## INSTALLATION INSTRUCTIONS

- 1. Remove all interior door panels including trim, handles and window cranks.
- 2. Remove vent divider bar mounting screws but do not remove the bar. Tilt the bottom vent glass channel toward the outer skin of door.
- 3. Remove existing regulator by removing the mounting bolts (3,4,5 or 6). Slide the regulator roller pins out of the window channel. Remove the regulator from inside the door.
- 4. Manipulate your new power window regulator into the door. (Be sure to match left unit to the left door and right unit to the right door.)

YOU MUST GREASE TRACKS WHERE NYLON ROLLERS RUN AND GREASE AND LUBRICATE ALL PIVOTS ON REGULATORS WITH NEW DISC BRAKE WHEEL BEARING GREASE.

## DO NOT USE LITHIUM GREASE

- 5. Align and insert the rollers into the window channel. It will be helpful to have someone hold the glass in position and move it up or down to assist in aligning the rollers. (Rollers may be nylon or steel with springs and washers.)
- 6. Once the rollers are in the channel move the glass up or down to align the holes in the regulator with the holes in the inner door panel and install the mounting bolts (3,4,5, or 6).
- 7. Install the mounting screws to the vent divider bar.
- 8. You can now hook up the switches, motors, hot lead and ground to test the window operation.

Adjusting the regulator to keep the window level in the door frame. (Not all window regulators have this adjustment. Only window regulators that had this adjustment on the factory regulators will have this on the power window regulator

1. Loosen the adjusting bolt (if equipped)on the regulator and set the top of the window parallel with the top of the window frame. Tighten the adjusting bolt

## Wiring Conduit Installation

Wiring must be run through the door jambs and into the kickpad and dash area.

- 1. Determine a location in the door and the kick panel area that will allow free movement of the plastic conduit that the wiring runs through. Also, pick a location that the thickness of the conduit flanges will leave enough space so that the door will not to bind.
- 2. Mark the center of the door jamb (outside to inside) being sure to allow for the diameter of the conduit retaining flanges.
- 3. Center punch and drill a small pilot hole in the door jamb.
- 4. Close the door and transfer the hole location to the door frame.
- 5. Open the door and center punch the marked door frame and drill a small pilot hole (1/8") in the door frame into the kick panel area.
- 6. Use a hole saw, rotary file, or round hand file to enlarge both holes to the outside diameter of the plastic conduit flange. Drill hole 15/16" O.D. allowing the flange to be tapped in. The flanges should be installed with a tight slip fit to retain them in the door and door frame.
- 7. Fit the flanges into the door and jambs and check that the door closes without pinching the flanges.
- 8. Install the plastic conduit through the door jambs and the flanges. Use duct tape, tie wrap or other method to retain the conduit to ONE flange. Attaching the conduit in this manner will cause the conduit to slide thru the other flange and into the door or kick panel area when the door is opened or closed. Be sure that there is room to allow for the wiring and conduit to move freely.

## Wiring Harness Installation

The wiring harness is marked for each door. (Left Master switch, Right front switch Left rear, right rear) There also is a 12 V red hot feed and a black ground.

The main wiring harness should be routed across the back of the dash with the fused hot feed near the steering column. The hot lead can be connected to any switched hot or hot all the time connection so that the windows will operate only with the ignition on or with the ignition off.

The door switch wiring will be routed through the plastic wiring conduit, into the kick panel area, and plugged into the main harness. The hole size to be bored in the door and jam is 15/16 inch.

Each wiring harness will have receptacles that the window switches plug into labeled left front, right front, left rear, right rear.

The black wire labeled ground should be attached to any clean ground

in the left door. (This wire is in the bundle to the left door switch.)

The white door switch receptacles should be placed in the doors in a location that coincides with the switch location in the door panel upholstery.

The motor plug (Black housing with two wires, blue and brown) will be plugged into the motor.

After installing the door jamb conduits you should complete the following.

Installing the wiring in the doors

- 1. The wires in the insulator shells (plugs that have gray, green and orange wires) should be removed from their shells to allow them to be passed through the door jambs and into the kick panel area. Unplug the plug that is between the main harness and the door switch receptacle. Inside this plug are three spade connectors that go into the receptacle side of the assembly. These three spades can be pushed out of the plastic housing by pinching the spade together slightly. Note the wire color location in the housing before removing them from the connector housing. Only disassemble one side at a time so you can look at the other side for correct reassembly.
- 2. Once the wires are removed from the connector housing, the wires can be passed through the conduit and into the kick panel area. The wires should then be re-assembled into the connector housing and plugged into the main wiring harness. (Be sure to replace the wires in the housing in their original location.)