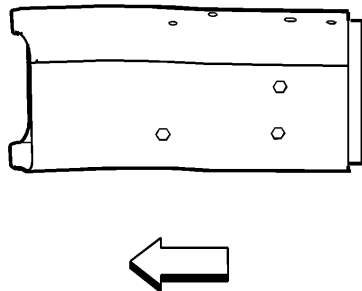


# Front Rail End Replacement

## Tools Required

[J 42058](#) Frame Adapter Clamp

## Removal Procedure



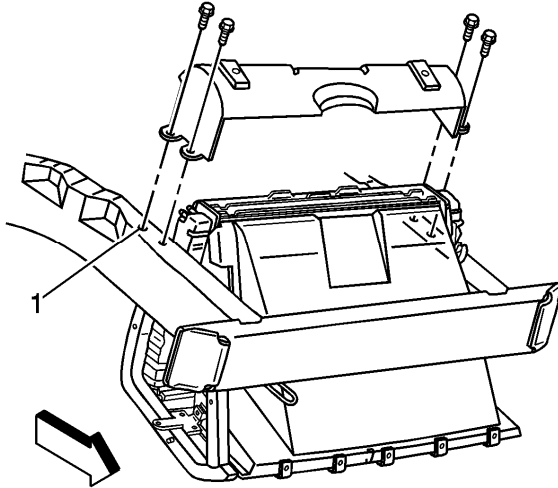
The service assemblies for the left and the right front frame rails are pre-sleeved, mild steel, hydro-formed parts.

**Caution:** Refer to [Approved Equipment for Collision Repair Caution](#) in Cautions and Notices.

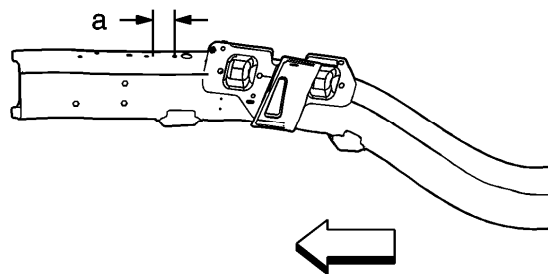
1. Disable the SIR system. Refer to [SIR Disabling and Enabling](#).
2. Disconnect the negative battery cable. Refer to [Battery Negative Cable Disconnection and Connection](#).
3. Remove all related panels and components.
4. Remove the front impact bar. Refer to [Front Bumper Impact Bar Replacement](#).

5. Note the location and remove the sealers and anti-corrosion materials from the repair area. Refer to [Anti-Corrosion Treatment and Repair](#).
6. Repair as much of the damage as possible to the factory specifications.
7. Use [J 42058](#) to secure the vehicle if pulling and straightening are required.

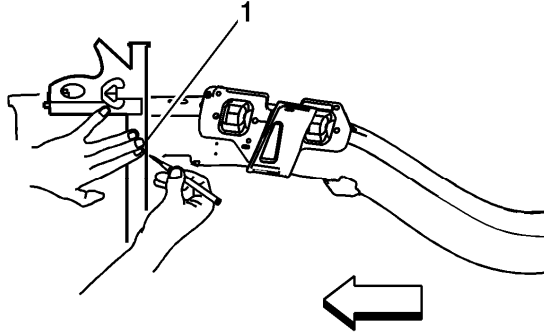
**Caution:** Refer to [Collision Sectioning Caution](#) in Cautions and Notices.



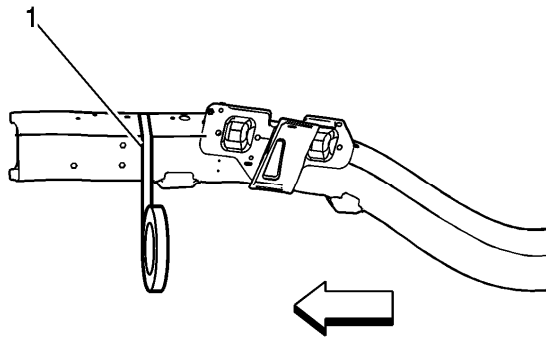
8. Determine the sectioning joint location from the center of the rear upper radiator support bolt (1).



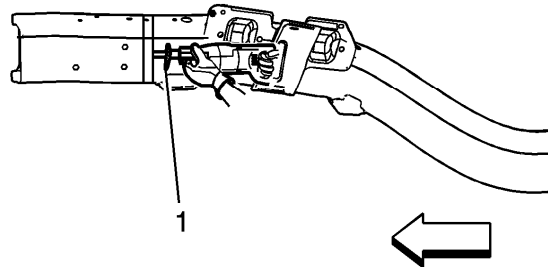
9. Measure 67 mm (2 5/8 in) (a) forward from the center of the rear upper radiator support bolt.



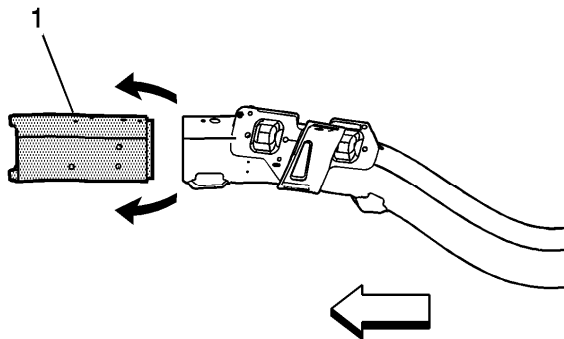
10. Mark the top of the frame rail at the sectioning location.
11. At the mark align a sliding square or similar tool (1) square to surface to the vertical walls of the frame rail.
12. Scribe a line to both sides of the frame rail.



13. Apply masking tape (1) to the scribe line completely around the frame rail.

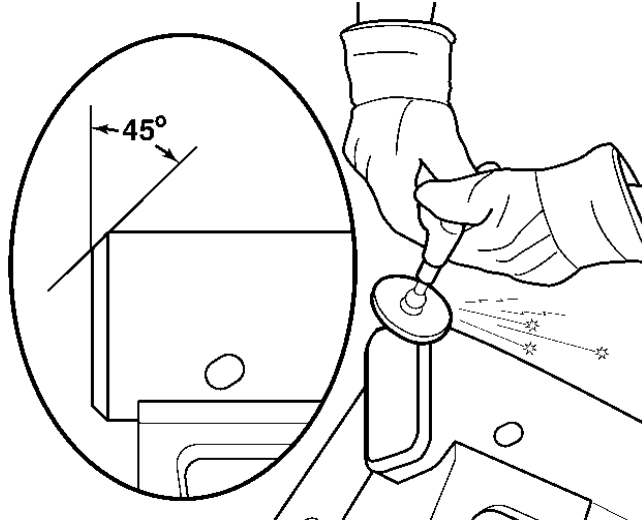


14. Cut the frame rail at the rear edge of the tape line using a reciprocating saw or equivalent tool (1).

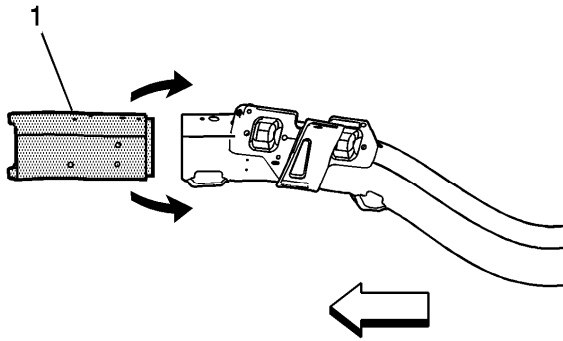


15. Remove the damaged frame rail end section (1).

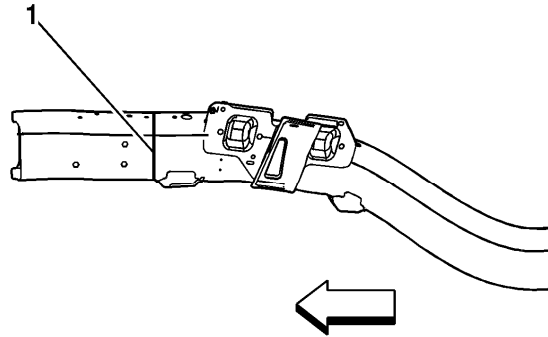
## [Installation Procedure](#)



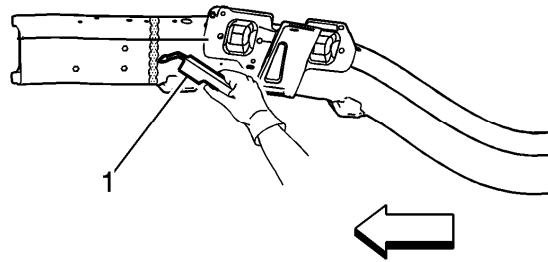
1. Grind the existing frame rail sectioning location to a 45 degree angle.
2. Clean and prepare all of the welded mating surfaces.
3. Apply GM-approved Weld-Thru Coating or equivalent to all mating surfaces.  
Refer to [Anti-Corrosion Treatment and Repair](#).



4. Position the service frame section (1) to the existing frame.



5. Maintain a gap of one and one half frame rail metal thickness at the sectioning joint (1) and clamp in place.
6. Inspect the frame measurements three-dimensional to ensure proper position of the service frame section.



**Important:** Use a 25-mm (1-in) stitch weld to avoid minimal heat distortion.

7. Using a metal inert gas (MIG) welder, weld completely around the sleeve joint.
8. Install the front impact bar. Refer to [Front Bumper Impact Bar Replacement](#).
9. Apply the sealers and anti-corrosion materials to the repair area. Refer to [Anti-Corrosion Treatment and Repair](#).

**Important:** DO NOT top coat any bonding surface. Use primer only on bonding surfaces. Refer to adhesive manufacturer's recommendations.

10. Paint the repair area. Refer to [Basecoat/Clearcoat Paint Systems](#).
  11. Install all related panels and components.
  12. Connect the negative battery cable. Refer to [Battery Negative Cable Disconnection and Connection](#).
  13. Enable the SIR system. Refer to [SIR Disabling and Enabling](#).
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