

SECTION 13-J

FRONT END

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13-27 WINDSHIELD (SERIES 50-70-700)

a. Windshield Reveal Moldings (Except Convertibles)

The windshield reveal moldings consist of the following parts; windshield upper reveal molding; windshield side reveal molding, right and left; and windshield lower reveal molding, right and left. The upper reveal molding is secured to the body by means of bolt and clip assemblies and attaching nuts. Access to these attaching nuts is gained by loosening the headlining over the windshield. The side and lower

reveal moldings are secured to the body by means of clips and screws which are accessible on the outside of the body.

The windshield reveal moldings are installed in the following sequence: (1) windshield upper and/or lower reveal moldings may be installed independently; (when lower reveal moldings are installed, the right molding is installed first). (2) The side reveal moldings, right and left, are installed last.

1. Removal and Installation of Windshield Side Reveal Molding.

(a) Open door. Remove screws securing side reveal molding to front body hinge pillar. See

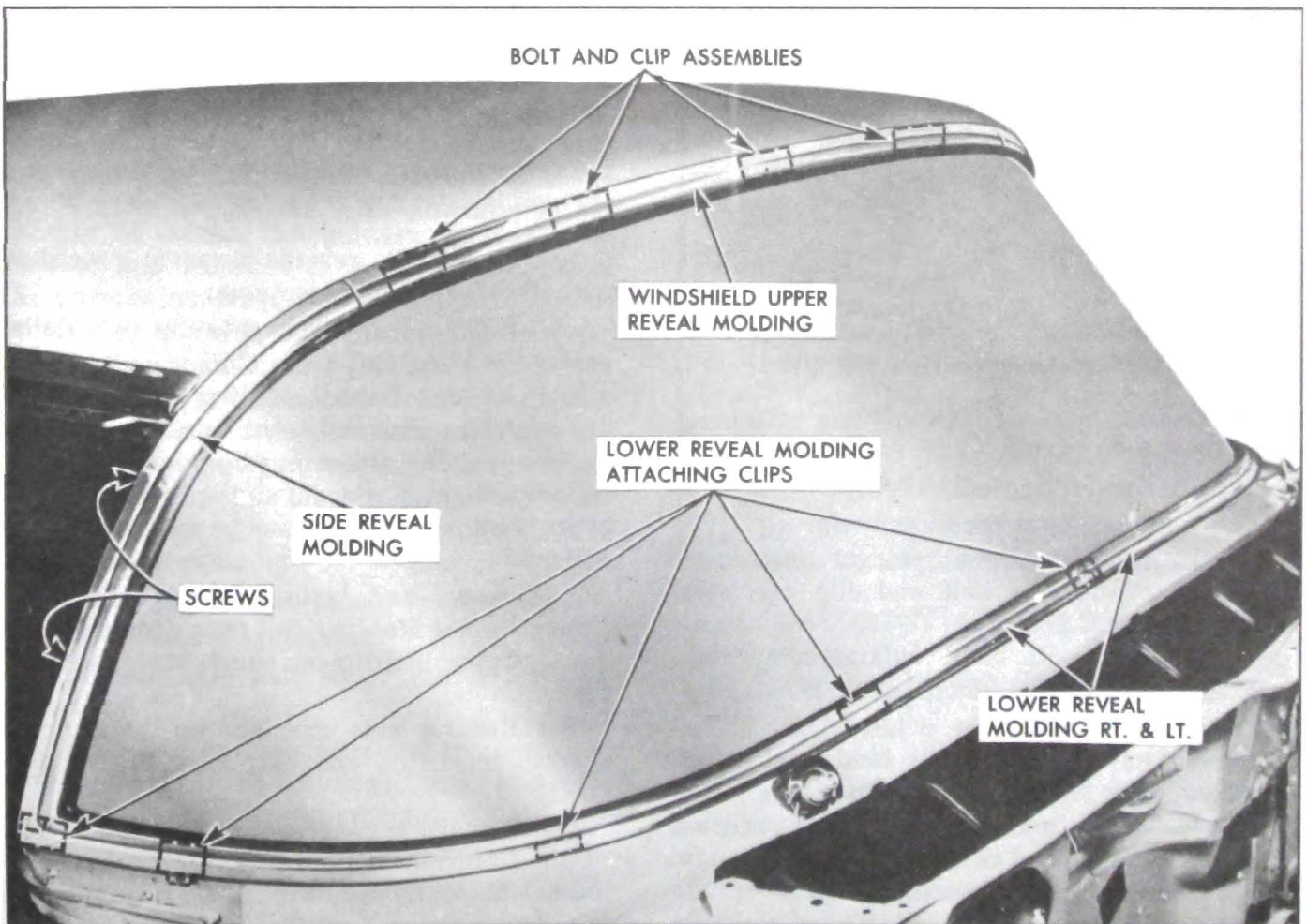


Figure 13-168—Windshield Reveal Molding Attachment

figure 13-168. To remove side reveal molding, first remove windshield drain gutter.

(b) Disengage side reveal molding from lower reveal molding. Then remove side reveal molding from upper reveal molding by pulling from center of body. See figure 13-168.

(c) To install, reverse removal procedure. Seal attaching screw holes with body caulking compound.

2. Removal and Installation of Windshield Upper Reveal Molding.

(a) Cover instrument panel, seat, hood and fenders.

(b) Remove windshield side and upper garnish moldings and rear view mirror support.

(c) Remove sunshades and sunshade supports.

(d) On 75-75R-750 and 755 style bodies, loosen side roof rail finishing moldings at front to gain access to headlining.

(e) Carefully remove tacks and loosen headlining sufficiently to gain access to upper reveal molding attaching nuts. See figure 13-169.

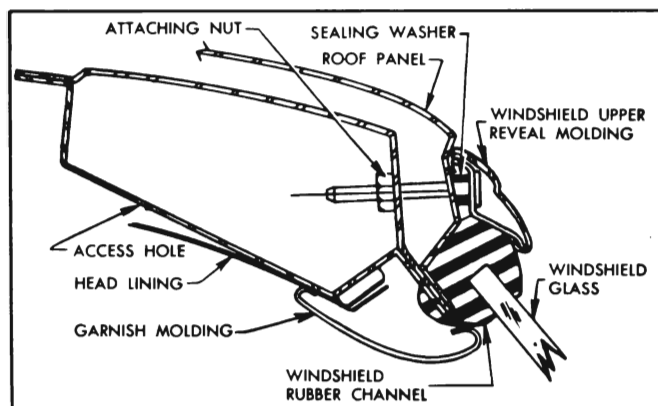


Figure 13-169—Windshield Reveal Molding Installation

(f) Remove upper reveal molding attaching nuts. See figure 13-169.

(g) Remove side reveal moldings.

(h) Remove upper reveal molding.

