

Banner



**FULL POWER
DAY AFTER DAY.**

 **STARTER BATTERY TYPE LIST MAY 2015**

**INCLUDING
MOTORCYCLE-/
HOBBY- & LEISURE
BATTERIES**





RUNNING BULL AGM

AGM FOR START/STOP VEHICLES WITH ENERGY RECUPERATION (ABSORBENT GLASS MAT).

By 2015, over 70 per cent of all new vehicles will be fitted with an engine start/stop function, in order to achieve the CO₂ limitation targets set by the EU by means of sustained fuel consumption savings and emission reductions. In general, two differing starter battery types are employed in these environment-friendly vehicles consisting of the absorbent glass mat (AGM) and the enhanced flooded battery (EFB) systems. The use of the appropriate technology depends largely on the fuel and CO₂ savings that can be attained. Above all, AGM batteries are utilised for start/stop systems with braking energy recuperation in mid-range and premium class vehicles.



TECHNICAL DATA AND INFORMATION

- ▶ Valve-regulated nonwoven battery (VRLA)
- ▶ Range of 5 types with capacities from 60-105Ah
- ▶ Three times greater cycle resistance than standard batteries: highest E4 classification pursuant to EN 50342-1
- ▶ Leak-proof due to electrolyte bonding into a glass nonwoven (absorbent glass mat)
- ▶ Zero maintenance due to recombination technology
- ▶ Highest V3 vibration resistance pursuant to EN 50342-1
- ▶ Maximum starting performance due to the very low internal resistance
- ▶ Installation in a lateral position possible (max. 90° angle)
- ▶ Flexible use as a starter and on-board power supply battery



Cars



Cars with start/stop systems



Taxis



LCV



Off Road



Motorhomes



Motorboats



Construction machinery

RUNNING BULL AGM

Typ	Info	UK No.	Box	Ah 20 h	A EN									Application
								Length	Width	Box height	Total height			
1	AGM 560 01	027 AGM OE	H5 / L2	60	640	0	1	241	175	190	190	mG	B13	BMW, VW, Audi, Hyundai, Kia
2	AGM 570 01	096 AGM OE	H6 / L3	70	720	0	1	278	175	190	190	mG	B13	BMW, VW, Audi, Mercedes, Porsche, Taxis
3	AGM 580 01	110 AGM OE	H7 / L4	80	800	0	1	315	175	190	190	mG	B13	BMW, VW, Audi, Mercedes, Porsche, Taxis
4	AGM 592 01	019 AGM OE	H8 / L5	92	850	0	1	354	175	190	190	mG	B13	BMW, VW, Audi, Mercedes, Porsche, Taxis
5	AGM 595 01	= AGM 592 01												
6	AGM 605 01	020 AGM OE	H9 / L6	105	950	0	1	394	175	190	190	mG	B13	BMW, VW, Audi, Mercedes, Porsche, Taxis

★ DT = Double Top, ★ 4K = 4-chamber leak protection, RF = vibration-resistant, GA = battery with central degassing, HGI = hard rubber set, mG = with handle, RZS = flame arrestor,
 * limited use, ** with base hold-down adapter

Start/Stop: replace AGM with AGM.





RUNNING BULL BACKUP

SUPPORT FOR VEHICLES WITH EXTREMELY HIGH ENERGY REQUIREMENTS (ABSORBENT GLASS MAT).

The Running Bull BackUp is the ideal support for starter batteries owing to the fact that it uses the same trend-setting technology as that employed in the "big" Running Bull. The small power pack is utilised in vehicles with a start/stop system and additional consumers with a high energy requirement such as redundant safety systems or power steering.

BACKUP

TECHNICAL DATA AND INFORMATION

- ▶ Valve-regulated nonwoven battery (VRLA)
- ▶ Range of 2 types with capacities from 9/12Ah
- ▶ Used by Audi, BMW, Mercedes and Volvo for Original Equipment
- ▶ Three times greater cycle resistance than standard batteries: highest E4 classification pursuant to EN 50342-1
- ▶ Leak-proof due to electrolyte bonding into a glass nonwoven (absorbent glass mat)
- ▶ Zero maintenance due to recombination technology
- ▶ Installation in a lateral position possible (max. 90° angle)



Cars








Cars with start/stop systems



Taxis

RUNNING BULL BACKUP

Typ	Info	UK No.	Box	Ah 20 h	A EN									Application
								Length	Width	Box height	Total height			
1	509 00 / AUX 09	AUX9 OE		9	120	1	10	150	88	106	106		B00	Volvo Start/Stopp, DRIVE
2	AUX 12	= 514 00 / AUX 14												
3	514 00 / AUX 14	AUX14 OE		12	200	1	10	150	88	145	145		B00	Audi, BMW 5/7Start/Stopp, Mercedes E/S-Class, Volvo Automatic, Start/Stopp

★ **pt** = Double Top, ★ **ak** = 4-chamber leak protection, RF = vibration-resistant, GA = battery with central degassing, HGI = hard rubber set, mG = with handle, RZS = flame arrestor,
 * limited use, ** with base hold-down adapter

Start/Stop: replace AGM with AGM.





RUNNING BULL EFB

EFB FOR START/STOP VEHICLES WITHOUT ENERGY RECUPERATION (ENHANCED FLOODED BATTERY).

EFB technology is used mainly in mid-range and small cars with simple start/stop systems, but without energy recuperation. In the coming years, this type of cycle-resistant starter battery will be employed with growing frequency for Original Equipment.



