



## Eagle AZ or EL Motor replacement Instructions

### Before you begin:

Verify that the motor will not respond with power directly applied to it. Disconnect the 12V power plug from the controller, and use wires from 12 pin connector behind the controller (1 & 2 azimuth, 3 & 4 Elevation) to apply power using the 12V plug place the wires, one in the center of the plug and the other to the outside of the plug. If you do not hear the motors run while holding the wires, then reverse the process.

You could also have a bad control cable connection, so you want to try and apply power directly to the wires at the motor with a battery when you have access to the motor on the mount directly.

You will need: a long hex wrench, a Phillips screwdriver, a jewelry screwdriver, 3/16 and 7/16 Allen wrench's, also have Loctite available to put in the new motor screws.

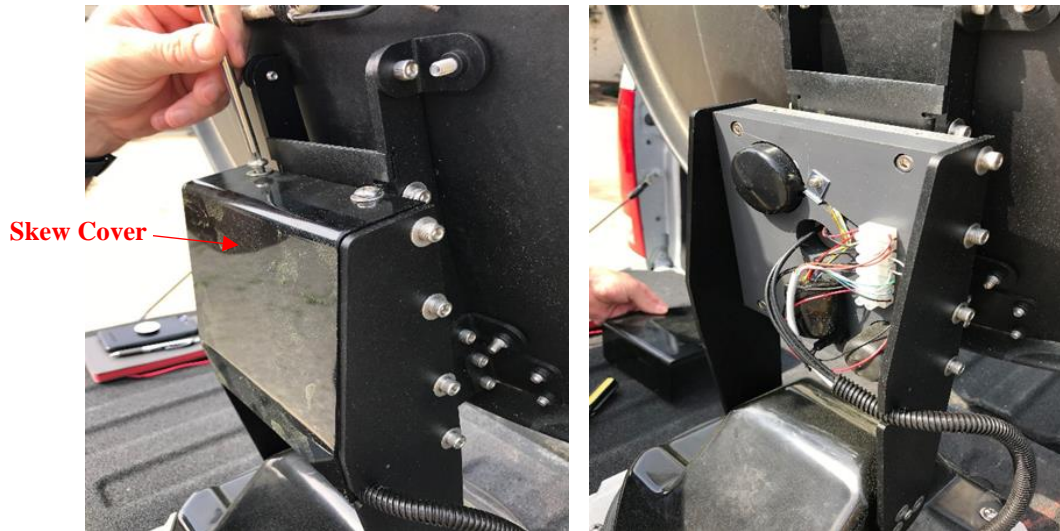
**Follow the steps below to remove a one-piece Motor cover. If you have a 2-piece split Motor cover, skip this section, and go to step 5.**

1. To remove the motor cover, start on the bottom left hand side of the elevation arm bracket (side opposite of cable harness) and remove the 4 bolts connecting the arm using a 3/16 Allen wrench. Then work up to the 4 bolts above it and remove. After removing the arm bracket, you will expose the elevation shaft cap.

**Note-Elevation Shaft cap comes off groove side inward!**



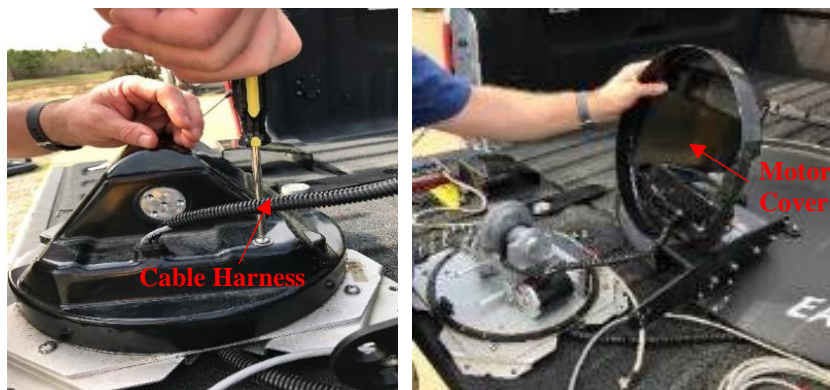
2. Continue to the top of the skew assembly box and remove the 2 Phillip screws to remove the skew cover.



3. Now move to the other arm bracket (cable harness side) and remove all 8 bolts like the previous side, starting with the 4 bolts at the bottom of the arm. You will need to hold the antenna reflector with your left hand to balance the dish.

