

# Aluminum Repair Procedures

## Body Repair

### Panel Bonding (Excluding Door Skin)

1		<p><b>Host Panel Preparation</b> Using a grade 80 abrasive belt, remove remaining weld nugget material from host panel. Prep remaining mating flanges on host panel with a coarse Scotch-Brite™ Belt.</p>
2		<p><b>Replacement Panel Preparation</b> Remove Ecoat from replacement panel mating flange areas using Scotch-Brite™ Belt or Clean N Strip Disc.</p>
3		<p><b>Clean</b> Clean host panel and replacement panel mating flange areas with a VOC compliant surface cleaner.</p>
4		<p><b>Dry Fit Panel</b> Dry fit replacement panel and complete any necessary metal straightening at flanges areas. Remove panel in preparation for adhesive application.</p>
5		<p><b>Pre Assembly NVH Replacement</b> If vehicle construction necessitates, apply NVH material or foams at original locations as required.</p>
6		<p><b>Apply Bonding Adhesive</b> Apply adhesive to mating flange areas on host panel and replacement panel covering all bare metal areas. Apply an additional bead of adhesive at mating flange areas to ensure proper bond line thickness.</p>
7		<p><b>Install Replacement Panel</b> Install replacement panel to host panel. Clamp in place and make required welds on rear vertical seams, cosmetic joints, or where otherwise recommended by the directions for use, or the OE manufacturer. Follow recommended adhesive clamp times.</p>
8		<p><b>Adhesive Clean Up</b> Tool excess adhesive squeeze out from repair area prior to curing to seal the repair. <b>Note: Grinding to remove excess adhesive can expose bare metal, causing corrosion.</b></p>
9		<p><b>Post Assembly Foam Replacement</b> Apply foams at original locations as required.</p>

Visit [www.3MCollision.com](http://www.3MCollision.com) for more SOPs and videos

### Product List

3M™ File Belt Sander, PN 28366



3M™ Cubitron™ II File Belt, grade 80+, PN 33446



Scotch-Brite™ Durable Flex Belt, CRS, PN 64475



Scotch-Brite™ Roloc™ + Clean N Strip XT Disc, PN 07470



Scotch-Brite™ Roloc™ + Clean N Strip TR Disc, PN 07466



3M™ NVH Dampening Material, PN 04274



3M™ Flexible Foam, 200mL, PN 08463



3M™ Panel Bonding Adhesive, 50mL, PN 38315; 200mL, PN 08115; 200mL, PN 08116; 450mL DMS, PN 58115



3M™ SMC/FRP Panel Adhesive, 200mL, PN 08219



3M™ Rigid Pillar Foam, 200mL, PN 08458



### Think About Your Health

3M™ E-A-R™ Skull Screws™ Ear Plug, PN P1300



3M™ Half Facepiece Respirator, PN 07182



3M™ Lexa™ Protective Eyewear, PN 15200



# Protect Your Repairs

Corrosion protection is recommended for this type of repair.

Protect repairs with a self-healing, non-hardening formula

- 3M Cavity Wax Plus, PN 08852
- 3M™ Cavity Wax Plus Applicator Wand Kit, PN 08851



All OEMs recommend the application of internal anti-corrosion material during body repair, which includes cavity wax.

## Individual Product Instruction and Safety Information

For individual product instructions and applicable precautions see product labels and associated literature for the individual product at [www.3MCollision.com](http://www.3MCollision.com)

For product material safety data sheets see [go.3M.com/SDS](http://go.3M.com/SDS)

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**IMPORTANT NOTE:** There are of course many factors and variables that can affect an individual repair, so the technician and repair facility need to evaluate each specific application and repair process, including relevant vehicle, part and OEM guidelines, and determine what is appropriate for that repair.



3M Automotive Aftermarket Division  
3M Center, Building 223-6N-01  
St. Paul, MN 55144-1000  
U.S.A.

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