SECTION 13-E
REAR END

CONTENTS OF SECTION 13-E

13-15 BACK WINDOW

a. Back Window Reveal Moldings (4019 Style)

The back window reveal moldings are equipped with an "L" shaped retaining flange which is secured in an "L" shaped cavity in the back window rubber channel. To remove the reveal moldings it is necessary to first remove the back window and rubber channel assembly.

b. Back Window Reveal Moldings (4119 Style)

The back window reveal moldings are secured by pronged retainer clips which require the use of reveal molding removal tool (J-7898-01) to disengage moldings from the clips. See Figure 13-69.

To disengage moldings from clips, insert one end of tool between back window rubber channel and reveal molding, engage point of tool

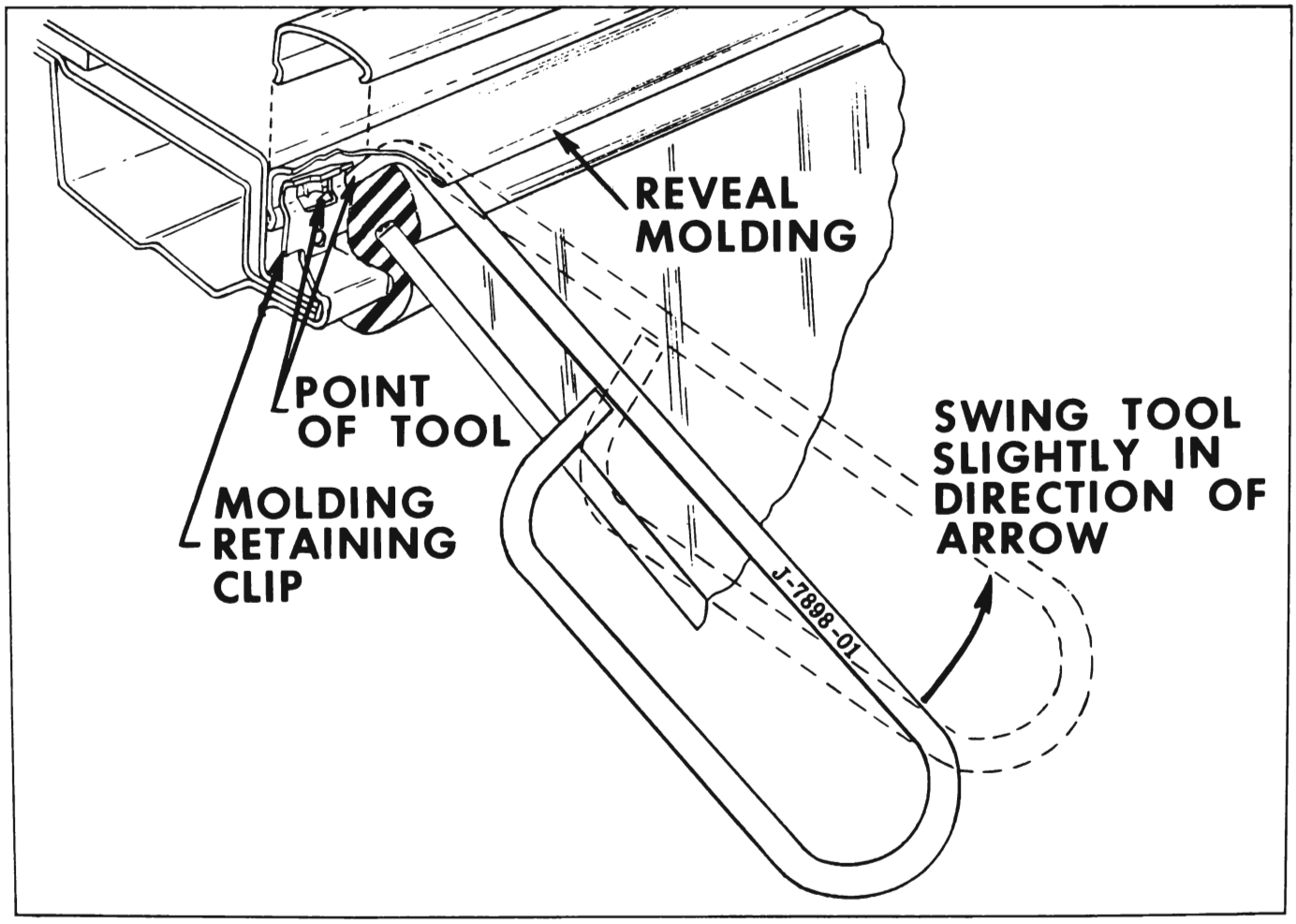

Figure 13-69—Back Window Reveal Molding Removal Tool

between retaining clip and molding, then swing tool slightly (see Figure 13-69) to disengage prongs of clip from molding and lift molding free of clip. Repeat this operation at each of the molding retaining clips.

Locations of back window reveal molding retaining clips are shown in Figure 13-71.

To install back window reveal moldings, position molding so that flange of molding is between clips and body metal, then push molding at retaining clip locations until molding is properly secured by retaining clips.

c. Removal of Back Window Assembly (4019 and 4119 Styles)

1. Place protective coverings over rear seat cushion and back assemblies, over parcel shelf trim and over painted surfaces around back window.

2. Remove back window garnish moldings.

3. Remove back window reveal moldings.

4. From inside of body using a hooked or other suitable tool, carefully break seal between lip of rubber channel and pinchweld flange completely around perimeter of glass.

5. Carefully push back window and rubber channel assembly outward until lip of rubber channel is disengaged from pinchweld and retaining flange.

6. With aid of a helper, lift complete assembly from body opening and place on a protected surface. On styles with reveal moldings secured in the rubber channel, remove moldings from rubber channel.

d. Installation of Back Window Assembly (4019 and 4119 Styles)

IMPORTANT: Care should be exercised to make certain glass does not strike body metal during installation as edge chips can cause tempered plate glass to shatter. DO NOT attempt to grind glass.

