

SECTION 9

TAIL GATE

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TAIL GATES

All Station Wagon Styles

DESCRIPTION

All tail gates incorporate either a manually or electrically operated window that can be lowered into the gate or raised into the back body opening. The manual window is operated by a regulator control handle located in the tail gate outer panel. The power window can be operated by either of two control switches; one on the instrument panel and one at the lock cylinder (key operated) of the tail gate outer panel. All styles using a power tail gate window are equipped with an electrical switch that prevents movement of the window with gate in any position other than fully closed.

The tail gate is unlocked by means of a remote control inside handle which cannot be opened until the gate window is fully lowered. All tail gates are counter-balanced by a torque rod that assists in reducing the effort required to open or close the tail gate.

Unless otherwise stated, the tail gate service procedures outlined in this manual pertain to all station wagon styles.

TAIL GATE INNER PANEL COVER

The inner panel cover is attached to the tail gate inner panel by a series of screws. Removal is obvious except in those cases where the tail gate cannot be opened. This could occur if a power operated window motor fails with glass in the up position. In such circumstances, proceed as follows:

1. The attaching screws on "A & X" Body Styles are still accessible with gate in the closed position. On "B" Body Styles, however, remove the side and center screws of the cover and slide panel up to remove from tail gate.

NOTE: The bottom retainer screws need not be removed as they secure retainer only. The tail gate inner panel cover is held in the bottom retainer by slots in side and center section metal strips. (See Fig. 9-1).

2. Once the inner panel cover has been removed, it is possible to remove the access hole covers and window sash channel cams as explained in the following pages. At this point, the tail gate window can be lowered and the gate opened.

TAIL GATE INNER PANEL WATER DEFLECTOR

A waterproof paper deflector is sealed against the tail gate inner panel to deflect water toward the bottom of the gate and out the drain holes.

IMPORTANT: Whenever work is performed on the tail gate that requires any detachment of the water deflector, it must be properly resealed to the inner panel.

Removal

1. Remove tail gate inner panel cover.
2. Using a flat-bladed tool, carefully break cement bond securing water deflector to inner

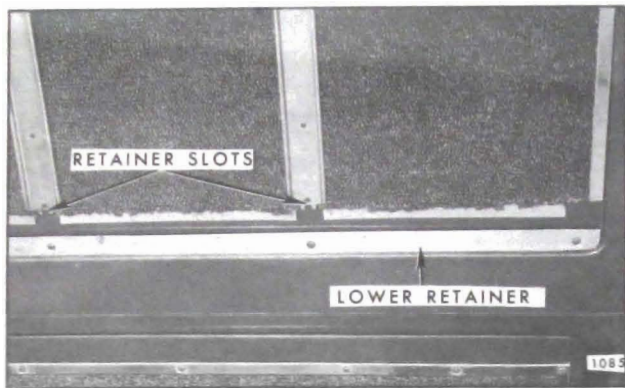


Fig. 9-1—Inner Panel Cover

panel. Make sure string, located within sealer, is against water deflector and carefully slide tool between sealer and inner panel along both sides and top to disengage deflector from inner panel. If the entire deflector need not be removed, detach only that portion necessary.

Installation

1. Inspect deflector and repair any damage noted with body waterproof tape applied to both sides.
2. If a new deflector is to be installed, use old deflector as a template.
3. If needed, apply a bead of body caulking compound (approximately 3/16" diameter) to tail gate inner panel. (See Fig. 9-2). The inner panel cover attaching screw holes should also be sealed with body caulking compound.
4. Position water deflector to tail gate with polyethylene coated side (black) against inner panel. Firmly press sealed areas to obtain a good bond between deflector and inner panel.

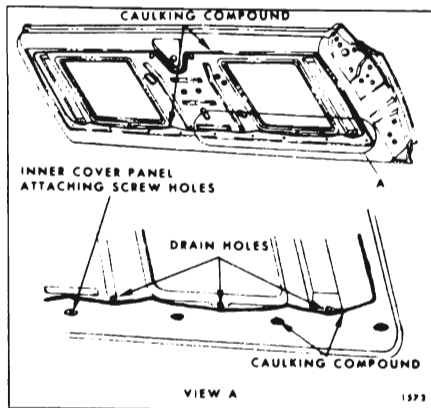


Fig. 9-2—Tail Gate Sealing

TAIL GATE INNER PANEL ACCESS HOLE COVERS

Removal and Installation

1. Remove tail gate inner panel cover and water deflector.
2. Remove screws securing right and left access hole covers to tail gate inner panel and remove covers. (See Fig. 9-3).
3. To install, reverse removal procedure.

TAIL GATE HINGE ASSEMBLY

Removal and Installation

1. Open tail gate and provide support for gate on side from which hinge is to be removed.
2. Remove escutcheon covering hinge entrance hole in tail gate outer panel by sliding retaining lips through "T" slot.
3. Remove tail gate hinge attaching bolts from tail gate and body (See Figs. 9-4 and 9-5) and remove hinge from gate.
4. To install, reverse removal procedure. Prior to installation, apply a coat of heavy-bodied sealer to surface of hinge that contacts body.
5. Check alignment of tail gate in opening and adjust as required.

TAIL GATE SUPPORT ASSEMBLIES

Removal and Installation

1. Open tail gate and support it in that position.
2. Remove screws securing support to tail gate and to body lock pillar and remove support. (See Figs. 9-4 and 9-5).

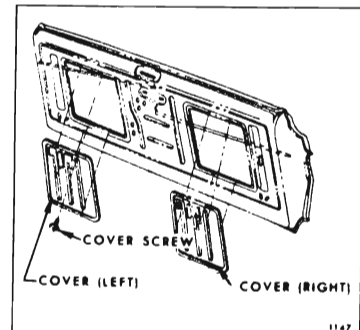


Fig. 9-3—Tail Gate Inner Panel Access Hole Covers

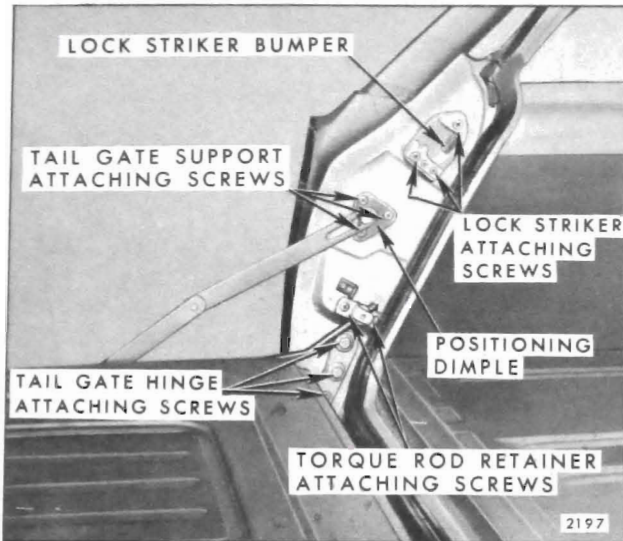


Fig. 9-4—Tail Gate Torque Rod, Hinge and Support Attachments "B & A" Body Styles

3. To install, reverse removal procedure.

NOTE: Objectionable slack in either support can be corrected by rotating support plate(s) at body pillar.

TAIL GATE ASSEMBLY

The basic hardware of all tail gates is similar, regardless of the style involved. For purposes of proper identification, however, Figures 9-6 ("B" Body), 9-7 ("A" Body) and 9-8 ("X" Body) identify the major hardware components of each specific body type.

Removal and Installation

1. Open tail gate and remove inner panel cover, water deflector and both access hole covers.
2. Raise tail gate to an approximate vertical position to relieve torque rod tension. Remove torque rod retainer attaching screws and remove retainer. On "B & A" Body Styles, this retainer is on the left body pillar as shown in Figure 9-4. On "X" Body Styles, however, the retainer is located on the right side of the rear body cross bar. (See Fig. 9-9).
3. On styles equipped with power operated tail gate windows, proceed as follows:
 - a. Remove tail gate window as described under "Tail Gate Window Assembly, Removal and Installation".

