



TECHNICAL SERVICE BULLETIN

Transmission Fluid Cooler Tubes Leaking At Transmission Case

24-232722 October
2024**Model:**

Ford 2020-2022 Mustang Shelby GT500

Issue: Some 2020-2022 Mustang Shelby GT500 vehicles may exhibit a transmission fluid leak at the mating surface between the rear transmission fluid cooler tubes and transmission case. This may be due to an improper sealing surface between the fluid tubes and the transmission case. To correct the condition, follow the Service Procedure to file the dimple flat and make sure the correct installation sequence is used to install the new rear transmission fluid cooler tubes.

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

- 2020 - 2022 Mustang Shelby GT500
- Transmission fluid leak from the mating surface between the transmission fluid cooler tubes and the transmission case

Parts

Service Part Number	Claim Quantity	Package Order Quantity	Number in Package	Description
KR3Z-7R081-C	1	1	1	Transmission Rear Cooler Tubes
PM-13-B	As Needed	As Needed	1	Motorcraft® Anti-Corrosion Coating
XT-14-L	As Needed	As Needed	1	Motorcraft® GT500 Dual Clutch Transmission Fluid

Claim Quantity refers to the total number of individual pieces required to repair the vehicle.

Package Order Quantity refers to the amount of the service part number package(s) required to repair the vehicle.

Number In Package refers to the number of individual pieces included in a service part number package.

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.

Only If Necessary indicates the part is not mandatory.

Warranty Status: Eligible under provisions of New Vehicle Limited Warranty (NVLW)/Service Part Warranty (SPW)/Service Part New Vehicle (SPNV)/Extended Service Plan (ESP) coverage. Limits/policies/prior approvals are not altered by a TSB. NVLW/SPW/SPNV/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

Labor Times

Description	Operation No.	Time
2020-2022 Mustang 5.2L: Replace The Transmission Fluid Cooler Tubes Includes Time To Modify New Tubes Following The Service Procedure (Do Not Use With Any Other Labor Operations)	242327A	2.3 Hrs.

Repair/Claim Coding

Causal Part:	7R081
Condition Code:	01

Service Procedure

1. Remove and discard the rear transmission fluid cooler tubes. Refer to WSM, Section 307-02B, Steps 1-6 and 9-12. Do not remove the front transmission fluid cooler tubes (Steps 7 and 8).

NOTE: For Steps 11-12 while removing the tubes from the transmission, take care to not scratch or damage the bores on the transmission case. A small 90 degree pick works best to remove any seals stuck inside the transmission bore.

2. Modify the new transmission fluid cooler tubes.

- (1). Remove the seals and backing rings and place them aside for later reinstallation. (Figure 1)

Figure 1



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- (2). Use a file to grind away the dimple on the sealing side. Be careful to not scrape the surrounding mating surface, bracket, or tube. (Figure 2-3)

