

LEADING COMPANIES OF AUSTRIA







Start-stop cars















Motorhomes





Construction machinery

AGM FOR START-STOP VEHICLES AND E-CARS WITH MAXIMUM ENERGY NEEDS.

Over 95 per cent of all new vehicles are currently equipped 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 used 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 upon the fuel and CO₂ attained. AGM technology is employed for start-stop systems with maximum energy requirements and braking energy recuperation. Within this context, in particular the Running Bull AGM constitutes the optimum solution for mid-range to premium and luxury class vehicles.

TECHNICAL DATA AND INFORMATION

- Valve-regulated AGM battery (VRLA)
- Range of six types with capacities from 50-105Ah
- Three times greater cycle resistance than standard batteries: highest M3 classification pursuant to EN 50342-1:2016
- Leak-proof due to electrolyte bonding into an absorbent glass mat
- Zero maintenance owing to recombination technology
- High V3 vibration resistance pursuant to EN 50342-1:2016
- 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 electrical system power supply battery
- Original equipment quality







Start-stop cars

















Hint: replace AGM with AGM

Type UK No.	Into	Вох	Ah 20 h	A EN	- + OO	(mm) L H B	Application

RUNNING BULL

AGM BATTERY WITH A GLASS MAT FOR PREMIUM START-STOP APPLICATIONS

									Length	Width	Box height	Total height			
NEW	AGM 550 01	012 AGM OE		H4 / L1	50	540	0	1	210	175	190	190		B13	BMW, Mini, VW, Audi, Opel, Hyundai, Kia, Suzuki
	AGM 560 01	027 AGM OE		H5 / L2	60	640	0	1	241	175	190	190	mG	B13	BMW, Mini, VW, Audi, Opel, Hyundai, Kia, Suzuki
	AGM 570 01	096 AGM OE		H6 / L3	70	720	0	1	278	175	190	190	mG	B13	BMW, VW, Audi, Mercedes, Porsche, Taxis
	AGM 580 01	110 AGM OE		H7 / L4	80	800	0	1	315	175	190	190	mG	B13	BMW, VW, Audi, Mercedes, Porsche, Taxis
	AGM 592 01	019 AGM OE		H8 / L5	92	850	0	1	354	175	190	190	mG	B13	BMW, VW, Audi, Mercedes, Porsche, Taxis
	AGM 605 01	020 AGM OE	Installizab	H9 / L6	105	950	0	1	394	175	190	190	mG	B13	BMW, VW, Audi, Mercedes, Porsche, Taxis

BACK-UP FOR START-STOP VEHICLES AND E-CARS

WITH EXTREMELY HIGH ENERGY NEEDS.

The use of the same trendsetting AGM technology as contained in the "big" Running Bull AGM makes the Running Bull BackUp the ideal support for the starter battery. This small power pack is utilised in vehicles fitted with start-stop systems and additional consumers with high energy requirements such as redundant safety and power steering. It is also being increasingly employed as a battery for the on-board systems in e-cars.





Start-stop cars





TECHNICAL DATA AND INFORMATION

- Valve-regulated AGM battery (VRLA)
- Range of three types with capacities from 9-20 Ah
- · Used by Audi, BMW, Mercedes and Volvo for first fitting
- Three times greater cycle resistance than standard batteries: highest M3 classification pursuant to EN 50342-1:2016
- Zero maintenance owing to recombination technology
- Leak-proof due to electrolyte bonding into an absorbent glass mat
- Installation in a lateral position possible (max. 90° angle)



Type

UK

Info

Box









Application

RUNNING BULL

AGM BACKUP WITH A GLASS MAT AS AN ON-BOARD BATTERY

					Length	Width	Box height	Total height		
509 00/AUX 09 AUX9 OE	9	120	1	10	150	88	106	106	B00	Volvo Start-Stopp, DRIVe
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
518 01/AUX 18L AUX18L OE	20	300	0	10	206	91	163	163	B00	BMW i3

EFB / PRO FOR START-STOP VEHICLES AND E-CARS WITH HIGH ENERGY NEEDS.

The new, performance-enhanced top versions of the Running Bull EFB PROfessional are based on proven Running Bull EFB technology and meet, or even exceed, the specifications for start-stop car batteries of leading German car manufacturers such as BMW and VW. These power packs are designed for modern, start-stop cars with high energy requirements and are also increasingly used as on-board batteries in e-cars.

TECHNICAL DATA AND INFORMATION

- Range of eleven types with capacities from 38-95Ah
- Glass fleece cover on the separator and special active mass composition
- Twice the cycle resistance of standard batteries: M2 classification pursuant to EN 50342-1:2016
- Top V3 vibration resistance rating pursuant to EN 50342-1:2016
- Measures to reduce acid stratification and improve charge absorption
- "Carbon loaded": The carbon additives lead to a marked reduction of the charging time!
- Double lid for maximum protection against leaks and operational safety
- Zero maintenance owing to modern calcium/calcium mesh technology
- · Original equipment quality







Start-stop cars





















- + Banner tip. What must be considered when upgrading the technology of startstop batteries from EFB to AGM? The heat-resistant EFB battery with a fitted thermal protection cover is located directly next to the engine block (combustion engine) and is to be preferred if it has already been installed as the original battery ex-works.
- + Banner note. Slight deviations in capacity or cold starting have no effect upon safety or the optimum electrical system power supply!

20 h





RUNNING BULL

Type

UK

EFB PROFESSIONAL BATTERY WITH EXTRA POWER FOR START-STOP APPLICATIONS

Box

									Length	Width	Box height	Total height			
VEW ?	EFB PRO 565 11	027 EFB UR OE	replaces EFB 560 11	H5 / L2	65	640	0	1	241	175	190	190	mGGA	B13	Alfa Romeo, Audi, BMW, Citroen, Fiat, Peugeot, Seat, Skoda, Toyota, VW
VEW :	EFB PRO 575 11	096 EFB UR OE	replaces EFB 570 11	H6 / L3	75	700	0	1	278	175	190	190	mGGA	B13	Alfa Romeo, Audi, BMW, Citroen, Fiat, Peugeot, Seat, Skoda, Toyota, VW
VEW ?	EFB PRO 585 11	115 EFB UR OE	replaces EFB 580 11, Starting Bull 588 34	H7 / L4	85	780	0	1	315	175	190	190	mGGA	B13	Alfa Romeo, Audi, BMW, Citroen, Fiat, Peugeot, Seat, Skoda, Toyota, VW

EFB BATTERY FOR STANDARD START-STOP APPLICATIONS

Info

								Length	Width	Box height	Total height			
EFB 538 15	054 EFB OE		35NS/B19	38	400	0	3	187	127	204	226	mGGA	B07	Mazda, Mitsubishi, Nissan, Subaru, Toyota
EFB 555 15	044 / 053 / 158 EFB OE		45NS/B24	55	460	0	1+3	238	129	203	225	mGGA	B00	Mazda, Mitsubishi, Nissan, Subaru, Toyota
EFB 560 11		= EFB PRO 565 11												
EFB 565 12	100 EFB OE		T6 / LB3	65	650	0	1	278	175	175	175	mGGA	B13	Ford, Opel
EFB 565 15	005L EFB OE	replaces EFB 565 00	D23	65	550	0	1	233	173	203	225	mGGA	B00	Mazda, Mitsubishi, Nissan, Subaru, Toyota
EFB 565 16	005 EFB OE	replaces EFB 565 01	D23	65	550	1	1	233	173	203	225	mGGA	B00	Mazda, Mitsubishi, Nissan, Subaru, Toyota
EFB 570 11		= EFB PRO 575 11												
EFB 570 15	068 EFB OE		D26 / MO60	70	680	0	1	260	174	200	222	mGGA	B00	Mazda, Mitsubishi, Nissan, Subaru, Toyota
EFB 575 12	110 EFB OE		T7 / LB4	75	730	0	1	315	175	175	175	mGGA	B13	Ford, Opel
EFB 580 11		= EFB PRO 585 11												
EFB 595 15	249 / 335 EFB OE	replaces EFB 595 00	D31 / 56AT	95	760	0	1	303	173	203	225	mGGA	B00	Mazda, Mitsubishi, Nissan, Subaru, Toyota - D, Fiat tractors





Start-stop cars



















Application











POWER BULL / PRO – SUPERBLY POWERFUL AND SAFE!MODERN CALCIUM TECHNOLOGY FOR ALL CARS WITHOUT A START-STOP FUNCTION.

The Power BULL PRO constitutes the "PROlongation" of a success story and hence the continuation of the triumphal progress of Power Bull PRO starter batteries. This is because Banner's "TOP-seller" offers proverbial, multiple award-winning product attributes and premium performance in a perfect symbiosis, which quite simply adds up to original part quality for retrofitting. The top, performance-enhanced Power Bull PROfessional versions are based on proven Power Bull technology and meet the car battery specifications of leading German car manufacturers such as BMW and VW. These power packs are designed for modern passenger cars with very high energy requirements, but without start-stop systems.

TECHNICAL DATA AND INFORMATION

- Robust cyclical behaviour with E2 classification pursuant to EN 50342-1:2016
- Double Top for twice the leak protection and 100 per cent leak protection up to an angle of 55°
- Absolutely maintenance-free due to modern calcium/calcium technology
- · Optimised cold start values, highest starting power
- Extensive coverage of the European and Asian vehicle fleets owing to 26 battery types from 40-110 Ah
- V2 vibration resistance rating pursuant to EN 50342-1:2016 due to the bonding of the plates to the battery floor and robust cell connections
- Improved flame arrest and ESD safety levels (against electrostatic discharge)



+ Banner tip. A Power Bull battery can be upgraded to an even more powerful Power Bull PRO battery in H5/L2 (62 Ah), H6/L3 (74 Ah) und H8/L5 (95 Ah) boxes. Please contact your Banner customer advisor.





Taxis









Application





Type

UK No.

Info

Box Ah









POWER BULL PROFESSIONAL CALCIUM CAR BATTERY OF THE LATEST GENERATION

									Length	Width	Box height	Total height			
DT	PRO P50 40		= Power Bull P50 03								ĺ				
DT	PRO P50 42		= Power Bull P44 09								ĺ				
DT	PRO P63 40	027 UR		H5 / L2	63	620	0	1	241	175	190	190	mGGA	B13	Audi, BMW, VW, Citroen, Mercedes, Peugeot, Renault, Fiat, Skoda
DT	PRO P63 42		= Power Bull P60 09								[
DT	PRO P77 40	096 UR		H6 / L3	77	700	0	1	278	175	190	190	mGGA	B13	Audi, BMW, VW, Citroen, Mercedes, Peugeot, Renault, Fiat, Skoda
DT	PRO P77 42		= Power Bull P72 09								ĺ				
DT	PRO P84 40	115 UR		H7 / L4	84	760	0	1	315	175	190	190	mGGA	B13	Audi, BMW, VW, Citroen, Mercedes, Peugeot, Renault, Fiat, Skoda
DT	PRO P100 40	019 UR		H8 / L5	100	820	0	1	354	175	190	190	mGGA	B13	Audi, BMW, VW, Citroen, Mercedes, Peugeot, Renault, Fiat, Skoda
DT	PRO P110 40	020 UR		H9 / L6	110	900	0	1	394	175	190	190	mGGA	B13	Audi, BMW, VW, Mercedes

A CALCIUM CAR BATTERY OF THE LATEST GENERATION

							i		Ī.		Box	Total			
									Length	Width	height	height			
	P40 25	054 BH		35NS/B19	40	330	0	3	187	137	204	226	mGGA	B01	535 04
	P40 26	054		35NS/B19	40	330	0	3	187	127	204	226	mGGA	B00	535 20, 540 26
	P40 27	055		35NS/B19	40	330	1	3	187	127	204	226	mGGA	B00	535 22, 540 27
	P42 08	002L / 202		H3 / L0	42	390	0	1	175	175	190	190	mGGA	B13	540 08, 542 08
DT	P44 09	063	replaces PRO P50 42	T4 / LB1	44	420	0	1	210	175	175	175	mGGA	B13	536 46**/53, 540 45**/63, 544 09/59*, 545 59*
	P45 23	044 / 053 / 158		45NS/B24	45	390	0	1+3	238	129	203	225	mGGA	B00	545 23/84
	P45 24	043 / 057 / 159		45NS/B24	45	390	1	1+3	238	129	203	225	mGGA	B00	545 24/51
DT	P50 03	012	replaces PRO P50 40	H4 / L1	50	450	0	1	210	175	190	190	mGGA	B13	544 09*/59, 545 59, 550 03
	P50 41		no alternative type												
DT	P60 09	075	replaces PRO P63 42	T5 / LB2	60	540	0	1	241	175	175	175	mGGA	B13	545 19**, 555 19/59*, 560 09
	P60 62		= Power Bull P60 68												
	P60 68	005L - BH	replaces P60 62	D23	60	510	0	1	233	173	203	225	mGGA	B07	560 62, 560 68, 565 33
	P60 69	005R/014		D23	60	510	1	1	233	173	203	225	mGGA	B07	560 69, 565 34
DT	P62 19	025 / 027		H5 / L2	62	550	0	1	241	175	190	190	mGGA	B13	560 09*, 562 05*/19
	P70 24	069		D26 / MO60	70	600	1	1	260	174	200	222	mGGA	B01	560 49, 570 24
	P70 29	068		D26 / MO60	70	600	0	1	260	174	200	222	mGGA	B01	560 48, 570 29, 580 09
DT	P72 09	100	replaces PRO P77 42	T6 / LB3	72	670	0	1	278	175	175	175	mGGA	B13	563 18**, 564 20**, 566 13/38*, 570 44, 571 13, 572 09/12*, 574 05/12*
DT	P74 12	096		H6 / L3	74	680	0	1	278	175	190	190	mGGA	B13	566 13*/38, 570 44*, 572 09*/12, 574 05*/12
	P80 09	068 HD		D26 / MO60	80	640	0	1	260	174	200	222	mGGA	B01	560 48, 570 29, 580 09
DT	P80 14	110		T7 / LB4	80	700	0	1	315	175	175	175	mGGA	B13	575 39, 580 14/35*/42*
DT	P88 20		= Starting Bull 588 20												
	P95 04	249 / 335		D31 / 56AT	95	740	0	1	303	173	203	225	mGGA	B07	595 04, 600 32
	P95 05	250/334		D31 / 56AT	95	740	1	1	303	173	203	225	mGGA	B07	595 05, 600 33
DT	P95 33	019		H8 / L5	95	780	0	1	354	175	190	190	mGGA	B13	595 21/33, 600 44









STARTING BULL

THE ENTRY TO THE Banner BRAND WORLD.

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 meets the very latest battery design standards.

TECHNICAL DATA AND INFORMATION

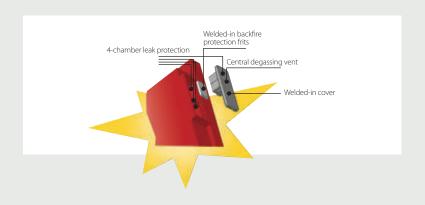
- Four-chamber leak protection with integrated flame arrestor sateguard for 12 best sellers from 44-95 Ah
- · Absolutely maintenance-free due to the use of calcium technology
- · Reliable cold starting behaviour
- Niche and supplementary types ensure complete coverage of the current vehicle fleet in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



4-CHAMBER LEAK PROTECTION.

THE INNOVATIVE SAFETY GUARANTEE.

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









حجلتام	
Cars	





Tuna	UK	Info	Pov	Ah	Α	-		1 a	Application
Туре	No.	Info	Box	20 h	EN	- +	ŌŌ	(mm)	Аррисации

STARTING BULL

CAR BATTERY IN OEM QUALITY

6 Volt								Length	Width		Total			
066 12	421			66	360	0	1	178	175	height 166	height 188		B04	VW - 1968, Trabant
077 18	404			77	450	0	1	216	170	166	191		B06	VW, Ford D, Trabant, Tatra 613
0// 10	101		l I	//	750	U		210	170	100	121	i i	ВОО	www, rold b, frabalit, fatta ors
			-											,
12 Volt								Length	Width	Box height	Total height			
530 30	895 / 101	replaces Bike Bull 528 16		30	300	0	4	187	128	165	165	mGGA	B00	Small tractors, BMW motorcycles
530 34	896			30	300	1	4	187	128	165	165	mGGA	B00	Small tractors
532 02	002R			32	240	1	1	165	170	165	190		B13	2000 Spanish built Vitara
538 37	037			38	300	0	19	239	135	179	200	ĺ	B09	Early Fords up to 1976
538 80	038			38	260	1	1	239	135	179	200	mG	B09	Austin
544 09	063 (44Ah)		T4 / LB1	44	360	0	1	210	175	175	175	mGGA	B13	Ford, Opel
4K 545 59	012		H4 / L1	45	400	0	1	210	175	190	190	mGGA	B13	Audi, BMW, VW, Citroen, Peugeot, Renault, Fiat, Skoda
545 77	048		E2	45	300	0	1	218	135	203	225		B01	Renault R8-R13, Dacia
545 79	049		E2	45	300	1	1	218	135	203	225		B01	Peugeot, Honda, Dacia
4K 555 19	065 / 075		T5 / LB2	55	450	0	1	241	175	175	175	mGGA	B13	Ford, Opel
4K 560 08	078		T5 / LB2	60	480	1	1	241	175	175	175	mGGA	B13	Lada, Moskvië
4K 560 09	075		T5 / LB2	60	480	0	1	241	175	175	175	mGGA	B13	Ford, Opel
560 10	U.S.A.		BCI 75	60	675	1	5	248	178		184	mGGA	B07	Chrysler Sebring/Stratus, GM Buick Regal/Chevy Camaro, Acura Integra/TL
4K 562 19	025 / 027		H5 / L2	62	510	0	1	241	175	190	190	mGGA	B13	Audi, BMW, VW, Citroen, Peugeot, Renault, Fiat, Skoda
4K 570 44	100		T6 / LB3	70	640	0	1	278	175	175	175	mGGA	B13	Ford, Opel
570 72	072		D26 / MO60	70	480	1	1	272	175		220	ĺ	B01	TVR, Land Rover Discovery >99
<u>≠k</u> 572 12	096		H6 / L3	72	650	0	1	278	175	190	190	mGGA	B13	Audi, BMW, VW, Citroen, Peugeot, Renault, Fiat, Skoda
572 33	082 / 086		H6 / L3	72	650	1	1	278	175	190	190	mGGA	B01	Chrysler Voyager
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
588 20 588 34 RF	017 / 024	replaces Power Bull P88 20 = Running Bull EFB PRO 585 11	T8 / LB5	88	680	0	1	354	175	175	175	mGGA	B13	Ford D, Opel D
590 17	643		95Ah	90	680	0	1	344	172	214	230	mG	B00	IHC, Massey Ferguson
590 18	644		95Ah	90	680	1	1	344	172	214	230	mG	B00	IHC, Mac Cormick
4 ₹ 595 33	019		H8 / L5	95	740	0	1	354	175	190	190	mGGA	B13	Audi, BMW, Mercedes, Porsche, VW











Construction machinery









BUFFALO BULL AGM -TOP NEWS



THE BUFFALO BULL AGM MEGA-POWER FOR LONG-DISTANCE TRUCKS.

