TF-0005	000	07/17	CWH
LNG Fuel General Troubleshooting Flowchart IVECO			

Low Fuel Pressure

Is Tank Pressure at or above economizer set-point?

No

Yes

Test plumbing & relief valves for leaks

Pass

Fail

Test Economizer Set-point & Function **(± 0.7bar acceptable)** Refer to VT-0014

Pass

Fail

Test Pressure Gauge Accuracy Refer to VT-0052

Pass

Fail

Refuel Tank and operate on highway for 40-45 kilometers

No

Yes

Was defueling performed?

Re-seal or Replace fittings or components as needed If defueling is needed follow VT-0017

Has the truck been fueled or defueled recently?

No

Yes

Refuel Tank and operate on highway for 40-45 kilometers

Possible Cold Fuel Issue. Contact Chart LNG Technical Service

Yes

Has the truck been parked longer than 24hrs?

No

Check for proper supply voltage and resistance at shut-off solenoid

Pass

Fail

Repair or replace wiring or solenoid as needed

Test Set-point and functionality of OPR

Pass

Fail

Re-set or replace OPR as needed

Issue is on truck side of system

	TF-0005	000	07/17	CWH
CHART®	LNG Fuel General Troubleshooting Flowchart IVECO			

High Fuel Pressure

Tank pressure in relation to PRV set-point

Tank pressure is above PRV set-point

If tank secondary relief valve is venting, lower pressure, defuel tank, remove from service, and contact Chart Technical Service.

If not, lower pressure to 24bar and monitor for rapid pressure rise. Rapid pressure rise will require defueling, removal from service, and testing for soft vacuum

Vacuum Test (per VT-0019)
Defuel (per VT-0017)

Check for obstructed/ damaged vent lines.

Defuel (per VT-0017) and repair as needed.

Replace both relief valves if a relief valve is the cause.
Refuel.

At or below set-point

What is engine inlet pressure in relation to OPR set-point?

Set-point can be determined using

Above set-point

Test set-point of OPR and adjust to proper setting or replace as needed.

Re-pressurize system.

What is engine inlet pressure in relation to OPR set-point?

Above set-point

At or below set-point

Verify accuracy of tank pressure gauge(s)

Refer to VT-0052

Correct?

Yes

No

Has the truck been parked longer than overnight or recently fueled?

Repair or replace gauge(s) as needed.

Refuel

Yes

No

Operate on highway for 40-45 kilometers.

What are tank pressures in relation to economizer set point?

What are tank pressures in relation to economizer set point?

At or below

Above

Finished
if pressures are at or within 0.7bar of economizer set-point.

If more than 0.7bar differential, proceed to high or low pressure issue according to pressure.

Operate on highway for 40-45 kilometers.

What are tank pressures in relation to economizer set point?

Above

Use economizer test tool to determine set-point of economizer, and functionality of economizer & 2psi. knuckle check valve.

Refer to VT-0014

Recalibrate/ Repair/Replace as needed.

Issue resolved?

Yes

No

Perform soft vacuum test per VT-0019

Fail

Pass

Contact Chart LNG Technical Service for assistance.

Finished

TF-0005	000	07/17	CWH
LNG Fuel General Troubleshooting Flowchart IVECO			

Low Flow

Is red handled valve open fully?

Yes

No

Open red handled valve fully

Issue resolved?

No

Yes

Finished

Test functionality of Shut-off Solenoid

Pass

Fail

Repair or replace components or fittings as needed

Issue Resolved?

No

Yes

Excess flow valve (if equipped) may be tripped.
Close red handled valve for ~5minutes. Slowly re-open red handled valve.

Is flow normal?

Yes

No

Engine Will Not Try To Start With Key Turned To Start

Is fuel receptacle door closed?

Yes

No

Close fuel receptacle door

Issue resolved?

No

Yes

Verify alignment of fuel door magnet with reed switch. Is alignment correct?

Yes

No

Repair/ replace as needed to restore continuity

Verify continuity through reed switch 2-pin connector from tank? Repair/ replace as needed to restore continuity

Issue is on truck side of system

Issue resolved

No

Yes

Finished

Damage

Impact Damage

Fire Damage

Remove from service

Refer to VT-0006 to determine damage severity

Contact Chart LNG Technical Service and provide pictures of damage for evaluation

Remove from service

De-fuel per VT-0017

Contact Chart LNG Technical Service and provide pictures of damage for evaluation