2).

Figure 24

**Step 3** Assemble drag hoses (1) to 360 Y-DROP base and secure with hose clamps (2).

Figure 25

**Step 4** Note the orientation of the drag hose clamps. The tails should point inward.

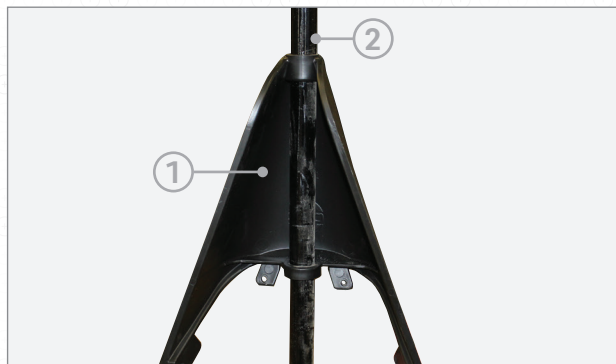


Figure 22



Figure 23

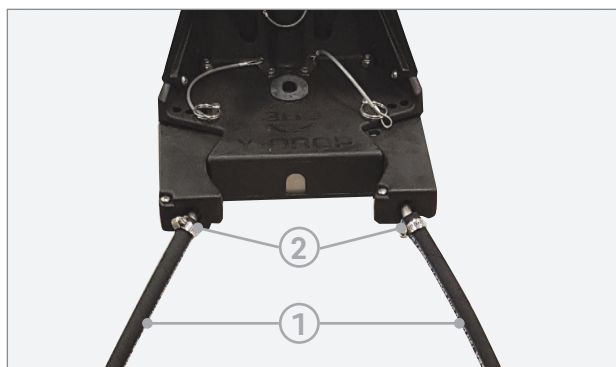


Figure 24



Figure 25

VI.

## INSTALL SHIELDS AND RISER HOSES *(continued)*

Figure 26



**CAUTION:** Do NOT use a drill or impact driver for Steps 5 and 6.

**Step 5** Install two ½" screws (1).

**Step 6** Install two ¾" screws (2).

**Step 7** Install rubber washer (3) into the "Y".

Figure 27

**Step 8** Install riser hose assembly (1) into the "Y".

Figure 28

**Step 9** Route riser hose assembly (1) as shown in Figure 28.

**Step 10** Install the riser hose assembly to the OEM nozzle body.

**Step 11** Use 3 equally spaced plastic ties to secure the riser hose assembly.

Repeat Steps 1-11 for the remaining 360 Y-DROP Shields.

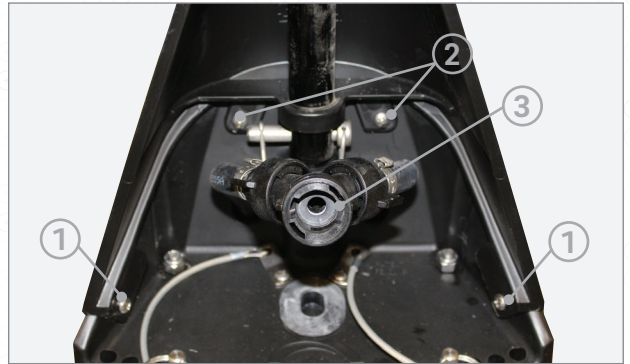


Figure 26



Figure 27

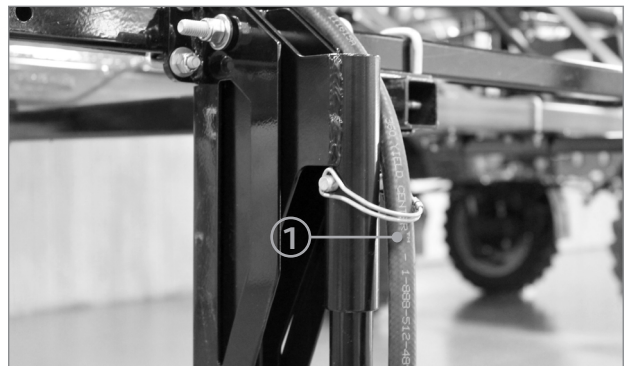


Figure 28

**⊕ INSTALLATION COMPLETE.**