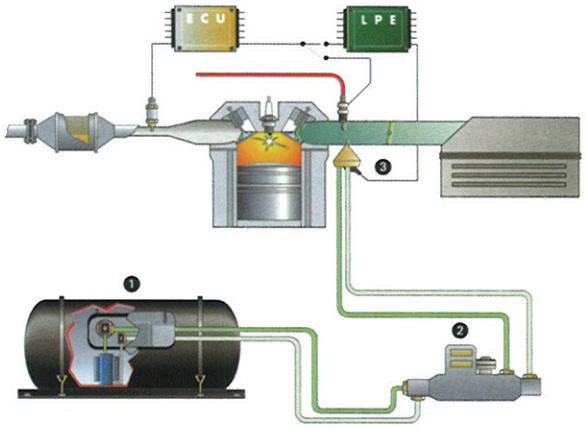
description of the LPi system



The operation of the LPi system can be compared to that of the petrol injection system: liquefied fuel is circulated and sent to the injectors. The system contains a fuel tank (1) with an integrated diaphragm pump. The pump increases the pressure in the fuel system by 5 bar and pumps the liquid LPG to the pressure regulation unit. The pressure regulation unit (2) monitors the pressure in the system. The unit contains a shut-off valve, which is opened when switching from petrol to LPG. The fuel flows to the injectors (3), which are mounted to the inlet manifold. The surplus LPG flows back to the tank through the return line and via the pressure regulation unit. The LPG injectors are controlled by the LPG control unit (LPE) by means of a signal sent to the petrol injectors. This signal comes from the original ECU, and is transformed into an LPG injector signal. All original engine management and diagnostic functions remain intact.

alternative fuel systems

Vialle B.V.
Steenoven 19
5626 DK Eindhoven
PO Box 28060
5602 JB Eindhoven
The Netherlands
Tel. +31 (0)40 - 2 663 663
Fax +31 (0)40 - 2 663 666
E-mail info@vialle.nl

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LPi®
LIQUID PROPANE INJECTION

technological expertise

helps create a cleaner environment

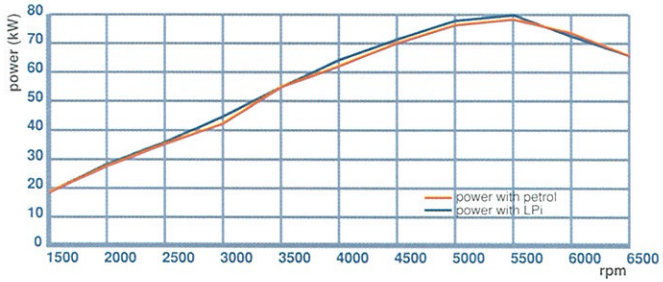
In the last few years, regulations for exhaust gas emissions and fuel consumption have become increasingly stringent. As a result, automotive technology has evolved to a very high level. Variable inlet systems, low-pressure turbos, ignition systems without distributors and multi-valve technology are examples of the industry's technological developments.

For many years, LPG has been recognized as a clean automotive fuel, providing considerable savings in fuel costs. In order to assure problem-free driving on this fuel, the LPG system that you choose must match the state-of-the-art technology of your car.
This way you save money without sacrificing performance.

The Liquid Propane Injection system (LPi) from Vialle offers all these advantages.

VIALLE
alternative fuel systems

Vialle, a Dutch manufacturer, is internationally known as the technological market leader in automotive LPG systems. After years of development and testing, Vialle has succeeded in producing an LPG injection system that measures up to the best petrol injection systems. The LPi system can be adapted to all modern injection engines and is the only system of its type to be used in lean-burn and turbo engines, while none of the engine's original capabilities are in any way affected.



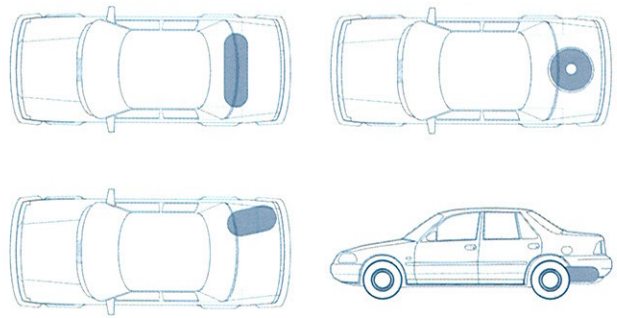
With this new technology, the LPG fuel is no longer evaporated but is injected in the inlet manifold of the engine in its liquid form. The cooling effect of the evaporating LPG in the inlet manifold results in a better degree of filling of the cylinder and increased engine power output.

Because the LPi system makes use of the original engine fuel managementsystem, all of the original capabilities are retained and the car is also more environmentally friendly.

While driving your car, you will notice:

- **that there is no noticeable difference between driving on petrol and on LPG**
- **that there is no loss of maximum power output; the torque of your car is not adversely affected**
- **that the acceleration power on LPG is the same as on petrol**
- **that your car needs no extra maintenance or tune-ups; you can maintain the usual service intervals**
- **that there is no risk of backfire damage, which can never be completely eliminated with evaporator type LPG systems**
- **that the system is impervious to environmental factors such as heat, cold, dryness, humidity and elevation**

There are several options for the location of the tank:



LPi
LIQUID PROPANE INJECTION