

Front Compartment Inner Side Rail Sectioning

Removal Procedure

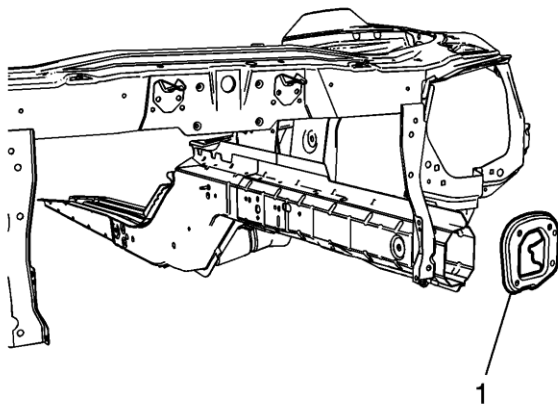
The front lower inner rail can be replaced at factory seams, refer to [Front Compartment Inner Side Rail Replacement](#) , but requires the removal of the engine, transmission and front suspension. The sectioning procedure has been developed as a more cost-effective alternative to complete replacement.

Warning: Refer to [Approved Equipment for Collision Repair Warning](#) in the Preface section.

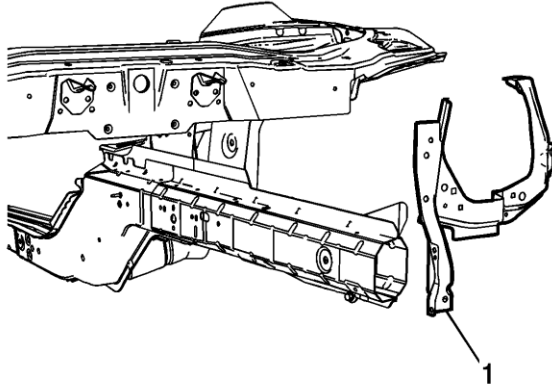
Warning: Refer to [Glass and Sheet Metal Handling Warning](#) in the Preface section.

Warning: Refer to [Collision Sectioning Warning](#) in the Preface section.

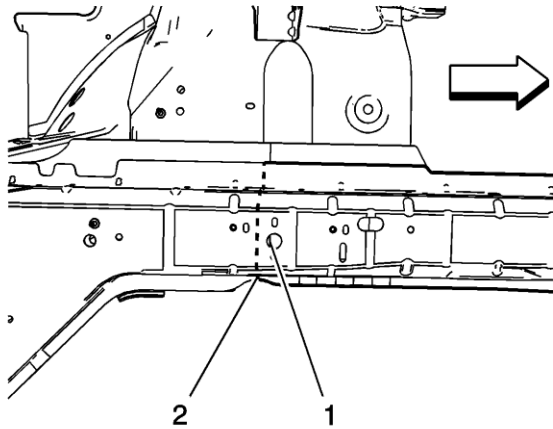
1. Disable the SIR system. Refer to [SIR Disabling and Enabling](#).
2. Disconnect the negative battery cable. Refer to [Battery Negative Cable Disconnection and Connection](#).
3. Remove all related panels and components to gain access to the repair.
4. Restore as much of the damage as possible to factory specifications using 3-dimensional measuring equipment.



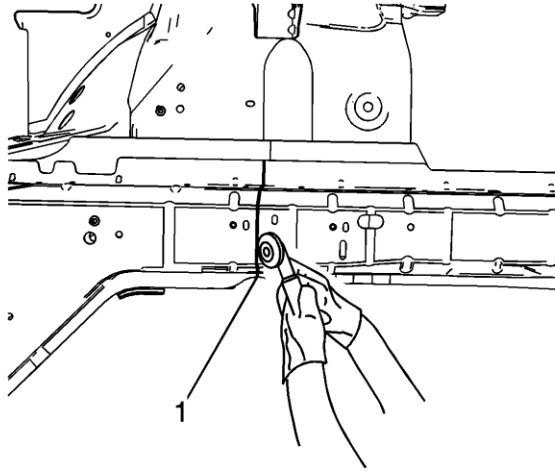
5. Remove Front Bumper Bracket (1).



