

TECHNICAL SERVICE BULLETIN23-21945.0L - Engine Oil Leak From The Engine Block - Built On 23-Aug-2022 And19 June 2023Through 30-Apr-202319 June 2023

Model:

Ford	Built on 23-Aug-2022 and through 30-Apr-2023
2022-2023 F-150	Engine: 5.0L

Issue: Some 2022-2023 F-150 vehicles built on 23-August-2022 and through 30-April-2023 equipped with a 5.0L engine may exhibit an oil leak from the oil filter adaptor to engine block mounting area. This may be due to block porosity just below the oil filter adapter near the main bearing cap outer bolt. To correct the condition, follow the Service Procedure to inspect the engine block for a porosity leak.

Action: Follow the Service Procedure to correct the condition on vehicles that meet all of the following criteria:

- 2022-2023 F-150
- Built on 23-August-2022 and through 30-Apr-2023
- 5.0L engine
- · Oil leak from the oil filter adapter area

Parts

Service Part Number	Quantity	Description	Unit of Issue	Piece Quantity	Note
ML3Z-6009-D	1	Engine Short Block Assembly		1	
BR3Z-6A340-A	1	Crankshaft Pulley Bolt And Washer	1	1	
JR3Z-6065-C	20	Cylinder Head Bolt	1	20	
W714735-S439	2	Engine Mount Bracket-to-Engine Bolt	4	6	
JL3Z-6379-A	8	Flexplate to Crankshaft Bolt	1	8	
W715211-S439	1	Left Engine Mount Through Bolt	4	1	
W713244-S439	1	Left Engine Mount-to-Frame Bolt		3	
7L1Z-4B496-C	2	Front Driveshaft-to-Pinion Flange Bolt and Washer Assembly	1	2	
AA5Z-6714-A	1	Engine Oil Filter	1	1	
ML3Z-6584-B	1	Right Camshaft and Carrier Assembly Gasket	1	1	
ML3Z-6584-C	1	Left Camshaft and Carrier Assembly Gasket	1	1	
ML3Z-6051-H	1	Right Cylinder Head Gasket	1	1	
ML3Z-6051-G	1	Left Cylinder Head Gasket			
ML3Z-6020-C	1	Front Engine Cover Gasket - Right	1	1	
ML3Z-6020-D	1	Front Engine Cover Gasket - Center	1	1	
ML3Z-6020-E	1	Front Engine Cover Gasket - Left	1	1	
W520514-S440	4	Catalytic Converter-to-Exhaust Manifold Nut	1	4	
W716530-S440	1	RH Engine Mount-to-Frame Nut	4	2	
W520113-S440	1	Stabilizer Bar Bracket Nut	4	4	
W715618-S437	1	Torque Converter-to-Flexplate Nut	4	4	

ML3Z-6A642-C	1	Oil Cooler Assembly	1	1	
F1VY-8507-A	1	Coolant Pump O-ring Seal	5	1	
JT4Z-9E583-A	1	High Pressure Fuel Pump O-ring Seal	1	1	
GK2Z-6700-A	1	Front Crankshaft Oil Seal Assembly		1	
ML3Z-9J323-B	1	High Pressure Fuel Pump-to-Fuel Rail Tube Assembly	1	1	
ML3Z-9J323-C	1	High Pressure Fuel Rail-to-Fuel Rail Tube Assembly	1	1	
ML3Z-3B478-A	1	Front Driveshaft CV Joint Boot Clamp	1	1	
ML3Z-3B478-B	1	Rear Driveshaft CV Joint Boot Clamp	1	1	Î
BR3Z-8255-A	1	Thermostat Housing Seal	1	1	
JR3Z-6701-A	1	Rear Crankshaft Seal	1	1	Î
W714870-S430	4	Exhaust Manifold Nut	4	16	
FR3Z-9448-A	2	Exhaust Manifold Gasket	1	2	
W714869-S901	4	Exhaust Manifold Stud	4	16	
W702600-S439	1	Steering Shaft Bolt	1	1	
W718644-S439	2	Frame to Cab Mounting Bolt	4	6	
DL3Z-19B596-B	1	A/C Compressor O Ring and Gasket	1	1	
DS7Z-19B596-A	1	A/C Compressor Seal	1	1	
BC3Z-8590-F	1	Lower Radiator to Radiator Hose Seal		1	1
VC-13-G	As Needed	Motorcraft® Yellow Prediluted Antifreeze/Coolant (All Markets Except Canada)			
CVC-13-G	As Needed	Motorcraft® Yellow Concentrated Antifreeze/Coolant (Canada Only)			
XO-5W20-Q1SP	As Needed	Motorcraft® SAE 5W-20 Synthetic Blend Motor Oil (All Markets Except Canada)			
CXO-5W20- LSP6	As Needed	Motorcraft® SAE 5W-20 Super Premium Motor Oil (Canada Only)			
PM-20	As Needed	Motorcraft® DOT 4 LV High Performance Motor Vehicle Brake Fluid			

Quantity refers to the amount of the service part number required to repair the vehicle.

Unit of Issue refers to the number of individual pieces included in a service part number package.

Piece Quantity refers to the total number of individual pieces required to repair the vehicle.

As Needed indicates the amount of the part may vary and/or is not a whole number. Parts can be billed out as non-whole numbers, including less than 1.

If Needed indicates the part is not mandatory.

Parts

Parts To Inspect And Replace Only If Necessary

Service Part Number	Quantity	Description	Unit of Issue	Piece Quantity
AA5Z-9C587-A	If Needed	Fuel Pump Assembly Tappet	1	1
JR3Z-12A227-A	If Needed	Crankshaft Position Sensor Ring	1	1
JL3Z-9439-A	If Needed	Intake Manifold Gasket	1	8

Warranty Status: Eligible under provisions of New Vehicle Limited Warranty (NVLW)/Service Part Warranty (SPW)/Special Service Part (SSP)/Extended Service Plan (ESP) coverage. Limits/policies/prior approvals are not altered by a TSB. NVLW/SPW/SSP/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

Labor Times

Description	Operation No.	Time
2022-2023 F-150 4X2 5.0L: Inspect And Replace The Engine Short Block Following The Service Procedure (Do Not Use With Any Other Labor Operations)	MT232194A	Actual Time Up To 18.3 Hrs.
2022-2023 F-150 4X4 5.0L: Inspect And Replace The Engine Short Block Following The Service Procedure (Do Not Use With Any Other Labor Operations)	MT232194B	Actual Time Up To 18.8 Hrs.

Repair/Claim Coding

Causal Part:	6009	
Condition Code:	D1	

Service Procedure

- 1. Inspect the engine block just below the oil filter adapter mounting area near the main bearing cap outer bolt. Does the location show signs of oil leaking at the engine block? (Figure 1)
 - (1). Yes proceed to Step 2.
 - (2). No this article does not apply. Refer to Workshop Manual section 300-00, Oil Leak Inspection.
- Replace the engine short block. Refer to the Workshop Manual (WSM), Section 303-01E, Removal > Disassembly > Engine.

© 2023 Ford Motor Company

All rights reserved.

NOTE: The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford or Lincoln dealership to determine whether the Bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supersede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.