

# GM Chevrolet Suburban 2021 Rear Differential Functional Test Command

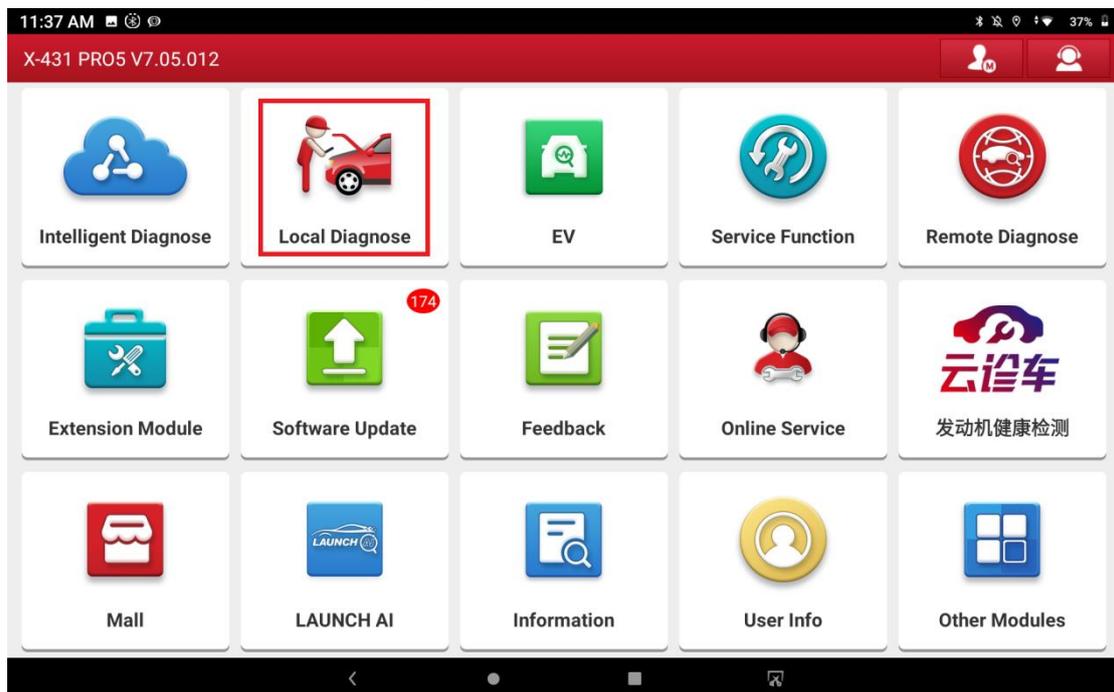
**Supported equipment:** Launch's full range of comprehensive diagnostic equipment

