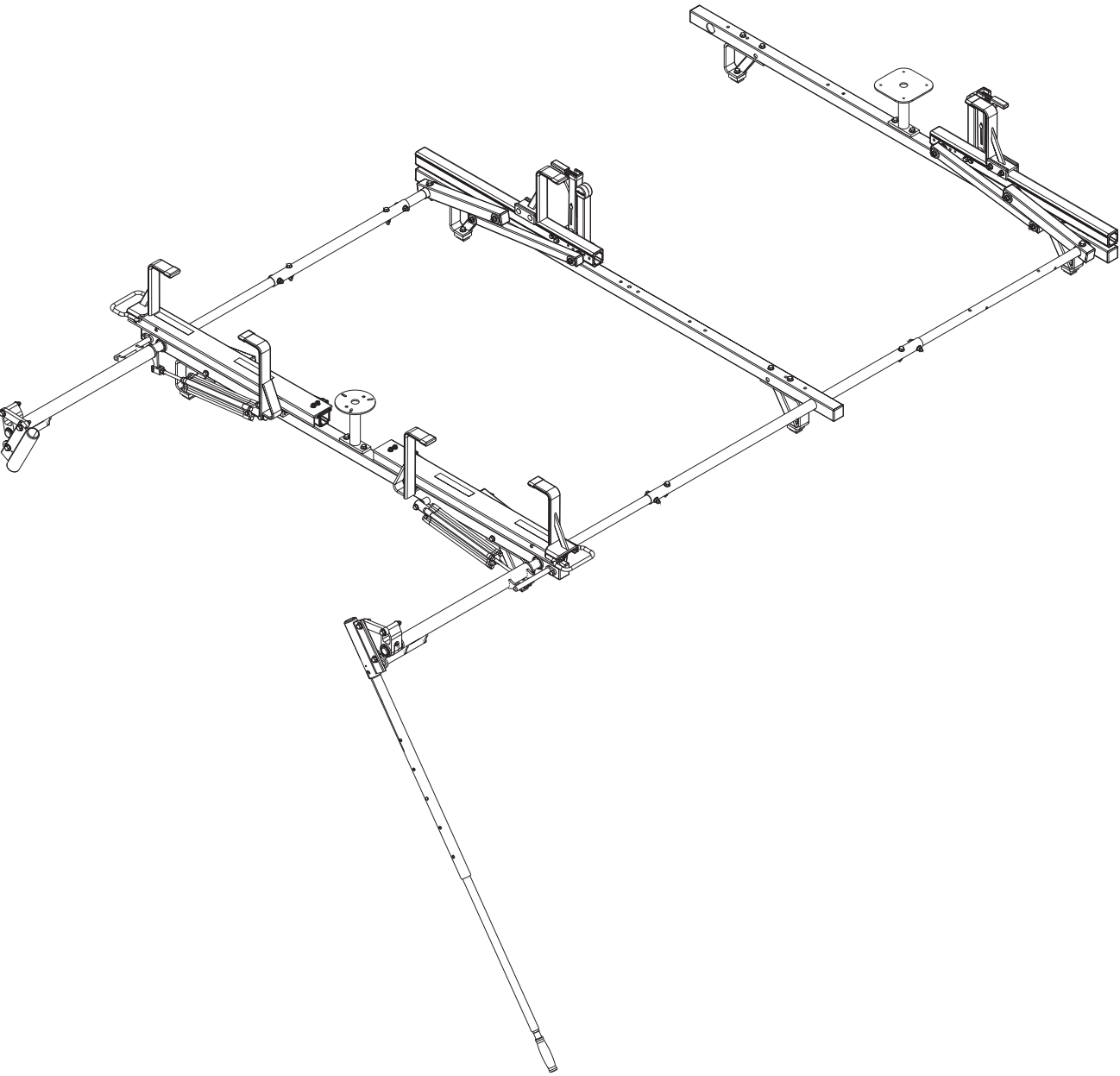


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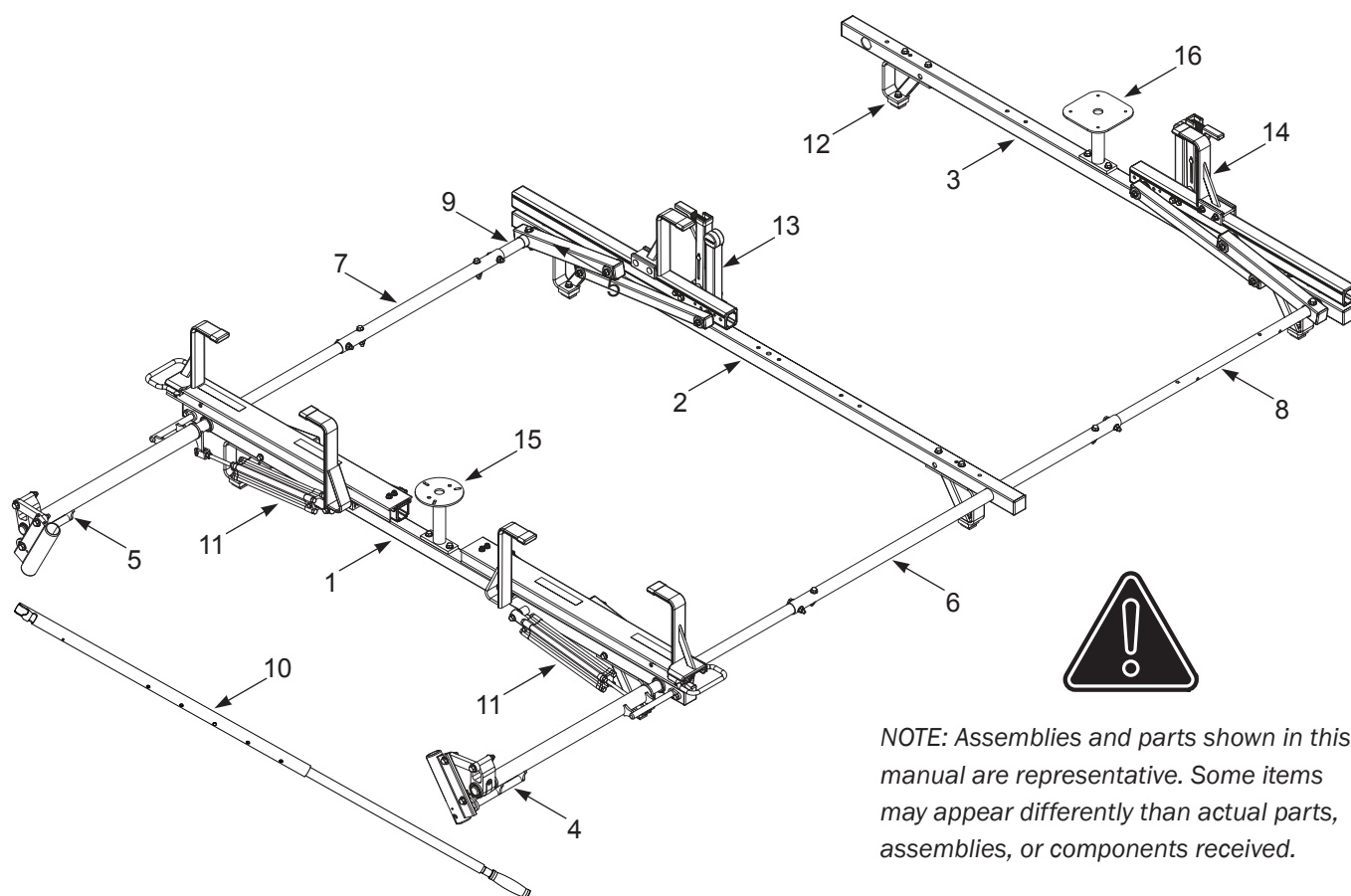
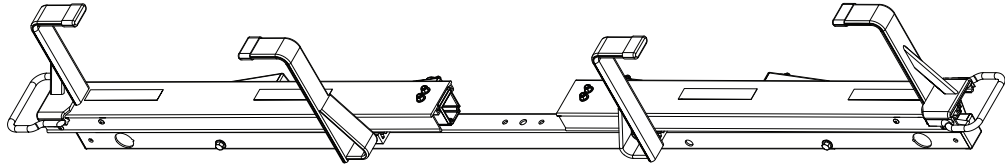


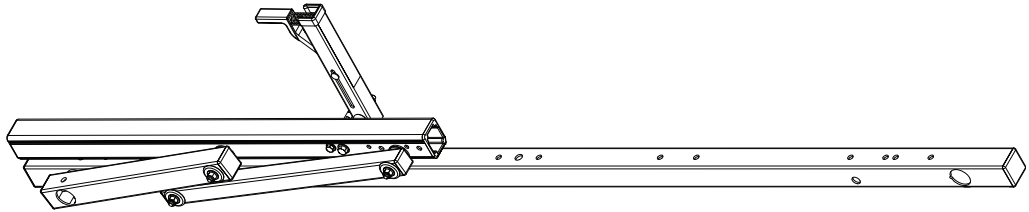
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Page 42.....	Final Assembly-Drive Shaft Sealing
Page 43.....	Final Assembly-Cylinder and Auto Clamp Adjustment

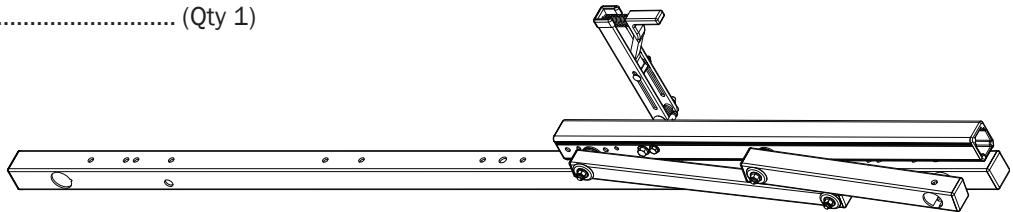
- 1—Rear Slide Rotation Assembly (Qty 1)
Left/Right Hand



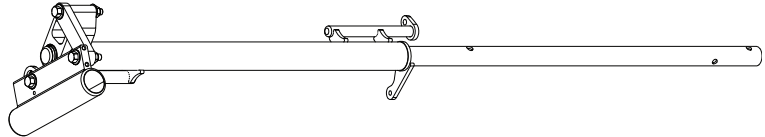
- 2—Center Rotation Assembly (Qty 1)
Left Hand



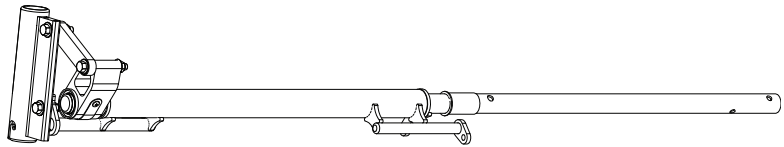
- 3—Front Rotation Assembly (Qty 1)
Right Hand



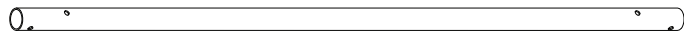
- 4—Drive Shaft (Qty 1)
Left Hand, Rear Assembly



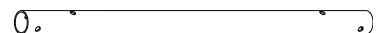
- 5—Drive Shaft (Qty 1)
Right Hand, Rear Assembly



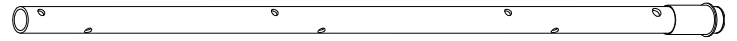
- 6—Connecting Bar (Qty 1)
4.00'



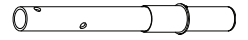
- 7—Connecting Bar (Qty 1)
2.00'



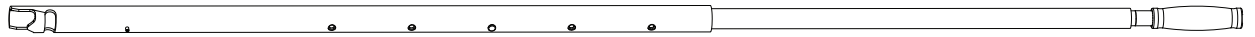
8—Front Rotation Drive Shaft (Qty 1)
35.75"



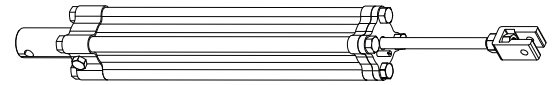
9—Front Rotation Drive Shaft (Qty 1)
11.75"



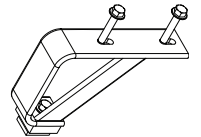
10—Removable Drive Shaft Handle (Qty 1)



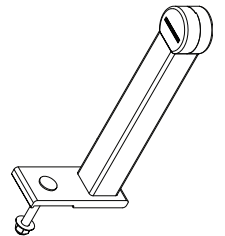
11—Cylinder Assembly (Qty 2)



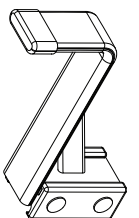
12—Mounting Bracket (Qty 6)



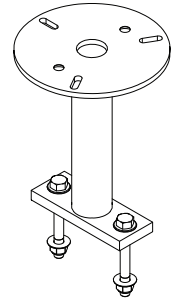
13—AutoClamp L Post (Qty 2)



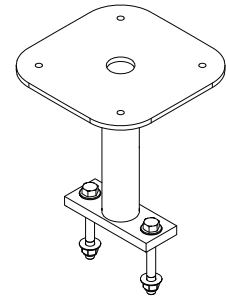
14—Upper Rotation Z Post (Qty 2)



15—Accessory Strobe Light Holder (Qty 7)
Mounting Plate, 5".00

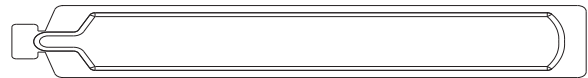


16—Accessory Strobe Light Holder (Qty 1)
Mounting Plate, 6.00"

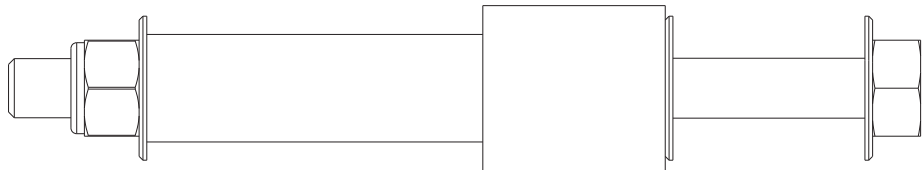


HKT-8140 (Qty 2)

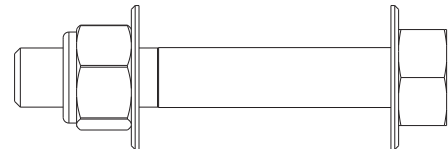
9.1—Bushing Assembly Lubricant (Qty 1)



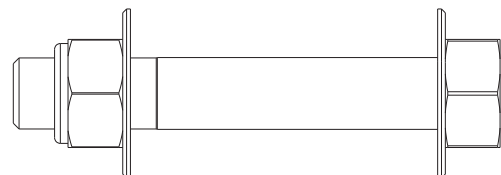
9.2—M8 x 110mm Bolt Assy (Qty 1)



9.4—5/16 x 2.00" Bolt Assy (Qty 4)

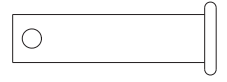


9.6—3/8 x 2.25" Bolt Assy (Qty 2)

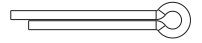


HKT-8140 Cont. (Qty 2)

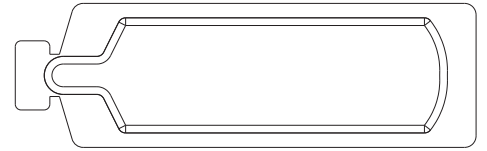
9.7—1/4 x 1.00" Clevis Pin (Qty 1)



9.8—3/32 x .75.00" Cotter Pin (Qty 1)

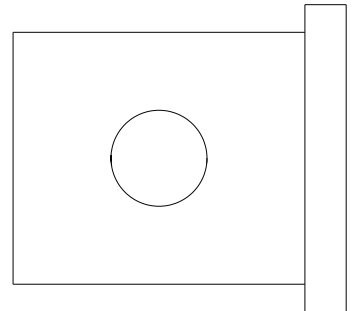
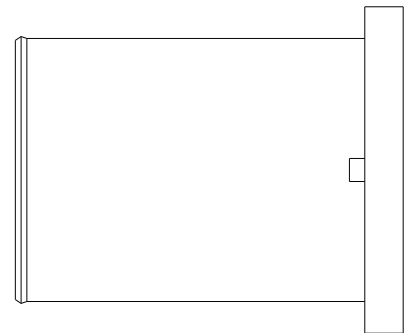


9.11—Anti-Seize..... (Qty 1)

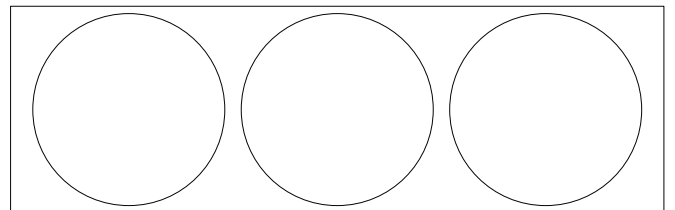


HKT-8106 (Qty 2)

10.1—Drive Arm Bushing..... (Qty 2)

10.2—Drive Shaft Large Bushing (Qty 2)
Celcon

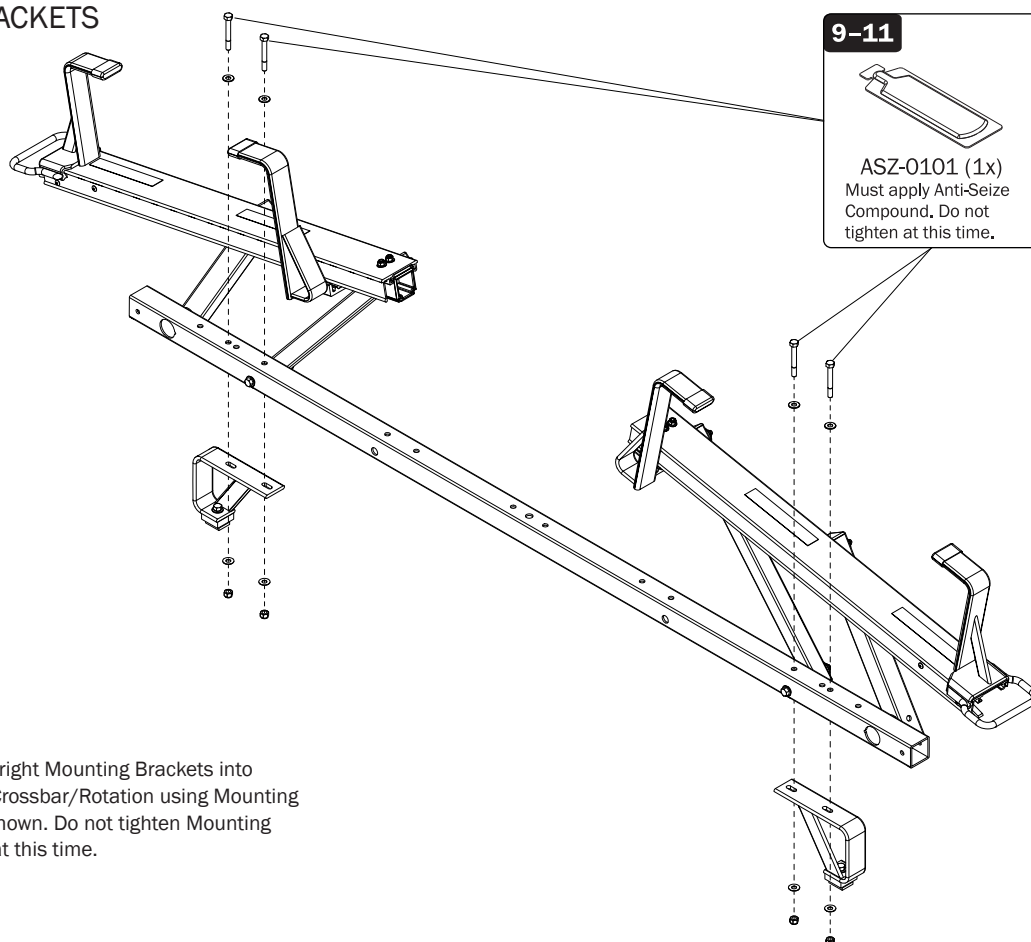
10.3—Drive Shaft Sealing Decals (Qty 16)



Packed By: _____ Date: ____ / ____ / ____

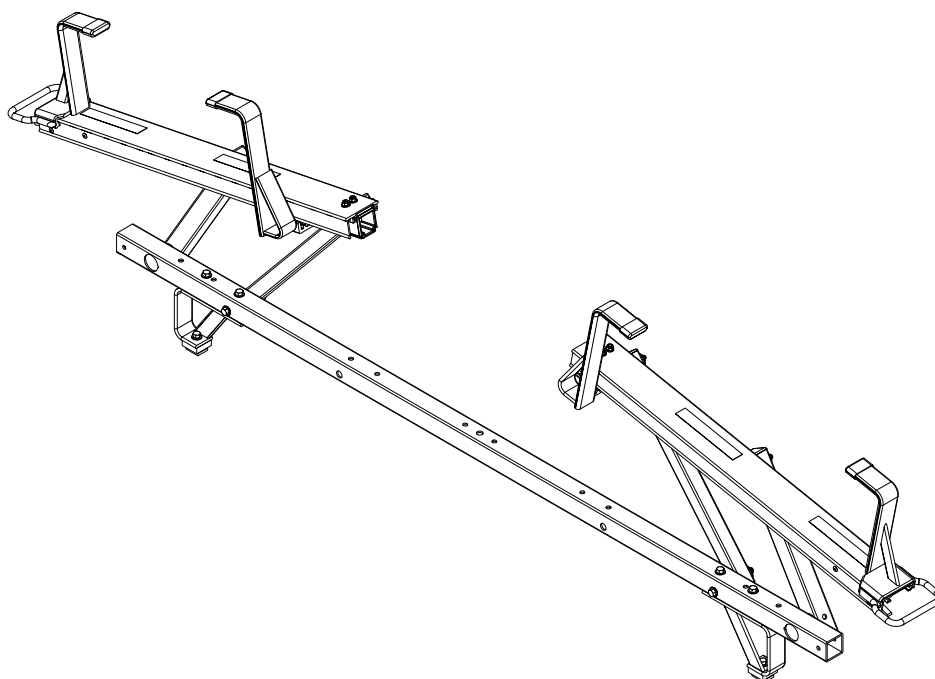
Inspected By: _____ Date: ____ / ____ / ____

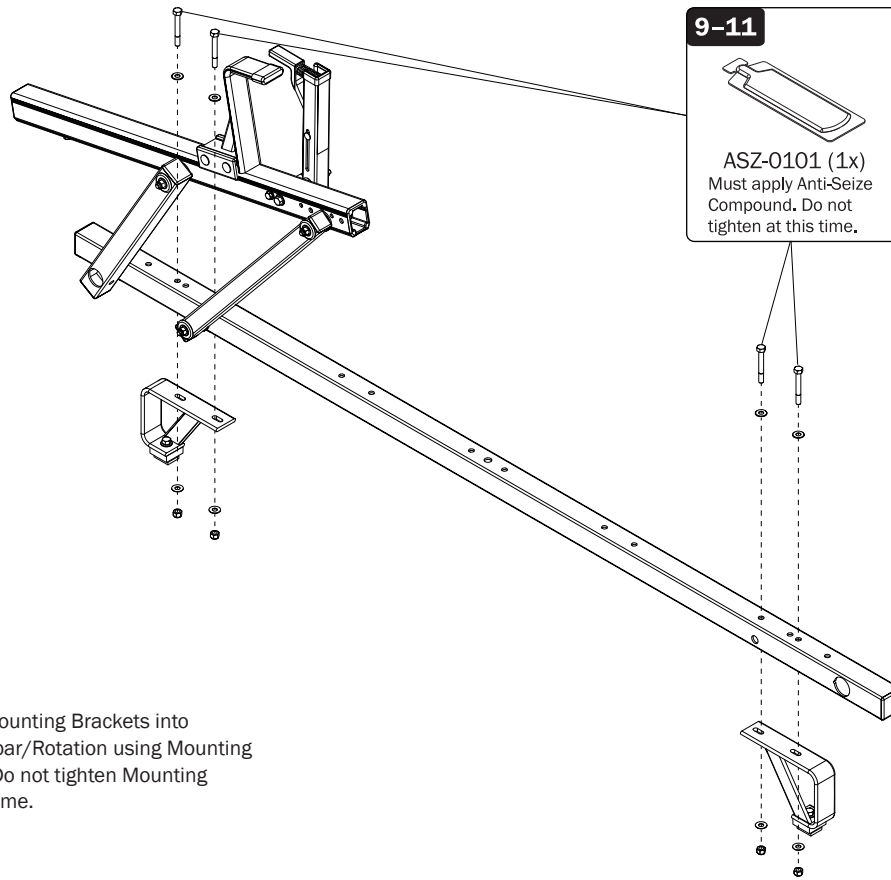
STEP 1:
INSTALLING THE REAR CROSSBAR ASSEMBLY
MOUNTING BRACKETS



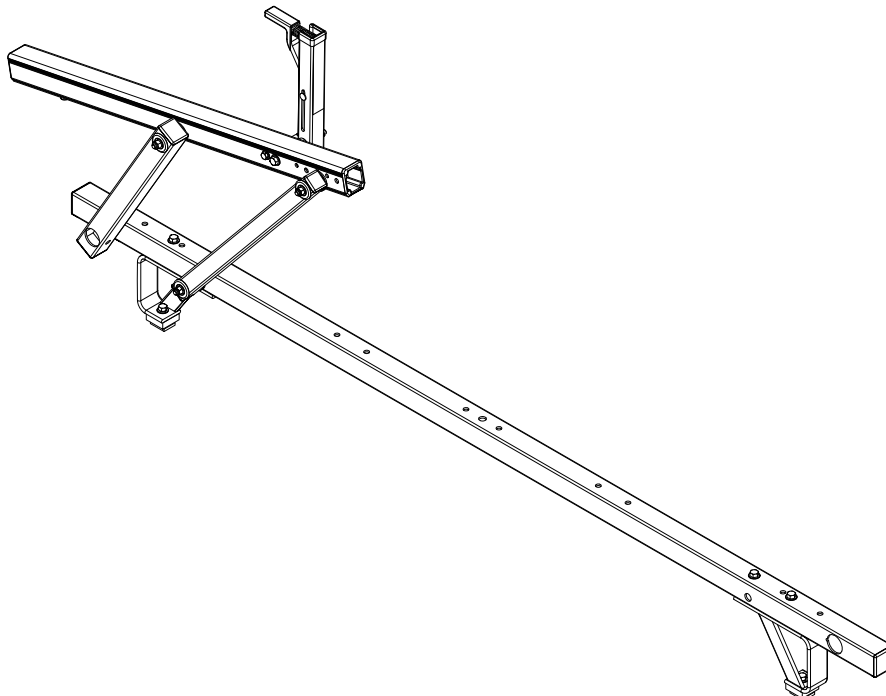
Step 1: Install left and right Mounting Brackets into Channel. Attach Rear Crossbar/Rotation using Mounting Bracket hardware as shown. Do not tighten Mounting Brackets to Channels at this time.

