Volume 3, Issue 2, February – 2025

LN-JETRONIC FUEL SPRAY RANGE

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Abstract

LN-Jetronic is an injector fuel supply system used in modern cars, providing a more accurate and efficient fuel mixture by spraying the fuel into each cylinder via separate injectors. This system has a number of advantages over carburetor systems, including fuel economy, environmental friendliness, improved engine reliability and dynamic characteristics. The article analyzes in detail the structure, principle of operation, advantages and disadvantages of the LN-Jetronic system.

Keywords: LN-Jetronic, fuel spray system, injector, electronic, control unit, fuel pump, fuel filter, engine, car, advantages, disadvantages.

Introduction

L-Jetronic fuel spraying system. The" L-Jetronic " is a multi - point, distributed fuel disconnects pur-calving system controlled by an electronic block. The main difference of this system from the K-Jetronic and KE-Jetronic systems is the absence in it of a normative-Distributive and controlling pressure adjuster. All forsunkas (worker and launcher) are electromagnetically controlled.

The" L-Jetronic " fuel spray system works as follows:

An electric gasoline pump carries fuel from the tank through the fuel cleaner to the distributor pipe with a pressure of 2.5 kg/cm2. The distributor pipe is adjacent to the working forceps using special hoses.

The pressure adjuster placed on the second end of the distributor pipe serves to keep the fuel pressure in the system at the specified value level and return the excess fuel to the tank

The amount of fuel being sprayed is determined by the electronic control unit taking into account the volume, pressure and temperature of the air being injected into the stylinders, as well as the frequency of revolutions of the elbow Valve, the engine load and the temperature of the cooling fluid.

At the moment of spraying, the input is collected in the space in front of the fuel valve when the valve is in a closed position, and at the next opening of the valve, it enters the stylindr in combination with air. An additional air transfer Valve is mounted in an air duct that is operated parallel to the drossel barrier, which transfers additional air to the engine when starting and heating the cold engine, and allows an increase in the rotation frequency of the crank shaft.



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Organizational parts of the LN-Jetronic system:

- * **Fuel pump:** provides fuel at high pressure.
- * Fuel filter: cleans fuel.
- * Fuel pressure regulator: keeps the fuel pressure at a constant value.
- Injectors: spray the fuel into the cylinder.

• Electronic control unit (EBB): controls the operating mode of the injectors based on the information coming from the various sensors of the engine.

• **Sensors:** transmit information about the operating mode of the engine to ebb (air flow, engine speed, liquid temperature, etc.).

EBB analyzes data coming from all sensors and sends signals to injectors to ensure an optimal fuel mix. Injectors, on the other hand, spray a specific amount of fuel into the cylinder based on this signal.

T/R	Advantages	Disadvantages
1.	Fuel economy	High repair costs
2.	Environmental friendliness	Complex structure
3.	Engine reliability	Difficult to diagnose
4.	Improving the dynamic characteristics of the engine	Precious
5.	Ease of operation	Requires qualified specialists

There are various modifications of the LN-Jetronic system, such as: K-Jetronic, KE-Jetronic, LE-Jetronic, Mono-Jetronic.

The principle of operation of the system: based on data from sensors, the electronic control unit sends signals to the injectors, which spray the fuel in an exact amount.





Conclusion

LN-Jetronic is an electronically controlled fuel supply system used in injector engines. It provides a more accurate and efficient fuel mix by spraying fuel into each cylinder via separate injectors, unlike carburetor systems.

Advantages of the LN-Jetronic system:

Fuel economy: fuel consumption is significantly reduced due to the optimal composition of the fuel mixture.

Environmental friendliness: the amount of toxic substances in the exhaust gas decreases, which reduces the pollution of the environment.

Reliability and long service life of the engine: a well-dosed fuel mixture improves the operating mode of the engine and slows down its wear and tear.

Improving the dynamic characteristics of the engine: quick response and high torque.

Easy launch: easy launch in any weather \Box

The LN-Jetronic system is a high-tech fuel supply system widely used in modern cars. Its main advantages are fuel economy, environmental friendliness and engine reliability. However, the complex structure of this system and high repair costs are considered its disadvantages.

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