HEADLINING—MOLDED TOP—EXTERIOR DECALS AND OVERLAYS

GENERAL

The headlining used in Cherokee, Wagoneer, and Truck models is made of laminated polystyrene backing board which is finished, depending on the model, with either a plastic coating or a soft vinyl covering. Lines scored into the backing board allow the headlining to be shaped to fit the contour of the roof while providing added strength for self-support.

CHEROKEE-WAGONEER

Removal

(1) Remove sun visors, escutcheons, and center support.
(2) Remove windshield moulding and end caps.
(3) Remove rear opening moulding and end caps.
(4) Remove plastic trim strip and end cap retainers.
(5) Remove lens from dome lamp and cargo lamp (if equipped). Remove screws securing lamp to roof bows.
(6) Remove coat hooks.
(7) Free rear headlining from J-moulding by pulling down carefully at the center, while pushing up on either outside edge.
(8) Push cargo lamp (if equipped) through die-cut opening in headlining.
(9) Remove rear headlining through tailgate opening.
(10) Free front headlining from J-moulding by pulling down carefully at the center, while pushing up on outside edges.
(11) Remove front headlining through tailgate opening.

Installation

(1) Position front headlining in vehicle and insert left side into J-moulding.
(2) Pull dome lamp through die-cut opening in headlining and align front headlining to vehicle roof.
(3) Pull down carefully at center of front headlining and insert right side of headlining into J-moulding.
(4) Position rear headlining in vehicle and insert left side into J-moulding.
(5) Pull cargo lamp (if equipped) through die-cut opening in rear headlining and align rear headlining to vehicle roof.
(6) Pull down carefully at center of rear headlining while pushing up on right edge, and insert right side of headlining into J-moulding.
(7) Check alignment of front headlining using sun visor and dome lamp holes and leading edge of headlining as guide. Adjust fore or aft as required.
(8) Check alignment of rear headlining using the trailing edge as a guide. Adjust fore or aft as required.
(9) Secure dome lamp (if equipped) and cargo lamp (if equipped) to roof bows and install lamp lenses.
(10) Install plastic trim strip and end cap retainers.
(11) Install coat hooks.
(12) Install rear opening moulding and end caps.
(13) Install windshield moulding and end caps.
(14) Install escutcheons, sun visors, and center support.

TRUCK

Removal

(1) Remove sun visors and center support.
(2) Remove lens from dome lamp. Remove screws securing dome lamp to rear window panel.
(3) Remove windshield moulding and end caps.
(4) Pull down carefully at center of headlining while pushing up on outside edges to disengage headlining from J-moulding.
(5) Push dome lamp through die-cut opening in headlining.
(6) Remove headlining from vehicle.
Installation
(1) Position headlining in vehicle and insert left side into J-mouldings.
(2) Pull dome lamp through die-cut opening and align headlining to vehicle roof.
(3) Pull down carefully at center of headlining while pushing up on right edge, and insert right side of headlining into J-moulding.
(4) Check alignment of the headlining using the sun visor and dome lamp holes and headlining leading edge as guides. Adjust fore and aft as necessary.
(5) Secure dome lamp to rear window panel and install dome lamp lens.
(6) Install windshield moulding and end cap.
(7) Install sun visors and center support.

MOLDED TOP AND LIFTGATE

GENERAL
A new lightweight, removable molded top is available for the CJ-7. The top is constructed of injection molded polycarbonate (a high quality foamed plastic material). The molded top and steel liftgate are painted with a special spatter finish enamel.

MOLDED TOP

Removal
(1) Remove screws and washers attaching molded top to windshield frame.
(2) Remove nuts, washers, and screws attaching molded top to rear quarter panels.
(3) Remove molded top from vehicle.

CAUTION: When removing molded top, avoid damaging foam sealer installed between the molded top and rear quarter panels.

Installation
(1) Inspect tubular windshield seal, bonded to molded top, for damage. Replace if necessary.
(2) Carefully position molded top on vehicle.

CAUTION: When installing the molded top, avoid damaging foam sealer installed between the molded top and rear quarter panels.
(3) Install screws, washers, and nuts attaching molded top to rear quarter panels.
(4) Install screws and washers attaching molded top to windshield frame.

LIFTGATE
Adjustment
(1) Open liftgate, support to prevent closing, and remove lockpins (fig. 20-1) from liftgate support attaching screws.
(2) Remove screws attaching supports to liftgate and fold supports downward.

