

# How to Change Sweep Angle and Park Position on a 4A Wiper Motor

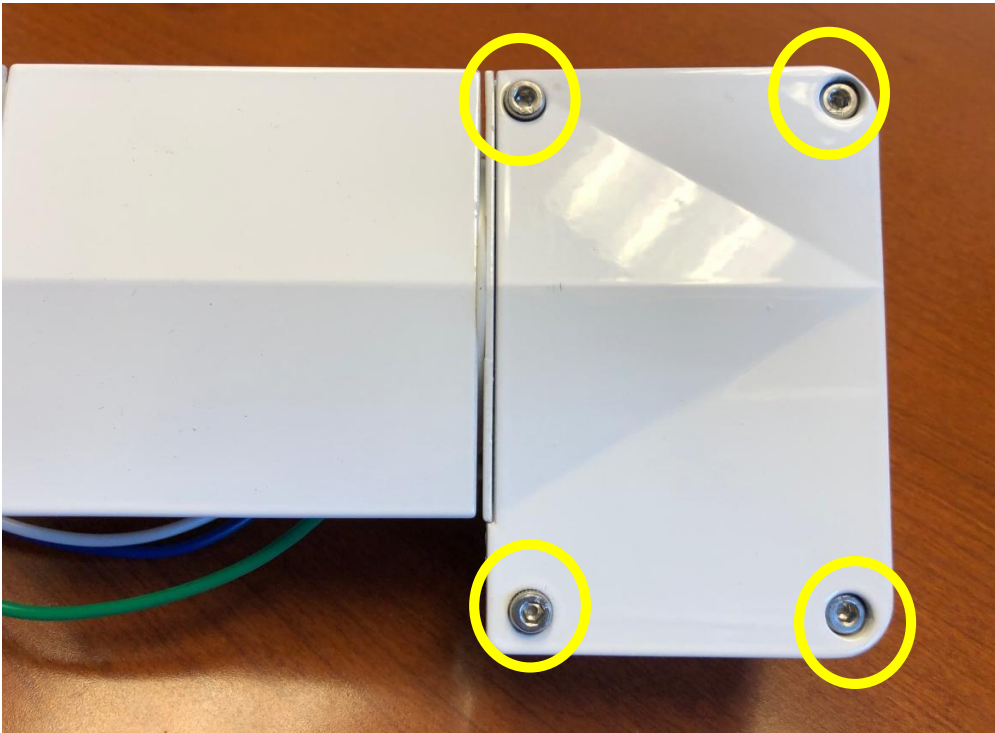
November 2019

1) This pictorial defines the procedure to change sweep angles and park positions on the WEXCO 4A motor.

The WEXCO 4A motor can be set to sweep at angles of 40, 50, 60, 70, 80, 90, 100, or 110 degrees.

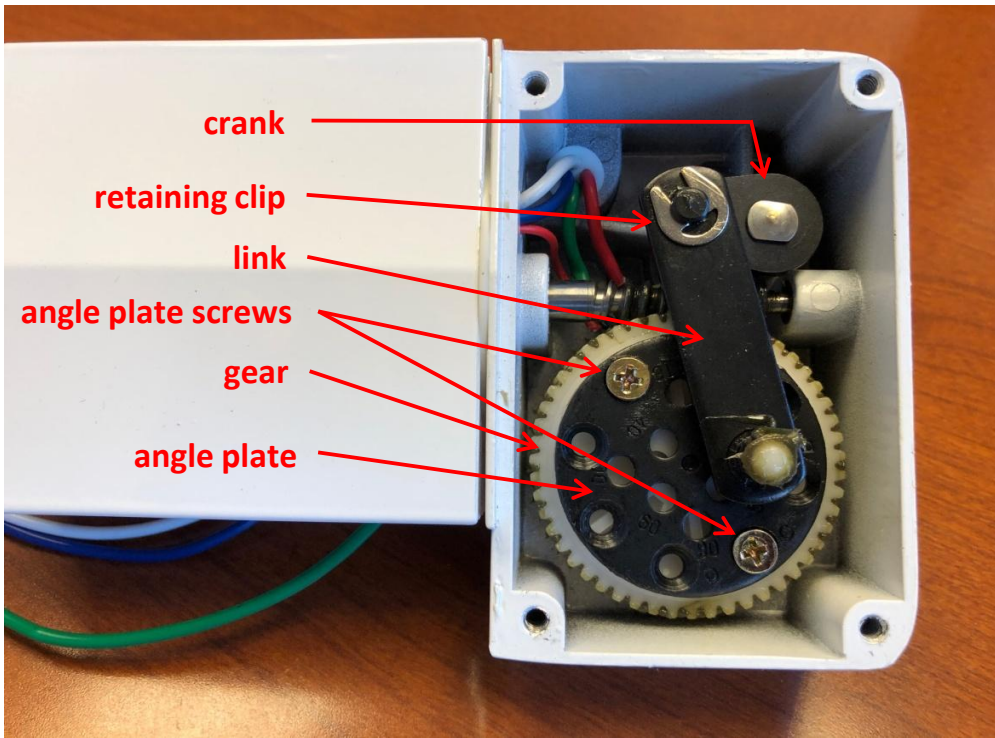
The WEXCO 4A motor can be set to park the wiper arms and blades on the left side of the windshield, or on the right side of the windshield. Please see the technical brief related to Park Position for definitions and details.

