CERTAIN 2021-2022 MODEL YEAR F-150, SUPER-DUTY, EXPEDITION, NAVIGATOR, AND 2022 MODEL YEAR MAVERICK VEHICLES — INTEGRATED TRAILER RELAY MODULE

SERVICE PROCEDURE

Module Programming

- **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. 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 VCM is properly connected to the DLC.
- 2. 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.
- 3. 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.
- 4. Select Toolbox tab.
- 5. From the list on the LH side of the screen, select the ITRM.
- 6. From the list on the RH side of the screen, select ITRM Integrated Trailer Relay Module (ITRM) Software Update.
- 7. Click RUN. Follow all on-screen instructions carefully.
- 8. 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

- 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.

