

Thaw Out Those Frozen Wiper Arms

By: Mike Bouse

A very frequent and common malady of Spiders is the wiper arms freezing. All too often, Spider owners unnecessarily purchase unneeded motors and wiper arm assemblies to resolve the issue. Others inadvertently ruin a good motor by attempting to force a bad situation. In many cases, about an hour of bench work in the garage is all that is needed to un-stick these frozen wiper arms.

Actually it is not the arms themselves, but the shafts that penetrate the cowling ride with very close tolerance inside their housings. Anyone that knows anything about old cars knows that close tolerances such as these, exposed to the elements, all but guarantee rust.

If your window wipers don't move, do not assume you have an electrical issue. Go ahead and test the fuses. But, before you go any further, make sure your wipers are in the parked position (as best you can).

Lift the wiper arms off the windshield and see if the motor will move the arms with zero drag before proceeding. If you are this lucky, your next step should be a generous amount of PB BLASTER, or similar rusty metal lubricant sprayed liberally into the shaft assembly, several times over the course of the next week. If you do not experience a drastic improvement, you should proceed as described below.

Take the cowling off the body by removing the six screws holding it in place. Be careful as you do this, as the six wires leading to your wiper motor will not be too long and you may accidentally disconnect them before you can write down the color schematic.

The wiper motor itself is connected to the wiper arm assembly with a very small metal arm. This arm is held on with two small hex nuts. Remove this arm and power the wiper motor. Zero movement says you have an electrical issue. If the motor rotates, you have a mechanical issue with the wiper arm assembly. Allow the motor to park before proceeding.

Remove the wiper arm assembly from the cowling. Put the assembly in your workbench vise, and douse the shaft assemblies liberally with penetrating oil. Don't be stingy with the penetrating oil. Remove the connecting arm between the two assemblies and with a pair of pliers (or similar) work each assembly back and forth until all of the rust has been flushed out. Occasionally, heat from a propane torch may help to loosen these assemblies, but be careful not to start a fire with all that penetrating oil.

Once you have these shafts rotating freely in the housing, reassemble the connecting arms, and put the complete assembly back in the cowling. Make sure the assembly is in the parked position before you secure the cowling in place. You certainly don't wanna ruin a paint job by scraping wiper arms across your cowling.

Unfortunately, once you run into this situation, it is bound to return within a few years. I keep the issue away for a while by applying some oil to the shaft every month. Rust loves inattention. Turn your wipers on occasionally, even in dry weather and keep the assembly lubricated.

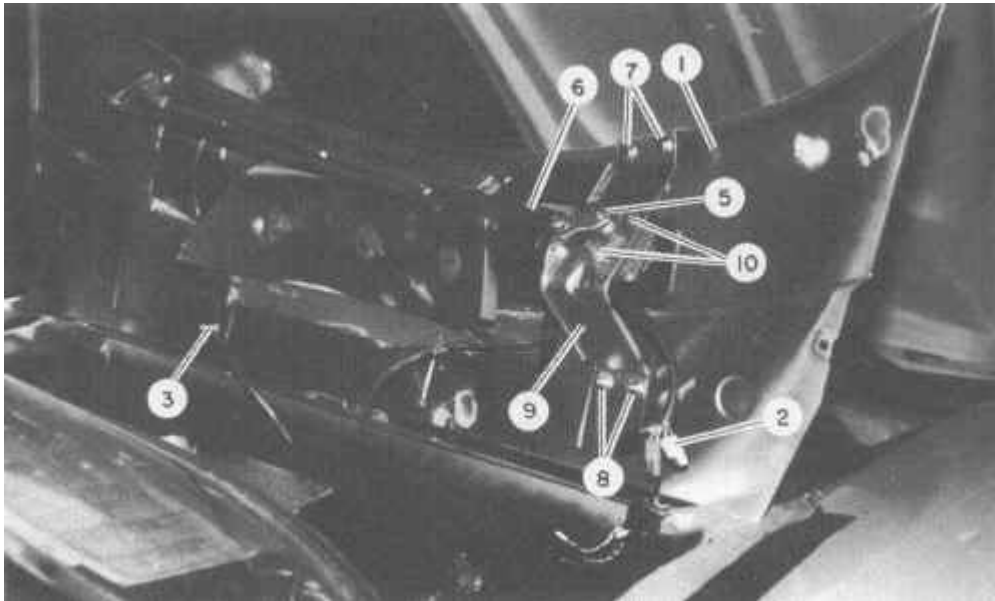
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Electrical

Accessories

Windshield wiper assembly - removal and installation



NOTE : Wiper blades should be in "Park" position

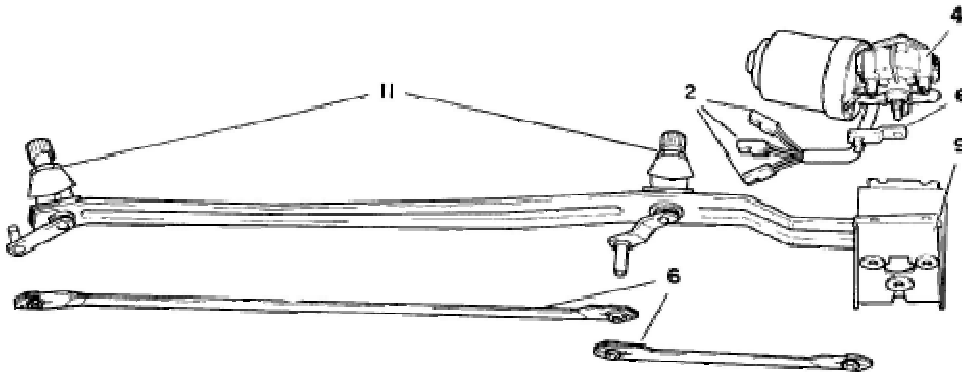
Pivot wiper arms up away from windshield and pull them off drive shafts

Raise hood. Remove six screws securing cowl (1) to body. Lift cowl up on body as shown, being careful not to damage finish. Disconnect electrical connectors (2), first noting to which connectors they are attached, for reinstallation. Disconnect windshield washer line at "T" fitting (3)

Place cowl on a bench. Remove two nuts (11) on drive shafts. Remove two bolts (7) and two nuts (8) holding motor mount bracket (9) to cowl. Remove entire wiper assembly from cowl

Remove motor drive shaft nut (5) holding linkage (6) to shaft. Pull link end off. Remove three bolts (10) holding motor assembly (4) to bracket.

Installation is reverse order of removal.



Refer to:

http://www.fiat-spider.net/servicemanualpages/electrical/windshieldwiper_removal.htm