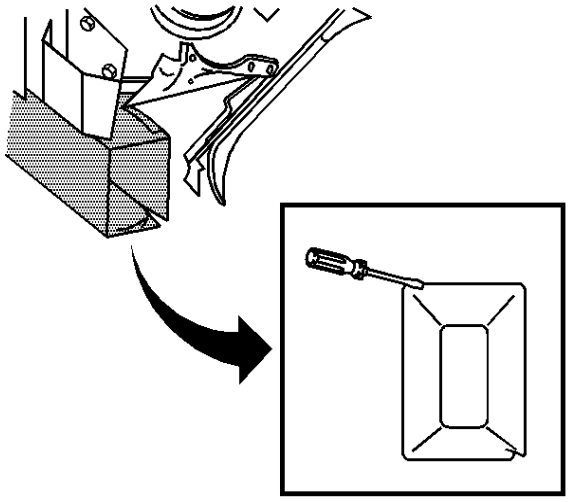
Offset Lap Joint Repair

Caution: Refer to Approved Equipment for Collision Repair Caution in Cautions and Notices.

Caution: Refer to Collision Sectioning Caution in Cautions and Notices.

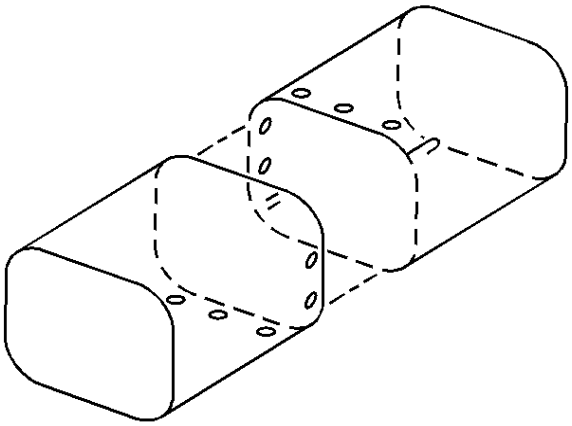
Important: The offset lap joint is used in areas with compound angles that won't allow the new frame section to fit properly with an internal sleeve. In these areas use the offset overlap method, which provides for some adjustment and allows for cut lines that may not be completely straight.



Important: The overlap of the offset joint repair can be as large as 100 mm (4 in).

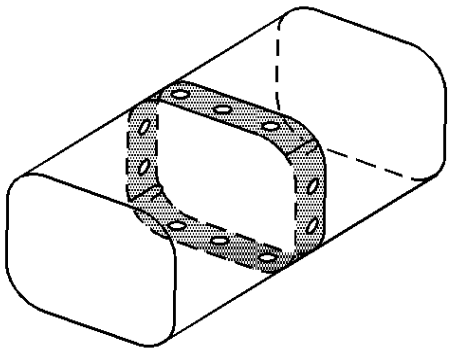
1. Cut two 75 mm (3 in) slots into 2 opposite corners of the existing frame rail.

2. Slightly pry open the slots in the existing frame rail.



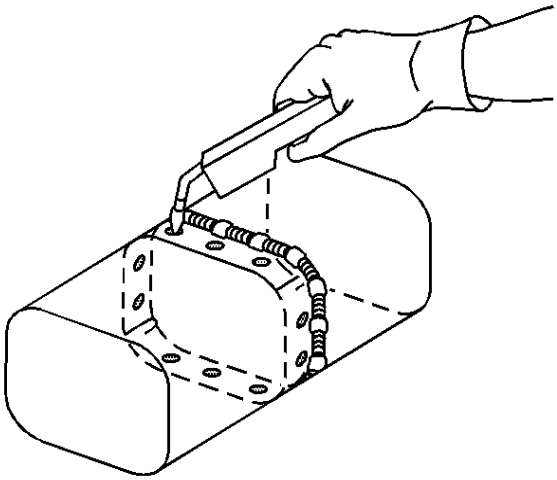
Important: The location of the 8 mm (5/16 in) holes will vary depending on the position of the frame rail overlap.

3. Drill three 8 mm (5/16 in) holes through each side of the frame rail sections.
4. Drill two 8 mm (5/16 in) holes through the top and the bottom of the frame rail sections.



5. Install the new section to the existing frame rail to create the offset lap joint.
6. Inspect the new section using three-dimensional measurements.
7. Clean and prepare all of the welded surfaces.

8. Apply GM-approved Weld-Thru Coating or equivalent to all mating surfaces. Refer to Anti-Corrosion Treatment and Repair.



Important: Use a 50 mm (2 in) stitch weld to avoid minimal heat distortion.

9. Using a metal inert gas (MIG) welder, plug weld the new section to the existing frame rail.
10. Using a MIG welder, weld completely around the overlap joint.