# BATTERIES

#### MORE DEMANDING ENERGY REQUIREMENTS THAN EVER BEFORE

In recent years, the energy demands of modern vehicles have risen by up to 300%. In order to select the correct battery, it is worth considering not only your car engine size and power, but also on-board electrically-powered equipment and even climate and driving conditions. The Exide Evolution Programme has been designed to help make your choice of battery the right one.

Exide Evolution Programme guarantees to identify the best-performing Exide battery to satisfy all your customers' needs.

EXIDE EVOLUTION

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#### THE HIGH PERFORMANCE BATTERY

Exide Premium\*\*\* delivers highlyconcentrated energy, high capacity, and high starting power - all combined in the same battery.

Great advances in manufacturing processes and outstanding material quality has allowed development of a battery with:

1. Extended product lifetime compared to a standard battery due to:

- · Better resistance to discharge and recharge gained by improved active paste adherence on the metal grids
- · Larger capacity reserve provided by the use of thicker plates
- Better corrosion resistance gained by expanded metal grids (Exmet) and use of improved metal alloys
- 2. High starting power and reliability in all weather conditions, delivering a greater number of engine starts.



+30%

6-2

₩\*

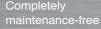
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Powerful diesel and petrol engines

more starting power than a standard battery

- Superior equipment (factory standard + optional extras)
- Everyday driving and Intensive

Extended product life in extreme hot or cold operating





State-of-charge indicator for quick assessment of charge level at a glance

Heat-sealed double lid,

Exide-patented labyrinth system, preventing acid spill and allowing safe flow-back of acid particles

Matching Quality" regulations

#### THE REFERENCE BATTERY

Most modern vehicles 4

more starting power than a +15% standard battery



EO D D

SUITABLE

Standard equipment



Everyday driving

#### Completely maintenance-free



State-of-charge indicator for quick assessment of charge level at a glance

Central venting with spark arrestors for improved safety







The economy choice for older cars with a basic number of electrical devices

SUITABLE FOR



The battery should always have enough starting power to match the size and power of the engine, always considering the vehicle manufacturer's recommended guidelines as a minimum requirement.

This starting power is the **cold cranking current** (CCA, in Amperes [A (EN)]), supplied by the battery.

For high performance petrol or diesel engines the required **starting power** will be a more important consideration.

#### 1 ENGINE SIZE AND TYPE

ENGINE SA

USE

Each vehicle, according to its power, its equipment level, its application or environmental working conditions, has its own individual energy requirements.



Everyday driving



### **4 DRIVING CONDITIONS**

Intensive urban driving usually involves many engine starts and short journeys which consumes additional energy from the battery. The on board charging system (alternator) cannot always recharge the battery sufficiently on these short trips, reducing charge capacity and resulting in a shorter product life.

For situations involving intensive urban use, the battery needs to have a **higher capacity** to return its full product lifetime and potential.

The battery is the energy source which supplies all the electronics in the vehicle. The amount of available energy in the electrical circuit is directly proportional to the capacity of the battery, which is measured in Amperes per hour (Ah).

Many security, comfort or luxury devices are fitted in the latest vehicles (on the right you can see a short check-list). The greater the equipment levels, the larger the battery capacity required to supply the necessary power to the vehicle equipment installed.

#### **EQUIPMENT** 2

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CLIMATA







Superior equipment:

• SAT/ NAV (GPS)

Alarm



Extreme temperatures can affect battery performance and shorten product life.

Higher working temperatures will damage the active material within the cell and cause corrosion. It will also accelerate self-discharge causing the performance and capacity of the battery to decline. In high temperatures the battery should have a higher capacity to maintain its full potential.

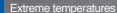
Cold climate conditions increase the internal resistance of the battery, reducing starting power and charge acceptance. Vehicles operating in these conditions require a battery with a higher cold cranking current (CCA) rating for reliable performance when starting the vehicle.



