

Technical Service Bulletin



46 Electronic parking brake warning light on; parking brake doesn't always release

46 13 38 2016350/5 May 15, 2013. Supersedes Technical Service Bulletin Group number 46 number 09-05 dated August 27, 2009 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A6 (C6)	2005	All	Not Applicable
A6 (C6)	2006	000001 – 144219	

Condition

REVISION HISTORY		
Revision	Date	Purpose
5	-	Revised header data (New customer codes)
4	8/27/2009	Revised header data (New customer codes)
3	11/4/2008	Revised title to include Repair Group

- Electromechanical parking brake (EPB) malfunction indicator is on in the instrument cluster.
- When customer shifts from park to drive after the vehicle has been parked with EPB applied, EPB may not release.

Technical Background

This condition can be a result of the customer's manner of use (A), or a result of outdated software (B). In both scenarios listed below (A and B), the EPB will engage and hold the vehicle, but, in scenario B, the EPB may not always release after the parking brake has been engaged.

A) Customer's manner of use:

Various DTCs may be stored in the EPB control module (address word 53) if the vehicle is driven for a long distance (approximately 620 miles, or 1,000km) without use of the EPB, parked with hot brakes, then the EPB carries out a self-test (calipers opened and closed once). The self-test will have different results in this case, with hot brakes, than it would with brakes that have cooled down. In this case, DTCs are stored in the EPB control module even though there is no fault with the system.

B) Outdated software version:

Various DTCs may be stored in EPB control modules with outdated software versions. Typically, there are at least three but no more than five DTCs stored. The following are some common combinations:

- **DTC 01487 008, DTC 02443 012 with DTC 02434 009 or DTC 02435 009**
- **DTC 01487 012, DTC 02443 012 with DTC 02432 00C or DTC 02433 00C**
- **DTC 01316 013, DTC 011487 008, DTC 02434 009, and DTC 02443 012**
- **DTC 00456 004, DTC 00456 008, DTC 01299 004, DTC 01299 008, and DTC 01314 008**
- **DTC 01316 004, DTC 01316 008, DTC 01316 013, DTC 01317 008, and DTC 01321 004**

For more information, please see the attached examples.

Production Solution

New software in the EPB Control Module (J540) resolved the problem.

Service

A) If the condition is a result of the customer's manner of use:

1. Switch off the ignition.
2. Restart the vehicle.
3. Move the parking brake switch in both directions (pull to apply parking brake, push to release parking brake).
4. The EPB malfunction indicator will turn off and the parking brake can again be used normally. If parking brake does not release, update the software version (see below).
5. Explain to the customer how to prevent the problem from happening again.

B) If the condition is a result of outdated software:

1. Check the software part number and software level in the EPB control module, J540.
2. Delete any DTCs that are stored in the EPB control module. For static/permanent DTCs, using the following steps:
 - a. Switch off ignition and remove the key.
 - b. Insert the key and switch on ignition.
 - c. While ignition is on, move the parking brake switch in both directions (pull to apply parking brake, push to release parking brake).
 - d. DTCs will change to sporadic and must now be deleted.
3. On vehicles with a manual transmission, the fuse for the clutch sensor must be removed before the software is updated (see current flow diagram). Reconnect the fuse after the update is complete.
4. Update the EPB control module using the SVM action code as listed in the table below.


Model	Old Software Part Number	Old Software Version	New Software Part Number	New Software Version (or higher)	SVM Action Code
A6 (C6)	4F0910801	010	4F0910801C	080	4F53A002
A6 (C6)	4F0910801	020	4F0910801C	080	4F53A002
A6 (C6)	4F0910801	030	4F0910801C	080	4F53A002
A6 (C6)	4F0910801A	040	4F0910801C	080	4F53A002
A6 (C6)	4F0910801B	060	4F0910801C	080	4F53A002

Technical Service Bulletin



The update takes place in two stages and ends when no further update is suggested in diagnostic address 53, and the following message appears: **“Vehicle modification/update successful. The changes are saved in the system.”**

5. After the update is complete, the EPB control must be coded using the same code which was used prior to the update. This is necessary even if the same code is shown after the update.
 - In case the update fails and the parking brake can no longer be found in the Guided Fault Finding, proceed to vehicle self-diagnosis.
 - If the message, **“The vehicle system is not programmed...”** appears, the EPB control unit can still be reached. In this exceptional case, proceed as follows:
 - a. Remove both fuses (SF3 and SF4) for the parking brake motors (V282 and V283) at the same time, for at least ten seconds. The fuses are located on the right side of the luggage compartment (fuse holder ST1).
 - b. Re-install both fuses then switch on the ignition.
 - c. Attempt to perform the update again.

 **Tip:** The SVM Process must be completed in its entirety so the database receives the update confirmation response. A warranty claim may not be reimbursed if there is no confirmation response to support the claim.

For further SVM update instructions and troubleshooting, please refer to TSB 2011732, *00 Software Version Management (SVM), operating instructions*.

Warranty

Claim Type:	Use applicable claim type. If vehicle is outside any warranty, this Technical Service Bulletin is informational only.		
Service Number:	4664		
Damage Code:	0039		
Diagnostic Time:	GFF	0150 0000	Time stated on diagnostic protocol
	Road test prior to service procedure	No allowance	0 TU
	Road test after service procedure	No allowance	0 TU
	Technical diagnosis at dealer's discretion (Refer to Section 2.2.1.2 and Audi Warranty Online for DADP allowance details)		
Claim Comment:	As per TSB #2016350/5		

All warranty claims submitted for payment must be in accordance with the *Audi Warranty Policies and Procedures Manual*. Claims are subject to review or audit by Audi Warranty.

Technical Service Bulletin



Additional Information

The following Technical Service Bulletin will be necessary to complete this procedure:

- TSB 2011732, *00 Software Version Management (SVM), operating instructions*

All parts and service references provided in this TSB are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.

53 - parking brake
4F0910801
EPB C63C0030 H03
code 321
dealer number 02334
4F0907801
3C0
0030

4 fault recognised

01316 013
brakes control unit
Read fault memory
sporadic

01487 008
system function test
implausible signal
sporadic fault

02434 009
power supply left channel of control unit
disruption/short circuit to earth
sporadic

02443 012
control panel
electric fault in the circuit
sporadic fault

53 - parking brake
4F0910801
EPB C63C0030 H03
code 521
dealer number 02334
4F0907801
3C0
0030

5 fault recognised

01314 008
engine control unit
implausible signal
sporadic fault

01316 013
brakes control unit
Read fault memory
sporadic

01321 004
airbag control unit -J234
no signal/communication
sporadic

01487 008
system function test
implausible signal
sporadic fault

02443 012
control panel
electric fault in the circuit
sporadic fault

53 - parking brake
4F0910801
EPB C63C0030 H03
code 321
dealer number 02334
4F0907801
3C0
0030

5 fault recognised

01314 004
engine control unit
no signal/communication
sporadic

01316 004
brakes control unit
no signal/communication
sporadic

01316 013
brakes control unit
Read fault memory
sporadic

02434 009
power supply left channel of control unit
disruption/short circuit to earth

02443 012
control panel
electric fault in the circuit
sporadic fault