



Refinishing System Process Guide



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FILLER REPAIR: Deep Filling



Use lint-free cloth to prepare surface with Water-based S2000 or Solvent-based S2002 Degreaser.



Abrade repair area with palm sander with U-POL P80-150 coarse grit disc. Repeat step 1.



Avoid air entrapment by mixing in a figure of eight.



Apply filler by pressing down firmly into repair area, skimming off excess and re-applying. Ensure no air is trapped.



Allow to cure thoroughly then apply thin coat of U-POL Dry Guide Coat S2004/AL. Abrade using disc grit P120-240. Prime and paint as required, following application recommendations.

FILLER REPAIR: Deep Filling



























Deep Fillers (steel, fibre glass):

EASY ONE Super Easy Sanding Body Filler 3.5L Tin, 600ml Bag

SMOOTH 7 Smooth Body Filler 3.5L Tin

QUICK SAND Unversal Easy Sanding Body Filler 670ml, 2.1L Tin, 1.3L Dispenser

Deep Fillers - Multifunction * (steel, fibre glass, aluminium, galvanised steel):

U-POL D Smooth Metallic Body Filler 1.1L Tin, 1.3L Dipsenser

GALV X Extra High Adhesion Body Filler 750ml Tin, 1.3L Dispenser

FANTASTIC Ultra Lightweight Body Filler/Stopper 3L Tin, 1L Bag

EXTRA GOLD Extra Smooth Easy Sand Body Filler 600ml, 1.1L, 2.1L Tin, 1.3L Dispenser

Other Products:

S2000 Water Based Degreaser 5L Tin

S2001 & S2002 Solvent Based Degreasers (Fast & Slow) 1L, 5L Tin, 500ml Aerosol

Maximum Abrasive Paper Discs P80, 120, 150, 180, 240 grit 100 discs

Applicators for Body Filler Single, Set of 3

ONION BOARD Multi Layered Mixing Palette 100 sheets

450ml Aerosol S2004 Dry Guide Coat Aerosol (Black)



^{*} Multifunction fillers provide great adhesion to all substrates including galvanised.

FILLER REPAIR: Rigid Plastic & Fibre Glass





Use lint-free cloth to prepare surface with Water-based S2000 or Solvent-based S2002 Degreaser.



Abrade surrounding area using palm sander with U-POL P80-150 coarse grit disc, remove any loose or fractured particles. Repeat step 1.



Apply film/mesh with filler into repair, bridging gap and spreading evenly.



Allow to cure thoroughly then apply thin coat of U-POL Dry Guide Coat S2004/AL. Abrade using grit P180-240. Repeat step 1. Refill any low areas with **U-POL Fine Finishing** Fillers (see U-POL Filler Repair Process: Top Filling).



Bridge large holes or missing sections by supporting bonding material with **U-POL Reinforcing Film** or Aluminium Mesh.

Mix U-POL SMC or Fibre Glass Bodyfiller with correct hardener ratio (refer to mixing guidelines on tin) on **Onion Mixing Board**. Avoid air entrapment by mixing in a figure of eight.

FILLER REPAIR: Rigid Plastic & Fibre Glass

























Products required for performing this process:

Rigid Plastic Fillers:

SMC High Adhesion Glass Fibre Body Filler (White, Black) 1.1L Tin

Glass Fibre Fillers:

P40 Glass Fibre Repair Paste 1L, 1.85L Tin

FIBRAL Sandable Glass Fibre Repair Paste 900ml Tin, 1.3L Dispenser, 1L Bag

Other Products:

Reinforcing Film SHRF 3.6metres

Aluminium Mesh PM/1 25x20cm

S2000 Water Based Degreaser 5L Tin

S2001 & S2002 Solvent Based Degreasers (Fast & Slow) 1L, 5L Tin, 500ml Aerosol

Maximum Abrasive Paper Discs P80, 120, 150, 180, 240 grit 100 discs

ONION BOARD Multi Layered Mixing Palette 100 sheets

Applicators for Body Filler Single, Set of 3

S2004 Dry Guide Coat Aerosol (Black) 450ml Aerosol

FILLER REPAIR: Top Filling / Finishing Filler





Use lint-free cloth to prepare surface with Water-based S2000 or Solvent-based S2002 Degreaser.



Abrade repair area using palm sander with U-POL P240-500 grit disc. Repeat step 1.



Dispense U-POL Fine Finishing Filler onto **Onion Mixing Board.**



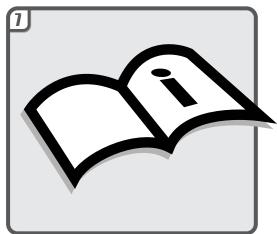
Mix bodyfiller with 2% hardener (mixing ratio: a pea of hardener to a golf ball of paste) on Onion Board. Avoid air entrapment by mixing in a figure of eight.



Apply filler by pressing down firmly into repair area, skimming off excess and re-applying. Ensure no air is trapped.



Allow to cure thoroughly and apply thin coat of **U-POL Dry Guide Coat S2004/AL**. Abrade using U-POL P320-500 grit disc.



Prime and paint as required, following application recommendations.

