Cloning for Audi DQ380 Gearbox

Supported devices: Launch X-431 PRO Immobilizer matching device (Expert

version), Launch X-43 PRO or PAD series comprehensive diagnostic device or +X-431 GIII Immobilizer programmer

Case description: Audi DQ380 gearbox ECU, the original gearbox ECU hardware failed, but still

can read, replace a used gearbox ECU and perform ECU data cloning.

Main process:

The cloning function can only be directly connected to ECU, backup and restore through the BENCH mode;

1. Connect the original gearbox ECU through the BENCH mode to back up the original gearbox data;

2. Connect the external used gearbox ECU through the BENCH mode, and write the original gearbox data backed up before.

3. Connect the external used gearbox ECU through the BENCH mode, and back up the data of external used gearbox ECU again

Current data (after data has been restored)

4. Compare if the original gearbox data backed up at the very beginning and the gearbox data after restored are the same (install it on the vehicle to test after checking the data are the same)

Operation guidelines:

1. Select the Immobilizer programmer software, connect to the programmer, click "OK", (as shown in the figure below);



Figure 1

2. Select 【Gearbox】, (as shown in the figure below);

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Show Menu	
IMMO PROGRAM V10.06 > Anti-Theft Key Matching Adaptor	🗄 12.08V
EEPROM	Engine
Gearbox	Кеу
SCM (Single Chip Microcomputer)	Data comparison

Immo Program							
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Figure 2

3. Select **[**VW/Audi **]**, (as shown in the figure below);

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Show Menu	
IMMO PROGRAM V10.06 > Gearbox	🗄 12.08V
VW/Audi	Porsche
Benz	Infiniti
Nissan	Bentley
Alpina	BMW
Chrysler	Dodge
Jaguar	Land Rover
Rolls Royce	Alfa Romeo
Immo Program	

Figure 3

4. Select **[**DQ380**]**, (as shown in the figure below);

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Show Menu	
IMMO PROGRAM V10.06 > VW/Audi	🕀 12.08V
DQ200-MQB	DQ250XX
DL501 Gen1	VL381
DQ400E	DL501 Gen2
DL382-7F	DQ380
AL551	AL450
AL552	DQ200G2

Immo Program				
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		Figure 4		

5. Please read the prompt information carefully, connect the USB cable according to the prompt, and click "OK" (as shown in the figure below);

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Information			A	ē	ŀ
IMMO PROGRAM V10.06 > VW/Audi					🗄 12.08V
	Pre	cautions.			
ECU may be damaged du USB to connect the devic	ue to erratic reading and w ce and connector.	riting data of Bluetooth or WiF	i in BENCH	mode. Pleas	se use
USB	WIFI/BLUETOOTH				
Immo Program					ОК
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Figure 5

6. Select [View Wiring Diagram], (as shown in the figure below);

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Show Menu	
IMMO PROGRAM V10.06 > DQ380	🗄 12.08V
Connect	Backup complete data
Restore complete data	Disconnect
View Wiring Diagram	

Immo Program						
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Figure 6

7. Connect the original gearbox ECU according to the picture. A 120 ohm resistance is needed for the connection between line 6 and 9, select "OK", and click "OK" after connected, (as shown in the figure below);



Figure 7

8. Please select the **[**Connect **]** function first, and test to verify whether the connection is correct (as shown in the figure below);

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Show Menu	
IMMO PROGRAM V10.06 > DQ380	🖽 12.08V
Connect	Backup complete data
Restore complete data	Disconnect
View Wiring Diagram	

Immo Program					
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			Figure 8		

9. Click "OK" after connected, as shown in the figure below, the connection is OK when it prompts Connected, and you can go to the next steps;

Show Menu			f		ŀ
IMMO PROGRAM V10.06 > DQ380					🗄 11.82V
Connect		Backup complete data			
Restore complete data		Disconnect			
View Wiring Diagram	Inform	nation			
	Connected				
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Immo Program					
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Figure 9

10. Select 【Backup complete data】, (as shown in the figure below);

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Show Menu	^	ē
IMMO PROGRAM V10.06 > DQ380		🗄 11.89V
Connect	Backup complete data	
Restore complete data	Disconnect	
View Wiring Diagram		

Immo Program						
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Figure 10

11. Reading data in progress, (as shown in the figure below);

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Show Menu			A		P
IMMO PROGRAM V10.06 > DQ380					🗄 11.78V
Connect		Backup complete data			
Restore complete data		Disconnect			
View Wiring Diagram	Inform	nation			
	Reading EEPROM, Prog	gress:			
		27%			
Immo Program					
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Figure 11

