

Aluminum Repair Procedures

Paint Prep

Feather-Prime-Block Waterborne

1		Featheredge Blow off repair area. Featheredge the surrounding repair area using P180 abrasive.
2		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.
3		Mask for Primer Mask repair area as necessary. Refer to primer masking standard operating procedures for 3M specific recommendations.
4		Apply Primer Apply primer to repair area following manufacturers recommendations. Allow to cure.
5		Apply Dry Guide Coat Apply 3M™ Dry Guide Coat over cured primer.
6		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 block sanding to repair any defects as required.
7		Re-Apply Dry Guide Coat Re-apply 3M™ Dry Guide Coat over entire repair area.
8		DA Sand Primer DA sand repair area using a P400 disc and a soft interface pad until all 3M™ Dry Guide Coat is removed.
9		Re-Apply Dry Guide Coat Re-apply 3M™ Dry Guide Coat over hand blocked repair area.
10		DA Sand Primer DA Sand repair area using a P600–P800 disc and a soft interface pad until all the 3M™ Dry Guide Coat is removed.
11		Clean the Damaged Area Clean the repair area with a recommended VOC compliant surface cleaner.

Product List

3M™ Purple Clean Sanding Hookit™ Disc, 6 in., P180 grit, PN 01816; P400 grit, PN 01811



3M™ Dry Guide Coat, 50 gram applicator kit, PN 05861



3M™ Purple Clean Sanding Hookit™ Disc 334U, 6 in., P320 grit, PN 01812



3M™ Accuspray™ Spray Gun Model HG09, PN 16570



3M™ Accuspray™ Atomizing Head, PN 16611



3M™ Hookit™ Purple Clean Sanding Roll, 70mm x 12m, P320, PN 30705



3M™ Purple Clean Sanding Hookit™ Disc 334U, 6 in., P600 grit, PN 30761; 6 in., P800 grit, PN 30760



3M™ Hookit™ Soft Interface Pad, PN 05777



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



Feather-Prime-Block Waterborne		
1		Featheredge Blow off repair area. Featheredge the surrounding repair area using P180 abrasive.
2		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.
3		Mask for Primer Mask repair area as necessary. Refer to Primer Masking SOP for 3M specific recommendations.
4		Apply Primer Apply primer to repair area following manufacturers recommendations. Allow to cure.
5		Apply Dry Guide Coat Apply 3M™ Dry Guide Coat over cured primer.
6		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 block sanding to repair any defects as required.
7		Re-Apply Dry Guide Coat Re-apply 3M™ Dry Guide Coat over entire repair area.
8		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.
9		Re-Apply Dry Guide Coat Re-apply 3M™ Dry Guide Coat over hand blocked repair area.
10		DA Sand Primer DA Sand repair area using a P600–P800 disc and a soft interface pad until all the 3M™ Dry Guide Coat is removed. Note: Use 3M™ Flexible Abrasive Disc to reduce burning through the primer surface.
11		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™ Dry Guide Coat, 50 gram applicator kit, PN 05861



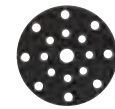
3M™ Accuspray™ Spray Gun Model HG18, PN 16570; 1.8mm Atomizing Head, PN 16611



3M™ Hookit™ Purple Clean Sanding Roll, 70mm x 12m, P320, PN 30705



Festool D150 Thin Interface Pad, PN 29939



3M™ Purple Clean Sanding Hookit™ Disc 334U, 6 in., P320 grit, PN 01812; 6 in., P400 grit, PN 01811; 6 in., P600 grit, PN 30761; 6 in., P800 grit, PN 30760



3M™ Flexible Abrasive Hookit™ Disc, 17 hole, 6 in., P400, PN 34800; 6 in., P600, PN 34801; 6 in., P800, PN 34802



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



Blend Panel Sanding Process		
1		<p>Clean the Repair Area Clean the repair area with soap and water, followed by a VOC compliant surface cleaner.</p>
2		<p>Hand Sand Edges Scuff hard to reach areas and panel edges by hand with P800–P1000 abrasive disc or flexible abrasive sheet.</p>
3		<p>DA Sand Color Blend Area DA sand the color blend area using a grade P800 abrasive disc and a soft interface pad. For best results, sand back into primer surfacer. Note: Use 3M™ Flexible Abrasive Disc to reduce burning through the top coat surface.</p>
4		<p>DA Sand Adjacent Panels DA sand the remainder of the blend panel(s) using a P1000 abrasive disc.</p>
5		<p>Clean and Inspect Clean the repair area with a VOC compliant or paint manufacturer recommended surface cleaner. Blow dry the repair area with clean, dry air. Inspect the repair area and re-sand any shiny spots as necessary.</p>

Product List	
<p>3M™ Trizact™ Hookit™ Blending Disc, 6 in., P1000, PN 02090</p>	
<p>3M™ Flexible Abrasive Hookit™ Sheet, 5.5 in. x 6.8 in., P800, PN 34340</p>	
<p>3M™ Purple Clean Sanding Hookit™ Disc 334U, 6 in., P800 grit, PN 30760</p>	
<p>3M™ Flexible Abrasive Hookit™ Disc, 17 hole, 6 in., P800, PN 34802; 6 in., P1000, PN 34803</p>	
<p>Festool D150 Thin Interface Pad, PN 29939</p>	

Think About Your Health	
<p>3M™ E-A-R™ Skull Screws™ Ear Plug, PN P1300</p>	
<p>3M™ Half Facepiece Respirator, PN 07182</p>	
<p>3M™ Lexa™ Protective Eyewear, PN 15200</p>	

Properly dress and finish welded areas prior to applying direct to metal sealer.

Seam Sealer Installation: Direct to Metal

1



Surface Prep

Scuff sealer application areas using a maroon Scotch-Brite™ Hand Pad. Blow off with clean, dry air.

2



Clean

Use a clean cloth or paper towel to clean repair area with all purpose cleaner and degreaser followed by a VOC compliant wax and grease remover. **Note: DO NOT spray or saturate seams with cleaner.**

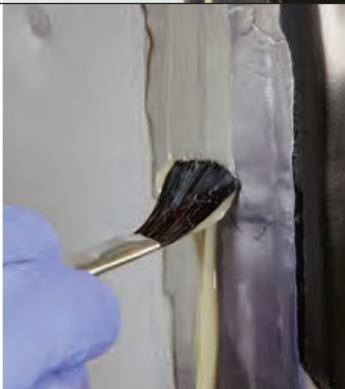
3



Apply Tight Coat

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

4



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; PN 08362



3M™ MSP Seam Sealer, PN 08370



3M™ Bare-Metal Seam Sealer 200mL, PN 08310; 600mL DMS, PN 58310



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.

Aluminum Repair Procedures

Paint Prep

E-Coat Panel Prep

1



Cleaning

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

2A



Surface Prep Hand

Sand 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.

2B



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.**

3



Re-Clean

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

4



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

