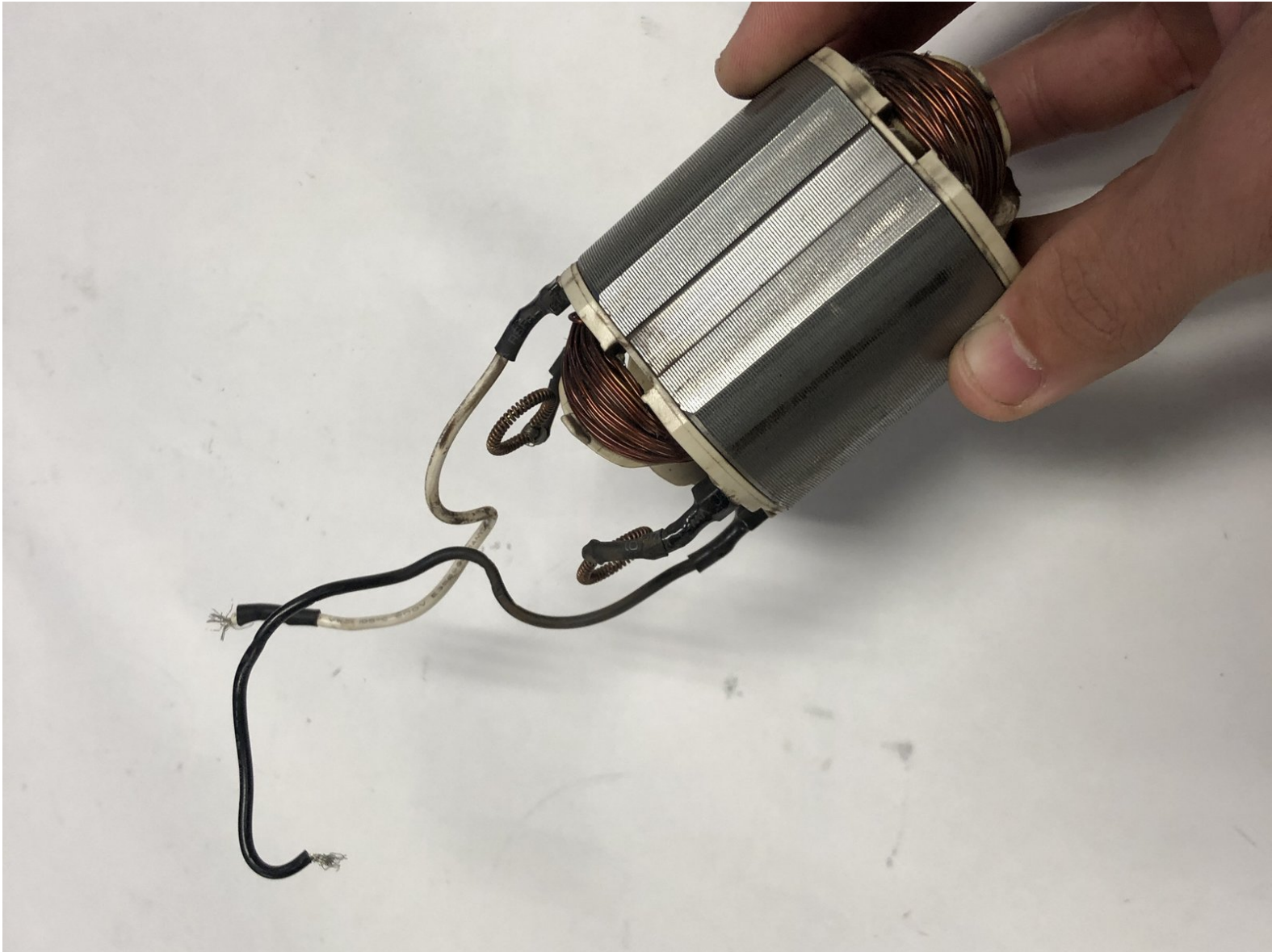




# RYOBI AG454 Motor Replacement

Use this guide to replace the motor in your Ryobi AG454.

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## INTRODUCTION

If your RYOBI AG454 is not working or turning on, your motor could be damaged. If the device is sputtering or smoke this could be a sign of motor damage. This guide explains how to detect issues in the motor. It will go through the process of how to understand that the issue is coming from the motor. It will then go through the process of taking apart the grinder so they can reach the motor. After this process, it will give the user helpful steps on how to see if the issue is fixable or not.



