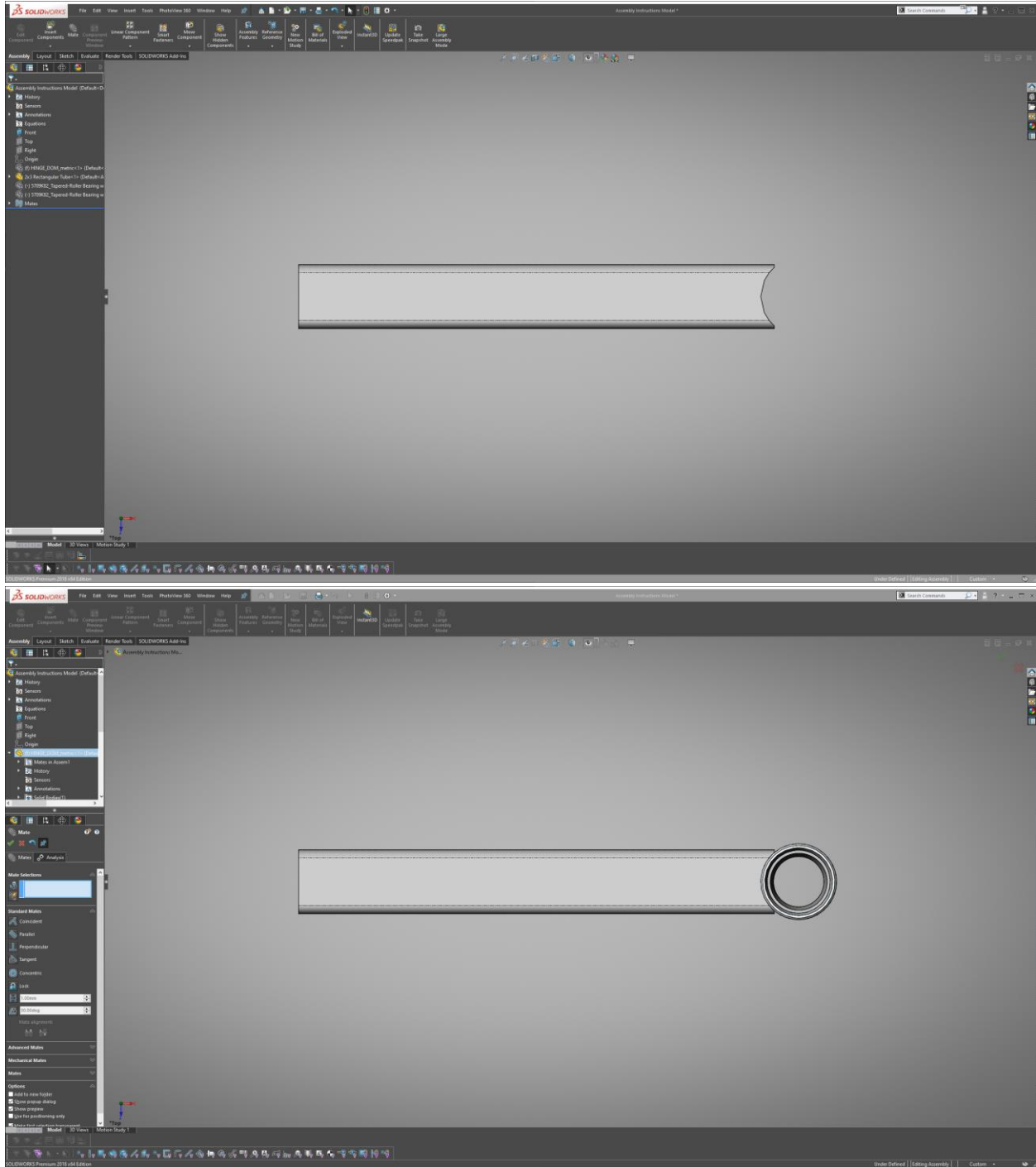
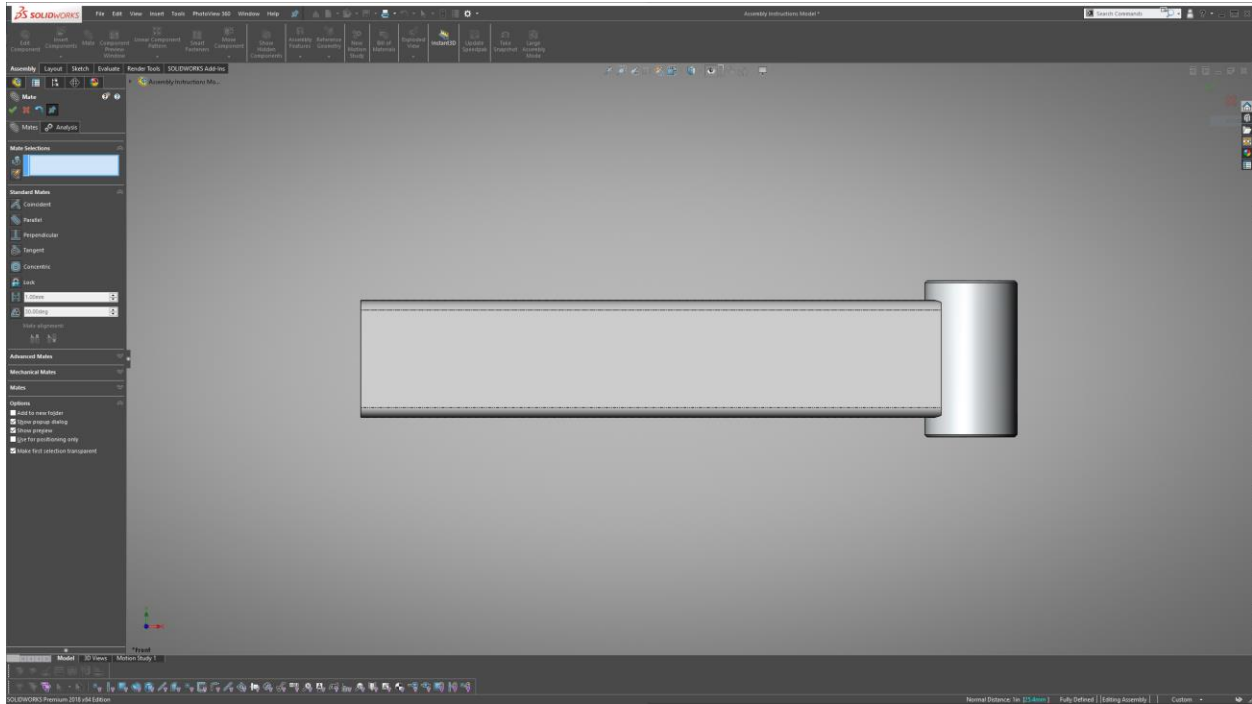


