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PRODUCT DATA SHEET
Catalogue reference for product evaluation

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Power Window System Trainer | Torquemaster-19

Category: Automobile Engineering Lab Equipment · **Order Code:** TORQUEMASTER-19 · **Country of Origin:** India

Product Overview

Power Window System Trainer Torquemaster-19 demonstrates a complete four-door power window system using OEM components and real-world circuit architecture. This Power Window System Trainer includes 4 window motors, master and slave switches, central door locking, and a lockable fault box with up to 4 insertable faults for diagnostic training. Diagnostic test points and detection terminals allow measurement of electrical signals, resistance, voltage, current, and frequency. It requires external 12V DC power and includes a user manual.

View this product online: https://scienticoindia.com/product/power-window-system-trainer-torquemaster-19/



Request a model-specific quotation
Include quantity and delivery country.

Technical Specifications

Power Window System Trainer Torquemaster-19 — Technical Specifications

Parameter	Value
Model	Torquemaster-19
Power Windows	4 doors
Window Motors	4 units
Switches	Master and slave switches
Fault Box	Lockable fault box with 4 faults
Test Points	Electrical test points for circuit diagnosis
Components	OEM components with OEM matching wire colors
Windows	Organic glass with aluminum rims
Diagnostic Capability	Detection terminals for electric signals, resistance, voltage, current, and frequency
Power Supply Required	External 12V DC
Length x Width x Height (approx.)	600 x 600 x 300 mm
Weight (approx.)	25 kg

Technical Data

Component	Detail
Window Motors	4 units, OEM components
Switches	Master and slave switches for window control
Central Door Locking	Included for system demonstration
Fault Insertion System	Lockable fault box, allows 1 to 4 fault insertions
Test Terminal Block	Receptacles for diagnostic test points
Detection Terminals	For measurement of electric signals, resistance, voltage, current, and frequency
Glazing	Organic glass with aluminum rims

Key Features

Key Features

- **Components:** OEM components (window motors, switches, with OEM matching wire colors)
- **Fault Box:** Lockable system fault box allowing 1 to 4 fault insertions for diagnostic learning
- **Diagnostic Points:** Electrical test points included on the trainer for circuit diagnosis
- **Monitoring:** Detection terminals to measure electric signals, resistance, voltage, current, and frequency
- **Control:** Central door locking and electric window switch operation for system demonstration
- **Design Type:** Power Window System Trainer with 4-door configuration for comprehensive training

Experiments

- Study of power window motor operation
- Study of master and slave switch function
- Study of central door locking system
- Measurement of electrical signals at test points
- Measurement of resistance, voltage, current, and frequency in circuit components
- Fault insertion and diagnostic troubleshooting
- Study of window control circuit operation

Construction and Design

The Power Window System Trainer Torquemaster-19 uses OEM components throughout, including four window motors and master and slave switches with OEM matching wire colours. The unit features organic glass with aluminum rims for window representation. A lockable system fault box with capacity for one to four faults is integrated for diagnostic training. Terminal block receptacles provide diagnostic test points for circuit measurement and analysis. Detection terminals allow measurement of electric signals, resistance, voltage, current, and frequency of circuit components. The central door locking system and electric window switches can be operated to demonstrate working processes. The trainer requires an external 12V DC power supply for operation.

Scope of Delivery

- Four-door power window system trainer
- 4 power window motors
- Master and slave window switches
- Central door locking system
- Lockable fault box with 4 faults
- Diagnostic test point terminal blocks
- Detection terminals for electrical measurements
- Organic glass windows with aluminum rims
- User manual

Required for Operation

- External 12V DC power supply

Ordering & Delivery

- Send the product name, quantity, delivery country and destination with your enquiry.
- Production schedule, freight, payment terms and export documents are confirmed in the written quotation.

Frequently Asked Questions

Q1: What does the Power Window System Trainer Torquemaster-19 demonstrate?
A: It demonstrates a complete power window system using real OEM components, including window motor operation, master and slave switch function, and central door locking.

Q2: How many faults can be inserted using the fault box?
A: The lockable system fault box allows instructors to insert from one to four faults for student diagnostic learning.

Q3: What measurements can be made at the detection terminals?
A: Electric signals, resistance, voltage, current, and frequency of circuit components can all be measured at the detection terminals.

Q4: What type of components are used in this trainer?
A: OEM components are used throughout, including window motors and switches with OEM matching wire colours.

Q5: What are the dimensions and weight of the trainer?
A: The approximate dimensions are 600 x 600 x 300 mm, with an approximate weight of 25 kg.

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