### TOOLS:

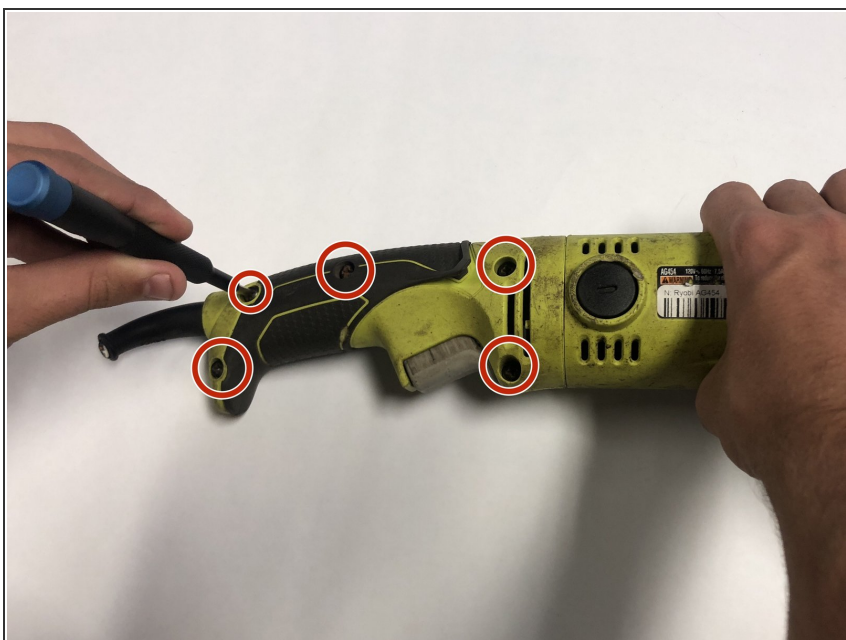
- [Phillips #1 Screwdriver](#) (1)
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## Step 1 — Rotator Handle



- Lay the handle on it's side, with the screws facing up.

## Step 2



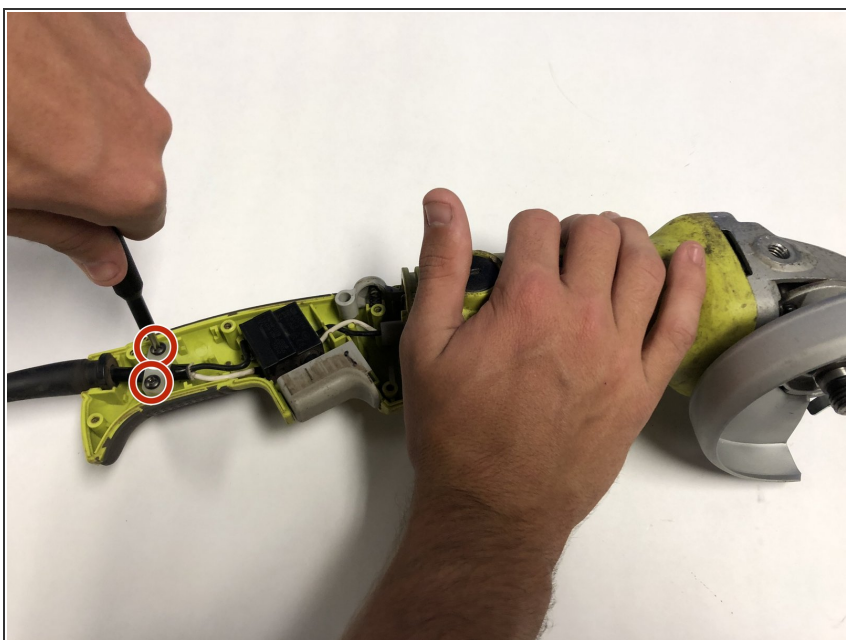
- Remove the five 14mm screws from the rotating handle using the Phillips #1 screwdriver.

### Step 3



- Take the top part of the handle off.

### Step 4



- Unscrew the two 14mm screws from the clear bracket using the Phillips #1 screwdriver.
- Remove the bracket.



## Step 5



- Push handle rotation latch and separate the rest of the handle from main body.

## Step 6 — Carbon Brush



- Remove the brush caps from each side of the body using the 4 mm flat head screwdriver.

## Step 7



- Remove the carbon brushes.

## Step 8 — Driveshaft



- Remove the two carbon brushes from both sides of the device.

## Step 9



- Remove the four 20mm screws that secures the gear box using a Phillips #1 screwdriver.

