



Model BT2300-PLUS

Cloud-Ready Battery Service Station



Owner's manual

Read entire manual before using this product.

MAIN FEATURES

1. Battery Testing and Fast Charging with Quick Diagnostic
2. Lithium Battery Support & Battery Charge
3. Supports Dynamic Real Load Test
4. Wi-Fi for Field Upgrade & Cloud Data Management
5. USB port for VIN Capture Via External Scanner / Field upgrade.
6. Power Supply for ECU reflash
7. 12V Lead-Acid / EFB / AGM / VRLA / LFP battery charge
8. Precise Temperature Compensation
9. 12 & 24 Volt Starting/Charging System Diagnostic
10. Print out test results.



IMPORTANT

1. For testing 12 volt batteries, and for testing 12 and 24 volt charging systems.
2. Suggested operation range 0°C (32°F) to 50°C (122°F) in ambient temperature.

WARNING

WARNING: This product can expose you to chemicals including arsenic, which is known to the State of California to cause cancer.

For more information, go to www.P65Warnings.ca.gov.

1. Working in the vicinity of a lead acid battery is dangerous. Batteries generate explosive gases during normal battery operation. For this reason, it is of utmost importance, if you have any doubt, that each time before using your tester, you read these instructions very carefully.
2. To reduce risk of battery explosion, follow these instructions and those published by the battery manufacturer and manufacturer of any equipment you intend to use in the vicinity of the battery. Observe cautionary markings on these items.
3. Do not expose the tester to rain or snow.

PERSONAL SAFETY PRECAUTIONS:

1. Someone should be within range of your voice or close enough to come to your aid when you work near a lead acid battery.
2. Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing or eyes.
3. Wear safety glasses and protective clothing.
4. If battery acid contacts skin or clothing, wash immediately with soap and water. If acid enters eye, immediately flood eye with running cold water for at least ten minutes and get medical attention immediately.
5. NEVER smoke or allow a spark or flame in vicinity of battery or engine.
6. Be extra cautious to reduce risk of dropping a metal tool onto the battery. It could spark or short-circuit the battery or other electrical parts and could cause an explosion.

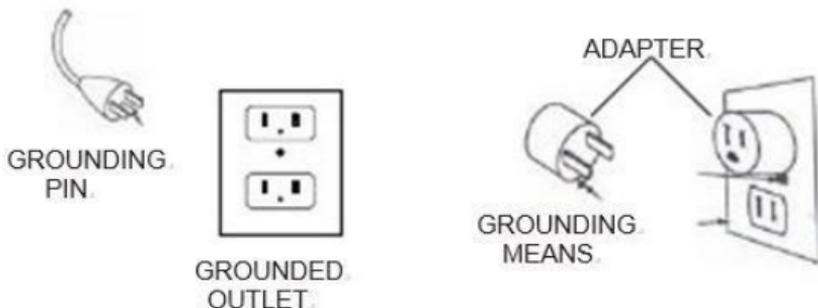
7. Remove personal metal items such as rings, bracelets, necklaces and watches when working with a lead acid battery. It can produce a short circuit current high enough to weld a ring or the like to metal causing a severe burn.

GROUNDING AND AC POWER CORD CONNECTION INSTRUCTIONS

The device must be grounded to reduce risk of electric shock. The device is equipped with an electric cord having an equipment grounding conductor and a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

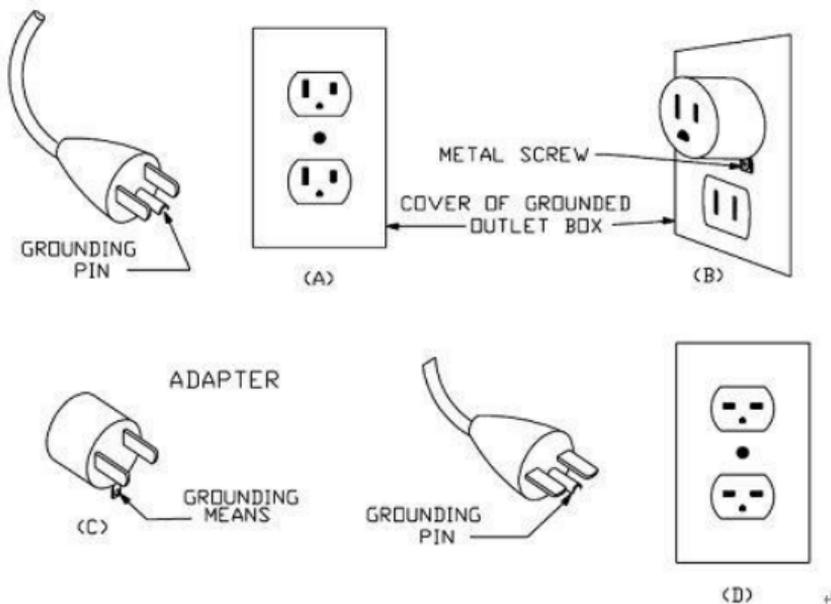
DANGER – Never alter AC cord or plug provided – if it will not fit outlet, have proper outlet installed by a qualified electrician. Improper connection can result in a risk of an electric shock.

USE OF AN ADAPTER IS NOT ALLOWED IN SOME COUNTRIES LIKE CANADA. IF A GROUNDING-TYPE RECEPTACLE IS NOT AVAILABLE, DO NOT USE THIS APPLIANCE UNTIL THE PROPER OUTLET IS INSTALLED BY A QUALIFIED ELECTRICIAN.



This battery Tester is for use on a nominal 120-volt circuit, and has a grounding plug that looks like the plug illustrated in sketch A. A temporary adapter, which looks like the adapter illustrated in sketches B and C, may be used to connect this plug to a two-pole receptacle as shown in sketch B if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician.

