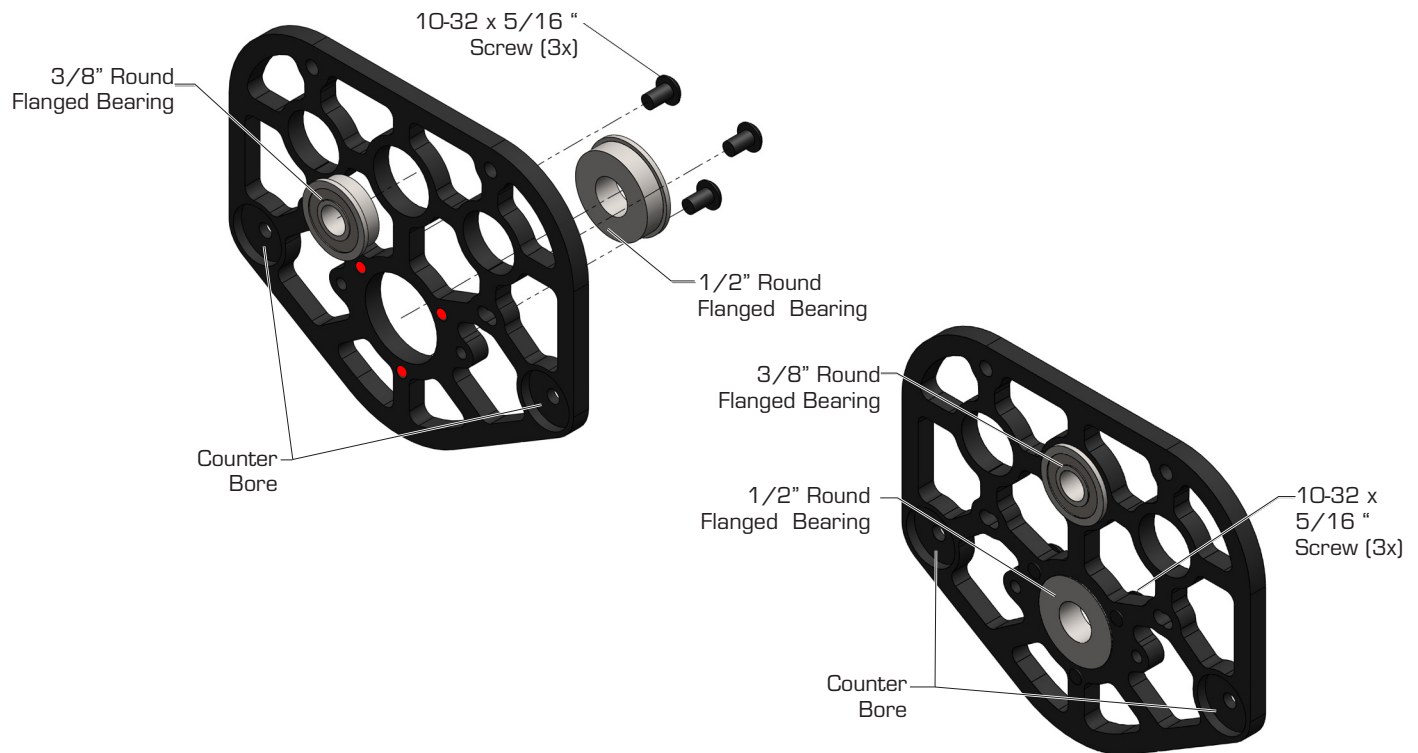
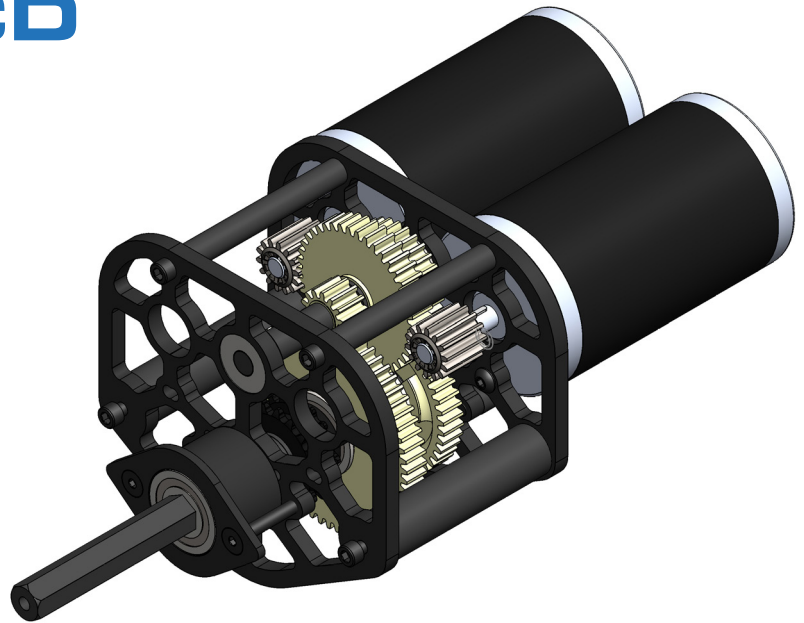