## Step 10



- Separate the gear box case from body.



## Step 11



- Pull out drive shaft and remove it from the device.

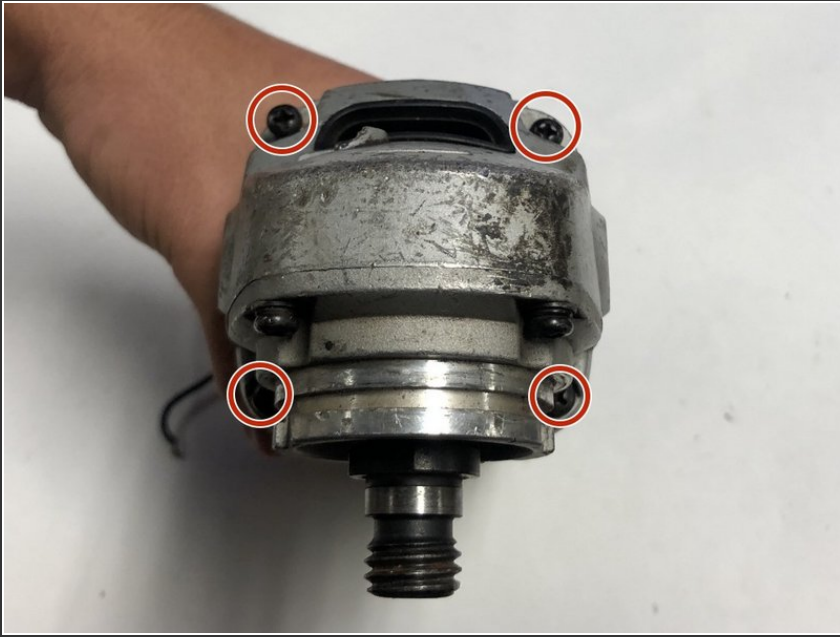
## Step 12 — Motor



- Remove the carbon brushes on both sides of the grinder.



## Step 13



- Remove the four 20mm screws securing gear box case using a Phillips #1 screwdriver.

## Step 14



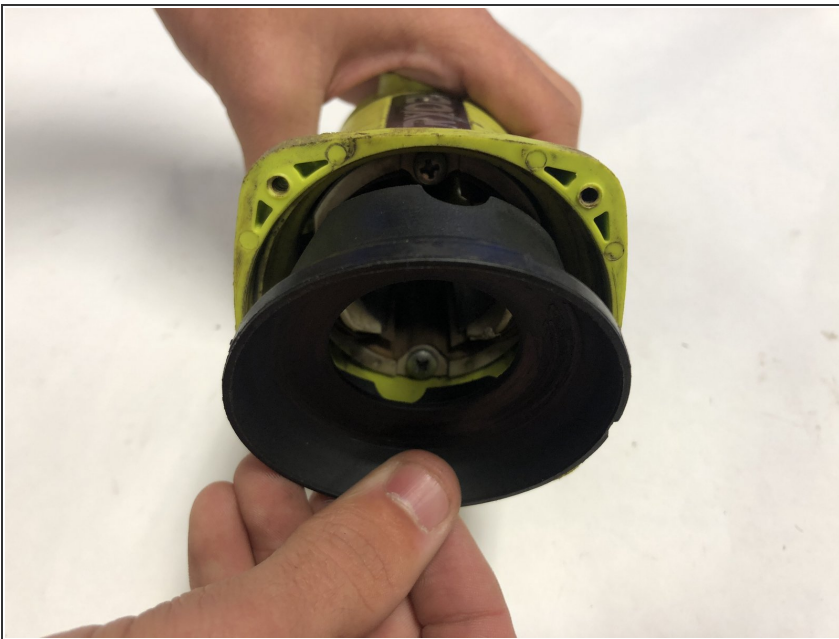
- Separate gear box case from body.