WARNING: To prevent injury or damage, never remove supports when liftgate is closed. The supports are under spring tension.
(3) Remove screws, using Torx Bit Tool J-25359, attaching latches to liftgate.

NOTE: Do not disconnect remote control cables from latches.
(4) Loosen screws, using Torx Bit Tool J-25359, attaching hinges (fig. 20-2).
(5) Close liftgate and shift liftgate to obtain desired gap (side-to-side).
(6) Open liftgate and tighten hinge-to-liftgate screws using Torx Bit Tool J-25359.
(7) Position latches on liftgate and install attaching screws using Torx Bit Tool J-25359.
(8) Position supports on liftgate and install attaching screws.
(9) Install lockpins on support attaching screws.

NOTE: Methyl-ethyl-ketone (MEK) is usually available from chemical houses listed under SOLVENTS in the Yellow Pages. If not available locally in small quantities, the solvent may be obtained from mail order chemical houses such as E. H. Sargent & Co. and Fisher Scientific,* which have sales-service centers through the country.

*This is not a complete list, nor is it a recommendation for the exclusive use of the chemical houses listed.
Strikers

The strikers provide durable retention points for the latches and prevent movement of the liftgate. Latches may be moved in or out to compensate for body and molded top variations. Use Torx Bit Tool J-25359 for removal.

Removal

(1) Open liftgate, support to prevent closing, and remove lockpins from liftgate support attaching screws.
(2) Remove screws attaching supports to liftgate and fold supports downward.

WARNING: To prevent injury or damage, never remove supports when liftgate is closed. The supports are under spring tension.

(3) Remove screws, using Torx Bit Tool J-25359, attaching hinges to liftgate and remove liftgate.

Installation

(1) Position liftgate on hinges and install hinge-to-liftgate attaching screws using Torx Bit Tool J-25359.
(2) Position supports on liftgate and install attaching screws.
(3) Install lockpins on support attaching screws.

Rubber Sealer

The liftgate 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 liftgate. 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 liftgate to loosen in its opening, resulting in noise. When servicing, use a dampened cloth to clean rubber sealer. Clean dirt from all points where rubber sealer contacts the molded top and tailgate. Apply AMC Silicone Lubricant or equivalent to rubber sealer.

CAUTION: Do not use graphite, brake fluid, or wax on 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 rubber sealer from liftgate, using needle nose pliers to remove plastic retainers from liftgate panel holes.
(2) Remove dust and dirt from rubber sealer, liftgate, and molded top.
(3) Install lower corner of sealer to liftgate first.
(4) Press retainers, starting at lower edge of liftgate, into liftgate panel holes.

Hinge Replacement

(1) Open liftgate, support to prevent closing, and remove lockpins from liftgate support attaching screws.
(2) Remove screws attaching supports to liftgate and fold supports downward.

WARNING: To prevent injury or damage, never remove supports when liftgate is closed. The supports are under spring tension.

(3) Remove screws, using Torx Bit Tool J-25359, attaching hinge to liftgate.
(4) Remove screws, using Torx Bit Tool J-25359, attaching reinforcement to molded top. Remove reinforcement and sealer from molded top.
(5) Remove nuts and washers attaching hinge to molded top. Remove hinge and sealer.
(6) Clean replacement hinge in a suitable solvent and blow dry with compressed air.
(7) Color-coat hinge to match molded top.
(8) Lubricate hinge with Lubriplate or equivalent.
(9) Position hinge on molded top and install attaching washers and nuts.
(10) Position reinforcement on molded top and install attaching screws using Torx Bit Tool J-25359.
(11) Seal hinge and reinforcement using white or black 3M Strip-Calk or equivalent to match molded top.
(12) Position liftgate on hinge and install hinge-to-liftgate attaching screws using Torx Bit Tool J-25359.
(13) Position supports on liftgate and install attaching screws.
(14) Install lockpins on support attaching screws.

Support Replacement

(1) Open liftgate, support to prevent closing, and remove lockpins from support attaching screws.
(2) Remove screws attaching supports and remove supports.
(3) Install supports and attaching screws.
(4) Install lockpins on support attaching screws.

Latch Replacement

(1) Loosen screw attaching remove control cable to latch. Disconnect cable from screw.
(2) Remove screws attaching latch (fig. 20-1) to liftgate using Torx Bit Tool J-25359. Remove latch.
(3) Position latch on liftgate and install attaching screws using Torx Bit Tool J-25359.
(4) Connect remote control cable to latch screw and tighten screw.

