

# WHAT YOU NEED TO KNOW ABOUT SIZE AND WEIGHT LIMITS

Florida law regulates the size and weight of each truck and load. Information on determining size and weight can be found in the following pages or by contacting an office of the Florida Department of Transportation (DOT), Office of Motor Carrier Compliance (OMCC), whose addresses and telephone numbers can be found in the back of this manual.

## TERMS YOU SHOULD KNOW

1. **GROSS WEIGHT** - Total weight of the vehicle and load.
2. **EXTERNAL BRIDGE LENGTH** - The distance between the center of the first axle and the center of the last axle of the vehicle. (Measurements are to the nearest foot.)
3. **INTERNAL BRIDGE LENGTH** (also called "inner-bridge") - The distance between the centers of 2 or more axles, but not the entire "external bridge". This applies on Interstate highways only. (Measurements are to the nearest foot.)
4. **SINGLE AXLE WEIGHT** - The weight placed on the road by all the wheels of one axle.
5. **TANDEM AXLE WEIGHT** - All the weight transmitted to the road by 2 axles together with equalization.
6. **TIRE WIDTH** - The width stamped on the side of the tire by the manufacturer. (A 10:00 X 20 is a 10" tire.)

## TEN PERCENT (10%) SCALE TOLERANCE

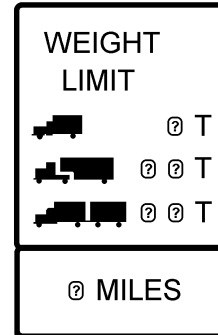
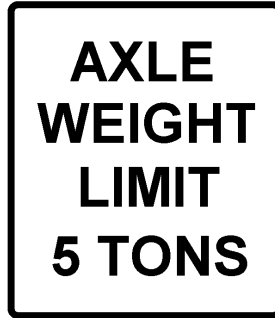
All weight limitations in this manual include a 10% tolerance to allow for any difference in scale weights. If you load to the maximum weight for your vehicle, you have used the tolerance allowed. For example, if the table says your truck can gross 80,000 pounds, that means you have used all the tolerance allowed by law when your truck weighs 80,000 pounds.

## LOW-LIMIT ROADS AND BRIDGES

Due to age, condition, or design, some roads and bridges in Florida cannot carry the load limits allowed in this manual. Signs detailing these lower limits have been posted on such roads and bridges.



MAXIMUM - ALL VEHICLES



MAXIMUM - BY CLASS

As illustrated above, posted load limit signs will indicate the maximum allowable weight, in tons (1 ton = 2,000 pounds), for all vehicles, or the maximum allowable weight for different classes of vehicles.

The maximum allowable weight is listed, in tons, beside the silhouette for each of the 3 classes of vehicles.

The **SINGLE-UNIT TRUCK** silhouette includes all straight trucks, cranes and other single-unit special mobile equipment regardless of the number of axles.

The **TRUCK TRACTOR SEMI-TRAILER** silhouette includes all truck tractor combinations regardless of the number of axles.

The **SINGLE-UNIT TRUCK WITH ONE TRAILER** includes all MAXI-CUBE and TANDEM TRAILER combinations regardless of the number of axles.

Please watch carefully for all load limit signs and obey them.

## SPECIAL PERMITS FOR OVERSIZE AND/OR OVERWEIGHT CONDITIONS

Special permits may be obtained in certain circumstances for oversize and/or overweight vehicles and loads which cannot be broken down. Information regarding permits can be found in the Overweight / Oversize Permits section of this manual.

### MAXIMUM SIZE AND WEIGHT LIMITS (TOLERANCES INCLUDED)

<b>GROSS WEIGHT (under certain conditions)</b>		<b>80,000 lbs.</b>
<b>SINGLE AXLE, MAXIMUM WEIGHT</b>		<b>22,000 lbs.</b>
<b>TANDEM AXLE, MAXIMUM WEIGHT</b>		<b>44,000 lbs.</b>
<b>SEMI-TRAILER LENGTH INCLUDING LOAD (commercial vehicles only)</b>	*	<b>48' / 53'</b>
<b>AUTOMOBILE AND BOAT TRANSPORTER SEMI-TRAILERS</b>	**	<b>50'</b>
<b>SINGLE UNIT</b>		<b>40'</b>
<b>STRAIGHT TRUCK-TRAILER COMBINATION</b>	***	<b>65'</b>
<b>BUSES</b>		<b>50'</b>
<b>WIDTH OF TRUCK / LOAD (on road with traffic lanes 12' wide or more)</b>	****	<b>8'6"</b>
<b>HEIGHT</b>		<b>13'6"</b>
<b>MAXIMUM OVERHANG OVER FRONT OR FRONT BUMPER OF VEHICLE</b>	*****	<b>3'</b>

#### REMEMBER:

All of the maximum weights you see above already include the 10% scale tolerance.

