# Science. Applied to Life.™

# **Standard Operating Procedures Body Repair**

### Weld Sealing



#### **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<sup>™</sup> Belt.

#### Mating Flange Panel Preparation

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

#### Clean

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<sup>™</sup> 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<sup>™</sup> 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 Seam Sealer**

Apply urethane or MSP seam sealer to mating flange areas on host panel and replacement panel covering all bare metal areas. Apply additional bead of sealer at mating flange areas.

#### Install Replacement Panel

Install replacement panel to host panel. Clamp in place.

#### Spot Weld

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

#### Sealer 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 sealer can expose bare metal, causing corrosion.

**Post-Assembly Foam Replacement** Apply foams at original locations as required.

#### A 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<sup>™</sup> File Belt Sander. 18 in., PN 33575 3M<sup>™</sup> Cubitron<sup>™</sup> II File Belt, grade 80+, PN 33446 Scotch-Brite<sup>™</sup> Durable Flex Belt, CRS, PN 64475 Scotch-Brite<sup>™</sup> Roloc<sup>™</sup>+ Clean and Strip XT Pro Disc, PN 21552 Scotch-Brite<sup>™</sup> Roloc<sup>™</sup>+ Clean and Strip XT Pro Extra Cut Disc. PN 21555 3M<sup>™</sup> Weld-Thru Coating II, PN 05917 3M<sup>™</sup> NVH Dampening Material, PN 04274

3M<sup>™</sup> Flexible Foam, 200mL, PN 08463

3M<sup>™</sup> Urethane Seam Sealer, PN 08361; PN 08362

3M<sup>™</sup> MSP Seam Sealer, PN 08370

3M<sup>™</sup> Rigid Pillar Foam, 200mL, PN 08458

## **Think About Your Health**

3M<sup>™</sup> E-A-R<sup>™</sup> Skull Screws<sup>™</sup> Ear Plug, PN P1300 3M<sup>™</sup> Half Facepiece Respirator, PN 07182 3M<sup>™</sup> Virtua<sup>™</sup> Protective Eyewear, PN 11326

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



# Aluminum Repair Procedures Body Repair



Note: Use caution when working on aluminum parts. Use tools that have been cleaned properly or designated for use on aluminum to reduce potential cross contamination. Do not re-use abrasives that were previously used on steel repairs.

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