How To Replace A OCPTY Starter Motor?

Preparation Required For A Starter Replacement

Here are some things you need to do before you replace your starter:

- ✓ Let your car's engine cool down
- ✓ Gather all the necessary tools
- ✓ Keep the vehicle or owner's manual around
- ✓ Before replacing the starter, note down where every wire and electrical connection is located in the starter and solenoid. This way, you won't forget what goes where after the starter motor replacement is done

10 Steps To Replace A Starter Motor

Step 1: Safety First

There are some basic safety measures that you must keep in mind:

- ✓ Always use safety stands and wheel chocks to prevent accidental car movement, and remember to never work under a car supported only by a jack
- ✓ Put on protective eyewear and gloves
- ✓ Only use the correctly sized torque wrench or socket wrench to loosen any nut or bolt
- ✓ However, the number one safety measure is disconnecting the battery and removing the negative battery cable.
- ✓ Pick a fitting hand or socket wrench size to loosen the nut holding the wire on the negative battery terminal.

However, you won't have to remove the nut entirely. If it's loose, just slide the wire up and off the battery terminal. To ensure that the wire doesn't come in contact with the terminal while you work, tuck it away to the side of the battery.

Note: You don't need to remove the positive battery cable (the large positive wire running to the battery).

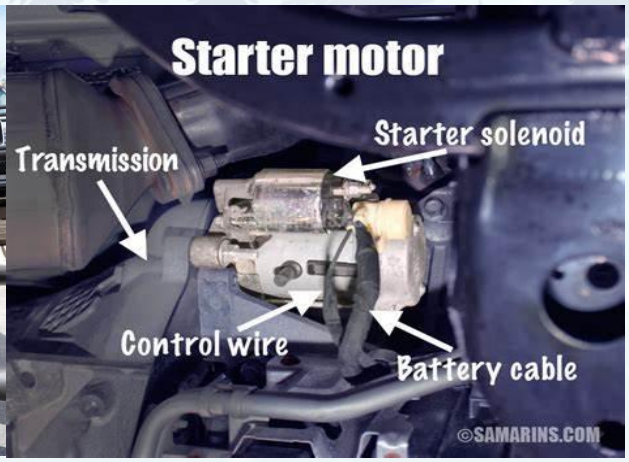
Step 2: Jack Up The Vehicle If Needed

- ✓ Some cars need you to jack up the vehicle to access the car starter.
- ✓ To do so, place a jack beneath one of the designated jack points at the vehicle's front. Then raise and lower or turn the handle to elevate the car from the ground.
- ✓ Don't forget you should always jack up a vehicle on flat and firm ground, and rest the car on jack stands for safety.

Step 3: Locate The Starter

- ✓ Pop the hood of the car to access the engine compartment. You should find the starter here. It looks like a big cylinder with a smaller cylinder attached to it, placed in the bell housing area.
- ✓ The smaller cylinder is the starter solenoid.
- ✓ A wire should run directly from the positive battery terminal or from the fuse box in the engine compartment to the top terminal on the starter solenoid.
- ✓ If you can't locate the starter, check your vehicle repair manual because the location can vary depending on your car's model and make.

Note: Bell housing is another term for the area of the transmission that covers the flywheel, clutch, or torque converter. It's shaped like a bell (bolted to the engine block), hence the name bell housing.



Step 4: Remove The Starter Motor And Bolts

- ✓ Start by removing the starter mounting bolts with a socket wrench. After every bolt is out, remove all the wiring including those connected to the solenoid in order to remove the car starter.
- ✓ Use a bit of force to pull and remove it from the bell housing in the engine compartment.
- ✓

Step 5: Compare The Replacement Starter To The Old One

- ✓ With the starter out of the car, place the old (original starter) and new OCPTY starter next to each other on a table to compare them.
- ✓ Both the starters should look almost identical. The holes for the starter mounting bolts should be in the same spot for the replacement starter.
- ✓ You don't have to worry about the starter solenoid being exact.
- ✓ Most cars have a solenoid with three or four terminals-you can omit the fourth if yours uses only three.

Step 6: Transfer Heat Shield

- ✓ What's a heat shield?
- ✓ In a car powered by an internal combustion engine, a heat shield protects a car component from absorbing excessive heat either by scattering, reflecting, or simply absorbing.
- ✓ So if your old car starter has any heat shield, transfer them to the new replacement starter.

Step 7: Place The New Starter

- ✓ Before inserting the new starter back in the bell housing, check the flywheel for damaged teeth. If everything looks good, keep the starter mounting bolts ready and insert the starter right where the old one used to be (bell housing).

Step 8: Insert The Starter Mounting Bolts

- ✓ After inserting, tighten every starter bolt to secure the starter.
- ✓ Slide the two starter mounting bolts through the bracket on the engine and the starter. Then turn each mounting bolt clockwise by hand till you're sure they're fastened properly.
- ✓ After that, pick up the right socket and socket wrench to tighten them all the way down.
- ✓ If any bolt still feels loose, unscrew it and try again.
- ✓ This way, the bolt doesn't vibrate and detach while the engine is running.

Step 9: Connect The Wiring

- ✓ With the car starter motor in position, reconnect the wiring you disconnected from the old starter onto the new one's terminals.
- ✓ Do the same for the new starter solenoid as well.
- ✓ If you're unsure, you can always refer to the owner's manual and make the right wire connections.

Step 10: Reconnect The Battery

- ✓ Now it's time to connect the battery.
- ✓ To do so, reconnect the black cable (ground wire) to the negative battery terminal.
- ✓ Then insert the key into the ignition and try to start your car. If it does, your starter replacement was successful.

What if your car still doesn't start?

- ✓ **Check if every wire is securely connected at both ends, then attempt to start again.**
- ✓ **And if that fails, you will have to call a mechanic to help.**