

46-0140 Replacing steering gear when performing repairs to vehicle involved in accident

Assessing steering gear of vehicle involved in accident

1. If the accident involves body damage (e.g. damaged wings, side members, side panelling, rear section etc.) the steering gear can be reused provided

- a) Front axle parts such as steering knuckle, control arm, tie rod and drag link, pitman arm, steering knuckle arm and steering idler arm are not damaged and the pitman arm shaft has not been twisted on the splined profile.
- b) No overstressing of the front axle has occurred or must be assumed.
- c) The steering gear can be rotated on the steering joint by hand from lock to lock without any signs of jamming.

2. The steering gear should be replaced for safety reasons if

- a) Parts of the front axle or of the steering gear have been permanently misshapen.
- b) An overstressing of the front axle is confirmed by the results of a measurement of axle alignment.

General

When assessing accident damage to the steering gear, pay attention to the following points:

If the damage relates to an insurance case, we recommend clarifying any decisions and procedures with the relevant insurance company or authorized vehicle assessor.

An impact which is transmitted through the steering linkage to the steering gear may cause damage which cannot be detected externally.

For this reason, it is necessary to examine the complete steering gear with a visual inspection and crack test. As it is not possible to conduct such a test in the majority of service shops, always replace the steering gear in cases of doubt.

Should the insurance assessor consider that the steering gear does not require to be replaced, contrary to the opinion of the workshop personnel, we recommend having the insurance assessor confirm his decision by his signature.

If, in an exceptional case, a steering gear must be examined (e.g. at the request of the insurance company, if the steering gear has been stated as the cause of the accident), the expert or person commissioned by the insurance company must be asked to issue a separate order. The workshop can then send the steering gear with RWL (returned goods delivery document) for examination to

Mercedes-Benz AG
Abladestelle 435 Garantiekontrolle
D-40476 Düsseldorf