Audi MQB Gearbox Replacement Guide

Description:

Here we take DQ200-MQB Gearbox as an example, replace its ECU and finish the settings.

Tools Requirement:

X-431 series and X-PRO G3

Software Requirement:

Audi V28.70 and above, IMMO PROGRAM V10.02 and above.

A Brief Introduction:

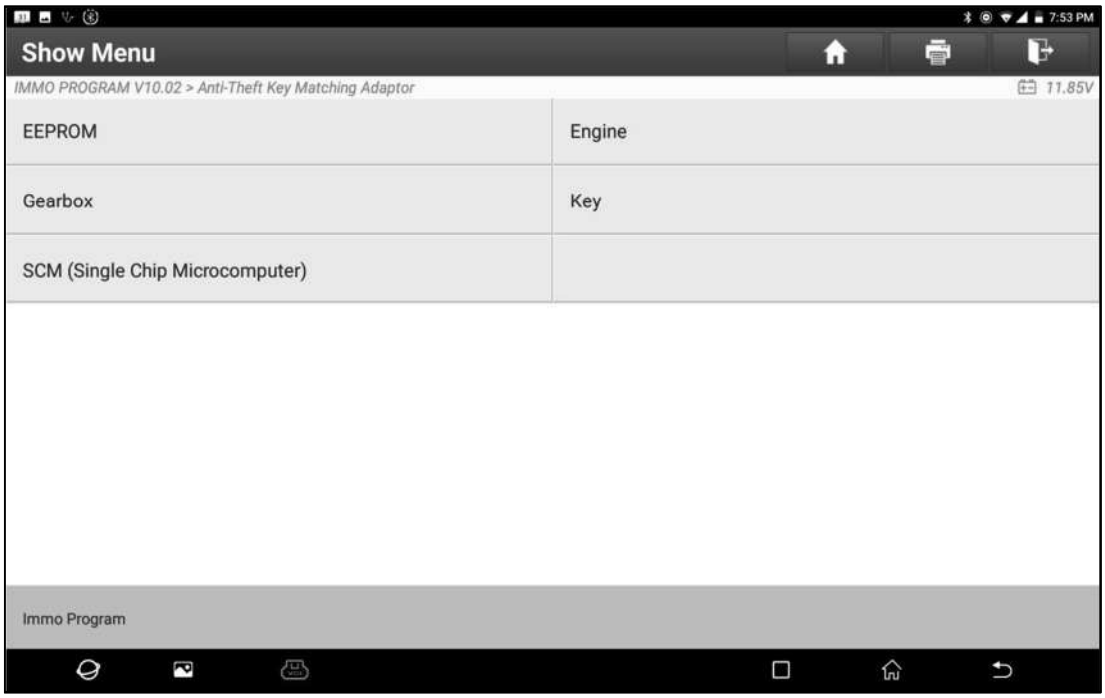
There are two kinds of gearbox ECU replacements, and the customer can choose one of them according to the actual situation.

- The data of the customer's original vehicle gearbox ECU is readable. Data is not damaged, and the gearbox can be cloned. In this situation, we just need to back up the original gearbox EEPROM and FLASH, and then restore them into the gearbox ECU for replacement.
- The data of the customer's original vehicle gearbox ECU is unreadable or the data is damaged. In this situation, we need to back up the EEPROM of the ECU for replacement, and then manually input the original CS code or get the original CS code from the original key.

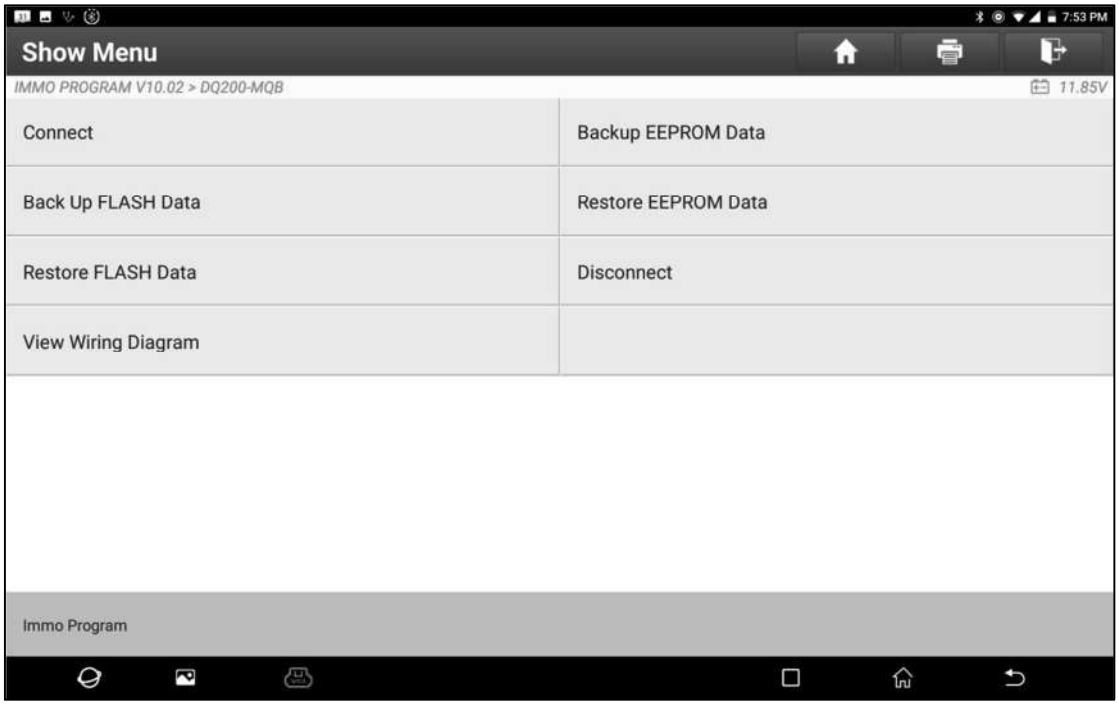
Operation Steps:

Situation 1: the customer's original vehicle gearbox data is readable and the data is not damaged, the gearbox can be cloned.

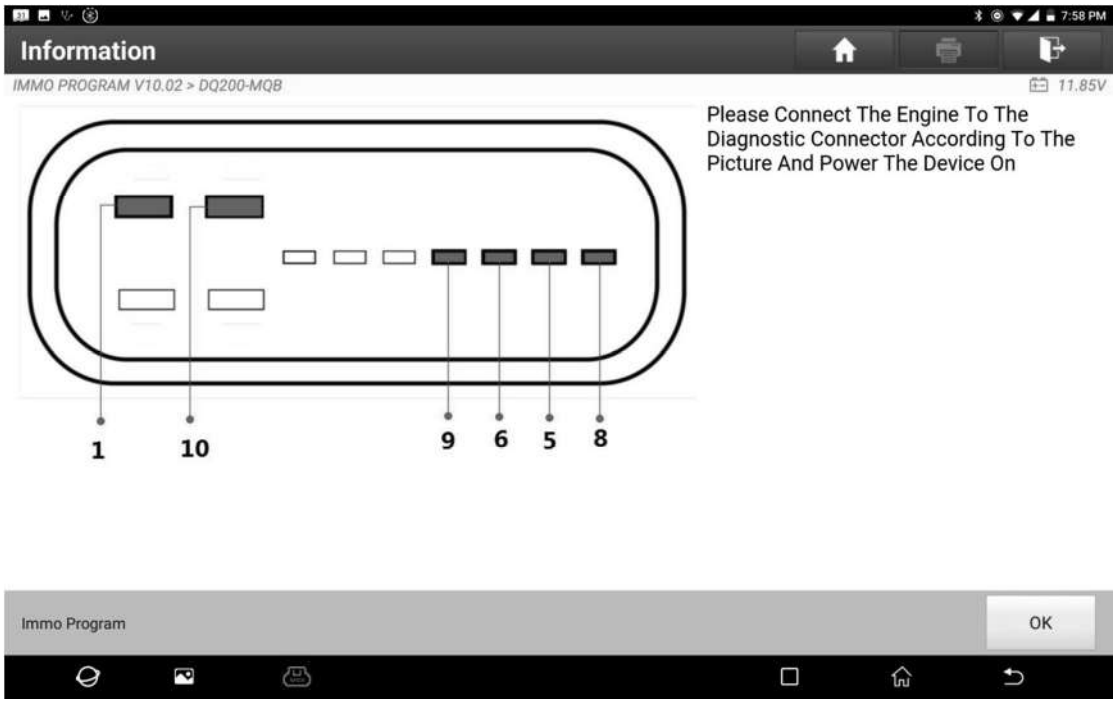
1. Enter [Service Function], find [IMMO PROGRAM], then [Anti-Theft Key Matching Adaptor].

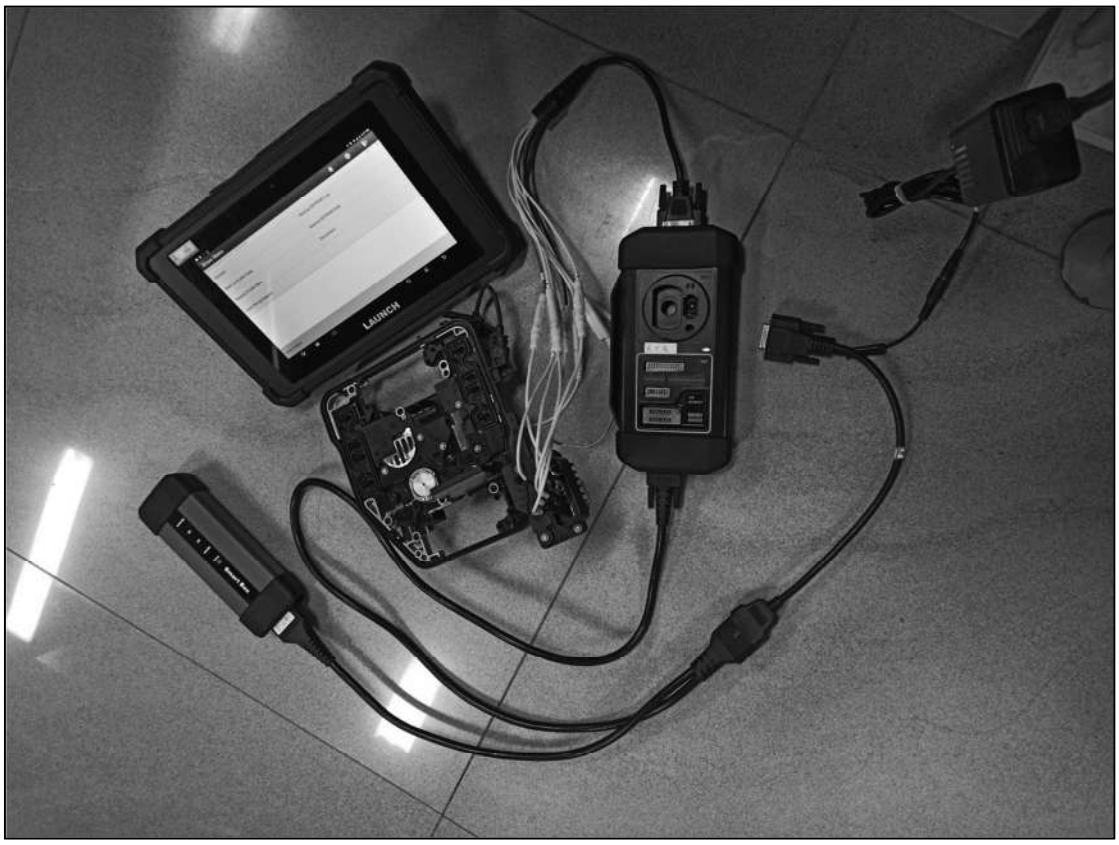


2. Select [Gearbox], and then select Gearbox type according to the specific model, here we choose [DQ200-MQB] to enter the function menu. As shown in the below figure：

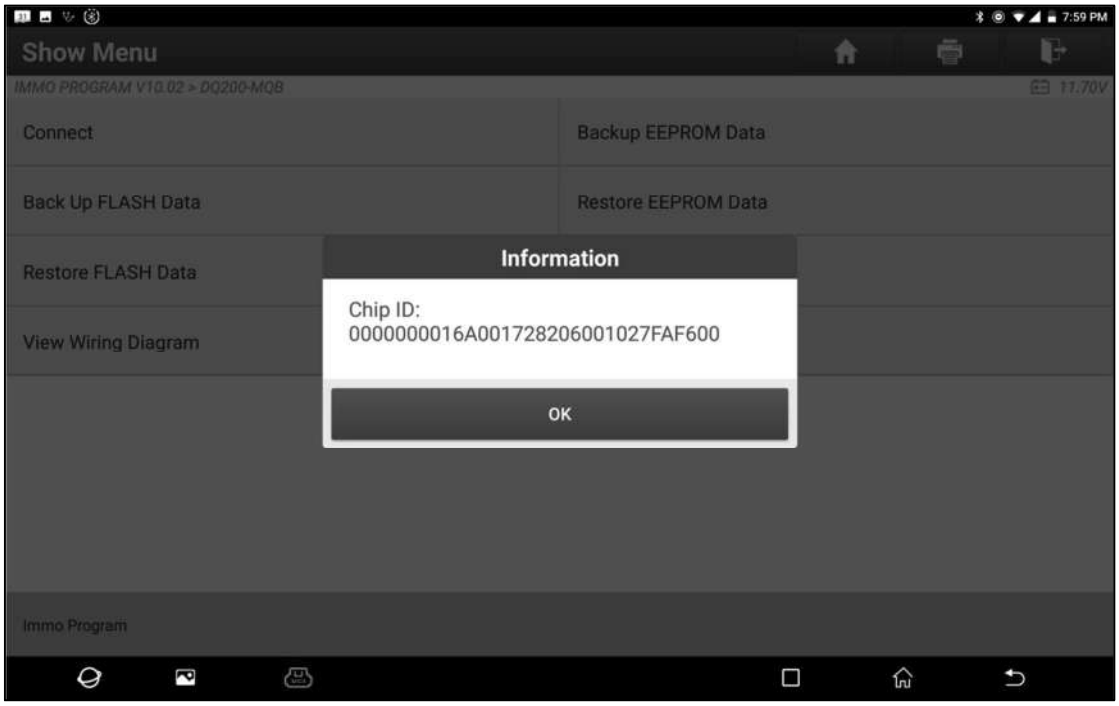


3. Click [View Writing Diagram], follow the connection diagram to connect the original car gearbox ECU with the anti-theft programmer(X-PRO G3) and diagnostic equipment, click [OK], the connection diagram and physical diagram are as shown in the following figure:

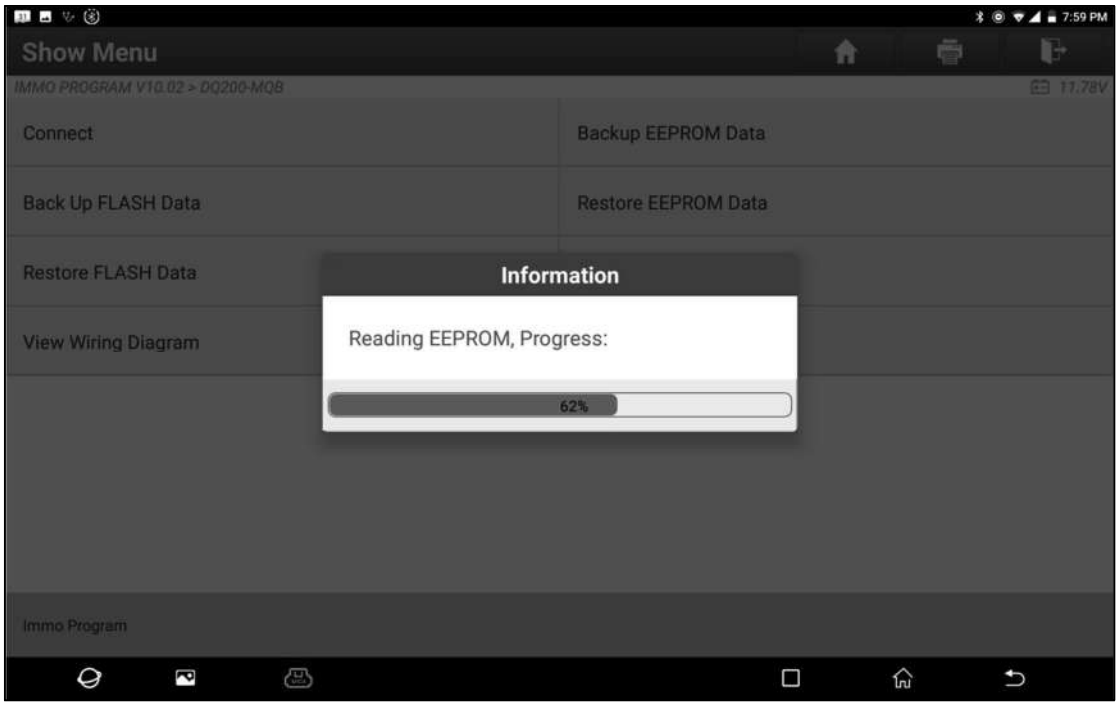


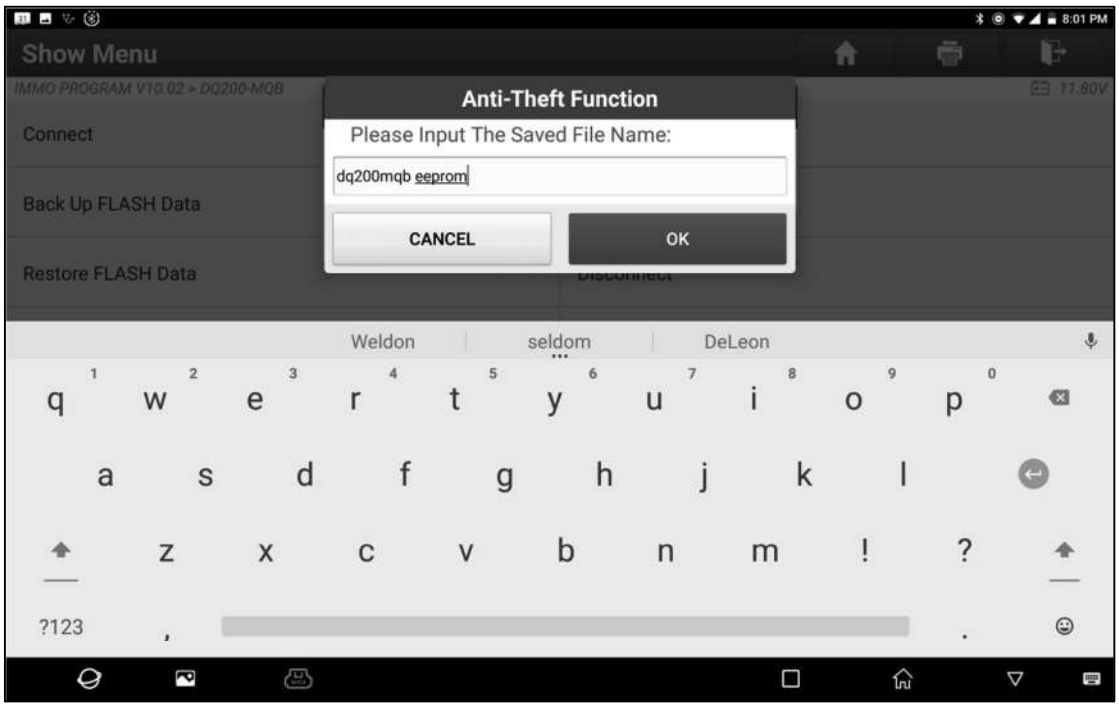


4. Click [Connect], click [OK] after reading the chip ID of the original car gearbox, as shown in the figure:

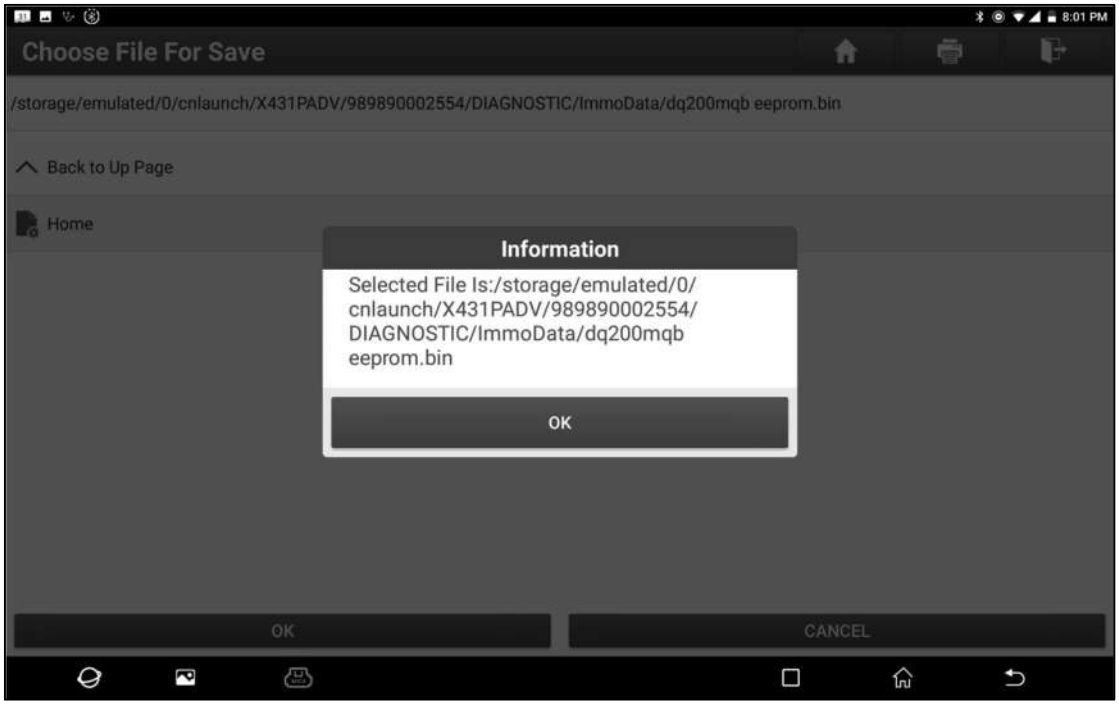


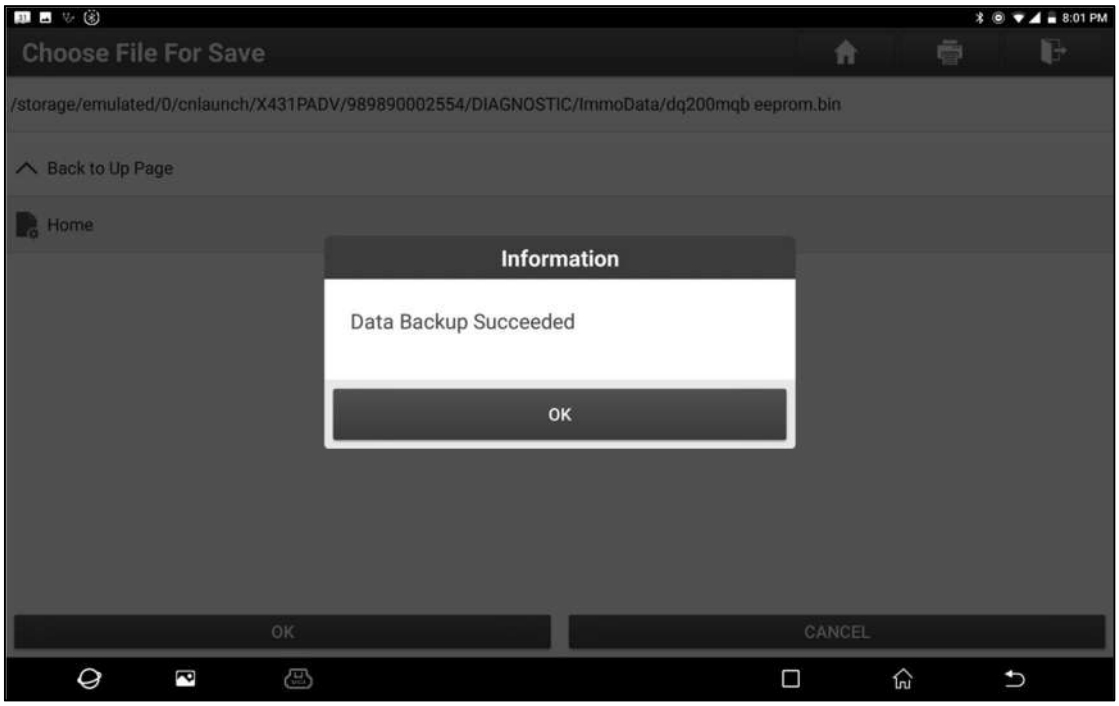
5. Click [Backup EEPROM Data] in this menu interface, read the EEPROM data of the original car gearbox, enter the file name to be saved, click [OK], select the path where the file is to be stored, and click [OK] to save. As shown below:





8:01 PM
Choose File For Save
/storage/emulated/0/cnlaunch/X431PADV/989890002554/DIAGNOSTIC/ImmoData/dq200mqb eeprom.bin
Back to Up Page
Home
OK
CANCEL


8:01 PM
Choose File For Save
/storage/emulated/0/cnlaunch/X431PADV/989890002554/DIAGNOSTIC/ImmoData/dq200mqb eeprom.bin
Back to Up Page
Home
Information
Selected File Is:/storage/emulated/0/
cnlaunch/X431PADV/989890002554/
DIAGNOSTIC/ImmoData/dq200mqb
eeprom.bin
OK
OK
CANCEL

