



Standard Operating Procedures

Heavy Duty Truck Repair

3M Automotive Aftermarket Division



Process for Success

Standard Operating Procedures

From metal and plastic repair, to sanding, paint finishing and truck clean-up, 3M has the products and repair processes for you. Feel confident your repair is done professionally and efficiently using our **Standard Operating Procedures**. These procedures will help you consistently produce quality, time-proven results for any of your collision repair needs.

For more Standard Operating Procedures, visit 3MCollision.com.

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Aluminum Panel Removal

1



Clean

Clean the panel prior to disassembly with soap and water followed by a VOC compliant surface cleaner.

2



Sealer/Coating Removal

If necessary, use a Scotch-Brite™ Clean N Strip Disc to remove seam sealer and coatings from large easy to access areas. For hard-to-reach areas use a CRS grade Scotch-Brite™ Belt.

3



Rivet/Spot Weld Removal — Belt Grinder

Use grade 80 abrasive belt to remove spot welds or rivet head from top panel. Note top panel thickness. Use belt thickness as a gauge (e.g., stop grinding when the back of belt is flush with exterior panel). **Note: During application, follow OEM recommended procedures for removal of rivets and/or other fasteners.**

4



Panel Separation

Separate exterior panel from the host panel. **DO NOT** force separation in areas where the weld isn't completely removed. Go back to Step 3 and finish weld removal before continuing.

Visit 3MCollision.com for more SOPs and videos

Product List

3M™ Car Wash Soap Concentrate, 5 gallons, PN 38378



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



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



Scotch-Brite™ Roloc™ + Clean N Strip TR 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™ Green Corps™ Reinforced Weld Grinding Wheel, PN 01991



3M™ Cut-Off Wheel Tool, 3 in., PN 33579



3M™ Cubitron™ II File Belt, 1/2 in. x 18 in., grade 80+, PN 33446



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.

Use only tools that have been cleaned properly or are designated for use on aluminum to reduce potential cross contamination. **DO NOT** re-use abrasives that were previously used on steel repairs.

Aluminum Panel Installation: Adhesive

1



Clean

Wash the truck and repair area prior to disassembly with soap and water followed by a VOC compliant surface cleaner.

2



Dry Fit Panel

Dry fit all parts to ensure a good fit before dispensing and applying adhesive. **Note:** Use 1-1/2 in. tape for alignment markings to determine proper placement and attachment.

3



Remove Panel

Cut tape between the two panels and remove panel. Use rubber gloves to prevent contamination.

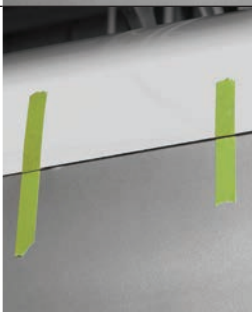
4



Apply Adhesive

Apply adhesive to the sanded replacement panel flange. Use rubber gloves to prevent contamination.

5



Fit Panel

Fit panel to the existing truck side panel and slide if necessary to align to 1-1/2 in. tape. **Note: Always slide panel and never pick up panel away from bonding surface.** Apply clamps.

Visit 3MCollision.com for more SOPs and videos

Product List

3M™ Car Wash
Soap Concentrate,
5 gallons, PN 38378



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



Scotch® Performance
Green Masking Tape
233+, 36mm width
(1.41 in.), PN 26338



3M™ SMC/FRP Repair – 90,
400mL, PN 08274



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 Dent Repair

| | | |
|----------|---|---|
| 1 |  | Pre-Cleaning Pre-wash/clean vehicle prior to disassembly (power wash undercarriage area at repair). |
| 2 |  | Initial Prep Sand DA sand the repair area using grade 80, removing paint beyond damage by 2–4 in. Clean the surface with an approved low VOC surface cleaner. |
| 3 |  | Final Metal Prep Remove remaining paint/coatings in “low spots” using a Scotch-Brite™ Clean N Strip disc. Use a 3 in. grinding disc to remove weld nuggets or other surface imperfections. Clean the surface with an approved low VOC surface cleaner. |
| 4 |  | Mix and Apply Filler Mix and apply filler per manufacturer’s recommendation or use the 3M™ Dynamic Mixing System. Keep the body filler within the primer featheredge area. Cure the body filler 15–20 minutes at 75°F. |
| 5 |  | Initial Sand Filler Block shape sand filler with P80. DA rough featheredge area with P80 abrasive. Use 3M™ Dry Guide Coat between sanding steps to highlight imperfections. Reapply 3M™ Dry Guide Coat as necessary. |
| 6 |  | Final Sand Filler Final block sand filler with P150 abrasive. DA fine featheredge sand the repair area with P180 abrasive and clean the surface with an approved low VOC surface cleaner applied to a clean towel. Use 3M™ Dry Guide Coat between sanding steps to highlight imperfections. |
| 7 |  | Mix and Apply Glaze Mix and apply glaze if required per manufacturer’s recommendation or if using the 3M™ Dynamic Mixing System. Keep the glaze within the primer featheredge area. Cure glaze for 15–20 minutes at 75°F. |
| 8 |  | Sand Glaze Block sand polyester glaze with P180 abrasive. Use 3M™ Dry Guide Coat to highlight imperfections. Reapply glaze as necessary to fill minor imperfections. |
| 9 |  | Final Sand and Inspect Featheredge the surrounding area using P180 abrasive. Inspect the repair for quality. |

Visit 3MCollision.com for more SOPs and videos

The Festool mobile dust extractor is not approved for use with aluminum dust. Adapt sander to a non-vacuum airline. PN 29917.

Product List

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

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

3M™ Cubitron™ II Clean Sanding Hookit™ Abrasive Disc, 3 in., 80+ grade, PN 31361; 6 in., 80+ grade, PN 31371

3M™ Platinum™ Plus Body Filler, 1 gallon, PN 01131; for DMS, PN 05863

3M™ Cubitron™ II Fibre Roloc™ Disc, 3 in., 80+ grade, PN 33392

3M™ Roloc™+ Holder, PN 07500

Scotch-Brite™ Roloc™+ Clean N Strip XT Disc, PN 07470

Scotch-Brite™ Roloc™+ Clean N Strip TR Disc, PN 07466

3M™ Platinum™ Plus Finishing Glaze, 30 oz., PN 31180

3M™ Platinum Glaze for DMS, 05862

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

3M™ Cubitron™ II Hookit™ Clean Sanding Sheet Roll, 70mm x 12m, 80+ grade, PN 34442; 150+ grade, PN 34445; 180+ grade, PN 34446

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

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.

Composite Panel Removal and Installation

1



Clean the Panels

Clean panels with soap and water followed by a VOC compliant surface cleaner. Thoroughly dry the parts. **DO NOT** apply any other cleaners throughout the remainder of the removal and installation procedure.

2



Panel Removal

Heat the bond line to 250–300°F and gently pry the panels apart with a rigid putty knife or equivalent. Remove all adhesive from the undamaged part using the same process as below. Let the surface cool.

3



Surface Prep

Sand the surfaces to be bonded using a grade 60 3M™ Roloc™ Abrasive Disc on a pistol grip sander set at a low speed to rough up the area, or a P80 abrasive disc on a DA. Blow off the repair area with clean, dry air and a clean cloth. **Note: If flame heat was used to help separate panels it's a must that the afterburn be removed with a P80 abrasive disc.** For metal parts, nothing coarser than P80 is necessary.

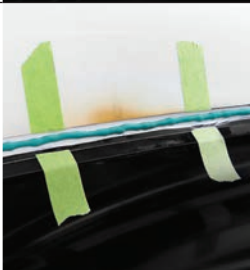
4



Dry Fit Parts

Dry fit all parts to ensure a good fit before dispensing and applying adhesive.

5



Apply Adhesive

Follow the Directions for Use to prepare, mix and apply 3M™ SMC/FRP Repair Adhesive. Apply a continuous bead to one part. **Note: If you need to adjust the part, slide the part to prevent air pockets in the adhesive bead.**

6



Bond

Mate the parts. Apply clamps to the bonded panel surface and clamp within the desired area. **Note: Apply as many clamps as needed to bring the panels together. Make sure NOT to over clamp, which can result in squeezing the bondline dry of adhesive.** Remove any excess adhesive squeeze out.

Visit 3MCollision.com for more SOPs and videos

Product List

3M™ Car Wash Soap Concentrate, 5 gallons, PN 38378



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



3M™ Cubitron™ II Fibre Roloc™ Disc, grade 60+, 3 in. (75mm), PN 33391



3M™ Pistol Grip Disc Sander, PN 33577



3M™ Cubitron™ II Clean Sanding Hookit™ Abrasive Disc, 6 in., 80+ grade, PN 31371



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



3M™ SMC/FRP Repair – 10, 400mL, PN 08272



3M™ SMC/FRP Repair – 35, 400mL, PN 08273



3M™ SMC/FRP Repair – 90, 400mL, PN 08274



3M™ Performance Pneumatic Applicator for 400mL cartridges, PN 08280



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.

