# Standard Operating Procedures **Bumper Repair**

### Two-Sided Bumper Repair Cracks, Holes & Punctures Clean the Damaged Area Clean the front and back of the repair area with soap and water, followed by a VOC compliant surface cleaner. **Prepare for Reinforcement Material** Apply aluminum autobody repair tape to the front side of the repair to align and secure the damage while the back side reinforcement is being completed. On the back side, use a DA with grade 80 abrasive disc to sand the repair area where the reinforcement patch will be applied. Blow off with clean, dry air and apply adhesion promoter, allowing 5 minutes to dry. **Apply Reinforcement Material** Apply alternating applications of thin, wet coats of semi-rigid plastic repair material and reinforcement cloth on the damaged area. Allow dry time of 15 minutes at 75°F. **Tapering the Front Side** Remove the aluminum tape. Grind the front damage using a 3 in. grade 60 disc or grade 36 file belt at a low speed to create a gradual "Dish Out" area 3 in. wide and deep enough to expose a 1/4-inch wide strip of the back side reinforcement material through the center of the damage. **Preparing the Repair Area** Use a DA with grade 80 abrasive disc to create a smooth transition into the dished area, remove any melted plastic and create a fuzzy surface for the adhesive. No shiny plastic areas should remain. Abrade with grade 180 around the dished out area where the adhesive will eventually be featheredged. Mix and Apply Flexible Filler Blow off the front side repair area with clean dry air, apply aerosol adhesion promoter and allow to dry for 5 minutes. Mix and apply flexible filler material with an initial "tight coat" immediately followed by additional coats to fill in all low areas. Allow 15 minutes to cure at 75°F. Sand Flexible Filler Use a DA to sand the flexible filler material with a grade 150 abrasive disc, followed by a block with grade 180. Final Sand and Inspect Use a DA sander to finish sand the repair area using P320 abrasive disc. Blow off and inspect the repair quality. Repeat steps 6 and 7 as necessary.

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#### **Product List**

3M™ Polyolefin Adhesion Promoter, 12 oz. aerosol, PN 05907

3M<sup>™</sup> Plastic Repair Material Semi-Rigid, 200mL cartridge, PN 04240

3M<sup>™</sup> Reinforcement Patch, 5 in. x 12 ft., roll, PN 04904

3M™ Pistol Grip Disc Sander, PN 33577

3M<sup>™</sup> Cubitron<sup>™</sup> II Fibre Roloc<sup>™</sup> Disc, grade 60+, PN 33391

3M<sup>™</sup> File Belt Sander, 18 in., PN 33575; 13 in., PN 33573

3M<sup>™</sup> Cubitron<sup>™</sup> II File Belt, 3/8 in. x 13 in. (10 × 330mm), grade 36+, PN 33443

3M<sup>™</sup> EZ Sand Multi-Purpose Flexible Adhesive, 200mL, PN 05887; 600mL DMS, PN 55887

3M<sup>™</sup> Performance Manual Applicator, 200mL, PN 08117

3M<sup>™</sup> Dynamic Mixing Applicator — Pneumatic, PN 05846

3M™ Purple Clean Sanding Hookit™ Disc, 3 in., P320, PN 30275; 6 in., P320, PN 01812

3M<sup>™</sup> Cubitron<sup>™</sup> II Clean Sanding Hookit<sup>™</sup> Abrasive Disc, 3 in, 80+, PN 31361

3 in, 150+, PN 31363 3 in, 180+, PN 31364

6 in, 80+, PN 31371 6 in, 150+, PN 31373

6 in, 180+, PN 31374

**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> Lexa<sup>™</sup> Protective Eyewear, PN 15200

Not a complete list. Select protective eyewear, appropriate gloves, hearing protection, respirator and protective clothing based on your job and exposure assessment.

Note: We do not recommend a final coat of 3M™ Polyolefin Adhesion Promoter (PN 05907) after the final sanding. The paint companies all recommend their own paint adhesion promoters and applying the PN 05907 may cause a compatibility issue.

## **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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**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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