

TITLE XXI MOTOR VEHICLES

CHAPTER 266 EQUIPMENT OF VEHICLES

Weight

Section 266:18-a

266:18-a Weight on Non-Interstate and General Highway System. –

The driving on ways of this state, other than on the interstate and defense highway system as provided by RSA 266:18, of any vehicle or combination of vehicles exceeding the limitations of this section is hereby prohibited; provided, however, that any police officer shall allow on any way other than the interstate and defense highway system a tolerance of 5 percent above said limitations.

I. Maximum tire and axle gross weights allowable:

(a) The manufacturer's load rating for the tires.

(b) Two axles less than 40 inches apart shall be considered as a single axle unit.

(c) When being driven on any way other than the interstate and defense highway system with a gross weight not in excess of 73,280 pounds:

(1) 22,400 pounds per axle on 3-axle single unit vehicles and on all other vehicles with axles 10 feet or more apart, including combination vehicles;

(2) 18,000 pounds per axle on axles of vehicles less than 10 feet apart, except 3-axle single unit vehicles.

ii. Maximum allowable vehicle gross weight:

(a) For 2-axle vehicles, 33,400 pounds.

(b) For single unit 3-axle vehicles, 55,000 pounds, or a gross weight not in excess of that produced by application of the weight formula as defined in subparagraph (h), whichever is greater, as shown in table III in subparagraph (h).

(c) For single unit 4-axle vehicles, provided that such vehicles shall have drive on 2 rear axles, and the tridem may contain not more than one retractable axle and, if not factory installed and load equalizing, must provide a system of load equalization by hydraulic, pneumatic, or mechanical means, and be equipped with brakes:

(1) 60,000 pounds, or a gross weight not in excess of that produced by application of the weight formula as defined in subparagraph (h), whichever is the greater; or

(2) If a heavy duty recovery vehicle, 80,000 pounds, or a gross weight not in excess of that produced by application of the weight formula as defined in subparagraph (h), whichever is the greater.

(d) For a single unit 5-axle heavy duty recovery vehicle, 84,000 pounds, or a gross weight not in excess of that produced by application of the weight formula as defined in subparagraph (h), whichever is the greater. Such vehicles shall have drive on 2 rear axles, and the tridem may contain not more than one retractable axle and, if not factory installed and load equalizing, must provide a system of load equalization by hydraulic, pneumatic, or mechanical means, and be equipped with brakes.

(e) For a combination of truck-tractor and semi-trailer equipped with 3 axles, the gross weight shall not exceed that set forth in table I as follows:

Table I.

<u>Distance Between Extreme Axles in Feet</u>	<u>Maximum Gross Weight in Pounds</u>
25	54,500
26	55,500
27	56,000

Table I.

<u>Distance Between Extreme Axles in Feet</u>	<u>Maximum Gross Weight in Pounds</u>
28	57,000
29	57,500
30	58,500
31	59,000
32	60,000

Further provided that the maximum tire and axle gross weights as provided in paragraph I shall apply, and the maximum load in pounds carried on any group of 2 or more consecutive axles shall not exceed that produced by application of the weight formula as defined in subparagraph (h).

(f) For a combination of truck-tractor and semi-trailer equipped with 4 axles, the gross weight shall not exceed that set forth in table II as follows:

Table II.

<u>Distance Between Extreme Axles in Feet</u>	<u>Maximum Gross Weight in Pounds</u>
28	60,500
29	61,500
30	62,000
31	62,500
32	63,500
33	64,000
34	64,500
35	65,500
36	66,000
37	66,500
38	67,500
39	68,000

Further provided that the maximum tire and axle gross weights as provided in paragraph I shall apply, and the maximum load in pounds carried on any group of 2 or more consecutive axles shall not exceed that produced by application of the weight formula as defined in subparagraph (h).

(g) For a combination of truck-tractor and single semi-trailer with 5 or more axles with gross weight not in excess of 73,280 pounds, the weight on any single axle shall not exceed 22,400 pounds and the weight on any tandem axle shall not exceed 36,000 pounds.

