

Fig. 11-6. 1962 Rear Door Automatic Window Circuit—(62LM-8005)

3. After the window travels down approximately 6 inches, the window stop switch is actuated and its contacts are opened. This now opens the down relay circuit, and the downward movement of the window stops.

Window Up Circuit

1. The up relay is already energized. This permits current to flow through the door pillar switch, the window cut-off switch, the up relay winding and the stop relay windings to ground. The relay contact points are closed and remain closed until the door is shut and the window is all the way up. However, the window does not go up until the door is shut because the position of the pillar switch (with the door open) leaves the up field feed circuit open.

As soon as the up relay contacts are closed, a lock-in circuit is established which will continue to energize the up relay coil after the pillar switch contacts are repositioned upon closing the door. This lock-in circuit permits current flow through the up relay contacts, the window cut-off switch, the up relay coil windings and the stop relay (window regulator control relay) contacts and through the by-pass switch to ground.

2. When the door is closed, the pillar switch plunger is depressed which repositions the pillar switch contacts and completes the circuit from the window up relay contacts, through the coil windings of the current sensing relay and the up field of the motor. The motor operates and closes the window.

NOTE: *The current sensing relay in the down relay circuit prevents feed-back through the down relay and thereby prevents energizing both the down and up fields of the motor at the same time.*

If the window has been lowered more than 7 inches, the window cut-off switch is actuated and the switch contacts are open. Thus, the up relay circuit is open and prevents the automatic up movement of the window.

3. Approximately $\frac{1}{4}$ inch before the window reaches the closed position, it actuates the stop relay by-pass switch. The by-pass switch circuit is provided to prevent the stop relay from cutting out if the window motor requires above normal operating current before it reaches the full up position.

4. With the by-pass switch circuit open, the motor stop relay coil carries the full motor current. As soon as the window stops its upward movement, the motor stalls and the stall current is sufficient to open the stop relay contacts. This opens the ground circuit of the up relay coil windings and the complete up circuit becomes inactive.

LOCATION OF ELECTRICAL COMPONENTS—1963

PART	LOCATION
Window Stop Switch (Window Travel Limit Switch) Cut-Off Switch (Window Return Cut-Off Switch)	On the switch plate inside door panel above the door lock (Both switches moulded into single unit).
By-Pass Switch (Window Regulator Motor Current Limiter Relay By-Pass Switch)	Inside of door panel at top of door on the window up-stop bracket.
Door Pillar Switch (Window Actuator Striker Switch)	On the door latch striker plate.
Current Sensing Relay	On relay panel behind rear seat.
Stop Relay (Window Regulator Motor Current Limiter Relay)	On relay panel behind rear seat.
Up Relay (Window Regulator Control Relay)	On relay panel behind rear seat.
Down Relay (Window Regulator Control Relay)	On relay panel behind rear seat.
20 amp Circuit Breaker	On the fuse panel at right side cowl panel (Right end of glove box).
Window Motor	Lower inner door panel.

AUTOMATIC WINDOW TROUBLE SHOOTING—1963

If the conventional power windows are operating properly and the automatic system is inoperative, the motor, manual switch, by-pass switch and 20 amp circuit breaker are not defective.

If both systems are inoperative, the conventional circuit should be checked first as the systems have a common motor and 20 amp circuit breaker.

Following is a trouble shooting guide.

Window Will Not Go Down

1. 20 amp circuit breaker.
2. Pillar switch.
3. Motor Down Relay.
4. Window stop switch.
5. Motor down field winding.
6. Current sensing relay.

Window Continues All the Way Down

1. Broken spring on the stop switch actuator lever.
2. Window stop switch.
3. Down relay.

Window Will Not Return to Up Position

1. 20 amp. circuit breaker.
2. Up relay.
3. Motor up field windings.
4. Cut-off switch.
5. Pillar switch.