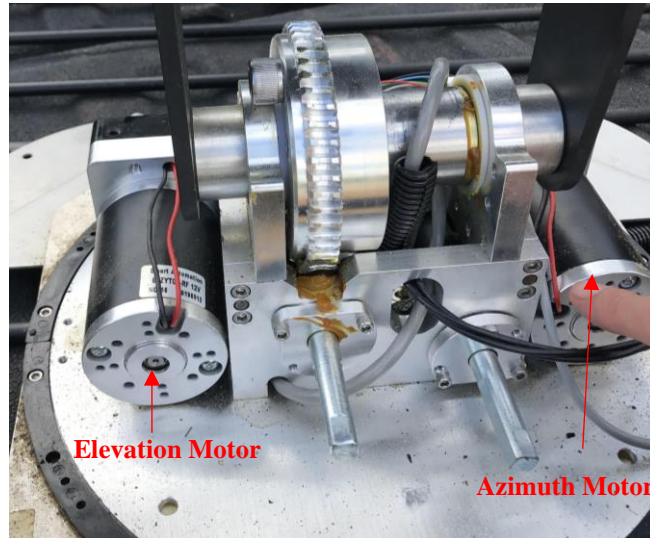


4. Lay the dish reflector down **carefully holding the LNB arms** and unscrew the 3 Phillip screws on the Motor Cover. Pull the cover up to view the assembly, being careful not to pull on the Cable Harness.

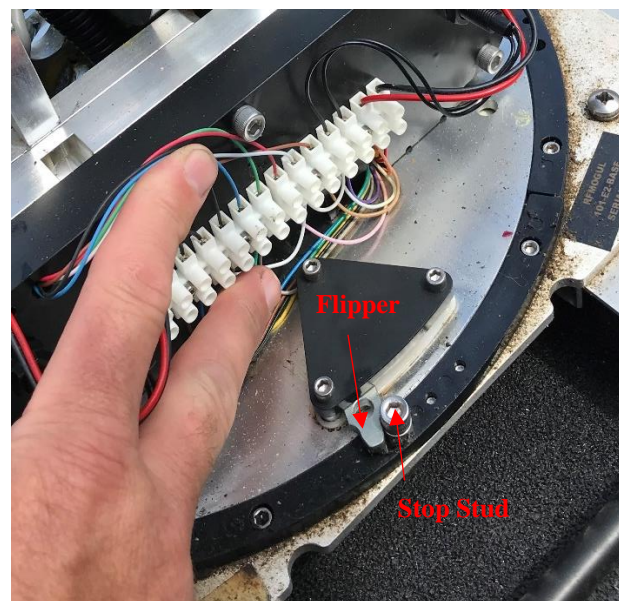
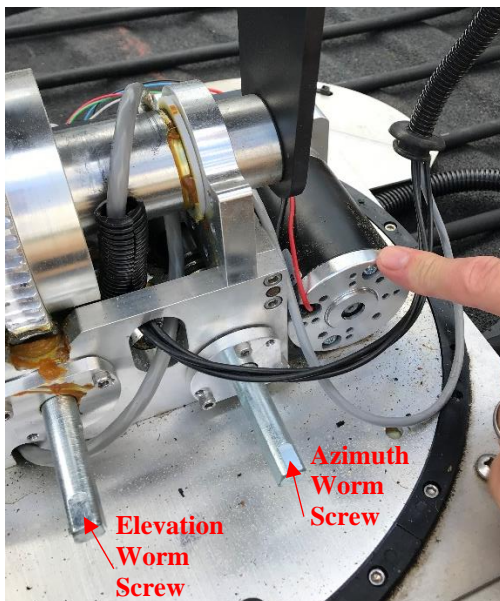


5. For existing two-piece split Motor covers: Remove the 7 bolts from the split cover and remove the cover.

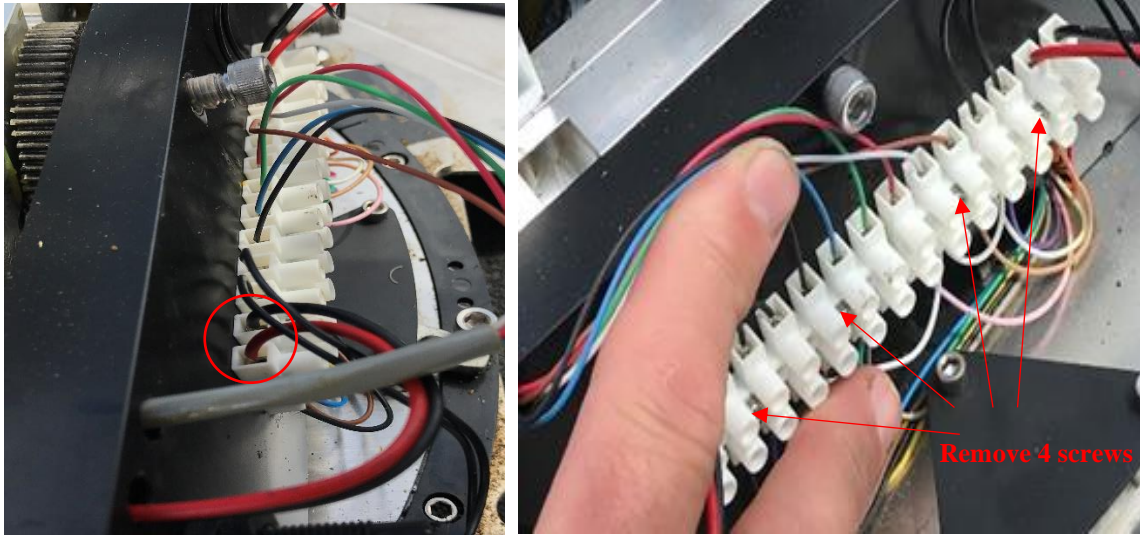
The pictures below will show how to access the inside of the gear box. The elevation motor is the one next to the big gear.



