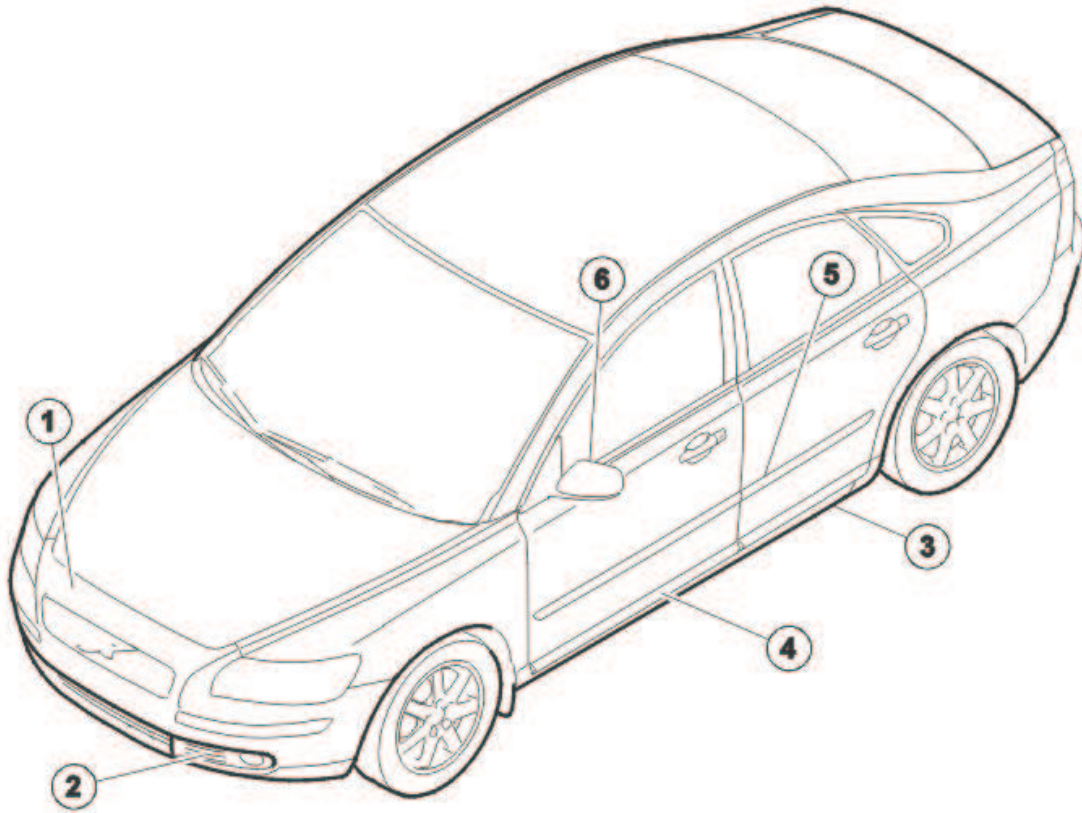


Design

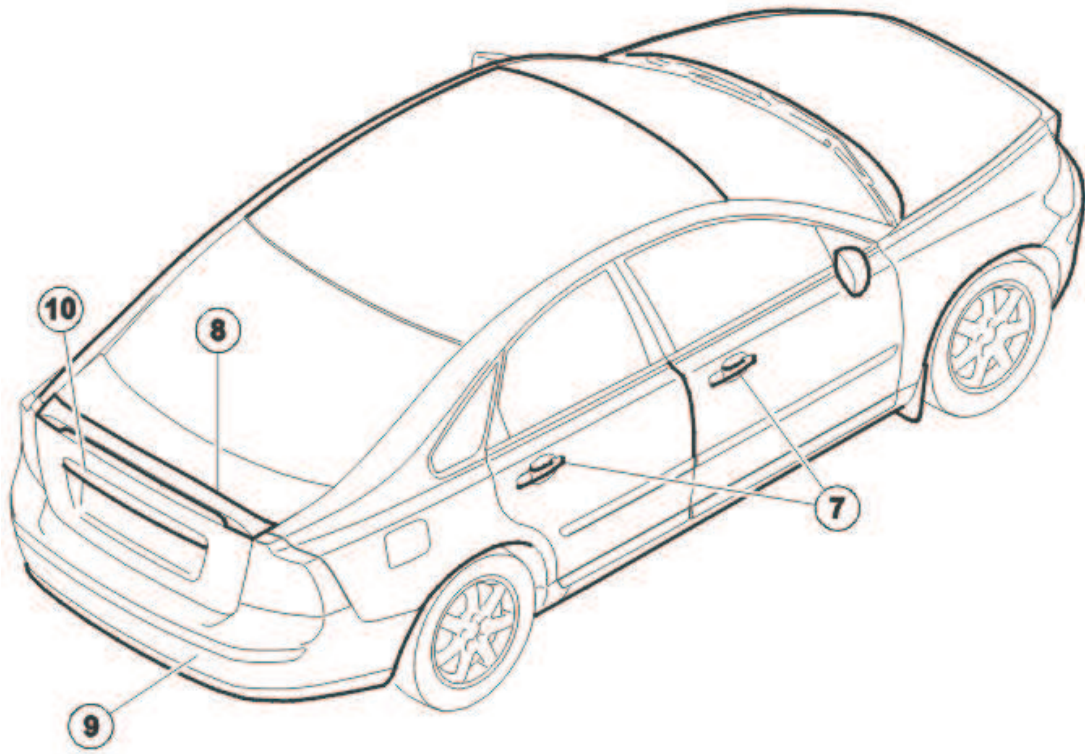
Plastic, material information

S40 (04-) and V50



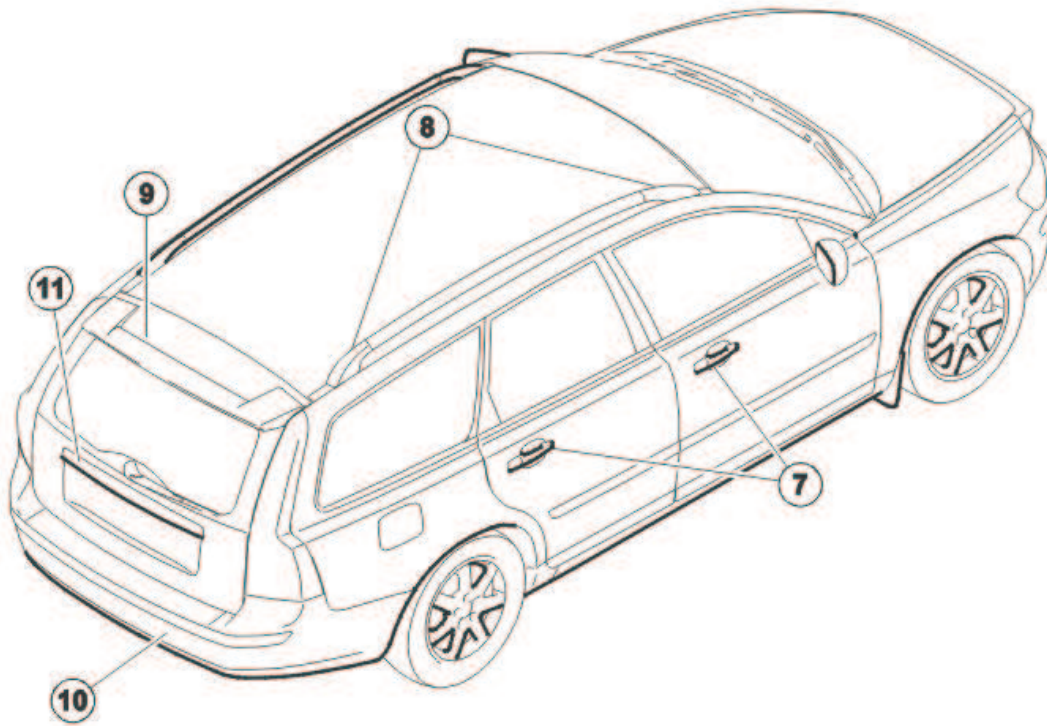
| Index | Component | Material |
|-------|-----------------------------|------------------|
| 1 | Bumper cover | PP + EPDM |
| 2 | Grille in bumper cover | PP + EPDM |
| 3 | Door sill | PP + EPDM T8 |
| 4 | Lower door trim | PP + EPDM T8 |
| 5 | Trim molding | PP + EPDM M26 |
| 6 | Door mirror cover (painted) | ABS |
| | Door mirror foot (black) | ASA |

