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## Supporting ball joint check

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Topic number	GI33.00-N-039932
Version	3
Design group	33.00 General
Date	07-31-2007
Validity	Model designation 901.### - 905.###
Reason for change	Damage code updated

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**Complaint:**

Supporting ball joint has too much play.

Supporting ball joint makes noises.

Attachments	
File	Designation
Traggelenkprufung.pdf	Supporting ball joint check

**Cause:**

1. Incorrect diagnosis of supporting ball joint.
2. The supporting ball joint has been subjected to extreme operating conditions (for example: rough roads) which has caused damage to the rubber boot and this has resulted in increased wear.
3. The supporting ball joint is assumed to be the component causing the noise when the vehicle is driven on uneven road surfaces or on bends.

**Remedy:**

Due to the fact that supporting ball joints are frequently replaced unnecessarily, we would once again like to point out that checking the supporting ball joints for axial play is not required and is not possible.

The wear behavior of the supporting ball joints under normal operating and service conditions is designed for the entire service life of vehicles.

Note: The following test steps for testing supporting ball joints have been agreed upon with the leading test organizations:

The supporting ball joints of the front axle must be checked for unacceptably high wear and to establish whether the dust boot is seated correctly and is undamaged. The stabilizer bar, shock-absorber struts, springs and their attachments must be checked to establish whether they are the cause of the noise.

**Checking for wear:**

Raise the vehicle at the front axle at the center of the crossmember at the level of the leaf spring using a pit lift until the wheels are no longer in contact with the ground.

When raising the vehicle, monitor whether there is lateral misalignment (radial play) in the supporting ball joint.

Misalignment of more than 3 mm is rated as a considerable defect by the technical inspection associations.

Checking dust boot:

Check whether the dust boot is seated correctly and whether it is damaged in any way.

Squeeze the boot together (using your fingers and not tools) to check the concealed parts and to establish whether moisture has penetrated the joint.

Damage to the dust boot should be rated as a considerable defect (if such damage exists, imminent failure of the supporting ball joint is likely).

Note:

Checking for wear by means of an assembly lever or comparable tool is not envisaged by the manufacturer. If this is performed there is a risk of the ball joint bearing shell being damaged due to excessive test forces and / or the rubber boot being damaged as a result of being trapped.

The existing WIS documents and service information regarding this topic are to be revised soon.

Symptoms
Chassis / suspension / Chassis, noises / Cracking
Chassis / suspension / Chassis, noises / Knocking
Chassis / suspension / Chassis, noises / Thumping
Chassis / suspension / Suspension / Dampening / Suspension system noises / Thumping noise

Work units				
Op. no.	Operation text	Time	Damage code	Note
			33113 36	
			33113 D1	