

CERTAIN 2024 MODEL YEAR NAUTILUS VEHICLES — INFOTAINMENT SOFTWARE UPDATE

NEW ! SERVICE PROCEDURE

IMPORTANT! The Service Technician Specialty Training (STST) Competency 10 certification requirement in the U.S. market only will be enforced starting with repair orders opened on or after August 31, 2024. Field Service Action (FSA) repairs will reject and the claim will not be paid if the repairing technician is not certified in STST Competency 10 FSA. See Electronic Field Communication (EFC)15332 for more details.

Module Programming

NOTE: Make sure the Ford Diagnosis and Repair System (FDRS) application version is at 42.5.6 or later, before attempting this repair. FDRS versions prior to 42.5.6 could result in a GVMS warning messages.

NOTE: Program appropriate vehicle modules before performing diagnostics and clear all Diagnostic Trouble Codes (DTCs) after programming. For DTCs generated after programming, follow normal diagnostic service procedures.

1. Insert the USB flash drive into the laptop and **reformat the flash drive**. This needs to be done for each *module* programmed.

NOTE: A **64GB** or larger USB flash drive is required for APIM, TCU, and GWM software updates. USB 3.0 or higher is recommended. 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:
 - a. Right click on the USB flash drive.
 - b. Select Format, select exFAT for the File System.
 - c. Select Default Allocation Size for the Allocation Unit Size.
 - d. De-selecting Quick Format is not necessary and will result in a lengthier operation.

NOTE: For the fastest file transfer speed, the use of a USB 3.2 flash drive with a compatible Gen 2 USB 3.2 laptop is recommended.

2. Turn off the engine time-out feature in the center display.
- a. From the center display settings menu, press Vehicle.
 - b. Switch 30 min Max Idle to OFF.



3. Check the vehicle's State Of Charge (SOC) Parameter Identification Data (PID) by performing the following:

- a. Launch the Ford Diagnostic and Repair System (FDRS) and navigate to toolbox tab > datalogger > BCM and select BATT SOC PID.
- b. Make sure the BATT_SOC PID reads over 50%.
- c. Using FDRS, navigate to toolbox tab > BCM > Reset Battery Monitor Sensor Learned Values application. Perform the BMS reset.

4. Connect the Rotunda battery tester and charger 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 make sure that it is within this range. **The battery state of charge (SOC) must be greater than 50% to continue with this FSA.**

NOTE: Verify the negative cable of the charger is installed on a chassis or engine ground and not the 12V 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).

NOTE: Some vehicles will require module updates to be performed before additional module updates are available. Multiple module updates will most likely be required to complete this FSA.

5. Log into Ford Diagnostic and Repair System (FDRS).

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.

6. Click **Read VIN from Vehicle** or manually enter the Vehicle Identification Number (VIN).

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

7. Select **Toolbox** tab.

8. On the RH side of the screen, select the **Multi-Module** tab.



9. From the list on the RH side of the screen, select **Read the Configuration Data**. See Figure 1.

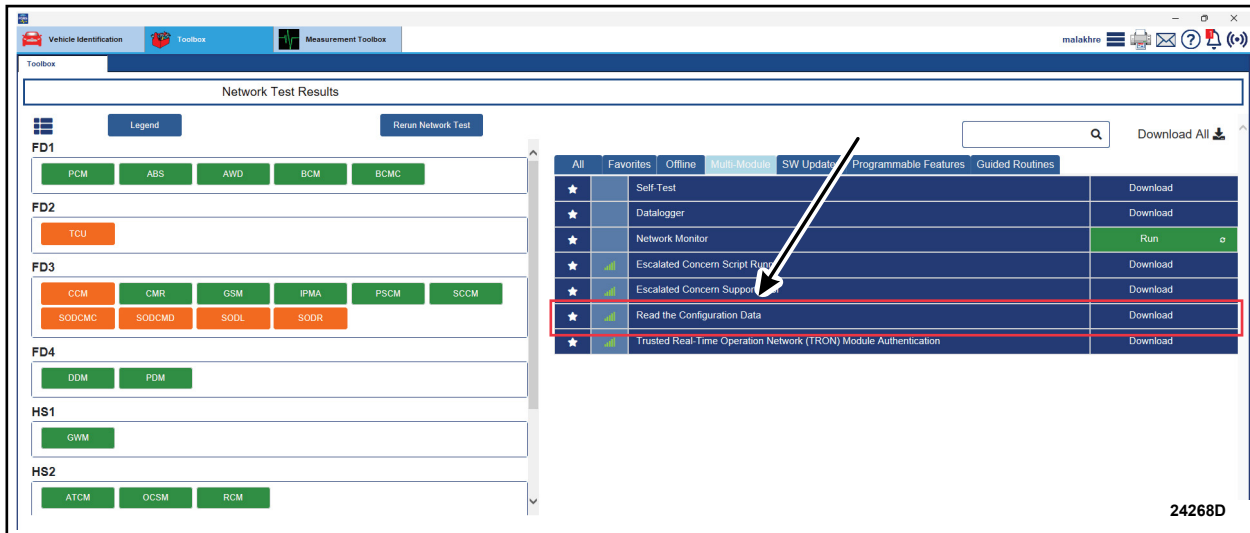


FIGURE 1

10. Click **RUN**. Follow all FDRS and vehicle instructions carefully.

11. On the center display screen of the vehicle, make sure the system setting is **NOT** using a guest profile. Change the system profile by selecting the center upper button on the home screen. See Figure 2.

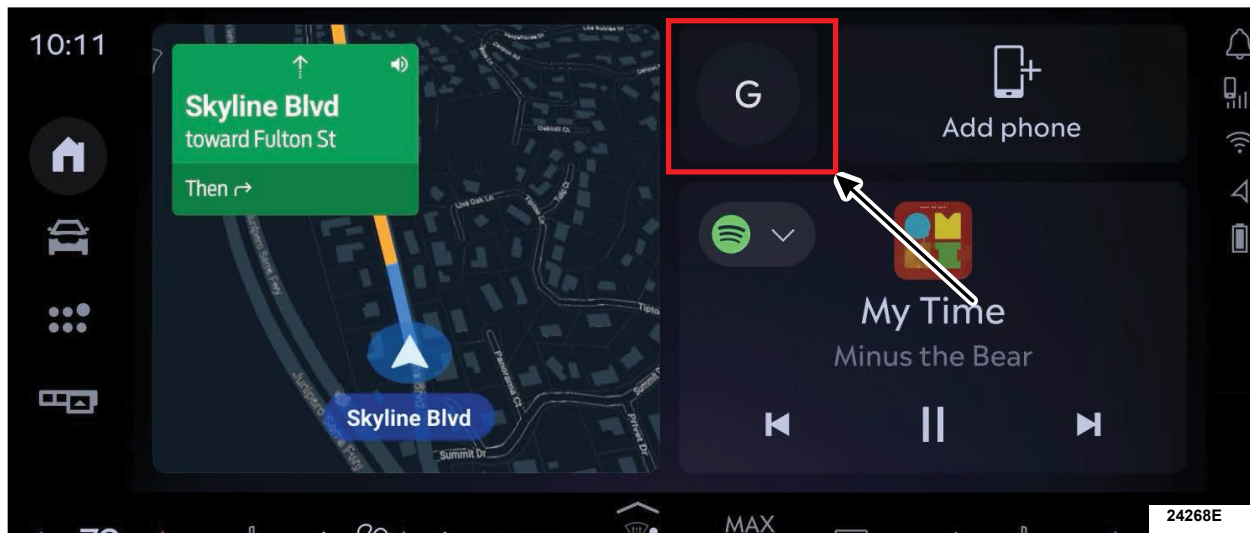


FIGURE 2



12. Select any other profile on the profile selection screen to switch out of the guest profile. See Figure 3.

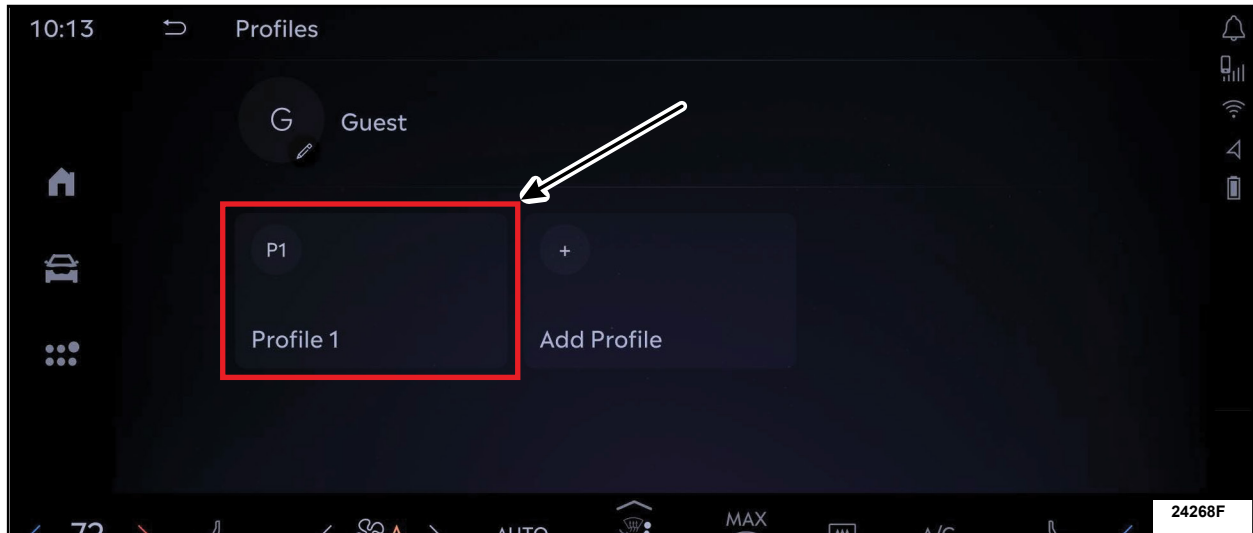


FIGURE 3

13. From the list on the LH side of the screen, select the **GWM**.

14. From the list on the RH side of the screen, select **GWM - Gateway Module A (GWM) Software Update**.

15. Click **RUN**. Follow all FDRS and vehicle instructions carefully.

16. *Within 10 minutes of inserting the USB into the vehicle, the software update should begin. Did the update begin?*

Yes - Continue to Step 22.

No - Continue to Step 17.

17. *Remove the USB flash drive.*

18. *Press and hold down the round volume button for 10 seconds. After releasing the button a system reset will take place.*

19. *Once the screens go black, re-insert the USB flash drive into the vehicle's media hub.*

20. *After the system resets, it should recognize the USB drive and begin updating. This could take approximately 5 minutes.*

21. *Continue to Step 22.*

NOTE: Once completed, an "update unsuccessful" message may appear on the vehicle screen. Disregard this message and proceed with this FSA.



22. *Is* the vehicle screen *stuck on* the 10 minute wait?

- Yes - Wait 5 minutes. Then remove the USB flash drive from the vehicle. Proceed to the next step *by selecting YES to the FDRS prompts.*
- No - Remove the USB flash drive from the vehicle. Proceed to the next step following FDRS prompts.

23. Insert the USB flash drive to the laptop and reformat the flash drive.

24. Using FDRS, from the list on the LH side of the screen, select the **APIM**.

NOTE: The APIM update will only show up once a successful GWM update has been performed.

25. From the list on the RH side of the screen, select **APIM - Accessory Protocol Interface Module [APIM] Software Update**.

NOTE: Transfer time from computer to USB could take up to 90 minutes. However, no technician interaction is needed once the transfer has started.

26. Turn off the engine time-out feature in the center display.

- a. From the center display settings menu, press Vehicle.*
- b. Switch 30 min Max Idle to OFF.*

27. Click **RUN**. Follow all FDRS and vehicle instructions carefully.

28. Within 10 minutes of inserting the USB into the vehicle, the software update should begin. Did the update begin?

- Yes - Continue to Step 34.*
- No - Continue to Step 29.*

29. Remove the USB flash drive.

30. Press and hold down the round volume button for 10 seconds. After releasing the button a system reset will take place.

31. Once the screens go black, re-insert the USB flash drive into the vehicle's media hub.

32. After the system resets, it should recognize the USB drive and begin updating. This could take approximately 5 minutes.

33. Continue to Step 34.

NOTE: APIM programming could take up to 1 hour and 15 minutes. Once the flash drive is inserted in the vehicle no tech interaction is needed to complete.

NOTE: Once completed, an "update unsuccessful" message may appear on the vehicle screen. Disregard this message and proceed with this FSA.



34. *Is* the vehicle screen *stuck on* the 10 minute wait?

- Yes - Wait 5 minutes. Then remove the USB flash drive from the vehicle. Proceed to the next step *by selecting YES to the FDRS prompts.*
- No - Remove the USB flash drive from the vehicle. Proceed to the next step following FDRS prompts.

35. Insert the USB flash drive to the laptop and reformat the flash drive.

36. Using FDRS, from the list on the LH side of the screen, select the **TCU**.

37. From the list on the RH side of the screen, select **TCU - Telematics Control Unit**.

38. Turn off the engine time-out feature in the center display.

- a. From the center display settings menu, press Vehicle.*
- b. Switch 30 min Max Idle to OFF.*

39. Click **RUN**. Follow all FDRS and vehicle instructions carefully.

40. Within 10 minutes of inserting the USB into the vehicle, the software update should begin. Did the update begin?

- Yes - Continue to Step 46.*
- No - Continue to Step 41.*

41. Remove the USB flash drive.

42. Press and hold down the round volume button for 10 seconds. After releasing the button a system reset will take place.

43. Once the screens go black, re-insert the USB flash drive into the vehicle's media hub.

44. After the system resets, it should recognize the USB drive and begin updating. This could take approximately 5 minutes.

45. Continue to Step 46.

NOTE: Once completed, an "update unsuccessful" message may appear on the vehicle screen. Disregard this message and proceed with this FSA.

46. *Is* the vehicle screen *stuck on* the 10 minute wait?

- Yes - Wait 5 minutes. Then remove the USB flash drive from the vehicle. Proceed to the next step *by selecting YES to the FDRS prompts.*
- No - Remove the USB flash drive from the vehicle. Proceed to the next step following FDRS prompts.



47. Using FDRS, check the following module for software updates.

- GWM

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

48. Is there a software update available for the GWM?

- Yes - Proceed to Step 13 and continue module programming steps for this FSA until no further updates are available.
- No - Proceed to the next step.

49. After properly updating the GWM, APIM, and TCU for this bulletin, the APIM should be at the following Software Part number: PU5T-14H535-CC (or later) or will show as Build Number 1.1.3.1-A45 (or later in the Center Touch Screen (under Settings-System-About).

50. From the list on the RH side of the screen, download and select the Trusted Real-Time Operation Network (TRON) *module authentication*. See Figure 4.

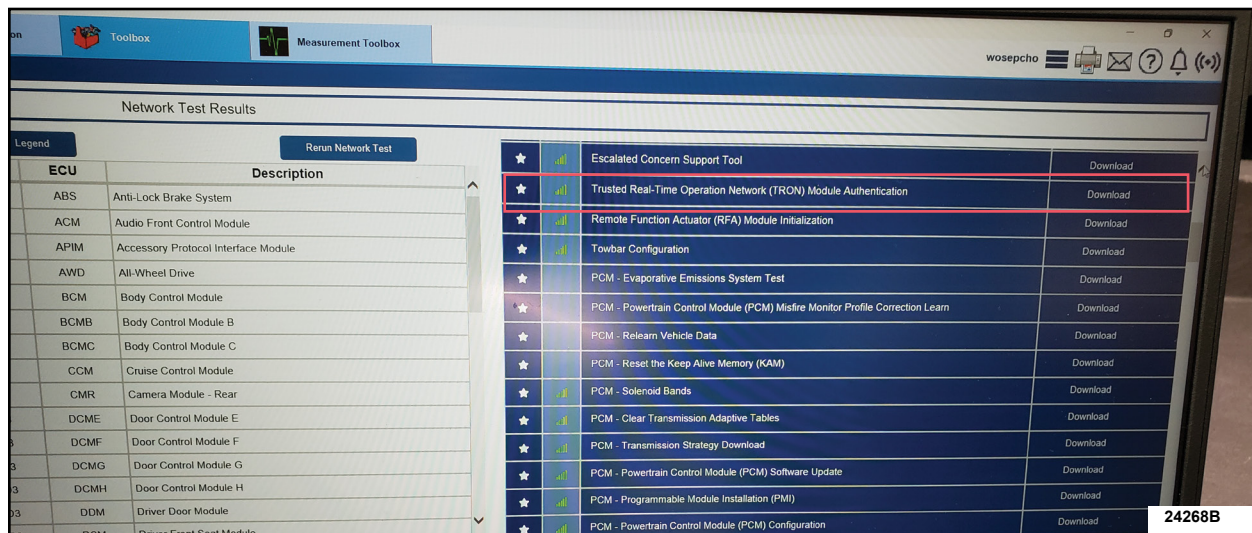


FIGURE 4

51. Select **YES** when prompted with "Do you wish to continue?".



52. Select TRON Diagnosis and Repair from the menu items and then click **Select**. See Figure 5.

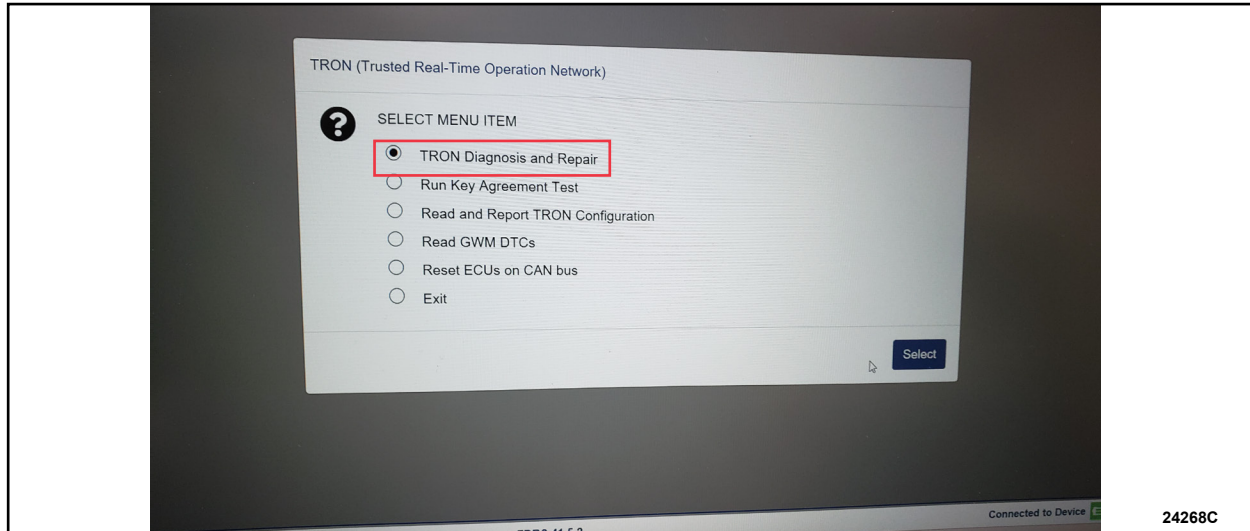


FIGURE 5

53. Once the TRON application has completed, from the list on the RH side of the screen, select **Self Test** and click **RUN**.

54. Click the **Run Selected Tests** button in the lower right.

55. Click the **Clear & Retest** button at the top of the screen to clear DTCs in all modules.

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

Important Information for Module Programming

NOTE: When programming a module, use the following basic checks to make sure the 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 the Vehicle Communication Module II (VCM II)/Vehicle Communication Module III (VCM III) or the Vehicle Communication and Measurement Module (VCMM) and the 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.
- Turn the accessories back on after programming has completed.
- 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 VCM II/VCM III or the VCMM from the data link connector (DLC) and your computer.
- b. After ten seconds, reconnect the VCMII/VCMIII or the VCMM to the DLC and the PC. Launch FDRS. The VCMII/VCMIII or the 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.





Service Engineering Operations
Ford Customer Service Division

Ford Motor Company
PO Box 1904
Dearborn, Michigan 48121

November 22, 2024

TO: All U.S. Ford and Lincoln Dealers

SUBJECT: **NEW VEHICLE RECOMMENDED DEMONSTRATION / DELIVERY HOLD**
Customer Satisfaction Program 24B54 – Supplement #1
Certain 2024 Model Year Nautilus Vehicles
Update Infotainment Software

REF: **NEW VEHICLE RECOMMENDED DEMONSTRATION / DELIVERY HOLD**
Customer Satisfaction Program 24B54
Dated October 2, 2024

New! REASON FOR THIS SUPPLEMENT

- **Revised Labor Allowances and Parts Ordering Information:** The labor time has been updated.
- **Revised Technical Instructions:** Multiple revisions made to improve programming success rate.

PROGRAM TERMS

This program will be in effect through October 31, 2025. There is no mileage limit for this program.

AFFECTED VEHICLES

Vehicle	Model Year	Assembly Plant	Build Dates
Nautilus	2024	Hangzhou	April 4, 2023 through July 8, 2024

US population of affected vehicles: 30,620. Affected vehicles are identified in OASIS and FSA VIN Lists.

Note: Some vehicles may be in the process of being repaired at the plant. Monitor OASIS before opening an RO and/or beginning a repair.

REASON FOR THIS PROGRAM

An Accessory Protocol Interface Module (APIM) software update has been released to address potential software reboot, freeze, and performance concerns while using the infotainment system. The update will provide several feature and quality refinements.

SERVICE ACTION

Before demonstrating or delivering any new in-stock vehicles involved in this program, it is recommended that dealers update the software in the APIM, Gateway Module (GWM), and Telematics Control Unit (TCU) to the latest version. This service must be performed on all affected vehicles at no charge to the vehicle owner. For new vehicle storage guidelines, refer to EFC13033, Storage Guidelines for New Vehicles.

To assist vehicle owners to have this repair completed when software is available, dealers should:

- Arrange to pick up the owner's vehicle and drive it to the dealership for repair
 - Re-deliver the owner's vehicle after repairs have been completed

- Pick-Up & Delivery should be made available for all customers. Refer to the Rental and Claiming sections for further details.

OVER-THE-AIR (OTA) UPDATES (LINCOLN SOFTWARE UPDATE):

- In addition to dealers being able to update vehicles using FDRS, Lincoln is planning to deploy an OTA software update in the 4th Quarter of 2024.
- Before scheduling service for an OTA-capable vehicle, please verify through PTS that the FSA is still open (OASIS) and that 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 the 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.)

New! OWNER NOTIFICATION MAILING SCHEDULE

Owners’ letters are expected to be mailed the week of *December 2, 2024 or sooner*. Owners will be given the option of installing the software update themselves, or they can have their dealer perform the service for them.

New! ATTACHMENTS

- Administrative Information
- *Labor Allowances* and Parts Ordering Information
- *Technical Instructions*
- Mobile Service Repair Assessment
- Vehicle Pick-Up & Delivery Record
- Owner Notification Letter

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.

Customer Service Division

Customer Satisfaction Program 24B54 – Supplement #1

MOBILE SERVICE REPAIR ASSESSMENT LEVEL

- All repairs in this program have the following assessment level:
 - ⊘ - Not a Mobile Service Repair

OASIS ACTIVATION

OASIS was activated on October 2, 2024.

FSA VIN LISTS ACTIVATION

FSA VIN Lists was available through <https://web.fsavinlists.dealerconnection.com> on October 2, 2024. Owner names and addresses were available on October 14, 2024.

NOTE: Your FSA VIN Lists may contain owner names and addresses obtained from motor vehicle registration records. The use of such motor vehicle registration data for any purpose other than in connection with this program is a violation of law in several states, provinces, and countries. Accordingly, you must limit the use of this listing to the follow-up necessary to complete this service action.

SOLD VEHICLES

- Owners of affected vehicles will be directed to dealers for repairs. Ford is also planning to deploy an OTA software update in the 4th Quarter of 2024.
- Immediately contact any of your affected customers whose vehicles are not on your VIN list but are identified in OASIS. Give the customer a copy of the Owner Notification Letter (when available) and schedule a service date.
- Correct other affected vehicles identified in OASIS which are brought to your dealership.
- 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.

BRANDED / SALVAGED TITLE VEHICLES

Affected branded / salvaged title 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.

LINCOLN PICK-UP & DELIVERY

Owners of Lincoln vehicles within a 4 year / 50,000-mile warranty have the option of requesting Pick-Up & Delivery service with a Lincoln loaner (up to 2 days), from their dealership. For details, reference EFC14054, 2024 Lincoln Pick-Up & Delivery Updates.

- For Lincoln vehicles outside of 4 years / 50,000-mile warranty, see labor claiming table below.

Customer Satisfaction Program 24B54 – Supplement #1**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 FSAs / 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.
 - 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 before 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
 - Sub Code: 24B54
 - Customer Concern Code (CCC): A45
 - Condition Code (CC): 04
 - Causal Part Number: 14H522, 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 the same claim type and subcode as described in Claim Entry above.

IMPORTANT: Click the Related Damage Indicator radio button.
- **Lincoln Pick-Up & Delivery:** Claims for Lincoln Pick-Up & Delivery with a Lincoln loaner (up to 2 days) should be submitted on a separate line from the FSA. Refer to EFC14054, 2024 Lincoln Pick-Up & Delivery Updates for details.
 - For Lincoln vehicles outside of 4 years / 50,000-mile warranty, see labor claiming table below.

Customer Satisfaction Program 24B54 – **Supplement #1**

New! LABOR ALLOWANCES

Description	Labor Operation	Labor Time
Update Gateway Module (GWM), APIM, and Telematics Control Unit (TCU) software. Run Trusted Real-Time Operation Network (TRON) application. Check for additional GWM, APIM, and TCU updates. If no additional updates are available, FSA is complete.	MT24B54C	M-Time up to 4.0 Hours
Lincoln vehicle PDL Allowance: Only vehicles outside of Lincoln PDL contract coverage of 4 years/50,000 miles . NOTE: This allowance is for dealer-performed vehicle PDL for dealership repairs only. Can only be claimed once, regardless of outstanding FSAs repaired.	24B54LL	0.5 Hours

PARTS REQUIREMENTS / ORDERING INFORMATION

Parts are not required to complete this repair.