

Sabre Heavy-Duty



Heavy-Duty Battery and Electrical System Diagnostic Tester

- Heavy-duty for 24-volt battery and electrical systems
- Diagnoses battery packs in series, parallel, or series/parallel
- Test AGM/gel cell batteries

Sabre Heavy-Duty

HIGHEST CCA capacity ranges (50-4000 CCA – 24V).

LARGE DISPLAY for less scrolling, more detailed instructions. It's also backlit for all light conditions.

INDUSTRY FIRST amp clamp connection ports for live amperage readings using optional external amp clamp.

15 FT. CABLE to perform tests from the cab of the vehicle.

FIELD UPDATEABLE to accommodate new battery types, system updates, feature additions.

Battery Testing

- Tests the following battery pack configurations:
 - One battery (6V or 12V)
 - Two batteries in series (24V); 2, 3, or 4 batteries in parallel (12V)
 - Two banks in parallel, each bank having 2 batteries in series (24V)
- Uses pack configuration in algorithm design.
- Step-by-step user instructions for easy test completion.
- Tester applied loads used on all pack combinations.

Electrical System Testing

- 12V and 24V charging system tests
- 12V and 24V starting system tests
- 12V and 24V diode tests
- Amp clamps available (not included) for starting/charging and current draw tests.

Features

Amp Clamp Connection – allows current drain tests and starting/charging analysis.

Tests Both FLA (flooded lead acid) and **AGM** (absorbed glass mat) battery types.

Scales – CCA, CA, AHR, MCA, JIS, DIN

User Definable – print header and footer.

Removable Test Cables – easily field replaceable.

PC Interface Port – allows for field updateable software.

IR Compatible – allows optional infrared wireless printer.

Readout Display – backlit for low light conditions, easy to view data in direct sunlight (4x20 character display).

Security Cable Connection – protects against stolen or dropped units.

Over-molded Surround with Soft-touch Keys – Ruggedly built, easy to use, even with gloves.

No. 3167-HD – Deluxe kit includes 24-Volt Heavy-Duty Battery Tester, 15 ft. test leads, instruction manual, molded plastic carrying case.

No. 3168-HD – Same as the 3167-HD above, but also includes an infrared wireless printer.

Accessories:

No. 3172-15 – 15 ft. Lead Set.

No. 3169 – Infrared Wireless Printer.

No. 3173 – Low Range Amp Probe (current drain tests).

No. 3174 – High Range Amp Probe (starting/charging test).



OTC Family Of Battery Testers

3167 Sabre HP

Sabre HP is designed to let you quickly diagnose bad batteries in a discharged state without needing to charge them first. By utilizing a patented OTC micro load testing method, this tester ensures accurate test results without any interpretation on vehicle battery, starting and charging systems. Ships with 3' leads.

Features and Benefits

- Digital circuitry precisely controls battery test loads to accurately determine battery conditions using OTC patented Micro Load test technology
 - Tests the battery both statically and dynamically with multiple fixed loads
 - Provides the most accurate test results
 - Less susceptible to erroneous results from remote or bad connections, surface charge and parasitic drains
 - Accurately tests both Active Glass Mat (AGM) and flooded lead acid batteries (FLA)
 - Tests vehicle starting and charging systems with minimal user interaction, automatically applies loads for accurate charging system tests
 - Tests all 6 and 12 volt batteries with a 50-2000 CCA operating range
 - Tests batteries down to 1 volt state of charge
 - Temperature and low charge compensation
 - Detects bad cells
 - Scales: CCA, CA, AHR, MCA, JIS, DIN
 - 4 x 20 backlit display shows CCA's, voltage, and good/bad status
 - Over-molded enclosure with soft-touch keys
 - Built-in infrared printer interface for remote printing (printer optional)
 - Flash upgradeable memory in field
 - Removable/auto-sensing leads (3' leads included in kits, optional 10' leads available)
 - Print out has date/time stamp and user definable header and footer
 - Optional amp clamps for current drain tests and starting/charging measurements (the only hand-held battery tester with this feature)
 - Reverse polarity protection
 - Hard carrying case
 - 3 year warranty
 - Made in U.S.
- SABRE HP** – Includes SABRE HP, 3' test leads, side-post terminal adapters, instruction manual, and molded-plastic carrying case. **No. 3167 – SABRE HP**



3168 SABRE HP Deluxe Kit

Includes SABRE HP, 3' test leads, side-post terminal adapters, instruction manual, infrared wireless printer, and molded-plastic carrying case.

Accessories:

- No. 3169 – Infrared wireless printer for use with No. 3167 (included with No. 3168)
- No. 3172 – 10 foot test leads
- No. 3173 – Low range amp probe (current drain tests)
- No. 3174 – High range amp probe (starting/charging test)



Battery Testers

**See comparison chart on back page*

3185 Professional Battery Charging Starting System Analyzer Kit

The 3184 can also be purchased as a kit, 3185, which includes the tester, an infrared printer, a 12 ft. extension cable for in-cab testing, 2 voltmeter probes and a large, soft-sided carrying case. Each of these accessories is also available separately.

BCS System Analyzer Kit – Includes BCS System Analyzer, infrared printer, a 12 ft. extension cable for in-cab testing, 2 voltmeter probes, battery side and threaded post adapters, detachable leads, 9 volt battery, soft sided carrying case.