2)



On the back of the 4A motor, remove the (4) retaining screws using an Allen key (provided with the motor), or a hex head.

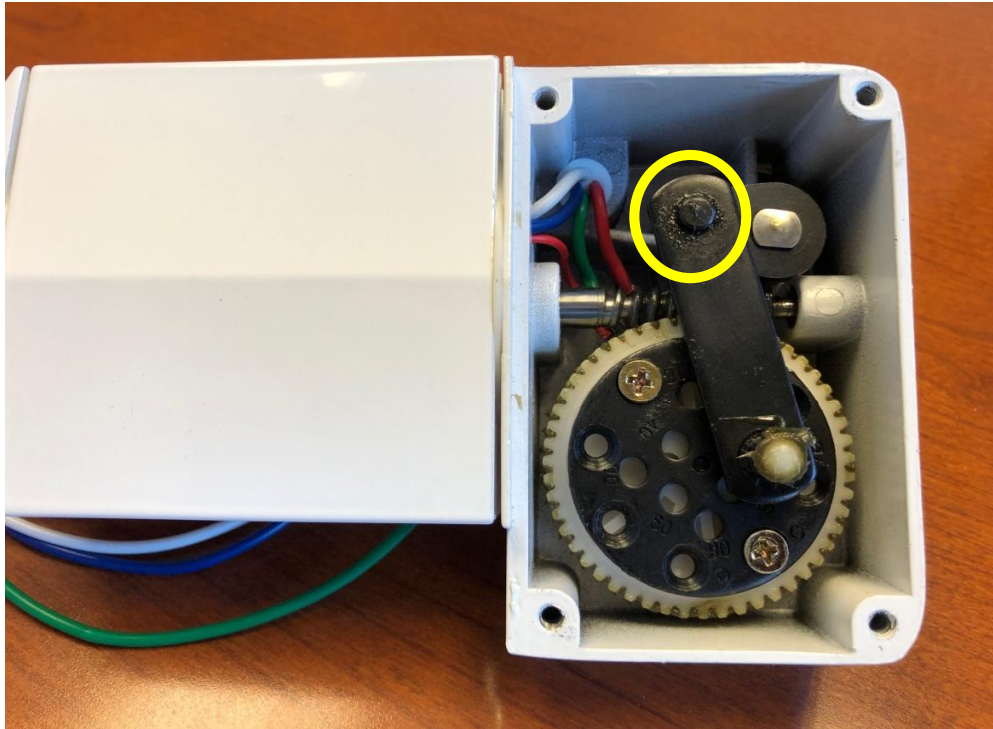
3)



Set the cover aside, making sure to retain the sealing gasket.