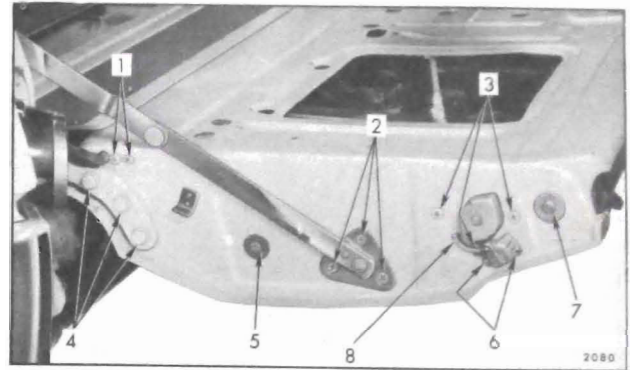


Fig. 9-5—Tail Gate Hardware - Left Side

1. Torque Rod Bearing Plate Screws
 2. Support to Tail Gate Bolts
 3. Tail Gate Lock Screws
 4. Hinge to Tail Gate Bolts
 5. Glass Run Channel Lower Bolt
 6. Jamb Switch Screws
 7. Glass Run Channel Upper Bolt
 8. Jamb Switch Arm
- b. Disconnect wire harness at key switch, jamb switch and at motor. Remove harness from tail gate.
 4. While properly supporting tail gate, remove right and left support to gate attaching screws and fold supports against body. (See Fig. 9-5).
 5. With the aid of a helper, remove right and left tail gate hinge to gate attaching bolts and remove tail gate from body. (See Fig. 9-5).
 6. To install, reverse removal procedure. Prior to installation, apply a coat of heavy bodied sealer to surface of hinges that contact tail gate.

Adjustments

Up or down and fore or aft adjustment is provided at hinge to gate attaching bolts. Side to side adjustment is available at hinge to body opening attaching bolts by using shims.

NOTE: Following any adjustments of the tail gate, check engagement of locks to strikers as described in "Tail Gate Lock Striker Adjustment".

TAIL GATE WINDOW ASSEMBLY—MANUAL OR ELECTRIC

Removal and Installation

1. Remove tail gate inner panel cover, water deflector and both access hole covers.

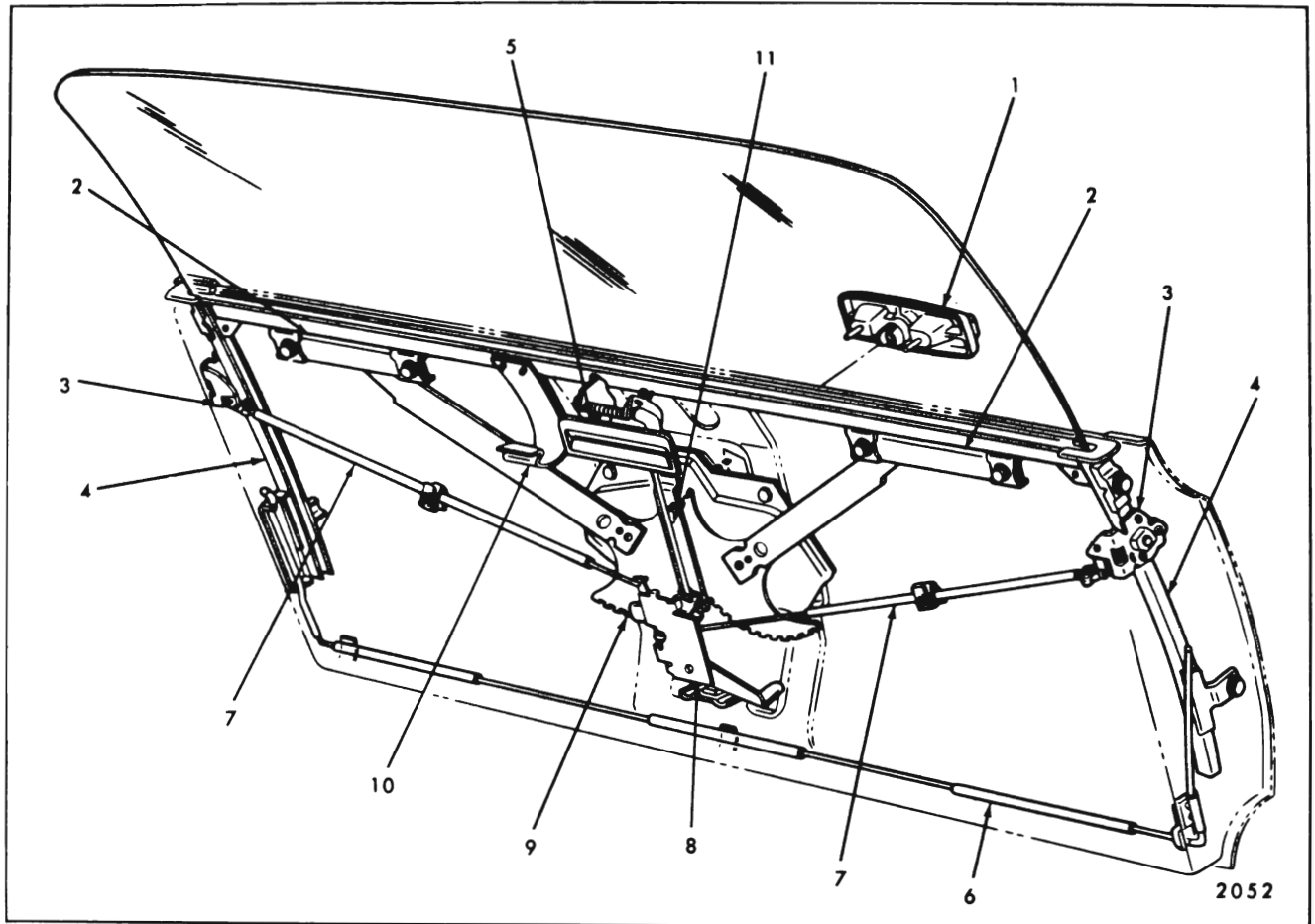


Fig. 9-6—Tail Gate Hardware - "B" Body Styles

- | | | |
|---------------------------------|-----------------------------------|----------------------------|
| 1. Outside Handle or Key Switch | 5. Inside Handle | 9. Regulator |
| 2. Sash Channel Cams | 6. Torque Rod | 10. Anti-Rattle Clip |
| 3. Locks | 7. Remote Control Connecting Rods | 11. Inside Handle Push Rod |
| 4. Lower Glass Run Channels | 8. Remote Control | |

2. Operate tail gate window to a point that sash channel cam attaching bolts are accessible as depicted in Figure 9-10.

NOTE: On styles equipped with power operated tail gate windows, engage jamb switch and operate window to any position desired. Engaging the tail gate jamb switch, makes it possible to operate the window (by key switch) with gate in the lowered position. This jamb switch is located on the left side of the tail gate on "B" Bodies and the right side for "A & X" Bodies. "B & A" Bodies have a switch of similar design that can be engaged by merely pushing arm with a finger. (See Fig. 9-5). On "X" Bodies, however, the jamb switch consists of two contact plates, one on gate and one on body pillar. These plates can be engaged with gate open by connecting them with a length of body wire. (See Fig. 9-11).

3. Remove right and left cam attaching bolts (Fig. 9-10). Slide cams sideways to disengage from regulator lift arm rollers and remove cams from tail gate.
4. Pull window straight out to remove from tail gate.
5. To install, reverse removal procedure.

Adjustments

The tail gate glass run channels can be adjusted to relieve a binding glass. To correct a rotated glass condition, loosen window regulator attaching screws and rotate regulator clockwise or counter clockwise as required.