Metal Working

1



Pre-Cleaning

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

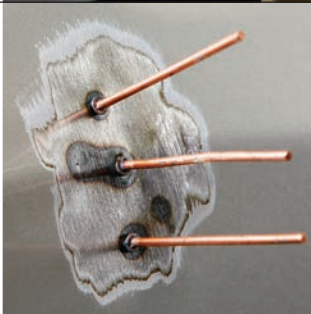
2



Surface Prep

Use a Scotch-Brite™ Clean N Strip disc or a Scotch-Brite™ Belt to remove paint/coating in low points of damage in preparation for dent pulling.

3



Dent Pulling

Pull low spots of dent using preferred dent pulling method and equipment.

4



Final Prep

Use a grade 80 Roloc™ grinding disc to remove weld nuggets from dent pulling operation.

5



Clean and Inspect

Clean with all purpose cleaner and degreaser. Blow off with clean, dry air. Inspect damage area to determine if additional metal straightening is required.

Visit 3MCollision.com for more SOPs and videos

Product List

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



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



Scotch-Brite™ Roloc™+
Clean N Strip XT Disc,
PN 07470



Scotch-Brite™ Roloc™+
Clean N Strip TR Disc,
PN 07466



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



Scotch-Brite™ Durable
Flex Belt, CRS, PN 64475



3M™ Cubitron™ II Fibre
Roloc™ Disc, grade
80+, 3 in., PN 33392



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



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

Note: It will be necessary to apply cavity wax to back side of panel at heat effected areas to restore corrosion protection.

Steel Part Replacement

| | | |
|----------------|---|--|
| 1 |  | Pre-Cleaning Pre-wash/clean vehicle prior to disassembly (power wash undercarriage area at repair). |
| 2 |  | Panel Cutting Identify OEM recommended sectioning location, scribe or mark with tape on the vehicle. Trim repair area using preferred cut-off wheel. Use grade 36 file belt in hard-to-reach areas to cut top panel and avoid damage to host panel. |
| 3 |  | Sealer/Coating Removal Use Scotch-Brite™ Clean N Strip disc to remove seam sealer and coatings from large easy to access areas. Use CRS Scotch-Brite™ Belt to remove coatings and seam sealers in hard-to-reach areas and along pinch weld flanges to expose spot weld locations. |
| 4 |  | Spot Weld Removal Using grade 36 or 60 abrasive belt, grind spot weld to remove weld from top panel. Note top panel thickness. Use caution when grinding to only grind top panel and limit cutting into host/interior panel. Use belt thickness as a gauge — stop grinding when back of belt is flush with exterior panel. Grade 80 belt can be used to remove welds from thinner steels. |
| 5 |  | Panel Separation Separate exterior panel from the host panel. DO NOT force separation in areas where the weld isn't completely removed; go back to step 4 and finish weld removal before continuing. |
| 6 _A |  | Surface Preparation Using a grade 80 abrasive belt, remove remaining weld nugget material from host panel. |
| 6 _B |  | Surface Preparation Clean and prep remaining mating flanges on host and replacement panel with a coarse Scotch-Brite™ Belt where necessary. |
| 7 _A |  | MIG Plug Weld Dressing Use a grade 80 abrasive belt to dress replacement MIG welds. Grind weld. Use caution to avoid damage to adjacent areas. |
| 7 _B |  | Continuous Weld Dressing Use a 3 in. grade 60 grinding disc to dress continuous MIG welds at sectioning joint. Grind weld. Use caution to limit amount of grinding done to adjacent areas. |
| 8 |  | Weld Cleaning Use a CRS Scotch-Brite™ Belt to clean weld site in preparation for subsequent operations. |

Visit 3MCollision.com for more SOPs and videos

Product List

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



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



3M™ Green Corps™
Cut-Off Wheel,
3 in. x 1/32 in., PN 01989;
3 in. x 1/16 in., PN 01990



Scotch-Brite™ Roloc™+
Clean N Strip XT Disc,
PN 07470



Scotch-Brite™ Roloc™+
Clean N Strip TR Disc,
PN 07466



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



Scotch-Brite™ Durable
Flex Belt, CRS, PN 64475



3M™ Cubitron™ II File Belt,
grade 36+, PN 33443;
grade 60+, PN 33445;
grade 80+, PN 33446



3M™ Pistol Grip Disc
Sander, PN 33577



3M™ Cubitron™ II Fibre
Roloc™ Disc, grade
60+, 3 in., PN 33391



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



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

Note: Follow High Strength steel heat control recommendations and techniques when necessary.

Back Side Reinforcement (SMC, FRP, Composites)

1



Clean the Damaged Area

Clean the repair area with soap and water followed by a VOC compliant surface cleaner making sure to minimize the exposure of damaged or exposed fibers to the cleaners. Thoroughly dry the part. Do not apply any other cleaners throughout the remainder of the repair procedure.

2



Surface Preparation

Grind the backside of the repair with a grade 60 3M™ Roloc™ Abrasive Disc on a pistol grip grinder set at a low speed. When finished the sanded area should be at least 2 in. larger than the repair area. Remove sanding debris from the surface using clean compressed air and a clean, dry rag.

3



Adhesion Promoter

No adhesion promoter is needed for SMC or FRP repairs. If repairing Metton® Liquid Molding Resin, apply a light, consistent coat of 3M™ Polyolefin Adhesion Promoter to the repair area. Allow to dry for at least 5 minutes.

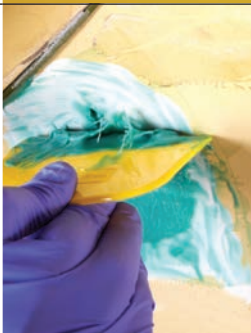
4



Alignment

Align the front side of the repair and cover the damaged area with Scotch® Auto Body Repair Tape to keep the adhesive from the back side from flowing through to the front side.

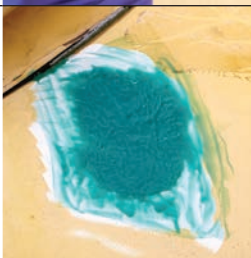
5



Prepare and Apply Reinforcement Material

Cut a piece of fiberglass matting 1-1/2 in. larger than the damaged area. Following product instructions, apply a "tight coat" of matting adhesive to the repair area to ensure good contact with the composite. Place the fiberglass mat on a clean, dry work surface. Saturate the entire section of mat with matting adhesive on both sides and apply it over the "tight coat" on the repair. Apply more 3M™ Fiberglass Mat Adhesive if necessary.

6



Dry

Allow the matting adhesive to cure for 45 minutes at 75°F.

Visit 3MCollision.com for more SOPs and videos

Product List

3M™ Car Wash Soap Concentrate, 5 gallons, PN 38378



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



3M™ Cubitron™ II Fibre Roloc™ Disc, grade 60+, 3 in. (75mm), PN 33391



3M™ Pistol Grip Disc Sander, PN 33577



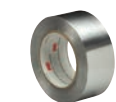
3M™ Polyolefin Adhesion Promoter, PN 05907



Scotch® Auto Body Repair Tape, 2 in. x 125 in., PN 95331



3M™ Aluminum Foil Tape 425, Silver, 2 in. x 60 yd., 4.6 mil, PN 95072



Scotch® Performance Green Masking Tape 233+, 48mm width (1.9 in.), PN 26340



Dynatron™ Fiberglass Mat, 8 sq. ft., PN 00688



3M™ Fiberglass Mat Adhesive, 400mL, PN 08277



3M™ Performance Pneumatic Applicator for 400mL cartridges, PN 08280



Marson® Yellow Spreaders, PN 20395



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.

Cosmetic Repair (SMC, FRP, Composites)

1



Clean the Damaged Area

Clean the repair area with soap and water followed by a VOC compliant surface cleaner making sure to minimize the exposure of damaged or exposed fibers to the cleaners. Thoroughly dry the part. **DO NOT** apply any other cleaners throughout the remainder of the repair procedure.

2



Rough Grind

Dish out the repair area with a grade 60 3M™ Roloc™ Abrasive Disc on a pistol grip sander set at a lower speed. Finish dishing out the repair area using a P80 abrasive disc on a DA.

3



Feather-edge

Finish the dish-out process using a P180 abrasive disc and feather well into the surrounding area. Blow off the repair area with clean, dry air and a clean cloth.

4



Adhesion Promoter

SMC and fiberglass do not require an adhesion promoter. If repairing Metton® Liquid Molding Resin, apply a light, consistent coat of 3M™ Polyolefin Adhesion Promoter, to the repair area. Allow adhesion promoter to dry for 5 minutes before applying the adhesive/filler.

