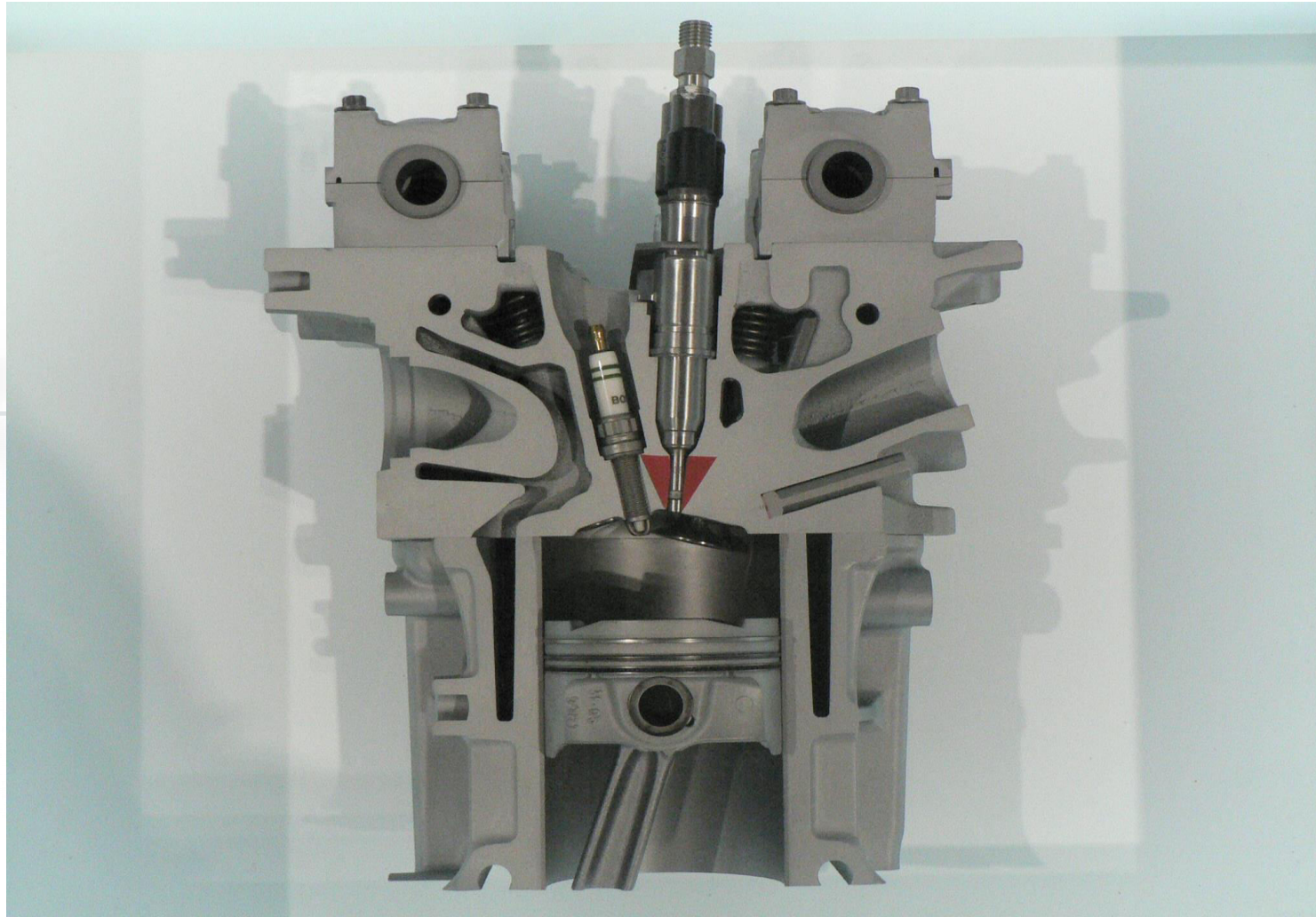




19M0611 - AUTOTRONICS

UNIT 2 - THE POWER OF PETROL FUEL INJECTION



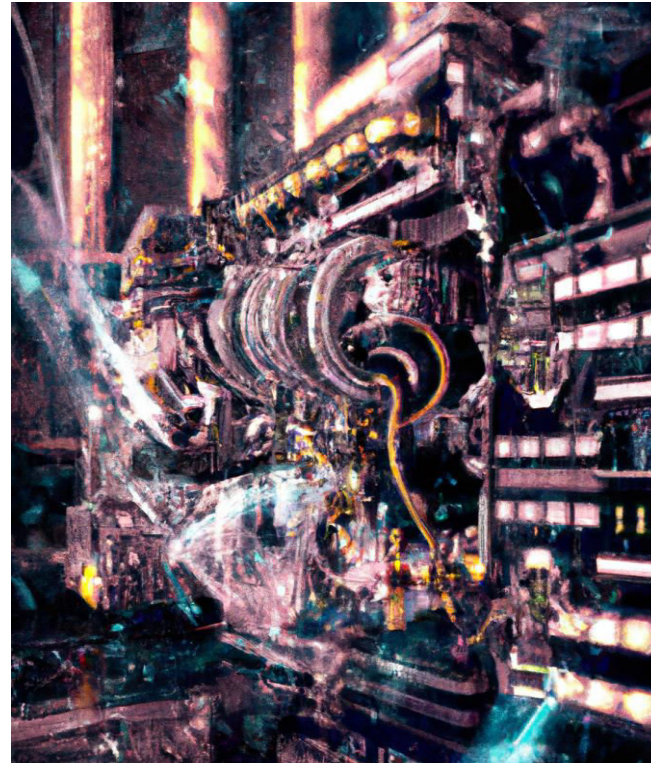
INTRODUCTION TO PETROL FUEL INJECTION

- ❑ Petrol fuel injection is a modern technology used in internal combustion engines. It replaced the traditional carburetor system that was used in earlier models of cars. The main purpose of petrol fuel injection is to deliver the right amount of fuel to the engine for efficient combustion.
- ❑ The first petrol fuel injection system was introduced in the 1950s, but it was not until the 1980s that it became widely used in cars. Today, almost all new cars come with petrol fuel injection systems.



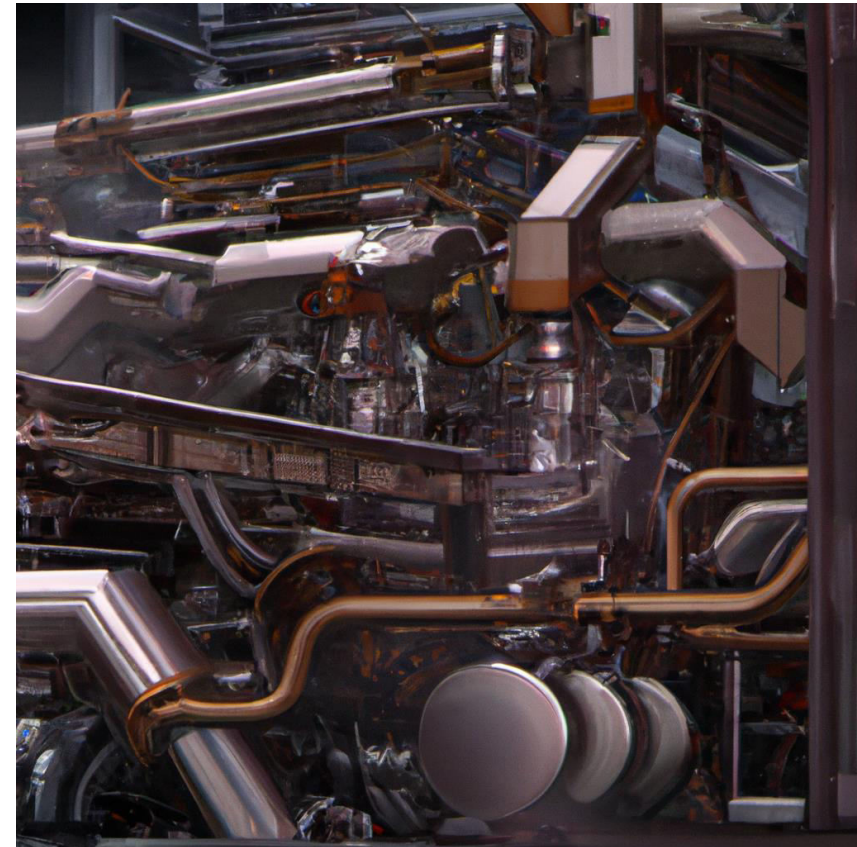
HOW PETROL FUEL INJECTION WORKS

- ❑ Petrol fuel injection works by using an electronic control unit (ECU) to monitor various sensors in the engine. These sensors measure factors such as air temperature, pressure, and flow rate, as well as the position of the throttle and the speed of the engine.
- ❑ Based on this information, the ECU determines the optimum amount of fuel to inject into the engine. The fuel is then sprayed into the engine through a series of nozzles or injectors, which are controlled by the ECU.



CHALLENGES OF PETROL FUEL INJECTION

- ❑ While petrol fuel injection has many advantages, there are also some challenges associated with this technology. One of the main challenges is that petrol fuel injection systems can be sensitive to dirt and debris in the fuel system. This can cause clogs in the injectors and lead to poor engine performance.
- ❑ Another challenge is that petrol fuel injection systems can be difficult to work on without specialized equipment and training.



FUTURE OF PETROL FUEL INJECTION

- ❑ Despite the challenges associated with petrol fuel injection, this technology is likely to continue to be used in internal combustion engines for the foreseeable future. As emissions regulations become stricter and fuel efficiency becomes more important, petrol fuel injection will play an increasingly important role in reducing emissions and improving performance.
- ❑ In addition, advances in technology are likely to make petrol fuel injection systems even more efficient and reliable in the coming years.





THANK YOU