

Notice: Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints, lubricants, or corrosion inhibitors on fasteners or fastener joint surfaces unless specified. These coatings affect fastener torque and joint clamping force and may damage the fastener. Use the correct tightening sequence and specifications when installing fasteners in order to avoid damage to parts and systems.

9. Install the suspension crossmember.

Tighten

Tighten the fasteners to 100 N·m (74 lb ft) + 180 degrees.

Rail Sectioning Front Compartment - Front

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

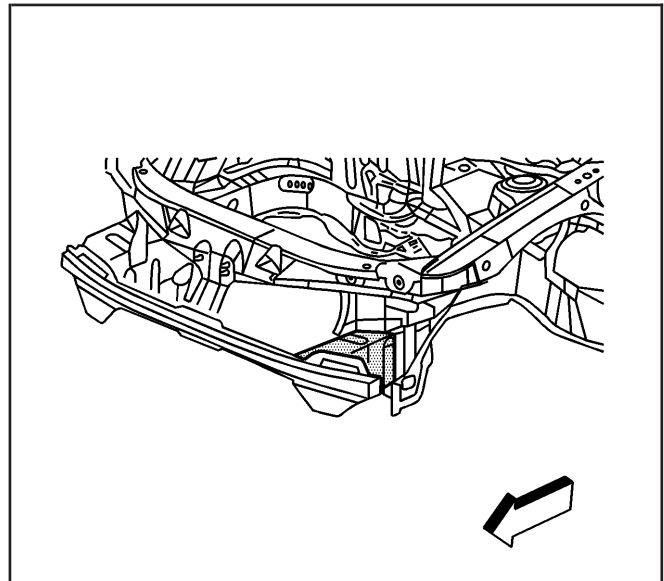
Caution: Sectioning should be performed only in the recommended areas. Failure to do so may compromise the structural integrity of the vehicle and cause personal injury if the vehicle is in a collision.

Caution: Refer to SIR Caution on page 1-1 in General Information.

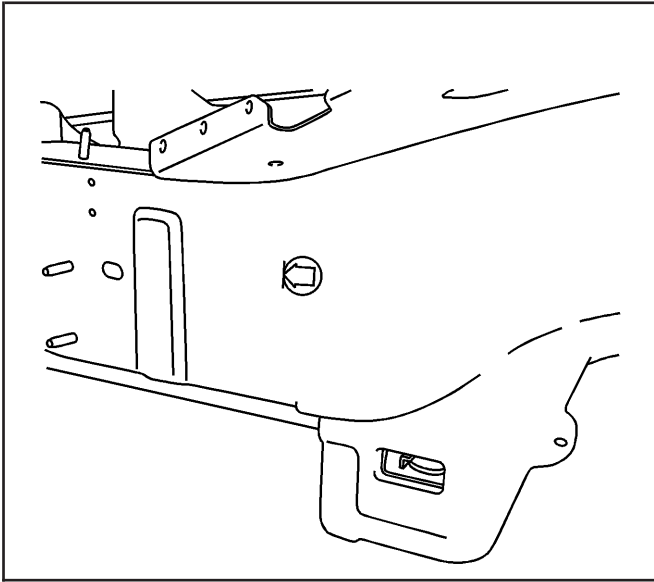
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all of the related panels and the components.
4. Remove the sealers and anti-corrosion materials from the repair area, as necessary.
5. Repair as much of the damage as possible to factory specifications. Refer to *Dimensions - Body* on page 3-7.