FILLER REPAIR: Top Filling / Finishing Filler





Products required for performing this process:







Finishing Fillers (steel, fibre glass):

TOP STOP Smooth Finishing Body Filler

750ml Tin, 1.3L Dispenser







Finishing Fillers – Multifunction * (steel, fibre glass, aluminium, galvanised steel):

TOP STOP GOLD Extra Smooth Easy Sand Finishing Stopper 1.1L Tin, 1.3L Dispenser, 1L Bag

DOLPHIN Brushable Very Fine Finishing Stopper 440ml Bag, 880ml Bottle

DOLPHIN HV High Viscosity Brushable Very Fine Finishing Stopper 440ml Bag







Other Products:

S2000 Water Based Degreaser 5L Tin

S2001 & S2002 Solvent Based Degreasers (Fast & Slow) 1L, 5L Tin, 500ml Aerosol

Maximum Abrasive Paper Discs P240, 320, 400, 500 grit 100 discs

ONION BOARD Multi Layered Mixing Palette 100 sheets

Applicators for Body Filler Single, Set of 3

S2004 Dry Guide Coat Aerosol (Black) 450ml Aerosol





^{*} Multifunction fillers provide great adhesion to all substrates including galvanised.

APPLYING PRIMER



Clean surface with **U-POL Degreaser** and lint-free cloth, for e-coat abrade with Grey Finishing Pad for bare metal key surface with **Red Finishing Pad**.



Degrease again and wipe with **U-POL Tack Cloth**.



Mix hardener with **U-POL Primer** according to ratio. Add thinners as necessary (+10% for primer surfacer for large areas, +15-20% for wet-on-wet sealer), for high build no thinners are required.



Pour activated primer through **U-POL** Strainer mesh (sizes 190µm to 280µm depending on thinned product) directly into **U-POL Spraygun** cup.



Wearing protective equipment in booth, apply primer. Allow sufficient flash-off time between coats. Follow curing guidelines for air dry/booth baking or IR.



Once fully cured, apply **U-POL Dry Guide** Coat S2004/AL and abrade using U-POL **P500 grit disc** with an interface pad.

For wet-on-wet non-sand primer (with 15-20% thinners added): Skip step 6 (abrading process) and apply basecoat directly to primer surface once matted off (10-20mins).



APPLYING PRIMER



























Products required for performing this process:

Multi-Purpose Primers:

S2020 2K High Build Primer 3:1 (Beige, Grey) 1L, 3L Tin

S2021 2K High Build Super Cure Easy Sand Primer 5:1 (Beige, Grey) 1L, 2.5L, 3L, 5L Tin

S2025 2K High Build Primer 4:1 (Grey, Dark Grey) 1L,4L Tin

Associated Coatings:

S2030 Fast Hardener 250ml, 330ml, 500ml, 1L, 2.5L, 5L Tin

S2031 Extra Fast Hardener 330ml, 500ml, 1L, 2.5L Tin

S2032 Standard Hardener 330ml, 500ml, 1L, 2.5L, 5L Tin

S2033 Slow Hardener 330ml, 500ml, 1L, 2.5L Tin

S2040 Slow Acrylic Thinner 1L,5L Tin S2041 Standard Acrylic Thinner 1L,5L Tin

S2042 Fast Acrylic Thinner 1L,5L Tin

1L,5L Tin S2044 Fast Universal Thinner

5L Tin S2045 Standard Universal Thinner

\$2046 Slow Universal Thinner 1L,5L Tin

Other Products

Maximum HVLP Gravity Spray Gun 1.3-1.7mm nozzle

Maximum Paint Strainers (Fine 280microns & Extra Fine 190microns) 250 strainers, 1000 strainers

S2000 Water Based Degreaser 5L Tin

S2001 & S2002 Solvent Based Degreasers (Fast & Slow) 1L, 5L Tin, 500ml Aerosol

Maximum Abrasive Paper Discs P500 grit 100 discs

Maximum Finishing Pads (Red Fine, Grey Super Fine) 10 pads, 35 sheet perforated roll

Maximum High Performance Tack Cloth 10 box, 50 dispenser

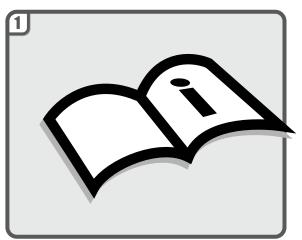
S2004 Dry Guide Coat Aerosol (Black) 450ml Aerosol

APPLYING CLEARCOAT: VOC Compliant UHS









Apply colour basecoat according to your paint manufacturer's recommendations.



Mix **U-POL Clearcoat** with appropriate hardener according to mixing ratio.



Pour activated clearcoat through **U-POL Strainer** mesh (size 125µm) directly into **U-POL Spraygun** cup. Use 1.3-1.4mm nozzle tip for HVLP sprayguns or 1.2mm for Hybrid sprayguns.



Apply "grip coat" by moving quickly over surface area to be sprayed.



Allowing no flash off time, immediately spray full coat ("rip coat") over grip coat, ensuring not to overload product on surface.



Allow product to flow. If within 10minutes flow out is not satisfactory, lightly apply **U-POL Fade Out** Thinner aerosol S2043/AL to rectify.

