

Limited Warranty

NEWMAR warrants with the original purchase of products sold by NEWMAR, that they shall be free from defects and material and workmanship for two years from the date of purchase.

In the event of a product failure caused by defect of material or workmanship you must return the entire product with original packing if possible, freight pre-paid, to the place of purchase or to NEWMAR, 2911 W. Garry Avenue, Santa Ana, California 92704. Besides paying to send back the product, you must include proof of purchase reflecting where the product was purchased, the date of purchase and a written explanation of the alleged defect. If this product is determined to be defective by NEWMAR, we will repair the product and ship it back to you without charge. If non-repairable within 30 days, we will ship an equivalent or better replacement product or provide you with a refund of your purchase price.

Repairs or adjustments to be made on the defective product shall be determined by NEWMAR in its sole discretion. If you have any questions concerning this Limited Warranty, contact us at the above address or call Customer Service at 1-714-751-0488.

This Limited Warranty does not apply to products that have not been installed properly or maintained adequately. This Limited Warranty does not apply to damage through accident, negligence, misuse, abuse, or normal wear and tear. Further, this warranty does not cover products that have been altered or modified from their original sale condition. For information regarding proper installation, please consult the instructions enclosed with the product. You may contact NEWMAR or an authorized retailer for additional installation instructions. It is your responsibility to check the product upon receipt for any damage during shipping and to contact the carrier or shipper regarding such damage. No person, including any NEWMAR dealer, is authorized to assume any further liability for NEWMAR beyond this Limited Warranty, in connection with products sold by NEWMAR. A customer's sole and exclusive recourse against NEWMAR is this Limited Warranty, regardless of a customer's recourse against a seller.

THERE ARE NO WARRANTIES EXPRESS OR IMPLIED WHICH EXIST BEYOND THE TERMS OF THIS LIMITED WARRANTY. THIS LIMITED WARRANTY IS NEWMAR'S SOLE OBLIGATION TO YOU FOR THIS PRODUCT AND CONSTITUTES YOUR EXCLUSIVE REMEDY UNDER THE LAW. NEWMAR SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR INDIRECT DAMAGES CAUSED AS A RESULT OF ANY DEFECT IN MATERIALS OR WORKMANSHIP. NEWMAR'S LIABILITY SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF DEFECTIVE PRODUCT. NEWMAR IS NOT RESPONSIBLE FOR ANY DAMAGE THIS PRODUCT CAUSES TO ANY OTHER EQUIPMENT OR ANY OTHER PRODUCT.

Some states do not allow limitations in how long an implied warranty may last, so the above limitation may not apply to you. Also some states do not allow the exclusion of incidental or consequential damages so the above limitation or exclusion may not apply to you. Finally, this warranty gives you specific legal rights; however, you may also have other rights which vary from state to state.

Patents

Made in the U.S.A. by Midtronics, Inc. and is protected by one or more of the following U.S. Patents: 6,323,650; 6,316,914; 6,304,087; 6,249,124; 6,225,808; 6,163,156; 6,091,245; 6,051,976; 5,831,435; 5,821,756; 5,757,192; 5,592,093; 5,585,728; 5,572,136; 4,912,416; 4,881,038; 4,825,170; 4,816,768; 4,322,685. Canadian Patents: 1,295,680; 1,280,164. United Kingdom Patent: 0,672,248; 0,417,173. German Patent: 693 25 388.6; 689 23 281.0-08; 93 21 638.6. And other U.S. and Foreign patents issued and pending. This product may utilize technology exclusively licensed to Midtronics, Inc. by Johnson Controls, Inc. and/or Motorola, Inc.

NEWMAR[®]

Digital Battery Analyzer

Model: DBA

*For testing 6 and 12-volt batteries
rated from 100 to 1400 CCA.*

INSTRUCTION MANUAL

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CAUTION: Because of the possibility of personal injury, always use extreme caution when working with batteries.

