Service Bulletin

Bulletin No.: 22-NA-112
Date: January, 2024

TECHNICAL

Subject: 2020 - 2022 Silverado and Sierra Equipped with Diesel Engine Setting DTCs P20BB or P20C3

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Silverado 1500	2020	2021			LM2, L5P	
	Silverado 1500 LTD (RPO J21, 12th VIN Digit = 4 or less)	2022	2022				
	Silverado 1500 New (RPO J22, 12th VIN Digit =5 or greater)						
	Silverado 2500HD/ 3500HD	2020	2022				
GMC	Sierra 1500	2020	2021			LM2, L5P	
	Sierra 1500 Limited (RPO J21, 12th VIN Digit = 4 or less)	2022	2022				
	Sierra 1500 New (RPO J22, 12th VIN Digit = 5 or greater)						
	Sierra 2500HD/ 3500HD	2020	2022				

Involved Region or Country	United States, Canada, Mexico, Australia, New Zealand
Additional Options (RPOs)	
Condition	Some customers may comment on Silverado and Sierra Equipped with Diesel Engine with a MIL illuminated in the DIC as well as a message stating “Speed will be reduced if it isn’t serviced” illuminated. Technicians may find DTCs P20BB or P20C3 set current or in history.
Cause	The cause of the condition may be the diagnostics for the DTC P20BB Reductant Heater 1 Control Circuit Low Voltage and DTC P20C3 Reductant Heater 3 Control Circuit Low Voltage Test Status has been changed to prevent false setting of the DTCs.
Correction	Reprogram the DEF (Diesel Exhaust Fluid) control module with the updated calibration, refer to the Service Procedure. • All vehicles require the base software, calibration 87836557. • Model Years 2020-2022 Heavy Duty Pickup (L5P) require calibration 87836559. • Model Years 2020-2021 Light Duty Pickup (LM2) require calibration 40009308 • Model Year 2022 Light Duty Pickup (carryover; 12th character of VIN <=4) also require calibration 40009308 • Model Years 2020-2022 Heavy Duty Cab Chassis (L5P) Regular Cab require calibration 87836560 • Model Years 2020-2022 Heavy Duty Cab Chassis (L5P) Crew Cab require calibration 87836561

Service Procedure

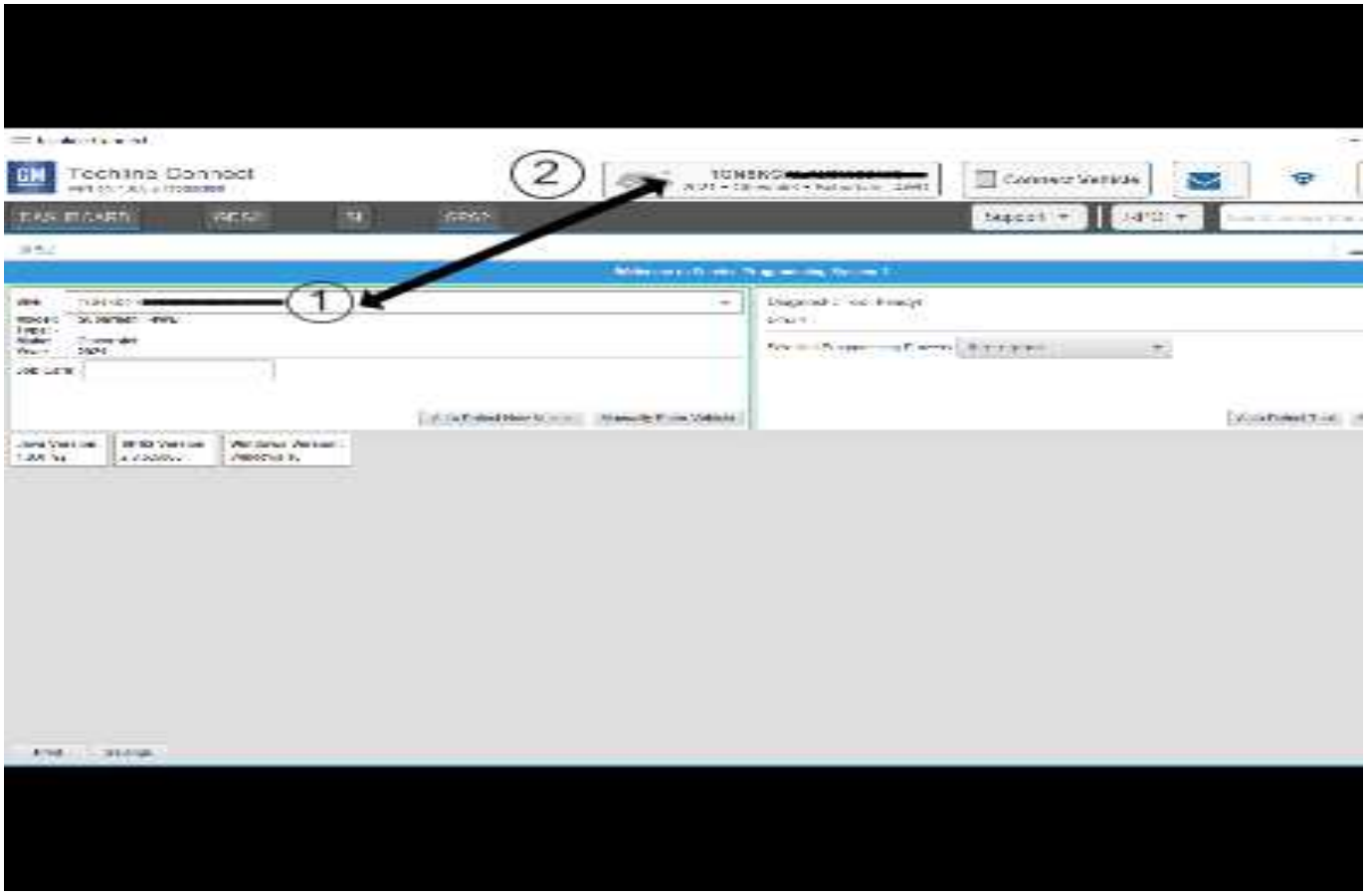
Caution: Before downloading the update files, be sure the computer is connected to the internet through a network cable (hardwired). DO NOT DOWNLOAD or install the files wirelessly. If there is an interruption during programming, programming failure or control module damage may occur.

- 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 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
- Please verify that the radio time and date are set correctly before inserting USB drive into vehicle for programming, otherwise an error will result..
- 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.

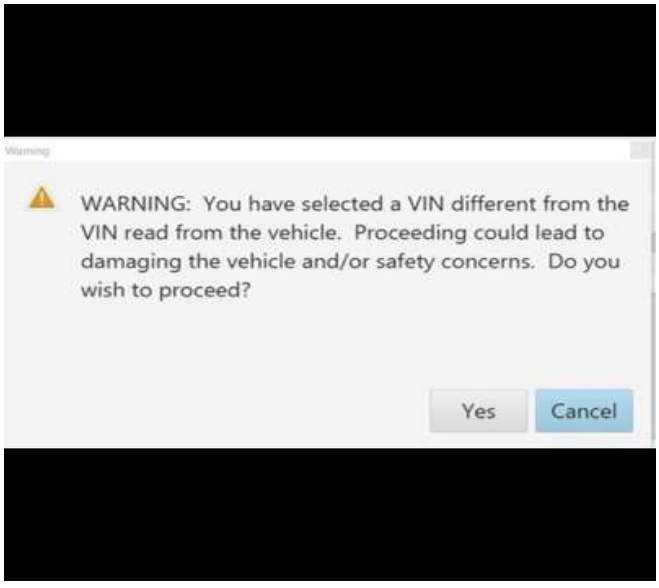
- For the TLC application, service technicians need to always ensure that the power mode (ignition) is “ON” before reading the VIN from the vehicle’s VIN master module and that they do not select a VIN that is already in the TLC application memory from a previous vehicle.
- If the VIN that shows up in 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.

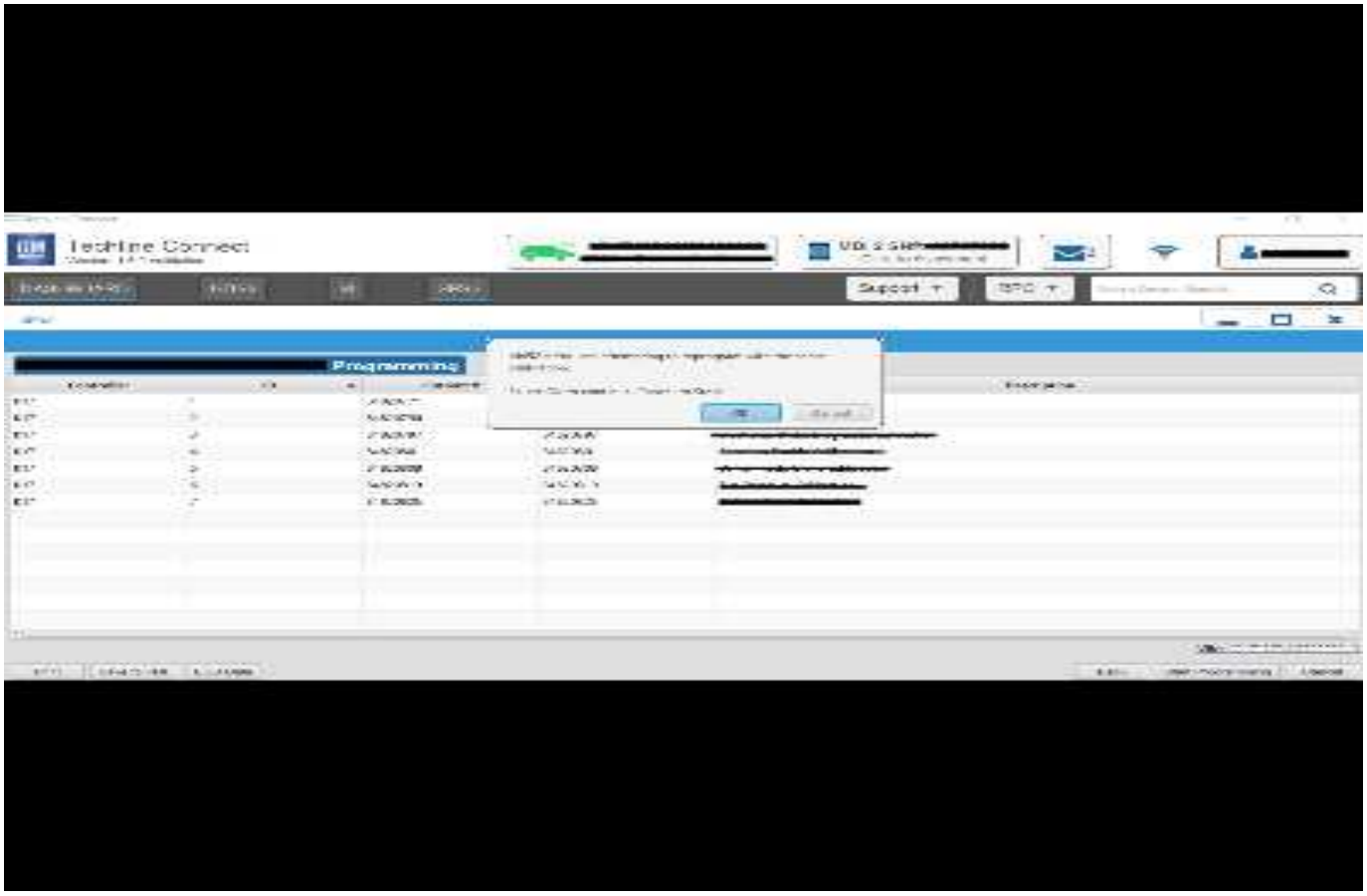


5743643

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



5877000

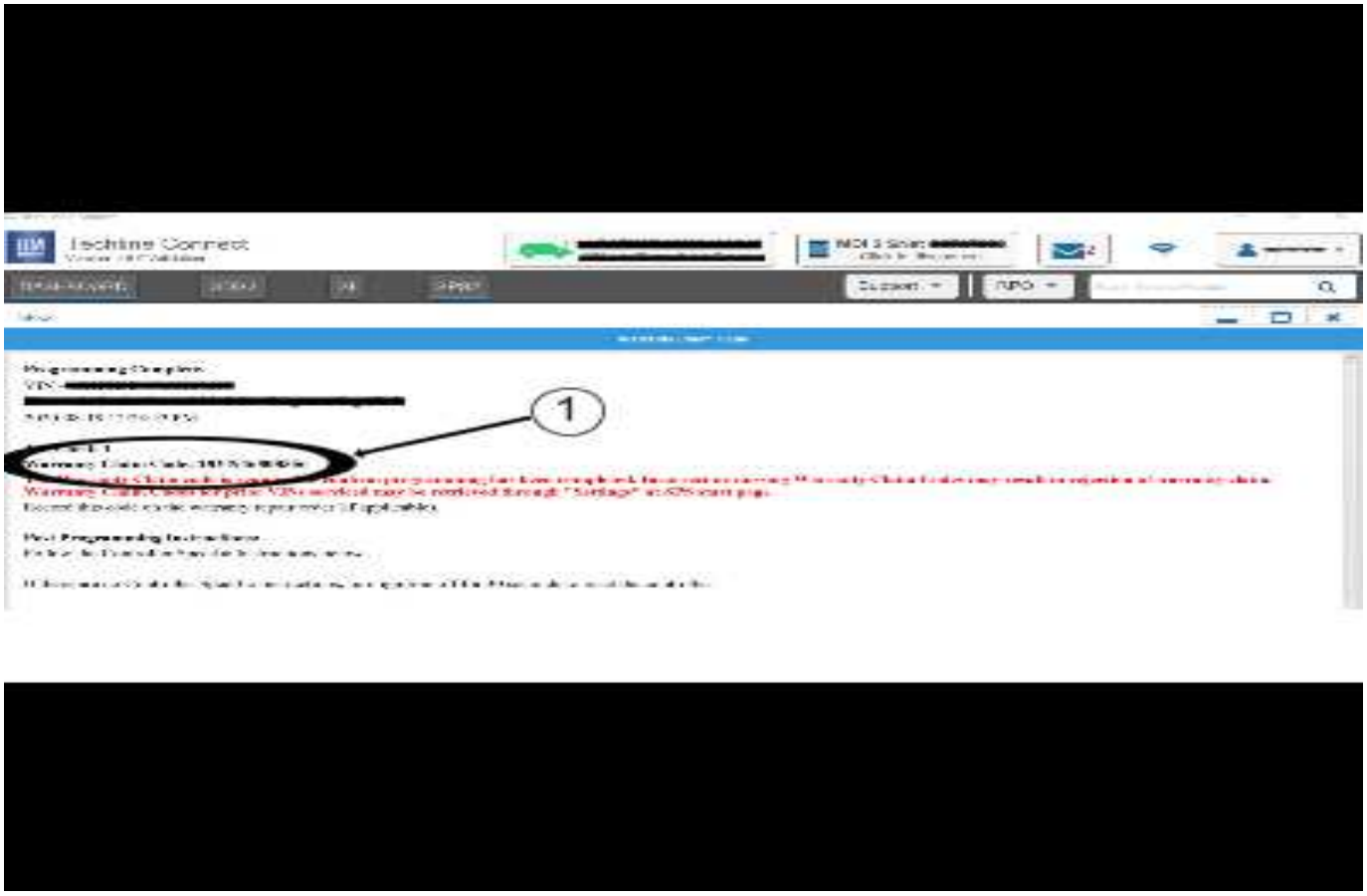


5644477

Important: Techline Connect and TIS2WEB screens shown above.

Important: If the same calibration/software warning is noted on the TLC or SPS 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 DEF through the Reductant Control Module. Refer to *K115 Reductant Control Module: Programming and Setup in the Service Manual* in SI.



5644478

Note: The screenshots above are 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 Warranty Claim Code on job card for warranty transaction submission.

Warranty Information

Important: LM2 Engine should have 8 year 80,000 mile/130,000 KM emission warranty applied (E2).

Important: L5P Engine should have 5 year 50,000 mile/80,000 KM emission warranty applied (E); this is the EPA Heavy Duty warranty for vehicles over 8,500 pounds.

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
*2888718	Reductant Control Module Reprogramming with SPS for DEF with DTCs P20BB or P20C3	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:

- The Warranty Claim Code must be accurately entered in the “SPS 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 “SPS Warranty Claim Code” field of the transaction, otherwise the transaction will reject. It is best practice to enter the FINAL code provided by SPS/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.
4. Select the Warranty Claim Code tab.

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.

Version	2
Modified	Released May 24, 2022 Revised January 19, 2024 – Revised the Important Warranty Statements under Warranty Information.