S40 (04-)



| Index | Component | Material |
|-------|-------------------------|-----------|
| 7 | Outer door handle | PA66 GF30 |
| 8 | Spoiler (B5254T3) | PUR |
| | Spoiler (other engines) | ABS |
| 9 | Bumper cover | PP + EPDM |
| 10 | Handle, tailgate | PC + ABS |

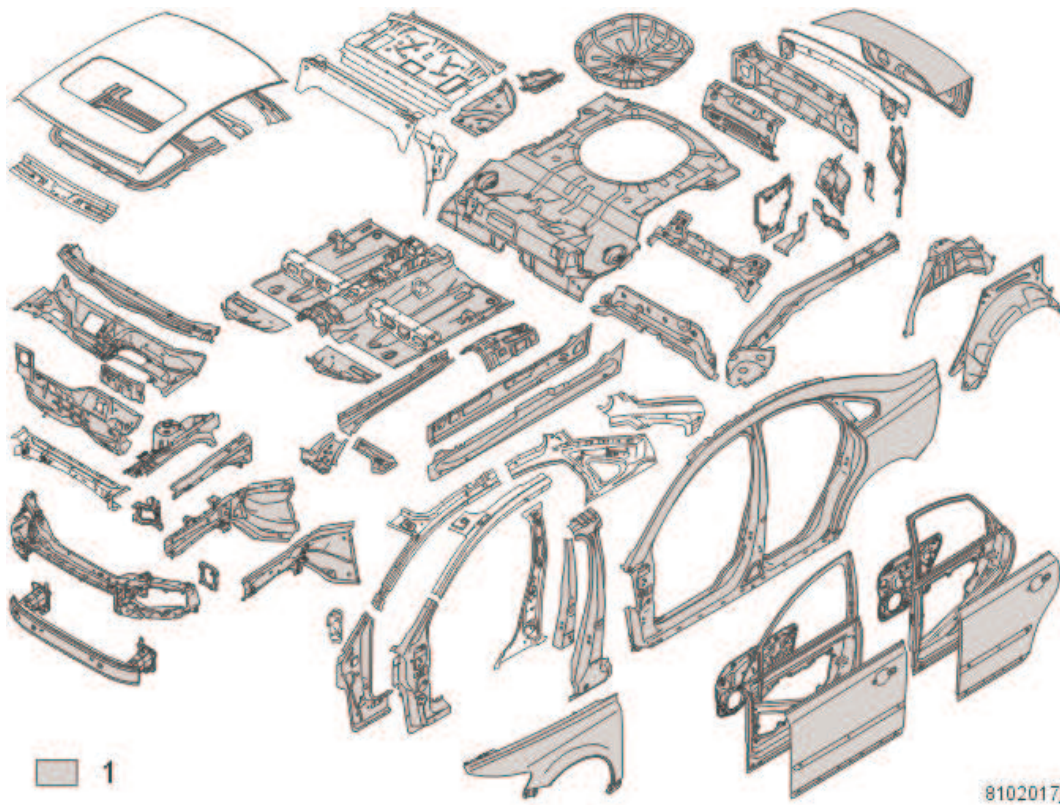
V50



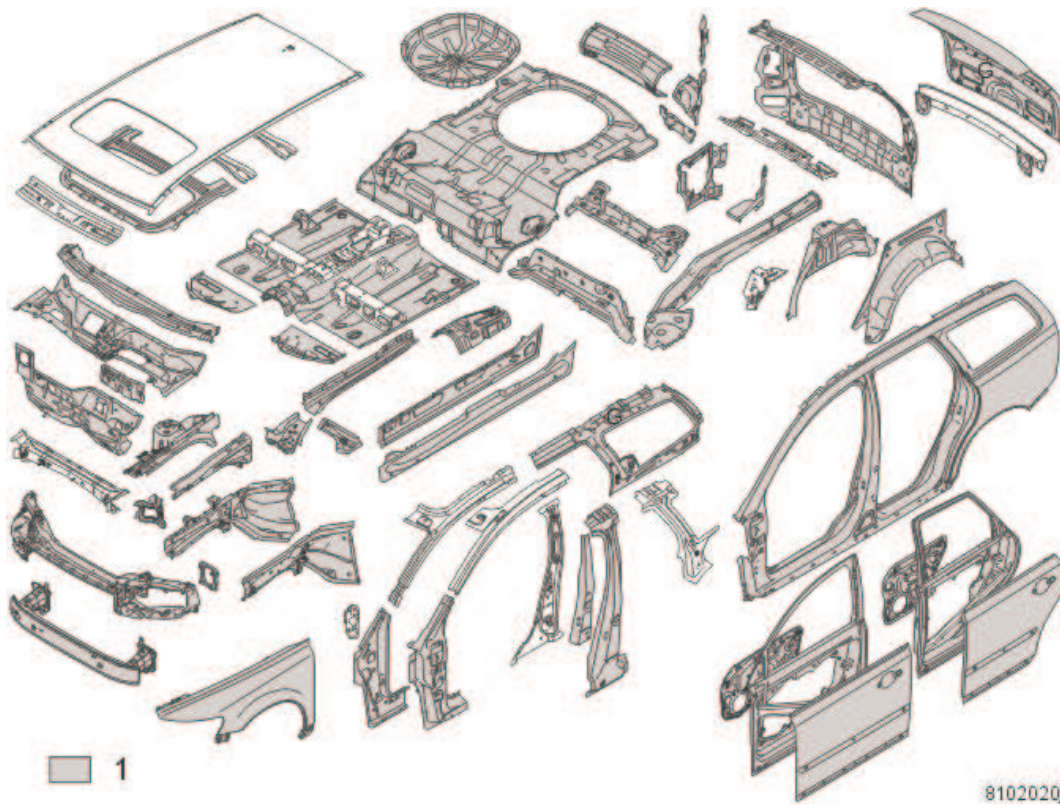
| Inde | Component | Material |
