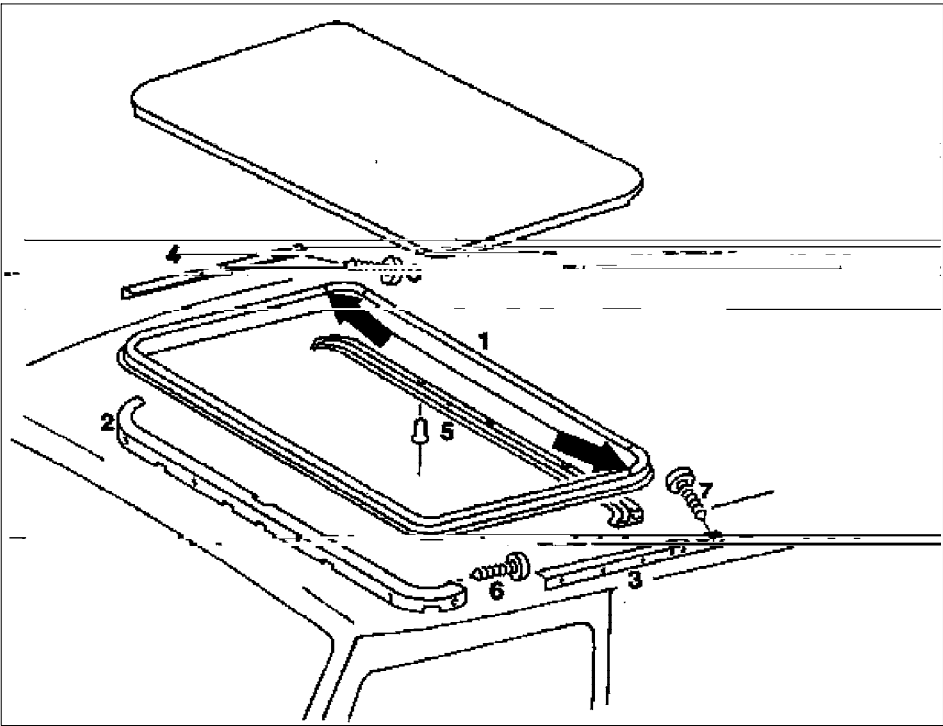





MODEL 463 /220 /221 /224 /225 /227 /228 /230 /231 /232 /233 /240 /241 /243 /244 /245 /246 /247 /248 /249 / 320 /321 /322 /323 /324 /325 /327 /328 /330 /331 /332 /333 with CODE (D27) Power sliding/pop-up roof

- 1 Seal
- 2 Front retaining rail
- 3 Left retaining rail
- 4 Right retaining rail
- 5 Rear retaining rail
- 6 Screw
- 7 Screw
- 8 Bolt

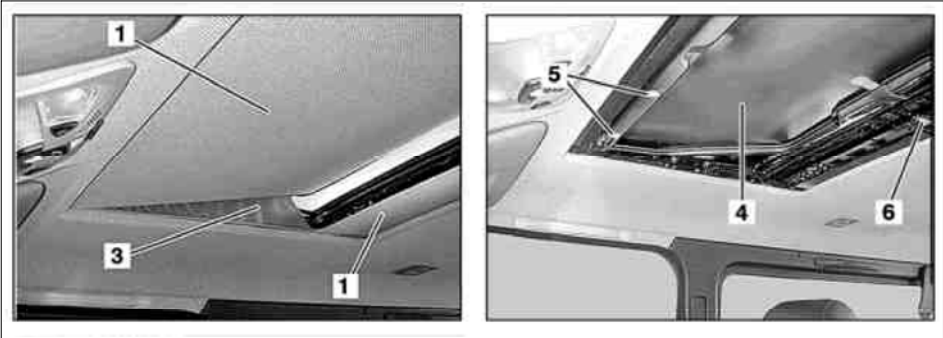


P77.20-0295-06







 	Remove, Install		
1	Completely open sliding/pop-up roof		
2	Mark installation position of seal (1) on roof cutout at connection points (arrows)		
3	Pull seal (1) out of retaining rails (2, 3, 4, 5)	<div> <div></div> <div> Installation: Press seal (1) into retaining rails (2, 3, 4, 5) Connection points of seal (1) should coincide with the marking on the roof cutout. The corrugation on the insert channel should point upward. </div> </div>	
4	Install in the reverse order		

MODEL 463.220 /221 /224 /225 /227 /228 /230 /231 /232 /233 /240 /241 /243 /244 /245 /246 /247 /248 /249 /3 20 /321 /322 /323 /324 /325 /327 /328 /330 /331 /332 /333 with CODE (D27) Power sliding/pop-up roof

