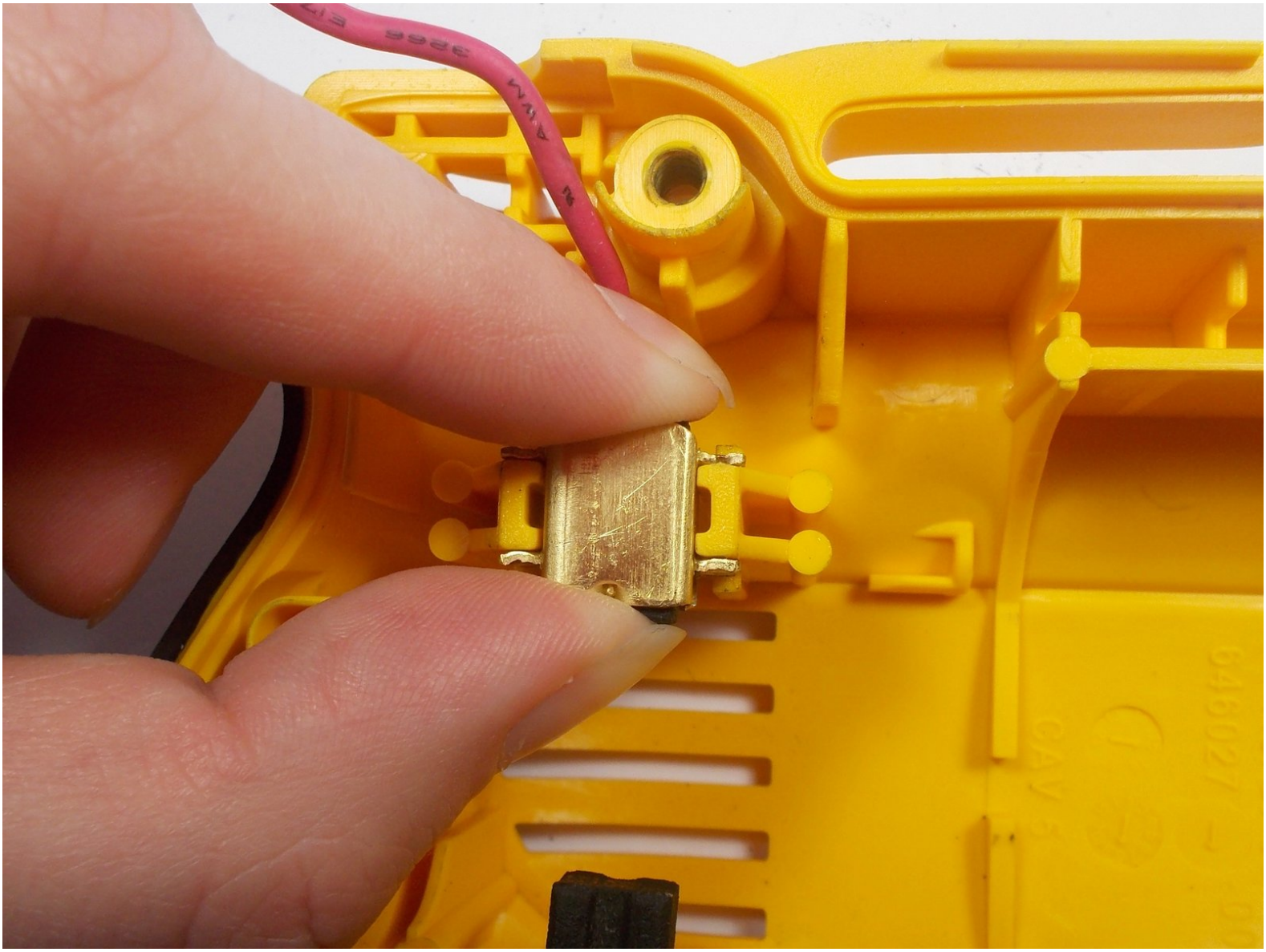
DeWalt DWD112 Brush Replacement

Replace worn brushes in your DeWalt DWD112 drill.

Written By: Joe Echelmeier



INTRODUCTION

The brushes in the DeWalt DWD112 direct the flow of current to the motor and create power for the drill. They can wear out over time, causing the drill to fail.

Worn out brushes can be replaced with a few easy steps. It is not necessary to remove all of the other parts for this repair, but it is advised as to not damage the other components.

