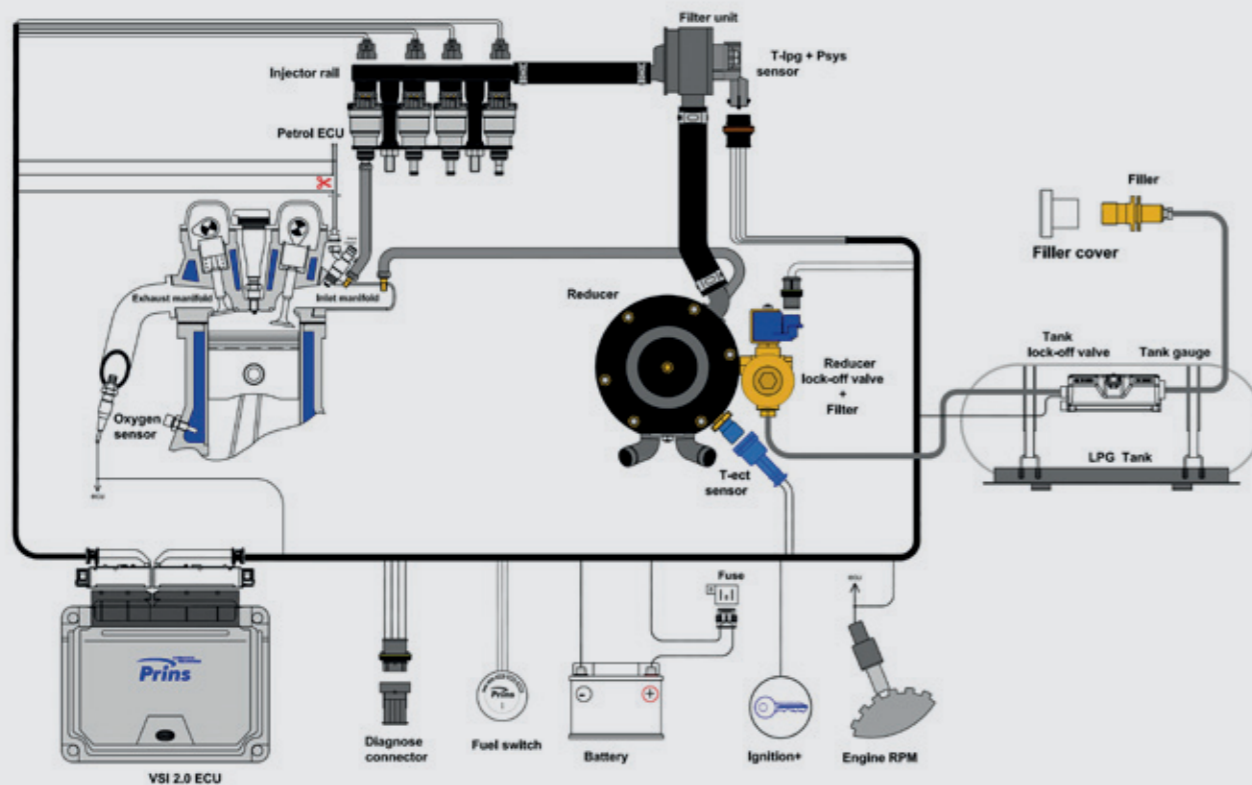


Layout overview
VSI-2.0 LPG system



Discover the VSI-2.0 system

Advanced calibration possibilities Diagnostic software in native language

The entire new Prins VSI-2.0 system is the latest development in alternative fuels. The system is an evolution of the VSI system which has proven itself over the last 10 years. The Prins VSI-2.0 system is available as a LPG as well as a CNG version and is also suitable for the latest generation Direct Injection engines (VSI-DI), also for CNG.

The key components of the system are all of OEM quality and specially designed for LPG and CNG applications. All components comply with the strictest regulations and certifications. The installation of the components is very easy due to the compact design of the components.

The dedicated diagnostic software is unique and enables fine tuning the VSI-2.0 system for optimal performance and emission reduction. The software will be available in your native language.

For the storage of the LPG or CNG are different tank options available.

Important to know:

- Adjustable LED colours of switch for integration with dashboard
- Possible to set the tank levels manually
- Extensive diagnostic functions, diagnostic software is divided in Basic and Advanced tabs
- Integrated checklist for switch over procedure, so fast diagnostic
- Extended actuator test, possible to check/control every valve manually
- Modular Plug & Play wiring loom, main and injector wiring are separate
- Freeze frame information of the first 2 errors
- 32-bits ECU of OEM quality
- One diagnostic tool for all Prins systems
- Pre-heated injectors to avoid sticking of the injectors at cold start
- Emergency gas start function integrated
- No RPM module necessary
- Sleep current ECU < 1 mA
- Complies with R67-01 and R115 regulations
- 3 years warranty on LPG system



Components

LPG Reducer



- Single stage
- Large capacity (14gr/s)
- Stable dynamic characteristics
- Adjustable pressure range with anti-tamper seal
- Map function
- Integrated OEM coolant sensor
- Complies with R67-01 homologation with 5 bar pressure relieve valve
- Complete with electronic lock off valve, liquid filter, and magnet
- Compact design for ease of installation

CNG Pressure regulator



- Precision built 'Single Stage' regulator developed by KEIHIN in cooperation with PRINS
- Based on OEM technology, quality and standards
- Integrated relief valve
- Small pressure drop level equivalent to a two stage regulator
- Manifold reference function
- System pressure is not affected by tank pressure
- Performance at cold temperature is identical as at normal temperature
- Optional in-line electrical lock-off valve. Wide range of connections possible at the valve inlet

Keihin OEM injector



- Developed by Keihin Corp, Japan, one of the worlds' leading injector manufacturers, in cooperation with Prins, ensuring quality and reliability
- Excellent linear flow rate (LFR = linear behaviour from minimum to maximum flow)
- Linear from 2,5 ms
- Model range available to cater for small and large engine displacement
- OEM quality injectors, performance guaranteed and long durability (290 million cycles)

Injector rail



- Easy fitting
- Assembled and leak tested at factory prior to dispatch
- 2/3/4/5 cylinder assemblies

Filter unit



- Compact design with single or dual delivery outlets
- Fitted with 10-micron ($\beta_{10} > 75$) dry gas filter protecting the fine tolerance of the injectors, from gaseous pollutants
- Combined gaseous temperature and pressure sensor

VSI-2.0 ECU



- The VSI-2.0 computer is the heart of the system and controls all the functions of the VSI-2.0 system for safety, switch over strategy, fuel injection and diagnostics
- OEM watertight case with ventilation plug
- One 81-pins connector for the master wiring loom and a small 40-pins connector for the specific engine configurations wiring loom
- A number of different communication interfaces for more advanced OEM engine integration.
- High performance 32-bits automotive controller combined with full diagnostic and self protected power-output circuits for high reliability and durability
- Diagnostics, service and parameter-load software operates from Windows XP / Vista / 7 applications

Fuel Selector switch



- Small and compact design suits all cab interiors
- Fuel selection via smart touch control. Informs operator of LPG tank contents, audible buzzer to alert low level switching or fault codes plus illuminated fault code warning with LED
- Self programmable LED colours

Tanks



- Cylindrical and toroidal tanks available for LPG
- Cylindrical tanks available for CNG, both steel and composite