Starter and on-board batteries in the commercial vehicle sector must increasingly meet special needs such as the maximum energy demand emanating from the growing number of comfort functions in long-distance trucks. Drivers often spend the night in their vehicles and use a variety of different electrical consumers, including auxiliary air conditioning or heating.

Banner has launched the new Buffalo Bull AGM onto the market for precisely these toughest requirements because now a long-distance truck is more than just a means of transporting goods from A to B. It is the driver's workplace (keyword: office) and home (keyword: kitchen, living room/bedroom) for more than three days a week and therefore the Buffalo Bull AGM has been designed specifically for this situation.



TECHNICAL DATA AND INFORMATION

- Valve-regulated lead acid battery (VRLA)
- Available in standard battery sizes (C-box) with 210 Ah
- Threefold cyclical resistance as compared to standard starter batteries, owing to the active mass recipe and glass fleece covers
- Robust design und maximum vibration resistance due to special set bonding
- Improved mesh corrosion resistance through the use of a continuous production process
- No acid stratification due to AGM design
- Outstanding charging: the vehicle's regulator voltage is also sufficient for deeply discharged batteries
- Calcium technology for minimal water consumption
- Designed for the maximum energy requirements resulting from increasing comfort functions in long-distance trucks
- Ideal for rear chassis integration (EURO Emission Class 5/6)
- Add-ons such as short-circuit protection and ESD plug for heightened product safety
- · Central degassing with integrated flame arrestor
- Dimensions in accordance with FN 50342-4:2009

ESD = electrostatic discharges are disruptive voltage breakdowns caused by major potential differences. These discharges (sometimes visible due to sparks) cause brief, high electrical current and can lead to the ignition of flammable materials. It is precisely this that the ESD plugs prevent with absolute safety

Type

Info

20 h











Application

BUFFALO BULL AGM -



Construction machinery

Agricultural machinery

Snow groomers

BUFFALO BULL AGM

COMMERCIAL VEHICLE BATTERY IN OEM QUALITY - AGM TECHNOLOGY

Box

							Length	Width	height	height			
NEW AGM 710 01 632 AGM OE	available in 2022	С	210	1200	3	1	517	273	212	240	mGGARZS	B00	Long-distance trucks:: MAN, Mercedes, Volvo, Scania, Steyr Trucks

THE BUFFALO BULL EFB

THE POWER PACK FOR LONG-DISTANCE TRUCKS.

Starter and on-board batteries in the commercial vehicle field must fulfil a growing variety of special needs such as the maximum energy demand emanating from the increasing number of comfort functions in long-distance trucks. Drivers often spend the night in their vehicles and use various electrical consumers. Moreover, in the case of battery integration into the rear chassis, extreme vibration-resistance is essential.

Banner has launched the new Buffalo Bull EFB onto the market for precisely these toughest requirements because today a long-distance truck is more than just a means of transporting goods from A to B. It is the driver's workplace (keyword: office) and home (keyword: kitchen, living room/bedroom) for often three nights per week and therefore the Buffalo Bull EFB has been designed specifically for this situation.



TECHNICAL DATA AND INFORMATION

- Range of three standard battery sizes (A, B and C boxes) with 150 Ah, 190 Ah and 240 Ah
- Increased cyclical resistance owing to the active mass recipe and glass fleece covers
- Robust design und maximum vibration resistance due to special set bonding
- Improved mesh corrosion resistance through the use of a continuous production process
- Calcium technology for minimal water consumption
- Designed for high energy requirements resulting from increasing comfort functions in long-distance trucks
- Maintenance-free (no topping up with water) under normal operating conditions
- Add-ons such as short-circuit protection and ESD plug for heightened product safety
- Central degassing with integrated flame arrestor
- Dimensions in accordance with EN 50342-4:2009

ESD = electrostatic discharges are disruptive voltage breakdowns caused by major potential differences. These discharges (sometimes visible due to sparks) cause brief, high electrical current and can lead to the ignition of flammable materials. It is precisely this that the ESD plugs prevent with absolute safety

Type













Application

BUFFALO BULL EFB

COMMERCIAL VEHICLE BATTERY IN OEM QUALITY - EFB-TECHNOLOGY

				-			Length	Width	Box height	Total height			
EFB 650 17	637 EFB OE	Α	150	850	3	1	513	189	195	220	mGGARZS	B00	Long-distance trucks:: MAN, Mercedes, Volvo, Scania, Steyr Trucks
EFB 690 17	629 EFB OE	В	190	1050	3	1	513	223	195	220	mGGARZS	B00	Long-distance trucks:: MAN, Mercedes, Volvo, Scania, Steyr Trucks
EFB 740 17	632 EFB OE	C	240	1200	3	1	517	273	212	240	mGGARZS	B00	Long-distance trucks:: MAN, Mercedes, Volvo, Scania, Steyr Trucks











BUFFALO BULL SHD/SHD PRO

PUTS FULL POWER INTO EVERY COMMERCIAL VEHICLE, FROM DISTRIBUTION TRUCKS TO BUSES.

Tough and continuous use in commercial vehicles presents batteries with massive challenges and the demands on cyclical and vibration resistance have increased enormously over the years. Therefore, properties such as freedom from maintenance, operational and cold start performance are now more important than ever and the optimised Buffalo Bull SHD batteries represent the answer. The Buffalo Bull SHD PROfessional battery types are the problem solver for stop & go, cold starts and co. and tough conditions that would cause others to quickly give up the ghost! Moreover, they also hold their own in the lucrative aftermarket. In fact, Banner has equipped these batteries with unbeatable advantages, which make them ideal for modern distribution trucks and buses!