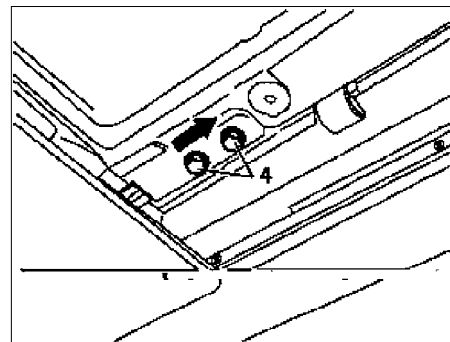
- 1 Paneling
- 4 Sliding/pop-up roof cover
- 5 Clip bottom section




P77.20-2359-04

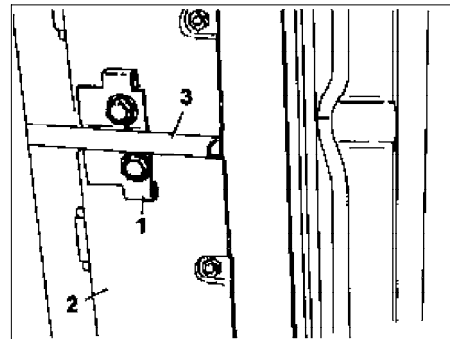
	Remove		
1	Remove paneling	 Electric sliding/pop-up roof, steel version (code D27).	AR77.20-P-0500-01EA
	Install		
2	Install paneling	 Electric sliding/pop-up roof, steel version (code D27). Except model 463.243/ 244/ 245/ 246/ 247/ 248/ 249/ 322/ 323/ 332/ 333. Model 463.243/244/245/246/247/248/249/322/323/332 /333.  If lining does not hold on the sliding/pop-up roof cover:~ Replace clip bottom section	AR77.20-P-0500-02EA AR77.20-P-0500-02EC AR77.20-P-0500-03EA WF58.50-P-7720-03A
 WF	Puller hook for clip bottom section on sliding/pop-up roof cover		
3	Close sliding/pop-up roof		
4	Check sliding/pop-up roof for proper function		

- 1 Loosen mounting screws (4) from sliding brackets on left and right.
- 2 Align sliding/pop-up roof precisely in center of cutout.
- 3 Move sliding bracket to inside (arrow) until sliding jaws make contact with guide at side.
- 4 Check centricity of sliding/pop-up roof in cutout.
- 5 Tighten mounting screws (4) for sliding brackets on left and right.



P77.20-2231-01

- 6 Remove guide plate (1) from sliding carrier (2).
- 7 Manually move sliding/pop-up roof cover and check side play of sliding jaws in relation to guide at several points.
 Sliding/pop-up roof cover should not cant, if necessary readjust sliding bracket, otherwise malfunctions can occur.
- 8 Install guide plate (1) on sliding carrier (2).

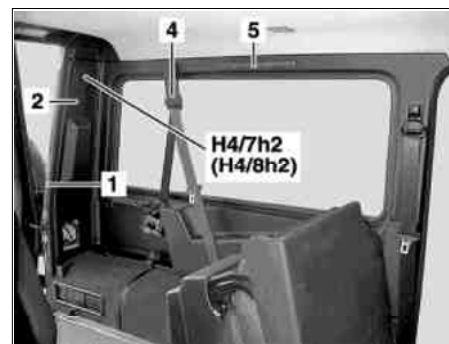


P77.20-0323-01

- 1 Remove left edge guard (1) from rear pillar.
- 2 Disconnect connector from left rear loudspeaker (H4/7h2).

i At rear of left rear pillar paneling (2).

- 3 Remove left rear pillar paneling (2).



P68.30-2520-01

- 4 Completely pull handwheel (arrow) out of sliding/pop-up roof motor and press in again approx. 3 to 4 mm.

i The sliding/pop-up roof should not be actuated electrically when the handwheel is pulled out.

- 5 Turn hand wheel (arrow) to left or right.

i One turn of the hand wheel changes the position of the sliding/pop-up roof by approx. 45 mm forward or back.

Turn hand wheel (arrow) to right = sliding/pop-up roof toward front

Turn hand wheel (arrow) to left = sliding/pop-up roof toward rear

- 6 Completely press hand wheel (arrow) into sliding/pop-up roof motor.

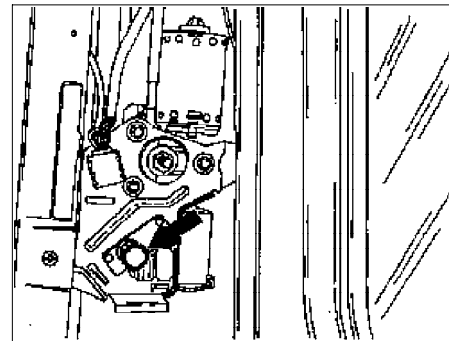
- 7 Check whether sliding/pop-up roof closes properly.

i If the sliding/pop-up roof does not close exactly after this adjustment, repeat adjustment.

