

TAILGATE—LUGGAGE RACK

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TAILGATE

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CJ-5

General

The hinged tailgate is held in the closed, up position with hooks which pass through slotted brackets on the tailgate and on the body. The hinges are designed in such a way that the tailgate can be removed easily. The body half of the hinge is slotted and the tailgate half has a matching flat surface. However, to prevent accidental dropping of the tailgate, the flat surface on the left hinge pin is not in line with the flat surface on the right hinge pin.

Removal

- (1) Rotate tailgate approximately 45 degrees from full up position and disengage right hinge.
- (2) Rotate tailgate an additional few degrees and then disengage left hinge.

Installation

- (1) Hold tailgate at approximately 45 degrees from full up position and engage right hinge.
- (2) Rotate tailgate an additional few degrees and then engage left hinge.

Adjustment

- (1) Loosen hinge attaching bolts and slide body half of hinge up, down, or to the sides as needed.
- (2) Tighten bolts.

CJ-7

General

The new tailgate is hinged at the bottom and held in the closed up position with dual latches. The tailgate is supported in the open position by two steel cables.

Removal

- (1) Remove screws and wave washers attaching support cables to tailgate.
- (2) With tailgate closed, remove screws attaching hinges to tailgate using Torx Bit Tool J-25359-02. Disengage latches and remove tailgate.

Installation

- (1) Position and align tailgate in body opening and engage latches.
- (2) Install hinge attaching screws using Torx Bit Tool J-25359-02.
- (3) Position support cables on tailgate and install attaching screws and wave washers.

Adjustment

- (1) Loosen hinge-to-body attaching screws and align tailgate to body opening.
- (2) Tighten hinge attaching screws.

Hinge Replacement

- (1) Remove all hinge attaching screws using Torx Bit Tool J-25359-02 and remove hinge.
- (2) Clean replacement hinge in a suitable solvent and blow dry with compressed air.
- (3) Paint hinge to match body with Jeep exterior spray paint.
- (4) Lubricate hinge with Lubriplate or equivalent.
- (5) Position hinge on body and tailgate and install attaching screws using Torx Bit Tool J-25359-02.

Rubber Sealer

The tailgate rubber sealer is made of molded latex foam with a smooth rubber skin on the outside.

Plastic retainers are used to retain the rubber sealer to the tailgate. Barbs on the retainers depress when inserted in the holes and spread when fully inserted.

Maintenance of Rubber Sealers

Cold weather may cause the rubber sealer to harden and lose resiliency. This may cause the tailgate to loosen in its opening, resulting in noise. When servicing, use a dampened cloth to clean the rubber sealer. Clean dirt from all points where the rubber sealer contacts the body. Apply AMC Silicone Lubricant or equivalent to the rubber sealer.

CAUTION: Do not use graphite, brake fluid, or wax on the rubber sealer.

Replacement

Replacement rubber sealers are coated with powder to prevent stickiness in storage. Remove all powder with a dampened cloth before installation.

(1) Carefully remove the rubber sealer from the tailgate using needle-nose pliers to remove plastic retainers from the tailgate panel holes.

(2) Remove dust and dirt from the rubber sealer, tailgate, and body.

(3) Install the lower corner of the rubber sealer to the tailgate first.

(4) Press plastic retainers into the tailgate panel holes.

CHEROKEE-WAGONEER

General

The tailgate is a horizontally hinged unit equipped with a manual or electrically operated window regulator. An access hole in the inner panel is for installing and servicing the window regulator and latch assemblies (fig. 16-1).

The torque rods serve to counterbalance and assist in opening as well as closing the tailgate.

Tailgate hinges are accessible at the body side of the hinge for easier adjustment or replacement.

Tailgate weatherseal is body-mounted for better wind and water-leak resistance.

Adjustment

Tailgate adjustment is similar to side door adjustments; proper alignment is obtained by changing the position of the hinges relative to the body and tailgate. On models equipped with carpeting, remove the carpeting to gain access to the hinge cover plates. Cherokee and Wagoner vehicles have hinge cover plates in the body floor and tailgate for easy access to hinge screws (fig. 16-1). The dovetail assemblies, which stabilize the tailgate and function as an overslam bumper, are adjusted by bringing the dovetail studs into alignment with the dovetail cap. The dovetail studs are located on the body pillars near the striker plates, and are adjustable. The dovetail caps are located on the tailgate and are nonadjustable.

