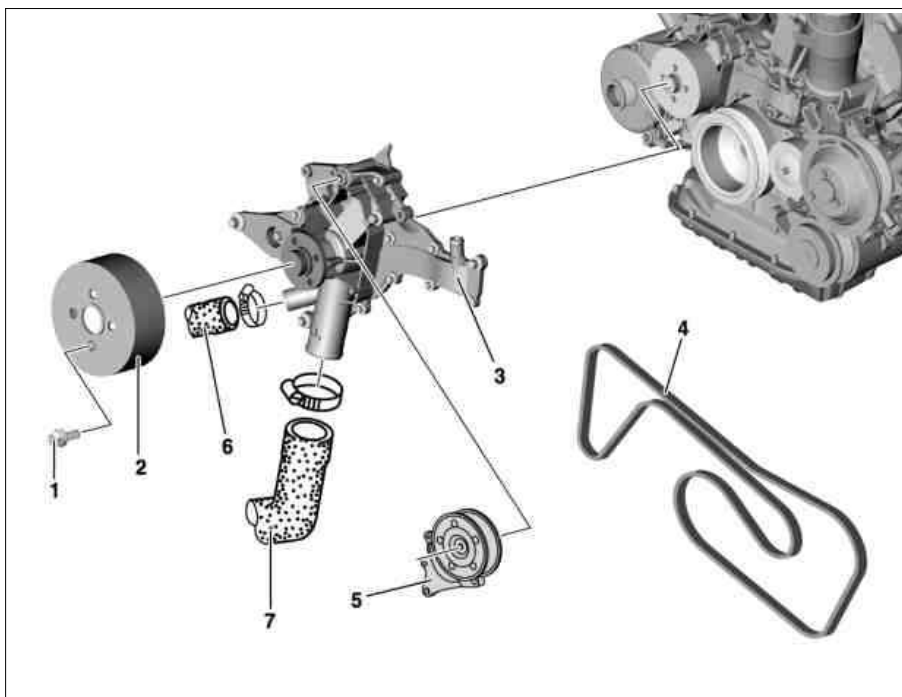


ENGINE 113.990 in MODEL 211.076 /276
ENGINE 113.991 in MODEL 215.374, 220.074
ENGINE 113.992 in MODEL 230.474
ENGINE 113.995 in MODEL 230.472

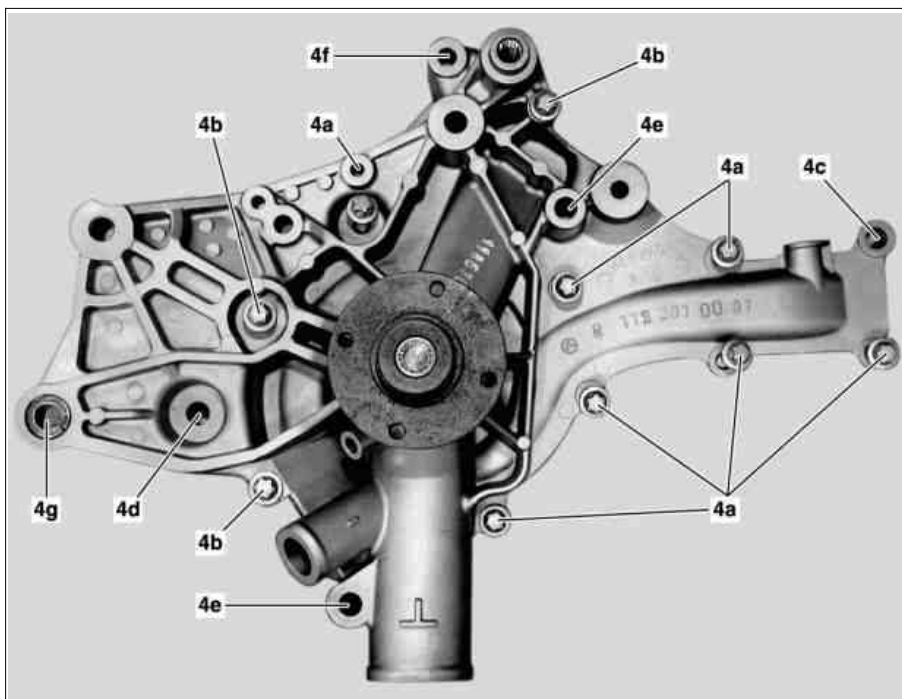
- 1 Bolt, belt pulley
- 2 Coolant pump belt pulley
- 3 Coolant pump
- 4 Poly-V belt
- 5 Tensioner pulley of compressor poly-V belt
- 6 Coolant hose
- 7 Coolant hose



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Bolt assignment of coolant pump

- 4a Bolt M6B19
- 4b Bolt M6B43
- 4c Bolt M8B80
- 4d Bolt M8B90
- 4e Bolt M8B110
- 4f Bolt M8B135
- 4g Bolt M10B110