Figure 2



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Figure 3

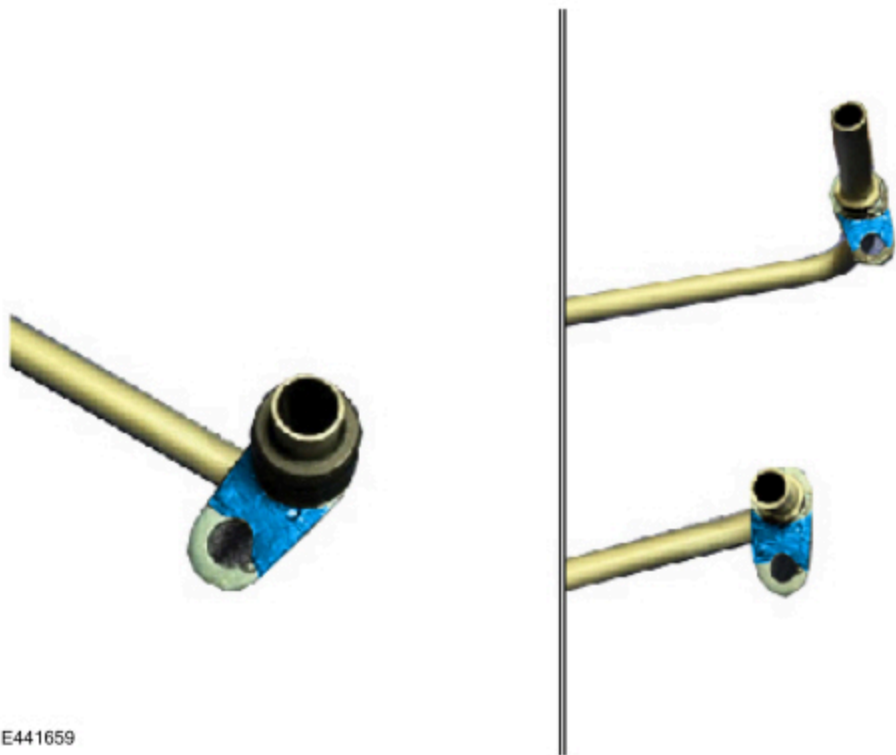


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(3). Wipe away metallic debris to make sure the surface is clean.

(4). Apply Motorcraft® Anti-Corrosion Coating with small brush and make sure all bare metal is covered. Coating must be dry to touch before proceeding to Step 3. (Figure 4)

Figure 4



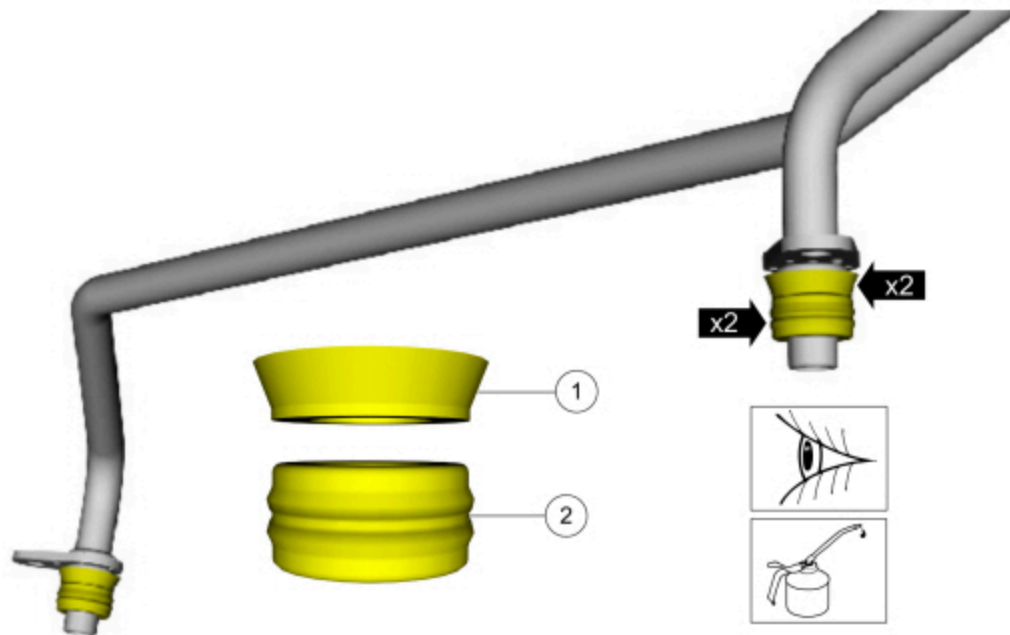
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(5). Perform Step 2(2) - 2(5) on the other attachment bracket, then proceed to Step 3.

