

Preview Solution CBR-2392-1

Battery Electric Vehicle (BEV) - Battery Thermal Management System (BTMS) - Diagnostic Trouble Codes (DTC) P116B87, P116B92, P116D87, And P116D92

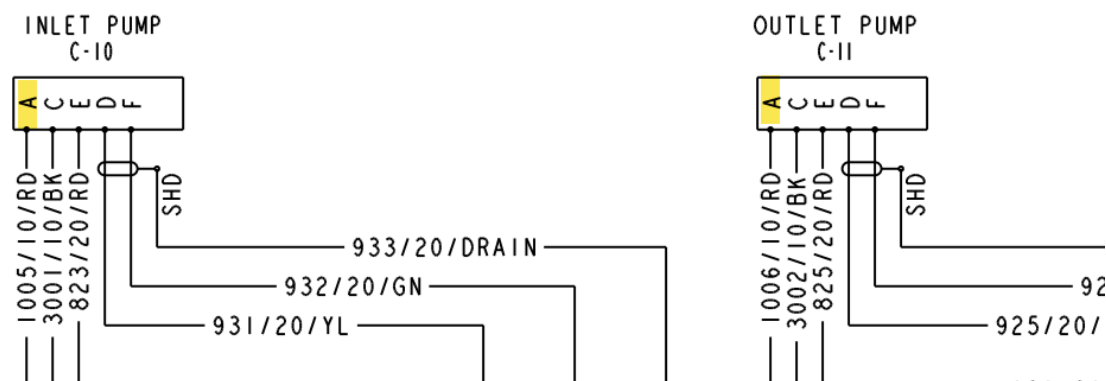
Published 28 October 2024

Valid for

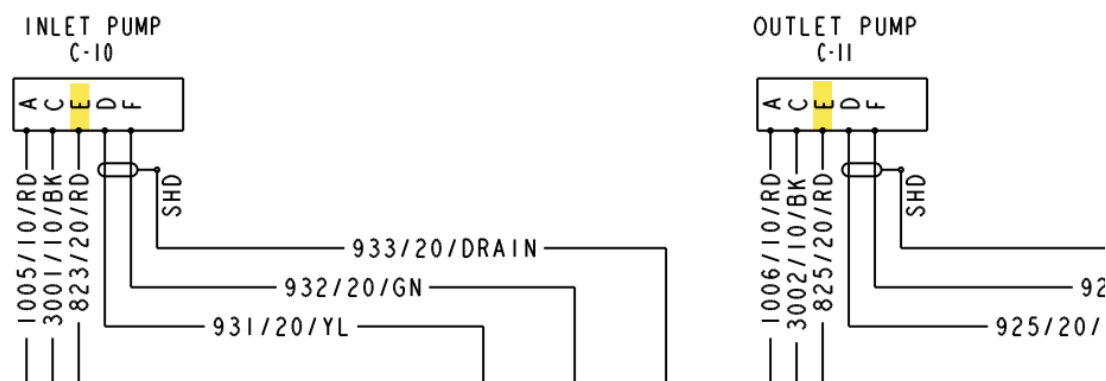
Volvo VNRe phase 2 model years 2022 to current

When fault codes **P116B87**, **P116B92**, **P116D87**, and **P116D92** are encountered, it is essential to conduct diagnostics before replacing the Battery Thermal Management System (BTMS) pump to ensure there are no underlying wiring issues.

- **Perform Wiring Checks:**
 - **Check Supply Voltage:**
 - With the key on, check the supply voltage to the faulty pump at **pin A**.

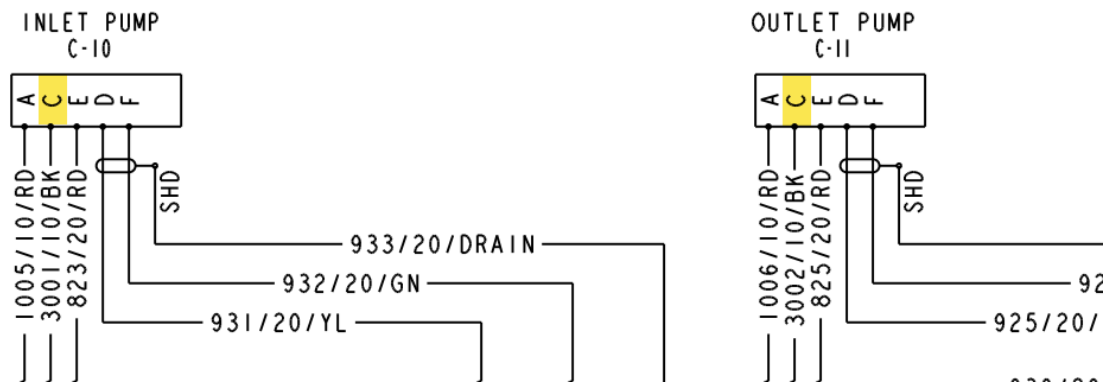


- **Check Ignition Voltage:**
 - With the key on, check the ignition voltage to the faulty pump at **pin E**.



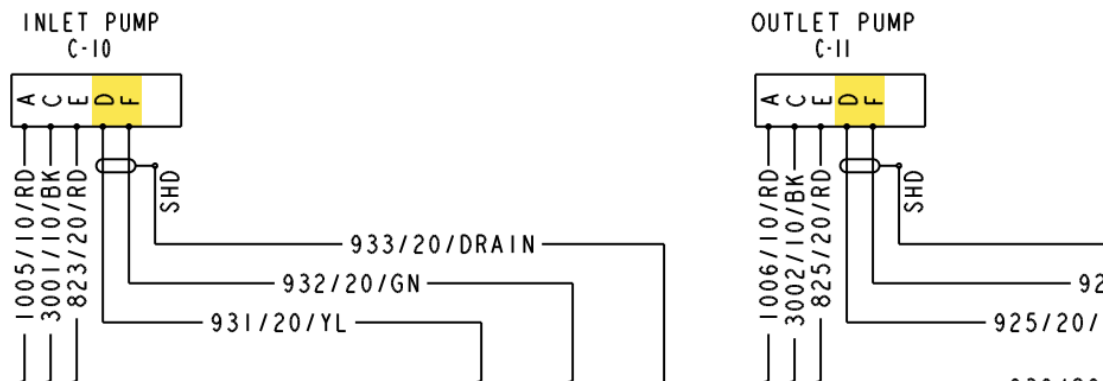
- **Verify Ground:**

- Verify the ground connection at **pin C**.



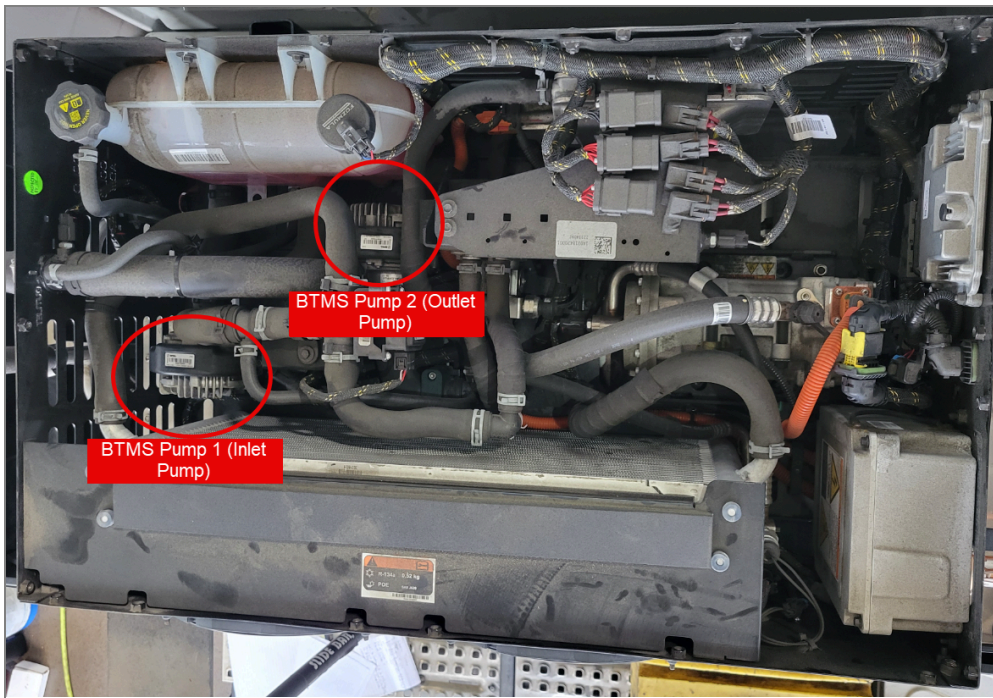
- **Verify Datalink Connections:**

- Confirm the datalink connections at **pins D and F**.