TECHNICAL DATA AND INFORMATION

- ▶ Range of 4 types with capacities from 60-95Ah
- ▶ Nonwoven cover on the separator and special active mass composition
- ▶ Twice the cycle resistance of standard batteries: E3 classification pursuant to EN 50342-1
- ▶ Top V3 vibration resistance rating pursuant to EN 50342-1
- ▶ Double lid for maximum protection against leaks and operational safety
- ▶ Zero maintenance due to modern calcium/calcium mesh technology



Cars



Cars with start/stop systems



Taxis



LCV



Off Road



Motorhomes



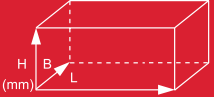




Motorboats



Construction machinery

RUNNING BULL EFB

Typ	Info	UK No.	Box	Ah 20 h	A EN									Application
								Length	Width	Box height	Total height			
1	EFB 560 00	027 EFB OE	H5 / L2	60	560	0	1	241	175	190	190	mGGA	B13	Alfa Romeo, Audi, Citroen, Fiat, Peugeot, Toyota, VW
2	EFB 565 00	005L EFB OE	D23	65	550	0	1	233	173	203	225	mGGA	B00	Mazda, Mitsubishi, Nissan, Subaru, Toyota
3	EFB 570 00	096 EFB OE	H6 / L3	70	660	0	1	278	175	190	190	mGGA	B13	Alfa Romeo, Audi, Citroen, Fiat, Peugeot, Toyota, VW
4	EFB 595 00	249 / 335 EFB OE	D31 / 56AT	95	760	0	1	303	173	203	225	mGGA	B00	Mazda, Mitsubishi, Nissan, Subaru, Toyota - D, Fiat Tractors

★ **DT** = Double Top, ★ **4K** = 4-chamber leak protection, RF = vibration-resistant, GA = battery with central degassing, HGI = hard rubber set, mG = with handle, RZS = flame arrestor,
 * limited use, ** with base hold-down adapter

Start/Stop: replace EFB with EFB.





UNI BULL

THE ABSOLUTELY MAINTENANCE-FREE UNIVERSAL BATTERY WITH PATENTED LEAK PROTECTION AND CALCIUM TECHNOLOGY. NOW IN THE NEW FIFTH GENERATION.

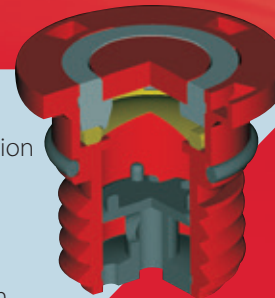
More than twenty years ago, Banner set a new benchmark in the battery design field with the Uni Bull, which was intended to reduce the diversity in the replacement business area. The new Uni Bull with calcium technology is absolutely maintenance-free. The electrode design has been computer-optimised, while the increased conductor cross-section and the very latest separators guarantee top power yield, which represents an important performance plus. What's more, the Uni Bull fits perfectly into more than 900 vehicle models.

COMPLETE PATENTED LEAK PROTECTION - ACCUSAFE WITH A GORE MEMBRANE.

Accusafe ensures total safety. The aerosol filter separates particles of acid from any gases and these can then escape through the partially permeable Gore membrane. Conversely, the acid is retained in the battery. As a result, corrosion and acid burns are simply things of the past.

TECHNICAL DATA AND INFORMATION



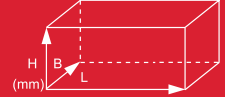


- ▶ Absolutely maintenance-free with calcium/calcium technology for minimum water consumption
- ▶ Up to 30% more power, as compared to standard DIN batteries
- ▶ Perfect installation with four-terminal connection that is suitable for 900 vehicle models
- ▶ Reliable in extreme temperatures with full power at all times
- ▶ Safe leak protection and high levels of operational safety due to the patented Accusafe system with Gore membrane



Cars



LCV



Typ	Info	UK No.	Box	Ah 20 h	A EN						Application			
												Length	Width	Box height
1	50 100	063 / 076 / 085 / 093 / 012 / 077 / 079	T4 / LB1	47	390	0+1	1+19	210	175	175	175	mG	B01/13	35/36/40/43/44/45/46/48/50 Ah
2	50 200	075 / 065 / 097 / 078 / 092 / 040	T5 / LB2	58	450	0+1	1+19	241	175	175	175	mG	B01/13	45/46/50/52/53/54/55/58/60 Ah
3	50 300	027 / 025 / 069* / 068* / 072*	H5 / L2	69	520	0+1	1+19	241	175	190	190	mG	B01/13	55/58/60/61/62/63/64/66/72 Ah
4	50 400	= P45 23/24												
5	50 500	096 / 067 / 095 / 082 / 086 / 115*	H6 / L3	80	700	0+1	1+19	278	175	190	190	mG	B01/13	66/70/72/74/75/76/77/80/84 Ah

50 100 replace: 535 28*, 536 21/24/27/28/41/46/53/54/55/59, 540 45/63, 543 12/15/16/17*/19/20/23/24, 544 09/13/34/49/59/64/65/66/69, 545 86, 546 14, 548 27*, 550 57*, P44 09, P50 03*, PRO P48 40*, PRO P50 40*

50 200 replace: 545 19/33/98, 546 13, 550 35/40/44/46/48/49/56/57*/69, 552 18/19, 554 14/15/23/26/27/28, 555 18/19/30/31/45/48/59/63/64/65/66/71, 555 72/73, 558 11*, 560 08/09/91*, 562 05/19*, P55 19, P62 05/19*, PRO P63 40*

50 300 replace: 555 18/19/30/31/45/48/59/63/64/65/66/71/72/73, 558 16/17, 560 08*/09*, 560 13*/73/74/76/ 78/88/93/94, 561 11/13, 562 05*/16/19/20/ 21, 563 18*/26/32, 564 01*/20*, 566 33*, 572 33*, P55 19*, P62 05*/19, PRO P63 40*

50 500 replace: 566 13/18/19/31/38/41/45/47, 570 24*/ 29*, 570 44/58/64/65/68/69/76, 572 17/19/20/ 21/23/25*, 572 09*/12/ 26*/29/30*/32/34, 574 05*/12/13, 575 31/40, 576 11/12, 577 19, 580 14*/34/35/41/42, P66 13*, P72 09*/12, P74 05*/12, PRO P75 40 , PRO P77 40 , P80 14*/42, PRO P84 40

 Double Top,  4-chamber leak protection, RF = vibration-resistant , GA = battery with central degassing, HGI = hard rubber set, mG = with handle, RZS = flame arrestor, * limited use, ** with base hold-down adapter





POWER BULL

SUPERB POWER AND SAFETY LEVELS WITH MODERN CALCIUM TECHNOLOGY FOR EVERY CAR WITHOUT A START STOP SYSTEM.

