

Technical Service Bulletin

94 Rear lights do not switch from bumper to hatchgate

94 16 83 2043851/2 October 12, 2016. Supersedes Technical Service Bulletin Group 94 number 16-78 dated June 27, 2016 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
Q7	2016	All	Not Applicable
Q7	2017	000001 - 010119	Not Applicable

Condition

REVISION HISTORY		
Revision	Date	Purpose
2	-	Revised <i>Service</i> (Additional part version information) Revised <i>Required Parts and Tools</i> (Part version information change)
1	06/27/2016	Initial publication

- When the rear lid is closed, the lights in the rear bumper do not switch over to the main lights on the rear lid.
- The error message “Vehicle lights: malfunction! Please contact Service” intermittently appears in the driver information system (Figure 1).
- All of the rear light bulbs are fully functional. None are found to be faulty or incorrect.



Figure 1. Error message.

- Any combination of the following DTCs may be stored:
 - In the rear lid control module, J605 (address word 6D):
 - DTC B113E29 (Pull-shut asst. Implausible signal)
 - DTC B113E07 (Pull-shut asst. mechanical malfunction - passive/sporadic)



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- In the comfort system central control module, J393 (address 46):
 - **DTC B146C29** (Rear lid -closed- sensor Implausible signal)

Technical Background

This condition is likely caused by incomplete actuation of the Rear Lid Closed Sensor G525/G526.

The actuation of the Rear Lid Closed Sensor G525/G526 relies on a correct latch angle to ensure that both paddles of the Rear Lid Closed Sensor are fully depressed. An incorrect latch angle can cause activation malfunctions or even damage to the Rear Lid Closed Sensor G525/G526.

One or more of the following conditions can adversely affect the proper actuation of the Rear Lid Closed Sensor G525/G526:

- Incorrect or incomplete installation of the lock carrier trim
- Incorrect or incomplete installation of the Rear Lid Closed Sensor (G525/G526)
- Incorrect mounted angle of the Rear Lid Latch (V53)
- An object in the cargo area that interferes with the correct operation of the rear lid and/or latch

Production Solution

Several improvements to the lock carrier trim and its assembly have been implemented in production. In addition, the mounting location and activation concept of the Rear Lid Closed Sensor G525/G526 has been changed.

Service

1. First check the Measured Values for the Rear Lid Closed Sensor G525/G526 in the comfort system central control module, J393 (address 46):
 - IDE08204 (Rear lid -closed- sensor 1; Rear lid -closed- sensor 2; Rear lid, Status)
 - IDE02092 (Main notch contact of rotary latch; Pre-engagement contact for rotary latch)

With the rear lid closed, the values should read as follows:

- Rear lid -closed- sensor 1 = open
- Rear lid -closed- sensor 2 = closed

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- Main notch contact of rotary latch = open
- Pre-engagement contact for rotary latch = open

In many cases the customer's symptom is not present and the values are correct.

2. Next, perform a visual inspection inside the latch entry, specifically of the clearance of the latch striker mounting studs to the lock carrier trim. If the lock carrier trim is correctly installed, there should be no more than five threads visible between the head of the nut and the lock carrier trim (Figure 2). If the correct number of threads is visible, no further work is necessary on the lock carrier trim.