(i) To install, reverse removal procedure. If necessary, replace bolt and clip assembly sealing washers. See figure 13-169. Seal attaching screw holes with body caulking compound.

3. Removal and Installation of Windshield Lower Reveal Molding.

(a) Cover seat, hood and fenders. Protect adjacent paint finish with masking tape.

(b) Open door and remove attaching screws securing upper reveal molding along front body hinge pillar. See figure 13-168.

(c) Disengage upper or side reveal molding from lower reveal molding sufficiently to re-

move lower reveal molding and attaching screws.

(d) Remove screw from lower reveal molding attaching clip which is readily accessible with door open.

(e) To disengage lower reveal molding from clip located outboard of wiper transmission, position loose end of molding downward until lower flange of molding is disengaged from the clip.

(f) Remove lower reveal molding from body by carefully sliding molding outboard until the molding is disengaged from the remaining attaching clips.

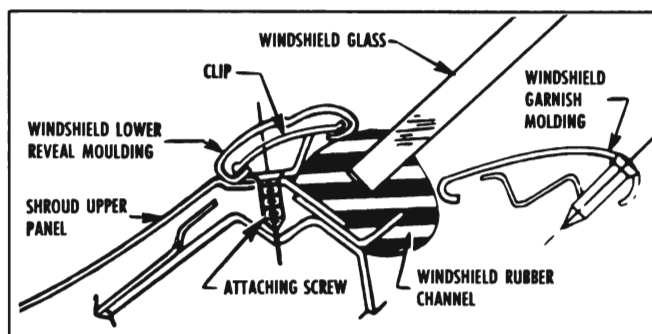


Figure 13-170—Lower Reveal Molding Attachment

NOTE: The left lower reveal molding slides into the integral center escutcheon of the right lower reveal molding. The right molding is secured at the body center line by means of a center attaching clip. See Figure 13-170.

(g) To install, reverse removal procedure with the following exceptions:

(1) Right lower reveal molding is installed before left molding.

(2) All lower reveal molding attaching clips are secured to the body with screws. When installing molding attaching clips, such as during windshield glass removal and installation operation, seal screw holes with medium bodied sealer.

4. Removal and Installation of Windshield Upper Reveal Molding (all four door models):

(a) Cover instrument panel, seat, hood and fenders.

(b) Remove side garnish moldings, upper garnish moldings, and rear view mirror supports.

(c) Remove sunshades and supports.

(d) Carefully remove tacks and loosen headlining sufficiently over windshield to gain access to the upper reveal molding attaching nuts. See Figure 13-169.

(e) Remove upper reveal molding attaching units and screws securing molding along front body hinge pillar.

(f) Disengage upper reveal molding from end of lower reveal molding and remove molding.

(g) To install, reverse removal procedure and seal molding attaching screw holes with body caulking compound. If necessary, replace bolt and clip assembly sealing washers.

5. Removal and Installation of Windshield Upper Reveal Molding (Convertibles only):

(a) Remove the windshield side and lower reveal moldings; then remove the screw securing each end of the windshield upper reveal molding.

(b) Remove the windshield glass with attached rubber channel and the reveal molding from the body opening; then disengage the upper reveal molding flange from the cavity in the rubber channel.

(c) To install molding, seal attaching screw holes with body caulking compound and reverse removal procedure.

b. Removal and Installation of Windshield Garnish Moldings and Rear View Mirror Support

The windshield garnish moldings are secured to the body with readily accessible screws. Because of design, the garnish moldings are removed and installed in a definite sequence. The garnish moldings consist of the following parts: side garnish molding, right and left; upper garnish molding, right and left; lower garnish molding, right and left; and the lower garnish molding center escutcheon. The rear view mirror support attaches to the body at the upper center of the windshield opening. The sides of the support are over-lapped by the upper garnish moldings.

1. Cover instrument panel, front seat, and adjacent paint and trim parts.

2. Remove side and lower center garnish moldings.

3. With side garnish moldings removed, remove upper garnish moldings, right and left, then remove rear view mirror support.

4. With side garnish moldings removed, remove lower garnish moldings, right and left, including center escutcheon.

5. To install, reverse removal procedure.

c. Removal and Installation of Windshield Header Moldings (Convertibles)

The windshield header moldings are made up of three sections: A right and left section and a center escutcheon.

1. Cover instrument panel and seat.

2. Lower top.

3. Remove windshield side and upper garnish moldings and remove rear view mirror support.

4. Remove sunshades, supports, and front roof rail lock strikers.

5. Remove side reveal moldings.

6. Remove windshield header molding center escutcheon.

7. Remove attaching screw from each end of upper reveal molding which also secures windshield header molding.

8. Remove windshield header moldings, right and left, by disengaging front edges of moldings from windshield reveal molding. See figure 13-171.

9. To install, reverse removal procedure.

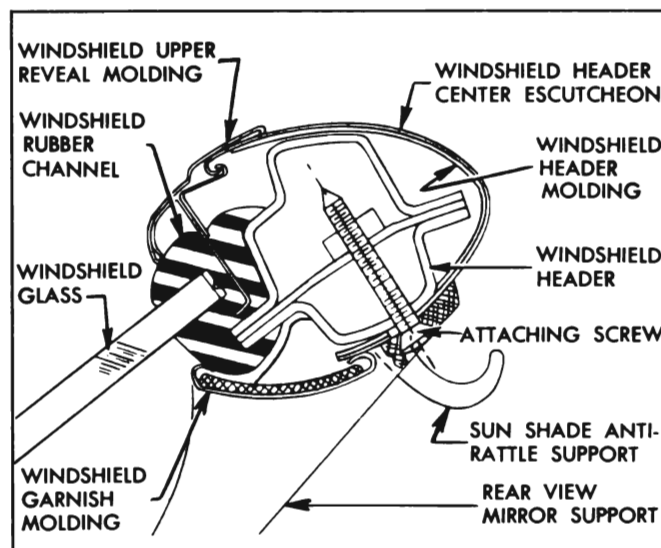


Figure 13-171—Windshield Header

d. Removal of Windshield Glass

The windshield is secured to the body by a one-piece rubber channel. With the exception of the convertible styles, the windshield reveal moldings are installed after the windshield installation. On convertible styles, the upper reveal molding is installed in the rubber channel before windshield glass installation.

1. Lower top on convertible styles.

2. Cover front seat, instrument panel, fenders and hood.
3. Remove windshield wiper arm and blade assemblies.
4. Remove windshield garnish moldings.
5. Remove windshield reveal moldings.
6. Apply outward pressure close to edge of glass with palm of hand and, using putty knife,

work lip of rubber channel over pinchweld flange. See figure 13-172.

