

Transmission Control Unit: Oil Level Adjustment

Tested Model: BMW 525Li

Function Description:

This function sets the standard oil level accurately by carrying out a quantitative overflow procedure under specified conditions regarding oil temperature, engine idling and gear-shifting.

It is typically performed in the following situations:

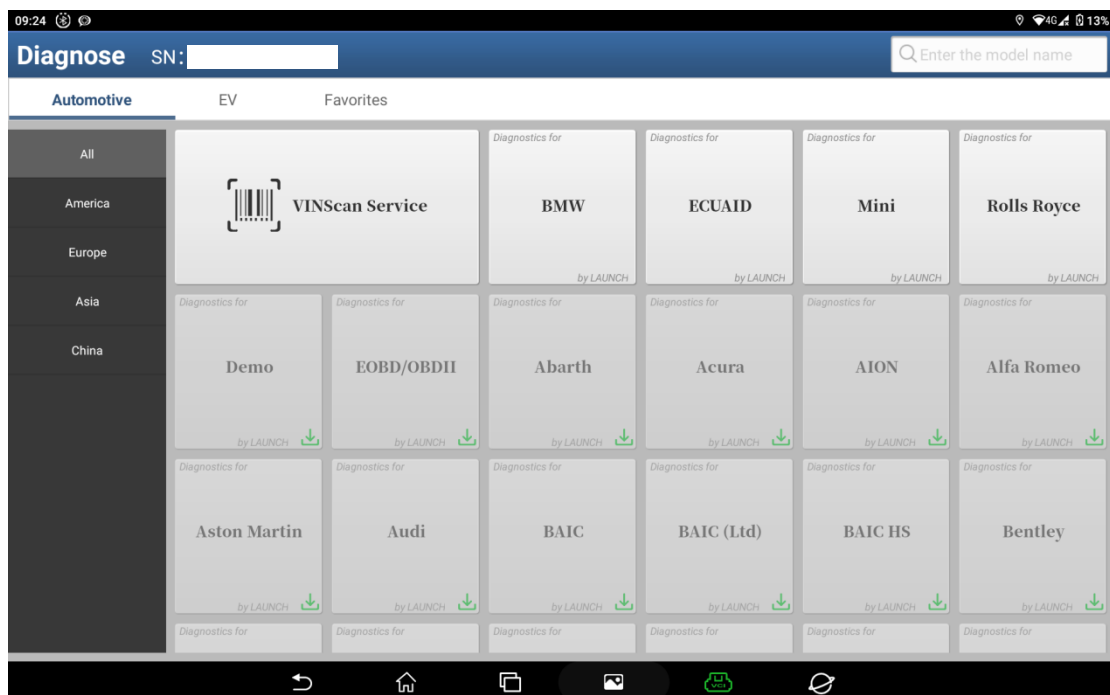
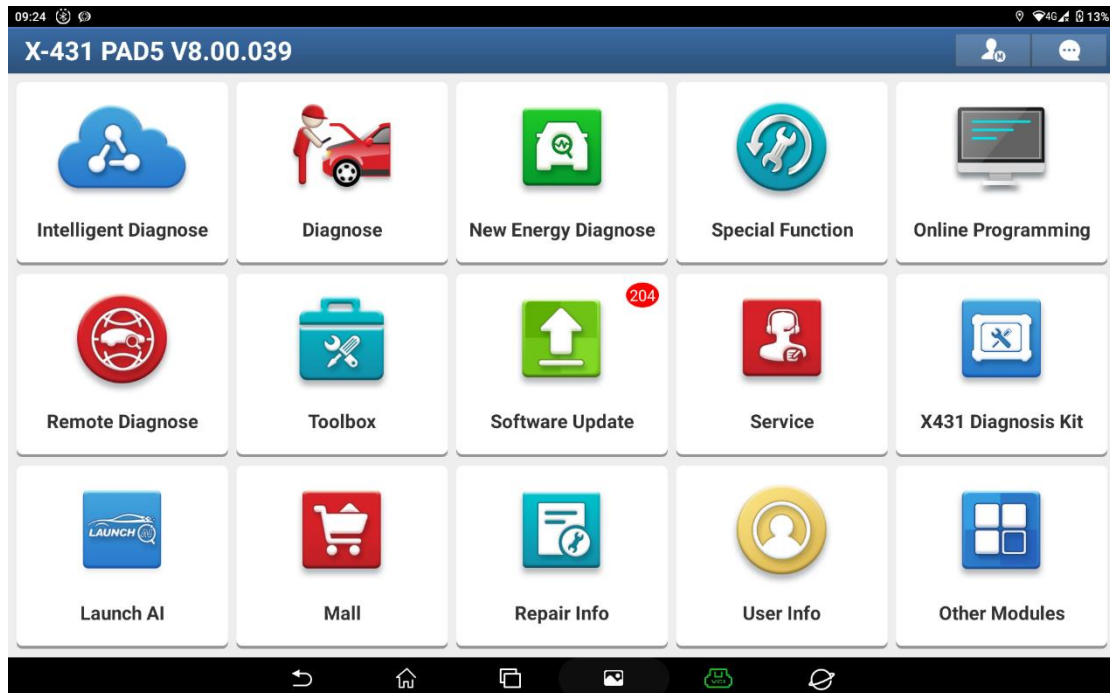
1. Relevant DTCs are reported by the transmission control unit.
2. Transmission oil, transmission oil filter, or oil sump is replaced.
3. The radiator is replaced.
4. The transmission control unit is replaced, programmed, or coded.
5. Abnormal issues such as shift shock, slipping, or shuddering occur after transmission repairs.

Execution Conditions:

- Vehicle parked on a level surface
- Sufficient battery voltage

Procedure:

1. On a PAD 5, choose [Diagnose], and then choose [BMW] for testing.



Vehicle Version Information		🏠	🖨️	📄
Software ID	Version #			
BMW	V51.70			

BMW Diagnostic Software V51.70

Software Instruction

Summary For The Covered ECU:

Engine, Automatic Transmission, Anti-lock Brake, Airbag, A/C, Dashboard, Electronic Throttle Rearview Mirror Rear Seat Memory, Anti-theft, Cruise, Center Control Module, Parking Sensor, and Light systems, etc.