No. 3185 – BCS System Analyzer Kit

3184 Professional Battery Charging Starting System Analyzer

Made for the professional technician, the 3184 tests batteries and starting/charging systems faster than ever before. The BCS System Analyzer has an operating range of 50-2000 CCA's and is able to store data in memory or remotely print out the results using an infrared printer interface. It also measures voltage and tests starting and charging systems at the push of a button.

Features and Benefits

- Utilizes cost effective conductance test technology for accurate testing at a value price point
- Quick 1-second initial results
- Tests charging and starting systems
- 50-2000 CCA range accurate to 5 CCA's
- Tests 6V and 12V batteries
- Temperature and low charge compensation
- Detects and identifies loose leads
- Supports CCA, IEC, EN, BCI, and DIN scales
- 4 line, 20 character LCD display shows CCA's, voltage, and good/bad status
- Displays results in 7 languages: English, French, Spanish, German, Italian, Dutch, Swedish
- Built-in infrared printer interface for remote printing
- Detachable cable leads

BCS System Analyzer

– Includes BCS System Analyzer, 12 Foot cable extensions, 9 volt battery, detachable leads.

No. 3184 – BCS System Analyzer

3183 Digital Battery Tester

Speed. Accuracy. Reliability. These are the cornerstones behind the technology in our digital battery testers. 3183 tests 12 volt batteries (125-1400 CCAs) and analyzes by measuring multiple parameters within the battery to deliver accurate results. A live voltmeter allows easy starting/charging system testing. Its bright, 4 digit LED display indicates the battery's good/bad status, voltage, and available CCAs. It even compensates for cold temperatures.

Features and Benefits

- Utilizes cost effective conductance test technology for accurate testing at a value price point
- Quick 1-second initial results
- 125-1400 CCA range
- Analyze starting/charging system voltages
- Tests 12V batteries
- Temperature and low charge compensation
- Detects and identifies loose leads
- Detects bad cells
- Surface charge warning
- Measures multiple international units: CCA, IEC, DIN, BCI, and EN
- 4 digit LED display shows good/bad status, available CCAs, and voltage

Digital Battery Tester

– Includes Digital Battery Tester and soft sided carrying case.

No. 3183 - Digital Battery Tester

Battery Load Testers

3182 130 Amp Digital Battery Load Tester

Produce more accurate results with this 130 amp digital battery load tester. The compact, lightweight design is rugged enough for everyday testing of 6 and 12 volt batteries.

Features and Benefits

- Large, easy to read display
- Unique clamp design
- Side clamp mount
- Comfortable, easy-to-grip, ergonomic handle
- Alternator test lead
- Ripple detection light
- 0-16 volt range
- Dual jaw load clamp design
- State of charge
- Battery load test
- Starter test
- Charging system test
- Alternator ripple test

130 Amp Digital Battery Load Tester – Includes 130 Amp Digital Battery Tester, Test leads.
No. 3182 - Digital Battery Tester

3181 130 Amp Heavy-Duty Battery Load Tester

Applying an industry-leading 130 amp load, this ergonomically designed, heavy-duty battery tester provides accurate, reliable test results in just 10 seconds. It includes uniquely designed clamps for a positive grip on top and side post batteries and an extra large, easy-to-read display.

Features and Benefits

- 130 amp load capacity for accurate results
- 0-16 volt range
- Uniquely-designed clamps for both top and side post batteries
- Extra large display with zero adjust
- Works on both 6V and 12V batteries
- Ergonomic handle design
- Side tabs for on-tool clamp storage
- Back brackets for tool storage on wall or toolbox

130 Amp Heavy-Duty Battery Load Tester – Includes Battery Load Tester.
No. 3181 - 130 Amp Heavy Duty Battery Load Tester

3180 100 Amp Battery Load Tester

Tests batteries on or off the car in just 10 seconds. Convenient, portable size and easy-to-read scales.

Features and Benefits

- Heavy-duty copper-plated clamps
- 100 amp load capacity
- 0-16 volt range
- Load safety switch prevents arcing
- Heavy-duty, chrome-plated, ventilated steel case
- Works on both 6V and 12V batteries
- Ceramic insulators
- Determines state of charge, cranking and charging volts
- Determines good/bad status
- Extra large display with zero adjust

100 Amp Battery Load Tester – Includes 100 Amp Battery load tester.
No. 3180 - 100 Amp Battery Load Tester

Battery Testers

Comparison Chart



	3183	3184/3185	3167
CCA range	125-1400	50-2000	50-2000
Testing method	Conductance	Conductance	Microload
Good/bad test results	■	■	■
Tests discharged batteries	■	■	■
Bad cell detection	■	■	■
Temperature compensation	■	■	■
Reverse polarity protection	■	■	■
Measure CCA potential	■	■	■
Stored test data		■	■
Removable test leads		■	■
Infrared printer option		■	■
Starting/charging system test		■	■
Extended test lead option		■	■
Accurately diagnoses AGM/spiral wound batteries			■
Tester applied load during charging system and battery test			■
Functional amp clamp option			■
PC interface port			■
Display	4 Digit LED	4-line 20 Character backlit LCD	4-line 20 Character backlit LCD
Scales	CCA, IEC, EN, BCI, DIN	CCA, IEC, EN, BCI, DIN	CCA, CA, AHR, MCA, JIS, DIN
Warranty	3 Year	3 Year	3 Year