

46—520 Removal and installation of intermediate steering arm

Data

Part No.	Version	Code No.
115 463 15 10	Lefthand steering	515
115 463 16 10	Righthand steering	516

Adjusting value

Permissible difference in height of ball point position between pitman arm and intermediate steering arm	4 mm
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Tightening torques

	Nm	(kpm)
Self-locking hex nut for attaching intermediate steering arm	120	(12)
Castle nut to track rod and drag link	35	(3.5)

Special tools

Puller for ball joint of track rod and drag link on intermediate steering arm



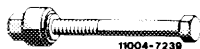
111 589 08 93 00

Remover for rubber slide bearing



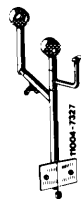
116 589 01 33 00

Installer for rubber slide bearing



115 589 08 61 00

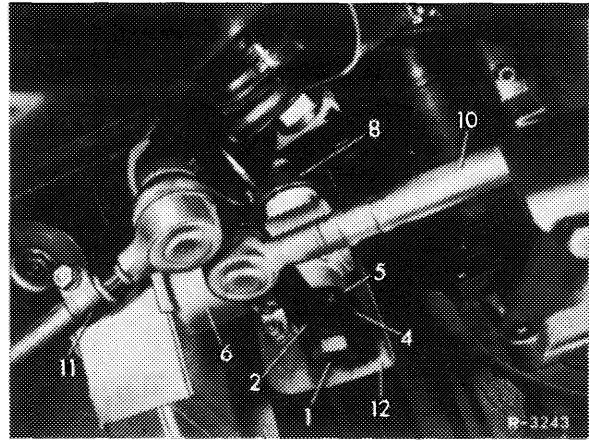
Measuring instrument for ball point position



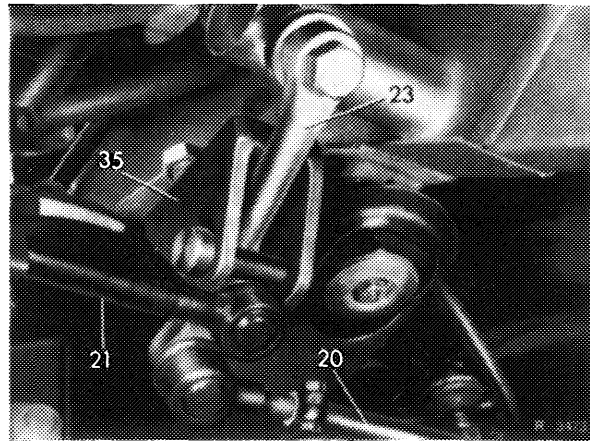
115 589 03 21 00

Removal

1 Remove shielding plate (12) from bearing (6) of intermediate steering arm (2).

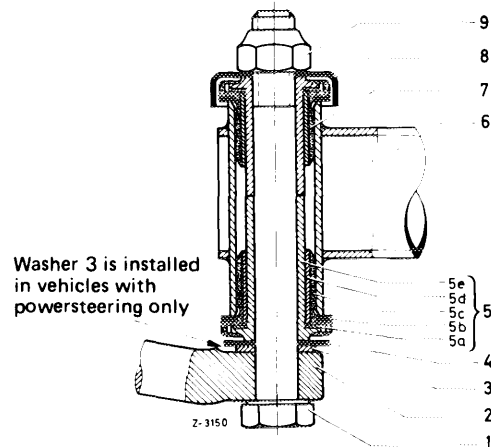


2 Uncotter ball joint of drag link and track rod. Unscrew castle nuts. Force drag link and track rod from intermediate steering arm by means of puller (35). Watch out for plastic cover and sealing ring on drag link.



3 Unscrew self-locking hex nut (9) from hex screw of intermediate steering arm.

- 1 Hex screw
- 2 Intermediate steering arm
- 3 Washer
- 4 Sealing washer
- 5 Lower rubber slide bearing
- 5a Washer
- 5b Steel washer
- 5c Rubber bushing
- 5d Slide bushing
- 5e Bushing
- 6 Journal bearing
- 7 Upper rubber slide bearing
- 8 Dust cap
- 9 Self-locking hex nut



