

## Battery Testing Options

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### Option 1

*This is a fast and easy test, no tools needed – results are about 20% accurate*

Procedure:

1. Position the Amigo against a heavy wall, pull the forward lever – if the battery gauge on the enclosure immediately drops, one or both batteries may need to be replaced. This is a stall test & will indicate if the battery has no depth.

### Option 2

*This is a fast test using a multi meter -- results are about 25% accurate*

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Procedure:

1. Set voltage meter to 50-volt range and connect red meter lead to positive post on one battery and black meter lead to negative post on the other battery.
2. Position the Amigo against a heavy wall, pull the forward lever – if the meter immediately drops below 20 volts, one or both batteries may need to be replaced.

### Option 3 – Automotive Battery Load Tester

*Results are about 25% accurate*

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A hand-held automotive battery load tester tests the cold cranking amps in a battery. This is the power that a battery can discharge all at once to start the engine in an automobile.

The batteries used in Amigo carts are rated in amps/hour. This type of battery will discharge over a long period of time instead of discharging all the power at once.

Procedure:

1. Fully charge battery before testing.
2. Attach according to the instructions that came with the load tester. The test button or test switch on the load tester will need to be applied more than once for a period of approximately five seconds each time.
3. Refer below for the number of recommended times a load will need to be applied to the battery for a valid test (applying a load means using the test button or test switch on the load tester).
  - 7 amps/hour                      Load test 1 time
  - 17 amps/hour                      Load test 2-3 times
  - 26-40 amps/hour                      Load test 3-4 times

The load tester will now give you the battery condition.

*This test is designed for testing automotive batteries, and is less accurate when used to test Amigo batteries.*

#### Option 4 – Multi-meter or Voltmeter

Results are about 30% accurate

Procedure:

1. Charge battery and **let it sit for an hour.**
2. Attach multi-meter wires to appropriate posts on battery
3. Compare the voltage reading to the table at right to determine the battery status:

Voltage	Rate of Charge	Status
12.60 +	100% ██████████	<b>GOOD</b>
12.50	90% ██████████	
12.42	80% ██████████	
12.32	70% ██████████	
12.20	60% ██████████	<b>OKAY</b>
12.06	50% ██████████	
11.90	40% ██████████	
11.75	30% ██████████	<b>BAD</b>
11.58	20% ██████████	
11.31	10% ██████████	
10.50	0% ██████████	

#### Option 5 – Battery Test with RC-300 Tester

Results are about 80% accurate



Amigo company has been using the RC-300 battery tester for the past four years. It identifies most defective/low capacity batteries. Using the RC-300, we have detected approximately 95% of defective batteries that were checked on our assembly line.

The RC-300 tester has been used on returned batteries detecting approximately 95% of defective low capacity batteries. It is not a fool-proof testing device, but we are confident that it is 95% correct.

The battery tester is pre-calibrated before leaving Amigo. A checkpoint label-identifying device that has been pre-calibrated is placed on each tester sent out. A simple procedural manual will also be sent out with

each battery tester.

#### RC-300 tester advantages:

- Following the testing procedure will eliminate replacing both batteries when only one battery is defective
- The RC-300 does not require batteries to be fully charged, or to wait for surface charge to dissipate
- Battery load is fixed --- there is no need to load wheels with hand pressure
- No risk of working around moving parts
- Compensates for temperature
- Provides “good”, “marginal” or “bad” indication with remaining AH capacity

RC-300 battery testers are available for sale from Amigo Mobility International for \$290 (average retail price is \$300 or more). To order yours, contact the Amigo service department at 800.248.9131 or [customerservice@myamigo.com](mailto:customerservice@myamigo.com) and reference part number 11163.

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