

#### 60 Water entry into cabin from the sunroof area

60 20 39 2056944/2 February 5, 2020. Supersedes Technical Service Bulletin Group 60 number 19-36 dated October 25, 2019 for reasons listed below.

Model(	s) Year	VIN Range	Vehicle-Specific Equipment
Q3, Q8, Audi e-ti quattre	on 2019 - 2021	All	Not Applicable

### Condition

REVISION HISTORY		
Revision	Date	Purpose
2	-	Revised Technical Background (Additional root causes)
		Revised Production Solution (Solution pending)
		Revised Service (Added work procedure)
		Revised Warranty (Added labor operations and SRTs)
1	10/25/2019	Initial publication

### **Customer states:**

• They see water drip from the headliner area (Figure 1).



Figure 1. Water intrusion near the headliner.

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### **Technical Background**

One or a combination of the following four possible malfunctions may be present. These areas of the sunroof system will need to be inspected as possible root causes.

1. <u>Sunroof drain hose or outlet</u> valve:

Visually inspect all 4 sunroof drain hoses and valves for any damage or obstruction (Figure 2).



Figure 2. Sunroof drain hose pinched by pillar trim.

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2. Roof opening seal:

Inspect the entire perimeter of the roof opening seal for any detachment or malformation (Figure 3).



Figure 3. Detached and malformed roof opening seal.

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3. Glass sunroof panels:

Check all adjustment axes of the sunroof glass panels for poor adjustment (Figure 4).



Figure 4. Front and rear glass panel adjustment.

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#### 4. <u>Unexplained or unduplicated</u> water entry:

When the vehicle is exposed to water (rain, car wash, or standing water on the roof panel) either with the vehicle stationary or driving it is possible for water to enter the sunroof frame mechanism that is not designed for exposure to water, breach the normal water drainage channeling, and leak into the cabin area. This risk is heightened if the sunroof is opened or vented when the vehicle is wet. This water intrusion may not manifest itself immediately but may appear after a driving period when the water travels to the underside of the headliner area during the normal course of driving (Figure 5-7). This occurs due to a slow migration of water along the wind deflector hinge arms and water entry into the stowage area for the wind deflector. This stowage area does not provide water drainage away from the vehicle.



Figure 5. Front sunroof opening with drainage exposed.

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Figure 6. Areas of sunroof opening water elimination capabilities.



Figure 7. Sunroof water channeling diagram.

### **Production Solution**

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Production and service solutions are in development. The instructions that follow are an immediate solution until the correct components are available.

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### **Service**

1. Sunroof drain hose or outlet valve:

Ensure that any water in the sunroof frame drainage areas flows freely. Replace any pinched or otherwise obstructed drain hose(s) or valve(s).

2. Roof opening seal:

If after inspecting the roof opening seal any detachment, malformation or damage is discovered, replace the sunroof opening seal.

3. <u>Glass sunroof panels:</u>

If after all dimensional measurements are made on the sunroof glass panels a problem is found make the necessary adjustments to the sunroof glass panels.

4. Unexplained or unduplicated water entry:

Replace no parts for this condition. Replacing parts at this time will not mitigate this symptom.

5. Open the front sunroof panel completely and locate the mounting points for the sunroof wind deflector (Figure 8).



Figure 8. Locating points for the sunroof wind deflector.

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 Fill the entire cavity of the sliding channels for the wind deflector with special lubricant G 052 141 A2. This has been shown to mitigate the migration of water along the wind deflector arms and into the undrained portions of the sunroof frame (Figure 9-11).



Figure 9. Lubrication points.



Figure 10. Lubrication points, wind deflector compressed.

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Figure 11. Lubricant applied.



Only apply this lubricant to the areas directed. This sunroof frame is lubricated with the Carbaflo lubricant and the special lubricant G 052 141 A2 will contaminate the slide and tilt mechanism lubrication and accelerate the wear.

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Claim Type:	Use applicable claim types. If the vehicle is of Service Bulletin is informational only.	outside any warranty, th	is Technical	
Service Number:	<ul> <li>Check and/or repair or replace sunroof drain hose(s): 6048.</li> <li>Check and/or replace the roof opening seal: 6042.</li> <li>Check and/or adjust the front and / or rear sunroof glass panel: 6039.</li> <li>Lubricate sunroof wind deflector sliding channels: 6033.</li> </ul>			
Damage Code:	0010			
Labor Operations:	Check and, if necessary, repair or replace sunroof drain hoses.	Use the appropriate labor operation(s) consistent with the necessary repair	See SRT	

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	Check and, if necessary, replace the roof opening seal.	Use the appropriate labor operation(s) consistent with the necessary repair	See SRT
	Check and, if necessary, adjust the front sunroof glass panel.	Use the appropriate labor operation(s) consistent with the necessary repair	See SRT
	Check and, if necessary, adjust the rear sunroof glass panel.	Use the appropriate labor operation(s) consistent with the necessary repair	See SRT
	Lubricate sunroof wind deflector sliding channels.	6033 9999	20 TU
Diagnostic Time:	GFF	No allowance	0 TU
	Road test prior to the service procedure	No allowance	0 TU
	Road test after the service procedure	No allowance	0 TU
Claim Comment:	As per TSB #2056944/2		

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**

Always check with your Parts Department and/or ETKA for the latest information and parts bulletins.		
Part Number	Part Description	Quantity
G 052141A2	Special Lubricant	0.2
See ETKA	Fasteners, Bolts, Nuts, and Screws as needed per the Repair Manual	See ETKA/ELSA

### **Additional Information**

All parts and service references provided in this TSB (2056944) are subject to change and/or removal.

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