



TECHNICAL SERVICE BULLETIN

2.7L/3.0L EcoBoost - Oil Pan Leaking

22-2181

17 October
2022

This bulletin supersedes 19-2332.

Model:

Ford 2015-2017 Edge	Engine: 2.7L
2017 Fusion	Engine: 2.7L
Lincoln 2017 Continental	Engine: 2.7L Engine: 3.0L
2016-2017 MKX	Engine: 2.7L
2017 MKZ	Engine: 3.0L

Summary

This article supersedes TSB 19-2332 to update the part list.

Issue: Some 2015-2017 Edge, 2016-2017 MKX, 2017 Fusion/MKZ/Continental vehicles equipped with a 2.7L EcoBoost or 3.0L EcoBoost engine vehicles may exhibit an oil leak from the engine oil pan RTV seal. This may be due to a lack of RTV adhesion. This article includes detailed steps to achieve proper RTV adhesion. To correct the condition, follow the Service Procedure steps to replace the oil pan.

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

- One of the following vehicle lines:
 - 2015-2017 Edge
 - 2016-2017 MKX
 - 2017 Continental/Fusion/MKZ
- 2.7L/3.0L engine
- Oil leak from the oil pan RTV seal

Parts

Service Part Number	Quantity	Description	Unit of Issue	Piece Quantity
KU2Z-6731-A	1	Oil Filter Element And O-Ring Seals	1	1
9W7Z-19B596-A	1	Seal Kit - A/C Compressor Gasket And O-Ring, 1/2 Inch (Edge/MKX)	1	1
DL3Z-19B596-B	1	Seal Kit - A/C Compressor Gasket And O-Ring, 5/8 Inch (Continental 2.7L)	1	1
DS7Z-19B596-A	1	Seal Kit - A/C Compressor Gaskets 8 mm, 1/2 Inch, 5/8 Inch (All Models)	1	1
HL3Z-19B596-A	1	Seal Kit - A/C O-Rings - 3/4 Inch, 1/2 Inch, 5/8 Inch And 3/8 Inch (Fusion/MKZ And Continental 3.0L)	1	1
W714265-S442	1	Left Catalytic Converter Nuts	4	2
BL3Z-9450-A	1	Catalytic Converter Gasket	1	1
FT4Z-6626-A	1	Oil Pump Seal	1	1
FT4Z-6675-C	1	Oil Pan	1	1

ZC-30-A	As Needed	Motorcraft® Gasket Remover		
ZC-31-B	As Needed	Motorcraft® Metal Surface Prep Wipes		
TA-357	As Needed	Motorcraft® High Performance Engine RTV Silicone		
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)		
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 (All Markets Except Canada)		
CXC-66-A	As Needed	Motorcraft® Engine Shampoo (Canada Only)		

Parts

Parts To Inspect And Replace Only If Necessary

Service Part Number	Quantity	Description
FT4Z-6A832-C	If Needed	Oil Filter And Cap Assembly Kit

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)/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.

Labor Times

Description	Operation No.	Time
2017 Continental 2.7L/3.0L EcoBoost: Inspect And Replace The Engine Oil Pan (Do Not Use With Any Labor Operations Outside Of This Article) (Can Be Claimed With D Or E And F)	222181A	3.2 Hrs.
2015-2017 Edge, 2016-2017 MKX 2.7L EcoBoost: Inspect And Replace The Engine Oil Pan (Do Not Use With Any Labor Operations Outside Of This Article) (Can Be Claimed With D Or E And F)	222181B	3.5 Hrs.
2017 Fusion 2.7L EcoBoost, 2017 MKZ 3.0L EcoBoost: Inspect And Replace The Engine Oil Pan (Do Not Use With Any Labor Operations Outside Of This Article) (Can Be Claimed With D Or E And F)	222181C	3.4 Hrs.
2015-2017 Edge, 2016-2017 MKX, 2017 Continental/Fusion/MKZ: Additional Time To Check And Correct Toe Vehicles Without Lane Departure	222181D	0.6 Hrs.
2015-2017 Edge, 2016-2017 MKX, 2017 Continental/Fusion/MKZ: Additional Time To Check And Correct Toe Vehicles With Lane Departure	222181E	0.8 Hrs.

Repair/Claim Coding

Causal Part:	6675
Condition Code:	D8

Service Procedure



CAUTION: 2015-2017 model year vehicles are not compatible with the press-in-place gasket oil pan. Installation of the press-in-place gasket oil pan results in engine damage.