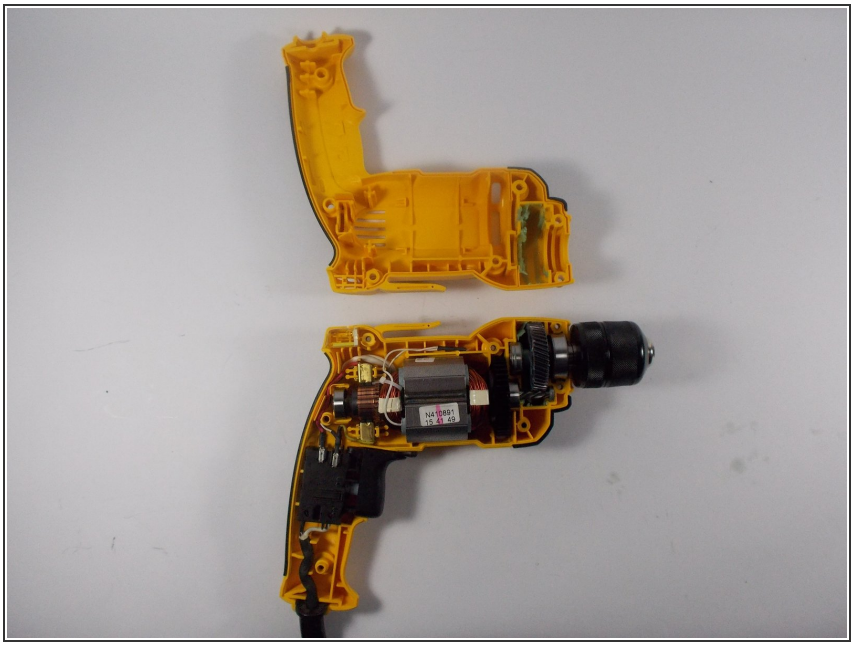
TOOLS:

- T20 Torx Screwdriver (1)

Step 1 — Power Cord

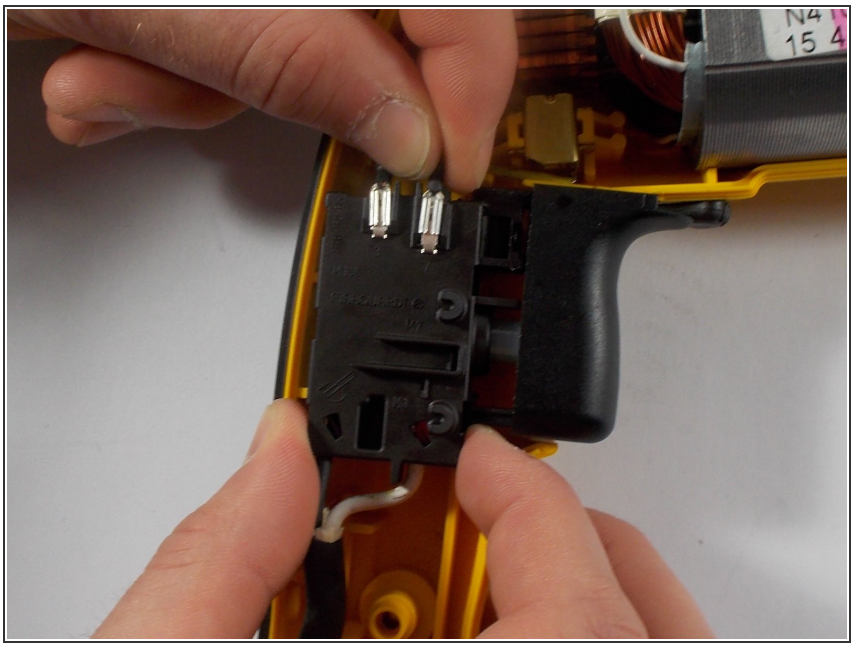
- Remove seven TR20 Torx Security screws from the side of the drill.

Step 2



- Remove the top cover to reveal the inside of the drill.
- Set the top cover of the drill aside.

