



# TECHNICAL SERVICE BULLETIN

## Loss Of Engine Coolant

**25-2581**  
05 December  
2025

This bulletin supersedes 25-2511. Reason for update: update the Service Procedure and Parts List

### Model:

<b>Ford</b> 2021-2024 Bronco Sport	Engine: 1.5L EcoBoost
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**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
HX7Z-8501-C	1	1	1	Coolant Pump
VC-1	1	1	1	Motorcraft® Premium Cooling System Flush
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)

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.

**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.

**Warranty Status:** Warranty coverage limits and policies are not altered by a TSB. Warranty coverage limits are determined by the identified causal part.

### Labor Times

Description	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)	252581A	2.4 Hrs.

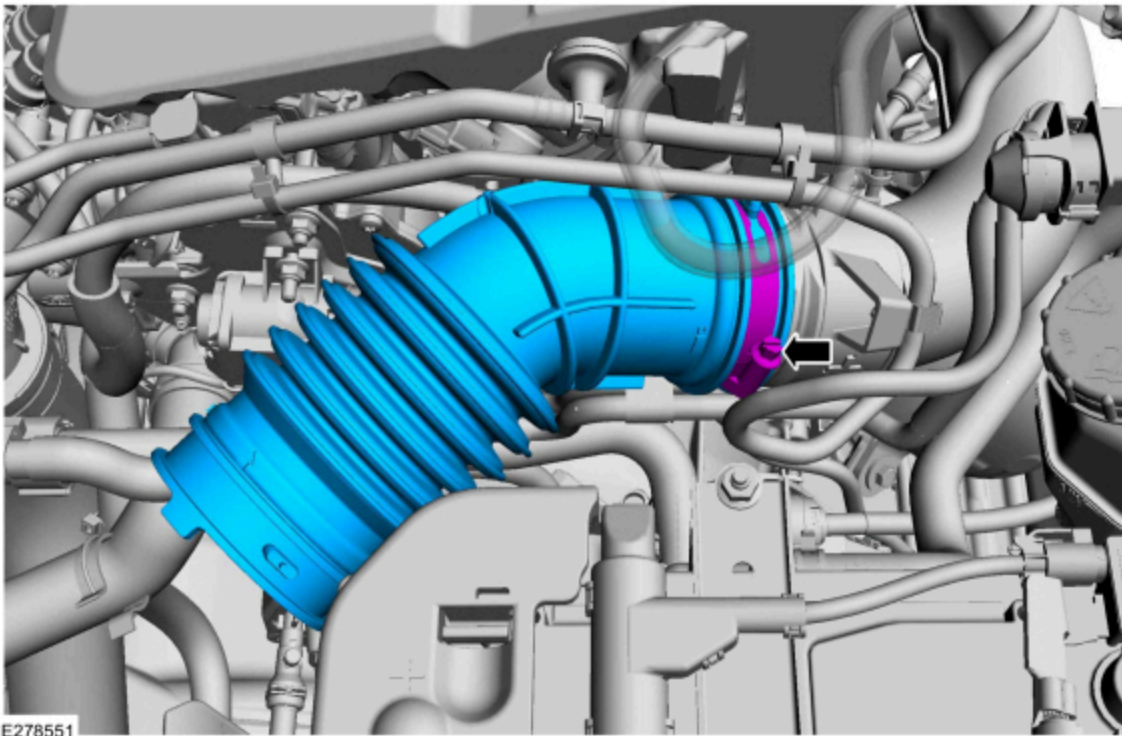
### Repair/Claim Coding

Causal Part:	8501
Condition Code:	D8

## Service Procedure

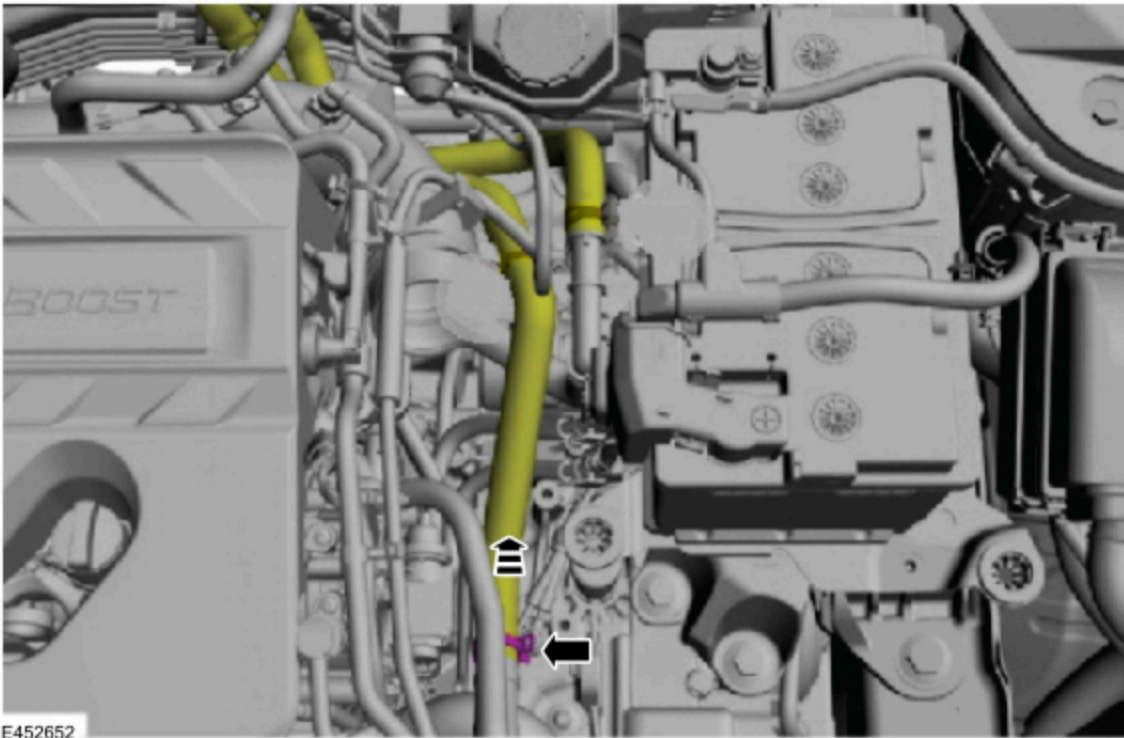
1. Perform a Cooling System Pressure Test. Refer to the WSM, Section 303-03A Engine Cooling - 1.5L EcoBoost > Diagnosis and Testing. Is the coolant pump leaking?
  - (1). Yes - proceed to Step 2.
  - (2). No - this article does not apply. Continue with normal diagnostics. Refer to WSM, Section 303-03A.
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 WSM, Section 303-03A Engine Cooling - 1.5L EcoBoost > Engine Cooling System Draining, Vacuum Filling and Bleeding.
4. Remove the air cleaner. Refer to WSM, 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 as shown 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 fresh water hose or flush machine in the upper hose port of the radiator.
8. Using compressed air regulated down to 20-30 psi, 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 WSM, 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 WSM direction.
10. Release the clamp and disconnect the heater core return hose from the hose connection near location shown in Figure 2.