(h) For a combination of truck-tractor and single semi-trailer equipped with 5 or more axles with a gross weight in excess of 73,280 pounds or a combination of truck-tractor and more than one trailing unit, the total gross weight shall not exceed 80,000 pounds including all law enforcement tolerances, and the overall gross weight on a group of 2 or more consecutive axles shall not exceed that produced by application of the following formula, known as the weight formula.

$$W = 500 \left\{ \frac{LN}{N-1} + 12N + 36 \right\}$$

(In which W equals overall gross weight on any group of 2 or more consecutive axles to the nearest 500 pounds;

L equals the distance measured to the nearest foot between the extreme of any group of 2 or more consecutive axles; and N equals the number of axles in the group under consideration.) Except that 2 consecutive sets of tandem axles may carry a gross load of 34,000 pounds each, provided the overall distance between the first and last axles of such consecutive sets of tandem axles is 36 feet or more and provided that such gross weight shall not exceed 80,000 pounds, including all law enforcement tolerances.

The formula $W = 500 \left\{ \frac{LN}{N-1} + 12N + 36 \right\}$

when expressed in tabular form results in maximum allowable load in pounds carried on any group of 2 or more consecutive axles as follows in table III.

Table III.

Distance*	2 axles	3 axles	4 axles	5 axles	6 axles	7 axles
4	34,000					
5	34,000					
6	34,000					
7	34,000					
8 and less	34,000	34,000				
more than 8	38,000	42,000				
9	39,000	42,500				
10	40,000	43,500				
11		44,000				
12		45,000	50,000			
13		45,500	50,500			
14		46,500	51,500			
15		47,000	52,000			
16		48,000	52,500	58,000		
17		48,500	53,500	58,500		
18		49,500	54,000	59,000		
19		50,000	54,500	60,000		
20		51,000	55,500	60,500	66,000	
21		51,500	56,000	61,000	66,500	
22		52,500	56,500	61,500	67,000	
23		53,000	57,500	62,500	68,000	
24		54,000	58,000	63,000	68,500	74,000
25		54,500	58,500	63,500	69,000	74,500
26		55,500	59,500	64,000	69,500	75,000
27		56,000	60,000	65,000	70,000	75,500
28		57,000	60,500	65,500	71,000	76,500
29		57,500	61,500	66,000	71,500	77,000
30		58,500	62,000	66,500	72,000	77,500
31		59,000	62,500	67,500	72,500	78,000
32		60,000	63,500	68,000	73,000	78,500
33			64,000	68,500	74,000	79,000

34	64,500	69,000	74,500	80,000
35	65,500	70,000	75,000	
**36	66,000	70,500	75,500	
**37	66,500	71,000	76,000	
**38	67,500	71,500	77,000	
39	68,000	72,500	77,500	
40	68,500	73,000	78,000	
41	69,500	73,500	78,500	
42	70,000	74,000	79,000	
43	70,500	75,000	80,000	
44	71,500	75,500		
45	72,000	76,000		
46	72,500	76,500		
47	73,500	77,500		
48	74,000	78,000		
49	74,500	78,500		
50	75,500	79,000		
51	76,000	80,000		
52	76,500			
53	77,500			
54	78,000			
55	78,500			
56	79,500			
57	80,000			

* Distance in feet between the extremes of any group of 2 or more consecutive axles.

** Distance in feet between the extremes of 4 axles. (2 sets of 2 axles) 68,000 gross weight exception. The permissible loads are computed to the nearest 500 pounds.

(i) The following loaded vehicles shall not be driven over H15-44 bridges:

(1) A combination vehicle equipped with 5 axles in the configuration of 3-axle truck-tractor and 2-axle semi-trailer with wheel base less than 38 feet or 2-axle truck-tractor with 1-axle semi-trailer and 2-axle full trailer with wheel base less than 45 feet.

(2) A loaded single unit vehicle with full trailer equipped with axles with wheel base less than 45 feet.

(3) Vehicles with 7, 8, or 9 axles.