TECHNICAL DATA AND INFORMATION

- Meets the requirements of Mercedes Trucks
- Central degassing and patented four-chamber leak protection
- Captive, welded-in flame arrestors and safety screws
- ConCast mesh production process and optimised mesh design provide reliable cold start performance
- SHD means extra cycle/vibration resistance in the highest E3/V3
- Short circuit protection against short circuits caused by tools



• Maintenance-free: calcium technology ensures minimum water consumption



category pursuant to EN 50342-1:2016

• EN 50342-4:2009 box height

Type

Info

Box

Ah 20 h













Application

BUFFALO BULL SHD / SHD PROFESSIONAL

COMMERCIAL VEHICLE BATTERY IN OEM QUALITY - SUPER HEAVY DUTY VARIATION

			and a second				Length	Width		Total height			
SHD 610 40 615 S	HD	MAC 110	110	760	3	1	513	175	210	210	mGGARZS	B03	MAN, Mercedes, Roman, Robur
SHD 635 44 630 S	HD	MAC 110	135	900	3	1	513	175	210	210	mGGARZS	B03	MAN, Mercedes, Roman
SHD 640 35	= SHD PRO 645 03												
SHD PRO 645 03 PROfess	replaces SHD 640 35	Α	145	800	3	1	513	189	195	220	mGGARZS	B00	Neoplan, MAN, Mercedes, Volvo, Scania, Steyr Trucks
SHD 670 33 MAC 140	SHD	MAC 140	170	1000	3	1	513	218	210	210	mGGARZS	B03	MAN, Mercedes, Liaz
SHD 680 32	= SHD PRO 680 08												
SHD PRO 680 08 PROfess	replaces SHD 680 32	В	180	1000	3	1	513	223	195	220	mGGARZS	B00	Neoplan, MAN, Mercedes, Volvo, Scania, Steyr Trucks
SHD 725 11	= SHD PRO 725 03												
SHD PRO 725 03 632 S PROfess	replaces SHD 725 11	С	225	1150	3	1	517	273	212	240	mGGARZS	B00	Neoplan, MAN, Mercedes, Volvo, Scania, Steyr Trucks













BUFFALO BULL

MEANS RELIABLE BRAND QUALITY.

If they opt for the Buffalo Bull, those looking for a suitable and reliable starter battery for their commercial vehicles will have made precisely the right decision. This is because the Buffalo Bull is a brand battery with proven Banner quality.



TECHNICAL DATA AND INFORMATION

- Niche and supplementary types for agricultural machinery and unusual commercial vehicles
- Simple maintenance due to the externally visible electrolyte level markings and practical screws
- Robust design with set bonding
- Bag separators for backfire protection and high starting current levels











Type

Info

Box

20 h















Application

BUFFALO BULL

COMMERCIAL VEHICLE BATTERY IN OEM QUALITY

								Length	Width	Box height	Total height							
600 26	221 / 616			100	600	0	1	413	175	195	220	mG	B00	Mercedes D, Steyr Traktoren, Daihatsu D, Barkas, Ursus				
600 35	221R			100	600	1	1	413	175	195	220	mG	B00	Daihatsu, Nissan, Mitsubishi D				
605 02	Type 31 / DP110 Centre Post		BCI 31	105	1000	9	1	330	171	218	241	mGGA	B00	AGCO Fendt - Massey Ferguson, Caterpillar, US Trucks				
610 11	663 BH		Compact	110	800	0	1	344	175	214	230	mG	B01	lveco Daily 01.05-, Renault				
610 47	663		Compact	110	800	0	1	344	172	214	230	mG	B00	IHC, Massey Ferguson				
610 48	664		Compact	110	800	1	1	344	172	214	230	mG	B00	IHC, McCormick				
620 34	627		A	120	720	3	1	513	189	195	220	mG	B00	MAN, Mercedes, Roman, MAZ				
625 11	647		Compact	125	760	0	1	345	172	260	283	mG	B00	Massey Ferguson				
625 13	648		Compact	125	760	1	1	345	172	260	283	mG	B00	McCormick				
625 23	6TN		NATO 6TN	125	720	2	1	280	267	213	230	mG	B00	NATO 6TN				
632 11			MAC 132	132	900	0	1	508	174	205	205	mG	B01	CNH Case New Holland, John Deere, Landini, McCormick				
635 11	655			135	760	0	1	345	172	260	283	mG	B00	Commercial vehicles				
635 13	656			135	760	1	1	345	172	260	283	mG	B00	Commercial vehicles				
640 35	637		A	140	760	3	1	513	189	195	220	mG	B00	Steyr Trucks, MAN, Mercedes				
650 11	637		A	150	1150	3	1	513	189	195	220	mGGARZS	B00	Municipal vehicles, construction machinery, snow groomers				
680 11	629 (180Ah)		В	180	1400	3	1	513	223	195	220	mGGARZS	B00	Municipal vehicles, construction machinery, snow groomers				
680 32	629 (180Ah)		В	180	950	3	1	513	223	195	220	mG	B00	Steyr-Trucks, MAN, Roman, Multicar, Magirus				
680 89	623		MAC 154	180	950	4	1	510	216	205	225	mGGA	B03	Fiat LKW, Tractors				
700 29	624		C	200	1000	4	1	517	273	212	240	mG	B00	Volvo, Scania				
725 11	632		C	225	1050	3	1	517	273	212	240	mG	B00	Steyr, MAN, Volvo-Trucks, Caterpillar, Tatra				
pr = Double Top	4K = 4-chambe	er leak protection F	RF = vibration-resistant	GA = battery w	vith central degassir	g HGI = ha	ard rubber set	mG = with	n handle	RZS = f	lame arres	tor * limited u	se ** wit	h base hold-down adapter				

BUFFALO BULL HIGH CURRENT THE MEGA COLD START POWER!

Special machines and vehicles (e.g. municipal vehicles such as sweepers or high-pressure rinsing vehicles, construction machinery and snow groomers) require ever-higher cold start current. This is due to the high lag loads (e.g. in hydraulic units), which have to be dealt with during starting. The Buffalo Bull high current battery has been specifically developed to meet these requirements.



TECHNICAL DATA AND INFORMATION

- Offer of two standard battery sizes (boxes A and B) with 1,150 A or 1,400 A cold start current
- High vibration-resistance
- Calcium technology for minimal water consumption
- Maintenance-free under normal operating conditions
- Central degassing with integrated flame arrestor
- Add-ons for heightened product safety: short circuit protection, ESD plugs*
- Dimensions in accordance with EN 50342-4:2009

T	vne	
	,,,,	



Info

Box













Application

BUFFALO BULL

COMMERCIAL VEHICLE BATTERY IN OEM QUALITY

							Length	Width	Box height	Total height			
650 11	637	Α	150	1150	3	1	513	189	195	220	mGGARZS	B00	Municipal vehicles , construction machinery, snow groomers
680 11	629 (180Ah)	В	180	1400	3	1	513	223	195	220	mGGARZS	B00	Municipal vehicles , construction machinery, snow groomers





















MORE INFO UNDER

ENERGY BULL FOR CONVINCING DEEP CYCLE CHARACTERISTICS.