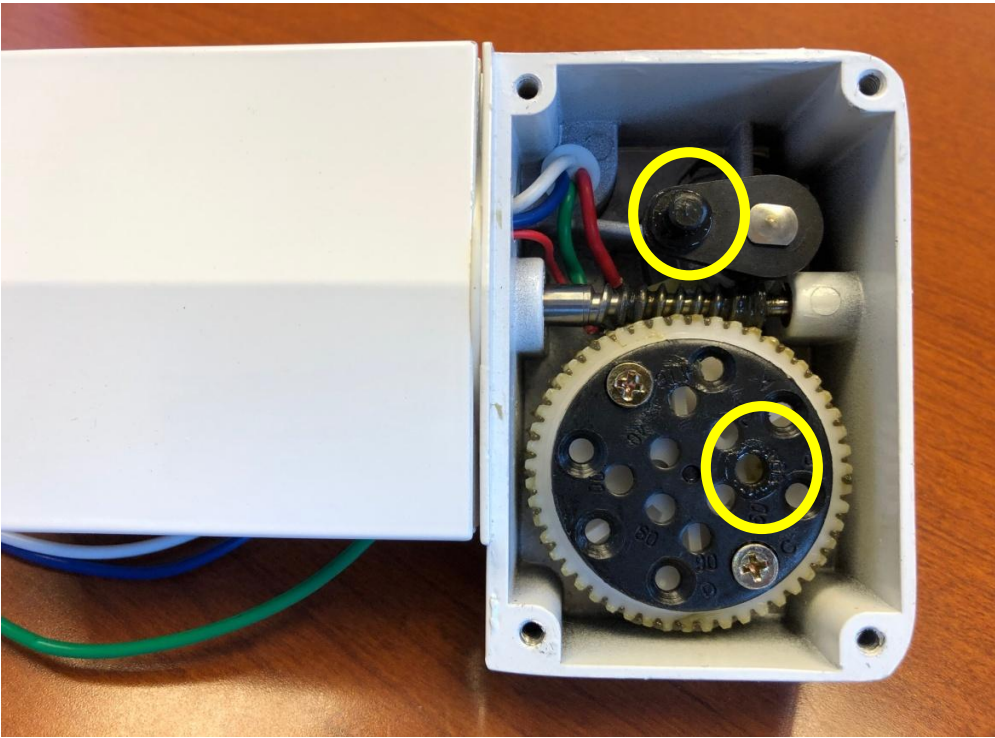
Once inside the motor, take note of the crank, retaining clip, link, angle plate screws, gear, and angle plate

4)



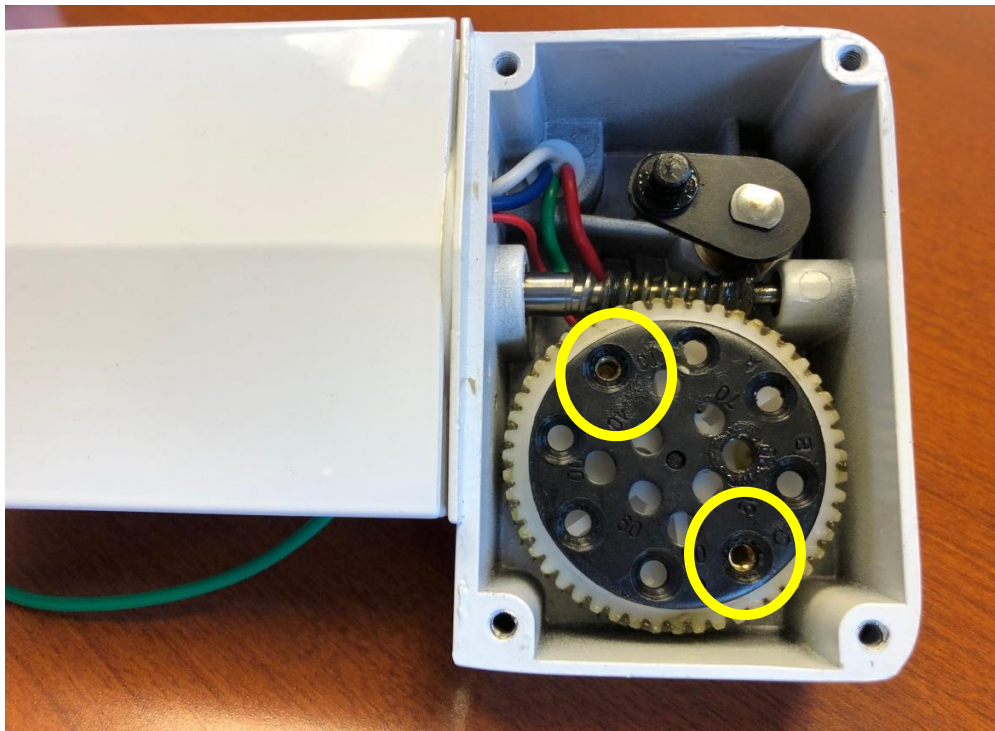
Using a small, flathead screwdriver, push the retaining clip off the crank pin.