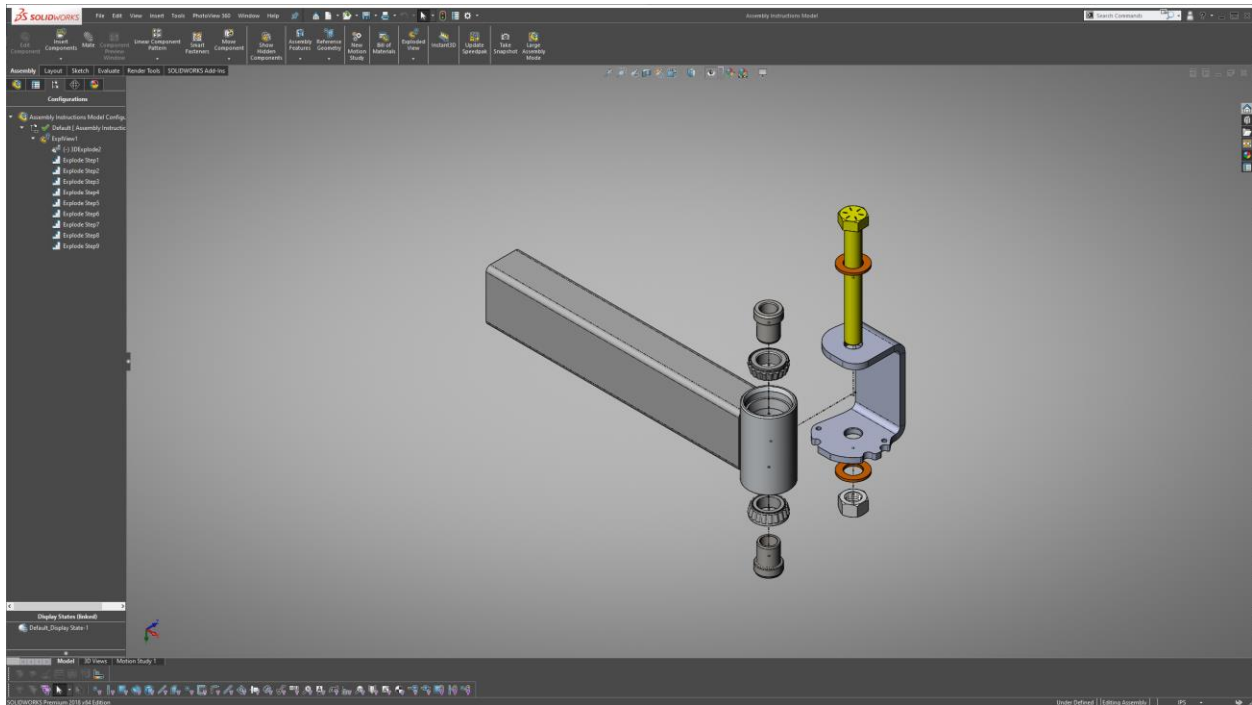
Heavy Duty Hinge Kit Assembly Instructions

1. Cut a moon cutout in your swing arm tube (2x2 or 2x3) and tack weld it perpendicular and center to the Hinge Body (2.375"x4") *Use the Hinge Tube as a guide to trace out your moon cutout for the tube.



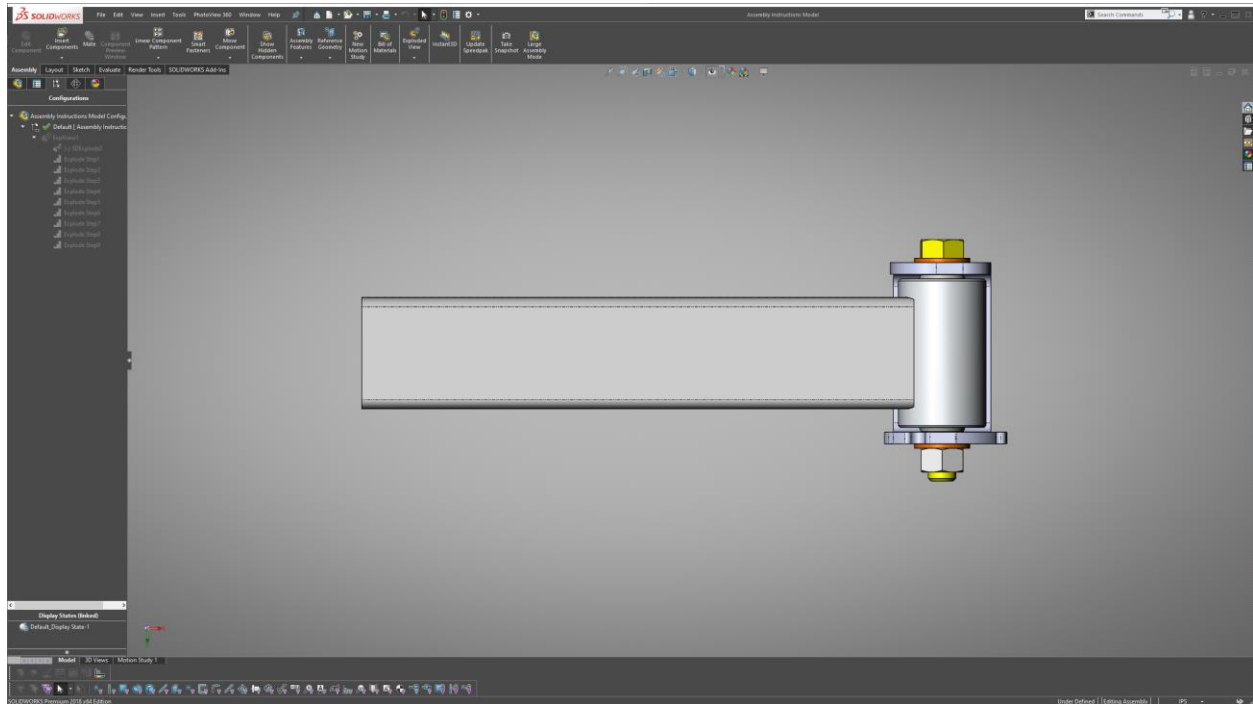


2. Next, dry fit the hinge assembly with the swing arm. Pre-install the Taper Roller Bearings, Bearing Sleeve, Hex bolt+ steel nut, washers, and hinge bracket.



3. Tighten it up (really snug) all the way then back off the nut a turn or two (somewhere in the middle of really tight and loose). This will allow for later on when you need to adjust the arm to

the desired angle so that it closes correctly. This is because after you put the tire on and whatever additional weight the horizontal (swing) arm will want to sag down ever so slightly below horizontal and this will allow you to straighten back up and compensate.