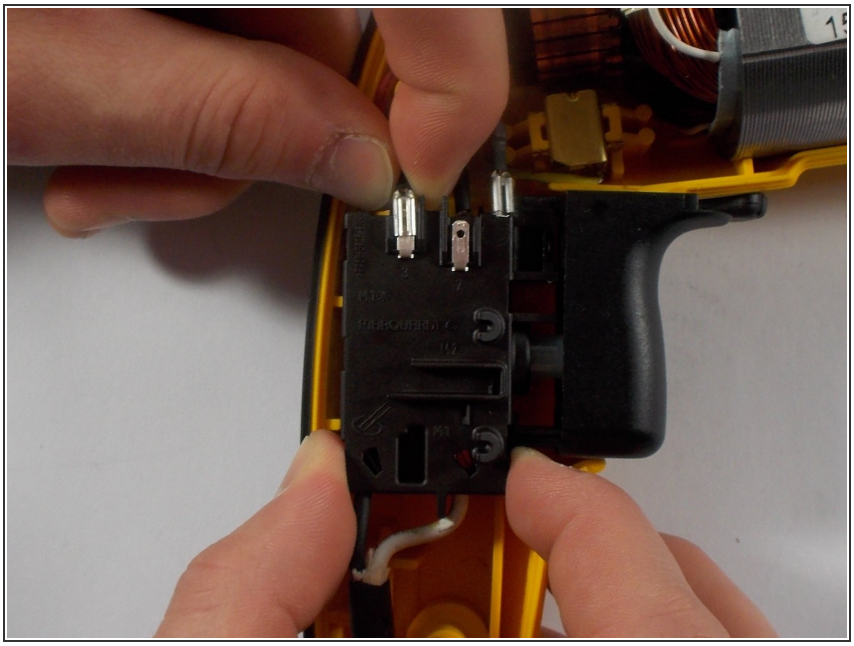
Step 3



The power cord and the trigger act as a single part and must be replaced together.

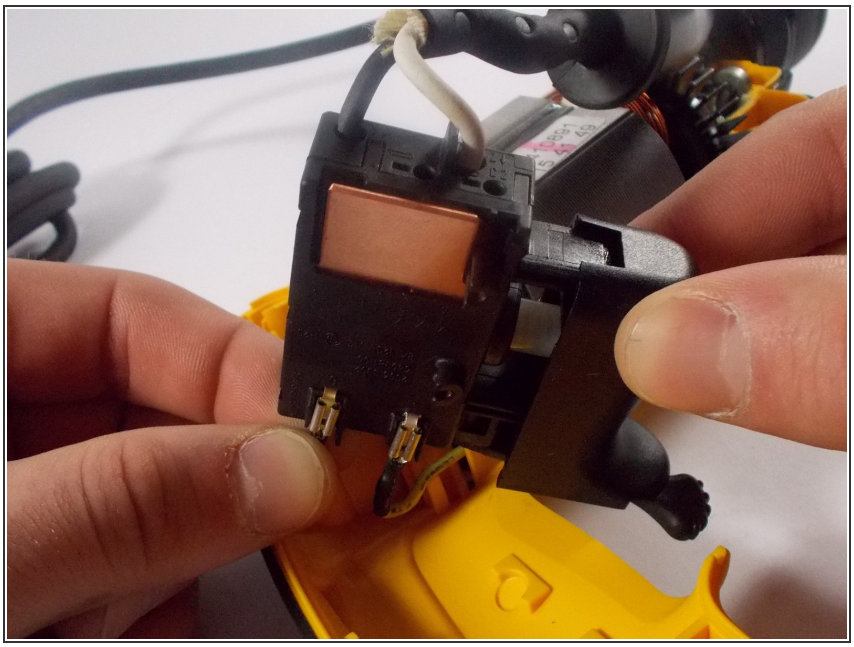
- Using one hand grab the trigger box and with the other grab the end of the wire connecting to the trigger box and disconnect the wire.

Step 4



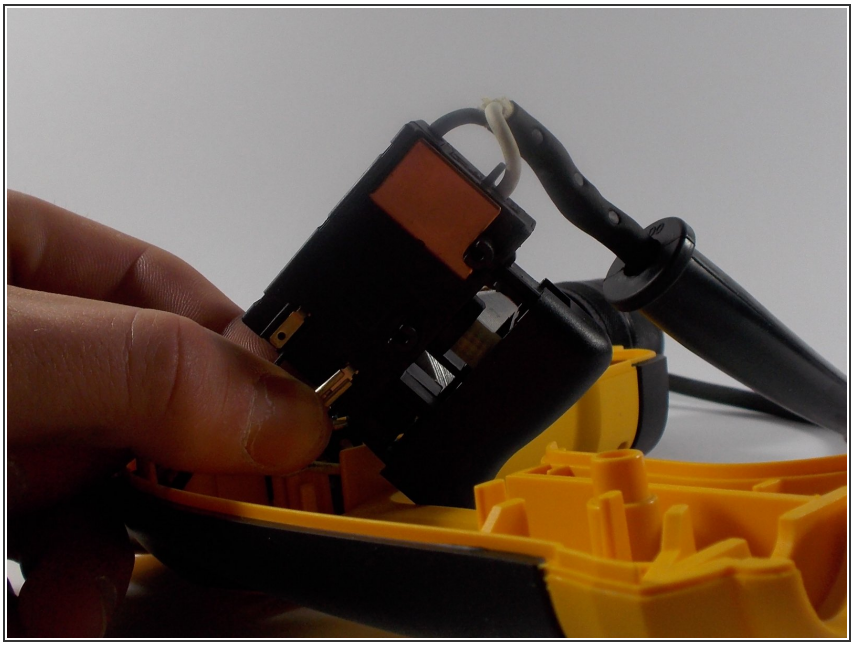
- Disconnect the second connected wire from the top of the trigger box.

