

# Windscreen Wiper Wheelbox Lubrication a DIY tech tip by Tiger Tom

The "Wheelbox" (The official British Lucas term for the gear box with the knurled nut that the wiper arm is pressed on to and common to most sports cars) desperately needs lubrication on older sports cars. Even if the wipers work OK and to your satisfaction, the wheel box should be lubricated for preventive maintenance.

Slow running or stalled wipers many times may be attributed to binding of the shaft in the bearing sleeve of the wheel box.

## How can you tell if they're binding?

If installed in the car, remove the wiper arms. The knurled nut should be easy to rotate back and forth to feel the play with the internal drive mechanism. If the part is out of the car, the wheel should spin freely.

It is impossible to lubricate the bearings with conventional means, but there is a trick.



*Wheelbox removed from the car shown with heater hose*

- Step 1** If the wheel box is installed on the car, remove the chrome nut and bezel.
- Step 2** Slide a 5/8" heater hose over the housing.
- Step 3** Secure hose with a hose clamp.
- Step 4** Pour in an ounce or two of about a 30 weight motor oil or low viscosity lubricant of your choice. NO WD40.
- Step 5** Apply 20 to 40 pounds air pressure in hose until oil is purged from the hose through the bearing.

Rotate the shaft while doing this process. The fluid forced through the bearing flushes contaminants and leaves a lubricating film behind. This process may take a few minutes.

Flush additional oil if contamination is severe.

Note: If doing this in a car, turn wiper mechanism on. Place rag under wheel box to prevent dripping in car interior.

- Step 6** Remove hose, wipe off excess oil.

When reinstalling "wheelboxes" in a vehicle, remember that wipers typically have different arc ranges. That means that each "wheelbox" provides a different amount wiper arm arc. If uncertain, assemble outside the car and compare arcs.

You are now ready for the Spring rains (or winter slush?) and can drive the rest of your life without a worry... at least about wheel box failure.



*Step 2: Heater hose over housing*



*Step 4: No WD40!*

