

Headlamps fogged

Topic number	LI82.10-P-062051
Version	9
Function group	82.10 Exterior lights
Date	07-06-2020
Validity	BR222 SA code 640 / 641 / 642 (dynamic LED headlamp) BR205 SA code 640 / 641 / 642 (dynamic LED headlamp) before modification year 18/1 BR217 up to facelift
Reason for change	Validity adapted: BR205 before modification year 18/1

Complaint:

Lamp unit fogged or droplets forming.

Cause:

Because of the housing cover with pressure compensation membrane, the lamp unit is a "closed system". This means that the lamp unit is protected against acid gases, dirt and exhaust gas. However, moisture can still enter from two sources.

Through absorption and desorption (the commonest cause) or through permeation.

Moisture is either absorbed by the plastic material and, when the light source is switched on, it is released from the plastic by desorption, or the moisture penetrates through the plastic materials of the headlamp from outside (permeation).

This can lead to the formation of condensation on the lens of the headlamp.

Remedy:

Check housing cover of lamp unit for natural fogging or condensation as per LI82.10-P-050139.

1. If a reduction in the degree of fogging is visible, the desiccant packs can be used once the condensation has completely evaporated.
2. If no reduction in the degree of fogging is visible, the lamp unit must be replaced.

On the new lamp unit, the service cover with desiccant pack must be installed.

Since the replacement headlamps are not supplied with control units, use the control units from the headlamp with condensation.

Make sure that the contacts of the old control unit are undamaged and dry.

Note:

Residual fogging is possible due to the laws of physics and is OK.

XENTRY TIPS

Fogging does not impair the functionality or the service life of the lamp unit.

Desiccant packs must always be used in both lamp units.

Install basket with desiccant pack and replace pressure compensation membrane.

1. Remove headlamp control unit [Figure 1].
2. Fold desiccant pack carefully in the middle then place into basket and seal [picture 2].

Note: Two desiccant packs are required for each headlamp.

3. Place basket in headlamp [Figure 3] and reinstall control unit.

4. The membrane already in the headlamp [picture 1] must be replaced by a new membrane (the membrane is packed in the separate bag)

Note: The bonding surface must be clean and dry.

5. If the headlamp housing has an additional 2nd membrane, this must be covered over with the masking tape.

Note: The bonding surface must be clean and dry.

To ensure that the drying pack (absorption) acts effectively, the headlamp has to be air-sealed.

Observe or check the following points for this:

1. The seals on the central connector must all be present [Picture 5 (1)] and correctly fitted [Picture 5 (2)].
2. The new transparent diaphragm must be correctly bonded [Picture 6].
3. Check headlamp housing for any external damage.

Note: Residual fogging is possible due to the laws of physics and is OK.

Fogging does not impair the functionality or the service life of the lamp unit.

Desiccant packs must always be used in both lamp units.

Attachments	
File	Description
Bild 3.jpg	[1] Folding basket installed
Bild 1.jpg	Headlamp: [1] Control unit [2] Diaphragm
Bild 5.jpg	1) Seals missing 2) Seals not correctly fitted
Bild 6.jpg	Transparent diaphragm correctly or incorrectly bonded.
Bild 2.jpg	[1] Fold desiccant pack carefully in the middle. [2] Place both desiccant packs carefully into basket. [3] Seal folding lid NOTE: Please make sure that the packaging is not damaged.

XENTRY TIPS

Parts						
Part number	ES1	ES2	Designation	Quantity	Note	EPC
A 000 826 13 00			LCU folding basket, right	1		X
A 000 826 12 00			LCU folding basket, left	1		X
A 000 826 16 00	09		Desiccant pack (15g)	2	2 desiccant packs per headlamp.	X
A 000 826 20 00			Masking tape	1	Masking tape for the existing 2nd membrane (on headlamp housing)	X