



# SERVICE INFORMATION

Technical customer service  
VKT ER/wi-ba

Motorcycles R69S/R50/R60  
Group: Engine

München, June 15, 67  
No. 4/67 (250) en.

Re: Tachometer (rev.- counter)

Dear Sirs,

Complying with a general request of our customers we have developed a tachometer with a mechanical drive as optional equipment for our sport model.

Effective of frame No.

661 445 on R 69 S

the timing gear cover with centered connection bore as well as the driving gear for the tachometer take-off are standard features so that after removing the blind cover the new tachometer gearbox may be connected without any preparatory work.

R 69 S machines with frame numbers lower than the above mentioned ones as well as the models R 50 and R 60 may on request subsequently be provided with the new system but taking into account the following points:

1. On principle the mentioned transformation is only possible commencing with the frame numbers

640 296 R 50 755

628 250 R 60 755

660 144 R 69 S 755

since from these numbers onwards the extended oil pump gear, Part No. 00 52 164, and the modified aluminium driving gear, Part No. 00 52 156, have become standard equipment.

*new oil pump drive*  
*long shaft thrust*

2. Only commencing with the frame numbers

- 642 386 on R 50
- 1810 255 on R 60
- 661 445 on R 69 S

the lodging bore for the tachometer gearbox could be centered on the new timing gear covers in the series production. Whenever installing subsequently the new tachometer system on machines with frame numbers lower than the above mentioned ones, it is always necessary to use the new, centered, timing gear cover, Part No. 00 02 030.

The complete tachometer assembly can be ordered as a set as well as in single components under the below mentioned Part Nos. The parts quoted in brackets are standard equipment on the R 69 S models already from frame number 661 445 onwards.

Tachometer assembly complete, 80 80 153  
consisting of:

Driving gear in engine

- (1) Gear (driving) 00 52 169
- (1) Cylindrical pin 3 m 6 x 8 99 42 161
- (1) Spring washer A 10 99 32 101
- (1) Hex. nut 00 52 165

Tachometer gearbox on engine timing gear cover

- 1 Tachometer gearbox complete 80 80 159
- 2 Gasket 00 02 171
- 3 Cylinder screws M 6 x 40 99 19 937

Tachometer on swinging fork prong, top, right

- 1 Tachometer (VDO) 80 80 151
- 1 Spring washer B 10 99 32 111

Drive cable on frame tube, front, left

- 1 Drive cable 80 80 156
- 1 Rubber grommet for drive cable 80 80 160
- 1 Cable tape (180 mm long) 40 66 130

Installation of the driving gear:

1. Remove engine
2. Remove ignition system
3. Remove timing gear cover retaining screws and withdraw the cover.

4. Remove aluminium gear for oil pump drive.
5. On the removed aluminium gear install the new driving gear, Part No. 00 52 169, align the two fitting bores provided in both gears and drive-in the lubricated cylindrical pin, Part No. 99 42 161.
6. Now reconnect the thus completed aluminium gear to the oil pump, using the new spring washer 99 32 101 and the new hexagonal nut 00 52 165 (with left-handed thread). The safety plate and the old nut used hitherto are superseded.
7. Reinstall the centered timing gear cover, with new, lubricated gasket 00 02 030, and then the ignition system.
8. Check the ignition point and adjust if necessary.
9. Reinstall the engine.

For the remaining installation operations not specified under point 1 - 9, see the Repair Manual R 50/R 50S/R 60/R69 S from page 44.

#### Installation of the tachometer gearbox:

1. Unscrew the blind cover on timing gear cover, place the lubricated gasket 00 02 171 upon the mating surface, enter the centering collet of the tachometer gearbox into the bore (observe position of teeth), fit the likewise lubricated gasket 00 02 171 to the open side of the tachometer gearbox and screw-on the latter, first slightly, with the hitherto used blind cover and the 3 new cylindrical screws M 6 x 40, No. 99 19 937.
2. Turn over the engine with switched off ignition (best with removed spark plugs) by actuating the kickstarter carefully a few times and subsequently tighten the screws evenly. The old inside hexagonal screws M 6 x 15 no longer occur.

#### Installation of the tachometer instrument:

On the upper fork guide, at right (viewed in driving direction) remove the fork screw 20 00 343 and flat washer 20 00 345. Fasten the tachometer instrument (with spot-welded support) so that the connection for the flexible shaft is located between headlamp and holder. Instead of the hitherto used flat washer use the new spring washer 99 32 111.

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Routing and connection of the flexible shaft

Previously, slide the rubber grommet 80 80 160 over the lower end of the tachometer drive shaft.

Viewed in the driving direction, the flexible shaft runs from the tachometer instrument downwards and before the lower fork guide slowly without sharp bend to the left onto the inner side of the frame tube. From here it runs further downwards, directly to the tachometer gearbox. Having connected the shaft, same manner as speedometer shaft, put the previously fitted rubber grommet on the connecting bush.

Just at the level of the engine front end cover retaining screws fasten the tachometer drive cable by means of cable tape 40 66 130 to the frame tube.

Please, perceive the available parts from the parts catalogue and in special cases from the circular letters of the spare parts department.

Very truly yours,

BAYERISCHE MOTOREN WERKE  
Aktiengesellschaft

ppa.

i.V.

  
Makowitzki

  
Delleske