### Example 1

| | |
|---|---|
| Length of dummy pinion head | =2·991 (75·97 mm) (standard). |
| Radius of dummy shaft | = ·813 (20·65 mm) (standard). |
| Gap between head and shaft | = ·005 (·127 mm) (feeler measurement). |
| Therefore C in this example | =3·809 (96·75 mm) |

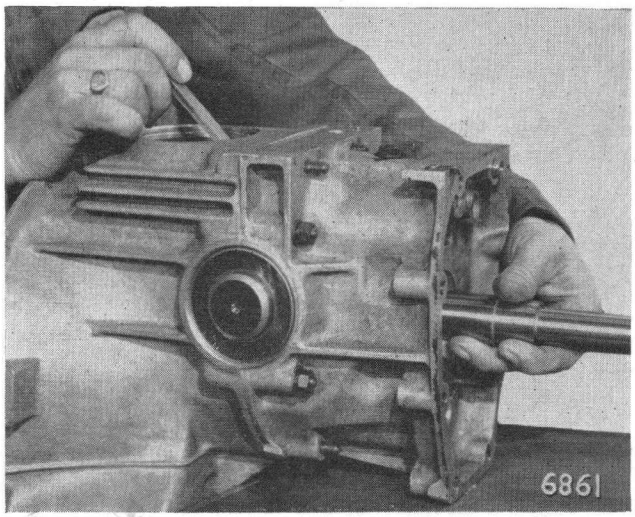


**Fig. 23.** *Feelers in pinion gap*

To measure the abutment height of the new bearing proceed as follows:—
(See Example 2)

A clock gauge is suitably mounted on a surface plate and set to zero on the abutment ring from Tool No. RG365.

A reading then taken on the bearing to be used gives the difference as shown in Fig. 24. Bearing must be well revolved during measurement.

Add this difference to the height of the gauge block (·705 in.) (17·9 mm). This block must be measured before use as the size can vary from ·703 in.–·709 in. (17·85-18·0 mm).

A bearing growth allowance of ·002 in. (·0508 mm) must be added.

To this measurement must be added the pinion setting distance (D) marked on pinion head. (See Example 3).

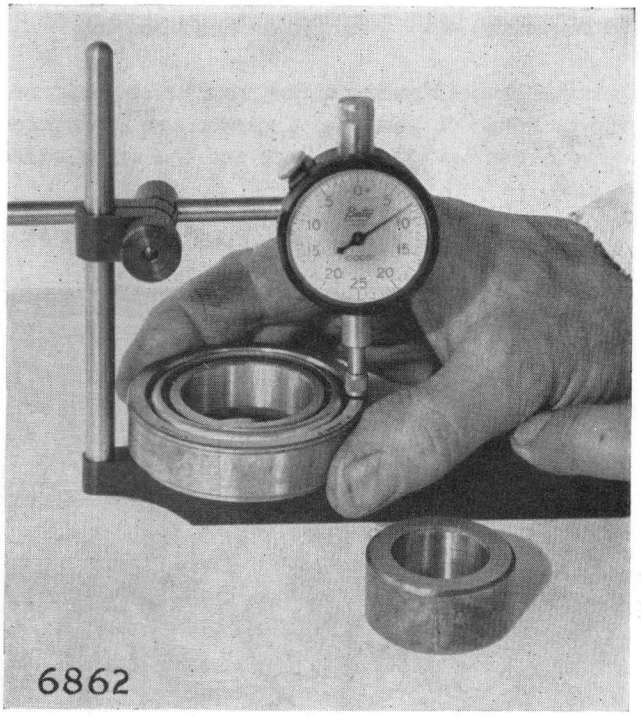


**Fig. 24.** *Measuring height of bearing*

### Example 2

Bearing abutment height as follows:—

| | |
|---|---|
| Height of gauge block | = 0·705 (17·9 mm) |
| Clock reading on bearing | = +0·003 (·0762 mm) |
| Bearing growth allowance | = +0·002 (·0508 mm) |
| Therefore B in this example | = 0·710 (18·03 mm) |

### Example 3

| | |
|---|---|
| Bearing abutment height (Result of Example 2) | = 0·710 (18·03 mm) |
| Pinion setting distance (say) | = 3·080 (78·23 mm) |
| So (B+D) | = 3·790 (96·26 mm) |

**Shims required as follows:**

| | |
|---|---|
| Result of Example 1 (C) | = 3·809 (96·75 mm) |
| Less Result of Example 3 (B+D) | = 3·790 (96·26 mm) |
| So shimming (S) | = 0·019 (·49 mm) |