CHART	TF-0003	000	06/17	CWH
	LNG Fuel Gauge Troubleshooting Flowchart SCANIA			

Chart LNG Fuel Gauge Troubleshooting Flow Chart for SCANIA Trucks

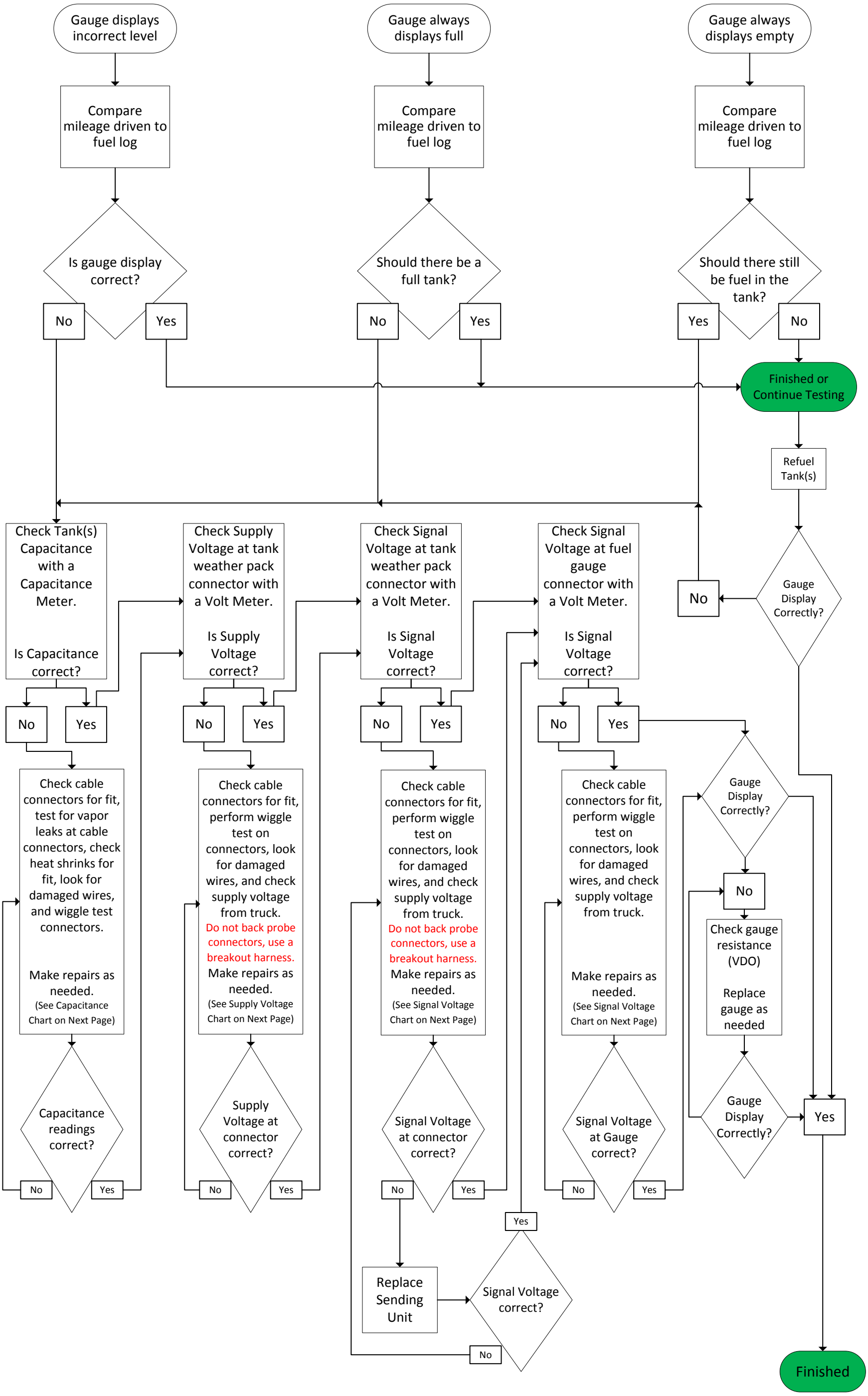


CHART	TF-0003	000	06/17	CWH
	LNG Fuel Gauge Troubleshooting Flowchart SCANIA			

Capacitance & Voltage Specifications SCANIA

Capacitance

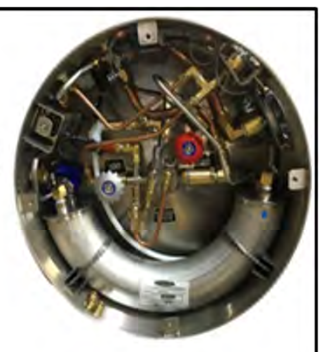
Compare readings from all capacitance tests to the following graphs according to the tank size being tested and feed through cable **(+/- 10 pF)**.

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

Fuel Gauge Resistance	
24V	
Contact	**Ohms**
Light Terminals	22
(S) and (-)	251
(+) and (S)	393
(+) and (-)	500
Resistor	221

Tank Outside Diameter	Empty Capacitance	Full Capacitance
22" VDO	343 pF	437 pF
26" VDO	400 pF	517 pF
26" Bonus VDO Type	404 pF	527 pF
26" Bonus Voltage Type	346 pF	516 pF

381mm/15" Feed Through



Tank Outside Diameter	Empty Capacitance	Full Capacitance
22" VDO	372 pF	466 pF
26" VDO	429 pF	546 pF
26" Bonus VDO Type	433 pF	556 pF
26" Bonus Voltage Type	406 pF	576 pF

686mm/27" Feed Through

Tank Outside Diameter	Empty Capacitance	Full Capacitance
22" VDO	312 pF	406 pF
26" VDO	369 pF	486 pF
26" Bonus VDO Type	373 pF	496 pF
26" Bonus Voltage Type	346 pF	516 pF

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

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.

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

VDO TYPE	VOLTAGE TYPE
	

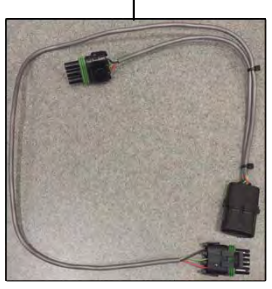
Input Voltage with engine operating, and charging system & batteries operating		
~24VDC		
Voltage Type		
Bonus Tank	Empty	0.5
	Full	4.5
VDO Type		
Standard Tank	Empty	4.5
	Full	0.5

Capacitance Meter with Test Leads & Separate BNC Test Lead

Capacitance Meter 11633137
Capacitance Test Lead 11385436

Breakout Harness

Breakout Harness 10989182



Volt Meter with Test Leads

NOTE: *General voltages & capacitances are provided in this document. Large deviations from provided numbers may indicate an issue. Supply voltage of ~24 VDC may vary depending on the engine operating rpm, and the functional state of the batteries & charging system. Low/High supply voltages can cause incorrect signal voltages*