

Theme :	MY21 U5 1.5.0 software upgrade service action		
Vehicle :	U5 EU	Release :	2020.11.13
MY :	2021	Effective :	2020.11.20
Bulletin No. :	US-ST-A18-20-009	Range :	LVXMAXBA3LR900532 to LVXMAXBA9LR900633 (250 vehicles)
Marketing :	EU	Replace :	None

1. Technician Level and High Voltage Certification

This is the minimum technician level required:

AIWAYS Standard	DGUV 200-006 Standard (BGI/GUV-I 8686 E)	Related Operations
L1	Stage 1	Disconnect Service Switch

L1 level certification is required for this operation. In order to ensure that the high-voltage battery will not be affected by sudden flashing, it is necessary to disconnect the service switch according to the prompts of IVHM before reprogramming the high-voltage module.

The L1 certified by AIWAYS is equivalent to the corresponding level standard of DGUV.

2. Update Content

Through this software upgrade, vehicle stability and user experience are improved. In particular, APA function is added and motor protection caused by long-time high-speed driving is improved

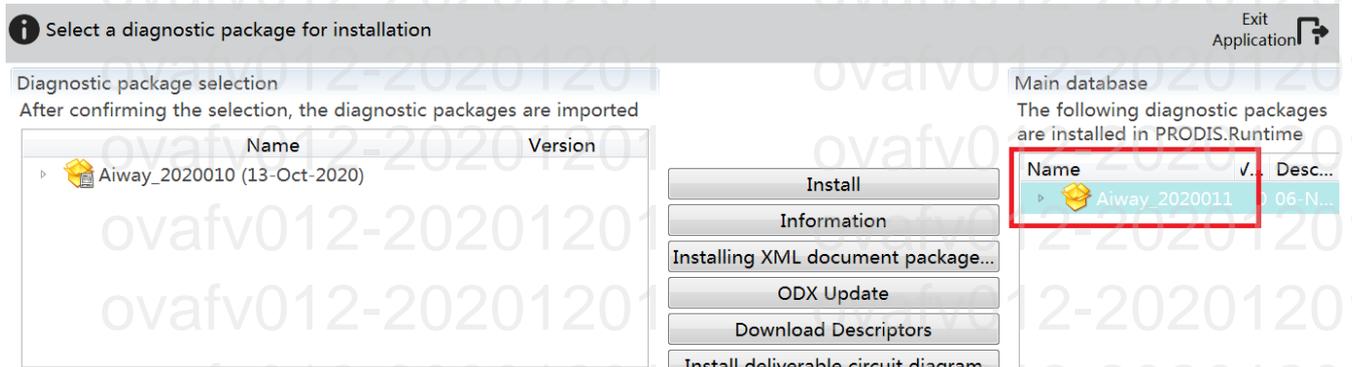
ECU	Modification
APA	Activate APA, add Auto Park function
BCM	High & Low Beam optimization; TPMS self-learning optimization.
BMS	DC/AC Calculation Time; Balance function improve; Thermal runaway module optimization.
CCM	When the car driving, single air conditioning refrigeration with the compressor speed limit.
EPS	Diagnosis for EPS fault optimization(Only for Repair)



MCU	Optimization of derating scope; Repair false alarm over temperature during Ignition ON; Avoid MCU reset and false failed
PLG	Fix some vehicles occasionally have anti pinch sound when the tail door rises to the top; Fix tail door closed, press and hold the inner switch of the tail gate for 3s, there is probability that the tail gate cannot be opened.
VCU	Repair of power curtailment caused by long time maximum speed drive; The max speed of gear R is changed to 38kph from 45kph; ADAS SLF limit changed from 130kph to 160kph; Optimize driving strategy.