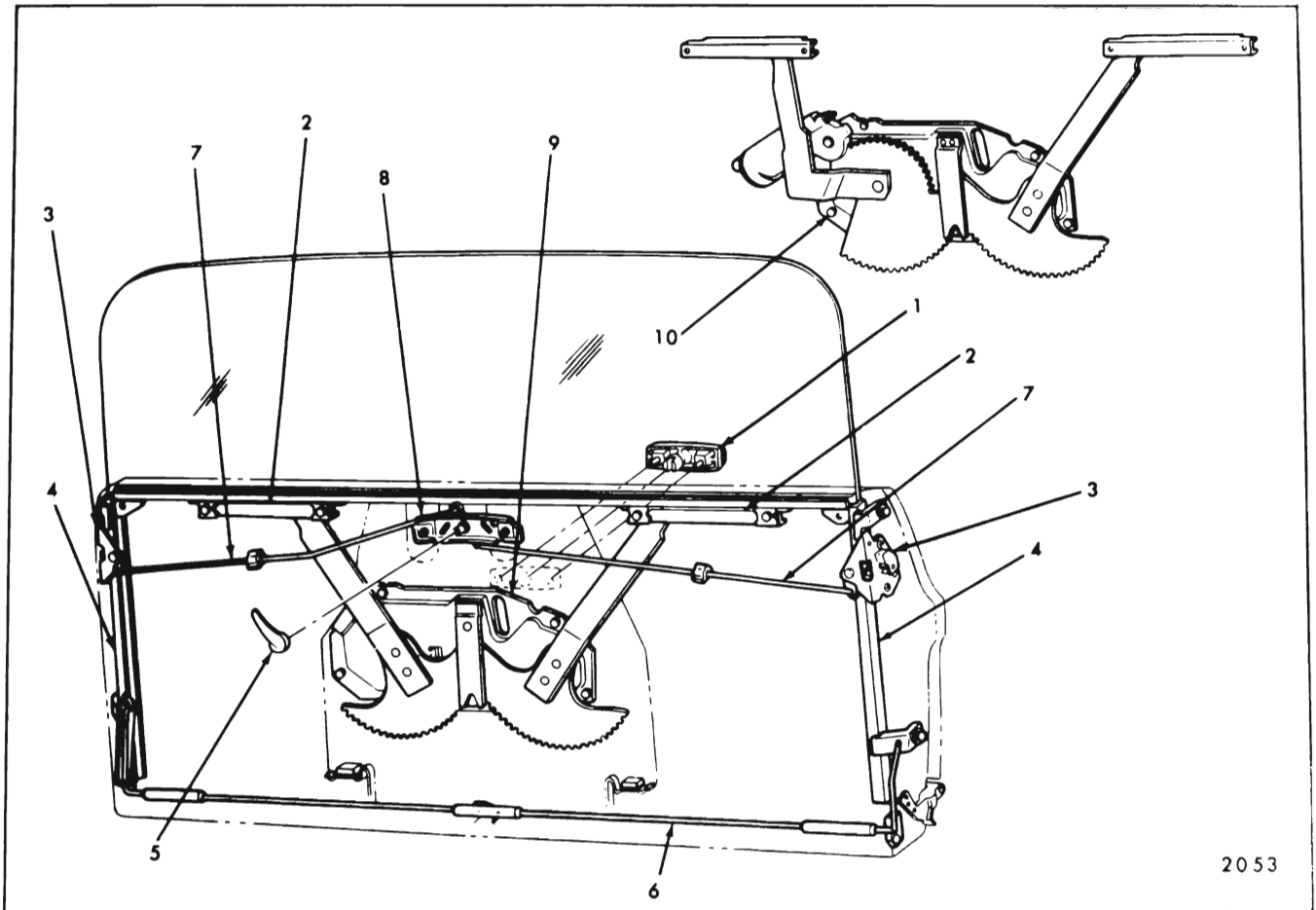


Fig. 9-7 — Tail Gate Hardware - "A" Body Styles

- | | |
|---------------------------------|-----------------------------------|
| 1. Outside Handle or Key Switch | 6. Torque Rod |
| 2. Sash Channel Cams | 7. Remote Control Connecting Rods |
| 3. Locks | 8. Remote Control |
| 4. Lower Glass Run Channels | 9. Regulator (Manual) |
| 5. Inside Handle | 10. Regulator (Electric) |

TAIL GATE WINDOW REGULATOR— MANUAL OR ELECTRIC

Removal and Installation

1. Remove tail gate window assembly.
2. On styles equipped with a power operated tail gate window, disconnect electric harness at regulator motor connector.

CAUTION: DO NOT operate regulator motor after window assembly has been disengaged from regulator or after regulator has been removed from tail gate. Operation of motor with load removed may damage unit.

3. Remove bolts securing regulator to support and remove regulator, with motor attached, from tail gate.

4. To install, reverse removal procedure.

TAIL GATE WINDOW ELECTRIC REGULATOR MOTOR ASSEMBLY

Removal

1. Open tail gate and remove tail gate inner cover panel.
2. Detach inner panel water deflector and remove inner panel right access hole cover.
3. Disconnect wire harness connector from motor.

IMPORTANT: The following operation must be performed if the window is removed or disengaged from the regulator lift arms. The

