

**Weld Bonding (Excluding Door Skin)**

<b>1</b>		<p><b>Host Panel Preparation</b></p> <p>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.</p>
<b>2</b>		<p><b>Mating Flange Panel Preparation</b></p> <p>Remove E-coat from replacement panel mating flange areas using Scotch-Brite™ Belt or Clean and Strip disc.</p>
<b>3</b>		<p><b>Clean</b></p> <p>Clean host panel and replacement panel mating flange areas with a VOC compliant surface cleaner.</p>
<b>4</b>		<p><b>Dry Fit Panel</b></p> <p>Dry fit replacement panel and complete any necessary metal straightening at flanges areas.</p>
<b>5</b>		<p><b>Weld-Thru Primer</b></p> <p>Use Scotch-Brite™ Belt to prepare metal surfaces. Clean and apply weld-thru primer to all areas requiring MIG welding. <b>Caution: Do not use Weld-Thru Primer in adhesive bonding areas.</b></p>
<b>6</b>		<p><b>Spot Weld Surface Preparation</b></p> <p>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.</p>
<b>7</b>		<p><b>Pre-Assembly NVH Replacement</b></p> <p>If vehicle construction necessitates, apply NVH material or foams at original locations as required.</p>
<b>8</b>		<p><b>Apply Bonding Adhesive</b></p> <p>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.</p>
<b>9</b>		<p><b>Install Replacement Panel</b></p> <p>Install replacement panel to host panel. Clamp in place.</p>
<b>10</b>		<p><b>Spot Weld</b></p> <p>Spot weld while adhesive is uncured at prepared weld sites. Follow welder settings determined from test panel.</p>
<b>11</b>		<p><b>Adhesive Clean Up</b></p> <p>Remove clamps and 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>
<b>12</b>		<p><b>Post-Assembly Foam Replacement</b></p> <p>Apply foams at original locations as required.</p>

**⚠ 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.**