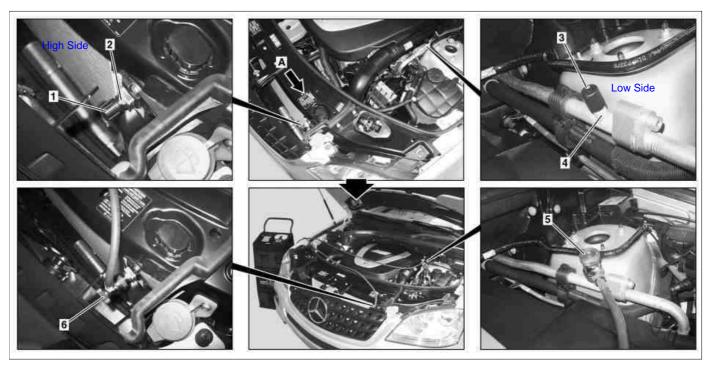
MODEL 164

with CODE (580) Automatic air conditioning with CODE (581) Comfort automatic air conditioning

with CODE (582) Rear air conditioner



P83.30-4121-09

## Illustrated on model 164.186

- 2 Filling connection of high pressure line
- Plug

- Filling connection of low-pressure line
- 5 Filling equipment connection
- Filling equipment connection

## **Modification notes**

12.7.06	Filling quantities added	Operation step 7	
5.1.07	Reference to document AR83.30-P-6520RT added	Operation step 4	

	Drain		
⚠ Danger!	Risk of explosion caused by welding or soldering work on closed air conditioning system. Risk of poisoning caused by inhaling overheated refrigerant vapors. Risk of injury to skin and eyes caused by contact with liquid refrigerants.	Never perform welding work on or near a closed air conditioning system. No smoking or open flames. Wear safety glasses and protective gloves. Work only in well ventilated areas. Carry out repair work on the air conditioning system circuit only after the system has been emptied.	AS83.00-Z-0001-01A
(9)	Procedure for a damaged or leaky air conditioning system		AH83.30-N-0004-01A
( <b>)</b>	Protect air conditioning circuit and components from moisture when carrying out repair work		AH83.30-P-0005-01P
i	Notes on handling R134a refrigerant	Air conditioning with refrigerant R134a	AH83.30-N-0003-01A
i	For all steps, proceed as per the operating instructions for the air conditioning vacuum, recycling and filling unit for refrigerant R134a		
1	Unscrew plug (1, 3)	i Depending on the engine model, various installation positions are possible for the filling connection of the high pressure line and for the filling connection of the low-pressure line.	
2	Connect the air conditioning vacuum, recycling and filling unit for refrigerant R134a to the vehicle	i Connect the filling unit connection (6) to the filling connection of the high pressure line (2) and the filling unit connection (5) to the filling connection for the low-pressure line (4)	
	Air conditioning draining, evacuating and charging equipment for refrigerant R134a	Air conditioner service unit R134a gotis://E_83_05.0	

3	Extract refrigerant R134a	i Make note of the amount of refrigerant compressor oil extracted.	
	Air conditioning draining, evacuating and charging equipment for refrigerant R134a  Evacuate	Air conditioner service unit R134a gotis://E_83_05.0	
4	Replace fluid reservoir (drier cartridge)	i Only if refrigerant circuit has been opened. Model 164, 251 / (except 164.177, 251.077 /177) With automatic air conditioning, code 580 With comfort automatic air conditioning, code 581 With rear air conditioner, code 582 Model 164.177, 251.077 /177 With automatic air conditioning, code 580 With comfort automatic air conditioning, code 580 With comfort automatic air conditioning, code 581	AR83.30-P-6520GZ AR83.30-P-6520RT
5	Clean refrigerant R134a and evacuate air conditioning system	With rear air conditioner, code 582	
	Air conditioning draining, evacuating and charging equipment for refrigerant R134a	Air conditioner service unit R134a gotis://E 83 05.0	
6	Replace the quantity of refrigerant compressor oil noted when evacuating the air conditioning system with new refrigerant compressor oil, fill it into the refrigerant circuit	Strictly observe the specifications of the adhesive data label (arrow A) of the air conditioning to prevent damage caused by overfilling or underfilling. The adhesive data label of the air conditioning contains specific data for the each vehicle. The AC compressor oil to be used is indicated in addition to the refrigerant quantity!	
	Air conditioning draining, evacuating and charging equipment for refrigerant R134a	If the wrong quantity of refrigerant compressor oil is filled, then the refrigerant compressor may be damaged.  Air conditioner service unit R134a gotis://E 83 05.0	
7	Charge air conditioning system	Strictly observe the specifications of the adhesive data label (arrow A) of the air conditioning to prevent damage caused by overfilling or underfilling. The adhesive data label of the air conditioning contains specific data for the each vehicle. The AC compressor oil to be used is indicated in addition to the refrigerant quantity!	
		Air conditioning system/automatic climate control filling capacity	*BF83.00-P-1001-01F
		Refrigerant compressor filling quantity Additional quantity of oil to be added when system suddenly looses fluid (e.g. line ruptured)	*BF83.55-P-1001-01I *BF83.55-P-1002-01I
		Additional oil filling quantity after replacing the condenser	*BF83.55-P-1003-01I
		Additional oil filling quantity after replacing evaporator	
		Additional oil filling quantity after replacing the fluid reservoir  Additional oil filling quantity after replacing	
		the low-pressure line  Additional oil filling quantity after replacing	
		the high pressure line  Additional oil filling quantity after replacing	
		the refrigerant compressor Additional oil filling capacity in case of detectable leakage	*BF83.55-P-1009-01I
		Additional oil filling quantity after replacing rear air conditioning evaporator	*BF83.55-P-1010-01I
		Additional oil filling quantity after replacing rear AC lines	
		Additional oil filling quantity after replacing evaporator (rear compartment)	
	Air conditioning draining, evacuating and charging equipment for refrigerant R134a	Additional filling capacity for refrigerant compressor with rear air conditioning Air conditioner service unit R134a gotis://E 83 05.0	*BF83.55-P-1013-01I
8	Perform pressure test on AC system	<u>3000.11L 00 00.0</u>	

	Air conditioning draining, evacuating and charging equipment for refrigerant R134a	Air conditioner service unit R134a gotis://E 83 05.0	
9	Disconnect the filling unit connection (6) from the filling connection for the high pressure line (2) and the filling unit connection (5) from the filling connection for the low-pressure line (4).		
	3, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	Air conditioner service unit R134a gotis://E 83 05.0	
10	Screw on plug (1, 3)	i Replace damaged plugs!	
<b>1</b>	Check		
11	Check air conditioning system for leakage with air conditioning leak detector.	Air conditioning system leak detector gotis://E 83 04.0	

## Air conditioning system/automatic air conditioning

Number	Designation		Model 164.1/8 without air conditioning in rear (code 582)	Model 164.8 with air conditioning in rear (code 582)
BF83.00-P-1001-01F	Filling capacity for air conditioning/ automatic air conditioning system	Refrigerant R134 a g	970 = 2.138 lbs. =34.216 ozs.	1220
		Specifications for Sheet Operating Fluids	BB00.40-P-0361-00A	BB00.40-P-0361-00A

## Refrigerant compressor

Number	Designation			Refrigerant compressor in model 164
		use chart to cover cm3 to fluid ozs.	t	
BF83.55-P-1001-01I	Refrigerant compressor filling quantity	Compressor oil	cm3	110
		Specifications for Soperating Fluids	Sheet	BB00.40-P-0362-00A
BF83.55-P-1002-01I	Additional oil filling quantity following sudden draining of system (e.g. line ruptured)	Compressor oil	cm <sup>3</sup>	40
		Specifications for Specifications Fluids	Sheet	BB00.40-P-0362-00A
BF83.55-P-1003-01I	Additional oil filling quantity after replacing condenser	Compressor oil	cm <sup>3</sup>	20
		Specifications for Specifications Fluids	Sheet	BB00.40-P-0362-00A
BF83.55-P-1004-01I	Additional oil filling quantity after replacing evaporator	Compressor oil	cm3	40
		Specifications for Specifications Fluids	Sheet	BB00.40-P-0362-00A
BF83.55-P-1005-01I	Additional oil filling quantity after replacing fluid reservoir	Compressor oil	cm3	10
		Specifications for Operating Fluids	Sheet	BB00.40-P-0362-00A
BF83.55-P-1006-01I	Additional oil filling quantity after replacing low- pressure line	Compressor oil	cm <sup>3</sup>	10