7. With aid of helper, carefully remove windshield assembly from body and place on covered bench.

8. Remove rubber channel from glass.

e. Checking Body Windshield Opening

It is important that the size and contour of the body windshield opening be checked thoroughly before the installation of a replacement windshield glass. The procedure below outlines the method which can be used to check the windshield opening:

1. Check windshield rubber channel for any irregularities.

2. Clean off old sealer from around windshield opening and check entire body opening flange for irregularities.

3. Support and center new glass in windshield opening with six spacers located as shown. **CAUTION:** *Be certain that glass does not strike body metal during this temporary installation. Chipped edges can result in future breaks. See figure 13-173.*

4. Figure 13-174 shows a typical cross-section taken through glass and body opening.

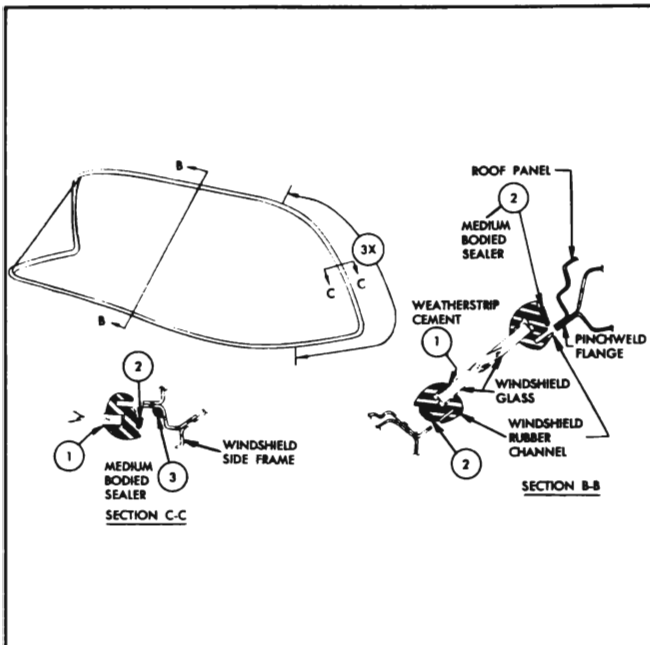


Figure 13-172—Windshield Glass Removal

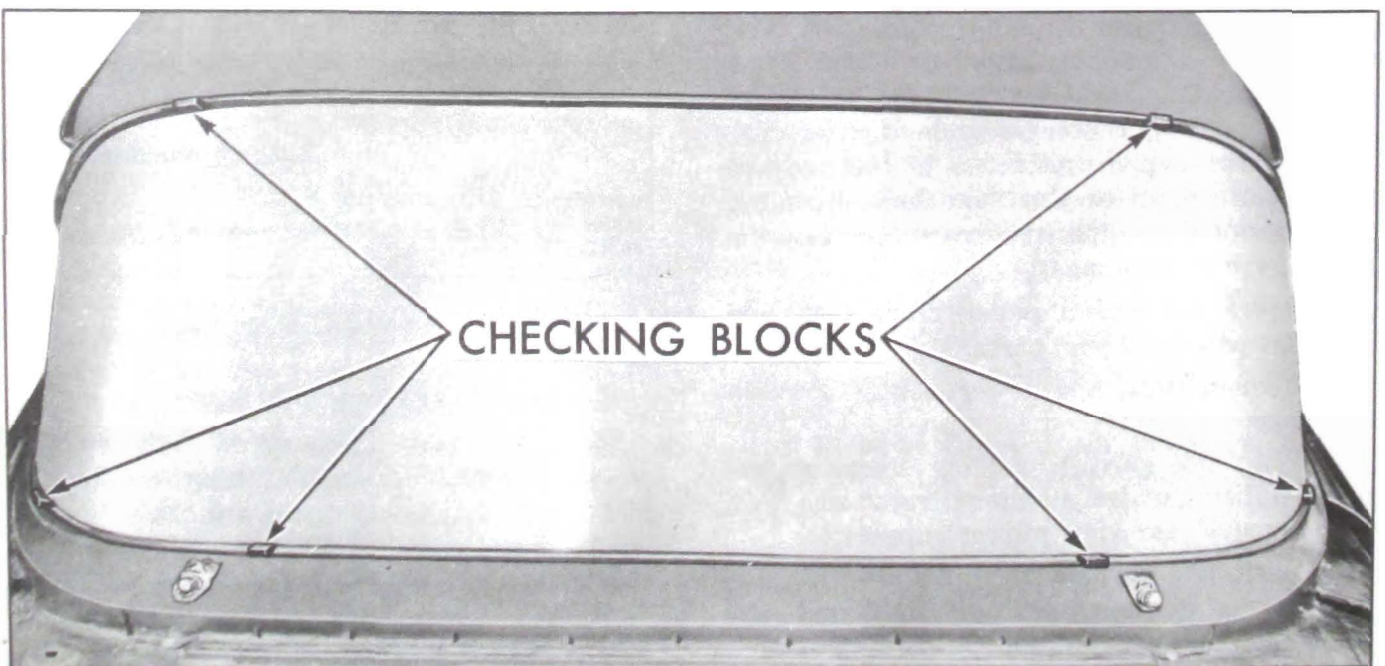


Figure 13-173—Spacer Position for Pinchweld Alignment

Spacing between glass and metal should be as follows:

(a) Between inside surface of glass and body opening flange spacing should be uniform and from $\frac{3}{16}$ " to $\frac{1}{4}$ ".

(b) Between edge of glass and body opening spacing should be uniform and when measured in plane of glass should be $\frac{5}{16}$ " to $\frac{7}{16}$ ".

5. Mark any sections of body to be re-formed (masking tape applied to body opening can be conveniently marked without damage to the painted surfaces), remove glass, and reform opening as required.

6. Check windshield opening again as outlined in step 4. **MARK THE GLASS AND**

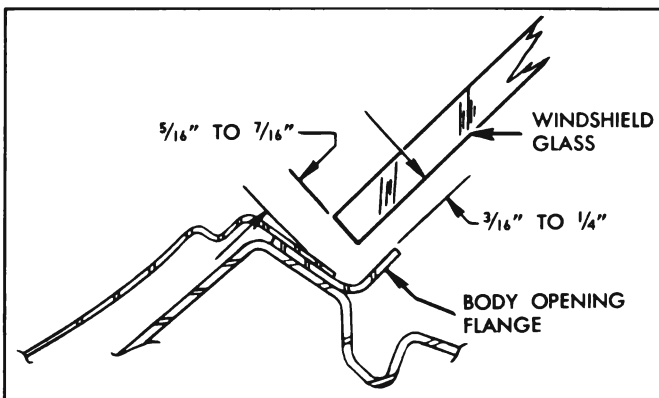


Figure 13-174—Windshield Glass to Pinchweld Clearances

BODY so that glass can be centered accurately in opening when installed.

f. Installation of Windshield Glass

1. Check windshield drain gutter and both left and right drain hose openings for obstructions and clean out if necessary.