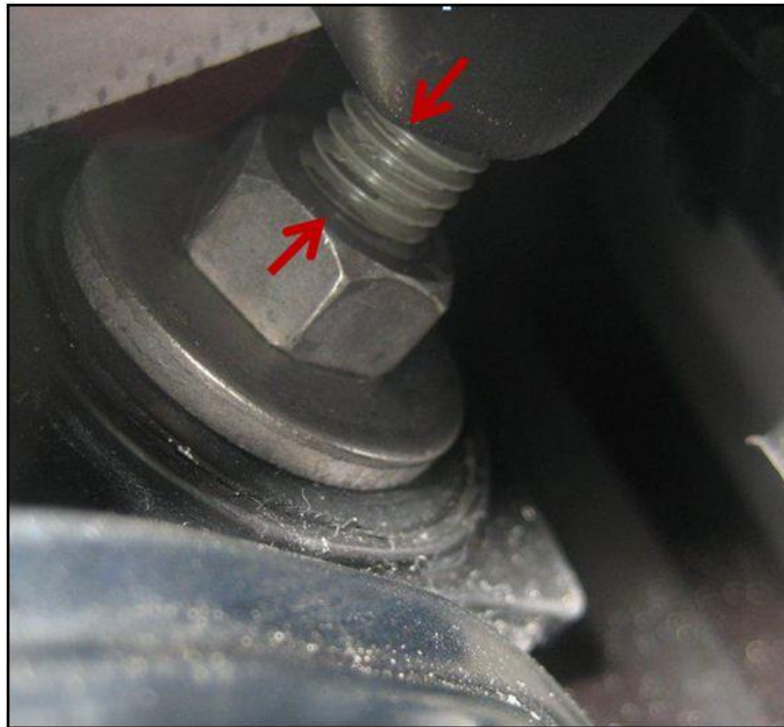


Figure 2. Correct number of threads visible.

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3. If more than five threads are visible (Figure 3), the lock carrier trim is being pushed upward and, as a consequence, it moves the Rear Lid Closed Sensor out of position. If more than five threads are visible, remove the lock carrier trim.

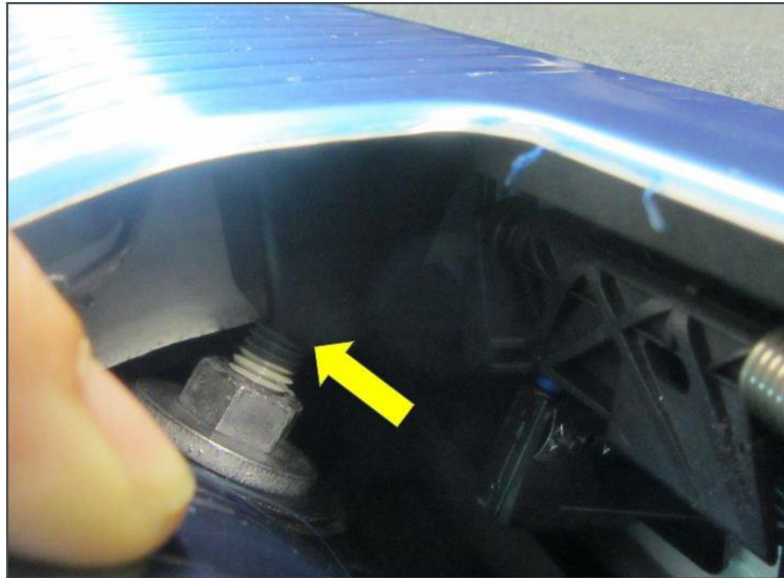


Figure 3. Too many visible threads.

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4. On the inside of the trim is stamped the part number of the trim as well as a yellow sticker with a part version stamped on it (Figure 4). If the part number of the trim has an index of B/D (plastic with stainless steel insert) or C/E (plastic without stainless steel insert) and the version number is "04S" or lower, replace the lock carrier trim. If the version number is "05S" or higher, this trim is the improved version and replacement of this version is not necessary unless irreparable damage is found.



Figure 4. Improved lock carrier trim with index B/D and version 05S.

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5. If the part number of the trim has an index of F/H or G/J (Figure 5) then all versions of this index are the improved version and replacement of this index trim is not necessary unless irreparable damage is found.



Figure 5. Improved lock carrier trim with index F/H.

6. In either case, if more than five threads are visible and the lock carrier trim is of the latest index / version, it may have been incompletely installed causing the trim to be out of position. Inspect and correct this if necessary.

7. Carefully inspect the installation of the Rear Lid Closed Sensor G525/G526. Remove the screws and the sensor. There should be a washer (part number N 912 006 01) at each screw point separating the sensor from the mounting buss. If incorrect washers are installed or if the washers are missing, order these washers, install them, and reassemble as shown in the illustration (Figure 6). If the Rear Lid Closed Sensor G525/G526 or

