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March 6, 2023

TO: All U.S. Ford and Lincoln Dealers

SUBJECT: **NEW VEHICLE DEMONSTRATION / DELIVERY HOLD - Compliance Recall 22C27- Supplement #1**
Certain 2021-2022 Model Year Bronco Vehicles
Accessory Protocol Interface Module Software Update

REF: **NEW VEHICLE DEMONSTRATION / DELIVERY HOLD - Compliance Recall 22C27**
Dated December 12, 2022

New! REASON FOR THIS SUPPLEMENT

DO NOT attempt repair on 2021-2022 Model Year Bronco vehicles at this time – software is not currently available.

AFFECTED VEHICLES

| Vehicle | Model Year | Assembly Plant | Build Dates |
|---------|------------|----------------|--|
| Bronco | 2021 | Michigan | September 23, 2020 through December 22, 2021 |
| Bronco | 2022 | Michigan | September 1, 2021 through May 18, 2022 |

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 COMPLIANCE RECALL

Some of the affected vehicles may not conform to the requirements specified by Federal Motor Vehicle Safety Standard (FMVSS) 111 S5.5 Rear Visibility. The rear view camera image may reappear on the SYNC screen after a backing event has completed while in 4WD Low mode. The reappearance of the rear view camera image may distract the driver, increasing the risk of a crash.

New! SERVICE ACTION

DO NOT ATTEMPT SOFTWARE UPDATE ON AFFECTED VEHICLES – Some software updates are not available at this time; the program is being temporarily put on hold as of 02/24/2023. Software is expected to be available 2nd quarter 2023.

Before demonstrating or delivering any new in-stock vehicles involved in this recall, dealers are to update the Accessory Protocol Interface Module (APIM) 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):

- In addition to you being able to update vehicles now using FDRS, Ford is planning to deploy an OTA software update in December 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 are expected to be mailed the week of December 19, 2022. Dealers should repair any affected vehicles that arrive at their dealerships, whether or not the customer has received a letter.

PLEASE NOTE:

Federal law requires dealers to complete this recall service before a new vehicle is delivered to the buyer or lessee. Violation of this requirement by a dealer could result in a civil penalty of up to \$26,315 per vehicle. Correct all vehicles in your new vehicle inventory before delivery.

ATTACHMENTS

Attachment I: Administrative Information
Attachment II: Labor Allowances and Parts Ordering Information
Attachment III: Technical Information

Owner Notification Letters

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 DEMONSTRATION / DELIVERY HOLD -
Compliance Recall 22C27- *Supplement #1*
Certain 2021-2022 Model Year Bronco Vehicles
Accessory Protocol Interface Module Software Update**

OASIS ACTIVATION

OASIS will be activated on December 12, 2022.

FSA VIN LISTS ACTIVATION

FSA VIN Lists will be available through <https://web.fsavinlists.dealerconnection.com> on December 12, 2022. Owner names and addresses will be available by January 6, 2023.

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 recall 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 recall.

SOLD VEHICLES

- Ford has not issued instructions to stop selling/delivering or driving used vehicles under this compliance recall. Owners should contact their dealer for an appointment to have their vehicles remedied as soon as practicable.
- 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.

DEALER-OPERATED RENTAL VEHICLES

The Fixing America's Surface Transportation (FAST) Act law effective June 2016 prohibits a rental company from selling, renting or leasing vehicles subject to a safety or compliance recall. Please consult your legal counsel for legal advice.

TITLE BRANDED / SALVAGED VEHICLES

Affected title branded and salvaged vehicles are eligible for this recall.

OWNER REFUNDS

Refunds are not approved for this program.

RENTAL VEHICLES

Rental vehicles are not approved for this program.

NEW VEHICLE DEMONSTRATION / DELIVERY HOLD -**Compliance Recall 22C27- *Supplement #1***

Certain 2021-2022 Model Year Bronco Vehicles
Accessory Protocol Interface Module Software Update

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.
 - Ford vehicles – 3 years or 36,000 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.
 - Sub Code: 22C27
 - 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 DEMONSTRATION / DELIVERY HOLD -**Compliance Recall 22C27- *Supplement #1***

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New! LABOR ALLOWANCES

DO NOT ATTEMPT SOFTWARE UPDATE ON AFFECTED VEHICLES – Some software updates are not available at this time; the program is being temporarily put on hold as of 02/24/2023. Software is expected to be available 2nd quarter 2023.

| Description | Labor Operation | Labor Time |
|---|-----------------|-----------------|
| 2021 Model Year Update the ECG, APIM, TCU, ECG, APIM as needed using FDRS | MT22C27B | Up to 4.0 Hours |
| 2022 Model Year Update the ECG, APIM as needed using FDRS | MT22C27C | Up to 2.5 Hours |
| If APIM or TCU module fails to update, Module recovery is needed and TSB 22-2150 is utilized. (Can only be used with 2021 Bronco Labor Op MT22C7B) | MT22C27D | Up to 1.0 Hour |

PARTS REQUIREMENTS / ORDERING INFORMATION

Parts are not required to complete this repair.

CERTAIN 2021-2022 MODEL YEAR BRONCO VEHICLES — ACCESSORY PROTOCOL INTERFACE MODULE SOFTWARE UPDATE

NEW ! REASON FOR THIS SUPPLEMENT

NOTE: DO NOT attempt repair on 2021-2022 Model Year Bronco vehicles at this time – software is not currently available.

SERVICE PROCEDURE

NEW ! NOTE: DO NOT ATTEMPT SOFTWARE UPDATE ON AFFECTED VEHICLES. Some software updates are not available at this time; the program is being temporarily put on hold as of 02/24/2023. Software is expected to be available 2nd quarter 2023.

For 2021 Model Year (MY) programing see 2021 Model Year Module Programming procedure below.

For 2022 MY programing see 2022 Model Year Module Programming procedure on Page 7.

2021 Model Year Module Programming

NOTE: Before beginning programing ensure the vehicle has enough fuel to idle for 2 hours.

NOTE: The following modules may each require more than one software update: Gateway Module (GWM), Telematic Control Unit (TCU) and/or Accessory Protocol Interface Module (APIM).

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



1. From the vehicle settings menu disable the 30 minute max idle option. From the center display press the vehicle settings button and turn off the 30 minute max idle setting. See Figure 1.

NOTE: F-150 shown, Bronco similar.

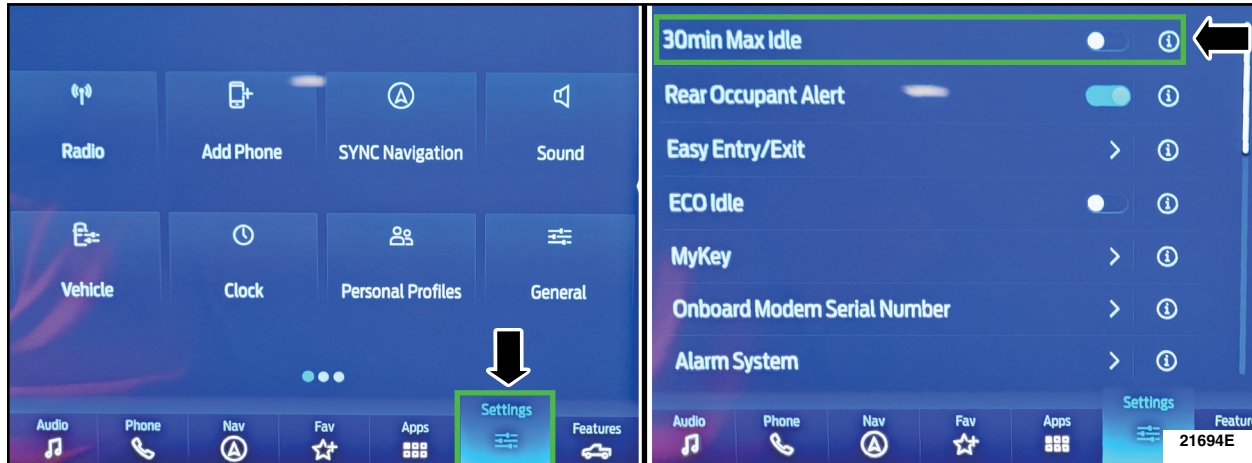


FIGURE 1

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

- Launch the Ford Diagnostic and Repair System (FDRS) and navigate to toolbox tab > datalogger > BCM and select **BATT SOC PID**.
- Ensure that the **BATT_SOC PID** reads over 80%. If the PID is less than 80%, fully recharge the vehicle's 12-volt battery using the appropriate Rotunda battery tester and charger.
- 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.
- 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 ensure that it is within this range.

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 VCM is properly connected to the DLC.

3. 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.
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.



6. Click 'Read VIN from Vehicle' or manually enter the VIN.

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.

7. Select Toolbox tab.

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

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

NOTE: If the GWM is at the latest software version, Proceed to Step 17.

10. Perform the Module Software Updating Procedures outlined below for the GWM module:
Perform a network test after each software update using the latest software level of the FDRS scan tool. This will refresh the list of modules that have available software updates based current module software levels. Continue performing software updates to the GWM module until all software updates are complete. If any error conditions are experienced during programming, refer to WSM Section 418-01A > General Procedures > Module Programming for the Error Condition Table.

11. If the in-vehicle SYNC screen does not indicate that the USB flash drive has started to download, this may require recovery of the APIM module. Refer to related Technical Service Bulletins (TSB) 22-2404 for APIM recovery using the FDRS service tool.

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.

12. Using the FDRS, begin module programming by selecting the SW Updates tab. Download and run the application for desired module. Follow all on-screen instructions carefully.

13. When prompted, connect the USB flash drive to the FDRS.

NOTE: It may take up to 5 minutes for the vehicle to recognize the USB flash drive.

14. When prompted by the FDRS, safely remove/eject the USB flash drive from the FDRS and connect it to the USB hub to install the software into the module. When the USB software update begins the touchscreen displays a message stating Do Not Remove USB. The update starts automatically and may take 10 minutes or longer to complete. If the message stating Do Not Remove USB does not display on the touchscreen within 5 minutes of the USB drive being connected to the vehicle's USB hub select Did The Update Install Successfully > No on the FDRS and follow the on-screen instructions to either attempt USB programming again or perform CAN programming for the module.



15. When the pop-up stating Restart Required appears on the touchscreen, turn the ignition OFF, open and close the driver's door, and wait for 10 minutes. Restart the engine (key-on engine running [KOER]). The update is still in process at this time.

NOTE: It may take up to 5 minutes before the touchscreen displays Update Successful pop-up. After 5 minutes if the Update Successful pop-up does not display on the touchscreen, remove the USB and select yes on the FDRS Was the USB Update Successful prompt (FDRS verifies if the module software update was successfully installed on the module).

16. Once the pop-up stating Update Successful appears on the touchscreen, select Close, remove the USB flash drive from the USB hub and connect it to the FDRS, and select Yes on FDRS indicating the update installed successfully. This initiates the remaining automated configuration steps and reports the module assembly, vehicle interface processor (VIP), calibration, customer interface processor (CIP), and application software levels to the Ford online database. Failure to follow this step results in an inaccurate database as well as omitted, improperly installed, or improperly configured applications (features) such as navigation (if equipped). It is normal for the module to reset during this step.

NOTE: Update the gateway module (GWM) before performing the APIM update. Updated APIM software will not show as being available in FDRS until the GWM has been successfully updated.

17. If a GWM software update was performed, re-run the network test on the FDRS. Is an APIM software update available?

- Yes - Proceed to Step 18.
- No - Proceed to Step 23.

18. Close all the doors on the vehicle. Locking the latch mechanically while the door is open simulates a closed door.

19. Download and run the APIM Software Update application on the FDRS and follow the on-screen prompts. If any error conditions are experienced during programming, refer to WSM Section 418-01A > General Procedures > Module Programming for the Error Condition Table.

NOTE: APIM software download to laptop and download to USB flash drive could each take up to 45 minutes to complete. However no technician interaction is needed once the download process has stated.

NOTE: Start the vehicle before installing the USB flash drive for the APIM update.

20. When directed by the FDRS, install the USB flash drive into the vehicle. Wait 5 minutes for the updating prompts to show up in the sync screen in the vehicle.

NOTE: It may take up to 5 minutes for the vehicle to recognize the USB flash drive. All doors must remain closed until the SYNC screen prompts a restart is required. To view the progress, drop down the updating screen in the sync screen.

21. When the update on the USB flash drive has downloaded to the vehicle, the touchscreen displays a Restart Required message. The ignition needs to be turned off for 10 minutes. Open the driver's door, then close it to allow the vehicle to completely power down. During this key off time, the screen continues through a reboot process.



22. After the 10 minutes, start the vehicle and allow another 5 minutes for the Update Successful message to appear in SYNC screen. Once the Update Successful message appears, the USB flash drive may be removed, and the doors opened.
23. If a APIM software update was performed, re-run the network test on the FDRS. Is an TCU software update available?
 - Yes - Proceed to Step 24.
 - No - Proceed to Step 28.
24. Select Toolbox tab.
25. From the list on the LH side of the screen, select the TCU.
26. From the list on the RH side of the screen, select TCU - Telematics Control Unit (TCU) Module Configuration.
27. Click RUN. Follow all on-screen instructions carefully.
28. If a TCU software update was performed, re-run the network test on the FDRS. Is an ECG and/or APIM software update available?
 - Yes - Perform the necessary update(s).
 - No - Proceed to Step 29.
29. From the list on the RH side of the screen, select Self-Test and click RUN.
30. Click the Run Selected Tests button in the lower right.
31. Click the Clear & Retest button at the top of the screen to clear DTC's in all modules.
32. 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 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

1. Disconnect the VCMII or VCMM from the data link connector (DLC) and your PC.
2. 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.
3. 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.
4. 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.
5. 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.



2022 Model Year Module Programming

NOTE: Before beginning programming ensure the vehicle has enough fuel to idle for 2 hours.

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

1. From the vehicle settings menu disable the 30 minute max idle option. From the center display press the vehicle settings button and turn off the 30 minute max idle setting. See Figure 2.

NOTE: F-150 shown, Bronco similar.

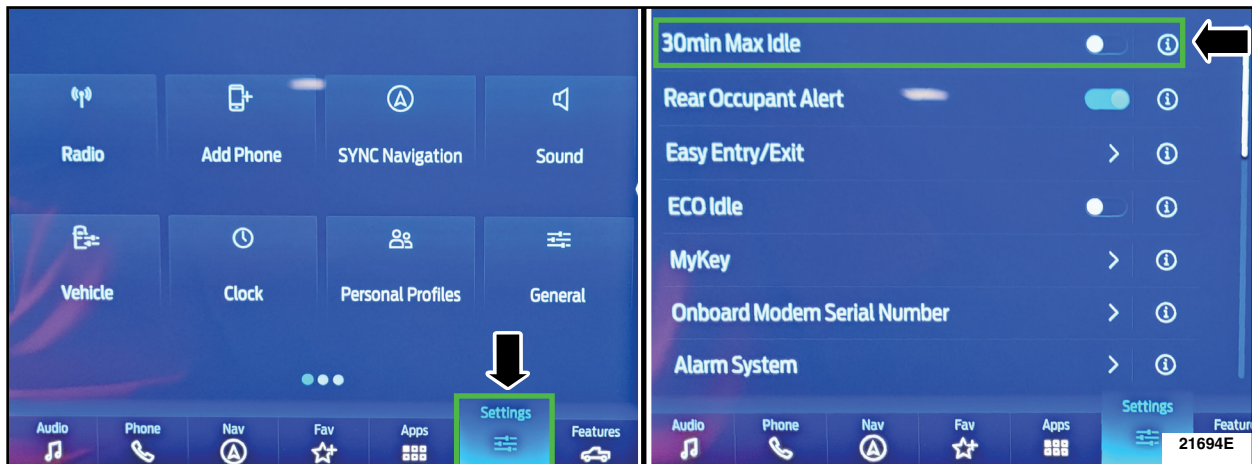


FIGURE 2

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

- Launch the Ford Diagnostic and Repair System (FDRS) and navigate to toolbox tab > datalogger > BCM and select **BATT SOC PID**.
- Ensure that the **BATT_SOC PID** reads over 80%. If the PID is less than 80%, fully recharge the vehicle's 12-volt battery using the appropriate Rotunda battery tester and charger.
- Remove the charger from the vehicle and using FDRS, navigate to toolbox tab > BCM > **Reset Battery**.
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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 VCM is properly connected to the DLC.

3. 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.



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.

6. Click 'Read VIN from Vehicle' or manually enter the VIN.

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.

7. Select Toolbox tab.

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13. When prompted, connect the USB flash drive to the FDRS.

NOTE: It may take up to 5 minutes for the vehicle to recognize the USB flash drive.



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NOTE: It may take up to 5 minutes before the touchscreen displays Update Successful pop-up. After 5 minutes if the Update Successful pop-up does not display on the touchscreen, remove the USB and select yes on the FDRS Was the USB Update Successful prompt (FDRS verifies if the module software update was successfully installed on the module).

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23. From the list on the RH side of the screen, select Self-Test and click RUN.
24. Click the Run Selected Tests button in the lower right.
25. Click the Clear & Retest button at the top of the screen to clear DTC's in all modules.
26. Disconnect the battery charger from the 12V battery once the programming has completed.

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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.
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5. 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.

