Refer to an authorized original equipment service manual for detailed installation instructions. If you do not have the experience, proper tools or manuals, please seek the services of a qualified technician.

**Wiper Motor**

**BEFORE YOU INSTALL**

- A wiper motor that does not run or will not shut off or park in the right position could be malfunctioning due to resistance in the ground path to the motor. Connect a ground strap from a good ground to the motor case to ensure a good connection. If motor operates, check wiring harness ground, terminal ground lug or ground strap if equipped for good connection. If motor still fails to operate correctly, check switch and control circuit harness.

- If original motor is covered by a splash guard or protective encasement, be sure that the replacement motor is installed the same way.

- Before installing replacement motor, visually inspect vehicle harness connector locking latches and keyways. Replace connector if damaged.

- If replacement wiper motor parks in wrong position, the likely cause is from power that was applied to the unit before installation, moving it off park position. Remove linkage from installed unit; operate motor on high speed for 5 seconds, then switch to park position. Reinstall linkage so wiper arms are in park position. Operate unit and test for proper operation. If not correct, test motor ground and refer to vehicle service manual for specific installation procedures. Replacement units are supplied in the correct park position.

- Some older applications have a pulse control board that mounts on the wiper motor. If the wiper motor will not park after replacing pulse board, the reason may be the contact arms on pulse board may not be contacting the wiper motor. It's possible that the contact pins may have been bent. The position of the contact arms should be checked before installation. Contacts should be approximately 1 inch (25 mm) above circuit board. Correct contact position ensures proper wiper motor parking function.

- To protect the replacement wiper motor and pulse board, be sure water does not drain on wiper motor assembly. Remove any debris that might block or restrict the flow of drain water to the left or right fender well areas. Be sure to also check for proper operation of control switch and associated wiring.

- Use caution while working around the wiper mechanism. If the key is on and the wiper lever is set to “intermediate” then the motor can start unexpectedly.

**Replacement Time:** <1 hr

**TIPS**

- Disconnect negative battery terminal before replacing wiper motor.

- Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pre-tensioner activation.

- Check that the body or chassis ground is connected as designed and tightened to torque specification as stated in the service manual.

- Verify wiper motor connector is free from corrosion and terminals are making good contact.

- Isolate wiper motor from vehicle harness and perform a bench test to verify the motor is the source of the problem.

- Use a curved pry bar to remove the end caps from the wiper arms to access the lock nuts.

- Use a wiper arm puller to remove wiper arms from the serrated shaft on the wiper motor.

- Use garnish clip remover to pull the plastic clips that retain the cowl air inlet panel and water deflector.

- Some applications have seals between the fenders, windshield and cowl air inlet panel. Be sure to install seals in the correct position before replacing the cowl air inlet panel.

- Some applications use double-sided tape to retain the cowl seals. Be sure to use replacement tape with the same adhesive strength.

- Operate the front wipers while spraying water or washer fluid on the windshield. Ensure that there is no interference between the blades and “A” pillars.

- In order to have proper delay and hidden park position for the wiper arms, the crank arm must be initialized to the replacement wiper motor.

- If installing a wiper motor with an integrated washer pump, make sure the washer pump is tested before installing the replacement motor.

- Certain replacement motors are not supplied with the connector due to the different connector configurations used by the O.E. manufacturer on a specific wiper motor design. This will require that the connector and circuit board assembly be transferred from the original motor to the replacement.

- Inspect body drains and cowling area to ensure all body drains are clear and that all shields, guards or weather stripping are intact to avoid premature failure of this replacement unit.

**SKILL LEVEL:**

Service Technician or higher

**GOT QUESTIONS ABOUT THIS PART?**

**CALL 888-280-8324**

Monday-Friday