Step 5



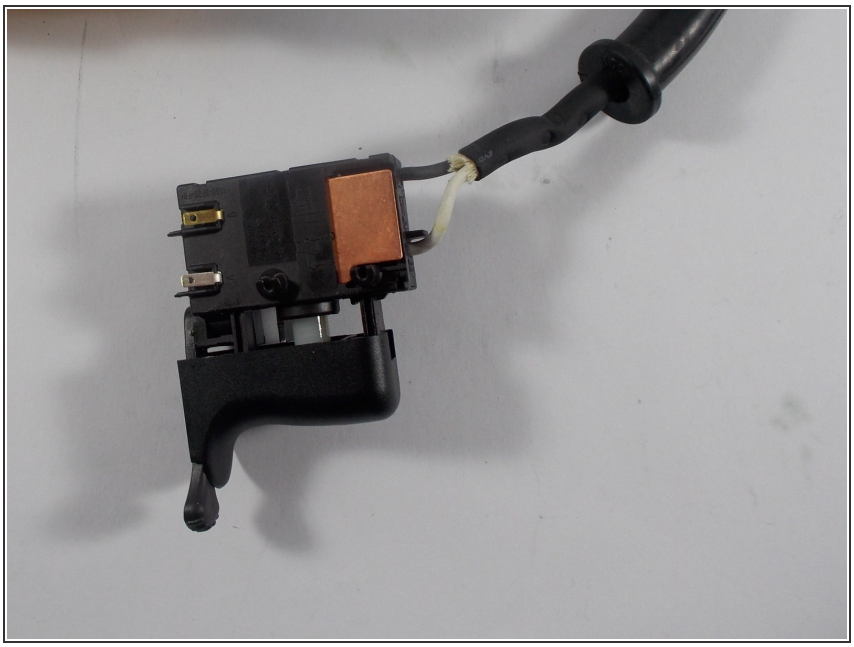
- Lift the trigger box up to reveal the bottom side.
- Disconnect the first connected wire from the bottom of the trigger box.

Step 6



- Disconnect the last wire from the trigger box using the same method from the previous step.

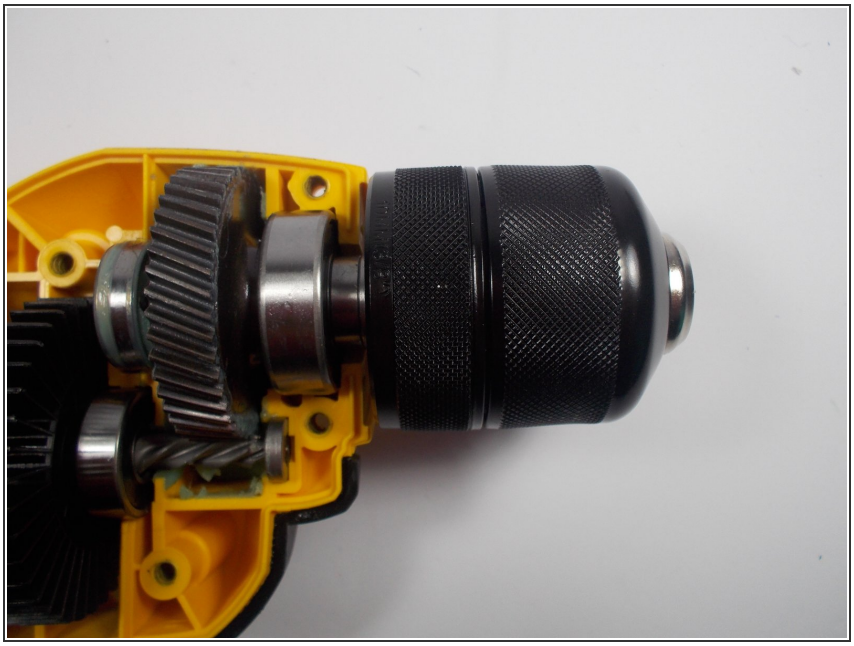
Step 7



- After all four wires are disconnected, the trigger and power cord are separated from the drill.

