



TECHNICAL SERVICE BULLETIN

1.5L EcoBoost - Low Coolant, White Exhaust Smoke And/Or Illuminated MIL - Built On Or Before 10-Jun-2019

19-237510 December
2019

This bulletin supersedes 19-2139. Reason for update: Replace Awareness/Interim Message

Model:

Ford 2014-2019 Fusion	Engine: 1.5L EcoBoost
2017-2019 Escape	Engine: 1.5L EcoBoost

Summary

This article supersedes TSB 19-2139 to update the production fix date.

Issue: Some 2014-2019 Fusion vehicles built on or before 10-Jun-2019 and 2017-2019 Escape vehicles built on or before 08-Apr-2019 equipped with a 1.5L EcoBoost engine may exhibit low coolant level, white exhaust smoke and/or runs rough condition with or without an illuminated malfunction indicator light (MIL) with only diagnostic trouble codes (DTCs) P0300, P0301-P0304, P0316, P0217, P1285 and/or P1299 stored in powertrain control module (PCM). This may be due to coolant intrusion into the cylinder. To resolve the condition, replace the short block and head gasket.

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

- One of the following vehicles:
 - 2014-2019 Fusion built on or before 10-Jun-2019
 - 2017-2019 Escape built on or before 08-Apr-2019
- 1.5L EcoBoost engine
- Low coolant level, white exhaust smoke and/or runs rough condition with or without an illuminated MIL with only DTCs P0300, P0301-P0304, P0316, P0217, P1285 and/or P1299 stored in PCM

NOTE: Part availability for this TSB is initially limited and Dealers may experience temporary backorders that will be filled as quickly as possible. Dealers are requested to order parts only when required to complete a customer vehicle repair.

NOTE: All part numbers contain 1 individual piece unless stated otherwise.

Parts

Part Number		Description	Quantity
DS7Z-6009-G	-	Short Block	1
DS7Z-6051-L	-	Head Gasket	1
DS7Z-9450-A	-	Turbocharger Gasket	1
AM5Z-9450-A	-	Catalytic Converter Gasket	1
DS7Z-6L092-A	-	Turbocharger Oil Return Tube Assembly	1
BM5Z-2A572-A	-	Vacuum Pump Gasket	1
	-	Turbocharger Oil Supply Tube Assembly	1

DS7Z-6K679-C			
W714789-S300	-	Coolant Outlet O-ring Seal	1
W706722-S300	Package Contains 4 Pieces, 1 Piece Required	Thermostat Ring	1
W715309-S300	Package Contains 4 Pieces, 4 Pieces Required	Turbocharger Mounting Studs	1
W716271-S437	Package Contains 4 Pieces, 4 Pieces Required	Turbocharger Nuts	1
DS7Z-8527-A	Package Contains 1 Piece, 2 Pieces Required	Turbocharger Coolant Tube O-ring Seals	2
W716038-S437	Package Contains 4 Pieces, 3 Pieces Required	Vacuum Pump Stud Bolts	1
W520101-S437	Package Contains 4 Pieces, 2 Pieces Required	Vacuum Control Regulator Nuts	1
DS7Z-9D354-B	-	High Pressure Fuel Tube	1
W505584-S436	Package Contains 4 Pieces, 2 Pieces Required	High Pressure Fuel Pump Bolts	1
DS7Z-9E583-A	-	High Pressure Fuel Pump O-ring Seal	1
DS7Z-9P847-A	Package Contains 1 Piece, 4 Pieces Required	Fuel Injector Clip	4
DS7Z-6584-A	-	Valve Cover Gasket	1
DS7Z-9229-B	-	Kit Fuel Injector O-rings	1
W708317-S300	Package Contains 4 Pieces, 1 Piece Required	Cylinder Head O-ring Seal	1
BE8Z-6065-B	Package Contains 10 Pieces, 10 Pieces Required	Cylinder Head Bolts	1
W715449-S437	Package Contains 4 Pieces, 16 Pieces Required	Camshaft Bearing Cap Bolts, M6x35mm	4
W716307-S442	Package Contains 4 Pieces, 2 Pieces Required	Mega Cap Bolts, M7x38mm	1
W710294-S437	Package Contains 4 Pieces, 2 Pieces Required	Mega Cap Bolts, M7x59mm	1
4R8Z-6N652-A	-	Turbocharger Oil Return Tube Gasket	1
BE8Z-6A340-A	-	Crankshaft Pulley Bolt	1