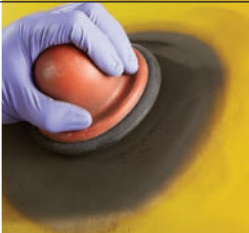
5



Apply

Following product instructions, apply a tight coat of adhesive/filler to the repair area to insure good contact with the composite. Continue to build until the repair area is slightly higher than the surrounding area. For best results heat set at 150°F for 15 minutes.

6



Rough Sand and Shape Filler

Rough shape the filler once it has cooled using a DA or a hand block with a P80 abrasive. Apply 3M™ Dry Guide Coat between sanding steps to highlight imperfections.

7



Final Sand and Inspect

Final DA or block sand the filler with P180 abrasive and feather into the surrounding composite and paint. Apply 3M™ Dry Guide Coat between sanding steps to highlight imperfections. Finish sanding with a P220 abrasive sanding well into the surrounding surface. **Note: Contact your paint manufacturer for final sand preparation.**

Visit 3MCollision.com for more SOPs and videos

Product List

3M™ Car Wash Soap Concentrate, 5 gallons, PN 38378



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



3M™ Cubitron™ II Fibre Roloc™ Disc, grade 60+, 3 in. (75mm), PN 33391



3M™ Cubitron™ II Clean Sanding Hookit™ Disc, 6 in., 180+ grade, PN 31374; 220+ grade, PN 31481



3M™ Polyolefin Adhesion Promoter, PN 05907



3M™ Rigid Parts Repair, 400mL, PN 08275



Marson® Yellow Spreaders, PN 20395



3M™ Dry Guide Coat, PN 05861



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.

Weld Bonding (Excluding Door Skin)

| | | |
|----|---|--|
| 1 |  | Host Panel Preparation 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. |
| 2 |  | Mating Flange Panel Preparation Remove E-coat from replacement panel mating flange areas using Scotch-Brite™ Belt or Clean N Strip disc. |
| 3 |  | Clean Clean host panel and replacement panel mating flange areas with a VOC compliant surface cleaner. |
| 4 |  | Dry Fit Panel Dry fit replacement panel and complete any necessary metal straightening at flanges areas. |
| 5 |  | Weld-Thru Primer Use Scotch-Brite™ Belt to prepare metal surfaces. Clean and apply weld-thru primer to all areas requiring MIG welding. |
| 6 |  | Spot Weld Surface Preparation 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. |
| 7 |  | Pre-Assembly NVH Replacement If vehicle construction necessitates, apply NVH material or foams at original locations as required. |
| 8 |  | Apply Bonding Adhesive 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. |
| 9 |  | Install Replacement Panel Install replacement panel to host panel. Clamp in place. |
| 10 |  | Spot Weld Spot weld while adhesive is uncured at prepared weld sites. Follow welder settings determined from test panel. |
| 11 |  | Adhesive Clean Up Remove clamps and tool excess adhesive squeeze-out from repair area prior to curing to seal the repair. Note: Grinding to remove excess adhesive can expose bare metal, causing corrosion. |
| 12 |  | Post-Assembly Foam Replacement Apply foams at original locations as required. |

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Note: Follow recommended internal corrosion protection processes prior to vehicle final assembly.

⚠ 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;
13 in., PN 33573



3M™ Cubitron™ II File Belt,
grade 80+, PN 33446



Scotch-Brite™ Durable
Flex Belt, CRS, PN 64475



Scotch-Brite™ Roloc™+
Clean N Strip XT Disc,
PN 07470



Scotch-Brite™ Roloc™+
Clean N Strip TR Disc,
PN 07466



3M™ Weld-Thru Coating II,
PN 05917



3M™ NVH Dampening
Material, PN 04274



3M™ Flexible Foam,
200mL, PN 08463



3M™ Panel Bonding Adhesive,
200mL, PN 08115;
200mL, PN 08116;
450mL DMS, PN 58115;
50mL, PN 38315



3M™ SMC/FRP Panel
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™ Lexa™ 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.

Weld Sealing

| | | |
|----|---|--|
| 1 |  | Host Panel Preparation 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. |
| 2 |  | Mating Flange Panel Preparation Remove E-coat from replacement panel mating flange areas using Scotch-Brite™ Belt or Clean N Strip disc. |
| 3 |  | Clean Clean host panel and replacement panel mating flange areas with a VOC compliant surface cleaner. |
| 4 |  | Dry Fit Panel Dry fit replacement panel and complete any necessary metal straightening at flanges areas. |
| 5 |  | Weld-Thru Primer Use Scotch-Brite™ Belt to prepare metal surfaces. Clean and apply weld-thru primer to all areas requiring MIG welding. |
| 6 |  | Spot Weld Surface Preparation 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. |
| 7 |  | Pre-Assembly NVH Replacement If vehicle construction necessitates, apply NVH material or foams at original locations as required. |
| 8 |  | Apply Seam Sealer Apply urethane or MSP seam sealer to mating flange areas on host panel and replacement panel covering all bare metal areas. Apply additional bead of sealer at mating flange areas. |
| 9 |  | Install Replacement Panel Install replacement panel to host panel. Clamp in place. |
| 10 |  | Spot Weld Spot weld while sealer is uncured at prepared weld sites. Follow welder settings determined from test panel. |
| 11 |  | Sealer Clean Up Remove clamps and tool excess adhesive squeeze-out from repair area prior to curing to seal the repair. Note: Grinding to remove excess sealer can expose bare metal, causing corrosion. |
| 12 |  | Post-Assembly Foam Replacement Apply foams at original locations as required. |

Visit 3MCollision.com for more SOPs and videos

⚠ 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;
13 in., PN 33573



3M™ Cubitron™ II File Belt,
grade 80+, PN 33446



Scotch-Brite™ Durable
Flex Belt, CRS, PN 64475



Scotch-Brite™ Roloc™+
Clean N Strip XT Disc,
PN 07470



Scotch-Brite™ Roloc™+
Clean N Strip TR Disc,
PN 07466



3M™ Weld-Thru Coating II,
PN 05917



3M™ NVH Dampening
Material, PN 04274



3M™ Flexible Foam,
200mL, PN 08463



3M™ Urethane Seam
Sealer, PN 08361;
PN 08362



3M™ MSP Seam Sealer,
PN 08370



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





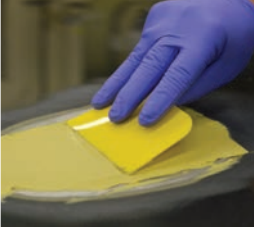




3M™ Lexa™ Protective
Eyewear, PN 15200



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

Note: Follow recommended internal corrosion protection processes prior to vehicle final assembly.

Small Damage Repair

| | | |
|---|---|--|
| 1 |  | Pre-Cleaning Pre-wash/clean vehicle prior to disassembly (power wash undercarriage area at repair). |
| 2 |  | Initial Prep Sand DA sand the repair area using grade 80, removing paint beyond damage by 2–4 in. Blow off with clean, dry air and re-clean with surface cleaner. |
| 3 |  | Mix and Apply Filler Mix and apply filler per manufacturer's recommendation or use the 3M™ Dynamic Mixing System. Keep the body filler within the primer featheredge area. Cure the body filler 15–20 minutes at 75°F. |
| 4 |  | Sand Filler Using a hand block, shape sand the body filler with P80 abrasive. Apply dry guide coat and finish block sanding with P150 abrasive. DA featheredge the repair area with P180 abrasive disc. Inspect the repair for quality; if glaze is not required, continue to step seven. |
| 5 |  | Mix and Apply Glaze Blow off the repair area, completely removing sanding dust from the surface. Mix and apply glaze, if required, per manufacturer's recommendation or if using the 3M™ Dynamic Mixing System. Keep the glaze within the primer featheredge area. Cure glaze for 15–20 minutes at 75°F. |
| 6 |  | Sand Glaze Sand polyester glaze with P180. Use 3M™ Dry Guide Coat between sanding steps to highlight imperfections. |
| 7 |  | Final Sand and Inspect Blow off repair area. Featheredge the surrounding area using P180 abrasive. Inspect the repair for quality. |

Visit 3MCollision.com for more SOPs and videos

Product List

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



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

3M™ Cubitron™ II Clean Sanding Hookit™ Abrasive Disc, 3 in., 80+ grade, PN 31361; 6 in., 80+ grade, PN 31371



3M™ Platinum™ Plus Body Filler, 1 gallon, PN 01131; for DMS, PN 05863



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



3M™ Platinum™ Plus Finishing Glaze, 30 oz., PN 31180



3M™ Platinum™ Glaze for DMS, PN 05862



3M™ Cubitron™ II Hookit™ Clean Sanding Sheet Roll, 70mm x 12m, 80+ grade, PN 34442; 150+ grade, PN 34445; 180+ grade, PN 34446



