

Complaints about noises or poor windshield wiper wiping performance

Topic number	LI82.30-P-059239
Version	9
Function group	82.30 Windshield wipers
Date	02-14-2018
Validity	All passenger car model series
Reason for change	Validity updated

Complaint:

There are several types of complaint about noises or poor windshield wiper wiping performance:

A: Wiper blades squeaking

B: Wiper blades shuddering

C: Windshield not completely wiped (streaking)

D: During downward movement, water is pulled back onto the windshield from the A-pillar (picture 1)

E: After windshield cleaning, water keeps spraying onto the windshield for several wipe cycles (picture 2)

Attachments	
File	Description
Bild 1.JPG	During the downward movement water is pulled back onto the windshield from the A-pillar
Bild 2.JPG	After windshield cleaning, water keeps spraying onto the windshield for several wipe cycles
Bild 3.JPG	Streaking due to excessive downforce of the wiper arm

Cause:

Re A:

A1: The windshield and wiper blades are contaminated with residues from car washing facilities, identifiable by water beading. The resulting differences in the

friction values between the wiper blades and the windshield could cause the wiper blades to vibrate.

Note: It is mostly wax residue from the washer system, but also water-repellent nano-particle coating for paint and/or silicone-based washer fluid that could cause this complaint. A partially dry windshield

also has different friction values, which can likewise cause squeaking of the wiper blades

A2: The wiper blades are worn by mechanical damage (wiper lip damaged by ice or insect debris, or deformed by long periods of disuse).

A3: Incorrect angle of incidence of the wiper arms to the windshield. Because of this, the rubber lip of the wiper blade may not flip over at the reversal point.

XENTRY TIPS

Re. B:

B1: Wiper blades wear because of mechanical damage (wiper lip damaged by ice, insect remains or deformed by long periods of disuse)

B2: Incorrect angle of incidence of wiper arms to windshield. Because of this, the rubber lip of the wiper blade may not flip over at the reversal point.

Re. C:

C1: Wax/dirt residue on the windshield

C2: Wiper blades deformed or worn

C3: Clamping force of wiper arm not OK (picture 3)

Re. D:

Water is pulled back onto the windshield by the differential pressure created as the wiper arm moves downwards.

Re. E:

Washer water collects in the fastening of the wiper blade and is blown onto the windshield by the airstream over several wipe cycles.

Note and supporting information: Wiper blades are wear parts which, even when "not used" for long periods (kept in park position), the blades may become permanently deformed and damaged. Further stresses on the rubber wiper blade arise due to various environmental influences which progressively change the effectiveness of the rubber wiper blade and accelerate the aging process. Due to the natural aging process and wear, the wiper blades should be replaced twice a year, preferably in Spring and Fall (see operator's manual).

Attachments	
File	Description
Video 1.mp4	Test

Remedy:

Re A:

A1: Clean the entire windshield with A 000 986 40 71.

A2: Check the water's flow behavior after the windshield has been cleaned (see video 1). If after cleaning there are still areas with water beading, then the cleaning process must be carried out again until water beading is no longer present.

Note:

On the vehicle in the video (video 1), water still beads on the bottom left of the windshield. The windshield is still not properly clean, even though it appears to be clean.

The windshield is only properly clean when there are no more areas on the windshield where water beads.

A3: Replace wiper blades with genuine wiper blades.

Important: Only exchange wiper blades if windshield no longer has water-repellent areas

XENTRY TIPS

Re. B:

B1: Check wiper blades and replace if necessary.

B2: Check adjustment angle of wiper blades and correct if necessary.

Re. C:

C1: Clean windshield with intensive cleaner A 000 986 40 71. Important: Do not clean the wiper blades otherwise the graphite coating will be damaged.

C2: Replace wiper blades with genuine wiper blades

C3: Check wiper arm for sluggishness in the bearing. Restore mobility or replace wiper arm if necessary.

Re. D:

This is a normal operating condition.

Exception: X204 up to 02/2014. In these vehicles it is possible to install the design configuration of vehicles as of 02/2014. This includes wiper arms (styled arms) with improved behavior in this respect. It is also necessary to replace the wiper blades because the styled arms feature a Top Lock connection (previously Side Lock). When installing the passenger-side wiper arm, observe the new park position (21 mm) via the marking on the windshield (Figure 4).

Notes: The costs for this conversion must be borne by the customer. It is not possible to enter the modification in the vehicle data card. The customer must therefore be advised that, when procuring replacement parts, wiper blades for the X204 as of 02/2014 must be ordered in future.

Re. E:

This is normal operating condition

Exception: Model series 204 C-Class and model series 207. On these vehicles the wiper blades of the model series 212 can be used to improve the situation.

Note: - Check and adjustment tools case for windshield wiper systems, see SI82.30-P-0004A - Wipe quality and noise behavior, see SI82.35-P-0002A - All about windshield wipers, see "AKUBIS-direct" SDmedia under the heading "Electrical system - Windshield wipers" - W&G policies, see SI82.30-P-0010A

If complaints continue to occur in isolated cases even after the criteria described above are taken into account, open a PTSS case to discuss further details and courses of action.

Note: Replacement windshields are not to be billed to Warranty in lieu of cleaning.

Attachments	
File	Description
Bild 4.JPG	Park position of tip of blade on X204 passenger-side wiper arm with Top Lock

Parts

XENTRY TIPS

Part number	ES1	ES2	Designation	Quantity	Note	EPC
A 000 986 40 71			Windshield cleaner	1	The windshield cleaner must not come into contact with plastic or painted parts otherwise they could be damaged.	X
A 204 820 16 44			Left wiper arm	1	Left wiper arm with Top Lock (Only for X204 up to 02/2014 when retrofitted, standard as of 02/2014)	X
A 204 820 17 44			Right wiper arm	1	Right wiper arm with Top Lock (Only for X204 up to 02/2014 when retrofitted, standard as of 02/2014)	X
A 204 820 14 00			Wiper blades parts kit	1	Parts kit for wiper blades with Top Lock. (Only for X204 up to 02/2014 when retrofitted, standard as of 02/2014)	X
A 212 820 17 00			Wiper blades parts kit, LHD	1	For D complaints in model series 204 C-Class and model series 207	X
A 212 820 18 00			Wiper blades parts kit, RHD	1	For D complaints in model series 204 C-Class and model series 207	X

WIS-References

Document number	Title	Note	Allocation
SI82.30-P-0004A	Check and adjustment tools case for windshield wiper systems		Remedy
SI82.35-P-0002A	Wipe quality and noise development		Remedy
SI82.30-P-0010A	Warranty and goodwill policies for wiper blades		Remedy