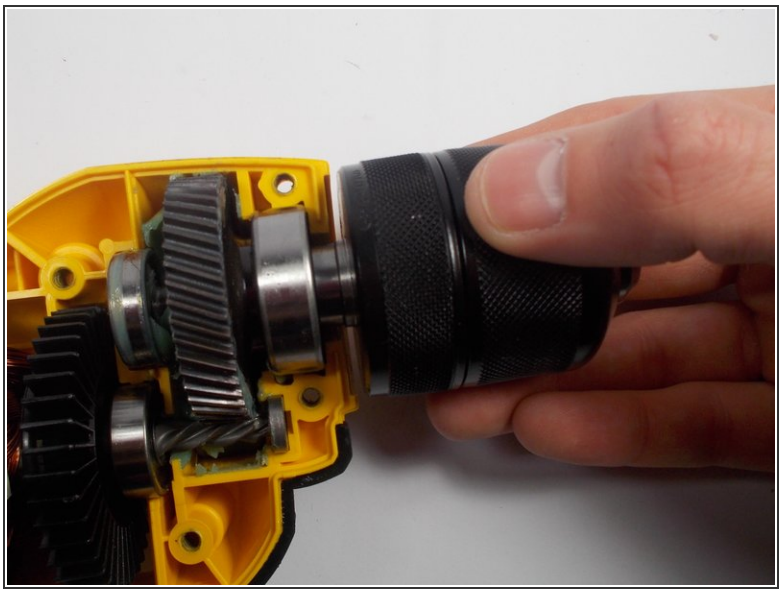
The power cord and trigger can be set aside if further disassembly is required.

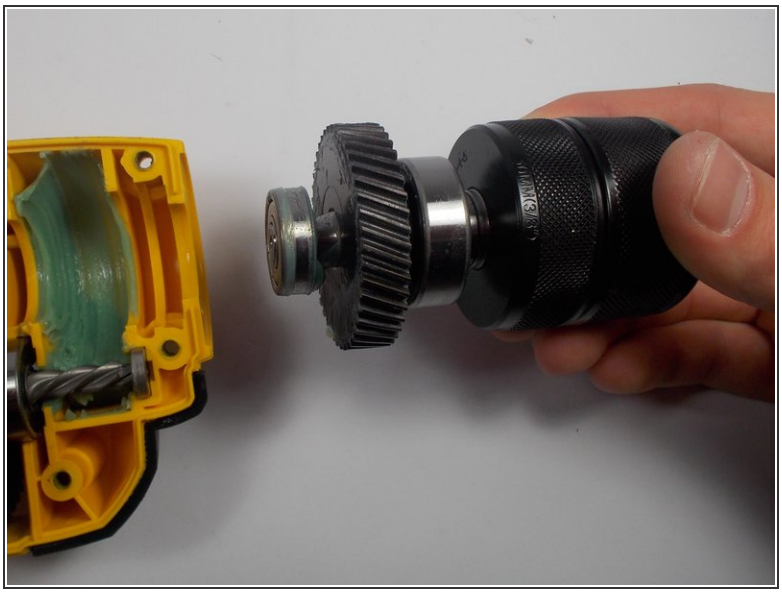
Step 8 — Armature



- Take note of the keyless chuck and the meshing of the gears.

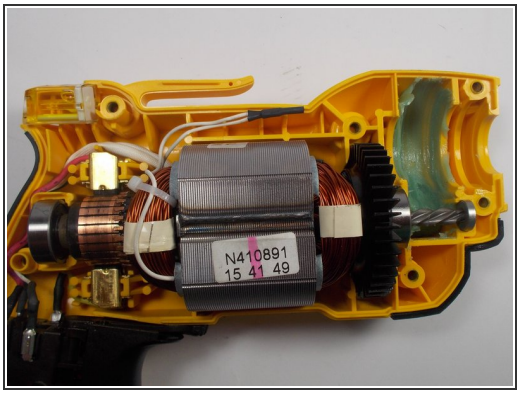
Step 9

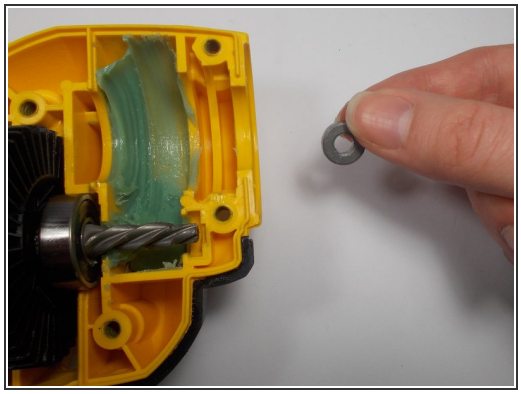




- Grab the metal chuck by the rotating spindle as if you are to tighten in a drill bit.
- Lift the metal chuck out of its resting place and set aside.

