





# Aluminum Repair Procedures

## Body Repair

### Aluminum Rivet Bonding

1		<b>Host Panel Preparation</b> Using a grade 80 abrasive belt, remove remaining rivet material from host panel. Prep remaining mating flanges on host panel with a coarse Scotch-Brite™ Durable Flex Belt.
2		<b>Mating Flange Panel Preparation</b> Remove Ecoat from replacement panel mating flange areas using a Scotch-Brite™ Belt or Clean N Strip Disc.
3		<b>Dry Fit Panel</b> Dry fit replacement panel and complete any necessary metal straightening at flanges areas.
4		<b>Clean</b> Clean host panel and replacement panel mating flange areas with a VOC compliant surface cleaner.
5		<b>Rivet Preparation</b> Identify replacement rivet sites and prepare the surface for the type of rivet recommended by the manufacturer. (For blind or solid rivets, drill all necessary holes.) Remove panel once complete.
6		<b>Pre Assembly NVH Replacement</b> If vehicle construction necessitates, apply 3M™ NVH Dampening Material or 3M™ Flexible Foam at original locations as required.
7		<b>Apply Bonding Adhesive</b> Apply adhesive to mating flange areas on host panel and replacement panel covering all bare metal areas. Apply additional bead of adhesive at mating flange area to ensure proper bond line thickness.
8		<b>Install Replacement Panel</b> Install replacement panel to host panel taking care to avoid scraping off any adhesive during installation. Clamp in place.
9		<b>Install Rivets and Welds</b> Install replacement rivets to all areas as recommended by the OE manufacturer. <b>Note: Rivets must be installed while adhesive is uncured.</b> Weld cosmetic joints/splices as necessary or recommended by the OE Manufacturer.
10		<b>Adhesive Clean Up</b> Remove clamps and tool excess adhesive squeeze out from repair area prior to curing to seal the repair. An acid brush works well to remove adhesive from between clamps. <b>Note: Grinding to remove excess cured adhesive can expose bare metal, causing corrosion.</b>
11		<b>Post Assembly Foam Replacement</b> Apply foams at original locations as required.

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### 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



## 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 [www.3MCollision.com](http://www.3MCollision.com)

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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.



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