Technical specifications and functions

- The educational equipment, functional engine with petrol/electric TOYOTA HYBRID CONTROL SYSTEM – II (THS–II), automatic gearbox, climate control system, instrument cluster, cooling system, electric power supply system, CAN gateway network, exhaust system and etc.;
- Electrical wiring diagram with built – in banana plug jumpers for measurements and simulation of system fault codes;
- Ability to simulate, on a didactic aids, more than 50 faults by disconnecting banana plug jumpers;
- Ability to measure exhaust gas before and after the catalytic converter;
- Completed with safety removable panels to protect against hot and rotating parts;
- Engine with external components is clearly visible after removing safety panels. Easy access to the engine and its components for service and maintenance;
- Fully functioning automatic climate control system with all most important components like electric AC compressor, R134a refrigerant, service couplers and etc.
- Integrated emergency stop button;

Diagnostic and measurement

Oscillosope/multimeter

- System‘s parameters are measured by connecting to the banana plug jumpers;
- Ability to measure electrical signal parameters of each system component (such as sensor or actuator);

Control unit diagnosis

- Diagnosis through OBD (J1962) 16 – pin diagnostic connector;
- Electronic control unit (ECU) identification;
- Reading/erasing fault codes
- Displaying the operating system parameters (live data)
- Actuator test (depends on the control unit)
- Control unit coding/configuration
- The hybrid engine trainer contains these ECU’s which could be found and readout with the scan tool:

– Hybrid Control System ECU
– Power Source ECU
– Engine ECU
– Transmission Control ECU
– Hybrid Vehicle Battery ECU
– AC Climate Control ECU
– Gateway ECU
– Transponder Key ECU
– Combination Meter ECU

Other

- The, educational equipment, hybrid engine trainer has a closed structure – internal wiring is not visible; Instrument cluster, measurement and fault simulation panel is integrated in a closed aluminum frame construction
- Dimensions approx. (HxLxW): 1750x1450x1200 mm
- Nett weight approx.: 470 Kg
- Made in EU