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Modification notes

28.5.08	Clean sealing surfaces - added	Step 15	
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Remove/install			

	Notes on coolant		AH20.00-N-2080-01A
2	Remove front engine compartment paneling		
3	Remove poly-V belt of supercharger		AR13.21-P-1202RVK
4	Remove poly-V belt (4)	Model 215.374, 220.074, 230.472 /474 Model 211.076 / 276	AR13.22-P-1202R AR13.22-P-1202RV
5	Unscrew bolts of belt pulley (1) at coolant pump (3)	 Installation: Tighten bolts for belt pulley (1) fully.  Engine 113.992 /995  Engine 113.990/ 991	*BA20.10-P-1002-01C *BA20.10-P-1002-01L
6	Take off belt pulley of coolant pump (2)	 Installation: Screw in bolts only by hand, do not tighten.	
7	Remove cap of compressor poly-V belt guide pulley	 Carefully lever off cap with a slotted screwdriver in order to avoid damaging guide pulley.	
8	Unscrew bolt for compressor poly-V belt guide pulley		*BA13.25-P-1008-01D
9	Take off compressor poly-V belt guide pulley		
10	Unscrew bolts for tensioner pulley for compressor poly-V-belt	 Installation: The threads for mounting tensioning device of compressor are not pre-tapped on a new timing case cover. For this reason a new timing case cover requires new self-cutting bolts to be used.  If timing case cover was not replaced, observe torque when threads are pre-tapped. 	*BA13.25-P-1006-01D
11	Take off tensioner pulley for compressor poly-V belt (5)		
12	Disconnect coolant hose (6) and coolant hose (7)	 Check condition of coolant hoses and hose clamps. Install new parts if necessary in order to avoid a loss of coolant.	
13	Loosen bolt M10×110 (4g) on alternator	 Installation: The threads for mounting alternator are not pre-tapped on a new timing case cover. For this reason a new timing case cover requires new self-cutting bolts to be used.  If timing case cover was not replaced, observe torque when threads are pre-tapped. 	*BA15.40-P-1005-01A
14	Unbolt coolant pump (3) at timing case cover and remove	 Installation: The threads for mounting coolant pump are not pre-tapped on a new timing case cover. For this reason a new timing case cover requires new self-cutting bolts to be used.	
	Notes on application of sealant to coolant pump housing	 If timing case cover was not replaced, observe torque when threads are pre-tapped.  Engine 113.992 /995  Engine 113.990/ 991 Loctite Loctite sealant 5970	AH20.10-P-0001-02RVK *BA20.10-P-1001-01C *BA20.10-P-1001-01L *BR00.45-Z-1013-01A
	Clean		
15	Clean sealing surfaces at timing case cover and coolant pump (3)	 Do not use any sharp-edged tools or abrasive paper as this will damage the sealing surfaces. Loctite 7200 Cleaning spray, Loctite 7063 (150ml)	AR01.00-P-0050-01A *BR00.45-Z-1038-04A *BR00.45-Z-1046-04A
16	Install in the reverse order		
17	Inspecting cooling system for leaks		AR20.00-P-1010RVK

 Coolant pump, coolant thermostat

Number	Designation	Engine 113.940/941/ 942/943/944/ 945/946/948/ 960/961/962/ 963/965/966/ 967/968/969/ 980/981/982/ 984/986/992 993/995

BA20.10-P-1001-01C	Self-tapping bolt, connecting coolant pump to timing case	Thread not pre-tapped	M6	Nm	14
		Thread not pre-tapped	M8	Nm	35
		Thread pre-tapped	M6	Nm	10
		Thread pre-tapped	M8	Nm	25
BA20.10-P-1002-01C	Belt pulley on coolant pump			Nm	10

Coolant pump, coolant thermostat

Number	Designation			Engine 113.987/988/ 990/991
BA20.10-P-1001-01L	Bolt, coolant pump to timing case	M6	Nm	14
		M8	Nm	20
BA20.10-P-1002-01L	Belt pulley on coolant pump		Nm	9

Belt tensioning device

Number	Designation			Engine 113.990/ 991/992/ 993/995
BA13.25-P-1006-01D	Self-tapping bolt, compressor belt tensioner to timing case cover	Thread not pretapped	Nm	35
		Thread pretapped	Nm	25
BA13.25-P-1008-01D	Bolt, guide pulley for compressor and major assembly belts to timing case cover	M8×78	Nm	68

Alternator

Number	Designation		Engine 113.991 in model 215, 220	Engine 113.992/ 995 in model 230	Engine 113.990 in model 211
BA15.40-P-1005-01A	Self-tapping bolt, alternator to timing case	Thread not pre-tapped	Nm	57	57
		Thread pre-tapped	Nm	45	45

Repair materials

Number	Designation	Order number
BR00.45-Z-1013-01A	Loctite sealant 5970	A 003 989 98 20
BR00.45-Z-1038-04A	Loctite 7200	Henkel Loctite Deutschland GmbH Arabellastrasse 17 81925 München Germany Tel. +49 899268-0 Fax + 49 899101978 www.Loctite.de
BR00.45-Z-1046-04A	Cleaning spray, Loctite 7063 (150ml)	A 001 986 71 71 10