STEP 1:
REAR CROSSBAR ASSEMBLY TO MOUNTING BRACKET
INSTALLATION RESULTS

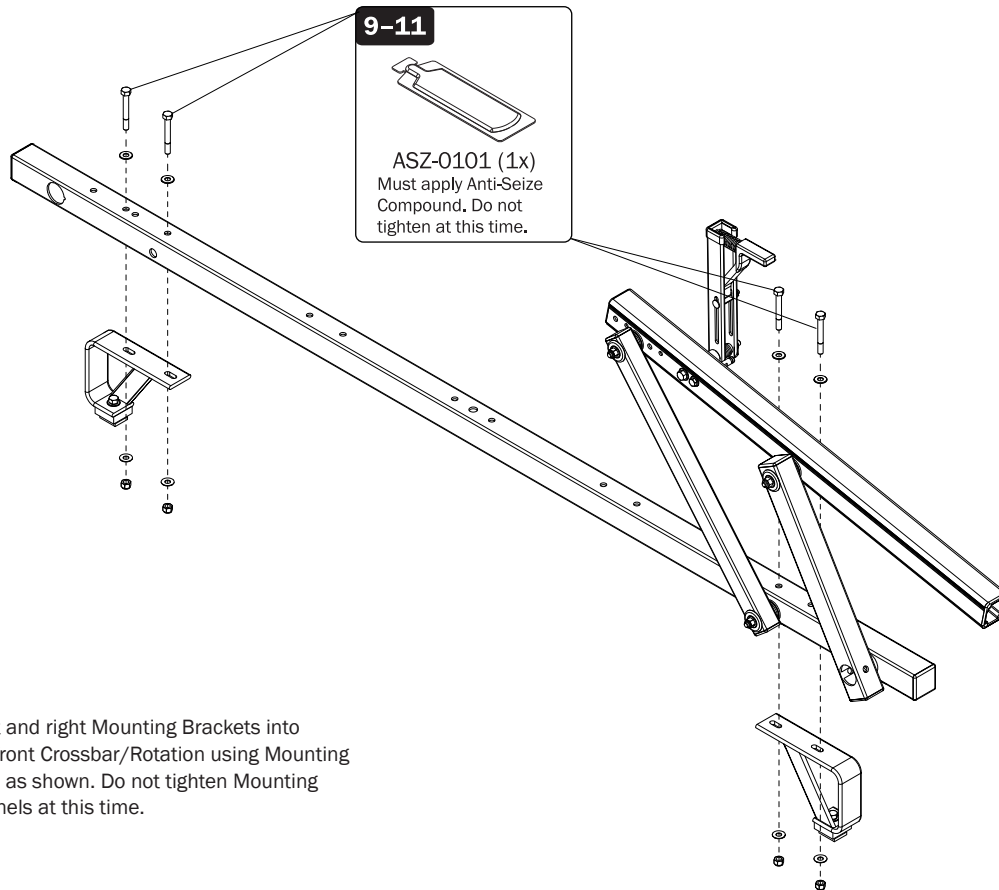


STEP 2:**INSTALLING THE CENTER CROSSBAR ASSEMBLY
MOUNTING BRACKETS**

Step 2: Install left and right Mounting Brackets into Channel. Attach Center Crossbar/Rotation using Mounting Bracket hardware as shown. Do not tighten Mounting Brackets to Channels at this time.

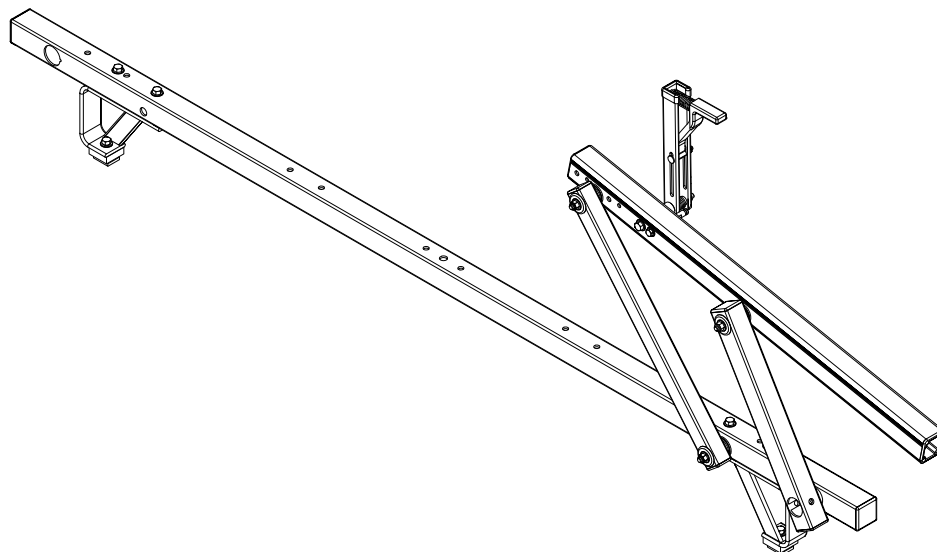
STEP 2:**CENTER CROSSBAR ASSEMBLY TO MOUNTING
BRACKET INSTALLATION RESULTS**

STEP 3:
INSTALLING THE FRONT CROSSBAR ASSEMBLY
MOUNTING BRACKETS



Step 3: Install left and right Mounting Brackets into Channel. Attach Front Crossbar/Rotation using Mounting Bracket hardware as shown. Do not tighten Mounting Brackets to Channels at this time.

STEP 3:
REAR CROSSBAR ASSEMBLY TO MOUNTING BRACKET
INSTALLATION RESULTS



RIGHT HAND ROTATION OVERVIEW

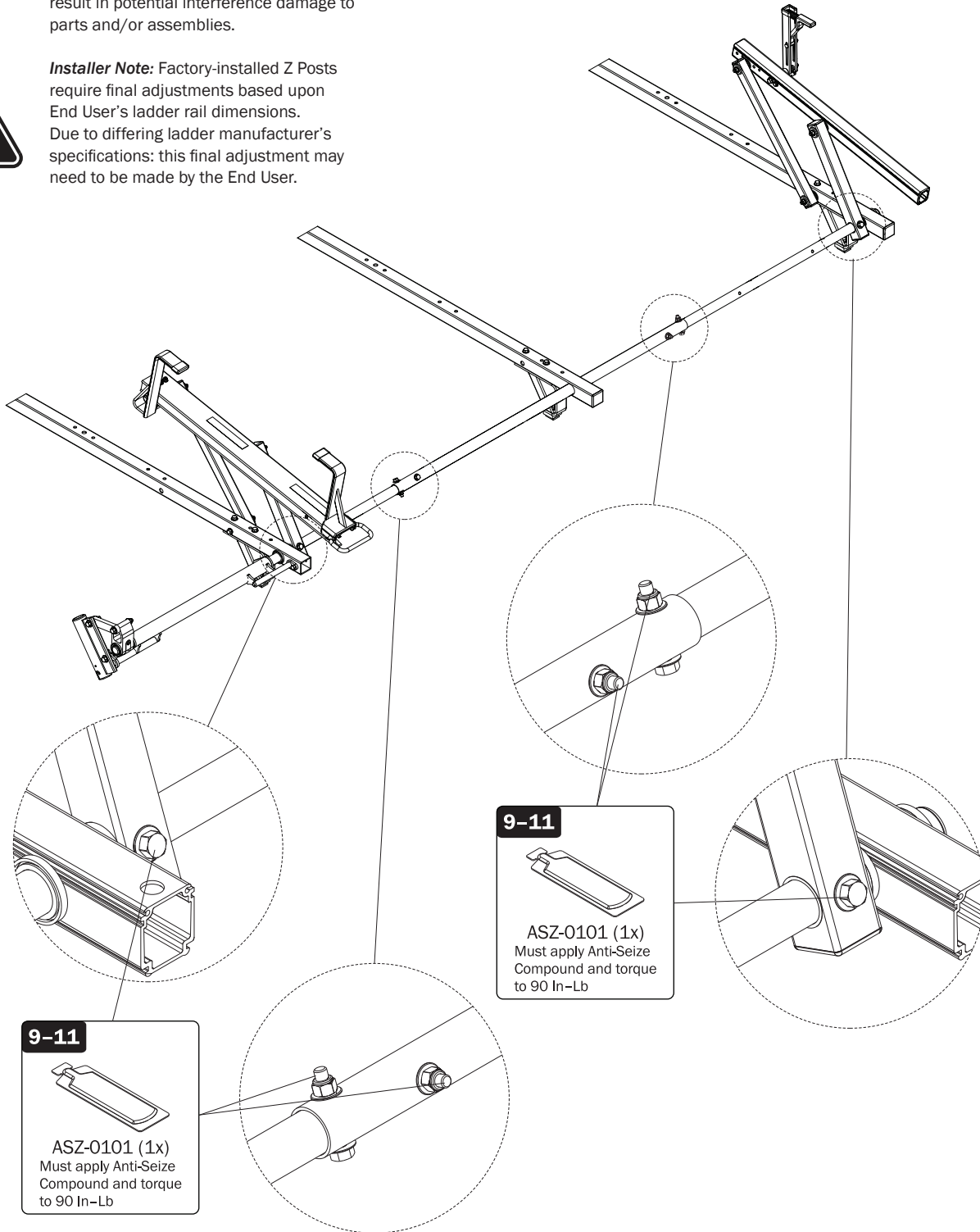


Attention Installer! All Rotation Assembly Bolts must face inward to rack assembly with bolt heads facing outside the Rotations. Front Rotation Bolts face rearward, while Rear Rotation Bolts face forward.

Failure to install fasteners as directed may result in potential interference damage to parts and/or assemblies.



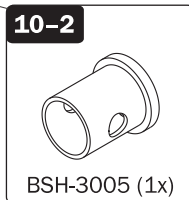
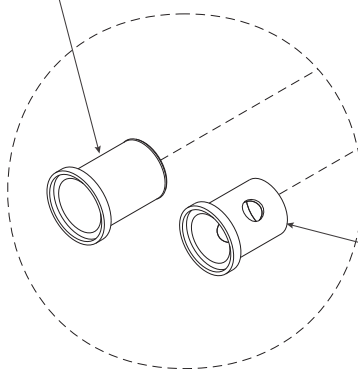
Installer Note: Factory-installed Z Posts require final adjustments based upon End User's ladder rail dimensions. Due to differing ladder manufacturer's specifications: this final adjustment may need to be made by the End User.



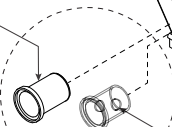
STEPS 4-5: INSTALLING THE RIGHT REAR ROTATION DRIVE SHAFT BUSHINGS



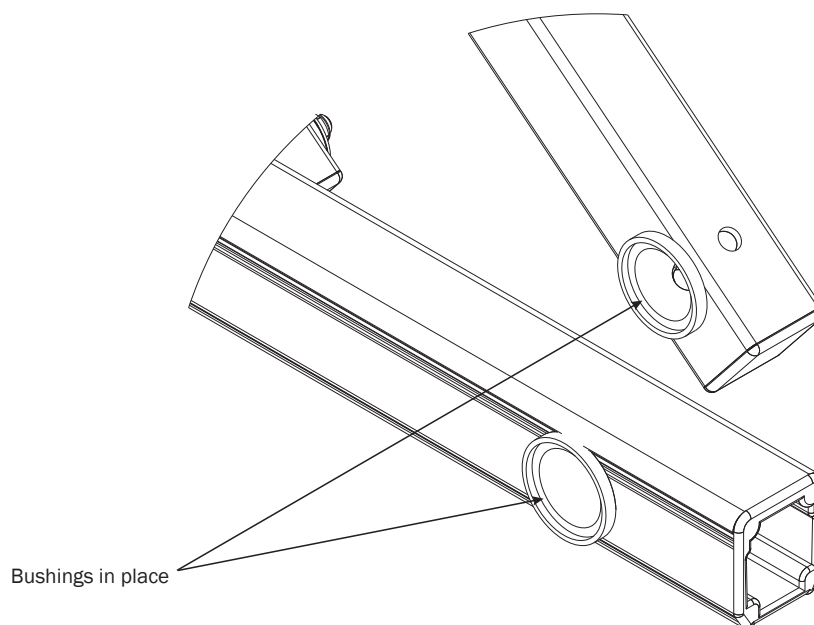
Step 4: Insert the large black plastic bushing through the Crossbar as shown. Line up the bushing key to the Crossbar key cut.

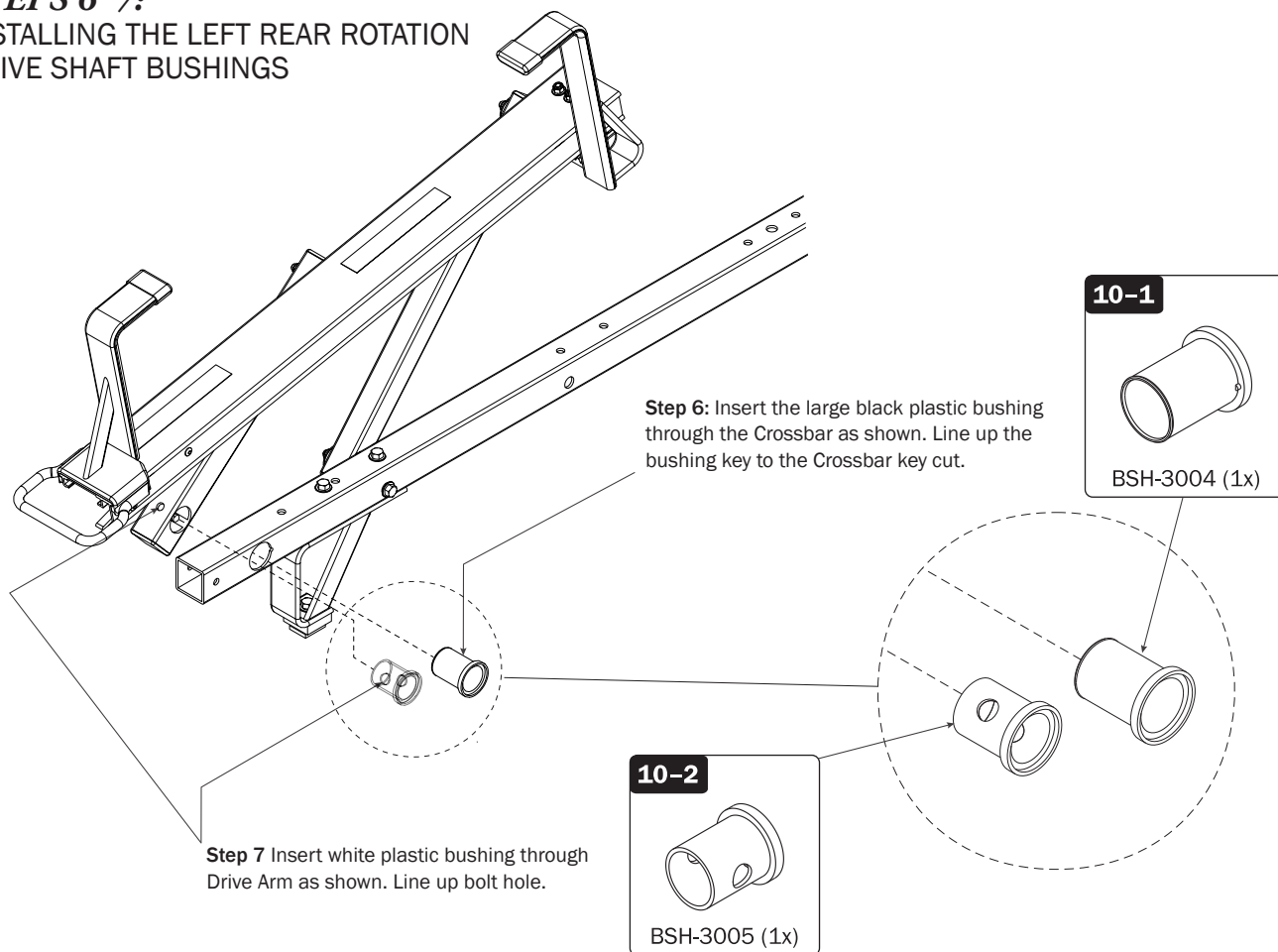
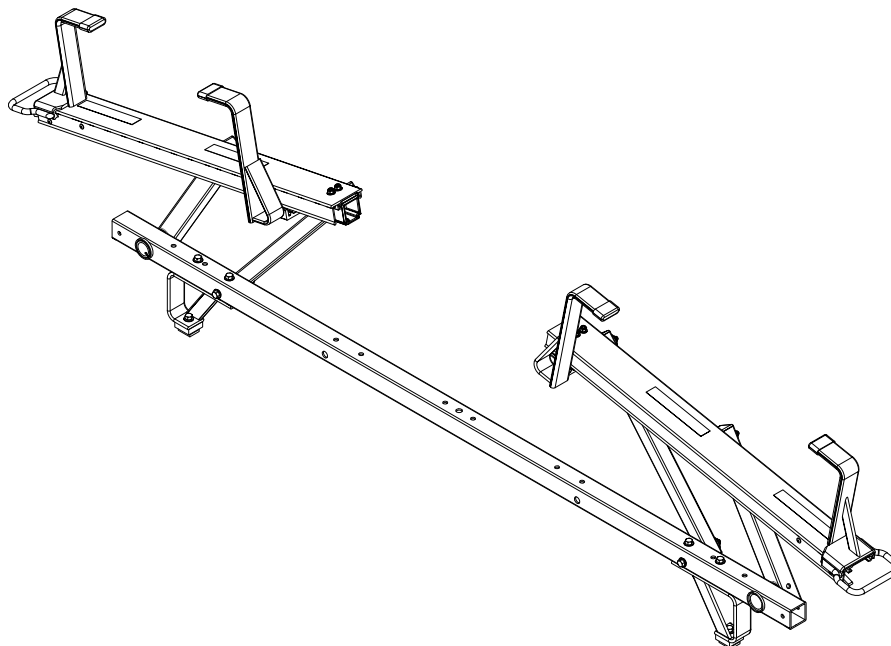


Step 5: Insert white plastic bushing through Drive Arm as shown. Line up bolt hole.

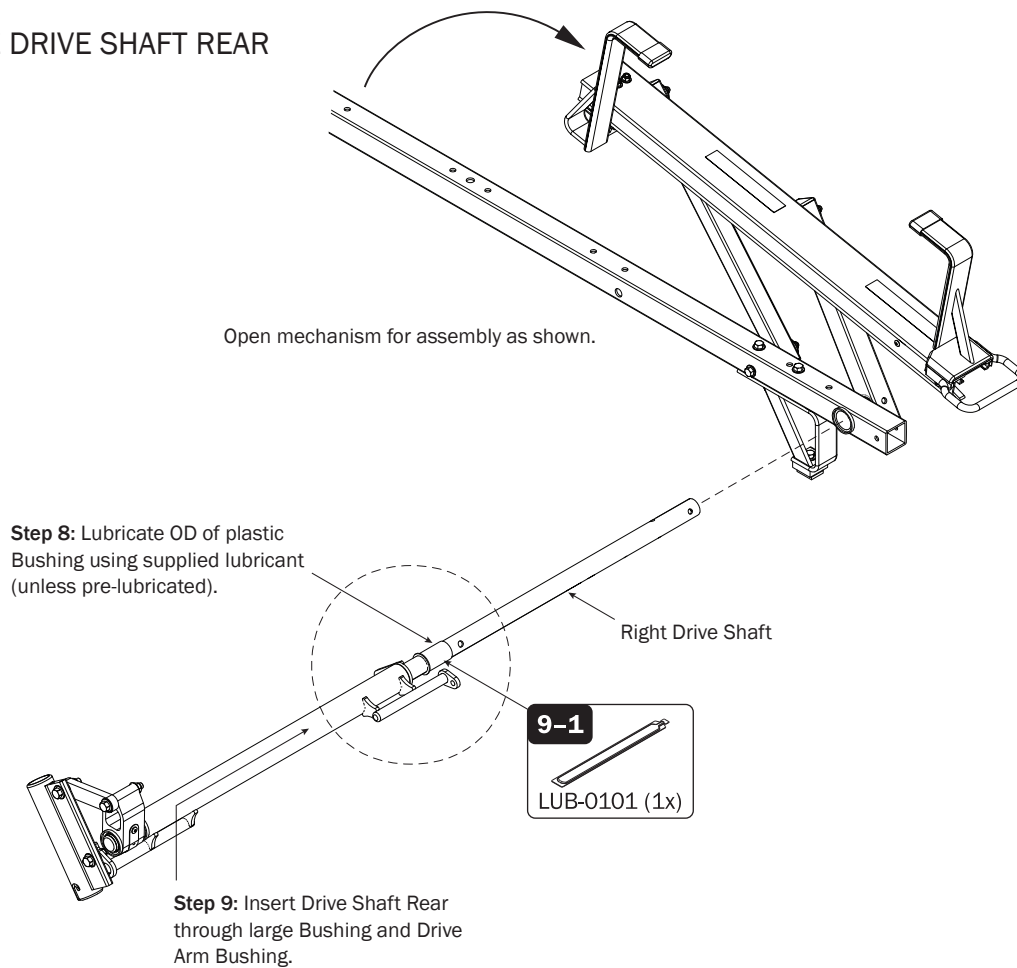


STEPS 4-5: RIGHT REAR ROTATION DRIVE SHAFT BUSHING INSTALLATION RESULTS

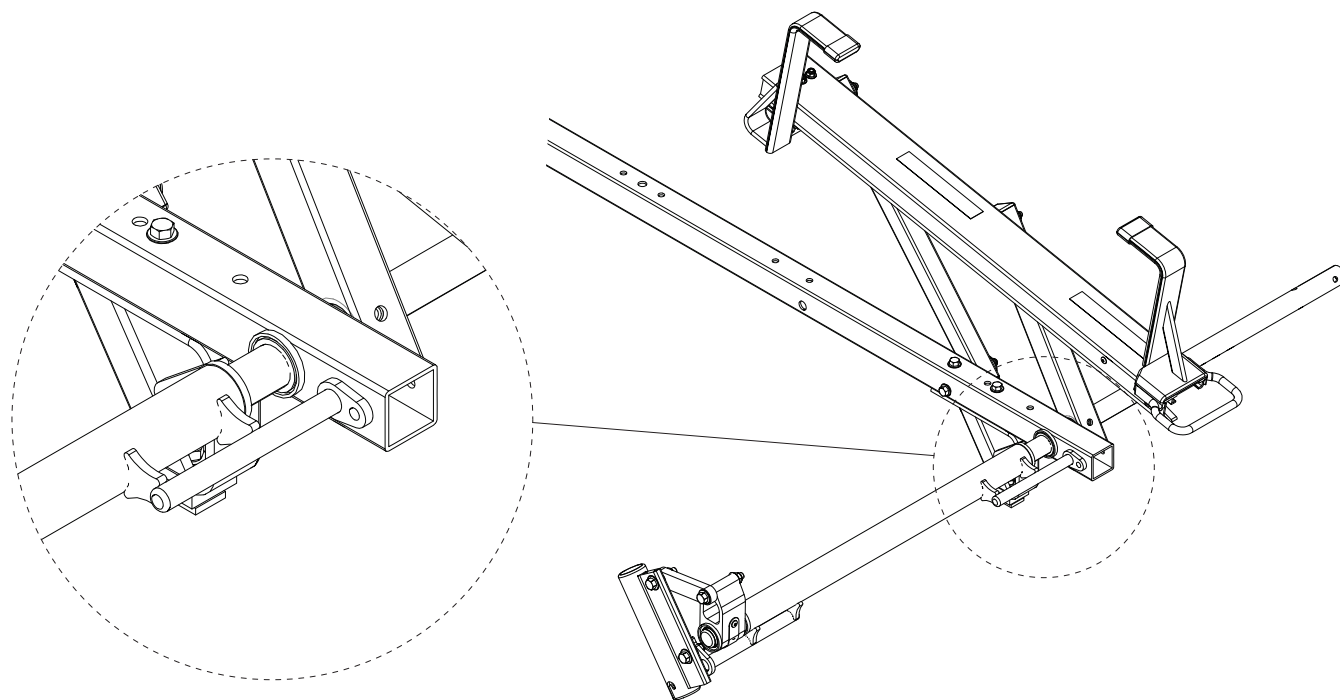


STEPS 6-7:**INSTALLING THE LEFT REAR ROTATION
DRIVE SHAFT BUSHINGS****STEPS 6-7:****REAR ROTATION DRIVE SHAFT BUSHING
INSTALLATION RESULTS**

STEPS 8-9: INSERTING THE DRIVE SHAFT REAR

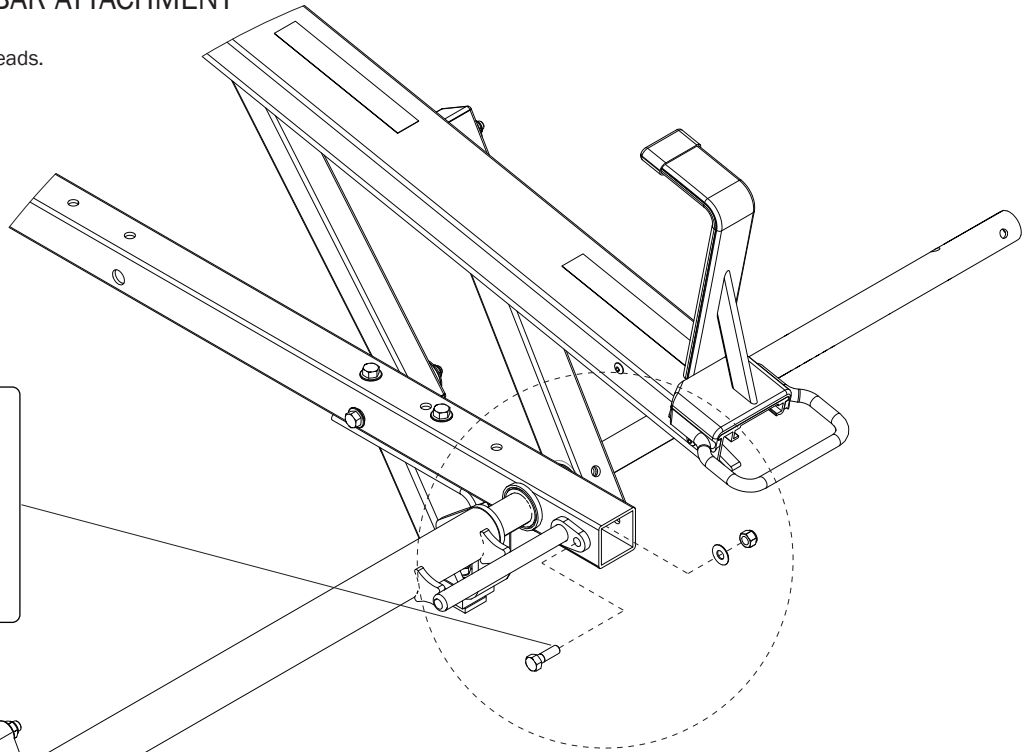


STEPS 8-9: DRIVE SHAFT INSERTION RESULTS

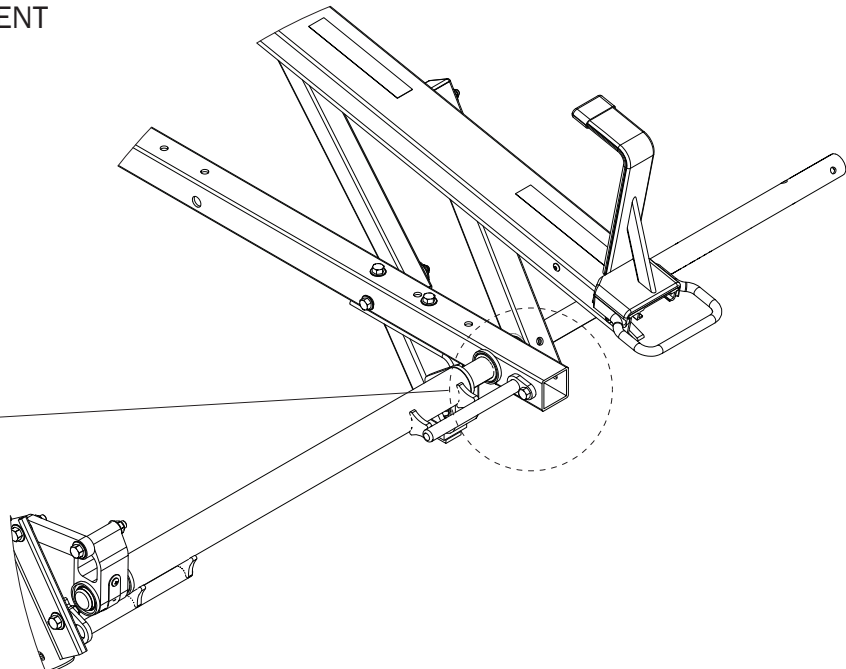
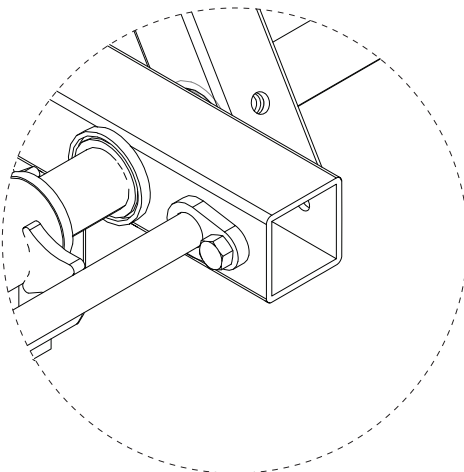


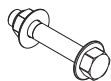
STEPS 10–11:**DRIVE SHAFT TO CROSSBAR ATTACHMENT**

Step 10: Apply Anti-Seize to Bolt threads.

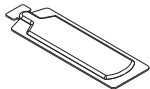


Step 11: Install Bolt Assembly and torque to 90 in-lb

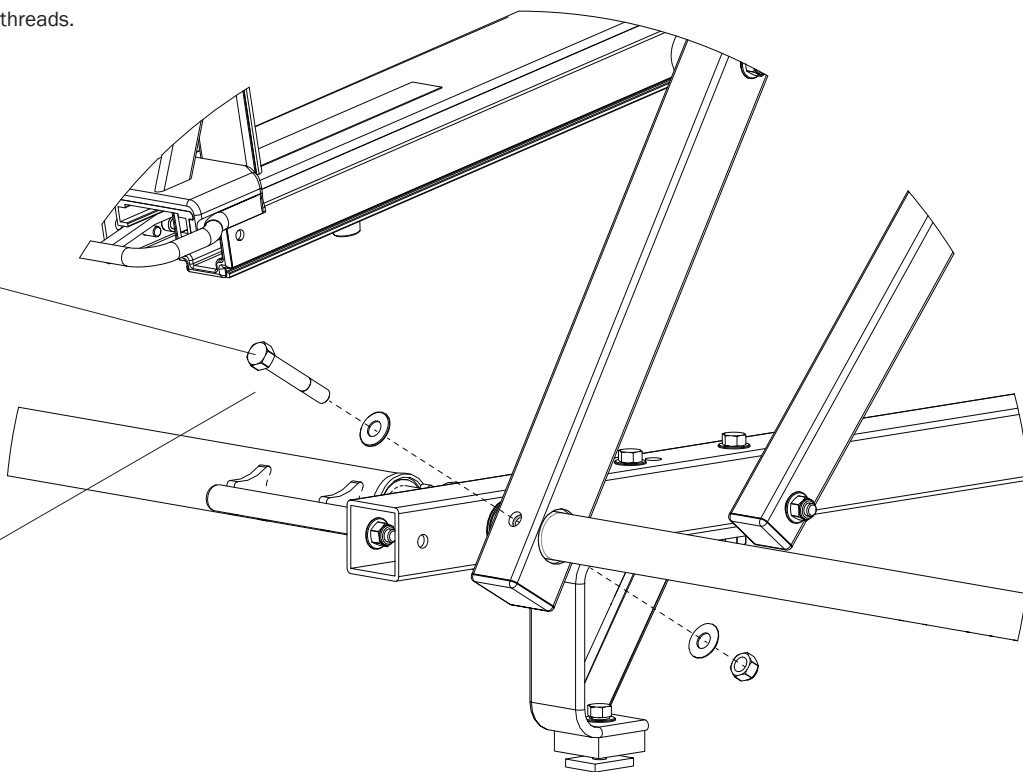
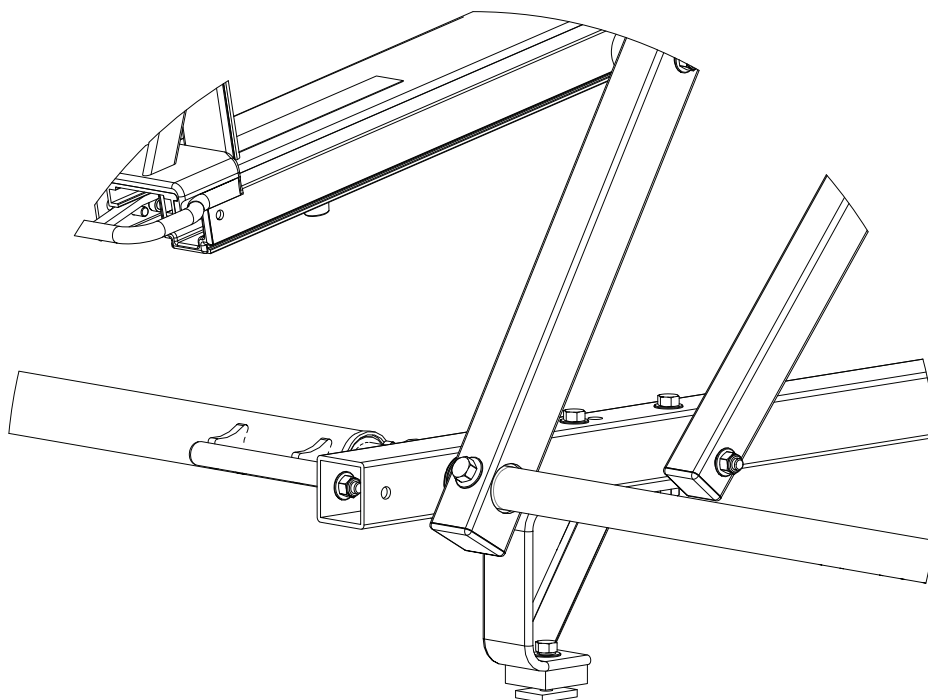
STEPS 10–11:**DRIVE SHAFT TO CROSSBAR ATTACHMENT
RESULTS**

STEPS 12-13:**INSTALLING THE DRIVE SHAFT TO DRIVE
ARM BOLT ASSEMBLY****Step 12:** Apply Anti-Seize to Bolt threads.**9-6****BLT-6822-H (1x)**

Tight fitting bolt. If required, tap lightly with a hammer to drive through.

9-11**ASZ-0101 (1x)**

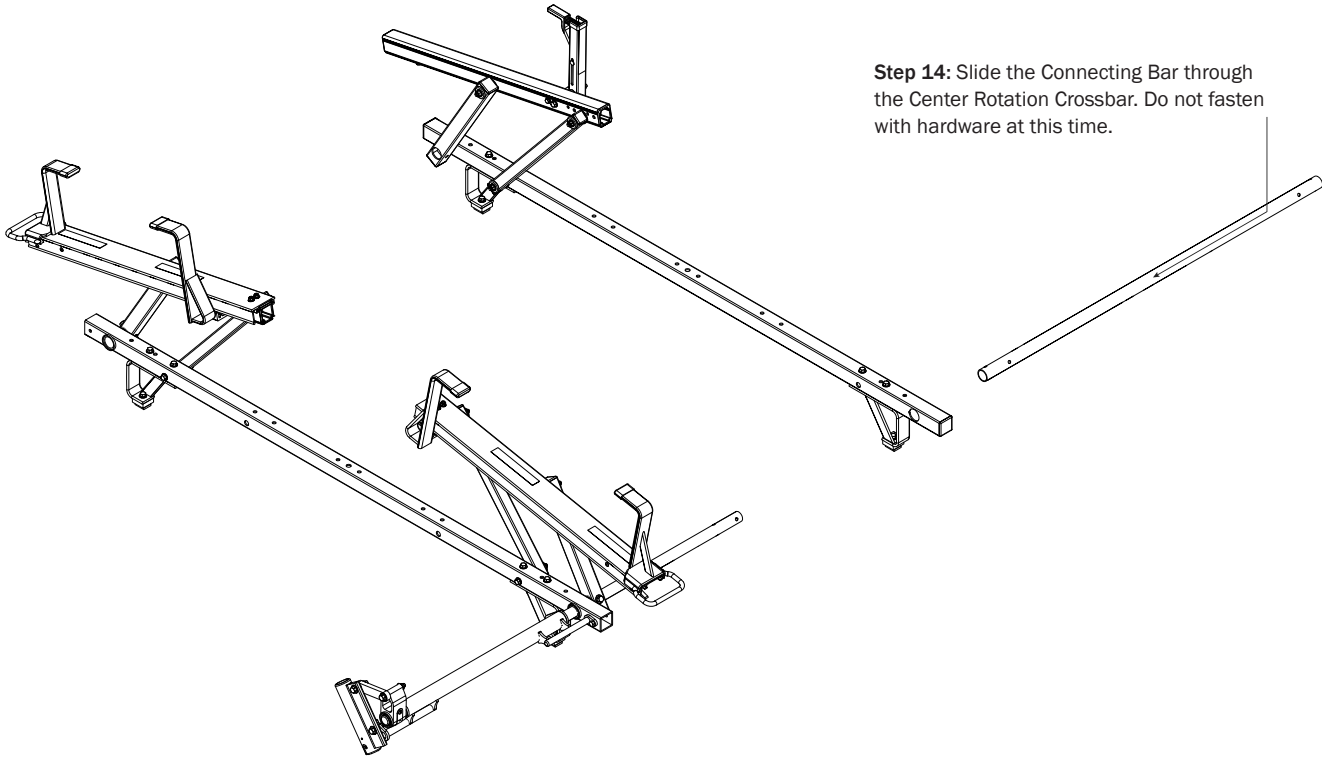
Must apply Anti-Seize Compound and torque to 90 In-Lb

**Step 13:** Install Bolt Assembly and torque to 90 in-lb**STEPS 12-13:****DRIVE SHAFT INSERTION RESULTS**

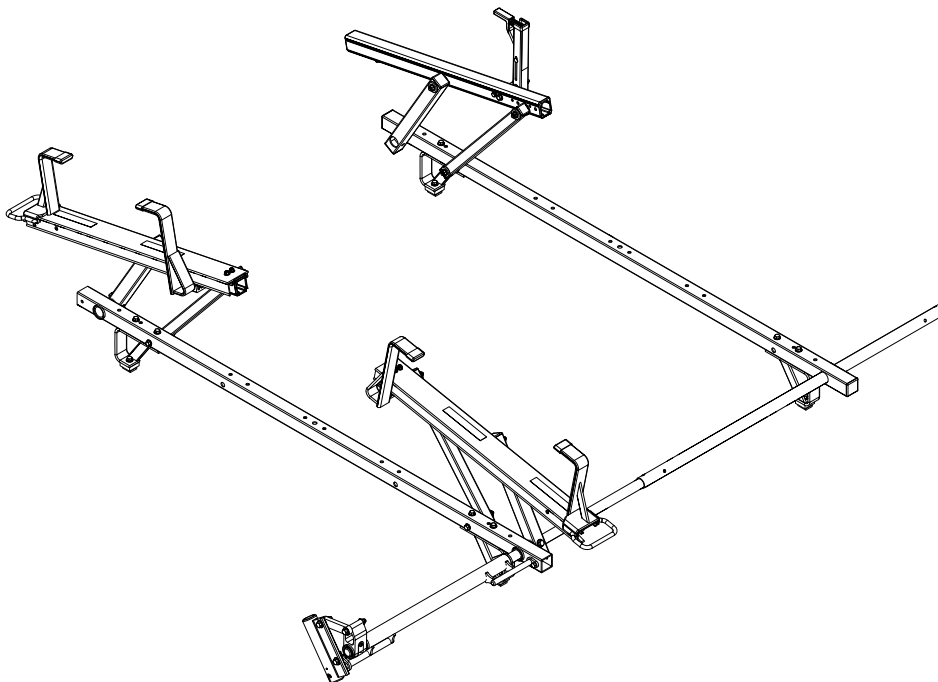
STEP 14:

INSERTING THE RIGHT ROTATION
CONNECTING BAR

Step 14: Slide the Connecting Bar through the Center Rotation Crossbar. Do not fasten with hardware at this time.

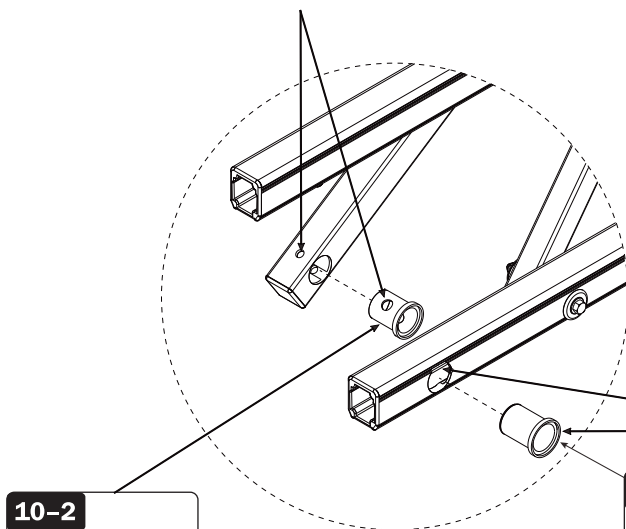
**STEP 14:**

RIGHT ROTATION CONNECTING BAR
RESULTS



STEPS 15-16:**INSTALLING THE RIGHT FRONT ROTATION
DRIVE SHAFT BUSHINGS**

Step 15: Insert white plastic bushing through
Drive Arm as shown. Line up bolt hole.

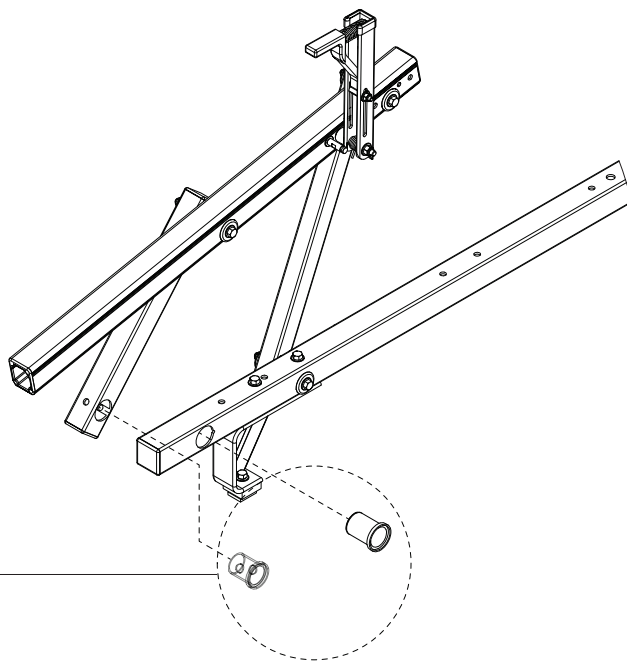
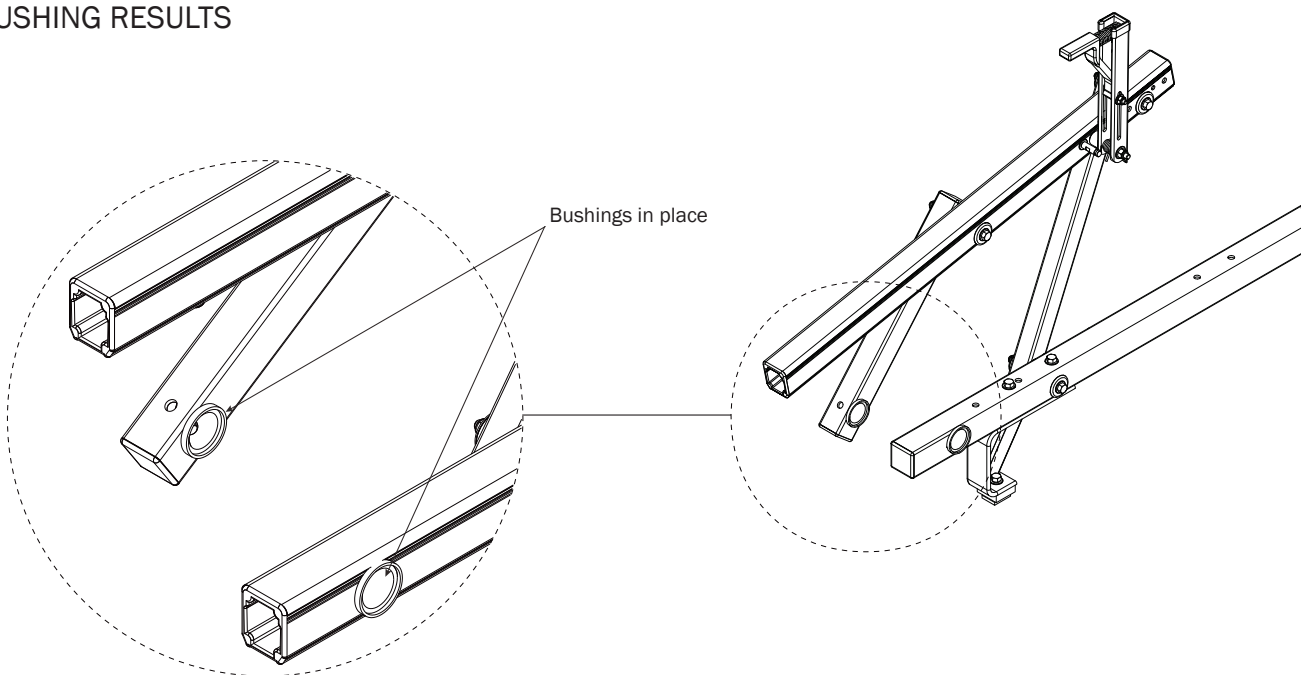
**10-2**

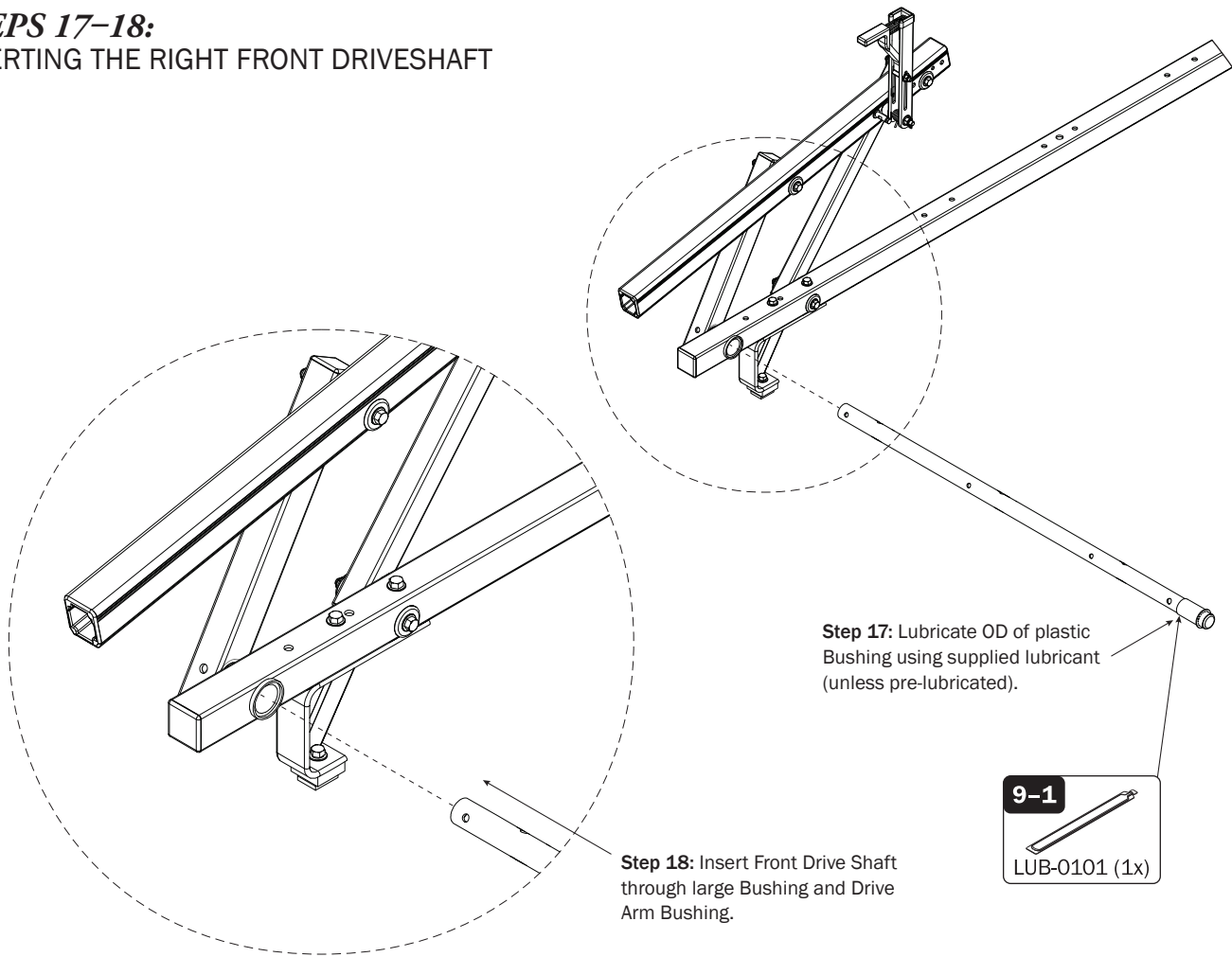
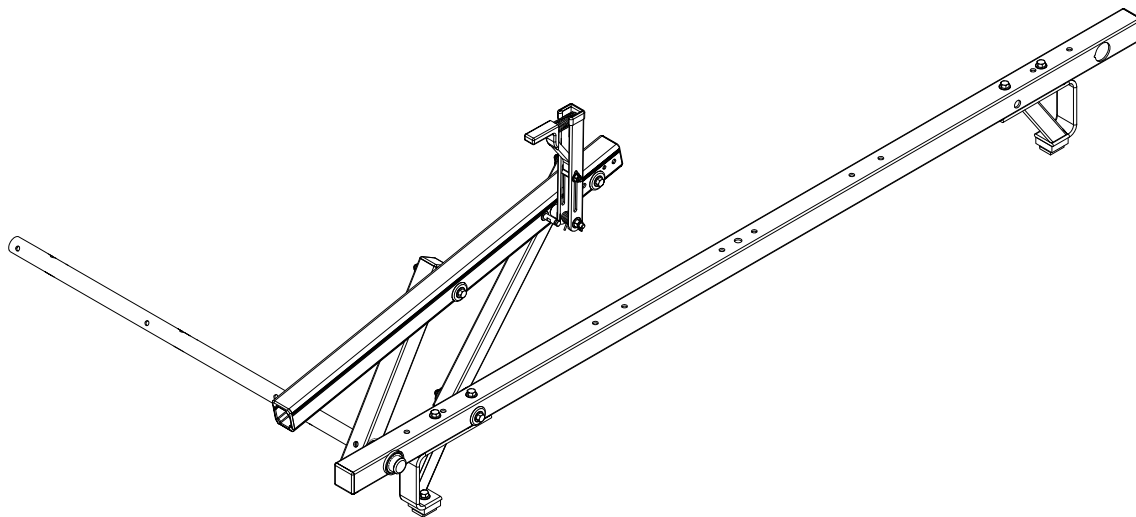
BSH-3005 (1x)

10-1

BSH-3004 (1x)

Step 16: Insert the large black plastic bushing through
the Crossbar as shown. Line up the bushing key to the
Crossbar key cut.

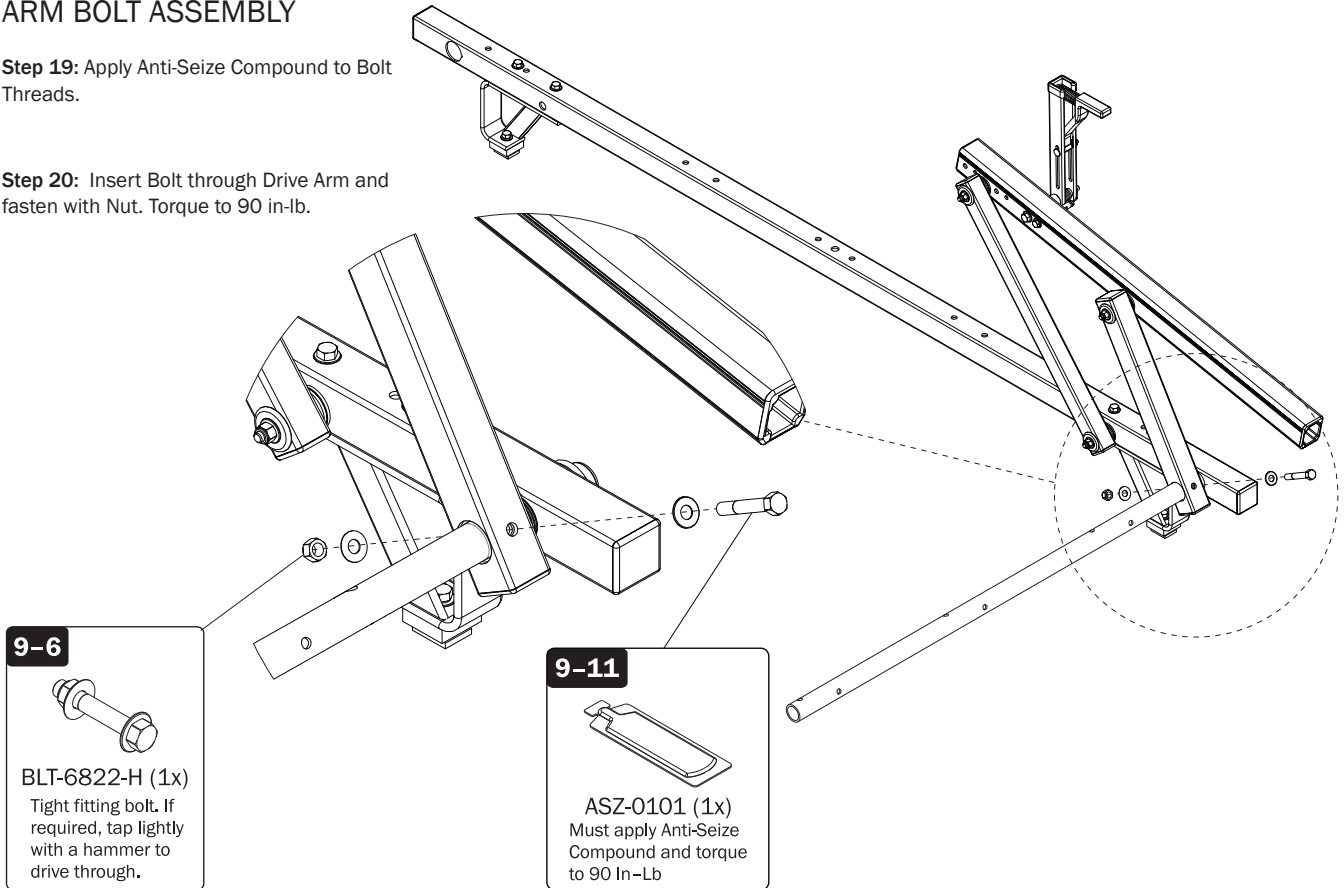
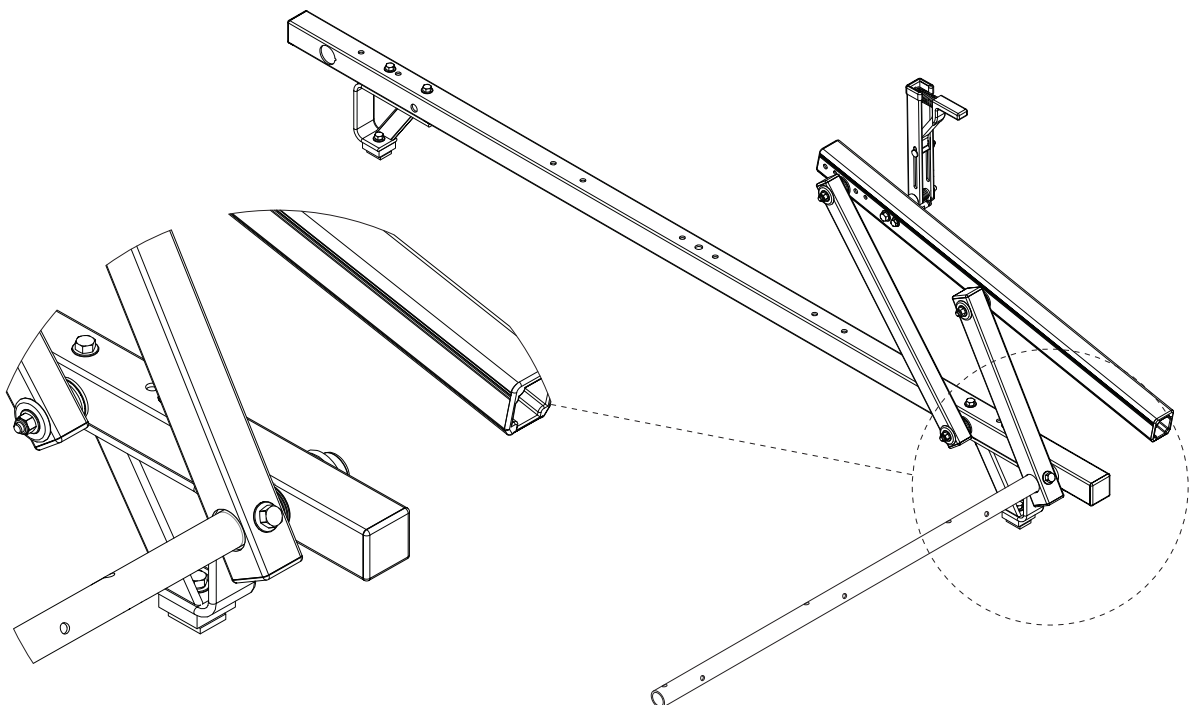
**STEPS 15-16:****RIGHT FRONT ROTATION DRIVE SHAFT
BUSHING RESULTS**

STEPS 17-18:**INSERTING THE RIGHT FRONT DRIVESHAFT****STEPS 17-18:****RIGHT FRONT DRIVE SHAFT INSERTION RESULTS**

STEPS 19-20:**INSERTING THE FRONT ROTATION DRIVE
ARM BOLT ASSEMBLY**

Step 19: Apply Anti-Seize Compound to Bolt Threads.

Step 20: Insert Bolt through Drive Arm and fasten with Nut. Torque to 90 in-lb.

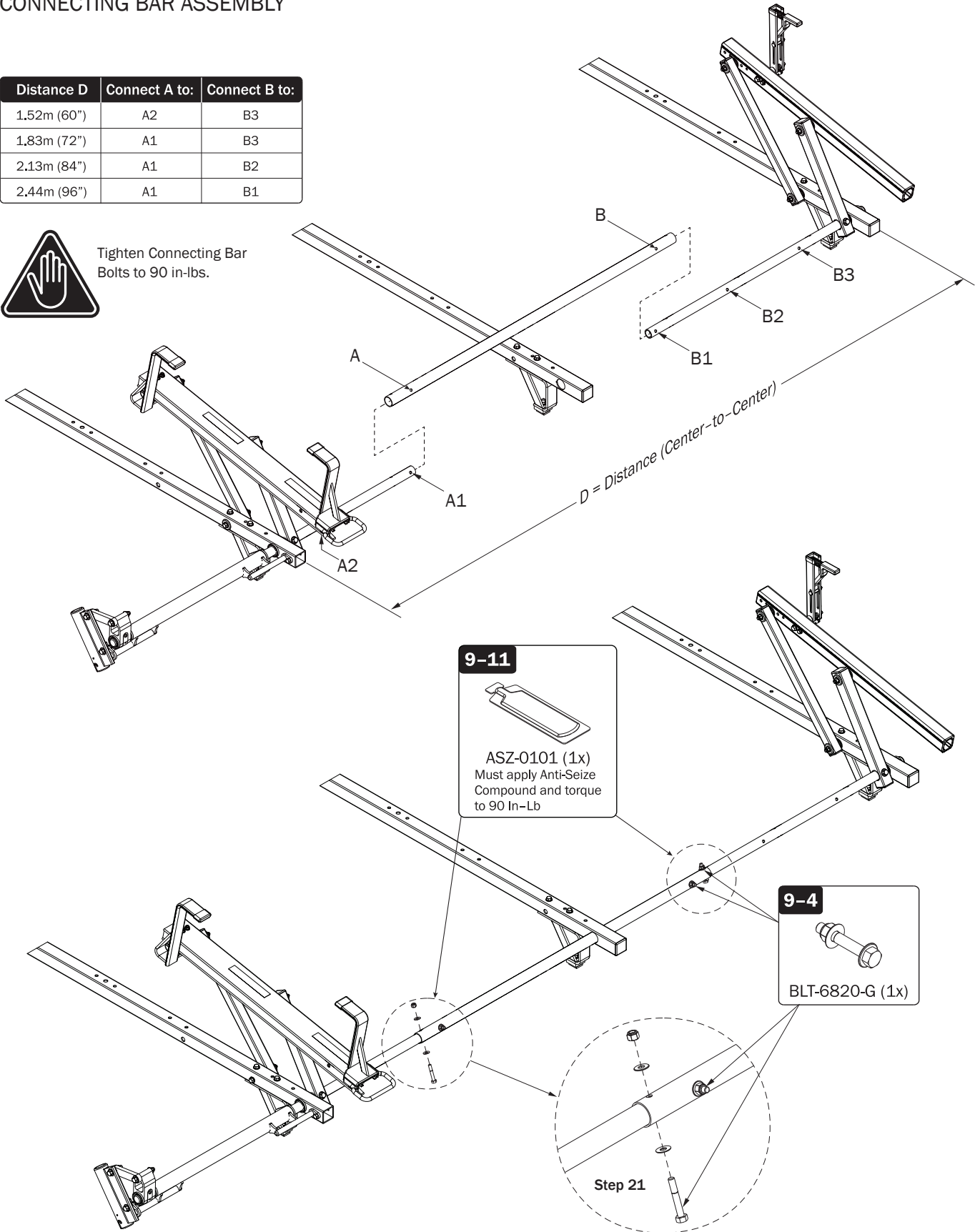
**STEPS 19-20:****BOLT ASSEMBLY RESULTS**

STEP 21: CONNECTING BAR ASSEMBLY

Distance D	Connect A to:	Connect B to:
1.52m (60")	A2	B3
1.83m (72")	A1	B3
2.13m (84")	A1	B2
2.44m (96")	A1	B1



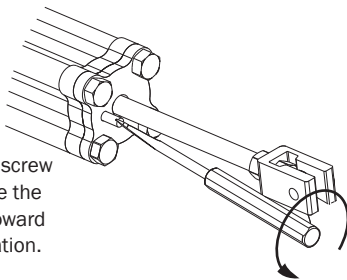
Tighten Connecting Bar Bolts to 90 in-lbs.



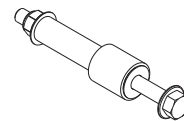
STEPS 22-23: CYLINDER ASSEMBLY



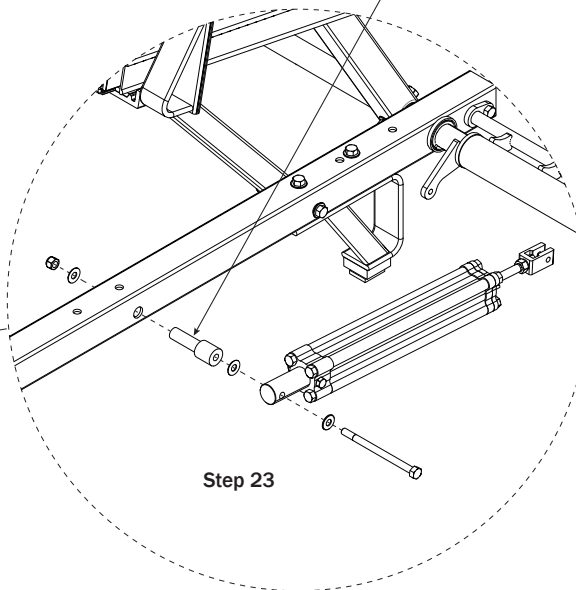
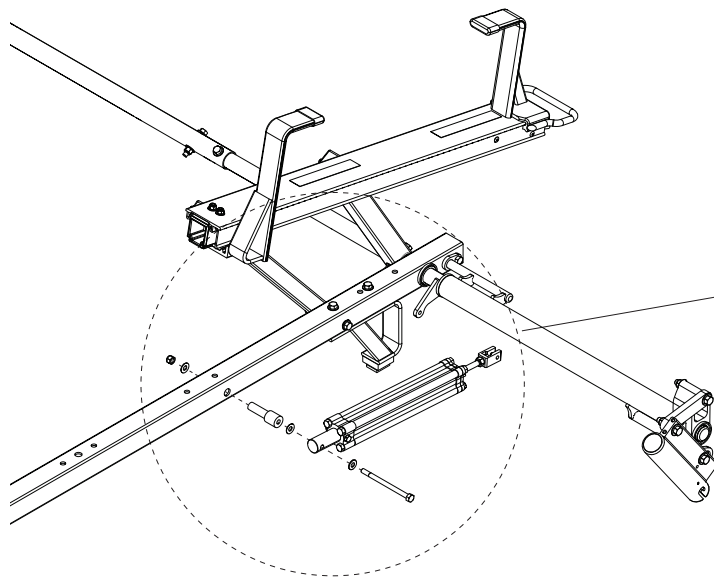
Step 22: Adjusting the Cylinder's Flow Control screw by 1-½ turns left to default setting will release the Cylinder Rod making it easier to pull the rod toward the Drive Shaft's Cylinder Lever during installation.



9-2

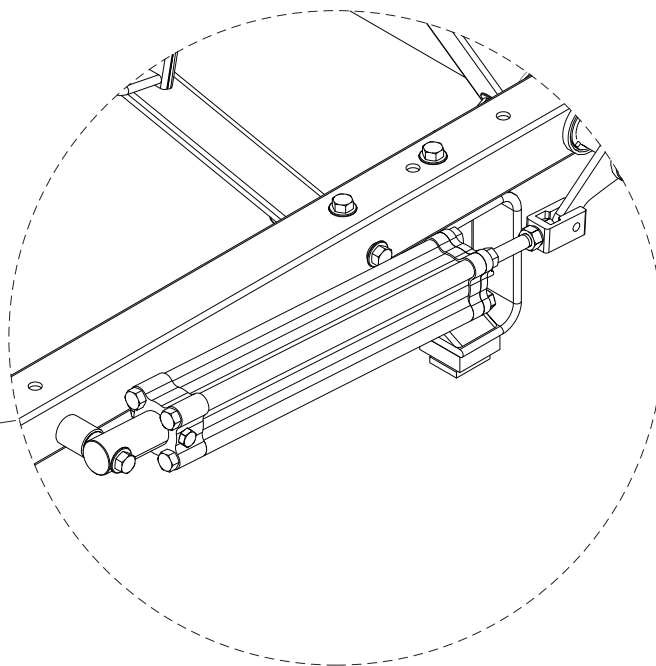
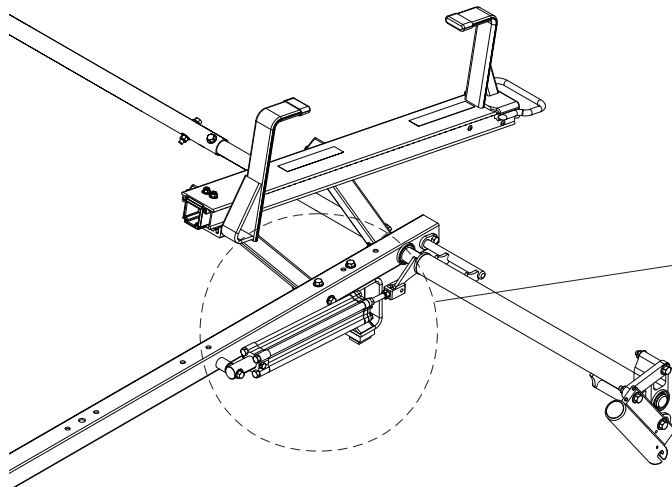


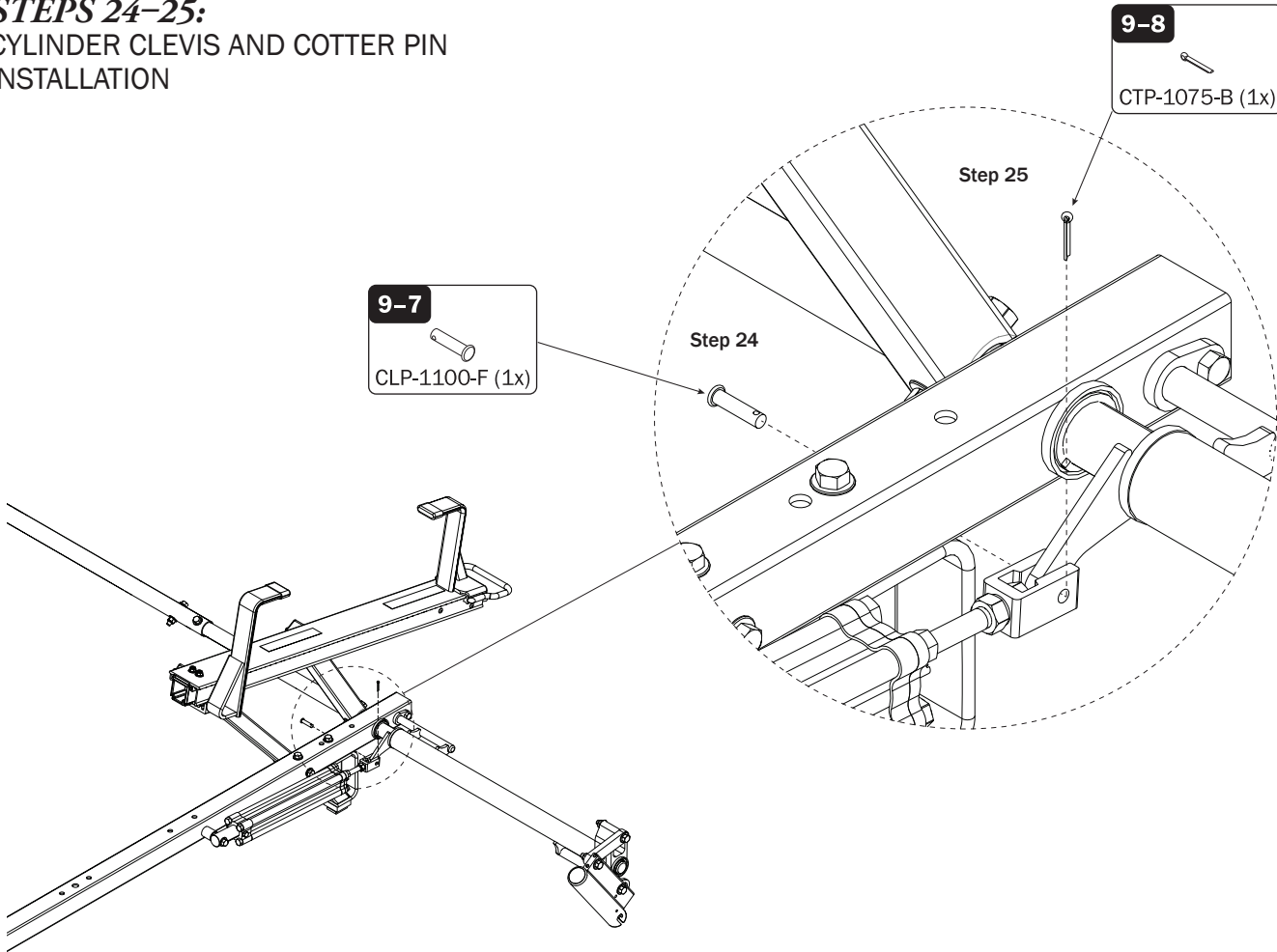
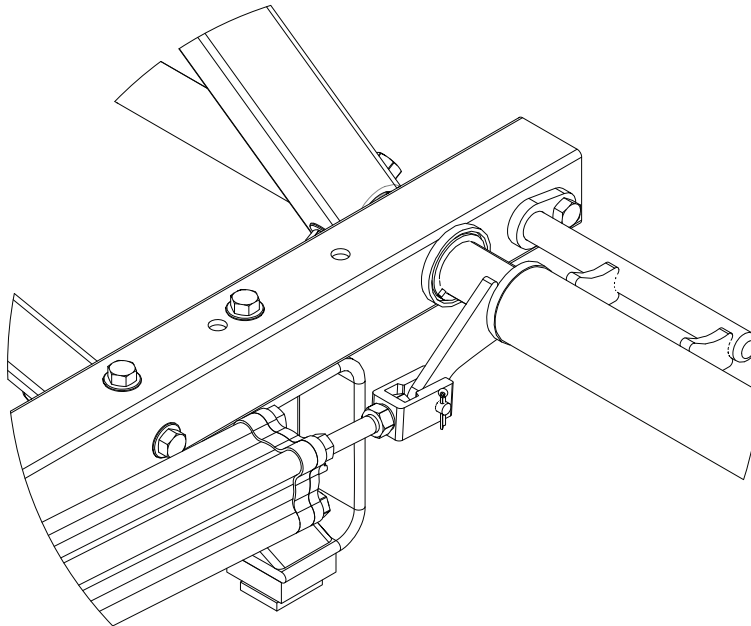
BLT-6811-M8 (1x)
Torque Cylinder Bolt
Assembly to 18 In-Lb



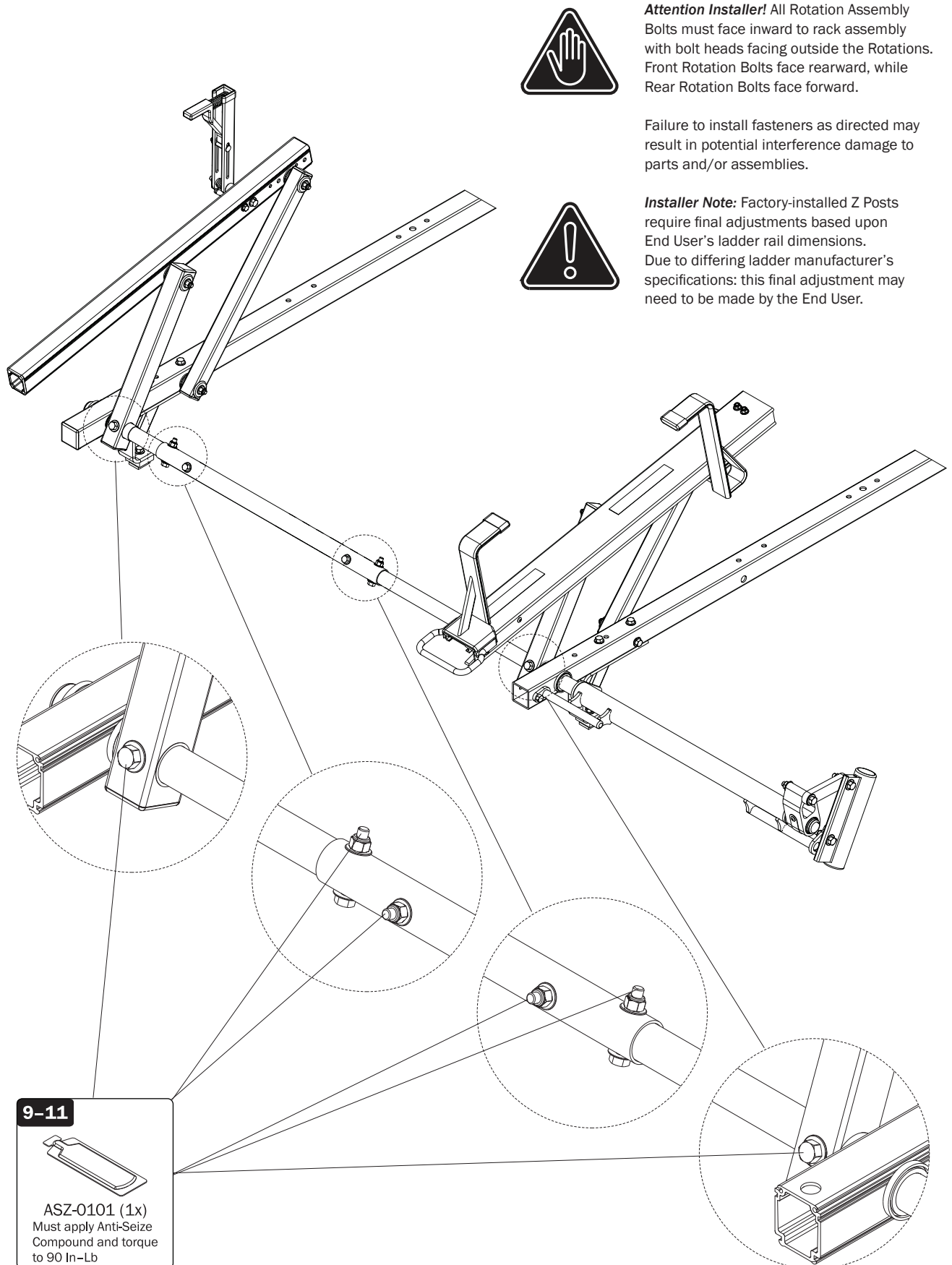
Step 23

STEPS 22-23: CYLINDER ASSEMBLY RESULTS



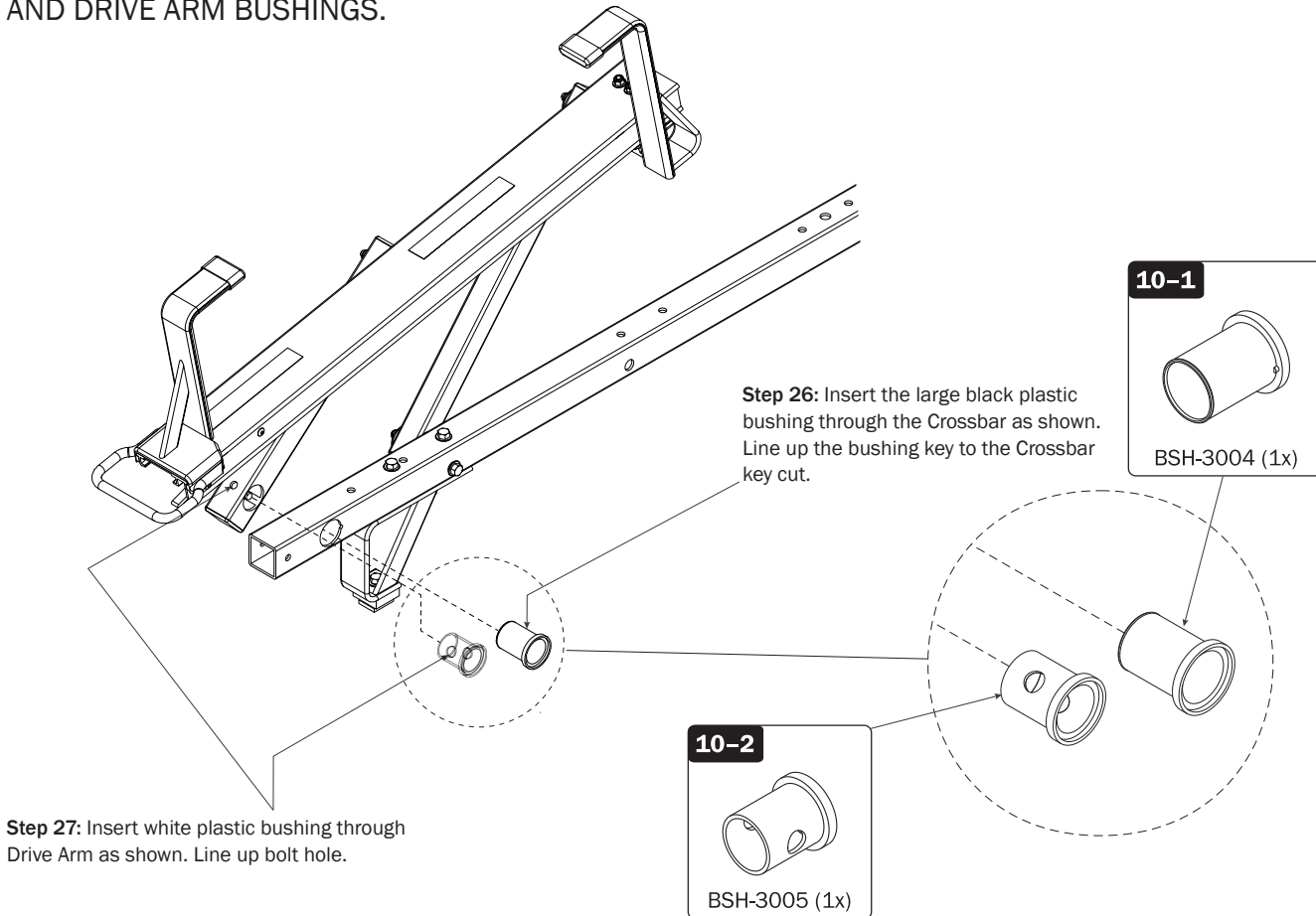
STEPS 24-25:CYLINDER CLEVIS AND COTTER PIN
INSTALLATION**STEPS 24-25:**CYLINDER CLEVIS AND COTTER PIN
INSTALLATION RESULTS

LEFT HAND ROTATION OVERVIEW

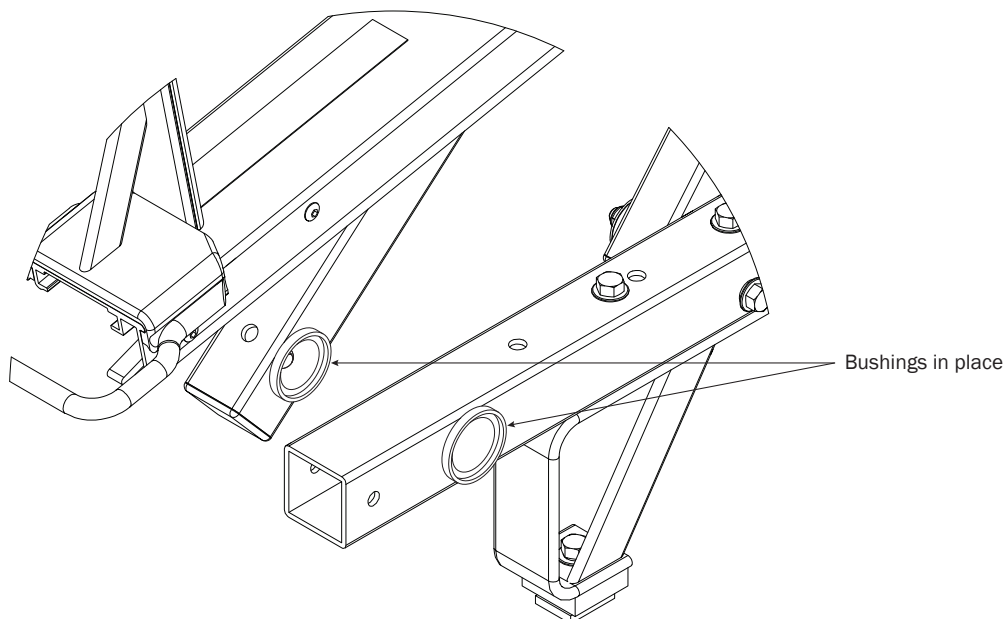


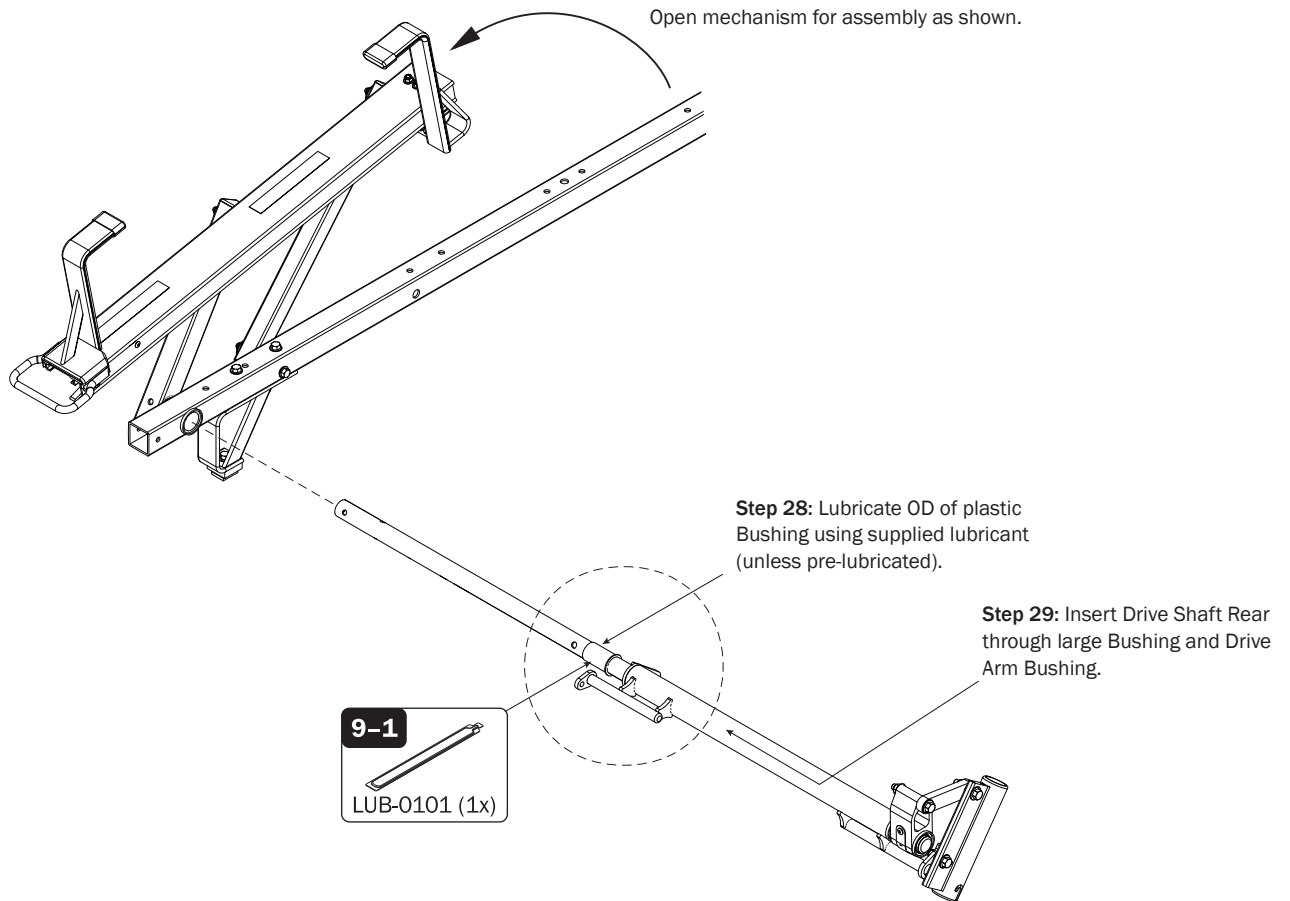
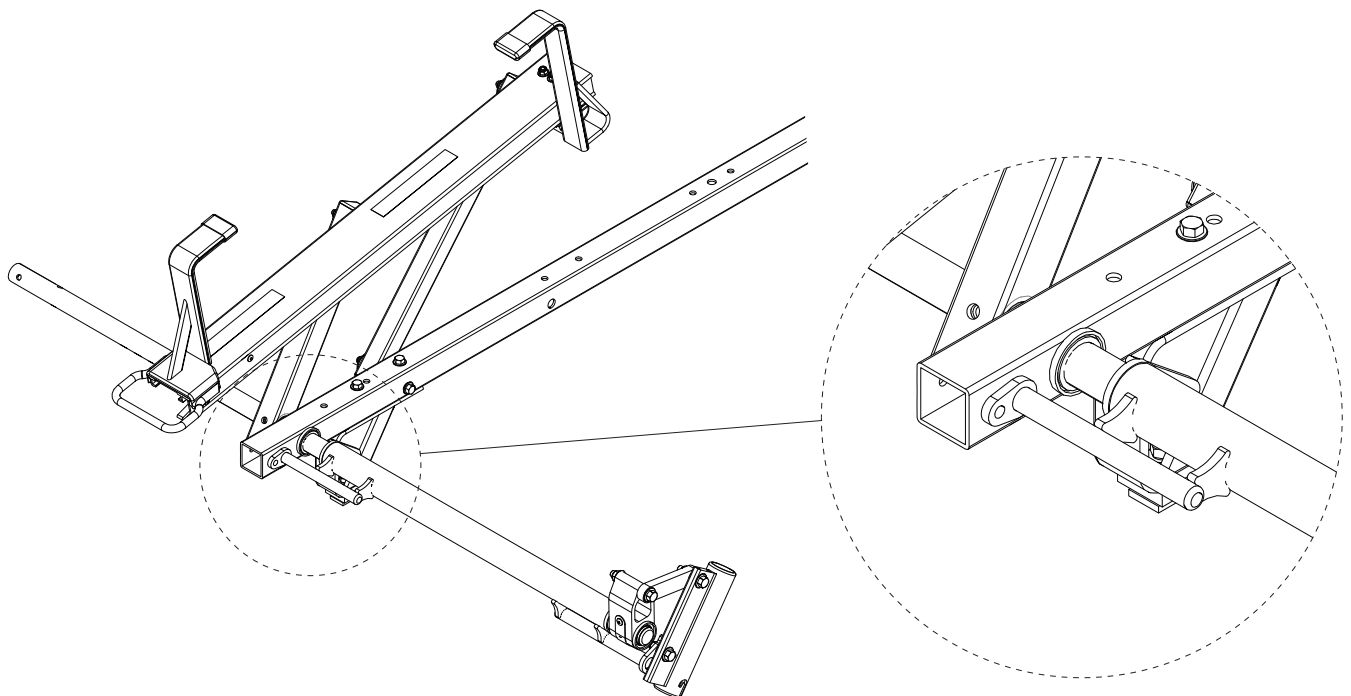
STEPS 26-27:

INSERTING THE REAR CROSSBAR
AND DRIVE ARM BUSHINGS.

**STEPS 26-27:**

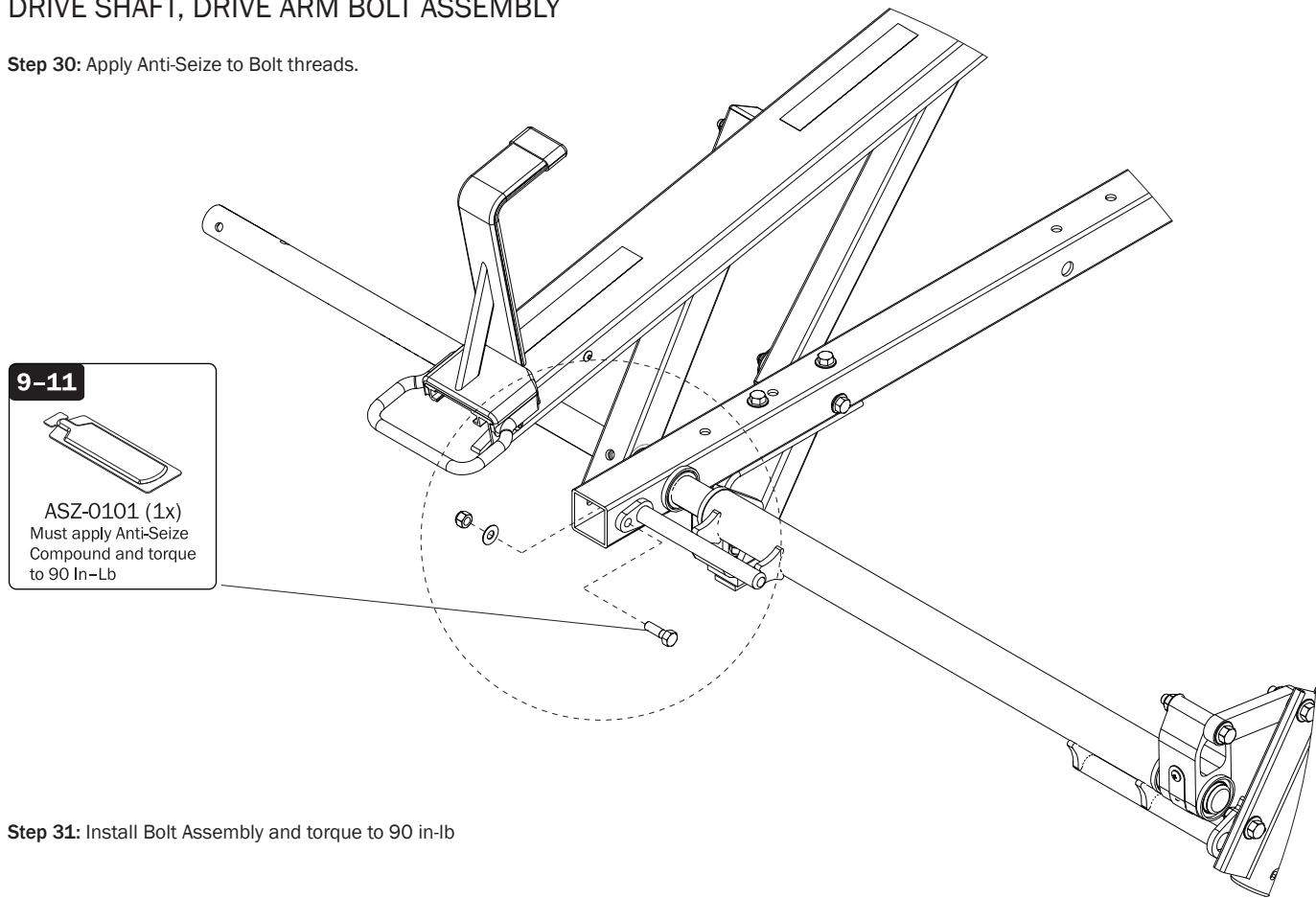
BUSHING INSERTION RESULTS



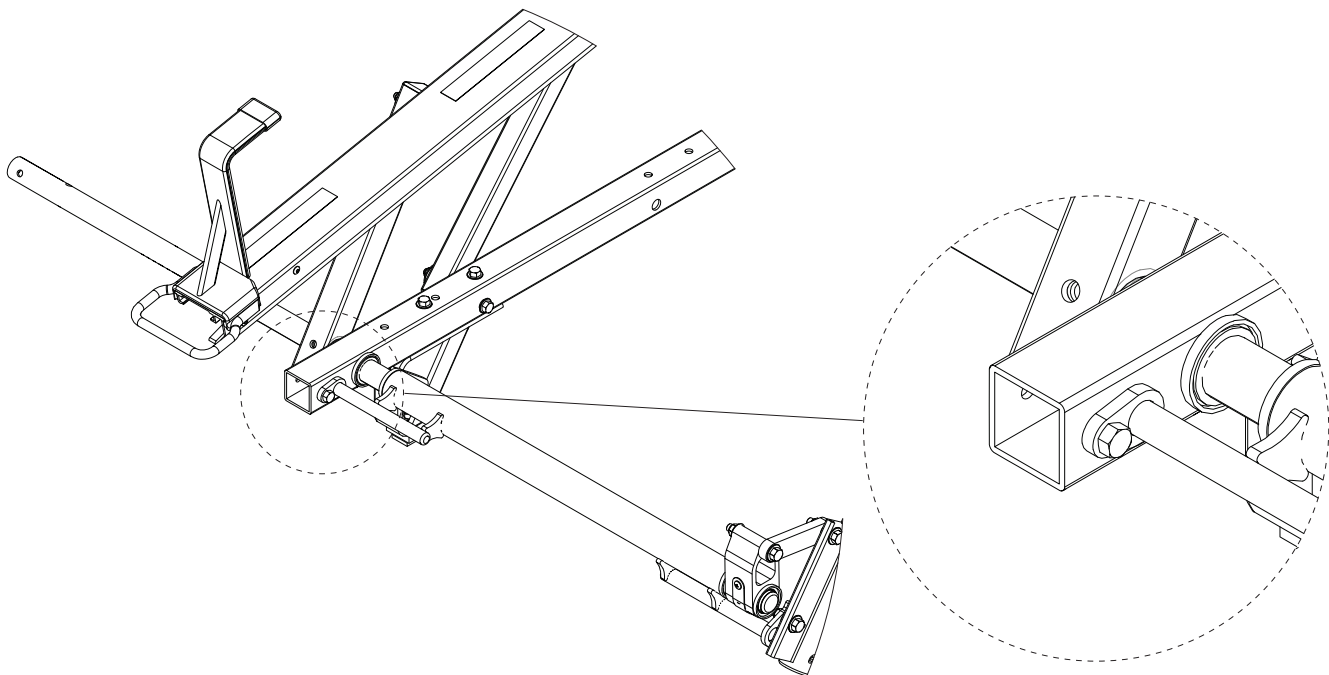
STEPS 28-29**INSERTING THE LEFT REAR DRIVE SHAFT****STEPS 28-29:****DRIVESHAFT INSERTION RESULTS**

STEPS 30–31:**DRIVE SHAFT, DRIVE ARM BOLT ASSEMBLY**

Step 30: Apply Anti-Seize to Bolt threads.

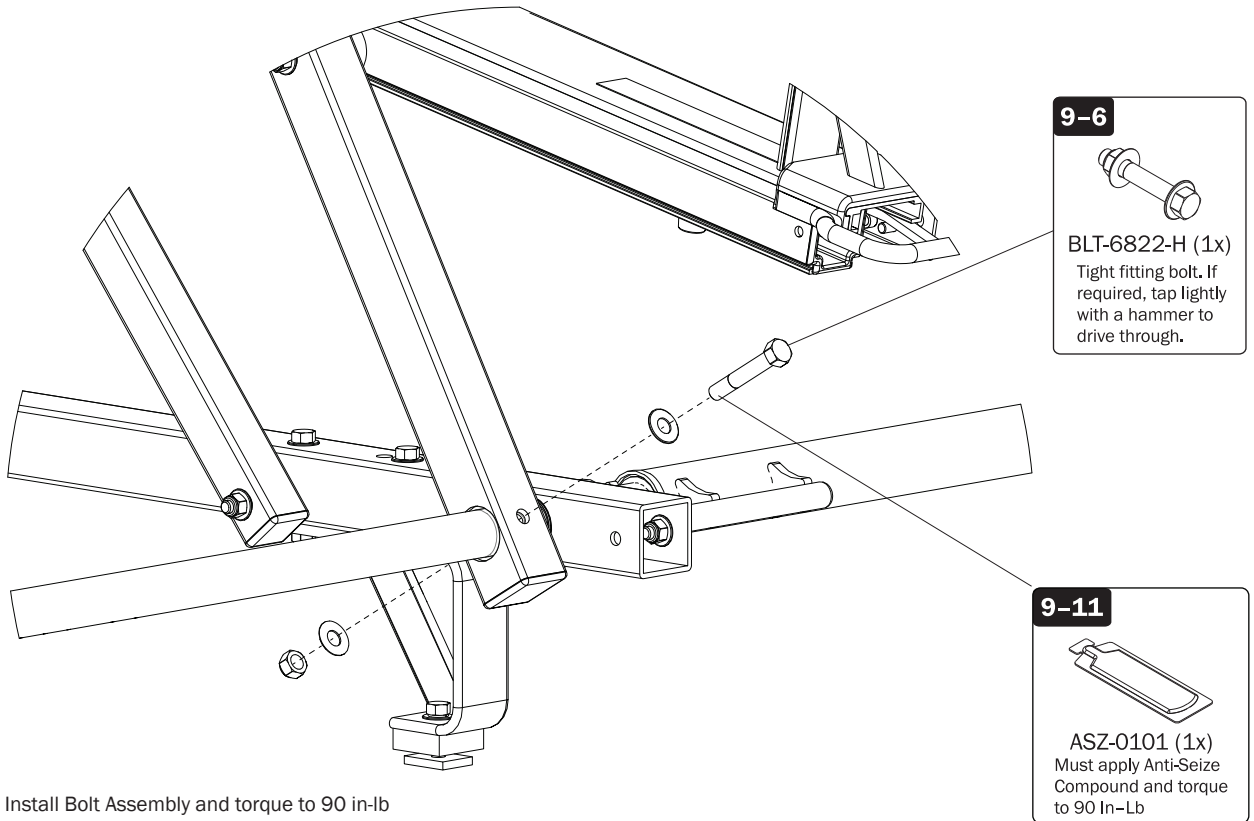


Step 31: Install Bolt Assembly and torque to 90 in-lb

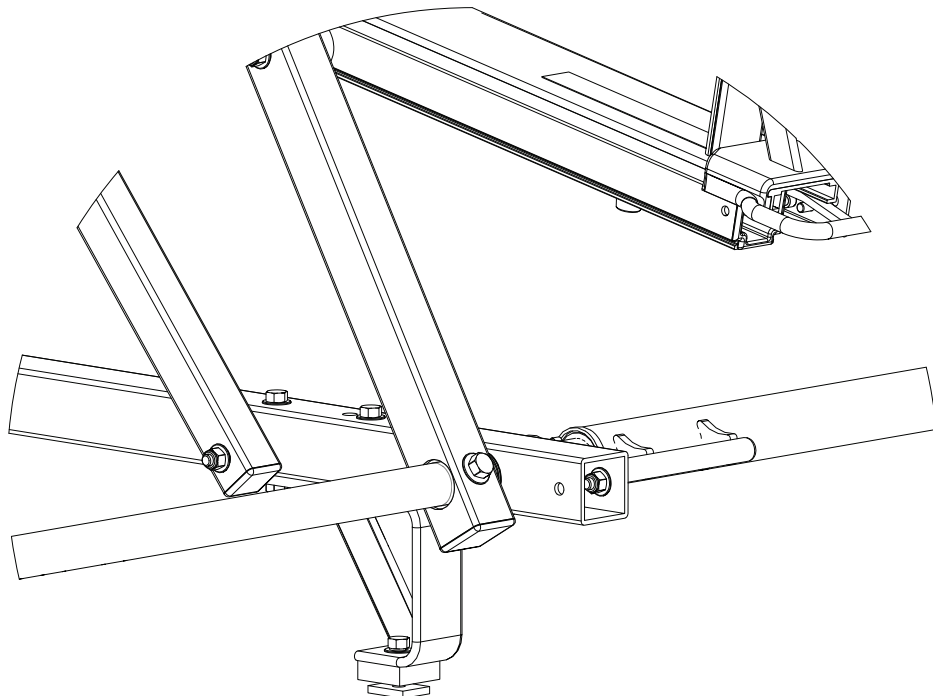
STEPS 30–31:**BOLT ASSEMBLY RESULTS**

STEPS 32-33:**INSTALLING THE LEFT REAR DRIVE SHAFT
TO DRIVE ARM BOLT ASSEMBLY**

Step 32: Apply Anti-Seize to Bolt threads.

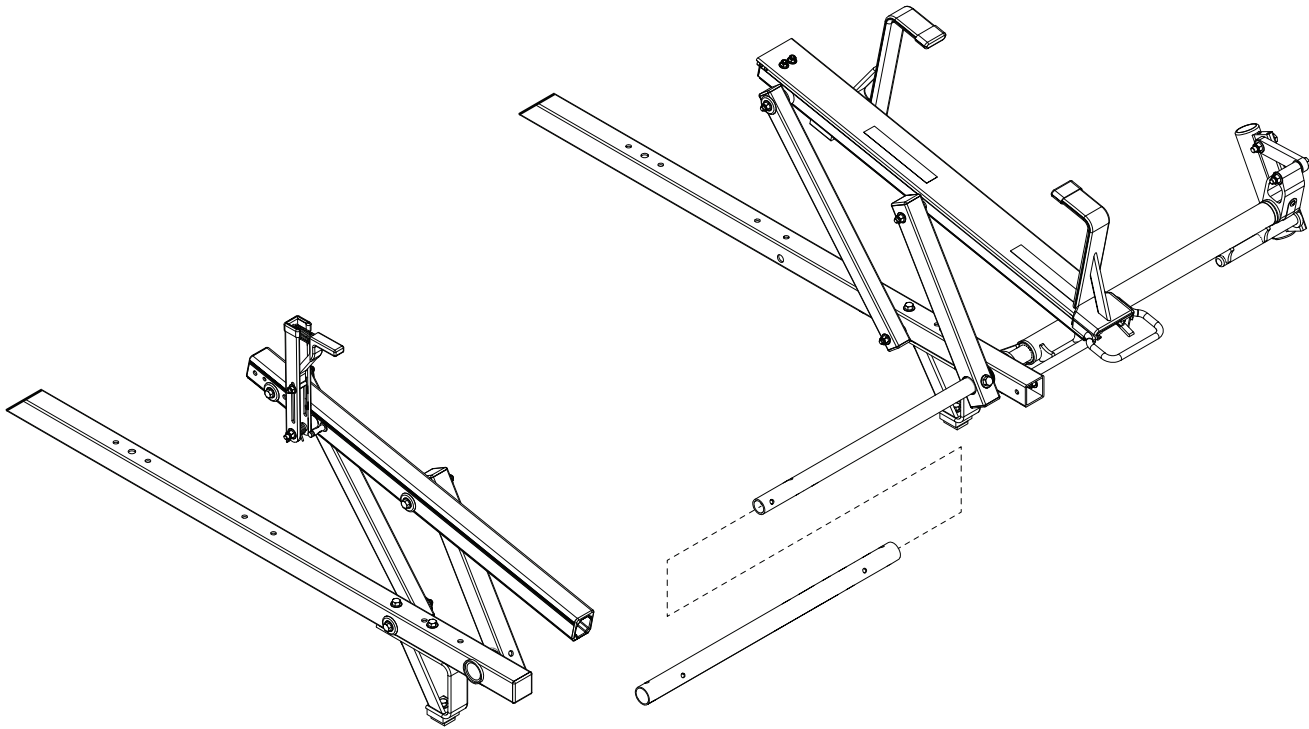


Step 33: Install Bolt Assembly and torque to 90 in-lb

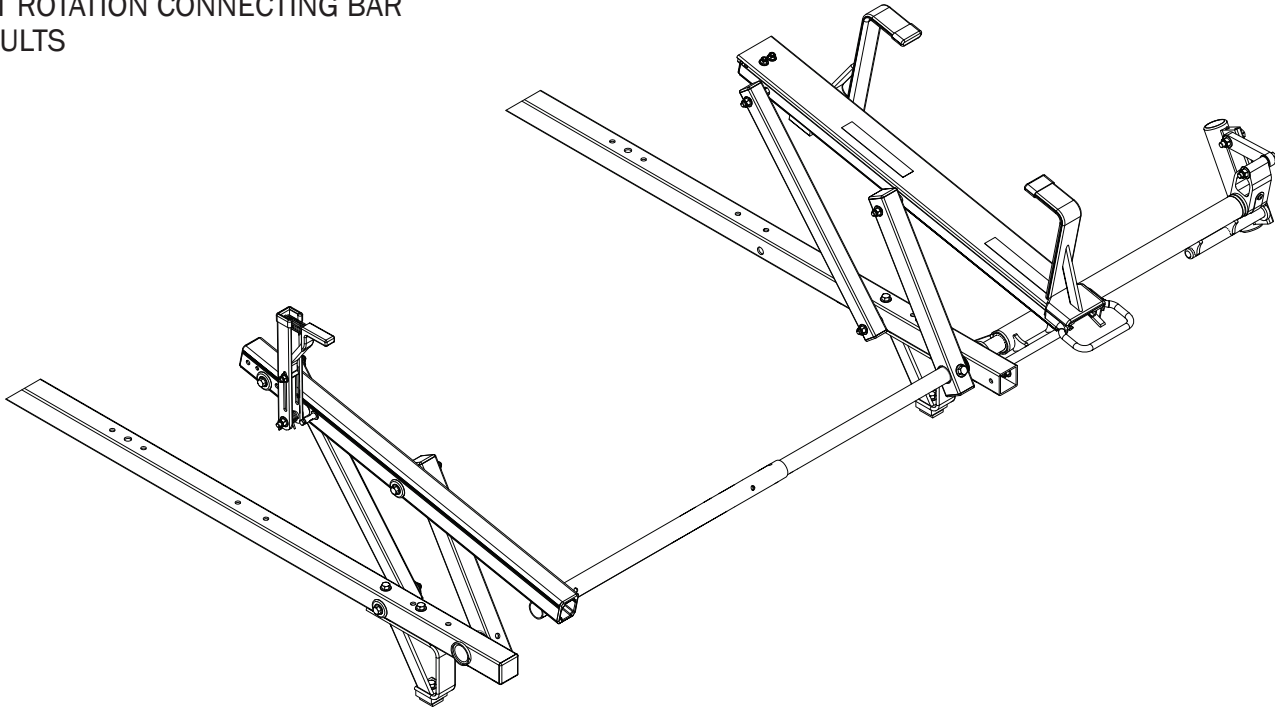
STEPS 32-33:**LEFT REAR DRIVE SHAFT INSERTION
RESULTS**

STEP 34:

INSERTING THE LEFT ROTATION
CONNECTING BAR

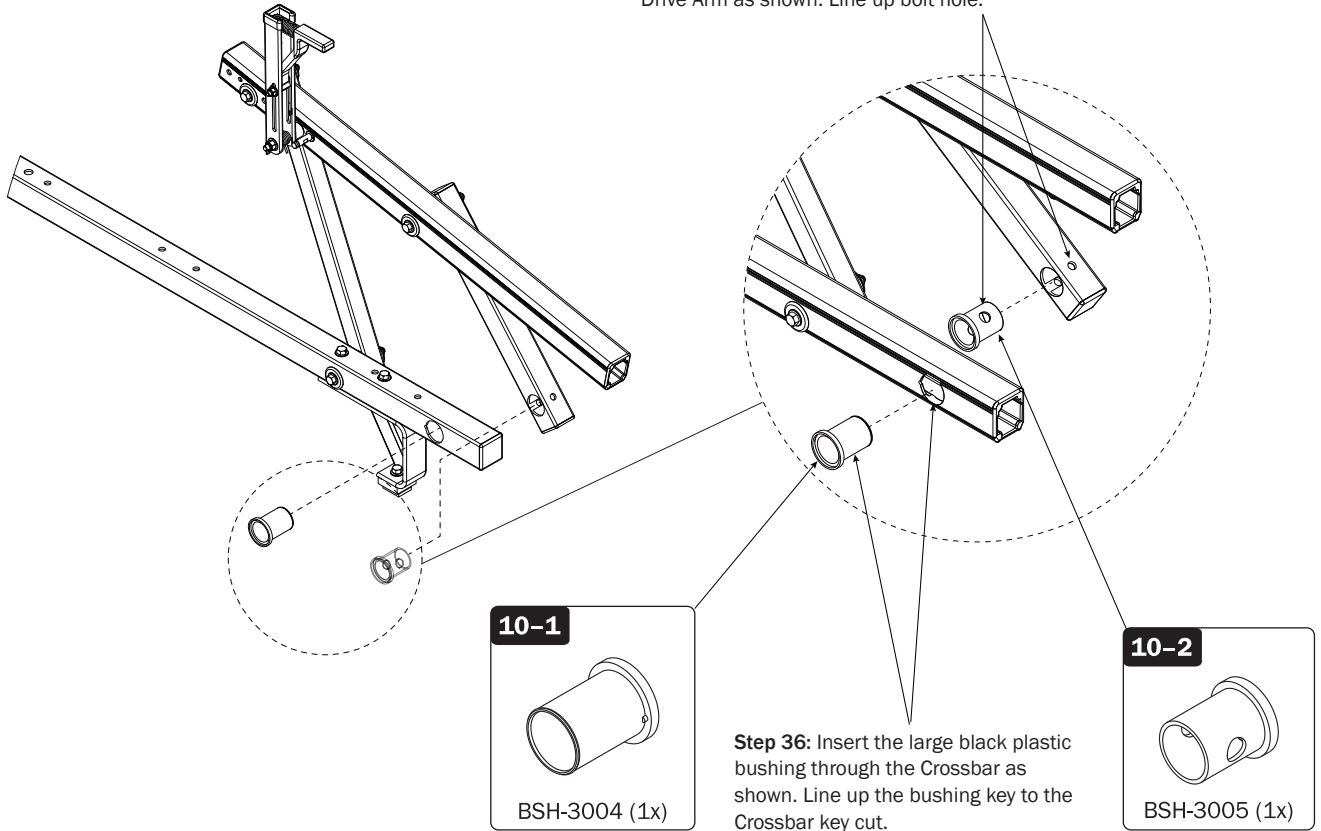
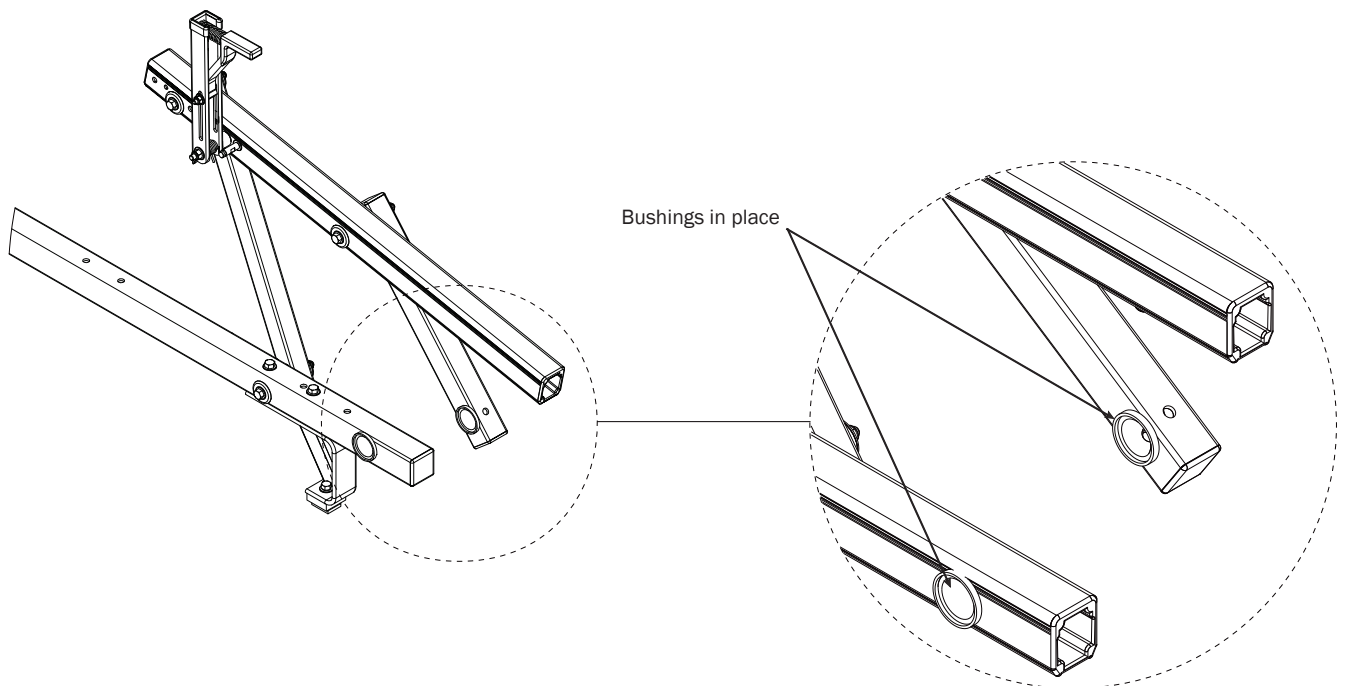
**STEP 34:**

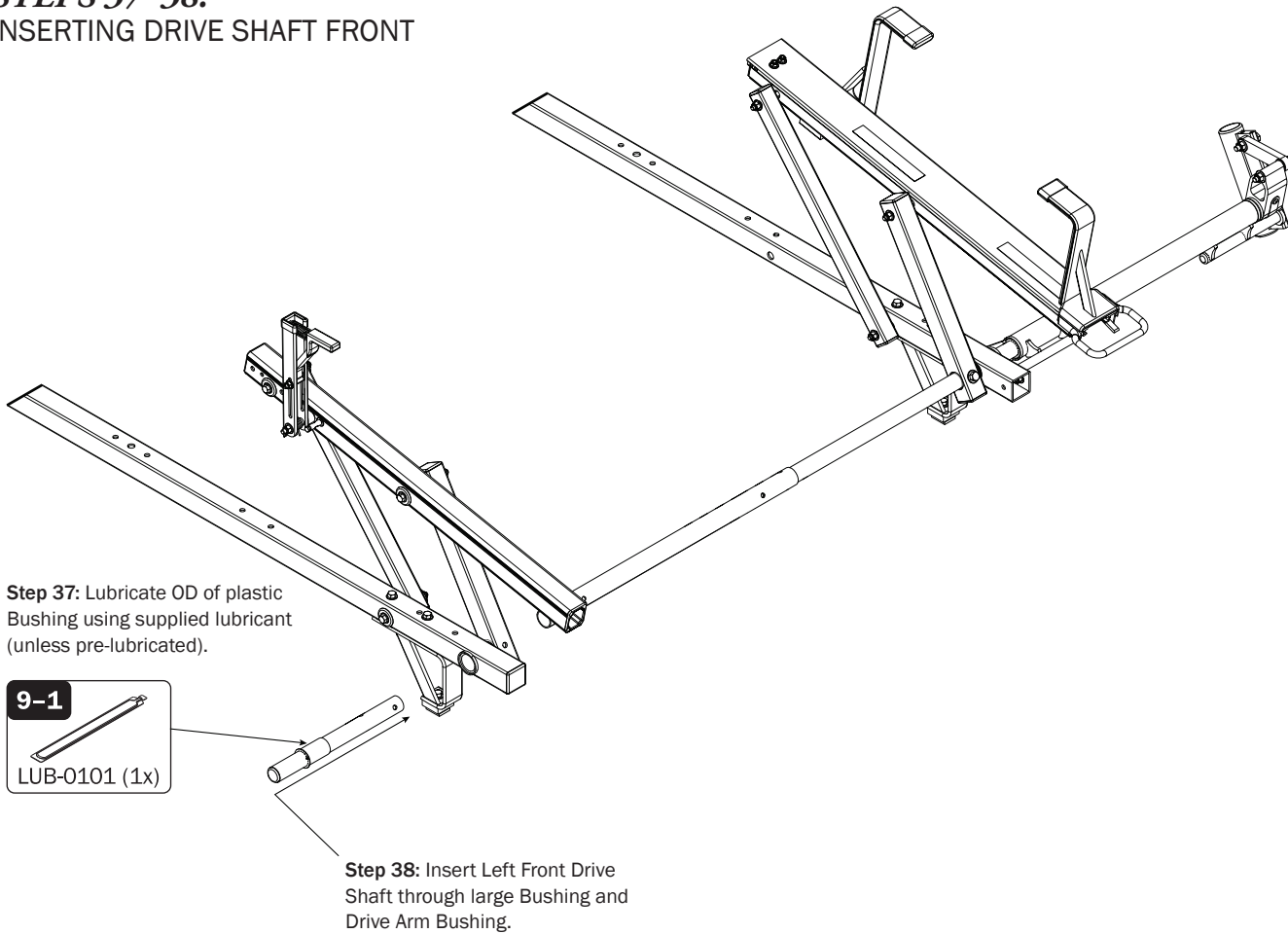
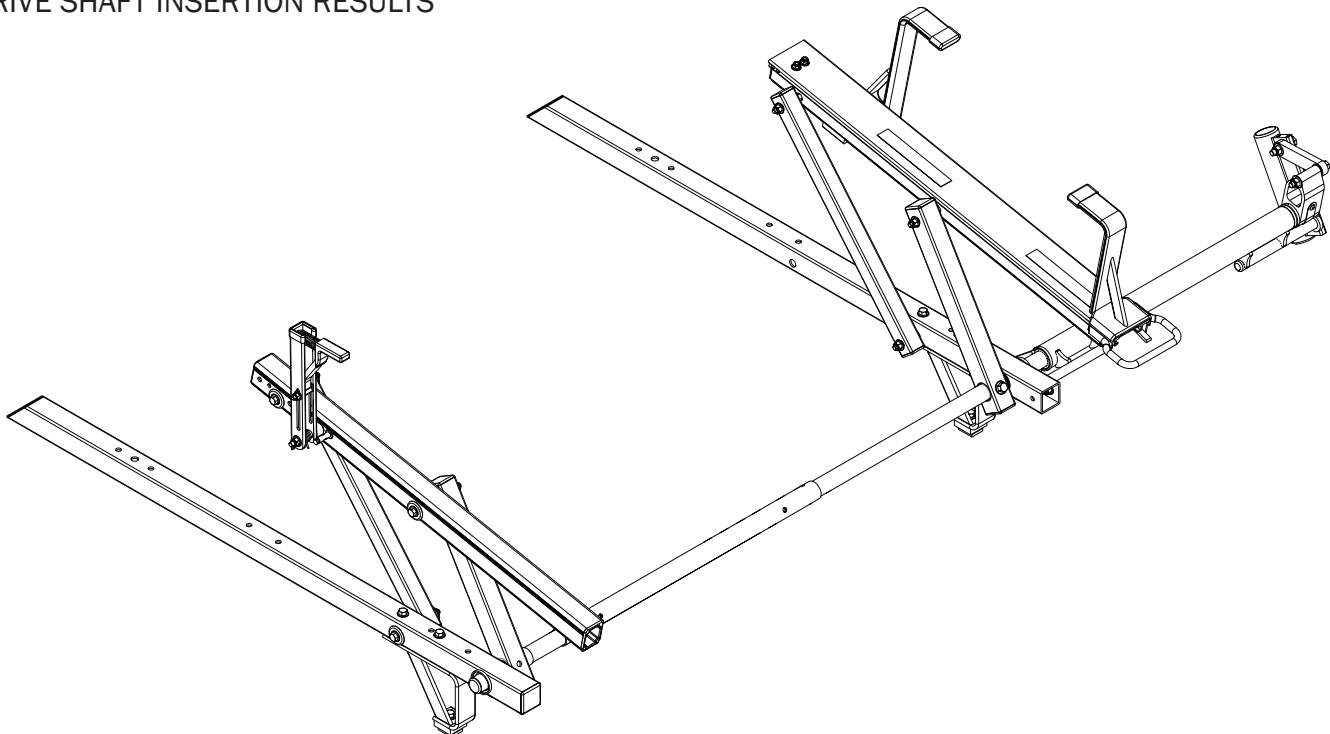
LEFT ROTATION CONNECTING BAR
RESULTS



STEPS 35-36:**INSERTING THE LEFT FRONT CROSSBAR
AND DRIVE ARM BUSHINGS**

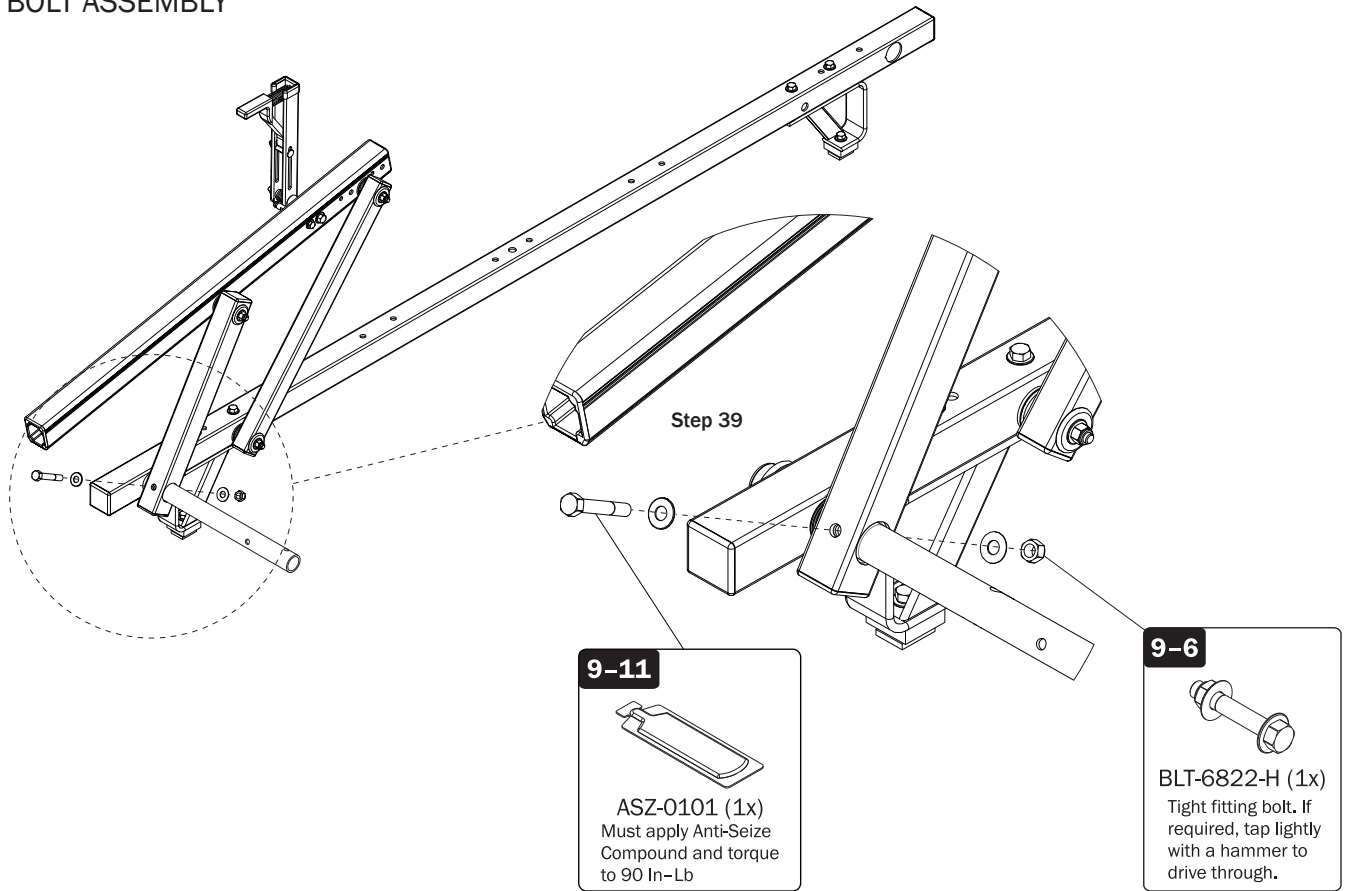
Step 35: Insert white plastic bushing through Drive Arm as shown. Line up bolt hole.

**STEPS 35-36:****BUSHING INSERTION RESULTS**

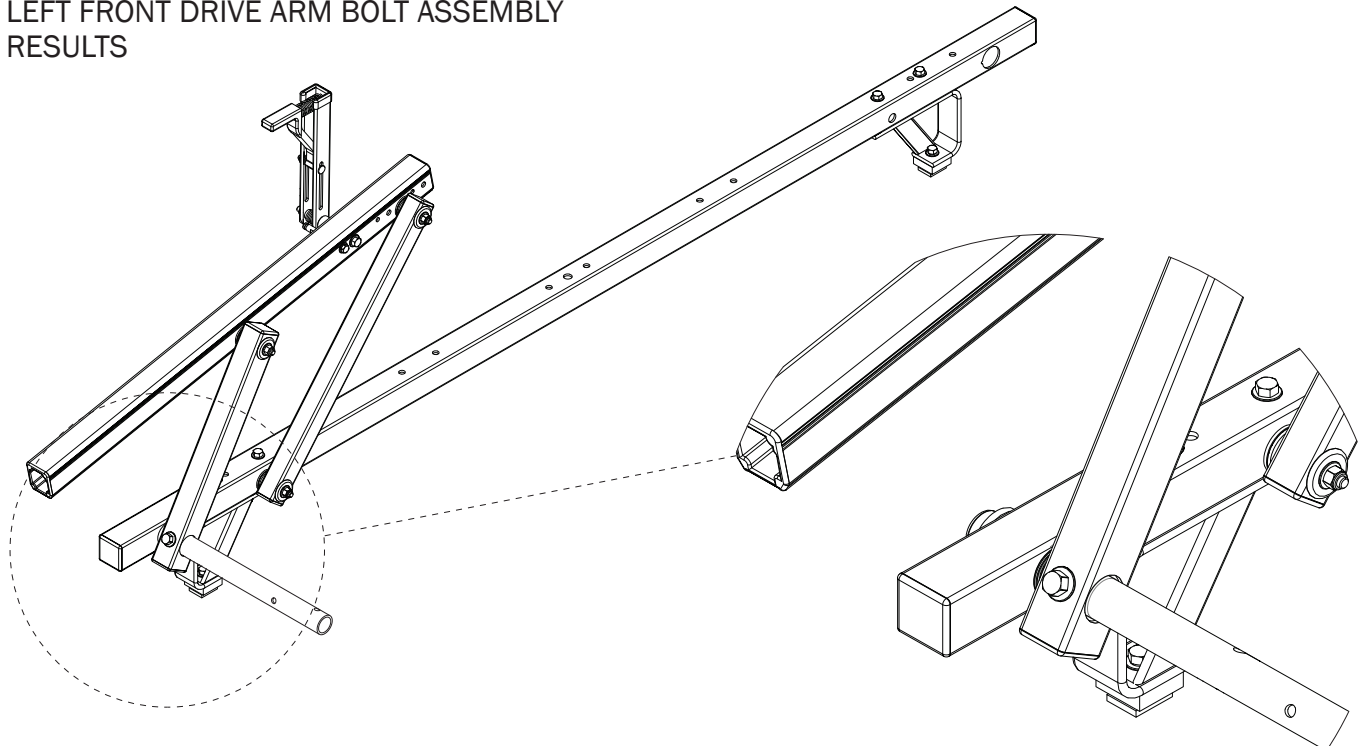
STEPS 37-38:**INSERTING DRIVE SHAFT FRONT****STEPS 37-38:****DRIVE SHAFT INSERTION RESULTS**

STEP 39:

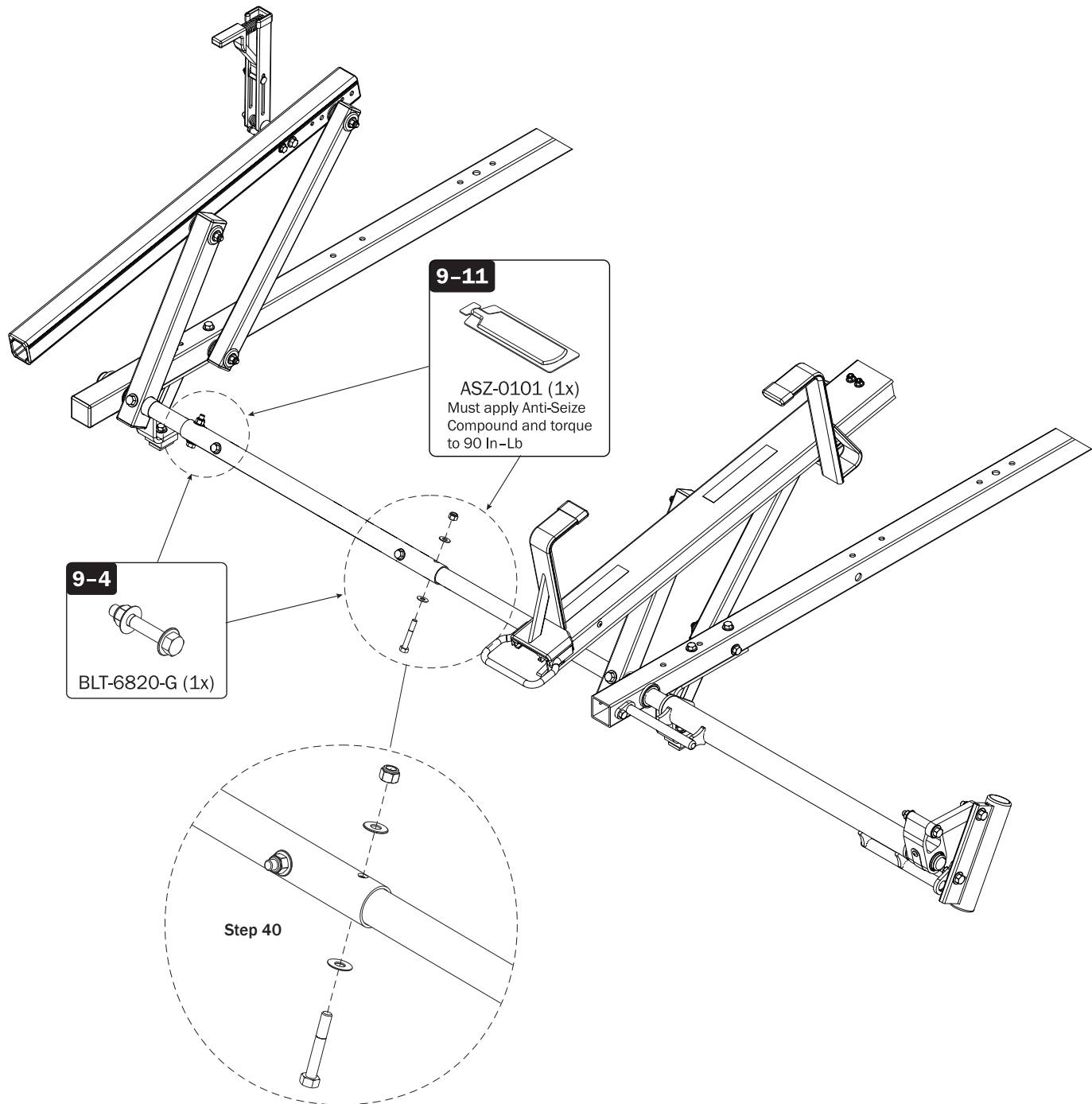
INSERTING THE LEFT FRONT DRIVE ARM
BOLT ASSEMBLY

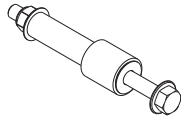
**STEP 39:**

LEFT FRONT DRIVE ARM BOLT ASSEMBLY
RESULTS

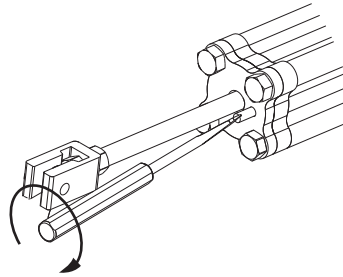


STEP 40:
CONNECTING BAR ASSEMBLY

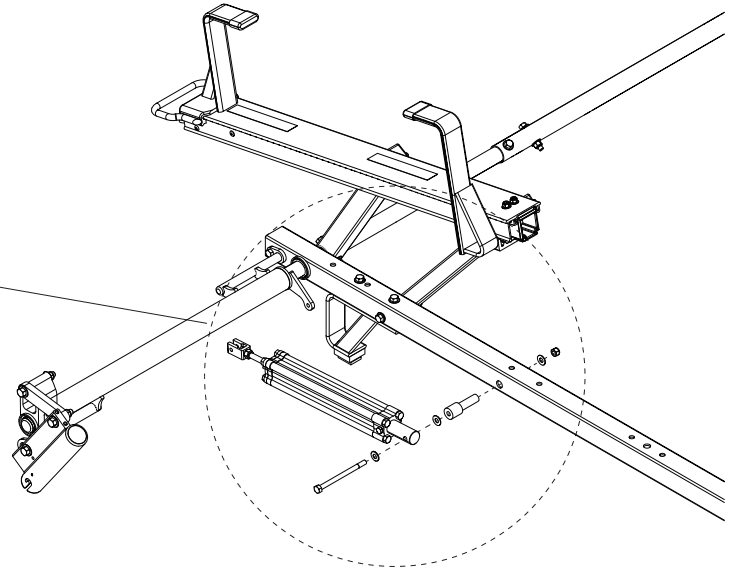
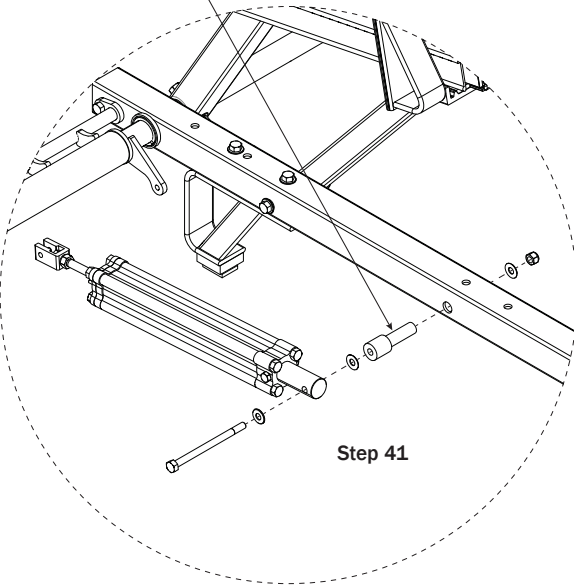
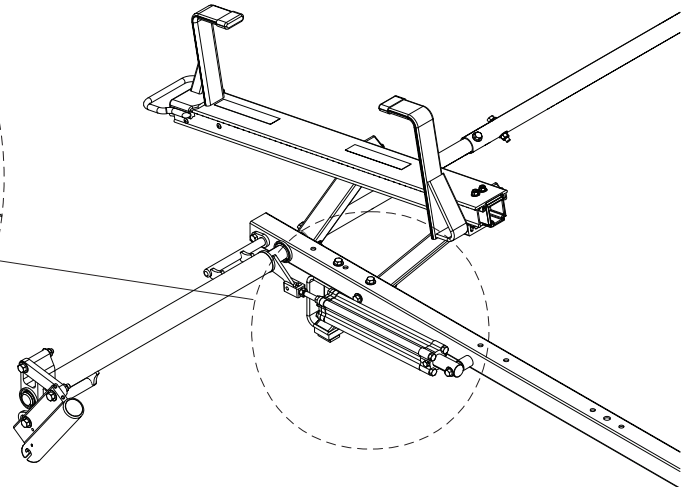
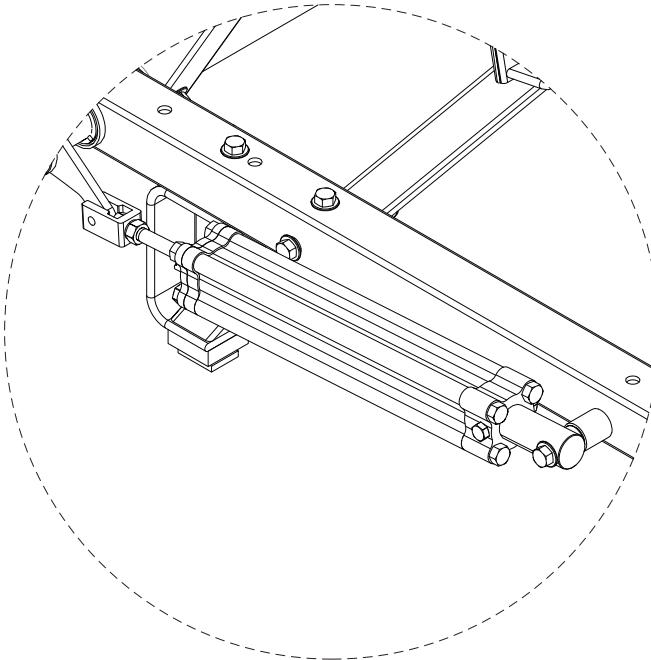


STEP 41:
CYLINDER ASSEMBLY**9-2**

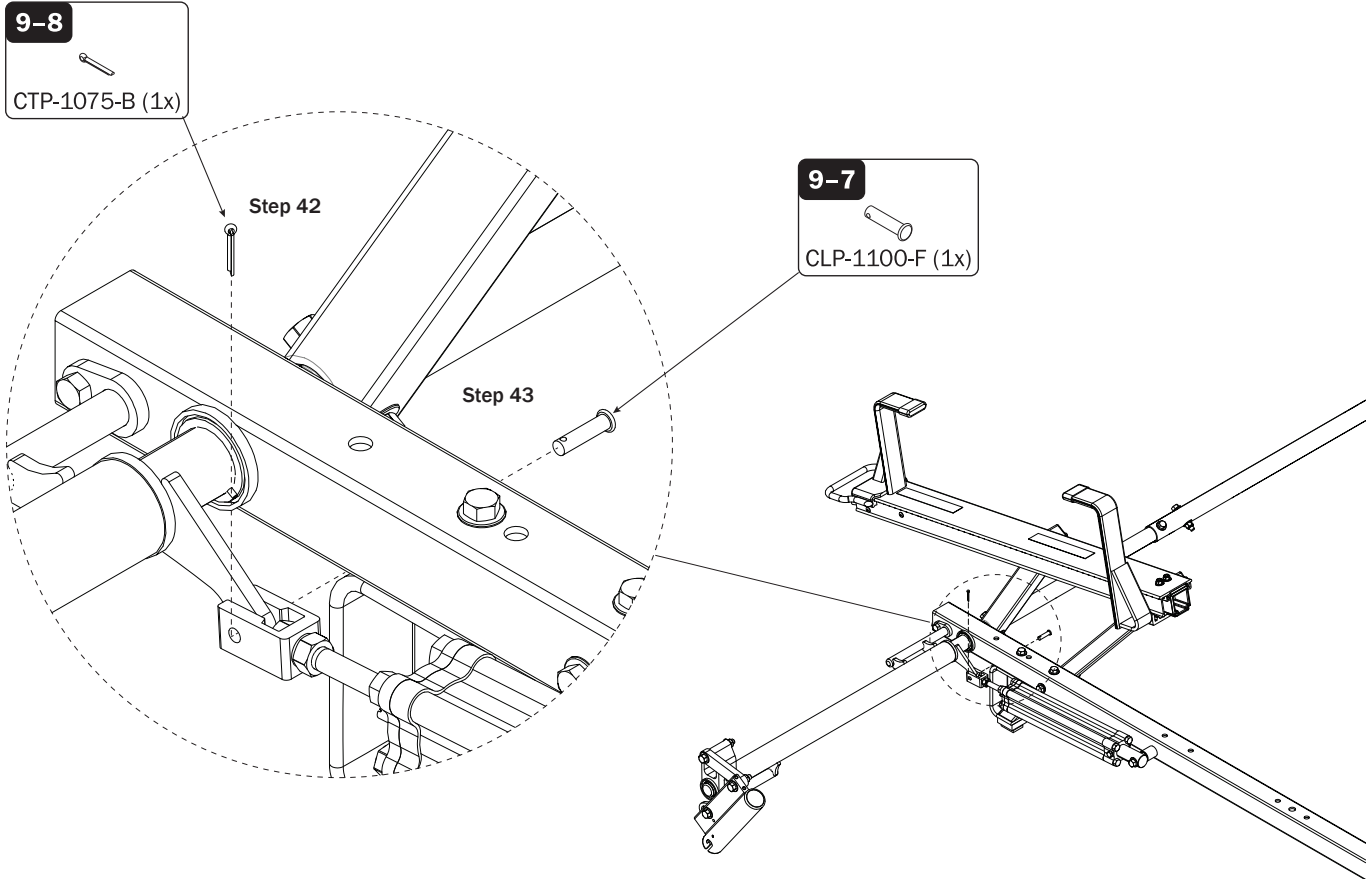
BLT-6811-M8 (1x)
Torque Cylinder Bolt
Assembly to 18 In-Lb

**Attention Installer!**

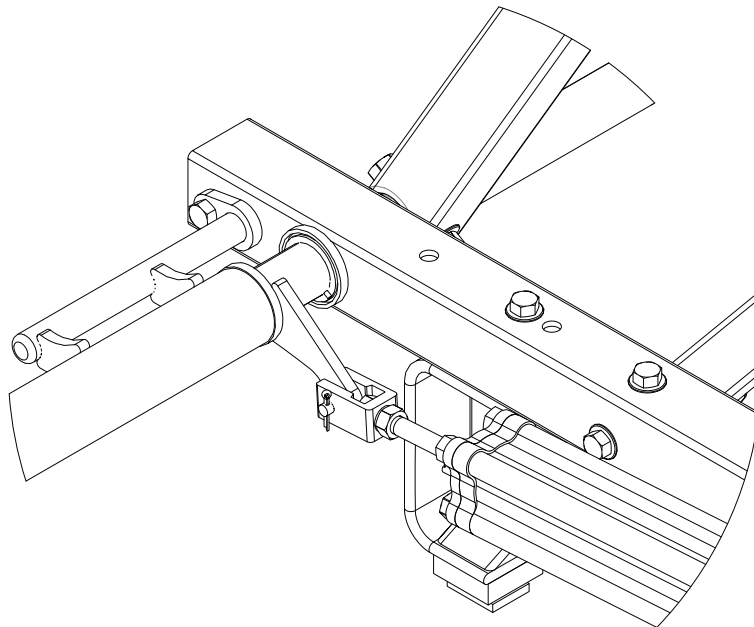
Adjusting the Cylinder's Flow Control screw by 1-½ turns left to default setting will release the Cylinder Rod making it easier to pull the rod toward the Drive Shaft's Cylinder Lever during installation.

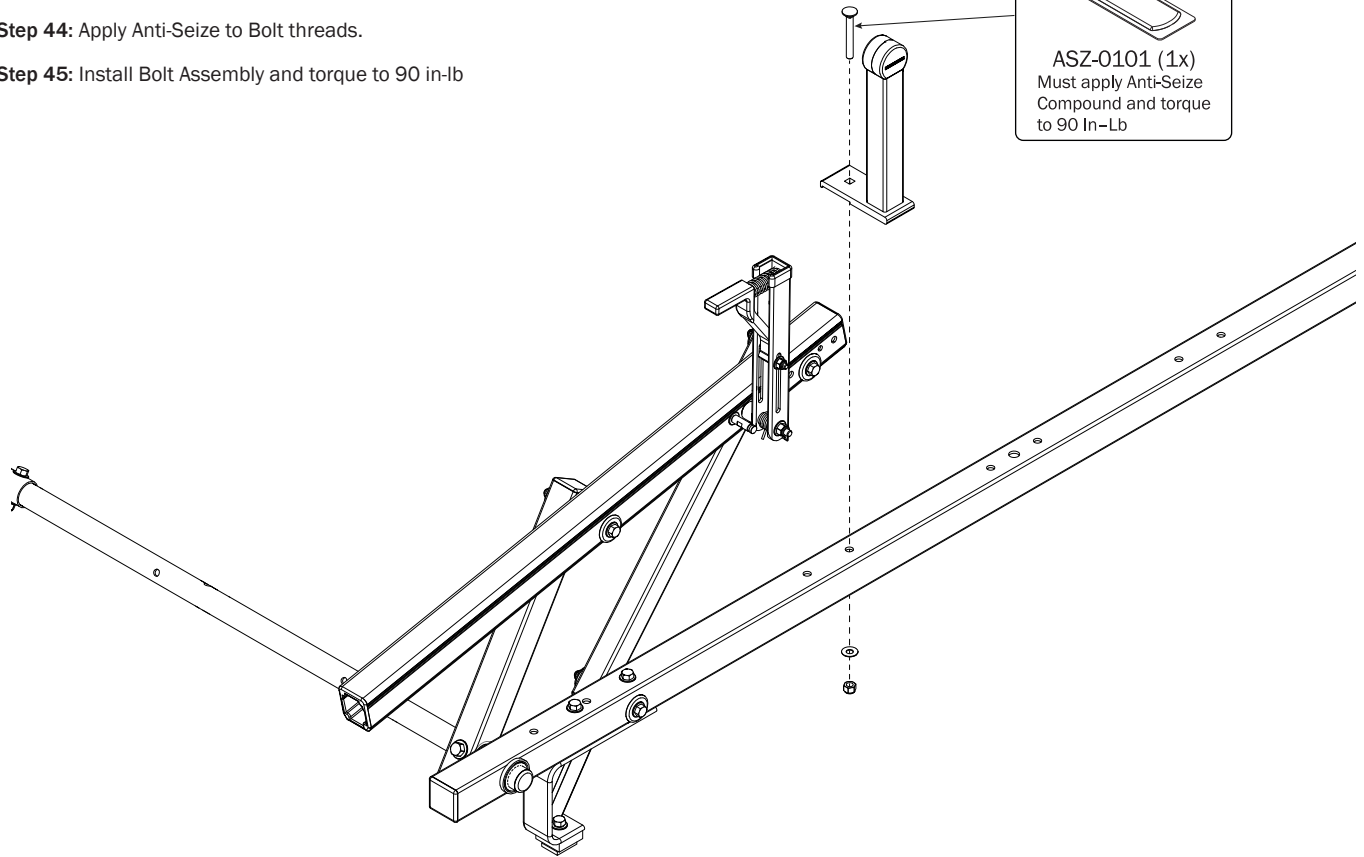
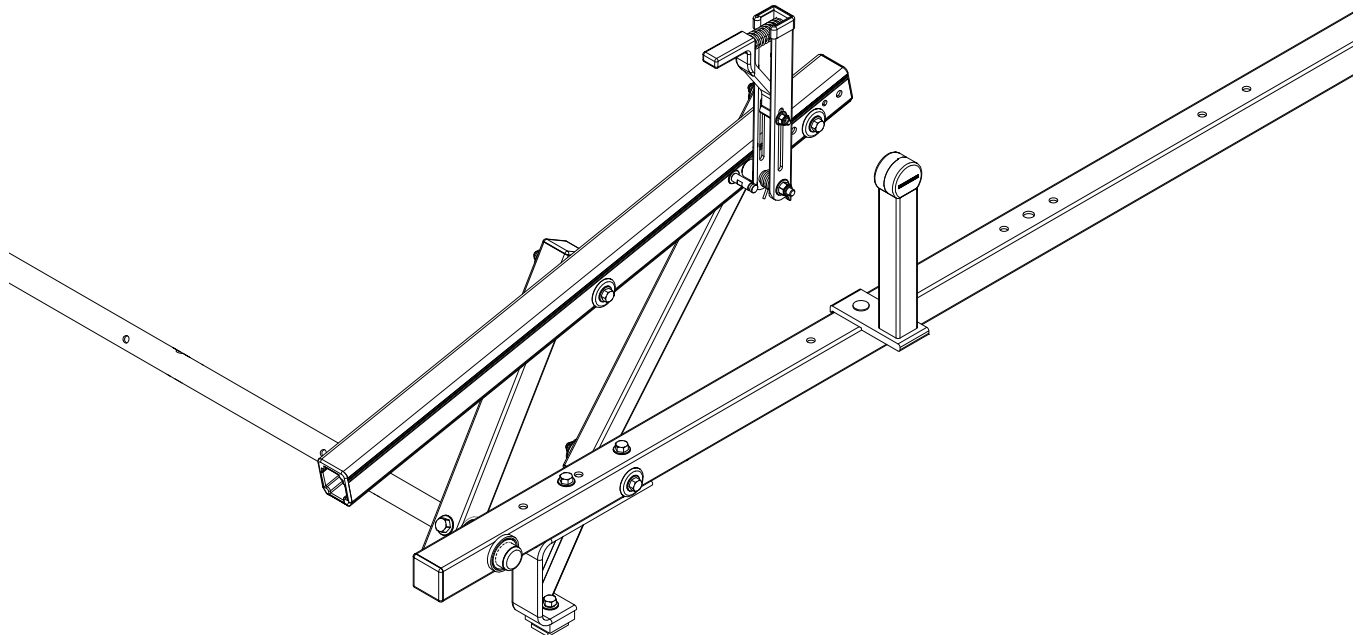
**STEP 41:**
CYLINDER ASSEMBLY RESULTS

STEPS 42-43:
CYLINDER COTTER PIN



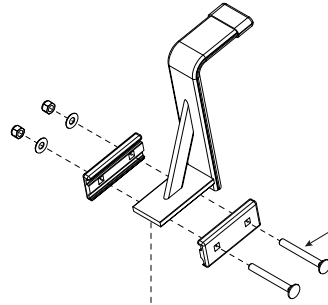
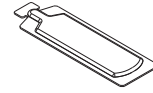
STEPS 42-43:
CYLINDER COTTER PIN RESULTS



STEPS 44-45:**RIGHT FRONT ROTATION AUTOCLAMP
L POST INSTALLATION****Step 44:** Apply Anti-Seize to Bolt threads.**Step 45:** Install Bolt Assembly and torque to 90 in-lb**STEPS 44-45:****RIGHT FRONT ROTATION AUTOCLAMP
L POST INSTALLATION RESULTS**

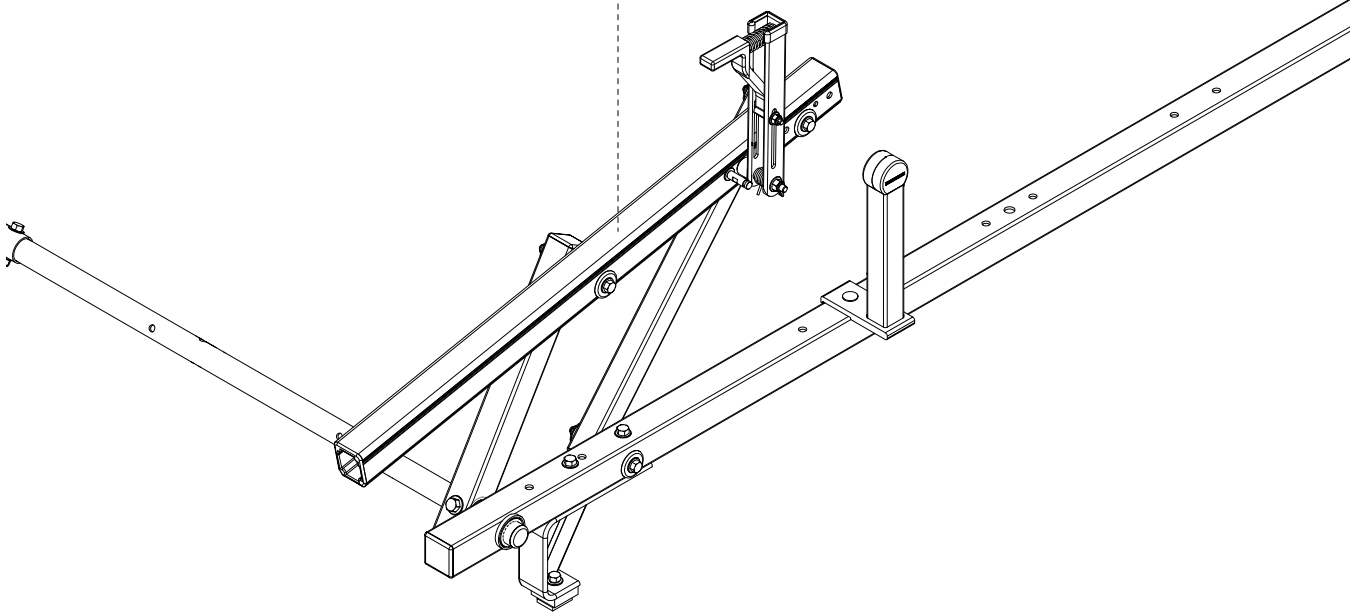
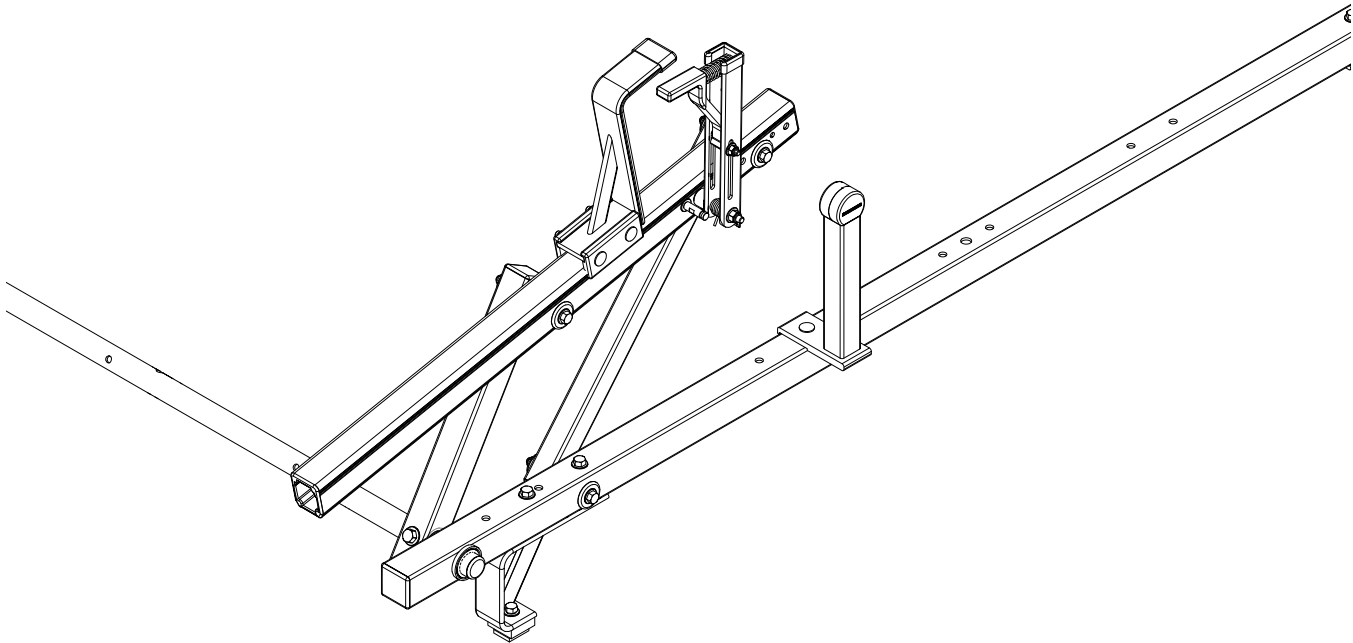
STEPS 46-47:**RIGHT FRONT ROTATION Z POST
INSTALLATION**

Step 46: Apply Anti-Seize to Bolt threads.

**9-11**

ASZ-0101 (1x)
Must apply Anti-Seize
Compound and torque
to 90 In-Lb

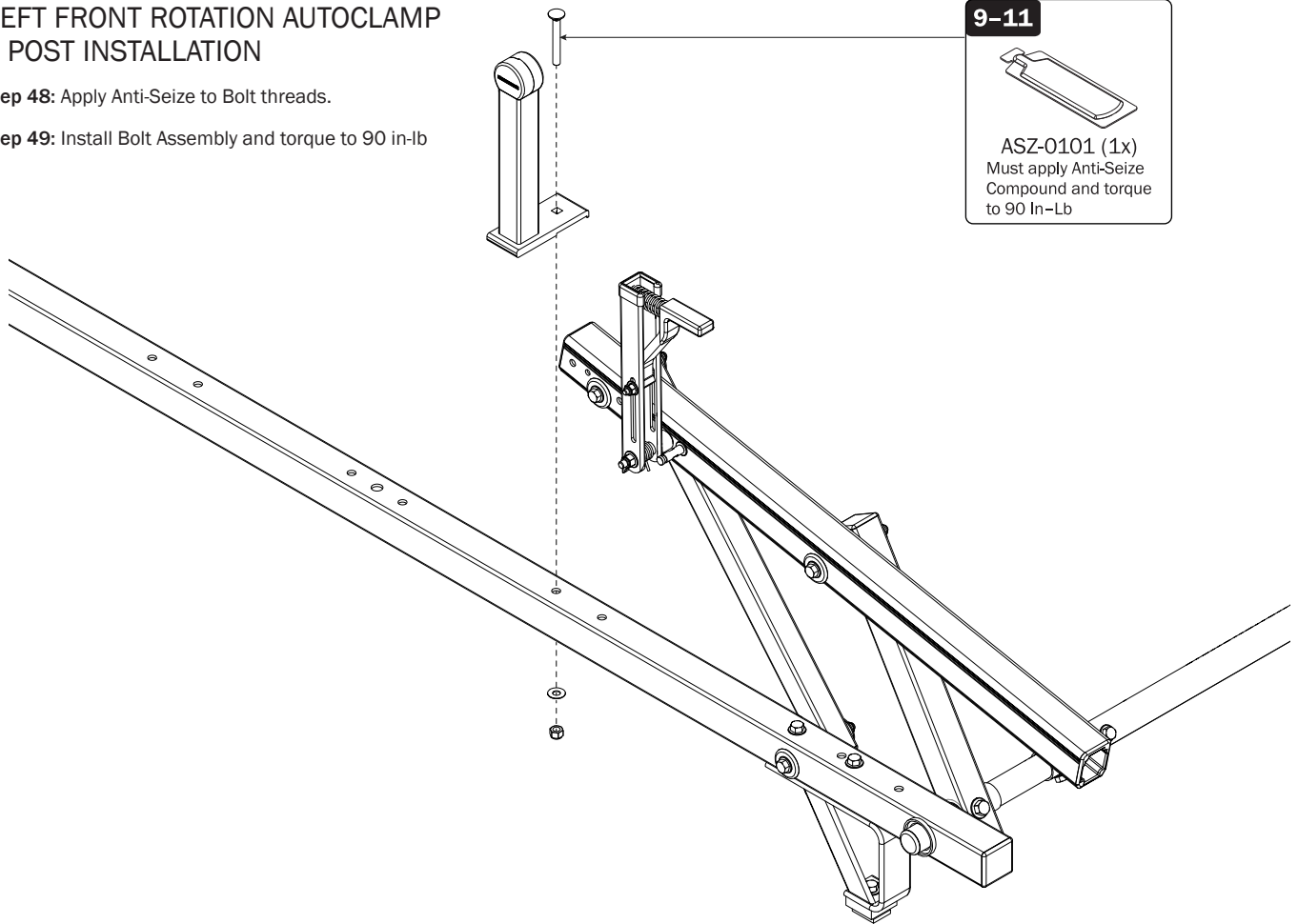
Step 47: Install Bolt Assembly and torque to 90 in-lb

