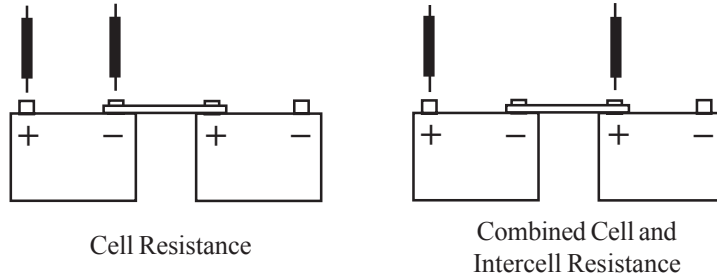


Position of Spike Probes for Internal Resistance Measurement.

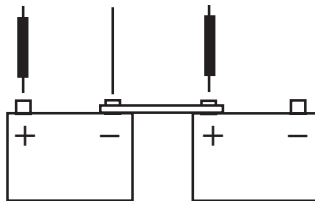
(For probes without the intercell clip.)



For Cell Resistance: Connect the red spike probe with the test button to the positive post of the cell. Connect the black spike probe to the negative post of the same cell.

For Combined Cell and Intercell Resistance: Connect the red spike probe with the test button to the positive post of the first cell. Connect the black spike probe to the positive post of the next cell. On the Cellcorder, select Option 5 Combined when not measuring the intercell as a separate reading.

Position of Spike Probes for Cell and Intercell Connection Resistance Measurement.



Connect the red spike probe with the test button to the positive post of the first cell. Connect the black spike probe to the positive post of the next cell. Connect the intercell clip to the negative post of the first cell.

Cellcorder Spike Probe

User's Guide



990 South Rogers Circle, Suite 11
Boca Raton, FL 33487
Tel: 561 997-2299 Fax: 561 997-5588
www.alber.com

Description

The Albécorp Spike Probe is for use with hard-to-access battery terminal posts. These probes measure intercell connections and the internal resistance of the cell or module. Probes without the intercell connector can produce a combined reading depending on how they are connected to the cell or module. The probes without the intercell connector may also be used for taking voltage readings.

The probes are designed for 6 volt and 12 volt module cabinet applications where access is both difficult and a safety hazard. As a plus, the probes may be used on 2 volt cells and 4 and 8 volt modules as well.

Each probe has an eight foot lead and an easy-to-grasp rubber handle. The positive probe features a push button that permits one technician to activate the testing process away from the Cellcorder.

The probes have an extension tube diameter of only 5/8" that makes more locations readily accessible, and are available in 8, 12 or 31 inch lengths to help ensure operator safety.

Measuring Internal Cell Resistance

The placement of the test probes is important and is directly related to the accuracy of the readings. When using the spike probes to measure internal resistance, ensure the following is done:

Contact should be made to the battery terminal, not to the mounting hardware.

When measuring internal cell resistance, the spike probes should be directly on the positive and negative terminal posts. This way, the measurement will not include any part of the external circuit. Refer to the diagrams on page 4 for more details.

Apply firm pressure so that both contacts on each spike probe contact the cell being tested.

Most battery terminal posts have a layer of lead dioxide, lead sulfate, copper oxide or dirt mixed with No-Ox grease. All are high in resistance, so make sure the test probes are making good connection with the metal surfaces.

When contact is stable, press the test button on the red probe handle. Do not move the probes while the test is in progress.

After releasing the test button, the probes may be moved to the next cell. Allow 15 seconds between test readings.

WARNING: Sparking may occur if the leads are moved during the test.

Measuring Intercell Connection Resistance

Taking intercell measurements checks the quality of the connection between the intercell bar and the terminal posts. When reading intercell connector resistance, place the spike probes on the terminal posts.

The diagrams on the next page show how to connect the spike probes for internal resistance and intercell resistance measurements.

Inaccessible Battery Posts

On some batteries (typically VRLA modules), it is impossible to access the terminal posts because they are covered by the intercell connector. For valve regulated batteries where only the intercell and mounting bolt are accessible, connect one probe to the bolt head and the other probe to the intercell bar. Measuring from bolt head to bolt head is not a true measure of the connection between the post and intercell bar. In most cases, the reading will be high because of the high resistance of the bolt itself.

More Information

For more information on test probes, leads, cell connections, and measurements, refer to the Cellcorder instruction manual.

Information in this document is subject to change without notice.

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