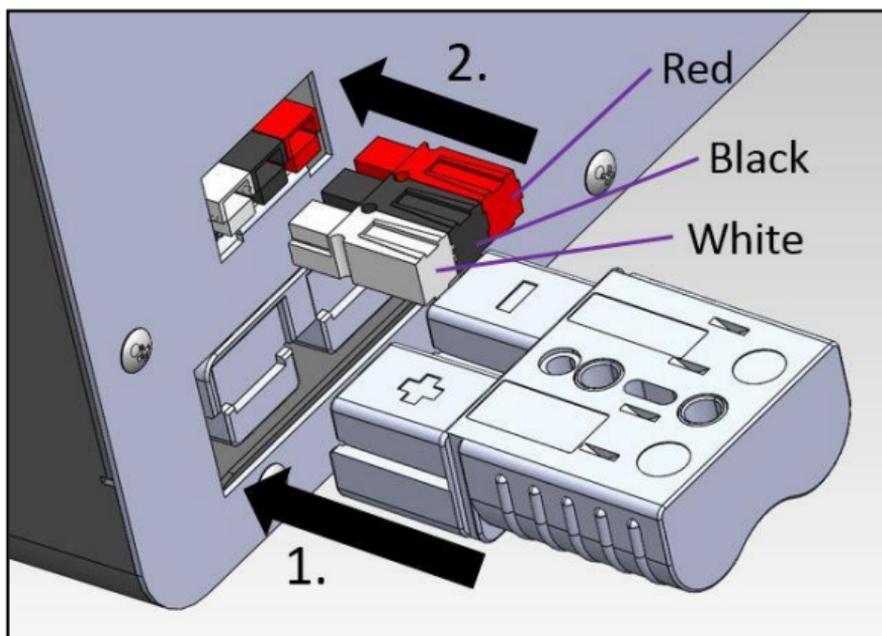
DANGER – Before using adapter as illustrated, be certain that center screw of outlet plate is grounded. The green-colored rigid ear or lug extending from adapter must be connected to a properly grounded outlet– make certain it is grounded. If necessary, replace original outlet cover plate screw with a longer screw that will secure adapter ear or lug to outlet cover plate and make ground connection to grounded outlet.



INSTALL THE CLAMP SET:

1. Follow the below instruction to plug two connectors of the clamp set to the back of the tester.
2. Insert the top three connectors by matching the color of the connectors.

NOTE: ALWAYS HOLD THE CONNECTORS INSTEAD OF THE WIRES WHEN INSERTING OR REPLACING THE CLAMP SET.



REPLACE THE CLAMP SET:

1. Hold the connectors and pull them off from the back off the tester.
2. Insert a new clamp set by following above install the clamp set instruction.

NOTE: ALWAYS HOLD THE CONNECTORS INSTEAD OF THE WIRES WHEN INSERTING OR REPLACING THE CLAMP SET.



PREPARING TO TEST:

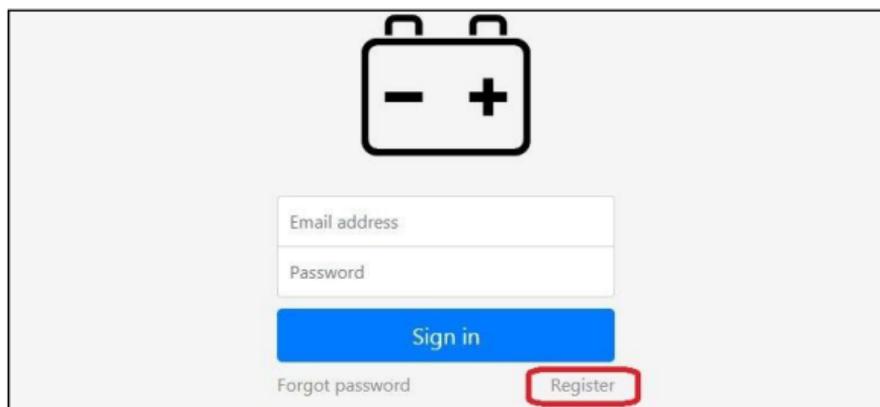
1. Be sure area around battery is well ventilated while battery is being tested.
2. Clean battery terminals. Be careful to keep corrosion from coming in contact with eyes.
3. Inspect the battery for cracked or broken case or cover. If battery is damaged, do not use tester.
4. If the battery is not sealed maintenance free, add distilled water in each cell until battery acid reaches level specified by the manufacturer. This helps purge excessive gas from cells. Do not overfill.
5. If it is necessary to remove battery from vehicle to test, always remove ground terminal from battery first. Make sure all accessories in the vehicle are off to ensure you do not cause any arcing.

OPERATION & USE:

Note: Each time you connect the tester to a battery, the tester will run a quick cable verification to ensure a proper connection through the output cables to sensors in the clamp jaws. If the connection checks out OK, the tester will proceed to the Home Screen. If the connection is poor, the display will show "CHECK CABLE". In this case, check cable connections for visible signs of damage, as you may need to re-connect the clamps to the battery or replace the cable end.

REGISTER AN ACCOUNT ON MY BATTERY EXPERT (CLOUD):

1. Switch on a laptop and go to: www.mybatteryexpert.com
2. Select "Register" on the lower right corner.



Email address

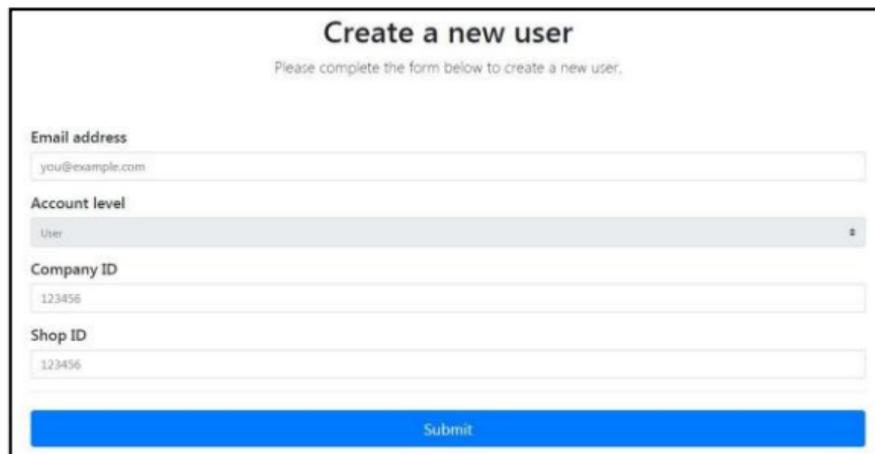
Password

Sign in

Forgot password

Register

3. Enter Email address, company ID, & Shop ID and click "Submit"



Create a new user

Please complete the form below to create a new user.

Email address

you@example.com

Account level

User

Company ID

123456

Shop ID

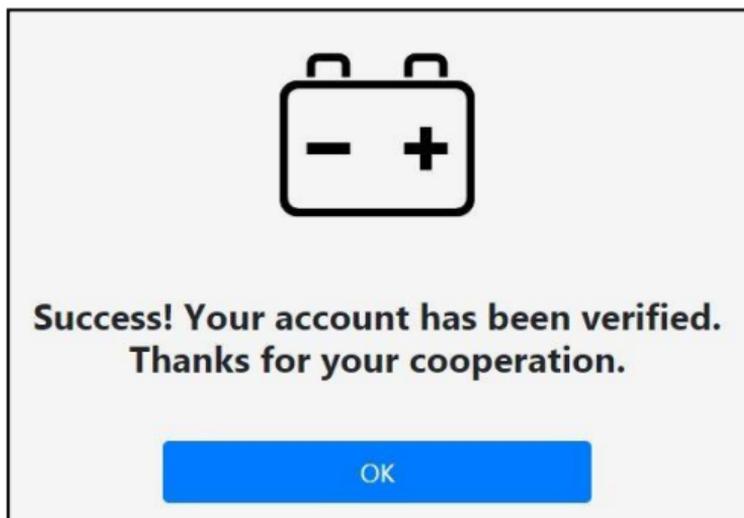
123456

Submit

4. Check your mailbox for the verification mail and click on the URL link to complete the verification.



5. Use the default password (000000) to login My Battery Expert (Cloud) and you will see a notification of successful registration



6. My Battery Expert will request the user to set up a new password for the first login. Simply enter a new password and click Submit to proceed to the dashboard of My Battery Expert.

