Checking and Repair of Front Axle Half

Job No. 33–5

On Models 180 to 220 SE the checking and repair procedures of the front axle halves are essentially the same as on Model 190. The following details, however, require attention:

a) Steering Knuckle Bushings

The 2nd version of the bushing pressed into the steering knuckle is 38 mm long. On the 1st versions of Models 180, 180 D, 190 SL, and 220 a, i. e. up to the chassis end numbers listed below, the bearing bushings were 32 mm long:

Model	up to Chassis End No.
180	55 10833
180 D	55 13506
190 SL	55 00473
220 a	55 11977

When repairs are carried out, the shorter bushings cannot be replaced by the longer bushings, since the seat in the bore of the steering knuckle is not sufficiently deep.

Models 180 b, 180 Db, 190 b, 190 Db, and recent cars of Models 190 SL and 220 SE Convertible and Coupé have bottom bushings 45 mm long.

b) Spacer Ring on Steering Knuckle

In the case of the 2nd version the spacer ring (2) is shrunk on the wheel spindle. On some older cars of Models 180, 180 D, and 220 a, on which the spacer ring is not shrunk on, grease may extrude between the ring and the wheel spindle and may soil the brake linings. To prevent this, rubber ring (1) Part No. 120 332 01 59 can be installed between the ring and the collar on the steering knuckle (Fig. 33-5/1).

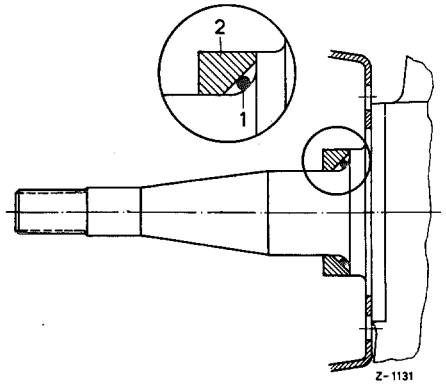

Fig. 33-5/1

1 Rubber ring
2 Spacer ring

When installing the spacer ring pay attention to the thread pattern on the circumference of the ring. On the bevelled side the spacer rings are marked

L = left side (right-hand thread) or
R = right side (left-hand thread).

On recent models the thread pattern on the circumference of the spacer ring is applied only over a length of 15 to 20 mm in order to prevent the sealing ring from making hissing noises at slow speeds (Fig. 33-5/2).

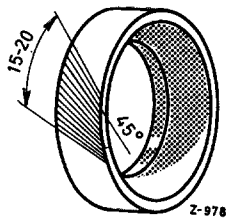

Fig. 33-5/2

When repairs are carried out install the spacer ring and then use fine emery cloth to reduce the thread pattern to the length given above of 15–20 mm on the circumference.

c) Control Arms

The upper control arms are identical on all models. In the case of the 1st version lower control arms on Models 180, 180 D, and 190 the diameter of the shock absorber throughway hole is 48 mm. These control arms were installed up to the following chassis end numbers:

Model	up to Chassis End No.
180	75 00074
180 D	75 00497
190	75 00515

In the case of the 2nd version lower control arms the shock absorber through-way hole has a diameter of 58 mm. These 2nd version control arms can only be installed in older cars of Models 180, 180 D, and 190 together with new shock absorbers.

On older cars the control arms should be checked with particular care. All control arms with slight cracks or loose cheese-head shock absorber attaching screws should always be replaced.