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Electro-mechanical parking brake, component overview

- Electro-Mechanical Parking Brake Button E538
 - Component location: In the instrument panel, next to light switch
- Electro-mechanical Parking Brake Indicator Lamp K213
 - Component location: in Electro-Mechanical Parking Brake Button E538
- Electric Park/Parking brake

Malfunction Indicator Lamp K214

- Component location: In the instrument cluster
- Brake System Warning Lamp K118
 - Component location: In the instrument cluster
- Acoustic signal
- -AUTO HOLD- Button E540
 - With -AUTO HOLD- Indicator Lamp 2 K237
 - Component location: In center console
- Electro-Mechanical Parking Brake Control Module J540 and ESP Sensor Unit G419
 - Installed together in one housing
 - Removing and installing ⇒ 46-3, Electro-Mechanical Parking Brake Control Module J540, removing and installing
- Sealing ring
- Right Parking Brake Motor V283
 - Component location: On right rear brake caliper
 - Removing and installing ⇒ <u>46-3, Parking brake motor,</u> removing and installing
- Inner Torx bolt, 12 Nm
- Left Parking Brake Motor V282
 - Component location: On left rear brake caliper

 Removing and installing ⇒ <u>46-3, Parking brake motor,</u> removing and installing

Electro-Mechanical Parking Brake Control Module J540, removing and installing

The Electro-Mechanical Parking Brake Control Module J540 and the ESP Sensor Unit G419 are installed in one housing under center console.

After replacing the Electro-Mechanical Parking Brake Control Module J540 with the ESP Sensor Unit G419, the ABS Control Module J104 must be coded and a basic setting of "Brake system" (Electro-Mechanical Parking Brake) must be performed.

Caution!

Strong vibrations (e.g. falls, impacts) can destroy the ESP Sensor Unit G419 . ESP Sensor Unit G419 must then no longer be used.

Removing

- Remove center console.

⇒ Repair Manual, Body Interior, Repair Group 68,

- Remove three nuts - arrows - .



- Disconnect connector - 1 - from Electro-Mechanical Parking Brake Control Module J540 .

- Remove Electro-Mechanical Parking Brake Control Module J540.

Installing

- Installation is in reverse order of removal.

When installing Electro-Mechanical Parking Brake Control Module J540 make sure it is correctly seated in its mounting and is free of stress.

Note:

- Do not use the securing nuts to forcibly position the Electro-Mechanical Parking Brake Control Module J540.
- Tighten securing nuts to 9 Nm.

- Perform ABS Control Module J104 coding using ⇒ Vehicle Diagnosis, Testing and Information System VAS 5051 in "Guided Fault Finding".

A Steering Angle Sensor G85, Transverse Acceleration Sensor G200, Brake Pressure Sensor 1 G201 and Longitudinal Acceleration Sensor G251 basic setting must be done.

- Perform basic setting for "Brake system" (Electro-Mechanical Parking Brake).

VAS 5051 , connecting and selecting functions \Rightarrow <u>45-3</u>, <u>VAS 5051 connecting and selecting functions</u> .

Parking brake motor, removing and installing

Special tools, testers and auxiliary items required



- Torque wrench V.A.G 1331
- Vehicle diagnostic, test and information system VAS 5051



Diagnostic cable VAS 5051/1 or VAS 5051/3

Removing

Note:

 Ignition must be switched off for at least 30 seconds before disconnecting the connector.



- Pull connector - 1 - off from parking brake motor.



- Remove both Torx bolts - **arrows** - from parking brake motor.

- Remove parking brake motor from brake caliper.
- Remove seal.

Make sure that the ring groove of the seal and the contact surface of the parking brake motor do not become damaged.

- Clean ring groove and contact surface of parking brake motor.

Installing



- Install new seal.



Turn spindle back slightly with help of a Torx insert T45 A - , until parking brake motor can be correctly positioned.

- Carefully set parking brake motor in place, paying attention to the seat of the seal.

- Rotate parking brake motor so far until the bolt hole and threads are aligned.

Make sure that the parking brake motor is seated flush against the brake caliper. Do not, under any circumstances, pull the parking brake motor against the brake caliper using the bolts.



- Set Torx bolts - **arrows** - in place by hand and then tighten.

- Install connector.
- Perform basic setting of brake system.

- VAS 5051 , connecting and selecting functions \Rightarrow <u>45-3</u>, <u>VAS 5051 connecting and selecting functions</u> .