

SECTION 2-C

REAR DOORS

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2-9 REAR DOOR ASSEMBLY

a. Description

Figure 2-26 is typical of sedan and station wagon style rear doors with the trim pad and inner panel water deflector removed. This illustration identifies the component parts of the rear door assembly, their relationship and various attaching points.

Figure 2-27 is typical of hard top sedan style rear door with the trim assembly and inner panel water deflector removed. This illustration identifies the component parts of the rear door assembly, their relationship and various attaching points.

Figure 2-28 is typical of hard top sedan style rear door with the trim assembly and inner panel water deflector removed. This illustration identifies the component parts of the rear door assembly, their relationship and various attaching points.

b. Removal of Rear Door Assembly and Hinges

The rear door hinges are attached to the center pillar with two (2) butt-type hinges. The hinges are secured to the center pillar and door hinge pillar by screws and anchor plates. The lower hinge incorporates an integral door check and hold open.

Either of the following two methods can be used to remove the door from the body.

A. The door and hinges can be removed as an assembly from the center pillar.

B. The door can be removed from the hinge straps.

1. On "29" and "39" styles lower door window.

2. Clean off excess sealer around each hinge strap and mark location on door hinge pillar

or center pillar, depending on method of removal being used.

3. On bodies equipped with electrically powered window regulators, proceed as follows:

a. Remove door trim assembly and detach inner panel water deflector sufficiently to gain access to wire connector at motor.

b. Detach wire harness from door inner panel as required and disconnect regulator motor from harness at connector.

c. Remove electrical conduit from door and remove wire harness from between door panels through opening in door hinge pillar.

4. With door properly supported, remove three (3) upper and three (3) lower hinge attaching screws at door hinge pillar or center pillar depending on method of removal. (See Figures 2-29 and 2-30)

5. With aid of helper remove door from body.

c. Installation of Rear Door Assembly and Hinge

1. With Scraper and mineral spirits clean off any old sealing compound at hinge attaching areas. This operation should be performed carefully to avoid possibility of soiling adjacent trim material.

2. Apply a coat of heavy-bodied sealer to attaching surfaces of hinge straps or corresponding surfaces of door or body. (See Figure 2-31)

3. With helper, lift door into position. Install screws loosely, then align strap within marks on pillar and tighten bolts. Check door for alignment.

4. On doors with electrically-operated windows, proceed as follows:

a. Install wiring harness inside of door. Connect regulator motor, then install wiring harness to inner panel.