Hinges

(1) Remove dovetail studs from the body pillars.

(2) If equipped with carpeting, remove the carpeting to gain access to the hinge cover plates.

(3) Remove the two body hinge cover plates.

(4) Loosen screws attaching hinges to the body and adjust the floating plates until the lower portion of the tailgate closes flush or underflush with the body sheet metal to ensure proper compression of the weatherseal. Tighten hinge screws to 15 to 20 foot-pounds torque.

(5) Install the body hinge cover plates and carpeting, if equipped.

(6) Install and adjust the dovetail studs.

Dovetail Assemblies

(1) Loosen the dovetail stud locking nuts.

(2) Close the tailgate into the locks.

(3) Adjust the dovetail studs into the dovetail caps and tighten the stud locking nuts.

(4) Check the tailgate for proper alignment and adjustment. Be sure the tailgate latches properly with the strikers and the dovetails align into the caps.

Striker Assemblies

(1) Loosen the dovetail stud locking nuts.

(2) The latch teeth should be aligned and nest in the center of the strikers.

(3) Add or remove the striker shim to obtain this adjustment.

(4) Adjust the strikers so the latches enter the strikers freely and the tailgate provides a flush fit with the adjacent panels.

(5) Perform the dovetail assemblies adjustment.

Hinge Replacement

(1) Open the tailgate and, if the vehicle is equipped with cargo area floor covering, remove the mouldings and place the floor covering aside.

(2) Remove the access hole cover plates from the body and the tailgate.

(3) Raise the tailgate to the vertical position to unload the counterbalance torque rods, and pry the rods from the clip welded to the body half of the hinge.

(4) Mark the outline of the existing hinge(s) on the body and the tailgate for reference with a wax pencil.

(5) Support the tailgate in the horizontal position, remove the screws attaching the hinge(s), and remove the hinge(s).

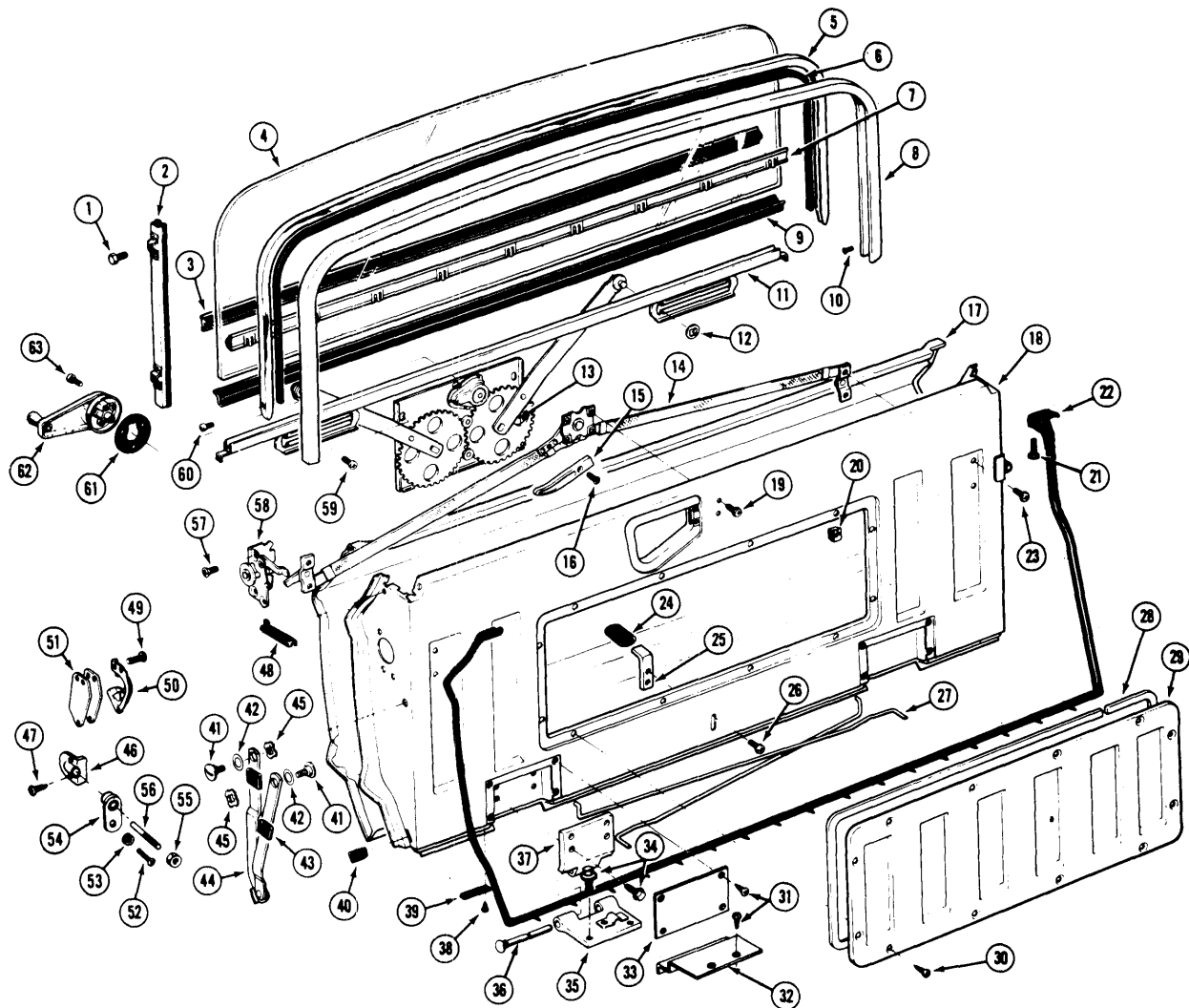
(6) Clean the replacement hinges in a suitable solvent and blow dry with compressed air.

