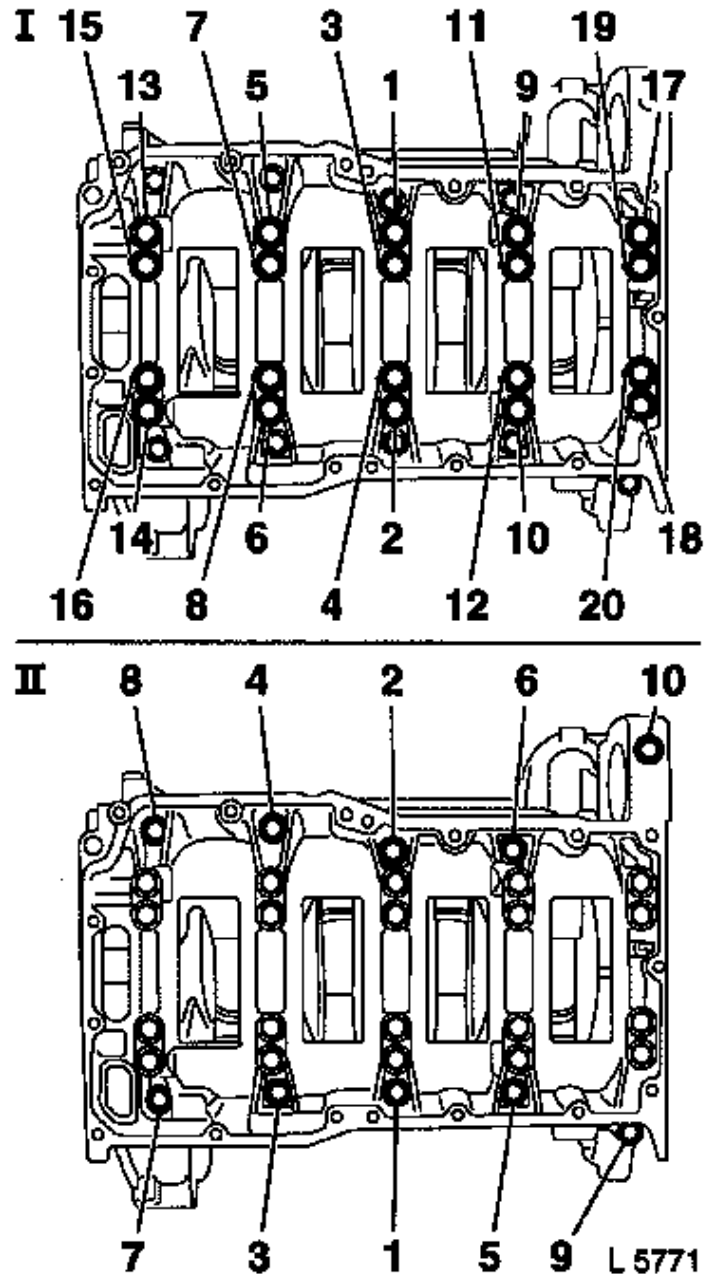


## Crankshaft Bearing Clearance, Check, Measure with micrometer (Z 22 SE)



### Measure

1. Attach the cylinder block base plate.
  - Note:** Observe the tightening sequence.
    - Tighten all bolts loosely.
    - Tighten the M10 bolts – tightening torque **20 Nm + 70° + 15°**
    - Tighten the M8 bolts – tightening torque **23 Nm**



2. Fit the internal gauge and calibrate it with the micrometer (1).
  - 1 Measure the diameter of the crankshaft bearings at 3 points.
    - Use the inside micrometer to measure at the points I, II and III.
  - 2 Measure the diameter of the crankshaft bearings at 3 points.
    - Use the inside micrometer to

measure at the points I, II and III.