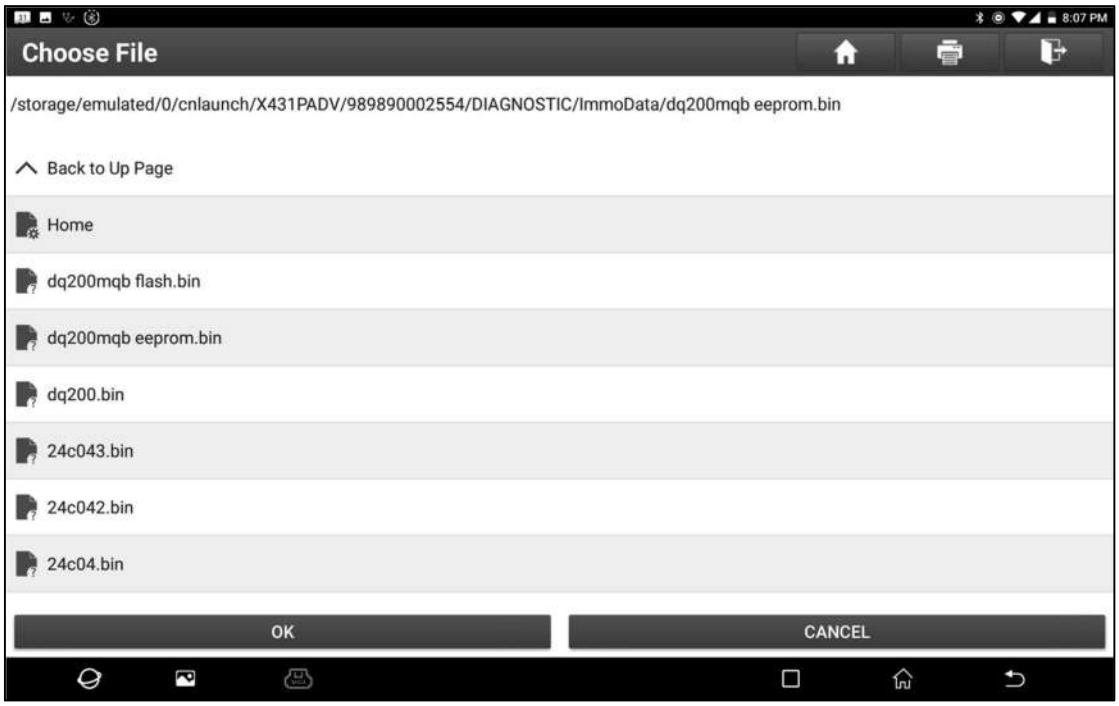


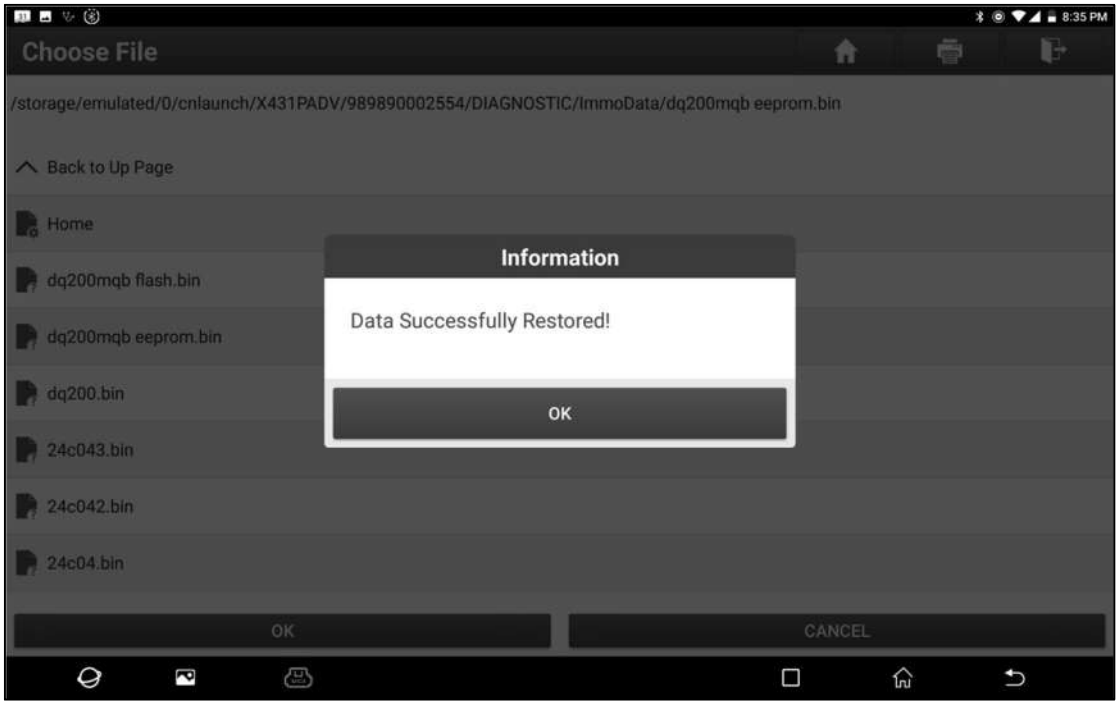
6. Click [Backup FLASH Data] to back up the FLASH data of the original vehicle gearbox, and the operation is the same as above.

7. Click [Disconnect] to disconnect the original vehicle gearbox, and then disconnect the original vehicle gearbox from the BENCH mode line.

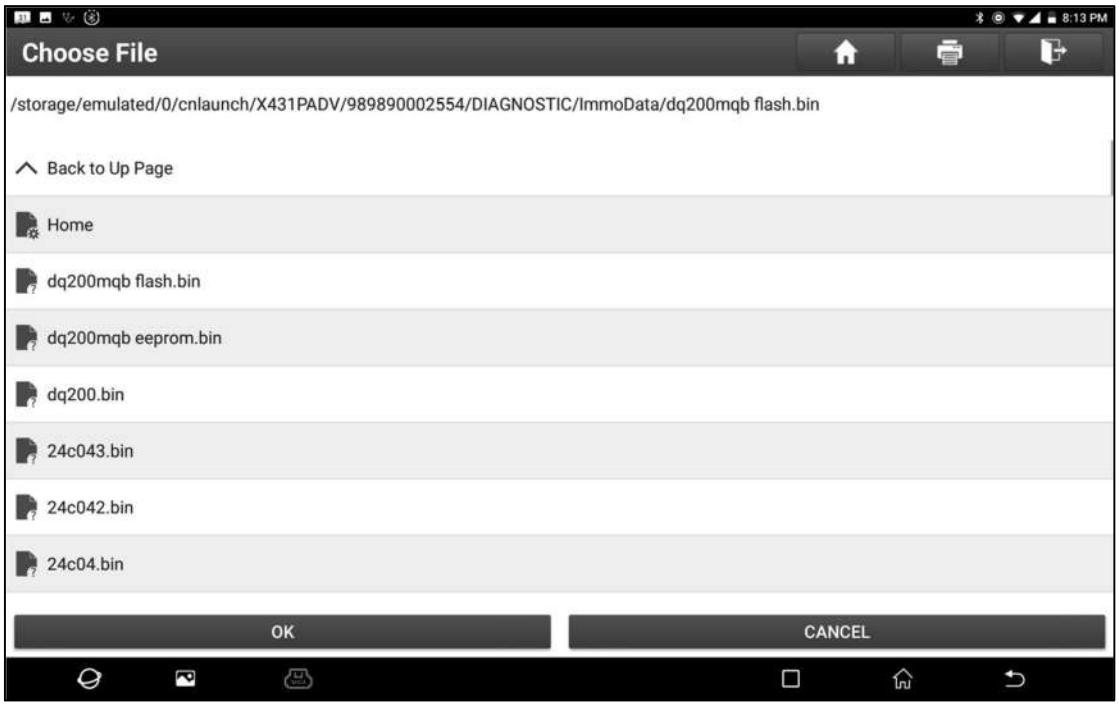
8. Connect the gearbox ECU for replacement to the anti-theft programmer according to the steps 3 and 4.

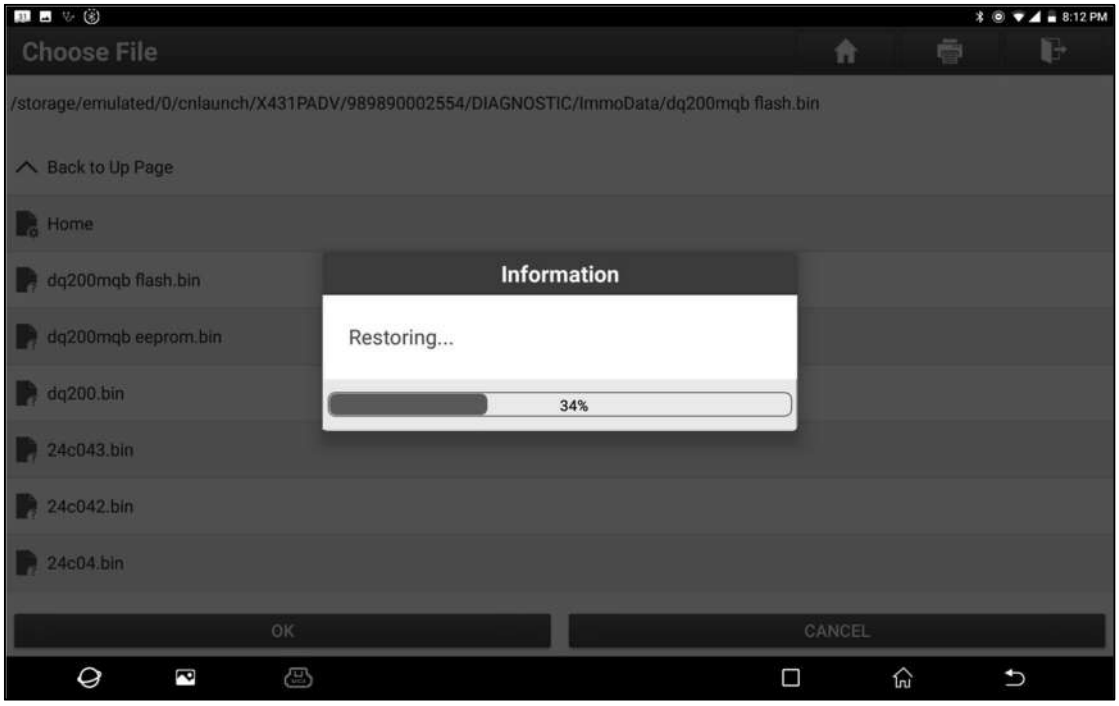
9. After connecting the gearbox ECU for replacement, click [Restore EEPROM Data] on the function menu interface of DQ200-MQB, select the EEPROM data backed up in step 5, and click [OK] to write the EEPROM data of the original vehicle gearbox In the new gearbox, as shown in the figure:

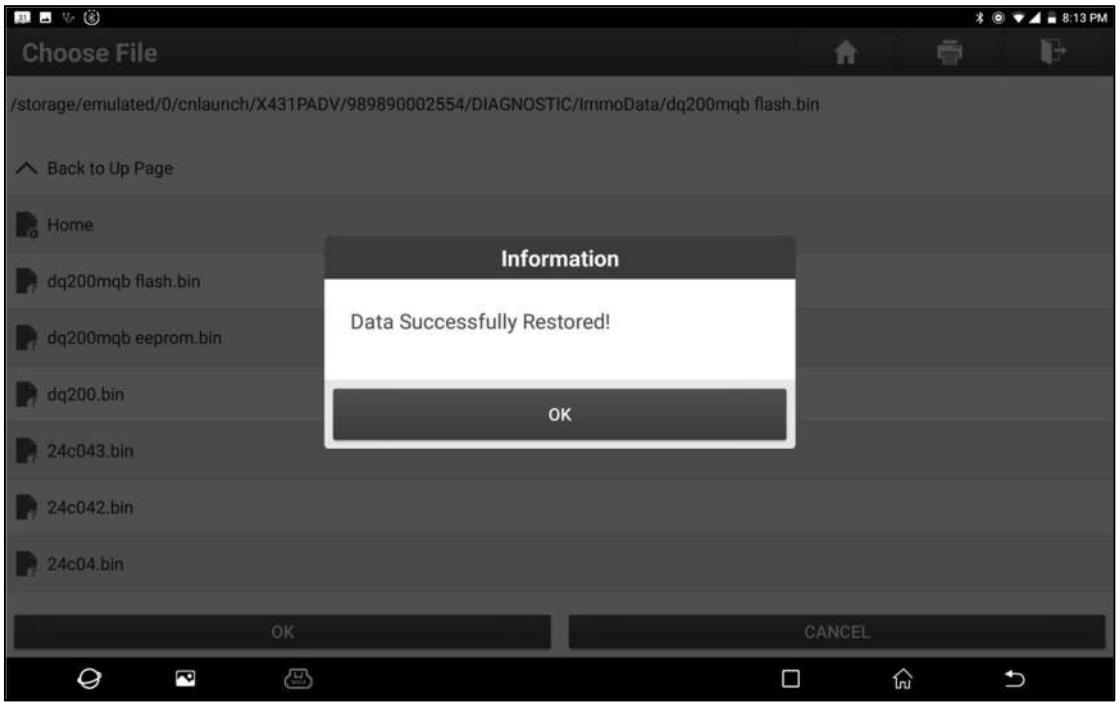




10. Click [Restore FLASH Data] to write the FLASH data of the original vehicle gearbox backed up in step 6 into the gearbox ECU for replacement. The operation steps are the same as step 9, as shown in the following figure:

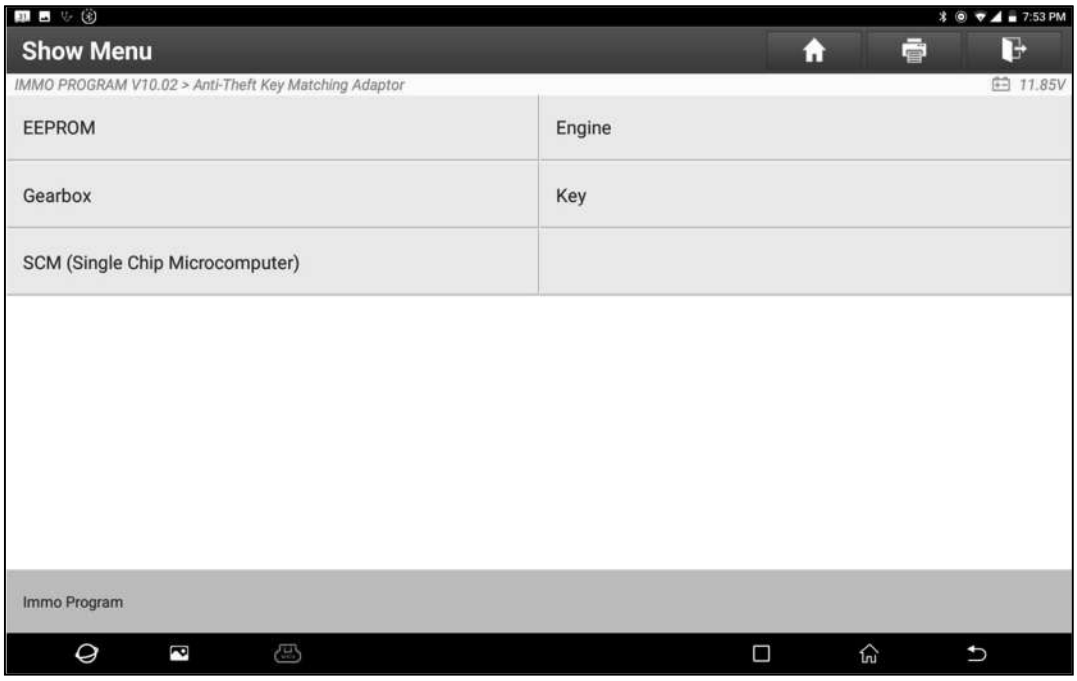

8:13 PM
Choose File
/storage/emulated/0/cnlaunch/X431PADV/989890002554/DIAGNOSTIC/ImmoData/dq200mqb flash.bin
Back to Up Page
Home
dq200mqb flash.bin
dq200mqb eeprom.bin
dq200.bin
24c043.bin
24c042.bin
24c04.bin
OK
CANCEL


8:12 PM
Choose File
/storage/emulated/0/cnlaunch/X431PADV/989890002554/DIAGNOSTIC/ImmoData/dq200mqb flash.bin
Back to Up Page
Home
dq200mqb flash.bin
dq200mqb eeprom.bin
dq200.bin
24c043.bin
24c042.bin
24c04.bin
Information
Restoring...
34%
OK
CANCEL

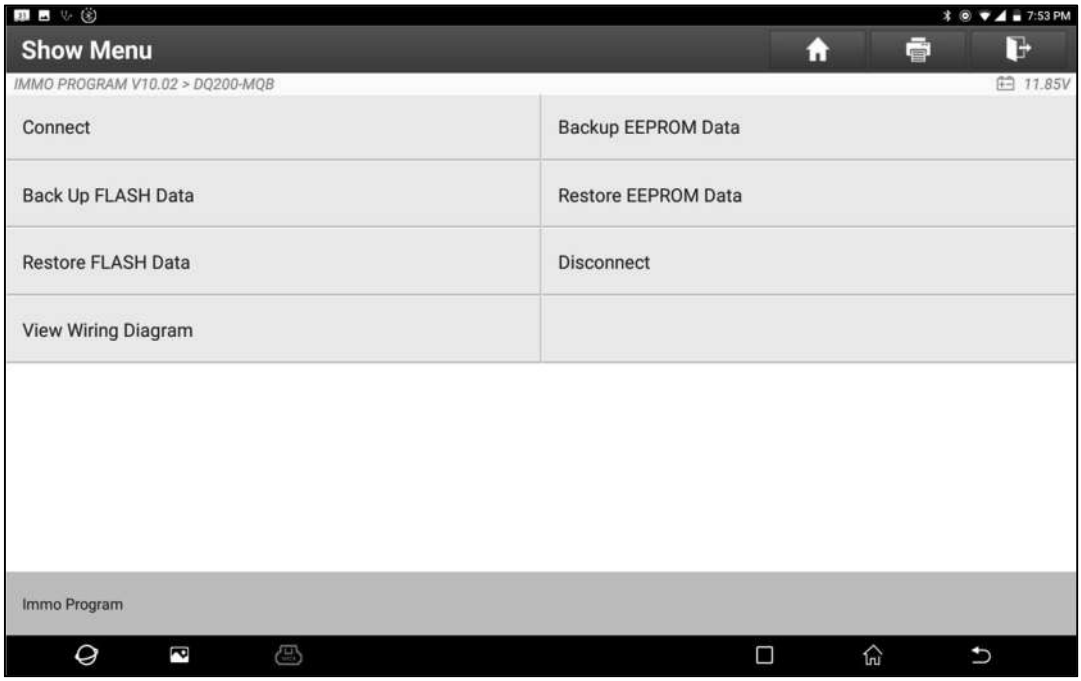


Situation 2: The data of the customer's original vehicle gearbox ECU is unreadable or the data is damaged. In this situation, we need to back up the EEPROM of the ECU for replacement (we call it new gearbox ECU here), and then manually input the original CS code or get the original CS code from the original key.

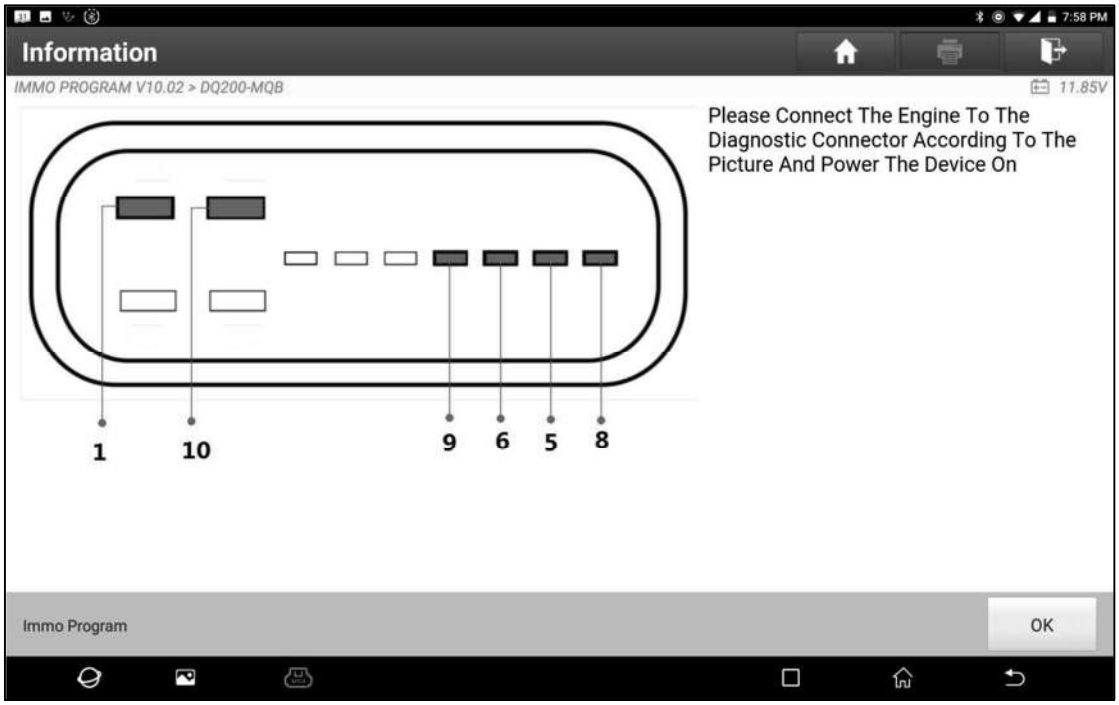
1. Enter “Service Function”, find “IMMO PROGRAM”, and choose [Anti-Theft Key Matching Adaptor].



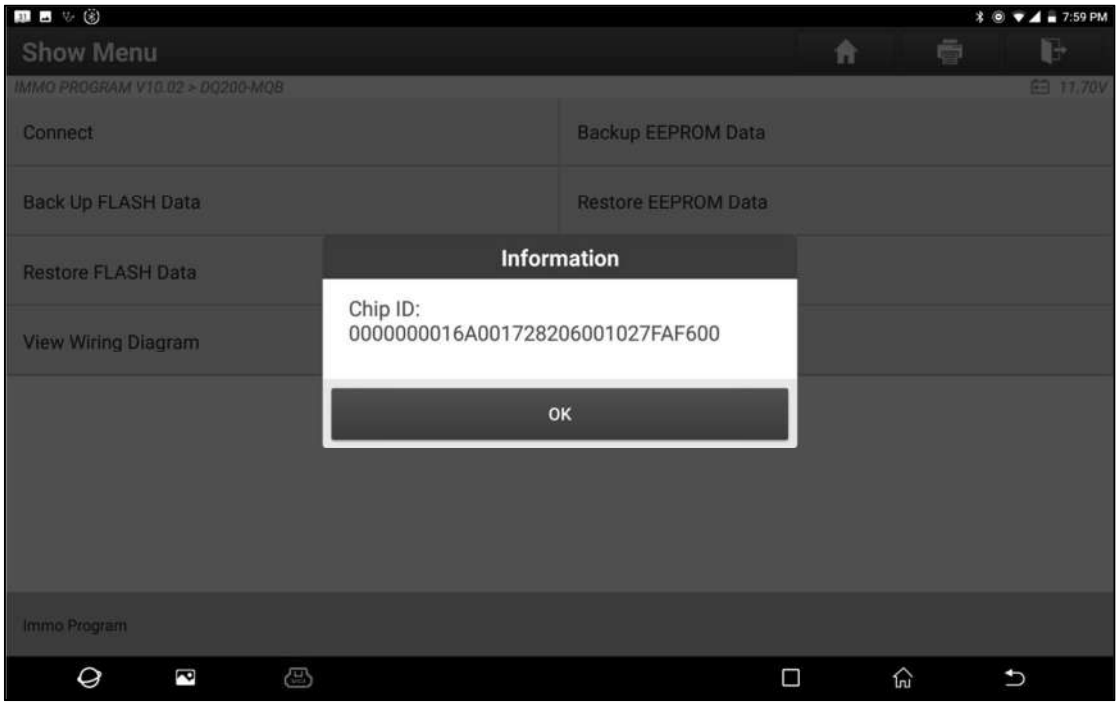
2. Select [Gearbox], and then select Gearbox type according to the specific model, here we choose [DQ200-MQB] to enter the function menu. As shown in the below figure：



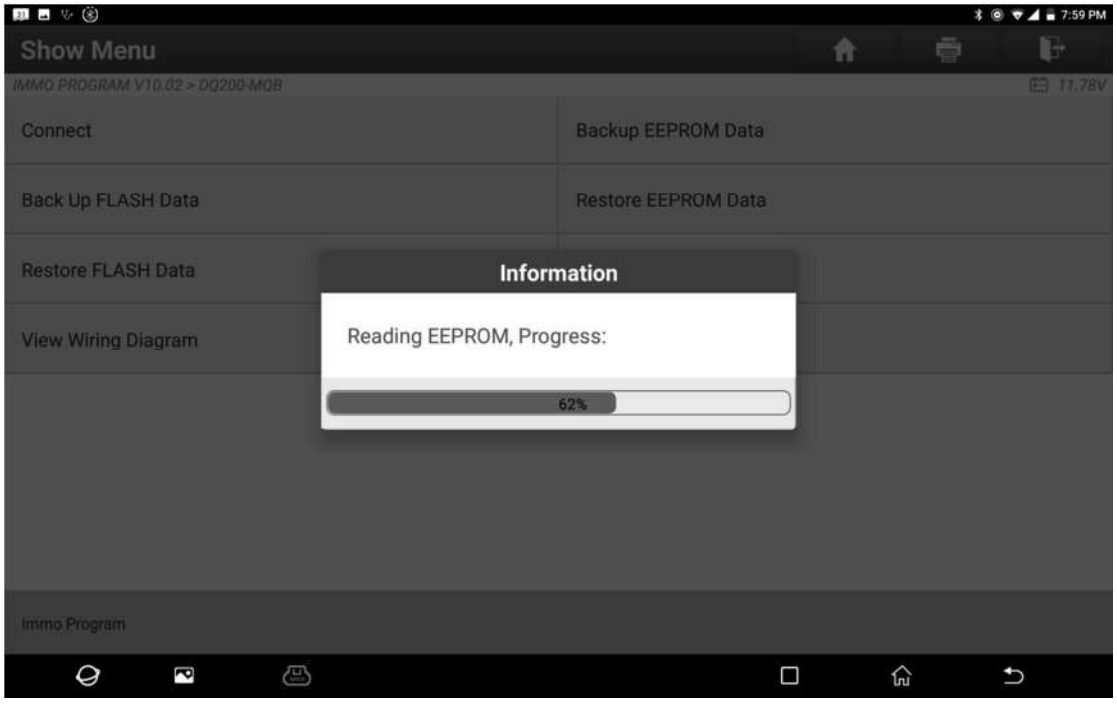
3. Click [View Writing Diagram], then connect the new gearbox ECU with X-PRO G3, X-431 Pad V as the below image.

