



Subject: Removal/Deletion – Front/Side Fuel Tank

Models Years Affected: 2020 - beyond

Models Affected: Chevrolet Silverado/GMC Sierra
3500 HD Chassis Cabs with
Diesel Engine (option L5P)

Origination Date: September 9, 2020

Revision Date: March 25, 2021

ADVISORY:

Condition/Concern:

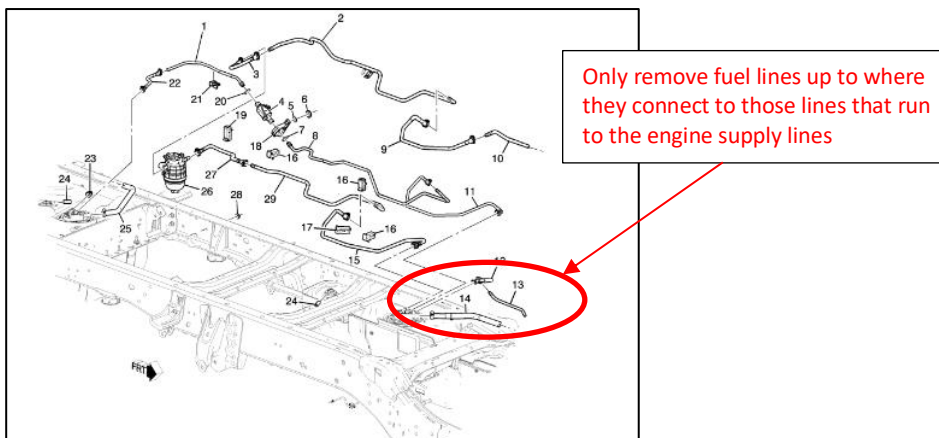
Some vehicle upfits of the Chevrolet Silverado and GMC Sierra 3500HD Chassis Cabs required the removal/deletion of the forward fuel tank to allow the relocation of the Diesel Exhaust Fluid (DEF) storage tank to allow for the installation upfit equipment. The following will provide instructions on the removal/addition of the necessary hardware to reconfigure the vehicle's fuel system from a dual (N2N) to a rear mounted (N2L) fuel tank system. Be advised that following the fuel system reconfiguration certain modules on the vehicle must be reprogram for the fuel system components to function properly.

NOTICE: READ THIS BULLETIN COMPLETELY IN ITS BEFORE BEGINNING THE RECONFIGURATION

Repair/Recommendation:

It is recommended to have all required parts on hand prior starting to perform the reconfiguration

1. [Drain the fuel tank.](#) (linked document)
2. [Remove the Fuel Tank](#)(linked document)
3. Remove fuel Lines – use care when removing as some lines are reused.

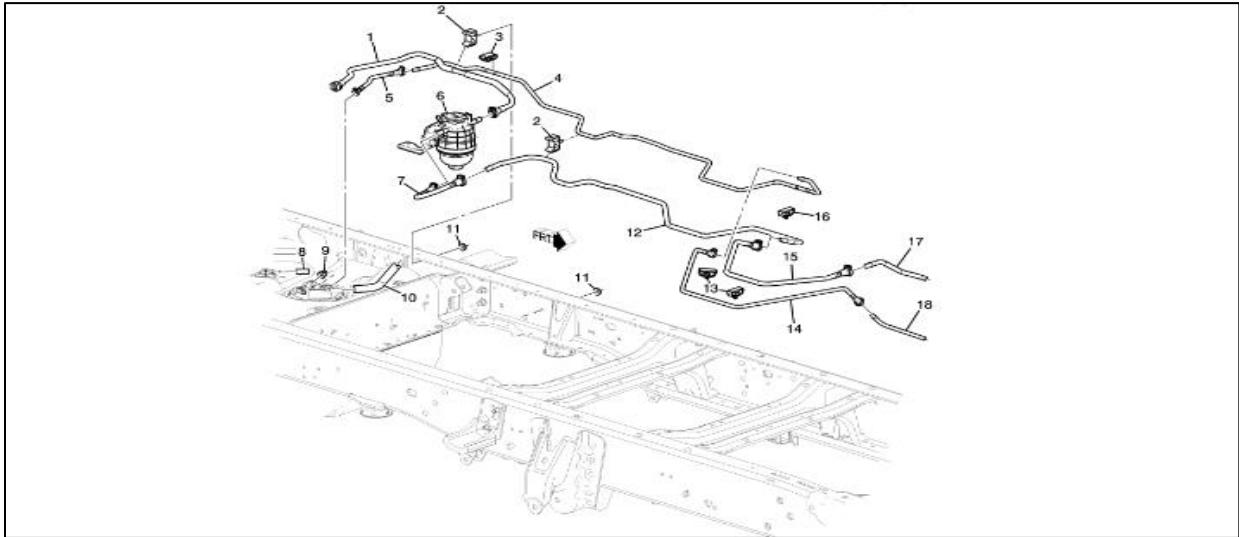


[Replace Rear tank Fuel Pump Module](#)(linked Document)



Fuel Supply Line Reconfiguration

The fuel lines must be reconfigured from dual tank (above) to single rear (below).



