

Instructions for BMW_2024_U12 Chassis EPS Start-up (Manual Activation of SFA Token)

Function Description: This function can be used for calibration when the EPS module is replaced or the vehicle reports a calibration fault.

Supported Products: PAD series comprehensive diagnostic equipment

Tested Product: X431PAD 5

[Tested Model]

For 2024 X1, after replacing the EPS (Electric Power Steering) with a new one and programming and coding it, it is necessary to use this special function to perform the start-up of the EPS system.



[Procedure]

1. Turn on the vehicle ignition switch, connect the diagnostic connector, and choose BMW V51.66 or later version.
2. Choose [Automatically Search] and read vehicle information.

11:01 AM

Show Menu

BMW V51.66 > Menu 12.18V

Please enter keyword

Automatically Search	Manually Select
Coding/Program	Special Function
ADAS Calibration	Immobilizer

SN:985690009100
BMW

11:02 AM

Information

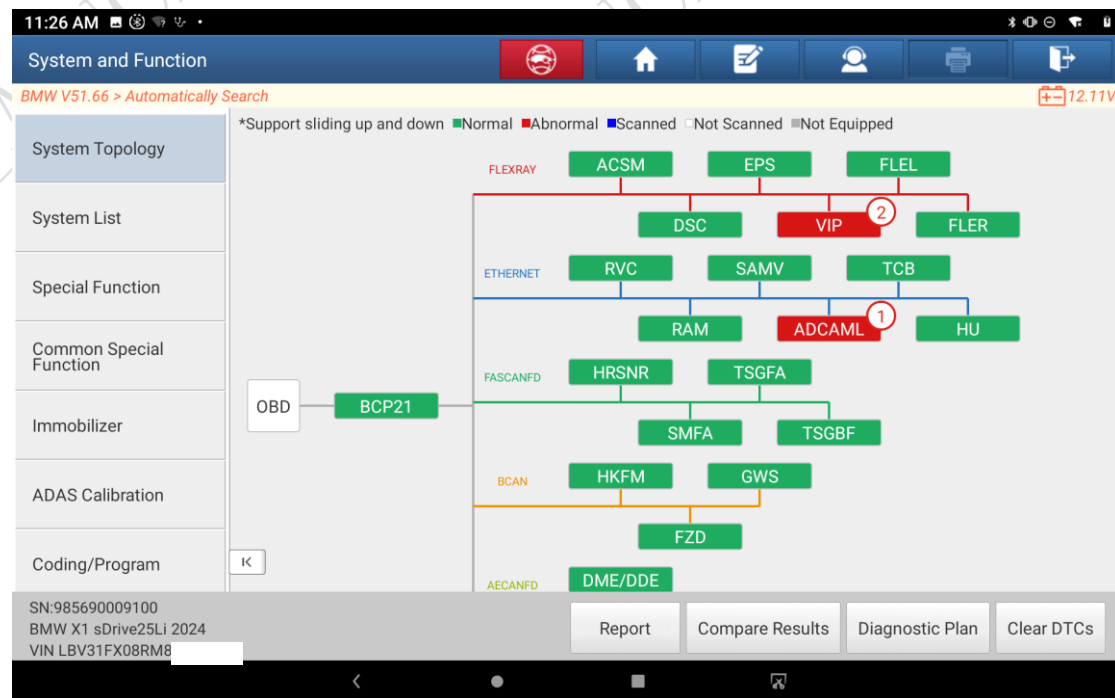
BMW V51.66 > Automatically Search 12.38V

Vehicle Information	Configuration
Vehicle Identification Number:	LBV31FX08RM
Development Code:	U12
Series:	X'
Sales Designation:	X1 sDrive25Li
Gearbox:	X
Steering:	left-hand drive
Construction Date:	2023.11

NEXT

SN:985690009100
BMW X1 sDrive25Li 2024
VIN LBV31FX08RM

3. Choose [NEXT].



4. Choose [Special Function].

11:26 AM Show Menu

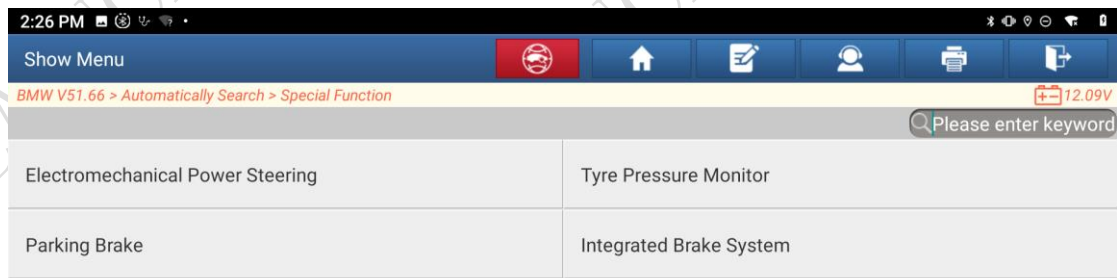
BMW V51.66 > Automatically Search > Special Function 12.11V

Please enter keyword

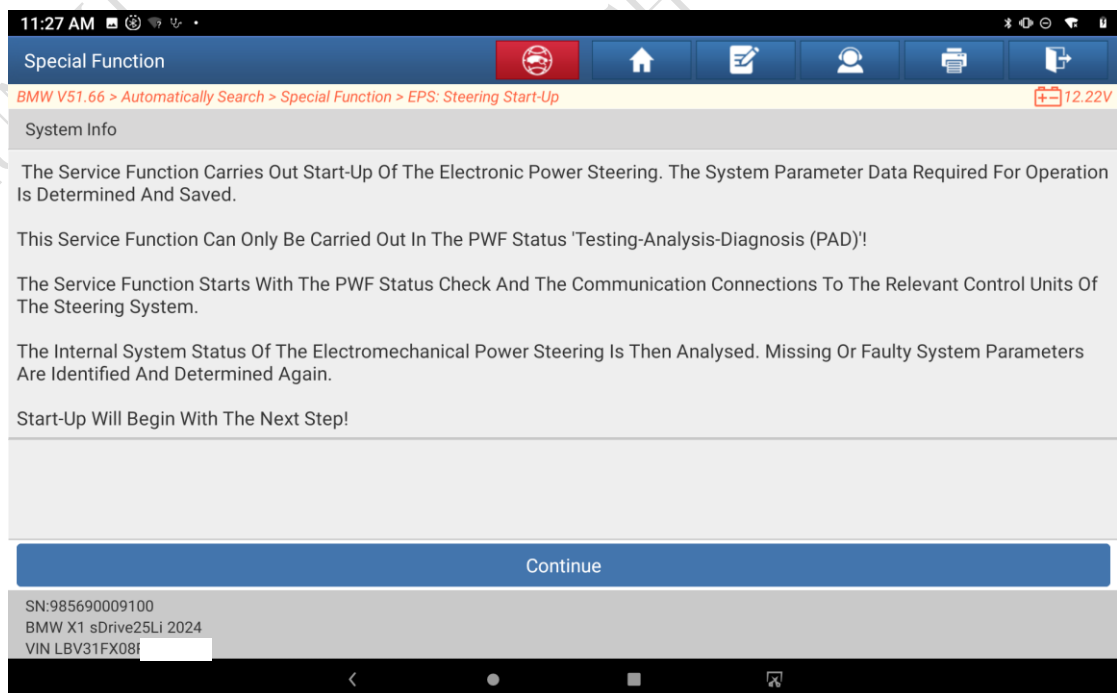
Power Train	Chassis And Suspension
Body	Driver Assistance
Maintenance And Pre-Delivery Check	Vehicle Information