**Current equipment:** PAD 5

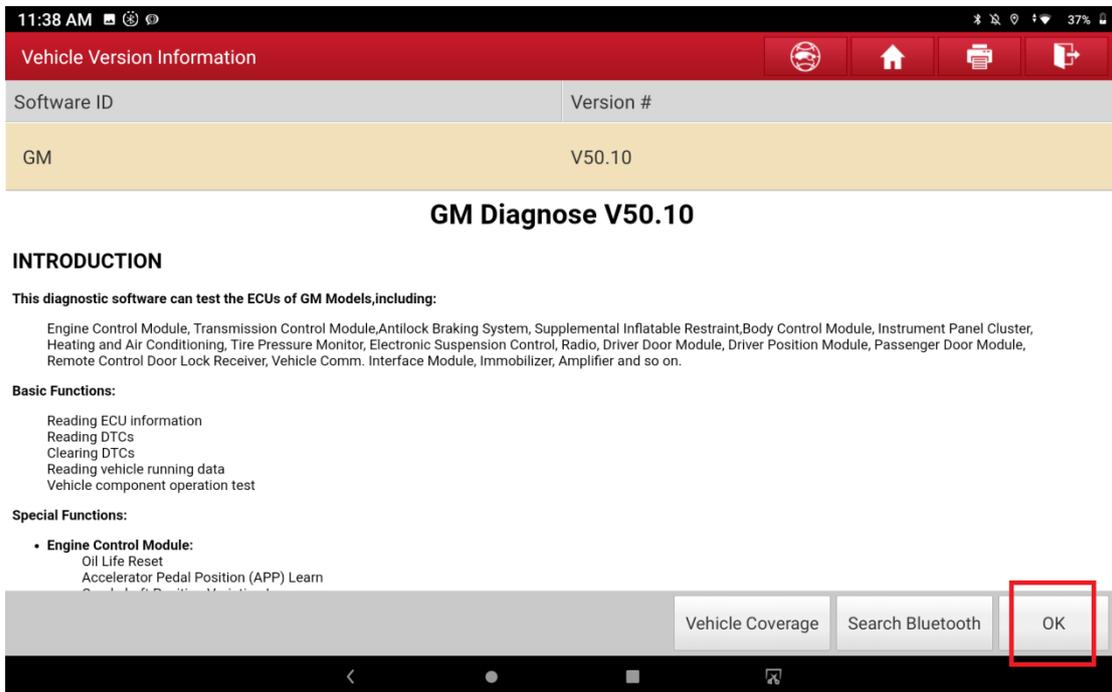
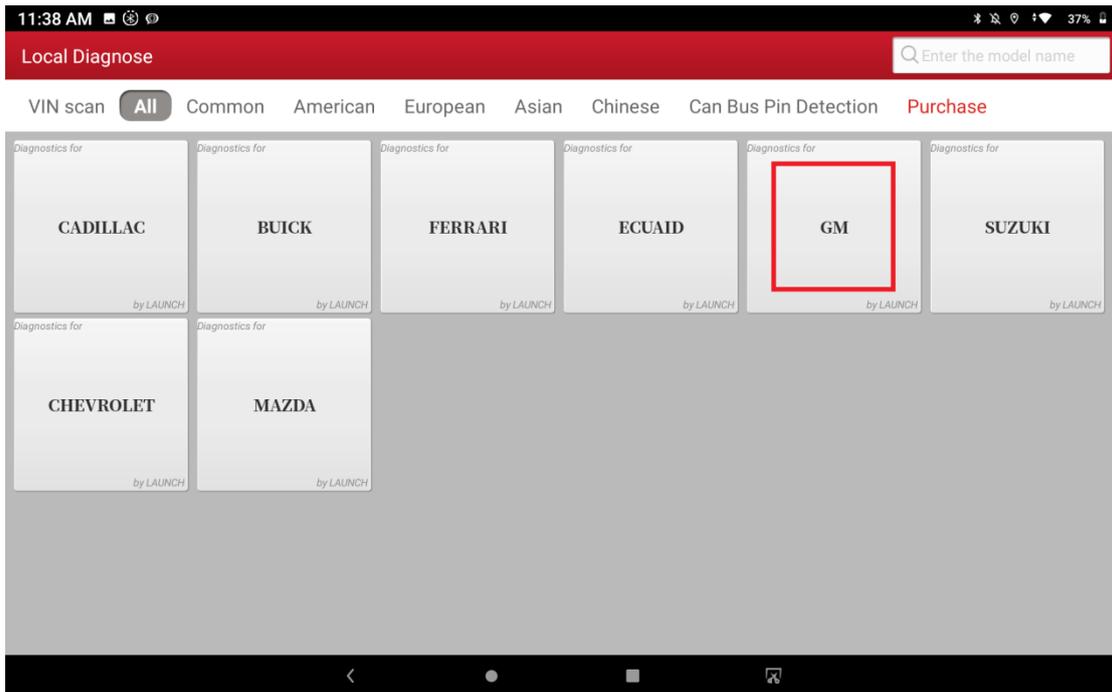
**Function description:** This function needs to be executed after the rear differential and related components are repaired or replaced.

**Tested model:** 2021 GM Chevrolet Suburban,  
VIN: 1GNSKDKD9MR\*\*\*\*\*

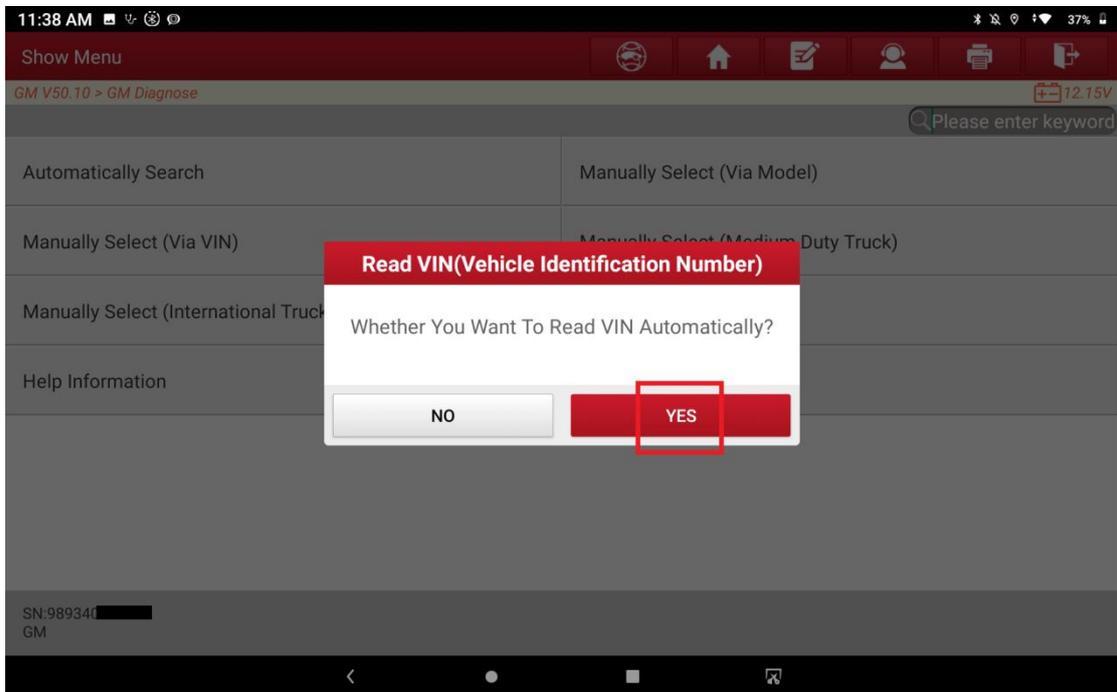
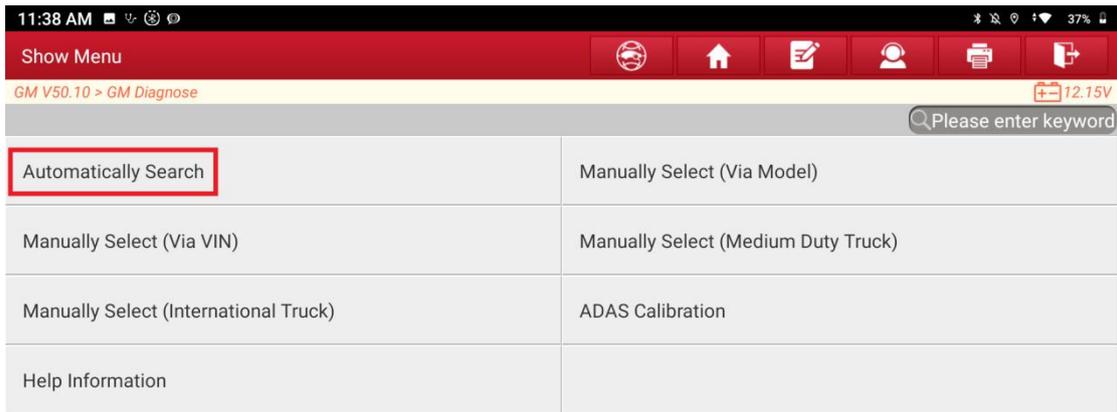
1. It is necessary to stop the vehicle before performing this function. On a PAD 5, choose [Local Diagnose].



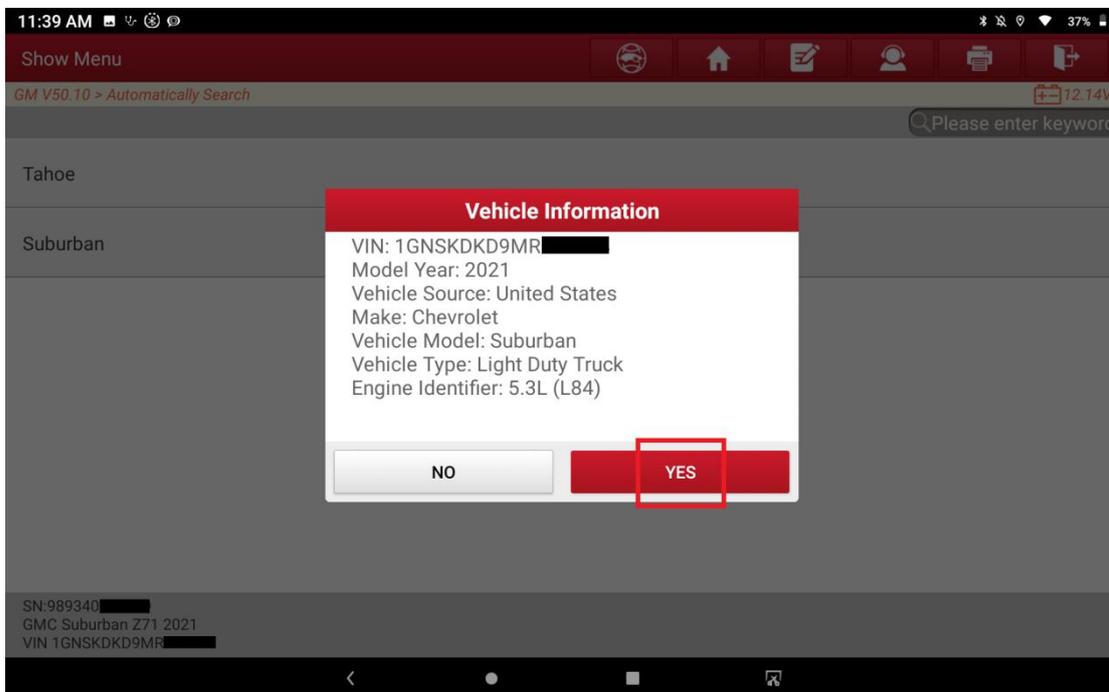
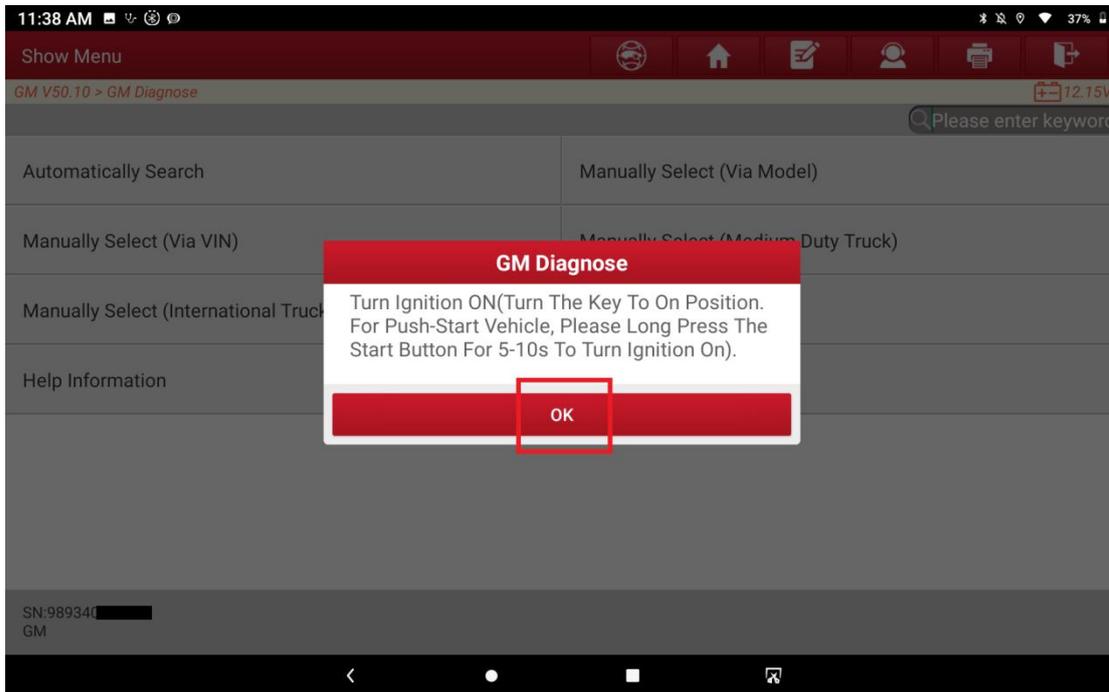
2. Choose [GM] to test.



3. Choose [Automatically Search] to identify car models automatically.



- 4. Operate according to the prompt “Turn Ignition ON (Turn The Key To On Position. For Push-Start Vehicle, Please Long Press The Start Button For 5-10s To Turn Ignition On)”.

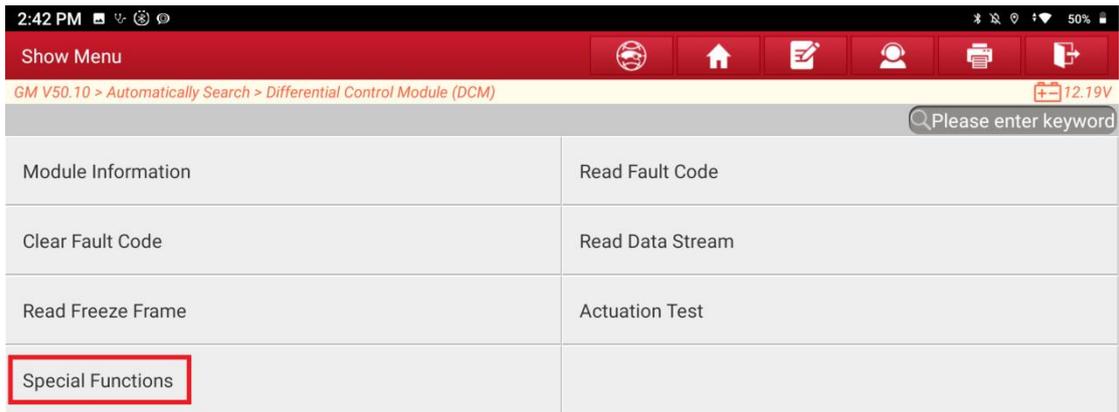


5. Click [DCM] to access the system.

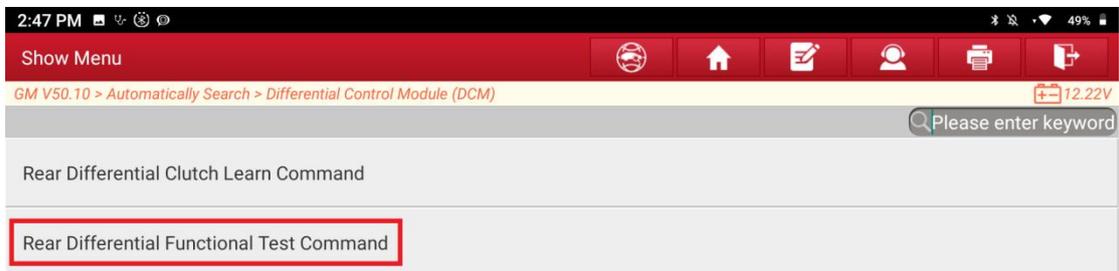
The screenshot shows the 'System and Function' interface for a GM V50.10 vehicle. The top status bar displays the time as 2:42 PM and battery level at 50%. The main area features a 'System Topology' diagram with a legend: Normal (green), Abnormal (red), Scanned (blue), Not Scanned (grey), and Not Configured (white). The diagram shows various modules connected to CAN bus lines (CAN(L14), CANFD(L14), CAN(H14)). The 'DCM' (Differential Control Module) is highlighted with a red box. Other modules include ECM, TCCM, BSCM, SCM, BCM, SDGM, RCM, TCM, PSCM, ALCM, LCM, GSCM, FSBRM\_L, FSBRM\_R, RC, IPM, VPM, RADIO, UHF, HACAC, IPCCM, HAACUICF, DMSCM, TLCDM, AA, TELCDM, DSAMM, RBCM, SODCM\_R, PACM, SCLCM, SRRS\_LF, SRRS\_LR, SODCM\_L, WACM, FCW, FRRS\_LR, SRRS\_RF, and SRRS\_RR. A sidebar on the left contains navigation options: System Topology, System List, ADAS Calibration, Common Special Function, and Vehicle Configuration. At the bottom, vehicle identification numbers are shown: SN: 989340, GMC Suburban Z71 2021, and VIN 1GNSKDKD9MR. Action buttons for 'Smart Detection', 'System Scan', and 'Select Detection' are visible.

This screenshot shows the 'Differential Control Module (DCM)' details screen. The top status bar is identical to the previous screenshot. The main area is titled 'Differential Control Module (DCM)'. On the left, the 'System Topology' diagram is partially visible, with the DCM module highlighted. A large red button labeled 'ENTER' is prominently displayed in the center of the screen. At the bottom, the same vehicle identification numbers and action buttons ('Smart Detection', 'System Scan', 'Select Detection') are present.

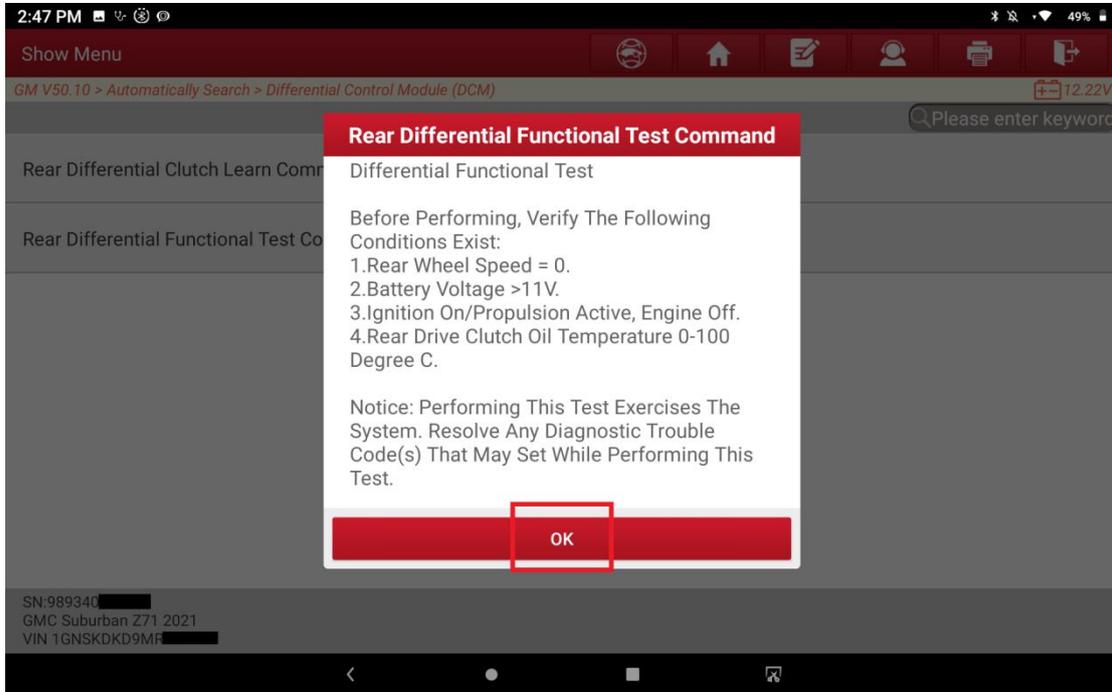
6. Click [Special Functions].



7. Click [Rear Differential Functional Test Command].



- Before execution, confirm that the following conditions are met: “1. Rear Wheel Speed = 0. 2. Battery Voltage >11V. 3. Ignition On/Propulsion Active, Engine Off. 4. Rear Drive Clutch Oil Temperature 0-100 Degree C. Notice: Performing This Test Exercises The System. Resolve Any Diagnostic Trouble Code(s) That May Set While Performing This Test.”



- Confirm that the following conditions are met: “Rear Wheel Speed = 0, Turn The Ignition On, Rear Drive Clutch Oil Temperature 0-100 Degree C, Rear Differential Clutch Temperature 0-130 Degree C, Rear Axle Motor Temperature 0-100 Degree.”



2:51 PM

Condition Check Information

GM V50.10 > Automatically Search > Differential Control Module (DCM) 12.21V

DataStream Name	Value	Condition
Left Rear Wheel Speed (rps)	0.00	Okay
Right Rear Wheel Speed (rps)	0.00	Okay
Power Mode	Run	Okay
Rear Drive Clutch Oil Temperature (degree C)	30	Okay
Rear Differential Clutch Temperature (degree C)	30	Okay
Rear Axle Motor Temperature (degree C)	50	Okay

SN:989340  
GMC Suburban Z71 2021  
VIN 1GNSKDKD9M

2:52 PM

Condition Check Information

GM V50.10 > Automatically Search > Differential Control Module (DCM) 12.20V

DataStream Name	Value	Condition
Left Rear Wheel Speed (rps)	0.00	Okay
Right Rear Wheel Speed (rps)	0.00	Okay
Power Mode		Okay
Rear Drive Clutch Oil Temperature (degree C)		Okay
Rear Differential Clutch Temperature (degree C)		Okay
Rear Axle Motor Temperature (degree C)		Okay

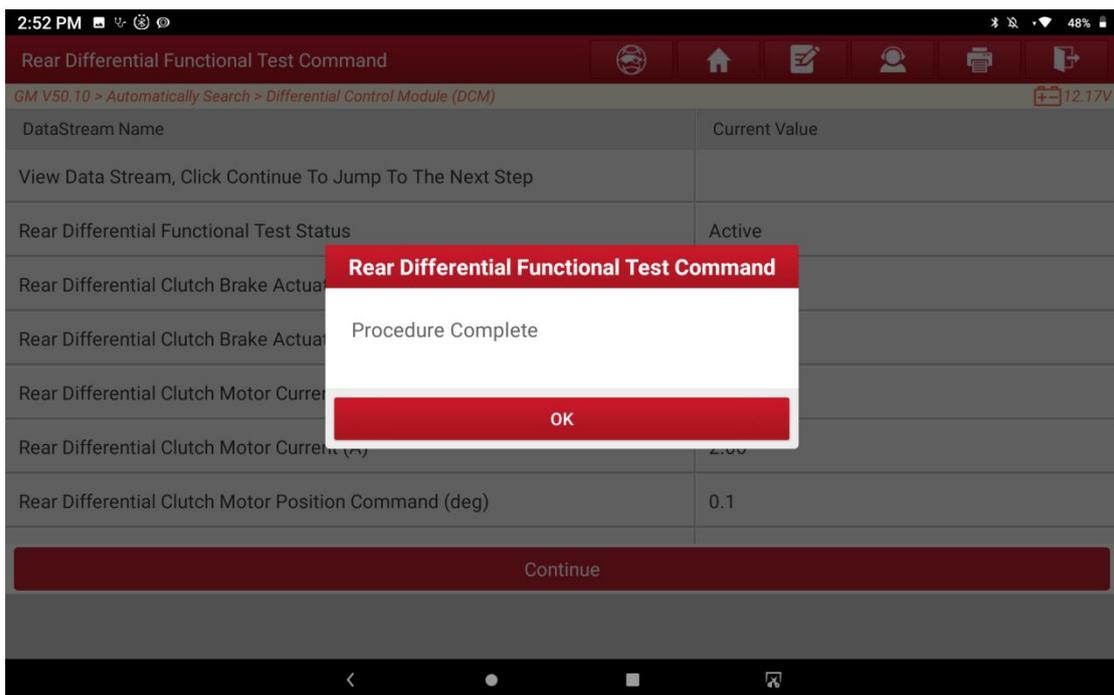
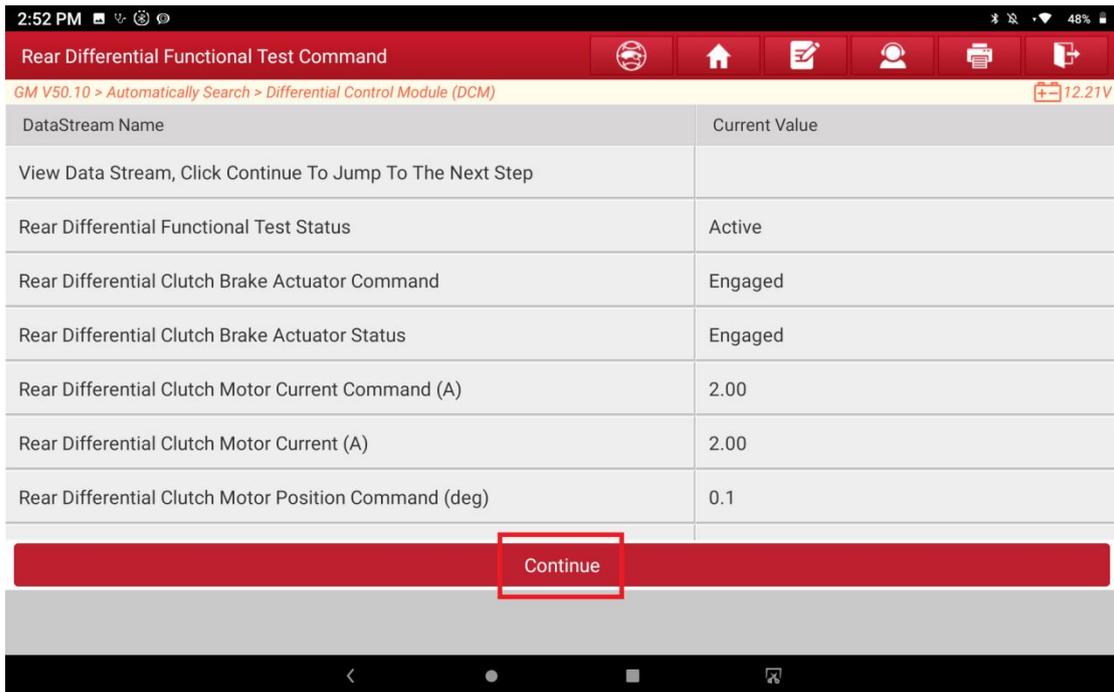
**Notes**

Processing, Please Wait... 50 s

**END SESSION**

SN:989340  
GMC Suburban Z71 2021  
VIN 1GNSKDKD9M

10. Click "Continue".



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