|------|-----------------------------|-----------|
| 7 | Outer door handle | PA66 GF30 |
| 8 | End cover, trim rack / rail | ASA + PC |
| 9 | Spoiler | ABS |
| 10 | Bumper cover | PP + EPDM |
| 11 | Tailgate handle | PC + ABS |

Sheet metal, material information

S40 (04-)



V50



Galvanized components

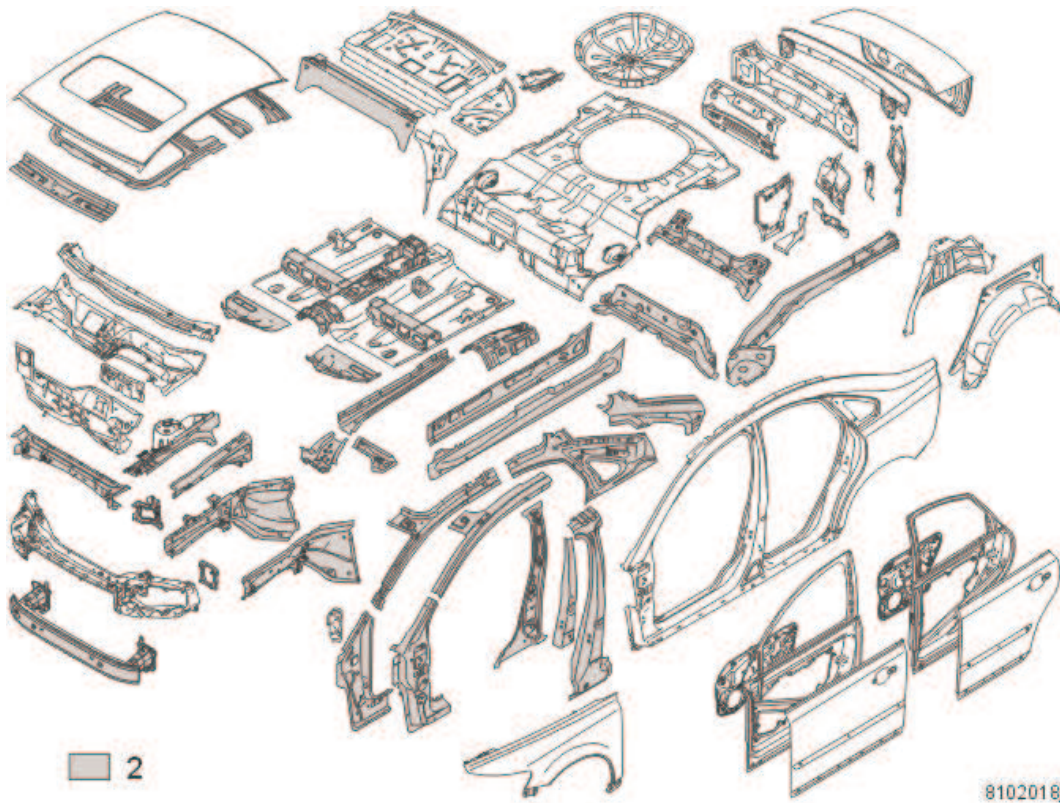
In the above illustrations, those components that are galvanized as replacement parts are

