

David J. Johnson Director Service Engineering Operations Ford Customer Service Division Ford Motor Company P. O. Box 1904 Dearborn, Michigan 48121

January 11, 2022

TO: All U.S. Ford and Lincoln Dealers

SUBJECT: Customer Satisfaction Program 21M01

Certain 2013-2016 Model Year F-250-F-550 Vehicles Equipped with a 6.7L Diesel

Engine - Reductant Heater and Sender Assembly Repair

PROGRAM TERMS

This program extends the warranty coverage of the reductant heater and sender assembly to 11 years of service or 120,000 miles from the warranty start date of the vehicle, whichever occurs first.

This program may be used multiple times as long as the vehicle is within time and mileage limits of the program. Once the program has expired, SPW and ESP may be eligible.

If a vehicle has already exceeded either the time or mileage limits, this extended warranty coverage will last through July 31, 2022.

Coverage is automatically transferred to subsequent owners.

VEHICLES COVERED BY THIS PROGRAM

Vehicle	Model Year	ar Assembly Plant Build Dates	
F-250-F-550*	2013-2016	Kentucky Truck	April 14, 2012 through July 3, 2016

^{*} Vehicles less than 14,000 lbs. Gross Vehicle Weight (GVW), build dates through December 9, 2014 and all weight class vehicles, build dates on or after December 10, 2014.

Affected vehicles are identified in OASIS.

NOTE: Performing the 21M01 Powertrain Control Module (PCM) software update fulfills the PCM software update requirement by Field Service Action (FSA) 20E08 or 21E01, therefore 20E08 or 21E01 will be closed automatically when 21M01 is claimed if applicable.

REASON FOR PROVIDING A NO-COST REPAIR

In some of the affected vehicles, the reductant heater and sender assembly may fail causing the malfunction indictor lamp (MIL) to illuminate and, in some instances, may cause the engine to go into a reduced power de-rate strategy. If this condition exists, diagnostic trouble codes (DTCs) related to the reductant heater and sender assembly will be present in the powertrain control module.

SERVICE ACTION

If an affected vehicle exhibits this condition, dealers are to service the reductant heater and sender system following the instructions in the technical information section of this bulletin. This service must be performed at no charge to the vehicle owner.

OWNER NOTIFICATION MAILING SCHEDULE

Owner Letters are expected to be mailed the week of January 31, 2022. Dealers should repair any affected vehicles that have the MIL illuminated with Diagnostic Trouble Codes (DTC's) related to the reductant heater and sender assembly 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

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,

David J. Johnson

Certain 2013-2016 Model Year F-250-F-550 Vehicles Equipped with a 6.7L Diesel Engine Reductant Heater and Sender Assembly Repair

OASIS ACTIVATION

OASIS will be activated on January 11, 2022.

FSA VIN LISTS ACTIVATION

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

SOLD VEHICLES

- Only owners with affected vehicles that exhibit the covered condition will be directed to dealers for repairs.
- Dealers are to prioritize repairs of customer vehicles over repairs of new and used vehicle inventory.

STOCK VEHICLES

• Do not perform this program unless the affected vehicle exhibits the covered condition.

TITLE BRANDED / SALVAGED VEHICLES

Title branded, salvaged vehicles and vehicles with cancelled warranty coverage are eligible for this program unless emission coverage is explicitly cancelled, as indicated by one of the following OASIS Warranty Cancellation Messages only:

- SCRAPPED UNIT ALL WARRANTY CANCELLED TOTAL INCLUDING EMISSIONS
- ALL WARRANTY CANCELLED INCLUDING EMISSIONS

OWNER REFUNDS

- Ford Motor Company is offering a refund for owner-paid repairs covered by this program if the repair was performed before the date of the Owner Notification Letter. This refund offer expires January 31, 2023.
- Dealers are also pre-approved to refund owner-paid <u>emergency</u> repairs that were performed away from an authorized servicing dealer after the date of the Owner Notification Letter. Noncovered repairs, or those judged by Ford to be excessive, will not be reimbursed.
- Refunds will only be provided for the cost associated with replacing the reductant heater and sender assembly.

RENTAL VEHICLES

The use of rental vehicles is not approved for this program.

Certain 2013-2016 Model Year F-250-F-550 Vehicles Equipped with a 6.7L Diesel Engine Reductant Heater and Sender Assembly Repair

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
- 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

- NOTE: Performing the 21M01 PCM software update fulfills the PCM software update requirement by FSA 20E08 or 21E01, therefore 20E08 or 21E01 will be closed automatically when 21M01 is claimed if applicable.
- NOTE: All repairs for this program should be claimed using the claim entry direction below regardless if the vehicle is still under the New Vehicle Limited Warranty.
 - Service Part Warranty (SPW) and/or Ford/Lincoln Loyalty Plans (ESP) eligible vehicles –
 Claim repairs to FSA 21M01 if vehicle is still within time and mileage limits.
- 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 (21M01) is the sub code.
 - Customer Concern Code (CCC): E29 "Check Engine" Light Troubles
 - Condition Code (CC): 42 Does Not Operate Properly
 - Causal Part Number: 5J225 Heater and Sender Assembly
 - 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.

- **Refunds:** Submit refunds on a separate repair line.
 - Program Code: 21M01
 Misc. Expense: ADMIN
 Misc. Expense: 0.2 Hrs.
 - Multiple refunds should be submitted on one repair line and the invoice details for each repair should be detailed in the comments section of the claim.

Certain 2013-2016 Model Year F-250-F-550 Vehicles Equipped with a 6.7L Diesel Engine Reductant Heater and Sender Assembly Repair

LABOR ALLOWANCES

Description	Labor Operation	Labor Time
2013-2014 Super Duty (All Configurations)		
FSA 20E08, 21E01, 21M01 (previous repair) or TSB 18- 2190 was NOT previously performed.		0.7 Hours
Reprogram the PCM using IDS release 120.07 or higher.		
NOTE: Performing the 21M01 PCM software update fulfills the PCM software update requirement by FSA 20E08 or 21E01, therefore 20E08 or 21E01 will be closed automatically when 21M01 is claimed if applicable.	21M01B	
NOTE: This labor operation can be used in combination with 21M01D, 21M01E, 21M01F, 21M01G or 21M01H as appropriate.		
2015-2016 Super Duty (All Configurations)		
FSA 20E08, 21E01, 21M01 (previous repair) or TSB 18- 2190 was NOT previously performed.	. ,	
Reprogram the PCM using IDS release 120.07 or higher.		0.4 Hours
NOTE: Performing the 21M01 PCM software update fulfills the PCM software update requirement by FSA 20E08 or 21E01, therefore 20E08 or 21E01 will be closed automatically when 21M01 is claimed if applicable.	21M01C	
NOTE: This labor operation can be used in combination with 21M01D, 21M01E, 21M01F, 21M01G or 21M01H as appropriate.		

Labor Allowances Continued on the Next Page

Certain 2013-2016 Model Year F-250-F-550 Vehicles Equipped with a 6.7L Diesel Engine Reductant Heater and Sender Assembly Repair

LABOR ALLOWANCES (Continued)

Description	Labor Operation	Labor Time	
2013-2016 Super Duty Pickup	21M01D	1.4 Hours	
Replace the reductant heater and sender assembly.	2 11010 1D		
2013-2016 Chassis Cab – Inboard Reductant Tank	0414045	4.0.11	
Replace the reductant heater and sender assembly.	21M01E	1.3 Hours	
2013-2016 Chassis Cab - Outboard Reductant Tank	0414045	4.0.11	
Replace the reductant heater and sender assembly.	21M01F	1.0 Hours	

Extra time to R&I fuel tank shield (if equipped) to access lifting points

Vehicle	Labor Operation	Labor Time	
Non-FX4 package vehicles	21M01G	0.1	
FX4 package vehicles only	21M01H	0.3	

PARTS REQUIREMENTS / ORDERING INFORMATION

Part Number	Description	Order Quantity	Claim Quantity
BC3Z-5J225-L	Reductant Heater and Sender Assembly (Pickup)	1	1
BC3Z-5J225-M	Reductant Heater and Sender Assembly (Chassis Cab)	1	1
PM-27*	Motorcraft Diesel Exhaust Fluid	Up to 5 gallons	

^{*}The use of PM-27-GAL, PM-27-JUG, PM-27-D, or PM-27-T is acceptable.

The DOR/COR number for this recall is 51121.

Order your parts through normal order processing channels. To guarantee the shortest delivery time, an emergency order for parts must be placed.

DEALER PRICE

For 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 in accordance with all applicable local, state and federal environmental protection and hazardous material regulations.

EXCESS STOCK RETURN

Excess stock returned for credit must have been purchased from Ford Customer Service Division in accordance with Policy Procedure Bulletin 4000.

Certain 2013-2016 Model Year F-250-F-550 Vehicles Equipped with a 6.7L Diesel Engine Reductant Heater and Sender Assembly Repair

REPLACED FSA PARTS INSPECTION AND SIGN OFF

Effective March 1st 2021 all parts replaced as part of an FSA repair with a repair order open date of March 1st 2021 or later must be inspected and signed off on the repair order by a member of your dealers 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 1st 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 from 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 clearly identified on the Repair Order. If multiple FSA's require approval on a single Repair Order, each applicable occurrence will require individual post repair approval by the designated employee.

CERTAIN 2013-2016 MODEL YEAR F-250-F-550 VEHICLES EQUIPPED WITH A 6.7L DIESEL ENGINE — REDUCTANT HEATER AND SENDER ASSEMBLY REPAIR

SERVICE PROCEDURE

NOTE: Performing the 21M01 Powertrain Control Module (PCM) software update fulfills the PCM software update requirement by Field Service Action (FSA) 20E08 or 21E01, therefore 20E08 or 21E01 will be closed automatically when 21M01 is claimed if applicable.

1. Using an Integrated Diagnostic Scan Tool (IDS) perform a Key On Engine Off (KOEO) self test on the PCM. Is Diagnostics Trouble Code (DTC) P203A, P203B, P203C, P203D, P203E, P2043, P21B0, P20BA, P20B9, P205C or P205D present?

NOTICE: When disconnecting the reductant pressure line from the reductant pump assembly, gently press the reductant pressure line connector towards the pump assembly and hold. Then press the connector tabs and pull the connector straight off the pump assembly nipple. Failure to follow these instructions may cause damage to the reductant pump assembly and the reductant pressure line.

- Yes Replace the reductant heater and sender assembly. Please follow the Workshop Manual (WSM) procedures in Section 303-08 then proceed to Step 2.
- No This program does not apply.
- 2. Has the PCM been previously reprogrammed for FSA 20E08, 21E01, 21M01 (previous repair) or per TSB 18-2190 in the vehicle warranty history?
 - Yes The PCM already has the software revision to address this concern. Repair is complete.
 - No Reprogram the PCM using Integrated Diagnostic Software (IDS) release 120.07 or higher. Proceed to the PCM Reprogramming procedure.

PCM Reprogramming

NOTE: Reprogram appropriate vehicle modules before performing diagnostics and clear all DTCs after programming. For DTCs generated after reprogramming, 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.

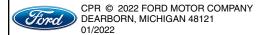
NOTE: Make sure the diagnostic scan tool does not enter sleep mode during programming.

2. Reprogram the PCM using IDS release 120.07 or higher.

NOTE: Calibration files may also be obtained at www.motorcraftservice.com.

NOTE: Follow the IDS on-screen instructions to complete the reprogramming procedure.

3. Disconnect the battery charger from the 12V battery once the reprogramming has completed.



Important Information for Module Programming

NOTE: When programming or reprogramming 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 IDS/diagnostic scan tool to a power source.
- Inspect Vehicle Communication Module (VCM) and cables for any damage. Make sure diagnostic 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 diagnostic scan tool on-screen instructions carefully.
- Disable IDS/diagnostic scan tool sleep mode, screensaver, hibernation modes.
 - Create all sessions 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: NEVER DELETE THE ORIGINAL SESSION!

- a. Obtain the original IDS that was used when the programming error occurred during Module Reprogramming (MR) or Programmable Module Installation (PMI).
- b. Disconnect the VCM from the Data Link Connector (DLC) and the IDS.
- c. Reconnect the VCM to IDS and then connect to the DLC. Once reconnected, the VCM icon should appear in the corner of the IDS screen. If it does not, troubleshoot the IDS to VCM connection.
- d. Locate the original vehicle session when programming failed. This should be the last session used in most cases. If not, use the session created on the date that the programming failed.

NOTE: If the original session is not listed in the previous session list, click the Recycle Bin icon at the lower right of the previous session screen. This loads any deleted sessions and allows you to look through them. Double-click the session to restore it.

- e. Once the session is loaded, the failed process should resume automatically.
- f. If programming does not resume automatically, proceed to the Module Programming menu and select the previously attempted process, PMI or MR.
- g. Follow all on-screen prompts/instructions.
- h. The last screen on the IDS may list additional steps required to complete the programming process. Make sure all applicable steps listed on the screen are followed in order.