

SECTION 12 ROOF COVER

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FABRIC ROOF COVER (ALL STYLES EXCEPT STATION WAGONS)

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 certain styles a pad is located between the fabric cover and roof panel. The 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 pad.

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

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

NOTE: On certain styles where roof panel moldings are utilized, the fabric roof cover is not secured at the windshield opening or inside the roof drip moldings. The retainers utilized to retain the roof panel moldings also secure the fabric roof cover.

Prior to and during removal and installation of fabric roof cover, review Figure 12-1, 12-2, 12-3, 12-4 and 12-5.

Figures 12-1 and 12-2 are applicable for all styles. Figure 12-4 is to be referred to when working on styles not equipped with roof panel moldings. Figure 12-3 is applicable only to styles equipped with a pad. Figure 12-5 should be referred to when working on styles equipped with roof panel moldings.

REMOVAL

1. The following parts must be removed prior to removing the roof panel fabric cover:
 - a. Windshield assembly (except styles equipped with roof panel moldings).

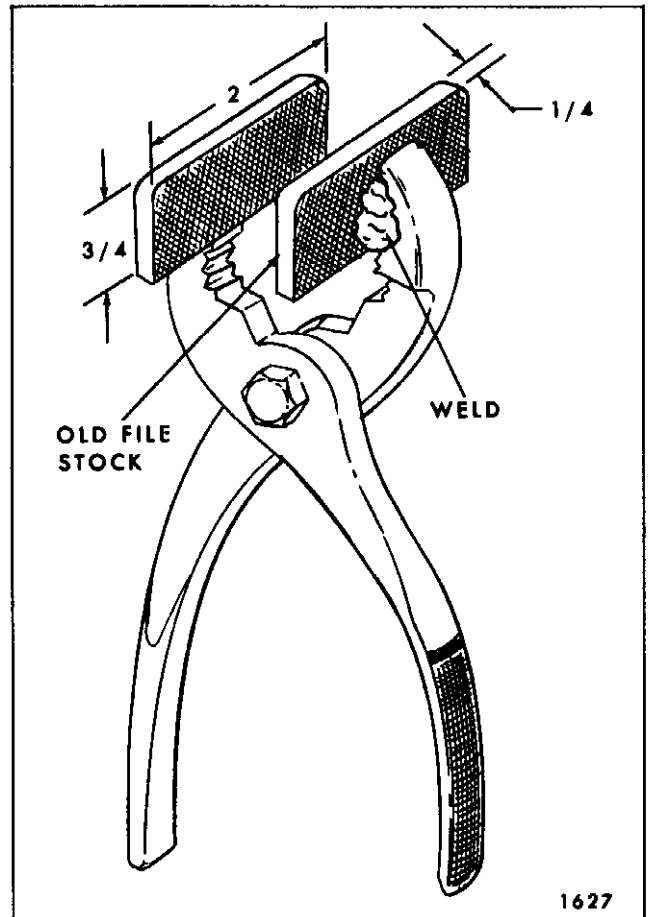


Fig. 12-1 — Fabric Cover Pliers

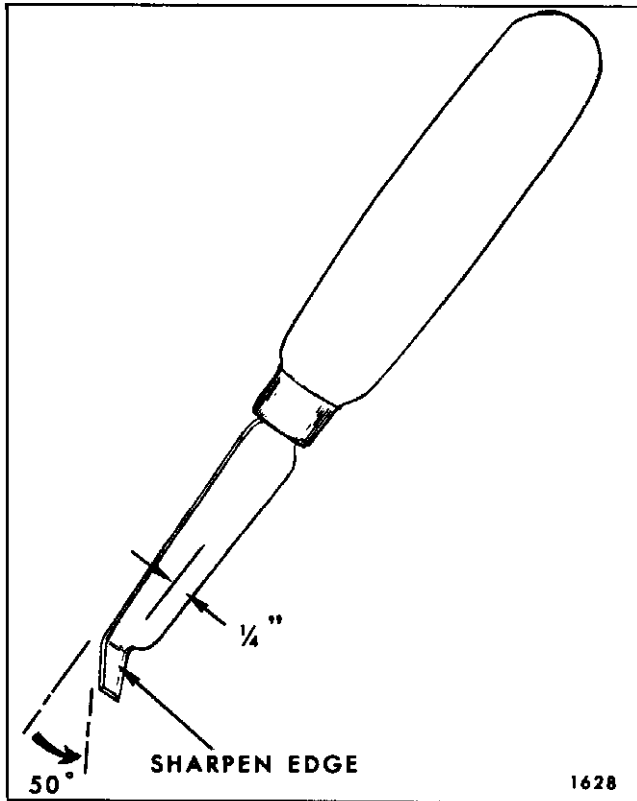


Fig. 12-2 — Fabric Cover Trimming Knife

- b. Roof drip molding scalps (except styles equipped with roof panel moldings).
 - c. Back window assembly.
 - d. Rear quarter belt reveal moldings and rear end belt reveal moldings.
 - e. Rear extension panel emblem and/or nameplate assembly.
 - f. All roof panel moldings and molding retainers on styles so equipped (View "B", Fig. 12-5).
2. Clean off all excess adhesive caulking material from windshield and back window openings.
 3. Remove drive nails and/or staples 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. (View "C", Fig. 12-4). 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. New retainers are to be used when replacing fabric cover.

NOTE: On styles equipped with roof panel moldings, front and side retainers are to be removed by first removing spring clips from weld-on studs (View "B", Fig. 12-5).

