



# Leisure Batteries

With OE Pedigree



# Banner

The Power Company



Energy Bull



Running Bull AGM



Power Bull Pro



# Guidance for battery use in caravans and motorhomes

- 1 **ALWAYS USE THE LARGEST, BEST QUALITY BATTERY POSSIBLE**  
Doing so will deliver longer life and maximum performance.
- 2 **BE AWARE OF DISCHARGE RATES IMPACTING ON PERFORMANCE**  
A larger battery discharged by say 30% will last many times longer than a smaller battery discharged by 50%.
- 3 **A STRONGER BATTERY IS PREFERABLE FOR 'OFF MAINS' APPLICATIONS**  
This is particularly important when using big energy consumers, such as colour TVs and motor mover devices.
- 4 **NEVER STORE A DISCHARGED, UNUSED BATTERY**  
Particularly over the winter, as it will sulphate and require scrapping by springtime.
- 5 **A DISCHARGED BATTERY SHOULD BE RECHARGED IMMEDIATELY**  
Recharging should be at a rate of 10% of the battery's capacity. For example, an 80ah capacity battery should be charged with an 8-10 amp charger until the voltage reaches 12.7 volts and delivers an acid specific gravity of 1,270.

- 6 **RECHARGING BEST PRACTICE WITHOUT USING A HYDROMETER**  
For those wanting to recharge a battery without having access to a hydrometer, then a 3-stage automatic charger should be deployed, as this will prevent an overcharge. It can be left connected even after the charge is finished, as it will not harm the battery even when slipping into float mode @13 volts.
- 7 **A LEISURE BATTERY CAN BE DISCHARGED AND RECHARGED DURING STORAGE**  
Leisure batteries should not be confused with ni-cads, which should not be discharged and recharged during storage.

## BATTERY GUARANTEES

All batteries typically carry a guarantee against manufacturing defects. Guarantees do not cover unfair wear and tear, such as discharged storage, or batteries that have been over used for the wrong application. Providing the correct battery is specified and used in accordance with the chart below, long and reliable performance will prevail.

Power Source	Ampage PH	X Hours	Example	Total Amps
LCD TV's	4 amps	x hours	eg 3	12
Single Axle M-Mover	20-60 amps	<b>Use only Energy Bull 100ah minimum</b>		
Twin Axle M-Mover	30-100 amps	<b>Use only Energy Bull 100ah minimum</b>		
Spotlights (2)	3 amps	x hours	eg 2	6
Fluorescents Single (3)	2 amps	x hours	eg 2	4
Fluorescents Double (3)	5 amps	x hours	eg 2	10
Blown Air Heating Fan	4 amps	x hours	eg 3	12
Water Pump (Shower)	5 amps	x hours	eg 1/2	2
		<b>Total</b>	<b>eg 9 1/2</b>	<b>34</b>
		<b>x 2</b>		<b>68</b>

**CALCULATE AMPS USED x HOURS IN USE, then x 2 for a SAFETY MARGIN.** ▶

**THIS EXAMPLE NEEDS A MINIMUM 68 ah BATTERY**

To calculate watts to amps divide by volts ie : 48 watts divided by 12 volts = 4 amps



# Energy Bull

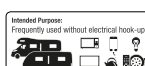
Genuine Semi-Traction OE Leisure Batteries



## Power for most motorised leisure activities

- The Banner Energy Bull is one of the few, true batteries designed for most motorised leisure activities, offering full, semi-traction cyclic technology for charging and discharging in non hook-up situations. They are spill proof, provide back fire protection and exhibit true OE quality and performance.
- Energy Bull batteries are suitable for motorhomes, caravans, boats, solar panels, signal systems and electric wheelchairs.
- They stand as the perfect solution for those requiring a leisure battery that will discharge for longer than a standard leisure battery (typically 25% or more), or if you have a mover or use a vehicle off a mains site.
- Energy Bull batteries are also proven to last 4 to 5 times longer than a standard leisure battery, typically 300-400 cycles against a figure of 80.
- Fitted as original equipment by many leading UK and European motorhome builders, Energy Bull batteries are guaranteed against manufacturing defects for 2 years.
- For added safety, each Energy Bull features 4 chamber leak protection, flame arrestors, central degassing and surge safeguards through the use of screws seals and O-rings.

