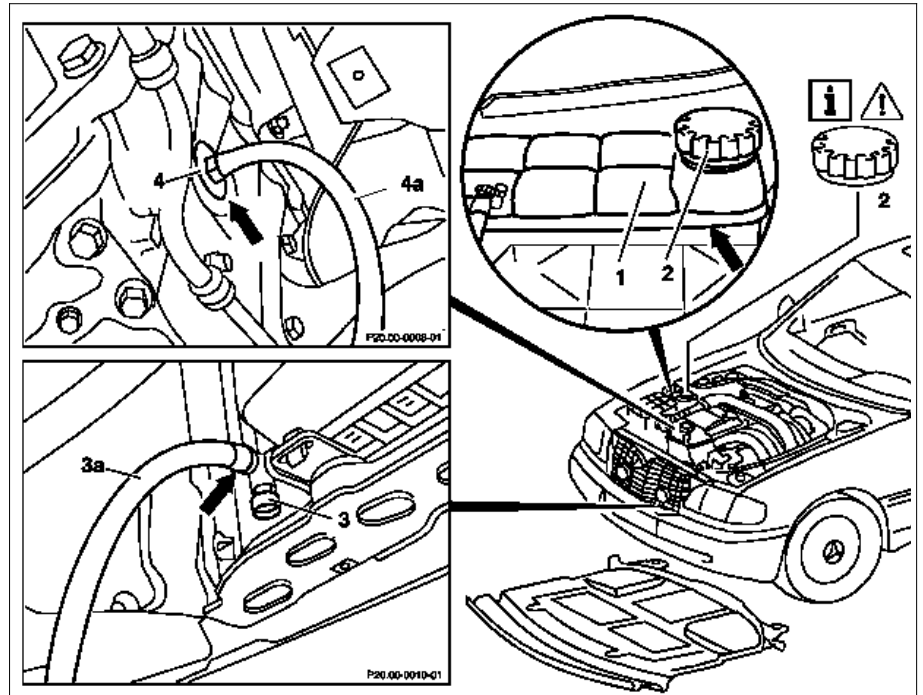


Engine	112 in model 129, 202, 208, 210, 211.061/065/080/082/261/265/280/282, 220, 230.467
Engine	112 in model 163
Engine	112.945 in model 463.209/232/233/244/245/250
Engine	113 (except 113.991) in model 215 (except 215.374)
Engine	113 (except 113.991) in model 220 (except 220.074/174)
Engine	113 in model 129, 202, 208, 210, 211.070/083/270/283
Engine	113 in model 163
Engine	113.962 in model 463.206/240/241/247/248/249/254
Engine	113.982 in model 463.241/243/246
Engine	137 in model 215, 220

Shown on MODEL 202

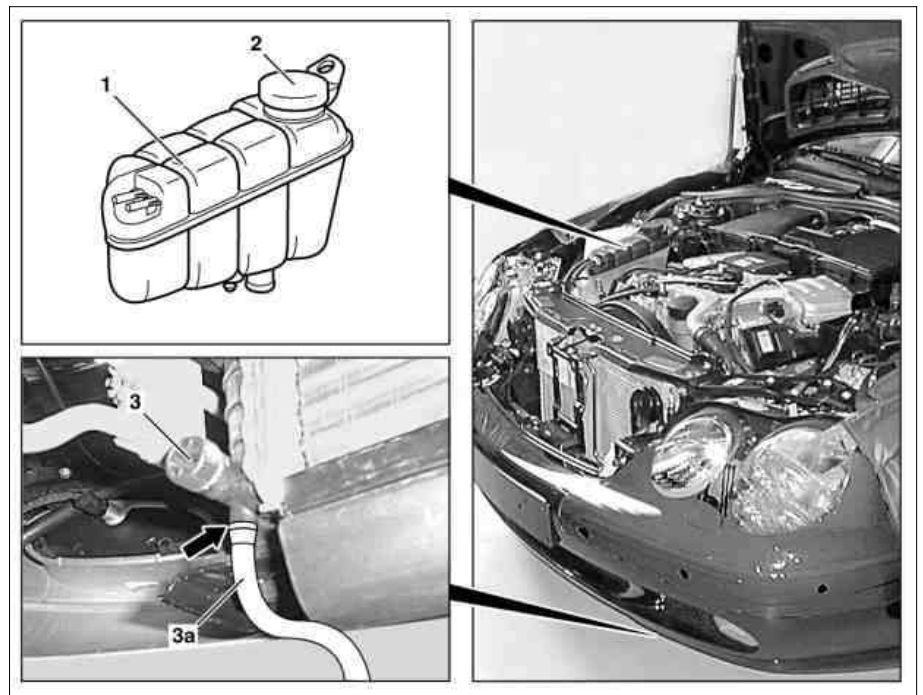
- 1 Coolant expansion reservoir
- 2 Cooling system cap
- 3 Drain screw for radiator
- 3a Drain hose
- 4 Drain screw for cylinder crankcase
- 4a Drain hose








