

Engine 112.913 in model 211.061/261
 Engine 112.917 in model 211.080/280
 Engine 112.922 in model 220.063/163
 Engine 112.944 in model 220.065/165
 Engine 112.949 in model 211.065/265
 Engine 112.954 in model 211.082/282
 Engine 112.972 in model 220.067/167
 Engine 112.973 in model 230.467
 Engine 112.975 in model 220.087/187
 Engine 113.941 in model 220.070/170
 Engine 113.948 in model 220.083/183
 Engine 113.960 in model 215.375, 220.875
 Engine 113.960 in model 220.075/175
 Engine 113.963 in model 230.475
 Engine 113.966 in model 220.084/184
 Engine 113.967 in model 211.070/270
 Engine 113.969 in model 211.083/283
 Engine 113.986 in model 215.373
 Engine 113.986 in model 220.073/173
 Engine 113.990 in model 211.076/276
 Engine 113.991 in model 215.374
 Engine 113.991 in model 220.074/174
 Engine 113.992 in model 230.474
 Engine 113.995 in model 230.472
 Engine 137.970 in model 215.378, 220.178/878
 Engine 271.941 in model 211.042/242
 Engine 271.956 in model 211.041/241
 Engine 272.922 in model 211.052/252
 Engine 272.943 in model 211.054/254
 Engine 272.944 in model 211.092/292
 Engine 272.964 in model 211.056/256
 Engine 272.972 in model 211.087/287
 Engine 272.985 in model 211.057/257
 Engine 273.960 in model 211.072/272
 Engine 273.962 in model 211.090/290

Modification notes

26.09.2014	Mischungsverhältnis Kühlmittel		BF20.00-P-1001-04A
------------	--------------------------------	--	--------------------

 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
 Warning	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 overpressure. Do not pour coolant into beverage containers. Wear protective gloves, protective clothing and safety glasses.	AS20.00-Z-0001-01A
Topical note	Notes on coolant		AH20.00-N-2080-01A
	Remove		
1	Switch off ignition		
2	Open engine hood		
 AR  AR  AR		MODEL 211 MODEL 215, 220 MODEL 230	AR88.40-P-1000T AR88.40-P-1000M AR88.40-P-1000R
	Check		
3.1	Check coolant level	MODEL 211	AP20.30-P-2050KN
3.2	Check coolant level	MODEL 215, 220, 230  Coolant cold: Engine coolant level up to marking "Cold water level".	

[illegible]

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 112.973 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 113.948/966 in model 220
BF20.00-P-1001-02K	Cooling system	Total filling capacity	Liter	≈ 11,5	≈ 11,6
		Filling capacity of anticorrosion agent/ antifreeze down to -37 °C	Liter	≈ 5,75	≈ 5,8
		Filling capacity of anticorrosion agent/ antifreeze down to -45 °C	Liter	≈ 6,25	≈ 6,4
		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 113.960/986 in model 215	Engine 113.963 in model 230.475
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	≈ 5,8
		Filling capacity of anticorrosion agent/ antifreeze down to -45 °C	Liter	≈ 6,25	≈ 6,5
		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 113.967/969 in model 211	Engine 113.986/991 in model 220
BF20.00-P-1001-02K	Cooling system	Total filling capacity	Liter	≈ 10,75	≈ 13,5
		Filling capacity of anticorrosion agent/ antifreeze down to -37 °C	Liter	≈ 5,25	≈ 6,8
		Filling capacity of anticorrosion agent/ antifreeze down to -45 °C	Liter	≈ 6,0	≈ 7,4
		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 113.990	Engine 113.991 in model 215
BF20.00-P-1001-02K	Cooling system	Total filling capacity	Liter	≈ 13,2	≈ 14,5

		Filling capacity of anticorrosion agent/ antifreeze down to -37 °C	Liter	≈ 6,6	≈ 7,3
		Filling capacity of anticorrosion agent/ antifreeze down to -45 °C	Liter	≈ 7,3	≈ 8
		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 113.992/995 in model 230			
BF20.00-P-1001-02K	Cooling system	Total filling capacity	Liter	≈ 13,0	
		Filling capacity of anticorrosion agent/ antifreeze down to -37 °C	Liter	≈ 6,5	
		Filling capacity of anticorrosion agent/ antifreeze down to -45 °C	Liter	≈ 7,3	
		Sheet		BB00.40-P-0310-01A	
		Sheet		BB00.40-P-0325-00A	

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-0310-01A	
		Sheet		BB00.40-P-0325-00A	

Cooling system

Number	Designation	Engine 271.9			
BF20.00-P-1001-02P	Cooling system	Workshop replacement quantity	Liter	≈ 5,6	
		Antifreeze/water	Up to -37°C	%	50/50
			As of -38 °C	%	55/45
		Sheet		BB00.40-P-0310-01A	
		Sheet		BB00.40-P-0325-00A	
		Sheet		BB00.40-P-0326-00A	

Cooling system

Number	Designation				Engine 272 in model 164, 211, 251 Engine 272.964 in model 219	Engine 273 in model 211, 219
BF20.00-P-1001-02U	Cooling system	Workshop replacement amount	Main circuit	Liter	≈ 5,0	≈ 7,0
			Low-temperature circuit	Liter	-	-
		Antifreeze/water	Down to -37 °C		50/50	50/50
			-38 °C and below		55/45	55/45
			Specifications for Operating Fluids, sheet		BB00.40-P-0310-01A	BB00.40-P-0310-01A
			Specifications for Operating Fluids, sheet		BB00.40-P-0325-00A	BB00.40-P-0325-00A

		Specifications for Operating Fluids, sheet	-	-
		-25_ °C	-	-
		Specifications for Operating Fluids, sheet	-	-
		Specifications for Operating Fluids, sheet	-	-

 Coolant mixing ratio

Number	Designation				All engines, except engine 178 in model 190.381
BF20.00-P-1001-04A	Coolant mixing ratio	Antifreeze/water	Up to -25 °C	%	-
			Up to -37 °C	%	50/50
			As of -38 °C	%	55/45
			Overview and specifications sheet		BB00.40-P-0310-01 A
			References to sheet specification		BB00.40-P-0310ZZ