- \* Semi-trailers which exceed 48' including overhang, up to 53' must have a 41' or less kingpin measurement and rear underride protection (ICC bumper).
- \*\* Automobile and boat carrier transporter semi-trailers shall not exceed 50'; load may extend an additional 6' beyond the rear of the trailer.
- \*\*\* Straight truck-trailer combinations exceeding 65' overall; trailer may not exceed 28' including load. Additional 6' rear overhang for truck-trailer combinations engaged in the transportation of boats.
- \*\*\*\* Some roads may be restricted to 8' in width by the Department of Transportation or local authorities.
- \*\*\*\*\* Front overhang limitations do not apply to bicycle racks carrying bicycles on public sector transit vehicles or front-end loading solid waste or recyclable collection vehicles while engaged in collection, when not exceeding 8'6" front overhang and operated at less than 20 miles per hour with warning lights activated.

## THE INTERNAL BRIDGE (INNER-BRIDGE) FORMULA

On Interstate highways, your truck's weight will be determined by external bridge length and by internal bridge (groups of consecutive axles). For example, the internal bridge can be both sets of tandem axles (4-axle bridge) or the axles of the tractor (3-axle bridge).

The inner-bridge formula applies to your truck if the gross weight exceeds 73,271 pounds, and:

1. it has 4 axles and 47' or more wheelbase; or
2. it has 5 axles and 41' or more wheelbase; or
3. it has 6 axles and 33' or more wheelbase.

To find your legal inner-bridge weight, measure the axle spacing between the groups of axles. Then find that length on TABLE 2, and look under the column with the number of axles in the group measured.

## HOW TO FIND YOUR TRUCK'S LEGAL WEIGHT

First, the type of truck you are driving determines which rules must be followed. Then the "bridge" length for your truck must be measured. Now, look at the Tables:

*TABLE 1* on **Page 7** is for some single units and some tractor trailers with short wheelbases.

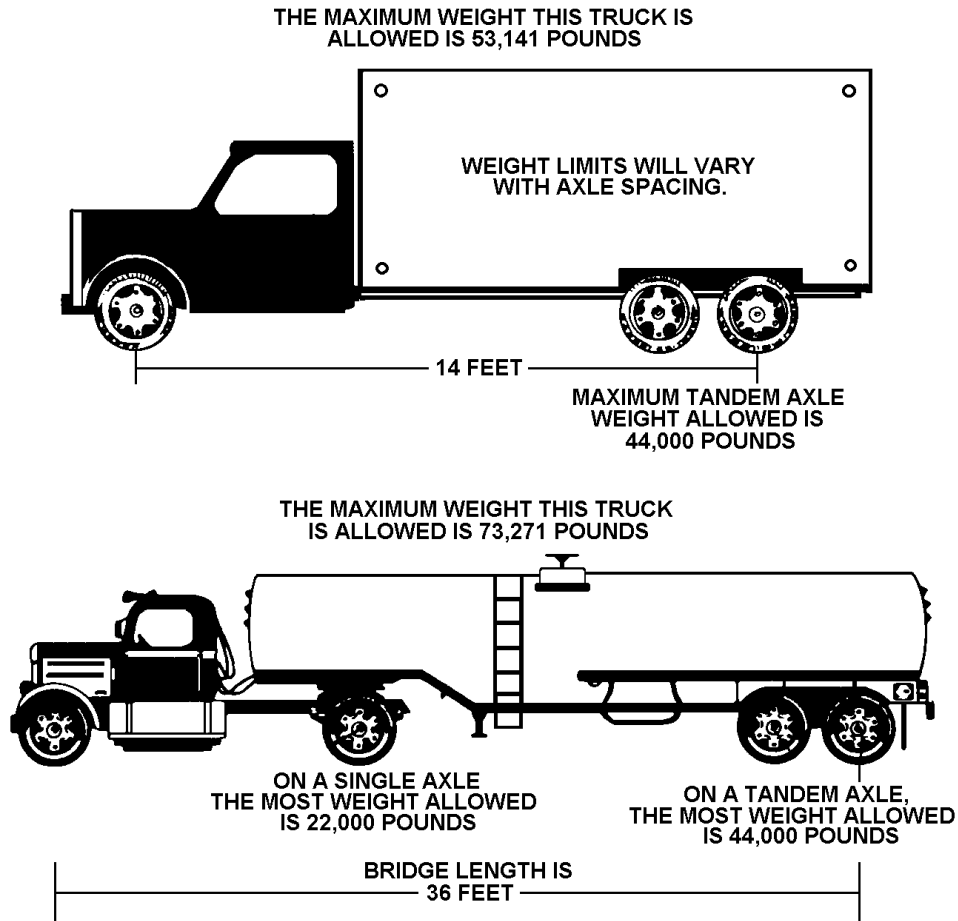
*TABLE 2* on **Page 9** is for tractor trailers which have enough axles and enough wheelbase to allow more weight than TABLE 1. So, use the table which allows the most weight.