9-6 TAIL GATE

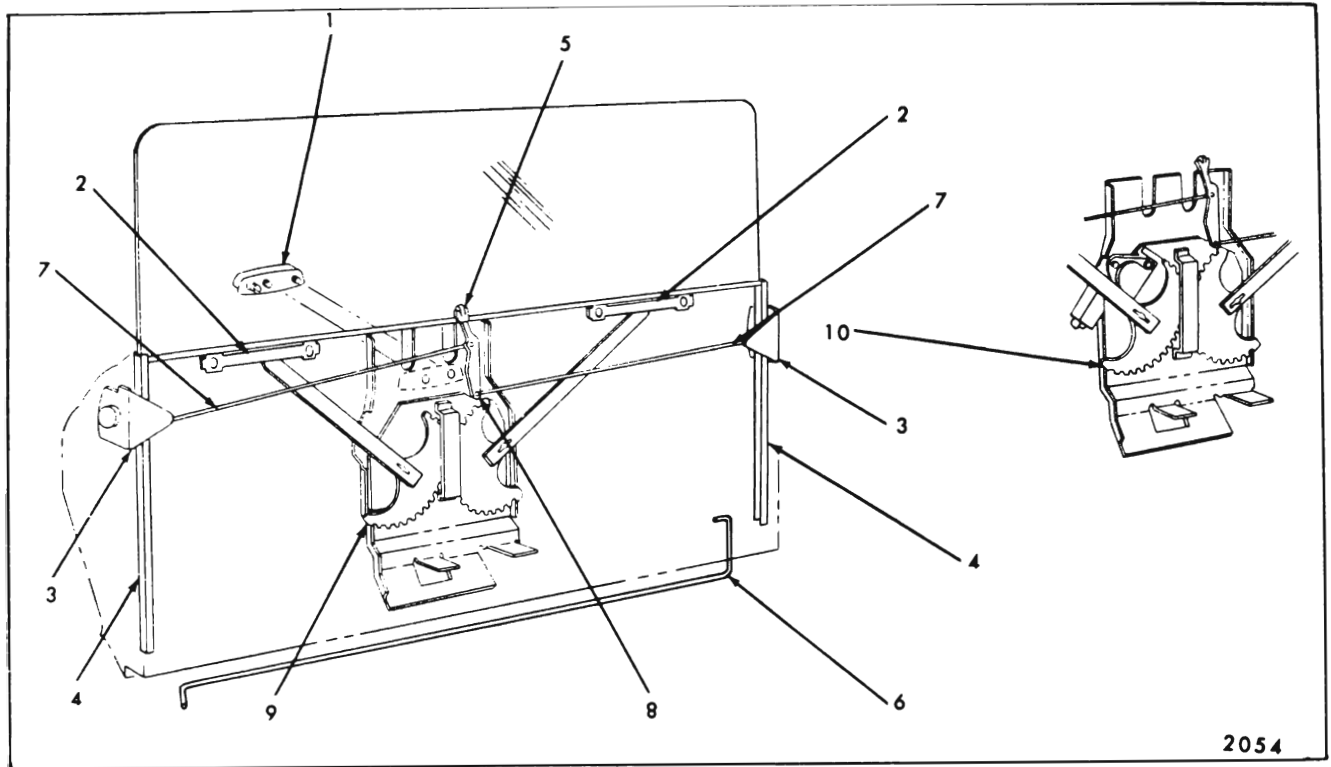


Fig. 9-8—Tail Gate Hardware - "X" Body Styles

- | | |
|---------------------------------|-----------------------------------|
| 1. Outside Handle or Key Switch | 6. Torque Rod |
| 2. Lower Sash Channel Cams | 7. Remote Control Connecting Rods |
| 3. Locks | 8. Remote Control |
| 4. Lower Glass Run Channels | 9. Regulator (Manual) |
| 5. Inside Handle | 10. Regulator (Electric) |

regulator lift arms, which are under tension from the counter-balance spring, can cause serious injury if the motor is removed without locking the sector gears in position.

4. Drill a 1/8" hole through regulator sector and back plate. (See Fig. 9-12). DO NOT drill hole closer than 1/2" to edge of sector gear of back plate. Install a pan head sheet metal tapping screw (#10-12 x 5/8) in drilled hole to lock sector gears in position.

5. Loosen regulator right upper attaching screw. Remove the three regulator motor attaching screws and remove motor assembly from regulator and tail gate.

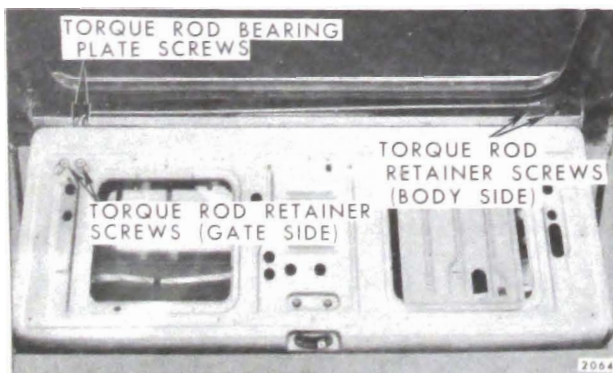


Fig. 9-9—Tail Gate Hardware "X" Body Styles

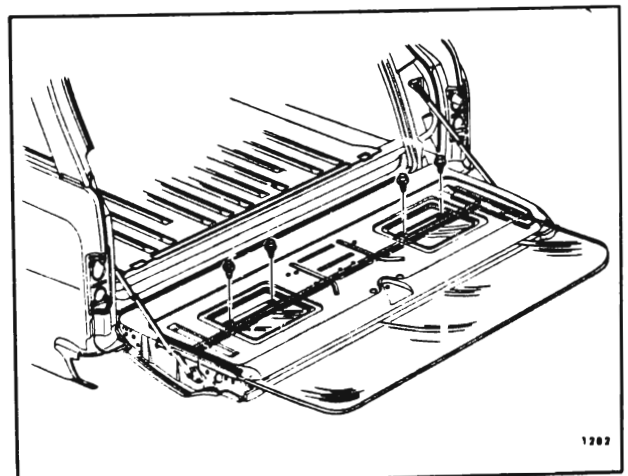


Fig. 9-10—Tail Gate Inner Panel Cams Attachment

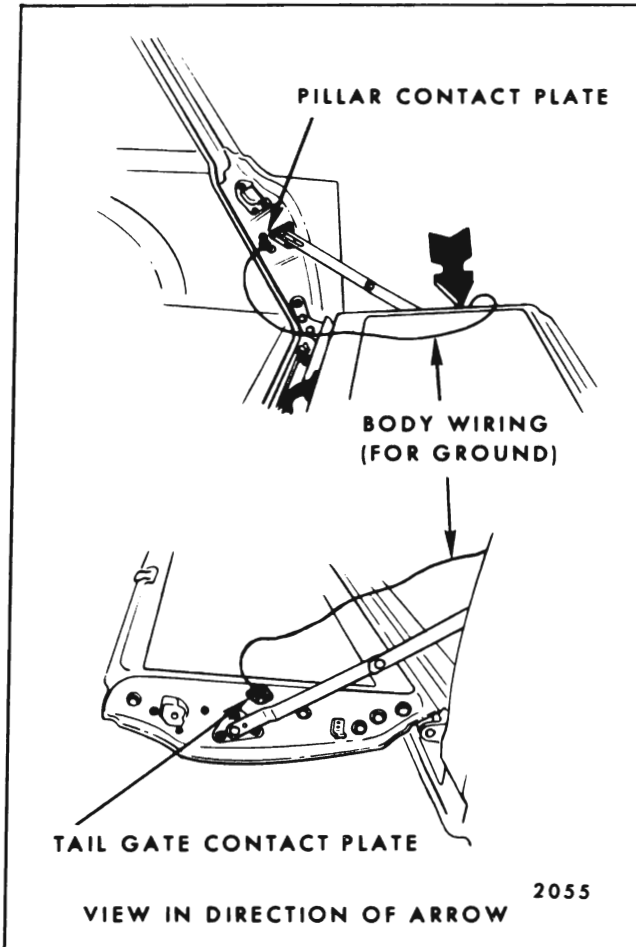


Fig. 9-11—"X" Body Tail Gate Jamb Switch

Installation

1. Lubricate the motor drive gear and regulator sector teeth with Lubriplate or its equivalent.
2. With tail gate in an open position, install regulator motor to regulator. Make sure the motor pinion gear teeth mesh properly with the sector gear teeth before installing the three motor attaching screws.
3. Tighten regulator attaching screws and remove screw locking sector gears into a fixed position.
4. Connect wire harness to motor and cycle tail gate window prior to installation of inner panel access hole cover, water deflector and cover panel.

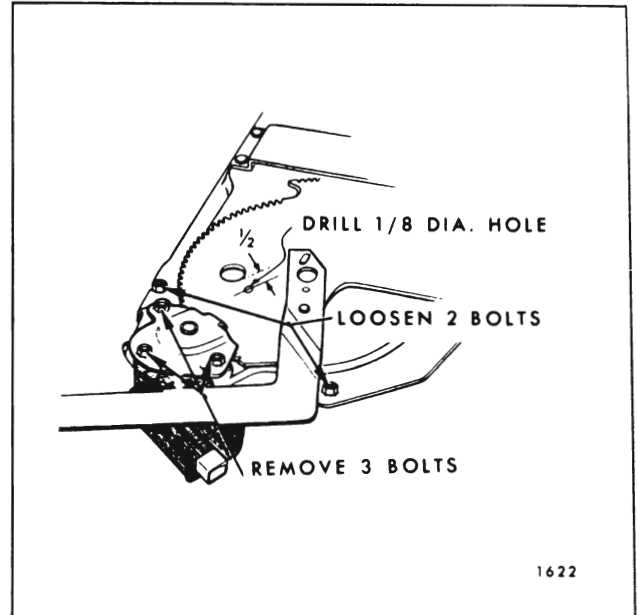


Fig. 9-12—Tail Gate Regulator Motor Assembly

TAIL GATE WINDOW REGULATOR OUTSIDE HANDLE—MANUAL OR ELECTRIC

Removal and Installation

1. Lower tail gate and remove inner panel cover and water deflector.
2. Position tail gate window so that outside handle (or key switch) attaching nuts are accessible through gate inner panel and window regulator access holes. (See Fig. 9-13).
3. Remove nuts securing handle (or key switch) to tail gate and remove handle and sealing gasket. (See Fig. 9-14).
NOTE: On electrical styles, disconnect wire harness from connector on escutcheon (key switch).
4. To install, reverse removal procedure.

