



Jeep



PLASTIC REPAIR GUIDE

SAFETY

This publication's purpose is to provide technical training information to individuals in the automotive trade. All test and repair procedures must be performed in accordance with the manufacturers' service and diagnostic manuals. All warnings, cautions and notes must be observed for safety reasons. The following is a list of general guidelines.

- The information in this publication has been developed for service personnel, and can help determine the proper method(s) for repairing paint system repair failures.
- Always wear safety glasses when working on vehicles or vehicle components.
- Wear appropriate shoes and clothing.
- Avoid wearing jewelry, rings, watches and clothing with metal fasteners.
- Long hair can be caught in rotating machinery. Tie back long hair, or wear a cap that covers and contains the hair.
- Avoid wearing belts with metal buckles.
- Review Material Safety Data Sheets (MSDS) when there is any question concerning the use, handling or disposal of a product.
- Wear breathing masks when recommended or if specified by state or local requirements.
- Improper service methods may damage the vehicle.

This safety information covers only the situations and procedures DaimlerChrysler Motors Corporation has encountered and recommended. DaimlerChrysler Motors Corporation cannot know, evaluate and advise the service trade of all conceivable ways in which service may be performed, or of the possible hazards of each. Consequently, DaimlerChrysler Motors Corporation has not undertaken any such broad service review. Accordingly, anyone who used a service procedure or tool that is not recommended in this publication, must be certain that neither personal safety, nor vehicle safety, is jeopardized by the service methods they select.

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TABLE OF CONTENTS

Exterior Plastic Chart.....4

Interior Plastic Chart.....5

Surface Prep/Helpful Hints.....6

Terminology.....7

Tools.....8

Manufacturers Listing.....Back Page

Paint and Sealer Manufacturer Procedures

**Dodge vehicle plastic ID information
(red pages)**

**Chrysler vehicle plastic ID information
(blue pages)**

**Chrysler/Dodge (cross-platform) vehicle
plastic ID information
(blue/red) pages)**

**Jeep vehicle plastic ID information
(green pages)**

TABLE OF CONTENTS

Exterior Plastic Chart

ITEM	MATERIAL	FAMILY NAME	SURFACE TYPES	RIGID/SEMI-RIGID	FLEXIBLE
1	PA	Polyamid	Mold In Color, Painted	X	
2	ASA	Acrylonitrile Styrene Acrylite	Mold In Color, Painted	X	
3	TPO	Thermopolyolefin	Mold In Color, Painted		X
4	PC	Polycarbonate	Clear	X	
5	PMMA	Acrylic	Clear, Colored	X	
6	PC/ABS	Polycarbonate/ Acrylonitrille Butadiene Styrene	Mold In Color, Painted, Chrome	X	
7	RIM	Reaction Injected Molded Polyurethane	Painted		X
8	PPO	Polyphenylene Oxide	Mold In Color, Painted	X	
9	SMC	Sheet Molded Compound	Painted	X	
10	ABS	Acrylonitrille Butadiene Styrene	Mold In Color, Chrome	X	
11	RTM	Resin Transfer Molding Compound	Painted	X	
12	PPA (A MODEL)	Polyphynelene Amid	Painted	X	
13	PVC	Polyvinyl Chloride	Rubber Mold		X
14	PP	Polypropylene	Painted		X
15	PBT	Polyester	Mold In Color, Painted	X	
16	GTX	Polyphenylene Oxide/ Nylon Blend	Painted	X	

**COLOR
KEY:**

PA	ASA	TPO	PC	PMMA	PC/ABS	RIM	PPO	SMC	ABS	RTM	PPA	PVC	PP	PBT	GTX
															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Interior Plastic Chart

Interior Areas

Instrument Panel Retainers
Instrument Panel Top Covers
Door & Large Hard Trim Panels

Types of Plastics

PC, PC/ABS, PPO and/or filled TPO
PC and/or TPO
ABS, SMC and/or PP

***Note: Airbags Should Never Be Refinished !**

ITEM	MATERIAL	FAMILY NAME	SURFACE TYPES	RIGID/SEMI-RIGID	FLEXIBLE
3	TPO	Thermopolyolefin	Mold In Color, Painted		X
4	PC	Polycarbonate	Clear	X	
6	PC/ABS	Polycarbonate/ Acrylonitrille Butadiene Styrene	Mold In Color, Painted, Chrome	X	
8	PPO	Polyphenylene Oxide	Mold In Color, Painted	X	
9	SMC	Sheet Molded Compound	Painted	X	
10	ABS	Acrylonitrille Butadiene Styrene	Mold In Color, Chrome	X	
14	PP	Polypropylene	Painted		X

**COLOR
KEY:**

PA	ASA	TPO	PC	PMMA	PC/ABS	RIM	PPO	SMC	ABS	RTM	PPA	PVC	PP	PBT	GTX
															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Identify Plastic

To determine type of plastic, refer to Exterior or Interior Plastic Chart.

Surface Preparation

The first step in any high quality repair is to wash the vehicle with hot, soapy water to remove water soluble contaminants such as; dirt, tree sap, brake dust, road salt, and bird droppings and wipe dry with clean dry cloth.

The next step after all water contaminants have been removed is solvent cleaning. This step is designed to remove solvent soluble contaminants such as;

grease, oil, road tar, waxes, polishes, and silicone. Apply cleaner on to a clean, lint free cloth and wipe surface.

DO NOT apply cleaner directly on to the substrate or sanded surface. Wipe dry with clean dry cloth. This is the only time a solvent should be introduced into the repair.

Helpful Tips

- Heat gun may be used to remove minor distortions.
- **DO NOT** apply cleaners or solvent directly onto any sanded substrate to prevent solvent penetration.
- Do not dry using an air hose, as this may contaminate the repair area.
- When sanding, do not allow substrate to get hot or melt. Always keep substrate cool. If surface gets too hot or melted, let cool and re-prep surface. Hand sand at a slow speed.
- When featheredging adhesive, use low Rpm's with DA-Sander or hand sand to avoid adhesive roll back.
- If surface appears fuzzy after finish sanding, block with 320 grit.
- Repair adhesive should be slightly higher than the damaged surface to allow for sanding and contouring.
- When adhesive layering, be sure to fully saturate reinforcing material, a saturation roller may be necessary. Do not allow reinforcing material to extend beyond or above the substrate.
- To prevent further tearing, drill pilot hole 1/8 inch at each end of tear.
- Reinforcing material may consist of mesh, tape, similar plastic piece, matting, or other plastic pieces. If damaged area is larger than 3 inches, reinforce with similar plastic.

Terminology

V-groove: For plastic WELDING ONLY. See illustration "A" below.

Dish: See illustration "B" below.

Adhesive Layering: See illustration "C" below.

Fiber Reinforced: Includes plastic that contains fibrous material such as SMC, Fiberglass, and RTM.

Non-Fibrous: Contains no fibers.

One-sided Repair: Minor damage occurring only on the surface, such as, scratches, dings, dents and scuffs.

Two-sided Repair: Damage that penetrates through the substrate, such as, holes, tears and cracks. This requires reinforcing the backside with reinforcing material. See Illustration "D" below.

Set: When adhesive is sandable and easy to featheredge.

Cure: Refer to adhesive manufacturer's recommendations.

Adhesive undercut: Sanding the adhesive below it's original surface.

Illustration A

Use for plastic welding only.

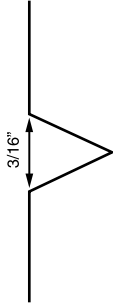


Illustration B

Dish



Illustration C

Adhesive layering

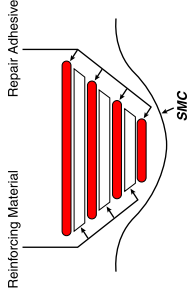
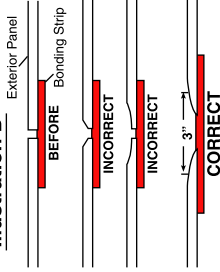
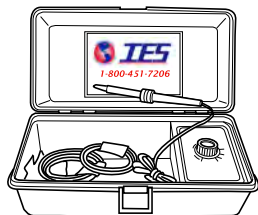
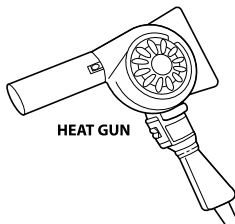


Illustration D

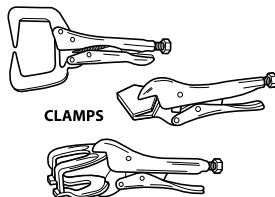




PLASTIC WELDING KIT

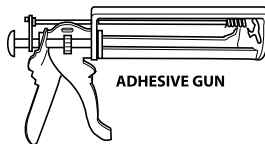
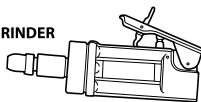


HEAT GUN

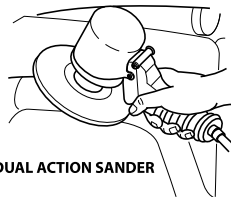


CLAMPS

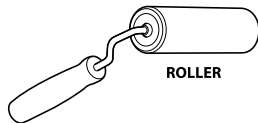
DIE GRINDER



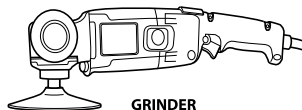
ADHESIVE GUN



DUAL ACTION SANDER



ROLLER

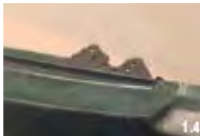


GRINDER

3M Plastic Mounting Tab Repair Procedure



2. Grind and bevel tab



3. Drill mounting holes



7. Apply adhesive



9. Shape mounting tab

1-877-MMM-CARS
www.3m.com/automotive

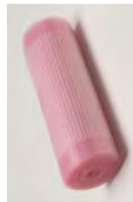


1. Clean first with soap and water, then with 3M General Purpose Adhesive Cleaner (PN 08984, 08986 or 08987)
2. Grind and bevel the tab with a 3M Green Corps™ Roloc™ Disc Grade 50 (PN 01396).
3. Drill 1/8" holes through the tab about 1/2" apart.
4. Use clean, unoled compressed air to remove any dust from the tab surface.
5. Lightly coat tab area with 3M Automix™ Polyolefin Adhesion Promoter (PN 05907), allow 5 minutes to dry.
6. Cut a piece of Duramix™ Plastic Contour Sheet (PN 04903) two and a half times as long as the tab to be repaired.
7. Using the contour sheet to mold it, dispense enough Duramix™ Super Fast Plastic Repair Adhesive (PN 04247) to re-make the tab. Work quickly; this adhesive has a 20 second work time!
8. Allow adhesive to cure for 5 minutes.
9. Carefully peel off contour sheet and grind tab to shape with 3M Green Corps™ Roloc™ Disc Grade 50 (PN 01396).
10. Drill or use a die grinder to create an appropriately shaped mounting hole.

3M Plastic Bumper Cover Repair Procedures

These procedures are for repairing tears, rips and holes in bumper covers. To repair minor cosmetic scratches on the front side only, follow step 1, then go to steps 5-8. For more detailed procedures, contact your 3M representative.

1. Thoroughly clean the bumper to be repaired.
2. Dish out and open up the crack on both sides of the bumper with 3M abrasives.
3. Seal the front of the bumper with 3M tape, and apply 3M adhesion promoter to the back.
4. Apply Duramix 04240 adhesive and 04904 reinforcing material to the back and let cure.
5. Dish out the front side of the bumper with 3M abrasives to insure a good cosmetic appearance.
6. Apply adhesion promoter and Automix 05887 adhesive to the front of the bumper.
7. Sand the adhesive flush with the bumper, using 3M abrasives.
8. Apply adhesion promoter, and paint.



3M Products You'll Need:

- 3M AutomixTM EZ Sand Flexible Parts Repair 05887
- 3M DuramixTM Semi-Rigid Plastic Repair 04240
- 3M DuramixTM Reinforcement Patch 04904
- 3M AutomixTM Polyolefin Adhesion Promoter 05907
- 3M Green CorpsTM RolocTM Disc Grade 50 01396
- 3M ImperialTM HookitTM II Film Discs, grades 80, 180, 320
- ScotchTM Auto Body Repair Tape 06930
- 3M General Purpose Adhesive Cleaner 08984, 08986, 08987.

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Plastic Mounting Tab Repair Procedure

Duramix™ tab repair procedures are identical to 3M tab repair procedures. The part number of the Duramix™ Super Fast Plastic Repair Adhesive is different; 04147 fits the 6 oz. Duramix™ applicators, while 04247 fits the 200 ml Automix™ applicators.

*PN 04747 fits the 50 cc Duramix™ applicator

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1. Clean first with soap and water, then with 3M General Purpose Adhesive Cleaner (PN 08984, 08986 or 08987)
2. Grind and bevel the tab with a 3M Green Corps™ Roloc™ Disc Grade 50 (PN 01396).
3. Drill 1/8" holes through the tab about 1/2" apart.
4. Use clean, unooled compressed air to remove any dust from the tab surface.
5. Lightly coat tab area with 3M Automix™ Polyolefin Adhesion Promoter (PN 05907), allow 5 minutes to dry.
6. Cut a piece of Duramix™ Plastic Contour Sheet (PN 04903) two and a half times as long as the tab to be repaired.
7. Using the contour sheet to mold it, dispense enough Duramix™ Super Fast Plastic Repair Adhesive (PN 04247) to re-make the tab. Work quickly; this adhesive has a 20 second work time!
8. Allow adhesive to cure for 5 minutes.
9. Carefully peel off contour sheet and grind tab to shape with 3M Green Corps™ Roloc™ Disc Grade 50 (PN 01396).
10. Drill or use a die grinder to create an appropriately shaped mounting hole.

Bumper Cover Repair Process

These procedures are for repairing tears, rips and holes in bumper covers. To repair minor cosmetic scratches on the front side only, follow step 1, then go to steps 5-8. For more detailed procedures, contact your 3M representative.

1. Thoroughly clean the bumper to be repaired.
2. Dish out and open up the crack on both sides of the bumper with 3M abrasives.
3. Seal the front of the bumper with 3M tape, and apply 3M adhesion promoter to the back.
4. Apply Duramix 04040 adhesive and 04904 reinforcing material to the back and let cure.
5. Dish out the front side of the bumper with 3M abrasives to insure a good cosmetic appearance.
6. Apply adhesion promoter and Automix 05895 or Duramix 4058 adhesive to the front of the bumper.
7. Sand the adhesive flush with the bumper, using 3M abrasives.
8. Apply adhesion promoter, and paint.



3M and Duramix Products You'll Need:

- 3M AutomixTM EZ Sand Flexible Parts Repair 05895 or DuramixTM EZ Sand Plastic Finishing Paste 04058
- 3M DuramixTM Semi-Rigid Plastic Repair 04240
- 3M DuramixTM Reinforcement Patch 04904
- 3M AutomixTM Polyolefin Adhesion Promoter 05907
- 3M Green CorpsTM RolocTM Disc Grade 50 01396
- 3M ImperialTM HookitTM II Film Discs, grades 80, 180, 320
- ScotchTM Auto Body Repair Tape 06930
- 3M General Purpose Adhesive Cleaner 08984, 08986, 08987.