**Remote Control Replacement**

(1) Loosen screws attaching remote control cables to latch. Disconnect cables from screws.
(2) Remove screws attaching remote control (fig. 20-1) to liftgate using Torx Bit Tool J-25359.
(3) Position remote control on liftgate and install attaching screws using Torx Bit Tool J-25359.
(4) Connect remote control cables to latch screws and tighten screws.

**Outside Handle Replacement**

(1) Remove screws attaching remote control to liftgate using Torx Bit Tool J-25359.
(2) Remove nuts attaching outside handle to liftgate and remove handle.

**NOTE:** The replacement outside handle is furnished without the lock cylinder. The lock cylinder is furnished uncoded without keys.

(3) Code existing door lock key to replacement cylinder.
(a) Insert key in replacement cylinder.
(b) File tumblers until flush with cylinder body.
(c) Remove and install key, and check that tumblers are flush with body.
(d) Install cylinder in replacement outside handle.
(4) Position outside handle in liftgate and install attaching nuts.

(5) Position remote control on liftgate and install attaching screws using Torx Bit Tool J-25359.

**Rear Window Replacement**

(1) Unlock rubber weatherstrip (fig. 20-2) using wood wand or fiber stick.
(2) Use fiber stick to break seal between glass and rubber weatherstrip.
(3) Push glass and weatherstrip toward outside of vehicle. Remove glass.
(4) Remove weatherstrip from liftgate opening.
(5) Inspect weatherstrip and clean off sealer from glass cavity and flange cavity.

**NOTE:** Inspect for uneven surfaces or irregularities in the opening flange that could cause stress damage to the glass.

(6) Before installing weatherstrip on flange, apply a 3/16-inch bead of 3M Auto Bedding and Glazing Compound or equivalent in weatherstrip flange cavity using a pressure-type applicator.
(7) Install weatherstrip on liftgate opening flange.
(8) Apply a liberal amount of liquid soap solution to glass cavity of weatherstrip.
(9) Position glass into upper glass cavity and into each side. Position wooden wand under glass and lift up and into lower cavity. Check for equal side clearance.
(10) Use wooden wand to lock weatherstrip.

**NOTE:** Soap solution should be removed from the weatherstrip and glass before installing sealer.

(11) Using a pressure-type applicator, apply 3M Windshield Sealer or equivalent between weatherstrip and glass on outside of glass around entire perimeter.
EXTERIOR DECALS

GENERAL

Exterior decals are made from a tough, durable, weather-resistant, solid vinyl with a pressure-sensitive back. The pressure-sensitive back is protected by a paper backing which is easily peeled away upon installation. During shipment and storage the face is protected with an easy-release paper.

REPAIRS

Repair small nicks or scratches with touch-up paints mixed to blend with the affected area.

Repair blisters or air bubbles by piercing them with a sharp needle or pin. Work the trapped air out through the pin hole and press the decal firmly against the panel. It may be necessary to preheat the panel slightly to soften the adhesive. Heat also may be used to remove small wrinkles or irregularities.

PREPARATION

Workroom temperature should be between 65°F and 90°F. Decals should not be replaced in temperatures below 65°F.

The following equipment and materials are necessary to make a quality decal installation.

- Liquid detergent (Joy, Vel, or equivalent)
- Wax and silicone remover (3M Adhesive Cleaner, Acrylic-Clean, Prep-Sol, xylol, or equivalent)
- Isopropyl alcohol (rubbing alcohol)
- Squeegee—four to five inches wide (plastic or hard rubber)
- Water bucket and sponge
- 750 Degrees F heat gun with grounding adapter, or infrared heat bulb and extension cord
- Clean wiping rags or paper towels
- Sharp knife, single-edge razor blade, or Exacto knife
- Scissors
- Sharp needle or pin
- Grease pencil

REMOVAL

(1) Clean repair surfaces, adjacent panels, and openings as required.
(2) Remove decal overlapping parts from affected panel.
(3) Remove decal by starting at one edge and peeling it from painted surface. Apply heat to decal to facilitate removal.

NOTE: Avoid using pointed or sharp tools as they may damage the painted surface.

(4) Remove adhesive from painted surfaces by wiping area with a rag saturated with 3M Adhesive Cleaner, xylol or equivalent and then scraping with a squeegee.

NOTE: Exercise care when using solvents because of possible damage to painted surfaces. To determine if solvent is harmful to body paint, test it on a hidden area of the vehicle.

(5) Rinse thoroughly with clean water.
(6) Clean painted surface with wax and silicone remover (3M Adhesive Cleaner, Acrylic-Clean, Prep-Sol, or equivalent). Wipe surface with clean cloth and allow to dry.