3 Measure the diameter of the crankshaft bearings at 3 points.

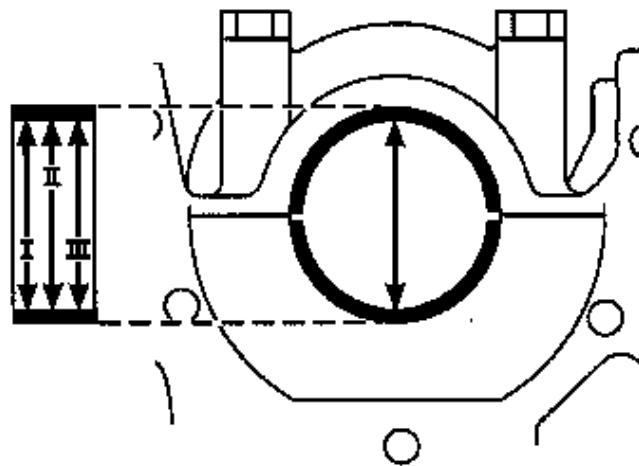
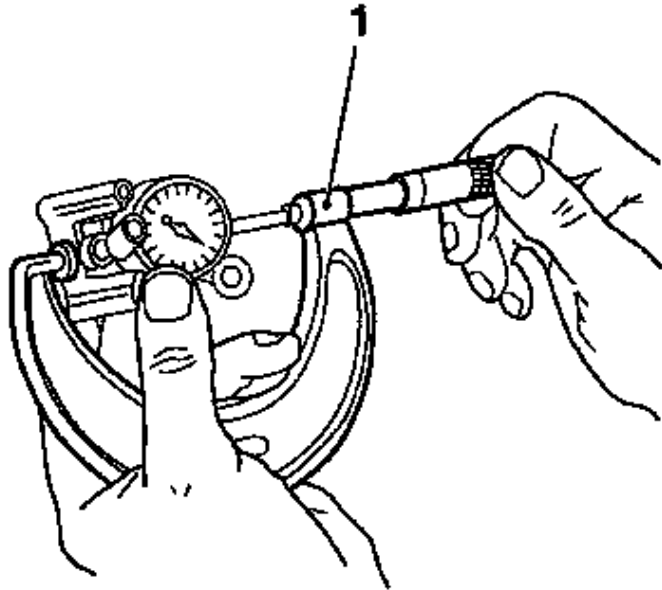
- Use the inside micrometer to measure at the points I, II and III.

4 Measure the diameter of the crankshaft bearings at 3 points.

- Use the inside micrometer to measure at the points I, II and III.

Calculate the mean value for the crankshaft bearing diameter.

- Formula:  $I + II + III / 3$



L 6049

### 3.

Measure the crankshaft bearing journal diameter.

1 Measure the crankshaft bearing journal diameter at 2 points.

- Use a micrometer to measure at the points I and II.

2 Measure the crankshaft bearing journal diameter at 2 points.

- Use a micrometer to measure at the points I and II.

3 Measure the crankshaft bearing journal diameter at 2 points.

- Use a micrometer to measure at

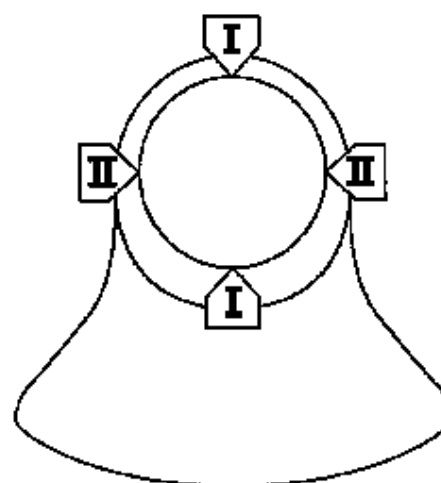
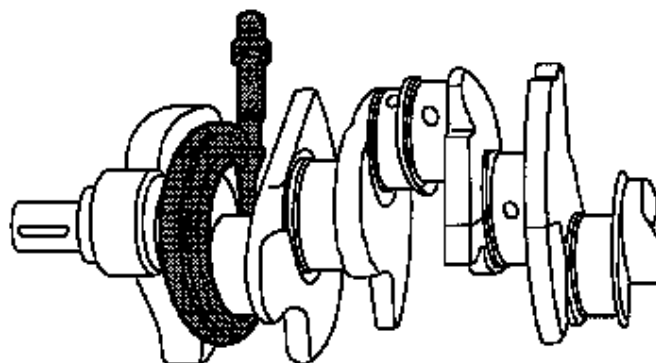
the points I and II.

4 Measure the crankshaft bearing journal diameter at 2 points.

- Use a micrometer to measure at the points I and II.

Calculate the mean value for the crankshaft bearing journal diameter.

- Formula:  $I + II / 2$



L 6050

4. Determine the crankshaft bearing clearance.

- Formula: Mean crankshaft bearing diameter – mean crankshaft bearing journal diameter

5. Comparison between specified values and actual values

- Permissible crankshaft bearing clearance: **0,007 - 0,014 mm**