5)



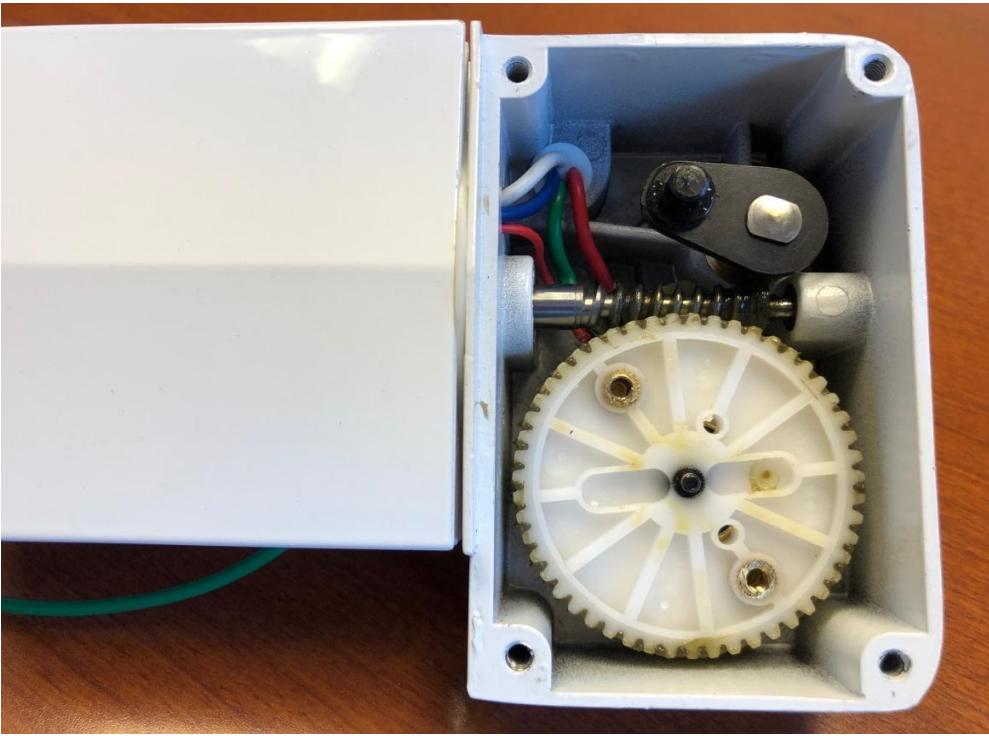
Lift the link straight up, off the crank pin and out of the hole on the angle plate.

6)



Using a #2 Phillips head screwdriver, remove the two M4 angle plate screws, and their lock-washers. Caution: the screws are soft brass, and can strip easily.

7)

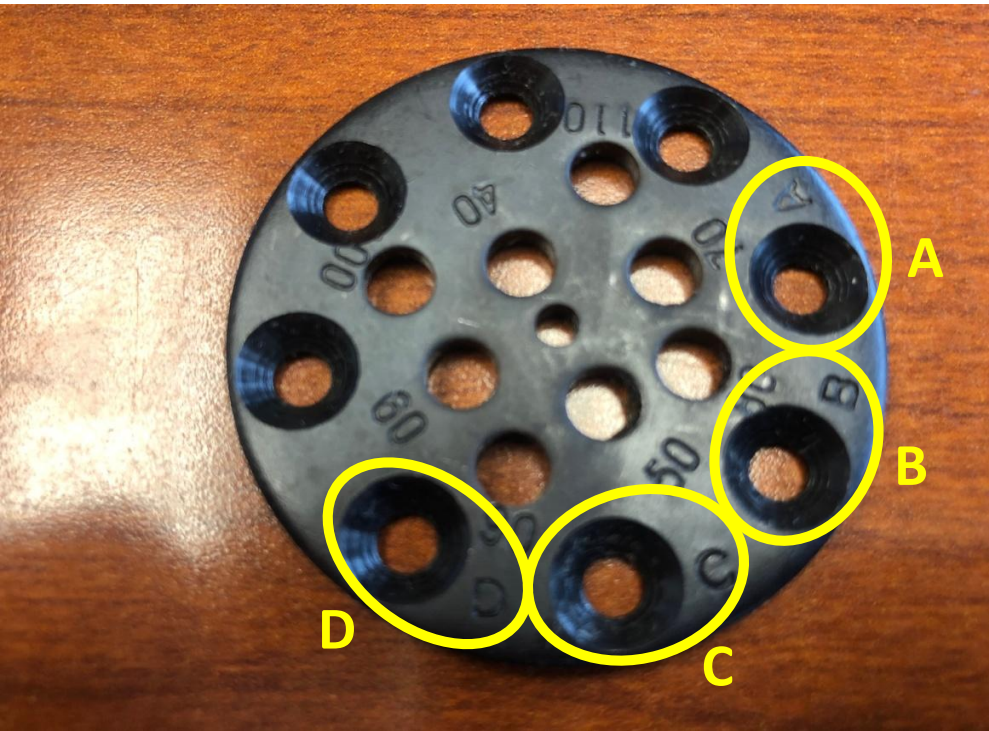


Lift the angle plate straight up, out of the gear.

