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October 6, 2022

TO: All U.S. Ford and Lincoln Dealers

SUBJECT: NEW VEHICLE RECOMMENDED DELIVERY HOLD

Customer Satisfaction Program 22P08 – Supplement #2

Certain 2022 Model Year Expedition/Navigator, 2021-2022 Model Year F-150 and Mach-E Vehicles Equipped with Ford/Lincoln Co-Pilot and BlueCruise/ActiveGlide BlueCruise/ActiveGlide Maps Expiration

New! REASON FOR THIS SUPPLEMENT

- The technical instructions have been updated with additional details and screen shots to assist in successfully updating the gateway module (GWM) and BlueCruise/ActiveGlide Maps.*
- Additional population has been added to the affected vehicles with updated build dates.*
- Added requirement to verify through PTS that the Field Service Action (FSA) is still open (OASIS) and the vehicle has not already received the OTA update.*

PROGRAM TERMS

This program will be in effect through March 14, 2023, for vehicles within the new bumper-to-bumper warranty coverage period (e.g., less than 36,000 miles).

New! AFFECTED VEHICLES

Vehicle	Model Year	Assembly Plant	Build Dates
Expedition/Navigator	2022	Kentucky Truck	September 22, 2021 through <i>July 1, 2022</i>
F-150	2021-2022	Dearborn	January 12, 2021 through <i>August 25, 2022</i>
F-150	2021-2022	Kansas City	June 25, 2021 through <i>August 17, 2022</i>
<i>F-150</i>	<i>2022</i>	<i>Rouge Electrical Vehicle Center</i>	<i>October 14, 2021 through August 22, 2022</i>
Mach-E	2021-2022	Cuautitlan	January 18, 2021 through <i>July 13, 2022</i>

Affected vehicles are identified in OASIS and FSA VIN Lists.

Note: Monitor OASIS before opening an RO and/or beginning a repair.

New! REASON FOR THIS PROGRAM

In some of the affected vehicles, the Connected Blue Zone Maps will expire on *September 10th, 2022*. When the maps expire, the BlueCruise with hands-free highway driving feature will no longer be available. Unsold vehicles that are in transport mode or on dealer lots are unable to receive an over the air update containing the updated maps.

SERVICE ACTION

Before delivering any new in-stock vehicles involved in this program, dealers are to update the gateway module using FDRS. This service must be performed on all affected vehicles at no charge to the vehicle owner.

OVER THE AIR (OTA) UPDATES (FORD POWER-UP / LINCOLN ENHANCED):

- *In addition to your dealer being able to update vehicles now using FDRS, Ford deployed an OTA software update in August, 2022.*
- *Before scheduling service for an OTA capable vehicle, please verify through PTS that the Field Service Action (FSA) is still open (OASIS) and the vehicle has not already received the OTA update.*
 1. *Verify FSA is still open by viewing the "Outstanding Field Service Actions" on the OASIS results page on PTS. (Note: If the OTA update was recently downloaded onto vehicle the FSA may still show as open)*
 2. *If the FSA is still open in the Outstanding Field Service Actions section, proceed to the tab titled "Connected Vehicle". In the "Over the Air Update 60 Day History", you can determine if an OTA update occurred on the affected module by viewing the "Completion Status", which should show "Campaign Successful". The "Release Notes" will also indicate that the campaign was successfully downloaded onto the vehicle. (Note: the FSA may still show as open in the Outstanding Field Service Actions section of PTS even though the OTA update was successfully downloaded onto the vehicle. This FSA will eventually be removed from the Outstanding Field Service Actions screen of PTS.)*

OWNER NOTIFICATION MAILING SCHEDULE

Owner letters will not be mailed for this program.

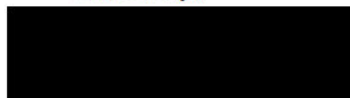
New! ATTACHMENTS

<i>Attachment I:</i>	<i>Administrative Information</i>
<i>Attachment II:</i>	<i>Labor Allowances and Parts Ordering Information</i>
<i>Attachment III:</i>	<i>Technical Information Mach-E</i>
<i>Attachment IV:</i>	<i>Technical Information F-150</i>

QUESTIONS & ASSISTANCE

For questions and assistance, contact the Special Service Support Center (SSSC) via the SSSC Web Contact Site. The SSSC Web Contact Site can be accessed through the Professional Technician System (PTS) website using the SSSC link listed at the bottom of the OASIS VIN report screen or listed under the SSSC tab.

Sincerely,



Stacy L. Balzer

NEW VEHICLE RECOMMENDED DELIVERY HOLD
Customer Satisfaction Program 22P08 – *Supplement #2*

Certain 2022 Model Year Expedition/Navigator, 2021-2022 Model Year F-150 and Mach-E Vehicles
Equipped with Ford/Lincoln Co-Pilot and BlueCruise/ActiveGlide
BlueCruise/ActiveGlide Maps Expiration

New! OASIS ACTIVATION

OASIS was activated on March 14, 2022. *The additional population will be activated on October 6, 2022.*

Note: Over-the-air software updates may complete at any time, dealers should confirm program is still open by checking PTS before using FDRS.

FSA VIN LISTS ACTIVATION

FSA VIN Lists will not be activated for this service action.

SOLD VEHICLES

- Correct affected vehicles identified in OASIS which are brought to your dealership within the applicable bumper-to-bumper warranty coverage period.
- Dealers are to prioritize repairs of customer vehicles over repairs of new and used vehicle inventory.

STOCK VEHICLES

- Correct all affected units in your new vehicle inventory before delivery.
- Use OASIS to identify any affected vehicles in your used vehicle inventory.

TITLE BRANDED / SALVAGED VEHICLES

Affected title branded and salvaged vehicles are eligible for this service action.

OWNER REFUNDS

Refunds are not approved for this program.

RENTAL VEHICLES

Rental vehicles are not approved for this program.

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Customer Satisfaction Program 22P08 – *Supplement #2*

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BlueCruise/ActiveGlide Maps Expiration

ADDITIONAL REPAIR (LABOR TIME AND/OR PARTS)

Additional repairs identified as necessary to complete the FSA should be managed as follows:

- For related damage and access time requirements, refer to the Warranty and Policy Manual / Section 6 – Ford & Lincoln Program Policies / General Information & Special Circumstances for FSA's / Related Damage.
- For vehicles within new vehicle bumper-to-bumper warranty coverage, no SSSC approval is required, although related damage must be on a separate repair line with the "Related Damage" radio button checked.
 - Ford vehicles – 3 years or 36,000 miles
 - Lincoln vehicles – 4 years or 50,000 miles
- For vehicles outside new vehicle bumper-to-bumper warranty coverage, submit an Approval Request to the SSSC Web Contact Site prior to completing the repair.

CLAIMS PREPARATION AND SUBMISSION

- **Claim Entry:** Enter claims using Dealer Management System (DMS) or One Warranty Solution (OWS) online.
 - When entering claims:
 - Claim type 31: Field Service Action. The FSA number (22P08) is the sub code.
 - Customer Concern Code (CCC): A25 Engagement troubles
 - Condition Code (CC): 04 Software Revision/Flash Module
 - Causal Part Number: 14G650
 - Part Quantity: 0
 - For additional claims preparation and submission information, refer to the Recall and Customer Satisfaction Program (CSP) Repairs in the OWS User Guide.
- **Related Damage/Additional labor and/or parts:** Must be claimed as Related Damage on a separate repair line from the FSA with same claim type and sub code as described in Claim Entry above.

IMPORTANT: Click the Related Damage Indicator radio button.

NEW VEHICLE RECOMMENDED DELIVERY HOLD**Customer Satisfaction Program 22P08 – *Supplement #2***

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BlueCruise/ActiveGlide Maps Expiration

LABOR ALLOWANCES

Description	Labor Operation	Labor Time
Update Gateway Module (GWM) Software using FDRS	22P08B	0.4 Hours

PARTS REQUIREMENTS / ORDERING INFORMATION

Parts are not required to complete this repair.

CERTAIN 2022 MODEL YEAR EXPEDITION/NAVIGATOR AND 2021-2022 MODEL YEAR F-150 VEHICLES EQUIPPED WITH FORD/LINCOLN CO-PILOT AND BLUECRUISE/ACTIVEGLIDE — BLUECRUISE/ACTIVEGLIDE MAPS EXPIRATION

SERVICE PROCEDURE

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Gateway Module A Programming

NOTE: A blank 32GB or larger USB flash drive is required for APIM, TCU, Cluster, and GWM software updates. Make sure the USB flash drive being used is formatted correctly. To see the available drives, hold down the Windows icon keyboard key and press the E keyboard key. Right click on the USB flash drive and select Properties. If File System under the General tab is not exFAT, the drive must be formatted. To format the USB flash drive, right click on the USB flash drive, select Format, select exFAT for the File System, and select Default Allocation Size for the Allocation Unit Size. De-selecting Quick Format is not necessary and will result in a lengthier operation.

NOTE: Program appropriate vehicle modules before performing diagnostics and clear all DTC's after programming. For DTC's generated after programming, follow normal diagnostic service procedures.

1. Connect a battery charger to the 12V battery.

NOTE: Verify that the negative cable of the charger is installed on a chassis or engine ground, and not the 12 volt battery negative terminal to prevent the battery saver mode from activating on the vehicle.

NOTE: If the diagnostic software does not load or if the vehicle cannot be identified properly, make sure there is a good internet connection and the Vehicle Communication Module (VCM) is properly connected to the Data Link Connector (DLC). VCM 3 is recommended for improved data download time.

2. Close all the doors on the vehicle. If a door must be left open during the service procedure, mechanically latch the door latch to simulate a closed door.



- On the center display screen, navigate to Settings > About SYNC > Hands-Free Driving Mode available through DD-MM-YYYY. Record the expiration date. See Figure 1.

NEW ! NOTE: Mach-E shown Expedition, Navigator and F-150 vehicles similar.



FIGURE 1

- Log into Ford Diagnostic and Repair System (FDRS). Ensure that FDRS and the VCM 3 are updated to latest version.
- Start a new FDRS session.

NOTE: Vehicle information is automatically retrieved by the diagnostic software and a Network Test is run. Vehicle identification data appears on the screen when this is complete.

NOTE: Available modules are shown on the LH side of the screen, and available procedures are listed on the RH side of the screen. Modules that are communicating are highlighted in green.



6. Select Toolbox tab. See Figure 2.

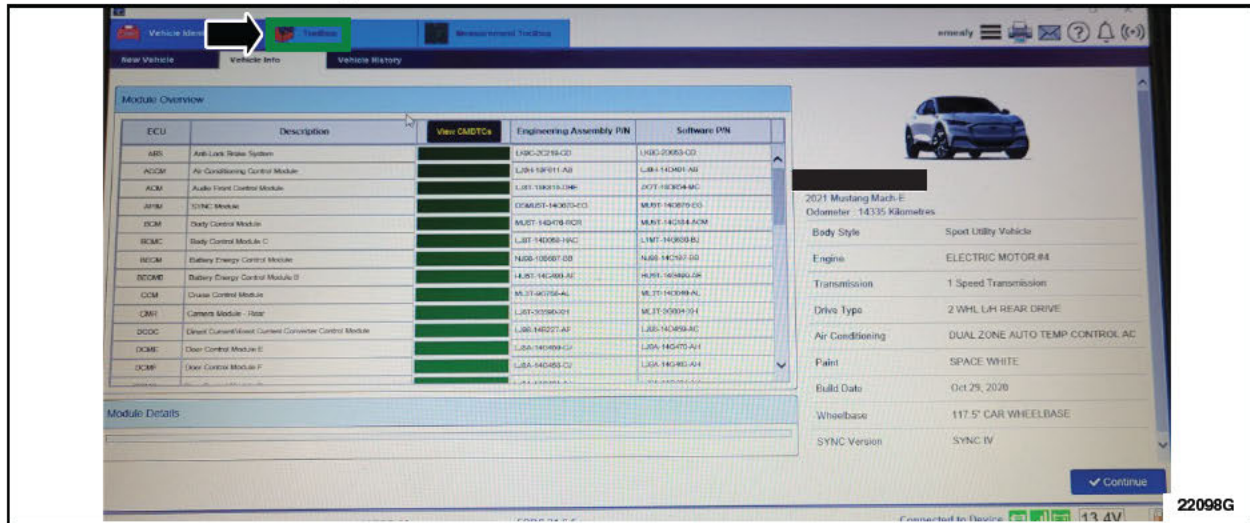


FIGURE 2

7. From the list on the LH side of the screen, select the GWM. See Figure 3.

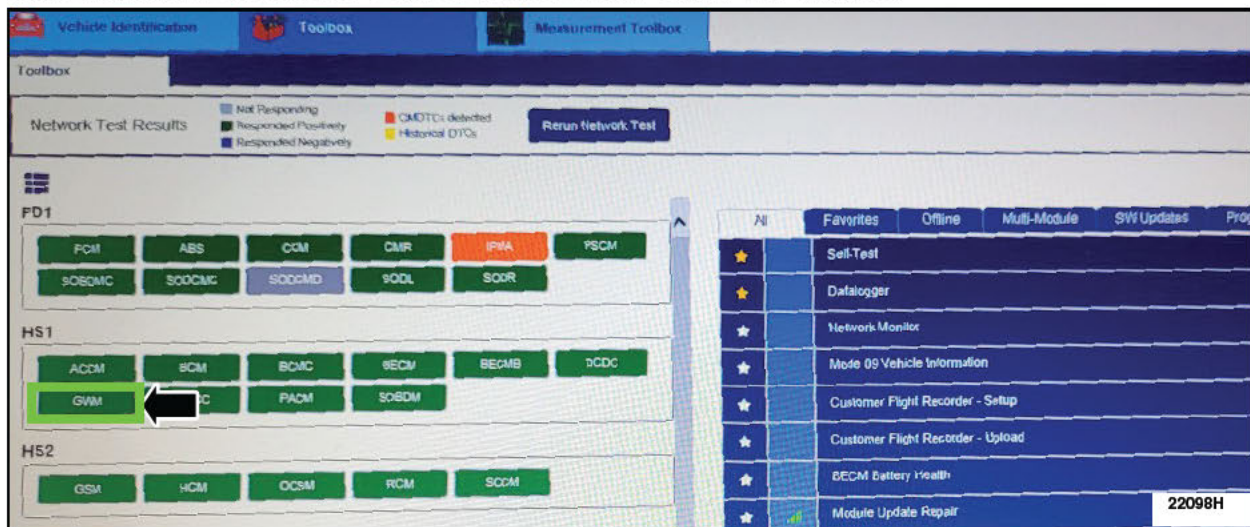


FIGURE 3



NEW ! 8. From the list on the RH side of the screen, download GWM - GWM Software Update. See Figure 4.

