

Instructions (HD Motor Shaft Replacement):

Video Instructions at: <https://rumble.com/vum6e9-hd-motor-shaft-replacement.html>

TOOLS NEEDED:

- 7/16" and 9/16" Wrenches
- 1/16" and 7/64" Hex Key Wrenches
- Flat Blade Screwdrivers
- Rubber Mallet or Dead Blow Hammer.
- * Blue Loctite
- * 1/4" Nut Driver
- * Vise

1.) Using 9/16" Wrenches, remove old swing arm.



2.) Remove motor from base. Using 7/16" Wrench, remove (3) 1/4" bolts that secure motor to base.



3.) Pry Spring Washer off of Motor using a flat blade screwdriver (This is what holds the shaft in place).



4.) Remove plate from the back of the gear box using a ¼" Nut Driver.



5.) Using ¼" Nut Driver, push old shaft and gear out back of gear box (where plate was removed).

6.) Apply grease (from old gear and inside gear box) to worm gear and new gear. Make sure all the cogs are coated.



7.) Re-install shaft and gear in gear box housing. Wiggle gear a little if needed and ensure it mates with the worm gear, and seats all the way into gear box. Turn upside down, using a large socket to hold the gear in the gear box. Then install rubber O-ring. Then plastic washer. Then metal washer, and then spring washer. With large socket holding gear in gear box, tap spring washer securely onto shaft using a 15mm or similar size socket. Ensure spring washer goes around thick part of shaft, securely holding the shaft and gear in place.



8.) Install new gasket and reinstall plate on back side of gear box.

Install Woodruff key in shaft keyway, ensure it is centered, and then press it securely into place using a vice.



9.) Install motor back onto The Green Guard Base. Install the (3) ¼"-28 fine thread bolts and tighten using a 7/16" wrench. If necessary, install more blue Loctite.

10.) Install coupling onto shaft. If necessary, lightly tap coupling with a rubber mallet until it goes fully on the motor shaft (the end of the coupling lines up with the end of the shaft). Install blue Loctite, and small set screw in coupling and tighten to secure coupling to shaft (using 1/16" hex key wrench). *(Note: If you accidentally tapped too hard and pushed the shaft towards the gear box, and the spring washer came loose...you'll need to reinstall the spring washer. You can do this by using (2) flat blade screw drivers to pry the spring washer back onto the thick part of the shaft.*



11.) Install blue Loctite in (4) threaded holes in coupling. Install Swing Arm. Install (4) little black 6-32 Allen head screws and tighten using 7/64" hex key wrench.



12.) Reattach other end of swing arm. Use included washers to fill the gap between the swing arm and the bearing. Install 3/8" bolt and secure with 3/8" Jam Lock Nut. Tighten using 9/16" Wrenches.

OK. You are now back in business.

Install The Green Guard on your mower and get back to mowing!