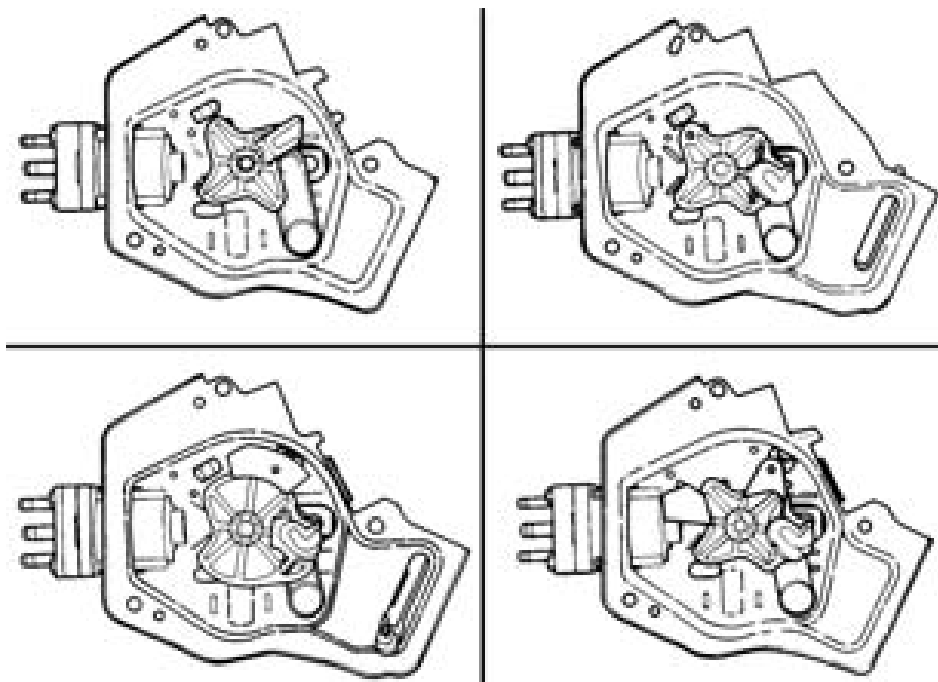


WINDSHIELD WASHER PUMP REPLACEMENT PROCEDURE

INSTRUCTIONS

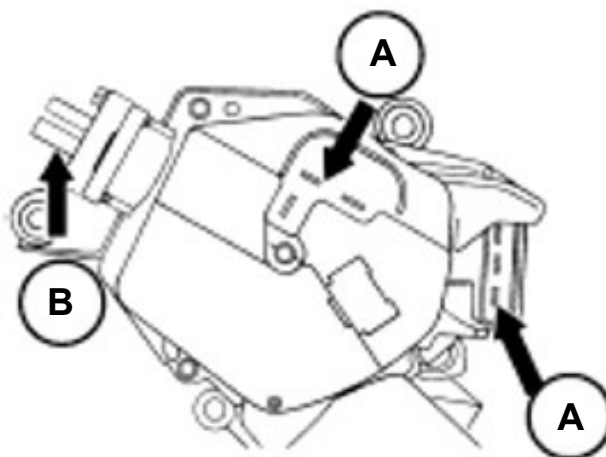
Note: Read ALL instructions before starting installation!

THE PUMPS BELOW ARE REPLACED BY THIS SERVICE PUMP. NOZZLES MAY BE ANGLED INSTEAD OF STRAIGHT AS SHOWN.



IMPORTANT: Operate wipers, then turn off to be certain they are in park position before starting installation and disconnect negative battery lead.

