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2019

#### **TECHNICAL SERVICE BULLETIN** 2.7L/3.0L - Oil Consumption With DTC P0524 And/Or P06DD, Rough 2243 09 August Idle, Misfire And/Or White Or Blue Exhaust Smoke - Built On 1-Apr-2016 And Through 1-Jan-2017

This bulletin supersedes 17-2235. Reason for update: New Part/Procedure For Same Condition

Model:	
Ford 2016-2017 Edge	
2017 Fusion	
Lincoln 2016-2017 MKX	
2017 Continental	
2017 MKZ	

# Summary

This article supersedes TSB 17-2235 to update the Service Procedure and Parts List.

Issue: Some 2016-2017 Edge/MKX and 2017 Continental/Fusion/MKZ vehicles equipped with a 2.7L or 3.0L EcoBoost engine and built on 1-Apr-2016 and through 1-Jan-2017 may exhibit white or blue smoke from the exhaust, rough idle in neutral or park at normal operating temperature or after a hot restart. The vehicle may also exhibit an illuminated malfunction indicator lamp (MIL) with diagnostic trouble codes (DTCs) P0300, P0301, P0302, P0303, P0304, P0305, P0306 and/or P0316, P0524 and/or P06DD with excessive oil consumption. Oil consumption may be 1 liter (1 quart) in less than 4,800 km (3,000 miles). This may be due to the valve guides. To correct the condition, follow the Service Procedure to replace the cylinder heads.

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

- 2016-2017 Edge/MKX or 2017 Continental/Fusion/MKZ
- Built on 1-Apr-2016 and through 1-Jan-2017
- 2.7L/3.0L EcoBoost engine
- White or blue smoke from the exhaust, rough idle in neutral or park at normal operating temperature or after a hot restart

Part Number	Description	Quantity
FT4Z-6049-E	2.7L Cylinder Head, Left Side	1
FT4Z-6049-F	2.7L Cylinder Head, Right Side	1
FL3Z-6079-D	2.7L Cylinder Head Gasket Kit	1
GB8Z-6049-G	3.0L Cylinder Head Assembly, Left Side	1
GB8Z-6049-F	3.0L Cylinder Head Assembly, Right Side	1
GB8Z-6079-A	3.0L Cylinder Head Gasket Kit	1

Parts

FT4Z-6675-C	Engine Oil Pan Assembly	1
FT4Z-6731-A	Engine Oil Filter Assembly	1
W712503-S440	Sway Bar Mount Nut	2
W714265-S442	Catalytic Converter Nut	1
BL3Z-9450-A	Catalytic Converter Gasket	2
W712154-S439	Center Bearing Bolts	1
W717674-S439	Engine Mount And Bracket Bolt	1
W712334-S442	Engine Mount And Bracket Nut	1
W710807-S442	Engine Mount And Bracket Nut	1
W716779-S439	Transmission Mount Bolt	1
W520215-S440	Outer Tie Rod End Nut (Fusion/MKZ/Continental)	1
CCPZ-3B477-B	Wheel Hub Nut (Fusion/MKZ/Continental)	1
W500545-S439	Ball Joint Pinch Bolt (Fusion/MKZ/Continental)	1
W520214-S440	Ball Joint Pinch Bolt Nut (Fusion/MKZ/Continental)	1
4S4Z-3N324-AA	Halfshaft Retaining Strap (Fusion/MKZ/Continental)	1
W520102-S442	Halfshaft Retaining Strap Nut (Fusion/MKZ/Continental)	1
W715618-S437	Torque Converter Nut (Fusion/MKZ/Continental)	2
W716457-S439	Subframe Bolt	1
9W7Z- 19B596-A	A/C O-ring Kit	1
DS7Z-19B596-A	A/C O-ring Kit Assembly	1
W716383-S437	Turbo Mounting Stud	1
FT4Z-6A340-A	Crankshaft Pulley Bolt	1
CP9Z-6279-C	Variable Camshaft Timing Bolt (Fusion/MKZ/Continental)	1
9L8Z-6G004-F	Cylinder Head Temp Sensor Assembly (Fusion/MKZ/Continental)	1
CYFS-092-YPT	Spark Plug SP542 (Fusion/MKZ/Continental)	6
FT4Z-9J323-A	High Pressure Fuel Rail	1
FT4Z-9J323-B	High Pressure Fuel Rail	1
CU7Z-19B508-A	Flange Sealant (Fusion/MKZ/Continental)	1
BR3Z-6C535-B	Spark Plug Seals In Cam Cover	1
AA5Z-9C587-A	High Pressure Pump Tappet (Fusion/MKZ/Continental)	As Needed
CV6Z-7H426-B	Intermediate Shaft Seal (AWD, Fusion/MKZ/Continental)	1
CN1Z-7H424-B	Intermediate Shaft Seal (AWD)	1
7T4Z-1177-C	Right Side Intermediate Shaft Seal Kit (FWD, Fusion/MKZ/Continental)	1
BL3Z-9C995-A	Fuel Injector Seal Kit (6 Pieces Required, Package Contains 4)	2
F2GZ-7H469-B	Seal Kit (AWD)	1
W715623-S439	Brake Anchor Plate Bolt (Fusion/MKZ)	1
DG9Z-7G273-B	Halfshaft Washer (Fusion/MKZ)	1
W711960-S439	Driveshaft To RDU Bolts (Continental)	3

