

46–520 Removal and installation of intermediate steering arm, checking and reconditioning of intermediate steering arm bearing

Data

| Part No. | Version | Code No. | Remarks |
|---------------|--------------------|----------|---|
| 107 463 04 10 | Lefthand steering | 0704 | 1st version |
| 107 463 05 10 | Righthand steering | 0705 | |
| 107 463 08 10 | Lefthand steering | 0708 | 2nd version and replacement for 1st version |
| 107 463 09 10 | Righthand steering | 0709 | |
| 107 463 10 10 | Lefthand steering | 0710 | 3rd version for left-hand steering and replacement for 1st and 2nd version. |

Adjusting value

| | |
|--|------|
| Permissible difference in height of ball point location between pitman arm and steering intermediate lever | 4 mm |
|--|------|

Tightening torques

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

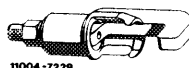
Special tools

Puller for ball joint of track rod



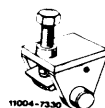
186 589 10 33 00

Puller for ball joint of drag link



123 589 09 33 00

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



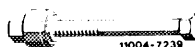
111 589 08 33 00

Remover for rubber slide bearing



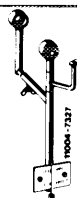
116 589 01 33 00

Installer for rubber slide bearing



115 589 08 61 00

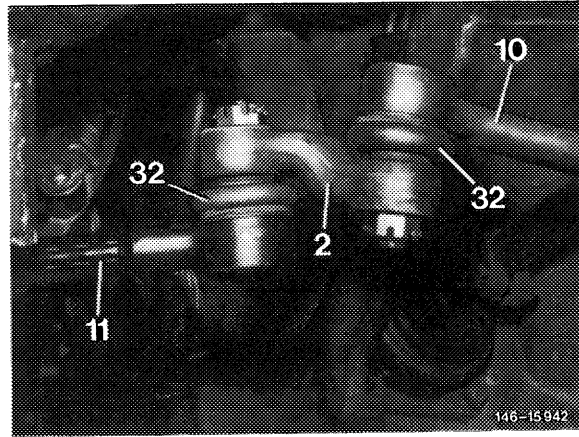
Measuring instrument for ball point position



115 589 03 21 00

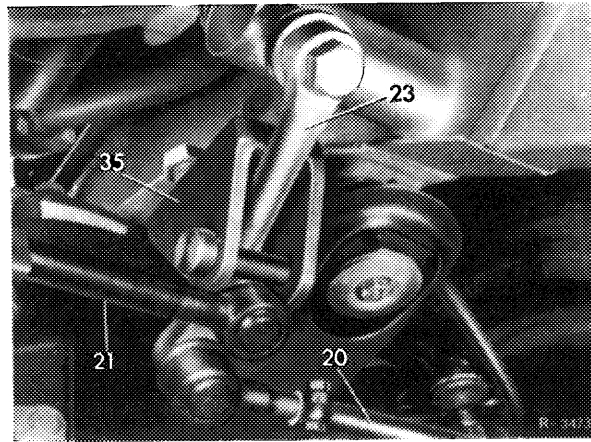
Removal

1 Remove cotter pins from castle nuts of drag link and track rod and unscrew castle nuts.



2 Remove shielding plate from bearing of steering intermediate arm.

3 Force ball joint of drag link from steering intermediate arm by means of puller (35). Pay attention to plastic cover and sealing ring on drag link 1st version.



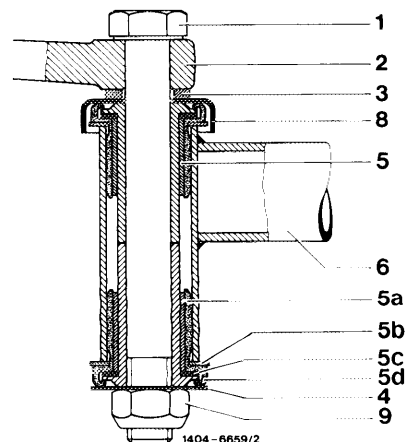
Note: The ball joint of the drag link can also be removed from steering intermediate arm by means of puller 123 589 00 33 00.

To prevent damaging rubber sleeve on drag link 2nd version, use puller 123 589 00 33 00 only if the bell-type puller has been refinished.