1. Remove and discard the oil pan and oil pump seal. It is recommended to allow the crankcase to drain overnight to prevent contamination of the engine sealing surface. Refer to the Workshop Manual (WSM), Section 303-01.

NOTE: Cleaning and preparation of the engine sealing surface is critical for proper adhesion of the new oil pan. Improperly cleaned and prepared sealing surfaces results in an oil leak.

2. Thoroughly clean the engine sealing surface using Motorcraft® Silicone Gasket Remover and a plastic scraper. Allow the gasket remover to set for several minutes after application to aid in removal of the RTV sealant.

(1). The engine block skirt stiffener sealing surface must be clean and free of any residual RTV. Do not use metal scrapers, wire brushes, or rotary tools of any type on the engine sealing surface. These tools damage the sealing surface including scratches or gouges that create leak paths. A second application of Motorcraft® Silicone Gasket Remover may be required.

NOTE: When cleaning the engine sealing surface it must be wiped clean using a lint free cloth. Spraying the surface with brake cleaner and air drying does not adequately remove the oil and other contaminants from the surface and may leave residue from the brake cleaner that may interfere with RTV adhesion.

3. Use a lint free towel and Motorcraft® Metal Brake Parts Cleaner to remove all residual sealant and oil from the engine sealing surface until a clean lint free towel no longer shows any residual oil when wiping the surface. (Figures 1-2)

(1). Use only Motorcraft® Metal Brake Parts Cleaner to clean the engine sealing surface. Some unapproved brake parts cleaners contain chemicals that inhibit RTV adhesion or may evaporate without removing all of the residual oil from the sealing surface resulting in a repeat leak condition.

Figure 1



Figure 2



NOTE: Motorcraft® Engine Shampoo and Degreaser removes residual brake cleaner which can cause RTV failure and prepares the surface for the Motorcraft® Metal Surface Prep Wipes. The use of any other brand engine shampoo or engine cleaner can compromise the sealing surface and lead to failure of the RTV seal and a fluid leak.

4. Use Motorcraft® Engine Shampoo and Degreaser to clean the surface of any remaining oil contamination and prepare the surface for the Motorcraft® Metal Surface Prep Wipes. Dry the surface with a lint free towel.

NOTE: Do not use Motorcraft® Metal Surface Prep Wipes on the replacement oil pan. Using Motorcraft® Metal Surface Prep Wipes on the oil pan contaminates the treated oil pan sealing surface causing reduced RTV adhesion and a potential oil leak.

5. Wipe the metal engine block skirt stiffener sealing surface using Motorcraft® Metal Surface Prep Wipes. Thoroughly coat the surface with the fluid. Discard the wipes after a single use.

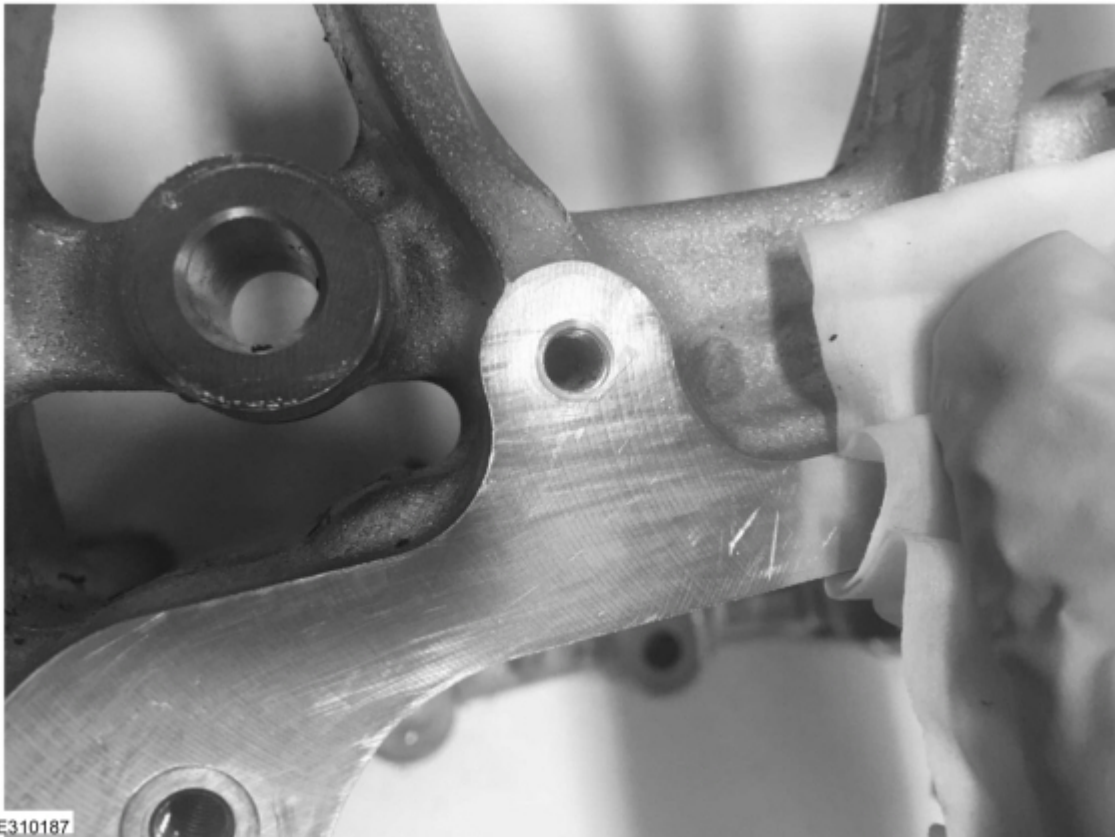
(1). Motorcraft® Metal Surface Prep Wipes create a conversion coating providing an improved base for RTV sealing. The wipes use a water-based, slightly acidic solution that etches and bonds to the metal providing a microscopic layer for the RTV to adhere to. If the surface is oily, the solution beads and the surface is not properly treated. If the solution beads when applied to the sealing surface, clean the surface again and reapply the Motorcraft® Metal Surface Prep Wipes. (Figures 3-4)