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



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



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

Large Damage Repair

| | | |
|---|---|--|
| 1 |  | Pre-Cleaning Pre-wash/clean vehicle prior to disassembly (power wash undercarriage area at repair). |
| 2 |  | Initial Prep Sand DA sand the repair area using grade 80, removing paint beyond damage by 2–4 in. Blow off with clean, dry air and re-clean with surface cleaner. |
| 3 |  | Final Metal Prep Remove remaining paint/coatings in “low spots” using a Scotch-Brite™ Clean N Strip disc. Use a 3 in. grinding disc to remove weld nuggets or other surface imperfections. Blow off with clean, dry air and re-clean with surface cleaner. |
| 4 |  | Mix and Apply Filler Mix and apply filler per manufacturer’s recommendation or use the 3M™ Dynamic Mixing System. Keep the body filler within the primer featheredge area. Cure the body filler 15–20 minutes at 75°F. |
| 5 |  | Initial Sand Filler Block shape sand filler with P80. DA rough featheredge area with P80 abrasive. Use 3M™ Dry Guide Coat between sanding steps to highlight imperfections. Reapply 3M™ Dry Guide Coat as necessary. |
| 6 |  | Final Sand Filler Final block sand filler with P150 abrasive. DA fine featheredge sand the repair area with P180 abrasive and blow off the area with clean, dry air. Use 3M™ Dry Guide Coat between sanding steps to highlight imperfections. |
| 7 |  | Mix and Apply Glaze Blow off the repair area, completely removing sanding dust from the surface. Mix and apply glaze, if required, per manufacturer’s recommendation or if using the 3M™ Dynamic Mixing System. Keep the glaze within the primer featheredge area. Cure glaze for 15–20 minutes at 75°F. |
| 8 |  | Sand Glaze Block sand polyester glaze with P180 abrasive. Use 3M™ Dry Guide Coat to highlight imperfections. Reapply glaze as necessary to fill minor imperfections. |
| 9 |  | Final Sand and Inspect Blow off repair area. Featheredge the surrounding area using P180 abrasive. Inspect the repair for quality. |

Visit 3MCollision.com for more SOPs and videos

Product List

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

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

3M™ Cubitron™ II Clean Sanding Hookit™ Abrasive Disc, 3 in., 80+ grade, PN 31361; 6 in., 80+ grade, PN 31371

3M™ Platinum™ Plus Body Filler, 1 gallon, PN 01131; for DMS, PN 05863

3M™ Cubitron™ II Fibre Roloc™ Disc, 3 in., 80+ grade, PN 33392

3M™ Roloc™+ Holder, PN 07500

Scotch-Brite™ Roloc™+ Clean N Strip XT Disc, PN 07470

Scotch-Brite™ Roloc™+ Clean N Strip TR Disc, PN 07466

3M™ Platinum™ Plus Finishing Glaze, 30 oz., PN 31180

3M™ Platinum™ Glaze for DMS, 05862

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

3M™ Cubitron™ II Hookit™ Clean Sanding Sheet Roll, 70mm x 12m, 80+ grade, PN 34442; 150+ grade, PN 34445; 180+ grade, PN 34446

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

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

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

Seam Sealer Removal

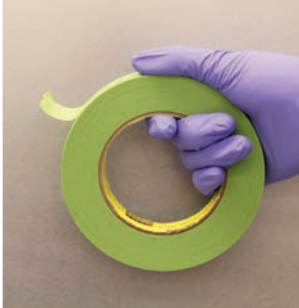
1



Clean

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

2



Protect

Protect surrounding areas with masking tape.

3



Method A

Use a Scotch-Brite™ Clean N Strip Disc to remove seam sealer and coatings where accessible.

4



Method B

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

5



Clean

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

Visit 3MCollision.com for more SOPs and videos

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.

Seam Sealer Installation: Over Primer

1



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.**

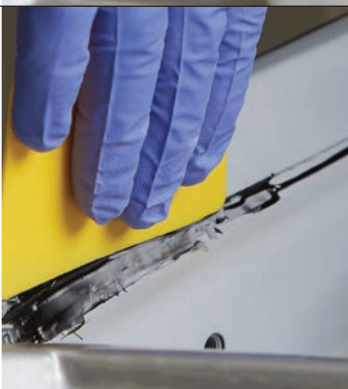
2



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.**

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.

Visit 3MCollision.com for more SOPs and videos

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 DMS, PN 58308



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 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.

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

Seam Sealer Installation: Direct to Metal

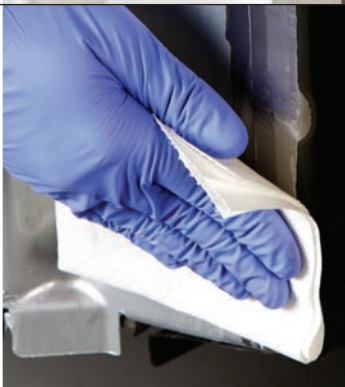
1



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.**

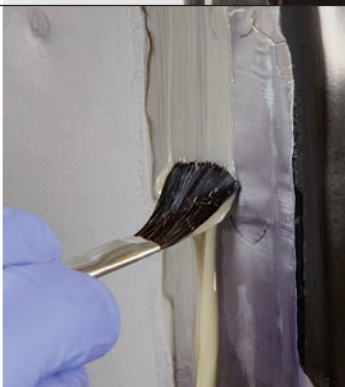
3



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.

Visit 3MCollision.com for more SOPs and videos

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



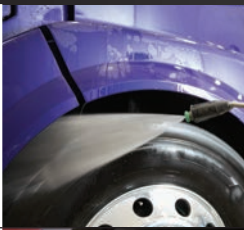
3M™ Virtua™ CCS Protective Eyewear with Foam Gasket, PN 11872



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

Corrosion Protection (Cavity Wax)

1



Pre-Cleaning

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

2



Shake Aerosol

Agitate the aerosol can thoroughly — one minute of shaking is required to mix the components prior to use. Attach the desired accessory extension and actuator if needed to access the areas inside the panel enclosure.

3



Application with Standard Actuator

If applying to new panels prior to installation use the standard actuator. Spray up to three (3) coats to ensure full coverage and maximize protection.

4



Mark Extension Wand

If using the 360° accessory wand, mark the extension about one inch from the end as a reference to reduce overspray.

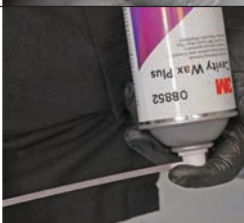
5



Insert Wand Into Panel Opening

Insert the wand to the farthest point. Begin spraying as you remove the wand until the reference mark comes into view. Repeat up to three (3) times to ensure complete coverage and maximize corrosion protection.

6



Clean Accessory Nozzle

After application, invert the can and clear material from the accessory wand and nozzle by depressing the actuator.

7



Remove Excess Cavity Wax

Re-assemble the associated parts and wipe off any excess using a VOC compliant surface cleaner.

Visit 3MCollision.com for more SOPs and videos

Product List

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



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

3M™ Cavity Wax Plus 18 oz. aerosol, PN 08852



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

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

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

Corrosion Protection (Undercoating)

1



Pre-Cleaning

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

2



Surface Preparation

Use Scotch-Brite™ Clean N Strip disc to remove loose coatings from the repair area. Use CRS Scotch-Brite™ belt in hard-to-reach areas.

3



Clean and Inspect

Blow off area with clean dry compressed air to remove dust and loose surface contaminants. Use a VOC compliant surface cleaner to remove any remaining contaminants. **Note: Coatings must be applied over thoroughly cleaned substrates to maximize corrosion protection.**

4



Coating Application

Apply appropriate undercoating following local VOC regulations to the area. For maximum corrosion protection apply four medium coats of undercoating allowing flash time between coats.

Visit 3MCollision.com for more SOPs and videos

Product List

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



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



Scotch-Brite™ Roloc™ + Clean N Strip XT Disc, PN 07470



Scotch-Brite™ Roloc™ + Clean N Strip TR Disc, PN 07466



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



Scotch-Brite™ Durable Flex Belt, CRS, PN 64475



3M™ Waterbased Paintable Undercoating Pouch, 5.5 fl. oz. (US), PN 08744



3M™ Paintable Undercoating Pouch, 5.5 fl. oz., PN 08747



Think About Your Health

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



3M™ Respirator Assembly/ Organic Vapor N95 Dual Cartridge, PN 07192



3M™ Lexa™ 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.

LASD Replacement (On Body)

1



Pre-Cleaning

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

2



LASD Removal

Remove sound deadening material from affected repair area using a scraper or chisel.

3



Surface Prep

Scuff surface with a maroon Scotch-Brite™ Hand Pad. Blow off area with compressed air and clean with APCD.

