



TECHNICAL SERVICE BULLETIN

2.7L EcoBoost - Cold Start Ticking/Tapping Or Rattle Type Noise

23-2356

23 February
2024

This bulletin supersedes 23-2049.

Model:

Ford 2019-2023 Edge	Engine: 2.7L EcoBoost
Lincoln 2019-2023 Nautilus	Engine: 2.7L EcoBoost

Summary

This article supersedes TSB 23-2049 to update the parts list.

Issue: Some 2019-2023 Edge/Nautilus vehicles equipped with a 2.7L EcoBoost engine may exhibit a ticking/tapping or rattle type noise from the top front cover area of the engine on initial start-up after a cold soak of 6 hours or more that may last for 2-5 seconds. This may be due to stuck internal components of the variable cam timing (VCT) unit. To correct the condition, follow the Service Procedure to replace the VCT units.

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

- 2019-2023 Edge/Nautilus
- 2.7L EcoBoost
- Customer symptom of ticking/tapping or rattle noise from the front cover area after a cold start

NOTE: Dealers should only order parts for customer vehicles that require repairs. Because of part constraints, dealers may experience situational short-term backorders on some parts. Customers should continue to drive vehicles while parts are on order.

Parts - All Vehicles - Required Parts

Service Part Number	Claim Quantity	Package Order Quantity	Number in Package	Description
CP9Z-6279-C	4	4	1	VCT Unit Bolts
FT4Z-6A340-A	1	1	1	Crankshaft Pulley Bolt
KU2Z-6731-A	1	1	1	Engine Oil Filter
JT4Z-6710-A	1	1	1	Oil Pan Press-In-Place Gasket
KT4Z-6710-A	1	1	1	Oil Pan Gasket
FT4Z-6626-A	1	1	1	Oil Pump Seal
FT4Z-6020-G	1	1	1	Coolant Pump Gasket
FT4Z-8507-C	1	1	1	Coolant Pump Seal
XW4Z-6700-B	1	1	1	Crankshaft Front Oil Seal
FT4Z-6020-K	1	1	1	Engine Front Cover Gasket 1
FT4Z-6020-H	1	1	1	Engine Front Cover Gasket 2
FT4Z-6020-J	1	1	1	Engine Front Cover Gasket 3
FT4Z-6020-A	1	1	1	Engine Front Cover Gasket 4

FT4Z-00815-C	1	1	1	Oil Seal
FT4Z-00815-A	1	1	1	Oil Gallery Seal
L1MZ-6256-C	2	2	1	VCT Unit - Intake
L1MZ-6C525-C	2	2	1	VCT Unit - Exhaust
BL3Z-9450-A	2	2	1	Catalytic Converter Gasket
FT4Z-6584-D	1	1	1	Left Valve Cover Gasket
FT4Z-6584-B	1	1	1	Right Valve Cover Gasket
FT4Z-6584-C	1	1	1	Left Valve Cover Gasket
FT4Z-6584-E	1	1	1	Right Valve Cover Gasket
1X4Z-9E936-AA	1	1	1	Throttle Body Gasket
DL3Z-19B596-B	1	1	1	A/C O-Ring Kit
DS7Z-19B596-A	1	1	1	A/C Gasket Kit
W712334-S440	4	2	3	Engine Mount Bracket-To-Engine Nuts
W717674-S439	2	1	4	Engine Mount-To-Frame Bolts
W710807-S442	1	1	4	Engine Mount-To-Frame Nut
W716457-S439	4	1	4	Subframe Bolts
W712458-S900	4	1	4	Exhaust Studs
W714265-S442	4	1	4	Catalytic Converter To Turbo Flange Nuts
VC-13DL-G		As Needed		Motorcraft® Yellow Prediluted Antifreeze/Coolant (All Markets Except Canada)
CVC-13DL-G		As Needed		Motorcraft® Yellow Prediluted Antifreeze/Coolant (Canada Only)
XO-5W30-Q1SP		As Needed		Motorcraft® SAE 5W-30 Synthetic Blend Motor Oil (All Markets Except Canada)
CXO-5W30-LSP6		As Needed		Motorcraft® SAE 5W-30 Super Premium Motor Oil (Canada Only)
XL-2		As Needed		Motorcraft® High Temperature Nickel Anti-Seize Lubricant
ZC-37-A		As Needed		Motorcraft® Wheel and Tire Cleaner
XL-1		As Needed		Motorcraft® Penetrating and Lock Lubricant
TA-26		As Needed		Motorcraft® Threadlock 262
YN-35		As Needed		Motorcraft® R-1234yf Refrigerant PAG Oil
TA-357		As Needed		Motorcraft® High Performance Engine RTV Silicone
ZC-30-A		As Needed		Motorcraft® Gasket Remover
ZC-31-B		As Needed		Motorcraft® Metal Surface Prep Wipes
PM-4-A		As Needed		Motorcraft® Metal Brake Parts Cleaner (Compliant With Low Volatile Organic Compound Requirements As

				Required In Some USA States)
PM-4-B		As Needed		Motorcraft® Metal Brake Parts Cleaner (Not Compliant With Volatile Organic Compound Requirements)
ZC-20		As Needed		Motorcraft® Engine Shampoo and Degreaser

Parts - Nautilus Only Parts

Service Part Number	Claim Quantity	Package Order Quantity	Number in Package	Description
W712961-S450B	1	1	4	Steering Shaft Coupler Bolt
W520215-S440	2	1	4	Tie Rod Nut
W712503-S440	2	2	1	Stabilizer Bar Nuts
W520214-S440	2	1	2	Ball Joint Nut
W500545-S439	2	1	4	Ball Joint Stud
W717016-S439	2	1	4	Rearward Subframe Bolt

Parts - All Vehicles - Parts To Inspect And Replace Only If Necessary

Service Part Number	Package Order Quantity	Number in Package	Description
FT4Z-6A832-C	If Needed	1	Oil Filter Housing And Stem
BR3Z-6C535-B	If Needed	1	Spark Plug Seals

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.

Warranty Status: Eligible under provisions of New Vehicle Limited Warranty (NVLW)/Emissions Warranty/Service Part Warranty (SPW)/Special Service Part (SSP)/Extended Service Plan (ESP) coverage. Limits/policies/prior approvals are not altered by a TSB. NVLW/Emissions Warranty/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
2019-2023 Edge AWD 2.7L EcoBoost, Nautilus FWD/AWD 2.7L EcoBoost: Replace All 4 VCT Units (Do Not Use With Any Other Labor Operations)	232356A	14.7 Hrs.

Repair/Claim Coding

Causal Part:	6C525
Condition Code:	42

Service Procedure

1. Replace all 4 VCT units. Refer to Workshop Manual (WSM), Section 303-01. Do not replace any additional VCT or engine timing-related components not included in the Parts List.

(1). All the VCT solenoid and spark plug tube seals require inspection, but not all require replacement.

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.