BE8Z-6700-B	-	Crankshaft Front Seal	1
BM5Z-6K301-B	-	Crankshaft Rear Seal	1
W713043-S437	Package Contains 4 Pieces, 6 Pieces Required	Coolant Pump Bolts	2
BE8Z-8507-A	-	Coolant Pump Gasket	1
4M5Z-6M282-A	Package Contains 1 Piece, 2 Pieces Required	VCT Bolts	2
BE8Z-6K292-C	Package Contains 1 Piece, 2 Pieces required	Camshaft Seals	2
BM5Z-6659-B	-	Oil Pump Gasket	1
W714878-S439	Package Contains 4 Pieces, 1 Piece Required	Steering Column Bolt (Fusion 2013-2016)	1
W712961-S450B	-	Steering Column Bolt (Fusion 2017-2019)	1
W711137-S442	Package Contains 4 Pieces, 1 Piece Required	Steering Column Bolt (Escape)	1
W520214-S442	Package Contains 1 Piece, 3 Pieces Required	Engine Mount Nuts (Fusion)	3
W520214-S440	Package Contains 2 Pieces, 3 Pieces Required	Engine Mount Nuts (Escape)	2
W708728-S442	Package Contains 4 Pieces, 2 Pieces Required	Engine Mount Bolts (Fusion)	1
W716136-S442	Package Contains 4 Pieces, 2 Pieces Required	Engine Mount Bolts (Escape)	1
DS7Z-19B596-A	-	A/C Line Gaskets	1
DL3Z-19B596-B	-	Compressor O-ring And Gasket	1
BE8Z-6731-AB	-	Oil Filter	1
W520103-S442	Package Contains 4 Pieces, 2 Pieces Required	Muffler Inlet Pipe Nuts (Fusion)	1
W520103-S403	Package Contains 4 Pieces, 2 Pieces Required	Muffler Inlet Pipe Nuts (Escape)	1
CV6Z-9450-D	-	Muffler Inlet Pipe Gasket	1
W716457-S439	Package Contains 4 Pieces, 4 Pieces Required	Subframe Mounting Bolts (Fusion)	1
W715681-S900	Package Contains 4 Pieces, 2 Pieces Required	Catalytic Converter Bolts	1

W715618-S437	Package Contains 4 Pieces, 4 Pieces Required	Torque Converter Nuts	1
BE8Z-6379-AB	Package Contains 1 Piece, 6 Pieces Required	Flex Plate Bolts	6
W715623-S439	Package Contains 4 Pieces, 4 Pieces Required	Brake Caliper Bolts (Fusion)	1
5F9Z-4682-AA	Package Contains 1 Piece, 6 Pieces Required	Driveshaft-To-Pinion Flange Bolts (Escape AWD Only)	6
W715135-S440	Package Contains 4 Pieces, 2 Pieces Required	Stabilizer Bar Nut (Escape)	1
W716075-S442	Package Contains 4 Pieces, 2 Pieces Required	Wheel Knuckle Strut Bolt (Escape)	1
DS7Z-6584-B	-	Valve Cover Gasket (Escape)	1
6M5Z-6B752-A	-	Oil Separator Gasket	1
BM5Z-8527-A	-	Oil Separator O-Ring	1
7N5Z-00812-A	Package Contains 1 Piece, 2 Pieces Required	Rear Subframe Mounting Bolts (Escape)	2
8V4Z-5D035-A	Package Contains 1 Piece, 2 Pieces Required	Front Subframe Mounting Bolts (Escape)	2
W714753-S442	Package Contains 4 Pieces, 4 Pieces Required	Brake Caliper Bolts (Escape)	1
W520202-S437	Package Contains 4 Pieces, 2 Pieces Required	Coolant Outline Fastener	1
CCPZ-3B477-C	-	Wheel Hub Nut (Escape AWD Only)	1
F1EZ-8620-A	-	Stretchy Belt	1
W716075-S442	Package Contains 4 Pieces, 1 Piece Required	Lower Ball Joint Bolt (Escape AWD Only)	1
W520415-S442	Package Contains 4 Pieces, 1 Piece Required	Lower Ball Joint Nut (Escape AWD Only)	1
W718250-S439	Package Contains 5 Pieces, 5 Pieces Required	Upper/Lower PTU Bolts (Escape AWD Only)	1
YS4Z-3N324-AA	-	Halfshaft Bearing Retaining Strap (Escape AWD Only)	1
W520102-S442	Package Contains 4 Pieces, 2 Pieces Required	Halfshaft Bearing Retaining Nuts (Escape AWD Only)	1
CN1Z-7H424-B	-	Intermediate Shaft Seal (Escape AWD Only)	1
CV6Z-7086-A	-	PTU Compression Seal (Escape AWD Only)	1

