

## Water ingress - retractable hardtop front section

Topic number	LI77.30-P-056644
Version	1
Design group	77.30 Vario roof, soft top - complete
Date	07-25-2013
Validity	SLK - BR172
Reason for change	Damage code for retractable hardtop front section adjusted. New damage code is 79201 04 for Vario roof front section - Leaking. Published worldwide.
Reason for block	

### Complaint:

Water entry through front section of retractable hardtop with the following localization:

- Partial water entry in the area of the side seals to the A-pillar (for area see Fig. 1) when accelerating/braking the vehicle.
- Water entry in rear area of side seals (see Fig. 2 and Fig. 3).
- Water entry in area of rear pivot/mounting for front section of retractable hardtop (see Fig. 4 and Fig. 5)
- Water entry in side area of headliner (see Fig. 6).

Attachments	
File	Designation
Abb.1.jpg	Fig. 1
Abb.2.jpg	Fig. 2
Abb.3.jpg	Fig. 3
Abb.4.jpg	Fig. 4
Abb.5.jpg	Fig. 5
Abb.6.jpg	Fig. 6

### Cause:

- Incomplete seam seal on front section of retractable hardtop or
- damaged side seal.

### Remedy:

To successfully rectify any water entry as described above and to ensure that follow-up repairs are not required, the following procedure should be observed.

#### 1.) Disassembling the headliner:

In order to accurately localize any water entry through the front section of the retractable hardtop, the headliner has to be dismantled before the subsequent rain test. Water traces may only be capable of being localized once the headliner has been dismantled. These possible water entry points should be observed closely during the subsequent rain test.

#### 2.) Conduct standard rain test (20 minutes):

Before conducting any repairs or measures to prevent water entry, a standard rain test should be performed beforehand (e.g. using a "Garden" shower head etc.). While doing so, the light sprinkling action should be over the front section of the retractable hardtop only. To enhance the troubleshooting success factor, the main intensity of the

sprinkler should be on the side where the complaint has been registered. During the rain test it may be worthwhile taking photos of the water entry or water entry point.

3.) Dismantling side seal:

In order to localize the water entry after the rain test, the side seal on the side on which the complaint was registered must be removed. Then the seal should be checked for any damage. The polyurethane foam bead (see Fig. 7) of the side seal is not wet/moist.

- Side seal damaged: In the event that the side seal is damaged, then this has to be replaced in accordance with WIS document "AR77.50-P-4200W". Special care should be paid here to the correct butyl routing.

Important! After this, a rain test should be performed again to check how successful the repair has been.

- Polyurethane foam bead wet/moist: In the event that the polyurethane foam bead (see Fig. 7) of the side seal is found to be wet/moist, then following operation steps should be performed to check the front section of the retractable hardtop.

4.) Check front section of retractable hardtop:

- Check using endoscope (if available):

The endoscope can be used to check the interior of the side panel for any water entry. Access for the endoscope here is through the previously made hole in the rear area of the magnesium frame (see Fig. 8 and Fig. 9). It is important here to check the entire panel for any water entry or drops of water.

- Check by drilling holes (if endoscope not available):

A drill bit with a max. diameter of 3 mm is to be used at the corresponding positions (see marked areas in Fig.10, Fig. 11 and Fig. 12) to drill water exit holes (note dimensions in Fig. 13). These water exit holes can be used to check whether water escapes and therefore whether there is any water located in the side panel (a piece of wire can be used here to help force water out of the 3 mm water exit holes).

**Important!**The drill bit diameter must not be larger than 3 mm and the marked areas in Fig. 10, Fig. 11 with the dimensions from Fig. 12 must be maintained, because the holes are in the dry area.

If this test should reveal that there is no water in the side panel, then the water exit holes are to be sealed again using 4 mm butyl cord. No excess butyl may protrude here beyond the hole to ensure that this does not stick to the seal later on.

If, in one of these cases, water entry is detected in the side panel on the front section of the retractable hardtop, then this is to be replaced in accordance with WIS document "AR77.50-P-3100W". Corresponding pictures (water exit from water exit holes, other water entry points) are to be included with the warranty claim.

