

Peterbilt 520 Wire Harness Installation

Date: 4.22.2024

Subject: Peterbilt 520 Wire Harness Installation

Models: All CCFT Fuel System



Cummins Clean Fuel Technologies

1051 Republic Drive, Suite 200

Roanoke, TX 76262

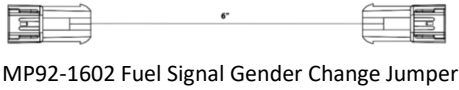
Phone: 817-767-6020

1) Locate the 520-fuel sender connector on the chassis wiring harness figure 1.



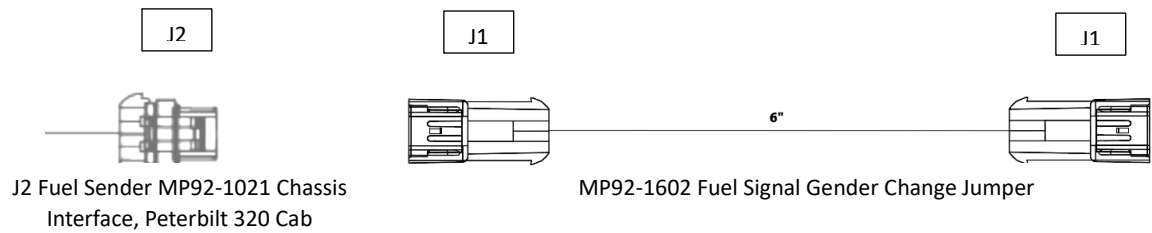
figure1

2) Plug the 520-fuel sender connector on the chassis wiring harness to the MP92-1602 Fuel Signal Gender Change. -1021.



MP92-1602 Fuel Signal Gender Change Jumper

3) Plug MP92-1602 Fuel Signal Gender Change harness to the J2 MP92-1021.



Route the MP92-1021 Chassis Interface, Peterbilt 320 Cab Harness towards the front of the truck in a manner that protects the wiring harness from damage figure 2.

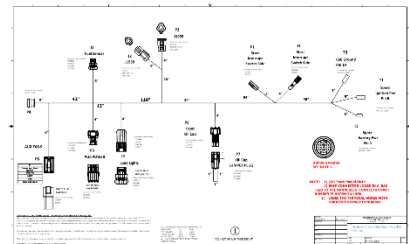


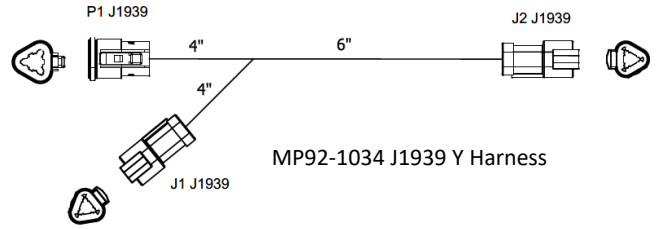
figure 2

If equipped with a Digital Gauge Kit use the MP92-1034 J1939 Y Harness at the engine connection figure 3.



figure 3

Connect P1 and J1 on the MP92-1034 J1939 Y Harness to the engine J1939.



J2 on the MP92-1034 J1939 Y Harness will connect to the P2 on the MP92-1021 Chassis Interface, Peterbilt 320 Cab harness figure 4.

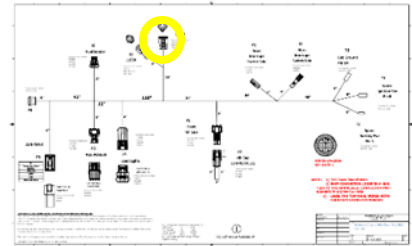
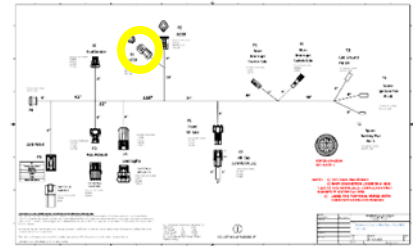


figure 4

Connect the P1 MP92-1035 J1939 Extension Jumper Harness to the J3 on the MP92-1021 Chassis Interface, Peterbilt 320 Cab Harness figure 5.



