Multipoint Gas Injection system ProGAS

User's Manual

General

System ProGAS is the controller of multipoint gas injection
It could be installed on to the cars with following types of fuel injection:

- Multipoint phased petrol injection into engine manifold.
- Multipoint coupled petrol injection into engine manifold.
- Multipoint simultaneous petrol injection into engine manifold.
- Monoinjection of petrol into engine manifold.

ProGAS consists of: main unit which is installed in engine compartment, temperature and pressure sensors, installation kit and remote control which is installed in passenger compartment in handy place . ProGAS memorizes last performance mode: "AUTOMATIC" or "PETROL" . It is provided forced starting on gas . There are light and sound indication of the status and system modes.

Remote control

General

Remote control is intended for working in ProGAS system. Front panel of control panel has 7 LEDs (yellow, red and 5 green ones) and two buttons. Rear panel has connector to link up the main unit.

Control buttons

- **«P»** - Petrol. Switches ProGAS system into "Petrol" mode (Fig.3).
- **«G»** - Gas. Switches ProGAS system into "Automatic" mode (Fig.1) and further with automatic switching onto gas (Fig. 2).

Light indication

5 green LEDs and one red LED indicate level of gas in tank (red LED indicates minimal level) and modes of performance "Automatic" and "Gas" , and yellow LED indicates performance in "Petrol" mode.

Sound indication

Built-in buzzer alerts the driver by two short signals that gas level in tank is minimal (red LED burns) and by one interrupted signal when emergency switching onto petrol occurred due to empty gas tank (yellow LED burns). Stopping buzzer signal is possible by switching performance mode of ProGas system by means of pushing the button on the control panel.

Attention! If tank is full but red LED burns and buzzer is signalling twice it means that level sensor is not connected or there is wrong configuration of level sensor in the program TamonaGAS in shortcut „Configuration“ (F2) – “Devices” (F12), clause 1. Consult autoshop to adjust or switch off level sensor in configuration if it is not connected in fact.

ProGAS performance modes
ProGAS performance modes could be switched in any time of car running.

Fig. 1 Fig. 2 Fig. 3

- **“Automatic”** - (Fig. 1). Car starts and works on petrol (yellow LED burns and green LED in the left corner of remote control blinks). After the moment that all parameters of switching onto gas are satisfied (gas reducer temperature, pressure, rounds per minute) which are adujsted in autoshop then switching onto gas (all green LEDs burn and yellow is off) occurs. In case of minimal level of gas in tank the driver is alerted by two short buzzer signals.

- **“Gas”** - (Fig. 2) Car works on gas (only after automatic switching or by forced starting on gas as described below). Full indication of gas level provided. If the level of gas lowered less minimal, the driver is ed two short buzzer signals (see remarks) and in case of emergency (tank is empty) the driver is informed by constant-interrupted signal which could be switched off by pushing any button of control panel.

- **“Petrol”** - (Fig. 3) Car starts and works on petrol (yellow LED burns).

Forced starting on gas
Possibility to start forcely on gas allows to switch car onto gas bypassing conditions mentioned in description of “Automatic” mode. When ignition is off it is necessary to push button “G” and holding it to turn igintion key but not to start. There is a constant monotone buzzer and all green LEDs burn that informs that forced starting on gas is in actio. After releasing the button “G” you can start engine.

Daily exploitation
First time after ignition turn “Automatic” mode on. The ProGas memorizes this mode and turns automatically onto gas (see description of “Automatic” mode. There is no need to any control action further. No need to push buttons, you should only start the car. The ProGAS system turns onto gas itself. The system informs when it is necessary to fill the tank by sound signal (if the level sensor is connected (see description of “Gas” mode).