4



Application

Mask area and apply seam sealer. Re-create desired appearance and texture of NVH material using tools of the trade (e.g., notched spreaders, brushes, scuff pads, compressed air, etc.). Remove perimeter masking following the tooling process and prior to final cure.

Visit 3MCollision.com for more SOPs and videos

Product List

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



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



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™ Heavy-Bodied Seam
Sealer, 200mL, PN 08308;
600mL DMS, PN 58308



3M™ Urethane Seam
Sealer, PN 08361



3M™ MSP Seam
Sealer, PN 08370



3M™ NVH Dampening
Material, PN 04274



Think About Your Health

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



3M™ Respirator Assembly/
Organic Vapor N95
Dual Cartridge, PN 07192



3M™ Lexa™ 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.

Cosmetic Flexible Bumper Repair Scrapes, Gouges and Deformations

1



Clean the Damaged Area

Clean the repair area with soap and water, followed by a VOC compliant surface cleaner.

2



Initial Prep Sand

"Dish Out" the damaged area using a P80 abrasive disc on a DA sander. Keep the P80 abrasive scratches within the "Dish Out" area. Use a DA sander with P180 abrasive to "feather" the repair area 2–3 in. from the "Dish Out" area.

3



Apply Adhesion Promoter

Blow off the repair area with clean, dry air. Apply aerosol adhesion promoter, allowing to dry 5–10 minutes. Always apply adhesion promoter before any filler material.

4



Mix and Apply Flexible Filler

Mix and apply flexible filler with a "tight coat," followed by additional coats to fill in all low areas. Allow to cure for 15 minutes at 75°F.

5



Sand Flexible Filler

Hand block or DA sand flexible repair material with a P150 disc or sheet, followed by a P180 disc or sheet.

6



Final Sand and Inspect

Finish sand the repair and the surrounding area using a P320 abrasive disc. Blow off and inspect the repair for quality. Repeat steps 3, 4 and 5 as necessary.

Visit 3MCollision.com for more SOPs and videos

Product List

3M™ Cubitron™ II Clean Sanding Hookit™ Abrasive Disc, 3 in., 320+, PN 31463
6 in., 320+, PN 31483



3M™ Cubitron™ II Clean Sanding Hookit™ 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



3M™ Cubitron™ II Hookit™ Clean Sanding Sheet Roll, 70mm x 12m, 150+ grade, PN 34445;
180+ grade, PN 34446



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



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



3M™ Performance Manual Applicator, 200mL, PN 08117



Think About Your Health

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



3M™ Half Facepiece Respirator, PN 07182







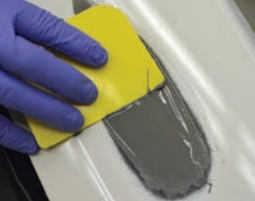


3M™ Lexa™ Protective Eyewear, PN 15200



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.

Flexible Patch Non-Structural Bumper Repair

| | | |
|---|---|--|
| 1 |  | Clean the Damaged Area Clean the front and back of the repair area with soap and water, followed by a VOC compliant surface cleaner. Be sure to remove any overspray from the back side of the repair area. A Scotch-Brite™ Scuffing Pad may be used to assist with stubborn overspray. |
| 2 |  | Initial Grinding Grind the front of the repair using a 3 in. grade 60 disc. Grind at a low speed creating a "Dish Out" area 3 in. wide that tapers to the bottom of the damage. |
| 3 |  | Initial Prep Sand Sand the "Dish Out" area using a P80 abrasive disc on a DA sander, removing any melted plastic. Keep the P80 abrasive scratches within the "Dish Out" area. Using P180 abrasive, feather edge 2-4 in. from the "Dish Out" area. |
| 4 |  | Apply Reinforcement Patch On the back side of the repair area apply the flexible patch adhesion promoter. Firmly apply the flexible reinforcement patch overlapping the damaged area by 1-1/2 in. on all sides of the repair. |
| 5 |  | Mix and Apply Flexible Filler Apply 3M™ Polyolefin Adhesion Promoter (PN 05907) to the front side of the repair and allow to dry for 5 minutes. Mix and apply flexible filler with a "tight coat" followed by additional coats to fill in all low areas. Allow 15 minutes to cure at 75°F. |
| 6 |  | Sand Flexible Filler DA sand the flexible filler material with a P150 abrasive disc. Block sand the repair area with a P180 abrasive sheet. |
| 7 |  | Final Sand and Inspect Using a DA sander, finish sand the repair and the surrounding area using a P320 abrasive disc. Blow off and inspect the repair for quality. Repeat steps 5 and 6 as necessary. |

Visit 3MCollision.com for more SOPs and videos

Product List

3M™ Cubitron™ II Clean Sanding Hookit™ Abrasive Disc, 3 in., 320+, PN 31463
6 in., 320+, PN 31483



3M™ Cubitron™ II Clean Sanding Hookit™ 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



3M™ Cubitron™ II Hookit™ Clean Sanding Sheet Roll, 70mm x 12m, 180+ grade, PN 34446



3M™ Cubitron™ II Fibre Roloc™ Disc, grade 60+, PN 33391



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



3M™ EZ Fix Flexible Patch Kit (with adhesion promoter wipes), 4 in. x 8 in., PN 05888



3M™ Automotive Adhesion Promoter, Sponge Applicator Packets, 2.5mL per packet, PN 06396



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



3M™ Performance Manual Applicator, 200mL, PN 08117



Think About Your Health

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





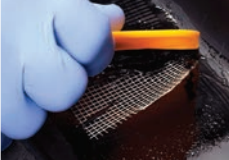




3M™ Half Facepiece Respirator, PN 07182

3M™ Lexa™ Protective Eyewear, PN 15200

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.

Two-Sided Bumper Repair Cracks, Holes & Punctures

| | | |
|---|---|--|
| 1 |  | Clean the Damaged Area Clean the front and back of the repair area with soap and water, followed by a VOC compliant surface cleaner. |
| 2 |  | 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. |
| 3 |  | 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. |
| 4 |  | 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. |
| 5 |  | 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. |
| 6 |  | 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. |
| 7 |  | 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. |
| 8 |  | 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. |

Visit 3MCollision.com for more SOPs and videos

Product List

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

3M™ Plastic Repair Material Semi-Rigid, 200mL cartridge, PN 04240

3M™ Reinforcement Patch, 5 in. x 12 ft., roll, PN 04904

3M™ Pistol Grip Disc Sander, PN 33577

3M™ Cubitron™ II Fibre Roloc™ Disc, grade 60+, PN 33391

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

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

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

3M™ Performance Manual Applicator, 200mL, PN 08117

3M™ Dynamic Mixing Applicator — Pneumatic, PN 05846

3M™ Cubitron™ II Clean Sanding Hookit™ Abrasive Disc, 3 in., 320+, PN 31463 6 in., 320+, PN 31483

3M™ Cubitron™ II Clean Sanding Hookit™ 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™ E-A-R™ Skull Screws™ Ear Plug, PN P1300

3M™ Half Facepiece Respirator, PN 07182

3M™ Lexa™ 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.

General Masking

1



Clean Area

Clean the area with water based cleaner. Wipe area with a VOC compliant solvent prep cleaner. Dry the area. The preferable surface temperature for masking is 60–80°F.

2



Critical Edge Masking

Mask the areas that require fineline tape first. Mask the rest of the repair and back up the fineline with creped tape. Protect any nearby moldings with trim masking tape.

3



Overspray Protection

Ensure that the car is completely dry prior to applying plastic sheeting. Mask entire vehicle with plastic sheeting. Cut out the repair area with a razor blade. Tape the plastic sheeting directly to critical masking edge.

4



Masking Removal

After painting, remove the masking tape at a 90-degree angle to the vehicle's surface.

Visit 3MCollision.com for more SOPs and videos

Product List

Scotch® Performance Green Masking Tape 233+, 18mm x 55m (3/4 in. applications), PN 26334; 36mm x 55m (1-1/2 in. applications), PN 26338; 48mm x 55m (2 in. applications), PN 26340



3M™ Vinyl Tape 471+, 1/4 in. width (6.4mm), PN 06405



3M™ Perforated Trim Masking Tape, 5mm, PN 06345; 7mm, PN 06347; 10mm, PN 06349; 15mm, PN 06348



3M™ Overspray Protective Sheeting, 12 ft. x 400 ft. roll, PN 06727; 16 ft. x 400 ft. roll, PN 06728; 20 ft. x 250 ft. roll, PN 06742



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



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

Mask Openings

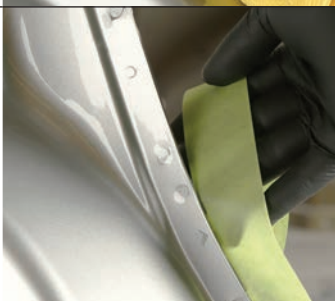
1



Clean

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

2



Back Masking

Back mask outer edge of opening using wide width tape, ensuring that half of tape width is exposed to the opening.

