

tabs at the left and right ends of the front guide rail from the left and right guide rails, respectively, and remove the front guide rail (Fig. 8).

4. Slide the cable left and right guide rails from their respective rear retainers and lift them out of the panel housing (Fig. 8). The guide rails will contain the rear slide and cable assemblies.
5. Remove the sliding panel trim piece from its stowed position in the roof panel.
6. Remove the rear slide and cable assemblies from the guide rails, by sliding them forward and out (Fig. 8).

Installation

1. Insert the rear slide and cable assemblies into the guide rails. The plastic rollers on each rear slide assembly should be inboard, so that the right and left slides will be installed in the right and left guide rails, respectively (Fig. 8).
2. Install the left and right guide rails in the panel housing, sliding them onto their respective rear retainers (Fig. 8). Be sure that the guide rail rear retainers are engaged in their brackets at the rear of the housing assembly, inside the roof.
3. Install the front guide rail in the housing, so that the locating tabs on each end engage the right and left guide rails (Fig. 8). Then install the two retaining screws near the center of the front guide rail (Fig. 7).
4. Install the two cable side covers (3 screws each, Fig. 7), and pull both rear slide assemblies forward against the stops of the cable side covers.
5. Thread the right cable into the outboard channel of the left guide rail and the left cable into the inboard channel of the right guide rail (Fig. 8).
6. Seat the cable into the front guide rail and install the cable front retainer on top of the cables in the center of the front guide rail (Figs. 7 and 8).
7. Lubricate the top of each cable at the front guide rail with ESB-M1C93A (Ford Part No. 19584 or equivalent) polyethylene grease. Wipe the excess grease into the guide rail channels.
8. Make sure that the cable rear slides are still positioned against the stops of the cable side covers, and then install the cable front cover (9 screws, Fig. 7).
9. Install the drive assembly, the escutcheon and the crank handle, as shown in Fig. 6. Make sure that the rear slides are still positioned at the stops of the cable side covers.
10. Cycle the cables and rear slides to make sure that the cable and guide rail system functions without binding.
11. Install the trim panel by sliding it into the guide rails from the front. Then, slide the trim panel to the extreme rear position.
12. With the rear slide assemblies against the stops of the side covers and the slide adjusting links in the vertical position, place the roof sliding panel into the roof opening.
13. Attach the sliding panel to the left and right rear slide assemblies. To make this attachment, position each slide mounting bracket over the tapping plate

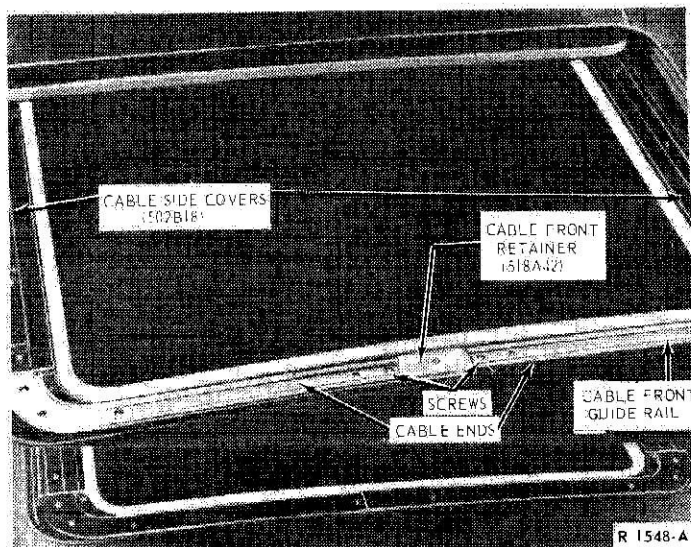


FIG. 7 Cables and Guide Rails Installed

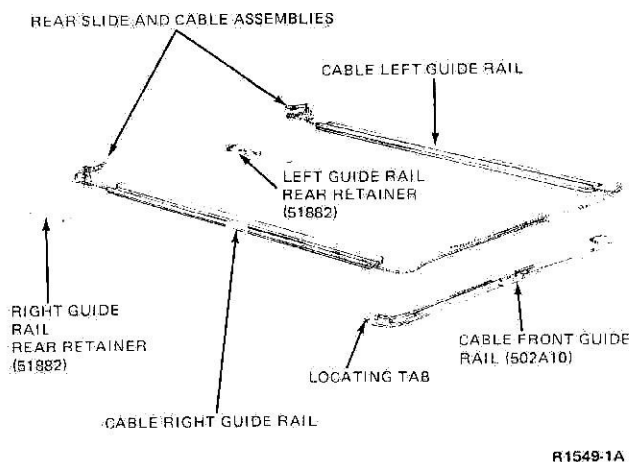


FIG. 8 Guide Rail and Cable System

holes and between the retainer tabs in the sliding panel. Then slide the mounting bracket retainer into the tabs against the bracket and secure with two retaining screws (Figs. 4 and 5).

14. On Pinto and Bobcat only, turn the sliding panel front adjusting nut counterclockwise to the mid-position on each front slide adjusting stud (Fig. 1). For Mustang II, position the front guides midway on the adjusting ramp (Fig. 2).
15. Engage the left and right front slides to the left and right guide rails, respectively, and attach each slide to its adjusting nut on the sliding panel (2 screws each, Figs. 1 and 4). The slide assembly should be perpendicular to the guide rail. To avoid binding, be sure that the base of the slide throat does not contact the guide rail (Fig. 1). **Do not jamb the slide to the guide rail.**
16. Raise or lower the sliding panel to proper alignment with the roof, as outlined in the Adjustment Section.
17. Lock each rear slide tension spring in applied position, by rotating it outboard and engaging it in the plastic roller (Fig. 4).

18. Crank the roof sliding panel open about five inches, pull the trim panel forward, and engage it to the sliding panel at the seven trim clips (Fig. 2).
19. Crank the sliding panel to the closed position, and check the crank handle alignment within the escutcheon cup (Fig. 6). Realign the handle on the drive shaft, if necessary.

REAR SLIDE AND CABLE ASSEMBLY

1. Remove the roof sliding panel from the roof panel, as outlined under Roof Sliding Panel, Steps 1 through 7.
2. Remove the crank handle and drive assembly.
3. Remove the guide rail(s), as outlined under Guide Rail, Slide and Cable System, Steps 2 through 6.
4. Install the rear slide to the guide rail and the guide rail to the housing, as outlined under Installation, Steps 1 through 19.

