### What is a catalytic converter?

A catalytic converter is a key automotive component that reduces harmful emissions. It's been a mandatory part of all gas-powered cars since the 1975 model year, and it's located between the engine and the muffler on the underside of the vehicle. It consists of a ceramic honeycomb coated in metals (typically platinum, rhodium, and/or palladium) that allows dangerous substances in the car's exhaust, such as hydrocarbons, nitrogen oxides, and carbon monoxide to recombine and convert into safer gases. For instance, carbon monoxide, a poisonous gas, enters the converter, mixes with oxygen and the metals, and exits as carbon dioxide and water vapor.

### Why do people steal catalytic converters?

The metals used in catalytic converters are quite valuable, and they can be easier to steal due to their exposed location on the underside of a vehicle. It only takes a few minutes for a thief to steal a catalytic converter, so multiple catalytic converters can be stolen in a relatively short amount of time. This combination makes catalytic converters a popular target for thieves.

It only takes a few minutes for a thief to steal a catalytic converter.

# How can I tell if my catalytic converter has been stolen?

If your vehicle has been targeted, there are some obvious signs to look for. When you start the car, it may be much louder than usual because a stolen catalytic converter will disconnect the muffler. The vehicle will also seem less responsive than usual and will lack acceleration. You may also notice a foul odor from the unclean exhaust now exiting the vehicle. You can confirm the catalytic converter theft by looking underneath the car for an obvious hole in the undercarriage near the muffler.

If you discover your catalytic converter has been stolen, take your car to a mechanic immediately. Consider calling a tow truck because driving without the converter can be hazardous.

### <u>Is a stolen catalytic converter covered by insurance?</u>

If you have comprehensive coverage on your auto insurance policy, then you're typically covered against catalytic converter theft. Comprehensive coverage will typically pay to replace the stolen catalytic converter and repair any related damage from its removal.

#### What vehicles are the biggest targets?

Taller vehicles, such as trucks and SUVs are targeted because of the easy access to the catalytic converter, they are under the car attached to the exhaust and the muffler, so a higher car is easier to get under for removal. Hybrid cars are also targeted frequently because some of them have 2 catalytic converters and they produce less emissions, so the precious metals are less eroded.

# What are other states doing to prevent stolen converters?

There are 32 states that have adopted or amended laws to combat the theft of catalytic converters. 11 more states are expected to at least have introduced legislation this year. Other states legislatures have come up with a few ideas to combat this, such as VIN stamping all new vehicles converters so there is record or who's car the converter came off. Mandating all people who sell catalytic converters at scrap metal shops be over 18 years old, proof of ID, and proof of ownership from the vehicle it came off of. Some states like Virginia are also holding events at volunteering car shops to stamp VINs onto cars that don't have a VIN stamp on their converter and use high temp heat stamps so they cannot wear off.

### How bad is catalytic converter theft, do we really need legislation for it?

In 2022 alone there were 153,000 reported stolen catalytic converters, however there were many more, considering some people cannot afford car insurance. According to GEICO car insurance, between the years of 2019-2022 catalytic converter thefts were up 1,215%.

# How much do people make off the converters vs the price to replace your converter?

Most converters that are sold to scrap metal shops are sold from \$25-\$1,000, and are \$2,000-\$5,000 to fix, depending on insurance coverage and what type of vehicle you drive.

# What are the top 10 targeted vehicles overall?

Top 10 cars targeted according to CarFax, in order, in the nation are, Ford F-series trucks, Honda Accord, Toyota Prius, Honda CR-V, Ford Explorer, Ford Econoline, Chevrolet Equinox, Chevrolet Silverado, Toyota Tacoma, and Chevrolet Cruze.

# What is the value of the precious metals?

On April 19, 2023, the value of Platinum per ounce was \$1,070.12, rhodium was at \$7,900 per ounce, and palladium was worth \$1,597 per ounce. Many vehicles have fewer than 6 grams of all three combined precious metals.

# **Definition of nonferrous metals**

Non-ferrous metals or alloys is defined as are materials that are not iron-based like their ferrous counterparts. The difference between ferrous alloys and non-ferrous alloys is ferrous metals contain iron making most of their metals a magnetic property. Non-ferrous metals are found in the Earth as chemical compounds.