"If you notice white smoke, also known as steam, coming from your Tesla while charging, don't worry, it's just water vapor recondensing in cooler air. This is a normal part of the charging process and nothing to be concerned about. However, if you smell burning or notice an actual fire, stop charging immediately and call a Tesla technician or emergency services."

Tesla smoking while charging is quite a popularly reported issue, especially by Model 3 owners.

If this happened to you, I'm sure it's not a pretty sight.

As an EV mechanic with a decade of experience, I have had to work with many Tesla owners, helping them diagnose this particular problem.

According to Tesla, your car can release smoke while charging because the charging process causes the battery to heat up, which can break down the chemicals and release smoke.

So, technically, it's a normal occurrence. But if the fog emitting from your Tesla is becoming excessive and has a strange odor, then there's more than meets the eye.

So, we can't categorically say all situations where smoke is emitted from a <u>Tesla while</u> charging are perfectly normal.

In the rest of this post, I'll <u>explain to you the different reasons why you see smoke emit from your Tesla</u> EV while charging, what it could mean, and the actionable steps you can take to ensure you, your car, the charger, and the environment remain safe.

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## 7 Reasons why Tesla smokes while charging

If you are not new to <u>charging Tesla</u> cars, you probably already know that these electric vehicles often emit a small amount of smoke while charging. This happens especially when it's chilly outside or when the vehicle is plugged in while it's raining or snowing.

Tesla has said it all in its Model 3 owner's manual here:

But this time, if you notice a large plume of smoke coming from the car while it's charging, then it could be something more serious.

Having diagnosed dozens of Tesla cars with a similar issue, here are the few most common reasons I've gathered as to why these EV vehicles would smoke while charging:

- Cold weather
- overcharged battery
- damaged battery
- faulty charger
- electrical short
- vehicle overheating.

#### **Cold weather**

The most likely reason why your <u>Tesla emits smoke while plugged in is that you're charging</u> in cold weather. As you supercharge, the battery gets warm, and then the humidity of the air during cold weather condenses on the battery pack, converting it into water droplets.

Hence, the condensed water droplet turns into warm water vapor.

The water vapor turns into steam and emits out of the car as steam, or what you'd call white smoke.

This is elementary science.

But sometimes, for instance when it rains or during icy conditions, the water can splash on your car and make its way into the radiators, wheel wells, and under the car, which then results in vapor build-up.

#### **Bad Charger**

Another common reason why smoke would come out of a Tesla car when plugged in is that there's a fault in the charger.

For example, a defective charger can push power into the battery instead of supplying it with power. This results in overheating and smoking.

When you notice that the smoke has an unpleasant odor and that it gets worse as you charge, it is best to pull the plug on the charging process.

The good thing is that these chargers have been designed to go off once an issue is detected within the unit. But when it's faulty, the charger may not go off completely, and then this will lead to overheating and consequential smoke.

#### **Overcharged battery**

It could be that your battery is overcharged, and then the unwanted voltage releases heat as its form of energy, eventually leading to overheating and then smoke.

In many investigated cases of fires while Tesla cars were charging, the occurrence has been linked to an issue with the car's charging system and not necessarily the battery itself.

But a few cases, especially among the <u>Tesla Model</u> S, still point to an overcharged battery.

#### **Damaged Battery**

Oddly enough, a damaged battery could be the culprit behind the smoke buildup from your vehicle while it's charging.

If your battery is damaged and you plug the Tesla car into the charger, the damaged battery can cause the car to smoke while plugged in due to improper heat dissipation.

# So what do you do when your Tesla emits "smoke" while charging?

First of all, you need to be able to discern whether it's smoke or steam.

If the emission does not have a weird odor, it is most likely steam. And so, it's nothing serious, and you can continue charging.

The steam you see is caused by water on the battery while it got hot from optimum charging. The water then transforms into condensed vapor due to the heated batter and emits steam.

But if the fog comes with a burning smell, then it's a red flag. And I'd recommend you call the attention of a Tesla technician. You could be having a battery or overhearing problem.

But before that, it is generally safe to detach the charger from the car to eliminate the possibility of a defective charger.

But in most cases, complaints about <u>smoke from Tesla EVs while charging surface in the cold winter months</u>. It's an indication that what these owners are experiencing is harmless steam and nothing to be worried about.

So if it's harmless steam, what do you do? You only have to keep charging. As the water droplets dry off, the steam will subside.

But still, keep an eye on the vehicle and make sure it's steam and not smoke.

There's a difference.

# **Final thoughts**

While <u>Tesla and other electric vehicle manufacturers have implemented several safety</u> <u>features</u> to prevent battery fires, it is always best to be cautious and proactive when charging your vehicle.

With this in mind, here's my \$0.02:

Regularly inspect the charging equipment and battery of your Tesla.

Use the recommended charging methods.

Avoid overcharging to reduce the risk of any incidents while charging your Tesla.

Stay safe.