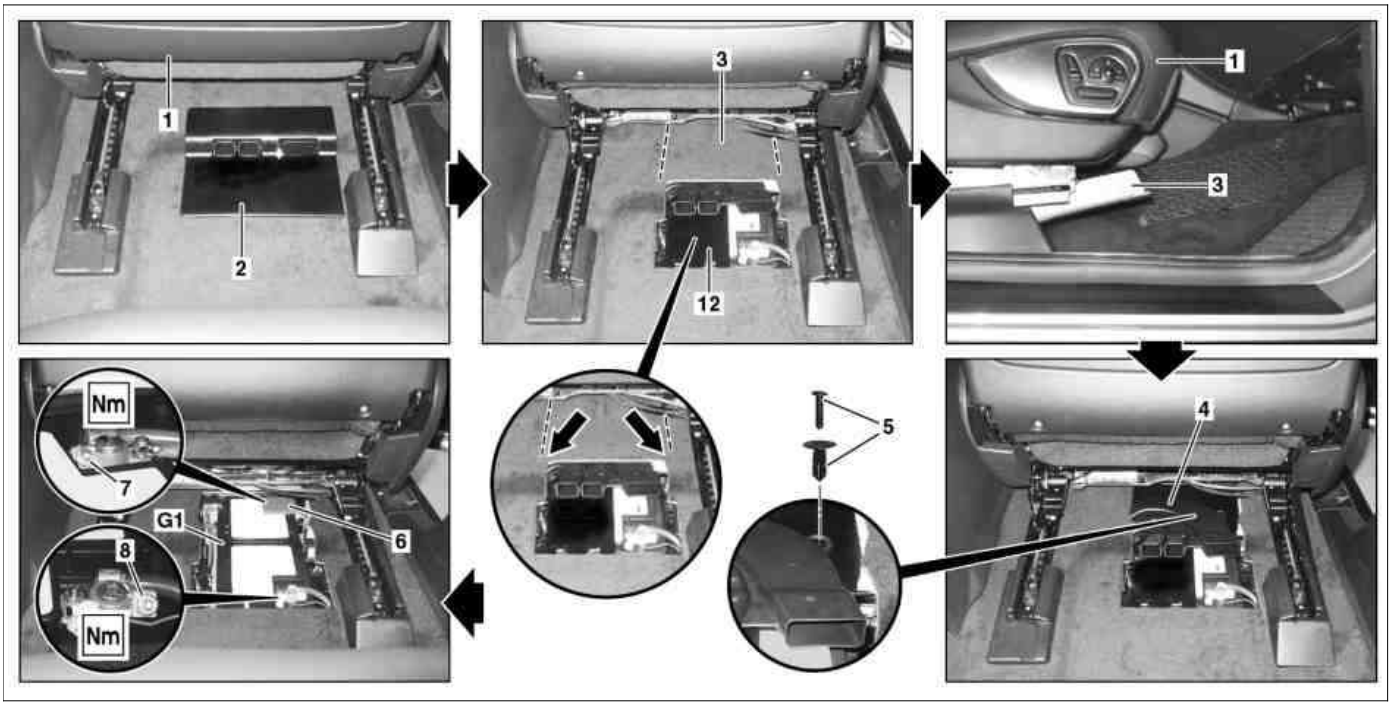
MODEL 164



P54.10-2514-09

1 Passenger seat
2 Cover
3 Floor Covering
4 Air vent
5 Expansion clip
6 Positive battery terminal cover
7 Nut on positive battery terminal clamping device
8 Nut on negative battery terminal clamping device
12 Battery cover

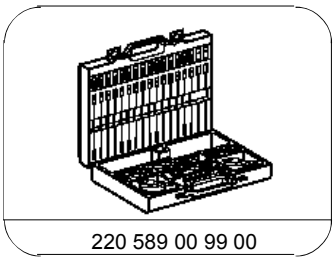
	Removing		
⚠ **Danger!**	**Risk of explosion** caused by escaping oxyhydrogen gas. **Risk of injury** caused by caustic burns to eyes, skin and mucous membranes from battery electrolyte (contains diluted sulfuric acid) or metal spatter due to short circuit. **Risk of burn injuries** caused by short circuit. **Risk of poisoning** caused by swallowing battery electrolyte (contains diluted sulfuric acid) or absorption of lead over the skin or orifices	No fire, sparks, open flames or smoking. Wear acid-resistant gloves and clothing and safety glasses with side guards. Do not place any conductive objects on the battery and avoid any short circuit from battery positive to ground. Only fill liquid battery electrolyte (diluted sulfuric acid) into suitable and appropriately marked containers.	AS54.10-Z-0001-01A
	Notes on battery	All models	AH54.10-P-0001-01A
i	Notes on AGM battery		AH54.10-P-0002-01A
1	Switch off ignition and remove the transmitter key from the EIS [EZS] control unit	i On vehicles with Keyless Go, code 889: Press Keyless Go start/stop button repeatedly until ignition is switched off. Remove transmitter key from vehicle and store it in a location beyond its transmission range (at least 2 m).	
2	Move head restraint on front passenger seat (1) all the way down	If the head restraint is not moved all the way down, the sun visor may be damaged when inclining the seat backrest.	
3	Move front passenger seat (1) forward and upward as far as possible and tilt seat backrest forward		
4	Remove cover (2)		
5	Separate floor covering (3) at both marked positions (arrows)	i The floor covering (3) has already been separated, if at an earlier stage work was performed on or in the battery compartment.	
6	Move front passenger seat (1) all the way to rear		
7	Fold floor covering (3) forwards, move front passenger seat (1) as far forward as possible, until the battery compartment is completely accessible	i Make sure that the folded-over floor covering (3) does not tear at the fold.	
8	Remove spreader clip (5) and detach air vent (4)	i **Installation:** Replace spreader clip (5), if it is damaged.	

