Infobulletin

Bulletin no.: LSI210005
Date: 10th of June, 2021.
Subject: LiquidSi firmware upgrade **V2.28**

Dear Vialle Partner,

In this info bulletin we would like to inform you regarding a new firmware update, version 2.28, of our LiquidSi ECU. The new firmware update has a number of six new improved features, which we would like to present to you.

1. Minimum RPM has been lowered from 600 to 500RPM.

When LPG is chosen and the engine is started, the system will switch to LPG if the engine RPM is higher than this minimum value. From now this RPM can be set to a lower value.

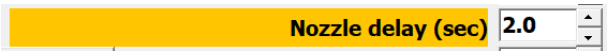
2. The max pressure drop value for empty tank detection, can be set higher up to 6 bar.

In case of using a PTS70 pump, the default setting for empty tank detection is 4 bar.

In combination with a powerfull engine, which uses so much fuel that the system pressure drops down to around 5 bar,herewith an empty tank can be detected. To prevent such faulse detection with conversions of big engines, the maximum drop pressure value is now increased up to 6 bar. This one bar extra makes it possible to drive longer on LPG or in other words to a higher value of engine power. When using our double banjo bolt set 311923.0 in order to feed both cylinder benches seperately, will also help to reduce to pressure drop at high engine load. For more information about this double banjo set please refer to info bulletin ALG210004 and manual 311647.0.
CAUTION: Do not apply too big values for this pressure drop setting! For example, when one uses 5 bar and the pump pressure increase is only 4 bar the pressure will never drop more then 4 bar, so the system will not be able to detect an empty tank! Use these max drop settings:

PTS-40	**2.4 – 3.0 bar**
PTS-70	**4.0 – 6.0 bar**

3. Nozzle delay in combination with „Start-stop“:



In version 2.26 this „nozzle delay“ was only used once, at the moment the engine switches to LPG for the first time. It did not respect this “nozzle delay” after a „start-stop“ period. Then the system switches ON the LPG injectors simultaneously. This leads to not smoothly switch over behaviour and causes yerking. Now in V2.28 the nozzle delay setting is applied at all moments the system switches from petrol to LPG. These are after the start, after a “start-stop” phase and after a temporary switch from LPG to petrol, because the set max RPM value was trespassed.

4. Dry run test:

It is **NOT** possible anymore to disable the dry run test. It is absolutely mandatory for the system to do this pressure rise test before running on LPG, otherwise the system can not check if the pump is working correct!

5. RPM fault:

In case of using „Virtual RPM function, that the actual RPM is calculated by means of the injector signals and BATTERY voltage level“ it could happen that the calculated RPM in version 2.26 did not represent the real RPM. A bug in the software caused this problem, which is now solved.

6. Offset Gas:

A new injector offset correction table is implemented, this is automatically configured and applied when the gas injector type is selected.
This improves more stable fuel supply and injector behavior at load changes, especially with an idling engine.

Please contact our Helpdesk, if you have any questions about this new firmware.

Kind regards.