4 Force ball joint of track rod from steering intermediate arm.

5 Unscrew self-locking hex. nut (9) from hex. bolt (1). Remove sealing washer (4).

6 Remove hex. bolt (1) together with steering intermediate lever (2) and dust cap (8). Pay attention to washer (3) between steering intermediate arm and dust cap, if installed.



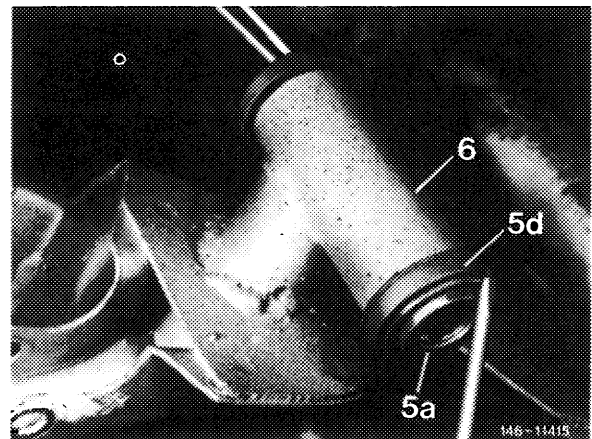
Checking and reconditioning of intermediate steering arm bearing

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

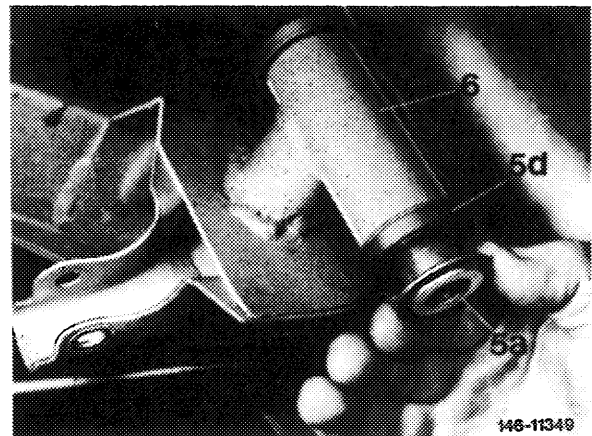
Pay attention to correct code number of steering intermediate arm.

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

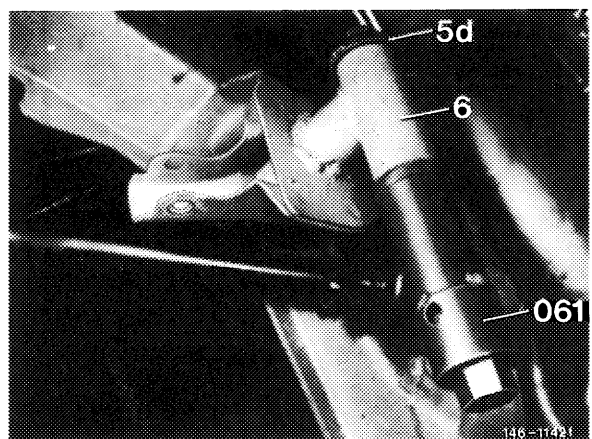
For this purpose, lift rubber bushing (5d) with a screw driver.



8 Remove slide bushing (5a) from rubber bearing.

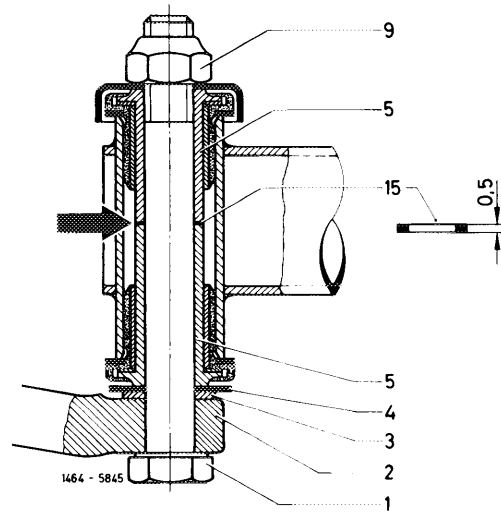


9 Remove both rubber bushings (5d) from journal bearing by means of puller (061).

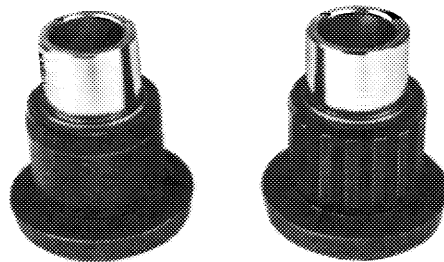


Note: If new rubber slide bearings are installed because of complaints about noise, proceed as follows:

a) When installing rubber slide bearing 1st version, insert steel disc part no. 115 463 01 52 (15) between both slide bushings. Note that the end play of both slide bushings in rubber bushings should not exceed max. 0.5 mm. The end play is checked by pushing steering intermediate arm on and off.



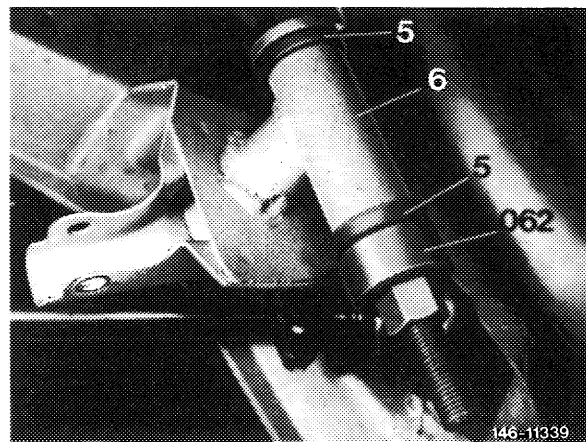
b) Install rubber slide bearing 2nd version with longitudinal grooves.



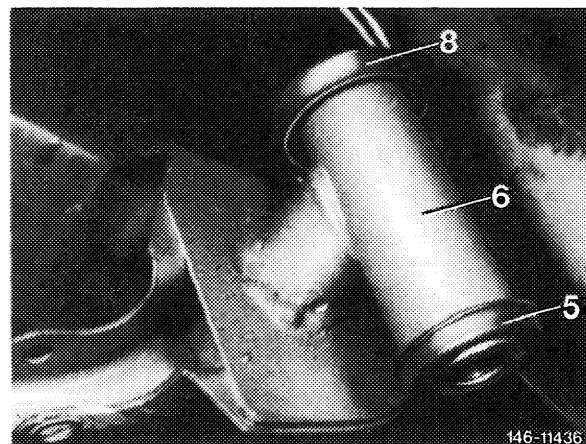
left: smooth rubber slide bearing
right: rubber slide bearing with longitudinal grooves

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10 Rub rubber slide bearing (5) outside with slide fluid, e.g. white oil, and press into journal bearing (6) by means of pressing-in tool (062).



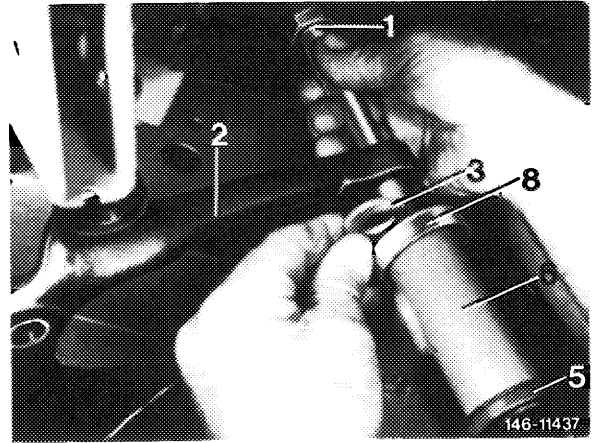
11 Place dust cap (8) on upper rubber slide bearing.



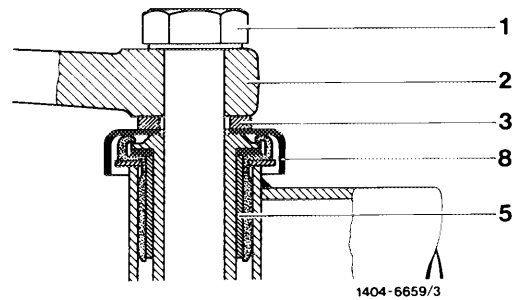
Installation

12 Insert hex. bolt (1) with steering intermediate arm (2) and dust cap (8) into rubber slide bearing.

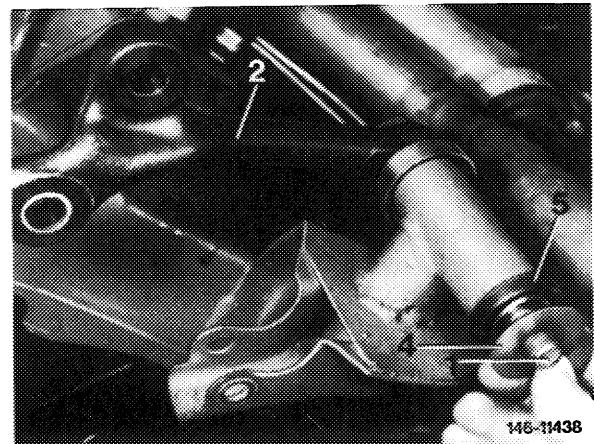
Note: Mount hex. bolt with bolt head facing steering intermediate arm, install bolts of grade 10.9 only.



13 Reinstall spacing washer (3) between dust cap (8) and steering intermediate arm (2), if previously installed.

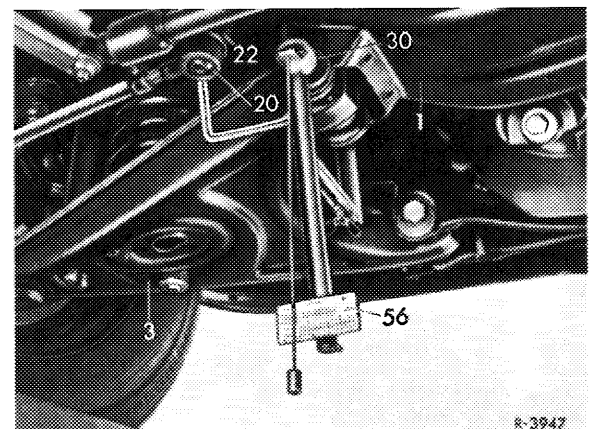


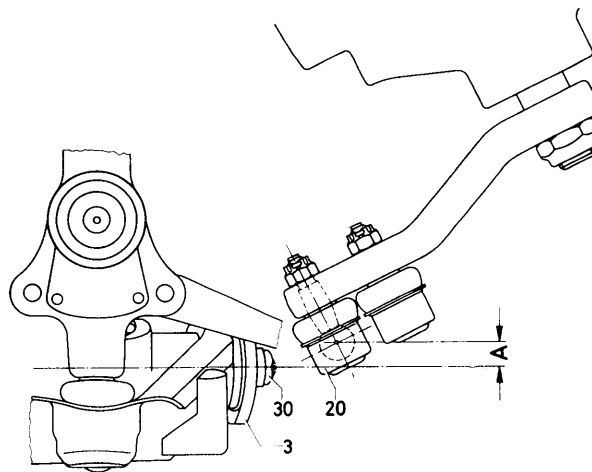
14 Mount sealing plate (4), screw-on normal hex. nut M 16 x 1.5 and tighten to approx. 70 Nm (7 kpm).



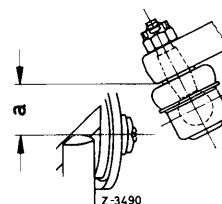
15 Measure permissible deviation in height of ball point location between pitman arm and intermediate steering arm by means of measuring instrument (56). Max. permissible difference 4 mm.

If a larger difference is measured, perform remedies described in 40–320.





- 3 Lower control arm
- 20 Track rod
- 30 Eccentric bolt
- A Ball point position (theoretical)
- a Ball point position (measuring point)



16 Unscrew hex. nut, then screw-on new self-locking hex. nut (9) and tighten to 120 Nm (12 kpm).

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

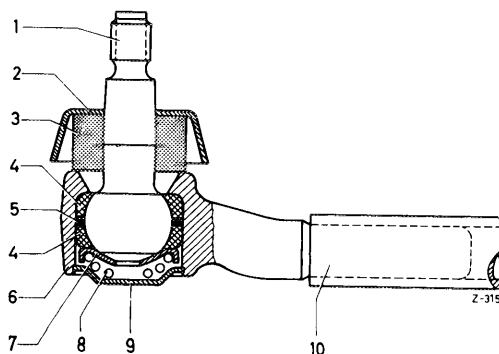
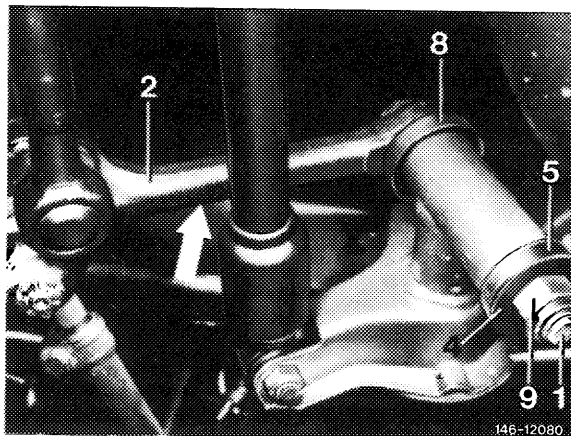
Attention!

Always replace self-locking hex. nut on principle.

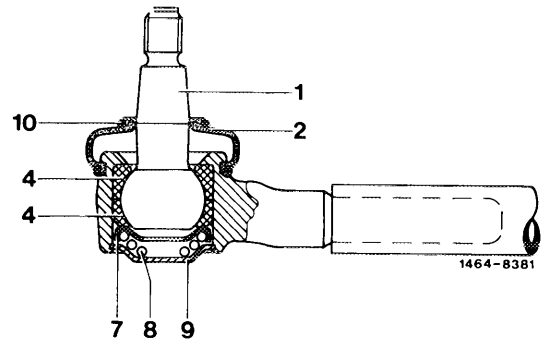
17 Check whether steering intermediate arm can be turned to the left and right without binding.

18 Attach shielding plate to journal bearing.

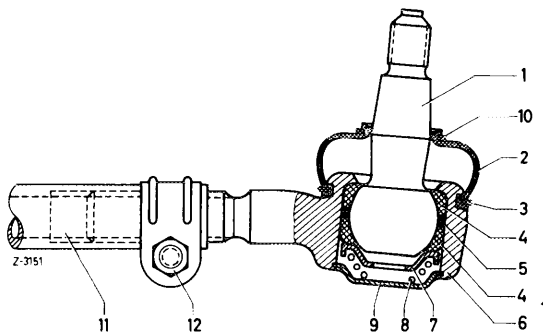
19 On drag link 1st version, check joint of drag link for wear and replace drag link, if required. Place sealing ring (3) and plastic cover (2) on ball joint (46–550).



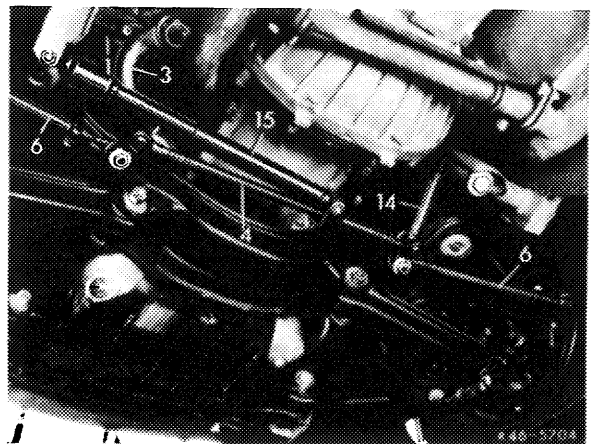
20 On drag link 2nd version, check rubber sleeve (2) on ball pin. If rubber sleeve is damaged, check ball joint for wear and replace drag link, if required (46–550).



21 Check rubber sleeve (2) on ball pin of track rod. If rubber sleeve has been damaged, replace complete ball joint (46–540).



22 Fasten track rod and drag link to intermediate steering arm, insert cotter pins into castle nuts. Tightening torque 35 Nm (3.5 kpm) — reference value.



23 Turn steering completely to the left and right while checking whether steering knuckle arm (8) rests each time against stop (16) of lower control arm.

24 Check wheel adjusting values on front axle (40–320).