(j) Coupled vehicles consisting of a truck together with a trailer attached to the truck by a pintle hook or similar coupling device with adequate breakaway protection as provided in RSA 266:63 may be driven, provided the total combined gross weight of the vehicles does not exceed 80,000 pounds and provided that each unit of the coupled vehicles shall be limited to the maximum permissible axle weights and gross weights of the individual units, and further provided that the weight of 2 or more consecutive axles of the coupled vehicle shall not be in excess of that produced by application of the weight formula as defined in subparagraph (h) and shall be limited to a total combined gross weight not in excess of 80,000 pounds, a single axle limit of 20,000 pounds and a tandem axle limit of 34,000 pounds.

Source. 1983, 434:16. 1986, 121:3; 136:7. 1987, 404:21. 2008, 39:1, eff. July 11, 2008. 2018, 74:3, eff. July 24, 2018.

TITLE XXI

MOTOR VEHICLES

CHAPTER 266

EQUIPMENT OF VEHICLES

Weight

Section 266:18-b

266:18-b Weight on Non-Interstate and General Highway System for Vehicles With Additional Registration. –

The provisions of this section shall only apply to vehicles or combinations of vehicles which have been certified pursuant to RSA 266:18-d and shall only apply to the driving of such vehicles on any way other than the interstate and defense highway system. The driving of any such vehicle exceeding the limitations of this section is hereby prohibited; provided, however, that any police officer shall allow on any way other than the interstate and defense highway system a tolerance of 5 percent above said limitations and 10 percent above said limitations on the axle weights.

I. The maximum gross weights allowable for tires shall be the manufacturer's load rating for the tire.

II. Maximum axle weights allowable:

(a) 22,400 pounds per axle on 3-axle single unit vehicles and 20,000 pounds per axle on 4-axle single unit vehicles and 22,400 pounds on all other vehicles with axles 10 feet or more apart, including combination vehicles.

(b) 18,000 pounds per axle on axles of vehicles less than 10 feet apart, except 3-axle single unit vehicles and 4-axle single unit vehicles.

(c) Two axles less than 40 inches apart shall be considered as a single axle unit.

(d) The distribution of loads shall be further controlled as:

(1) No single axle of a tandem unit shall support more than 60 percent of the total weight supported by the tandem unit. It shall not be considered a violation if neither axle of a tandem unit exceeds the weight legally allowed on a single axle unit for the same vehicle.

(2) No single axle of a tri-axle unit shall support more than 40 percent of the total weight supported by the tri-axle unit.

(3) The allowable gross weight of a vehicle shall not be increased by the addition of a trailing axle, so called, unless the trailing axle supports at least 50 percent of the added weight permitted by the addition of that trailing axle.

III. Maximum allowable vehicle gross weights:

(a) For 2-axle vehicles, 37,400 pounds.

(b) For single unit 3-axle vehicles, 65,000 pounds.

(c) For single unit 4-axle vehicles, provided that such vehicles shall have drive on 2 rear axles, and the tridem may contain not more than one retractable axle and, if not factory installed and load equalizing, must provide a system of load equalization by hydraulic, pneumatic, or mechanical means, and be equipped with brakes:

(1) 73,000 pounds; or

(2) If a heavy duty recovery vehicle, 84,000 pounds.

(d) For a single unit 5-axle heavy duty recovery vehicle, 99,000 pounds, provided that such vehicles shall have drive on 2 rear axles, and the tridem may contain not more than one retractable axle and, if not factory installed and load equalizing, must provide a system of load equalization by hydraulic, pneumatic, or mechanical means, and be equipped with brakes.

(e) For a combination of truck-tractor and semi-trailer equipped with 3 axles, the gross weight shall not exceed that set forth in table I as follows:

Table I.
 Distance Between Maximum Gross Weight
Extreme Axles in Feet in Pounds

25	54,500
26	55,500
27	56,000
28	57,000
29	57,500
30	58,500
31	59,000
32	60,000

Further provided that the maximum tire and axle gross weights as provided in paragraph I shall apply, and the maximum load in pounds carried on any axle shall not exceed that provided in paragraph II.

(f) For a combination of truck-tractor and semi-trailer equipped with 4 axles or more, the gross weight shall not exceed that set forth in the following table:

Distance	* Total Axles	Gross Wt.
8	4 or more	59,000
9		60,000
10		61,000
11		62,000
12		63,000
13		64,000
14		65,000
15		66,000
16		67,000
17		68,000
18		69,000
19	5 or more	70,000
20		72,000
21		74,000
22		76,000
23		78,000
24		80,000
25		80,000
26		80,000
27		80,000
28		82,000
29		84,000
30	6 or more	86,000
31		88,000
32		90,000
33		92,500
34		95,000
35		97,500
36		99,000

* The distance in feet noted is that between extreme axles, excluding the steering axle.

Further provided that the maximum tire and axle gross weights as provided in paragraphs I and II shall apply.

(g) For a combination of truck-tractor and single semi-trailer with 4 or more axles, the weight on any single axle shall not exceed 22,400 pounds and the weight on any tandem axle shall not exceed 36,000 pounds, and the weight of any tri-axle shall not exceed 54,000 pounds. For a combination of truck-tractor and single semi-trailer with 4 or more axles that is carrying raw forestry products, the weight on any tandem axle shall not exceed 40,000 pounds. For purposes of this subparagraph, "raw forestry products" means unprocessed logs and wood chips harvested from forestland, as defined in RSA 227-G:2, VIII, that have not previously been moved off site.

(h) For a combination of truck-tractor and one or more trailing units being driven upon any way of this state, the total gross weight shall not exceed 99,000 pounds.

(i) The commissioner of transportation may restrict at his or her discretion the crossing of certain bridges or other structures, which he or she determines to have insufficient strength to safely carry multiple legal loads, by limiting vehicles to a caution crossing, whereby the bridge is restricted to one vehicle certified under RSA 266:18-d exceeding 37,400 pounds on the bridge at any one time. When multiple vehicles of more than 2 axles are located on the designated bridge, all loaded certified vehicles shall be required to stop and wait until other traffic passes before crossing the bridge. A bridge so restricted shall be posted according to RSA 266:18-c.

(j) The following loaded vehicles shall not be driven over HI 5-44 bridges unless so authorized by the commissioner of transportation:

(1) A combination vehicle equipped with 5 axles in the configuration of 3-axle truck-tractor and 2-axle semi-trailer with wheel base less than 38 feet or 2-axle truck-tractor with one-axle semi-trailer and 2-axle full trailer with wheel base less than 45 feet.

(2) A loaded single unit vehicle with full trailer equipped with 6 axles with wheel base less than 45 feet.

(3) Vehicles with 7, 8, or 9 axles.

(k) Coupled vehicles consisting of a truck together with a trailer attached to the truck by a pintle hook or similar coupling device with adequate breakaway protection as provided in RSA 266:63 may be driven, provided the total combined gross weight of the vehicles does not exceed 99,000 pounds and provided that each unit of the coupled vehicles shall be limited to the maximum permissible axle weights and gross weights of the individual units, and further provided that the weight of 2 or more consecutive axles of the coupled vehicle shall not be in excess of that produced by application of the weight formula as defined in RSA 266:18-b, III(f) and shall be limited to a total combined gross weight not in excess of 99,000 pounds, a single axle limit of 22,400 pounds, a tandem axle limit of 36,000 pounds, and a tri-axle limit of 54,000 pounds.

(l) For a combination of truck-tractor and dump trailer equipped with 6 axles or more, the gross weight shall not exceed 99,000 pounds if the distance between the extreme axles, excluding the steering axle, is 28 feet or more. If the distance between the extreme axles is less than 28 feet, the maximum weight shall be determined under subparagraph (f).

Source. 1986, 121:3. 1987, 404:22, eff. July 25, 1987. 2016, 193:1, eff. June 30, 2016. 2018, 74:4, eff. July 24, 2018. 2021, 204:2, Pt. VII, Sec. 1, eff. Oct. 9, 2021.