1. Disconnect electrical connections (A) and hoses (B).



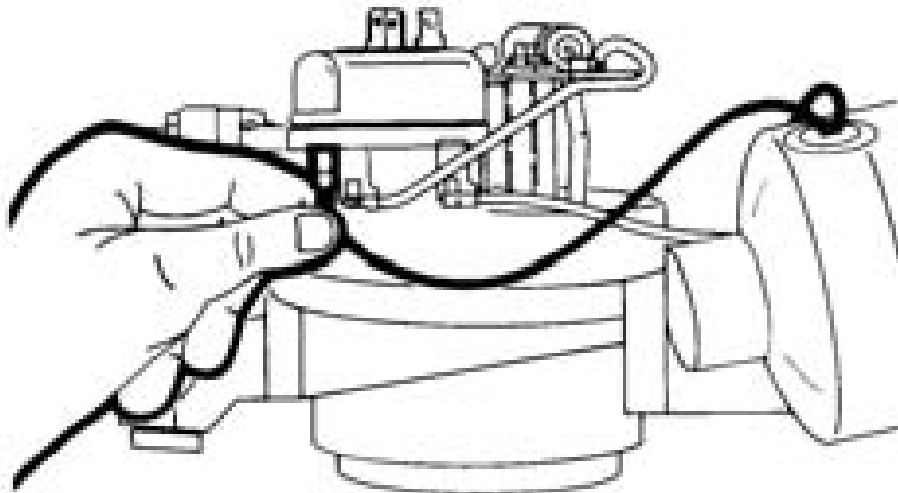
2. Remove Pump Cover. Pull from base plate and ease over electrical terminals.

(STANDARD PUMP ONLY)

3. Position new Pump Assembly on Wiper Gear Box and reinstall screws. (Go to Step 17 and continue.)

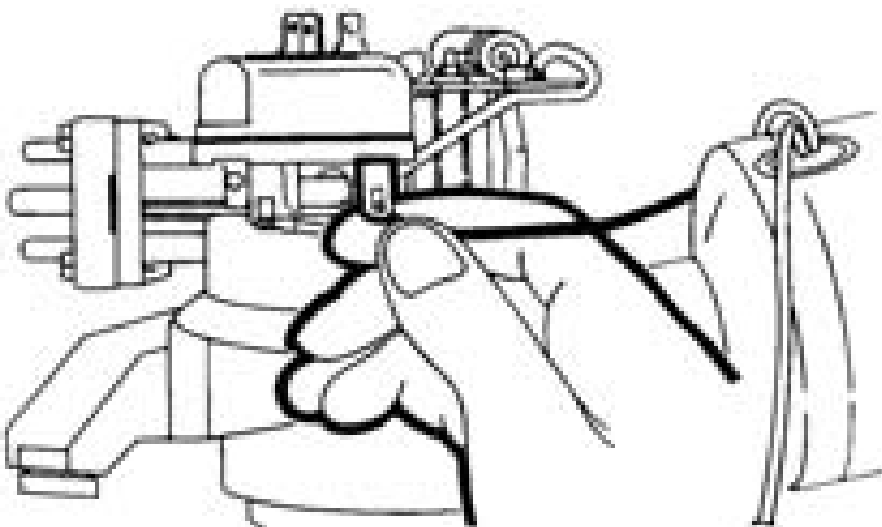
(PULSE AND MULTIPLEX PULSE, ONLY IF REPLACING PULSE CIRCUIT BOARD)

4. Find Black/Pink wire. If wire is connected to delay assembly terminal by a removable clip, then disconnect.. If wire is soldered to terminal, then cut wire leaving 3" length from terminal.



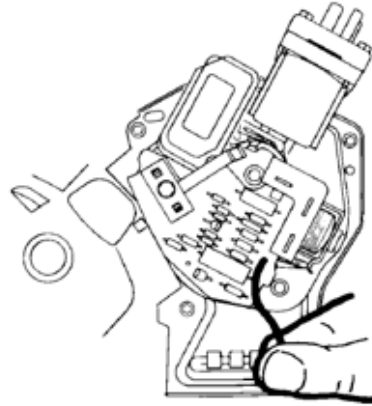
(PULSE UNIT ONLY)