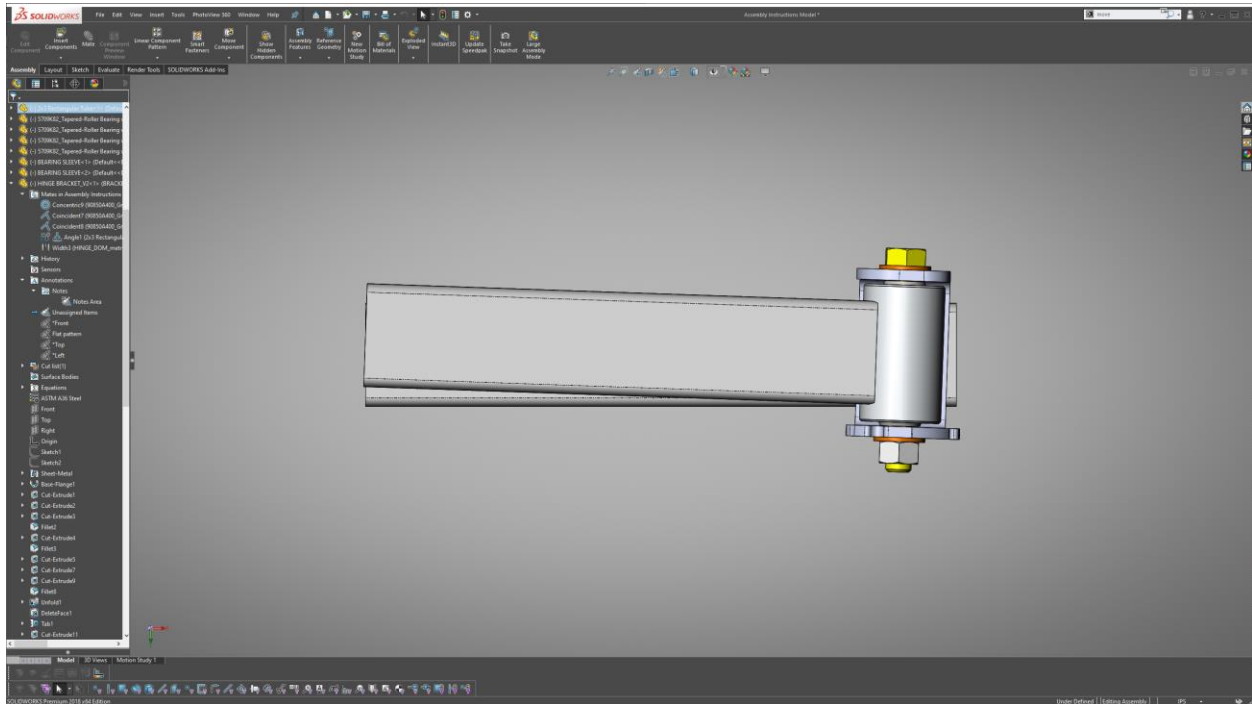


4. Next, you're going to want to clock the hinge assembly clockwise 1 or 2 degrees from wherever you're going to mount it.

Enough so the swing arm that slides over the plastic wear pad is about (1/16) higher from horizontal.

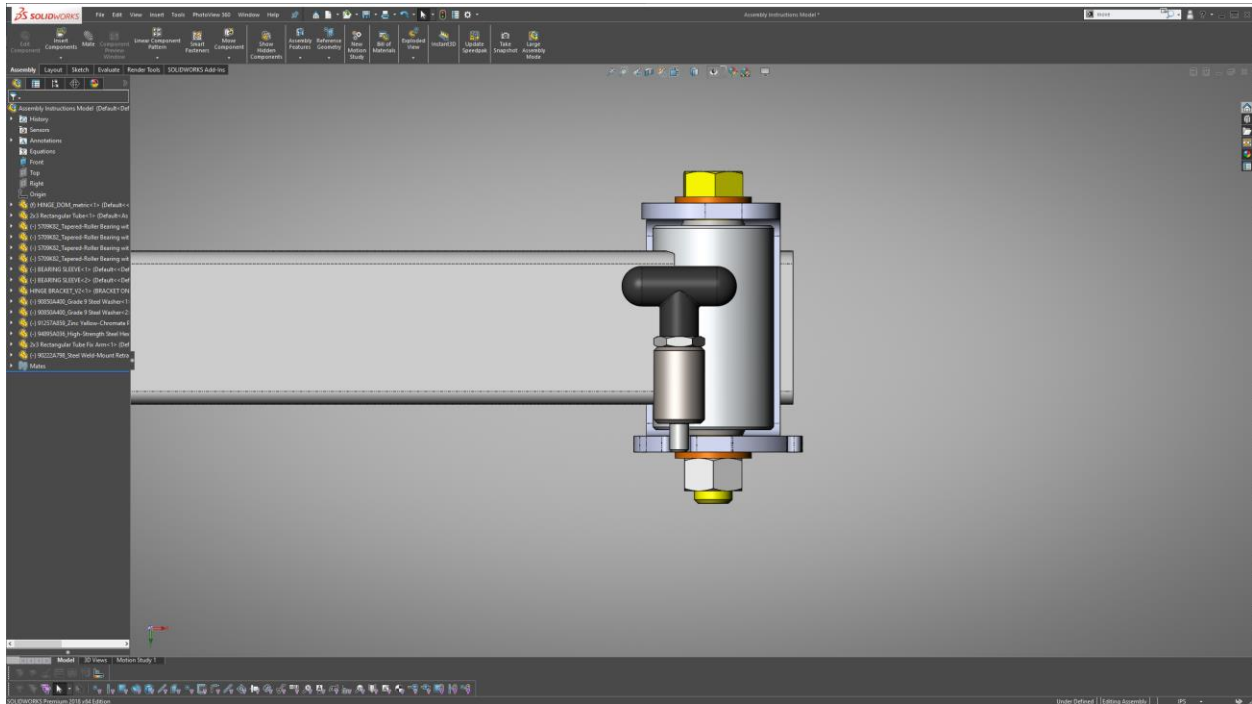
This step is optional but I find that it is more and more necessary especially if you're going to be adding a lot of weight to the Swing Arm.

The image below is exaggerated to further explain what I mean. This may take a few tries to get it right so make sure to tack in the hinge and adjust until you're satisfied with the outcome. But ideally, you want to be sitting 1/16" about the horizontal on where it gets latched.

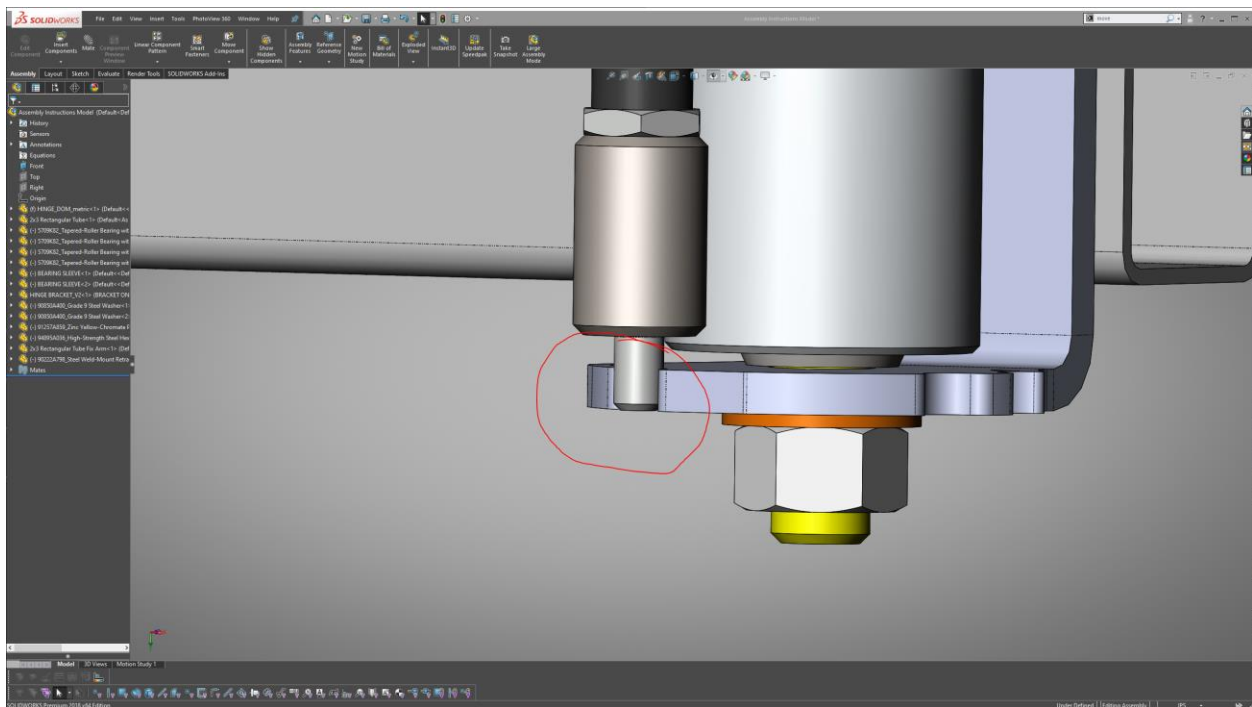


5. Carefully mount everything like the wheel and whatever extra stuff you plan to add and then swing open and close the arm and see how much of a sag is needed to compensate. If it's too low or below horizontal then tighten the nut that should bring it back up vice versa. You may also need to play with the angle of the hinge assembly to get it dialed in.