- 8 Connect connector of left rear loudspeaker (H4/7h2).

- 9 Install left rear pillar paneling (2).

- 10 Press left edge guard (1) onto rear pillar.

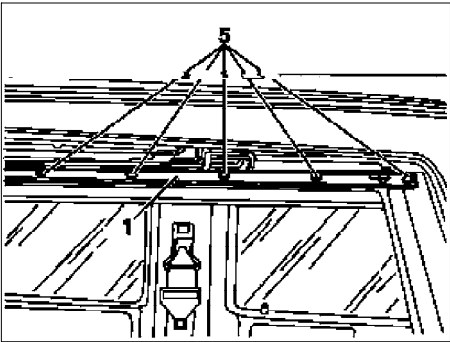


P77.20-0291-01

Test values for sliding/pop-up roof roof

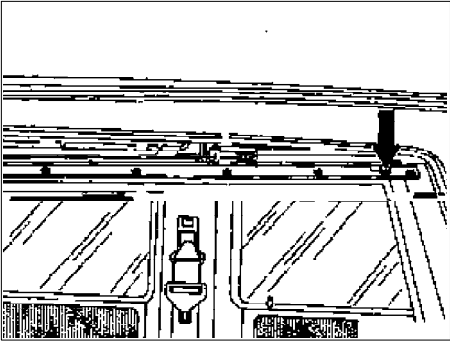
Number	Designation	Model
		463.220/221/224/225/ 227/228/230/ 231/232/ 233/240/241/243/244/ 245/ 246/247/248/249/ 320/321/322/323/ 324/ 325/327/328/330/331/ 332/333
BE77.20-P-1001-01B	Height adjustment	Front: lower than outer roof surface mm 0-1
		Rear: higher than outer roof surface mm 0-1

- 1 Open sliding/pop-up roof.
- 2 Loosen mounting screws (5) from sliding rails (1) on left and right.
- 3 Close sliding/pop-up roof.




P77.20-2253-01

- 4 Adjust front edge of sliding/pop-up roof cover by turning height adjustment screws (arrow) in relation to exterior roof surface (see table for values).
- 5 Tighten mounting screws (5) for sliding rails (1) on left and right.



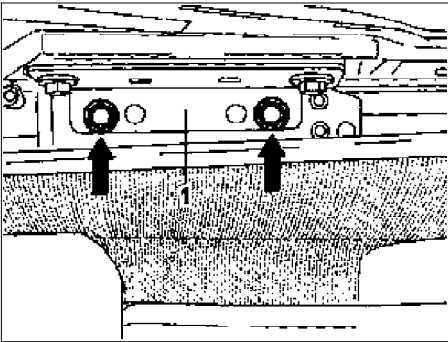
P77.20-0292-01

AR77.20-P-1100-04A	Adjust height at rear of sliding/pop-up roof	
 WF	Centering bolts for sliding roof	WF58.50-P-7720-01A

Test values for sliding/pop-up roof roof

Number	Designation		Model	
			463.220/221/224/225/ 227/228/230/ 231/232/ 233/240/241/243/244/ 245/ 246/247/248/249/ 320/321/322/323/ 324/ 325/327/328/330/331/ 332/333	
BE77.20-P-1001-01B	Height adjustment	Front: lower than outer roof surface	mm	0-1
		Rear: higher than outer roof surface	mm	0-1

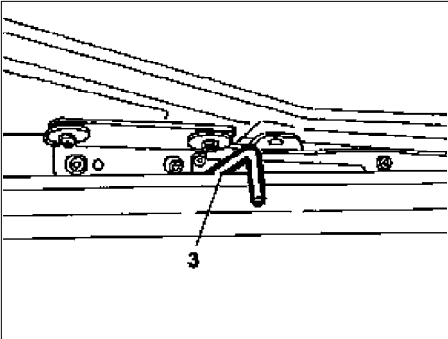
- Close sliding/pop-up roof.
- Loosen screws (arrows) from retaining brackets (1) on left and right.



P77.20-0337-01

- Insert left and right centering bolts (3) into centering holes.
- Adjust sliding/pop-up roof cover in relation to outer surface of roof.

i Adjust edges of rear radiuses of sliding/pop-up roof cover in relation to exterior roof surface (see table for values).
- Tighten screws (arrows) on retaining brackets (1) on left and right.
- Pull centering bolts (3) out of centering holes on left and right.