2. Install rubber channel on glass. On convertible styles, install and center upper reveal molding in rubber channel.

3. Insert strong cord in pinchweld cavity of rubber channel completely around windshield. Form loop with cord at bottom center of glass and tape loop to inside of glass. See figure 13-176.

4. Apply a ribbon of medium-bodied sealer completely around base of rubber channel as indicated at 2 in figure 13-175. In addition, apply a ribbon of sealer along pinchweld flange as indicated at 3 in figure 13-175. This seal is to be applied at each side of windshield opening as indicated by distance 3X.

5. With aid of helper, position glass in opening and center glass between windshield pillars.

6. Use care when positioning glass close to windshield opening for cord pulling operation. *Do not use excessive pressures or blows of any type during or after glass installation. Have*

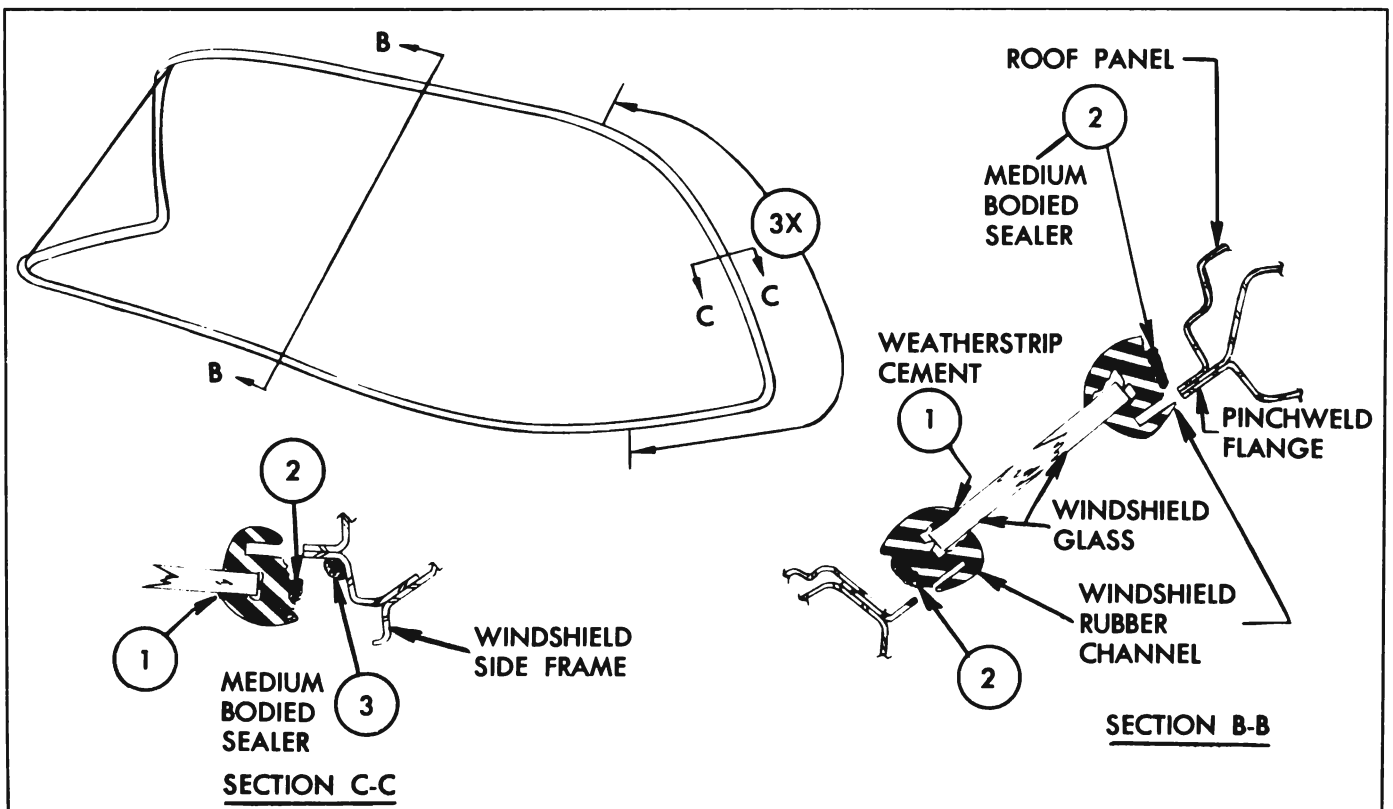


Figure 13-175—Windshield Glass Sealing

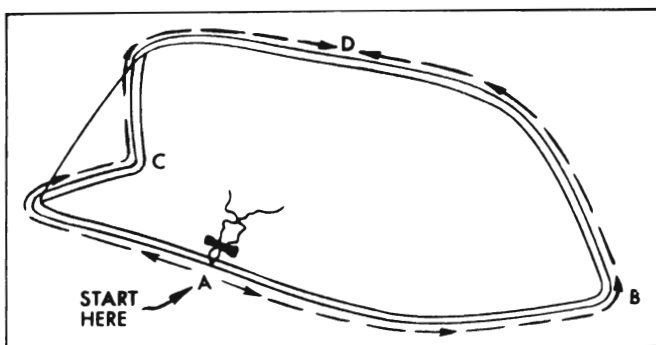


Figure 13-176—Windshield Glass Installation

helper inside pull cord slowly in following sequence to seat lip of channel over pinchweld. (Figure 13-176.)

(a) Along bottom, "a" to point "b," as shown.

(b) Along bottom, "a" to point "c," as shown.

(c) Along top, "c" to point "d," as shown.

(d) Along top, "b" to point "d," as shown.

7. Use weatherstrip cement to seal between outside lip of rubber channel and glass. See figure 13-177.

8. Clean off all excess sealer and install previously removed parts. Remove protective coverings.

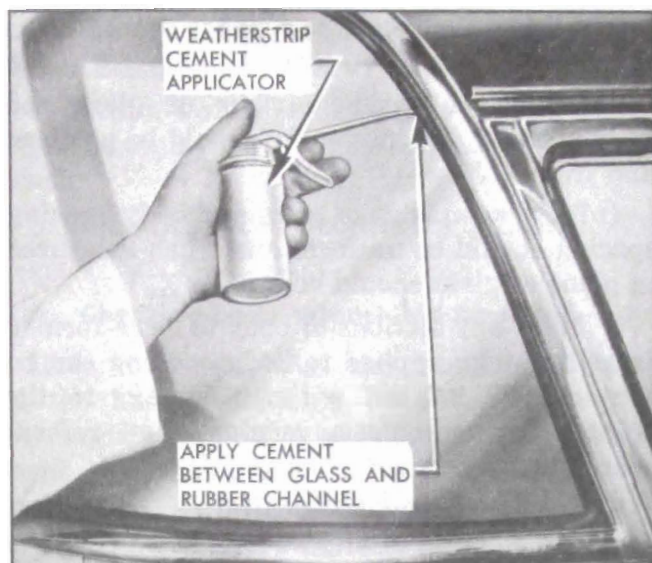


Figure 13-177—Windshield Rubber Channel Sealing

taching screws with washers and disengage motor from auxiliary drive assembly. See figure 13-178.

