

Front Upper Rail Assembly

Upper Rail Inner Panel Sectioning

Important: With the outer rail panel removed, the upper rail inner panel can be replaced at the factory seams, or sectioned just in front of the cowl panel extension (Fig. 4.2).

Important: Sectioning the upper rail inner panel: Create a 50mm (2 inch) overlap just in front of the strut tower (Fig. 4.3). Measure 50mm (2 inches) forward from the cowl panel extension and mark a line. Cut the damaged rail square to the vehicle. Drill 8mm (5/16 inch) holes for plug welding. Cut the service rail long enough to overlap the remaining portion of the original rail 50mm (2 inches). Position the service rail under the remaining portion of the original rail to create a 50mm (2 inch) overlap. Check for proper fit and plug weld as necessary.

Front Fender Mounting Bracket

Important: The fender brackets are formed and pierced during vehicle assembly. The service parts are pre-drilled and will need to be located and shimmed using three dimensional measuring equipment.

Upper Rail Replacement

Important: Complete upper rail inner panel replacement: There are a number of welds attaching the rear of the upper inner rail to the cowl panel extension and the strut tower cap. These welds can be accessed with the outer panels removed. Due to limited access for welding, care must be taken when deciding the side of the panel from which to drill.

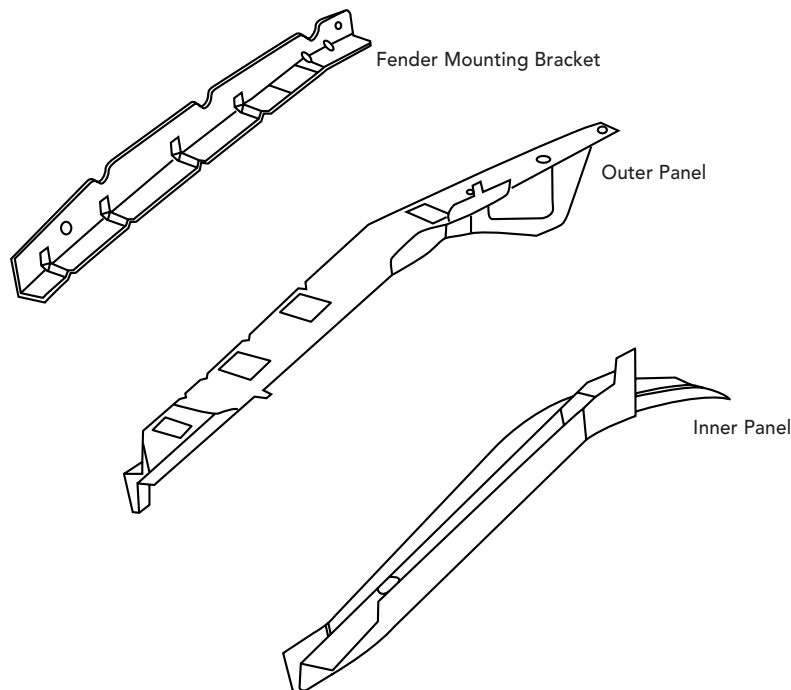


Fig. 4.2 — Upper Rail Assembly

— REMOVE OR DISCONNECT —

- 1 Remove panels and components as necessary for access.
- 2 Restore as much of the damage as possible to the factory specifications.
- 3 Remove all sealers and anti-corrosion materials as necessary.
- 4 Locate, mark, and drill out all factory welds attaching the upper rail outer panel. (Note the number of welds for installation of the service panel.)
- 5 Remove the damaged upper rail assembly.