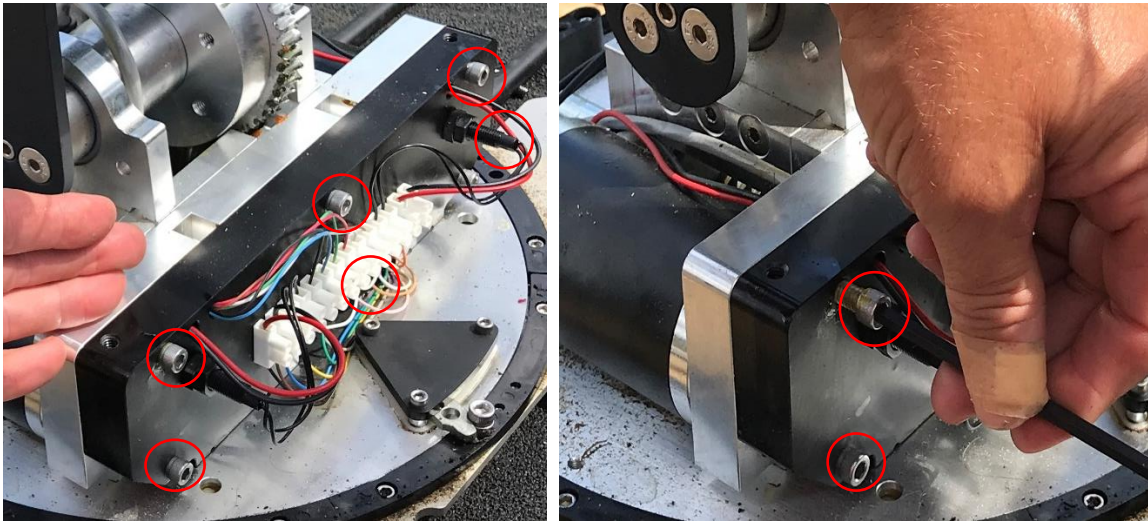
6. With a 7/16 wrench turn the azimuth worm screw to move the flipper (on the opposite side) away from the stop stud, then remove the flipper by removing 3 screws and then pry up on the sides until it loosens off. Doing this will allow more room to detach the gear box cover. You may want to loosen the worm screws a little to replace the gear box cover later as it fits tight.



7. Unscrew the Red and Black motor wires on the far left side (or right, depending on which motor is being replaced) of the Wire Terminal Block, then remove the 4 screws in the Wire Terminal Block making sure not to pull the wires taut only loose to be able to move the motor gear box a little bit.

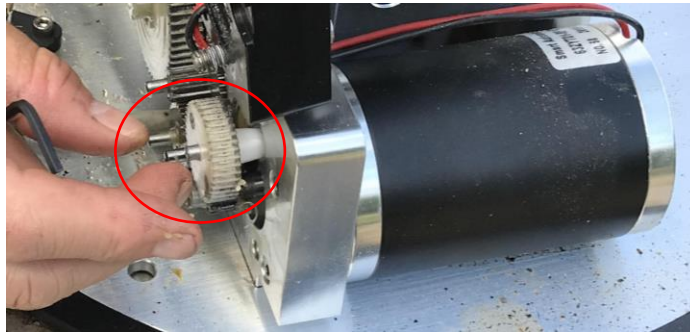
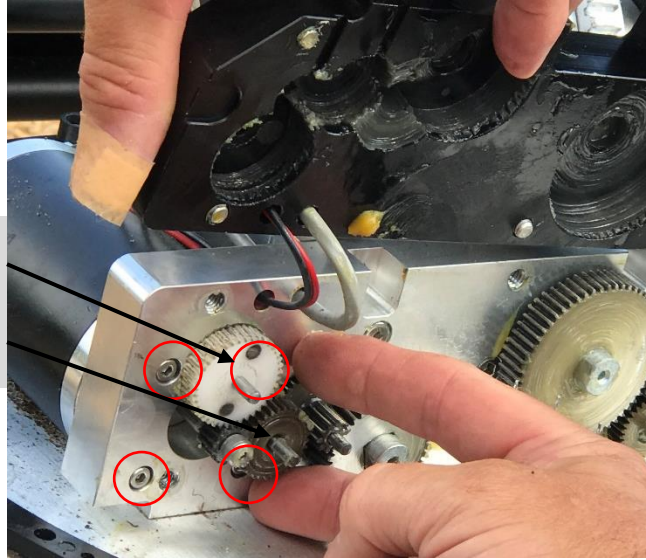