FRONT SLIDE

1. Remove the trim panel from the roof sliding panel, as described under Roof Sliding Panel, Steps 1 through 3.
2. Remove the front slide assembly from the adjusting nut or adjusting ramp, at the front end of the sliding panel (2 screws, Fig. 4).
3. When installing the slide, engage it to the guide rail and attach it to the adjusting nut or adjusting ramp, on the sliding panel. The slide assembly should be perpendicular to the guide rail. To avoid binding, be sure that the base of the slide throat does not contact the guide rail (Fig. 1). **Do not jam the slide to the guide rail.**

REAR SLIDE TENSION SPRING

1. Remove the trim panel and slide it to the rear (stowed) position, as outlined under **Roof Sliding Panel**, steps 1 through 3.
2. Using a 3/16-inch drill, remove the rivet that retains the spring to the roof sliding panel (Fig. 4).
3. Install a new spring washer and spring with a pop rivet.

SLIDING PANEL HOUSING ASSEMBLY

1. Crank the roof sliding panel to the half open position.
2. Remove the crank handle and escutcheon assembly (Fig. 6).
3. Remove the headlining retainer and the headlining, as outlined in Part 45-41.
4. Disconnect the four drain hoses (Fig. 10).
5. Remove the (7) nuts (for Pinto and Bobcat, (6) nuts for Mustang II) that retain the housing assembly to the roof panel, and lower the housing from the roof (Fig. 9). **The housing should be held in position, while the retaining nuts are being removed.**
6. When installing the housing assembly, tighten the retaining nuts to a torque of 3 to 7 ft-lbs.

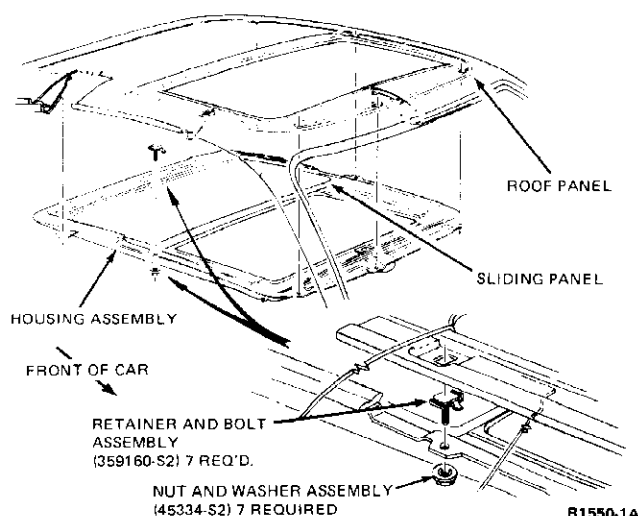


FIG. 9 Sliding Panel-To-Roof Panel Attaching Points

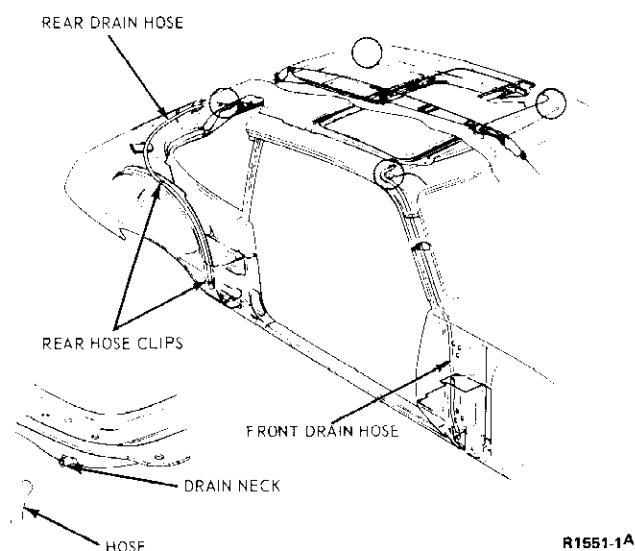


FIG. 10 Roof Drainage System

DRAIN HOSES

To replace front drain hose, the headlining assembly must be lowered at the windshield header area for access. Disconnect the hose from the roof front drain neck (Fig. 10). Remove the cowl side trim panel for access to the lower end of the hose. Attach the replacement hose to the lower end of the existing hose. Pull the new hose into place from below, as the existing hose is pulled out at the top.

To replace a rear drain hose, pull the headlining down from the affected corner of the roof panel for access. Then disconnect the hose from the roof rear drain neck (Fig. 10). Remove the quarter trim panel for access to the lower end of the hose. Attach the replacement hose to the lower end of the existing hose, and remove the retaining clips. The new hose can then be pulled into place from below, as the existing hose is pulled out at the top. Secure the new hose with the retaining clips before installing the quarter panel.

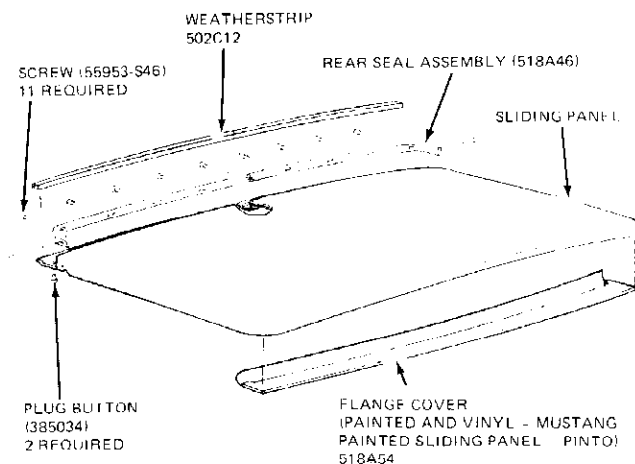
During regular maintenance, check the drain hole at each of the four corners of the roof, to see if it is free of foreign material. Any hole that is plugged may be cleaned out with a flexible hose of smaller diameter, or with air pressure.

ROOF SLIDING PANEL REAR SEAL

1. Remove the roof sliding panel from the roof, as outlined in this Section.
2. Remove the rear seal from the rear vertical flange of the panel, as shown in Fig. 11.
3. Remove the weatherstrip from the rear horizontal flange of the panel, as shown in Fig. 11.