The two channels in the gear determine the park position (left or right) of the motor.

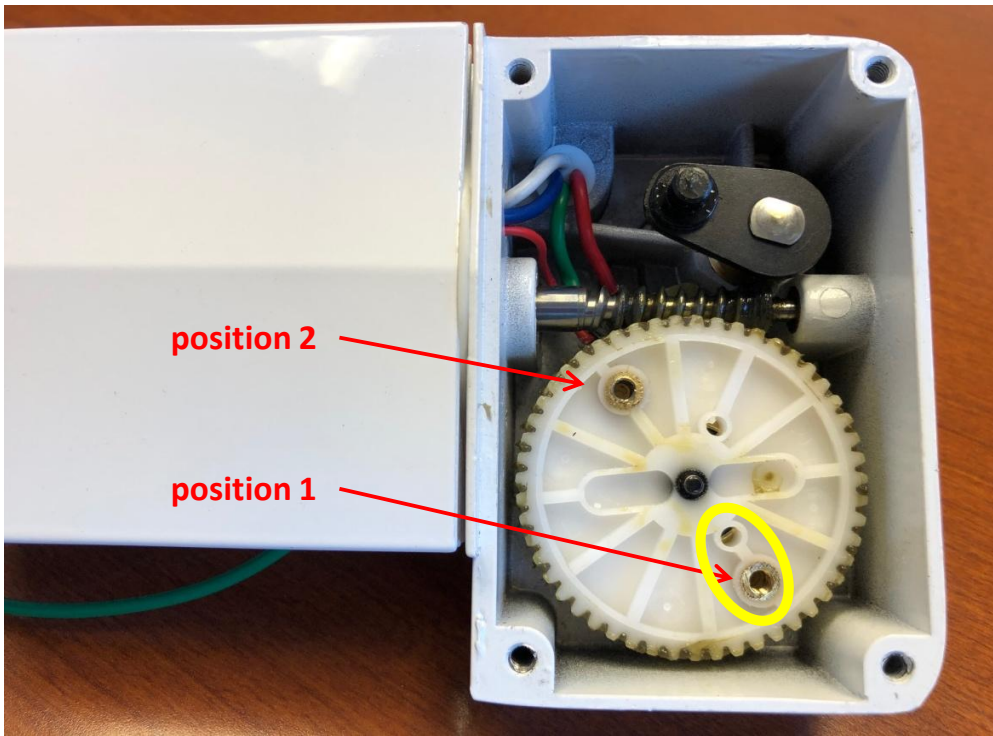
When re-assembling, the desired angle hole will need to be positioned above one of these two channels, or else the pin on the link will not properly engage.

8)



Note that around the perimeter, the angle plate has four holes, stamped "A", "B", "C" and "D"

9)



To achieve the desired sweep angle, use the chart in step 9.

