HF35 TRANSMISSION - THUMPING/RUBBING OR GRINDING NOISE - BUILT ON OR BEFORE 8/15/2015

TSB 16-0105

FORD:

2013-2015 C-MAX 2013-2016 Fusion **LINCOLN:**

2013-2016 MKZ

This article supersedes TSB **14-0214** to add a production fix date, update the vehicle model years, Service Procedure and Part List.

ISSUE

Some 2013-2016 Fusion, MKZ and 2013-2015 C-Max vehicles equipped with an HF35 transmission and built on or before 8/15/2015 may exhibit a thumping/rubbing or grinding noise coming from the transmission. The noise may be present in all gear ranges including neutral when the vehicle is moving, but will not be present when the vehicle is stationary or in Park.

ACTION

Follow the Service Procedure steps to correct the condition.

SERVICE PROCEDURE

- 1. Check the vehicle build date. Was the vehicle built on or before 8/15/2015?
 - a. Yes proceed to Step 2.
 - b. No this article does not apply. Refer to Workshop Manual (WSM), Section 307-01 for normal diagnostics.
- 2. With vehicle at operating temperature, road test vehicle and lightly apply the brakes from 48-16 Km/h (30-10 MPH).
 - a. The engine will shut-off on deceleration when the vehicle is at operating temperature.
- 3. Is a thumping/rubbing or grinding noise present?
 - a. Yes proceed to Step 4.
 - b. No this article does not apply. Refer to WSM, Section 307-01 for normal diagnostics.
- Remove the transmission assembly. Refer to WSM, Section 307-01.
- 5. Remove damper housing and transfer shaft assembly. Refer to WSM Section, 307-01.
- Inspect the damper housing for transfer shaft contact or wear. Is contact or wear present on damper housing or transfer shaft?
 - a. Yes proceed to Step 9.
 - b. No proceed to Step 7.
- 7. Install transfer shaft kit. Follow kit repair and assembly procedure.
- Reinstall the transmission assembly. Refer to WSM, Section 307-01. Proceed to Step 10.
- 9. Install new transmission assembly. Refer to WSM, Section 307-01.
- 10. Flush transmission fluid cooling system. Refer to WSM, Section 307-02.

NOTE: The information contained 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, Lincoln, or Mercury 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 supercede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.

PART NUMBER	PART NAME
FG9Z-7000-C	Transmission Assembly 2.57 Gas/Electric - C-MAX/Fusion FHEV
FM5Z-7000-D	Transmission Assembly 2.91 Plug-In - C-MAX/Fusion PHEV
FG9Z-7000-E	Transmission Assembly 2.57 - MKZ
FG9Z-7000-G	Transmission Assembly 2.91 - MKZ
W520102-S442	Nut - Axle Bearing Strap - Right Side - All Vehicles (2 Required)
YS4Z-3N324-AA	Clamp - Center Shaft - C-MAX
AE5Z-4B422-A	Circlip - Axle Inner - Left Side - C-MAX
CV6Z-9450-B	Gasket - Exhaust Flange - C-MAX
CV6Z-9448-A	Gasket - Exhaust Manifold - C-MAX
W520103-S442	Nut - Exhaust To Pipe - C-MAX (2 Required)
CV6Z-3B477-A	Nut - Axle - C-MAX (2 Required)
W520415-S442	Nut - Lower Ball Joint - C-MAX(2 Required)
W704474-S437	Stud - Exhaust Manifold - C-MAX - (7 Required)
W713095-S437	Nut - Exhaust Manifold To Head - C-MAX (7 Required)
W715491-S442	Bolt - Lower Ball Joint - C-MAX (2 Required)
BB5Z-4B422-B	Circlip - Axle Inner - Left Side - Fusion/ MKZ
W500545-S439	Bolt - Lower Ball Joint - Fusion/ MKZ (2 Required)
W520214-S440	Nut - Lower Ball Joint - Fusion/ MKZ (2 Required)
W520215-S440	Nut - Tie Rod - Fusion/ MKZ (2 Required)
W712503-S440	Nut - Lower Stabilizer -Fusion/ MKZ (2 Required)
W714878-S439	Bolt - Steering Shaft - Fusion/ MKZ
W716457-S439	Bolt - Large Frame To Body Rear - Fusion/ MKZ (2 Required)
4S4Z-3N324-AA	Clamp - Center Shaft - Fusion/MKZ
1S7G-8255-BD	Gasket - Coolant Outlet - Fusion/MKZ
FG9Z-7H348-D	Kit - Transfer Shaft (Front Wheel Drive 2.57 Axle Ratio) - C-MAX/Fusion FHEV
FG9Z-7H348-E	Kit - Transfer Shaft (Front Wheel Drive 2.91 Axle Ratio) - C-MAX/Fusion PHEV/MKZ
ZC-31-B	Motorcraft® Metal Surface Prep Wipes
ZC-30-A	Motorcraft® Silicone Gasket Remover
TA-26	Motorcraft® Threadlock 262
TA-29	Motorcraft® Ultra Silicone Sealant
PM-4-A	Motorcraft® Metal Brake Parts Cleaner
XT-10-QLVC	Motorcraft® MERCON® LV Automatic Transmission Fluid

