Test values for alignment of shock absorbers at rear axle

Model		Semitrailing arm position (for checking in design position)	Permissible deviation of alignment
107.022 107.023 107.024 ¹)	107.044 ¹) 114 115	+ 16 ± 5 mm	
107.042 107.043		+ 6±5 mm	5 mm
107.024 107.026		+ 108 ± 5 mm	
107.044		+ 97 ± 5 mm	

¹⁾ Only vehicles in (USA) and (1) version with standard diagonal swing axle without starting torque compensation.

Special tools

Special tools					
Checking and straightening tool for alignment of front and rear shock absorbers	11004 - 8985	123 589 05 21 00			
Measuring instrument for semi- trailing arm position of rear axle (standard diagonal swing axle)	11004-7279	107 589 02 23 00			
Measuring instrument for semi- trailing arm position of rear axle (diagonal swing axle with start- ing torque compensation)	11004-8975	116 589 16 21 00			

Note

Excessive deviations in alignment of shock absorber suspension points may lead to increased wear in shock absorber and subsequent rumbling noises and leaks of piston rod seal. In extreme cases, the driving comfort may be impaired (hardening of suspension by increased friction).

A checkup and, if required, a correction of the shock absorber alignment should therefore be performed following pertinent adjustment and reconditioning jobs of respective frame members at rear end. The shock absorbers will be checked for alignment with the axle installed in design position of vehicle.

The testing and adjusting tool 107 589 00 21 00 valid up to now for checking alignment of shock absorbers on rear axle, has been replaced by the testing and adjusting tool 123 589 05 21 00, used for front and rear axle of models 116 and 123.

Attention!

When removing gas pressure shock absorbers with separating piston or with piston rod mounted at top, with vehicle jacked up and axle half relieved, make sure that the piston rod is not turning along when loosening upper suspension. Since in this condition the resilience stop in shock absorber rests against operating piston, the attachment of operating piston to piston rod may then suddenly extend piston rod and the oil in shock absorber would flow out (risk of an accident).

- Testing and adjusting tool O13a Adjusting boit
 O13b Testing and adjusting pin
 O13c Test sleeve
 O13d Test plate
- 013e Washer 013f Hex nut 013g Tightening screw

013a 013b

132-16855

Test procedure

- 1 Remove rear shock absorbers or spring struts (32-110 or 32-610).
- 2 Load vehicle rear end in this condition until specified semitrailing arm position is attained.
- 3 Attach testing and adjusting tool to shock absorber dome of frame floor.

4 Check alignment with the sleeve (013c). Uniform clearance all-around in relation to semitrailing arm (refer to arrow) indicates 0 mm deviation. For corrections, remove test sleeve and use testing and adjusting pin.



