

## Lubricating the Vacuum Wiper Motor

The Trico type wiper motor does not operate properly without an internal lubricant. This is especially the case when a rebuilding kit has been installed, since the reciprocating parts fit tightly, resulting in high friction. An opposite effect occurs in the used motor where the reciprocating parts are worn. In this case, internal leakage of air past the seals occurs. Believe it or not, the performance of the engine is affected as leakage in the wiper motor lowers the intake manifold vacuum and leans out the fuel-air mixture.

In consideration of the above points, an ideal wiper motor lubricant must reduce friction and have a high enough viscosity not to act as a sealant. Additionally, the lubricant must not congeal in cold weather, must not thicken with age, must not cause corrosion of the die cast and brass parts, and must not attack the leather or plastic seals. The author has tried several lubricants, but two have given the best performance. Marvel Mystery Oil works well, particularly on a rebuilt motor. It has one drawback: the viscosity of the Mystery Oil is a bit too low. In a relatively short time, the oil is sucked out of the wiper motor by the engine manifold vacuum. On the other hand, brake fluid is excellent. It lasts longer than mystery oil due to its higher viscosity, and is especially effective on an old motor which has been idle for years.

***[Editor Note: Using brake fluid as a lubricant is not recommended by Chuck Christensen, 2012 MAFCA Technical Director, as spilled brake fluid can damage the car's paint, either during the lubrication or afterward during wiper use. Instead, use a light machine oil.]***

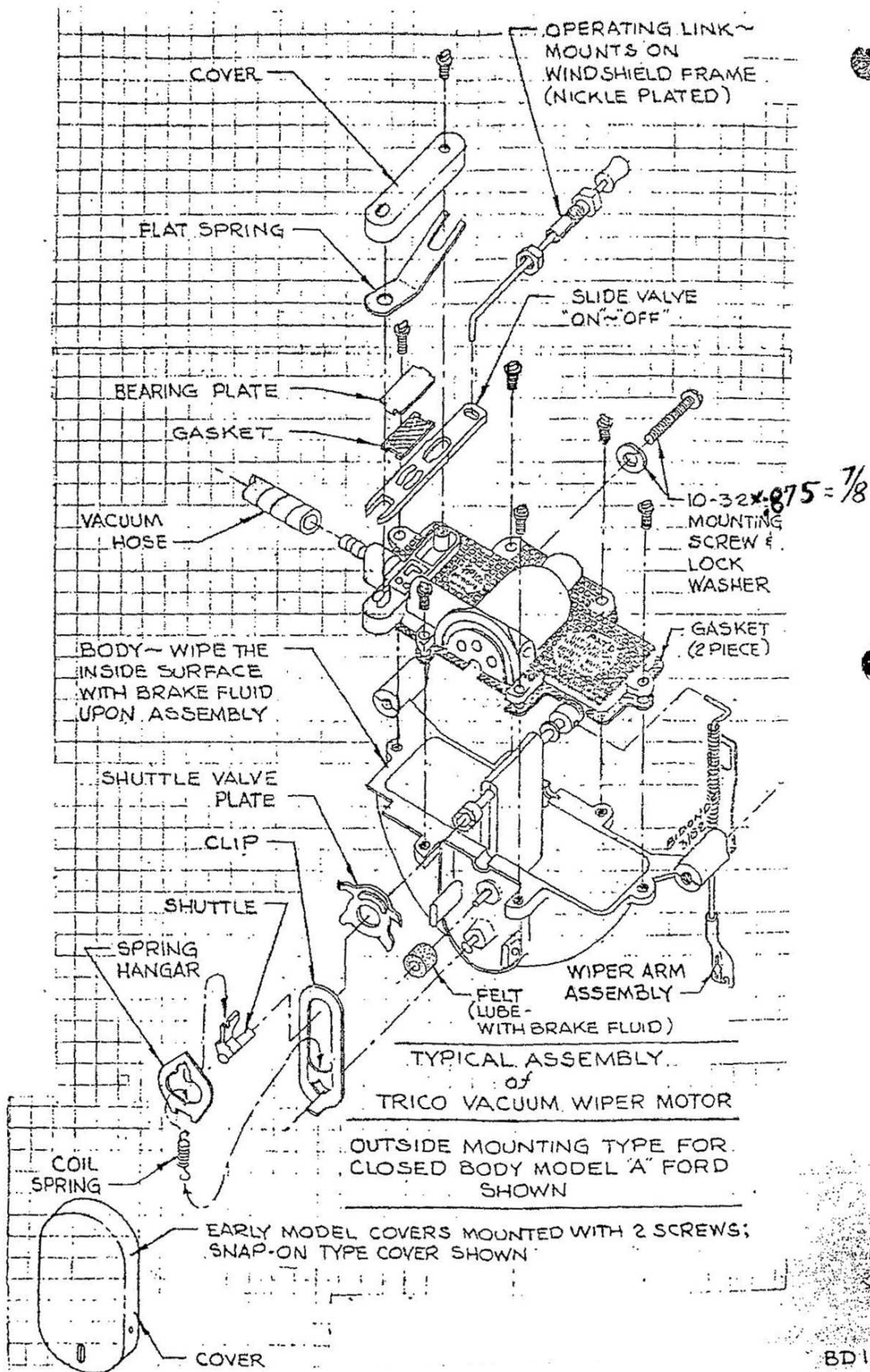
Here's how to lubricate the motor, which should be done three or four times a year:

1. Remove the vacuum hose at the wiper motor. Lightly hold your finger over the hose nipple on the motor and cycle the wiper blade back and forth.. Note that in one direction the motor sucks in air, and in the opposite direction, the motor expels air through the nipple. Place the wiper blade in the position such that the motor will begin to suck air at the nipple.
2. Attach a six-inch long piece of hose to the motor nipple and hold the open end up. Using a squeeze bottle, force one teaspoonful of lubricant into the hose. Place a rag on the cowl below the wiper motor. Hold another rag over the open end of the hose.
3. Cycle the wiper blade back and forth several times. Repeat the process again, adding a second teaspoonful of lubricant.
4. Start the engine and run the wiper motor. It should run well. If it does not, the wiper motor should be disassembled, cleaned, inspected and a rebuilding kit installed. It is normal for the wiper to slow down when the car is accelerated, but it should not stop altogether.

One last point to note. If you test run the wiper motor on a modern car and it runs real well, it may not do so on the "A". Always test the wiper motor on the car it was designed for, the Model A!

If the roof doesn't leak, now you are ready to run the "A" in the rain.

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