

# Setting the direction.

Light vehicle battery solutions for every demand.



EXIDE

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EXIDE



Creating the future - the Exide way:

EK720

Sustainability High Performance

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# We're an inventive battery maker. And also a pacemaker.

Never stop improving. Never stop innovating. Never stop progressing.

Exide Technologies' promise to continue its push towards energy transition is evident. We provide one of the most extensive and diverse ranges of premium batteries for powertrain technologies - and as an original equipment manufacturer (OEM), we have the pedigree to deliver powerful solutions. An innovator, performer and leader, we are a trusted OE brand and a dependable partner for the aftermarket.

## Exploring new horizons.

The need for sustainable mobility solutions has led to an irreversible trend of alternative drive systems - to reduce fuel consumption and emissions. This has resulted in large share of Start-Stop vehicles in the car parc, which require OE-compliant AGM & EFB batteries for maximum fuel savings. While also registrations of electrified vehicles (xEVs) are increasing year-on-year, they rely on state-of-the-art 12V lead acid batteries for critical vehicle functions - a new era is underway.

## **First choice for major** European car brands.

Exide has been supplying lead-acid batteries to carmakers for over 100 years. We design the most technically advanced products in the industry, and were the first to introduce Start-Stop technology to the European market in 2004. Carmakers trust the quality of our products and our commitment to excellence in manufacturing.

#### Exide Technologies works with leading car manufacturers, including:

Abarth, Alfa Romeo, BMW, Citroen, Dacia, Ferrari, Fiat, Hyundai, IVECO, Jaguar, Jeep, Kia, Lancia, Land Rover, Ligier, Maserati, Mazda, Microlino, Mitsubishi, Nissan, Opel, Peugeot, Piaggio, Renault, Skoda, Suzuki, Toyota, Volvo.



## Best batteries, bold design.

One label – one and only quality. The smart design shows how striking, and recognizable a portfolio can be.





## Vehicle requirements

Power source for e-mobility	ideal for all xEV's	ideal for all xEV's
Start-Stop powertrain	Replace replacement	Recommended OE replacement
Non Start-Stop powertrain	Unless specified by vehicle manufacturer	Extra life for conventional vehicle
Regenerative braking		
Intensive urban use		
Power-hungry equipment		

## **Battery performance**

CCA (cold cranking amperes)	 
Charge acceptance*	 
Cycle life	 
Extra energy**	 

\* Charge acceptance (in A/Ah)

\*\* Energy throughput during lifetime


## **Exide AGM**

The best in class, with highest lifespan and performance.

Being the first means striving for excellence. Exide was the pioneer in introducing AGM batteries for Start-Stop systems back in 2004. Today, we continue to lead the way by bringing the latest and most advanced AGM battery technology from original equipment to the aftermarket.

Every product reflects the highest standards of leading car makers, especially to meet the demands of xEV's\* in the transition to electric mobility.

- High dynamic charge acceptance over Шţ battery lifespan
- Higher energy throughput over battery lifespan <u>آ</u>با thanks to latest grid technology
- Optimized for partial state of charge (iiii) operations (PSoC)
- Ideal for large cars, SUVs, vans, and vehicles with Start-Stop and power-hungry electrical equipment
- Recombinant VRLA (valve regulated) VRLA with top-level safety features

Latest generation approved by car manufacturers







START discharge and recharge of Start-Stop systems

> Typical pattern of State of Charge (SoC) during a journey with Start-Stop system

Designed and built to endure continuous battery

Regenerative braking

Sealed double security lid with degassing outlet and flame arrestor

Exide unique valve regulated venting

Tall plate group with high compression

**Negative plate** Framed negative plate

#### Positive plate

New framed grid design with high-tech alloy. The high-capillarity glass mat separator provides extra absorption for maximum electrolyte volume

## Advanced framed grid

Exide's next-generation grid design with efficient geometry provides consistent power and longer battery life



## Features for xEV



High lifespan and performance stability over lifetime



Lower Internal resistance, limited voltage drops on high power demands

Best response for safety loads with high voltage threshold requirements (e.g. break/steer by wire) during evasive maneuvers, safe states, side-laning situations



Ideal 12V power source for auxiliary systems in **xEV** vehicles.



**ADAS Support: Crucial for safety** integrity, supports critical functions in driver assistance and vehicle safety.

\* The special term xEV is the collective term for all types of electrified vehicles - whether micro hybrid or fully electric. EV stands for Electric Vehicle and the x stands for the different variants. Learn more on page 10.



## Exide EFB

Approved by car makers.

Invented by Exide in 2008, EFB batteries play a crucial role in the automobile market. Exide offers the latest OE generation to the aftermarket, featuring our proprietary **Carbon Boost.** The Exide EFB battery **supports all vehicles, with or without Start-Stop systems.** It shows an unmatched energy recovery and exceptional dynamic charge acceptance.

- High dynamic charge acceptance over battery lifespan
- Extra energy and extra life for vehicles with and without Start-Stop systems
- Optimised regenerative braking functionality in vehicles with Start-Stop systems – ensuring maximum fuel savings and less CO<sub>2</sub> emissions
- High-level safety features
- Cptimal operation in engine compartment
- Latest generation approved by car manufacturers
- Great car park coverage from a limited number of SKUs
- Long shelf life

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- 75% more energy recovered in the same amount of time compared to older EFB
- Longer overall lifespan





Exide EFB offers significant performance advantages over a conventional battery also when fitted into a car without Start-Stop system.

 Ideal 12V power source for auxiliary systems in xEV vehicles.

 Spill-proof security lid with flame arrestor

 Plate group with medium compression

 Negative plate and a grid with Carbon Boost

## Positive plate 3DX grid and advanced glass mat retainer covering active mass.





Lab tests show that it takes significantly less time to recharge an Exide Premium Carbon Boost battery than a standard battery under the same conditions.



Carbon Boost<sup>®</sup> is Exide's unique recipe for carbon additives on the negative plates that was first developed for Exide's Start-Stop OEM batteries. Continuous investments in R&D, tighter emissions regulations, and the increasing demands from the OEMs in regards to charge acceptance and energy availability have lead to the development of the latest generation Carbon Boost.



Carbon Boost uses improved carbon additives, combining an optimized surface structure with significantly better conductivity. This enables a better current flow within the battery, resulting in unmatched charge acceptance. It also helps to dissolve the lead sulfate deposits that usually form on a battery's discharged negative plates, reducing its ability to recharge efficiently.



ADAS Support: Crucial for safety integrity, supports critical functions in driver assistance and vehicle safety.





Without Carbon Boost® The plates are covered with sulfate



With Carbon Boost® Sulfate is reduced due to Carbon Boost technology

## **Exide Premium**

OEM experience for the aftermarket.

The latest Premium with Carbon Boost recharges up to two times faster compared to other conventional batteries, thanks to Exide's proprietary application of carbon additives on the negative plates. While battery failure remains the number one cause of car breakdowns\*, fast recharging considerably reduces the risk of breakdowns by helping the battery retain a healthy state of charge for longer.

The Premium Carbon Boost battery is designed to withstand extreme temperature, power-hungry electrical equipment, and intensive urban driving.

- Made with recycled plastic components to reduce CO<sub>2</sub> emissions by over 2,700 tons and to save 8 million liters of water and 1.2 million liters of crude oil every year
- Latest plate design for greater robustness and ക്ര increased resistance to high temperatures
- 'CAUTION' label to prevent conventional (!) batteries being installed in Start-Stop vehicles
- 30 % extra starting power ۲ĩ)٠
- Ideal for highly equipped cars with powerful Ċ engines and demanding electrical needs
- Ideal for extreme weather and urban driving \*\* conditions





3DX grid technology



Original equipment experience inside meets OE requirements



- Faster recharging (2x times faster than other conventional batteries)
- Longer lifespan (higher average state-of-charge £Jy throughout battery life)

## **Exide Excell**

All-round battery for standard use.

'CAUTION' label to avoid conventional ( batteries being installed in Start-Stop vehicles [¥]+ 15 % extra starting power All-round battery for standard use 3DX grid technology

## **Exide Classic**

Ideal for vehicles with basic energy demands.





 $\widehat{\mathbf{C}}$  Ideal for cars with basic power needs



3DX grid technology

Clear and quickly identifiable 'CAUTION' message **Recycled plastic** components **Negative plate** 3DX grid with Carbon Boost Positive plate 3DX grid enveloped with highperformance polyethylene separator

Installation advice on top labels always equipped safely.

Exide was a first-mover in adding a distinctive 'CAUTION' label on its Premium, Excell, and Classic standard flooded batteries to ensure that they are not installed into cars that are equipped with a Start-Stop system.





## Good to know!

Hot weather significantly impairs battery performance. But it is during the cold season that more energy is needed for light and heating. Hot weather accelerates self-discharge, grid corrosion and active material shedding. It could lead to shorter service life if batteries are not reinforced for extreme climates.

In urban environments the engine is often turned off or idles, and the electrical system may consume more power than the alternator can supply. This puts extra pressure on the battery. Power-hungry electrical equipment, such as media players or navigation equipment, put extra pressure on the battery.

# Supporting the change of tomorrow.

The automotive industry is facing a major transition.



EU regulations lead the way to cleaner transportation and therefore drive the development of various types of electric vehicles. In this changing world, Exide Technologies continues to create new batteries to enable future vehicles to reduce CO<sub>2</sub> emissions even further and improve overall driving efficiency and safety.

## The electrification of vehicles has evolved.

Here is an overview of electrified vehicles. The special term xEV is the collective term for all types - whether micro hybrid or fully electric. EV stands for Electric Vehicle and the x stands for the different variants.

Feature	Start-Stop Micro hybrid	Mild hybrid	Full hybrid	Plug-in hybrid	Electric
Propulsion	Internal combustion engine	Internal combustion engine	Internal combustion engine + electric drive (10-30km)	Internal combustion engine + electric drive (50-100km)	Electric drive (200-500km)
Fuel	Petrol/diesel	Petrol/diesel	Petrol	Petrol + electric	Electric
(Hybrid) type	Micro	MHEV (mild)	FHEV	PHEV	BEV

## The essential role of the 12V lead-acid battery.

The job description of the 12V battery does not fit on a business card. It is responsible for so many things; nothing works without it. It provides the necessary energy to activate the safety relay and connect the high-voltage battery to the board net and electric engine.

## On eye-level with progress.

ADAS and AV continue to evolve, so at some point, you will be able to drive from A to B fully autonomously. It makes the role of 12V batteries increasingly crucial to ensure reliability and safety in every moment and in every electric vehicle.



Advanced Driver Assistance Systems (ADAS)





Parking Main electrical loads are on the 12V battery

- · Standby power for security systems (alarm system, sensors, cameras)
- Standby power to several ECUs and memory
- Door locking (+ possibly BT or WiFi for handsfree access via mobile or remote access/ control via app etc.)\*

\* Refers to BEV



Charging Main electrical loads are on the 12V battery

 Initialization and monitoring of the charging process



Starting Main electrical loads are on the 12V battery

- · When the lead-acid battery is discharged. the car cannot start
- Provide power to the relays/ safety contactors to activate the HV battery





Read more in the xEV brochure.

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Autonomous vehicles (AV)



## Driving

Main electrical loads on the DC/DC converter, 12V battery as backup

- · Backup system capable of directly powering specific secondary loads
- Stabilizes overall electrical system voltage



## System failure

- Main electrical loads are shifted from DC/DC to 12V battery
- · Power support to safetycritical loads such as power steering, ABS and brake boosting, door locks, emergency lights and e-call system (if installed) as the main power unit
- Critical function in case of system failure

## **Be your customers** first choice.

## 45% of car breakdowns are caused by the 12V battery system. 100 % maintenance can change that.

E-mobility is in the fast lane towards the future. The 12V battery in the xEV feeds many more electronic and safety-relevant systems compared to the combustion engine. More load means more abrasion and more risks for road safety. That is why it is particularly important to offer a battery test service for all types of vehicles. 5 minutes is all it takes to ensure that a failing battery is replaced on-time and customers have a safe ride.

## Reasons for car breakdown\*



Always at your side. Always at hand.

Integrality turns us into a partner. Just as you are there for your customers, we are there for you. With expertise, advice and tools.



Workshops are evolving to meet changing vehicle needs, including fitments, replacements, and advanced diagnostics. Exide Technologies is already setting standards today in providing customers with futureproof solutions and programs making them fit for the future.

## Testing

**Battery Tester EBT965P** & Battery Tester app



Charging

**Battery Charger** 



\* Source: ADAC Breakdown Statistics for Germany 2025

## Selecting

**Battery Finder** 

The Exide Battery Finder guides to easily find the right battery.



Google Play





Scan the code to open the **Battery Finder.** 

## Replacing

**Replacement Tool BRT-12** 



## **Replacement Guide**



## **Power whenever and** wherever you need it.



Find out more about the battery details.

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Excell EB320

EB356

EB356A

EB357

EB440

EB442

EB450

EB451

EB454

EB455

EB456

EB457

EB500

EB501

EB504

EB505

EB558

EB602

EB604

EB605

EB620

EB621

Exide	Perfor		
Code	Capacity Ah	CCA A (en)	Container

32

35

35

35

44

44

45

45

45

45

45

50

50

50

55

60

60

62

62

50

60

45

270

240

240

240

400

420

330

330

330

330

330

330

450

450

360

360

620

540

480

480

540

540

540

E01

B19

B19

B19

L00

LB1

E02

B24

B24

L01

L01

D20

D20

575

D23

D23

L02

L02

D26

D26

G78

L03

L04

LB4

LB5

LB3

L03

LB2

B24

E02

B24



Code	Capacity Ah	CCA A (en)	Container	L (mm)	H (mm)	W (mm)	Hold down	Polarity	Terminal
GM									
EK620	62	680	L02	242	175	190	B13	ETN 0	1
EK720	72	760	L03	278	175	190	B13	ETN 0	1
EK820	82	800	L04	315	175	190	B13	ETN 0	1
EK960	96	850	L05	353	175	190	B13	ETN 0	1
EK1060	106	950	L06	392	175	190	B13	ETN 0	1
EK454	45	380	B24	237	227	127	В0	ETN 0	JIS taper post
EK457	45	380	B24	237	227	127	В0	ETN 1	JIS taper post
EK013	1,2	18	C20	97	58	43	В0	ETN 4	Faston S (4,8)
EK091	9	120	C54	150	90	105	В0	ETN 1	M12
EK111	11	150	C55	150	90	130	В0	ETN 1	M04
EK131	13	200	C56	150	90	145	В0	ETN 1	M04
EK151	15	200	C76	150	100	100	В0	ETN 3	Screwed/lug
EK143	14	80	C56	150	90	145	B0	ETN 1	Small taper post



EL550	55	540	L01	207	175	190	B13	ETN 0	1
EL600	60	640	L02	242	175	190	B13	ETN 0	1
EL604	60	520	D23	230	173	222	В0	ETN 0	1
EL605	60	520	D23	230	173	222	В0	ETN 1	1
EL652	65	650	LB3	278	175	175	B13	ETN 0	1
EL700	70	760	L03	278	175	190	B13	ETN 0	1
EL752	75	730	LB4	315	175	175	B13	ETN 0	1
EL754	75	750	D26	270	173	222	В0	ETN 0	1
EL800	80	800	L04	315	175	190	B13	ETN 0	1
EL954	95	800	D31	306	173	222	Korean B1	ETN 0	1
EL955	95	800	D31	306	173	222	Korean B1	ETN 1	1
EL1000	100	900	L05	353	175	190	B13	ETN 0	1
EL1050	105	950	L06	392	175	190	B13	ETN 0	1





EFB

EA406	40	350	B19	187	136	220	B1	ETN 0	JIS taper pos + adapter
EA456	45	390	B24	237	136	227	B1	ETN 0	3 + adapter
EA472	47	450	LB1	207	175	175	B13	ETN 0	1
EA530	53	540	L01	207	175	190	B13	ETN 0	1
EA601	60	600	L02	242	175	190	B13	ETN 1	1
EA612	61	600	LB2	242	175	175	B13	ETN 0	1
EA640	64	640	L02	242	175	190	B13	ETN 0	1
EA654	65	580	D23	230	173	222	Korean B1	ETN 0	1
EA680	68	650	S68	277	175	190	B13/Adapteur	ETN 0	1
EA681	68	650	S68	277	175	190	B13/Adapteur	ETN 1	1
EA722	72	720	LB3	278	175	175	B13	ETN 0	1
EA754	75	630	D26	270	173	222	Korean B1+B6	ETN 0	1
EA755	75	630	D26	270	173	222	Korean B1+B6	ETN1	1
EA770	77	760	L03	278	175	190	B13	ETN 0	1
EA852	85	800	LB4	315	175	175	B13	ETN 0	1
EA900	90	720	L04	315	175	190	B13	ETN 0	1
EA954	95	800	D31	306	173	222	Korean B1	ETN 0	1
EA955	95	800	D31	306	173	222	Korean B1	ETN 1	1
EA1000	100	900	L05	353	175	190	B13	ETN 0	1
EA1050	105	850	LH4	315	175	205	B13	ETN 0	1

