



DeWALT DW106 Amp Drill Maintenance

How to access and reinforce internal frayed wiring on a Dewalt Corded Drill.

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INTRODUCTION

Use this guide to disassemble your drill for cleaning, troubleshooting, or other maintenance.

TOOLS:

- [T20 Torx Screwdriver](#) (1)
- [Electrical Tape in 6 Assorted Colors](#) (1)
- [Utility Scissors](#) (1)
- [driver T-handle](#) (1)
- [Spudger](#) (1)

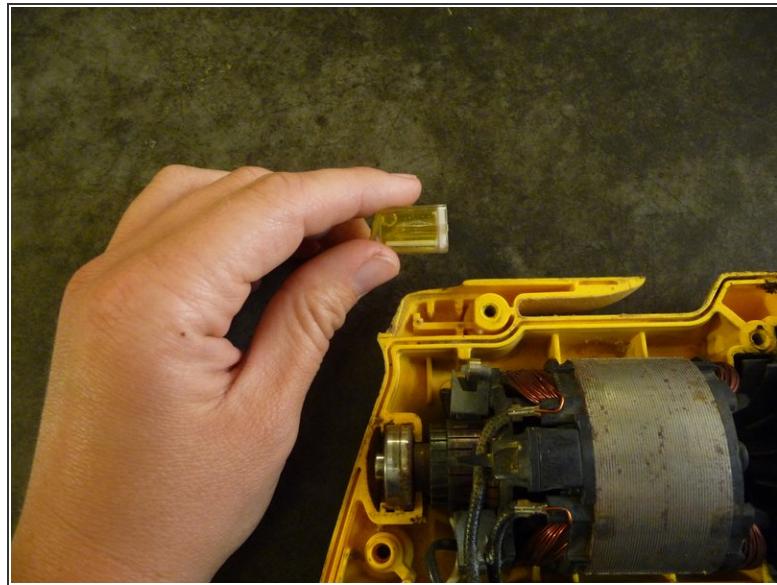
Step 1 — Drill



- Remove the seven T20 screws.
- Use the T-handle configuration of the screwdriver for the necessary force to loosen the screws.

(i) This drill required some cleaning to access the heads of the screws.

Step 2



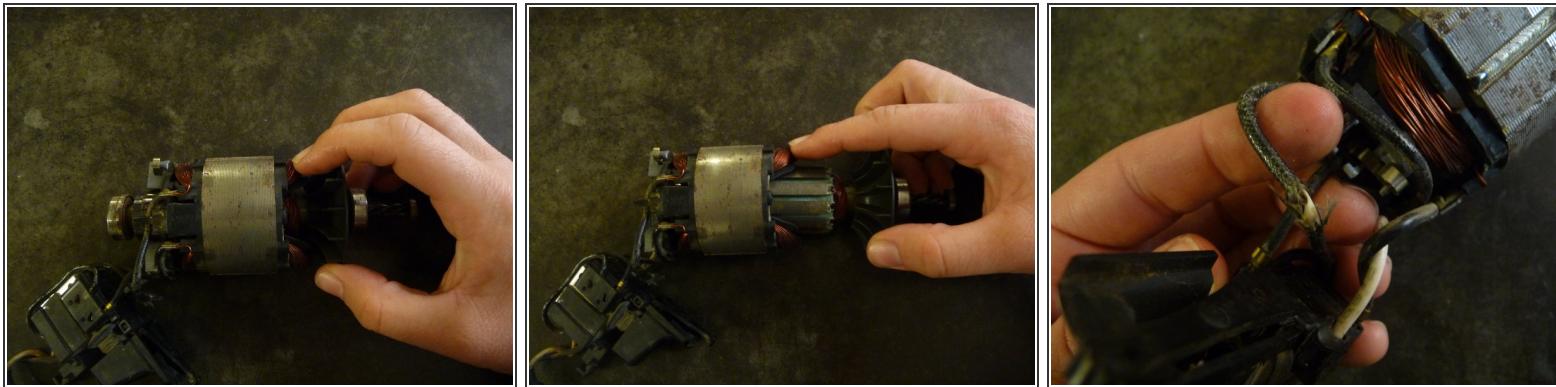
- Wiggle the power supply cord to loosen the clamshell set and rotate the case open.
- Remove the bubble level.