## Step 15



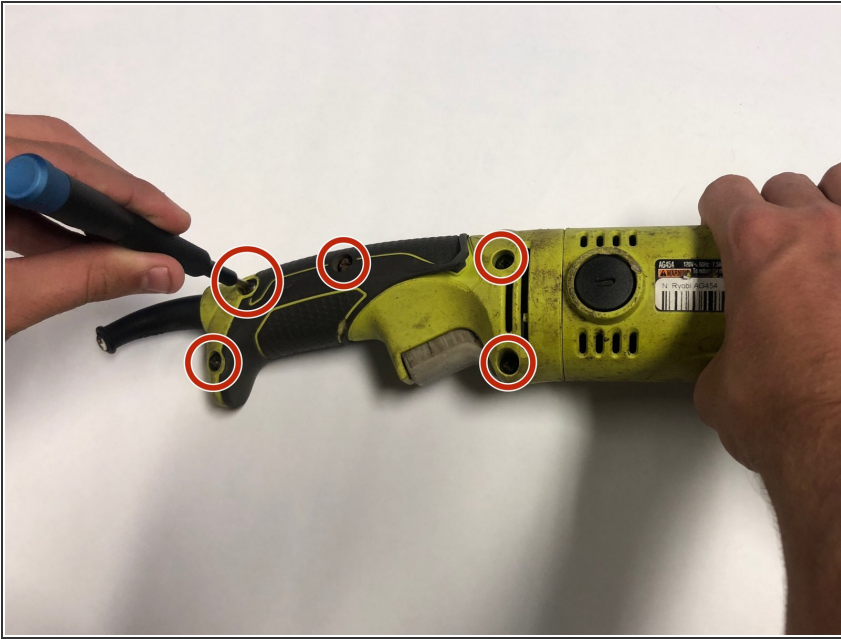
- Pull drive shaft from body of device.

## Step 16



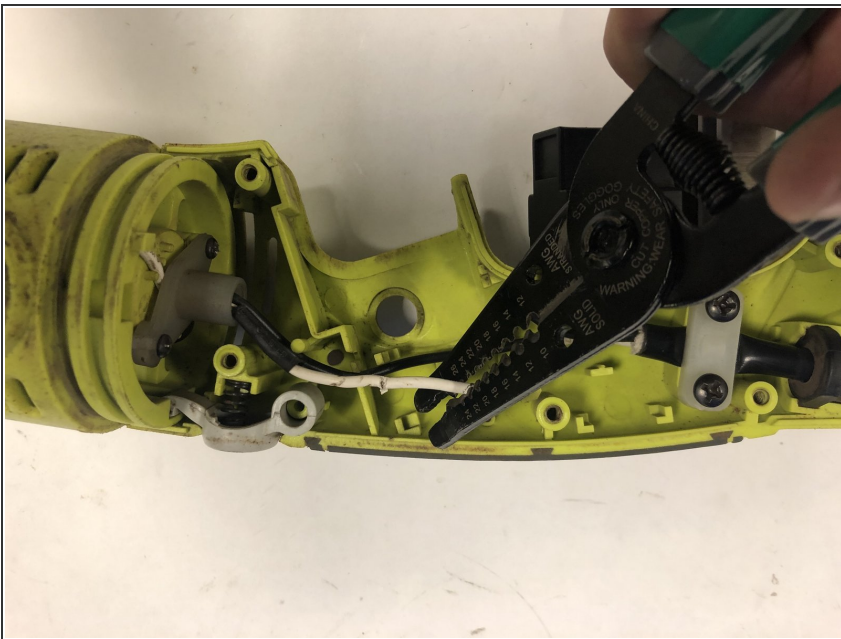
- After removing the drive shaft pull out the cap.

## Step 17



- To remove the handle, remove the five screws using a Phillips #1 screwdriver.

