

CHOOSING A BOOSTER PACK

Choosing a booster pack, stripping away the nonsense

What I aim to do here is cut through the hype and get to what really matters.

There are three main considerations when choosing any piece of equipment and in that respect a booster pack is no different, they are, Safety, Ease of use and Performance.

When buying a booster pack you are getting a very powerful bit of kit that has the potential to do great damage and harm, however harnessed correctly it will be safe, easy to use and provide the energy necessary to start your vehicle.

Control, the first and most obvious feature that a booster pack should have is an On/Off switch. While it may sound silly; connecting ‘live’ leads to the vehicle battery can lead to sparking/arching and is unsafe. In addition to physical harm; damage to delicate vehicle electronic components may occur. Frankly, I cannot think of many powerful electric tools that do not have an On/Off switch.

Reverse polarity Alarm- This means that an alarm will sound if hooked up backwards (polarity reversed). This important feature protects both the operator and the vehicle from incorrect connection and no product should be without it....if safety is a consideration.

Long leads not what you might call an obvious safety feature. However, this is an extremely important link from the Booster to the vehicle. A failure here means a “no-start” and/or an unsafe condition.

Now...what do long or short cables mean?? The simple answer is nothing. Put Booster where you can. However, longer cable let's you keep the unit on the ground.

ALL cable is made up of copper, or copper clad aluminum, AND the capacity carrying ability is less for aluminum than copper

Schumacher cable is made of 99.99% pure copper and has 2500 strands in 4 Ga cable. You simply cannot beat this!!)

1. Copper wire –
2. Ultra-Flex insulation – down to -40C
3. Enersys/Hawker battery

It is important as you would not want to have to balance the booster pack inside the vehicle or on top of the engine; especially if the booster pack falls while the engine is starting, Flexible leads are a must especially in cold conditions, finely stranded copper leads not only offer the flexibility needed but also minimize the resistance in the leads, further enhancing the units performance. However, if a shorter cable length is desired; the convenient cable wrap is there to manage the excess length.

Ventilation, in extreme circumstances a battery when it is being worked hard can expel explosive gasses, look for a booster pack that is ventilated and in some models even a fan to prevent the build up of gasses in the case. This is extremely important....a gassing battery is not safe. The Schumacher Boosters ensure recharging is both exceptional and safe with their

“Thermal Runaway Protection” Patent...no other compares.

The charger should be powerful enough to fully charge the battery as the biggest threat to the performance of the booster pack is the battery developing sulphation, this is when a crystal like substance grows on the un-charged areas of the plates, insulating the plate from the electrolyte and therefore reducing the capacity of the battery (this effect is accelerated in warm conditions and when the battery is not fully charged), the best way of avoiding this effect is to keep the battery fully charged, in the real world we know that mistakes happen and the booster may be left un charged, so it is important to pick a booster that has a charger that is capable of rapidly charging the battery and automatically remove any sulphation build up.

Robust case, the case should be tough enough to protect the internal components without damage, the Schumacher cases are proven to be tough and are guaranteed against failure.

Display, It is important to know if the booster pack has sufficient charge and a back lit display that can easily be read in the dark which shows the voltage and state of charge is very useful (another useful feature is a display that shows the alternator output voltage once the vehicle is running)

Performance, or its all about the battery

The reason why you buy a booster pack is to start vehicles that will not start under its own power. There are almost as many different figures quoted on booster adverts as there are booster packs, each manufacturer claims ever higher figures for their products, a wonderful example of ‘mines bigger than yours’, the question is which of the figures quoted are relevant? Here is the explanation of the numbers:

Peak Current: is a measure of how big the spark would be if the battery terminals were shorted together, no relevance to the starting ability of the battery.

Cranking Current or Cranking Amps: is a measure of the initial surge of current when the starter is cranked, again this is a transitory figure that does not indicate the ability of the booster to start the engine as it only lasts for a split second.

CCA: the international rating for automotive starting batteries, not relevant as it does not indicate the batteries ability to deliver power over a longer period of time or multiple starts without charging in between.

Starting Current: this is the figure that counts, but it is only relevant if there is a time quoted, as it is a statement of the actual cranking amps that the booster can provide, it is useful to know that the average modern car will normally start in 2 crank rotations or less than 2 seconds

It is the ability of the battery to produce the Starting Current consistently and repeatedly a great many times that counts, a high quality booster pack will be able to produce starting power long after its cheaper rivals have given up.

It is generally acknowledged that the best battery for use in a booster pack is called the Hawker Enersys battery, its power output and longevity put it head and shoulders above its competition. The construction of the battery means that it has much less internal resistance and can therefore deliver more power and for longer without overheating, and make the battery a lot more rugged, the near pure lead plates give it a much longer shelf life that

alternatives and its ability to recover from deep discharge are much greater, typically a Hawker battery can be charged and discharged over 2,000 times compared to less than 1,000 for cheaper alternatives, a booster fitted with this type of battery will last longer and give greater performance working out to be much cheaper in the long run.

So as with all things in life you get what you pay for, a booster pack is for emergencies, so it seems daft to buy cheaply only for it to let you down when you really need it.