

FABRIC ROOF COVER

ROOF PANEL FABRIC COVER 23000 SERIES

DESCRIPTION

The roof panel fabric cover is a vinyl coated fabric covering applied to the roof panel. The fabric covering is made in sections which are dielectrically joined at the seams.

On the 23769 style, a felt pad is located between the fabric cover and roof panel. The felt pad is cemented to the roof panel with nitrile type non-staining cement. The roof panel fabric is cemented around the perimeter only and not to the felt pad.

On all other styles the fabric cover is cemented to the entire surface of the roof panel with nitrile type non-staining cement.

The roof panel fabric cover is attached at the windshield and back window openings by drive nails. Drive nails are used at the belt line of the roof panel extension. A flexible retainer secures the fabric cover inside the right and left drip moldings.

Removal

1. The following parts must be removed prior to removing the roof panel fabric cover:

- a. Windshield assembly.
- b. Back window assembly.
- c. Roof drip molding scalps.
- d. Rear quarter belt reveal moldings.
- e. Rear end belt moldings.

2. Clean off all excess sealer from windshield and back window openings.

3. Remove drive nails from edge of fabric cover at windshield, back window openings, and at roof panel extension (at belt).

NOTE: Drive nails can best be removed by first driving a screwdriver or suitable tool under the heads of the nails to loosen them. Diagonal cutters or similar tool can then be used to grasp nails and twist them out. Unnecessary enlargement of holes in roof panel should be avoided.

4. Remove flexible retainers securing fabric cover inside right and left drip moldings. The retainers may be removed by inserting tip of screwdriver or similar tool under retainer at front of

drip molding. While exerting slight outward force on drip molding with pliers, disengage fingers of retainer from drip molding flange. Do not damage drip molding.

NOTE: New flexible retainers should be used when replacing fabric cover.

5. Prior to removing fabric cover, application of heat to cemented areas will permit easier loosening of cemented edges.

CAUTION: Heat may be applied by lamps held 18" (minimum) from fabric only until fabric is warm. If lamps are held too close or fabric cover is heated over 200°F, the fabric may lose its grain, blister, or become very shiny.

6. Loosen cemented edges of fabric cover at windshield, side roof rails, back window, and rear quarter areas; then, carefully remove fabric cover from remaining cemented area of roof panel.

IMPORTANT: On the 23769 Style exercise care when removing fabric cover so felt pad will not be damaged.

7. Inspect felt padding and, if necessary, replace damaged area. Felt padding (1/16") should be used for replacement. Padding may be removed by applying xylol solvent such as 3M Adhesive Cleaner or equivalent to affected area. Allow solvent to dissolve adhesive and remove padding. Exercise care to avoid excessive damage to paint finish.

8. Replace felt pad by cementing felt pad to roof panel with nitrile vinyl trim adhesive.

Installation

1. Check all cementing surfaces on body to insure a smooth surface. Cementing surface must be smooth to prevent "highlighting" of excess cement through fabric cover after new cover has been installed. Clean off old cement as required.

NOTE: A xylol solvent such as 3M Adhesive Cleaner or equivalent, should be used to remove or smooth out excess old cement. Apply solvent and allow to soak before rubbing.

CAUTION: Be certain to follow manufacturer's directions when using cleaner.

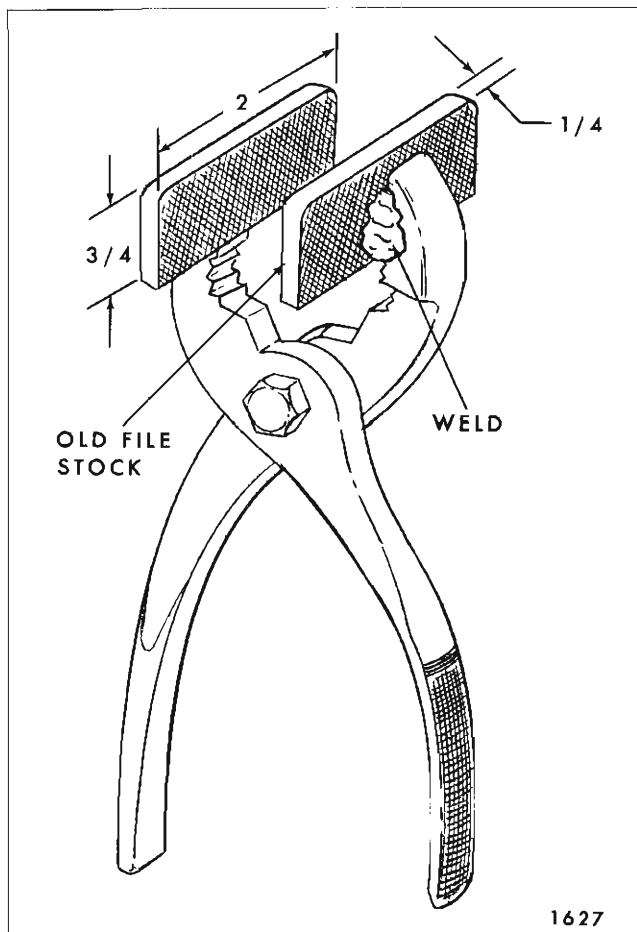


Fig. 2J1—Fabric Cover Pliers

2. To permit easier fitting and removing of wrinkles from new cover assembly, where possible, install new cover at room temperature (approximately 72° F).

NOTE: Where new cover is installed at temperatures below 72° F, pliers fabricated as shown in Figure 2J1 will aid in removing wrinkles.

3. Determine center line of roof panel by marking center points on windshield and back window openings with chalk or equivalent.

4. Fold cover lengthwise, precisely at center location. Mark center location at front and rear of cover.

5. Lay cover on roof panel and align to correspond with center line of roof panel. Determine proper material overhang at windshield and back window openings.

6. On the 23769 style with felt pad, position and install fabric cover as follows:

a. Apply nitrile vinyl trim adhesive to inner perimeter of fabric cover and the exposed areas of

the roof panel where fabric cover is attached (See Fig. 2J2). (3M Vinyl Trim Adhesive, Permalastic Vinyl Trim Adhesive, or equivalent.) Allow to dry for fifteen minutes.

NOTE: If nitrile adhesive is not available, use neoprene type non-staining weatherstrip cement. (3M Super Weatherstrip Cement or equivalent.) Do not allow drying period.

IMPORTANT: No cement should come in contact with felt pad.

b. With aid of a helper position fabric cover over roof panel to previous locating marks.

c. At back window opening, install a drive nail at each seam location. View "B" in Figure 2J3 is typical of both seam locations at back window opening.

NOTE: When installing drive nails, it is best to first use an awl or similar tool to start a hole in metal. Drive nails at seam locations should be installed only far enough to hold cover, since repositioning of the cover may be necessary. Installation of drive nails should also be as low as possible in windshield and back window opening to prevent cutting edge of fabric cover by hammer blows.

d. Apply extra bead of cement to each side of dielectric seams between fabric cover and roof panel at back window opening. (View "B", Fig. 2J3).

e. At front of body, carefully stretch fabric cover forward and install a drive nail in windshield opening at each seam location. (View "A", Fig. 2J3).

f. Carefully smooth out cover to each side roof rail and attach cover (cement only). Check fit of cover.

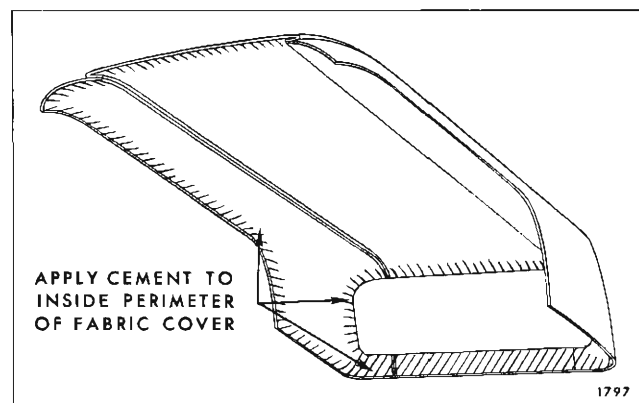


Fig. 2J2—Cementing of Fabric Roof Cover for Styles with Felt Pad

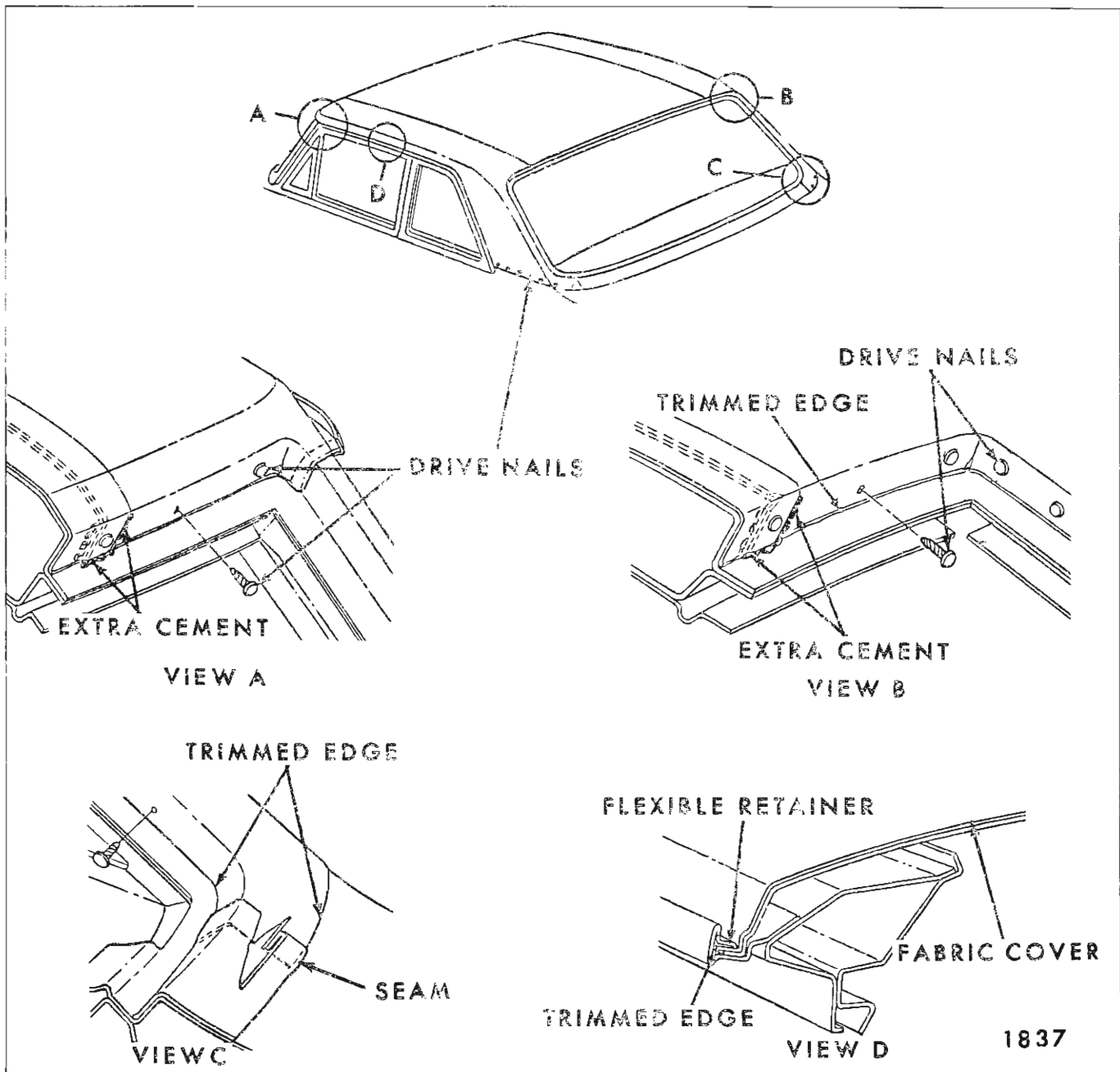


Fig. 2J3—Fabric Roof Cover Installation

g. At right roof panel extension area, pull fabric cover down and rearward and fasten cover (cement only) into back window opening. Also stretch and fasten cover (cement only) at belt area. When operation is completed, fabric cover should be free of all wrinkles and draws in this area.

h. Repeat step G at left rear quarter area.

i. Position fabric cover around back window.

j. Cement fabric cover to rear compartment front and shelf panel below back window opening. Be certain dielectric seams are straight.

k. Check fabric cover center to side section seams. Seams should be straight. Where necessary, adjust cover along side roof rails.

l. Install cover into roof drip moldings. Be sure center to side section seams are straight after cover has been installed.

NOTE: When installing fabric cover to inside of drip molding, a small thin-edged piece of plastic or similar material may be used to insert cover in place inside drip rails. Exercise care so damage will not occur to cover when performing this operation.

7. On styles without felt pad; position and install the fabric cover as follows:

- a. Place fabric cover on protected surface with inner layer of material exposed.
- b. Apply nitrile non-staining vinyl trim adhesive such as 3M Vinyl Trim Adhesive, Permalastic Vinyl Trim Adhesive, or the equivalent to entire inner layer of fabric cover. Allow to dry for minimum of fifteen minutes.

If nitrile non-staining cement is not available, neoprene type non-staining weatherstrip cement (3M Super Weatherstrip Cement or equivalent) may be used. Instead of applying neoprene cement to entire inner layer of cover in one application, a step procedure is used. Begin by applying an 8" wide strip of cement adjacent to center line of fabric cover (See Fig. 2J4).

IMPORTANT: Application of nitrile vinyl trim adhesive should be as thin as possible, as an excess amount of cement may result in trapped solvents (blisters) between fabric cover and roof panel. Application of neoprene type adhesive should also be as thin as possible as an excess amount of cement may result in "highlights" (cement build-up). For these reasons, a mohair roller or equivalent should be used to apply a thin coat of cement to fabric cover and roof panel; however, if necessary, a brush may be used. Exercise care when applying cement on inner layer of cover to prevent cement from contacting outer layer.

- c. Fold cover on center line with inner layer of cover exposed and place on roof panel adjacent to

center line. Apply an 8" wide strip of cement (nitrile or neoprene) on roof panel adjacent to center line of roof panel. (See Fig. 2J4).

- d. With aid of helper, slide folded cover to center line of roof panel. Holding fabric cover securely at windshield and back window opening, turn over folded half of fabric cover and fasten to cemented portion of roof panel.

NOTE: This operation should center fabric cover on roof panel. Center marks on windshield and back window openings must correspond to center marks on fabric cover.

- e. Once 8" strip of fabric cover is cemented to roof panel, fold over side portion of fabric cover. Apply nitrile cement to roof panel to extend approximately 1" beyond dielectric seam location. If neoprene type weatherstrip cement is used, apply cement to fabric cover and roof panel to extend 1" beyond dielectric seam location. (See Fig. 2J4).

IMPORTANT: Application of cement should not overlap with previously cemented area, as "highlighting" of excess cement through fabric cover will result.

- f. Cement prepared portion of fabric cover to roof panel making certain dielectric seam is straight.

- g. Cement fabric cover to side portion of roof panel (except rear quarter area) and drip molding.

NOTE: When installing fabric cover to inside of drip molding, a small thin edged piece of plastic, or similar material, may be used to insert cover in place inside drip molding. Exercise care to prevent damage to cover when performing this operation.

- h. Cement fabric cover in roof extension area.

- i. Repeat steps E, F, G and H on right side.

- j. At windshield and back window openings cement cover into opening. Apply extra bead of cement to each side of dielectric seam between fabric cover and roof panel at windshield and back window openings. (View "A & B", Fig. 2J3).

- k. Position fabric cover around back window where required.

- l. Cement fabric cover to rear compartment front and shelf below back window opening. Be certain dielectric seams are straight. (See View "C", Fig. 2J3).

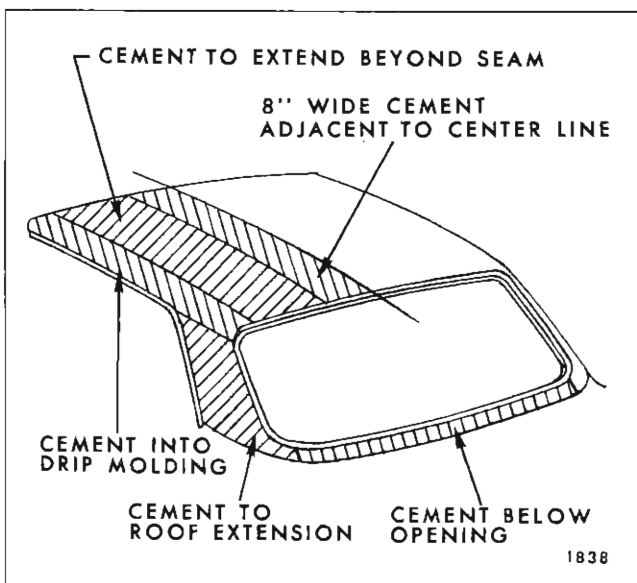


Fig. 2J4—Cementing Fabric Roof Cover

8. Using hammer and flat end punch install drive nails at windshield and back window openings.

NOTE: When installing drive nails it is best to first use an awl or similar tool to initiate a hole in metal. Drive nails should be spaced approximately 2" apart on styles with felt pad and 3" apart for other styles on the straight, and 1" apart at the radius. Strike drive nails only hard enough to seat them. Installation of drive nails should also be as low as possible in windshield and back window opening. This will aid in preventing cutting edge of fabric cover due to a missed hammer blow when drive nails are installed.

9. Install drive nails at belt line of roof extension area.

10. Trim off material at windshield, back window, and roof extension area (belt).

11. Using fabric cover trimming tool (J-21092), or suitable small knife, trim fabric cover just under lip of roof drip molding. (View "D", Fig. 2J3). A tool may be fabricated to trim material along side roof rail moldings as illustrated in Fig. 2J5.

12. Prior to installing flexible retainers in side roof rail drip moldings, spread them slightly to insure a tight fit.

13. Install flexible retainer starting at radius area above rear door or quarter window. Working toward rear of body, carefully insert retainer into drip molding so that fingers are under drip molding flange. (See View "D", Fig. 2J3). Use fibre or wood block with slight concave end to push retainer downward. DO NOT DAMAGE RETAINER.

14. Install all previously removed moldings and assemblies.

NOTE: Normally, minor creases or fold marks will gradually disappear after cover assembly has been in service.

IMPORTANT: If nitrile adhesive is used, fabric cover should be allowed to dry approximately four hours after installation. If fabric cover is

subjected to extreme direct sunlight or heat immediately after installation, blistering due to trapped solvents may occur.

15. When installing windshield and back window assemblies be certain to protect fabric cover from coming in contact with adhesive caulking material. Adhesive caulking material will permanently damage fabric cover material. Masking tape should be applied around windshield and back window openings. Tape may extend 1/4" into openings.

16. Use mineral spirits, kerosene or equivalent to remove windshield and back window sealer from fabric cover.

IMPORTANT: Do not apply excessive pressure when wiping sealer from cover as damage may occur to fabric cover.

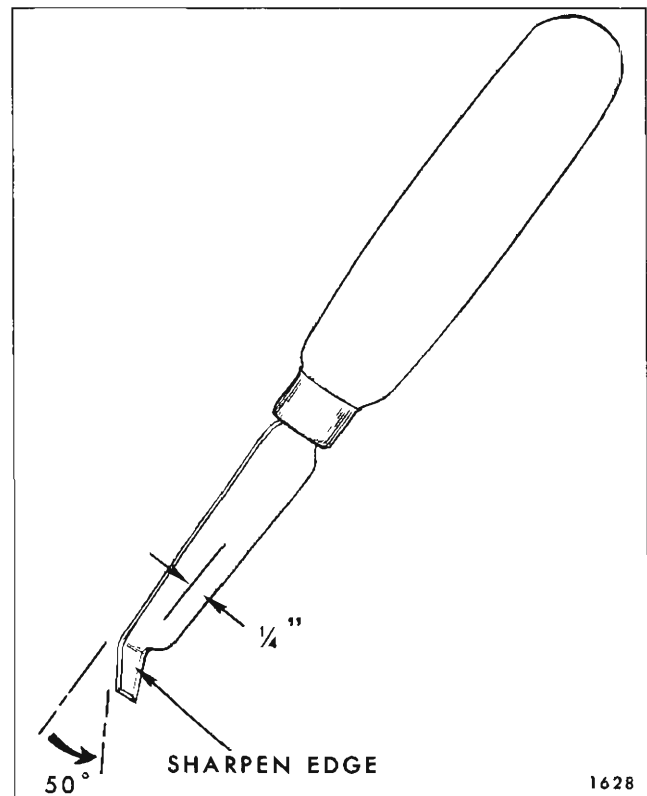


Fig. 2J5—Fabric Cover Trimming Knife

ROOF PANEL FABRIC COVER 44427-37 STYLES

DESCRIPTION

The roof panel fabric cover is a vinyl coated fabric covering applied to the metal roof panel.

The roof cover is cemented to the roof panel. Drive nails are used at the back window opening. The roof panel molding retainers are used to secure the cover at the front and right and left sides.

In addition, the roof panel fabric cover is cemented to the entire surface of the roof panel with a nitrile type non-staining cement on both styles.

Removal

1. The following parts must be removed prior to removing the roof panel fabric cover:

- a. Back window assembly
- b. Rear end belt molding
- c. Roof panel front and side moldings

2. Clean off all excess sealer from back window openings.

3. Remove drive nails from edge of fabric cover at back window opening.

NOTE: Drive nails can best be removed by first driving a screwdriver or suitable tool under the heads of the nails to loosen them. Diagonal cutters or similar tool can then be used to grasp nails and twist them out. Unnecessary enlargement of holes in roof panel should be avoided.

4. Remove roof panel molding front and side retainers by removing spring clip securing retainer to body. (See Section C-C, Fig. 2J6).

5. Prior to removing fabric cover, application of heat will permit easier loosening of cemented area.

CAUTION: Heat may be applied by lamps held 18" (minimum) from fabric only until fabric is warm. If lamps are held too close or fabric cover is heated over 200° F, the fabric may lose its grain, blister, or become very shiny.

6. Loosen cemented edges of fabric roof cover and carefully remove fabric cover from remaining cemented area of roof panel.

Installation

1. Completely tape (mask) pinchweld flange of back window opening. Solvents and adhesive will affect the bond of the adhesive caulking material when replacing glass.

2. Completely mask off area of roof panel which is not covered by fabric cover. Extend tape over windshield upper reveal molding so solvent will not contact paint or adhesive caulking material.

3. Check all cementing surfaces on body to insure a smooth surface. Cementing surface must be smooth to prevent "highlighting" of excess cement through fabric cover after new cover has been installed. Clean off old cement as required. DO NOT ALLOW SOLVENT TO CONTACT EXPOSED PAINT FINISH.

NOTE: A xylol solvent such as 3M Adhesive Cleaner or equivalent, should be used to remove or smooth out excess old cement. Apply solvent and allow to soak before rubbing.

CAUTION: Be certain to follow manufacturer's directions when using cleaner.

4. To permit easier fitting and removing of wrinkles from new cover assembly, where possible, install new cover at room temperature (approximately 72° F).

NOTE: Where new cover is installed at temperatures below 72° F, pliers fabricated as shown in Figure 2J7 will aid in removing wrinkles.

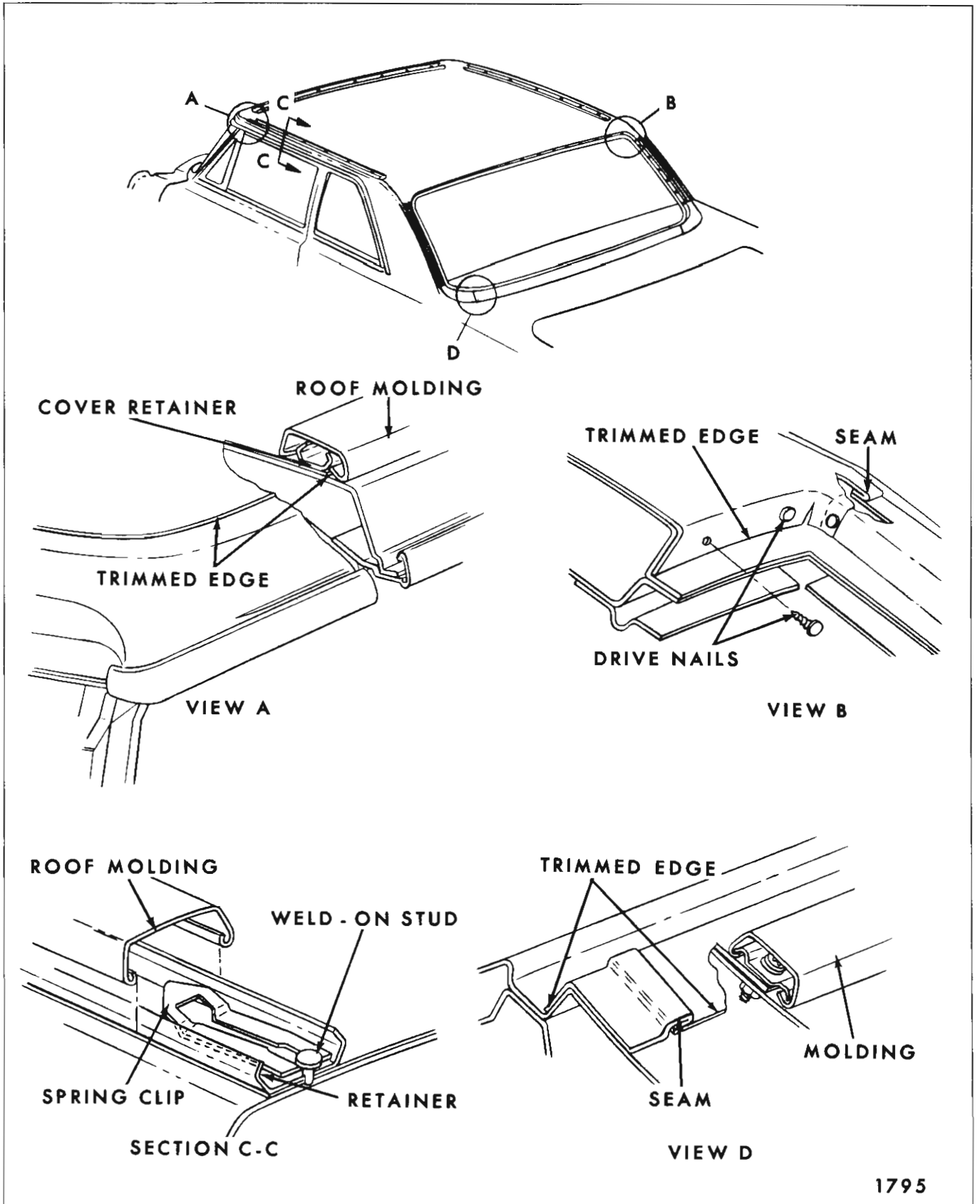
5. Determine center line of roof panel by marking center points on front of roof panel and upper and lower portion of back window opening with chalk or equivalent.

6. Fold cover lengthwise, precisely at center location. Mark center location at front and rear of cover.

7. Lay cover on roof panel and align to correspond with center line of roof panel. Determine proper material overhang at front edge and back window opening. Seams at upper corners of back window should be positioned as shown in View "B", Figure 2J7.

8. Place fabric cover on protected surface with inner layer of material exposed.

9. Apply nitrile non-staining vinyl trim adhesive such as 3M Vinyl Trim Adhesive, Permalastic



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Fig. 2J6—Fabric Roof Cover Installation -
44000 Series

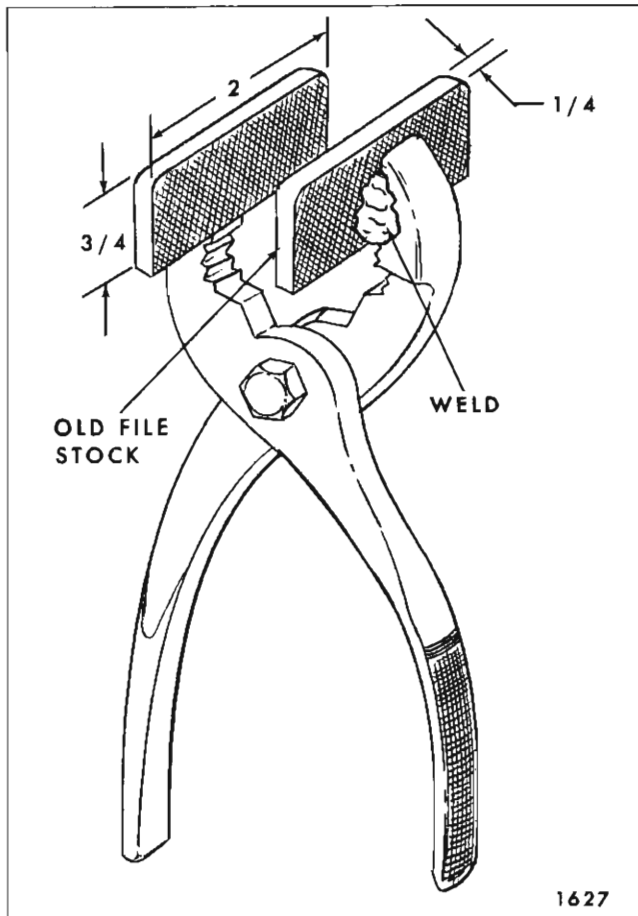


Fig. 2J7—Fabric Cover Pliers

Vinyl Trim Adhesive, or equivalent to entire inner layer of fabric cover. Allow to dry for a minimum of fifteen minutes.

If nitrile adhesive is not available, neoprene type non-staining weatherstrip cement (3M Super Weatherstrip Cement or equivalent) may be used. Instead of applying neoprene cement to entire inner layer of cover in one application, a step procedure is used. Do not allow drying period. Begin by applying an 8" wide strip of cement adjacent to center line of fabric cover to correspond with area shown in Figure 2J8.

IMPORTANT: Application of nitrile vinyl trim adhesive should be as thin as possible, as an excess amount of cement may result in trapped solvents (blisters) between fabric cover and roof panel. Application of neoprene type adhesive should also be as thin as possible as an excess amount may result in "highlights" (cement build-up). For these reasons, a mohair roller or equivalent should be used to apply a thin coat of cement to fabric cover and roof panel; however, if necessary, a brush may be used. Exercise care when applying cement on inner layer of

cover to prevent cement from contacting outer layer.

10. Fold cover on center line with inner layer of cover exposed and place on roof panel adjacent to center line. Apply an 8" wide strip of cement (nitrile or neoprene) on roof panel adjacent to center line of roof panel. (See Fig. 2J8).

11. With aid of helper, slide folded cover to center line of roof panel. Holding fabric cover securely at front and back window opening, turn over folded half of fabric cover and fasten to cemented portion of roof panel.

NOTE: This operation should center fabric cover on roof panel. Center marks on front and back window opening must correspond to center marks on fabric cover.

12. Once 8" strip of fabric cover is cemented to roof panel, fold over side portion of fabric cover.

Apply nitrile cement to roof panel to extend to location of edge of fabric cover previously removed and cut relief notches in fabric cover at weld-on stud locations. Do Not Allow Cement to Contact Painted Surface that will be Exposed After Cover is Installed. If neoprene type weatherstrip cement is used, apply cement to fabric cover and roof panel.

IMPORTANT: Application of cement should not overlap with previously cemented area, as "highlighting" of excess cement through fabric cover will result.

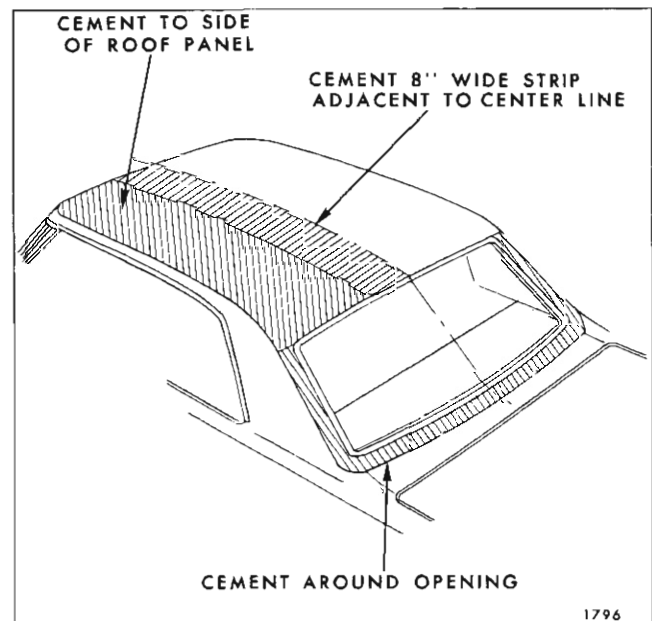


Fig. 2J8—Cementing Procedure for Fabric Cover

13. Cement prepared portion of fabric cover to roof panel making certain dielectric seam is straight.

14. Repeat steps 10, 11, 12 and 13 on opposite side.

15. Position and install fabric cover around back window opening. (See Views "B" and "D", Fig. 2J6).

16. Cement fabric cover to rear compartment front and shelf panel below back window opening. Be certain dielectric seams are straight.