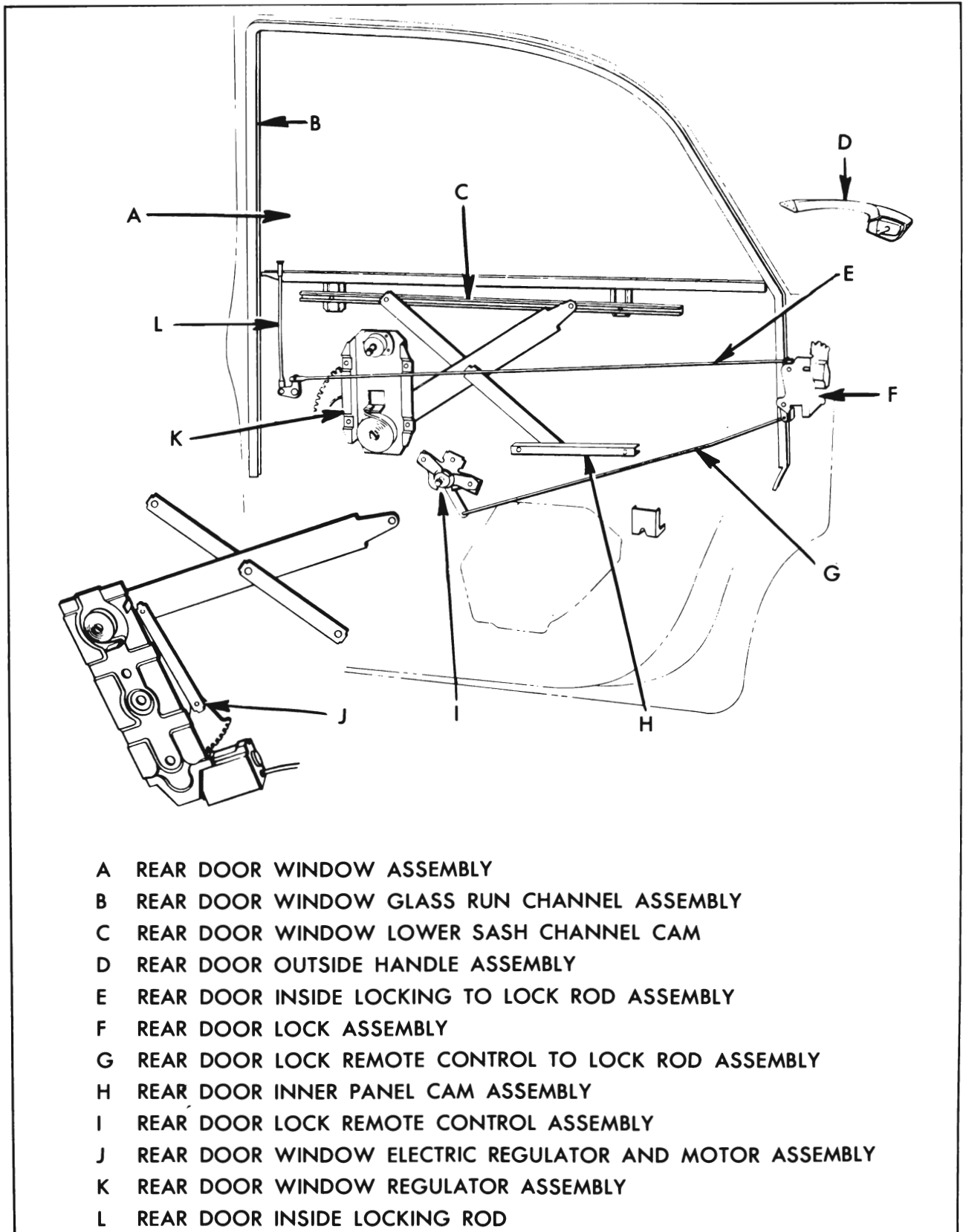


Figure 2-26—Rear Door Assembly Typical of Sedan

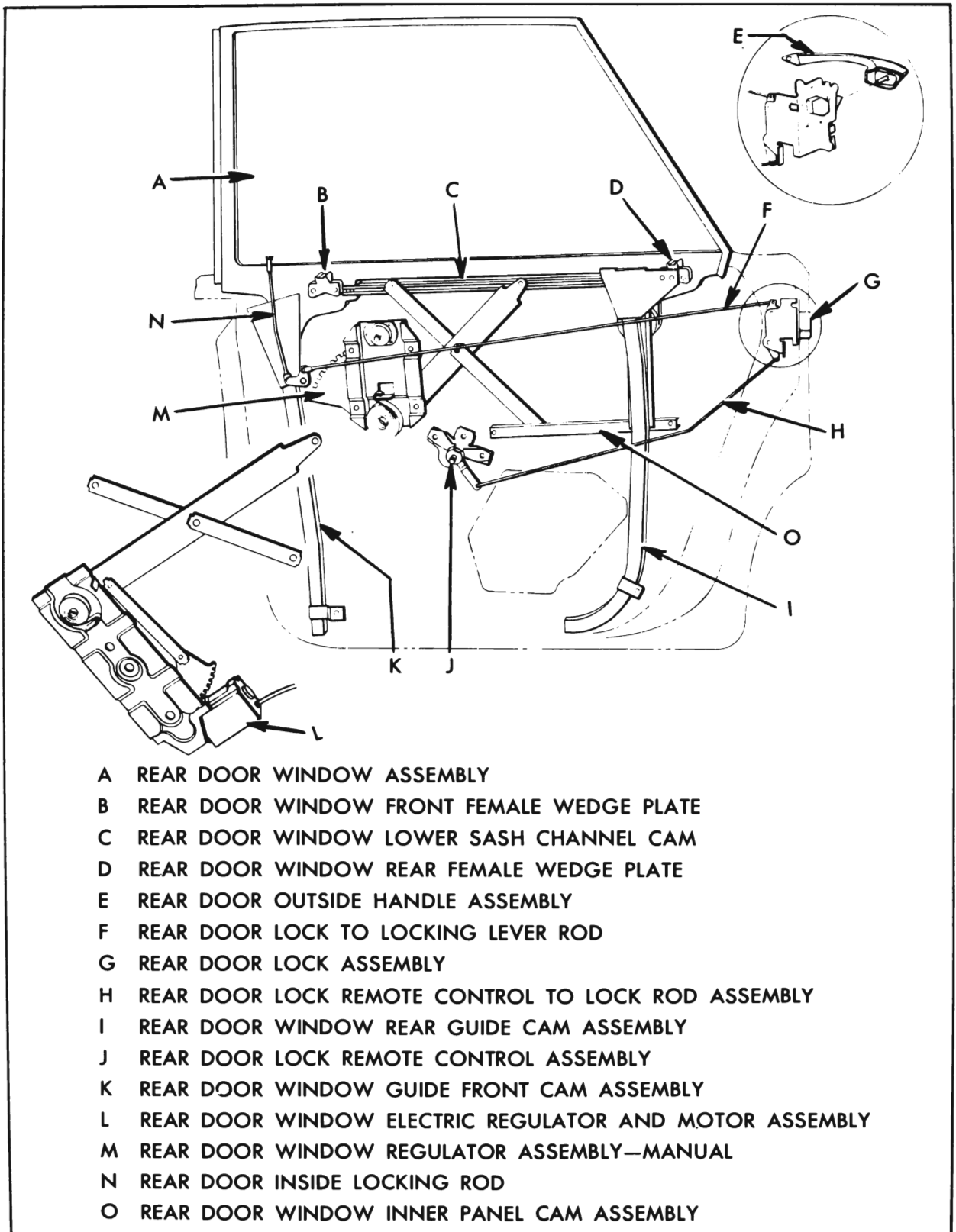


Figure 2-27—Rear Door Assembly Typical of "39" Styles

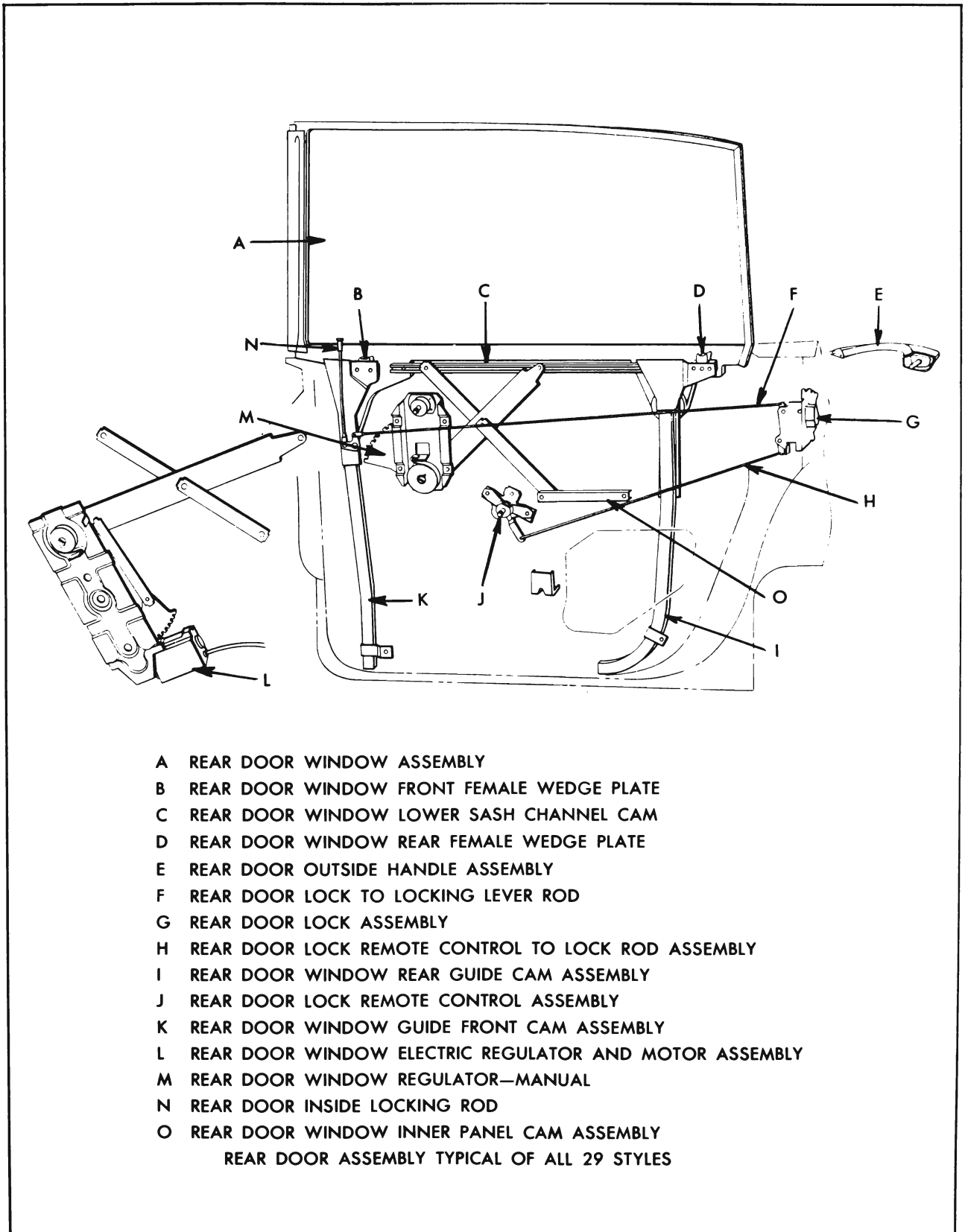