1. Clean original sealer from back window body opening and rubber channel and install rubber channel to glass.

IMPORTANT: Before installing back window glass, check the back window body opening and pinchweld flange for any irregularities and correct, where necessary. Mark center of back window and body opening.

2. On 4119 styles, check installation of reveal molding clips at pinchweld and retaining flange and remove any damaged clips.

3. Prior to installing any reveal molding clips apply a continuous ribbon of medium-bodied sealer (approximately 1/4 inch thick) along the pinchweld and retaining flange, as indicated at "1" in Section "A-A", Figure 13-71, completely around opening.

Replace any damaged or missing reveal molding clips.

4. Apply a second continuous ribbon of medium-bodied sealer (approximately 1/4 inch thick) along the outer wall of the back window opening, as indicated at "2" in Section "A-A", Figure 13-71, completely around opening.

5. Install rubber channel to glass and insert a strong cord into pinchweld cavity of rubber channel; tie ends together at bottom center and tape ends to inside surface of glass. On styles where the reveal moldings are secured by the rubber channel, install moldings to rubber channel and, where necessary, tie moldings to glass and channel assembly. Make sure moldings are positioned properly as moldings are difficult to reposition after installation of back window assembly.

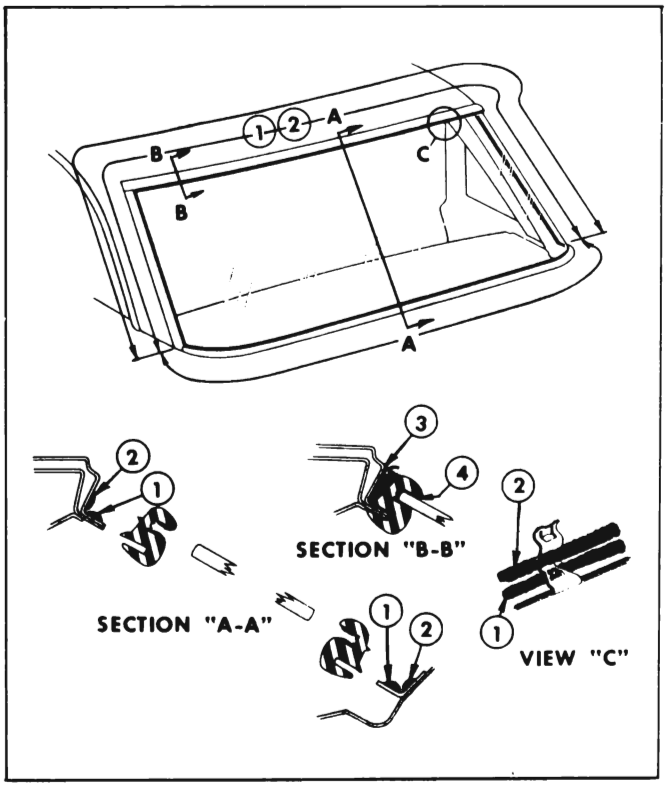

Figure 13-71—Back Window Sealing

6. With aid of a helper, position back window and rubber channel assembly into body opening. While helper is applying hand pressure to outside surface of glass, carefully pull ends of cord across bottom, up sides and across top of window opening to seat lip of rubber channel over pinchweld and retaining flange completely around back window.

7. On 4119 styles apply sufficient medium-bodied sealer to fill the void between rubber channel and body opening up sides and across top of window, as indicated at "3" in Section "B-B", Figure 13-71.

8. Using a pressure type applicator apply an approved weatherstrip adhesive between outer lip of rubber channel and glass, as indicated at "4" in Section "B-B", Figure 13-71, completely around rubber channel.

9. On 4119 styles, install back window reveal moldings.

10. Clean off excess sealer and cement; install previously removed parts and remove protective coverings.

13-16 REAR COMPARTMENT

a. Removal and Installation of Rear Compartment Lid

1. Open lid and place protective covering along edges of rear compartment opening to prevent damage to painted surfaces.

2. Scribe location of hinge straps on lid inner panel.

3. With aid of a helper to hold lid, remove lid attaching bolts "A" and "B" (see Figure 13-72) at both hinge straps and remove rear compartment lid.

4. To install rear compartment lid, first, as an anti-squeak precaution, apply a coat of heavy-bodied sealer on the surface of the compartment lid hinge which contacts the rear compartment lid; then, reverse removal procedure.

b. Rear Compartment Lid Adjustments

1. To adjust compartment lid forward or rearward or from side to side in body opening, loosen hinge strap attaching bolts "A" and "B" (see Figure 13-72) on both sides of lid, adjust lid as required, then tighten bolts.

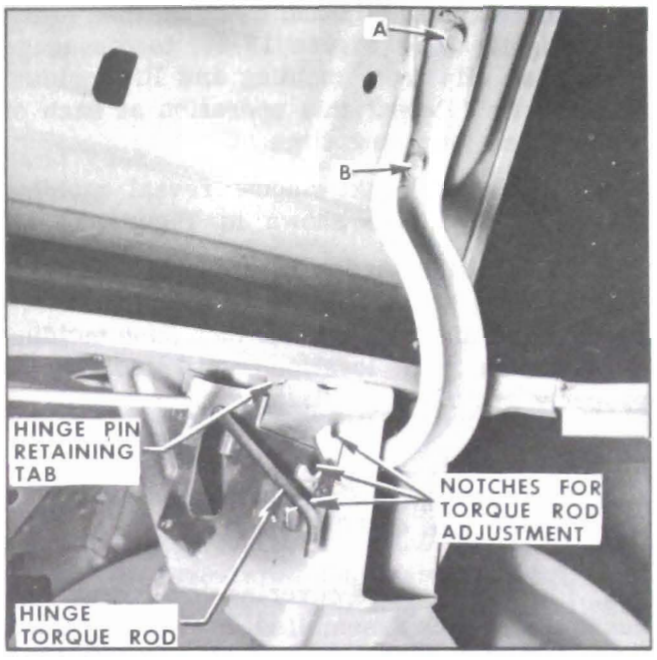

Figure 13-72—Rear Compartment Lid Removal

2. To adjust front of compartment lid up or down, install shims between lid inner panel and hinge strap as follows:

(a) To raise front edge of lid, place shim(s) between lid inner panel and forward portion of one or both hinge straps at "A" (see Figure 13-72.)

