



TF-0007

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10/17

LNG Resistance Type Gauge Troubleshooting Flowchart IVECO

Capacitance & Resistance Specifications IVECO

CAPACITANCE

Compare readings from all capacitance tests to the following graphs according to the tank size being tested and feed through cable

(+/- 15 pF)

Dual Tanks

3.4m/11ft crossover patch cable = ~195pf

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

Capacitances listed are for single and dual tank set-ups. In a dual tank system with resistance type senders both tanks will have a sending unit and a 381mm/15" feed through cable

Tank Outside Diameter	Empty Capacitance	Full Capacitance
610mm/24"	342	477
660mm/26" Bonus	380	531

381mm/15" Feed Through



Tank Outside	Empty	Full
Diameter	Capacitance	Capacitance
610mm/24"	317	452
660mm/26" Bonus	355	506

Bare Wire



Input Voltage

Supply voltage will be measured on the "RED" wire. Supply voltage will be ~24 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

Signal Voltage & Amperage

Signal voltage & amperage 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.

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.

Red Wire = Supply Voltage Green Wire = Signal Voltage Black Wire = Ground



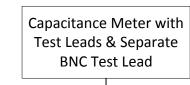
NOTE: Working resistance needs to be determined for troubleshooting. Use the following formula: Ω = Signal Voltage/Signal Current-Amperage. To obtain signal current it is necessary to break the signal wire (green) from the sending unit.

Insert a test meter set to measure DC milliamps (mA) in the circuit:



Compare reading to chart below.





11633137 Capacitance Meter Capacitance Test Lead 11385436



Breakout Harness **Breakout Harness**



Volt Meter with DC voltage & DC mA settings and test leads



Resistance Type IVECO **Tank Capacity** Standard Bonus 198Ω Empty 26" Outer

50Ω Full 26" Outer 24" Outer 198Ω Empty 50Ω 24" Outer Full Signal Voltage $\Omega =$

Signal Current-Amperage