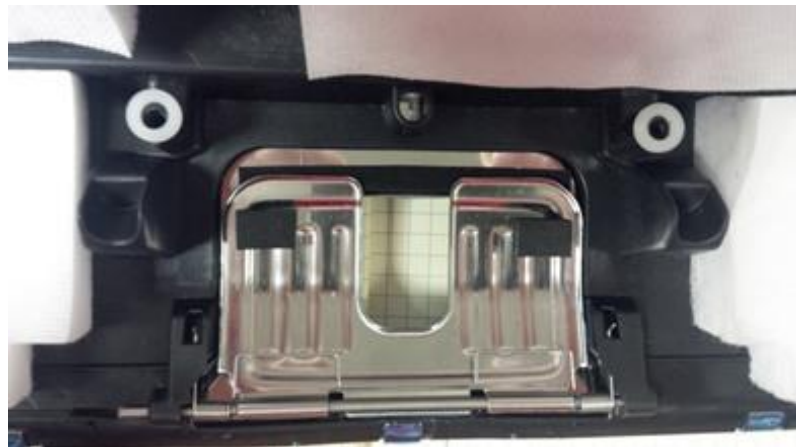


Figure 6. Washers N 912 006 01 as they should be installed.

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the related wiring is damaged, replace or repair it as well.

8. The Rear Lid Closed Sensor G525/G526 has an indexing pin cast into the housing (Figure 7). Ensure that it is not damaged and that it is properly seated in the corresponding opening in the lock carrier trim.

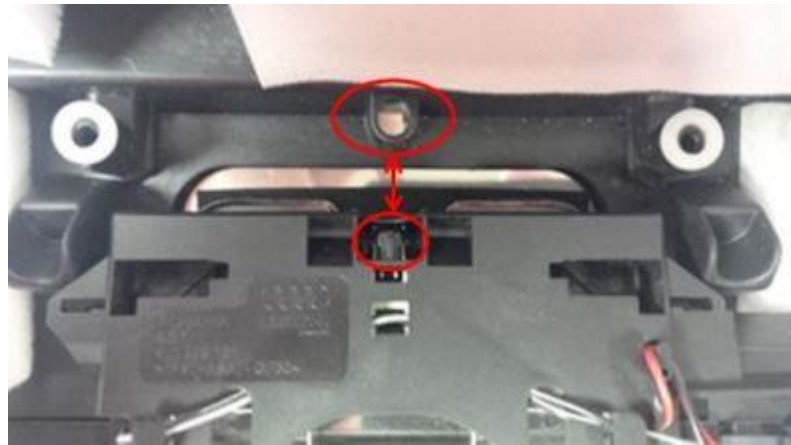


Figure 7. Sensor indexing pin.

9. Reassemble and reinstall the lock carrier trim. Proper assembly is critical to correct rear lighting change-over operation (Figure 8).

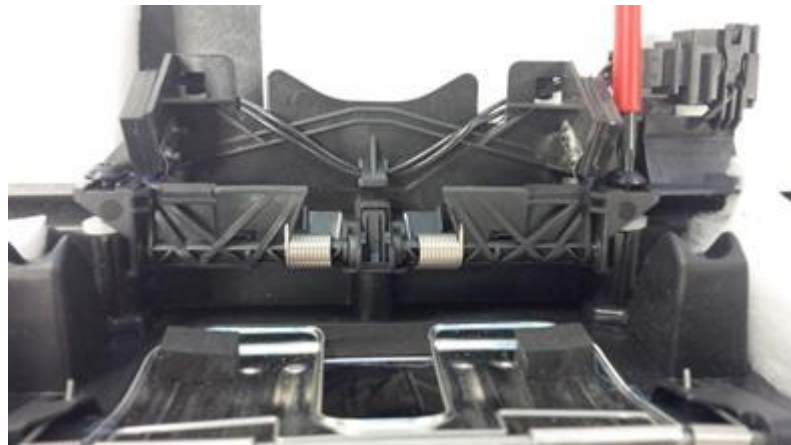


Figure 8. Proper sensor to lock carrier trim assembly order.

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10. Finally, the mounted angle of the Rear Lid Latch (V53) will be checked (Figure 9).



Figure 9. Rear Lid Latch V53 as it enters the lock carrier during closing.

11. Apply a marking medium (such as chalk or a tire grease pencil) on the inner edge (the edge that first contacts the G525/G526 paddles) to the Rear Lid Latch (Figure 10).



Figure 10. Tire grease pencil applied to the leading edge of the Rear Lid Latch V53.

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12. Close the rear lid normally, then open it normally. A mark on each paddle of the G525/G526 sensor will have been transferred to the paddle surfaces (Figure 11).



