



# GEARBOX WITH CLUTCH CUTAWAY EDUCATIONAL TRAINER

A2

Product number

AE411030M



5-speed gearbox with a reverse gear, featuring free-ring straight cone synchronizers and a dry single-plate clutch system. The model is carefully sectioned, with chromium-plated and galvanized components for durability, and is color-coded to highlight key parts such as the main shaft, driving gears, sliding sleeves, and roller bearings. Trainer allows manual control of the transmission system, providing hands-on experience in gear shifting, clutch operation, and maintenance techniques using specialized tools.



## Features

- 5-speed gearbox with reverse, featuring free-ring straight cone synchronizers and constant mesh gears.
- Dry single-plate clutch system, manually operated with a foot pedal for realistic training purposes.
- Sectioned components for visibility, with color-coded parts to differentiate various mechanical elements.
- Handwheel operation for manual control of the gearbox, enabling direct manipulation of the transmission for training.
- Includes specialized tools for training in sealing, tightening, and bearing removal operations.
- Mounted on a mobile stand with wheels for ease of transport and classroom use.





### Value for Students

- 5-speed manual gearbox with a reverse gear, including the operation of free-ring straight cone synchronizers and the constant mesh gear system.
- Dry single-plate clutch mechanism, learn about spring and diaphragm-based clutch operations, and the mechanical actuation of clutches via a foot pedal.
- Explore the assembly and disassembly process of transmission components, such as the main shaft, driving gear, and sleeve, learning proper fitting techniques like sealing the rear cover and tightening check nuts with a torque wrench.
- Study the detailed internal workings of gear shifting systems, including sliding sleeves for gear engagement, roller bearings for second gear, and the direct drive shaft.
- Perform maintenance tasks like removing the front bearing for the transmission shaft and using specialized tools.



### Value for Instructors

- Durable, clearly sectioned model that highlights key components of a manual gearbox and clutch system for effective classroom demonstrations.
- Visually identify critical parts, including the main shaft, driving gears, hub, and sliding sleeve, which are painted in different colors for easy differentiation.
- OEM components learning experience with a model that simulates mechanical gear shifting and clutch operation in a controlled, safe environment.
- Ensure longevity of the training tool with chromium-plated and galvanized parts, minimizing wear and tear while reducing long-term maintenance requirements.
- Encourage collaborative and practical learning by utilizing the model's mobile stand, allowing for easy movement and integration into different teaching setups.



### Specifications

- Dimensions: 950 x 600 x 500 mm (37.40in x 23.62in x 19.69in)
- Weight: 50 kg (110 lb)
- Product number: AE411030M