3. Install the new modified rear transmission fluid cooler tubes onto the vehicle.

(1). Inspect, lubricate, and install the band seals and backing rings onto the line set. (Figure 5)

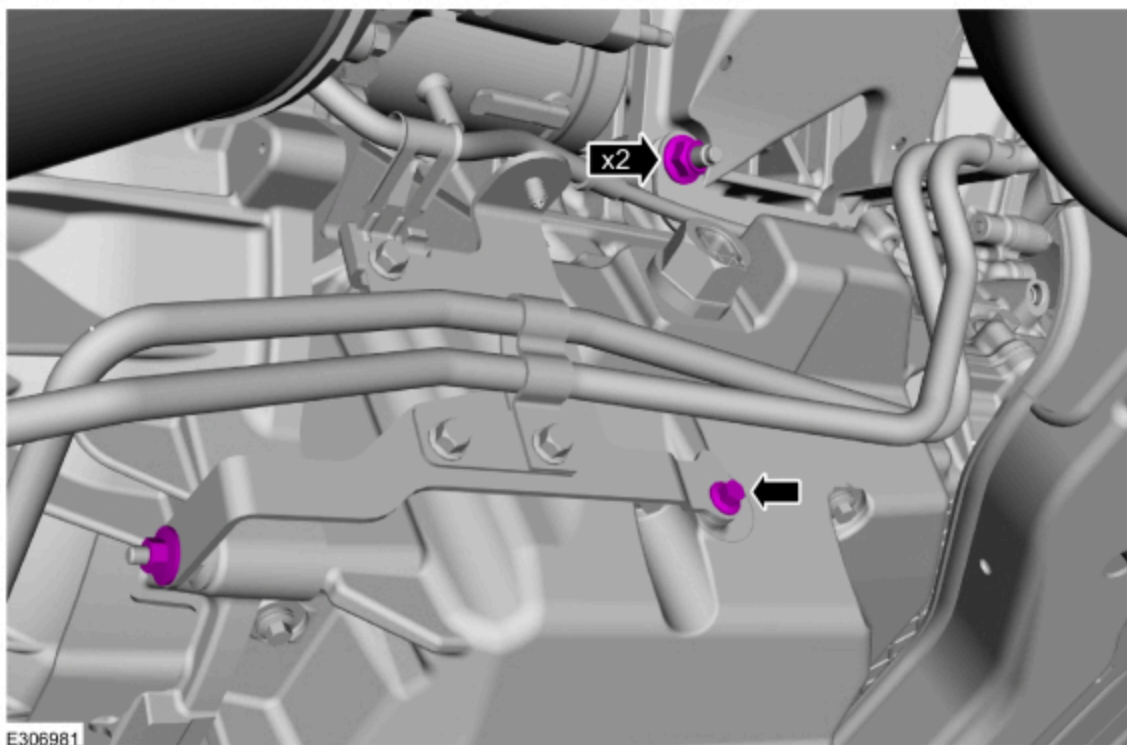
Figure 5



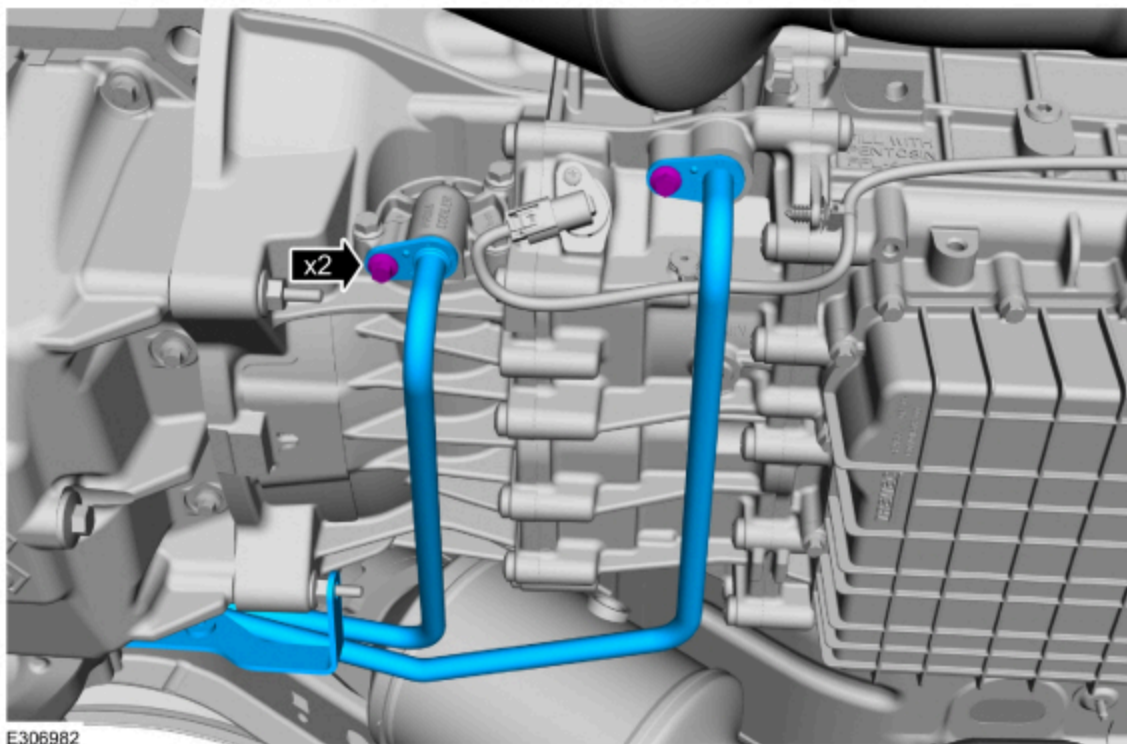
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(2). Install the fluid cooler tubes bracket retainers but do not tighten. (Figure 6)

