

DTNA Solutions > Service Solutions > Freightliner
 > SS 3161-FTL Cascadia intermittent no-start and CPC...

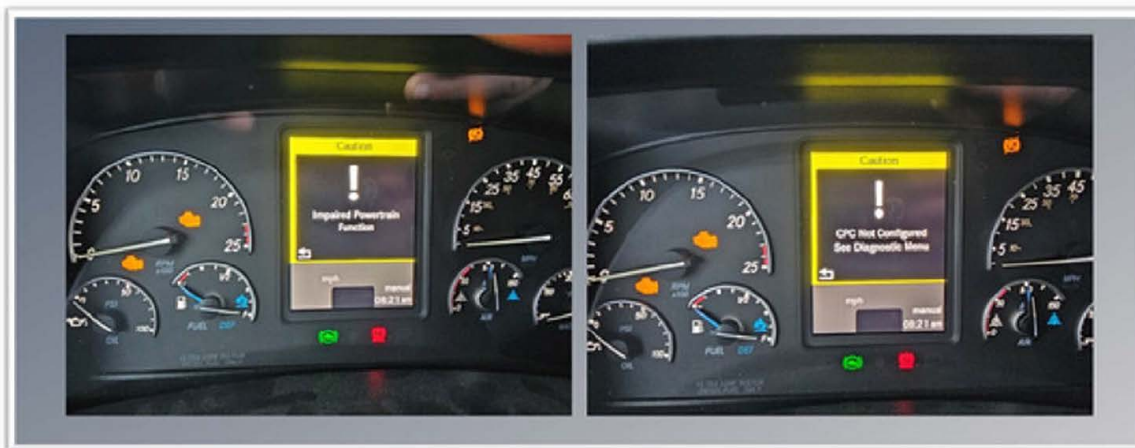
SS 3161-FTL Cascadia intermittent no-start and CPC not configured message

Applicable Vehicles

New Cascadia vehicles with Detroit powertrain

Symptoms

Intermittent No-start with "CPC not configured" or "Impaired powertrain" message in ICUC



Issue

The relay that controls the ignition wake-up function for powertrain modules does not supply power to initialize the powertrain communications prior to starting the engine.

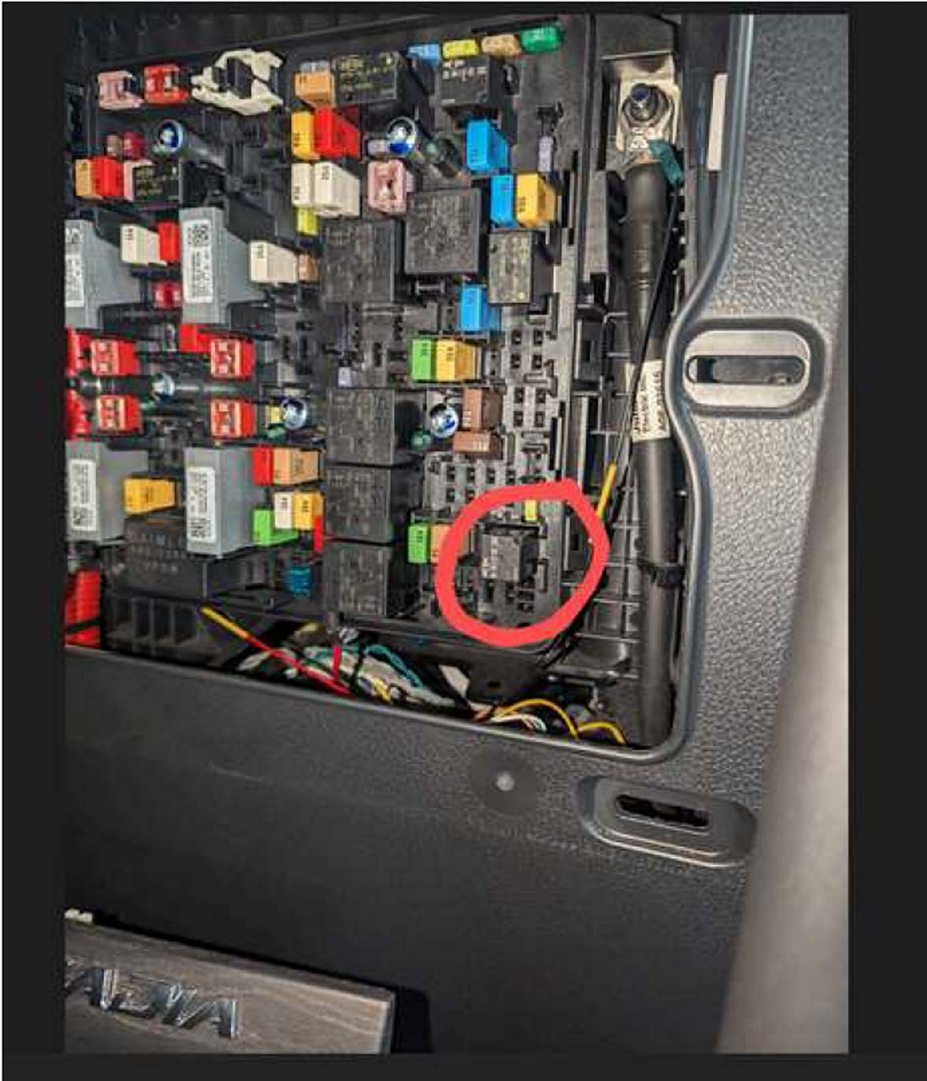
Solution

This is typically accompanied with MCM, ACM, TCM, data not plausible faults, along with either fault 158/2 or 168/2 for ignition switch not plausible or voltage erratic.

2024 Freightliner New Cascadia 126 Day Cab 4 x 4 Tractor				
VIN: 3AK8LUDV485V19813 Transmission: DT12-DT12-DC				
EIN: 47195251100543 Engine: ODEEC20-DO13				
All faults Fault History Test Results Virtual Technician Data				
Description	Number	Mode	Status	Troubleshooting
Impaired Powertrain - Common Powertrain Controller 5				
DT12 TEM CAN signal faulty	520193	14	previously active	Traditional
DT12 MCM CAN signal faulty	520194	14	previously active	Traditional
ACM data not plausible	520222	12	previously active	Traditional
WPC data - CAN timeout	520330	12	previously active	Traditional
Ignition Circuit Voltage Erratic	168	2	previously active	Traditional
TCM data not plausible	1482	12	previously active	Traditional
MCM data - CAN timeout	1483	12	previously active	Refer to TechLit

In the majority of cases with this complaint, we have verified this to be an intermittent concern with the PT Wake up/IGN relay within the VPDM. This will be either relay R22 or R24 in the VPDM depending on the layout.

The relay location will be shown on the back of the VPDM cover.

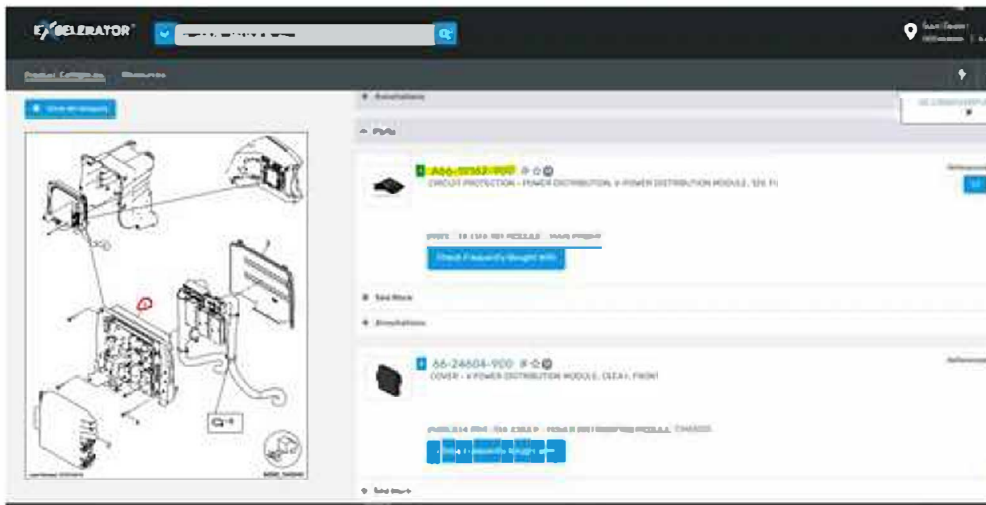


Use BOM 285 along with the VIN in Excelerator to obtain the VPDM part number. Refer to the CEEA+ CEEA+ Troubleshooting Guide in Tech Lit.

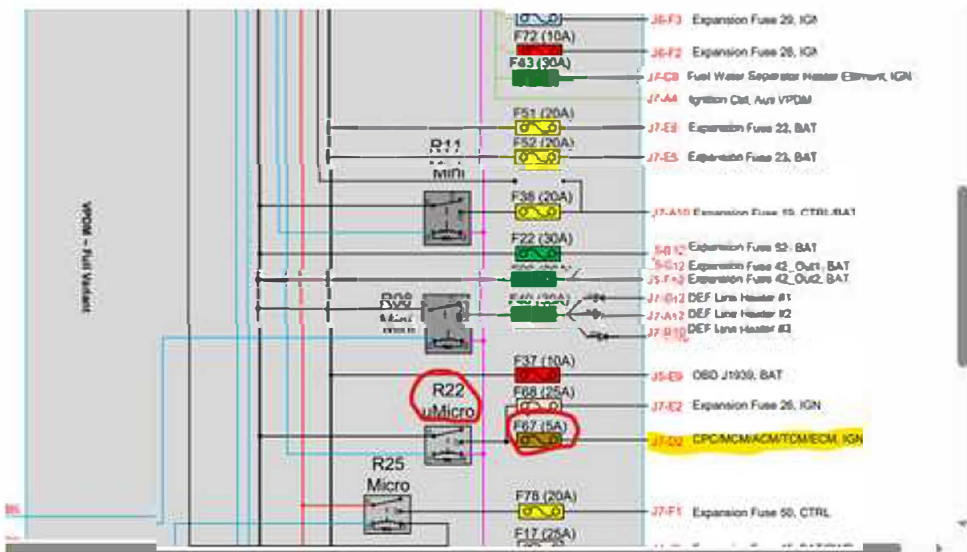
See section 3.3.2 Wall Charts for the VPDM Layout

Use the VPDM part number to locate the correct Wall Chart

[Wall Charts – CEEA+ Vehicles - Technical Literature \(dtnatechlit.com\)](https://www.dtnasolutions.com/t5/tkb/articleprintpage/tkb-id/freightliner-service/article-id/3161)



Once the correct wall chart is located search for either fuse F49 or F67 as this is the ignition power for all Powertrain modules, this will show us the correct relay that powers the ignition circuit for all Powertrain modules (Typically either R22 or R24 in the VPDM).



Should the concern persist here is what has been recommended in the past.

1. Review SS 1033628 in DTNA solutions, clean all ground connections at the MGJB, bulkhead pass through stud, cab skin ground, and left-hand frame rail grounds of all red glyptal paint.
2. Review Freightliner bulletin [54-330 Compressor Bracket Modification to Reduce Harness Chafing - Technical Literature](#) Inspect the MCM harness near the air compressor bracket as this is a known area to rub through or pinch due to improper routing.
3. Review SS 3075 in DTNA solutions, inspect the transmission harness near the shift controller and on top of the transmission especially near the bellhousing for any potential rub through points.
4. Refrain from installing test modules as this typically does not resolve the concern.

Labels :

- Electrical
- New Cascadia
- Power Train

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