Aluminum Repair Procedures Co

Paint Prep

E-Coat Panel Prep

Cleaning

Clean part with soap and water, followed by a recommended VOC compliant surface cleaner.



Surface Prep HandSand edges and other hard to reach areas using P400 flexible abrasive sheet or Scotch-Brite™ Hand Pad until the surface is matte and all sheen has been removed.



Surface Prep Machine Sand remaining surfaces using P400 abrasive on a DA sander until the surface is matte and all sheen has been removed. Note: Use 3M™ Hookit™ Hard E-coat Disc on hard to sand aftermarket parts.



Re-Clean

Blow off with clean, dry air. Clean bumper surface with soap and water, followed by a VOC compliant surface cleaner.



Apply Top Coats

Seal and paint following paint company recommendations.

Product List

3M™ Car Wash Soap Concentrate, 1 gallon, PN 38377



3M™ All Purpose Cleaner and Degreaser Concentrate, 1 gallon, PN 38350



3M™ Flexible Abrasive Hookit[™] Sheet, 5.5 in. x 6.8 in., P400. PN 34337



3M[™] Flexible Abrasive Hookit[™] Foam Pad, PN 34349



Scotch-Brite™ Durable Flex Hand Pad, MX-HP, 4-1/2 in. x 9 in.. Very Fine. PN 64659



Scotch-Brite™ 7447 PRO Hand Pads, Very Fine grade, 6 in. x 9 in., PN 64926



3M™ Purple Clean Sanding Hookit[™] Disc 334U, 6 in., P400 grit, PN 01811



3M[™] Hookit[™] Hard E-Coat Disc, 320 Grit, PN 30695



3M[™] Accuspray[™] Spray Gun Model HG14 Kit, 1.4mm, PN 16577



Think About Your Health

3M™ E-A-R™ Skull Screws™ Ear Plug, PN P1300



3M™ Half Facepiece Respirator, PN 07182



3M™ Lexa™ Protective Eyewear, PN 15200



Standard Operating Procedures Body Repair

Product List Door Skin Replacement Door Frame Preparation 3M™ File Belt Sander, PN 28366 Using a grade 80 abrasive belt, remove remaining weld nugget material from door frame. Clean and prep 3M™ Cubitron™ II File Belt, remaining mating flanges on door frame with a coarse grade 80+, PN 33446 Scotch-Brite[™] belt. Flex Belt, CRS, PN 64475 Clean Clean door frame and replacement panel mating flange Scotch-Brite[™] Durable areas with a VOC compliant surface cleaner. Flex Hand Pad, MX-HP, PN 64659 Scotch-Brite[™] 7447 PRO Replacement Skin Prep Scuff replacement skin mating flange areas using Scotch-Brite[™] hand pad. 3M™ NVH Dampening Dry Fit Panel Dry fit replacement panel and complete any necessary Sealer, PN 08361 metal straightening at flanges areas. Remove door skin in preparation for adhesive application. 3M™ MSP Seam Sealer, PN 08370 **NVH Replacement** 50mL, PN 38315; Apply NVH material at original locations on 200mL, PN 08115; intrusion beam. 200mL, PN 08116; 450mL DMS, PN 58115 **Apply Bonding Adhesive** Adhesive, 200mL, Re-clean bonding surfaces with a VOC compliant PN 08219 surface cleaner. Apply adhesive to door frame covering all bare metal areas. Apply an additional bead of adhesive at mating flange areas to ensure Sealer 200mL, PN 08310; proper bond line thickness. 600mL DMS, PN 58310 Install Door Skin Install replacement door skin onto door frame. Crimp hem flange using hammer and dolly. Clamp as necessary. (For aluminum panels, follow OEM recommended flanging procedures.) Clamp and Cure Follow recommended adhesive clamp and cure times. Clean any adhesive squeeze-out from hem flange area with a VOC compliant cleaner. Ear Plug, PN P1300 3M™ Half Facepiece Seam Sealing Re-apply seam sealer to hem flange as required following general seam sealing guidelines.



Scotch-Brite™ Durable



4-1/2 in. x 9 in., Very Fine,



Hand Pads, Very Fine, 6 in. x 9 in., PN 64926

Material, PN 04274







3M™ Panel Bonding Adhesive

3M™ SMC/FRP Panel





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



Think About Your Health

3M[™] E-A-R[™] Skull Screws[™]



Respirator, PN 07182



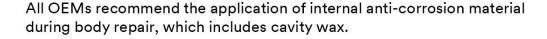
3M™ Lexa™ Protective Eyewear, PN 15200

Protect Your Repairs

Corrosion protection is recommended for this type of repair.

Protect repairs with a self-healing, non-hardening formula

- 3M Cavity Wax Plus, PN 08852
- 3M™ Cavity Wax Plus Applicator Wand Kit, PN 08851





Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

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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.

