



BAYERISCHE MOTOREN WERKE
AKTIENGESELLSCHAFT

Rundschreiben der Abteilung Kundendienst und Teile

Circular-Letter of the Service Department
Motorcycles: Group Suspensions and shock absorbers No. 1/56
(104)

Munich, 30/10/56
KVF Wi/E/Dn/Se

Dear Sirs,

Subject: Adjustment of tapered roller bearings on front and
rear suspension unit of models R 26, R 50, R 60, R 69.

Road holding qualities and suspension of all motor-
cycles are governed by the adjustment of suspension bearings.
We are therefore kindly asking you to devote your special atten-
tion to our instructions for adjustment of tapered roller
bearings on the front- and rear wheel suspension units. Every
12 000 km the suspension bearing units must be removed, cleansed
and regreased during the maintenance service job.

A - Front suspension unit:

Remove front wheel and mudguard, unhook suspension units
from lower connecting points.

Unscrew cap nut of pin, turn off pin. In this way the
suspension unit is loosened from the fork.

Take care of washers!

Remove oil seal ring, pressure bushing and inner race
with roller cage; outer race and covering disk are left
behind.

Carefully cleanse bearing, regrease and refit. Insert
seal ring and pressure bushing. The tapered roller
bearings may not be interchanged.

In order to avoid damaging the thread of the pin it is
necessary to screw into the inner thread M 8 of the pin
the MATRA special tool No. 519. By means of this tool
the pin is centrically approached to the thread in the
centre of the fork and fitting is rendered more easy.
The pin is now fitted so tightly that the front wheel
suspension unit is falling slowly down from its hori-
zontal position by its own weight and will remain
standing in oblique position. Loosen pin again slightly
until suspension unit will move more downwards, but
without turning quite freely.

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- In this position fasten pin for swinging suspension unit with cap nut.

B. - Rear wheel suspension unit:

Disconnect electrical wires, remove rear wheel and mud-guard, loosen suspension unit from lower connection point.

On models R 50, R 60 and R 69: drain oil from unit, remove 2 clamps, screw off 4 inner hexagon screws for carrier flange on gear box.

Remove cap nuts, loosen hexagon nuts and turn off bearing pin. In this way rear suspension unit is loosened from frame. Remove unit.

Take off seal ring, pressure bushing and inner race with roller cage, outer race and covering disk are not removed.

Carefully cleanse bearing, regrease and refit.

Insert seal ring and pressure bushing. The tapered roller bearings may not be interchanged.

On fitting be careful to place suspension unit right into center by turning both bearing pins, i.e. the lateral distances towards frame must be equal (drawing 2).

Screw in one of the two bearing pins until a resistance can be felt. The thread in the frame must be in good condition, if necessary recut thread with cutter M 20 x 1.5.

Tighten this bearing pin now by 1/8 of a turn more and in this position, by supporting with pin spanner contained in tool set of vehicle, tighten hexagon nut. The other pin may not be retightened but must be fastened in normal position. Screw on cap nuts.

In order to find the above named resistance of the bearing pin on the pressure bushing in an easier way, new bearing pins with an improved resistance surface for the pressure

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bushing will be fitted on our serial models as of the
following frame numbers:

R 50 557 206

R 69 652 801

R 60 618 401

R 26 348 701

(see drawing 1)

We suggest that on repairs the bearing pins having
been used till now should be replaced by the new design.

1 bearing pin 30 54 170.

We remain, dear Sirs,

Yours truly

BAYERISCHE MOTOREN WERKE
Aktiengesellschaft

2 drawings

h. A. Th. Willhelms

Lagerzapfen 30 54 170

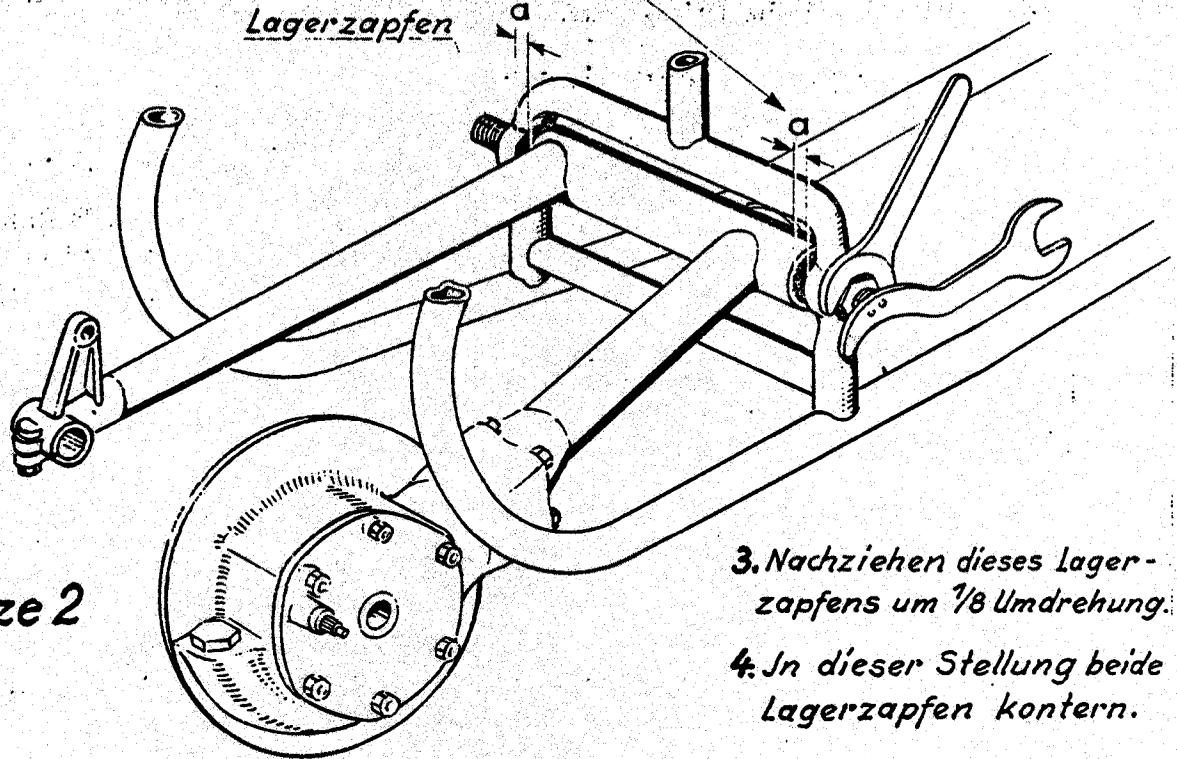


Skizze 1

1. Schwinge ausmitteln durch Verdrehen der Lagerzapfen.
Abstände „a“ müssen gleich sein!

2. Einen Lagerzapfen bis auf Anschlag einschrauben

Lagerzapfen



Skizze 2

3. Nachziehen dieses Lagerzapfens um $\frac{1}{8}$ Umdrehung.

4. In dieser Stellung beide Lagerzapfen kontern.