

Rail Replacement - Rear Section

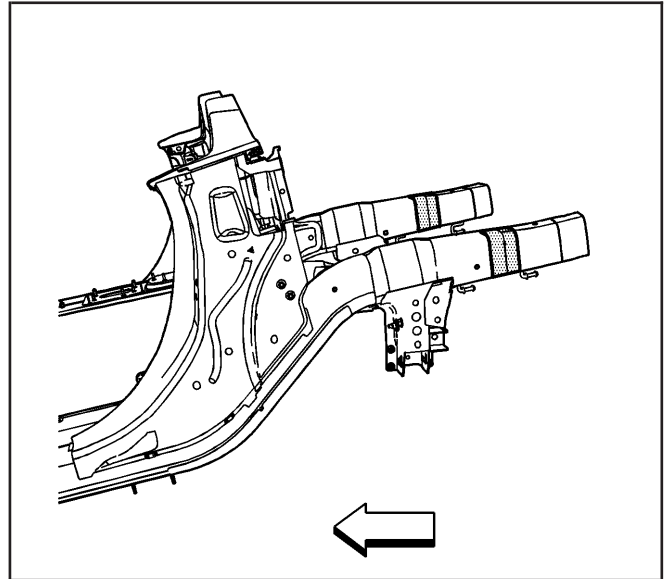
Removal Procedure

Caution: Refer to Approved Equipment for Collision Repair Caution on page 1-2.

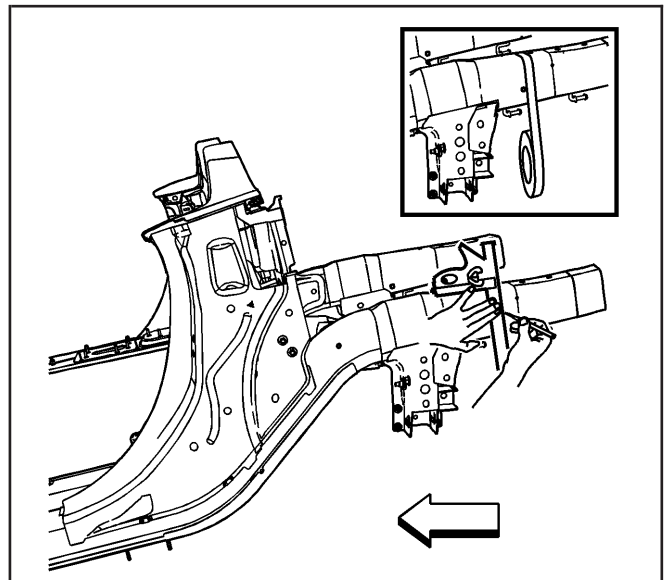
1. Disable the SIR system. Refer to *SIR Disabling and Enabling Zones*.
2. Disconnect the negative battery cable. Refer to *Battery Negative Cable Disconnect/Connect Procedure*.
3. Remove all related panels and components.
4. Remove the rear impact bar. Refer to *Impact Bar Replacement - Rear Bumper on page 3-20*.
5. Remove the quarter panel. Refer to *Quarter Panel Replacement - Outer on page 3-17*.
6. Remove the rear compartment. Refer to *Compartment Panel Replacement - Rear on page 3-42*.
7. Note the location and remove the sealers and anti-corrosion materials from the repair area. Refer to *Anti-Corrosion Treatment and Repair*.
8. Repair as much of the damage as possible to the factory specifications.

Caution: Refer to Collision Sectioning Caution on page 1-4.

