

# WINDOW LIFT MOTOR INSTALLATION GUIDE

## REMOVING THE ORIGINAL MOTOR

**IMPORTANT NOTE:** You are urged to refer to a suitable service manual before attempting to make repairs. If you do not have such a manual, or lack the experience, you should seek the services of a qualified technician.

### Make these three checks to Avoid Warranty Problems!

1. Make sure you check that glass is not binding.
2. Make sure you check window switch functions.
3. Make sure you lubricate the window regulator.

### BEFORE YOU BEGIN, READ THIS:

It is easy to replace a window lift motor. However, you must take proper precautions to assure a safe, trouble-free installation. Park the vehicle in a level, well-ventilated area. Set the parking brake to avoid inadvertent movement. There must be enough room to fully open the doors for easy access to the window regulator and window lift motor.

**CAUTION:** If the vehicle is equipped with a seat belt (safety belt) system or air bag system that is attached to the door, refer to a suitable repair manual to make sure you have the tools, skill and knowledge to remove and correctly install such systems.

## REMOVE ORIGINAL MOTOR

1. Raise window to the full "up" position. Support glass with cloth-backed (duct) tape. If window cannot be raised and is in a partially down position, it must be supported to keep it from falling into the window well during motor removal.
2. Disconnect the ground cable from the battery.
3. Remove door trim panel and moisture barrier.
4. Remove bolts or rivets securing regulator/motor assembly to inner door panel. To remove rivets, punch out center pins. Then drill out the rivets using the appropriate bit.

**NOTE:** Some models have locating dimples in front inner door panels to locate motor-to-regulator attaching bolts. Use a 3/4" hole saw to drill three holes at dimples. Then remove attaching bolts.

5. Disconnect motor electrical lead.
6. Move regulator assembly rearward and disengage rollers from sash channel, if so equipped.
7. Remove regulator assembly through access panel in door.
8. **Important!** Before removing the motor from the regulator, secure the sector gear so it can't move. Injury can result if the sector gear is not

locked into position. To do this, drill a 1/4" or 3/8" hole through the backplate and gear. Install a 1/4" or 3/8" bolt and nut to lock sector gear in place. **DO NOT** drill hole closer than 13mm (1/2") to the edge of sector gear or backplate.

9. Remove motor to regulator attaching screws or rivets. Use a 3/16" drill bit to drill out rivets ( if equipped).
10. Separate motor f regulator.

**NOTE:** If the original window lift motor has a bracket, remove it by slightly loosening through-bolts. Transfer the bracket to the replacement motor.

## INSPECTING THE WINDOW LIFT MOTOR

1. If motor is supplied with a gear, remove gear from old motor and inspect for chipped teeth or cracks. If damaged, replace the gear.
2. If the gear is good, transfer to the replacement motor.

## INSTALLING NEW WINDOW LIFT MOTOR

1. Install motor to regulator using nuts and bolts supplied with motor or 3/16" rivets. Make sure motor pinion gear teeth mesh with sector gear teeth.
2. Remove sheet metal screw or bolt and nut used to lock sector gear in place ONLY after motor is installed to regulator.
3. Position regulator assembly through rear access hole into door inner panel.
4. Connect electrical lead to motor before moving regulator assembly to mounting position.

**NOTE:** Use wire colors for reference to determine correct harness plug/motor lead connection.

5. Install lift arm roller into glass sash channel, if so equipped.
6. Bolt or rivet regulator assembly to door inner panel.
7. Reconnect battery ground cable.
8. Remove tape or window securing wedges.
9. Run window up and down several times to make sure gear teeth are meshing and motor is working properly.

**NOTE:** If the motor runs backwards, unplug and reverse the motor electrical connector.

10. Install moisture barrier and trim panel ( if equipped).  
**If window lift does not work, refer to the troubleshooting chart.**

## Troubleshooting Chart

Possible Problem	Symptom		
One motor doesn't work	Open in feed wire to motor; Defective motor switch, window regulator mechanical binding.	X	
All windows don't work	Open in main feed wire (circuit breaker tripped), Open in master switch ground.		X
One (or more) motor(s) runs backwards			Motor leads reversed.