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 | | |

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 Service Bulletin

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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Technical Service Bulletin

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 |



Technical Service Bulletin

| | 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 | s at dealer's discretion .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.