

DEPARTMENT OF ELECTRICAL ENGINEERING DIT UNIVERSITY, DEHRA DUN AUTOMOTIVE ELECTRICAL & ELECTRONICS UNIT2 IGNITION SYSTEM

Introduction: Most vehicles are equipped with internal combustion engines which require an ignition system to ignite the mixture of fuel and air that is drawn into the cylinders. The high voltage surges are supplied to the spark plugs in the engine cylinders by the ignition system. These high voltage surges should be supplied at the popular time.

The ignition system comprises a battery, a switch, a distributor, an ignition coil, spark plugs and wiring. The generator is also part of the system which is driven from the engine and charges the battery. The distributor consists of two separate devices - a distributing mechanism and a fast acting switch. It is driven at half the engine speed by gearing from the camshaft.

Ignition System with contact point distributor: The fig. 1 shows the schematic wiring diagram of an ignition system with the contact points type of distributor. There are ignition systems which make use of transistors in order to reduce the electric load on the contact points of the distributor. There are ignition systems have no contact points in the distributor but instead make use of a combination of transistors and a magnetic pick-up.



Fig.1 Schematic wiring dig of ignition system

In the above system earth return method is employed when the ignition