LEARNING EXPERIENCE

This demonstration bench is based on a Volkswagen Passat ABS/EBD/ASR system with a dedicated silkscreen diagram to display the operation of the system.

The device applies to theoretical teaching and maintenance training of the car chassis construction for secondary vocational skill schools. It can be used to show the structure and operation demonstration of the ABS/EBD/ASR system.

GENERAL CHARACTERISTICS

- Dim. mm (HxLxW) : 1800x1600x1000
- Weight approx. 300 kg
- Input power supply: A.C. 380V ± 10% 50Hz – five wires
- Operating voltage: 12V DC
- Operating functioning temperature: -40°C to +50°C
- Master oil canal pressure meter: 0–250 kg/psi
- Pressure gauge for the brake cylinder: 0–150 kg/psi
- Operating functioning temperature: -40°C to +50°C

MAIN CHARACTERISTICS

The didactic bench shows a real ABS/EBD/ASR system in order to display the structure of the system.

A three-phase asynchronous motor drives the rotation of the front and rear shafts, simulating the running of the automobile. When the operator pushes down the brake pedal, the ABS/EBD/ASR system starts operating. The front and rear brake flaps keep rotating slowly. The operator can feel that the brake pedal is vibrating. In this way, the device demonstrates the operation of the ABS/EBD/ASR system.
ACCESSORIES

Suggested instruments for best practice:

- Digital Multimeter (not included)
- OBD Fault diagnosis Scanner (not included)

OTHER CHARACTERISTICS

(a) The trainer is made of advanced aluminum-plastic plate with characteristics of not less than 4mm thick. The plate is corrosion resistant, impact resistant, pollution resistant, fireproof, and moisture proof. The panel surface is processed by special craft and spraying primer. The circuit diagrams are painted with never fade colour and the boards are coated with varnish. The trainees can learn and analyze the working principle of the control system by looking and analysing the diagram and the real-life components.

(b) The training panel has installed detection terminals to identify electric signals, such as resistance, voltage, current, and frequency, of pins of each sensor and electronic control unit (ECU).

(c) The training bench is composed of six pressure gauges to display real-time hydraulic pressure of master cylinder, master brake cylinder and four brake cylinders.

(d) The training bench is installed with a fault indicator lamp and a diagnosis socket which can be connected to an automobile decoder to read fault codes, so to check ECU codes, to read and clear fault codes, to read data streams, to test components, to set parameters and to conduct wave analysis on the ABS electrical control system.

(e) The training base frame is made of steel and the surface is paint-coated. Pivoting wheels are mounted.

(f) Equipped with intelligent fault setting system, include fault setting and troubleshooting.