ROOF SLIDING PANEL FRONT SEAL

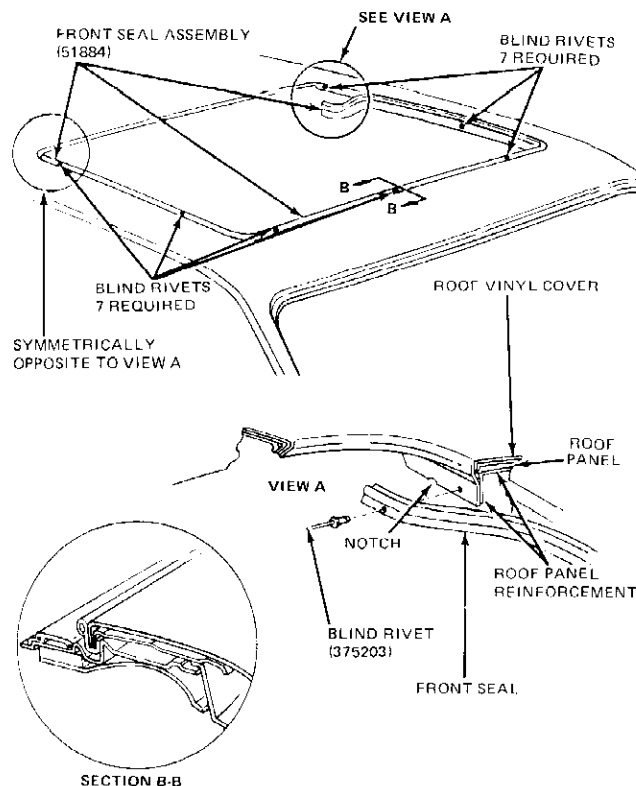
1. Remove the sliding panel housing assembly, as outlined in this Section.
2. Drill out the blind rivets from the seal and remove the seal assembly (Fig. 12).



R1552-1D

FIG. 11 Rear Seal Replacement

3. Install the new seal assembly to the roof panel reinforcement flange. Trim the seal to the proper length at the notches in the flange of the roof reinforcement.
4. Pierce rivet holes in the seal assembly. Use the existing holes in the roof flange as guides.
5. Secure the seal, using seven 1/8-inch blind rivets.
6. Install the sliding panel housing assembly back in the roof, as outlined in this Part.



R1553-1B

FIG. 12 Front Seal and Vinyl Cover Installation

Manual Sun Roof -- Removable

PART
46-12

CR2854-2A

REMOVABLE SUN ROOF OPERATION

The optional removable sun roof is operated as follows: To open to vent position, move the release lever as far forward and upward as it will go. To close, move the lever to its full rearward position (Fig. 1).

PANEL REMOVAL

To remove the glass panel, move the release lever to mid-position. Then squeeze the attaching links together to disengage the latching mechanism from the roof panel. From outside the vehicle, raise the rear edge of the glass and remove it by lifting upward and rearward (Fig. 2).

PANEL STOWAGE

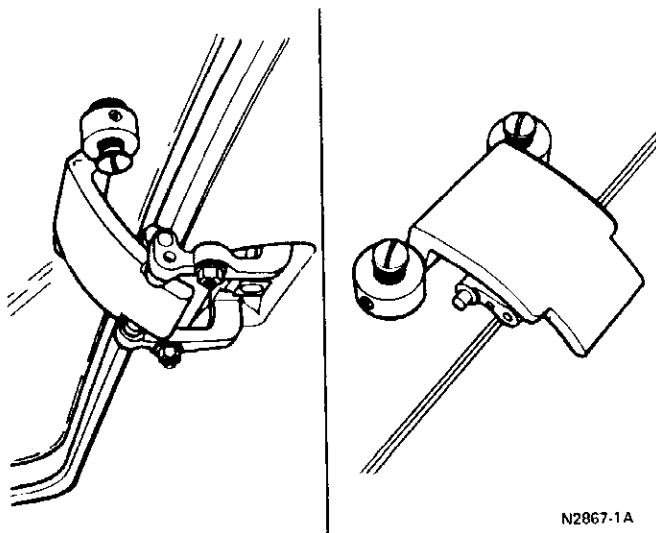
Whenever the glass panel is removed, it should be stored in the stowage bag provided (Fig. 3). The glass panel and sunshade should never be stored anywhere

else in the vehicle. The stowage bag consists of two compartments that can safely accommodate the removable glass and sun shade.

The stowage bag on 2-door models rests against the rear seat back at the bottom edge and clips to the drain trough beneath the weatherstrip at the top edge. On 3-door models it is strapped to the rear floor on the passenger side of the vehicle.

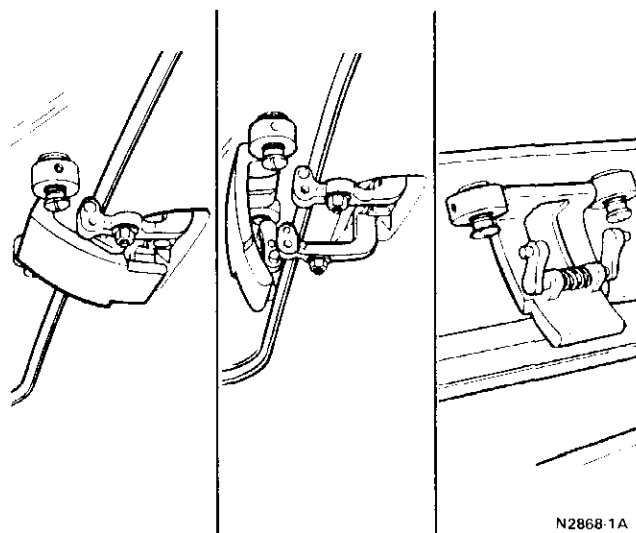
PANEL INSTALLATION

To install the glass panel, align the two hinges at the front of the glass with the hinge sockets in the roof panel (Fig. 4). Hinges should be fully seated in their sockets before the rear edge of the panel is lowered. From inside the vehicle, squeeze the connecting links together and insert them in their respective sockets. Glass can then be locked in position by actuating the release lever.