6. Remove Upper Tie Bar Reinforcement (1).

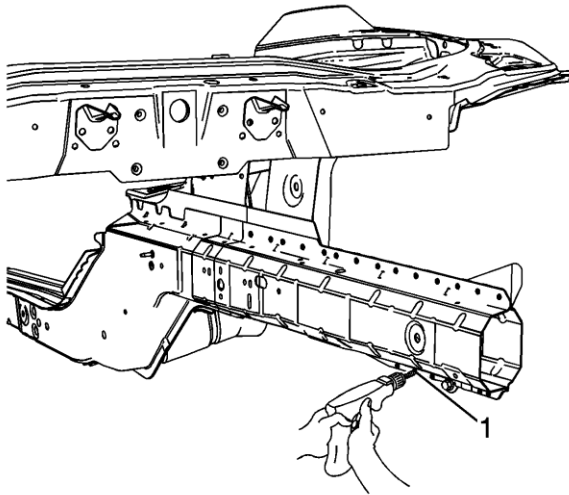


7. Measure 13 mm rearward from 21 mm gage hole (1) and scribe a horizontal line (2).



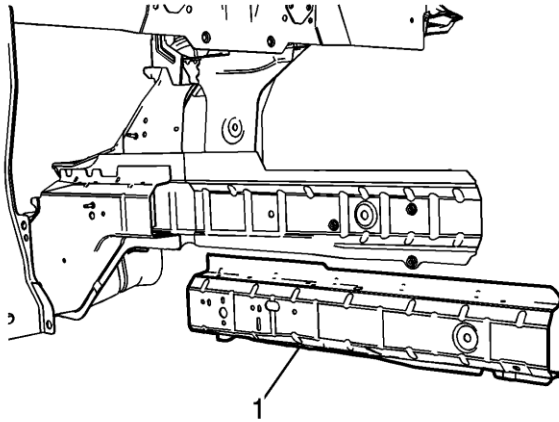
Note: Do not damage any inner panels or reinforcements.

8. Cut the panel where sectioning is to be performed (1).



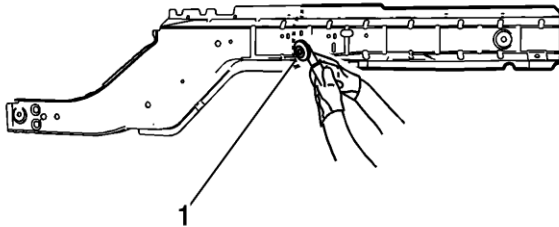
Note: Record the number and location of the original welds for installation of the service part.

9. Locate and drill out all factory welds (1).

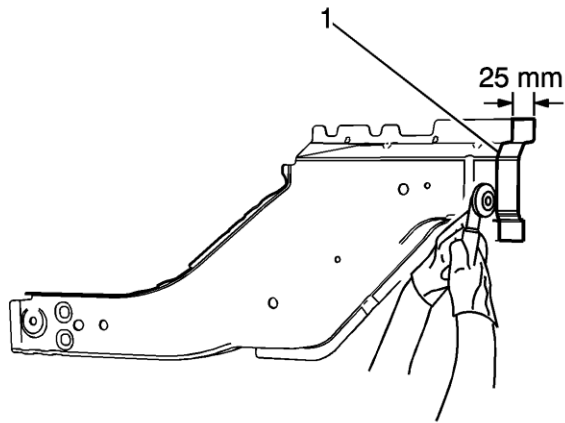


10. Remove the damaged Front Lower Rail (1).

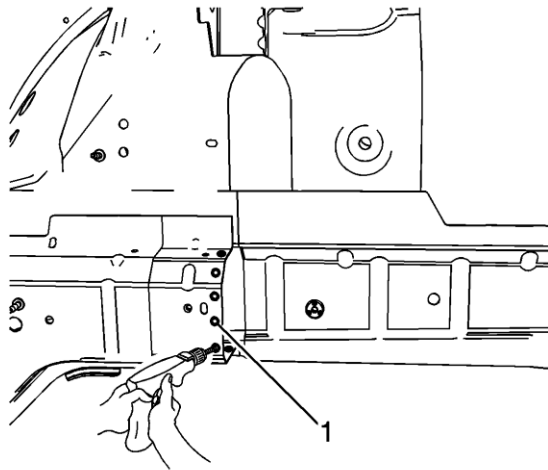
Installation Procedure



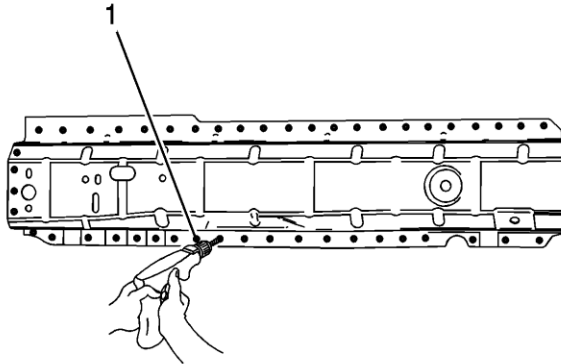
1. Cut the replacement Front Lower Rail in corresponding locations to fit the original panel (1). The sectioning joint should be trimmed to allow 1.5 times the metal thickness at the sectioning joint.