First fitter quality for retrofitting! The Power Bull is Banner's premium starter battery for modern petrol & all diesel vehicles without Start Stop systems. Designed in accordance with the OEM standards of BMW and VW, the Power Bull is a logical first choice when it comes to replacement battery selection and is far more suitable for modern driving styles (shorter journeys & deeper discharges).

POWER BULL PROFESSIONAL, ORIGINAL QUALITY FOR RETROFITTING.

The new top versions of the Power Bull PROfessional with increased performance are based on proven Power Bull technology and fulfil precisely the requirements of leading German automotive manufacturers. These power packs are designed for modern cars with very high energy demands.

TECHNICAL DATA AND INFORMATION

- ▶ Robust cyclical behaviour with E2 classification pursuant to EN 50342-1
- ▶ Double Top for twice the leak protection and 100 per cent leak protection up to an angle of 45°
- ▶ Absolutely maintenance-free due to modern calcium/calcium technology
- ▶ Extensive coverage of the European and Asian vehicle fleets owing to 30 battery types from 40-110 Ah
- ▶ V2 vibration resistance rating pursuant to EN 50342-1 due to the bonding of the plates to the battery floor and robust cell connections
- ▶ Improved external ignition and ESD safety levels (against electrostatic discharge)



Cars



Taxis



LCV



Motorboats



STARTING BULL

THE ENTRY TO THE Banner BRAND WORLD. FOR OLDER VEHICLES.

The Banner Starting Bull is the entry level product to the Banner brand. However, safety knows no compromises and therefore this product, which has been proven millions of times over, also meets the very latest battery design standards & is suitable for older petrol vehicles & some diesel vehicles up to 2005 with little or few electrical consumers.

FOUR-CHAMBER LEAK PROTECTION, THE INNOVATIVE SAFETY GUARANTEE.

Tried and tested four-chamber leak protection is used in 12 Starting Bull European types. In this system, four chambers provide a safeguard against escapes of battery acid during extreme vibrations. Moreover, central degassing and welded-in flame arrestors secure optimum operational safety. All these features add up to a significant increase in safety during vehicle use and handling.

TECHNICAL DATA AND INFORMATION

- ▶ Four-chamber leak protection with integrated external ignition protection for 12 best sellers from 44-95Ah
- ▶ Absolutely maintenance-free due to the use of calcium/calcium technology
- ▶ Reliable cold starting behaviour
- ▶ Niche and supplementary types ensure complete coverage of the current vehicle fleet in Europe
- ▶ Simple classification due to the use of DIN and UK number for type designations
- ▶ Quality and know-how from Austria
- ▶ Optimum price-performance ratio



Cars




















LCV


















Motorboats



STARTING BULL

Typ	Info	UK No.	Box	Ah 20 h	A EN						Application			
								Length	Width	Box height	Total height			
6 Volt														
1	066 12	421		66	360	0	1	178	175	166	188	B04	VW -1968, Trabant	
2	077 18	404		77	450	0	1	216	170	166	191	B06	VW, Ford D, Trabant, Tatra 613	
12 Volt														
								Length	Width	Box height	Total height			
3	530 30	895 / 101		30	300	0	4	187	128	165	165	mGGA	B00	Small tractors, BMW-Motorcycles
4	530 34	896		30	300	1	4	187	128	165	165	mGGA	B00	Small tractors
5	532 02	002R		32	240	1	1	165	170	165	190		B13	>2000 Spanish built Vitara
6	535 04	= P40 25												
7	535 20	= P40 26												
8	535 22	= P40 27												
9	538 37	037		38	300	0	19	239	135	179	200		B09	Early Fords up to 1976
10	538 80	038		38	260	1	1	239	135	179	200	mG	B09	Austin
11	540 08 	= P42 08												
12	540 63 	= P44 09/544 09												
13	542 08 	= P42 08												
14	543 17	= 544 09 with Ford conversion or 50 100												
15	544 09 	063 (44Ah)	T4 / LB1	44	360	0	1	210	175	175	175	mGGA	B13	Ford, Opel
16	544 13	= 50 100												
17	544 59	= PRO P50 40/P50 03/545 59												
18	545 19	= P60 09**/555 19**												
19	545 23	= P45 23												
20	545 24	= P45 24												
21	545 51	= P45 24												
22	545 59  	012	H4 / L1	45	400	0	1	210	175	190	190	mGGA	B13	Audi, BMW, VW, Citroen, Peugeot, Renault, Fiat, Skoda
23	545 77	048	E2	45	300	0	1	218	135	203	225		B01	Renault R8-R13, Dacia
24	545 79	049	E2	45	300	1	1	218	135	203	225		B01	Peugeot, Honda, Dacia
25	545 84	= P45 23												
26	548 80	= 538 80												
27	550 41	= P50 41												
28	550 42	= P60 69												
29	555 18 	= 560 08												
30	555 19 	065 / 075	T5 / LB2	55	450	0	1	241	175	175	175	mGGA	B13	Ford, Opel
31	557 16	= 50 200 without handle												
32	560 08 	078	T5 / LB2	60	480	1	1	241	175	175	175	mGGA	B13	Lada, Moskvie
33	560 09 	075	T5 / LB2	60	480	0	1	241	175	175	175	mGGA	B13	Ford, Opel

