PORSCHE

Advanced Technical Information

Bulletin #: 2216
Part ID: 1961

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Cayenne (E3) Turbo – Insufficient Heating Caused by Incorrect Coolant Line Assembly

Vehicles Affected

Models	Model Year	Model Type	VIN Range	Vehicle-Specific Equipment
Cayenne	As of 2019 up to 2020	9YACF1	N/A	N/A

Revision History

Revision	Release Date	Changes
0	June 13, 2022	Original document

Condition

The customer complains of insufficient cabin heating. A possible cause for this condition are incorrectly assembled cooling houses for vehicles assembled prior to January 10, 2020.

Technical Background

The improper coolant line installation illustrated below in Figures 1 & 2 results in flow stagnation through the heater core, thus preventing heat exchange in the heater core.

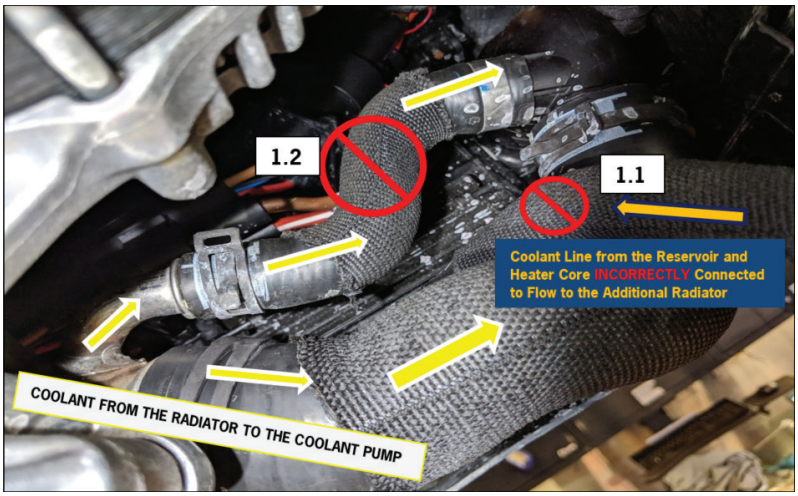


Figure 1 – Incorrect Coolant Hose Assembly (located behind front-right bumper cover)

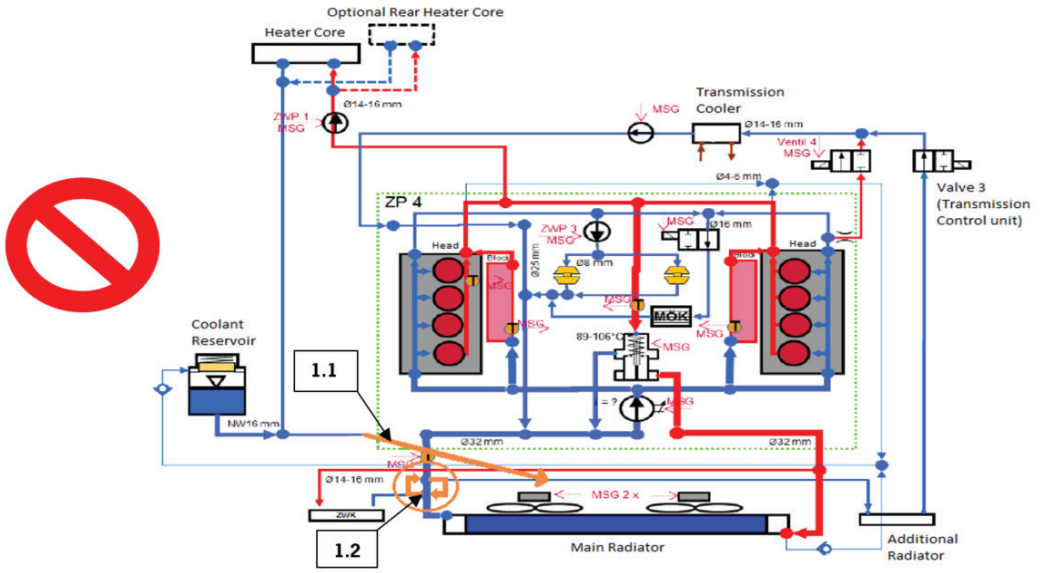


Figure 2 – Cooling System Functional Flow Diagram (Incorrect Assembly)

