

Grunting/creaking sound from area of front axle

Topic number	LI33.15-P-050245
Version	5
Design group	33.15 Axle links
Date	04-02-2012
Validity	Model 164/251
Reason for change	Cause, remedy and part number expanded
Reason for block	

Complaint:

Grunting/creaking sound from the area of the front axle when braking, driving over surface undulations, negotiating tight corners, or while maneuvering.

Attachments	
File	Designation
Geraeusch Ursache 2.mp3	Noise
Geraeusch Ursache 1.mp3	Noise
3.mp3	Noise

Cause:

Cause 1: Bolt torque connecting the crash strut with the chassis (M10 bolt) too low, see "picture 1.pdf" in attachment.

Cause 2: End faces of front rubber mounts rub against the body and cause noises during certain movements of the transverse control arms.

Cause 3: Bump stop of rear rubber mount comes into contact with external shell.

Attachments	
File	Designation
Bild 1.pdf	Picture

Remedy:

Perform a test drive and use e.g. the Steelman Chassis Ear to locate the source of the noise and identify the relevant cause.

If the cause cannot be clearly identified, proceed as follows:

1.) Clean M10 bolt on crash strut and install using a thread locking agent (e.g. Loctite 270).

Tighten bolt to the increased torque of 80 Nm.

Refer to reference sound file 1.mp3

2.) Replace rubber mounts of upper transverse control arms.

Refer to 164 bushing picture

3.) Fully lubricate rear rubber mount of lower transverse control arm with silicone paste and perform a test drive.

Refer to reference sound file 3.mp3

4.) If the noise is still present, replace front rubber mount of lower transverse control arm.

Refer to reference sound file 2.mp3

Note:

A new repair method has been defined, according to which both rubber mounts of the upper transverse control arm and the front rubber mount of the lower transverse control arm are replaced separately.

Attachments	
File	Designation
164 bushing.pdf	164 lower bushing lube

Symptoms
Grunting / Chassis/suspension / Chassis, noises /
Howling/whistling/squeaking / Chassis/suspension / Chassis, noises /

Parts							
Part number	ES1	ES2	Designation	Quantity	Note	EPC	Non-EPC
A 164 333 04 14			Rubber mount	2	Front rubber mounts of lower transverse control arm	X	
A 251 333 01 14			Rubber mount	4	Rubber mounts of upper transverse control arm	X	
N 910143 010011			Bolt	2	Thread must be recut and cleaned!	X	
A 000 989 84 51			Silicone paste	1	Re. remedy 2	X	

Work units				
Op. no.	Operation text	Time	Damage code	Note
33-1565	REPLACE LOWER BEARINGS ON BOTH TRANSVERSE CONTROL ARMS OF FRONT AXLE (TRANSVERSE CONTROL ARM REMOVED)		33112 36	Models 164 and 251
33-1564	REPLACE UPPER BEARINGS ON BOTH TRANSVERSE CONTROL ARMS OF FRONT AXLE (REMOVED)		33102 36	Models 164 and 251
33-1432	REMOVE/INSTALL LEFT LOWER TRANSVERSE CONTROL ARM OF FRONT AXLE, REPLACE IF NECESSARY		33112 36	Models 164 and 251
33-1433	REMOVE/INSTALL RIGHT LOWER TRANSVERSE CONTROL ARM OF FRONT AXLE, REPLACE IF NECESSARY		33112 36	Models 164 and 251
33-1438	REMOVE/INSTALL LEFT UPPER TRANSVERSE CONTROL ARM OF FRONT AXLE, REPLACE IF NECESSARY		33102 36	Models 164 and 251, without AIR-matic
33-1440	REMOVE/INSTALL RIGHT UPPER TRANSVERSE CONTROL ARM OF		33102 36	Models 164 and 251, without AIR-matic

	FRONT AXLE, REPLACE IF NECESSARY			
33-1437	REMOVE/INSTALL LEFT UPPER TRANSVERSE CONTROL ARM OF FRONT AXLE, REPLACE IF NECESSARY, VEH. WITH AIRMATIC		33102 36	Model 251, with AIRmatic
33-1439	REMOVE/INSTALL RIGHT UPPER TRANSVERSE CONTROL ARM OF FRONT AXLE, REPLACE IF NECESSARY, VEH. WITH AIRMATIC		33102 36	Model 251, with AIRmatic
40-1590	REMOVE/INSTALL WHEELS (2)		33102 36	
40-6500	PERFORM VEHICLE ALIGNMENT		33112 36	Alignment only necessary after repairing lower transverse control arm
94-1015	LOCALIZE NOISES FROM SUSPENSION, TEST DRIVE BY TECHNICIAN			Models 164 and 251

WIS-References			
Document number	Title	Note	Allocation
AR33.00-P-2000A	Localize noises at front axle	Models 164 and 251	Remedy
AR33.20-P-0500RTA	Remove/install right upper transverse control arm	Model 251	Remedy
AR33.20-P-0500RT	Remove/install left upper transverse control arm	Model 251	Remedy
AR33.20-P-0510RT	Remove/install lower transverse control arm	Model 251	Remedy
AR33.20-P-0500GZ	Remove/install left upper transverse control arm	Model 164	Remedy
AR33.20-P-0510GZ	Remove/install lower transverse control arm	Model 164	Remedy
AR33.20-P-0500GZA	Remove/install right upper transverse control arm	Model 164	Remedy
AR33.20-P-0400GZO	Remove/install rubber mounts of transverse control arms	Models 164 and 251, upper transverse control arm	Remedy
AR33.20-P-0400GZU	Remove/install rubber mounts of transverse control arms	MODEL 164 and 251, front mount of lower transverse control arm	Remedy
AR40.20-P-0200GZ	Perform wheel alignment check	MODEL 164, only after repair of lower transverse control arm!	Remedy
AR40.20-P-0200RT	Perform wheel alignment check	MODEL 251, only after repair of lower transverse control arm!	Remedy
AP40.10-P-4050Z	Remove/install wheels, rotate if necessary	MODEL 164 and 251	Remedy

Validity		
Vehicle	Engine	Transmission

XENTRY

164.120	*	*
164.121	*	*
164.122	*	*
164.124	*	*
164.125	*	*
164.128	*	*
164.156	*	*
164.172	*	*
164.175	*	*
164.177	*	*
164.182	*	*
164.186	*	*
164.195	*	*
164.822	*	*
164.823	*	*
164.824	*	*
164.825	*	*
164.828	*	*
164.871	*	*
164.886	*	*
251.020	*	*
251.021	*	*
251.022	*	*
251.023	*	*
251.026	*	*
251.054	*	*
251.056	*	*
251.065	*	*
251.072	*	*
251.075	*	*
251.077	*	*
251.122	*	*
251.123	*	*
251.124	*	*
251.125	*	*
251.126	*	*
251.154	*	*
251.156	*	*
251.165	*	*
251.172	*	*
251.175	*	*
251.177	*	*