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 roof 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 styles where a pad is present, exercise care when removing fabric cover so pad will not be damaged.

7. On styles equipped with pad, inspect padding and, if necessary, replace damaged area. 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 softening of roof panel paint finish.

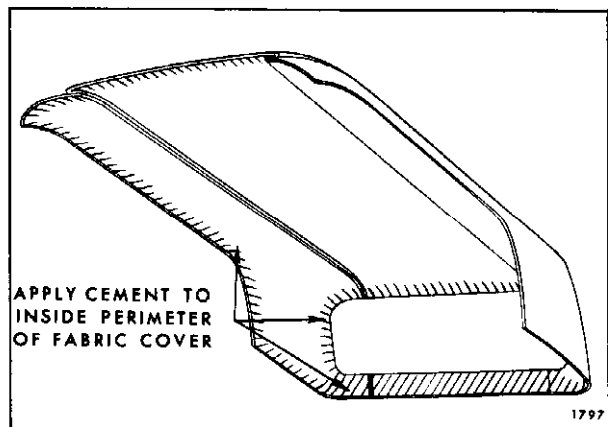


Fig. 12-3 — Cementing Fabric Cover with Pad

8. Replace pad by cementing 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.

2. On style equipped with roof panel moldings, 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. On all other styles, mask portion of windshield and back window opening where adhesive caulk material will be later applied. In addition, all doors and flat painted surfaces (hood, rear compartment lid, etc.) should be masked.
3. Where possible, install new cover at room temperature (approximately 72°), to permit easier fitting and removing of wrinkles from new cover assembly.

NOTE: Where new cover is installed at temperatures below 72°, fabricated pliers as shown in Figure 12-1 will aid in removing wrinkles.

4. Determine center line of roof panel by marking center points on windshield and back window opening with tape or equivalent.
5. Lay cover on roof panel and fold cover lengthwise, precisely at center location. Mark center location at front and rear of cover.
6. Remove cover from roof panel and lay cover with lining side upward on a clean flat area.
7. a. On styles where pad is not present, apply an even application of nitrile non-staining vinyl trim adhesive (such as 3M Vinyl Trim Adhesive or Permalastic Vinyl Trim Adhesive or equivalent) over entire lining side of fabric cover.

NOTE: Neoprene non-staining weather-strip adhesive may be used if the above is not available.

- b. On styles equipped with pad, apply nitrile type trim adhesive to that part of lining side of cover that will contact the metal portion of the roof panel. Cement should be applied so it will overlap the pad approximately 1".

NOTE: It is recommended that the nitrile trim adhesive be applied with a spray gun. As an alternate method, a brush or roller may be used. If spraying method is utilized, a spray gun with a pressure cup and specific Fluid Tip and air cap should be used as shown on chart below (or equivalent).