12. Enter the file name, and then click "OK", while the data will not be saved if click "Cancel", (as shown in the figure below);

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Show Menu		A ā P
IMMO PROGRAM V10.06 > DQ380	Anti-Theft Functio	n 🕀 11.83V
Connect	Please Input The Saved File Nan	ne:
Restore complete data		
View Wiring Diagram		OK
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1 2 3	4 5 6	7 8 9 0 🖾
@ # ₹	% & -	+ () 😖
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Figure 12

13. You can choose the save path independently, click "OK", (as shown in the figure below);

Choose File For Save			f		P
/storage/emulated/0/cnlaunch/X431PAl yuanche202111091355.bin	0V/989890002554/DIAGNOSTIC/Imm	oData/IMMO_VW/DQ380) complete dat	e	
A Back to Up Page					
Home	Informatio	1			
	Selected File Is:/storage/em cnlaunch/X431PADV/98989 DIAGNOSTIC/ImmoData/IM complete date yuanche2021	ulated/0/ 0002554/ MO_VW/DQ380 11091355.bin			
	ок				
ОК			CANCEL		
<i>Q</i>			 命		5

Figure 13

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Choose File For Save		A		P
/storage/emulated/0/cnlaunch/X431PAl yuanche202111091355.bin	DV/989890002554/DIAGNOSTIC/ImmoData/IMMO_VW/D0	380 complete	date	
A Back to Up Page				
Home				
	Information			
	Data Backup Succeeded			
	ок			
ок		CANCEL		
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14. Click "OK" and it is saved successfully, (as shown in the figure below);

Figure 14

15. Select [Disconnect], click "OK", (as shown in the figure below);

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Show Menu			A		P
IMMO PROGRAM V10.06 > DQ380					🕂 11.89V
Connect		Backup complete data			
Restore complete data		Disconnect			
View Wiring Diagram	Inform	nation			
	Disconnection Succee	ded			
	0	К			
Immo Program					
<i>Q</i> 💌 😃				<u>ن</u>	5

Figure 15

16. Disconnect the harness connection of original gearbox ECU, and connect the external gearbox ECU according to step 6-9. After the external used gearbox ECU is successfully connected, click [Connect] first and it is tested normal, then select [Restore complete data];

	1	
IMMO PROGRAM V10.06 > DQ380		E 11.89
Connect	Backup complete data	
Restore complete data	Disconnect	
View Wiring Diagram		
Immo Program		
Ø P		
Fig	ure 16	
17. Select the original gearbox data that has	been backed up, and click "OK	" to restore it.
(as shown in the figure helew)	1 '	,
(as shown in the figure below);		
Choose File	^	ē P
(as shown in the figure below); Choose File /storage/emulated/0/cnlaunch/X431PADV/989890002554/DIAGN	DSTIC/ImmoData/IMMO_VW	a P
(as shown in the figure below); Choose File /storage/emulated/0/cnlaunch/X431PADV/989890002554/DIAGN A Back to Up Page	OSTIC/ImmoData/IMMO_VW	F
(as shown in the figure below); Choose File /storage/emulated/0/cnlaunch/X431PADV/989890002554/DIAGN A Back to Up Page Home	OSTIC/ImmoData/IMMO_VW	đ P
(as shown in the figure below); Choose File /storage/emulated/0/cnlaunch/X431PADV/989890002554/DIAGN > Back to Up Page Home DQ380 complete data new 202111101400.bin	OSTIC/ImmoData/IMMO_VW	
(as shown in the figure below); Choose File /storage/emulated/0/cnlaunch/X431PADV/989890002554/DIAGN > Back to Up Page Home DQ380 complete data new 202111101400.bin > DQ380 complete date yuanche202111091355.bin	OSTIC/ImmoData/IMMO_VW	
(as shown in the figure below); Choose File /storage/emulated/0/cnlaunch/X431PADV/989890002554/DIAGN > Back to Up Page Home DQ380 complete data new 202111101400.bin DQ380 complete date yuanche202111091355.bin MED17.7.7-FLASH.bin	OSTIC/ImmoData/IMMO_VW	
Choose File /storage/emulated/0/cnlaunch/X431PADV/989890002554/DIAGN > Back to Up Page > Home > DQ380 complete data new 202111101400.bin > DQ380 complete date yuanche202111091355.bin > MED17.7.7-FLASH.bin > MED17.7.7-EEPROM.bin	DSTIC/ImmoData/IMMO_VW	
(as shown in the figure below); Choose File /storage/emulated/0/cnlaunch/X431PADV/989890002554/DIAGN A Back to Up Page Home DQ380 complete data new 202111101400.bin DQ380 complete data new 202111101400.bin DQ380 complete date yuanche202111091355.bin MED17.7.7-FLASH.bin MED17.7.7-EEPROM.bin bcm2 eeprom.bin	OSTIC/ImmoData/IMMO_VW	
 Choose File /storage/emulated/0/cnlaunch/X431PADV/989890002554/DIAGN Back to Up Page Home DQ380 complete data new 202111101400.bin DQ380 complete date yuanche202111091355.bin MED17.7.7-FLASH.bin MED17.7.7-EEPROM.bin bcm2 eeprom.bin awaw.bin 	OSTIC/ImmoData/IMMO_VW	
(as shown in the figure below); Choose File /storage/emulated/0/cnlaunch/X431PADV/989890002554/DIAGN * Back to Up Page * Home DQ380 complete data new 202111101400.bin DQ380 complete data new 202111101400.bin * DQ380 complete date yuanche202111091355.bin MED17.7.7-FLASH.bin * MED17.7.7-EEPROM.bin * bcm2 eeprom.bin * awaw.bin OK	OSTIC/ImmoData/IMMO_VW	