Item	Part #	QTY.	Description
			Specific part usage for 310xx (60" CA) 314xx (84" CA) Common Usage for Both models/Cas REUSED
1	84733587	1	HOSE, FUEL/WAT SEP INL (Service Lane Part)
2	15035903	2	CLIP, FUEL FEED & RTN PIPE (NYLON, HOLDS TWO PIPES 12.7/9.5, WIDTH 22, LENGTH 58 W/M8 STUD) (Service Lane Part)
3	22737791	1	CLIP, FUEL FEED & RTN RR HOSE (HOLDS TWO PIPES 12.6/9.5, WIDTH 21, LENGTH 52) (Service Lane Part)
4	84631070	1	PIPE, FUEL RTN RR (AC-Delco #84631070) (Service Lane Part) 310xx (60" CA)
4	84631059	1	PIPE, FUEL RTN RR (AC-Delco #84631059) (Service Lane Part) 314xx (84" CA)
5	84987666*	1	HOSE, FUEL FLTR (Service Lane Part) *replaces P/N 84631060
6		NR	FILTER, FUEL (W/WATSEP) (SEE GROUP 03 "FUEL FILTER & MOUNTING" FOR DETAILED ILLUSTRATED VIEW)
7	84631056	1	HOSE, FUEL FLTR (Service Lane Part)
8	22883445	NR	CAP, F/TNK FIL VENT PIPE (AC-Delco #22883445) (Service Lane Part)
9	23287870	NR	PLUG, F/PMP PORT (AC-Delco #23287870) (Service Lane Part)
10		NR	HOSE, F/TNK FIL VENT (SEE GROUP 03 "FUEL TANK FILLER PIPES & HOSES" FOR DETAILED ILLUSTRATED VIEW)
11	11546459	NR	NUT, FUEL FEED & RTN RR PIPE CLIP (M8X1.25 OD 24, 10THK) (8.915) (Service Lane Part)
12	84733594	1	PIPE, FUEL FEED RR (AC-Delco #84733594) (Service Lane Part) 310xx (60" CA)
12	84733593	1	PIPE, FUEL FEED RR (AC-Delco #84733593) (Service Lane Part) 314xx (84" CA)
13	25792015	3	CLIP, FUEL FEED & RTN PIPE (FOR 905 & 1206 PIPES, 50MMLNG, 15MMWIDTH; W/PSHRTNR) (Service Lane Part)
14	84631064	1	HOSE, FUEL RTN (AC-Delco #84631064) (Service Lane Part)
15	84733586	1	HOSE, FUEL FEED (INCLS CONNECTOR) (AC-Delco #84733586) (Service Lane Part)
16	25792013	1	CLIP, FUEL FEED & RTN PIPE (HOLDS 2 LINES W/MAS-TREE STYLE RETAINER) (Service Lane Part)



Additional Required Parts

Component	Component P/N	Qty Req.
Fuel Pump Driver Control Module (FPZM)	13531869	1
Fuel Tank Pump Module	84777095	1
Service Connector - Fuel Pump control Module	19354086	1
Terminated Lead - Terminal Type I	19300440	6
Terminated Lead - Terminal Type II	19329958	15

[Replace Fuel Pump Zone Module \(FPZM\)](#) (linked document)

Once the module has been replaced you will note the connector does not fit in the new module. You will need to transfer wires from the 46 cavity connector to the new 30 cavity connector you should have ordered for the P/N listed above.



NOTE: Not all wires will be transferred from 46 cavity into the NEW 30 cavity connector and not all cavities in the 30 cavity connector will be utilized. For easier reconfiguration, remove the jumper harness from the chassis harness to the Fuel pump module. Once the 46 to 30 cavity conversion is complete it is suggested that the unused wires be removed from the chassis connector of the jumper harness

