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Figure 5-144. Parking Brake Group

- (12) Remove retainer clip (9).
 - (13) Disengage front control assembly (8) from parking brake lever.
 - (14) Remove front control assembly (8) and remove grommet (10).
 - (15) Remove screw and lockwasher (2) and flat washer (3).
 - (16) Remove release handle (6).
 - (17) Remove hex nuts (4), flat washers (5) and brake assembly (1).
 - (18) Remove pedal pad (7).
- b. Cleaning and inspection. Refer to paragraphs 5-4.3 and 5-4.4 for general cleaning and inspection procedures.
- c. Repair and replacement. Replace all worn or damaged parts.
- d. Assembly and installation. Assembly is accomplished during installation. Install parking brake group as follows:
- (1) Install pedal pad (7).
 - (2) Install brake assembly (1) using hex nuts (4) and washers (5).
 - (3) Install release handle.
 - (4) Install screw and lockwasher (2) and flat washer (3).
 - (5) Install front control assembly (8) through floorpan and install grommet (10) on cable and in floorpan.

- (6) Install bolts connecting front conduit and cable assembly to brake assembly (1).
- (7) Install pin through handle (6) and front control assembly (8) and install retainer clip (9).
- (8) Install clip (11).
- (9) Install cable bracket (12) and install front control assembly (8) through it.
- (10) Install retainer clip (9).
- (11) Install capscrews (20) and clip (11).
- (12) Install cable bracket (21) on left and right rear cable assemblies (18) and (19).
- (13) Refer to paragraph 5-5.7.9 and install left and right rear cable assemblies (18) and (19) on rear drum brakes. Reassemble brakes.
- (14) Install retainer clips (17).
- (15) Install left and right rear brake cable assemblies (18) and (19) in rear cable equalizer (15) using cotter pins (16).
- (16) Install front control assembly (8) in rear cable equalizer (15) and install flat washer (14) and hex nuts (13).
- (17) Adjust parking brake by performing steps (18) through (22).
- (18) Make sure parking brakes are released and hex nuts (13) are loosened.
- (19) Tighten hex nuts (13) until slight drag is produced at wheels.
- (20) Loosen hex nuts (13) until wheels rotate freely and brake drag is eliminated.
- (21) Tighten hex nuts (13) securely.
- (22) Check parking brake operation.

5-5.7.9 *Rear Brake and Cylinder Group*. Refer to figure 5-145, and perform the following steps to overhaul the rear brake and cylinder group.

NOTE

Left and right rear brakes and cylinders are identical and are removed and disassembled in a similar manner.

- a. Removal and disassembly. Disassembly is accomplished during removal. Remove rear brake and cylinder group as follows:
 - (1) Loosen hex nuts at parking brake equalizer to relieve cable tension.
 - (2) Refer to paragraph 5-5.7.2 and remove rear wheels.

- (3) Refer to paragraph 5-5.6.5 and remove rear brake drums.
 - (4) Remove springs (2), spring (3), springs (5) and pins (31).
 - (5) Remove pin (4), spring (6), lever (7) and cable guide (8).
 - (6) Remove hex nut (30), anchor bolt (9), washer (10), lever (11), bushing (12), plate (13) and cable assembly (14).
 - (7) Remove brake shoe set (1) and nut and screw (15).
 - (8) Remove hex nuts (28), lockwashers (29), screws (17) and clip (16) from plate assembly (33).
 - (9) Remove two capscrews (19) and cylinder assembly (18).
 - (10) Remove two connecting links (26), cup and boot kit (25), push rod (23) and bleeder screw (27) from housing (24).
 - (11) Disassemble boot (20), cup (22), and piston (21).
 - (12) Remove adjustment hole cover (32).
- b. Cleaning and inspection. Refer to paragraphs 5-4.3 and 5-4.4 for general cleaning and inspection procedures. In addition, perform the following steps:
 - (1) Inspect brake lining for wear and compare to limit specified in table 6-1.
 - (2) Inspect lining for wear. Lining must be replaced if wear is uneven across width of lining. Check drum for distortion and runout if wear is uneven.
 - (3) Inspect lining for cracks, charred surface or broken rivets. Lining must be replaced if these conditions exist or if it is contaminated with brake fluid, axle lubricant or similar contaminants.
 - (4) Inspect all springs for breaking, distortion, discoloration (overheated) or lack of tension.
 - (5) Inspect levers (7) and (11) for wear and defects such as bending or breaking.
 - (6) Inspect adjusting nut and screw (15) for excessive wear. The screw must rotate freely.
 - (7) Inspect cables for wearing, fraying, kinking or seizure. Check for missing or loose cable end retainer buttons.
 - (8) Inspect parking brake lever (11) for distortion and worn pivot pin for proper cable retention.

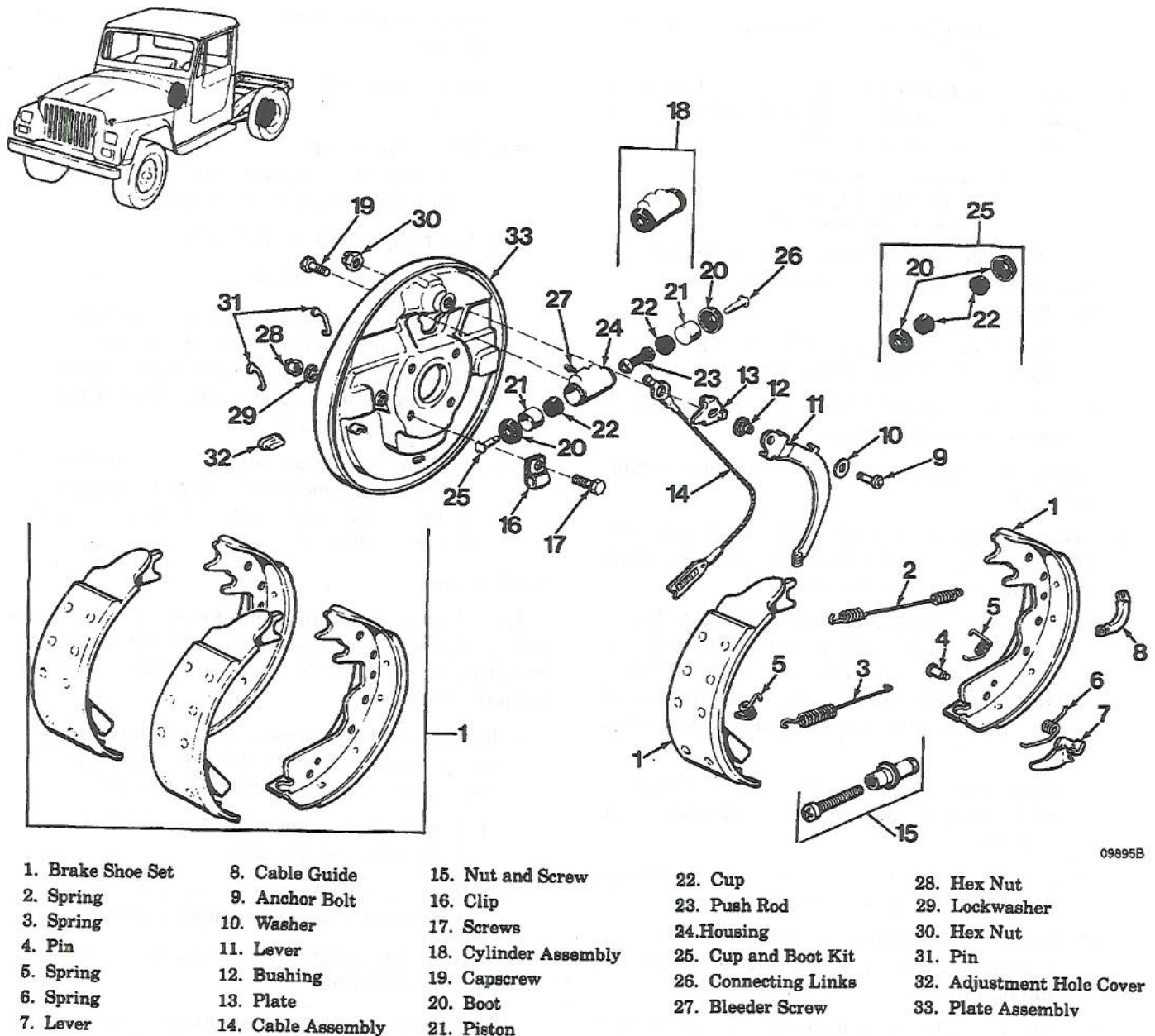


Figure 5-145. Rear Brake and Cylinder Group

- (9) Inspect wheel cylinders for evidence of leakage. Pull back dust boots (20) and check for leakage past cups (22).
- (10) Inspect bleeder screw (27) and hydraulic line connection for evidence of leakage or damaged threads.
- (11) Check brake lines for swelling, distortion, kinks or cracks.

WARNING

Remove brake lining residue with a cloth dampened with P-D-680 Type II solvent. Do not use compressed air. Consult local bioengineer for evaluation/review of this operation.

P-D-680 Type II is toxic to the skin, eyes and respiratory tract. Avoid skin and eye contact. Good general ventilation is normally adequate.

- (12) Clean plate (33) with cloth dampened with P-D-680 Type II.
- (13) Inspect anchor bolt (9) for wear or looseness and polish with crocus cloth. Polish ledges of plate (33) with emery cloth.



Do not attempt to reduce deep ridges or grooves by grinding or improper shoe-to-drum contact may result.

- (14) Check ledges of plate (33) for deep grooves or ridges which might restrict movement of shoe (1).
- (15) Refer to paragraph 5-5.6.5 for cleaning and inspection of brake drums.

c. Repair and replacement. Replace all worn or damaged parts.

d. Assembly and installation. Installation is accomplished during assembly. Install the rear brake drum and cylinder group as follows:

- (1) Apply thin film of grease (item 25, table 5-1) to ledges of plate assembly (33), anchor bolt (9), nut and screw (15), surface where lever (7) contacts brake shoe set (1), pin (4), and portion of lever (11) that contacts secondary shoe of brake shoe set (1).
- (2) Install lever (7) cable assembly (14), spring (6), cable guide (8) and pin (4) on secondary shoe of brake shoe set (1).
- (3) Install brake shoe set (1) with lever (7), springs (5) and (6) and pins (4) and (31).
- (4) Install cable assembly (14) with anchor bolt (9), washer (10), lever (11), brushing (12), plate (13) and hex nut (30).
- (5) Use kit (25) to assemble cup (22), piston (21) and boot (20).
- (6) Assemble cylinder assembly (18) with push rod (23), two cups (22), piston (21) and boots (23); install in housing (24).
- (7) Install bleeder screw in housing (24).
- (8) Install cylinder assembly (18) with capscrews (19).
- (9) Install springs (2) and (3) and nut and screw (15).
- (10) Install clip (16), screws (17), lockwasher (29) and hex nuts (28).
- (11) Install adjustment hole cover (32).
- (12) Refer to paragraph 4-4.5 and perform initial brake adjustment.

- (13) Refer to paragraph 5-5.6.5 and install brake drums.
- (14) Refer to paragraph 5-5.7.2 and install rear wheels.
- (15) Refer to paragraph 5-5.7.8 and tighten hex nuts at parking brake equalizer to restore cable tension; lower vehicle to the ground.
- (16) Test brake operation before moving vehicle.

NOTE

Do not use forward range of automatic transmission to halt reverse movement of vehicle. Doing so will prevent automatic brake adjusters from operating properly and result in unsatisfactory pedal height.

