

# Technical Service Bulletin



## 91 Bluetooth call quality issues for caller on other end of call (A6, A7, A8)

91 14 34 2027718/7 April 8, 2014. Supersedes Technical Service Bulletin Group 91 number 14-20 dated January 3, 2014 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A6, A7, A8	2011 - 2013	All	Bluetooth®

## Condition

REVISION HISTORY		
Revision	Date	Purpose
7	-	Revised header data (Removed model) Revised <i>Service</i> (Revised instructions; updated web address)
6	1/3/2014	Revised <i>Service</i> (Added diagnostic step to reinstall non-damaged microphones)
5	10/31/2013	Revised <i>Service</i> (Added note to call TAC for certain repairs)
4	6/11/2013	Revised <i>Required Parts and Tools</i> (Changed quantity) Revised <i>Service</i> (Clarified information) Revised <i>Warranty</i> (Updated Diagnostic Time) Revised header data (added model year)
3	11/12/2012	Revised <i>Warranty</i> (Adjusted TUs)
2	8/6/2012	Revised <i>Service</i>
1	10/25/2011	Original publication

When the driver uses the Bluetooth hands-free telephone system to make a call, the listener on the other end cannot clearly understand the driver. The driver's voice sounds muffled, as if it is being heard from under water.

## Technical Background

The microphone seal was damaged during installation into the roof module.

## Production Solution

Improved microphone installation procedure and optimized the microphone seal, beginning with January 2012 vehicle production. Microphones with improved seals are at the 03S level or greater (Figure 1).



Figure 1. Microphones with improved seals.

## Service



**Tip:** This bulletin does not allow for replacement of the microphones unless there is physical damage found to the rubber seal on the end of the microphone. Because there has been no hardware optimization to the microphone, replacing a microphone that is not damaged will not improve the sound quality.

### Confirm that the sound quality issue is not due to the phone or phone service provider:

1. Ensure that the customer's phone is an Audi-approved Bluetooth device by checking the list located at <http://audi-intelligence.com/bluetooth/prod/>
2. Before making any repairs, road test the vehicle at a minimum speed of 45 mph with the all windows closed.
3. During the road test, verify the call quality issue by making a Bluetooth call to someone at the workshop. Make sure that the *same* person will be available to answer another call after any repairs are made so that the call quality improvement can be verified.
4. If no call quality issues are confirmed during the road test, end all analysis. The issue is most likely due to the customer's phone and/or service provider, which can be demonstrated to the customer by using a different paired phone with a different service provider. If call quality issues are confirmed, proceed with the repair procedure below.

### Remove the trim plate in order to inspect the microphone

1. Remove the roof module from the vehicle according to *ElsaWeb*>>*Repair Manual*>>*Electrical System*>>*Electrical Equipment*>>*96 Interior Lights, Switches*>>*Removal and Installation*>>*Roof Trim Lamps*

and Switches.

2. Remove the decorative trim plate from the roof module in order to inspect the seal of the microphone:

For A6 and A7 vehicles:

- Use your fingers to remove the decorative trim from the base plate. If necessary, gently pry the trim with a trim stick or bone tool, then finish removing it with your fingers.
- There are a number of different clips holding the trim plate to the base plate depending on the trim level of the vehicle (Figure 2).

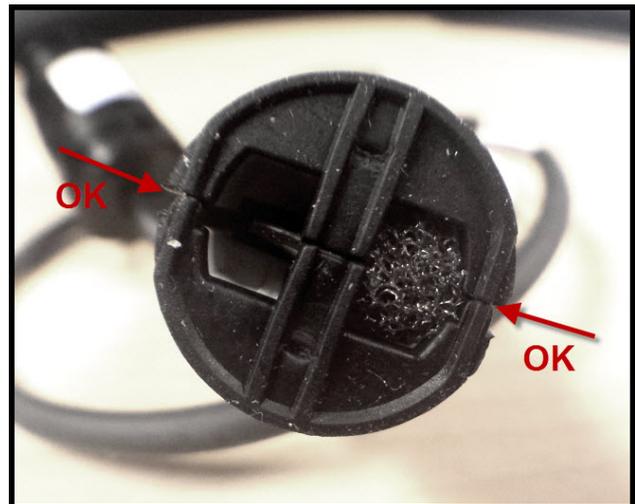


**Figure 2.** Clip location for A6/A7 high-line roof module (left) and for mid-line roof module (right)

## Inspect and replace the microphone

1. Inspect the seal of the microphone for damage:

- There are two splits in the rubber seal. This is normal as long as the two halves of the seal are touching each other (Figure 3).



**Figure 3.** Undamaged seal

- If the two halves of the seal are loose and move freely, the seal is damaged (Figure 4).



**Figure 4.** Examples of damaged seals

2. If none of the seals are damaged, reinstall the microphones into the roof module:

- Ensure that the microphones are firmly seated. A loud snap can be heard and felt when the microphone is fully seated. Reinstall the roof module and retest for the complaint before proceeding with diagnosis. If the complaint cannot be reproduced, no additional action is necessary.

If any of the seals are damaged, install a replacement microphone:

- In order to prevent damage to the microphone seal, install the microphone while the decorative trim is removed from the base plate. Slowly install the microphone perpendicular to the base plate (Figure 5). Do not install the microphone at an angle, as this may pinch the seal (Figures 6 and 7).
- Carefully inspect the new microphone seal after it has been snapped into place.



**Figure 5.** Proper installation.



**Figure 6.** Incorrect installation at an angle, showing a pinched seal on the left.



*Figure 7. Damage caused by a pinched seal.*

## Complete the repair

1. After the repair, road test the vehicle at a minimum speed of 45 mph with all windows closed.
2. During the road test, verify the call quality issue by making a Bluetooth call to the same person at the workshop that was called before the repair in order to verify call quality improvement.
3. If the call quality is still poor, call the Technical Assistance Center (TAC).
4. If the seals and microphones are installed properly, continue with diagnosis. Refer to TSB 2026895, 91 *Microphone testing tips* and TSB 2026888, 91 *Bluetooth Phone: Poor call quality*.

# 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>	9157		
<b>Damage Code:</b>	0010		
<b>Labor Operations:</b>	Remove and install interior light	9620 1900	30 TU
	Remove and install telephone microphones	9157 1950	10 TU
	Extended road test before and after repair	9157 9999	40 TU Max
<b>Diagnostic Time:</b>	GFF	No allowance	0 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)		
<b>Claim Comment:</b>	As per TSB # 2027718/7		

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
See ETKA	Microphone	As needed

## Additional Information

The following Technical Service Bulletin(s) may be necessary to complete this procedure:

- TSB 2026895, *91 Microphone testing tips*
- TSB 2026888, *91 Bluetooth Phone: Poor call quality*

All parts and service references provided in this TSB (2027718) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.