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DOMINION SURE SEAL

PLASTIC REPAIR GUIDE

PLASTIC REPAIR

FLEXIBLE

TPUR, PUR, RIM
Porous
Open Cell

SEMI RIGID

PP, TPO, EPDM
Non-porous
Greasy, Shiny

CLEAN

BAP/SPP/SPD - PLASTIC CLEANER

1. Using a lint free cloth, clean surfaces to be repaired.
2. Allow cleaner to flash-off completely.
3. If repair is a tear/rip bond with XPSA (plastic weld kit). Mist both sides with XPA-A. Allow 15-20 seconds to flash off. Apply bead of XPA-B on one side and press part firmly together. Mist area with XPA-A.
4. V-Groove front side of repair and sand back side of area to be reinforced using 80 grit sandpaper either by hand or using a dual action sander.
5. Re-clean surface & allow to flash-off completely.

PROMOTE

XPPP/SXPP

1. Spray adhesion promoter to prepared substrate and allow to dry.

REPAIR

FLEXIBLE

XPST (Epoxy for front & back of repairs)
XSMF (Urethane for front and back of repair*)
XSM6002 (Urethane for front and back of repair*)
XSM1002 (Epoxy for front over urethane or for front and back of repair)

SEMI RIGID

XPSAP (Epoxy for front and back of repairs)
XSMAP (Urethane for front and back of repair*)
XSM6002 (Urethane for front and back of repair*)
XSM1002 (Epoxy for front over urethane or for front and back of repair)
Reinforce: (XWT) - tear/rip or hole.

Repair:

1. If rip/tear or hole, apply reinforce material to completely cover back side of repair.
 2. Choose appropriate repair material (Flexible / Semi Rigid).
 3. If using epoxy on front & back - mix 1:1 until a uniform color is achieved. Apply to back side of repair completely covering reinforce material. Apply epoxy to front of repair and let dry 30 min (22°C / 75°F).
If using urethane apply material on backside of repair completely cover reinforce material. Allow 5 - 15 min. to dry depending on urethane used. Apply skim coat of epoxy on front side of repair. Let the epoxy dry for 30 min (22°C / 75°F).
 5. Sand with 120, 180 and 220 grit sand paper either by hand or using a dual action sander.
 6. If re-application of repair material is needed, re-clean and promote surfaces prior to the application of additional material to bare or non-coated plastic.
 7. If finishing - re-clean substrate, promote bare plastic and allow to dry. Prime surface using SFX / BFX Flex Fill or any other Dominion Sure Seal Plastic Parts Coatings.
- * If using Urethane on front side of repair we recommend a skim coat of epoxy over repair area for ease of sanding and feather-edging.



DOMINION SURE SEAL

PLASTIC REPAIR GUIDE

PLASTIC REPAIR

RIGID

FRP, SMC, RTM

Fiber reinforced, Glass reinforced

Smooth on BOTH Sides

CLEAN

BAP/SPP/SPD-PLASTIC CLEANER

1. Using a lint free cloth, clean surfaces to be repaired.
2. Allow cleaner to flash-off completely.
3. V-Groove front side of repair and sand back side of repair area to be reinforced using 80 grit sand paper either by hand or using a dual action sander.
4. Re-clean surfaces and allow to flash-off completely.

PROMOTE

NO ADHESION AID REQUIRED

(Reinforced Plastics)

REPAIR

RIGID

XRNTR (Epoxy for bonding, 2 hour work time, or reinforcing back side of repair)

XRF (Epoxy for front and back of repairs or fast set bonding, 10-15 min. work time)

XSM13002 (Epoxy for front and back of repairs or fast set bonding, 4-6 min. work time)

XSMAR (Urethane for back side of repair or for use bonding backer panels)

Reinforce: (XWT) - tear/rip or hole

Bonding:

1. Tubes: Mix product (XRFNTR - 2 hour work time, XRF - 10-15 min. work time) 1:1 until uniform color is achieved.
Cartridges: Attach mixer, purge cartridge. Extrude sufficient amount of material to completely cover bond area and clamp (XSM13002 - 4-6 min. work time).
2. Apply adhesive to sanded part and clamp into place.
Uncure after 8 hours (XRFNTR), 30 min. (XRF), or XSM13002 in 30 min @ 22°C / 75°F
Uncure times can be accelerated with heat. Continue with repair.

Repair:

1. If repairing tears or holes apply reinforcing tape (XWT) to backside and apply either XRFNTR (2 hour work time), XRF (10-15 min. work time), or XSM13002 (4-6 min. work time) to back side of repair completely covering reinforce material. Allow to set. Set time can be accelerated with heat.
2. Tubes: Mix parts A & B and apply XRF to front side of repair and let dry (30 min.).
Cartridges: Attach mixer, purge and apply sufficient amount of product to thoroughly cover the repair area and let dry (15 min.).
3. Sand with 120, 180, and 220 grit sand paper by hand or with a dual action sander.
4. If finishing, re-clean substrate and allow to flash-off completely.
5. Prime surface with SFX/BFX Flex Fill or any other Dominion Sure Seal Plastic Parts Coatings.

THE DOMINION SURE SEAL GROUP

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www.dominionsureseal.com

AUTOMOTIVE REPAIR ADHESIVES

LORD Fusor® Flexible Plastic Repair

Two-Sided (Reinforced) Repair

LORD Fusor® #142/143 or LORD Fusor® #152/153

Back Side Reinforcement Repair

1. Refer to Surface Preparation on page 6.
2. Rough sand back side using a D/A sander with 80-grit at low RPMs. Note: Sand slowly to prevent melting the plastic.
3. Apply Fusor #602EZ Surface Modifier, allow 10 minute flash.
4. Cut a piece of Fusor #700, Bumper Reinforcing Mesh to extend one-inch beyond the repair area.
5. Apply Fusor #142/143 (#152/153) Extreme Plastic Repair and spread onto repair area. Lay reinforcing mesh into the adhesive. Spread additional adhesive to completely cover fiberglass cloth.
6. Allow adhesive to set for 20 minutes (Allow #152/153 to cure for 90 minutes or use heat to accelerate the cure).

Front Side Repair

7. Refer to Surface Preparation on page 6.
8. Dish out repair area with 80-grit and wipe with clean dry cloth. (See Illustration B on page 7).
9. Apply Fusor #602EZ Surface Modifier, allow to flash 10 minutes.
10. Apply Fusor #142/143 or #152/153, allow to set for 20-30 minutes (Allow #152/153 to cure for 90 minutes or use heat to accelerate the cure). Build repair area higher than surrounding area.
11. Slowly rough sand the adhesive with 80-grit sandpaper.
12. Finish sand and contour with 180-grit, then 220-grit.
13. If surface shows imperfections, skim coat with Fusor #114.
14. Prime and paint per paint manufacturer's recommendations.

One-Sided (Surface) Repair

Minor Scratch or Gouge

LORD Fusor® #114

Front Side Repair

1. Refer to Surface Preparation on page #6.
2. Dish out repair area with 80-grit and wipe dry with a clean dry cloth. (See Illustration B, page #7).
3. Fusor #602 Surface Modifier is not required for use with Fusor #114.
4. Apply Fusor #114 Bumper Finishing Adhesive and allow to set for 10-15 minutes. Always build repair higher than surrounding area.
5. Slowly rough sand with 80-grit sandpaper.
6. Finish sand with 180-grit, then 220-grit.
7. If surface shows imperfections repeat steps 3 through 6.
8. Prime and paint per paint manufacturer's recommendations.

Refer to detailed repair procedures and additional LORD Fusor® product information at www.lord.com/3159.

LORD

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AUTOMOTIVE REPAIR ADHESIVES

LORD Fusor® Semi-Rigid Non-Fiber Repair

Two-Sided (Reinforced) Repair

LORD Fusor® #142/143 or LORD Fusor® #152/153

Back Side Reinforcement Repair

1. Refer to Surface Preparation on page 6.
2. Rough sand the backside with 80-grit sandpaper.
3. Clean with a prep solvent, wipe dry with a clean dry cloth.
4. Cut a piece of Fusor #700 Bumper Reinforcing Mesh to extend one-inch beyond the repair area.
5. Apply Fusor #142/143 Extreme Plastic Repair and spread onto repair area. Lay fiberglass cloth into the adhesive. Spread additional adhesive to completely cover fiberglass cloth.
6. Allow to cure 15-20 minutes.

Front Side Repair

7. Refer to Surface Preparation on page 6.
8. Dish out front side of repair area with 36-grit, then 80-grit. (See Illustration B, page 7).
9. Clean with a prep solvent, dry with a clean dry cloth.
10. Apply Fusor #142/143 and allow to cure 20-30 minutes. Always build repair adhesive higher than undamaged area.
11. Rough sand the adhesive with 80-grit.
12. Finish sand and contour with 180-grit, then 220-grit.
13. Prime and paint per paint manufacturer's recommendations.

One-Sided (Surface) Repair

LORD Fusor® #142/143 or LORD Fusor® #152/153

Front Side Repair

1. Refer to Surface Preparation on page 6.
2. Dish out the repair area with 80-grit and clean with a prep solvent, wipe dry with a clean dry cloth. (See Illustration B, page 7).
3. Apply Fusor #142/143 and allow to cure for 20-30 minutes (Allow #152/153 to cure for 90 minutes or use heat to accelerate the cure). Always build repair adhesive higher than surrounding area.
4. Rough sand the adhesive with 80-grit.
5. Finish sand with 180-grit, then 220-grit.
6. If surface shows imperfections repeat steps 2 through 6.
7. Prime and paint per paint manufacturer's recommendations.

Refer to detailed repair procedures and additional LORD Fusor® product information at www.lord.com/3159.

LORD
AskUsHow™

RIGID PLASTIC REPAIR

FIBER REINFORCED

TWO - SIDED REPAIR Reinforced Repair

1. Refer to Surface Preparation on Page # 6 .
2. Rough sand the backside with 80-grit.
3. Cut a piece of plastic reinforcing material (IES™ Fiberglass Mesh Tape #70528) to extend one inch beyond the repair area. Apply a second piece on top of the first in an "X" shape.
4. Apply IES™ HIGH STRESS EPOXY or INTER-MIX 40sec Rigid/Semi-Rigid onto the backside of repair area following the IES™ procedure. Spread the adhesive on top of the reinforcing material to completely cover the plastic reinforcing material.
6. Allow adhesive to fully set according to IES™ procedure.

FRONT SIDE REPAIR

7. Dish out repair area with 80-grit.
(See Illustration B on Page# 7).
8. Under cut repair area and taper 1-1/2" beyond repair area.
9. Begin layering adhesive and reinforcing material
(See Illustration C on Page # 7).
10. Proceed to Step #3 of Surface Repair to finish front side.

ONE - SIDED REPAIR Surface Repair

1. Refer to Surface Preparation on Page # 6 .
2. Dish out repair area with 36-grit and wipe dry with a clean dry cloth (See Illustration B on Page # 7).
3. Begin layering adhesive and reinforcing material
(See Illustration C on Page # 7).
4. Apply IES™ HIGH STRESS EPOXY or INTER-MIX 40sec Rigid/Semi-Rigid and allow to fully set according to IES™ procedure. Always build repair adhesive higher than the undamaged area.
5. Rough sand the adhesive with 80-grit.
6. Finish sand and contour with 180-grit, then 220-grit.
7. If surface shows imperfections repeat steps 4 through 6 or use IES™ #8080 Easy-Sand.
8. Prime and paint per paint manufacturer's recommendations.

*Please refer to the
IES™ PLASTIC REPAIR PROCEDURES &
MIXING DIRECTIONS*



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PLASTIC WELDING REPAIR

TWO - SIDED REPAIR

1. Refer to Surface Preparation on Page # 6.
2. V-Groove front side (3/16" opening at the top), rough sand both sides with 120-grit (See Illustration A on Page # 7).
3. Align, tear & attach IES™ #70525 aluminum tape to back side.
4. Select the proper welding rod.
 - A. Refer to the Exterior or Interior I.D. Chart on page # 4 - 5.
 - B. Test welding material: If the rod sticks to it, it will weld it.
5. Use proper temperature setting, with an IES™ 80-watt welder (Part #6080), according to IES™ procedures to weld front side.
6. Let cool, remove the aluminum tape and weld the backside.
7. Rough sand the front side with 120-grit.

Surface Cosmetic Repair / Restoration

8. Check with IES™ directions to determine if adhesion promotor is necessary and follow IES™ procedure.
9. Apply IES™ EPOXYFLEX, HIGH STRESS EPOXY or INTER-MIX 40sec (Rigid or Flexible), whichever is applicable to the substrate, and allow to fully set according to IES™ procedure. Always build repair adhesive higher than the undamaged area.
10. Slowly rough sand the adhesive with 120-grit. Keep surface cool.
11. Finish sand and contour with 180-grit, then 220-grit.
12. If surface shows imperfections repeat steps 9 through 11 or use IES™ #8080 Easy-Sand.
13. Prime and paint per paint manufacturer's recommendations.



#6080 IES™ 80-Watt Plastic Welder

*Please refer to the
IES™ PLASTIC REPAIR PROCEDURES & MIXING DIRECTIONS
(Section II) for detailed instructions on Rigid/Semi-Rigid Plastic Repair.*



FLEXIBLE PLASTIC REPAIR

TWO - SIDED REPAIR Reinforced Repair

1. Refer to Surface Preparation on Page # 6 .
2. Rough sand the backside with 120-grit.
3. Check with IES™ directions to determine if adhesion promotor is necessary and follow IES™ procedure.
4. Cut a piece of IES #70528 Fiberglass plastic reinforcing material to extend one inch beyond the repair area. Apply a second piece, on top of the first, in an "X" shape.
5. Apply IES™ EPOXYFLEX or INTER-MIX 40sec Flexible/Semi-Flexible onto the backside of repair area following the IES™ procedure. Spread the adhesive on top of the reinforcing material to completely cover the plastic reinforcing material.
6. Allow adhesive to fully set.
7. Proceed to Step #2 of One-Sided Surface Repair to finish front side.

ONE - SIDED REPAIR Surface Repair

1. Refer to Surface Preparation on Page # 6 .
2. Dish out repair area with 120-grit and wipe dry with a clean dry cloth (See Illustration B on Page # 7).
3. Check with IES™ directions to determine if adhesion promotor is necessary and follow IES™ procedure.
4. Apply IES™ EPOXYFLEX or INTER-MIX 40sec Flexible/Semi-Flexible and allow to fully set according to IES™ procedure. Always build repair adhesive higher than the undamaged area.
5. Slowly rough sand the adhesive with 120-grit. Keep surface cool.
6. Finish sand and contour with 180-grit, then 220-grit.
7. If surface shows imperfections repeat steps 4 through 6 or use IES™ #8080 Easy-Sand.
8. Prime and paint per paint manufacturer's recommendations.