Dual Tank Configuration (N2N)						Single Tank Configuration - Rear Only (N2L)					
Function	Color	Size	Circuit	Pin	From/To	Pin	Circuit	Size	Color	Function	
Fuel Pump Control	GY	2.5	120	2	----->	8	120	2.5	GY	Fuel Pump Control	
Fuel Filter Temperature Sensor Low Reference	BK/VT	0.5	412	24	----->	19	412	0.5	BK/VT	Fuel Filter Temperature Sensor Low Reference	
Run/Crank Ignition 1 Voltage 4	VT/IGN	0.5	439	3	----->	17	439	0.5	VT/IGN	Run/Crank Ignition 1 Voltage 4	
Fuel Filter Temperature Signal	BN/VT	0.5	455	36	----->	4	455	0.5	BN/VT	Fuel Filter Temperature Signal	
Fuel Pump Primary Relay Control	GNG/Y	0.5	465	11	----->	18	465	0.5	GNG/Y	Fuel Pump Primary Relay Control	
Primary Fuel Level Sensor Signal 2	BL/VT	0.8	1589	37	----->	13	1589	0.5	BL/VT	Primary Fuel Level Sensor Signal 2	
Ground 17	BK	2.5	1750	14	----->	22	1750	2.5	BK	Ground 17	
Fuel Pump Supply Voltage Phase 2	YE/GY	2.5	4137	30	----->	9	4137	2.5	YE/GY	Fuel Pump Supply Voltage Phase 2	
Fuel Pump Supply Voltage Phase 3	WH/BN	2.5	4138	1	----->	24	4138	2.5	WH/BN	Fuel Pump Supply Voltage Phase 3	
Powertrain Sensor Bus Enable	VT/IGN	0.5	4320	10	----->	16	4320	0.5	VT/IGN	Selective Catalytic Reduction Power Module Wake-Up Signal	
High Speed GMLAN Serial Data [+/-] 7	BL/BN	0.5	4498	7	----->	30	4498	0.5	BL/BN	High Speed GMLAN Serial Data [+/-] 7	
High Speed GMLAN Serial Data [-] 7	WH	0.5	4499	8	----->	15	4499	0.5	WH	High Speed GMLAN Serial Data [-] 7	
Secondary Fused Battery Positive Voltage 53	RD/VT	2.5	5340	46	----->	7	5340	2.5	RD/VT	Secondary Fused Battery Positive Voltage 53	
Fuel Level Sensor Low Reference	BK/GN	0.5	6281	21	----->	28	6281	0.5	BK/GN	Fuel Level Sensor Low Reference	
Water In Fuel Sensor Signal	BL/YE	0.5	6861	16	----->	2	6861	0.5	BL/YE	Water In Fuel Sensor Signal	
Water In Fuel Sensor Voltage Reference	WH/RD	0.5	6862	4	----->	1	6862	0.5	WH/RD	Water In Fuel Sensor Voltage Reference	
Water In Fuel Sensor Low Reference	BK/BU	0.5	6863	23	----->	3	6863	0.5	BK/BU	Water In Fuel Sensor Low Reference	
Fuel Pump Assembly Shield Ground	BN	0.8	7444	15	----->	23	7444	0.5	BN	Fuel Pump Assembly Shield Ground	
Fuel Pressure Sensor 5V Reference	BN/RD	0.5	7445	19	----->	12	7445	0.5	BN/RD	Fuel Pressure Sensor 5V Reference	
Fuel Pressure Sensor Signal	BL/WH	0.8	7446	20	----->	26	7446	0.5	BL/WH	Fuel Pressure Sensor Signal	
Fuel Pressure Sensor Low Reference	BK/YE	0.5	7447	35	----->	27	7447	0.5	BK/YE	Fuel Pressure Sensor Low Reference	

These circuit need to re-routed to the new fuel pump module in the rear tank.

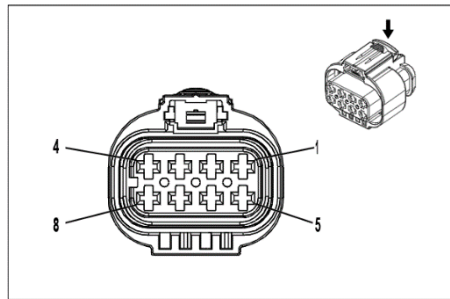


General Motors Upfitter Integration

<http://www.gmupfitter.com>



Relocate/Reroute **Primary Fuel Pump (FP) wires** from the front fuel tank to the now primary rear fuel tank. Having previous replaced the Fuel Pump (FP) Module in the rear tank you should note that the new pump has an 8 cavity connector versus the previous 2 cavity connector from the removed pump. This 8 cavity connector had previous been plugged into the front tank and now must be plugged into the rear tank...the 2 cavity FP connector previously connected to the rear tank FP is no longer used.



A6C Fuel Pump and Level Sensor Assembly - Primary (L5P+N2L)

Pin	Size	Color	Circuit	Function	Terminal Type ID	Option
1	2.5	GY	120	Fuel Pump Control	I	—
2	2.5	YE/GY	4137	Fuel Pump Supply Voltage Phase 2	I	—
3	2.5	WH/BN	4138	Fuel Pump Supply Voltage Phase 3	I	—
4	0.5	BN	7444	Fuel Pump Assembly Shield Ground	I	—
5	0.5	BU/VT	1589	Primary Fuel Level Sensor Signal 2	I	—
6	0.5	BK/GN	6281	Fuel Level Sensor Low Reference	I	—
7 - 8	—	—	—	Not Occupied	—	—

[Prime the Fuel System](#) (linked document)

Additional Information:

Upon completion of the fuel system hardware reconfiguration, it is necessary to reprogram the vehicle’s **Engine Control Module (ECM)** by a GM dealer to enable proper fuel system operation and IP Cluster fuel level indication.

GM DEALERS:

Contact Techline Customer Support Center (TCSC) and request the vehicle configuration string be modified, replacing the dual fuel tank option (N2N) with the rear only fuel tank option (N2L).

- **NOTE:** TCSC charges the dealer an administrative fee (~\$100 +/- \$25) for modifying the configuration string, this fee is typically passed onto the customer.
- Be sure to check for and clear any DTCs that may be present following the vehicle reconfiguration. Verify proper operation fuel level gauge/indication.