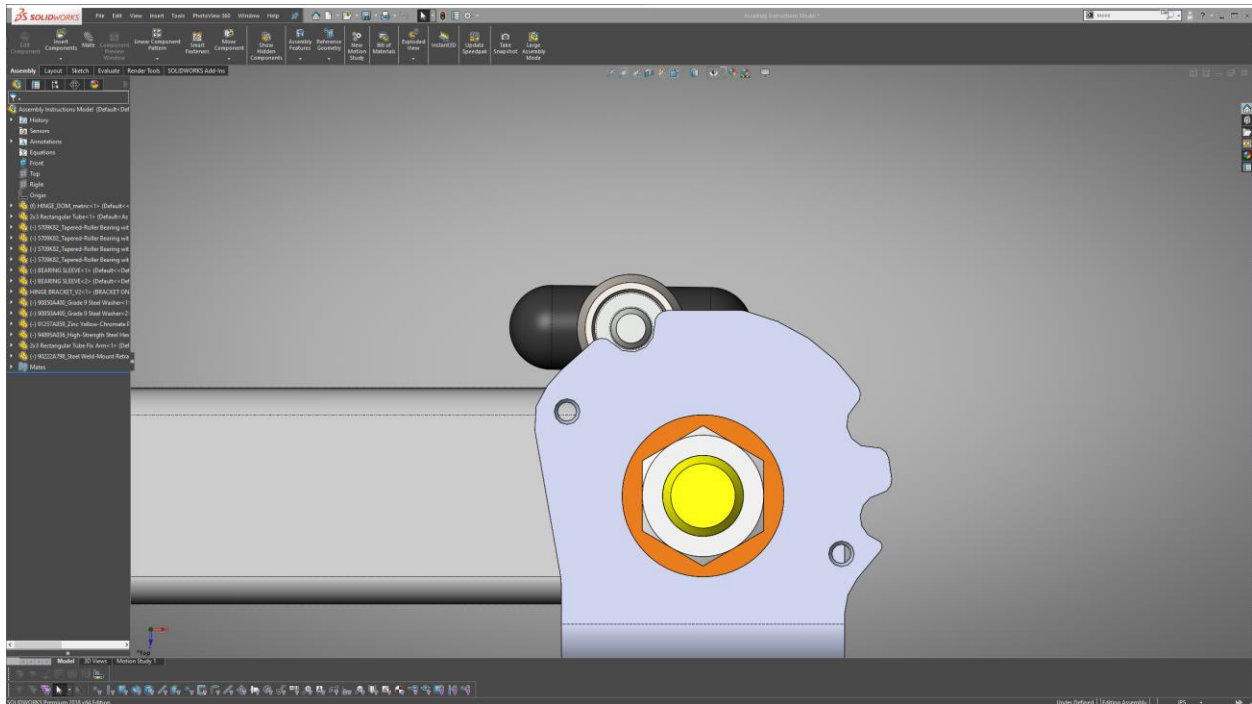
- Next go ahead and mount your compression/toggle latch and lock the arm in place. This is going to be where the swing arm is in the close position. From there you can now align and position the plunger pin. As shown in the image below.



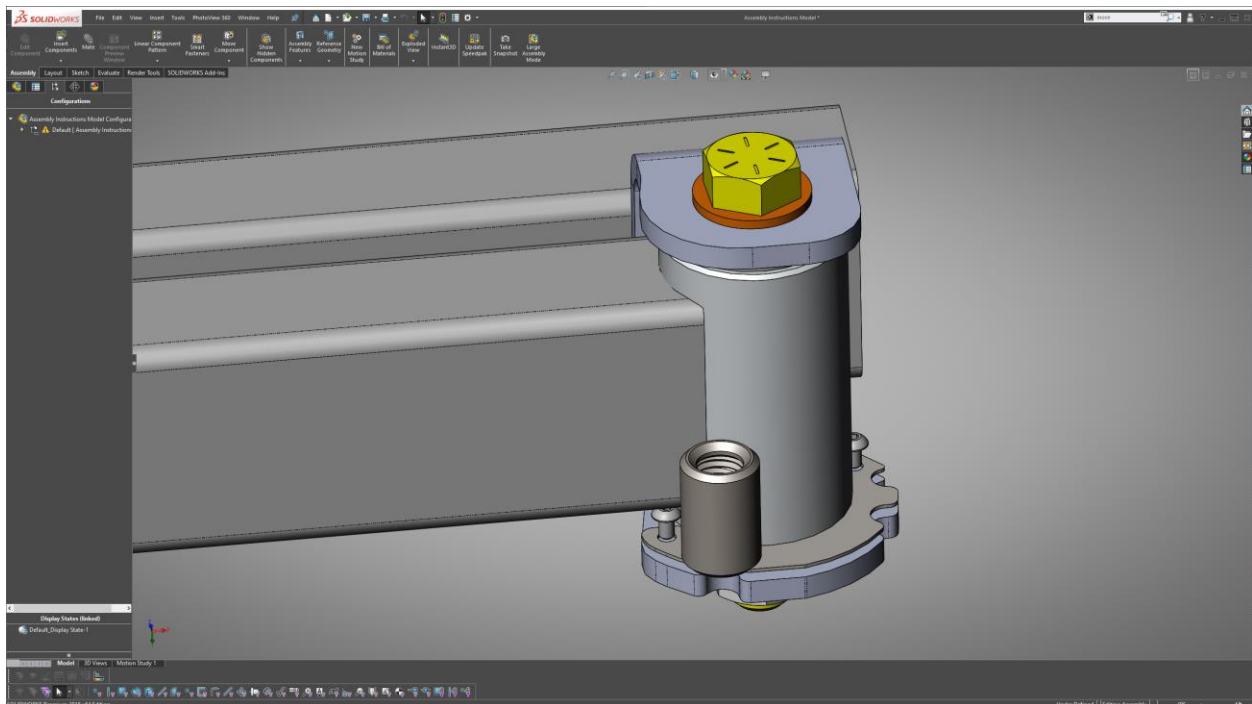
The plunger pin is to sit flush with the bottom of the Hinge Bracket

