Vehicle appears to lean

Topic number	LI60.80-P-054047
Version	3
Function group	60.80 Cab, cab mounting
Date	06-21-2016
Validity	Model series: 461, 463
Reason for change	codes

Complaint: Vehicle appears to lean

Cause:

- #1 Frame not straight on chassis
- #2 Body not straight on frame

Remedy:

- 1. Check to find the cause
- Before checking, remove all heavy objects from the vehicle interior
- Avoid subjecting suspension to mechanical stress
- 1.1 Check for crooked frame:
- Park vehicle on level ground
- Measure distance between frame and ground (front left/right, rear left/right)
- Variations <=15 mm are within tolerance and do not signify any technical defect
- If variations > 15 mm are found, continue with step 2.1
- If the variations are OK, continue with step 1.2
- 1.2 Check for crooked body:
- Park vehicle on level ground
- Measure distance between wheel arch and ground (front left/right, rear left/right)
- Variations <=15 mm are within tolerance and do not signify any technical defect
- If variations > 15 mm are found, continue with step 2.2

XENTRY TIPS

2. Remedies (if variations > 15 mm):

2.1 Crooked frame (cause I):

A:

- Slacken threaded connections of trailing arms

- Rock the vehicle at the body several times back and forth to release any stresses between the suspension and the frame

- Retighten threaded connections to the specified torque
- Assess position of vehicle. If not OK -> Remedy B

B:

- Remove springs
- Compare length of springs on one axle in the removed state
- If there is a variation: Install left spring on right side and right spring on left side
- Assess position of vehicle. If not OK -> Remedy C

C:

Important: Changing the position of the body relative to the frame can produce an angular misalignment between the body and the bumper. This must be corrected if necessary by centering the bumper.

- Slacken bolts of body mounts
- Unfasten steering spindle and disconnect from steering shaft
- Lift body and correct lean by inserting shims (each bearing point must have at least one, but no more than two shims)
- Bolt body back onto frame
- Assess position of vehicle. If not OK -> Replace shims again
- Install steering spindle
- Center bumper if necessary

2.2 Crooked body (cause II):

Perform remedy C only

Attachments				
File	Description			
2_Messpunkte_Aufbau.jpg	Measuring points for measuring body height at wheel arch			
2_Messpunkte_Rahmen_hinten.jpg	Measuring points for measuring rear frame height at lower edge of mounting consoles			

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2_Messpunkte_Rahmen_vorne.jpg	Measuring points for measuring front frame height at
	lower edge of towing eyes

Parts						
Part number	ES1	ES2	Designation	Quantity	Note	EPC
A 461 317 00 51			Shim 3 mm	1	As required	Х
A 667 317 02 76			Shim 5 mm	1	As required	Х
A 461 317 01 51			Shim 8 mm	1	As required	X
A 461 317 03 76			Shim 10 mm	1	As required	Х

Operation numbers/damage codes					
Op. no.	Operation text	Time	Damage Note code		
40-7501	MEASURE FRAME, INSTALL SHIMS		31001 A3		