AR05.20-P-6020QK Set basic position of camshafts 11.5.06

ENGINE 271.940 in MODELS 203.042 /242 /742, 209.342 /442 ENGINE 271.941 in MODELS 211.042 /242

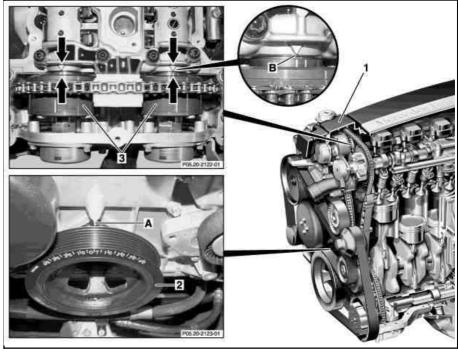
ENGINE 271.946 in MODELS 203.046 /246 /746 ENGINE 271.948 in MODELS 203.040 /240 /740

ENGINE 271.942 in MODELS 203.043 /243 /743, 209.343

ENGINE 271.921 in MODEL 203.730 ENGINE 271.955 in MODELS 209.341 /441 ENGINE 271.956 in MODELS 211.041 /241

Shown on engine 271.940

- 1 Cylinder head cover
- 2 Belt pulley/vibration damper
- 3 Camshaft adjuster
- A Guide edge on timing case cover
- B Marking



P05.20-2121-06



4 🛭 Retaining device



P05.20-2124-01

Modification notes

18.4.05	The timing chain must not be removed from the intake	Step 5	
	camshaft. The timing chain is slackened only		

\boxtimes	Removing		
1	Open engine hood	Model 203	AR88.40-P-1000P
		Model 209	AR88.40-P-1000Q
		Model 211	AR88.40-P-1000T
2	Remove cylinder head cover (1)	Model 203, 209	AR01.20-P-5014QK
		Model 211	AR01.20-P-5014TK
3	Remove front cover at cylinder head		AR01.30-P-5700QK
4	Spin engine at the crankshaft in direction of rotation until the piston of cylinder 1 is positioned at TDC marking $\pm~2^\circ$	i The TDC marking on belt pulley/vibration damper (2) must be aligned with the positioning edge (A) on timing case cover. i The cams of the inlet and exhaust camshaft at cylinder 1 must be positioned upright at an angle (arrows, picture 2).	
5	Release timing chain	3	AR05.10-P-7605-01TK *271589003100

6	Remove camshaft adjuster (3)	i Secure against falling.	AR05.20-P-7201QK
7	Mount retainer (4)	At the same time the camshafts are attached in basic position.	*271589006100
X	Install		
8	Install camshaft adjuster (3)	The markings on camshaft adjusters (3) must be aligned with markings (B) at camshaft bearing housing (arrows, picture 1). The TDC marking on belt pulley/vibration damper (2) must be aligned with positioning edge (A) on timing case cover. The camshaft adjusters (3) require no particular adjustment, as they automatically take on a basic position to the camshafts when engine is vertical.	AR05.20-P-7201QK
9	Clamp timing chain	For this step	AR05.10-P-7605-01TK *271589003100
10	S Dismount retainer (4)	3	*271589006100
11	Rotate crankshaft by two revolutions in direction of rotation of engine and once again check basic position of camshafts	The markings on the camshaft adjusters (3) must be aligned with the markings (B) at the camshaft bearing housing (arrows, picture 1). The TDC marking on belt pulley/ vibration damper (2) must be aligned with positioning edge (A) on timing case cover.	
12	Install front cover at cylinder head		AR01.30-P-5700QK
13	Install cylinder head cover (1)	Models 203, 309 Model 211	AR01.20-P-5014QK AR01.20-P-5014TK
⚠ Danger!	Risk of accident caused by vehicle starting off by itself when engine is running. Risk of injury caused by contusions and burns during starting procedure or when working near the running engine Check for leaks with engine running	Secure vehicle to prevent it from moving by itself. Wear closed and snug-fitting work clothes. Do not grasp hot or rotating parts.	AS00.00-Z-0005-01A
15	Close engine hood	Model 203 Model 209 Model 211	AR88.40-P-1000P AR88.40-P-1000Q AR88.40-P-1000T