TITLE XXI

MOTOR VEHICLES

CHAPTER 266

EQUIPMENT OF VEHICLES

Weight

Section 266:18-c

266:18-c General Weight Provisions. —

The following provisions shall apply to any vehicle covered by RSA 266:18, 18-a, or 18-b, regardless of the type of way or highway on which it is driven, except as otherwise specified:

- I. A vehicle or combination of vehicles equipped with any solid rubber tires shall not have weights more than 80 percent of those permitted; provided that no vehicle equipped with solid rubber tires which has at any point less than one inch of rubber above the top or beyond the flange or rim shall be driven upon any way.
- II. Motor vehicles or vehicles drawn by motor vehicles when equipped with metal or other hard tires shall not have weights more than 40 percent of those permitted.
- III. The provisions of RSA 266:18, 18-a, and 18-b shall not apply to vehicles used exclusively in the surfacing of ways of the state of New Hampshire, or subdivisions thereof; provided that the commodities of tar, asphalt, or the combination thereof shall not exceed 2,000 gallons on any 2-axle vehicle, or 4,000 gallons on any 3-axle vehicle.

IV. A vehicle or combination of vehicles shall not be driven or moved over any bridge or other structure on any way if the weight of such vehicle, or combination of vehicles and load, is greater than the capacity of the structure as shown by a sign on the right side of or overhead on the structure.

V. It shall be the duty of the commissioner of transportation to cause signs to be erected at both ends on the right side of or overhead on all bridges or other structures under his jurisdiction stating the capacity in tons of 2,000 pounds which the bridge or other structure will safely carry. As an alternative to posting signs with stated weight limits, the commissioner of transportation may, at his discretion, post standardized warning signs designating certain restricted bridges as caution crossing bridges, or as excluded bridges, and publish a list which designates all such bridges so conditioned at least annually. For all other bridges or other structures it shall be the duty of the authority having jurisdiction to place similar signs. The signing message for posting of weight limits for bridges and structures shall read as follows:

WEIGHTLIMITXTONS

If the authority determines that a bridge or other structure may safely carry loads greater than this limit by vehicles with 3 or more axles, the signs shall read as follows:

GROSS WEIGHT LIMITX TONS ORY% OF LEGAL LOADS

"X" is the numerical value that equals the posted maximum legal gross weight limit for a 2-axle vehicle. "Y%" is the numerical value expressed as a percentage of the maximum legal gross weight limit of any single axle or tandem axle, and the combined gross weight limit of any 3-axle truck or any combination as noted in this section. Where no special permit loads are allowed, the signing message for posting shall read as follows:

NO PERMIT LOADLEGAL LOADS MAXIMUM

Upon bridges or other structures of sufficient strength to carry safely the legal loads permissible by this section, no such signs shall be required.

VI. A determination of the gross weight of vehicles under the tables as set forth in RSA 266:18, 18-a, and 18-b shall, in cases in which the distance between extreme axles is not in exact number of feet, be governed by the following: if the distance is 6 inches or less in excess of the number of feet stated in the table, the gross weight shall be based upon the number of feet stated in the table; if the distance is more than 6 inches in excess of the number of feet in the table, the gross weight shall be based upon the next higher number of feet.

VII. Any vehicle subject to this subdivision that utilizes an auxiliary power or idle reduction technology unit in order to promote reduction of fuel use and emissions because of engine idling, may be allowed up to an additional 550 pounds in gross, axle, tandem, or bridge formula weight limits. To be eligible for this exception the driver of the vehicle must be able to prove by written certification the weight of the auxiliary power unit and by demonstration or certification that the idle reduction technology is fully functional at all times. Certification of the weight of the auxiliary power unit must be available to law enforcement officers if the vehicle is found in violation of applicable weight laws. The additional weight allowed may not exceed 550 pounds or the weight certified, whichever is less.

Source. 1986, 121:3. 2011, 9:1. 2013, 138:1, eff. June 27, 2013.