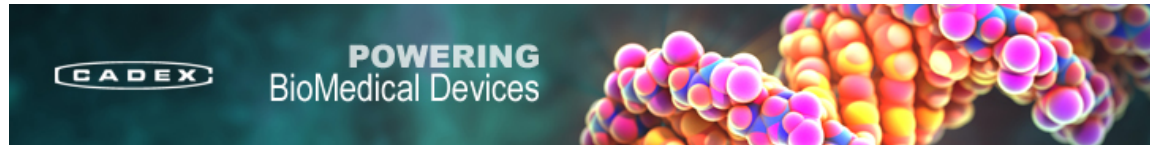


[Battery University](#)

## What Causes Car Batteries to Fail?

Driving habits rather than battery defect are often the cause of battery failure.

A German manufacturer of luxury cars reveals that of 400 car batteries returned under warranty, 200 are working well and have no problem. Low charge and acid stratification are the most common causes of the apparent failure. The car manufacturer says that the problem is more common on large luxury cars offering power-hungry auxiliary options than on the more basic models.

In Japan, battery failure is the largest complaint among new car owners. The average car is only driven 13 km (8 miles) per day and mostly in a congested city. As a result, the batteries will never get fully charged and sulfation occurs. The batteries in Japanese cars are small and only provide enough power to crank the engine and perform some rudimentary functions. North America may be shielded from these battery problems, in part because of long distance driving.

Good battery performance is important because problems during the warranty period tarnish customer satisfaction. Any service requirement during that time is recorded and the number is published in trade magazines. This data is of great interest among prospective car buyers throughout the world.

Battery malfunction is seldom caused by a factory defect; driving habits are the more common culprits. Heavy accessory power when driving short distance prevents a periodic fully saturated charge that is so important for the longevity of a lead acid battery. According to a leading European manufacturer of car batteries, factory defects amounts to less than 7 percent.

The battery remains a weak link and the breakdowns on 1.95 million vehicles six years or less are as follows:

- 52% battery
- 15% flat tire
- 8% engine
- 7% wheels
- 7% fuel injection
- 6% heating & cooling
- 6% fuel system

A breakdown due to the battery remains the number one cause.

*\* Source ADAC 2008 for the year 2007*

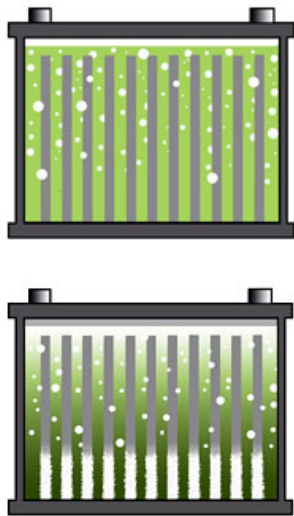
### Acid stratification, a problem with luxury cars

A common cause of battery failure is acid stratification. The electrolyte on a stratified battery concentrates on the bottom, causing the upper half of the cell to be acid poor. This effect is similar to a cup of coffee in which the sugar collects on the bottom when the waitress forgets to bring the stirring spoon. Batteries tend to stratify if kept at low charge (below 80%) and never have the opportunity to receive a full charge. Short distance driving while running windshield wiper and electric heaters contributes to this. Acid stratification reduces the overall performance of the battery.

Figure 1 illustrates a normal battery in which the acid is equally distributed from top to bottom. This battery provides good performance because the correct acid concentration surrounds the plates. Figure 2 shows a stratified battery in which the acid concentration is light on top and heavy on the bottom. A light acid limits plate activation, promotes corrosion and reduces performance. High acid concentration on the bottom, on the other hand, artificially raises the open circuit voltage. The battery appears fully charged but provides a low CCA. High acid concentration also promotes sulfation and decreases the already low conductivity further. If unchecked, such a condition will eventually lead to battery failure.

#### **Figure 1: Normal battery**

*The acid is equally distributed from the top to the bottom in the cell and provides maximum CCA and capacity.*



**Figure 2: Stratified battery**

The acid concentration is light on top and heavy on the bottom. High acid concentration artificially raises the open circuit voltage. The battery appears fully charged but has a low CCA. Excessive acid concentration induces sulfation on the lower half of the plates.

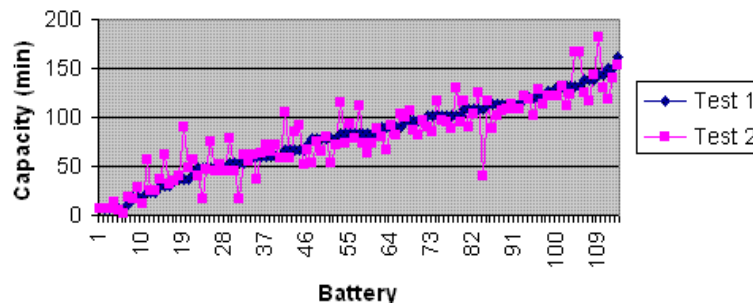
Allowing the battery to rest for a few days, applying a shaking motion or tipping the unit over tends to correct the problem. A topping charge by which the 12-volt battery is brought up to 16 volts for one to two hours also reverses the acid stratification. The topping charge also reduces sulfation caused by high acid concentration. Careful attention is needed to keep the battery from heating up and losing excessive electrolyte through hydrogen gassing. Always charge the battery in a well-ventilated room. Accumulation of hydrogen gas can lead to an explosion. Hydrogen is odorless and can only be detected with measuring devices.

### The challenge of battery testing

During the last 20 years, battery testing lagged behind other technologies. The reason: the battery is a very difficult animal to test, short of applying a full charge, discharge and recharge. The battery behaves similar to us humans. We still don't know why we perform better on certain days than others.

Even by using highly accurate charge and discharge equipment, lead acid batteries produce disturbingly high capacity fluctuations on repetitive measurements. To demonstrate the variations, Cadex tested 91 car batteries with diverse performance levels (Figure 3). We first prepared the batteries by giving them a full charge and a 24-hour rest period. We then measured the capacity by applying a 25A discharge to 10.50V or 1.75V/cell (black diamonds).

This procedure was repeated for a second time and the resulting capacities were plotted (purple squared). This produced a whopping  $\pm 15\%$  variation in capacity readings across the full population. Some batteries had higher readings the second time; others were lower. Other chemistries appear to be more consistent in capacity readings than lead acid.



**Figure 3: Capacity fluctuations.** Capacities of 91 car batteries measured with a conventional discharge method show a fluctuation of  $\pm 15\%$ .

From the beginning, load testers have been the standard test method for car batteries. The year 1992 brought us AC conductance, a method that simplified battery testing. Now we are experimenting with multi-model electrochemical impedance spectroscopy (EIS) in a portable version at an affordable price.

Getting a fast and dependable assessment of a failing battery is difficult. Most battery testers in use only take cold cranking amps (CCA) and voltage readings. Capacity, the most important measurement of a battery, is unavailable. While taking the CCA reading alone is relatively simple, measuring the capacity is very complex and instruments offering this feature are expensive.

The Spectro CA-12 by Cadex Electronics is the first in a series of high-end battery testers capable of measuring capacity, CCA and state-of-charge (SoC) in a single, non-invasive test. The technology is based on multi-model electrochemical impedance spectroscopy (EIS). The system injects 24 excitation frequencies ranging from 20 to 2000 Hertz. The sinusoidal signals are regulated at 10mV/cell to remain within the thermal battery voltage of lead acid. This achieves stable readings for small and large batteries.

During the 30-second test, over 40 million transactions are completed. A patented algorithm analyses the data and the final results are displayed in capacity, CCA and state-of-charge.

EIS is very complex and until recently required dedicated computers and expensive laboratory equipment, not to mention chemists and engineers to interpret the readings. The hardware of a full EIS system is commonly mounted on racks and the installation runs into tens of thousands of dollars.

### The tough choice

No battery tester solves all problems. Entry-level testers are low cost, simple to use and capable of servicing a broad range of batteries. However, these units only provide a rough indication of the battery condition. A lab test at Cadex demonstrates that a battery tester based on EIS is four times more accurate in detecting weak batteries than AC conductance. Conventional testers often misjudge the battery on account of low state-of-charge. Many batteries are replaced when they should have been recharged, while others are given a clean bill of health when it should have been replaced.

Acid stratification is difficult to measure, even with the EIS technology. Non-invasive testers simply take a snapshot, average the measurements and spit out the results. Stratified batteries tend to show higher state-of-charge readings because of elevated voltage. On preliminary tests, the Spectro CA-12 also shows slightly higher CCA and capacity readings than normal. After letting the battery rest, the capacity tends to normalize. This may be due to diffusion effects in the stratified as a result of resting. Little information is available on how long a stratified battery needs to rest to improve the condition, other than to note that higher temperatures will hasten the diffusion process.

Ideally, a battery tester should indicate the level of acid stratification; sulfation, surface charge and other such condition and display how to correct the problem. This feature is not yet possible. Much research is being done in finding a solution that offers a more complete battery evaluation without the need for a full discharge. The knowledge gained on lead acid batteries can then be applied to other battery systems, such as traction, military, marine, aviation and stationary batteries.

### \*\*\* Please Read Regarding Comments \*\*\*

Comments are intended for "commenting," an open discussion amongst site visitors. Battery University monitors the comments and understands the importance of expressing perspectives and opinions in a shared forum. However, all communication must be done with the use of appropriate language and the avoidance of spam and discrimination.

If you have a suggestion or would like to report an error, please use the "[contact us](#)" form or email us at: [BatteryU@cadex.com](mailto:BatteryU@cadex.com). We like to hear from you but we cannot answer all inquiries. We recommend posting your question in the comment sections for the Battery University Group (BUG) to share.

### Or Jump To Another Archive

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- [Observing Batteries in Everyday Life](#)
- [Wheeled and Stationary](#)
- [What Causes Car Batteries to Fail?](#)
- [Starting is Easy, but can I Steer and Brake?](#)
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919

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## Comments

On December 15, 2010 at 10:12am

**jerry White** wrote:

i have not read anything this thorough in any auto service magazine or training manual in decades. Congratulations on a great presentation of a complex subject.

---

On January 25, 2011 at 7:32am

**Stefanie H.** wrote:

I have a Lexus and drive short distances every couple of days. Once a month I may go on a longer trip. Is this enough to charge my battery? I didn't realize that the further you drive the more charged your battery is. That sounds silly but I guess I never thought of it. Stefanie H.

---

On April 11, 2011 at 3:15pm

**Al Miller** wrote:

What causes a battery to pass the voltage test with no load and then fail when a load is put on the battery? Is sulfation the culprit? Is this what used to called "dead cells?"

---

On April 30, 2011 at 8:56pm

**tye** wrote:

The 30 year old truck only gets driven 2x/month 20 miles or less

The truck turns over but wont start.

could the 4 yr old battery that was tested & showed low cca (about 250 instead of 650) be charged back to normal? 2-3 of the cells were also low on fluid. What causes the cells to lose acid?

---

On September 5, 2011 at 4:27pm

**rex** wrote:

i have a nissan sentra 1998 super saloon and i encountered a problem once when i did not start my vehicle for 2 weeks. it just crank and the remedy that i make is to jumpstart the vehicle then it when okay. if you do not use or even warm up your car every week i think you are in deep trouble. lots of rust also piled up in my coolant tank.

---

On September 5, 2011 at 4:35pm

**ronie** wrote:

so i am not the only one experiencing problems with clogging of rust in my coolant tank.

---

On January 24, 2012 at 3:03am

**Rainer** wrote:

A very good article. But I miss a solution of this problem. Please allow me to mention one solution that I provided as a OEM in cooperation with a major German battery manufacturer. My company developped a system providing a small air pump sitting on top of the battery connected by tubes with every battery cell. Thus the acid was stirred by ais bubbles avoiding stratification while charging or in operation. For big batteries such as floor transportation carts we provided pumps with integrated electronic control unit with microprocessor. These units had a port to read out system up time, system down time, number of chargings etc.for more information don't hesitat to contact me.

---

On January 24, 2012 at 11:46pm

**Hank** wrote:

Also understand that your charging system is not designed to charge a dead battery. if you jump start your car driving it around will not charge the battery properly and youll only be wearing out your charging system. After jump starting a car The battery needs to be charged on automotive battery charger. Equality battery charger will usually cost at least 100 dollars. Box stores sell inexpensive battery chargers that are charging at 2 to 3 amps after only 15 minutes. That is so the battery will not experience gasification. and blow up your garage, etc. Fast charging is very harmful to batteries.It is best for discharge battery to be charged for 2 to3 hours. Hope This helps.

---

On January 26, 2012 at 1:21pm

**Bill** wrote:

Hello, My 2004 Toyota Tundra is making me crazy! It starts and runs well for a month or so and then I'll try to start it and all it does is go, "click, click, click" over and over. The battery is fully charged by the way and my horn and other accessories still function as they're supposed to? I have undone and re-tightened the cables a number of times and even bought new cables and installed them?

Maybe I'm way off here but my thought process now leans toward the steering wheel or gear shifter? Could that possibly be the problem?

---

*On January 30, 2012 at 7:23pm*

**meaty** wrote:

Well batteries really wear out and that is normal to any <a >car</a>

---

*On February 8, 2012 at 10:38am*

**Fred** wrote:

I have a battery I currently am trying to revive it with a BatteryMinder charger/maintainer/ desulphator-conditioner. After two weeks, I have four well-charged cells and two that are dead. Because the battery is from a car that I bought used, I do not know if it ever went low on water.

I am intrigued by Rainer's air bubble solution to stratification. Can I accomplish the same thing by using a bicycle pump and a piece of plastic tubing to stir up the acid in the bad cells?

Also, how can I contact Rainer?

---

*On February 9, 2012 at 5:32pm*

**anonymous** wrote:

I was told by my car dealership that my car battery had a short in it. can a car battery have a short in it?

---

*On February 17, 2012 at 10:19am*

**James** wrote:

How about just a simple fish tank type air pump maybe \$10-15 since you can control the amount of air with a simple plastic valve that is connected to the air hose. I think this would work or do it to!

---

*On March 11, 2012 at 7:39pm*

**John Smith** wrote:

I have a battery that was loosely connected to the terminal. I drive short distances on the weekend and during the week I drive 12 miles back and forth to work. Is this enough to charge my battery?

A local auto store tested mine a couple months ago and it was at 76% according to them. Today it wouldn't start I took it out to look at it and charge it, then put back on the connector and it started back up. I also shook up my battery a little bit.

it's only 2 years old, does shaking it hurt it? Also, is it possible for my battery to get back up to 100% again?(Assuming it was a bad terminal connection)

Thanks,  
John

---

*On March 19, 2012 at 3:31pm*

**Terry** wrote:

I purchased a new battery for my 1987 190E Mercedes Benz 2.6 on Sept. 8, 2011 and it went dead on March 15, 2012. I took the battery back to O'Reilly's Auto parts on a warranty and all they did was recharge my battery. How long will this battery stay charged?

---

*On September 5, 2012 at 11:52pm*

**High Frequency Trading** wrote:

Wow! I need to say. Actually not often do I encounter a weblog that is both educative and entertaining, and let me let you know, you've hit the nail on the head. I am hoping the same high-grade blog post from you in the upcoming as well. I agree that a web designer must have a creative approach and must have a understanding user.

Regards:-  
[High Frequency Trading](#)

---

*On December 15, 2012 at 6:44am*

**James** wrote:

Well, its about time that battery manufacturers sorted these problems out. If drivers are predominately using vehicles for short trips and low recharge cycles and the battery is becoming stratified then that's the way we use our cars. The battery and alternator manufacturers need to bang their heads together and sort the problem and not expect us to alter our driving habits to suit their outdated equipment! I too have to charge my battery once a month to keep it 'charged'... I also give it a good shake to stir the battery acid juice.

WE SHOULD NOT HAVE TO DO THIS!

Perhaps the battery fluid cycler would be an idea (but expensive to instigate)

---

On March 10, 2013 at 5:02am

**Inus** wrote:

Hi Bill,

Your Toyota Tundra is equipped with a v8 diesel ? Petrol. I would have the starter motor checked out. The buses tends to wear out check them for play. It needs to be a tight fit. Also inspect for lubricant that has become gooey. Alternatively the solenoid contacts tend to burn or even burn away which in turn resist / block the battery current from turning the motor. Make sure that the battery terminal clamps inside is properly cleaned with baking soda and hot water. Hope it will help.

---

On April 17, 2013 at 11:28pm

**Alwis** wrote:

i have a 2007 toyota kdh220. I didn't start it in nearly 3 or 4 days. So now i try and it didn't start. Only had a 'click' sound. So is rainer's method suitable for this? Then can you explain me to how i do it with my small fish tank air motor.

---

On June 22, 2013 at 9:28pm

**Helenjerry** wrote:

I always forget either spare clothes or wipes! And of course, whatever I forget is what I end up needing!

---

On September 11, 2013 at 3:53pm

**Charley J. Wagner** wrote:

Question, can any conditions exist in a cars electrical system that will completely kill a battery. Not drain it so it can be recharges but totally destroy the battery.

---

On December 31, 2013 at 10:36am

**John Dawson** wrote:

I installed a new battery. The vehicle started several times. When left overnight would not start. I noticed when I installed battery connections there was a large spark. Volt meter on dash shows 14-15 volts which should tell me the alternator is working. What should I look for?

---

On February 10, 2014 at 7:27pm

**Dennis Burton** wrote:

If vehicle is standing for longer than 5days best to disconnect battery terminals which should prevent discharge. How long can a battery last if topped up with tap water?

---

On March 18, 2014 at 11:01pm

**Creative Web Systems** wrote:

I am hoping the same high-grade blog post from you in the upcoming as well. I agree that a web designer must have a creative approach and must have a understanding user.

---

On March 21, 2014 at 5:03am

**southernbatteries** wrote:

I go through your website it's very good and having good information about the Lead acid battery manufacturers, and we are also having similar website you can visit us.

[Lead acid battery manufacturers](#)

---

On March 25, 2014 at 6:56pm

**James Powell** wrote:

Had my car radio, taken out for repair { CD player }, car would not start next morning. Car dealer put in new battery and three days later it did not start again

---

On March 25, 2014 at 7:03pm

**James Powell** wrote:

Had car radio taken out ,CD player not working ,next morning car would not start ,car dealer then put in new battery and that failed after three days

---

*On March 27, 2014 at 7:41am*

**Laddie Bolden** wrote:

Had a new battery installed in my 1998 Grand Marquis Nov.11, 2013. Within four months I had to jump-start my car 3 different times. A NEW battery was installed March 17, 2014. Seven days later my car would not start. Hence, another jump-start. I did not drive the car every day, but, after seven days and the battery would not start my car? Thank you.

---

*On April 14, 2014 at 6:32pm*

**Mindy** wrote:

Great article. Finally an explanation of why my battery has been dying every 2 years: my roundtrip commute is an average of 10 miles per day in city traffic. Then, when I park, I pop open the trunk for a few minutes while I unload items - thereby, running the interior lights.

---

*On May 15, 2014 at 3:46pm*

**linda davis** wrote:

this guy i know i think has put a tracking device on my car and its draining the battery,cause for the last two years every six months..When it goes to every day light savings time, this is when the battery goes...then when i tell him what is going on he will start saying all these stupid things about what could be doing the battery.Then all the sudden he comes up with oh i can't use my computer it crashed again..i'm waiting for the computer people to come fix it..It sure does happen every time my battery dies... please help me with a possible answer to this mysterious bullshit i have been going through for the last two years....IS MY THINKING POSSIBLE???ABOUT HIM PUTTING THE TRACKING DEVICE ON MY CAR,,,if someone can help me call me....linda 707-455-1591..thanks anyone...

---

*On August 24, 2014 at 9:46am*

**MUKUL BHARDWAJ** wrote:

how much amount of battery consume when any vehicle starts?

---

*On September 22, 2014 at 11:37am*

**al periquet** wrote:

about batteries, is all business. manufacturers can make them last forever if they want to but the company will shut down in no time.

---

*On October 30, 2014 at 7:19pm*

**asda** wrote:

manufacturers can make them last forever if they want to but the company will shut down in no time.

---

*On January 5, 2015 at 9:43am*

**Carriere A.J.** wrote:

When I went to Costco, I was looking at the sheets that they supply to look for a battery and I couldn't find it, I ask one of the clerk that was working if they had a battery for my farm tractor and he point out one on the shelf, so I bought it.

I install the battery in my farm tractor and after one hour or so the battery exploded and the acid leak on my legs chest and shoulders. I found out later on that this battery wasn't for a farm tractor, it was for a automobile. Be aware of the personnel at Costco because they don't know there products.

---

*On January 30, 2015 at 12:09pm*

**Alison Mccarthy** wrote:

My 2014 Subaru Outback is on it's third battery in 12 months. I am stranded on average once every two weeks. The dealership states the battery has a bad cell. Twice??? Is there something that could be happening with the car to kill the battery?

I drive on average 9 miles on weekdays and varying amounts on the weekends. Is this enough to keep a charge in the battery?

---

*On February 6, 2015 at 2:30pm*

**Lessi** wrote:

I got an interesting problem with a small motorcycle battery, 12 V, 4.5Ah. I only used it for one hour total during 1,5 years and have kept it charged. But now I seem to get a Sharp drop in voltage and not a steady decrease as I use it.

From 12,20 Volts using a 6 W load of LEDs it just drops down to 8 Volts. Does anyone know what could be the problem?

---

On March 22, 2015 at 5:16am

**Robert Thurston** wrote:

I have a 2011 Nissan X-Trail, and have covered 30000 miles since new. battery is now going flat every 3 weeks, meaning I have to charge with a bench charger over night. I understand that the new charging system on Nissan cars does not give a continuous charge to the battery when the engine is running (as in the olden days), but cuts out when max voltage is reached. This is to save fuel, and hence published fuel consumption figures are better. (same reason for not putting spare tyres in new cars in Europe). My previous 5 cars over 25 years, never had a new battery. Is this new charging system the reason for my battery dying or is battery quality getting worse.

---

On March 24, 2015 at 11:21am

**Mike** wrote:

Great article!

---

On March 24, 2015 at 11:22am

**James Dempsey** wrote:

Several things check n clean cables n or battery posts. Check water level in batteries find a pulse charger n attach 2 ur battery 40-80.00 keeps plates inside cleaner 4 longer battery life. Or turn ur lites on and your heater n blower fan on. This forces ur generator to produce more amps. An is how most dealerships recharge dead batteries in lot cars. Not enough battery chargers if u have a lot of cars with dead batteries on ur lot.

N best if vehicle is a daily driver and not setting unused for week at a time. Even new cars on sales lots eventually drain down if they arent used enough or several months.

There is something called a capacitive charger that also is a pulse charger as well! Nobody makes or sells them ud have to make your own! But in say like a golf cart there good for an Equalization charge as it pulses and charges at a very high voltage. But they need to be on a timer and batteries have to be unhooked from ur cart or they can fry fuses and or other electrical equipment. Not good idea for a rookie.

But charging with regular charger and ur power pulse pulse charger should do the trick as well. They are also known as desulfators if the plates stay clean you should have optimum battery life for your gas vehicle battery.

---

On November 9, 2015 at 6:18am

**Amardev Banerjee** wrote:

Please send me some more information on battery technology and latest developments.

---

On November 15, 2015 at 12:37am

**Allen** wrote:

I brought a delkor battery for my wife's mazda 3. It failed (dropped a cell ) they said. At only 15 months old it was still well within the 30 month warranty . But they said it was the wrong battery for the car. There's the door mate  
Bye bye to you to Delkor.

---

On December 12, 2015 at 5:34am

**khadar Mohamed** wrote:

The battery of the Ambulance have been replaced on July, 2015, please justify the reason that less than five months the battery spoiled again.

---

On March 1, 2016 at 12:23am

**BatteryBhai** wrote:

Really very helpful information. I have never before known battery failure issues like that.

---

On March 9, 2016 at 12:45am

**Shirley allison** wrote:

Is battery able to be saved by charging if short infrequent journeys have caused battery to fail?

---

On March 19, 2016 at 7:09am

**Brent** wrote:

I am a battery tech for AAA Northern New England. The text I just read is an excellent refresher for me. For those who dont know, AAA installs battery s as a service. Why batteries die due to CCA drop is the most common question and reason for failure. I have a good simple answer now.

---

On August 31, 2016 at 4:43am



**ANDRES PEÑA** wrote:

I am a support field engineer and i have to solve why on the stationary compressors with diesel engines (cat, deutz, kubota) the batteries don't work well or do not complete their lifetime cycle.

---

*On September 6, 2016 at 12:14pm*

**Joan Edwards** wrote:

Purchased a AAA Battery last Nov. which has been dying all summer. Called AAA three times and they said it was fine. I finally brought it to my mechanic who put in a delco and now it runs fine.. What would make a bum battery test ok when there is obviously a problem.. Any suggestions appreciated. I sure would like my money back.

---

*On December 30, 2016 at 12:36pm*

**Peter Gillham** wrote:

It appears most peoples's problems arise when trying to start their cars.

I own a LR Discovery which I only use once a week at most and I nearly always failed to start the engine in winter until I fitted a super capacitor pack directly across the battery terminals.No more problems!

The super capacitors provide instant high current discharge to the starter motor which a battery cannot do due to internal resistance.

However super capacitors need very careful handling and special charging and balancing networks.

I am now contemplating production version.

---

*On January 10, 2017 at 2:47am*

**Wayne.** wrote:

Good day. Nice interesting and informative site. Can you please direct me to the placing of the follow up of "Brent's" comment on the cure of CCA . He ends off with, "I have a good simple answer now", I don't know where he posted his answer.,and that was on March 19: 2016. 7:09 am.

Many thanks and appreciation.

Wayne.

---

*On February 25, 2017 at 9:00am*

**Oliver Hardy** wrote:

How about mounting the battery so it gets sloshed a little, instead of being comfortably treated like a passenger?

---

*On May 11, 2017 at 11:46pm*

**Sammy Wright** wrote:

This is a very good article. Thank you for sharing this. I'm very glad I found this. Great!

---

*On September 22, 2017 at 5:12am*

**Charles Fetherlin** wrote:

I enjoyed reading this article. Am getting ready to install a new battery after original went out after 1.5 years.

---

*On October 15, 2017 at 5:41am*

**Rajendra Swain** wrote:

great content thanks for this

---

*On December 22, 2017 at 1:08am*

**Total Car Collections** wrote:

A car battery is one of the most important parts of a car. In the sense, it is as important as the car engine, because without it, it is impossible to start the vehicle without having to push it from behind. It is the heart of the car and movement begins when car batteries function the way they're supposed to.

---

*On January 24, 2018 at 10:04am*

**Hadi Waqar** wrote:

Purchased a AAA Battery last Nov. which has been dying all summer. How could i solve this issue? Looking forward to your response.

Regards,

---

On February 23, 2018 at 9:19pm

**Jessaca Blanco** wrote:

So, last night, my kids wanted to hang out in the car with their phones while I shopped. At some point, they turned off the car but left the lights and music on. As a result, the battery died and I had to get a jump. After the jump, I drove for more than 2 hours. The next day, some of the warning lights came on. I had the battery tested and they said it said it was. Bad battery. Is this from it being drained the night before? Or, did it drain within 45 min. because it was bad? Thank you so much in advance for any information that can help me understand what happened. I learned my lesson for sure! Haha. Thanks again!!

On February 28, 2018 at 12:26pm

**Anthony Jackson** wrote:

Put a new AC Delco 42 month battery in my truck and now it will show charge on the gauge and while driving it will go to discharge and than after a while it will show chargeing and than discharge back and fourth can some one tell me whats going on the dealer that I bought the truck off new says they cannot find anything wrong this never happened before I put the new battery in.

Thanks  
Anthony

On April 1, 2018 at 12:32am

**eugene hopson** wrote:

It is obvious to me. . Voltage regulators are in the altinator now . Should always change same time any way rebuild or replace it .. At least have it tested at auto parts store.

On June 20, 2018 at 9:41pm

**Wreckeroo Wreckers** wrote:

A car battery is one of the very most important parts of a car. In the sense, it is as important as the car engine, because without it, it is impossible to start the vehicle without having to push it from behind. It is the heart of the car and movement begins when car batteries function the way they're supposed to.

Regards  
Wreckeroo Car Wreckers

On July 10, 2018 at 7:23am

**Jenny E Howell** wrote:

Sevens months ago I purchased Bosch battery from Pep Boys, and it failed yesterday. I was convinced I have got the best product available. I did notice that those batteries do not have imprinted or engraved the Bosch name. The just have a paper sticker with the Bosch name sticking on the battery. So I assume it is a PetBoys brand with the Bosch sticker on it. But regardless should it last at least three years. I have been driving for more than 40 years different cars and use different batteries brand , and without exceptions they have last more that 4 years. SO WHAT IS HAPPENING HERE WHIT MY \$ 150 PRI.IUM BATTERY?.

On August 28, 2018 at 5:23pm

**Dennis Miller** wrote:

Jenny. Got one from pep boys in December 2017 and it shows 2.17 volts today. Dead dead dead. You are not alone.

On September 8, 2018 at 7:57am

**Kyle Mart** wrote:

The thing I figured out from this article is, you talked about the inside matters such as the led acid part. Such an impressive one. You talked in-depth about the issue and seems it's one the best article about the battery dying issue. Keep it updated with new problems for these modern days. You can get a few ideas from here:

[Why Car Battery Dies](#)

On October 30, 2018 at 4:53pm

**Trevor** wrote:

I have a question. My battery has slowly gotten worse and worse to now where if I don't start my car in a hour or less it needs jumped it's gotten that bad in the past 3 weeks slowly but surely. My question is if I go.to the parts store and buy battery acid because they sell it if I replace it will it fix it if I charge it up after that? Any help would be great thx

On April 8, 2019 at 12:20pm

**Nil** wrote:

How to Get Rid of Battery Cell Early?

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*On July 2, 2019 at 7:52am*

**Oliver Ray** wrote:

I didn't know that there are a few warning signs to a dying battery like headlights being dim and buzzing sound when trying to get the car to start. I have a car that I use so often at night the lights are important to me. I have started to realize my lights aren't as bright as the other peoples on the road. I'll have to go into a shop and see if the battery needs to be replaced.

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*On September 3, 2019 at 9:09pm*

**vae** wrote:

Hey guys! I hate battery issues, especially since they can be expensive. Luckily I discovered a way never to buy another battery ever again. Car battery or any other battery for that matter. Saved me some money for sure. But the best part is, I'm reconditioning these dead batteries and selling them off for a nice little profit! Lol check it out

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*On September 4, 2019 at 3:52am*

**Harry Clark** wrote:

It's very nice to see...I would like to comment your post...You done a great work here...

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*On December 6, 2019 at 10:26am*

**Sandra** wrote:

My daughter's Mercedes battery died this morning while in the car loop dropping off my grandchild at school! I was searching to find out why her battery may have died. Found this very informative article which explains a great deal to someone who has experienced many battery deaths over a lifetime of vehicle ownerships. From the heat of the desert to the cold of the Sierras, we depend on these batteries to transport us and keep us safe. Manufacturers need to do more to stabilize and equalize their reliability. Just reading all the comments confirms the lack of regulation and I can vouch for the unscrupulous profits made off inferior products sold and installed by auto stores, warehouses and local mechanics. If you find an ethical repairman, count yourself lucky. This article is good knowledge to ask questions before buying that next battery! PS- I don't like the batteries that are sealed because am always told can't be checked for charge! I don't believe it..... Granny P

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*On December 12, 2019 at 7:05pm*

**Philip** wrote:

Pulling out your fuse for your satellite tracking on your vehicle will solve some battery drains.

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*On April 13, 2020 at 7:49am*

**Leah** wrote:

I recently bought a used (volvo v40 cc 2015) a car from a dealership, drove home (167 miles). Drove to work 2 days (20 mile round trip), then went on lockdown and working from home. For the next 10 days I have had approx 7/8 trips to the shops (from 2 to 30 miles round trips). On the 15th day of ownership drove to supermarket (30 miles), all good then later in the afternoon went to start the car and only had a clicking sound! I called roadside assistance who needed a battery pack and his van to jump start the car on 3 occasions. The mechanic told me the battery was gone. I went back to the dealership who told me they didn't believe there was a problem with the battery and I should put it on a trickle charger. I did this for 25 hours, the charger showed 90% charge but the car still did not charge. Can you advise any further as the dealership are telling me it was fine when they tested it, but there was no warning lights or anything?

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*On May 10, 2020 at 2:24pm*

**ryanburbridge** wrote:

This is probably a poor place to ask questions. I have yet to see very constant answers.

I'm looking for information comparing name brand smart chargers or maintainers. Their prices vary widely and have found ZERO actual tests about how they actually work. This can't be a secret they literally produce testable outputs lol anyone come across quality tests?

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*On May 16, 2020 at 12:47am*

**Bill Wilson** wrote:

I'm trying to bring an Everstart ES16CLB m/c battery back to snuff. Was new a few years ago and used briefly in my motorcycle before being removed for storage. Kept it on a float charger and tested good (full cca's) after a year so left it on the charger. Unfortunately my friend unplugged the charger to access the outlet and didn't plug the charger back in, so the battery sat idle for two years and discharged down to 4 - 5 volts. I added some water then put it on a 2 amp charge for a couple days that raised it to 12.6v with unknown cca's (was in the red near yellow using a 50 amp HF load tester. Raised the charge to 6 amps for a few hours which raised the voltage to 13v with the cca's test in the center of the red. I left the charger off for a day then put it back on the 2 amp charge for another day or so, which raised the cca's a bit more. Let it rest again and noticed that the cells have continued to generate gas the past few days. Can I assume that's due to overcharging and the low cca readings means there's a bad cell? My plans are to buy a new battery and keep this one for emergency lighting and occasional use to run a 12v Shurflo water pump.

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*On August 22, 2020 at 4:33am*

**Graham Sindam** wrote:

I was fascinated when the needed solution of ma question is being given via this site I was using. I am previlage to join you in assisting me of some of ma questions later coz I liked tgis site with whole of ma life and is very helpful to me as technical student. Thanks..

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