APPLYING CLEARCOAT: VOC Compliant UHS







Products required for performing this process:



Clear Coats:

S2081EV UHS Clear Coat 3:1 1L,5L Tin S2083EV UHS Super Clear Coat 2:1 1L,5L Tin S2086EV UHS Super Fast Clear Coat 3:1 1L,5L Tin S2090 HS Scratch Resistant Clear Coat 3:1 1L,5L Tin (Conventional Application)



S2034 Standard Hardener (for S2083EV only)	1L, 2.5L Tin
S2035 Fast Hardener (for S2083EV only)	1L, 2.5L Tin
S2036 Slow Hardener (for S2083EV only)	1L, 2.5L Tin
S2037EV Slow Hardener (for S2081EV and S2086EV only)	1L, 2.5L Tin
S2038EV Fast Hardener (for S2081EV and S2086EV only)	330ml, 1L, 2.5L Tin

S2039EV Standard Hardener (for S2081EV and S2086EV only) 330ml, 1L, 2.5L Tin

Other Products

Maximum Hybrid Gravity Spray Gun	1.2mm nozzle
Maximum HVLP Gravity Spray Gun	1.3 or 1.4mm nozzle
Maximum Paint Strainers (Super Fine 125microns)	250 strainers, 1000 strainers

S2043 Fade Out Thinner Aerosol 450ml Aerosol









CURING COATINGS



Through dry by air (for all coatings).



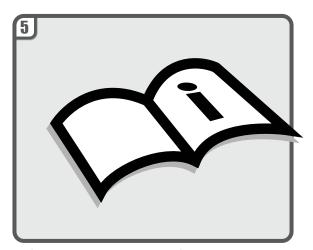
Through dry by baking at 60°C in booth (for all coatings except waterborne basecoats).



Curing by Infra-Red (IR) dryer (for fillers, primers and clearcoats). When used in a static position, place IR dryer at 0.5m (20inches) minimum distance from curing surface.



Through dry by **U-POL DRYFLOW** airflow gun (for all waterborne coatings). Direct airflow across paint surface for optimum drying.



Refer to technical datasheets for recommended drying times associated with each method.

CURING COATINGS





Products required for performing this process:



Curing Tools:

Maximum DRYFLOW Air Jet Gun

Maximum DRYSTAND Adjustable Stand (for DRYFLOW Gun)



BLENDING & DE-NIBBING CLEAR COAT

Clean areas surrounding new repair with **U-POL** Degreaser.



Abrade surface gently using sander with U-POL P1000 grit **film disc** and foam interface pad. Remove any excess debris by wiping work surface with U-POL Tack Cloth.

Abrade surface gently with **U-POL Grey Finishing Pad.** Remove any excess debris by wiping work surface with U-POL Tack Cloth.



Clean and degrease entire area ready for application of clearcoat. (See U-POL process: Applying Clearcoat)



Clean fully cured clearcoat surface with **U-POL Degreaser.**



Remove any nibs or contaminants using sander with **U-POL P1500 grit film disc** and soft-foam interface pad. Remove any excess debris by wiping work surface with **U-POL Tack Cloth**.



Clean and degrease area ready for polishing. (See U-POL process: Compounding & Polishing)

BLENDING & DE-NIBBING CLEAR COAT





Products required for performing this process:





Products:

S2000 Water Based Degreaser

S2001 & S2002 Solvent Based Degreasers (Fast & Slow)

Maximum Abrasive Premium Film Discs P1000, 1500 grit

Maximum Finishing Pads (Grey Super Fine)

Maximum High Performance Tack Cloth

5L Tin

1L, 5L Tin, 500ml Aerosol

50 discs

10 pads, 35 sheet perforated roll

10 box, 50 dispenser







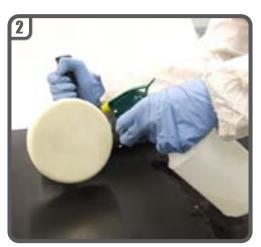
COMPOUNDING & POLISHING







To remove P1500 abrasive marks: apply U-POL 333 Cutting Compound (paste or liquid) to a clean and conditioned hard foam mop head. Alternatively, for hand use, apply compound to polishing cloth.



For optimum performance add water to mop head as necessary. Re-apply if needed to avoid product dry-out and over-heating.



Start polishing machine (speed 1200 rpm) flat on work surface, maintain pad as horizontal as possible. Work areas of 800mm square at a time before moving on.



Buff surface with polishing cloth, wipe away any residue and bring out gloss.



Repeating steps 1-4, remove any compounding swirl marks with U-POL 334 **Fine Finishing Compound**. Also suitable for restoring weathered paintwork and blending dry edges of blow-ins.



Repeating steps 1-4, use U-POL 335 High Gloss Final Glaze, produce a deep, lasting professional gloss. Apply without water, using a soft foam mop head at 1200 rpm. Allow to dry before buffing with soft cloth.



As a final step, give durable long-lasting protection to polished surface by applying **U-POL 336 Ultra Gloss Wax Protector** by hand using soft polishing cloth.

COMPOUNDING & POLISHING





Products required for performing this process:















Compounding Products:

333 Cutting Compound Paste 1.25kg, 3.25kg Tub

333 Cutting Compound Liquid 1L Bottle

Polishing Products:

334 Fine Polishing Compound 1L Bottle

335 High Gloss Final Glaze 1L Bottle

336 Ultra Gloss Wax Protector 1L Bottle

Other Products:

S2000 Water Based Degreaser 5L Tin

S2001 & S2002 Solvent Based Degreasers (Fast & Slow) 1L, 5L Tin, 500ml Aerosol

Maximum High Performance Tack Cloth 10 box, 50 dispenser

SEALANTS

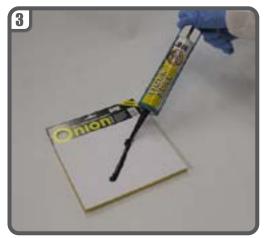




Abrade edges to be sealed using sander with **U-POL P80-120 coarse grit disc**. Alternatively abrade by hand with **U-POL Red Finishing Pad**.



