Painting methods

The painting system basic stucture. Partial painting or total painting

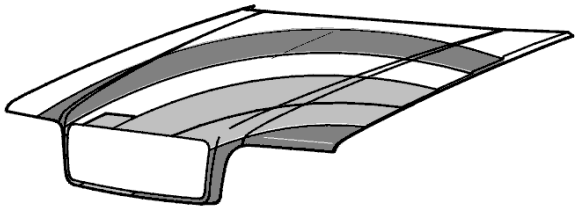
A distinction is drawn between partial and total painting in the repair instructions below.
Partial painting respectively **total painting** occur after the same repair procedures, the only difference in procedure is in the size of the surface to be painted.
There are different methods depending on the suppliers different systems. Always follow the manufacturers recommendations and never mix the different systems.
A painting system in this form gives a durable end result and a good finish. Work should be carried out in the order prescribed and none of the stages may be left out.
The description below follows the recommended Volvo method.

- First carry out any pre-treatment according to the instructions Preparation .
- If necessary then base fill according to the instructions Base filling .
  The need for base filling must be judged in every situation.
- After base filling apply an etching primer according to the instructions Primer .
- Then spray filler according to instructions Filler .
- The color coat is applied after filler. Method for applying the color coat depends on the sort of paint to be used.
  Solid color is applied according to instruction Color coat .
  Metallic paint is applied according to instruction Color coat .
  3–Coat Pearl is applied according to instruction Color coat .
- After the color coat finishing is carried out according to instruction Finishing .

Note! Special methods for

- **reinforced wear guard on the door sill, see Painting the door sill .**
- **painting plastic, see Plastic components spraying .**

Original paint (see illustration) is applied this way in the factory. For the best finish, highest quality and good durability
The fields in the illustration display the paint build up from the bottom up:



- Body
- Phosphate coating
- Etching primer
- Filler
- Base solid or base metallic
- Varnish

Preparation

Preparation

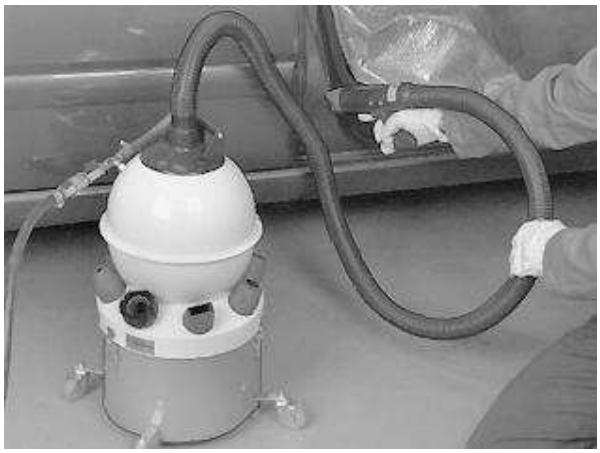
Clean and degrease the surface.
Carefully remove all dirt, wax, fingerprints, sanding residue etc.
Silicon is removed with thinners or with silicon removal agent suitable for steelplate, galvanized plate or aluminum.

Note! If the panel is not cleaned before priming blistering and rust can develop.

Sand the damaged area to bare metal

Use a low speed rotating grinder and dry sand paper P 80–120.

Sand blast any rust

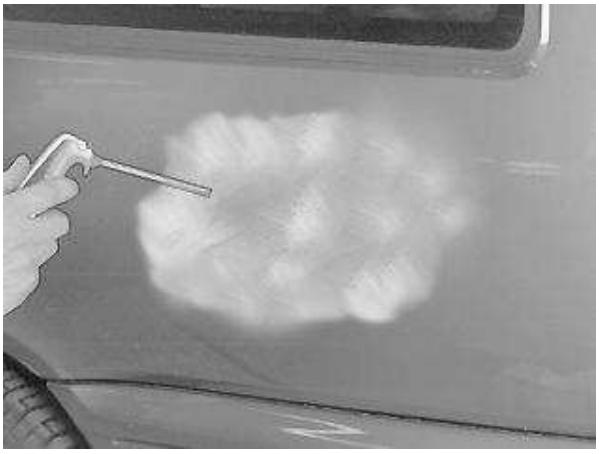


Use sand blasting equipment to remove rust, particularly in pitting. For further descriptions of sand blasting and sand blasting equipment see Blasting .

Sand the surrounding area to matt

Sand old paint with P 320–400 sandpaper. Sand down paint edges so that there is a smooth transition from the metal plate to the paint surrounding it.

Blow clean surface



Blowover the whole car with dry, clean compressed air (even for smaller repairs) to remove any excess sanding dust, particles and water.

Mask the surface

Mask around the area that is to be painted. For further description of masking see Masking .

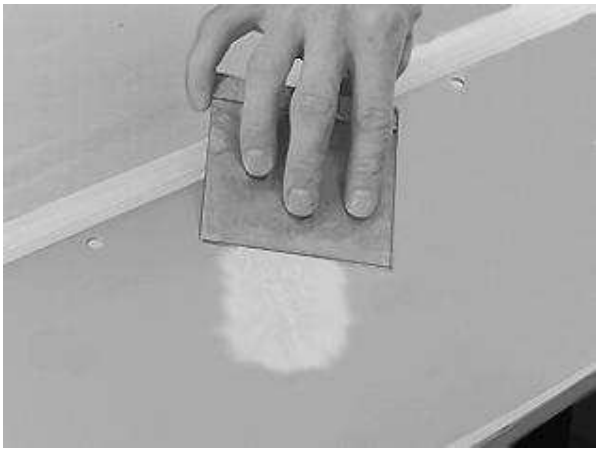
Dry the surface

Dry off and wash the surface with cleaning agent. Dust and sanding residue should be removed and the surface dry before painting begins.

