


The English translation is believed to be accurate. In case of discrepancies the German version shall govern.

VOLKSWAGEN AG 	<h2 style="margin: 0;">Semi-independent Rear Suspension</h2> <h3 style="margin: 0;">Strength Requirements</h3>	TL 823 27
Zentralnorm	Written on the basis of EGF 2-058	8H C2 1
<p>Note: Approval of first shipment and change per VW 011 55 "Vehicle Vendor Parts - General" Enhanced requirements and possibly additional scopes of testing apply for the development release.</p> <p>1 General</p> <p>1.1 Design</p> <p>As per drawing; deviating requirements called out in drawings take precedence over this TL standard (Technical Supply Specification).</p> <p>1.2 Scope</p> <p>Non-driven rear axle with semi-independent suspension</p> <p>1.3 Drawing entries</p> <p>See sections 2.1.2 and 2.2.2</p> <p>2 Dynamic testing</p> <p>2.1 Thrust test</p> <p>2.1.1 Testing arrangement</p> <p>The rear axle is mounted into a test stand with its related parts: stud axles, wheel hubs, brake discs and pivot mounts. The spring-damper struts shall be replaced by linked adapters having original mountings on the axle. The pilot bearings can be replaced by a rigid pivoted part of the same dimensions (optional). The thrusting force F_x is applied along the longitudinal axis of the vehicle, to the center of one wheel. The axle is to be kept in actual design position during testing. Cool the pilot bearing with air if necessary.</p> <p>2.1.2 Procedure</p> <p>The greater portion of the thrust is applied in a backward direction relative to the vehicle. Testing force $\pm F$ [kN] per drawing. Test frequency f (2 to 3) Hz</p> <p>2.1.3 Test requirement</p> <p>Mean number of cycles: $\bar{N} \geq 200\ 000$ Permissible scattering: $s_{\log} \leq 0.20$ Number of specimens: $n \geq 4$ Failure condition: (20 to 40) mm crack</p> <p>The specified number of cycles increases by 1.5 in case of development or design releases.</p>		Referenced Standards VW 01155
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2.2 Vertical testing (alternate deflection)

2.2.1 Testing arrangement

The rear axle shall be mounted into a test stand with its related parts (stud axles, locating linkages and pivot mounts). The spring-damper struts can be removed.

2.2.2 Procedure

Having been lifted to its actual design position, both ends of the axle are alternately moved up by S_z which is measured at the wheel center.

Test stroke $\pm S_z$ [mm] as per drawing

Test frequency f (2 to 3) Hz

In case of stabilizer failure it is removed and testing is resumed.

2.2.3 Test requirement

Mean number of cycles: $\bar{N} \geq 150\ 000$

Permissible scattering: $S_{\log} \leq 0.20$

Number of specimens $n \geq 4$

Failure condition: (20 to 40) mm crack

The specified number of cycles increases by 1.5 in case of development or design releases.