

## Autogas - Liquid Petroleum Gas (LP Gas) conversion does not require changes in the engine

Liquid petroleum Gas (LP Gas) autogas conversion works in the same way as a normal petrol or diesel engine, only the conventional fuel is replaced with autogas LP Gas. Everything about the vehicle remains the same but a separate autogas fuel systemis added. Converted vehicles become "dual-fuel" – you can change between running on petrol or diesel or Gas LP Gas autogas, even whilst on the move. LP Gas autogas tank constructed from steel is fitted in the boot. It is fitted with a multivalve. This unit comprises of a fuel gauge, a pressure relief valve, excess flow valve and various shut off valves. Tank is filled via a filling valve located usually at the rear of the vehicle. The LP Gas autogas in liquid form is carried through plastic coated copper pipes to the front of the vehicle. Here it goes through a filter and then to the autogas LP Gas reducer. At this point it is converted to a gas ready for use by the engine. The flow of gas to the engine is controlled by an autogas ECU. This unit works alongside the car's own ECU constantly monitoring the exhaust emissions and adjusting the gas supply accordingly. This unit is self-learning and adapts to different drivers and road conditions automatically. A switch on the dashboard allows you to manually select the option of running on autogas or petrol or diesel. LP Gas autogas kits to convert petrol and diesel engines consist of the same components. But the process of adjusting and setting the system looks different, cars with diesel engines requires more experience and knowledge.

## Liquid Petroleum Gas (LP Gas) autogas is safe

The Autogas Liquid petroleum Gas (LP Gas) system has several important safety features including:

- A 3mm welded steel pressure cylinder which is stress-tested to many times its normal operating pressure prior to being installed.
- Two electronically controlled shut-off solenoids (on autogas LP Gas tank and on reducer under bonnet) which stop the flow of LPG autogas to the engine if the engine stops for any reason.
  - Pressure relief valves for the tank and the system, to prevent any pressure build up that may damage the system, or be hazardous.
    - Double back-check valves to ensure autogas tight filling.
  - Sealed compartments and venting around valves and pipe-work to ensure no LP Gas enters the interior of the vehicle.
    - Approved components to ensure long service life.
    - The support of trained personnel who comply with rigorous European Standards for manufacture and installation of the system.