 Double Top,  = 4-chamber leak protection, RF = vibration-resistant, GA = battery with central degassing, HGI = hard rubber set, mG = with handle, RZS = flame arrestor, * limited use, ** with base hold-down adapter

STARTING BULL

Typ	Info	UK No.	Box	Ah 20 h	A EN									Application	
								Length	Width	Box height	Total height				
12 Volt															
34	560 10		BCI 75	60	675	1	5	248	178		184	mGGA	B07	Chrysler Sebring/Stratus, GM Buick Regal/Chevy Camaro, Acura Integra/TL	
35	560 11	= 50 200													
36	560 62	= P60 62													
37	560 68	= P60 68													
38	560 69	= P60 69													
39	560 91	= 50 200													
40	562 05 	= P60 09/560 09													
41	562 19 		025 / 027	H5 / L2	62	510	0	1	241	175	190	190	mGGA	B13	Audi, BMW, VW, Citroen, Peugeot, Renault, Fiat, Skoda
42	563 18	= P72 09**/570 44**													
43	564 20	= P72 09**/570 44**													
44	565 33	= EFB 565 00													
45	566 13 	= P72 09/570 44													
46	570 24	= P70 24													
47	570 29	= P70 29/P80 09													
48	570 44 		100	T6 / LB3	70	640	0	1	278	175	175	175	mGGA	B13	Ford, Opel
49	570 72		072	D26/MO60	70	480	1	1	272	175		220		B01	TVR, Land Rover Discovery >99
50	570 88		088	D26/MO60	70	480	0	1	272	175		220		B00	Jaguar, Isuzu, Toyota
51	570 89		089	D26/MO60	70	480	1	1	272	175		220		B00	Jaguar, Triumph, Isuzu, Toyota
52	571 14	= P72 09/570 44 with Ford battery clamps													
53	572 09 	= P72 09/570 44													
54	572 12 		096	H6 / L3	72	650	0	1	278	175	190	190	mGGA	B13	Audi, BMW, VW, Citroen, Peugeot, Renault, Fiat, Skoda
55	572 33 		082 / 086	H6 / L3	72	650	1	1	278	175	190	190	mGGA	B01	Chrysler Voyager
56	580 09	= P80 09													
57	580 14 		110	T7 / LB4	80	660	0	1	315	175	175	175	mGGA	B13	Audi D, BMW D, Ford D, Opel D, Nissan D, Renault D, VW D
58	580 42	= PRO P84 40													
59	588 20 		017 / 024	T8 / LB5	88	660	0	1	354	175	175	175	mGGA	B13	Ford D, Opel D
60	590 17		643	95Ah	90	680	0	1	344	172	214	230	mG	B00	IHC, Massey Ferguson
61	590 18		644	95Ah	90	680	1	1	344	172	214	230	mG	B00	IHC, Mac Cormick
62	595 04	= P95 04													
63	595 05	= P95 05													
64	595 33 		019	H8 / L5	95	740	0	1	354	175	190	190	mGGA	B13	Audi, BMW, Mercedes, Porsche, VW
65	610 42	= PRO P110 40													

 Double Top,  = 4-chamber leak protection, RF = vibration-resistant, GA = battery with central degassing, HGI = hard rubber set, mG = with handle, RZS = flame arrestor, * limited use, ** with base hold-down adapter



BUFFALO BULL

THE BUFFALO BULL PUTS FULL POWER INTO EVERY COMMERCIAL VEHICLE FOR STOP & GO AND COLD STARTS.

Those who opt for the Buffalo Bull after having searched for a suitable and reliable starter battery for their commercial vehicles will have made just the right decision. This is because the Buffalo Bull is a brand battery with proven Banner quality.

Rugged, constant use in commercial vehicles puts batteries to the severest test. Moreover, over the years the demands made on modern batteries have increased greatly and in addition to cycle and vibration resistance, characteristics such as ease of maintenance, operational reliability and cold start performance are more important than ever. The optimised Buffalo Bull SHD constitutes the perfect response.

The Buffalo Bull SHD PROfessional is a top product that starts to show its problem-solving capacity in tough situations such as stop & go and cold starts, etc., when other batteries have long given up the ghost. It has thus consolidated its solid position in the lucrative retrofitting market.

Banner has equipped the Buffalo Bull with unbeatable advantages that make this battery ideal for modern trucks and buses.

TECHNICAL DATA AND INFORMATION

- ▶ Meets the requirements of Mercedes trucks
- ▶ Maintenance-free: hybrid technology ensures minimum water consumption
- ▶ Central degassing and patented four-chamber leak protection
- ▶ Captive, welded-in flame arrestors and safety screws
- ▶ PinFin protection against short circuits caused by tools
- ▶ SHD means extra cycle/vibration resistance in the highest E4/V3 category pursuant to EN 50342-1
- ▶ ConCast mesh production process and optimised mesh design provide reliable cold start performance
- ▶ EN 50342-4 casing height



