# Natural Gas Vehicle Weight Allowance Guidance - 23 USC 127(s)

#### Federal Law Provides 2,000 lb. Weight Allowance and 82,000 lb. Maximum for Natural Gas Vehicles\*

**Authority:** Section 127(s) of Title 23 of the United States Code, as amended by the Consolidated Appropriations Act of 2019 (PL 116-6), clarifies language relating to the 2,000 lbs. increase to the existing 80,000 lbs. gross vehicle weight limit for natural gas trucks operating on the interstate Highway System as previously extended in The Fixing America's Surface Transportation (FAST) Act of 2015 (PL 114-94).

**Effective Date:** February 15, 2019

**FHWA Guidance:** On November 4, 2019, the Federal Highway Administration (FHWA) issued a departmental memorandum that provides further guidance concerning this increased weight allowance. This complete memorandum is available at:

https://www.ngvamerica.org/wp-content/uploads/2019/11/Memoto-Divisions-2019-Appropriations-Truck-Size-and-Weight-Provisions.pdf

# Section 422 amended 23 U.S.C. 127 (s)-Vehicle weight limitations-Interstate System

**Natural gas and electric battery vehicles.** — A vehicle, if operated by an engine fueled primarily by natural gas or powered primarily by means of electric power, may exceed the weight limit on the power unit by up to 2,000 pounds (up to a maximum gross vehicle weight of 82,000 pounds) under this section.

**Scope of Weight Allowance:** Per FHWA guidance, state authorities must allow the additional weight on the Interstate Highway System and must provide reasonable access to the Interstate. The guidance indicates that the weight allowance applies beyond the Gross Vehicle Weight (GVW) and extends to single axle, tandem axle and bridge weight formula limits.

It also provides that the weight allowance can be taken in addition to other weight allowances. For example, a 550 lbs. weight allowance exists for auxiliary power units (APUs); per FHWA guidance, a natural gas truck equipped with an APU therefore may exceed existing weight limits by up to 2,550 lbs. (e.g. gross weight up to 82,550 lbs.).

\*The 82,000 lb. maximum does not negate higher limits authorized by federal or state law, including higher limits that have been grandfathered into law

# Commonly Asked Questions as Published in FHWA Guidance (11/4/19):

## Question #11 [revised October 25, 2019]):

What is the Federal weight allowance for Natural Gas Vehicles and Electric Battery Vehicles?

#### Answer 11:

A Natural Gas Vehicle or Electric Battery Vehicle, if operated by an engine fueled primarily by natural gas or powered primarily by means of electric battery power, may exceed the weight limit on the power unit by up to 2,000 pounds (up to a maximum gross vehicle weight of 82,000 pounds) under 23 U.S.C. 127(s).

#### Question #12 [revised October 25, 2019]):

Does the weight allowance only apply to the Gross Vehicle Weight (GVW)?

#### Answer 12:

No, a vehicle may exceed the limits on the power unit for: the single axle, tandem axle, and Federal bridge formula maximum weights, provided that the weight on the power unit does not exceed 2,000 pounds, and total GVW does not exceed 82,000 pounds.

#### Question #13 [revised October 25, 2019]):

May the weight allowance for Idle Reduction Technology or Auxiliary Power Unit (APU) of up to 550 pounds be added to the weight allowance for the Natural Gas Vehicles and Electric Battery Vehicles?

#### Answer 13:

Yes. For example, if a Natural Gas Vehicle or Electric Battery Vehicle with a 2,000-pound allowance has a 550-pound APU, the total additional allowable weight would be 2,550 pounds.

#### Question #14 [revised October 25, 2019]):

Must States allow the additional weight (for a GVW of up to 82,000 pounds) for any legal Natural Gas Vehicle or Electric Battery Vehicle operating on the Interstate or within reasonable access to the Interstate?

#### Answer 14:

Yes, States must allow up to 2,000 additional pounds for any legal Natural Gas Vehicle or Electric Battery Vehicle traveling on the Interstate Highway System and within reasonable access to the Interstate.





# **Identifying Natural Gas Vehicles**

Natural gas trucks include those powered by compressed natural gas (CNG) and liquefied natural gas (LNG). The CNG or LNG source can be either geologic natural gas or renewable natural gas (biomethane or RNG). Natural Gas Vehicles (NGVs) can be dedicated — solely powered by natural gas — dual-fueled — powered by a combination/mix of natural gas and diesel fuel for combustion — or bi-fueled — powered independently by natural gas or gasoline. Natural gas trucks look like most other trucks but have key identifiers that distinguish them from conventionally-powered trucks.

## **Blue Diamond Labeling**

Most natural gas trucks are labeled with a Blue Diamond. The diamond includes the letters CNG or LNG. The CNG or LNG stickers are generally located on the back of natural gas vehicles on the lower righthand side but may also be located on tanks, near fueling connectors or on the natural gas fuel system coverings, or shields.





### **Fuel Receptacles**

In addition to their unique tank systems and blue diamond labeling, natural gas vehicles also have fueling connectors unique to natural gas.



LNG Fill Receptacle

## **Additional Labeling**

State highway inspectors also can verify that the vehicle is an NGV by checking for emissions control labeling since the U.S. EPA and California Air Resources Board (CARB) require such labels for both new NGVs and NGV conversions.

#### **Fuel Tanks**

CNG Fill Receptacle

For Class 8 trucks, natural gas fuel tanks will either be rail mounted, located behind the cab, or both.

For refuse trucks, natural gas fuel tanks will be located behind the cab, mounted on the roof, or mounted at the rear (or tail).



Example of a rail mounted, uncovered LNG tank on a Class 8 truck. Side Saddle tanks like the one shown here are often shielded and may sometimes look similar to diesel fuel systems. However, the natural gas fuel management module and fueling receptacles (located on the right side of the photo) identify this as an LNG fuel system.



Example of a Class 8 truck cab with both a rail mounted, driver side CNG tank and a behind the cab box with CNG tanks located inside.



Example of a refuse truck with a roof mounted fuel tank box.



Example of a refuse truck with a tail mounted fuel tank box.



Example of a refuse truck with a behind the cab fuel tank box.

