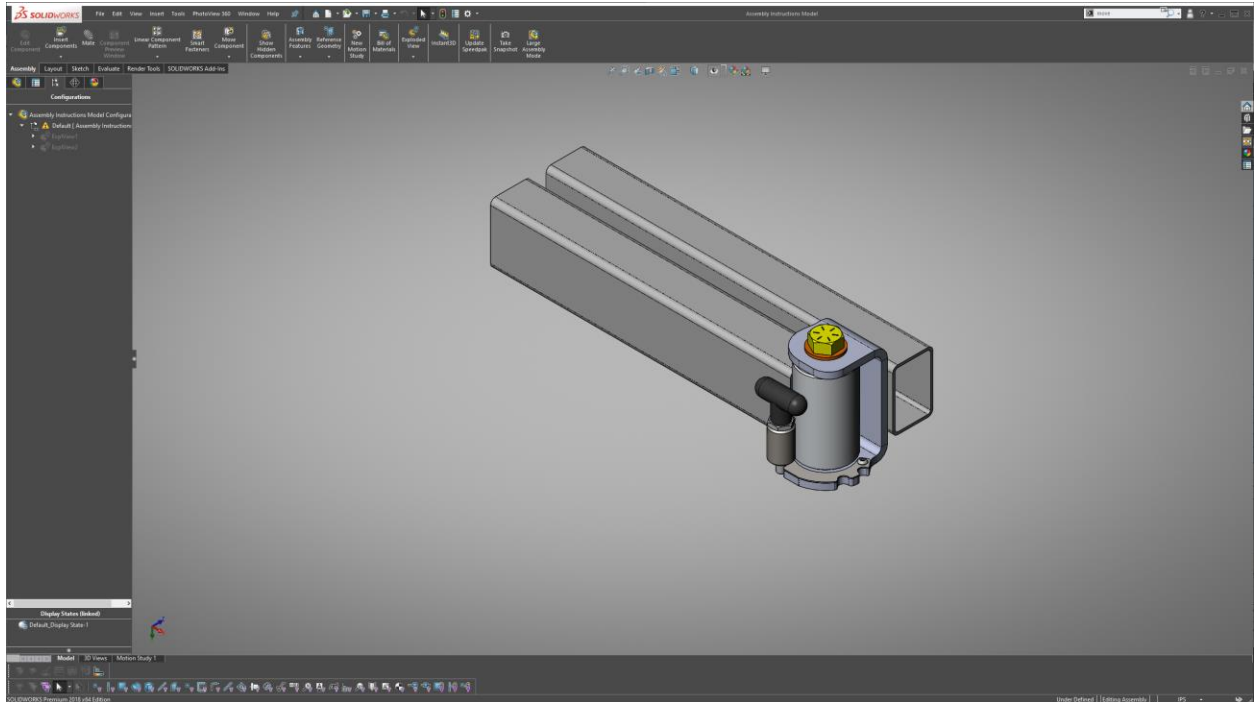


The plunger pin should be aligned with the center of the first half-moon cut out of the hinge bracket as shown below. Tack in the plunger body and then remove the t-handle and pin.

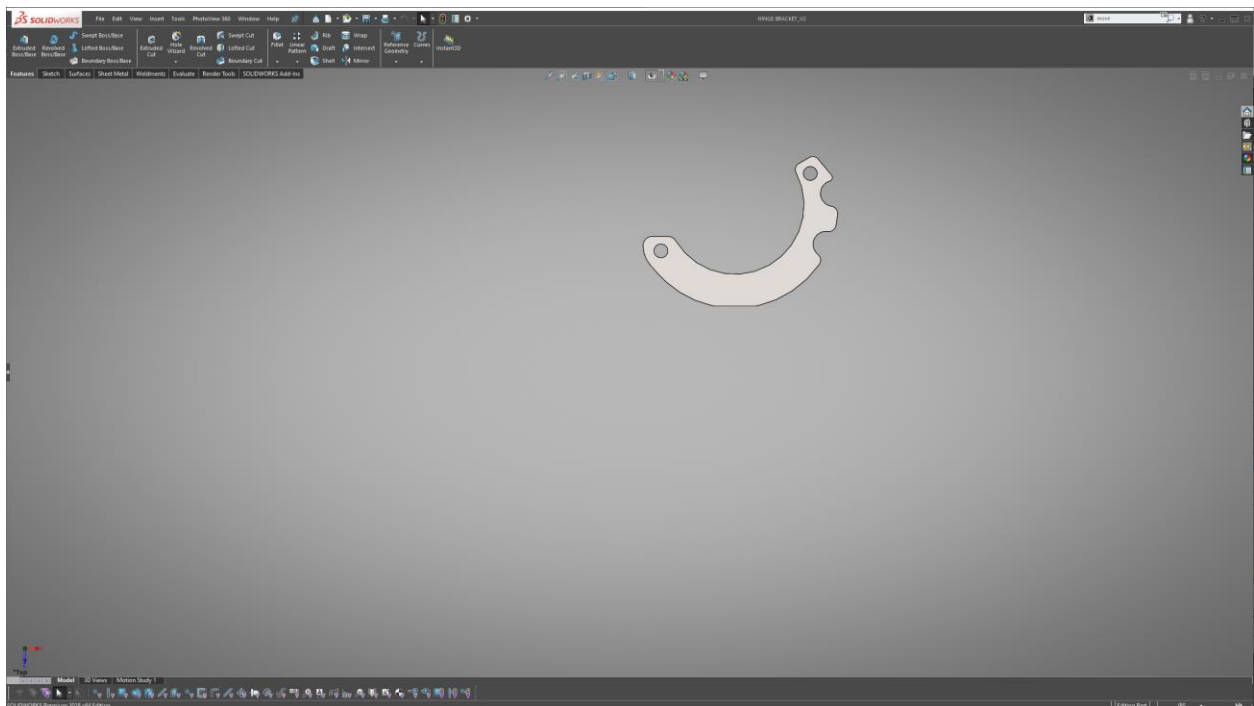


7. Next is to install the stainless-steel wear pad. There are two versions a lock and unlock. Which one you choose will depend on the user preference. Below is the locking version of the wear pad where there are a total of 3 half-moon cutouts. (lock, 90 & 120 & openings)

