

TECHNICAL SERVICE BULLETIN Loss Of Engine Coolant

25-206327 February
2025

This bulletin supersedes 25-2016. Reason for update: revised Parts List and Service Procedure

Model:

Ford	Engine: 1.5L EcoBoost
2021-2024 Bronco Sport	

Markets: North American markets only

Issue: Some of the vehicles listed in the Model statement above may exhibit a loss of engine coolant from a leak at the coolant pump. This may be due to contamination in the engine's cooling system.

Action: For vehicles that meet all of the criteria in the Issue and Model statements, follow the Service Procedure to flush the engine cooling system and replace the coolant pump.

NOTE: The water pump pulley bolts are reused in this repair if there is no damage to the bolts identified. This may differ from current WSM direction.

Parts

Service Part Number	Claim Quantity	Package Order Quantity	Number in Package	Description	Note
DS7Z- 19B596-A	1 Kit	1 Kit	1 Kit	Air Conditioning O-Ring	Kit contains 2 each of 1/2 inch, 5/8 inch, 8 mm (6 total pieces)
DL3Z- 19B596-B	1	1	1	Air Conditioning O-Ring / Gasket Kit (Compressor Inlet Line)	
HX7Z-8501- B	1	1	1	Coolant Pump	
VC-13DL-G	As Needed	As Needed		Motorcraft® Yellow Prediluted Antifreeze/Coolant (All Markets Except Canada)	
CVC-13DL- G	As Needed	As Needed		Motorcraft® Yellow Prediluted Antifreeze/Coolant (Canada Only)	
VC-1	As Needed	As Needed		Motorcraft® Premium Cooling System Flush	
YN-35	As Needed	As Needed		Motorcraft® R-1234yf Refrigerant PAG Oil	
YN-12-D	As Needed	As Needed		Motorcraft® PAG Refrigerant Compressor Oil	R-134a
YN-33-A	As Needed	As Needed		R-1234yf Refrigerant (All Markets Except Canada)	
HS7Z- 19B519-BA	As Needed	As Needed		R-1234yf Refrigerant (Canada Only)	
YN-19	As Needed	As Needed		Motorcraft® R-134a Refrigerant (All Markets Except Canada and Mexico)	
CYN-19-RB	As Needed	As Needed		R-134a Refrigerant (Canada Only)	

MYN-19	As	As Needed		torcraft® R-134a Refrigerant	
	Needed		(Me	exico Only)	

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 part is necessary but 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.

Service part numbers and "number in package" quantity may change after publication, thus also affecting the "package order quantity". Refer to the parts catalog for the latest information.

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

LIBECTINTION	Operation No.	Time
2021-2024 Bronco Sport 1.5L EcoBoost: Pressure Test Engine Cooling System To Verify Leak (Fail) Flush Engine Cooling System And Replace The Coolant Pump Following The Service Procedure (Do Not Use With Any Other Labor Operations)	252063A	3.1 Hrs.