2. Disconnect vacuum hoses from wiper motor and washer coordinator.

3. Disconnect wiper motor control cable at wiper motor and remove wiper motor. See figure 13-178.

4. To install wiper motor, reverse removal procedure and check operation of motor.

13-28 WINDSHIELD WIPER (SERIES 50-70-700)

a. Cam-O-Matic Windshield Wiper Transmissions

The Cam-O-Matic windshield wiper transmission is designed with a windshield wiper arm cam on the transmission shaft. A follower on the wiper arm engages with the cam maintaining blade-to-glass contact. The wiper arm cam is secured to the transmission shaft by the transmission spanner nut. To remove the wiper arm assembly raise the upper section of the wiper arm to disengage the cam follower from the cam. With wiper arm in raised position, carefully pull or pry arm from transmission shaft.

b. Removal and Installation of Windshield Wiper Motor

The windshield wiper motor attaches to the auxiliary drive assembly at the forward side of the dash panel.

1. Remove two wiper motor to support at-

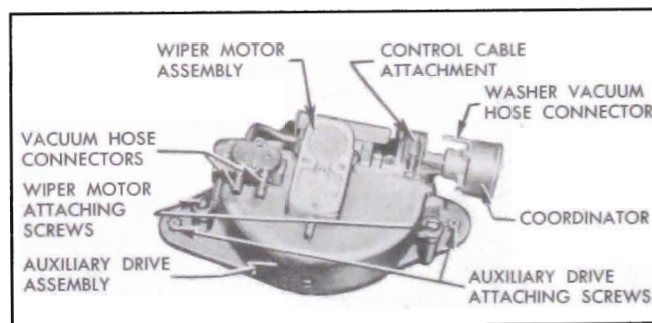


Figure 13-178—Windshield Wiper Motor

c. Removal of Windshield Wiper Motor Auxiliary Drive Assembly

The auxiliary drive assembly attaches to the forward side of the dash panel. The wiper motor attaches to the drive at this location. The drive assembly consists of two pairs of pulleys, a pair of copper notched pulleys and a pair of steel notched pulleys, to which the ends of the transmission cables are attached. The pulleys are designed to operate simultaneously as an integral unit.

1. Remove instrument panel center section.
2. Adjust wiper transmission cables to slack

position. See "Wiper Transmission Cable Adjustment."

3. Observe and note wiper transmission cable to auxiliary drive attachment to assure proper installation, then disconnect cables from pulleys. See figure 13-179.

4. Disconnect wiper motor from auxiliary drive by removing motor attaching screws. See figure 13-178.

5. Remove auxiliary drive to dash attaching screws. Carefully break seal between auxiliary drive and gasket on body and remove drive. See figure 13-178.

d. Installation of Windshield Wiper Motor Auxiliary Drive Assembly

1. If necessary, cement new auxiliary drive gasket to body with weatherstrip cement and install auxiliary drive. See figure 13-178.

2. Install windshield wiper motor. See figure 13-178.

3. Inside of body, attach wiper transmission cables to auxiliary drive.

IMPORTANT: *The "right" wiper transmission cables attach to the "outer" two (of four) drive pulleys and the "left" wiper transmission cables attach to the "inner" two (of four) drive pulleys as shown. Also, copper colored cable ends must be installed to copper colored pulley notches and steel colored cable ends to steel*

colored pulley notches. The right transmission cables cross and the left transmission cables do not cross. See figure 13-179.

4. Adjust cable tension as required. See "Wiper Transmission Cable Adjustment."

5. Check auxiliary drive for proper operation.

6. Install instrument panel center section.

e. Removal of Windshield Wiper Transmission

The windshield wiper transmission has been redesigned and attaches to the body by means of a spanner nut. Since an additional spanner nut is required to secure the escutcheon, the new transmission service procedures now involve two spanner nuts, each of a different size. The new transmissions are designed with "idler" pulleys in addition to "drive" pulleys which play an important role in routing the power from the wiper motor to the windshield wipers. The new wiper transmissions retain the "push-button" cable adjustment feature.

