



Technical Service Bulletin

00 Professional noise analysis with the VAS 611 015 PICO-NVH tool

00 23 81 2070568/2 November 7, 2023. Supersedes Technical Service Bulletin Group 00 number 23-71 dated September 7, 2023 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
All Audi Vehicles	2007 – 2025	All	Not Applicable

Condition

REVISION HISTORY		
Revision	Date	Purpose
2	-	Revised <i>Warranty</i> (Corrected Labor Operation)
1	09/07/2023	Initial publication

Customer states:

- Noise or vibration complaints.

Workshop findings:

The concern can be duplicated but the root cause is not easily identified.

Technical Background

There are different techniques and options to analyze noises or vibrations. This TSB describes the measurement options using the VAS 611 015 PICO NVH tool.

Production Solution

The following information is attached to this TSB:

- The analysis guidelines for using the PICO-NVH tool for noise analysis.
- The analysis guidelines for the measuring points on the transmission.

The VAS 611 015 Software can be found at: *Audi ServiceNet >> Workshop Equipment >> Tool Information >> Tool Software Updates*

The software and instructions to connect the VAS 6154 to VAS 611 015 PICO NVH Tool can be found at: *Audi ServiceNet >> Workshop Equipment >> Tool Information >> Tool Software Updates* (Required for OBD connection for live road speed signal and engine RPM).



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Service

It is possible to detect the sources of noises and vibrations more precisely via acceleration sensors and/or microphones. Information such as engine speed and vehicle speed, which is required for subsequent analysis, is recorded in addition to the noise recording via the OBD adapter VAS 6154.



Audi e-tron vehicles:

Ensure that the newest PICO software version is installed, otherwise a vehicle speed signal cannot be recorded via the on-board diagnosis adapter.

In the PICO software, the setting “EV” must be selected when connecting the on-board diagnosis adapter VAS 6154.

The attached guidelines answer many questions and can be used to provide support and practical instructions on using the VAS 611 015 PICO NVH Tool.

The following is attached to this TSB (Figure 1):

- The Guidelines for acoustic analysis with the Pico NVH kit for noise analysis.
- The analysis guidelines for the measuring points on the transmission.
- Connecting VAS 6154 to PICO NVH tool VAS 611 015.



Figure 1. Attachments Tab in the repair manual

Required software can be found via Service Net:

- **VAS 611 015:** Audi ServiceNet >> Workshop Equipment >> Tool Information >> Tool Software Updates.
- **Software and instructions to connect the VAS 6154 to VAS 611 015 PICO NVH Tool:** Audi ServiceNet >> Workshop Equipment >> Tool Information >> Tool Software Updates (Required for OBD connection for live road speed signal and engine RPM).

Warranty

Claim Type:	<ul style="list-style-type: none"> • 110 up to 48 Months/50,000 Miles. • If the vehicle is outside any warranty, this Technical Service Bulletin is informational only.
Service Number:	Use Service Number for the casual part
Damage Code:	Use correct Damage Code for cause



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1. Setting-up time (only for the PICO-NVH application)

Model:	Repair operation:	Designation:	Time units:
	0161 0199	Setting-up time of noise analysis tool	50 TU
<ul style="list-style-type: none">• Observe information on predecessors as well as included and excluded items in the repair operations.• Use the repair operations from APOS for the removal of other components.			

All work carried out must be documented as follows:

- Attach photos of the sensor positions (**at least one photo with vehicle identification number**) to the RO.
- Photo labelling: e.g. sensor A measurement setup 01

2. Measurement/test drive

Model:	Repair operation:	Designation:	Time units:
	XXXX 0199	Measurement drive (use service number depending on component)	Please bill according to time required. All work carried out must be clearly documented.
<ul style="list-style-type: none">• Observe information on predecessors as well as included and excluded items in the repair operations.			

All work carried out must be documented as follows:

- Make a note of the mileage before and after the test drive

3. Time required for analysis/evaluation of measurements

Model:	Repair operation:	Designation:	Time units:
	XXXX 0199	Analysis (use service number depending on component)	Please bill according to time required. All work carried out must be clearly documented.
<ul style="list-style-type: none">• Observe information on predecessors as well as included and excluded items in the repair operations.			

All work carried out must be documented as follows:

- Keep screenshots of the measurement report of the analysis for the RO.



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End or continue with point 5.

4. Repositioning measuring technology

Model:	Repair operation:	Designation:	Time units:
	0161 3199	Time required to reposition noise analysis tool	25 TU
<ul style="list-style-type: none">Observe information on predecessors as well as included and excluded items in the repair operations.			

All work carried out must be documented as follows:

- Reason why repositioning necessary
- Photos of new sensor positions (labelling: e.g. sensor A measurement setup 02)

5. Another test/measurement drive

- As point 2

6. Time required for another analysis/evaluation of measurements

- As point 3

7. End or continue with point 5.

Claim Comment:	Diagnosis per TSB 2070568/2
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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

- VAS 611 015 VAS PicoScope NVH Kit (Minimum Required Tool)
- VAS 6154, please install the required driver (see attached instructions) on the workshop laptop.

Additional Information

All part and service references provided in this TSB (**2070568**) are subject to change and/or removal. Always check with your Parts Department and/or ETKA for the latest information and parts bulletins. Please check the Repair Manual for fasteners, bolts, nuts, and screws that require replacement during the repair.

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