

Diesel Engine Power and Year Factsheet

Labels and Tags

The horsepower and model year are used to determine the engine Tier classification. Nearly all engines started out with an engine label or an engine data tag. Most engines also have a serial number tag. Tier 1 or higher engines recognized by the US Environmental Protection Agency (EPA) also have an emissions label. If there is no EPA label, then the engine is likely a Tier 0 engine.

Engine labels and engine data tags usually list the date of manufacture and the power rating of the engine. EPA emissions labels use an alpha-numeric code called the [engine family name](#) to convey the engine model year. Engine serial number decoders can also be used to determine the date when an engine was manufactured and the engine power rating.

In addition to the engine and emissions labels, vehicles also have a vehicle data tag. The vehicle data tag usually lists the vehicle serial number and information about the engine originally installed in the vehicle. Some vehicles may have undergone an engine replacement, so extra care is required when using vehicle data tags to determine the engine model year and power rating.

Engine Power Rating

Engine power ratings are usually listed on the engine label, the engine data tag, the vehicle data tag or the owner's manual. The power rating of an engine can be given in either horsepower (hp) or kilowatts (kW).



This engine data tag from a 1992 Caterpillar 14G motor grader shows the engine power rating is 200 hp or 149 kW.



Engine Model Year

Engine model years are determined by the annual new model production period during which the engine was produced. Some vehicles may have been assembled using engines from previous engine model years. To determine the engine model year and engine power rating:

- Check the engine label and emissions label.
- Check the owner's manual.
- Check the vehicle data tag and model number label.
- Check the sales/service literature.
- Have the engine manufacturer or dealer determine the model year of the engine from the engine's serial number.



The engine serial number data plate from a 1992 Caterpillar 14G motor grader. The serial number reads 08Z68216

Please contact us if you have any questions at nonroaddiesel@metrovancover.org or 604-451-6655.

Web Resources

1. [California Air Resources Board DOORS User Guide - Engine Family Names](#)

