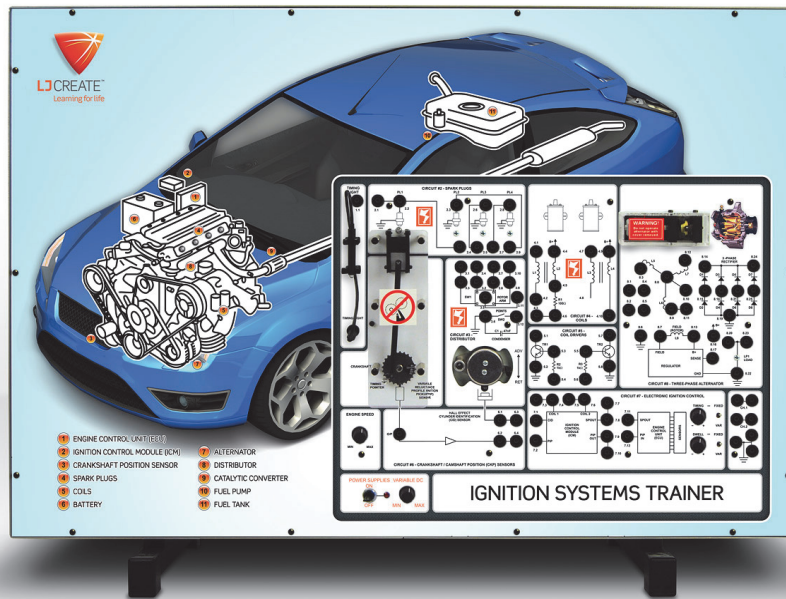


# Product Information Sheet

## Ignition and Charging Systems Panel Trainer



This trainer provides students and instructors with the opportunity to demonstrate, investigate and fault-find a simulation of a typical automotive ignition and charging system. The trainer is designed to allow access to a variety of ignition systems and a charging system, as well as provide an understanding of the overall system layout and configuration. To facilitate the development of techniques in diagnostics and fault-finding skills, the panel includes a range of fault-insertion options to simulate typical real-world system malfunctions.

This trainer includes access to digital curriculum materials including theory and practical learning tasks.

The trainer can also be used in conjunction with our optional cloud-based software, which offers online practical electronics tasks as well as interactive theory presentations, investigations, and assessments, which link directly to the practical activities carried out using this resource.

The panel trainer provides a complete simulation of a vehicle ignition system, and incorporates an engine rotation simulator with a crankshaft, connecting rod and piston. Sensors are provided for crankshaft/camshaft position, profile ignition pickup and cylinder identification. LEDs are used to simulate spark plugs and a special timing light is also provided.

The electronic ignition system represented on the panel trainer is a two-coil 'wasted spark' type, with a single micro-controller providing the operating facilities of the Ignition Control Module (ICM) and Engine Control Module (ECM), as found on modern vehicles.

### Typical Practical Tasks Include:

- Identify ignition system components and types.
- Identify and investigate the operation of spark plugs.
- Identify and investigate contact breaker ignition systems.
- Diagnose faults in contact breaker ignition systems.
- Identify and investigate electronic ignition systems.
- Diagnose faults in electronic ignition systems.
- Identify starting and charging system components and types.

### Items Included:

- Trainer
- Curriculum in digital format
- Wall mounting brackets
- Bench stands
- Digital multimeter
- Accessory Kit

### Other Items Required:

- Lab Scope

### General Information:

Trainer Dimensions: 900 x 170 x 600 mm (W, D, H)  
Packed Volume: Approx 0.316 m<sup>3</sup>  
Packed Weight: Approx 26 kg

**Order Code: 750-01**

P8480-B

**For more information visit [www.ljcreate.com](http://www.ljcreate.com)**