



TECHNICAL SERVICE BULLETIN

2.7L/3.0L - Oil Consumption With DTC P0524 And/Or P06DD, Rough Idle, Misfire And/Or White Or Blue Exhaust Smoke - Built On 1-Apr-2016 And Through 1-Jan-2017

17-2235

 17 November
2017

Model:

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

Issue: Some 2016-2017 Edge/MKX, 2017 Continental, and 2017 Fusion/MKZ vehicles equipped with a 2.7L or 3.0L gasoline turbocharged direct injection (GTDI) 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).

Action: Follow the Service Procedure steps to correct the condition.

Parts

Part Number	Description	Quantity
FT4Z-6006-B	2.7L Engine Assembly	1
GB8Z-6006-A	3.0L Engine Assembly	1
FT4Z-6049-E	2.7L Cylinder Head Assembly	1
FT4Z-6049-F	2.7L Cylinder Head Assembly	1
FL3Z-6079-D	2.7L Cylinder Head Gasket Kit	1
GB8Z-6079-A	3.0L Cylinder Head Gasket Kit	1
FT4Z-6675-C	Engine Oil Pan Assembly, 2.7L and 3.0L	1
FT4Z-6731-A	Filter Engine Oil Assembly	1
W712961-S442	Steering Shaft Bolt	1
W712503-S440	Sway Bar Mount Nut	2
W714265-S442	Catalytic Converter Nut	1
BL3Z-9450-A	Catalytic Converter Gasket	2
F2GZ-4682-A	Driveshaft to PTU Bolt and Washer Assembly	3
W790063-S900	Driveshaft to RDU Bolt and Washer Assembly	1
W712154-S439	Center Bearing Bolts	1
W715295-S439	Strut to Knuckle Bolt (package of 4)	1
W520216-S440	Strut to Knuckle Nut (package of 4)	1

W717674-S439	Engine Mount And Bracket Bolt (package of 2)	1
W712334-S442	Engine Mount And Bracket Nut (package of 4)	1
W710807-S442	Engine Mount and Bracket Nut	1
W716779-S439	Transmission Mount Bolt (package of 4)	1
FT4Z-6A340-A	Crank Pulley Bolt	1
FT4Z-9J323-A	High Pressure Fuel Rail	1
CP9Z-6279-C	Variable Camshaft Timing Bolt	1
W716383-S437	Turbo Mounting Stud	1
FT4Z-9J323-B	High Pressure Fuel Rail	1
W520215-S440	Outer Tie Rod End Nut	1
CCPZ-3B477-B	Wheel Hub Nut	1
W500545-S439	Ball Joint Pinch Bolt	1
W520214-S440	Ball Joint Pinch Bolt Nut	1
4S4Z-3N324-AA	Halfshaft Retaining Strap	1
W520102-S442	Halfshaft Retaining Strap Nut (package of 2)	1
W715618-S437	Torque Converter Nut	2
9L8Z-6G004-F	Cylinder Head Temp Sensor Assembly	1
CYFS-092-YPT	Spark Plug SP542	6
CU7Z-19B508-A	Flange Sealant	1
VC-3-B	Motorcraft® Orange Concentrated Antifreeze/Coolant	1
XO-5W30-QSP	Motorcraft® SAE 5W-30 Premium Synthetic Blend Motor	1
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	1
ZC-37-A	Motorcraft® Wheel And Tire Cleaner	1
XL-2	Motorcraft® High Temperature Nickel Anti-Seize Lubricant	1
W716457-S439	Subframe Bolt (package of 4)	1
7T4Z-1177-C	Right Side Intermediate Shaft Seal Kit (FWD)	1
F2GZ-7H469-B	Right Side Intermediate Shaft Seal Kit (AWD)	1
9W7Z-19B596-A	A/C O-ring Kit	1
DS7Z-19B596-A	A/C O-ring Kit	1
BL3Z-9C995-A	Fuel Injector Clip With O-ring	6
BL3Z-9229-C	Fuel Injector O-ring Kit	2

