

Fault Codes With Insignificant Value

TSB-54-367-FTL

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Engine or Vehicle Affected:

- ▶ eM2
- ▶ eCascadia

Description of Revisions: This bulletin replaces the version dated 2025-04-23. The last modified date has been added.

This is an informational bulletin only. The described condition is a product improvement and is not warrantable.

Described Condition

In eCascadia and eM2 vehicles, the active fault codes by eDrive Common Powertrain Controller (ECPC) and Unified Diagnostic Services (UDS) are generally reliable and should not be ignored. Troubleshoot beginning with the lowest number SPN then progressively work through faults with increasing numbered SPNs. The fault codes under the J1939 in DiagnosticLink® can be ignored. The purpose of this service bulletin is to provide guidance in avoiding unnecessary actions in response to those active fault code triggers that, despite being triggered, do not require any intervention. See Table 1, Table 2, Table 3, and Table 4.

Table 1, Faults that Should Generally be Ignored

Source Address	Device Name	SPN	FMI	Description
0	ECPC	517087	14	Low Voltage Battery State of Charge or Connection Fault
23	ICC5	523021	31	The list of ECUs stored in the warning database (WDB) does not match the list of ECUs parameterized in PID 0x20
48	EAPU	522502	9	Momentary CAN Timeout for BS_E9 Message
48	EAPU	522505	9	Momentary CAN Timeout for CPC3_E3 CAN Message
48	EAPU	522510	9	Momentary CAN Timeout for CPC3_E7 CAN Message
73	DCB1	517043	0	Low Voltage Power Supply Voltage Momentarily Too High or Data Timing False Trigger
214	DCB2	517043	0	Low Voltage Power Supply Voltage Momentarily Too High or Data Timing False Trigger

Table 1, Faults that Should Generally be Ignored

Table 2, Fault Codes Active When the Estop Button is Pressed

Source Address	Device Name	SPN	FMI	Description
0	ECPC	8207	14	Fault Reported By A DCB And Relayed to the ECPC to Display an Indication of the Fault
0	ECPC	517055	14	HVIL is Open Circuit While the Vehicle is Not Moving
0	ECPC	517099	14	Safe Torque Off Active on Inverter 1 (PTI1) - Clamp 30C Voltage is Out of Range
0	ECPC	517100	14	Safe Torque Off Active on Inverter 2 (PTI2) - Clamp 30C Voltage is Out of Range

Source Address	Device Name	SPN	FMI	Description
0	ECPC	517101	14	Safe Torque Off Active on Inverter 3 (PTI3) - Clamp 30C Voltage is Out of Range
73	DCB1	517042	11	KL30C Voltage Supply is Low Voltage
73	DCB1	517043	0	Low Voltage Power Supply Voltage Momentarily Too High or Data Timing False Trigger
102	BMS2	8098	4	System HVIL Circuit Open or Shorted to Ground
214	DCB2	517042	11	KL30C Voltage Supply is Low Voltage
214	DCB2	517043	0	Low Voltage Power Supply Voltage Momentarily Too High or Data Timing False Trigger
225	DCL	8587	8	DCL Input Under Voltage Error or the Keyswitch is in the Accessory Position

Table 2, Fault Codes Active When the Estop Button is Pressed

Table 3, Fault Codes Active When the Estop Button is Pressed While the Key is ON

Source Address	Device Name	SPN	FMI	Description
0	ECPC	9506	2	HV Battery Contactor State Mismatch Between Command and Actual While Vehicle is at Standstill
102	BMS2	8413	4	Clamp 30C Circuit Voltage Too Low - the Estop button may be depressed or an Ecut loop may be open circuit
103	BMS3	8413	4	Clamp 30C Circuit Voltage Too Low - the Estop button may be depressed
104	BMS4	8413	4	Clamp 30C Circuit Voltage Too Low - the Estop button may be depressed
105	BMS5	8413	4	Clamp 30C Circuit Voltage Too Low - the Estop button may be depressed
106	BMS6	8413	4	Clamp 30C Circuit Voltage Too Low - the Estop button may be depressed
107	BMS7	8413	4	Clamp 30C Circuit Voltage Too Low - the Estop button may be depressed
108	BMS8	8413	4	Clamp 30C Circuit Voltage Too Low - the Estop button may be depressed
109	BMS9	8413	4	Clamp 30C Circuit Voltage Too Low - the Estop button may be depressed
243	BMS1	8413	4	Clamp 30C Circuit Voltage Too Low - the Estop button may be depressed
102	BMS2	8414	12	Contactor Control Fault the Contactors are not Closing as Commanded
105	BMS5	8414	12	Contactor Control Fault the Contactors are not Closing as Commanded

Table 3, Fault Codes Active When the Estop Button is Pressed While the Key is ON

Table 4, Faults that May Show Previously Active After the Estop Button is Released

Source Address	Device Name	SPN	FMI	Description
0	ECPC	8207	14	Fault Reported By a DCB And Relayed to the ECPC to Display an Indication of the Fault
0	ECPC	9506	2	HV Battery Contactor State Mismatch Between Command and Actual While Vehicle is at Standstill
0	ECPC	9691	4	Radiator Fan Control Signal Short to Ground
0	ECPC	9691	5	Radiator Fan Control Signal Open Circuit
0	ECPC	9692	4	Radiator Fan Control Signal Short to Ground
0	ECPC	9692	5	Radiator Fan Control Signal Open Circuit
0	ECPC	517055	14	HVIL is Open Circuit While the Vehicle is not Moving
0	ECPC	517099	14	Safe Torque Off Active on Inverter 1 (PTI1) - Clamp 30C Voltage is Out Of Range
0	ECPC	517100	14	Safe Torque Off Active on Inverter 2 (PTI2) - Clamp 30C Voltage is Out Of Range
0	ECPC	517101	14	Safe Torque Off Active on Inverter 3 (PTI3) - Clamp 30C Voltage is Out Of Range

Source Address	Device Name	SPN	FMI	Description
37	CGW	524083	31	Lost communication with the (Supplimental Restraint System) SRS module for 3 seconds or longer
73	DCB1	517042	11	KL30C Voltage Supply is Low Voltage
102	BMS2	8098	4	System HVIL Circuit Open or Shorted to Ground
102	BMS2	8413	4	Clamp 30C Circuit Voltage Too Low - the Estop button may be depressed or an Ecut loop may be open circuit
103	BMS3	8413	4	Clamp 30C Circuit Voltage Too Low - the Estop button may be depressed or an Ecut loop may be open circuit
104	BMS4	8413	4	Clamp 30C Circuit Voltage Too Low - the Estop button may be depressed or an Ecut loop may be open circuit
105	BMS5	8413	4	Clamp 30C Circuit Voltage Too Low - the Estop button may be depressed or an Ecut loop may be open circuit
106	BMS6	8413	4	Clamp 30C Circuit Voltage Too Low - the Estop button may be depressed or an Ecut loop may be open circuit
107	BMS7	8413	4	Clamp 30C Circuit Voltage Too Low - the Estop button may be depressed or an Ecut loop may be open circuit
108	BMS8	8413	4	Clamp 30C Circuit Voltage Too Low - the Estop button may be depressed or an Ecut loop may be open circuit
109	BMS9	8413	4	Clamp 30C Circuit Voltage Too Low - the Estop button may be depressed or an Ecut loop may be open circuit
214	DCB2	517042	11	KL30C Voltage Supply is Low Voltage
225	DCL	4973	11	DCDL Loss of Crash Detection Signal
225	DCL	8087	10	KL15 Circuit Low - Data Communication Indicates Keyswitch is ON
225	DCL	8585	12	DCL Low Voltage Output Too High
225	DCL	8587	18	DCL Input Under Voltage Error or the Keyswitch is in the Accessory Position
225	DCL	516106	2	INT_CAN_BUS_PASSIVE
225	DCL	516112	19	DCL Internal CAN Data Error
225	DCL	516113	19	DCL Internal CAN Data Error
225	DCL	516114	19	DCL Internal CAN Data Error
225	DCL	516115	19	DCL Internal CAN Data Error
225	DCL	516127	8	DCL Internal CAN Data Error
243	BMS1	8413	4	Clamp 30C Circuit Voltage Too Low - the Estop button may be depressed or an Ecut loop may be open circuit

Table 4, Faults that May Show Previously Active After the Estop Button is Released

Warranty

This is an informational bulletin only. The described condition is a product improvement and is not warrantable.

Note:

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TROUBLESHOOT

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