With the Energy Bull, Banner presents a special battery for hobbies and leisure. The robust Energy Bull's characteristics make it an ideal power pack for camping/caravans, boats and use in many other applications, which extend to signal systems and electrical motor drives.

In tandem with bag separators and a special mass composition, the robust mesh structure of the battery ensures extreme cyclical resistance. The advantages at a glance:



TECHNICAL DATA AND INFORMATION

- Extremely cycle-resistant and durable four times the cyclical resistance of a starter battery
- Maintenance-friendly easy to open and MIN/MAX marking on the transparent box
- Backfire safety a flame arrestor is integrated into the surge protectors in the battery lid
- Low-maintenance reduced water consumption and low selfdischarge
- Simple charging charging with standard chargers
- Vibration-resistant floor bonded plate sets and bag separators covered with a glass mat; V3 classification pursuant to EN 50342-1:2016
- Optimised capacity ideal for cyclical loads
- Environment- and user-friendly delivered filled and charged
- Practical handles













Type

UK No.

Info

Box

Ah 5 h 20 h

100 h

















Application

ENERGY BULL

LONG-DURATION DISCHARGE BATTERY

									Length	Width	Box height	Total height			
4K	955 01	065 Box Premi- um Leisure	H5 / L2	50	60	70	0	1	241	175	190	190	mGGA	B13	Wheelchairs
	955 51	678 Box Premi- um Leisure	D26 / MO60	55	72	85	1	1	256	174	205	225	mGGA	B00	Boats, wheelchairs
4K	956 01	096 Box Premi- um Leisure	H6/L3	60	80	90	0	1	278	175	190	190	mGGA	B13	Wheelchairs
4K	957 51	110LB / 019 Box Premium Leisure	H8 / L5	75	100	110	0	1	354	175	190	190	mGGA	B13	Boats
4K	959 01	110 / 679 Box Premium Leisure	LOT7	90	115	135	0	1	350	175	235	235	mGGA	B00	Boats
	960 51	627 Box Premi- um Leisure	A	105	130	140	3	1	513	189	195	220	mGRZS	B00	Boats, signal devices
	963 51	629 Box Premi- um Leisure	В	135	180	195	3	1	513	223	195	220	mGRZS	B00	Boats
	968 01	625 Box Premi- um Leisure	C	180	230	250	3	1	517	273	212	240	mGRZS	B00	Boats
	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
	VL679	679 Standard Leisure		70	90	110	1	1	344	172		235	mGGA	B00	Caravan, Motorhome, Camping, Mains Hook Up, Light Cycling



0











BIKE BULL CLASSIC POWER FOR MOTORBIKES.

Entry into the world of the Banner brand is comprised by classic lead batteries with an electrolyte pack. The robust technology has been specially designed for the burdens relating to motorcycle riding. These batteries are only opened for start-up and maintenance.

TECHNICAL DATA AND INFORMATION

- High load-bearing capacity
- Safe starting even in the case of short run use
- Extensive programme consisting of 27 types
- Dry, pre-charged; enclosed electrolyte in the precisely required volume





Ah 10 h

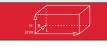
Capacity in Ah (10h)

A (EN)

Low-temperature test current



Terminal



Max. dimensions in mm Length x Width x Total height



Bottom strip



Acid in approx. litres Motorcycles road/cross











Motorcycles road/cross

ATV/Quads







Banner battery type First fitting designation Banner order number







Drawing

BIKE BULL CLASSIC

6 VOLT

					Length	Width	Height			
004 12	B6N4B-2A	020 004 12 0100	4	5	102	48	96	0,20	B00	
007 14	BB39-6	020 007 14 0100	7	6	126	48	126	0,30	B00	
008 11	BB49-6	020 008 11 0100	8	6	91	83	160	0,50	B00	+ : <u>Q</u>
012 11	B6N11A-3A	020 012 11 0100	11	6	122	62	132	0,40	B00	(a i i i i i
012 14	B6N11A-1B	020 012 14 0100	11	6	122	62	132	0,40	B00	
013 14	BB38-6A	020 013 14 0100	14	6	119	83	161	0,70	B00	<u> </u>

12 VOLT

					Length	Width	Height			
502.12 502.12					Lengar	matii	ricigiit			
503 12 = 503 13	DD21 D	020 502 12 0100	2		00	5.0	110	0.20	DOO	.
503 13 replaces 503 12	BB3L-B	020 503 13 0100	3	6	98	56	110	0,20	B00	
504 11	BB4L-B	020 504 11 0100	4	5	120	70	92	0,30	B00	
505 12	BB5L-B	020 505 12 0100	5	6	120	60	130	0,40	B00	
506 11	B12N5,5-3B	020 506 11 0100	6	6	135	60	130	0,40	B00	<u>.</u>
507 13	BB7-A	020 507 13 0100	8	6	135	75	133	0,60	B00	(*
507 14	BB7C-A	020 507 14 0100	8	3	130	90	114	0,60	B00	
509 14	BB9-B	020 509 14 0100	9	6	135	75	139	0,60	B00	
511 12	BB10L-A2	020 511 12 0100	11	8	135	90	145	0,80	B00	G i i
511 13	BB10L-B	020 511 13 0100	11	6	135	90	145	0,80	B00	<u> </u>
512 11	BB12A-A	020 512 11 0100	12	6	134	80	160	0,80	B00	4
512 13	BB12AL-A2	020 512 13 0100	12	8	134	80	160	0,80	B00	
512 15	BB12A-B	020 512 15 0100	12	6	134	80	160	0,80	B00	
514 11	BB14L-A2	020 514 11 0100	14	8	134	89	166	0,90	B00	<u> </u>
514 12	BB14-A2	020 514 12 0100	14	8	134	89	166	0,90	B00	€ III
514 13	BB14L-B2	020 514 13 0100	14	8	134	89	166	0,90	B00	· · · · · · · · · · · · · · · · · ·
516 15	BB16B-A1	020 516 15 0100	16	7	160	90	161	1,00	B00	
516 16	BB16AL-A2	020 516 16 0100	16	2	207	71	164	1,10	B00	€ III å
518 14	Europa	020 518 14 0100	19	10	186	82	171	1,00	B00	
519 12 = AGM PRO 516 21										
520 12	B50-N18L-A	020 520 12 0100	20	7	205	90	162	1,40	B00	GIII.
528 16 = Starting Bull 530 30										
530 30		010 530 30 0101	30	10	187	128	165	1,60	B00	<u> </u>
530 34		010 530 34 0101	30	10	187	128	165	1,60	B00	##

BIKE BULL AGM

THE LATEST AGM TECHNOLOGY FOR UNIVERSAL APPLICATIONS.