Image Processing Module A

PCM	ABS	CCM	CMR	IPMA	PSCM
SODCMC	SODCMD	SODL	SODR	TCCM	
ATCM	BCM	BCMC	DCACA	DSP	GWM
IPC	OCIM	RCM	TRM	WACM	
GSM	SCCM				
ACM	APIM	HCM			
TCU					
PDM	DSM	HVAC	PDM	RTM	
RGTM					

All Favorites Offline Multi-Module SW Updates Programmable Features Guided Routines

★	📶	GWM - Gateway Module A (GWM) Software Update	Download
★	📶	TRM - Trailer Module (TRM) Software Update	Download

FDRS checks the software level in all modules during Vehicle ID.
If a software update is available for any module, then the tool needed to download and install the update will be shown above.

The modules shown below are already programmed to the latest available software level.

ABS	ACM	APIM	ATCM	BCM	BCMC	CCM	CMR
DCACA	DEM	DSM	DSP	GSM	HCM	HVAC	IPC
IPMA	OCIM	PCM	PDM	PSCM	RCM	RGTM	RTM
SCCM	SODCMC	SODCMD	SODL	SODR	TCCM	TCU	WACM

22098Ae

FIGURE 4



NOTE: If software is already at the latest level, this selection will not be available. Verify that an Over The Air (OTA) update was previously installed. Log into Professional Technician System (PTS) > Connected Vehicle tab > OTA Dashboard. Click on release notes to confirm what was included in the OTA update. See Figures 5 and 6.

The screenshot shows the 'Over The Air Update Dashboard' for a 2021 Mustang Mach-E. The vehicle's VIN is [REDACTED]. The latest status is 'Campaign Successful' with a date/time of February 10, 2022 04:31 PM and update ID 488616-515632. Below this, the 'Over The Air Updates Currently In Process' section shows 'No OTA Currently In Process'. The 'Over The Air Update 60 Days History' table has one entry:

Update ID	Deployment ID	Deployment Date	Module	Latest Status	Update Status	Expiration Date	Vehicle Inhibit	Wi-Fi Required	Release Notes
488616-515632	[REDACTED]	February 10, 2022	04:31 PM	GWM	Campaign Successful	S1010	No	No	[Icon]

The status 'Campaign Successful' is highlighted with a green box. A black arrow points from the 'No OTA Currently In Process' text to the 'Campaign Successful' status. The document ID 22098E is in the bottom right.

FIGURE 5

The screenshot shows the 'Over The Air Update Dashboard' for a 2021 Mustang Mach-E. The latest status is 'Update Downloading' with a date/time of March 30, 2022 01:06 PM and update ID 543622-560173. The 'Over The Air Updates Currently In Process' table shows one entry:

ID	Deployment ID	Deployment Date	Module	Latest Status	Update Status	Expiration Date	Vehicle Inhibit	Wi-Fi Required
50173	[REDACTED]	March 30, 2022	GWM	Update Downloading	S1006	Vehicle Activation: April 06, 2022	No	No

The 'Update Downloading' status is highlighted with a yellow box. Below, the 'Over The Air Update 60 Days History' table shows two entries:

ID	Deployment ID	Deployment Date	Module	Latest Status	Update Status	Expiration Date	Vehicle Inhibit	Wi-Fi Required	Release Notes	Troubleshooting R
560	[REDACTED]	March 18, 2022	12:45 PM	GWM	Update Campaign Final Failure	E1016	No	No	[Icon]	[Icon]
528	[REDACTED]	March 15, 2022	02:28 PM	GWM	Campaign is Cancelled	S1011	No	No	[Icon]	

The 'Update Campaign Final Failure' and 'Campaign is Cancelled' statuses are highlighted with red boxes. Black arrows point from the 'Update Downloading' status in the current updates table to the 'Update Campaign Final Failure' and 'Campaign is Cancelled' statuses in the history table. The document ID 22098F is in the bottom right.

FIGURE 6



9. Click RUN to start the GWM update. See Figure 7.

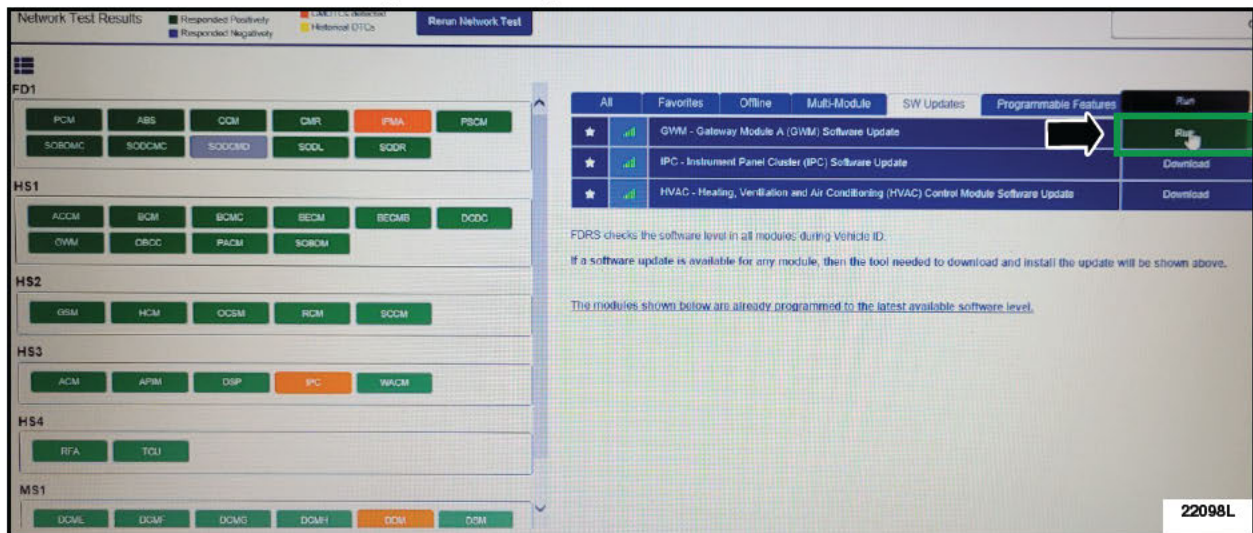


FIGURE 7

10. Verify that the vehicle is connected to a battery charger. Click yes and follow all on-screen instructions carefully. See Figure 8.



FIGURE 8



11. When prompted, turn the ignition to key on engine off and click the OK icon. See Figure 9.



FIGURE 9

12. Allow the software files to process. See Figure 10.

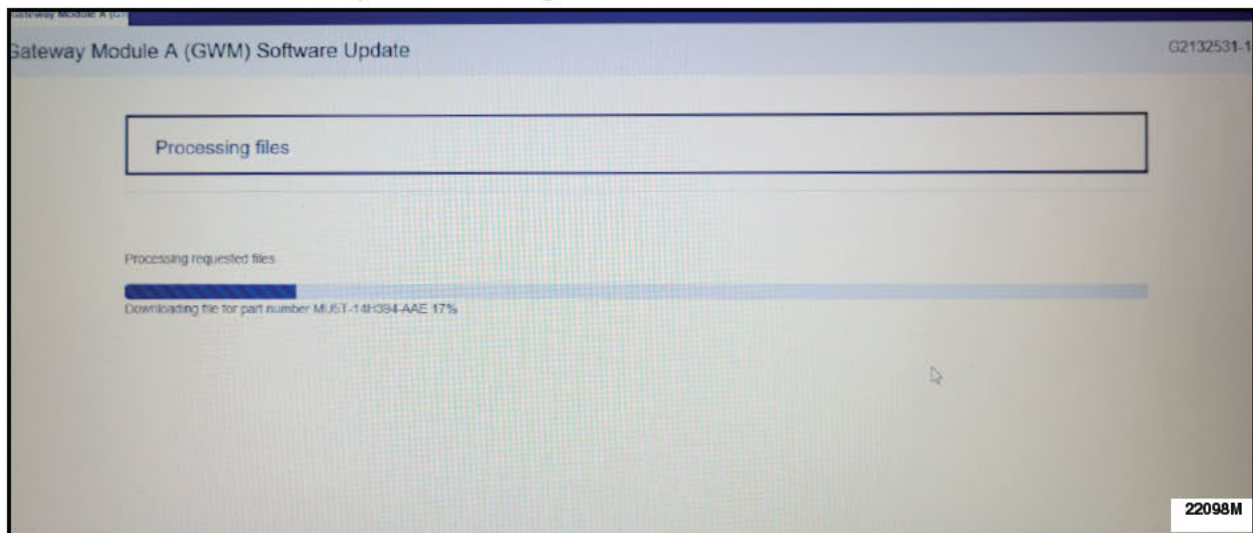


FIGURE 10



13. When prompted, connect the USB flash drive to the diagnostic scan tool and click the OK icon. See Figure 11.

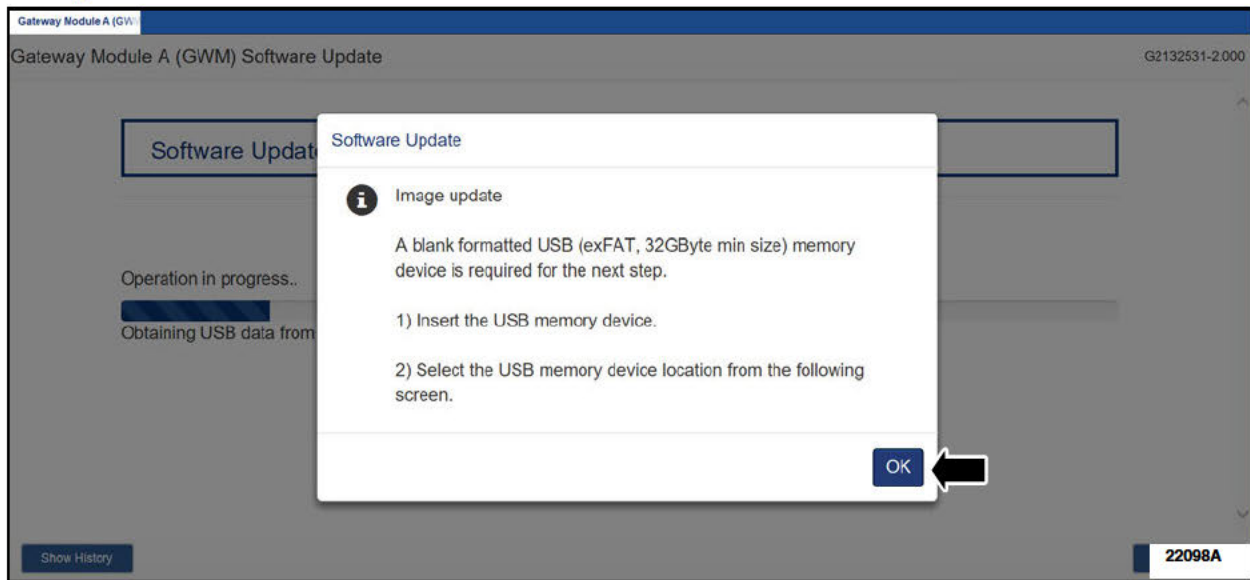


FIGURE 11

NOTE: Do not install the software update on a sub folder on the USB drive. See Figure 12.