Figure 2-28—Rear Door Assembly Typical of "29" Styles

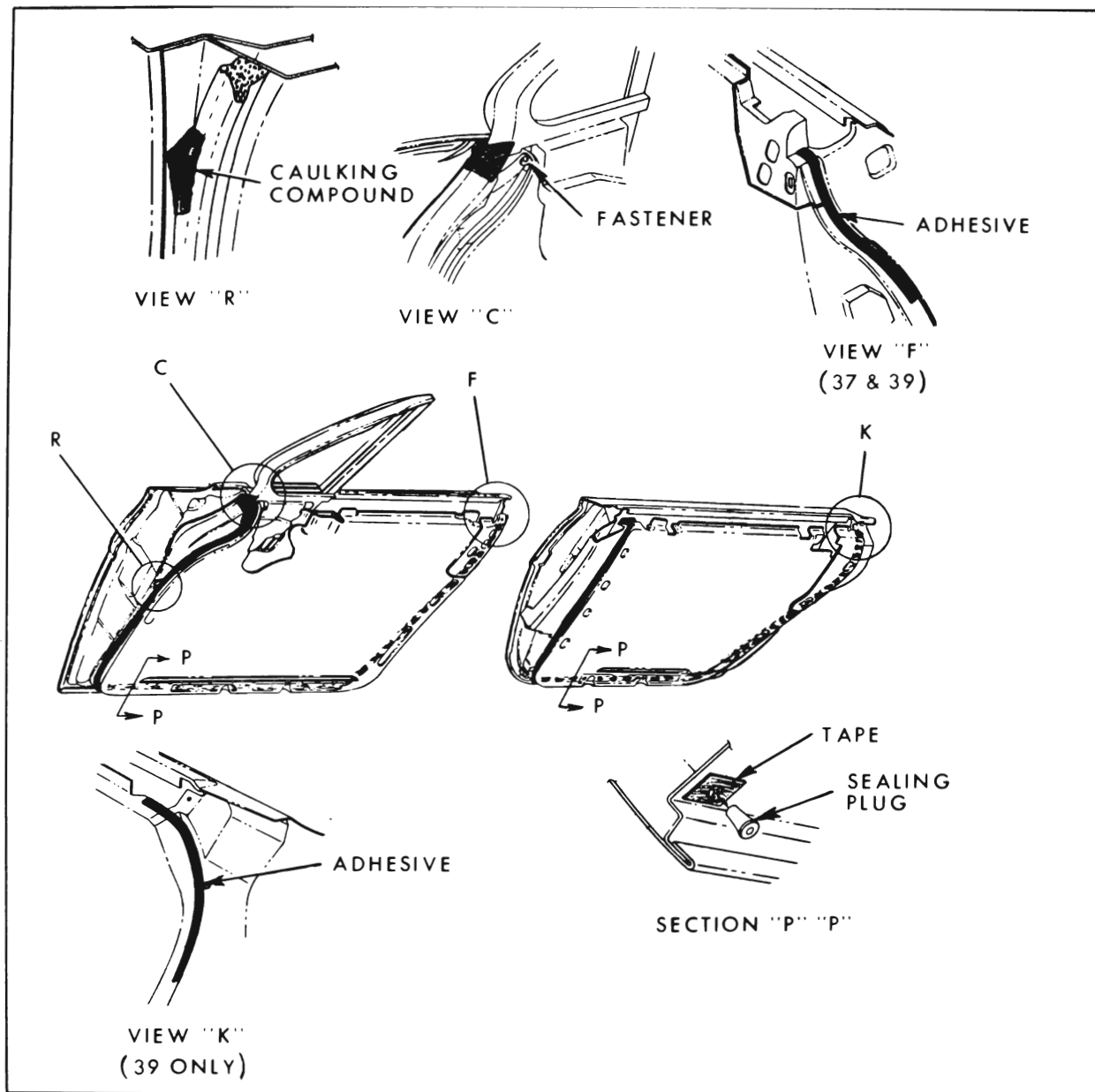


Figure 2-29—Door Weatherstrips Typical of Hardtops and Convertibles

b. Install conduit to door hinge pillar. Check operation of electric window assembly.