N2867-1A

FIG. 1 Removable Sun Roof Operation



N2868-1A

FIG. 2 Panel Removal

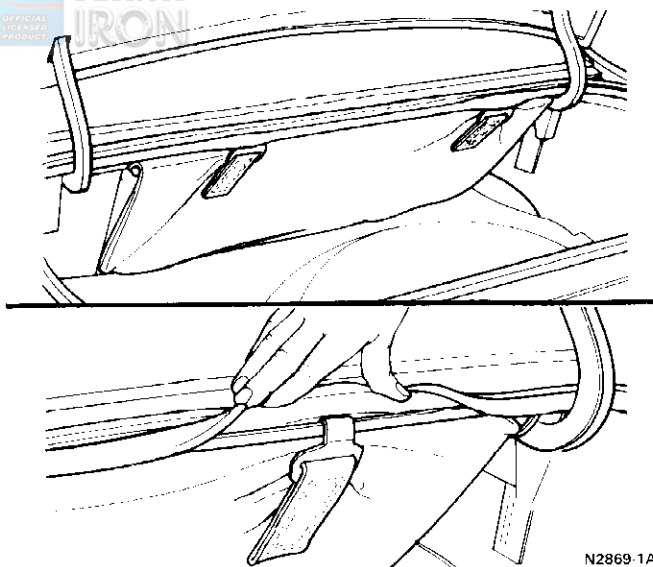


FIG. 3 Panel Stowage

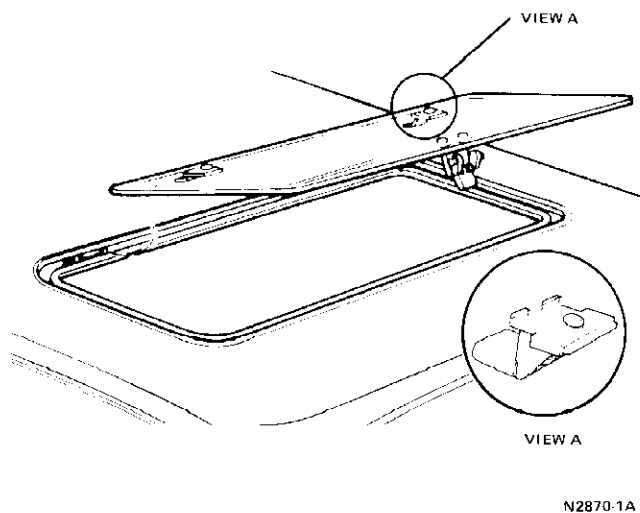


FIG. 4 Panel Installation

REPAIR PROCEDURES

GLASS REPLACEMENT

Remove the hinge brackets from the broken glass by removing the attaching screws at the center of each bracket. Loosen the allen set screws on the latch mechanism and unscrew the two attaching bolts to separate from the broken glass. Be sure to transfer all sleeves and washers to the new installation (See Fig. 5).

Recommended attaching torque is 36-54 in-lbs.

ADJUSTMENT

After the glass panel is installed in the vehicle the latching mechanism can be adjusted to obtain optimum fit. Adjustment is accomplished by moving the latch sleeves up or down and locking them in place with the set screws.

The portion of the latch that is attached to the roof panel can be adjusted fore and aft by loosening the two 1/4-20 bolts and repositioning the bracket.

WEATHERSTRIP REPLACEMENT

If weatherstripping is removed or replaced it should be secured as follows:

Body opening seal: remove attaching pop-rivets and install new seal with pop-rivets drill-at-assembly.

Weatherstrip roof opening: pull off and reinstall new part by pushing on (no adhesive required).

HINGE SOCKET REPLACEMENT

In order to replace the front hinge sockets, it is necessary to locally lower the headlining for access.

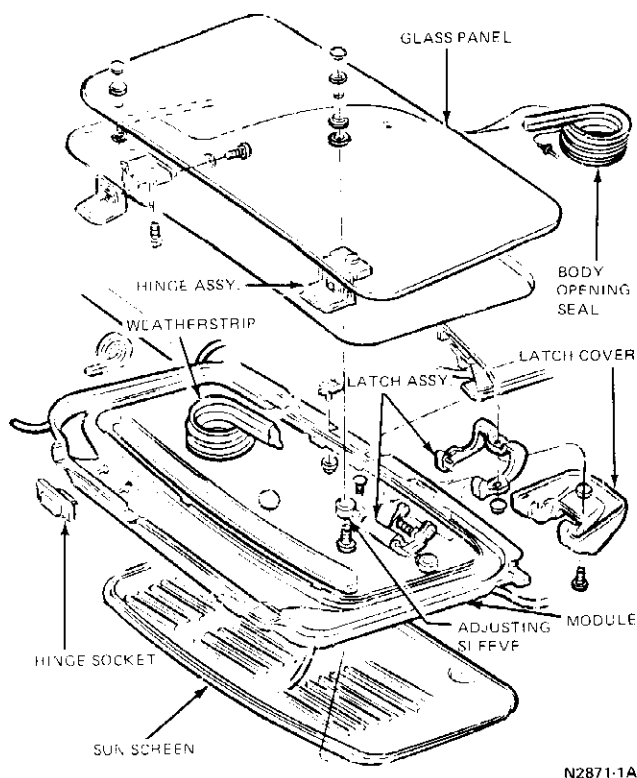


FIG. 5 Glass

Parts can then be removed and replaced in the normal manner (2 attaching screws).

Roof Outside Cover

PART
46-20

SUBJECT	PAGE	SUBJECT	PAGE
REMOVAL AND INSTALLATION		MAJOR REPAIR	
Roof Outside Cover –		All Vinyl Roof Material	20-12
Non-Ensolute Pad	20-1	General Repair Information	20-8
Roof Outside Cover –		Levant Type Pattern Only	20-7
W/Ensolute Pad	20-8		

REMOVAL AND INSTALLATION

ROOF OUTSIDE COVER—NON-ENSOLITE PAD (FIGS. 1-4)

If some of the following steps do not apply to the particular model being serviced, proceed to the next step.