Summary For The Covered Basic Function:

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

Summary For The Covered Special Function:

- Recoding after replacing ECU(RECODING)
- Change ECU setting information
- Delete transportation mode
- Functions of key test
- Display status of all keys
- Disable/enable key

Vehicle Coverage

OK

2. Choose [Automatically Search].

Show Menu		🏠	📝	💬	🖨️	📄
BMW V51.70 > Menu		🔋 12.27V				
		🔍 Please enter keyword				
Automatically Search	Manually Select					
Coding/Program	Special Function					
ADAS Calibration	Immobilizer					

SN:
BMW

3. Confirm the vehicle information and click "NEXT".

11:26 100% 4G

Information     

BMW V51.70 > Automatically Search 12.25V

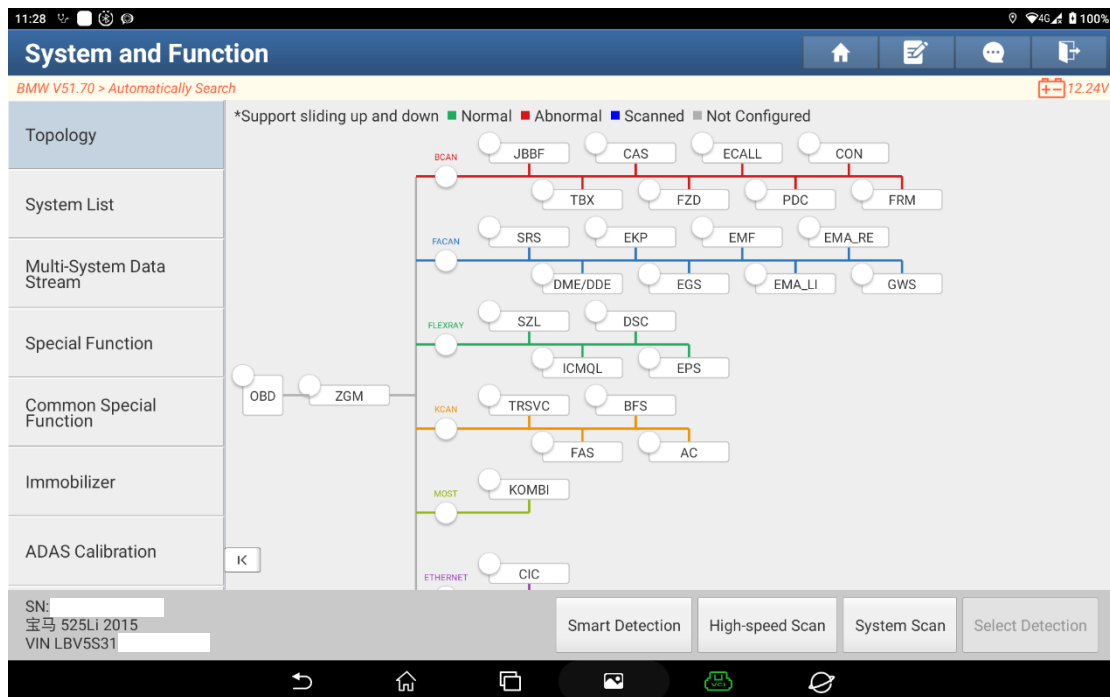
Vehicle Information	Configuration
Vehicle Identification Number:	LBV5S3101
Mileage (Km [Mls]):	208039(129269)
Development Code:	F18
Series:	5'
Sales Designation:	525Li
Gearbox:	AUT
Steering:	left-hand drive
Construction Date:	2015 07