3. Reminder

1. The upgrade lasts about 25 minutes. It is recommended to provide additional power to the 12V battery during the upgrade process.
2. This service action is carried out through IVHM online flash function. You can reprogram the vehicle through the diagnostic VCI. After the completion of the program, please submit the health report under the following path to the relevant person in charge of AIWAYS.
C:\Vehicle Report
3. The upgrade action is 1.5.0, but the IVHM write version number is 1.5.1, which does not affect the normal use of the vehicle.
4. In this upgrade, IVHM requires a database version no earlier than **aiway_2020011**.



5. This upgrade might result in the loss of the tailgate learning value. After the implementation, please instruct the customer to relearn his/her habitual position of the tailgate according to the owner's manual.

4. Sub-Version Info

From this table, you can know the target version of each ECU for this upgrade

ECU	Type	Version	Way
APA	Part Number	861944101_020	IVHM
	Application Number	861978093_013	IVHM
BCM	Part Number	861911201B_100	IVHM
	Application Number	861975013_100	IVHM
BMS	Part Number	861134211F_004	IVHM
	Application Number	861979023F_004	IVHM
CCM	Part Number	861931151_016	IVHM
	Application Number	861975033_016	IVHM
EPS	Part Number	861633100A_005	IVHM
	Application Number	861978033_005	IVHM
MCU	Part Number	861120501B_008	IVHM
	Application Number	861979043B_008	IVHM
PLG	Part Number	861919323_011	IVHM
	Application Number	861975053_011	IVHM
VCU	Part Number	861110100D_007	IVHM
	Application Number	861979013D_007	IVHM

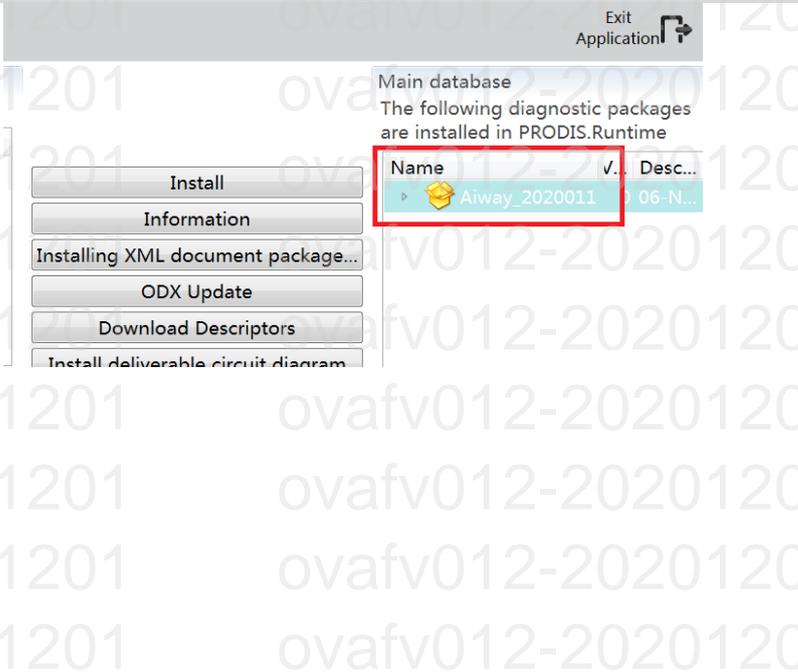
5. Tools

Tool No	Name	Number	Function
EE0001	IVHM	1	Upgrade the Vehicle
--	Computer	1	Install the IVHM application

