BATTERY ANALYSIS

FIELD TESTING: Process Steps

Battery testing is most effective as a diagnostic resource when employed at established scheduled intervals. When conducting field testing, it is your responsibility to ensure that inspection and test activities are deployed with maximum attention to **safe working practices and established test procedure norms.**

Safety.First.

Battery powered mobile equipment and stationary energy systems are some of your largest capital investments — and also one of your biggest opportunities for delivering a strong return on investment in these systems.

CROWN®
THE POWER OF 1

AN EFFECTIVE BATTERY MANAGEMENT PROGRAM CAN:

1. Ensure equipment reliability
2. Reduce maintenance costs
3. Lower the total cost of battery ownership
4. Optimize warranty claim management
5. Build stronger customer relationships

In today's operating environment, low-risk battery management and field analysis practices have become the norm for improving the efficiencies and performance that drive overall operations. A systematic, planned analysis of AGM battery and charger performance allows you to manage your investment over time, reduce your upfront and recurring battery costs and ultimately achieve a better ROI.

Through proactive product management and advanced diagnostics, technicians and machine owners can reduce downtime by diagnosing problems more quickly, knowing exactly what to repair, or even identifying a problem before it becomes a downtime incident. Using the attached 4-Point test process, the Safety.First. battery inspection process simplifies battery inspection and testing while producing credible data that ensure owners can optimize battery life and reliability — while reducing cost of ownership.

Success begins when the best practices described on the following page are deployed — and when customers commit the initiative and resources that are necessary to leverage these best practices as a product management resource.

SAFETY IS YOUR RESPONSIBILITY!

- AGM batteries produce hydrogen gas, which is highly flammable. Keep sparks, flames and cigarettes away from batteries at all times. Maintain good ventilation when working on or charging batteries.
- When working with batteries — wear proper protective gear such as safety glasses, protective foot-wear and gloves. Remove watches or jewelry and avoid causing sparks with tools.
- When handling AGM batteries, do not tamper with or attempt to remove battery vent components. Position batteries upright; if necessary — AGM batteries can be oriented on their side or end walls if required. Never install batteries in an inverted position or in a sealed compartment.

CROWN BATTERY
100 YEARS SINCE 1926

A CENTURY OF POWER. A LEGACY OF PERFORMANCE.

Battery Analysis Field Support

You can reach Crown Battery's Product Support Desk by phone between 8:00AM – 4:30PM, North American Eastern Standard Time, or via email

+1.419.334.7181
commercial@crownbattery.com
WWW.CROWNBATTERY.COM

It is the option of Crown Battery to request additional inspection details such as digital photos, manufacturing codes or to authorize the return of batteries to Crown Battery's for advanced inspection. Please refer to Crown Battery's Limited Warranty Policy for additional details.

Safety. First.

BATTERY TEST REPORT

CROWN BATTERY 100 YEARS SINCE 1926

A CENTURY OF POWER. A LEGACY OF PERFORMANCE.

CUSTOMER, BATTERY & APPLICATION DETAILS:

Customer Name		Application / Machine	
Customer Location		Machine Model Number	
Phone Number		Battery Charger Make / Model	
Email Address		Charger Algorithm / Setting	
Battery Model		Battery Quantity Installed	
System Voltage	☐ 12 V ☐ 24 V ☐ 36 V ☐ 48 V	Date of Installation	

PHYSICAL INSPECTION DETAILS:

Terminal Condition:	Cable Condition:	Battery Container:	Electrolyte Condition:	Compartment Condition:
☐ Good	☐ Clean	☐ Good	☐ Good	☐ Clean
☐ Corrosion	☐ Corrosion	☐ Cracked	☐ Moist	☐ Dirty
☐ Melted	☐ Loose	☐ Punctured	☐ Loose Vent	☐ Wet
☐ Broken / Over-Torque	☐ Broken / Torn	☐ Side Wall Bulging		

FULLY CHARGE BATTERIES:

- Connect the battery pack to its matched charger and fully recharge the batteries.
- Allow the batteries to rest / cool for at least 8 hours following termination of charge.

OPEN CIRCUIT VOLTAGE TEST:

- Inspect open circuit voltage of each battery in the battery pack.
- Review and record battery voltage conditions after charging service. Battery location starting at the positive cable connection to the application, traveling from left-to-right, to the negative cable connection.

Battery Position	Battery 1	Battery 2	Battery 3	Battery 4	Battery 5	Battery 6	Battery 7	Battery 8
Date Code								
Voltage								

DISCHARGE / LOAD TEST:

- Qualified battery and equipment technicians can utilize approved battery discharge testing equipment to verify battery integrity
- Discharge testing should be performed by applying a 25, 56 or 75 ampere load condition to a fully charged battery pack.
- After commencing the discharge test, record the number of battery runtime minutes until the discharge is complete.

Battery Position	Battery 1	Battery 2	Battery 3	Battery 4	Battery 5	Battery 6	Battery 7	Battery 8
End-Test Voltage								

Discharge Minutes:	Discharge Current:	Battery Temperature:

ADDITIONAL COMMENTS:

PRINTED IN THE U.S.A.

AGM-TESTRPT-B0126