INJECTOR

CHOOSING OUR GENUINE PARTS

PARTS
&SERVICE

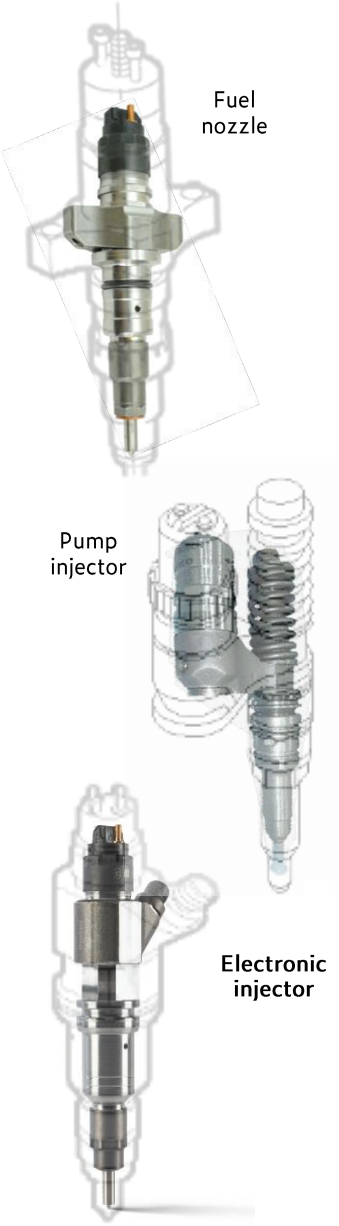
Genuine Parts

How Injector works

Ignition in diesel engines occurs through compression. When the highly pressurised air inside the cylinder reaches a certain temperature, the fuel-air mixture ignites. During this operation, the injectors are extremely important since the accelerator pedal operates the injection pump or the electronic control unit and therefore it alters the volume of fuel introduced into the cylinders as atomised jets. Therefore at all speeds, optimum power is ensured.

Since their introduction, diesel systems have been constantly updated: the technology focused particularly on systems that allowed an increasingly efficient combination of fuel and air mixture.
Increasing attention to environmental issues require checks of exhaust emissions on a regular basis. FPT engines have always had the most technologically advanced injection systems that comply with strict European air pollution regulations; they give optimum performance in all conditions.

The main injection system components used on the FPT engines are injectors with fuel nozzle, pump injectors and electronic injectors. The latter are operated by an electronic control unit that monitors the water and air temperature of the engine as well as the signals that are sent by vehicle sensors: accelerator pedal, brakes, clutch and speedometer.
The correct volume of fuel can be therefore introduced into the cylinders.



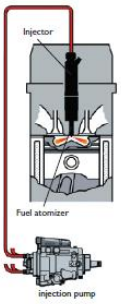
The main functions of the injector are:

1. RIGHT FUEL INTAKE AT OPTIMAL PRESSURE LEVEL
2. FUEL COMPLEX SPRAY PATTERN
3. REDUCING CO_2, NO_X, PM EMISSIONS
4. INCREASING ENGINE POWER AND TORQUE OUTPUT

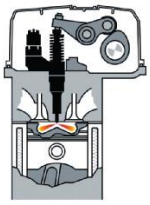
ENSURING OPTIMUM ENGINE PERFORMANCE MINIMASING FUEL CONSUMPTION AND EMISSIONS

Genuine Injector performance

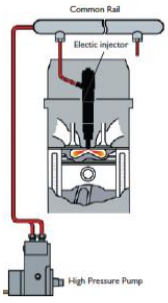
The injector is directly fixed on the cylinder head and regulates the fuel intake from the injection pump that is controlled by the drive shaft. Among its main components, we will discuss further the roles of the fuel atomiser and the nozzle holder.



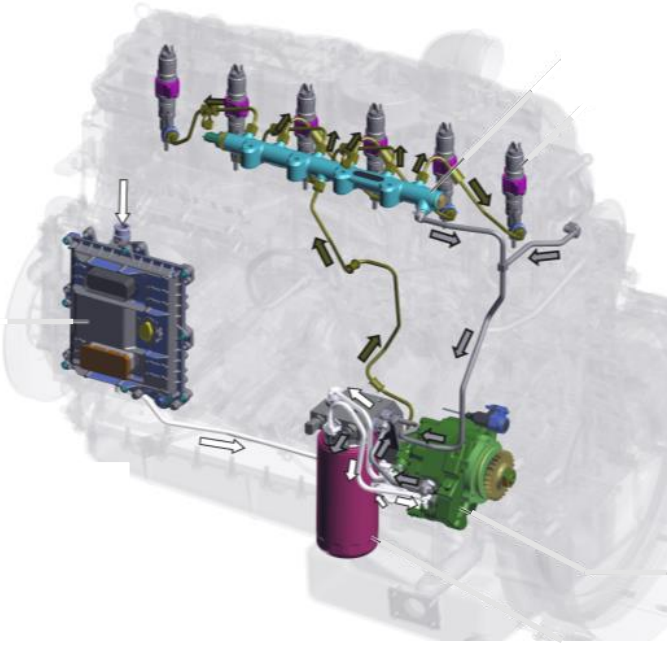
Fuel nozzle
Converts the fuel into fine spray (diameter of 20-100 micron) to allow uniform distribution in the combustion chamber. After the injection, the nozzle closes automatically to avoid combustion gases climbing back into the injector. If the fuel atomiser is worn or dirty it can compromise the engine efficiency, but if periodically replaced, it guarantees greater driving comfort, less fuel consumption and lower exhaust gas emissions.



