

# SIMULATOR OF COMMON RAIL DIESEL INJECTION

## Mod. AST12/EV

Simulator mod. AST12/EV is included in a complete set of educational equipment for the basic training in the field of automotive systems.

This simulator consists of a computer-controlled panel, with silk-screen-printed schematic diagram for an easy location of its components.

Various zones of this schematic diagram are represented with different colours and shades to emphasize peculiar aspects of the system. Warning lights installed in the schematic diagram enable to check control trend.

The graphic display of information on PC screen enables the permanent monitoring of the system.

The operational conditions are set by students according to the educational path indicated in the courseware.

The testing phase is completed with insertion of faults, carried out by the PC, for the study of car repairing techniques.

### TRAINING PROGRAM:

- Operating principle of Common Rail
- Fuel circuit
- Motor-driven pump
- High-pressure pump
- Electronic injectors
- Air mass sensor
- Engine r.p.m. sensor
- Engine temperature sensor
- Turbo boosting
- Electronic accelerator
- Multistage centrifugal blower of variable geometry
- Troubleshooting



### TECHNICAL CHARACTERISTICS:

The system is arranged on a wide silk-screen-printed panel including:

- test jacks with diameter of 2 mm
- load adjustment by three-position selector
- pulse ignition key
- selection of operational conditions via potentiometers and buttons
- display of system state via warning lights (LEDs and/or bargraphs)
- dynamic display of parameters on PC screen, with software of high graphic performance
- Connections with Personal Computer via USB port

**Power supply:** 230 Vac 50 Hz single-phase - 50 VA  
(Other voltage and frequency on request)

**Dimensions:** 920 x 450 x 720 mm

**Weight:** 30 kg

### REQUIRED

**PERSONAL COMPUTER**  
- NOT INCLUDED -



### SUPPLIED WITH

**SOFTWARE:**  
PROGRAM FOR CONTROLLING SIMULATOR  
AND GRAPHIC DISPLAY ON PC SCREEN  
FAULT INSERTION FROM PC



**THEORETICAL-EXPERIMENTAL TEXTS:**  
STUDENT HANDBOOK  
TEACHER HANDBOOK

