



CA-1550

Battery Charger / Analyzer

The CA-1550 Charger/Analyzer is a self-contained unit for charging and discharge capacity testing of rechargeable batteries. It has been designed to accurately test, charge and guarantee the emergency capacity of sealed or vented lead-acid or nickel-cadmium batteries. Guaranteed emergency capacity is especially important for aircraft batteries.

The unit comes in a convenient protective carrying case. It is very easy to move around to accommodate flexibility in the work environment, whether used portable or in the hangar or battery shop. The flexibility of charge and discharge parameters of the CA-1550 makes it usable for a wide variety of batteries and voltages. The unit accurately charges and tests lead-acid batteries of 12 or 24 volts, as well as nickel-cadmium batteries of a single cell to 24 volts.

The charge unit of the CA-1550 allows charging at both constant potential and constant current to give maximum flexibility in selection of charge method. The charger has an adjustable charge current from 0 to 25 amperes, and an automatic timer for charge time selection.

The discharge unit of the CA-1550 enables battery capacity testing with a constant current of 0 to 50 amperes (usually set to 80-100% of the battery's capacity rating) for a preset time. The unit automatically analyzes the discharge characteristics and passes or fails the battery depending on the battery's ability to maintain the specified minimum voltage for the duration of the test.

DISPLAYS AND CONTROLS

The CA-1550 has been designed to have very simple and easy to understand controls and displays. Two digital panel meters allow viewing of charge and discharge current and voltage. A digital electronic timer displays elapsed time and can be set to any fixed duration period. Light indicators display if the unit is in charge or discharge mode and also indicate battery pass or reject status after a discharge test.



APPLICATION:

Charging and discharge testing of 12 or 24 volt lead-acid or nickel-cadmium aircraft batteries. Charging in either constant potential or constant-current mode.

FEATURES:

- AC input 115 or 230 VAC $\pm 10\%$ 50/60 Hz -selectable
- Control knob adjustment for charge and discharge currents
- Adjustable discharge voltage cutoff, for 12 and 24 volt lead acid batteries and from single cell to 24 volt nickel-cadmium batteries
- Adjustable charge current in constant-current charging mode
- Adjustable voltage in constant-potential charging mode
- Meter reading accuracy: Voltmeter ± 0.1 volts
Ammeter ± 0.1 amperes
Timer 0.1% of preset time