Gun Model	Devilbiss		Binks	
	MBC-510	JGA-502	62	18
1 Qt. Pressure	KB-519	KB-519	80-256	80-210
Air Cap	24	24	66PG	66PG
Fluid Tip	E	E	66	66
Fluid Needle	E	E	365	65

The recommended air pressures are as follows:

- A. Air Line Pressure - 50 Lbs.
- B. Cup Pressure - 2 to 4 Lbs.

Permalastic or 3M Vinyl Trim Adhesive purchased in the field is of spraying consistency. If rolling method is used, a mohair type roller should be utilized. Make certain cement is applied evenly and there are no highlights from excess cement build-up.

8. Allow cement on fabric roof cover to thoroughly dry.
9. Lay cover on roof panel and align to correspond with center line of roof panel. Determine proper material overhang to windshield and back window openings (approximately 2" overhang at seam area at back window and windshield opening).
10. a. On styles not equipped with pad, fold one half of cover back at centerline and apply nitrile type vinyl trim adhesive to exposed half of roof panel (Do not include drip molding or roof extension area). Starting in center at centerline and working toward drip molding, cement cover to area while cement is wet. As cover is being "unfolded" and cemented, it should be thoroughly "slicked" down to avoid wrinkles or air bubbles.

- b. On styles equipped with pad, install drive nail at seam areas only in back window opening. Apply cement to one side of exposed roof panel (including drip moldings) where cover is attached (make certain cement overlaps pad approximately 1") and cement cover to areas. On styles with roof panel moldings, relief notches must be cut in fabric roof cover at weld-on studs.

NOTE: When installing fabric cover to inside of drip molding, a small thin-edge 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.

11. Repeat Steps 10a and b on opposite side of roof panel.
- NOTE:** Make certain that cover is free of wrinkles and seams are straight. Fabric cover pliers may be used in aiding removal of wrinkles.
12. Apply cement across the top of windshield and back window opening and cement cover in these areas.
- NOTE:** Relief notches must be cut in cover where weld-on studs are present and at upper radius of windshield and back window opening.
13. Using hammer and flat end punch install drive nails at top of windshield and back window openings (View "B" and "E" Figure 12-4 show typical drive nail installation). Drive nails are not to be used at weld-on studs on roof panel on styles equipped with roof panel moldings.
- 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 in a straight area, and 1" apart at a 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.
14. Apply cement to roof extension areas and below back window opening on styles where covers extend below back window.
15. On styles where cover extends below back window opening, cement cover in that area prior to performing Step 16.
16. Cement cover at roof extension areas by pulling cover down and rearward. When operation is completed, fabric cover should be free of all wrinkles and draws in this area.
17. Cement cover into side of back window opening. If weld-on studs are present, cut relief notches in cover.
18. Using flat end punch and hammer, install drive nails at side of back window opening (styles with pad only) and along belt line at extension area (all styles). Drive nails at belt are to be spaced 3" apart.
19. On styles equipped with roof panel moldings, position roof panel cover retainers over weld-on studs and install retaining clips.
20. On styles where roof panel cover extends down windshield pillar, cement fabric roof cover to windshield pillar.
21. On styles equipped with roof panel moldings, trim fabric cover along roof panel molding retainers (View "B", Fig. 12-5). Trimming tool (J-21092) or suitable small knife may be used to trim cover (See Figure 12-2). 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. 12-5). Remove masking tape from roof panel.
22. On all styles, trim material along belt line at roof extension area. On styles where fabric cover extends below back window, trim cover along rear end belt molding area. If it is necessary to trim material from outer edge of fabric cover around windshield or back window opening, raise cemented edge and cut as required. Edge of fabric cover should exist as shown in View "B" and "E", Fig. 12-4. Do Not Damage Paint Finish.
23. On styles not equipped with roof panel moldings perform the following operations.
- Cement fabric cover into drip moldings (styles without pad).
 - Using fabric cover trimming tool (J-21092), or suitable small knife, trim fabric cover just under lip of roof drip molding (View "C", Fig. 12-4). A tool may be fabricated to trim material along side roof rail drip moldings as illustrated in Figure 12-2.
 - Install flexible retainer starting at radius area above rear door or quarter window. Working toward rear of body, carefully

