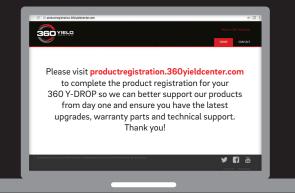


# HAGIE DELTA BOOM

### **360 Y-DROP® REGISTRATION**



360YIELDCENTER.COM V1 - 01.25.2017



### ↔ 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

## ESTABLISH DROP LOCATIONS

#### Figures 1 and 2

Ь

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 Starting at the wing fold pivot pin on the primary boom, measure and mark points at 59", 120", 179"; 241" and 301" (all measurements are ±5"). Repeat for the other primary boom.



Figure 1



Figure 2

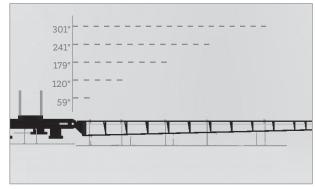


Figure 3

# II. INSTALL MOUNT ASSEMBLIES ON THE OEM PRIMARY BOOM

#### Figures 4 and 5

Step 1	With the threads pointing down, install
	U-bolt (1) on the bottom side of the
	OEM primary boom.
	Bag AB
Step 2	Install bracket assembly (2) and flange
	nuts.
	Hardware Kit D
Step 3	Install extension tube (3).
Step 4	Install boom bracket (4) onto the
	extension tube.
Step 5	Install stop bolts at both the front

- and the rear of the extension tube. Hardware Kit B
- Step 6 Install stainless steel set screw (5) and the jam nut assembly onto both OEM bracket assembly and Y-DROP boom bracket assembly. Hardware Kit D

Repeat Steps 1-6 the remaining mount assemblies on the OEM primary boom.

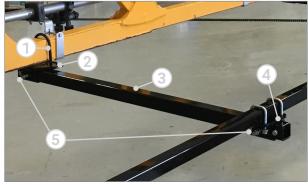


Figure 4



## III. INSTALL CENTER SECTION SQUARE TUBE UPGRADE

# Figure 6 Step 1

Place top plate (1) on top of the center section and install two bolts (2) with 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

- Step 2Place 14" top plate (1) and bracket<br/>assemblies (2) into position, then install<br/>four flange nuts (3).
- **Step 3** Install extension tube (4) onto bracket assembly (2).
- **Step 4** Install boom bracket (5).

#### Figure 8

- Step 5 Install stainless steel set screw (1) and the jam nut assembly onto both OEM bracket assembly and Y-DROP boom bracket assembly.
- **Step 6** Install square U-bolt (2), the 5/16" extra thick washers and the 5/16" nuts. Hardware Kit A

Repeat steps 1-6 for second center section mount.

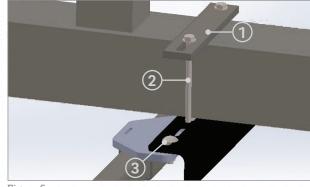


Figure 6

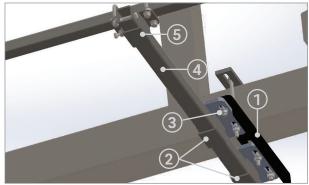


Figure 7



Figure 8



Figure9

#### 360YIELDCENTER.COM

## IV. INSTALL 360 Y-DROP BOOM

### Figure 10

Step 1 Assemble 5' boom sections (1) utilizing8" 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 11

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 12 and 13

- 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 the 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 16 for detail. Repeat for the remaining mount assemblies on the primary boom.

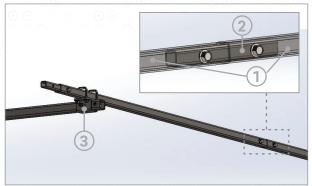


Figure 10



Figure 11

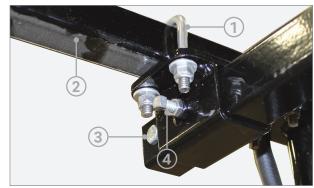


Figure 12

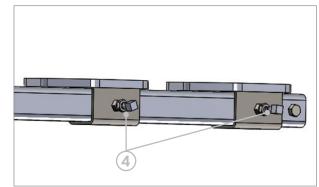


Figure 13

# V.

## INSTALL YOKE ASSEMBLIES ON THE OEM PRIMARY BOOM

Figure 14

- **Step 1** With the U-bolt pointing to the front, install the yoke mount (1) and flange nuts to upper boom section.
- Step 2With the square U-bolt threads pointing<br/>up and using the extra thick washer and<br/>Nylock nut, install yoke mount (2) to the<br/>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 remaining yokes on the OEM primary booms. Yokes should be spaced approximately 60" (±5") apart.



## I.) INSTALL BREAKAWAY ASSEMBLY -ONE PIECE

#### Figure 15

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 16

Figure 16 may show more or fewer mounts than your installation. The alignment and quantity of the mounts will depend on your row spacing.

#### Figure 17

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.

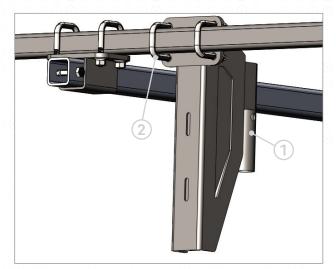
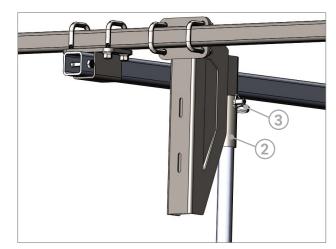


Figure 15



Figure 16



## VI. INSTALL RISER MOUNTS WITHOUT BREAKAWAY ASSEMBLIES (OPTIONAL)

#### Figure 18

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 19

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 20

**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.

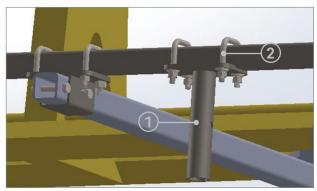
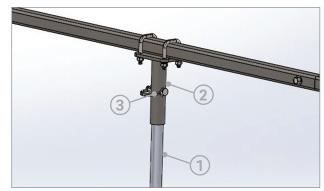


Figure 18



Figure 19





# NSTALL SHIELDS AND RISER HOSES

Figure 21	
Step 1	Install shield (1) onto riser tube (2).
Figure 22	
Step 2	Install base unit (1) onto riser tube (2).
Figure 23	
Step 3	Assemble drag hoses (1) to 360 Y-DROP
	base and secure with hose clamps (2).
Figure 24	
Step 4	Note the orientation of the drag hose
	clamps. The tails should point inward.



Figure 21



Figure 22

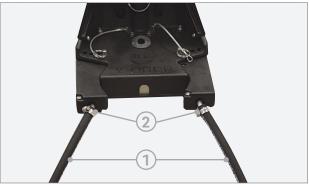


Figure 23



Figure 24

#### 360YIELDCENTER.COM

# II. INSTALL SHIELDS AND RISER HOSES (CONTINUED)

### Figure 25 **CAUTION:** Do NOT use a drill or impact driver for Steps 5 and 6. **Step 5** Install two ½" screws (1). Install two ¾" screws (2). Step 6 Step 7 Install rubber washer (3) into the "Y". Figure 26 Install riser hose assembly (1) into the "Y". Step 8 Figure 27 Route riser hose assembly (1) as shown Step 9 in Figure 24. **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

Figure 25



Figure 26



Figure 27

### ↔ INSTALLATION COMPLETE.

360 Y-DROP Shields.



#### 360YIELDCENTER.COM

All other trademarks are the property of 360 Yield Center, its affiliates and/or its licensors. ©2017 360 Yield Center. All rights reserved.