2 STROKE PETROL ENGINE CUTAWAY

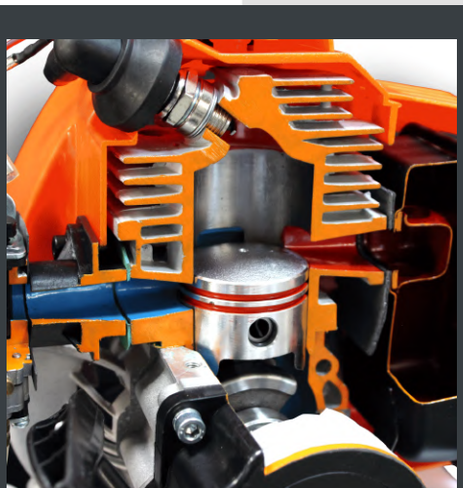
A1

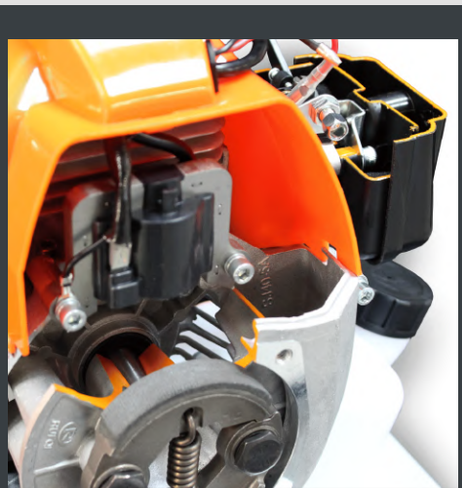
Product number
AE37450M

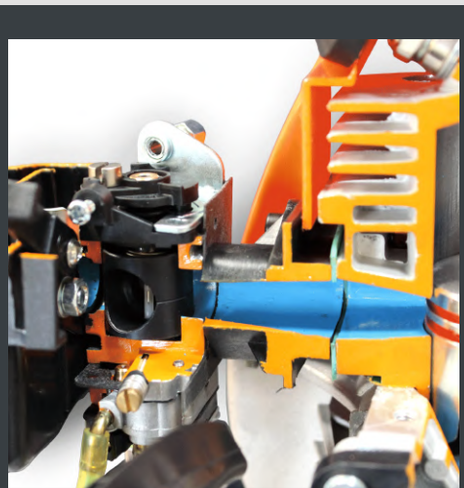
Cutaway Educational Trainer features a piston displacement of 46 cm^3, an air cooling system, and electronic ignition. This sectioned model showcases internal components such as a box carburetor, stamped and treated steel drive shaft, and die-cast aluminum cylinder with a cast-iron jacket. The engine operates manually via a crank handle, demonstrating practical mechanics with a fuel mixture ratio of 95% petrol(gasoline) to 5% oil. Its robust construction and detailed design facilitate an in-depth understanding of 2-stroke engine dynamics and maintenance.

Features

- Accurate sectioning of the engine reveals internal parts including the carburetor, ignition system, and air cooling mechanisms.
- Highlighted engine channels: suction, exhaust, and transfer channels are distinctly marked to facilitate learning of the engine cycle.
- Equipped with a crank handle for manual operation to simulate engine start-up and running.
- Solid, durable materials ensure long-lasting use and resistance to wear.
- Demonstrates modern ignition technology with a flywheel-based electronic ignition system.
- Forced air cooling via a fan on the flywheel ensures effective heat dissipation.







Value for Students

- The cutaway design exposes all critical internal components including the carburetor, ignition system, and suction-exhaust-transfer channels. This allows students to visually comprehend the engine's assembly and operation.
- The highlighted suction, exhaust, and transfer channels provide a clear view of the engine cycle, aiding in understanding the sequence of operations in a 2-stroke engine.
- The engine is operated manually via a crank handle, offering practical experience in engine operation and manual start techniques.
- Students will learn about the function of various components such as the stamped steel drive shaft, connecting rod, and die-cast aluminum cylinder. They will gain insights into how each part contributes to overall engine performance.
- Instruction on fuel mixture, running-in periods, spark plug maintenance, and air filter cleaning helps students understand routine engine care and troubleshooting.
- Understanding electronic ignition, air cooling systems, and the mechanical interactions within the engine provides foundational knowledge applicable to real-world scenarios.

Value for Instructors

- The detailed cutaway model supports various teaching methods by providing a tangible example of engine internals and operational principles.
- Teachers can use the exposed components to visually demonstrate engine functions, making complex concepts more accessible and understandable for students.
- Constructed from robust materials, the model requires minimal maintenance, ensuring consistent use in an educational setting.
- The manual crank operation allows instructors to guide students through engine start-up procedures and operational checks in a controlled environment.
- Facilitates the teaching of engine diagnostics and maintenance techniques through hands-on interaction with the engine’s core components.

Specifications

- Dimensions: 300 x 300 x 400 mm (11.81 in×11.81 in×15.75 in)
- Weight: 8 kg (17 lb)
- Product number: AE37450M