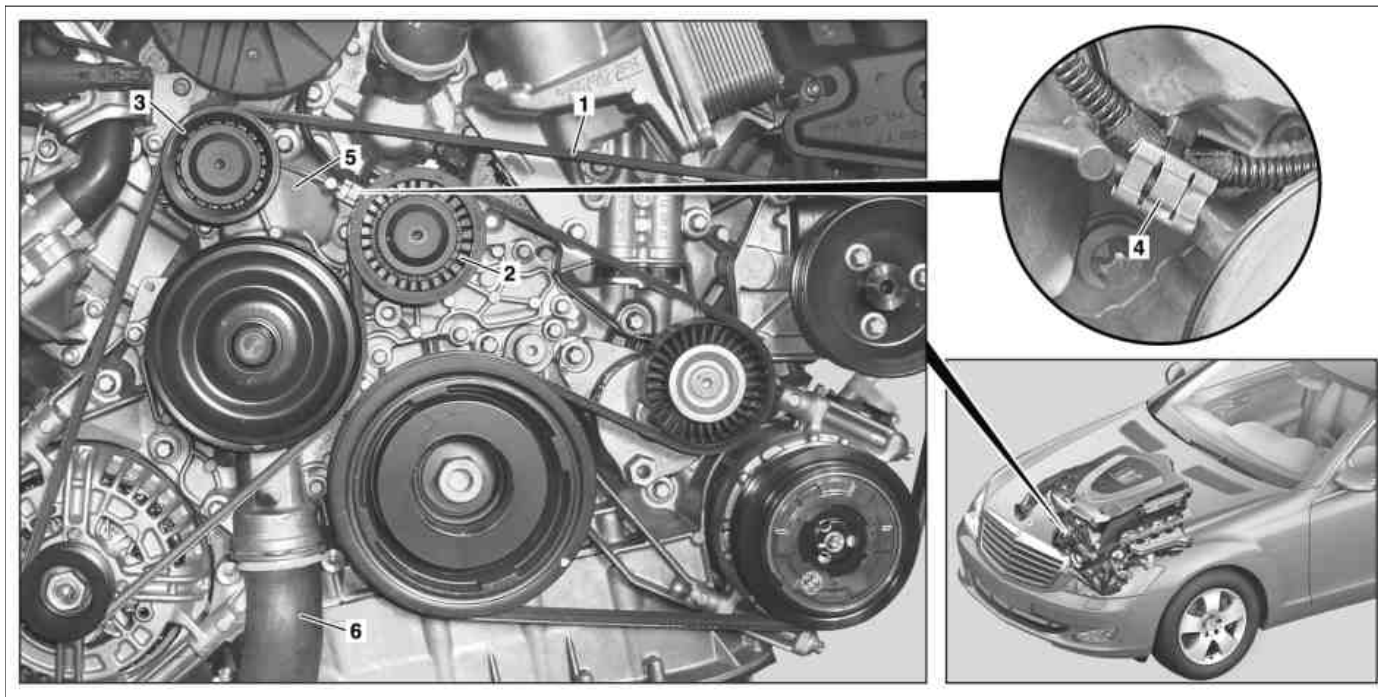


Engine 272, 273 in model 221  
 Engine 273 in model 216







Modification notes


27.02.2012	Reference to modified version of poly-V belt, added	Operation step 3.1, 3.2	BT13.20-P-1000-01SXH
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P20.10-2186-09

- |      |              |   |                 |   |              |
|------|--------------|---|-----------------|---|--------------|
| 1    | Poly-V belt  | 4 | Retaining clamp | 6 | Coolant hose |
| 2, 3 | Guide pulley | 5 | Coolant pump    |   |              |

 	Remove/install		
1	Switch off ignition		
2	Drain coolant at radiator Notes on coolant		AR20.00-P-1142SX AH20.00-N-2080-01A
3.1	Remove poly-V belt (1) and guide pulley (2, 3)	Engine 272 in model 221 Vehicles with a single-belt pulley Engine 273 in model 216 Engine 273 in model 221	AR13.20-P-0001SX BT13.20-P-1000-01SXH
 BT	V-belt version modified		
3.2	Remove both poly-V belts	Engine 272.974 in model 221.095/195 Vehicles with a twin-belt pulley	AR13.22-P-1202SXH BT13.20-P-1000-01SXH
 BT	V-belt version modified		
4	Remove alternator	Model 221.095/195 with engine 272.974	AR15.40-P-5032SXH
5	Detach alternator bracket from timing case cover and coolant pump (5)	Model 221.095/195 with engine 272	*BA15.40-P-1010-01F
		 Bolt, alternator bracket to timing case cover/coolant pump	
6	Pry off electrical feed line retaining clamp (4) from coolant pump (5)	Model 216 with engine 273 Model 221 (except 221.095/195) with engine 272, 273	
7	Detach coolant hose (6) from coolant pump (5)	 <b>Installation:</b> Replace sealing ring on coolant hose (6).	

8	Remove screw/bolts and coolant pump (5) from timing case cover	Bolt plan for coolant pump <b>i</b> <b>Installation:</b> Replace seal and observe bolt plan. <b>Nm</b> Self-tapping bolt connecting coolant pump to timing case cover <b>Nm</b> Bolt, coolant pump to cylinder crankcase	AR20.10-P-1271-03VA  *BA20.10-P-1001-01U *BA20.10-P-1002-01U
	<b>Clean</b>		
9	Clean sealing surfaces on coolant pump (5) and timing case cover with a rag		
10	Install in the reverse order		
11	Check cooling system for leaktightness		AR20.00-P-1010SX
<b>⚠ Danger !</b>	<b>Risk of accident</b> from vehicle starting off by itself when engine running. <b>Risk of injury</b> (bruises and burns) resulting from working on the engine while it is being started or when it is running.	Secure vehicle to prevent it from starting off by itself. Wear closed and snug-fitting work clothes. Do not touch hot or rotating parts.	AS00.00-Z-0005-01A
12	Perform an engine test run and check coolant pump (5) for leaktightness		

**Nm** Alternator

Number	Designation		Engine 272
BA15.40-P-1010-01F	Bolt, alternator bracket to timing case cover/coolant pump	Nm	20

**Nm** Coolant pump, coolant thermostat

Number	Designation		Engine 272	Engine 273	
BA20.10-P-1001-01U	Self-tapping bolt M7 connecting coolant pump to timing case cover	Stage 1	Nm	10	10
		Stage 2	Nm	25	25

**Nm** Coolant pump, coolant thermostat

Number	Designation		Engine 272	Engine 273	
BA20.10-P-1002-01U	Bolt, coolant pump to M8 cylinder crankcase	Stage 1	Nm	5	5
		Stage 2	Nm	20	20