5. Disconnect Red wire from delay assembly terminal

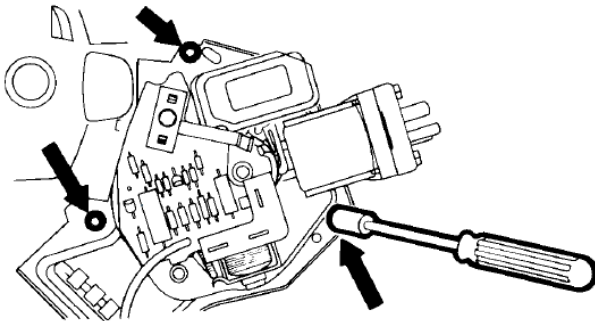


(PULSE UNIT ONLY)

6. Disconnect Blue wire from Wiper Motor terminal.



7. Unscrew 3 bolts and remove old pump.



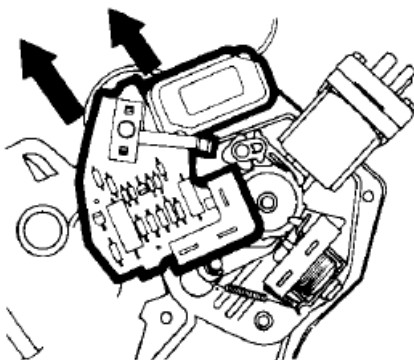
IMPORTANT: Steps (7A) through (7E) explain the Wiper Delay instructions.

NOTE: Multiplex Board shown; Pulse Board is similar.

READ THESE SECTIONS THROUGH IN THEIR ENTIRETY BEFORE COMMENCING INSTALLATION AT STEP 8.

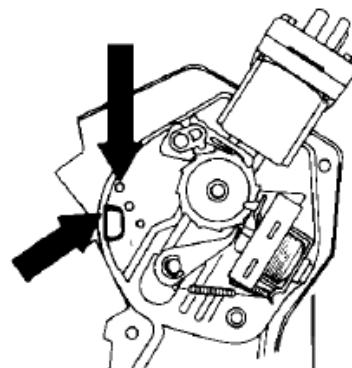
- 7A. The Wiper Delay Assembly must be removed from the old Pump, and reinstalled on the new Pump. This includes the triple prong black foam insulator.

REMOVE FROM HERE



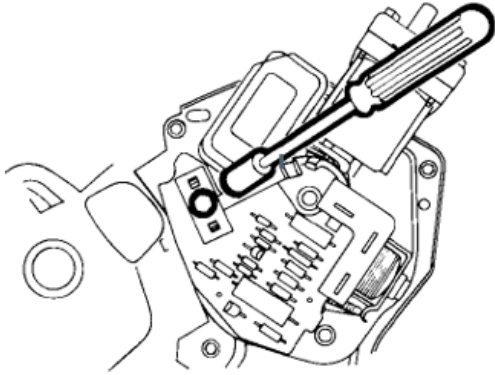
OLD PUMP

INSTALL HERE

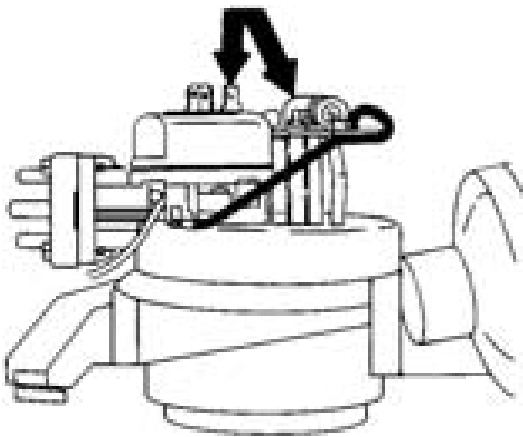


NEW PUMP

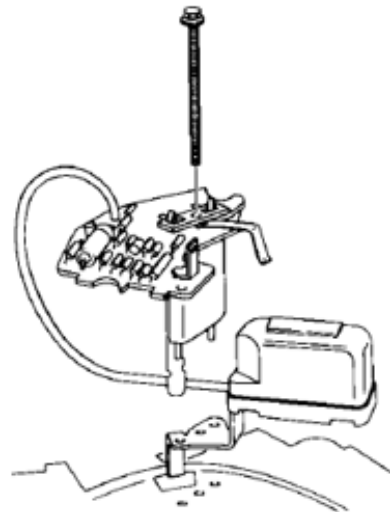
7B. The Delay Assembly is fastened to the Pump Base Plate with a socket head screw.



