

#### 43 Self-leveling does not work (DTC 02645)

43 17 25 2033587/3 April 20, 2017. Supersedes Technical Service Bulletin Group 43 number 16-24 dated September 19, 2016 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
Q7	2007	099729 - 999999	Self-leveling Suspension
Q7	2008 -2014	All	Self-leveling Suspension

### Condition

REVISION HISTORY				
Revision	Date	Purpose		
3		Revised <i>Service</i> (Updated photo and instructions) Revised title (Updated formatting)		
2	09/19/2016	Revised Condition (DTC number)		
1	4/9/2013	Initial publication		

- Self-leveling suspension cannot be adjusted during extremely cold weather.
- The self-leveling suspension warning light is illuminated in the instrument cluster.
- The self-leveling suspension operates normally again after the vehicle has been parked for a while in a garage or in the sun.
- DTC 02645 003 (valves for self-leveling control, mechanical fault) is present in the level control system module, J197 (address word 0034).

### **Technical Background**

If the dryer on the air supply unit (air compressor) has taken in humidity for a long period of time, it may become saturated. As a result, the increased air humidity may get into the solenoid valve block and create condensation. In freezing temperatures, the condensation can freeze and block the valves, a condition that is recognized as a mechanical fault by the vehicle's self-diagnosis.

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On vehicles of model year 2008 a leak on the socket box between the vacuum pipe of the compressor and the air hose to the air filter housing can draw in humidity (Figure 1).



Figure 1. Leak on the socket box.

Humidity can also enter the system if there is too much water in the air filter housing. Excess water can enter the air filter housing if the vehicle is driven in deep water or exposed to splashing water for an extended period of time (such as during off-road use).

#### **Production Solution**

Not applicable.

#### Service

Ensure that the vehicle is not exposed to freezing temperatures before beginning.

- 1. Bleed the pressure reservoir and the suspension struts using guided functions.
- 2. Put the vehicle on a lift.
- 3. Remove the air supply unit.
- 4. Replace the dryer of the air supply unit using repair kit 4L0698010.
- 5. Remove the engine air filter element.
- 6. With the air supply unit disconnected from the vehicle, use compressed air to blow out the intake hose between the air filter housing and the air supply unit.



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Always use eye protection when working with compressed air.

- 7. Re-install the air supply unit.
- 8. Using guided functions, completely fill, then bleed, the pressure reservoir, and the suspension struts. Repeat this process three times to blow out any remaining humidity.
- 9. Perform a test drive in order to check the function of the self-leveling suspension. During the test drive, adjust the self-leveling suspension several times.

The air supply unit may overheat and switch off due to excessive use during the test drive, which is a normal function of the self-leveling suspension.

10. Erase any DTCs related to the self-leveling suspension that may have appeared as a result of overheating during the test drive.

**Tip:** Replacement of the air supply unit is not required for this TSB, and will not be accepted by Audi Warranty.

#### Warranty

Claim Type:	<ul> <li>110 up to 48 Months/50,000 Miles.</li> <li>G10 for CPO Covered Vehicles – Verify Owner.</li> <li>If vehicle is outside any warranty, this Technical Service Bulletin is informational only.</li> </ul>		
Service Number:	4315		
Damage Code:	0016		
Labor Operations:	Compressor remove & reinstall	4315 1900	70 TU
	Remove and install repair kit	4315 1999	20 TU
	Air cleaner element remove & reinstall (diesel engines)	2324 1997	10 TU

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	Air cleaner element remove & reinstall (3.6L FSI)	2424 1958	10 TU
	Air cleaner element remove & reinstall (3.0L TFSI)	2424 1989	20 TU
	Air cleaner element remove & reinstall (8 cylinder gas engines)	2424 2051	20 TU
	Clean intake hose	4315 2999	10 TU
Diagnostic Time:	GFF	0150 0000	Time stated on diagnostic protocol (100 TU Max)
	Road test after service procedure	0121 0004	10 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 #2033587/3		

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.

### **Required Parts and Tools**

Part Number	Part Description	Quantity
4L0698010	Repair set for air dryer unit	1

### **Additional Information**

All parts and service references provided in this TSB (2033587) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.

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