

Rear Compartment Panel Frame

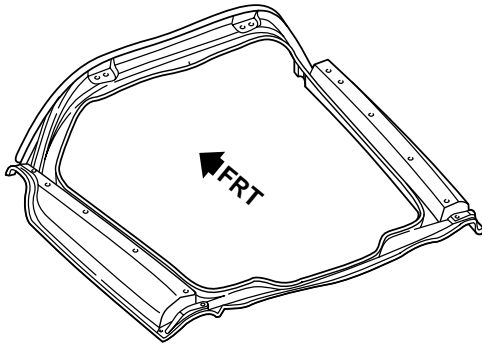


Fig. 3.60 — Coupe rear panel frame

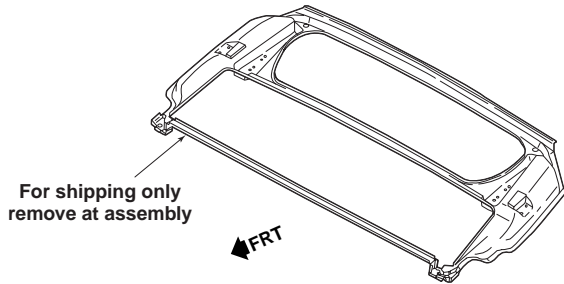


Fig. 3.61 — Convertible rear panel frame

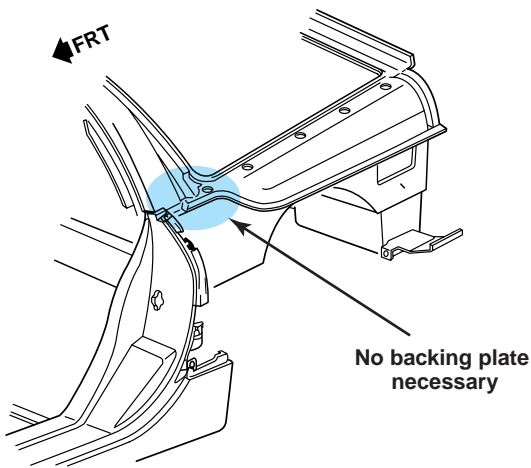


Fig. 3.62 — Section coupe rear surround in shaded area

The Rear Compartment Panel Frame (rear surround) is made of Sheet Moulded Compound (SMC). This panel, on coupe models, provides a mounting surface for the quarter-panels and is the sealing surface for the rear hatch (Fig. 3.60). Convertible rear compartment panel frame provides a mounting surface for the stow compartment and rear compartment lids (Fig. 3.61). Installing this panel is critical to the proper fit-up of the rear end of the vehicle.

Since the Roof Bow Cover overlaps the Rear Compartment Panel Frame (rear surround), sectioning is faster and more cost effective than full panel replacement, if the Roof Bow Cover is not damaged. The frame panel may be sectioned anywhere along the quarter panel mounting surface. Sectioning in the front corners (at the base of the Roof Bow), does not require the use of a reinforcement, the Rear Compartment Panel flange can act as a backing plate (Fig. 3.62). If sectioning is performed in the middle area of the 'rear surround' a backing plate is required for 'butt-joint' reinforcement (Fig. 3.63). (Refer to SMC Repair Procedures.)

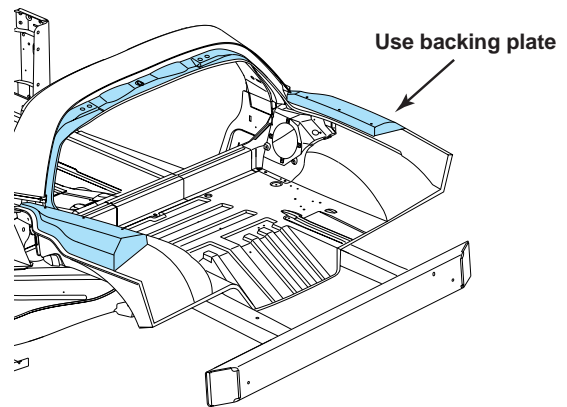


Fig. 3.63 — Stagger the rear panel frame to rear compartment panel sectioning joints

The SMC roof bow cover must be removed to replace the 'rear surround' at factory seams. Sectioning of this panel is recommended when damage is limited to the rear portion of the rear surround, not including the "Roof Bow Cover". The rear surround is the mounting surface for the quarter panels (Fig. 3.64), and is shimmed with structural adhesive; it may vary from 1mm ≤ 7mm in thickness.

