

Diagnosis – Function Test **WARNING!**

Life threatening injuries possible if following protective measures are not followed.

 **CAUTION!**

Risk of severe injury, due to uneven placement of lift arms/lift arm supports, as well as the support and lifting of vehicle components, there is the possibility of the vehicle slipping while on the lift.

 **CAUTION!**

Danger of vehicle toppling off of lift due to irregular weight distribution after the removal of components and axles.

Protective measures:

- Center vehicle (fore, aft and across) properly on both sides of the lift columns.
- When supporting components while the vehicle is on a lift, ensure that the vehicle is not lifted from the lift arms, therefore secure vehicle to the lift arms as well.
- Ensure that the lift arm supports are even and parallel to each other when lifting the vehicle.
- Prior to lift vehicle completely (wheels still in contact with floor), ensure that the lift arm supports are correctly placed onto the vehicle contact points.

Protective measures continued:

- Prior to removing the axles or components from the vehicle while on the lift, secure the vehicle to the lift arms or place sand bags inside the vehicle to ensure proper weight distribution to prevent toppling of the vehicle from the lift.
- Basically obey all the rules/guide lines regarding the lifting of vehicles as stated in the operator's manual by the lift manufacturer.

Preparation for Test:

1. Review section 0, 13, 21, 22, 23
2. Review the following wiring schematics:
PE00.19-110D, PE00.10-P-110A, PE42.00-P-1100D, PE42.00-P-1100A, based on the model being tested.



A function test of Rotational speed and lateral acceleration sensor (B24/15) is required after the replacement of this sensor.



Control module adaption:

After replacing either the ESP/SPS control module (N47-5) or the brake booster (A7/7), it is absolutely necessary to perform an adaption of the ESP/SPS control module (N47-5) as well.

The ESP/SPS control module (N47-5) has to learn the values for the BAS solenoid valve (A7/7y1), see HHT menu.

Function Test is not possible with Model 210.082/282 (4MATIC), please see section 9.4 for test procedure.

Diagnosis – Function Test

Test step/Test scope	Test condition	Nominal value	Possible cause/Remedy ¹⁾
<p>⇒ 1.0 Brake torque control circuit</p>	<p>Test cables are not to be hooked up to the HHT while performing function tests.</p> <p>Lift rear of vehicle so that both rear wheels can be rotated freely.</p> <p> Secure vehicle accordingly !</p> <p>Engine: at Idle</p> <p>Selector lever in transmission range “D”.</p> <p>Apply WOT using accelerator pedal.</p> <p> Should ASR not come into effect: Release accelerator pedal to idle speed.</p>	<p>The rear wheels are noticeably braked; simultaneously the high-pressure/return pump can audibly be heard operating. Engine speed is reduced to approx. 1000 rpm. The ESP warning lamp blinks.</p>	<p>23, DM, Engines, Vol. 4, section 9</p>
<p>⇒ 2.0 ESP off function using ESP OFF switch (S76/6)</p>	<p>Engine: at Idle</p> <p>Selector lever in “N”.</p> <p>Press ESP OFF switch (S76/6).</p> <p>Selector lever in transmission range “D”.</p> <p>Slowly depress accelerator pedal.</p>	<p>The ESP warning lamp illuminates steady.</p> <p>Engine speed is not reduced, The rear wheels are not braked, The ESP warning lamp blinks.</p>	<p>HHT: Actual Values</p>

1) Observe Preparation for Test, see 22.