7C. The Delay Assembly consists of two sections nested together and connected by an Orange wire.

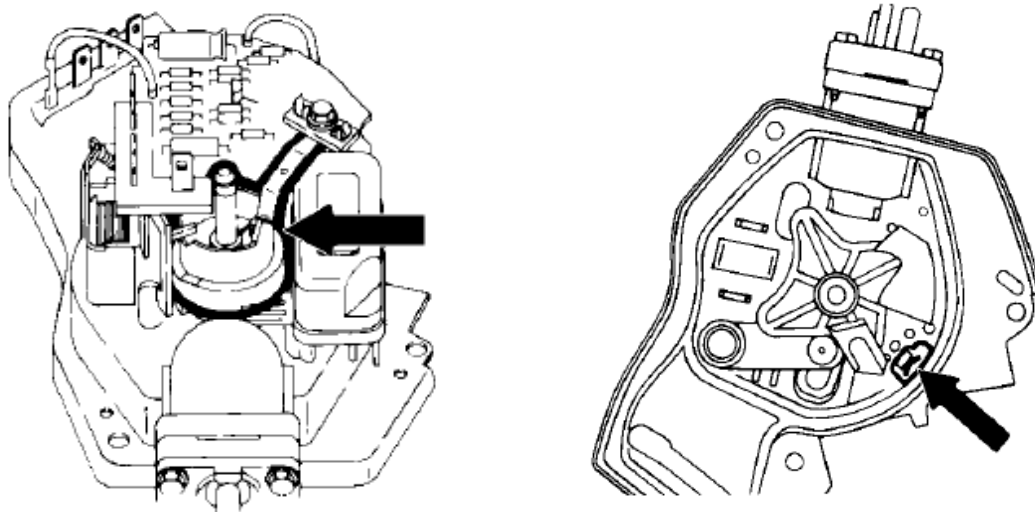


7D. The two sections will readily fall apart, unless care is taken to hold them together when removal is made.



7E. The two sections can be easily nested and when properly reassembled onto the new pump the override switch rests on the ratchet gear projection, as shown below, and the holding switch projects down through the Pump Base Plate as shown below.

CAUTION: Care must be taken to prevent bending or damage to either switch in disassembly or reinstallations.

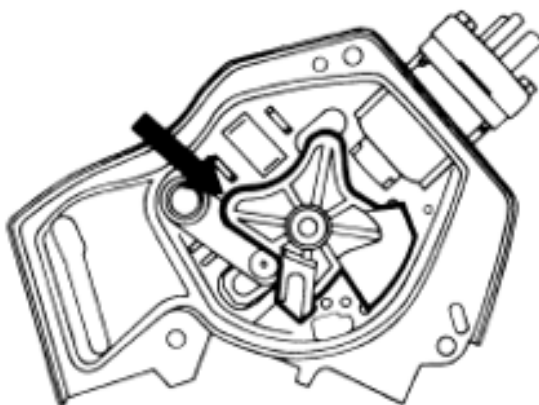


4-LOBE CAM SHOWN REPLACE 2-LOBE CAM

IMPORTANT: READ (7A) THROUGH (7E) BEFORE COMMENCING INSTALLATION AT STEP 8.

8. Remove Pump Cover from new Pump
9. Turn new Pump over and make certain that the Cam is in the position shown below...rotate and reposition Cam, if necessary.