NOTE: If the sealing surface or an area of the sealing surface becomes contaminated after it has been prepared, use a lint-free towel soaked in isopropyl alcohol to clean the area. Prepare the area again using Motorcraft® Metal Surface Prep Wipes.

Figure 3



Figure 4



6. Allow the surface to air dry for approximately 2 minutes.

(1). Do not dry the surface using any other method. Attempting to dry the surface may result in sealing surface contamination that may cause oil leaks.

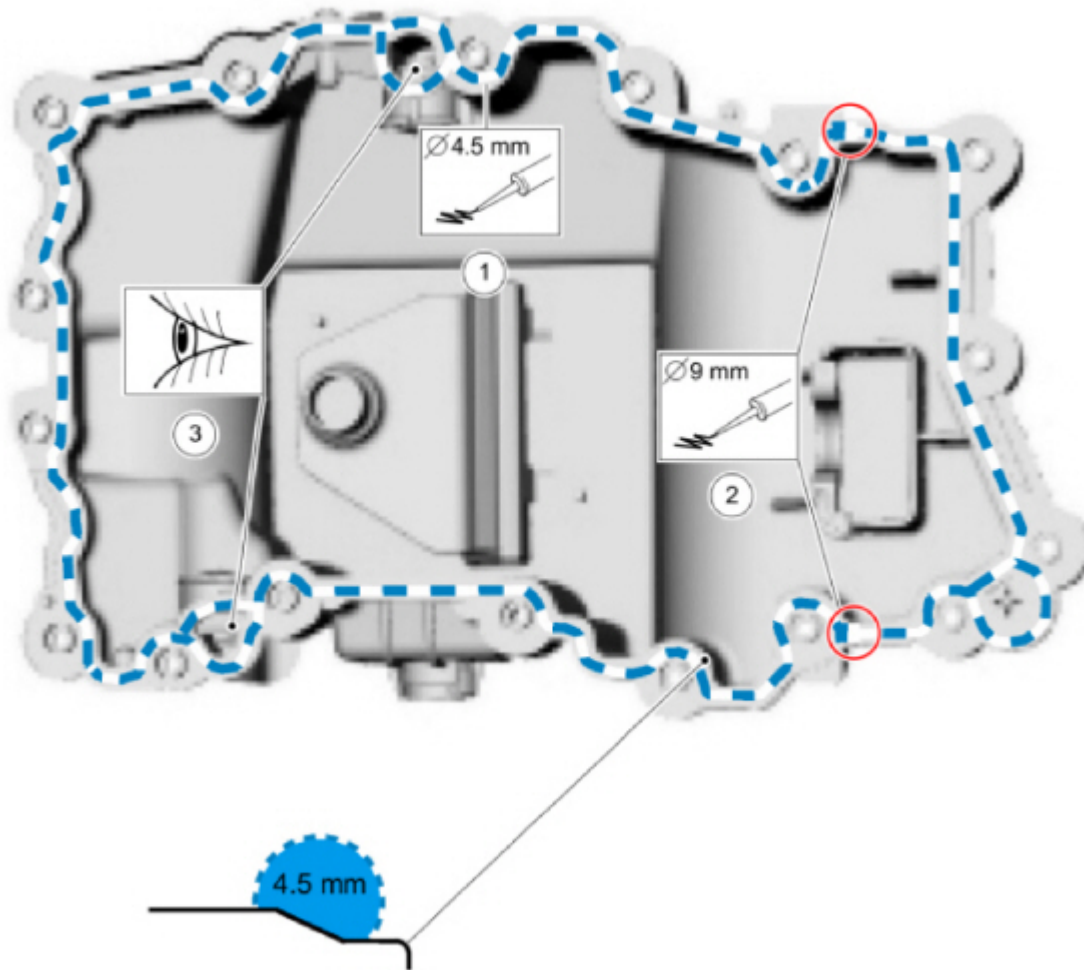
7. Install the new oil pump seal. Refer to the WSM, Section 303-01.

