

Engine Family Names

One of the pieces of information fleets are required to report to the Air Resources Board (ARB), as part of initial reporting under the off-road diesel vehicle regulation, is the engine family name.

What is the engine family name?

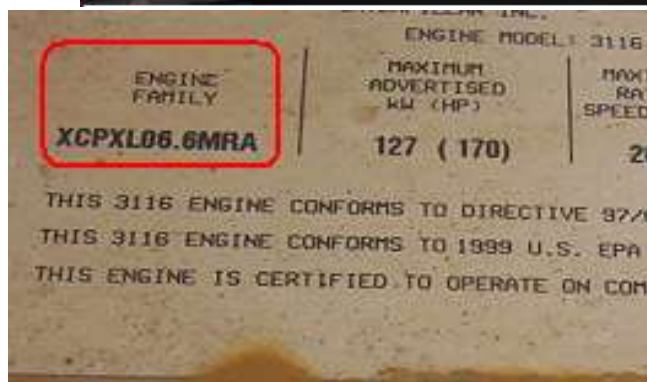
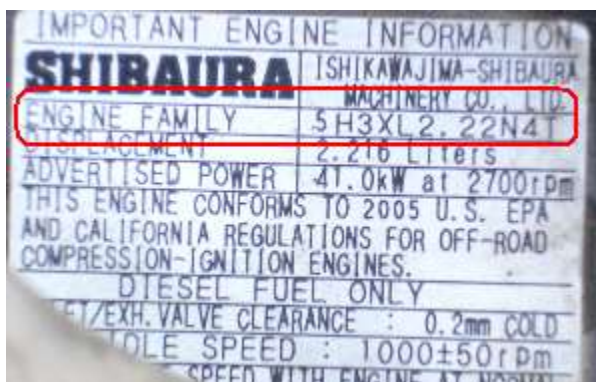
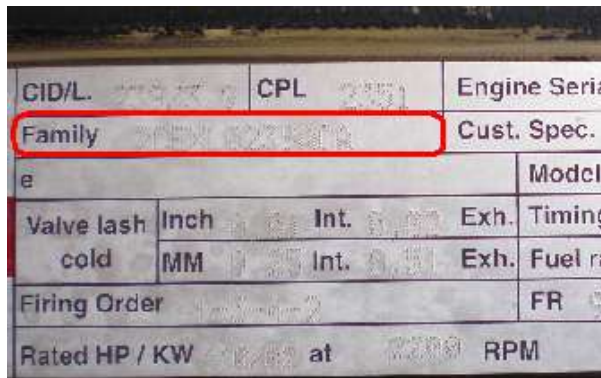
The engine family name is an identifier assigned by the Environmental Protection Agency (EPA) to every engine verified to Tier 1 emission standards or higher. Engine standards were implemented in the mid-1990s. Engines without a standard are considered Tier 0 engines, and will not have an engine family name. Engine family names are generally 11 to 12 digits long for off-road diesel vehicles, such as the example listed below. Note that although most engines families will generally have periods as the seventh or eighth character, those with displacement listed in cubic inches will not, or the period may be hard to see on the label.

Example Engine Family: **4DDXL14.0VLD**

The 'engine family name' required for reporting refers to this identifier, which is unique to an engine of a specific model year, build, and manufacturer. The engine family name does **not** refer to the engine Tier, or the manufacturer's production 'family' of engines, such as the 650 series engines, etc.

Where would I find the engine family name?

The engine family name is usually listed on the engine label, as shown below. As shown in the top right picture, it may be stamped into the label, which may make the family name difficult to read.



However, the engine label may also list the manufacturer's production family of engines, as shown in the example below. This is **NOT** the engine family name required by ARB. If the engine family listed is not at least 10 digits, and in the format shown above in the examples, it is not the engine family required when reporting engine information to ARB.

INCORRECT



If the engine label does not list the EPA-issued engine family name, the manufacturer of your engine may be able to assist you in determining the engine family name if you are able to supply information on the model year and make of the engine, or the engine serial number. Some manufacturers also have online tools where their customer can enter engine serial numbers and determine the engine family name.

What if I have a Tier 0 with no engine family name, or it is not labeled on my engine?

For Tier 0 equipment, you should leave the engine family name blank when reporting to ARB. Do not list it as “Tier 0” or “N/A”. Simply leave the field blank. For Tier 1 or newer engines for which you cannot find the engine family name and are unable to receive help from the manufacturer or dealer, you may also leave the field blank and report to ARB. Do not list the field as “Could not find it” or “Missing”, simply leave the field blank.

More information on the engine family name format:

The engine family name designations include abbreviations which denote the model year, manufacturer, engine production type, displacement, and then an arbitrary sequence to make the family name unique. More information is available in Appendix D of the Certification Guidance, which begins on page 65 and may be found online at <http://www.arb.ca.gov/diesel/documents/ciguide.pdf>.

Displacement:

One of the additional pieces of information fleets are required to report is the engine displacement, which can sometimes be difficult to find. If you cannot find the displacement labeled on the vehicle or engine, but have the engine family name, you may be able to take the displacement from the engine family name. The displacement is generally listed as the sixth through ninth characters, for example for an engine with a family name “4DDXL14.0VLD”, the displacement is 14.0 liters. If there is no decimal, the displacement is listed in cubic inches and should be converted to liters by multiplying it by 0.0164.