

TECHNICAL SERVICE BULLETIN

2017-2019 Fusion/Mondeo- 2.0L EcoBoost - Rattle Noise At The Transmission Bellhousing Area

23-2198

12 July 2023

Model:

Ford 2017-2019 Fusion	Engine: 2.0L TIVCT GTDI T/C 240PS GAS (EN R9) Transmission/Transaxle: 6 SPD AUTO TRANS 6F MID-RANGE (TR W6)
2017-2019 Mondeo	Engine: 2.0L TIVCT GTDI T/C 240PS GAS (EN R9) Transmission/Transaxle: 6 SPD AUTO TRANS 6F MID-RANGE (TR W6)

Issue: Some 2017-2019 Fusion/Mondeo vehicles equipped with a 2.0L EcoBoost engine may exhibit a rattle noise from the transmission bellhousing area. This may be more noticeable at idle. This may be due to a flexplate crack around the mounting area. To correct the condition, follow the Service Procedure to replace the flexplate, transmission fluid pump, and torque converter.

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

- 2017-2019 Fusion/Mondeo
- 2.0L EcoBoost engine
- Rattle noise from the transmission bellhousing area

Parts

Service Part Number	Quantity	Description
1S7Z-6375-D	1	FLEXPLATE
1L5Z-6379-AA	6	FLEXPLATE BOLTS
W712961-S450B	1	STEERING COLUMN SHAFT COUPLER BOLT
W520215-S440	2	TIE ROD END NUTS
W705606-S440	2	STABILIZER BAR LINK LOWER NUTS
W500545-S439	2	BALL JOINT PICH BOLTS
W520214-S442	2	BALL JOINT PINCH BOLT NUTS
W716457-S439	4	REARWARD AND FORWARD FRONT SUBFRAME BOLTS
4S4Z-3N324-AA	1	HALFSHAFT BRACKET
W520102-S442	2	HALFSHAFT BRACKET NUTS
FB5Z-6840-A	1	OIL FILTER ADAPTER GASKET
W715618-S437	4	TORQUE CONVERTER NUTS
9L8Z-7A103-J	1	TRANSMSSION FLUID PUMP
DG9Z-7902-H	1	TORQUE CONVERTER
BB5Z-4B422-C	1	LH HALFSHAFT CIRCLIP
9L8Z-1177-G	1	LH-HALFSHAFT SEAL
BB5Z-1S177-C	1	RH-HALFSHAFT SEAL-2WD
9L8Z-7A248-B	4	CLUTCH FEED SEALS-SMALL
9L8Z-7A248-C	1	CLUTCH FEED SEAL-LARGE
BB5Z-7A098-E	1	TRANSMISSION FLUID FILTER
XO-5W30-Q1SP	1	5W30 ENGINE OIL

XT-10-QLVC	12	TRANSMISSION FLUID
XL-5-A	1	MULTI PURPOSE GREASE SPRAY
TA-25-B	1	THREADLOCK AND SEALER
XL-2	1	HIGH TEMP NICKEL ANTI-SEIZE LUBRICANT
TA-29	1	ULTRA SILICONE SEALANT
W712146-S437	1	COOLER LINE BOLT
W716200-S437	1	COOLER LINE BOLT STUD
5F9Z-4682-AA	3	DRIVESHAFT TO PTU AND RDU BOLTS
W520103-S442	2	TAILPIPE NUTS
CV6Z-9450-E	1	TAILPIPE GASKET
W714265-S442	2	CATALYTIC CONVERTER-TO-TURBOCHARGER NUTS
EJ7Z-6L612-A	1	CATALYTIC CONVERTER-TO-TURBOCHARGER GASKET
W718250-S439	5	UPPER AND LOWER PTU BOLTS
9L8Z-1177-C	1	REAR HALFSHAFT SEAL-4WD
CCPZ-3B477-B	1	REAR HALFSHAFT NUT
DG9Z-7G273-B	1	REAR HALFSHAFT WASHER
CV6Z-7086-B	1	PTU CPMPRESSION SEAL
1S7Z-6840-AA	1	OIL FILTER ADAPTER GASKET
W500635-S439	5	UPPER AND LOWER PTU BOLTS
CV6Z-5A231-C	1	CATALYTIC CONVERTER TO TURBOCHARGER CLAMP
BB5Z-6L612-A	1	CATALYTIC CONVERTER TO TURBOCHARGER GASKET
R/AUROFE53/MS/205	1	Engine Oil 5W-30 YPF Elaion Auro FE 530 (Spec Ford: WSS-M2C913-D)
EM5G/6714/AA/	1	ENGINE OIL FILTER

Labor Times

Description	Operation No.	Time
2015-2016 Fusion FWD and AWD 2.0L EcoBoost: Retrieve DTCs, Perform Inspections (Pass) Includes Time To Remove And Install Starter (Do Not Use With Any Other Labor Operations)	232198A	1.8 Hrs.
2015-2016 Fusion FWD 2.0L EcoBoost: Retrieve DTCs, Perform Inspections (Fail) Replace The Flexplate, Torque Convertor, Pump And Filter Includes Time To Remove And Install The Transmission (Can be Claimed With Operation N Or P)	232198B	9.4 Hrs.
2015-2016 Fusion AWD 2.0L EcoBoost: Retrieve DTCs, Perform Inspections (Fail) Replace The Flexplate, Torque Convertor, Pump And Filter Includes Time To Remove And Install The Transmission (Can be Claimed With Operation N Or P)	232198C	11.4 Hrs.
2017-2018 Fusion FWD and AWD 2.0L EcoBoost: Retrieve DTCs, Perform Inspections (Pass) Includes Time To Remove And Install Starter (Do Not Use With Any Other Labor Operations)	232198G	1.9 Hrs.
2017-2018 Fusion FWD 2.0L EcoBoost: Retrieve DTCs, Perform Inspections (Fail) Replace The Flexplate, Torque Convertor, Pump And Filter Includes Time To Remove And Install The Transmission (Can be Claimed With Operation N Or P)	232198H	9.9 Hrs.
2017-2018 Fusion AWD 2.0L EcoBoost: Retrieve DTCs, Perform Inspections (Fail) Replace The Flexplate, Torque Convertor, Pump And Filter Includes Time To Remove And Install The Transmission (Can be Claimed With Operation N Or P)	232198J	11.8 Hrs.
2015-2018 Fusion Without Lane Departure: Additional Time To Check And Correct Front Toe (Can be Claimed With Labor Operations B, C, E, F, H, J, L Or M)	232198N	0.6 Hrs.
2015-2018 Fusion With Lane Departure: Additional Time To Check And Correct Front Toe (Can be Claimed With Labor Operations B, C, E, F, H, J, L Or M)	232198P	0.8 Hrs.

Repair/Claim Coding

Causal Part:	6375
Condition Code:	01

Service Procedure

1. Check for diagnostic trouble codes (DTCs) that may be causing the rattle noise. Are there any DTCs present that could be causing the rattle noise?
 - (1). Yes - this article does not apply. Refer to Workshop Manual (WSM), Section 100-04 for further diagnostics.
 - (2). No - proceed to Step 2.
2. Inspect the vehicle for possible loose or broken components near the engine or transmission that could be causing the rattle noise. The use of chassis ears may aid in narrowing down the noise to the bellhousing area. Are there any loose or broken components?
 - (1). Yes - this article does not apply. Refer to WSM, Section 100-04 for further diagnostics.
 - (2). No - proceed to Step 3.
3. Remove the starter motor. Refer to WSM, Section 303-06.
4. Placing a borescope between the engine block and flexplate, inspect the flexplate for cracks near the crankshaft. Are there any cracks present in the flexplate? (Figures 1-4)

NOTE: It may be necessary to rotate the engine crank to find the cracks in the flexplate.

