



Freightliner Wiring Installation Cascadia

Date: 4.30.2024

Subject: Freightliner Wiring Installation Cascadia

Models: Cascadia



Cummins Clean Fuel Technologies

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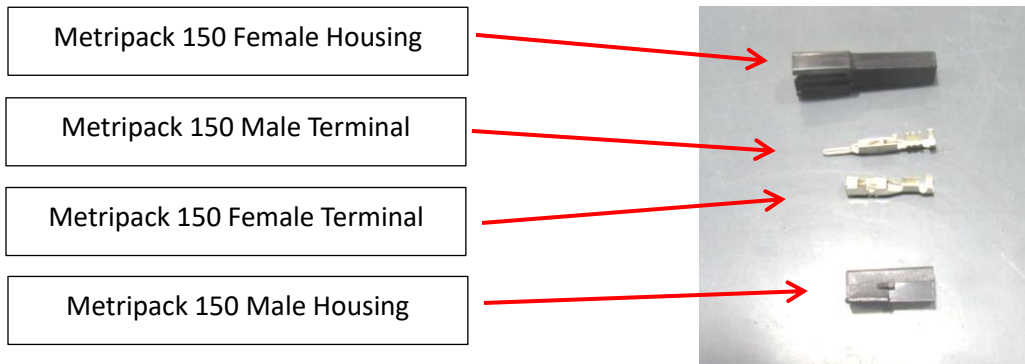
Phone: 817-767-6020

CCFT Freightliner Wiring Installation

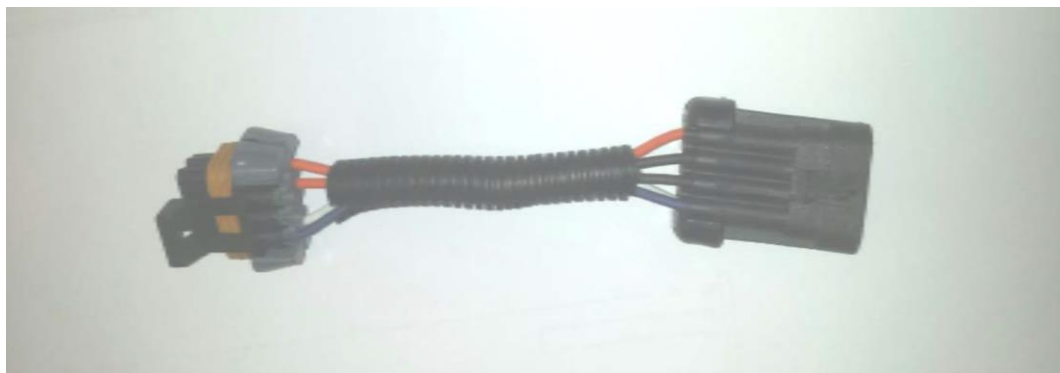
Chassis Interface Harness



Starter Interrupt Terminals and Housings

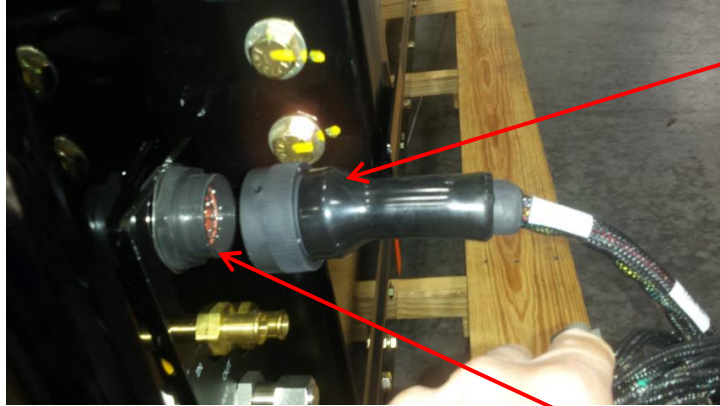


Freightliner 8 Pin Adapter Harness



Wiring Harness Installation:

Connect Chassis Interface Harness 23 pin cannon plug to the 23-pin connector on either the Fuel Management Module or the system, depending on which one you have.

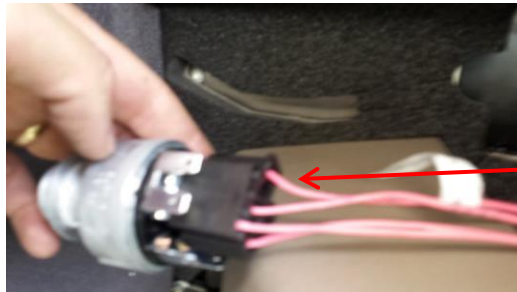


23 Pin Connector

23 Pin Bulkhead Connector on System or Fuel Management Module (FMM)

Run the Start Interrupt wires into the cab. Start Interrupt needs to route by the key switch.

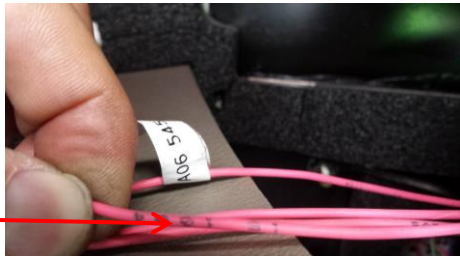
Cut the crank wire coming from the key switch in a location that connectors can be installed on both ends.



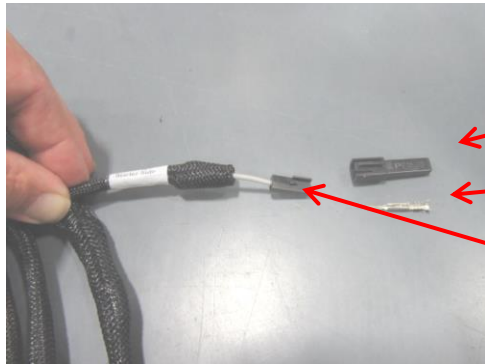
Key Switch

Install the Metripack 150 Series Male Housing on the wire going to the key switch side to connect to the yellow Starter Interrupt Switch Side connector on the Chassis Interface Harness.

Cut wire in location where Metripack 150 Series connectors can be installed on each end.



Install the Metripack 150 Series Female Housing on the side going to the starter to connect to Gray Starter Interrupt Starter Side on Chassis Interface Harness.



Metripack 150 Series Female

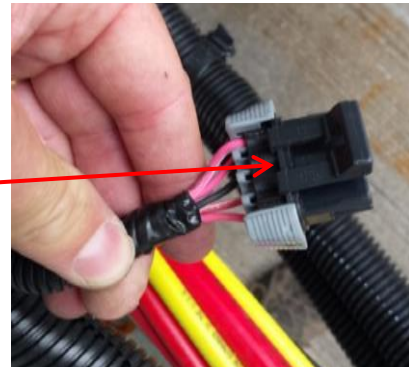
Metripack 150 Series Male

Gray Starter Interrupt Starter Side Connector on Chassis Interface Harness

Plug in the Starter Interrupt wires on the Chassis Interface Harness to these connectors. It is imperative that the yellow Starter Interrupt wire on the Chassis Interface Harness goes to the key switch side and must get power directly from the key switch when the key is in the start (crank) position.

Locate the Freightliner 8 Pin interface connector. It is normally approximately 2 feet back of cab in the left-hand frame rail. It should have a cap on it with approximately 4 inches of wires that have heat shrink over it.

Freightliner Interface Connector
(Note: Shown unplugged from cap.
Some chassis may have additional
wires in the connector).