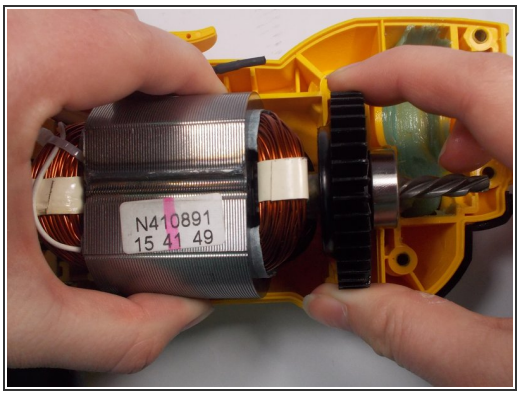
Step 10

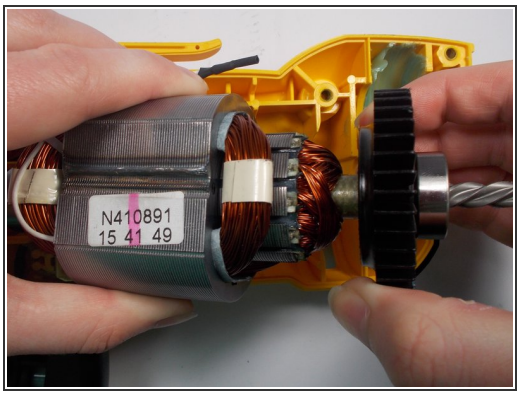


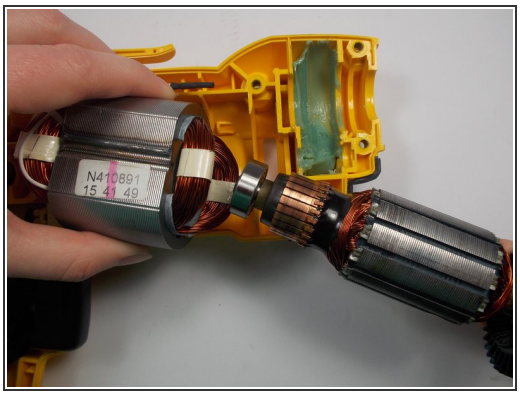


- With your left hand, grab hold of the field, which is the large metal block with coils looped around the inside.
- Use your other hand to take the bearing out from the end of the gear connected to the armature.

Step 11



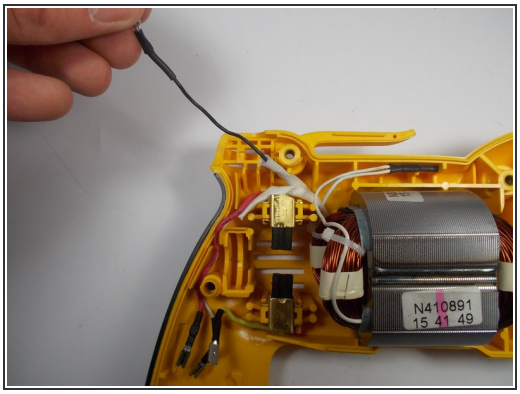


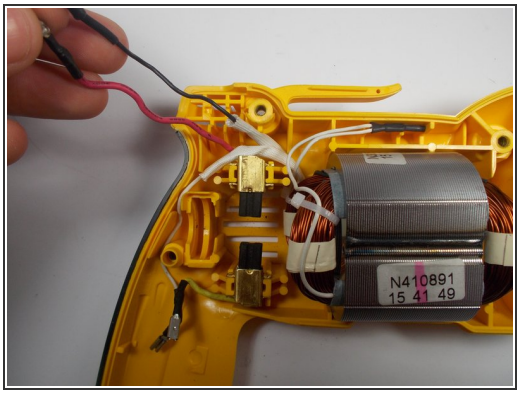


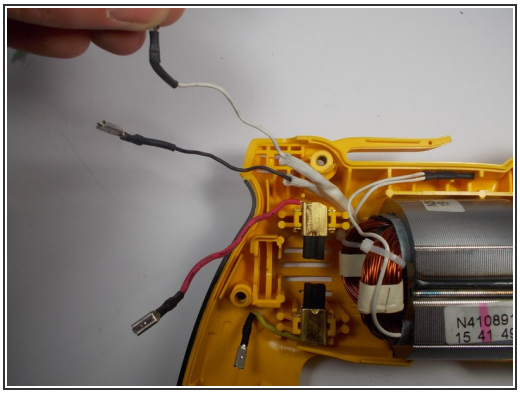
- Lift the field up once more with one hand and grab the cooling fan with the other hand and gently slide the armature out of the field.

The brushes will now be disconnected from the armature, meaning no current can flow from the power cord to the motor.