*TABLE 3* on **Page 11** is only for single-unit dump trucks, concrete mixing trucks, garbage trucks and fuel oil and gasoline trucks. The maximum axle weight is determined by tire size. The maximum gross weight for these types of trucks with 2 or 3 axles is determined by adding the axle weight limitations. The maximum gross weight for these types of trucks with more than 3 axles is 70,000 pounds.

## HOW TO USE TABLE 1

This table is for tractor trailers with shorter bridge measurements and for single-unit vehicles which *are not* dump trucks, garbage trucks, fuel oil or concrete mixing trucks. If your truck fits here, measure the bridge length and find the maximum gross weight on TABLE 1. If your truck is longer than 36', you may be allowed more weight than shown on TABLE 1. See TABLE 2 if:

1. your truck has 4 axles and is 47' or longer; or
2. your truck has 5 axles and is 41' or longer; or
3. your truck has 6 axles and is 33' or longer.



**MAXIMUM LEGAL WEIGHT BASED ON THE DISTANCE FROM THE TRUCK'S FRONT AXLE TO REAR AXLE**

**TABLE 1**

Commercial motor vehicle weights are also limited by the gross vehicle weight declared on the power unit tag registration, and are subject to penalty if such declared weight is exceeded.

**(See facing page for instructions on how to use this TABLE.)**

**Single Axle - 22,000 Pounds; Tandem Axle - 44,000 Pounds**

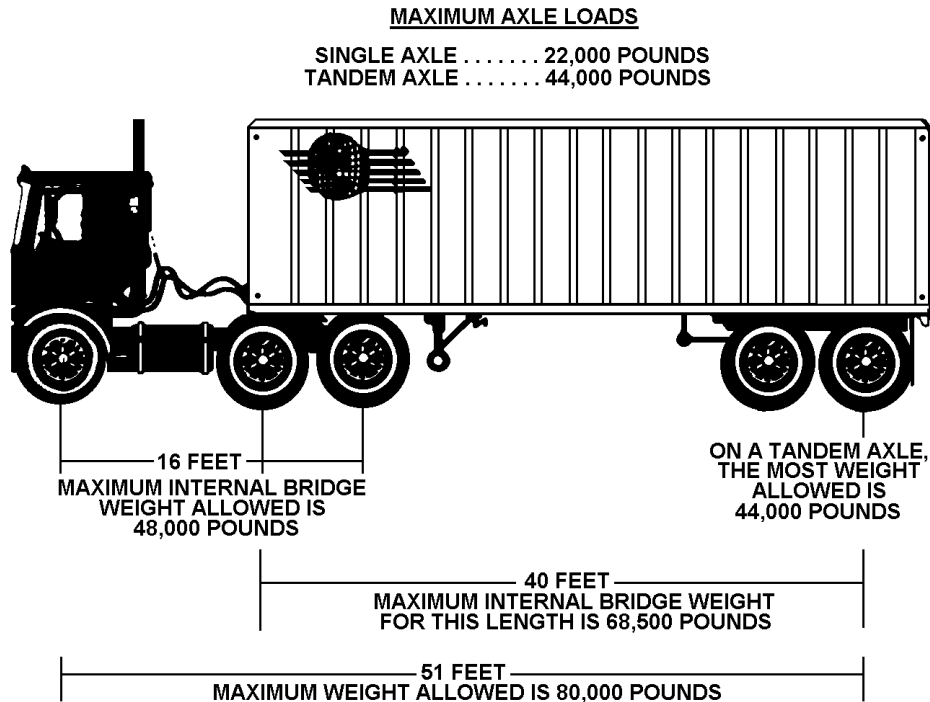
Distance Between First and Last Axles (In Feet)	Maximum Gross Weight Allowed to be Hauled (In Pounds)
This is overall distance and includes any combination of units	[10% Tolerance Included]
4	44,000
5	44,000
6	44,000
7	44,000
8	44,000
9	48,554
10	49,478
11	50,391
12	51,304
13	52,228
14	53,141
15	54,065
16	54,978
17	55,891
18	56,805
19	57,728
20	58,641
21	59,554
22	60,478
23	61,391
24	62,304
25	63,217
26	64,141
27	65,054
28	65,967
29	66,891
30	67,804
31	68,717
32	69,641
33	70,554
34	71,467
35	72,380
36 OR MORE	73,271

