

Creaking, grating or grunting noise when steering

Topic number	LI46.40-P-055798
Version	2
Design group	46.40 Steering linkage
Date	02-18-2014
Validity	All model 451
Reason for change	Series production cleanpoint added
Reason for block	

Complaint:

Creaking, grating or grunting noise while steering audible in the steering gear area. The noise can be transferred through the steering gear into the interior. The noise occurs, in particular, at high temperatures, e.g. in the summer.

Cause:

The outboard tie rod ball joints can exhibit an increased breakaway torque and moment of friction, and consequently cause noise (stick-slip effect).

Cleanpoint for M115-1 grease change for outboard joints ex Hambach plant on 11/04/2013 with production no: 5748610 2 last 7 of VIN: K748429 and steering gear serial number 45146007511313507342.

Attachments	
File	Designation
KnarzenGelenk aussen - Kopie.mp3	Creaking or grunting noise when steering in installed condition

Remedy:

For vehicles from the production period between July 2010 to December 2010, in which the noise could not be localized, both outboard tie rod ball joints should be replaced.

Before this the rack-and-pinion steering with unhooked tie rod ends should be moved in both directions, to ensure that the noise does not emanate from the steering itself.

Symptoms
Chassis/suspension / Steering system / Steering noise / Chattering/knocking
Chassis/suspension / Steering system / Steering noise / Humming/vibrations
Chassis/suspension / Steering system / Steering System Function / Stiff movement
Chassis/suspension / Chassis, noises / Grunting
Chassis/suspension / Steering system / Steering System Function / Return too slow
Chassis/suspension / Chassis, noises / Creaking

Parts							
Part number	ES1	ES2	Designation	Quantity	Note	EPC	Other ma-

							ke part
A 451 338 01 37			Repair kit for tie rod ball joint	2	Contents of repair kit: 1x tie rod ball joint, 1x lock nut		X

Work units				
Op. no.	Operation text	Time	Damage code	Note
46-7233	REPLACE BALL HEAD (BOTH) OF TIE ROD (TIE ROD RELEASED ON ONE SIDE)		46487 36	
40-6501	PERFORM STANDARD WHEEL ALIGNMENT CHECK			

WIS-References			
Document number	Title	Note	Allocation
ar46.40-p-0210mcc	Remove/install tie rod end		Remedy

Validity		
Vehicle	Engine	Transmission
451.300	*	*
451.301	*	*
451.330	*	*
451.331	*	*
451.332	*	*
451.333	*	*
451.334	*	*
451.380	*	*
451.390	*	*
451.391	*	*
451.400	*	*
451.401	*	*
451.431	*	*
451.432	*	*
451.433	*	*
451.480	*	*
451.490	*	*
451.491	*	*