

SIMPLE PULSER INSTRUCTIONS

DO NOT CONNECT THE DESULPHATOR TO THE BATTERY CHARGER – CONNECT IT TO THE BATTERY & THEN CONNECT THE CHARGER. MAKE SURE THE BATTERY CHARGER IS UNPLUGGED FROM THE MAINS SUPPLY BEFORE CONNECTING/ DISCONNECTING.

TO PREVENT DAMAGE BY SHORTING OUT OF THE PCB PLEASE ENSURE IT IS USED IN SOME FORM OF INSULATING CONTAINER (kits & unboxed pulsers only).

1. Is it working? If the red LED is lit and you can hear a distinct 'buzzing' noise then yes it is.
2. Only slightly less important is ensuring that any battery charging activities are carried out in a reasonably well ventilated environment. This is particularly relevant here as you will both hear and see sparks generated as you connect this desulphator. This is perfectly normal, but possibly 'alarming' to the first time user.
3. The battery to be recovered must measure at least 10.5V 'open circuit'. Any less than this and the cause of the battery's deterioration may well be more than sulphation and this desulphator is unlikely to function as intended i.e. recover a sulphated battery.
4. Ensure that the electrolyte levels are adequate prior to starting, these should be checked regularly whilst the device is in use. It may seem obvious but don't do this with the pulser connected, they don't like water.
5. The desulphator should be used in conjunction with a simple trickle battery charger. **We would caution against using the desulphator in conjunction with more modern intelligent chargers such as those available from Ctek unless:-**

While the typical unfiltered battery charger is not a problem, some other types of loads, such as inverters, might shunt away some of the desulphator's output. In such a case, place a choke in series with one of the inverter leads to keep the high frequency spikes from travelling further. This can be a simple ferrite toroid with one or two turns through it, or a few ferrite beads placed over the wire.

6. The desulphator can be left connected whilst the trickle charger is connected/ disconnected from the battery. I re-iterate, do not leave the desulphator connected solely to the battery charger.
7. Having said this the desulphator can be used on its own i.e. without a charger until the battery voltage drops to 10.5V i.e. trickle charge the battery in conjunction with the pulser until a peak is reached and then disconnect the charger and let the desulphator 'pull' the battery voltage down. Depending on the state of the battery this could be several days.
8. If you have a voltmeter the simplest indication of the battery improving will be the maximum voltage achieved after charging each time. This should rise noticeably during the first week and then reduce over time.

The next best reliable indicator is putting a load on it i.e. put it in a vehicle and try starting it – probably the simplest 'load test' around.
9. I cannot emphasise enough the importance of ensuring the voltage level doesn't drop below 10.5V at any time. It is almost certain irreversible battery damage will result.
10. Ready built desulphators have been bench tested prior to despatch.
11. The desulphators are now supplied with reverse polarity protection consisting of a PPTC fuse and a diode. If you connect the device to the battery the wrong way around the internally mounted PPTC type fuse will react. Just remove the desulphator from the battery, allow a short period for the 'fuse' to cool and connect the correct way around.