

# Technical Service Bulletin



## 48 Electric steering column adjustment is inoperative

48 13 51 2017266/6 August 30, 2013. Supersedes Technical Service Bulletin Group 48 number 10-09 dated August 13, 2010 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A8	2003 - 2010	All	Not Applicable
A6	2005 - 2012		
Q7	2007 - 2015		

## Condition

REVISION HISTORY		
Revision	Date	Purpose
6	-	Revised header data (Updated customer codes, workshop codes, and applicable model years) Revised <i>Condition</i> (Updated TSB in reference) Revised <i>Warranty</i> (Reformatted table)
5	8/13/2010	Revised header data (Controlling TSB display in ElsaWeb)
4	2/18/2009	Revise <i>Warranty</i>
3	11/4/2008	Revise Title to include Repair Group

- Electric steering column adjustment is restricted or does not work at all.
- Incorrect operation of Easy Entry is not the cause. It is unlikely that external forces have led to the loss of the stored end positions of the adjustment movement. See TSB 2015819, *48 Easy Entry function of the power adjustable steering column intermittently does not work*, for more information.
- The seat adjustments can be used to maintain the 10-inch minimum recommended distance from the steering wheel in case of airbag deployment.

## Technical Background

The steering column may be under tension due to unfavorable tolerances of the steering column and module cross carrier. As a result, the current draw of the regulator motors is above specification, so the electric steering column adjustment fails.

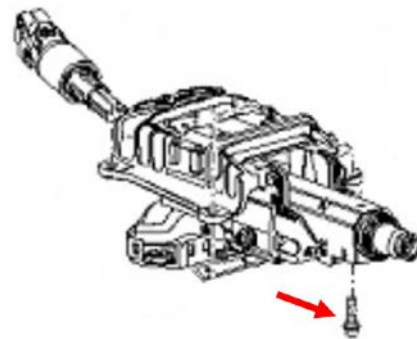
## Production Solution

Additional checks are executed in production.

## Service

### Check the electrically-adjustable steering column

1. Remove the steering wheel column trim and detach the right upper bolt (Figure 1).



**Figure 1.** The right upper bolt .

2. Use a feeler gauge to measure the gap between the steering column and cross carrier:
  - If the gap is *less than* 0.3 mm wide:
    - a. Retighten the upper bolt.
    - b. Perform the basic settings in the electronic central electrics module, J519 (address word 09). A reset of the control module may be necessary.
    - c. If the procedure is still unsuccessful, open a TAC ticket for further instruction.
  - If the gap is *more than* 0.3 mm wide:
    - a. Retighten the upper bolt.
    - b. Identify pins 1 and 5 (center contact of motors) on the 8-pin connector on the steering column.
    - c. Surround the wires from pins 1 and 5 with the current pick-up clamp.
    - d. Use the guided functions on the scan tool to read and document measured value blocks 2 and 3 of the electronic central electrics module, J519.
    - e. Perform basic settings of the steering column in the electronic central electrics module, J519. Record the changing current values during the length and height adjustment.
    - f. Loosen all mounting bolts of the steering column.
    - g. Repeat basic settings and measure and record the current values again.
    - h. Retighten the steering column bolts.
    - i. Repeat the measurement/recording a third time.

3. The obstruction counters in measured value blocks 2 and 3 of the electronic central electrics module, J519, indicate tension if the counters differ greatly (e.g., the value for vertical high is five times higher than the remaining obstruction counters).

The expected current draw in correct steering columns is about 1A for axial adjustments and about 2.8A - 3.4A for vertical adjustment. Current draws above these values are an indication of a tight steering column.

- If the current draw is lower and within the specifications after the mounting bolts have been loosened, the steering column had tension. If the current draw stays low after the reinstallation, the tension is only caused by the installation. A modification of the steering column is not necessary.
- If the current consumption rises to its original level after the reinstallation, the tension is caused by unfavorable tolerances of the components. The steering column must be modified as described in the instructions that follow.

## Modification of the steering column to reduce belt tension



**Tip:** Changing the tension of the belt drive may lead to an increased noise level during adjustments of the steering column.

1. Loosen the belt cover of the steering column:
  1. If necessary, remove the footwell and steering column cover.
  2. Move the height adjustment of the steering column to a central position.
  3. Carefully loosen the side clips without damaging the clasps (Figure 2).