(b) To lower front edge of lid, place shim(s) between lid inner panel and rear portion of one or both hinge straps at "B" (see Figure 13-72).

3. To check lid lock bolt engagement with lock striker, see "Rear Compartment Lid Lock Striker Engagement Check".

c. Rear Compartment Lid Torque Rod Adjustments

The amount of effort required to open and close the rear compartment lid is determined by the position of the torque rods in the notches on the inboard face of the hinge boxes. See Figure 13-72. If the torque rod is located in the lowest notch the effort required to open the lid is the greatest and the amount of effort required to close the lid is the least. If the torque rod is located in the top notch, the amount of effort required to open the lid is the least and the amount of effort to close the lid is the greatest.

The torque rods can be disengaged and engaged in the notches by using a suitable length of pipe over the end of the torque rod.

NOTE: It is not necessary to adjust the left and right torque rods at the same time or to the same final position (notch).

d. Removal of Rear Compartment Lid Hinge

1. Open lid and place protective covering along edges of rear compartment opening to prevent damage to painted surfaces. Provide support for lid on side where hinge is to be removed.

2. Remove rear compartment side trim foundation at hinge area.

3. Scribe location of hinge strap on lid inner panel and remove bolts "A" and "B" (see Figure 13-72) securing hinge strap to lid.

4. With a suitable length of pipe, disengage torque rod from notched retainer on inboard face of opposite hinge box.

5. Bend up hinge pin retaining tab on inboard face of hinge box (see Figure 13-72) and remove hinge pin, then remove hinge from box.

e. Installation of Rear Compartment Lid Hinge

1. Position hinge in box and install hinge pin. Bend over retaining tab to secure hinge pin. See Figure 13-72.

2. Install "U" shaped end of torque rod to hinge box making certain outer end of rod is engaged in hole in outboard face of hinge box.

3. Engage torque rod in notch of hinge strap lever; then, engage other end of rod to correct retaining notch on inboard face of opposite hinge box.

4. As an anti-squeak precaution, apply a coat of heavy-bodied sealer to surface of hinge strap which contacts the rear compartment lid.

5. Position hinge strap within scribe marks on lid inner panel and install attaching bolts.

6. Check alignment of rear compartment lid and make any necessary adjustments.

7. Replace all previously removed trim.

f. Removal and Installation of Rear Compartment Lid Lock Cylinder

1. Carefully bend lock cylinder retainer tab (see Figure 13-73) forward to allow disengagement of retainer.

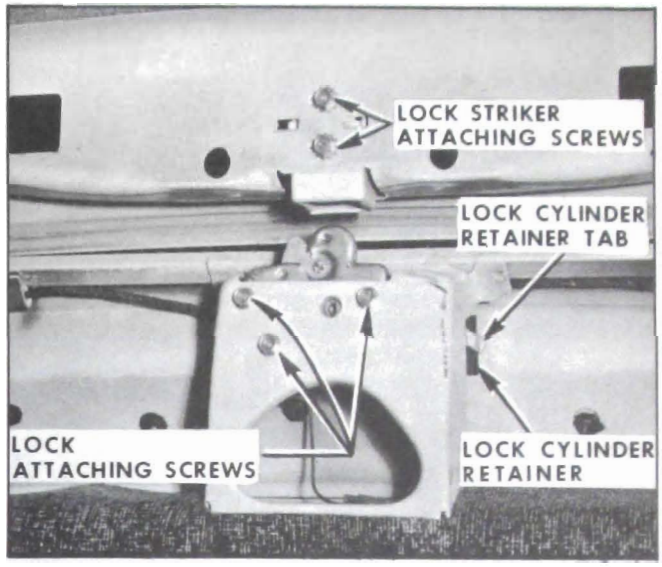

Figure 13-73—Rear Compartment Lid Lock Cylinder Removal

2. Using a suitable hooked tool, pull lock cylinder retainer (see Figure 13-73) until retainer disengages from lock cylinder.

3. Remove lock cylinder and gasket from rear end panel.

4. To install rear compartment lid lock cylinder, replace gasket, if necessary, and reverse removal procedure.

g. Removal and Installation of Rear Compartment Lid Lock

1. Remove rear compartment lid lock cylinder.

2. Remove three (3) rear compartment lock attaching screws (see Figure 13-73) and remove lock.

3. To install rear compartment lid lock, reverse removal procedure.

h. Removal and Installation of Rear Compartment Lid Lock Striker

1. Mark location of striker on compartment lid panel; then, remove striker attaching bolts and remove striker and retaining plates. See Figure 13-73.

2. To install striker, position striker and retaining plate within scribe marks and install attaching bolts and washers.

Figure 13-74—Rear Compartment Lid Lock Striker Engagement Check

i. Rear Compartment Lid Lock Striker Engagement Check

IMPORTANT: Make sure rear compartment lid is properly positioned in body opening before performing striker engagement check.

To check for proper engagement of rear compartment lid striker with lock bolt, use the following procedure:

1. Place a small amount of modeling clay or body caulking compound on frame of lock at both sides of the lock bolt. See Figure 13-74. Close lid with moderate force.

