



DeWalt DW660 Bearings Replacement

The bearings in the DW660 are intended to last the lifetime of the tool, however improper use may lead to failures in the bearings, which can only be resolved by replacing them.

Written By: Ryan Owen Rheaume



INTRODUCTION

This guide will take you through the steps of disassembling the DW660 motor and replacing the bearings. Please make sure that your DW660 is not plugged in to any outlet before taking it apart.

TOOLS:

- [T15 Torx Screwdriver](#) (1)
- [T20 Torx Screwdriver](#) (1)
- [Snap Ring Pliers](#) (1)
- [Ball Bearing Puller](#) (1)

Step 1 — Bearings



- Pull off the depth guide.
- *i* If the guide doesn't come away easily, use a twisting motion to pull it from the tool.

Step 2



- Hold down lock #1 to prevent the motor from spinning.
- While holding lock #1, hold down lock #2 as well.
- Rotate lock #2 counterclockwise to unscrew the collet nut.

Step 3



- Remove the collet nut and the collet from the device.

Step 4



- Unscrew the four 19mm T20 Torx screws on the motor shroud.
- Carefully remove the shroud from the body.

⚠ When removing the shroud, the spring that operates lock #2 may pop out.

Step 5



- Unscrew the four 19mm T20 Torx screws on the side of the back end of the DW660.
- Take apart the back two halves.
- Using two fingers, pull the black and white power wires from the motor to completely disconnect the back half of the device.

Step 6



- Lift the coiled spring from the back of the brush using a spudger.
- While holding the spring out of the way, use a pointed spudger to slide the carbon brush up out of the guide.
- Slowly release the brush spring. It will sit in the brush guide.
- Repeat this step for the second brush.

Step 7



- Pull the rotor out of the front of the DW660.

⚠ Be very careful to make sure the rotor does not collide with the stator. The stator coils or the commutator can be damaged very easily.

Step 8



- Remove the snap ring from the bearing by using snap ring pliers.

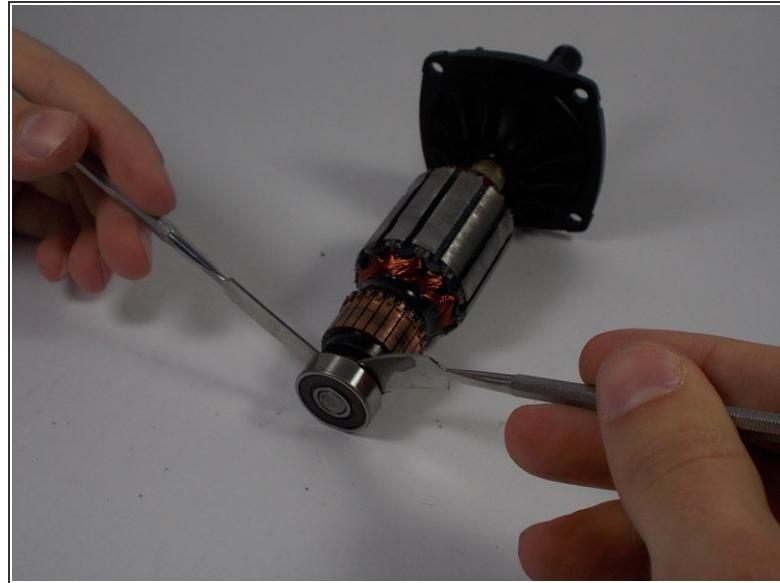
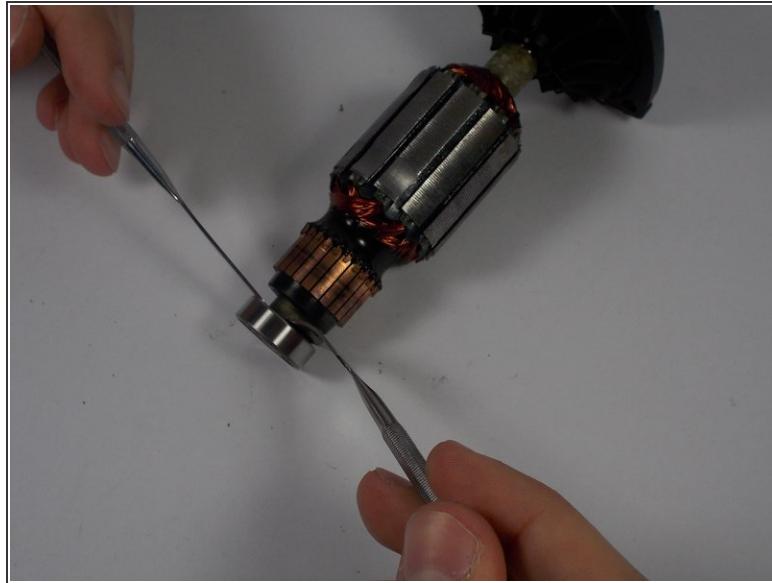
⚠ This will take some force and the snap ring will act as a spring, so be careful to make sure the ring does not fly off the pliers.

Step 9



- Pull the black plastic bearing block off of the motor shaft.
- Remove the ball bearing from the bearing block.

Step 10



- Remove the rubber cap from the bearing.
- Use the bearing puller to remove the bearing from the shaft.

★ When installing the new bearings, it may help to use a small hammer and a hollow circular pipe with the same outer diameter as the inner ring of the bearing.

To reassemble your device, follow these instructions in reverse order.