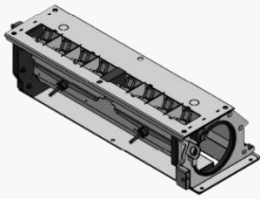


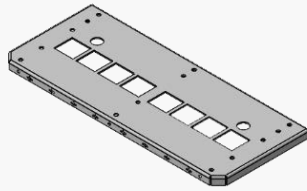
BOSS 2.0 SC Meter Housing Installation Manual



INCLUDES



**BOSS 2.0 SC Meter
Housing**



**Meter Mounting
Plate**



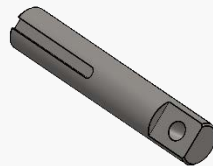
Slide Gate Plate



**Slide Gate Doors
(8)**



**Slide Gate Handles
(8)**



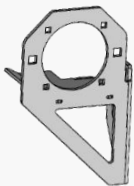
**Meter Roll Drive
Shaft**



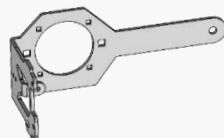
**Drive Coupler Kit
& Washer**



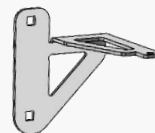
Drop-In Dividers



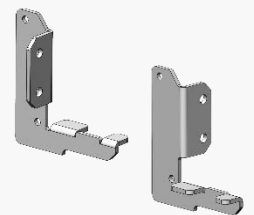
Main Bracket



L-Bracket



Shield Bracket



**Valve Body
Mounting Brackets**

HARDWARE INCLUDED

Meter Hardware

$\frac{1}{2}$ " x $1\frac{1}{4}$ " Hex Bolts (6)



O-Rings (4)



$\frac{1}{2}$ " Serrated Flange Nuts (14)



Hydraulic Bracket Hardware

$\frac{5}{16}$ " x $1\frac{3}{4}$ " Carriage Bolt (1)



$\frac{5}{16}$ " Serrated Flange Nuts (3)



$\frac{5}{16}$ " x 2" Carriage Bolts (2)



$\frac{3}{8}$ " Nyloc Flange Nuts (2)



$\frac{3}{8}$ " x $1\frac{1}{2}$ " Carriage Bolts (2)

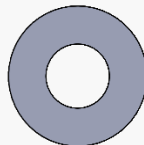


Valve Body Mounting Hardware

$\frac{3}{8}$ " x $4\frac{3}{4}$ " Hex Bolts (2)



$\frac{3}{8}$ " Washers (2)



$\frac{3}{8}$ " Nyloc Flange Nuts (2)



Note: All hardware must have anti-seize applied to prevent binding.

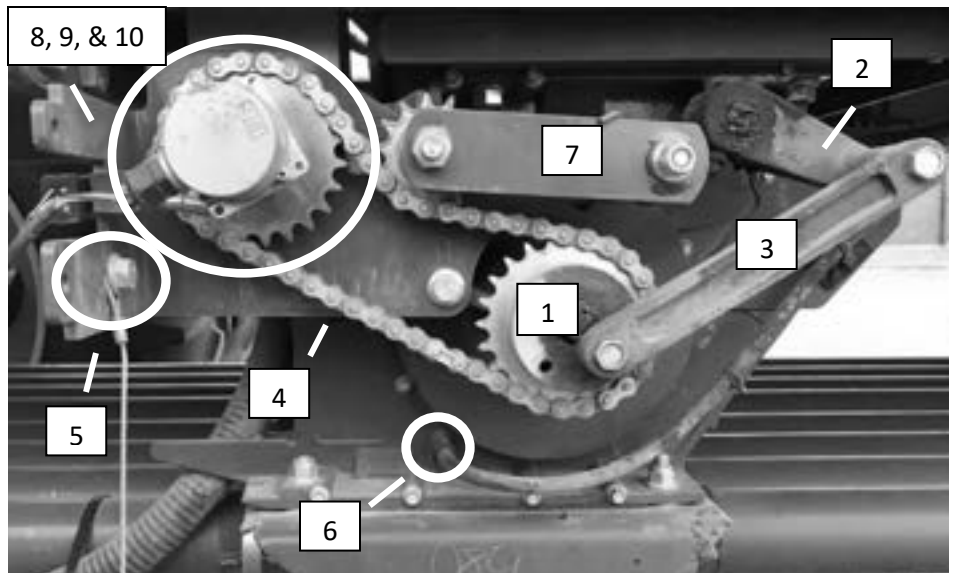
John Deere Hydraulic Meter Disassembly

After removing the tubes and the below meter components from the John Deere meter, select meter parts should be saved and reassembled onto the Boss 2.0 SC Meter Housing.

The list below includes the John Deere components that will be reused on the Boss 2.0 SC Meter Housing:

Meter Drive Side

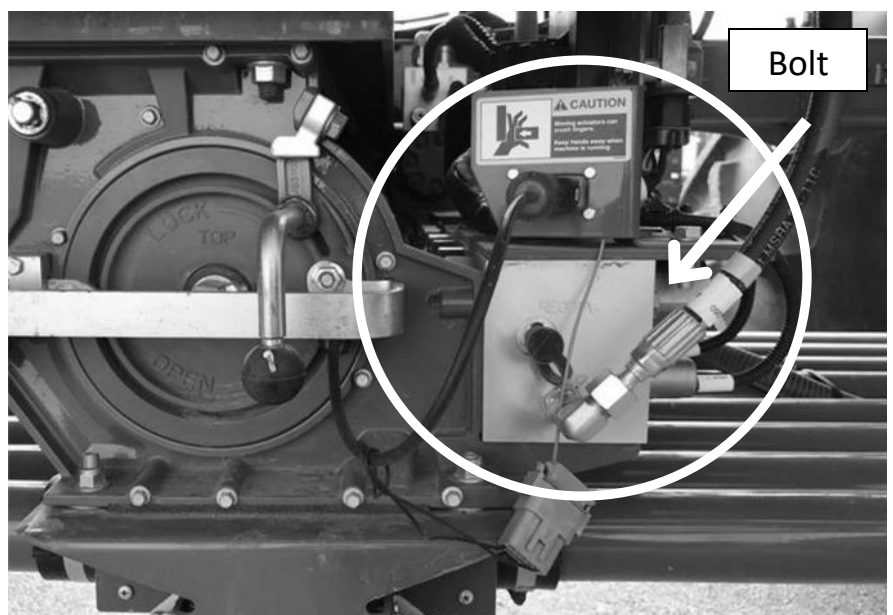
1. Drive Sprocket w/ Key
2. Agitator Drive Arm w/ Hardware
3. Drive Arm w/ Hardware
4. Chain
5. Shield Cable w/ Hardware
6. Pressure Gauge Fitting
7. Chain Tensioner w/ Hardware
8. Hydraulic Motor
9. Hydraulic Drive Sprocket
10. Motor Speed Sensor



Note: Motor Speed Sensor is reverse thread and needs to be turned clockwise to remove

Meter Roll Side

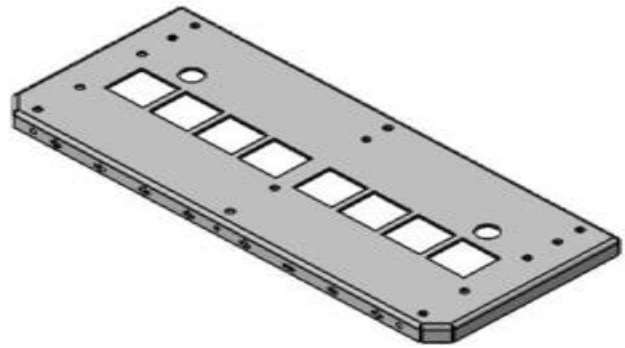
1. Valve Body (one bolt on each side)
2. Pins that connect to actuators



Meter Mounting Plate

Items Needed:

- Meter Mounting Plate
- Meter Hardware Kit
- $\frac{3}{4}$ " Wrench or Socket
- Floor Jack w/ Block of Wood
- 1 or 2 Punches
- Drill with $\frac{1}{2}$ " Drill Bit (Optional)



Step 1: Install Mounting Plate

1. Position the Mounting Plate under the Transition Gasket to make sure the ladder tube holes are aligned.

Note: Using a floor jack and a block of wood to lift the Mounting Plate will help compress the Transition Gasket into place.

$\frac{1}{2}$ " x $1\frac{1}{4}$ " Hex Bolts (4)

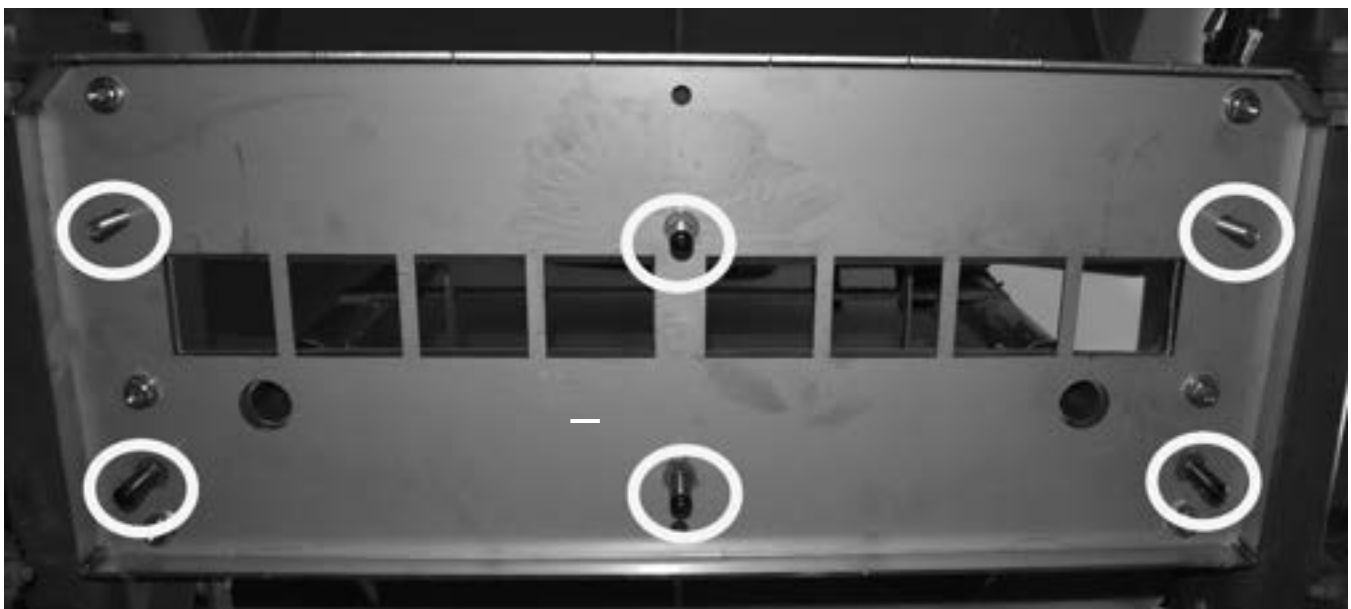


2. Using (2) $\frac{1}{2}$ " Serrated Flange Nuts, tighten down the Mounting Plate to the short studs of the Transition.
3. Secure the 4 corners of the Mounting Plate using (4) $\frac{1}{2}$ " x $1\frac{1}{4}$ " Hex Bolts and (4) $\frac{1}{2}$ " Serrated Flange Nuts to the cart frame. Punches can be used to help line up the holes.

$\frac{1}{2}$ " Serrated Flange Nuts (6)



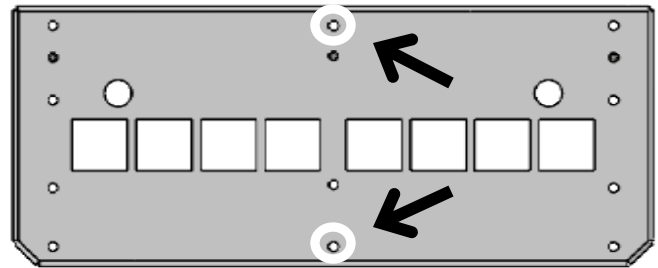
After completion, there should be 6 studs remaining for BOSS Meter attachment.



Optional:

The Meter Mounting Plate has 2 additional holes in the center of the Mounting Plate. These holes are available to provide added support to the center of the meter.

1. Using the $\frac{1}{2}$ " drill bit, drill the 2 middle holes into the frame using the Mounting Plate holes as a guide.
2. The Meter Hardware Kit includes the extra (2) $\frac{1}{2}$ " x $1\frac{1}{4}$ " Hex Bolts and (2) Serrated Flange Nuts needed to complete this step.
3. This option is not required but is highly recommended.



Slide Gate Plate and Slide Gate Doors

Although it is a replacement for the John Deere 1" foam gasket, the Slide Gate Plate **cannot** be used in conjunction with a John Deere meter without modification.

Items Needed:

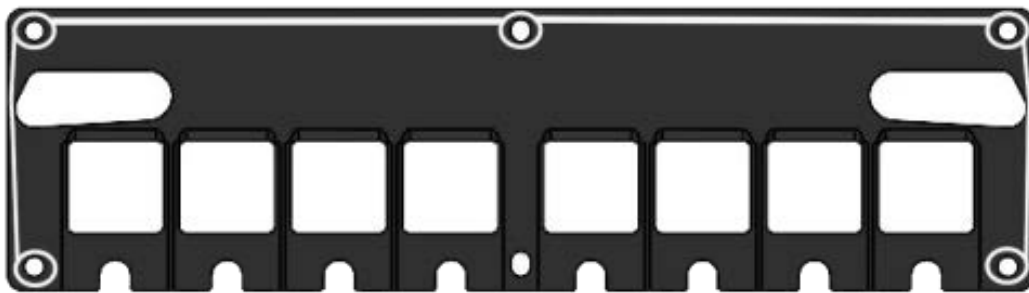
- Slide Gate Plate
- Clear Silicone
- O-Rings (4)
- Slide Gate Doors (8)



Step 1: Apply Silicone

Before installing the Slide Gate Plate on to the Mounting Plate, apply a thin line of clear silicone around the perimeter of the Slide Gate Plate on both sides – roughly $\frac{1}{8}$ " bead.

Silicone Pattern – Door Track Side



Note: Try to prevent the silicone from getting into the Slide Gate Door tracks. This could prevent the doors from sliding smoothly.

Step 2: Install Slide Gate Plate

1. Position the Slide Gate Plate onto the studs of the Meter Mounting Plate making sure the holes from the ladder tubes align with the holes in the plate.
2. Using the (4) O-Rings supplied in the Meter Hardware Kit, suspend the Slide Gate Plate on the 4 outside studs (about 1" from the Meter Mounting Plate).

O-Rings (4)

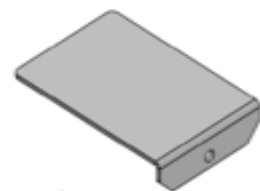


Note: The O-Rings will not be removed and will compress into the hole cavities when the meter is installed.

Step 3: Installing Slide Gate Doors

1. Insert the 8 Slide Gate Doors into the Slide Gate Plate tracks.
2. After the Slide Gate Doors are installed push the Slide Gate Plate upwards to adhere to the Meter Mounting Plate.
3. Roll the O-Rings up the studs to hold the Slide Gate Plate in position.

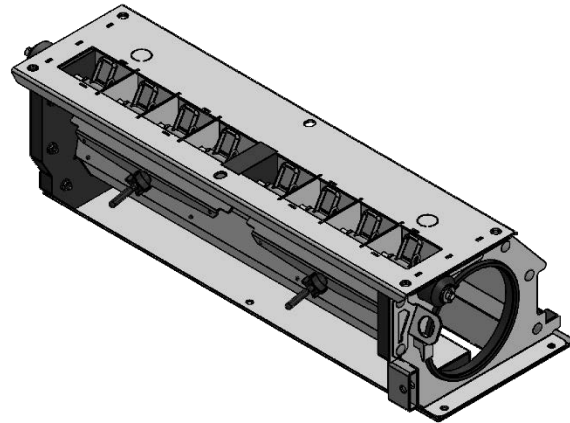
Slide Gate Doors (8)



BOSS 2.0 SC Stainless Steel Meter Housing

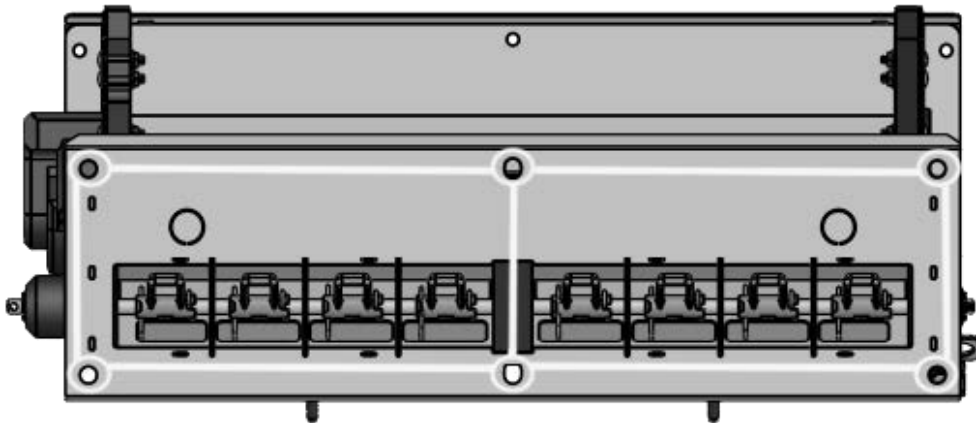
Items Needed:

- BOSS 2.0 SC Meter
- Clear Silicone
- Meter Hardware Kit
- Slide Gate Handles (8)
- Floor Jack w/ Block of Wood
- $\frac{3}{4}$ " Wrenches or Sockets (2)
- $\frac{7}{16}$ " Wrench



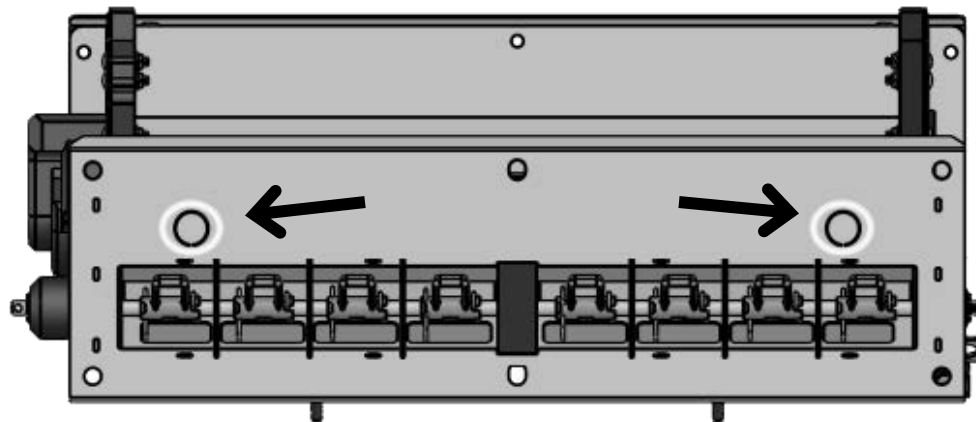
Step 1: Apply Silicone

Before installing the BOSS 2.0 SC Meter Housing apply $\frac{1}{8}$ " bead of clear silicone to the top of the housing as shown below.



Optional:

There are 2 holes in the top of the meter, as shown below. These holes are for the option to run tank pressure through the ladder using the Knock-Out Style Tank Pressure Kit (KOTPKIT100). If using the Tank Pressure Kit (TPKIT100) to deliver pressure, DO NOT punch out these holes and instead seal with silicone.



Step 2: Meter Housing Installation

1. Double check to make sure the Slide Gate Doors are in position before lifting the Meter Housing in place.
2. Position the Meter Housing and secure with (6) $\frac{1}{2}$ " Serrated Flange Nuts.
3. While tightening, slide the Slide Gate Doors back and forth to make sure they are still in position.

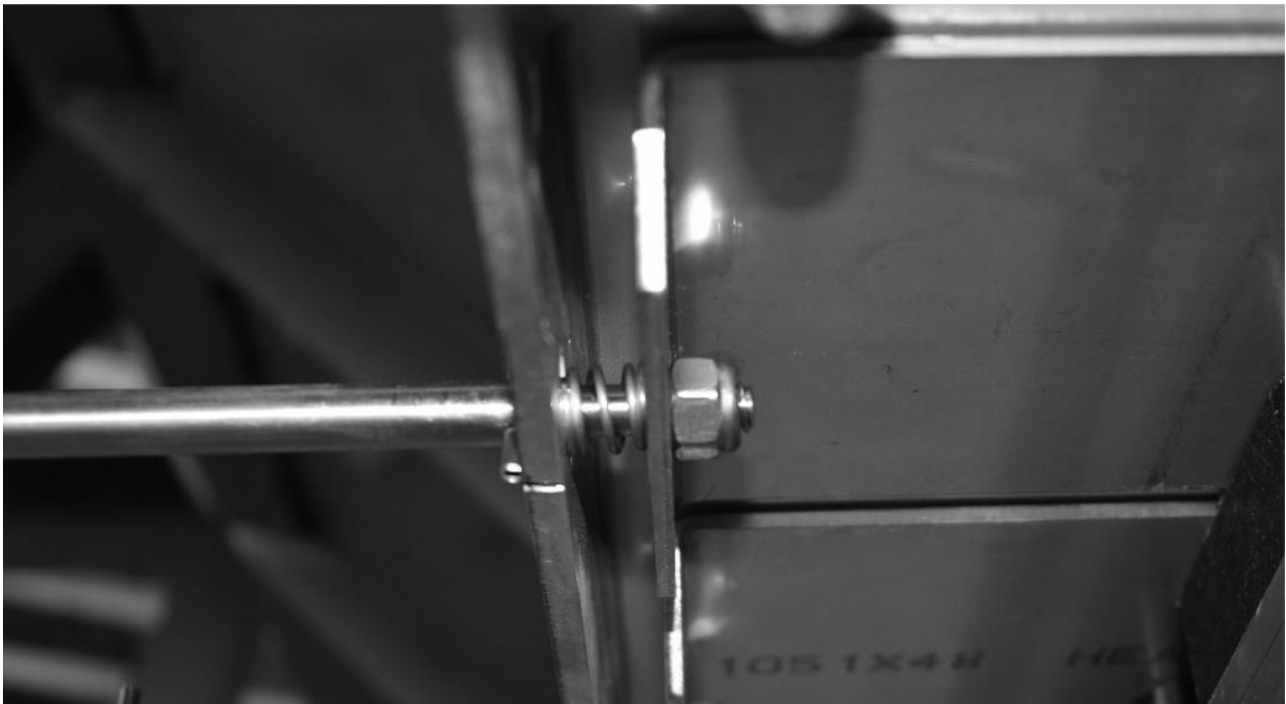
$\frac{1}{2}$ " Serrated Flange Nuts (6)



Step 3: Slide Gate Handles

1. Insert the Slide Gate Handle through the holes in the Meter Mounting Plate.
2. Add the spring before inserting the handle through the Slide Gate Door.
3. Attach the Nyloc Nut onto the handle on the inside of the door.
4. Using a $\frac{7}{16}$ " wrench, tighten the nut until 1 thread is showing as shown below.

Slide Gate Handle (8)



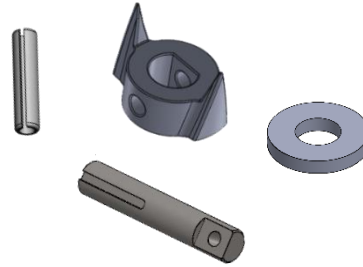
Assembly order of the Slide Gate Handle

Meter Mounting Plate – Spring – Slide Gate Door – Nyloc Nut

Meter Roll Drive Shaft and Drive Coupler

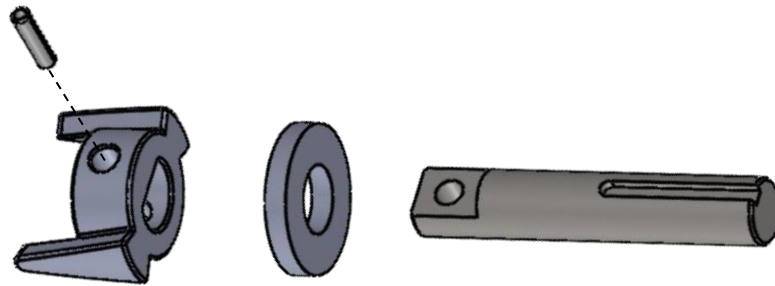
Items Needed:

- Drive Coupler Kit & Washer
- Meter Roll Drive Shaft



Step 1: Install Meter Roll Shaft

1. Attach the Drive Coupler to the Meter Roll Drive Shaft using the roll pin provided in the Drive Coupler Kit.

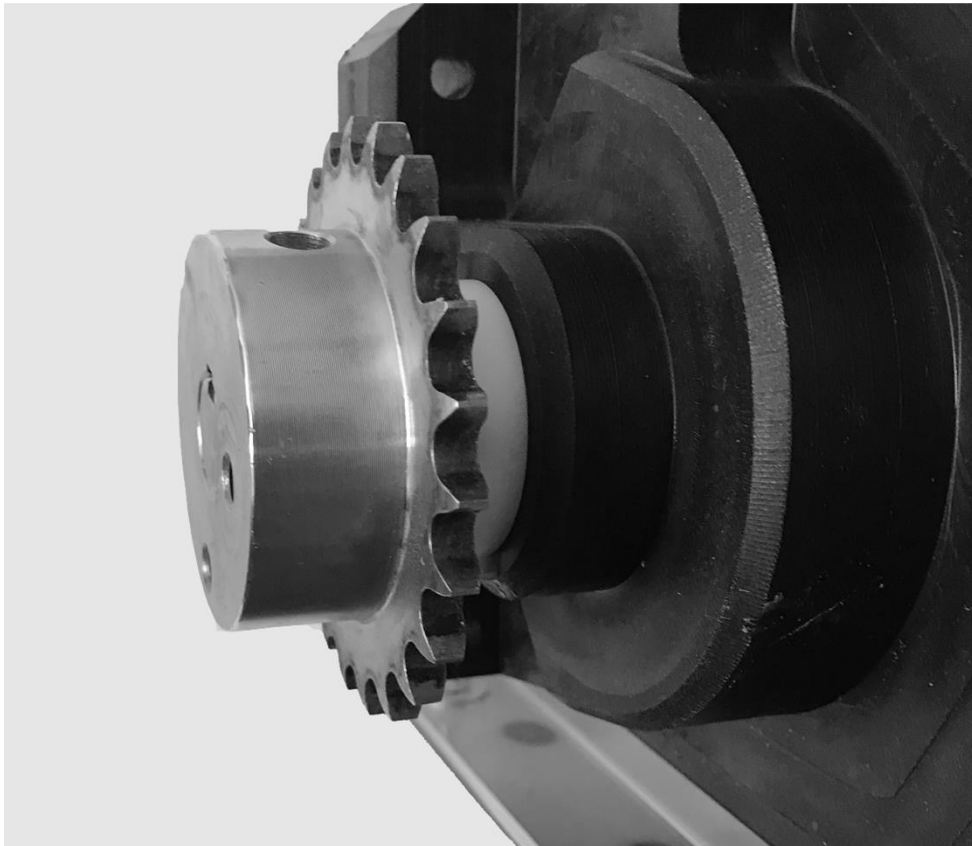


2. Place the provided plastic washer onto the shaft.
3. Insert through the hole on the inside of the meter housing as shown below:



Step 2: Hydraulic Drive Sprocket

1. Slide the Hydraulic Drive Sprocket onto the shaft. The sprocket should be installed with the tooth end closest to the housing, as shown in the picture below.
2. The shaft should be close to flush with the end of the sprocket. You may need to apply pressure to the shaft from the inside to help with adjustment.
3. Add the shaft key and tighten the set screw.

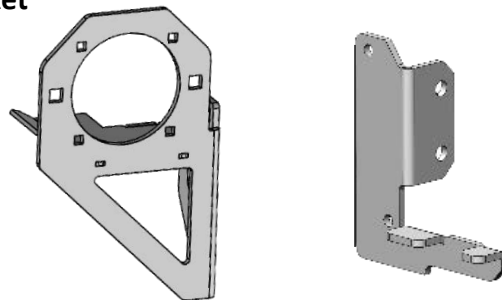


Hydraulic Drive & Valve Body Mounting Brackets

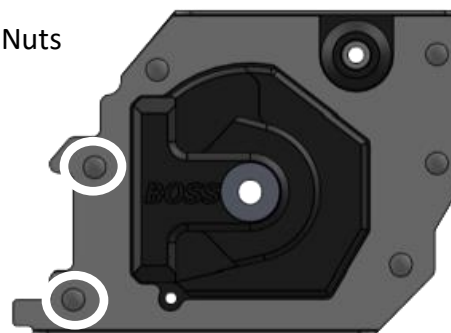
Step 1: Install Main Bracket & Right Valve Body Mounting Bracket

Items Needed:

- Main Bracket
- Hydraulic Bracket Hardware Kit
- $\frac{1}{2}$ " Wrench or Socket
- Right Valve Body Mounting Bracket



1. Remove the (2) $\frac{5}{16}$ " x 1 $\frac{1}{2}$ " Carriage Bolts and Serrated Flange Nuts from the drive end. **The top bolt and nut will not be re-used.**

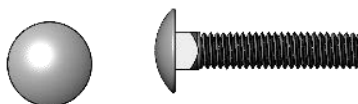


2. Attach the Main Bracket and Right Valve Body Mounting Bracket reusing (1) $\frac{5}{16}$ " x 1 $\frac{1}{2}$ " and nut and (1) $\frac{5}{16}$ " x 1 $\frac{3}{4}$ " Carriage Bolt and Serrated Flange Nut from the Hydraulic Bracket Hardware Kit.

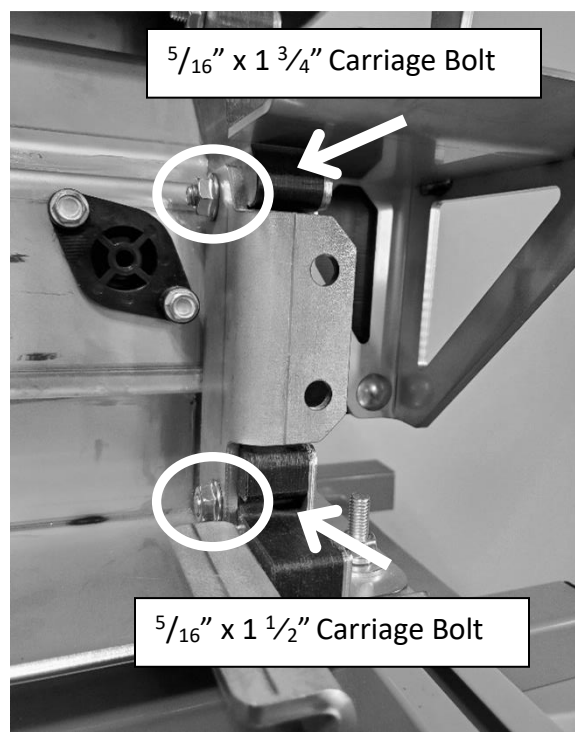
$\frac{5}{16}$ " x 1 $\frac{3}{4}$ " Carriage Bolt (1)



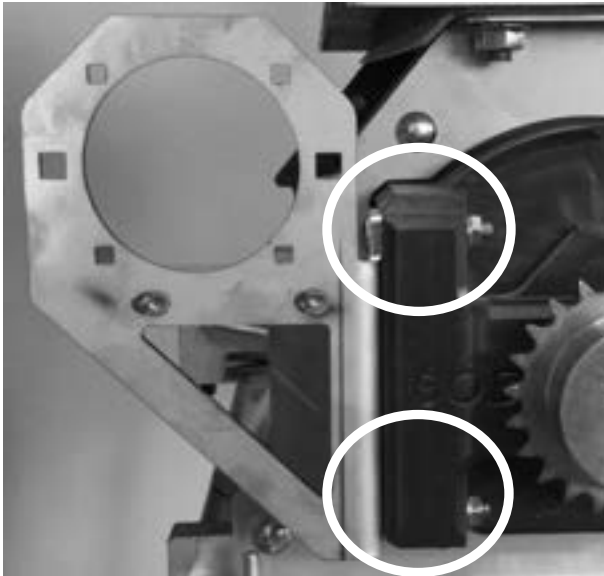
$\frac{5}{16}$ " x 1 $\frac{1}{2}$ " Carriage Bolt (1)



$\frac{5}{16}$ " Serrated Flange Nuts (2)



3. Use two $\frac{5}{16}$ " x 2" Carriage Bolts to attach the Main Bracket to the side of the end cap shown below.



$\frac{5}{16}$ " x 2" Carriage Bolts (2)



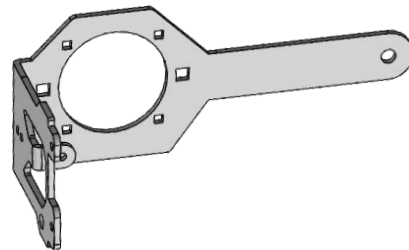
$\frac{5}{16}$ " Serrated Flange Nuts (2)



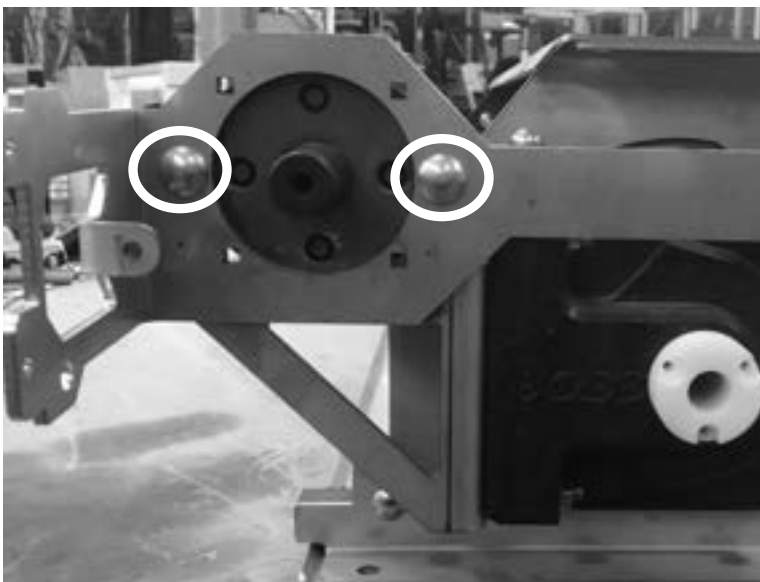
Step 2: Install L-Bracket

Items Needed:

- Hydraulic Motor (from disassembly)
- L-Bracket
- Hydraulic Bracket Hardware Kit
- $\frac{9}{16}$ " Wrench and Socket



1. Attach the L-Bracket using two $\frac{3}{8}$ " x 1 $\frac{1}{2}$ " Carriage Bolts with $\frac{3}{8}$ " Nyloc Flange Nuts. The bolts hold the Hydraulic Motor and the L-Bracket in position.



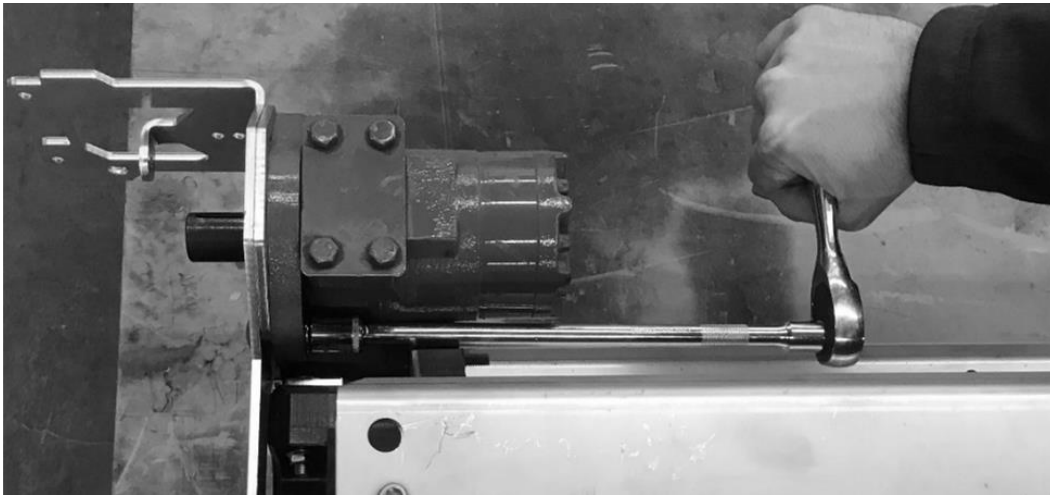
$\frac{3}{8}$ " x 1 $\frac{1}{2}$ " Carriage Bolts (2)



$\frac{3}{8}$ " Nyloc Flange Nuts (2)

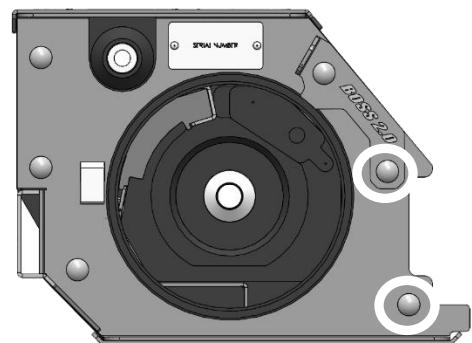


Note: An extension is needed to reach the inside $\frac{3}{8}$ " Nyloc Flange Nut to attach the Hydraulic Motor.

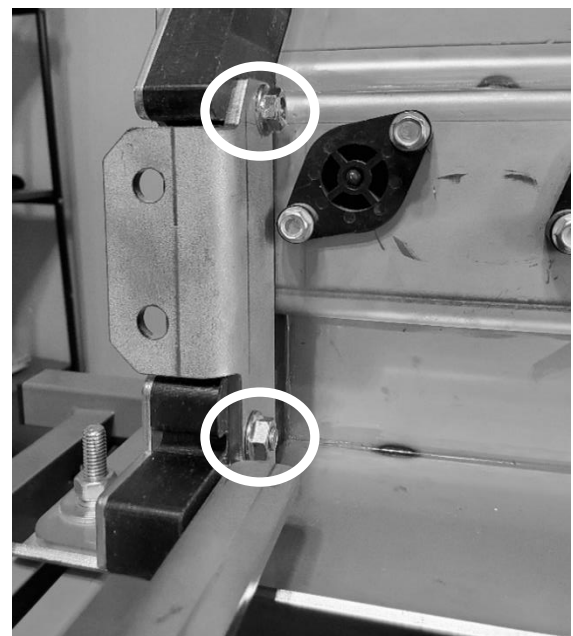


Step 3: Install Left Valve Body Mounting Bracket

1. Remove the (2) $\frac{5}{16}$ " x $1\frac{1}{2}$ " Carriage Bolts and Serrated Flange Nuts from the meter roll end.



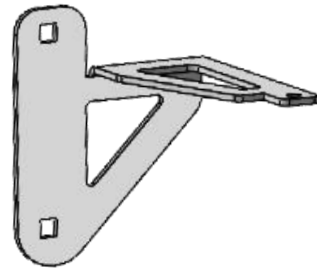
2. Attach the Left Valve Body Mounting Bracket reusing the (2) $\frac{5}{16}$ " x $1\frac{1}{2}$ " and nuts that were taken off.



Step 4: Install Shield Bracket

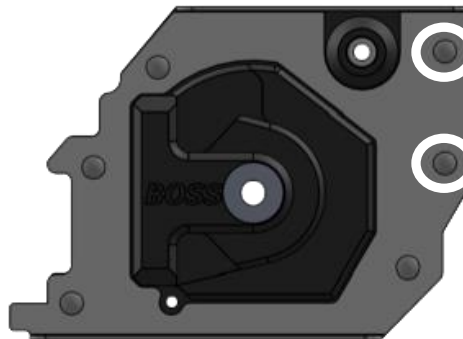
Items Needed:

- Shield Bracket
- $\frac{1}{2}$ " Wrench or Socket



Install Shield Bracket

1. When attaching the Shield Bracket, first remove the two $\frac{5}{16}$ " x $1\frac{1}{2}$ " Carriage Bolts, as shown below.



2. Position the Shield Bracket onto the meter housing and tighten reusing the hardware removed previously.



3. Make sure that the cable is tightened so that the cable eyelet is facing straight out. This will allow the meter clean-out door to move freely.



Note: All hardware must have anti-seize applied to prevent binding.

JD SectionCommand™ Installation

1. Place the pins onto the actuators and slide the valve body into position.

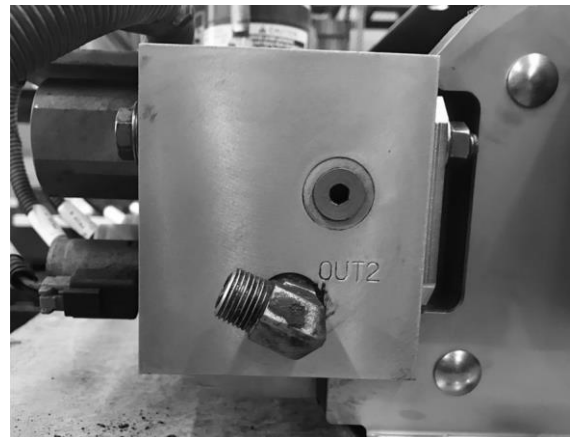
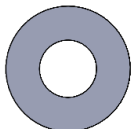


2. Using the hardware from the Valve Body Hardware Kit, bolt the Valve Body to the Valve Body Mounting Brackets.

$\frac{3}{8}$ " x 4 $\frac{3}{4}$ " Hex Bolts (2)

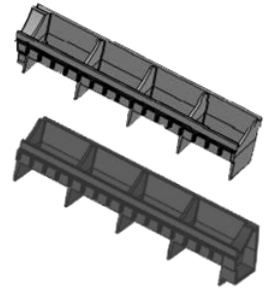


$\frac{3}{8}$ " Washers (2) $\frac{3}{8}$ " Nyloc Flange Nuts (2)

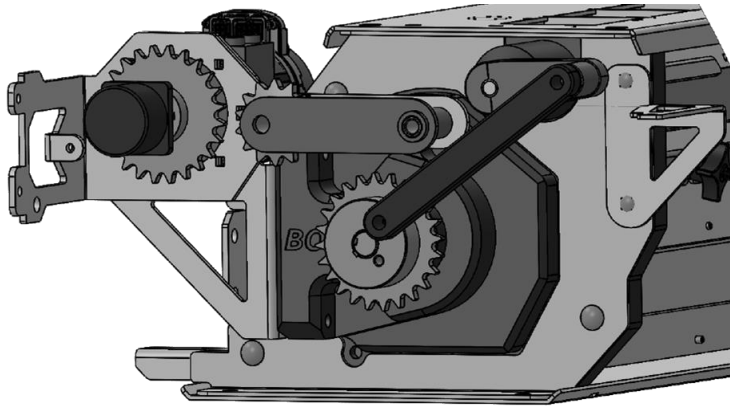


After Hydraulic Brackets Are Installed

- Drop-In Dividers
- John Deere Parts from Disassembly

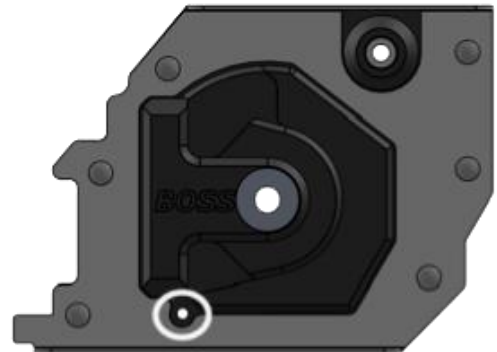


Below is an image showing the reassembly of the John Deere meter components.



Pressure Gauge Fitting

The Tank Pressure Gauge Fitting is attached to the meter through the hole as shown. The hose fitting threads into the hole.



Drop-In Dividers

The set of Drop-In Dividers need to be placed inside the meter so that the Pressure Gauge Fitting fits into the hole in the divider.

Note: The Drop-In Dividers should be inserted after the run kits have been installed.