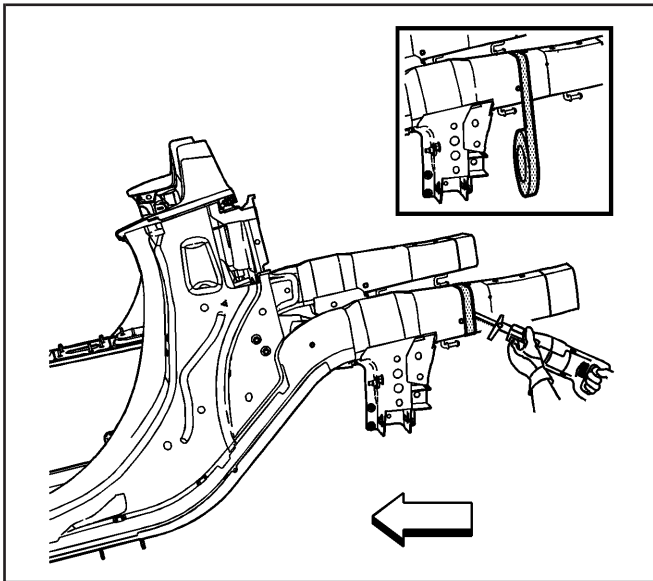
9. Determine the sectioning joint location.
10. Locate 5 mm (5/32 in) hole on the outboard surface, rearward of the rear suspension mounting.
11. Measure 25 mm (1 in) (a) rearward from the hole (a).
12. Mark the top of the frame rail at the sectioning location.
13. At the mark align a sliding square or similar tool square to surface to the vertical walls of the frame rail.
14. Scribe a line to both sides of the frame rail.



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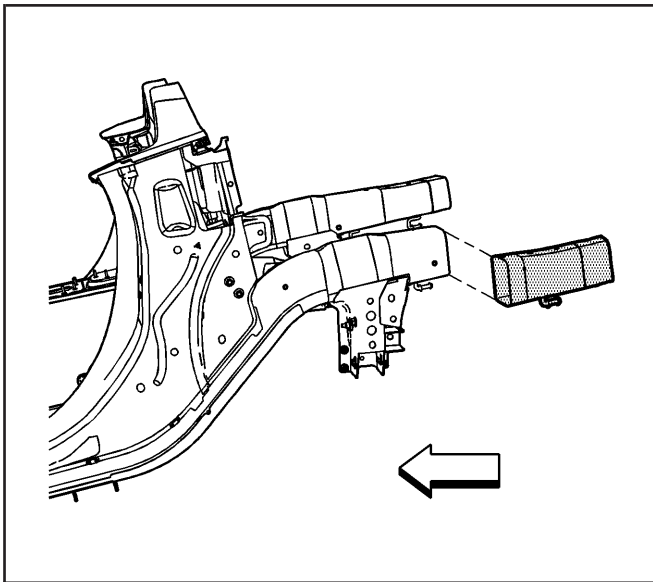


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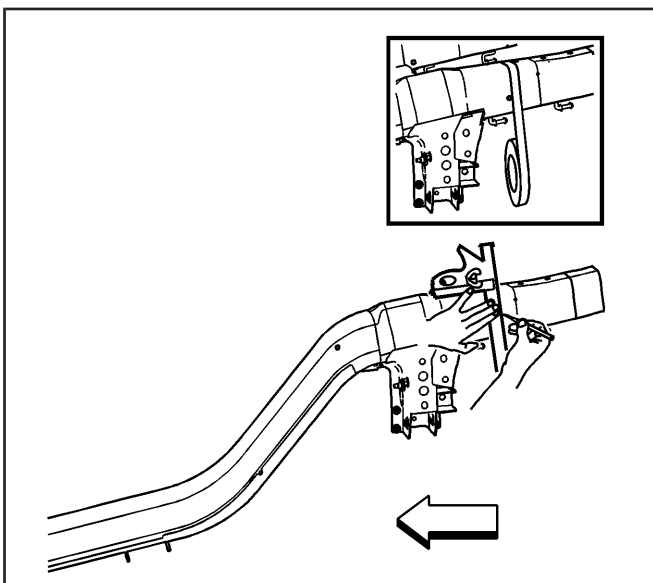
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15. Apply masking tape (1) to the scribe line completely around the frame rail.
16. Cut the frame rail at the rear edge of the tape line using a reciprocating saw or equivalent tool (1).



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

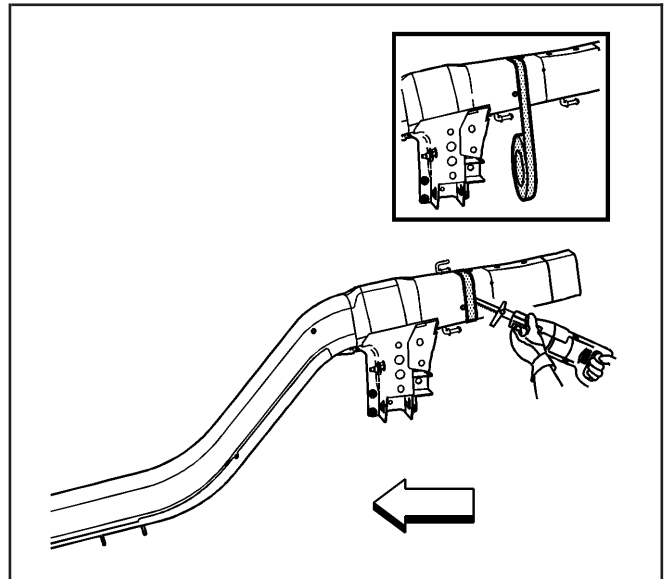


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Installation Procedure

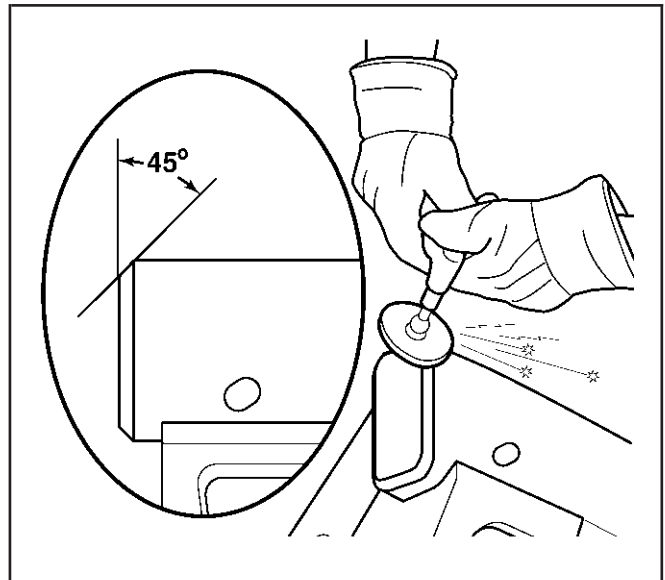
1. Locate the 5 mm (5/32 in) hole on the outboard surface of the service rail.
2. Measure rearward from the hole 25 mm (1 in). Mark the location (a) in the same manner as in the Removal Procedure.

3. Using the mark made in the previous step as a starting point, use a sliding square and a scribing tool to transfer a line all of the way around the service rail.
4. Cut the service rail at the marked location.



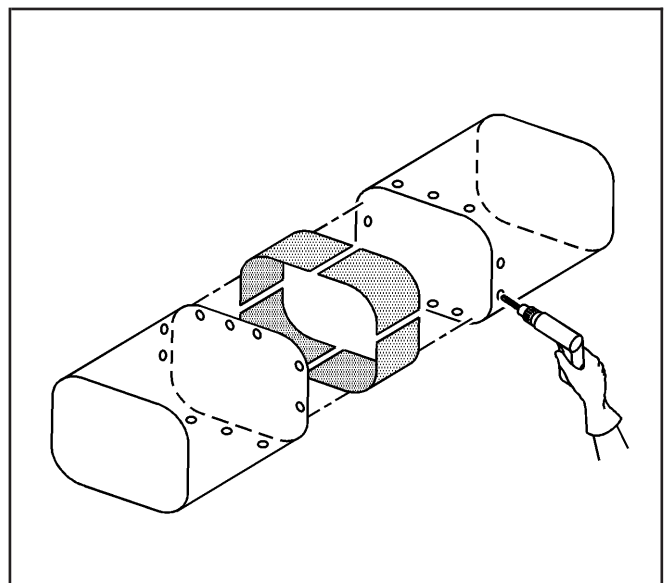
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5. Grind the existing frame rail and the new service part seam to taper the seam at a 45-degree angle.
6. Clean and prepare all of the welded mating surfaces.
7. Apply 3M weld-thru coating P/N 05916 or equivalent as necessary to all bare metal surfaces.

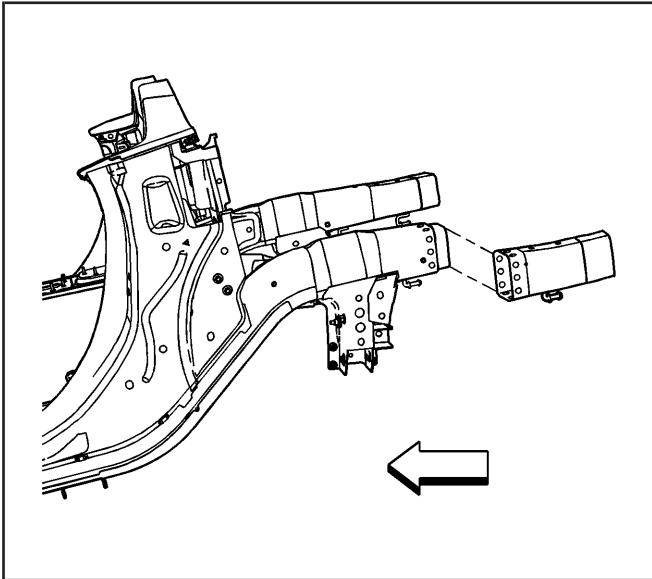


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8. Make a 50 mm weld-backer sleeve. Refer to *Sleeved Butt Joint Repair* on page 3-27.

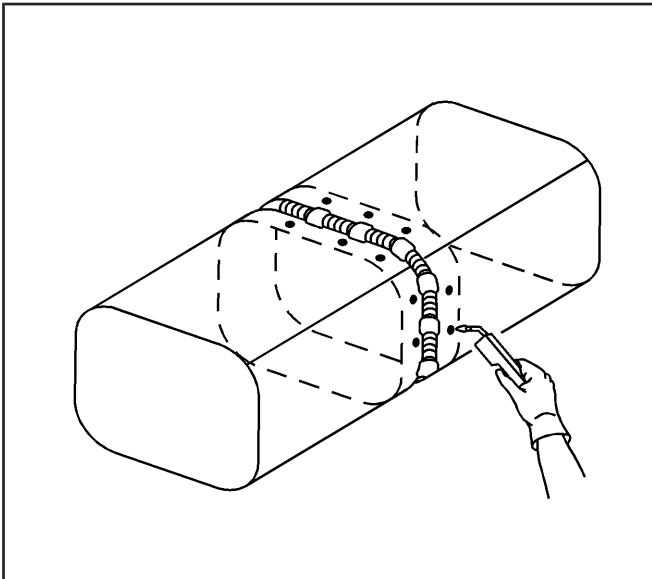


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9. Position the service frame section to the existing frame.
10. Maintain a gap of one and one half frame rail metal thickness at the sectioning joint (1) and clamp in place.
11. Inspect the frame measurements three-dimensional to ensure proper position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



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

12. Using a MIG welder, weld completely around the sleeve joint.
13. Install the rear impact bar. Refer to *Impact Bar Replacement - Rear Bumper* on page 3-20.
14. Install the quarter panel. Refer to *Quarter Panel Replacement - Outer* on page 3-17.
15. Install the rear compartment. Refer to *Compartment Panel Replacement - Rear* on page 3-42.
16. 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.

17. Paint the repair area. Refer to *Basecoat/Clearcoat Paint Systems*. in *Paint and Coating*.
18. Install all related panels and components.
19. Connect the negative battery cable. Refer to *Battery Negative Cable Disconnect/Connect Procedure*.
20. Enable the SIR system. Refer to *SIR Disabling and Enabling Zones*.