

# ➔ HEV Technology

High engagement,  
without high voltage!



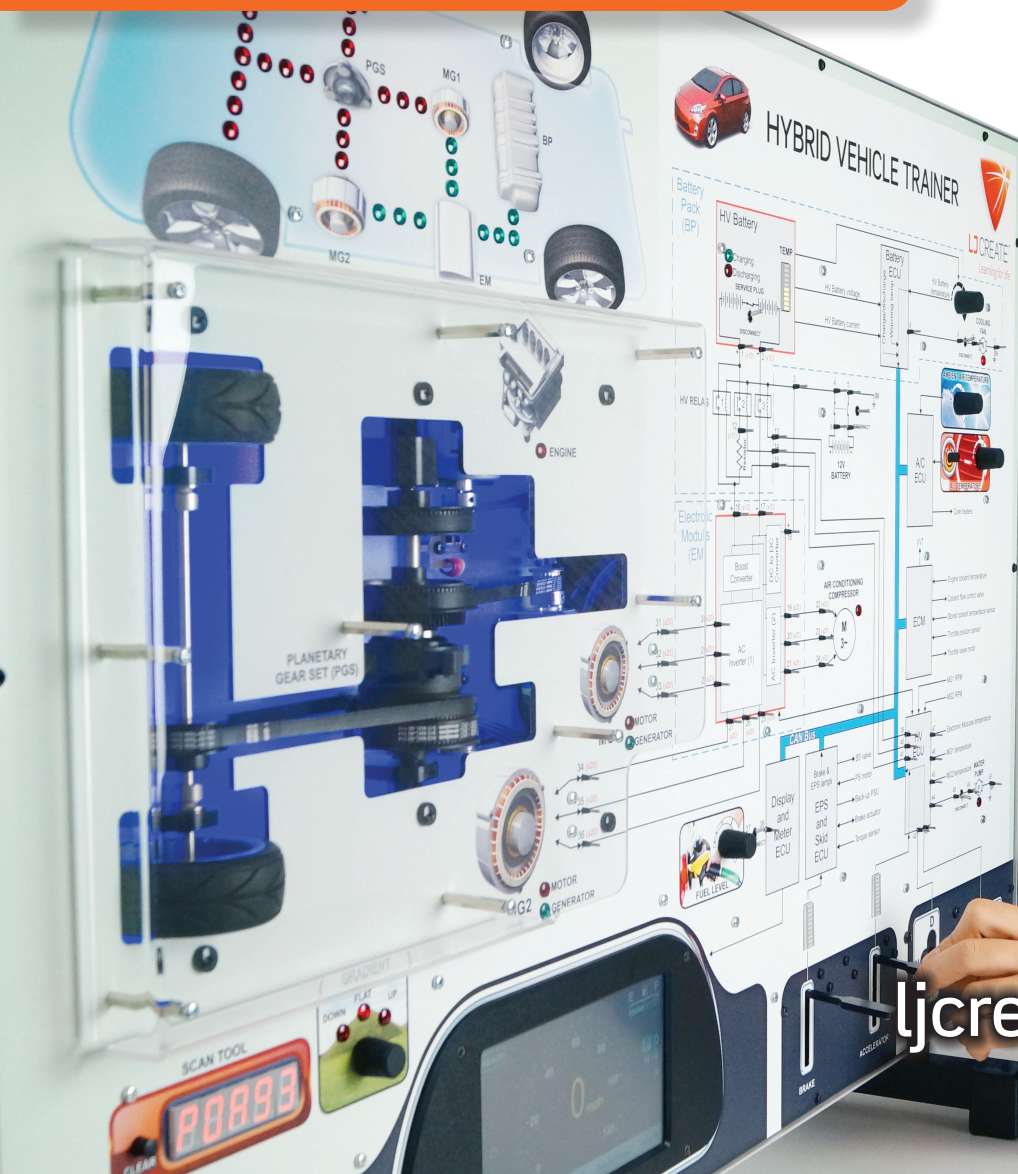
**LJ CREATE™**  
Learning for life

As hybrid technology is increasingly being adopted by automotive manufacturers across the world, we see a need for a new set of skills and understanding for maintenance technicians.

Our training package provides an excellent introduction to the mechanical and electrical systems used in a series/parallel hybrid vehicle.

includes  
access to

**80+**  
HEV lessons



[ljcreate.com/HEV](http://ljcreate.com/HEV)



# HEV Technology

## Hybrid Vehicle Systems Panel Trainer (756-01)

Our hybrid vehicle trainer provides students and instructors with the opportunity to demonstrate, investigate, and fault-find a simulation of a hybrid vehicle electrical system.

The trainer is designed to allow access to a simulation of the mechanical operation as well as provide a mimic of the electrical power flow.

The panel also includes test points at a safe voltage level to allow for investigation of electrical circuits. To facilitate the development of techniques in diagnostics and fault-finding skills, the panel includes a range of fault-insertion options to simulate typical real-world system malfunctions.

