

# Heavy Duty

**MIDTRONICS**

## MDX-700 HD Heavy Duty Battery Conductance and Electric System Analyzers

### Advanced System Analysis for Multiple Battery Vehicles

Introducing the MDX-700 HD from Midtronics, the worldwide leader in battery and electrical diagnostics. Created specifically for the heavy-duty commercial/fleet market, the new MDX-700 HD uses Midtronics' advanced conductance technology, making it easy for anyone to test the full electrical system on heavy duty vehicles.

Technicians can quickly find the problem – in the battery, starting or charging system – in minutes, not hours. Full test results, including multiple battery tests, can be printed on an optional integrated printer. The MDX-700's 15' cable set allows for starting and charging system tests to be run from the cab, for complete control and simplicity. The analyzer's user-friendly interface intuitively prompts the technician through the entire test sequence quickly and easily.

Using patented conductance technology and an advanced heavy-duty battery testing algorithm, the MDX-700 HD provides accurate test results reliably for multiple configurations up to 2000 CCA.

- **SAFE** to use anywhere, even in front of the customer
- **FAST** and accurate testing of the battery or full system accurately in seconds
- **SIMPLE** proven user interface eliminates guesswork and user error, providing accurate analysis every time

The MDX-700 HD helps to:

- Save time and money by improving battery and electrical diagnostic productivity
- Improve customer service by reducing wait time
- Increase sales by pro actively testing batteries and systems
- Increase customer satisfaction by identifying problems before they occur



### PATENTED CONDUCTANCE TECHNOLOGY IS AT THE HEART OF OUR ANALYZERS



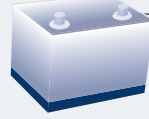
#### NEW BATTERY

Rating: 500 CCA  
Measured:  
600 CCA



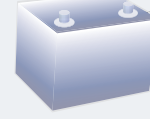
#### DURING LIFE

450-600 CCA



#### APPROACHING END OF LIFE

430 CCA



#### REPLACE BATTERY

350 CCA

Conductance is a unique electrical measurement that determines the ability of a battery to transmit current through its internal structure. Years of laboratory and field research have proven that conductance provides a reliable indication of battery state-of-health and a correlation to the battery's cranking ability

Conductance Technology can be used to detect cell defects, shorts, and normal aging. Midtronics Conductance Technology is recognized globally as the standard for determining battery condition and controlling battery charging. Conductance is the required test method for battery warranty decisions at most automotive OEMs.

A new battery, when fully charged, will have a high conductance reading, anywhere from 10% to 15% higher than its full CCA rating.

As a battery ages, its internal components wear out through corrosion, disintegration, and shedding. Performance of the battery is significantly degraded and can be measured through its conductance value.

### THE COMPLETE TOOL FOR ALL VEHICLE AND BATTERY APPLICATIONS

The MDX-700HD combines all of the testing functionality of our MDX-650 series with the added ability to test the multiple battery systems found in trucks and commercial equipment



#### Vehicle Applications

- Group 31
- Automotive
- Motorcycle
- Marine Cranking
- Lawn and Garden
- Commercial 4D/8D



#### Battery Types

- Regular flooded
- AGM flat plate
- AGM spiral
- Gel



#### Global Systems

- CCA, CA, MCA, JIS, SAE, EN, DIN, IEC
- 6 and 12 volt batteries
- 12 & 24 volt charging system testing



#### Starter/ Alternator Testing

- Quick starter analysis without disabling the ignition
- Advanced menu-driven interface for a complete charging system analysis in seconds



#### Battery Pack Testing

- Test the pack with batteries connected for PM testing
- Routine for testing and reporting individual battery results from multiple battery systems

#### Additional Features

- VIEW/PRINT – to view last test from memory or print another copy
- QC MODE for performing quality control testing
- Multiple Languages
- COUNTER Information to track activity, including good vs. replace, batteries and system test results
- Large back-lit display keeps operation simple for all levels of users
- Data card reader for software upgrades
- 15' Heavy Duty Removable cable set allows running tests from the cab



MDX-700HD

## MDX-700HD OVERVIEW

Heavy Duty Battery Conductance and Electrical System Analyzer for testing 6 and 12 volt system batteries in 12 to 24 volt systems consisting of one or as many as six batteries (in a pack)

- In-vehicle capabilities for analyzing the starting and charging systems
- Date and time for accurate records
- User definable header
- Complete system information in an easy to read and understand format