Figure 2



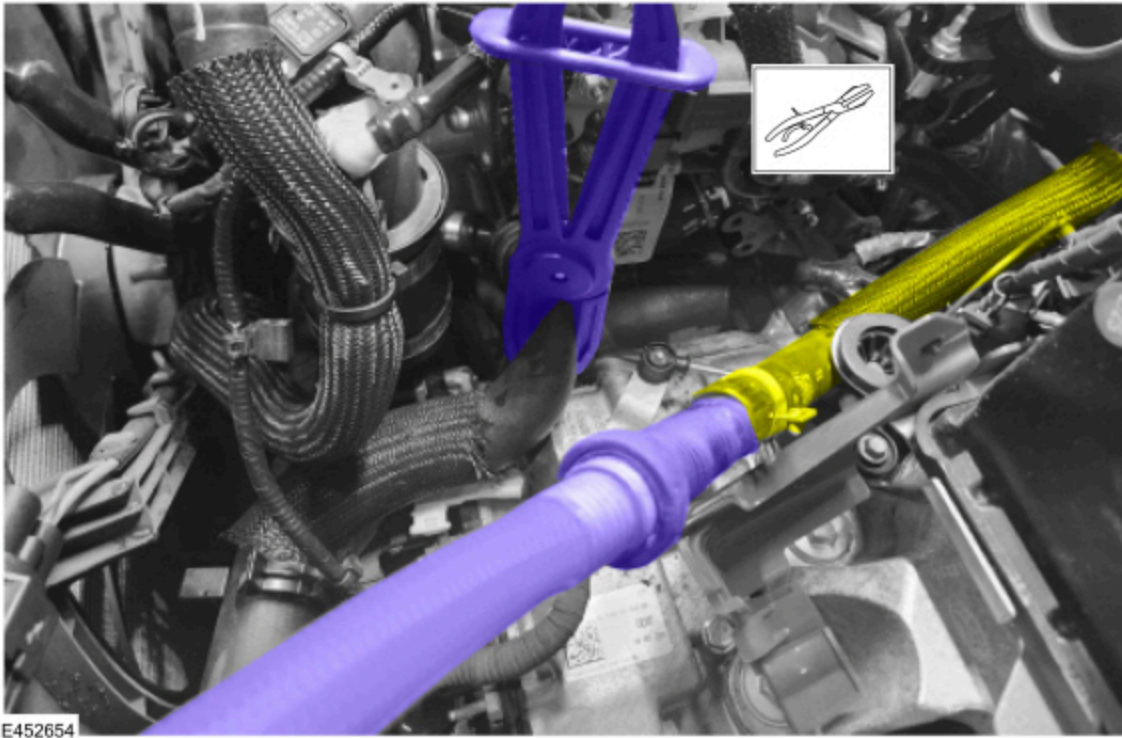
11. Using a hose clamping tool, clamp off the coolant bypass hose in the location shown just below the intake manifold and throttle body, near the fan motor as shown in Figure 3.

Figure 3



12. Using a hose clamping tool, clamp off the upper radiator hose. (Figure 4)

Figure 4



- 13.** Flush the heater core and engine for 2-3 minutes by connecting a fresh water hose or flush machine to the heater core return hose as shown above in Figure 4.
- 14.** Using compressed air regulated down to 20-30 psi, 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 WSM, 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 WSM 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 WSM, Section 303-12A Intake Air Distribution and Filtering - 1.5L EcoBoost > Removal and Installation > Air Cleaner.
- 20.** Fill the cooling system. Refer to the WSM, Section 303-03A Engine Cooling - 1.5L EcoBoost > Engine Cooling System Draining, Vacuum Filling and Bleeding. Repeat Steps 10-14 a total of 10 times to remove any remaining air trapped in the system.
  - (1). Repeating Steps 10-14 differs from current WSM 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.