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5F9Z-4682-AA	Driveshaft To PTU Bolts (Continental)	3
F2GZ-4682-A	Driveshaft To PTU Bolt And Washer Assembly (Edge/MKX)	3
W790063-S900	Driveshaft To RDU Bolt And Washer Assembly (Edge/MKX)	
W716973-S439	PTU Side Center Bearing Bolts (Fusion/MKZ/Continental)	
W712961- S450B	Steering Shaft Bolt (Continental/Edge/MKX)	
W714878-S439	Steering Shaft Bolt (Fusion/MKZ)	1
W715932-S439	Strut To Knuckle Bolt (Continental)	1
W520517-S450	Strut To Knuckle Nut (Continental)	1
W715295-S439	Strut To Knuckle Bolt (Edge/MKX)	1
W520216-S440	Strut To Knuckle Nut (Edge/MKX)	1
FT4Z-6A895-A	Z-6A895-A Oil Pump Seal (Edge/MKX)	
BL3Z-6C683-B	Turbocharger Oil Supply Tube Oil Filter (Edge/MKX)	1
FT4Z-9448-B	Turbocharger Gasket (Edge/MKX)	1
VC-3-B	Motorcraft® Orange Concentrated Antifreeze/Coolant (All Markets Except Canada)	2
CVC-3-B2	Motorcraft® Orange Concentrated Antifreeze/Coolant (Canada Only)	2
XO-5W30-Q1SP	Motorcraft® SAE 5W-30 Synthetic Blend Motor Oil (All Markets Except Canada)	6
CXO-5W30- LSP6	Motorcraft® SAE 5W-30 Super Premium Motor Oil (Canada Only)	6
ZC-30-A	Motorcraft® Silicone Gasket Remover	1
PM-4-A	Motorcraft® Metal Brake Parts Cleaner	1
ZC-31-B	Motorcraft® Metal Surface Prep Wipes	1
TA-357	Motorcraft® High Performance Engine RTV Silicone	1
TA-24-B	Motorcraft® Thread Sealant with PTFE (Fusion/MKZ/Continental)	1
ZC-37-A	Motorcraft® Wheel and Tire Cleaner	1
XL-2	Motorcraft® High Temperature Nickel Anti-Seize Lubricant	1

**Warranty Status:** Eligible Under Provisions Of New Vehicle Limited Warranty Coverage Warranty/ESP coverage limits/policies/prior approvals are not altered by a TSB. Warranty/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

