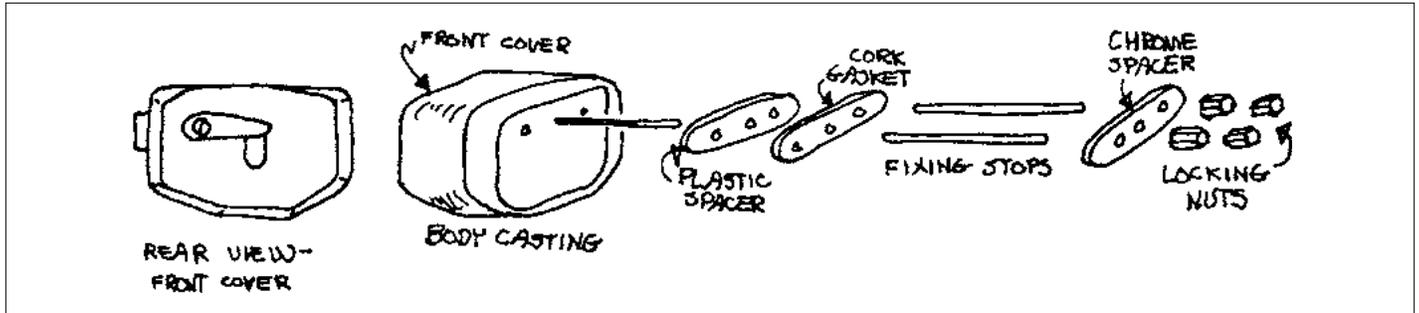




TClinic

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MAINTAINING THE TD WINDSHIELD WIPER MOTOR



Demounting Wiper Motor

Loosen the screws holding the pair of wires feeding the motor and remove wires from sockets. These wires are normally dead if ignition switch is off. With two wrenches loosen the lock nuts holding motor to windshield frame. Remove arm from shaft by backing off jamb nut on end of shaft and prying off arm. Remove motor from windshield frame. Remove fixing studs, plastic spacer, et al. Note general order of assembly.

Cleaning and Lubing Front Compartment

Remove two small screws and lock washers. Remove special screw slot nut holding manual actuating lever. Slip lever off. Wipe clean or soak in petrol and wipe clean. Relube switch. When cover is off the complete electrics are exposed. Handle with care. Observe commutator and brushes. Commutator should be smooth and have a gray tinge. Brushes should be free and not too short. Replace cover and holding screws, but not actuating lever.

Cleaning and Lubing Rear Compartment

Remove cotter pin holding washer and spring on shaft, two screws holding cover and then the cover. This exposes the gearbox. Observe general layout. Remove cotter holding sector gear, thrust washer and then sector gear and con rod as one unit.

Remove large metal gear and smaller fiber gear and shaft gear collar as a unit. Watch for thrust washers—the large metal gear has one. Soak these parts in petrol while you take a child's size toothbrush and petrol, and brush out gear case—tipping toward opening to keep petrol from running down bearings to the electrics. Avoid a large amount of petrol on armature gear. Just brush clear with a slightly moistened toothbrush. The three bushing exposed should be cleaned with a pipe cleaner plus petrol or patches of cloth over a rod of appropriate size moistened in petrol. In cases of considerable gum and dirt the whole casting could be stood in a pan of petrol deep enough to just penetrate about halfway up bushings for overnight.

OK—all parts clean and dry. Reassemble.

Grease gear shafts—coat them good, slide them in and out of their respective bushings and regrease. There should be plenty of lubricant on thrust area, as well as the rotating areas. The armature shaft should have several drops of oil. Note oiling holes both top and bottom for periodic oiling of this fast turning shaft. With all rotating parts lubed and replaced, including con rod and sector, replace thrust washer on sector and cotter. Cotter key (1/16") is if you need one. Now coat the gear teeth liberally and apply 12 volts across terminals and allow motor to run. Relube gears and rerun motor until well lubricated.

REASSEMBLE

Replace lubed shaft, then the cover, the spring, washer and cotter. Cotter should be bent to clear spacer. Replace manual control on front side and remount motor on windshield frame, observing proper order of spacer gaskets, chrome spacer, and lock nuts. Before replacing arm on shaft, check operation of motor—without binding or dragging against frame or spacers, otherwise motor will get hot, melt out lubricant and burn up. The pivot shaft for RH wiper blade can be oiled without removing. Replace arms and tighten jamb nuts just enough to hold.

- Suggested lubricants: Lithium grease, Lubriplate, or speedometer cable lube.
- Rubber lubricant can be used on the rubber gland in the chrome spacer.

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2002 Update

While it was pretty standard to clean parts in fuel years ago, it is frowned upon now. There are many less hazardous cleaning solvents available at your automotive parts store.