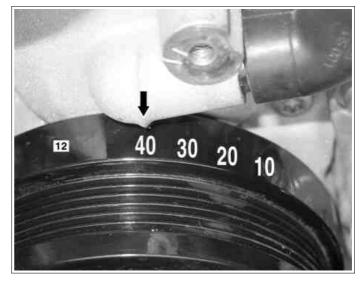
#### **ENGINES 156**

## Basic position of camshafts for a 40° crank angle after top dead center

## 12 Belt pulley

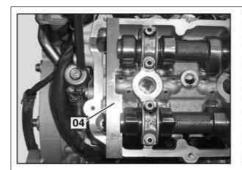
Arrow Marking on the timing case cover

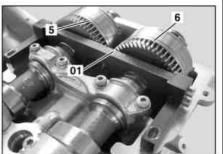


P05.20-2280-11

#### Shown on right cylinder head

01 Holding device04 Straightedge





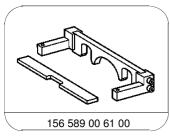
P05.20-2281-04

XX	Remove/install		
⚠ Danger!	Risk of explosion caused by fuel igniting, risk of poisoning caused by inhaling and swallowing fuel and risk of injury to eyes and skin caused by contact with fuel	No fire, sparks, open flames or smoking. Pour fuels only into suitable and appropriately marked containers. Wear protective clothing when handling fuel.	AS47.00-Z-0001-01A
⚠ Danger!	Risk of injury caused by fingers being pinched or crushed when removing, installing or aligning hoods, doors, trunk lids, liftgates or sliding roof	Keep body parts and limbs well clear of moving parts.	AS00.00-Z-0011-01A
(1)	Notes on self-locking nuts and bolts		AH00.00-N-0001-01A
1	Switch off ignition		
2	Open engine hood		
3	Remove partition wall between wheel wells	Model 251	AR62.30-P-2400RT
4	Remove air filter housing	Model 164, 251	AR09.10-P-1150GZS
		Model 204, 212	AR09.10-P-1150CMG
		Model 209, 211, 219	AR09.10-P-1150TMG
		Model 216, 221	AR09.10-P-1150SMG
		Model 230	AR09.10-P-1150RMG
5	Remove spark plugs	i Only if it is not possible to crank engine due to high compression.	
		Model 164, 251	AR15.12-P-1010GZS
		Model 204, 212	AR15.12-P-1010CMG
		Model 209, 211, 219	AR15.12-P-1010TMG
		Model 216, 221	AR15.12-P-1010SMG
		Model 230	AR15.12-P-1010RMG
6	Remove poly-V belt	Model 209 with code P98 Black Series	AR13.22-P-1202TMG
		Model 204, 212	AR13.20-P-0001CMG
		Model 230	AR13.20-P-0001RMG
7	Detach the guide pulley above crankshaft belt pulley (12)	Model 209 with code P98 Black Series	
		Model 204, 212	AR13.20-P-0001CMG
		Model 230	AR13.20-P-0001RMG

		Nm	*BA13.25-P-1005-01U
8	Turn the engine on the crankshaft center bolt in the direction of engine rotation to 40° crank angle ATDC of cylinder 1	i The TDC marking on belt pulley (12) must align with marking on timing case cover (arrow).	
9	Remove cylinder head covers	Model 164, 251	AR01.20-P-5014GZS
	, , , , , , , , , , , , , , , , , , , ,	Model 204, 212	AR01.20-P-5014CMG
		Model 209, 211, 219	AR01.20-P-5014TMG
		Model 216, 221	AR01.20-P-5014SMG
		Model 230	AR01.20-P-5014RMG
10	Fix camshafts in place with a straightedge (04) on the rear side	3	*156589006100
11	Install holding device (01) on right or left cylinder head	The holding device (01) must be able to move over the camshaft. If this is not the case, the timing must be set: ↓ Remove/install camshaft adjusters Up to engine number 001177 from engine number 001178  The holding device (01) is constructed symmetrically. To check the camshafts in the LH cylinder head, the holding device (01) and straightedge (04) are mounted in the same way as for the RH side.	
		3	*156589006100
12	Install in the reverse order		

# Nm Belt tensioning device

Number	Designation		Engine 156, 159
BA13.25-P-1005-01U	Guide pulley (between poly-V belt tensioning device and coolant pump)	Nm	20



Holding device