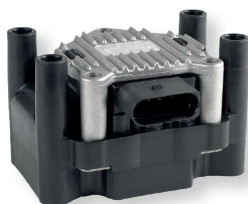


IGNITION COIL



ITS FUNCTION



The ignition coil is an essential component in the ignition system of internal combustion engines running on petrol. Its main role is **to transform the low voltage of the battery (12V) into the high voltage (15,000 to 40,000V) needed to create a spark at the spark plug**. This spark ignites the air/fuel mixture in the combustion chamber, ensuring combustion in the engine.

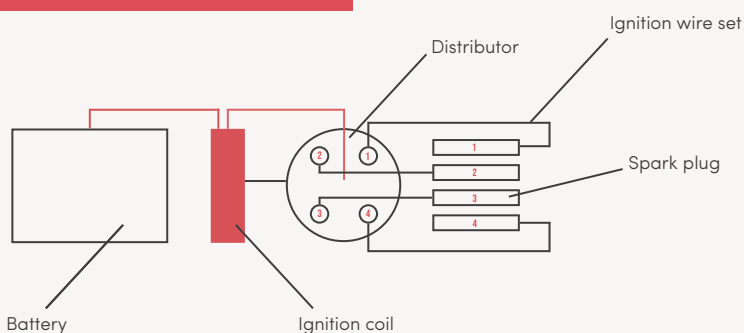
GOOD TO KNOW

The ignition coil can be located in **different places on the engine, depending on the type of coil used**:

- **Conventional coil**: located close to the engine, it sends the spark to the spark plugs via a distributor and an ignition wire set.
- **Dual output coil**: feeds two cylinders and is fitted to the cylinder head or a nearby support.
- **Pencil / top plug coil**: installed directly on each spark plug, one per cylinder.
- **Coil in rack**: a single module grouping together several coils for all the cylinders.



ILLUSTRATION



Operation of a conventional coil on a 4-cylinder engine



TECHNOLOGIES

The ignition coil works like a **step-up transformer**. It consists of a primary winding, a secondary winding and a magnetic core, which generate the induction required for ignition.

Today, **individual coils of the pencil and top plug type** are increasingly common on the market.



TECHNICAL HOTLINE

+33 (0)4 72 88 12 63

hotline.aftermarket@efiautomotive.com