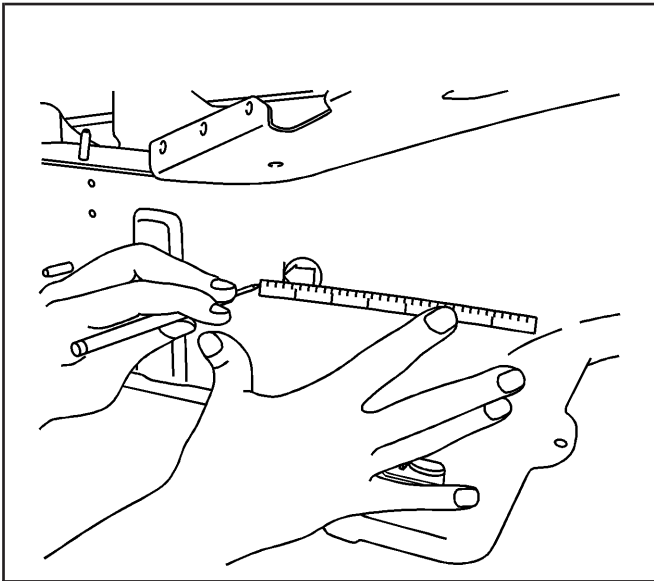


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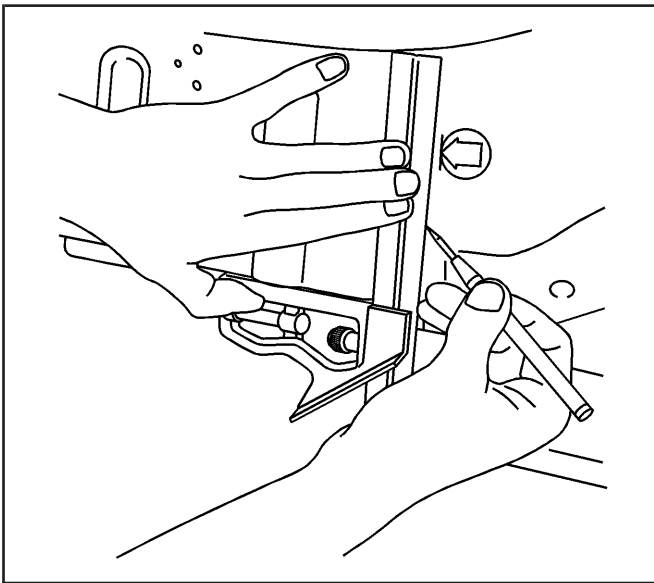
6. Locate the die marks on the inner and outer halves of the front rail.



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Important: Do not section the rail except where indicated.

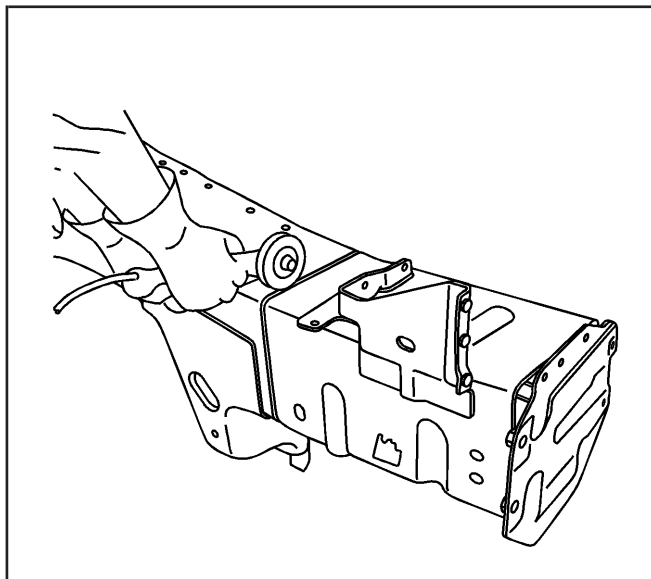
7. Measure forward of the straight line shown on the die marks 7 mm ($\frac{1}{4}$ in). Mark the rail at both die mark locations.



