



Roli Gearbox Maintenance

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EZ-Robot Inc.
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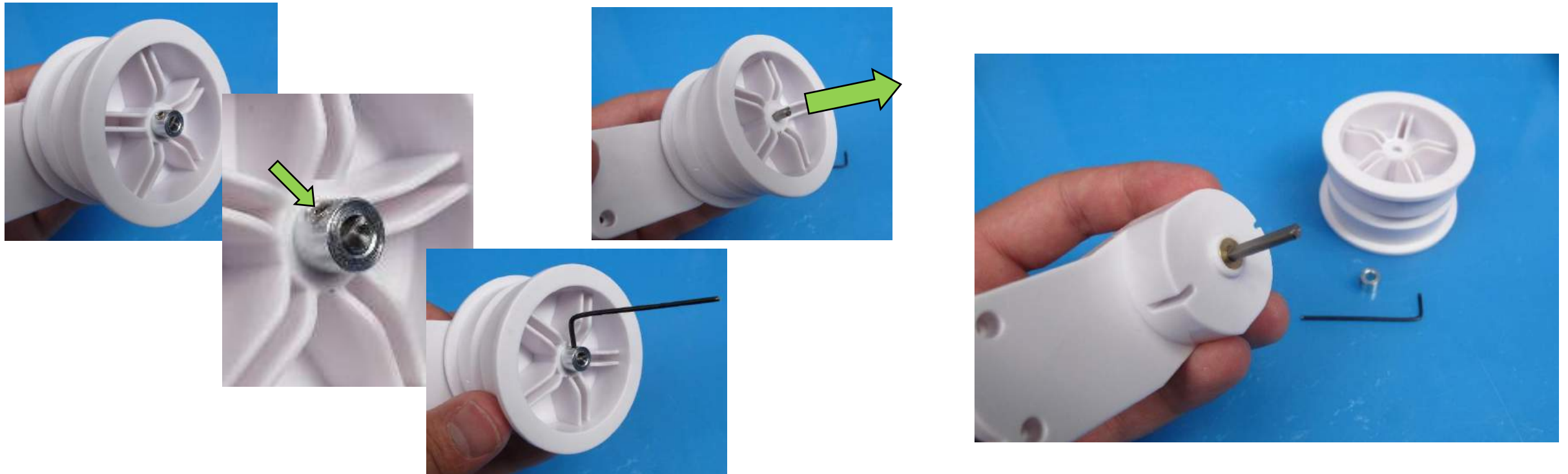
Jeremie Boulianne

Wear and Tear



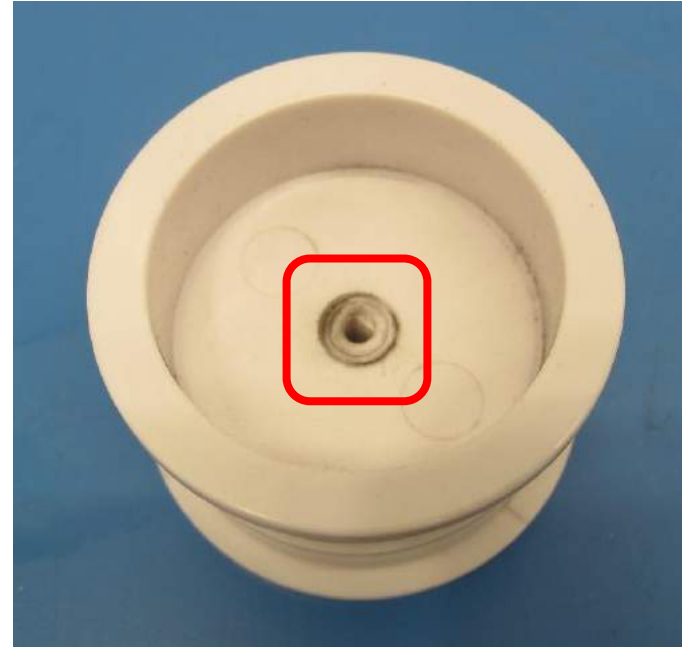
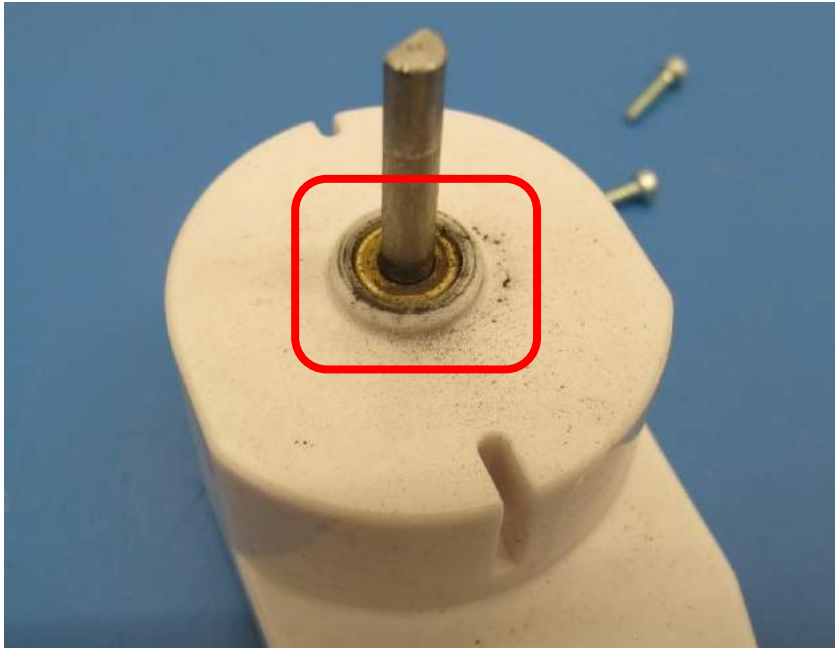
The K-1403, K-1404, K-1405, K-1406 Roli gearboxes are items that may experience wear and tear over time. Wear occurs due to friction, causing carbon build-up after prolonged use. To keep gearboxes running optimally, maintenance can be performed when the gearbox begins to operate sluggishly.