Step 3



- Disengage and remove the spindle and gear assembly.
- Lift out the field assembly and armature.

Step 4



- Slide the armature out of the field assembly.
- Rotate the field assembly to lay on the top. This allows for easier access to the frayed wire.

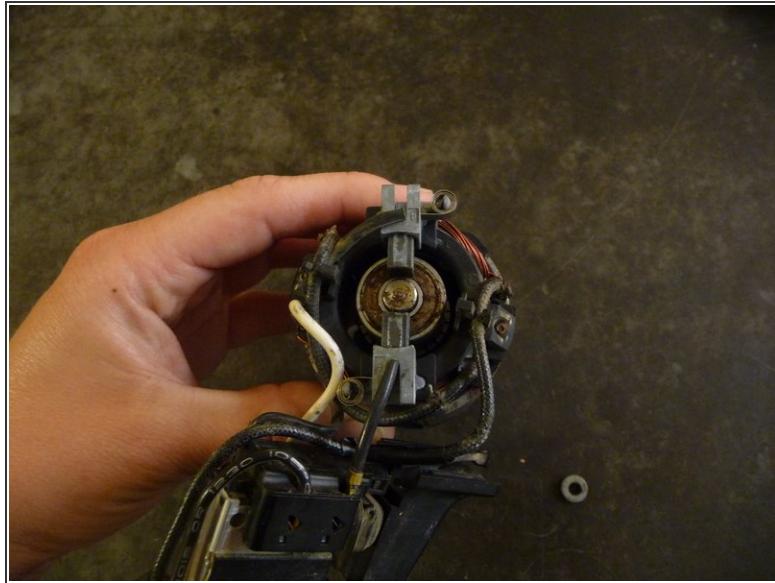
Step 5



- Cut a piece of electrical tape about one inch long.
- Wrap it tightly around the frayed section of the wiring.

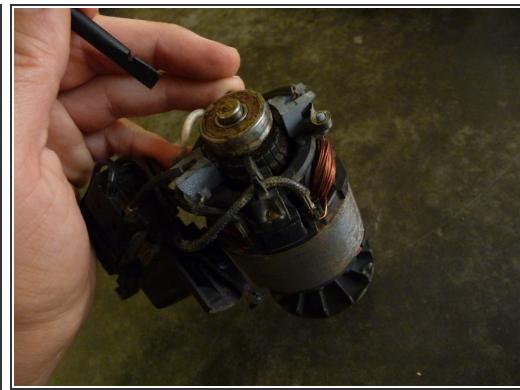
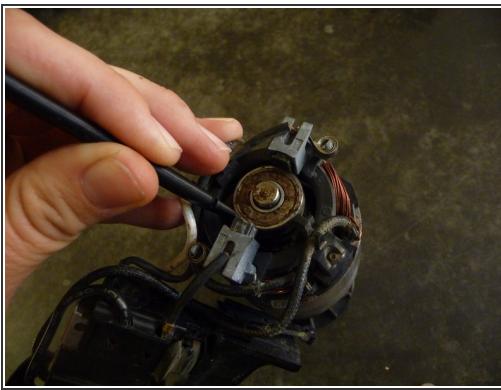
(i) It is easier to start with one of the corners and wrap the tape at an angle.

Step 6



- Lay the field assembly back down and align the armature.
- Reinsert the armature and rotate to point it "drill downward."

Step 7



- Compress the brushes in the brush ring so the ball bearing at the end of the armature assembly can get through.
- Use a spudger or similar thin tool.

i Side view. This is not far enough.

Step 8



- Reaching from the sides, use the spudger to insert the armature even farther.