### Note:

Do not disconnect the wiring harness at the side on the cover attachment.

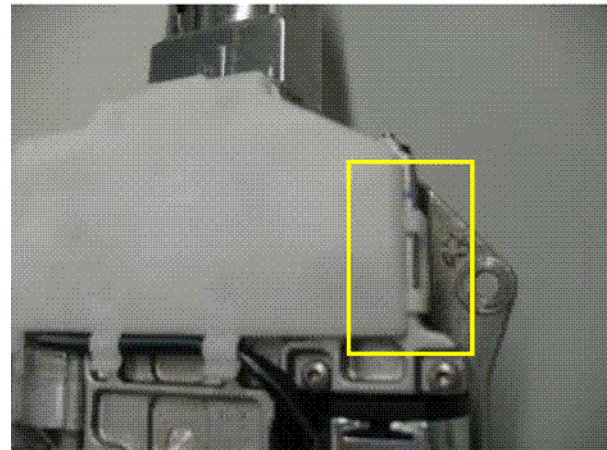


Figure 2. Side clips.

2. Mark the position of the gear wheels and the gear belt on the housing (Figure 3). Use a touch-up pencil so that it is easily noticeable.

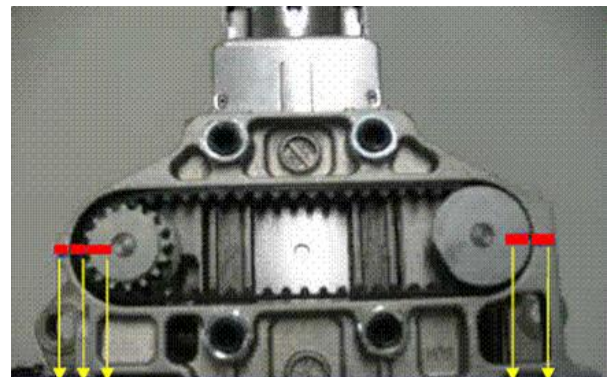


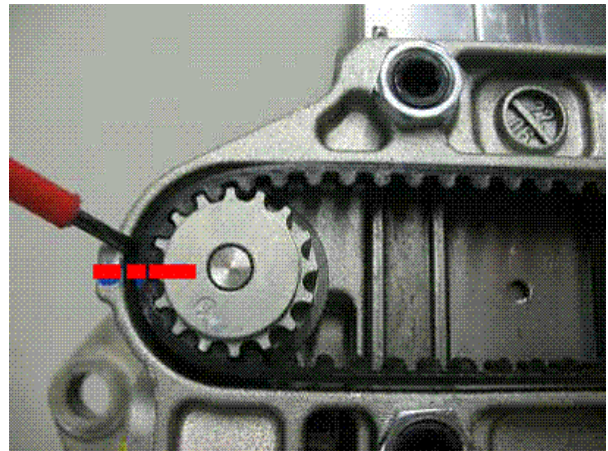
Figure 3. Positions of the gear wheels and gear belt to be marked.

- Carefully loosen the gear belt from one gear wheel, using a fine screwdriver.



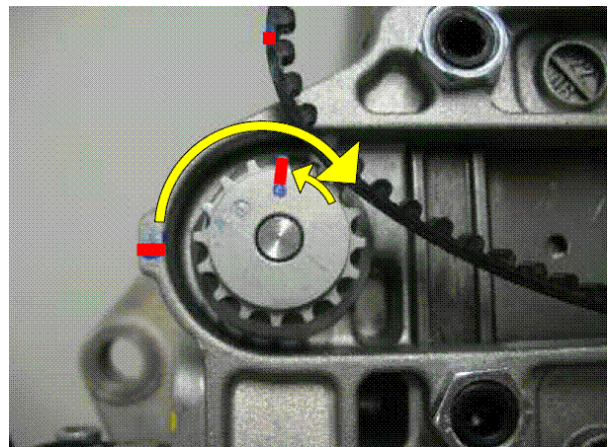
**Note:**

Make sure that the belt does not come off the opposite gear wheel.