NOTE: The oil pan must be installed within 10 minutes of applying the RTV.

8. Apply a 4.5 mm (0.18 in) bead of Motorcraft® High Performance Engine RTV Silicone to the new oil pan. The RTV bead must be applied to straddle the step chamfer and sealing face. (Figures 5-6)

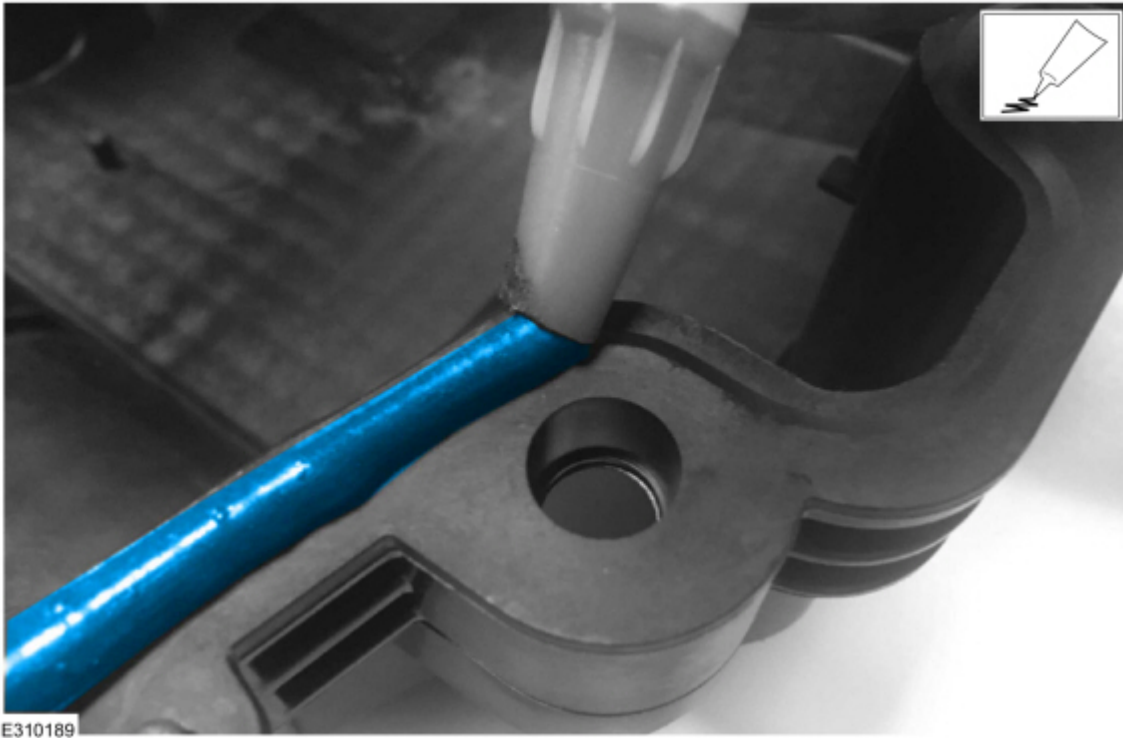
(1). Using too little sealant may result in oil leaks and using too much sealant may result in oil contamination and engine damage.

Figure 5



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Figure 6



- 9.** Apply a 9 mm (0.35 in) bead of Motorcraft® High Performance Engine RTV Silicone to the engine front cover-to-cylinder block joint areas on the new oil pan as shown in Figure 5.
- 10.** Install the new oil pan. Refer to the WSM, Section 303-01.

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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.