**STEPS 46-47:****RIGHT FRONT ROTATION Z POST
INSTALLATION RESULTS**

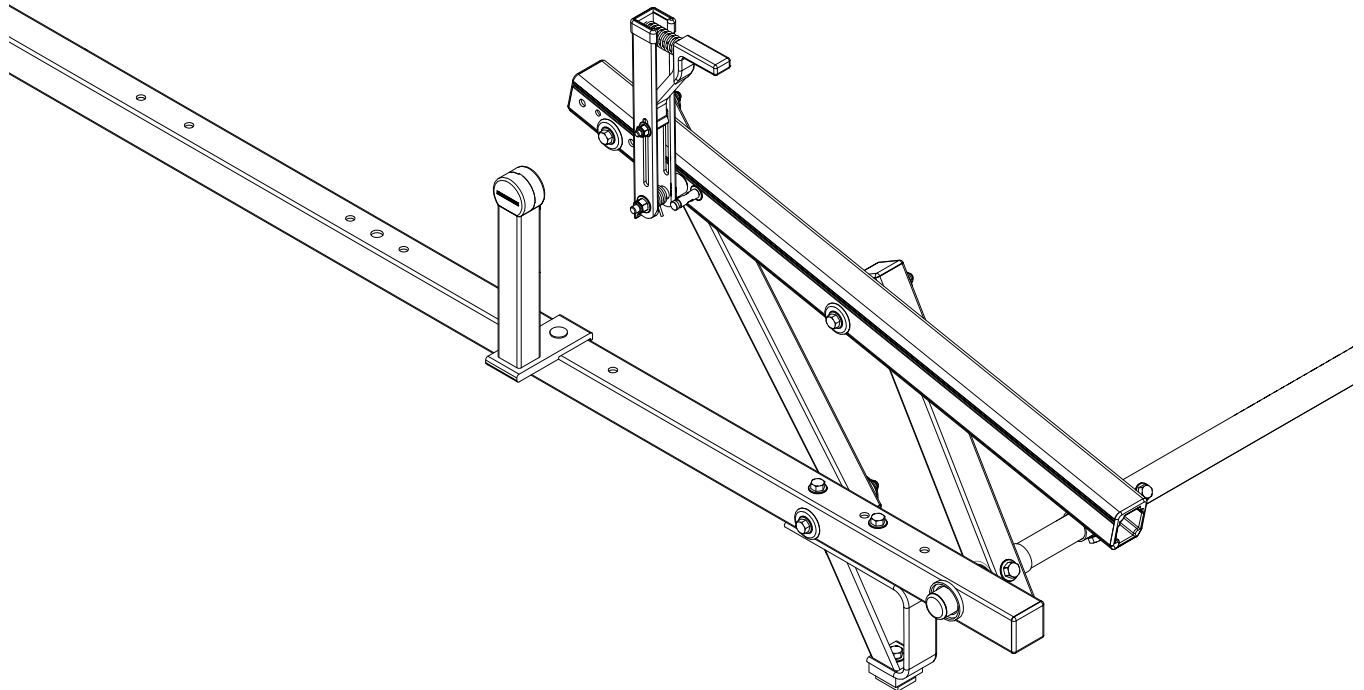
STEPS 48-49:
LEFT FRONT ROTATION AUTOCLAMP
L POST INSTALLATION

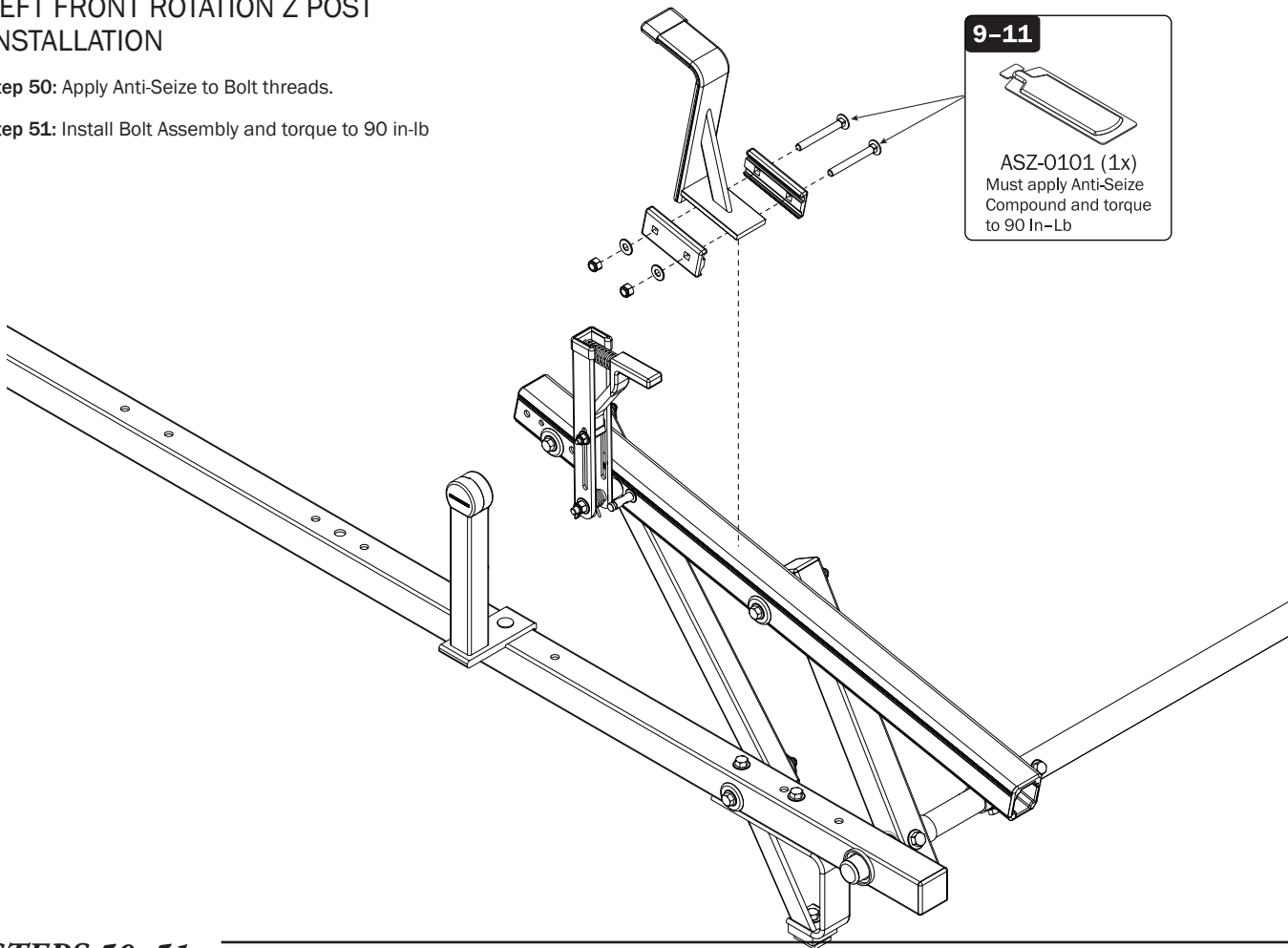
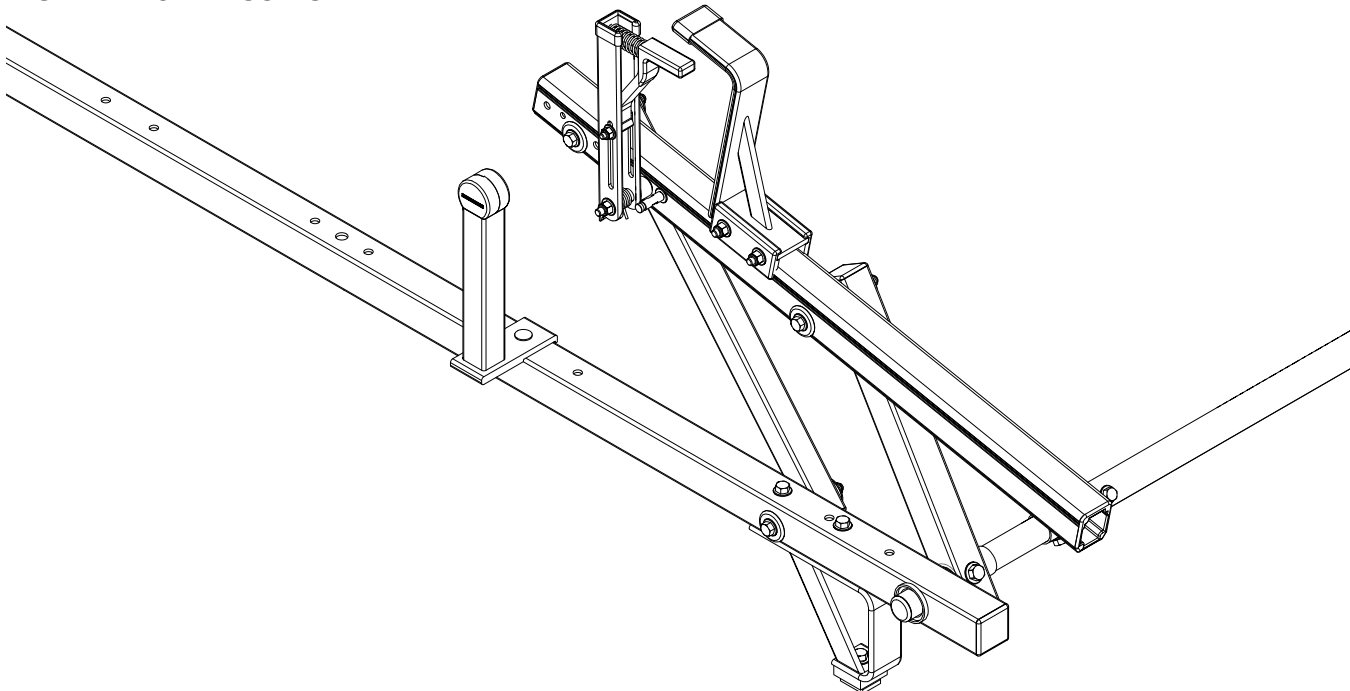
Step 48: Apply Anti-Seize to Bolt threads.

Step 49: Install Bolt Assembly and torque to 90 in-lb



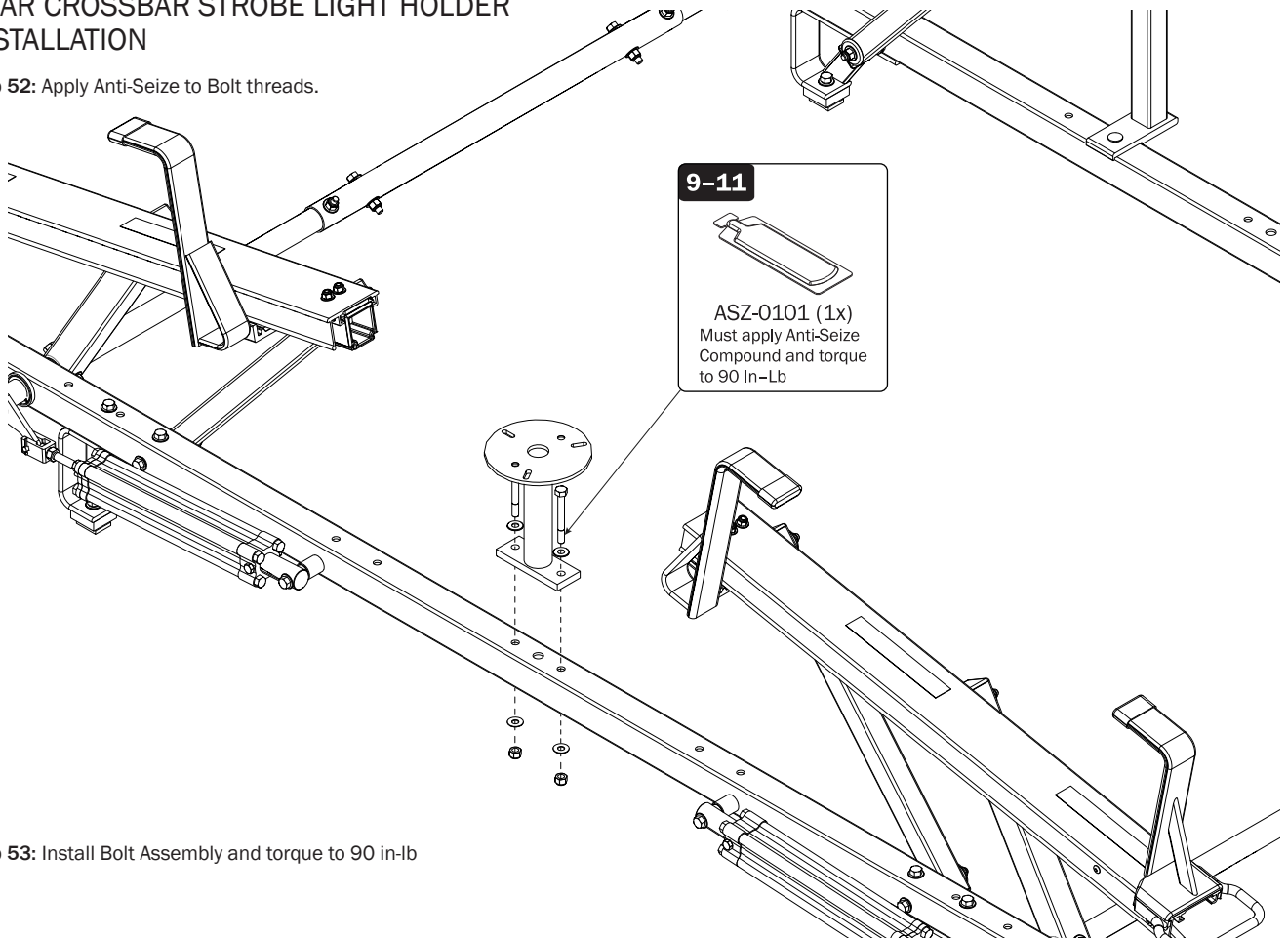
STEPS 48-49:
LEFT FRONT ROTATION AUTOCLAMP
L POST INSTALLATION RESULTS



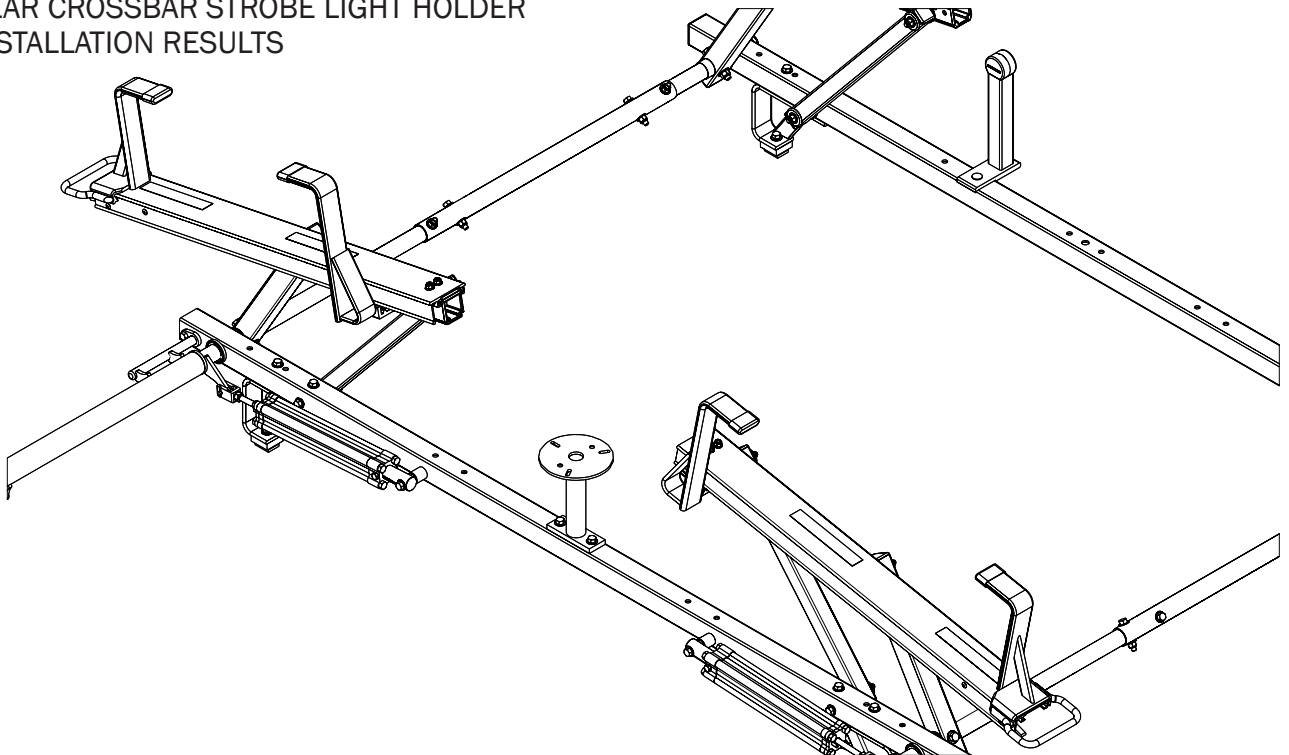
STEPS 50-51:**LEFT FRONT ROTATION Z POST
INSTALLATION****Step 50:** Apply Anti-Seize to Bolt threads.**Step 51:** Install Bolt Assembly and torque to 90 in-lb**STEPS 50-51:****LEFT FRONT ROTATION Z POST
INSTALLATION RESULTS**

STEPS 52-53:**REAR CROSSBAR STROBE LIGHT HOLDER
INSTALLATION**

Step 52: Apply Anti-Seize to Bolt threads.



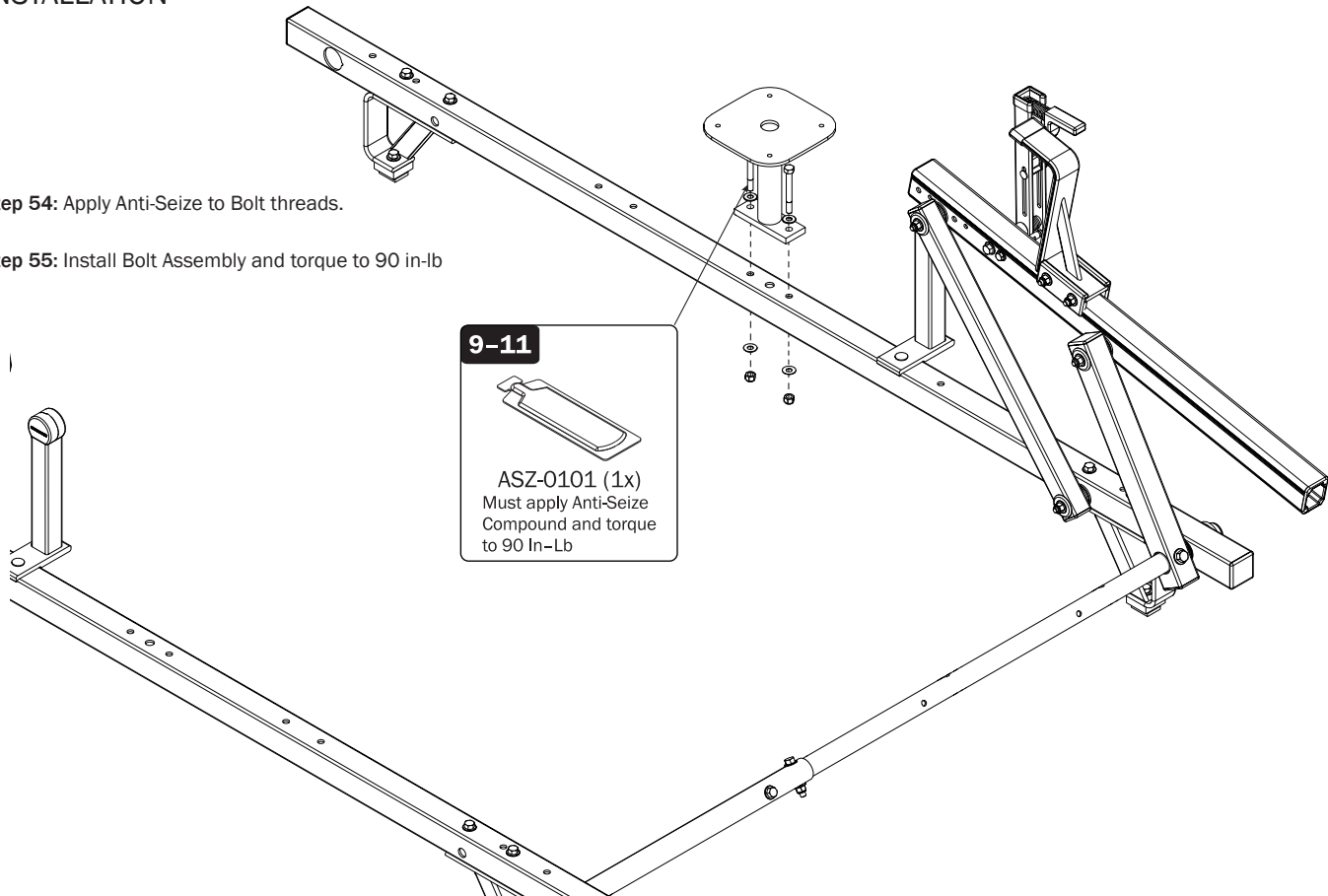
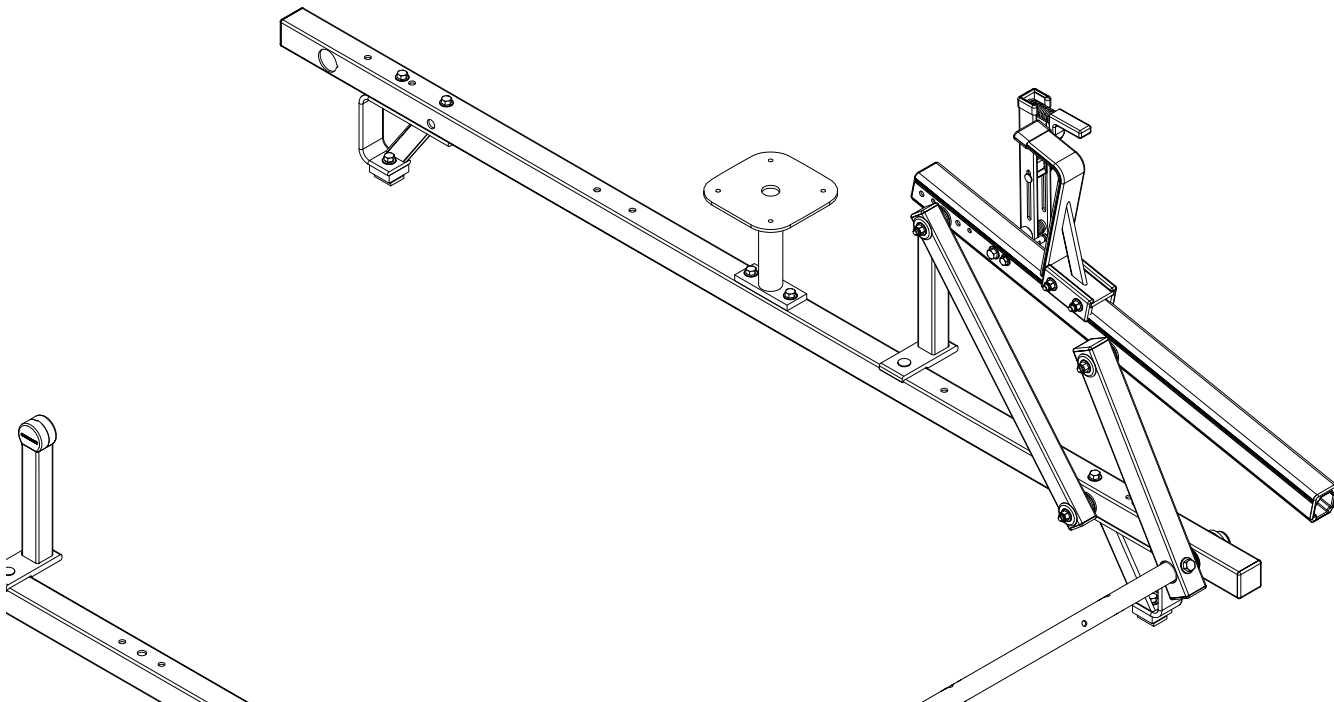
Step 53: Install Bolt Assembly and torque to 90 in-lb

STEPS 52-53:**REAR CROSSBAR STROBE LIGHT HOLDER
INSTALLATION RESULTS**

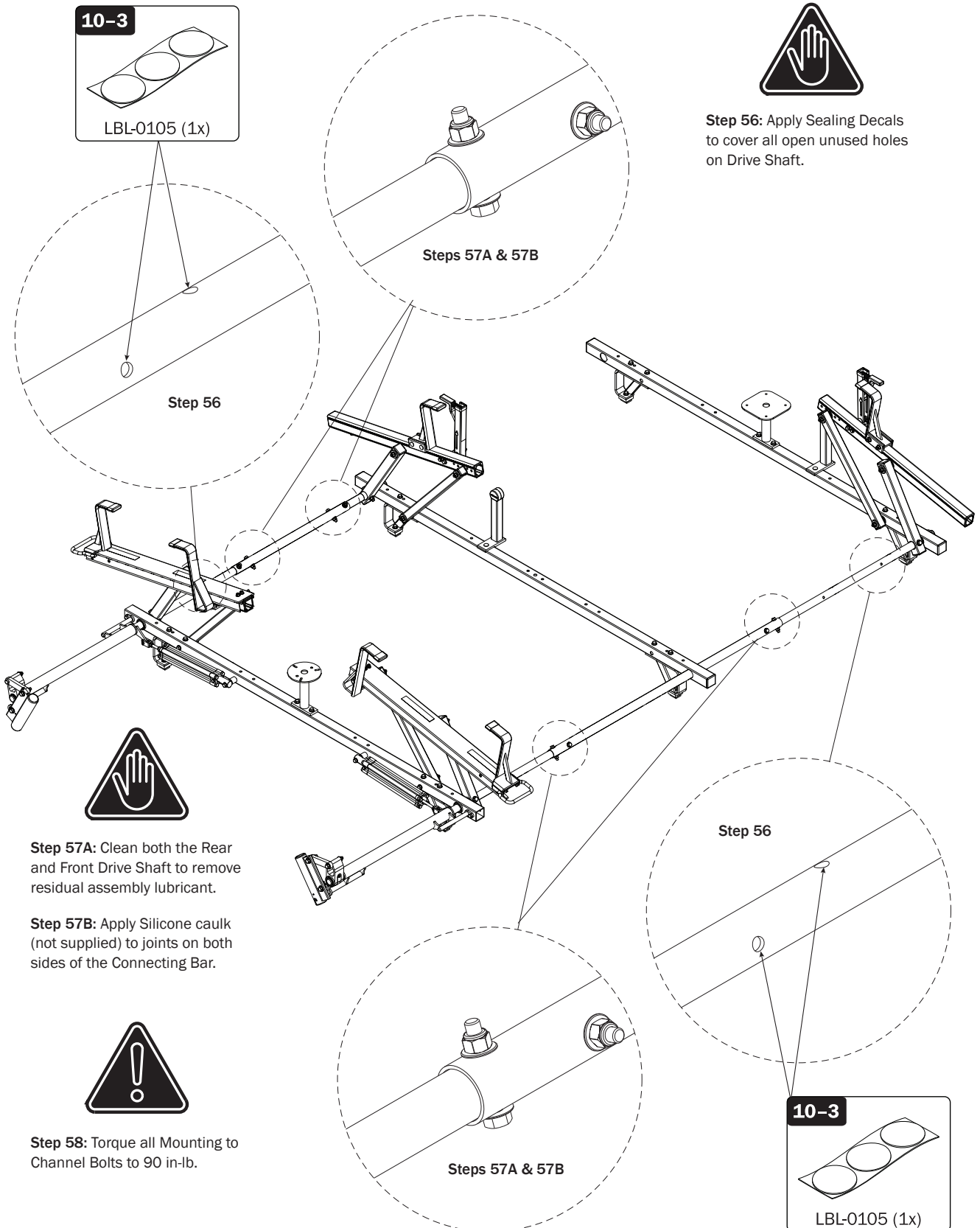
STEPS 54-55:**FRONT CROSSBAR STROBE LIGHT HOLDER
INSTALLATION**

Step 54: Apply Anti-Seize to Bolt threads.

Step 55: Install Bolt Assembly and torque to 90 in-lb

**STEPS 54-55:****FRONT CROSSBAR STROBE LIGHT
HOLDER INSTALLATION RESULTS**

STEPS 56-58: SEALING THE DRIVE SHAFTS



Step 57A: Clean both the Rear and Front Drive Shaft to remove residual assembly lubricant.

Step 57B: Apply Silicone caulk (not supplied) to joints on both sides of the Connecting Bar.

Step 58: Torque all Mounting to Channel Bolts to 90 in-lb.

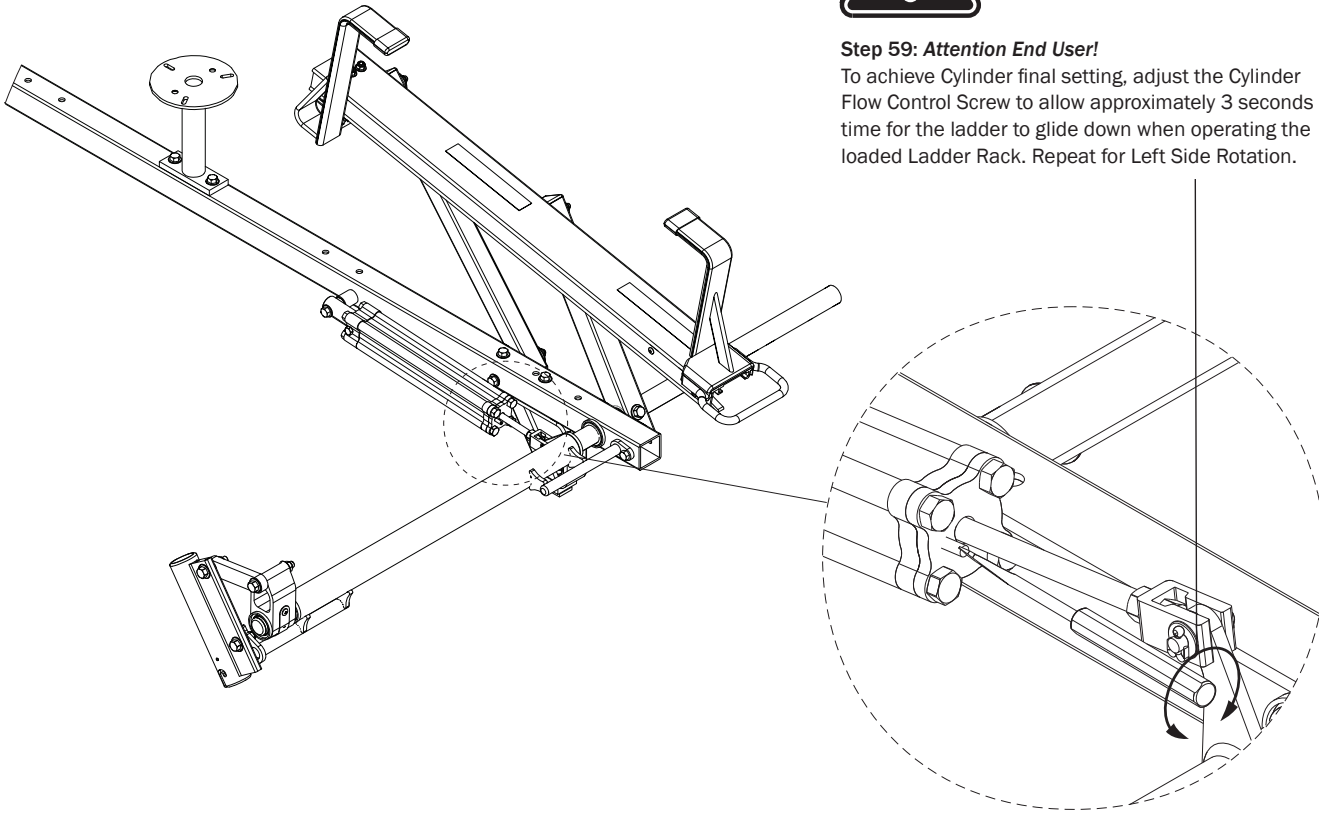
Step 56: Apply Sealing Decals to cover all open unused holes on Drive Shaft.

STEPS 59–60: ADJUSTING THE CYLINDER FLOW CONTROL



Step 59: Attention End User!

To achieve Cylinder final setting, adjust the Cylinder Flow Control Screw to allow approximately 3 seconds time for the ladder to glide down when operating the loaded Ladder Rack. Repeat for Left Side Rotation.



STEPS 59–60: ADJUSTING THE AUTO CLAMP

Step 60: Adjust the height of the Auto Clamp by loosening the nut. To obtain proper tension, do not press down on the ladder. The correct gap between the ladder rail and bottom of Auto Clamp is approximately 5mm. If less than 5mm, the Auto Clamp may not properly release while opening.



Step 60 Continued: Adjust the tension of the Z Post against the ladder. Loosen the 2 nuts where the Z Post attaches to the Cross Bar. Slide the Z Post against the ladder to compress the spring on the Auto Clamp, then re-tighten the Z Post nuts to complete.