The improperly assembled coolant lines causing this condition are marked 1.1 and 1.2, in both Figures 1 and 2. The line marked 1.1 shows the combined downstream flow of the coolant reservoir together with the heater core. Falsely forcing the flow of 1.1 (shown in Figures 1 & 2) through the additional radiator towards 'Valve 3,' prevents heat exchange across the heater core, particularly when the valve is closed. The false assembly of line 1.2 results in a coolant return line from the radiator (downstream of the radiator) recirculating, whereas the proper installation requires this return line to flow through the additional radiator toward 'Valve 3.' In other words, the two assembled connections are mismatched.

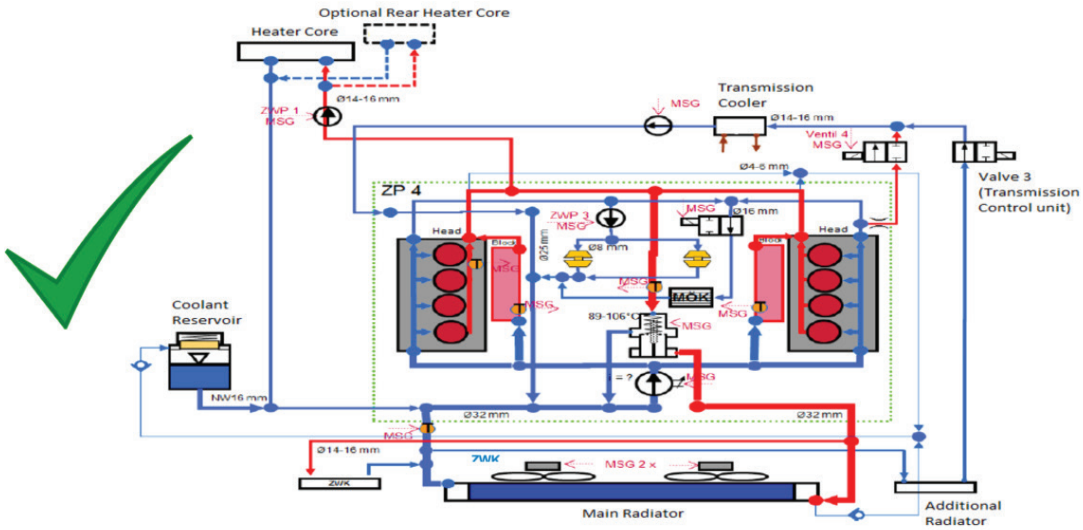


Figure 3 – Cooling System Functional Flow Diagram (Correct)