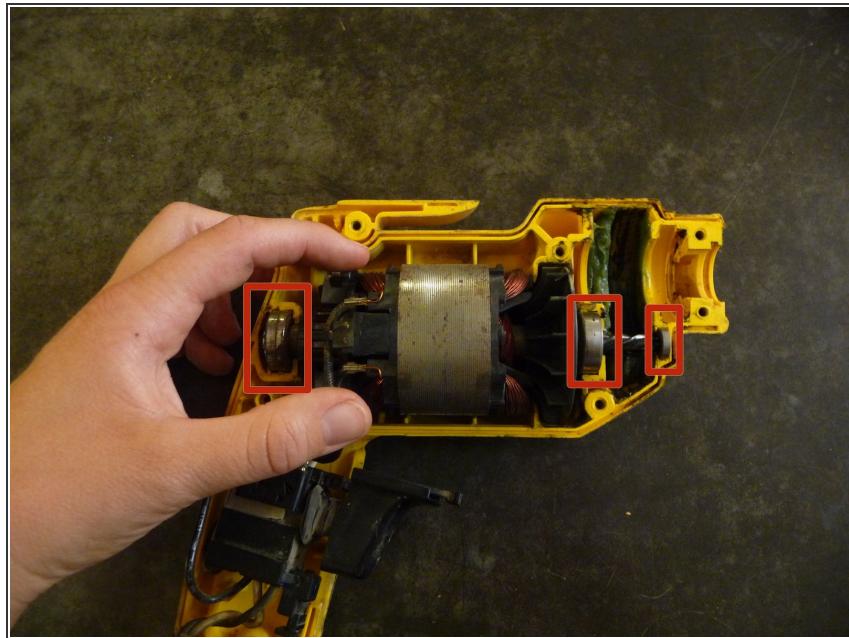
(i) Side view. This is far enough.

Step 9



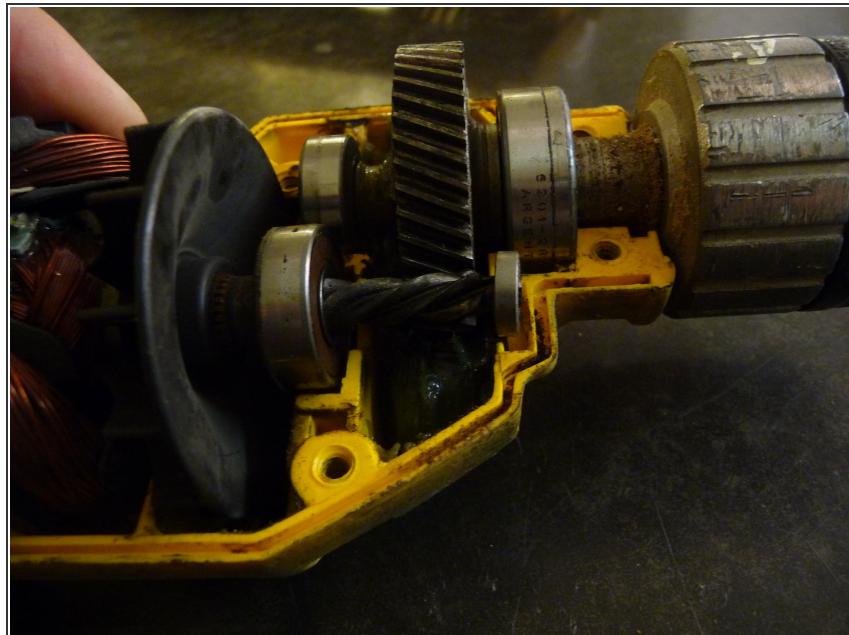
- Lay the field/armature assembly down.
- Place the ball bearing ring on the opposite end of the armature.

