



**18-2237**  
29 August  
2018

## TECHNICAL SERVICE BULLETIN

### 2.7L EcoBoost - Oil Consumption, Rough Idle, Misfire And/Or White Or Blue Exhaust Smoke - Built On 1-Apr-2016 And Through 1-Jan-2017

This bulletin supersedes 17-2077. Reason for update: Incorrect or Missing Parts

#### Model:

<b>Ford</b> 2016-2017 F-150
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#### Summary

This article supersedes TSB 17-2077 to update the Service Procedure and Part List.

**Issue:** Some 2016-2017 F-150 vehicles equipped with a 2.7L 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) and diagnostic trouble codes (DTCs) P0300, P0301, P0302, P0303, P0304, P0305, P0306, P0316, P0524 and/or P06DD with the 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 this condition.

#### Parts

Part Number	Description	Quantity
FL3Z-6049-J	Cylinder Head Assembly, Left Side	1
FL3Z-6049-K	Cylinder Head Assembly, Right Side	1
FL3Z-6079-D	Cylinder Head Gasket Kit	1
FL3Z-6675-B	Engine Oil Pan Assembly	1
CP9Z-6279-C	Variable Camshaft Timing Bolt	4
BL3Z-9229-C	Fuel Injector O-ring Kit	2
CYFS- 092-YPT	Spark Plug	6
W714870-S430	Turbo Mount Nut	4
W716117-S437	Turbo Mounting Bolt	2
W716383-S437	Turbo Mounting Stud	1
BL3Z-6C683-A	Filter Assembly	1
FL3Z-5C226-A	Exhaust Gasket	2
FT4Z-6A340-A	Crank Pulley Bolt	1
FT4Z-9J323-A	High Pressure Fuel Rail, Right Side	1
FT4Z-9J323-B	High Pressure Fuel Rail, Left Side	1
FT4Z-8507-C	Water Pump Gasket	1
9L8Z-6G004-E	Cylinder Head Temperature Sensor	1
FT4Z-6731-A	Engine Oil Filer Assembly	1
CU7Z-19B508-A	Flange Sealant	1
PM-4-A	Motorcraft® Metal Brake Parts Cleaner	1
TA-24-B	Motorcraft® Thread Sealant with PTFE	1
XL-2	Motorcraft® High Temperature Nickel Anti-Seize Lubricant	1
TA-357	Motorcraft® High Performance Engine RTV Silicone	1

ZC-30-A	Motorcraft® Silicone Gasket Remover	1
ZC-31-B	Motorcraft® Metal Surface Prep Wipes	1
VC-3-B	Motorcraft® Orange Concentrated Antifreeze/Coolant	1
XO-5W30-Q1SP	Motorcraft® SAE 5W-30 Synthetic Blend Motor Oil (up to 6 quarts)	6

**Warranty Status:** Eligible Under Provisions Of New Vehicle Limited Warranty Coverage And Emissions 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 F-150 4X2 2.7L GTDI: Retrieve DTCs And Replace Both (2) Cylinder Heads Includes Time To Perform Road Tests (Do Not Use With Any Other Labor Operations)	182237A	23.3 Hrs.
2016-2017 F-150 4X4 2.7L GTDI: Retrieve DTCs And Replace Both (2) Cylinder Heads Includes Time To Perform Road Tests (Do Not Use With Any Other Labor Operations)	182237B	24.2 Hrs.

### Repair/Claim Coding

Causal Part:	6049
Condition Code:	42

### 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 Control/Emissions Diagnosis (PC/ED) Manual for normal diagnostics.

2. Does the vehicle exhibit any of the following conditions/symptoms: white or blue smoke from the exhaust, rough idle, an illuminated MIL and DTCs P0300, P0301, P0302, P0303, P0304, P0305, P0306, P0316, P0524 and/or P06DD with the excessive oil consumption?

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

- During service and repair achieving proper torque of the crankshaft pulley bolt is critical. Incorrect torque may allow the bolt to loosen resulting in the timing gear breaking 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: 225 Nm (166 lb.ft)

- Stage 2: Loosen 360°

- Stage 3: 35 Nm (26 lb.ft)

- Stage 4: Tighten 270°.

(2). No - this article does not apply. Refer to the PC/ED Manual for normal diagnostics.

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