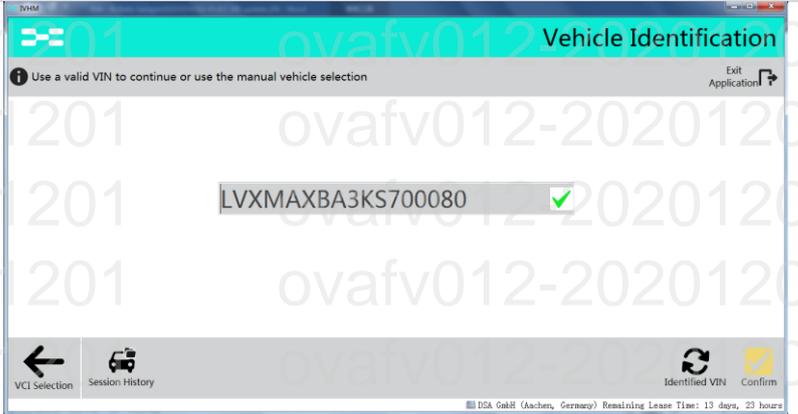


6. Operation procedure

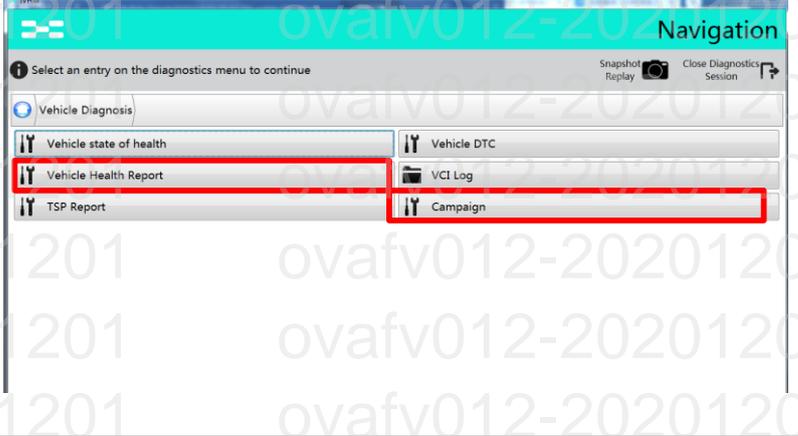
1. Please ensure that the surrounding network environment is good before software upgrade;
2. Run IVHM sync client;
3. Update the diagnostic package. After downloading, the system will try to restart the application automatically to complete the installation. If your program fails to restart automatically, please restart the computer and complete the installation;
Note: after the installation is successful, your diagnostic package version should be: **AIWAY_2020011**



4. Diagnostic instrument page: read VIN and confirm → manual vehicle selection → advanced diagnosis → click icon ;



5. Select "Vehicle Health Report" and read it.
6. Select "Campaign" ;
7. Select next step according to the reminder ;

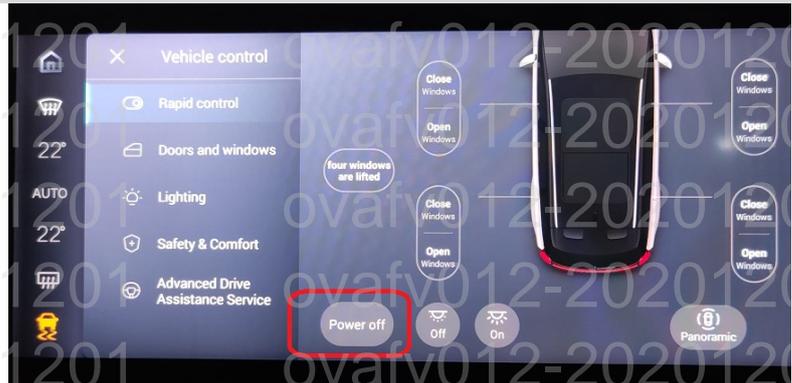


<p>8. Ensure the 1.5.1 version is the target program version ;</p>																																	
<p>9. Ensure the version of each ECU is correct and click "Next" ;</p>	<table border="1"> <thead> <tr> <th>Name</th> <th>Part Number</th> <th>Is flash?</th> </tr> </thead> <tbody> <tr> <td>EPS</td> <td>861633100A_004 ==> 861633100_004</td> <td>Upgrade</td> </tr> <tr> <td>GW</td> <td>861983101A_014 ==> 861983101A_015</td> <td>Upgrade</td> </tr> <tr> <td>EGS</td> <td>861953301B_003 ==> 861953301B_003</td> <td>Not Upgrade</td> </tr> <tr> <td>ESC</td> <td>861562110_007 ==> 861562110_010</td> <td>Upgrade</td> </tr> <tr> <td>IBOOSTER</td> <td>861524100_003 ==> 861524100A_005</td> <td>Upgrade</td> </tr> </tbody> </table>	Name	Part Number	Is flash?	EPS	861633100A_004 ==> 861633100_004	Upgrade	GW	861983101A_014 ==> 861983101A_015	Upgrade	EGS	861953301B_003 ==> 861953301B_003	Not Upgrade	ESC	861562110_007 ==> 861562110_010	Upgrade	IBOOSTER	861524100_003 ==> 861524100A_005	Upgrade														
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<p>10. The programming steps will be low voltage system ECUs => high voltage system ECUs => BCM.</p>	<table border="1"> <thead> <tr> <th>ECU</th> <th>Details</th> <th>Progress</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>EPS</td> <td></td> <td></td> <td>Flash successful</td> </tr> <tr> <td>APA</td> <td></td> <td></td> <td>Flashing, please wait...</td> </tr> <tr> <td>CCM</td> <td></td> <td></td> <td>Flashing, please wait...</td> </tr> <tr> <td>PLG</td> <td></td> <td></td> <td>Flashing, please wait...</td> </tr> <tr> <td>VCU</td> <td></td> <td></td> <td>Flashing, please wait...</td> </tr> <tr> <td>BMS</td> <td></td> <td></td> <td>Flashing, please wait...</td> </tr> <tr> <td>MCU</td> <td></td> <td></td> <td>Flashing, please wait...</td> </tr> </tbody> </table>	ECU	Details	Progress	Status	EPS			Flash successful	APA			Flashing, please wait...	CCM			Flashing, please wait...	PLG			Flashing, please wait...	VCU			Flashing, please wait...	BMS			Flashing, please wait...	MCU			Flashing, please wait...
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<p>11. During the programming, if this dialog happened, it means the High voltage module need update, please following the next instruction to Power off the high voltage system;</p>																																	



Power off process before HV system module flash.

- a. Click power off on the central control panel to set the vehicle power status to "Power off" state;
- b. Please open the front cabin before upgrading the high-pressure parts;



12. If BCM need update, it will be the last one, after BCM program finish, the vehicle will power off automatically.

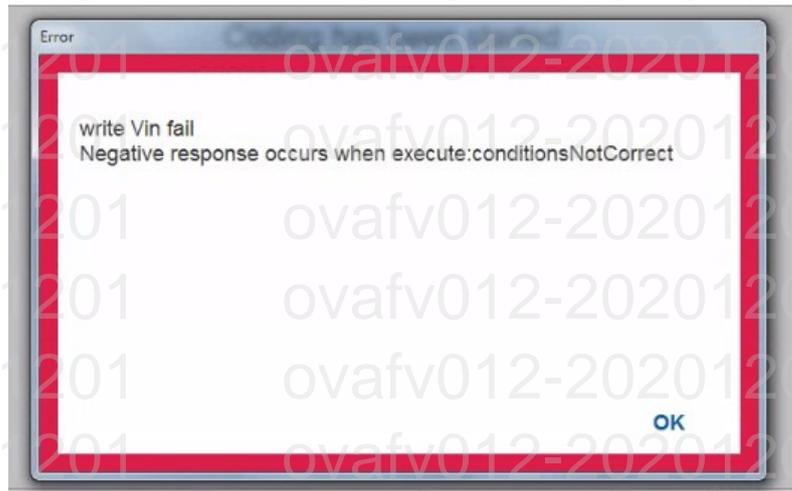
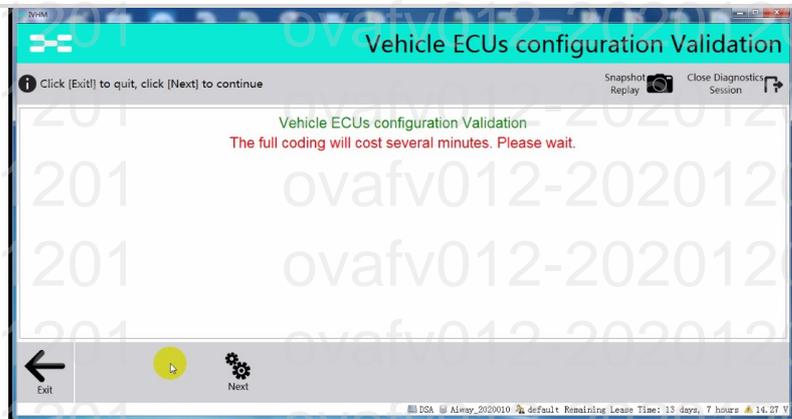


13. Press the Brake pedal to power on the vehicle

14. Click Next when it told you wait in configuration

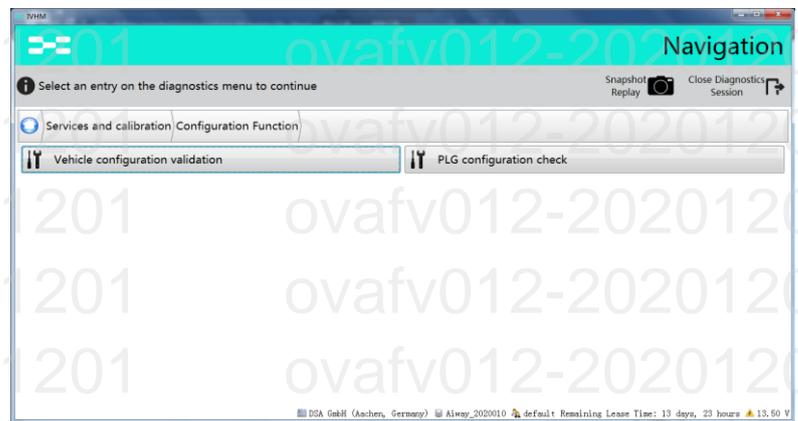
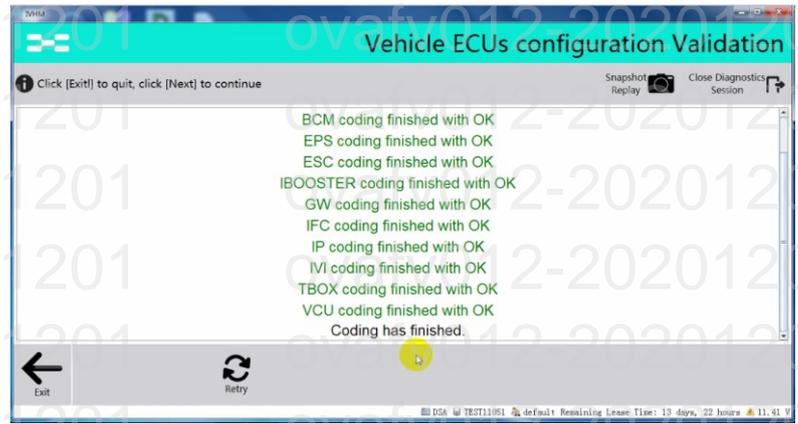
Note:

- a. Ignore the VIN fail, if it occurred in Coding
- b. If IVI coding failed, it caused by the 12V battery disconnect. Try to recoding in the service and calibration interface, Select "configuration function" and "vehicle configuration validation" in the page;