*Please refer to the
IES™ PLASTIC REPAIR PROCEDURES & MIXING DIRECTIONS
(Section I) for detailed instructions on Flexible Plastic Repair.*



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RIGID/SEMI-RIGID PLASTIC REPAIR

TWO - SIDED REPAIR Reinforced Repair

1. Refer to Surface Preparation on Page # 6 .
2. Rough sand the backside with 120-grit.
3. Check with IES™ directions to determine if adhesion promotor is necessary and follow IES™ procedure.
4. Cut a piece of IES #70528 Fiberglass plastic reinforcing material to extend one inch beyond the repair area. Apply a second piece, on top of the first, in an "X" shape.
5. Apply IES™ HIGH STRESS EPOXY or INTER-MIX 40sec Rigid/Semi-Rigid onto the backside of repair area following the IES™ procedure. Spread the adhesive on top of the reinforcing material to completely cover the plastic reinforcing material.
6. Allow adhesive to fully set according to IES™ procedure.
7. Proceed to Step #2 of One-Sided Surface Repair to finish front side.

ONE - SIDED REPAIR Surface Repair

1. Refer to Surface Preparation on Page # 6 .
2. Dish out repair area with 120-grit and wipe dry with a clean dry cloth (See Illustration B on Page # 7).
3. Check with IES™ directions to determine if adhesion promotor is necessary and follow IES™ procedure.
4. Apply IES™ HIGH STRESS EPOXY or INTER-MIX 40sec Rigid/Semi-Rigid and allow to fully set according to IES™ procedure. Always build repair adhesive higher than the undamaged area.
5. Slowly rough sand the adhesive with 120-grit. Keep surface cool.
6. Finish sand and contour with 180-grit, then 220-grit.
7. If surface shows imperfections repeat steps 4 through 6 or use IES™ #8080 Easy-Sand.
8. Prime and paint per paint manufacturer's recommendations.

*Please refer to the
IES™ PLASTIC REPAIR PROCEDURES & MIXING DIRECTIONS
(Section II) for detailed instructions on Rigid/Semi-Rigid Plastic Repair.*



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RIGID PLASTIC REPAIR

FIBER REINFORCED

TWO - SIDED REPAIR

Reinforced Repair

1. Refer to Surface Preparation on Page # 6 .
2. Rough sand the backside with 80-grit.
3. Cut a piece of plastic reinforcing material (IES™ Fiberglass Mesh Tape #70528) to extend one inch beyond the repair area. Apply a second piece on top of the first in an "X" shape.
4. Apply IES™ HIGH STRESS EPOXY or INTER-MIX 40sec Rigid/Semi-Rigid onto the backside of repair area following the IES™ procedure. Spread the adhesive on top of the reinforcing material to completely cover the plastic reinforcing material.
6. Allow adhesive to fully set according to IES™ procedure.

FRONT SIDE REPAIR

7. Dish out repair area with 80-grit.
(See Illustration B on Page# 7).
8. Under cut repair area and taper 1-1/2" beyond repair area.
9. Begin layering adhesive and reinforcing material
(See Illustration C on Page # 7).
10. Proceed to Step #3 of Surface Repair to finish front side.

ONE - SIDED REPAIR

Surface Repair

1. Refer to Surface Preparation on Page # 6 .
2. Dish out repair area with 36-grit and wipe dry with a clean dry cloth (See Illustration B on Page # 8).
3. Begin layering adhesive and reinforcing material
(See Illustration C on Page # 8).
4. Apply IES™ HIGH STRESS EPOXY or INTER-MIX 40sec Rigid/Semi-Rigid and allow to fully set according to IES™ procedure. Always build repair adhesive higher than the undamaged area.
5. Rough sand the adhesive with 80-grit.
6. Finish sand and contour with 180-grit, then 220-grit.
7. If surface shows imperfections repeat steps 4 through 6 or use IES™ #8080 Easy-Sand.
8. Prime and paint per paint manufacturer's recommendations.

*Please refer to the
IES™ PLASTIC REPAIR PROCEDURES &
MIXING DIRECTIONS*



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PLASTIC WELDING REPAIR

TWO - SIDED REPAIR

1. Refer to Surface Preparation on Page # 6.
2. V-Groove front side (3/16" opening at the top), rough sand both sides with 120-grit (See Illustration A on Page # 6).
3. Align, tear & attach IES™ #70525 aluminum tape to back side.
4. Select the proper welding rod.
 - A. Refer to the Exterior or Interior I.D. Chart on page # 4-5.
 - B. Test welding material: If the rod sticks to it, it will weld it.
5. Use proper temperature setting, with an IES™ 80-watt welder (Part #6080), according to IES™ procedures to weld front side.
6. Let cool, remove the aluminum tape and weld the backside.
7. Rough sand the front side with 120-grit.

Surface Cosmetic Repair / Restoration

8. Check with IES™ directions to determine if adhesion promotor is necessary and follow IES™ procedure.
9. Apply IES™ EPOXYFLEX, HIGH STRESS EPOXY or INTER-MIX 40sec (Rigid or Flexible), whichever is applicable to the substrate, and allow to fully set according to IES™ procedure. Always build repair adhesive higher than the undamaged area.
10. Slowly rough sand the adhesive with 120-grit. Keep surface cool.
11. Finish sand and contour with 180-grit, then 220-grit.
12. If surface shows imperfections repeat steps 9 through 11 or use IES™ #8080 Easy-Sand.
13. Prime and paint per paint manufacturer's recommendations.



#6080 IES™ 80-Watt Plastic Welder

*Please refer to the
IES™ PLASTIC REPAIR PROCEDURES & MIXING DIRECTIONS
(Section II) for detailed instructions on Rigid/Semi-Rigid Plastic Repair.*

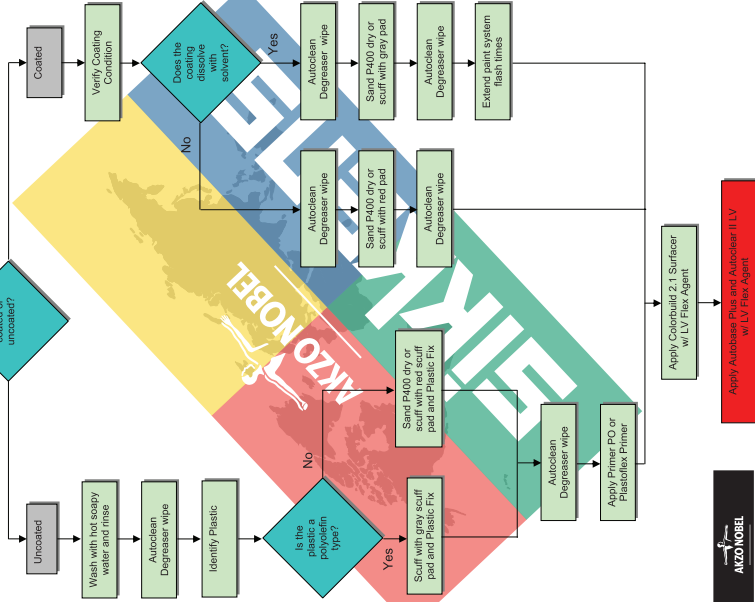


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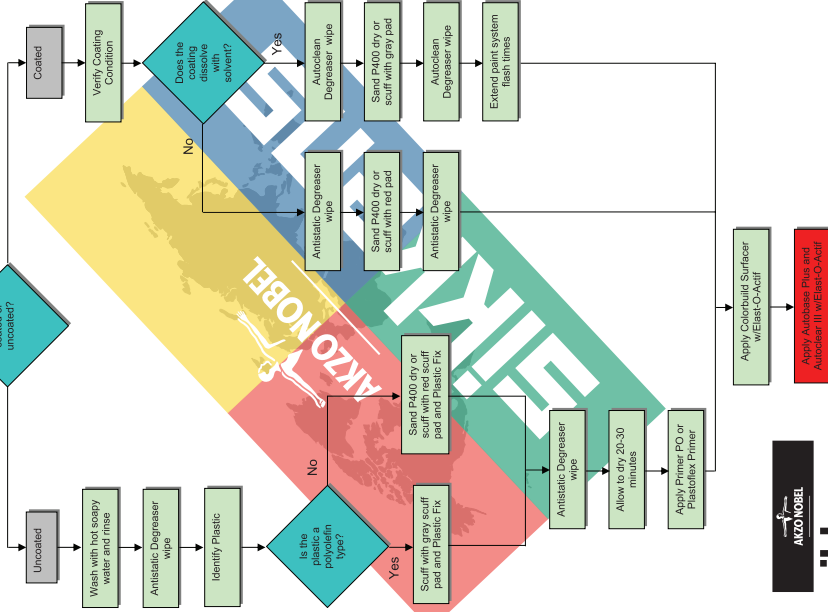
Refinish Process for Replacement Parts and Repairs

Rule 45 and 1151 Area Plastic Parts Refinishing Flowchart



Refinish Process for Replacement Parts and Repairs

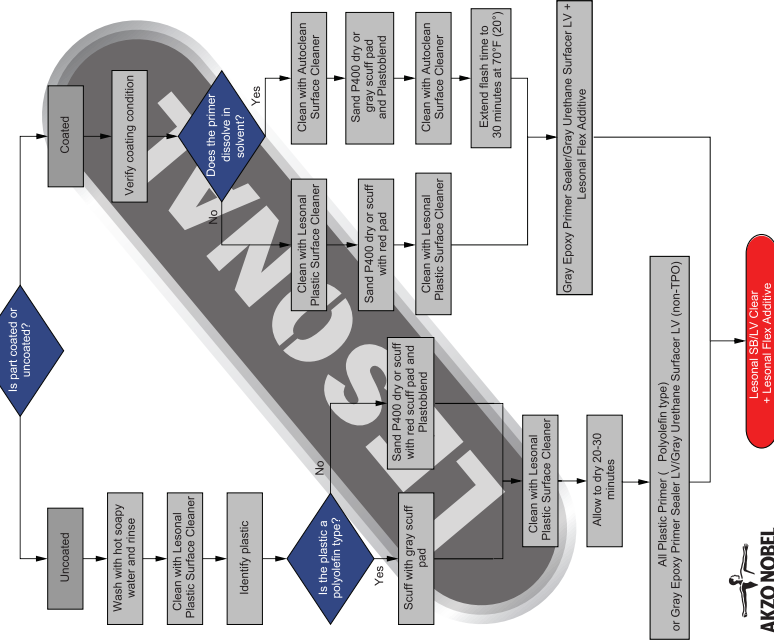
Federal Rule Plastic Parts Refinishing Flowchart



LESONAL

Rule 45 and 1151 Area Plastic Parts Refinishing Flowchart

Refinish Process
for Replacement
Parts and
Repairs



AKZO NOBEL

LESONAL

Federal Rule Plastic Parts Refinishing Flowchart

Refinish Process
for Replacement
Parts and
Repairs

Is part coated or
uncoated?

Uncoated

Wash with hot soapy
water and rinse

Clean with Lesonal
Plastic Surface Cleaner

Identify plastic

Is the plastic a
polyolefin type?

Yes

Scuff with gray scuff
pad

Sand P400 dry or scuff
with red scuff pad and
Plastoblend

Clean with Lesonal
Plastic Surface Cleaner

Allow to dry 20-30
minutes

All Plastic Primer (Polyolefin type)
or Gray Epoxy Primer Sealer/Gray Urethane Surfacers (non-TPO)

Lesonal SB/Glamour Clear
+Lesonal Flex Additive

Coated

Verify coating condition

Does the primer
dissolve in
solvent?

Yes

Clean with Autoclean
Surface Cleaner

Sand P400 dry or
gray scuff pad
and Plastoblend

Clean with Autoclean
Surface Cleaner

Extend flash time to
30 minutes at 70°F (20°)

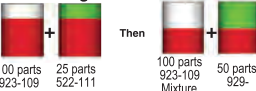
Gray Epoxy Primer Sealer/Gray Urethane Surfacers +
Lesonal Flex Additive



AKZO NOBEL



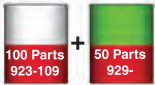
Repair System for Flexible Plastic Substrate

Adhesion Promoter 934-0			Ready For Use	 Application 1 coat (.1 - .25 mil)
Primer Filler 285-60		Additive 522-111 Hardeners 929-28/2 Reducers 352-50 352-91 352-216	Mixing Ratio 4:1 then 4:1:1  100 parts 285-60 + 25 parts 522-111 Then 100 parts 285-60/522-11 Mixture + 25 parts 929-28/2 + 25 parts 352-	 Application 2-3 coats (2.0 - 3.0 mils)
Basecoat 55-Line		Activator 355-55 Reducers 352-50 352-91 352-216	Mixing Ratio 10:1:4  100 Parts 55-Line + 10 Parts 355-55 + 40 Parts 352-	 Application 2 coats or until hiding is achieved (1.5 mils max)
Clearcoat 923-109		Additive 522-111 Hardeners 929-91 929-93 929-94	Mixing Ratio 4:1 then 2:1  100 parts 923-109 + 25 parts 522-111 Then 100 parts 923-109 Mixture + 50 parts 929-	 Application 2 coats (2.0 - 2.4 mils)

Please refer to the Glasurit Technical Manual for more detailed information.



Repair System for Rigid Plastic Substrate

Transparent Filler 285-0		Hardeners 929-81 929-83 Reducers 352-50 352-91 352-216	Mixing Ratio 2:1 + 30% 	Application  1 coat (.6 mils)
Primer-Surfacer 285-60		Hardeners 929-51 929-53 Reducers 352-50 352-91 352-216	Mixing Ratio 4:1:1 	Application  2-3 coats (2.0 - 3.0 mils)
Basecoat 55-Line		Activator 355-55 Reducers 352-50 352-91 352-216	Mixing Ratio 10:1:4 	Application  2 coats or until hiding is achieved (1.5 mils max)
Clearcoat 923-109		Hardeners 929-91 929-93 929-94	Mixing Ratio 2:1 	Application  2 coats (2.0 - 2.8 mils)

Please refer to the Glasurit Technical Manual for more detailed information.



Repair System for Flexible Plastic Substrate

**Adhesion
Promoter
865**



Ready For Use



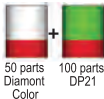
Application

1 coat (.1 - .25 mil)

**Color-It
Primer
DP21**



**Additive
DF25
Hardeners
PH60 PH61
Reducers
UR30 UR60
UR40 UR70
UR50**



Mixing Ratio 1:2 then 3:1 then 4:1:1



Application



2 coats (2.0 mils)

**Basecoat
Diamont**



**Hardener
BCH2
Reducers
UR30 UR60
UR40 UR70
UR50**

Mixing Ratio 10:1:5



Application



2-3 coats or until hiding is achieved (.75 - 1.0 mils)

**Clearcoat
DC5300**



**Additive
DF25
Hardeners
DH42 DH46 DH47
Reducers
UR30 UR60
UR40 UR70
UR50**

Mixing Ratio 4:1:2:4



Application



2 medium wet coats (2.0 - 2.5 mils)

Please refer to the R-M Technical Manual for more detailed information.



