



TECHNICAL SERVICE BULLETIN

HF35 Transmission - Thumping/Rubbing Or Grinding Noise - Built On Or Before 15-Aug-2015

18-2328
30 October
2018

This bulletin supersedes 17-0039 . Reason for update: Incorrect Procedure

Model:

Ford 2013-2016 C-MAX Hybrid
2013-2016 Fusion
Lincoln 2013-2016 MKZ

Summary

This article supersedes TSB 17-0039 to update the Service Procedure.

Issue: Some 2013-2016 Fusion, MKZ and C-Max vehicles equipped with an HF35 transmission and built on or before 15-Aug-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.

Parts

Part Number	Description	Quantity
FG9Z-7000-C	Transmission Assembly 2.57 Gas/Electric (C-MAX/Fusion FHEV)	1
FM5Z-7000-D	Transmission Assembly 2.91 Plug-In (C-MAX/Fusion PHEV)	1
FG9Z-7000-E	Transmission Assembly 2.57 (MKZ)	1
FG9Z-7000-G	Transmission Assembly 2.91 (MKZ)	1
W520102-S442	Axle Bearing Strap Nut, Right Side (All Vehicles)	2
YS4Z-3N324-AA	Center Shaft Clamp (C-Max)	1
AE5Z-4B422-A	Axle Inner Circlip (C-Max)	1
CV6Z-9450-B	Exhaust Flange Gasket (C-Max)	1
CV6Z-9448-A	Exhaust Manifold Gasket (C-Max)	1
W520103-S442	Exhaust To Pipe Nut (C-Max)	2
CCPZ-3B477-G	Axle Nut (C-Max)	2
W520415-S442	Lower Ball Joint Nut (C-Max)	2
W704474-S437	Exhaust Manifold Stud (C-Max)	7
W713095-S437	Exhaust Manifold To Head Nut (C-Max)	7
W715491-S442	Lower Ball Joint Bolt (C-Max)	2
BB5Z-4B422-B	Axle Inner Circlip, Left Side (Fusion/MKZ)	1
W500545-S439	Lower Ball Joint Bolt (Fusion/MKZ)	2
W520214-S440	Lower Ball Joint Nut (Fusion/MKZ)	2
W520215-S440	Tie Rod Nut (Fusion/MKZ)	2
W712503-S440	Lower Stabilizer Nut (Fusion/MKZ)	2
W714878-S439	Steering Shaft Bolt (Fusion/MKZ)	1

W716457-S439	Large Frame To Body Rear Bolt (Fusion/MKZ)	2
4S4Z-3N324-AA	Center Shaft Clamp (Fusion/MKZ)	1
1S7G-8255-BD	Coolant Outlet Gasket (Fusion/MKZ)	1
FG9Z-7H348-F	Transfer Shaft Kit, Front Wheel Drive 2.57 Axle Ratio (C-MAX/Fusion FHEV)	1
FG9Z-7H348-G	Transfer Shaft Kit, Front Wheel Drive 2.91 Axle Ratio (C-MAX/Fusion PHEV/MKZ)	1
W714358-S442	Underbody Shield Nut (Fusion/MKZ)	16
ZC-31-B	Motorcraft® Metal Surface Prep Wipes	1
ZC-30-A	Motorcraft® Silicone Gasket Remover	1
TA-26	Motorcraft® Threadlock 262	1
TA-29	Motorcraft® Ultra Silicone Sealant	1
PM-4-A	Motorcraft® Metal Brake Parts Cleaner	1
XT-10-QLVC	Motorcraft® MERCON® LV Automatic Transmission Fluid	5
VC-3DIL-B	Motorcraft® Orange Prediluted Antifreeze/Coolant	1

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
2013-2016 C-MAX Hybrid: Diagnose, Inspect And Repair Transmission Includes Time For Road Tests And Flushing (Do Not Use With Any Other Labor Operations)	182328A	12.2 Hrs.
2013-2016 C-MAX Hybrid: Diagnose, Inspect And Replace Transmission Includes Time For Road Tests And Flushing (Do Not Use With Any Other Labor Operations Except N)	182328B	10.6 Hrs.
2013-2016 C-MAX Energi: Diagnose, Inspect And Repair Transmission Includes Time For Road Tests And Flushing (Do Not Use With Any Other Labor Operations)	182328C	12.5 Hrs.
2013-2016 C-MAX Energi: Diagnose, Inspect And Replace Transmission Includes Time For Road Tests And Flushing (Do Not Use With Any Other Labor Operations Except N)	182328D	10.9 Hrs.
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 L Or M)	182328E	10.8 Hrs.
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 L Or M And N)	182328F	9.2 Hrs.
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 L Or M)	182328G	11.1 Hrs.
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 L Or M And N)	182328H	9.5 Hrs.
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 L Or M)	182328J	11.0 Hrs.
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 L Or M And N)	182328K	9.3 Hrs.
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 E, F, G, H, J Or K)	182328L	0.6 Hrs.
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 E, F, G, H, J Or K)	182328M	0.8 Hrs.
If Required Additional Time To Obtain Prior Approval When Transmission Replacement Is Necessary	182328N	0.3 Hrs.

Repair/Claim Coding

Causal Part:	7H348
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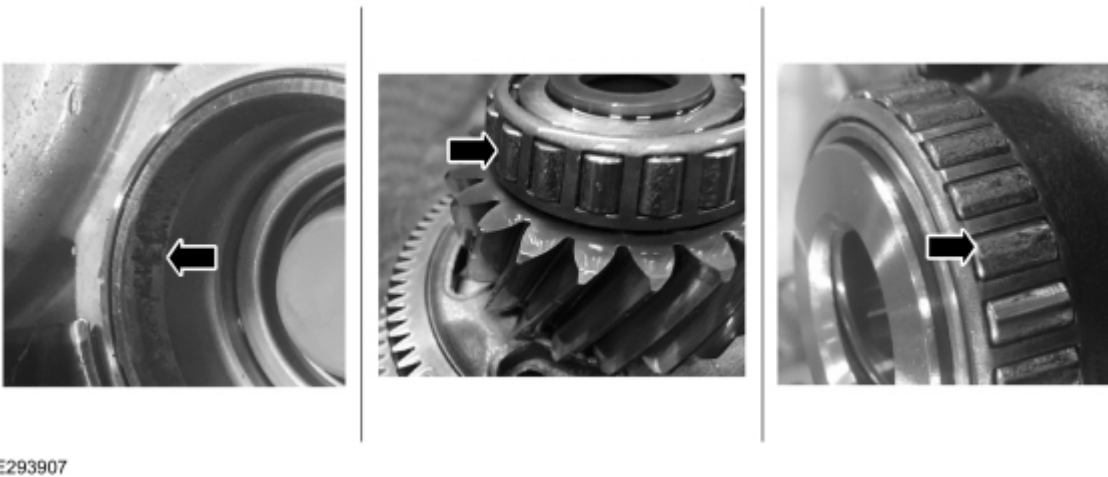
Service Procedure

1. Check the vehicle build date. Was the vehicle built on or before 15-Aug-2015?
 - (1). Yes - proceed to Step 2.
 - (2). No - this article does not apply. Refer to Workshop Manual (WSM), Section 307-01 for normal diagnostics.
2. With the vehicle at operating temperature, road test the vehicle and lightly apply the brakes from 48-16 Km/h (30-10 MPH).
 - (1). The engine will shut-off on deceleration when the vehicle is at operating temperature.
3. Is a thumping/rubbing or grinding noise present?
 - (1). Yes - proceed to Step 4.
 - (2). No - this article does not apply. Refer to WSM, Section 307-01 for normal diagnostics.
4. Remove the transmission assembly. Refer to WSM, Section 307-01.
5. Remove the damper housing and transfer shaft assembly. Refer to WSM, Section 307-01.
6. Inspect the differential bearings. Is there any noticeable differential bearing damage? (Figures 1 - 2)
 - (1). Yes - proceed to Step 10.
 - (2). No - proceed to Step 7.

Figure 1



Figure 2



7. Inspect the damper housing for transfer shaft to housing contact. Is damage present on the damper housing from the transfer shaft?
 - (1). Yes - proceed to Step 10.
 - (2). No - proceed to Step 8.
8. Install transfer shaft kit. Follow the kit repair and assembly procedure.

9. Reinstall the transmission assembly. Refer to WSM, Section 307-01. Proceed to Step 11.

10. Install a new transmission assembly. Refer to WSM, Section 307-01.

11. Flush the transmission fluid cooling system. Refer to WSM, Section 307-01.

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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.