NOTE: Freshly painted surfaces must be thoroughly dry. Residual solvents in fresh paint may cause decal to blister.

(7) Position decal on panel surface and mark position with grease pencil (fig. 20-3). Allow 1/2-inch overlap around door and fender areas. Cut decal to approximate length using scissors.

(8) Position decal on panel and hold in place with small strips of masking tape (fig. 20-4). Be sure decal is aligned with decal on adjacent panels.
(9) Swing decal up using strips of masking tape as hinges (fig. 20-5).

(10) Remove approximately six inches of paper backing from one end (fig. 20-6).

(11) Swing decal back down to aligned position. Squeegee decal to panel using firm strokes while removing remainder of paper backing (fig. 20-7).

**NOTE:** To avoid pre-adhesion or stretching of the decal, do not remove more than six inches of paper backing at one time.

(12) Where possible, extend decal 1/2 inch beyond corners or edges (fig. 20-8) and wrap firmly using finger pressure and squeegee. Avoid trapping air in these areas.

(13) Remove easy-release paper from face of decal (if applicable).

(14) Inspect decal installation using reflected light to detect any irregularities that may have developed during installation. Remove all air or moisture bubbles. Refer to Repair for the procedure.

(15) Install previously removed parts and clean vehicle as required.

**Installation of Intricate Decals**

For large intricately-shaped decals, the following procedure will simplify installation.

(1) The use of wetting solution assures a better bond between decal and painted surfaces. Prepare a supply of wetting solution by thoroughly mixing two or three teaspoons of detergent (Joy, Vel, or equivalent) in one gallon of water.

**NOTE:** Too much detergent will reduce the effectiveness of the bond. **Do not use soap.**

(2) Place decal on clean, flat surface with paper backing side up. Bend up a corner and separate edge of paper backing from decal. Hold decal firmly to the surface of a table and, in a smooth motion, remove entire paper backing. Under hot, humid conditions, a slight jerking motion will aid in removing the paper backing.

**CAUTION:** Always remove the paper backing from the decal; never the decal from the backing, as possible film stretching may result. Hold decal in corners when removing paper backing as fingerprints will adversely affect adhesion.

(3) Using clean sponge, apply ample wetting solution to decal adhesive and panel surface. The wetting solution permits ease of movement of decal while positioning it on panel surface.

(4) Immediately apply wetted decal to panel surface. Apply wetting solution to decorative face of decal to allow squeegee to slip during application.
(5) Squeegee a short section of decal at the center. Lift right or left side of decal, position it straight and close to panel, and squeegee toward lifted edge. Avoid stitching decal at lifted edge. Squeegee progressively from center with firm, overlapping strokes.

(a) Lift upper area of decal (up to bonded area) and, working upward from the bonded section at center, squeegee decal into place.

(b) Lift lower area of decal (up to bonded area) and, working downward from bonded section at center, squeegee decal into place.

NOTE: If a wrinkle is trapped during squeegee operations, stop immediately. Carefully lift affected section, align section to panel, and progressively squeegee decal into place.

OVERLAYS

GENERAL

The opaque exterior woodgrain overlay panels are made of a tough, durable, weather-resistant, cast vinyl and have a pressure-sensitive back. The pressure-sensitive back is protected by a paper backing which is removed at installation. The simulated woodgrain is embedded in the cast vinyl for a longer lasting attractive appearance.

REPAIRS

Small nicks, bruises, or scratches can be touched up with paint in much the same manner as painted surfaces. Proper color match can be obtained by blending small amounts of appropriate paint colors, and then applying to the affected area of the overlay.

Repair blisters or air bubbles by piercing them with a sharp needle or pin. Work the trapped air out through the pin hole and press the overlay firmly against the panel. It may be necessary to preheat the panel slightly to soften the adhesive. Heat also may be applied to remove small wrinkles or irregularities.

PREPARATION

Workroom temperature should be between 65°F and 90°F. Overlays should not be replaced in temperatures below 65°F.

The following equipment and materials are necessary to make overlay installation.

