Light Vehicle
Battery Solutions

New EFB Battery

Latest Generation
AGM & Premium

Carbon Boost 2.0

Accessories
& Support

Made in Europe
by Exide Technologies
Original Equipment
Manufacturer

The future is now

Bringing OE innovation to the independent aftermarket

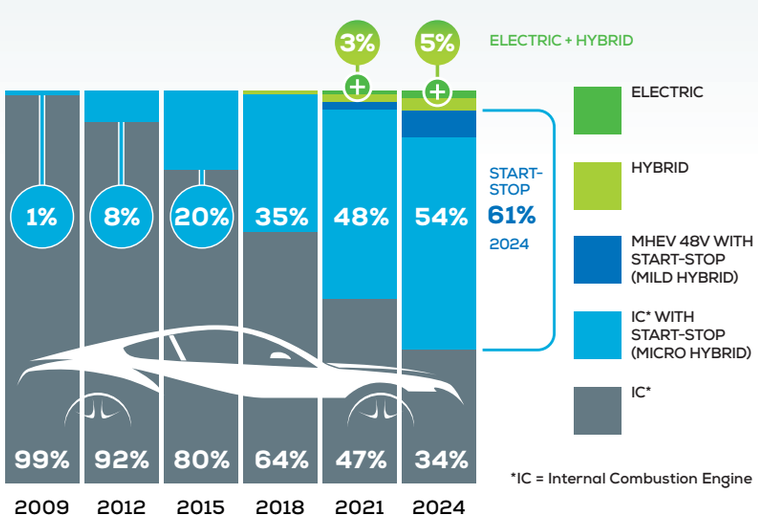
Exide is introducing its next generation of light-vehicle batteries. The range was developed in Exide's original equipment business, and is specially optimised for the most advanced powertrain technologies coming to market now and in the years ahead. It provides unparalleled performance and the reassurance of a leading OE brand. Exide also offers a suite of professional accessories, allowing workshops to provide customers with the highest level of service.

An indisputable trend

Very ambitious EU legislation targets restricting CO_2 emissions have incentivised vehicle manufacturers to design much more efficient cars with modern engines, next-generation fuel-saving capabilities such as Start-Stop, battery management systems and smart alternators. The number of Start-Stop vehicles, all of which need OE-compliant AGM and EFB batteries, is increasing dramatically. While conventional powertrains still powered most of the car parc in 2018, the percentage of Start-Stop vehicles in Europe is growing rapidly every year.

European car parc and changing powertrains

- In 2018, cars with Start-Stop powertrains accounted for approximately 35% of the total car parc in Europe
- By 2024, the majority (61%) of vehicles in the car parc will feature a Start-Stop system (Micro & Mild Hybrids)
- The number of cars with Start-Stop systems will have risen from 1% to 61% in just 15 years
- Significant replacement potential for OE-compliant AGM and EFB batteries in the aftermarket



Source: Exide estimation EU28+EFTA (European Free Trade Association inc: Iceland, Liechtenstein, Switzerland and Norway)

Trusted by leading carmakers

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

EQUIPMENT ORIGINAL MANUFACTURER

Exide works with leading car manufacturers, including:

Alfa Romeo, Bentley, Citroen, Dacia, DS, Fiat, Ford, Hyundai, Jaguar, Jeep, Kia, Lancia, Land Rover, Mazda, Mercedes-Benz, Mitsubishi, Nissan, Opel, Peugeot, Piaggio, Porshe, Renault, Suzuki, Toyota, Volkswagen Group, Volvo

70% of European car brands work with Exide batteries

Light Vehicle Battery Range

Start-Stop | Conventional

carbon boost 2.0

carbon boost 2.0

	AGM PAGE 3	EFB PAGE 4	Premium PAGE 5	Excell PAGE 6	Classic PAGE 6
VEHICLE REQUIREMENTS					
START STOP Powertrain	AGM Replace AGM **Recommended OE Replacement**	EFB Replace EFB **Recommended OE Replacement**	✗	✗	✗
NON START STOP Powertrain	✗ Unless specified by vehicle manufacturer	✓ ***EXTRA* LIFE** For conventional vehicles	✓ **Carbon Boost®** Faster recharge for high equipment level	✓ **Widest Range** to fit almost 100% of car parc	✓ **Lowest Cost** for older and more basic vehicles
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

