ANTI-LOCK BRAKING SYSTEM

DL AM14

LEARNING EXPERIENCE

This simulation panel has been specially designed and realized to allow for a complete and easy learning of the techniques and the electromechanical devices used in the anti lock braking systems in the cars.

It is possible to simulate a braking system, provided with a four sensors anti-lock system (ABS). The panel shows how modern car ABS systems are designed to operate.

MAIN CHARACTERISTICS

The system covers the following subjects:
- ABS operation when wheels rotate at different speeds
- ABS operation when wheels rotate at same speed
- Pressure measurement during operation
- Hydraulic ABS valve operation
- Self-diagnosis control
- Fault diagnosis procedure
- Various control signals measurements in the ABS system
- Low fluid level detection
- ABS operation with one wheel speed sensor is disconnected
- ABS operation with destroyed hydraulic valve
- Brake system operation when the electronic brake unit is disconnected
- Brakes operation when there is leakage
- System operation with different relative rotation speed of wheels
- ABS operation with hydraulic valve stuck

This vertical frame bench-top trainer is specially designed to show to students how automotive systems work. The simulator consists of a panel operated by the support of a computer with a colored silk-screen diagram that clearly shows the structure of the system and allows the location of the components on it. The trainer is supplied with a CAI Software and the supported documentation guides the students to the study and the performance of the simulation exercises. All components installed and given leads are made to protect the safety of the students.