







#### UNI BULL – WITH THE LEAKPROOF GORE MEMBRANE

Banner has set yet another benchmark in battery design with the Uni Bull, which employs pure calcium technology and is entirely maintenance-free. Computer-calculated electrical design, enlarged conductor cross-sections and the latest separators guarantee optimum performance and that important extra power!

Patented ACCUSAFE® leak protection ensures absolute safety. The aerosol separator removes acid particles from gases, which means that the gases can be exhausted while the acid is retained in the battery.In other words, injuries and corrosion due to acid vapours are a thing of the past. ACCUSAFE® leak protection employs a membrane from Gore, the producer of GORE-TEX clothing.





Aerosol separator

## UNI BULL POWER FOR OVER 900 CAR MODELS!

The safe Uni Bull is possessed of truly universal genius and fits perfectly into almost any car. The practical 4-terminal design and pre-mounted, bottom strip adapter permit the installation of the Uni Bull in over 900 differing models. Terminal covers, which also allow the Uni Bull to be carried comfortably, also furnish protection against short circuits.

Incidentally, due to the special 19/Ford terminal design and the use of pure calcium technology, the Banner Uni Bull also meets Ford's strict demands.





Banner Tip!
Only Uni Bull has
ACCUSAFE® leak protection
for increased safety. No acid
can escape and the battery is
danger-free. It is also as environment-friendly as a liquid
electrolyte battery and as
robust as a recombination battery.

## HERE YOU WILL FIND THE PERFECT UNI BULL FOR YOUR CAR.

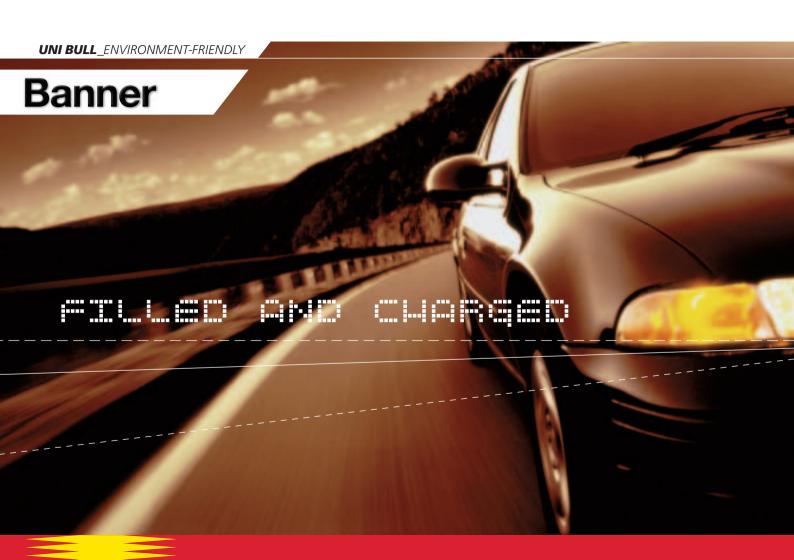
From Alfa to VW, the Uni Bull can be installed in over 900 different car types. The table on the left shows the appropriate battery type for every model. The table on the right lists the Uni Bull alternatives to your old battery.

Тур	Alternative type	Ah 20h	A EN	RC min	Switching	Terminals			<b>sions in m</b> g height/To		Bottom strip
50 100	535 28*, 536 21/24/27/28/41/46/53/54/55/59, 540 45, 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	47	390	77	0+1	1+19	210	175		175	B01/13
50 200	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 91*, P55 19, P62 05/19*	58	450	100	0+1	1+19	241	175		175	B01/13
50 300	555 18/19/30/31/45/48/59/63/64/65/ 66/71/72/73, 558 16/17, 560 13*7/3/74/76/ 78/88/93/94, 561 11/13, 562 05/16/19/20/ 21, 563 18*26/32, 564 01*20*, 566 33*, 572 33*, 955 19*, P62 05*/19	69	520	130	0+1	1+19	241	175		190	B01/13
50 400*	535 20*/21*/22*, 538 56/57/80/81, 540 38/39/50/53, 545 23*/24*/51*/77/ 78/79/80/84*, P40 26*/27*, P45 23*/24*	46	360	72	0+1	1+3	228	140	203	225	B01/13
50 500	566 13/18/19/31/38/41/45/47, 570 24'/ 29'/58/64/65/68/69/76, 572 17/19/20'/ 21/23/25', 572 26'/29/30'/32/34, 574 05/12/13, 575 31/40, 576 11/12, 571 19, 580 14'/34/25/41/42, P66 13', P74 05'/12, P80 14'/42	80	700	150	0+1	1+19	278	175		190	B01/13