Remove the Wheel from the Gearbox



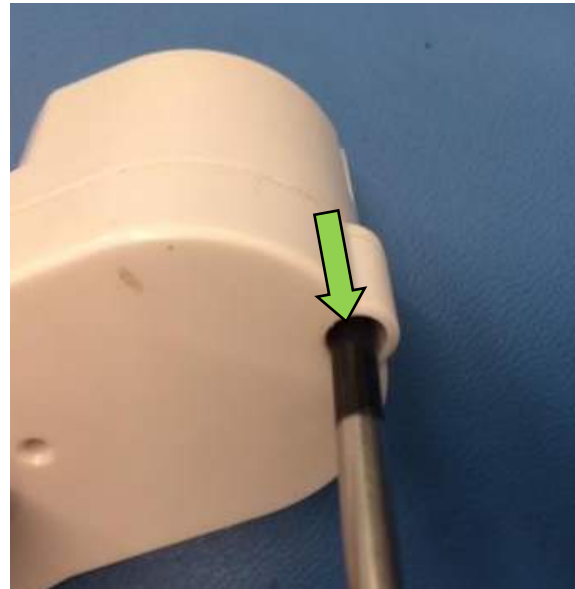
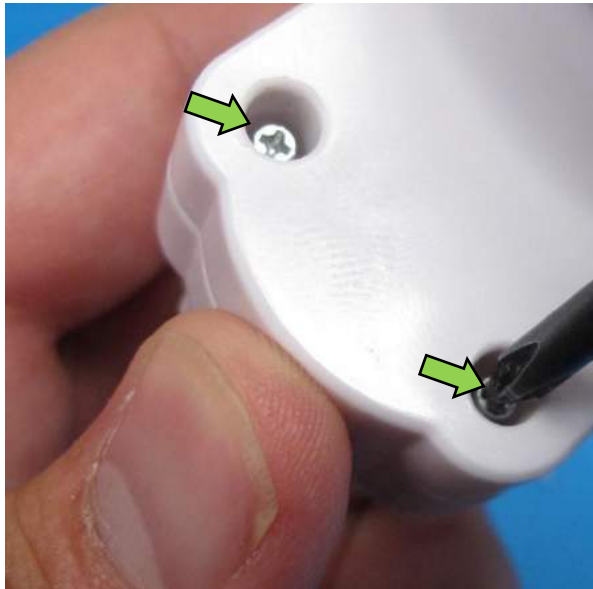
Use a 1.5mm Allen Key to loosen the set screw on the collar. Remove the collar and then remove the wheel from the gearbox. If the wheel does not separate easily, carefully pry the wheel away from the gearbox housing using a No. 2 Phillips screwdriver.