8. Partially unscrew the 6 screws from the Motor gear box enough so it can be removed. No need to completely remove screws as it is easier and quicker to put back together.

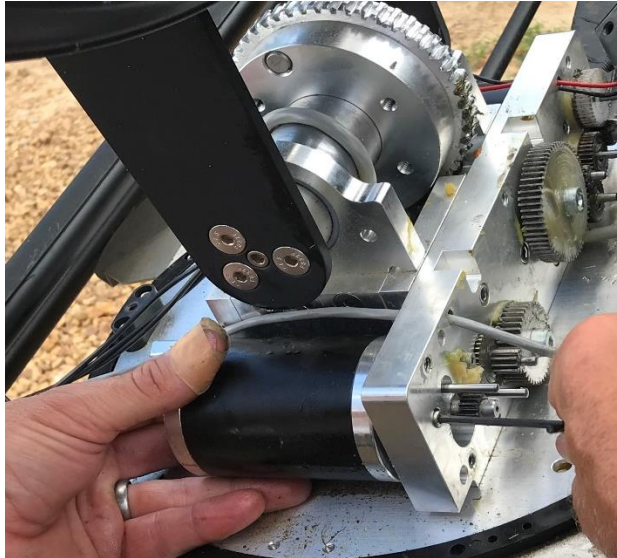
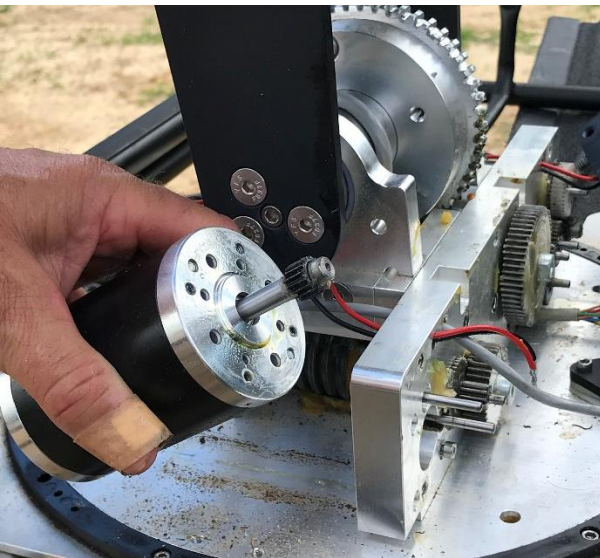


9. Remove the **4** screws holding the Motor onto the Gear Box. Sometimes, because of the grease, the gears come out with the gray cover when you open the gear box. This is normal.

Remove the white and grey gear to access the 3<sup>rd</sup> and 4<sup>th</sup> screws.



10. You should now be able to pull off the motor and replace it with a new one. Apply blue Loctite to the new motor screws. Follow these steps in reverse to reassemble. Reinstall flipper making sure it operates OK by moving it slowly to both sides coming back to the middle. Test the motor before reinstalling the Motor Cover.



**Note: When reassembling the Motor Cover make sure the Cable Harness rubber plug is securely seated.**

**Note: If installing a new split (two piece) cover you will need to cut the old cover off. Cut from the Cable Harness hole outward to the edge of the cover to remove old Motor Cover.**

**Note: If you are installing a 1-piece Cover, make sure to install the ELEVATION SHAFT CAPS with the groove side in with the single screw prior to installing the ELEVATION ARM Assembly! Also note the Y shape of the ELAVATION SHAFT CAP BOLT pattern and align the ELEVATION ARM with the appropriate mounting holes.**

**Note: When installing the CABLE SIDE ELEVATION ARM (with the dish reflector and assembly attached) you will need to balance the assembly to get the three bolts to fit tight.**

Please contact RF Mogul Tech Support if you have any questions at:

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Website: [www.rfmogul.com/submit-a-ticket](http://www.rfmogul.com/submit-a-ticket)