

Item No.: SO4205-1D

## Course Automotive 18: Automotive electrical fundamentals (USA/Australia)

### Includes:

- 1 experiment board equipped with
  - set of lamps
  - set of resistors
  - transistor
  - relay
  - fuses
  - switches
  - motor
- CD-ROM with Labsoft browser and course software

### Training Content

Electrical principles specifically explained for automotive applications

- Voltage DC, AC and PWM
- Resistance
- Current
- Ohms law
- Series and parallel and mixed circuits
- Understanding automotive circuits, wiring diagrams and electrical symbols

Automotive electrical component testing and diagnosis

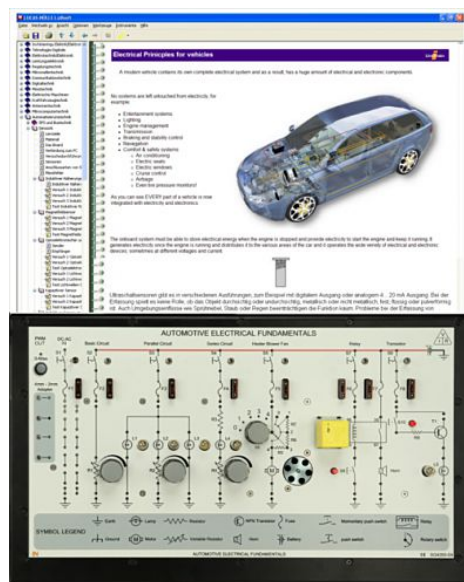
- Fuses
- Relays
- Switches
- Transistors
- Potentiometers
- DC motors
- Light globes
- Power supplies

Automotive circuits

- Brake light circuit
- Instrument panel dimmer circuit
- Heater blower fan variable speed circuit
- Horn circuit

Use of typical automotive diagnostic tools found in the workshop

- Digital Multimeter
- Voltmeter
- Ohmmeter
- Ammeter
- Test light
- Oscilloscope



Diagnosing of common automotive circuit failures and components with built in automatic fault switching in the following areas

- Open circuits
- Short circuits
- Faulty components