1. Remove wiper arm and blade assemblies.

2. Remove instrument panel center section.

3. Adjust wiper transmission cables to slack position. See "Wiper Transmission Cable Adjustment."

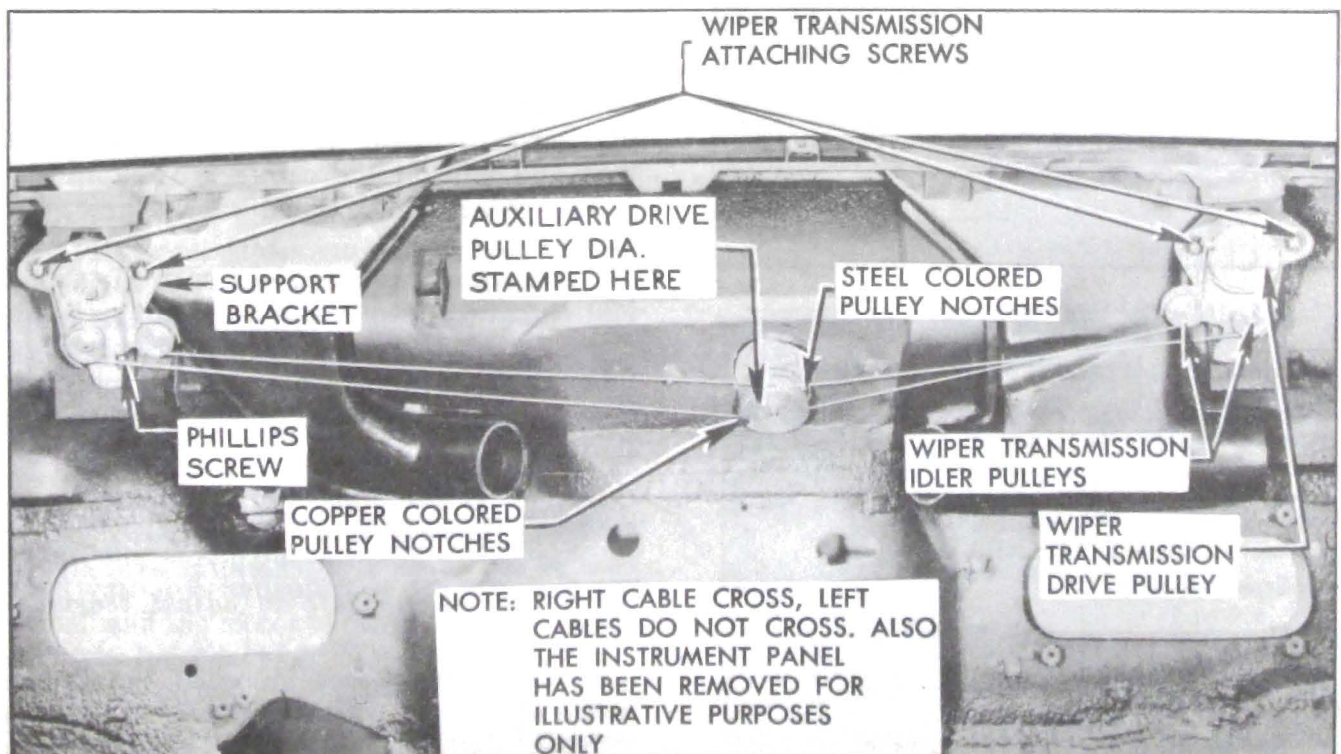


Figure 13-179—Wiper Transmission and Auxiliary Drive Installation

4. Observe and note attachment of transmission cables at auxiliary drive pulleys to assure proper installation, then disconnect cables from auxiliary drive pulleys. See figure 13-179.

5. Using wrench 6592, remove wiper transmission spanner nut; then remove cam, (if equipped with Cam-O-Matic feature) washer, and escutcheon. Disconnect washer hose to remove escutcheon.

CAUTION: Tape hose to body to simplify installation. See figure 13-180.

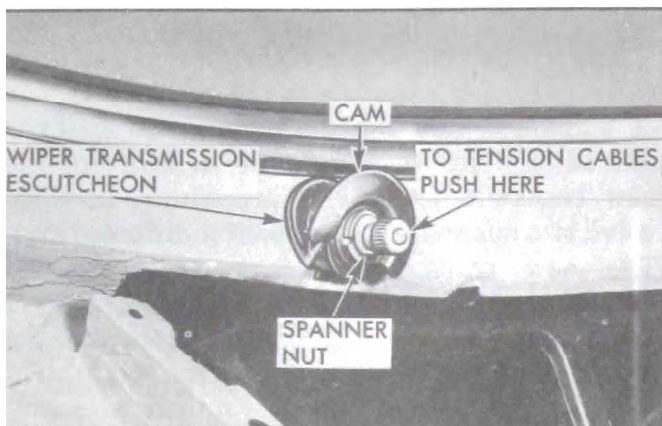


Figure 13-180—Windshield Wiper Transmission

6. Using wrench 6592, remove wiper transmission spanner nut and spacer. See figure 13-181.

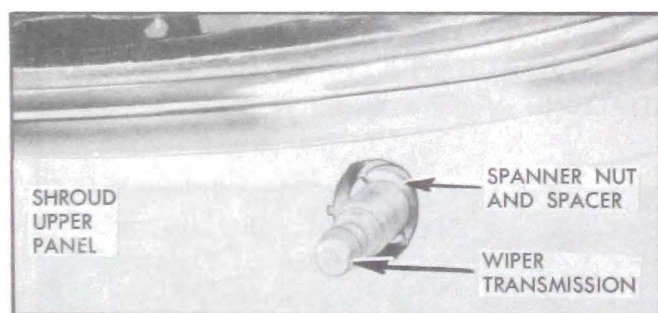


Figure 13-181—Windshield Wiper Transmission Attachment

7. Remove transmission attaching screws. Break seal between transmission gasket and body and remove transmission. See figure 13-179.

f. Installation of Windshield Wiper Transmission

1. If necessary replace gasket and arrange transmission component parts for installation. See figure 13-182.

2. Inside of body, position gasket on transmission and position transmission in body.

“Start” attaching screws but do not tighten them at this time. See figure 13-179.

3. Outside of body, position transmission spacer and spanner nut. Check alignment of wiper transmission and tighten spanner nut with wrench 6592. Then, inside of body, tighten wiper transmission attaching screws. See figure 13-182.

4. Connect washer hose to escutcheon. Position escutcheon washer and cam and install spanner nut with wrench 6592. See figure 13-180.

5. Inside of body, attach transmission cables to auxiliary drive pulleys as shown. **NOTE:** The “right” transmission cables attach to the two “outer” pulleys of the auxiliary drive, and the left transmission cables attach to the two “inner” pulleys of the auxiliary drive. **IMPORTANT:** The copper colored cable ends must be installed to the copper colored pulley notches and the steel colored cable ends must be installed on the steel colored pulley notches. The right transmission cables cross and the left transmission cables do not cross. Fig. 13-179.

6. Restore cable tension as required. See “Wiper Transmission Cable Adjustment.”

7. Install wiper arm and blade assemblies and check operation of wiper transmission.

8. Install instrument panel center section.

g. Windshield Wiper Transmission Cable Adjustment

The transmission cables are tensioned by “spring-loaded” pulleys. When the end of the transmission shaft is pushed “in” as shown in the illustration, the spring-loaded pulleys unlock and tension the cables. To obtain slack in the wiper transmission cables, proceed as follows:

1. On wiper transmissions with the Cam-O-Matic feature, remove wiper arm by pulling upper section of arm upward to disengage cam follower from cam, then pull arm from transmission shaft. Push “in” end of transmission shaft.

NOTE: If the wiper transmission does not have the Cam-O-Matic feature, push “in” the base of the wiper arm where the arm fits over the transmission shaft to adjust tension in cables.

2. While pulleys are unlocked, have helper inside of car pull cable to obtain slack. When sufficient slack is obtained, release end of transmission shaft to lock cable in slack position.