Figure 11. Tire grease pencil marks transferred to the paddles.

13. Measure the width of the mark. The ideal width is 6mm +/- 1mm (Figure 12). If this dimension is achieved, no further work is necessary.

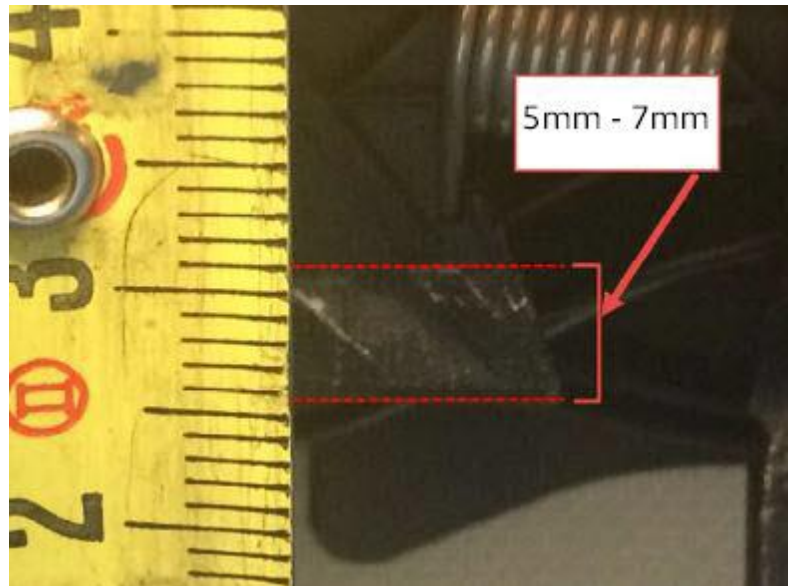


Figure 12. Ideal contact width of the rear lid latch and the sensor paddles.

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14. If the Rear Lid Latch V53 angle is at issue, the contact width will be approximately 4mm or less. If this is the case, the Rear Lid Latch V53 angle will need to be adjusted inward for higher contact with the paddles.

To make this adjustment, a 2 x 4 board (100cm long (39 3/8")) and a carpenter's square (preferably with metric graduations) are needed. Apply a small piece of tape to the areas that will come in contact with the square to protect the paint. Apply the square to the three points on the rear lid shown in the illustration (Figure 13).



Figure 13. Checking the Rear Lid Latch geometry.

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15. The lower axis of the square must contact the lug of the rear lid latch as shown in the illustration (Figure 14).

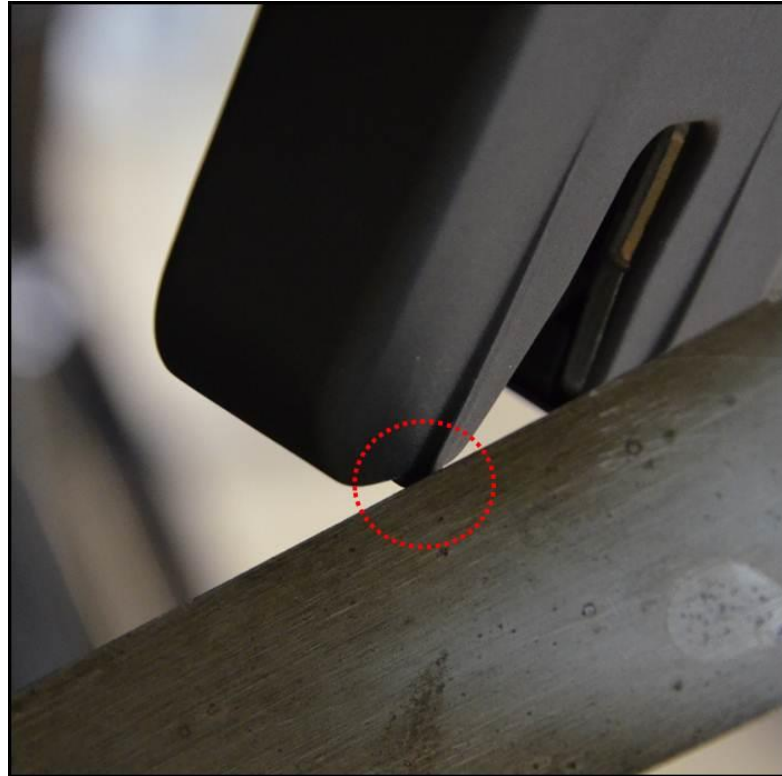
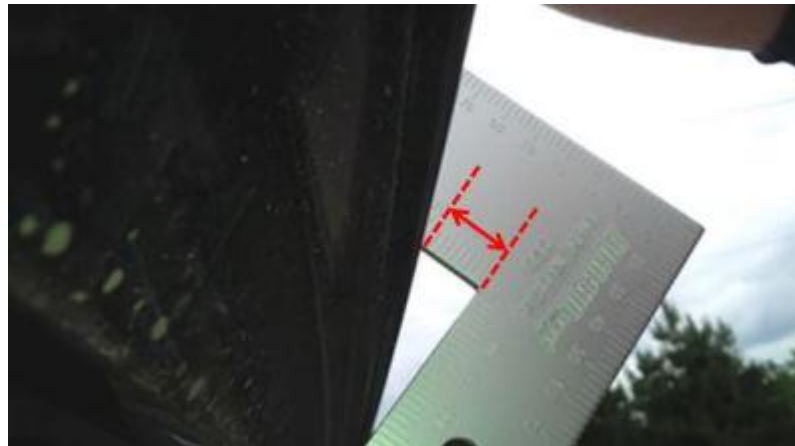


Figure 14. Lower axis of carpenter's square in contact with the Rear Lid Latch lug.

16. The gap between the lower edge of the rear lid and the apex of the square should ideally be 15mm +/- 1mm (Figure 15). With a G525/G526 paddle mark width measurement of 4mm or less, the measurement on the square could likely be less than 14mm, assuming the installation and position of the lock carrier trim and Rear Lid Closed sensor are correct.



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Figure 15. Measuring the gap.

17. To move the Rear Lid Latch angle forward, bring the rear lid down and rest the latch on the 2 x 4 board as shown in the illustration (Figure 16). Ensure that the board does not make contact with the rear bumper cover.



Figure 16. Rear Lid Latch on 2 x 4.

18. Push down slightly on the rear lid with light pressure to move the latch angle as shown in the illustration (Figure 17). Reapply the marking medium, open and close the rear lid, and recheck the contact width on the paddles. Repeat this process until a contact width on the paddles is 6mm +/- 1mm.



Figure 17. Applying downward pressure to rear lid to adjust latch angle.

19. Open and close the rear lid several times to confirm that the rear lighting switches over correctly. Clear any existing DTCs in the rear lid control module, J605 (address word 6D) or the comfort system central control module, J393 (address 46). Test drive to confirm that the warning on the error message in the driver information system does not return.



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Warranty

Claim Type:	<ul style="list-style-type: none"> • 110 up to 48 Months/50,000 Miles. • If vehicle is outside any warranty, this Technical Service Bulletin is informational only. 		
Service Number:	5587		
Damage Code:	0010		
Labor Operations:	Luggage compartment rear trim remove+reinstall	7006 1900	20 TU
	Lock carrier cover remove+reinstall	7039 1950	10 TU
	Check lock carrier version, mounting of the Rear Lid Closed sensor and repair or replace, if necessary	7039 9999	20 TU
	“Chalk Test” of V53 Rear Lid Latch to G525 / G525 Rear Lid Closed sensor	5556 9999	100 TU
Diagnostic Time:	GFF	0150 0000	Time stated on diagnostic protocol (Max 100 TU)
	Road test prior to service procedure	0121 0002	10 TU
	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 #2043851/2		

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.



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Required Parts and Tools

Part Number	Part Description	Quantity
4M0864483F XXX (Use appropriate color code based on the VIN in ETKA)	Trim for rear cross panel (with stainless insert)	1
4M0864483G XXX (Use appropriate color code based on the VIN in ETKA)	Trim for rear cross panel (without stainless insert)	1
4L0959121	G525 / G525 Rear Lid Closed sensor	1
N 91200601	Washers for G525 / G525 Rear Lid Closed sensor	2
N 10507201	Screws for G525 / G525 Rear Lid Closed sensor	2

Additional Information

All parts and service references provided in this TSB (2043851) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.

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