Pump injector
The pump injector is bigger than the classic injector, because it is both injector and injection pump. Every cylinder has a pump injector mounted on the head, which is mechanically operated by the engine camshaft. The fuel is pumped into the injector at a low pressure. The pressure then increases inside the component up to 2000 bar.

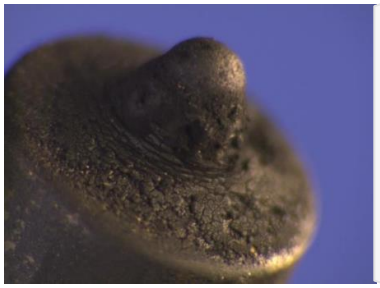


Electronic injector
This injector is at the heart of the Common Rail system. This is a system that represents the most recent technological evolution. The fuel is brought to a very high pressure inside a single duct, which is called the "Common Rail" that directly supplies the electronic injectors.

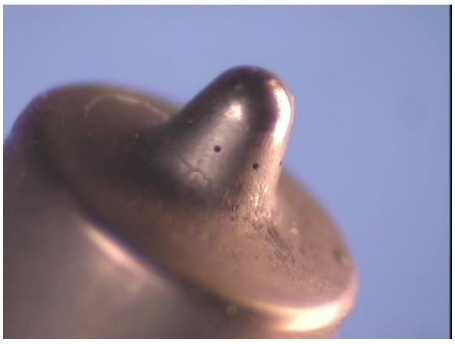


SERVICE LIFE TARGET
for all engine duration

Why choose a Genuine FPT Injector



Dirty spray-orifice disk of an injector before cleaning



Clean spray-orifice disk of a new injector

Potential risks of not using FPT Genuine Parts

- INCREASED FUEL CONSUMPTION
- PARTICULATE FILTER BREAKDOWN AND BAD EXHAUST GAS BEHAVIOR
- NO GUARANTEE PRODUCT FOR FPT ENGINE
- ENGINE STARTING POSSIBLE ISSUES
- LOSS OF POWER AND REDUCED ENGINE LIFE

GOOD PRACTICES INCREASE SERVICE LIFE AND GENERATE TCO REDUCTION BY AVOIDING HARMFUL DEFORMATIONS ON OTHER ENGINE COMPONENTS

Get the most from your Injector

When using your vehicle on a daily basis, you expect the vehicle to perform reliably: for this reason FPT builds its engines to the highest standards, meeting the latest environmental and legal requirements. At the core of this technology is the fuel injection system that ensures the engine operates at full efficiency whilst minimising its carbon footprint.

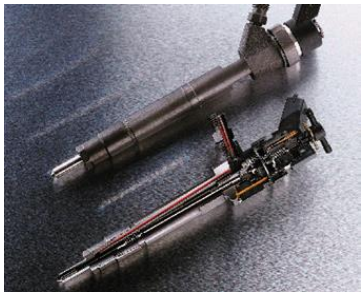
Only FPT Original Injectors give you the best power performance, constant high torque values and ultimate driving comfort.

Through regular checks by our qualified technicians on the injection system, you can avoid any premature wear and damage, thereby ensuring maximum engine performance and minimum emissions.

Always ask for FPT original injectors if you want to take good care of your vehicle.

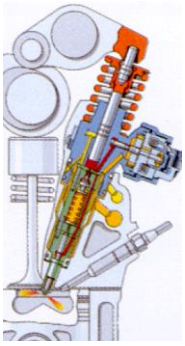
This is why it is critical to insist on FPT Original Injectors: they are an essential part of the engine which guarantees optimum performance. Always





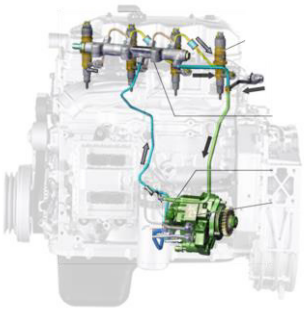


Design



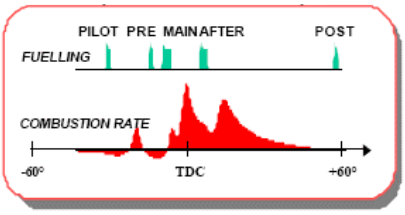
Full compliancy with technical specification

Reliability



Stringent quality checks to grant functionality and duration

Performance



Materials and technology that meet strict quality standards for best engine efficiency

INJECT ENERGY INTO YOUR ENGINE

Genuine Parts Benefits

FPT is the only one who can guarantee the original quality and performance of your engines. By using Genuine parts, made by those who built your engine, you ensure long-lasting performance and over-time value of your investment.

- ACHIEVING THE MAINTENANCE INTERVAL DECLARED BY FPT
- PERFECT FIT FOR SYSTEM EFFICIENCY OF THE ENTIRE ENGINE
- COMPLIES FULLY WITH FPT SPECIFICATIONS
- ALL GASKETS SUPPLIED HAVE ACCURATE PROFILES TO PROVIDE PERFECT SEAL
- MAXIMIZING PRODUCTIVITY BY REDUCING TURNAROUND TIME AT DEALER WORKSHOP
- ANTI-COUNTERFEITING TEXT ON LABEL
- COMPLETE PRODUCT RANGE COVERING RUNNING PARC
- 12 MONTHS WARRANTY

Wherever you are, you can have access to a vast selection of Genuine Parts for your engine. This means enhanced performance and minimal downtime to maintain high levels of productivity.

TOP QUALITY AND PERFORMANCE ARE REACHED ONLY BY USING FPT GENUINE PARTS.

Contact us

FPT Industrial S.p.A.

Via Puglia 15, 10156 Torino, Italy

fptindustrial.com