# Audi

# Technical Service Bulletin

#### 94 Moisture accumulation in headlamps

94 12 91 2028277/3 October 24, 2012. Supersedes Technical Service Bulletin Group 94 number 12-68 dated March 1, 2012 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment	
Q7	2010-2011	000001-999999	Not Applicable	
	2012	000001-004736	Not Applicable	

### Condition

REVISION HISTORY				
Revision	Date	Purpose		
3	-	Revised <i>Required Parts and Tools</i> Revised <i>Production Solution</i>		
2	3/1/12	Revised Service Revised Required Parts and Tools		
1	12/20/2011	Original publication		

#### **Customer Complaint:**

- Considerable moisture present in headlamp.
- The moisture disappears only after extended drives (greater than 10 minutes).

#### Workshop Findings:

 No external damage to headlamp which could introduce moisture.



Figure 1. Moisture in headlamp.

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### **Technical Background**

Humid air settles on the inside of the glass, causing moisture to appear on the inside of the headlamp lens. Because of the headlamp circulation system, outside air is allowed to flow through the headlamps. The open, water-protected ventilation system (needed for pressure compensation) creates different "climate zones" inside the headlamp, where the lens is either warmed up by the light or cooled down by passing air.

When high air humidity and temperature differences exist between the inside of the headlamps and the outside, condensation can form on the inside of the lens, especially in cold and wet weather. The moisture in the headlamps can be compared with condensation on the windshield, which is cleared by the "defroster vent". This moisture buildup can happen for example: after a car wash, after steam cleaning of the engine or the front end, or after overnight temperature changes.

This condition is more easily visible with headlamps made from clear glass. The moisture is an *optical condition* which **does not** affect the headlamp function (light performance) and does not lead to corrosion nor does it lead to damage of the internal headlamp parts.

This condition is common to all exterior vehicle lights, and can occur on every headlamp, fog lamp, or rear lamp.

#### **Production Solution**

Optimized headlamp ventilation hose placed into production for all XENON headlamps.

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#### Service

- 1. Remove the headlamps and dry the inside using compressed air or hot air blower.
- Replace the headlamp ventilation hose for each headlamp with the new part number to help reduce any further humidity ingress into the headlamps (see Part information table below).
   The modified ventilation hose can be recognized by the integrated filter as seen in Figure 2.



Figure 2. Ventilation Hose with Integrated Filter

- 3. Reinstall headlamps.
- 4. Please inform the customer the new ventilation hoses are only to help reduce this condition, but will not eliminate this condition completely. Moisture in the headlamp lens is normal and can occur even with the improved ventilation hose.

## Warranty

Claim Type:	Use applicable claim type. If vehicle is outside any warranty, this Technical Service Bulletin is informational only.		
Service Number:	9415		
Damage Code:	0010		
Labor Operations:	Remove and reinstall both headlamps	9415 2001	50 TU



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	Modify both headlamps	9415 5099	20 TU
Diagnostic Time:	GFF – Checking and clearing fault codes included in existing labor operations	No allowance	0 TU
	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)		
Claim Comment:	As per TSB #2028277/3		

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
4L0941717A	Left Headlamp Ventilation Hose	1
4L0941718A	Right Headlamp Ventilation Hose	1

### **Additional Information**

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

• TSB 2012749, 94 Exterior lights, moisture accumulation

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