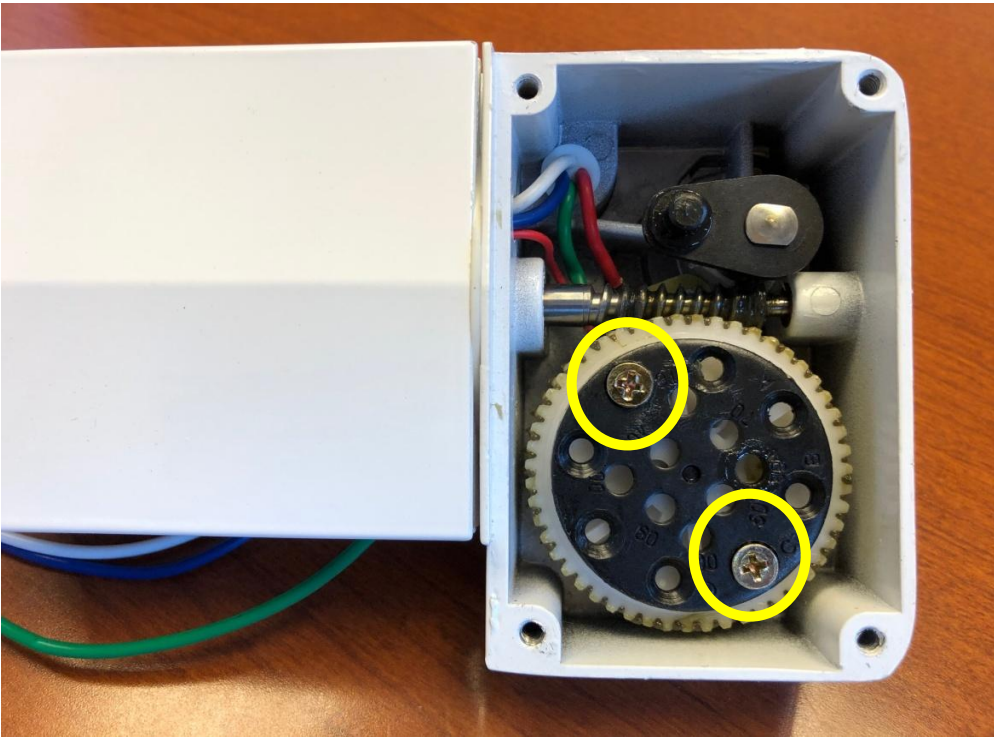
Position the correct stamped hole, over the correct position on the gear. Confirm that the desired angle (stamped on the angle plate) is positioned over one of the channels in the gear.

Position 1 is always closest to the hole.

- 10) 40 degrees of sweep, parked right
- 40 degrees of sweep, parked left
- 50 degrees of sweep, parked right
- 50 degrees of sweep, parked left
- 60 degrees of sweep, parked right
- 60 degrees of sweep, parked left
- 70 degrees of sweep, parked right
- 70 degrees of sweep, parked left
- 80 degrees of sweep, parked right
- 80 degrees of sweep, parked left
- 90 degrees of sweep, parked right
- 90 degrees of sweep, parked left
- 100 degrees of sweep, parked right
- 100 degrees of sweep, parked left
- 110 degrees of sweep, parked right
- 110 degrees of sweep, parked left

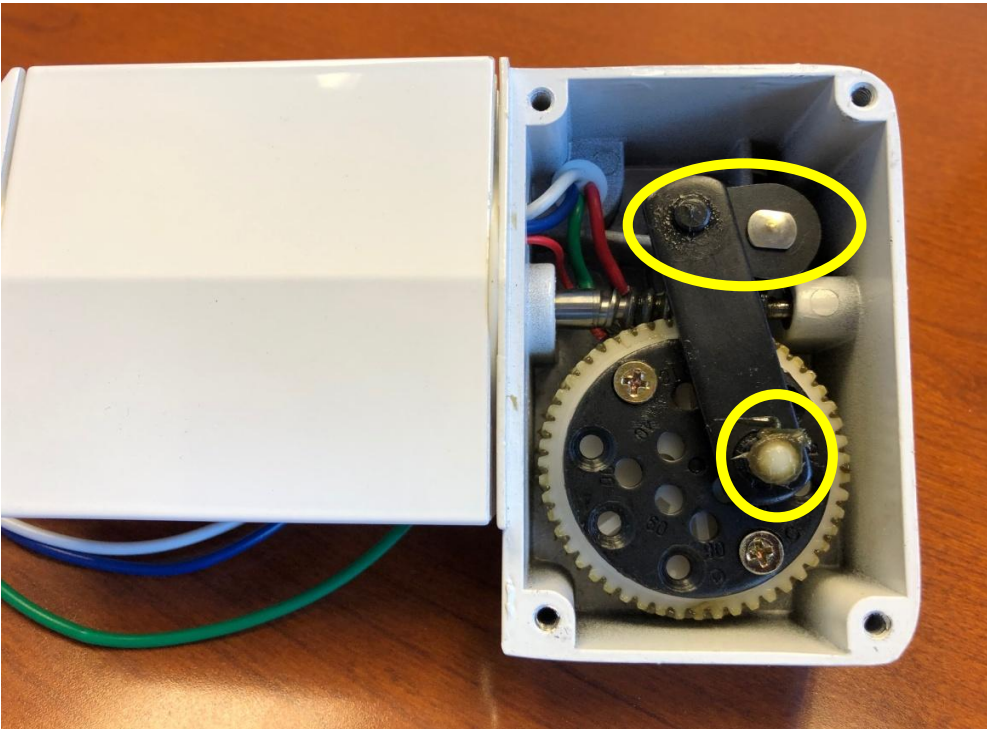
- |                       |   |                 |
|-----------------------|---|-----------------|
| position stamped hole | D | over position 2 |
| position stamped hole | D | over position 1 |
| position stamped hole | D | over position 1 |
| position stamped hole | D | over position 2 |
| position stamped hole | B | over position 2 |
| position stamped hole | B | over position 1 |
| position stamped hole | B | over position 1 |
| position stamped hole | B | over position 2 |
| position stamped hole | C | over position 1 |
| position stamped hole | C | over position 2 |
| position stamped hole | A | over position 2 |
| position stamped hole | A | over position 1 |
| position stamped hole | C | over position 2 |
| position stamped hole | C | over position 1 |
| position stamped hole | A | over position 1 |
| position stamped hole | A | over position 2 |