NOTE: Some parts may be non-stocking parts for MBUSA, and possibly C66 and not immediately available from DAG. Please be aware and check availability prior to scheduling customer repairs

Attachments	
File	Designation
Abb.7.jpg	Fig. 7
Abb.8.jpg	Fig. 8
Abb.9.jpg	Fig. 9
Abb.10.jpg	Fig. 10
Abb.11.jpg	Fig. 11
Abb.12.jpg	Fig. 12

Symptoms
Body / Roof system / Convertible top/vario roof / Vario roof / Leaks
Body / Roof system / Convertible top/vario roof / Vario roof / Inaccurate gasket fit

Parts							
Part number	ES1	ES2	Designation	Quantity	Note	EPC	Other make part

A 172 790 14 40			FRONT FOLDING ROOF - GLASS ROOF	1	Valid for code 415/4U8, please note EPC! FRONT FOLDING ROOF must be ordered in appropriate ve- hicle color.	X	
A 172 790 10 40			FRONT FOLDING ROOF - MSC ROOF	1	Valid for code 412, please no- te EPC! FRONT FOLDING ROOF must be ordered in appropriate ve- hicle color.	X	
A 172 790 17 98			SEALING - ROOF LEFT SIDE	1		X	
A 172 790 18 98			SEALING - ROOF RIGHT SI- DE	1		X	
A 004 989 60 20	12		SEALING STRIP - Butyl 4 mm	1	Package contents are suffi- cient for several vehicles.	X	

Work units				
Op. no.	Operation text	Time	Damage code	Note
77-6211	REMOVE/INSTALL VARIO ROOF FRONT SECTION		79201 04	Only refer to damage code when the water entry is through the front sec- tion of the retractable hardtop, and not through the seals. In the event of water entry, please also note this in the note/additional information.
77-6501	REPLACE SEALING AT LEFT SIDE ON FRONT SECTION OF RETRACTABLE HARDTOP		79A01 04	Only refer to damage code if seals are found to be faulty and they were the reason for the water entry.
77-6502	REPLACE SEALING AT RIGHT SIDE ON FRONT SECTION OF RETRACTA- BLE HARDTOP		79N01 04	Only refer to damage code if seals are found to be faulty and they were the reason for the water entry.

Validity		
Vehicle	Engine	Transmission
SLK (172)	*	*

Full model designation breakdown		
Vehicle	Engine	Transmission
172.403	651.980	711.670
172.403	651.980	722.908
172.447	271.861	711.653
172.447	271.861	711.654
172.447	271.861	722.997
172.448	271.861	711.655
172.448	271.861	722.997

172.457	276.956	722.906
172.475	152.980	722.909

## Attachments

Abb.1.jpg:



Abb.2.jpg:



Abb.3.jpg:

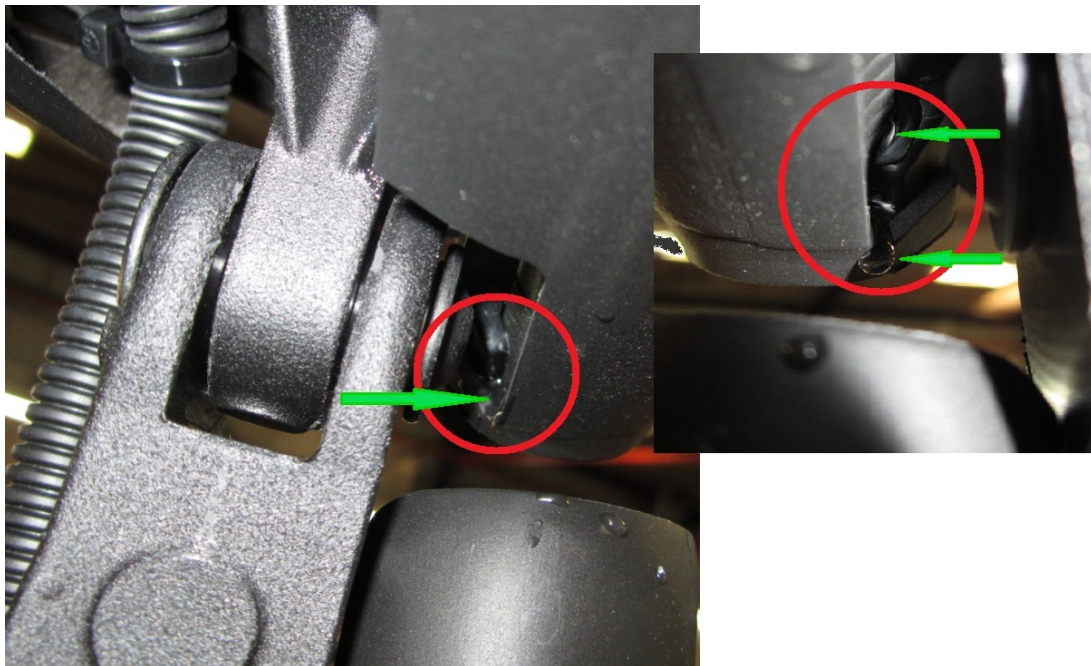


Abb.4.jpg:

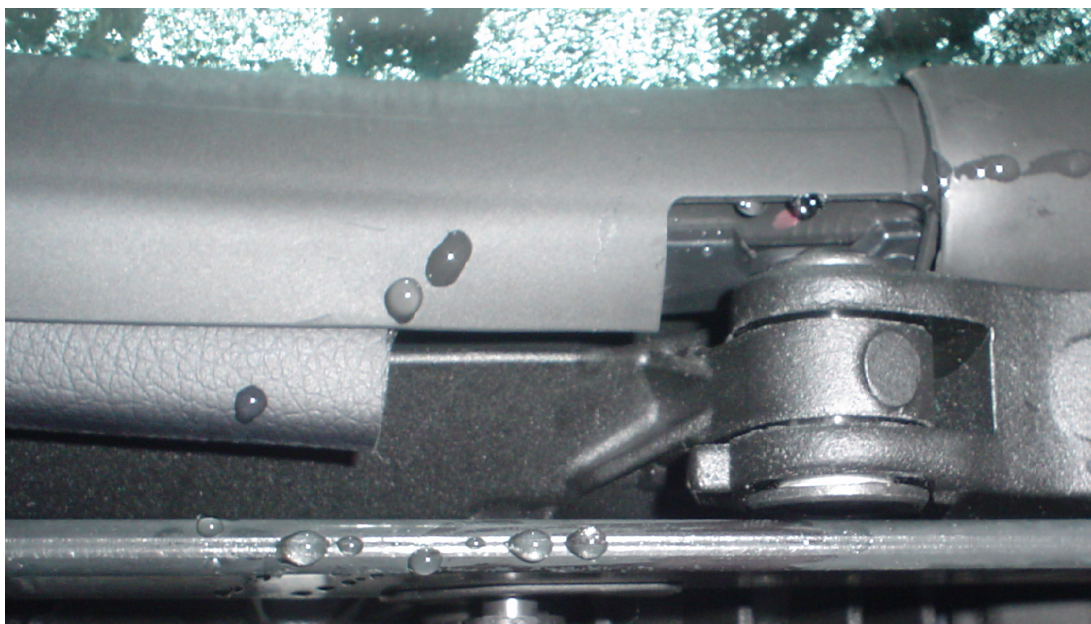


Abb.5.jpg:

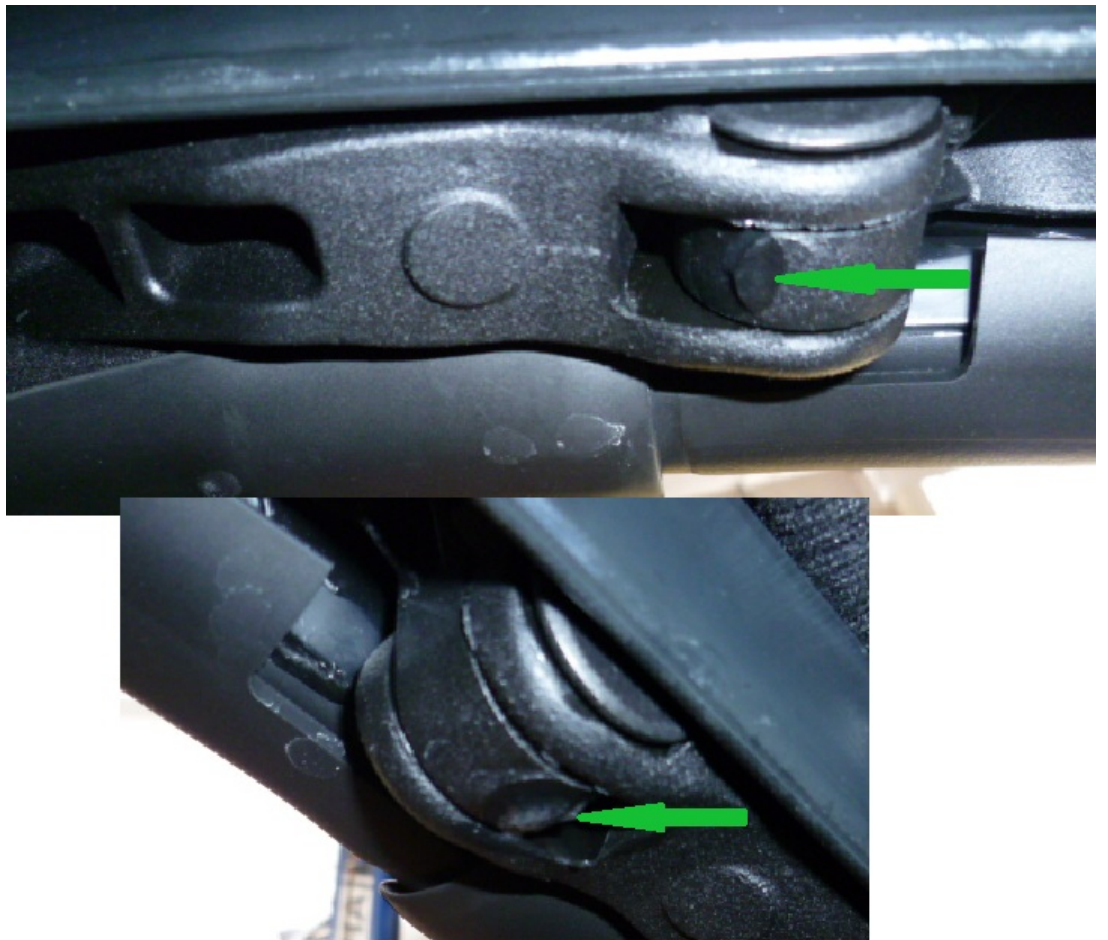


Abb.6.jpg:



Abb.7.jpg:



Abb.8.jpg:

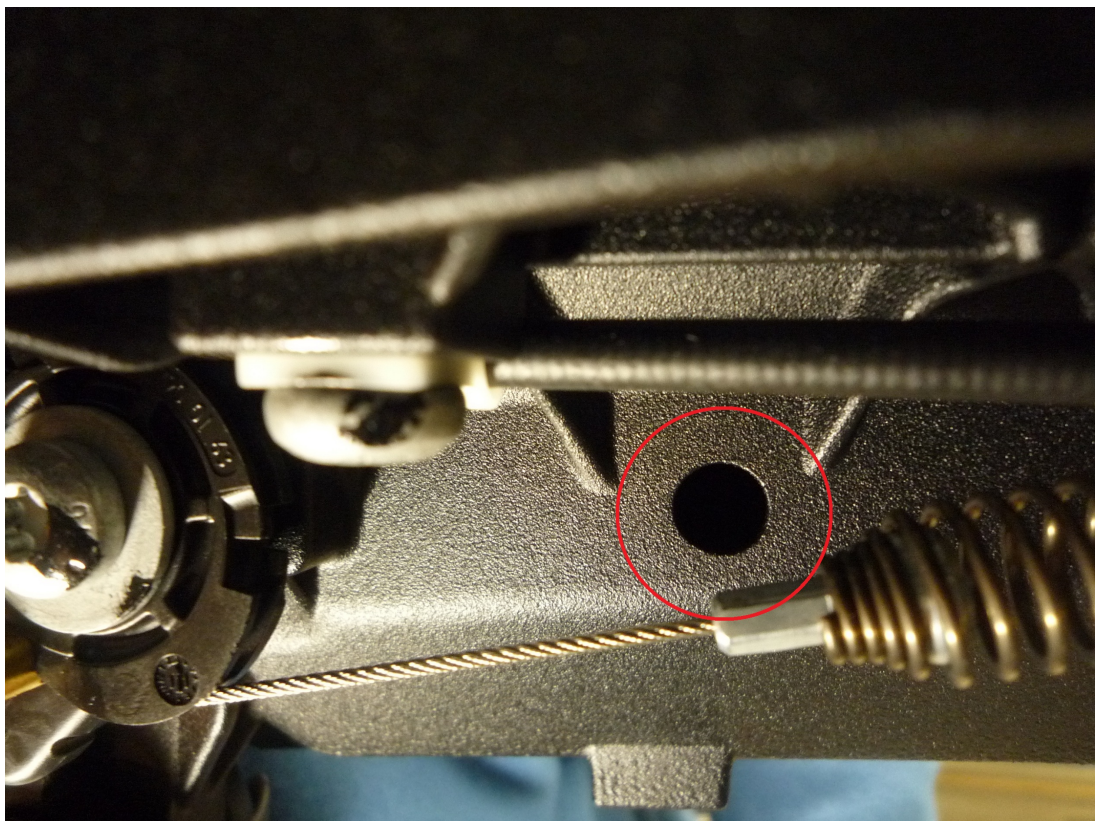




Abb.9.jpg:



Abb.10.jpg:

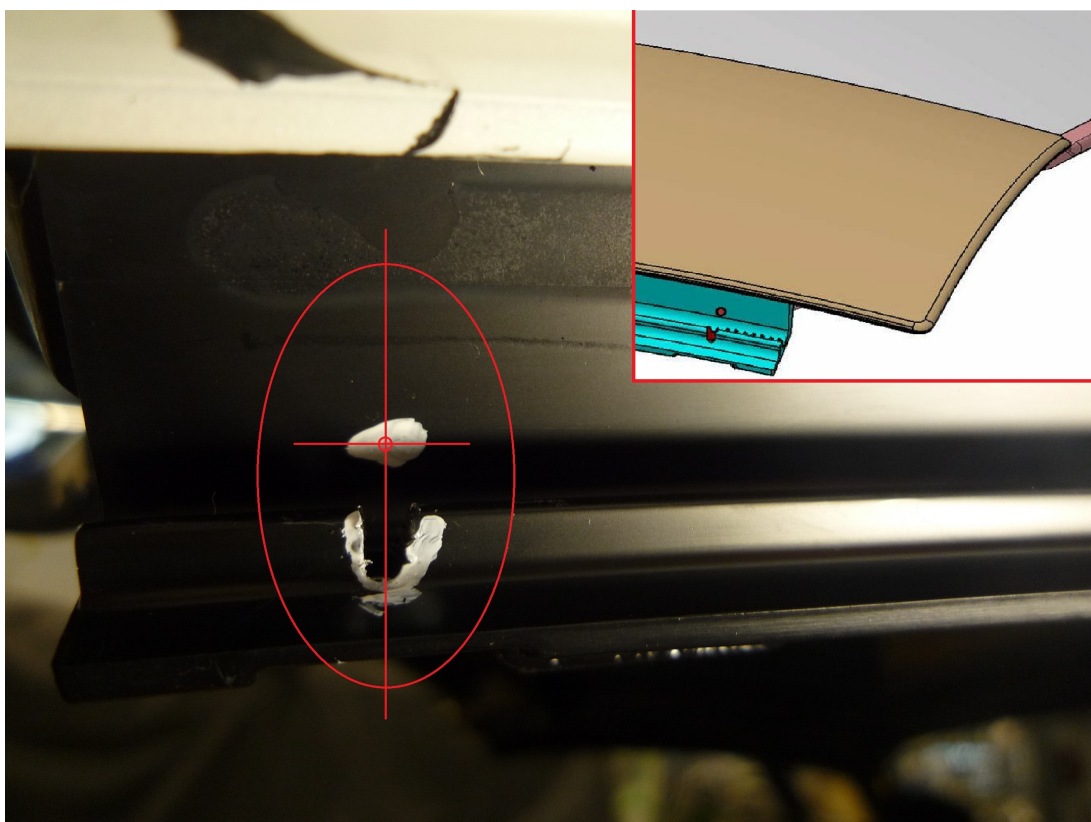


Abb.11.jpg:

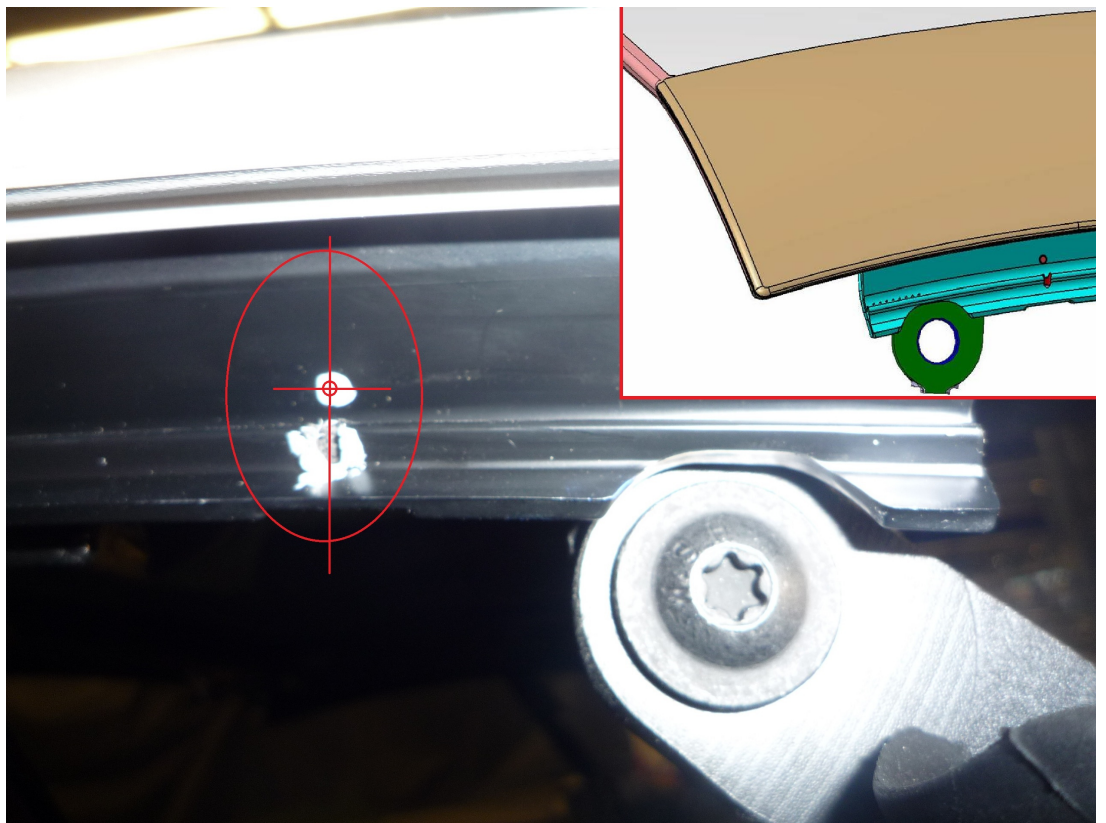


Abb.12.jpg:

