

46–490 Adjustment of removed power steering

Note

On model 116.036, the steering cannot be adjusted when installed in vehicle.

Adjusting value

Ncm

Total friction of steering
measured on steering worm

120–160

Tightening torque

Nm

Hex. collar nut
on adjusting screw

60–65

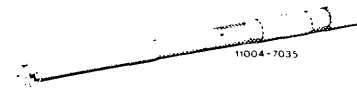
Special tools

Assembly fixture



116 589 03 59 00

Torque wrench handle
20–100 Nm



001 589 35 21 00

Torque wrench 1/2" square
0–400 Ncm



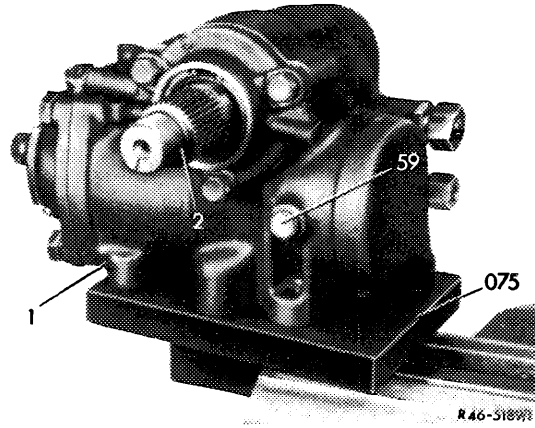
123 589 02 21 00

Conventional tool

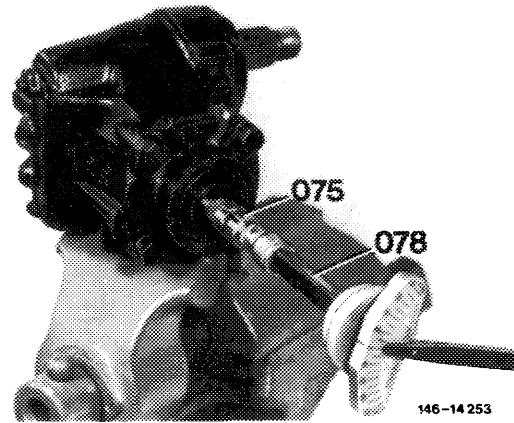
Box wrench 19 mm for torque wrench
handle 001 589 35 21 00

e. g. made by Hahn u. Kolb, D-7000 Stuttgart
order No. 52251/19

- 1 Remove steering 46–412.
- 2 Attach steering to assembly fixture.



- 3 Turn steering several times from lock to lock with torque wrench while measuring friction torque.

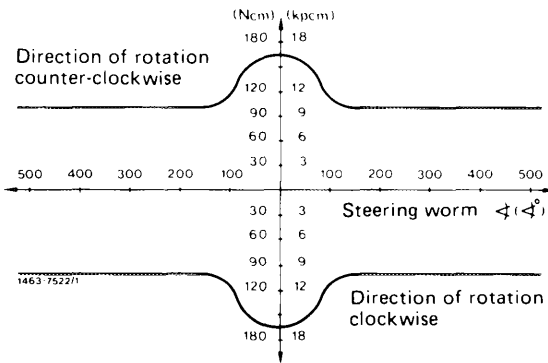


- 4 Adjust steering if friction torque is not above basic friction value when turning beyond center position range.

Note:

- a) Friction torque of new steering:
in center position = 110–160 Ncm
Basic friction value = 100 Ncm

Torque flow (without servo pressure) over total steering range. Operation via steering worm.

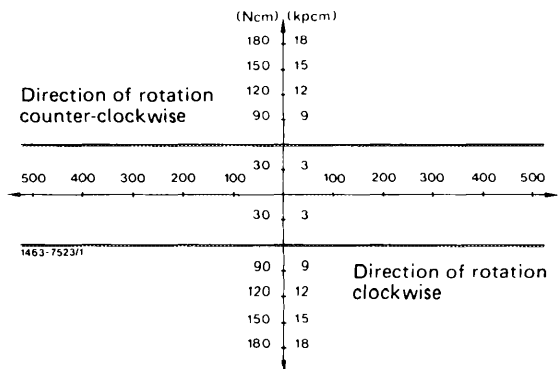


- b) Friction torque of used steering:
The friction torque is down to approx. 50 Ncm through entire turning range, there is no increased friction value in center range.

Attention!

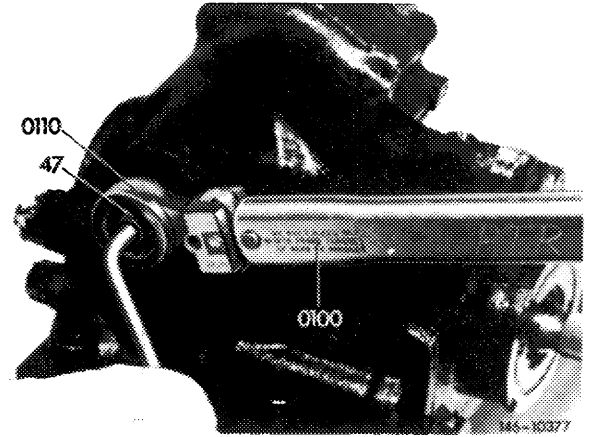
If the torque increases above 110 Ncm in center range of steering, no readjustment should be made.

Torque flow (without servo pressure) over total steering range. Operation via steering worm.



5 Adjust steering by loosening hex. collar nut and turning adjusting screw by 1/8 to 1/4 turn to the left. Tighten hex. collar nut to 60–65 Nm.

Note: Unscrewing of adjusting nut by 1/4 turn will increase friction torque by approx. 50–70 Ncm.



6 Measure friction torque once again beyond center position by means of torque wrench. The friction torque should be 50–70 Ncm above basic friction torque.

If this addition is not attained, unscrew adjusting nut once again by 1/8 to 1/4 turn.

When turning beyond center position, the friction torque should not exceed 160 Ncm.

Turn steering from lock to lock. Steering should not bind throughout entire turning range.