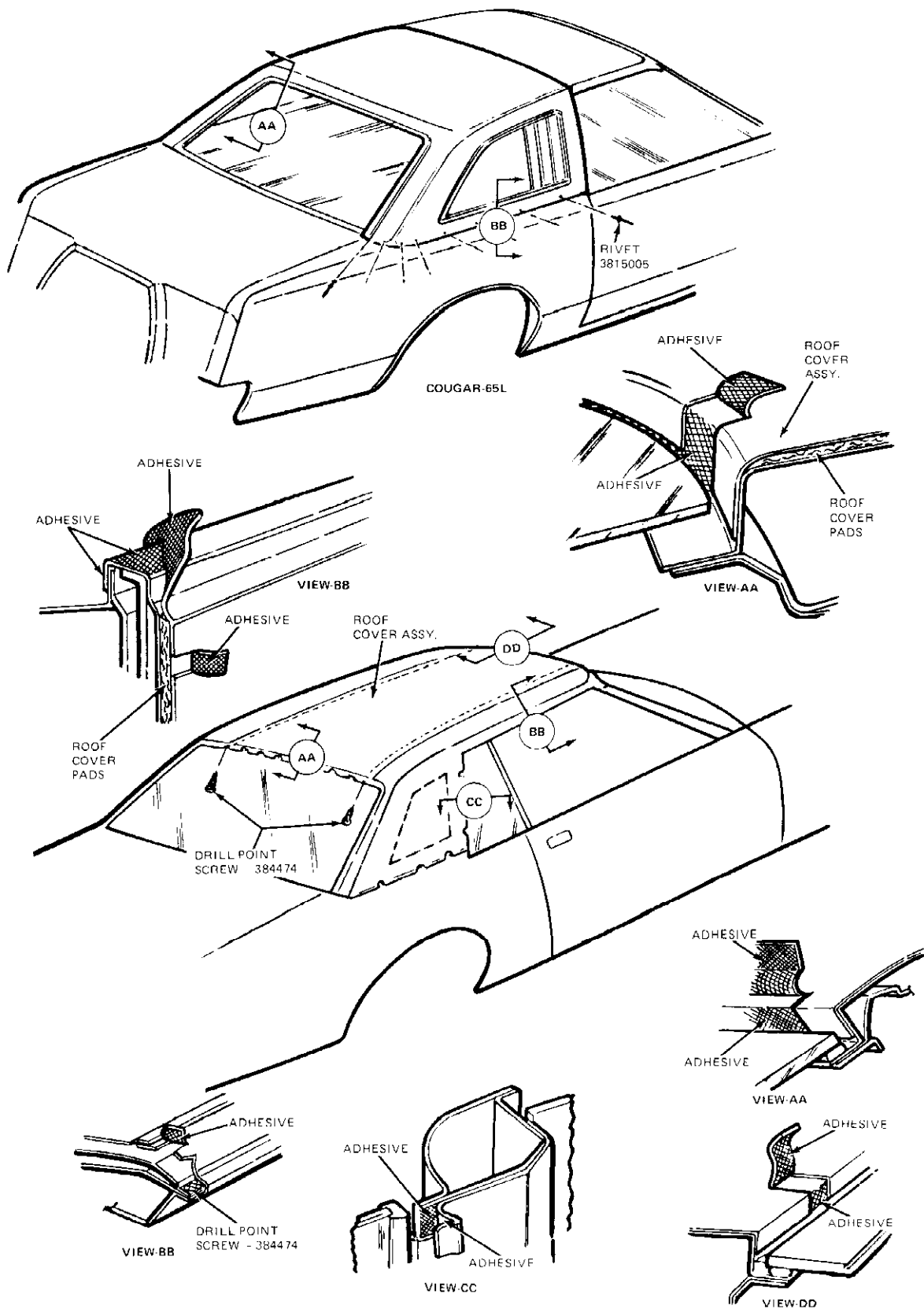
Removal

1. Unpack the new cover and spread it out to remove the wrinkles.
2. Cover the fenders, seats and rear deck.
3. Remove the rear seat cushion and seat back.
4. On models with roof side ornaments, remove the blind quarter interior trim panel for access to the ornament retaining nuts. Remove the ornaments. For trim panel removal see Group 45.
5. Remove the weatherstrips (Group 44) and the exterior mouldings around the windshield and rear window (Group 43). In some cases, part of the interior garnish moulding may have to be removed for access to weatherstrip retaining screw(s). Also remove the exterior trim moulding from the opera window, if so equipped.
6. Remove the drip rail mouldings and weatherstrips (Groups 44 and 47).
7. Remove the side and rear belt mouldings (Group 47).
8. Remove screws that retain the cover at front and rear window openings (one at each seam).
9. Remove the cover from the roof.
10. Clean all mouldings and retainers. Clean excess sealer from around the windshield and back window.

Installation

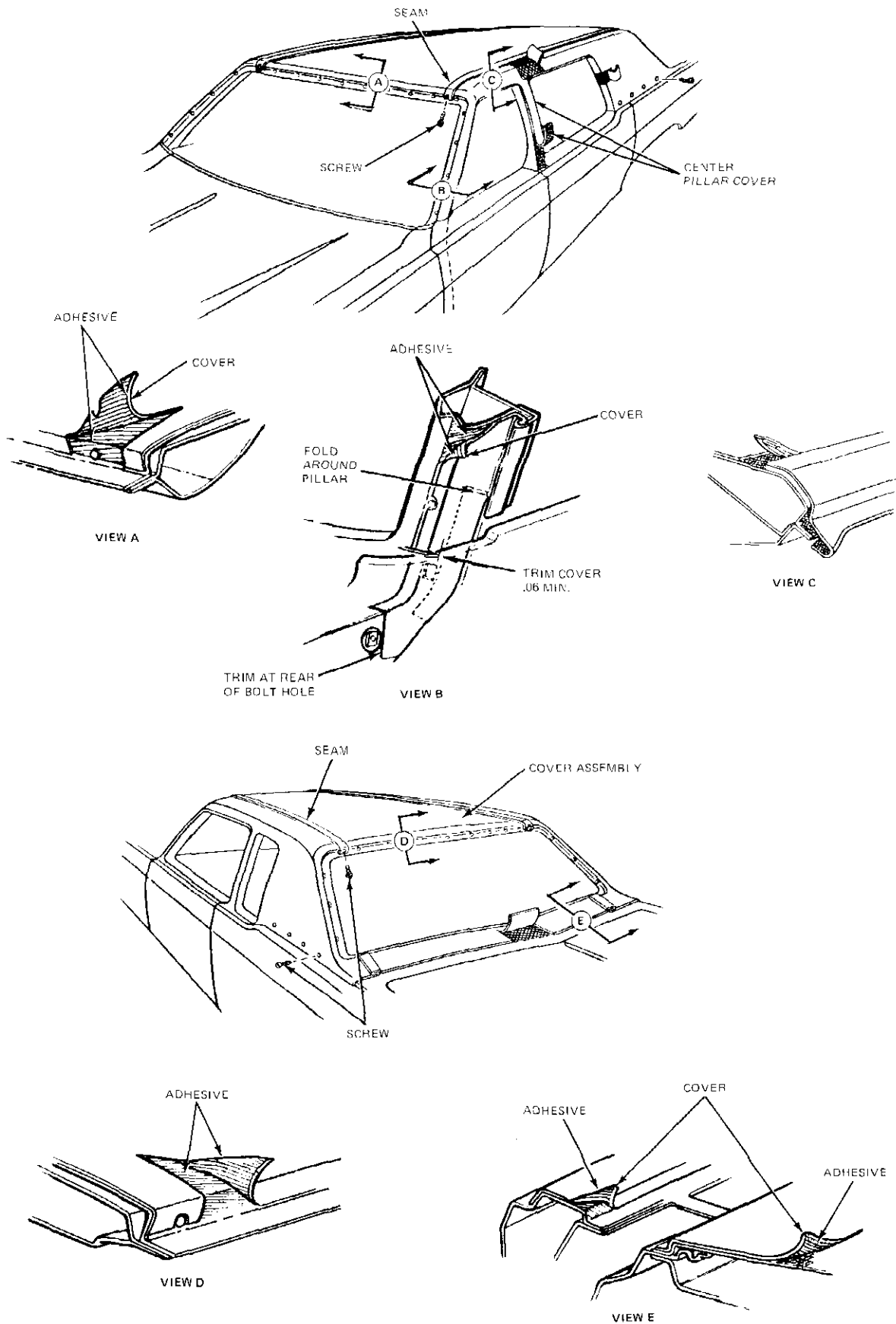
1. With Thunderbird and Continental Mark V only—if the roof side front or rear pads are torn or damaged, pull off the old pad and clean the sheet metal area with a wire brush. Apply adhesive (19C525 or equivalent) to the roof sheet metal and the underside of the new pad(s). Position the pad(s) to the top sheet metal as shown in Fig. 2.