Step 12 — Field

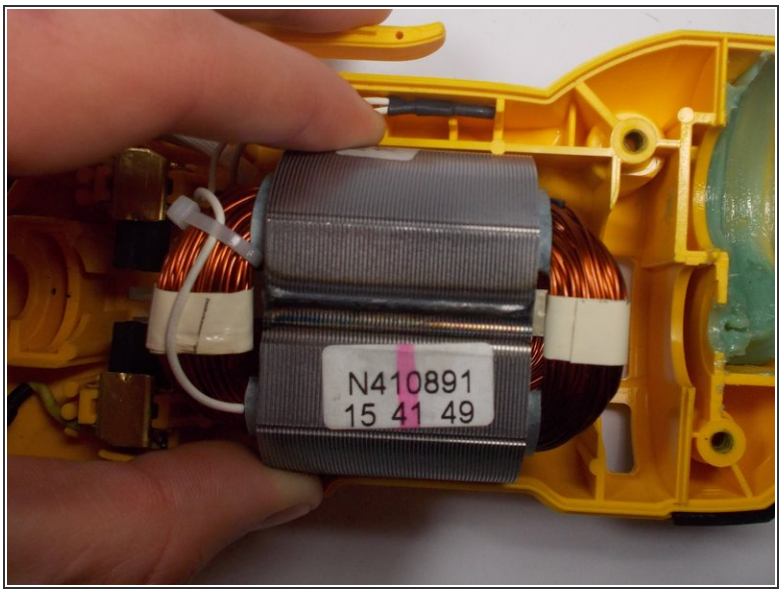


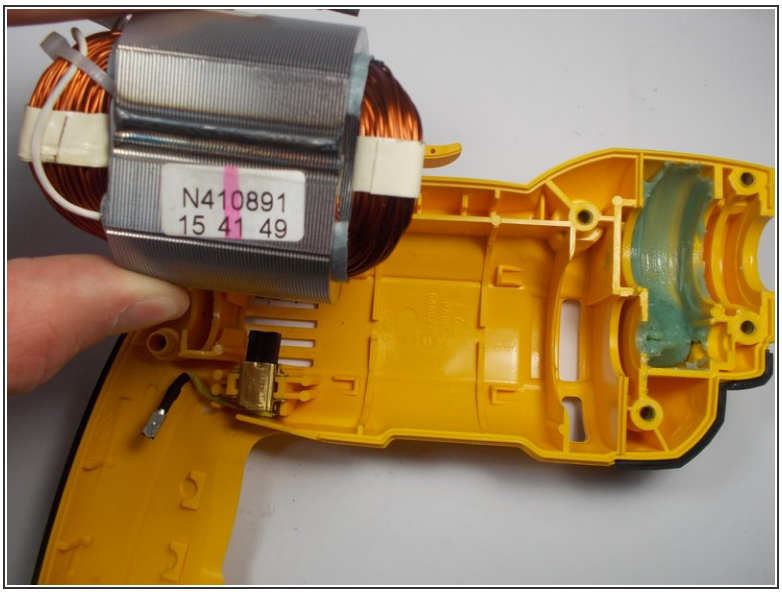




- Move the black wire clear from any obstruction.
- Repeat this step for the white wire and the red wire.