## HOW TO USE TABLE 2

This table is for finding your legal external bridge and internal bridge weight.

Legal maximum weight may be found by measuring the external bridge and locating that distance in the left-hand column of TABLE 2. Then read the weight under the correct column for the number of axles on your truck.

For internal bridge weight limits for your truck on the Interstate Highway System, measure the distance from the center of the steering axle on the tractor to the center of the last tractor axle and the distance from the center of the first drive axle to the center of the last trailer axle. Then find the number of feet measured on the left-hand side of the table and read the legal weight in the column under the number of axles measured for each internal bridge distance.



**TABLE 2**

**MAXIMUM LEGAL WEIGHT BASED ON THE TOTAL NUMBER OF AXLES AND THE DISTANCE BETWEEN THE AXLES, OR SETS OF AXLES**

Commercial motor vehicle weights are also limited by the gross vehicle weight declared on the power unit tag registration, and are subject to penalty if such declared weight is exceeded.

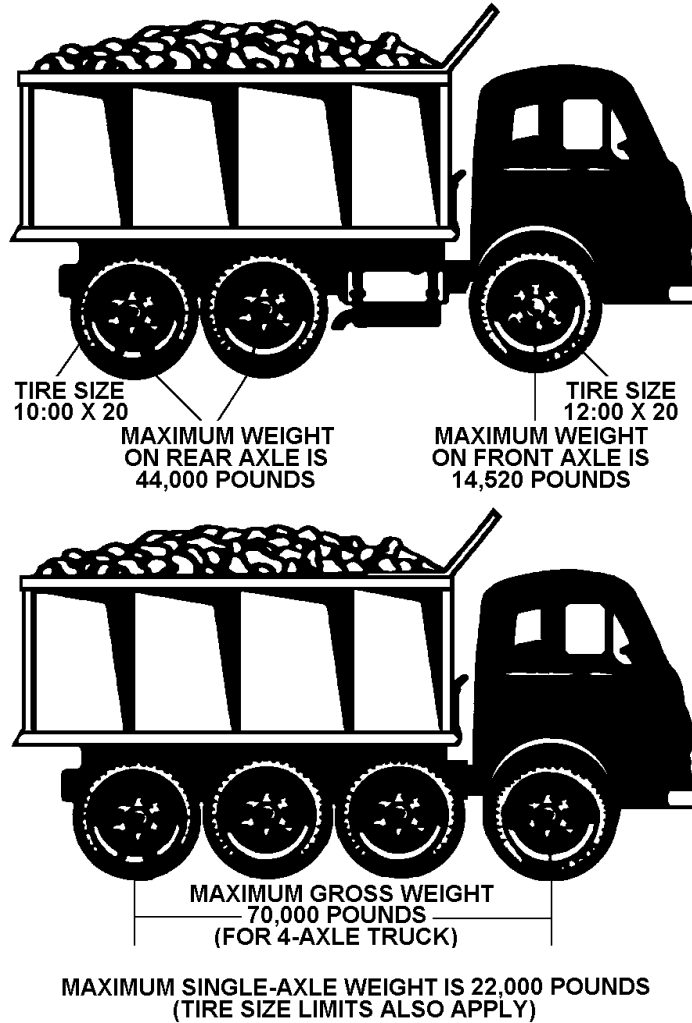
**(See facing page for instructions on how to use this TABLE)**