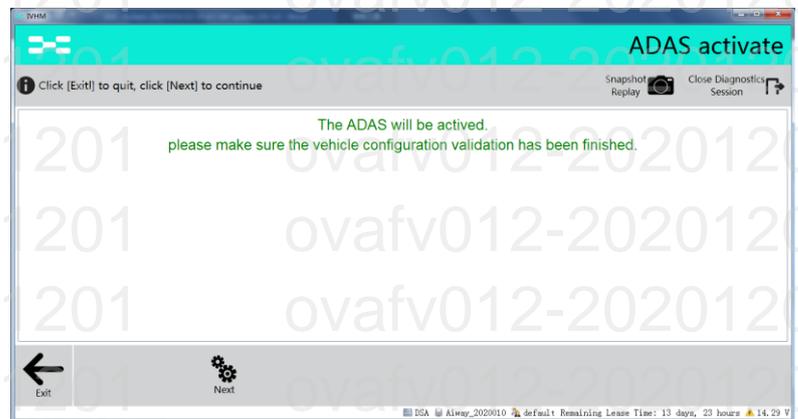
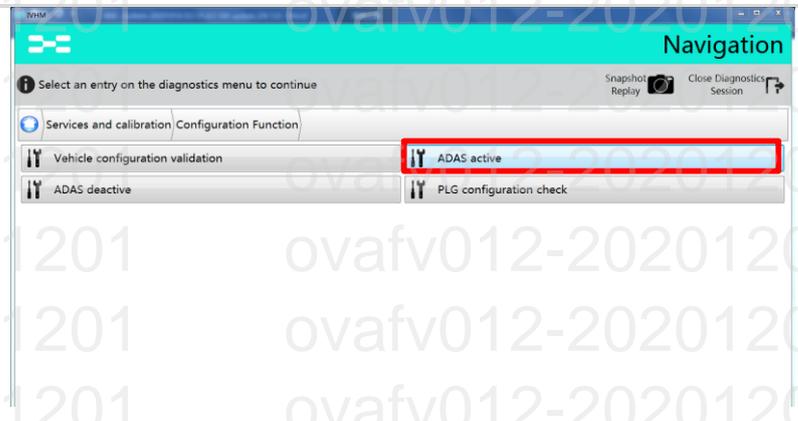


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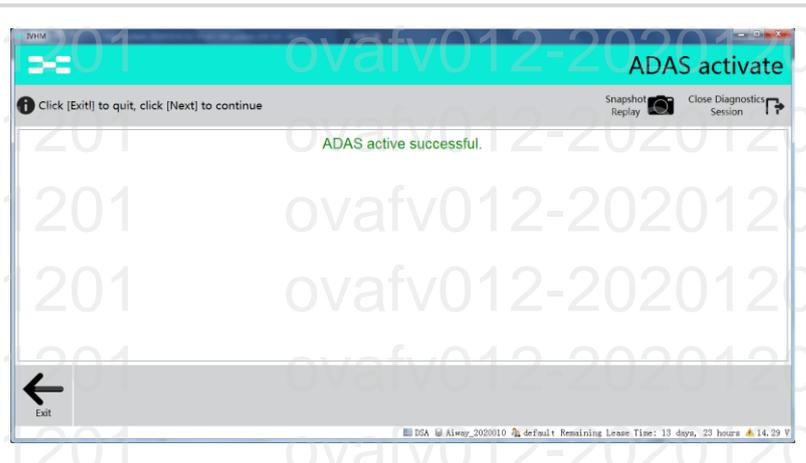
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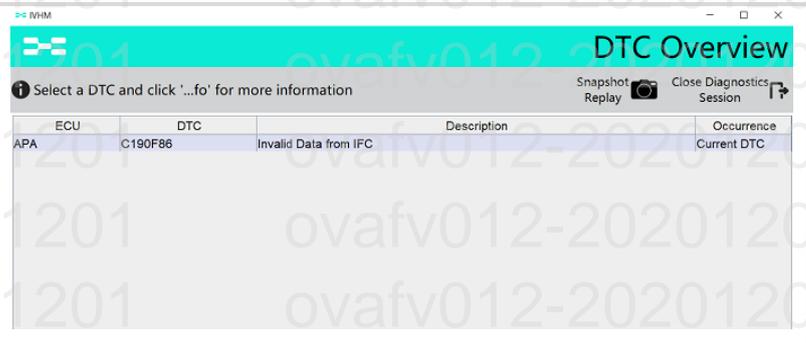
15. Use the configuration function to activate the ADAS function.



