

Paint damage due to weather influences



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Hint:

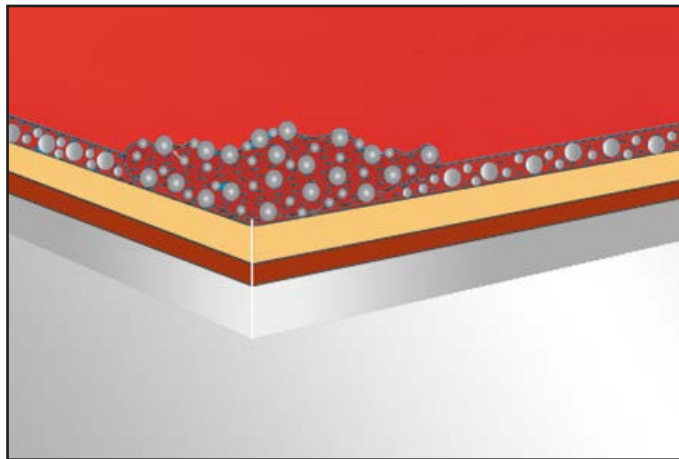
All paint damage described in this chapter can be avoided or greatly reduced in advance by applying a high-quality paint protection seal.

Paint damage due to weather influences

Fading

Damage description

Bleaching occurs with colourfully pigmented one-coat coatings (top coats). They are recognizable as lightening, fading (whitish matt surface) or discoloration of the paint structure. The basis for this is the destruction of the binder by UV radiation. This paint damage is easily confused with chalking or matting.



Possible causes

- The type of binder used
- Too little binder, resulting in faster bleaching.
- Use of organic pigments, mainly in the red and yellow range. These are less light-stable than inorganic pigments.
- A small proportion of colour pigments. This increases the probability of fading.
- The particle size of the pigments can also have effects on the bleaching of coatings. The coarser the pigment particles, the lower the risk of bleaching.
- Strong UV radiation. A high intensity of UV radiation accelerates the bleaching of a coating. This destroys the structure of the binder and exposes the pigments on the surface.
- Use of a false white pigment

Removal

- In the initial stage, careful cleaning and polishing is sufficient, but this process may have to be repeated.
- In case of heavy bleaching, sand down the paint build-up and then rebuild.



picture_4-001



picture_4-002



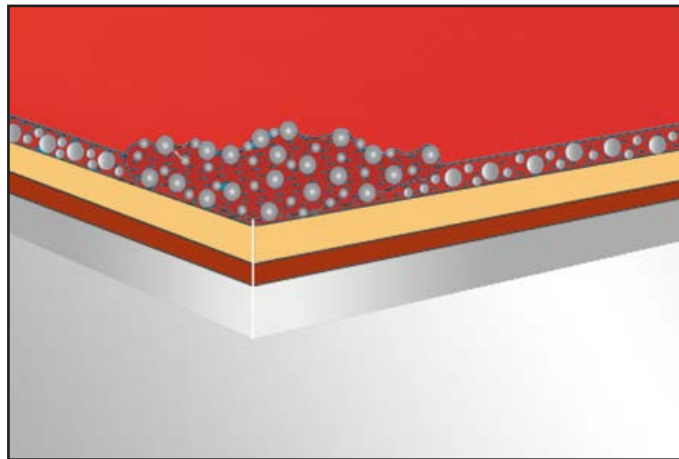
picture_4-003

Paint damage due to weather influences

Chalking

Damage description

Fading or discoloration of the original shade occurring as stains. The cause is the loss of colour of the colour pigments. As a rule, these stains only appear a few years after weathering. This phenomenon often occurs in vehicles painted red. The ageing process of paintwork is called chalking. In this process, the pigments on the paint surface are exposed by the dissolution of the binder, which negatively changes the color tone and gloss level of the paint surface.



Possible causes

- UV radiation which causes changes in the colour pigments
- Surface destruction of binders caused by UV radiation
- Inadequate paint care
- Use of a false white pigment

Removal

- In case of slight damage, clean the paint thoroughly, polish and then seal with hard wax. Unfortunately, the polishing is only of short duration and the chalking out cannot be eliminated with it finally.
- In case of severe damage, sand the paint down to the substrate and then rebuild.



picture_4-004



picture_4-005



picture_4-006

Paint damage due to weather influences

Lightning strike

Damage description

Selective paint stripping with fusing of the sheet metal to the substrate. Due to the enormously high current strength occurring in a very short period of time and the associated very high temperature, there are hardly any traces of soot during the fusion. These are predominantly only visible in the selective fusion of the sheet metal. Temperature damage usually occurs at the point of lightning strike.

Possible causes

- Lightning strike favoured by adjacent objects such as trees, telephone poles, lanterns, high-voltage pylons, etc. and by moisture (heavy rain).

Removal

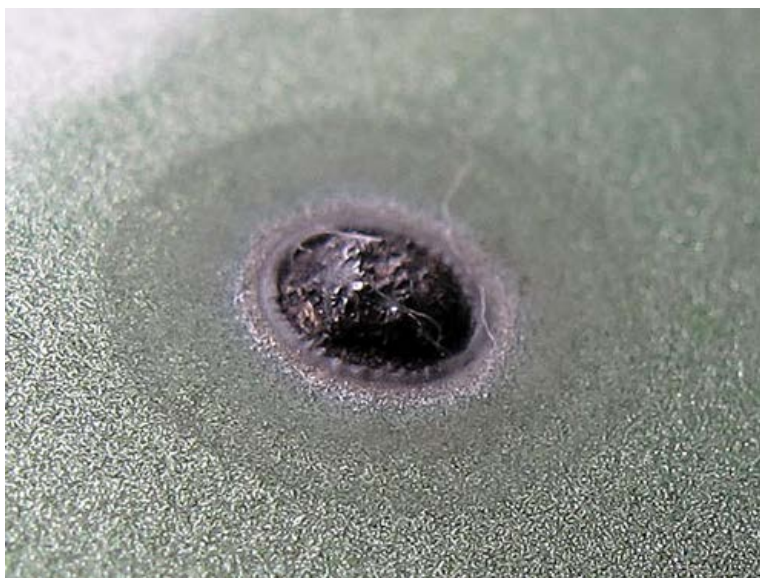
- Sand out fusions, fill and completely repaint components.
- A spot repair may also be sufficient.



picture _4-007



picture _4-008



picture _4-009