TAIL GATE WINDOW LOWER GLASS RUN CHANNELS

Removal and Installation

1. Remove tail gate window.
2. Remove bolts securing run channel(s) to tail gate. (See Fig. 9-5).

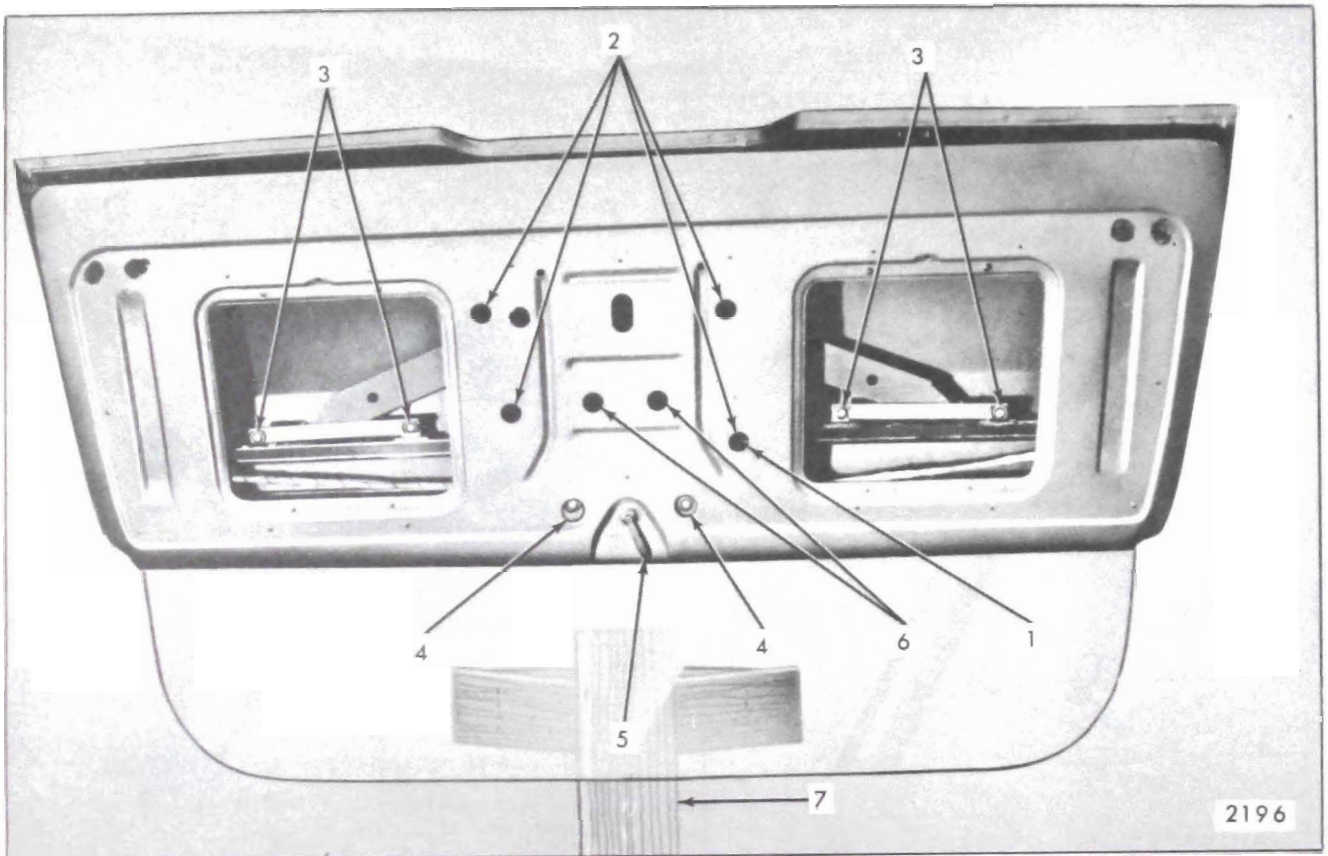


Fig. 9-13—Tail Gate Window Hardware

1. Access Hole for Regulator Adjusting Screw
2. Access Holes for Window Regulator Attaching Screws
3. Window Lower Sash Channel Cams Attaching Screws

4. Lock Remote Control Attaching Screws
5. Lock Remote Control Handle Attaching Screw
6. Access Holes for Outside Handle or Key Switch
7. Support Glass

3. Pull run channel(s) down into tail gate and remove through inner panel access hole.

4. To install, reverse removal procedure.

TAIL GATE JAMB SWITCH—ELECTRIC STYLES

The electric jamb switch is used to prevent operation of the tail gate window with the tail gate in an open position.

Removal and Installation

1. Remove screws securing jamb switch to tail gate, disconnect attached wire and remove switch. (See Fig. 9-15).

NOTE: Figure 9-15 illustrates the jamb switch on a "B" Body but is indicative of all styles.

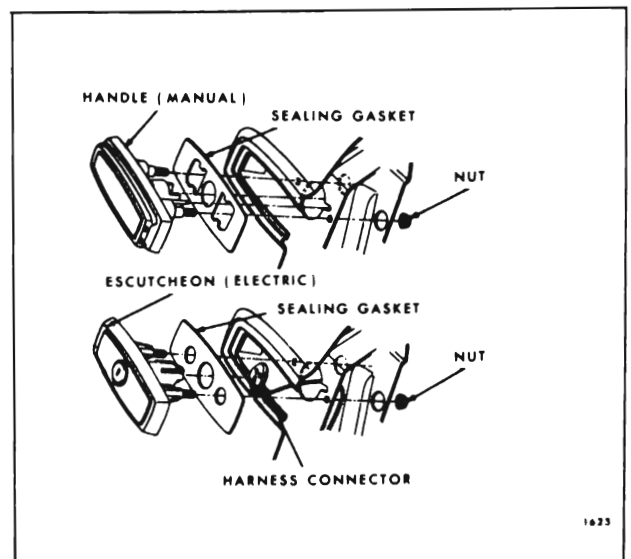


Fig. 9-14—Tail Gate Outside Handle Assemblies

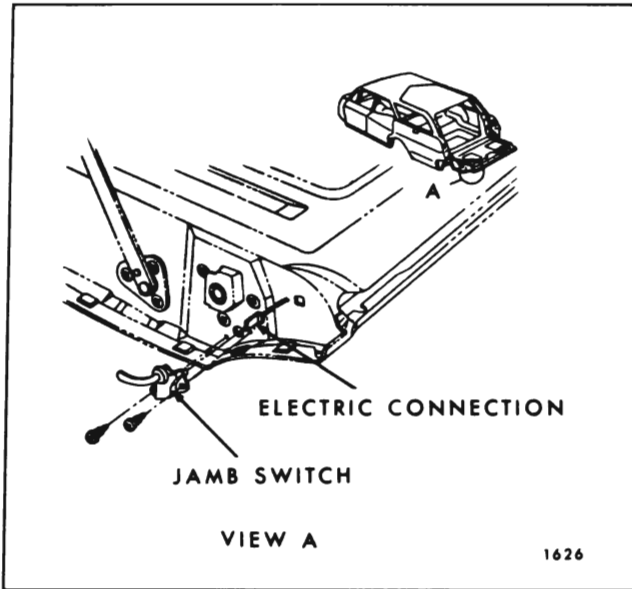


Fig. 9-15—Tail Gate Jamb Switch

2. To install, reverse removal procedure.

TAIL GATE REMOTE CONTROL INSIDE HANDLE "B" STYLES

Removal and Installation

1. Raise inside handle and disengage remote push rod from spring clip. (See Fig. 9-16).
2. Remove screws securing handle to inner panel and remove handle.
3. To install, reverse removal procedure.

NOTE: The inside handle on "A & X" Body Styles is retained by a single attaching screw.

TAIL GATE LOCK REMOTE CONTROL ASSEMBLY

Removal and Installation

1. Remove tail gate window assembly.
2. Disconnect remote control to lock connecting rods at remote assembly by sliding clip out of engagement. (See Section "B-B" in Fig. 9-17).
3. On "X" Body Styles, remove remote control inside handle attaching screw and remove handle. (See View II in Fig. 9-17). Pry out and remove escutcheon.

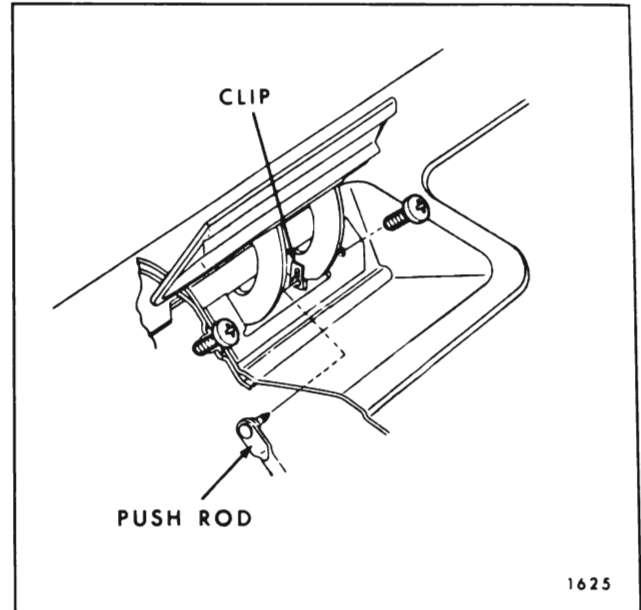


Fig. 9-16—Tail Gate Inside Handle Attachment

4. Remove remote control attaching bolts and remove assembly from tail gate. On "B" Body Styles, it will be necessary to disengage remote from inside handle push rod. (See Fig. 9-17 for "X" Body Styles and Fig. 9-18 for "B & A" Body Styles).

5. To install, reverse removal procedure.

NOTE: The remote adjusting nut on "B" and "A" Body Styles (Fig. 9-18) can be adjusted to increase or decrease remote operating effort.

TAIL GATE LOCK ASSEMBLY— RIGHT OR LEFT SIDE

Removal and Installation

1. Remove tail gate window assembly.
2. Remove tail gate window lower glass run channel on side from which lock is to be removed.
3. Remove screws securing lock to tail gate. (See Fig. 9-19).
4. Move lock assembly to tail gate access hole, disengage remote rod anti-rattle clip and remove lock assembly.
5. To install, reverse removal procedure.

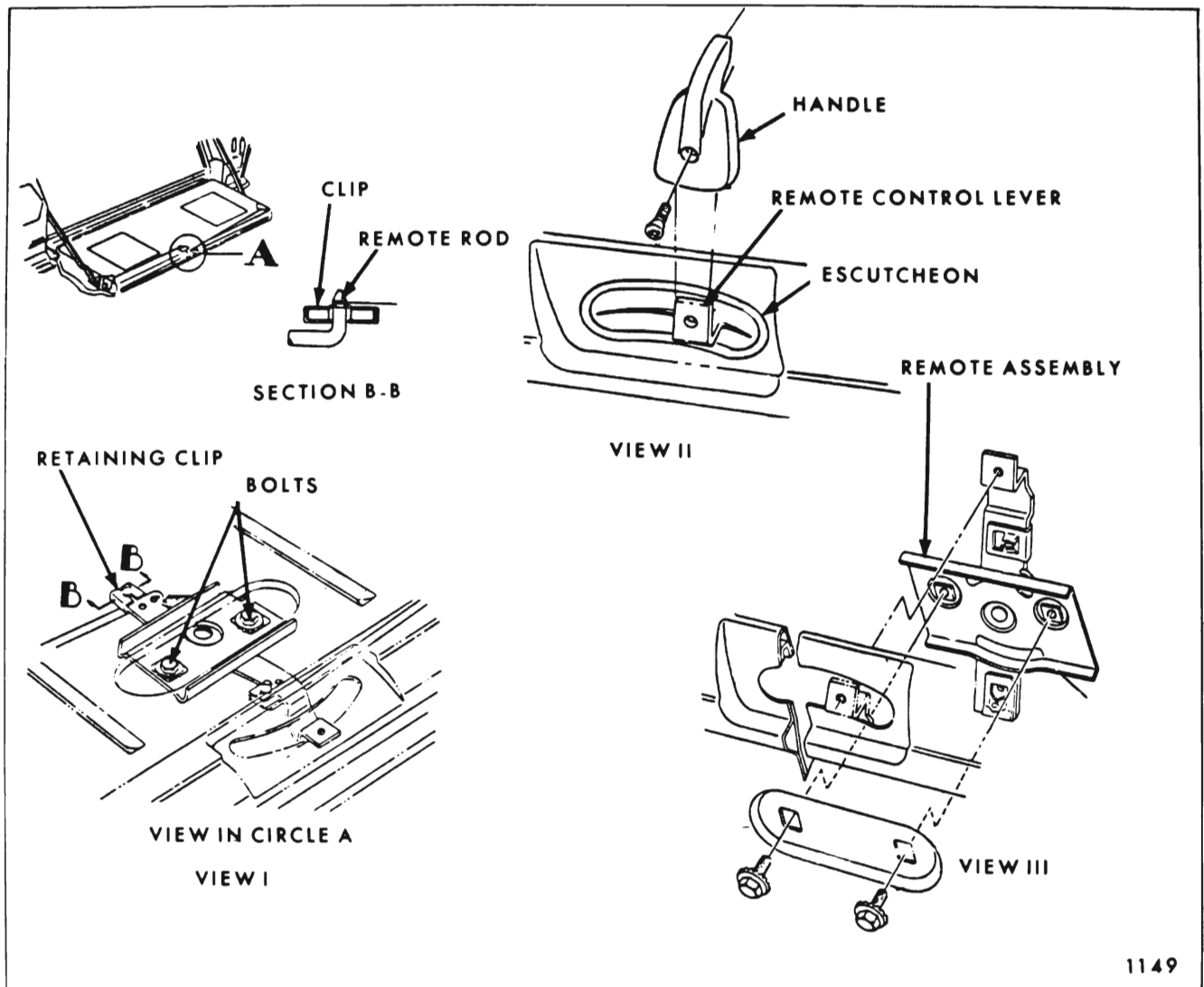


Fig. 9-17 — Tail Gate Lock Remote Control Assembly - "X" Body Styles

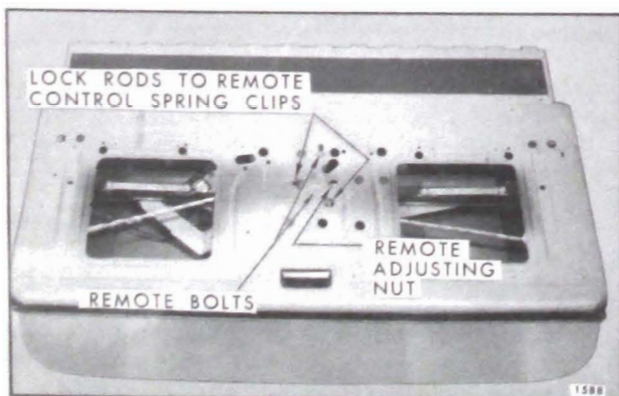


Fig. 9-18 — Tail Gate Hardware - "A & B" Body Styles

TAIL GATE LOCK STRIKER— RIGHT OR LEFT SIDE

Removal and Installation

1. Open tail gate and mark (pencil) position of striker on body pillar. (See Fig. 9-4).
2. Remove lock striker attaching screws and remove striker and adjusting plates from body pillar.
3. To install, align striker and components within pencil marks and install attaching screws. (See Fig. 9-20).

