



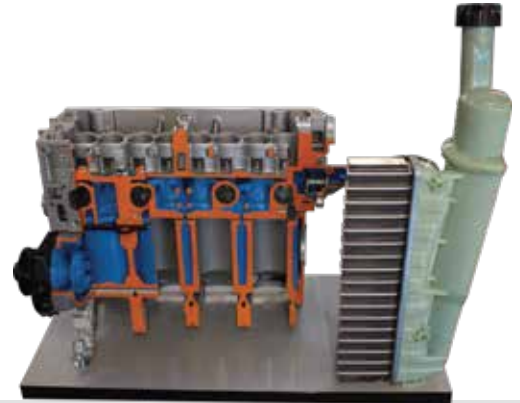
ENGINE COOLING SYSTEM CUTAWAY EDUCATIONAL TRAINER

A1

Product number
AE410401S



Cutaway educational trainer is designed to provide an in-depth look at internal combustion engine cooling systems. Featuring a detailed cutaway view, this trainer includes critical components such as the block-head canalization, water pump, thermostatic valve, water temperature bulb, expansion tank, and radiator. The model offers a comprehensive visualization of fluid flow and heat exchange processes, allowing users to explore the principles of conductive and convective heat transfer. Ideal for technical and vocational automotive education, this trainer facilitates hands-on learning and detailed examination of cooling system efficiency and functionality.



Features

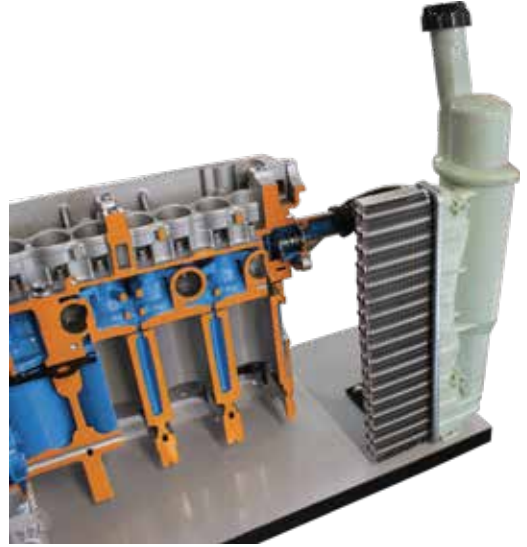
- Provides view of internal cooling system components, including the block-head canalization, water pump, thermostatic valve, water temperature bulb, expansion tank, and radiator.
- Detailed cutaways of critical components allow for examination of fluid flow paths and heat exchange processes.
- Illustrates key principles of heat transfer and cooling efficiency, including conductive and convective heat transfer, and the effects of coolant properties on system performance.
- Designed to complement automotive training curricula with practical, visual aids that enhance theoretical understanding.





Value for instructors

- Fully cutaway model to provide a clear and comprehensive view of engine cooling components and their functions. This visual aid enhances teaching by allowing students to directly observe and interact with the cooling system's internal mechanisms.
- The trainer's durable construction and precise engineering ensure reliable, long-term use in educational settings.
- The model integrates seamlessly into automotive education programs, supporting hands-on learning objectives and facilitating in-depth discussions on cooling system design, efficiency, and maintenance.
- Mobile and space saving stand, allows concurrent use by multiple students, promoting collaborative learning and practical training opportunities.



Value for students

- Study and analyze each key component of the engine cooling system, including the block-head canalization, water pump, thermostatic valve, water temperature bulb, expansion tank, and radiator. Understand their specific functions, interconnections, and operational principles within a cooling system.
- Engage with the internal mechanics of the cooling system. The cutaway design offers clear visibility of internal structures and fluid pathways, allowing students to observe and understand how coolant flows and heat is dissipated through the system.
- Learn how the thermostatic valve and water temperature bulb regulate engine temperature. Observe the role of these components in maintaining optimal engine performance and preventing overheating.
- Explore the principles of heat transfer, including conductive and convective heat transfer. Learn about coolant properties such as specific heat capacity, viscosity, and thermal conductivity, and how these factors influence cooling system design and effectiveness.



Specifications

- Dimensions: 500 x 700 x 750 mm (19.69in×27.56in×29.53in)
- Net Weight: 26 kg (57 lb)
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