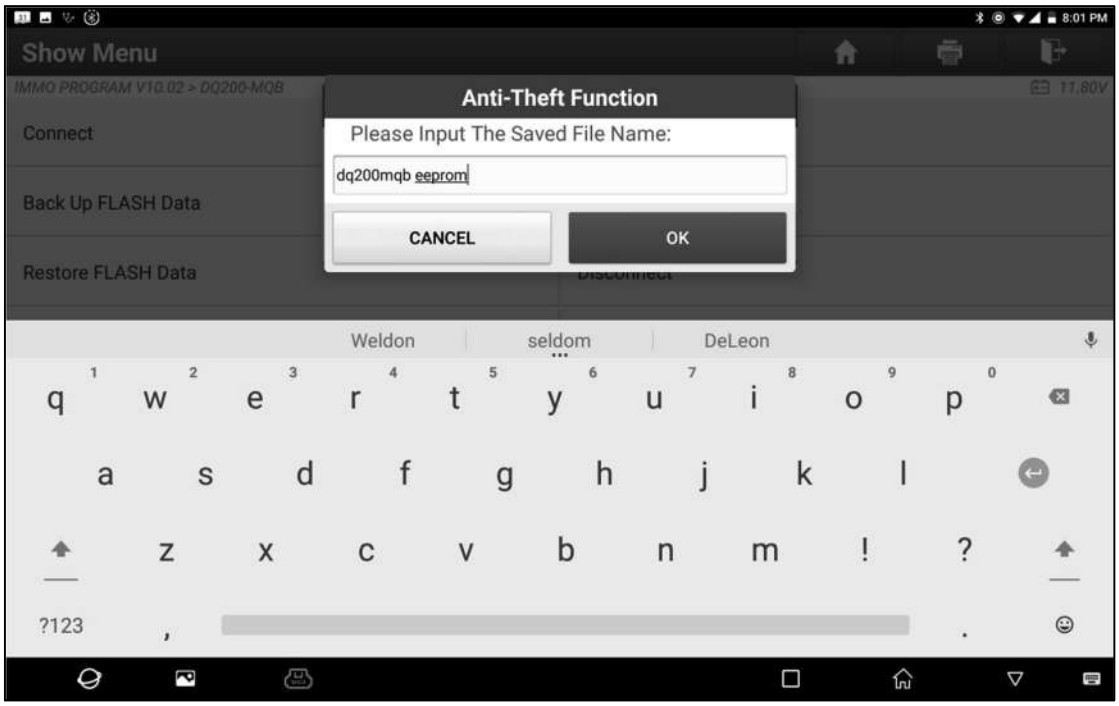


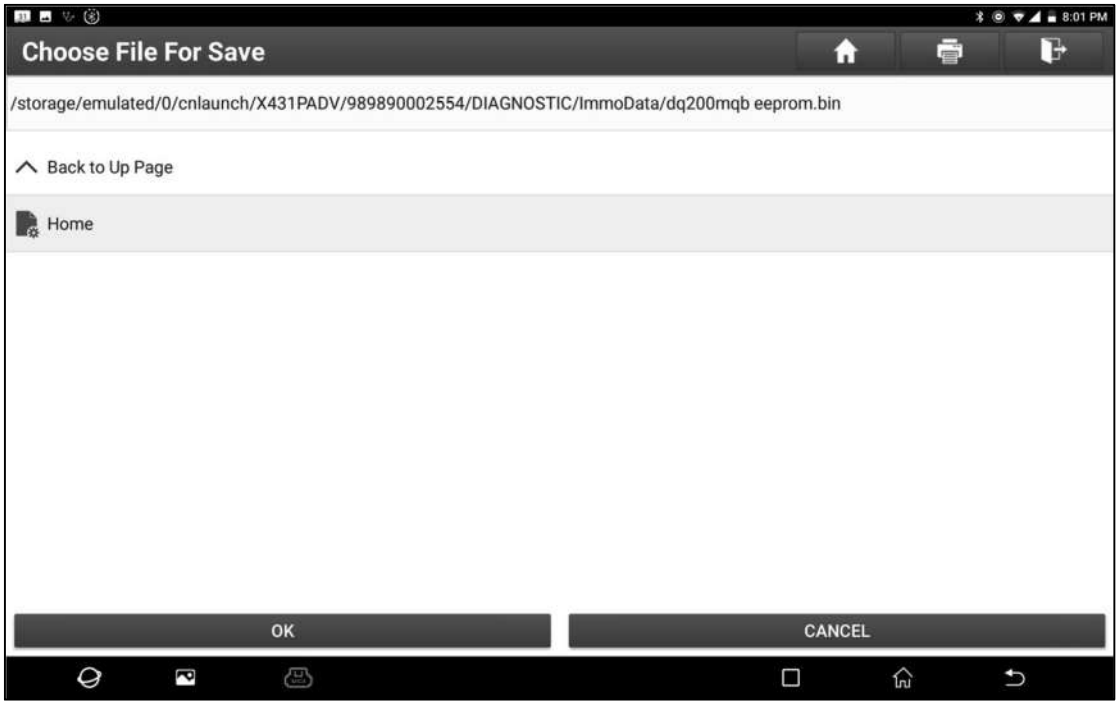
4. Then click [Connect], click [OK] after read out the ID of the new gearbox ECU chip.

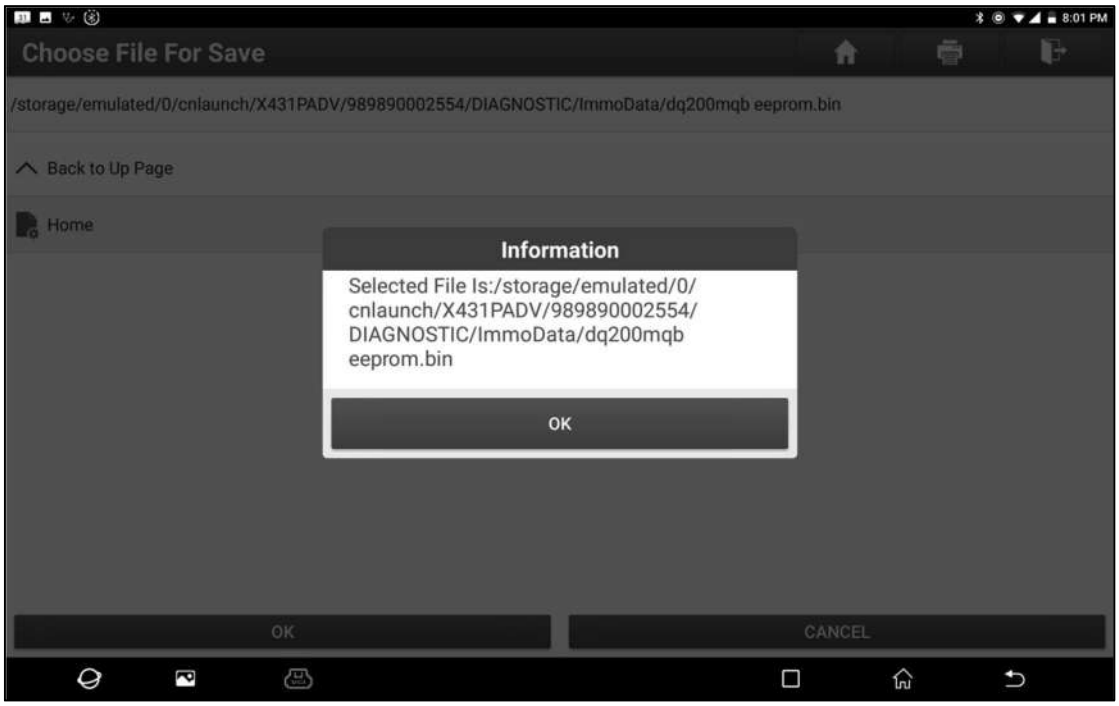


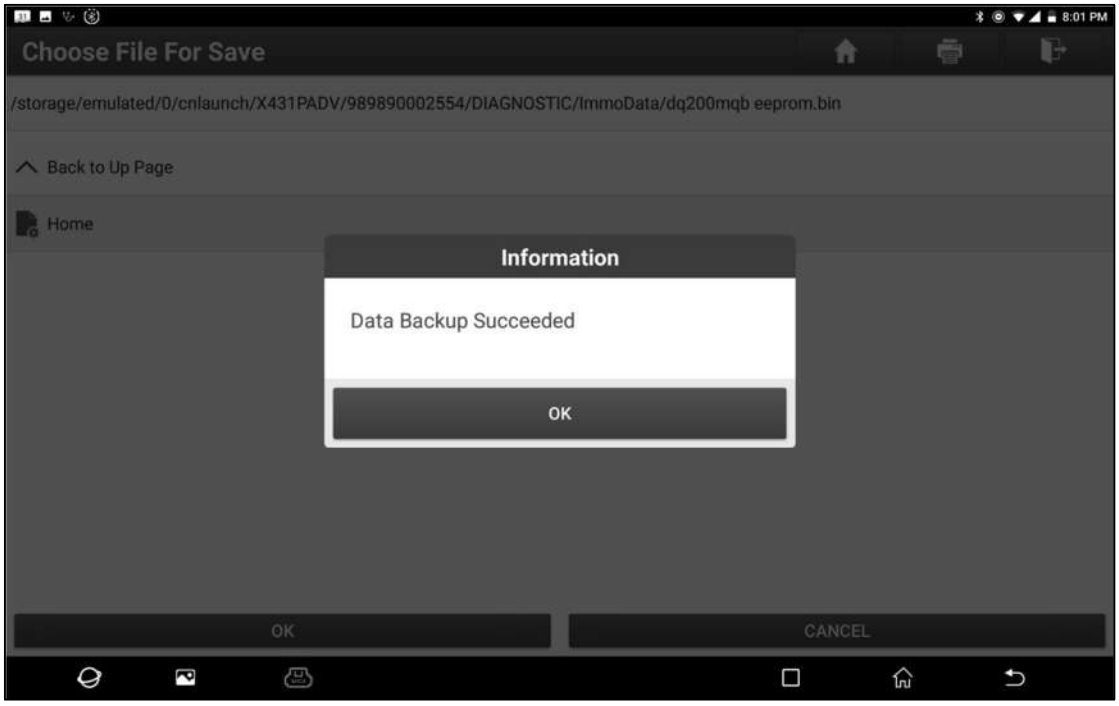
5. Click [Backup EEPROM Data] in this menu, read the EEPROM data of the new gearbox, enter the file name to be saved, click [OK], select the path where the file is to be stored, and click [OK] to save, as shown in the figure below Show:



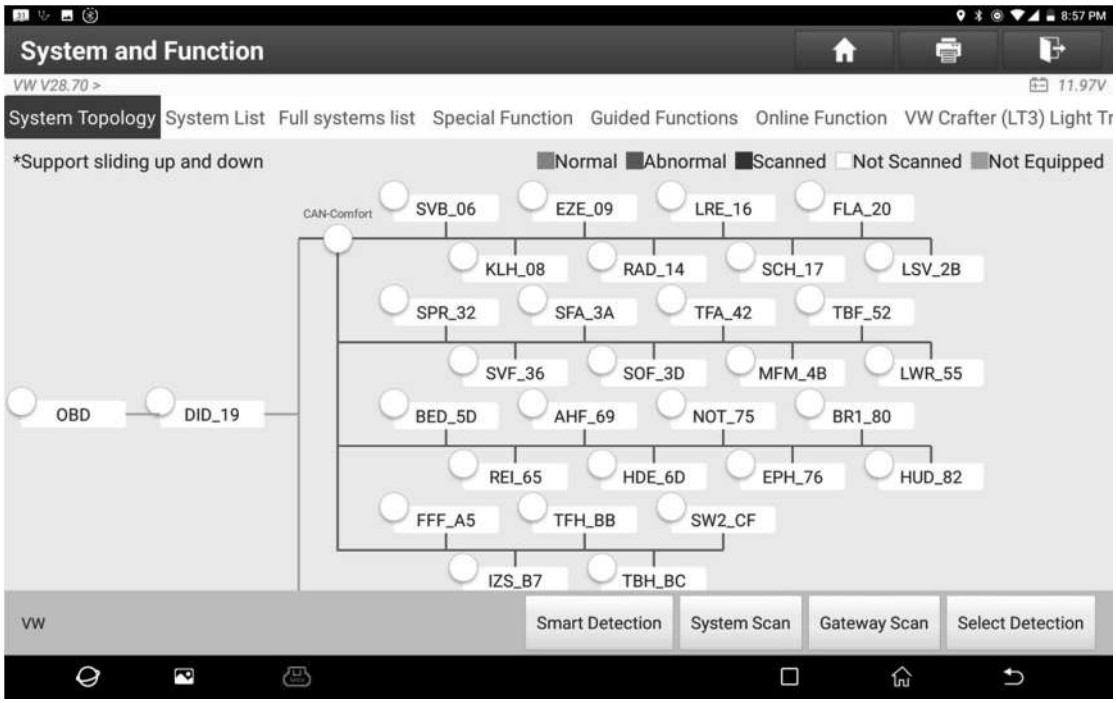

8:01 PM
Show Menu
IMMO PROGRAM V10.02 > DQ200-MQB
11.80V
Connect
Back Up FLASH Data
Restore FLASH Data
Anti-Theft Function
Please Input The Saved File Name:
dq200mqb eeprom
CANCEL
OK
Weldon
seldom
DeLeon
?123

