

## GM GMC Sierra Crankshaft Position Variation Learning Method

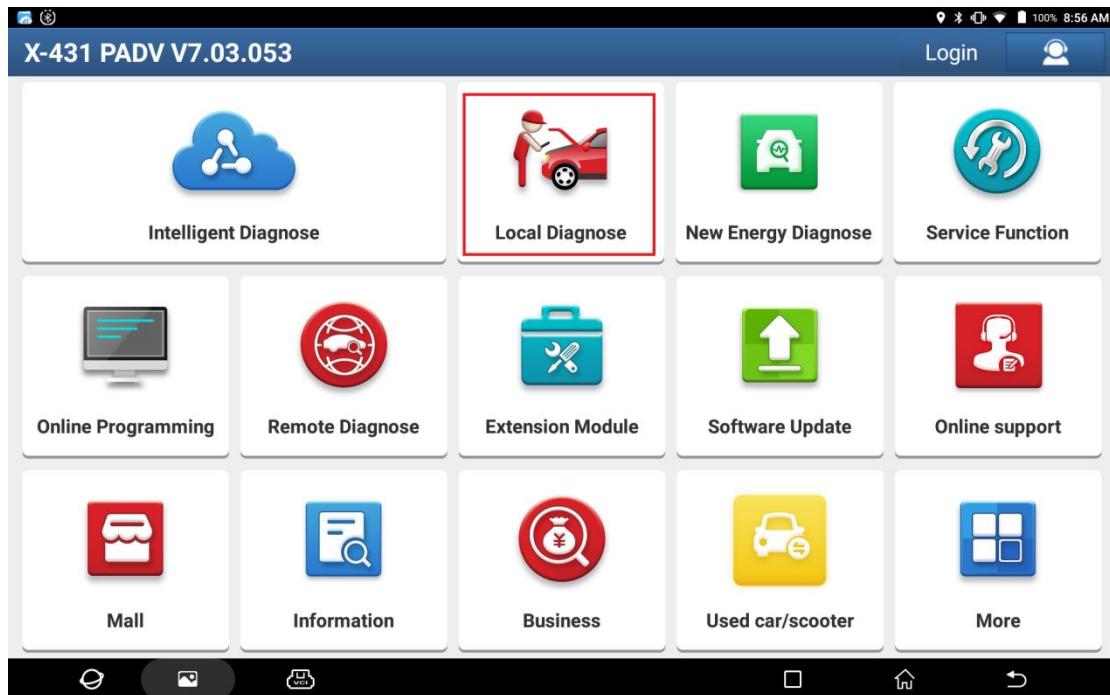
**Supported equipment:** Launch's full range of comprehensive diagnostic equipment

**Current equipment:** PAD V

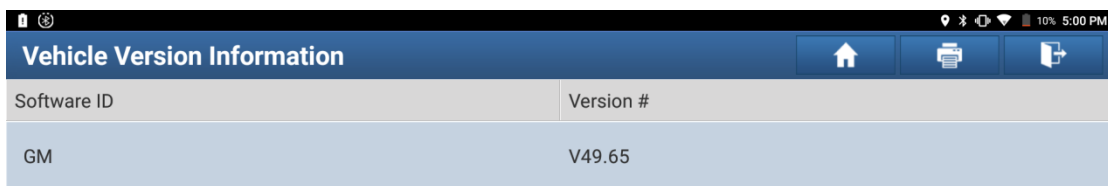
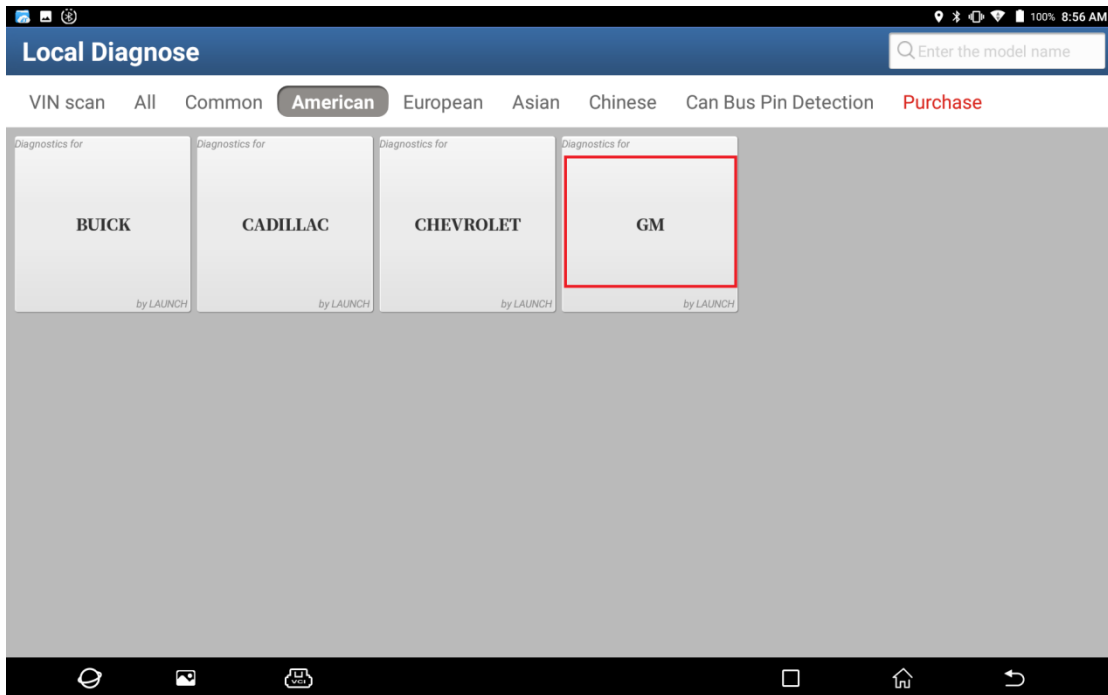
**Function description:** When replacing the engine control unit or crankshaft position sensor, it is necessary to perform the crankshaft position variation learning function.

Tested model: 2020 GMC Sierra VIN: 3GTU2NEJ1JG2\*\*\*\*\*

1. Use PAD V to choose "Local Diagnose".



2. Choose "GM" to test.



### GM Diagnose V49.65

#### INTRODUCTION

This diagnostic software can test the ECUs of GM Models, including:

Engine Control Module, Transmission Control Module, Antilock Braking System, Supplemental Inflatable Restraint, Body Control Module, Instrument Panel Cluster, Heating and Air Conditioning, Tire Pressure Monitor, Electronic Suspension Control, Radio, Driver Door Module, Driver Position Module, Passenger Door Module, Remote Control Door Lock Receiver, Vehicle Comm. Interface Module, Immobilizer, Amplifier and so on.

#### Basic Functions:

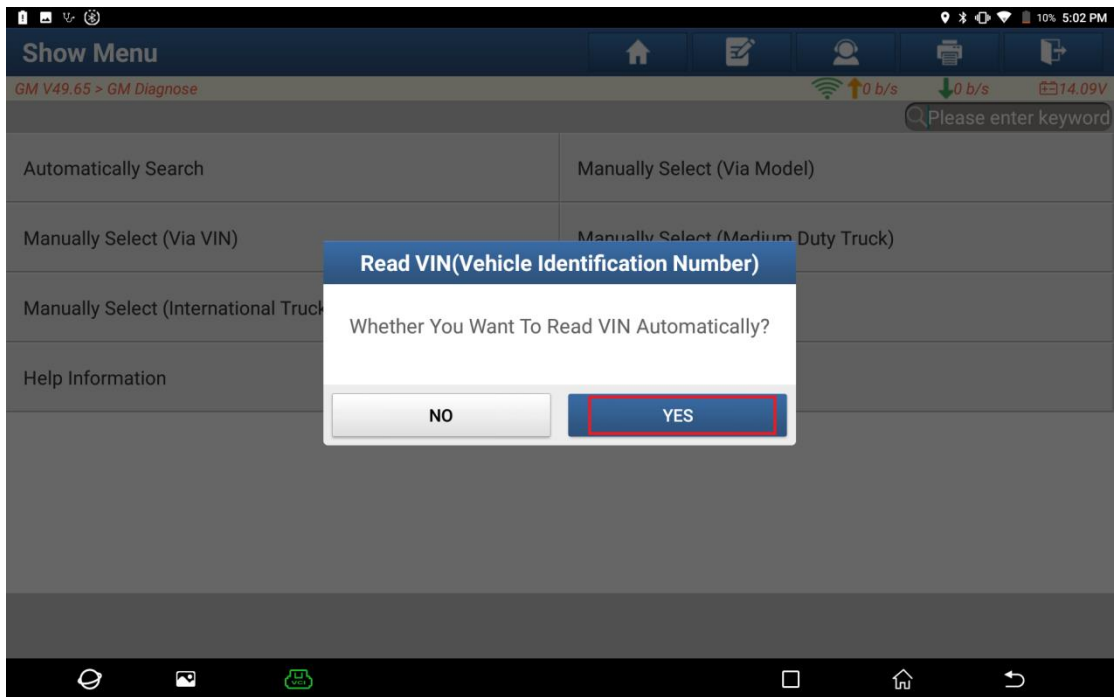
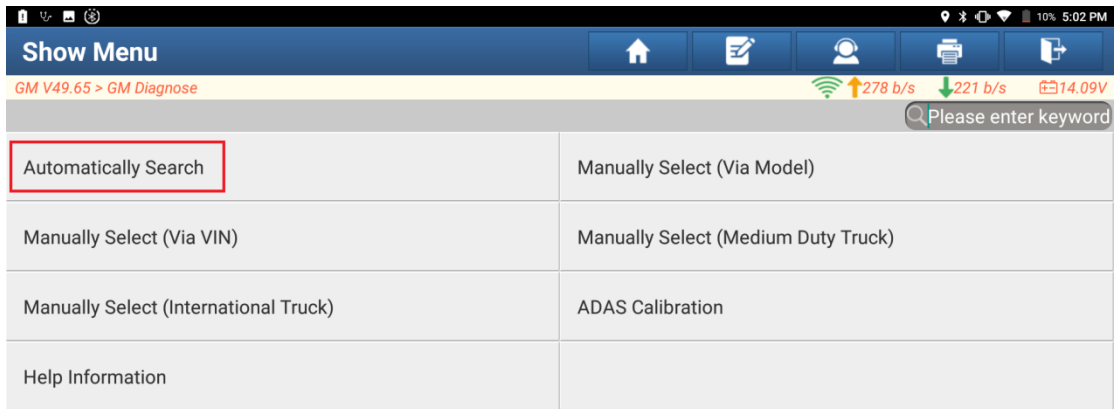
- Reading ECU information
- Reading DTCs
- Clearing DTCs
- Reading vehicle running data
- Vehicle component operation test

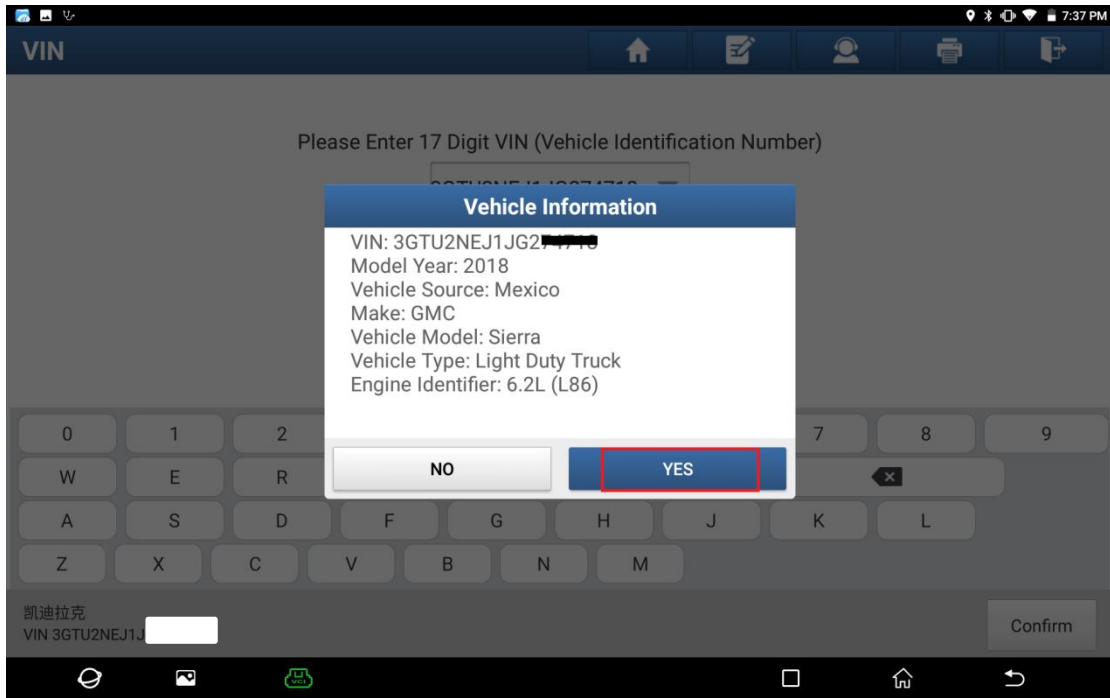
#### Special Functions:

- **Engine Control Module:**
  - Oil Life Reset
  - Accelerator Pedal Position (APP) Learn
  - Gas Pedal Position Variation Learn

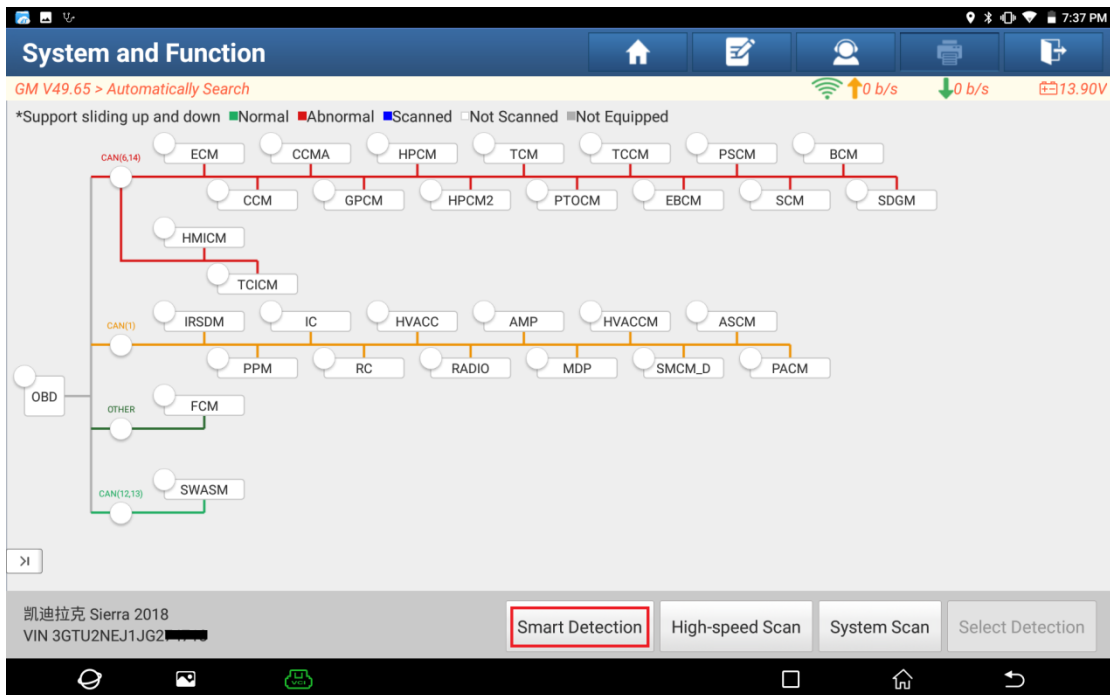


3. Choose “Automatically Search” to identify car models automatically.

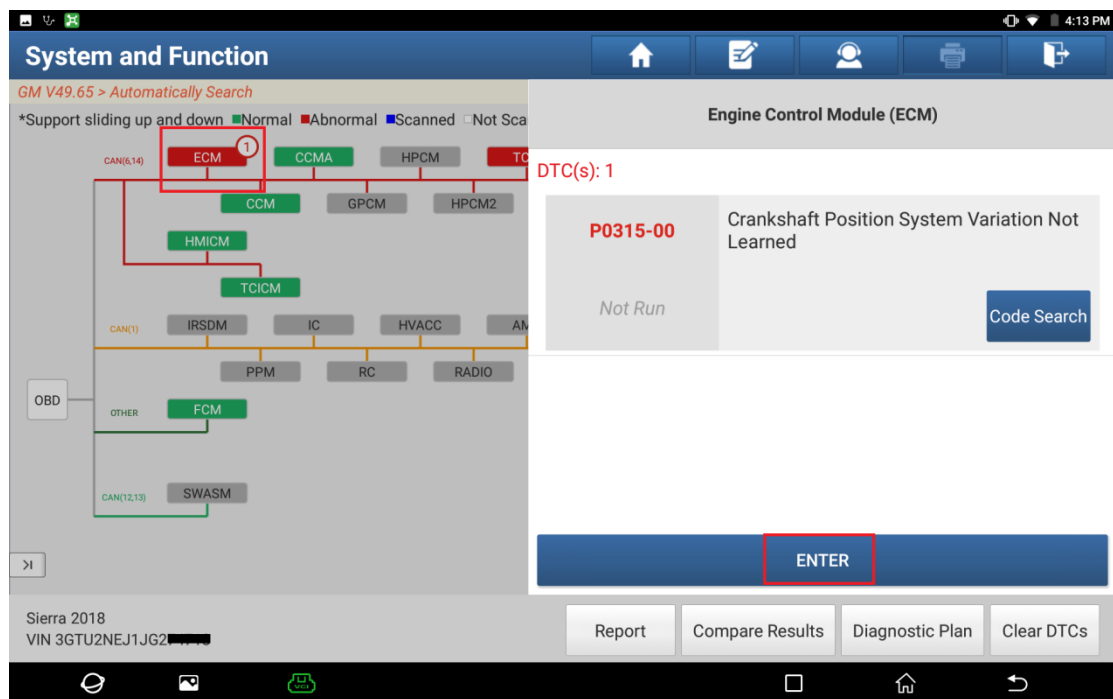
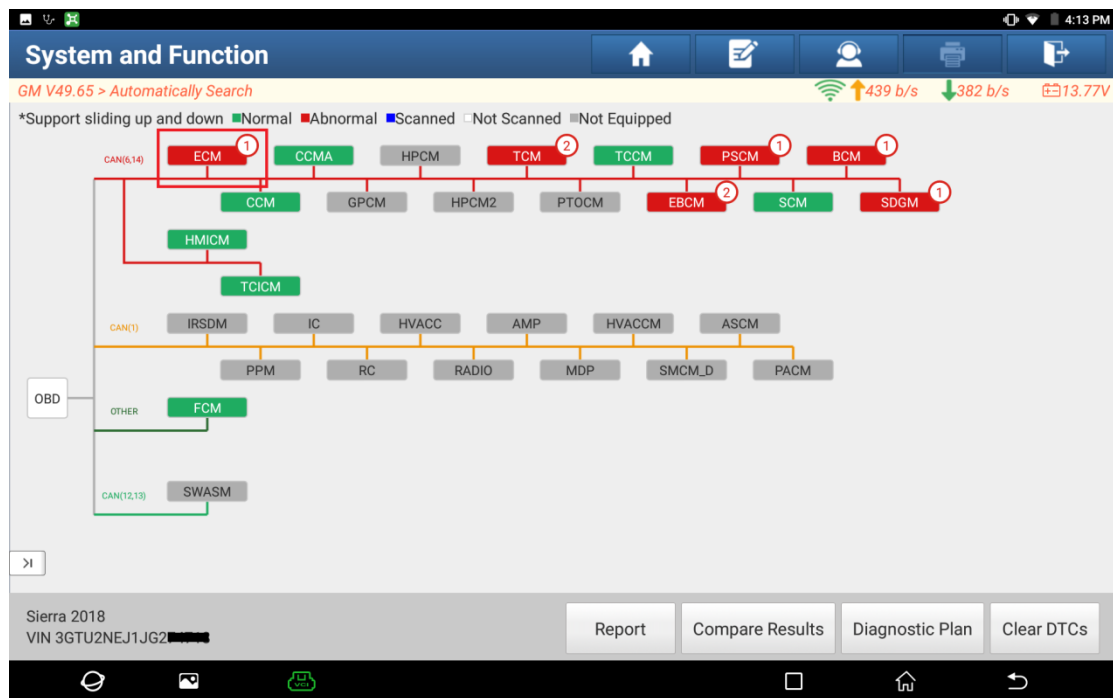




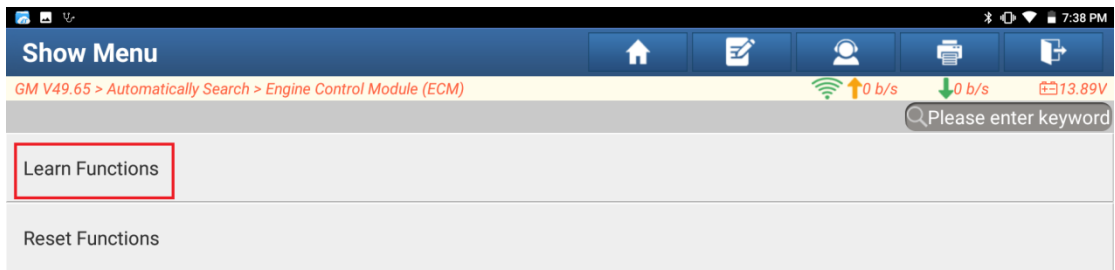
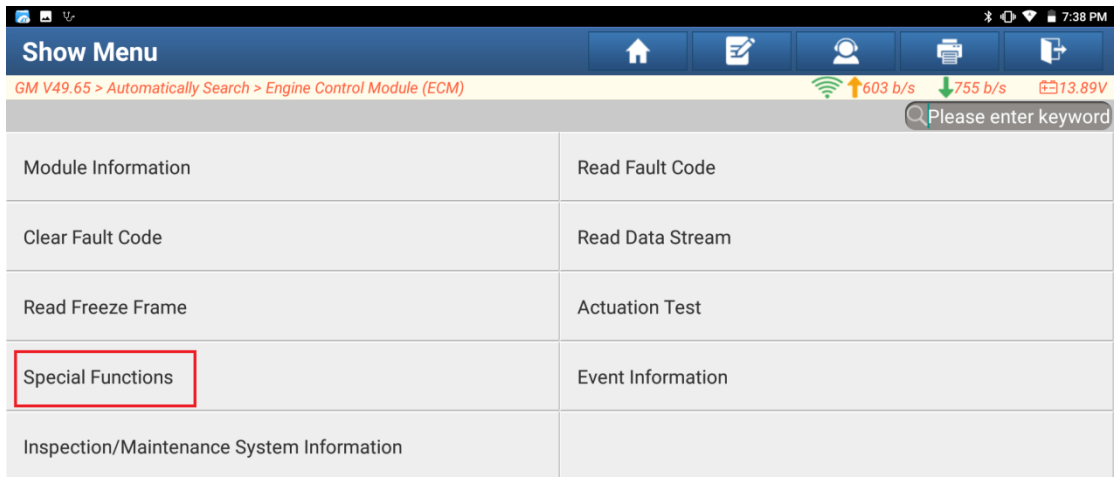
4. Click "Smart Detection" to scan the entire vehicle systems.



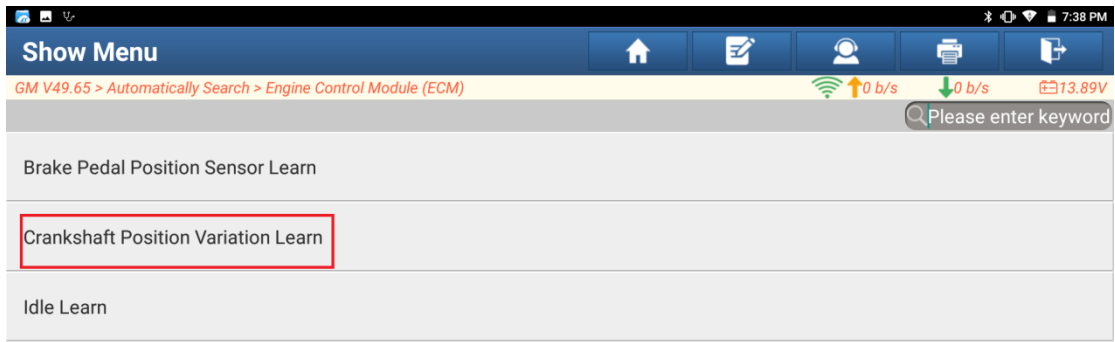
5. Click “ECM (Engine Control Module)” to access the system.



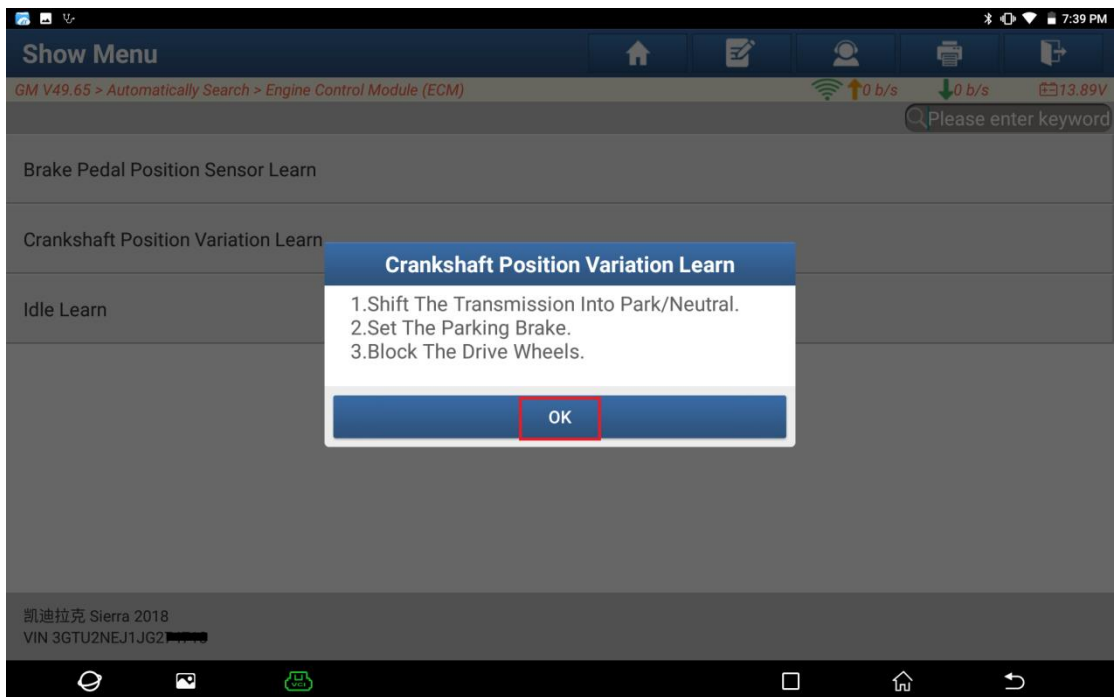
6. Click “Special Functions” and then click “Learn Functions”.

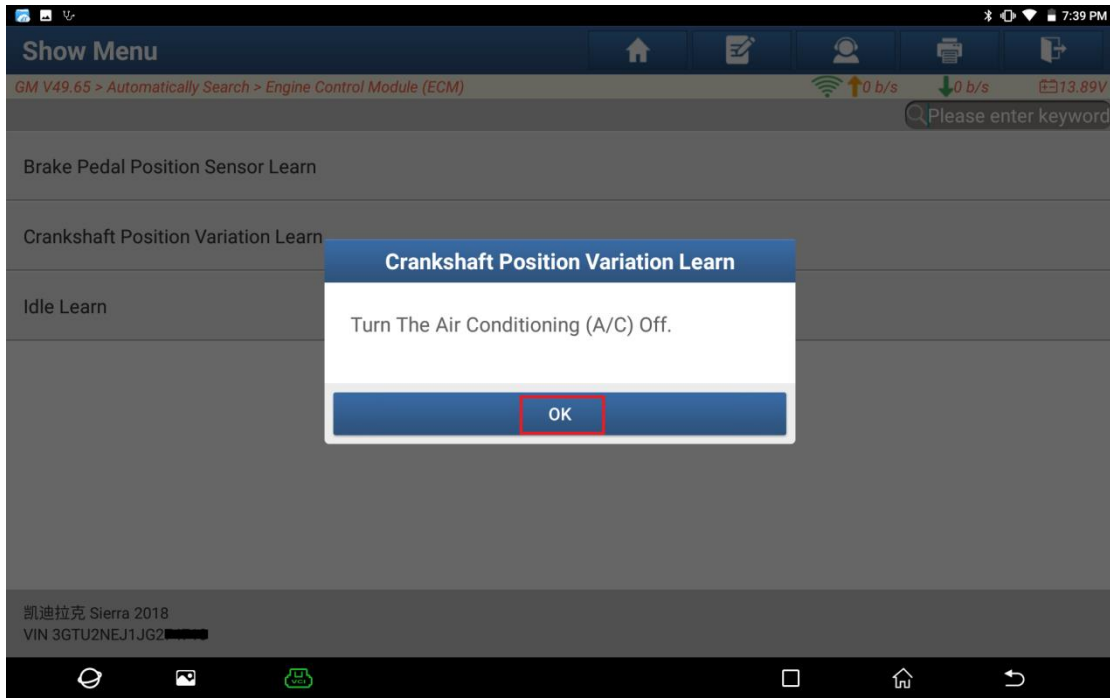


7. Click “Crankshaft Position Variation Learn”.

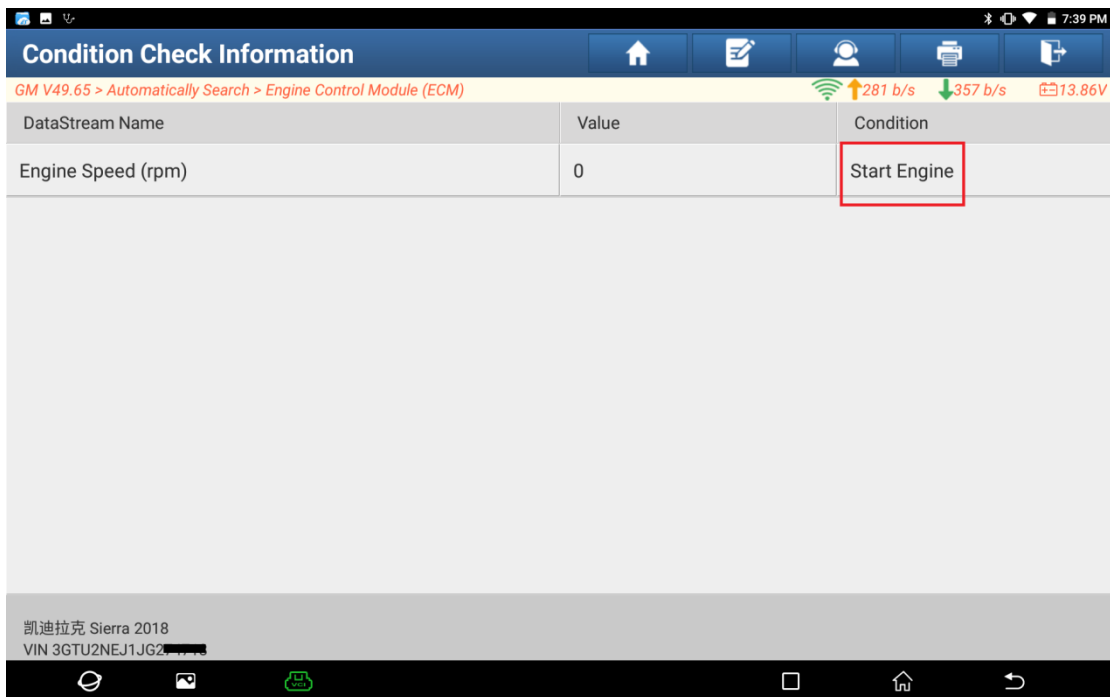


8. Click “OK” to proceed to the next step.





9. Start the engine and proceed to the next step if the conditions are met.





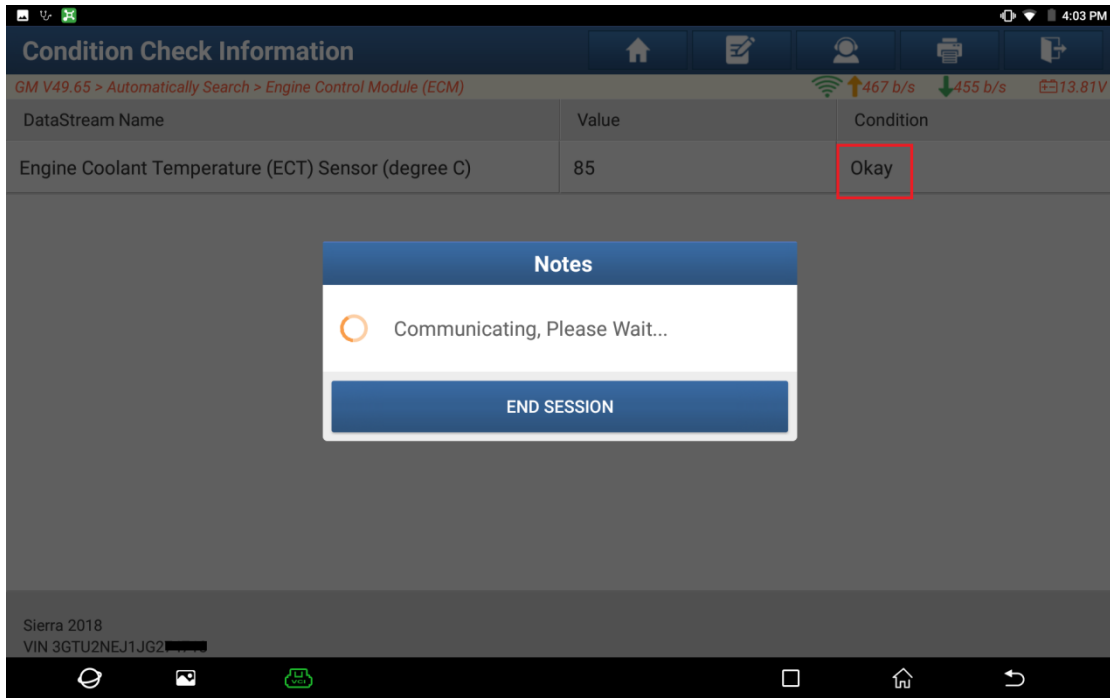
The screenshot shows the 'Condition Check Information' app interface. At the top, there is a blue header with the title and navigation icons. Below the header, a yellow status bar displays 'GM V49.65 > Automatically Search > Engine Control Module (ECM)' along with network and battery status. The main content is a table with three columns: 'DataStream Name', 'Value', and 'Condition'. The first row shows 'Engine Speed (rpm)' with a value of 832 and a condition of 'Okay', which is highlighted with a red box. At the bottom, a grey bar shows 'Sierra 2018' and 'VIN 3GTU2NEJ1JG2'. The Android navigation bar is visible at the very bottom.

DataStream Name	Value	Condition
Engine Speed (rpm)	832	Okay

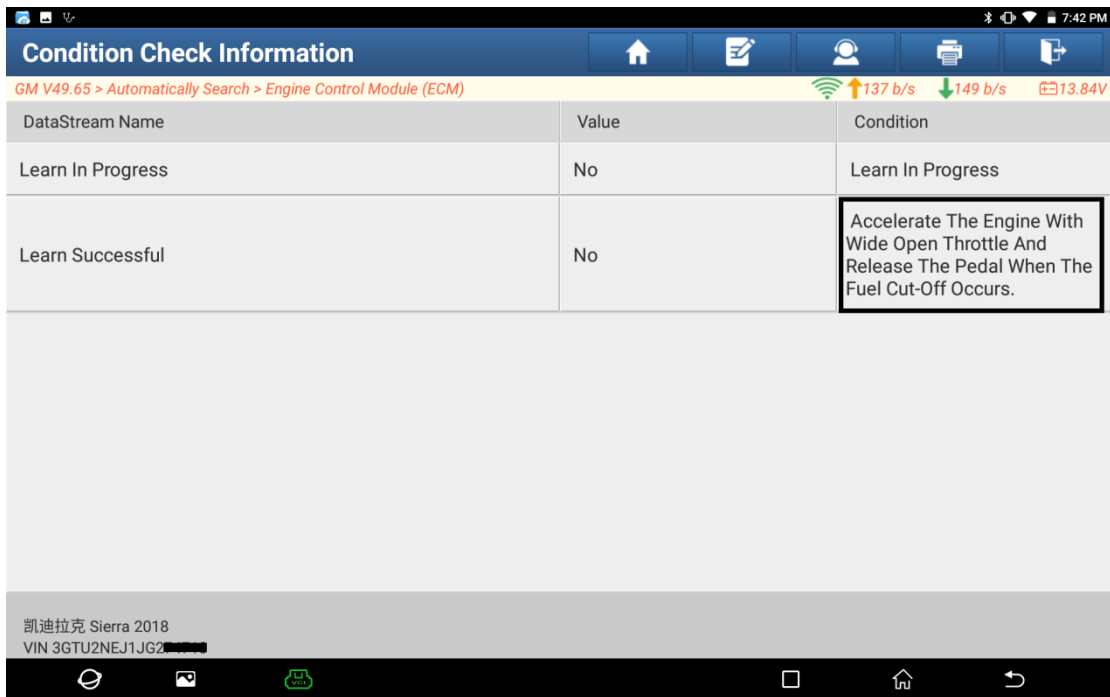
10. Wait until the engine coolant temperature meets the conditions to proceed to the next step.

The screenshot shows the 'Condition Check Information' app interface. At the top, there is a blue header with the title and navigation icons. Below the header, a yellow status bar displays 'GM V49.65 > Automatically Search > Engine Control Module (ECM)' along with network and battery status. The main content is a table with three columns: 'DataStream Name', 'Value', and 'Condition'. The first row shows 'Engine Coolant Temperature (ECT) Sensor (degree C)' with a value of 37 and a condition of 'Low Temperature', which is highlighted with a red box. At the bottom, a grey bar shows 'Sierra 2018' and 'VIN 3GTU2NEJ1JG2'. The Android navigation bar is visible at the very bottom.

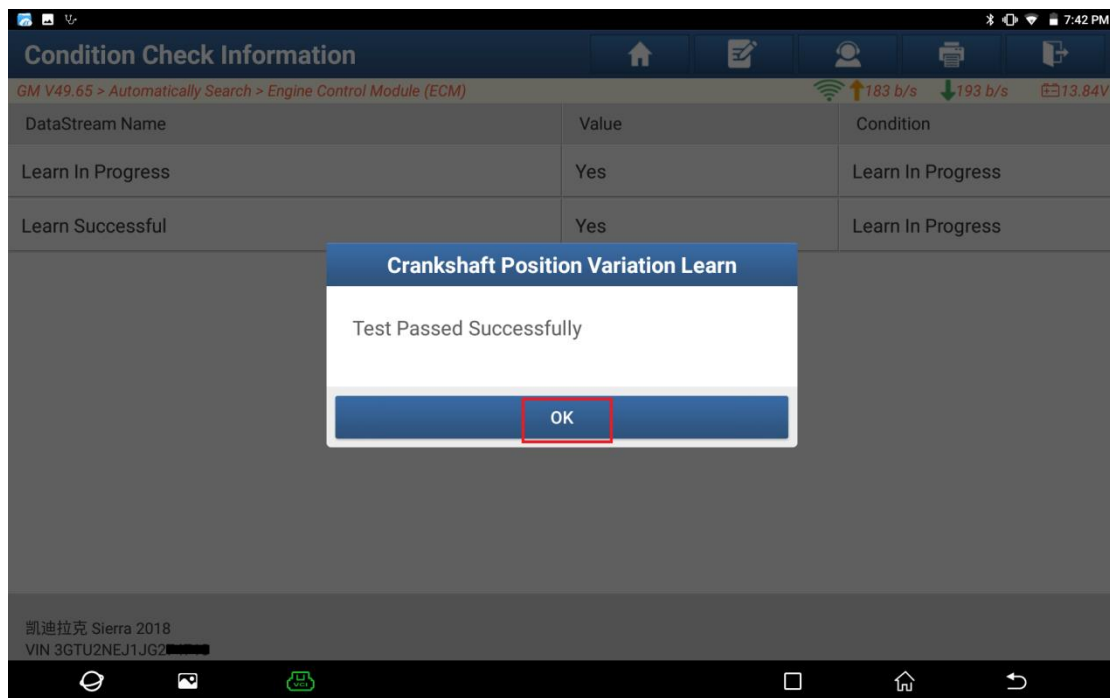
DataStream Name	Value	Condition
Engine Coolant Temperature (ECT) Sensor (degree C)	37	Low Temperature



11. Depress the accelerator fully to meet the conditions.



12. Click “OK” to exit the function.



### Statement:

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