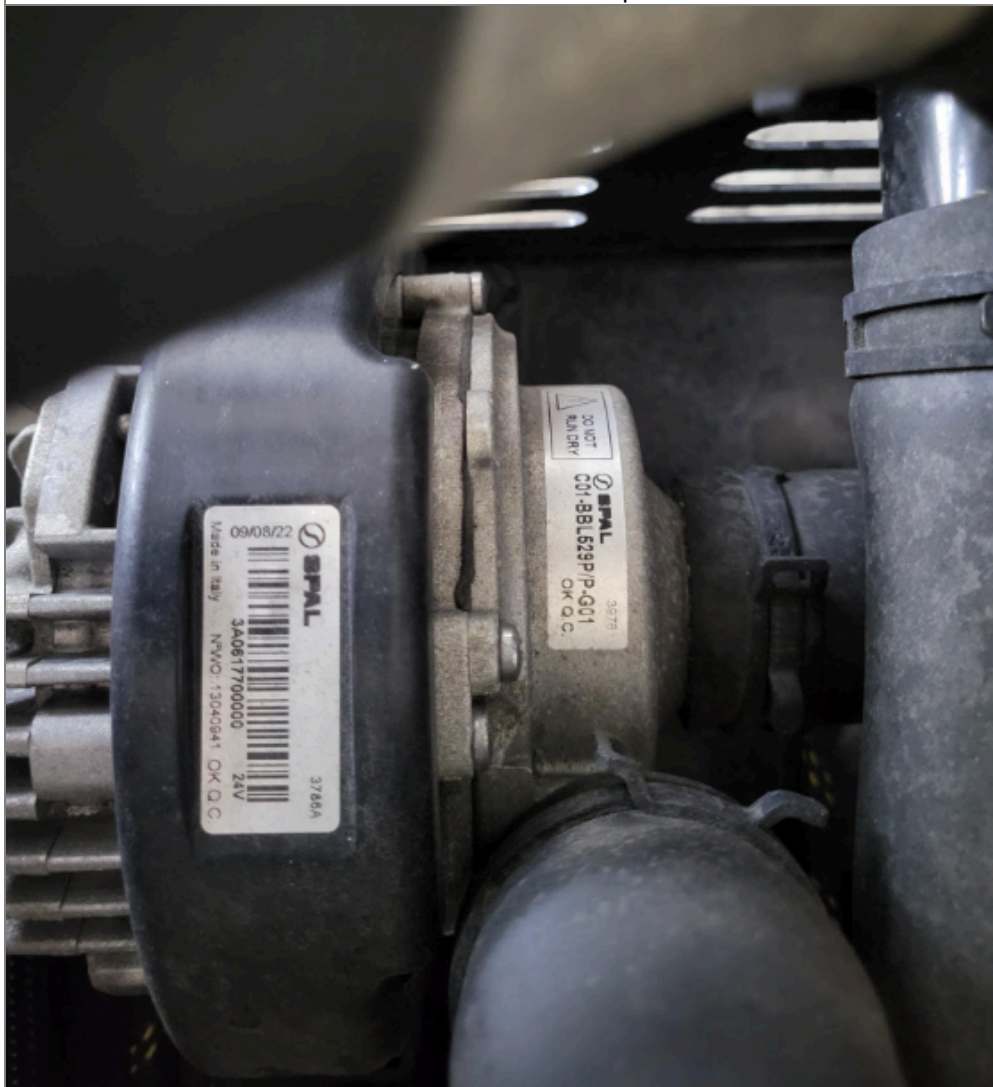


- **Note:**

All wiring checks must be completed before replacing any parts.



Overhead view of the BTMS with top cover removed



BTMS #1



BTMS #2

- **Run BTMS Test:**
 - Use the **BTMS test (2609-08-03-01 Battery Thermal Management System (BTMS), Test)** in Tech Tool to verify the faulty pump.
 - **Screenshot the test results** and attach them to the e - service case.
- **Document Findings:**
 - Fill out the attached questionnaire and upload it to the E-service case. ([BTMS Pump Info Sheet](#))

Related links and attachments

No links or attachments available



Share

to others that might find it helpful



Feedback

[Give feedback](#)

to help improve the content of this article

Case Information: BTMS Pump Replacement

SR #:	
Dealer:	
VIN or Chassis #:	
Mileage:	
BTMS Serial #:	
Pump Part #(s):	
Sandwich harness present?	YES or NO or UNKNOWN
Warranty Claim #:	

Fault Codes:

Check appropriate fault code:

☐	P116B92 Mech Failure Fault 17: Pump 1 Inop	☐ Active	☐ Inactive
☐	P116B87 Missing Msg Fault 18: Pump 1 Heartbeat	☐ Active	☐ Inactive
☐	P116D92 Mech Failure Fault 19: Pump 2 Inop	☐ Active	☐ Inactive
☐	P116D87 Missing Msg Fault 20: Pump 2 Heartbeat	☐ Active	☐ Inactive

Any addition information:
