

AR03.20-P-4355-02AW	Mount crankshaft axially		
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#### Inspection data of crankshaft bearing clearance

Number	Designation	Engine 601, 602 except 602.982, 603
BE03.20-P-1001-04C	Main bearing play	Radial, when new mm 0.03...0.05
		Radial, wear limit mm 0.08
		Axial, when new mm 0.10...0.25
		Axial, wear limit mm 0.3

#### Crankshaft test data

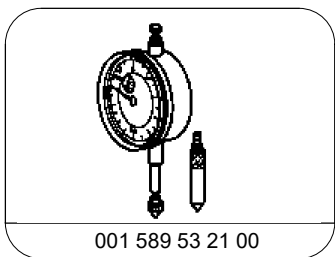
Number	Designation	Engine 601 up to 06/84	Engine 601 as of 07/84, 602 except 602.98, 603
BE03.20-P-1003-02C	Fitted bearing journal width	Standard size mm 26.500...26.520	24.500...24.533
		mm 26.600...26.620	24.600...24.633
		Repair phase mm 26.700...26.720	24.700...24.733
		mm 26.900...26.920	24.900...24.933
		mm 27.000...27.020	25.000...25.033

#### Inspection data of bolts of crankshaft bearing caps

Number	Designation	Engine 601, 602 except 602.982, 603
BE03.20-P-1001-01B	Bolt of crankshaft bearing cap (2nd version)	Thread diameter M 11
		Length (L) when new mm 62.0
		max. length (L) mm 63.8
		Fig. see AR03.20-P-4351-03A

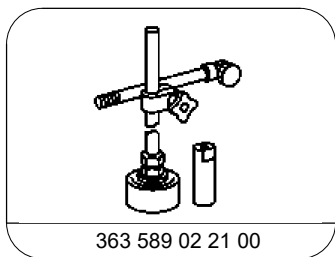
#### Crankshaft bearing cap

Number	Designation	Engine 601, 602, 603 except 602.98
BA03.20-P-1001-01A	Bolt of crankshaft bearing cap	M11 1st stage NM 55
		Step 2 4° 90
BA03.20-P-1002-01A	Bolt of crankshaft bearing	M12 NM 90



001 589 53 21 00

Dial gage



363 589 02 21 00

Dial gage holder

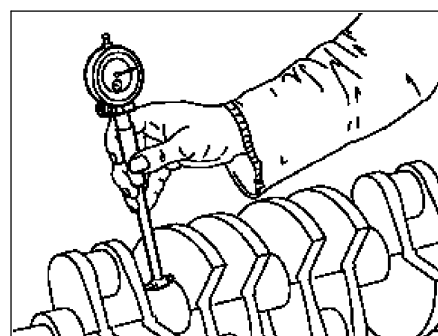
**Commercially available tools** (see Workshop Equipment Manual)

Number	Designation	Make (e. g.)	Order number
WH58.30-Z-1055-12A	Setting gage for micrometer	Hahn und Kolb Borsigstr. 50 70469 Stuttgart www.hahn-kolb.de	
WH58.30-Z-1065-12A	Quick calipers for internal measurements	Hahn und Kolb Borsigstr. 50 70469 Stuttgart www.hahn-kolb.de	

- 1 Measure width of fit bearing at crankcase and at fit bearing cap, note.
- 2 Measure width of fit bearing at crankshaft, note.
- 3 Determine thickness of thrust washer

**i** Thrust washers of the same thickness must always be inserted in the crankcase and in the fit bearing cap.

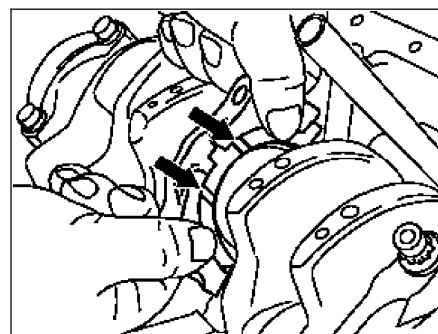
The thrust plates are available in thickness of 2.15 up to 2.40 mm in grades of 0.05 mm



P03.20-0249-01

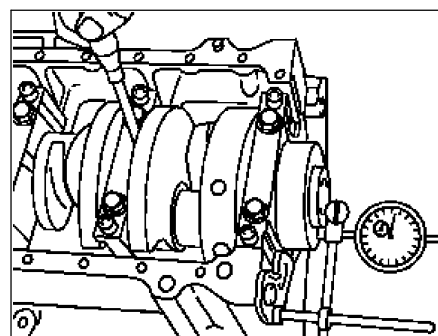
- 4 Install thrust washers

**i** The oil grooves (arrows) must point toward the contact surface of the crankshaft and must be oiled. The anti-twist lock is positioned against the thrust washer in the bearing cap



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- 5 Measure axial bearing play, adjust if necessary.



P03.20-0251-01