Note! Do not use drying cloths containing fluff or nylon.

Do not touch sanded and degreased areas. Even hand sweat contains salt which can cause blistering in the finished product.

Base filling

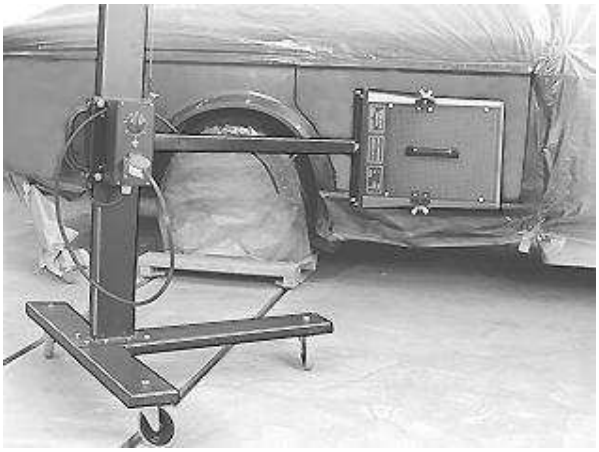


Coarse filling

Filler intended for (galvanized panels) larger unevenness **mixed thoroughly** with the hardener included. See the text on the pot. Do not fill deeper than 1 mm.
Incorrect hardener or incorrect quantity of hardener can lead to blotches in the paint.

Fine filler

Filler intended for smaller unevenness **mixed thoroughly** with the hardener included. See the text on the pot.
For specific filling data see Usage data for painting materials .



Allow filler to dry

The data given below is approximate and can vary between manufacturers. Therefore always follow the manufacturers recommendation.
Drying time 20–30 minutes at room temperature (20°C (68°F)).
Filler can be force dried as follows:

Surface temperature	70-80°C (158-176°F)
Lamp distance from target	minimum 30 cm
Duration	10 minutes

Note! There is always a risk of cracking when force drying polyester products.

Sand the filler

Sand filler with dry sandpaper P180 and an oscillating grinder.

Note! Do not sand with coarser paper than P 80.
Do not wet sand.

Primer

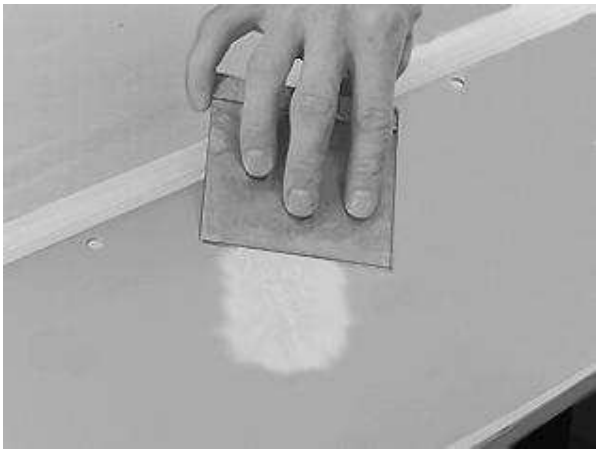
Priming untreated panel surfaces

An etching primer should be used as a primer.

Note! Etching primer should be applied to bare panel surfaces. The primer should be sprayed as one coat.

Allow the primer coat to air dry (approximately 20–30 minutes, 20°C (68°F)). Spray filler should not be directly applied to etching primer.

Adjust fill smaller unevenness



Fill any minor pitting (if visible after priming) with fine filler.
Apply the filler in thin layers a maximum of 3 times per hour.
Allow the filler to dry and sand with P 320 sanding paper.
Apply primer.

Note! Polythene filler cannot be applied to etching primer.

Wet sand

Wet sand the primed surface with P 600 sandpaper.

Filler

General on Filler

Filler gives a solid base, anti-corrosion protection and finish.
Filler of the “non-sanding” material (where the cover coat is sprayed “wet on wet” on the filler without sanding) can be used on **well** primed areas for a good base and faster paintwork repairs. For specific paint data see Usage data for painting materials .

Cleaning

Clean the surface thoroughly before applying filler.

Alt 1: Filler

Spray on the filler.

Sand the filler to matt

Wet sand with P 800 sandpaper. Avoid sanding through.

Wash the surface

Wash the surface thoroughly with cleaning agent.

Blow dry

Blow dry with compressed air and dry off the surface.
Use a Tac-rag (adhesive rag to trap loose particles).

Alt 2: Painting with “nonsanding-paint”

Spray on the “nonsanding-paint”.
At least 30–40 µm.

Air

Air for 15–20 minutes at room temperature (20°C (68°F))

Filler wet on wet

Note! Sanding is not required for "nonsanding paint" but if not painted over within 24 hours the paint must be sanded for maximum adhesion to be achieved.

Smooth any unevenness (applies to alternatives 1 and 2)

Smooth any unevenness before beginning painting.
Wetsand any faults and unevenness with P 800 sandpaper.
in those cases where this is not sufficient fill and touch up according to earlier instructions.

Note! "Nonsanding paint" must dry before it can be worked on.

Drying time/surface temperature
20 hours/20°C (68°F)
60 minutes/60°C (140°F)

Color coat

Solid color

General of solid color

Two part paint (without varnish)

Two part paint should be used when repairing solid colors, because it gives a high finish and good outdoor durability.
For specific working data for two part paint see Usage data for painting materials .
Solid color paint must be applied in **several coats**.

Base solid + varnish

If the color codes 5th digit is a 3, 4, 6 or 7 primer + varnish should be used.
The procedure is the same as for metallic, see Metallic .

Spray the 1st coat

Spray the first coat to cover the surface well with a good flow.
Always spray at right angles to the surface and start at the edges.

Wait at least 3 minutes

Wait at 3 minutes for necessary "Flash-off".