Figure 6



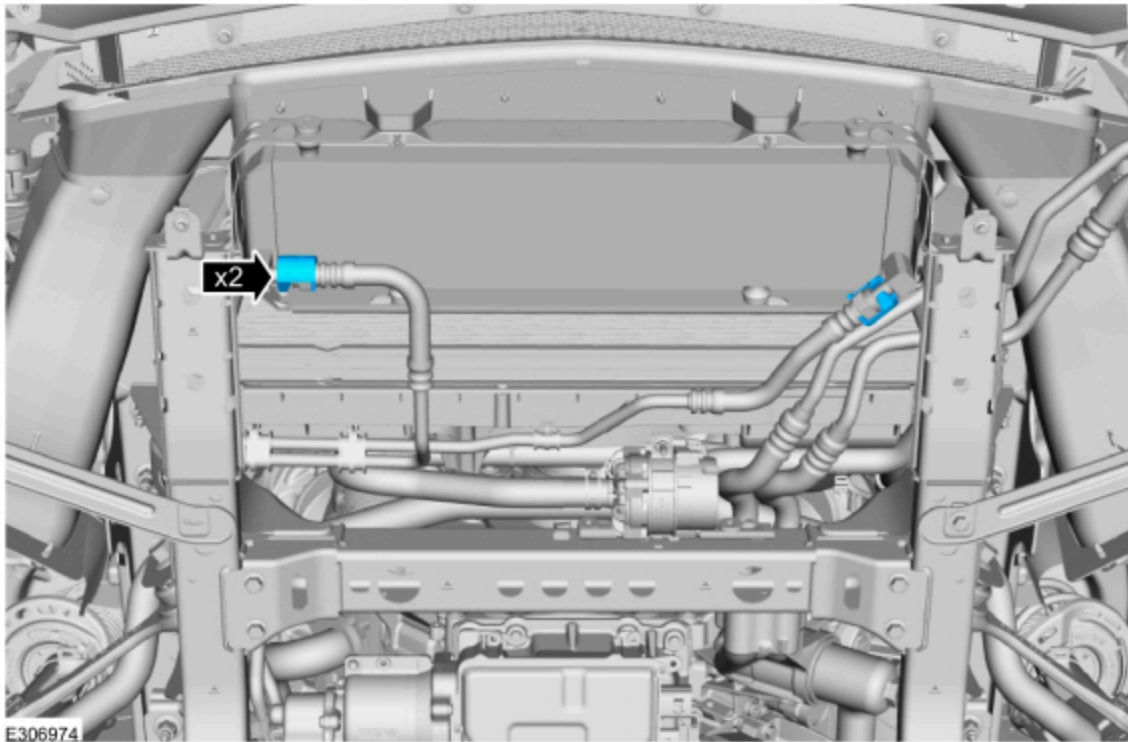
(3). Insert the transmission fluid cooler tubes into the transmission case and tighten to 89 lb.in (10 Nm) (Figure 7)
Figure 7



(4). Connect the rear transmission fluid cooler tubes to the front transmission fluid cooler tubes and install the retaining clips.