P20.00-0215-06

Shown on model 215 with engine 137










- 1 Coolant expansion reservoir
- 2 Cooling system cap
- 3 Drain screw for radiator
- 3a Drain hose



P20.00-2045-06


 Danger!	Risk of injury to skin and eyes suffering scalding from contact with hot coolantspray. Risk of poisoning from swallowing coolant.	Do not open cooling system unless coolant temperature is below 90 °C. Open cap slowly and release the pressure. Do not pour coolant into beverage containers. Wear protective gloves, protective clothing and safety glasses.	AS20.00-Z-0001-01A
 Danger!	Risk of death caused by vehicle slipping or toppling off of the lifting platform.	Align vehicle between vehicle lift columns and position the four support plates at the vehicle lift support points specified by the vehicle manufacturer.	AS00.00-Z-0010-01A
	Notes on coolant		AH20.00-N-2080-01A
	Drain off		
1	Open engine hood		
2	Detach ground line from battery	Only when draining coolant at cylinder crankcase, right Engine 112 in model 129, 163, 202, 208, 210 Engine 113 in model 129, 163, 202, 208, 210 Engine 112 in model 211.061/065/080/082 Engine 113 in model 211.070/083 Engine 112 in model 211.261/265/280/282 Engine 113 in model 211.270/283 Engine 112 in model 220 Engine 113 (except 113.991) in model 215 (except 215.374) Engine 113 (except 113.991) in model 220 (except 220.074/174) Engine 137 in model 215, 220 Engine 112 in model 230.467 except code P99 (Special model "AMG Black Series") Engine 112.945 in model 463.209/232/233/244/245/250 Engine 113.962 in model 463.206/240/247/249/254 Engine 113.962 in model 463.248 except code 979 (Special protection MB Guard) Engine 113.962/982 in model 463.241 except code 979 (Special protection MB Guard) Engine 113.982 in model 463.243/246 Engine 113.962 in model 463.241 with code 979 (Special protection MB Guard) with code ZS4 (Special protection version FB4) with code ZS6 (Special protection version FB6) with code ZS7 (Special protection version FB7) Engine 113.982 in model 463.241 with code 979 (Special protection MB Guard) with code E26 (Auxiliary battery) with code ZS4 (Special protection version FB4) with code ZS6 (Special protection version FB6) with code ZS7 (Special protection version FB7) Engine 113.962 in model 463.248 with code 979 (Special protection MB Guard) with code E26 (Auxiliary battery) with code ZS6 (Special protection version FB6) with code ZS7 (Special protection version FB7)  Do not connect no-load current retention unit.	AR54.10-P-0003A AR54.10-P-0003T AR54.10-P-0003TA AR54.10-P-0003I AR54.10-P-0003R AR54.10-P-0003G AR54.10-P-0003PV AR54.10-P-0003PM
3	Open cooling system cap (2) at coolant expansion reservoir (1)	 Pay attention to different versions. Cooling system cap (2) with notch: Carefully turn cooling system cap (2) to first predetent, relieve overpressure, then unscrew cooling system cap (2). 1-stage and 2-stage cooling system cap (2): Turn cooling system cap (2) by 1/2 revolution anti-clockwise, release overpressure, then unscrew cooling system cap (2).	
4	Raise vehicle		

