

2022 Chevy Truck Silverado 1500 LTD 4WD L4-2.7L Turbo

Vehicle &gt; Technical Service Bulletins

## L3B TURBOCHARGER WASTEGATE SERVICE CALIBRATION

## #24-NA-091: L3B Turbocharger Wastegate Service Calibration - (Jun 20, 2024)

Subject: L3B Turbocharger Wastegate Service Calibration



Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	VIN	Build Date		
Chevrolet	Silverado 1500 LTD (RPO J21, VIN Digit 5 = W / Y)	2022	2022	3GCPDDEK9NG500018	December 11, 2021	L3B	
	Silverado 1500 New (RPO J22, VIN Digit 5 = A / D)						
	Silverado 1500	2023	2023				
GMC	Sierra 1500 Limited (RPO J21, VIN Digit 5 = 8 / 9)	2022	2022	3GTPUCEK1NG500055	November 09, 2021		
	Sierra 1500 New (RPO J22, VIN Digit 5 = H / U)						
	Sierra 1500	2023	2023				

Involved Region or Country	North America
Additional Options (RPOs)	
Condition	Some customers may comment on a screeching noise during engine shutdown.
Cause	The cause of the condition may be a cycling of turbocharger wastegate during shutdown.
Correction	Update the Engine Control Module (ECM) with the latest service calibration.

## Service Procedure

**Important:** Service agents must comply with all International, Federal, State, Provincial, and/or Local laws applicable to the activities it performs under this bulletin, including but not limited to handling, deploying, preparing, classifying, packaging, marking, labeling, and shipping dangerous goods. In the event of a conflict between the procedures set forth in this bulletin and the laws that apply to your dealership, you must follow those applicable laws.

**Caution:** Before downloading the update files, be sure the computer is connected to the internet through a network cable (hardwired). DO NOT DOWNLOAD or install the files wirelessly. If there is an interruption during programming, programming failure or control module damage may occur.

- Ensure the programming tool is equipped with the latest software and is securely connected to the data link connector. If there is an interruption during programming, programming failure or control module damage may occur.
- Stable battery voltage is critical during programming. Any fluctuation, spiking, over voltage or loss of voltage will interrupt programming. Install a GM Authorized Programming Support Tool to maintain system voltage. Refer to [www.gmdesolutions.com](http://www.gmdesolutions.com) for further information. If not available, connect a fully charged 12 V jumper or booster pack disconnected from the AC voltage supply. DO NOT connect a battery charger.
- Follow the on-screen prompts regarding ignition power mode, but ensure that anything that drains excessive power (exterior lights, HVAC blower motor, etc) is off.
- Clear DTCs after programming is complete. Clearing powertrain DTCs will set the Inspection/Maintenance (I/M) system status indicators to NO.

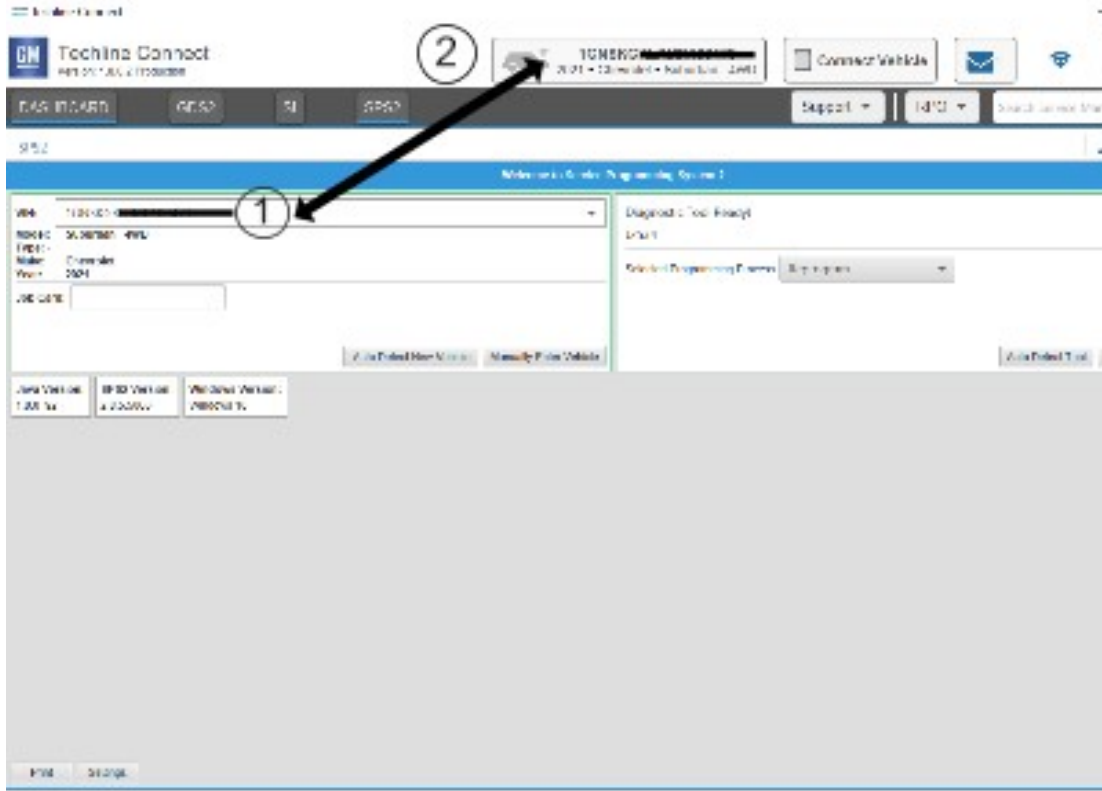
**Important:** The service technician always needs to verify that the VIN displayed in the TLC left side drop down menu and the top center window match the VIN plate of the vehicle to be programmed prior to using Service Programming System 2 (SPS2) for programming or reprogramming a module.