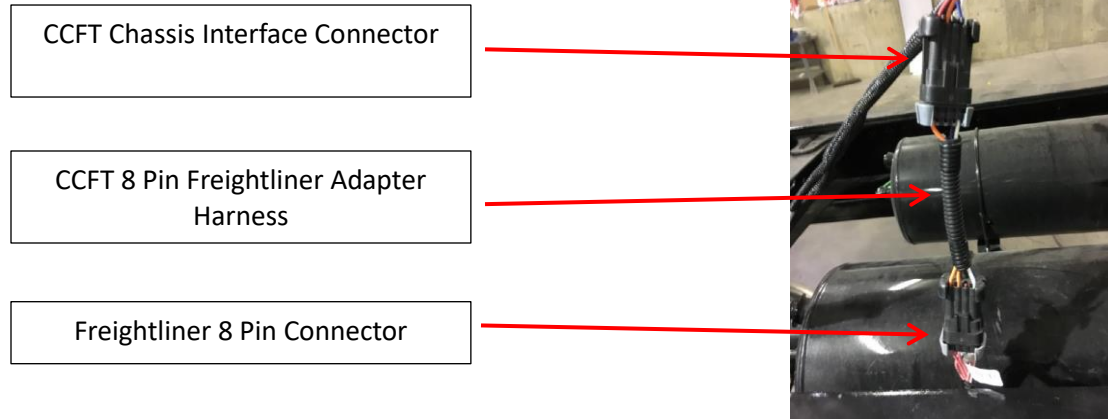


Freightliner Interface Connector
Cap. Note heat shrink tubing
protection wires and fuel level
resistor. This cap is to be removed
during installation.



Remove the cap. This will not be used for the installation.

Plug the Momentum Freightliner 8 Pin Adapter Harness into the Freightliner chassis harness and the Chassis Interface Connector on the Momentum Chassis Interface Harness. This connection supplies power, ground, and fuel level signal.



J1939 Connections

Locate the J1939 connector inside the cab.



Locate the J1939 Y-Harness in the Momentum Installation Kit



Cut off Amp Superseal connectors and terminals and install Deutsch DTM series terminals and 2 pin connectors.

Unplug terminating resistor from Freightliner plug. Remove wedgelock that is in the plug the terminating resistor was installed in.

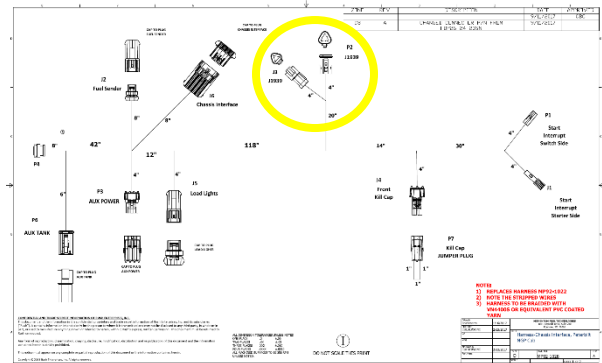
Install standard Deutsch DTM wedgelock in the Freightliner plug. Install the terminating resistor wedgelock in the DTM plug installed on the Momentum Y-Harness.

Install the Y harness to the Freightliner Plug and terminating resistor.

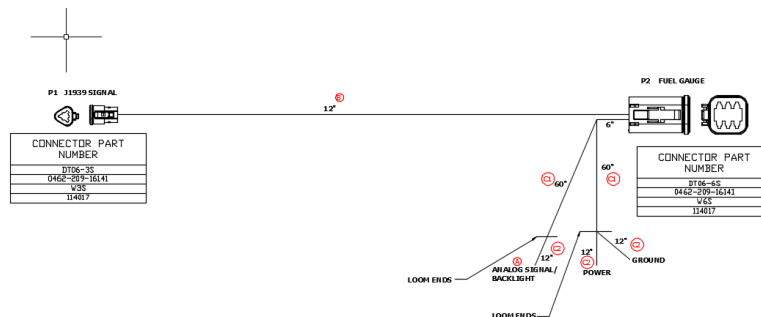
There should be (2) J1939 Extension Harnesses, MP92-1035, one in the Gauge Kit and one in the BOC Installation Kit.



Run one J1939 Extension Harness from each of the J1939 connectors on the Chassis Interface Harness, MP92-1028 into the cab. One will be for the digital gauge, and one will be for the system.



Connect on to the J1939 Y-Harness installed at the Freightliner connector and connect one to the J1939 connector on the Gauge Harness, MP92-1031.



Connect the red Power wire to a switched power connection, and the black Ground wire to a ground connection. The blue Analog Signal/Backlight does not need to be connected.