

California Converters 101

Solutions to difficult applications

We are all familiar with check engine light (CEL, code 420) problems with various GM, Toyota and Honda applications. The new buzzword that has become a household name is "California". But what is California Emissions? What is a California OBD-II converter? And how does this apply to you the installer? We will answer these questions below.

What is California Emissions?

In 1988 the California Air Resource Board (CARB) established a new emissions standard that was stricter than previously established EPA guidelines. This applied to both original equipment as well as aftermarket converters. Many automakers would design separate vehicles for California versus Federal markets. Aftermarket Converters submitted to CARB for testing have to pass stricter test standards based upon worst case original equipment scenarios. The converters must also be submitted to the EPA for testing. Since CARB standards are stricter, any converter that passes this test is considered to be superior in quality to units that are not. Almost all aftermarket converters on the market today meet EPA and CARB standards. Most meet EPA OBD-II standards, but only a handful meet California OBD-II standards.

What is a California OBD-II Converter?

CARB certification was considered to be a rather significant measure of quality until OBD-II standards came into effect in 1996. Under these new standards, each vehicle would monitor its own emission compliance by actively measuring the oxygen content of the exhaust gases. Under these new requirements, CARB and the EPA established a new compliance standard known as OBD-II certification. California OBD-II certification is not a broad test that covers all vehicles or all engines. California OBD-II certification is approved on individual applications, e.g. 1999 GM 3.8L and does not automatically certify the converter for a GM 3.4L or 3.1L even though they are smaller engines. In addition it does not automatically certify the part for a different car with the same engine. The test must be repeated for each intended application and approved for that application.

What does this mean to you?

Aftermarket converters that meet California OBD-II standards have been evaluated and approved for the listed application by CARB. This means the converter has passed strict tests and can be legally installed on the tested OBD-II vehicle within the State of California. But what does this mean to us in the remaining 49 states. While the vehicle may meet California emission standards, California laws concerning aftermarket converters DO NOT APPLY TO YOU. It is not a requirement to install a California OBD-II converter as a replacement.

What about the check engine light?

What is required to keep the CEL off is a converter that is powerful enough to meet the standards that the vehicle requires. Catalytic converters were previously rated by Engine displacement and GVW ratings. These ratings do not necessarily apply to OBD-II compliant cars, and certainly not to California OBD-II cars. In order to keep the computer from triggering a CEL, the converter must meet several requirements that are influenced by a variety of factors, but are basically related to the converters precious metal content, surface area, and cerium content.

How do I select the appropriate converter?

We recommend Automotive Edge (AE) 200 or 2000 series converter for all GM cars and minivans model year 1998 and newer equipped with 2.2L 2.4L 3.1L, 3.4L, and 3.8L engines. These converters meet the necessary requirements to prevent the CEL from being set. They have very high precious metal loadings, high cerium content, and a large surface area. BRC has sold many of these parts for these vehicles, and have not had issues with the CEL coming back on when the vehicle has been properly maintained and repaired. BRC specializes in problem-solving and we carry converters for many other troublesome applications that are designed to prevent problems down the road, not just for the next few weeks or months, or for the warranty period, but for the life of the vehicle. We have problem solving parts for the Mazda Protégé, and 626, Honda Civic, Accord, Odyssey, Toyota Camry, and Corolla, Nissan Sentra, Maxima, and many others. Feel free to call us at : (801)514-3327