2. Create a 25 mm (1 in) backing plate from the unused portion of the service part (1). Trim the backing plate as necessary to fit behind the sectioning joint.

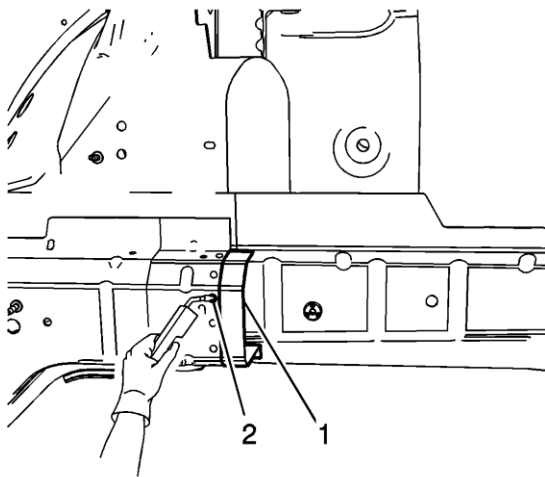


3. Drill 8 mm plug weld holes along the sectioning cut on the remaining original part (1). Space these holes 40 mm apart.

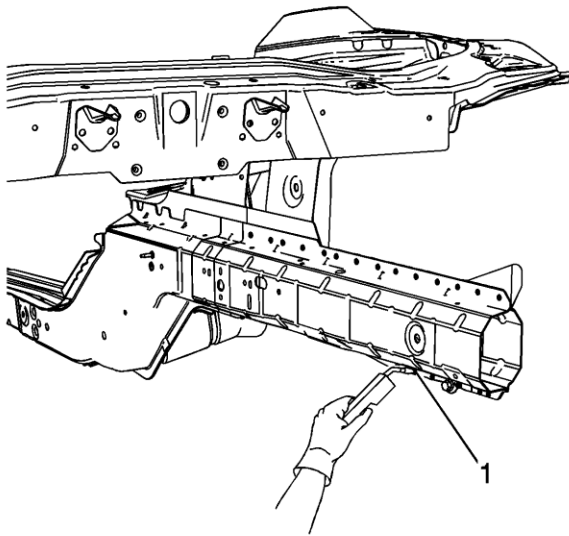


Note: In any area damaged beyond recognition, space plug weld holes every 40 mm (1.5 in) apart.

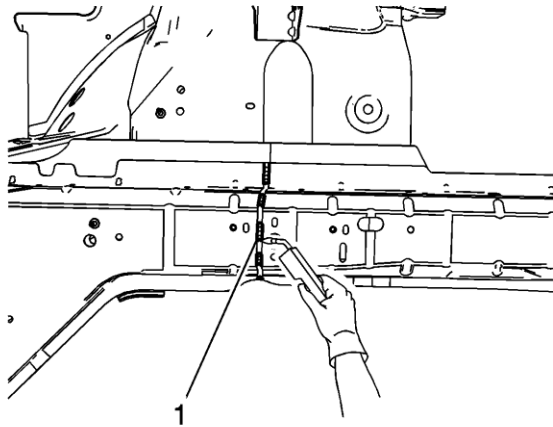
4. Drill 8 mm plug weld holes in the service part as necessary in the locations noted from the original panel and along the sectioning cut (1).
5. Prepare all attached surfaces as necessary for welding.
6. Apply GM approved Weld-Thru Coating or equivalent to all mating surfaces. Refer to [Anti-Corrosion Treatment and Repair](#).



7. Fit the backing plate halfway into the sectioning joint (1), clamp and plug weld to the vehicle (2).



8. Position the Service Front Lower Rail to the vehicle.
9. Plug weld accordingly (1).



Note: To create a solid weld with minimum heat distortion make 25 mm stitch welds along the seam with 25 mm gaps between them. Then go back and complete the stitch weld.

10. Stitch weld sectioning joint (1).
11. Clean and prepare all welding surfaces.
12. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to [Anti-Corrosion Treatment and Repair](#).
13. Paint the repair area. Refer to [Basecoat/Clearcoat Paint Systems](#).
14. Install all related panels and components.

15. Connect the negative battery cable. Refer to [Battery Negative Cable Disconnection and Connection](#).
16. Enable the SIR system. Refer to [SIR Disabling and Enabling](#).

© 2009 General Motors Corporation. All rights reserved.