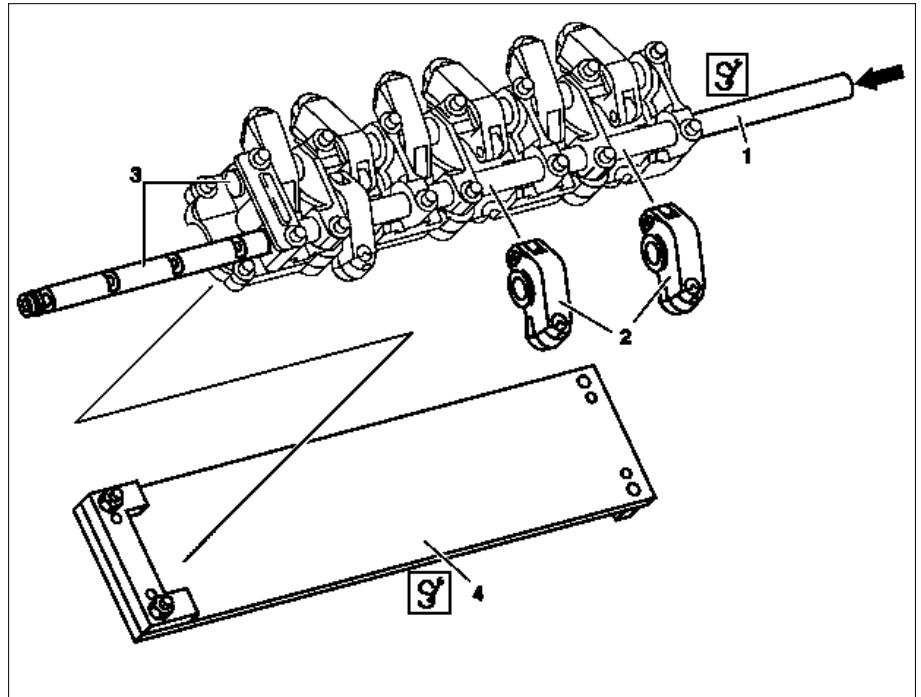


ENGINES 112
ENGINES 113 except CODE (479) Cylinder shutoff
ENGINES 112.945 in MODEL 463.209 /232 /233 /244 /245 /250
ENGINES 113.962 in MODELS 463.206 /240 /241 /247 /248 /249 /254
ENGINES 113.982 in MODEL 463.243 /246

Shown on engine 112

- 1 15 mm dia. drift
- 2 Rocker arm
- 3 Rocker arm shafts
- 4 Oddments tray for warmed camshaft bearing bridge



P05.20-0302-06

	Removing		
1	Remove camshaft bearing bridge	i Pay attention to slackening diagram. All models except 171.473, 164.175, 251.075 /175, 219.375 /376 Model 164.175 Model 251.075 / 175 Model 219.375 /376 Model 171.473	AR05.20-P-7103AU AR05.20-P-7103GZ AR05.20-P-7103RT AR05.20-P-7103TY AR05.20-P-7103VT
⚠ Danger! 2	Risk of injury to skin and eyes caused by handling hot or glowing objects. Remove the rocker arm spindles (3)	Wear safety gloves, protective clothing and safety glasses, if necessary. i If the rocker arm spindle (3) is not able to move easily in its bearings (clamps), the camshaft bearing bridge must be warmed up: ↓ Warm up camshaft bearing bridge ☞ Drift punch ☞ Support plate Recirculated air warming cabinet Heating oven	AS00.00-Z-0002-01A AR05.20-P-2350AU *112589001500 *112589105900
3	Remove rocker arm (2)	i Take out 15 mm dia. drift (1).	
	Install		
4	Check bearing surfaces of rocker arm (2) for damage	i Pay attention to any long score marks caused by the removal of the rocker arm spindles (3). If damage is present ↓ Replace rocker arm (2)	
5	Introduce guide shaft into camshaft bearing bridge	i At the same time preassemble the rocker arms (2) on the guide shaft. ☞ 16 mm dia. guide shaft ☞ 18 mm dia. guide shaft	*112589023100 *112589033100
⚠ Danger! 6	Risk of injury to skin and eyes caused by handling hot or glowing objects. Install the rocker arm spindles (3)	Wear safety gloves, protective clothing and safety glasses, if necessary. If the rocker arm spindle (3) cannot be easily introduced into its bearings (clamps), the camshaft bearing bridge must be warmed up: ↓	AS00.00-Z-0002-01A