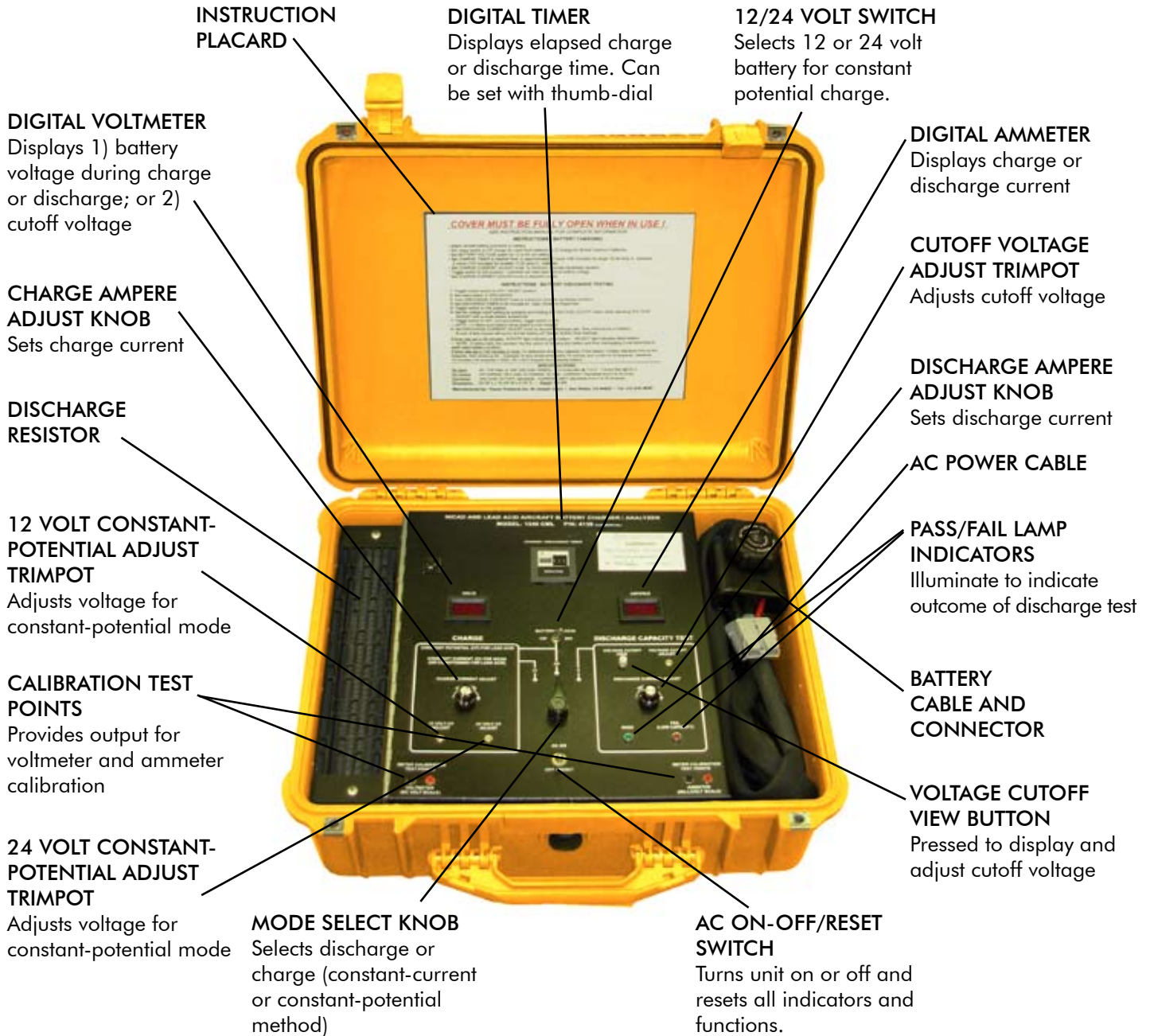


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Battery Charger / Analyzer

Part Number: 4159-CML

Model Number: CA-1550



INSTRUCTION PLACARD

DIGITAL TIMER

Displays elapsed charge or discharge time. Can be set with thumb-dial

12/24 VOLT SWITCH

Selects 12 or 24 volt battery for constant potential charge.

DIGITAL VOLTMETER

Displays 1) battery voltage during charge or discharge; or 2) cutoff voltage

DIGITAL AMMETER

Displays charge or discharge current

CHARGE AMPERE ADJUST KNOB

Sets charge current

CUTOFF VOLTAGE ADJUST TRIMPOT

Adjusts cutoff voltage

DISCHARGE RESISTOR

DISCHARGE AMPERE ADJUST KNOB

Sets discharge current

12 VOLT CONSTANT-POTENTIAL ADJUST TRIMPOT

Adjusts voltage for constant-potential mode

AC POWER CABLE

PASS/FAIL LAMP INDICATORS

Illuminate to indicate outcome of discharge test

CALIBRATION TEST POINTS

Provides output for voltmeter and ammeter calibration

BATTERY CABLE AND CONNECTOR

VOLTAGE CUTOFF VIEW BUTTON

Pressed to display and adjust cutoff voltage

24 VOLT CONSTANT-POTENTIAL ADJUST TRIMPOT

Adjusts voltage for constant-potential mode

MODE SELECT KNOB

Selects discharge or charge (constant-current or constant-potential method)

AC ON-OFF/RESET SWITCH

Turns unit on or off and resets all indicators and functions.

SPECIFICATIONS

Dimensions: 20 1/2" L x 16 3/4" W x 8 1/2" D

Weight: 55 lb

AC Input: 95-135 Volts or 200-250 Volts, 50/60 Hz
14 Amps Max @ 115 Volts, 7Amps Max @ 230 Volts

DC Output: CP Charge: 29 Volts, CI Charge: 35 Volts

DC Output: CP Charge: 29 Volts, CI Charge: 35 Volts

CURRENT: Adjustable from 0 to 25 Amps.

Discharge: VOLTAGE CUTOFF: Adjustable

CURRENT LIMIT: Adjustable from 0 to 50 Amps.