Step 13

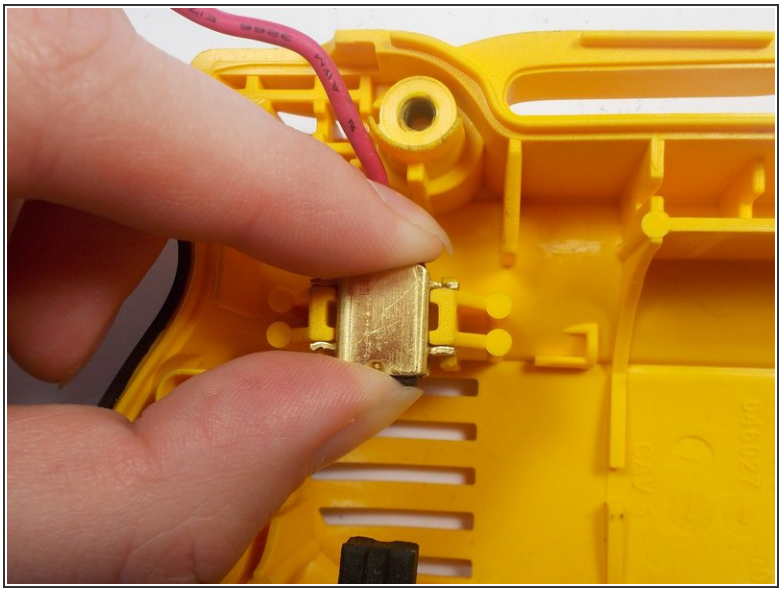


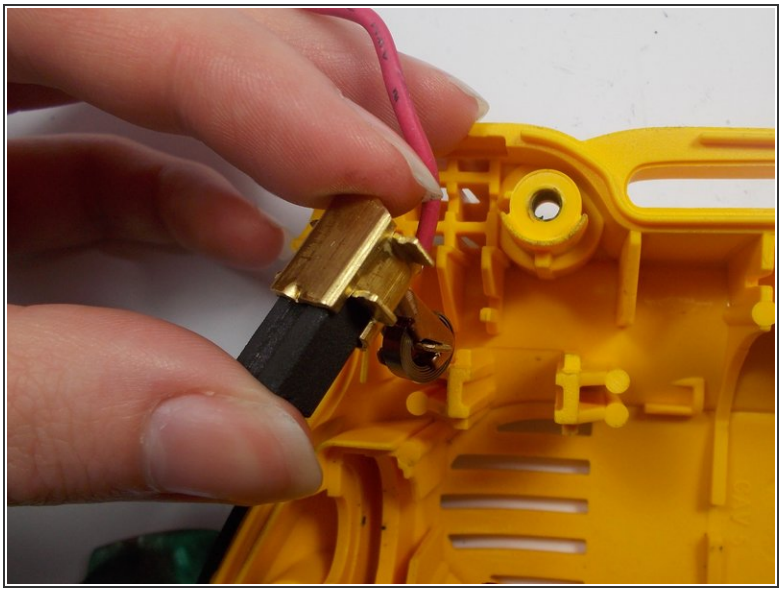


The field is disconnected from all other parts.

- Grab the field and gently lift it out of the case.

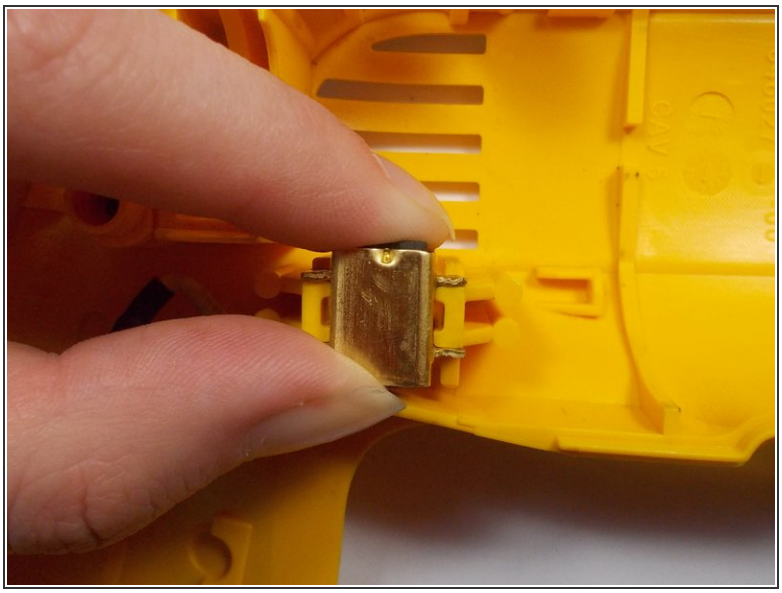
Step 14 — Brush

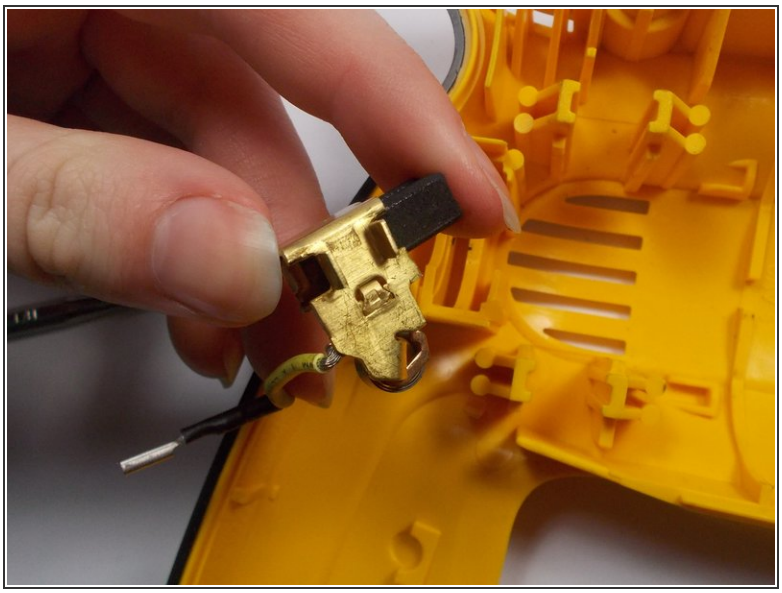




- Using two fingers, press the brush into the metal casing.
- Firmly pull out the brush using the same two fingers.

Step 15





- Repeat the same process to remove the second brush.

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