This is Banner power for motorbikes, ATVs/quads, jet skis and tractor mowers. The Bike Bull AGM is an absolutely maintenance-free battery employing the latest absorbent glass mat (AGM) technology. The acid is bound into a glass fibre web and therefore cannot escape.

TECHNICAL DATA AND INFORMATION

- High start performance with safety reserves
- AGM technology (absorbent glass mat)
- Absolute maintenance-free
- Vibration-resistant
- Dry, pre-charged; enclosed electrolyte in the precisely required volume



Banner battery type

First fitting designation

Banner order number

Ah 10 h A EN







Drawing

BIKE BULL 12 V AGM-TECHNOLOGY

AGM = ABSORBENT GLASS MAT WITH ELECTROLYTE

						Length	Width	Height			
AGM 503 14	BTX4L-BS	021 503 14 0100	3	50	5	113	70	87	0,19	B00	a
AGM 504 12	BTX5L-BS	021 504 12 0100	4	80	5	113	70	105	0,24	B00	0 0
AGM 506 14	BTX7L-BS	021 506 14 0100	6	100	5	113	70	130	0,33	B00	a
AGM 506 15	BTX7A-BS	021 506 15 0100	6	105	5	150	87	95	0,38	B00	÷
AGM 508 12	BTX9-BS	021 508 12 0100	8	110	5	151	87	106	0,45	B00	#
AGM 510 12	BTX12-BS	021 510 12 0100	10	160	5	150	87	130	0,60	B00	
AGM 512 14	BTX14-BS	021 512 14 0100	12	190	5	150	87	146	0,69	B00	÷
AGM 514 22	BTX16-BS	021 514 22 0100	14	210	4	150	88	161	0,80	B00	÷
AGM 518 21	BTX20L-BS	021 518 21 0100	18	250	4	175	87	154	0,90	B00	ā ! ! <u>†</u>
AGM 518 22	BTX20CH-BS	021 518 22 0100	18	220	4	150	87	161	0,70	B00	
AGM 522 14	BTX50L-BS	021 522 14 0100	22	320	4	205	90	164	1,08	B00	ā III jā











BIKE BULL GEL

GEL POWER FOR OFF-ROAD AND TOURING RIDERS.

The Bike Bull GEL combines innovative GEL technology with outstanding user satisfaction levels and operational safety. It is ideally suited to enduro and touring bikes. The Bike Bull GEL is an advanced, top quality battery with non-woven web separator and fixed electrolyte for increased start performance and outstanding vibration and cyclical resistance.

TECHNICAL DATA AND INFORMATION

- First class start performance
- Excellent vibration and cyclical resistance
- Absolutely maintenance-free
- Cor
- Lat
- Pre





ompletely leak-proof	GEL
teral installation possible	
e-charged and ready for immediate use	

Banner order number

10 h

BIKE BULL 12 V GEL-TECHNOLOGY

First fitting designation

GEL POWER - PLUG-IN POWER

Banner battery type

						Length	Width	Height			
GEL 503 01	BGTR4A-5	023 503 01 0101	3	53	12	113	48	85	-	B00	<u> </u>
GEL 506 01	BGT7B-4	023 506 01 0101	6	90	11	150	65	92	-	B00	pi i i i i i i i i i i i i i i i i i i
GEL 506 21	BGT7-3	023 506 21 0101	6	95	5	114	71	106	-	B00	a
GEL 508 01	BGT9B-4	023 508 01 0101	8	115	11	150	69	105	-	B00	;
GEL 509 01	BGTZ10-4	023 509 01 0101	9	180	11	150	86	94	-	B00	#
GEL 510 01	BGT12B-4	023 510 01 0101	10	185	11	150	69	130	-	B00	#
GEL 510 21 replaces AGM PRO 509 01	BGT12A-4	023 510 21 0101	10	185	11	150	87	106	-	B00	# i i i i i i i i i i i i i i i i i i i
GEL 512 01	BGTZ14-4	023 512 01 0101	11	190	11	151	87	110	-	B00	;
GEL 512 21	BGTZ14B-4	023 512 21 0101	12	200	11	150	69	145	-	B00	#
GEL 521 01	BGT20H-3	023 521 01 0101	19	310	10	183	79	171	-	B00	o : : : : : : : : : : : : : : : : : : :
GEL 530 01	BGT30-3	023 530 01 0101	30	380	5	168	127	177	-	B00	i









Drawing

BIKE BULL AGM PROFESSIONAL

PROFESSIONAL AGM POWER FOR THE TOUGHEST DEMANDS.

The Bike Bull AGM PROfessional is a top product in first fitter (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 class start performance
- Maximum vibration and cyclical resistance
- Absolutely maintenance-free
- Completely leak-proof
- Lateral installation possible
- Excellent stability in low temperatures
- Pre-charged and ready for immediate use





Banner battery type	First fitting designation	Banner order number	Ah 10 b	A	H B	Akku-Säure	Drawing

BIKE BULL 12 V AGM PROFESSIONAL

FOR THE HIGHEST DEMANDS

						Length	Width	Height			
AGM PRO 509 01 = GEL 510 21											
AGM PRO 514 01	BETX 14	024 514 01 0101	12	220	10	150	88	145	-	B00	i io
AGM PRO 514 21	BETX 14L	024 514 21 0101	12	220	10	150	88	145	-	B00	o to
AGM PRO 516 01	BETX 16L	024 516 01 0101	19	325	10	175	100	155	-	B00	o :: <u>;</u>
AGM PRO 516 21 replaces 519 12	BETX 16	024 516 21 0101	19	325	10	170	100	155	-	B00	, i.i.
AGM PRO 520 01	BETX 20L	024 520 01 0101	18	310	10	175	88	155	-	B00	- <u>+</u>
AGM PRO 530 01	BETX 30L	024 530 01 0101	26	400	10	168	131	176	-	B00	