4-LOBE CAM (REPLACES 2- LOBE CAM)



10. Unscrew and remove the Delay Assembly, being careful to hold both parts together, and not bending the switches.



11. Remove double prong foam insulator from new Pump. Position and reinstall the Delay Assembly into the new Pump.



12. The override switch and the holding switch contact points should be in the positions shown in Step (7E).

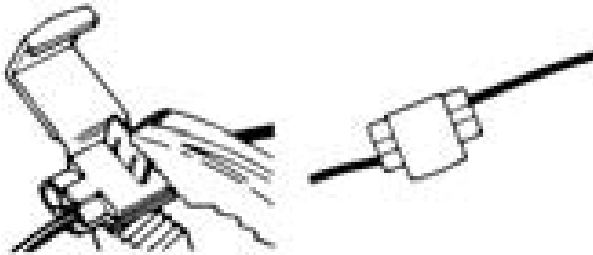
13. Reposition new Pump and bolt to Motor. Refer to Step 7 for bolt locations.

14. Reconnect Blue wire to Motor terminal. Route wire as shown in Step 6.

15. Reconnect Red wire to Delay Assembly terminal (see Step 5).

16. Reconnect Black/Pink wire if Step 4 was performed. If wire was cut, use enclosed easy splice connector.

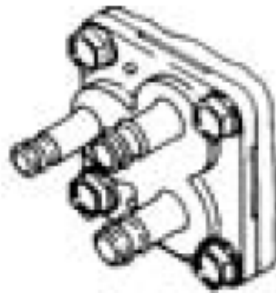
Press "U" element down with pliers



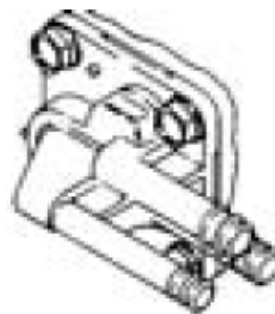
Snap Hinge cover closed.

17. Reinstall hoses.

NOTE: If new nozzle is different (angled instead of straight as shown below) from original and interferes with or crimps hoses, then install original nozzle on new Pump.



Straight



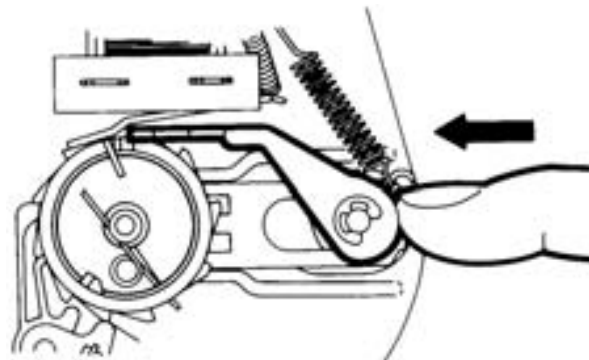
Angled

18. To engage Cam...

- Reconnect electrical connections.
- Turn wipers on. A loud clunking sound should be heard from the cam follower slipping off cam lobes.
- Turn wipers off. After completely stopped in park position, turn wipers on again.

If clunking has not stopped...

- Turn wipers off. After completely stopped in park position, place finger on cam follower and ratchet pawl. Apply pressure in the direction shown. Cam should engage and cam follower and ratchet pawl should slide about one-fourth (1/4) inch and click into place.
- Turn wipers on.



If clunking has stopped...

- f. Turn wipers off.
- g. Disconnect electrical connections.
- h. Install Pump Cover and Dust Shield.
- i. Reconnect electrical connections.

NOTE: It may be necessary to activate washer a number of times in order to prime pump. Cycle unit 5 or more times to alleviate air locks that may be present due to trapping of air in installation or possible low solution level.

IMPORTANT: For satisfactory operation and extended life, the following steps should be taken:

1. Inspect old hoses, replace cracked or hardened hose(s).
2. Remove and clean old reservoir. Refill with washer solvent or washer antifreeze.

NOTE: It is very important to inspect hose that extends into reservoir from reservoir cover. The hose should be cleaned along with filter at bottom of hose.