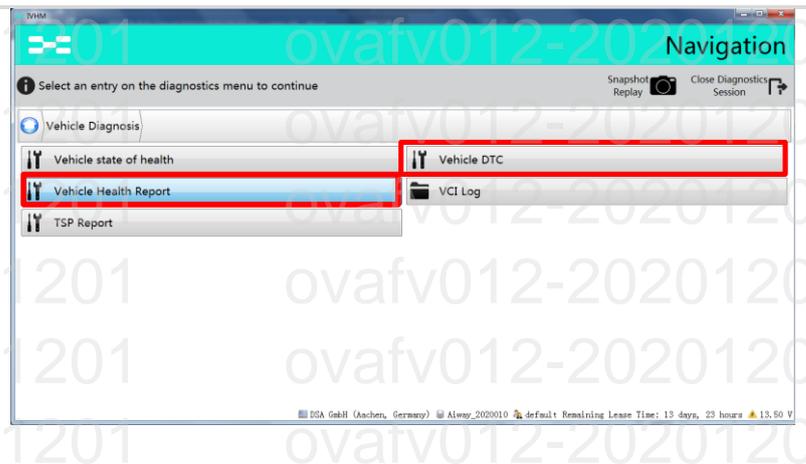
15. In the vehicle diagnosis interface, click "vehicle health report". If there is any fault code in the health report, it is necessary to clear the fault code manually;



16. Clear all the DTCs of vehicle;
 Note:
 a. If APA Report **C190F86 Invalid Data from IFC** Can be ignored.
 b. If IFC report **C1B4A96 FCR not support required destination**
 Please do vehicle configuration validation.

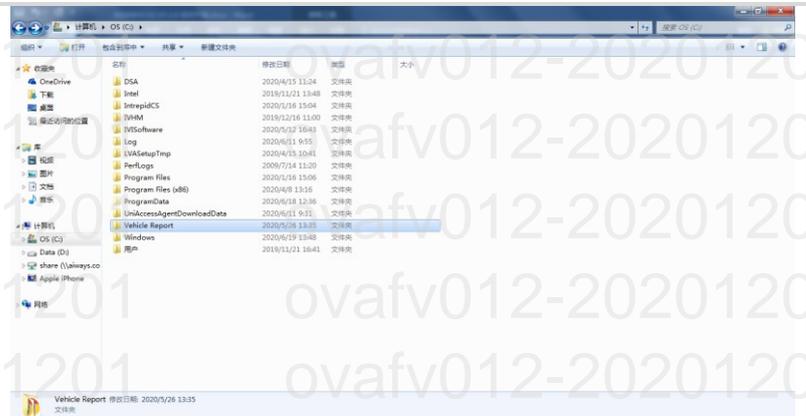


17. In the vehicle diagnosis interface, click "vehicle health report". If there is any fault code in the health report, it is necessary to clear the fault code manually;



18. According to the vehicle diagnosis report, whether the current software version is upgraded successfully can be identified;

19. The health report is automatically stored in the default path and can be reserved for data backup;
 Patch:
C:\Vehicle Report



20. This upgrade might result in the loss of the tailgate learning value. After the implementation, please instruct the customer to relearn his/her habitual position of the tailgate according to the owner's manual.



7. DTC code handle after program

DTC	ECU	Name	Solution
C190F86	APA	Invalid Data from IFC	Ignore or vehicle fall asleep
C1B4A96	IFC	FCR not support required destination	Do vehicle configuration validation

8. Labor Time

Item	CODE	Labor
A1820009 - V1.5.0 software upgrade	980010009	0.6