### Hybrid Vehicle Simulator

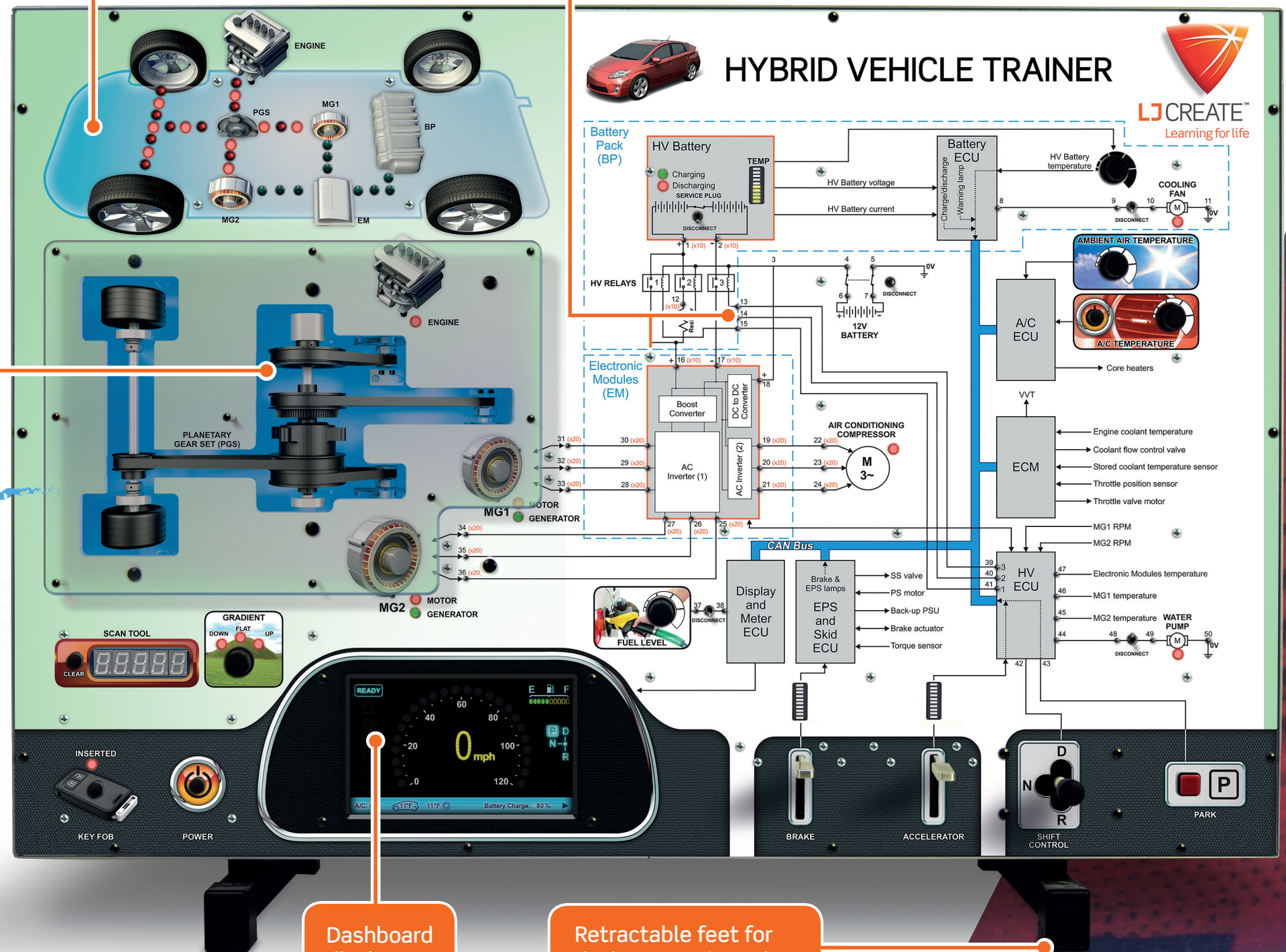


Power flow mimic allows students to investigate the balance between electrical and internal combustion power

High and low voltage system test points

Fault insertion options to simulate real-world system malfunctions

Planetary gear set



Dashboard display

Retractable feet for desktop use (can also be wall-mounted)



# → Hybrid Vehicle Curriculum

Our emphasis is on delivering training solutions that:

- Match curriculum requirements
- Can be taught within the unit times available
- Can be used by any student

The lessons we've developed to accompany this trainer include the following topics:

## HYBRID AND ELECTRIC VEHICLE SYSTEMS

- Introduction to Hybrid and Electric Vehicles
- Fuel and Emissions
- Series Parallel Hybrid Systems and Components
- Practical Series Parallel Hybrid Systems
- Hybrid Vehicle Trainer Controls
- Plug-in Electric Vehicles
- Plug-in Hybrid Vehicles
- The High Voltage System
- The Low Voltage System
- AC Motors and Generators
- Hybrid Engines
- Hybrid Electric Motors
- Electronic Circuits and Modules
- Cables, Connectors and Protection Devices
- Introduction to Electrical Storage Devices
- Lead Acid Batteries
- Nickel Metal Hydride Batteries
- Lithium-ion Batteries
- Battery Packs
- Brake Systems
- Hybrid Safety Issues and Concerns
- Troubleshooting the High Voltage System
- Disabling Hybrid Vehicle Systems
- Disabling the High Voltage System
- Series Hybrid Systems
- Parallel Hybrid Systems
- Gears and Planetary Gear Sets
- Introduction to the Hybrid Vehicle Trainer
- Troubleshooting Introduction
- Tools and Test Equipment
- Rules and Procedures



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Order As:  
**756-01 Hybrid Vehicle Systems Panel Trainer**

Includes:

- Hybrid vehicle trainer
- Access to 80+ hybrid vehicle lessons
- Hybrid vehicle simulator software
- Digital multimeter