2. Open lid and check amount of engagement of striker with lock frame, as indicated by the compression of the clay. The striker impressions in the clay should be even on both sides of the lock frame, as indicated in Figure 13-74. Where required, loosen striker attaching screws; adjust striker sideways or up or down to obtain proper engagement, then tighten screws.

j. Removal of Rear Compartment Lid Weatherstrip

1. Separate "butt" ends of weatherstrip at rear of compartment opening.

2. Using a flat-bladed tool, carefully disengage weatherstrip from its cemented foundation in gutter around entire perimeter of rear compartment and remove weatherstrip.

k. Installation of Rear Compartment Lid Weatherstrip

1. Clean out gutter around entire rear compartment opening to provide a clean cementing surface.

2. Apply (brush) a continuous coat of weatherstrip cement (neoprene type) along the lower and outer surfaces of the rear compartment gutter, as indicated at "1" in Figure 13-75, around full length of gutter.

3. Using a flat-bladed tool, such as a putty knife or headlining inserting tool, insert weatherstrip into gutter starting with one end of weatherstrip at rear center of gutter and working completely around gutter.

4. If installing new weatherstrip, trim end of weatherstrip to form a butt joint at rear center of opening. Brush weatherstrip adhesive (black) on both ends of weatherstrip and secure ends together to form a butt joint.

5. Using a pressure type applicator, apply weatherstrip cement (neoprene type) between weatherstrip and outer surface of gutter as indicated at "2" in Figure 13-75, completely around gutter to assure a watertight seal.

6. Roll or press weatherstrip to aid in obtaining a good cement bond and proper retention of the weatherstrip. Allow sufficient time for cement to set before closing rear compartment lid.

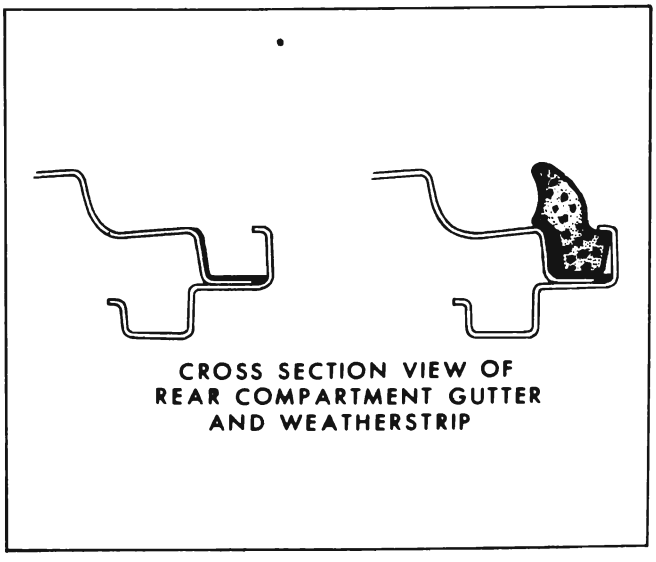

Figure 13-75—Rear Compartment Gutter and Weatherstrip

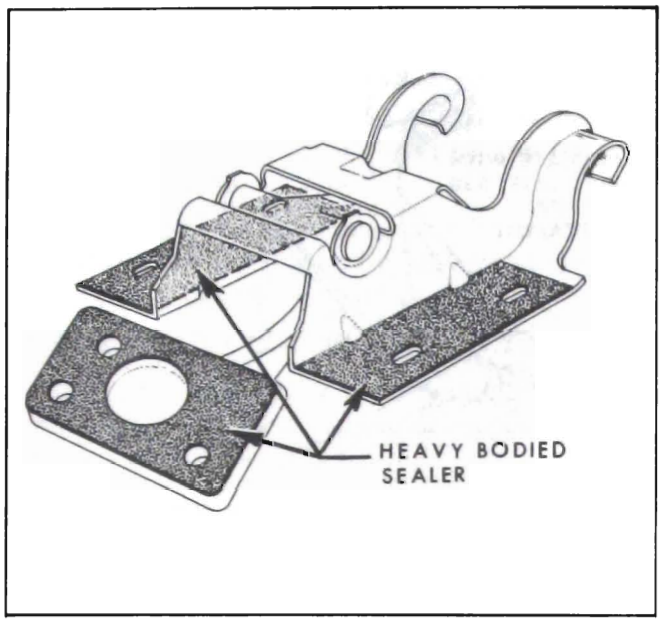

Figure 13-76—Back Door Hinge - Anti-squeak

13-17 BACK DOOR

a. Removal and Installation of Back Door

1. Open back door and mark location of hinge strap on back door inner panel to facilitate installation in same location.

2. With the aid of a helper to hold back door, remove hinge-to-back door attaching bolts (see Figure 13-77) at both hinges and remove back door assembly.

3. To install back door assembly, first, as an anti-squeak precaution, apply a coat of heavy-bodied sealer to attaching surfaces of both hinges (see Figure 13-76); then, reverse removal procedure. Align back door with previously made hinge marks.

4. Where required, adjust back door as described under "Back Door Adjustments".

b. Back Door Adjustments

1. To adjust the back door assembly up or down or sideways in the back body opening, remove back door lock striker and loosen both right and left hinge-to-back door attaching bolts. Shift door to desired position on hinges; then, tighten hinge attaching bolts and install back door lock striker.

2. To adjust the upper portion of the back door in or out proceed as follows:

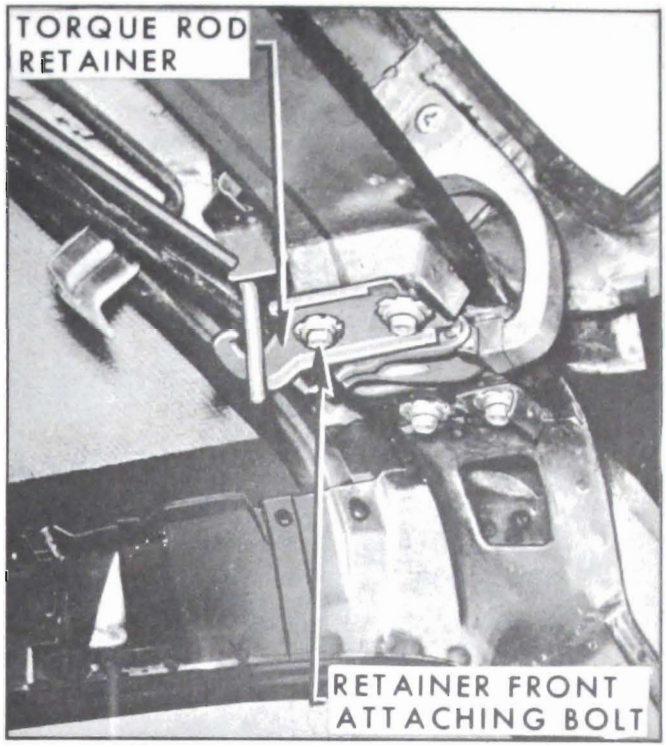

Figure 13-77—Back Door Hinge and Torque Rod

(a) Remove back door opening upper finishing panels.

(b) Mark position of torque rod retainers (see Figure 13-77) at both right and left hinges to facilitate reposition retainers in same fore and aft position.

(c) Using a suitable length of pipe over end of torque rod, release tension of torque rod from retainer. While tension of torque rod is released from retainer, loosen retainer attaching bolts (see Figure 13-77); then, release retainer. Loosen the two remaining hinge attaching bolts. Perform this operation at both right and left hinges.

(d) Shift the hinges and back door assembly to desired position; then, tighten hinge attaching bolts making sure torque rod retainers are aligned with previously made marks. install back door opening upper finishing panels.

3. To adjust the lower portion of the door in or out, see "Back Door Lock Striker Adjustments".

c. Removal of Back Door Hinge Torque Rod and Back Door Hinge Assembly

1. Raise back door and remove both right and left back body opening upper finishing panels.

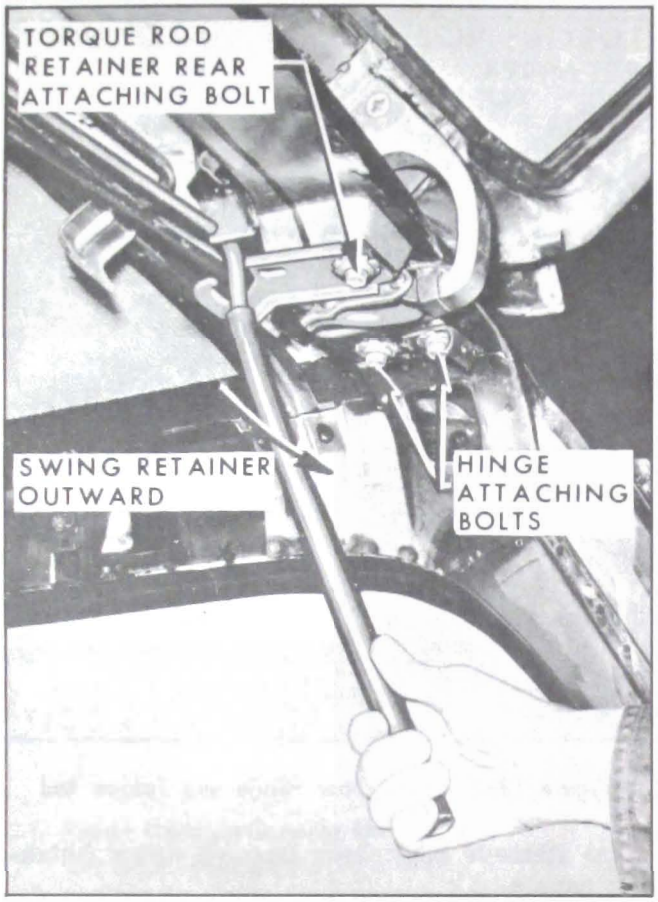

Figure 13-78—Back Door Hinge and Torque Rod Removal

2. Prop the back door in the open position on the side from which hinge is being removed.

NOTE: If removing both hinges, remove the back door assembly from the hinges.

Mark position of torque rod retainer to facilities installation in same fore and aft position.

4. Using a suitable length of pipe over end of torque rod, release tension of torque rod from retainer. While tension of torque rod is released from retainer, remove retainer front attaching bolt and loosen (no more than two (2) turns) retainer rear attaching bolt; then, swing front end of retainer towards outside of body and release torque rod. See Figure 13-78.

5. If removing left torque rod, remove clip securing torque rod to body upper panel. Loosen anti-rattle clip attached to both torque rods; then, disengage torque rod from hinge and remove torque rod.

6. Remove hinge to back door attaching bolts; then, remove hinge to body attaching bolts and remove torque rod retainer and hinge from body.

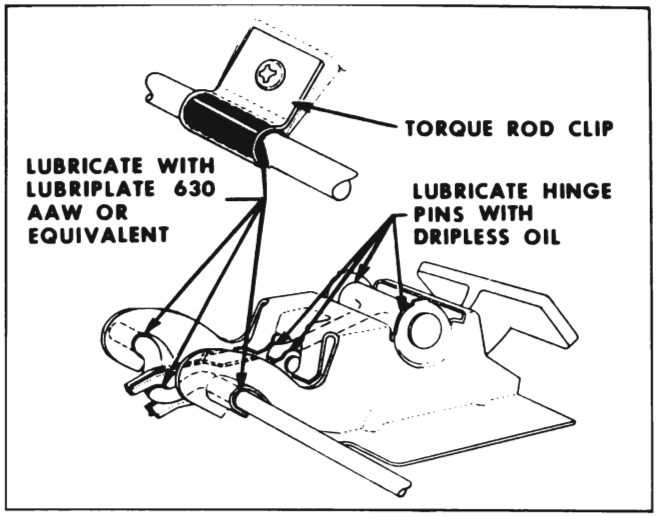

Figure 13-79—Back Door Hinge and Torque Rod Lubrication

d. Installation of Back Door Hinge Torque Rod and Back Door Hinge Assembly

1. Lubricate both right and left hinge pivot pins with an approved dripless oil. See Figure 13-79.

2. As an anti-squeak precaution, apply a coat of heavy-bodied sealer to surfaces of hinge which contact body and back door. See Figure 13-76.

3. To install back door hinge assembly, reverse steps 1 through 7 of the "Removal" procedure.

NOTE: When installing hinge torque rod, make certain torque rod is properly engaged with hinge, as shown in Figure 13-79, and align torque rod retainer with previously made marks.

4. After installation of torque rods, lubricate torque rod frictional surfaces on both right and left hinges and frictional surfaces of both torque rod clips with Lubriplate 630 AAW or equivalent. See Figure 13-79.

5. Where required, adjust back door as described under "Back Door Adjustments".

e. Back Door Hinge Torque Rod Tension Adjustment

The amount of effort required to open and close the back door is determined by the forward and rearward position of the right and left torque rod retainers. If both torque rod retainers are adjusted to the full forward position the amount of effort to raise the lid is the

greatest and the amount of effort to close the lid is the least. If both torque retainers are adjusted to the full rearward position the amount of effort to raise the lid is the least and the amount of effort to close the lid is the greatest.

NOTE: It is not necessary to adjust both right and left torque rod retainers at the same time or to the same final position.

Adjust torque rod retainers as follows:

1. Raise back door and remove both right and left back body opening upper finishing panels.

2. Securely prop back door in the open position.

3. Mark location of retainer to facilitate adjustment from original position.

4. Using a suitable length of pipe over end of torque rod, remove tension of torque rod from retainer. While tension of torque rod is removed from retainer, loosen retainer attaching bolts (see Figure 13-77), adjust retainer forward or rearward, as required; then, tighten retainer attaching bolts.

5. Lubricate both right and left hinge pivot pins with an approved dripless oil. See Figure 13-79. Lubricate torque rod frictional surfaces on both hinges and frictional surfaces of both torque rod clips with Lubriplate 630 AAW or equivalent. See Figure 13-79.

6. Install back body opening upper finishing panels.

f. Removal and Installation of Back Door Trim Assembly

1. Apply masking tape to back door inner panel adjacent to trim at retaining nail locations.

2. Using a clean rubber mallet, tap around edge of trim assembly to free trim nails in nail slots.

3. Insert a flat-bladed tool between inner panel and trim assembly at each retaining nail location; carefully disengage retaining nails from retaining slots in inner panel and remove trim from door.

4. To install, reverse removal procedure. Broken retaining nails should be replaced with repair tabs which are available as service parts.

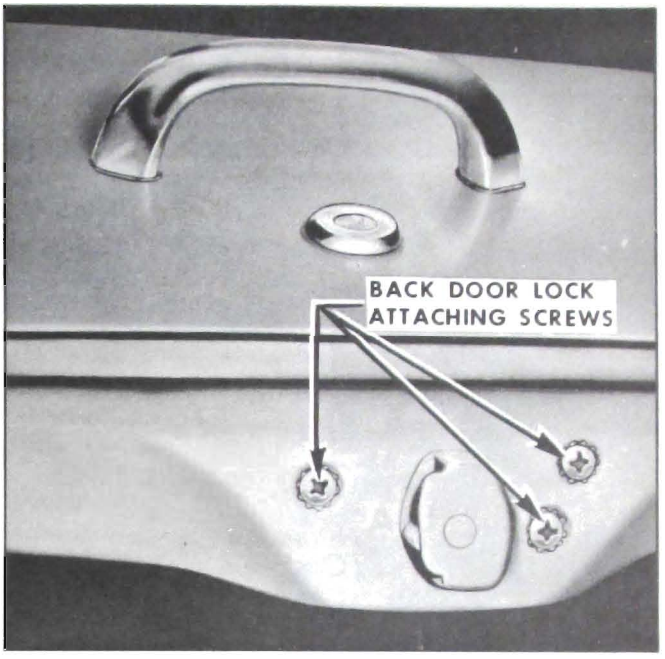

Figure 13-81 — Back Door Lock Assembly Removal

g. Removal and Installation of Back Door Lock Assembly

1. Remove door trim assembly as described under "Back Door Trim Assembly".

2. Remove three back door lock attaching screws from face of lock pillar (see Figure 13-81) and remove lock through hole in door inner panel.

3. To install, reverse removal procedure. Check operation of lock before installing inside trim.

h. Back Door Lock Striker Adjustments

1. To adjust the back door lock striker forward or rearward to obtain in or out adjustment of the lower portion of the door, or to adjust the striker sideways to obtain proper alignment with the back door lock rotary bolt, loosen striker attaching screws, shift striker to desired position and tighten screws.

2. Lock striker emergency spacer requirements:

(a) The back door assembly should be properly aligned in the body opening before checking spacer requirements.

(b) To determine if lock striker emergency spacers are required, apply modeling clay or body caulking compound in the lock striker

