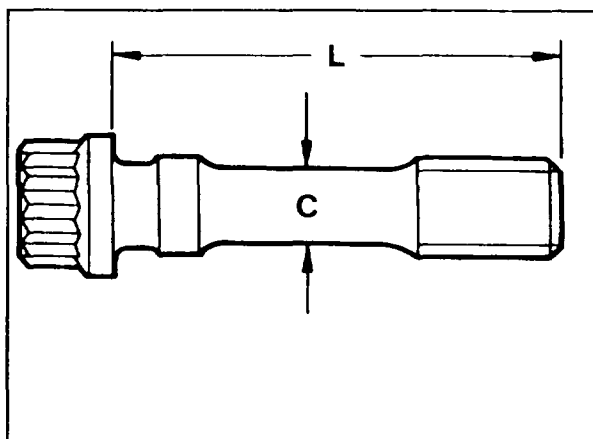


## 03-3100 Checking, replacing and tightening conrod bolts

Operation no. of operation texts and work units or standard texts  
and flat rates  
03-4341, 03-4351

### Stretch shaft bolt (1st version)

Part no.	102 038 00 71
Thread dia. (d)	M9 x 1
Stretch shaft dia. (c) when new	7.4 - 0.1
Minimum stretch shaft dia. (c)	7.1
Length (L) when new	52 - 0.3



P03-0100-13.

### Tightening torque in Nm

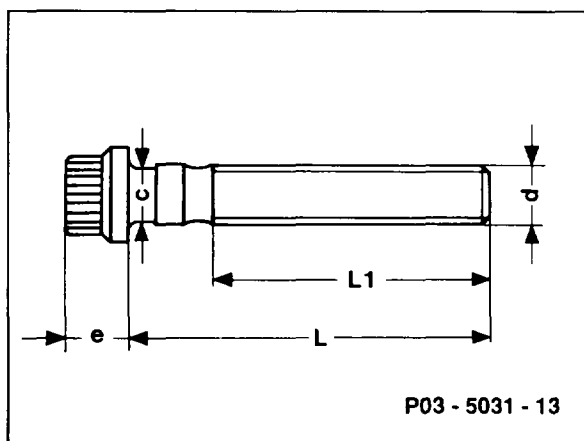
Stretch shaft bolt	Initial tightening torque <sup>2)</sup>	30
	Angle of rotation torque	90 - 100°

<sup>2)</sup> Thread and contact surface of bolt head moistened with engine oil before fitting.

### Flow shaft bolt (2nd version)

Part no.	102 038 02 71
Thread dia. (d)	M9 x 1
Shaft dia. (c) when new	8.7 - 0.2
Minimum shaft dia. (c)	8.2
Length (L) when new	52 - 0.3 <sup>1)</sup>

<sup>1)</sup> Re-use conrod bolt up to max. 52.9 mm.



P03 - 5031 - 13



### Tightening torque in Nm

Flow shaft bolt	Initial tightening torque <sup>2)</sup>	30 (40) <sup>5)</sup>
	Angle of rotation torque	90 – 100°

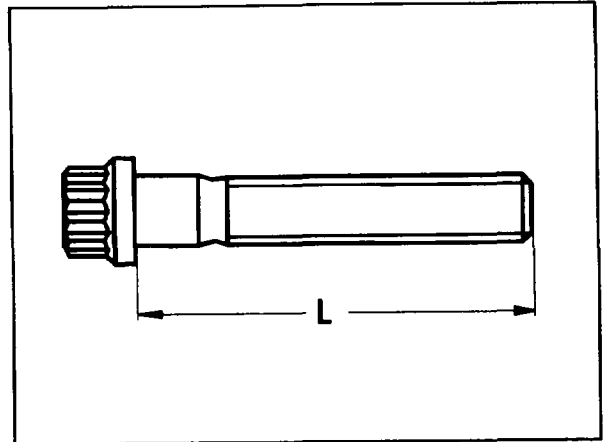
<sup>2)</sup> Thread and contact surface of head of bolt moistened with engine oil before fitting.

<sup>5)</sup> For initial tightening.

### Flow shaft bolt (3rd version)

Part no.	111 038 00 71
Thread Ø	M9 x 1
Length (L) when new	52 – 0.3 <sup>1)</sup>

<sup>1)</sup> Re-use conrod bolt up to max. 52.9 mm



P03-5270-13

### Tightening torque in Nm

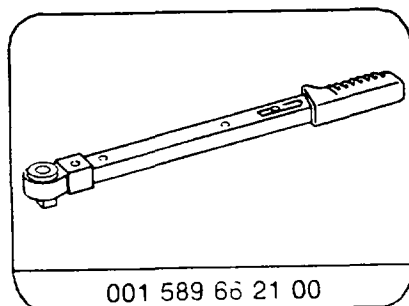
Flow shaft bolt	Initial tightening torque <sup>2)</sup>	35 (45) <sup>5)</sup>
	Angle of rotation torque	90 – 100°

<sup>2)</sup> Thread and contact surface of head of bolt moistened with engine oil before fitting.

<sup>5)</sup> For initial tightening.

- Conrod bolts ..... re-use up to minimum stretch shaft dia. or up to max. flow shaft length.
- Different weight ..... note (see note).
- Thread and bolt head contact surface ..... oil before fitting.
- Conrod bolts ..... tighten initially with torque wrench 001 589 66 21 00.
- Conrod bolts ..... tighten with angle of rotation wrench. Pay attention to note.

### Special tool



001 589 66 21 00

**Note**

The conrod bolts of the three versions have different weights. Only the same conrod bolts may be installed in an engine.

If no angle of rotation torque wrench is available, the conrod bolt can be tightened further by the specified angle with a socket wrench and lever in a single operation. To eliminate angularity errors, do not use bending rod torque wrenches for tightening to angle of rotation torques.