5. Where required, seal door inner panel water deflector as specified in "DOOR INNER PANEL WATER DEFLECTOR" and reinstall all previously removed parts.

6. For lubrication information see "LUBRICATION" Section.

d. Adjustments of Rear Door Assembly and Hinge

In and out or up and down adjustments are provided at door hinge pillar. Fore and aft and a slight up and down adjustment are provided at center pillar. When checking the door for alignment, remove door lock striker from body pillar to allow door to hang free on its hinges.

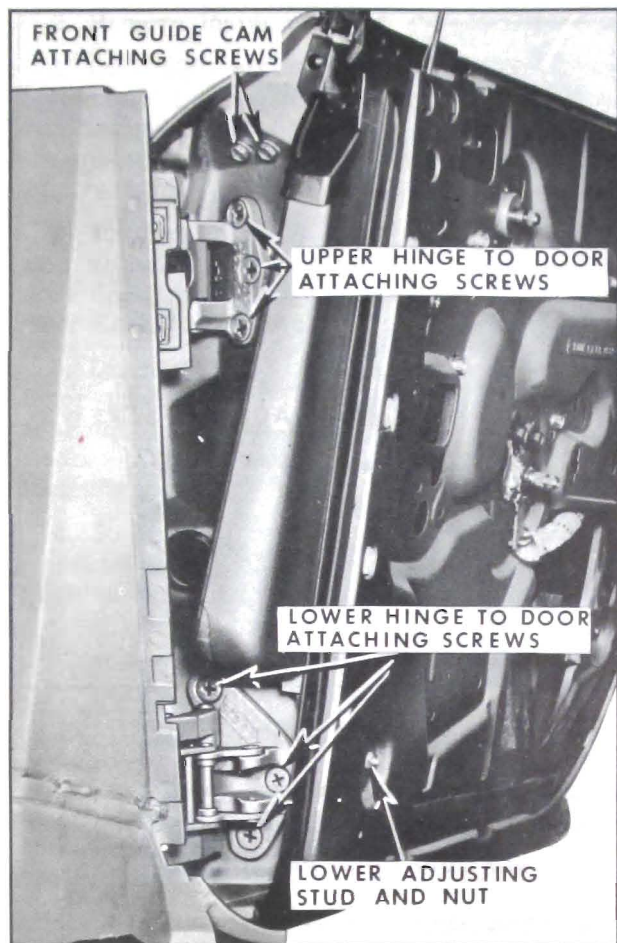


Figure 2-30—Rear Door Hinge Attachment

NOTE: After performing any adjustments the rear door window on "29" and "39" styles should be checked for proper alignment with side roof rail weatherstrip. In addition, door lock extension-to-striker engagement should be checked and adjusted if necessary.

1. For in and out or up and down adjustment, loosen hinge to door pillar attaching screws. (See Figure 2-29) Adjust door as required and tighten screws.

NOTE: When performing in and out or fore and aft adjustments, adjust one hinge at a time so that "up and down" adjustment is maintained.

2. To adjust door fore or aft, loosen hinge to center pillar attaching screws. (See Figure 2-29) Adjust door fore or aft as required and tighten screws and bolts.

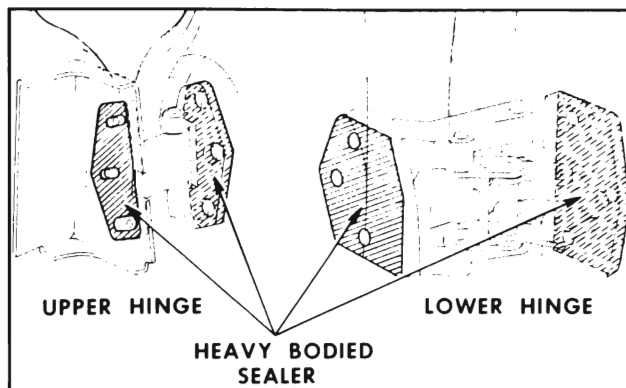


Figure 2-31—Rear Door Hinge Anti-Squeak and Sealing

2-10 REAR DOOR LOCKS

a. Removal and Installation of Rear Door Outside Handle

1. Raise door window. Remove door trim assembly and detach inner panel water deflector sufficiently to gain access to door outside handle attaching screws. (See Figure 2-33)

2. Through access hole remove handle attaching screws, then remove handle and gaskets from door outer panel.

3. To install, reverse removal procedure. Make certain front and rear gaskets are installed between handle and door outer panel. Check all operations of door lock before installing door inner panel water deflector.

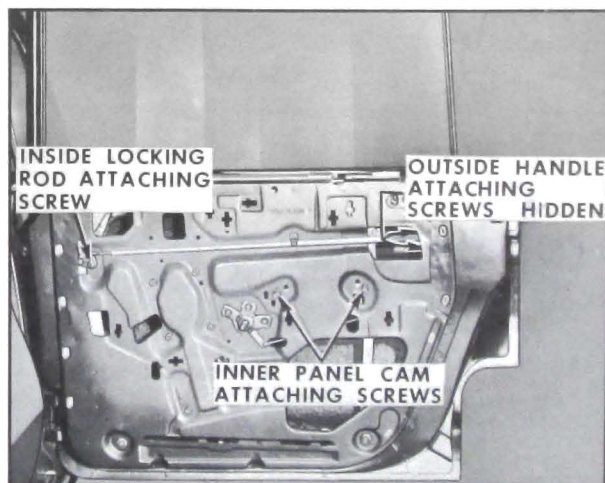


Figure 2-33—Rear Door Assembly - "39" Style

b. Disassembly and Assembly of Rear Door Outside Handle

1. Remove door outside handle.
2. Depress retainer sufficiently to turn retainer one-quarter turn. Remove retainer, spring push button and shaft and sealing ring from handle. (See Figure 2-16)
3. To assemble, reverse disassembly procedure.

c. Removal and Installation of Rear Door Lock Assembly

1. Raise door window. Remove door trim assembly and detach inner panel water deflector.
2. On "69" styles, through large access hole, remove screw securing lower end of glass run channel at door lock pillar and raise end of channel to expose lock assembly. (See Figure 2-34)
3. Through access hole disengage spring clips and detach inside lock connecting rod and remote control connecting rod from lock assembly. (See Door Lock Spring Clips)
4. At lock pillar facing, remove door lock attaching screws and remove lock assembly through access hole. (See Figure 2-35)
5. To install door lock, reverse removal procedure. Check all operations of door lock before installing door trim and inside hardware.