Note: MP92-1035 J1939 Extension Jumper Harness will run with the main chassis harness into the cab on the left-hand side. You will want as much harness as possible to go to the front.

If equipped with a bumper fill receptacle connect to the plug to the J5 Front Kill Cap connection, for front bumper fill receptacle. Comes with Kill Cap Jumper Plug if not used figure 6.



figure 6

Note: after plugging the bumper fill receptacle run the rest of the wires into the cab on the left-hand side of the cab through the bulkhead where all the airlines run through.

locate the start interrupt connection. Typically, it is right behind the steering column, it will be an orange and gray wire connected together figure 7



figure 7

Unplug the orange and gray wires and plug in the P1 and J1 on the MP92-1021 Chassis Interface, Peterbilt 320 Cab harness figure 8.

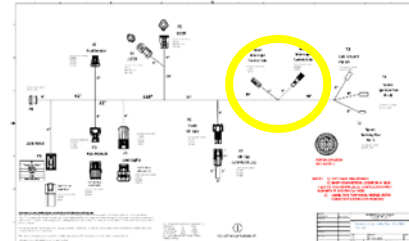
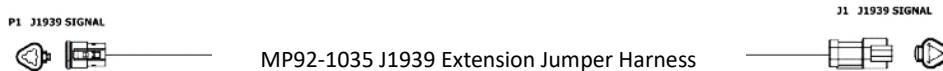
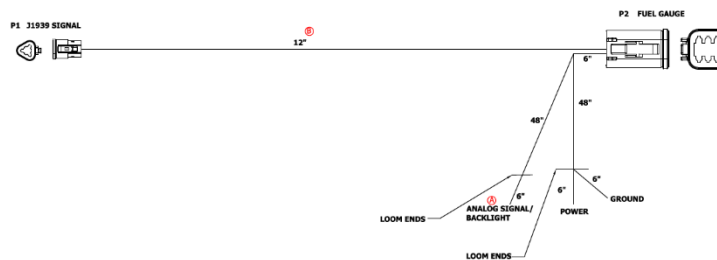


figure 8

Route the MP92-1035 J1939 Extension Jumper Harness up to the gauge cluster to install the Cummins Digital Fuel Gauge. Remove the factory fuel gauge and install the Cummins Digital Fuel Gauge



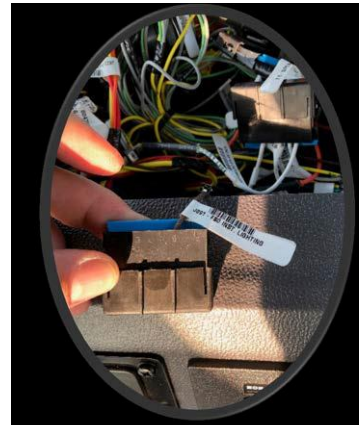
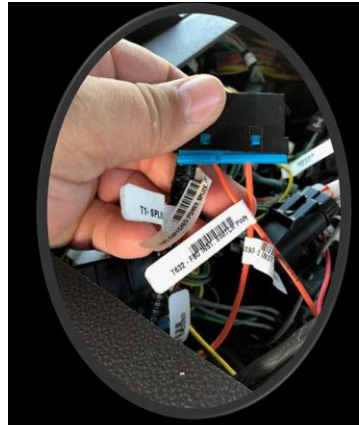
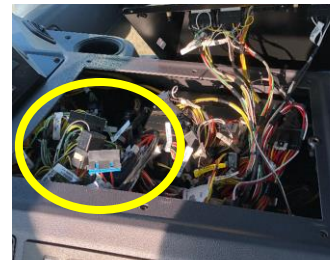
Connect the digital fuel gauge harness MP92-1031 C-COM AMETEK Fuel Gauge Harness P1 plug to the J1 plug on the MP92-1021 Chassis Interface, Peterbilt 320 Cab Harness.



MP92-1031 C-COM AMETEK Fuel Gauge Harness

Note: Route the rest of the MP92-1021 Chassis Interface, Peterbilt 320 Cab Harness to the "Doghouse".