<sup>\*</sup> usable under certain conditions



	50 100	50 200	50 300	50 400	50 500
ALFA ROMEO		33, 75-164	33 TD, JTD, 75-166, Brera, RZ Zagato, Spider, SZ Zagato		75-166 TD, JTD , Spider 3,2 V6
AUDI	80	80+TDI, 90+TDI, 100-200+TDI, TT	100-200, A2, A3, A4, A6, Coupé, Roadster TTS, S3, S4, S6		A2-A8 TDI, S8
BMW		Series 1 116-118i, 3, 5, 6, 7, 8, M3, Z1, Z3	Mini, Series 1 120-130i, 3, 5, 6, 7, 8		Series 1 d, tds, 3 d, tds, 5 d, tds, 6 d, tds, 7 d, tds, 8, Z3, Z4
CHRYSLER					Voyager + TD, Cherokee, Grand Cherokee+TD
CITROEN	AX, C 1, C 2, C 3, C 4, Saxo, Visa, ZX	AX, Berlingo, C 1, C 2, C 3, C 4, Saxo, Visa, Xsara, ZX	AX D, Berlingo D, C 1 HDi, C 2 HDi, C 3 HDi, C 4 HDi, C 5, C 6, C 8, Evasion, Saxo HDi, Xsara HDi, Xantia+TD, ZX		C 5 HDi, C 6 HDi, C 8 HDi, Evasion TD, Xantia HDi, XM+TD, ZX TD
DAIHATSU				Applause, Charmant, Copen, Feroza, Gran Move, Move, Sirion, Terios, Trevis, YRV	
FIAT	Barchetta, Bravo, Brava, Cinquecento, Idea+JTD, Marea, Palio, Stilo, Sedici, Seicento, Tipo, Uno	Bravo, Brava, Croma, Doblo, Marea, Tipo	Croma, Multipla, Doblo JTD, Punto - Grande Punto JTD, Sedici JTD, Stilo, Tempra, Tipo, Ulysse, Uno		Croma TD, Tipo TD, Tempra TD, Marea JTD, Multipla JTD, Scudo JTD, Stilo JTD, Tempra TD, Ulysse JTD
FORD	C-Max, Fiesta, Focus, Fusion, Ka, Street Ka, Sport Ka	C-Max, Cougar, Fiesta+TDCi, Focus, Mondeo, Puma, Scorpio, S-Max, Tourneo, Transit	Galaxy+TDi, TDCi		
HONDA				Accord IV, V, Civic, CR-V, CRX, HR-V, Insight, Logo, Prelude II, Quintett, S2000, Stream	
HYUNDAI				Accent, Atos Prime, Lantra II, S-Coupe, Stellar	
MAZDA				Demio, 121 II (DB)	A 160-200 CDI, B 150-200, E/200-E/420,
MERCEDES BENZ			A140-200, B 150-200, E/200, E/220, C180-230, E 230, 300, SL, SLK, V200, V280, Vaneo		190+D, SL 500-600, Vaneo CDI, Viano 2,0-2,2 CDI (80kW), Vito
NISSAN				Micra+D (K10, K11)	
OPEL/VAUXHALL	Agila, Astra, Corsa, Vectra	Agila CDTI, Arena D, Astra F, G, Calibra, Coupe+TD, Corsa CDTI, Speedster, Tigra, Vectra	Agila CDTI, Arena D, Astra F, G, Calibra, Coupe+TD, Corsa CDTI, Roadster GT, Sintra, Speedster, Tigra, Vectra, Zafira		Frontera TD, TDS, Signum+DTI, Sintra DTI, Vivaro+CDTI, Zafira DTI, CDTI
PEUGEOT	106, 107, 1007, 206, 207		Expert, Partner, 106 D, 107 HDi, 1007 HDi, 206 TD, 207 HDi, 306 TD, 307 HDi, 406, 407, 505, 605, 607, 806, 807		Boxer, Expert HDi, Partner HDi, 406 TD, 407 HDi, 605 TD, 607 HDi, 806 HDi, 807 HDi
RENAULT	Clio, Kangoo, Megane, Modus, Sport Spider, Twingo	Clio, Laguna, Megane, Modus, Kangoo, Safrane	Avantime, Clio dCi, Espace, Kangoo, Laguna, Megane, Modus dCi, Safrane, Trafic, Vel Satis		Avantime dCi, Espace TD, dCi, Kangoo dCi, Megane dCi, dTi, Laguna dCi, dTi, Safrane dT, Trafic dCi, dTi, Vel Satis 3,5 V6, dCi
SEAT	Arosa, Ibiza	Altea, Arosa TDI, Cordoba+TDI, Inca+SDI, TDI, Leon, Toledo+TDI	Alhambra, Altea TDI, Cordoba TD, Ibiza TD, Toledo TD		Alhambra 2,8 V6, Cordoba SDI, TDI, Leon TDI, Toledo SDI, TDI
SKODA		Fabia, Felicia, Octavia, Roomster, Superb	Fabia TDI, Felicia TDI, Roomster, Superb		Fabia SDI, TDI, Felicia D, Octavia SDI, TDI, Roomster SDI, TDI, Superb 2,8 V6, TDI
SMART	fortwo 0,6-0,7-Crossblade, Roadster, -Coupé, City-Coupé, Cabrio, forfour 1,1 - 1,3		fortwo 0,8 CDI-City-Coupé, Cabrio, forfour 1,5 CDI		
SUBARU				Justy I, II, Libero, Vivio	
SUZUKI				Alto II, III, IV, Baleno, Cappuccino, Carry, Jimny DDiS, Liana DDiS, Swift I, II, III, Vitara, Wagon R±. X-90	
TOYOTA				Yaris-Verso (CP10, NCP2), RAV 4, Starlet	
VOLVO			440-480, 740-780, 850-960, C30, S40, V40, V 50, S 60, C70, S70, V70, S80, S90, V90		440 TDI, 460 TDI, 740-780 TDI, 850-960 TDI, C30 TDI, S40 TDI, V40 TDI, V50 2,4 D5, S60 2,4 D5, C70 TDI, S70 TDI, V70 TDI, XC70, S80, S90, V90, XC90 2,5
VW	Beetle, Bora, Fox, Golf I-III, Jetta, Lupo, Passat, Vento	Beetle, Eos, Fox SDI, TDI, Golf I-V Plus, Passat+TD, SDI, TDI, Touran FSI, Vento+SDI, TDI	Beetle, Eos, Fox SDI, TDI, Golf I-V D, TD, SDI, TDI, Lupo SDI, TDI, Multivan, Passat, Polo SDI, TDI, Sharan		Beetle TDI, Eos 3,2 V6, TDI, Golf IV-V Plus SDI, TDI, Multivan TDI, Passat SDI, TDI, Sharan SDI, TDI, Touran TDI