5.1	Remove lower engine compartment paneling	<p>Engine 112 in model 129, 202, 208, 210, 211.061/065/080/082/261/265/280/282, 220, 230.467</p> <p>Engine 112 in model 163</p> <p>Engine 113 (except 113.991) in model 215 (except 215.374)</p> <p>Engine 113 (except 113.991) in model 220 (except 220.074/174)</p> <p>Engine 113 in model 129, 202, 208, 210, 211.070/083/270/283</p> <p>Engine 113 in model 163</p> <p>Engine 137 in model 215, 220</p> <p>Engine 112 in model 129, 202, 208, 210</p> <p>Engine 113 in model 129, 202, 208, 210</p> <p>Engine 113.942 in model 163.172</p> <p>Engine 113.965 in model 163.175</p> <p>Engine 113.981 in model 163.174</p> <p>Engine 112 in model 211.061/065/080/082/261/265/280/282</p> <p>Engine 113 in model 211.070/083/270/283</p> <p>Engine 112 in model 220</p> <p>Engine 113 (except 113.991) in model 215 (except 215.374)</p> <p>Engine 113 (except 113.991) in model 220 (except 220.074/174)</p> <p>Engine 137 in model 215, 220</p> <p>Engine 112 in model 230.467 except code P99 (Special model "AMG Black Series")</p>	<p>AR61.20-P-1105AB</p> <p>AR61.20-P-1105GH</p> <p>AR61.20-P-1105T</p> <p>AR61.20-P-1105M</p> <p>AR61.20-P-1105R</p>
5.2	Remove underride guard	<p>Engine 112.945 in model 463.209/232/233/244/245/250</p> <p>Engine 113.962 in model 463.206/240/241/247/248/249/254</p> <p>Engine 113.982 in model 463.241/243/246</p>	
6	Remove air deflector shield	Engine 113.942 in model 163	
	Drain coolant at radiator		
7	Push drain hose (3a) onto radiator drain screw (3)	<p>Engine 112 in model 129, 202, 208, 210, 211.061/065/080/082/261/265/280/282, 220, 230.467</p> <p>Engine 112.945 in model 463.209/232/233/244/245/250</p> <p>Engine 113 (except 113.991) in model 215 (except 215.374)</p> <p>Engine 113 (except 113.991) in model 220 (except 220.074/174)</p> <p>Engine 113 in model 129, 202, 208, 210, 211.070/083/270/283</p> <p>Engine 113.962 in model 463.206/240/241/247/248/249/254</p> <p>Engine 113.982 in model 463.241/243/246</p> <p>Engine 137 in model 215, 220</p>	
8	Open radiator drain screw (3) and drain coolant	<p>Engine 112 in model 129, 202, 208, 210, 211.061/065/080/082/261/265/280/282, 220, 230.467</p> <p>Engine 112.945 in model 463.209/232/233/244/245/250</p> <p>Engine 113 (except 113.991) in model 215 (except 215.374)</p> <p>Engine 113 (except 113.991) in model 220 (except 220.074/174)</p> <p>Engine 113 in model 129, 202, 208, 210, 211.070/083/270/283</p> <p>Engine 113.962 in model 463.206/240/241/247/248/249/254</p> <p>Engine 113.982 in model 463.241/243/246</p> <p>Engine 137 in model 215, 220</p> <p>i Catch coolant in a suitable container.</p>	
9	Tighten radiator drain screw (3) and detach drain hose (3a) from radiator drain screw (3)	<p>Engine 112 in model 129, 202, 208, 210, 211.061/065/080/082/261/265/280/282, 220, 230.467</p> <p>Engine 112.945 in model 463.209/232/233/244/245/250</p> <p>Engine 113 (except 113.991) in model 215 (except 215.374)</p> <p>Engine 113 (except 113.991) in model 220 (except 220.074/174)</p> <p>Engine 113 in model 129, 202, 208, 210, 211.070/083/270/283</p> <p>Engine 113.962 in model 463.206/240/241/247/248/249/254</p> <p>Engine 113.982 in model 463.241/243/246</p> <p>Engine 137 in model 215, 220</p>	

<p>16</p> <p>   BB  BB</p>	<p>Pour in coolant and bleed cooling system</p> <p>Notes on coolant level</p> <p>Notes on coolant level</p> <p>Anticorrosion/antifreeze agents (Sheet 325.0)</p> <p>Coolant specifications</p>	<p>Engine 112 in model 129, 202, 208, 210, 211.061/065/080/082/261/265/280/282, 220, 230.467 Engine 112 in model 163 Engine 112.945 in model 463.209/232/233/244/245/250 Engine 113 (except 113.991) in model 215 (except 215.374) Engine 113 (except 113.991) in model 220 (except 220.074/174) Engine 113 in model 129, 202, 208, 210, 211.070/083/270/283 Engine 113 in model 163 Engine 113.962 in model 463.206/240/241/247/248/249/254 Engine 113.982 in model 463.241/243/246 Engine 137 in model 215, 220</p> <p> Re-use clean coolant.</p> <p> Engine 112.910/920 in model 202 Engine 112.911/921/941 in model 210 Engine 112.913/917/949/954 in model 211 Engine 112.922/944/972 in model 220 Engine 112.923/943 in model 129 Engine 112.940 in model 208 Engine 112.942 in model 163 Engine 112.945 in model 463.209/232/233/244/245/250 Engine 112.970, 113.965 in model 163 Engine 112.973 in model 230.467 Engine 112.975 in model 220 Engine 113.940/980 in model 210 Engine 113.941/960 in model 220 Engine 113.942/981 in model 163 Engine 113.943/984 in model 208 Engine 113.944 in model 202 Engine 113.948/966 in model 220 Engine 113.961 in model 129 Engine 113.962 in model 463.206/240/241/247/248/249/254 Engine 113.967/969 in model 211 Engine 113.982 in model 463.241/243/246 Engine 113.986 in model 215Cooling system</p> <p> Engine 137.970 in model 215, 220Cooling system</p> <p> Cooler vacuum filling device</p> <p> Test cap</p>	<p>AR20.00-P-1142-04AK</p> <p>AH20.00-P-1142-01V</p> <p>AH20.00-P-1142-01GH</p> <p>BB00.40-P-0325-00A</p> <p>BB00.40-P-0310-01A</p> <p>*BF20.00-P-1001-02K</p> <p>*BF20.00-P-1001-02M</p> <p>*285589002100</p> <p>*169589009100</p>
<p>17</p>	<p>Check cooling system for leaktightness</p>	<p>Engine 112 in model 129, 202, 208, 210, 211.061/065/080/082/261/265/280/282, 220, 230.467 Engine 112 in model 163 Engine 112.945 in model 463.209/232/233/244/245/250 Engine 113 (except 113.991) in model 215 (except 215.374) Engine 113 (except 113.991) in model 220 (except 220.074/174) Engine 113 in model 129, 202, 208, 210, 211.070/083/270/283 Engine 113 in model 163 Engine 113.962 in model 463.206/240/241/247/248/249/254 Engine 113.982 in model 463.241/243/246</p>	<p>AR20.00-P-1010HA</p>
<p>18</p>	<p>Install air deflector shield</p>	<p>Engine 113.942 in model 163</p>	
<p>19.1</p>	<p>Install underride guard</p>	<p>Engine 112.945 in model 463.209/232/233/244/245/250 Engine 113.962 in model 463.206/240/241/247/248/249/254 Engine 113.982 in model 463.241/243/246</p>	

19.2	Install lower engine compartment paneling	<p>Engine 112 in model 129, 202, 208, 210, 211.061/065/080/082/261/265/280/282, 220, 230.467</p> <p>Engine 112 in model 163</p> <p>Engine 113 (except 113.991) in model 215 (except 215.374)</p> <p>Engine 113 (except 113.991) in model 220 (except 220.074/174)</p> <p>Engine 113 in model 129, 202, 208, 210, 211.070/083/270/283</p> <p>Engine 113 in model 163</p> <p>Engine 137 in model 215, 220</p> <p>Engine 112 in model 129, 202, 208, 210</p> <p>Engine 113 in model 129, 202, 208, 210</p> <p>Engine 113.942 in model 163.172</p> <p>Engine 113.965 in model 163.175</p> <p>Engine 113.981 in model 163.174</p> <p>Engine 112 in model 211.061/065/080/082/261/265/280/282</p> <p>Engine 113 in model 211.070/083/270/283</p> <p>Engine 112 in model 220</p> <p>Engine 113 (except 113.991) in model 215 (except 215.374)</p> <p>Engine 113 (except 113.991) in model 220 (except 220.074/174)</p> <p>Engine 137 in model 215, 220</p> <p>Engine 112 in model 230.467 except code P99 (Special model "AMG Black Series")</p>	<p>AR61.20-P-1105AB</p> <p>AR61.20-P-1105GH</p> <p>AR61.20-P-1105T</p> <p>AR61.20-P-1105M</p> <p>AR61.20-P-1105R</p>
20	Lower vehicle		
21	Connect ground line to battery	<p>Only when coolant has been drained at cylinder crankcase on the right</p> <p>Engine 112 in model 129, 163, 202, 208, 210</p> <p>Engine 113 in model 129, 163, 202, 208, 210</p> <p>Engine 112 in model 211.061/065/080/082</p> <p>Engine 113 in model 211.070/083</p> <p>Engine 112 in model 211.261/265/280/282</p> <p>Engine 113 in model 211.270/283</p> <p>Engine 112 in model 220</p> <p>Engine 113 (except 113.991) in model 215 (except 215.374)</p> <p>Engine 113 (except 113.991) in model 220 (except 220.074/174)</p> <p>Engine 137 in model 215, 220</p> <p>Engine 112 in model 230.467 except code P99 (Special model "AMG Black Series")</p> <p>Engine 112.945 in model 463.209/232/233/244/245/250</p> <p>Engine 113.962 in model 463.206/240/247/249/254</p> <p>Engine 113.962 in model 463.241/248 except code 979 (Special protection MB Guard)</p> <p>Engine 113.982 in model 463.241 except code 979 (Special protection MB Guard)</p> <p>Engine 113.982 in model 463.243/246</p> <p>Engine 113.962 in model 463.248 with code 979 (Special protection MB Guard) with code E26 (Auxiliary battery) with code ZS6 (Special protection version FB6) with code ZS7 (Special protection version FB7)</p> <p>Engine 113.962/982 in model 463.241 with code 979 (Special protection MB Guard) with code E26 (Auxiliary battery) with code ZS4 (Special protection version FB4) with code ZS6 (Special protection version FB6) with code ZS7 (Special protection version FB7)</p>	<p>AR54.10-P-0003A</p> <p>AR54.10-P-0003T</p> <p>AR54.10-P-0003TA</p> <p>AR54.10-P-0003I</p> <p>AR54.10-P-0003R</p> <p>AR54.10-P-0003G</p> <p>AR54.10-P-0003PM</p> <p>AR54.10-P-0003PV</p>
22	Perform basic programming	<p>Model 463.206/ 209/ 232/ 233/ 240/ 241</p> <p>Only if ground line for battery has been detached</p> <p>Engine 112, 113 in model 129</p> <p>Engine 112, 113 in model 163</p> <p>Engine 112, 113 in model 202, 208</p> <p>Engine 112, 113 in model 210</p>	<p>AR00.19-P-0200A</p> <p>AR00.19-P-0200GH</p> <p>AR00.19-P-0200C</p> <p>AR00.19-P-0200D</p>


		Engine 112 in model 211.061/065/080/082/261/265/280/282 Engine 113 in model 211.070/083/270/283 Engine 137 in model 215, 220 Engine 112 in model 230.467 Engine 112.945 in model 463.244/245/250 Engine 113.962 in model 463.247/248/249/254 Engine 113.982 in model 463.243/246	AR00.19-P-0200T AR00.19-P-0200M AR00.19-P-0200R AR00.19-P-0200P
23	Read out and clear the fault memory using Star Diagnosis	Only if ground line for battery has been detached	
24	Close engine hood		

 Cylinder crankcase, timing case cover, end cover

Number	Designation	Engine
		113.940/941/942/943/944/948/960/961/962/963/964/965/966/967/968/969/971/980/981/982/984/986/992/995
BA01.40-P-1003-01C	Crankcase discharge fitting	Nm 12

 Engine cooling, general

Number	Designation	Engine
		112, 113.940/941/942/943/944/948/960/961/963/964/965/966/967/968/971/980/981/984/986/987/988/990/991/992/995
BA20.00-P-1001-02B	Coolant drain plug on crankcase	Nm 12

 Radiator, coolant hoses

Number	Designation	Engine
		112.942/970, 113.942/965/981
BA20.20-P-1004-01A	Hose clamp	Nm 3

 Cooling system

Number	Designation	Engine 112.910/920 in model 202 Engine 112.940 in model 208	Engine 112.911/921/941 in model 210
BF20.00-P-1001-02K	Cooling system	Total filling capacity Liter	≈ 9,5
		Filling capacity of anticorrosion agent/antifreeze down to -37 °C Liter	≈ 4,75
		Filling capacity of anticorrosion agent/antifreeze down to -45 °C Liter	≈ 5,25
		Sheet	BB00.40-P-0310-01A
		Sheet	BB00.40-P-0325-00A
			≈ 10,0
			≈ 5,0
			≈ 5,5
			BB00.40-P-0310-01A
			BB00.40-P-0325-00A

 Cooling system

Number	Designation	Engine 112.913/917/949/954 in model 211	Engine 112.922/944/972 in model 220
BF20.00-P-1001-02K	Cooling system	Total filling capacity Liter	≈ 9,5
			≈ 10,5

		Filling capacity of anticorrosion agent/ antifreeze down to -37 °C	Liter	≈ 4,75	≈ 5,0
		Filling capacity of anticorrosion agent/ antifreeze down to -45 °C	Liter	≈ 5,25	≈ 5,5
		Sheet		BB00.40-P-0310-01A	BB00.40-P-0310-01A
		Sheet		BB00.40-P-0325-00A	BB00.40-P-0325-00A

 Cooling system


Number	Designation			Engine 112.923/943 in model 129	Engine 112.942 in model 163 Engine 113.940/980 in model 210 Engine 113.943/984 in model 208 Engine 113.944 in model 202
BF20.00-P-1001-02K	Cooling system	Total filling capacity	Liter	≈ 11,75	≈ 11,0
		Filling capacity of anticorrosion agent/ antifreeze down to -37 °C	Liter	≈ 6,0	≈ 5,5
		Filling capacity of anticorrosion agent/ antifreeze down to -45 °C	Liter	≈ 6,5	≈ 6,0
		Sheet		BB00.40-P-0310-01A	BB00.40-P-0310-01A
		Sheet		BB00.40-P-0325-00A	BB00.40-P-0325-00A

 Cooling system

Number	Designation			ENGINE 112.945 in MODEL 463.209/ 232/233/244/245/ 250	Engine 112.970, 113.965 in model 163
BF20.00-P-1001-02K	Cooling system	Total filling capacity	Liter	≈ 11,5	≈ 12,0
		Filling capacity of anticorrosion agent/ antifreeze down to -37 °C	Liter	≈ 5,8	≈ 6,0
		Filling capacity of anticorrosion agent/ antifreeze down to -45 °C	Liter	≈ 6,4	≈ 6,75
		Sheet		BB00.40-P-0310-01A	BB00.40-P-0310-01A
		Sheet		BB00.40-P-0325-00A	BB00.40-P-0325-00A

 Cooling system


Number	Designation			Engine 112.973 in model 230.467	Engine 112.975 in model 220
BF20.00-P-1001-02K	Cooling system	Total filling capacity	Liter	≈ 10,8	≈ 10,4
		Filling capacity of anticorrosion agent/ antifreeze down to -37 °C	Liter	≈ 5,4	≈ 5,2
		Filling capacity of anticorrosion agent/ antifreeze down to -45 °C	Liter	≈ 6	≈ 5,7
		Sheet		BB00.40-P-0310-01A	BB00.40-P-0310-01A
		Sheet		BB00.40-P-0310-01A	BB00.40-P-0310-01A

 Cooling system

Number	Designation			Engine 113.941/960 in model 220	Engine 113.942/981 in model 163
BF20.00-P-1001-02K	Cooling system	Total filling capacity	Liter	≈ 11,5	≈ 11,5
		Filling capacity of anticorrosion agent/ antifreeze down to -37 °C	Liter	≈ 5,75	≈ 5,75
		Filling capacity of anticorrosion agent/ antifreeze down to -45 °C	Liter	≈ 6,25	≈ 6,25
		Sheet		BB00.40-P-0310-01A	BB00.40-P-0310-01A
		Sheet		BB00.40-P-0325-00A	BB00.40-P-0325-00A

 Cooling system

Number	Designation			Engine 113.948/966 in model 220	Engine 113.960/986 in model 215
BF20.00-P-1001-02K	Cooling system	Total filling capacity	Liter	≈ 11,6	≈ 11,5
		Filling capacity of anticorrosion agent/ antifreeze down to -37 °C	Liter	≈ 5,8	≈ 5,75
		Filling capacity of anticorrosion agent/ antifreeze down to -45 °C	Liter	≈ 6,4	≈ 6,25
		Sheet		BB00.40-P-0310-01A	BB00.40-P-0310-01A
		Sheet		BB00.40-P-0325-00A	BB00.40-P-0325-00A

 Cooling system

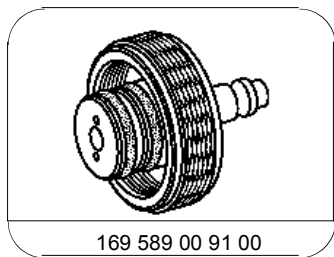
Number	Designation			Engine 113.961 in model 129	ENGINE 113.962 in MODEL 463.206/ 240/241/247/248/ 249/254
BF20.00-P-1001-02K	Cooling system	Total filling capacity	Liter	≈ 12,75	≈ 12
		Filling capacity of anticorrosion agent/ antifreeze down to -37 °C	Liter	≈ 6,25	≈ 6
		Filling capacity of anticorrosion agent/ antifreeze down to -45 °C	Liter	≈ 7,0	≈ 6,6
		Sheet		BB00.40-P-0310-01A	BB00.40-P-0310-01A
		Sheet		BB00.40-P-0325-00A	BB00.40-P-0325-00A

 Cooling system

Number	Designation			Engine 113.967/969 in model 211	Engine 113.982 in model 463.241/243/246
BF20.00-P-1001-02K	Cooling system	Total filling capacity	Liter	≈ 10,75	≈ 11,9
		Filling capacity of anticorrosion agent/ antifreeze down to -37 °C	Liter	≈ 5,25	≈ 5,95
		Filling capacity of anticorrosion agent/ antifreeze down to -45 °C	Liter	≈ 6,0	≈ 6,55
		Sheet		BB00.40-P-0310-01A	BB00.40-P-0310-01A

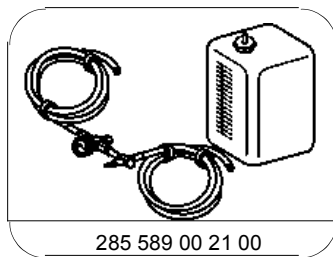
 Cooling system

Number	Designation			Engine 137.970
BF20.00-P-1001-02M	Cooling system	Total filling capacity	Liter	≈ 12
		Filling capacity of anticorrosion/antifreeze down to -37°C	Liter	≈ 6
		Filling capacity of anticorrosion/antifreeze down to -45°C	Liter	≈ 6,6
		Sheet		BB00.40-P-0310-01 A
		Sheet		BB00.40-P-0325-00 A



169 589 00 91 00

Test cap



285 589 00 21 00

Cooler vacuum filling device