2. Measure and mark the center of the new cover fabric.
3. Measure and mark the center of the vehicle roof.
4. Apply adhesive to the underside of the new roof cover assembly between the center mark and one of the outboard seams. **Do not apply adhesive to those parts of the assembly which cover the roof sides and the area around the door, windshield and back window openings.**
5. Apply adhesive to the corresponding half of the roof. **Do not apply adhesive to the roof sides and the sheet metal area around the door, windshield, and the back window openings.**
6. Position the cover to the roof, and align the center marks. Then, cement the cover to the roof. Stretch out all wrinkles.
7. Apply adhesive to the remaining half of the roof and cover as described in Steps 4 and 5. Position the cover to the roof as described in Step 6, and stretch out all wrinkles.
8. Apply adhesive to the body and underside of the cover in the area below the back window. Position the cover and remove any wrinkles.
9. Apply adhesive to the roof sides and door openings and to the underside of the cover. Make angle cuts at the corners as necessary. Then, stretch the cover and cement in place.
10. Trim the roof cover at the windshield and back window openings. Leave 1/2 inch of material at the openings for cover attachment in the window opening recess.
11. Apply adhesive to the back window opening and the underside of the roof cover. Make angle cuts as necessary at the corners and cement the material in the back window opening recess. Trim the cover around the moulding retainer weld studs.
12. Apply adhesive to the windshield opening and the underside of the roof cover. Make angle cuts as necessary at the corners and cement the material in the windshield opening recess. Trim the cover around the moulding retainer weld studs.