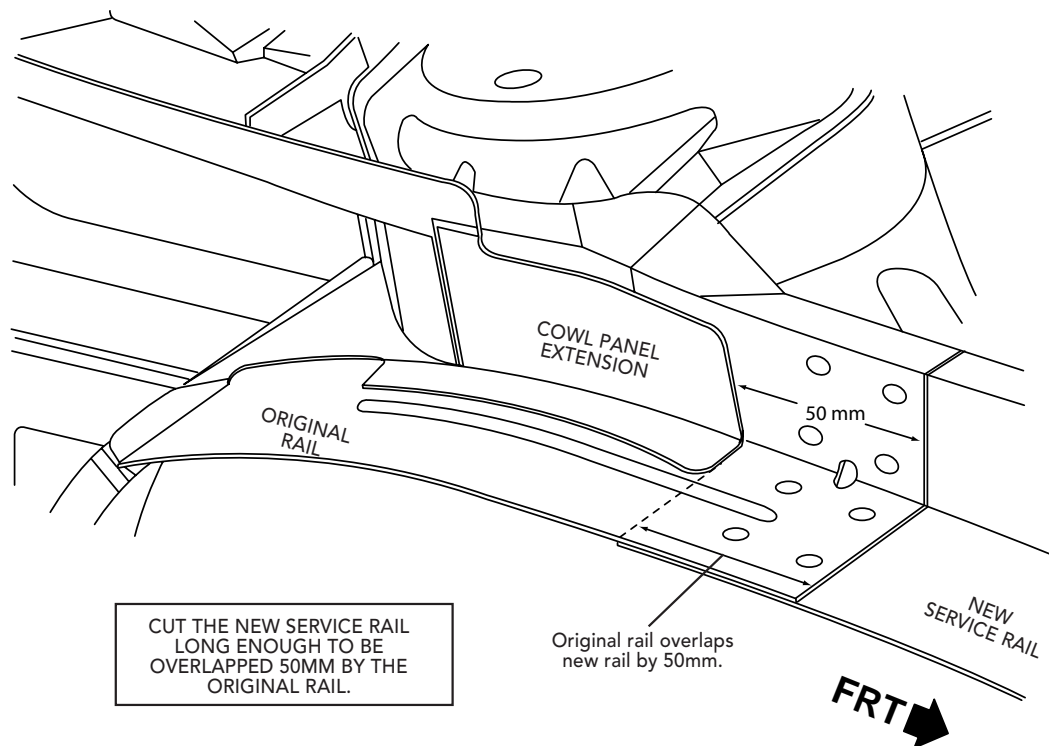


Fig. 4.3 — Inner Rail Sectioning

Front Upper Rail Assembly

— INSTALL OR CONNECT —

- 1 Check for proper fit of the upper rail service panels.
- 2 Drill 8mm (5/16 inch) holes in the service panels for plug welding at the locations noted from the original panels.
- 3 Check the position of the front fender mounting bracket location using three-dimensional measuring equipment.
- 4 Plug weld the front fender mounting bracket as necessary.
- 5 Install the upper tie-bar top panels to the upper rail assembly and the radiator support assembly and plug weld as necessary (Fig. 4.4).
- 6 Clean and prepare all bare metal surfaces. Apply as necessary:
 - sealers and anti-corrosion materials
 - two-part catalyzed primer top-coat

Important: Do not combine paint systems. Refer to paint manufacturer's recommendations.
- 7 Install all the panels and components previously removed for access.

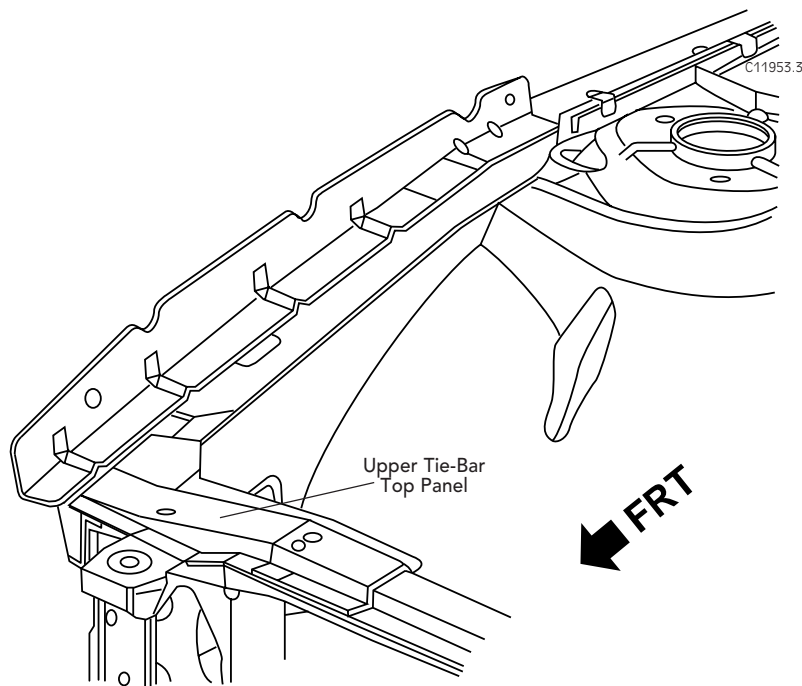


Fig. 4.4 — Upper Rail Assembly