WCP DS WCD

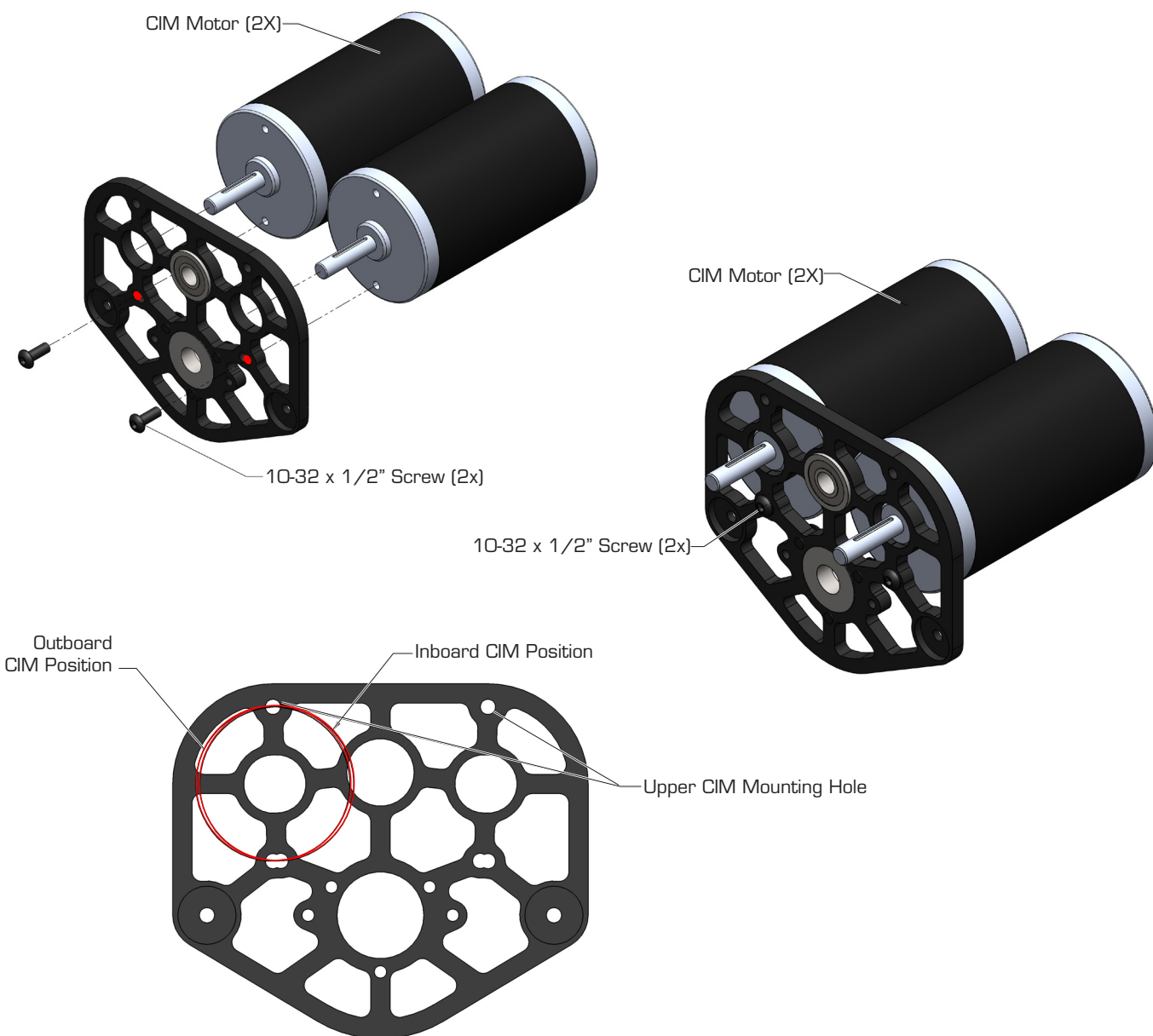
Assembly Guide



Step 1:

Insert the 1/2" round flanged bearing and a 3/8" flanged bearing into the transmission plate as shown. Use (3X) 10-32 x 5/16" screws to retain the 1/2" bearing.

Note: Make sure to install the bearings so the 3/8" bearing's flange is oriented towards the large counter-bores while the 1/2" bearing's flanged is oriented away. Both transmission plates included are identical.

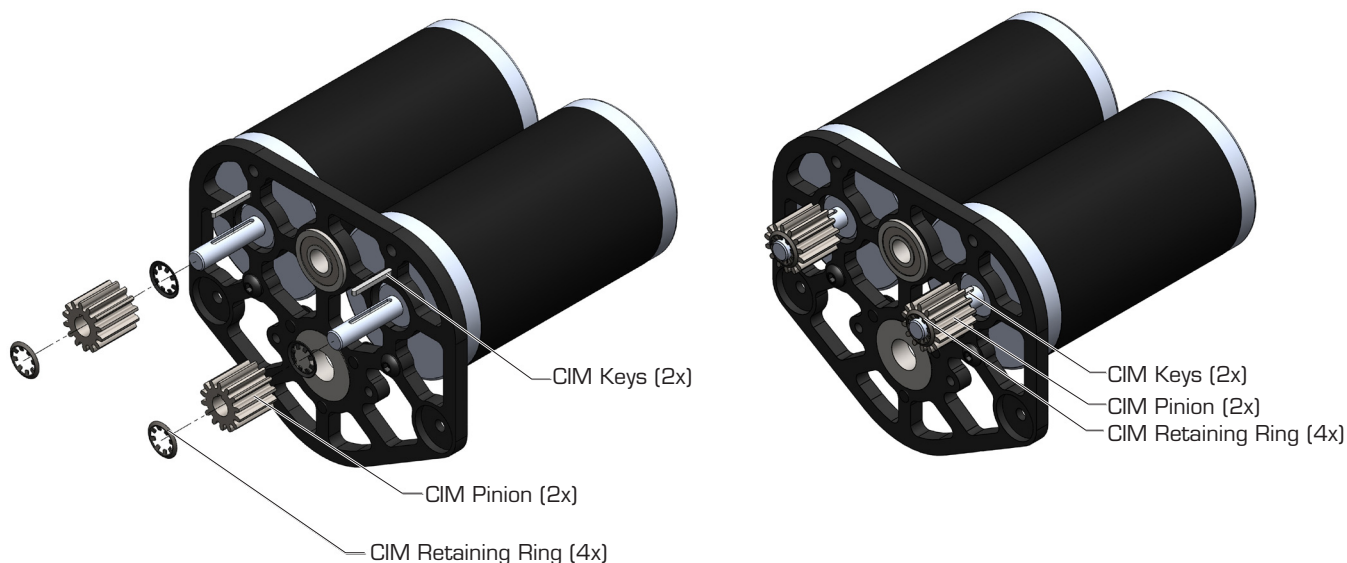


Step 2:

Using the lower mounting holes as shown, affix the (2X) CIM Motors (not included) to the transmission plate with (2X) 10-32 x 1/2" screws as shown. **Do not place screws in the upper CIM mounting holes.**