- For the TLC application, service technicians need to always ensure that the power mode (ignition) is "ON" before reading the VIN from the vehicle's VIN master module and that they do not select a VIN that is already in the TLC application memory from a previous vehicle.
- If the VIN that shows up in the TLC top center window after correctly reading the VIN from the vehicle does not match the VIN plate of the vehicle, manually type in the VIN characters from the vehicle VIN plate into the TLC top center window and use these for programming or reprogramming

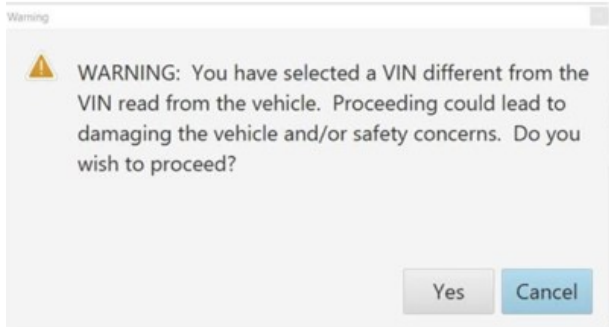
the subject module with the correct vehicle VIN and software and/or calibrations.

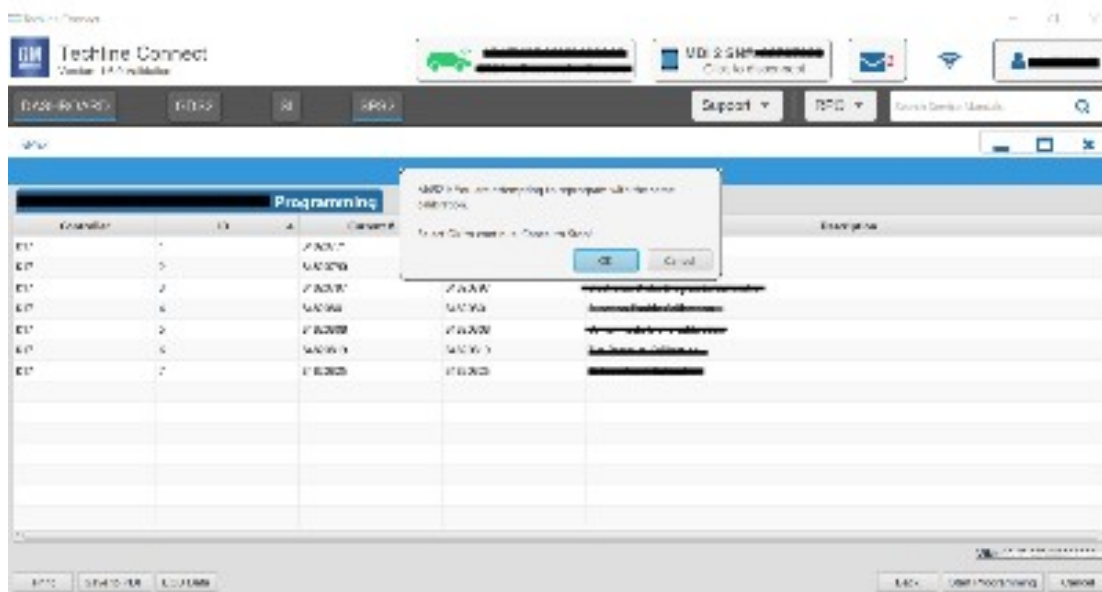
- The Engine Control Module (ECM) is the master module (for VIP vehicles) that TLC reads to determine the VIN of the vehicle. If the VIN read from the vehicle by TLC does not match the VIN plate of the vehicle, the ECM also needs to be reprogrammed with the correct VIN, software and calibrations that match the vehicle's VIN plate.
- The Body Control Module (BCM) is the master module (for GEM vehicles) that TLC reads to determine the VIN of the vehicle. If the VIN read from the vehicle by TLC does not match the VIN plate of the vehicle, the BCM also needs to be reprogrammed with the correct VIN, software and calibrations that match the vehicle's VIN plate.

**Caution:** Be sure the VIN selected in the drop down menu (1) is the same as the vehicle connected (2) before beginning programming.



**Important:** If the vehicle VIN DOES NOT match, the message below will be shown





**Important:** Techline Connect screens shown above.

**Important:** If the same calibration/software warning is noted on the TLC Summary screen, select OK and follow screen instructions. After a successful programming event, the WCC is located in the Service Programming System dialogue box of the SPS Summary screen. No further action is required. Refer to the Warranty section of the bulletin.