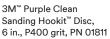
Standard Operating Procedures Paint Prep

Feather-Prime-Block **Featheredge** Blow off repair area. Featheredge the surrounding repair area using P180 abrasive. Final Sand and Inspect Final sand surrounding area using P320 abrasive disc on a DA sander. Blow off with clean, dry air. Clean with wax and grease remover. Inspect the repair for quality. Mask for Primer Mask repair area as necessary. Refer to Primer Masking SOP for 3M specific recommendations. PN 05861 **Apply Primer** Apply primer to repair area following manufacturers recommendations. Allow to cure. PN 01812 **Apply Dry Guide Coat** Apply 3M[™] Dry Guide Coat over cured primer. **Hand Block Repair** Hand sand or "check block" sand the repair area using a P320 abrasive sheet on an appropriately sized hand block. Look for imperfections in the repair area highlighted by the dry guide coat. If necessary, re-apply dry guide coat and continue PN 30705 block sanding to repair any defects as required. Re-Apply Dry Guide Coat Re-apply 3M™ Dry Guide Coat over entire repair area. **DA Sand Primer** DA sand repair area using a P400 disc and a soft interface pad until all 3M™ Dry Guide Coat is removed. Note: Use 3M™ Flexible Abrasive Disc to reduce burning through the primer surface. Clean the Damaged Area Clean the repair area with a VOC compliant

surface cleaner.

Product List

3M[™] Cubitron[™] II Clean Sanding Hookit™ Disc, 6 in., 180+ grade, PN 31374



3M™ Flexible Abrasive Hookit™ Disc, 17 hole, 6 in., P400, PN 34800

3M™ Dry Guide Coat, 50 gram applicator kit,

3M™ Purple Clean Sanding Hookit™ Disc 334U, 6 in., P320 grit,

3M™ Accuspray™ Spray Gun Model HG18, PN 16570; 1.8mm Atomizing Head, PN 16611

3M™ Hookit™ Purple Clean Sanding Roll, 70mm x 12m, P320,

Festool D150 Thin Interface Pad, PN 29939



Think About Your Health

3M™ E-A-R™ Skull Screws™ Ear Plug, PN P1300

3M[™] Half Facepiece Respirator, PN 07182

3M[™] Lexa[™] Protective Eyewear, PN 15200









Standard Operating Procedures Truck Repair

Seam Sealer Removal

1



Clean

Prewash/clean vehicle prior to disassembly (power wash undercarriage area at repair).

2



Protect

Protect surrounding areas with masking tape.

3



Method A

4



Method B

Use CRS Scotch-Brite™ Belt to remove coatings and seam sealers in hard to reach areas.

5



Clear

Blow off the surface with clean dry air and then use a VOC compliant surface cleaner to remove any remaining residue.

Product List

3M[™] Car Wash Soap Concentrate, 1 gallon, PN 38377

3M[™] All Purpose Cleaner and Degreaser Concentrate, 1 gallon, PN 38350



Scotch® Performance Green Masking Tape 233+, 18mm width (.71 in.), PN 26334



Scotch-Brite[™] Roloc[™]+ Clean N Strip XT Disc, 4 in. x 1/2 in., Extra Coarse, PN 07470



Scotch-Brite[™] Roloc[™]+ Clean N Strip Disc, 4 in. x 1/2 in., Extra Coarse, PN 07466



3M[™] File Belt Sander, 18 in., PN 33575; 13 in., PN 33573



Scotch-Brite™ Durable Flex Belt, 1/2 in. x 18 in., Coarse, PN 64475



3M[™] Specialty Adhesive Remover, 15 oz. aerosol, PN 38987



Think About Your Health

3M[™] E-A-R[™] Skull Screws[™] Ear Plug, PN P1300

3M[™] Half Facepiece Respirator, PN 07182

3M[™] Virtua[™] CCS Protective Eyewear with Foam Gasket, PN 11872



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

Standard Operating Procedures Truck Repair

Seam Sealer Installation: Over Primer



Surface Prep

Scuff primer in sealer application areas using a maroon Scotch-Brite™ Hand Pad. Blow off with clean, dry air. Note: Apply 3M seam sealers only over two-part epoxy or two-part urethane primers.



Clean

Use a clean cloth or paper towel to clean repair area with 3M™ All Purpose Cleaner and Degreaser followed by a VOC compliant wax and grease remover. Note: DO NOT spray or saturate seams with cleaner.



Apply Tight Coat

Apply thin bead of sealer to desired joint. Tool sealer into seam ensuring proper sealing and adhesive qualities.



Apply Seam Sealer

Apply seam sealer over the prepared seam. Tool to recreate OEM appearance.

Product List

Scotch-Brite[™] Hand Pads 7447 PRO, Very Fine grade, 6 in. x 9 in., PN 64926



3M™ All Purpose Cleaner and Degreaser Concentrate, 1 gallon, PN 38350



Marson® Yellow Spreaders, PN 20395



3M™ Urethane Seam Sealer, PN 08361



3M™ MSP Seam Sealer, PN 08370

3M™ MSP Sprayable Seam Sealer, PN 08374

3M™ Heavy-Bodied Seam Sealer, 200mL, PN 08308; 600mL





3M™ EZ Sand Multi-Purpose Repair Material, 200mL, PN 05887; 600mL DMS, PN 55887

Think About Your Health

3M™ E-A-R™ Skull Screws™ Ear Plug, PN P1300

3M[™] Half Facepiece Respirator, PN 07182



3M™ Virtua™ CCS Protective Evewear with Foam Gasket. PN 11872

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