Step 10



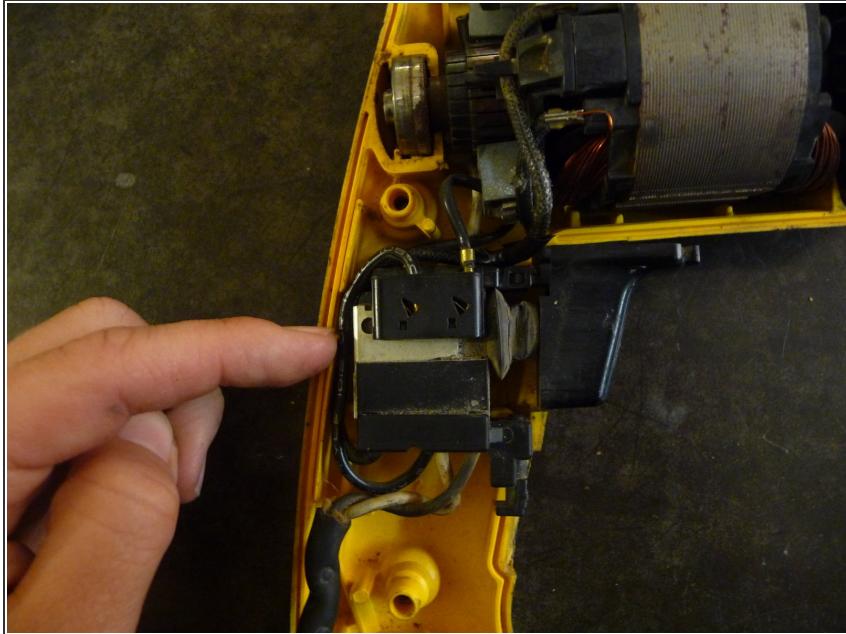
- Place the motor back into the bottom half of the clamshell case.
- Make sure the three ball bearings are aligned with their receptors. Slightly adjusting the armature inside the field may be necessary.

Step 11



- Replace the spindle and gear assembly.
- Lift and adjust until the two helical gears are meshed properly.

Step 12



- Place the switch into the slot.
- Tuck the wiring both inside the edge of the case and out of the way of the support pegs.

Step 13



- Thread the power cord through the support pegs.
- Insert the top end of the cord protector into the slot.

Step 14



- Replace the level.

Step 15



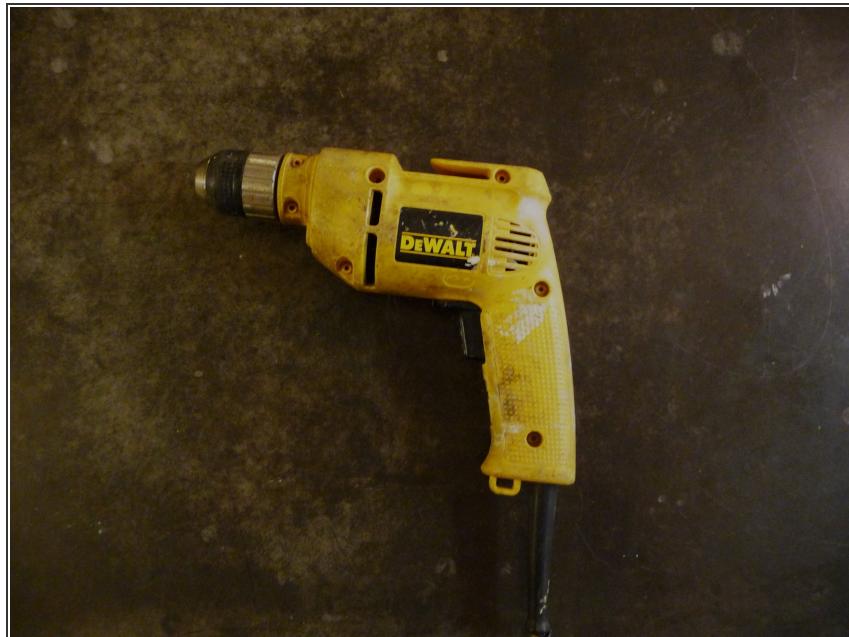
- Using the notch, align the two halves of the clamshell case and close it.
- Pay special attention to ensure the wiring all stays clear of the support pegs and the ball bearing wheels and level all stay in their slots.

Step 16



- Rescrew all seven screws using the T20 driver.
- To ensure a tight fit, use the T-handle configuration on the screwdriver.

Step 17



- Finished.

Plug it in and see if it works more reliably.