



TECHNICAL SERVICE BULLETIN

2.7/3.0L EcoBoost - Engine Oil Leak From The Crankshaft Rear Seal With Retaining Plate

24-2331
23 October
2024

Model:

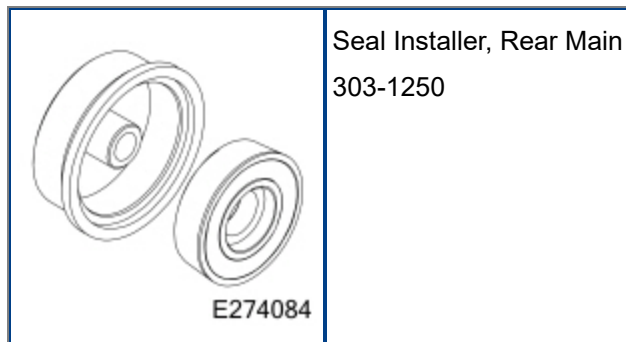
Ford 2021-2024 Bronco	Engine: 2.7L EcoBoost Engine: 3.0L EcoBoost
2018-2024 Edge	Engine: 2.7L EcoBoost
2020-2025 Explorer	Engine: 3.0L EcoBoost
2018-2024 F-150	Engine: 2.7L EcoBoost
2024 Ranger	Engine: 2.7L EcoBoost Engine: 3.0L EcoBoost
Lincoln 2020-2025 Aviator	Engine: 3.0L EcoBoost
2018-2023 Nautilus	Engine: 2.7L EcoBoost

Issue: Some 2018-2024 F150/Edge, 2018 MKX, 2019-2023 Nautilus, 2020-2025 Explorer/Aviator, 2021-2024 Bronco, and 2024 Ranger vehicles equipped with a 2.7L EcoBoost or a 3.0L EcoBoost engine may exhibit an engine oil leak from the crankshaft rear seal with retaining plate. This may be due to incorrect WSM installation instructions. To correct this condition, use this information along with the Service Procedure located within the WSM, Section 303-01 to correctly replace the crankshaft rear seal with retaining plate.

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

- One of the following vehicles:
 - 2018-2024 F150
 - 2018-2024 Edge
 - 2018 MKX
 - 2019-2023 Nautilus
 - 2020-2025 Explorer/Aviator
 - 2021-2024 Bronco
 - 2024 Ranger
- Equipped with one of the following engines:
 - 2.7L EcoBoost
 - 3.0L EcoBoost
- Engine oil leak coming from the crankshaft rear seal with retaining plate

Special Tool(s)



Warranty Status: Information Only.

Repair/Claim Coding

Causal Part:	IN
Condition Code:	-1

Service Procedure

Do not attempt to replace the rear crankshaft seal by itself. Order and install the rear crankshaft seal with retaining plate assembly (service base part# 6335).

Prior to installing the crankshaft rear seal and retaining plate, the crankshaft surface must be cleaned using a dust-free cloth and Motorcraft® Metal Brake Parts Cleaner. Do not use abrasive materials as this can damage the sealing surface and affect the performance of the rear crankshaft seal.

The engine block sealing surface must be completely clean and free of oil and debris in preparation for RTV silicone application. Clean the metal surface as outlined in the RTV Sealing Surface Cleaning and Preparation procedure. Refer to the WSM, Section 303-00 Engine System > General Information, General Procedures > RTV Sealing Surface Cleaning and Preparation.

During installation of the crankshaft rear seal and retaining plate onto the crankshaft:

- Lubricate the essential special service tool (ESST) outer surface, rear main seal inner surface, and the crankshaft sealing surface with new engine oil.
- Once the crankshaft rear seal and retaining plate assembly is in place and during the removal of the ESST, closely inspect for seal roll. If a seal is rolled it will create an oil leak. Refer to Figure 1 for an example of a correctly installed seal, Figure 2 for an example of an incorrectly installed seal that has a partial roll, and Figure 3 for an example of a incorrectly installed seal with a fully rolled seal around the entire sealing surface.
- Rear crankshaft seal with retainer plates are one-time-use parts. If the rear crankshaft seal becomes rolled during installation, the rear crankshaft seal with retaining plate assembly must be discarded.

Figure 1

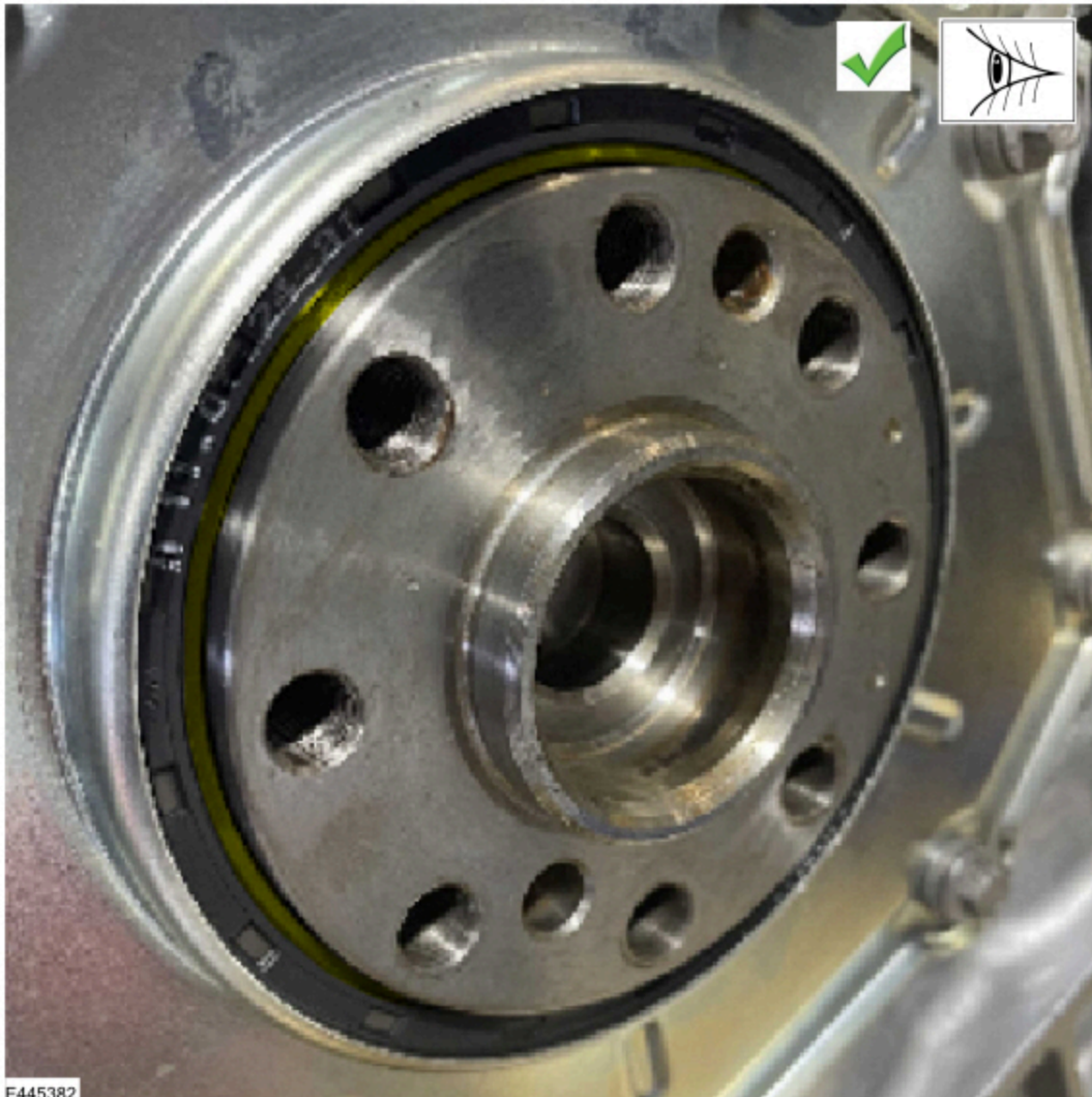


Figure 2



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Figure 3



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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.