1. Reprogram the Engine Control Module. Refer to *K20 Engine Control Module: Programming and Setup* (<https://gsitlc.ext.gm.com/gsi/cellHandler.do?cellId=148765&refDoc=6656112&pubName=null&pubSubSectionName=null&svclInfoTypeQualSyskey=0&pubSectionName=null&bullTypeKey=-1&lar>)



**Note:** The screenshot above is an example of module programming and may not be indicative of the specific module that is being programmed. Module selection and VIN information have been blacked out.

**Important:** To avoid warranty transaction rejections, you MUST record the warranty claim code provided on the Warranty Claim Code (WCC) screen shown above on the job card. Refer to callout 1 above for the location of the WCC on the screen.

2. Record SPS Warranty Claim Code on job card for warranty transaction submission.

### Warranty Information

For vehicles repaired under the Emission coverage, use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Description	Labor Time
*2887648	ECM Reprogramming for Turbocharger Wastegate Cycling	0.3 hr

\*This is a unique Labor Operation for Bulletin use only.

**Important:** \*\*To avoid warranty transaction rejections, carefully read and follow the instructions below:

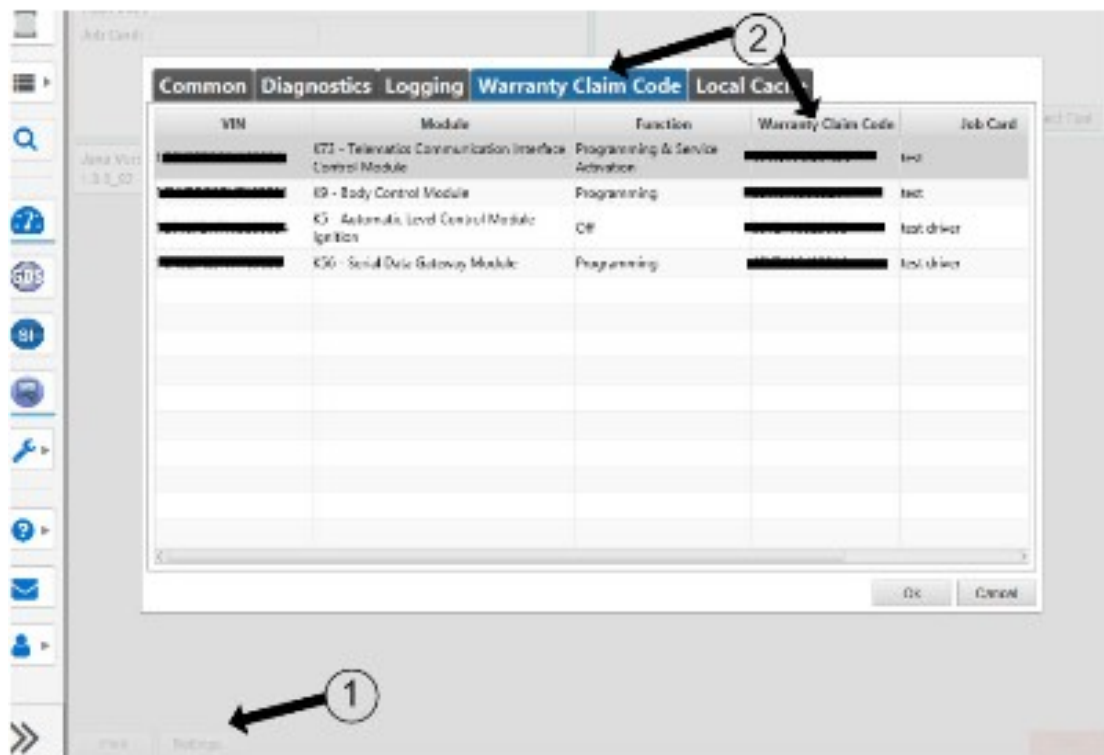
Labour Time [\[Top\]](#)

Labour Operation Code:

Additional labour op code information: SPS Warranty Claim Code:

- The Warranty Claim Code must be accurately entered in the "Warranty Claim Code" field of the transaction.
- When more than one Warranty Claim Code is generated for a programming event, it is required to document all Warranty Claim Codes in the "Correction" field on the job card. Dealers must also enter one of the codes in the "Warranty Claim Code" field of the transaction, otherwise the transaction will reject. It is best practice to enter the FINAL code provided by SPS2.

**Warranty Claim Code Information Retrieval**



If the Warranty Claim Code was not recorded on the Job Card, the code can be retrieved in the SPS2 system as follows:

1. Open TLC on the computer used to program the vehicle.
2. Select and start SPS2.
3. Select Settings (1).
4. Select the Warranty Claim Code tab (2).

The VIN, Warranty Claim Code and Date/Time will be listed on a roster of recent programming events. If the code is retrievable, dealers should resubmit the transaction making sure to include the code in the SPS Warranty Claim Code field.

<b>Version</b>	1
<b>Modified</b>	Released June 20, 2024

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.



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