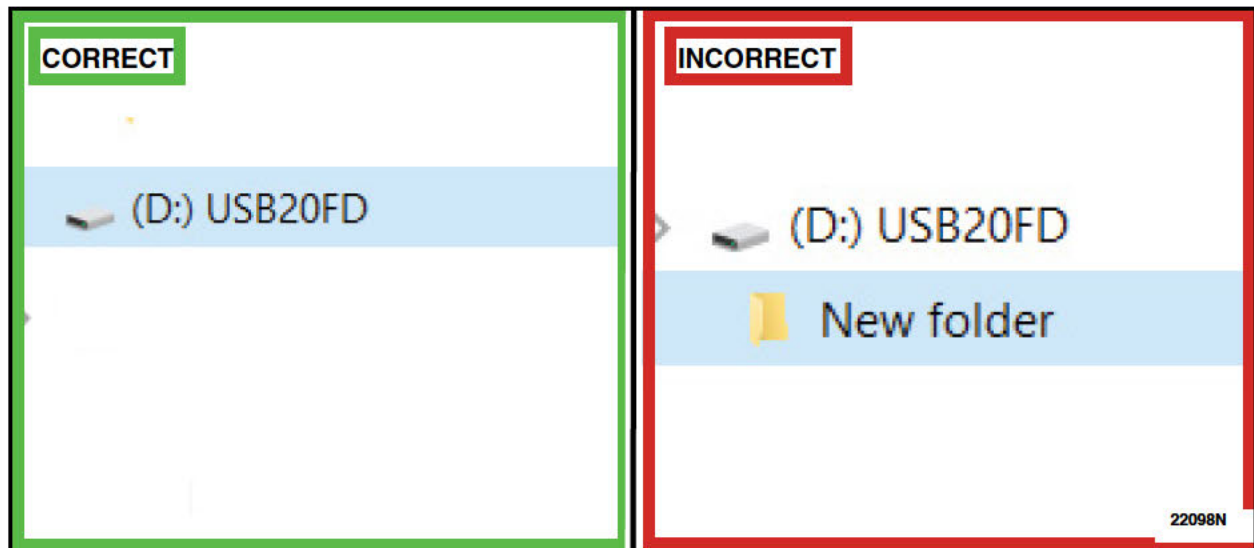


FIGURE 12



14. Cycle the ignition to the ignition on engine on position and click the OK icon. See Figure 13.

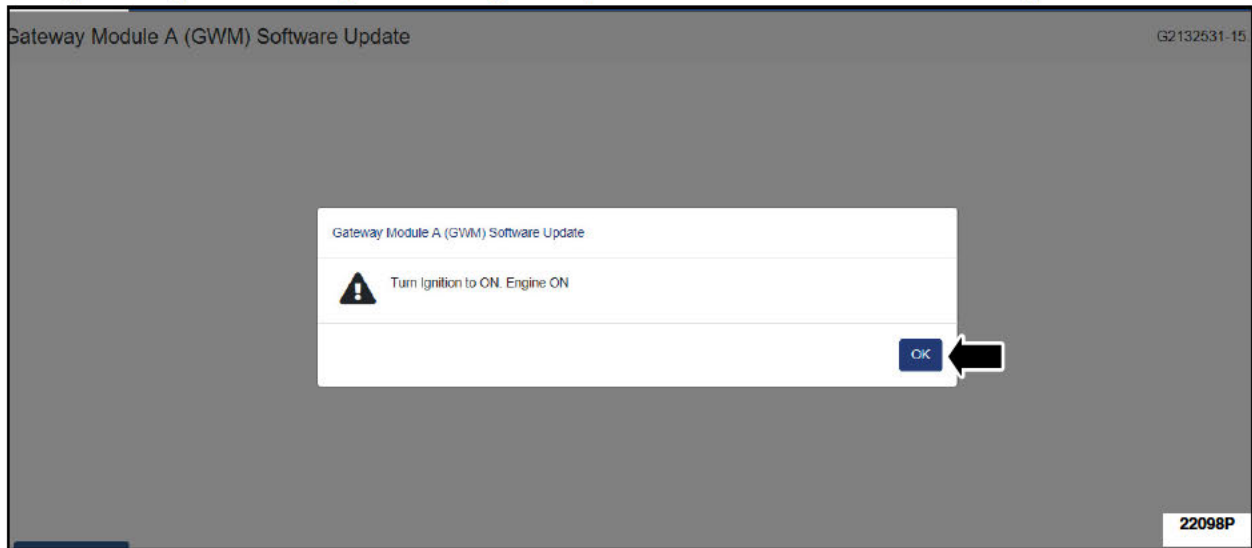


FIGURE 13

15. Verify that the green ready light is on on the instrument cluster. See Figure 14.

NOTE: Close all the doors on the vehicle. If a door must be left open during the service procedure, mechanically latch the door latch to simulate a closed door and ensure that the trunk is closed if applicable.

NEW ! NOTE: Mach-E shown Expedition, Navigator and F-150 vehicles similar.

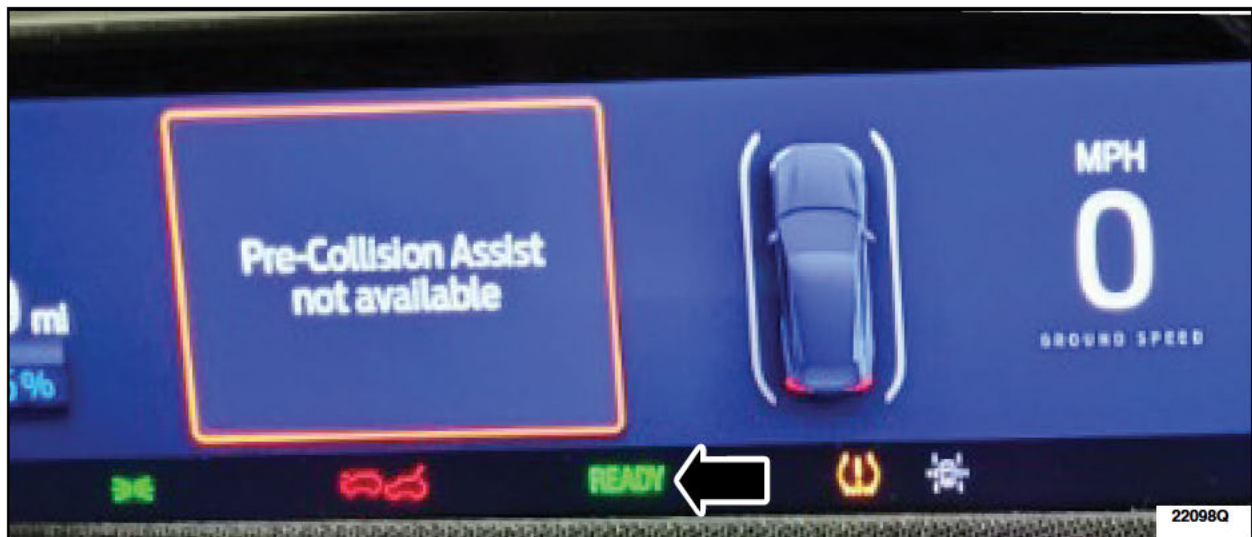


FIGURE 14



IMPORTANT: Do not select the Yes button in FDRS until the software update on the USB drive has been completed. See Figure 15.

NOTE: If the yes or no icon in FDRS is pressed by accident the software update will not be successful. **DO NOT PROCEED WITH THE CAN FLASH.** You may receive an inaccurate message stating that the software update was successful but the bluecruise maps will not be updated.

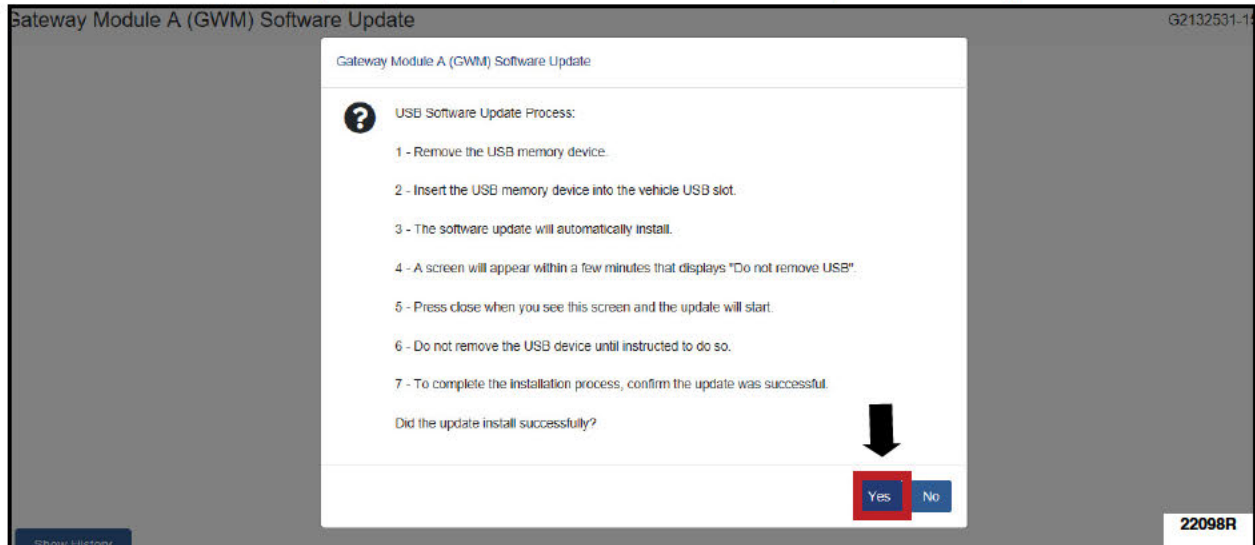


FIGURE 15

16. When prompted by the diagnostic scan tool, safely remove/eject the USB flash drive from the diagnostic scan tool and connect it to the USB hub in the vehicle to install the software into the GWM. See Figure 16.

NEW ! NOTE: Mach-E shown Expedition, Navigator and F-150 vehicles similar.



FIGURE 16



17. The update should start automatically. It is normal for the GWM to reset during this step.
See Figure 17.

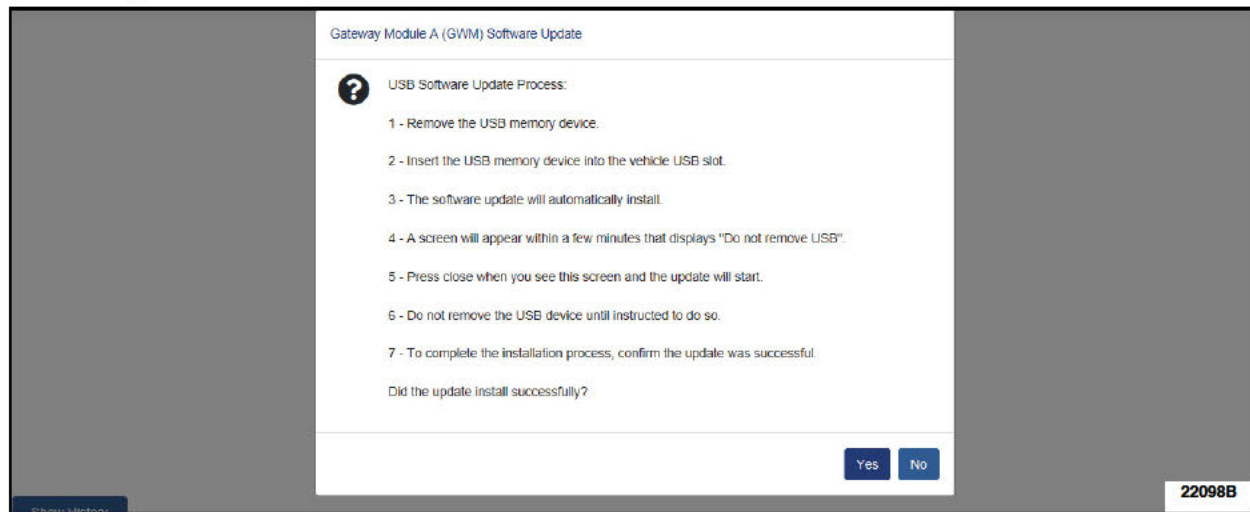


FIGURE 17

18. Press the close icon on navigation screen. The GWM software update will start automatically.
See Figure 18.
19. Set a timer for 10 minutes to ensure enough time passes to allow the update to complete before removing the USB drive.

NEW ! NOTE: Mach-E shown Expedition, Navigator and F-150 vehicles similar.

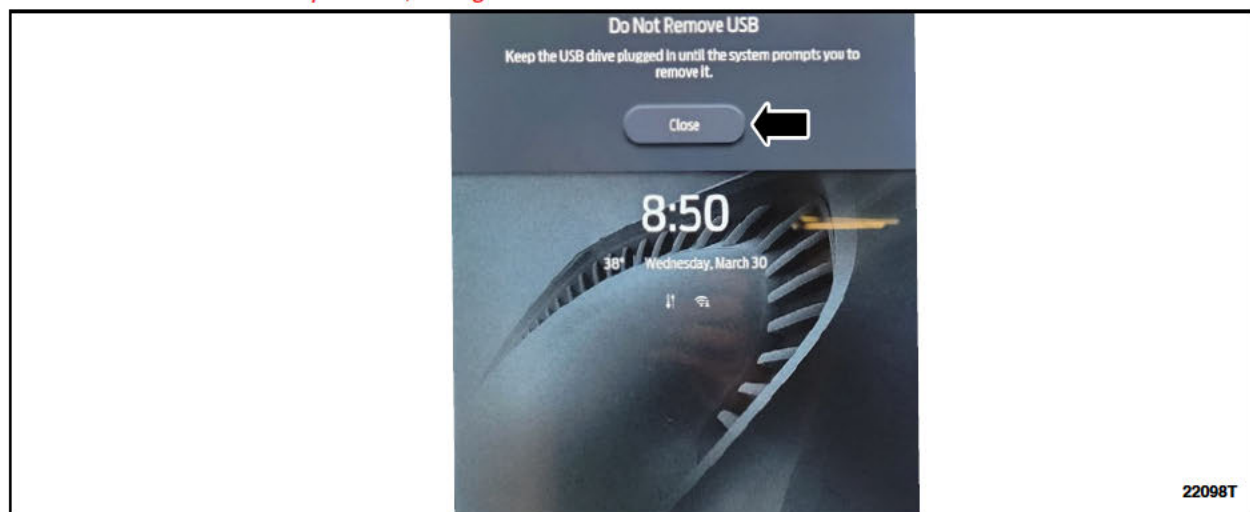


FIGURE 18



NEW ! 20. Turn off the vehicle and open and close the driver's door. See Figure 19.

NOTE: You may receive a question regarding the alarm system. Click yes or no as appropriate.

NEW ! NOTE: Mach-E shown Expedition, Navigator and F-150 vehicles similar.

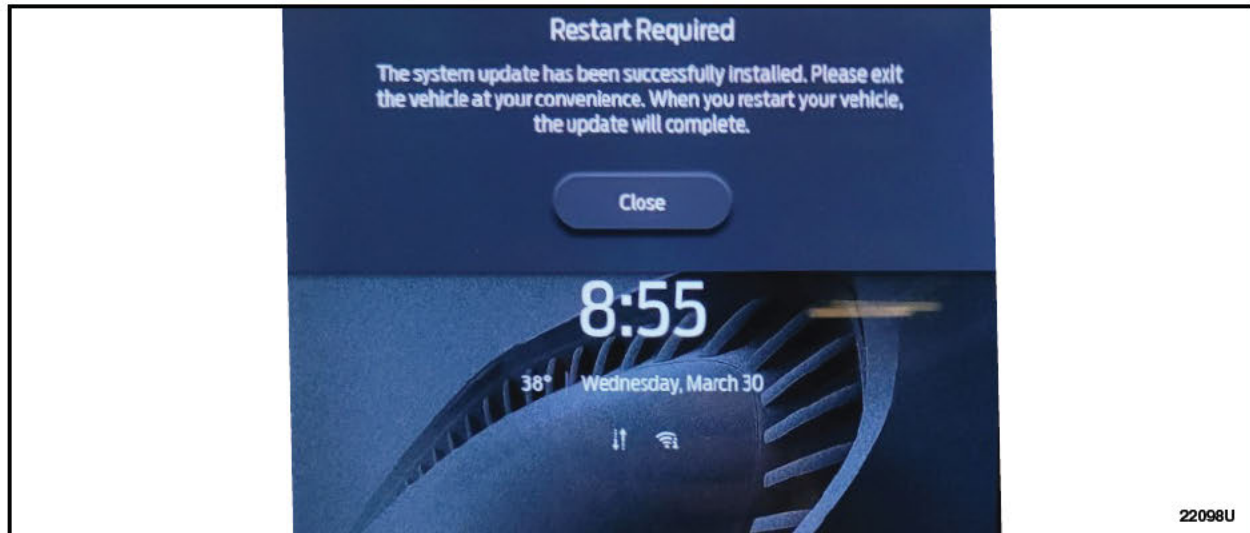


FIGURE 19

21. Restart the vehicle. **Only remove the USB stick from the vehicle when the update successful message appears.** See Figure 20.
22. If there is not an immediate message stating that the update was successful set a timer for 5 minutes. It may take up to 5 minutes before SYNC touchscreen displays Update Successful pop up. After 5 minutes if "Successful" pop up is not shown on SYNC touchscreen.
 - Select the close icon on the SYNC touchscreen.
 - Remove the USB stick
 - Click yes on the FDRS screen "Was the USB Update Successful" prompt (FDRS verifies if the module software update was successfully installed on the module).