	Specifications for Operating Fluids	Sheet	BB00.40-P-0362-00A
Additional oil filling quantity after replacing high- pressure line	Compressor oil	cm <sup>3</sup>	10
	Specifications for Operating Fluids	Sheet	BB00.40-P-0362-00A
Additional oil filling quantity after replacing refrigerant compressor	Compressor oil	cm <sup>3</sup>	20
	Specifications for Operating Fluids	Sheet	BB00.40-P-0362-00A
Additional oil filling quantity in case of detectable leakage	Compressor oil	cm3	20
	Specifications for Operating Fluids	Sheet	BB00.40-P-0362-00A
Additional oil filling quantity after replacing rear air conditioning evaporator	Compressor oil	cm <sup>3</sup>	30
	Specifications for Operating Fluids	Sheet	BB00.40-P-0362-00A
Additional oil filling quantity after replacing rear AC lines	Compressor oil	cm <sup>3</sup>	20
	Specifications for Operating Fluids	Sheet	BB00.40-P-0362-00A
Additional oil filling quantity after replacing evaporator (rear compartment)	Compressor oil	cm <sup>3</sup>	10
	Specifications for Operating Fluids	Sheet	BB00.40-P-0362-00A
Additional filling capacity for refrigerant compressor with rear air conditioning	Compressor oil	cm <sup>3</sup>	30
	Specifications for Operating Fluids	Sheet	BB00.40-P-0362-00A
	Additional oil filling quantity after replacing refrigerant compressor  Additional oil filling quantity in case of detectable leakage  Additional oil filling quantity after replacing rear air conditioning evaporator  Additional oil filling quantity after replacing rear AC lines  Additional oil filling quantity after replacing evaporator (rear compartment)	Additional oil filling quantity after replacing high- pressure line  Additional oil filling quantity after replacing refrigerant compressor  Additional oil filling quantity after replacing refrigerant compressor  Additional oil filling quantity in case of detectable leakage  Additional oil filling quantity after replacing rear air conditioning evaporator  Additional oil filling quantity after replacing rear air compressor oil specifications for Operating Fluids  Additional oil filling quantity after replacing rear AC Compressor oil specifications for Operating Fluids  Additional oil filling quantity after replacing rear AC Compressor oil specifications for Operating Fluids  Additional oil filling quantity after replacing compressor oil evaporator (rear compartment)  Additional filling quantity after replacing compressor oil with rear air conditioning  Specifications for Operating Fluids  Additional filling capacity for refrigerant compressor Compressor oil with rear air conditioning  Specifications for Operating Fluids	Additional oil filling quantity after replacing high- pressure line  Additional oil filling quantity after replacing refrigerant compressor  Additional oil filling quantity after replacing refrigerant compressor  Additional oil filling quantity in case of detectable leakage  Additional oil filling quantity after replacing rear air conditioning evaporator  Additional oil filling quantity after replacing rear air conditional oil filling quantity after replacing rear AC Compressor oil cm3  Additional oil filling quantity after replacing rear AC Compressor oil lines  Additional oil filling quantity after replacing rear AC Compressor oil cm3  Specifications for Operating Fluids  Additional oil filling quantity after replacing rear AC Compressor oil cm3  Additional oil filling quantity after replacing Compressor oil cm3  Additional oil filling quantity after replacing Compressor oil cm3  Additional filling quantity after replacing Compressor oil cm3  Additional filling capacity for refrigerant compressor Compressor oil with rear air conditioning  Additional filling capacity for refrigerant compressor Compressor oil cm3  Specifications for Sheet  Specifications for Sheet