Buses



Trucks



Construction machinery



Agricultural machinery



Snow groomers

BUFFALO BULL

Typ	Info	UK No.	Box	Ah 20 h	A EN						Application			
Buffalo Bull SHD PROfessional								Length	Width	Box height	Total height			
1	SHD PRO 645 03	637 SHD PROfessional	A	145	800	3	1	514	189	195	220	mGGARZS	B00	Neoplan, MAN, Mercedes, Volvo, Scania, Steyr Trucks
2	SHD PRO 680 08	629 SHD PROfessional	B	180	1000	3	1	514	223	195	220	mGGARZS	B00	Neoplan, MAN, Mercedes, Volvo, Scania, Steyr Trucks
3	SHD PRO 725 03	632 SHD PROfessional	C	225	1150	3	1	517	273	212	240	mGGARZS	B00	Neoplan, MAN, Mercedes, Volvo, Scania, Steyr Trucks
Buffalo Bull SHD								Length	Width	Box height	Total height			
4	SHD 610 40	615 SHD	MAC 110	110	760	3	1	514	175	210	210	mGGARZS	B03	MAN, Mercedes, Roman, Robur
5	SHD 620 34	= SHD PRO 645 03/SHD 640 35/620 34												
6	SHD 630 13	= SHD 670 33												
7	SHD 635 44	630 SHD	MAC 110	135	900	3	1	514	175	210	210	mGGARZS	B03	MAN, Mercedes, Roman
8	SHD 640 35	637 SHD	A	140	800	3	1	514	189	195	220	mGRZS	B00	Steyr Trucks, MAN, Mercedes
9	SHD 643 27	= SHD PRO 680 08/SHD 680 32/680 32												
10	SHD 650 38	= SHD PRO 645 03/SHD 640 35/640 35												
11	SHD 670 33	MAC 140 SHD	MAC 140	170	1000	3	1	514	218	210	210	mGGARZS	B03	MAN, Mercedes, Liaz
12	SHD 670 43	= SHD PRO 680 08/SHD 680 32/680 32												
13	SHD 680 32	629 SHD	B	180	1000	3	1	514	223	195	220	mGRZS	B00	Steyr Trucks, MAN, Roman, Multicar
14	SHD 700 27	= SHD PRO 725 03/SHD 725 11/725 11												
15	SHD 725 11	632 SHD	C	225	1150	3	1	517	273	212	240	mGRZS	B00	Steyr, MAN, Volvo-Trucks
Buffalo Bull								Length	Width	Box height	Total height			
16	600 26	221 / 616		100	600	0	1	413	175	195	220	mG	B00	Mercedes D, Steyr Tractors, Daihatsu D, Barkas, Ursus
17	600 35	221R		100	600	1	1	413	175	195	220	mG	B00	Daihatsu, Nissan, Mitsubishi D
18	605 02	Type 31/DP110 Centre Post	BCI 31	105	1000	9	1	330	171	218	241	mGGA	B00	Caterpillar, US Trucks
19	605 11	= 610 11												
20	605 27	= 610 48												
21	605 28	= 610 47												
22	610 11	663 BH	Compact	110	720	0	1	344	172	214	230	mG	B01	Iveco Daily 01.05-, Renault
23	610 47	663	Compact	110	720	0	1	344	172	214	230	mG	B00	IHC, Massey Ferguson
24	610 48	664	Compact	110	720	1	1	344	172	214	230	mG	B00	IHC, McCormick
25	610 50	= 605 02												
26	620 34	627	A	120	720	3	1	514	189	195	220	mG	B00/01	MAN, Mercedes, Roman, MAZ
27	625 11	647	Compact	125	760	0	1	345	172	260	283	mG	B00	Massey Ferguson
28	625 13	648	Compact	125	760	1	1	345	172	260	283	mG	B00	McCormick
29	625 23	6TN	NATO 6TN	125	720	2	1	280	267	213	230	mG	B00	NATO 6TN
30	632 11			132	900	0	1	508	174	205	205	mG	B01	CNH Case New Holland, John Deere, Landini, McCormick
31	635 11	655		135	760	0	1	345	172	260	283	mG	B00	Commercial vehicles
32	635 13	656		135	760	1	1	345	172	260	283	mG	B00	Commercial vehicles
33	640 35	637	A	140	760	3	1	514	189	195	220	mG	B00/01	Steyr Trucks, MAN, Mercedes

♦ Double Top, ♦♦ 4-chamber leak protection, RF = vibration-resistant, GA = battery with central degassing, HGI = hard rubber set, mG = with handle, RZS = flame arrestor, * limited use, ** with base hold-down adapter

BUFFALO BULL

Typ	Info	UK No.	Box	Ah 20 h	A EN									Application	
								Length	Width	Box height	Total height				
34	670 43	= SHD 680 32/680 32													
35	680 32		629 (180ah)	B	180	950	3	1	514	223	195	220	mG	B00	Steyr-Trucks, MAN, Roman, Multicar, Magirus
36	680 89		623	MAC 154	180	950	4	1	510	216	205	225	mGGA	B03	Fiat Trucks, Tractors
37	700 27	= SHD 725 11/725 11													
38	700 29		624	C	200	1000	4	1	517	273	212	240	mG	B00	Volvo, Scania
39	725 11		632	C	225	1050	3	1	517	273	212	240	mG	B00	Steyr, MAN, Volvo-Trucks, Caterpillar, Tatra

Double Top, = 4-chamber leak protection, RF = vibration-resistant, GA = battery with central degassing, HGI = hard rubber set, mG = with handle, RZS = flame arrestor,
 * limited use, ** with base hold-down adapter





ENERGY BULL

**PORTABLE POWER WITH THE CYCLE-RESISTANT,
SPECIAL BATTERY FOR HOBBIES AND LEISURE - FITTED AS ORIGINAL EQUIPMENT
BY LEADING UK & EUROPEAN MOTORHOME MANUFACTURERS & CONVERTERS.**

With the Energy Bull, Banner offers a special battery for hobby and leisure purposes. The Energy Bull's features mean that it is robust and an ideal energy source for camping/caravanning, on boats and a wealth of other applications that extend to signalling systems and the powering of e-motors.