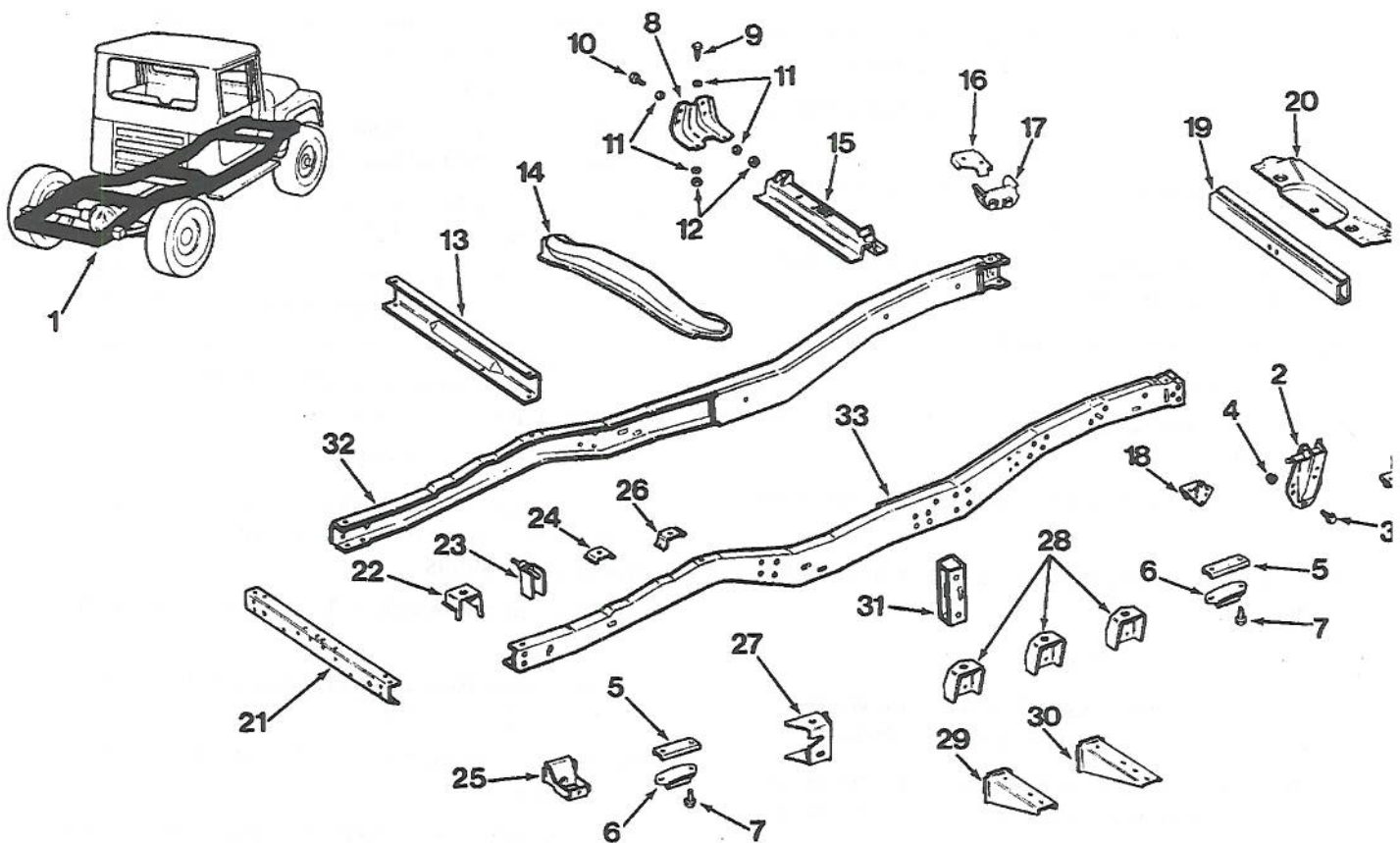
- (17) Perform final brake adjustment by making 10 to 15 forward and reverse stops to equalize adjustment and until satisfactory brake pedal height is obtained.

5-5.8 Frame.

5-5.8.1 *Frame Assembly and Frame Components Group.* Refer to figure 5-146, and perform the following steps to overhaul the frame assembly and frame components group.

- a. Removal and disassembly. Disassembly is accomplished during removal. Remove frame assembly and frame components group as follows:

- (1) Refer to paragraphs 5-5.5.4 and 5-5.6.3 and remove front and rear axles.
- (2) Remove machine screws (7), axle bumper assemblies (6) and axle bumper spacers (5).
- (3) Refer to paragraph 5-5.5.1 and remove front shock absorber.
- (4) Support transmission and transfer case.
- (5) Remove machine screws (3), hex nuts (4) and left front shock absorber bracket assembly (2). Remove right shock absorber bracket assembly in the same manner.
- (6) Remove transmission support crossmember assembly (15) using cutting torch.
- (7) Remove machine screws (9) and (10), flat washers (11) and hex nuts (12).
- (8) Remove transmission crossmember support bracket (8).
- (9) Refer to paragraph 5-5.4.4 and remove steering gear components.



- | | | |
|-------------------------|--------------------------|--------------------------------|
| 1. Frame Assembly | 12. Hex Nut | 23. Bracket and Shaft Assembly |
| 2. Bracket Assembly | 13. Crossmember Assembly | 24. Support Bracket |
| 3. Machine Screw | 14. Crossmember Assembly | 25. Bracket |
| 4. Hex Nut | 15. Crossmember Assembly | 26. Support Bracket |
| 5. Spacer | 16. Gusset | 27. Pivot Bracket |
| 6. Axle Bumper Assembly | 17. Bracket | 28. Bracket |
| 7. Machine Screw | 18. Bracket | 29. Mounting Bracket |
| 8. Support Bracket | 19. Crossmember Assembly | 30. Mounting Bracket |
| 9. Machine Screw | 20. Mounting Panel | 31. Reinforcement Assembly |
| 10. Machine Screw | 21. Crossmember Assembly | 32. Left Side Member |
| 11. Flat Washer | 22. Mounting Bracket | 33. Right Crossmember |

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Figure 5-146. Frame Assembly and Frame Components Group

- (10) Remove left steering gear mounting bracket (17) and steering gear mounting bracket gussets (16). Remove right steering gear mounting bracket in the same manner.
- (11) Refer to paragraph 5-5.6.1 and remove rear shock absorbers.
- (12) Remove rear shock absorber bracket and shaft assemblies (23) using a cutting torch.
- (13) Remove pickup box and right pickup box mounting bracket (22) using a cutting torch. Remove left pickup box mounting bracket in the same manner.
- (14) Remove rear pickup box support brackets (24) and front pickup box support brackets (26) using a cutting torch.
- (15) Refer to paragraph 5-5.6.2 and remove rear springs.

- (16) Remove rear spring brackets (25) and rear spring pivot brackets (27) using a cutting torch.
- (17) Refer to paragraph 5-5.9.1 and remove running boards.
- (18) Remove front and rear running board mounting brackets (29) and (30).
- (19) Refer to paragraph 5-5.9.2 and remove body holddown capscrews.
- (20) Remove body mount brackets (28) using a cutting torch.
- (21) Refer to paragraph 5-5.5.3 and remove front springs.
- (22) Remove front spring brackets (18) using a cutting torch.
- (23) Refer to paragraph 5-5.1.12 and remove radiator.

NOTE

Remove wiring harnesses, hoses and tie wraps as necessary for removal of crossmembers.

- (24) Remove radiator front body mounting panel (20) and front crossmember assembly (19) using a cutting torch.
- (25) Remove intermediate crossmember assemblies (13) and (14) using a cutting torch.
- (26) Remove frame reinforcement assemblies (31) using a cutting torch.
- (27) Remove rear crossmember assembly (21) using a cutting torch.
- (28) Support crossmembers (if still attached), right frame sidemember (33) and other attached assemblies; remove left frame sidemember (32) using a cutting torch. Remove right frame sidemember (33) in the same manner.
- b. Cleaning and inspection. Refer to paragraphs 5-4.3 and 5-4.4 for general cleaning and inspection procedures.
- c. Repair and replacement. Replace all worn or damaged parts. In addition, after removing any part using a cutting torch, grind all residual material from remaining parts of frame assembly before welding new part in place.
- d. Assembly and installation. Assembly is accomplished during installation. Install frame assembly and frame components group as follows:

- (1) Weld left frame sidemember (32) to crossmembers. Weld right frame sidemember (33) to frame in the same manner.
- (2) Weld new rear crossmember assembly (21) to sidemembers (32) and (33).
- (3) Weld new frame reinforcement assemblies (31) to sidemembers (32) and (33).
- (4) Weld new intermediate crossover assemblies (13) and (14) to sidemembers (32) and (33).
- (5) Weld new radiator front body mounting panel (20) and front crossmember assembly (19) to sidemembers (32) and (33).

NOTE

Replace any wiring harnesses, hoses and tie wraps which were removed during removal of frame components.

- (6) Refer to paragraph 5-5.1.12 and install radiator.
- (7) Weld new front spring brackets (18) to sidemembers (32) and (33).
- (8) Refer to paragraph 5-5.5.3 and install front springs.
- (9) Weld new body mount brackets (28) to sidemembers (32) and (33).
- (10) Refer to paragraph 5-5.9.2 and install body hold-down capscrews.
- (11) Weld new front and rear running board mounting brackets (29) and (30) to sidemembers (32) and (33).
- (12) Refer to paragraph 5-5.9.1 and install running boards.
- (13) Weld new rear spring brackets (25) and rear spring pivot brackets (27) to sidemembers (32) and (33).
- (14) Refer to paragraph 5-5.6.2 and install rear springs.
- (15) Weld new rear pickup box support brackets (24) and front pickup box support brackets (26) to sidemembers (32) and (33).
- (16) Weld new right pickup box mounting bracket (22) to sidemembers. Install left pickup box mounting bracket in the same manner.
- (17) Install pickup box.
- (18) Weld new rear shock absorber bracket and shaft assemblies (23) to sidemembers.

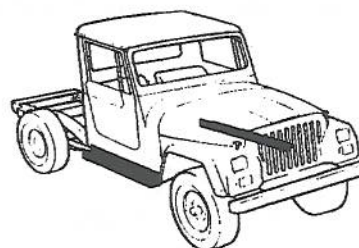
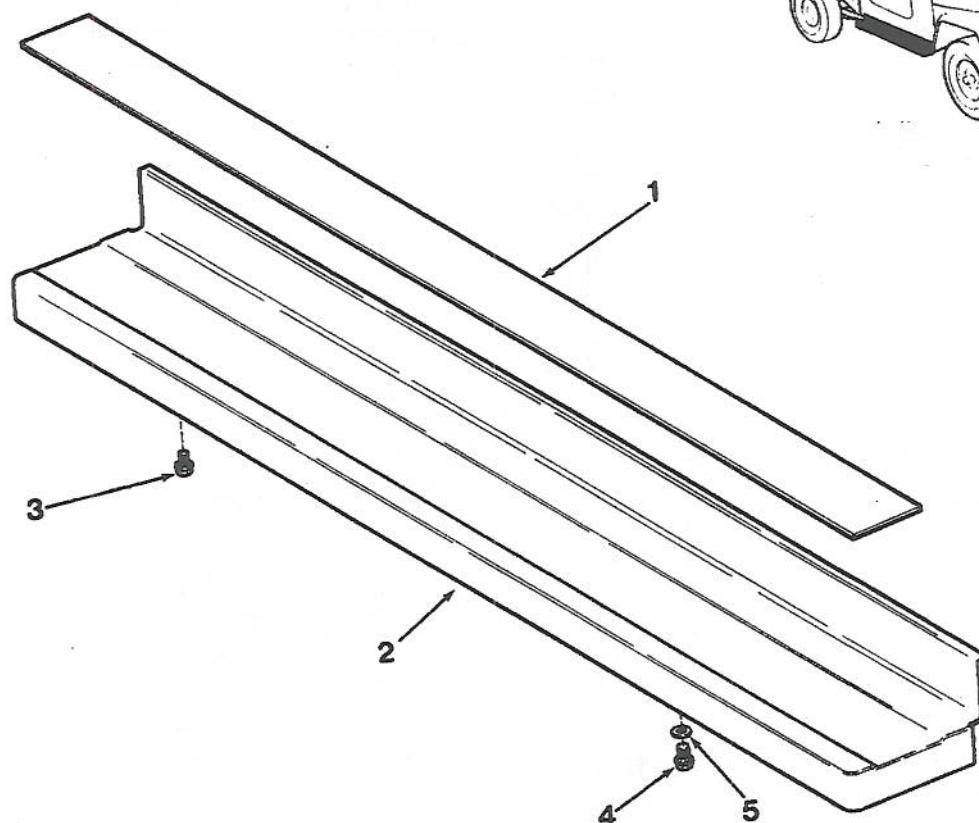
- (19) Refer to paragraph 5-5.6.1 and install rear shock absorbers.
- (20) Weld new steering gear mounting bracket gussets (16) to sidemembers (32) and (33).
- (21) Install new left steering gear mounting bracket (17) on gusset (16). Install right steering gear mounting bracket in a similar manner.
- (22) Refer to paragraph 5-5.4.4 and install steering gear mounting components.
- (23) Install transmission crossmember support bracket (8) on transmission support crossover assembly (15) using machine screws (9) and (10), flat washers (11) and hex nuts (12).
- (24) Weld new transmission support crossmember assembly (15) to sidemembers (32) and (33).
- (25) Remove transmission supports placed during removal.
- (26) Install left front shock absorber bracket assembly (2) using machine screws (3) and hex nuts (4). Install right shock absorber bracket assembly in the same manner.
- (27) Refer to paragraph 5-5.5.1 and install front shock absorbers.
- (28) Install axle bumper assemblies (6) and axle bumper spacers (5) using machine screws (7).
- (29) Refer to paragraphs 5-5.5.4 and 5-5.6.3 and install front and rear axles.

