



# **IGNITION SYSTEM**



## **DL AM13**

#### LEARNING EXPERIENCE

This simulation panel has been specially designed and realized to allow for a complete and easy learning of the techniques and of the electronic devices used for a correct ignition in the motor vehicle. This simulator shows how modern cars ignition systems operate.

It is possible to simulate the following systems:

• Transistor based ignition controlled through Hall transducer and electronic board for the automatic adjustment of current and closing angle

• Electronic ignition with transducer of the rpm on the engine shaft and adjustment of the knock.

All relative signals, such as the output of Hall sensor, knock sensor output, engine speed, the refrigerator temperature, MAP output, A/D input, voltage and current of initial and secondary ignition, stroboscope trigger, end to test points.

#### **GENERAL CHARACTERISTICS**

- Dim. mm approx (HxLxW) : 700x1000x150 (470 with the base)
- Weight approx. kg 25
- Input power supply: AC 220V±10% 50 Hz
- Working temperature: -40°C ~ +50°C.

### MAIN CHARACTERISTICS

The system covers the following subjects:

- Different spark types analysis
- Dwell timing and control
- MAP sensor characteristics
- Cooling sensor operation
- Knock sensor characteristics
- Constant current for various engine speeds
- Ignition system operation at various conditions of speed, load and engine temperature
- Ignition time and dwell measurements
- Operation of the ignition system with fuel electronic injection

This vertical frame bench-top trainer is specially designed to show to students how automotive systems work. The simulator consists of a panel operated by the support of a computer with a coloured silk-screen diagram that clearly shows the structure of the system and allows the location of the components on it. The display of the information available on the computer screen allows the continuous control of the educational system. The operational conditions can be entered by the students and the insertion of faults can be carried out through the computer by the teacher. The trainer is supplied with a CAI Software and the supported documentation guides the students to the study and the performance of the simulation exercises. All components installed and given leads are made to protect the safety of the students.

DE LORENZO S.p.A. V.le Romagna 20 – 20089 ROZZANO (MI) Italy – Tel. ++ 39 02 8254551 Fax ++39 02 8255181- E-mail: <u>info@delorenzo.it</u>- <u>sales@delorenzo.it</u>