3



Overspray Protection

Cover opening with overspray masking film. Pull tight and adhere film to exposed edge of back masking.

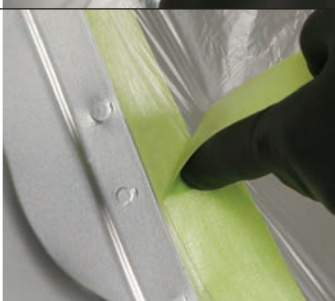
4



Trim Opening

Trim film around inner panel opening.

5



Seal Edge

Seal edge of masking film using wide width masking tape.

Visit 3MCollision.com for more SOPs and videos

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+, 36mm width
(1.41 in.), PN 26338;
48mm width (1.9 in.),
PN 26340



3M™ Overspray Protective Sheet,
12 ft. x 400 ft. roll, PN 06727;
16 ft. x 400 ft. roll, PN 06728;
20 ft. x 250 ft. roll, PN 06742



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



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

Note: All critical edge, jamb masking and general masking should be completed prior to masking openings.

Primer Masking

1



Clean

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

2



Back Masking

Back mask primer application area using tape and paper.

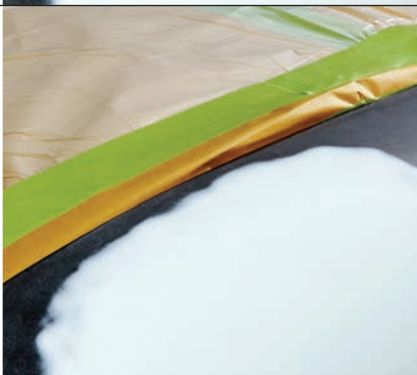
3



Overspray Protection

Apply plastic film to remaining exposed areas, cut out repair area.

4



Seal Edge

Seal edge of masking film using wide width masking tape.

Visit 3MCollision.com for more SOPs and videos

Product List

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



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



3M™ Scotchblok™
Masking Paper,
18 in. x 750 ft.,
PN 06718



3M™ Overspray Protective Sheetting,
12 ft. x 400 ft. roll, PN 06727;
16 ft. x 400 ft. roll, PN 06728;
20 ft. x 250 ft. roll, PN 06742



Scotch® Performance
Green Masking Tape 233+,
18mm width (.71 in.),
PN 26334; 36mm width
(1.41 in.), PN 26338; 48mm
width (1.9 in.), PN 26340



Think About Your Health

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



3M™ Half Facepiece
Respirator, PN 07182



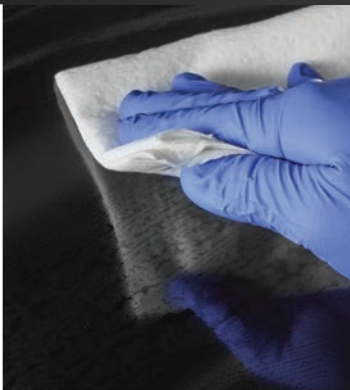
3M™ Lexa™ Protective
Eyewear, PN 15200



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

Prep New Parts

1



Clean

Clean parts to be painted with a VOC compliant wax and grease remover to remove any remaining surface contamination.

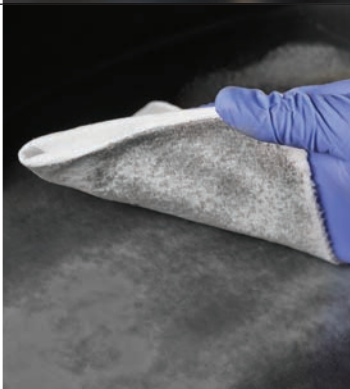
2



Scuff

Use a P320 abrasive on a DA equipped with a soft interface pad or a red Scotch-Brite™ Hand Pad to sand the part.

3



Clean

Blow off the repair area with clean, dry air and a clean cloth. Clean parts to be painted with a VOC compliant wax and grease remover to remove any remaining surface contamination.

4



Apply Top Coats

Seal and paint bumper following paint company recommendations.

Visit 3MCollision.com for more SOPs and videos

Product List

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



3M™ Cubitron™ II Clean Sanding Hookit™ Abrasive Disc, 6 in., 320+, PN 31483



Festool D150 Thin Interface Pad, PN 29939



Scotch-Brite™ General Purpose Hand Pad, PN 07447



3M™ Accuspray™ ONE Spray Gun, PN 16579



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.

Prime Parts (Aluminum, SMC, FRP, Composite)

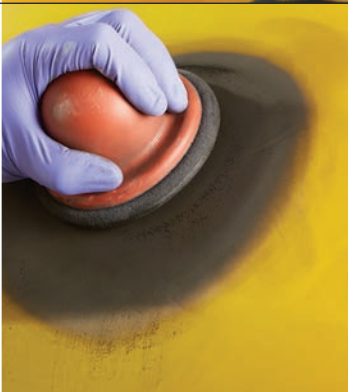
1



Assess and Sand

Assess damaged area for flatness/straightness. Use P220 abrasive, if necessary, on a DA over the entire repaired area to guarantee the surface is ready to prime. Blow off the repair area with clean, dry air and a clean cloth. Then clean with a VOC compliant wax and grease remover to remove any remaining surface contamination.

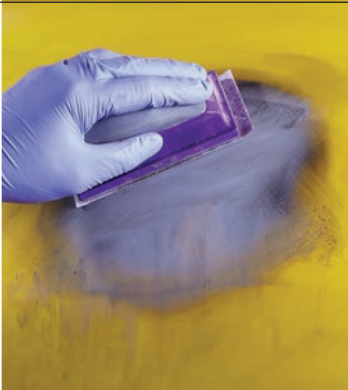
2



Apply Primer and Finish Sand

Apply primer to repair area following manufacturer's recommendations. Apply 3M™ Dry Guide Coat over the entire repaired area. Sand with P220 abrasive to ensure flatness.

3



Block Sand

Double check flatness of the repair by block sanding it with P220 abrasive.

4



Paint

Paint per manufacturer's recommendation.

Visit 3MCollision.com for more SOPs and videos

Product List

3M™ Cubitron™ II Clean Sanding Hookit™ Disc, 6 in., 220+ grade, PN 31481



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



3M™ Dry Guide Coat, PN 05861



3M™ Hookit™ Purple Clean Sanding Sheet Roll, 220 grade, 70mm x 12m, PN 30708



3M™ Hookit™ Sanding Block Dust Free, 70mm x 127mm, PN 05207



3M™ Accuspray™ ONE Spray Gun, PN 16579



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.

Note: Follow paint company recommended procedures for new raw plastic bumpers.

Refinish Bumper Prep

1



Cleaning

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

2_A



Surface Prep Hand

Sand edges and other hard-to-reach areas using P800–P1000 flexible abrasive sheet until the surface is matte and all sheen has been removed.

2_B



Surface Prep Machine

Sand remaining surfaces using P800–P1000 flexible abrasives on an orbital sander until the surface is matte and all sheen has been removed.

3



Re-Clean

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

4



Apply Top Coats

Seal and paint bumper following paint company recommendations.

Visit 3MCollision.com for more SOPs and videos

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,
P800, PN 34340;
P1000, PN 34341



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



3M™ Orbital Sander,
3 in. x 4 in. Non-Vacuum,
10,000 RPM, PN 20331



3M™ Accuspray™
ONE Spray Gun,
PN 16579



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



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

Note: Follow paint company recommended procedures for new raw plastic bumpers.

New Primed Bumper Prep

1



Cleaning

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

2_A



Surface Prep Hand

Sand edges and other hard-to-reach areas using P400 flexible abrasive sheet until the surface is matte and all sheen has been removed.

2_B



Surface Prep Machine

Sand remaining surfaces using P400 flexible abrasives on an orbital sander until the surface is matte and all sheen has been removed.

3



Re-clean

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

4



Apply Top Coats

Seal and paint bumper following paint company recommendations.

Visit 3MCollision.com for more SOPs and videos

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



3M™ Orbital Sander,
3 in. x 4 in. Non-Vacuum,
10,000 RPM, PN 20331



3M™ Accuspray™
ONE Spray Gun,
PN 16579



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



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

E-Coat Panel Prep

1



Cleaning

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

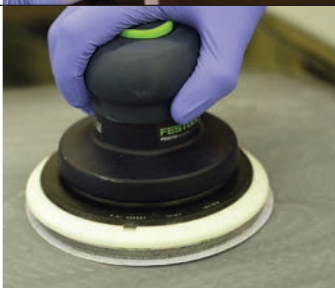
2_A



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.

2_B



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™ Flexible Abrasive Disc to reduce burning through the e-coat surface.**

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.