SPARE ORIGINAL PART

For toughest electrical needs of Start-Stop vehicles

Continuous investments in R&D have allowed Exide to propose the latest innovative AGM batteries from OE also to the aftermarket. It features the new LifeGrid™ technology, perfect for advanced Start-Stop systems where the battery needs to be quickly recharged through the energy provided by the regenerative braking system.
The new LifeGrid™ technology, combined with high-capillarity glass mat separators, advanced lead-tin alloys and unique carbon additives in the active mass, provides consistent power and even longer battery life.

AGM technology

AGM Replace AGM

Benefits:

NEW!

- **Top charge acceptance**
- **Higher energy throughput over battery lifespan thanks to new LifeGrid™ technology**
- Optimised for partial state of charge operations
- Ideal for large cars, SUVs, vans and vehicles with Start-Stop and power-hungry electrical equipment
- Top-level safety features and absolutely no free acid
- Recombinant VRLA (valve regulated)
- Latest generation approved by car manufacturers
- Great car parc coverage from a limited number of SKUs
- Long shelf life

START STOP

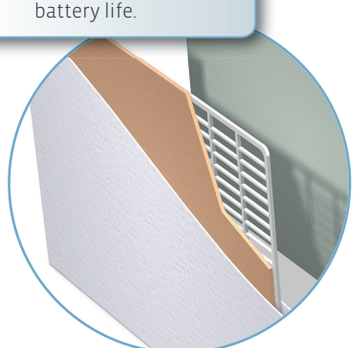
Designed and built to endure continuous battery discharge and recharge of Start-Stop systems

Typical pattern of State of Charge during a journey with Start-Stop system

ABSORBENT GLASS MAT | SUPERIOR POWER | REGENERATIVE BRAKING | INTENSIVE USE | RECOMMENDED FOR START-STOP

NEW!

The new LifeGrid™ technology
Exide's new grid design provides consistent power and longer battery life.



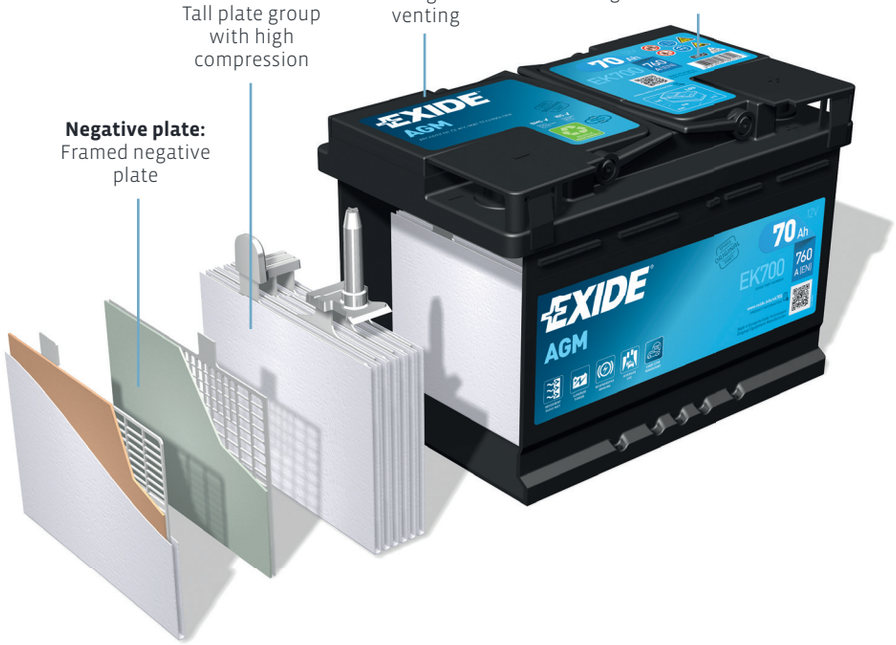
Positive plate:
New framed grid design with high-tech alloy. The high-capillarity glass mat separator provides extra absorption for maximum electrolyte volume and to avoid stratification.

