

## Product Overview

The Toyota Corolla Full Vehicle Electrical System Trainer (BT-08VES) is designed to demonstrate the structure and operation of automotive electrical systems using original vehicle components. It includes systems such as ECU, lighting, ignition, wiper, horn, power windows, door locks, starting, and charging systems. The platform allows students to learn circuit operation, perform diagnostics, and practice trouble shooting in a safe training environment.



## Technical Specifications

### A. Power Supply & Protection Components

01. 12V Battery (45Ah) - 1pcs
02. DC Power Supply 12V 30A - 1pcs
03. Main Power Switch 32A - 1pcs
04. Fuse Box - 1pcs
05. Automotive Blade Fuses (10~40A) - 1Set
06. Automotive Relays (12V) 8-12
07. Relay Base 8-12
08. Terminal Blocks - 1Set
09. Ground Bus Bar - 1pcs
10. AC MCB (220V input)- 1pcs

### B. ECU & Engine Electrical System

- 1 Engine Control Unit (ECU) - 1pcs
- 2 ECU Wiring Harness - 1pcs
- 3 Ignition Switch with Key - 1pcs
- 4 Crankshaft Position Sensor - 1pcs
- 5 Signal Wheel / Trigger Wheel - 1pcs
- 6 Ignition Coil Pack - 1pcs
- 7 Spark Plugs - 4pcs
- 8 Fuel Injector Indicator Lamps - 4pcs
- 9 Fuel Pump Relay -- 1pcs
- 10 Fuel Pump Indicator Lamp-- 1pcs

### C. Starting & Charging System

- 1 Starter Motor - 1pcs
- 2 Alternator / Generator - 1pcs
- 3 Asynchronous Motor - 1pcs
- 4 Starter Relay - 1pcs
- 5 Charging Indicator Lamp - 1pcs

### D. Instrument & Control System

- 1 Instrument Cluster - 1pcs
- 2 Combination Switch - 1pcs
- 3 Light Switch - 1pcs
- 4 Hazard Switch - 1pcs
- 5 Brake Light Switch - 1pcs
- 6 Reverse Light Switch - 1pcs
- 7 Diagnostic Connector (OBD DLC3) - 1pcs

### E. Lighting System

- 1 Front Headlight Assemblies (LH/RH) - 1 Set
- 2 Fog Lights (LH/RH) - 1 Set
- 3 Front Turn Signals - 1 Set
- 4 Rear Turn Signals - 1 Set
- 5 Rear Combination Tail Lights - 1 Set
- 6 License Plate Lights - 1 Set

### F. Body Electrical System

- 1 Power Window Main Switch - 1pcs
- 2 Rear Window Switches - 2pcs
- 3 Power Window Motors - 2pcs
- 4 Door Lock Motors / Actuators - 4pcs
- 5 Comfort Control Module / Body ECU - 1pcs
- 6 Door Control Module - 1pcs

### 7. Wiper, Washer & Horn System

- 1 Wiper Motor Assembly - 1pcs
- 2 Wiper Controller / Relay - 1pcs
- 3 Washer Motor - 1pcs
- 4 Washer Bottle - 1pcs
- 5 Electric Horn - 2pcs