4 Remove dust cap (8) in upward direction and hex screw (1) with intermediate steering arm (2) in downward direction.

5 Remove sealing washer (4) and washer (3) from intermediate steering arm.

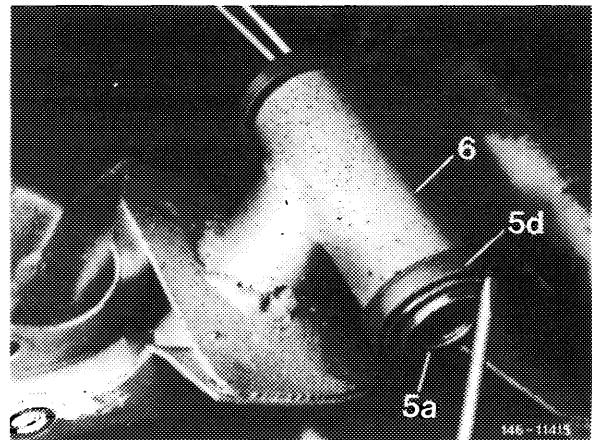
Checkup and repair

The intermediate steering arm cannot be checked with conventional workshop tools. **When in doubt**, particularly following an accident, replace intermediate steering arm.

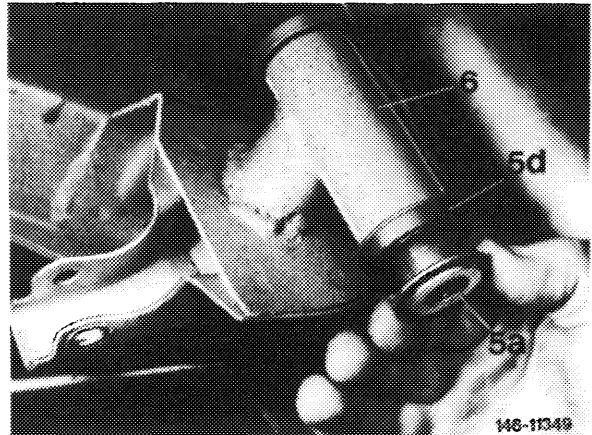
Watch out for correct code number of intermediate steering arm.

6 Check rubber slide bearing in journal bearing (6) for wear and replace, if required.

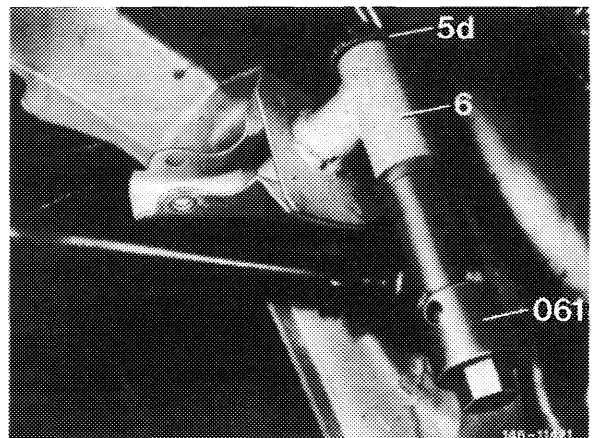
For this purpose, lift sealing lip of rubber bushing (5d) with a screwdriver.



7 Remove slide bushing (5a) from rubber mount.



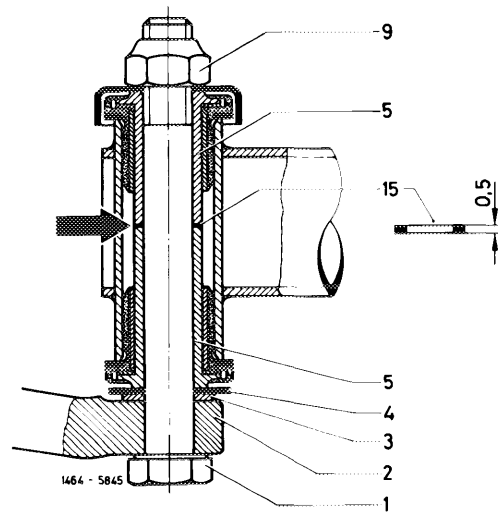
8 Remove both rubber bushings (5d) from journal bearing by means of remover (061).



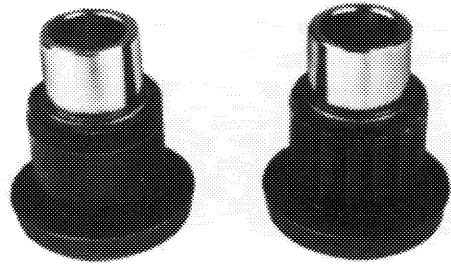
Installation

Note: If in the event of complains about noise new rubber slide bearings are installed, watch out for the following:

a) When installing rubber slide bearings 1st version, place steel washer part No. 115 463 01 52 (15) between both slide bushings.



