

Item No.: SO4204-7C

Course - Automotive 3: Pulse generation and ignition systems

Includes:

- 1 Experiment card with mechanical model of a crankshaft and cylinders, electronic simulation of an inductive speed sensor, Hall sensor, mechanical ignition distributor, simple ignition coil, distributorless ignition system DIS
- CD-ROM with Labsoft browser and course software

Course contents:

- Design and function of various ignition systems:
- Contact controlled ignition system
- Transistor controlled ignition system with induction sensor (TZ-I)
- Transistor controlled ignition system with Hall sensor (TZ-H)
- Semi- and fully electronic ignition systems (EZ/VZ)
- Components of various ignition systems
- Design and function of spark plugs
- Effect of ignition firing angle on combustion
- Setting ignition firing angle and dwell angle
- Design and function of equipment to set angle by centrifugal force or vacuum
- Generation and distribution of high voltage
- Signal measurements over time from inductive and Hall sensors
- Measurement of the speed signal from an inductive sensor
- Measurements of ignition voltage signals over time
- Ignition parameters
- Course duration: 8 h approx.