NEXT

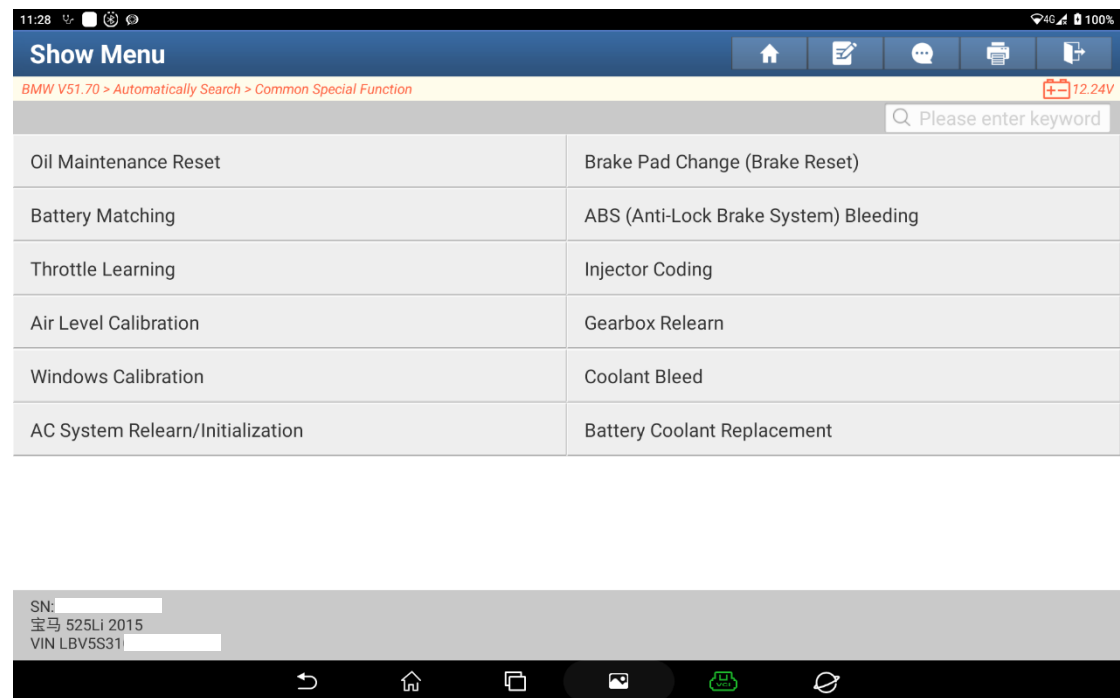
SN:
 宝马 525Li 2015
 VIN LBV5S31

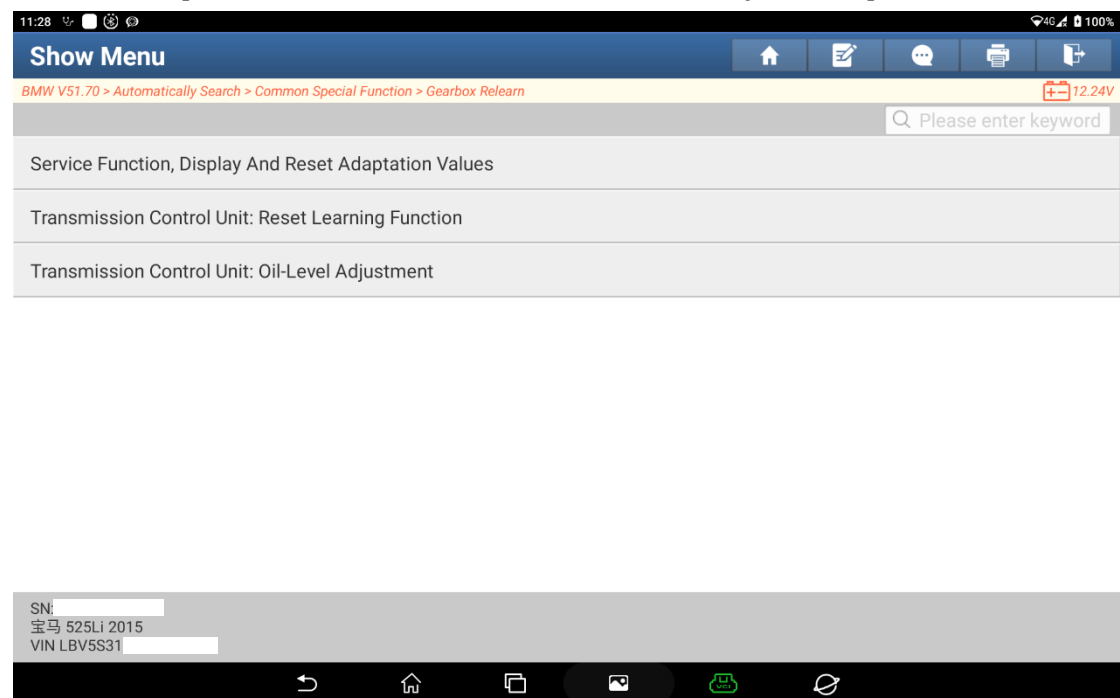
4. Choose [Common Special Function].



5. Choose [Gearbox Relearn].



6. Choose [Transmission Control Unit: Oil-Level Adjustment].



7. Carefully read the required preconditions, and then click "Continue".

The screenshot shows the 'Special Function' screen for a BMW V51.70. The breadcrumb trail is: BMW V51.70 > Automatically Search > Common Special Function > Gearbox Relearn > Transmission Control Unit: Oil-Level Adjustment. The battery voltage is 12.24V. The 'System Info' section lists the following preconditions: 'The Oil Level In The Automatic Transmission Can Only Be Adjusted When The Following Preconditions Are Met: Idle Speed Between 550 1/Min And 900 1/Min; Transmission Oil Temperature Between 30 Degree C And 40 Degree C (As Start Condition); Transmission Oil Temperature Between 40 Degree C And 50 Degree C (As Final Condition); It Is Mandatory To Observe The Temperature Ranges Even With High Ambient Temperatures. For This Purpose, It May Be Necessary To Let The Vehicle Cool Down For An Extended Period Of Time (In An Extreme Case Even Over Night);'. A 'Continue' button is at the bottom. The vehicle information at the bottom shows SN: [redacted], 宝马 525Li 2015, and VIN LBV5S31I [redacted].

11:28 4G 100%

Special Function

BMW V51.70 > Automatically Search > Common Special Function > Gearbox Relearn > Transmission Control Unit: Oil-Level Adjustment 12.24V

System Info

The Oil Level In The Automatic Transmission Can Only Be Adjusted When The Following Preconditions Are Met:
Idle Speed Between 550 1/Min And 900 1/Min
Transmission Oil Temperature Between 30 Degree C And 40 Degree C (As Start Condition)
Transmission Oil Temperature Between 40 Degree C And 50 Degree C (As Final Condition)
It Is Mandatory To Observe The Temperature Ranges Even With High Ambient Temperatures. For This Purpose, It May Be Necessary To Let The Vehicle Cool Down For An Extended Period Of Time (In An Extreme Case Even Over Night).
Continue

Continue

SN: [redacted]
宝马 525Li 2015
VIN LBV5S31I [redacted]

8. Choose the reason for the oil level adjustment based on the actual situation.
For this test, choose "F1".

The screenshot shows the 'Special Function' screen for a BMW V51.70. The breadcrumb trail is: BMW V51.70 > Automatically Search > Common Special Function > Gearbox Relearn > Transmission Control Unit: Oil-Level Adjustment. The battery voltage is 12.24V. The 'System Info' section asks 'Why Does The Oil Level Need To Be Adjusted?' and lists five options: 'F1. Oil-Level Check Due To Faults In The Transmission Control', 'F2. Transmission Replacement Without Purging Of The Cooling System', 'F3. Transmission Replacement With Purging Of The Cooling System', 'F4. Refilling After Part Exchange (Oil Sump Was Removed) Or Converter Replacement', and 'F5. Radiator Exchange (Radiator, Thermostat Or Transmission Oil Cooler Lines)'. At the bottom, there are five buttons labeled F1, F2, F3, F4, and F5. The vehicle information at the bottom shows SN: [redacted], 宝马 525Li 2015, and VIN LBV5S31I [redacted].

11:29 4G 100%

Special Function

BMW V51.70 > Automatically Search > Common Special Function > Gearbox Relearn > Transmission Control Unit: Oil-Level Adjustment 12.24V

System Info

Why Does The Oil Level Need To Be Adjusted?