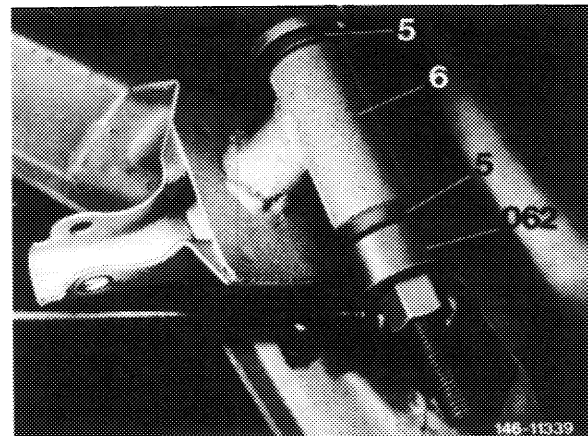
b) Install rubber slide bearings 2nd version with longitudinal grooves.



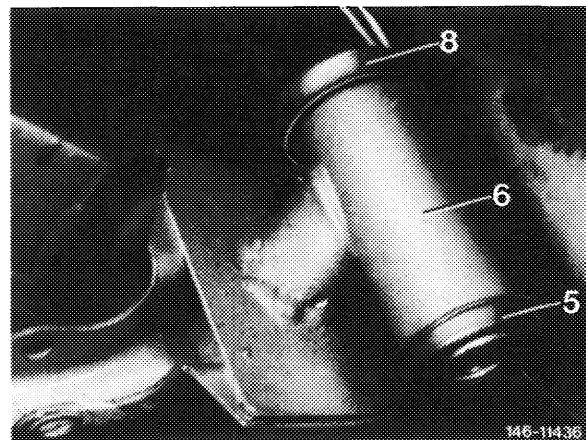
at left: smooth rubber slide bearings
at right: rubber slide bearing with longitudinal grooves

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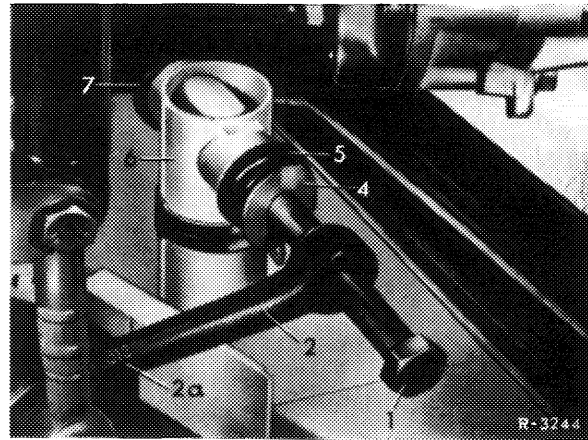
9 Coat rubber slide bearing (5) outside with slide fluid, e. g. white oil and press into journal bearing (6) by means of installation tool (062).



10 Place dust cap (8) on upper rubber slide bearing.

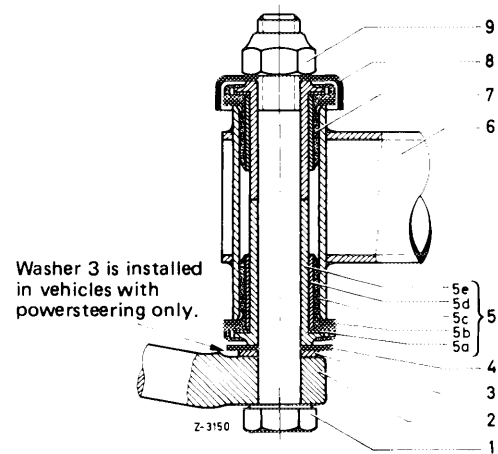


11 Place intermediate steering arm (2) on hex screw (1) in such a manner that offset shows in upward direction, or that the pressed-in code number (2a) shows below.

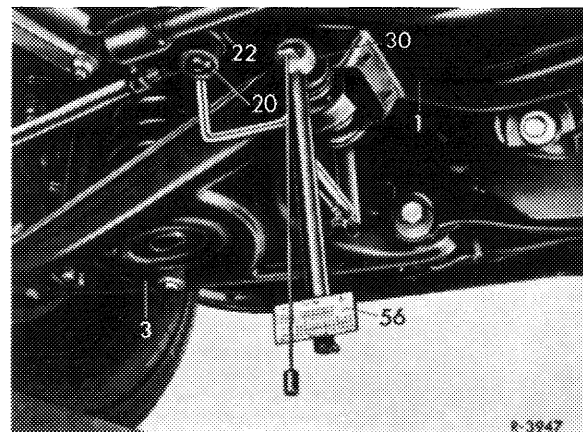


12 Place washer (3) and sealing washer (4) on hex screw (1).

13 Mount hex screw with intermediate steering arm (2) into journal bearing (6). Screw-on standard nut and tighten to approx. 60 to 80 Nm (6 to 8 kpm).