MIDTRONICS MDX-700 HD	
04/21/2018 9:56 AM	
PACK 1	
<b>CHECK PACK</b>	
VOLTS MEASURED	11.48V 428 CCA
RATING	550 CCA
BATTERY TYPE	REGULAR FLOODED
BAT. LOCATION	IN VEHICLE
POST TYPE	TOP POST
APPLICATION	GROUP 31
CHARGE STATE	BEFORE CHARGE
BATTERY 1	
<b>GOOD BATTERY</b>	
VOLTS MEASURED	12.51V 541 CCA
BATTERY 2	
<b>GOOD BATTERY</b>	
VOLTS MEASURED	12.53V 546 CCA
BATTERY 3	
<b>GOOD BATTERY</b>	
VOLTS MEASURED	12.54V 546 CCA
BATTERY 4	
<b>REPLACE BATTERY</b>	
VOLTS MEASURED	11.48V 264 CCA

Sample Printout



MDX-700PHD

## AVAILABLE MODELS

MDX-700HD Series products can be purchased with an integrated printer or a portable IR printer to provide a professional diagnostic report to the consumer.

- **MDX-700HD**  
Battery Conductance and Electrical System Analyzer w/15' cable and heavy duty battery clamps
- **MDX-700PHD**  
Battery Conductance and Electrical System Analyzer w/15' cable and heavy duty battery clamps and an integrated thermal printer

*Midtronics is focused on developing innovative technologies for battery management.*

*For preventive maintenance, professional service and warranty management, our battery and electrical diagnostic equipment is the accepted standard by new vehicle dealers, service centers and battery retailers worldwide.*

Removable Cable set



SIMM Card Data Transfer



Extra Long Cable set allows testing from the cab



**SPECIFICATIONS:**

**Models:**

- **MDX-700HD** Battery Conductance and Electrical System Analyzer  
Includes: MDX-700HD Series Analyzer, MDX-700HD Software (installed), Manual, stud adapters, 15' cable set, tool bag.
- **MDX-700PHD** Battery Conductance and Electrical System Analyzer  
Includes everything from MDX-700HD with the addition of an Integrated Printer.

**Available Accessories:**

- A156 Tool Bag Carrying Case
- A260 Replacement 15' Battery Test Cable
- A033 Lead Stud Adapters, 2 male, 2 female
- A095 6 pack, thermal paper\*  
*\* Replacement paper rolls available at most office supply stores*
- A087 IR Printer with Charger (for MDX-700HD)

**Applications:**

- Group 31
- Automotive
- Motorcycle
- Marine
- Lawn & Garden
- Group 31
- Commercial 4D/8D

**Display:**

5-line Text/Graphical Backlit Display

**Operating Temperature:**

0°C to +50°C (32°F to +122°F)

**Test Range:**

- CCA: 100-2000 BY 5
- MCA: 100-2000 BY 5
- EN: 100-2000 BY 5
- SAE: 100-2000 by 5
- CA: 100-2000 BY 5
- JIS#: By Part Number
- DIN: 100-1200 by 5
- IEC: 100-1200 by 5

**Voltage Range:**

.9Vdc – 30Vdc

**Cable Length:**

- 15'/455cm (standard)

**Power Requirements:**

Uses the power of the battery under test and 6 AA Internal Batteries

**Languages:**

- English
- French Canadian
- Spanish

**Housing Material:**

Acid resistant ABS plastic

**Dimensions:**

MDX-700HD: 19.5cm x 10cm x 5cm  
(7.7" x 3.9" x 2.4")

MDX-700PHD: 27cm x 10cm x 5cm (10.6" x 3.9" x 2.4")

**Weight:**

MDX-700 HD: 544g (1.2 lbs)

MDX-700P HD: 771g (1.7 lbs)



**Corporate Headquarters**

Willowbrook, IL USA  
Phone: 1.630.323.2800  
Canadian Inquiries  
Toll Free: 1.866.592.8053

**Midtronics b.v.**

European Headquarters  
IJsselstein, The Netherlands  
Serving Europe, Africa, the Middle East, and The Netherlands  
Phone: +31 306 868 150

**European Sales Locations**

IJsselstein, The Netherlands  
Paris, France  
Dusseldorf, Germany

**Midtronics India**

Mumbai, India  
Phone: +91.989 237 6661

**Midtronics China Office**

China Operations  
Shenzhen, China  
Phone: +86 755 8202 2037

**Asia/Pacific (excluding China)**

Contact Corporate Headquarters  
Phone: +1.630.323.2800