Figure 17

18. Writing the original gearbox data in progress, and it will take a little long time, please wait patiently (as shown in the figure below);

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Choose File		A	ē P
/storage/emulated/0/cnlaunch/X431PADV/98989000255 yuanche202111091355.bin	54/DIAGNOSTIC/ImmoData/IMMC)_VW/DQ380 complete da	te
A Back to Up Page			
Home			
DQ380 complete data new 2021111	Information		
DQ380 complete date yuanche2021 Writing FLA	ASH Data Please Wait.		
MED17.7.7-FLASH.bin	19%		
MED17.7.7-EEPROM.bin			
bcm2 eeprom.bin			
awaw.bin			
ОК		CANCEL	
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Figure 18

19. Click "OK" after the data is successfully restored (as shown in the figure below);

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Choose File		A		F
/storage/emulated/0/cnlaunch/X431PAD yuanche202111091355.bin	V/989890002554/DIAGNOSTIC/ImmoData/IMMO_VW/DQ3	80 complete d	late	
A Back to Up Page				
Home				
	Information			
2021111				
DQ380 complete date yuanche2021	Data Successfully Restored!			
MED17.7.7-FLASH.bin	ОК			
MED17.7.7-EEPROM.bin				
bcm2 eeprom.bin				
awaw.bin				
ок		CANCEL		
<i>Q</i> 🗠			ŵ	5

Figure 19

20. If you want to verify whether the data is written correctly, you can select [Backup Complete Data] again to back up the current data of external gearbox (the current external gearbox has been executed 【Restore Complete Data】, which means the data is the original data already), and save the data, select 【Disconnect】, press the return key to return to the first level menu, select 【Data Comparison】, (as shown in the figure below);

Show Menu		f		₽
IMMO PROGRAM V10.06 > Anti-Theft Key Matching Adaptor				🗄 12.08V
EEPROM	Engine			
Gearbox	Кеу			
SCM (Single Chip Microcomputer)	Data comparison			
Immo Program				
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21. Click **[**F1**]** and **[**F2**]** respectively to import the backed-up original gearbox data and the external gearbox data which was backed up later. The purpose is to compare whether the original gearbox data is consistent with the data after cloning for the replaced gearbox (as shown in the figure below);

Data comparison			^	e P
IMMO PROGRAM V10.06 > Data compariso	n			🖽 <i>11.90</i> \
[F1] load the first data to be compare [F2] load the second data to be compared	d Status			
F1	Not Load	led		
F2	Not Load	led		
Return	F1	F2	Comparison	Return
Immo Program				
	5			

22. Click 【Comparison】 to compare the two backed up data, (as shown in the figure below):

Data comparison			f	ē t		
IMMO PROGRAM V10.06 > Data co	omparison			🗄 11.90V		
[F1] load the first data to be c [F2] load the second data to b compared	compared Status					
F1	DQ380 co	DQ380 complete date yuanche202111091355.bin				
F2	dq380 co	nnect.bin				
Return	F1	F2	Comparison	Return		
Immo Program						
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Figure 22

23. The comparison result shows that the two data are the same, then install the external gearbox on the vehicle (as shown in the figure below);

Data comparison				f	ē	P
IMMO PROGRAM V10.06 > Data comparison						🖽 11.90V
[F1] load the first data to be [F2] load the second data to compared	compared be Status	Status				
F1	DQ380 c	DQ380 complete date yuanche202111091355.bin				
F2		Information				
	The con same	The contents of two loaded data are the same				
		ОК				
-						
Return	F1	F2	Comparis		Ret	urn
Immo Program						
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Figure 23

Statement:

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