

A common question EV owners are asked is what does long-term ownership and maintenance look like? I can offer my perspective as an owner of 2 different EV brands since 2011. While each EV manufacturer has a slightly different take on maintenance, in general, there's significantly less maintenance than an Internal Combustion Engine (ICE) aka gas-powered vehicle. Aside from items that are common to all cars like tires, brakes, and fluid checks. EVs don't need oil changes, tune-ups, belts, transmission flushes, etc.

The only additional maintenance item that EVs may have compared to ICE vehicles is brake cleaning service in cold-weather regions. EVs use regenerative braking to do most of the work to slow the car down instead of the friction brakes. So salt and winter grime aren't burned off of the brakes from use nearly as much as in ICE vehicles. As such, brake cleaning service is recommended annually to prevent seizing and rotor warping.

In terms of long-term care for an EV, I offer the following tips.

Charging

- As much as possible try to use AC chargers (L1/L2) and limit DC Fast charging (L3) to as needed.
- If charging to 100% try to start your trip within an hour of the charge completing. Most EV batteries don't like being fully charged for long periods of time before dispersing the energy.
- When possible preconditioning, or getting your battery and cabin to ideal temps should be done while charging on a Level 2 AC charger. That way the battery doesn't have to use as much of its own energy to warm/cool itself and your cabin.

Suspension

- To extend the life of suspension arms take speed bumps at or below the maximum speed posted. This is good conventional wisdom for all cars in general but especially helpful for EVs because they're heavier than their ICE vehicle counterparts due to the weight of the battery pack.

Braking

- Using regenerative braking to do most of your stopping will allow you to get significantly more life out of your brake pads vs an ICE vehicle.

I know some of you are thinking, but he didn't say when you have to get a new battery? The answer is you shouldn't have to. Today's EV batteries are designed to last the life of the car under normal use just like an engine in a gas car. But if a battery does fail out of warranty it is a lot more expensive to replace than a gas engine or transmission. This is one of the few downsides of EVs. Although in recent years third-party EV repair shops have been opening that can repair bad modules in a battery pack vs replacing the whole battery which can save money. Both of my EVs are the first production years of their models. One is from a startup company with over 180k miles on the original battery and counting. As such I'm confident current generation EVs will easily meet or exceed the 200k mile average lifespan of a gas-powered vehicle.