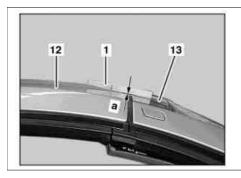
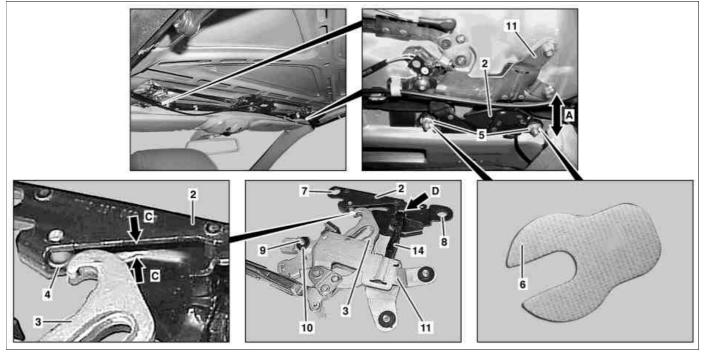
MODEL 230.4 except CODE (P99) "AMG Black Series" special model





P77.50-2113-07

- Straightedge
- 12 Vario roof front section
- 13 Crossmember above windshield
- a Height offset dimension
- b Gap dimension



P77.50-2199-09

Shown on right side of vehicle

- 2 Mount
- 3 Lock hook
- 4 Washer5 Nuts

- 6 Spacer
- 7 Inner attachment point mount
- 8 Outer attachment point mount
- 9 Inner attachment point lock
- 10 Washer
- 11 Lock
- 14 Catch lug

4	Checking		
⚠ Danger!	Risk of injury caused by moving parts that can pinch, crush or, in extreme cases, even sever extremities	No parts of the body or limbs should be within the operating range of the mechanism when moving components.	AS00.00-Z-0009-01A
⚠ Danger!	Risk of injury caused by body parts being trapped or crushed when working on partially open Vario roof (stop mode) or in its closing area as a result of the Vario roof suddenly collapsing	Secure Vario roof with a suitable special tool.	AS77.50-Z-0001-01A
1	Check transition from crossmember via windshield (13) to Vario roof front section (12) with a ruler (1)	Determine height offset dimension (a) directly on front roof edge of Vario roof front section (12). Vario roof should be closed and locked completely. Height offset from crossmember above windshield to Vario roof front section	*BE77.33-P-1006-01A
2	Check gap dimension (b) between crossmember above windshield (13) and Vario roof front section (12) with feeler gauge	Gap for crossmember above windshield to Vario roof front section	*BE77.30-P-1004-01A
		3	*129589032100