SN:985690009100
BMW X1 sDrive25Li 2024
VIN LBV31FX08RM8

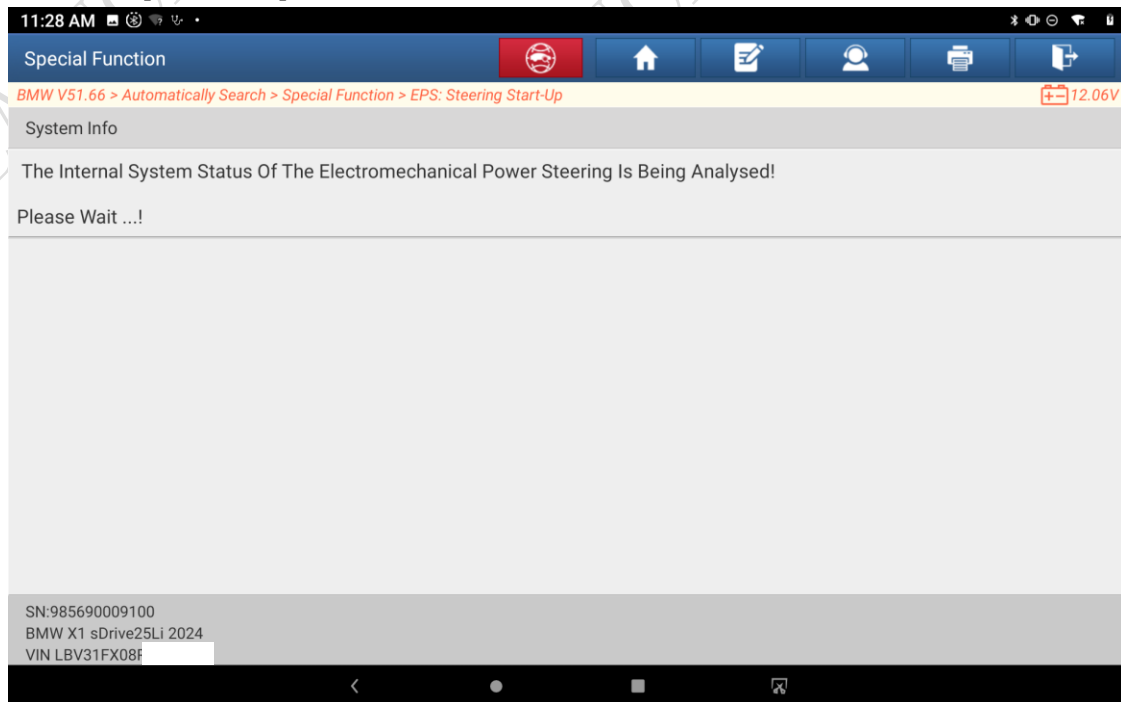
5. Choose [Chassis And Suspension].



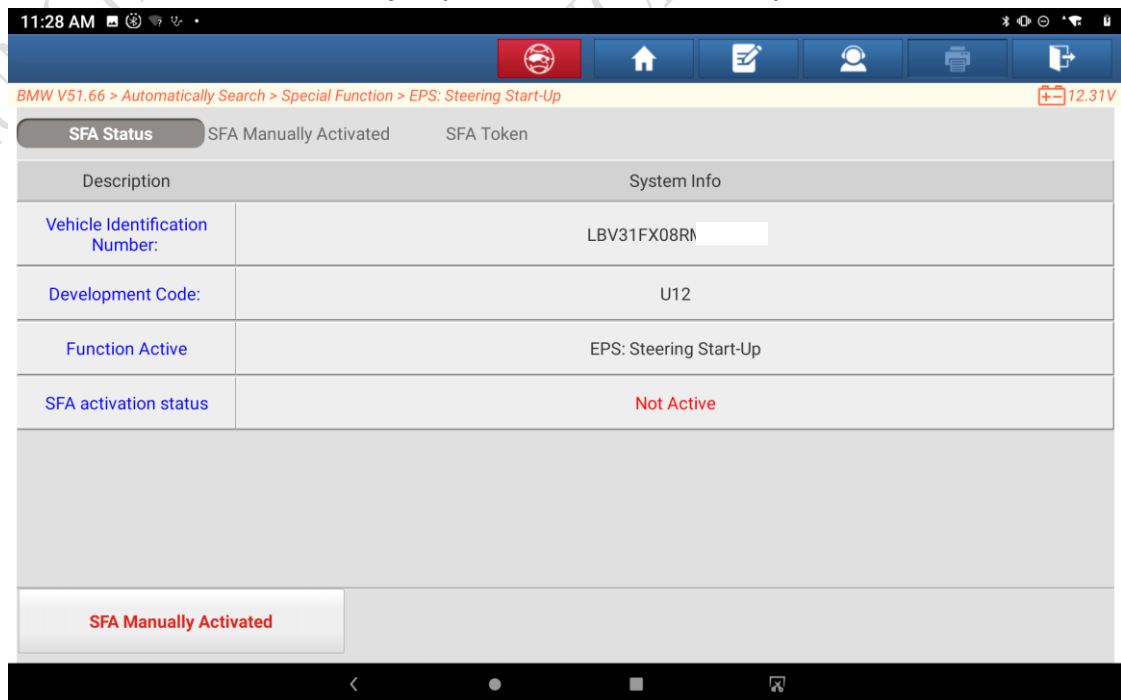
6. Choose [EPS: Steering Start-Up].



7. Click [Continue].



8. At this point, the software will read the current SFA status of the function. If it is not activated, it will jump to the manual SFA import interface.



9. Choose [SFA Manually Activated]. Two operation methods are provided: QR code sharing and server sharing. First, the QR code sharing option is introduced. Select the [QR Code] option from the [Share Data] button on the manual SFA activation interface.

11:29 AM

BMW V51.66 > Automatically Search > Special Function > EPS: Steering Start-Up 12.31V

SFA Status	SFA Manually Activated	SFA Token
Description	System Info	
Vehicle Identification Number:	LBV31FX08RM	
Development Code:	U12	
Function Active	EPS: Steering Start-Up	

Input Request Parameter

Unlock Request Structure

```
{ "VIN17": "LBV31FX08RM849718", "Host": "06;#Z4X+WsyhRiJ2BrCTS+9Ks01VQYE=#DESKTOP-GPCD0PP", "System": "T00L;#1.00", "TokenRequests": [ { "Type": "ecu-uid", "Features": [ { "Feature": "0x005DF2", "DiagnosisAddress": "0x39", "EnableType": 1, "ECU-UID": "0x9ED908EA48C16800112223346002254D" } ] }, { "MessageFormatVersion": 2, "Data": "70750915112844Z" } ] }
```

QR Code
Server
Share Data

10. Scan the QR code using Alipay's scan function or WeChat's QR code scanning mini-program.

11:29 AM

BMW V51.66 > Automatically Search > Special Function > EPS: Steering Start-Up 12.31V

SFA Manually Activated

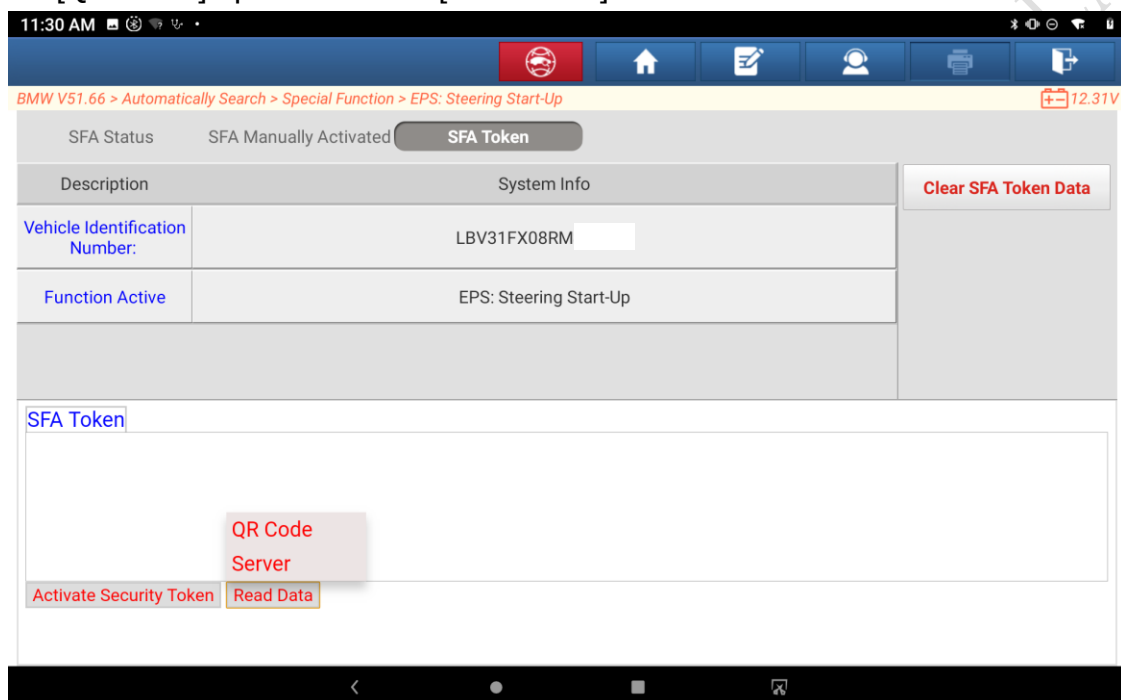


Please Use The QR Code Scanning Program On Your Phone Or Other Mobile Device To Scan The QR Code In The Above Picture. If You Are Not Able To Scan It, Please Try Other QR Code Scanning Programs.

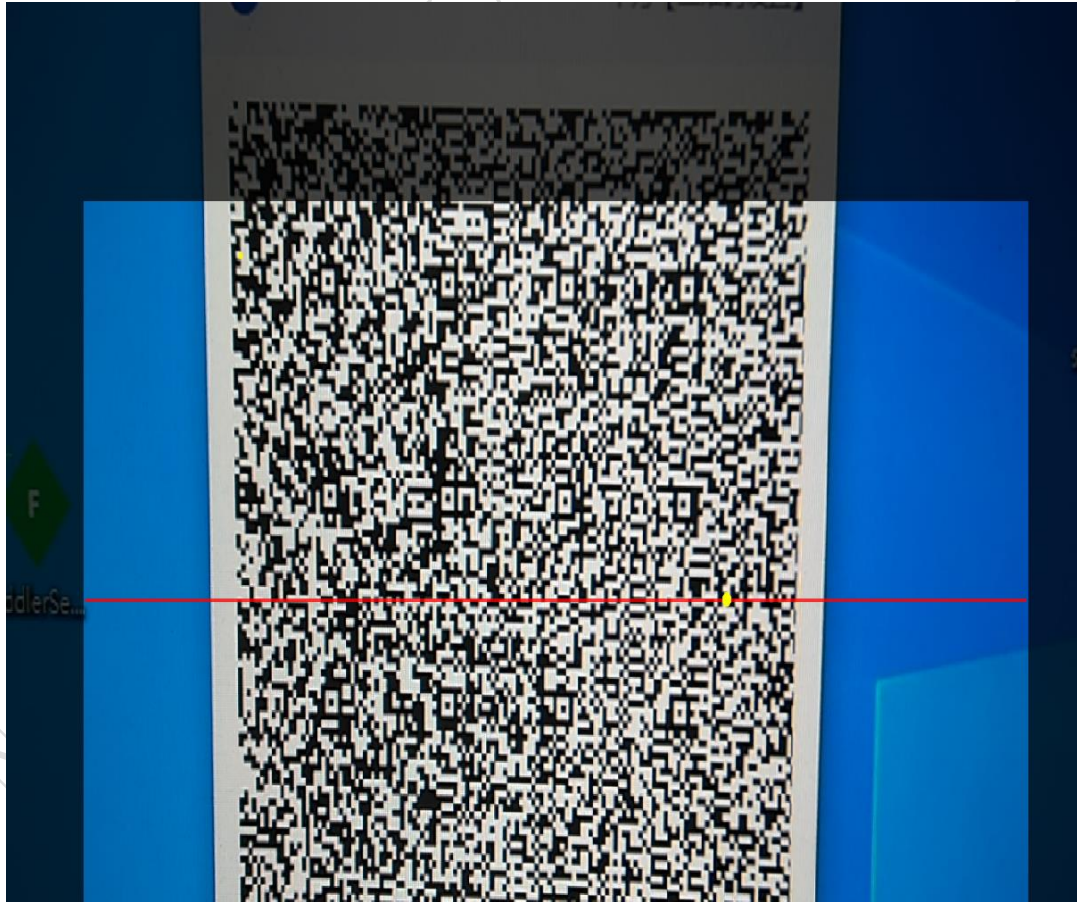
11. Share the "Unlock Request Structure" data obtained from the scan with a third party (such as a Taobao seller) for calculation.

```
Vehicle Identification Number: : LBV31FX08RM
Development Code: : U12
Function Active : EPS: Steering Start-Up
Unlock Request Structure :
{"VIN17":"LBV31FX08RM","Host":
06;#Z4X+WsyhRiJ2BrcTS+9KsOIVQYE=;#D
ESKTOP-
GPCDOPP","System":"TOOL;#1.00","Token
Requests":[{"Type":"ecu-uid","Features":
[{"Feature":"0x005DF2","DiagnosisAddress
":"0x39","EnableType":1,"ECU-
UID":"0x9ED908EA48C168001122233460
02254D"}]]},"MessageFormatVersion":2,"D
ate":"20250915112844Z"}
```

12. Click the [SFA Token] button on the diagnostic device, and then click the [QR Code] option from the [Read Data] button.



13. Then use the QR code scanning window to scan the SFA token data QR code provided by the third party (if text data is returned, you can use Baidu to search for QR code generator and generate a QR code from the corresponding text data).



14. After the scan is completed, the SFA token data will be obtained, as shown in the figure below.

[illegible]

9.1 The second sharing method: server sharing. Click [Server].

上午10:04

宝马 V51.66 > 自动搜索 > 特殊功能 > EPS: 转向系试运行

12.14V

SFA状态

SFA手动激活

SFA令牌

说明	系统信息
车辆识别号:	LBV31FX08RM
开发序列代号:	U12
功能激活	EPS: 转向系试运行

输入请求参数

解锁请求结构

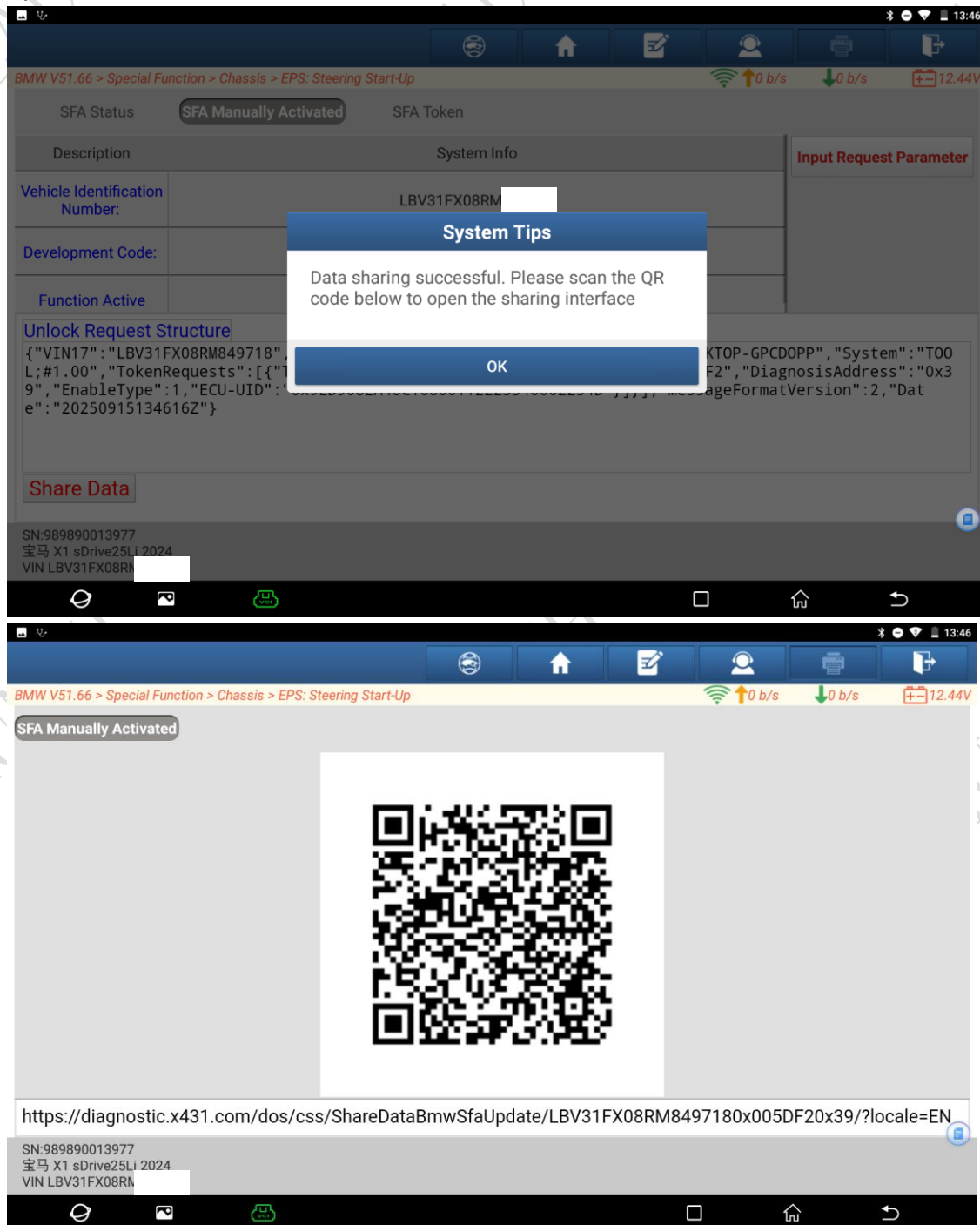
```
{ "VIN17": "LBV31FX08RM849718", "Host": "06;#Z4X+WsyhRiJ2BrCtS+9Ks0lVQYE=#DESKTOP-GPCDOPP", "System": "TOOL;#1.00", "TokenRequests": [{"Type": "ecu-uid", "Features": [{"Feature": "0x005DF2", "DiagnosisAddress": "0x39", "EnableType": 1, "ECU-UID": "0x9ED908EA48C1680011223346002254D"}]}], "MessageFormatVersion": 2, "Date": "20250915100313Z" }
```

二维码

服务器

分享数据

10.1 Start connecting to the server to upload data. After the data is uploaded successfully, a QR code will be displayed. Use WeChat to scan the QR code to open the website.



11.1 On the webpage, you can copy the unlock structure data and share the data with a third party (such as a Taobao seller) for calculation.

English 简体中文

SFA Data Share

ID	LBV31FX08	005DF20x39
SFA Request Data Type	Text	
SFA Request Data	Copy Select All Vehicle Identification Number: : LBV31F0 Development Code: : U12 Function Active : EPS: Steering Start-Up Unlock Request Structure : { "VIN17": "LBV31FX08RM949718", "Host": "06:#24X-WsyhRiJ2BrcTS+9Ks01VQVE=:#DESKTOP-GPCDOPP", "System": "TOOL;#1.00", "TokenRequests": [{"Type": "ecu-uid", "Features": [{"Feature": "0x005DF2", "D	
SFA Token Type	Text	
SFA Token	Paste Copy Select All Clear All Submit SFA Token	
Expired Time	2025-09-16 13:46:31.816	
Create Time	2025-09-15 13:46:31.816	
Update Time	2025-09-15 13:46:31.816	

激活 Windows
转到“设置”以激活 Windows。

12.1 After the third-party seller completes the calculation, they will provide you with a JSON file. On the webpage interface, select [File] from the [SFA Token Type] field, import the file you just obtained, and click [Submit SFA Token].

SFA Data Share

ID	LBV31FX08	005DF20x39
SFA Request Data Type	Text	
SFA Request Data	Copy Select All Vehicle Identification Number: : LBV31FX08 Development Code: : U12 Function Active : EPS: Steering Start-Up Unlock Request Structure : { "VIN17": "LBV31FX08RM949718", "Host": "06:#24X-WsyhRiJ2BrcTS+9Ks01VQVE=:#DESKTOP-GPCDOPP", "System": "TOOL;#1.00", "TokenRequests": [{"Type": "ecu-uid", "Features": [{"Feature": "0x005DF2", "D	
SFA Token Type	File	
SFA Token	C:\fakepath\SecurityTokenRes_LBV31FX07R... Submit SFA Token	
Expired Time	2025-09-16 13:46:31.816	
Create Time	2025-09-15 13:46:31.816	
Update Time	2025-09-15 13:46:31.816	



12.2 Alternatively, select [Text] from the [SFA Token Type] field, open the JSON file you just obtained, copy the file content, paste it into the [SFA Token] field, and click [Submit SFA Token].

[illegible]

13.1 After the data submission is completed, return to the diagnostic software interface, click [SFA Token], and click the [Server] option from the [Read Data] button.

14.1 Obtain the data submitted on the webpage.

[illegible]

15. Click the [Activate Security Token] button, and the unlocking will be successful. Then, the corresponding EPS steering system start-up can be performed.

11:36 AM

Special Function

BMW V51.66 > Automatically Search > Special Function > EPS: Steering Start-Up

12.04

System Info

The Electromechanical Power Steering (EPS) Is Not Operational. No Further Measures Are Necessary. Another Start-Up Only Makes Sense In The Special Cases Below:

Customer Complaint (E.G. Effort To Hold The Steering Horizontal For Straight-Ahead Driving). Problems Or Failures With Control Units (E.G. DSC) That Indicate A Steering Angle. Repairs And/Or Adjustment Work On The Front Axle, Especially The Track Rods.

Do Not Carry Out A Start-Up If Not Required! The Initial Operation That Has Already Been Performed Was Significantly More Precise Than What Could Be Achieved With The Tools That Are Available.

Carry Out Start-Up Again?

F1. Yes

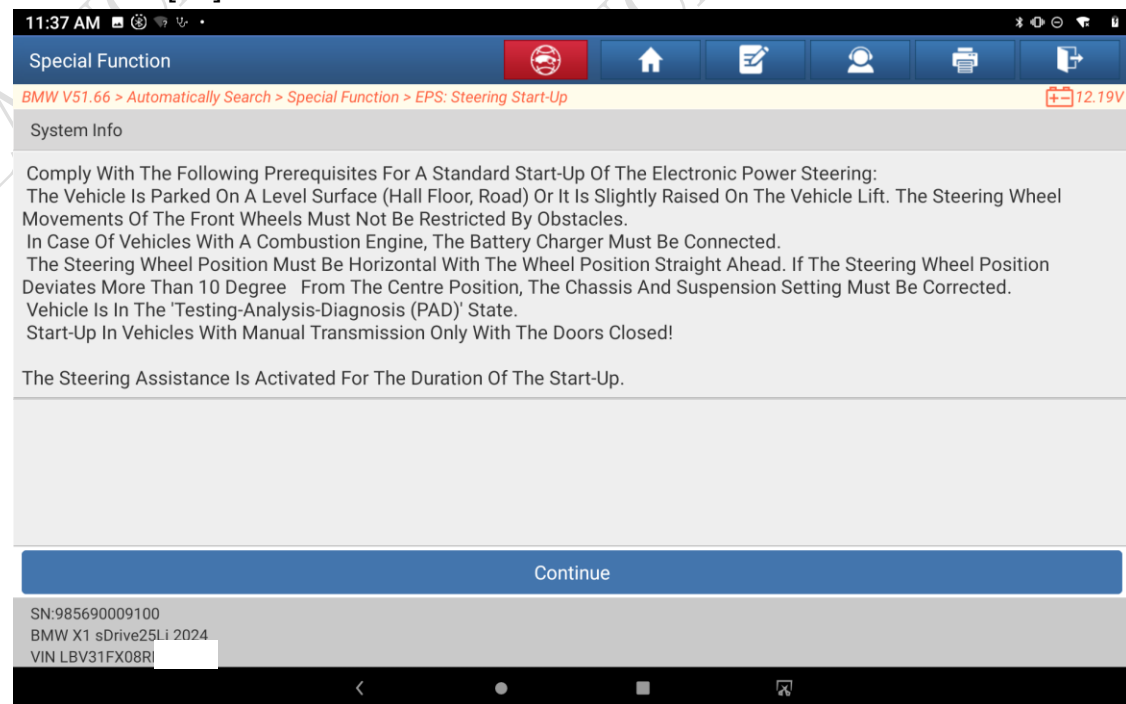
F2. No

F1

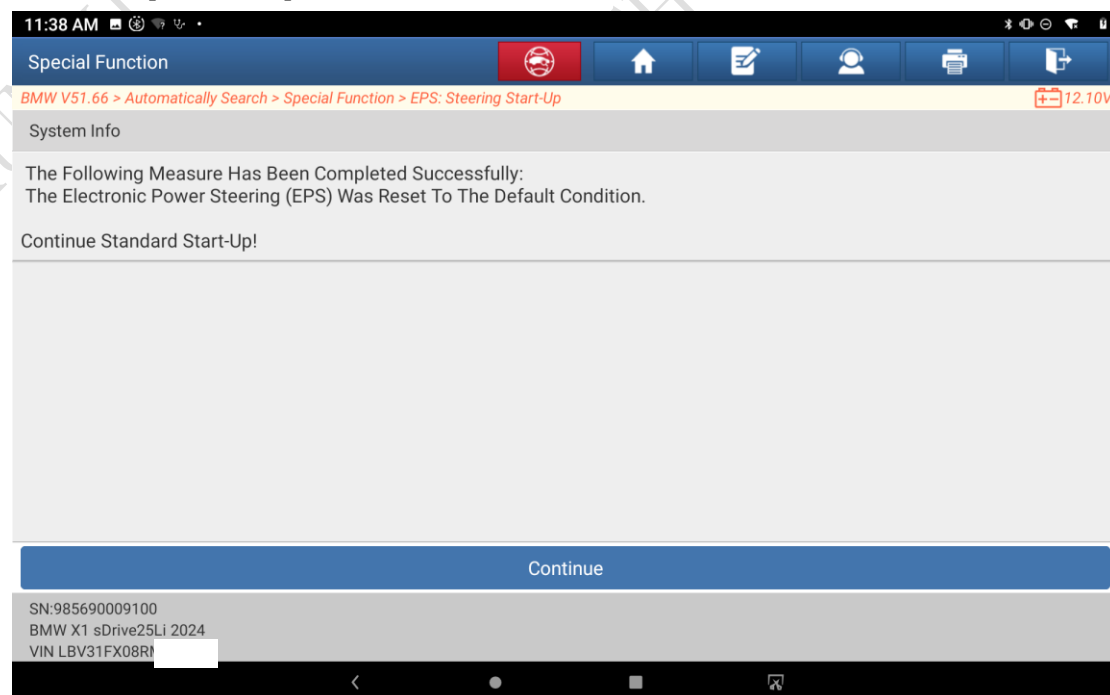
F2

SN:985690009100
BMW X1 sDrive25i 2024
VIN LBV31FX08RM

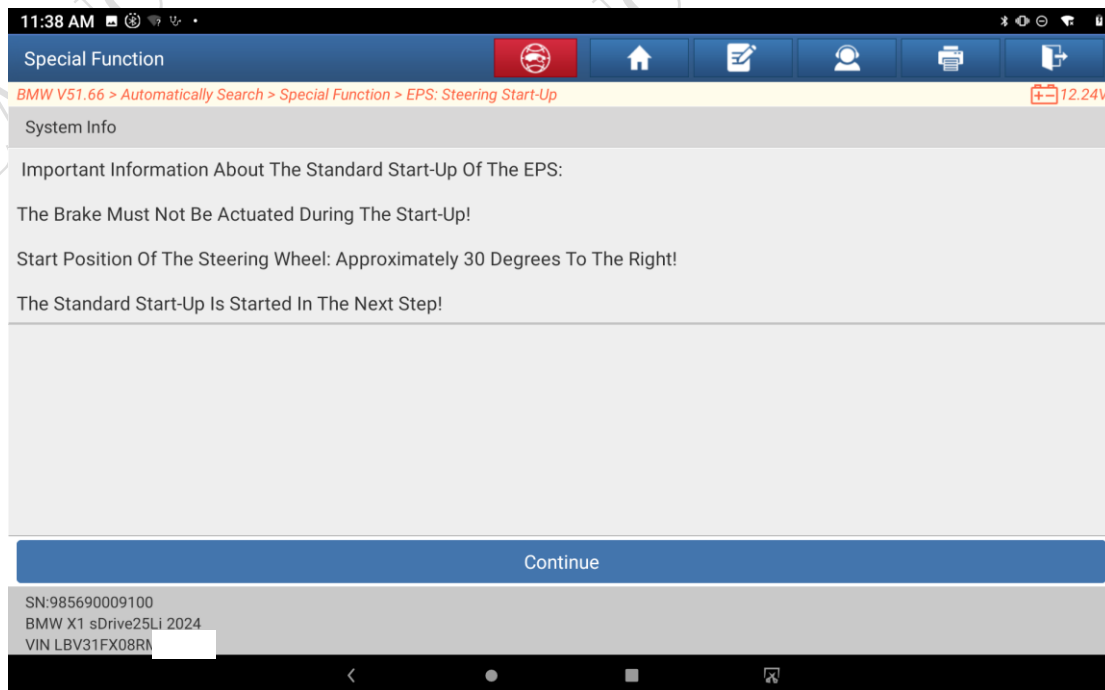
16. Select [F1].



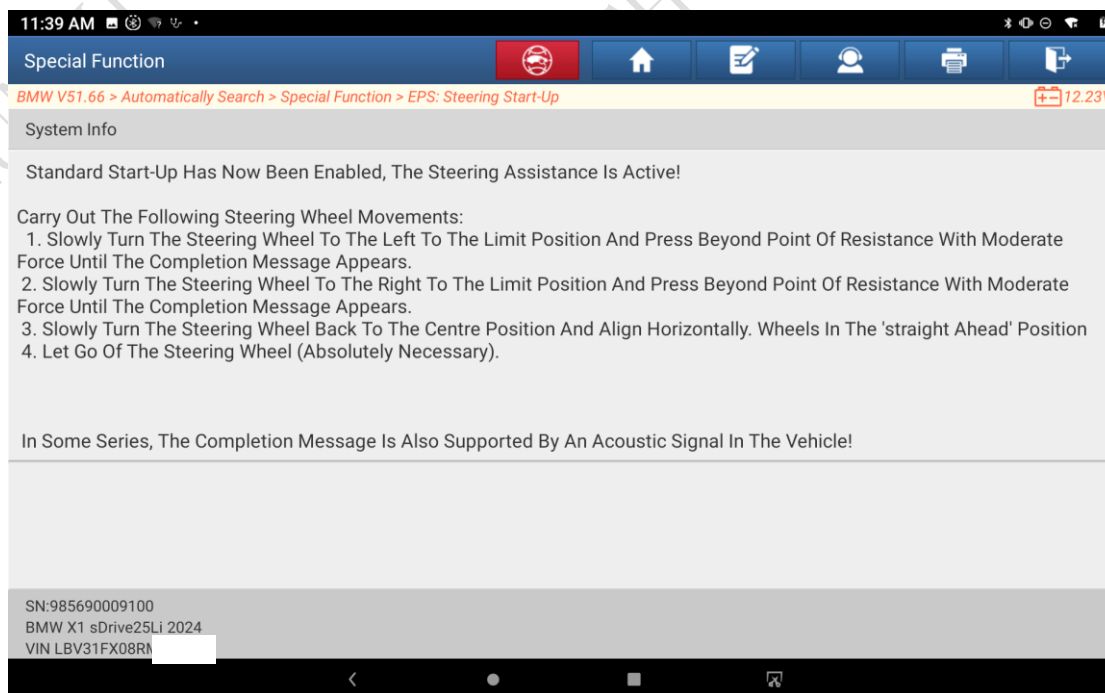
17. Click [Continue].



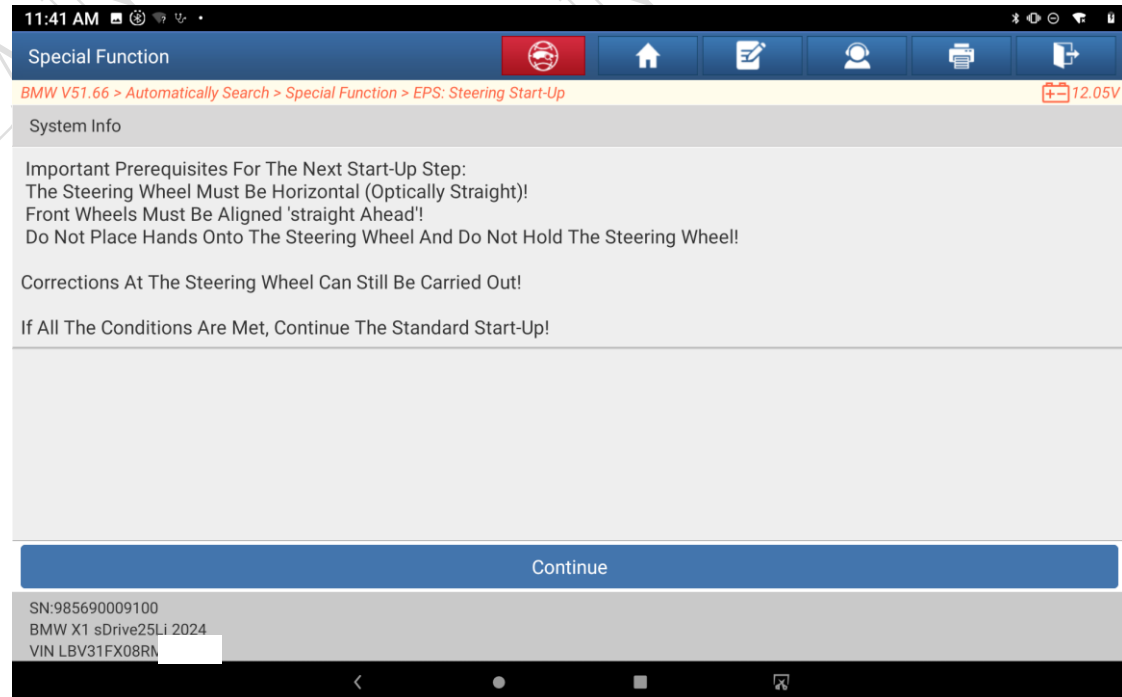
18. Click [Continue].



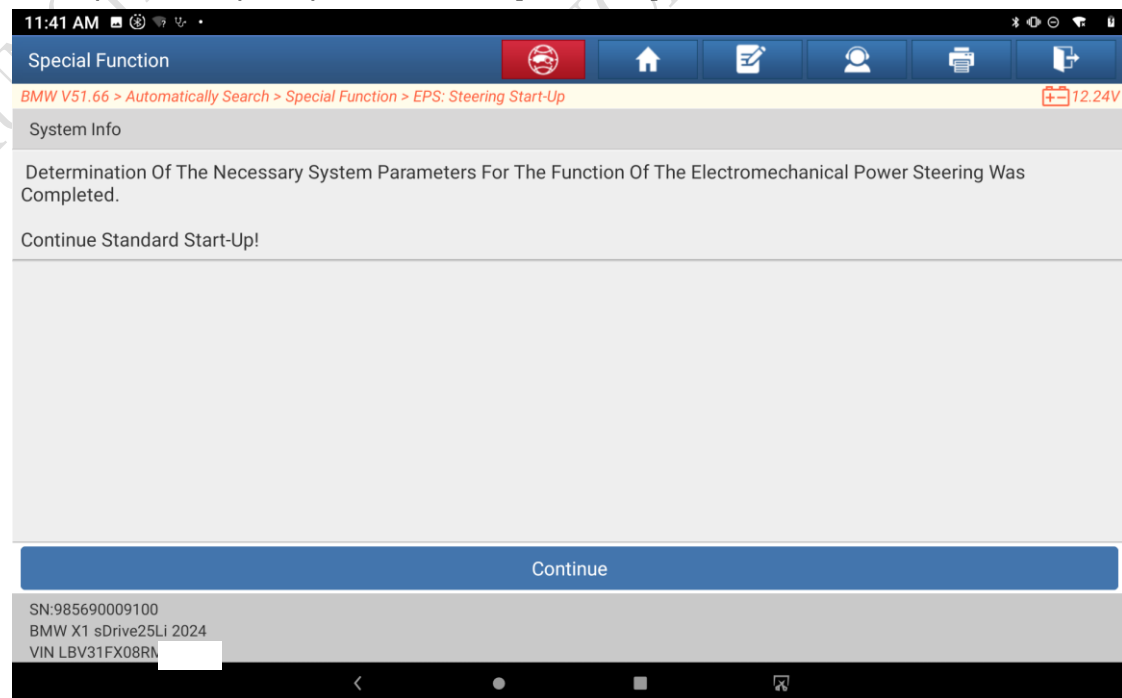
19. Operate as prompted and click [Continue].



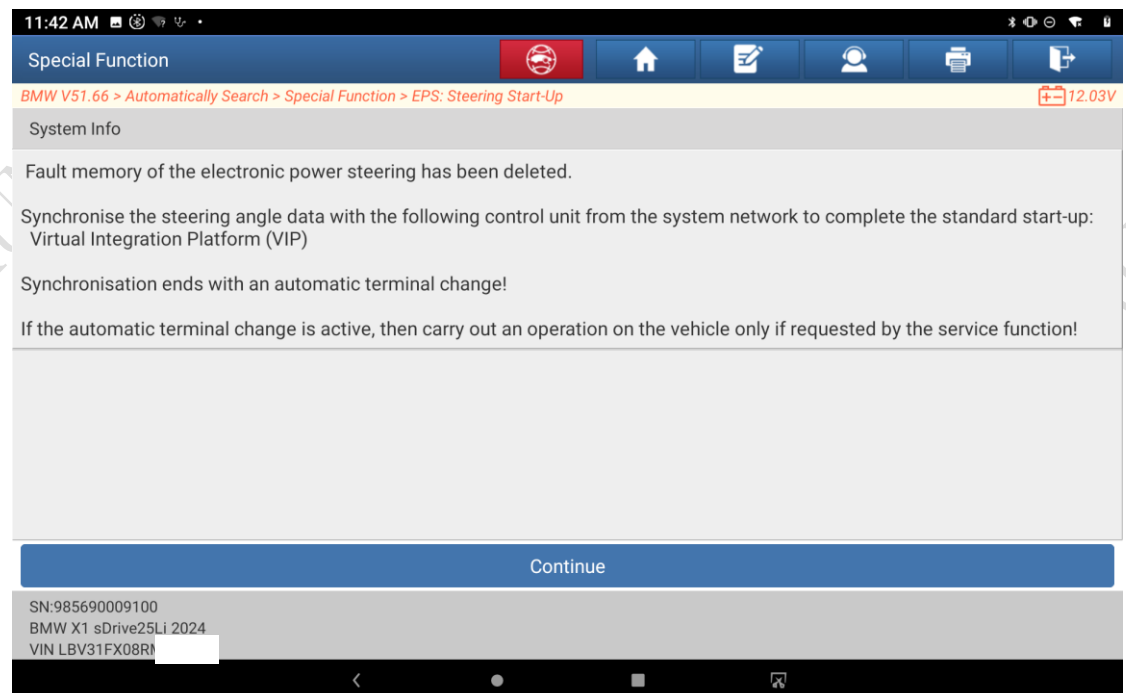
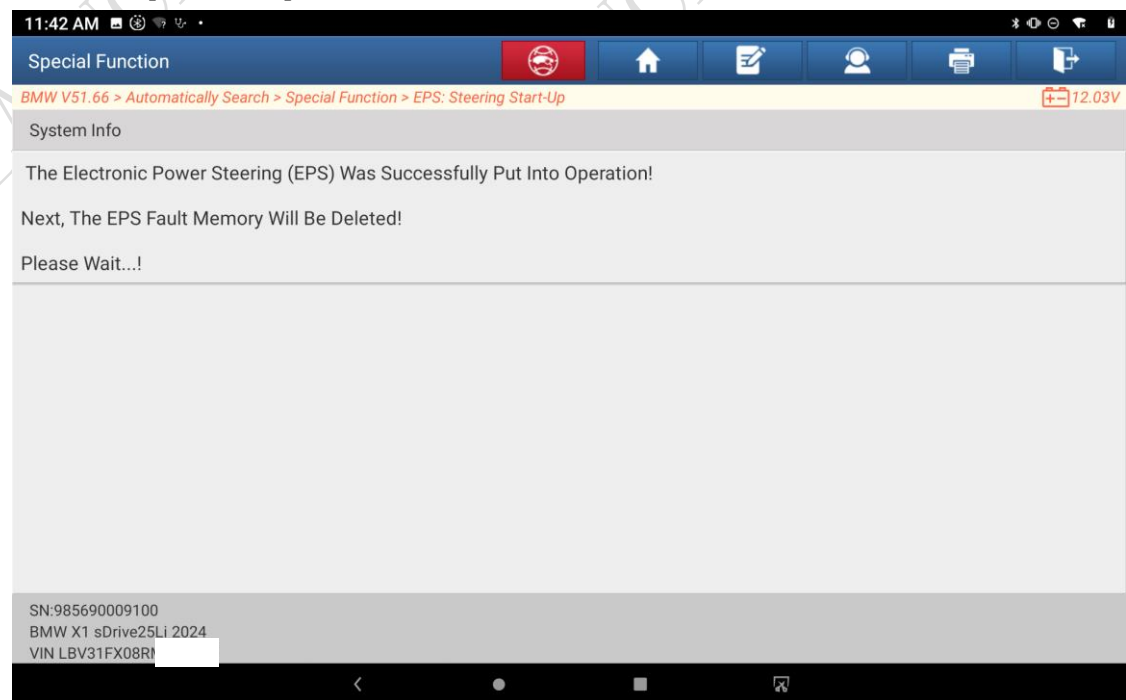
20. Turn the steering wheel according to the previous step prompt. It automatically jumps to the next step when the conditions are met.



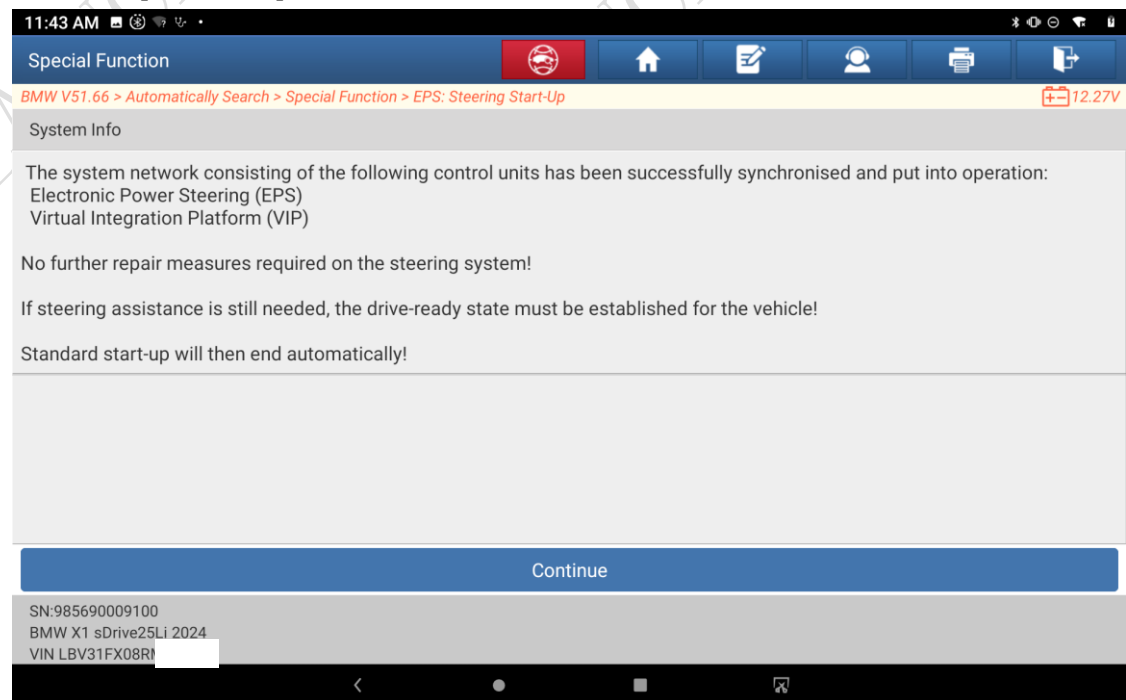
21. Operate as prompted and click [Continue].



22. Click [Continue].



23. Click [Continue].



The function is completed.

[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.