

## Overlap/Backing Plate Sectioning (Welding)

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

1. Fit the service panel to the vehicle to ensure a proper fit.
2. Measure and mark a line at the sail panel 120 mm (4 3/4 in) from the back glass opening and 70 mm (2 3/4 in) rearward from the rocker panel locating hole edge of the service panel.
3. Cut along the line to trim the service panel.
4. Fabricate a 50 mm (2 in) backer plate so that the panel will fit behind the sectioning joint at the sail panel.
5. Fabricate a 100 mm (4 in) backer plate for the rocker panel.
6. Drill 8 mm (5/16 in) plug weld holes as necessary in the locations noted from the original panel.
7. Bevel the sail panel and service panel edges at the sectioned area to approximately 10 degrees.
8. Grind a 50 mm (2 in) area of the outer surface on the vehicle to remove any corrosion, E-coat, primers, coatings and galvanizing that may be present.
9. At the section area on the service panel, grind a 50 mm (2 in) area of the back side to remove any corrosion, E-coat, primers, coatings and galvanizing that may be present.
10. Drill plug weld holes approximately 13 mm (1/2 in) from the edge of the cuts the sectioning areas of the service panel and the original panel.
11. Prepare all mating surfaces as necessary.
12. Apply GM-approved weld-thru coating or equivalent to all mating surfaces. Refer to [Anti-Corrosion Treatment and Repair](#).
13. Position and clamp or screw the backer plate with half of the backer plate exposed at the sectioning joint.

**Important:** Leave a gap of 1 1/2 times the thickness of the metal at the sectioning joint to the original panel.

14. Position the service panel to overlap the backer plate and 1 1/2 times the thickness up to the original panel.
15. Check for proper fit and alignment to the vehicle. Clamp the panels together.
16. Plug weld the backer plate accordingly.
17. Stitch weld along the entire sectioning joint, make 25 mm (1 in) welds along the seam with 25 mm (1 in) gaps between them.
18. Complete the stitch weld.

19. Clean and prepare all welded surfaces of the entire sectioning joint.

**Important:** Always follow the system manufacturer's instructions for application, handling, and curing.

20. Apply a lightweight body filler to the backer plate area.