that term does not apply, “passenger-carrying volume” means the sum in cubic feet, rounded to the nearest 0.1 cubic feet, of the volume of a vehicle’s front seat and seats to the rear of the front seat, as applicable, calculated as follows with the head room, shoulder room, and leg room dimensions determined in accordance with the procedures outlined in Society of Automotive Engineers Recommended Practice J1100a, Motor Vehicle Dimensions (Report of Human Factors Engineering Committee, Society of Automotive Engineers, approved September 1973 and last revised September 1975).

(1) For front seat volume, divide 1,728 into the product of the following SAE dimensions, measured in inches to the nearest 0.1 inches, and round the quotient to the nearest 0.001 cubic feet.

(i) H61—Effective head room—front.
(ii) W3—Shoulder room—front.
(iii) L34—Maximum effective leg room—accelerator.

(2) For the volume of seats to the rear of the front seat, divide 1,728 into the product of the following SAE dimensions, measured in inches to the nearest 0.1 inches, and rounded the quotient to the nearest 0.001 cubic feet.

(i) H63—Effective head room—second.
(ii) W4—Shoulder room—second.
(iii) L51—Minimum effective leg room—second.

Pickup truck means a non-passenger automobile which has a passenger compartment and an open cargo area (bed).

Recreational vehicle or RV means a motor vehicle equipped with living space and amenities found in a motor home.

Running clearance means the distance from the surface on which an automobile is standing to the lowest point on the automobile, excluding unsprung weight.

Static loaded radius arc means a portion of a circle whose center is the center of a standard tire-rim combination of an automobile and whose radius is the distance from that center to the level surface on which the automobile is standing, measured with the automobile at curb weight, the wheel parallel to the vehicle’s longitudinal centerline, and the tire inflated to the manufacturer’s recommended pressure.

Temporary living quarters means a space in the interior of an automobile in which people may temporarily live and which includes sleeping surfaces, such as beds, and household conveniences, such as a sink, stove, refrigerator, or toilet.

Van means a vehicle with a body that fully encloses the driver and a cargo carrying or work performing compartment. The distance from the leading edge of the windshield to the foremost body section of vans is typically shorter than that of pickup trucks and sport utility vehicles.

Vocational tractor means a tractor that is classified as a vocational vehicle according to 40 CFR 1037.630.

Vocational vehicle means a vehicle that is equipped for a particular industry, trade or occupation such as construction, heavy haulage, mining, logging, oil fields, refuse and includes vehicles such as school buses, motorcoaches and RVs.

Work truck means a vehicle that is rated at more than 8,500 pounds and less than or equal to 10,000 pounds gross vehicle weight, and is not a medium-duty passenger vehicle as defined in 40 CFR 86.1803 effective as of December 20, 2007.

§ 523.3 Automobile.

(a) An automobile is any 4-wheeled vehicle that is propelled by fuel, or by alternative fuel, manufactured primarily for use on public streets, roads, and highways and rated at less than 10,000 pounds gross vehicle weight, except:

(1) A vehicle operated only on a rail line;

(2) A vehicle manufactured in different stages by 2 or more manufacturers, if no intermediate or final-stage manufacturer of that vehicle manufactures more than 10,000 multi-stage vehicles per year; or

(3) A work truck.

(b) The following vehicles rated at more than 6,000 pounds and less than 10,000 pounds gross vehicle weight are determined to be automobiles:

(1) Vehicles which would satisfy the criteria in §523.4 (relating to passenger automobiles) but for their gross vehicle weight rating.

(2) Vehicles which would satisfy the criteria in §523.5 (relating to light trucks) but for their gross vehicle weight rating, and which

(i) Have a basic vehicle frontal area of 45 square feet or less,
(ii) Have a curb weight of 6,000 pounds or less,
(iii) Have a gross vehicle weight rating of 8,500 pounds or less, and

(iv) Are manufactured during the 1980 model year or thereafter.

(3) Vehicles that are defined as medium duty passenger vehicles, and
§ 523.4 Passenger automobile.
A passenger automobile is any automobile (other than an automobile capable of off-highway operation) manufactured primarily for use in the transportation of not more than 10 individuals.


[42 FR 38362, July 28, 1977]

§ 523.5 Non-passenger automobile.
A non-passenger automobile means an automobile that is not a passenger automobile or a work truck and includes vehicles described in paragraphs (a) and (b) of this section:
(a) An automobile designed to perform at least one of the following functions:
(1) Transport more than 10 persons;
(2) Provide temporary living quarters;
(3) Transport property on an open bed;
(4) Provide, as sold to the first retail purchaser, greater cargo-carrying than passenger-carrying volume, such as in a cargo van; if a vehicle is sold with a second-row seat, its cargo-carrying volume is determined with that seat installed, regardless of whether the manufacturer has described that seat as optional; or
(5) Permit expanded use of the automobile for cargo-carrying purposes or other nonpassenger-carrying purposes through:
(i) For non-passenger automobiles manufactured prior to model year 2012, the removal of seats by means installed for that purpose by the automobile’s manufacturer or with simple tools, such as screwdrivers and wrenches, so as to create a flat, floor level, surface extending from the forwardmost point of installation of those seats to the rear of the automobile’s interior; or
(ii) For non-passenger automobiles manufactured in model year 2008 and beyond, for vehicles equipped with at least 3 rows of designated seating positions as standard equipment, permit expanded use of the automobile for cargo-carrying purposes or other non-passenger-carrying purposes through the removal or stowing of foldable or pivoting seats so as to create a flat, leveled cargo surface extending from the forwardmost point of installation of those seats to the rear of the automobile’s interior.
(b) An automobile capable of off-highway operation, as indicated by the fact that it:
(1)(i) Has 4-wheel drive; or
(ii) Is rated at more than 6,000 pounds gross vehicle weight; and
(2) Has at least four of the following characteristics calculated when the automobile is at curb weight, on a level surface, with the front wheels parallel to the automobile’s longitudinal centerline, and the tires inflated to the manufacturer’s recommended pressure—
(i) Approach angle of not less than 28 degrees.
(ii) Breakover angle of not less than 14 degrees.
(iii) Departure angle of not less than 20 degrees.
(iv) Running clearance of not less than 20 centimeters.
(v) Front and rear axle clearances of not less than 18 centimeters each.


[74 FR 14449, Mar. 30, 2009]

§ 523.6 Heavy-duty vehicle.
(a) A heavy-duty vehicle is any commercial medium- and heavy-duty on highway vehicle or a work truck, as defined in 49 U.S.C. 32901(a)(7) and (19). For the purpose of this part, heavy-duty vehicles are divided into three regulatory categories as follows:
(1) Heavy-duty pickup trucks and vans;
(2) Heavy-duty vocational vehicles; and