Always shim and dry-fit the surround and outerbody panels before bonding.

— REMOVE OR DISCONNECT —

- 1 Visually inspect and restore as much of the damage as possible to specifications using three-dimensional measuring procedures.

Notice: The frame rails and bumper impact bars must be serviced as required, and returned to three-dimensional coordinates before any SMC repairs are attempted.

Notice: Use Kent Moore Tools Frame Adapter Clamp (P/N J42058) to secure the vehicle if pulling and straightening is required (Fig. 3.65).
- 2 Remove all interior components related to the rear of the vehicle.

Notice: Save any and all brackets, mounting studs, and accessories for transfer to the new rear compartment panel.
- 3 Remove quarter panels, rear bumper cover, and the roof bow cover. (Refer to Roof Bow Cover Service Procedures.)
- 4 Apply heat to the Rear Compartment Frame Panel side of the bond area and pry up on the damaged panel. Use caution so as not to damage the rear compartment panel.
- 5 Once the 'rear surround' is completely removed, clean off most of the adhesive bead. Leave a few small areas (about 25mm (1 inch) in length) of adhesive in place to act as shims for the new 'rear surround'.

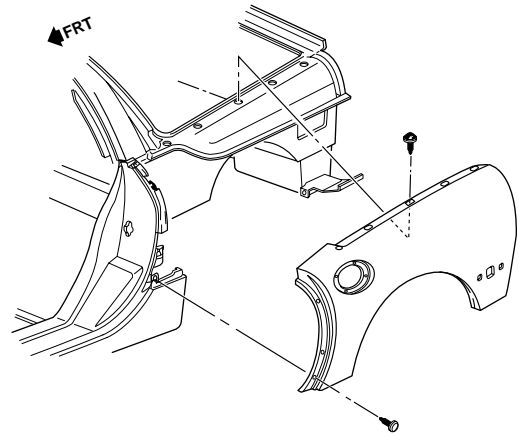


Fig. 3.64 — Bolt-On Quarter Panels

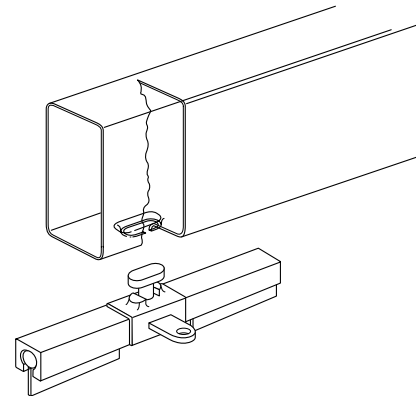


Fig. 3.65 — Adapter Clamp for Conventional Anchoring System

Rear Compartment Panel Frame

— INSTALL OR CONNECT —

- 1 Scuff the service panel bonding surface to ensure good adhesion. (Refer to *SMC Repair Procedures*.)
- 2 Temporarily assemble rear end of vehicle to check alignment with the doors. This includes installation of the quarter-panels, roof bow cover, and rear hatch. Place shims as necessary to achieve proper panel alignment and establish adhesive thickness (Fig. 3.66).
- 3 Remove and disassemble panels for installation.
- 4 Scuff all bonding surfaces to ensure proper adhesion. (Refer to *SMC Repair Procedures*.)
- 5 Clean and prepare all bonding surfaces as necessary. (Refer to *SMC Repair Procedures*.)
Important: Prior to refinishing, refer to GM P/N 4901 Refinish Manual for recommended products.
- 6 Apply approved anti-corrosion primer.
Notice: DO NOT top-coat any bonding surface.