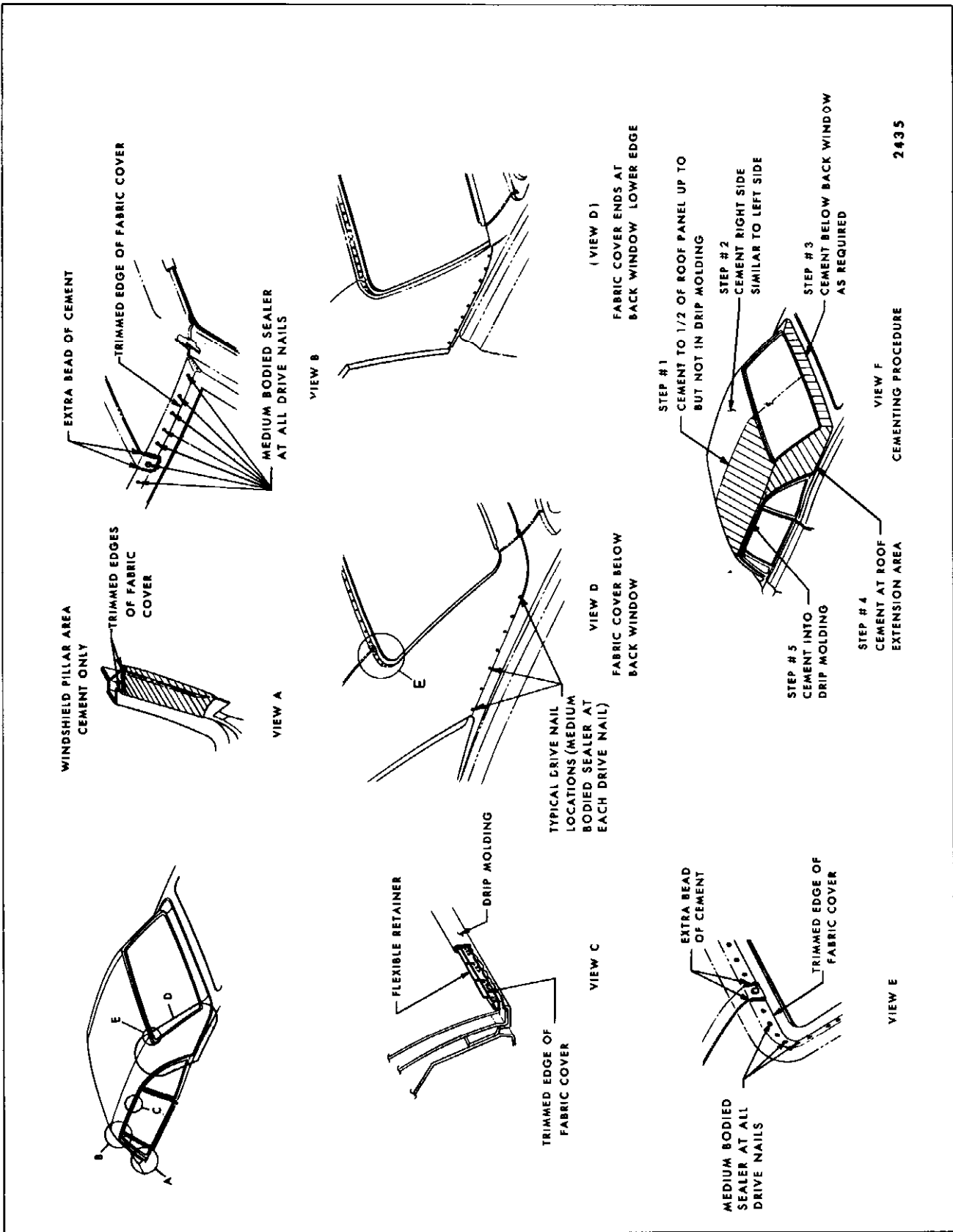


Fig. 12-4—Fabric Roof Cover Installation - Styles without Roof Panel Molding

insert retainer into drip molding so that outside edge is under drip molding flange (See View "C", Fig. 12-4). Use fibre or wood block with slight concave end to push retainer downward. DO NOT DAMAGE RETAINER.

