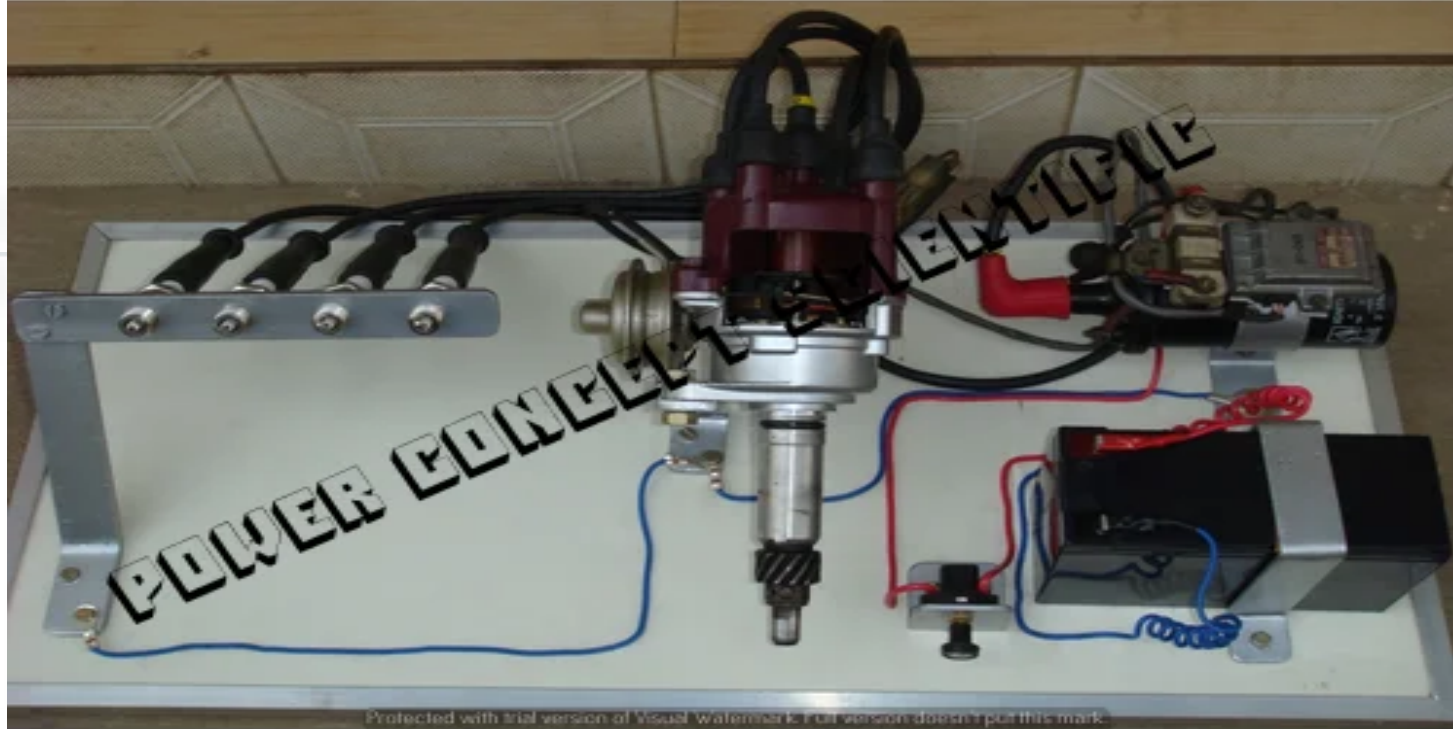




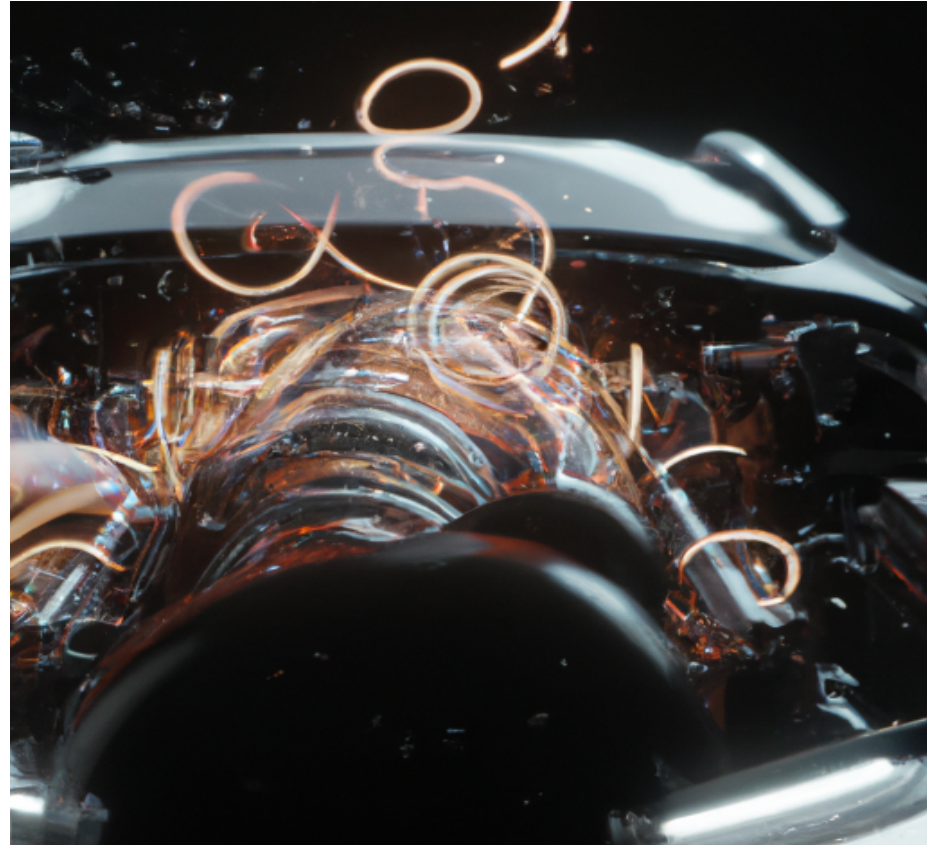
19M0611 - AUTOTRONICS

UNIT 2 - ELECTRONIC IGNITION
SYSTEM



INTRODUCTION TO ELECTRONIC IGNITION SYSTEM

- ❑ Electronic ignition system is a modern technology that has replaced the traditional ignition system in modern vehicles. It is an electronic device used to ignite fuel in an internal combustion engine. The system works by generating high voltage electrical pulses that are delivered to the spark plugs, which then ignite the fuel mixture in the engine.



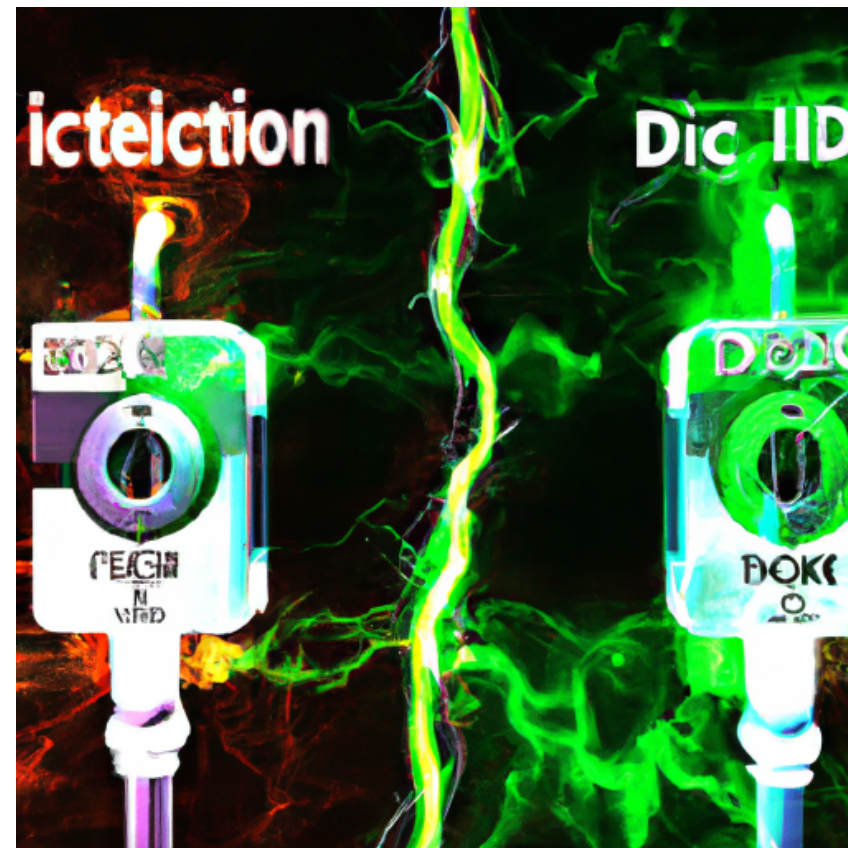
COMPONENTS OF ELECTRONIC IGNITION SYSTEM

- ❑ The electronic ignition system consists of several components, including the battery, ignition coil, distributor, spark plugs, and control module. The battery provides power to the system, while the ignition coil transforms the battery's low voltage into high voltage electrical pulses.
- ❑ The distributor distributes the electrical pulses to each spark plug in the correct firing order, while the control module regulates the timing and duration of the electrical pulses.



TYPES OF ELECTRONIC IGNITION SYSTEM

- ❑ There are two types of electronic ignition systems: capacitive discharge ignition (CDI) and inductive discharge ignition (IDI). CDI systems store energy in a capacitor and release it quickly to generate high voltage electrical pulses. IDI systems use a transformer to step up the voltage from the battery and generate high voltage electrical pulses.
- ❑ Both types of electronic ignition systems have their advantages and disadvantages. CDI systems are more expensive but provide better performance at high RPMs.



TROUBLESHOOTING ELECTRONIC IGNITION SYSTEM

- ❑ Electronic ignition systems are generally reliable and require less maintenance than traditional ignition systems. However, if there is a problem with the system, it can be diagnosed using a multimeter or a diagnostic tool. Common problems include faulty spark plugs, ignition coils, and control modules.
- ❑ If the system is not functioning properly, it can lead to poor engine performance, reduced fuel efficiency, and increased emissions.





THANK YOU