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
2017 MKZ FWD 3.0L GTDI: Diagnose And Replace The Long Block Engine Assembly (Can Be Claimed With Operations R Or S) (Do Not Use With Any Labor Operations Outside Of This Article)	172235A	15.1
2017 MKZ AWD 3.0L GTDI: Diagnose And Replace The Long Block Engine Assembly (Can Be Claimed With Operations R Or S) (Do Not Use With Any Labor Operations Outside Of This Article)	172235B	15.6
2017 MKZ AWD 3.0L GTDI: Diagnose And Replace Both Cylinder Head Assemblies (Can Be Claimed With Operations R Or S) (Do Not Use With Any Labor Operations Outside Of This Article)	172235C	20.5
2017 MKZ FWD 3.0L GTDI: Diagnose And Replace Both Cylinder Head Assemblies (Can Be Claimed With Operations R Or S) (Do Not Use With Any Labor Operations Outside Of This Article)	172235D	20.3
2016-2017 MKX/Edge AWD 2.7L GTDI: Diagnose And Replace The Long Block Engine Assembly (Can Be Claimed With Operations R Or S And T) (Do Not Use With Any Labor Operations Outside Of This Article)	172235E	15.7
2016-2017 MKX/Edge AWD 2.7L GTDI: Diagnose And Replace Replace Both Cylinder Head Assemblies (Can Be Claimed With Operations R Or S And T) (Do Not Use With Any Labor Operations Outside Of This Article)	172235F	21
2016-2017 MKX/Edge FWD 2.7L GTDI: Diagnose And Replace The Long Block Engine Assembly (Can Be Claimed With Operations R Or S And T) (Do Not Use With Any Labor Operations Outside Of This Article)	172235G	15.3
2016-2017 MKX/Edge FWD 2.7L GTDI: Diagnose And Replace The Cylinder Head Assemblies (Can Be Claimed With Operations R Or S And T) (Do Not Use With Any Labor Operations Outside Of This Article)	172235H	20.9
2017 Fusion AWD 2.7L GTDI: Diagnose And Replace The Long Block Engine Assembly (Can Be Claimed With Operations R Or S) (Do Not Use With Any Labor Operations Outside Of This Article)	172235J	15.1
2017 Fusion AWD 2.7L GTDI: Diagnose And Replace Both Cylinder Head Assemblies (Can Be Claimed With Operations R Or S) (Do Not Use With Any Labor Operations Outside Of This Article)	172235K	20.1
2017 Continental FWD 2.7L GTDI: Diagnose And Replace The Long Block Engine Assembly (Can Be Claimed With Operations R Or S) (Do Not Use With Any Labor Operations Outside Of This Article)	172235L	14.3
2017 Continental AWD 2.7L GTDI: Diagnose And Replace The Long Block Engine Assembly (Can Be Claimed With Operations R Or S) (Do Not Use With Any Labor Operations Outside Of This Article)	172235M	15
2017 Continental AWD 2.7L GTDI: Diagnose And Replace Both Cylinder Head Assemblies (Can Be Claimed With Operations R Or S) (Do Not Use With Any Labor Operations Outside Of This Article)	172235N	19.9
2017 Continental FWD 2.7L GTDI: Diagnose And Replace Both Cylinder Head Assemblies (Can Be Claimed With Operations R Or S) (Do Not Use With Any Labor Operations Outside Of This Article)	172235O	19.6
2017 Continental AWD 3.0L GTDI: Diagnose And Replace The Long Block Engine Assembly (Can Be Claimed With Operations R Or S) (Do Not Use With Any Labor Operations Outside Of This Article)	172235P	15.5
2017 Continental AWD 3.0L GTDI: Diagnose And Replace Both Cylinder Head Assemblies (Can Be Claimed With Operations R Or S) (Do Not Use With Any Labor Operations Outside Of This Article)	172235Q	20.3

Additional Time To Check And Correct Toe Vehicles Without Lane Departure.	172235R	0.6
Additional Time To Check And Correct Toe Vehicles With Lane Departure.	172235S	0.8
2016-2017 MKX: Additional Time When 360 Degree Camera Alignment Is Necessary.	172235T	0.5