- Liquid detergent (Joy, Vel, or equivalent)
- Wax and silicone remover (3M Adhesive Cleaner, Acrylic-Clean, Prep-Sol, xylol, or equivalent)
- Isopropyl alcohol (rubbing alcohol)
- Squeegee—four to five inches wide (plastic or hard rubber)
- Water bucket and sponge
- Sandpaper (No. 360 or 400, wet-or-dry type)
- 750°F heat gun with grounding adapter, or infrared heat bulb and extension cord
- Clean wiping rags or paper towels
- Sharp knife, single-edge razor blade, or Exacto knife
- Scissors
- Sharp needle or pin
- Grease pencil

Prepare supply of wetting solution by thoroughly mixing two to three teaspoons of detergent (Joy, Vel, or equivalent) in one gallon of water. The use of a wetting solution will provide a better bond between overlay and painted surface. Too much detergent will reduce the effectiveness of the bond. Do not use soap.

REMOVAL

(1) Clean repair surfaces, adjacent panels, and openings as required.

(2) Remove lock assembly, rear taillamps, and/or other overlay overlapping parts from affected panel.

(3) Remove overlay by starting at one edge and peeling it from painted surface. Apply heat to overlay to facilitate removal.

NOTE: Avoid using pointed or sharp tools as they may damage the painted surface.

(4) Remove adhesive residue from painted surface with 3M Adhesive Cleaner, xylol, isopropyl alcohol, or equivalent.

INSTALLATION

(1) Scuff-sand painted surface with No. 360 or No. 400 sandpaper.

NOTE: Freshly painted surfaces must be thoroughly dry. Residual solvents in fresh paint may cause overlay to blister.

(2) Clean painted surface with wax and silicone remover (3M Adhesive Cleaner, (Acrylic-Clean, xylol, or equivalent). Wipe surface with clean cloth and allow to dry.

(3) Position overlay on repair panel surface and mark approximate outline of overlay with a grease pencil.
(4) Place overlay on a table or clean, flat surface with protective paper backing side up. Bend up a corner of overlay. Hold overlay firmly to the surface of the table and remove entire paper backing in a smooth motion. Under hot, humid conditions, a slight jerking motion will aid in removing paper backing.

CAUTION: Always remove the paper backing from the overlay; never the overlay from the backing, as film stretching may result. Hold overlay in corners when removing paper backing as fingerprints will adversely affect adhesion.

(5) Using clean sponge, apply ample wetting solution to overlay adhesive and to repair panel surface. The wetting solution permits ease of movement of overlay while positioning it on a panel surface.

(6) Immediately apply wetted overlay to repair panel surface. Position overlay in center of area to be covered with at least 1/2 inch extending beyond edges. Apply wetting solution to woodgrain surface of overlay to allow squeegee to slip during application.

(7) Squeegee from center to edges of overlay with firm strokes to remove all air bubbles and wetting solution and to assure bonding of overlay to painted surface. On large overlays, the following steps will simplify installation.

(a) Squeegee a short (4- to 6-inch) horizontal section of the overlay at center of panel. Lift right or left side of overlay, position it straight and close to panel, and squeegee toward lifted edge. Avoid stretching overlay at lifted end, squeegee progressively from middle with firm, overlapping strokes.

(b) Lift upper area of overlay (up to bonded area) and, working upward from bonded section at center, squeegee overlay into place.

(c) Lift lower area of overlay (up to bonded area) and, working downward from bonded section at center, squeegee overlay into place.

NOTE: If a wrinkle is trapped during squeegee operations, stop immediately. Carefully lift affected section, realign section to panel, and progressively squeegee it into place. Do not lift overlay if only a few bubbles are trapped.

(8) Notch corner or curved edges of overlay where necessary and trim off excess material.

(9) Allow 1/2-inch extra material beyond edges that are to be wrapped around flange areas. To activate adhesive, wipe adhesive side of overlay with isopropyl alcohol. Warm overlay at edges by passing a heat source, such as a heat gun or lamp, over surface to soften it. Firmly press overlay into position with fingertips, a cloth, and finally a squeegee, alternately warming and pressing it until complete adhesion is obtained.

CAUTION: Use extreme care to avoid spilling isopropyl alcohol (rubbing alcohol) on trim or painted surfaces. Wipe spills immediately as alcohol will discolor trim or painted surfaces on prolonger contact.

NOTE: Avoid undue pulling or stretching at ends of overlay as tearing could result.

(10) Apply heat to overlay at lock assembly depressions. Press overlay uniformly into depression to obtain formed bond.

(11) With sharp knife, carefully cut out excess overlay from lock assembly openings in panel.

(12) Inspect overlay installation using reflected light to detect irregularities that may have developed during installation.

(13) Remove all air or moisture bubbles by piercing them with a sharp needle or pin and then press firmly until overlay adheres to body panel.

(14) Install previously removed parts and clean up vehicle as required.