

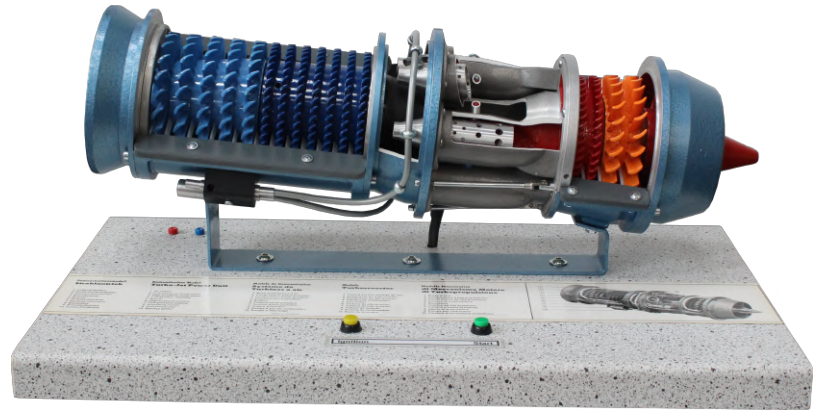


# TURBO JET ENGINE CUTAWAY MODEL

A1

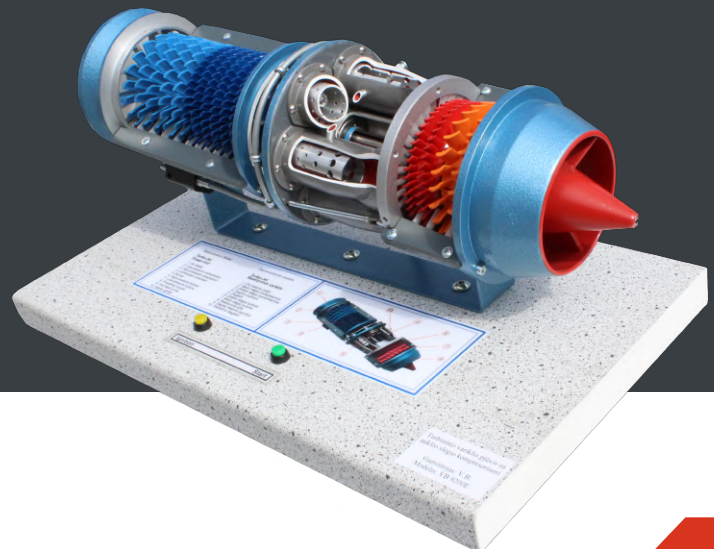
Product number  
AE39200E

Sectioned housing that reveals key components of a modern two-wave turbine engine, including the low-pressure and high-pressure compressors, combustion chamber, and turbines. Equipped with an electro-motor, the model allows for real-time turbine rotation, showcasing the air intake, fuel feed pump, burner, and starting igniter. Understanding of turbojet propulsion, demonstrating the processes of air compression, fuel combustion, and high-speed gas ejection through the propelling nozzle for thrust generation.



## Features

- Detailed sectioned housing to expose the low-pressure and high-pressure compressors, combustion chamber, turbines, and propelling nozzle.
- Electro-motor to simulate real-time operation, allowing turbines to rotate and demonstrate airflow through the system.
- Visible fuel feed pump, burner, and starting igniter for practical learning about ignition and fuel delivery systems.
- Components include the air intake, low and high-pressure compressors, combustion chamber, low and high-pressure turbines, and exhaust nozzle for complete jet engine learning.
- Mounted on a robust base, ensuring stability during operation and easy movement for classroom settings.





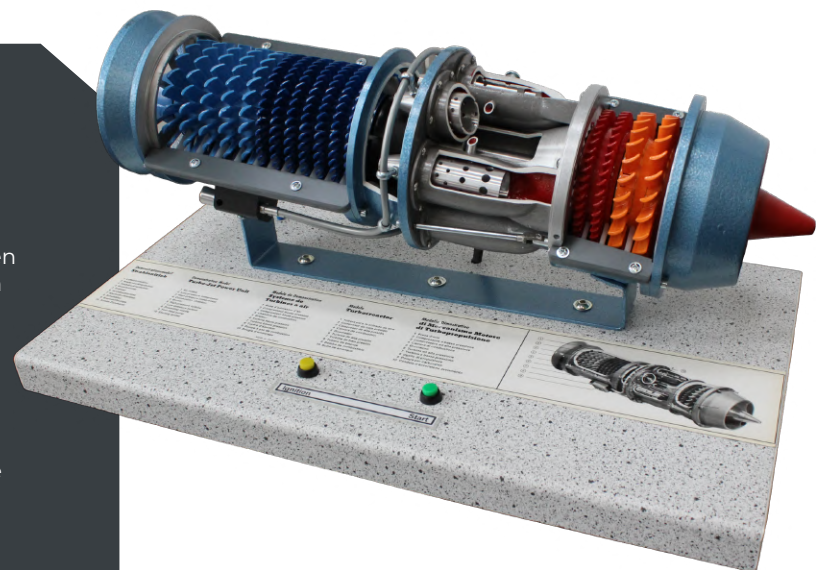
## Values for students

- Modern two-wave turbine engine, studying each component such as the air intake, compressors, combustion chamber, turbines, and exhaust nozzle.
- Operation of high and low-pressure compressors and turbines, learning how air is compressed, fuel is injected and ignited, and how propulsion is achieved through exhaust gases.
- Visualize critical engine processes, including air compression, combustion, and expansion, using the electro-motor to set turbines in motion.
- Analyze key systems like the fuel feed pump, burner, and starting igniter, understanding their role in maintaining engine efficiency and reliability.
- Learn the principles of gas turbine propulsion, including air compression, combustion, and high-speed gas ejection through the propelling nozzle to generate thrust.
- Study the efficiency improvements in modern turbojet engines, such as multi-stage compressors and turbines designed for optimal performance at high altitudes and speeds.



## Values for teachers

- Demonstrate the workings of a turbojet engine in a clear, visual, and interactive way using a sectioned model with easily visible components.
- Provide students with a fully functional electro-motor-driven turbine system to enhance understanding of jet propulsion technology.
- Teach various aspects of turbojet operation, from the air intake to the exhaust nozzle, allowing students to fully comprehend the flow of air and combustion gases.
- Facilitate hands-on learning in a safe environment with the model's compact, sectioned design, showcasing all critical parts of a two-wave turbine.
- Easily integrate the model into classroom settings with its portable and durable base, ensuring long-term use and practical lessons.



## Specifications

- Dimensions: 700 x 280 x 450 mm (27.56 in x 11.02 in x 17.72 in)
- Weight: 13 kg (28 lb)
- Made in EU
- Product number: AE39200E