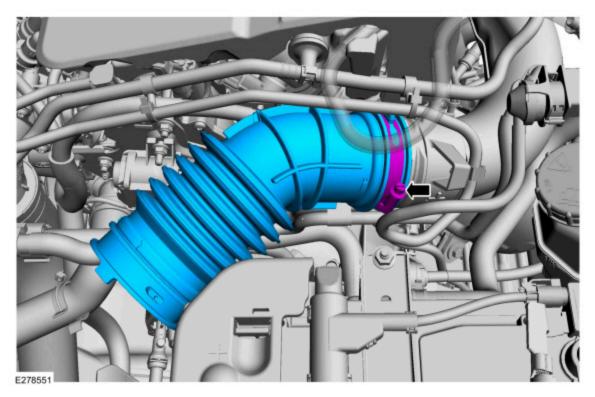
Repair/Claim Coding

Causal Part:	8501
Condition Code:	D8

Service Procedure

- **1.** Perform a Cooling System Pressure Test. Refer to the <u>WSM</u>, Section 303-03A Engine Cooling 1.5L EcoBoost > Diagnosis and Testing. Is the coolant pump leaking?
 - (1). Yes proceed to Step 2.
 - (2). No this article does not apply. Continue with normal WSM diagnosis.
- 2. Add Motorcraft® Premium Cooling System Flush to the cooling system and top off with water as needed and allow the engine to idle for 30 minutes.
- **3.** Drain the cooling system and leave the radiator drain valve open. Refer to the <u>WSM</u>, Section 303-03A Engine Cooling 1.5L EcoBoost > Engine Cooling System Draining, Vacuum Filling and Bleeding.
- **4.** Remove the air cleaner. Refer to <u>WSM</u>, Section 303-12A Intake Air Distribution and Filtering 1.5L EcoBoost > Removal and Installation > Air Cleaner.
- **5.** Loosen the clamp and remove the air cleaner outlet pipe in Figure 1.

Figure 1



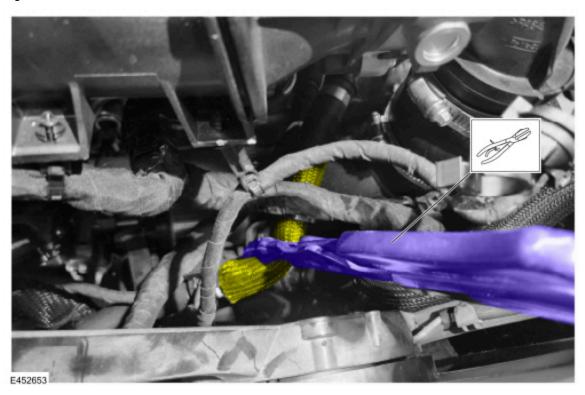
- 6. Release the clamps and disconnect the upper and lower radiator hoses from the radiator.
- **7.** Flush the radiator for 2-3 minutes by inserting/connecting a freshwater hose or flush machine in the upper hose port of the radiator.
- **8.** Using compressed air regulated down to 20-30psi, blow compressed air through the upper hose connection of the radiator for 1-2 minutes to remove any remaining water.
- **9.** Remove the coolant pump. Refer to <u>WSM</u>, Section 303-03A Engine Cooling 1.5L EcoBoost > Removal and Installation > Coolant Pump.
 - (1). The water pump pulley bolts can be reused for this repair if there is no damage to the bolts identified. This may differ from current <u>WSM</u> direction.
- **10.** Release the clamp and disconnect the heater core return hose from the hose connection near location shown in Figure 2.

Figure 2



11. Using a hose clamping tool, clamp off the coolant bypass hose in the location shown just blow the intake manifold and throttle body, near the fan motor in Figure 3.

Figure 3



- **12.** Using a hose clamping tool, clamp off the upper radiator hose. (Figure 4)
- **13.** Flush the heater core and engine for 2-3 minutes by connecting a freshwater hose or flush machine to the heater core return hose as shown above in Figure 4.

Figure 4



- **14.** Using compressed air regulated down to 20-30psi, blow compressed air through the heater core return line for 1-2 minutes to remove any remaining water.
- **15.** Remove all the hose clamping tools. Connect the upper and lower radiator hoses and close the radiator drain valve.
- **16.** Install the new coolant pump. Refer to <u>WSM</u>, Section 303-03A Engine Cooling 1.5L EcoBoost > Removal and Installation > Coolant Pump.
 - (1). The water pump pulley bolts can be reused for this repair if there is no damage to the bolts identified. This may differ from current <u>WSM</u> direction.
- **17.** Connect the heater core return hose.
- **18.** Install the air cleaner outlet pipe and tighten the clamp to 42 lb-in (4.8 Nm).
- **19.** Install the air cleaner. Refer to <u>WSM</u>, Section 303-12A Intake Air Distribution and Filtering 1.5L EcoBoost > Removal and Installation > Air Cleaner.
- **20.** Fill cooling system. Refer to the <u>WSM</u>, Section 303-03A Engine Cooling 1.5L EcoBoost > Engine Cooling System Draining, Vacuum Filling and Bleeding. Repeat Steps 10-12 a total of 10 times to remove any remaining air trapped in the system.
 - (1). Repeating Steps 10-12 differs from current <u>WSM</u> direction, but performing this process 10 times is required for this particular repair.

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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.