Hybrid Vehicle Simulator with All Necessaries BT-15HVS

Product Overview

Hybrid Vehicle Simulator Trainer **(BT-15HVS)** with gasoline engine, electric motor system, hybrid transmission and control components mounted on a heavy-duty metal frame. The trainer includes a printed schematic panel, diagnostic interface, test points for sensor and actuator signal measurement, and a fault simulation module for troubleshooting practice. Suitable for hands-on training, demonstration of hybrid vehicle operation, maintenance, and diagnostic learning in automotive training institutes.

Key Features

- Demonstrates hybrid gasoline–electric vehicle operation
- Real automotive components for practical training
- Printed hybrid system schematic training panel
- Test terminals for sensor and actuator signal measurement
- OBD diagnostic interface for scanner connection
- Manual fault simulation module for troubleshooting training
- Heavy-duty mobile frame with lockable caster wheels
- Safety covers for rotating and electrical components

Technical Specifications

Item	Specification
Engine	Toyota Hybrid Engine (1NZ-FXE / 2ZR-FXE)
Motor	Three-phase AC motor
Transmission	Hybrid transaxle (E-CVT planetary gear)
Battery	High voltage hybrid battery + 12V battery
Fuel Tank	Minimum 10 Liters
Cooling System	Radiator with electronic fan
Diagnostic	OBD-II diagnostic interface
Measurement	Voltage, resistance and signal test points
Fault Simulation	Manual switch type fault insertion
Frame	Heavy-duty powder coated steel mobile frame
Year of Manufacture	2026

Training Functions

- Hybrid vehicle system structure study
- Engine and motor operation demonstration
- Sensor and actuator signal measurement
- Diagnostic scanner operation
- Fault detection and troubleshooting
- Hybrid system maintenance training

Main Components

- Test panel with printed schematic diagram
- Dashboard assembly
- Engine ECU
- Automatic transmission ECU
- Hybrid control ECU
- High voltage battery control ECU
- Power control ECU
- Gateway ECU
- Smart key system
- High voltage hybrid battery
- Engine assembly
- Radiator with cooling fan
- Accelerator pedal
- Fuel tank (10L)
- 12V auxiliary battery
- Relay and fuse system
- Diagnostic port
- Fault simulation module
- Mobile training frame