Digital Fuel Gauge power, ground, and backlight connection's location in the "Doghouse." MP92-1031 C-COM AMETEK Fuel Gauge Harness will connect to each location.



Ground

Switch Power

Backlight

Six PIN connector on back of digital fuel gauge.

Yellow J1939 + Fuel System Chassis Wiring Harness

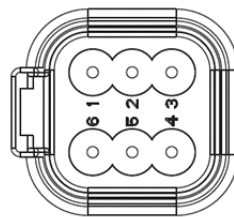
Green J1939 – Fuel System Chassis Wiring Harness

Black Chassis Ground

Red Chassis Key ON Power

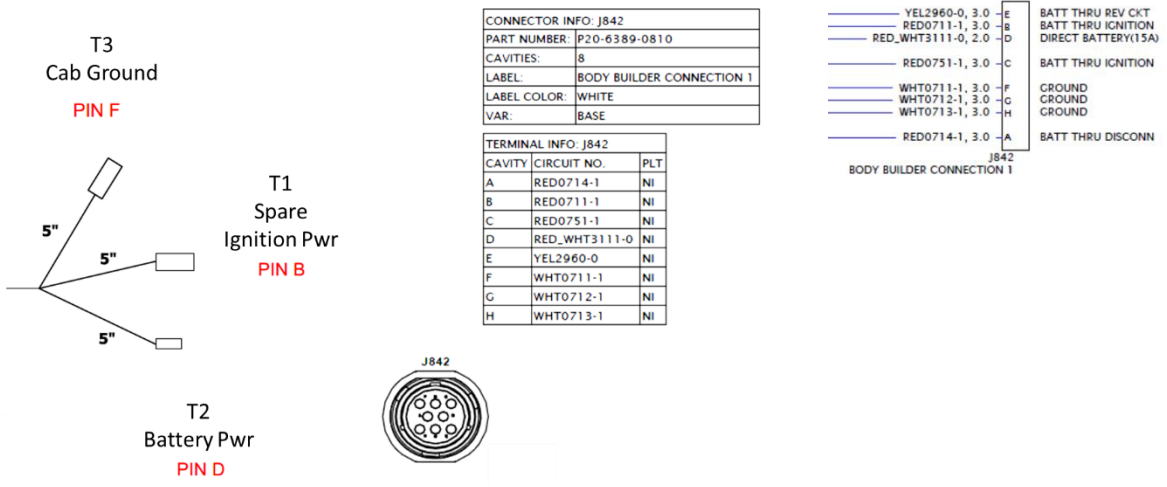
Blue Analog Signal/Backlight *Not always used*

Electrical Connections



PIN	SIGNAL
1	Battery/Ignition
2	Ground
3	Backlight (optional Analog input)
4	J1939+
5	J1939-
6	Output, switch to ground

Connect the MP92-1021 Chassis Interface, Peterbilt 320 Cab Harness Power, Switch power, and Ground to the body builder connection in the "Doghouse".



CONNECTOR INFO: J842	
PART NUMBER:	P20-6389-0810
CAVITIES:	8
LABEL:	BODY BUILDER CONNECTION 1
LABEL COLOR:	WHITE
VAR:	BASE

TERMINAL INFO: J842		
CAVITY	CIRCUIT NO.	PLT
A	RED0714-1	NI
B	RED0711-1	NI
C	RED0751-1	NI
D	RED_WHT3111-0	NI
E	YEL2960-0	NI
F	WHT0711-1	NI
G	WHT0712-1	NI
H	WHT0713-1	NI

YEL2960-0, 3.0	E	BATT THRU REV CKT
RED0711-1, 3.0	B	BATT THRU IGNITION
RED_WHT3111-0, 2.0	D	DIRECT BATTERY(15A)
RED0751-1, 3.0	C	BATT THRU IGNITION
WHT0711-1, 3.0	F	GROUND
WHT0712-1, 3.0	G	GROUND
WHT0713-1, 3.0	H	GROUND
RED0714-1, 3.0	A	BATT THRU DISCONN

J842
BODY BUILDER CONNECTION 1