indicated by a darker color (1).

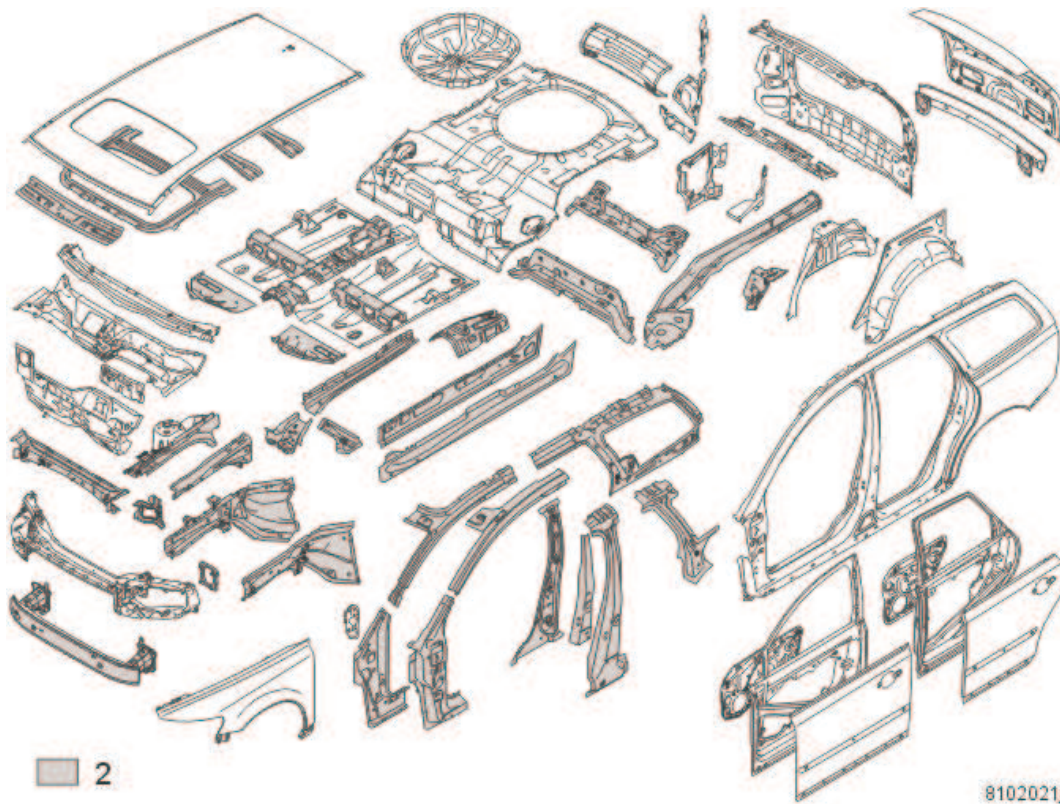
Volvo uses a large number of body components of single-, double-sided and extra-thickness galvanized steel. This provides maximum anti-corrosion protection. Take care not to damage galvanized components when carrying out body repairs, or when grinding or sanding.

On completing work, damaged galvanizing must be replaced with single component filler primer.