5-5.9 Body.

5-5.9.1 *Running Board Group.* Refer to figure 5-147, and perform the following steps to overhaul the running board group.

- 1. Running Board Cover
- 2. Running Board Assembly
- 3. Capscrew

- 4. Screw and Washer
- 5. Flat Washer



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Figure 5-147. Running Board Group

a. Removal and disassembly. Disassembly is accomplished during removal. Remove running board group as follows:

- (1) Remove screws and washers (4), capscrews (3), flat washers (5) and running board assembly (2).

- (2) Remove running board cover (1).

b. Cleaning and inspection. Refer to paragraphs 5-4.3 and 5-4.4 for general cleaning and inspection procedures.

c. Repair and replacement. Replace all worn or defective parts.

d. Assembly and installation. Assembly is accomplished during installation. Install running board group as follows:

- (1) Install running board cover (1).

- (2) Install running board assembly (2) using screws and washers (4), capscrews (3) and flat washers (5).

5-5.9.2 *Body Holddowns Group*. Refer to figure 5-148, and perform the overhaul for the body holddowns group.

a. Removal and disassembly. Disassembly is accomplished during removal. Remove the body holddowns group as follows:

WARNING

Do not work under raised vehicle without first supporting vehicle with safety jack stands or injury to personnel may result.

- (1) Raise vehicle and support with jack stand.

NOTE

Procedures for removing each of the six body holddown groups are identical.

- (2) Remove capscrew (1), flat washer (2) and insulator (3).

- (3) Remove insulator (4), washer and tube (5) and serrated washer (6).

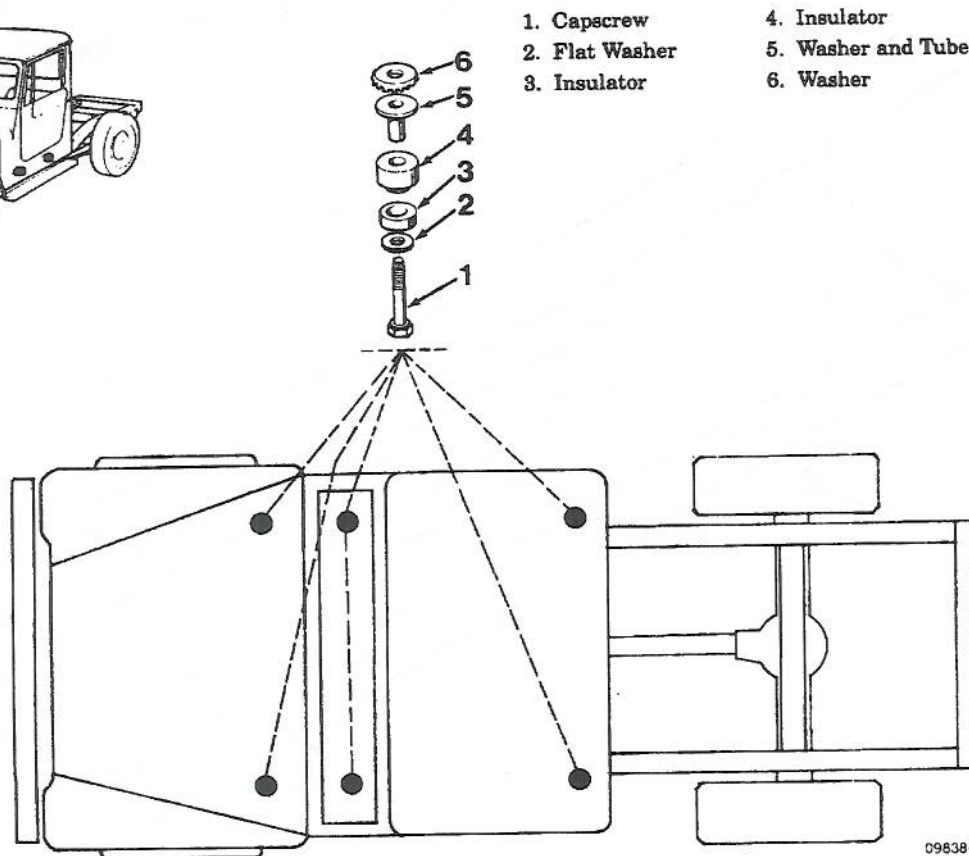
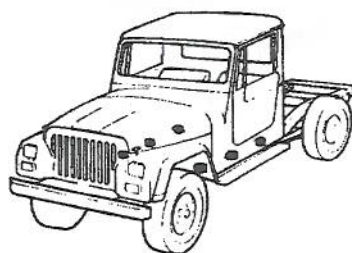


Figure 5-148. Body Holddowns Group

- b. Cleaning and inspection. Refer to paragraphs 5-4.3 and 5-4.4 for general cleaning and inspection procedures.
- c. Repair and replacement. Replace all worn or damaged parts.
- d. Assembly and installation. Assembly is accomplished during installation. Remove the body hold-downs group as follows:

WARNING

Do not work under raised vehicle without first supporting vehicle with safety jack stands or injury to personnel may result.

- (1) Vehicle should be supported in raised position.

NOTE

Procedures for installing each of the six body hold-down groups are identical.

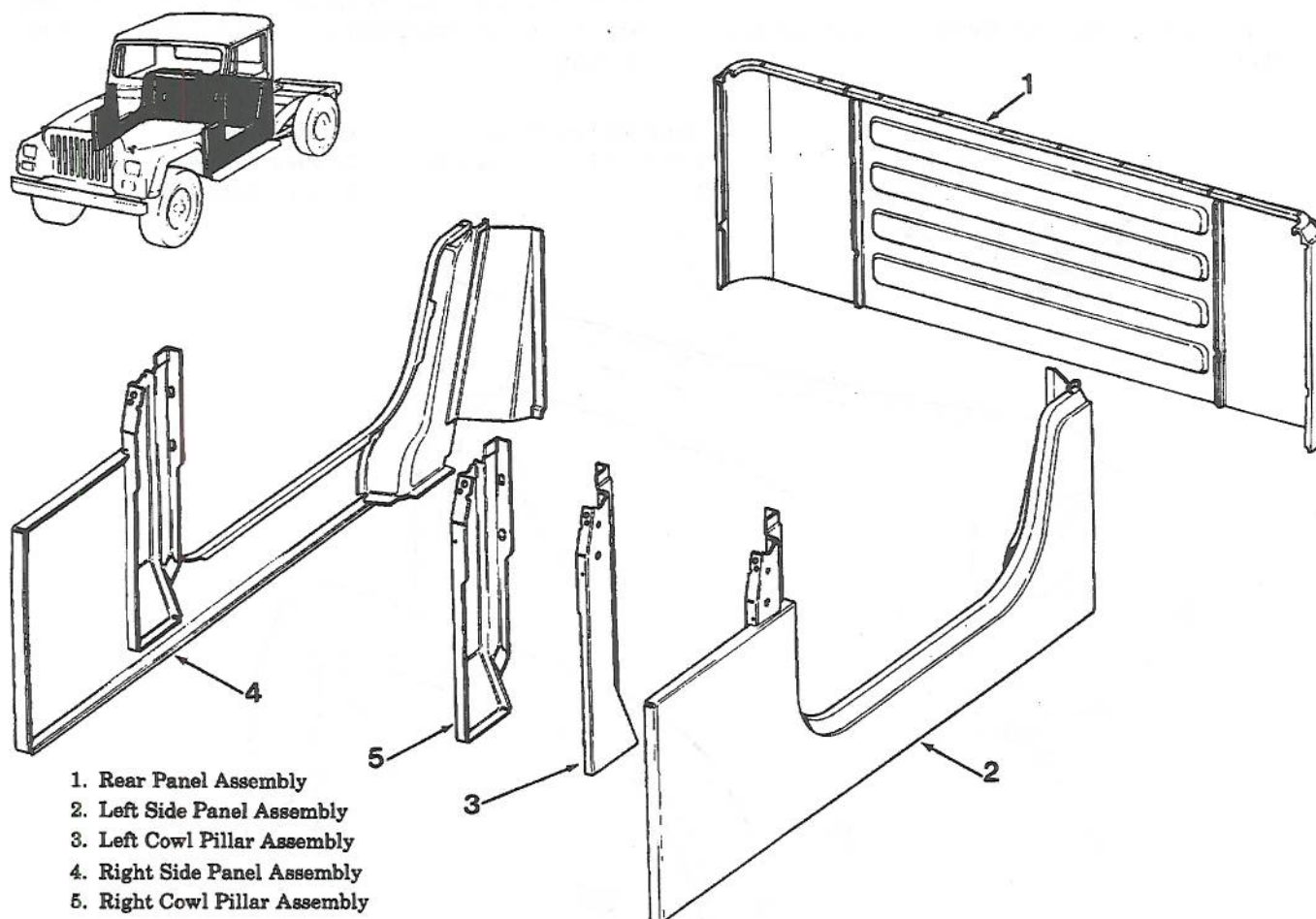
- (2) Install capscrew (1), flat washer (2) and insulator (3).
- (3) Install insulator (4), washer and tube (5) and serrated washer (6).

5-5.9.3 Body Side and Rear Panels Group. Refer to figure 5-149, and perform the following steps to overhaul the body side and rear panels group.

- a. Removal and disassembly. Disassembly is accomplished during removal. Remove body side and rear panels as follows:

NOTE

Assembled sections or any of the individual panels available for replacement are complete and may be installed as a unit.



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Figure 5-149. Body Side and Rear Panels Group

WARNING

Welding and brazing operations produce heat, toxic fumes, radiation, metal slag and carbon particles. Welding and brazing goggles with properly tinted lenses, gloves, apron or jacket and welder boots are required to protect the welder.

- (1) Cut and remove rear panel assembly (1).
 - (2) Cut and remove left side panel assembly (2).
 - (3) Cut and remove left cowl pillar assembly (3) from left side panel assembly (2).
 - (4) Cut and remove right side panel assembly (4).
 - (5) Cut and remove right cowl pillar assembly (5) from right side panel assembly (4).
- b. Cleaning and inspection. Refer to paragraphs 5-4.3 and 5-4.4 for general cleaning and inspection procedures.
- c. Repair and replacement. Replace all worn or damaged parts.

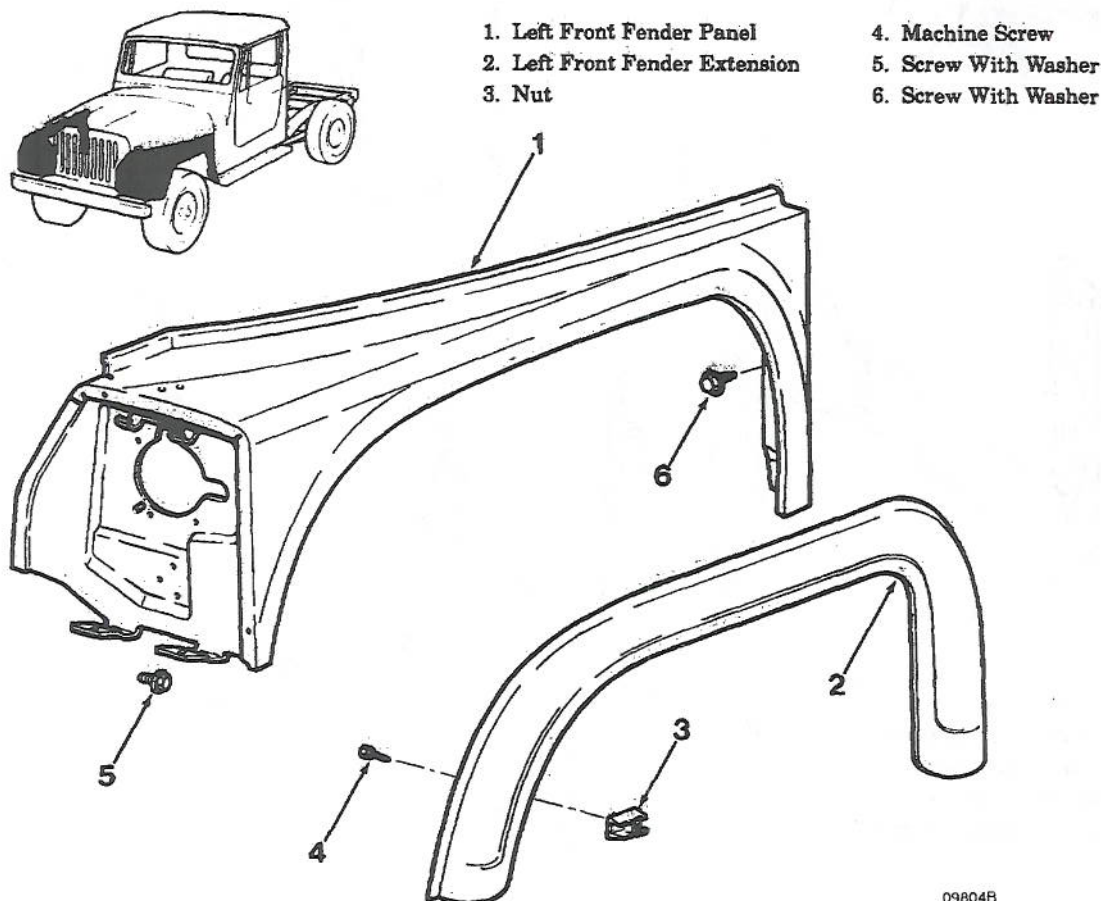
- d. Assembly and installation. Assembly is accomplished during installation. Install rear and side panel assemblies as follows:

WARNING

Welding and brazing operations produce heat, toxic fumes, radiation, metal slag and carbon particles. Welding and brazing goggles with properly tinted lenses, gloves, apron or jacket and welder boots are required to protect the welder.

- (1) Weld right cowl pillar assembly (5) to right side panel assembly (4).
- (2) Weld right side panel assembly (4) in place.
- (3) Weld left cowl pillar assembly (3) into place.
- (4) Weld left side panel assembly (2) into place.
- (5) Weld rear panel assembly (1) into place.

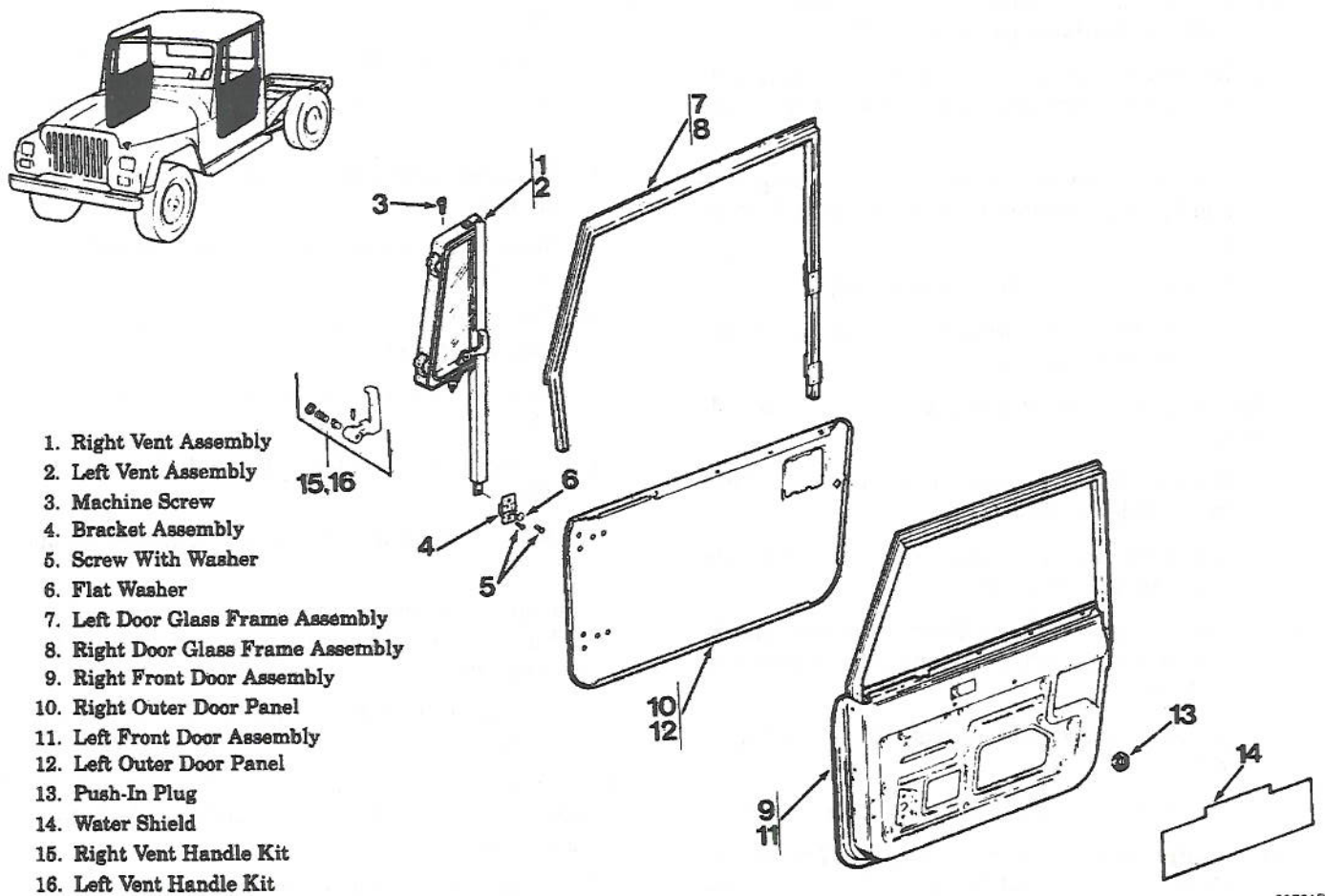
5-5.9.4 *Front Fender Group*. Refer to figure 5-150, and perform the following steps to overhaul the front fender group.



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Figure 5-150. Front Fender Group

- a. Removal. Remove front fender group as follows:
 - (1) Remove or disconnect all items attached to apron of left-hand panel assembly (1).
 - (2) Remove screws and washers (5) attaching left-hand panel assembly (1) and brace to dash panel.
 - (3) Remove screw and washers (6) attaching left-hand panel assembly (1) to radiator grille panel.
 - (4) Remove left-hand panel assembly (1).
 - (5) Follow the same procedure when removing right-hand panel assembly.
 - b. Disassembly. Disassemble panel assembly as follows:
 - (1) Remove machine screws (4), nuts (3) and left front fender extension (2).
 - (2) Follow the same procedure when removing right front fender extension.
 - c. Cleaning and inspection. Refer to paragraphs 5-4.3 and 5-4.4 for general cleaning and inspection procedures.
 - d. Repair and replacement. Replace all worn or damaged parts.
 - e. Assembly. Assemble front fender group as follows:
 - (1) Position left front fender extension (2) on left-hand panel assembly (1) and align screw holes.
 - (2) Install machine screws (4) and nuts (3).
 - (3) Follow the same procedure when installing right front fender extension.
 - f. Installation. Install front fender group as follows:
 - (1) Position left-hand panel assembly (1) on vehicle and install fender-to-radiator screws and washers (6).
 - (2) Install fender-to-dash screws and washers.
 - (3) Install all items previously removed from left-hand panel assembly (1).
 - (4) Follow the same procedure when installing right-hand panel assembly.
- 5-5.9.5 *Door Group*. Refer to figure 5-151, and perform the following steps to overhaul the door group.
- a. Removal and disassembly. Disassembly is accomplished during removal. Remove door group as follows:
 - (1) Remove trim panels.
 - (2) Remove water shields (14) and push-in plugs (13).
 - (3) Remove right and left outer door panels (10) and (12).
 - (4) Remove right and left door glass assemblies (7) and (8).
 - (5) Remove screws and washers (5) and bracket assemblies (4).
 - (6) Remove machine screws (3) and flat washers (6).
 - (7) Remove right and left vent handle kits (15) and (16).
 - (8) Remove right and left door assemblies (9) and (11).
 - b. Cleaning and inspection. Refer to paragraphs 5-4.3 and 5-4.4 for general cleaning and inspection procedures.
 - c. Repair and replacement. Replace all worn or damaged parts.
 - d. Assembly and installation. Assembly is accomplished during installation. Install the door group as follows:
 - (1) Install right and left vent handle kits (15) and (16).
 - (2) Install right and left door glass assemblies (1) and (2) using machine screws (3), flat washers (6), bracket assemblies (4) and screw and washers (5).
 - (3) Install right and left door glass assemblies (7) and (8).
 - (4) Install right and left outer door panels (10) and (12).
- NOTE**
- When installing water shields, be sure the slit lower portion is tucked inside the door panels at the access openings and that the shields are bonded securely to the door inner panels.
- (5) Install push-in plugs (13) and water shields (14).
 - (6) Install trim panels.



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Figure 5-151. Door Group

5-5.9.6 *Door Hinges Group.* Refer to figure 5-152, and perform the following steps to overhaul the door hinges group.

- a. Removal and disassembly. Disassembly is accomplished during removal. Remove the door hinges group as follows:

NOTE

Removal procedures for left and right door hinges are identical.

- (1) Open door and remove screws (6), loop (5) and webbing strap (4).
- (2) Mark outlines of door hinges on doors and body with wax pencil.
- (3) Lift door and hinge assemblies from vehicle.

NOTE

Use torx bit tool #J-25359-C to remove all screws.

- (4) Remove screws and washers (2), pin (3) and bracket assembly (1).
- (5) Remove screws (9) and hinge assemblies (7) right, (8) left.

NOTE

Support the windshield frame during upper hinge removal.

- (6) Remove screws (17) and hinge (15) right, (16) left.
- (7) Remove shim (13); screws (12); hinges (10) right, (11) left; and plate (14).

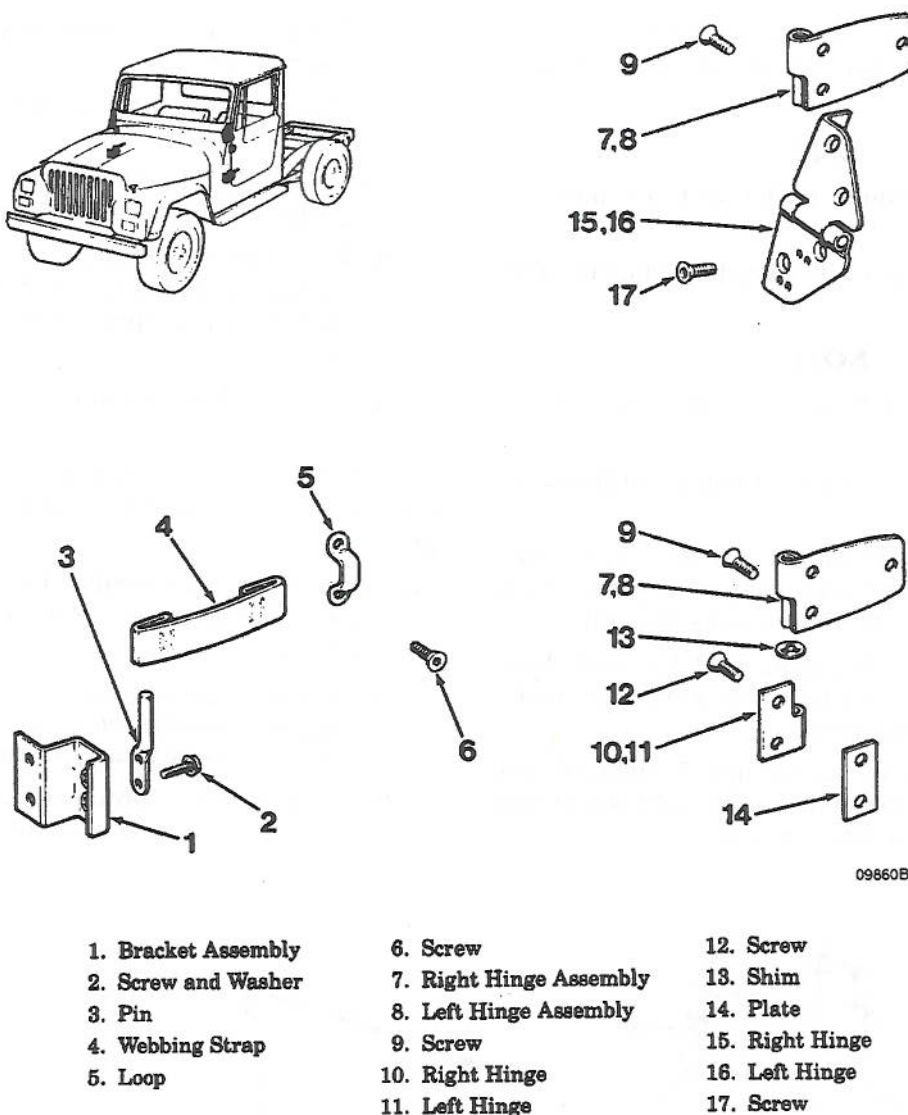


Figure 5-152. Door Hinges Group

- b. Cleaning and inspection. Refer to paragraphs 5-4.3 and 5-4.4 for general cleaning and inspection procedures. In addition, perform the following steps:

- (1) Clean hinges (7) right, (8) left; hinges (10) right, (11) left; and hinges (15) right, (16) left in P-D-680 Type II solvent (7, table 5-1).

WARNING

Compressed air used for cleaning can create airborne particles that may enter the eyes. Pressure shall not exceed 30 psi and eye protection is required.

WARNING

P-D-680 Type II is toxic to the skin, eyes and respiratory tract. Avoid skin and eye contact. Good general ventilation is normally adequate.

- (2) Blow dry all hinges with compressed air.

- c. Repair and replacement. Replace all worn or damaged parts. In addition, perform the following steps:

- (1) Refer to paragraph 5-4.4 and paint hinges (7) right, (8) left; hinges (10) right, (11) left; and hinges (15) right, (16) left with exterior spray paint (30, table 5-1).

- d. Assembly and installation. Assembly is accomplished during installation. Install the door hinges group as follows:

NOTE

Installation procedures for left and right door hinges are identical.

- (1) Lubricate hinges with spray lubricant (31, table 5-1).

NOTE

Use torx bit tool #J-25359-C to install all screws.

Support the windshield frame during upper hinge installation.

- (2) Install plate (14);, hinge (10) right, (11) left; two screws (12) and shim (13) so they align with wax pencil marks made during removal.
- (3) Install hinge (15) right, (16) left with three screws (17) so it aligns with wax pencil marks made during removal.
- (4) Install two hinge assemblies (7) right, (8) left with screws (9) so they align with wax pencil marks made during removal.

- (5) Install bracket assembly (1), pin (3) and screws and washers (2).

- (6) Hang door and hinge assemblies on pins (3) on body.

- (7) Close door and check door alignment. Door should close flush with adjacent body panels.

- (8) If door needs to be adjusted, remove door latch so door closes freely and adjust hinge positions until door is properly aligned. Reinstall door latch.

- (9) Install webbing strap (4), loop (5) and screws (6).

5-5.9.7 *Door Seals Group*. Refer to figure 5-153, and perform the following steps to overhaul the door seals group.

- a. Removal and disassembly. Disassembly is accomplished during removal. Remove door seals group as follows:

- (1) Remove right seal assembly (1) from door using weatherstrip remover #J-21104-01 to remove sealer fasteners (3) panel holes.
- (2) Remove upper portion of seal assembly (1) using fingers or piece of wood.

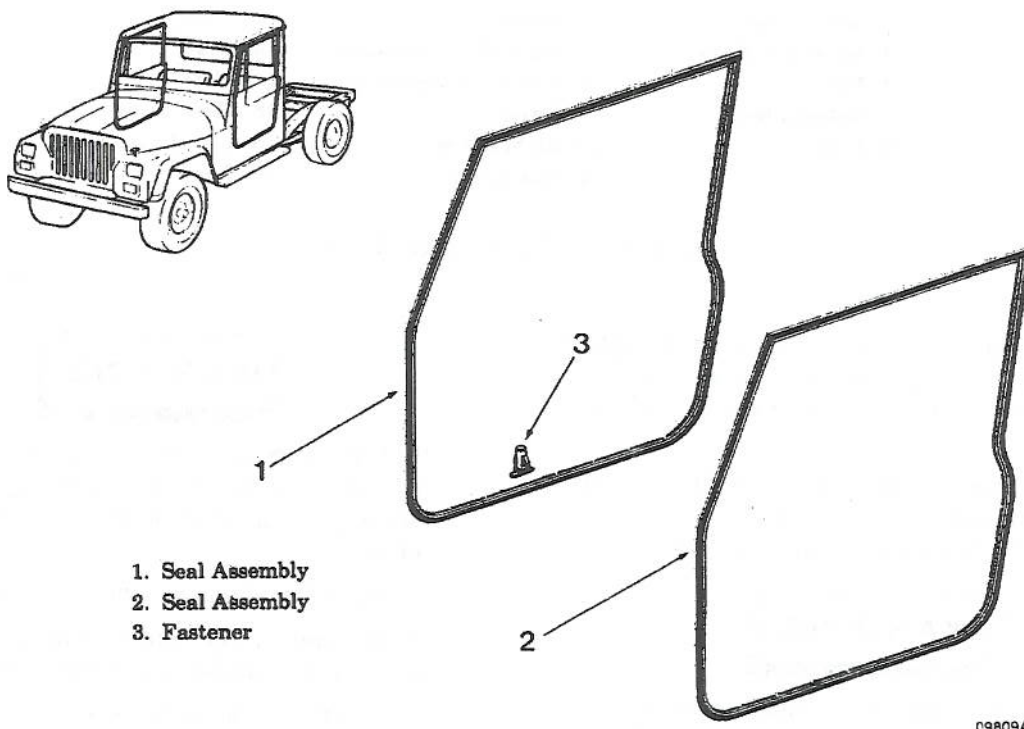


Figure 5-153. Door Seals Group

- (3) Remove dust and dirt from seal assembly (1), door and body.
- (4) Follow same procedure when removing left seal assembly (2).
- b. Cleaning inspection. Refer to paragraphs 5-4.3 and 5-4.4 for general cleaning and inspection procedures.
 - (c) Repair and replacement. Replace all worn or damaged parts.
 - (d) Assembly and installation. Assembly is accomplished during installation. Install door seals group as follows:
 - (1) Install upper front corner of right seal assembly in door frame using fingers or piece of wood to push seal assembly into door frame channel.
 - (2) Press seal fasteners (3), starting at rear edge of door, into door panel holes.
 - (3) Follow the same procedure when installing left seal assembly (2).

5-5.9.8 *Door Latch Group*. Refer to figure 5-154, and perform the following steps to overhaul the door latch group.

- a. Removal and disassembly. Disassembly is accomplished during removal. Remove the door latch group as follows:

NOTE

Removal procedures for left and right door latch groups are identical.

- (1) Remove door trim panel and watershield paper.
- (2) Remove screws (11) and plate (9) left, (10) right.
- (3) Remove pins (19) and rod and bushing (17) left, (18) right.
- (4) Remove clip and bushing (16) and rod (15).
- (5) Remove screws (14) and latch assembly (12) left, (13) right.
- (6) Remove screws (8) and rivets (7).
- (7) Remove striker plate assembly (2) and cover (5) left, (6) right.
- (8) Remove striker assembly (1), mounting plate (3) and shim (4).
- b. Cleaning and inspection. Refer to paragraphs 5-4.3 and 5-4.4 for general cleaning and inspection procedures.

- c. Repair and replacement. Replace all worn or damaged parts.
- d. Assembly and installation. Assembly is accomplished during removal. Install the door latch group as follows:

NOTE

Installation procedures for left and right door latch groups are identical.

- (1) Install cover (5) left, (6) right using screws (8).
- (2) Install striker plate assembly (2).
- (3) Install shim (4), mounting plate (3) and striker assembly (1).
- (4) Install rivets (7).
- (5) Install latch assembly (12) left, (13) right using screws (14).
- (6) Install clip and bushing (16) and rod (15).
- (7) Install rod and bushing (17) left, (18) right and pins (19).
- (8) Install plate (9) left, (10) right using screws and washers (11).
- (9) Install watershield paper and door trim panel.

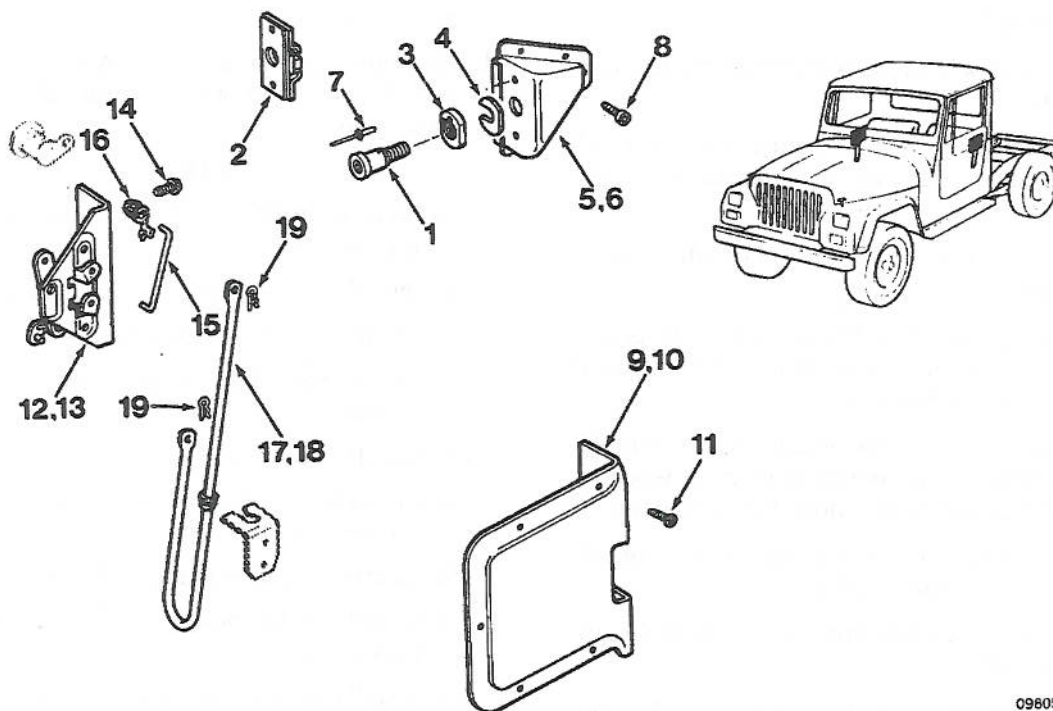
5-5.9.9 *Door Handles and Lock Rod Group*. Refer to figure 5-155, and perform the following steps to overhaul the door handles and lock rod group.

- a. Removal and disassembly. Disassembly is accomplished during removal. Remove door handle and lock rod group as follows:

NOTE

Procedures for removing left and right door handles and lock rod groups are identical.

- (1) Remove screw (3) using torx bit tool #J-25359-C from interior handle assembly (1) and remove handle assembly (2).
- (2) Remove handle assembly (1) from door.
- (3) Remove door trim panel and watershield paper from door.
- (4) Remove rods (4) and (5).
- (5) Remove plugs (11).
- (6) Close window completely and tap door keepers (10) up.
- (7) Remove outside handle assembly (6) and handle assembly (7).
- (8) Remove bezel (8) and gasket (9).



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- | | | |
|---------------------------|-------------------------|---------------------------|
| 1. Striker Assembly | 7. Rivet | 13. Right Latch Assembly |
| 2. Striker Plate Assembly | 8. Screw | 14. Screw |
| 3. Mounting Plate | 9. Left Plate | 15. Rod |
| 4. Shim | 10. Right Plate | 16. Clip and Bushing |
| 5. Left Cover | 11. Screws | 17. Left Rod and Bushing |
| 6. Right Cover | 12. Left Latch Assembly | 18. Right Rod and Bushing |
| | | 19. Pin |

Figure 5-154. Door Latch Group

- b. Cleaning and inspection. Refer to paragraphs 5-4.3 and 5-4.4 for general cleaning and inspection procedures.
- c. Repair and replacement. Replace all worn or damaged parts.
- d. Assembly and installation. Assembly is accomplished during installation. Install the door handles and lock rod group as follows:

NOTE

Procedures for installing the left and right door handles and lock rod groups are identical.

- (1) Install bezel (8) and gasket (9).
- (2) Install handle assemblies (6) and (7).
- (3) Tap door keepers (10) lightly downward to tighten handle.

- (4) Install plugs (11).
- (5) Install rod (4) and rod (5).
- (6) Install watershield paper and door trim panel.
- (7) Install handle assembly (1) and handle assembly (2) with screw (3). Tighten screws using torx bit tool #J-25359-C.

5-5.9.10 *Locks and Keys Group*. Refer to figure 5156, and perform the following steps to overhaul the locks and keys group.

- a. Removal. Remove door lock assemblies as follows:
 - (1) Remove door trim panel and watershield paper.
 - (2) Remove door latch cover screws and remove covers.

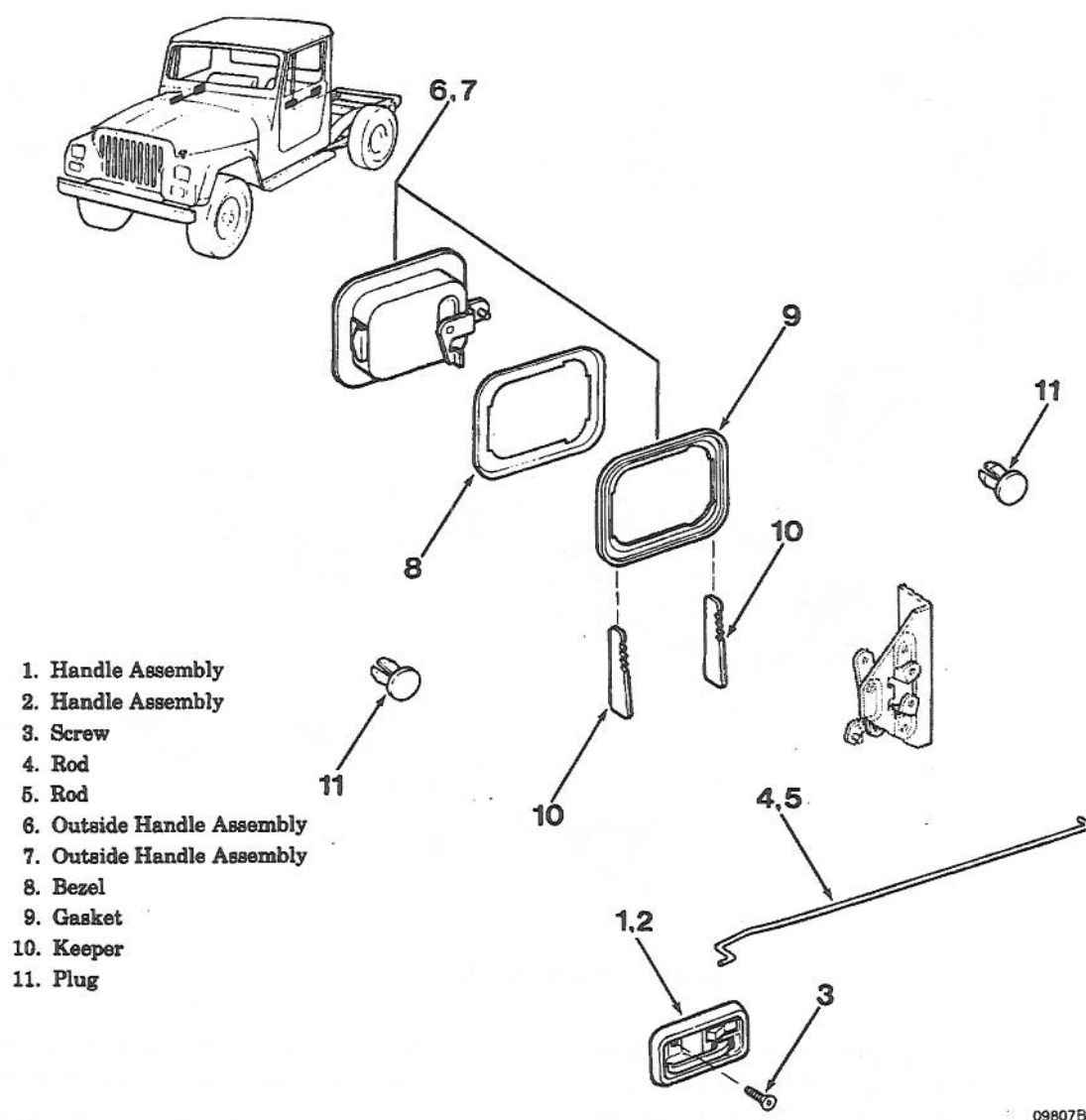
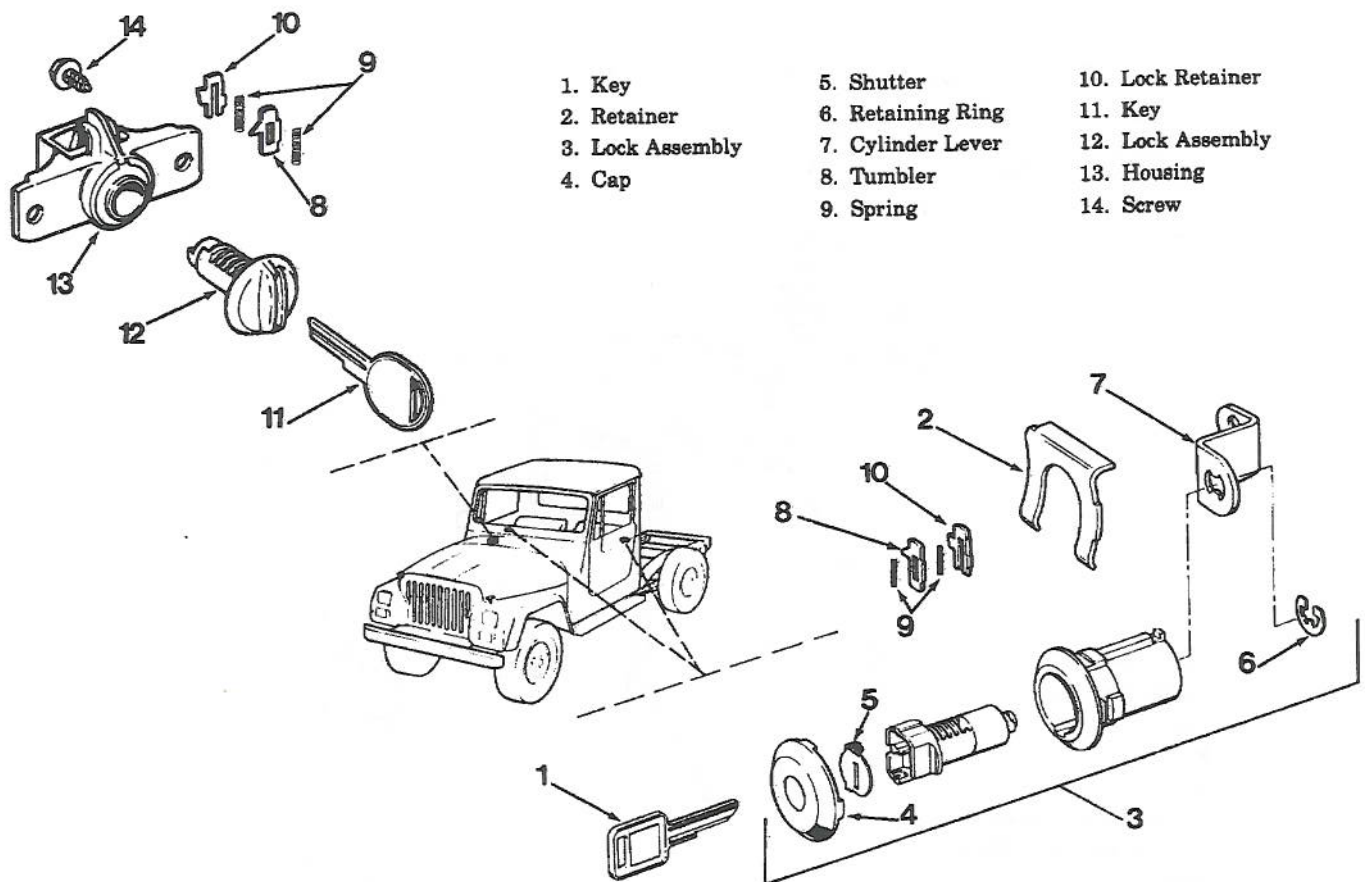


Figure 5-155. Door Handles and Lock Rod Group

- (3) Remove retaining clips and remove lock-to-cylinder rods.
- (4) Remove cylinder retainers (2) and remove lock assemblies (3).
- b. Disassembly. Disassemble locks and keys group as follows:
 - (1) Remove caps (4) and shutters (5).
 - (2) Remove retaining rings (6) and cylinder levers (7).
 - (3) Depress lock retainers (10).
 - (4) Insert keys (1) into cores of lock assemblies (3) and turn slightly.
 - (5) Withdraw keys (1) and cores of door lock assemblies (3).
 - (6) Slowly withdraw keys (1) from cores of lock assemblies (3), releasing tumblers (8) one at a time. Remove each tumbler (8), lock retainer (10) and spring (9).
 - (7) Depress lock retainer (10) in glove box lock assembly (12).
 - (8) Insert key (11) into lock assembly (12) and turn slightly.
 - (9) Withdraw key (11) and lock assembly (12).



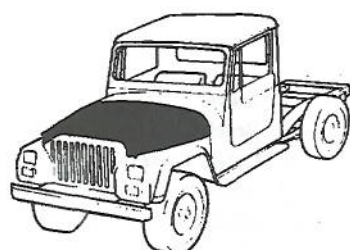
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Figure 5-156. Locks and Keys Group

- (10) Slowly withdraw key (11) from glove box assembly (12), releasing tumblers (8) one at a time. Remove each tumbler (8), lock retainer (10) and lock spring (9).
- (11) Remove screws (14) and remove housing (13).
- c. Cleaning and inspection. Refer to paragraphs 5-4.3 and 5-4.4 for general cleaning and inspection procedures.
- d. Repair and replacement. Replace all worn or damaged parts.
- e. Assembly. Assemble locks and keys group as follows:
 - (1) Install housing (13) using screws (14).
 - (2) Install each tumbler (8), lock retainer (10) and spring (9) in lock assembly (12).
 - (3) Insert key (11) in lock assembly (12).
 - (4) Depress lock retainer (10) and insert key (11) and lock assembly (12) into lock housing (13). Remove key (11).
 - (5) Install tumblers (8), lock retainers (10) and springs (9) in cores of lock assemblies (3).
 - (6) Insert key (1) into cores of lock assemblies (3).
 - (7) Depress lock retainers (10) and insert key (1) and core of lock assembly (3) into lock assembly (3).
 - (8) Remove key (1).
 - (9) Install cylinder levers (7) and retaining rings (6).
 - (10) Install shutters (5) and caps (4).
- f. Installation. Install lock and key group as follows:
 - (1) Install door lock assemblies (3) and cylinder retainers (2).
 - (2) Attach lock-to-cylinder rods and install retaining clips.
 - (3) Install door latches cover using screws.
 - (4) Install watershield paper and door trim panels.

5-5.9.11 *Hood and Hinges Group*. Refer to figure 5-157, and perform the following steps to overhaul the hood and hinges group.

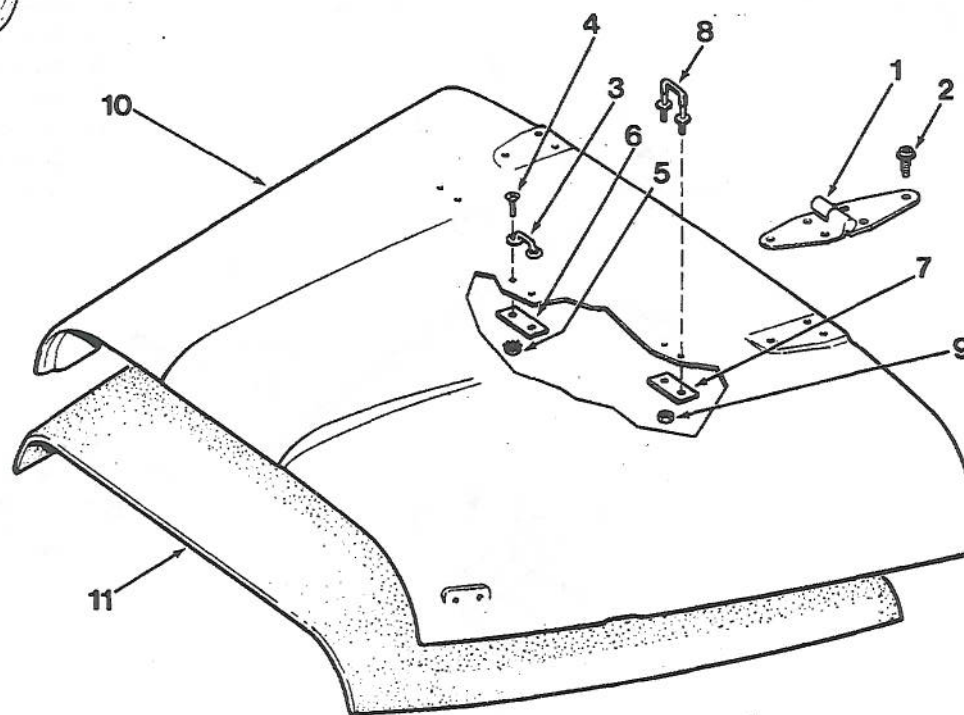
- a. Removal. Remove hood and hinges group as follows:
 - (1) Mark position of hinges on mounting panels before removing hood.
 - (2) Remove screws and washers (2) and hinge assemblies (1).
 - (3) Remove hood weldment assembly (10).
- b. Disassembly. Disassemble hood and hinges group as follows:
 - (1) Remove screws (4), footman loop (3), nuts and washers (5) and reinforcement (6).
 - (2) Remove self-locking nut (9), U-bolts (8) and reinforcements (7).
 - (3) Remove pad (11).
- c. Cleaning and inspection. Refer to paragraphs 5-4.3 and 5-4.4 for general cleaning and inspection procedures.
- d. Repair and replacement. Replace all worn or damaged parts.
- e. Assembly. Assemble hood and hinges group as follows:
 - (1) Install pad (11).
 - (2) Install reinforcements (7), U-bolts (8) and self-locking nut (9).
 - (3) Install footman loop (3), screws (4), reinforcement (6) and nuts and washers (5).
- f. Installation. Install hood and hinges group as follows:
 - (1) Position hood weldment assembly (10) and align hinge assemblies (1) with alignment marks made during removal.



1. Hinge Assemblies
2. Screws and Washers
3. Footman Loop

4. Screw
5. Nut and Washer
6. Reinforcement
7. Reinforcement

8. U-Bolt
9. Self-Locking Nut
10. Hood Weldment Assembly
11. Pad



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Figure 5-157. Hood and Hinges Group

- (2) Install screws and washers (2).
- (3) Check alignment of hood. Loosen screws and washers (2) and correct alignment, if necessary.

5-5.9.12 *Hood Latch, Prop Rod and Holddown Group*. Refer to figure 5-158, and perform the following steps to overhaul the hood latch, prop rod and holddown group.

a. Removal and disassembly. Disassembly is accomplished during removal. Remove the hood latch, prop rod and holddown group as follows:

- (1) Remove screws and washers (9) from hook (11).
- (2) Remove hook (11) and spring (10).
- (3) Remove screws and washers (2), bracket (1) and rod (3).
- (4) Remove rod (3) from bracket (1).
- (5) Remove bracket (7).

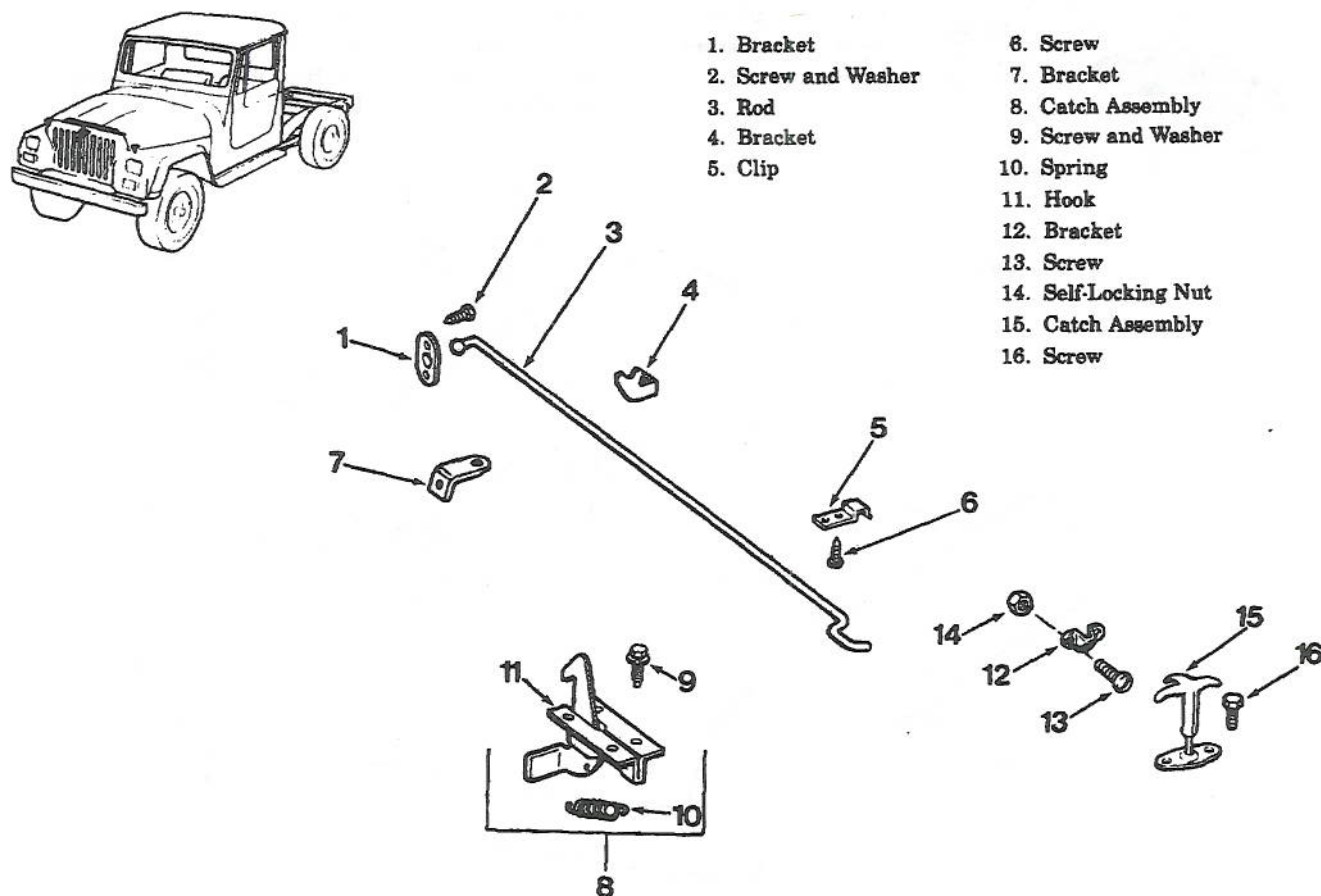
- (6) Remove bracket (4).
- (7) Remove screw (6) and clip (5).
- (8) Remove screw (13), self-locking nut (14) and bracket (12).
- (9) Remove capscrews (16) and catch assembly (15).

b. Cleaning and inspection. Refer to paragraphs 5-4.3 and 5-4.4 for general cleaning and inspection procedures.

c. Repair and replacement. Replace all worn or damaged parts.

d. Assembly and installation. Assembly is accomplished during installation. Install hood latch, prop rod and holddown group as follows:

- (1) Install catch assembly (15) using capscrews (16).
- (2) Install bracket (12) using screw (13) and self-locking nut (14).



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Figure 5-158. Hood Latch, Prop Rod and Holddown Group

- (3) Install clip (5) using screw (6).
- (4) Install bracket (4).
- (5) Install bracket (7).
- (6) Install rod (3) in bracket (1).
- (7) Install bracket (1) on vehicle using screw and washer (2).
- (8) Install hook (11) and spring (10) using screws and washers (2).

5-5.9.13 *Hard Top Enclosure*. Refer to figure 5-159, and perform the following steps to overhaul the hard top enclosure.

- a. Removal and disassembly. Disassembly is accomplished during removal. Remove hard top enclosure as follows:

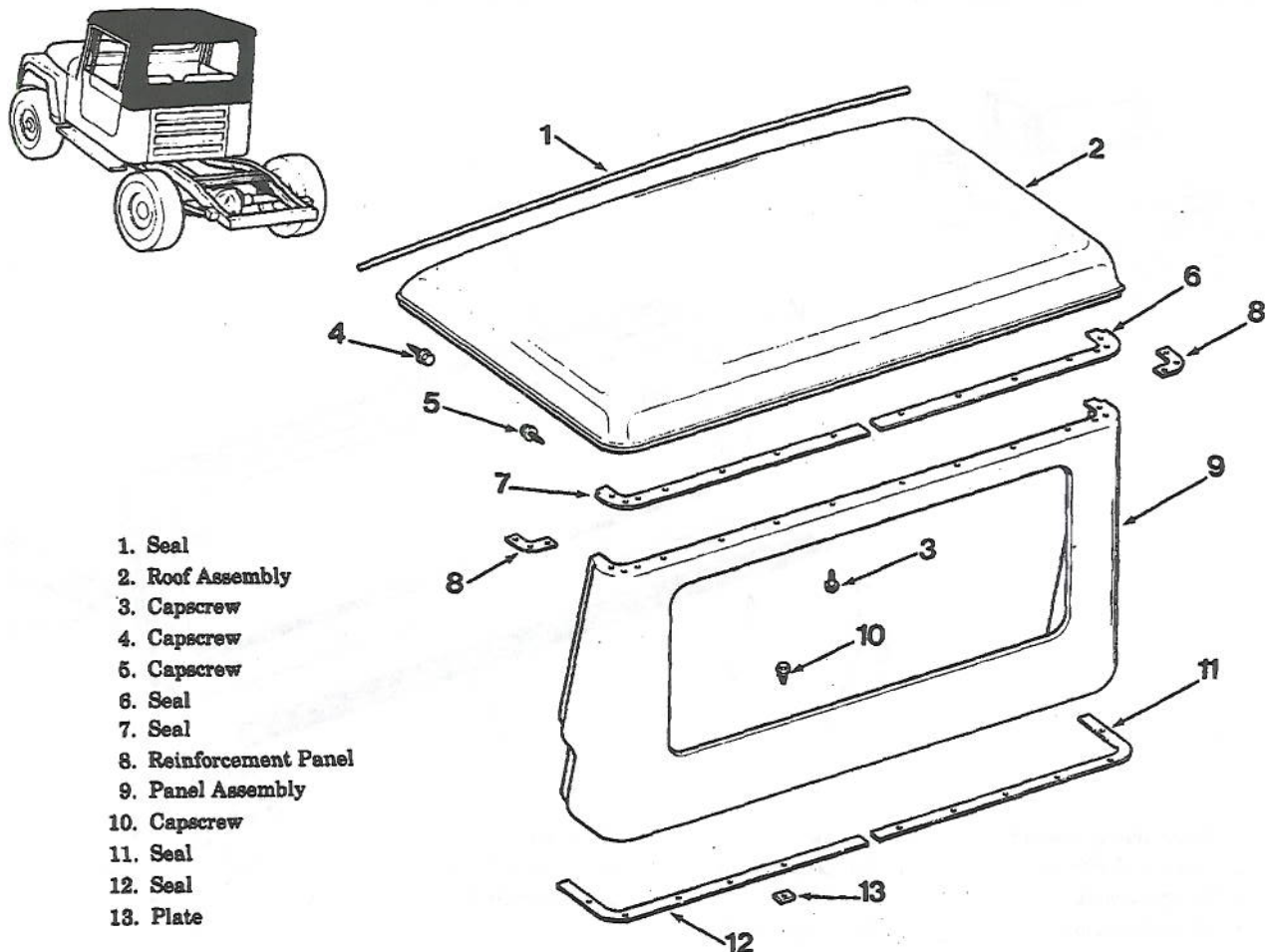
- (1) Disconnect interior dome lamp.

- (2) Remove capscrews (3), (4) and (5) and roof assembly (2).
- (3) Remove seals (1), (6) and (7).
- (4) Remove reinforcements (8).

CAUTION

When removing hard top enclosure, avoid damaging foam seals installed between the panel assembly and the rear body panel.

- (5) Remove capscrews (10) and panel assembly (9).
- (6) Remove seal (11), seal (12) and plate (13).
- b. Cleaning and inspection. Refer to paragraphs 5-4.3 and 5-4.4 for general cleaning and inspection procedures.



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Figure 5-159. Hard Top Enclosure

- c. Repair and replacement. Replace all worn or damaged seals or capscrews. Replace or repair the roof assembly (2) and panel assembly (9) if damaged. Refer to paragraphs 5-8 and 5-11 for general repair and painting procedures.
- d. Assembly and installation. Assembly is accomplished during installation. Install the hard top enclosure as follows:

CAUTION

When installing hard top enclosure, avoid damaging foam seals installed between the panel assembly and the rear body panel.

- (1) Install plate (3) and seals (11) and (12).
- (2) Install panel assembly (9) using capscrews (10).
- (3) Install reinforcements (8).
- (4) Install seal (1), seal (6) and seal (7).

- (5) Install capscrews (3), (4) and (5) and roof assembly (2).

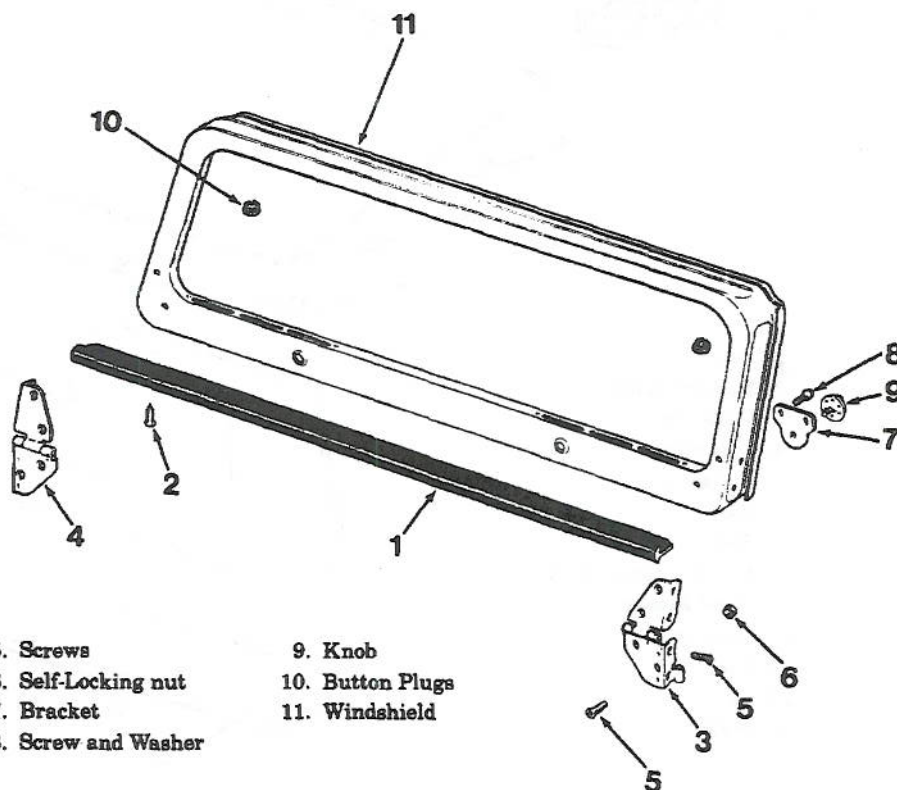
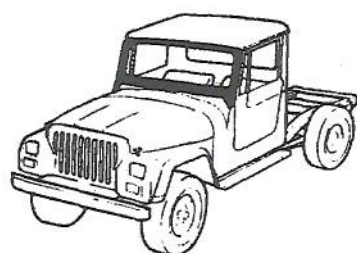
- (6) Connect interior dome lamp.

5-5.9.14 *Windshield Frame Group*. Refer to figure 5-160, and perform the following steps to overhaul the windshield frame group.

- a. Removal. Remove windshield frame group as follows:

- (1) Disconnect wiper motor wiring harness from switch.
- (2) Remove screws (5) and self-locking nuts (6) attaching windshield assembly (11) to vehicle using torx bit tool #J-25359-C.
- (3) Remove screw and washer (8), knobs (9) and bracket(7).

- b. Disassembly. Disassemble windshield frame group as follows:



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Figure 5-160. Windshield Frame Group

- (1) Remove screws (5) and selflocking nuts (6) attaching left and right hinge assemblies (3) and (4) to windshield assembly (11).
 - (2) Remove screws and washers (2) and weatherstrip assembly (1).
 - (3) Remove button plugs (10).
 - c. Cleaning and inspection. Refer to paragraphs 5-4.3 and 5-4.4 for general cleaning and inspection procedures.
 - d. Repair and replacement. Replace all worn or damaged parts.
 - e. Assembly. Assemble windshield assembly as follows:
 - (1) Install button plugs (10).
 - (2) Install weatherstrip assembly (1), using screws and washers (2), on windshield assembly (11).
 - (3) Install left and right hinge assemblies (3) and (4) using screws (5) and selflocking nuts (6).
 - f. Installation. Install windshield frame group as follows:
 - (1) Install holddown bracket (7) and knobs (9) using screws and washers (8).
 - (2) Install windshield assembly (11) to vehicle using screws (5) and self-locking nuts (6). Tighten machine screws (5) using torx bit tool #J-25359-C.
 - (3) Reconnect wiper motor wiring harness to switch.
- 5-5.9.15 Window Seals Group.** Refer to figure 5-161, and perform the following steps to overhaul the window seals group.
- a. Removal and disassembly. Disassembly is accomplished during removal. Remove window seals group as follows:
 - (1) Remove right door trim panel and watershield.
 - (2) Remove glass down-stop.
 - (3) Remove screws attaching guide channel to plastic fasteners; remove guide channel and plastic fasteners. Lower glass to bottom of door.
 - (4) Remove weatherstrip assembly (3) right, (4) left and remove outer weatherstrip assembly (5).
 - (5) Remove channel (6) and weatherstrip (7).
 - (6) Use the same procedures when removing the window seals from the left door.
 - (7) Refer to paragraph 5-5.9.16 and remove windshield and rear window glass.
 - (8) Starting at top of windshield frame, pull weatherstrip (2) away from flange while gently pushing out on glass.
 - (9) Starting at top of rear window frame, pull weatherstrip (2) away from flange while gently pushing out on glass.
 - b. Cleaning and inspection. Refer to paragraphs 5-4.3 and 5-4.4 for general cleaning and inspection procedures.
 - c. Repair and replacement. Replace all worn or damaged parts.
 - d. Assembly and installation. Assembly is accomplished during installation. Install window seals group as follows:
 - (1) Apply a 1/16-inch bead of bedding and glazing compound (32, table 5-1) completely around windshield weatherstrip (2) in flange cavity.
 - (2) Install weatherstrip (2) on glass, centering split in weatherstrip (2) on bottom of glass.
 - (3) Beginning at bottom of glass, work weatherstrip (2) over flange using fingers or piece of wood.
 - (4) Apply windshield sealer, or equivalent between weatherstrip and outside of glass around entire perimeter.
 - (5) Clean off excess sealer.
 - (6) Use the same procedure when installing rear window weatherstrip (1).
 - (7) Install weatherstrip (7) and channel (6) in right door.
 - (8) Install weatherstrip assembly (3) right, (4) left and outer weatherstrip assembly (5) on bottom of window.
 - (9) Install guide channel and plastic fasteners using screws.
 - (10) Install glass down-stop.
 - (11) Install right door trim panel and watershield.
 - (12) Use the same procedure when installing window seals on left door.

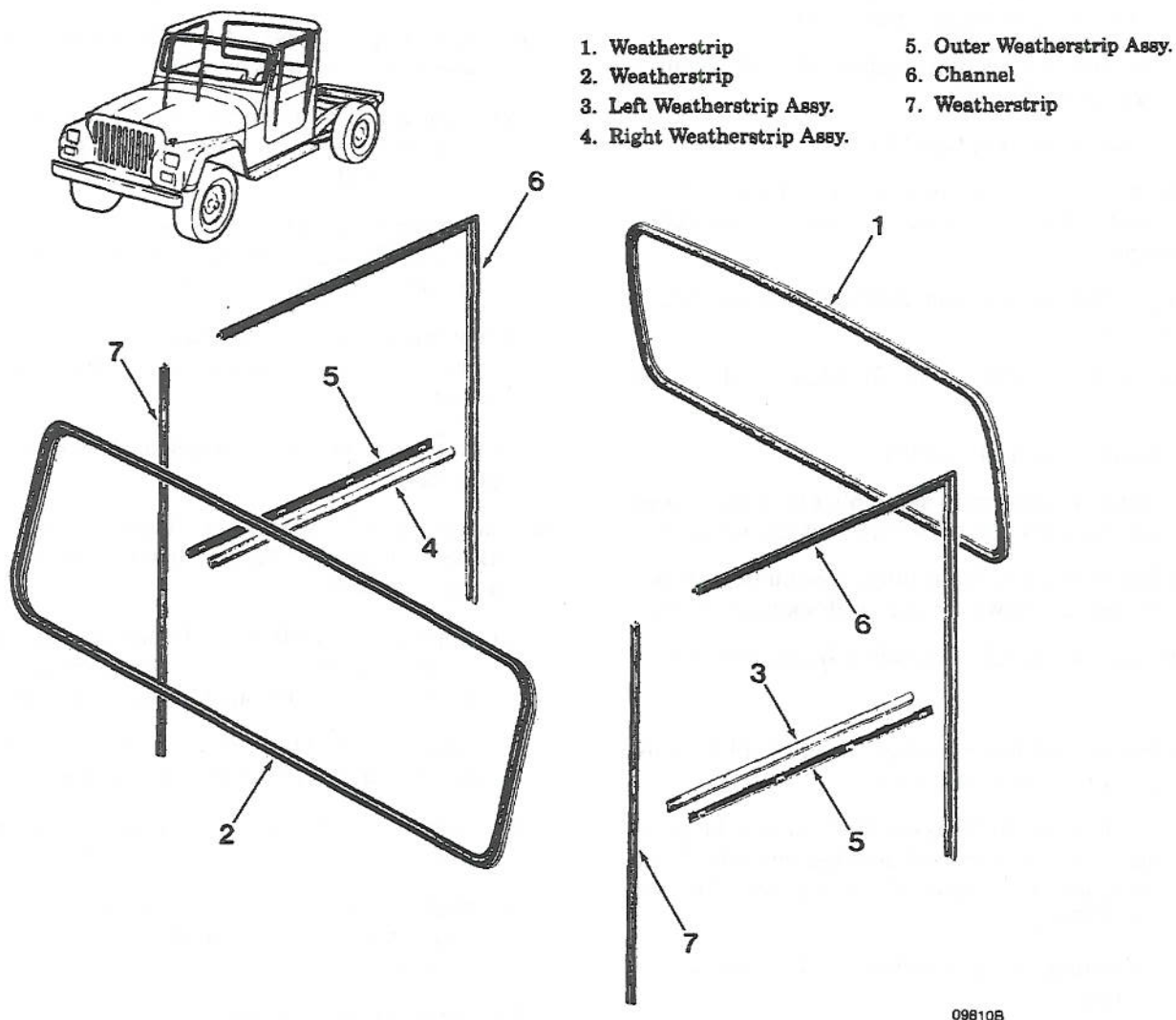


Figure 5-161. Window Seals Group

5-5.9.16. *Glass Group*. Refer to figure 5-162, and perform the following steps to overhaul the glass group.

a. Removal and disassembly. Disassembly is accomplished during removal. Remove glass as follows:

- (1) Remove windshield assembly (1) by performing steps (2) through (8).
- (2) Cover adjoining painted surfaces to protect finish.
- (3) Refer to paragraph 5-5.9.20 and remove windshield wiper arms.
- (4) Refer to paragraph 5-5.10.10 and remove sun visor.
- (5) Refer to paragraph 5-5.10.9 and remove rear view mirror.
- (6) Refer to paragraph 5-5.10.15 and remove defroster ducts.
- (7) Refer to paragraph 5-5.9.15 and remove windshield seals, starting at top of windshield frame.
- (8) Gently push out glass windshield assembly (1).
- (9) Remove rear window assembly (6) by performing steps (10) through (12).
- (10) Refer to paragraph 5-5.9.15 and remove rear window seals. Use fiber stick to break seal