

#### 97 Sporadic DTCs - contact check

97 18 61 2013504/9 June 6, 2018. Supersedes Technical Service Bulletin Group 97 number 15-48 dated May 29, 2015 for reasons listed below.

Model(s)	Year	VIN Range	e Vehicle-Specific Equipment	
All	2000 - 2020	All	Not Applicable	

### Condition

REVISION HISTORY						
Revision	Date	Purpose				
9	-	Revised header data (Added model years) Revised <i>Service</i> (Added nano contact section)				
8	06/01/2015	Revised header data (Added model years)				
7	10/20/2010	Revised header data (Added model year)				

Sporadic DTCs are stored in various control modules.

## **Technical Background**

Contacts and nano contacts may be damaged if incorrect pins or incorrect methods for current flow tests are used. Either action may cause intermittent electrical connections, which can cause sporadic DTCs to be stored in various control modules.

### U Note:

Ensure that special tool VAG 1594/51 is used when performing diagnosis on any nano contacts.

## **Production Solution**

Not applicable.

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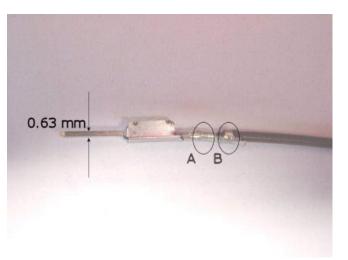


### Service

- 1. Check the contacts on the control module and connector:
  - Verify that all pins and terminals are securely clipped into the connectors.
  - Verify that no pins are deformed.

Verify proper crimping:

- Pin/terminal must be crimped onto the wire (Figure 1, A).
- Pin/terminal must be crimped onto the wire sheathing (Figure 1, B).



**Figure 1.** The male pin must be 0.63 mm in width. The pin and terminal must be crimped onto the wire (A) and crimped again onto the wire sheathing (B).

- 2. Mechanically check the contacts on the control module and connector:
  - Test the individual terminals by using the standard 0.63 mm male pin to verify proper contact.
  - Ensure that the test pin is not twisted and is inserted correctly into the female terminal. The contact must be tight, but still allow the pin to slide into the terminal of the control module connector.

Only use the 0.63 mm male pins because the female terminals are designed for these pins.

3. If the pin/terminal is deformed, improperly crimped, or does not contact correctly, the contact must be replaced (with the **VAS 1978B** repair kit or ordered in sets).

#### How to recognize nano contacts for MY2017 and later vehicles:

Appearance of contact unlocking in housing:

- The photo on the left (Figure 2) shows an example of the nano contacts on the 56 pin engine control module connector.
- The photo on the right (Figure 3) shows a close-up example of the nano contacts on the connector.
- The contacts can be removed with the VAS 1978/35-3.

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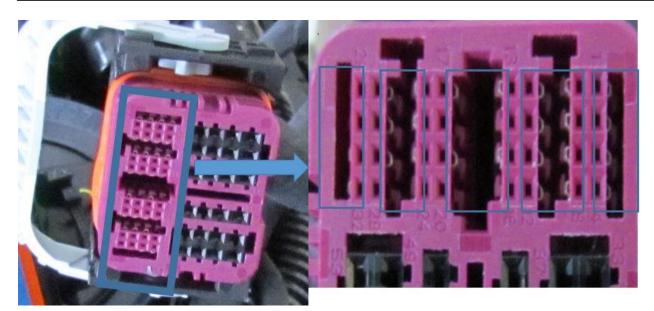
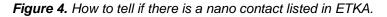


Figure 2 and 3. Examples of nano contacts on a 56 pin engine control module connector.

Using the part number:

• The proposed repair cable for nano contacts is listed as a 0.5 mm flat contact in ETKA (Figure 4).

POS	PART NUMBER	NAME	REMARK	QTY
(28)	000 979 053 E	1 set of single wires each with 2 contacts, in bag of 5 'order unit 5'		x
		Temp, resistant:	-40C/+125C	
		with cable crosssection:	0,35QMM	
		flat contact	0,5MM	
(28)	000 979 053 EC	1 set of single leads with		x
		2 silver-coated contacts		
		each, in bag of 5 items		
		'order qty. 5'		
		Temp. resistant:	-40C/+125C	
		with cable crosssection:	0,35QMM	
		flat connector with	0,5MM	
		retaining lug		



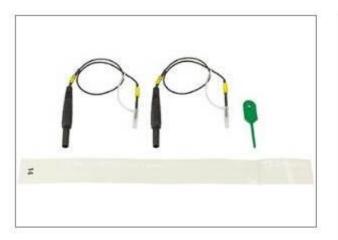


To physically check any nano contacts use VAG 1594/51. If any other method or tool is used you risk damaging the nano contacts.

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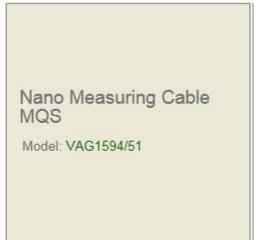


Figure 5. Special tool VAG1594/51.

### Warranty

This TSB is informational only and not applicable to any Audi Warranty.

## **Required Parts and Tools**

Always check with your Parts Department and/or ETKA for the latest information and parts bulletins. Please check the Repair Manual for fasteners, bolts, nuts, and screws that require replacement during the repair.

	· · ·	- ·
Part Number	Part Description	Quantity
000979007	Male Pin	1*
000979012	Male Pin	1*
000979409	Male Pin	1**
VAS 1978/35-3 and/or VAS 1978B	Wiring Harness Repair Set	As needed
VAG 1594/51	Nano Measuring Cable MQS	As needed

\* An order of 1 will provide a bag of 5 wires with like connectors on each end.

\*\* An order of 1 will provide a bag of 3 wires with like connectors on each end.

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## **Additional Information**

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