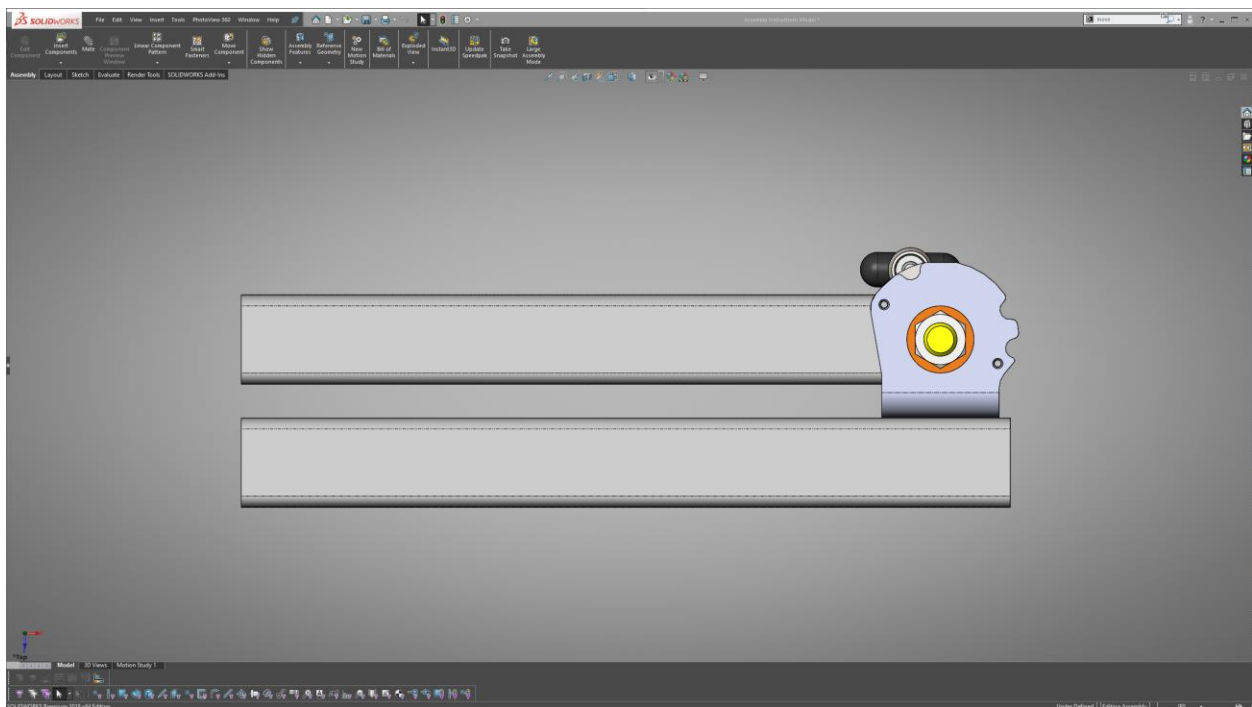
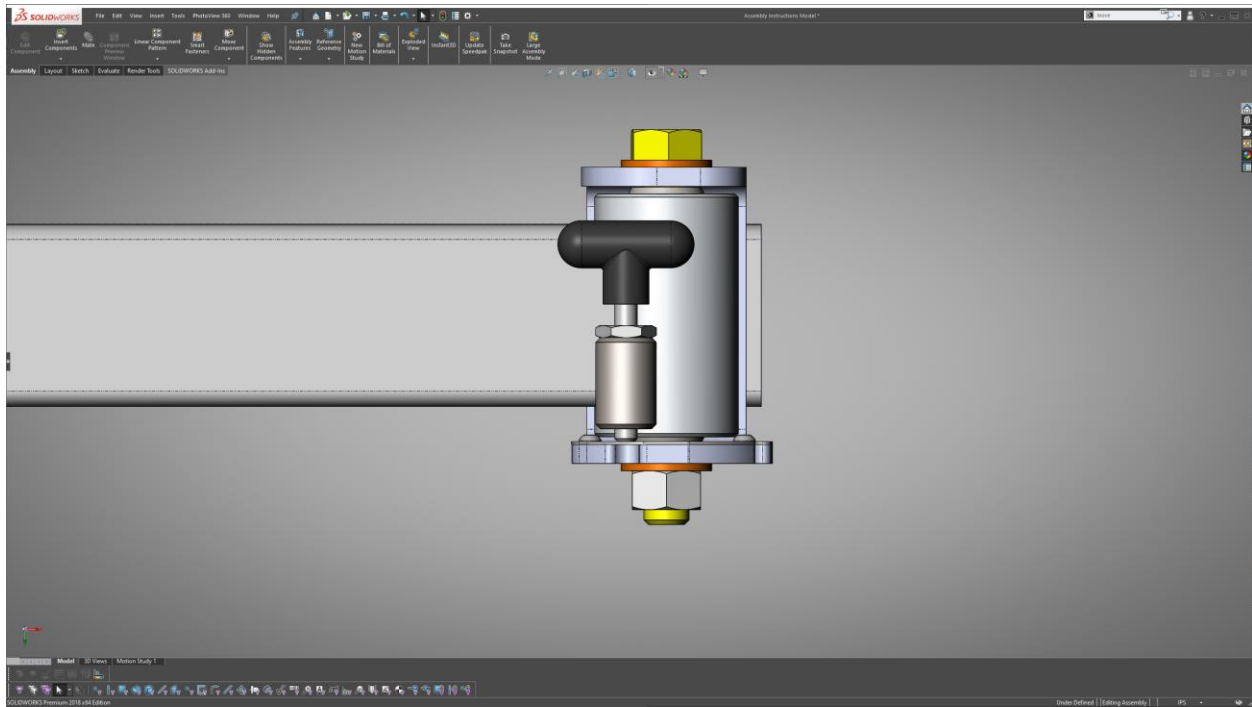




The locking wear pad is ideal if you want the peace of mind of knowing your swing arm will not open in the event of use. However, it can be an additional step for the user because when you open the latch you will also need to pull up on the t-handle to open it. However, if you decide you want it to freely open while skipping that step, I suggest using the wear pad with only two half-moon cutouts.

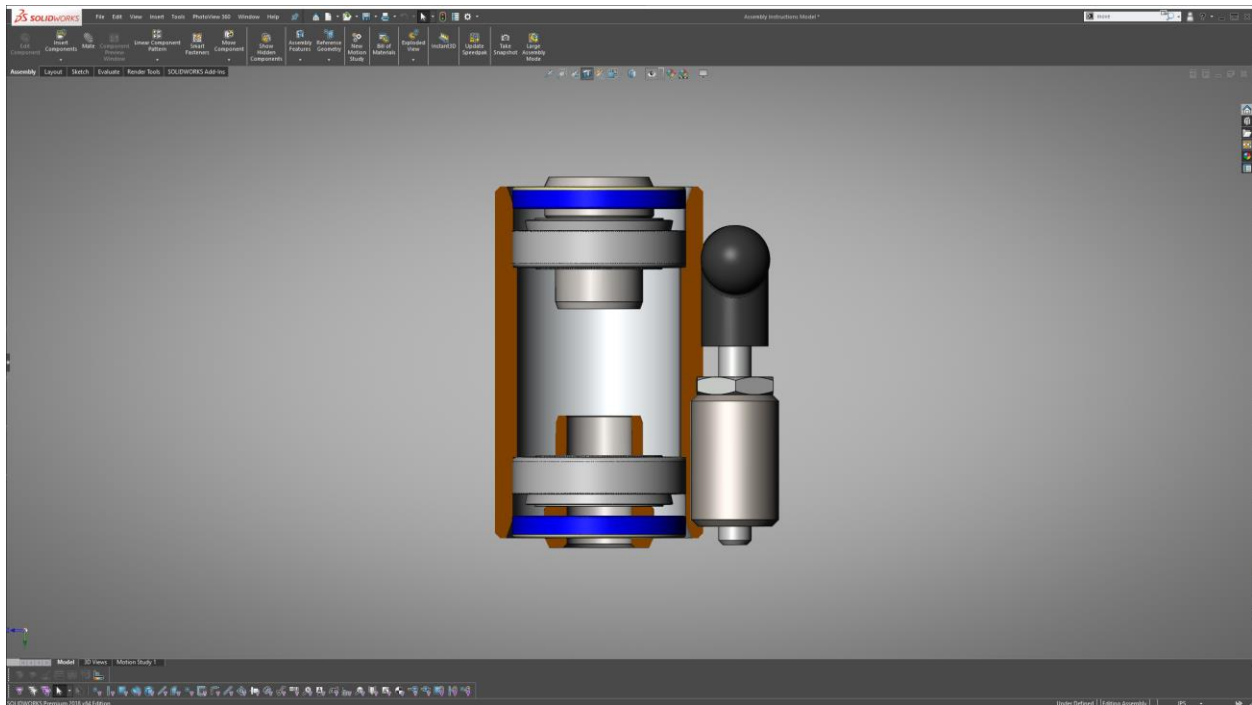
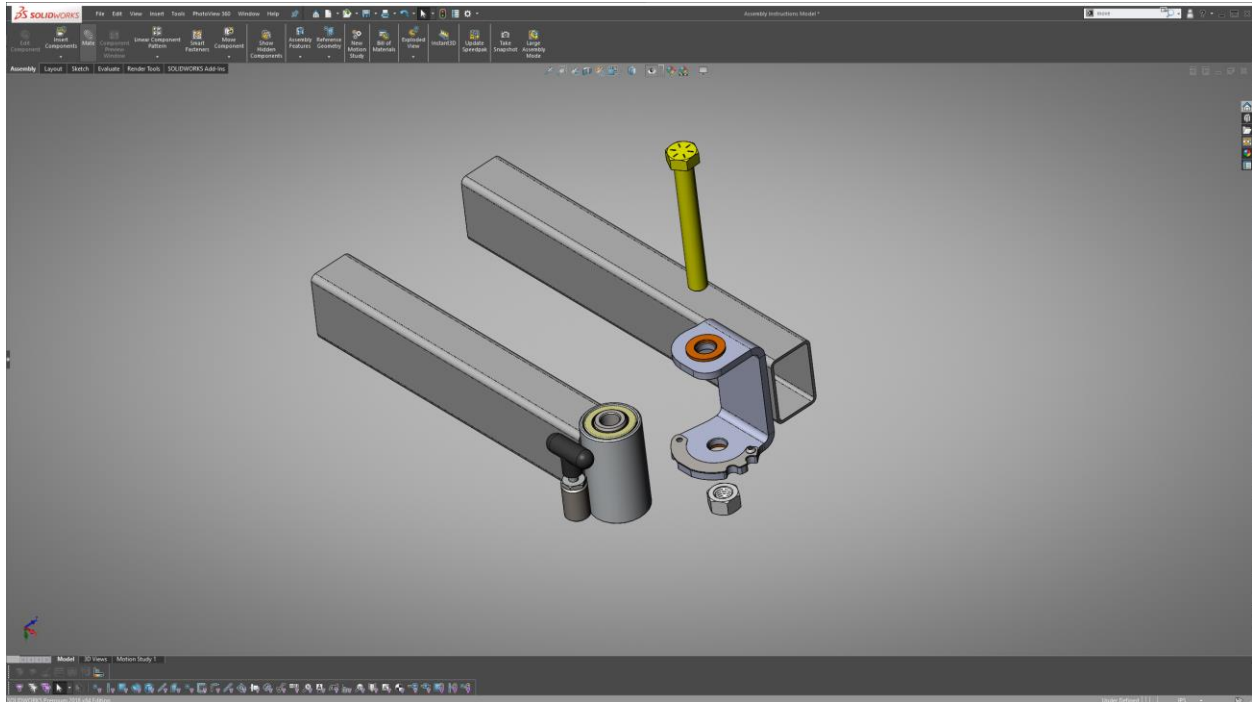


This is how it will look like when using the “unlock” wearpad. The Plunger is free to move once the toggle latch or swing out has swung open.



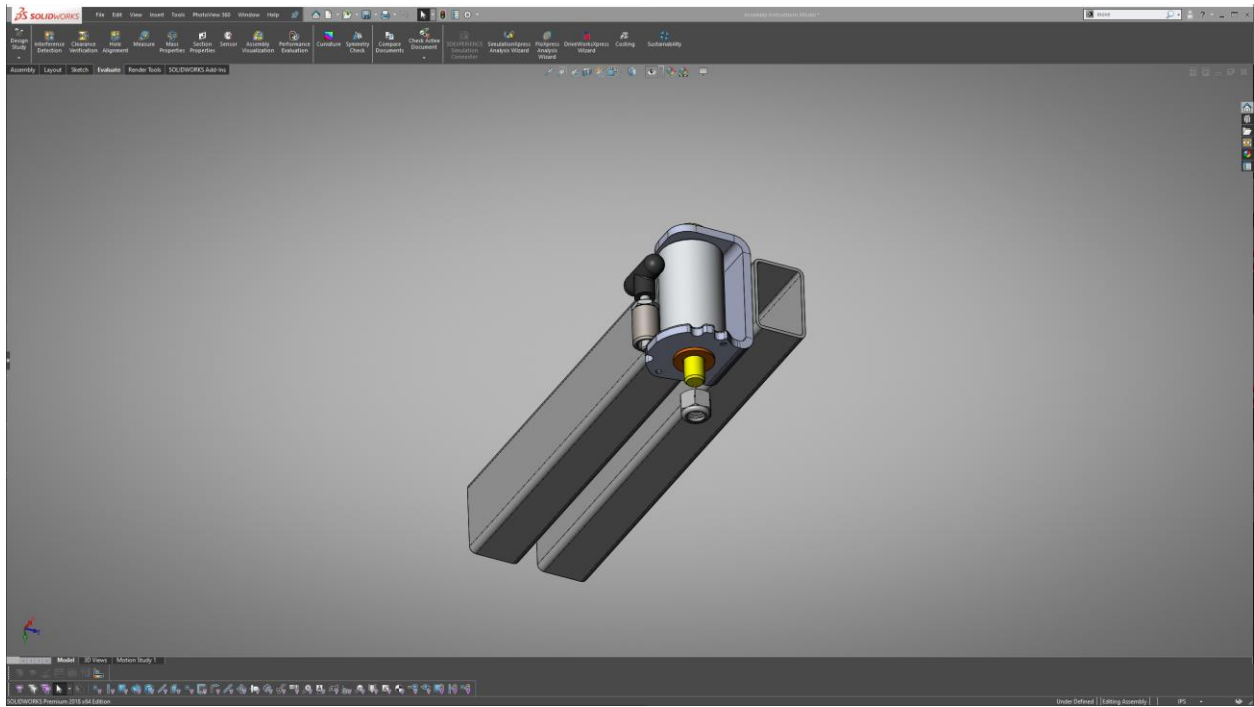
8. Now you can weld everything in. And don't forget to place Loctite to the threads of the socket head screw of the wear pad and nut from the plunger pin.
9. You can now pack the grease for the taper roller bearings and then reinstall.

10. Next install the dust seals. Align them with the hinge body and tap them in using a wood block and rubber mallet to prevent damage to the seals during install. They should sit flush or $1/32''$ below the hinge body. Also, take some grease and lube the inside of the seal where the rubber is. This will make it easier to install the bearing sleeves.



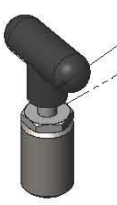
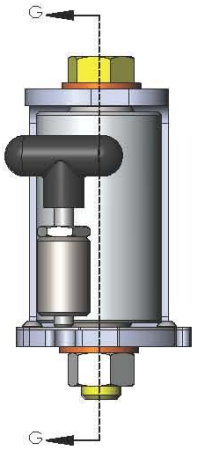
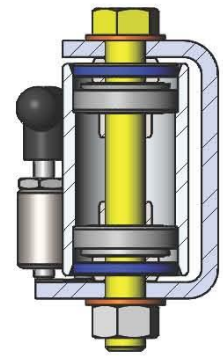
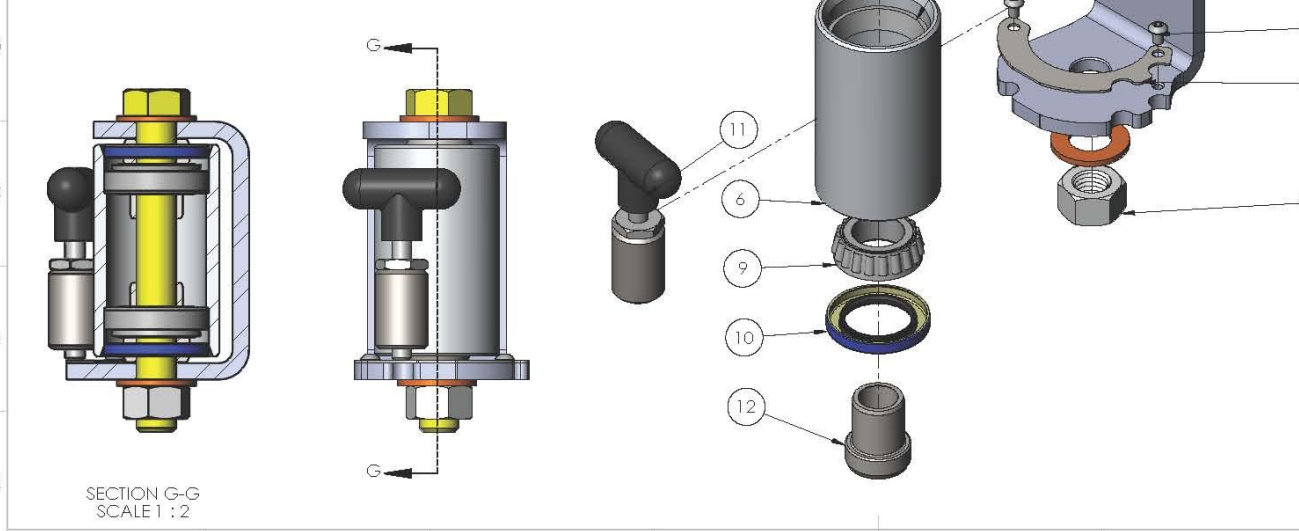
11. Next install the Bearing Sleeves then reinstall into the hinge bracket using the provided nylon locknut.

12. The install procedures of this will be a mirror version for the drivers side hinge kit



ITEM NO.	DESCRIPTION	QTY
1	3/4-10 X 6" HEX BOLT GRADE 8	1
2	3/4" FLAT WASHER	2
3	HD HINGE BRACKET; PASSENGER SIDE	1
4	BUTTON HEAD HEX DRIVE SCREW M5X8MM	2
5	WEAR PAD (UNLOCK)	1
6	HINGE BODY DOM O.D 2.375" X 4"	1
7	BEARING RACE	2
8	3/4-10 HEX NUT	1
9	TAPER ROLLER BEARING	2
10	DUST SEAL	2
11	SPRING PLUNGER (UNLOCK) 3/8 PIN; T-HANDLE	1
12	BEARING SLEEVE	2

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED



NAME	DATE	PROJECT TITLE:	HD UNIVERSAL HINGE KIT INSTRUCTIONS	
RS	3/22/24	DESCRIPTION:	HD UNIVERSAL HINGE KIT (PASSenger SIDE)	
UNLESS OTHERWISE SPECIFIED		SIZE	CUSTOMER NAME:	REV
TOLERANCES ARE: FRACTIONAL DECIMALS ANGLES		B	RATHA DIGITAL MEDIA LLC	0
D-DIMENSIONS ARE: ±.010 ±.015 ±.020 ±.030 ±.040 ±.050 ±.060 ±.070 ±.080 ±.090 ±.100 ±.125 ±.150 ±.180 ±.200 ±.250 ±.300 ±.350 ±.400 ±.450 ±.500 ±.550 ±.600 ±.650 ±.700 ±.750 ±.800 ±.850 ±.900 ±.950 ±.1000 ±.1250 ±.1500 ±.1750 ±.2000 ±.2250 ±.2500 ±.2750 ±.3000 ±.3250 ±.3500 ±.3750 ±.4000 ±.4250 ±.4500 ±.4750 ±.5000 ±.5250 ±.5500 ±.5750 ±.6000 ±.6250 ±.6500 ±.6750 ±.7000 ±.7250 ±.7500 ±.7750 ±.8000 ±.8250 ±.8500 ±.8750 ±.9000 ±.9250 ±.9500 ±.9750 ±.10000		PART NO.	WEIGHT	SHEET 1 OF 2
D-DIMENSIONS ARE: ±.010 ±.015 ±.020 ±.030 ±.040 ±.050 ±.060 ±.070 ±.080 ±.090 ±.100 ±.125 ±.150 ±.180 ±.200 ±.250 ±.300 ±.350 ±.400 ±.450 ±.500 ±.550 ±.600 ±.650 ±.700 ±.750 ±.800 ±.850 ±.900 ±.950 ±.1000		150		

SECTION G-G
SCALE 1 : 2

8

7

6

5

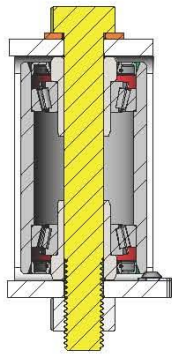
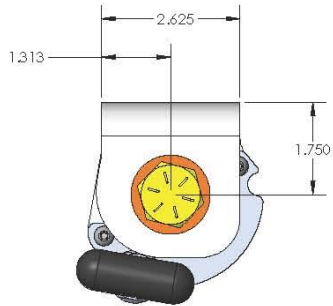
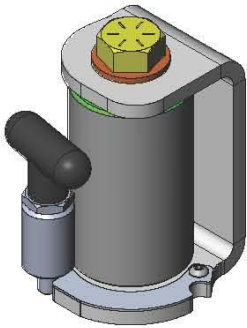
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3

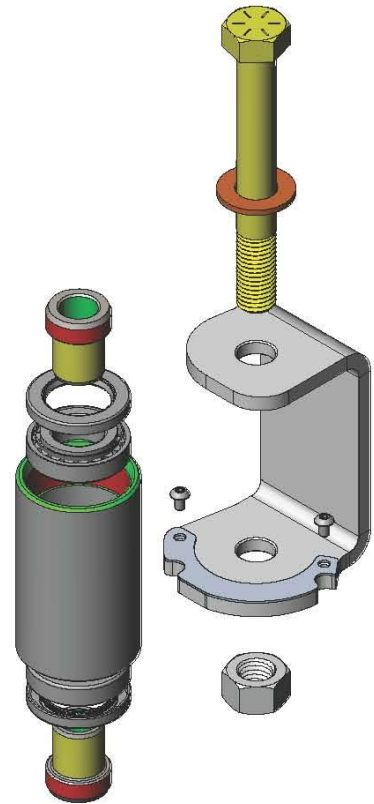
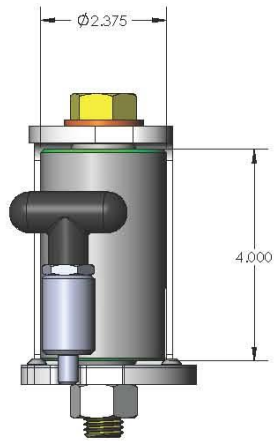
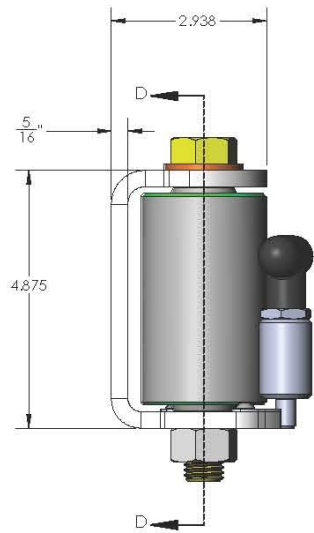
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1

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED



SECTION D-D
SCALE 1 : 2



H
G
F
E
D
C
B
A

H
G
F
E
D
C
B

8

7

6

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4

3

2