



## NEW ENERGY ELECTRIC VACUUM ASSISTED HYDRAULIC BRAKE TRAINING BENCH



AUTOTRONICS - DEMONSTRATORS

DL DM49

### LEARNING EXPERIENCE

This demonstration bench shows the mainstream new energy electric vacuum assisted hydraulic brake components. It works displaying the same function and control mode as in the most popular pure electric vehicles.

It represents the connection and control relationship, installation position and operating parameters of each components of electric vacuum assisted hydraulic brake system.

A vacuum meter shows the vacuum degree, it helps trainees to know the principle that vacuum degree affect the working status of vacuum pump. It also helps trainees to develop the fault analysis and processing skills about electric vacuum assisted.

### MAIN CHARACTERISTICS

Truly operational new energy electric vacuum assisted hydraulic brake for fully demonstration of the structure and logic control relationship of all main components.

All main components are installed on the rack, with the same electrical connection mode as real vehicles. It is convenient for assembly and disassembly, so that students can learn the disassembly points of electric vacuum assisted hydraulic brake components during disassembling and assembling connections.



## GENERAL CHARACTERISTICS

- Dim. mm (HxLxW) : 1800x1000x1000
- Weight approx. 150 kg
- Input power supply: AC 220V±10% 50 Hz
- Switchable mode
- Working temperature: -40°C ~ +50°C.
- Power Supply: AC220V-DC12V-30A

## ACCESSORIES

Suggested instruments for best practice:

- Digital Multimeter (not included)

## OTHER CHARACTERISTICS

- a) The connecting lines can be scanned with the help of a two dimensional code, after which, their assembly and disassembly methods and precautions can be completely demonstrated on the screen.
- b) Vacuum meter is connected with the vacuum tank installed on the panel of rack, where the connection and disconnection of vacuum pump current digits can be displayed at the same time.
- c) By pressing the brake pedal, students can observe the control relationship between vacuum meter level and vacuum pump running status; when the vacuum degree decreases to -45Kpa, the pressure sensor closes 12V power supply and the vacuum pump starts to work. When the vacuum degree increases to -80Kpa, the pressure sensor disconnects the 12V power supply and the vacuum pump stops working. Students can master the working principle of pure electric vacuum booster through practical observation.
- d) The training bench is placed horizontally for installing main components;
- e) 4 wheels for moving flexibly are mounted, which also have self-lock device for fixing position.
- f) The training bench is equipped with a brake shield and other safety protecting devices to safeguard students' experiments.
- g) The training panel shows the cutaway view of vacuum pump assembly, vacuum tank assembly and booster pump assembly to reproduce clearly the internal structure of the main components of an electric vacuum assisted system.