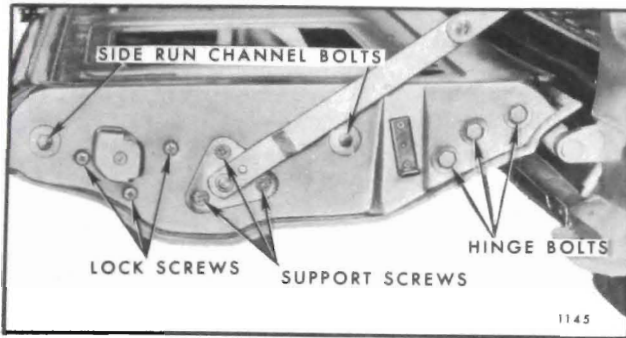


Fig. 9-19 — Tail Gate Lock and Support

TAIL GATE LOCK STRIKER ADJUSTMENTS

1. To adjust the tail gate lock striker up or down or forward or rearward, loosen striker attaching screws, shift striker and adjusting plates to desired position and tighten attaching screws.
2. DIMENSIONAL SPECIFICATIONS FOR USE OF DOOR LOCK STRIKER SERVICE SPACERS.
 - a. Tail gate should be properly aligned before checking spacer requirements.
 - b. To determine if tail gate lock striker service spacers are required, apply modeling clay or body caulking compound in the lock striker notch where the lock extension engages and close tail gate to form a measurable impression in the clay or caulking compound, as shown in Figure 9-21.

When dimension "A" from inside face of striker teeth to center of lock extension is less than $3/16$ " install service spacers and proper length striker attaching screws as follows:

Dimension "A"	Spacers Required	Thickness	Striker Attaching Screws*
$3/16$ " to $1/8$ "	1	$1/16$ "	Original Screw
$1/8$ " to $1/16$ "	1	$1/8$ "	Service Screw ($1/8$ " Longer)
$1/16$ " to 0	1 ($1/8$ " Spacer) 1 ($1/16$ " Spacer)	$3/16$ " (Total)	Service Screw ($1/4$ " Longer)
0 to $1/16$ " Interference	2 ($1/8$ " Spacer)	$1/4$ " (Total)	Service Screw ($1/4$ " Longer)

*Zinc or cadmium-plated flat-head cross-recess screw with countersunk washer.

NOTE: Dimension "B" from center of lock extension to inside face of striker should never be less than $1/16$ ".

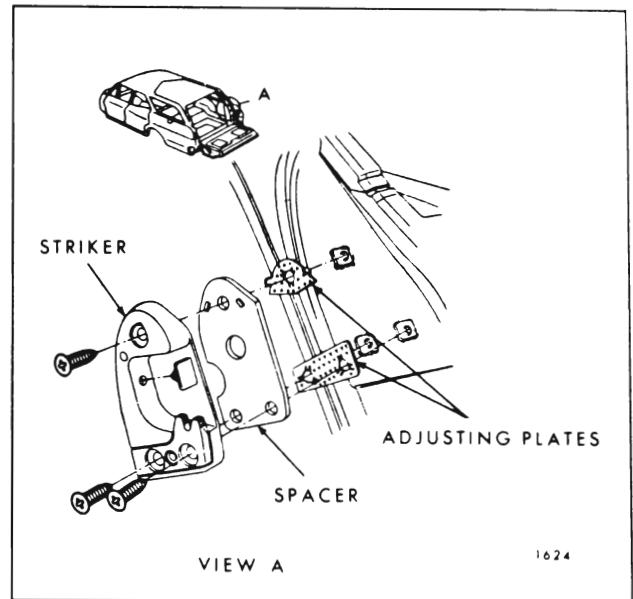


Fig. 9-20 — Tail Gate Lock Striker Assembly

TAIL GATE TORQUE ROD

Removal and Installation

1. Remove tail gate window assembly and torque rod retainer(s). (See Figs. 9-4 and 9-9).
2. Remove screws securing torque rod bearing plate to tail gate. (See Fig. 9-5 for "B & A" Bodies and Fig. 9-9 for "X" Bodies).

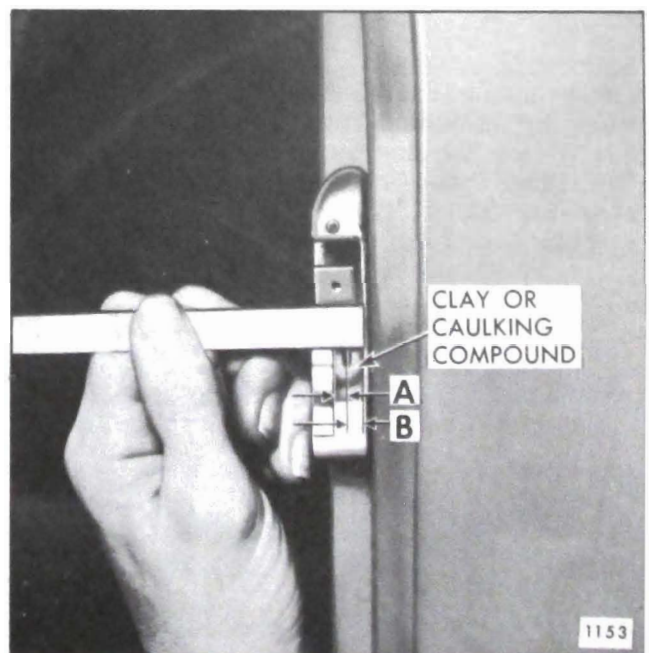


Fig. 9-21 — Tail Gate Lock Striker Caulking Check

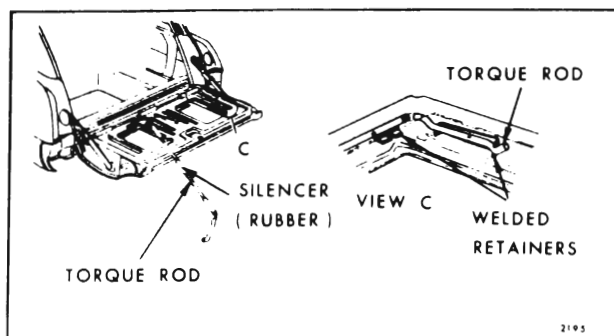


Fig. 9-22 — Tail Gate Torque Rod

3. On "B & A" Body Styles, disengage torque rod from welded retainers. (See View "C" in Fig. 9-22).
4. On "B & A" Body Styles, remove torque rod silencer (rubber) from left side of torque rod (exposed). Work torque rod out of opening on left side and remove rod through top of gate. (See Fig. 9-22).
5. On "X" Body Styles, remove torque rod from gate through entrance hole. (See Fig. 9-9).
6. To install, reverse removal procedure.

TAIL GATE WINDOW INNER AND OUTER STRIP ASSEMBLIES

Removal and Installation

Both strip assemblies are retained by clips in either the inner or outer panel of tail gate. The outer strip is additionally retained by two screws, one at each extreme end. To remove either strip, first remove screws and, using a flat tool, remove strip assemblies. To install, reverse removal procedure. (See Fig. 9-23).

