



# SERVO GEAR REPLACEMENT GUIDE

**November 13, 2017**

# GEARSET REPLACEMENT PROCESS



Figure 1: Smart Servo



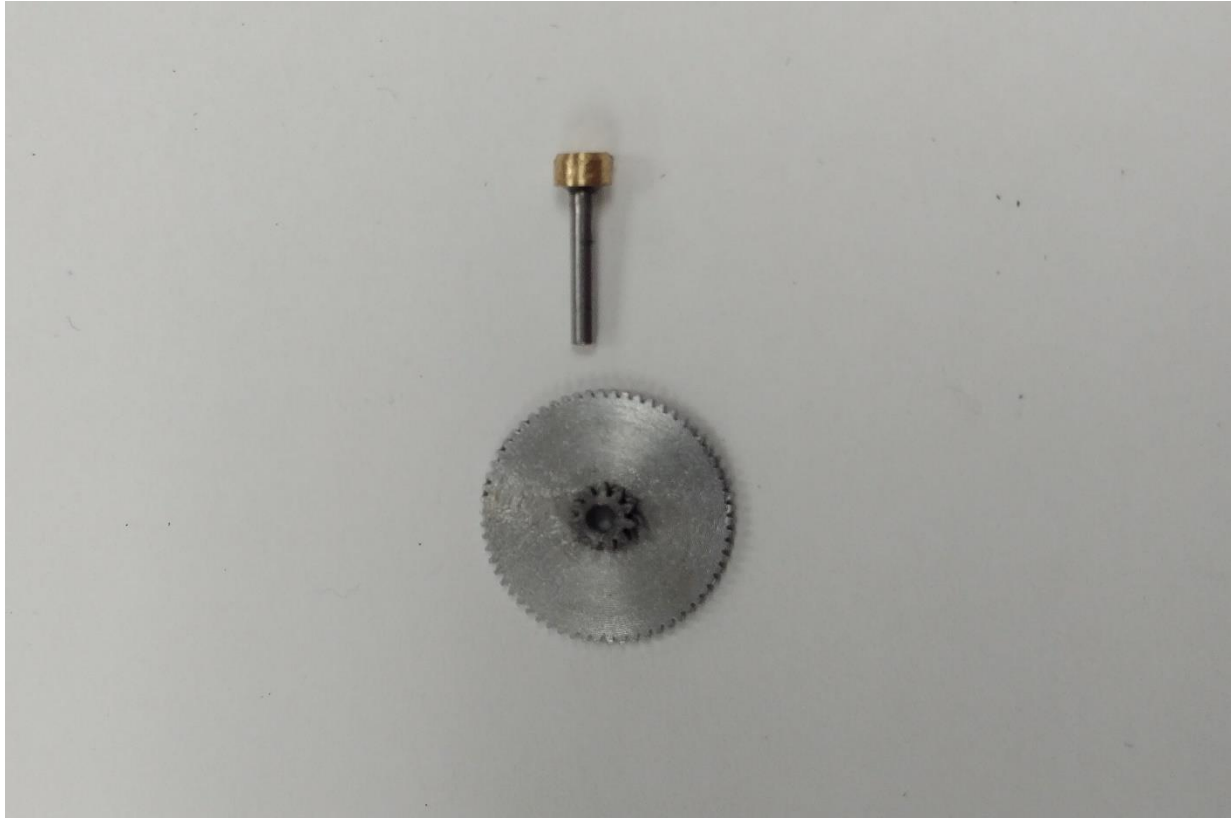
Figure 2: Remove 4 screws on bottom of servo.



Figure 3: Take off top plastic cover of servo.



