

Corrosion on the surface due to external effects (flash rust)

Topic number	LI98.00-N-037818
Version	2
Design group	98.00 General
Date	08-19-2016
Validity	Model 447, 906
Reason for change	Document for models 447 and 906 extended and completely updated.
Reason for block	

Complaint:

Customer or workshop complains of spots of corrosion.

Attachments	
File	Description
01.jpg	Flash rust (roof, model 447/448/636/639)
02.jpg	Flash rust (guide rail, model 906)
03.jpg	Flash rust (sidewall, model 906)
04.jpg	Flash rust (bumper, model 906)
05.jpg	Flash rust (right bumper, model 906)
06.jpg	Flash rust (left driver door wheel arch, model 906)
07.jpg	Flash rust under a reflected-light microscope
08.jpg	Staining due to industrial fallout

Cause:

Coarse gravel, grit, and construction areas that process metals with files and grinding material can leave behind fine-grained deposits of various kinds of metal particles on the painted surface, which can corrode relatively quickly in relatively humid climates. A solid compound of metal particles and paint can form on vehicles that are not maintained properly resulting in ingress of metal particles into the surface which can cause irreparable damage that can only be eliminated through repainting.

Note:

- Welding and cutting/grinding work also produces hot metal particles which fly around and can cause damage of this kind.
- Weather conditions and UV radiation cause point-shaped or surface corrosion effects to penetrate the top coat where they may leave depressions on the paintwork surface which, if allowed to act for a long time, advance through the healthy paint layer down to the panel and cause damage that can only be rectified by repainting.
- This effect can often also be observed on detachable plastic parts such as the horizontal surfaces of the front and rear bumpers.
- On the subject of paintwork, see the information provided in WIS under: GF98.00-P-9099A directory on paint damage assessment.
- Further information from the different paint manufacturers on paint damage assessment, and on flash rust in particular, is available in several languages in XENTRY Portal under: XENTRY Portal → Consulting & Services → Body and paintwork → Paint technology → "Select corresponding manufacturer" → Paint damage diagnosis

XENTRY TIPS

Note: Not all languages are available.

- Further information on the topic flash rust is available in XENTRY Portal under: XENTRY Portal → Consulting & Services → Body and paintwork → Paint technology → FAQ

Note: Information is only available in German.

Remedy:

Remove metal particles properly (see AP98.00-S-0636S).

Note:

- If the metal particles are not properly removed, for example if it is only polished out or if inadequate means are employed, then only the consequence of the metal particles, i.e. the surface corrosion, is removed. The metal particles are left behind in the paint and will corrode again in a very short time. In order to remove it completely, a metal dust remover must be used which loosens the metal particles from the paint. Because of the oxalic acid contained in the metal dust remover, the treated surface must then be polished and preserved.
- The preservation agents offered and used in car wash facilities have only a short-term effect. We recommend the use of cleaning, polishing and preservation agents approved by Mercedes-Benz: dust remover A 002 986 04 71, paint polish A 000 986 46 74 09 and preservation agent A 000 986 44 74 09 or similar branded products (e.g.: 3M, Farecla, ...).

Note:

- Draw the customer's attention to the notes on caring for the exterior of the vehicle in the operator's manual. Regular and proper care helps to preserve the value of the vehicle. The best protection against harmful environmental influences is regular washing and preservation.
- The recommended care products are specially matched for Mercedes-Benz vehicles and represent the very latest technology.
- Recommendation of paint manufacturers: Apply preservation agent to vehicle twice a year. In early spring and in early fall.
- Due to recent events we wish to inform you that flash rust is an external phenomenon and is not a deficiency for which the manufacturer can be held responsible. Accordingly, this damage cannot be billed through warranty or goodwill channels.

Symptoms
Overall vehicle / Paint/corrosion / Paint damage / Environmental influences
Overall vehicle / Paint/corrosion / Paint damage / Foreign influence
Overall vehicle / Paint/corrosion / Corrosion / General rust formation
Overall vehicle / Paint/corrosion / Corrosion / Flash rust

Parts						
Part number	ES1	ES2	Designation	Quantity	Note	EPC
A 000 986 44 74	09		Preservation agent	1	As required	X
A 000 986 46 74	09		Paint polish	1	As required	X
A 002 986 04 71			Dust remover	1	As required	X

WIS-References			
Document number	Title	Note	Allocation
AP98.00-S-0636S	Use of metal dust remover		Remedy
GF98.00-P-9099A	Index of paint damage assessment		Cause

XENTRY TIPS

Validity		
Vehicle	Engine	Transmission
Sprinter II	*	*
Sprinter III	*	*
Vito/Metris 447	*	*

Attachments

01.jpg:



02.jpg:



XENTRY TIPS

03.jpg:



04.jpg:



XENTRY TIPS

05.jpg:



06.jpg:

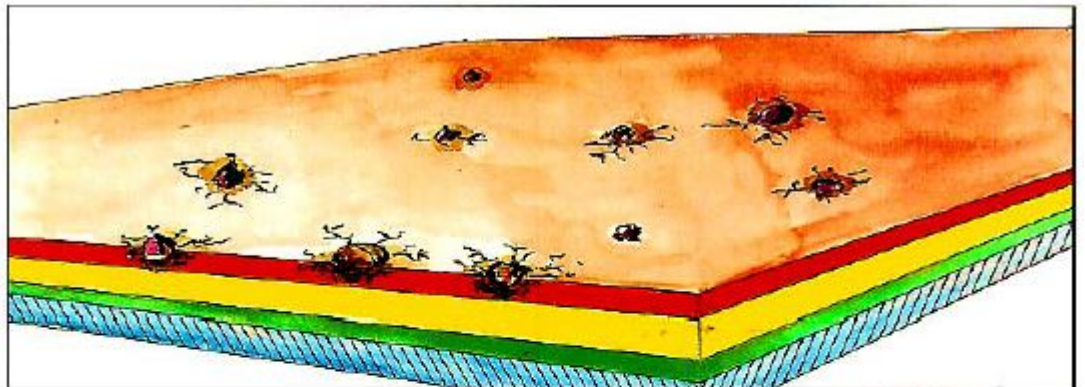


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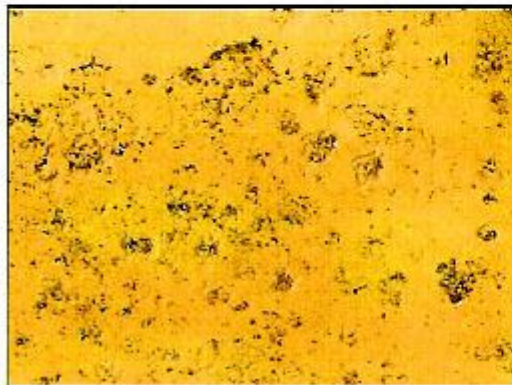
07.jpg:



08.jpg:



P98.00-0917-74



P98.00-0918-71



P98.00-0919-71