Change password

Please complete the form below to change your password.

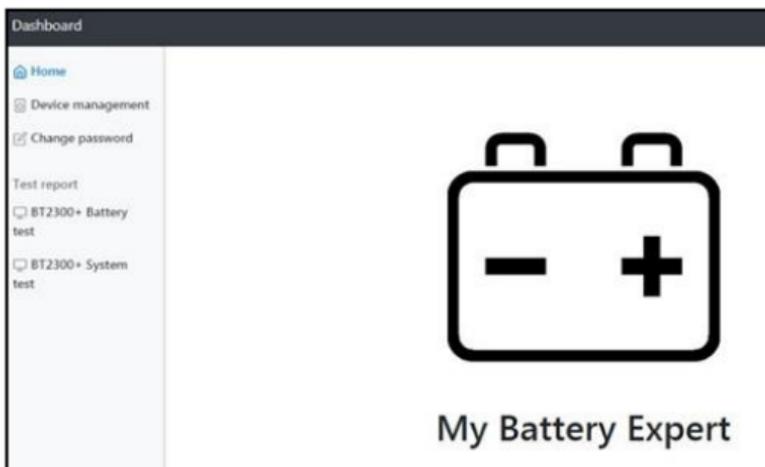
Account

Password

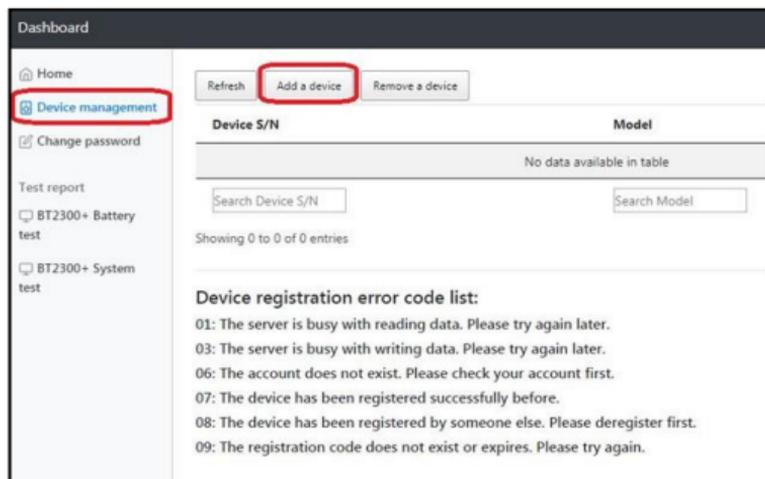
Confirm password

The password must be between 8-20 characters in length. It must include at least one numbers (0-9) and one letter (a-z, A-Z).

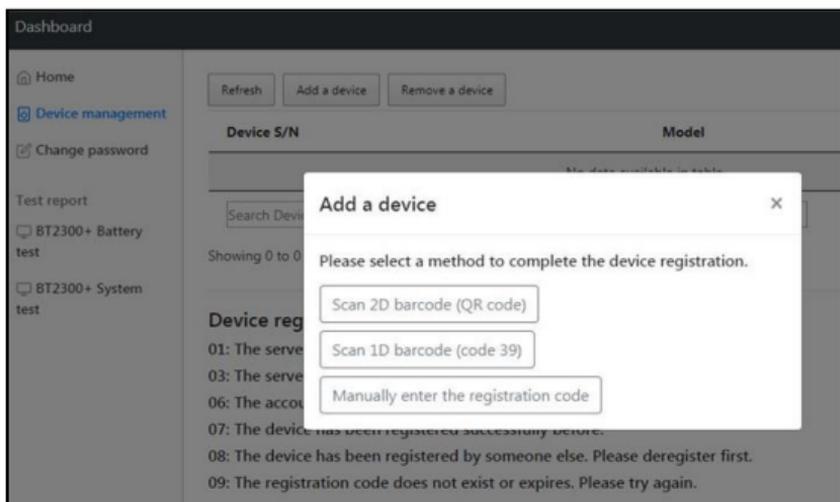
7. Access to the dash board of My Battery Expert.



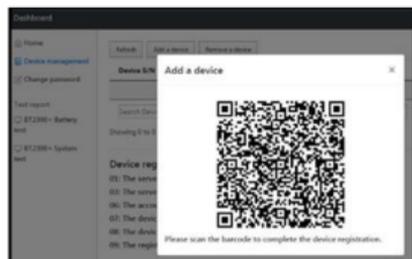
8. Click "Device management" and then click "Add device" to generate a 1D / 2D barcode or a Registration code for the tester that you want to upload the test results.



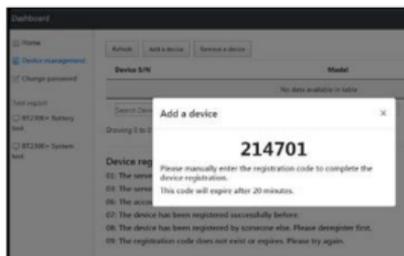
9. My Battery Expert will then pop up options. You may select “1D / 2D barcode” and scan the code with the external barcode scanner on the tester. Or you can simply select “manually enter the registration code”.



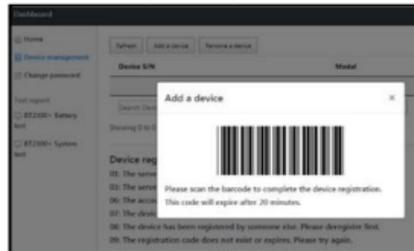
2D Barcode (QR code)



Manually Input the code

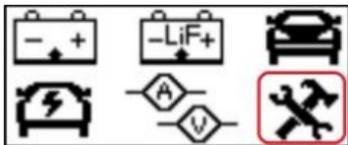


1D Barcode (code39) /

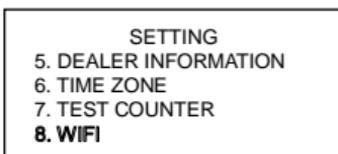


BINGDING THE TESTER WITH THE CLOUD ACCOUNT:

1. Switch on the BT2300-PLUS tester, and select “Setting” from the main menu. (The switch is on the lower right corner of the back side of the tester.)



