



2015 360 Y-DROP ASSEMBLY INSTRUCTIONS

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It's important to know where each mounting bracket fits up, relative to the row spacing of the crop that will be serviced. The first position a 360 Y-DROP/360 UNDERCOVER unit should be placed is the very center of the machine. This is critical in understanding the assembly of the system to the sprayer. This will give good guidance for mounting the system to your sprayer boom. There are, however, numerous permutations of booms among all sprayer models; it could very well be that your sprayer is not identical to the model in the following steps of the guide and pictures may differ from yours. While these steps will help you install most of your 360 Y-DROP system, you may need to custom fit some components, based on your particular boom.



1. From center of the machine, there are five (5) mounting zones on each of the primary side booms (first fold) in which the mounting brackets will be installed. This depends on the width of your boom and account for both 20" & 30" row spacing. **Extend the right and left primary booms (first fold) and measure from machine center, marking both ends of each of the following zones on both right and left primary booms:**

1. Zone 1: 80"-90" from center
2. Zone 2: 120"-140" from center
3. Zone 3: 180"-200" from center
4. Zone 4: 240"-260" from center
5. Zone 5: 300"-320" from center



2. **Assemble mounting bracket in Zone 1, 2 & 3 on the boom and leave loose**, shown in FIG 2. The 6" top plate is bolted to the z-slider bracket using a 1-1/4" carriage bolt and one leg of the 3/8" u-bolt, shown in FIG 2.

1. One (1) 6" z-slider bracket
2. One (1) 6" plate
3. One (1) 3/8" U-bolt
4. One (1) 1-1/4" Carriage Bolt
5. Three (3) 3/8" flat washers
6. Three (3) 3/8" lock washers
7. Three (3) 3/8" nuts.