Exide unique valve regulated venting

Sealed double security lid with degas-sing outlet and flame arrestor

Tall plate group with high compression

Negative plate:
Framed negative plate



Exide EFB carbon boost 2.0

SPARE ORIGINAL PART

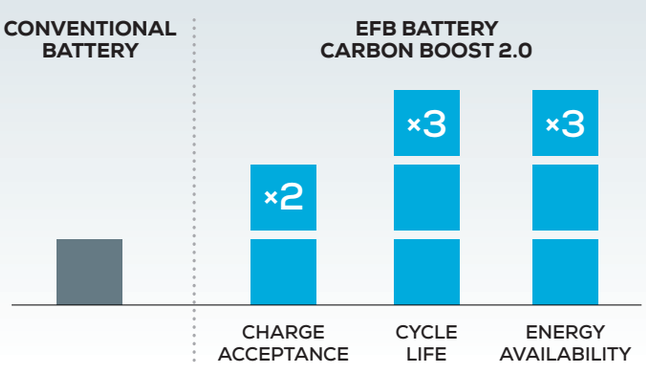
OEM experience for the aftermarket

First invented by Exide in 2008, EFB batteries have come to play an increasingly crucial role for car manufacturers in order to reduce fuel consumption and emissions. Now Exide brings the latest OE generation to the aftermarket, featuring **Carbon Boost 2.0.**

The new Exide EFB battery **supports all vehicles, with and without Start-Stop systems,** which have high cycling requirements. When installed in cars with a Start-Stop system, Exide's new EFB battery shows an unmatched energy recovery and exceptional dynamic charge acceptance. The battery also benefits from a longer overall lifespan, when installed in cars with conventional power train.

NEW!

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



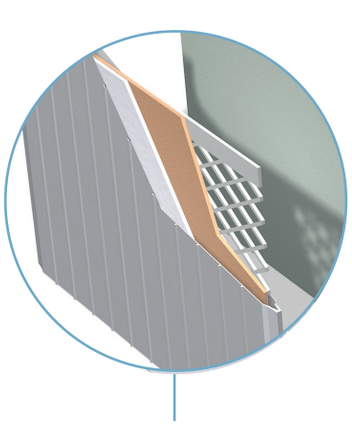
EFB technology

EFB Replace EFB

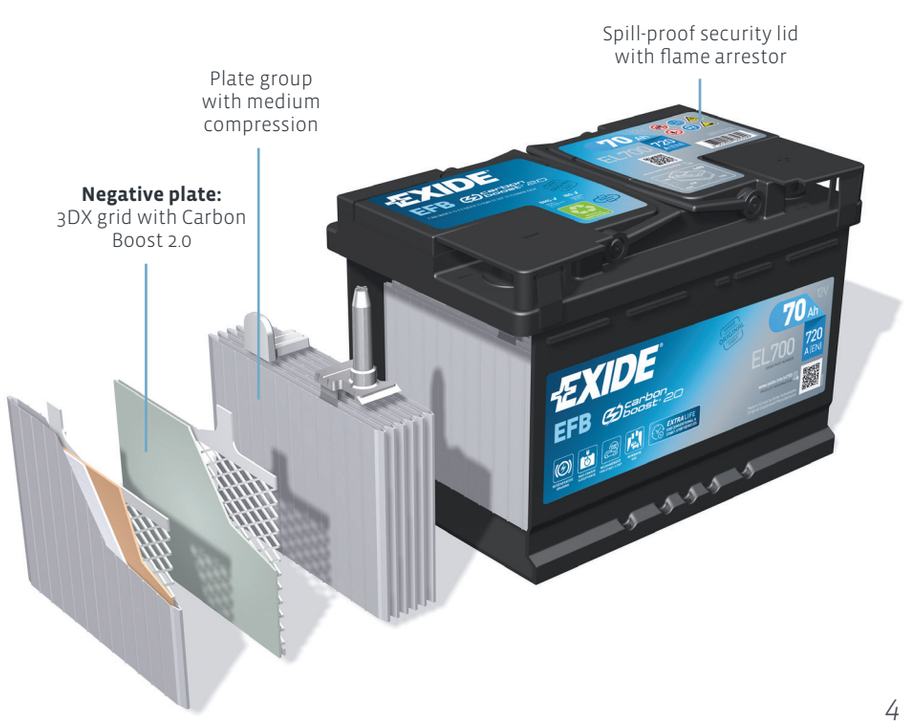
Benefits:

NEW!

- **High dynamic charge acceptance over life of battery**
- **Extra energy 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_2 emissions**
- High-level safety features
- Optimal operation in engine compartment
- Latest generation approved by car manufacturers
- Great car parc coverage from a limited number of SKUs
- Long shelf life

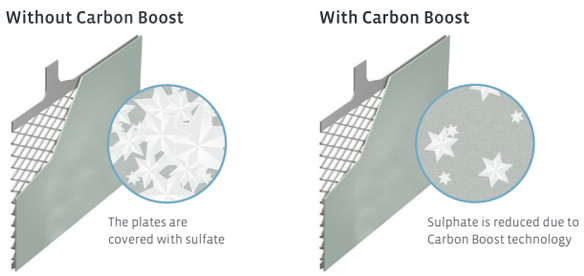


Positive plate:
3DX grid and advanced glass mat retainer covering active mass



Carbon Boost® 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 new **Carbon Boost 2.0.**

Carbon Boost 2.0 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 consolidate on a battery's discharged negative plates, reducing its ability to charge back efficiently.



Exide EFB with Carbon Boost 2.0

Exide's new EFB batteries feature Carbon Boost 2.0. with exceptional dynamic charge acceptance, offering important benefits for drivers, especially in intensive urban driving conditions:

Benefits

- **75% more energy recovered in the same amount of time compared to older EFB**
- **Optimized regenerative braking functionality - ensuring fuel savings and reduction of CO_2 emissions**
- **Longer overall lifespan**

WLTP (Worldwide Harmonised Light Vehicle Test Procedure)

Strict new EU regulations have imposed a CO_2 emissions limit of 95g/km in vehicle homologation testing by 2021*.
The WLTP test measures how much battery capacity is depleted in testing and converts it to equivalent fuel consumed and CO_2 emitted. The battery should retain a high percentage of its initial capacity to help car makers avoid being penalized when passing certain thresholds. Since the recharging process accounts for only 8% of test duration, the battery needs to achieve the highest possible energy recovery in a short time. With Carbon Boost 2.0, the dynamic charge acceptance of EFB batteries is maximized, and

- The battery accepts 75% higher average recharging current than previous generation
- It preserves a higher capacity at the end of the test (2,5 × less state-of-charge loss compared to previous generations)

*Fleet average/bonus included

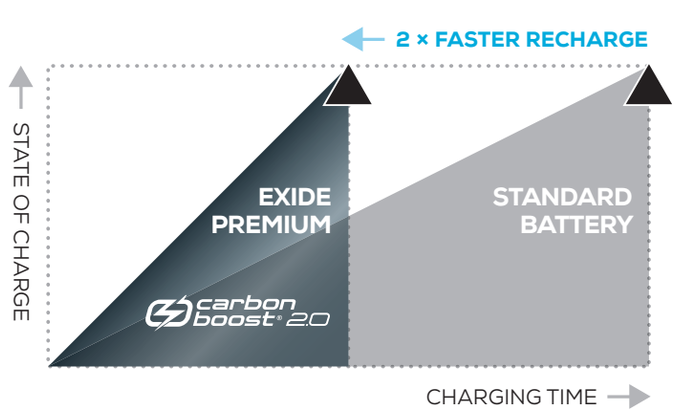
Exide Premium with Carbon Boost 2.0

Carbon Boost was first introduced in the aftermarket Premium range in 2014. The new Carbon Boost 2.0. brings performance to the next level:

Benefits

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

Faster recharging reduces the risk of breakdowns by keeping the battery in a healthy state of charge for longer.



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.

Exide Premium carbon boost 2.0

The latest Premium with Carbon Boost 2.0 now recharges up to 2 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.

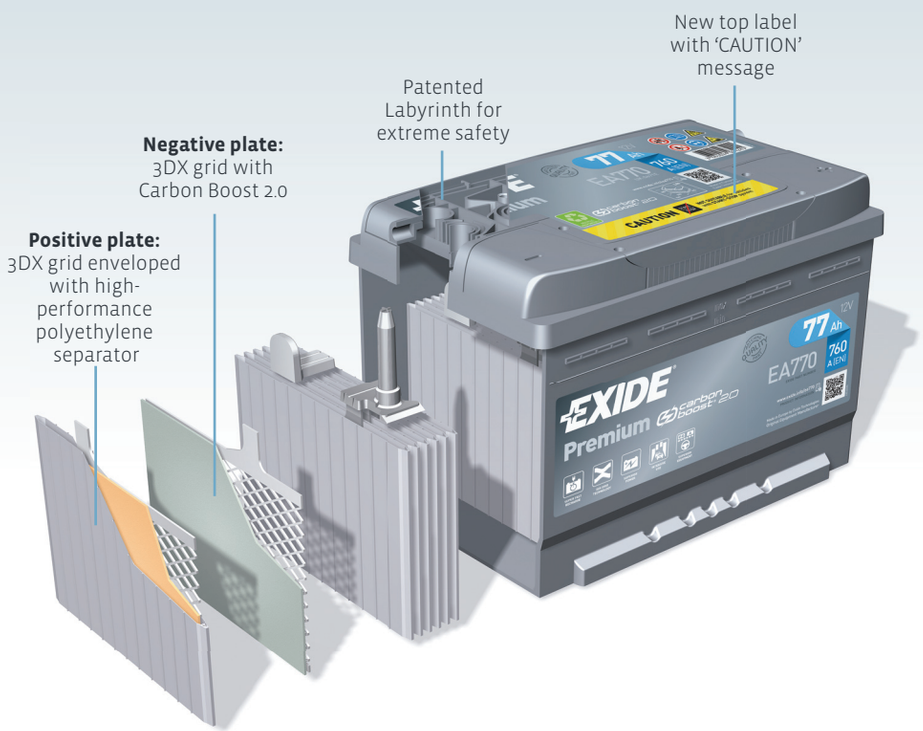
MATCHING QUALITY PART

* ADAC (Allgemeiner Deutscher Automobil-Club) Breakdown Statistics 2018

Benefits

NEW!

- **Recharges up to 2 times faster compared to other conventional batteries**
- **Latest plate design for greater robustness and increased resistance to high temperatures**
- **Updated top label – 'CAUTION' label to prevent conventional batteries to be installed on Start-Stop vehicles**
- 30% extra starting power
- Ideal for highly equipped cars with powerful engines and demanding electrical needs
- Ideal for extreme weather and urban driving conditions
- Original equipment experience inside
- Meets OE requirements
- Comprehensive range covering around 90% of car parc



SUPER FAST RECHARGE · 3DX GRID TECHNOLOGY · SUPERIOR POWER · INTENSIVE USE · SUPERIOR EQUIPMENT

Did you know? - Things that drain your battery

***Cold 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 idle, 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.*

Exide Excell & Classic

3DX GRID TECHNOLOGY | MEDIUM POWER | STANDARD EQUIPMENT

Exide Excell

Benefits

NEW!