Clean surface area with **U-POL Degreasers** and allow to dry thoroughly.



Load **U-POL Tigerseal** cartridge into dispensing gun, cut nozzle to required bead diameter at 45° angle slice. Gun out and discard first 10cm of sealant.



Apply **Tigerseal** (white, black, grey) to surface in single continuous dispensing stroke. Allow time to through-cure (refer to datasheets for guidelines) before over-coating.



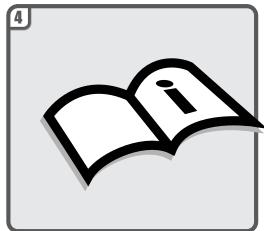
Abrade panel edges to be sealed with **U-POL Red Finishing Pad**.



Clean surface area with **U-POL Degreasers** and allow to dry thoroughly.



Apply **U-POL Greystripe** generously and evenly with stiff brush, always brushing along direction of seam. One coat is adequate for most applications.



Allow time to through-cure (refer to datasheets for guidelines) before over-coating.

SEALANTS



















Products required for performing this process:

Coating Products:

GREY STRIPE Brushable Seam Sealer 1L Tin

TIGER SEAL Polyurethane Adhesive & Sealant (Grey, Black, White) 310ml Cartridge

Other Products:

S2000 Water Based Degreaser 5L Tin

S2001 & S2002 Solvent Based Degreasers (Fast & Slow) 1L, 5L Tin, 500ml Aerosol

Maximum Abrasive Paper Discs P80, 120 grit 100 discs

Maximum Finishing Pads (Red Fine) 10 pads, 35 sheet perforated roll

ONION BOARD Multi Layered Mixing Palette 100 sheets

Applicators for spreading Sealant Single, Set of 3

UNDERBODY STONE CHIP REPAIR Application of tough, durable coating to reproduce manufacturer's original finish







Use **U-POL Clear Masking Film** to protect areas not to be sprayed. Ensure static-cling side of film faces down on vehicle.



Mask off areas surrounding repair surface.



Use lint-free cloth to prepare surface with Water-based S2000 or Solvent-based S2002 Degreaser.



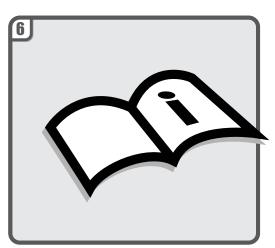
Abrade repair area using sander with **U-POL** P180 grit disc. Repeat step 3.



Thoroughly shake **U-POL Gravi-gard Anti Stone Chip** aerosol for 2mins. Apply 1-2 coats from ca. 30cm away from surface.



Alternatively, apply **U-POL Gravitex Stone Chip Protector** using **U-POL Suction** Shutz Gun.



Prime and paint as required, following application recommendations.

OR

UNDERBODY STONE CHIP REPAIR Application of tough, durable coating to reproduce manufacturer's original finish

















Products required for performing this process:

Stone Chip Repair Products:

GRAVI-GARD Anti Stone Chip Aerosol (Grey, Black) 500ml Aerosol

GRAVITEX HS Stone Chip Protector Coating (Black, Grey, White) 1L Bottle

Other Products:

Shutz Thick Coating Spray Gun

5L Tin S2000 Water Based Degreaser

S2001 & S2002 Solvent Based Degreasers (Fast & Slow) 1L, 5L Tin, 500ml Aerosol

Maximum Abrasive Paper Discs P180 grit 100 discs

Maximum Premium Clear Masking Film (on Dispensing roll) 4x150m, 5x120m

Maximum Safety Cutter for Masking Film 5 pcs.



RAPTOR TRUCK BED LINER





Lightly abrade original manufacturer's finish using sander with U-POL P240 grit disc, or by hand with **U-POL Red Finishing Pad**. Treat any bare metal surface with U-POL ACID#8 Etch Primer.



Clean entire surface with **U-POL Degreaser**. Use **U-POL Clear Masking Film** to protect areas not to be sprayed.



Add U-POL System20 Hardener directly into Raptor bottle up to level A (see product instructions). For tintable version, add basecoat tinter to level B. For option to apply using a HVLP spraygun, add up to 10% U-POL System20 Fast Thinners.



Replace cap and shake vigorously for 2minutes to activate mix. Remove cap and attach U-POL Raptor bottle directly to suction shutz gun.



Apply to truck bed with an even sweeping motion to obtain required texture. Allow 60minute flash off period between coats. Allow to cure according to recommended guidelines.



RAPTOR TRUCK BED LINER



















Products required for performing this process:

Coating Products:

RAPTOR Spray-On Liner (Black, Tintable) 4L Kit (incl. hardener)

Associated Coatings:

S2030 Fast Hardener 250ml, 330ml, 500ml, 1L, 2.5L, 5L Tin

S2031 Extra Fast Hardener 330ml, 500ml, 1L, 2.5L Tin

S2032 Standard Hardener 330ml, 500ml, 1L, 2.5L, 5L Tin

S2033 Slow Hardener 330ml, 500ml, 1L, 2.5L Tin

S2040 Thinners Range (for spraygun application) 1L,5L Tin

Other Products:

5L Tin S2000 Water Based Degreaser

S2001 & S2002 Solvent Based Degreasers (Fast & Slow) 1L, 5L Tin, 500ml Aerosol

Maximum Abrasive Paper Discs P240 grit 100 discs

Shutz Thick Coating Spray Gun

ACID#8 Acid Etch Primer Aerosol 450ml Aerosol

WELD THROUGH CORROSION PROTECTION To achieve rust protection in welding applications

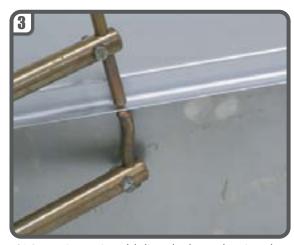




Use lint-free cloth to prepare surface with Water-based S2000 or Solvent-based S2002 Degreaser.



Spray one coat of **U-POL WELD#2 Weld Though** Zinc rich or Copper rich Primer onto all surfaces to be welded and allow to dry.



SPOT, MIG or TIG-weld directly through primed surfaces. Refinish as required.

WELD THROUGH CORROSION PROTECTION To achieve rust protection in welding applications





Products required for performing this process:





Products:

WELD#2 Weld Through Zinc-rich Primer Aerosol 450ml Aerosol

WELD#2 Weld Through Copper-rich Primer Aerosol 450ml Aerosol

S2000 Water Based Degreaser 5L Tin

S2001 & S2002 Solvent Based Degreasers (Fast & Slow) 1L, 5L Tin, 500ml Aerosol





PLASTIC REPAIRS: Fast Plastic Bonding





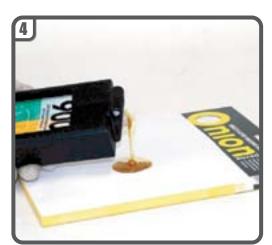
Use lint-free cloth to prepare surface with **Water-based S2000**.



Abrade repair area using sander with **U-POL P80-120 coarse grit disc**. Repeat step 1.



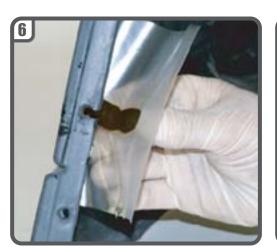
Apply one coat of **U-POL Plast-X Adhesion Promoter PLAS/2** aerosol and allow to dry for 30 minutes.



Open U-POL Stronghold Super-Fast Adhesive SH901 and allow to stand upright for 1 min. Place into Cartridge Gun and equalise content of tube. Refer to U-POL Stronghold Range for adhesive product options.



As adhesive cures in 50seconds, fit mixing nozzle, quickly gun out and discard first 5cm of adhesive on **Onion Mixing Board**.



Apply adhesive on **U-POL Contouring Film** and immediately position on repair.
Leave to harden for minimum 30mins. **Reinforcing Film** can be used for greater strength.



Adhesive can be used for re-attaching lugs on bumpers and headlamps, fixing new bolts which have been torn out or applying block of bonding material for drilling and tapping.

www.u-pol.com

PLASTIC REPAIRS: Fast Plastic Bonding

















Products required for performing this process:

Plastic Adhesion Products:

PLAST-X 2 Adhesion Promoter Aerosol

400ml Aerosol

Adhesive Bonding Products:

STRONGHOLD SH900 Adhesive Range

Other Products:

S2000 Water Based Degreaser

5L Tin

Maximum Abrasive Paper Discs P80, 120 grit

100 discs

ONION BOARD Multi Layered Mixing Palette

100 sheets

High Performance Dual Cartridge Dispensing Gun

50ml, 200ml

Reinforcing Film (for PLAST-X)

1metre

Contouring Film (for PLAST-X)

1metre

Mixing Tips (for PLAST-X and STRONGHOLD)





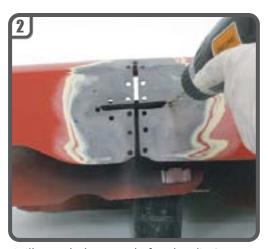


PLASTIC REPAIRS: Repairing A Split

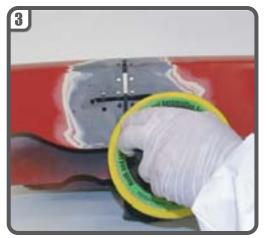




Use lint-free cloth to prepare surface with **Water-based S2000 Degreaser**. Use heat gun to warm plastic and re-shape any damaged areas.



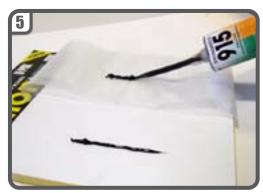
Drill 5mm holes at end of each split. Open entire split to 3mm wide, chamfer edges to 30mm width. Drill 5mm-holes 10mm apart, along both sides of split.



Abrade inside and outside of repair area using **U-POL P80-180 grit disc**. Repeat step 1. Apply one coat of **U-POL Adhesion Promoter PLAS/2** and allow to dry for 30 minutes.



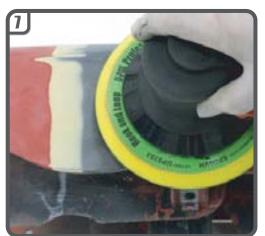
Open **Stronghold SH915 Adhesive** (for all thermo plastics), allow to stand upright for 1min to settle and equalise contents of tube.



Work on sections that can be covered with one hand at a time. Cut a piece **U-POL Reinforcing Film** and **Contouring Film** larger than area required. Attach mixing nozzle, gun out and discard first 5cm of adhesive on **Onion Mixing Board**. Apply to reinforcing film.



Apply coated reinforcing film to underside of repair, quickly push adhesive through splits and holes, place contouring film on the top. Smooth adhesive through film.



Remove contouring film after 10-15minutes. Abrade adhesive with **U-POL P120-240 grit disc**.



For minor imperfections in repair or a scuff: Apply **Adhesion Promoter PLAS/2** and allow to dry. Mix **Plastic Filler PLAS/6** with 2% hardener. Apply and once cured, abrade

PLASTIC REPAIRS: Repairing A Split





Products required for performing this process:



















Specialist Plastic Products:

PLAST-X 2 Adhesion Promoter Aerosol 400ml Aerosol

STRONGHOLD SH915 Flexible TPO Adhesive (50sec) 50, 200ml Cartridge

PLAST-X 6 Smooth High Adhesion Body Filler for Plastics 600ml Tin

Other Products:

S2000 Water Based Degreaser 5L Tin

Maximum Abrasive Paper Discs P80, 120, 150, 180, 240, 320 grit 100 discs

ONION BOARD Multi Layered Mixing Palette 100 sheets

Single, Set of 3 **Applicators for Body Filler**

Reinforcing Film (for PLAST-X) 1metre

Contouring Film (for PLAST-X) 1metre

High Performance Dual Cartridge Dispensing Gun 50ml

Mixing Tips (for PLAST-X)

PLASTIC REPAIRS: Texturing & Painting Reproducing manufacturers original finish on plastic parts







Use lint-free cloth to prepare surface with Plastic Cleaner PLAS/1 or Water-based **S2000 Degreaser** (do not spray directly onto paint).



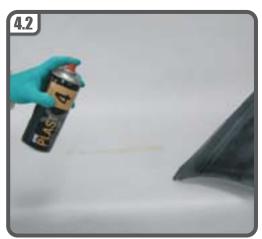
Apply U-POL Adhesion Promoter PLAS/2 and allow to dry.



Spray surface with Grey Primer PLAS/3 or High Build Primer PLAS/3HB. Once cured, flat with U-POL P240-320 grit disc. Repeat step 1.



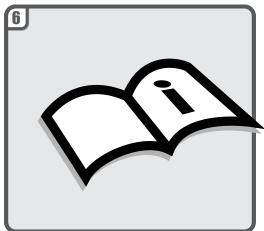
For fine texture coating: Apply Fine Texture PLAS/4F in one or two very light coats.



For coarse texture: Apply Coarse Texture PLAS/4C from distance of about 1meter, single very light even coat.



For the black or grey colours: check against available shades of **U-POL Plastic Bumper Colours PLAS/5**. Spray two or three light coats directly over prepared surface until match is achieved.



For coloured parts skip steps 4 and 5: refinish as paint manufacturer's recommendations.

PLASTIC REPAIRS: Texturing & Painting Reproducing manufacturers original finish on plastic parts





Products required for performing this process:







Specialist Plastic Products:

PLAST-X 1 Plastic Cleaner 400ml Aerosol

PLAST-X 2 Adhesion Promoter Aerosol 400ml Aerosol

PLAST-X 3 Primer Filler for Plastic Components 400ml Aerosol

PLAST-X 3HB High Build Primer Filler for Plastic Components 400ml Aerosol

PLAST-X 4F Fine Texture Coating 400ml Aerosol

PLAST-X 4C Coarse Texture Coating 400ml Aerosol

PLAST-X 5 Plastic Bumper and Trim Colour Coatings 400ml Aerosol

(See attached range leaflet for detail)

Products:

S2000 Water Based Degreaser 5L Tin



Product	Description
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		1100	iuci i	9636	riptic	<u>''' </u>	_			
Make of Car	Model	PLAS/5B (UP0209) BLACK	PLAS/5/BG (UP0219) BASALT GREY	PLAS/5DG (UP0208) DARK GREY	PLAS/5GG (UP0220) GRAPHITE GREY	PLAS/5LG (UP0206) LIGHT GREY	PLAS/5MG (UP0207) MID GREY	PLAS/5SB (UP0222) SIGNAL BLACK	PLAS/5SG (UP0221) SMOKE GREY	PLAS/5TB (UP0223) TRAFFIC BLACK
ALFA ROMEO	All models									
AUDI	A2 A3 A4 A6 A8									
BMW	2 Series 3 Series * 5 Series * 7 Series Mini *									
CITROËN	C5 C3 C2 Xsara Saxo									
FIAT	Punto Stilo Panda Scudo Doblo Mutipla Ducata Bravo * Cinquecento									
FORD	Fiesta * Mondeo * Ka Focus Fusion Escort Maverick									

Product Description										
Make of Car	Model	PLAS/5B (UP0209) BLACK	PLAS/5/BG (UP0219) BASALT GREY	PLAS/5DG (UP0208) DARK GREY	PLAS/5GG (UP0220) GRAPHITE GREY	PLAS/5LG (UP0206) LIGHT GREY	PLAS/5MG (UP0207) MID GREY	PLAS/5SB (UP0222) SIGNAL BLACK	PLAS/5SG (UP0221) SMOKE GREY	PLAS/5TB (UP0223) TRAFFIC BLACK
	CR-V									
HONDA	Civic									
HONDA	Jazz									
	HR-V									
LAND ROVER	All models *									
MERCEDES	A190									
	Almera									
NISSAN	Interstar									
NIOOAN	Micra									
	Primera									
	106									
	205									
	206									
PEUGEOT	306									
LUGLO	405									
	406									
	605									
	807									
	Laguna									
	Clio									
RENAULT	Mégane									
	Espace									
	Trafic									
	Scenic									
ROVER	25					ļ		<u> </u>		
	Corolla									
TOYOTA	Starlet *									
	Avensis									
	Rav 4 *									
	Corsa									
VALIVITALI	Vectra *									
VAUXHALL OPEL	Astra *									
OPEL	Zafira					 				
	Meriva									
	Agila									
	V40 *									
	XC90 *					 				
VOLVO	S60					-				
	S80					-				
	740									

VW

V70 Golf * Polo *

Sharan Passat * Touran

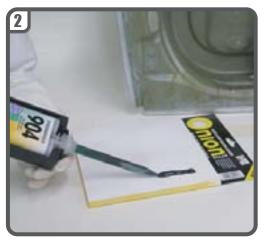
^{*} The choice of bumper colour may vary depending on the year of manufacture of the vehicle.



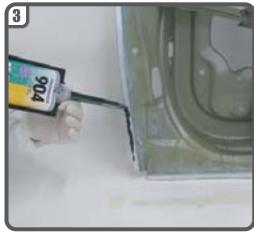
Use lint-free cloth to prepare surface with **S2000 Water-based Degreaser**. Abrade panel edges using sander with **U-POL** P80-120 coarse grit disc. For plastics, apply single coat of Adhesion Promoter PLAS/2 and allow to dry for 30 minutes.



Position new panel carefully and clamp gently and evenly into place.



Use **U-POL Stronghold** bonding compounds SH902 (5 mins) or SH904 (45 mins); depending on working time required. Remove tip, allow to stand upright for 1min then equalise the two sections. Attach mixing tube, dispense and discard one trigger full onto a **U-POL Onion Board**.



Apply bead of bonding material to both surfaces to be bonded.



Spread evenly over edges of contact and apply second bead ca.5mm thick over prepared surface.

A. For Metal door skins:

Fold door skin edges over door frame flange, remove excess adhesive with lint-free cloth and leave to dry. Metal finish panel, prepare and paint to match car.

B. For Stylizing kits:

Remove excess bonding material, sand down edges and fill as required (See U-POL Filler Repair Process: Top Filling).

C. For Plastic door skins and Roof panels:

Remove excess bonding material, seal edges where necessary with a Seam Sealer.

PANEL & BODY KIT BONDING Bonding door skins, stylizing kits, roof panels















Products required for performing this process:

Bonding Products:

STRONGHOLD SH901 Semi-Rigid Adhesive (90sec) 50ml, 200ml Cartridge

STRONGHOLD SH902 Semi-Rigid Adhesive (5minutes) 50ml, 200ml Cartridge

STRONGHOLD SH904 Semi-Rigid Adhesive (45minutes) 200ml Cartridge

(See attached instructions leaflet for further detail)

Other Products:

PLAST-X 2 Adhesion Promoter Aerosol 400ml Aerosol

S2000 Water Based Degreaser 5L Tin

Maximum Abrasive Paper Discs P80, 120 grit 100 discs

ONION BOARD Multi Layered Mixing Palette 100 sheets

High Performance Dual Cartridge Dispensing Gun 50ml, 200ml

Applicators for spreading Adhesive Single, Set of 3





All STRONGHOLD™ Adhesives are easy to apply, have excellent gap-filling properties, are non-shrinking, can be sanded easily and are over-paintable.

Curing is rapid and once achieved, STRONGHOLD™ Adhesives provide a bond that has both excellent strength and durability.

۷DH	ECIV	/EC 4.	Applications T									Tech	Technical Data		
AUN		Order Lode	or metal, plastics & wood Product Description	Ferrous Metals and Aluminium	Zinc and Galvanised Metal	GRP/SMC/Thermoset Composites	Rigid Thermoplastics	Flexible Thermoplastics	Polyamides/Polstyrene Foams/PU Foams	Rubbers	Wood	Work Time Open Time	De-Clamping sanding and over painting Time	Optimum Cure Time	
<u>.</u>	901	SH9011 (50ml) SH9012 (200ml)	90 sec black adhesive for rapid repair & assembly operations. Brackets, lugs, clips, fixings, trim and emblems. Rapid repair of rigid plastic and composite sections.	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$		×	X	X	\checkmark	90 Sec	10 Min	1 hr	
Semi-Rigid	902	SH9021 (50ML) SH9022 (200ml)	5 min black adhesive for structural repair & assembly/full bodied seamsealer. Splits, cracks and general repair of rigid substrates. Used to reproduce OE seam sealer.	P	$\sqrt{}$	$\sqrt{}$	/	X	X	X	\checkmark	5 Min	20 Min	4 hr	
Se	904	SH9042 (200ml)	45 min black adhesive for doorskin, metal, aluminium, SMC & fibre glass. Door skins, body kits, small panel and sectional replacements.	1,8 8 %	$\sqrt{}$	$\sqrt{}$		X	X	X	$\sqrt{}$	45 Min	3 hr	24 hr	
Po	915	SH9151 (50ml) SH9152	50 sec black TPO plastic repair adhesive for rapid repair & bonding of thermoplastic olefins. Suitable for difficult to repair TPO plastics such as PP, PPEPDM, EPDM.	X	X	X	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	50 Sec	10 Min	1 hr	

HOW TO USE THIS CHART

Step 1 - Substrate.

Once you have identified the substrate(s) you wish to bond or repair, use the chart to choose a suitable group of adhesives e.g. for metals, composites and rigid thermoplastics use the semi-rigid group of adhesives.

Step 2 - Work time / Open time.

Using the chart, choose an adhesive with a suitable work time/open time to carry out the repair or bonding operation.

Work time/open time refers to the maximum amount of time in which the mixed adhesive remains in a workable state prior to setting.

 $Case\ Quantities:\ 200ml\ (6\ cartridges/carton)$

50ml~(5~cartridges/carton)

ANCILLARIES		der de	Product Description					
Filler	706	SH706/1 (600ml)	High density plastic filler for the repair of scratches and dents to most plastic substrates.					
8	PLAS/TIP	PLASTIP	Small tip. Precise static mixer for use with all Stronghold 50ml cartridges.					
Ë	TIP M	SHTIPM	Medium tip. Precise static mixer for use with all Stronghold 200ml adhesives.					
2	PLAS/GUN	PLAS/GUN	Dispensing gun for all Stronghold 50ml cartridges.					
3	GUN	SHGUN	Dispensing gun for all Stronghold 200ml cartridges.					
SE SE	CF	PLASCFLM (1m)	Contouring film. To aid the shaping and contouring of plastic repair adhesives.					
Ē	RF	PLASRFLM (1m)	Reinforcing film. To reinforce and support repairs to plastic and composite substrates.					

SMART REPAIRS Achieving top quality refinish via convenient and economical use of products







Use lint-free cloth to prepare surface with Water-based S2000 or Solvent-based S2002 **Degreaser**. Abrade repair area with sander with U-POL P240 grit disc.



If required, apply **U-POL Topstop Gold Bodyfiller** or similar fine finishing filler (see U-POL Filler Repair Process: Top Filling). Repeat step 1.



Apply U-POL HIGH#5 High Build Primer (beige, grey, dark grey or white). For difficult areas to abrade, apply 2 light coats of U-POL GRIP#4 Adhesion Promoter prior to priming.



Flat down primer with fine grit P500 paper. If any bare metal is exposed, apply very light coat U-POL ACID#8 Etch Primer.



Mix and fill basecoat colour into **U-POL** Custom Can aerosol (see U-POL process: Paint Aerosol Filling), apply basecoat as per manufacturer's recommendations.



Apply two or three light coats of **U-POL CLEAR#1UV Clear Coat.**



Blend any dry edges by lightly applying U-POL Fade Out Spray S2043/AL. Polish repaired panel to gloss finish (see U-POL Compounding & Polishing repair process).

SMART REPAIRS Achieving top quality refinish via convenient and economical use of products





















Products required for performing this process:

Fillers:

TOP STOP GOLD Extra Smooth Easy Sand Finishing Stopper 1.1L Tin, 1.3L Dispenser, 1L Bag

(see "FILLER REPAIR: Top Filling /Finishing Filler" for other fillers that can be used for this step)

Aerosols:

HIGH#5 High Build Primer Aerosol (Grey, Beige, White, Dark Grey) 450ml Aerosol **GRIP#4 Universal Adhesion Promoter Aerosol** 450ml Aerosol ACID#8 Acid Etch Primer Aerosol 450ml Aerosol **CCUP Custom Can Aerosol** 400ml Aerosol **CCWP Custom Can Waterbased Areosol** 400ml Aerosol CLEAR#1 High Gloss Clear Coat Aerosol 450ml Aerosol S2043 Fade Out Thinner Aerosol 450ml Aerosol

Other Products:

Maximum Abrasive Paper Discs P240, 500 grit 100 discs S2000 Water Based Degreaser 5L Tin

S2001 & S2002 Solvent Based Degreasers (Fast & Slow) 1L, 5L Tin, 500ml Aerosol

Applicators for Body Filler Single, Set of 3

PAINT AEROSOL FILLING



Remove lid and nozzle from U-POL Custom Can aerosol. Attach U-POL Custom Can Filling Cup.



Mix paint to manufacturer's recommendations, Place mounted cup and aerosol into **U-POL** pour basecoat through **U-POL Strainer** mesh (size 125µm) directly into Custom Can cup.



Custom Can Filling Machine, securing with spring clamp.



Close and lock door. Push green button to activate fill cycle.



Open door, remove mounted cup with aerosol and detach cup from aerosol.



Replace aerosol nozzle and lid. Label contents of aerosol with a permanent marker pen. To flush out nozzle, turn aerosol upside down and apply short spray.



To apply, shake vigorously for 2minutes and spray as per manufacturer's recommendations.



Clean piston tip and cup with **U-POL Degreaser.**

PAINT AEROSOL FILLING









Products required for performing this process:

Products:

Custom Can Professional Pneumatic Machine

CCUP Custom Can Aerosol

CCWP Custom Can Waterbased Areosol

Maximum Paint Strainers (Super Fine 125microns)

S2000 Water Based Degreaser

S2001 & S2002 Solvent Based Degreasers (Fast & Slow)

400ml Aerosol

400ml Aerosol

250 strainers, 1000 strainers

5L Tin

1L, 5L Tin, 500ml Aerosol







HEALTH & SAFETY: Best Practice



Full body protection with **U-POL Painters Overalls**.



Hand and finger protection with gloves.



Eye protection with safety goggles.



Lung protection with **U-POL Particulate Respirators** (when sanding and spraying aerosols).



Lung and respiratory tract protection with full-face and eye air-fed respirator (when spraying isocyanates).



Ear protection with ear defenders/earplugs (when using noisy vibrating machinery and spraying).

HEALTH & SAFETY: Best Practice





Products required for performing this process:



Products:

Maximum Painters Overalls

M, L, XL, XXL, XXXL sizes

10 pcs.