EB704	70	540
EB705	70	540
EB708	70	740
EB712	71	670
EB740	74	680
EB741	74	680
EB800	80	640
EB802	80	700
EB852	85	760
EB858	85	800
EB950	95	800
EB954	95	760
EB955	95	760
EB1000	100	720
EB1100	110	850



EB858	85	800	G65
EB950	95	800	L05
EB954	95	760	D31
EB955	95	760	D31
EB1000	100	720	LH4
EB1100	110	850	L06
Classic			
50440			
EC440	44	360	L01
EC440 EC542	44 54	360 500	L01 LB2
EC542	54	500	LB2
EC542 EC550	54 55	500 460	LB2 L02
EC542 EC550 EC605	54 55 60	500 460 440	LB2 L02 D26

EC904 90 680 D31

EC905 90 680

## A role model for the circular economy!

Exide Technologies operates three recycling facilities in Europe. 99% of automotive lead-acid batteries are recycled in Europe. 100% of a lead-acid battery can be recycled.\*



D31

Dimer	isions		Technical characteristics			
L (mm)	H (mm)	W (mm)	Hold down	Polarity	Terminal	
178	135	225	B1	ETN 0	1	
187	127	220	B0	ETN 0	3	
187	136	220	Korean B1 Long	ETN 0	3	
187	127	220	В0	ETN 1	3	
175	175	190	B13	ETN 0	1	
207	175	175	B13	ETN 0	1	
220	135	225	B1	ETN 0	1	
220	135	225	B1	ETN 1	1	
237	127	227	В0	ETN 0	1	
237	127	227	B0	ETN 1	1	
237	127	227	B0	ETN 0	3	
237	127	227	B0	ETN 1	3	
207	175	190	B13	ETN 0	1	
207	175	190	B13	ETN 1	1	
200	173	222	Korean B1	ETN 0	1	
200	173	222	Korean B1	ETN 1	1	
230	180	186	B7	ETN 1	SAE S side Terminal 3/8"	
242	175	175	B13	ETN 0	1	
230	173	222	Korean B1	ETN 0	1	
230	173	222	Korean B1	ETN 1	1	
242	175	190	B13	ETN 0	1	
242	175	190	B13	ETN 1	1	
270	173	222	Korean B1+B6	ETN 0	1	
270	173	222	Korean B1+B6	ETN 1	1	
260	180	186	B7	ETN 1	SAE S side Terminal 3/8"	
278	175	175	B13	ETN 0	1	
278	175	190	B13	ETN 0	1	
278	175	190	B13	ETN 1	1	
315	175	190	B13	ETN 0	1	
315	175	175	B13	ETN 0	1	
353	175	175	B13	ETN 0	1	
306	192	192	B1	ETN 1	EN taper post	
353	175	190	B13	ETN 0	1	
306	173	222	Korean B1	ETN 0	1	
306	173	222	Korean B1	ETN 1	1	
315	175	205	B13	ETN 0	1	
392	175	190	B13	ETN 0	1	

207	175	190	B13	ETN 0	1
242	175	175	B13	ETN 0	1
242	175	190	B13	ETN 0	1
270	173	222	Korean B1+B6	ETN 1	1
278	175	175	B13	ETN 0	1
278	175	190	B13	ETN 0	1
353	175	190	B13	ETN 0	1
306	173	222	Korean B1	ETN 0	1
306	173	222	Korean B1	ETN 1	1



of all automotive lead batteries are recycled in Europe









