



In a previous [Corvettemagazine.com](#) article, we repaired the headlight motors in a 1986 Corvette. This time around, we're repairing the headlight motors in a 1991 Corvette by replacing the worn out bushings.

You'll want to reserve a full day to accomplish the headlight bushing replacement, just in case you run into any problems. You will need common tools such as a metric socket set, Phillips and flat-blade screwdrivers, a Torx bit set, and a small punch. The removal of the headlight is pretty straight-forward by just following our directions, do so and you shouldn't have any problems. You will want to pay close attention to the motor linkage and the angle it is facing because you will need to reinstall the motors in the same position.

As before in the 1984-87 Corvette headlight article, we received all of our headlight parts from Zip [Corvette Parts](#), 8067 Fast Lane, Mechanicsville, VA 23111, 1-800-962-9632.



01: The first thing you need to do (after opening your hood) is locate the headlight motor plug. There are two different plugs depending on the year of the Corvette. The '88-89 has a two-wire plug, and all you need to do is unplug it. If you have a '90-96, then you have a five-wire plug, which is a little more difficult. First unplug the green and gray wires, then remove the wires from the plug by removing the cap from the back of the plug, inserting a paperclip into the front, and depressing the small prong on the terminal to release the wire.



02: With the headlight motor disconnected from the power source, you can rotate the headlight with the manual knob.



03: Rotate the headlight until you can see the screw that holds the sides of the headlight bezel. Remove it along with the two Torx screws in the front of the bezel.



04: Once the bezel is off, continue to rotate the headlight until you locate the 13mm nut that holds the motor to the housing. Remove the nut.



05: On the under hood side, remove the bracket between the motor and the hood hinge. The carriage bolt has a 13mm nut and there is a 10mm nut that holds the bracket to the headlight frame.



06: Using the Torx socket, remove the motor bracket screws that attach it to the headlight support.



07: Once the Torx screws are removed, the headlight motor will pull away from the housing and frame. Before you remove the motor from the housing, rotate the headlight to the closed position. Also, note the location the linkage assembly because you will need to reassemble it in the same location.



08: Now you can remove the headlight. Locate the clip that holds the wires to the headlight frame - it should be located in the corner of the frame. Remove this clip with a small flat-blade screwdriver by carefully prying it off. Once the clip is removed, unweave the wire from the support and remove the motor assembly from the car.



09: With the motor out, start disconnecting the motor from the linkage assembly. Use a small punch to remove the roll pin from the linkage where it connects to the motor shaft.



10: Use the Torx bit to remove the three screws that hold the linkage to the motor itself, then you can remove the motor from the linkage. There is a small stop that rotates with the motor and linkage, make note of its location and how it is mounted so you can reassemble it in the same manner.



11: Remove the small 1/4-inch screws that hold the gear cover on. Once they are out, the cover will come off by gently prying on it.



12: Now very carefully loosen - but do not remove - the pair of motor housing screws. If you remove them you could permanently damage the motor.



13: Next, carefully loosen the set-screw in the other end of the motor. Just back the screw out two turns.



14: Insert a small punch or screwdriver through the hole in the end of the motor shaft, then pull the gear assembly out of the housing. You may have to pull fairly hard or rock it back and forth a little.



15: Once the gear is out, you will see a nylon gear and the aluminum housing the gear sits on. Press the center shaft while holding the nylon gear. This should separate the aluminum housing from the nylon gear.



16: As you can see, these bushings were going bad but not as bad as some we've seen. Many times we will open a customer's headlights and find that the bushings have turned to powder.



17: Here are the new bushings supplied by [Zip Corvette](#) for the rebuild. The headlight motors use three bushings per side.



18: Place the three new bushings in the gear, then press the aluminum housing over the top of them. It will be a very tight fit.



19: Now reinstall the gear into the housing, and reverse the disassembly to reassemble the headlight motor and linkage. Once they are back together, use the manual knob and completely rotate the headlight through its full cycle to make sure it does not bind. If it does bind, you probably put the little stop bracket between the motor and the linkage on backwards. Once the headlight works manually, set the linkage back to the closed position and reinstall the motor into the car.

C4 Headlamp Bushings: **1988-1996 Corvette Headlight Bushing Replacement**

Source:

Zip [Corvette Parts](#)
8067 Fast Lane
Mechanicsville, VA 23111
(800) 962-9632

Parts List:

- [1988-1996 C4 Corvette Headlight Motor Repair Bushings](#)
- [1988-1996 C4 Corvette Headlight Motor Nylon Gear](#)
- [1984-1996 C4 Corvette Headlight Motors - New](#)
- [1984-1996 C4 Corvette Headlight Motors - Rebuilt](#)

Text and images by Justin Abbott.