## Science. Applied to Life.™

Standard Operating Procedures Bumper Repair

**Product List** 

**Two-Sided Bumper Repair** Cracks, Holes & Punctures

			3M <sup>™</sup> Cubitron <sup>™</sup> II Hookit <sup>™</sup> Clean Sanding Abrasive Disc,
1		<b>Clean the Damaged Area</b> Clean the front and back of the repair area with soap and water, followed by a VOC compliant surface cleaner.	Clean Sanding Abrasive Disc, 3 in., grade 80+, PN 31364; 3 in., grade 180+, PN 31364; 6 in., grade 80+, PN 31374; 6 in., grade 180+, PN 31374; 6 in., grade 320+, PN 31483
		Prepare for Reinforcement Material	M
2		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	3M <sup>™</sup> Semi-Rigid Plastic Repair Material, 200mL cartridge, PN 04240
		clean, dry air and apply adhesion promoter, allowing 10 minutes to dry.	3M <sup>™</sup> Reinforcement Patch, 5 in. x 12 ft. roll,
		Apply Reinforcement Material	PN 04904
3		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.	3M <sup>™</sup> File Belt Sander, 18 in., PN 33575
		Tapering the Front Side	3M <sup>™</sup> Cubitron <sup>™</sup> II File Belt, grade 36+, PN 33443
Л	31	Remove the aluminum tape. Grind the front damage using a grade 36 file belt at a low speed to create	
4		a gradual "Dish Out" area 3 in. wide and deep enough to expose a 1/4-inch wide strip of the back	3M <sup>™</sup> Polyolefin Adhesion
		side reinforcement material through the center of the damage.	Promoter, 12 oz. aerosol, PN 05907
			access?"
		Preparing the Repair Area	Nûr 💭
5		<b>Preparing the Repair Area</b> Use a 3 in. 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	3M <sup>™</sup> EZ Sand Multi-Purpose Repair Material, 200mL, PN 05887; 600mL DMS, PN 55887
5		Use a 3 in. 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.	Repair Material, 200mL, PN 05887; 600mL DMS, PN 55887 3M <sup>™</sup> Performance
5		Use a 3 in. 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	Repair Material, 200mL, PN 05887; 600mL DMS, PN 55887
5 6		Use a 3 in. 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. <b>Mix and Apply Flexible Filler</b>	Repair Material, 200mL, PN 05887; 600mL DMS, PN 55887 3M <sup>™</sup> Performance Manual Applicator,
5 6		Use a 3 in. 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. <b>Mix and Apply Flexible Filler</b> Blow off the front side repair area with clean dry air, apply aerosol adhesion promoter and allow to dry for 10 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. <b>Sand Flexible Filler</b>	Repair Material, 200mL, PN 05887; 600mL DMS, PN 55887Image: Constraint of the second se
5 6 7		Use a 3 in. 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. <b>Mix and Apply Flexible Filler</b> Blow off the front side repair area with clean dry air, apply aerosol adhesion promoter and allow to dry for 10 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. <b>Sand Flexible Filler</b> DA sand flexible repair material with grade 80 disc	Repair Material,   200mL, PN 05887;   600mL DMS, PN 55887   3M™ Performance   Manual Applicator,   200mL, PN 08117   3M™ Dynamic Mixing   Applicator — Pneumatic,
5 6 7		Use a 3 in. 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. <b>Mix and Apply Flexible Filler</b> Blow off the front side repair area with clean dry air, apply aerosol adhesion promoter and allow to dry for 10 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. <b>Sand Flexible Filler</b>	Repair Material,   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
5 6 7		Use a 3 in. 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. <b>Mix and Apply Flexible Filler</b> Blow off the front side repair area with clean dry air, apply aerosol adhesion promoter and allow to dry for 10 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. <b>Sand Flexible Filler</b> DA sand flexible repair material with grade 80 disc to roughly shape, staying on top of the flexible repair material only. Block sand the repair area with grade 180 sheet to finish shaping and featheredging the repair. <b>Final Sand and Inspect</b>	Repair Material, 200mL, PN 05887;   600mL DMS, PN 55887 Image: Constraint of the second sec
5 6 7 8		Use a 3 in. 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. <b>Mix and Apply Flexible Filler</b> Blow off the front side repair area with clean dry air, apply aerosol adhesion promoter and allow to dry for 10 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. <b>Sand Flexible Filler</b> DA sand flexible repair material with grade 80 disc to roughly shape, staying on top of the flexible repair material only. Block sand the repair area with grade 180 sheet to finish shaping and featheredging the repair. <b>Final Sand and Inspect</b> Use a DA sander to finish sand the repair area using grade 320 abrasive disc. Blow off and inspect the	Repair Material, 200mL, PN 05887;   600mL DMS, PN 55887 Image: Constraint of the second sec
5 6 7 8		Use a 3 in. 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. <b>Mix and Apply Flexible Filler</b> Blow off the front side repair area with clean dry air, apply aerosol adhesion promoter and allow to dry for 10 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. <b>Sand Flexible Filler</b> DA sand flexible repair material with grade 80 disc to roughly shape, staying on top of the flexible repair material only. Block sand the repair area with grade 180 sheet to finish shaping and featheredging the repair. <b>Final Sand and Inspect</b> Use a DA sander to finish sand the repair area using	Repair Material,   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 <b>Think About Your Health</b> 3M <sup>™</sup> E-A-R <sup>™</sup> Skull Screws <sup>™</sup> Ear Plug, PN P1300   3M <sup>™</sup> Half Facepiece

Note: We do not recommend a final coat of 3M<sup>™</sup> 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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