Figure 1



Figure 2

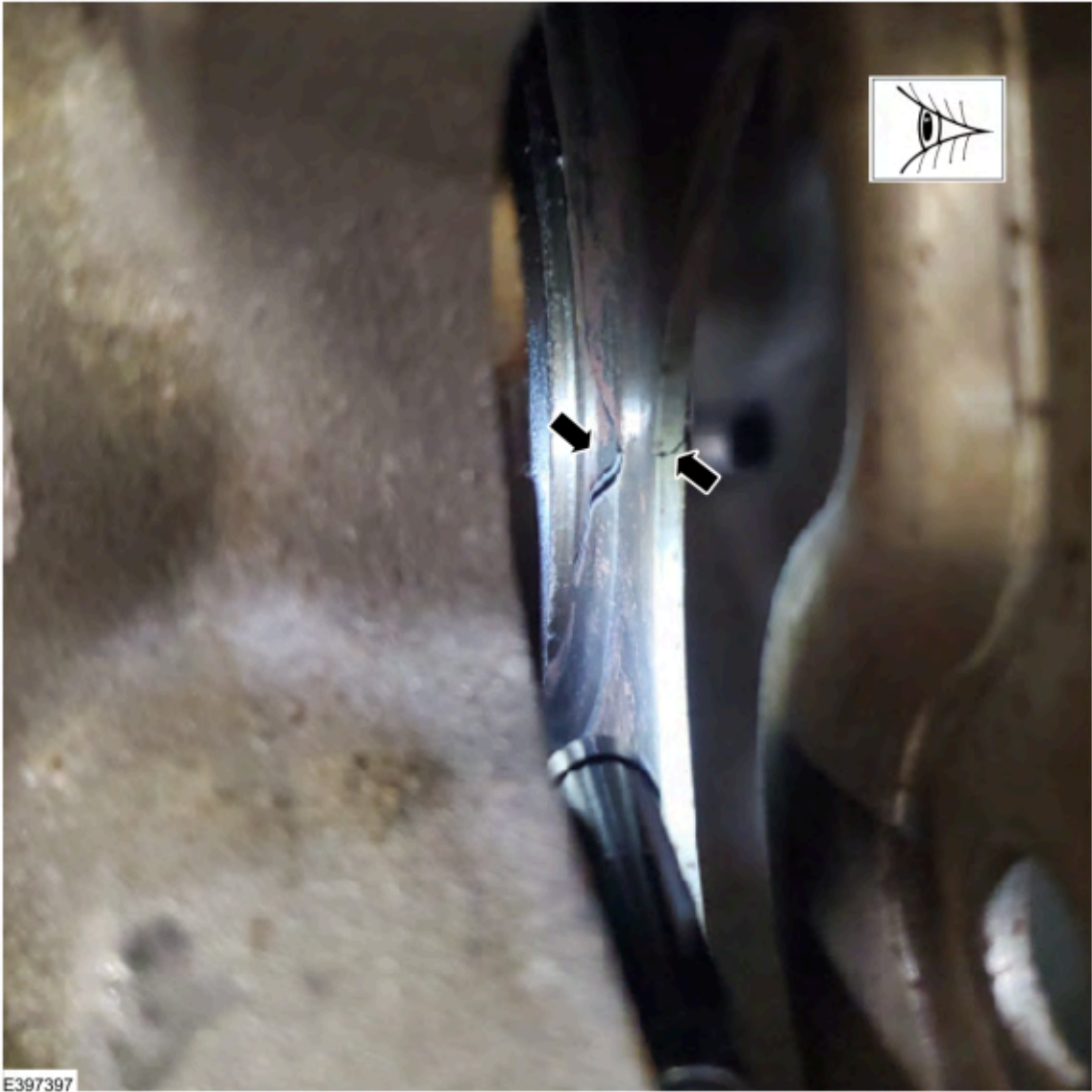


Figure 3

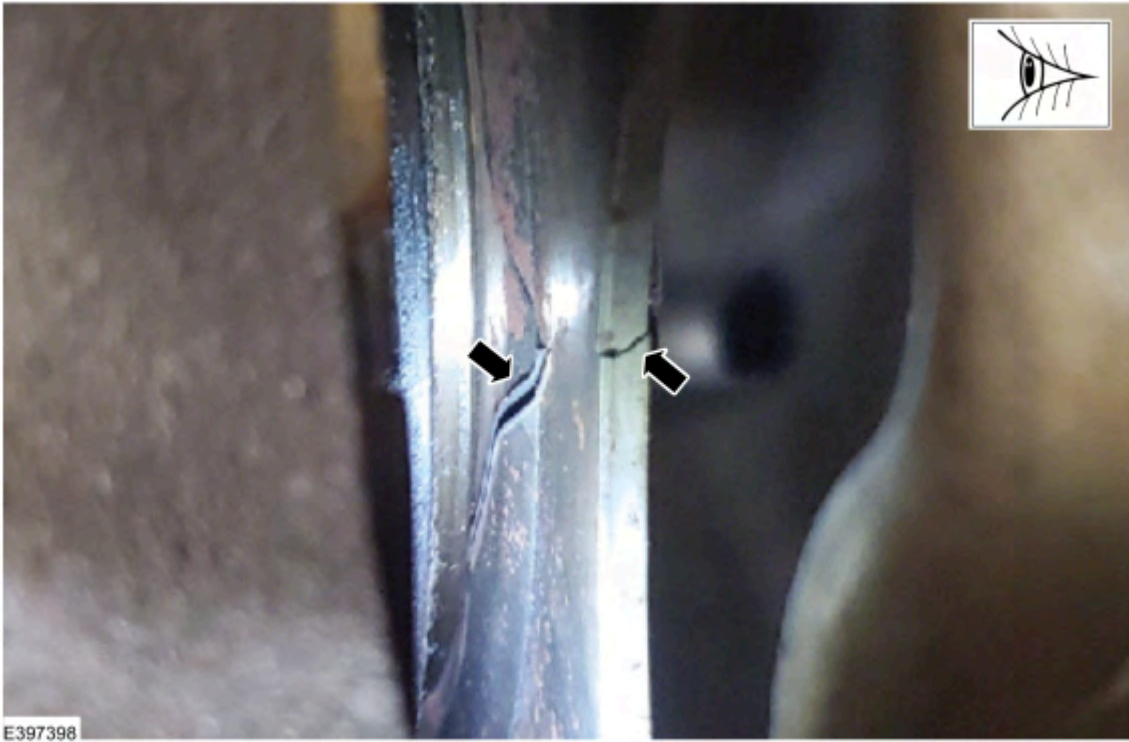


Figure 4



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- (1). Yes - proceed to Step 5.
- (2). No - reinstall the starter motor. Refer to WSM, Section 303-06. For further diagnostics outside this article, refer to WSM, Section 100-04. Repair is complete.
- 5.** Remove the transmission and inspect the engine block mounting face for the presence of dowel pins. If the dowel pins are not present in the engine block, inspect the transmission for the dowel pins. If the dowel pins are present in the transmission, remove the dowel pins and reinstall into the engine block prior to transmission installation. Refer to WSM, Section 307-01A. If dowel pins are damaged or missing, replace as needed.
- 6.** Remove and replace the flexplate. Refer to WSM, Section 303-01B.
- 7.** Remove and discard the torque converter.
- 8.** Remove the torque converter housing from the transmission case. Refer to WSM, Section 307-01A. Steps 6 through 40 are not required.
- 9.** Remove the pump-to-torque converter housing bolts. Remove and discard the pump assembly and fluid filter. Refer to WSM, Section 307-01A.
- 10.** Replace the pump assembly and the fluid filter. Refer to WSM, Section 307-01A.
- 11.** Remove and discard the clutch feed seals. Install the 5 new clutch feed seals. Refer to WSM, Section 307-01A.
- 12.** Reassemble the transmission. Refer to WSM, Section 307-01A.
- 13.** Install the new torque converter. Refer to WSM, Section 307-01A.
- 14.** Apply Motorcraft® Multi-Purpose Grease Spray to the torque converter pilot hub prior to reassembly.
- 15.** Inspect for damage on the crankshaft pilot bore. Is there damage? (Figure 5)