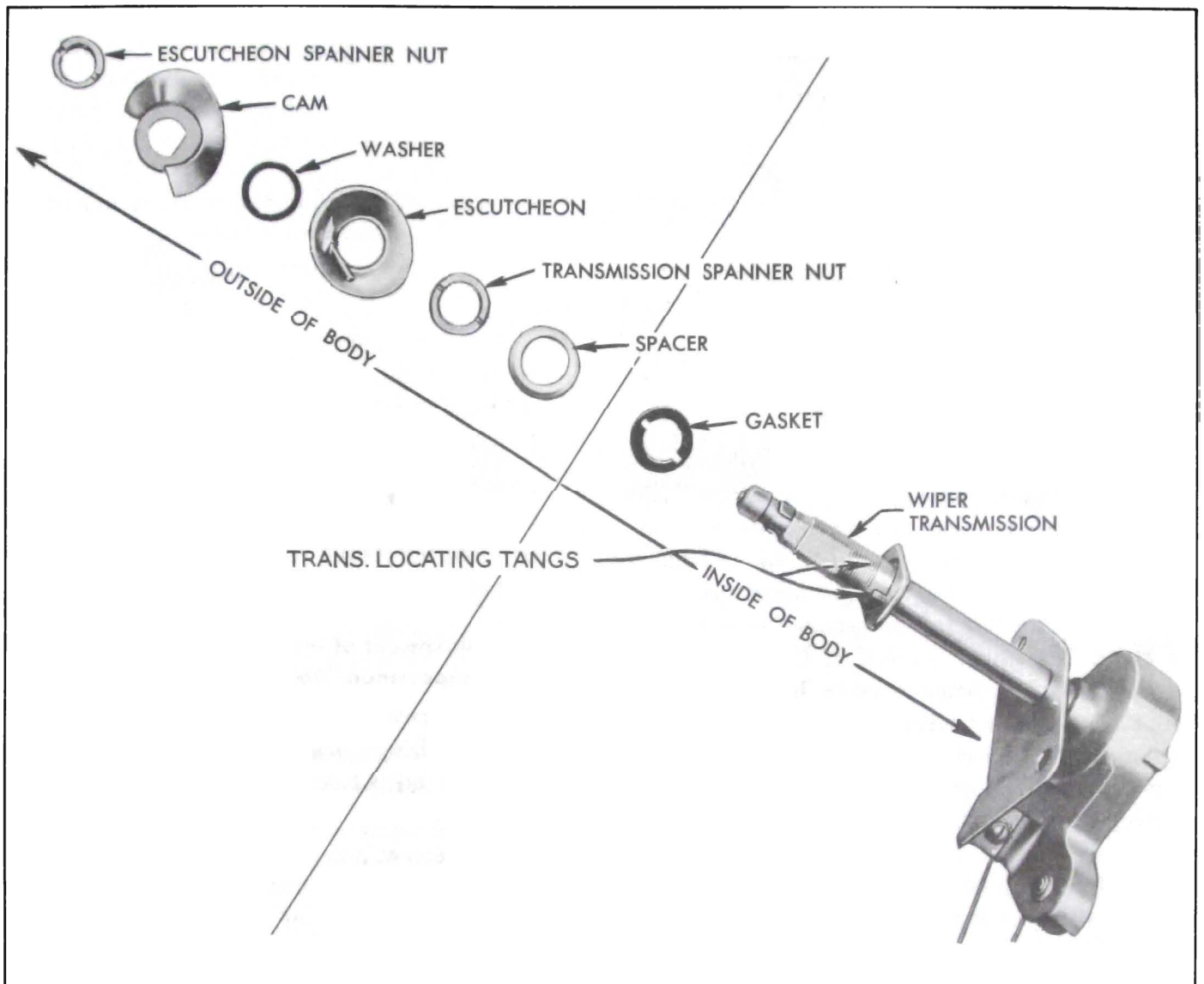


Figure 13-182—Windshield Wiper Transmission Component Parts

3. To restore tension in cables, push “in” on end of transmission shaft. Repeat operation on opposite transmission.

NOTE: *Loose cables cause blade slap or over-travel at end of stroke. If this condition exists, adjust tension of cables as outlined in step “3.” See figure 13-180.*

h. Removal and Installation of Windshield Wiper Control

The windshield wiper control is attached to the left side of the instrument panel. The windshield washer is controlled by a new type “push-button” and the motor is controlled by a “push-pull” type lever control.

1. Cover seat and fenders.
2. Disconnect wiper control cable from motor. It is necessary first to disconnect motor

from auxiliary drive to gain access to wiper control attachment.

3. Tie strong cord or wire to control cable.
4. Remove attaching screws from wiper con-

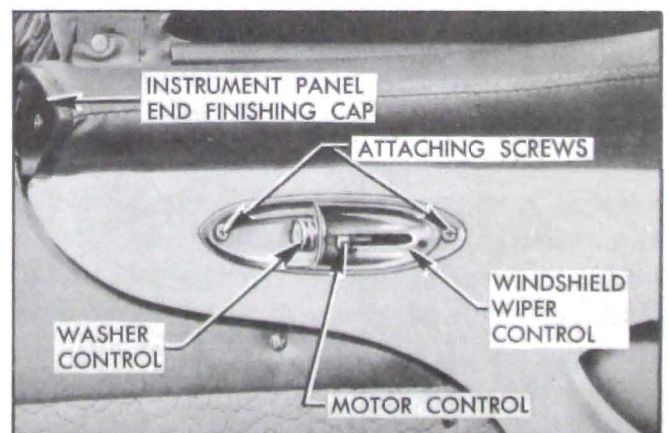


Figure 13-183—Windshield Wiper Control Attachment

trol and disconnect washer control hose. See figure 13-183.

5. Remove wiper control and cable as an assembly and disconnect strong cord.

6. To install, reverse removal procedure. Use strong cord previously installed to help in correctly positioning cable through openings in front end.

7. Position control cable correctly at motor and check operation of wiper control.

13-29 INSTRUMENT PANEL (SERIES 50-70-700)

The instrument panel on the 50, 70 and 700 Series consists of a one (1) piece upper section, a one-piece lower section, and a one (1) piece instrument panel upper cover assembly. The lower instrument panel is secured to the body by bolts. The upper section of the instrument panel is secured to the body by bolts along the front edge and by screws along the rear edge of the panel. The cover assembly consists of a vinyl covered sponge padding with integral attaching studs which are positioned through an attaching bracket welded to the lower instrument panel. It is necessary to remove the upper section of the instrument panel to gain access to the instrument panel cover attaching nuts.

An instrument panel cover assembly is also installed on the compartment door, and at the right side of the instrument panel. These covers are installed with attaching screws in the same manner as they were on past styles.

a. Removal and Installation of Instrument Panel Compartment Door

1. Open door and scribe position of hinge on door.

2. Remove door stop attaching screws on each side of door and disconnect compartment door stops. See figure 13-185.

3. Remove hinge to door attaching screws and remove door. See figure 13-185.

4. To install, reverse removal procedure. Align door according to previously made scribe marks and tighten attaching screws.

b. Adjustment of Instrument Panel Compartment Door

1. The screw holes in the compartment door side of the hinge are elongated to permit "up and down" adjustment of the door. See figure 13-185.

2. The screw holes in the instrument panel side of the hinge are elongated to permit "side-to-side" adjustment of the door. See figure 13-185.