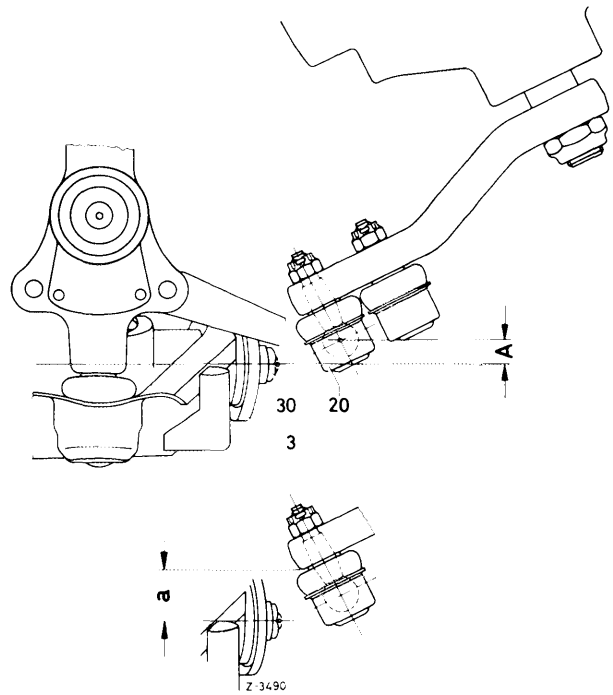


14 Measure permissible difference in height of ball point position between pitman arm and intermediate steering arm by means of measuring instrument (56). Max. permissible difference 4 mm. (Also refer to 40–320 Checking wheel adjustment values on front axle).



15 If the difference is higher, screw out hex screw (1) and add a second washer (3), part No. 115 463 00 52 between intermediate steering arm (2) and sealing washer (4).

- 3 Lower cross member
- 20 Track rod
- 30 Eccentric bolt
- A Ball joint position (theoretically)
- a Ball joint position (measuring point)



16 Screw-on new self-locking hex nut and tighten to 120 Nm (12 kpm).

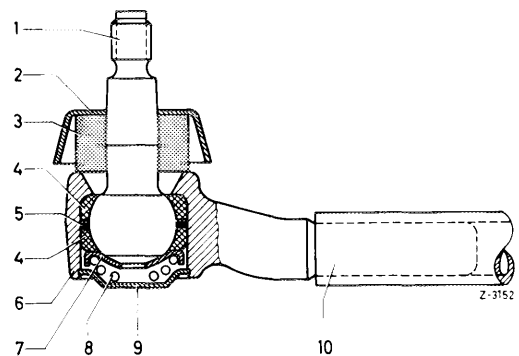
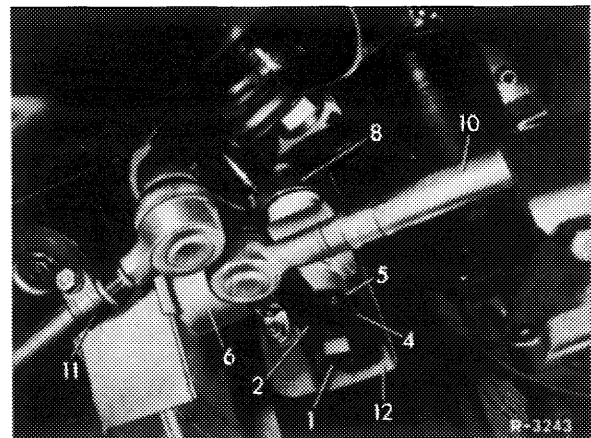
Note: After tightening self-locking hex nut, at least one thread of hex screw should extend above hex nut.

Attention!
Always replace self-locking hex nuts on principle.

17 Check whether intermediate steering arm can be turned to the left and right without binding.

18 Fasten shielding plate to journal bearing.

19 Place sealing ring (3) and plastic cover (2) on ball pin of drag link and attach drag link to intermediate steering arm. Tightening torque of castle nut 35 Nm (3.5 kpm) — reference value. Cotter castle nut.



20 Check rubber sleeve (2) on ball pin of track rod.
If rubber sleeve is damaged, replace complete ball
joint (refer to 46–540). Fasten track rod to intermediate
steering arm. Tightening torque of castle nut 35 Nm
(3.5 kpm) – reference value. Cotter castle nut.

21 Check wheel adjustment on front axle (40–320).

