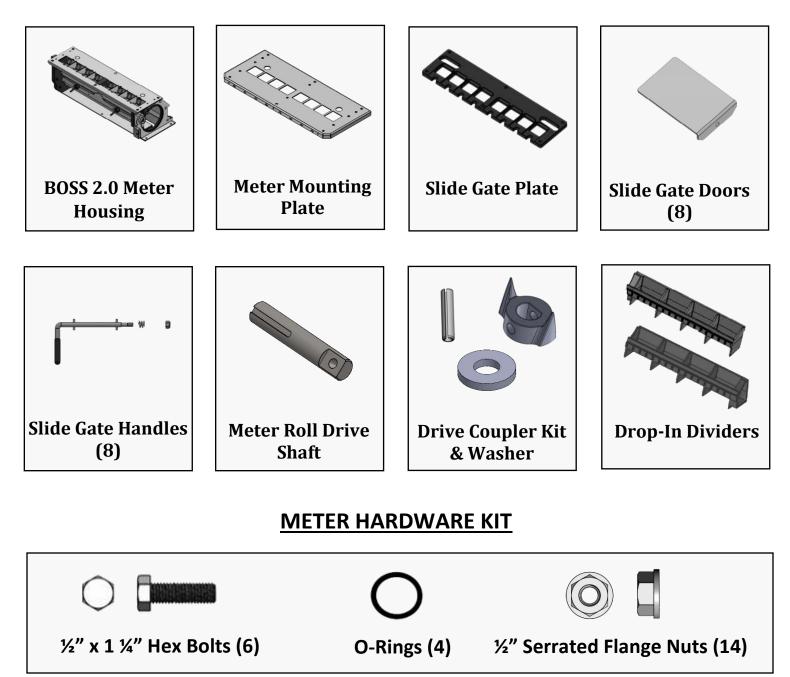
# **BOSS 2.0 Meter Housing Installation Manual**





# **INCLUDES**

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

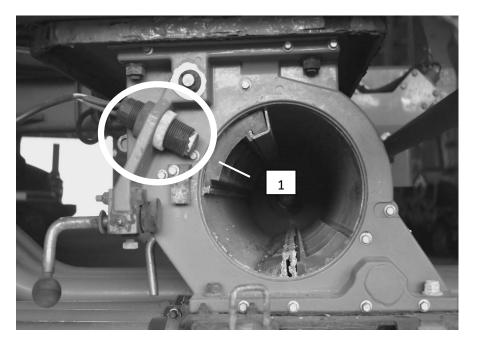
# John Deere Meter Disassembly

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

Note: Below is the listing of the John Deere components that will be reused on the Boss 2.0 Ground Drive Meter. If you have a hydraulic drive meter, please refer to the disassembly page in the Hydraulic Bracket Kit directions for parts listing.

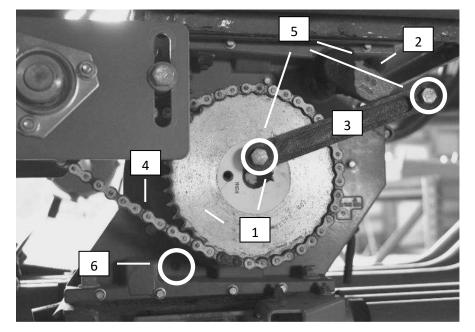
# Meter Cartridge Side

1. Wheel Speed Sensor



# **Meter Drive Side**

- 1. Drive Sprocket w/ Key
- 2. Agitator Drive Arm
- 3. Drive Arm
- 4. Chain
- 5. Hardware
- 6. Pressure Gauge Fitting





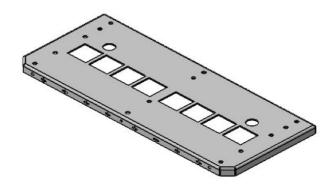
# **Meter Mounting Plate**

Items Needed:

- Meter Mounting Plate
- ½" x 1 ¼" Hex Bolts (4)
- <sup>1</sup>/<sub>2</sub>" Serrated Flange Nuts (6)
- ¾" Wrench or Socket
- Floor Jack w/ Block of Wood
- 1 or 2 Punches
- Drill with ½" Drill Bit (Optional)

# **Step 1: Install Mounting Plate**

- Position the Mounting Plate under the Transition Gasket to make sure the ladder tube holes are aligned.
   Note: Using a floor jack and block of wood to lift the Mounting Plate will help compress the Transition Gasket into place.
- Using (2) ½" Serrated Flange Nuts, tighten down the Mounting Plate to the short studs of the Transition.
- Secure the 4 corners of the Mounting Plate using (4) ½" x 1 ¼" Hex Bolts and (4) ½" Serrated Flange Nuts to the cart frame. Punches can be used to help line up the holes.



1/2" x 1 1/4" Hex Bolts (4)



# 1/2" Serrated Flange Nuts (6)



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



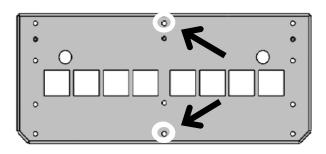


# **Optional:**

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.

- Using the ½" drill bit, drill the 2 middle holes into the frame using the Mounting Plate holes as a guide.
- The Meter Hardware Kit include the extra

   ½" x 1 ¼" 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 **can not** be used in conjunction with a John Deere meter without modification.

