Suspension Level Control Calibration Updated 16 Nov. 2010

Ross-Tech is not responsible for any damage or problems that may result from following these instructions. They are to be used at your own risk. As always, you should refer to a Factory Repair Manual for your vehicle!

This procedure details how to lower/raise the zero position for the Level Control module in VW Phaeton (3D), VW Touareg (7L), Audi A6 (4F), Audi A8 (4E) and Audi Q7 (4L) vehicles.

This procedure does not apply to the *old* Audi A6 (C5 platform, 4B chassis) Allroad. For that vehicle, there is a different procedure.

There are certain test conditions that must be met before doing this procedure:

- Transmission in park/neutral.
- Start the vehicle, keep the engine running and do not switch off the ignition.
- Doors have to stay closed, otherwise the system is not ready.

The default values:

Audi A6 (4F) (PR-1BK): 386 mm (front) and 384 mm (rear) Audi A6 (4F) Allroad (PR-1BY): 388 mm (front) and 380 mm (rear)

Audi A8 (4E) standard suspension (PR-1BK): 416 mm (front) and 398 mm (rear) Audi A8/S8 (4E) sport suspension (PR-2MA/2MB): 396 mm (front) and 378 mm (rear)

Audi Q7 (4L): 449 mm (front) and 465 mm (rear)

VW Phaeton (3D) RoW (Rest of World): 407 mm (front) and 401 mm (rear) VW Phaeton (3D) NAR (North American Region): 417 mm (front) and 411 (rear)

VW Touareg (7L) standard: 497 mm (front) and 502 mm (rear) VW Touareg (7L) offroad: 488 mm (front) and 498 mm (rear)

North American Phaeton owners: Please read a very detailed alternate procedure here

The above values are NOT what you enter into each Adaptation channel. You need to enter the ACTUAL

MEASURED VALUES from each corner of the car as explained below.

[Se [34	lect] - Level Contro	b]]					
146- COM	VAG-COM: Open	Controlle	r			×	
	Comm Status IC=1 TE=0 RE=0 Protocol: KWP2089 - Open Controller						
Г	Controller Info-			_		1	
	VAG Number:		7L6 907 553 B	0	Component: LUFTFDRCDC- 3C1P1 3650		
	Soft. Coding:		0025520		Shop # Imp: 123 WSC 12345		
	Extra:						
	Extra:			-	Geraet 58363		
	Basic Functions These are "Safe"				Advanced Functions Refer to Service Manual !		
	Fault Codes - 02 Readiness - 15		Readiness - 15		Login - 11 Recode - 07		
	Meas. Blocks - 08		Advanced ID - 1A		Basic Settings - 04 Adaptation - 10		
	Single Reading - 09 Future Exp.			Output Tests - 03 Security Access - 16			
	Close Controller, Go Back - 06						

[Security Access - 16] Enter 31564 [Do It!]

VAG-COM: Oper	n Controller	X						
Comm Status IC=1 TE=0 R Protocol: KWF	E=0 V 2089 - O	AG-COM pen Controller						
Controller Info								
VAG Number:	7L6 907 553 B	Component: LUFTFDRCDC- 3C1P1 3650						
Soft. Coding:	0025520	Shop # Imp: 123 WSC 12345						
Extra:								
Extra: Geraet 58363								
VAG-Com: Securi	VAG-Com: Security Access							
1	Most Controllers only allow one access attempt. If an incorrect access key							
is	is entered, you will have to leave the ignition ON for at least ten minutes before							
	trying again. Refer to Service Manual for a valid access key.							
Enter security access key (0 - 99999): 31564								
Do it! Cancel								

[Adaption - 10] Channel 01 (front left) [Read] Wait until the car goes into 2 different levels.

TAG-LUM: Upen Controller	<u>×</u>
Comm Status IC=1 TE=0 RE=0 Protocol: KWP2089 ×	VAG-COM Open Controller
VAG Number: 7L6 907 5	53 B Compagent: LUETEDRCDC- 3C1P1 3650
VAG-COM: Adaptation	×
Wait	- Low Level Start driving
Channel Number: 01	Up Read Stored Value: 497
New Value: 497	Up Test Test Value:
	Save
	Done, Go Back
🚾 VAG-COM: Open Controller	×
VAG-COM: Open Controller Comm Status IC=1 TE=0 RE=0 Protocol: KWP2089 –	▼ VAG-COM Open Controller
VAG-COM: Open Controller Comm Status IC=1 TE=0 RE=0 Protocol: KWP2089 – Controller Info VAG Number: 7L6 907 5	VAG-COM Open Controller 53 B Component: LUFTFDRCDC- 3C1P1 3650
VAG-COM: Open Controller Comm Status IC=1 TE=0 RE=0 Protocol: KWP2089 - Controller Info VAG Number: 7L6 907 5 VAG-COM: Adaptation	VAG-COM Open Controller 553 B Component: LUFTFDRCDC- 3C1P1 3650
VAG-COM: Open Controller Comm Status IC=1 TE=0 RE=0 Protocol: KWP2089 - Controller Info VAG Number: 7L6 907 5 VAG-COM: Adaptation	VAG-COM Open Controller 553 B Component: LUFTFDRCDC- 3C1P1 3650
VAG-COM: Open Controller Comm Status IC=1 TE=0 RE=0 Protocol: KWP2089 - Controller Info VAG Number: 7L6 907 5 VAG-COM: Adaptation Wait	VAG-COM Open Controller Component: LUFTFDRCDC- 3C1P1 3650
VAG-COM: Open Controller Comm Status IC=1 TE=0 RE=0 Protocol: KWP2089 - Controller Info VAG Number: 7L6 907 5 VAG-COM: Adaptation Wait	VAG-COM Open Controller 553 B Component: LUFTFDRCDC- 3C1P1 3650 - Normal Level Start driving
VAG-COM: Open Controller Comm Status IC=1 TE=0 RE=0 Protocol: KWP2089 - Controller Info VAG Number: 7L6 907 S Wait Channel Number: 01	VAG-COM Open Controller 53 B Component: LUFTFDRCDC- 3C1P1 3650 Normal Level Start driving Up Read Stored Value: 497
VAG-COM: Open Controller Comm Status IC=1 TE=0 RE=0 Protocol: KWP2089 – Controller Info VAG Number: 7L6 907 5 VAG-COM: Adaptation Wait Channel Number: 01 New Value: 497	✓ VAG-COM Open Controller 53 B Component: LUFTFDRCDC- 3C1P1 3650 ✓ - Normal Level Start driving Up Read Stored Value: 497 Up Test Test Value:
VAG-COM: Open Controller Comm Status IC=1 TE=0 RE=0 Protocol: KWP2089 - Controller Info VAG Number: 7L6 907 5 VAG-COM: Adaptation Wait Channel Number: 01 New Value: 497	VAG-COM Open Controller 553 B Component: LUFTFDRCDC- 3C1P1 3650 - Normal Level Start driving Up Read Stored Value: 497 Dn Test Test Value: Save