NEW ! NOTE: Mach-E shown Expedition, Navigator and F-150 vehicles similar.

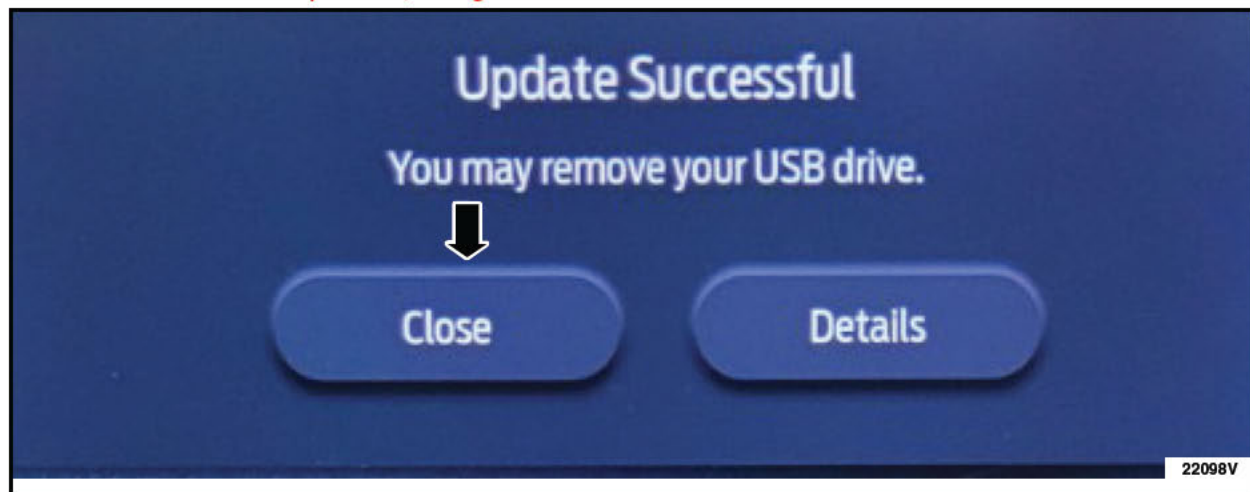


FIGURE 20



23. Turn ignition to off and click the OK icon on the FDRS screen. See Figure 21.

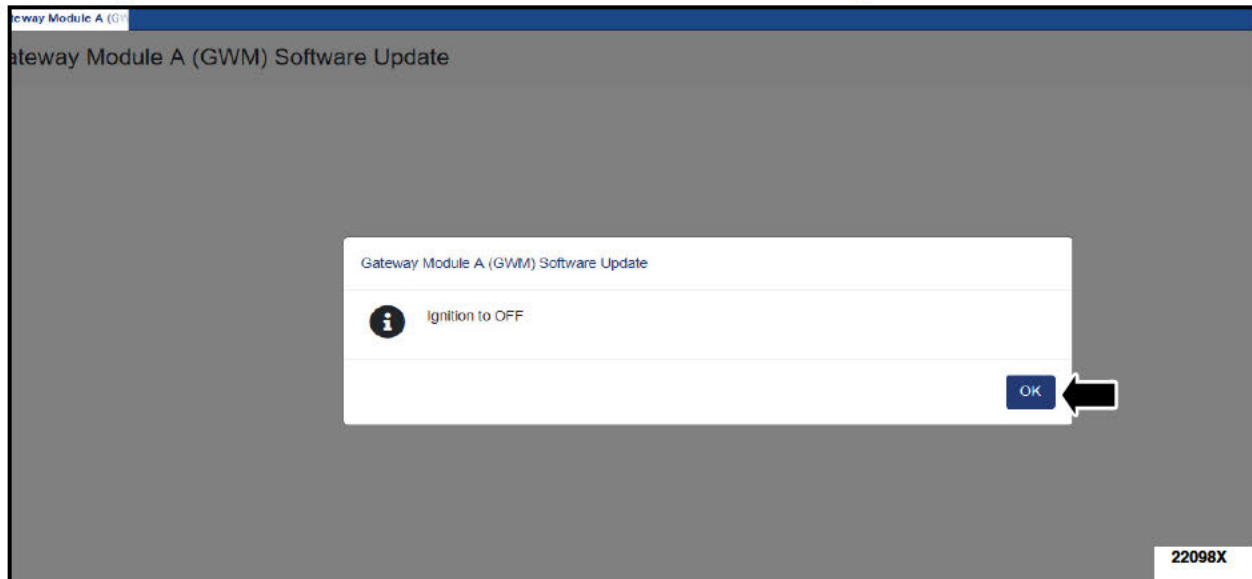


FIGURE 21

24. Turn ignition to the ignition on engine off position and click the OK icon on the FDRS screen. See Figure 22.



FIGURE 22



25. On the FDRS screen wait for the validating software process to finish. See Figure 23.

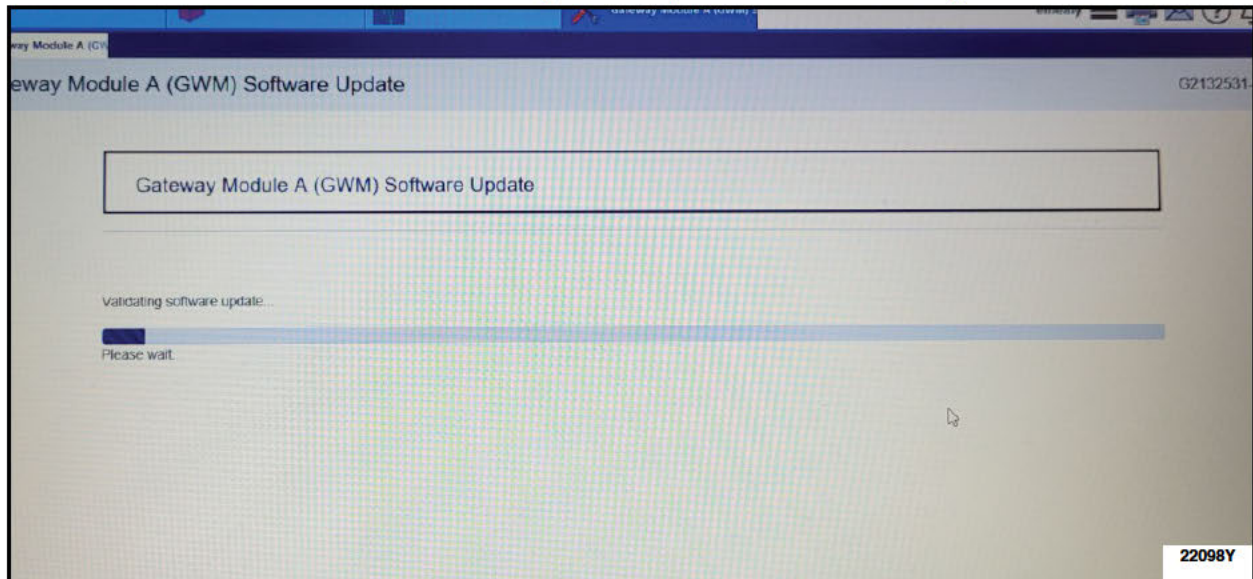


FIGURE 23

26. Turn ignition to off and click the OK icon on the FDRS screen. See Figure 24.

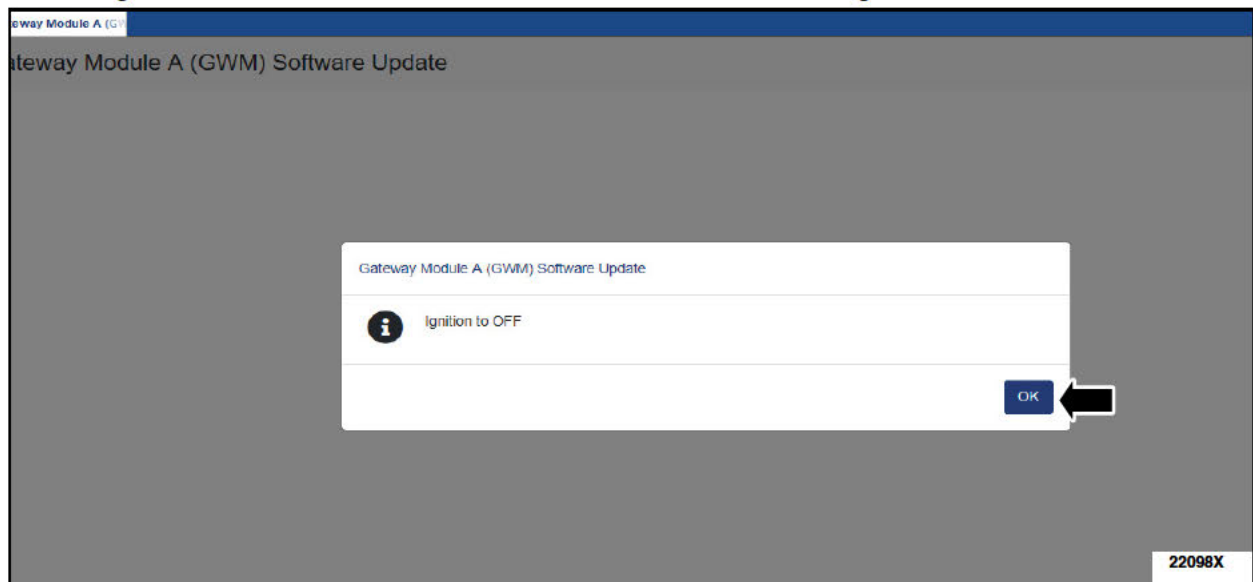


FIGURE 24



27. Click OK on the FDRS screen when the application finished message appears. See Figure 25.

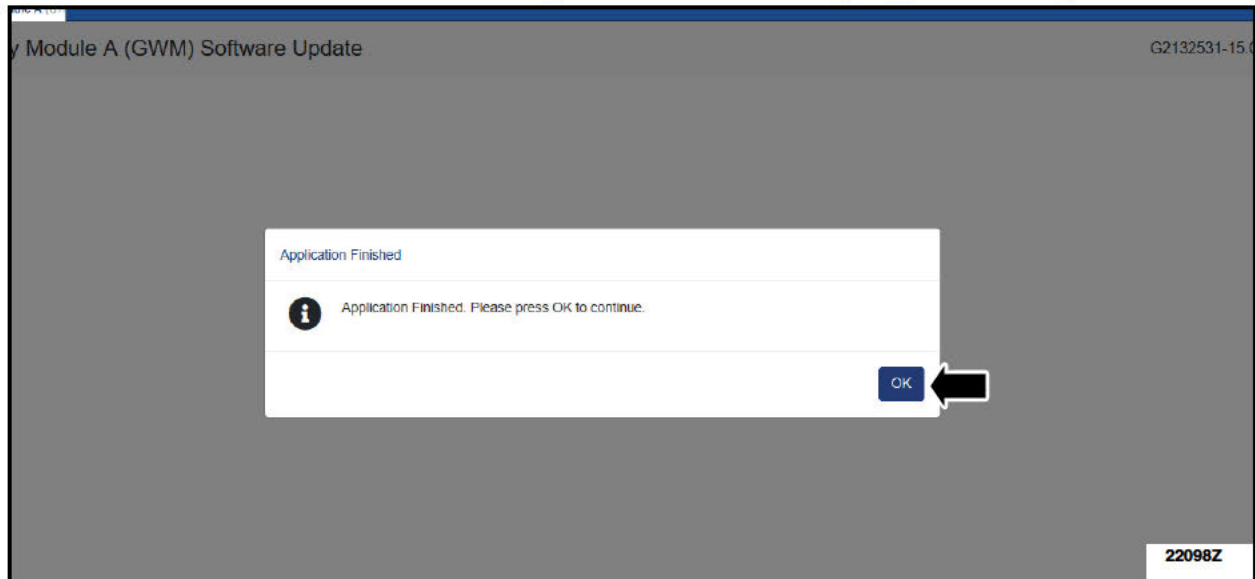


FIGURE 25

28. From the list on the RH side of the screen, select Self-Test and click RUN.

29. Click the Run Selected Tests button in the lower right.

30. Click the Clear & Retest button at the top of the screen to clear DTC's in all modules.

31. Disconnect the battery charger from the 12V battery once the programming has completed.

32. On the center display screen, navigate to Settings > About SYNC > Hands-Free Driving Mode available through DD-MM-YYYY. Verify that expiration date is in the future. See Figure 26.