TECHNICAL DATA AND INFORMATION

- ▶ The Energy Bull offers up to four times the cycle resistance of standard starter batteries and is extremely cyclical resistant and durable
- ▶ MIN/MAX markings on the transparent battery casing and easy opening make the battery maintenance-friendly
- ▶ External ignition protection is integrated into the battery cover and surge protectors
- ▶ Low maintenance is secured by minimum water consumption and self-discharge
- ▶ The suitability of any standard charger makes charging straightforward
- ▶ A top V3 vibration resistance rating pursuant to EN 50342-1 is secured by plate bonding to the battery bottom and pocket separators with glass web layer
- ▶ Optimum capacity that is perfect for deal with cyclical loads
- ▶ Delivery in a filled and charged condition is both user- and environment-friendly
- ▶ Practical handles for easy transport



Yachts



Motorhomes



Caravans



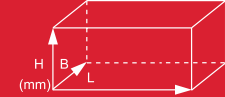










Camping



Solar power systems



ENERGY BULL


Typ	Info	UK No.	Box	Ah 5 h	Ah 20 h	Ah 100 h						Application				
													Length	Width	Box height	Total height
1	955 01 		065 Box Premium Leisure	H5 / L2	50	60	70	0	1	241	175	190	190	mGGA	B13	Caravan, Motorhome, Camping, Wheelchairs
2	955 51		678 Box Premium Leisure	D26 / MO60	55	72	85	1	1	256	174	205	225	mGGA	B00	Caravan, Motorhome, Camping, Boats, Wheelchairs
3	956 01 		096 Box Premium Leisure	H6 / L3	60	80	90	0	1	278	175	190	190	mGGA	B13	Caravan, Motorhome, Camping, Wheelchairs
4	957 51 		110LB / 019 Box Premium Leisure	H8 / L5	75	100	110	0	1	354	175	190	190	mGGA	B13	Caravan, Motorhome, Camping, Boats
5	959 01 		110 / 679 Box Premium Leisure	LOT7	90	115	135	0	1	350	175	230	230	mGGA	B00	Caravan, Motorhome, Camping, Boats
6	960 51		627 Box Premium Leisure	A	105	130	140	3	1	514	189	195	220	mGRZS	B00	Caravan, Motorhome, Camping, Boats, Signal units
7	963 51		629 Box Premium Leisure	B	135	180	195	3	1	514	223	195	220	mGRZS	B00	Caravan, Motorhome, Camping, Boats
8	968 01		625 Box Premium Leisure	C	180	230	250	3	1	517	273	212	240	mGRZS	B00	Caravan, Motorhome, Camping, Boats
Voyager Leisure																
9	VL678		678 Standard Leisure	D26 / MO60	47	55	75	1	1	272	172	202	220	mGGA	B00	Caravan, Motorhome, Camping, Mains Hook Up, Light Cycling
10	VL679		679 Standard Leisure		70	90	110	1	1	344	172		235	mGGA	B00	Caravan, Motorhome, Camping, Mains Hook Up, Light Cycling



 Double Top,  = 4-chamber leak protection, RF = vibration-resistant, GA = battery with central degassing, HGI = hard rubber set, mG = with handle, RZS = flame arrestor, * limited use, ** with base hold-down adapter



Ah 20 h	Capacity Ah 20 h rate
A (EN)	Cold discharge test current in A

	Layout
	Terminal

	Max. dimensions mm Length x Width x Box-/Total height
---	--

	Battery specifications
	Base hold-down



BIKE BULL CLASSIC

MOTORBIKE POWER.

Entry into Banner's brand world consists of classic lead batteries with an electrolyte pack. The robust technology involved has been specially trimmed to motorcycling and the batteries are only opened for commissioning and maintenance.

TECHNICAL DATA AND INFORMATION

- ▶ Highly resilient
- ▶ Reliable starting even in the case of short distance use
- ▶ Extensive product programme with 35 types of battery
- ▶ Dry pre-charging, including electrolyte pack



Motorcycles road/cross



ATV/Quads



Jetskis



Tractor mowers







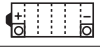
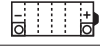
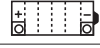





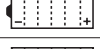
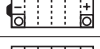
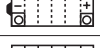
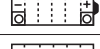




Snowmobiles

BIKE BULL CLASSIC

Banner battery type		First fitting designation	Banner order number	Ah 10 h							Drawing
6 Volt						Length x Width x Height					
1	004 12	6N4B-2A	020 004 12 0100	4	5	102	48	96	0,20	B00	
2	007 14	B39-6	020 007 14 0100	7	6	126	48	126	0,30	B00	
3	008 11	B49-6	020 008 11 0100	8	6	91	83	160	0,50	B00	
4	012 11	6N11A-3A	020 012 11 0100	11	6	122	62	132	0,40	B00	
5	012 14	6N11A-1B	020 012 14 0100	11	6	122	62	132	0,40	B00	
6	012 25	6N12A-2D	020 012 25 0100	12	6	156	57	116	0,50	B00	
7	013 14	B38-6A	020 013 14 0100	14	6	119	83	161	0,70	B00	
12 Volt											
8	503 12	YB3L-A	020 503 12 0100	3	6	98	56	110	0,20	B00	
9	503 13	YB3L-B	020 503 13 0100	3	6	98	56	110	0,20	B00	
10	504 11	YB4L-B	020 504 11 0100	4	5	120	70	92	0,30	B00	
11	505 12	YB5L-B	020 505 12 0100	5	6	120	60	130	0,40	B00	
12	506 11	12N5,5-3B	020 506 11 0100	6	6	135	60	130	0,40	B00	
13	507 13	YB7-A	020 507 13 0100	8	6	135	75	133	0,60	B00	
14	507 14	YB7C-A	020 507 14 0100	8	3	130	90	114	0,60	B00	
15	509 14	YB9-B	020 509 14 0100	9	6	135	75	139	0,60	B00	
16	511 12	YB10L-A2	020 511 12 0100	11	8	135	90	145	0,80	B00	
17	511 13	YB10L-B	020 511 13 0100	11	6	135	90	145	0,80	B00	
18	512 11	YB12A-A	020 512 11 0100	12	6	134	80	160	0,80	B00	
19	512 13	YB12AL-A2	020 512 13 0100	12	8	134	80	160	0,80	B00	

