



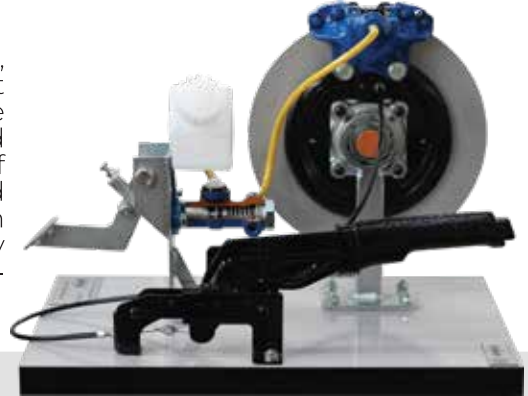
DISC AND DRUM BRAKE CUTAWAY EDUCATIONAL TRAINER

A5

Product number
AE412030M

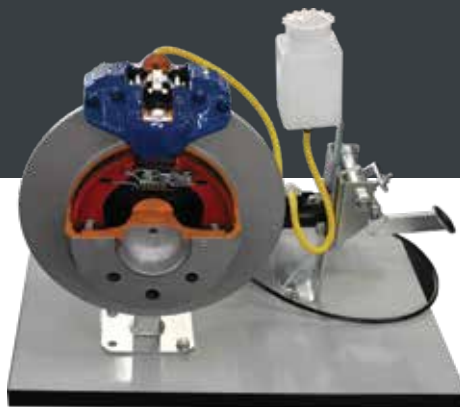


Detailed and interactive view of hydraulic braking systems, featuring both disc and drum brake components. This robust educational model includes a brake master cylinder, brake tank, and lever, with visible cutaways of the caliper, disc, and drum assemblies. It provides an in-depth examination of hydraulic force transmission, component interactions, and cooling mechanisms in braking systems. Constructed from high-quality materials, the trainer is designed for durability and stability, making it an ideal tool for technical and vocational automotive education.



Features

- **Dual Brake Systems:** Cutaway views of both disc and drum brake systems, including key components such as the master cylinder, brake tank, brake lever, caliper, and both disc and drum assemblies.
- **Hydraulic System:** Detailed depiction of the hydraulic braking system, including the master cylinder, actuator cylinders, and brake fluid paths.
- **Cooling Features:** Visible design elements such as ventilation holes in disc brakes and finned drums, illustrating thermal management.
- **Component Visibility:** Clear visibility of brake components and their interaction, with sectioned views for detailed study.
- **Educational Base:** Mounted on a sturdy base for stability and ease of use during demonstrations.





Value for instructors

- Explain the workings of both disc and drum brakes, with clear visual and functional demonstrations of each system's components and principles.
- Facilitate hands-on learning with a model that allows students to directly observe and interact with the cutaway components, enhancing their understanding of braking system mechanics.
- Ensure clear instruction with an accessible model that provides safe and detailed views of internal brake mechanisms, making complex systems easier to teach and understand.
- Simplify lesson preparation and execution with a well-organized, sectioned trainer that requires minimal setup and maintenance, allowing more time for instructional activities.

Mounted on a robust stand with wheels, this trainer is easily movable within the classroom, making it accessible for demonstrations and group learning sessions.



Value for students

- Gain practical knowledge of hydraulic braking systems, including the interplay between disc and drum brakes. Understand how hydraulic force translates into braking power and the mechanics behind effective braking without wheel lock-up.
- Examine the brake master cylinder, brake tank, brake lever, caliper, and both disc and drum brake mechanisms. Learn about the thermal management of brake systems, including ventilation holes, finned drums, and cooling deflectors.
- Study the operation of disc brakes, including the function of the piston in the caliper, the role of friction pads, and the autoventilating design of modern discs. Analyze drum brake components, such as the rotating drum, brake shoes, and the interaction of braking force.
- Explore the principles of hydraulic force multiplication through the brake system. Understand the function of different cylinders in the brake system, including the smaller pump cylinder and the larger actuator cylinders, and how hydraulic pressure is used to create braking force.
- Observe the design features of disc brakes that aid in heat dissipation and cooling, crucial for maintaining braking performance during successive applications.



Specifications

- Dimensions: 600 x 400 x 450 mm (23.62in×15.75in×17.72in)
- Weight: Approx. 25 kg (55 lb)
- Product number: AE412030M