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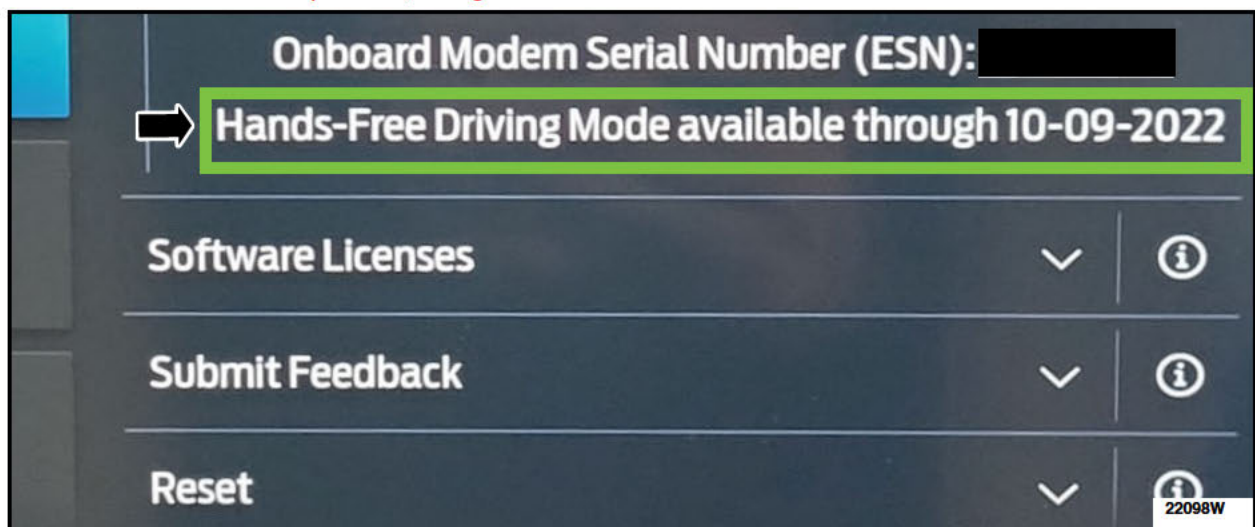


FIGURE 26



TROUBLESHOOTING

Error States/Messages:

1. When the USB drive is removed from the laptop, inserted into the vehicle and the vehicles infotainment screen says "restart required", the vehicle is restarted and then goes into a loop where it continues to say "restart required" .
2. When the vehicles infotainment display screen says "programming successful" , the USB drive is removed from the vehicle and inserted back into the laptop. At this point, FDRS displays an error stating "Part Number Validation Failed" or "DID Validation Failed".

Steps to Resolve:

The procedure that we have provided to dealers and confirmed to resolve these errors is:

1. Launch FDRS and navigate to toolbox tab > datalogger > BCM and select the "BATT_SOC" PID.
2. Ensure that the BATT_SOC PID reads over 80%.
3. If the PID is less than 80%, fully recharge the vehicles 12-volt battery using the appropriate Rotunda battery tester and charger.
4. Remove the charger from the vehicle and using FDRS, navigate to toolbox tab > BCM > Reset Battery Monitor Sensor Learned Values application. Perform the BMS reset.
5. Connect the Rotunda tool and set it to maintain 12.6 to 13.6 volts. Monitor the voltage real time using the indicator at the bottom right corner of FDRS to ensure that it is within this range.
6. Repeat the Software Update application that failed.



Important Information for Module Programming

NOTE: When programming a module, use the following basic checks to ensure programming completes without errors.

- Make sure the 12V battery is fully charged before carrying out the programming steps and connect FDRS/scan tool to a power source.

NOTE: A good internet connection is necessary to identify the vehicle and to load the diagnostic software.

- Inspect Vehicle Communication Module II (VCM II)/Vehicle Communication and Measurement Module (VCMM) and cables for any damage. Make sure scan tool connections are not interrupted during programming.
- A hardwired connection is strongly recommended.
- Turn off all unnecessary accessories (radio, heated/cooled seats, headlamps, interior lamps, HVAC system, etc.) and close doors.
- Disconnect/depower any aftermarket accessories (remote start, alarm, power inverter, CB radio, etc.).
- Follow all scan tool on-screen instructions carefully.
- Disable FDRS/scan tool sleep mode, screensaver, hibernation modes.
- Create all sessions key on engine off (KOEO). Starting the vehicle before creating a session will cause errors within the programming inhale process.

Recovering a module when programming has resulted in a blank module

- a. Disconnect the VCMII or VCMM from the data link connector (DLC) and your PC.
- b. After ten seconds, reconnect the VCMII/VCMM to the DLC and the PC. Launch FDRS. The VCMII/VCMM icon should turn green in the bottom right corner of the screen. If it does not, troubleshoot the FDRS to VCM connection.
- c. If you are using the same FDRS as the initial programming attempt, select the appropriate VIN from the Vehicle Identification menu. If you are using a different FDRS, select "Read VIN from Vehicle" and proceed through the Network Test.
- d. In the Toolbox menu, navigate to the failed module and Download/Run Programmable Module Installation (PMI). Follow the on-screen prompts. When asked if the original module is installed, select "No" and continue through the installation application.
- e. Once programming has completed, a screen may list additional steps required to complete the programming process. Make sure all applicable steps are followed in order.



CERTAIN 2022 MODEL YEAR EXPEDITION/NAVIGATOR AND 2021-2022 MODEL YEAR F-150 VEHICLES EQUIPPED WITH FORD/LINCOLN CO-PILOT AND BLUECRUISE/ACTIVEGLIDE — BLUECRUISE/ACTIVEGLIDE MAPS EXPIRATION

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Gateway Module A Programming

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1. Connect a battery charger to the 12V battery.

NOTE: Verify that the negative cable of the charger is installed on a chassis or engine ground, and not the 12 volt battery negative terminal to prevent the battery saver mode from activating on the vehicle.

NOTE: If the diagnostic software does not load or if the vehicle cannot be identified properly, make sure there is a good internet connection and the Vehicle Communication Module (VCM) is properly connected to the Data Link Connector (DLC). VCM 3 is recommended for improved data download time.

2. Close all the doors on the vehicle. If a door must be left open during the service procedure, mechanically latch the door latch to simulate a closed door.



3. On the center display screen, navigate to Settings > About SYNC > Hands-Free Driving Mode available through DD-MM-YYYY. Record the expiration date. See Figure 1.

NEW ! *NOTE: F-150 shown Expedition, Navigator and Mach-E vehicles similar.*

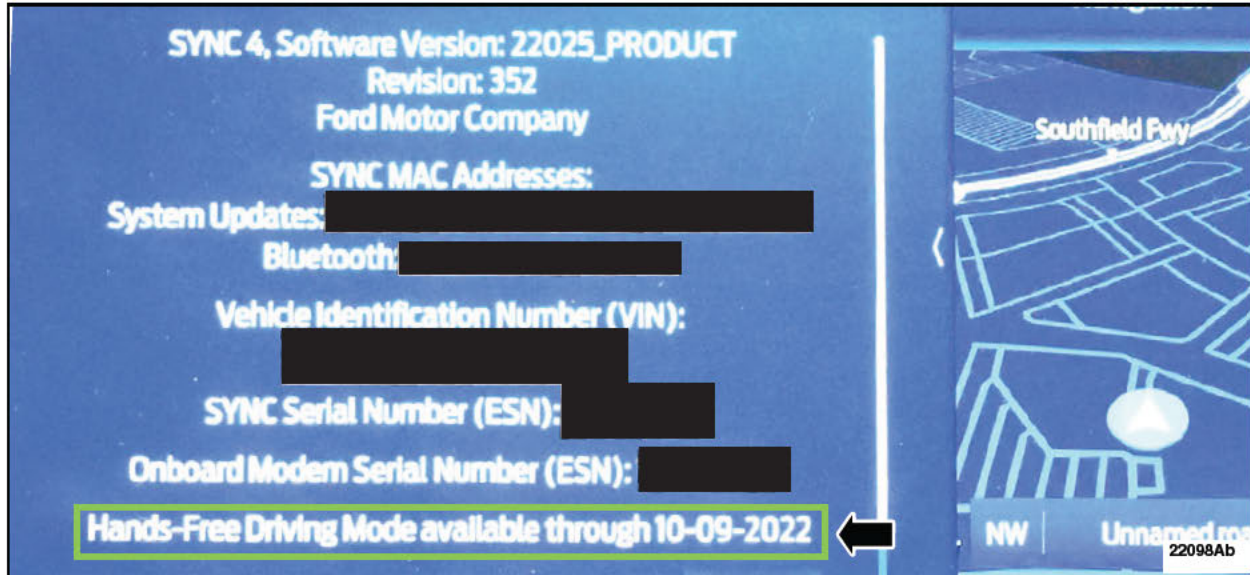


FIGURE 1

4. Log into Ford Diagnostic and Repair System (FDRS). Ensure FDRS and VCM 3 are updated to latest version.

5. Start a new FDRS session.

NOTE: Vehicle information is automatically retrieved by the diagnostic software and a Network Test is run. Vehicle identification data appears on the screen when this is complete.

NOTE: Available modules are shown on the LH side of the screen, and available procedures are listed on the RH side of the screen. Modules that are communicating are highlighted in green.



6. Select Toolbox tab. See Figure 2.

ECU	Description	View CMBTCs	Engineering Assembly P/N	Software P/N
ABS	Anti-Lock Brake System		NL34-2C219-CB	NL34-2D053-CA
ACM	Audio Front Control Module		ML3T-18G10-FEH	JX7T-14C362-GA
APIM	SYNC Module		DSMUST-14G670-GB	ML3T-
ATCM	AS Terrain Control Module		NL3T-14G366-FA	NL3T-14D834-AA
BCM	Body Control Module		MUST-14B476-KAG	MUST-14C184-AA
BCMC	Body Control Module C		ML3T-14D368-SD	MUST-14G630-DD
CCM	Cruise Control Module		ML3T-9G768-AK	ML3T-14D849-AK
CMR	Camera Module - Rear		ML3T-3G590-AJ	ML3T-3G584-MD
DCACA	Direct Current/Alternating Current Converter Module A		NL3T-14G620-AB	NL3T-14H079-AB
DDM	Driver Door Module		MUST-14B531-BM	MUST-14C064-BM
DSM	Driver Front Seat Module		MUST-14C708-BG	MUST-14C030-AH
DSP	Audio Digital Signal Processing Module		ML3T-18G149-AJ	ML3T-14C595-AJ
GSM	Gear Shift Module		ML3P-7P427-AK	ML3P-7P473-AJ
GWM	Gateway Module A		DSMUST-14G650-FB	ML3T-14H021-FAD
HCM	Headlamp Control Module		ML34-13C148-AE	JX7B-13B526-BJ
HVAC	Heating, Ventilation And Air Conditioning		NL3T-18C112-TA	NL3T-18D519-BA
IPC	Instrument Panel Cluster		DSML3T-1A292-CCE	NL3T-14C626-CDB

Module Details

2022 F150
Odometer : 2883 Kilometres
Body Style : Crew Cab
Engine : 3.5L CYCLON-D4- G-DI-TIVCT-UP
Transmission : 10 Speed Auto Transmission (10)
Drive Type : 4 WHL L/H PART TIME DRIVE
Air Conditioning : DUAL ZONE AUTO TEMP CONTR
Paint : OXFORD WHITE SOLID C/C
Build Date : Oct 22, 2021
Wheelbase : 157"/3989MM WHEELBASE
SYNC Version : SYNC IV **22098Ac**

FIGURE 2

7. From the list on the LH side of the screen, select the GWM. See Figure 3.

Network Test Results

FD1

PCM, ABS, CCM, CMR, IPMA, PSCM, SODCM, SORCM, SKOL, SKOR, TGCM

HS1

ATCM, BCM, BCMC, DCACA, DSP, GWM, IPC, OCSM, RCM, TRM, WACM

HS2

GSM ✓

HS3

ACM, APIM, HCM

HS4

TCU

MS1

22098Ad

FIGURE 3



8. From the list on the RH side of the screen, download GWM - GWM Software Update. See Figure 4.

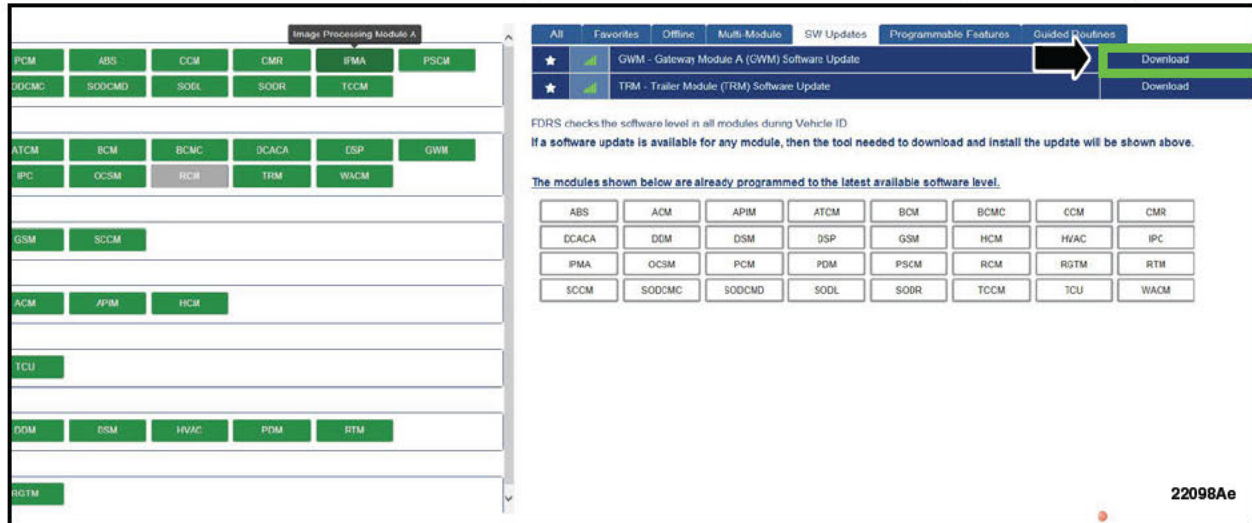


FIGURE 4



NOTE: If software is already at the latest level, this selection will not be available. Verify that an Over The Air (OTA) update was previously installed. Log into Professional Technician System (PTS) > Connected Vehicle tab > OTA Dashboard. Click on release notes to confirm what was included in the OTA update. See Figures 5 and 6.

NEW ! NOTE: Mach-E shown Expedition, Navigator and F-150 vehicles similar.

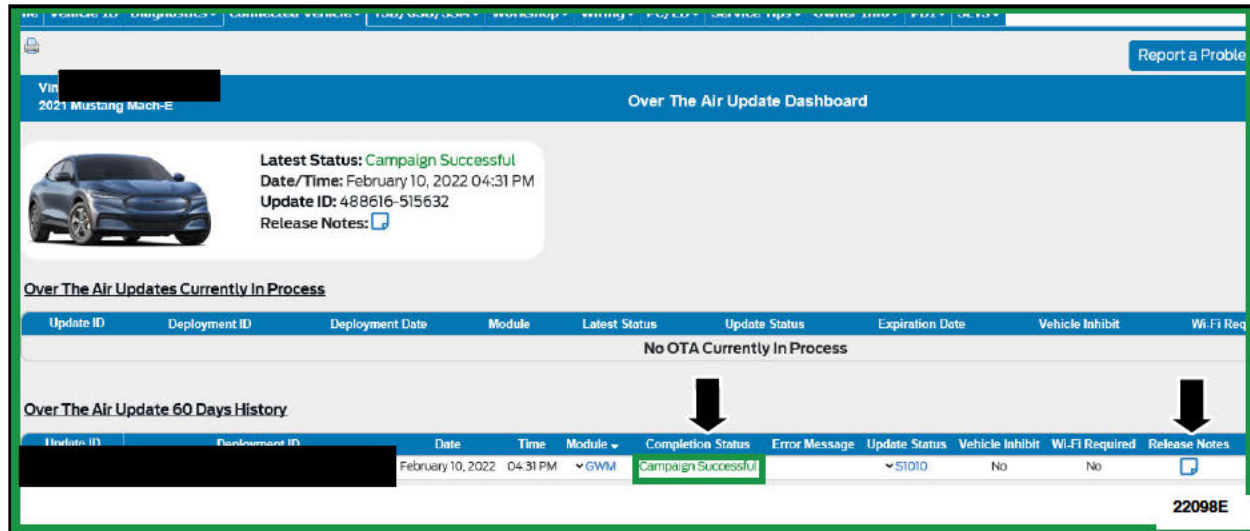


FIGURE 5

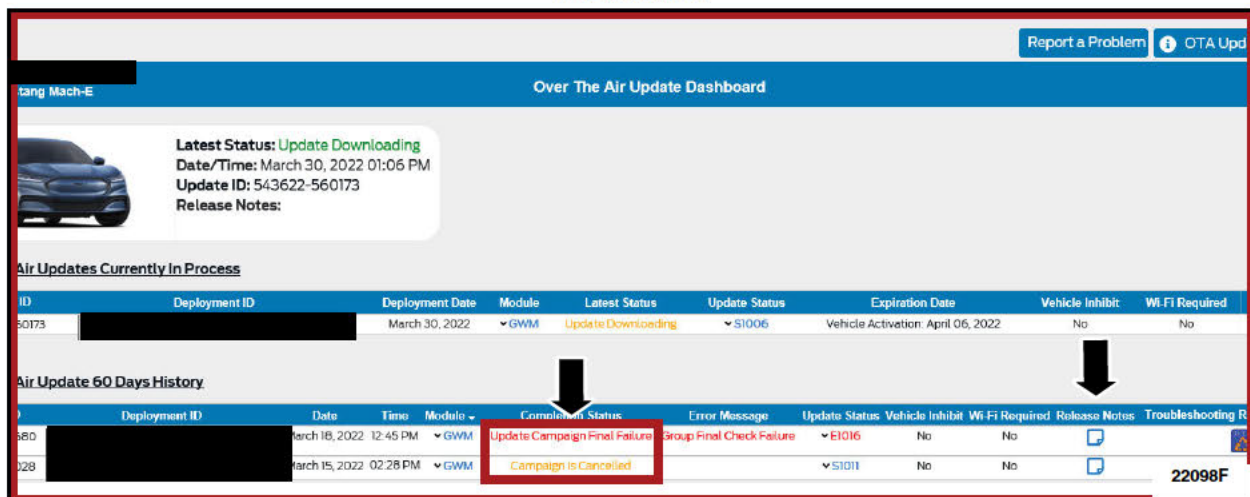


FIGURE 6



9. Click RUN to start the GWM update. See Figure 7.

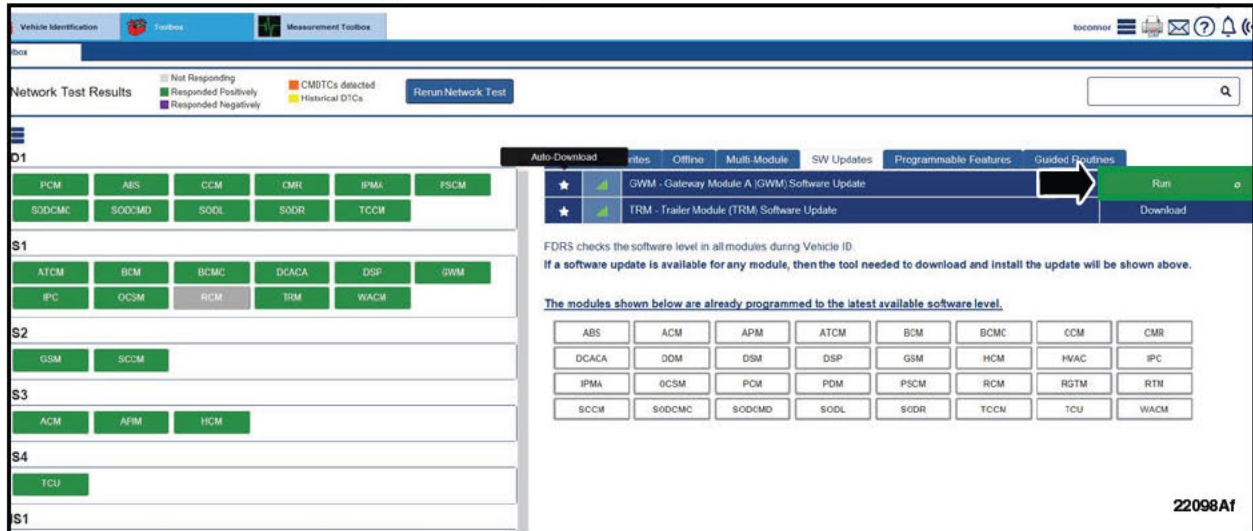


FIGURE 7

10. Verify that the vehicle is connected to a battery charger. Click yes and follow all on-screen instructions carefully. See Figure 8.



FIGURE 8



11. When prompted, turn the ignition to key on engine off and click the OK icon. See Figure 9.



FIGURE 9

12. Allow the software files to process. See Figure 10.

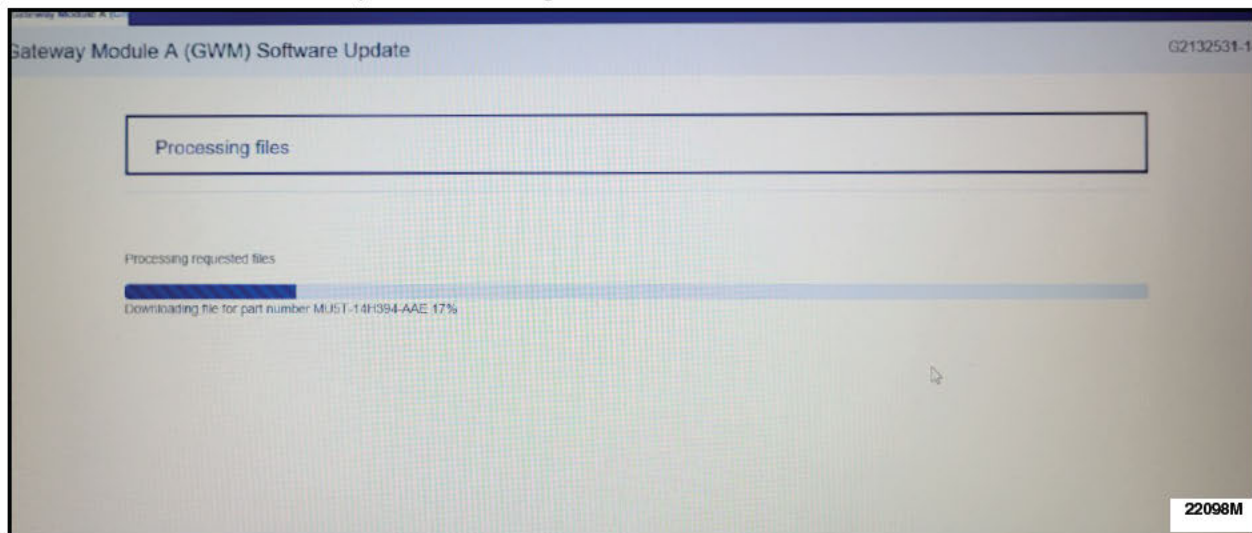


FIGURE 10



13. When prompted, connect the USB flash drive to the diagnostic scan tool and click the OK icon. See Figure 11.

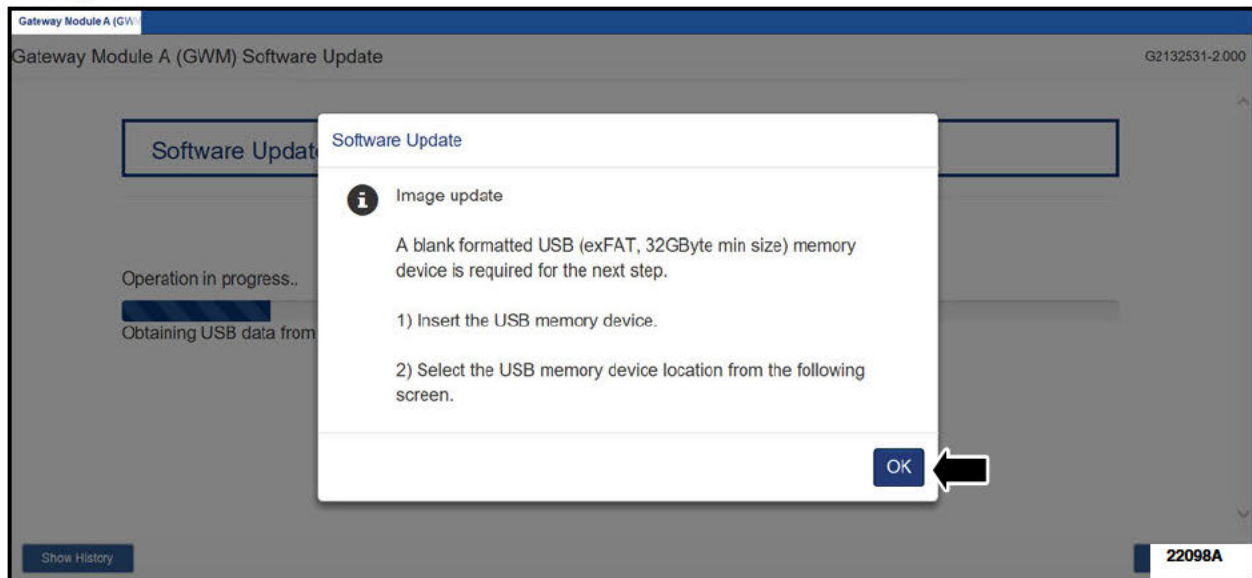


FIGURE 11

NOTE: Do not install the software update on a sub folder on the USB drive. See Figure 12.

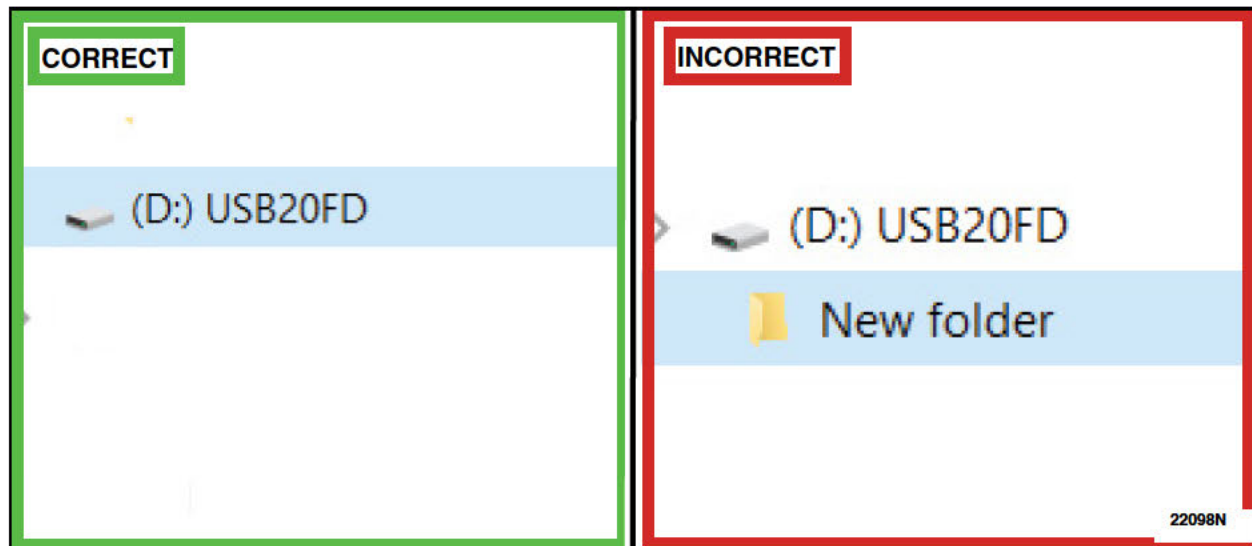


FIGURE 12



14. Cycle the ignition to the ignition on engine on position and click the OK icon. See Figure 13.

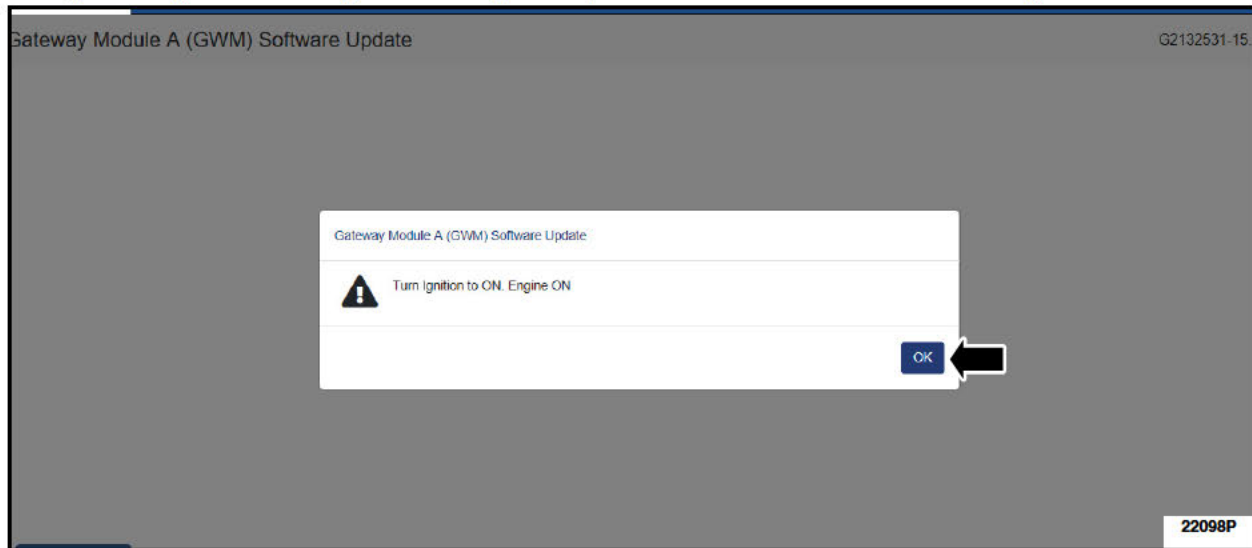


FIGURE 13

NOTE: Close all the doors on the vehicle. If a door must be left open during the service procedure, mechanically latch the door latch to simulate a closed door and ensure that the trunk is closed if applicable.

IMPORTANT: Do not select the Yes button in FDRS until the software update on the USB drive has been completed. See Figure 14.

NOTE: If the yes or no icon in FDRS is pressed by accident the software update will not be successful. **DO NOT PROCEED WITH THE CAN FLASH.** You may receive an inaccurate message stating that the software update was successful but the Bluecruise maps will not be updated.

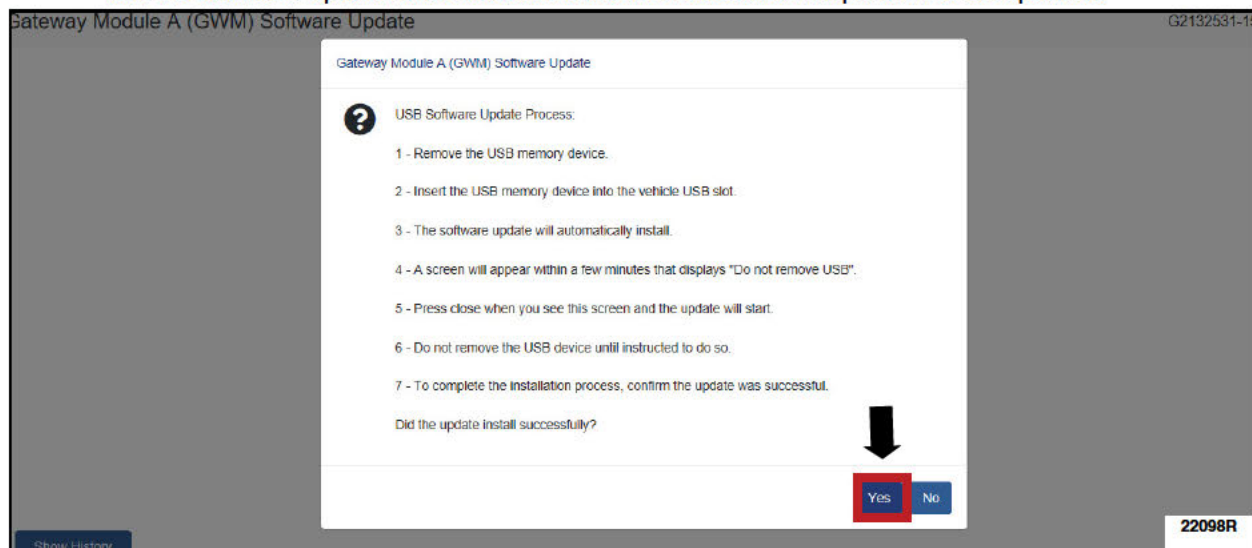


FIGURE 14



15. When prompted by the diagnostic scan tool, safely remove/eject the USB flash drive from the diagnostic scan tool and connect it to the USB hub in the vehicle to install the software into the GWM. See Figure 15.

NEW ! NOTE: Mach-E shown Expedition, Navigator and F-150 vehicles similar.



FIGURE 15

16. The update should start automatically. It is normal for the GWM to reset during this step. See Figure 16.

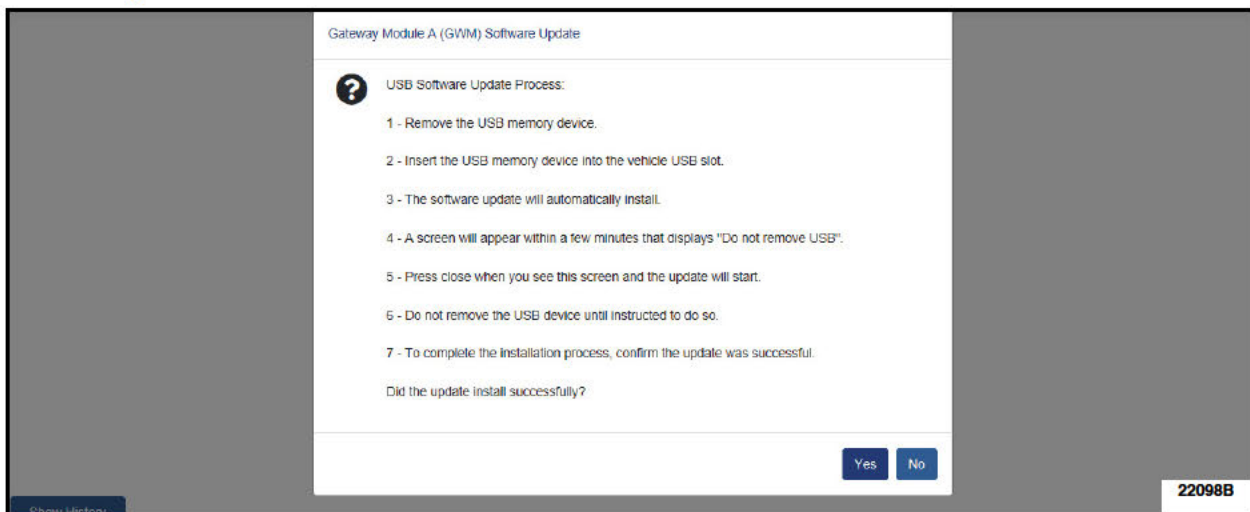


FIGURE 16



17. Press the close icon on navigation screen. The GWM software update will start automatically.
See Figure 17.
18. Set a timer for 10 minutes to ensure enough time passes to allow the update to complete before removing the USB drive.

NEW ! NOTE: F-150 shown Expedition and Navigator vehicles similar.



FIGURE 17

19. Turn off the vehicle and open and close the driver's door. See Figure 18.

NEW ! NOTE: F-150 shown Expedition and Navigator vehicles similar.

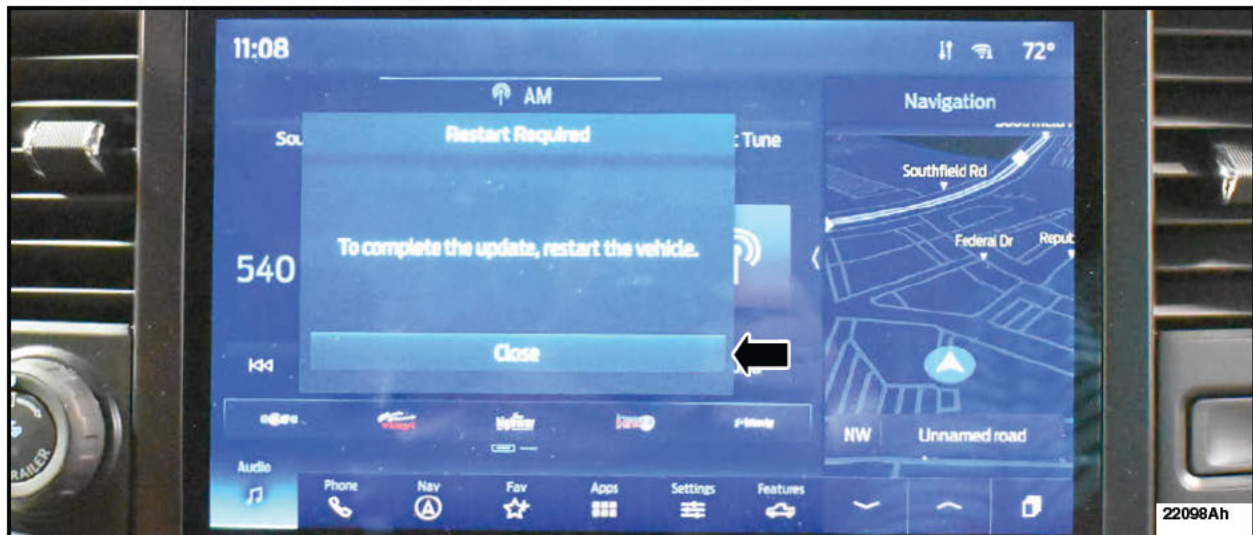


FIGURE 18



20. Restart the vehicle. **Only remove the USB stick from the vehicle when the update successful message appears.** See Figure 19.
21. If there is not an immediate message stating that the update was successful set a timer for 5 minutes. It may take up to 5 minutes before SYNC touchscreen displays Update Successful pop up. After 5 minutes if "Successful" pop up is not shown on SYNC touchscreen.
- Select the close icon on the SYNC touchscreen.
 - Remove the USB stick
 - Click yes on the FDRS screen "Was the USB Update Successful" prompt (FDRS verifies if the module software update was successfully installed on the module).

NEW ! NOTE: F-150 shown Expedition and Navigator vehicles similar.

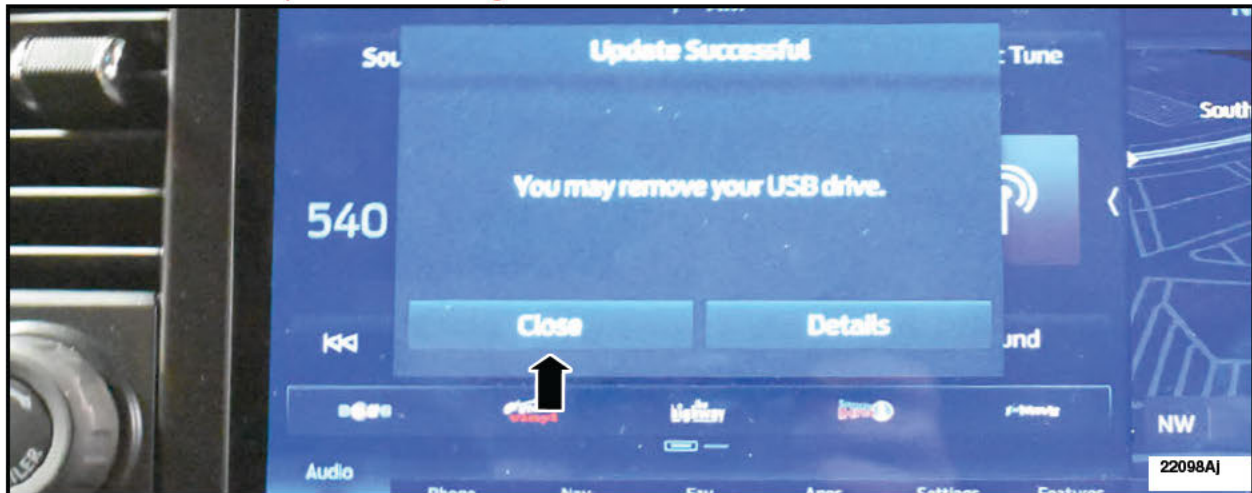


FIGURE 19



22. Turn ignition to off and click the OK icon on the FDRS screen. See Figure 20.

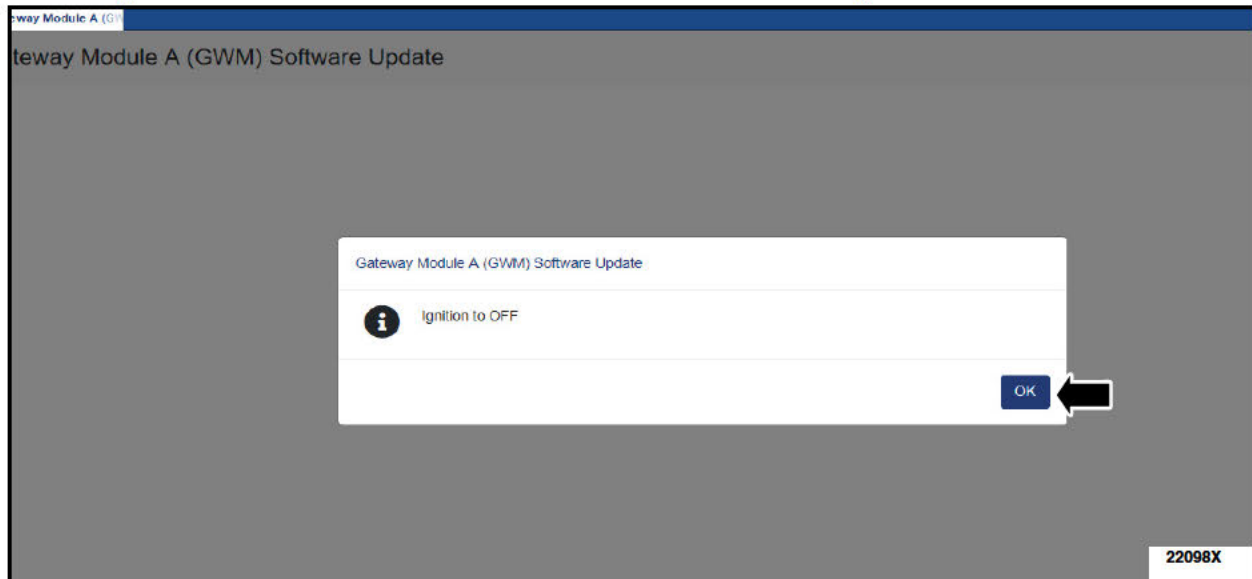


FIGURE 20

23. Turn ignition to the ignition on engine off position and click the OK icon on the FDRS screen. See Figure 21.



FIGURE 21



24. On the FDRS screen wait for the validating software process to finish. See Figure 22.

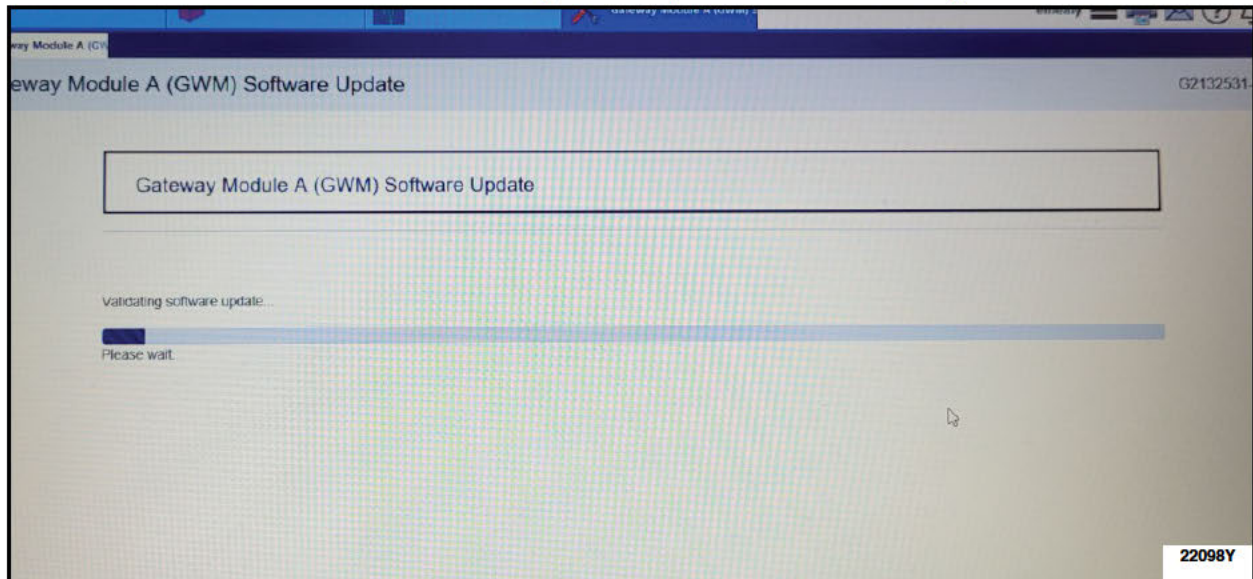


FIGURE 22

25. Turn ignition to off and click the OK icon on the FDRS screen. See Figure 23.

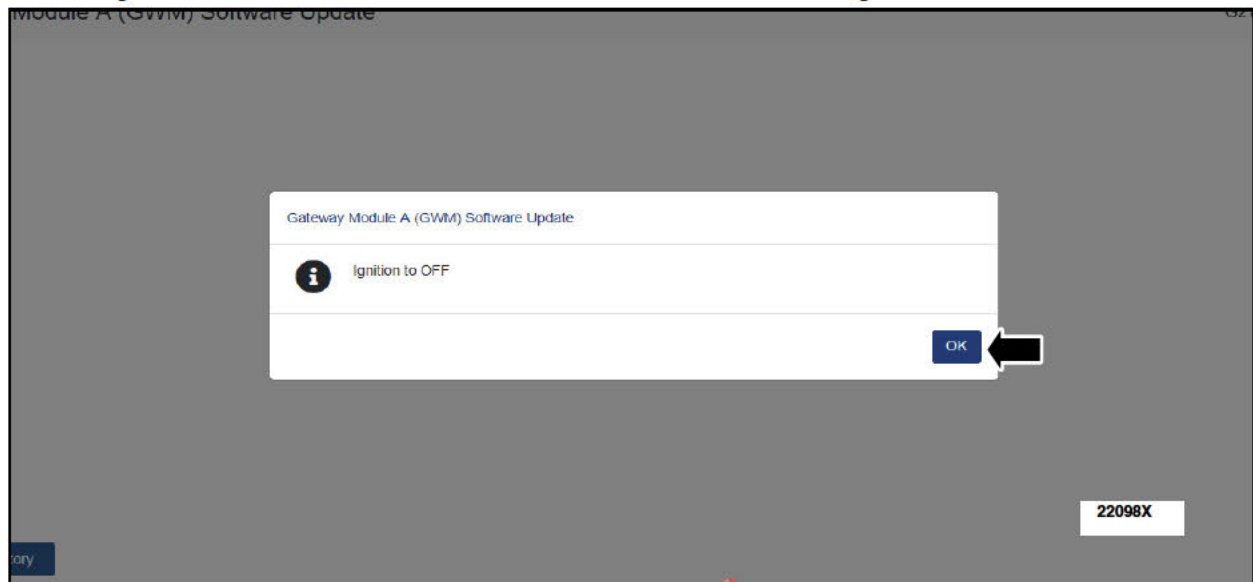


FIGURE 23



26. Click OK on the FDRS screen when the application finished message appears. See Figure 24.

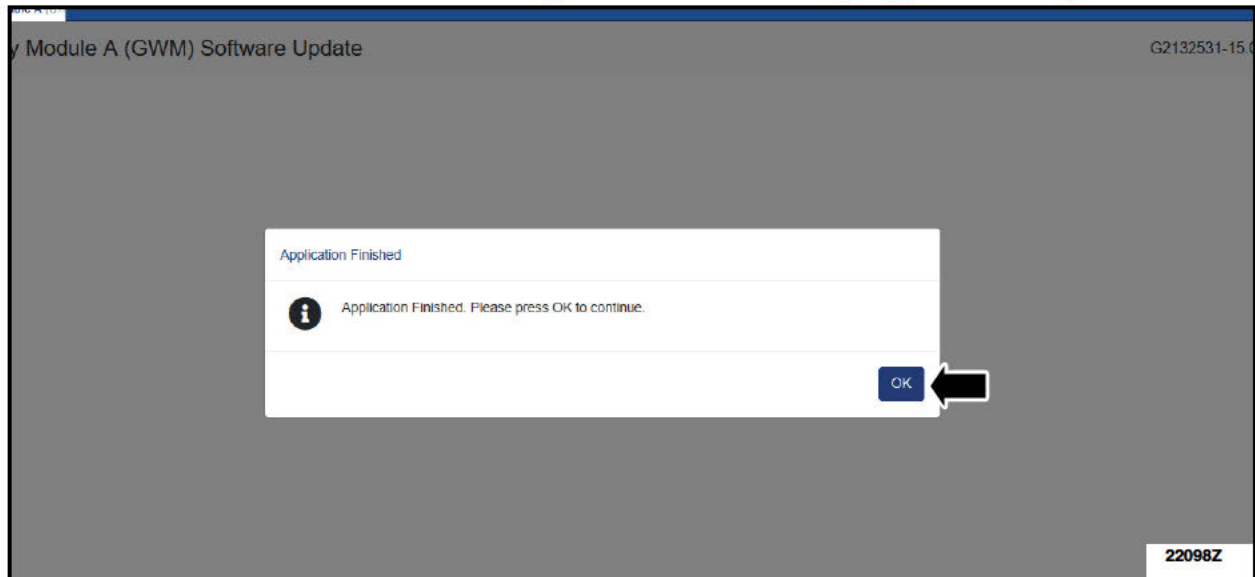


FIGURE 24

27. From the list on the RH side of the screen, select Self-Test and click RUN.

28. Click the Run Selected Tests button in the lower right.

29. Click the Clear & Retest button at the top of the screen to clear DTC's in all modules.

30. Disconnect the battery charger from the 12V battery once the programming has completed.

31. On the center display screen, navigate to Settings > About SYNC > Hands-Free Driving Mode available through DD-MM-YYYY. Verify that expiration date is in the future. See Figure 25.

NEW ! NOTE: Mach-E shown Expedition, Navigator and F-150 vehicles similar.

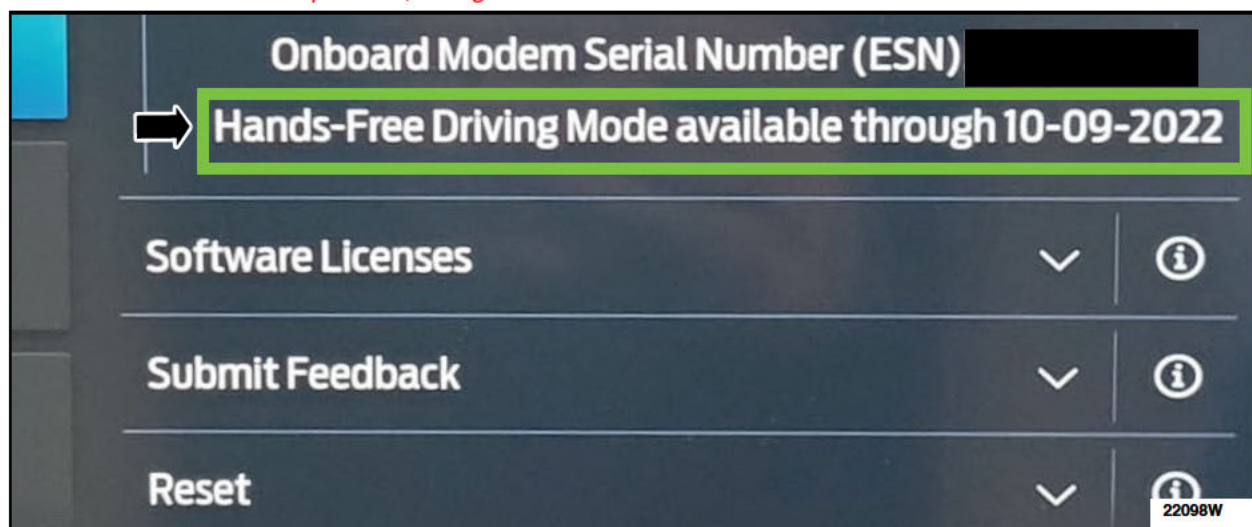


FIGURE 25



TROUBLESHOOTING

Error States/Messages:

1. When the USB drive is removed from the laptop, inserted into the vehicle and the vehicles infotainment screen says "restart required", the vehicle is restarted and then goes into a loop where it continues to say "restart required" .
2. When the vehicles infotainment display screen says "programming successful" , the USB drive is removed from the vehicle and inserted back into the laptop. At this point, FDRS displays an error stating "Part Number Validation Failed" or "DID Validation Failed".

Steps to Resolve:

The procedure that we have provided to dealers and confirmed to resolve these errors is:

1. Launch FDRS and navigate to toolbox tab > datalogger > BCM and select the "BATT_SOC" PID.
2. Ensure that the BATT_SOC PID reads over 80%.
3. If the PID is less than 80%, fully recharge the vehicles 12-volt battery using the appropriate Rotunda battery tester and charger.
4. Remove the charger from the vehicle and using FDRS, navigate to toolbox tab > BCM > Reset Battery Monitor Sensor Learned Values application. Perform the BMS reset.
5. Connect the Rotunda tool and set it to maintain 12.6 to 13.6 volts. Monitor the voltage real time using the indicator at the bottom right corner of FDRS to ensure that it is within this range.
6. Repeat the Software Update application that failed.



Important Information for Module Programming

NOTE: When programming a module, use the following basic checks to ensure programming completes without errors.

- Make sure the 12V battery is fully charged before carrying out the programming steps and connect FDRS/scan tool to a power source.

NOTE: A good internet connection is necessary to identify the vehicle and to load the diagnostic software.

- Inspect Vehicle Communication Module II (VCM II)/Vehicle Communication and Measurement Module (VCMM) and cables for any damage. Make sure scan tool connections are not interrupted during programming.
- A hardwired connection is strongly recommended.
- Turn off all unnecessary accessories (radio, heated/cooled seats, headlamps, interior lamps, HVAC system, etc.) and close doors.
- Disconnect/depower any aftermarket accessories (remote start, alarm, power inverter, CB radio, etc.).
- Follow all scan tool on-screen instructions carefully.
- Disable FDRS/scan tool sleep mode, screensaver, hibernation modes.
- Create all sessions key on engine off (KOEO). Starting the vehicle before creating a session will cause errors within the programming inhale process.

Recovering a module when programming has resulted in a blank module

- a. Disconnect the VCMII or VCMM from the data link connector (DLC) and your PC.
- b. After ten seconds, reconnect the VCMII/VCMM to the DLC and the PC. Launch FDRS. The VCMII/VCMM icon should turn green in the bottom right corner of the screen. If it does not, troubleshoot the FDRS to VCM connection.
- c. If you are using the same FDRS as the initial programming attempt, select the appropriate VIN from the Vehicle Identification menu. If you are using a different FDRS, select "Read VIN from Vehicle" and proceed through the Network Test.
- d. In the Toolbox menu, navigate to the failed module and Download/Run Programmable Module Installation (PMI). Follow the on-screen prompts. When asked if the original module is installed, select "No" and continue through the installation application.
- e. Once programming has completed, a screen may list additional steps required to complete the programming process. Make sure all applicable steps are followed in order.

