

Removal and Installation of Steering Gear Arm

Models 219, 220a, 220S

Job No.

L 12

Removal:

1. Pull out the castle nut cotters at the ball-heads and unscrew the castle nuts. Then use Bell-shaped Puller 186 589 10 33 to press out the ball-heads of the tie-rod assembly from the steering gear arm.
2. Remove the cotter pin from the steering shaft castle nut, unscrew the castle nut and use Bell-shaped Puller 186 589 04 33 to pull the steering gear arm off the serrations of the steering shaft.
3. Check the steering gear arm for distortion (Fig. L 12/1).
If the steering gear arm is bent, it must be replaced. As an expedient the steering gear arm can be straightened in cold condition but then a careful check must be made for cracks.

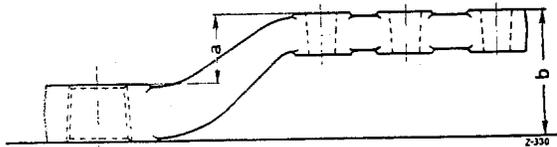


Fig. L 12/1

a = 30 ± 0.3 b = 55 mm

Installation:

4. Press the steering gear arm onto the serrations of the steering shaft. The markings on the steering gear arm and the steering shaft must coincide!
5. Screw the castle nut onto the steering gear arm, tighten firmly and cotter.
6. Fit a sealing cover and a rubber cuff on each of the ball-heads.

Press the tie-rod assembly into the steering gear arm.

Note: The contact faces of the ball-heads must be free of oil and grease.

7. Screw on, tighten up and cotter the castle nuts.
8. Check and if necessary adjust the toe-in. In doing this, check whether the steering knuckle arm rests against the steering knuckle assembly stop face at full lock (see Job No. L 1, Paragraph 14).

Removal and Installation of Steering Coupling Jointing Disk

Models 219, 220a, 220S

Job No.

L 13

Removal:

1. Disconnect the ground cable at the negative terminal of the battery.
2. Loosen and remove the upper clamping screw of the steering coupling.
3. Disconnect the cables for the flash direction signals and the horn from the steering cable connector at the wheel arch assembly.
4. Unscrew the stud bolt from the steering column jacket and pull the steering tube out of the steering coupling and the wiring harness out of the steering cable tube.
5. Loosen and remove the lower clamping screw of the steering coupling.
6. Pull the steering coupling off the steering worm serrations.

L 13/1

- Pull the cotter pins out of the four castle nuts.

Unscrew the castle nuts and take off the jointing disk.

Installation:

- Using two hexagon screws in each case, screw the upper and lower flanges to the jointing disk.

Do not omit the ground strap and the safety strap (Fig. L 13/1).

Tighten up the hexagon screws to a tightening torque of 0.6—0.7 mkg.

- Cotter the four castle nuts.
- Pull the steering coupling onto the steering shaft serrations.
- Pull the wiring harness through the cable tube.

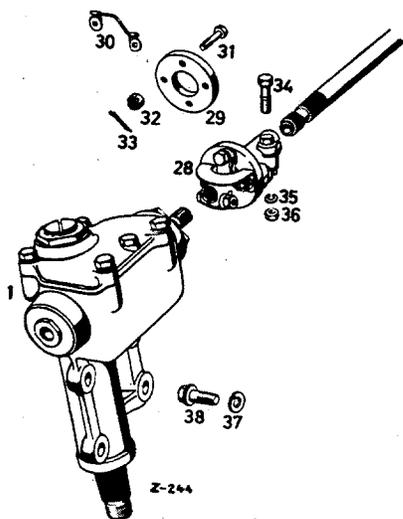


Fig. L 13/1

1 Steering	33 Cotter pin 2×18
28 Steering coupling	34 Hexagon screw
29 Jointing disk	35 Lock washer
30 Ground connection	36 Hexagon nut
31 Hexagon screw	37 Lock washer
32 Castle nut	38 Hexagon screw

- Line up the front wheels in a straight fore and aft position, bring the steering wheel to the dead center position and insert the steering tube in the steering coupling.

Note: Use Center Position Check Screw 186 589 00 23 for the steering.

If, when the steering wheel is at the exact center position, the road wheels do not line up in the straight fore and aft position, the front wheel alignment must be corrected by adjusting the tie-rods.

- Insert the upper and lower clamping screw, screw on and tighten up the hexagon nut and lock washer.

Note: If necessary, replace clamping screw, nut and lock washer.

Only specified clamping screws may be used to fix the steering coupling to the steering tube and the steering worm.

These screws should be tightened so that the steering coupling is seated firmly on the steering worm and on the steering tube. Excessive tightening must be avoided in order to prevent the screws from being strained and from snapping.

- Connect the flash direction signal and horn cables to the steering column cable connector at the wheel arch assembly.

When connecting up the individual cables, pay attention to the color coding:

The individual cables must be connected so that the color coding of the cables of the steering tube wiring harness corresponds to the color coding of the main wiring harness cables.

- Screw in and tighten the stud bolt for the steering column jacket (see Job No. L 1, Paragraphs 12—13).

- Check and, if necessary, adjust toe-in.

- Check whether the horn and the flash direction signals are working properly.