24. a. On styles without pad, install medium bodied sealer at each drive nail and relief notch in the windshield and back window opening.
 - b. On styles with pad, apply medium bodied sealer across the top of windshield opening (styles where cover is installed in windshield opening) and back window opening.
25. Remove masking tape from windshield and back window opening.
 26. 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.

27. Use mineral spirits, kerosene or equivalent to remove windshield and back window adhesive caulking material from fabric cover.

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

NOTE: In the event slight bubbles or wrinkles exist in fabric cover, they can be repaired as follows:

- a. Pierce bubble with small needle.
- b. Apply a dampened shop towel over area.
- c. Using a low heat home type iron, apply iron to dampened towel using back and forth strokes until wrinkle or bubble disappears. Be certain shop towel does not become dry as excess heat will permanently damage fabric roof cover.

FABRIC ROOF COVER (STATION WAGON STYLES)

The procedure for removal and installation of the fabric cover on station wagon styles is divided into two sections. The roof panel fabric cover procedure is followed by the tailgate fabric cover procedure.

NOTE: The roof panel fabric cover assembly is ordered as a separate service part. The fabric used on the tailgate is ordered as "yardage material" in the normal manner.

DESCRIPTION

The roof panel fabric cover is cemented to the entire surface of the roof panel and tailgate with nitrile type non-staining cement. In addition to cement, the fabric cover is attached at the windshield by drive nails and in the tailgate opening by two screws at the seams. Drive nails are used at the belt line of the back body opening pillar. A flexible retainer secures the fabric cover inside the right and left drip moldings.

Prior to and during removal and installation of fabric roof cover, review Fig. 12-1, 12-2 and 12-6.

REMOVAL

1. The following parts must be removed prior to removing the roof panel fabric cover:
 - a. Windshield pillar drip molding.
 - b. Windshield assembly.
 - c. Back body opening upper and side reveal moldings.
 - d. Roof drip molding scalps.
 - e. Back body pillar cover finishing molding retainers.
 - f. Tailgate upper glass run channel.
2. Clean off all excess adhesive caulking material from windshield opening.
3. Remove screws, drive nails and/or staples from edge of fabric cover at windshield, and at back body pillar.

NOTE: Drive nails can best be removed by first driving a screwdriver or suitable tool