	Maximum Weight Allowed on this Number of Axles (In Pounds) [10% Tolerance Included]					
	2 Axles	3 Axles	4 Axles	5 Axles	6 Axles	7 Axles
4	44,000					
5	44,000					
6	44,000					
7	44,000					
8	44,000	44,000				
9	44,000	44,000				
10	44,000	44,000				
11	44,000	44,500				
12	44,000	45,000	50,000			
13	44,000	46,000	50,500			
14	44,000	46,500	51,500			
15	44,000	47,500	52,000			
16	44,000	48,000	52,500	58,000		
17	44,000	49,000	53,500	58,500		
18	44,000	49,500	54,000	59,500		
19	44,000	50,500	54,500	60,000		
20	44,000	51,000	55,500	60,500	66,000	
21	44,000	52,000	56,000	61,000	66,500	
22	44,000	52,500	56,500	62,000	67,000	
23	44,000	53,500	57,500	62,500	68,000	
24	44,000	54,500	58,000	63,000	68,500	74,000
25	44,000	55,000	58,500	63,500	69,000	74,500
26	44,000	55,500	59,500	64,500	69,500	75,000
27	44,000	56,500	60,000	65,000	70,000	76,000
28	44,000	57,000	60,500	65,500	71,000	76,500
29	44,000	58,000	61,500	66,000	71,500	77,000
30	44,000	58,500	62,000	67,000	72,000	77,500
31	44,000	59,500	62,500	67,500	72,500	78,000
32	44,000	60,000	63,500	68,000	73,000	78,500
33	44,000	61,000	64,000	68,500	74,000*	79,500
34	44,000	61,500	64,500	69,500	74,500	80,000
35	44,000	62,500	65,500	70,000	75,000	
36	44,000	63,000	68,000	70,500	75,500	
37	44,000	64,000	68,000	71,000	76,000	
38	44,000	64,500	68,000	72,000	77,000	
39	44,000	65,500	68,000	72,500	77,500	
40	44,000	66,000	68,500	73,000	78,000	
41	44,000		69,500	73,500*	78,500	
42	44,000		70,000	74,500	79,000	
43	44,000		70,500	75,000	80,000	
44	44,000		71,500	75,500		
45	44,000		72,000	76,000		
46	44,000		72,500	77,000		
47	44,000		73,500*	77,500		
48	44,000		74,000	78,000		
49	44,000		74,500	78,500		
50	44,000		75,500	79,500		
51	44,000		76,000	80,000		

**WARNING:** You may be legal on external bridge weight, but not on internal bridge. Be sure to check those weights before using the Interstate highways.

### HOW TO USE TABLE 3

This TABLE is for finding the legal weight for single-unit dump trucks, concrete mixing trucks, garbage trucks, and fuel oil and gasoline trucks. Legal axle weight may be determined by finding the tire width stamped on the vehicle's tires and locating that number in the left-hand column. Then read across to find the weight allowed for an axle with 2 tires or with 4 tires (note that no axle may exceed the lawful weight limit of 22,000 pounds, regardless of tire size). Maximum gross weight is the total of allowable axle weights, not to exceed 70,000 pounds.



**TABLE 3**

**MAXIMUM LEGAL WEIGHT FOR SINGLE-UNIT DUMP TRUCKS, CONCRETE MIXING TRUCKS, GARBAGE TRUCKS, AND FUEL OIL AND GASOLINE TRUCKS BASED ON 605 POUNDS PER INCH OF TIRE WIDTH**

Commercial motor vehicle weights are also limited by the gross vehicle weight declared on the power unit tag registration, and are subject to penalty if such declared weight is exceeded.

**(See facing page for instructions on how to use this TABLE)**

If your tire size is	Total Weight for 2 Tires on 1 Axle is	Total Weight for 4 Tires on 1 Axle is
	[10% Tolerance Included]	
Maximum is still 22,000 pounds, with no exception.		
7:50	9,075	18,150
8:00	9,680	19,360
8:22.5	9,680	19,360
8:25	9,983	19,965
9:00	10,890	21,780
9:22.5	10,890	21,780
10:00	12,100	22,000
10:22.5	12,100	22,000
10.3-22.5	12,463	22,000
11:00	13,310	22,000
11:22.5	13,310	22,000
11:24.5	13,310	22,000
12:00	14,520	22,000
12:22.5	14,520	22,000
12:24.5	14,520	22,000
13:00	15,730	22,000
14:00	16,940	22,000
15:00	18,150	22,000
16:00	19,360	22,000
16:5	19,965	22,000
17:00	20,570	22,000
18:00	21,780	22,000
19:00	22,000	

Metric Conversion Chart		
	215/75R17.5	8.5
	225/70R19.5	9.0
	245/70R19.5	10.0
	235/80R22.5	9.0
	255/70R22.5	10.0
	255/80R22.5	10.0
	275/80R22.5	11.0
	295/80R22.5	12.0
	315/80R22.5	13.0
	385/65R22.5	15.0
	425/65R22.5	16.5
	445/65R22.5	18.0
	275/80R24.5	11.0