SOS BOOSTER Functionality Tests

How to check if your Booster is performing at 100%

Micro 12V Unit

Testing the Voltmeter

⇨ Press the red button on the front of your unit.
The voltmeter should light up and indicate the voltage of the battery.

Testing the Fuse and Exact Voltage

With an accurate multimeter, you can measure the exact voltage of the battery.

⇨ Connect the terminals of the multimeter to the clamps. Connect the red terminal on the red clamp and the black terminal on the blue clamp. The reading will show the exact voltage of the battery, and you will also be able to confirm that the internal fuse is operating correctly.

Testing the Charger

With an accurate multimeter, you can test the charger of your Booster.

⇨ Connect the terminals of the multimeter directly to the clamps.

⇨ Connect the original automatic electronic charger to a power point and the cigarette lighter plug to the Booster.

When the charger is working properly, you will see after approx. 20 seconds the second decimal of the multimeter going up.

If this does not occur, there may be a:

- → Problem with the charger (You will see a red light come on when the charger is connected to the mains) or,
- → Problem with the female cigarette lighter plug.

Testing the Female Cigarette Lighter Plug

You can easily test the female cigarette lighter plug with an accurate multimeter.

⇨ Connect the terminals of the multimeter directly to the cigarette lighter plug as follows:

Red terminal to the center of the plug, Black terminal to the side of the plug.

When the lighter plug is working properly, the exact voltage of the battery will be indicated on your multimeter.

Testing the Buzzer (when an optional "switch & buzzer" is installed)

⇨ If you create an inversion of polarity (red clamp on the negative terminal and blue clamp on the positive terminal of a vehicle or battery), you will hear the buzzer.

Note: The switch must be disconnected, and the battery of the vehicle must have a minimum of 4V.

Portable 12/24V Units

Testing the Voltmeter

Same as the Micro 12V

Testing the Fuses and Exact Voltage

Old Casing:

- ⇨ Connect the black terminal of your multimeter directly to the blue clamp and the red terminal to the positive contact of the voltage selector plug.
  The voltage on the multimeter indicates that the fuse of the first battery is operating correctly.
- ⇨ Connect the red terminal of the multimeter directly to the red clamp and the black terminal of the multimeter on the negative contact of the voltage selector plug.
  The voltage on the multimeter indicates that the fuse of the second battery is operating correctly.

- ⇨ By connecting the voltage selector in 12V, and the terminals of the multimeter directly to the clamps, you will see the correct voltage of the batteries in 12V (12.5 - 13V).
- ⇨ By connecting the voltage selector in 24V, and the terminals of the multimeter directly to the clamps, you will see the correct voltage of the batteries in 24V (24 - 26V).

New Slimline Casing:

With an accurate multimeter, you can easily test the fuses.

- ⇨ Position your multimeter near the signal/buzzer.
- ⇨ Insert the two terminals of the multimeter directly into the outlets designated for the internal fuses, where it is marked on the Booster.

You have two internal fuses in the 12/24V, so you will need to test both sides. If the fuses are operating correctly you will hear the Buzzer sound.

Testing the Charger

With an accurate multimeter, you can test the charger of your Booster.

- ⇨ Connect the terminals of the multimeter directly to the clamps.
- ⇨ Connect the original automatic electronic charger to a power point and the male 4 pole plug to the Booster.

When the charger is working properly, you will see after approx. 20 seconds the second decimal of the multimeter increases in voltage.

If this does not occur, there may be a:

- → Problem with the charger (You will see a red light come on when the charger is connected to the mains) or,
- → Problem with the female charging plug (It may be damaged or a cable inside may be disconnected).

Testing the Female Cigarette Lighter Plug

Same as the Micro 12V

Testing the Buzzer

⇨ If you create an inversion of polarity (red clamp on the negative terminal and blue clamp on the positive terminal of a vehicle or battery), you will hear the buzzer.

Note: The switch must be disconnected, and the battery of the vehicle must have a minimum of 4V.

Mobile 12/24V Units

Testing the Voltmeter

Same as the Micro 12V

Testing the Fuses and Exact Voltage

With an accurate multimeter, you can easily test the fuses.

- ⇨ Position your multimeter near the signal/buzzer.
- ⇨ Insert the two terminals of the multimeter directly into the outlets designated for the internal fuses, where it is marked on the Booster.

You have two internal fuses in the 12/24V, so you will need to test both sides. If the fuses are operating correctly you will hear the Buzzer sound.

- ⇨ Connect the terminals directly to the clamps; The red terminal to the red clamp and the black terminal to the blue clamp.

Firstly connect the voltage selector in 12V, and you will see the exact voltage of the two batteries in 12V. Then connect the voltage selector in 24V and you will see the exact voltage of the two batteries in 24V.

To Test the Charger

With an accurate multimeter, you can test the charger of your Booster.

- ⇨ Connect the terminals of the multimeter directly to the clamps.
- ⇨ Connect the original automatic electronic charger to a power point and the male charging plug to the female charging plug of the Booster.

When the charger is working properly, you will see after approx. 20 seconds the second decimal of the multimeter increasing in voltage.

If this does not occur, there may be a:

- → Problem with the charger (You will see a red light come on when the charger is connected to the mains) or,
- → Problem with the female recharging plug (It may damaged or a cable inside may be disconnected).

To Test the Buzzer

The same as Portable 12/24V Booster Units.

To Test the Female Cigarette Lighter Plug

The same as 12V Micro Booster Units.

12V Boosters

TROUBLE SHOOTING

If your Booster...

A. Does not recharge anymore:

- There is no current in the power point to which you have connected the charger
- The internal wires of the cigarette lighter plug of the charger are disconnected
- The charger does not function any more
- The battery is sulphated, swollen or 'boiled' and cannot receive a charge

B. Has no power anymore: Check the Voltage on the clamps with a Multimeter

If 0 Volts: The internal fuse is blown.

If more than 0 Volts:

- The Booster is not charged (See point A, properly charged = 12.5V - 13V)
- The battery lost its power due to:
  - The sulphation of the battery: you have not been recharging your Booster regularly
  - A recharge with a non automatic charger or an automatic charger in the 'fast charge' or 'boost' position
  - A connection to a 24V vehicle for even a short time.
- An element inside the battery melted due to:
  - Starting attempts superseding the user instructions.
- The battery is 'boiled' due to:
  - A connection to a 24V vehicle
  - A recharge of the Booster on board a 24V vehicle
  - Use of the Booster on a 12V vehicle which has its alternator's regulator broken or when the alternator produces too high a voltage
  - Recharging on a non-automatic charger (More than 14.4 Voltage).
- The battery is swollen due to:
  - Recharging with a non-automatic charger or in the 'fast charge' or 'boost' position, or a recharge of the Booster when the battery is deeply discharged (you have not been recharging your Booster regularly).

C. Indicates 0 Volts on the Voltmeter: Check the voltage on the clamps with a multimeter

- 0 volts = The internal fuse is blown.
- The voltage is good = The voltmeter or push button is broken or defective.

General Questions

A. Can a Booster which is too powerful (example 12V/1600CA) damage a small engine (eg. motor bike)?

No. The engine will only take the necessary power to start.

B. May I use my Booster as a battery for my fridge, mobile phone, etc.?

Yes, this is possible, *but not at all recommended*.
Under 12.4V the sulphation process will begin, thereby reducing the life of your Booster.

C. How often do I need to recharge the Booster ?

You should recharge your Booster at the end of each day of use, unless you are using it multiple times during a day. The power of the provided charger is designed to recharge the Booster at 100% overnight (for normal usage).

If you have any further questions please contact your reseller, or call our Pro Quip Technical Representative on (03) 9761 1110.

12/24V Boosters

TROUBLE SHOOTING

If your Booster...

A. Does not recharge anymore:
- There is no current in the power point to which you have connected the charger
- The recharge plug of the Booster is damaged
- The charger does not function any more
- The batteries are sulphated, swollen or 'boiled' and cannot receive a charge.

B. Does not work in 24V, but still works in 12V:
- One of the internal fuses has blown.

C. Does not work in 12V or in 24V:
- Both of the internal fuses have blown.

D. Has no power anymore:
- The Booster is not charged (See point A, properly charged = 12.5V - 13V)
- The batteries lost their power due to:
  - The sulphation of the batteries: you have not been recharging your Booster regularly
  - A recharge with a non automatic charger or an automatic charger in the 'fast charge' or 'boost' position
  - A connection to a 24V vehicle when the Booster is in the 12V position, for even a short time.
- An element inside the batteries melted due to:
  - Starting attempts superseding the user instructions.
- The batteries are 'boiled' due to:
  - A connection to a 24V vehicle when the Booster is in the 12V position
  - Recharging on a non-automatic charger (More than 14.4 Voltage).
- The batteries are swollen due to :
  - Recharging with a non-automatic charger or in the 'fast charge' or 'boost' position, or a recharge of the Booster when the batteries are deeply discharged (you have not been recharging your Booster regularly).

E. The Voltmeter does not Deviate:
- The voltmeter or push button is broken or defective
- The voltage of the batteries is below 9V.

General Questions

A. Can a Booster which is too powerful (eg. 12/24V-2400/1200CA) damage a small engine (eg. motor bike)?

No. The engine will only take the necessary power to start.

B. May I use my Booster as a battery for my fridge, mobile phone, etc.?

Yes, this is possible, *but not at all recommended*.
Under 12.4V the sulphation process will begin, thereby reducing the life of your Booster.

C. How often do I need to recharge the Booster ?

You should recharge your Booster at the end of each day of use, unless you are using it multiple times during a day. The power of the provided charger is designed to recharge the Booster at 100% overnight (for normal usage).

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