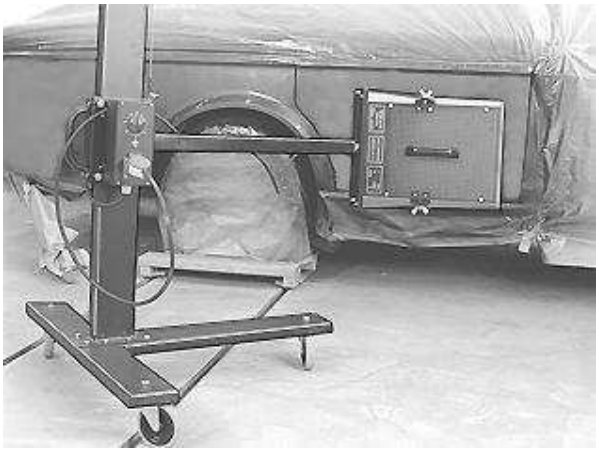
Spray 2nd and 3rd coat

spray second and third coat with a good flow.
The color coat should reach a thickness of 35–40 µm (corresponding to 3 spray strokes).

Allow the color coat to dry

Drying time/surface temperature
8 hours/20°C (68°F)
60 minutes/60°C (140°F)

Drying with a heat lamp or hot-air gun



Applies especially to smaller repairs.

Surface temperature
Lamp distance from target
Duration

Allow the car to stand at room temperature (20°C (68°F)) for at least 12 hours after painting.

Base solid + varnish

A car painted with base solid and varnish should **always** be repainted with the same type of paint.
This is so that no color and depth of shine differences occur later.
Solid paint without varnish should be repainted without varnish.
Volvos base solid paint + varnish is the two coat type. It consists of a base-solid paint underneath and a two part varnish on top. This system gives good finish and color durability.
Working data for base solid paint is provided by each supplier.

Stir base-solid paint

Stir base-solid paint thoroughly at start.
This is important to reduce risk of color deviation.

Dilute base-solid paint

Dilute base-solid to the correct spraying viscosity.
Use the prescribed thinner. Other thinners can cause

patches.

Note! When repainting base-solid paints always paint a test panel to check the color.

Spray viscosity is usually measured according to SIS cup 4 mm/20°C (68°F).

Adjust the paint sprayer

Correct adjustment of the paint sprayer is important when painting with base solid paints.
Use nozzle 1.3–1.5 and spray pressure of 300–500 kPa (43-73 psi)).
The wrong nozzle combination can make it impossible to achieve the correct color tone.
Bad dispersion because of the incorrect nozzle leads to large drops and too “wet” (dark) spraying.
Too thick a coat leads to patchiness.

Metallic

General about metallic

It is always difficult getting a good color match when repainting metallic colors. In general it is easier to obtain matches with dark colors than with light colors.
Color match is most affected by how the base metal paint is applied, that is the spray technique used. This affects the coat thickness and flow.
The drying time between the coats also has importance color match.
An incorrect color can, therefore, be obtained despite careful preparations. This usually results in too dark or too light a coat.
(Dark) patchy coat (so called “wet coat”) is due to too little aluminum in the surface. This is adjusted with a “drier” second coat.
Light coat (so called“dry coat”) is due to too much aluminum in the surface and gives a gray tone to the surface. This is adjusted with a “wetter” second coat.
“Wet spraying” is obtained when:

- color flow is increased
- air supply is reduced
- spraying distance is reduced
- the second coat is applied thicker

Corrective action to obtain a “dry spraying” are the opposite of “wet spraying”. When there are difficulties in achieving a drier spray it may be necessary to lower the spray viscosity of the base metallic paint for a few seconds. Occasionally “faster” thinning is necessary.
Volvos metallic paint is a two coat type. It consists of a base metallic coat underneath with a two part varnish on top. This system gives good finish and color durability.
For specific working data see Usage data for painting materials .

Stir base metallic paint

Stir base metallic paint thoroughly before use.
This is important to reduce risk of color deviation.

Dilute the base metallic paint

Dilute the base metallic paint to the correct spray viscosity.
Use the prescribed thinner. Other thinners can cause patches.

Note! When repainting metallic paints always spray a test plate to check color.

Spray viscosity 16–18 seconds SIS cup 4 mm/20°C (68° F).

Adjust the paint sprayer

Correct adjustment of the paint sprayer is important for painting with metallic paints.
Use nozzle 1.3–1.5 and spray pressure of 300–500 kPa (43-73 psi).
The wrong nozzle combination can make it impossible to achieve the correct color tone.
Bad dispersion because of the incorrect nozzle leads to large drops and too “wet” (dark) spraying.
Too thick a coat leads to patchiness.

Spray base metallic paint 1st coat

Spray base metallic paint first layer with normal flow.

Allow base metallic paint dry

Allow base metallic paint dry to a matt surface.

Note! Risk of patches if the drying time is too short.

Spray base metallic paint 2nd coat

Spray base metallic paint second coat with reduced flow (dry).
Increase spray stand. Base metallic coat should achieve 10–20 µm coat thickness after the second coat was applied. (If the second coat is sprayed with greater flow the shade will be more strongly colored than if a thin coat was sprayed.)

Allow base metallic paint air dry

Allow the base metallic to air dry (airing) for approximately 15 minutes until a matt surface is obtained.

Note! If the base metallic paint is not completely dry when the varnish is applied there is a risk that paint will be patchy.