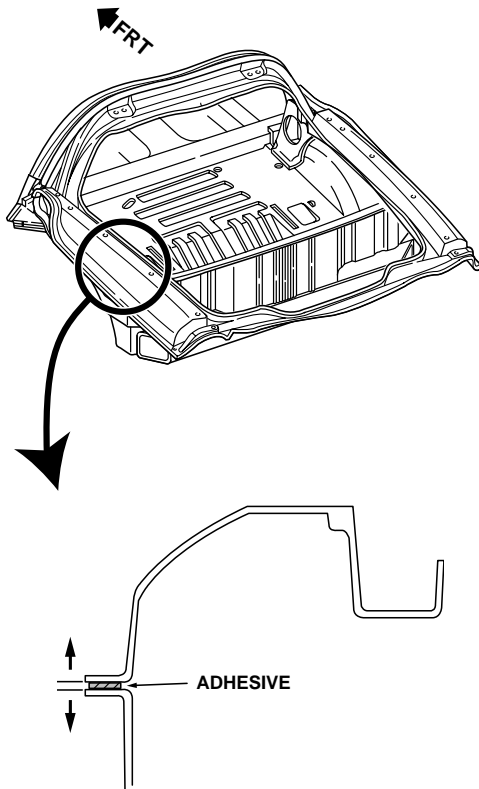


Fig. 3.66 — Adjust Rear Surround Using Adhesive Bead 1mm ≤ 7mm In Thickness

- 7 Apply a consistent bead of adhesive to the entire perimeter of the rear compartment panel mating flange and the tops of speaker housings. Apply enough adhesive for proper wet-out (Fig. 3.67).

Important: Use US Chemical and Plastics 82007B System 2000 Structural Adhesive, a PLIOGRIP® adhesive manufactured by Ashland Chemical Company, or equivalent. Note the 30 minute working time and 2.5 to 3 hour cure time.

- 8 Install shims and 'rear surround', clamp in place. Tool excess adhesive to form a consistent leak-proof bond.
- 9 Allow to cure according to the adhesive manufacturer's recommendations. Remove clamps and install roof bow panel. (Refer to *Roof Bow Cover Service Procedures*.)
- 10 Install all related panels and components.

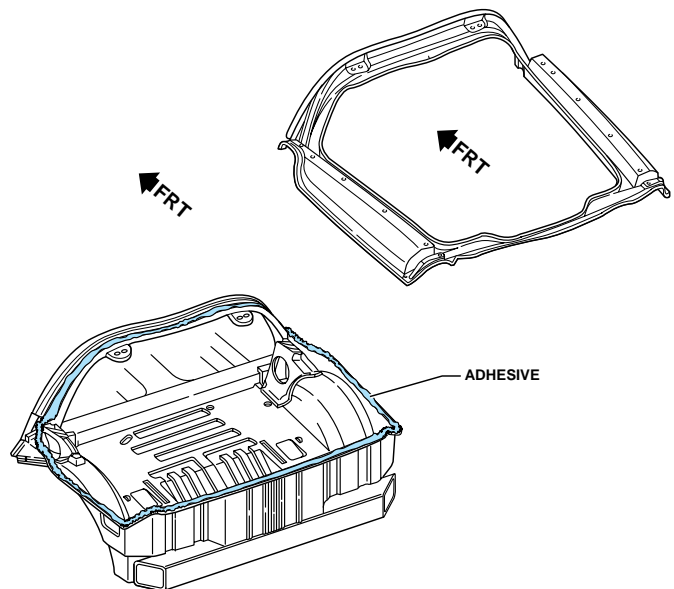


Fig. 3.67 — Apply a Consistent Bead of Adhesive to the Entire Perimeter to Form a Leak-Proof Seal