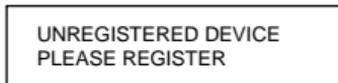
2. Select “WiFi” from the setting.



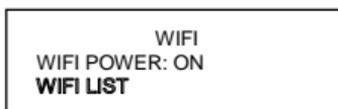
3. Press Enter to enable WiFi.



4. A notification will pop up to remind the user that the tester is yet to be registered. Press enter to skip.



5. Select WiFi list.



6. Select the WiFi you want to connect. And enter the WiFi password.



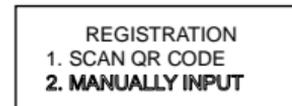
7. Once the WiFi is successfully connected. You will see “WiFi connected” is displayed on the screen with the name of the WiFi.



8. Go to upper level of setting page by pressing left directional button. And select “REGISTRATION”



9. Choose either “SCAN CODE” or “MANUALLY INPUT”



10. If "MANUALLY INPUT" is selected. Input the registration code that shows on your laptop.

REGISTRATION
CODE
214701

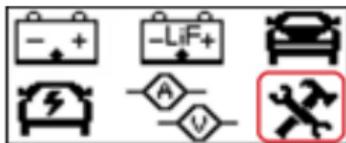
11. Press "enter" to complete registration. Now the test results will be uploaded to My Battery Expert (Cloud). And you can check the results by selecting either Battery test results or System test results on the cloud.

REGISTRATION
SUCCESS

Note: VIN & RO numbers must be input before the tests. The test results without VIN & RO will not be uploaded to MY BATTERY EXPERT. However, test results with and without VIN & RO numbers will be saved in the tester and able to be transferred to the PC S/W for further review.

ENTER THE DEALER INFO:

1. Select "Setting" from the main menu



2. Select "DEALER INFORMATION"

SETTING
DEALER INFORMATION
TIME ZONE
TEST COUNTER
WIFI

3. Enter the Dealer Code:
(Hold the button to switch from number to alphabet.)
(Press Stop to delete the input at the cursor position

if needed)
(Use Left & Right button to move the cursor when needed.)

DEALER CODE
26417399

DEALER NAME
SERVICE CENTER

Press Down directional button to complete and proceed to Dealer Address.

4. Enter the Dealer Address: (Same procedure as above)

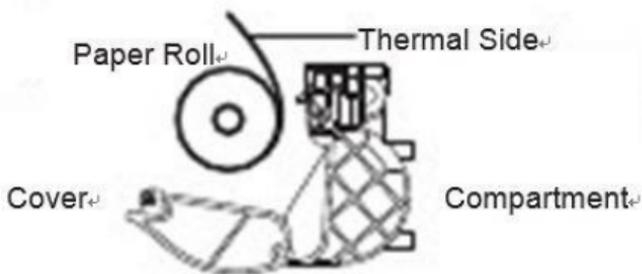
DEALER ADDRESS
8F., No8.308, Sec 1,
Datong Rd.,

5. Select "SAVE ALL" to save dealer information you just entered.
Now the test results will be uploaded with dealer code.

OPTIONS
SAVE ALL
CLEAR ALL

PAPER REPLACEMENT:

1. Open the clear cover.
2. Place a new paper roll in the compartment. Make sure the thermal side is upside placed as below.

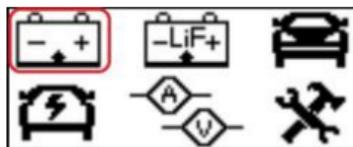


3. Pull a short length of paper from the compartment and press down the clear cover to close.

BATTERY TEST:

The BT2300-PLUS is a SET N GO tester, which means it can automatically determine whether the charging and the real load test is needed after the DHC patented S.L.D.R (Single Load Dynamic Resistance) test is performed to the battery.

1. Select Battery test from the main menu.



2. Enter VIN code manually or use barcode scanner to scan the VIN code from the chassis.

ENTER COMPLETE VIN

3. Enter RO number.

ENTER COMPLETE RO

NOTO: If the VIN or RO is not entered correctly, the tester will pop up warnings to remind the user to revise. The user may ignore the incorrect VIN or RO and proceed to the test. However, if the user ignores the VIN or RO, the test result WILL NO be uploaded to the cloud. The test result will only be saved in the tester which can only be reviewed by

INVALID VIN. RESULT NOT
SUITABLE FOR WARRANTY
INPUT VIN
IGNORE

INVALID RO. RESULT NOT
SUITABLE FOR WARRANTY
INPUT RO
IGNORE

the PC S/W.

4. Select PDI Charge or Auto Test & Charge

- PDI Charge stands for Pre-delivery Insepection. If charging is needed after the S.L.D.R. test, the

CHARGE METHOD
1. PDI CHARGE
2. AUTO TEST & CHARGE

BT2300-PLUS will automatically charge the battery with 50A for 20min.

(PDI charge mode is suitable for new batteries.)

- Auto Test & Charge on the other hand will fully charge the battery when needed.
(5hr MAX)

CHARGE METHOD
1. PDI CHARGE
2. **AUTO TEST & CHARGE**

(Auto Test & Charge is suitable for used batteries.)

5. Select battery type:

The tester can test following battery types: Flooded, AGM flat, AGM Spiral, VRLA/GEL, Start-Stop AGM, & Start-Stop EFB.

(Use directional keys to change between options and pages.)

BATTERY TYPE
1. FLOODED
2. AGM FLAT PLATE
3. AGM SPIRAL
4. VRLA/GEL
5. SS - AGM
6. SS - EFB

6. Select rating:

Select the rating according to the battery that is being tested.

BATTERY TYPE
1. CCA 4. IEC
2. SAE 5. JIS
3. EN 6. DIN

7. Set capacity:

use the keypad to unput the capacity or use directional kep to adjust the capacity.

SET CAPACITY

0 CCA

8. Press Enter to start testing.

The test will perform the S.L.D.R test and then automatically determine if the battery needs to be charged for a real load test.

9. The tester will pop up a warning if the voltage is unstable. The user may press "STOP" to go back to the main menu.

VOLTAGE UNSTABLE
WAIT FOR STABLE
XX.XX V

10. If the surface charge is detected, the tester will automatically discharge the battery for 5 seconds and wait for 15 seconds before proceeding to the test.



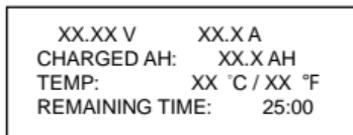
11. The tester automatically starts the S.L.D.R battery test.

12. The tester will automatically determine if the battery needs to be charged for a real load test. If the charge is needed. The user will see the tester initiate charge.