Moderate temperatures





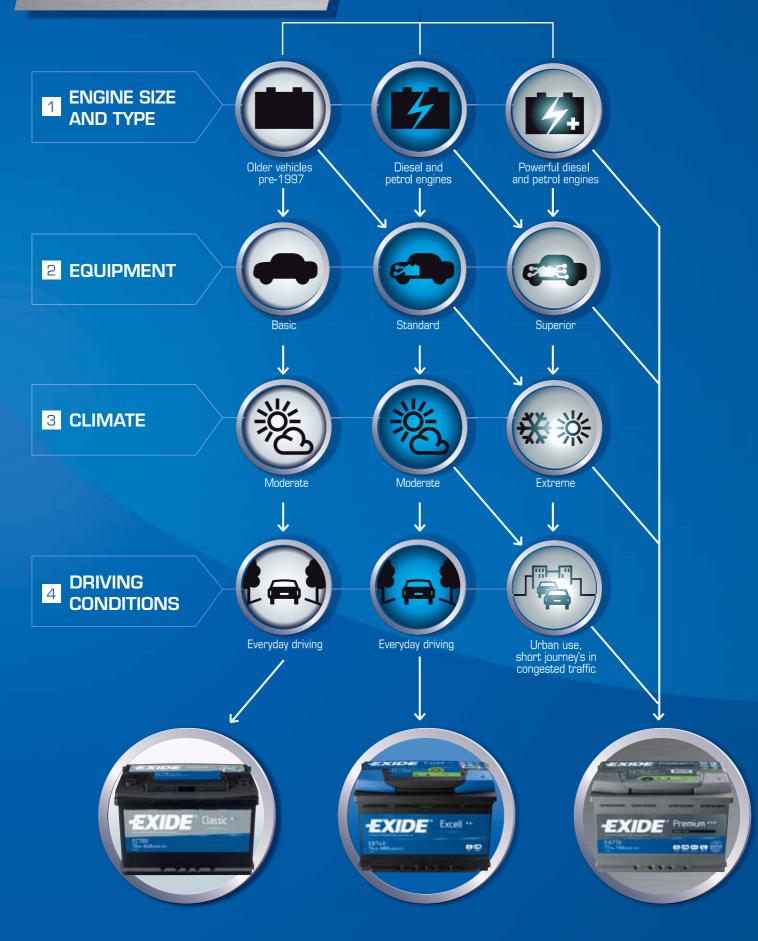




## HOW TO SELECT THE BEST BATTERY FOR YOUR CUSTOMER?

Once you have identified the right battery size with the help of the Exide fitment catalogue use this chart to select the right product performances to best meet your customer's equirements.