**Figure 4: Carefully remove the 4 original, broken gears from the case. The last, silver gear is removed with the axle as one unit.**



**Figure 5: Remove the axle pin from the broken silver gear.**



**Figure 6: Attach the new silver gear to the axle pin.**



**Figure 7: Place the new silver gear onto the servo unit. (1) Make contact with the servo motor's output shaft gear first, then (2) slide the axle into the plastic axle hole.**



**Figure 8: Place the second gear in place. Make sure the lower level of teeth on this gear mesh with the upper level of teeth on the silver gear.**

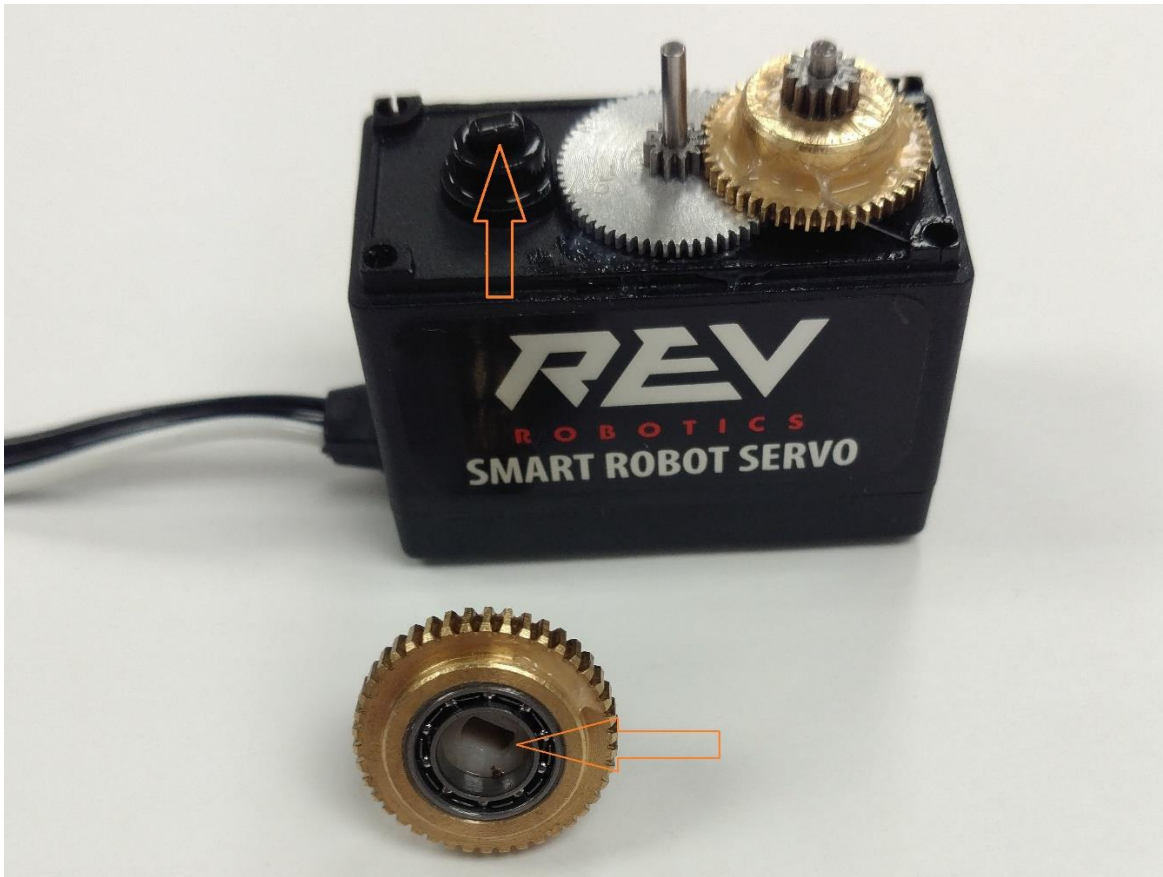


Figure 9: Next place the output shaft gear in position. Make sure to align the slot in the gear with the tab on the servo.



Figure 10: Once the output shaft is in place correctly, it should be seated securely but not touching any other gears.



Figure 11: Place the final gear on the middle shaft. It should first mesh with the output shaft on its lower set of teeth, and then its upper teeth will mesh with the gear on the right shaft.

**REMINDER**

These gears are shipped un-greased. They need grease to run smoothly, so make sure there is enough grease in the gearbox, and if not, add equivalent of ~1/4" diameter sphere of grease to gears in the gearbox.



Figure 12: Finally, reattach the top plastic cover, making sure to place it directly down on top of the gears so that they don't become misaligned. Reattach the 4 screws and the servo is ready to operate.