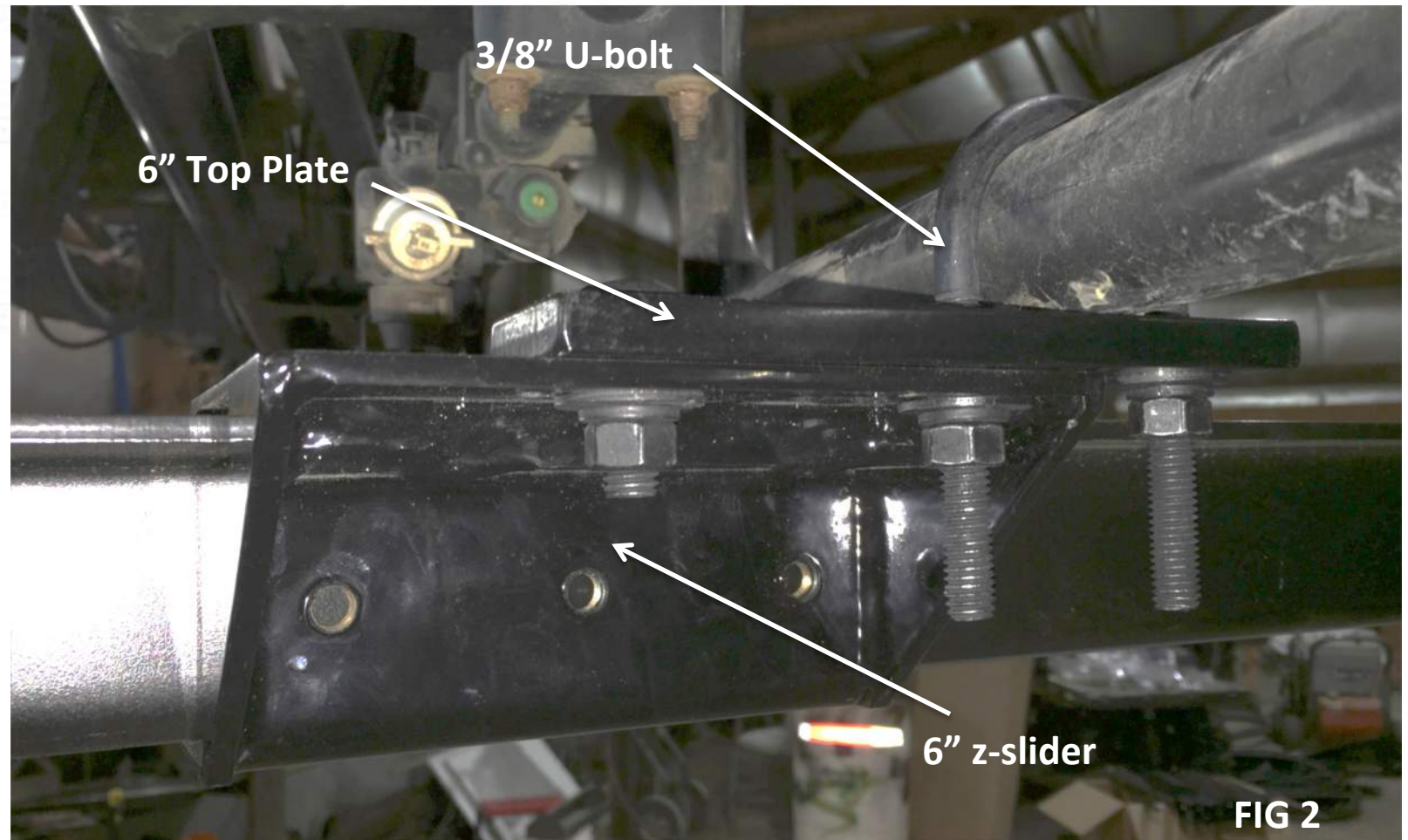


FIG 2

3. Install two sets of the mounting brackets in Zones 4 & 5 and leave loose, shown in FIG 3:

1. One (1) 6" z-slider bracket
2. One (1) 4" plate
3. One (1) 3/8" U-bolts
4. Two (2) 3/8" flat washers
5. Two (2) 3/8" lock washers
6. Two (2) 3/8" nuts.

4. Space all five sets of mount brackets nominally 60" apart and tighten. Distances between brackets may vary, depending on your specific boom. Be sure to take into account where your drops will fall.

5. Repeat STEPS 2 - 4 on the other boom fold. At this point, fold your sprayer booms to see if there are any areas where the mounting brackets interfere and adjust mounting brackets accordingly. Once brackets are clear, unfold the sprayer boom and tighten u-bolts.