The user may stop charging and go back to main menu by pressing "STOP"

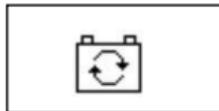
13. The user may see necessary info, including remaining time counting down on the screen.



NOTE: Charging status of SS (Soft-Start) / CC mode / CV mode / END, will be displayed on the bottom of the screen.

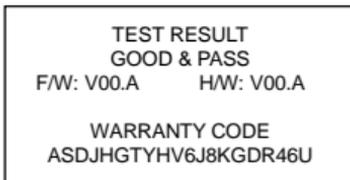
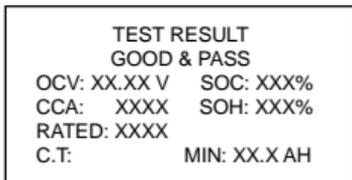
OCP (Over current protection) / OTP (over temperature protection) will be displayed on the lower right of the screen if occurred.

14. Once the charging is done. The tester will automatically perform a real load test.



15. The tester will display the test result on the screen. The user may press the directional keys to review between 2 pages of the result.

The test result will also be saved and uploaded to the cloud.



NOTE: C.T. represents the total charging time it took.

NOTE: If the WiFi is not connected. The test result will be saved in the tester only and will be automatically uploaded to the cloud when the WiFi is connected next time.

16. Press "ENTER" to proceed to the print out. Select YES to print out the test result or select NO to go back to the main menu.

PRINT RESULT? YES NO

BATTERY TEST RESULTS

1. **GOOD & PASS**

The battery is good and capable of holding a charge.

2. **GOOD & RECHARGE**

The battery is good but needs to be recharged.

3. **CAUTION**

The battery may be serviced but decrease the capability of starting the engine gradually. The battery may fail under extreme climate conditions. There may be a poor connection between the vehicle and the battery affect the charging function. Please pay attention to the battery for replacement consideration and charging system checking.

4. **RECHARGE & RETEST**

Battery is discharged, the battery condition cannot be determined until it is fully charged. Recharge & retest the battery

5. **BAD & REPLACE**

The battery will not hold a charge. It should be replaced immediately.

6. **BAD CELL & REPLACE**

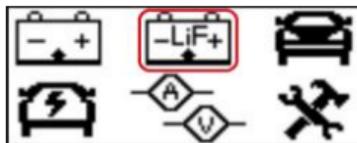
The battery has at least one cell short circuit. It should be replaced immediately

7. LOAD ERROR

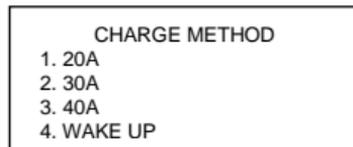
The tested battery is bigger than 2000CCA/SAE or 200AH. Or the clamps are not connected properly. Please fully charge the battery and retest after excluding both previous reasons. If reading is the same, the battery should be replaced immediately.

LiF BATTERY CHARGE:

1. Select LiF BATTERY CHARGE to charge a LiF battery



2. Select charge current manually.
The tester can perform 20A / 30A / 40A / Wake up Feature.

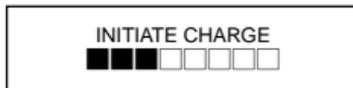


*Wake up feature is for waking up the LiF battery in sleep mode.

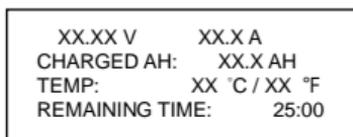
3. The tester will pop up a warning if the voltage is unstable. The user may press "STOP" to go back to the main menu.



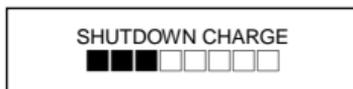
4. The tester will start charging the LiF battery.



5. The user may see necessary info, including charged AH, temperature, and estimated remaining time counting down on the screen.

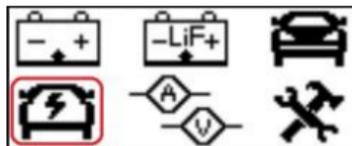


6. The tester will automatically stop charging when the battery is fully charged or charging time reaches 300 mins. Press ENTER after charging is finished and return to main menu.



POWER SUPPLY:

1. Select POWER SUPPLY to support ECU programming.
2. Input supply voltage and press ENTER to start power supply.



INPUT SUPPLY VOLTAGE

13.0 VOLT.

INITIATE CHARGE

■ ■ ■ □ □ □ □ □

3. Charging status will be displayed on the screen during the power supply.
NOTE: Power supply is set to support 600 mins at max.

POWER SUPPLY

XX.XX V XX.X A

TEMP: XX °C / XX °F

TIME: 25:00

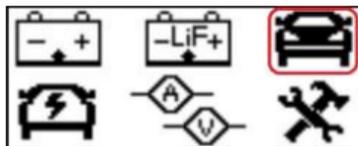
4. Press "STOP" to stop the power supply and return to main menu.

SHUTDOWN CHARGE

■ ■ ■ □ □ □ □ □

SYSTEM TEST:

1. Select SYSTEM TEST to perform cranking & charging tests
2. Enter VIN code manually or use barcode scanner to scan the VIN code from the chassis.
3. Enter RO number.



ENTER COMPLETE VIN

ENTER COMPLETE RO

NOTO: If the VIN or RO is not entered correctly, the tester will pop up warnings to remind the user to revise. The user may ignore the incorrect VIN or RO and proceed to the test. However, if the user ignores

the VIN or RO, the test result WILL NOT be uploaded to the cloud. The test result will only be saved in the tester which can only be reviewed by the PC S/W.

INVALID VIN. RESULT NOT
SUITABLE FOR WARRANTY
INPUT VIN
IGNORE

INVALID RO. RESULT NOT
SUITABLE FOR WARRANTY
INPUT RO
IGNORE

4. Turn off all vehicle accessory loads such as light, air conditioning, radio, etc. Before starting the engine.

TURN OFF LOADS
START ENGINE

5. When the engine is started, one of the three results will be displayed along with the actual reading measured.

CRANKING VOLTS NORMAL

The system is showing normal draw. Press «ENTER» to perform the charging system test.

CRANKING VOLTS
XX.XX V NORMAL

CRANKING VOLTS LOW

The cranking voltage is below normal limits, troubleshoot the starter with manufacturers recommended procedure.

CRANKING VOLTS
XX.XX V LOW

CRANKING VOLTS NOT DETECTED

The cranking voltage is not detected.