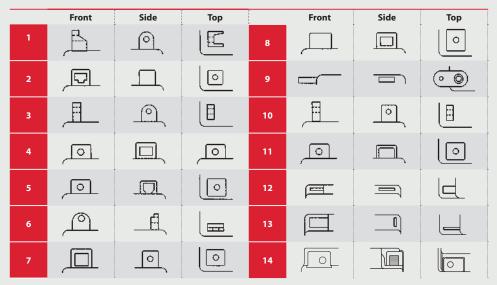






TERMINALS

CONNECTING TERMINALS



TERMINALS

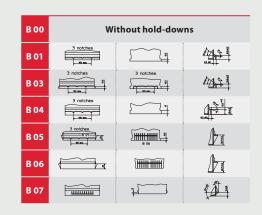
Terminal 1	Terminal 4	Terminal T4	Terminal 8	Terminal 20
2	7.88			Observation or which is they because it
Terminal 3	Terminal 5		Terminal 19	Terminal K 21
	100 A			

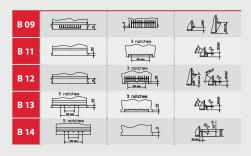
LAYOUT

	6 Volt	12 Volt
0	⊕ + 3 + • ⊕	⊕ ® 3
1	# O 3	→ → → →
2	● H 2	⊕
3	⊕ + + ● ≥	0 + + 3
4	+ + + + +	0 + + + z

	6 Volt	12 Volt
5		● • • • • • • • • • • • • • • • • • • •
6		→ → → → → → → → → → → → → → → → → → →
9	(H)	H 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
10		# 1

BASE HOLD-DOWNS





Banner KNOW-HOW – THE INFO PLATFORM FOR MORE POWER.

Banner offers an informative and up-to-date information platform, which covers the most important subjects relating to the world of batteries.

SIX CURRENT MENU ITEMS:

- Battery know-how
- Technologies and products
- Start-stop
- HOW-TO

- Tips and tricks
- Lexicon

This battery know-how is constantly updated and expanded to include interesting topics and is already one of the most comprehensive information platforms in the industry. Its main premises are user-friendly design, simple and fast function!

Banner sales partners will find an inexhaustible source of topics for their own information and inspiration, professional customer advice and a multitude of marketing activities such as newsletters and much more besides. Indeed, irrespective of whether you are a parts retailer, workshop, commercial end user, mechanic or automotive engineer, anyone can make proactive use of this information system!

SO CLICK ON AND TEST THE SYSTEM RIGHT AWAY!



Banner BATTERY KNOW-HOW



BATTERY SEARCHES -QUICK, EFFICIENT AND SIMPLE.



AS OF NOW, Banner IS USING THE AVAILABLE DVSE TOPMOTIVE VEHICLE MASTERS IN ITS ONLINE BATTERY SEARCH. These relate to all the passenger vehicle applications, i.e. cars, commercial vehicles and motorbikes. For all other applications, without DVSE Topmotive vehicle masters, the updating of the company's own Excel vehicle masters, e.g. for agricultural and construction machinery, ATV guads and much more besides, will continue.

The Banner battery search is available for online call-up at https://www.bannerbatterien.com/en/Battery-search. The aim is to name the best Banner battery for you quickly and easily. Initially, in the form of the most popular type and then, wherever feasible and sensible, with a possible upgrade option. The database is constantly updated in cooperation with battery experts and selected workshops with the goal of making your daily work simpler and more efficient.



WITH THE NEW NUMBER SEARCH we offer our distribution partners an additional service. Here a start with an OE = Original Equipment or Original Spare Part number search is possible. For example, the OE number VW/Audi 000 915 105 CF, can be read on the top label of the original battery = Banner Running Bull AGM 605 01/016605010101. At the moment, more than 3,400 such numbers are recorded here and more are being added every day.



THE SEARCH ON THE APPROVAL CERTIFICATE will give you a result according to the following selections 1. Manufacturer, 2. Model, 3. Fuel type, 4. Engine (type). Further possible search options are undergoing clarification (design, kW/hp, ...).



THE KBA NUMBER SEARCH FOR GERMANY. The KBA number is a unique code under which the vehicle type is registered with the Federal Motor Transport Authority. By searching using the KBA number, you can be sure that exactly the right vehicle is selected. The KBA number is comprised of two parts consisting of the HSN manufacturer key number (four-digit numeric) and the TSN type code number (eight-digit alphanumeric). The first three digits stand for the model and are therefore relevant for the search. You will find the KBA number in the vehicle/registration certificate in the fields 2. or 2.1 and 3. or 2.2.

CHANGING A BATTERY IS NO LONGER AN EASY TASK. Complexity and variety mainly constitute the overall spare parts management challenge. Primarily, it is the diversity of models and the wealth of variants within individual car series that make precise battery identification and ordering difficult.

A typical issue in this connection is vehicle and part identification and the objective of making this easier and more effective. Fewer incorrect orders and lower return rates reduce costs for workshops and retailers. In addition, repair appointments can be better calculated and more reliably kept, which therewith increases customer satisfaction. This is important because in the European parts market the return rate of ordered parts, including batteries, due to insufficient identification is still around 10 to 15 %! In fact, finding the appropriate starter or electrical on-board and dealing with the changes between EFB and AGM technology for start-stop batteries in the same year of manufacture, constitute a genuine challenges!

SPECIFICALLY FOR YOU, AS THE PLATFORM FOR BATTERY IDENTIFICATION AND PROFESSIONAL BATTERY BUSINESS, THE Banner BUFFALO WILL BE CONSTANTLY UPDATED AND FURTHER DEVELOPED FOR ONLINE BATTERY SEARCHES!

PS: Further search options and possibilities for various European countries are currently being clarified (e.g. national codes, number plate searches, Vehicle Identification No. (VIN) searches -, ...).

Banner BATTERY SEARCHES











Communications systems



Emergency power generators



Explosion protection



Golf car



AGV:



Small stackers



Cleaning machines



Fauldise.



ifting platforn



Hauler



CERTIFICATIONS

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

PATENTS

Double cover joint patent with Moll U - 02027 9204 (registration still in progress, also registered in the USA) **Double lid screw connection** utility model with Moll 202 18730.6 **AGM valve stopper** joint registered design protection with Accumalux