# Ball joint check on front axle

Topic number LI33.00-N-066643

Version 1

Design group 33.00 General
Date 06-30-2017

Validity Model 901.###, 902.###, 903.###, 904.###, 905.###

Reason for change Distribution revised

Reason for block

# Complaint:

- Supporting ball joint has too much play.
- Supporting ball joint makes noises.

Attachments	
File	Description
01.jpg	Supporting ball joint check

#### Cause:

- Incorrect diagnosis of supporting ball joint.
- The supporting joint has been exposed to extreme operating conditions (e.g. rough roads), which has caused damage to the rubber boot and this has resulted in increased wear.
- 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 joints under normal operating and service conditions is designed for the "vehicle's service life".

<u>Note:</u> 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 floor jack 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 joint.
- Misalignment of more than 3 mm is rated as a serious defect by the technical inspection associations.

#### Checking dust boot:

- Visual inspection for correct seating and possible damage.
- Squeeze the boot together (using your fingers, not tools) to check the concealed parts and to establish whether moisture has penetrated the joint.
- Damage to the dust boot must be rated as a serious defect (if such damage exists, the supporting joint can be expected to fail soon).

#### Note:

# XENTRY TIPS

Checking for wear by means of an pry bar 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.

Symptoms	
Chassis/suspension / Noises / Cracking	
Chassis/suspension / Noises / Knocks	
Chassis/suspension / Noises / Thumping	
Chassis/suspension / Suspension/Dampening / Suspension system noises / Thumping	

Operation	on numbers/damage code	S		
Op. no.	Operation text	Time	Damage code	Note
			33113 36	Front axle lower supporting joint – Noise The listed damage code is not to be considered as an acceptance of costs. The general guidelines in the Warranty Manual apply.
			33113 D1	Front axle lower supporting joint – The listed damage code is not to be considered as an acceptance of costs. The general guidelines in the Warranty Manual apply.

Validity		
Vehicle	Engine	Transmission
Sprinter I	*	*
Sprinter II	*	*

Attachme	ents									
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01.jpg:

