



Paccar Medium Duty Wiring Installation

Date: 4.29.2024

Subject: Paccar Medium Duty Wiring Installation

Models: All Models



Cummins Clean Fuel Technologies

1051 Republic Drive, Suite 200

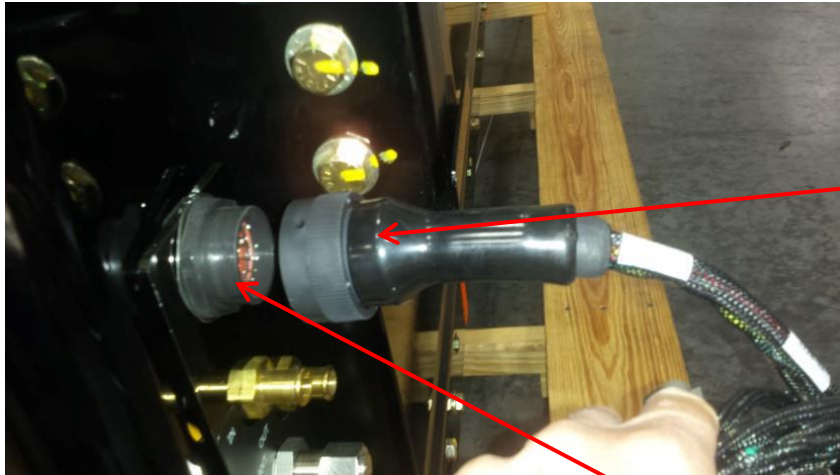
Roanoke, TX 76262

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Wiring Harness Installation:

CONNECTING POWER AND GROUND TO SYSTEM.

On the Chassis Interface Harness, MP92-1028, connect the P4 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)

On the Chassis Interface Harness MP92-1028, locate the 8-pin connector labeled J6 Chassis Interface.

Plug the 8-pin connector labeled Chassis Interface on the Power Harness MP92-1610 into the 8-pin connector labeled Chassis Interface on the Chassis Interface Harness, MP92-1028.



The orange and white wires on the Power Harness, MP92-1610 will run into the cab through the firewall manifold and up to the spare power and ground locations behind the speedometer and tachometer.



The row of spare power and ground locations closest to the firewall are switched power and will be the ones that are used for the system. Depending on the options on the chassis, the three on the left may only be accessory power and may lose power during cranking. The system requires power during cranking so this will need to be verified.



CONNECTING THE FUEL SENDER

Locate the connector labeled J2 Fuel Sender on the Chassis Interface Harness, MP92-1028. This will plug into the FUEL TANK connector on the Peterbilt Chassis Interface Harness.



CONNECTING TO THE J1939 DATA BUS

Locate the J1939 Y harness, MP92-1032. This will be used to Y into the chassis 1939 data link.

On the chassis, locate the connector labeled J1939 V-Can in the engine harness. Normally it is near the air cleaner bracket on the LH side of the firewall in the engine compartment.



Unplug the male plug going into the bright blue connector. NOTE: Make sure the terminating resistor does not come out of the blue connector. If it comes out on the plug, unplug it and reinsert it into the blue connector.

Plug the J1939 Y harness, MP92-1032 in between the blue connector and the 1939 V-Can plug unplugged in the previous step.

Locate the (2) three pin Deutsch connectors on the Chassis Interface Harness, MP92-1020, labeled J1939. Plug the plug from the Chassis Interface Harness, MP92-1028, into the receptacle on the 1939 Y Harness, MP92-1032.

Plug the plug of the J1939 extension harness, MP92-1035, into the 1939 receptacle on the Chassis Interface Harness, MP92-1028. The J1939 extension harness will need to run into the cab through the firewall manifold. In order to do this the receptacle must be removed.

RUNNING WIRES INTO THE CAB

There will be three sets of wires that need to run into the cab through the firewall manifold. It will require removing at least two of the empty plugs in the manifold. The wires that will need to be run into the cab are:

Start Interrupt wires on the Chassis Interface Harness, MP92-1028. These will need to route towards the key switch.

Power and Ground wires from the Power Harness, MP92-1610. These will need to route behind the main dash panel with the speedometer.

J1939 wires on J1939 Extension Harness, MP92-1035. These will need to route towards the main dash panel where the digital gauge is to be installed.

Once the wires are run through the firewall manifold, seal the opening with silicone.

CONNECTING THE START INTERRUPT WIRING

Run the Start Interrupt wires into the cab and route towards the key switch. In the Peterbilt Main Cab Harness, locate connectors J100 and P100 labeled START INTERRUPT. These should be orange and gray wires. Plug in Start Interrupt wires from the Chassis Interface Harness, MP92-1028, into the Start Interrupt connections on the Peterbilt Main Cab Harness. NOTE: The yellow wire on the Chassis Interface Harness, MP92-1028, must plug into the Orange wire in the Peterbilt Main Cab Harness. The engine will not crank if the wires are reversed. If the gender is reversed the gender changer harness must be installed.



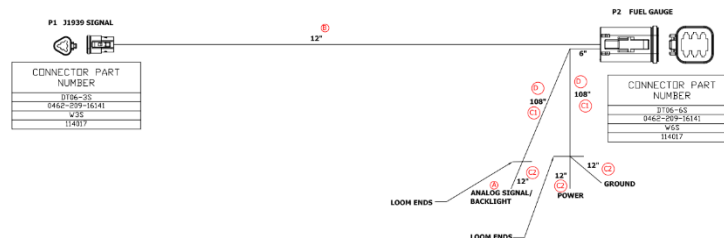
INSTALLING THE FUEL GAUGE

The main dash panel should have an open hole, this is where the digital gauge will be installed. It will be necessary to fill down the tap in the hole in order for the digital gauge to fit.