- Updated top label –'CAUTION' label to avoid conventional batteries to be installed on Start-Stop vehicles
- 15% extra starting power
- All-round battery for standard use
- Complete range covering almost 100% of car parc
- Original equipment experience inside

Exide Classic

Benefits

NEW!

- Updated top label –'CAUTION' label to avoid conventional batteries to be installed on Start-Stop vehicles
- Economy solution
- Ideal for cars with basic power needs

3DX GRID TECHNOLOGY

NEW!

Installation Advice on top labels

Exide is the first in the market to add a distinctive, **'CAUTION' label on its Premium, Excell** and **Classic** standard flooded batteries, to ensure that they are only fitted into cars that are not equipped with a Start-Stop system.
Trust the battery expert for trouble-free installation and enhanced customer satisfaction.

Start-Stop Auxiliary

Auxiliary batteries power the electrical equipment in certain cars, as a complement to the main starter battery.

The reliable secondary battery

MATCHING QUALITY PART

Benefits:

- 3 times higher cycle life
- Long shelf life
- VRLA (valve regulated) for leak-proof security
- Original equipment experience inside

ABSORBENT GLASS MAT | INTENSIVE USE | 3 x STANDARD CYCLABILITY

Innovative Workshop Tools

Exide has a comprehensive range of accessories and support. We help you test, charge, select, replace and recycle batteries – everything workshops need to keep work in house, provide quality service and grow profitability.

Testing

NEW!

EBT-965P Battery Tester

Exide's advanced and easy to use EBT-965P is the next-generation battery tester, designed for the most reliable diagnostics of any make or type of battery. It enables preventative maintenance and ensures maximum customer satisfaction.

Previous testers only measured the conductance, but the new EBT-965P also features Conductance Profiling™ , including battery health and the remaining available energy in the test results..

CONVENTIONAL AGM EFB GEL

STANDARD TESTERS

Conductance

Cranking Capability (CCA)

EXIDE EBT-965P TESTER

Conductance Profiling™

Energy Availability

CHARGE

Charging

Battery Charger

Exide chargers can be used on cars, boats and motorcycles, and are ideal for both consumers and professionals alike.

Workshops use the device to ensure customers leave with a fully charged battery every time.

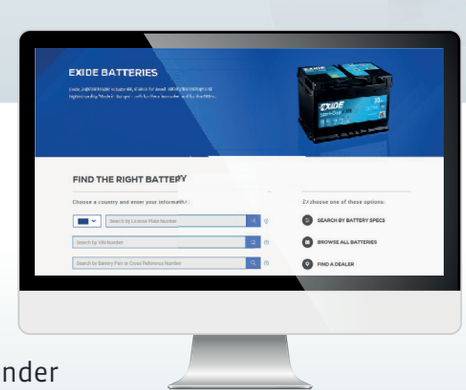
CONVENTIONAL AGM EFB GEL

REPLACE

Replacing Start-Stop Batteries

BRT-12 Battery Replacement Tool

Our award-winning* Battery Replacement Tool comes pre-loaded with battery codes, and makes it easy to replace batteries and clear faults from the dashboard.



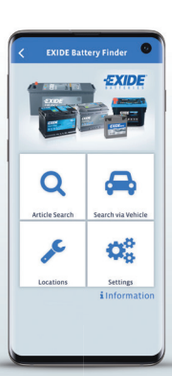
Selecting

Battery Finder App

Search by car model, VIN or registration number to quickly find the right battery on the go.

Google play

App Store



Online Battery Finder

NEW!

www.exide.com/eu/en/battery-finder

The new Online battery finder features a modern interface and all-new user experience, it supports battery selection and fitting for the most comprehensive range of vehicle types such as cars, buses, trucks and motorcycles – plus, for the first time, construction and agricultural vehicles, ATVs, snow mobiles and jet skis.

* Professional Motor Mechanic magazine Top Product Award 2013