11)



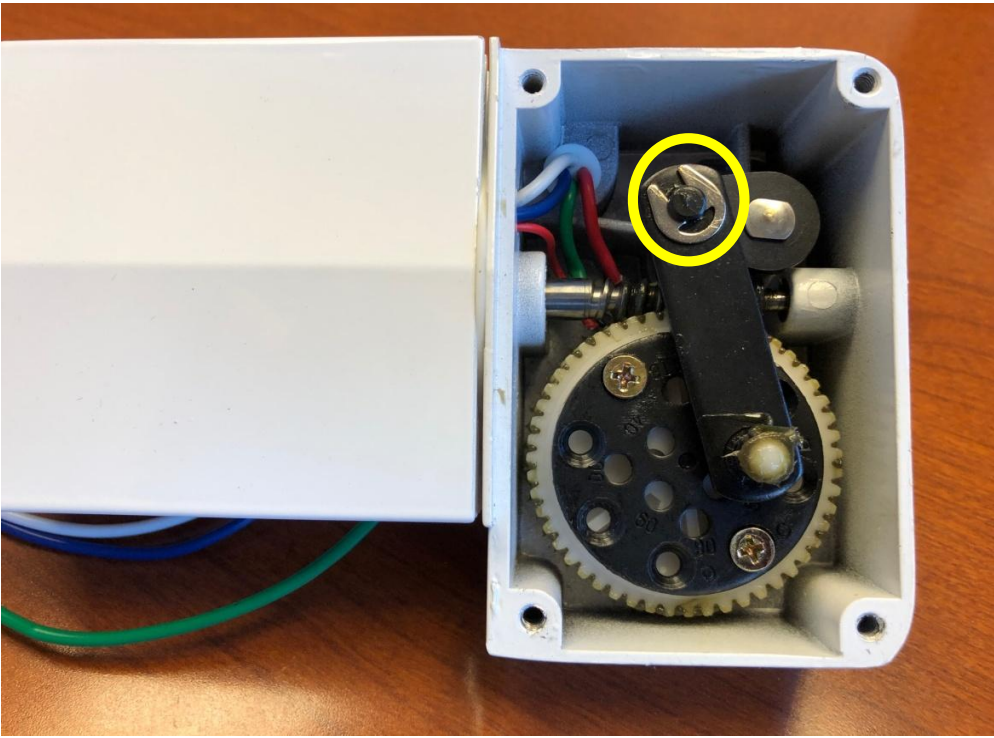
Re-install the two M4 angle plate screws, and their lock-washers. Tighten with a #2 Phillips head screwdriver, until the lock washers lock.

12)



