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March 2, 2021

**TO:** All U.S. Ford and Lincoln Dealers

**SUBJECT: Customer Satisfaction Program 21B10**  
 Certain 2017-2020 Model Year F-150 Equipped with a 3.5L GTDI Engine  
 Powertrain Control Module Reprogram for Cam Phaser Rattle

**PROGRAM TERMS**

This program will be in effect through March 31, 2022. There is no mileage limit for this program. Customers that receive the 21B10 repair prior to August 31, 2021 will receive coverage for a pro-rated cam phaser replacement (if needed) under a separate Customer Service Program (21N03) for one year until September 1, 2022.

We recommend dealers utilize their FSA VIN Lists name and address to contact customers with affected vehicles. This will help minimize the number of vehicles that may develop a cam phaser rattle, which requires a more extensive repair.

**AFFECTED VEHICLES**

Vehicle	Model Year	Assembly Plant	Build Dates
F-150*	2017-2020	Dearborn	March 10, 2016 through November 30, 2019
		Kansas	April 15, 2016 through November 30, 2019

Note: This program does NOT include the F-150 Raptor/Limited variants.

Affected vehicles are identified in OASIS and FSA VIN Lists.

**REASON FOR THIS PROGRAM**

In some of the affected vehicles, an undesirable noise may develop from the cam phasers in the 3.5L GTDI engine. This noise might occur as a rattle when starting the engine after the vehicle was turned off for an extended period of time, or as a knocking noise when the engine is idling after it is warmed up.

A cam phaser that has developed an undesirable noise does not affect the vehicle safety, performance, or emissions.

**SERVICE ACTION**

Dealers are to reprogram the powertrain control module (PCM) to the latest level using IDS release 120.05 or higher. 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 March 15, 2021. 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  
Owner Notification

## **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,

A handwritten signature in cursive script that reads "D. Johnson".

David J. Johnson

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**OASIS ACTIVATION**

OASIS will be activated on March 2, 2021.

**FSA VIN LISTS ACTIVATION**

FSA VIN Lists will be available through <https://web.fsavinlists.dealerconnection.com> on March 2, 2021. Owner names and addresses will be available by April 1, 2021.

**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.
- 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.

**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.

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**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
  - 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 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. The FSA number 21B10 is the sub code.
    - Customer Concern Code (CCC): N09
    - Condition Code (CC): 42
    - Causal Part Number: RECAL
    - 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.

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**LABOR ALLOWANCES**

<b>Description</b>	<b>Labor Operation</b>	<b>Labor Time</b>
Reprogram the Powertrain Control Module to the latest level using IDS release 120.05 or higher	21B10B	0.3 Hour(s)

**PARTS REQUIREMENTS / ORDERING INFORMATION**

Parts are not required to complete this repair.

## CERTAIN 2017-2020 MODEL YEAR F-150 VEHICLES EQUIPPED WITH A 3.5L ECOBOOST ENGINE — POWERTRAIN CONTROL MODULE REPROGRAMMING

### SERVICE PROCEDURE

#### Module Reprogramming

**NOTE:** All vehicles are to have the Powertrain Control Module (PCM) reprogrammed regardless of symptoms.

**NOTE:** If any other Diagnostic Trouble Codes (DTC's) are present in the PCM and the engine light is illuminated, record them on the repair order and advise the customer that this update will not repair these issues and that the DTC's will be cleared but will return again after this update.

1. Connect a battery charger to the 12 volt 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 Integrated Diagnostic Software (IDS) computer does not enter sleep mode during programming.

2. Reprogram the PCM using the latest IDS release. Make sure you are connected to the Internet prior to reprogramming.

**NOTE:** Calibration files may also be obtained at [www.motorcraftservice.com](http://www.motorcraftservice.com).

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

3. Clear all DTC's.

4. Disconnect the battery charger from the 12 volt battery once the reprogramming has completed.

**NOTE:** Advise the customer that this vehicle is equipped with an adaptive transmission shift strategy which allows the vehicle's computer to learn the transmission's unique parameters and improve shift quality. When the adaptive strategy is reset, the computer will begin a re-learning process. This re-learning process may result in firmer than normal upshifts and downshifts for several days.



## 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/scan tool to a power source.
- Inspect Vehicle Communication Module (VCM) 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 IDS/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: **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.