9	Remove battery cover (12) and detach cover from positive battery terminal (6)		
10	Close engine hood, trunk lid and all doors (except rear right door)		
11	Move rotary tumbler in lock of rear right door to "closed" position while door is open	When measurements have been completed, the rotary tumbler must be unlocked again by actuating the outside door handle, otherwise the rotary tumbler could be destroyed when the door is closed. When the rotary tumbler is set to the "closed" position, the interior light will be switched off after a delay of approx. 10 seconds.	
12	Lock vehicle from outside	It must be ensured that no remote starting unit is connected to the vehicle. The time between locking the vehicle and performing the measurements must be at least 35 minutes. The vehicle must remain completely motionless during this time. No doors should be opened or closed, the vehicle should not be locked and unlocked, and none of the switches and instruments should be operated.	
	Measure		
13.1	Connect positive measurement cable of multimeter to ground connection of body	When measuring with multimeter. Electrical connection set Multimeter	*220589009900
14.1	Undo nut on battery negative pole terminal (8), carefully lift off battery negative pole terminal and simultaneously connect negative measurement cable of multimeter to battery negative pole	When measuring with multimeter. The circuit should not be broken as this could delete faults that may be stored in the control units. If the multimeter cannot be attached without breaking the circuit, an additional battery must be connected parallel to the power supply battery. After the measuring equipment has been connected and the CAN bus has deactivated (after at least 35 minutes), the additional battery must be disconnected again. Electrical connection set Multimeter	*220589009900
15.1	Completely detach battery negative pole terminal from battery negative pole	When measuring with multimeter.	
16	Check quiescent current consumption	A measured value of 50 mA must not be exceeded. Possible causes for increased values: ↓ ● If the measured value is between 0.05 and 1.6 A, this usually indicates that a control unit has failed to switch itself off. However, this can also be caused by an electric or electronic component (e.g. switch or relay). ● If the measured value is above 1.6 A, this usually indicates that a defective control unit is preventing the engine compartment CAN bus or interior CAN bus from switching off. Measurement with multimeter: ↓ Electrical connection set Multimeter When measuring with current clamp: ↓ Current measurement pliers Current clamp with display and multimeter connection for checking quiescent current Current clamp with multimeter connection for checking quiescent current Current clamp with display for quiescent current measurement	*220589009900
17.1	Locate defective consumers via power supply	With quiescent current consumption between 0.05 and 1.6 A (after a waiting time of at least 35 minutes).	AR54.10-P-1030-09GZ
GF	Fuse assignment of front prefuse box		GF54.15-P-1256-07GZ
GF	Fuse assignment of battery compartment prefuse box		GF54.15-P-1256-15GZ
GF	Fuse assignment of fuse and relay box in right engine compartment		GF54.15-P-1256-02GZ

GF	Fuse assignment of fuse box in cockpit		GF54.15-P-1256-16GZ
GF	Relay assignment of the load compartment fuse and relay box		GF54.15-P-1257-08GZ
GF	Relay assignment of fuse and relay box in right engine compartment		GF54.15-P-1257-02GZ
17.2	Locate defective consumer via CAN bus	i With quiescent current consumption above 1.6 A (after a waiting time of at least 35 minutes).	AR54.10-P-1030-10GZ
PE	Wiring diagram for interior CAN bus	Voltage distributor X30/4 and X30/6, sheet 1	PE00.19-P-2300MAA
		Voltage distributor X30/7, sheet 2	PE00.19-P-2300MAB
		Only model 164.8, voltage distributor X30/5, sheet 3	PE00.19-P-2300MAC
PE	Wiring diagram for engine CAN bus	Only with engine 113, 272, 642. Only with engine 156 as of 1.1.06.	PE00.19-P-2200MAA
18.1	Fully attach battery negative pole terminal to battery negative pole and tighten nut on battery negative pole terminal (8)	i When measuring with multimeter. i The circuit must not be broken. Nm	*BA54.10-P-1012-01C
	Remove/install		
19	Remove consumer identified as being defective and fit new consumer		
20 AD	Read out and erase fault memory Connect STAR DIAGNOSIS and read out fault memory	STAR DIAGNOSIS diagnosis system	AD00.00-P-2000-04A
	Measure		
21	Recheck quiescent current consumption		
	Install		
22	Fit battery positive pole cover (6) and clip on battery cover (12)		
23	Fit air vent (4) and secure expansion clip (5)	i Replace expansion clip (5).	
24	Move front passenger seat (1) to original position, fold floor covering (3) back again and clip on cover (2)		
25	Move rotary tumbler in lock of rear right door to "open" position by actuating outside door handle and then close door	The rotary tumbler must be unlocked again by actuating the outside door handle, otherwise the rotary tumbler could be destroyed when the door is closed.	

Nm Battery

Number	Designation			Model 164
BA54.10-P-1012-01C	Nut, battery cable to battery terminal	M6	Nm	6



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Electrical connection kit