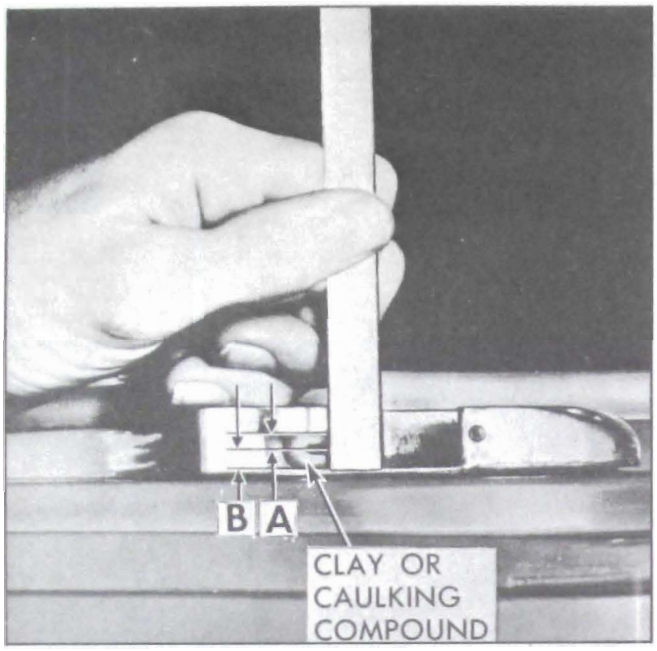

Figure 13-82 — Striker Engagement Check

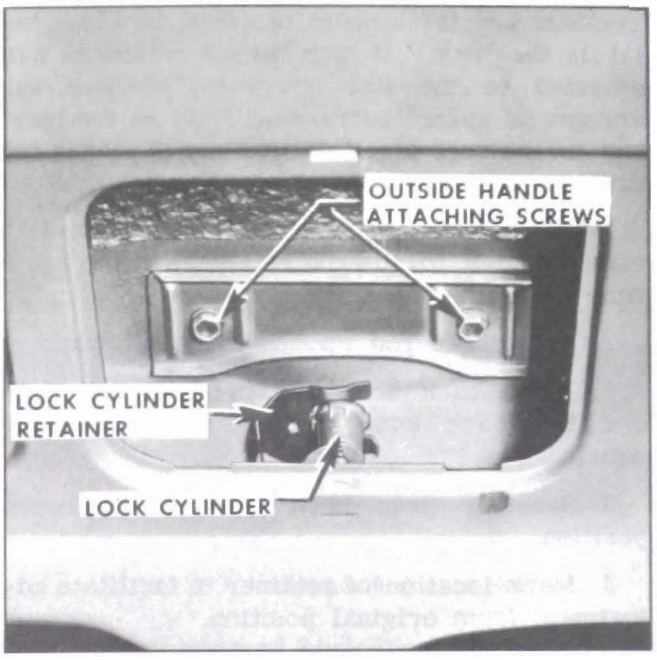

Figure 13-83 — Back Door Outside Handle Removal

notch where the lock extension engages; then, close the back door to form a measurable impression in the clay or caulking compound. See Figure 13-82.

When dimension "A" from inside face of striker teeth is less than 3/16", install one or more 1/16" emergency spacers (see Parts Book) to bring dimension "A" to the specified 3/16". If two or three spacers are required, install 1/8" longer striker attaching screws. If three or four spacers are required, install 1/4" longer striker attaching screws.

NOTE: Dimension "B" from center of lock extension to inside face of striker should never be less than 1/8".

i. Removal and Installation of Back Door Outside Handle

1. Remove back door trim assembly as described under "Back Door Trim Assembly".

2. Remove two (2) screws securing outside handle (see Figure 13-83) and remove handle and gaskets.

3. To install back door outside handle, first cement handle gaskets to handle with weatherstrip adhesive (black) and apply a coat of adhesive to surface of gaskets which contacts door outer panel. See Figure 13-83. Then, reverse removal procedure.

j. Removal and Installation of Back Door Lock Cylinder Assembly

1. Remove back door trim assembly as described under "Back Door Trim Assembly".

2. Using a hooked tool or other suitable tool, through access holes in door inner panel, pry out lock cylinder retaining clip (see Figure 13-83) sufficiently to allow removal of lock cylinder and gasket from outer panel.

3. To install lock cylinder assembly, reverse removal procedure. Apply weatherstrip adhesive (black) on both contacting surfaces of lock cylinder gasket. Check operation of lock cylinder and lock before installing inside trim.

k. Removal of Back Door Weatherstrip

1. With a flat-bladed tool, carefully break cement bond securing butt ends of weatherstrip at bottom center of door and cement bond securing weatherstrip to door for a distance of approximately two (2) inches on both sides of butt joint.

2. Starting at bottom center of door, insert tip of weatherstrip clip inserting tool (J-5757) or other suitable tool at the first clip and carefully snap clip from retaining hole. Then, using a flat-bladed tool, carefully break cement bond securing weatherstrip in corner of rabbet to

the next clip. Perform the alternate operations of snapping clip out of retaining hole, and breaking cement bond to the next clip completely around door; then, remove weatherstrip.

l. Installation of Back Door Weatherstrip

1. Clean off old cement from back door to provide a clean cementing surface.

2. Check weatherstrip clips for proper contour and reform clips, where required, using clip reforming tool J-5984. See Figure 13-84.

3. For a distance of two (2) inches on both sides of the butt joint location (bottom center of door), apply weatherstrip adhesive (neoprene type) to the door panel surface contacted by weatherstrip (see "1" in View "A", Figure 13-85).

4. Apply a bead of weatherstrip adhesive (black) in the corner of the rabbet, as shown at "2" in Sections "B-B" and "C-C" in Figure 13-85, completely around door.

5. For a distance of two (2) inches on both ends of weatherstrip, apply a coat of weatherstrip adhesive (neoprene type) to the weatherstrip surface which contacts the door panel as indicated at "3" in View "A", Figure 13-85.

6. Starting with end of weatherstrip at bottom center of door, install weatherstrip clips into retaining holes completely around door using weatherstrip clip inserting tool J-5757.