Window Closes—

Motor Continues to Operate

1. Window stop relay.
2. By-pass switch. (Improper adjustment or shorted contacts).

Window Moves Up Only A Short Distance After Door Is Closed

1. By-pass switch.
2. Stalled motor due to tight window channels.

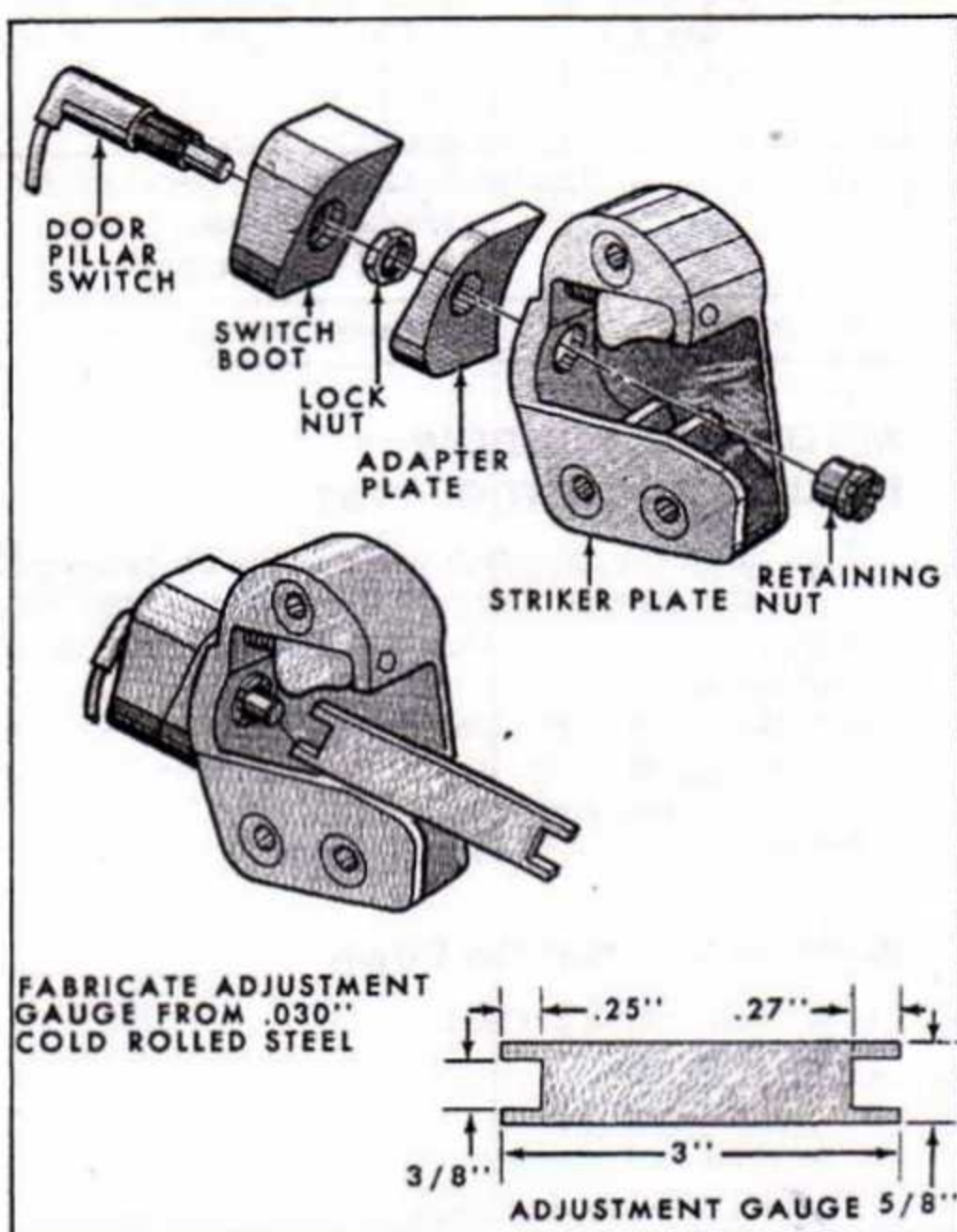


Fig. 11-8. Pillar Switch Adjustment—(N1279-A)

ADJUSTMENTS

BY-PASS SWITCH

1. Lower the window to the down position.
2. Disconnect the negative (ground) cable from the battery.
3. Remove the trim panel from the door.
4. Mark the position of the window up stop bracket.
5. Remove the window up stop and by-pass switch from the door as an assembly.
6. Adjust the switch so the threaded portion of the switch is flush with the lower surface of the window stop bracket. **The threaded part must not protrude beyond the bracket.**
7. Install the window stop and switch in the door.
8. Connect the switch lead wires. Be sure the wires are routed through the three retaining clips.
9. Install the door trim panel and connect the battery cable to the battery.

WINDOW CUT-OFF AND STOP SWITCHES (1961 AND 1962)

1. Lower the rear door window and disconnect the negative (ground) cable from the battery.
2. Remove the switch opening cover plate which is located just above the door lock.
3. Disconnect the leads from the switches.
4. Remove two outer switch plate retaining screws. Remove the inner screw and switch plate from the door.
5. Loosen the cut-off switch (switch without the roller) retaining screws.
6. Align the switch actuator lever so the surface opposite the switch is in line with the hair line on the switch plate.
7. Move the switch toward the actuator lever until the switch clicks; then, tighten the switch retaining screws.
8. Recheck the switch adjustment by moving the actuator lever against the switch. When the click is heard, the actuator lever should be in line with the hair line on the switch plate.
9. Loosen the stop switch (switch with roller) retaining screws.
10. Position the stop switch actuator arm against the cut-off switch actuator lever.
11. Move the stop switch toward the actuator arm until the arm has no free travel; then, tighten the switch retaining screws. Connect leads.
12. Install the assembly in the door. Be sure to position the cut-off switch actuator lever on top of the actuating pin.
13. Connect the battery cable to the battery and check the automatic window operation.

PILLAR SWITCH (1962 AND 1963)

1. Lower the window to the down position.
2. Fabricate a gauge as shown in Figure 11-8.
3. The switch should click when the plunger is depressed with the 0.250 inch end of the gauge but not with the 0.270 inch end.
4. If the switch fails to click with the 0.250 inch end, loosen the lock nut and turn the retaining nut clockwise until the switch is properly adjusted.
5. If the switch clicks with the 0.270 inch end, turn the retaining nut counterclockwise until the switch is properly adjusted.
6. Tighten the locknut and check the operation of the window. It should start moving down when the door is open $\frac{1}{8}'' \pm \frac{1}{64}''$. If the preceding adjustment does not give this operational dimension, readjust the switch as necessary. One complete turn of the retaining nut will change the operating point of the switch plunger $\frac{1}{32}$ inch.

WINDOW CUT-OFF AND STOP SWITCHES (1963)

The 1963 window cut-off and stop switch assembly is not adjustable. If defective the switch assembly must be replaced. Following is the removal and installation procedure:

1. Lower the window to its full down position.
2. Remove the switch opening cover plate which is located just above the door lock.
3. Disconnect the switch assembly multiple connector from the switch assembly.
4. Remove the two outer switch plate retaining screws. While pulling outward on the switch plate assembly, remove the inner retaining screw and plate assembly from the door.
5. Remove the three screws which retain the switch assembly to the mounting plate. Slide the switch assembly off the mounting plate and replace the switch assembly. Be sure that the short screw is used to fasten the lower part of the switch assembly to the switch mounting plate.
6. Check the actuator lever for free movement (against spring tension) in the slot of the switch assembly before installing the assembly in the door.
7. Hold the switch and plate assembly with the actuator lever pointing slightly upward and position the assembly in the door so that the actuator is on top of the actuator pin on the window mechanism. Install the switch plate retaining screws.
8. Connect the switch multiple connector of the wiring harness to the switch.
9. Recheck window operation.
10. Install the switch opening cover plate.

VACUUM CONTROLLED LUGGAGE COMPARTMENT DOOR LOCK

A vacuum operated luggage compartment door lock system is available on 1962 and 1963 Lincoln Continental sedans. (See figure 11-9.) The vacuum source for this system is obtained from the vacuum door lock system through a tee connection at the distributor supply line. The system is used to unlock the luggage compartment door from the interior of the car.

The principal components of the system are a control valve assembly and a door lock actuator assembly. The control valve, through which the vacuum is routed, is located in the glove compartment. The actuator, located in the luggage compartment, is a vacuum motor consisting of a diaphragm with a rod attached to operate the door mechanism.

REMOVAL AND INSTALLATION**WINDSHIELD Removal**

1. Remove the windshield wiper arm and blade assemblies.
2. Remove the windshield outside-side mouldings, both right-side and left.
3. Remove both upper and lower outside moulding retaining screws, both sides.
4. Remove the windshield upper garnish moulding, sun visor clamp, and rear view mirror.
5. Remove the windshield side garnish moldings.
6. Remove the radio knobs, face cover and speaker grille assembly.
7. Remove the instrument panel top trim pads.
8. Remove the sun visor and bracket assemblies.
9. Loosen the weatherstrip from the pinchweld flange on the inside of the vehicle; then, push the windshield and weatherstrip out of the opening.
10. Remove the weatherstrip from the glass and visually inspect it for defects. If the weatherstrip is to be reused, clean it thoroughly.
11. Remove the old sealer from the pinchweld flange.
12. Inspect the pinchweld flange area and rework any rough or ragged edges, or wavy pinchweld flange.

Installation

1. Apply sealer in the glass groove of the weatherstrip.
2. Install the weatherstrip on the glass to be installed.
3. Install a piece of $\frac{1}{8}$ inch sash cord around the outer perimeter of the weatherstrip in its body flange area. The ends of the cord should overlap at the bottom by approximately 12 inches. Tape the ends of the cords to the windshield.
4. Apply sealer to the pinchweld flange.