Look for carbon build-up



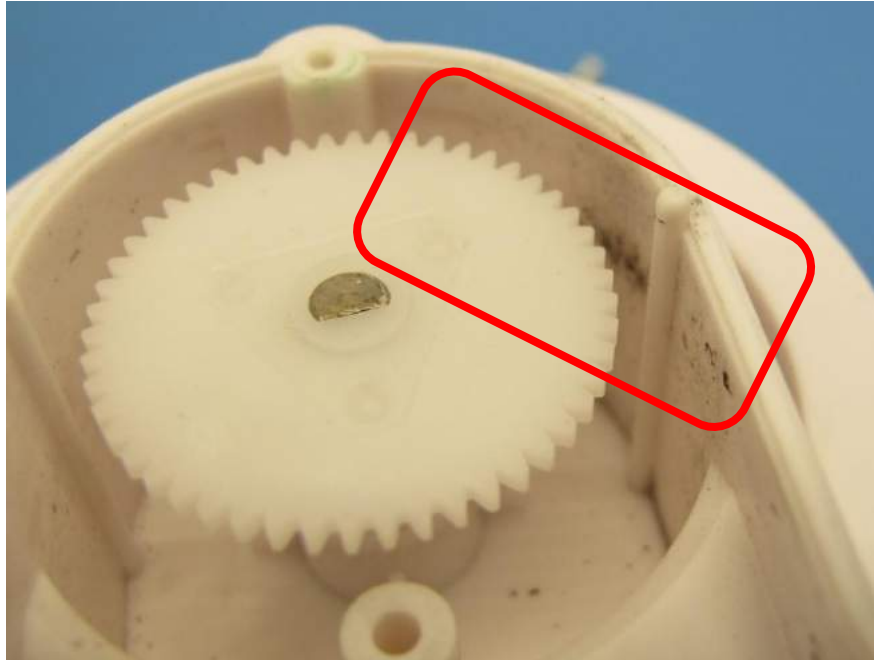
Look at and under the wheel for carbon build-up. If you see build-up, it's a great idea to continue on with the following steps. If no carbon build-up is present, and the wheel spins freely, cleaning is not necessary and you can reattach the wheel.

Open the Gearbox housing



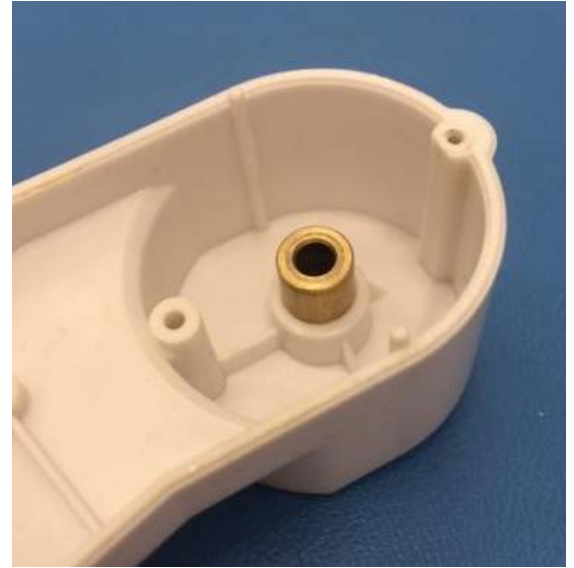
Use a No.1 Phillips Screwdriver to remove the 3 screws holding the gearbox together. Open the gearbox.

Look for carbon build-up



Look inside the housing and on the output shaft for carbon build-up.

Clean the brass bushing



Using Rubbing Alcohol (90% or greater) and a Cotton swab, clean the inside of the brass bushing. Multiple passes may be required. Also, clean the inside of the gearbox housing.

Clean the output shaft



Using Rubbing Alcohol (90% or greater) and a piece of paper towel, clean the output shaft. Multiple passes may be required. Also, clean the inside of the wheel.

Add 3-in-1 to the bushing



Add some lightweight 3-in-1 oil to the brass bushing to decrease friction in the future.

Put the gearbox back together



Put the K-1403, K-1404, K-1405, or K-1406 gearbox back together by reversing the disassembly steps. After the maintenance is done the gearbox will work wonderfully again!