Vehicle



# **TECHNICAL SPECIFICATIONS**

Ranges are subject to individual country requirements

	EXIDE		PERFORMANCES		DIMENSIONS				TECHNICAL CHARACTERISTICS		
	CODE	REPLACES	CAPACITY	CCA	CON-	L	L	Н	POLA-	TERMI-	HOLD
			Ah	A (EN)	TAINER	(mm)	(mm)	(mm)	RITY	NALS	DOWN
Fremium ***	EA386	XP19 (535 20)	38	300	B19	187	127	220	0	1/3	Korean B1
	EA387	XP20 (535 22)	38	300	B19	187	127	220	1	1/3	Korean B1
	EA456 EA457	EX154/XP21 (545 23/545 77) EX155/XP22 (545 24/545 51)	45 45	390 390	B24 B24	237 237	127 127	227 227	0	1/3 1/3	Korean B1 Korean B1
	EA457 EA472	XP03/XC03	45 47	450	LB1	207	175	175	0	1/3	B13
	EA472 EA530	EX05/XP01/XC01 (544 59)	53	430 540	LD1	207	175	190	0	1	B13
	EA602	XP06/XC06 EX10/EX09	60	600	LB2	242	175	175	0	1	B13
	EA640	XP04/EX11/12 (555 59/562 19)	64	640	L02	242	175	190	0	1	B13
	EA654	EX14/XP14 (560 68)	65	580	D23	230	173	222	0	1	Korean B1
	EA655	EX15/XP15 (560 69)	65	580	D23	230	173	222	1	1	Korean B1
	EA722	EX16/EX17 XP08/XC08	72	720	LB3	278	175	175	0	1	B13
	EA754	EX21/XP16 (570 29)	75	630	D26	270	173	222	0	1	Korean B1
	EA755	EX22/XP17 (570 24)	75	630	D26	270	173	222	1	1	Korean B1
	EA770 EA852	XP07/XC07/EX19 (572 30/574 12) EX23XP09 (580 35/580 43)	77 85	760 800	L03 LB4	278 315	175 175	190 175	0	1	B13 B13
	EA002	EX28/EX31/EX32 XP10/XC10	100	900	LD4	353	175	190	0	1	B13
	EA1004	XP11 (600 32/EX26)	100	850	D31	306	173	222	0	1	Korean B1
	EA1005	XP18 (600 33/EX27)	100	850	D31	306	173	222	1	1	Korean B1
	EB320	536 47 (532 26/532 28)	32	270	E01	178	135	225	0	1	B01
	EB356	EX54 (535 20)	35	240	B19	187	127	220	0	3	B00
	EB357	EX55 (535 22)	35	240	B19	187	127	220	1	3	B00
	EB440	EX50 (540 10/544 01)	44	400	LOO	175	175	190	0	1	B13
	EB442	EX02/EX01 (536 46)	44	420	LB1	207	175	175	0	1	B13/Adapter
	EB450 EB451	EX48 (545 77) EX49 (545 79)	45 45	330	E02 E02	220 220	135 135	225 225	0	1	B01
	EB451 EB454	EX49 (545 79) EX44 (545 23)	45 45	330 300	B24	220	135	225	0	1	B01 B00
Excell**	EB455	EX43 (545 24)	45	300	B24	237	127	227	1	1	B00
	EB456	EX154 (545 84)	45	300	B24	237	127	227	0	3	B00
	EB457	EX155 (545 51)	45	300	B24	237	127	227	1	3	B00
	EB500	EX05 (550 54)	50	450	L01	207	175	190	0	1	B13
	EB501	EX04 (544 64)	50	450	L01	207	175	190	1	1	B13
	EB504	EX07 (550 41)	50	360	D20	200	173	222	0	1	Korean B1
	EB505	EX08 (550 42)	50	360	D20	200	173	222	1	1	B00
	EB542	EX10/EX09 (550 46)	54	520	LB2	242	175	175	0	1	B13/Adapter
	EB604 EB605	EX14 (560 68) EX15 (560 69)	60 60	390 390	D23 D23	230 230	173 173	222 222	0	1	B00 B00
	EB603	EX15 (560 69)	60	640	G75	230	173	186	1	SAE	B00 B09
	EB620	EX11 (555 59/555 64)	62	540	L02	242	175	190	0	1	B13
	EB704	EX21 (570 29)	70	540	D26	270	173	222	0	1	B09
	EB705	EX22 (570 24)	70	540	D26	270	173	222	1	1	B09
	EB712	EX18 (566 38/566 47)	71	670	LB3	278	175	175	0	1	B13/Adapter
	EB740	EX19 (572 30/574 12)	74	680	L03	278	175	190	0	1	B13
	EB741	EX20 (572 19/574 13)	74	680	L03	278	175	190	1	1	B13
	EB758	US-Anschlüsse	75	770	G78	260	180	186	1	SAE	B07
	EB788	US-Anschlüsse	78	850	G65	365	192	192	1	1	B01
	EB800 EB802	EX23 (580 35/580 43) EX23 (580 35/580 43)	80 80	700 700	L04 LB4	315 315	175 175	190	0	1	B13 B13
	EB802 EB852	EX28/EX31 (585 15)	80	760	LB4 LB5	315	175	175 175	0	1	B13
	EB950	EX31 (588 277/592 26)	95	800	L05	353	175	190	0	1	B13
	EB1004	EX26 (600 32)	100	720	D31	306	173	222	0	1	Korean B1
	EB1005	EX27 (600 33)	100	720	D31	306	173	222	1	1	Korean B1
EXIDE	EC400	540 10	40	320	L00	175	175	190	0	1	B13
	EC412	536 46	41	370	LB1	207	175	175	0	1	B13/Adapter
	EC440	544 59	44	360	L01	207	175	190	0	1	B13
	EC441	544 64	44	360	L01	207	175	190	1	1	B13
	EC502 EC550	550 46 555 59	50 55	510 460	LB2 L02	242 242	175 175	175	0	1	B13/Adapter
	EC550 EC551	555 64	55	460 460	L02	242	175	190 190	0	1	B13 B13
	EC551 EC652	563 18/565 30	65	460 540	LO2 LB3	242	175	175	0	1	B13/Adapter
Classic*	EC700	572 30/574 12	70	640	L03	278	175	190	0	1	B13
	EC708	-	70	540	G34	260	173	206	1	1	B12
	EC900	588 27/592 26	90	720	L05	353	175	190	0	1	B13



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