Standard Operating Procedures Body Repair

Weld Bonding (Excluding Door Skin)

Host Panel Preparation

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 to remove all adhesive, corrosion and coatings.

Mating Flange Panel Preparation

Remove E-coat from replacement panel mating flange areas using Scotch-Brite™ Belt or Clean and Strip disc.



Clean host panel and replacement panel mating flange areas with a VOC compliant surface cleaner.



Dry Fit Panel

Dry fit replacement panel and complete any necessary metal straightening at flanges areas.



Weld-Thru Primer

Use Scotch-Brite™ Belt to prepare metal surfaces. Clean and apply weld-thru primer to all areas requiring MIG welding. Caution: Do not use Weld-Thru Primer in adhesive bonding areas.



Spot Weld Surface Preparation

Identify replacement spot weld sites and remove E-coat using Scotch-Brite™ belt where spot weld tips will contact host and replacement panel. Remove panel once complete.



Pre-Assembly NVH Replacement

If vehicle construction necessitates, apply NVH material or foams at original locations as required.



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 areas.

Install Replacement Panel

Install replacement panel to host panel. Clamp in place.



Spot Weld

Spot weld while adhesive is uncured at prepared weld sites. Follow welder settings determined from test panel.

Adhesive Clean Up

Remove clamps and tool excess adhesive squeeze-out from repair area prior to curing to seal the repair. Note: Grinding to remove excess adhesive can expose bare metal, causing corrosion.

Post-Assembly Foam Replacement

Apply foams at original locations as required.

Visit 3MCollision.com for more SOPs and videos

WARNING

Follow OEM and/or welder manufacturers' recommended procedure for making and testing welds. Before welding on a vehicle, test welds must be made to ensure proper weld quality and welding machine settings.

Product List

3M™ File Belt Sander, 18 in., PN 33575

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

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

Scotch-Brite™ Roloc™+ Clean and Strip XT Pro Disc, PN 21552

Scotch-Brite™ Roloc™+ Clean and Strip XT Pro Extra Cut Disc, PN 21555

3M™ Weld-Thru Coating II, PN 05917

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™ Impact Resistant Structural Adhesive 200mL, PN 07333; 450mL DMS, PN 57333

3M™ Composite and Metal Bonding 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[™] Virtua[™] Protective

Eyewear, PN 11326

Note: Follow recommended internal corrosion protection processes prior to vehicle final assembly.

Individual Product Instruction and Safety Information

For individual product instructions and applicable precautions see product labels and associated literature for the individual product at **3MCollision.com**

For product material safety data sheets see 3MCollision.com

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