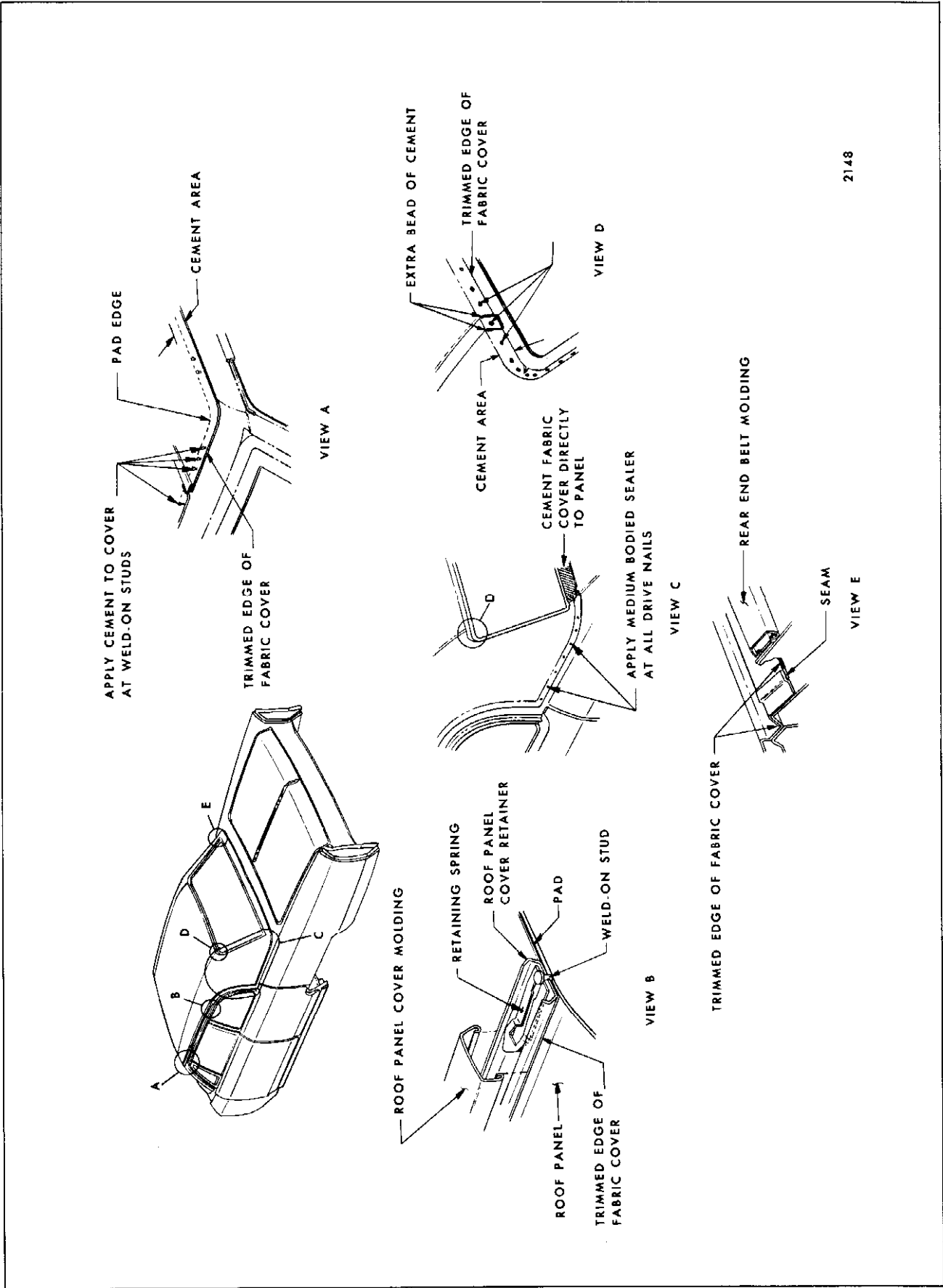


Fig. 12-5—Fabric Roof Cover Installation — Styles with Roof Panel Molding

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 (See Section "A-A", Fig. 12-6). 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 roof cover at windshield area, drip moldings, back body opening, and back body pillar areas; then, carefully remove fabric cover from remaining cemented area of roof panel.

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

NOTE: Where new cover is installed at temperatures below 72°F, pliers fabricated as shown in Figure 12-1 will aid in removing wrinkles.

4. Determine center line of roof panel by marking center points on windshield and back body opening with chalk or equivalent.
5. Fold cover lengthwise, precisely at center location. Mark center location at front and rear of cover.
6. Remove cover from roof panel and lay cover with lining side upward on a clean surface.
7. Apply an even application of nitrile non-staining vinyl trim adhesive (such as 3M Vinyl Trim Adhesive or Permalastic Vinyl Trim Adhesive or equivalent) over entire lining side of fabric cover. Neoprene non-staining weatherstrip adhesive may be used if the above is not available.

NOTE: It is recommended that nitrile trim adhesive be applied by spraying. As an alternate method, a roller or brush may be used. If spraying method is utilized, a spray gun with a pressure cup, and specific Fluid Tip and air cap should be used as shown on chart below (or equivalent).

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.

2. Mask all painted surfaces below belt line, including hood windshield pinchweld flange, instrument panel, and back body opening to protect painted surfaces.

CAUTION: Avoid prolonged contact of saturated masking materials to painted surfaces or paint etching may result.

	Devilbiss		Binks	
Gun Model	MBC-510	JGA-502	62	18
1 Qt. Pressure	KB-519	KB-519	80-256	80-210
Air Cap	24	24	66PG	66PG
Fluid Tip	E	E	66	66
Fluid Needle	E	E	365	65

The recommended air pressures are as follows:

- A. Air Line Pressure - 50 lbs.
- B. Cup Pressure - 2 to 4 lbs.