Install the fuel gauge in the hole.

Reinstall the receptacle on the J1939 Extension Harness, MP92-1035, that was run through the firewall.

Locate the Fuel Gauge Harness, MP92-1031. Connect the 6-pin connector labeled Fuel Gauge into the fuel gauge and the three-pin connector labeled J1939 Signal in the J1939 Extension Harness that was run through the firewall.



CONNECTING POWER AND GROUND

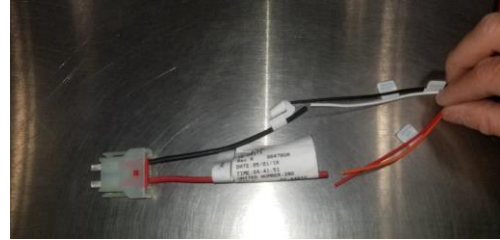
The power and ground for both the system and the gauge will be spliced together and use the same power and ground source.

Locate the Spare Power and Ground Tap, 16-09171.

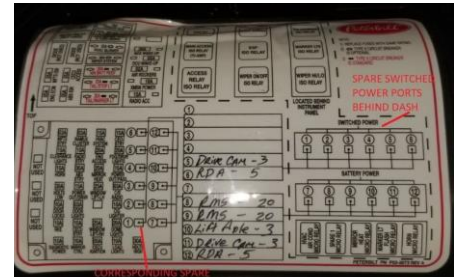


Butt splice the Orange wire from the Power Harness, MP92-1610 and the Red wire from the Gauge Harness, MP92-1031 to the Red wire on the Spare Power and Ground Tap, 16-09171.

Butt splice the White wire from the Power Harness, MP92-1610 and the Black wire from the Gauge Harness, MP92-1031 to the Black wire on the Spare Power and Ground Tap, 16-09171.



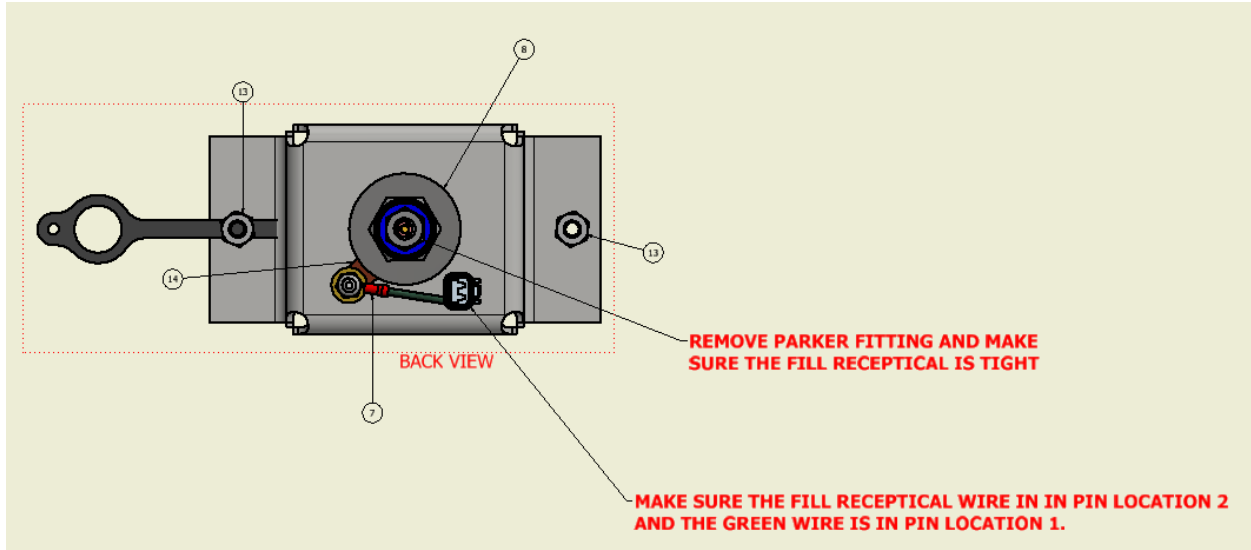
Plug the Spare Power and Ground Tap, 16-09171, into an empty Switched Power location behind the main dash panel with the Speedo. Note the location used by looking at the label on the back of the fuse panel door located on the driver's kick panel. Note that the location of the spare Switched Power behind the dash has a corresponding fuse location with the same number in the fuse panel. Add a 10-amp fuse to the corresponding fuse location and label the fuse panel with CNG Power on the appropriate line of the fuse label.



CONNECTING BUMPER FILL WIRING

Connecting the front fill wiring will require making a two-wire harness to go from the front fill box at the bumper to the front kill cap connector on the chassis interface harness.

On the Chassis Interface harness, MP92-1028 locate the Front Kill Cap connector and remove the Front Kill Cap Jumper Plug. Depending on routing this normally ends up near the fire wall. Locate the two pin Deutsch plug on the front fill box. A harness will need to be made to go between these two connectors.



In the bumper fill kit, there should be a two pin Duetsch receptacle, secondary locks for both the receptacle, Deutsch pins, two pin male Weatherpack connector, Weatherpack male terminals, gray wire, white wire, and split loom.

In the Weatherpack connector, the Gray wire will need to go to pin one and the White wire to pin two. In the Deutsch receptacle, the White wire will need to go to pin one, and the Gray wire to pin two.

Plug the harness into the front fill box and the Front Fill Cap connector.