3	Check transition from Vario roof front section (12) to A-pillar (arrow B)	i The side roof edges of the Vario roof front section (12) should be flush with the	
X	Removing	outer edges of the A-pillars.	
4	Remove paneling from windshield at top	Do not disconnect electrical connectors from overhead control panel control unit. Lay paneling on upper wind deflector down to side together with overhead control panel control unit.	AR68.30-P-4250R
5	Remove paneling from front Vario roof		AR68.30-P-4350R
6	Remove support for securing intermediate position of Vario roof	3	*230589046300
4	Checking		
7	Switch on ignition, completely close Vario roof using Vario roof switch and check position of lock hooks (3) in left and right mount (2)	The lock hooks (3) should be centered in the opening (arrows C) in the mounts (2) when the catch is locked. The lock hooks (3) should not make contact with the mounts (2) or the window (4) to prevent cracking noises while driving.	
	Adjust		
8	Open Vario roof approx. 10 cm using Vario roof switch and position suitable spacer, e.g. wooden block, between Vario roof front section (12) and crossmember above windshield (13). Then switch off ignition	The Vario roof closes automatically approx. 7 seconds after ignition is switched off. Thereby, the shim will be pinched The shim should keep the Vario roof open so that the mounts (2) can be removed.	
9	Unscrew nuts (5) from left and right mounts (2) and remove left and right mounts (2) together with spacer (6)	i One or more spacers (6) may be present at the attachment points of the mount (2).	
10	Adjust position of lock hook (3) in mount (2) by removing or inserting spacers (6) on inner mount attachment point (7)	i It may be necessary to remove or insert several spacers (6) on the inner attachment point mount (7) to achieve the correct position of the lock hook (3) in the opening (arrows C) of the mount (2).	
11	Adjust height offset dimension (a) by removing or inserting spacers (6) on outer attachment point mount (8) on left and right mount (2)	The number of spacers (6) which can be inserted is limited because, otherwise, the lock hook (3) hits against the upper panel of the mount (2). In this case, additionally remove washer (10) from inner attachment point of lock (9) Height offset from crossmember above	*BE77.33-P-1006-01A
		windshield to Vario roof front section	BL77.33-F-1000-01A
12	Position left and right mount (2) on installation location and screw on nuts (5)	i Tighten nuts (5) only to the extent that the mounts (2) still can be moved.	
13	Remove and reinstall lock (11) on front lock for adjustment	Only if it is necessary to adjust the height offset dimension (a) on the inner attachment point of lock (9) must be corrected.	AR77.50-P-3035-01R *BA77.33-P-1001-01A
		Nm	*BA77.33-P-1011-01A
14	Slightly lift Vario roof front section (12) and remove shim inserted between Vario roof front section (12) and crossmember above windshield (13)	Only if the adjustment of the height offset dimension (a) has not been corrected on the inner attachment point of lock (9).	
		After the shim is removed, the Vario roof closes by itself Ensure that both locks (11) run correctly into the mounts (2).	
15	Switch on ignition, completely lock Vario roof using Vario roof switch. Then switch off ignition	Only if the adjustment of the height offset dimension (a) has not been corrected on the inner attachment point of lock (9).	
16	Adjust gap (b) by moving mount (2) in direction of arrow (arrow A)	Gap for crossmember above windshield to Vario roof front section	*BE77.30-P-1004-01A *129589032100
17	Align transition from Vario roof front section (12) to A-pillar (arrows B) by moving Vario roof front section (12) at side	The side roof edges of the Vario roof front section (12) should be flush with the outer edges of the A-pillars.	
18	Tighten nuts (5)	Nm	*BA77.33-P-1011-01A
19	Check adjustments performed, repeat adjustment if necessary	Gap for crossmember above windshield to Vario roof front section	*BE77.30-P-1004-01A
		Height offset from crossmember above windshield to Vario roof front section	*BE77.33-P-1006-01A
		[3]	*129589032100

20		Leave ignition switched on. The Vario roof is not in a confirmed end position and the stop function starts. It stops the Vario roof for 7 minutes in the current position. After expiration of this time, the Vario roof moves to the next mechanical end position by force of gravity	
21	Clean locking lugs (14) and guide (arrow D) on mounts (2) with rag and then lubricate	Leave ignition switched on and observe stop mode of Vario roof Lubricate catch lugs (14) over entire length.	
		Lubricant paste	*BR00.45-Z-1004-06A
X	Install		
22	Install paneling at front of Vario-roof		AR68.30-P-4350R
23	Install paneling on windshield at top		AR68.30-P-4250R

Test values for Vario roof gap dimensions

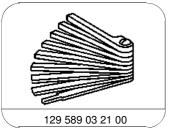
Number	Designation		Model 230
BE77.30-P-1004-01A	Gap for crossmember above windshield to Vario roof front section	Dimension mm "b"	5.0
		See picture	-

Test values for Vario roof and soft top mechanism

Number	Designation		Model 230
BE77.33-P-1006-01A	Height offset from crossmember above windshield to Vario roof front section	Dimension m	n 1.0
		See picture	-

$\ensuremath{{\rm Nm}}$ Soft top mechanical components

Number	Designation		Model 230
BA77.33-P-1001-01A	Bolt of catch on Vario roof	Nm	10
BA77.33-P-1011-01A	Nut, mount for lock to crossmember above windshield	Nm	10





Feeler gauge

Repair materials

Number	Designation	Order number
BR00.45-Z-1004-06A	Synthetic grease, sliding roof 500 g, DB supply specification 6827.60	A 001 989 46 51