F1. Oil-Level Check Due To Faults In The Transmission Control

F2. Transmission Replacement Without Purging Of The Cooling System

F3. Transmission Replacement With Purging Of The Cooling System

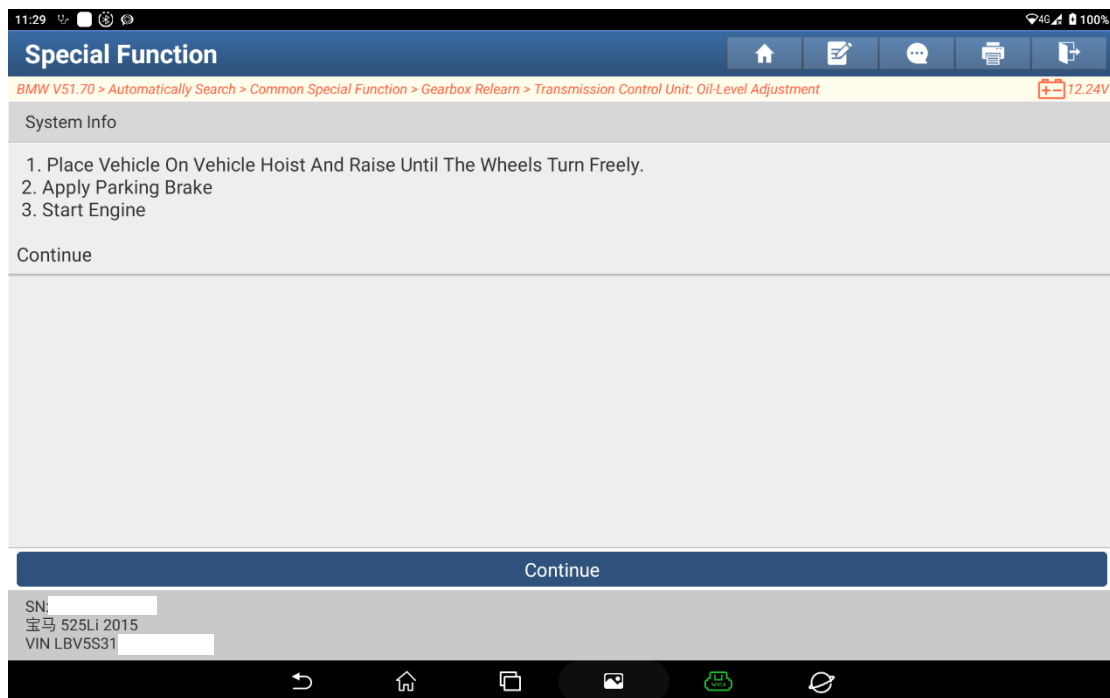
F4. Refilling After Part Exchange (Oil Sump Was Removed) Or Converter Replacement

F5. Radiator Exchange (Radiator, Thermostat Or Transmission Oil Cooler Lines)

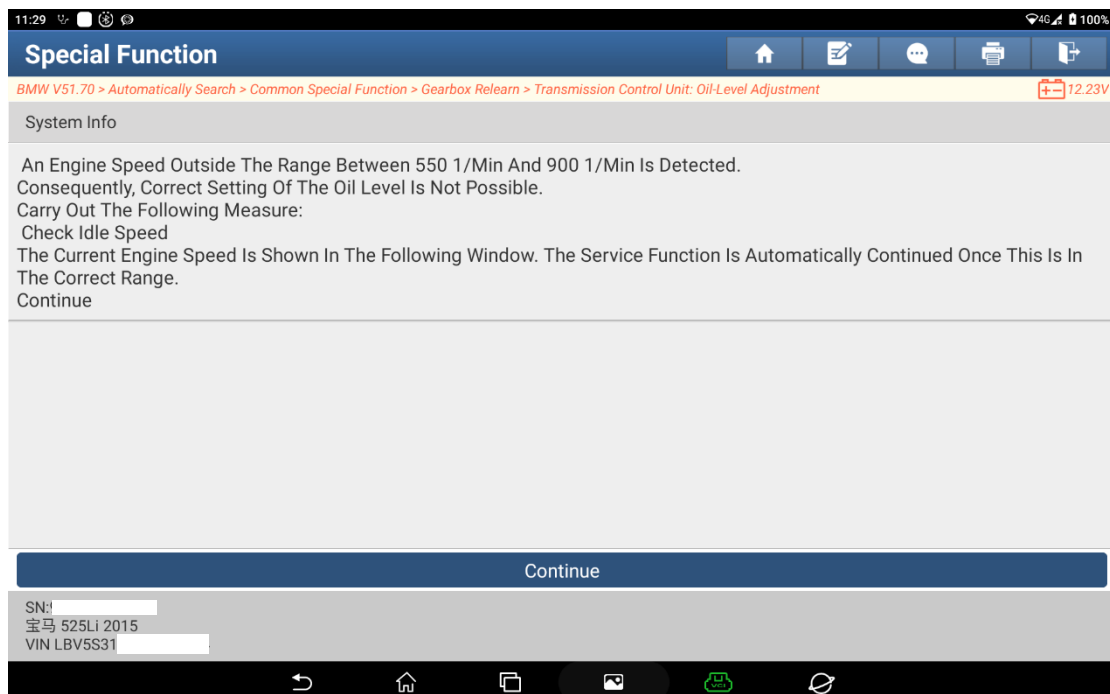
F1 F2 F3 F4 F5

SN: [redacted]
宝马 525Li 2015
VIN LBV5S31I [redacted]

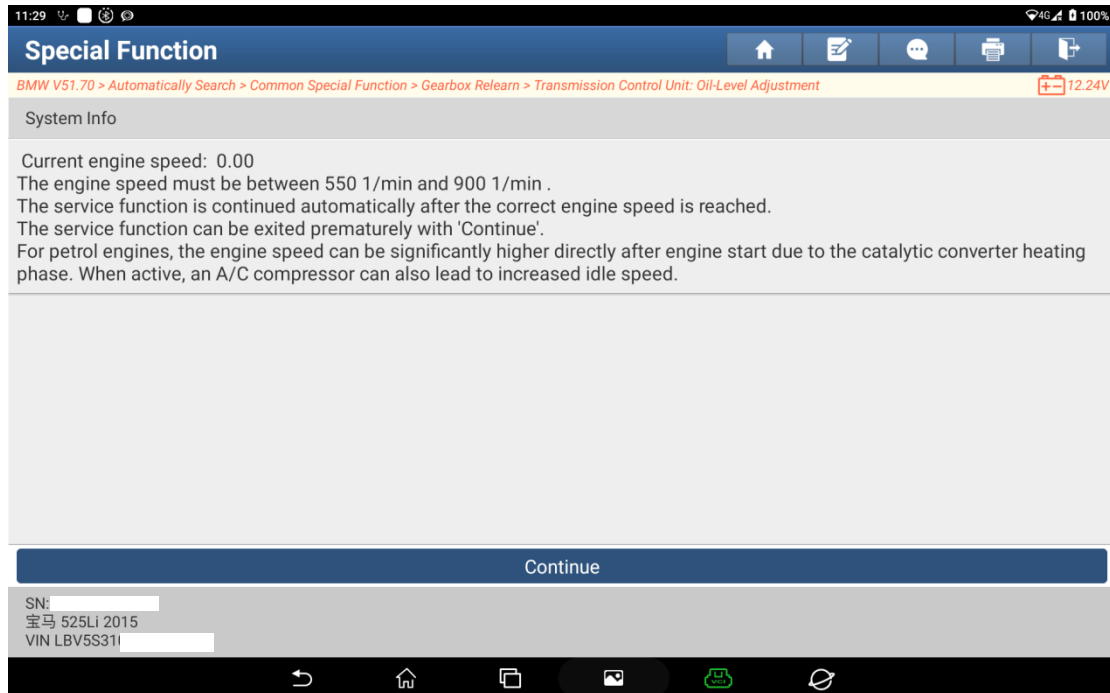
9. Follow the steps shown in the figure, and then click "Continue".



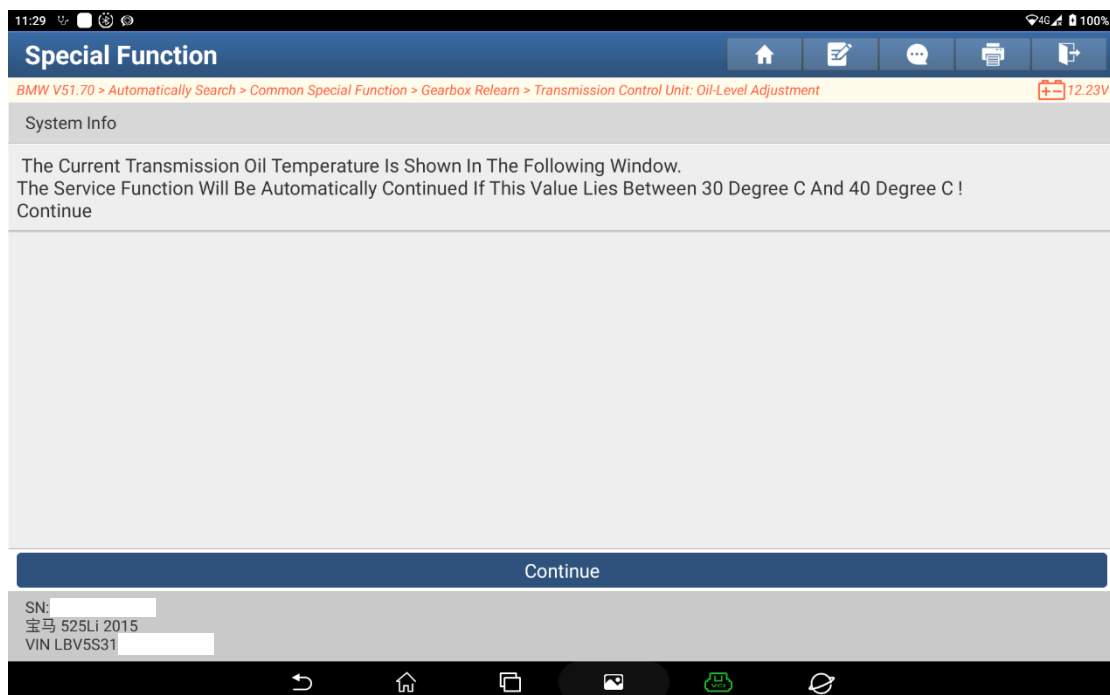
10. If the engine speed does not meet the requirements, the following interface will pop up. If requirements are met, the process proceeds automatically. Click "Continue".



11. Wait for the engine speed requirements to be met, and the process will then proceed automatically.



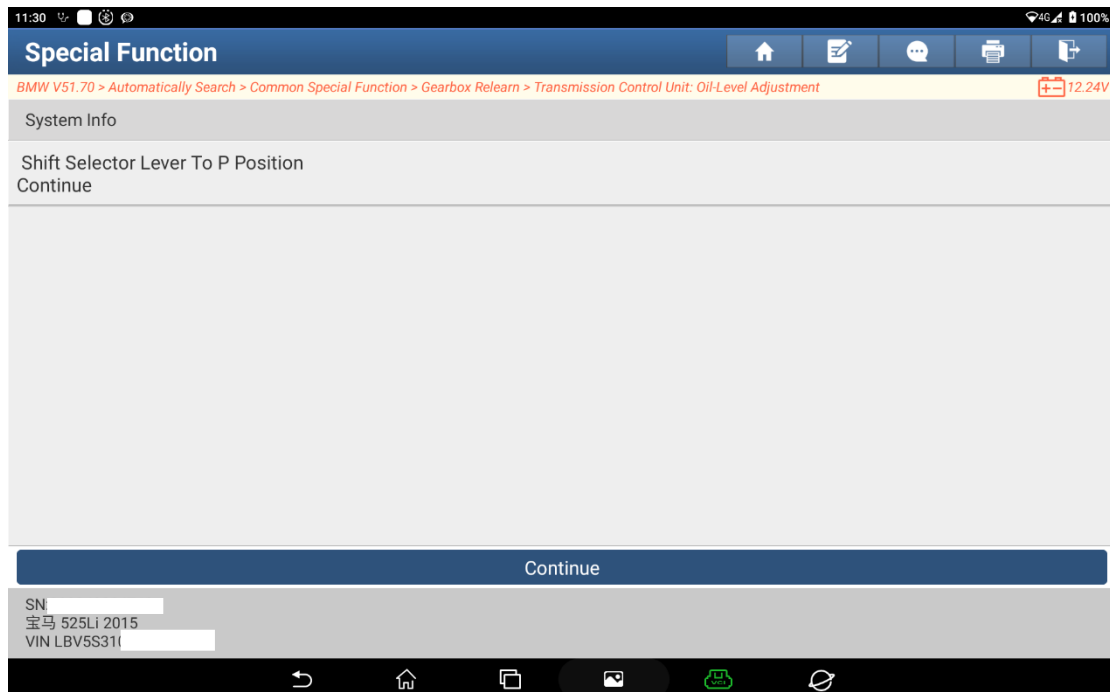
12. Click "Continue".



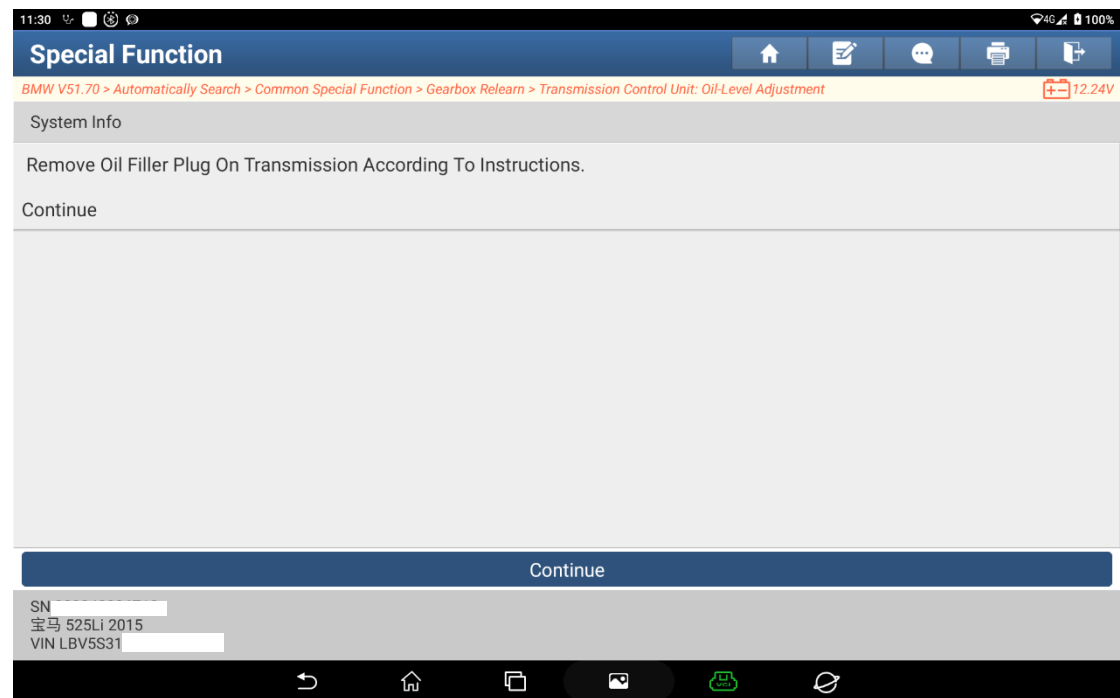
13. The function proceeds automatically when the oil temperature requirements are met.



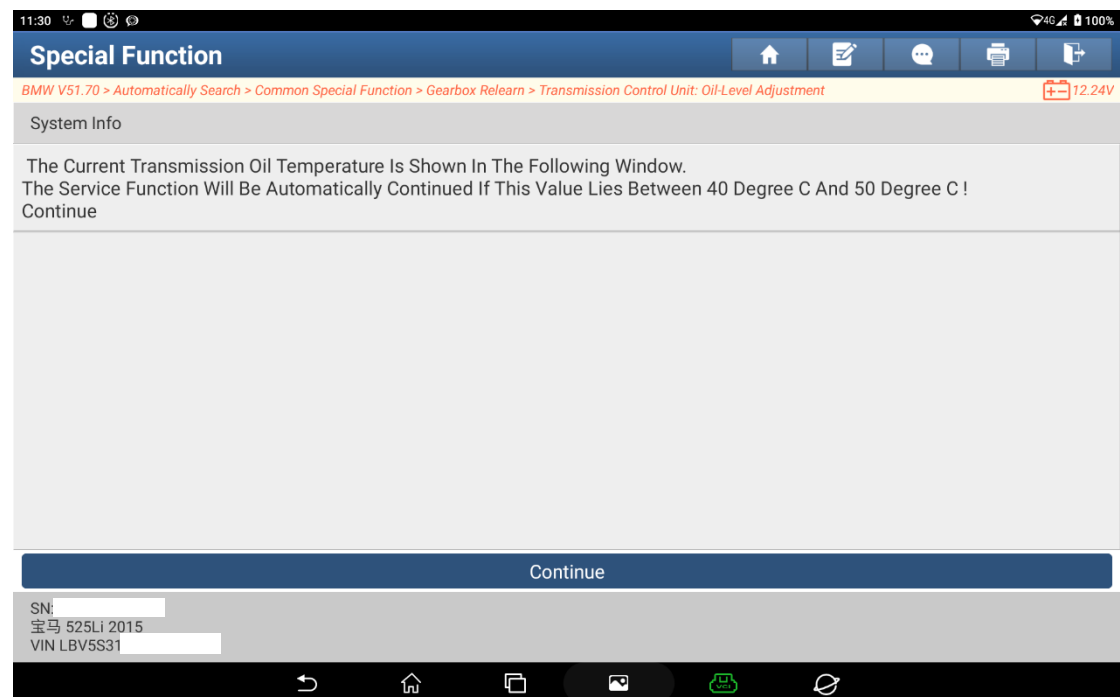
14. Set the selector lever to position P, and then click "Continue".



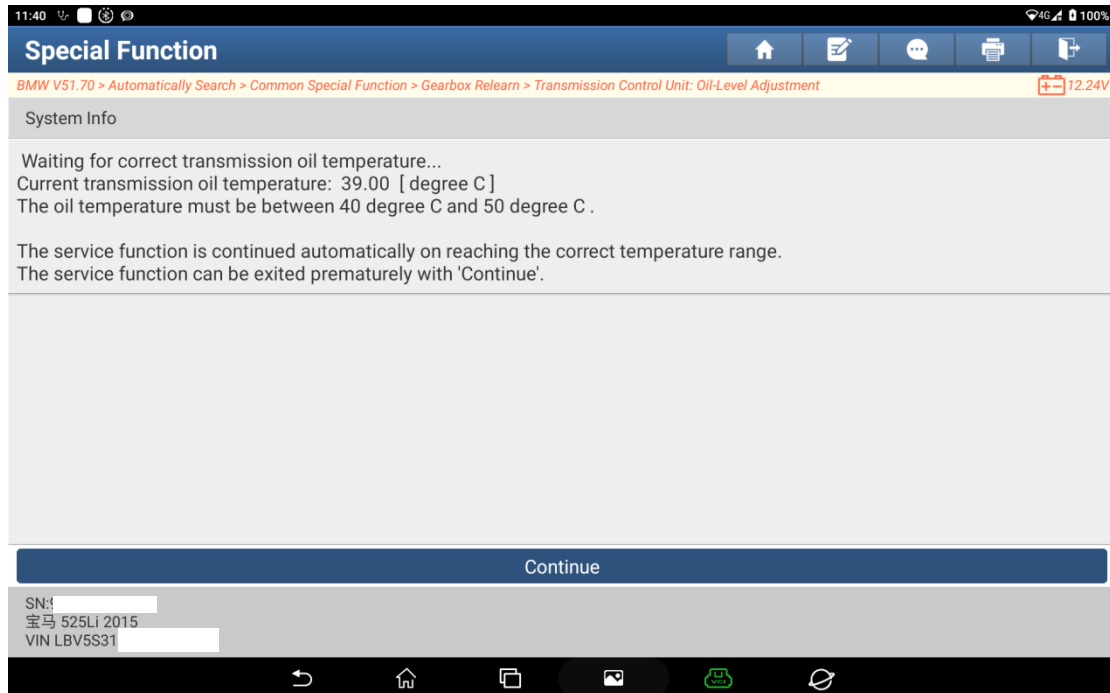
15. Remove the oil filler plug, and then click "Continue".



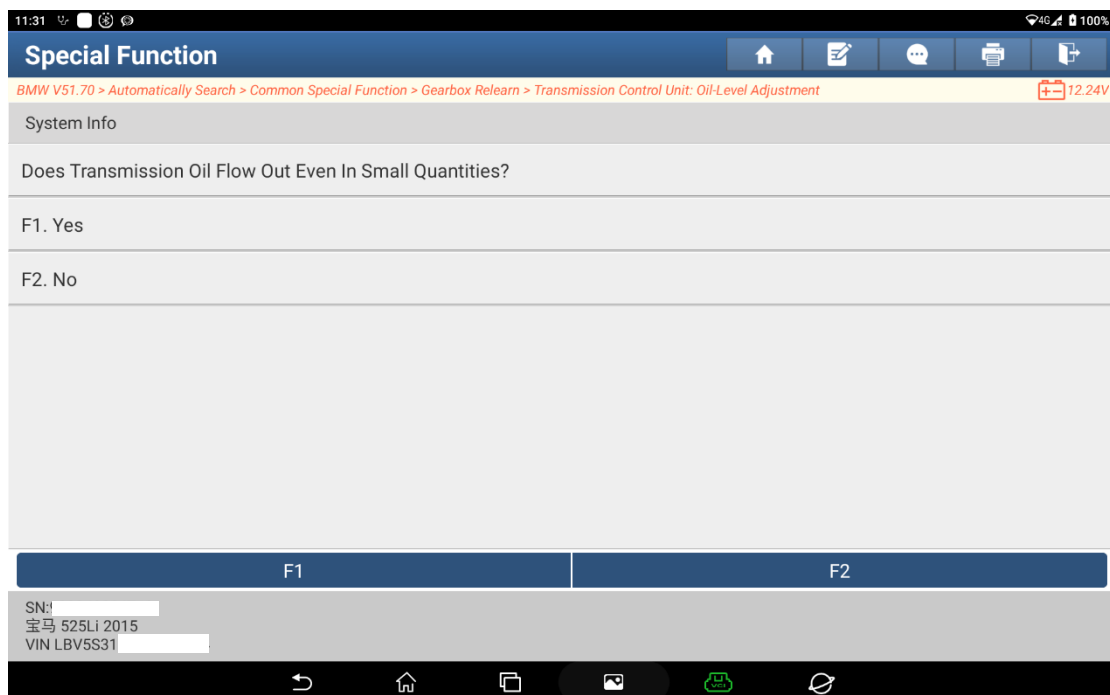
16. Click "Continue".



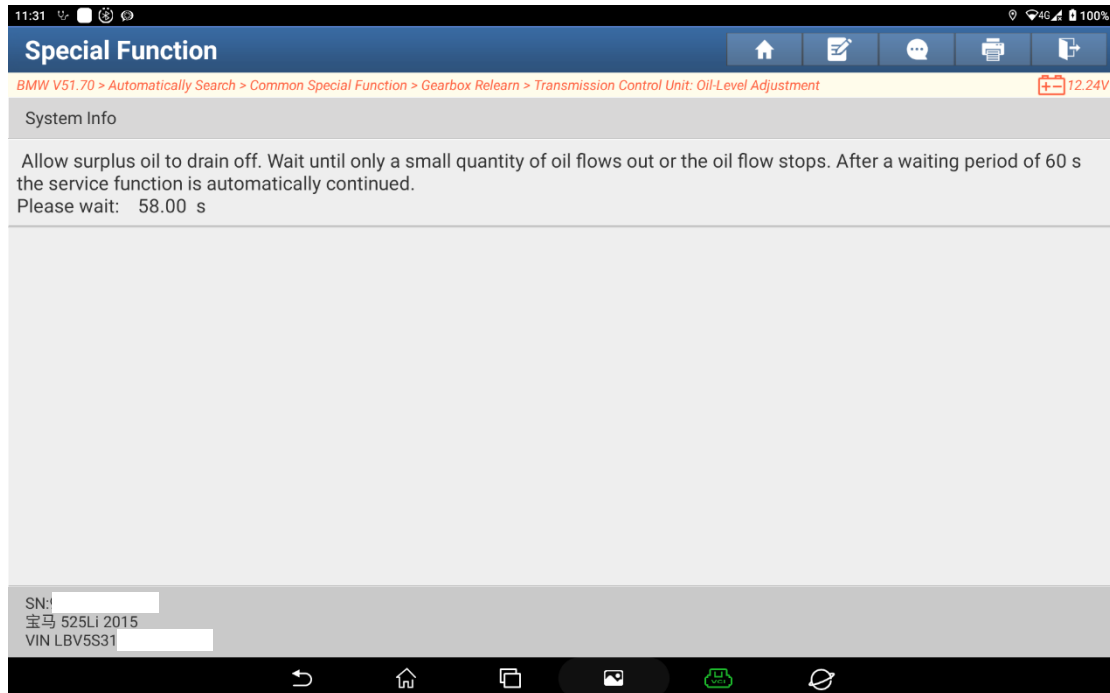
17. The function proceeds automatically when the oil temperature requirements are met.



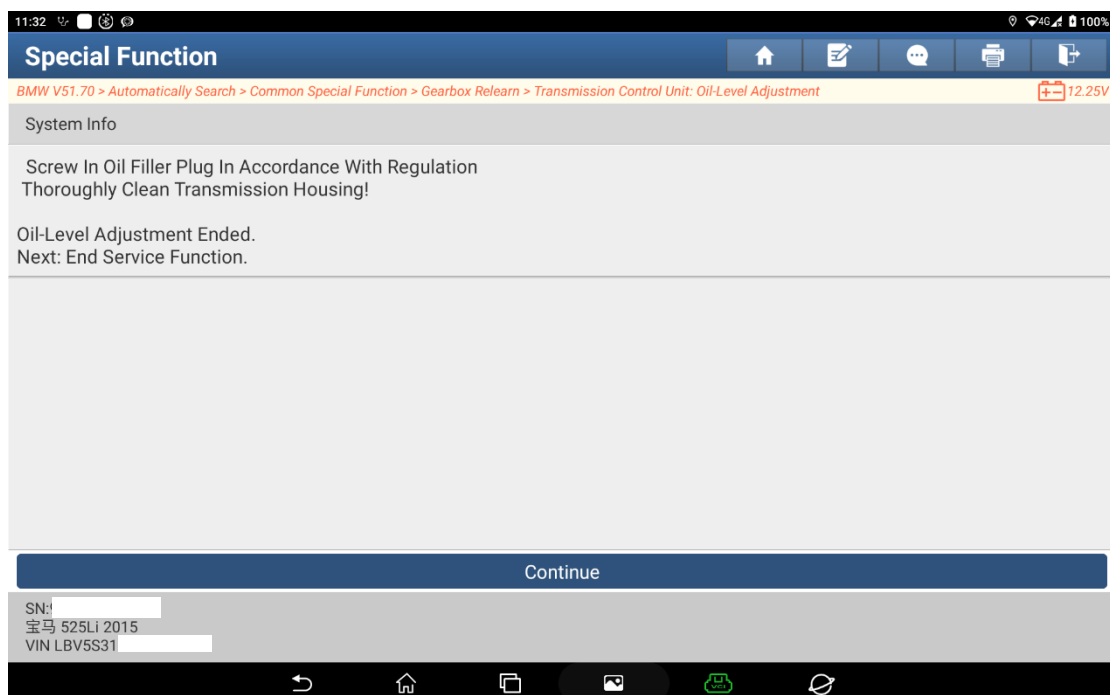
18. Choose "F1".



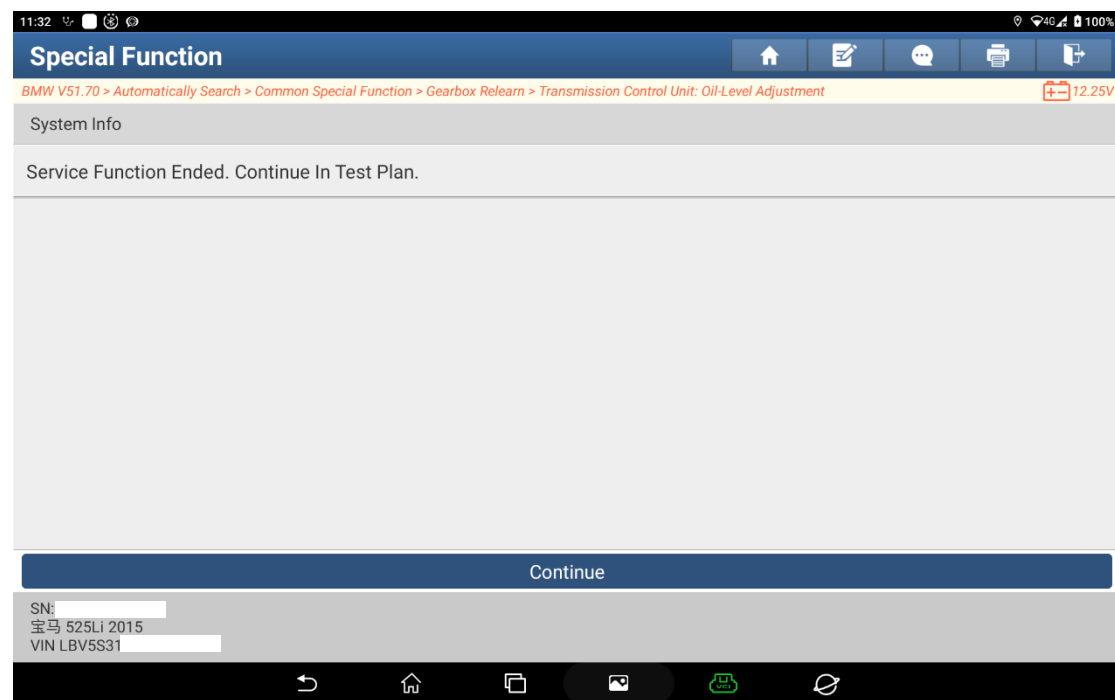
19. Drain the excess oil and wait for 60 seconds. The function will then proceed automatically.



20. Screw in the oil filler plug, clean the transmission housing, and then click "Continue".



21. Function ended. Click "Continue" to exit.



Statement:

The content of this document is copyrighted by LAUNCH TECH CO., LTD., and no individual or organization may quote or reprint it without consent.