Aftersales Field Action Bulletin



Document ID:	8-23-NA-35-005
Bulletin Title:	VF8 FRS 9.6 MHU software update campaign
Released by:	VF - GRSC
Date of issue:	EN Version 1.0 / 02 Jun 2023
Applies to:	VF Aftersales, Dealers and Showrooms

CHANGE HISTORY

Version	Status	Effective Date	Handled by	Approved by	Comments
1.0	Final	02 Jun 2023	Satishkumar Rajagopal / Bùi Văn Chiến	Nguyễn Phi Hùng	Initial English Release

1.0) Overview

This technical bulletin describes the procedure, which VinFast dealerships and showrooms must follow to update the affected vehicles, identified within the Dealer Management System (DMS) as "Open" for field action 8-23-NA-35-005.

This is a *Safety Recall* field action. VinFast will *send* customer communications (C-app/SMS/email/telephone call/Postal letter) relating to this field action. Dealerships and Showrooms shall apply this update to applicable vehicles (identified within DMS), when the applicable vehicle is presented via customer communication, regular service and / or an unrelated repair.

2.0) Programs and Model Years Impacted

The following programs and model years are impacted by this bulletin:

There are 999 VINs [SDI Battery pack] impacted by this field action [VIN List].

Program	Model Year Start	Model Year End	VIN Range	Affected Markets
VF8	MY2023	MY2023	Refer to attachment	US Only

3.0) Terms, Definitions & Abbreviations

- OBC On Board Charger
- FOTA / OTA Firmware over the Air
- FOTU Firmware over the USB
- ECU Electronic Control Unit
- HV High Voltage / LV Low Voltage
- DTC –Diagnostic Trouble Code
- DID Diagnostic Identifier
- MHU Multimedia Head Unit
- FuSa Functional Safety
- LKA Lane Keeping Assistance
- AHB Automatic High Beam
- CANdb Controller Area Network database
- VCU Vehicle Control Unit

4.0) Issue Description

Multimedia Head Unit (MHU) screen goes blank while driving or stationary.

5.0) Solution Summary

Affected vehicles will have a FOTU software update [FRS 9.6] for the MHU that fixes this issue.

ECU Description	Improvement details
MHU	 Add data privacy update including Wi-Fi functionality, battery % rounding, language translations, Sing & Swype app integration, synchronize mobile app and Vehicle naming, blank screen driver watchdog, show car mode, seat and wheel memory improvements Bug fixes for AHB indication, LKA defaults, Theft alert text, turn signal cancellation, Camp mode, trunk state change, deep sleep state recovery CANdb updates to v10.6, Diagnostics updates Off board new signals for data analytics

The software update will take approximately 45 minutes to complete via FOTU [USB method]

6.0) Technical Instructions

Software update program brief:

Step	Module	Action
1	TBOX	FOTU
2	MHU	
3	Update XL4 CERT	Perform on MDU
4	Lock vehicle for 10 minutes with key fob for sleeping.	

Requirement (Mandatory):

- A USB 3.0 device is required (at least 8Gb of memory, FAT32).
- Fasten the seatbelt of driver seat to keep the vehicle awake during update of all ECU's

Detail instruction:

For each ECU below, compare the listed part numbers to those in the vehicle and then as required complete <u>only</u> relevant 'IDS Functions' do not use any others, referring to <u>Diagnostics</u>, <u>Programming</u> and <u>Setup using Scan Tool in service - 1002970</u> for important information about <u>pre-conditions</u> and specific details for each function that must be followed.

Before update

TDOV

- 1. Use IDS tool to 'Read All DTC' and 'Record Result' at the 'Vehicle DTC check' page for the first time. Save the file for reference later.
- 2. Use IDS tool to 'Read all ECUs info' and save the file for reference later.
- 3. Refer to MHU/TBOX SW guideline to prepare a USB with TBOX, MHU for FOTU.

TBOX (Integrated in MHU)

1. At the Health Check page, check below information in the ECU info:

Parameter name	Value	Action
ECU Application Software	SOW30052001 Rev 14	– If the value is NOT MATCHING , go
Part Number and Revision		to step 2.
Level		– If the value is MATCHING , go to step
		3.

2. Follow below to update TBOX. Then go to step 3. Download software file from below link:

ECU	File name
TBOX	<u>FRS 9.6 - TBOX</u>

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Step	Instruction and illustration
1	Plug the USB device to data supported USB port on the vehicle.
2	Open MHU Engineering APP and login using TOTP.

3 At the UPGRADE page, select TBOX button to find all the available software files in the USB and show as a list.
Immunication with the select upgrade of the

3. Finish.

Note: In case of TBOX updating fails by above steps, another way to update TBOX by using *.tar.bz2 file as below:

1	Plug the USB. Open TBOX EngineeringApp and login using TOTP (Login is mandatory
	before updating TBOX)
2	Select FLASH MODE button and select FIND PACKAGES button. The application will
	find all the available software files in the USB and show as a list.
3	Select the correct software file with extension *.tar.bz2 from the list then select INSTALL
	TBOX BY QFLASH to continue.
	TBox Flashing FIND PACKAGES FIND PACKAGES INSTALL TROX BY OFLASH INSTALL T
4	Enter TOTP to start the update.
5	After the update is completed, wait for at least 3 minutes.

MHU

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1. At the Health Check page, check below information in the ECU info:

Parameter name	Value	Action
ECU Application Software	SOW30051001 Rev 29	– If the value is NOT MATCHING , go
Part Number and Revision		to step 2.
Level		– If the value is MATCHING , go to step
		3.

2. Follow below instruction to MHU. Then go to step 3. Download software file from below link:

	ECU	File name
MHU <u>FRS 9.6 - MHU</u>	MHU	<u>FRS 9.6 - MHU</u>

MHU	J
Step	Instruction and illustration
1	Plug the USB device to data supported USB port on the vehicle.

2	Open MHU Engineering APP and login using TOTP.					
3	Select UPGRADE page and select UPGRADE button. The application will find all the					
	available software files in the USB and show as a list.					
	UPGRADE (2) RECORD LOG GPS SYNC INFO TPMS					
4	Select the correct software file name in the list then select UPDRADE button.					
5	After the update is completed, perform knob reset.					

(IMPORTANT)

- 3. Follow below instruction to update XL4 CERT from EngineeringApp on MHU screen. Then go to step 4.
 - Step 1: open EngineeringApp from MHU screen by multiple tapping on the VIN in 'About vehicle' page
 - Step 2: Login EngineeringApp, using seed code to generate the TOTP number on the Fleet Management system
 - Step 3: Go to TOOL page, find the XL4 CERT button and press the button to update cert for MHU & ADAS. Confirm the OK result should be as below: MHU/ADAS: OK

		V V				U U	5	
R7 SW Ver:	1.6.6A	W	iFi:			Lat:		
VIP Ver:	2bc3af80	et	h0:	172.16.	.100.5	Lon:		
S32K Ver:		et	h1:	172.16.	.1.5	LV Battery:	0	
DBC Ver:	09.2.;	us	b0:			LV Battery Curr	ents: 0.	0
HW P/N:	20710000/01	W	iFi RSSI:			Working Log:	EN	ABLE
HW Type:			Dom0 Size: 8G			Vehicle Provisi	oned:	
VIN:			00:	0.0				
Fingerprint: P	Q2A.190405.003-R	REL4.1.2-r8a7795/vsr	nart0508090	4:userde	bug/test-keys			
UPGRAD	E	FACTORY RESET	ADB ON		SWITCH ADB	DUMP STATE	EXPORT LOGS	
		TACTORTRESET	1000		[DEVICE]	DOWN STATE	EXPORT E000	
RECORD								
		INSTALL APP	PROVIS		BOOT LOG	TOGGLE HCI	AUDIO TUNING	
LOG		into intel rui r	STATUS		[OFF]	[OFF]		
GPS		INSTALL	VIVI MO	DELS	VA VERIFY	CLEAR	ACTIVE MAP	
		VNC LICENSE				HERE MAP		
SYNC INF	o 1							
		CLEAR	CEREN		RESET	CODING DATA	ADAS	
TDOV		HISTORY DATA	MODE	LS	ASSISTANCE	0001110 0/11/1	[ENABLE]	2
TBOX				_				
		WIDEVINE	REBO	от	ODO	NIGHT MODE	NIGHT MODE	
TOOL		DRM	REDU	01	STATISTIC	ON	OFF	
				_				- 2
CLOSE		SYSTEM	ADAS I	00	WIFI	WARNING	XL4 CERT MHU: OK	
		VERSION	ADASI	-06	[ENABLE]	MESSAGES	ADAS: OK	
							1.2.10.01	

- 4. Lock vehicle with key fob for at least 10 minutes to put the vehicle into sleep mode (This step to make sure ADAS does soft reset and triggers new CERTIFICATE).
- 5. Finish.

Note:

- If result is MHU/ADAS: FAIL => Perform knob reset to reset MHU then try again. If you get
 FAIL again, please raise a ticket to GRSC.
- We just need to trigger XL4 CERT 1 time. Even after getting a successful result (MHU/ADAS OK) you perform FACTORY RESET for MHU/TBOX, then XL4 CERT state MHU/ADAS: NONE but actual value is OK.

Check DTC

After completing all the required updates for software:

- Use IDS tool to do 'Clear DTC' in the 'Vehicle DTC' page
- Perform 'Read All DTC' and 'Record Result' for the second time and save the file for reference
- Compare the remaining DTC's (second list) back to the original DTC's (first list) created before any work was conducted to identify any new DTC's
- If there are any warning messages, faults or new DTC's, use <u>DTC Repair Instruction Guidance</u>
 <u>1002963</u> as a guide to determine the root cause of any issue and use the relevant DTC Repair Actions

Finish update

Once all work is complete verify the completed work and vehicle status in IDS by selecting:

1. Use IDS tool to 'Read All DTC' and 'Record Result' at the 'Vehicle DTC check' page for the second time. Save the file for reference later.

7.0) Parts Information

No Service parts replacement applicable to this bulletin

8.0) Warranty Claim Information

The following warranty claim information applies to this bulletin:

SN	Module Name	Action	Tools	Additional Parts	Total FOTU Time [hours]
1	MHU, Tbox	FOTU [USB]	USB with SW	N/A	0.75

Description	Labour Time Paid (hours)	Labour Code
VF8 - FRS 9.6 MHU Software update campaign	0.25	99110000