Permalastic or 3M Vinyl Trim Adhesive purchased in the field is of spraying consistency. If rolling method is used, a mohair type roller should be utilized. Make certain cement is applied evenly and there are no highlights from excess cement build-up.

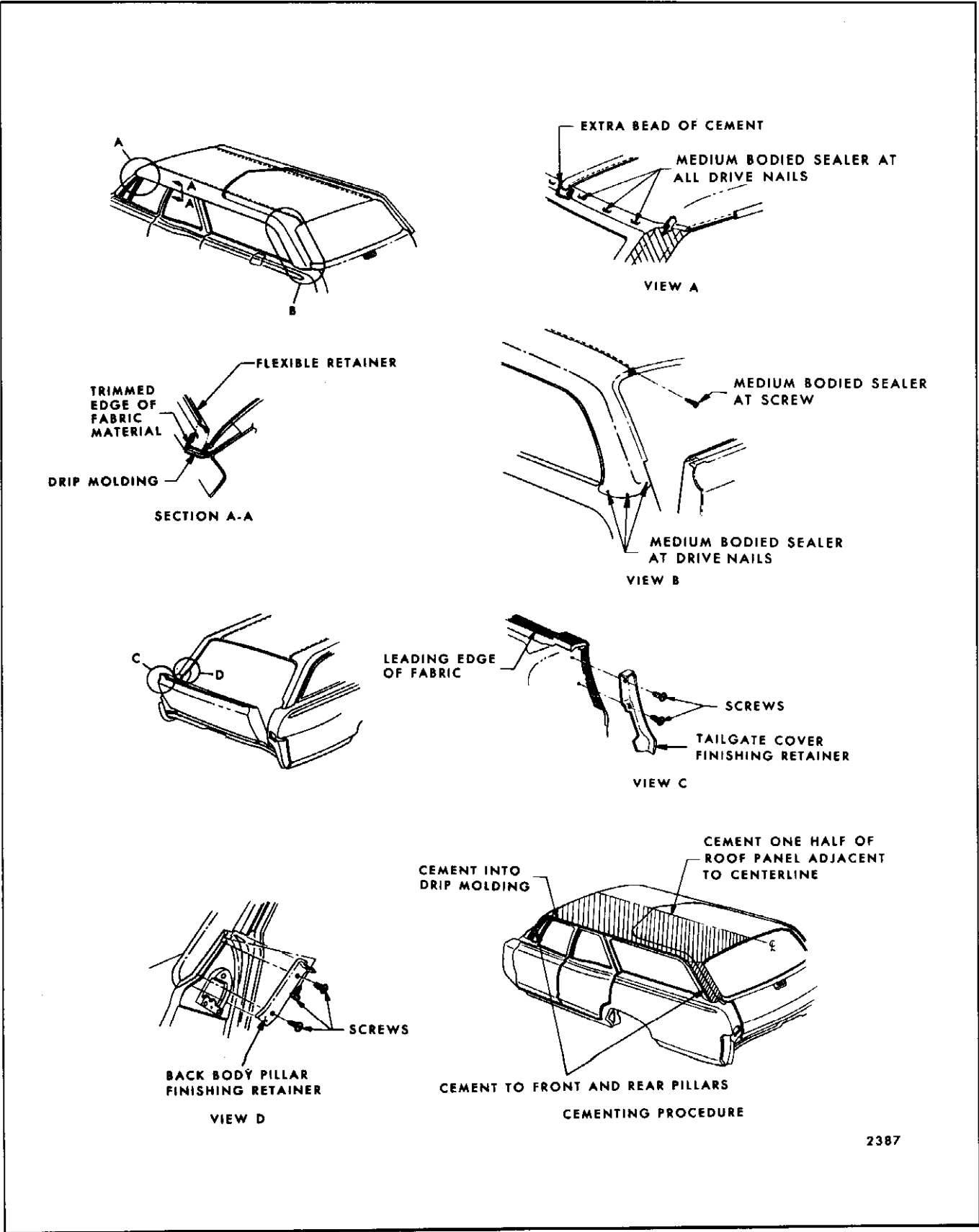


Fig. 12-6—Fabric Roof Cover Installation - Station Wagon Styles

8. Allow cement on fabric roof cover to thoroughly dry.
9. Lay cover on roof panel and align to correspond with center line of roof panel. Determine proper material overhang to windshield and back body openings (approximately 3" overhang at seam area at back body and windshield opening).