BIKE BULL CLASSIC


	Banner battery type	First fitting designation	Banner order number	Ah 10 h							Drawing
Length x Width x Height											
20	512 15	YB12A-B	020 512 15 0100	12	6	134	80	160	0,80	B00	
21	514 11	YB14L-A2	020 514 11 0100	14	8	134	89	166	0,90	B00	
22	514 12	YB14-A2	020 514 12 0100	14	8	134	89	166	0,90	B00	
23	514 13	YB14L-B2	020 514 13 0100	14	8	134	89	166	0,90	B00	
24	514 14	YB14-B2	020 514 14 0100	14	8	134	89	166	0,90	B00	
25	516 15	YB16B-A1	020 516 15 0100	16	7	160	90	161	1,00	B00	
26	516 16	YB16AL-A2	020 516 16 0100	16	2	207	71	164	1,10	B00	
27	518 14	Europa	020 518 14 0100	18	10	186	82	171	1,00	B00	
28	519 12	YB16-B	020 519 12 0100	19	6	175	100	155	1,20	B00	
29	519 15	YB16HL-A-CX	020 519 15 0100	19	5	175	100	155	1,20	B00	
30	520 11	Y50-N18L-A3	020 520 11 0100	20	4	205	90	162	1,40	B00	
31	520 12	Y50-N18L-A	020 520 12 0100	20	7	205	90	162	1,40	B00	
32	528 16	Y60-N24L-A	020 528 16 0100	28	3	184	124	175	1,70	B00	
33	530 15	YB30L-B	020 530 15 0100	30	4	168	132	176	2,00	B00	
34	530 30		010 530 30 0101	30	10	187	128	165	1,60	B00	
35	530 34		010 530 34 0101	30	10	187	128	165	1,60	B00	

Ah 10 h


Capacity in Ah (10h)

A (CCA)


Low-temperature test current



Terminal



Max. dimensions in mm
Length x Width x Total height



Bottom strip



Acid in approx. litres



BIKE BULL AGM

THE LATEST AGM TECHNOLOGY FOR UNIVERSAL APPLICATIONS.

This is pure Banner power for motorcycles, ATVs/quads, jet skis and tractor mowers. Bike Bull AGM batteries are absolutely maintenance-free and employ the latest absorbent glass mat (AGM) technology. The acid is bound in by the mat and therefore cannot escape.

TECHNICAL DATA AND INFORMATION

- ▶ Excellent start performance with safety reserves
- ▶ AGM technology
- ▶ Absolutely maintenance-free
- ▶ Vibration-resistant
- ▶ Dry pre-charging, including electrolyte pack



Motorcycles road/cross



ATV/Quads



Jetskis



Tractor mowers



Snowmobiles

BIKE BULL AGM

Banner battery type	First fitting designation	Banner order number	Ah 10 h	A (CCA)					Drawing			
Length x Width x Height												
1	AGM 503 14	YTX4L-BS	021 503 14 0100	3	40	5	114	71	86	0,19	B00	
2	AGM 504 12	YTX5L-BS	021 504 12 0100	4	55	5	114	71	106	0,24	B00	
3	AGM 506 14	YTX7L-BS	021 506 14 0100	6	75	5	114	71	131	0,33	B00	
4	AGM 506 15	YTX7A-BS	021 506 15 0100	6	85	5	150	87	95	0,38	B00	
5	AGM 508 12	YTX9-BS	021 508 12 0100	8	90	5	150	87	105	0,45	B00	
6	AGM 510 12	YTX12-BS	021 510 12 0100	10	160	5	150	87	131	0,60	B00	
7	AGM 512 14	YTX14-BS	021 512 14 0100	12	180	5	150	87	147	0,69	B00	
8	AGM 513 14	YTX15L-BS	021 513 14 0100	13	180	4	175	87	130	0,75	B00	
9	AGM 514 22	YTX16-BS	021 514 22 0100	14	200	4	150	87	161	0,80	B00	
10	AGM 518 21	YTX20L-BS	021 518 21 0100	18	210	4	175	87	155	0,90	B00	
11	AGM 518 22	YTX20CH-BS	021 518 22 0100	18	220	4	150	87	161	0,70	B00	
12	AGM 522 14	YTX50L-BS	021 522 14 0100	22	300	4	205	87	162	1,08	B00	

Ah 10 h

Capacity in Ah (10h)

A (CCA)

Low-temperature test current

Terminal

Max. dimensions in mm
Length x Width x Total height

Bottom strip

Acid in approx. litres



BIKE BULL GEL

NEW

GEL POWER FOR OFF-ROAD AND TOURING RIDERS.

The new Bike Bull GEL product line combines innovative GEL technology with the highest levels of user-friendliness and operational safety. It is therefore ideally suited to enduro and touring bikes. The Bike Bull GEL is an advanced quality battery with non-woven web separator and fixed electrolyte. It offers increased start performance and outstanding vibration and cyclical resistance.

TECHNICAL DATA AND INFORMATION

- ▶ Excellent start performance
- ▶ High levels of vibration and cyclical resistance
- ▶ Absolutely maintenance-free
- ▶ Totally leak-free
- ▶ Installation in a lateral position possible
- ▶ Pre-charged and ready for immediate use



Motorcycles road/cross



ATV/Quads



Jetskis



Tractor mowers

BIKE BULL GEL

Banner battery type	First fitting designation	Banner order number	Ah 10 h	A (CCA)					Drawing			
Length x Width x Height												
1	GEL 503 01	GTR4A-5	023 503 01 0101	3	53	12	113	48	85	-	B00	
2	GEL 506 01	GT7B-4	023 506 01 0101	6	90	11	150	65	92	-	B00	
3	GEL 506 21	GT7-3	023 506 21 0101	6	98	5	114	71	106	-	B00	
4	GEL 508 01	GT9B-4	023 508 01 0101	8	112	11	150	69	105	-	B00	
5	GEL 509 01	GTZ10-4	023 509 01 0101	9	180	11	150	86	94	-	B00	
6	GEL 510 01	GT12B-4	023 510 01 0101	10	180	11	150	69	130	-	B00	
7	GEL 510 21	GT12A-4	023 510 21 0101	10	180	11	150	87	106	-	B00	
8	GEL 512 01	GTZ14-4	023 512 01 0101	11	172	11	151	87	110	-	B00	
9	GEL 512 21	GTZ14B-4	023 512 21 0101	12	165	11	150	69	145	-	B00	
10	GEL 521 01	GT20H-3	023 521 01 0101	19	375	10	183	79	171	-	B00	
11	GEL 530 01	GT30-3	023 530 01 0101	30	390	5	168	127	177	-	B00	