OPERATION	DESCRIPTION	TIME
1	2013-2015 C-MAX Hybrid: Diagnose, Inspect And Repair Transmission Includes Time For Road Tests And Flushing (Do Not Use With Any Other Labor Operations)	12.2 Hrs.

OPERATION	DESCRIPTION	TIME
160105A	2013-2015 C-MAX Energi: Diagnose, Inspect And Repair Transmission Includes Time For Road Tests And Flushing (Do Not Use With Any Other Labor Operations)	12.5 Hrs.
160105A	2013-2016 MKZ Hybrid: Diagnose, Inspect And Repair Transmission Includes Time For Road Tests And Flushing (Do Not Use With Any Other Labor Operations Except C Or D)	10.9 Hrs.
160105A	2013-2016 Fusion Hybrid: Diagnose, Inspect And Repair Transmission Includes Time For Road Tests And Flushing (Do Not Use With Any Other Labor Operations Except C Or D)	10.5 Hrs.
160105A	2013-2016 Fusion Energi: Diagnose, Inspect And Repair Transmission Includes Time For Road Tests And Flushing (Do Not Use With Any Other Labor Operations Except C Or D)	10.7 Hrs.
160105B	2013-2015 C-MAX Hybrid: Diagnose, Inspect And Replace Transmission Includes Time For Road Tests And Flushing (Do Not Use With Any Other Labor Operations)	10.6 Hrs.
160105B	2013-2015 C-MAX Energi: Diagnose, Inspect And Replace Transmission Includes Time For Road Tests And Flushing (Do Not Use With Any Other Labor Operations)	10.9 Hrs.
160105B	2013-2016 MKZ Hybrid: Diagnose, Inspect And Replace Transmission Includes Time For Road Tests And Flushing (Do Not Use With Any Other Labor Operations Except C Or D)	9.2 Hrs.
160105B	2013-2016 Fusion Hybrid: Diagnose, Inspect And Replace Transmission Includes Time For Road Tests And Flushing (Do Not Use With Any Other Labor Operations Except C Or D)	8.9 Hrs.
160105B	2013-2016 Fusion Energi: Diagnose, Inspect And Replace Transmission Includes Time For Road Tests And Flushing (Do Not Use With Any Other Labor Operations Except C Or D)	9.1 Hrs.
160105C	2013-2016 Fusion/MKZ Hybrid/Energi Without Lane Departure Warning System: Check And Set Front End Toe (Do Not Use With Any Other Labor Operations Except A Or B)	0.6 Hr.
160105D	2013-2016 Fusion/MKZ Hybrid/Energi With Lane Departure Warning System: Check And Set Front End Toe (Do Not Use With Any Other Labor Operations Except A Or B)	0.8 Hr.

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.

DEALER CODING

BASIC PART NO.	CONDITION CODE
7000	01