



TF-0001

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11/17

CWH

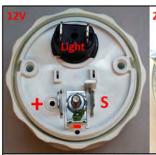
LNG Fuel Gauge Troubleshooting Flowchart USDOT

Capacitance & Voltage Specifications USDOT

Capacitance

Compare readings from all capacitance tests to the following graphs according to the tank size being tested and feed through cable (+/- 10 pF).

Note: If tank contains LNG, capacitance readings will reflect that level as a reading within the range between "Empty" & "Full" capacitances listed.





Fu	iel Gauge	e Resistance	
12V		24V	
Contact	Ohms	Contact	Ohms
Light Terminals	5	Light Terminals	22
(S) and (-)	250	(S) and (-)	251
(+) and (S)	170	(+) and (S)	393
(+) and (-)	278	(+) and (-)	500
		Resistor	221

Tank Outside	Empty	Full
Diameter	Capacitance	Capacitance
20"	287	397
22"	314	437
24"	342	477
26"	370	516
26" Bonus	380	531
	_	

Empty	Full
Capacitance	Capacitance
322	432
349	472
377	512
405	551
415	566
	322 349 377 405

Tank Outside	Empty	Full
Diameter	Capacitance	Capacitance
20"	262	372
22"	289	412
24"	317	452
26"	345	491
26" Bonus	355	506

Signal Voltage

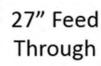
Signal voltage will be measured on the "Green"

wire. Signal voltage is driven by capacitance

and will vary depending on the amount of LNG

in the tank, and supply voltage.

15" Feed Through

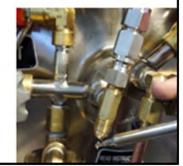




Bare Wire







Input Voltage

Supply voltage will be measured on the "RED" wire. Supply voltage will be 12 to 14 VDC depending if the engine is operating, and the functional state of the batteries & charging system. Low/High supply voltages can cause incorrect signal voltages

Red Wire = Supply Voltage Green Wire = Signal Voltage

Black Wire = Ground



VDO TYPE VOLTAGE TYPE

	Input Voltage with engine operating, and charging system & batteries operating normally	
		~14VDC
VDO Type	Empty	5.5
(Uses separate VDO gauge)	1/2 Tank	3.5
	Full	1.5
Voltage Type	Empty	0.5
(Uses OEM gauge)	1/2 Tank	2.5
	Full	4.5

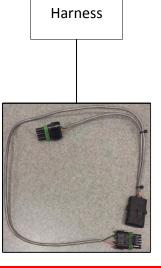
Capacitance Meter with Test Leads & Separate BNC Test Lead



Ground Resistance

Ground resistance will be measured on the "Black" wire. Connect one test lead to the black wire from the sending unit and the other to the tank for ground. Reading should be less than one ohm.





Breakout

Volt Meter with Test Leads