Ah 10 h

Capacity in Ah (10h)

A (CCA)

Low-temperature test current

Terminal

Max. dimensions in mm
Length x Width x Total height

Bottom strip

Acid in approx. litres



BIKE BULL AGM PROFESSIONAL

NEW

PROFESSIONAL AGM POWER FOR HIGHEST DEMANDS.

The new Bike Bull AGM PROfessional is a top product in original parts (OEM) quality. This premium AGM battery is used for Harley Davidsons and BMW bikes, as well as for models with ABS and numerous special features. Due to its excellent stability in low temperatures, it is also ideal for snowmobiles. In combination with tipping safety, this leak-proof battery also stands out due to its vibration resistance and exceptional starting performance.

TECHNICAL DATA AND INFORMATION

- ▶ Top start performance
- ▶ Maximum vibration and cyclical resistance
- ▶ Absolutely maintenance-free
- ▶ Totally leak-free
- ▶ Installation in a lateral position possible
- ▶ Excellent stability in low temperatures
- ▶ Pre-charged and ready for immediate use



Motorcycles road/cross



ATV/Quads



Jetskis



Tractor mowers



Snowmobiles

BIKE BULL AGM PROFESSIONAL

Banner battery type	First fitting designation	Banner order number	Ah 10 h	A (CCA)					Drawing			
Length x Width x Height												
1	AGM PRO 509 01	ETX 9	024 509 01 0101	8	120	10	150	88	106	-	B00	
2	AGM PRO 514 01	ETX 14	024 514 01 0101	12	220	10	150	88	145	-	B00	
3	AGM PRO 516 01	ETX 16L	024 516 01 0101	19	325	10	175	100	155	-	B00	
4	AGM PRO 520 01	ETX 20L	024 520 01 0101	18	310	10	175	88	155	-	B00	
5	AGM PRO 530 01	ETX 30L	024 530 01 0101	26	400	10	168	131	176	-	B00	

	Terminal				Terminal				Terminal		
	Front	Side	Top		Front	Side	Top		Front	Side	Top
1				6				11			
2				7				12			
3				8				13			
4				9				14			
5				10							

Ah 10 h

Capacity in Ah (10h)

A (CCA)

Low-temperature test current

Terminal

Max. dimensions in mm
Length x Width x Total height

Bottom strip

Acid in approx. litres

LAYOUT

	6 Volt	12 Volt
0		
1		
2		
3		
4		

	6 Volt	12 Volt
5		
6		
9		
10		

TERMINALS

 Terminal 1	 Terminal 4
 Terminal 3	 Terminal 5
 Terminal DT A	 Terminal DT V

 Terminal 8	 Terminal 20 Dimension as shown in fig 'terminal 1'
 Terminal 19	 Terminal K Terminal 21

BASE HOLD-DOWNS

	without hold down		
B 00			
B 01			
B 03			
B 04			
B 05			
B 06			
B 07			

B 09			
B 11			
B 12			
B 13			
B 14			



Traction Bull

The traction battery for the toughest industrial requirements.



Traction Bull Bloc

The leak-proof battery for extreme applications. With electrolyte in either liquid or AGM/GEL form.



Stand by Bull Bloc SBV

Stand by Bull Bloc GIV

Stand by Bull

The stationary battery for secure supplies of emergency power.



Banner Battery Accessories

Technology for professional battery servicing.



Wuchtfit

Lead-free wheel weights for all rims and vehicles.



We herewith confirm, that Banner GmbH is a producer and supplier of Original Equipment for the following manufacturers:

Manufacturer, model	Battery type(s)
Aston Martin	88 Ah flooded battery and 90 Ah AGM
AIXAM	various flooded battery types
Audi A3, Q5 Hybrid	EFB 69 Ah, AUX 14 AGM
BMW various models	90 Ah and 105 Ah AGM
Bomag construction equipment	various flooded battery types (AGM and EFB)
Caterpillar	various flooded battery types
Kärböhrer Pistenbully	various flooded battery types
Knaus Tabbert catavan	80 Ah and 95 Ah AGM
KTM X-Bow	Banner Ural Bull
Liabbert construction equipment	various flooded battery types
Mitsubishi	various flooded battery types
Mercedes commercial vehicle	170 Ah flooded battery
porche 911, boxer, Cayman	various AGM batteries
Rammex construction equipment	various flooded battery type
Seat	EFB 69 Ah
Suzuki	various flooded battery types
VOLVO	AUX 9 AGM
VW Passat, Golf, Amarok	EFB 69 Ah, 72 Ah and 95 Ah

LEADING COMPANIES OF THE WORLD

Banner Batteries
THE BATTERY COMPANY



CERTIFICATIONS

Manufacture at the Austrian production centre in Linz ensures constant, certificated top quality in accordance with ISO/TS 16949, ISO 9001 and ISO 14001.

PATENTS

- AccuSafe joint patent with Gore - usufruct rights assigned to Gore DE 197 03 444
- AccuSafe new applicant Banner A - 943/2001
- Double cover joint patent with Moll U - 02027 9204 (registration still in progress, also registered in the USA)
- AGM valve stopper joint registered design protection with Accumalux

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