GUARANTEES AND HOW TO DEAL WITH GUARANTEES

Customer comes with a battery: **Important**, is the battery charged?
Otherwise, first charge the battery, then let it rest for 4 - 6 hours before testing.

TEST RESULT:

Voltage is between 10 and 12 volts and the cold cranking (A/EN) is zero, almost zero = **cell closure = guarantee.**
Voltage is between 12.4 - 12.7 volts and still 70% of the power = **deep discharge = no guarantee.**

In addition to the battery tester, also use a load tester.
If the voltage drops below 9 volts during a test with the load tester, there is a broken cell.

If a customer drives up and asks to test the battery, first load the battery with a load tester before testing.
Also, measure the charging voltage of the alternator to check for leakage current.

It always depends on the battery, so listen to what the customer is telling you and ask questions, for example:
Do you drive a lot, does the car have many users (accessories) and do you also use it?

Nowadays people drive short distances, the car has many users (accessories) that are all used,
and this is a cycle every time.

For example a Ford Kuga, here the interior lighting remains on for 15 minutes after the car is turned off!

Magic eye, if the colour is green, but the measurement shows a voltage of 8 - 9 volts,
then another cell in the battery is broken.

A factory defect generally shows up within 3 - 4 months.

PERIOD MARCH/APRIL:

If a customer comes with a battery, recreation, during this period and the battery is below 11 volts, then this battery has not been charged during the winter period and the battery is broken, discharged, and is no reason for warranty

Motorcycle battery: below 11 volts is not charged, battery is broken, no grounds for warranty.

IMPORTANT:

A starter battery may only be discharged by 20%.
A semi traction battery 50% an AGM / Gel battery 60%

When selling, never give a battery below 12.6 volts, otherwise charging the battery.

Storage: off the ground on, for example, wooden pallets, temperature of about 15 - 18 degrees.

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Energie in Perfektion!

Panther BATTERIEN

10 FACTS

THAT LEAD TO PREMATURE FAILURE OF CAR BATTERIES

01. In the recent years the energy requirement of a vehicle has more than doubled.

02. The more power-requiring equipment is built into a car, the shorter the lifespan of a battery.

03. For years, new vehicles have not been designed to fulfill this demand for electricity, car batteries are completely inferior in terms of capacity.

04. Manufacturers and official dealers are currently responding with far-reaching leniency solutions, on this short lifespan of car batteries.

05. Garages and end users from the car parts trade will replace these car batteries, unfortunately for an equivalent undersized car battery.

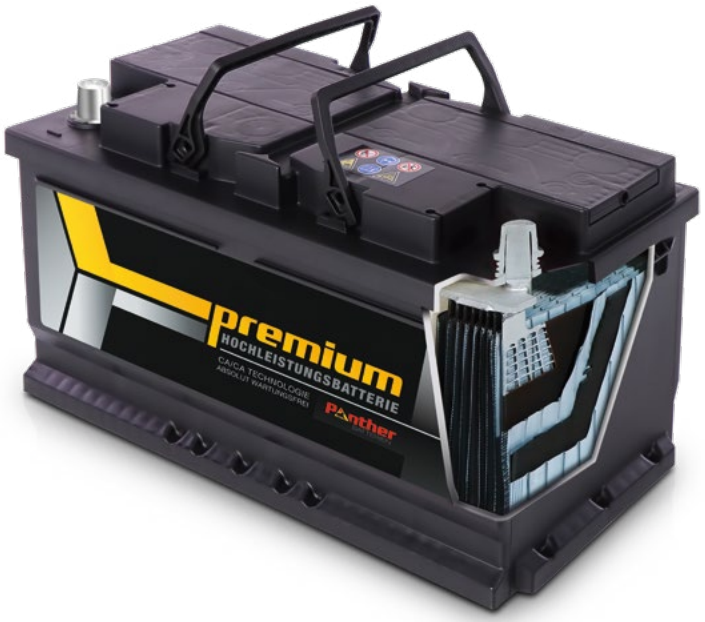
06. In new vehicles, car batteries are increasingly used as energy storage demanding the energy Equipment.

