



SERVICE INFORMATION

Techn. Customer Service
VKT 20 fm/wi-ba

BMW-Motorcycles R50,R60,R69S
Group: Transmission

München, July 1968
No.1/68 (268) en.

Re: Facilitation of gear shifting on models R 50, R 60, R 69S

Dear Sirs,

A considerably easier and quicker shifting of the various gears has been obtained by enlarging the radii of the cam plate and chamfering the faces of the shifting pegs on the spur gears of the output shaft.

This modification has been introduced in the series production on the models

R 50 commencing with frame No. 646 686

R 60 commencing with frame No. 1816 037

R69S commencing with frame No. 664 451

This improvement concerns the following parts:

Part	old part No.	new part No.
1. Cam plate with gear and contact rivet	23 31 1 066 248	23 31 1 066 239
2. Sector gear with ratchet	23 31 1 066 274	23 31 1 066 275
3. Pawl	23 31 1 066 256	23 31 1 066 259
4. Instead of pressure spring now leg spring	23 31 1 066 130	23 31 1 066 131
5. Washer 14x25x1 newly introduced	without	34 21 3 060 107
Spur gears for close-ratio (sports) transmission for "solo" machines		
6. Spur gear for first	23 22 1 030 244	23 22 1 030 246
7. Spur gear for second	23 22 1 030 145	23 22 1 030 147
8. Spur gear for third	23 22 1 030 149	23 22 1 030 154
9. Spur gear for fourth	23 22 1 030 151	23 22 1 030 153
Sports transmission complete	23 00 1 000 028	23 00 1 000 035

Spur gears for standard transmission sidecar outfits

Part	old Part No.	new Part No.
10. Spur gear for first	23 22 1 030 243	23 22 1 030 242
11. Spur gear for second	23 22 1 030 144	23 22 1 030 146
12. Spur gear for third	23 22 1 030 148	23 22 1 030 150
13. Spur gear for fourth same as on sports transmission		
Standard transmission complete for sidecar operation		23 00 1 000 026

The new transmission gears are also exchangeable separately against those of the old execution. Against new orders only transmission gears of the new execution will be supplied from now on.

When replacing one of the components of the shifting mechanism (part 1 - 5) only parts of either the old or the new execution can be fitted jointly.

For your information we would like to point out the differences between the sport transmission (gearbox for all solo machines) and the standard transmission (gearbox for all sidecar motorcycles).

The standard transmission differs from the sport transmission by different teeth numbers of the individual gear wheels of intermediary and output shafts to be perceived from the attached table.

See attached table

Caution!

The teeth number of the third speed gear of the output shaft equals on both the standard transmission and the sport gearbox, the gear wheels however feature a different profile deflection. For identifying, the third speed gear of the S-transmission is marked with a green colour dot; its outer diameter (addendum circle) is 65.2 mm (2.567") that of the third speed gear of the standard transmission 65.6 mm (2.582").

On both transmission types equals the helical four speed spur gear of the intermediary shaft (21 teeth) and that of the primary shaft (20 teeth). Further distinguishing mark of the two transmission executions constitutes the letter "S" stamped onto the housing of the sports transmission, close to the oil intake plug. The standard transmission is not marked.

Very truly yours,

BAYERISCHE MOTOREN WERKE
Aktiengesellschaft

Enclosure

i.V.

Scholz

i.V.

Bennewitz

Enclosure to Service Information
No. 1/68 (268) en.

Gear wheels

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	No. of teeth	S-transmission Solo machine Part. No.	No. of teeth	Standard transm. (for sidecar motorcycle) Part No.
Drive gear	13	23 22 1 020 245	13	23 22 1 020 245
4. speed spur gear intermediary shaft	21	23 22 1 040 108	21	23 22 1 040 108
Intermediary shaft	20 16 12	23 21 1 040 028	19 15 10	23 21 1 040 027
4. speed spur gear output shaft	20	23 22 1 030 153	20	23 22 1 030 153
3. speed spur gear output shaft	* 24	23 22 1 030 154	24	23 22 1 030 150
2. speed spur gear output shaft	27	23 22 1 030 147	28	23 22 1 030 146
1. speed spur gear output shaft	31	23 22 1 030 246	33	23 22 1 030 242

* marked with green colour dot.

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