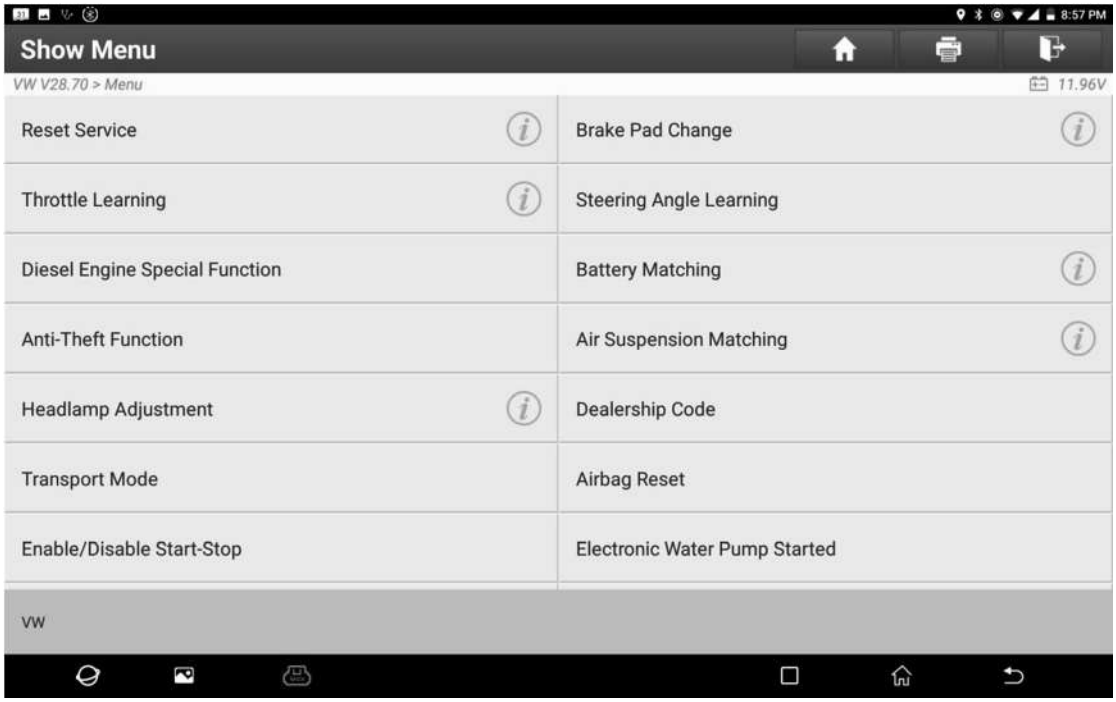

8:01 PM
Choose File For Save
/storage/emulated/0/cnlaunch/X431PADV/989890002554/DIAGNOSTIC/ImmoData/dq200mqb eeprom.bin
Back to Up Page
Home
OK
CANCEL

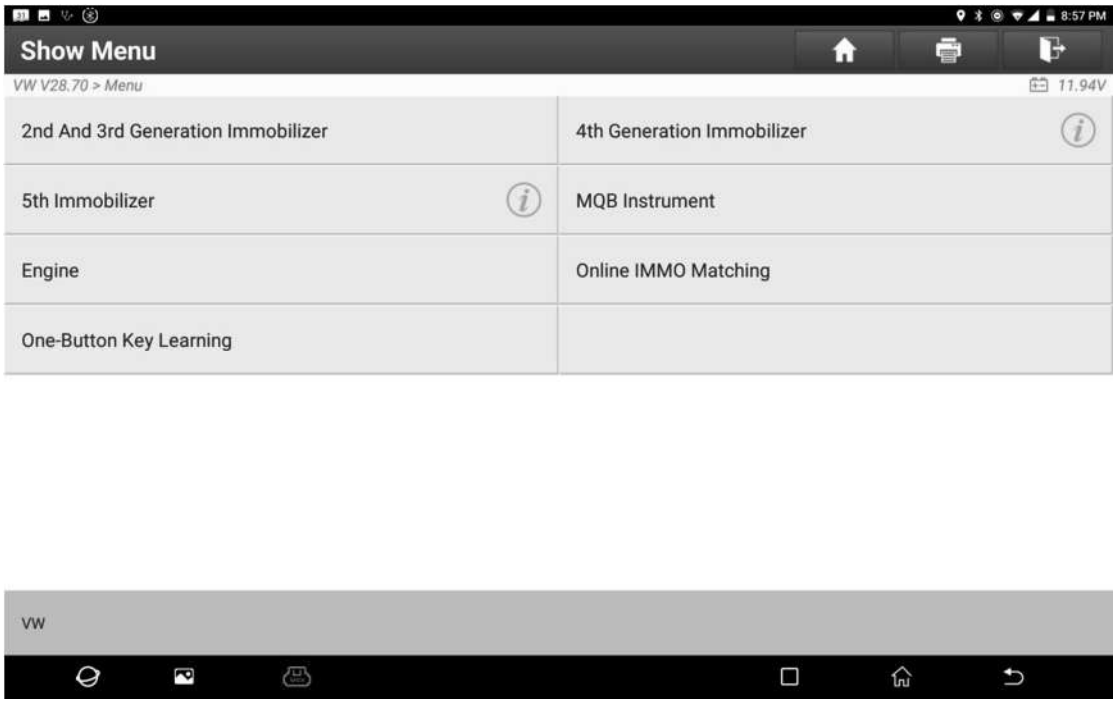


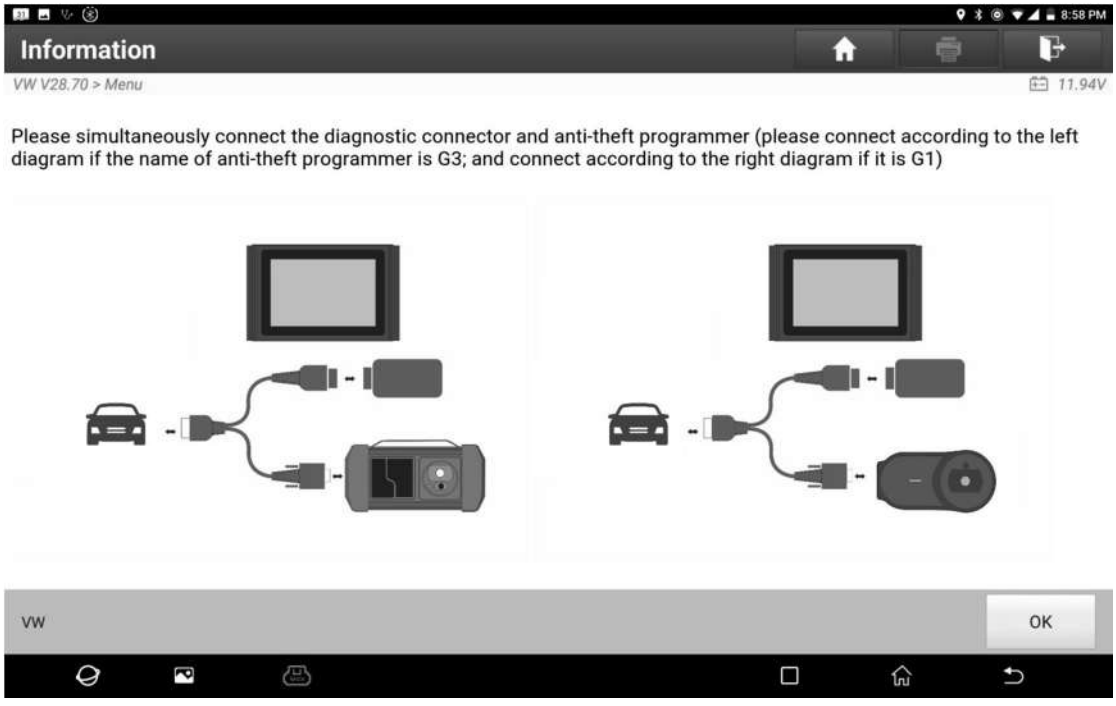


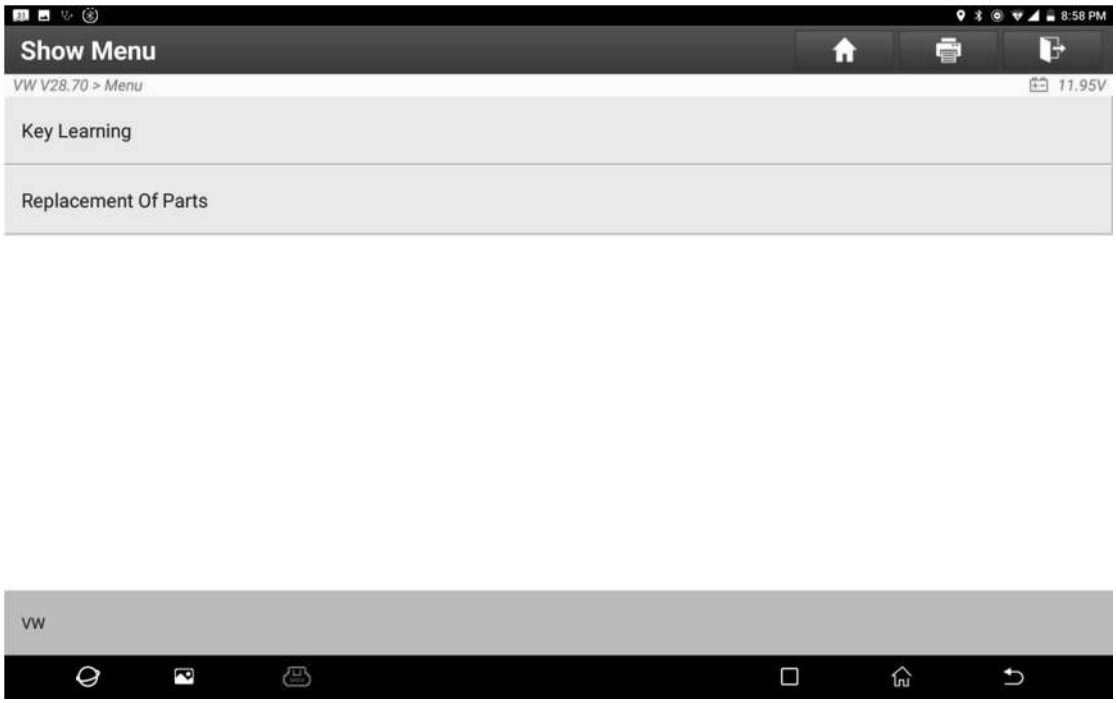
6. Exit the [Special Function], enter the local diagnosis, enter the Volkswagen software, select [Special Function]>>[Anti-Theft Function], click [OK], enter the main menu of the anti-theft system, select [MQB Instrument], click [OK]. Select [Replacement Of Parts]>>[Transmission], click [OK], click [YES] to enter the gearbox replacement page, as shown in the figure:

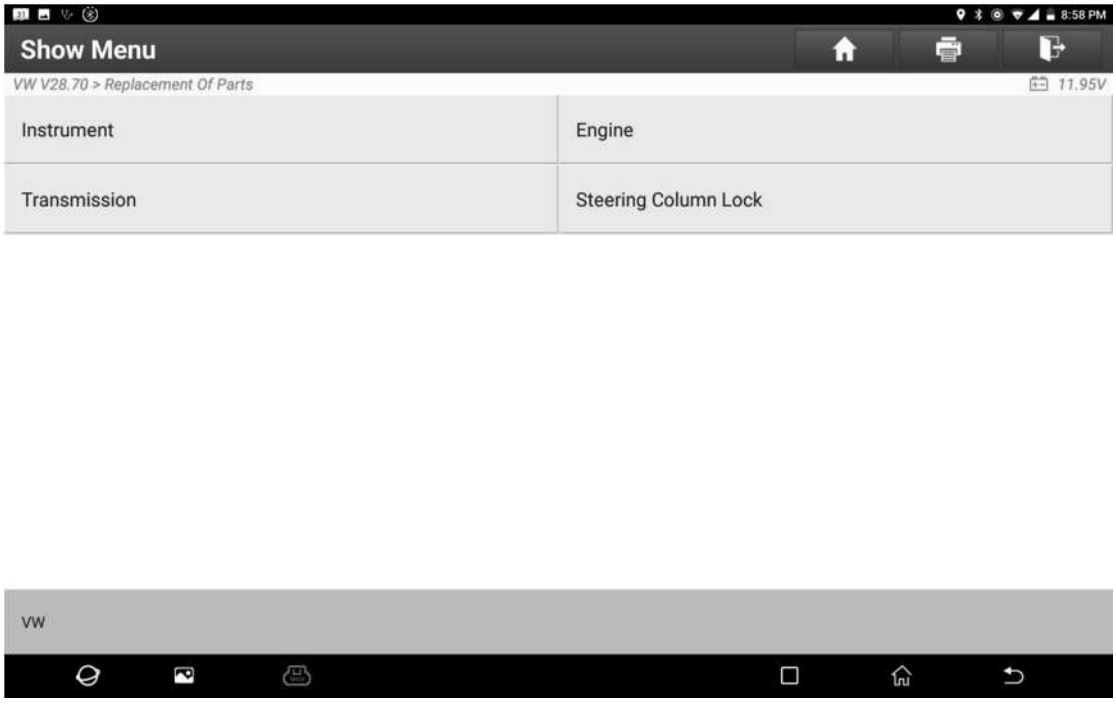

8:57 PM
System and Function
VW V28.70 >
11.97V
System Topology
System List
Full systems list
Special Function
Guided Functions
Online Function
VW Crafter (LT3) Light Tr
*Support sliding up and down
Normal
Abnormal
Scanned
Not Scanned
Not Equipped
CAN-Comfort
SVB_06
EZE_09
LRE_16
FLA_20
KLH_08
RAD_14
SCH_17
LSV_2B
SPR_32
SFA_3A
TFA_42
TBF_52
SVF_36
SOF_3D
MFM_4B
LWR_55
OBD
DID_19
BED_5D
AHF_69
NOT_75
BR1_80
REI_65
HDE_6D
EPH_76
HUD_82
FFF_A5
TFH_BB
SW2_CF
IZS_B7
TBH_BC
VW
Smart Detection
System Scan
Gateway Scan
Select Detection