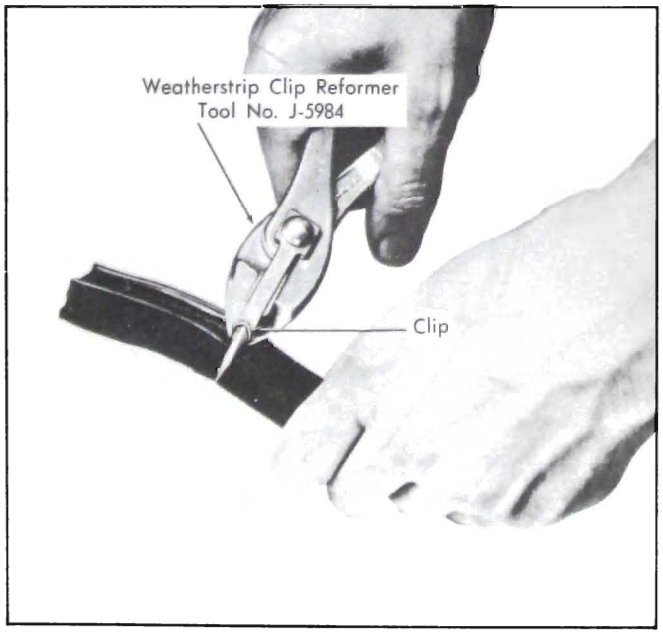

Figure 13-84 —-Weatherstrip Clip Reforming Tool

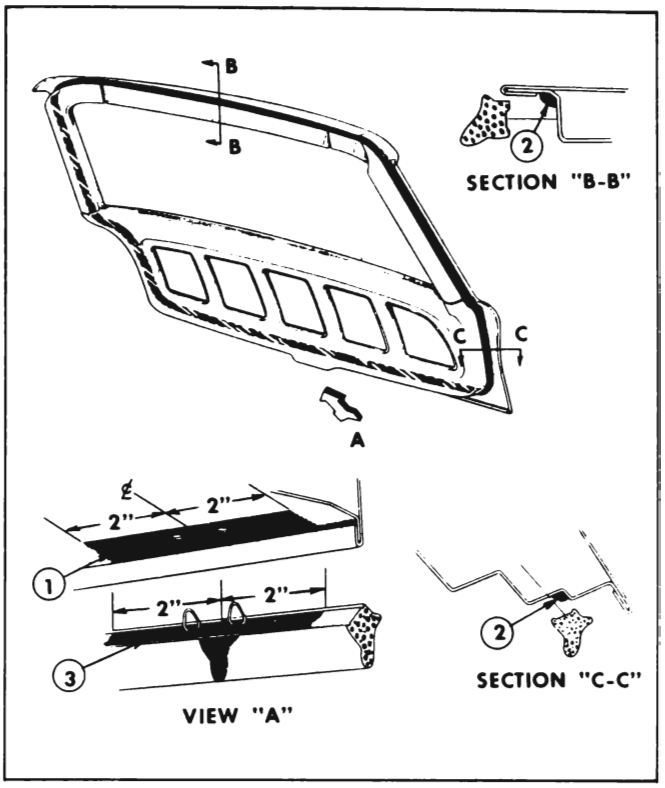

Figure 13-85 — Back Door Weatherstrip Installation

Press or roll weatherstrip completely around door to assure a good cement bond.

7. Apply weatherstrip adhesive (neoprene type) to butt ends of weatherstrip and cement ends together to form an even butt joint. See View "A", Figure 13-85.

m. Removal of Back Door Window

1. From inside body, carefully break seal between inside lip of rubber channel and pinchweld flange completely around rubber channel.

2. With aid of a helper to support glass on outside of body, carefully push lower edge of glass and rubber channel assembly outward until lip of rubber channel is disengaged from pinchweld flange; then, disengage remainder of rubber channel from pinchweld flange and remove rubber channel and glass from back door window opening.

3. Remove rubber channel and, where present, reveal moldings from glass.

n. Installation of Back Door Window

IMPORTANT: Care should be exercised to make certain glass does not strike body metal

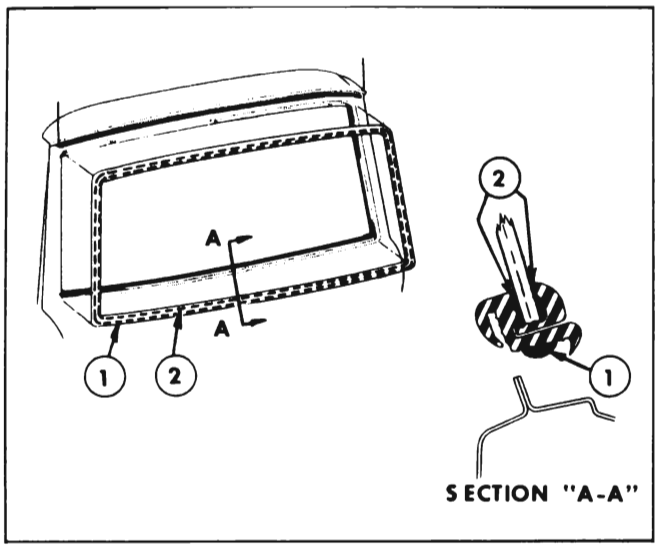

Figure 13-86 — Back Window Installation

during installation as edge chips can cause tempered plate glass to shatter. DO NOT attempt to grind glass.

1. Clean off original sealer from rubber channel and back door window opening.

2. Check back door window opening pinchweld flange for any irregularities and correct, where required.

3. Install rubber channel to glass. Install reveal moldings in rubber channel. The side reveal moldings overlap the lower reveal molding.

4. Apply a continuous ribbon of medium-bodied sealer (approximately 1/4 inch thick) to base of rubber channel, as indicated at "1" in Section "A-A", Figure 13-86, completely around rubber channel.

5. Insert a strong cord into pinchweld cavity of rubber channel so that ends of cord are at bottom center of glass. Tape ends of cord to inside surface of glass.

6. With aid of a helper, position glass and rubber channel assembly into door window opening. While a helper is applying hand pressure to outside surface of glass, use a hooked tool to seat lip of rubber channel over pinchweld flange at sides of window opening; then, pull cords in rubber channel to seat lip over flange across bottom and across top of window opening.

7. Using a pressure type applicator, apply weatherstrip adhesive (black) between rubber channel and glass on inside and outside of glass, as indicated at "2" in Figure 13-86, completely around glass and rubber channel. Application of adhesive should be continuous with no skips.

8. Clean off all excess sealer and adhesive.