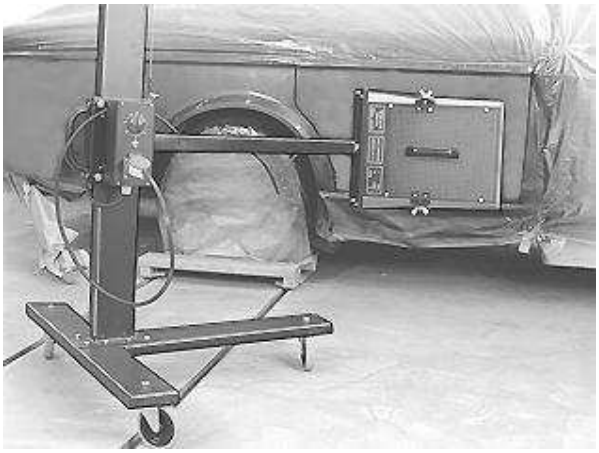
Spray varnish

Spray on varnish (two part) with good flow in two coats.
Wait 3–4 minutes between every coat.
Coat thickness 40–45 µm.

Allow the varnish to dry

Drying time/surface temperature:
12 hours/20°C (68°F)

Drying varnish with heat lamp or hot air gun



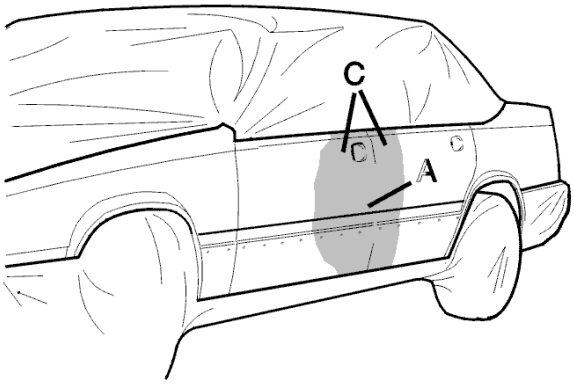
3–Coat Pearl

General about 3-Coat Pearl

Volvo 3-Coat Pearl is a 3–coat finish consisting of the following components:

- Solid one component air drying paint
- Pearl paint
- Two part varnish

In addition a colorless primer is used at the same time as pearl paint to obtain flow of pearl coat.
It is recommended that a separate test plate is painted according to instructions to ensure a full color match.
The painted test plate is compared with the existing undamaged paint on the card.



Spraying the damaged area with basecoat

The entire damaged area (A) is sprayed with basecoat. A small area (C), about 10 cm surrounding the damaged area, is also sprayed to obtain a good color match.

Note! When applying a pearlshine finish it is important that the basecoat is perfect. Small shifts in the shade of the basecoat will be amplified by the pearlshine topcoat.

Air

Air for approximately 15 minutes in room temperature (20°C (68°F)).

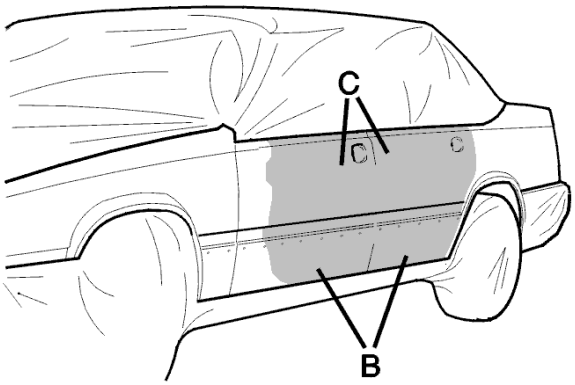
Dry the surface

Dry the surface with a “Tac-rag” (adhesive rag to capture loose particles).

Preparing spray painting equipment

Mix the pearlshine topcoat according to the manufacturer's instructions and pour into a spray gun. Fill another spray gun with colorless primer.
Both paint sprays will be used at the same time and are available in the spray box.

Spraying with pearl paint and one part varnish



Only spray one part varnish on the surrounding area (B). Directly afterwards spray pearl in approximately 2 spray coats. The number of spray coats depends on the result of the test painting.
The first coat is sprayed on a smaller area (C), approximately 10 cm around the damaged area. The following coat is sprayed on the surrounding area (B). Each coat increases the sprayed area around the damaged area a little.

Air between coats

Air at room temperature (20°C (68°F)) for approximately 15 minutes between coats.
Onlyspray a thin coat of one part varnish on the surrounding area, to retain the flow of the pearl coat.
If necessary spray a pearl coat on a smaller area (C), approximately 10 cm around the damaged area and on the surrounding surfaces (B), directly afterwards. Color powder from the pearl paint is absorbed by the one part varnish coat.
Air for approximately 30 minutes at room temperature (20°C (68°F)) before final spraying with two part varnish.

Paint with two part varnish

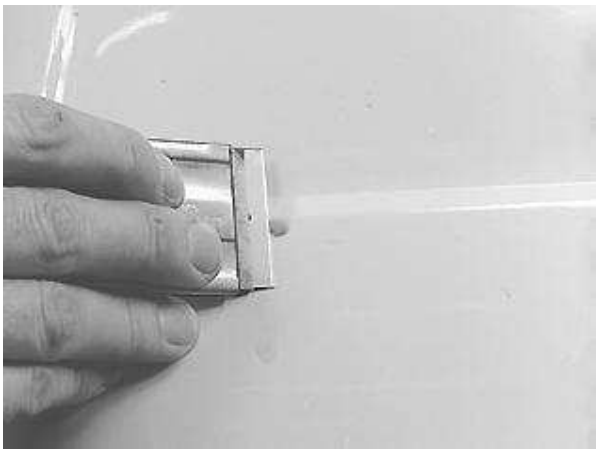
Paint the damaged area and the surrounding area with two part varnish.

Finishing

General about finishing

Polishing can in many cases avoid the need to repaint. As a rule small faults like scratches, dirt, spray mist etc can corrected by machine polishing.

Remove any surface defects



Remove any runs with a razor blade.
Wet sand. Start with P 1200 sandpaper and finish with P 1600 sandpaper.
Remove sanding residue with a clean cloth.

Large stresses

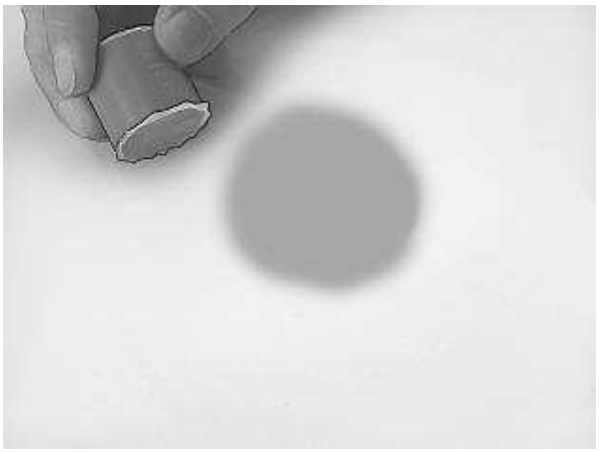
For example rapid washing or strong polishing agents can cause paintwork damage during the paint post-curing period.

Note! Be careful when filling with gasoline. Gasoline can cause permanent damage to newly painted areas, even ruin them.

Rust-proof sensitive areas according to Volvos instructions. See Service Manual Section 8 (81, 84).

Polishing with 3M:s MICRO FINISH FILM

Wet sand the surface

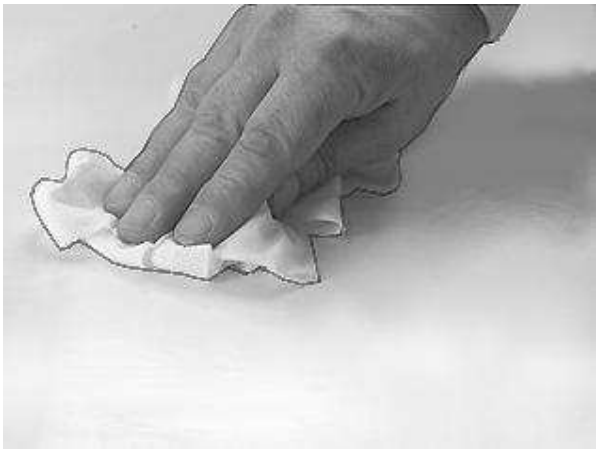


Wetsand the surface with Finesse hand pad 13441.
Remove sanding residue with a clean cloth.

Machine polish the surface

Spread 3M Finess-It 9631 over the surface thinly.
Polish the surface with an oscillating machine for 12–15 seconds, though not more than 15 because the “pad” gets too hot. Finish polishing with lighter strokes.

Hand polish the surface



Apply 3M Perfect-It (3M 05996 for dark paints).
Hand polish to a deep shine. Use a clean cloth.
Wipe off polish residue with a dry chamois leather.

Check result

The result is best checked in sunlight or in a dark environment with a single light.

Painting the door sill

General about spraying the door sill

Cars without plastic sill protection have an extra coat of polyester wear protection on the sills.
When replacing the door sill or when sanding through to bare metal paint should be built up as follows.

Prime

Use sanding filler (two part). Alternatively and etching priming filler can be used.

Note! Etching primimg filler should only be used on bare metal surfaces. When used it should be sprayed in a thin coat over the panel surface. This coat is then sprayed with sanding filler according to the above.

In total the primer coat should be 35 µm thick on all surfaces (2–3 spray strokes).

Apply the stone-chip protection

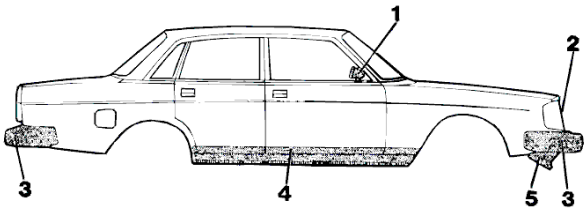
Use sprayable stone-chip protection.
Spray a thick even coat.

The coat can be painted over in the color of the car.

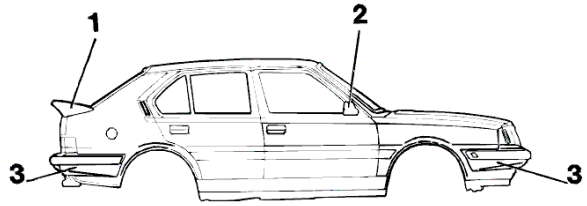
Plastic components

Exterior plastic components 200, 300, 400, 700, 800, 900, S40, V40, S70, V70, C70, S90, V90

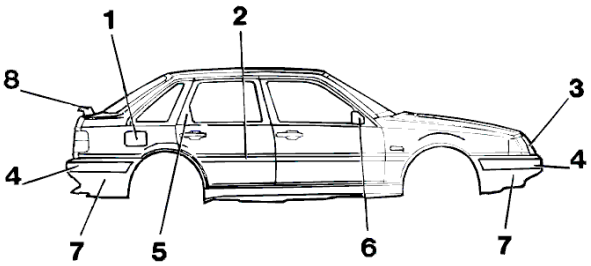
The following is a list of exterior plastic components on each car. The abbreviations in the right column indicate what material the component is made of.



200	Plastic material	
Bumper (3)	PP/EPDM	modified polypropylene
Spoiler (5)	PP/EPDM	modified polypropylene
Door mirror (1)	modified PPO	polyphenyloxide
Door trim (4)	PVC	polyvinylchloride
Grill (2)	ABS	acrylonitrile butadene/styrene copolymer

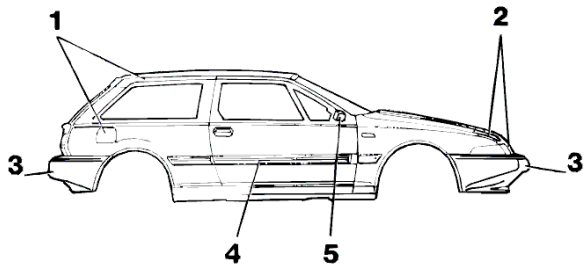


300	Plastic material	
Spoiler (1)	PU	polyurethane
Door mirror (2)	ABS	acrylonitrile butadene/styrene
Bumper (3)	PP/EPDM	polypropylene/cop

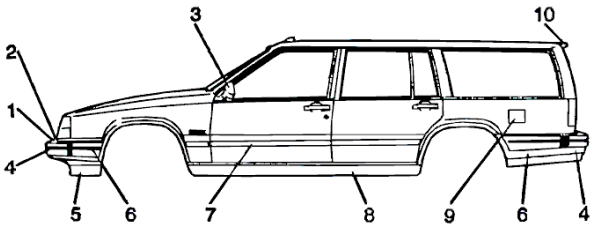


400/460	Plastic material	
Fuel tank filler cap (1)	PA6	polyamide 6
Trim molding (2)	PVC	polyvinylchloride
Trim under headlamp (3)	PA6	polyamide 6
Bumper (4)	PP/EPDM	polypropylene/cop
Door trim (5)	fiberglass reinforced PVC	
Door mirror (6)	ABS	acrylonitrile butadene/styrene
Spoiler (7)	ABS	acrylonitrile butadene/styrene
Spoiler (8)	PU	polyurethane foam

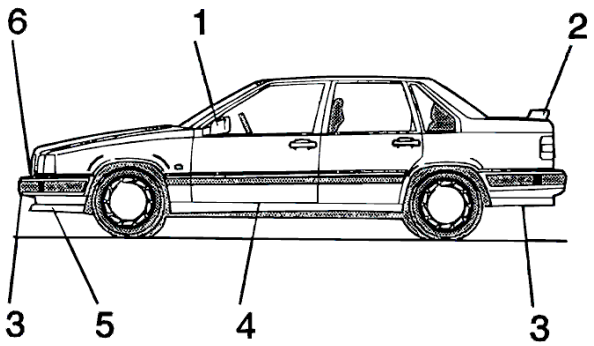
480	Plastic material	
Fuel tank filler cap/roof trim (1)	SMC	sheet
Hood/front/head-lamp cover (2)	SMC	molding compound
Bumper (3)	PU	polyurethane
Trim molding (4)	PP/EPDM	polypropylene/cop



Door mirror (5)	ABS/PPO	modified acrylonitrile butadene/styrene copolymer

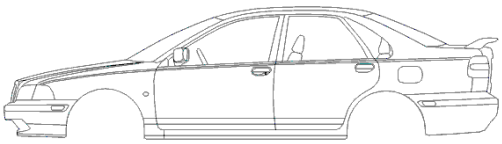


700/900/S90/V90	Plastic material	
Bumper lower section (4)	PP/EPDM	modified polypropylene
Bumper upper section (2)	PP/EPDM	modified polypropylene
Side piece (6)	PP/EPDM	modified polypropylene
Spoiler (5)	PP/EPDM	modified polypropylene
Door mirror (3)	PPO/SB	polyphenyloxide
Fuel tank filler cover (9)	PBT	polyamide
	P/PE	polyester (740 from 1990 model year)
Trim under headlamp (1)	ABS	acrylonitrile butadene/styrene copolymer
Trim molding (7)	PUR	
Door handle 4/5 doors	PA	(fiberglass reinforced)
Tailgate spoiler (10)	PUR	
Door sill (8)	PP/EPDM	modified polypropylene (740 and 760 up to and including 1987 model year)
		modified PA (760 from 1988 model year)



800/S70/V70/C70	Plastic material	
Door mirror (1)	Modified PPO (Noryl PX 1112)	polyphenyloxide
Spoiler (2)	modified PPO (Noryl BN 13)	polyphenyloxide
Bumper (3)	PP/EPDM (approximately 30% rubber)	modified polypropene
Door sill (4)	PC/PBT (Xenoy CL 101)	modified polypropene
Spoiler (5)	PP/EPDM	modified

	(approximately 30% rubber)	polypropene
Trim under headlamp (6)	PA/PPO	Polyamide/polyphe



S40/V40	Plastic material	
Spoiler front/rear	ABS	acrylonitrile butadene/styrene
Door mirror	ABS + per Fehr 97 ASA	acrylonitrile butadene/styrene
Trunk lid handle	ABS	acrylonitrile butadene/styrene
Bumpers	PP/EPDM	modified polypropene

Plastic components spraying

Clean and degrease the surface

Heat the plastic before clean.
Clean the surface with cleaning agent according to instructions from relevant suppliers.

Sand surface

Sand the surface with P 600 sandpaper.

Blow clean surface

Blow clean and clean the surface with cleaning agent

Prime

Prime unpainted and surfaces sanded bare with adhesive primer.
Coat thickness 5–10 µm (one spray stroke).
For specific paint data see Usage data for painting materials .

Apply the color coat

Solid color

Mix the solid paint according to specifications.
Spray according to instruction for painting with solid color see Color coat .

Metallic

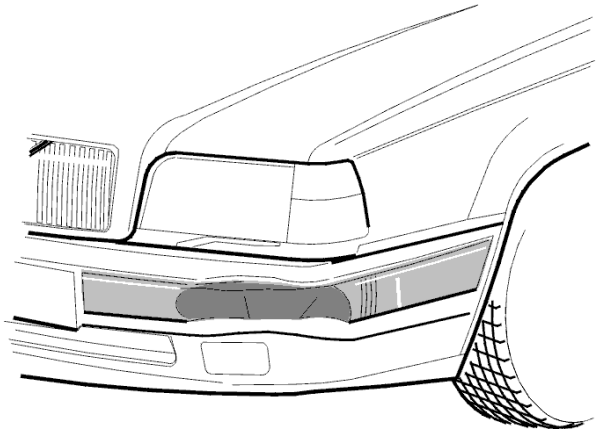
Spray base metallic paint according to instructions for painting with metallic paint see Color coat .
Use two part varnish according to specifications.
Spray base metallic paint according to instructions for painting with metallic paint.

Plastic repairs with epoxy (3M)

General about plastic repairs with epoxy (3M)

Carry out plastic repairs in the paint shop where the ventilation is good.
Carry out a sanding test with a machine to find out which are hard and which are soft plastics.
System I the plastic softens or becomes sticky (soft plastic).
System II the plastic gives off dust (hard plastic).

System I



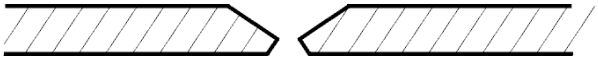
always start by heating the plastic to at least 40°C (104°F) to remove chemical substances which otherwise affect the end result.
If necessary align the damage first.

Clean the surface

Clean the surface with soap and water. Dry or blow dry. Then clean with 3M 8884 E adhesive remover to remove grease, oil, tar, silicon etc.

Note! Isopropylalcohol or similar is used for ABS plastics.

Sand surface

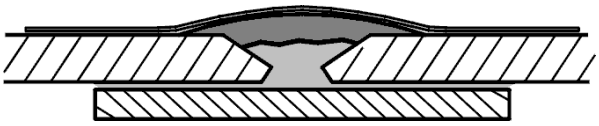


Sand the surface on the front and reverse so that the bodywork will adhere. If the damage has gone through bevel the edges to V shape
Scratches are only filled.

Blow clean and dry off the surface

Blow clean and dry off the surface.
Then spray a thin coat of 3M 5907 PAP and allow to dry.
If necessary secure the damaged area using a soldering iron or bonding adhesive.

Tape the damage



Tape the front side of the damage with 3M 6945 masking tape
Use 3M 5900 or 3M 5895 Flexibel Part Repair Material.
Mix parts A and B equally, to an even color.
Application should be carried out within 5–6 minutes.
Alternatively the reinforcement material of fiberglass weave, aluminum or plastic can be used. If plastic is used the plastic should be the same type as the damaged material.

Fix the damaged area

Wet the surface with a thin layer of 3M 5900 using a putty knife. If the damage has gone through the bodywork plastic should be pressed against the masking tape.
if necessary reinforce by laying 2 to 4 layers of fiberglass weave (close knit) crosswise
Allow to cure for 20–30 minutes at room temperature (20°C (68°F)).
After curing remove masking tape on the front.

Fine sand the area

Sand the area with P180 sandpaper.
If there are pores or sanding scratches first spray a thin layer of 3M 5907 PAP and allow to dry.
Then fill with a thin layer of 3M 5903.
Fine sand with P 600 sandpaper.
Spray a thin layer of 3M 5907 PAP and allow to dry.
Then spray a mist coat and two spray coats of 3M 5906 Flexibel Parts Coating over the repair area and the surrounding area.
Allow to dry approximately 30 minutes.
If necessary sand lightly with Scotch-Brite finark gray 7448 or 3M 622 Frecut P500.

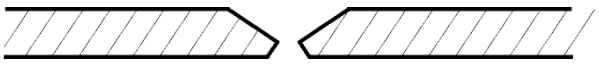
Plastic repairs with Teroson

Clean plastic component

Clean plastic component thoroughly with soap and water. Dry it.
If necessary align the component to the original (tension free) shape using hot air.
Note the risk of overheating.

Clean the damaged area

Clean the damaged area on both in- and outsides with Cleaner FL.
Air 15–20 minutes.



Sand the damaged area

Sand damaged area to a wedge shape (1–2 cm). Use sandpaper P120.
If the damage is a crack, drill a hole (approximately 2 mm in diameter) at the end of the crack. Widen the damaged

area mechanical (to approximately 1–2 mm) and then sand.
Roughen the damaged on both sides for better adhesion.

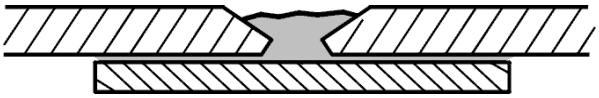
Repeat cleaning process

Repeat cleaning process on the damaged area on the in- and outside with Cleaner FL
Air 15–20 minutes.

Spray Terokal-150

Spray Terokal-150 thinly on both the in- and outside.
Air 15–20 minutes.

Bonding

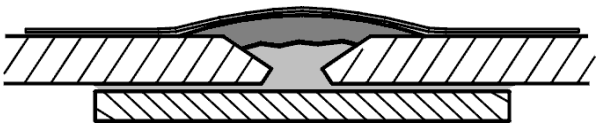


Use reinforcing plates for cracks. Plastic of the same material as the component may be used instead of metal as a reinforcement.
Lay the reinforcement weave on the inside of the damage and spread the adhesive evenly.

Let the adhesive cure

Use an IR-unit to accelerate adhesive curing (60–70°C (140–158°F), 15–40 minutes).
Note the risk of overheating
For faster treatment the damaged area can be cooled with water.

Apply Terokal



Apply Terokal-9225 on the outside of the damage and spread the adhesive.
Repeat the heat treatment as above (Let the adhesive cure).

Cool the component

Cool the component to room temperature (can be done with cold water).
Sand off excess adhesive.
Clean all grinding dust from the component.

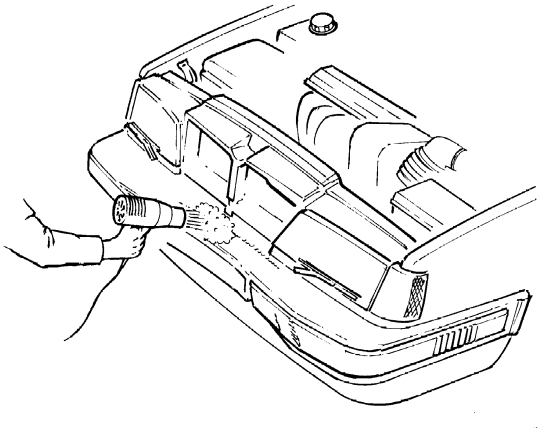
Spray with Terokal-150

Spray the damaged area Terokal-150.
Air 5–10 minutes.
Painted surfaces should be further treated according to the paint manufacturers directions.
Structured surfaces can be repaired with Terotex Super 3000 mixed with a hardener and paint (2p paint repair system).

Repairing bumper cover strip

General about repairing bumper cover strip

A small ridge may appear in the bumper cover following a low-speed collision. This can be repaired by heating the cover and pressing the material.

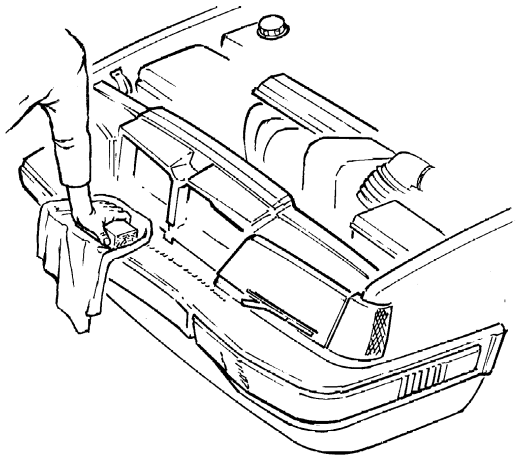


Heat the bumper cover

Heat bumper cover with a hot-air gun to soften the damaged area.
The bumper cover is sufficiently soft when light pressure with a wooden spatula produces a small mark in the plastic.
A suitable distance between the hot air gun and bumper is approximately 12 cm. The distance can vary depending on the type of hot air gun. Start with a greater distance and reduce if required.
It may be difficult to heat large areas. Divide the work into sections.

Note! Paintwork will be damaged by excessive temperature. Work carefully and be aware of changes in the paintwork caused by excessive temperature.

Press out the damage



Place a wet blanket over the heated area and press out the damage with a wooden block.
Keep pressure applied until the bumper has cooled (approximately 2 minutes).
Use compressed air to accelerate the cooling.

Repeat the operation

Repeat procedure until the damage has been completely repaired.
Some areas of bumper may require repeated treatment.

Blasting

General about sand blasting

All corrosion on the panel must be removed before painting. Sand blasting is a very good way of achieving this especially for deep rust damage.
During sand blasting aluminum oxide is sprayed with a very high pressure onto the damaged area which gives a bare metal area.
The advantages of sand blasting are that areas that are otherwise difficult to access can be reached and that there is a smooth transition between metal and paint.
Sand blasted surfaces also provide a good base for both tin filler and painting.
Volvo stocks a complete sand blasting unit (9986410–0), with a number of different nozzles.

Nozzle types

Standard	9986415-9
Universal	9986416-7
Grooved attachment	9986417-5
Edge attachment	9986418-3
Flat flange attachment	9986420-9
Brush nozzle with internal angle	9986422-5
Brush nozzle with external angle	9986423-3
Brush nozzle with internal rectangular notch	9986424-1
Straight brush nozzle	9986426-6

Spot blaster

The gun has seven revolving suction nozzles which have been developed with the help of experienced vehicle painters. The various nozzles seal against all the difficult edges and corners of the car.
The suction nozzles are manufactured of a special rubber which tolerate long blasting times. They prevent dust and dirt from being spread in the premises as well as protecting the paint beside the rust damage.
It is important that only the rust is removed because the original car paint is stronger than any paint repairs.

Note! Sand blasted areas should be sanded with P280 sandpaper and blown with compressed air. This is done to all sand blasted areas.

Note! A blasted surface corrodes very easily. The surface should not be exposed to damp and should be primed as soon as possible.

Masking

General about masking

To simplify masking separate carriers for masking paper and masking tape should be used.
Use lint-free masking paper with good strength and of sufficient quality to prevent solvent from penetrating.
Use 19 and 39 mm wide elastic masking tape. The tape should withstand temperatures of at least 80°C (176°F) and should not leave adhesive residue when baked.
Mask rationally. Do not bandage protruding components, such as door handles and similar, but lay the tape along the length of the components.

Note! Always press the tape tight to prevent paint running underneath.

The extent of masking necessary depends on whether a total painting, partial painting or a spot repair is to be carried out. If partially painting the right front fender the whole car should be masked in order to avoid spray and paint fog on the surrounding paint. For spot painting it is

often sufficient to fully mask off the repair area.

Border masking tape

As a complement to the traditional masking tape there is also border masking tape. The border masking tape is delivered in packages of 5x10 meters and can be ordered as P/N **1 161 418 –7**.
Areas of use

- door openings
- hood
- tailgate
- bordering (for example partial painting doors)
- Sunshine roof opening

When partially painting the bodywork border masking tape gives a softer transition at the seams. Masking of components/areas which are not to be painted is carried out in the usual way.

Masking windshield trims when painting the roof

The front and rear windshields on certain models have an integrated trim strip, to avoid removing the windshields when respraying.
The trims are masked with hard 3M plastic sheeting which is inserted between the windshield trim and the bodywork and taped to the windshield.
Insert the plastic sheeting between bodywork and windshield trim.
Fold up the sheeting towards the windshield and tape to the glass.
Carry out the other masking with masking paper.
3M:s P/N:
15 mm — 06348
10 mm — 06349