Question: My Corvette Wiper Motor Quit, Can you help me 1969-1972

Answer: Yes, with a few simple tests you can tell if the problem is from the wiper motor, wiring or switches!

There are a few simple test you perform to diagnose problems with your windshield wiper motor.

Below you will find simple suggestions combined with a wiring schematic and test for checking the motor before you remove it from your car.

What is required: 1) a 12 volt test light  2) A voltage tester. 3) A jumper wire. 4) A few test jumpers for running independent power and grounds.
The very first thing you should always check is the windshield wiper over-ride switch located in the dash of the car between the two vacuum over ride switch knobs. Many customers have ran test after test and replaced good motors only to find out they hit the knob cutting off power to the motor.

If the switch knob is in the correct on position, then proceed. This switch is number 10 in the picture below and the knob is number 7. Make sure this knob is turned on. The function of the switch is to cut power to the wiper motor so you can stop the arms when they are raised to service either the arm or the blade.

NOTE: You can view the parts that are available in this picture by clicking on the part or the associated description to the left.
The next test is to verify you have power on the wiper motor. The wiper motor is what is termed as a two field motor. There are two power supplies to this motor and the main power supply is the red wire with a white stripe. This wire is the main power feed from the ignition switch and runs through the over ride switch, the windshield wiper limit switch and then to the motor. Manually raise the wiper door and pull the wiper door limit switch to keep it up.

1) Test the power at the motor plug in.
2) Test the power at the limit switch connector
3) Test the power at the over ride switch

Basically what you are doing is backing up the power check. Starting with the motor and working your way backwards to the main supply. If you do not have power going in to one item, move backwards until you find power.

If you test the motor connection and there is no power, test the limit switch and the plunger number (16). Make sure the plunger 16 is pushing the limit switch (13) down and allowing it to pass voltage to the wiper motor. With the door raised you can check the limit switch by fabricating a U jumper at the motor connection side. If the motor runs with the switch bypassed replace the switch or adjust the plunger. Note: Do not remove or by-pass the limit switch without opening the wiper door! Should the motor begin to run with the door closed damage will occur.

NOTE: You can view the parts that are available in this picture by clicking on the part or the associated number.
If you do not have power at the **over ride switch**, you have a problem in the wiring of your car.

If you have found power at the motor or corrected any problem between the motor and the ignition switch wire and the motor is still not working please read on before removing the motor from the car.

The next test is to make sure the wiper motor is not missing a ground wire terminal number 4 below! If this ground is broken, loose or not on the motor. it will not run. This ground is run through the blower motor ground circuit and not a direct ground to the engine. Pull the ground wire off the brass terminal on the washer pump. Verify this is a good ground. If you want to cheat on this and run a simple and quick test run a test ground wire from the engine to the wire motor. After you run the ground wire test the wipers and see if they are working.

**If you still don’t have a working wiper motor please read on.**

**Always test the wiper motor before removing it from the car.**

To test the motor on the car follow these steps. Following the quick test below the schematic will allow you to know if you have a good motor or a wiring problem in the switched circuit.
To those that have used our schematic before, I apologize, the connector at the wiper switch was turned upside down and a wire was reversed on the wiper relay. We did use the GM schematic to draw the original one, however once again GM let us down. In the schematic above we used the trace wires from “Frankenmeter” shown below.
To Bench Test Your Motor:

A) Un-plug the 1-2-3 connector show in the picture.

B) Run a 12 volt wire direct to terminal number two as shown in the picture above. You can do this by using the 12 volt stud off the alternator.

C) Run a ground wire from the number 3 connector to the engine. The motor should run on high speed.

D) Run a ground wire from number 3 connector to the number 1 connector. Keep the ground on the number 3 connector to the engine and by grounding number 1 to it should give you low speed on the wiper motor.

You can verify a ground problem by checking for feedback voltage on the wiper motor 1-2-3 connector in the number 1 or 3 terminal. Lack of a ground on the motor will create this problem.

With the wire schematic above, and the proper equipment, you should be able to diagnose any problem with the wiper motor system.

Other simple test and explanations for the function of each component is listed in the picture above. Also see our section on vacuum parts and their functions.

If you do have the wires backwards on the wiper motor connection about the only thing that will happen is the motor switch will work backwards. At least this is what happened when we tested it.
Some pictures that may help you too!

Connector on the wiper switch. Note: The blocking tab for improper installation is toward the passenger side. Light blue is toward the passenger side.

Another View (Head On)
Wiper Motor Connection Blown Up!

Better known as Frankenmeter. . .
But hey even the ugly need Love and Attention! This test unit is homemade and will test everything from a wiper motor, to an oil temperature gauge. Note it has power adapter bolts (in the neck) for testing on the car or on the bench.
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