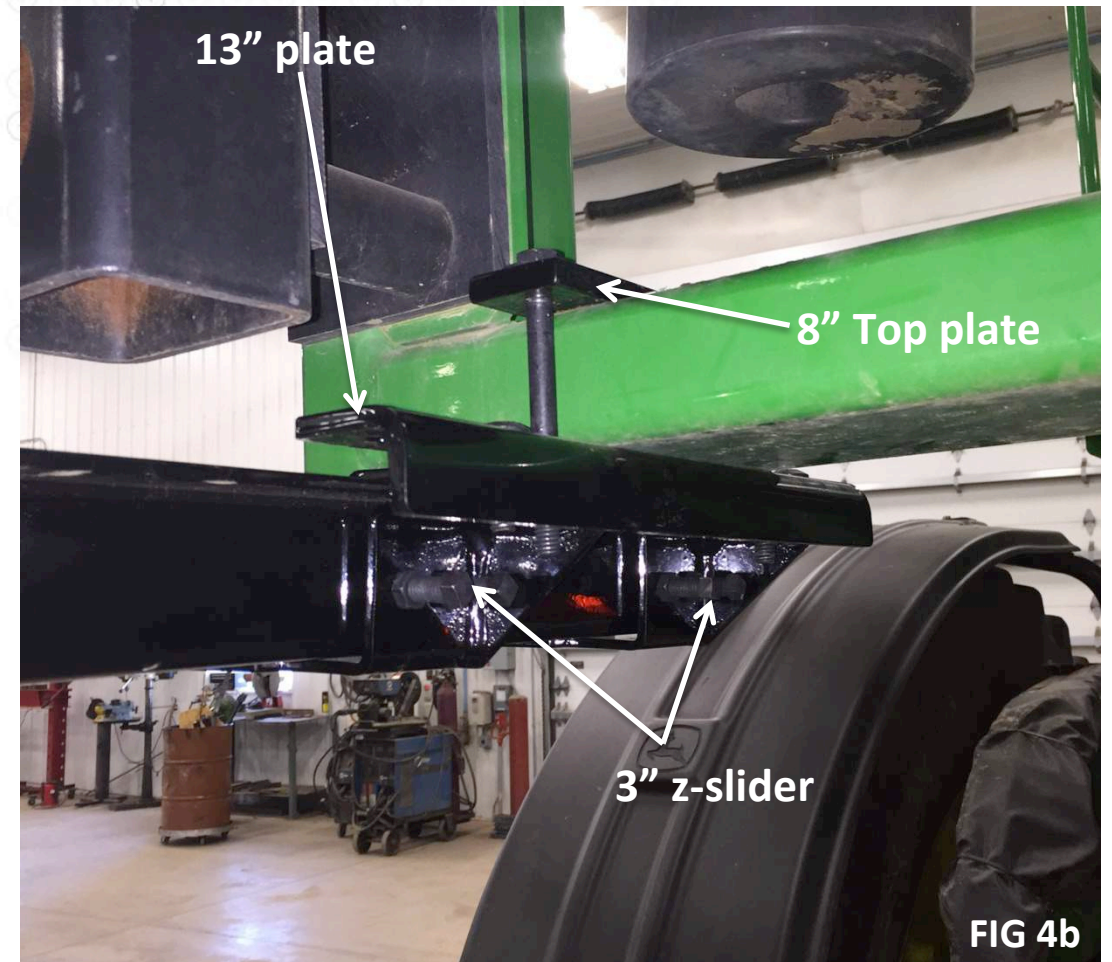


FIG 3



6. **Install two (2) sets of mounting brackets on center section, spaced evenly apart left & right and tighten, shown in FIG 4a & 4b:**

1. Four (4) 3" z-slider brackets
2. Two (2) 8" top plates
3. Two (2) 13" plates
4. Four (4) 4-1/2" bolts
5. Four (4) 1.25" carriage bolts
6. Twelve (12) 3/8" flat washers
7. Eight (8) 3/8" lock washers
8. Eight (8) 3/8" nuts

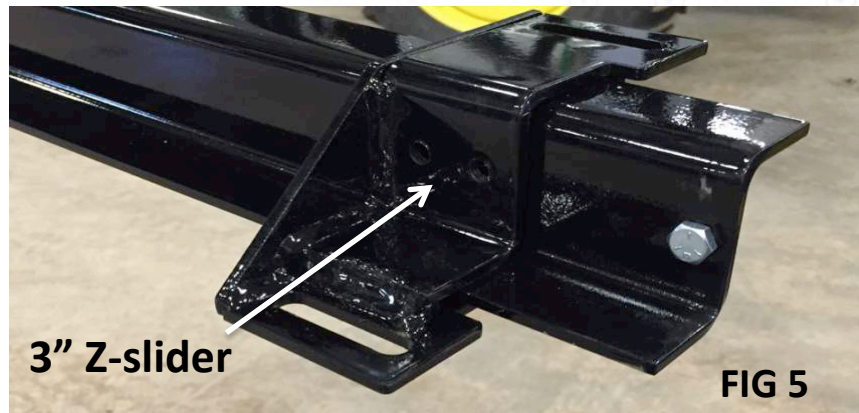


7. Install z-bars in all z-brackets, leave loose and *carefully fold sprayer booms into cradle to adjust z-bars fore/aft locations*. Left side cradles may need modification so the mount hardware clears the platform when booms are folded in.

1. Twelve (12) 38" z-bars

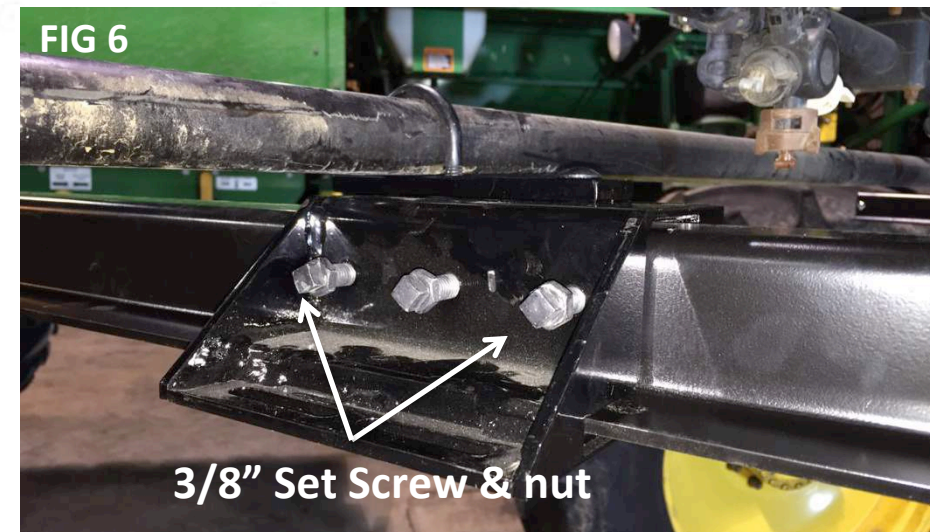
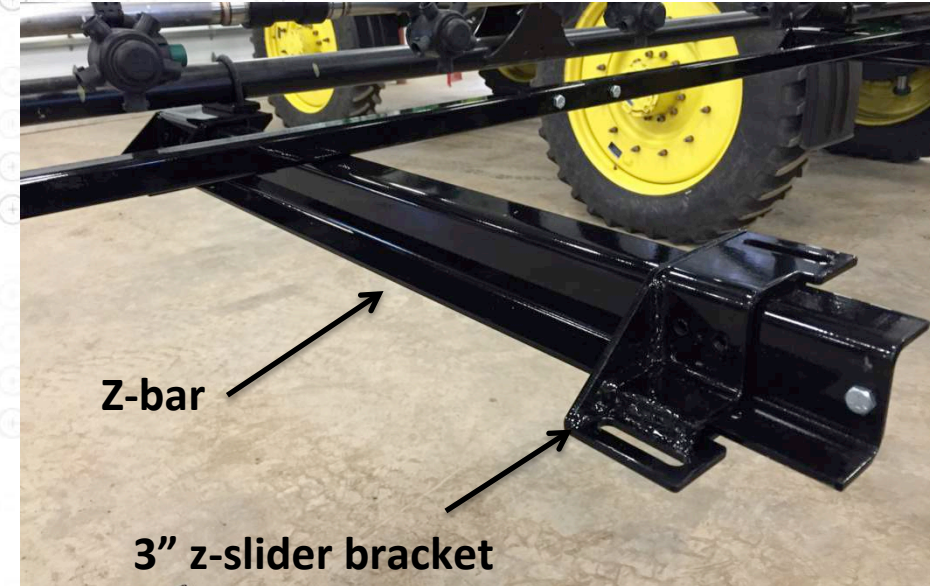
8. Install 3" z-slider brackets on all z-bars and 1" stop bolts and nuts, shown in FIG 5: Measure distance from 3" z-slider bracket to sprayer boom and ensure all 3" z-slider brackets are same relative distance.

1. Twelve (12) 3" z-slider brackets
2. (24) 5/16"x1" bolts
3. (24) 5/16" nuts



9. Install and tighten 3/8" set screws with jam nuts in all z-slider brackets, shown in FIG 6 (three per 6" z-slider, two per 3" z-slider):

1. (60) 3/8" set screws
2. (60) 3/8" jam nuts



10. **On both the left and right boom wings, assemble up to five (5) 5' boom sections with 8" connector bars using provided hardware.** The quantity of boom sections will depend on your 360 Y-DROP system; a 60' system will take five (5) 5' boom sections, an 80' system will take seven (7). **For the center section, assemble two (2) 5' boom sections and a third 5' boom section will need to be field cut to extend the length needed,** example shown in FIG 7. Cap the ends of left, right and center boom sections with rubber caps.