W717236-S300	Package Contains 4 Pieces, 1 Piece Required	Cylinder Head Fuel Drive O-ring Seal (Escape and Fusion)	1
XO-5W20-Q1SP	-	Motorcraft® SAE 5W-20 Synthetic Blend Motor Oil (All Markets Except Canada)	As Required
CXO-5W20-LSP6	-	Motorcraft® SAE 5W-20 Super Premium Motor Oil (Canada Only)	As Required
TA-26	-	Motorcraft® Threadlock 262	As Required
ZC-30-A	-	Motorcraft® Silicone Gasket Remover	As Required
CU7Z-19B508-A	-	Flange Sealant	As Required
ZC-31-B	-	Motorcraft® Metal Surface Prep Wipes	As Required
TA-30	-	Motorcraft® Silicone Gasket and Sealant	As Required
VC-3-B	-	Motorcraft® Orange Concentrated Antifreeze/Coolant, 1 Gallon (All Markets Except Canada)	As Required
CVC-3-B2	-	Motorcraft® Orange Concentrated Antifreeze/Coolant, 1 Gallon (Canada Only)	As Required
Parts To Inspect And Replace Only If Necessary			
BE8Z-6268-C	-	Timing Belt	As Needed
DS7Z-9439-A	-	Intake Manifold Gasket	As Needed
DS7Z-9L438-A	-	Intercooler Gasket	As Needed
DS7Z-9P867-A	-	Intercooler Seal	As Needed
HYFS-094-YEC	-	Spark Plugs	As Needed
F2GZ-63600A58-A	-	Intermediate Shaft Bushing (Escape AWD Only)	As Needed
DS7Z-9E936-A	-	Throttle Body Gasket	As Needed
8W9Z-6C287-A	-	High Pressure Fuel Pump Tappet	As Needed
DS7Z-6B856-A	-	Oil Cooler Assembly	As Needed
BE8Z-9278-A	-	Oil Pressure Switch	As Needed
DS7Z-12029-B	-	Ignition Coil-On-Plug	As Needed
XS6E-6626-AA	-	Oil Pickup Tube O-ring Seal	As Needed
		Cylinder Block Dowels	

W701183-S300	Package Contains 4 Pieces		As Needed
W701350-S437	Package Contains 4 Pieces	Cylinder Block Pins	As Needed
DS7Z-9346-B	-	Bracket	As Needed
BM5Z-6L092-C	-	Crankcase Vent Oil Drain Tube	As Needed

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. For repairs covered by the NVLW, completion of the procedure outlined in this TSB does not require obtaining Prior Approval or completion of a Cost Cap.

Labor Times

Description	Operation No.	Time
2017-2019 Escape Front Wheel Drive (FWD) 1.5L: Retrieve DTCs, Diagnose And Replace The Short Block (Do Not Use With Any Other Labor Operations)	DR192375A	19.7 Hrs.
2017-2019 Escape All Wheel Drive (AWD) 1.5L: Retrieve DTCs, Diagnose And Replace The Short Block (Do Not Use With Any Other Labor Operations)	DR192375B	21.2 Hrs.
2014-2019 Fusion 1.5L: Retrieve DTCs, Diagnose And Replace The Short Block (Can Be Claimed With Labor Operation D Or E)	DR192375C	19.2 Hrs.
2014-2019 Fusion, 2017-2019 Escape Without Lane Departure: Additional Time To Check And Correct Front Toe (Can be Claimed With Labor Operations A-C)	DR192375D	0.6 Hrs.
2014-2019 Fusion With Lane Departure: Additional Time To Check And Correct Front Toe (Can be Claimed With Labor Operation C Only)	DR192375E	0.8 Hrs.

Repair/Claim Coding

Causal Part:	6009
Condition Code:	d8

Service Procedure

For repairs covered by the New Vehicle Limited Warranty, completion of the procedure outlined in this TSB does not require obtaining Prior Approval or completion of a Cost Cap.

NOTE: Part availability for this TSB is initially limited and Dealers may experience temporary backorders that will be filled as quickly as possible. Dealers are requested to order parts only when required to complete a customer vehicle repair.

1. With the engine at normal operating temperature, pressurize the cooling system to 138 kPa (20 psi) and hold for 5 hours. Refer to the Cooling System Pressure Test in Workshop Manual (WSM), Section 303-03, Diagnosis and Testing.
2. Did coolant system pressure drop more than 27.57 kPa (4 psi) after 5 hours?
 - (1). Yes - proceed to Step 3.
 - (2). No - this article does not apply. Refer to Powertrain Control/Emission Diagnosis (PC/ED) Manual for normal diagnostics.
3. Remove the spark plugs. Refer to WSM, Section 303-07.

4. Inspect for coolant in the cylinders due to an erosion, corrosion, pitting and flatness of the engine block surface. Is coolant present in any cylinders?

(1). Yes - remove the engine and replace the engine short block. Refer to WSM, Section 303-01.

• **NOTE: For AWD Escape only, it is necessary to remove the power transfer unit (PTU) for engine removal and installation. Refer to WSM, Section 308-07B.**

• **NOTE: Advise the customer that some odor may be present after the repair has been completed until the residual coolant dissipates from the exhaust.**

(2). No - this article does not apply. Refer to WSM, Section 303-01 for normal diagnostics.

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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.