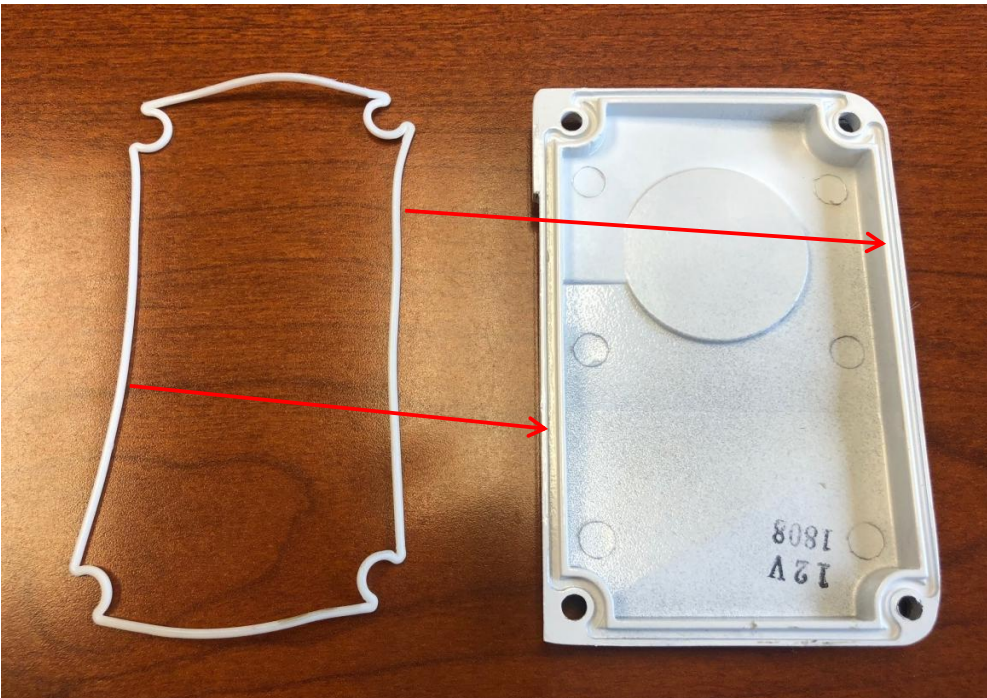
Re-install the link, moving the crank to allow both the pin on the crank to engage the hole in the link, AND the pin on the link to engage the hole on the angle plate at the same time. If the pin on the link does not properly seat itself in the hole on the angle plate, confirm that the hole on the angle plate is positioned over one of the channels in the gear.

13)



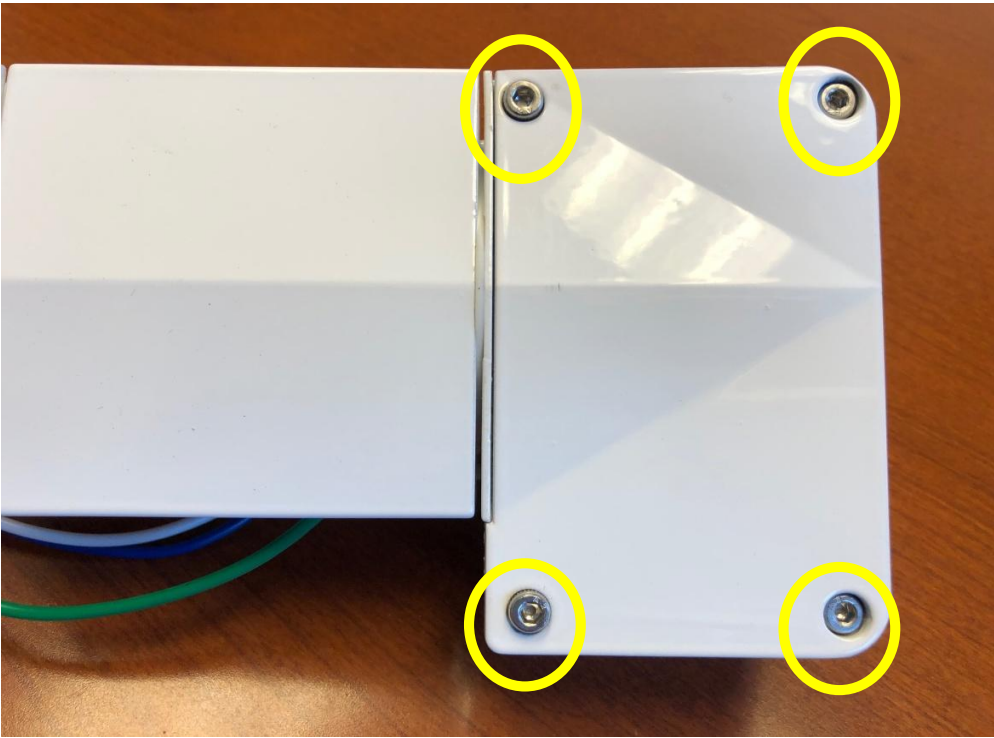
Re-install the retaining clip, making sure that the flat side of the clip is downward. The link is spring-loaded, so push down on the link to ensure that the retaining clip engages the groove in the crank pin.

14)



Before re-installing the cover, make sure that the gasket is properly seated in the grooves of the cover as shown.

15)



Re-install the motor cover, and tighten the (4) hex head screws, using an Allen key (provided with the motor), or a hex head.