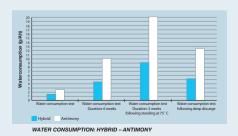


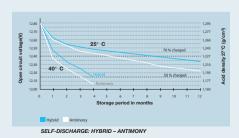
## UNI BULL IS ONLY TO BE FOUND UNDER ITS OWN NAME.

Every Uni Bull is supplied ready to install, or in other words, filled and charged. As a result, the handling of battery acid is a thing of the past. This is good for the environment and prevents injuries. Moreover, instead of the standard antimony alloy, the Uni Bull employs a pure calcium alloy. This cuts water consumption to a minimum and renders the universal battery maintenance-free throughout its service life.

The Uni Bull functions reliably in extreme temperatures and provides full power to the starter. Not least, this is due to the improved charging capacity and large reaction surfaces of the electrodes, which are especially important in the case of short journey driving.

Harmful vibrations also pose no threat to the Uni Bull, as the plate sets are bonded on the inside with the floor of the casing. This makes the Uni Bull vibration-resistant and safe against short circuits.





# UNI BULL – THE ADVANTAGES AT A GLANCE.

#### Banner Power-Tip!

Even after a storage period of twelve months without recharging, the Uni Bull is immediately ready for full use. If you store the battery, pay attention to the room temperature, which ideally should be

Absolutely maintenance-free >>	The replacement of traditional antimony with a pure calcium alloy cuts water consumption to a minimum. Therefore, the Uni Bull is absolutely maintenance-free.
30% more power >>	Computer-calculated electrode design, enlarged conductor cross-sections and a new separator generation reduce resistance within the battery. In combination with the new, optimised active mass recipe, these improvements add up to increased performance as compared to standard battery technology.
Perfect installation >>	Due to 4-terminal design with universal connection and the pre-mounted, bottom strip adapter, the Uni Bull fits perfectly into over 900 car models (switching 0.1; terminal 1 and 19/Ford versions; B3, B4 bottom strip). The Uni Bull terminal covers protect the battery against short circuits and also serve as comfortable handles.
The Uni Bull starts reliably even under extreme temperatures >>	This is due to the enlargement of the reaction surface of the electrodes and improved charging, especially during short drives.
Leak protection >>	Due to ACCUSAFE® ak protection, the Uni Bull is safeguarded against acid escapes and tipping problems.
High operational safety >>	The bonding of the plate sets with the floor of the casing protects the Uni Bull against short circuits and vibration. Should overloading occur, the membrane in the safety valve opens. The battery is also safe against the danger of explosion caused by external sources of ignition.
Environment-friendly. Filled and charged >>	The handling of acid is no longer required! The Uni Bull is delivered in a ready-to-install condition.
12-month storage >>	Recharging is unnecessary for a period of 12 months (at a storage temperature of max. 25 °C).





#### **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)
Screws and Magic Eye double cover utility model Moll 202 18730.6
AGM valve stopper joint registered design protection with Accumalux

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