(5). Install the transmission fluid cooler tubes secondary latches. (Figure 8)

Figure 8

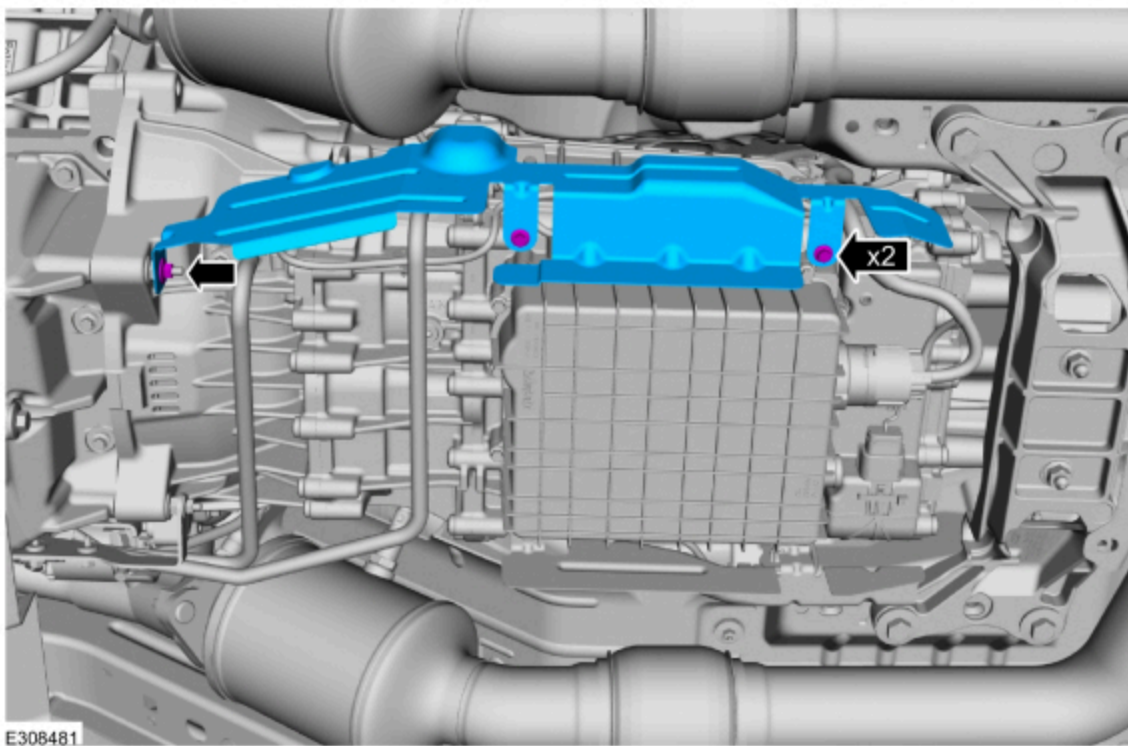


(6). Tighten the fluid cooler tubes bracket nuts to 35 lb.ft (48Nm), and bracket retainers bolt to 89lb.in (10 Nm).

(7). Refill the transmission fluid. Refer to WSM, Section 307-01 General Procedures > Transmission Fluid Drain and Refill.

(8). Install the transmission heat shield and tighten the retainers nut to 53 lb.in (6 Nm), and bolts to 62 lb.in (7 Nm) (Figure 9)

Figure 9



4. Reassemble the vehicle. Refer to WSM, Section 307-02B Removal and Installation > Transmission Fluid Cooler installation Steps 8-10.

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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.