Banner Model	NCC Class	UK Number	Ah Capacity 20hr/100hr	Dimensions (mm) LxWxH	Weight Kgs
95501 / 12v	Class C	95501 027 box	60ah / 70ah	241 x 175 x 190	16.6
95551 / 12v	Class C	95551 678 box	72ah / 85ah	256 x 174 x 205	19.5
95601 / 12v	Class C	95601 678 lowbox	80ah / 90ah	278 x 175 x 190	19.9
95751 / 12v	Class B	95751 110 lowbox	100ah / 110ah	354 x 175 x 190	24.1
95901 / 12v	Class B	95901 110/679 highbox	115ah / 135ah	350 x 175 x 230	27.6
96051 / 12v	Class B	96051 627 box	130ah / 140ah	514 x 189 x 195	36.4
96351 / 12v	Class B	96351 629 box	180ah / 195ah	514 x 223 x 195	46.8
96801 / 12v	Class B	96801 625 box	230ah / 250ah	517 x 273 x 212	63.2





# Running Bull AGM

## Genuine Absorbed Glass Mat OE Batteries



### Power for start-stop technology

- Running Bull AGM batteries have greater amp powers and cycle resistance.
- Be aware of the risks of fitting budget batteries, as they will invariably have a much shorter working life and low capability of powering vehicles during extreme weather conditions or short trip usage.
- Never fit a replacement battery with a lower Ah rating than the OE specification. The result could be a very unhappy customer and a warranty claim that is not covered by the battery manufacturer.
- Fit only AGM or EFB batteries to vehicles with start/stop function. Reported start/stop problems are primarily the result of incorrect battery specification.
- Ideally fit premium batteries from an OEM supplier. They may cost slightly more in the short term but they embody advanced technology to meet the specific demands of modern vehicles, ensuring the delivery of reliable performance and longer life.

Banner Model	NCC Class	UK Number	Ah Capacity 20hr/100hr	Dimensions (mm) LxWxH	Weight Kgs
56001 / 12v	Class C	027 AGM	60ah / 72ah	242 x 175 x 190	17
57001 / 12v	Class C	096 AGM	70ah / 88ah	278 x 175 x 190	21
58001 / 12v	Class C	115 AGM	80ah / 90ah	315 x 175 x 190	24
59201 / 12v	Class A	019 AGM	92ah / 110ah	354 x 175 x 190	28
60501 / 12v	Class A	020 AGM	105ah / 120ah	394 x 175 x 190	29.8





# Power Bull Pro

Genuine Extra Power as Fitted by OE Manufacturers



## Power for 'hook-up' and engines without start-stop technology

- Banner Batteries has extended its Power Bull Pro range covering over 80% of the European car parc. Banner is the only manufacturer offering an extensive range of Genuine OE batteries (as opposed to 'OE Matching Quality') to the UK leisure aftermarket.
- The Power Bull Pro range is manufactured in Austria by Banner, coming off the same track fulfilling OE orders.
- They can be distinguished from 'OE Matching Quality' batteries by their weight, being heavier due to more lead content and full car manufacturers' specifications.
- A Banner Power Bull Pro battery can be fitted in the absolute knowledge that it will match your vehicle's original battery specification exactly, delivering the same high quality capacity, starting performance and cyclic durability.

Banner Model	NCC Class	UK Number	Ah Capacity 20hr/100hr	Dimensions (mm) LxWxH	Weight Kgs
P6340 / 12v	Class C	027 OE	63ah	242 x 175 x 190	16.4
P7540 / 12v	Class C	096 OE	75ah	278 x 175 x 190	19
P10040 / 12v	Class C	019 OE	100ah	354 x 175 x 190	23.6
P11040 / 12v	Class C	020 OE	110ah	394 x 175 x 190	24





# Power Evolved

## With OE Pedigree

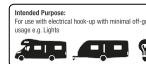
The power of Banner Batteries has not only evolved through ongoing product innovation combined with world class manufacturing, but an unparalleled OE pedigree that is the backbone of the company's genetic make-up. Indeed Banner's battery technology is the preferred choice of many motorhome manufacturers/converters, such as:

Adventure Motorhomes • Adventure Leisure Vehicles • Autotrail • Bailey  
Chausson • Dethleffs • East Nuek Campervans • Elite • Equitrek  
Hillside Leisure Vehicles • Hymer • LMC • Lunar • Pilote • Rapido  
Spinney • Vantage • Wanda Homes • Wellhouse Leisure • Wildax

# Banner

The Power Company

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For motorhomes with higher power consumption but still generally used without electrical hook-up it may be more practical to use multiple batteries from class A to provide the required storage capacity than to specify a single battery of the required capacity.