**Figure 4.** Loosening the gear belt with a fine screwdriver.

- Reduce the tension (Figure 5):
  - Turn the gear wheel clockwise by hand until there is no resistance. The gear wheel should now move very lightly.
  - Turn the gear wheel counter-clockwise until a light resistance (hand-tight) is felt.
  - Depending on the measured gap, use the following gear offset:
    - Gap <1mm: 1-2 teeth
    - Gap <1.7mm: 3-5 teeth

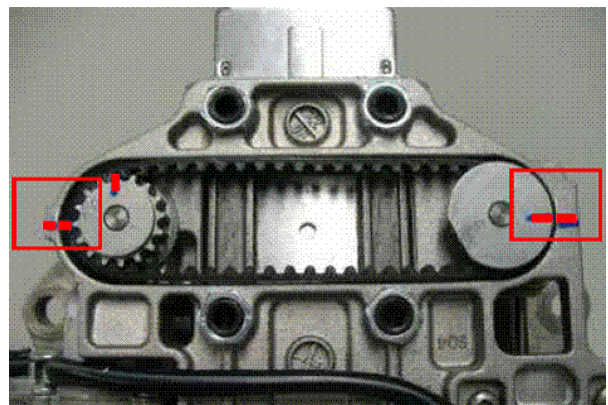


**Figure 5.** Turning the gear wheel to reduce tension.

- Place the gear belt by hand on the gear wheel (Figure 6).



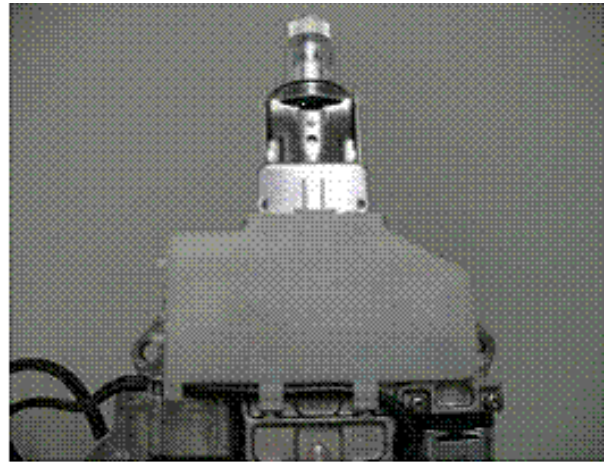
The identification on the belt must match the identification on the housing.



**Figure 6.** The location on which to place the gear belt, with gear offset.



6. Carefully reinstall the cover on the housing (Figure 7).



*Figure 7. The cover, installed on the housing.*

7. Set the basic settings:

1. Reprogram the steering column with V.A.G. scan tool 5052 in the basic settings for electronic central electrics module, J519.
2. Verify that the changing current values during length and height adjustment are within specification.
3. Perform a function check.

8. Reassemble the steering column.

9. Verify the proper function of the adjustment.

# Technical Service Bulletin



## Warranty

<b>Claim Type:</b>	Use applicable claim type. If vehicle is outside any warranty, this Technical Service Bulletin is informational only.	
<b>Service Number:</b>	4823	
<b>Damage Code:</b>	0017	
<b>Labor Operations:</b>	<b>For Q7, if the gap is <i>less than 0.3 mm wide</i>:</b>	
	Steering column trim remove + reinstall	7011 1900 40 TU
	<b>For A6, if the gap is <i>less than 0.3 mm wide</i>:</b>	
	Steering column trim remove + reinstall	7011 1900 40 TU
	<b>For A8, if the gap is <i>less than 0.3 mm wide</i>:</b>	
	Steering wheel remove + reinstall	4810 1903 50 TU
	Steering column trim remove + reinstall	7011 1950 40 TU
	<b>For Q7, if the gap is <i>more than 0.3 mm wide</i>:</b>	
	Steering column height adjustment remove + reinstall	4823 1900 250 TU
	<b>For A6, if the gap is <i>more than 0.3 mm wide</i>:</b>	
	Steering column height adjustment remove + reinstall	4823 1900 160 TU
	<b>For A8, if the gap is <i>more than 0.3 mm wide</i>:</b>	
	Steering column height adjustment remove + reinstall	4823 1900 220 TU
	<b>For all affected vehicles:</b>	
Belt tension modification	4823 1599 Time stated on diagnostic protocol	

# Technical Service Bulletin



<b>Diagnostic Time:</b>	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)		
<b>Claim Comment:</b>	As per TSB #2017266/6		

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

Tool Description	Quantity
Electric current pick-up clamp	1
Feeler gauge	1
Fine screwdriver	1

## Additional Information

All parts and service references provided in this TSB (2017266) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.