

Service Bulletin

TECHNICAL

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

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

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 <u>www.gmdesolutions.com</u> 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.

= k dente and	
Techina Bonnect (2)	10 NENCOMANDEL AND CONNECTION STATISTICS
TAS MAREN - PERS - TH COMM	Separative (Separate Security
352	
	Degend - so heady
THE X HOLE AND	ana
1982 - Nadar - Sama dati Naz 5824	See and see and see a superior of
Los Lew	
of the Posterio Diversity Post College	And Statement in
474 - 31040	
Pd - 3174	

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



5743643

Numerical Sector Numerical Sector<	Introduction Introduction Introduction Introduction Introduction Introduction Interded to the formation Introduction Introduction Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation Interded to the formation In	Interface Connect Interface Conne Interface Connect Inte	Number Numer Numer Numer <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>									
Projection All Control	Provide All Control <	Provider of the second program of the second seco	Provider 10 Marrier 0 CANN Cannot For provider all restrictions 0 Cannot Cannot For provider all restr						Hert .	Conne		_
Constraint Constraint Constraint Foregram 1 Constraint Constraint Foregram 2 Constraint Constraint Foregram 3 Constraint Constraint Foregram 4 Constraint Constraint Foregram 5 Constraint Constraint Foregram 4 Constraint Constraint Foregram 5 Constraint Constraint Foregram 6 Constraint Constraint Foregram 7 Foregram Foregram Foregram	State All Marrier 1 All Marrier 2 All Marrier 3 All Marrier 4 All Marrier 5 All Marrier 6 All Marrier 7 Filler Marrier 7 Filler Marrier	State All State State State State 1 AAA AAA Total State	Provide 10 Material Ma	-	(1970 (T)) Surger Surger	Skpost 1		14 ARA	in e	- 94		
Constraint Constraint Constraint Foregram 1 Constraint Constraint Foregram 2 Constraint Constraint Foregram 3 Constraint Constraint Foregram 4 Constraint Constraint Foregram 5 Constraint Constraint Foregram 4 Constraint Constraint Foregram 5 Constraint Constraint Foregram 6 Constraint Constraint Foregram 7 Foregram Foregram Foregram	State All Marrier 1 All Marrier 2 All Marrier 3 All Marrier 4 All Marrier 5 All Marrier 6 All Marrier 7 Filler Marrier 7 Filler Marrier	State All State State State State 1 AAA AAA Total State	Ended Alt - Ended Ended <th< td=""><td>- 0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>7</td></th<>	- 0								7
Projection Projection 1 A NA ** 2 A NA ** 3 A NA ** 4 A NA ** 5 A NA ** 4 A NA ** 5 A NA ** 4 A NA ** 5 A NA ** 6 A NA ** 7 A NA ** 7 F STRS 7 F STRS 7 F STRS	Production Production 1 A N T 2 A N T 3 A N T 4 A N T 5 A N T 4 A N T 5 A N T 6 A N T 7 A N T 7 Fill S D	Proceeding No Proceeding	Ended Alt - Ended Ended <th< td=""><td>100000000000000000000000000000000000000</td><td></td><td></td><td></td><td>- 30</td><td></td><td></td><td></td><td></td></th<>	100000000000000000000000000000000000000				- 30				
Construction Construction Description 1 AXX-7 Image:	Notestime Notestime Notestime 1 A.N.* International Annual	Notestime Notestime Notestime 1 A.N.* Intercontant Annual A	Note of the second s			decides managements	SBOCT - The section and the section of	Front memory in a				
A CANT Contract Contr	Image: Control of the second secon	ANAL ANAL ANAL ANAL ANAL ANAL ANAL ANAL	· · <td></td> <td>Excernance.</td> <td>200 - Contract - Contr</td> <td></td> <td></td> <td>2.00</td> <td></td> <td>(Younghing)</td> <td>ī.</td>		Excernance.	200 - Contract - Contr			2.00		(Younghing)	ī.
2 PANN CAN CAN CAN CAN CAN CAN CAN CAN CAN	2 2000 2000 4 COM COM COMPANY 4 COM COM COMPANY 4 COM COM COMPANY 4 COM COM COMPANY 4 COMPANY 4 COM COMPANY 4 COM	2 2000 2000 4 COM COM COMPANY 4 COM COM COMPANY 5 COM COM COMPANY 5 COM COM COMPANY 5 COM COM COMPANY 5 COMPANY 5 COM COMPANY 5 COM COMPANY 5 COM COMPANY 5 COM COMPANY 5 COM COMPANY 5 COMP	2 2.557 2.557 2.557 6 USAS USAS			and the second se	1 States and Colored and Solar Pro-			1.1		
 COM UNA Anti-Anti-Anti-Anti-Anti-Anti-Anti-Anti-	 Color 	 Color 	 George George Geo			Line all				1.00		
2 FRAM CANA Antonio Contra Cana Cana Cana Cana Cana Cana Cana Ca	PROFESSION CONTRACTOR CONTRACT	PROFESSION CONTRACTOR CONTRACT	2 PROM CONTRACTOR CONTRACTOR 7 PROM PROM 7			the state of the boy sector where	2586	2.80/80				
						Annual Contractor Contractor	14.07.968	NACES OF BRIDE				
						-the selector estimates						
						La contra de la co				6		
						and the second se		1 8-26Ch		1.1		
												ü
Line and Line and Statement A	(164.5.48 L.7008)		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Mon Plant								
				n-moore mente di late	6.60 m - 1 m				-	a	1	b

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.

5644477

- and the laser			
Isohine Connect		Cito is Browner 22	· ·····
testestestes (state) (a)	2490	Turner + NPO +	a
14-2			
	Contract Contract		
Programming Chargelines			1
VIN-	(
505 (5.151706 (1F5)	(1)		
Varianty Claim Cale, 107 No. 840 in	general factors rough in the enternance	. Warmate Child field a cast cash in colorida	100000
Warrang Calls Clear Repeter VIN an electrony formatility sold startic warranty repair over 10 applica	be noticed through "Suttings" at 575 start plan		
0.505	1000		
Peri Programming Instructions Printe de Transdombas de boren autor, en es			
If here was also do the specific metal science of a	the offer the set of a set is a debu		

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.

5644478

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.