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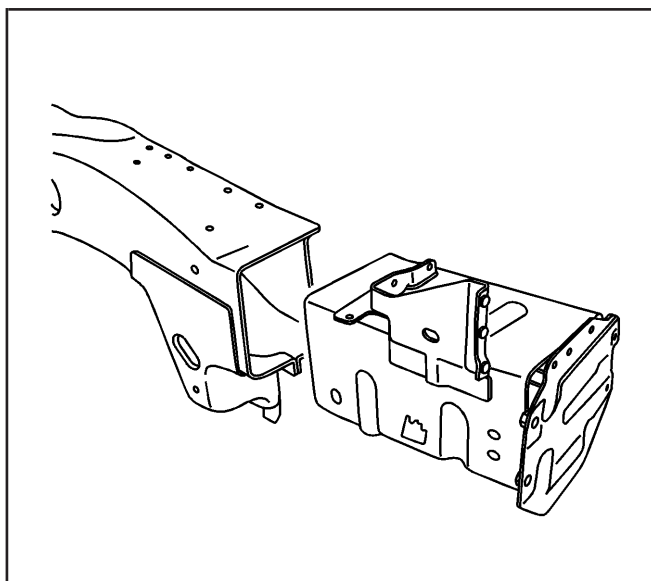
8. At the marks made forward of the die marks, align a sliding square or similar tool to the bottom side of the front rail. Scribe a line 360 degrees around the frame rail, 7 mm ($\frac{1}{4}$ in) forward of the die marks.

9. Cut the rail at the marked location.



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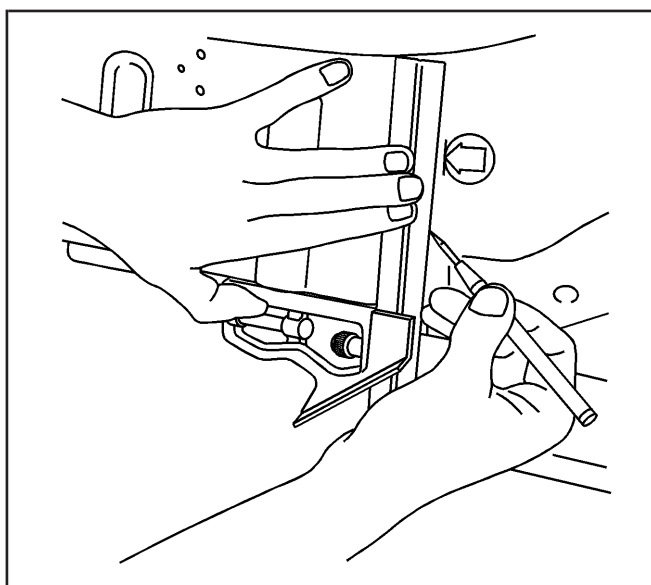
10. Remove the damaged component from the vehicle.



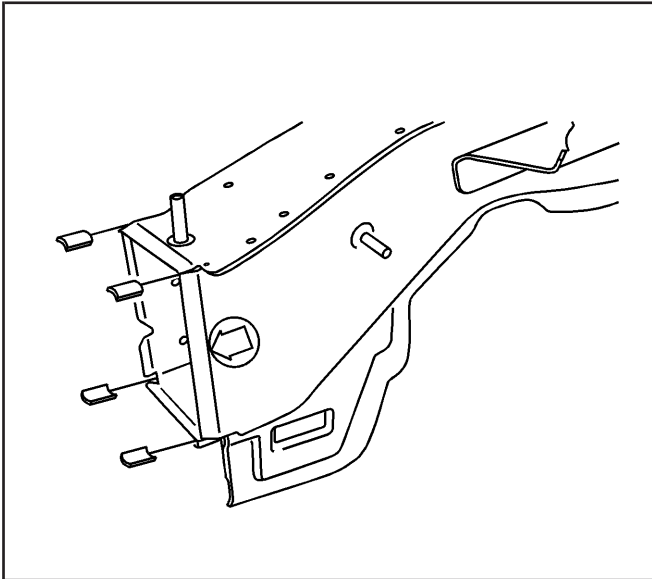
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Installation Procedure

1. At the straight line on the die mark, align a sliding square or similar tool to this line and the bottom side of the front lower rail. Scribe a line completely around the frame rail.

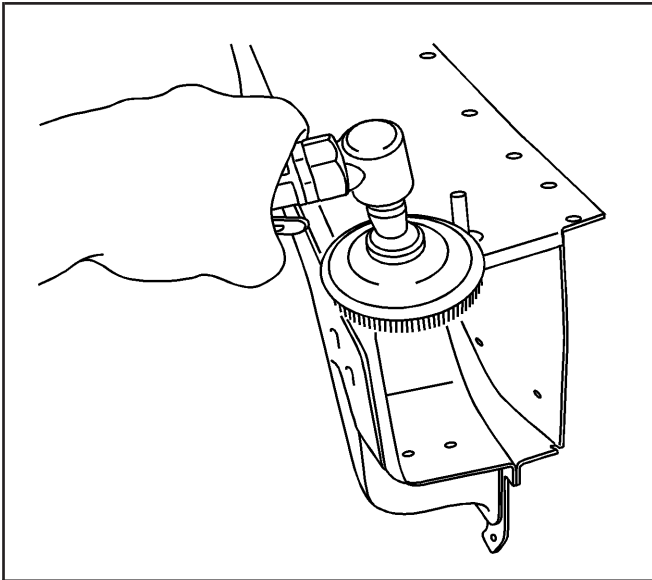


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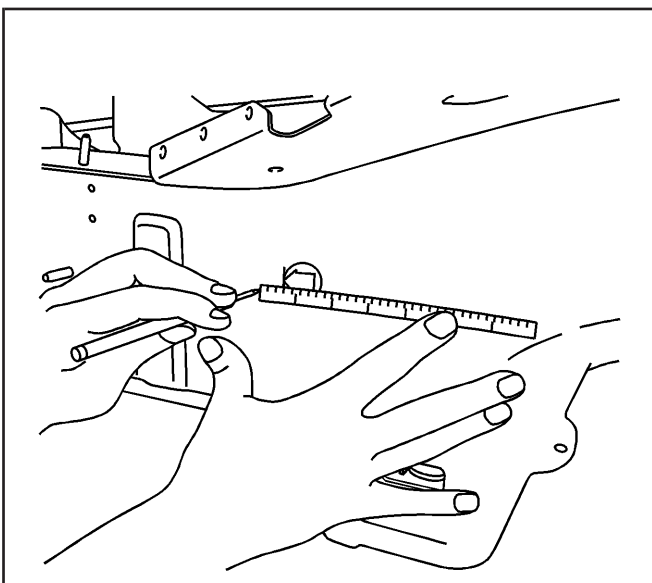
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2. Cut the upper and lower inner and outer corners of the frame rail. Cut at the beginning and the end of the radius at each corner rearward 7 mm (1/4 in) to the scribe line.
3. Bend each side of the rail inward by aligning a vice grip flanging tool or similar tool to the scribe line. Bend a 7 mm (1/4 in) flange inward slightly. This flange is the welding backer.



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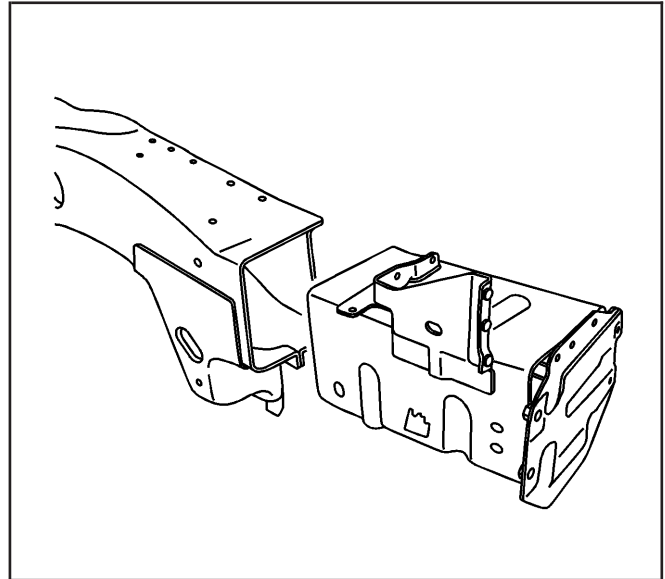
4. Prepare the sectioning weld area as necessary for welding.



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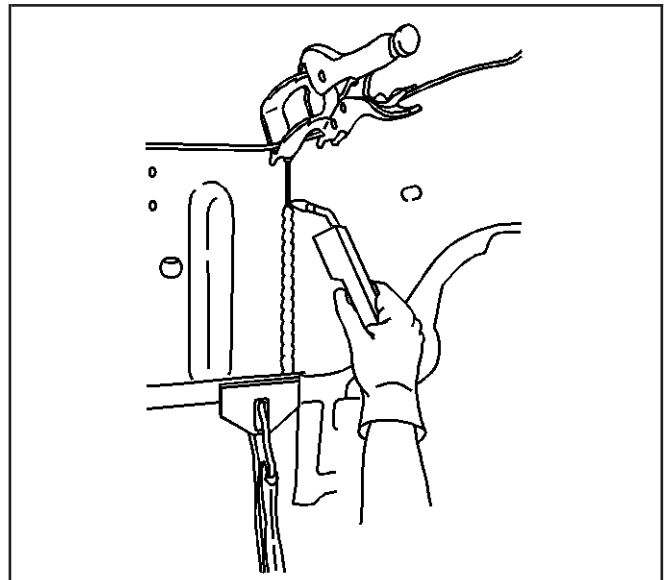
5. Locate the die marks on the service part front rail.
6. Scribe a line completely around the service rail at the line in the die mark by aligning a sliding square or similar tool to the bottom edge of the front rail service part.
7. Cut at the marked location. Remove the front portion of the rail.
8. Prepare the cut edge of the front rail section for welding.
9. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.

- Position the front rail section using 3-dimensional measuring equipment. Clamp the service part in place.



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- Tack weld the part into position.
- Inspect the service rail for proper dimensions using 3-dimensional measuring equipment.
- Stitch weld along the entire sectioning joint. Make 25 mm (1 in) welds along the seam with 25 mm (1 in) gaps between.
- Complete the stitch weld.
- Clean and prepare the welded surfaces.
- Install all of the related panels and components.
- Apply the sealers and anti-corrosion materials to the repair area, as necessary.
- Paint the repaired area.
- Enable the SIR system.
- Connect the negative battery cable.



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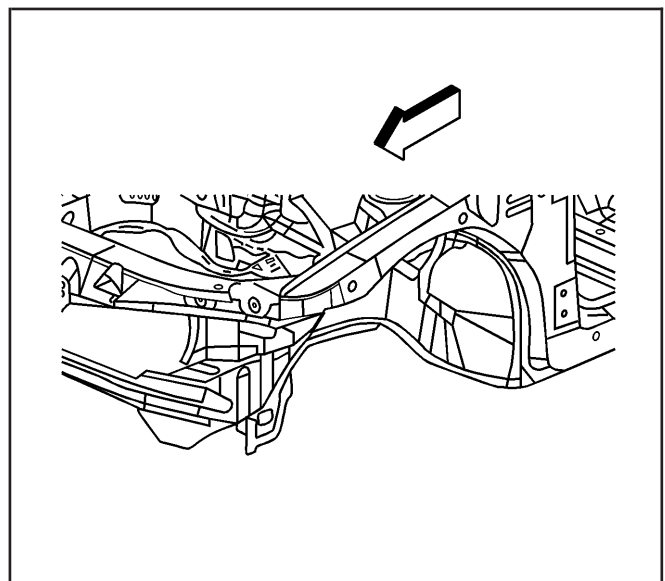
Rail Replacement Front Side Underbody - Outer

Removal Procedure

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- Disable the SIR system.



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