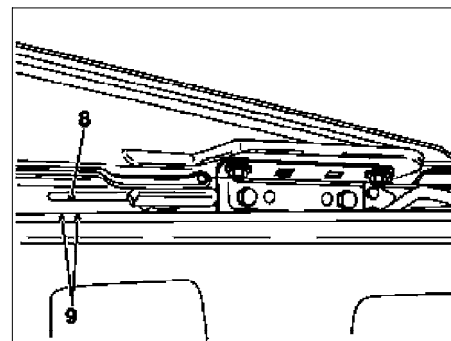


P77.20-0294-01

AR77.20-P-1100A	Adjust sliding/pop-up roof cover	11.11.96
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MODEL 463.220 /221 /224 /225 /227 /228 /230 /231 /232 /233 /240 /241 /243 /244 /245 /246 /247 /248 /249 /3 20 /321 /322 /323 /324 /325 /327 /328 /330 /331 /332 /333 with CODE (D27) Power sliding/pop-up roof

- 8 Adjustment marking
9 Adjustment marking



P77.20-2260-01

	Remove		
1	Remove lining on sliding / pop-up roof		AR77.20-P-0500G
2	Close sliding/pop-up roof		
	Setting		
3	Adjust sliding jaws on sliding/pop-up roof		AR77.20-P-1100-01A
4	Close sliding/pop-up roof		
5	Check markings (8, 9) on left and right sliding bracket for coincidence	<p> If the markings (8, 9) do not coincide:~</p> <p>Remove paneling from rear pillar. Only model 463.243/ 244/ 245/ 246/ 247/ 248/ 249/ 322/ 323 / 332/ 333.</p> <p> On left side only.</p> <p>Perform fine adjustment of sliding/pop-up roof.</p>	<p>AR68.30-P-4505GK</p> <p>AR77.20-P-1100-02A</p>
6	Close sliding/pop-up roof		
7	Check dimension between exterior roof surface and sliding/pop-up roof cover (see table for values)	<p> If dimension deviates:~</p> <p>Adjust height at front of sliding/pop-up roof.</p>	<p>*BE77.20-P-1001-01B</p> <p>AR77.20-P-1100-03A</p>
8	Close sliding/pop-up roof		
9	Check dimension between exterior roof surface and sliding/pop-up roof cover at rear (see table for values)	<p> If dimension deviates:~</p> <p>Adjust height at rear of sliding/pop-up roof</p>	<p>*BE77.20-P-1001-01B</p> <p>AR77.20-P-1100-04A</p>
WF	Centering bolts for sliding roof		WF58.50-P-7720-01A
	Install		
10	Install lining on sliding/pop-up roof		AR77.20-P-0500G
11.1	Install paneling on rear pillar	Only model 463.243/ 244/ 245/ 246/ 247/ 248/ 249/ 322/ 323 / 332/ 333.	AR68.30-P-4505GK

Test values for sliding/pop-up roof roof

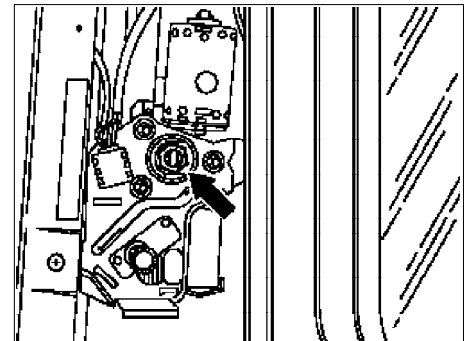
Number	Designation	Model
		463.220/221/224/225/ 227/228/230/ 231/232/ 233/240/241/243/244/ 245/ 246/247/248/249/ 320/321/322/323/ 324/ 325/327/328/330/331/ 332/333
BE77.20-P-1001-01B	Height adjustment	Front: lower than outer roof surface mm 0-1
		Rear: higher than outer roof surface mm 0-1

AR77.20-P-3009-01A	Adjust sliding clutch on sliding/pop-up roof motor	
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Test values for sliding/pop-up roof roof

Number	Designation	Model
		463.220/221/224/225/ 227/228/230/ 231/232/ 233/240/241/243/244/ 245/ 246/247/248/249/ 320/321/322/323/ 324/ 325/327/328/330/331/ 332/333
BE77.20-P-1002-01B	Sliding clutch tightening torque	Specified value Nm 6-7

- Remove plastic cap for emergency crank drive.
- Correct tightening torque for sliding clutch by turning hex. nut (arrow) (see table for value). Hold gear shaft with open-end wrench so that it cannot turn.
 - ⚙ Turn hex. nut max. 60°, sliding clutch should not lock up under any circumstances.
 - i** Turn hex. nut to right ° to increase torque.
Turn hex. nut to left ° to reduce torque.
- Press on plastic cap.



P77.20-0266-01