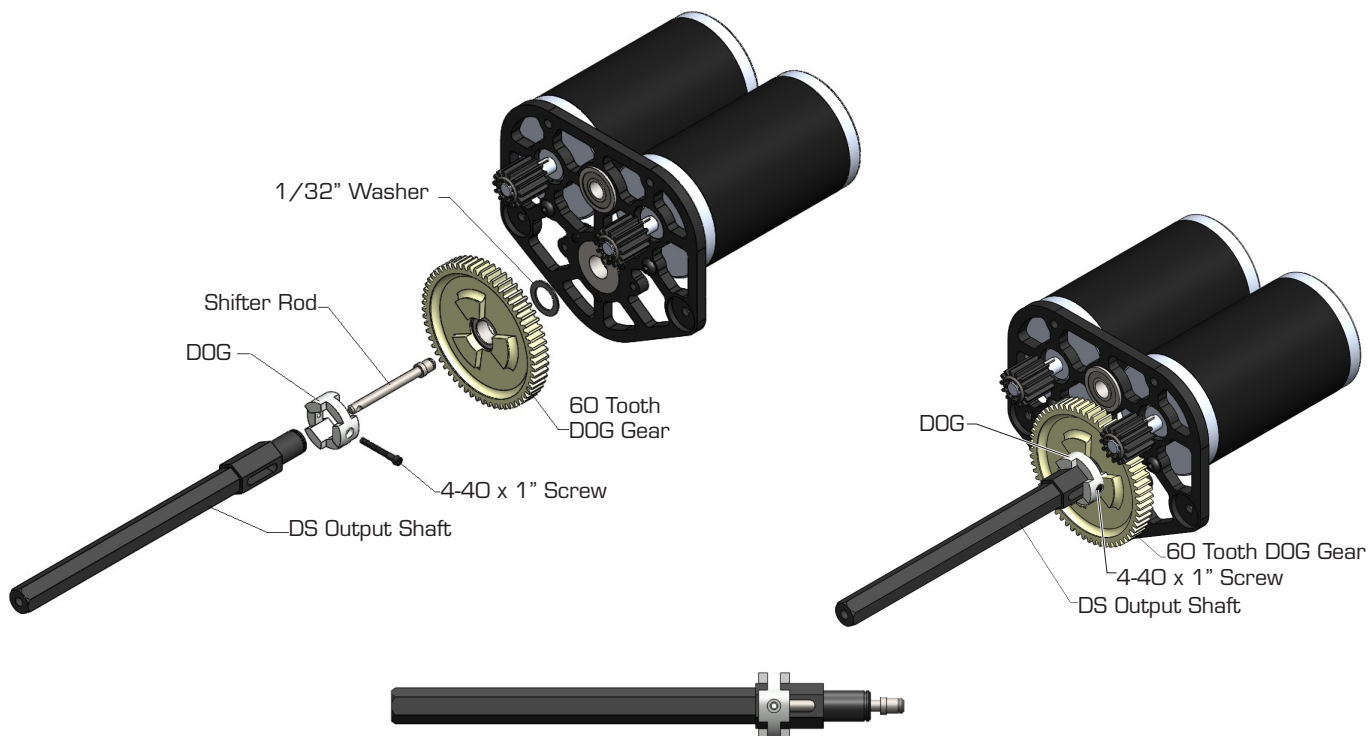
Note: The WCP DS Transmission has oblong shaped CIM Motor pilot and mounting holes. This allows the CIM Motor to be in two different positions (INBOARD & OUTBOARD), as shown, and allows four different CIM Motor pinions to be used to further customize gear ratios. The proper CIM Motor position must be selected for a given pinion and cluster gear size. To determine the proper CIM motor position, consult the chart below.

Pinion Gear	Cluster Gear	CIM Position
11T	42T	INBOARD
12T	42T	INBOARD
13T	42T	OUTBOARD
14T	42T	OUTBOARD
13T	40T	INBOARD
14T	40T	INBOARD



Step 3:

Install (4X) CIM retaining rings, (2X) 2mm keys, and (2X) 11, 12, 13, or 14 tooth pinion gears. Take care to push the first retaining ring just past the keyway and no further.



Step 4:

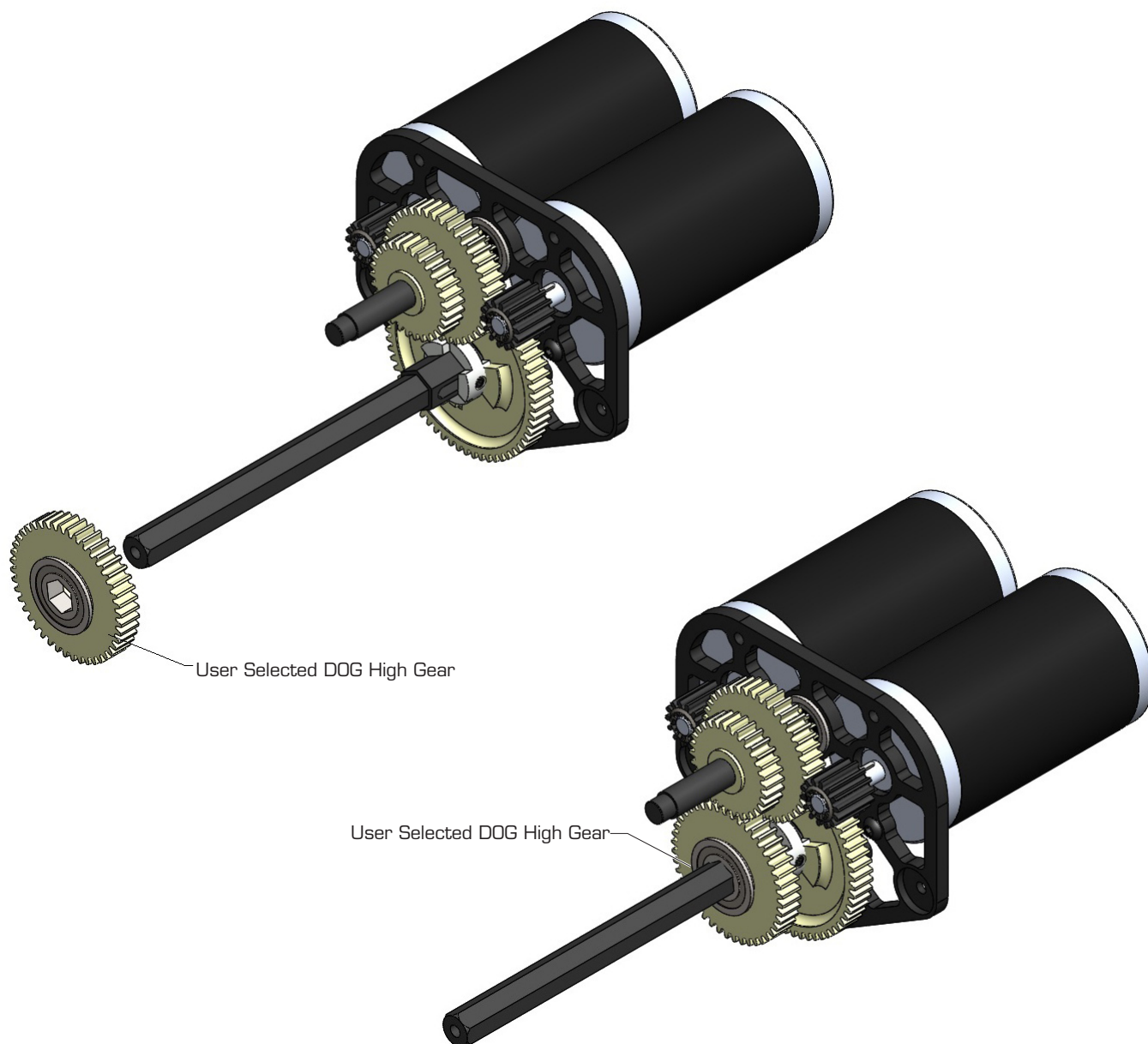
Insert the DOG, shifter rod, and 4-40 x 1 inch screw to secure the shifter rod to the DOG. Do not overtighten or binding may occur. Then insert the 60 tooth DOG gear and 1/32 inch washer onto the DS output shaft, as shown. Make sure the DOG teeth are oriented towards the DOG and insert the output shaft into the transmission.

Note: Make sure to align the DOG and shifter rod with the slot. When properly aligned, one should be able to see straight through the holes to the other side. The 1/32 inch washer is the thinnest of all the spacers.

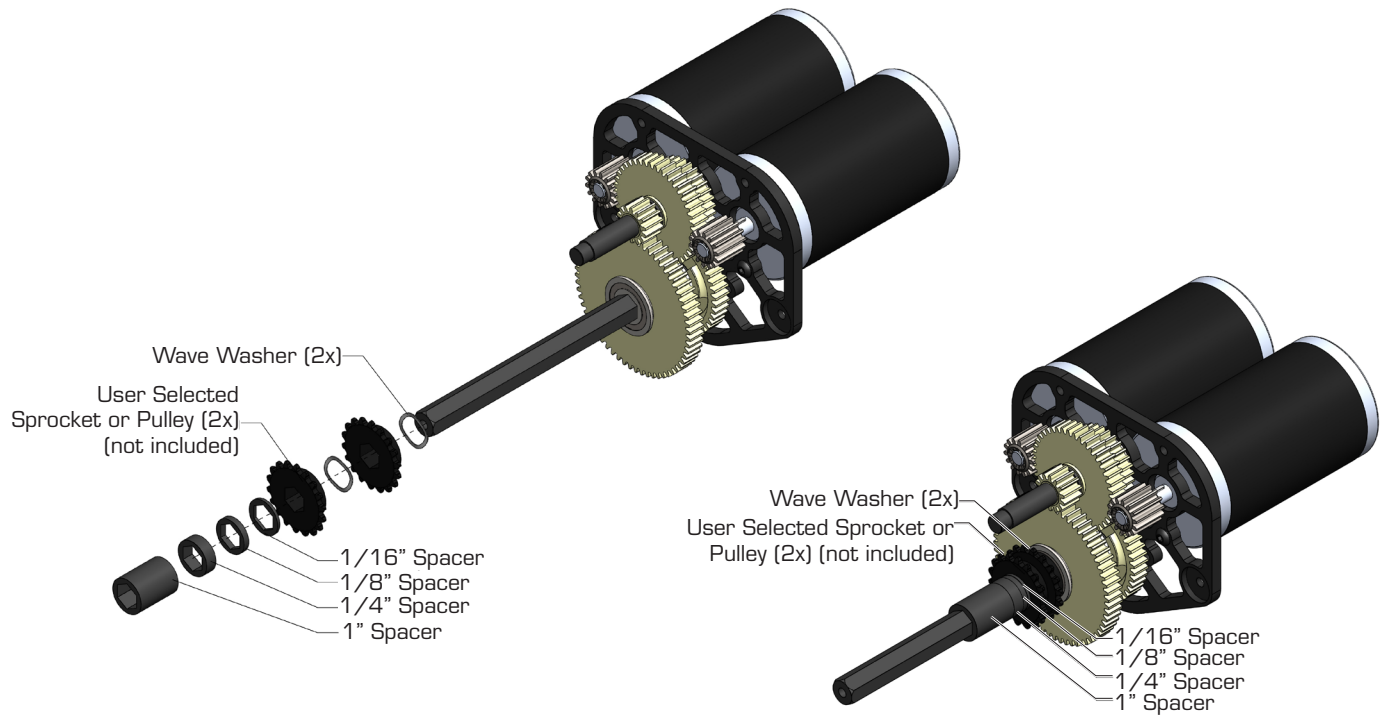
**Step 5:**

Insert (2X) 1/16" spacers, user selected high gear, 42 tooth input gear, user selected low gear, and DS WCD input shaft as shown.

Note: Use the smallest ID spacer that fits on the shaft.

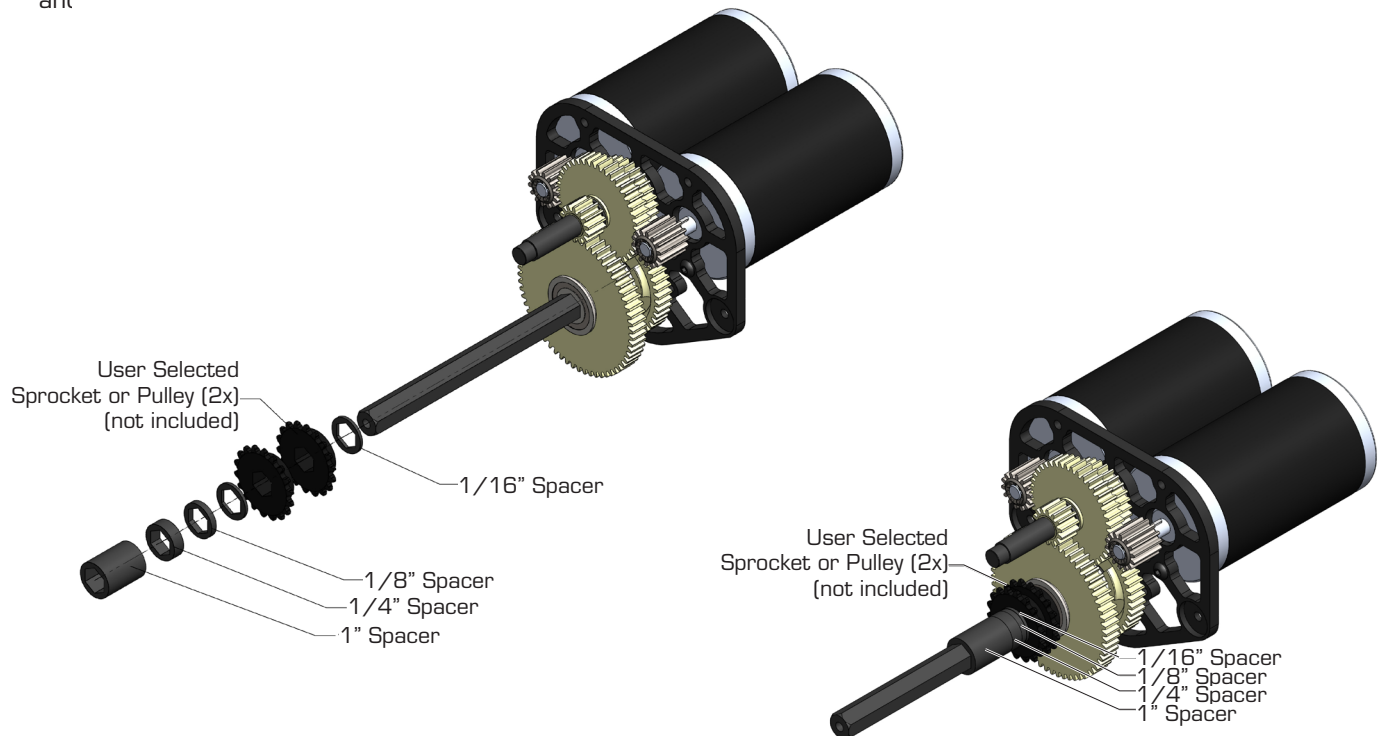
**Step 6:**

Insert the user selected DOG low gear as shown. Make sure the DOG teeth are oriented towards the DOG. **At this point a liberal application of white lithium grease is required on all gears.**



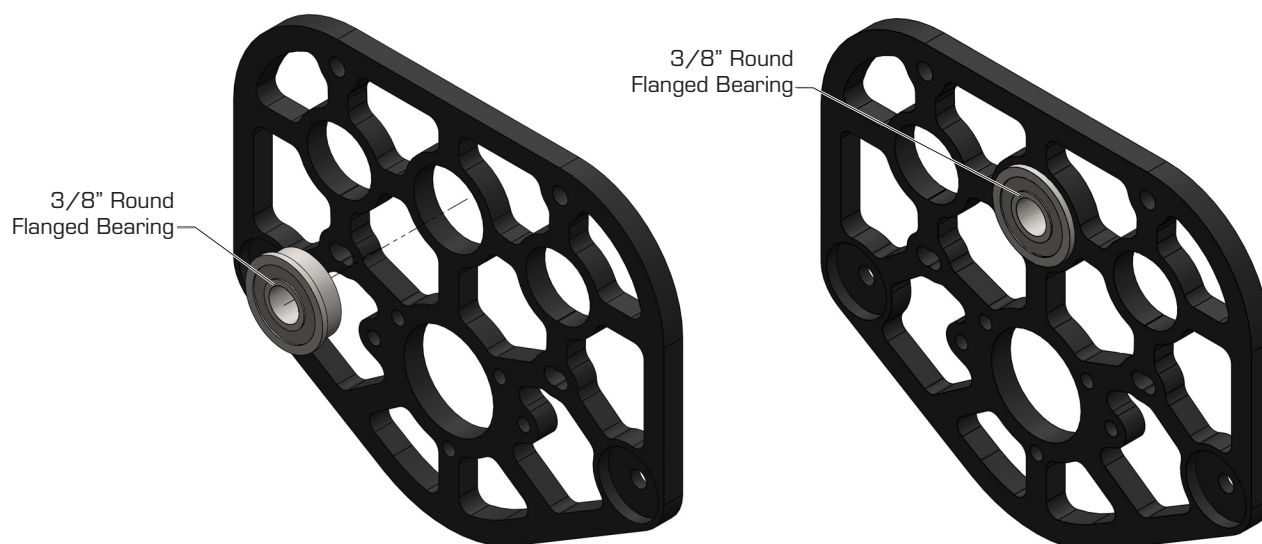
Step 7 (6 Wheel Drive Configuration):

If using a 6 wheel drive configuration, insert (2X) wave washers, (2X) user selected sprockets or pulleys (not included), and the 1/16", 1/8", 1/4", and 1" spacers, as shown.