BEFORE TESTING

- Clean the battery posts or side terminals with a wire brush.
- For Group 31 or side-post batteries, install and tighten the lead terminal stud adapters (included). **Failure to properly install stud adapters, or using stud adapters that are dirty or worn may result in false test results.**
- If testing in the vessel, make sure all accessory loads are off and the ignition is in the off position. Read the **Testing in the Vessel** section of this manual before testing.

CONNECTING THE TESTER

Note: Batteries wired in series need not be disconnected to test individually. Batteries wired in parallel must be disconnected for an accurate reading.

1. Connect the red clamp to the positive (+) terminal.
2. Connect the black clamp to the negative (-) terminal.
3. To ensure a proper connection, rock the clamps back and forth. The tester requires both sides of the clamp to be firmly connected before testing. A poor connection will prevent testing and a **CHECK CONNECTION** message will appear. If this occurs, clean the terminals and reconnect.

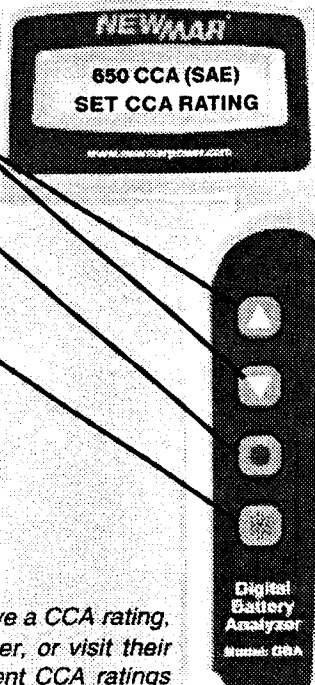
TEST PROCEDURE

Use the Up/Down Arrow buttons to scroll to the battery's CCA* rating.

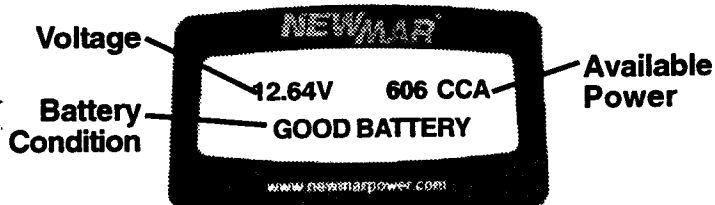
Press the Start button to test.

After testing, if the battery's temperature is 32 °F (0 °C) or below, press the Temperature Compensation button to get a compensated test result.

* If the battery label does not have a CCA rating, consult the battery manufacturer, or visit their Web site—many have equivalent CCA ratings listed there. Or call NEWMAR technical service, who may also be able to help.



TEST RESULTS



GOOD BATTERY	Fully charge the battery and return to service.
GOOD-RECHARGE	Fully charge the battery and retest.
CHARGE & RESET	Failure to fully charge the battery before retesting may cause false readings.
REPLACE BATTERY	Replace battery.
BAD CELL-REPLACE	Replace battery.

TESTING IN THE VESSEL

- Apply a load of about 5 amps (by switching on some cabin lights, for instance) to remove the battery's surface charge; then wait at least 1 minute to allow the voltage to recover before starting the test.
- A **REPLACE** reading may be the result of a poor connection or corrosion between the vessel's battery cables and the battery. Retest the battery after disconnecting the cables before replacing.
- If the **SYSTEM NOISE** message appears, make sure all accessory loads are off and the ignition switch is in the off position. Retest.

If the **SYSTEM NOISE** message continues after several retest attempts, disconnect the battery cables and retest.

TROUBLESHOOTING

If the display does not illuminate:

- Check the connection to the battery.
- The battery may be too low to power the tester (below 5.5 volts). Fully charge the battery and retest.

If the SYSTEM NOISE message appears when the battery is not connected in the vessel:

- You may be testing too close to a source of noise, i.e., a charger or other high-current device. If so, move away and retest.
- If no source of noise is identified, fully charge the battery and retest. If the message appears after charging, replace the battery.

QUESTIONS OR COMMENTS? CALL 1-714-751-0488