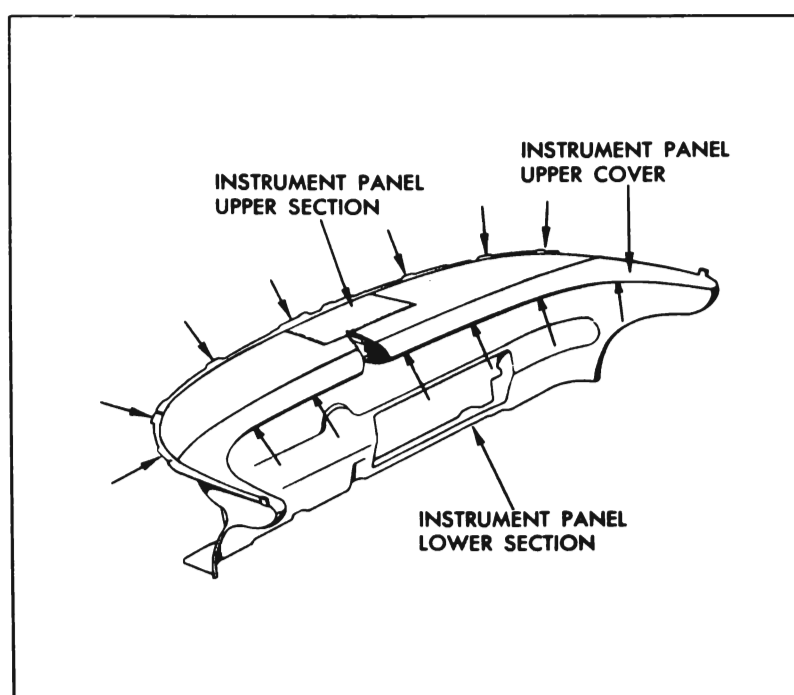


Figure 13-184—Instrument Panel Upper Section (50-70-700 Series)

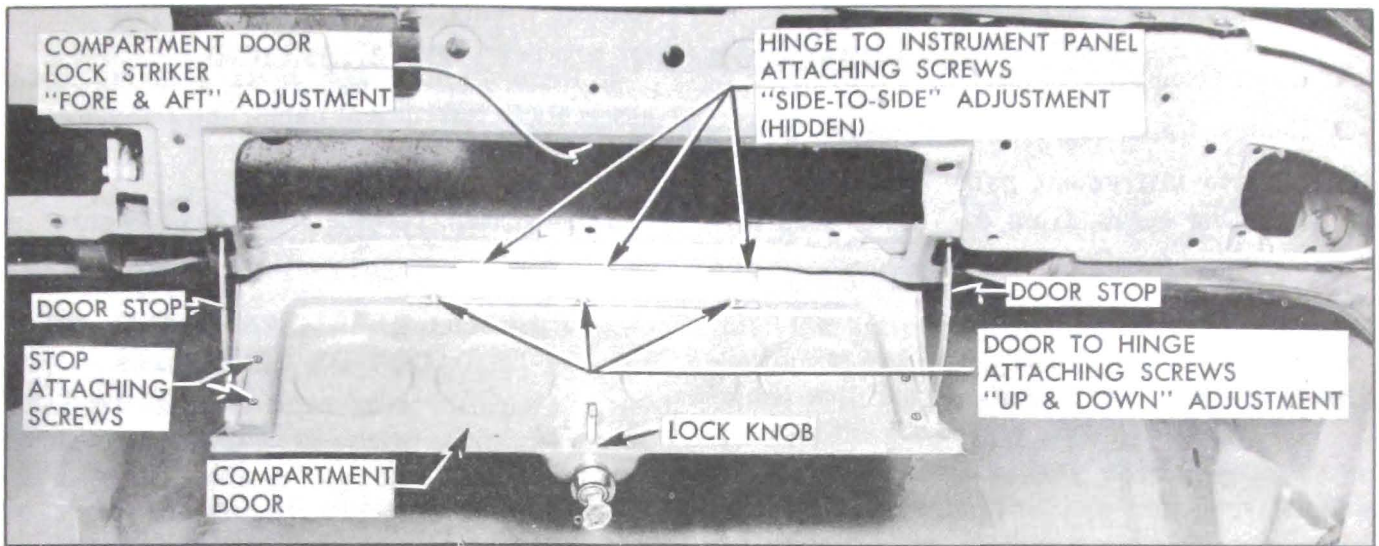


Figure 13-185—Instrument Panel Compartment Door Parts

3. The instrument panel attaching screw holes for the lock striker are elongated to permit "fore and aft" adjustment of the top of the door.

c. Removal and Installation of Instrument Panel Compartment Door Lock Cylinder

1. Note position of lock cylinder key opening when in the locked and unlocked position.
2. Insert key in lock cylinder and open door.
3. Hold lock bolt in rear position, turn key clockwise 90° from unlocked position, and remove cylinder with key. See figure 13-186.
4. To install, reverse removal procedure.

d. Removal and Installation of Instrument Panel Compartment Door Lock Knob

1. Open door and remove door lock knob to

retainer attaching screw. See figure 13-185.

2. Remove lock knob retainer and lock knob.
3. To install, reverse removal procedure.

e. Removal and Installation of Instrument Panel—Upper Section

1. Cover front seat assembly.
2. Remove windshield lower center, and side garnish moldings.
3. Remove bolts securing front edge of upper instrument panel to supports, and screws securing rear edge of upper instrument panel to the lower instrument panel; then carefully disengage speaker wiring and remove panel from body.
4. To install, reverse removal procedure. See figure 13-184.

f. Removal and Installation of Instrument Panel Upper Cover Assembly

DESCRIPTION: The cover assembly consists of a vinyl covered sponge padding with integral attaching studs, which are positioned through an attaching bracket welded to the lower section of the instrument panel. The cover assembly is secured to the body by attaching nuts installed to the integral studs on the cover assembly, and by two (2) attaching bolts located on the front, outboard edge of the cover assembly. It is necessary to remove the upper section

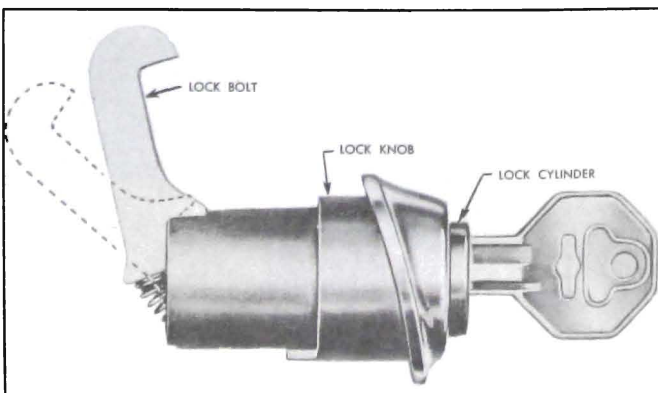


Figure 13-186—Instrument Panel Compartment Door Lock Cylinder Removal

of the instrument panel to gain access to the cover attaching nuts. See figure 13-184.

1. Cover front seat assembly.
2. Remove upper section of instrument panel.
3. Remove instrument panel cover end cap and attaching screw from each end of cover.

Remove door window control switches and disconnect wiring.

4. Remove nuts and bolts securing cover assembly to instrument panel, and remove cover assembly.
5. To install, reverse removal procedure.