# Items needed:

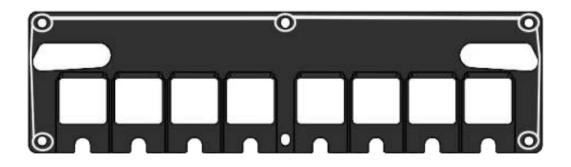
- Slide Gate Plate
- Clear Silicone
- O-Rings (4)
- Slide Gate Doors (8)



# 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 1/8" bead.

# Silicone Pattern – Door Track Side



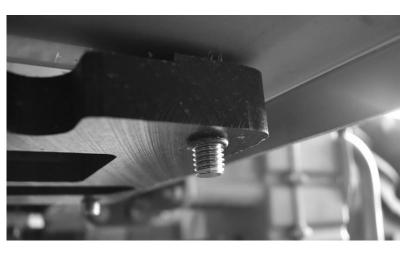
Note: Try to prevent the silicone from getting into the Slide Gate Door tracks. This could prevent the doors from sliding smoothly.



### Step 2: Install Slide Gate Plate

- Position the Slide Gate Plate on the studs of the Meter Mounting Plate, making sure the holes from the ladder tubes align.
- 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)

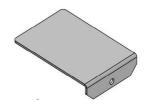


Note: The O-Rings will not be removed and will compress into the hole cavities when the meter is installed.

#### **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 place.

Slide Gate Doors (8)



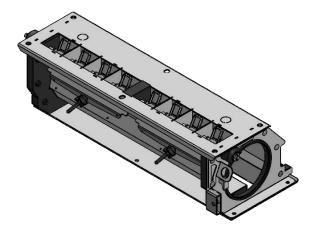




# **BOSS 2.0 Stainless Steel Meter Housing**

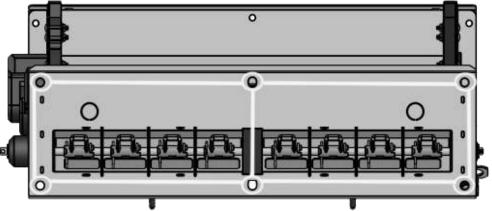
Items Needed:

- BOSS 2.0 Meter
- Clear Silicone
- 1/2" Serrated Flange Nuts (6)
- Slide Gate Handles (8)
- Floor Jack w/ Block of Wood
- ¾" Wrenches or Sockets (2)
- <sup>7</sup>/<sub>16</sub>" Wrench



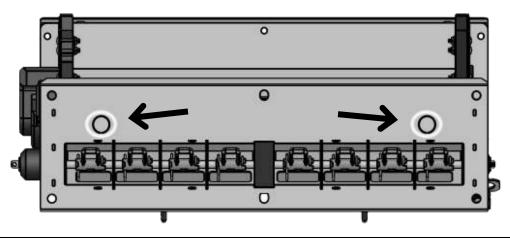
# Step 1: Apply Silicone

Before installing the BOSS Meter Housing, apply 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, shown in the image below. These holes are an option to run tank pressure though 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 into place.
- Position the Meter Housing and secure with (6) ½" Serrated Flange Nuts.
- 3. While tightening, slide the Slide Gate Doors back and forth to make sure they are still in position.

#### Step 3: Slide Gate Handles

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

# ½" Serrated Flange Nuts (6)



# Slide Gate Handle (8)





#### Assembly order of the Slide Gate Handle

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



# After Meter is Installed

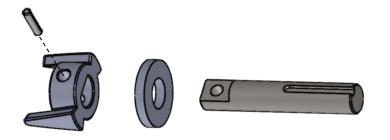
Items Needed:

- Drive Coupler Kit & Washer
- Meter Roll Shaft
- Drop-In Dividers
- John Deere Parts from Disassembly



# Step 1: Drive Sprocket/Meter Roll Shaft

1. Attach the Drive Coupler to the Meter Roll 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:





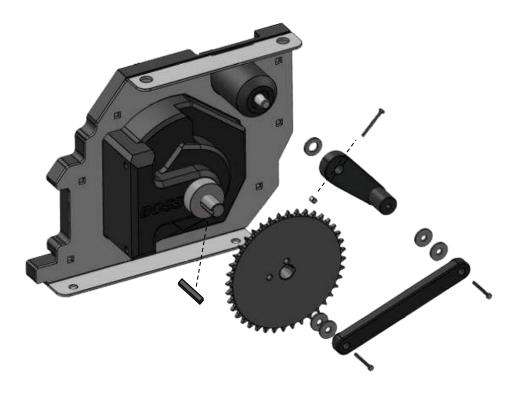
# Step 2: Ground Drive Sprocket

The Ground Drive Meter uses the chain driven mechanism to drive the meter roll. If you have a hydraulic drive meter, please skip this last section, and refer to the directions included in the Hydraulic Drive Bracket Kit.

- 1. Slide the Ground Drive Sprocket onto the shaft.
- 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 set screw.



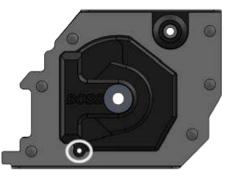
Below is a diagram for the reassembly of the John Deere components.





# Step 3: 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.



### Step 4: Drop-In Dividers

When installing the Drop-In Dividers, make sure 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.



#### Step 5: Wheel Speed Sensor

The Wheel Speed Sensor needs to be re-attached with the appropriate spacing (about  $1/_{16}$ ") between the end of the sensor and the Meter Tone Wheel.