Measure the heights from wheel center to the lower edge of the fender (see comments).

Enter the ACTUAL MEASURED VALUE FROM THE CAR in "new value" in Millimeters into Channel 01. [Test] [Save]

VAG-COM: Open Controller				X
Comm Status IC=1 TE=0 RE=0 Protocol: KWP2089 –	VAG-C Open Contro	OM oller		
Controller Info	53 B 0			-
VAG Number: VAG-COM: Adaptation	STD Com	ponent: LOI II DF	L-CDC- JCTFT 3030	×
Value Whe	el: F/Left	Enter	1000	-
			Bin. Bits	
Channel Number: 01	Up Dn Read	Stored Value:	497	
New Value: 497	Up Dn Test	Test Value:		
	Save			
	Done, Go Ba	ack		

Channel 02 (front right)

[Read]

Measure the heights from wheel center to the lower edge of the fender (see comments).

Enter the ACTUAL MEASURED VALUE FROM THE CAR in "new value" in Millimeters into Channel 02. **[Test]**

[Save]

VAG-COM: Open Contro	oller		x
Comm Status IC=1 TE=0 RE=0 Protocol: KWP2089	I Open	G-COM Controller	
Controller Info			
VAG Number:	7L6 907 553 B	Component: LUFTFDF	RCDC- 3C1P1 3650
VAG-COM: Adaptation			×
Value	Wheel: F/Right	Enter	1000
			Bin, Bits
Channel Num	nber: 02 Up	Read Stored Value:	497
New Value	497 Up	Test Test Value:	
		Save	
	Don	Ga Back	
	Done	e, Go Dack	

Channel 03 (rear left)

[Read]

Measure the heights from wheel center to the lower edge of the fender (see comments).

Enter the ACTUAL MEASURED VALUE FROM THE CAR in "new value" in Millimeters into Channel 03. [Test]

[Save]

VAG-COM: Open Contro	oller		x
Comm Status IC=1 TE=0 RE=0 Protocol: KWP2089	∖ Oper	G-COM n Controller	
Controller Info			
VAG Number:	7L6 907 553 B	Component: LUFTFD	RCDC- 3C1P1 3650
VAG-COM: Adaptation			×
Value	Wheel: R/Left	Enter	1100
			Bin. Bits
Channel Num	nber: 03 Up	Read Stored Value	502
	Dn		
New Value	: 502 Up Dn	Test Test Value:	
		Save	
		- MARK	
	Don	e, Go Back	

Channel 04 (rear right)

[Read]

Measure the heights from wheel center to the lower edge of the fender (see comments).

Enter the ACTUAL MEASURED VALUE FROM THE CAR in "new value" in Millimeters into Channel 04. [Test]

[Save]

🗱 VAG-COM: Open Contro	oller		×
Comm Status IC=1 TE=0 RE=0 Protocol: KWP2089	I Open	G-COM Controller	
Controller Info			
VAG Number:	7L6 907 553 B	Component: LUFTFDF	RCDC- 3C1P1 3650
VAG-COM: Adaptation			×
Value	Wheel: R/Right	Enter	1110
			Bin. Bits
Channel Num	iber: 04 Up	Read Stored Value:	502
	Dn		
New Value	: 502 Up Dn	Test Value:	
		Save	
	Done	e, Go Back	

Channel 05 (confirmation) [Read]

If all measured values are correct, enter "new value" of 1.

[Test] [Save]

🗱 VAG-COM: Open Controller					×
Comm Status IC=1 TE=0 RE=0 Protocol: KWP2089 /	VA Oper	G-CON n Controller	Л		
Controller Info VAG Number: 7L6 9	07 553 B	Componer	It: LUFTFDR.	-CDC- 3C1P	1 3650
VAG-COM: Adaptation					×
Value	Valid		N/A	N,	A
Channel Number:	05 Up	Read	Stored Value:	0	
New Value:	1 Up Dn	Test	Test Value:	1	
		Save			
	Don	ie, Go Back			

Click the [Done, Go Back] button and you're all set.

Check for fault codes, if all procedures went fine there should be none.

Comments:

The height of each wheel is measured between the center of the wheel (the space in between the V and the W) and the lower edge of the fender. All measurements have to be done in Millimeters (mm).



If a Channel is not accepting a value, put the "new value" in again and click **[Test]** and **[Save]** again instead of starting the whole process from the beginning.

In some cases the controller says "invalid value", start "rocking" the car a little bit, this should solve problem.