10. Fold one half of cover back at centerline and apply nitrile type vinyl trim adhesive to exposed half of roof panel (including drip molding). Starting in center at centerline and working toward drip molding, immediately cement cover to area. As cover is being "unfolded" and cemented, it should be thoroughly "slicked" down with hands to avoid wrinkles or air bubbles.

NOTE: When installing fabric cover to inside of drip molding, a small thin edge 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.

11. Repeat Step 10 on opposite side of roof panel.

NOTE: Make certain that cover is free of wrinkles and seams are straight. Fabric cover pliers may be used in aiding removal of wrinkles.

12. Apply cement to windshield and back body pillars and in windshield and back body openings. Cement cover in those areas.

NOTE: Relief notches must be cut in cover where any weld-on studs are present.

13. Using hammer and flat end punch install drive nails at top of windshield opening.

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 3" apart in a straight area, and 1" apart at a radius. Strike drive nails only

hard enough to seat them. Installation of drive nails should also be as low as possible in windshield opening. This will aid in preventing cutting edge of fabric cover due to a missed hammer blow when drive nails are installed.

14. Install drive nails at belt line of back body pillar area and screws in back body opening. Do Not use awl for punching holes at belt line. Use existing holes or drill.
15. Trim off material at windshield opening, windshield pillar, back body opening, and back body pillar.
16. Using fabric cover trimming tool (J-21092), or suitable small knife, trim fabric cover just under lip of roof drip molding (Section "A-A", Figure 12-6). A tool may be fabricated to trim material along roof drip rail moldings as illustrated in Figure 12-2.
17. Install flexible retainer starting at front end of drip molding. Working toward rear of body, carefully insert inner edge of retainer into drip molding and snap fingers of retainer under drip molding flange. Use fibre or wood block with slight concave end to push retainer downward. **DO NOT DAMAGE RETAINER.**
18. Apply medium bodied sealer at each drive nail and at 2 screws at seam area in back body opening (View "A" and "B", Fig. 12-6).
19. Remove all masking tape.
20. 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.

TAIL GATE FABRIC COVER

DESCRIPTION

The tail gate fabric cover is a vinyl coated fabric of one section and is cemented to the surface of tailgate.

REMOVAL

1. The following parts must be removed prior to removing the tailgate fabric cover.

- a. Tail gate belt reveal molding.
 - b. Tail gate window lower reveal molding.
 - c. Tail gate cover finishing retainer.
2. 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.

3. Loosen cemented edges of fabric cover on tail gate, then carefully remove cover from remaining cemented area.

INSTALLATION

1. Check 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.

2. Mask area below fabric break line on tailgate to protect painted surfaces.

CAUTION: Avoid prolonged contact of saturated masking materials to painted surfaces or paint etching may result.

3. To permit easier fitting and removing of wrinkles from new cover assembly, where

possible, install new cover at room temperature (approximately 72°).

4. Position and install fabric cover on tailgate as follows:

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

b. Apply adhesive material to entire inner surface of fabric roof cover and allow to thoroughly dry.

NOTE: See Note under Step 7 in Fabric Roof Cover (Station Wagon Styles) installation procedure for method in applying cement.

c. Apply adhesive material to exposed surface of tail gate panel including inner flange.

d. Immediately position fabric to top leading edge of tail gate panel and work material down to molding attaching holes (See View "C", Fig. 12-6).

e. Wrap fabric around flange on tailgate.

f. Trim off excess material on tail gate flange (View "C", Fig. 12-6).

5. Install all previously removed moldings and assemblies.

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.

6. Remove all masking tape.

NOTE: For repair of wrinkles or bubbles see Note at conclusion of Installation procedure of "Fabric Roof Cover (All Styles except Station Wagons)".