07. The more and deeper a car battery is discharged, the higher the wear and tear. Even after 3 months, batteries can already show wear.

08. A car battery with an average deep discharge of 20% lasts 5 times as long as a battery with a deep discharge of 50%.

09. Only 10% of all returns are with a clear production error such as, for example cell closure

10. A deeply discharged or worn out car battery is not a valid complain in the sense of warranty!



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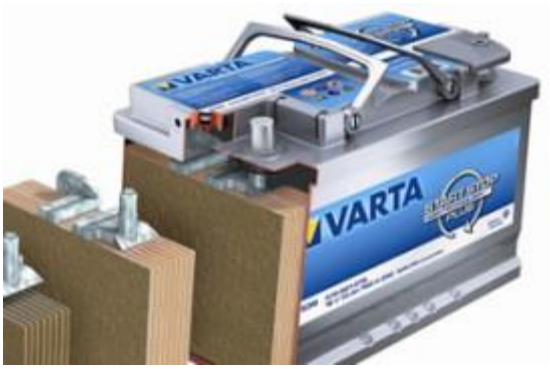
Energie in Perfektion!

AGM, EFB, ECM: which battery should be used?

TECHNIQUE

Not all batteries are the same. Especially now that the first cars with a start-stop system are due for a new battery, you have to be careful when replacing them. What should be in it, AGM, EFB or ECM? And what do those letters actually stand for?



A conventional lead-acid starter battery prefers to be 'full'. Or better, such a battery lasts the longest if the State of Charge is always 100%. That's fine too. At the cold start, the SoC briefly drops to a minimum of 95%. But if the journey is not too short, the alternator quickly brings the state of charge back to 100%.

Cyclic load in micro hybrid

With micro-hybrid cars, the situation is different. At the traffic lights, they stop the engine, but lights, infotainment and other facilities continue as usual. When accelerating afterwards, all the energy has to go to the wheels, so the 'Passive Boost' switches off the alternator. When braking, the alternator goes the extra mile to regenerate braking energy. Of course, this requires 'space' in the battery. In short, the cyclic load on the battery in a micro hybrid is much greater and the SoC is often only 60% or less.

Advantages of AGM

Under these conditions, a conventional starter battery would quickly succumb to stratification and sulfation. That's why we find AGM batteries in microhybrids. In such an Absorbent Glass Mat battery, the electrolyte is enclosed in a fiberglass fleece. For example, it cannot flow freely and stratification is impossible. An additional advantage is low water consumption. This eliminates the need for an extra electrolyte supply above the plates, so that they can continue to the top of the tank. This gives extra capacity for the same container size.

Disadvantages AGM

The lack of that extra liquid makes the AGM battery more sensitive to high temperatures. Fortunately, an AGM does not guest, so it can be installed in the interior without any problem. That's why we often find an AGM under the luggage compartment.

Alternative needed

In search of the last grams of CO2 gain, cars from the lower price segments have also been given a start-stop system in recent years. For those cars, an AGM is too expensive. In addition, car manufacturers are reluctant to change the location of the battery because of a start-stop system. Not even if the existing location is too thermally loaded.

EFB or ECM

The solution came in the form of the EFB or ECM battery. In terms of construction, performance and price, such an Enhanced Flooded Battery or Enhanced Cycling Mat sits between the AGM and the conventional lead-acid battery. An EFB achieves an excellent lifespan in cars with only a start-stop system. In cars that also regenerate braking energy and 'passively boost' when accelerating, the cyclic load on the battery is too great for an EFB. They can't do without an AGM.

Lifespan after replacement

This gives us the answer to the question of what should be included. Replace an EFB with an EFB and replace an AGM with an AGM. If not, the lifespan of the new battery could be very short.

Photo