CAUTION: Do not immerse the hinge in solvent.

(7) Color coat the hinges to match the body.

(8) Lubricate the hinges with a suitable lubricant.

(9) Install the replacement hinge(s), being careful to align with the wax pencil marks. Tighten the screws to 15 to 20 foot-pounds torque.



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|----------------------|---------------------|-------------------------|-----------------------|
| 1. Hexagon Screw | 17. Outer Panel | 33. Cover Plate | 49. Machine Screw |
| 2. Lower Channel | 18. Tailgate | 34. Hinge Screw | 50. Tailgate Striker |
| 3. Weatherstrip | 19. Machine Screw | 35. Body Half Hinge | 51. Striker Shim |
| 4. Tailgate Glass | 20. Speed Nut | 36. Hinge Pin | 52. Machine Screw |
| 5. Run Channel | 21. Plastic Rivet | 37. Tailgate Half Hinge | 53. Lock Washer |
| 6. Upper Cushion | 22. Tailgate Sealer | 38. Plastic Rivet | 54. Tailgate Dovetail |
| 7. Weatherstrip | 23. Machine Screw | 39. Dust Seal | 55. Hexagon Nut |
| 8. Glass Frame | 24. Bracket Bumper | 40. Arm Bumper | 56. Dovetail Stud |
| 9. Channel Sealer | 25. Stop Bracket | 41. Shoulder Bolt | 57. Machine Screw |
| 10. Tapping Screw | 26. Machine Screw | 42. Spring Washer | 58. Tailgate Latch |
| 11. Bottom Channel | 27. Torque Rod | 43. Arm Sleeve | 59. Machine Screw |
| 12. Stud Retainer | 28. Cover Gasket | 44. Support Arm | 60. Machine Screw |
| 13. Window Regulator | 29. Access Cover | 45. Lock Washer | 61. Handle Gasket |
| 14. Remote Control | 30. Tapping Screw | 46. Dovetail Cap | 62. Regulator Handle |
| 15. Release Handle | 31. Tapping Screw | 47. Tapping Screw | 63. Machine Screw |
| 16. Oval Head Screw | 32. Cover Plate | 48. End Cap | |

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Fig. 16-1 Tailgate—Manual Regulator—Cherokee-Wagoneer

(10) Raise tailgate to vertical position and install counterbalance torque rods in welded clips on body half of hinges.

(11) Check tailgate alignment and adjust if necessary.

(12) Install access hole cover plates on body and tailgate and, if equipped, replace cargo area floor covering and mouldings.

Tailgate and Torque Rod

Removal

(1) Remove carpeting from tailgate, if equipped.

(2) Remove tailgate access cover plate and disconnect wiring.

(3) Remove carpeting (if equipped) to gain access to hinge access hole cover plates.

- (4) Remove hinge access hole cover plates on body.
- (5) Close tailgate and drive out hinge pins.
- (6) With tailgate in a vertical position, counter-balance torque rods are unloaded and can be removed from the clip which is attached to the body half of the hinge.
- (7) Remove screws holding lower end of support arms to tailgate.

Installation

- (1) Attach support arms to tailgate and raise tailgate to a vertical position in tailgate opening.
- (2) Insert curved end of one torque rod in hole at bottom edge of tailgate and right-angle tapered end of rod in clip which is attached to body half of the hinge. Attach other torque rod in same manner.
- (3) Install hinge pins with head of pin on inboardside of hinge.
- (4) Install hinge access hole cover plates on body.
- (5) Install carpeting, if equipped.
- (6) Connect wiring and replace tailgate access cover plate and carpeting, if equipped.
- (7) Adjust tailgate.

Tailgate Lock Remote Control

Replacement

- (1) Lower tailgate and move tailgate glass to the extreme out position so remote control assembly will be accessible. Tailgate glass should be supported to relieve stress on its lower edge.
- (2) Remove carpeting from tailgate, if equipped.
- (3) Remove access cover and tailgate latch handle from tailgate.
- (4) Remove screws attaching center of remote control assembly.
- (5) Remove screws from each end of remote control rods.
- (6) Release lower edge of vinyl water shield on vehicle, if equipped.
- (7) Pull rods down toward bottom of tailgate to obtain side clearance.
- (8) Move remote control assembly toward side of tailgate and free remote control from latch opening in tailgate. Remove remote control assembly through access cover opening.

Tailgate Latch Replacement

- (1) Lower tailgate and move tailgate glass to the extreme out position so remote control assembly will be accessible. Tailgate glass should be supported to relieve stress on its lower edge.
- (2) Remove carpeting from tailgate, if equipped.
- (3) Remove access cover and remove screws attaching ends of remote control rods to tailgate.
- (4) Remove screws attaching latch assemblies to ends of gate and remove latch assemblies.

Tailgate Glass Replacement

Tailgate glass is operated by a double-arm window regulator which is connected directly to an outside window regulator handle. The complete window assembly will slide up and out of the run channels when the pins at the ends of the regulator arms are withdrawn from the slot in the lifter channel.

- (1) Remove access cover on inside tailgate panel and pry off retainers with a screwdriver.

NOTE: *Retainers can be damaged when removed and their condition should be checked. When installing retainers, the tabs must be firmly locked in groove of pin. If difficulty is experienced when installing retainers, they were probably damaged during removal and should be replaced.*

- (2) When installing tailgate glass, check glass assembly and regulator separately to make sure that both operate freely before connecting the two together.
- (3) Should difficulty be experienced in raising the window from its lowered position, replace existing glass stop bumper.
- (4) Push new bumper on bracket as far as possible.
- (5) Position free end to lay up against outside panel.

Tailgate Window Regulator Replacement

- (1) Remove access cover.
- (2) Remove tailgate window.
- (3) Remove regulator by sliding nameplate cover aside and rotating handle until hole in handle is aligned with screws that attach handle assembly to the tailgate. Remove attaching screws and handle.
- (4) Remove screws that attach regulator assembly to tailgate.
- (5) Remove regulator assembly through access cover opening.
- (6) After installation and before access cover is replaced, raise and lower window to check that window fits properly. The window regulator can be adjusted by loosening attaching screws and moving regulator assembly in slotted screw holes until proper window adjustment is obtained.
- (7) Adjust handle to be in vertical position when window is full up.

Tailgate Glass Adjustment

The tailgate glass, when closed, must seat fully into the upper glass channel to obtain a positive seal at the horizontal weatherstrip located at the top of the tailgate. If tailgate does not seat properly when closed, check the upper glass channel to be certain it is bolted in the body opening, also check alignment of the tailgate glass run channel.

- (1) If adjustment is necessary, loosen two cap-screws on either side panel of the tailgate (fig. 16-2).

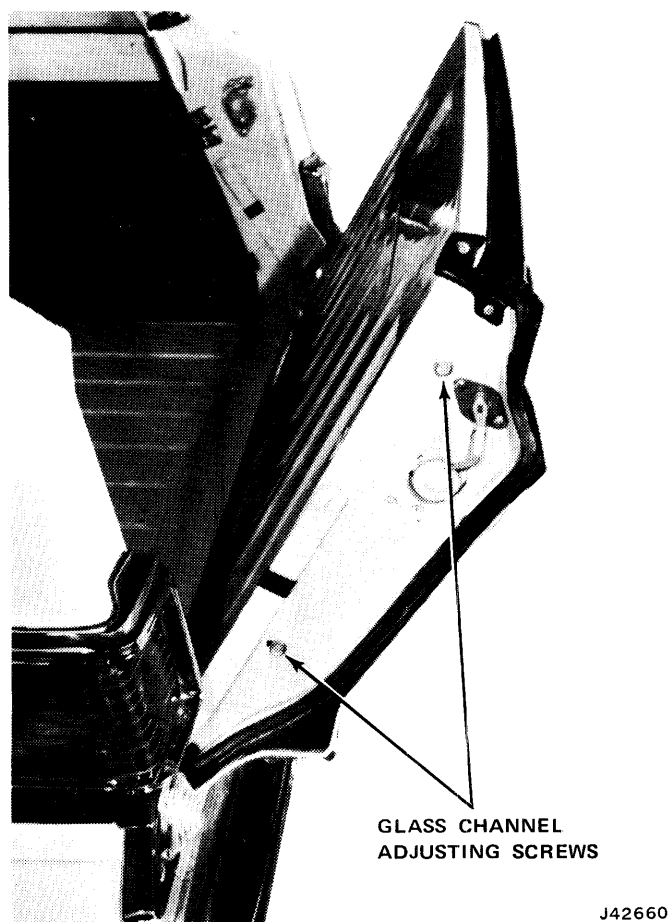


Fig. 16-2 Glass Channel Adjustment

(2) Raise and lower glass several times with tailgate in the closed position. This will align the glass with the channel.

(3) Open tailgate slightly and tighten adjusting screws with tailgate in vertical position.

TRUCK TAILGATE

The tailgate on the pickup box is hinged at both sides. It is necessary to lower the tailgate for access to the cross-recessed countersunk attaching screws.

The tailgate on the pickup box is held in the up or closed position with spring-loaded latches at the top of the gate. A paddle handle, located in the center of the tailgate operates the latches at each side through connecting rods.

Pin type hinges are located on the sides of the pickup box. The hinge pin brackets are attached with cross-recessed countersunk attaching screws and cage nuts for easier adjusting.

The left side hinge pin is a solid round bar. The right side pin is similar but with two flat surfaces which correspond with a notch and the two flat surfaces allow the tailgate to be removed quickly from the tailgate opening.

To remove, open and lower the tailgate. Remove the side supports and then raise the tailgate to about 45 degrees from horizontal. Disengage the right side hinge and move the tailgate to the right to disengage the left side hinge.

ELECTRICAL TAILGATE WINDOW

The ignition switch must be in either the accessory or ignition position to energize the window lift circuit.

The rear window control switch is located left of the steering column on the instrument panel. The switch is spring-loaded and will return to the neutral position.

The tailgate glass also can be lowered or raised, by inserting the ignition key in the tailgate lock. Turn the key to the left to lower and to the right to raise the tailgate glass.

After the glass has been lowered, the tailgate can be opened by lifting up on the tailgate latch release handle on the inside of the tailgate at the center.

NOTE: The tailgate safety switch is in series with the brown wire which feeds the up circuit of the tailgate motor. It prevents up operation when the tailgate is open.

The proper assembly of all moveable parts is important for satisfactory operation of the tailgate window.

The glass assembly must be in alignment in the tailgate and glass slide channels to operate with free movement. The window regulator teeth in all gears, the coil springs, and the bottom channel slide sections must be lubricated with Lubriplate or equivalent to ensure proper operation of the glass when it is raised or lowered.

Safety Switch

A safety switch, mounted in the upper left side of the tailgate, prevents raising the glass when the tailgate is in the open position to avoid possible damage to glass channels and regulator.

Circuit Breakers

The electric tailgate regulator motor and wiring harness are protected by two 30-ampere circuit breakers located in the fuse block.

Instrument Panel Switch

The rear window switch is mounted at the lower left side of the instrument panel. For removal, remove knob by depressing spring clip. Remove attaching screws. Disconnect wiring and remove switch.

Wiring Harness

The tailgate circuit is a two-section wire harness: the body section, which is routed along the left side of the vehicle, and the section in the tailgate. The two harnesses are connected at the rear body crossmember.

Remove the tailgate access cover to gain access to the wiring harness.

Tailgate Key Lock

The tailgate key lock assembly is held in place by two special screws located under the key hole cover. Remove the screws using Torx Bit Tool J-25359-02.

Tailgate Window Switch

The tailgate window switch is mounted to the bottom side of the left regulator mounting support. It is fastened with two screws which are visible and accessible after the window regulator is removed.

Diagnosis Guide

Three colors are used for coding the wires in the tailgate electric window regulator circuit.

Refer to Cherokee and Wagoneer Wiring Diagram.

To test the tailgate wiring, switches, and motor, a 12-volt test lamp can be used at the three-way connector located under the body at rear of the crossmember. Separate the connector 1/16-inch or just far enough to insert a thin test probe without disrupting the circuit.

Connect one probe of the test lamp to ground and the other to the individual tan, brown, or red wires.

The red is hot at all times to supply the tailgate key-operated switch.

When the ignition switch is in either the off or on position and both tailgate switches are in the neutral position, there is no current flow in the tan or brown wires.

When either switch is operated, current flows in both the tan and brown wires.

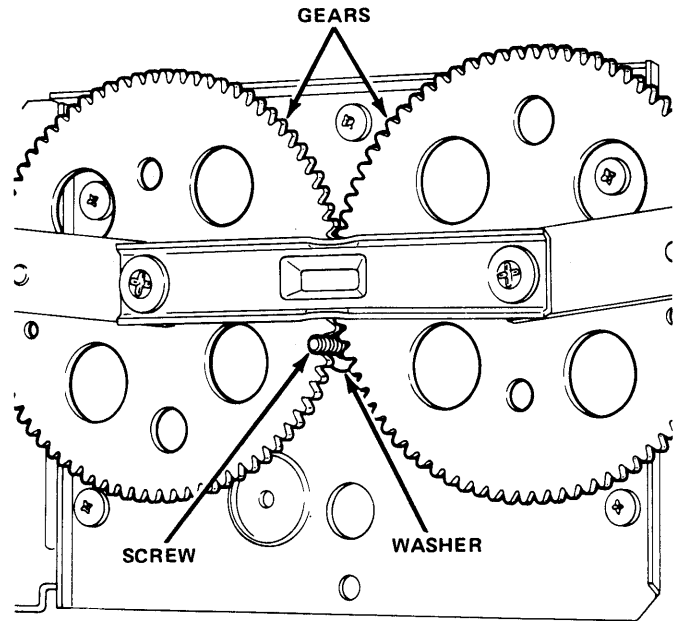
The tailgate safety switch must be closed to perform the above test. If the switch is open, no current flow will be indicated in the brown wire when the tailgate switch is operated.

Motor—Removal

- (1) Remove carpet from tailgate, if equipped.
- (2) Remove tailgate access cover plate.
- (3) If tailgate window is blocking access to motor attaching screws, proceed as follows:
 - (a) Remove retainers attaching regulator arms to channel.
 - (b) Disengage regulator arm pins from channel and raise glass.
 - (c) Carefully support glass in the raised position.

WARNING: To prevent possible personal injury, the spring tension **MUST** be retained before motor and drive unit are removed from the regulator.

- (4) Position a 1/4-inch by 1 inch screw, with a flat washer, between sector gear teeth. If necessary, use a hammer and punch to tap screw down between meshing gear teeth as shown in figure 16-3.



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Fig. 16-3 Locking Electric Operated Window Regulator Gears

- (5) Remove motor attaching screws and slide motor from under regulator.
- (6) Disconnect wiring harness and remove motor.

Motor—Installation

- (1) Connect wiring harness and position motor under regulator.
- (2) Install motor attaching screws.
- (3) Remove screw and washers from between sector gear teeth. Tap screw out using hammer and punch, if necessary.
- (4) Check motor operation.
- (5) If glass was disconnected from regulator arms, position channel over regulator arm pins and install replacement retainers.
- (6) Install access cover plate.
- (7) Install carpet, if equipped.

Regulator—Removal

- (1) Remove carpet from tailgate, if equipped.
- (2) Remove tailgate access cover plate.
- (3) Remove retainers attaching regulator arms to channel.
- (4) Disengage regulator arm pins from channel and raise glass.
- (5) Carefully support glass in the raised position.

WARNING: To prevent possible personal injury, the spring tension **MUST** be retained before motor and drive unit are removed from the regulator.

- (6) Position a 1/4-inch by 1-inch screw, with a flat

washer, between the sector gear teeth. If necessary use a hammer and punch to tap screw down between meshing gear teeth as shown in figure 16-3.

(7) Remove motor attaching screws and slide motor from under regulator.

(8) If regulator attaching screws are accessible, remove regulator attaching screws and regulator. If sector gears are covering two attaching screws, proceed as follows:

(a) Grasp regulator arm as far outboard as access hole will allow.

(b) Push down on arm until holes in sector gears align with two attaching screws.

(c) While holding regulator in this position, wedge screw between meshing teeth, using other hand.

(d) Remove regulator attaching screws and regulator.

WARNING: *To prevent possible personal injury, never discard a loaded regulator.*

(9) Clamp one regulator arm in a vice, just inboard of the regulator arm pin.

(10) Push down on remaining arm and remove screw from between sector teeth.

(11) Slowly allow spring tension to bring regulator arms together.

(12) Remove regulator from vice.

(13) Grasp one regulator arm in each hand, cross regulator arms and slowly allow spring tension to cross regulator arms.

(14) Release spring tension by using a large screwdriver to snap the spring from under the tension bracket.

Regulator—Installation

(1) Position spring on regulator and snap over tension bracket using large screwdriver.

(2) Grasp one regulator arm in each hand and pull until arms are no longer crossed.

(3) Allow regulator arms to come together and rest against each other.

(4) Clamp on regulator arm in a vice.

(5) Pull other regulator arm down until regulator arms are horizontal and install 1/4-inch screw between meshing sector gear teeth.

(6) Position regulator in tailgate and install attaching screws.

(7) Connect wiring harness and position motor under regulator and install attaching screws.

(8) Remove screw from between sector gear teeth. Tap screw out using hammer and punch, if necessary.

(9) Check motor operation.

(10) Position channel over regulator arm pins and install replacement retainer.

(11) Install access cover plate.

(12) Install carpet, if equipped.

LUGGAGE RACK

GENERAL

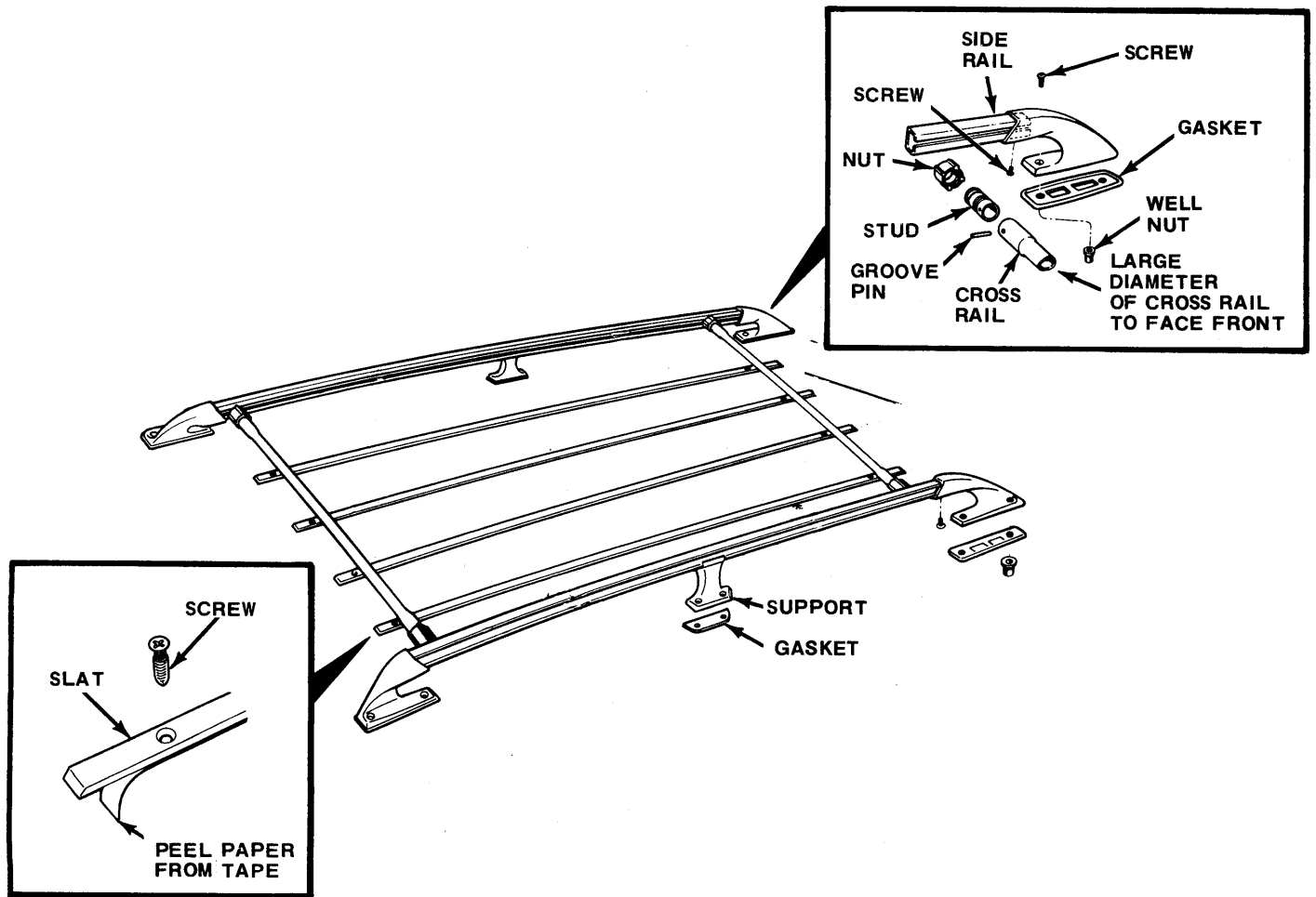
The luggage rack (fig. 16-4) consists of side rails, adjustable end rails, end and center supports, and roof mounted slats. A spanner wrench, located in the vehicle glove box, facilitates securing the adjustable end rails.

The ends and center supports are attached to the roof top with well nuts and machine screws. The roof slats

are attached with sheet metal screws and pressure sensitive tape.

Luggage rack components can be replaced without removing the entire assembly from vehicle.

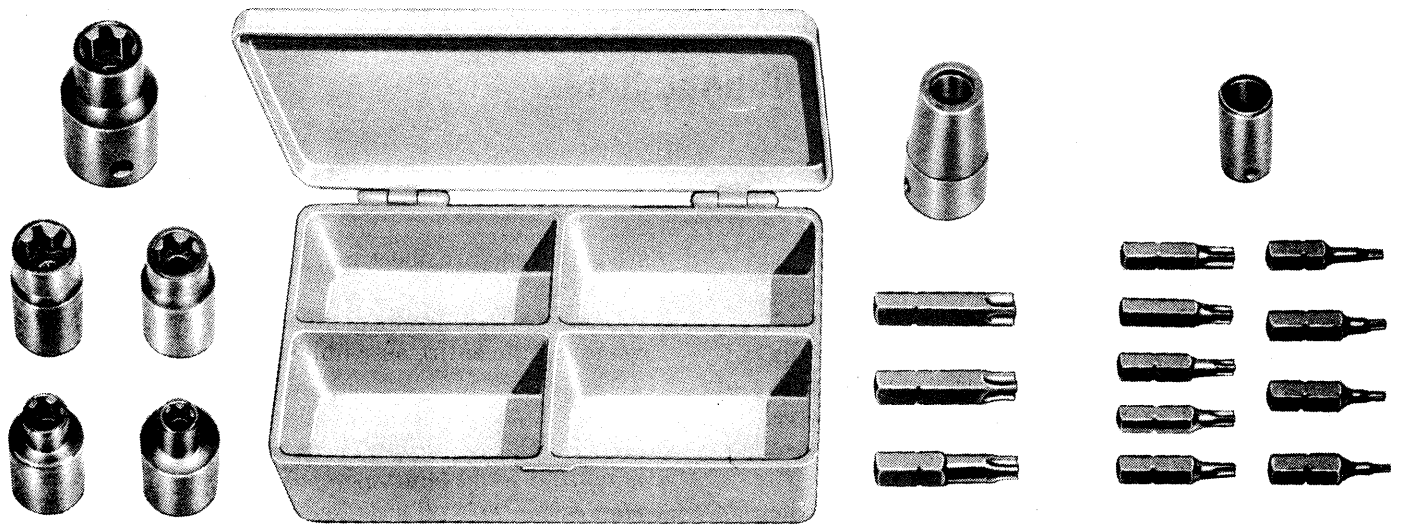
NOTE: *Do not apply extreme pressure to support mounting screws during removal or installation as this may cause the well nuts to drop between the roof panel and headliner.*



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Fig. 16-4 Luggage Rack

Special Tools



J-25359-02 TORX BIT AND SOCKET SET

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