



# Preliminary Information

## PIP5358A Vehicle Noise Diagnosis and TAC Requests For Assistance With Noise Related Complaints

### Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
All	All	2000 - 2021	All	All	All	All

### Supersession Statement

This PI was superseded to update model years and models and to add PICOSCOPE recording instructions. Please discard PIP5358

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

### Condition / Concern

When working with a vehicle that has an unusual noise and is difficult to identify, isolate or pinpoint, we would request that prior to dis-assembly for this concern you get a sound/video file of the noise prior to calling Technical Assistance.

To accomplish this you can use a cell phone to record audio or video with sound to send to TAC or the process below will show how to use the PICOSCOPE as a microphone and that file can be sent in. This is a much higher quality recording.

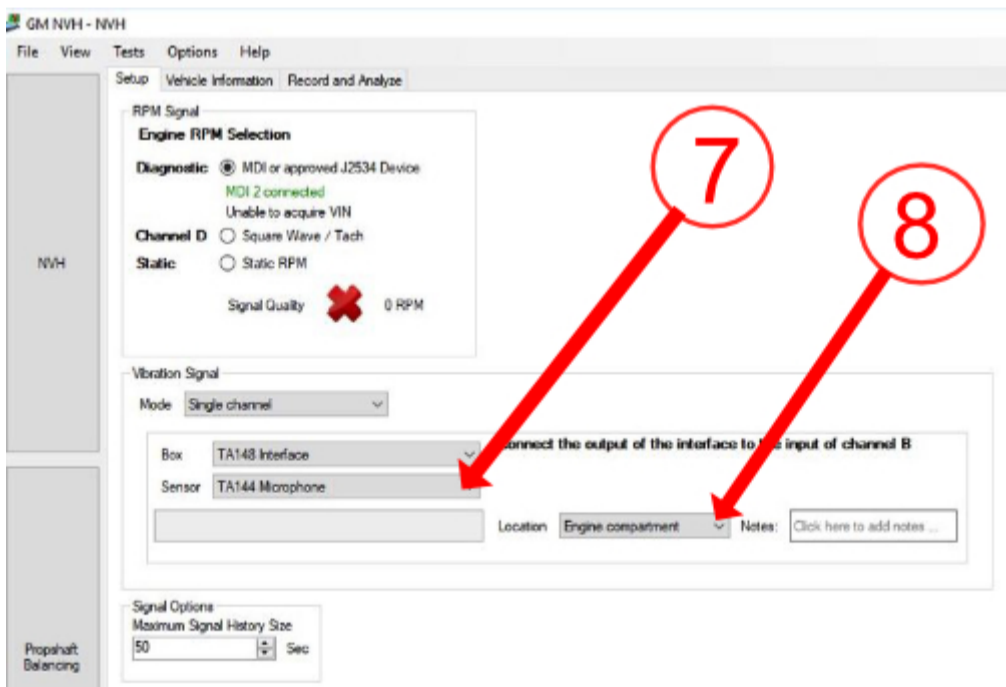
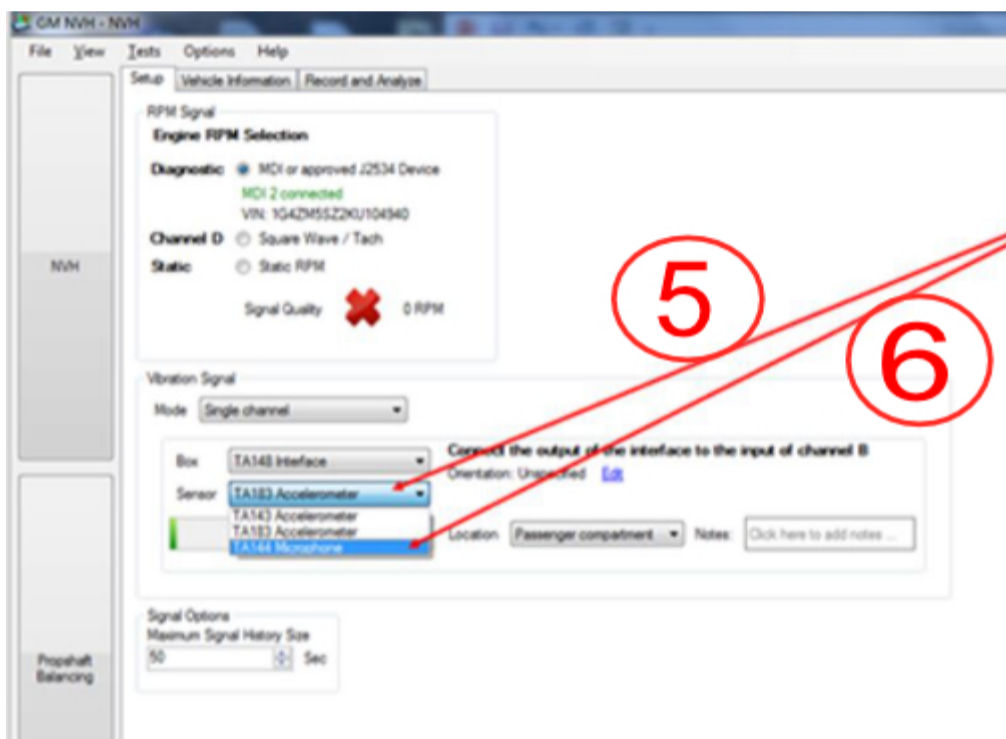
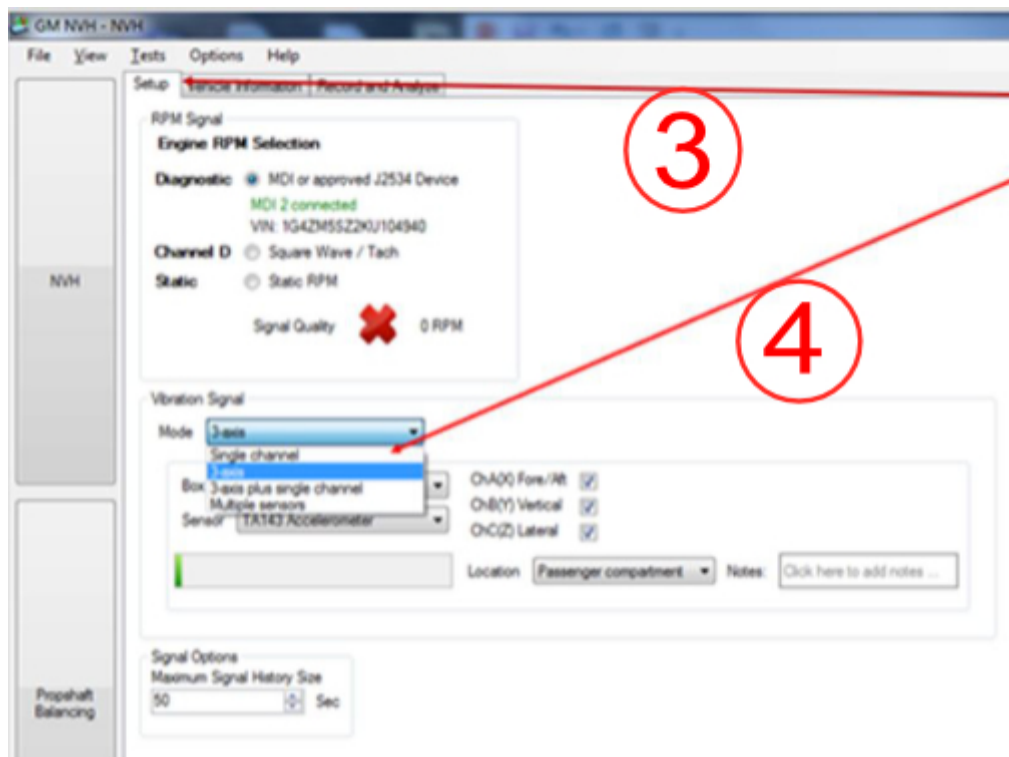
If you need to download or update the PicoScope, follow the steps below:

- 1) Log into GM GlobalConnect.
- 2) Click on the "Departments" drop down menu and select "Service."
- 3) Under "Applications" on the service page, select "Special Tools and Software updates."
- 4) You will now be re-directed to [www.gmtoolsandequipment.com](http://www.gmtoolsandequipment.com) (do not access this site directly as it requires the use of GlobalConnect to allow downloads).
- 5) Click the link under "Software Downloads" for the latest PicoScope software version and a new page will open.
- 6) Click the setup links and follow instructions to update the tool.

- 1) Place the PicoScope accelerometer sensor nearest to where the noise appears to be coming from.  
Moving the sensor and getting another recording may help to isolate the area better.

**Note: Ensure to keep the cable routed away from the exhaust if working in the engine compartment or moving parts if working under the vehicle.**

- 2) Open the most current version of GM NVH.
- 3) After completing the wizard, go back into the setup tab under Vibration Signal and select Single Channel.  
Select TA148 Interface in the "Box" dropdown and TA144 Microphone for the "Sensor" Drop down. (You will still use the accelerometer as your microphone)  
Select the Location as current location being inspected.



Note: If using 3 axis, use center channel only and set up as single axis.

4) Operate the vehicle to verify condition and record a Pico data file of the concern.

NOTE: Review the file, it will play back an audio file that can be heard from the PC speakers.

PICO will pick up normal noises and make them clearly audible.

Make sure the noise that we are trying to diagnose is on the file.

If the noise is not there, move the sensor and record another file until you find the source area.

5) While the reviewed file is on the screen, click File Save. It should be formatted as .pddata

6) The next box allows you to save the vehicle information as well as customer information and notes in the Notes box. This could be sensor location, sensor direction and even road surface name, etc. Click Ok when you are done adding information.

7) Create an e-mail to TACSNAPSHOT@gm.com in the U.S. and TACSNAPSHOTCANADA@gm.com in Canada and in the subject line Put Vibration, your BAC, and last 8 of the VIN.

Or using the latest version of PIP5632 in the U.S. you can put the recording directly into the case.

**Note: For Middle East, Japan or other countries, contact your local TAC for submission instructions.**

## Recommendations / Instructions

In an attempt to better assist dealers and get vehicles returned to customers repaired right the first time, GM TAC will request any calls regarding assistance for unidentified or non-isolated noise complaints to have a sound/video file ready to send in for assessment by engineering.

At times TAC will request the aid of engineers to help locate or isolate a noise and it may be something they have heard before. The sound file or video may assist with this if the noise can be captured.

Please follow this diagnostic or repair process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed.



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