S40 (04-)



V50



HSS steel

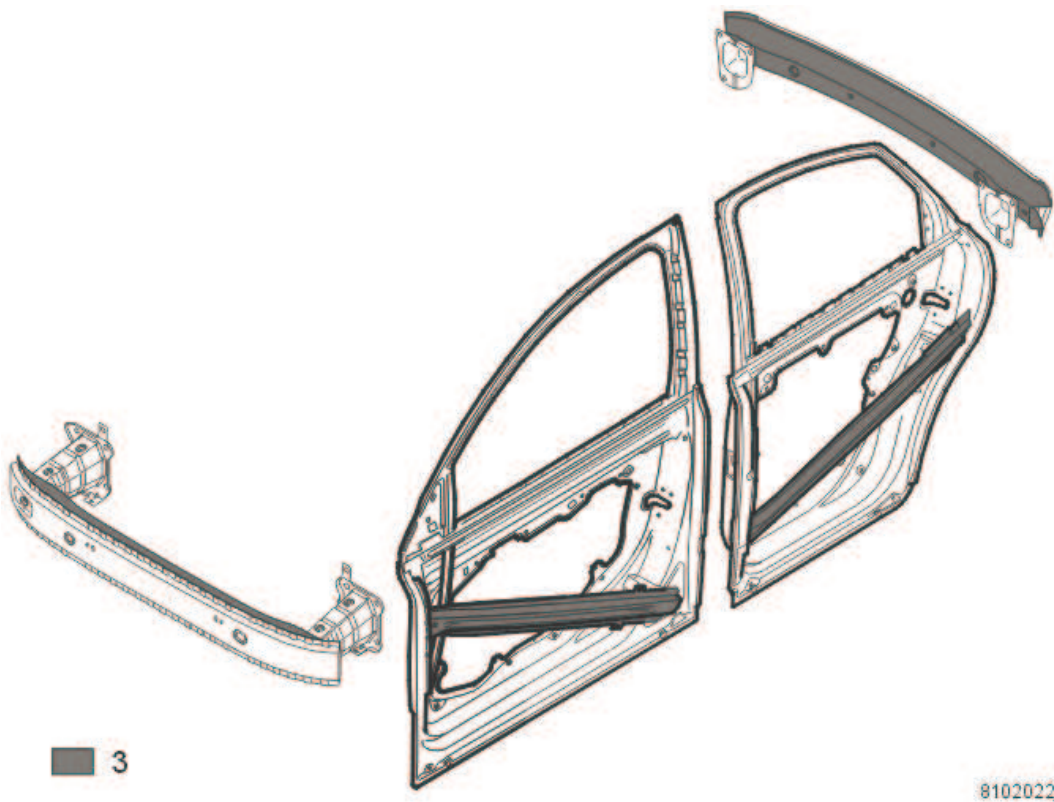
In the above illustrations, all components made of HSS steel are indicated by a darker color (2). The bodywork is made up of a number of different steel materials. This is to optimize collision safety, stiffness, fuel economy, etc. The steel types described in this section are HSS steel (HSS = High Strength Steel). These have a yield point of approximately 250 N/mm^2 . The yield and breaking points are higher than with normal steel plate.

The yield point increases when the material is heat treated. HSS steel can therefore be more difficult to align than ordinary steel plate. When using an alignment bench, HSS components can cause problems if the counterhold is not correctly placed so that puller has maximum effect. Note how the bodywork reacts to tension and ensure that only the deformed area moves.

Always follow the welding procedures shown in VIDA.

Note! HSS steel must not be heat aligned.

S40 (04-) and V50



Boron steel

Boron steel comes under the HSS steel group. The dark gray sections (3) in the illustration are made of boron steel. Boron steel has a very high yield and breaking point. The yield point is approximately 1350 N/mm^2 and particular attention must therefore be paid to boron steel during repair work.

When replacing boron steel components, it is not possible to drill off spot welds. Grinding or plasma cutting must be used instead.

Boron steel offers good welding capacity.

When producing boron steel, it is not possible to galvanize the steel. These components must therefore be rust-proofed particularly carefully. Boron steel gets its strength through the addition of the element boron. Boron steel also contains a relatively large proportion of carbon. The sheet profiles are formed between a press and pad while the metal is red hot. The material also cures here.

Note! Boron steel must not be aligned or heated.

Note! Boron steel can only be joined where indicated. Mark carefully using a template. Use a

cutting disc or plasma torch.