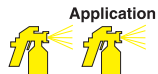
Repair System for Rigid Plastic Substrate

Clear 2K Sealer DS30



Hardeners
PH12 PH36
Reducers
UR40 UR50
UR60

Mixing Ratio 2:1:10%



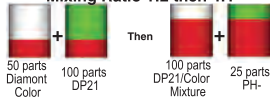
1-2 light coats (.5 - .75 mil)

Color-It Primer DP21



Hardeners
PH60
PH61

Mixing Ratio 1:2 then 4:1



2-3 coats (2.0 mils)

Basecoat Diamond



Hardener
BCH2
Reducers
UR30 UR60
UR40 UR70
UR50

Mixing Ratio 10:1:5



2 coats or until hiding is achieved (.75 - 1.0 mils max)

Clearcoat DC5300



Hardeners
DH42 DH46
DH47
Reducers
UR30 UR60
UR40 UR70
UR50

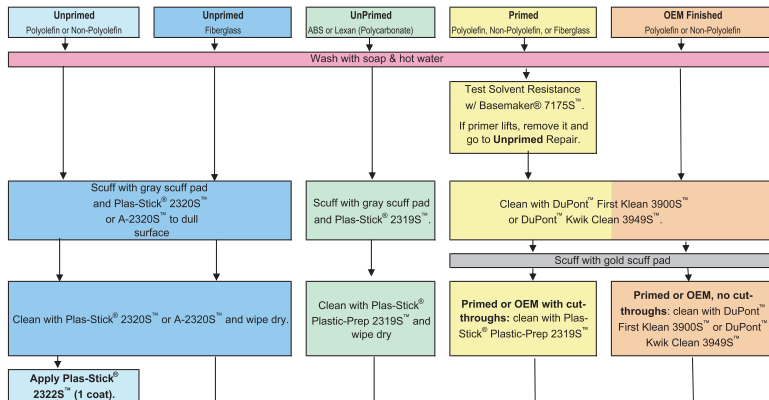
Mixing Ratio 3:1:1



2-3 medium wet coats (2.0 - 2.5 mils)

Please refer to the R-M Technical Manual for more detailed information.

1. Prepare the Substrate



2. Complete the Repair



Special Hints:

- 1 OEM factory primed plastic parts: Perform solvent check*, then sand, clean and apply Permacron® Series 293/295 Base Coat. If surfacer is desired, Permasolid® Spectro Surfacers 5400 or Permacron® Vario Surfacers 8590 with 30% Permasolid® Elastic Additive 9050 may be used. (see appropriate TDS)**
- 2 All raw plastic parts or cut through's should be prepared using the following procedure:**
 - a Apply Permahyd® Plastic Cleaning Paste 7081 with a gray or gold scuff pad and Hot Water.**
 - b Rinse thoroughly with water.**
 - c Bake raw parts for 15-30 minutes at 140°F (60°C) surface temperature.**
 - d Re-Apply Permahyd® Plastic Cleaning Paste 7081 using a gray or gold scuff pad and hot water as many times as needed until clean.**
 - e Rinse thoroughly with water then dry.**
 - f Apply 1½ coats of Permacron® 1:1 Elastic Primer Surfacers 3300. Allow 20 minute flash-off.**
- 3 Apply Permacron® Series 293/295 Base Coat to coverage.**
- 4 Add 15-30% Permasolid® Elastic Additive 9050 to Permasolid® HS or Permacron® MS Clear Coat prior to adding hardener. Do not add 9050 to base coat.**

***For solvent check, use Permacron® Reducer 3363 Medium on a rag. If primer dissolves, remove and treat as raw.**



Substrate Procedure	Factory Primed or Painted Parts	Raw Plastic Parts	PUR Soft Foam Parts
Clean with warm soapy water.	X		X
Clean before and after sanding with Permanent® Silicone Remover 7010 or Permahyd® Silicone Remover 7090.	X		
Sand part with 400-500 dry or 600-800 wet.	X		
Scrub with Permahyd® Plastic Cleaning Paste 7081 using a gray or gold scuff pad and Hot Water. Rinse thoroughly with clean water.		X	
Bake plastic parts for 15-30 minutes at 140°F (60°) surface temperature.		X	X
Scrub again with Permahyd® Plastic Cleaning Paste 7081 using a gray or gold scuff pad and Hot Water.		X	
Rinse thoroughly, making sure cleaning paste does not dry on the surface.		X	
Clean with Priomat® Plastic Reducer 8581 and a gray scuff pad.			X
Apply Permacron® 1:1 Elastic Primer Surfacer 3300.		X	X
Apply Permacron® Series 293/295 Base Coat to coverage.	X	X	X
Add 15-30% Permasolid® Elastic Additive 9050 to Permasolid® HS or Permacron® MS Clear Coat prior to adding hardener.	X	X	X

Plastic Refinishing Procedures

Raw Plastic Parts

Clean the plastic 2-3 times with **Standoflex**[®] Low VOC Plastic Cleaner (16010) and clean, gold scuff pads each time. For hard to reach areas the included brush should be used. Do not let the cleaner dry on the part. Rinse thoroughly until residue is removed.

Final clean with **Standox**[®] Silicone Remover Antistatic (11654) or **Standohyd**[®] Cleaner (16155).

Option 1: Apply 2 coats **Standoflex**[®] 2K Plastic Primer Surfacer (11816). Mix 1:1 with **Standoflex**[®] 2K Plastic Hardener (11824). Flash off for 20 min/68°F (20°C) before application of Standox Topcoats. Or, Option 2: Apply 1 coat of ready-to-spray **Standoflex**[®] Plastic Primer (12065 or 14408-aerosol). Then, apply **Standox**[®] 2K Nonstop Primer Filler (15331/16153/16154) with 15% **Standox**[®] 2K Plasticiser (3+15%:1+20-30%). 1.5-2 coats (1.2-1.6 mil). Flash off 20 min/68°F (20°C).

Proceed to **Standox**[®] Topcoats.

Factory Primed Replacement Parts

If primer fails a solvent test, scuff lightly with a fine pad, avoiding break-throughs. Clean with **Standohyd**[®] Low VOC Silicone Remover (11310) or **Standohyd**[®] Cleaner (16155).

Or, if primer does not fail a solvent test, thoroughly scuff and de-gloss bumper with a red or gray scuff pad and **Standoflex**[®] Low VOC Plastic Cleaner (16010).

Apply **Standox**[®] 2K Nonstop Primer Filler (15331/16153/16154) with 15% **Standox**[®] 2K Plasticiser (3+15%:1+20-30%). 1.5-2 coats (1.2-1.6 mil). Flash off 20 min/68°F (20°C).

Proceed to **Standox**[®] Topcoats.

Repairing Plastic Parts (Minor Repairs)

Sand damaged repair area. After Sanding, clean any bare plastic with **Standoflex**[®] Thinner 11100 (11425 or 16160) and a clean gold scuff pad.

Apply 2 coats **Standoflex**[®] 2K Plastic Primer Surfacer (11816). Mix 1:1 with **Standoflex**[®] 2K Plastic Hardener (11824). Flash off for 20 min/68°F (20°C).

Proceed to **Standox**[®] Topcoats.

Repairing Plastic Parts (Major Repairs)

Sand damaged repair area. After Sanding, clean any bare plastic with **Standoflex**[®] Thinner 11100 (11425 or 16160) and a clean gold scuff pad.

If minor repairs are needed, apply 1 coat of ready to spray **Standoflex**[®] Plastic Primer (12065 or 14408 aerosol), then use **Standosoft**[®] Fine Plastic. See TDS 230.

Apply 1 coat of ready-to-spray **Standoflex**[®] Plastic Primer (12065 or 14408-aerosol).

Apply **Standox**[®] 2K Nonstop Primer Filler (15331/16153/16154) with 30% **Standox**[®] 2K Plasticiser.

3+30%:1+10-15%. 2-3 coats. 2.4-3.6 mil., or **Standox**[®] 2.1 Filler (11999) with 30% **Standox**[®] 2K

Plasticiser. 2+30%:1+30%. 2 coats. 3 mil., or **Standox**[®] 2K HS System Filler (15161) with 30% **Standox**[®] 2K Plasticiser. 2+30%:1+30%. 2 coats. 3 mil. Dry and sand.

Proceed to **Standox**[®] Topcoats.

ADDITIONAL COMMENTS.

- 1) Cleaning and the removal of release agents are the most important tasks in plastic refinishing.
- 2) See Rule specific VOC charts for California VOC recommendations.
- 3) Allow 6 weeks to pass before cleaning the finished part with a high-pressure washer.
- 4) For extremely flexible parts and for vehicles subject to high chipping environments, up to 30% 2K Plasticiser must be added to the primer.
- 5) Rigid covers still need to be plasticised.

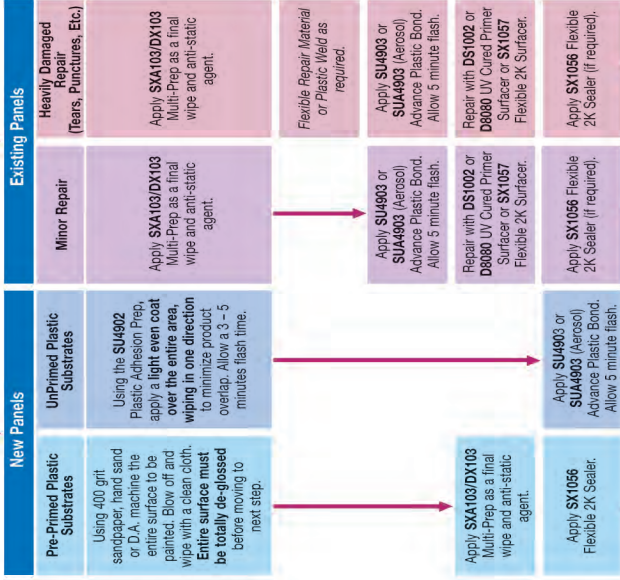
* This is a condensed version of the Standox Plastic Refinishing charts. Please verify these are the most current recommendation against the latest Standox Technical Manual. Please verify VOC compliance against all local and federal legislation before using any Standox product.



Note: Products used to refinish flexible bumper covers fall under the category of SPECIALTY COATINGS, therefore products specified in the system below may be used in any VOC regulated area.

Thoroughly clean the substrate using the pre-saturated SU4901 Clean and Scuff Pad, then rinse thoroughly with water. Water should sheet (flat run off) from the surface, if not, repeat the process.

Blow dry or wipe with a clean cloth. Make sure surface is thoroughly dry before proceeding.



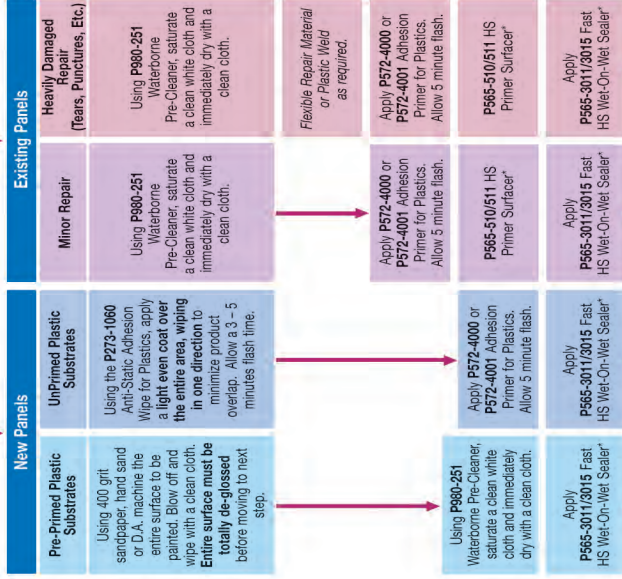
TOPCOAT WITH ANY FLEXIBILIZED DELTRON or GLOBAL TOPCOAT SYSTEM



Note: Products used to refinish flexible bumper covers fall under the category of SPECIALTY COATINGS, therefore products specified in the system below may be used in any VOC regulated area.

Thoroughly clean the substrate using the pre-saturated **P273-1444** Adhesion Cleaner for Plastics, then rinse thoroughly with water. Water should sheet (flat run off) from the surface, if not, repeat the process.

Blow dry or wipe with a clean cloth. Make sure surface is thoroughly dry before proceeding.



TOPCOAT WITH ANY FLEXIBILIZED NEXA AUTOCOLOR TOPCOAT SYSTEM

For additional information, refer to PDS N7.1 Plastic Painting Process or PDS N7.2 2K™ Plastic Preparation System

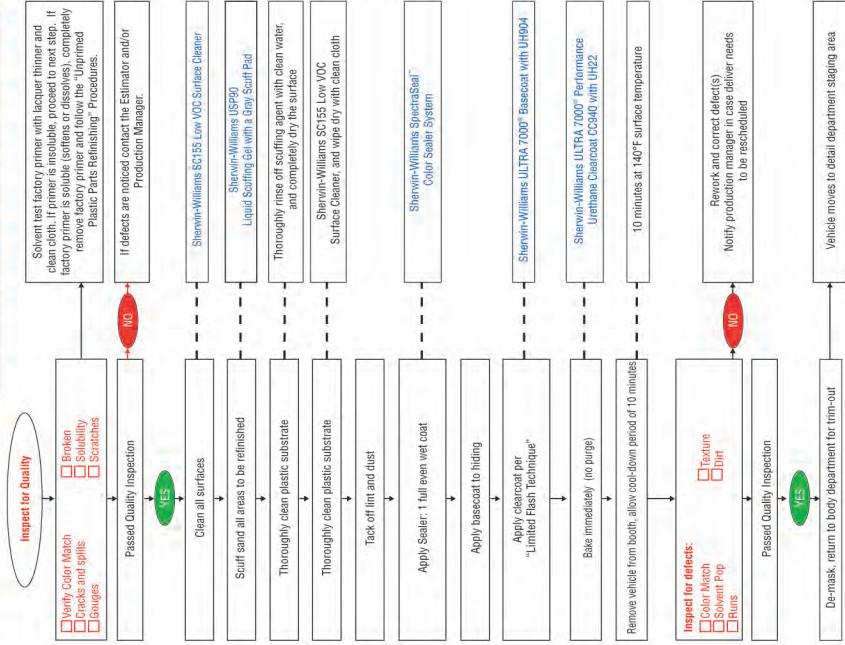
*On rigid plastic parts, no flexible additives are necessary.



**SHERWIN
WILLIAMS®**
Automotive Finishes

process map

PRIMED PLASTIC PARTS REFINISHING

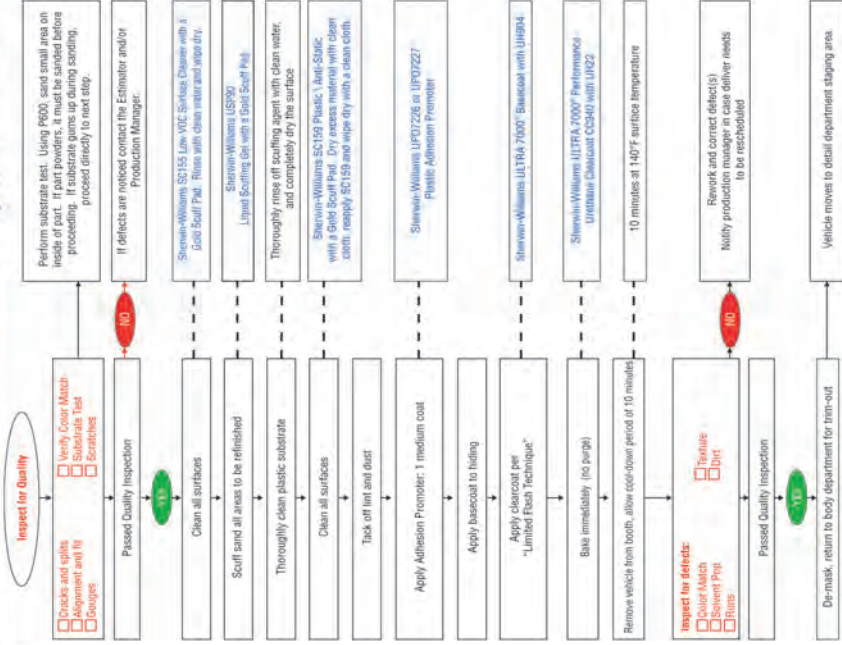


*For VOC compliance information, please visit our website at www.sherwin-automotive.com

process map



UNPRIMED PLASTIC PARTS REFINISHING



*For VOC compliance information, please visit our website at

www.sherwin-automotive.com



PLASTIC REFINISHING

Flexible Plastics

Prepare substrate
(see Surface Preparation)

Check Integrity of
coating/plastic

Is the Integrity
Acceptable?



What VOC Regulation is needed?



National Rule	
Apply PR-2	
Apply PR-3 Flexible 2K Polyurethane Primer	
Apply 333 ColorBase Basecoat*	
Apply AC4400, AC355, or AC2135	

Rule 45 (Bay Area)	
Apply PR-2	
Apply PR-4 Flexible 2K Polyurethane Primer	
Apply 333 ColorBase Basecoat*	
Apply AC4400 (3.5 VOC), AC355 (3.5 VOC), or AC2135 (3.5 VOC)	

Rule 1151 (SCAQMD)	
Apply PR-2	
Apply PR-4 Flexible 2K Polyurethane Primer	
Apply 333 ColorBase Basecoat*	
Apply AC2135 (2.1 VOC)	

Return part or
remove finish

If finish is
removed, Refer
to Surface
Preparation

Not Acceptable



FLEXIBLE PLASTICS

* Basecoat must be activated with 2 oz./qt of HPC000



PLASTIC REFINISHING

Rigid/Semi Rigid Plastics

Prepare substrate
(see Surface Preparation)

Check Integrity of
coating/plastic

Is the Integrity
Acceptable?

YES

Return part or
remove finish

If finish is
removed, Refer
to Surface
Preparation

Not Acceptable

What VOC Regulation is needed?

National Rule

Apply 97N or
92B060 2K
Polyurethane Primer

Apply 333 ColorBase
Basecoat*

Apply AC4400,
AC355, or AC2135

Rule 45 (Bay Area)

Apply 97N 2K
Polyurethane Sealer

Apply 333 ColorBase
Basecoat*

Apply
AC4400 (3.5 VOC),
AC355 (3.5 VOC), or
AC2135 (3.5 VOC)

Rule 1151 (SCAQMD)

Apply 97N 2K
Polyurethane Sealer
(Mixed at 2.8 VOC)

Apply 333 ColorBase
Basecoat*

Apply AC2135
(2.1 VOC)

RIGID/SEMI RIGID PLASTICS

* Basecoat must be activated with 2 oz./qt of HPC000



PLASTIC REFINISHING

Surface Preparation

Wipe with 170 AquaClean

- Scuff with sanding paste and/or 3M 7448 Scotch® Pad
 - Sand and featheredge repairs as needed

Rinse until water "sheets" off

Apply PR-1 and wipe dry

Identify the type of plastic



Is the plastic PVC, RIM or TPO?



Refer to Rigid/Semi
Rigid Plastic
Refinishing Chart



Refer to Flexible
Plastic Refinishing
Chart

SURFACE PREPARATION



Valspar[®] **REFINISH**

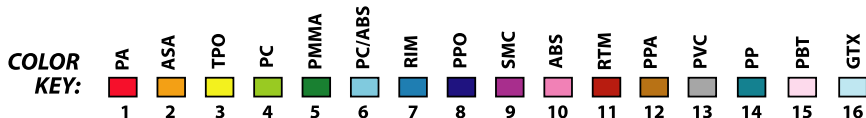
**DO YOU NEED MORE
PRODUCT INFORMATION,
TECHNICAL DATA SHEET,
OR MSDS SHEETS?
CHECK OUT OUR
WEBSITE AT**

www.valsparrefinish.com

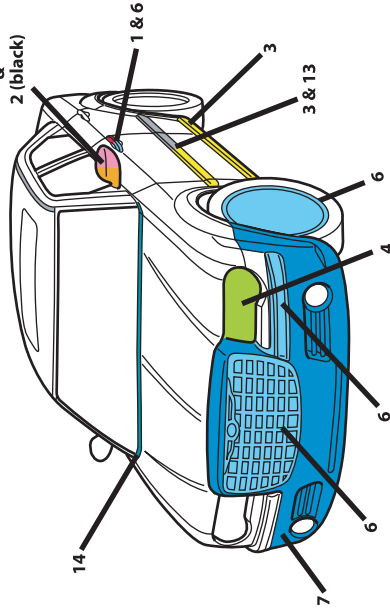


PLASTIC IDENTIFICATION KEY

- | | |
|---|---|
| 1 PA ——— Polyamid | 9 SMC ——— Sheet Molded Compound |
| 2 ASA ——— Acrylonitrile Styrene Acrylite | 10 ABS ——— Acrylonitrille Butadiene Styrene |
| 3 TPO ——— Thermopolyolefin | 11 RTM ——— Resin Transfer Molding Compound |
| 4 PC ——— Polycarbonate | 12 PPA ——— Polyphynelene Amid
(A MODEL) |
| 5 PMMA ——— Acrylic | 13 PVC ——— Polyvinyl Chloride |
| 6 PC/ABS ——— Polycarbonate/ Acrylonitrille Butadiene
Styrene | 14 PP ——— Polypropylene |
| 7 RIM ——— Reaction Injected Molded Polyurethane | 15 PBT ——— Polyester |
| 8 PPO ——— Polyphenylene Oxide | 16 GTX ——— Polyphenylene Oxide/ Nylon Blend |



10 (chrome/body color)
&
2 (black)



1 PA

2 ASA

3 TPO

4 PC

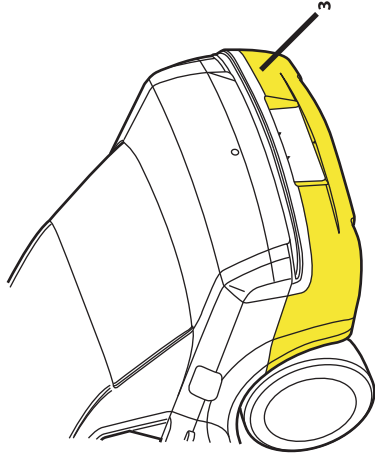
6 PC / ABS

7 RIM

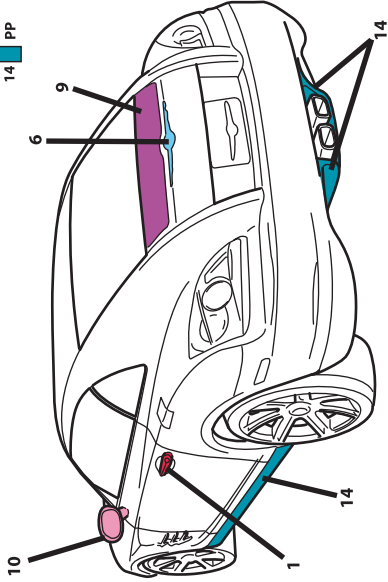
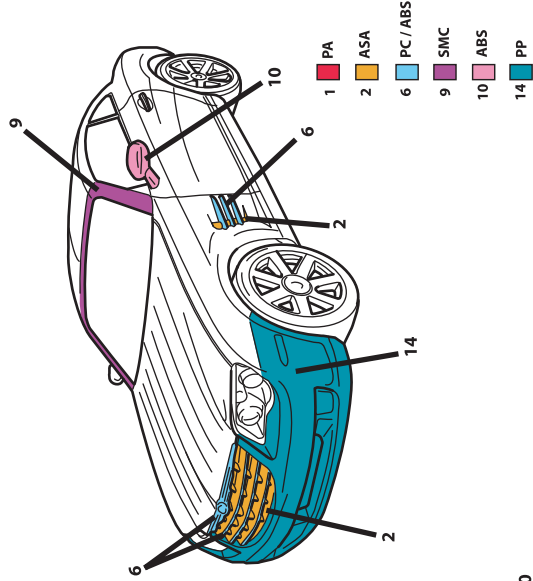
10 ABS

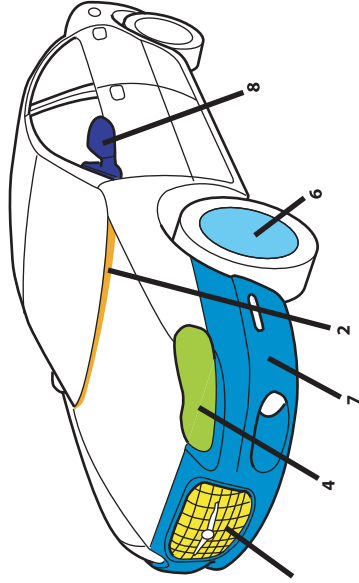
13 PVC

14 PP

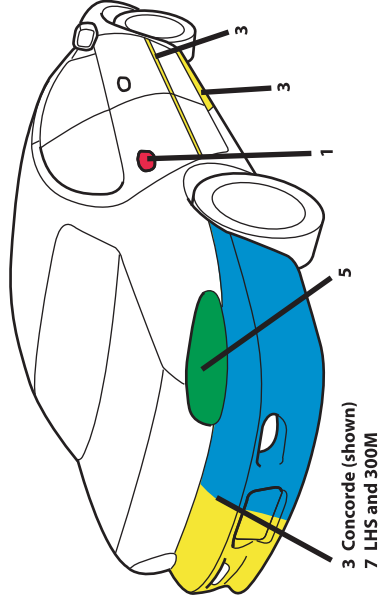


LX-Chrysler 300

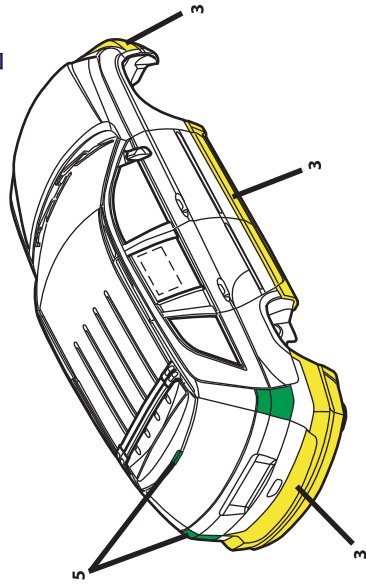
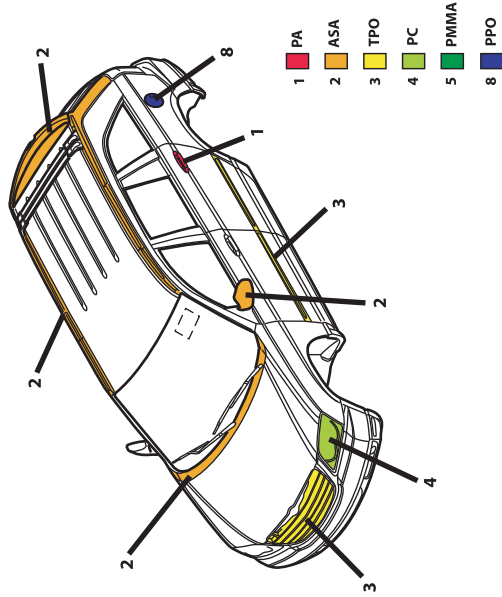


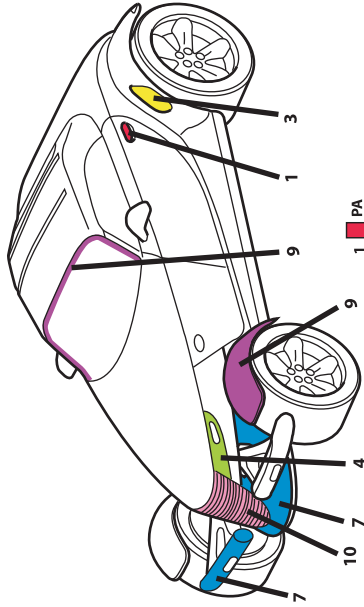


- | | | | |
|---|-----|---|----------|
| 1 | PA | 8 | PPO |
| 2 | ASA | 7 | RIM |
| 3 | TPO | 6 | PC / ABS |
| 4 | PC | 5 | PMMA |

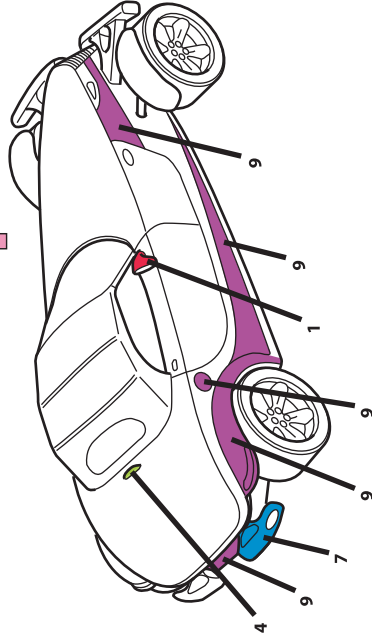


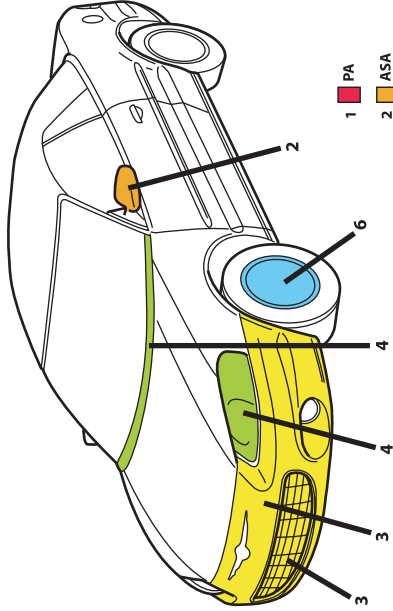
3 Concorde (shown)
7 LHS and 300M



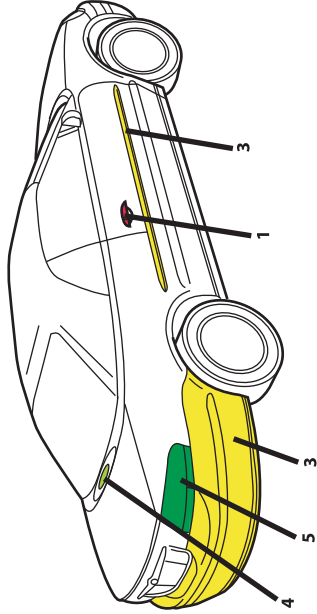


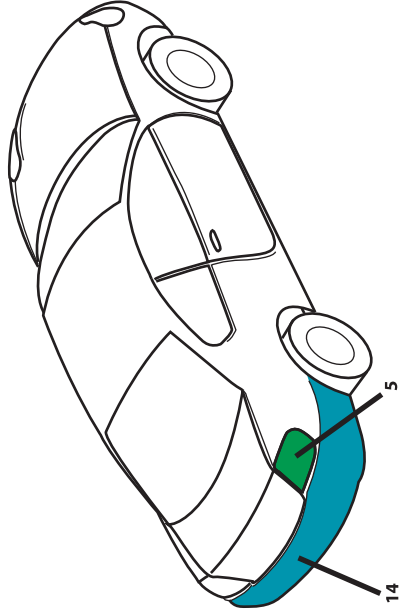
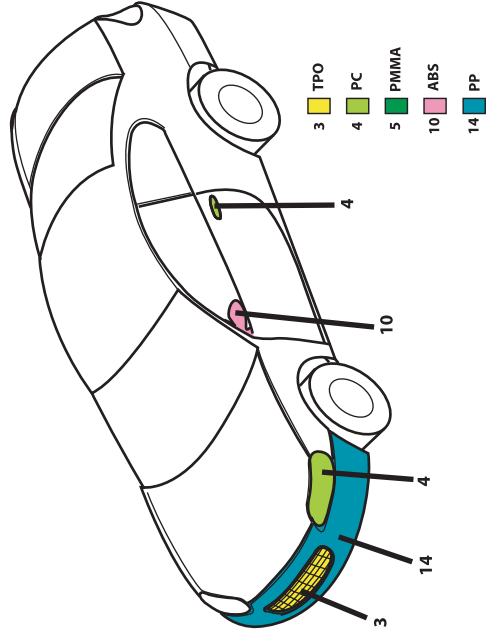
- | | |
|----|-----|
| 1 | PA |
| 3 | TPO |
| 4 | PC |
| 7 | RIM |
| 9 | SMC |
| 10 | ABS |

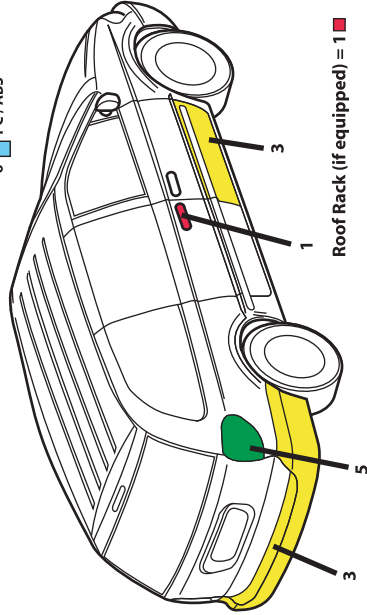
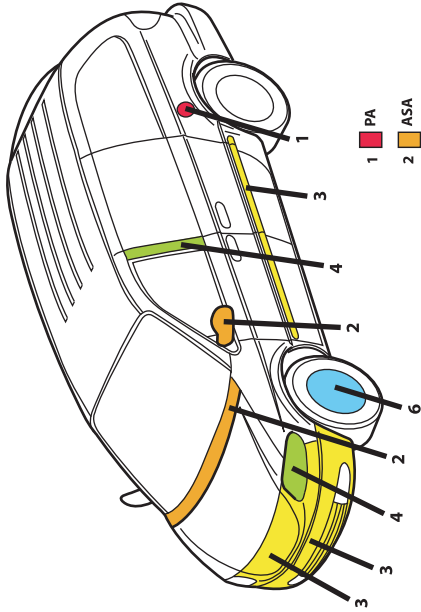




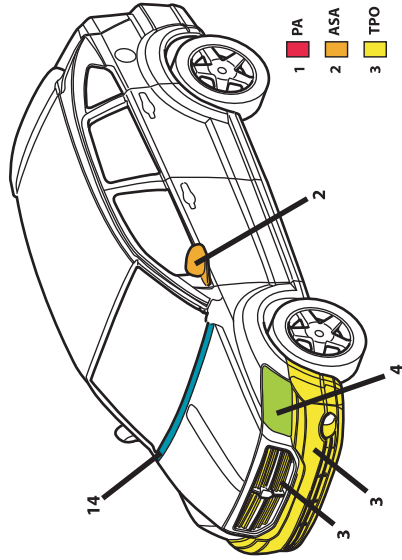
- 1 PA
- 2 ASA
- 3 TPO
- 4 PC
- 5 PMMA
- 6 PC / ABS



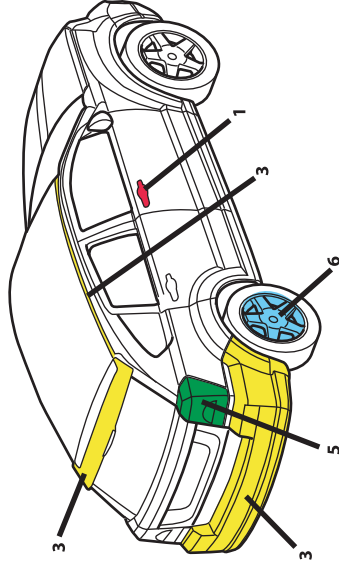


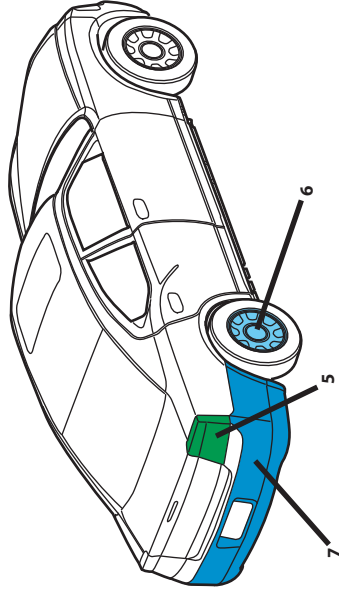
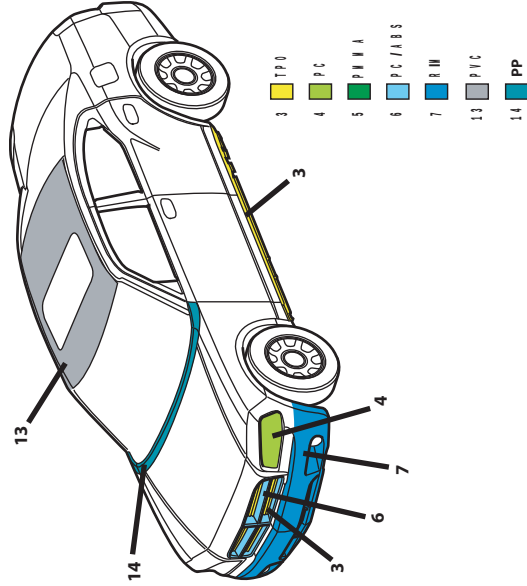


Roof Rack (if equipped) = 1

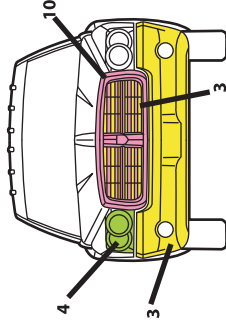
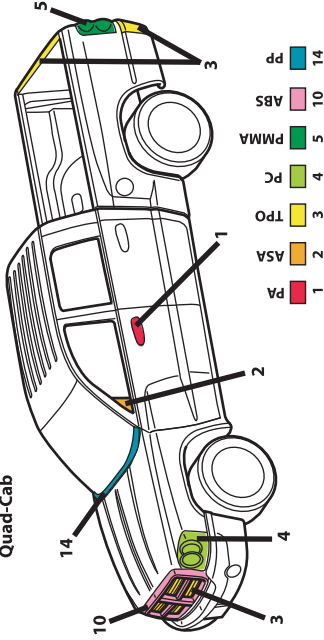


- | | | | | | | | | | | | | | |
|---|----|---|-----|---|-----|---|----|---|------|---|----------|----|----|
| 1 | PA | 2 | ASA | 3 | TPO | 4 | PC | 5 | PMMA | 6 | PC / ABS | 14 | PP |
|---|----|---|-----|---|-----|---|----|---|------|---|----------|----|----|

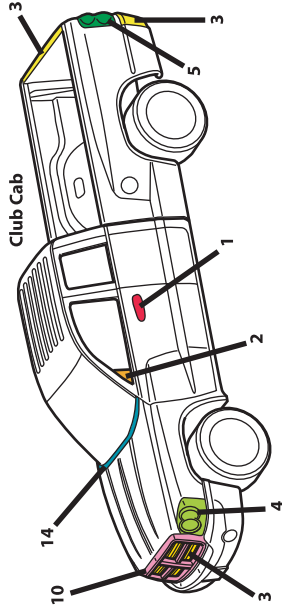


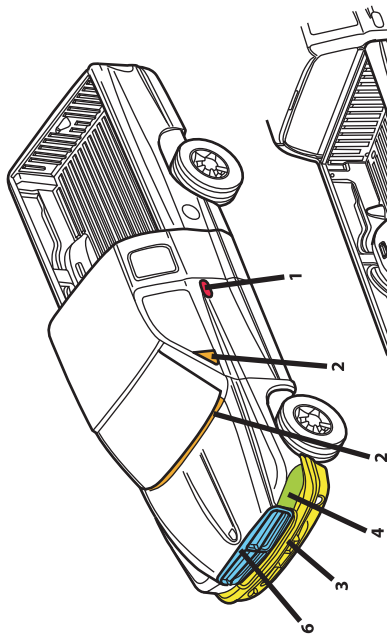


Quad-Cab



Club Cab





1 PA

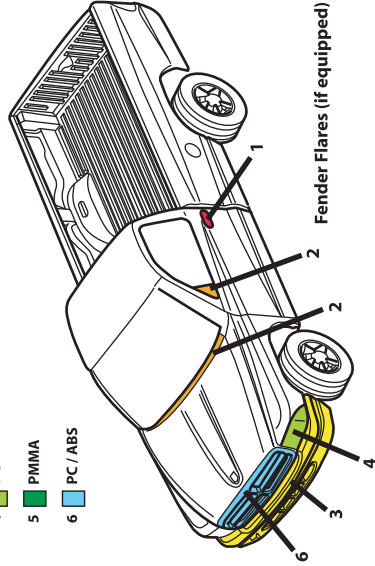
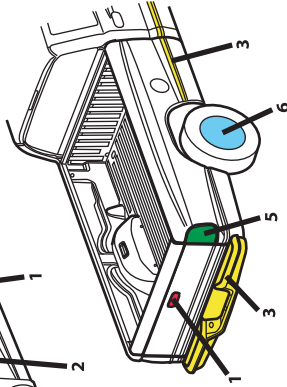
2 ASA

3 TPO

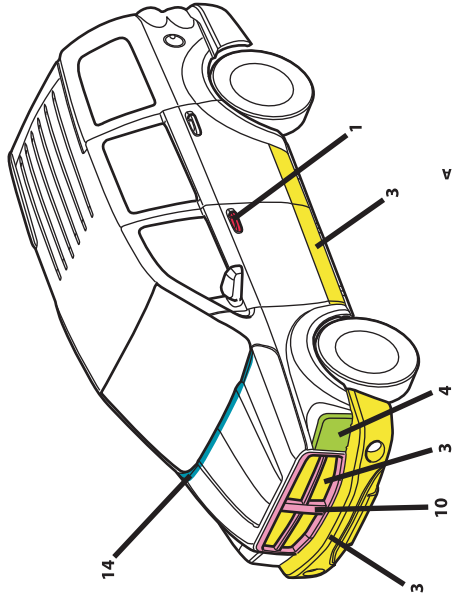
4 PC

5 PMMA

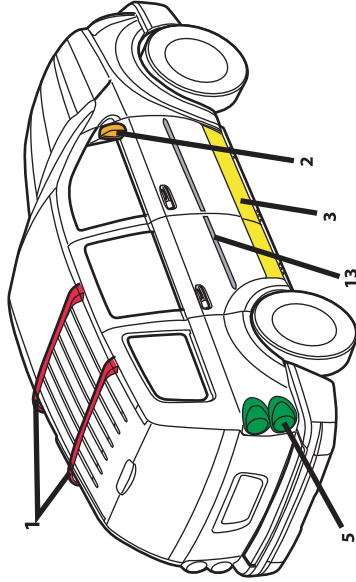
6 PC / ABS



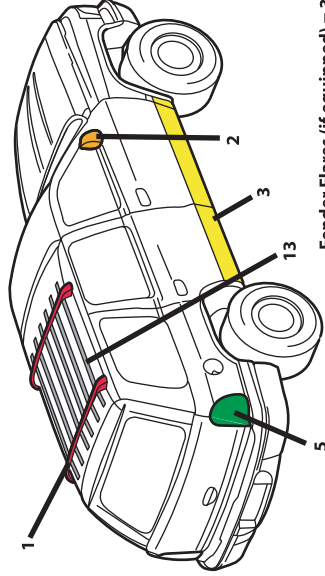
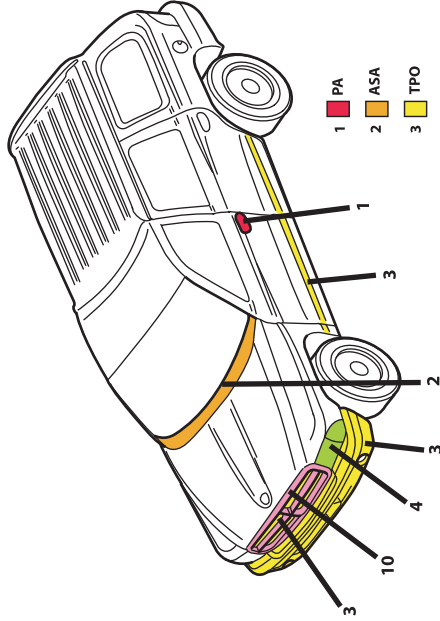
Fender Flares (if equipped) = 3



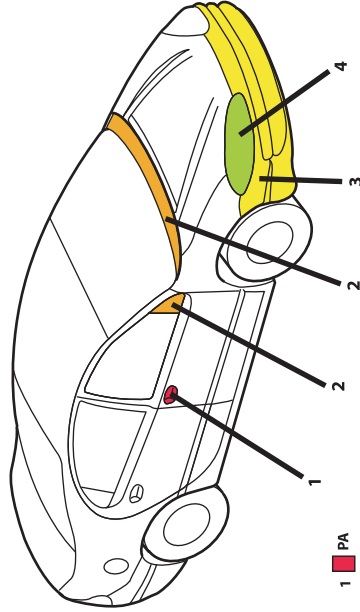
PP	14
PVC	13
ABS	10
PMMA	5
PC	4
TPO	3
ASA	2
PA	1



HB-Durango (Current Model)



Fender Flares (if equipped) = 3



1 PA

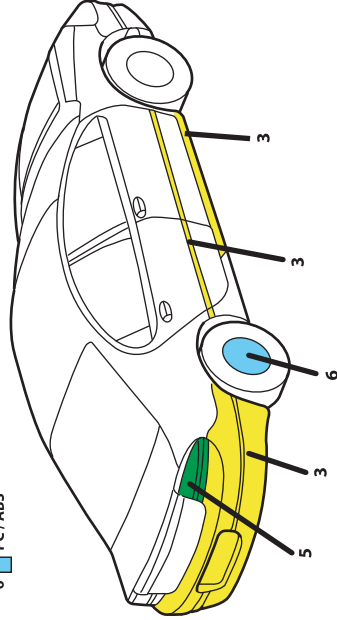
2 ASA

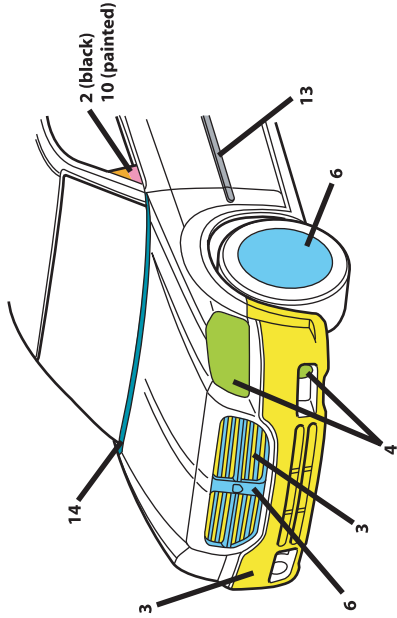
3 TPO

4 PC

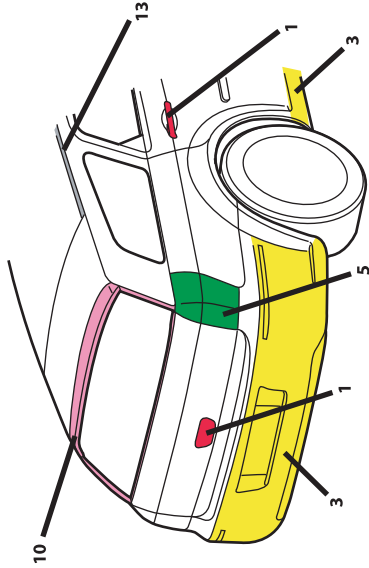
5 PMMA

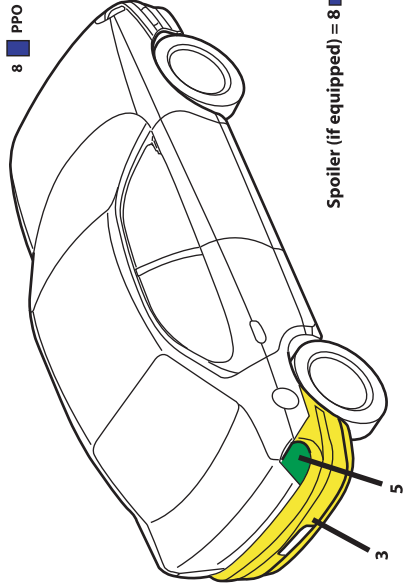
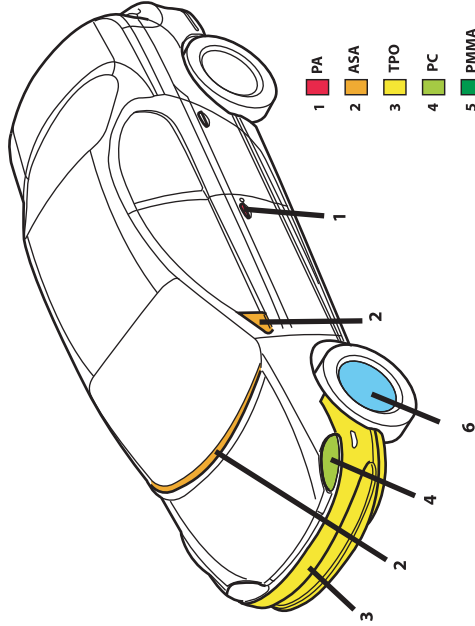
6 PC / ABS



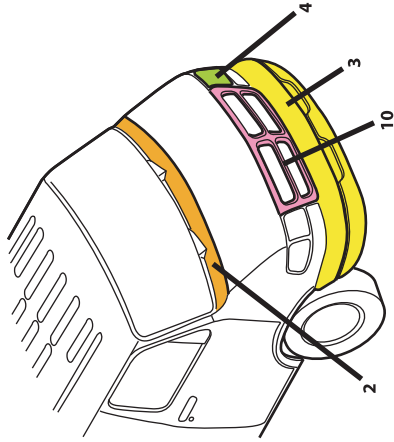


PP	14
PVC	13
ABS	10
PC / ABS	6
PMMA	5
PC	4
TPO	3
ASA	2
PA	1

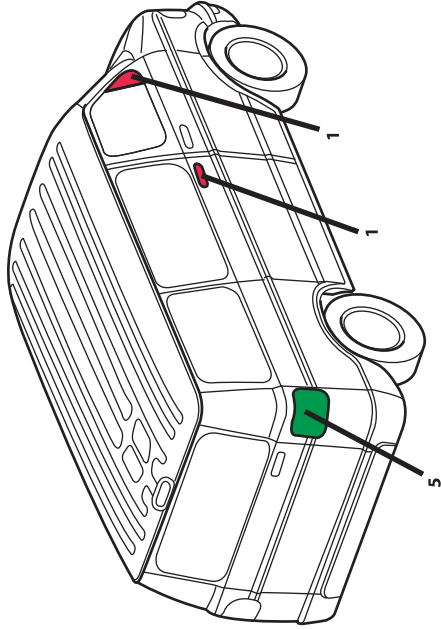


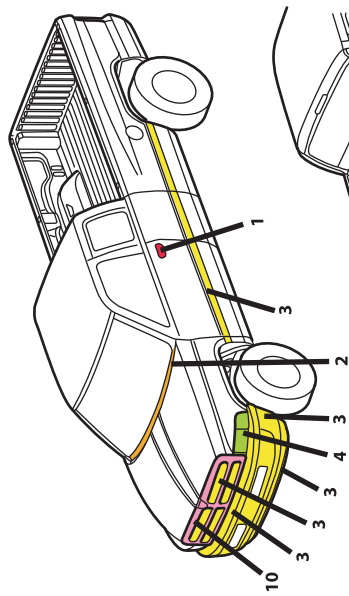


Spoiler (if equipped) = 8

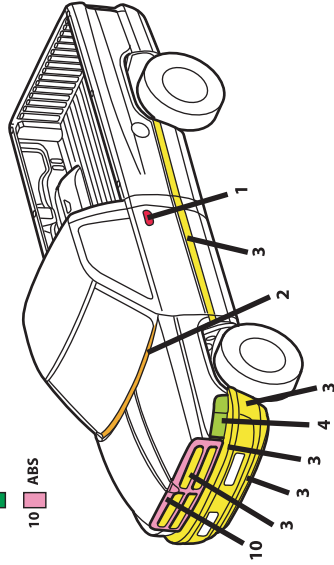
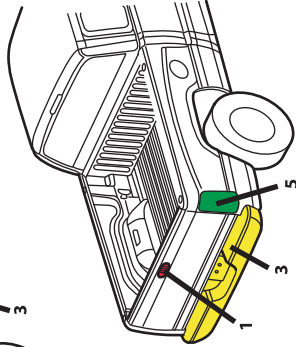


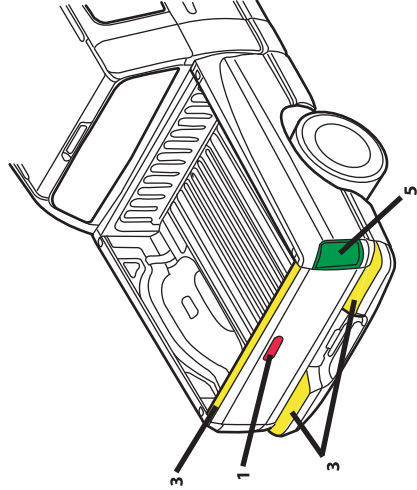
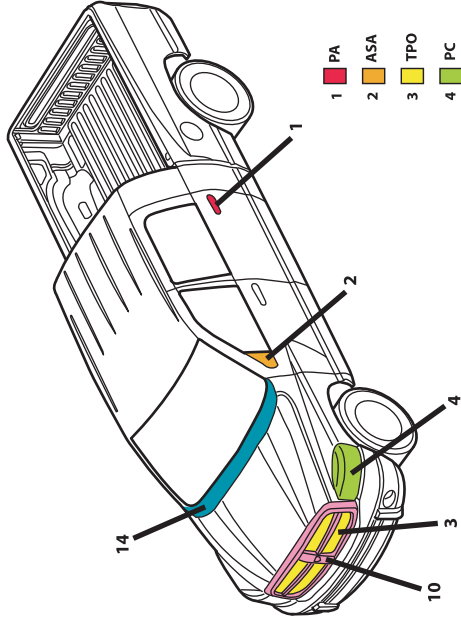
- | | |
|----|------|
| 1 | PA |
| 2 | ASA |
| 3 | TPO |
| 4 | PC |
| 5 | PMMA |
| 10 | ABS |



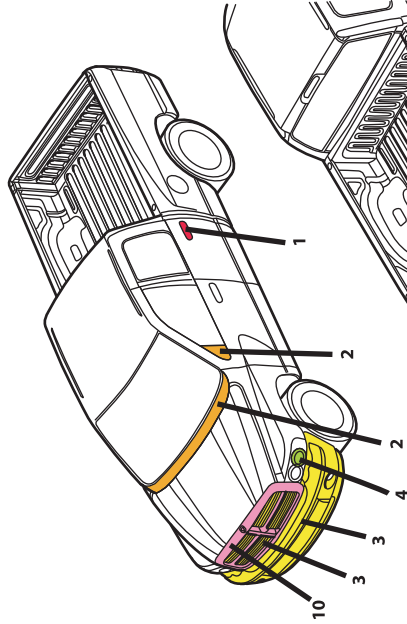


- | | |
|----|------|
| 1 | PA |
| 2 | ASA |
| 3 | TPO |
| 4 | PC |
| 5 | PMMA |
| 10 | ABS |

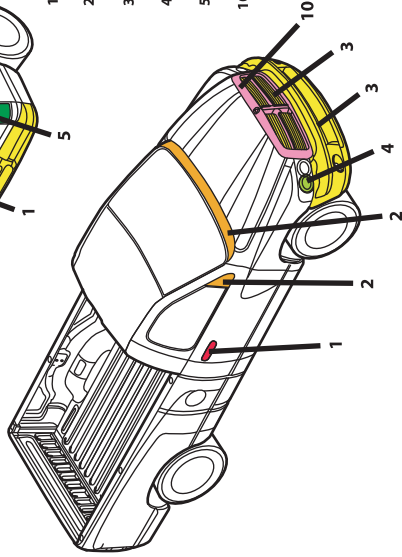


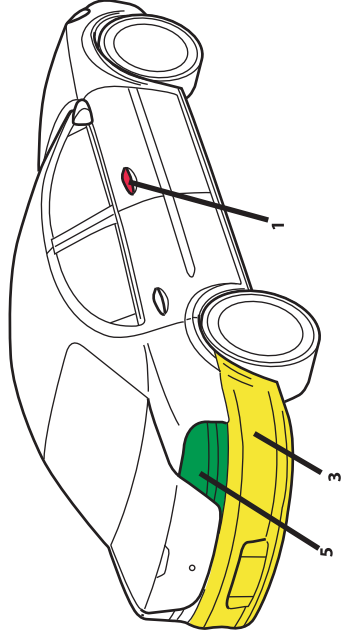
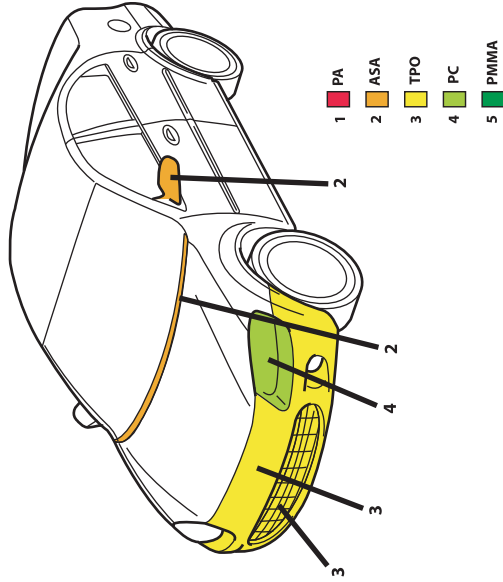


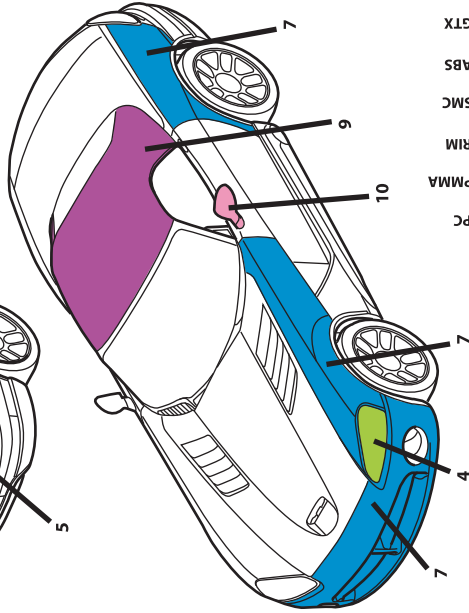
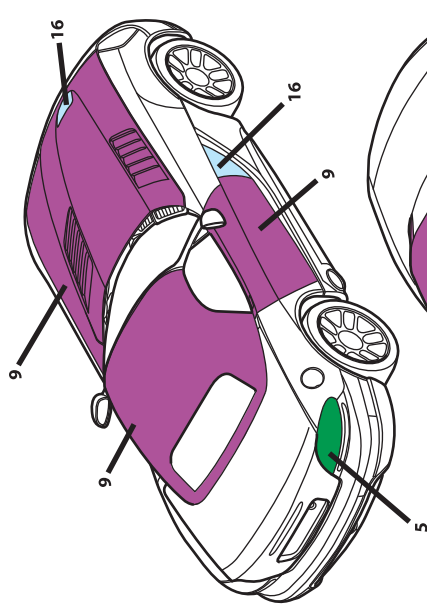
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|---|----|---|-----|---|-----|---|----|---|------|----|-----|----|----|
| 1 | PA | 2 | ASA | 3 | TPO | 4 | PC | 5 | PMMA | 10 | ABS | 14 | PP |
|---|----|---|-----|---|-----|---|----|---|------|----|-----|----|----|



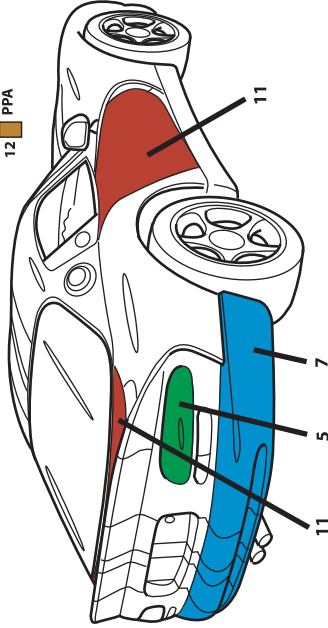
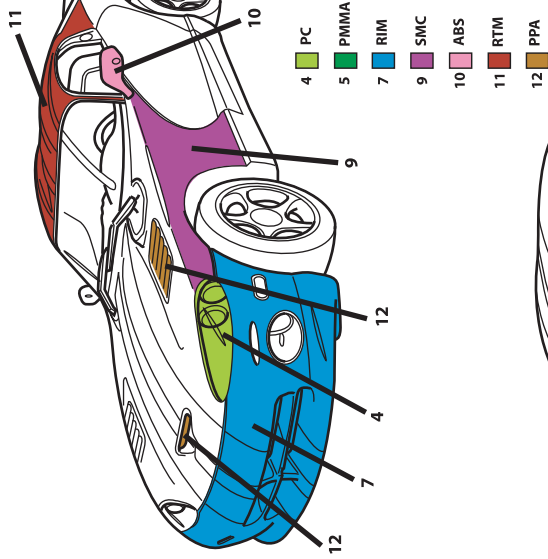
- | | | | | | | | | | | | |
|---|----|---|-----|---|-----|---|----|---|------|----|-----|
| 1 | PA | 2 | ASA | 3 | TPO | 4 | PC | 5 | PMMA | 10 | ABS |
|---|----|---|-----|---|-----|---|----|---|------|----|-----|





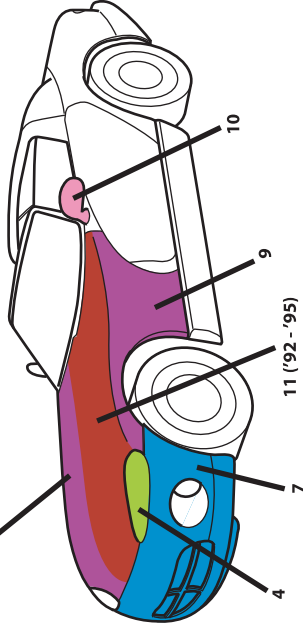


PC	4
PMMA	5
RIM	7
SMC	9
ABS	10
GTX	16

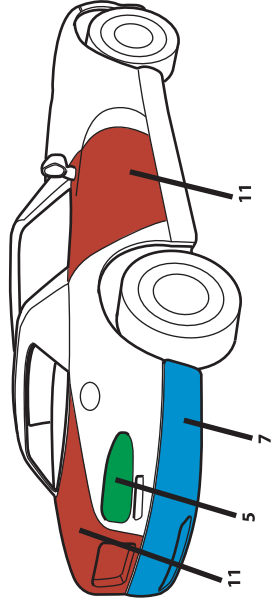


SR-Viper Coupe (Previous Generation)

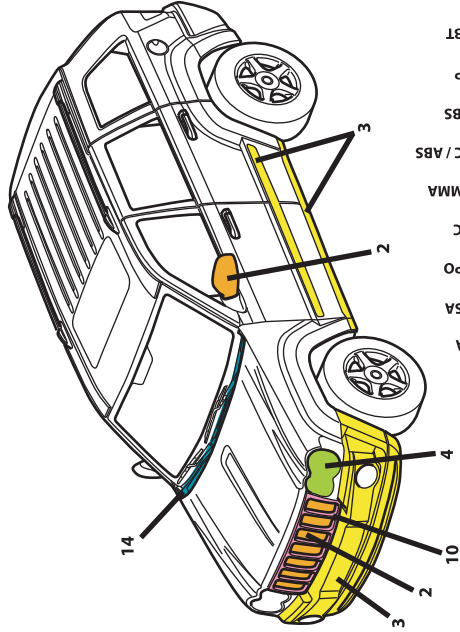
9 ('95 - '04)



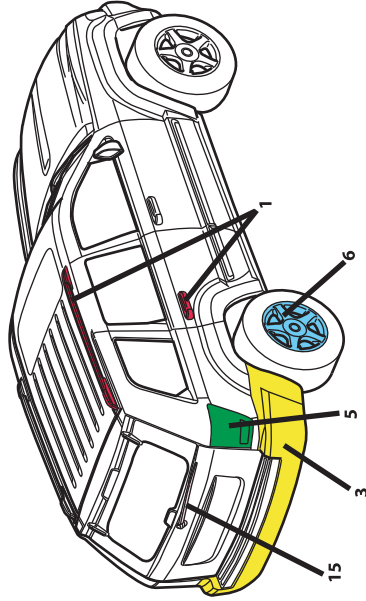
- 4 PC
- 5 PMMA
- 7 RIM
- 9 SMC
- 10 ABS
- 11 RTM



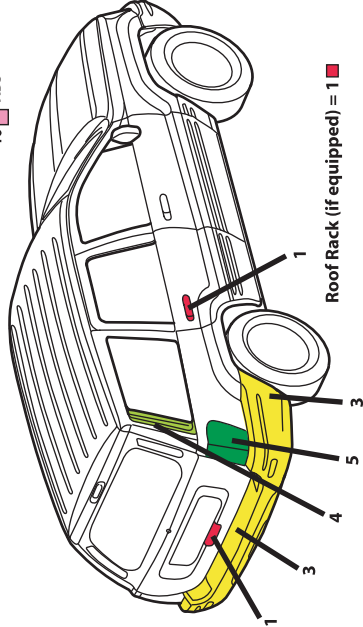
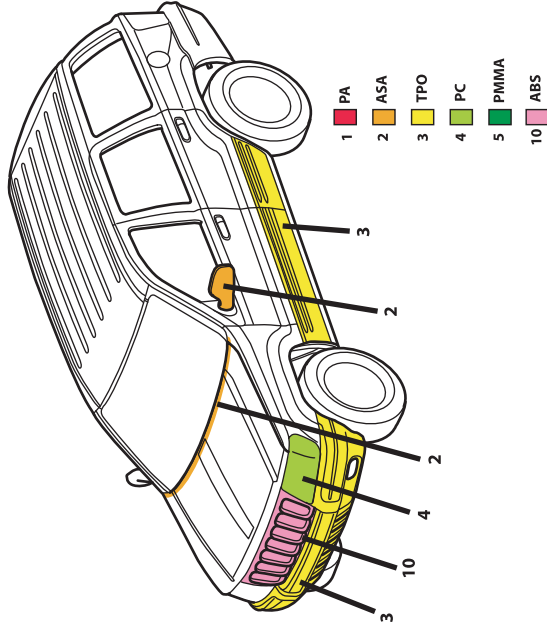
SR-Viper Roadster (Previous Generation)

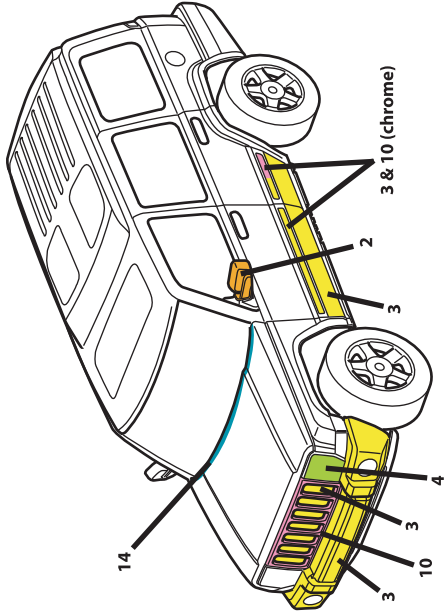


PA	1	Red
ASA	2	Orange
TPO	3	Yellow
PC	4	Light Green
PMMA	5	Dark Green
PC / ABS	6	Light Blue
ABS	10	Pink
PP	14	Teal
PBT	15	Light Pink

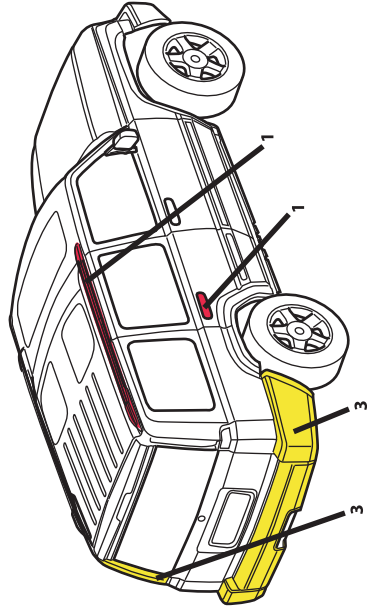


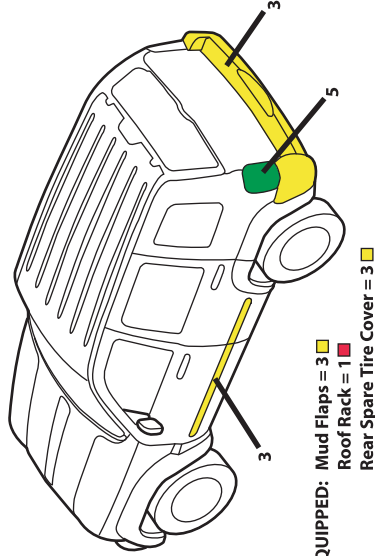
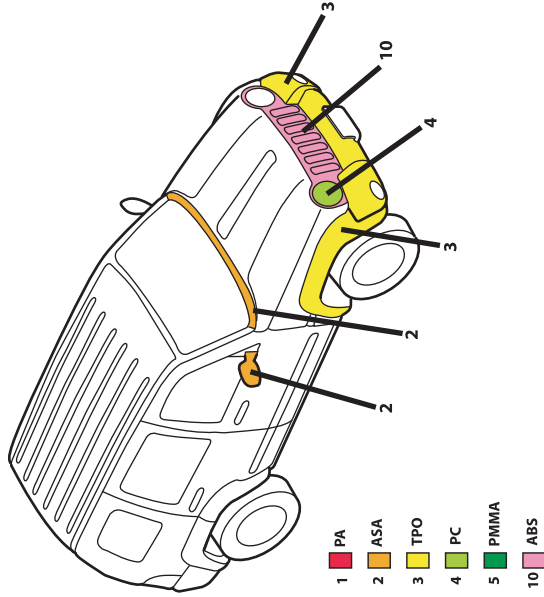
WK-Grand Cherokee (Current Model)





PP	14
ABS	10
PC	4
TPO	3
ASA	2
PA	1



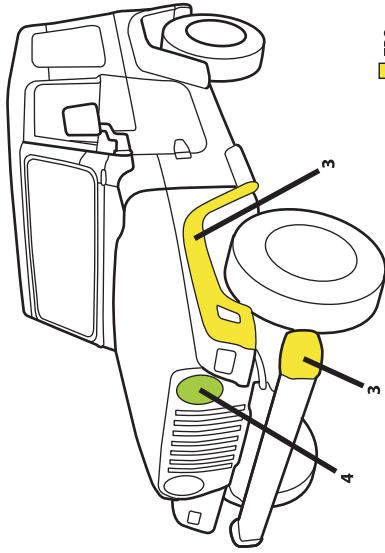


IF EQUIPPED: Mud Flaps = 3

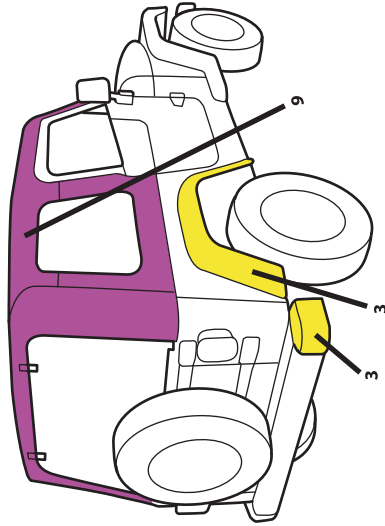
Roof Rack = 1

Rear Spare Tire Cover = 3

KJ-Liberty



- 3 TPO
- 4 PC
- 9 SMC



Manufacturer & website	Technical Hotline
3M www.3m.com/automotive	1.877.666.2277
Akzo-Nobel www.akzonobelcarrefinishes.net	1.800.521.9222
BASF www.basfrefinish.com	1.800.825.3000
Dominion Sure Seal www.dominionsureseal.com	1.800.265.0790
DuPont Refinish www.performancecoatings.dupont.com	1.800.338.7668
International Epoxies and Sealers www.internationalepoxies.com mail@internationalepoxies.com	1.800.451.7206
Lord-Fusor www.lord.com	1.800.234.3876
Nexa Autocolor www.nexaautocolor.com	1.800.647.6050
PPG www.ppgrefinish.com	1.800.647.6050
S & R Fastener Company, Inc. www.internationalepoxies.com mail@internationalepoxies.com	1.800.451.7206
Sherwin-Williams Automotive Finishes Corp. www.sherwin-automotive.com	1.800.798.5872
Spies Hecker www.SpiesHeckerUSA.com	1.888.371.3313
Standox www.standoxna.com	1.800.551.9296
Valspar www.valsparrefinish.com	1.800.845.2500 ext. 253

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