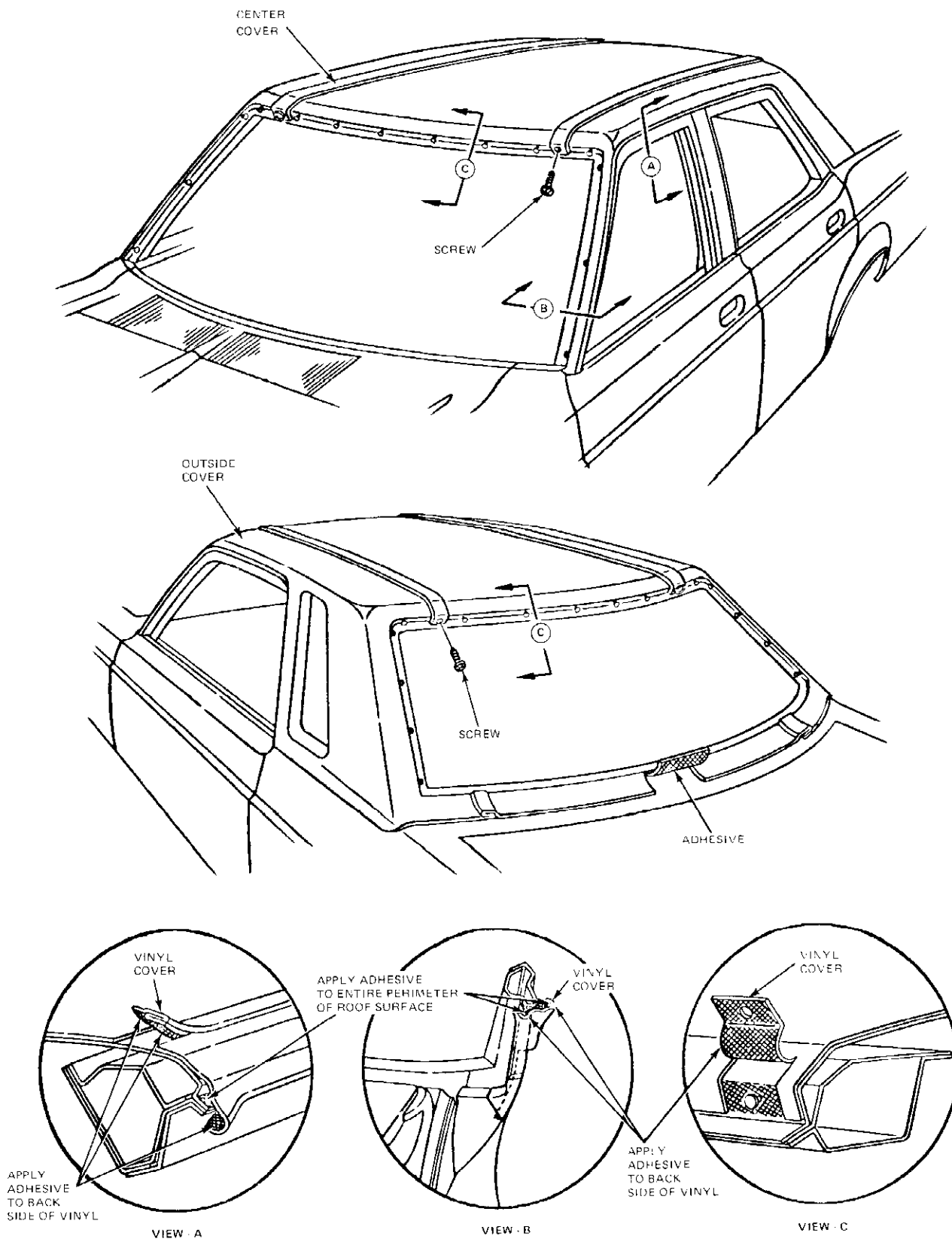
R1531 2C

FIG. 1 Roof Outside Cover Installation—LTD II and Cougar



R1104.2E

FIG. 2 Roof Outside Cover Installation—Lincoln Continental



R1952-A

FIG. 3 Roof Outside Cover Installation—Granada and Monarch

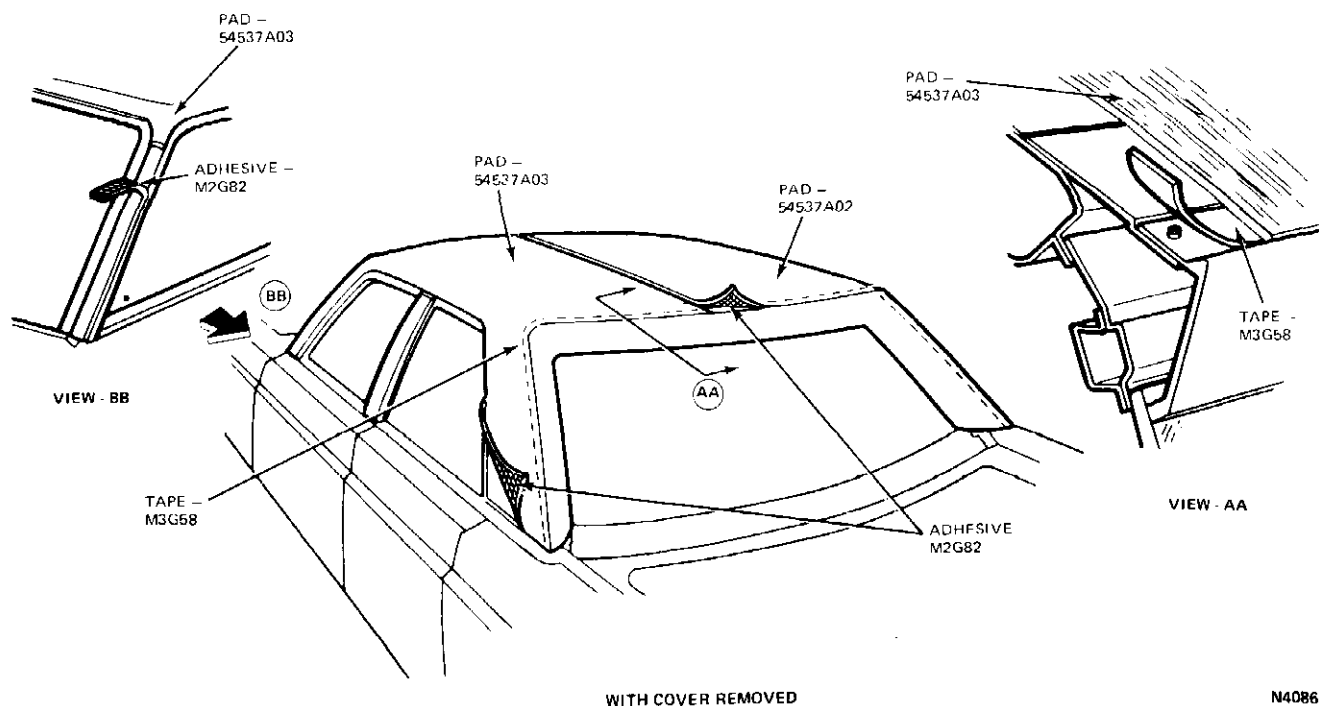
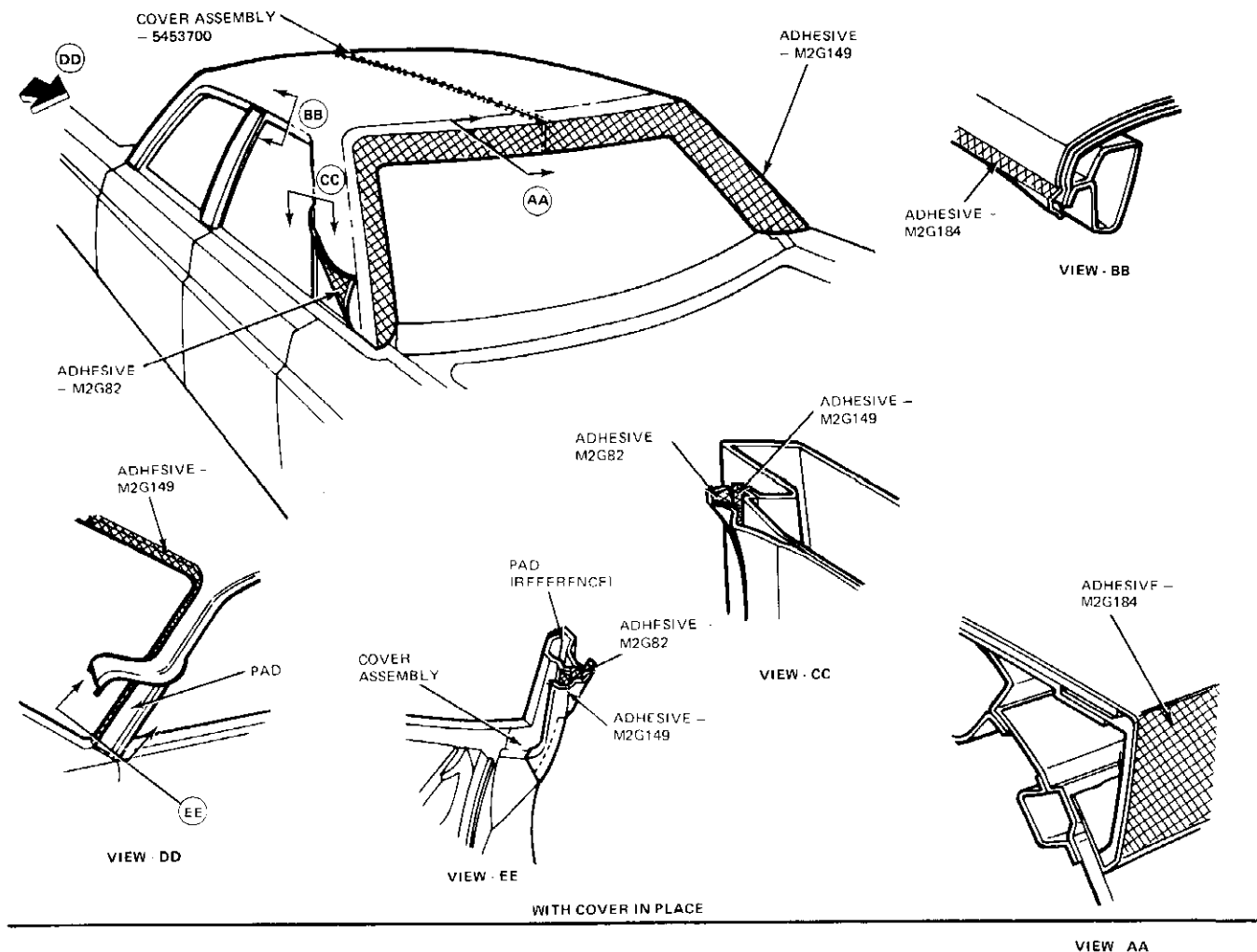