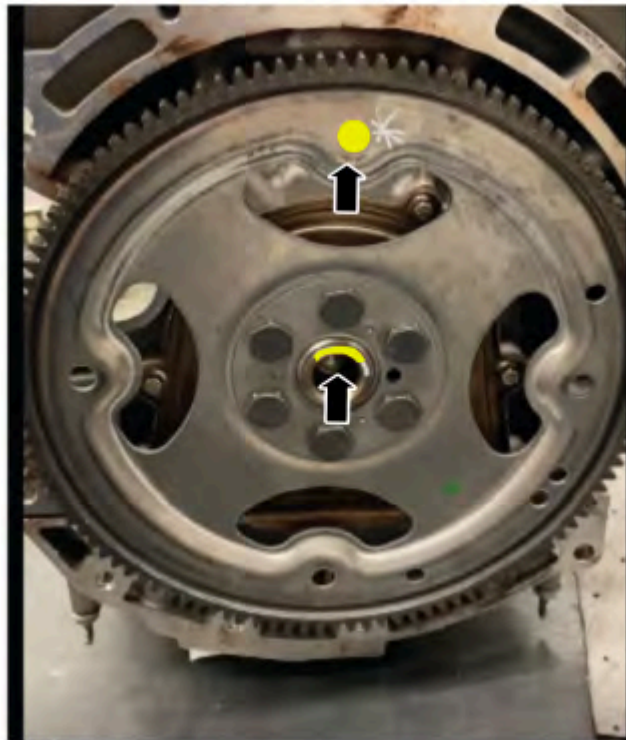
Figure 5



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(1). Yes - rotate the stud hole nearest to the 12 O'clock upright position so that the damaged part of the crankshaft pilot bore is at the 12 O'clock position. This is important to endure minimal imbalance. Proceed to Step 16. (Figure 6).

Figure 6



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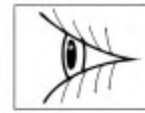
(2). No - proceed to Step 17.

NOTE: The flexplate can be installed in multiple positions.

16. Locate the balance mark on the torque converter and rotate the stud nearest to the 12 O'clock position. (Figure 7)

(1). The balance mark indicates the heavy side of the torque converter.

Figure 7

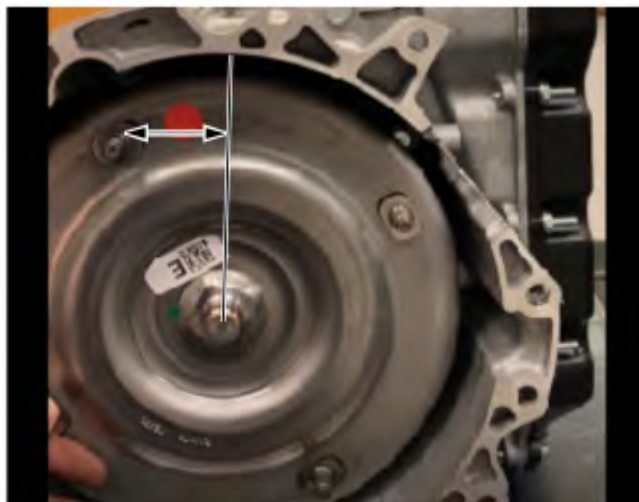


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17. Install the transmission. Refer to WSM, Section 307-01A.

(1). When tightening the torque converter nuts, rotate the nearest stud the minimal amount to the window and install nut. (Figure 8).

Figure 8



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