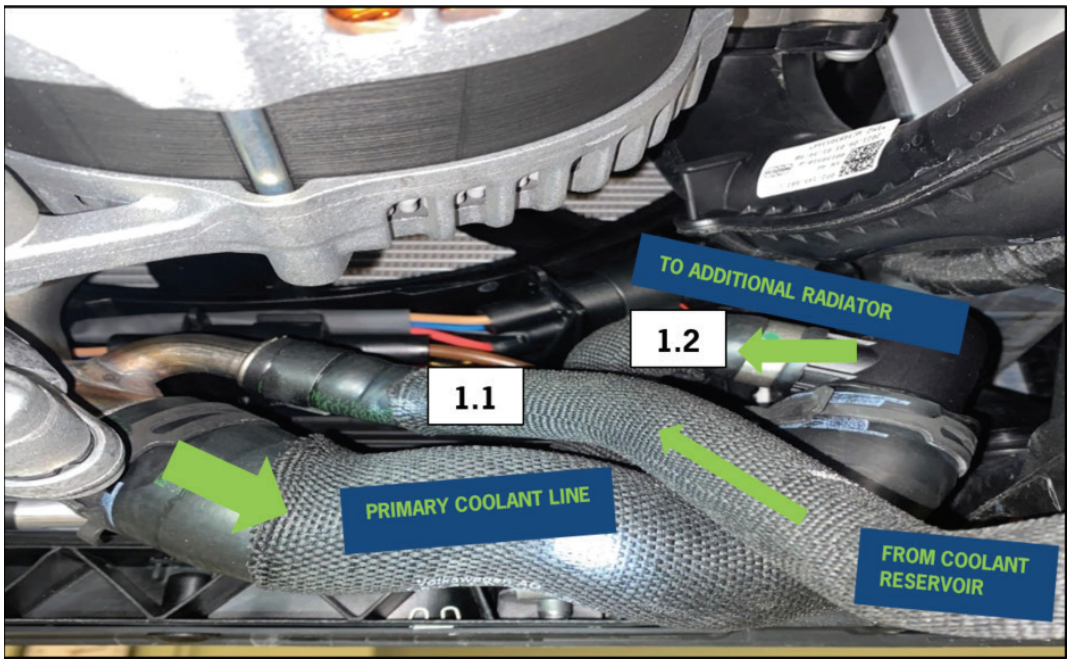


Figure 4 – Correct Coolant Hose Assembly (facing forward, towards the vehicle's front)

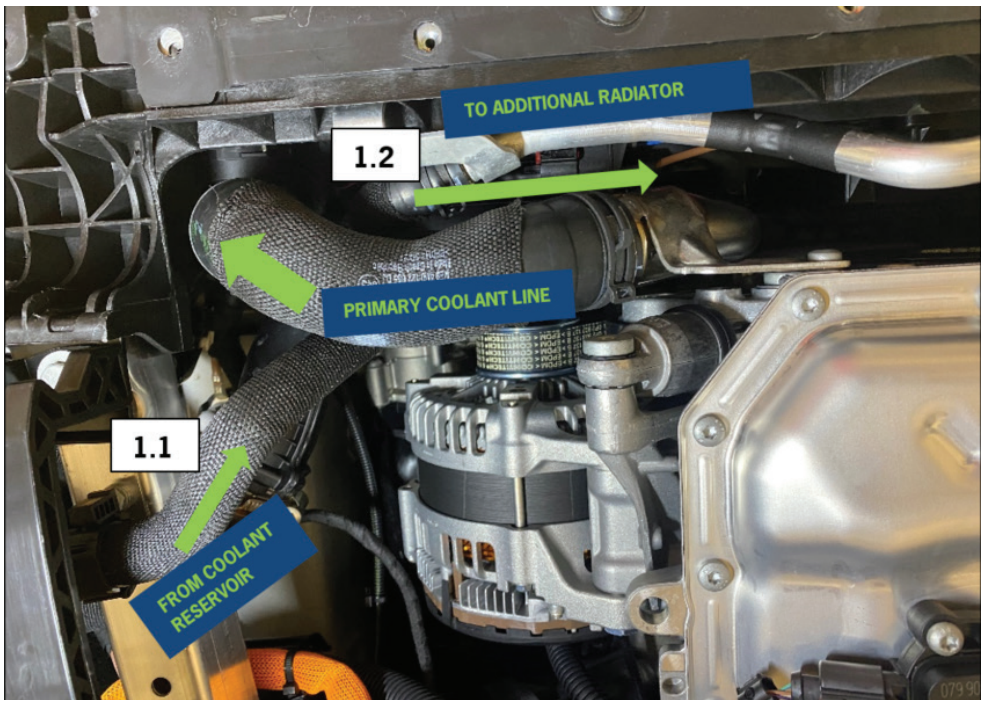


Figure 5 – View from Underneath of Correct Assembly

Figures 4 and 5 illustrate the correct assembly for lines 1.1 and 1.2 as depicted in the Function Flow Diagram of Figure 3.

Service Information

Please please ensure the correct aforementioned assembly configuration is present when diagnosing complaints for insufficient heating in the E3.I Turbo.

Warranty

As always, be sure to document the repair completely in PQIS.

For this repair, please code the "cause" as follows:

Cause location:	19610	Coolant Pipe
Cause symptom:	1031	Incorrectly connected, reversed

Use the following troubleshooting labor operation:

19381750	Coolant drain and fill

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