### Labor Times

Description	Operation No.	Time
2016-2017 Edge FWD 2.7L GTDI: Diagnose And Replace The Cylinder Head Assemblies (Can Be Claimed With Operations L Or M And N) (Do Not Use With Any Labor Operations Outside Of This Article)	192243A	25.4 Hrs.
2016-2017 Edge AWD 2.7L GTDI: Diagnose And Replace The Cylinder Head Assemblies (Can Be Claimed With Operations L Or M And N) (Do Not Use With Any Labor Operations Outside Of This Article)	192243B	26.0 Hrs.
2016-2017 MKX FWD 2.7L GTDI: Diagnose And Replace The Cylinder Head Assemblies (Can Be Claimed With Operations L Or M And N) (Do Not Use With Any Labor Operations Outside Of This Article)	192243C	25.8 Hrs.

2016-2017 MKX AWD 2.7L GTDI: Diagnose And Replace The Cylinder Head Assemblies (Can Be Claimed With Operations L Or M And N) (Do Not Use With Any Labor Operations Outside Of This Article)	192243D	26.5 Hrs.
2017 Continental FWD 2.7L GTDI: Diagnose And Replace Both Cylinder Head Assemblies (Can Be Claimed With Operations L Or M And N) (Do Not Use With Any Labor Operations Outside Of This Article)	192243E	24.4 Hrs.
2017 Continental AWD 2.7L GTDI: Diagnose And Replace Both Cylinder Head Assemblies (Can Be Claimed With Operations L Or M And N) (Do Not Use With Any Labor Operations Outside Of This Article)	192243F	25.5 Hrs.
2017 Continental AWD 3.0L GTDI: Diagnose And Replace Both Cylinder Head Assemblies (Can Be Claimed With Operations L Or M And N) (Do Not Use With Any Labor Operations Outside Of This Article)	192243G	25.8 Hrs.
2017 Fusion AWD 2.7L GTDI: Diagnose And Replace Both Cylinder Head Assemblies (Can Be Claimed With Operations L Or M?) (Do Not Use With Any Labor Operations Outside Of This Article)	192243H	24.9 Hrs.
2017 MKZ FWD 3.0L GTDI: Diagnose And Replace Both Cylinder Head Assemblies (Can Be Claimed With Operations L Or M And N) (Do Not Use With Any Labor Operations Outside Of This Article)	192243J	24.3 Hrs.
2017 MKZ AWD 3.0L GTDI: Diagnose And Replace Both Cylinder Head Assemblies (Can Be Claimed With Operations L Or M And N) (Do Not Use With Any Labor Operations Outside Of This Article)	192243K	24.5 Hrs.
Additional Time To Check And Correct Toe, Vehicles Without Lane Departure	192243L	0.6 Hrs.
Additional Time To Check And Correct Toe, Vehicles With Lane Departure	192243M	0.8 Hrs.
Additional Time When 360 Degree Camera Alignment Is Necessary	192243N	0.5 Hrs.

### **Repair/Claim Coding**

Causal Part:	6049
Condition Code:	42

# **Service Procedure**

1. Replace the cylinder heads. Refer to Workshop Manual (WSM), Section 303-01.

NOTE: During service and repair, achieving proper torque of the crankshaft pulley bolt is critical. Incorrect torque may allow the bolt to loosen resulting in timing gear failure and engine damage. Replacement of the bolt is critical to the repair. The bolt requires a 4 stage torque procedure. Hold the pulley using a universal holding tool OTC 4754 or equivalent. Refer to WSM, Section 303-01. The bolt torque procedure can be found in the crankshaft front seal removal and installation procedure or in the engine assembly procedure.

- Stage 1: Tighten to 225 Nm (166 lb.ft)
- Stage 2: Loosen 360°
- Stage 3: Tighten to 35 Nm (26 lb.ft)
- Stage 4: Tighten 270°

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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.