		Heat the camshaft bearing bridge and drive out the guide shaft with the rocker arm spindle (3). Ensure that the rocker arms (2) do not get jammed. Recirculated air warming cabinet Heating oven	AR05.20-P-2350AU
7	Install bearing bridge camshaft	Observe tightening procedure. All models except 171.473, 164.175, 251.075 /175, 219.375 /376 Model 164.175 Model 251.075 / 175 Model 219.375 /376 Model 171.473 	AR05.20-P-7103AU AR05.20-P-7103GZ AR05.20-P-7103RT AR05.20-P-7103TY AR05.20-P-7103VT *BA05.20-P-1002-01B *BA05.20-P-1004-01B

Camshaft

Number	Designation				Engine 112 except 112.951/976	Engine 112.951/976
BA05.20-P-1002-01B	Bolt connecting camshaft bearing bridge to cylinder head	M7×45	Stage 1	Nm	15	8
			Stage 2	⌘°	-	120
BA05.20-P-1004-01B	Bolt connecting camshaft bearing bridge to cylinder head	M7×84	Stage 1	Nm	10	8
			Stage 2	⌘°	90	120

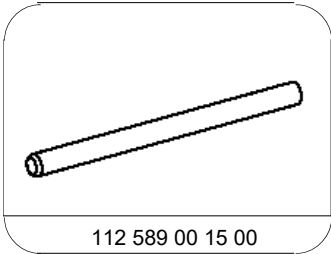
Camshaft

Number	Designation				Engine 113.940/941/942/943/944/948/961/962/963/964/965/966/967/968/969/971/980/981/982/984/986/992/995	Engine 113.960 without code 479
BA05.20-P-1002-01B	Bolt connecting camshaft bearing bridge to cylinder head	M7×45	Stage 1	Nm	15	15
			Stage 2	⌘°	-	-
BA05.20-P-1004-01B	Bolt connecting camshaft bearing bridge to cylinder head	M7×84	Stage 1	Nm	10	10
			Stage 2	⌘°	90	90

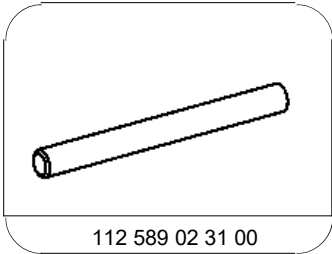
Camshaft

Number	Designation	Engine 113.987/988/990/993	Engine 113.989	Engine 113.991
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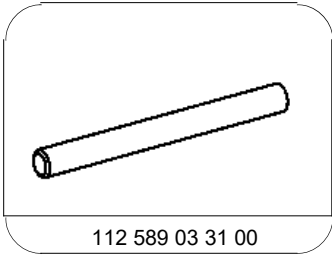
BA05.20-P-1002-01B	Bolt connecting camshaft bearing bridge to cylinder head	M7×45	Stage 1	Nm	8	8	8
			Stage 2	⌵°	120	120	120
BA05.20-P-1004-01B	Bolt connecting camshaft bearing bridge to cylinder head	M7×84	Stage 1	Nm	8	8	8
			Stage 2	⌵°	120	120	120



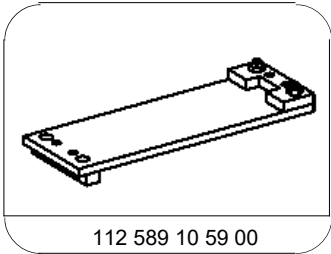
Extraction drift



Guide shaft



Guide shaft



Board