FIG. 4 Roof Outside Cover Installation—Versailles

N4086-2A

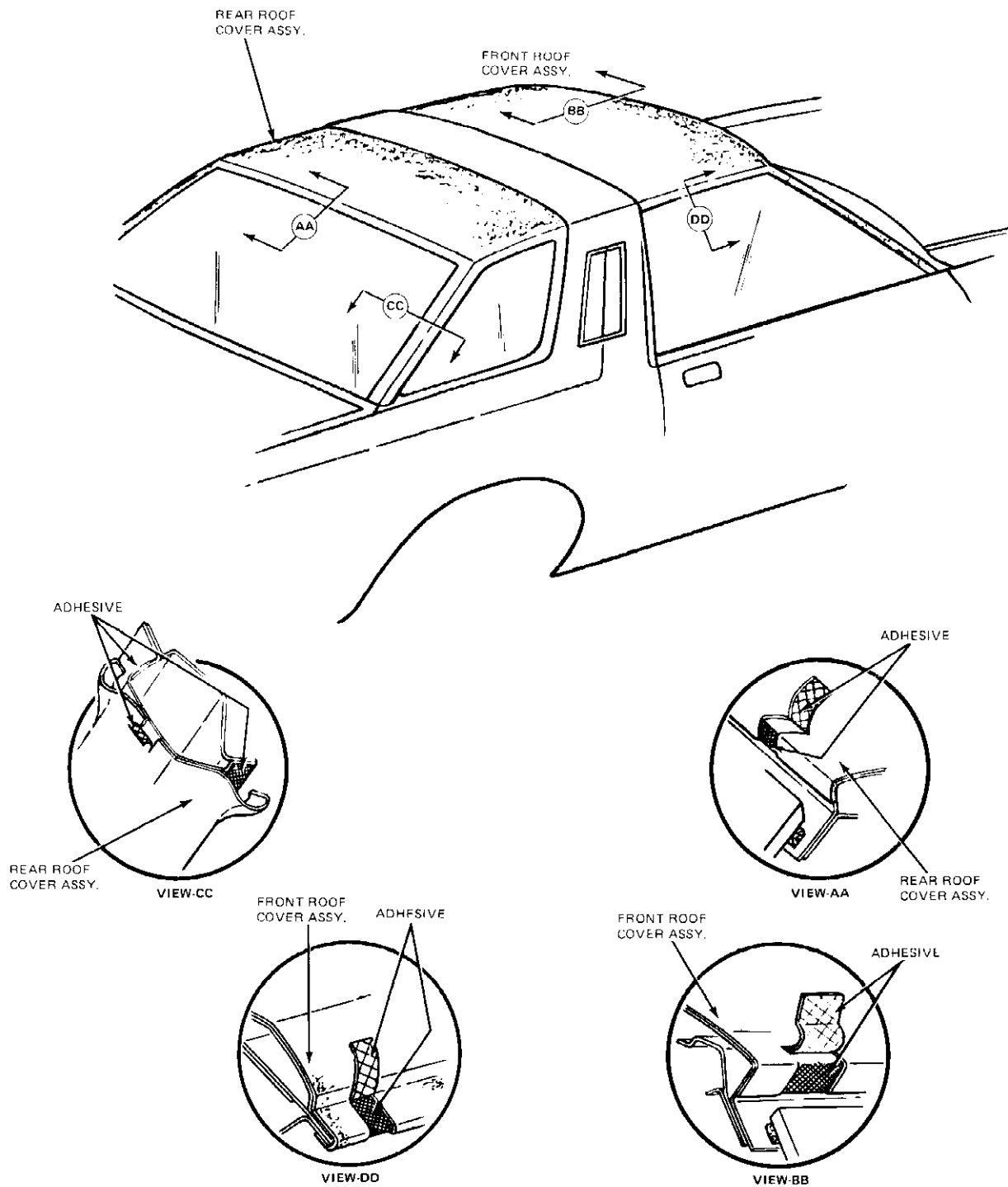


FIG. 5 Roof Outside Cover Installation—(Non-Ensolite Pad)—Thunderbird

13. At each roof rear quarter, locate and punch two holes for the roof side ornament on models so equipped. Install each side ornament with the studs entering the punched holes; then, from inside the vehicle, install the retaining nuts on the studs. Apply sealer around the nuts.
14. Re-install all interior trim panels, garnish mouldings, weatherstrips and exterior mouldings that were removed before cover replacement.

NOTE: Any exterior mouldings using positive bolt-on fasteners must be installed prior to installation of interior trim parts.

15. Clean the glass, mouldings, top and surrounding area.

ROOF OUTSIDE COVER—W/ENSOLITE PAD

Continental Mark V (Fig. 6)

Removal

1. Unpack new cover and new pad, spread out to remove the wrinkles.
2. Cover the hood, fenders, rear deck and seats with protective covers.
3. Remove rear seat cushion and seat back assemblies (Group 41).
4. Remove upper and lower 1/4 trim panels right and left (Group 45).
5. Remove opera windows and outside opera window mouldings.
6. Remove 1/4 window housing right and left, to gain access to T-Bolt nuts that retain the outer belt moulding.
7. Remove windshield garnish moulding and sun visors including sun visor brackets.
8. Remove staples and pull headliner down on both sides and across front at windshield.
9. Remove T-Bolts nuts retaining the halo mouldings along both sides, across front of roof and across lower roof panel at rear. Lower rear roof panel T-Bolt nuts can be reached from inside trunk.
10. Remove all roof cover retaining mouldings and rear window outside mouldings and clips (Group 43).
11. Mark all seam and hole locations. This will aid in lining up new cover.
12. Remove all screws and clips retaining cover to roof.

13. Remove the cover from roof.
14. Remove rubber backing from roof and scrape off all excess backing.
15. Repair areas damaged by scraping.
16. Grind excess cement and padding from roof area prior to priming.
17. Mask area for priming and wipe with solvent.
18. Prime entire top (1st) coat.
19. Prime entire top (2nd) coat.
20. Scuff sand, blow and wipe roof area clean.

Installation

1. Position all mouldings in place to line up pad for proper alignment of cover to mouldings.

NOTE: It is very important that the mouldings be installed around the backlite and beltline to properly position the Ensolite pad before any cutting is done. If the pad is not properly positioned to the mouldings, the cover will have a gap at the mouldings (Fig. 5).

2. Tape all mouldings to prevent spraying glue on them.
3. Spray glue to roof and pads and install to roof. Trim excess pad.
4. Remove tape from mouldings and remove mouldings.
5. Remove backing from pad.
6. Cut opening in pad for opera windows.
7. Position cover on top and inspect for proper fit.
8. Position and mark cover and roof area for proper alignment.
9. Spray glue to pad and cover and install cover to pad. Loosely install halo mouldings and mark and trim excess cover.
10. Cut opening in cover for opera windows, trim and install outer retainers.
11. Cut holes in cover at weld studs and punch holes for retaining screws and install screws.
12. Install retainers and clips and install mouldings.
13. Apply clear silicone sealer in backlite opening.
14. Install rear window garnish mouldings.
15. Install halo mouldings.
16. Install all interior trim and staple headliner.
17. Remove all tape and paper.
18. Clean interior and exterior.

MAJOR REPAIR

GENERAL REPAIR INFORMATION

Repairs on White Vinyl

Although repairs can be performed on white vinyl tops, the repair is more difficult with white (particularly when repairing a cut or scuff on the vinyl surface). However, with certain precautions the repair can be made to an acceptable level.

It is important that the vinyl surface is thoroughly cleaned before the repair is made and also that excessive heat be avoided to prevent possible charring of the vinyl. The recommended cleaning procedure and temperatures are outlined under Repair Procedures.

The following vinyl top repair material and tools can be obtained from a local automotive parts supply jobber or direct from: