

Roof Panel Replacement - Outer

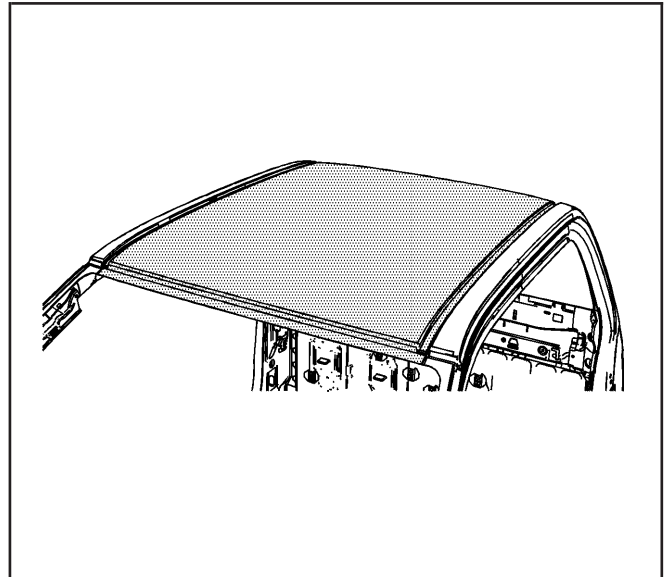
Removal Procedure

This repair procedure includes an installation procedure for either metal-inert gas welding or adhesive bonding.

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.

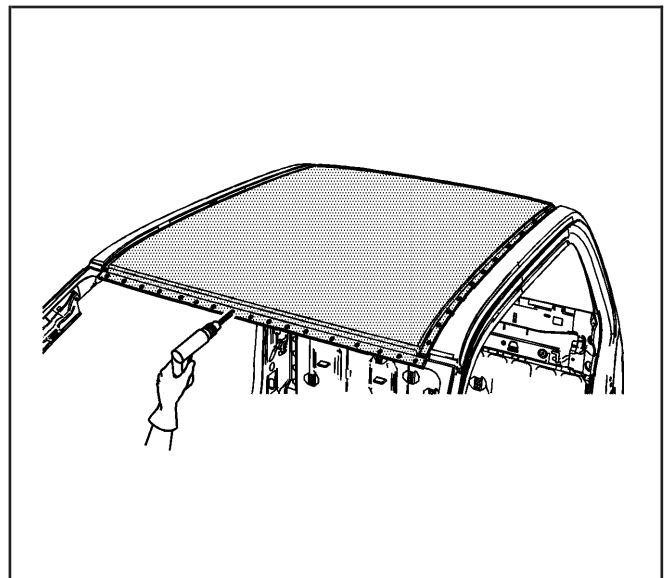
Important: When replacing panels that involve servicing of stationary windows, refer to *Urethane Adhesive Installation of Stationary Windows on page 1-8* in General Information before performing any priming or refinishing.

1. Disable the SIR system. Refer to *SIR Disabling and Enabling Zones on page 2-81*.
2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible to factory specifications. Refer to *Dimensions - Body on page 2-2*.
5. Note the location and remove the sealers and anti-corrosion materials from the repair area, as necessary. Refer to *Anti-Corrosion Treatment and Repair on page 1-5* in General Information.
6. Remove the windshield.
7. Remove the rear window.

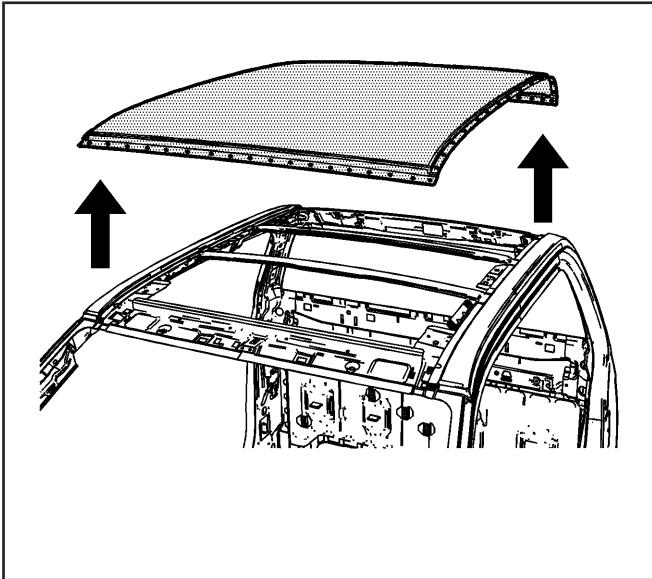


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8. Locate and drill out all factory welds. Note the number and location of welds for installation of the roof panel.

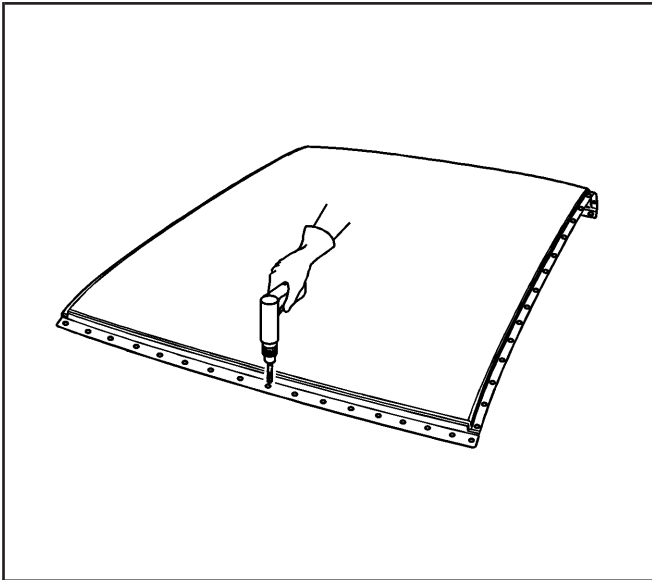


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9. With an assistant remove the roof panel.



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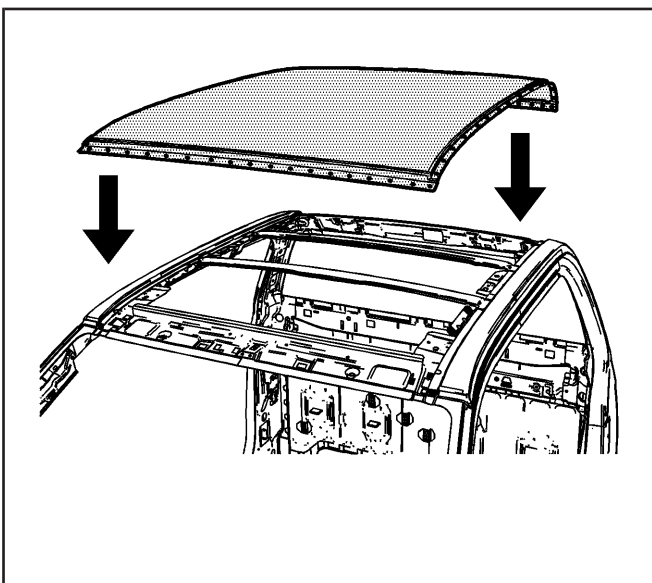
Installation Procedure – Weld-on

1. Drill 8-mm (5/16-in) plug weld holes as necessary in locations noted from the original panel.

Important: If the location of the original plug weld holes can not be determined, or if structural weld-thru adhesive is present, space the plug weld holes every 40 mm (1½ in) apart.

2. Prepare all mating surfaces as necessary.

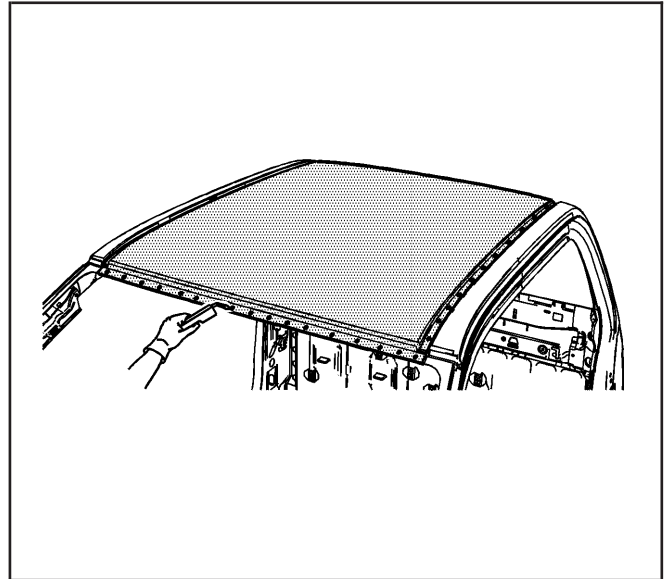
3. Apply 3M® Weld-Thru coating P/N 05916 or equivalent to all mating surfaces



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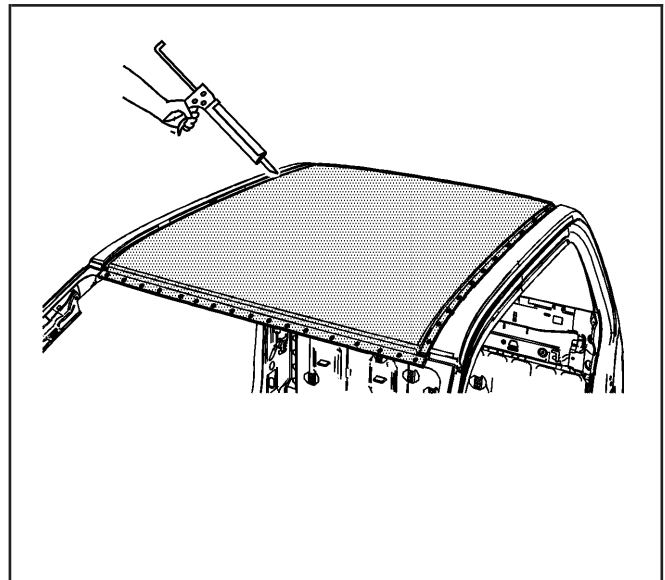
4. With the aid of an assistant, position the roof panel to the body.

5. Plug weld accordingly.
6. Clean and prepare all welded surfaces.



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7. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to *Anti-Corrosion Treatment and Repair* on page 1-5 in General Information.
8. Paint the repair area. Refer to *Basecoat/Clearcoat Paint Systems* on page 1-7 in General Information.
9. Install the windshield.
10. Install the rear window.
11. Install all related panels and components.
12. Connect the negative battery cable.
13. Enable the SIR system. Refer to *SIR Disabling and Enabling Zones* on page 2-81.

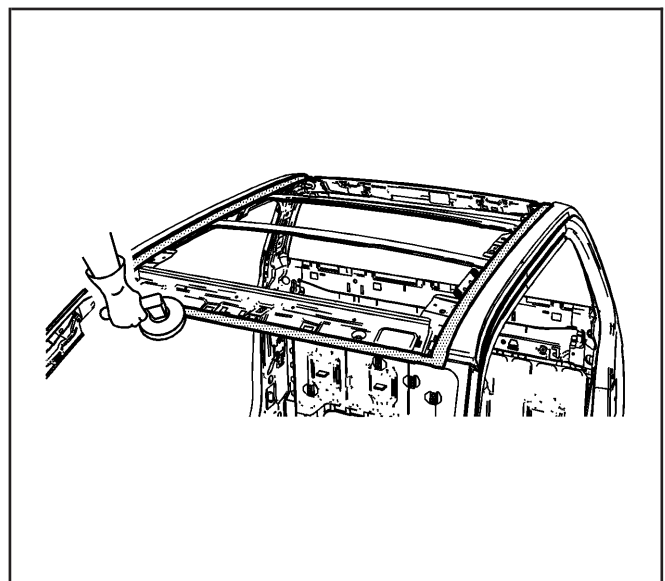


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Installation Procedure – Adhesive Bonding

Important: Before you begin the repair, refer to *Metal Panel Bonding* on page 1-4 for proper adhesive preparations and general information.

1. Grind the surface of the body mating flanges to bare steel.



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2. Grind the roof panel mating flanges to remove the E-coating. Take care not to damage the corners or thin the metal during the grinding operation.
3. Clean the mating surfaces.

Important: The adhesive has a 40–50 minute working time. Do not allow the adhesive to totally cure off the vehicle, as proper alignment of the roof panel to the body will be difficult.



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4. Apply a 3–6 mm (1/8 to 1/4 in) bead of metal panel bonding adhesive GM P/N 12378567 (Canadian P/N 88901675) or equivalent to both of the mating surfaces.



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5. Using a small acid brush, spread a coat of adhesive to cover all the bare metal surfaces to ensure corrosion protection.

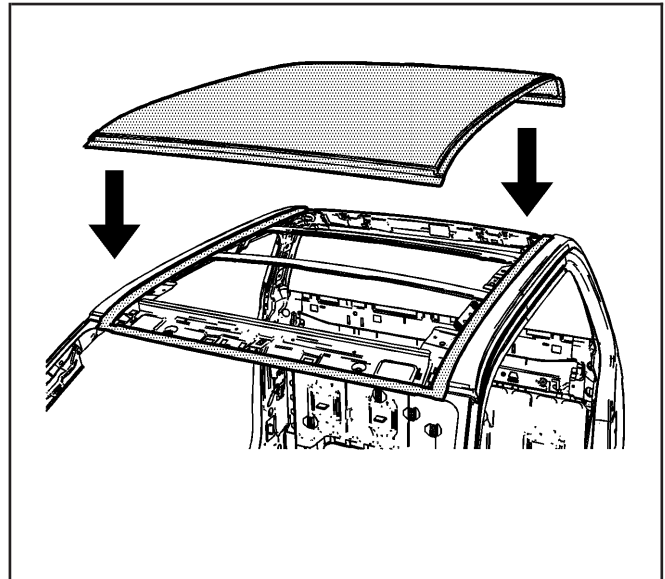
6. Apply a 9–13 mm (3/8 to 1/2 in) bead of metal panel bonding adhesive GM P/N 12378567 (Canadian P/N 88901675) or equivalent to the service panel mating surfaces.



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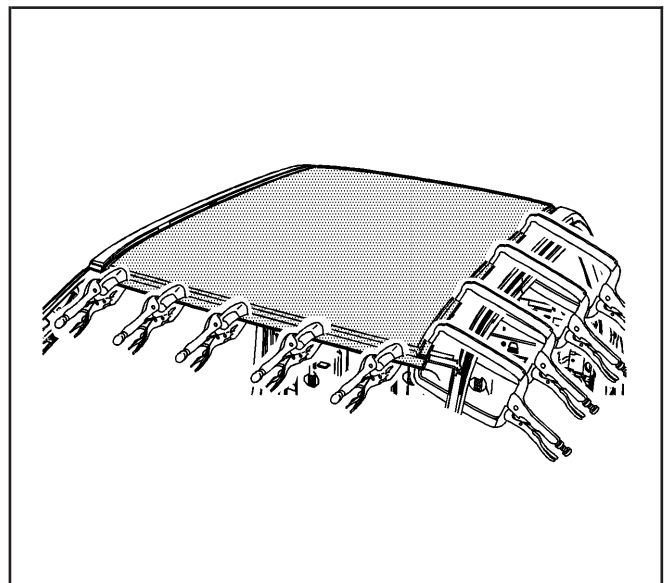
Important: DO NOT pull the panels apart after being joined together. Slide the panels against each other to realign the panels.

7. Install the roof panel to the body with two or more assistants.



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8. Clamp the roof panel into position as required.
9. Using lacquer thinner remove the excess adhesive from the roof panel area.
10. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to *Anti-Corrosion Treatment and Repair* on page 1-5 in General Information.
11. Paint the repair area. Refer to *Basecoat/Clearcoat Paint Systems* on page 1-7 in General Information.
12. Install the windshield.
13. Install all related panels and components.
14. Connect the negative battery cable.
15. Enable the SIR system. Refer to *SIR Disabling and Enabling Zones* on page 2-81 in SIR.



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