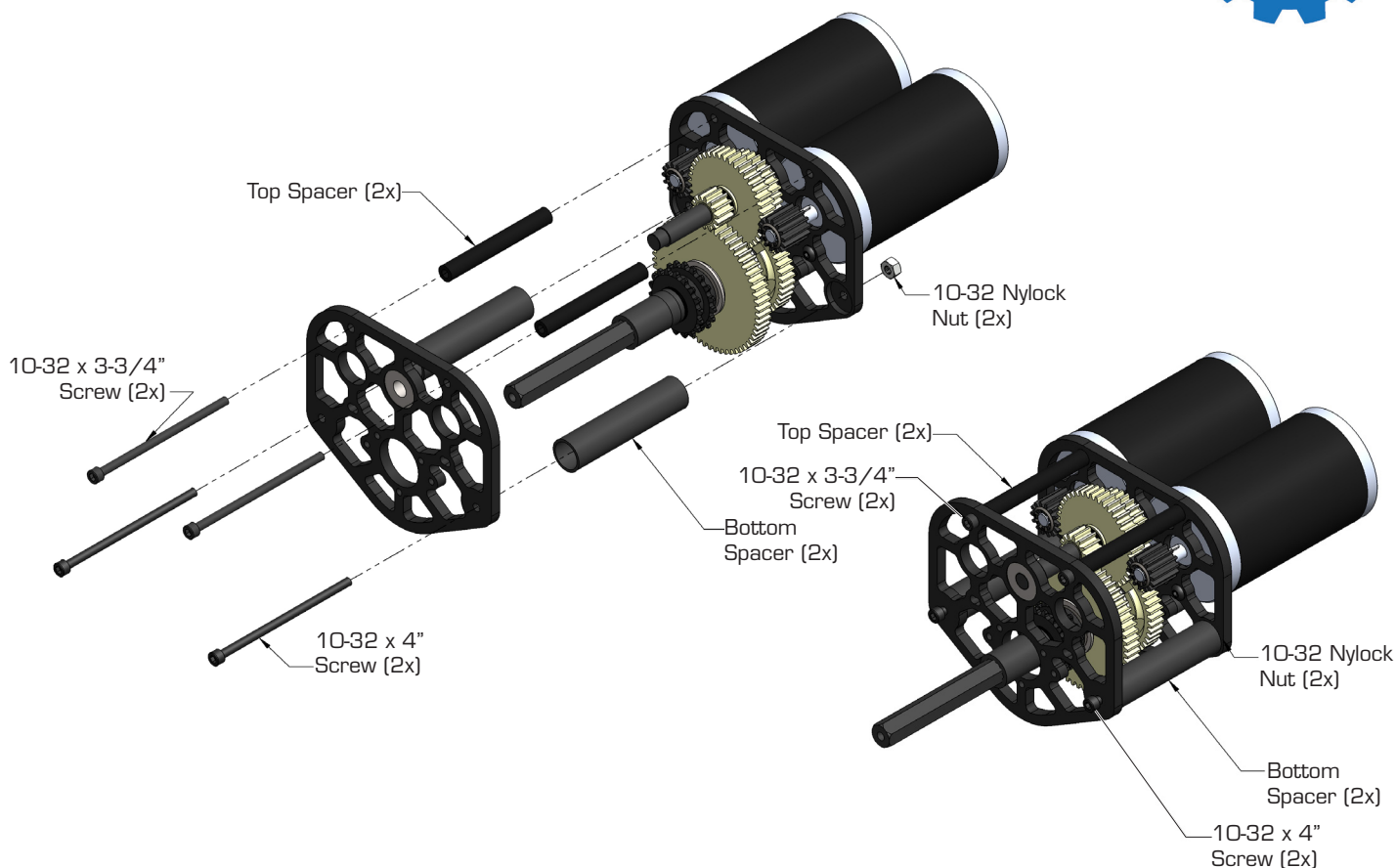


Step 7 (8 Wheel Drive Configuration):

If using an 8 wheel drive configuration, insert a 1/16" spacer, (2X) user selected sprockets or pulleys (not included), and the 1/8", 1/4", and 1" spacers, as shown.

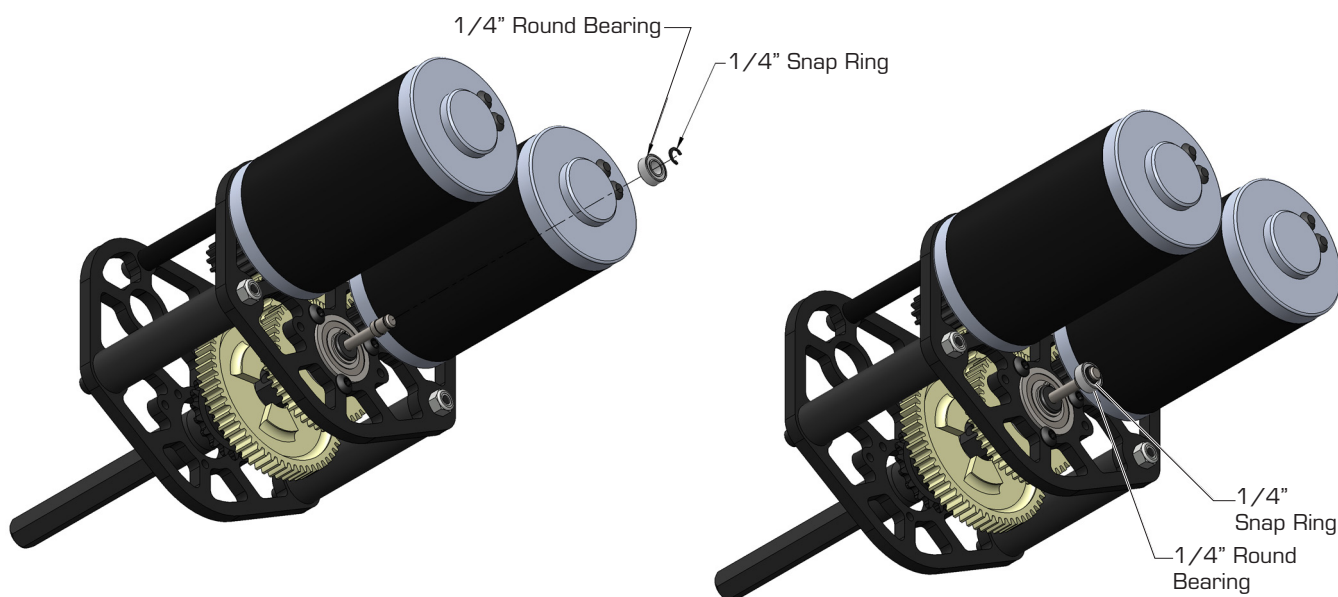
**Step 8:**

Insert a 3/8" round flanged bearing into the remaining transmission plate, as shown.