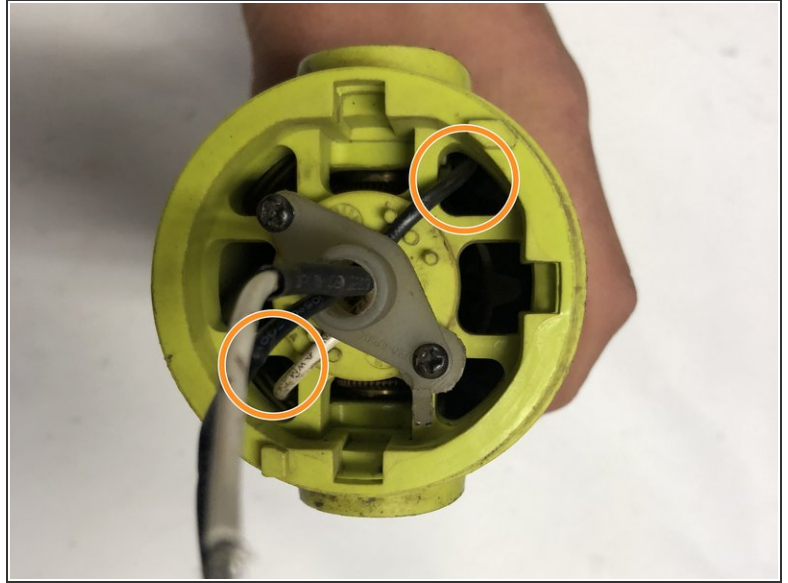
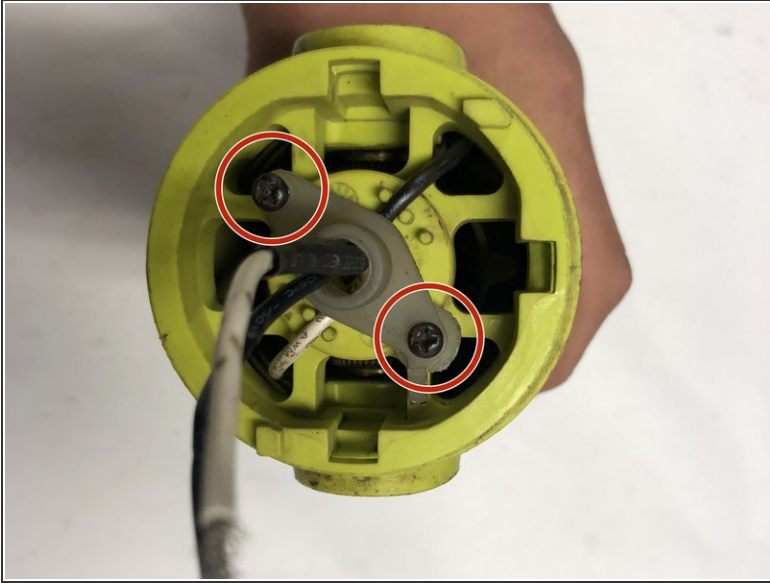
## Step 18



- Cut the white wire that's located below the trigger in rear rotator handle with wire strippers.
- ⓘ When reassembling the handle twist the ends of the two wires together and crimp them.



## Step 19



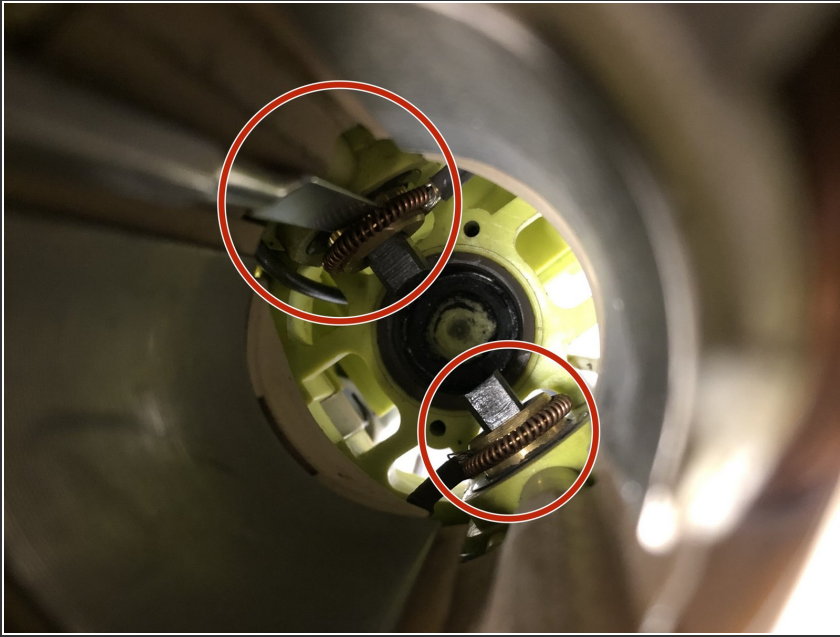
- Using a Phillips #1 screwdriver, remove the two screws from the bracket on the bottom of the body.
- Remove the bracket from the device.
- When reassembling be sure to pull the wires back through these two holes.

## Step 20



- Remove two screws from the motor using the Phillips #1 screwdriver.

## Step 21



- From the bottom of the body, slide the two coils off the brushes with a Jimmy.
- ⓘ When putting the coils back in place, use the Jimmy on top of the coils and push down the roll around the edges to push the coil down.
- ⓘ Another way of putting the coils back on is to push the Jimmy on top of coil and use another Jimmy to push down the back of the coil.
- ★ Putting on the coils may take multiple attempts so do not get frustrated if you can't get it on first try.

## Step 22



- Carefully pull motor along with wires straight out from the body and remove it from the device.

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