CRANKING VOLTS
NOT DETECTED

6. Press «ENTER» to begin charging system test

PRESS ENTER
FOR CHARGING TEST

MAKE SURE ALL
LOADS ARE OFF

7. One of the three results will be displayed along with the actual reading measured

HIGH CHARGING VOLTS WHEN TEST AT IDLE

ALT. IDLE VOLTS
XX.XX V HIGH

The voltage output from the alternator to the battery exceeds the normal limits of a functioning regulator. Check to ensure there is no loose connection and the ground connection is normal

If there is no connection issue, replace the regulator. Since most alternators have the regulator built-in, this will require you to replace the alternator. The normal high limit of a typical automotive regulator is 14.7 volts +/- 0.05. Check manufacturer specifications for the correct limit, as it will vary by vehicle type and manufacturer.

CHARGING SYSTEM NORMAL WHEN TEST AT IDLE

ALT. IDLE VOLTS
XX.XX V NORMAL

The system is showing normal output from the alternator. No problem is detected.

LOW CHARGING VOLTS WHEN TEST AT IDLE

ALT. IDLE VOLTS
XX.XX V LOW

The alternator is not providing sufficient current to the battery. Check the belts to ensure the alternator is rotating with engine running.

If the belts are slipping or broken, replace the belts and retest. Check the connections from the alternator to the battery. If the connection is loose or heavily corroded, clean or replace the cable and retest. If the belts and connections are in good condition, replace the alternator.

8. Press «ENTER» for the charging system with accessory loads. Turn on the blower to high (heat), high beam headlights, and rear defogger. Do not use cyclical loads such as air conditioning or windshield wipers.

TURN ON LOADS
PRESS ENTER

9. Run up the engine to 2500 rpm for 15 seconds.

RUN ENGINE UP
TO 2500RPM
FOR 15 SEC

10. Press «ENTER» to read the ripple from the charging system to the battery. One of the three testing results will be displayed along with the actual testing measured.

RIPPLE DETECTED NORMAL

Diodes function well in the alternator / starter.

RIPPLE DETECTED
XX.XX V NORMAL

NO RIPPLE DETECT

Ripple is not detected.

NO RIPPLE DETECT
PRESS ENTER

EXCESS RIPPLE DETECTED

One or more diodes in the alternator are not functioning or there is stator damage. Check to ensure the alternator mounting is sturdy and that the belts are in good shape and functioning properly. If the mounting and belts are good, replace the alternator.

RIPPLE DETECTED
XX.XX V HIGH

11. Press the «ENTER» key to continue the charging system with accessory loads. One of the three results will be displayed along with the actual testing measured.

CHARGING SYSTEM HIGH WHEN
TEST WITH ACCESSORY LOADS

The voltage output from the alternator to the battery exceeds the normal limits of a functioning regulator.

Check to ensure there are no loose connections and that the ground connection is normal. If there are no connection issues, replace the regulator. Since most alternators have the regulator built-in, this will require you to replace the alternator.

ALT. LOAD VOLTS
XX.XX V HIGH

CHARGING SYSTEM LOW WHEN
TEST WITH ACCESSORY LOADS

The alternator is not providing sufficient current for the system's electrical loads and the charging current for the battery. Check the belts to ensure the alternator is rotating with the engine running. If the belts are slipping or broken, replace the belts and retest.

ALT. LOAD VOLTS
XX.XX V LOW

Check the connections from the alternator to the battery. If the connection is loose or heavily corroded, clean or replace the cable and retest. If the belts and connections are in good working condition, replace the alternator.

CHARGING SYSTEM NORMAL WHEN TEST WITH ACCESSORY LOADS

The system is showing normal output from the alternator. No problem detected.

ALT. LOAD VOLTS
XX.XX V NORMAL

12. Press «ENTER» when charging system test is completed. Turn all accessory loads and engine off. Press «ENTER» to read the system test results. Use directional keys to switch between two result pages.

CRANKING VOLT: XX.XX V
ALT. IDLE VOLT: XX.XX V

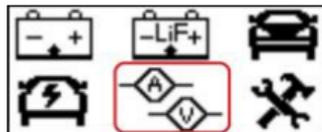
RIPPLE VOLT: XX.XX V
ALT. LOAD VOLT: XX.XX V

13. Select YES to print out the result, or select NO to return to main menu.

PRINT RESULT?
YES / NO

AMP CLAMP & VOLT PROBE INSTRUCTION GUIDE

Select DC/AC Current & DC Voltage measurement from the main menu



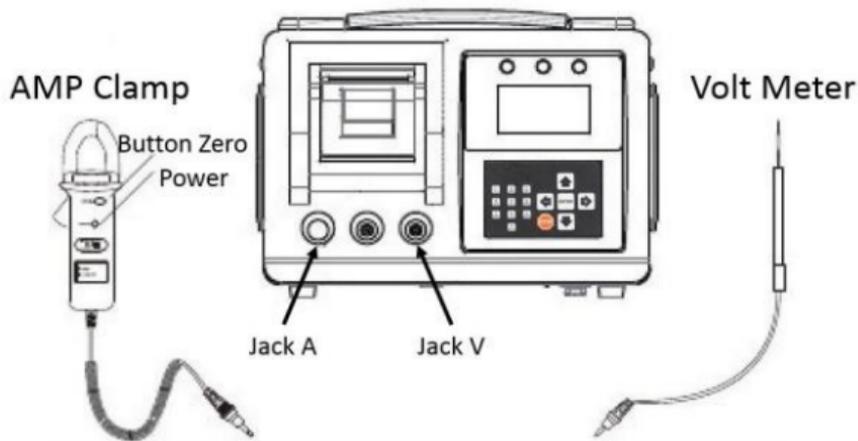
DC/AC Current measurement

1. Install the 9V battery.
2. Connect Clamp Meter to the jack A on BT2300-PLUS.
3. Press the button ZERO. Make sure the display reads zero.
4. Press the trigger to open the transformer jaws and clamp one electrical wire.
5. Make sure the clamp jaw is perfectly closed.
7. Read the displayed value.

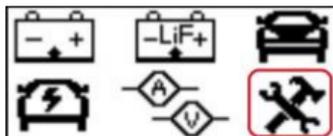
DC Voltage Measurements

1. Connect Red Test Lead to the jack V on BT2300-PLUS.
2. Use the test lead to touch a point within the network of the battery.
3. Read the displayed value.

NOTE: Do not test more than 60V, it may damage the tester.

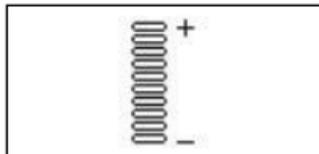
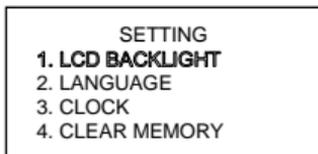


SETTING



1. LCD BACKLIGHT

Select LCD BACKLIGHT and use directional keys to adjust the brightness. Press enter to confirm setting and return to the setting menu.



2. LANGUAGE SELECT

Enter LANGUAGE SELECT to change languages between English, French, German, Spanish, Italian, and Portuguese.

SETTING
1. LCD BACKLIGHT
2. LANGUAGE SELECT
3. CLOCK
4. CLEAR MEMORY

LANGUAGE SELECT
1. English
2. French
3. German
4. Spanish

3. CLOCK

Select CLOCK to read date & time. The date and time are unadjustable. Make sure the tester is connected to WiFi and the time zone is selected correctly before performing a test. The tester will automatically sync and adjust the date & time from the internet.

SETTING
1. LCD BACKLIGHT
2. LANGUAGE SELECT
3. CLOCK
4. CLEAR MEMORY

4. CLEAR MEMORY

Select CLEAR MEMORY to clear the test records that saved in the tester. Select YES to clear memory / Select NO to return to the setting menu.

SETTING
1. LCD BACKLIGHT
2. LANGUAGE SELECT
3. CLOCK
4. CLEAR MEMORY

ERASE MEMORY?

YES
NO

5. DEALER INFORMATION

Enter DEALER INFORMATION to edit the dealer code, dealer name, and dealer address. Please refer to BINDING THE TESTER WITH THE CLOUD ACCOUNT

SETTING
5. DEALER INFORMATION
6. TIME ZONE
7. TEST COUNTER
8. WIFI

6. TIME ZONE

Enter TIME ZONE and use directional keys to adjust the UTC time zone. The tester will automatically re-match the date and time from the internet when the WiFi is connected.

SETTING 5. DEALER INFORMATION 6. TIME ZONE 7. TEST COUNTER 8. WIFI

TIME ZONE UTC

7. TEST COUNTER

Enter TEST COUNTER to check the counter of battery test, LiF battery, and system test. Press LEFT to return to the setting menu or use the directional keys to select one of the three counters.

SETTING 5. DEALER INFORMATION 6. TIME ZONE 7. TEST COUNTER 8. WIFI

TEST COUNTER 1. BATTERY TEST 2. LiF BATTERY 3. SYSTEM TEST
--

TEST COUNTER ERASE? YES NO

Use UP & DOWN keys to go to the second page when printing out the tester counter is needed.

TEST COUNTER PRINT

TEST COUNTER PRINT? YES NO

8. WIFI

Select WFI to set the WiFi. Please refer to [BINDING THE TESTER WITH THE CLOUD ACCOUNT](#) for the WiFi setting procedures.

SETTING 5. DEALER INFORMATION 6. TIME ZONE 7. TEST COUNTER 8. WIFI

9. OTA UPGRADE

If a new firmware is available, the tester will receive a notification (Only if the WiFi is connected) to ask the user to go to OTA UPGRADE and upgrade the F/W by following the step by step instruction.

SETTING 9. OTA UPGRADE A. REGISTRATION B. VERSION

10. REGISTRATION

Enter **REGISTRATION** to complete the registration on My Battery Expert (Cloud). Please refer to **REGISTER AN ACCOUNT ON MY BATTERY EXPERT (CLOUD)** for the procedures in details.

SETTING
9. OTA UPGRADE
A. REGISTRATION
B. VERSION

PC S/W

1. Install the BT2300-PLUS PC S/W on your laptop or PC.
2. Use the male to male USB cable to connect your laptop to the tester.
3. Make sure the tester is switched on.
4. Initiate the BT2300-PLUS PC S/W
5. Select one of the features from the BT2300-PLUS PC S/W main menu.

BT2300-PLUS PC S/W MAIN MENU:



VIEW TEST RESULT

Click “VIEW TEST RESULT” icon from the main menu to enter all test records that have been transferred to PC. The user may print out / export / delete the selected records.

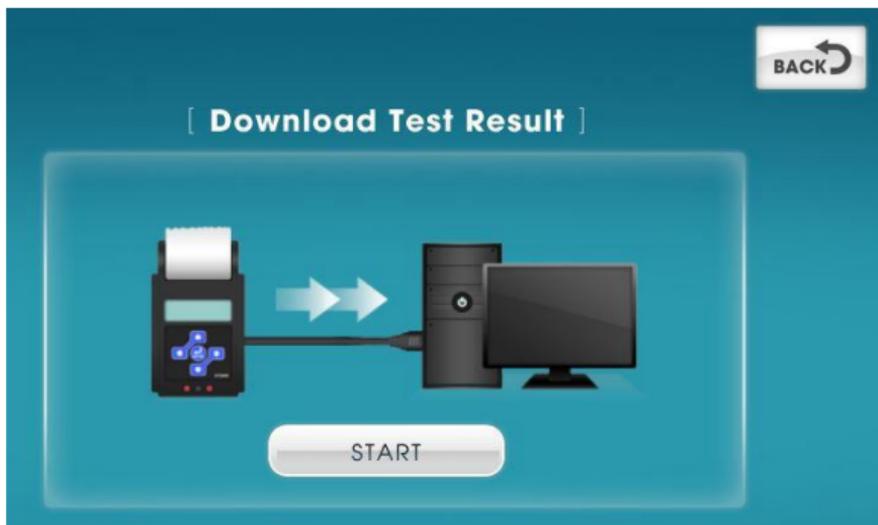
The screenshot shows the DHC software interface with a 'Test Result' screen. At the top, there are icons for 'PRINT', 'SAVE AS...', and 'DELETE'. Below these is a search bar. The main area contains a table with the following columns: Select All, Test Information, NO., Test Type, VIN, NO. Number, Battery Type, Date/Time, Serial Number, Software Version, Field Measurement Charge Date, Battery Condition, Open Circuit Voltage, Rate 1 CCA, Tested CCA, Starting volts, OCV after 15min rest, Ending volts, and Charge Time.

Select All	Test Information	NO.	Test Type	VIN	NO. Number	Battery Type	Date/Time	Serial Number	Software Version	Field Measurement Charge Date	Battery Condition	Open Circuit Voltage	Rate 1 CCA	Tested CCA	Starting volts	OCV after 15min rest	Ending volts	Charge Time
<input type="checkbox"/>	BATTERY TEST REPORT	0073	BATTERY TEST REPORT	191112040346LJ101	20191108	FLOODED	2019/11/08 14:38:39	R106079319-001	00.P	2019/12/08 14:38:38	GOOD & PAID	12.39V	295CCA	290CCA	12.39V	10.27V	12.36V	1hr30
<input type="checkbox"/>	BATTERY TEST REPORT	0072	BATTERY TEST REPORT	191112040346LJ101	20191107	FLOODED	2019/11/07 10:37:47	R106079319-001	00.P	2019/12/07 10:37:47	BAD & REPLACE	12.39V	585CCA	290CCA	12.39V	0V	12.59V	3min0
<input type="checkbox"/>	BATTERY TEST REPORT	0071	BATTERY TEST REPORT	19881200270C23.08	20191104	FLOODED	2019/11/04 14:20:55	R106079319-001	00.P	2019/12/04 14:20:55	BADCELL REPLACE	5.79V	5205AE	304E	5.79V	0V	8.85V	30min0
<input type="checkbox"/>	BATTERY TEST REPORT	0070	BATTERY TEST REPORT	19881200270C23.01	20191104	FLOODED	2019/11/04 06:22:40	R106079319-001	00.P	2019/12/04 06:22:40	GOOD & PAID	12.39V	5205AE	5355AE	12.39V	10.41V	12.59V	1hr30