Repair/Claim Coding

Causal Part:	6049
Condition Code:	42

Drive	Tool
1/4"	6 mm Deep Well Socket
1/4"	7 mm Deep Well Socket
1/4"	8 mm Deep Well Socket
1/4"	10 mm Deep Well Socket
1/4"	11 mm Deep Well Socket
1/4"	13 mm Deep Well Socket
1/4"	15 mm Deep Well Socket
1/4"	5 mm Short Socket
1/4"	10 mm Flex Socket
1/4"	10 mm Mid Length Socket
1/4"	13 mm Mid Length Socket
1/4"	15 mm Mid Length Socket
1/4"	1.5" Extension
1/4"	2" Extension
1/4"	4" Extension
1/4"	6" Extension
1/4"	11" Extension
1/4"	14" Extension
1/4"	Long Handle Ratchet
1/4"	Air Ratchet
1/4"	Torque Wrench
3/8"	8 mm Deep Well Socket
3/8"	10 mm Deep Well Socket
3/8"	11 mm Deep Well Socket
3/8"	13 mm Deep Well Socket
3/8"	15 mm Deep Well Socket
3/8"	2" Extension
3/8"	4" Extension
3/8"	6" Extension
3/8"	11" Extension

3/8"	14" Extension
3/8"	Long Handle Ratchet
3/8"	6 mm Allen Socket
3/8"	Air Ratchet
3/8"	17 mm Crows Foot
3/8"	15 mm 12-Point Deep Well Socket
3/8"	E8 Torx Socket
1/2"	13 mm Deep Well Impact Socket
1/2"	15 mm Deep Well Impact Socket
1/2"	18 mm Deep Well Impact Socket
1/2"	21 mm Deep Well Impact Socket
1/2"	32 mm Deep Well Impact Socket
1/2"	24 mm Short Socket
1/2"	Long Handle Ratchet
1/2"	Impact Wrench
1/2"	Torque Wrench
1/2"	Long Breaker Bar
	10 mm Combination Wrench
	13 mm Combination Wrench
	15 mm Combination Wrench
	17 mm Combination Wrench
	18 mm Combination Wrench
	19 mm Combination Wrench
	7 mm Ratchet Wrench
	8 mm Ratchet Wrench
	10 mm Ratchet Wrench
	13 mm Ratchet Wrench
	15 mm Ratchet Wrench
	18 mm Ratchet Wrench
	Small Trim Tool
	Large Trim Tool
	Hose Clamp Pliers
	Pliers
	Long Pry Bar
	17" Punch
	20 Ounce Hammer
	Steering Wheel Tool
	Magnet

Bungee Cords
Seal Pick
Marker
2" Roloc Disc
1/2" Drill
Plastic Scraper
Air Blow Gun
Phillips Screwdriver
Engine Spreader Bar 303-1246
Lift Eyes 313-1634
Torque Converter Retainer 307-346
Disconnect Tool 307-569
Installer Halfshaft 204-161
Front Wheel Hub Remover 205D070

Service Procedure

1. Check the vehicle build date. Was the vehicle built on 1-Apr-2016 and through 1-Jan-2017?
 - (1). Yes - proceed to Step 2.
 - (2). No - this article does not apply. Refer to the Powertrain Controls/Emissions Diagnosis (PC/ED) manual for normal diagnostics.
2. Connect the Ford Integrated Diagnostic System (IDS) or Ford J2534 Diagnostic Software (FJDS) to the data link connector (DLC) and check for DTCs. Are DTCs P0524 and/or P06DD stored in the powertrain control module (PCM) memory?
 - (1). Yes - continue to Step 3.
 - (2). No - replace the cylinder heads. Refer to Workshop Manual (WSM), Section 303-01. The repair is complete.
3. Check the engine oil level on the engine oil level indicator. Refer to WSM, Section 303-01. Is the oil level within the minimum and maximum marks on the indicator?
 - (1). Yes - proceed to Step 4.
 - (2). No - add engine oil as needed to achieve the correct oil level on the indicator. Proceed to Step 4.
4. Run the engine until it reaches normal operating temperature. Using IDS or FJDS monitor the engine oil pressure. Refer to WSM, Section 303-01. Is the oil pressure within specification?
 - (1). Yes - replace the cylinder heads. Refer to WSM, Section 303-01.
 - (2). No - replace the long block engine assembly. Refer to WSM, Section 303-01.

Prior approval and cost cap must be completed as required; however, follow the diagnostics repair procedure in this article to determine correct repair.

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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.