17. Cement cover at back window opening.

18. Using flat end punch and hammer, install drive nails at back window opening and roof extension area (belt).

NOTE: When installing drive nails it is best to first use an awl or similar tool to initiate a hole in metal. Nails should be spaced approximately 3" apart on the straight and 1" in the radius. Strike drive nails only hard enough to seat them. Installation of drive nails should also be as low as possible in back window opening. This will aid in preventing cutting edge of fabric cover due to a missed hammer blow when drive nails are installed.

19. Position molding retainers over weld on studs and install retaining clips.

20. Trim off excess material.

Trim fabric cover along roof panel molding retainers. (See Fig. 2J9). Trimming tool (J-21092) or suitable small knife may be used to trim cover. (See Fig. 2J10). Do Not Damage Paint Finish. At front corners, raise cemented edge of cover and using scissors or sharp knife cut radius so roof panel moldings cover cut edge. Recement fabric cover to roof panel. (See View "A," Fig. 2J6).

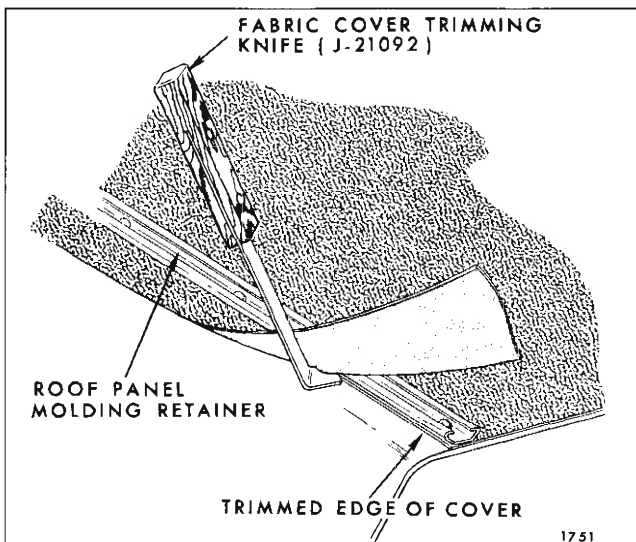
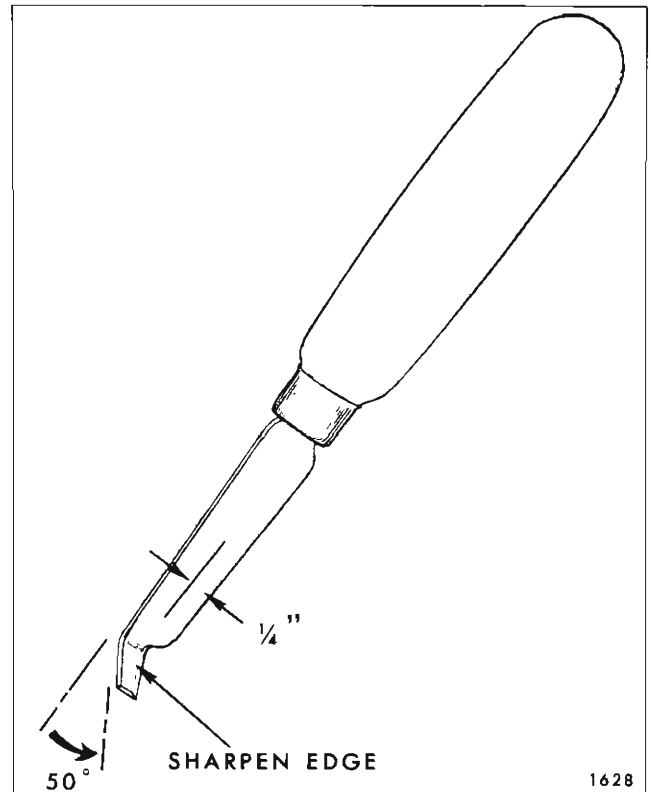


Fig. 2J9—Trimming Fabric Roof Cover



2J10—Fabric Cover Trimming Knife

If it is necessary to trim material from outer edge of fabric cover around back window opening, raise cemented edge and cut as required. Edge of fabric cover should exist as shown in View "D", Fig. 2J6. Do Not Damage Paint Finish. Remove masking from roof panel.

21. Install all previously removed moldings and assemblies.

NOTE: Normally, minor creases or fold marks will gradually disappear after cover assembly has been in service.

IMPORTANT: If nitrile adhesive is used, fabric cover should be allowed to dry approximately four hours after installation. If fabric cover is subjected to extreme direct sunlight or heat immediately after installation, blistering due to trapped solvents may occur.

22. When installing windshield and back window assemblies be certain to protect fabric cover from coming in contact with adhesive caulking material. Adhesive caulking material will permanently damage fabric cover material. Masking tape should be applied around back window opening. Tape may extend 1/4" into openings.

23. Use mineral spirits, kerosene or equivalent to remove back window sealer from fabric cover.

IMPORTANT: Do not apply excessive pressure when wiping sealer from cover as damage may occur to fabric cover.