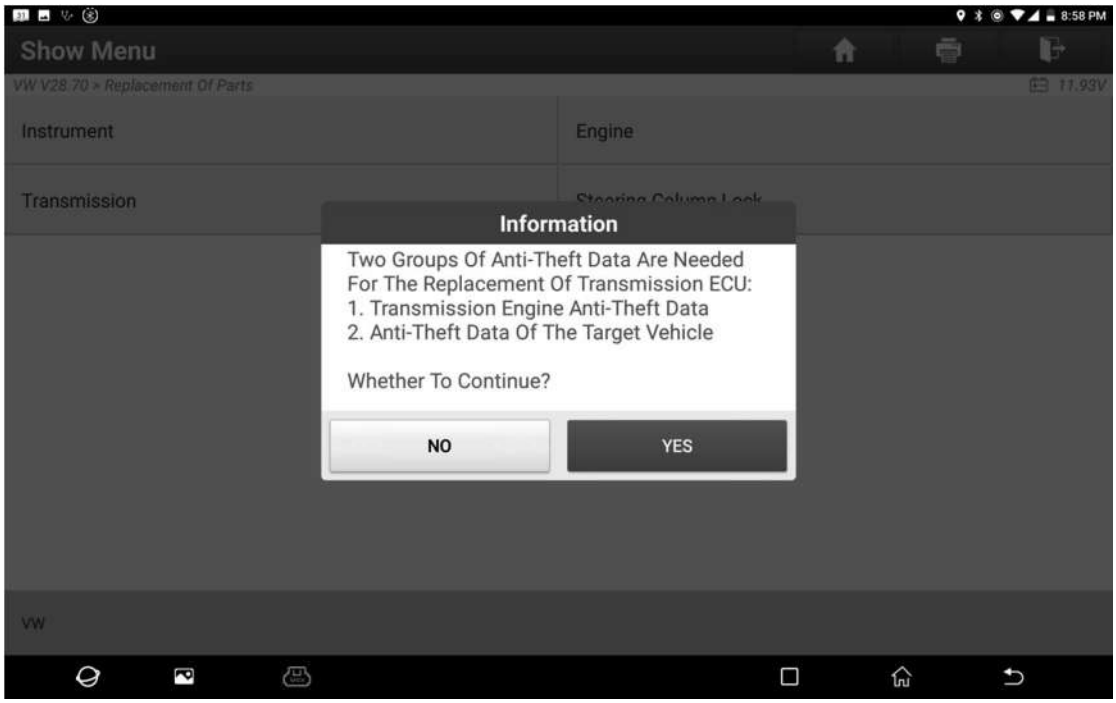

8:57 PM
Show Menu
VW V28.70 > Menu
11.96V
Reset Service
Brake Pad Change
Throttle Learning
Steering Angle Learning
Diesel Engine Special Function
Battery Matching
Anti-Theft Function
Air Suspension Matching
Headlamp Adjustment
Dealership Code
Transport Mode
Airbag Reset
Enable/Disable Start-Stop
Electronic Water Pump Started
VW

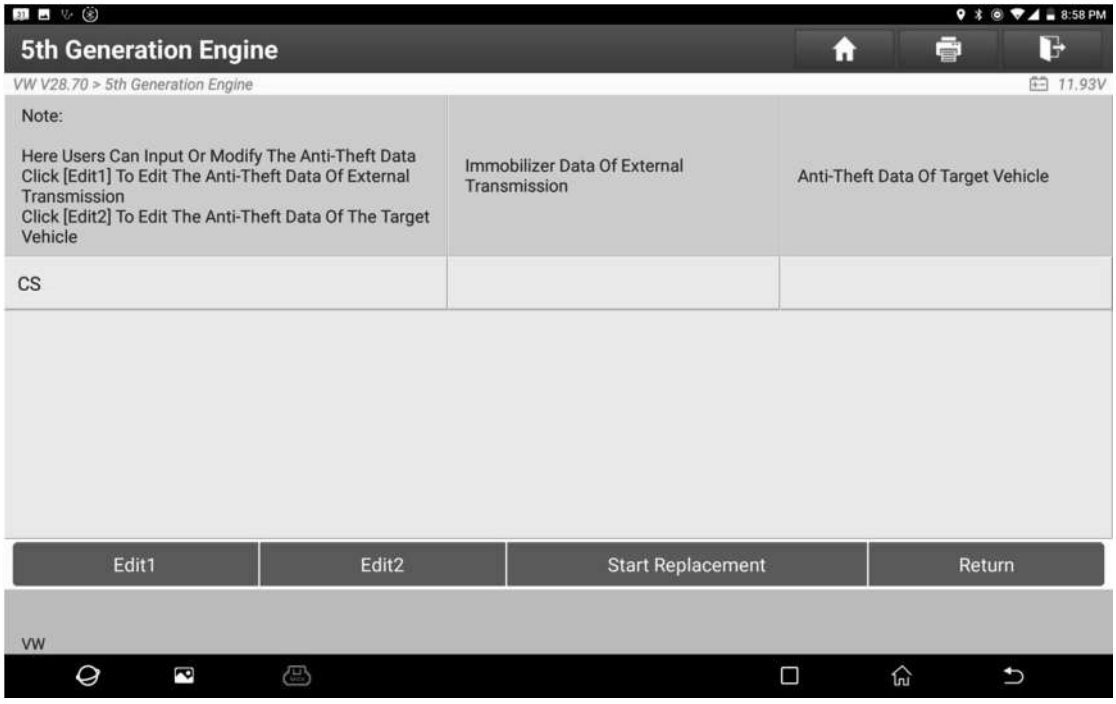

8:57 PM
Show Menu
VW V28.70 > Menu
11.94V
2nd And 3rd Generation Immobilizer
4th Generation Immobilizer
5th Immobilizer
MQB Instrument
Engine
Online IMMO Matching
One-Button Key Learning
VW


8:58 PM
Information
VW V28.70 > Menu
11.94V
Please simultaneously connect the diagnostic connector and anti-theft programmer (please connect according to the left diagram if the name of anti-theft programmer is G3; and connect according to the right diagram if it is G1)
VW
OK

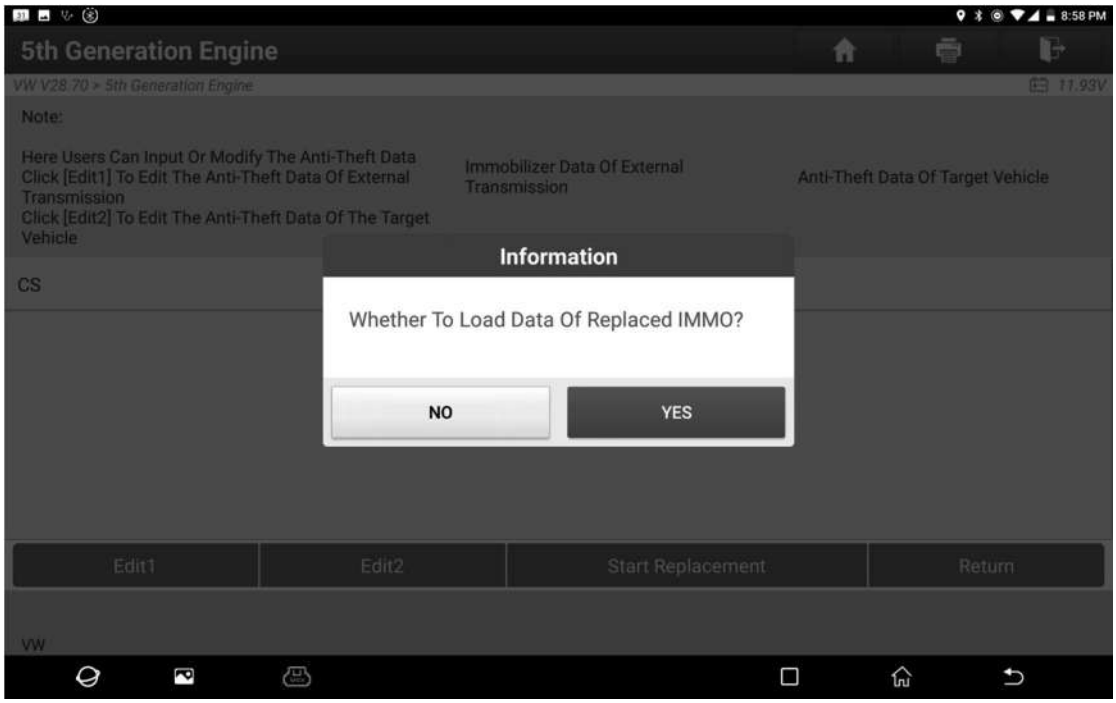

8:58 PM
Show Menu
VW V28.70 > Menu
11.95V
Key Learning
Replacement Of Parts
vw

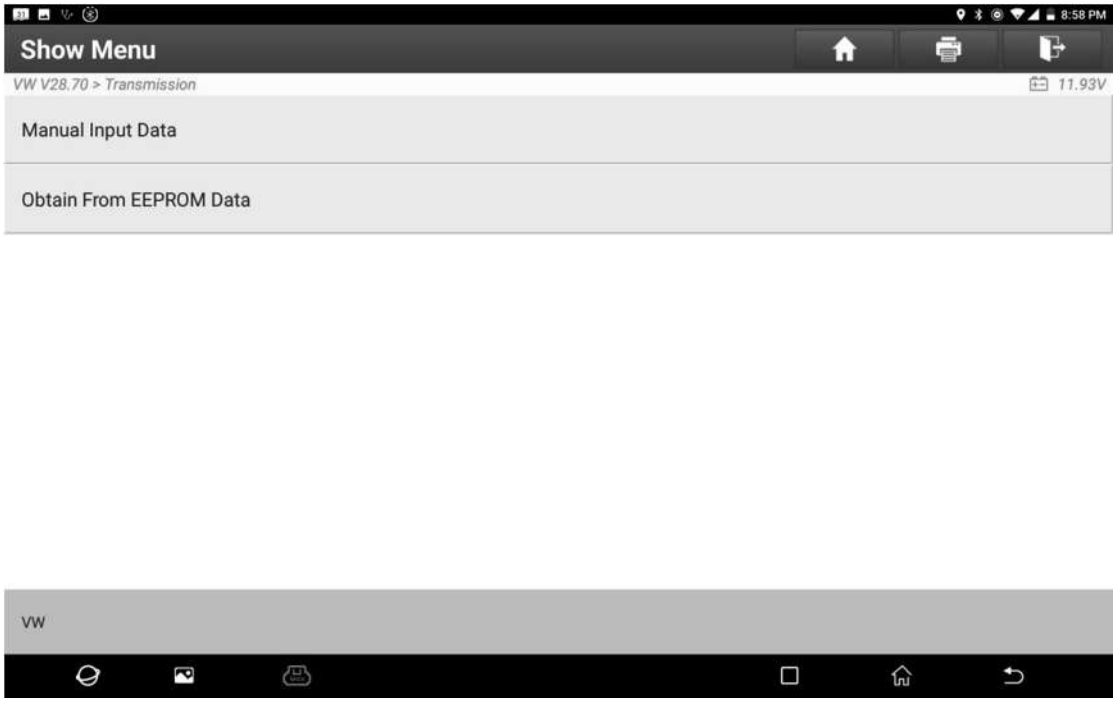

8:58 PM
Show Menu
VW V28.70 > Replacement Of Parts
11.95V
Instrument
Engine
Transmission
Steering Column Lock
vw

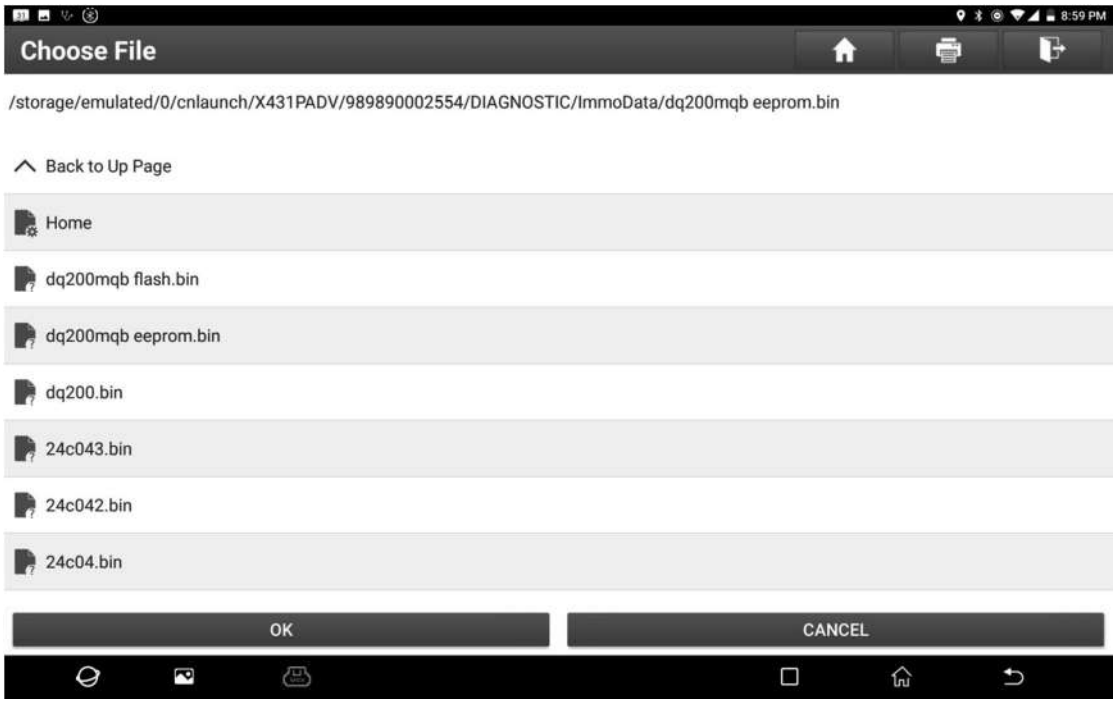




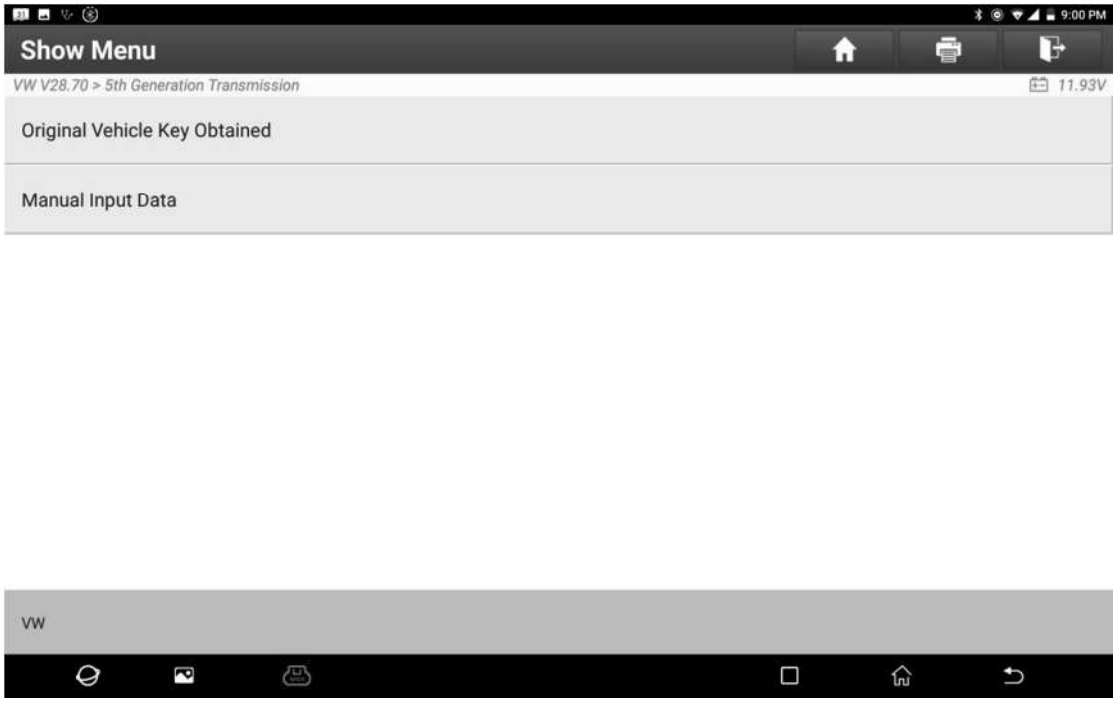
7. Select [Edit1], click [NO], click [Obtain From EEPROM Data], select the new gearbox EEPROM data backed up in step 5, and click [OK], as shown in the figure:

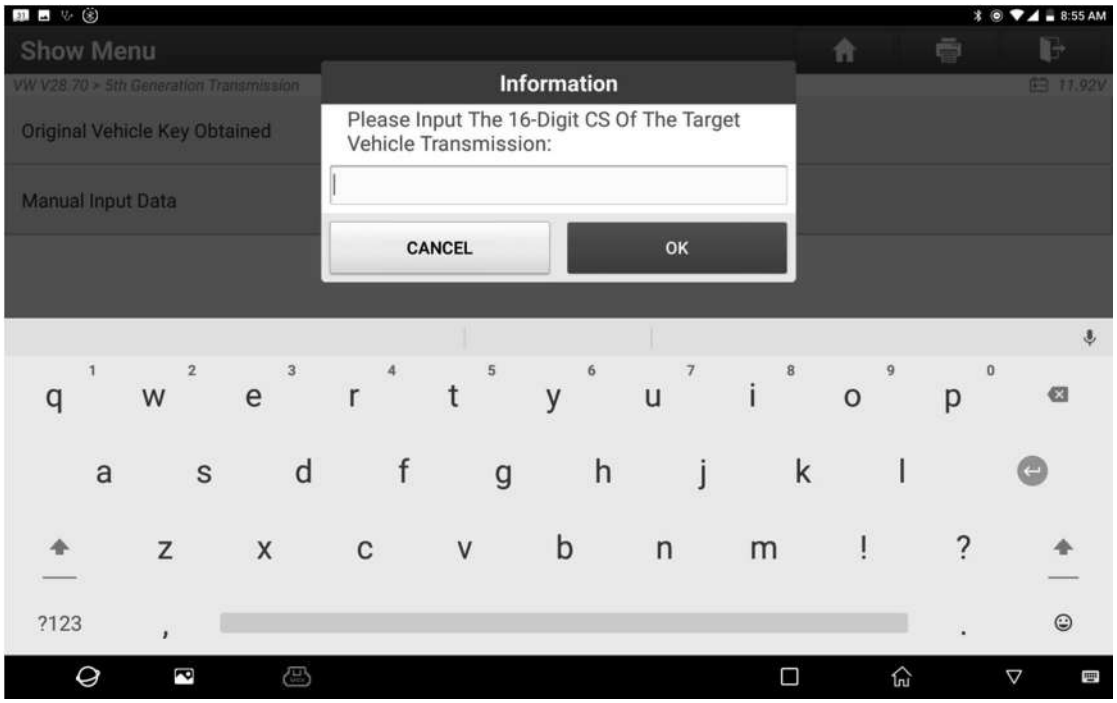

8:58 PM
5th Generation Engine
VW V28.70 > 5th Generation Engine
11.93V
Note:
Here Users Can Input Or Modify The Anti-Theft Data
Click [Edit1] To Edit The Anti-Theft Data Of External Transmission
Click [Edit2] To Edit The Anti-Theft Data Of The Target Vehicle
Immobilizer Data Of External Transmission
Anti-Theft Data Of Target Vehicle
CS
Information
Whether To Load Data Of Replaced IMMO?
NO
YES
Edit1
Edit2
Start Replacement
Return
VW

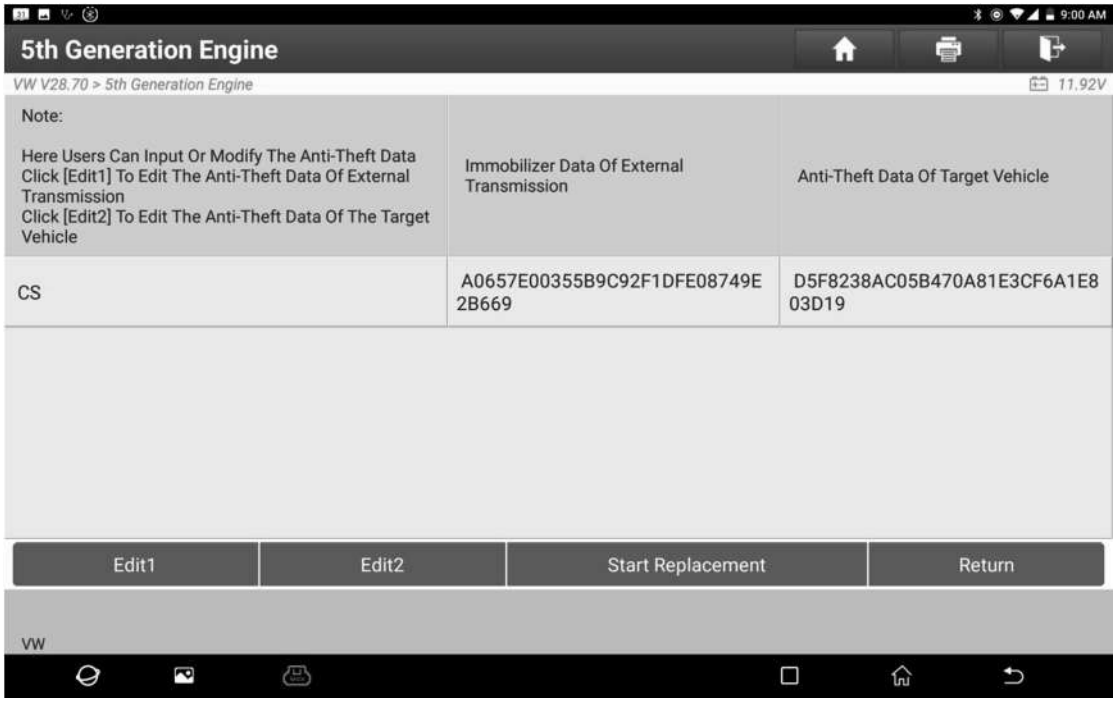
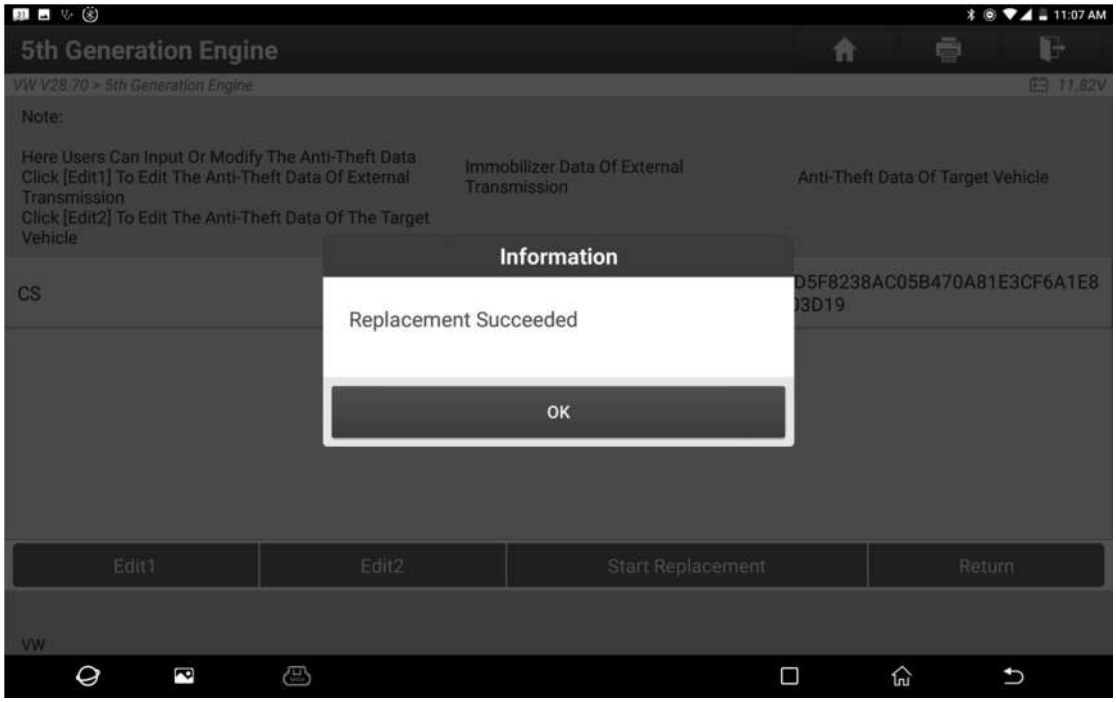

8:58 PM
Show Menu
VW V28.70 > Transmission
11.93V
Manual Input Data
Obtain From EEPROM Data
VW



8. Click [Edit2], if you have obtained the relevant data of the original vehicle gearbox from other equipment, select [Manual Input Data] and enter the 16-byte CS code of the original vehicle gearbox, as shown in the figure below: (Note: If there is no anti-theft data of the target vehicle, select [Original Vehicle Key Obtained], put the original vehicle key in the anti-theft programmer G3, and just follow the information prompts to complete, no need to enter any data to complete the replacement)




8:55 AM
Show Menu
VW V28.70 > 5th Generation Transmission
11.92V
Original Vehicle Key Obtained
Manual Input Data
Information
Please Input The 16-Digit CS Of The Target Vehicle Transmission:
CANCEL
OK


9:00 AM
5th Generation Engine
VW V28.70 > 5th Generation Engine
11.92V
Note:
Here Users Can Input Or Modify The Anti-Theft Data
Click [Edit1] To Edit The Anti-Theft Data Of External Transmission
Click [Edit2] To Edit The Anti-Theft Data Of The Target Vehicle
Immobilizer Data Of External Transmission
Anti-Theft Data Of Target Vehicle
CS
A0657E00355B9C92F1DFE08749E2B669
D5F8238AC05B470A81E3CF6A1E803D19
Edit1
Edit2
Start Replacement
Return
VW

9. Click the [Start Replacement] button, and input the original car's VIN code, power level and CS code of the original car instrument according to the information prompts to complete the gearbox replacement, as shown in the figure: