

Stacy L. Balzer Operating Director Service Engineering Operations Ford Customer Service Division Ford Motor Company P. O. Box 1904 Dearborn, Michigan 48121

June 15, 2023

TO: All U.S. Ford and Lincoln Dealers

SUBJECT: Optional Product Improvement Program 22G07

Certain 2020-2022 Model Year Police Interceptor Utility Vehicles Equipped with a Low Band Frequency Noise Suppression Kit - Electromagnetic Compatibility

Upgrade

PROGRAM TERMS

This program will be in effect through *June 15*, 2024. There is no mileage limit for this program.

AFFECTED VEHICLES

Vehicle	Model Year	Assembly Plant	Build Dates
Police Interceptor Utility	2020 - 2022	Chicago Assembly	November 03, 2019 through December 17, 2021
	2021-2022	Chicago SHO Center	September 14, 2020 through November 10, 2021

US population of affected vehicles: 1,292

NOTE: Only vehicles operating <u>low-band</u> very high frequency (VHF) (39-48 MHz) 2-way radios and are equipped with low band frequency noise suppression kits will apply.

Affected vehicles are identified in OASIS.

NOTE: Some vehicles may be in the process of being repaired. Monitor OASIS before opening an RO and/or beginning a repair. Parts purchased for an FSA can be returned for credit, if required. See the EXCESS STOCK RETURN details in Attachment II for more information.

REASON FOR THIS PROGRAM

In some of the affected vehicles, the installed Low-Band Frequency Noise Suppression Kit may not meet the Electromagnetic Compatibility (EMC) requirements for certain frequency bands. Specifically, police agencies that operate low-band very high frequency (VHF) (39-48 MHz) 2-way radios. If the EMC requirements are not met, customers may experience a degradation in audio quality when operating low-band VHF two-way radios under weak signal conditions in remote locations.

SERVICE ACTION

Only for vehicles operating <u>low-band</u> frequency (VHF) (39-48 MHz) 2-way radios and equipped with low band frequency noise suppression kits, dealers are to perform the following actions:

- Inspect both left-hand (LH) and right-hand (RH) rear ground straps and secure to the body if necessary.
- Inspect and secure as needed or install hood ground straps.
- Replace both headlamp assemblies with the specific electromagnetic compatibility (EMC) design and install new ground bolts.
- Install eight (8) ferrites to the vehicle per Attachment III Technical Information.

SERVICE ACTION (continued)

This service must be performed on all affected vehicles at no charge to the vehicle owner.

OWNER NOTIFICATION MAILING SCHEDULE

Owner letters are expected to be mailed the week of July 3, 2023. Dealers should repair any affected vehicles that arrive at their dealerships, whether or not the customer has received a letter.

ATTACHMENTS

Attachment I: Administrative Information

Attachment II: Labor Allowances and Parts Ordering Information

Attachment III: Technical Information

Attachment IV: Mobile Service Repair Assessment

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.

Sincerely,

Stacy L. Balzer

Certain 2020-2022 Model Year Police Interceptor Utility Vehicles Equipped with a Low Band Frequency Noise Suppression Kit - Electromagnetic Compatibility Upgrade

MOBILE SERVICE REPAIR ASSESSMENT LEVEL

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

OASIS ACTIVATION

OASIS will be activated on June 15, 2023.

FSA VIN LISTS ACTIVATION

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

SOLD VEHICLES

- Owners of affected vehicles will be directed to dealers for repairs.
- 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.

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.

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 Field Service Actions (FSA) Related Damage.
- For vehicles within new vehicle bumper-to-bumper warranty coverage, no SSSC approval is required.
 - 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 before completing the repair.

Certain 2020-2022 Model Year Police Interceptor Utility Vehicles Equipped with a Low Band Frequency Noise Suppression Kit - Electromagnetic Compatibility Upgrade

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: 22G07

Customer Concern Code (CCC): L29 - Other lighting troubles

Condition Code (CC): 42 - Does Not Operate Properly

Causal Part Number: 13008, 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. Includes extra time to remove police specific equipment to perform this FSA repair.

IMPORTANT: Click the Related Damage Indicator radio button.

- **NOTE:** Maintain supporting documentation for sublet repairs and all Miscellaneous Expenses according to procedure as identified in the Warranty and Policy Manual.
- **Provision for Locally Obtained Supply:** Hex Ferrites (includes shipping), Coroplast® temp resistant cloth tape:

Program Code: 22G07
MISC. Expense: OTHER
Amount: Up to \$142.00

NOTE: Coroplast® temp resistant cloth tape expected to support multiple repairs.

Certain 2020-2022 Model Year Police Interceptor Utility Vehicles Equipped with a Low Band Frequency Noise Suppression Kit - Electromagnetic Compatibility Upgrade

LABOR ALLOWANCES

NOTE: Applies ONLY to vehicles with Low Band Frequency Noise Suppression Kits to operate radios between **39-48** MHz.

Description	Labor Operation	Labor Time
Electromagnetic Compatibility Upgrade as described in Attachment III – Technical Information	22G07B	2.5 Hours

NOTE: Refer to Related Damage/Additional labor and/or parts section for extra time needed for police specific equipment removal.

PARTS REQUIREMENTS / ORDERING INFORMATION

NOTE: For vehicles with Low Band Frequency Noise Suppression Kits only

Special Program Part Ordering:

To place an order for <u>any of the parts listed below</u> submit a VIN-specific Part Order contact via the SSSC Web Contact Site.

Part Number	Description	Order Quantity	Claim Quantity
MB5Z-13008-BJ	Headlamp RH assembly upgrade (Includes LED module)	1	1
MB5Z-13008-BH	Headlamp LH assembly upgrade (Includes LED module)	1	1
W712356-S450	Headlamp Ground Bolt (4 per pkg, 2 req'd)	1	2
L1MZ-19A095-JA	Hood Ground Strap	Up to 2	Up to 2
W505425-S437	Ground Strap Fender Bolt (4 per pkg)	1	Up to 2
W709923-S437	Ground Strap Hood Nut (4 per pkg)	1	Up to 2

Dealers will be notified via a DOES II communication if circumstances warrant a change in part supply strategy and when open ordering resumes.

LOCALLY OBTAINED MATERIALS:

NOTE: Ferrites (also called Round Cable Snap-Its) must be ordered from an outside distributor. Reference fair-rite.com: Search for part number needed... / Check Stock (use link) / select distributor.

Non-Ford Part Numbers	Description	Order Quantity	Claim Quantity
0444177081	Large Hex Ferrite - Round Cable Snap-Its	3	As Needed
0444176451	Medium Hex Ferrite - Round Cable Snap-Its	4	Claim as
0444164181	Small Hex Ferrite - Round Cable Snap-Its	1	MISC OTHER
NAI837X	Coroplast® - anti-abrasion cloth tape (Rotunda)	As Needed	up to \$142

Certain 2020-2022 Model Year Police Interceptor Utility Vehicles Equipped with a Low Band Frequency Noise Suppression Kit - Electromagnetic Compatibility Upgrade

DEALER PRICE

For the latest prices, refer to DOES II.

PARTS RETENTION, RETURN, & SCRAPPING

Follow the provisions of the Warranty and Policy Manual, Section 1 - WARRANTY PARTS RETENTION AND RETURN POLICIES. If a replaced part receives a scrap disposition, the part must be scrapped by all applicable local, state, and federal environmental protection and hazardous material regulations. Federal law prohibits selling motor vehicle parts or components that are under safety, compliance, or emissions recall.

EXCESS STOCK RETURN

The excess stock returned for credit must have been purchased from Ford Customer Service Division by Policy Procedure Bulletin 4000.

REPLACED FSA PARTS INSPECTION AND SIGN OFF

Effective March 1^{st,} 2021 all parts replaced as part of an FSA repair with a repair order open date of March 1^{st,} 2021, or later must be inspected and signed off on the repair order by a member of your dealer's fixed operations management team or an employee the task has been delegated to. If the task is to be delegated to a non-management employee, the employee needs to be someone other than the technician who completed the repair and needs to understand the importance of completing this task consistently and accurately.

- All parts replaced as part of an FSA repair should be returned to the parts department following the Warranty Parts Retention and Return Policies.
- Inspect the replaced parts to verify the FSA repair was completed.
- If the FSA repair is found to be complete, the designated employee signs the repair order line or parts return stamp area (electronic or hand signed) for the FSA repair indicating the parts were inspected and validated to have been replaced.
- After the parts have been inspected, they should be handled based on the guidance in the parts status report in the Online Warranty System (Hold, Return, CORE, Scrap, etc.).
- This process is subject to review during warranty audits for FSA repairs with a repair order open date of March 1^{st,} 2021, or later. Any eligible FSA claims requiring parts replacement found not to have been inspected and signed off during a warranty audit will be subject to chargeback and consideration for enrollment into the Dealer Incomplete Recall Repair Process.

Note: Other approvals (electronic or handwritten) for add-on repair lines, dealer-owned vehicle repairs, and repeat repairs do not qualify as FSA parts inspection approvals. The post-repair FSA parts inspection process (electronic or handwritten) is independent of other warranty approval requirements. The approval by the designated employee implies that the FSA parts were found to be replaced and must be able to be identified on the Repair Order. If multiple FSAs require approval on a single Repair Order, each applicable occurrence will require individual post-repair approval by the designated employee.

CERTAIN 2020-2022 MODEL YEAR POLICE INTERCEPTOR UTILITY VEHICLES EQUIPPED WITH A LOW BAND FREQUENCY NOISE SUPPRESSION KIT — ELECTROMAGNETIC COMPATIBILITY UPGRADE

SERVICE PROCEDURE

- 1. Position the vehicle on a hoist.
- 2. Remove both rear wheels. Follow the Workshop Manual (WSM) procedures in Section 204-04A.
- 3. On both sides, check the rear ground strap upper and lower fasteners (2 fasteners per side) located at the rear brake caliper for proper torque. See Figure 1.

Torque A: 62 lb-in (7 Nm)Torque B: 133 lb-in (15 Nm)

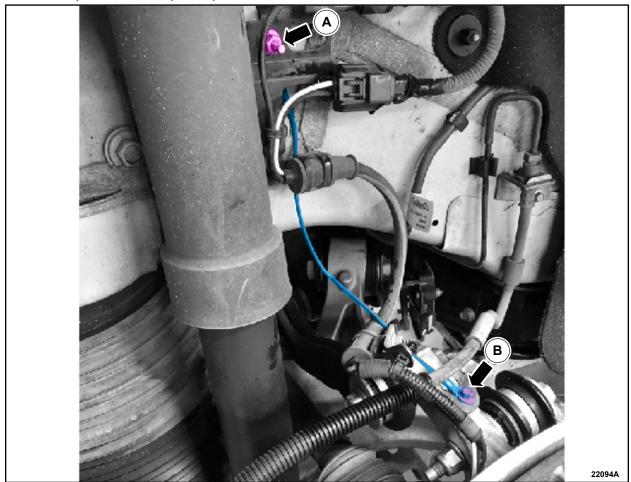


FIGURE 1

4. Reinstall both rear wheels. Follow the WSM procedures in Section 204-04A.

- 5. Remove and discard both headlamp assemblies including the Light Emitting Diode (LED) Control Modules. Follow the WSM procedures in Section 417-01.
 - Do **NOT** transfer the LED Control Modules. Discard along with the headlamp assemblies.
- 6. Install the new headlamp assemblies. Follow the WSM procedures in Section 417-01.

NOTE: New special headlamp assemblies will come with LED modules attached and will require the BCM LIN new module initialization procedure.

- 7. On both sides, remove and discard the original headlamp bolt. Install the *new* headlamp bolt. See figure 2.
 - Torque: 28 lb.in (3.2 Nm)

NOTE: Driver side shown, passenger side similar.

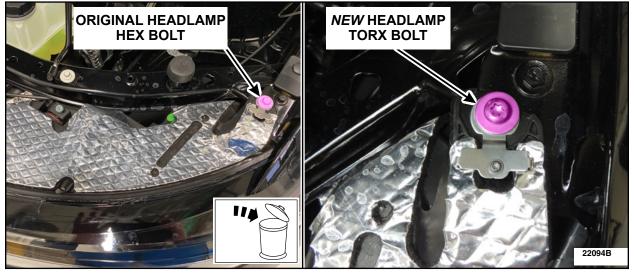


FIGURE 2

8. Remove the cowl panel grille. Follow the WSM procedure in Section 501-02.

9. Inspect for a ground strap located at the passenger side hood. See Figure 3. Was a ground strap found on the passenger side of the vehicle under the hood?

YES - Proceed to Step 11. **NO** - Proceed to Step 10.



FIGURE 3

10. Install the passenger side ground strap and retainers. See Figure 4.

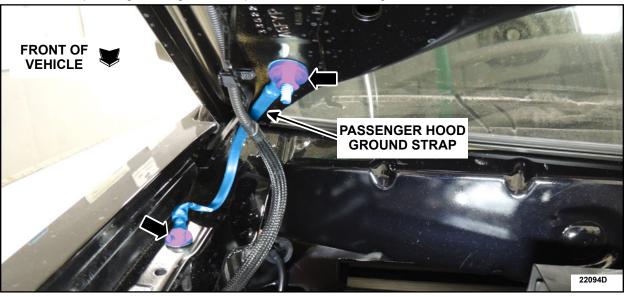


FIGURE 4

11. Tighten the passenger side ground strap retainers. See Figure 5.

• Torque: 13 lb.ft (17.5 Nm)

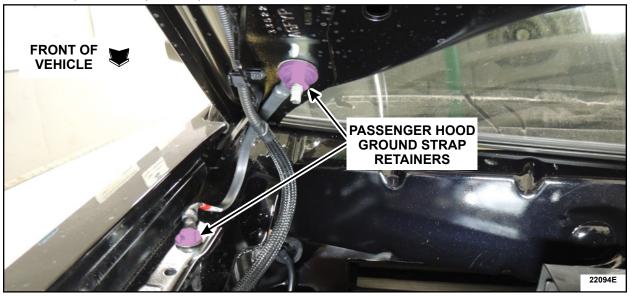


FIGURE 5

12. Install the driver side ground strap and retainers. See Figure 6.

• Torque: 13 lb.ft (17.5 Nm)

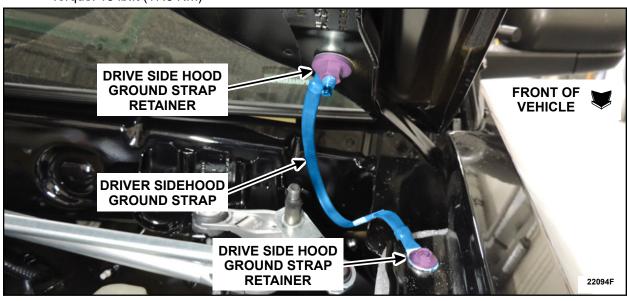


FIGURE 6

- 13. Disconnect the battery. Follow the WSM procedure in Section 414-01.
- 14. Release the tabs and remove the Body Control Module C (BCMC) cover located on the on the driver side. See Figure 7.

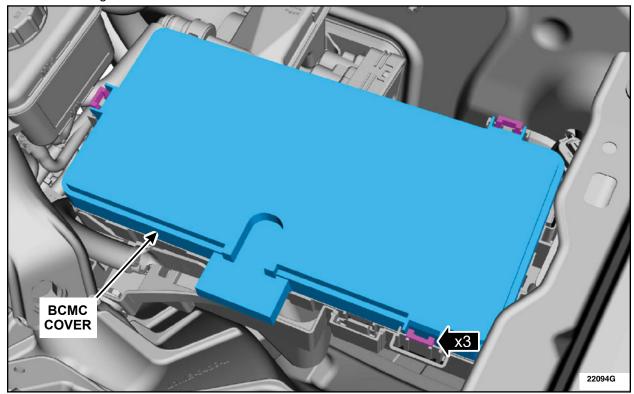


FIGURE 7

15. Remove the nut and position the cable aside (1), then fully loosen the BCMC connector bolts (2). See Figure 8.

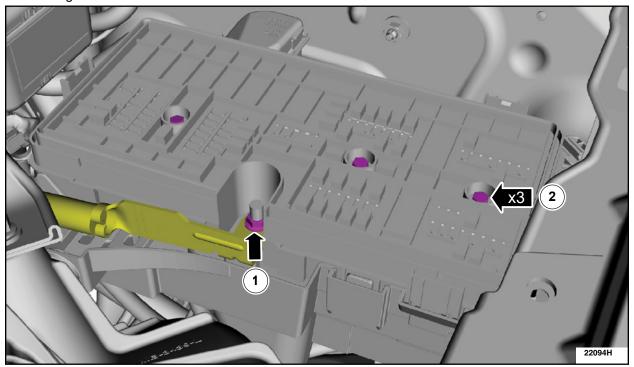


FIGURE 8

16. Release the tabs and remove the BCMC. See Figure 9.

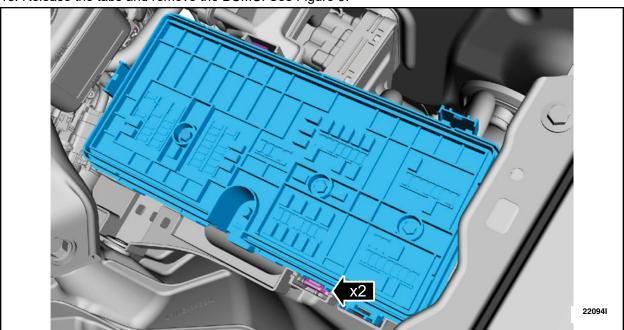


FIGURE 9

17. Remove the bolts, detach the wiring retainers and then remove the BCMC support bracket. See Figure 10.

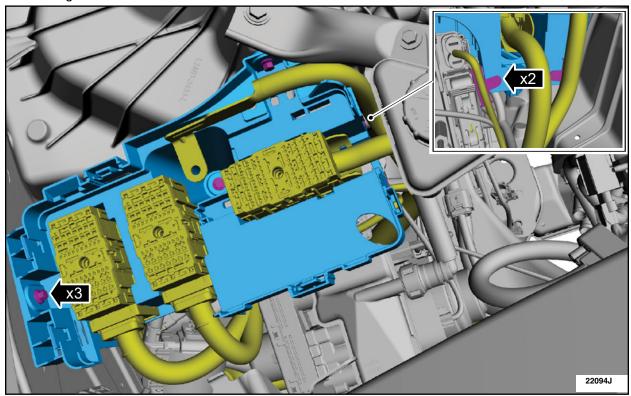


FIGURE 10

Ferrite Identification



FIGURE 11

Item	Description	Non- Ford Part Number	Quantity
Α	Large Hex Ferrite	0444177081	3
В	Medium Hex Ferrite	0444176451	4
С	Small Hex Ferrite	0444164181	1

NOTE: Part numbers listed are not Ford part numbers, refer to dealer bulletin Parts Requirements / Ordering Information section for more details.

General Notes for Ferrite Installation:

NOTE: Wiring variation may require wire harness tape to be removed for proper ferrite location.

NOTE: Make sure ferrite halves are completely closed / latched without harness tape trapped in between the halves.

NOTE: Tape ferrites securely with high temperature and abrasion resistance tape such as Coroplast® after installation to prevent movement.

- 18. Make sure the wire routing is as shown below in Figure 12 and adjust as necessary.
 - Wires A and B need to be routed in front of wire bundles C and D.

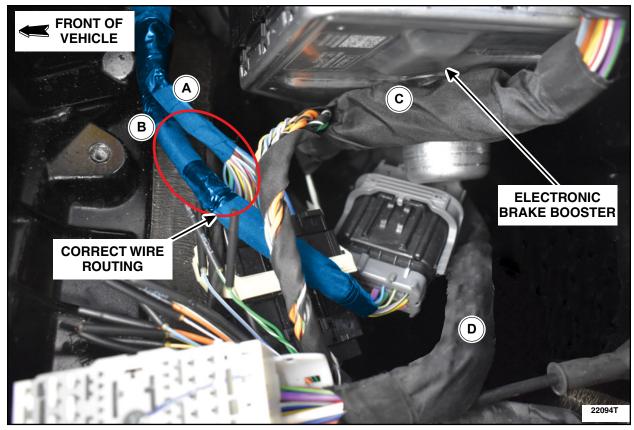
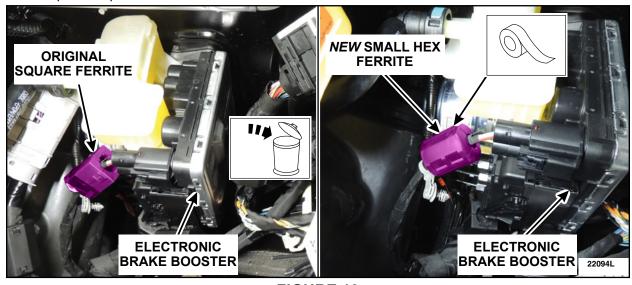


FIGURE 12

19. Remove and discard the square ferrite from the Electronic Brake Booster (EBB) upper electrical connector, then install a *new* **SMALL** hex ferrite (item C). See Figure 13. Apply 3 wraps of Coroplast® tape around the *new* ferrite to secure it closed.



20. Install a **MEDIUM** ferrite (item B) onto the lower EBB wire and a **LARGE** ferrite (item A) to the lower wiring harness. See Figure 14. Apply 3 wraps of Coroplast® tape around the ferrites to secure it closed.

NOTE: If a ferrite is already present, confirm it is the correct size, position, and is properly secured.

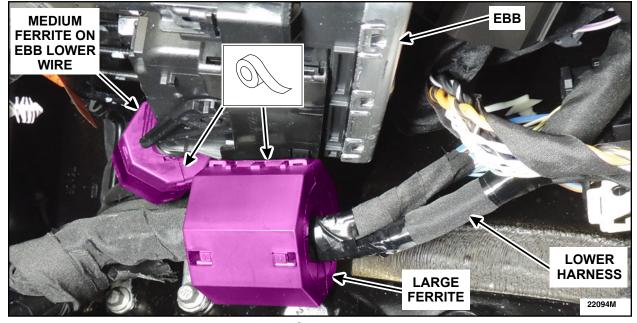


FIGURE 14

21. Measure 3 inches (76.2 MM) from the back of the grey connector. Install a **MEDIUM** ferrite (item B) to the wiring harness in the designated location. See Figure 15. Apply 3 wraps of Coroplast® tape around the ferrite to secure it closed.

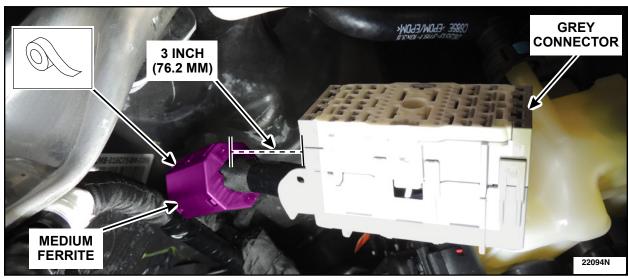


FIGURE 15

22. Measure 4.25 inches (108 MM) from the back of the black connector. Install a **LARGE** ferrite (item A) to the wiring harness in the designated location. See Figure 16. Apply 3 wraps of Coroplast® tape around the ferrite to secure it closed.

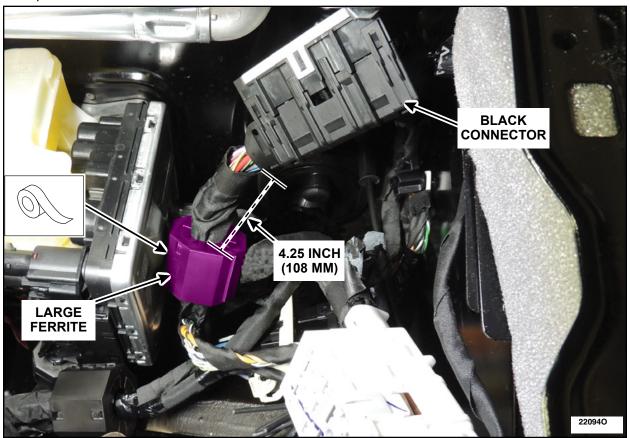


FIGURE 16

23. Measure 5.75 inches (146 MM) from the back of the white connector. Install a **LARGE** ferrite (item A) to the wiring harness in the designated location. See Figure 17. Apply 3 wraps of Coroplast® tape around the ferrite to secure it closed.

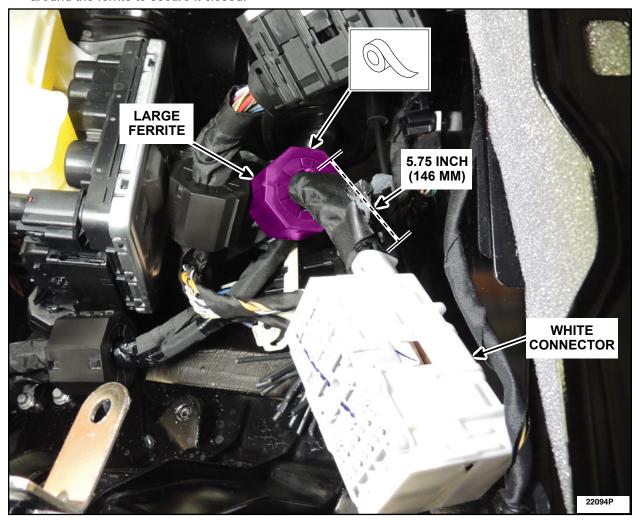


FIGURE 17

24. Locate the driver side frame rail wire harness take out. Install a **MEDIUM** ferrite (item B) onto the wire harness right behind the frame rail wire harness take out and before the brake lines. See Figure 18. Apply 3 wraps of Coroplast® (temperature/abrasion resistant cloth) tape to the ferrite to secure it closed and prevent movement on the harness.

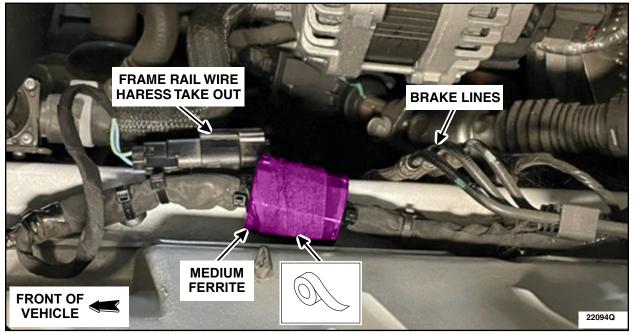


FIGURE 18

25. Locate the passenger side frame rail wire harness push pin towards the front of the vehicle. Install a **MEDIUM** ferrite (item B) onto the wire harness right behind the frame rail wire harness push pin. See Figure 19. Apply 3 wraps of Coroplast® tape to the ferrite to secure it closed.

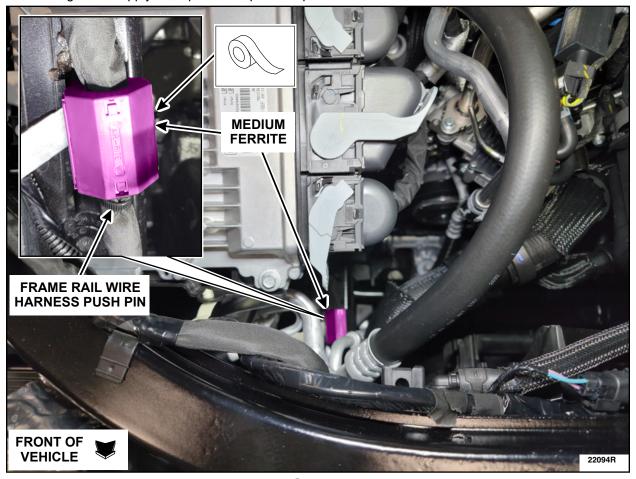


FIGURE 19

26. Install the BCMC support brackert and attach the wiring retainers, then install the bolts. See Figure 20.

• Torque: 106 lb.in (12 Nm)

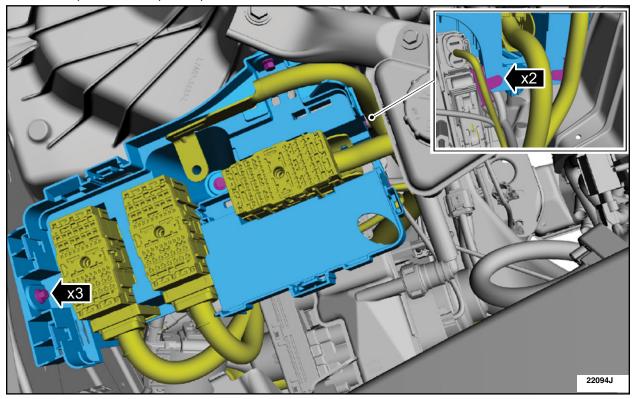
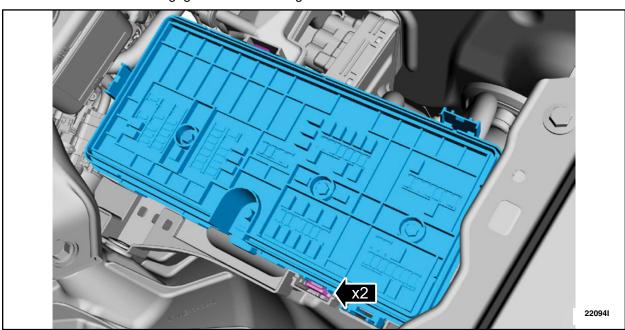


FIGURE 20

27. Install the BCMC and engage the tabs. See Figure 21.



- 28. Tighten the three BCMC connector bolts. See Figure 22.
 - Torque: 48 lb.in (5.4 Nm)
- 29. Position back the cable and install the nut. See Figure 22.
 - Torque: 106 lb.in (12 Nm)

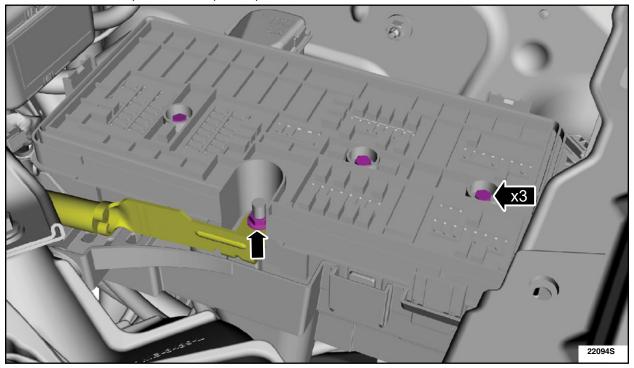


FIGURE 22

30. Install the BCMC cover and engage the tabs. See Figure 23.

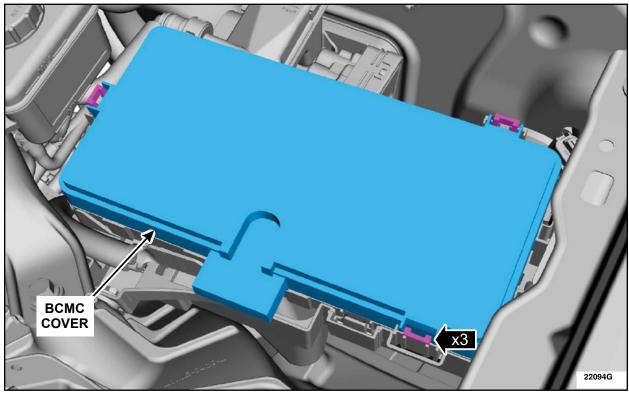


FIGURE 23

- 31. Connect the battery. Follow the WSM procedure in Section 414-01.
- 32. Install the cowl panel grille. Follow the WSM procedure in Section 501-02.

IMPORTANT NOTE: Federal law prohibits selling motor vehicle parts or components that are under safety, compliance, or emissions recall. Unless a part is requested to be returned to Ford, all parts replaced under this FSA must be scrapped in accordance with all applicable local, state and federal environmental protection and hazardous material regulations. Refer to the Parts Retention, Return, & Scrapping section of the FSA dealer bulletin for further information.

Certain 2020-2022 Model Year Police Interceptor Utility Vehicles Equipped with a Low Band Frequency Noise Suppression Kit - Electromagnetic Compatibility Upgrade

Mobile Service Repair Assessment

Assessment levels have been identified to help determine the ease of performing eligible mobile service repairs for a Field Service Action (FSA) outside of the dealership service facility.

Dealer Bulletin

Within Attachment I of the dealer bulletin a mobile service repair assessment level(s) will be provided. These assessment levels have been determined using the amount of time, equipment and labor identified to perform the intended service action.

Assessment Levels

- Mobile Reprogramming
- Light Mobile Service
- Enhanced Mobile Service
- Advanced Mobile Service
- Wheel and Tire Mobile Service
- Not a Mobile Service Repair

Description of each level that is used to determine the overall assessment.

- Mobile Reprogramming
 - Module Programming or similar type services
 - Minimum tools maybe required other than an IDS/FDRS setup
 - FDRS programming that requires internet connection (wi-fi or mobile hotspot)
 - Make sure vehicle has a charge port to ensure battery voltage is maintained during flashing of the module(s)
 - Repairs not greater than 1 hour in length (including time to wait for programming)

 Note: The location will need a charging station or wall box to maintain the 12-volt battery.
- Light Mobile Service
 - Interior repair procedures that do not require seat, dash, or headliner removal
 - Under hood repairs that do not require large component removal
 - Exterior repairs that do not require large component/panel removal
 - Repairs may require standard hand tools (Access to a Technician starter kit or similar)

Certain 2020-2022 Model Year Police Interceptor Utility Vehicles Equipped with a Low Band Frequency Noise Suppression Kit - Electromagnetic Compatibility Upgrade

- - Enhanced Mobile Service

- A two-person process is required anytime a procedure requires work under the vehicle
- Brake Inspection and Brake Repair/Replacement
- Limited Suspension Component replacement (no alignment)
- Under Vehicle access for limited repairs (no large component removal)
- Vehicle Check Up VCU
- Pre-Delivery Inspection PDI
- Used Car Inspection/Presale Inspection
- May require floor jack, jack stands, and impact tools

Note: Wheel lock may be required.

- Advanced Mobile Service

- Fluid Exchange/Oil Change
- Light Repairs
- Brake Hydraulic Repairs
- Wheel and Tire Mobile Service
 - Tire Removal from Wheel
 - Tire Balancing
 - Tire Repair

Note: Specialized Mobile Service unit and equipment including Tire balancer and Tire Changer required.

— Not a Mobile Service Repair

- Large component removal
- BEV Battery Replacement
- Requires a vehicle hoist to complete the repair (more than inspection)
- Required vehicle alignment
- Requires significant vehicle disassembly
- Repairs greater than 2-3 hours
- Any repairs that require M-Time
- Includes a service procedure where the vehicle owner may be distressed about the state of their vehicle