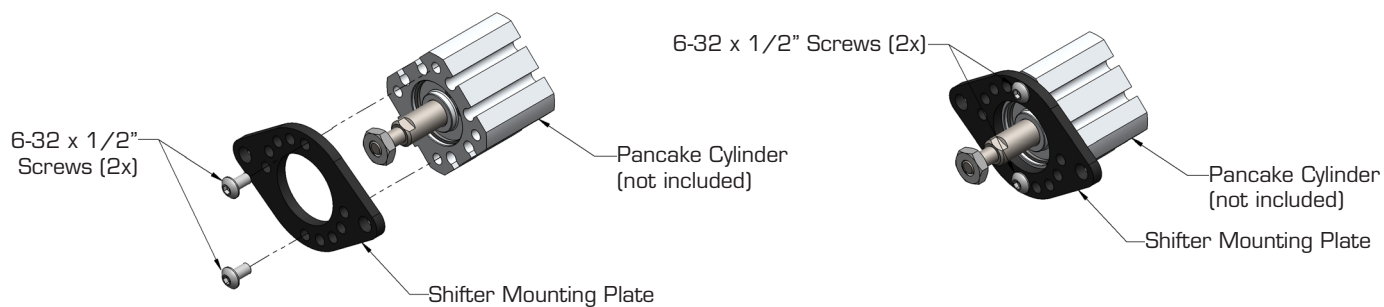
**Step 9:**

Insert (2X) bottom spacers, (2X) top spacers, the second transmission plate, (2X) 3-3/4" screws, (2X) 4" screws, and (2X) 10-32 Nylock nuts as shown.

Note: The 10-32 x 3-3/4" screws are used to retain the CIM motors and will screw directly into the motors.

**Step 10:**

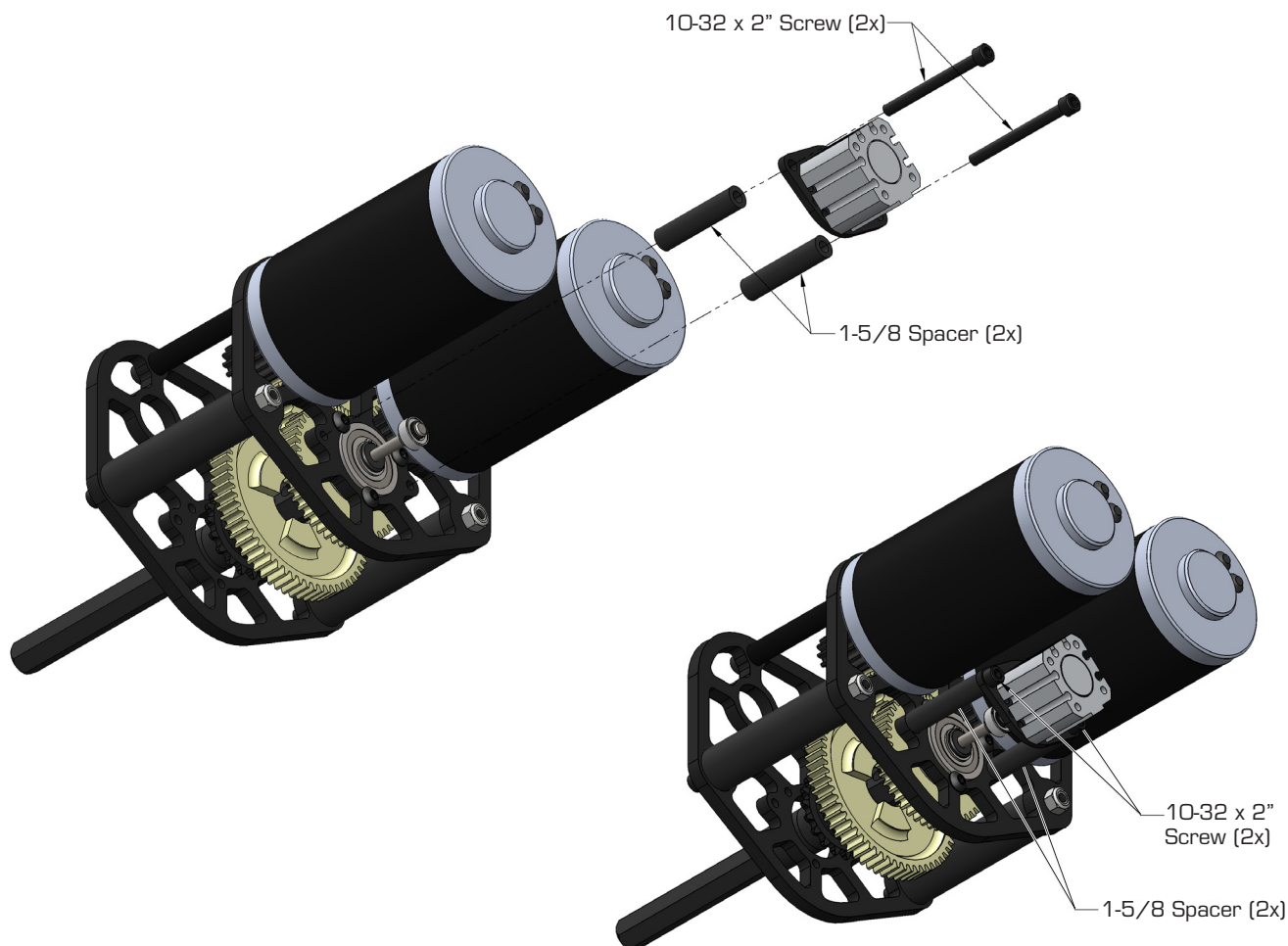
Insert the 1/4" round bearing onto the shifter rod and retain with the 1/4" snap ring as shown.



Step 11:

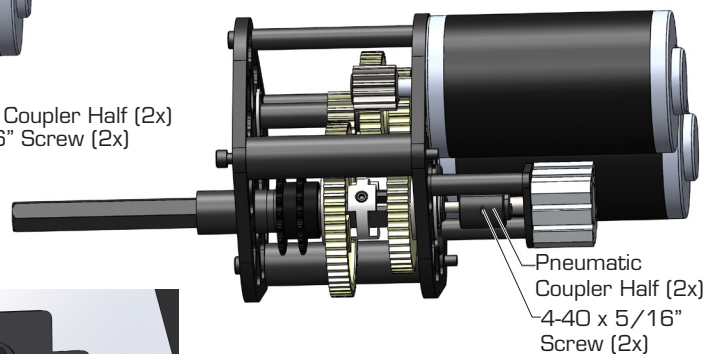
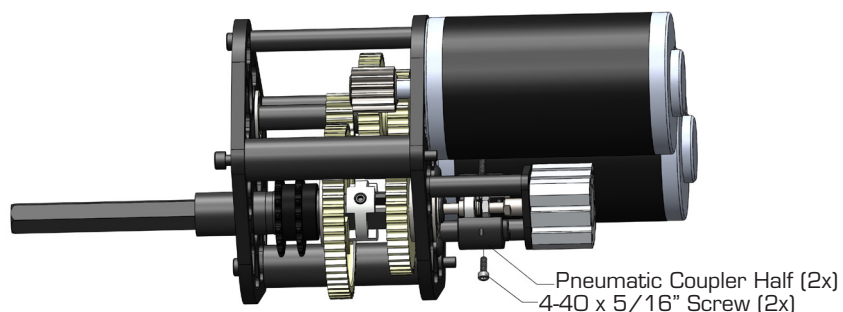
Use (2X) 6-32 x 1/4" screws to attach the pancake cylinder (not included) to the shifter mounting plate.

Note: There are multiples holes on the DS Shifter Plate to allow the air ports on the pancake cylinder to be repositioned for the user's specific configuration.

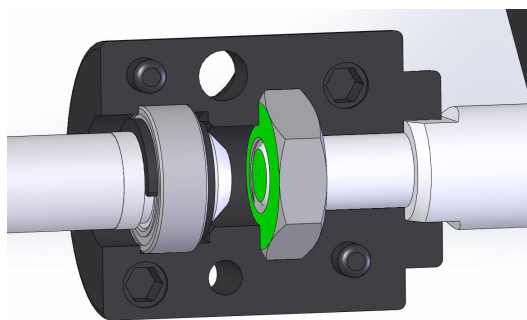


Step 12:

Use (2X) 10-32 x 2" screws and (2X) 1-5/8" spacers to attach the pancake cylinder assembly to the back of the transmission.

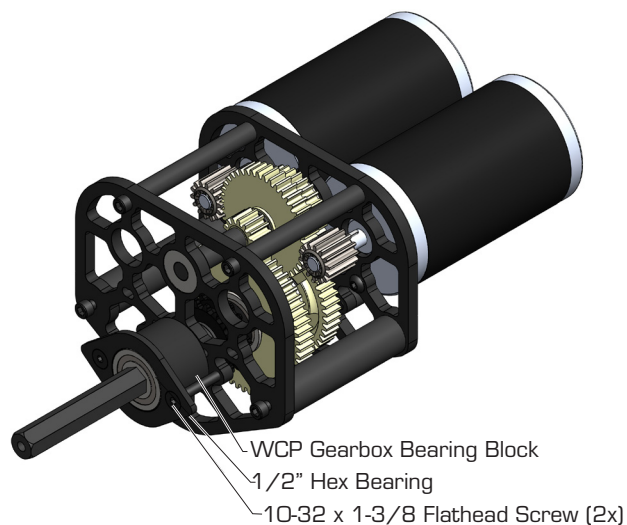
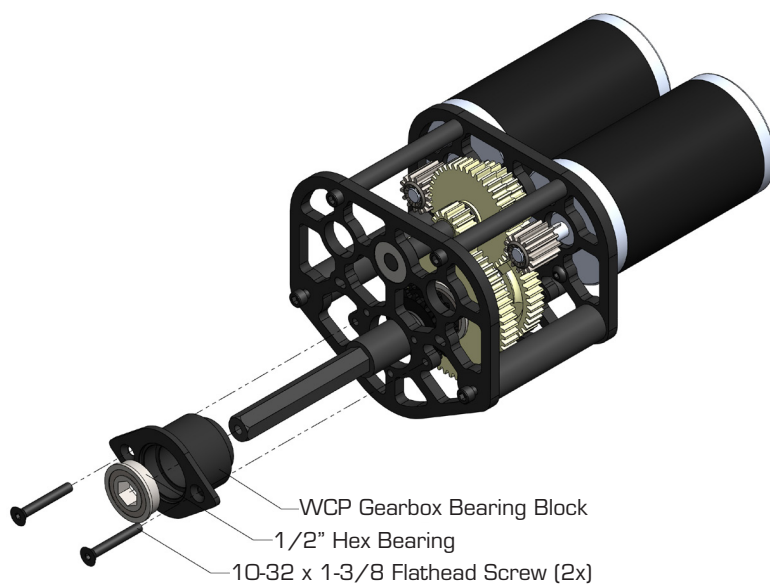


IMPORTANT: The hex nut **MUST BE FLUSH** with the end of the piston rod as illustrated.



Step 13:

Use (2X) pneumatic coupler halves to capture the pancake cylinder rod and the bearing installed in Step 10 as shown. Then use (2X) 4-40 x 5/16" screws to attach the two halves.



Step 14:

Insert the 1/2" hex flanged bearing, WCP bearing block, and (2X) 10-32 x 1-3/8" flathead screws as shown.