



# ELECTRIC POWER-ASSISTED STEERING (EPS) SYSTEM WITH SUSPENSION

A4

Product number

AE410778E



Fully operational EPS system, complete with McPherson struts, rack-and-pinion steering, and a body computer with low-speed CAN bus. This trainer includes vehicle speed simulation (0-120 km/h - 75 mph), adjustable steering effort, alternator simulation, and real-time voltage/current displays, all integrated into a mobile, classroom-ready unit.



## Features

- **Fully Operational EPS System:** Equipped with a complete electric power-assisted steering system, including McPherson struts and a rack-and-pinion mechanism.
- **Adjustable Steering Effort:** Allows users to modify the steering effort directly on the rack, simulating various driving conditions.
- **Vehicle Speed Simulation:** Simulates vehicle speeds ranging from 0 to 120 km/h (75 mph), providing a realistic steering response.
- **Normal/City Mode Switch:** A push-button control that allows for quick switching between normal and city driving modes, altering the steering dynamics accordingly.
- **Alternator Simulation:** Includes an alternator simulation to replicate the impact of electrical load on the EPS system.
- **Real-Time Data Display:** Features an instrument cluster and two additional displays for monitoring voltage, current, and other critical parameters during operation.
- **Diagnostic Capabilities:** Integrated body computer with an OBD 16-pin diagnostic socket, supporting low-speed CAN bus communication for advanced diagnostic exercises.



## Values for students

- Gain practical experience with an authentic EPS system, including rack and pinion steering, McPherson struts, and vehicle speed simulation.
- Utilize the built-in body computer with a diagnostic socket and low-speed CAN bus for real-time data analysis, fault code management, and system diagnostics.
- Engage with variable steering efforts and vehicle speed simulations ranging from 0 to 120 km/h (75 mph), replicating real driving scenarios.
- Learn to interpret and analyze live voltage, current, and other operational data displayed on the instrument cluster and additional displays.
- Comprehensive understanding of EPS, explore the impact of various inputs on steering dynamics, such as alternator simulation, normal/city mode adjustments, and steering effort variations.



## Values for teachers

- Demonstrate the functionality and operation of modern EPS systems using original vehicle components, ensuring students receive a practical, industry-relevant education.
- The robust and mobile design facilitates seamless integration into classroom environments, allowing for flexible teaching arrangements and easy movement between sessions.
- The interactive nature of the trainer, including real-time data displays and adjustable parameters, keeps students engaged and provides valuable insights into steering system operations.
- Multiple students can interact with the trainer simultaneously, promoting teamwork and collaborative problem-solving skills.
- The trainer is designed for ease of use, requiring minimal adjustments to prepare for each lesson, thereby maximizing instructional time.



## Specifications

- Dimensions: 62.99 in x 51.18 in x 59.06 in (1600 x 1300 x 1500 mm)
- Weight: 330 lb (150 kg)
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