DOWNLOAD TEST RESULT

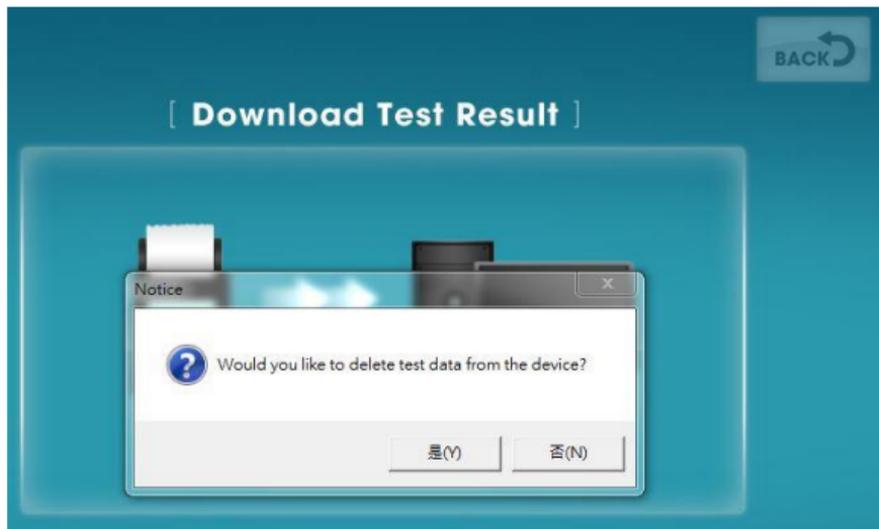
Click “DOWNLOAD TEST RESULT” icon from the main menu and click “START” to start transferring all test records from BT2300-PLUS to the USB connected laptop or PC.

Once completed, click “BACK” on the top right corner in order to go back to the main menu of the PC S/W.



Note:

The PC S/W will pop up a question to check if the user wants to delete the records from BT2300-PLUS.



DELETE TEST RESULT

Click on "DELETE TEST RESULT" icon to delete all test records in BT2300-PLUS

UPGRADE SOFTWARE

Click on "UPGRADE SOFTWARE" icon and select the correct .bin file to upgrade BT2300-PLUS

WARRANTY CODE

Click "WARRANTY CODE" to decode warranty codes

GLOSSARY

What is a GEL battery?

A gel battery is a lead-acid electric storage battery that:

- is sealed using special pressure valves and should never be opened.
- is completely maintenance-free.
- uses thixotropic gelled electrolyte.
- uses a recombination reaction to prevent the escape of hydrogen and oxygen gases normally lost in a flooded lead-acid battery (particularly in deep cycle applications).
- is non-spillable, and therefore can be operated in virtually any position. However, upside-down installation is not recommended.
- Connections must be retorqued and the batteries should be cleaned periodically.

What is an AGM battery?

An AGM battery is a lead-acid electric storage battery that:

- is sealed using special pressure valves and should never be opened.
- is completely maintenance-free.*
- has all of its electrolyte absorbed in separators consisting of a sponge-like mass of matted glass fibers.
- uses a recombination reaction to prevent the escape of hydrogen and oxygen gases normally lost in a flooded lead-acid battery (particularly in deep cycle applications).
- is non-spillable, and therefore can be operated in virtually any position. However, upside-down installation is not recommended.
- Connections must be retorqued and the batteries should be cleaned periodically.

What is a VRLA battery?

Valve Regulated Lead Acid Battery – This type of battery is sealed Maintenance Free with a “Bunce” Valve or Valves in the top of them that opens when a preset pressure is realized inside the battery and let’s the excess gas pressure out. Then the valve resets itself.

What is a SLI battery?

These initials stand for Starting, Lighting and Ignition, which are the three basic functions which a battery has to perform on all normal vehicles. Batteries given this description will have been specifically designed for service on cars and trucks within a voltage controlled electrical system. Those SLI batteries which are intended for heavy haulage vehicles fitted with large diesel motors may often be called COMMERCIAL batteries. They have to be much more powerful and more robust than batteries intended for cars.

What is STATE OF HEALTH?

It means how much battery capacity is left (%) comparing with the marked original battery capacity.

What is STATE OF CHARGE?

It means how many percent of the battery is actually charged.

What is CCA (COLD CRANKING AMPS)?

The current in amperes which a new fully charged battery can deliver for 30 seconds continuously without the terminal voltage falling below 1.2volts per cell, after it has been cooled to 00F and held at that temperature. This rating reflects the ability of the battery to deliver engine starting currents under winter conditions.

What is AMPERE-HOUR?

The unit of measurement of electrical capacity. A current of one ampere for one hour implies the delivery or receipt of one ampere-hour of electricity. Current multiplied by time in hours equals ampere-hours.



TERMS AND CONDITIONS OF WARRANTY

Any battery tester defective in material or workmanship will be repaired or replaced according to published defective return test repair procedures. The existence of a defect shall be determined by the seller in accordance with published procedures. The published test procedures are available upon request.

This warranty does not cover any unit that has been damaged due to accident, abuse, alternation, use for a purpose other than that for which it was intended, or failure to follow operating instructions. This warranty is expressly limited to original retail buyers. This warranty is not assignable or transferable. Proof of purchase is required for all alleged claims. Warranty cannot be authorized without proof of purchase. Warranty claims must be sent pre-paid with dated proof of purchase. Damage incurred during shipment is the responsibility of the shipper (customer returning unit) If the returned unit qualifies for warranty, the shipper will only incur shipping cost. The seller reserves the right to substitute or offer alternative warranty options at its discretion.

The sole and exclusive remedy for any unit found to be defective is repair or replacement, at the option of the seller. In no event shall the seller be liable for any direct, indirect, special, incidental, or consequential damages (including lost profit) whether based on warranty, contract, tort, or any other legal theory.

RETURN GOODS:

Pack with sufficient over-pack to prevent damage during shipment. Damage incurred during return shipment is not covered under this warranty. Repair costs for such damages will be charged back to shipper.

REMARK:

WHEN RETURNING GOODS, PLEASE SHOW "RETURN GOODS" ON ALL INVOICES & RELATED SHIPPING DOCUMENTS TO PREVENT ANY EXTRA CHARGE."