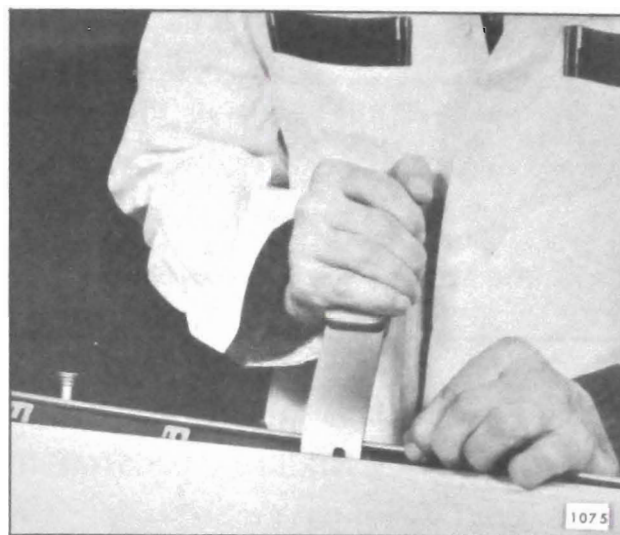


Fig. 9-23 — Tail Gate Strip Assembly Removal

TAIL GATE BOTTOM DRAIN HOLE SEALING STRIPS

Removal and Installation

1. With a flat-bladed tool carefully pry out snap-on fastener at each end of strip and remove sealing strip from tail gate.
2. To install sealing strips, reverse removal procedure. To prevent strip from adhering to the tail gate panel and blocking the drain holes, apply a sparing amount of silicone rubber lubricant on the center section of the sealing strip. (See illustration under "Front and Rear Door Bottom Drain Hole Sealing Strips").

TAIL GATE OPENING WEATHERSTRIP

Removal and Installation

1. Open tail gate and remove fasteners and/or screws securing weatherstrip to right and left body pillars (at belt). On "B" Body Styles, remove screws securing lower weatherstrip retainer to rear body cross bar. (See Fig. 9-24).
2. With a flat bladed tool, carefully remove weatherstrip all along rail gate opening.
3. To install, apply a bead of black weatherstrip cement into retainer along entire opening and reverse removal procedure.



Fig. 9-24 — Tail Gate Weatherstrip Retention

TAIL GATE WINDOW UPPER GLASS RUN CHANNEL "B & A" BODY STYLES

Removal and Installation

1. Open tail gate. With finger pressure only, squeeze run channel at one end and pull channel out of retainer.
2. Once run channel has been removed, the retainer attaching screws are exposed. (See Fig. 9-25). The retainer can be adjusted by loosening attaching screws, shifting retainer to desired position and tightening screws. If retainer is removed, seal same with medium bodied sealer prior to installation.
3. To install, reverse removal procedure.

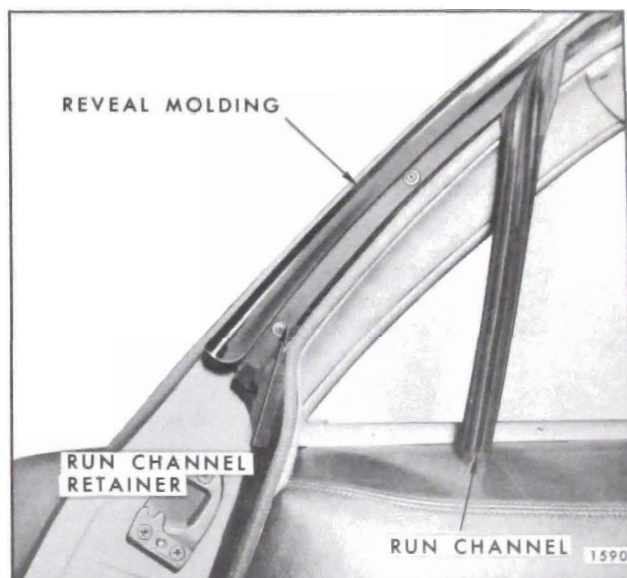


Fig. 9-25—Tail Gate Upper Glass Run Channel Retention

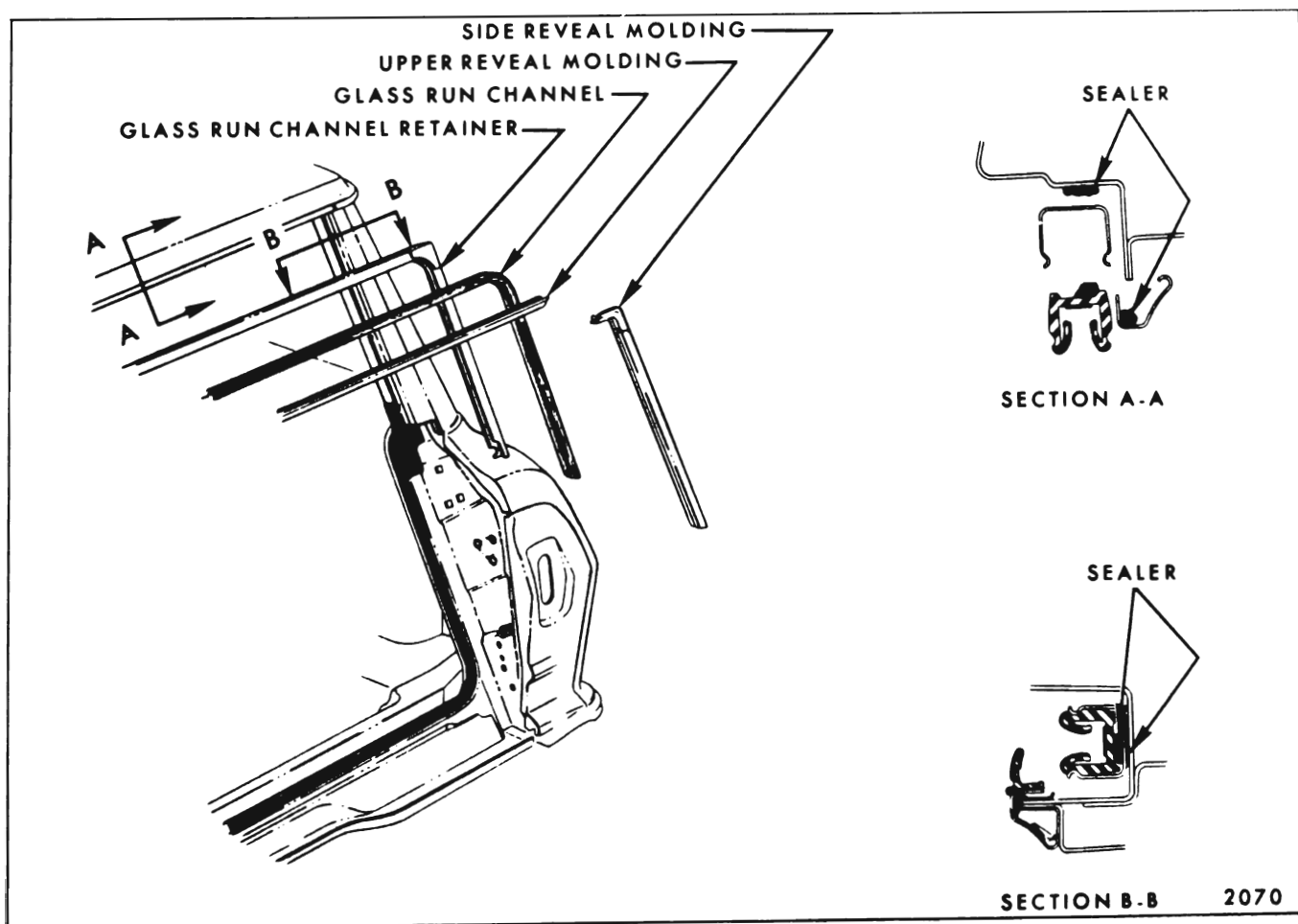


Fig. 9-26—Tail Gate Opening Sealing - "X" Body Styles

TAIL GATE WINDOW UPPER GLASS RUN CHANNEL "X" BODY STYLES

Removal and Installation

1. Open tail gate and remove exposed clip at each end of glass run channel securing channel to body pillar at belt line.
2. Carefully break cement bond between run channel and retainer and remove run channel.
3. Remove screws to run channel retainer and remove retainer.
4. Prior to installation of either run channel or retainer, seal contact areas with medium bodied sealer as depicted in Sections "A-A" and "B-B" in Figure 9-26.
5. To install, reverse removal procedure.