Visit 3MCollision.com for more SOPs and videos

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



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™ Flexible Abrasive Hookit™ Foam Pad, PN 34349



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



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



3M™ Accuspray™ ONE Spray Gun, PN 16579



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



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

Feather-Prime-Block

| | | |
|---|---|---|
| 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 manufacturer's 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, reapply dry guide coat and continue block sanding to repair any defects as required. |
| 7 |  | Reapply Dry Guide Coat Reapply 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 |  | Clean the Damaged Area Clean the repair area with a VOC compliant surface cleaner. |

Visit 3MCollision.com for more SOPs and videos

Product List

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



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



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



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



3M™ Cubitron™ II Clean Sanding Hookit™ Abrasive Disc, 6 in., 320+, PN 31483



3M™ Accuspray™ ONE Spray Gun, PN 16579



3M™ Cubitron™ II Hookit™ Clean Sanding Sheet Roll, 70mm x 12m, 320+, PN 34449



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



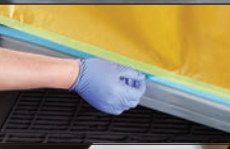










3M™ Lexa™ Protective Eyewear, PN 15200



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

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 manufacturer's 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, reapply dry guide coat and continue block sanding to repair any defects as required. |
| 7 |  | Reapply Dry Guide Coat Reapply 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 |  | Reapply Dry Guide Coat Reapply 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. |

Visit 3MCollision.com for more SOPs and videos

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



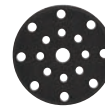
3M™ Accuspray™ ONE Spray Gun, PN 16579



3M™ Cubitron™ II Hookit™ Clean Sanding Sheet Roll, 70mm x 12m, 320+, PN 34449



Festool D150 Thin Interface Pad, PN 29939



3M™ Cubitron™ II Clean Sanding Hookit™ Abrasive Disc, 6 in., 320+, PN 31483



3M™ Purple Clean Sanding Hookit™ Disc 334U, 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



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

Blend Panel Sanding Process

1



Clean the Repair Area

Clean the repair area with soap and water, followed by a VOC compliant surface cleaner.

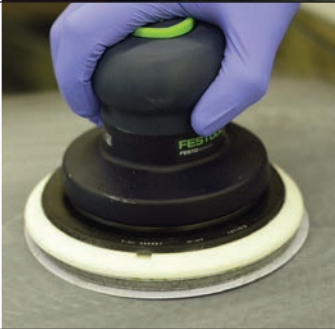
2



Hand Sand Edges

Scuff hard-to-reach areas and panel edges by hand with P800–P1000 abrasive disc or flexible abrasive sheet.

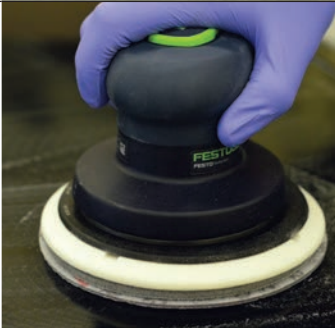
3



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.**

4



DA Sand Adjacent Panels

DA sand the remainder of the blend panel(s) using a P1000 abrasive disc.

5



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.

Visit 3MCollision.com for more SOPs and videos

Product List

3M™ Trizact™
Hookit™ Blending
Disc, 6 in., P1000,
PN 02090



3M™ Flexible Abrasive
Hookit™ Sheet,
5.5 in. x 6.8 in.,
P800, PN 34340



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



3M™ Flexible Abrasive
Hookit™ Disc, 17 hole,
6 in., P800, PN 34802;
6 in., P1000, PN 34803



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



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

3M™ PPS™ Series 2.0 Spray Cup System

An innovative, all-in-one disposable system that enables painters to eliminate expensive liquid coating waste left on mixing cups and filters by mixing directly in the PPS cup. Mix, measure, filter and spray your coating materials.

| | Part No. | Description |
|--|----------|----------------------------------|
| 3M™ Accuspray™ Spray Gun Kits | | |
|  | 16579 | 3M™ Accuspray™ ONE Spray Gun |
| | 16587 | 3M™ Accuspray™ HGP Spray Gun Kit |
| 3M™ Accuspray™ Atomizing Heads for 3M™ PPS™ Series 2.0 | | |
|  | 22612 | 1.2mm, blue |
| | 22613 | 1.3mm, green |
| | 22614 | 1.4mm, orange |
| | 22618 | 1.8mm, clear |
| | 22620 | 2.0mm, red |



3 fluid ounces



Ideal for spot repairs that require 3 fluid ounces of material or less.



3M™ PPS™ Series 2.0 Micro Cup System Kit, PN 26028, 3 fl. oz. (90mL) full diameter 200 micron filters

3M™ PPS™ Series 2.0 Micro Cup System Kit, PN 26328, 3 fl. oz. (90mL) full diameter 125 micron filters

6.8 fluid ounces



Ideal for small areas that require 6.8 fluid ounces of material or less.



3M™ PPS™ Series 2.0 Mini Cup System Kit, PN 26114 6.8 fl. oz. (200mL) full diameter 200 micron filters

3M™ PPS™ Series 2.0 Mini Cup System Kit, PN 26314 6.8 fl. oz. (200mL) full diameter 125 micron filters



13.5 fluid ounces

Ideal for areas that require 13.5 fluid ounces of material or less.



3M™ PPS™ Series 2.0 Midi Cup System Kit,
PN 26112, 13.5 fl. oz. (400mL) full diameter
200 micron filters

3M™ PPS™ Series 2.0 Midi Cup System Kit,
PN 26312, 13.5 fl. oz. (400mL) full diameter
125 micron filters



22 fluid ounces

Ideal for large areas that require 22 fluid ounces of material or less.



3M™ PPS™ Series 2.0 Standard Cup System Kit,
PN 26000, 22 fl. oz. (650mL) full diameter
200 micron filters

3M™ PPS™ Series 2.0 Standard Cup System Kit,
PN 26301, 22 fl. oz. (650mL) full diameter
125 micron filters



28 fluid ounces

Ideal for large jobs that require 28 fluid ounces of material or less.










3M™ PPS™ Series 2.0 Large Cup System Kit,
PN 26024, 28 fl. oz. (850mL) full diameter
200 micron filters

3M™ PPS™ Series 2.0 Large Cup System Kit,
PN 26325, 28 fl. oz. (850mL) full diameter
125 micron filters



Paint Finishing: Small Areas

| | | |
|---|---|---|
| 1 |  | Initial Defect Removal DA sand the repair area with a 4 in. P1500 finishing film disc, removing all paint defects. Wipe panel clean. When using 3M™ Trizact™ Abrasives, use a light mist of water while sanding to avoid clogging of the disc. |
| 2 |  | Scratch Refinement P3000 Refine the P1500 scratches with a DA and a 4 in. P3000 3M™ Trizact™ Foam Disc used damp with a soft interface pad. Wipe panel clean. |
| 3 |  | Scratch Refinement 5000 (Optional) Refine the P3000 scratches with a DA and a 4 in. 5000 3M™ Trizact™ Foam Disc used damp with a soft interface pad. To thoroughly remove previous scratches go over each area five times. The use of P3000 is required prior to 5000 for best results. |
| 4 |  | Buff Compound the repair area with a 4 in. polisher. Use a 4 in. foam compound pad and the appropriate rubbing compound. Wipe panel clean. |
| 5 |  | Polish Polish the repair area with a 4 in. polisher. Use a 4 in. black foam polishing pad and the appropriate machine polish. Wipe panel clean with a yellow microfiber cloth. |
| 6 |  | Swirl Elimination Ultrafine polish the repair area with a 4 in. polisher. Use a 4 in. blue foam polishing pad and ultrafine machine polish. Leave a light film of polish on the surface and wipe the panel clean with a blue microfiber cloth. |
| 7 |  | Final Detail Clean sling from adjacent panels and door jamb areas. Doing this immediately after the repair will greatly improve the ease of this step. |

Visit 3MCollision.com for more SOPs and videos

Product List

3M™ Trizact™ Hookit™ Clear Coat Sanding Disc, 3 in., P1500 grit, PN 02094



3M™ Purple Finishing Film Hookit™ Disc, 3 in., P1500 grit, PN 30367



3M™ Hookit™ Soft Interface Pad, 3 in., PN 05771



3M™ Pistol Grip Disc Sander, PN 33577



3M™ Trizact™ Hookit™ Foam Disc, 3 in., 3000 grit, PN 02087; 5000 grit, PN 30362



3M™ Perfect-It™ EX AC Rubbing Compound, 1 qt., PN 36060



3M™ Perfect-It™ Foam Compounding Pad, Single Sided with Inset, Hookit™ Attachment, 4 in., PN 30041



3M™ Perfect-It™ EX Machine Polish, 1 qt., PN 06094



3M™ Perfect-It™ Foam Polishing Pad, Single Sided with Inset, Hookit™ Attachment, 4 in., PN 30042



3M™ Perfect-It™ Jumbo Detailing Cloth, PN 06018



3M™ Perfect-It™ EX Ultrafine Machine Polish, 1 qt., PN 06068



3M™ Perfect-It™ Ultrafine Foam Polishing Pad, Single Sided with Inset, Hookit™ Attachment, 4 in., PN 30043



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.

