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Ford Motor Company
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March 2, 2021

TO: All U.S. Ford and Lincoln Dealers

SUBJECT: **Customer Satisfaction Program 21N03**
 Certain 2017-2020 Model Year F-150 Equipped with a 3.5L GTDI Engine
 Cam Phaser Replacement

PROGRAM TERMS

This program extends the warranty coverage of the engine cam phasers until September 1, 2022 provided the Repair Order (RO) date of Powertrain Control Module reflash under Customer Satisfaction Program 21B10 occurs on or before August 31, 2021.

Ford will cover the repair or refund costs following the proration table below using the mileage shown on the RO.

Ford Vehicles	
Mileage	Ford Will Cover
Up to 69,999	100%
70,000 – 79,999	66%
80,000 – 89,999	33%
90,000 or higher	0%

This is a one-time repair program.

Coverage is automatically transferred to subsequent owners.

VEHICLES COVERED BY THIS PROGRAM

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.

REASON FOR PROVIDING EXTENDED WARRANTY COVERAGE

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

If an affected vehicle exhibits this condition, dealers are to replace all four cam phasers. This service will be covered by Ford Motor Company following the proration table contained within the term and conditions.

OWNER NOTIFICATION MAILING SCHEDULE

Owner Letters are expected to be mailed the week of March 15, 2021. Dealers should repair any affected vehicles that experience undesirable cam phaser noise after field service action 21B10, 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 Society (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

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OASIS ACTIVATION

OASIS will be activated on March 2, 2021. Vehicles will not show FSA 21N03 until FSA 21B10 has been completed and processed.

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

Vehicles with cancelled warranties are not eligible for this service action.

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 September 1, 2021.
- Dealers are also pre-approved to refund owner-paid emergency repairs that were performed away from an authorized servicing dealer after the date of the Owner Notification Letter. Non-covered repairs, or those judged by Ford to be excessive, will not be reimbursed.
- Refunds will only be provided for the cost associated with cam phaser replacement due to unacceptable noise.
- To ensure that the correct proration is applied follow the directions in the Refund Claiming section.

RENTAL VEHICLES

Dealers are pre-approved for up to 1 day for a rental vehicle. Follow Extended Service Plan (ESP) guidelines for dollar amounts. Rentals will only be reimbursed for the day(s) the vehicle is at the dealership for part replacement. Prior approval for more than 1 rental day is required from the SSSC via the SSSC Web Contact Site.

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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 21N03 is the sub code.
 - Customer Concern Code (CCC): N09
 - Condition Code (CC): 42
 - Causal Part Number: 6256
 - 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.
- **Rentals:** For rental vehicle claiming, follow Extended Service Plan (ESP) guidelines for dollar amounts. Enter the total amount of the rental expense under Miscellaneous Expense code RENTAL.

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- **Refunds:** Submit each unique refund on a separate **repair order**.
 - Program Code: 21N03
 - Misc. Expense: ADMIN
 - Misc. Expense: REFUND
 - Misc. Expense: 0.2 Hrs.
- To ensure that the correct proration is applied. OWS will automatically do the prorate calculations. See below.
 - **Step 1** – Claim Repair Order write up in dealer DMS
 - Open separate RO from 21B10 in the dealer DMS
 - **NO OTHER REPAIR LINES ALLOWED**
 - Check that original repair receipt provided matches vehicle owner
 - Check original repair mileage qualifies for the prorate.
 - Use the **CURRENT DATE** and **MILEAGE** on this Repair Order
 - Customer Concern field. Enter (Requests Refund for Program 21N03)
 - Tech comment section- Provide Date of Repair, Mileage, Full Dollar Amount of Original Repair
 - Refund amount is only for the **CAM PHASER** repairs.
 - Do a misc. expense at **ZERO** dollars.
 - Close RO – Ensure REFUND is at zero dollars
 - Do **NOT** submit via DMS
 - **Step 2** – Claim submittal into OWS
 - **MANUALLY ENTER THIS CLAIM**
 - Enter the **DATE** and **MILEAGE FROM THE ORIGINAL REPAIR RECEIPT**
 - Enter the **CURRENT RO NUMBER**
 - Submit for the **FULL** amount of the refund. OWS will **AUTOMATICALLY** prorate the refund for you based on the original mileage from the customer repair invoice provided to you.
 - **PRE-VALIDATE** and **SUBMIT**
 - When claim pays perform necessary accounting adjustments depending on your DMS.
 - Provide customer with refund check

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○ **Proration Table**

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LABOR ALLOWANCES

Description	Labor Operation	Labor Time
Replace all four (4) VCT units – F-150 (excluding Raptor)	21N03B	9.5 Hours

PARTS REQUIREMENTS / ORDERING INFORMATION

Part Number	Description	Order Quantity	Claim Quantity
HL3Z-6256-CD	Intake VCT Unit - Package Contains 1 Piece, 2 Pieces Required	2	2
HL3Z-6C525-CD	Exhaust VCT Unit - Package Contains 1 Piece, 2 Pieces Required	2	2
HL3Z-6279-A	VCT Unit Bolt Package Contains 1 Piece, 4 Pieces Required	4	4
ML3Z-6584-G	Left Valve Cover Gasket	1	1
HL3Z-6584-A	Right Valve Cover Gasket	1	1
HL3Z-9439-A	Intake Port Gasket - Package Contains 3 Pieces, 6 Pieces Required	2	6
W503275-S437	High Pressure Fuel Tube Retaining Bolt - Package Contains 4 Pieces, 1 Piece Required	1	1
W503280-S437	High Pressure Fuel Tube Retaining Bolt - Package Contains 4 Pieces, 1 Piece Required	1	1
W714498-S900	High Pressure Pump Mounting Bolt - Package Contains 4 Pieces, 2 Pieces Required	1	2
AA5Z-9E583-A	High Pressure Pump O-ring	1	1
HL3Z-8507-A	Coolant Pump Gasket	1	1
BR3Z-8527-A	Coolant Pump O-ring	1	1
HL3Z-6A340-A	Crankshaft Pulley Shaft Bolt	1	1
XW4Z-6700-AA	Front Crankshaft Seal	1	1
BR3Z-6020-A	Front Cover Coolant Pipe Seal	1	1
BR3Z-6C535-A	Oil Pump Electrical Connector Seal	1	1
AA5Z-6714-A	Oil Filter	1	1
TA-357	Motorcraft® High Performance Engine RTV Silicone	As Needed	
ZC-30-A	Motorcraft® Silicone Gasket Remover	As Needed	
ZC-31-B	Motorcraft® Metal Surface Cleaner	As Needed	
VC-13-G	Motorcraft® Orange Antifreeze/Coolant Concentrated (All Markets Except Canada)	As Needed	

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CVC-13-G	Motorcraft® Orange Antifreeze/Coolant Concentrated (Canada Only)	As Needed
VC-13-G	Motorcraft® Yellow Antifreeze/Coolant Concentrated (All Markets Except Canada)	As Needed
CVC-13-G	Motorcraft® Yellow Antifreeze/Coolant Concentrated (Canada Only)	As Needed
XO-5W30-Q1SP	Motorcraft® SAE 5W-30 Premium Synthetic Blend Motor Oil (All Markets Except Canada)	As Needed
CXO-5W30-LSP6	Motorcraft® SAE 5W-30 Super Premium Motor Oil (Canada Only)	As Needed
ZC-20	Motorcraft® Engine Shampoo and Degreaser (All Markets Except Canada)	As Needed
CXC-66-A	Motorcraft® Engine Shampoo (Canada Only)	As Needed
PM-4-A	Motorcraft® Metal Brake Parts Cleaner (Compliant With Low Volatile Organic Compound Requirements As Required In Some USA States) -	As Needed
PM-4-B	Motorcraft® Metal Brake Parts Cleaner (Not Compliant With Volatile Organic Compound Requirements) -	As Needed
Parts To Inspect And Replace Only If Necessary		
HL3Z-9H486-A	Upper Intake Manifold Gaskets - Package Contains 6 Pieces	If Needed
BR3Z-6C535-A	VCT Oil Control Seal	If Needed
BR3Z-6C535-B	Spark Plug Tube Seal	If Needed
HL3Z-9417-A	High Pressure Pump Mounting Plate Seal	If Needed
BL3Z-9374-A	High Pressure Pump Mounting Plate O-ring	If Needed
HL3Z-8507-D	Thermostat Housing O-ring	If Needed
HL3Z-8527-A	Thermostat Housing O-ring	If Needed
HL3Z-8590-A	Water Pump Outlet O-ring	If Needed
HL3Z-9J323-C	High Pressure Pump to Rail Tube	If Needed

Order your parts requirements 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.

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PARTS RETENTION AND RETURN

Follow the provisions of the Warranty and Policy Manual, Section 1 - WARRANTY PARTS
RETENTION AND RETURN POLICIES.

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 2017-2020 MODEL YEAR F-150 VEHICLES EQUIPPED WITH A 3.5L ECOBOOST ENGINE — CAM PHASER REPLACEMENT

SERVICE PROCEDURE

NOTE: This procedure will only resolve noise concerns with the cam phasers. The two noise concerns that a phaser can make is a cold engine start rattle and a hot idle knock. These sound clips are representative of a cam phaser noise.

- i. Sound captured of a cold engine rattle. [Click Here.](#)
- ii. Sound captured of a hot idle knock. [Click Here.](#)

NOTE: The following parts may be reused for this repair if no damage is present.

- Intake gaskets (HL3Z-9H486-A).
- High pressure fuel tube (HL3Z-9J323-C) may be reused for this repair, if the fuel tube has not previously been reused. The high-pressure fuel pump to fuel rail high-pressure fuel tube flare nuts must be torqued to 32 Nm +/-2 Nm when reusing the fuel tube for this FSA.
- VCT solenoid seals (BR3Z-6C535-A) and spark plug tube seals (BR3Z-6C535-B) should continue to be reused if no damage is present.

1. Replace all 4 Variable Camshaft Timing (VCT) units. Please follow the Workshop Manual (WSM) procedures in Section 303-01.

NOTE: Do not replace any additional VCT or engine timing related components.

- It is not necessary to remove the two left valve cover camshaft sensors.
- All the VCT solenoid and spark plug tube seals require inspection, but not all require replacement.

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.