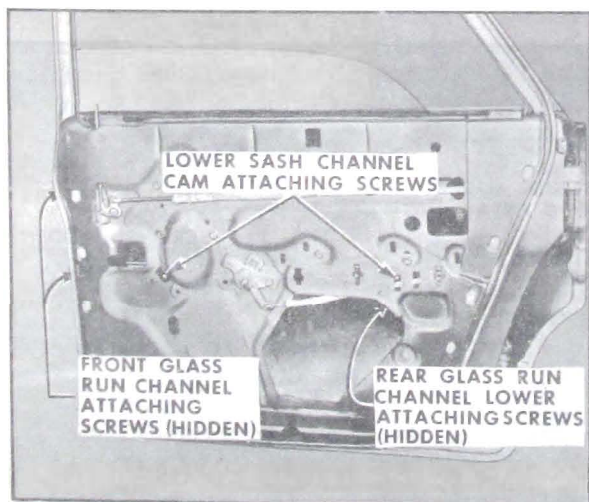


Figure 2-34—Rear Door Assembly - "69" Styles

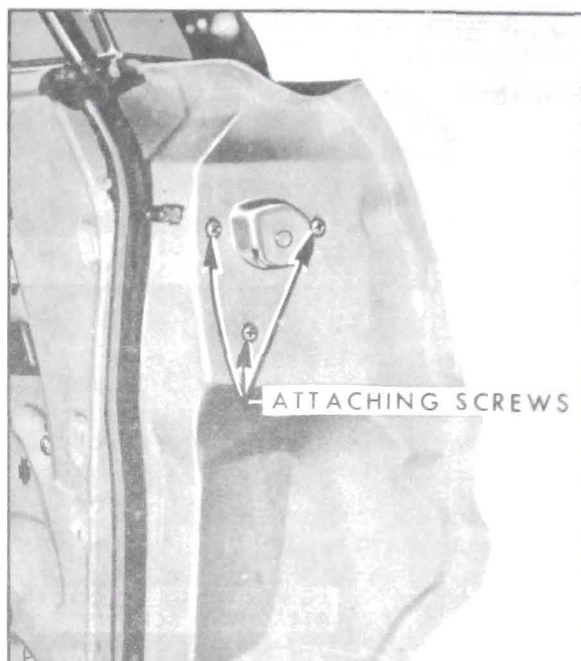


Figure 2-35—Rear Door Lock Assembly

d. Removal and Installation of Rear Door Inner Panel Cam

1. Raise door window. Remove door trim assembly and detach inner panel water deflector sufficiently to expose inner panel cam attaching screws. (See Figure 2-33)
2. Remove cam attaching screws; then disengage cam from window regulator arm roller and remove from door.
3. To install, reverse removal procedure. Prior to installation of inner panel cam, lubricate entire length of cam with 630 AAW Lubriplate or equivalent.

e. Adjustments of Rear Door Inner Panel Cam

1. To correct a condition where the window glass is cocked in glass run channels, loosen door inner panel cam attaching screws, adjust cam as required, and tighten screws. (See Figure 2-33)

f. Removal and Installation of Rear Door Lock to Locking Lever Rod

1. Raise door window. Remove door trim assembly and detach inner panel water deflector sufficiently to expose lock rod assembly and gain access to rear door lock assembly.

2. Remove inside locking rod knob from rod.
3. On "69" styles, through large access hole remove screw securing lower end of glass run channel at door lock pillar to gain access to spring clip securing rod to lock. (See Figure 2-34)
4. Through access hole, disengage spring clip securing inside locking rod assembly to door lock and disengage rod from lock. (See Door Lock Spring Clip)
5. Disengage rod from spring clip on door inner panel. Then remove inside locking rod assembly attaching screw, spring washer and washer cup and remove assembly from door. (See Figure 2-33)
6. To install, reverse removal procedure. Check operation of inside locking rod assembly prior to installing water deflector.

g. Removal and Installation of Rear Door Lock Remote Control and Connecting Link Assembly

1. Raise door window. Remove door trim assembly and detach inner panel water deflector sufficiently to gain access to remote control attaching screws and door lock assembly.
2. Remove remote control attaching screws and remove remote control from connecting rod. (See Figure 2-36)
3. On "69" styles, through large access hole, remove glass run channel lower attaching screw at lock pillar to gain access to spring clip securing rod to lock. (See Figure 2-34)
4. Through access hole, disengage remote control connecting rod spring clip and disengage rod from lock. Remove rod from door.

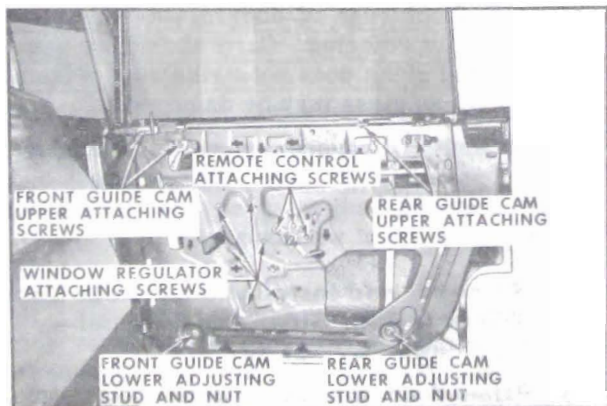


Figure 2-36—Rear Door Assembly - "39" Styles

5. To install remote control and connecting rod, reverse removal procedure. Position remote control rearward sufficiently to take up slack in linkage so that all clearances are taken out of linkage in a rearward position. Check all operations of door lock before installing door inner panel water deflector.

2-11 REAR DOOR WINDOWS

a. Removal and Installation of Rear Door Window Regulator Assembly—Manual and Electric

1. Lower door window. Remove door trim assembly and detach inner panel water deflector.
2. Remove door window lower sash channel cam. Then carefully raise window and prop in up position.
3. On styles equipped with electric window regulators, disconnect wiring harness feed wires from regulator motor at connector. In addition, on 4800 styles, loosen rear guide cam upper attaching screws and remove lower adjusting stud and nut to permit removal of electric window regulator.

CAUTION: DO NOT OPERATE REGULATOR MOTOR after window assembly is disengaged from regulator. Operation of motor with load removed may damage unit.

4. Remove regulator attaching screws, disengage balance arm from inner panel cam and remove regulator assembly through access hole. (See Figure 2-36)
5. To install, reverse removal procedure. Check operation of window before installing inner panel water deflector.

NOTE: To remove electric motor from regulator assembly, see WINDOW REGULATOR ELECTRIC MOTOR ASSEMBLY.

b. Removal and Installation of Rear Door Window Glass Run Channel Outer Strip Assembly—"39" and "69" Styles

On styles having rear door reveal moldings, the strip assembly is part of the reveal molding assembly.

1. Remove door trim assembly and detach inner panel water deflector.

2. Disengage window lower sash channel cam from window lower sash channel and carefully lower glass to bottom of door.

3. Remove screws securing assembly. Then press down on assembly to disengage clips and remove assembly.

4. To install, reverse removal procedure.

c. Removal and Installation of Rear Door and/or Rear Quarter Window Regulator Electric Motor Assembly

The electric motor assembly which powers the window regulator on electrically-operated windows is a 12-volt reversible motor with a built-in type circuit breaker and a self-locking gear drive. The motor is attached to the regulator assembly with bolts.

1. Remove electric window regulator assembly from door and/or rear quarter and clamp securely in vise. (See Figure 2-37)

NOTE: The position of the regulator clamped in the vise will vary with type of regulator and position of lift arm.

CAUTION: BE SURE TO PERFORM STEPS 2 AND 3 BEFORE ATTEMPTING TO REMOVE MOTOR FROM REGULATOR. The regulator lift arm, which is under tension from the counter-balance spring, can cause serious injury if the motor is removed without locking the sector in position.

2. Drill a 1/4" hole through sector and back plate within area indicated by "A". (See Figure 2-37)

NOTE: Locate hole a sufficient distance from edge of sector to insure proper retention of the sector.

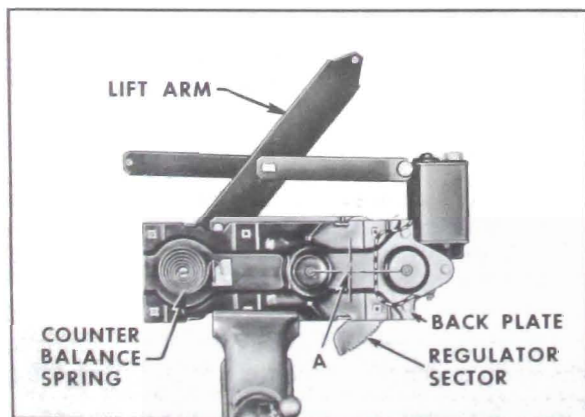


Figure 2-37—Rear Door Window Regulator Assembly

3. Insert a 3/16" bolt through hole in back plate and sector and install nut to bolt. (Do not tighten nut)

4. Remove motor attaching bolts and remove motor assembly from regulator. (See Figure 2-37)

NOTE: Clean off steel chips from regulator sector and motor pinion gear after drilling operation.

5. To install, reverse removal procedure. If difficulty is encountered when trying to line up motor assembly attaching holes, the regulator lift arm may be moved up or down manually so that motor pinion gear will mesh with teeth on regulator sector, and regulator attaching holes will line up.

NOTE: Be sure to remove temporary nut and bolt from regulator before installing it into door or rear quarter.

d. Removal and Installation of Rear Door Window Front Glass Run Channel—“19” and “69” Styles

1. Remove door trim assembly and detach inner panel water deflector. Then disengage lower sash channel cam from window sash channel. On “69” styles remove door window assembly and on “19” styles carefully lower window assembly to bottom of door.

2. Remove front glass run channel lower attaching screws from hinge pillar facing of door inner panel. (See Figure 2-39)

3. Carefully disengage glass run channel attaching clips along front of door window frame. Pull glass run channel inboard and upward and remove channel from between inner and outer panels.

CAUTION: After glass run channel has been removed, front edge of door glass is left exposed and unprotected. Care should be exercised so that glass does not strike window frame at any point as glass may be damaged.

4. To install, reverse removal procedure. Check operation of rear door window and, where required, adjust glass run channel for proper operation of window assembly.

e. Removal and Installation of Rear Door Window Rear Glass Run Channel—“19” and “69” Styles

1. Raise door window. Remove door trim assembly and detach inner panel water deflector sufficiently to gain access to rear glass

run channel lower attaching screw and remove screw. (See Figure 2-39)

2. Remove front glass run channel. On "19" styles carefully slide window assembly forward to permit removal of rear glass run channel.

CAUTION: Exercise care so that exposed front edge of glass does not become damaged by contacting window frame.

3. Carefully disengage glass run channel attaching clips along top and lock pillar portion of window frame. Then pull rear door glass run channel inboard and upward and remove channel from between inner and outer panels.

4. To install, reverse removal procedure. Check operation of rear door window and, where required, adjust glass run channel for proper window operation.

f. Rear Door Window Glass Run Channel Adjustments—"19" and "69" Styles

1. To adjust either glass run channel in or out or up or down, loosen channel attaching screw(s), adjust channel as required and tighten screws. After any adjustments, check window for proper operation.

NOTE: Adjustment of both channels must be coordinated to provide proper operation of the rear door window assembly.

g. Removal and Installation of Rear Door Window Lower Sash Channel Cam

1. Remove door trim assembly and detach inner panel water deflector.

2. Lower door window sufficiently to gain access to lower sash channel cam attaching screws through access holes in door inner panel and remove screws. See Figure 2-38.

3. While supporting window by hand, carefully disengage cam from window lower sash channel and rollers on window regulator arms and remove from door. Carefully lower door window.

4. To install, reverse removal procedure. Prior to installation, lubricate entire length of sash channel cam with 630AAW Lubriplate or equivalent. Check operation of window assembly prior to installing inner panel water deflector.



Figure 2-38—Rear Door Window Lower Sash Channel Cam Attachment

h. Removal and Installation of Rear Door Window Assembly—"19" and "69" Styles

1. Lower door window. Remove door trim assembly and detach inner panel water deflector.

2. Remove rear door window front glass run channel.

3. Remove lower sash channel cam attaching screws and disengage cam from sash channel. (See Figure 2-39)

NOTE: On styles equipped with electric window regulators, disconnect wiring harness electrical feed plug from regulator motor at connector.

CAUTION: DO NOT OPERATE REGULATOR MOTOR after window assembly is disengaged from regulator. Operation of motor with load removed may damage unit.

4. On "19" styles carefully rotate rear edge of window assembly upward and remove window assembly from door. On "69" styles rotate rear edge of window assembly downward to remove assembly from door.

5. To install, reverse removal procedure. Prior to installation of window lower sash channel cam, lubricate entire length of cam with 630AAW Lubriplate or equivalent. Check operation of window assembly and, where required, adjust window as described under REAR DOOR WINDOW GLASS RUN CHANNEL ASSEMBLIES AND REAR DOOR INNER PANEL CAM.

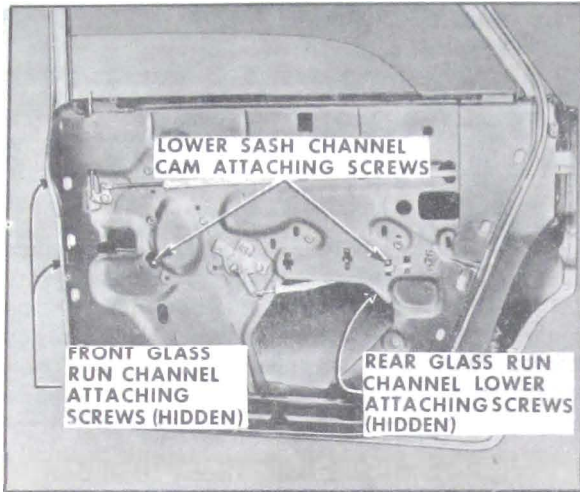


Figure 2-39—Rear Door Assembly

i. Removal and Installation of Rear Door Window Guide Front Cam Assembly—“29” and “39” Styles

The window guide front cam assembly incorporates an attaching support bracket at the upper end of the guide cam which is attached to the door hinge pillar facing by two (2) screws. The front cam can be removed without removing this attaching bracket.

1. Raise door window. Remove door trim assembly and detach inner panel water deflector.

2. Through inner panel access hole remove front guide cam upper attaching screw(s) and front guide cam lower adjusting stud and nut. (See Figure 2-40)

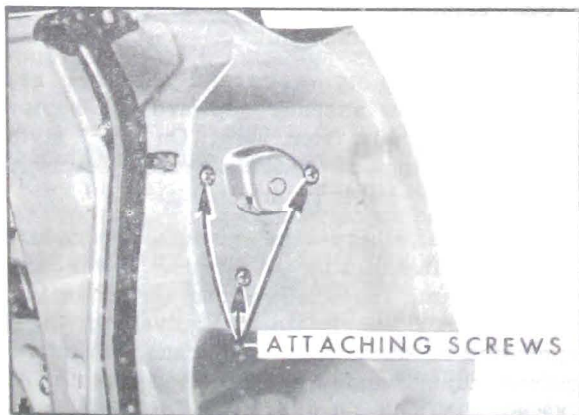


Figure 2-40—Rear Door Assembly

3. Carefully disengage guide cam from window lower sash channel roller and remove guide cam through access hole.

4. To install, reverse removal procedure. Prior to installation, lubricate entire length of guide cam with 630AAW Lubriplate or equivalent. Reseal front guide cam lower adjusting stud and nut with body caulking compound.

5. Check operation of window assembly and, where required, adjust window as described under “Rear Door Window Adjustments.”

j. Removal and Installation of Rear Door Window Guide Front Cam Support—“39” Styles

1. Remove door trim assembly and detach inner panel water deflector.

2. Raise door window. Through inner panel access hole remove front guide cam upper attaching screw. (See Figure 2-40)

3. At door hinge pillar facing, remove two (2) screws securing guide cam support and remove support through access hole. (See Figure 2-30)

4. To install, reverse removal procedure. Check operation of window assembly and, where required, adjust window as described under “Rear Door Window Adjustments.”

k. Removal and Installation of Rear Door Window Guide Rear Cam Assembly—“29” and “39” Styles

1. Raise door window. Remove door trim assembly and detach inner panel water deflector.

2. Remove rear cam upper attaching screws and lower adjusting stud and nut. (See Figure 2-40)

3. Carefully disengage cam from roller on window guide assembly and remove rear cam through large access hole.

4. To install, reverse removal procedure. Prior to installation lubricate entire length of cam with 630AAW Lubriplate or equivalent. If exposed, seal cam lower adjusting stud and nut with body caulking compound.

5. Check operation of window assembly and, where required, adjust window as described under “Rear Door Window Adjustments.”

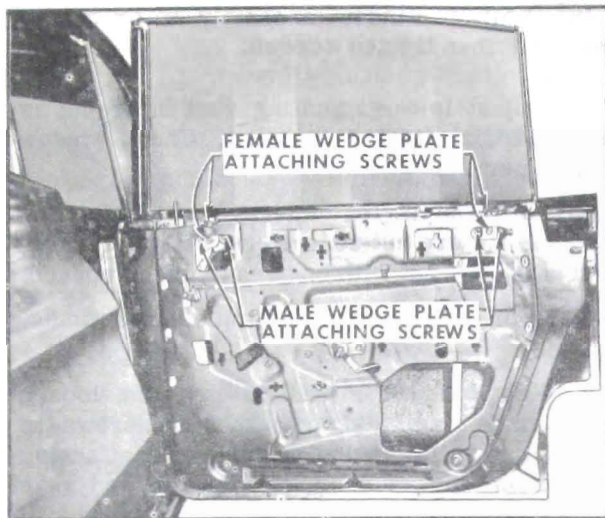


Figure 2-41—Rear Door Assembly - "39" Styles

I. Removal and Installation of Rear Door Window Assembly—Manual and Electric—"29" and "39" Styles

1. Raise door window. Remove door trim assembly and detach inner panel water deflector.

2. Through access holes in door inner panel remove screws securing rear door window front and rear male wedge plates to window lower sash channel and remove wedge plates. (See Figure 2-41)

3. Lower door window and remove lower sash channel cam attaching screws. (See Figure 2-38)

NOTE: On styles equipped with electric window regulators, disconnect wiring harness electrical feed plug from regulator motor at connector.

CAUTION: DO NOT OPERATE REGULATOR MOTOR after window assembly is disengaged from regulator. Operation of motor with load removed may damage unit.

4. Carefully raise door window and remove from door.

5. To install, reverse removal procedure. Check window for proper alignment and, where necessary, align window as described under "Rear Door Window Adjustments." Prior to installation of window lower sash channel cam, lubricate entire length of cam with 630AAW Lubriplate or equivalent. Also lubricate lower sash channel rollers and pivot area of rear door window rear guide.

m. Rear Door Window Adjustments—Manual and Electric—"29" and "39" Styles

IMPORTANT: The rear door assembly should be properly aligned in the body opening before adjusting the rear door window.

Adjustments have been provided to insure proper contact of the rear door window with the side roof rail weatherstrip and with the door glass run outer strip assembly; also, for proper contact of the rear door window front frame weatherstrip with the front door window frame. Unless otherwise specified, the following window adjustments are for both manually and electrically-operated windows.

NOTE: To perform the following rear door window adjustments, remove door trim assembly and detach inner panel water deflector.

1. Up and down adjustment of door window assembly.

a. Through inner panel access holes, loosen screws securing front and rear male wedge plates to window lower sash channel.

b. Reposition window assembly as required, adjust front and rear male wedge plates up or down as required; then tighten wedge plate attaching screws. Check operation of window assembly.

IMPORTANT: The front or rear of window assembly may be adjusted up or down by adjusting either front or rear male wedge plate up or down as required. In cases of major adjustment, however, both wedge plates should be adjusted.

2. Fore or aft adjustment of rear door window assembly.

a. Loosen lower adjusting stud nut on both front rear guide cams. (See Figure 2-41)

b. Loosen screw(s) securing upper end of front and rear guide cams, position window fore or aft as required, then tighten screw(s) and lower stud nut on each cam.

c. Check window for proper operation and, if necessary, readjust rear door window front and/or rear male wedge plates fore or aft to insure proper contact with female wedge plates on door inner panel.

NOTE: On styles where lower adjusting stud and nut are not covered by water deflector, seal stud and nut with body caulking compound.

3. The in and out adjustment of the rear door window assembly can be obtained by adjusting the front and rear guide cams in or out as required. It is desirable, however, to adjust only one (1) guide cam at a time in order to maintain the fore and aft adjustment of the window assembly.

a. To adjust front of window assembly in or out on 4400 and 4600 Series proceed as follows:

(1) With window in full up position, loosen front guide cam adjusting stud nut. (See Figure 2-41)

(2) Loosen front female wedge plate attaching screw. (See Figure 2-41)

(3) Loosen two (2) front guide cam support attaching screws on door hinge pillar facing. (See Figure 2-30)

(4) Position front of window assembly in or out as required and adjust front female wedge plate accordingly; then tighten wedge plate attaching screw.

(5) Adjust front guide cam lower adjusting stud in or out as required and tighten nut. Tighten front guide cam support attaching screws on door hinge pillar facing.

(6) Reseal lower adjusting stud and nut with body caulking compound.

b. To adjust front of window assembly on 4800 Styles, and rear of window assembly on all styles in or out, proceed as follows:

(1) With window in full up position, loosen guide cam lower adjusting stud nut and screws securing female wedge plate and guide cam to top of door inner panel. (See Figure 2-41)

(2) Position window assembly in or out as required; then tighten screws.

(3) Adjust lower adjusting stud in or out as required and tighten stud nut. Check window for proper operation.

NOTE: On styles where lower adjusting stud and nut are not covered by water deflector, seal stud and nut with body caulking compound.

4. In or out adjustment of top of rear window frame.

a. With window in full up position, loosen front guide cam support attaching screws on door hinge pillar facing or guide cam attaching screws on top of door inner panel, and rear guide cam upper attaching screws.

b. Loosen front and rear guide cam lower adjusting stud nuts.

c. Adjust studs in or out as required then tighten stud nuts.

d. Tighten screws securing upper end of guide cam and check window for proper operation. Reseal all guide cam lower adjusting stud(s) and nut(s) not covered by water deflector with body caulking compound.

n. Removal and Installation of Rear Door Hinge Pillar Sealing Strip—At Belt—“29” and “39” Styles

1. Remove fasteners securing sealing strip and remove strip.

2. To install, reverse removal procedure.