Paint Finishing: Large Areas

1



Initial Defect Removal Texture Match

DA sand the repair area with a P1500/P2000 3M™ Purple Finishing Film Hookit™ Disc or P1500 3M™ Trizact™ Clearcoat Sanding Disc used damp. Remove all paint defects and match texture to adjacent OEM panels. Wipe panel clean.

2



Scratch Refinement 3000

Refine the P1500/P2000 scratches with a DA and a 3000 3M™ Trizact™ Hookit™ Foam Disc used damp with a 3M™ Hookit™ Soft Interface Pad. Wipe panel clean.

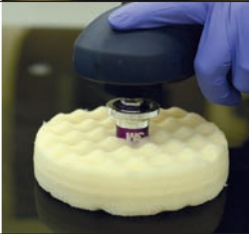
3



Scratch Refinement 5000 (Optional)

To reduce your buffing time refine the 3000 scratches with a DA and a 5000 grit 3M™ Trizact™ Hookit™ Foam Disc used damp with a 3M™ Hookit™ Soft Interface Pad. Wipe panel clean. The use of 3000 is required prior to 5000 for best results.

4



Compound

Compound the repair area with a high speed polisher set between 1200–2000 RPM. For faster results, use a foam compounding pad and the appropriate rubbing compound. To insure all sand scratches have been removed, inspect the surface by spraying with an Inspection Spray and wipe clean with a yellow microfiber cloth.

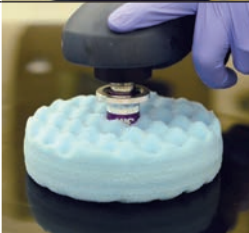
5



Machine Polish

Polish the repair area with a high speed polisher set between 1200–2000 RPM. Use a black foam polishing pad and the appropriate machine polish. Wipe the panel clean with a yellow microfiber cloth.

6



Ultrafine Machine Polish

Polish the repair area with a high speed polisher with the speed set between 1200–2000 RPM. Use a blue foam polishing pad and the appropriate ultrafine machine polish. Leave a light film of the polish on the panel and wipe clean with a blue microfiber cloth.

7



Final Detail

Remove any masking material from the repair area and clean any residual sling from adjacent panels and door jamb areas. Cleaning the panel immediately after compounding and polishing will greatly improve the ease of cleaning. Inspect the surface using the 3M™ PPS™ SUN GUN™ II Light Kit.

Visit 3MCollision.com for more SOPs and videos

Product List

3M™ Purple Finishing Film Hookit™ Disc, 6 in., P1500, PN 30667; P2000, PN 30666

3M™ Trizact™ Hookit™ Clearcoat Sanding Disc, 6 in., P1500, PN 02088

Festool D150 Thin Interface Pad, PN 29939

3M™ Trizact™ Hookit™ Foam Disc, 6 in., 3000, PN 02085; 6 in., 5000 grit, PN 30662

3M™ Perfect-It™ EX AC Rubbing Compound, 1 qt., PN 36060

3M™ Perfect-It™ Foam Compounding Pad, Double Sided, Quick Connect, 9 in., PN 05706

3M™ Perfect-It™ Low Linting 100% Wool Compound Pad, Double Sided, Quick Connect, PN 33279

3M™ Quick Connect Adaptor, 14mm. Thread, PN 33271

3M™ Perfect-It™ EX Machine Polish, 1 qt., PN 06094

3M™ Perfect-It™ Foam Polishing Pad, Double Sided, Quick Connect, 9 in., PN 05707

3M™ Inspection Spray, 1 gallon, PN 06082

3M™ Perfect-It™ EX Ultrafine Machine Polish, 1 qt., PN 06068

3M™ Perfect-It™ Ultrafine Foam Polishing Pad, Double Sided, Quick Connect, 9 in., PN 05708

3M™ Perfect-It™ Detail Cloth, PN 06016; PN 06020

3M™ PPS™ SUN GUN™ II Light Kit, PN 16550

3M™ Perfect-It™ Clean and Shine, 16 fl. oz. bottle, PN 06084

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.

Headlight Restoration

1



Clean and Mask

Clean the damaged lens with soap and water. Perimeter mask the lens with two layers of masking tape.

2



Sand to Remove Yellowing and Defects

Dry DA sand the damaged headlight lens with a 4 in. P500 abrasive disc using a soft interface pad. Completely remove any yellowing and/or surface defects.

3



1st Step Scratch Refinement

Refine the P500 sand scratches by dry DA sanding with a 4 in. P800 abrasive disc on a soft interface pad. Wipe the headlight lens clean.

4



2nd Step Scratch Refinement

Refine the P800 sand scratches by DA sanding with a 4 in. P1000 foam disc on a soft interface pad. Use water to lubricate the P1000 foam abrasive disc. Spend extra time on this step to ensure removal of all P800 sand scratches. Wipe the headlight lens clean.

5



3rd Step Scratch Refinement

Refine the P1000 sand scratches by DA sanding with a 4 in. P3000 foam abrasive disc on a soft interface pad. Use water to lubricate the P3000 foam abrasive disc. Spend extra time on this step to ensure removal of all P1000 sand scratches. Wipe the headlight lens clean.

6



Compound Lens

Completely remove the P3000 sand scratches using a 4 in. polishing tool with a foam compounding pad and rubbing compound. Wipe the headlight lens with a clean microfiber cloth.

7



Polish Lens

Polish the headlight lens using a 4 in. foam polishing pad and machine polish. Wipe the headlight lens with a clean microfiber cloth. Remove the masking tape and inspect for quality.

Visit 3MCollision.com for more SOPs and videos

Product List

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



Scotch® Performance Masking Tape 233+, 18mm x 55m, PN 26334



3M™ Hookit™ Soft Interface Pad, 3 in., PN 05771



3M™ Purple Clean Sanding Hookit™ Disc, 3 in., P500, PN 30272; 3 in., P800, PN 30260



3M™ Trizact™ Hookit™ Blending Disc, 3 in., P1000, PN 02091



3M™ Trizact™ Hookit™ Foam Disc, 3 in., 3000, PN 02087



3M™ Perfect-It™ EX AC Rubbing Compound, 8 oz., PN 36058



3M™ Perfect-It™ Foam Buffing Pad, 4 in., PN 30041



3M™ Perfect-It™ EX Machine Polish, 8 oz., PN 06093



3M™ Perfect-It™ Foam Polishing Pad, 4 in., PN 30042



3M™ Perfect-It™ Detail Cloth, PN 06016



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



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Clean-Up Process

1



Inspect

Remove any trash and blow out the air vents. Vacuum the interior of the truck. Inspect the carpet and upholstery for any heavily soiled stains that may require a pre-spot treatment.

2



Clean Interior and Glass

Clean interior vinyl and leather using 3M™ All Purpose Cleaner and Degreaser at a 1:30 dilution ratio. Clean the interior and the exterior of the windows with glass cleaner. Use an extractor on carpet or fabric as needed.

3



Rinse Truck Exterior

Scrub, pressure wash, and rinse any areas where pre-cleaner was applied. Rinse the entire vehicle to remove loose dirt and debris.

4



Wash Truck Exterior

Pre-soak any remaining bugs, soiled areas or compound residue using 3M™ All Purpose Cleaner and Degreaser at a 1:15 ratio. Wash the entire vehicle, then rinse. Dry, using a water blade or chamois as needed.

5



Apply Tire Dressing

Dress the tires with a silicone-free tire dressing, being sure to remove the excess with an absorbent cloth.

6



Final Detail

Apply a body shop safe spray detailer to the vehicle's exterior surfaces by misting on and wiping off. Spray detailer will remove any compound residue, dust or fingerprints and will also improve gloss.

Visit 3MCollision.com for more SOPs and videos

Product List

3M™ Detailing
Diluter, PN 37721



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



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

3M™ Glass Cleaner
Concentrate, 1 gallon,
PN 38399



3M™ Detailing Spray
Bottle, PN 37716



3M™ Spray Trigger
Nozzle Head, PN 37717
or PN 37718



3M™ Silicone Free
Tire Dressing, 1 gallon,
PN 38327



3M™ Perfect-It™ III Truck
Detailing Cloth, PN 06020



3M™ Perfect-It™
Clean and Shine,
16 oz., PN 06084

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.

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/HDTruck**

For product material safety data sheets see **3MCollision.com/HDTruck**

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