1. 5 Foot Boom Section
2. 8" connector bar
3. 3/8" x 1-3/4" stainless steel flange bolt
4. 3/8" stainless steel flat washer
5. 3/8" stainless steel lock washer
6. 3/8" stainless steel nut
7. (6) 1-1/4" square rubber cap

11. **Ensure boom sections span far enough to support all 360 Y-DROP units you plan to install and fasten to 3" z-slider mounts with provided hardware, shown in FIG 8.**

9. One (1) 5/16" x 1-3/8" square u-bolt
10. Two (2) 5/16" stainless steel flat washer
11. Two (2) 5/16" stainless steel lock washers
12. Two (2) 5/16" stainless steel nuts

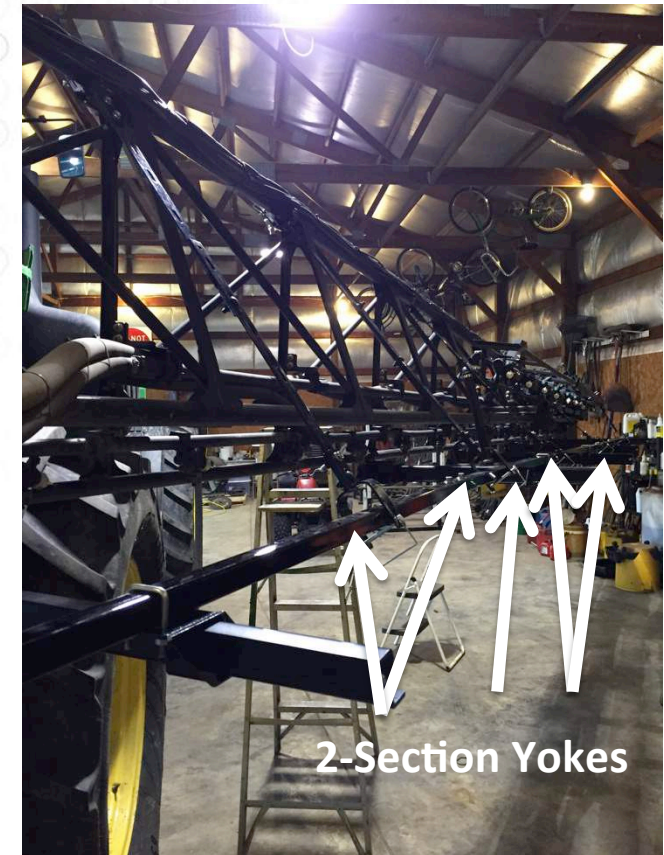


12. Assemble Support Yokes to be used as support straps from 360 Y-DROP boom to sprayer boom, shown in FIG 9. Note: Length will need to be adjusted to fit distance between booms.

10. (2) 23" Yoke straps
11. (4) Yoke ends
12. (4) 3/8" x 1-1/4" carriage bolts
13. (2) 3/8" x 1-1/4" bolt
14. (6) 3/8" flat washers
15. (6) 3/8" lock washers
16. (6) 3/8" nuts
17. (2) 3.5" locking clip pin



13. **Assemble 2-Section Yokes from top sprayer boom section to 360 Y-DROP boom**, shown in FIG 10a. Note: Length will need to be adjusted to fit distance between sprayer boom and 360 Y-DROP boom and may even need to be cut, FIG 10b. Try to install one yoke for every 5' boom section. Yokes should take out enough slack to keep the 360 Y-DROP boom in place vertically.



14. Assemble riser mount brackets to square boom with stainless steel hardware provided and leave loose, shown in FIG 11. Quantity and spacing will depend on your system configuration and application profile.

1. Riser mount brackets
2. Two (2) 5/16" x 1-3/8" U-Bolts
3. Four (4) 5/16" flat washers
4. Four (4) 5/16" lock washers
5. Four (4) 5/16" nuts

15. From center of machine, measure appropriate distance, based on row spacing and tighten u-bolts on riser mount brackets.



FIG 11

16. **Assemble drag hoses to 360 Y-DROP base unit, shown in FIG 12,** using hose clamps provided.



FIG 12

17. **Attach Riser Tube Assembly to 360 Y-DROP base unit using stainless steel wire lock pin, shown in FIG 13a & 13b. Repeat for every drop.**



FIG 13a



FIG 13b

18. **Attach Riser Tube Assembly / 360 Y-DROP to Riser Mount Bracket on the 360 Y-DROP boom with stainless steel wire lock pin, as shown in FIG 14. Repeat for every drop.**
19. **Connect and route riser hoses from 360 Y-DROP base unit up riser and connect to sprayer nozzle body. Zip tie hoses at least every 18" along riser tube.**



FIG 14