

## Dimensions of Connecting Rod Bolt

Model	M 116, M 117
Part No.	116 038 01 71
Threads	M 11 x 1
Expanding shaft dia. when new	9.0–0.1
Min. expanding shaft dia.	8.5

## Tightening the Expanding Bolts

Model	all
Initial torque	4 + 1 kpm
Angle of rotation torque	90° + 10°

## Special Tool

Angle of rotation tightening tool	115 589 02 13 00 for all connecting rod and flywheel bolts
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## General Note

Each time an expanding bolt is tightened, a lasting deformation will remain. Prior to reusing an expanding bolt the smallest diameter of the expanding shaft should be measured with the knife edges of a slide gauge.

**When the expanding shaft is down to the minimum dia. named in the Table, replace bolts.**

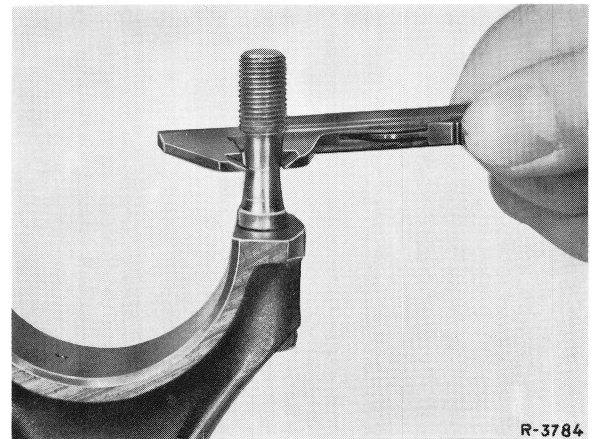


Fig. 1

## 03.0 Checking and Tightening Connecting Rod Bolts

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### Inspection

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**1** Measure expanding shaft visible after removing connecting rod bearing cap, since deformation will occur at this point only (Fig. 1).

Knock connecting rod bolts out of connecting rod only if they are subsequently replaced.

### Tightening

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**2** Coat threads and contact surface well with oil prior to screwing on nuts.

**Note:** Use **only perfect socket wrenches** for tightening. Since tightening according to angle of rotation provides higher torques than with the tightening method used before, widened or badly applied wrenches may easily slip.

**3** Tighten to specified initial torque ( $4 + 1$  kpm) with torque wrench.

**4** Then tighten to specified angle ( $90^\circ + 10^\circ$ ) with angle of rotation tightening tool (Fig. 2).

**Note:** If no angle of rotation tightening tool is available, the nut can be tightened by means of a standard socket spanner and a tommy bar in one step by the specified angle. Estimate angle as accurately as possible.

**To prevent angle errors, do not use a yielding torque wrench** when tightening according to angle of rotation.

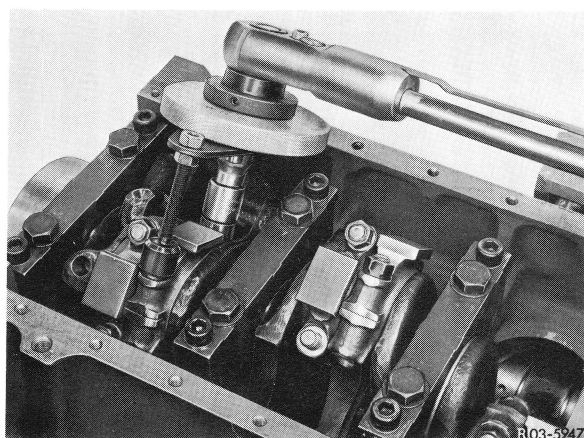


Fig. 2