

# Axle Spacing Calculator Help

# Axle Spacing Calculator

- Helpful tool for knowing the weight limitations of a vehicle combination or single unit.
- An axle spacing report number is required for each overweight permit
- The report number will be assigned to the configuration

The distance between each axle

How many tires per axle

Tire size of all two-tire axles

### Axle Spacing Report

Axle Spacing Report No.    [Help](#)

To calculate permitted weight, enter axle spacing, tires per axle and tire sizes and click Calculate and then Save.

This is Not a Permit

Use Feet-Inches vs. Decimal Feet

Axle No.	1	2	3	4	5	6	7	8	9	10
Axle Spacing Ft-In	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Tires per Axle	<input type="text" value="Cnt"/>	<input type="text" value="Cnt"/>	<input type="text" value="Cnt"/>	<input type="text" value="Cnt"/>	<input type="text" value="Cnt"/>	<input type="text" value="Cnt"/>	<input type="text" value="Cnt"/>	<input type="text" value="Cnt"/>	<input type="text" value="Cnt"/>	<input type="text" value="Cnt"/>
Tire Width (in. or mm) <a href="#">?</a>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Steer Axle <a href="#">?</a>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drop Axle		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Permitted Weight (* see Remarks)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Total Permitted  Legal Weight  [More Axles](#) [Less Axles](#)

Axle Restriction and Remarks for Permitted Weights

Indicate if there are any drop axles and if it is a self steering drop axle

## Axle Spacing Report

Axle Spacing Report No.   [Search](#) [Help](#)

To calculate permitted weight, enter axle spacing, tires per axle and tire sizes and click Calculate and then Save.

This is Not a Permit

<input checked="" type="checkbox"/> Use Feet-Inches vs. Decimal Feet											
Axle No.	1	2	3	4	5	6	7	8	9	10	
Axle Spacing Ft-In	<input type="text" value="13-6"/>	<input type="text" value="4-6"/>	<input type="text" value="4-6"/>	<input type="text" value="4-6"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Tires per Axle	<input type="text" value="2"/> ▾	<input type="text" value="4"/> ▾	<input type="text" value="4"/> ▾	<input type="text" value="4"/> ▾	<input type="text" value="4"/> ▾	<input type="text" value="Cnt"/> ▾	<input type="text" value="Cnt"/> ▾	<input type="text" value="Cnt"/> ▾	<input type="text" value="Cnt"/> ▾	<input type="text" value="Cnt"/> ▾	<input type="text"/>
Tire Width (in. or mm) ?	<input type="text" value="11"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Steer Axle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Dashes indicate feet and inches

- When inputting tire size, do not use alpha characters.
- The first number indicates tire width
- An 11R 22.5 tire should be listed as, “11”

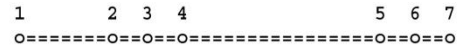
- After calculating and saving the axle spacing report, a five digit axle spacing report number.\* will be provided

- This report number will always be assigned to the combination.



**eSNOOPI Axle Spacing Report No.\* 23115**

**Vehicle Layout**



7 Axles - Length: 68.00 ft. - Axle Groups: 2-4, 5-7

Axle No.	1	2	3	4	5	6	7	8	9	10
Axle Spacing (ft.)		15.00	5.00	5.00	33.00	5.00	5.00			
Tires (count/size)	2/11	4	4	4	4	4	4			
Axle Type	steer									
Permitted Weight (*see Remarks)	13,200	22,000*	22,000*	22,000*	22,000*	22,000*	22,000*			

Total Permitted Weight	Legal Weight
143,200	99,200

**Axle Restrictions and Remarks for Permitted Weights:**

Axles 2-4 NTE 65,000 lbs.

Axles 5-7 NTE 65,000 lbs.

**\*\*This is the axle spacing report for the vehicle configuration described. Displayed are the legal weight limits and the maximum permitted weights allowed for this configuration.**

**The report number displayed at the top of this page is required for any future weight permits for this configuration.**

# Axle Spacing Report - Details

http://www.wsdot.wa.gov... Axle Spacing Report

## Vehicle Size & Weight Permits

### Axle Spacing Report

Axle Spacing Report No.  [Look Up](#) [Calculate](#) [Search](#) [Clear](#) [Save Help](#) [Print](#)

1                      2    3  
○-----○=○  
(3 Axles - Length: 25.08 ft. - Axle Groups: )

### This is Not a Permit

Use Feet-Inches vs. Decimal Feet

Axle No.	1	2	3	4	5	6	7	8	9	10
Axle Spacing Ft-In	20	5-1								
Tires per Axle	2 ▾	4 ▾	4 ▾	Cnt ▾	Cnt ▾	Cnt ▾	Cnt ▾	Cnt ▾	Cnt ▾	Cnt ▾
Tire Width (in. or mm)	11									
Steer Axle		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drop Axle		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Permitted Weight (* see Remarks)	13,200	22,000	22,000							

Total Permitted  Legal Weight  [More Axles](#) [Less Axles](#)

#### Axle Restriction and Remarks for Permitted Weights

Axles separated by less than 7 ft. Not to Exceed 43,000 lbs.

[Show Detail](#)

Last modified on 2/29/2008

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# Axle Spacing Report - Details

- The detail will show both permit weight and legal weight.
- The program will show the max allowed per single axle, group axles, and gross axles.

[Hide Detail](#)

Number of Axles: 3  
 Length: 25.08 ft.  
 Total Permitted: 56,200 lbs. = 1 (13200) + 2-3 (43000)  
 Legal Allowed: 47,200 lbs. = 1 (13200) + 2-3 (34000)

Axle(s)	Span (ft.)	Permitted Weight lbs.
1		13,200
1-2	20.00	35,200 = 1 (13200) + 2 (22000)
1-3	25.08	56,200 = 1 (13200) + 2-3 (43000)
2		22,000
2-3	5.08	43,000
3		22,000

Axle(s)	Span (ft.)	Legal Weight lbs.
1		13,200
1-2	20.00	33,200 = 1 (13200) + 2 (20000)
1-3	25.08	47,200 = 1 (13200) + 2-3 (34000)
2		20,000
2-3	5.08	34,000
3		20,000

Last modified on 2/29/2008

# Axle Spacing Calculator Glossary

- **Axle Spacing Report Number** – Allows an existing axle spacing report to be displayed (for axle spacing report numbers 10001 and greater only). Enter the desired axle spacing report number and click Look Up. This is helpful if a previous axle spacing report has axle spacing and tire values that close resemble the desired vehicle configuration.
- **Axle No.** – Indicates a specific axle on the vehicle, where axle number 1 represents the front axle of the combination.
- **Axle spacing (ft).** This can be entered in two different ways:  
Feet with hundredths of a foot; **23.50**  
Feet – inches; **23-6** (Remember to use “-” to separate feet and inches)
- **Tires per Axle** – Number of tires on that entire axle.
- **Tire size** – This can be entered as metric or inches. Inches can be specified in hundredths (for example, 12.75).
- **Steer Axle and Drop axle** – This has three functions – You can click on it for help.
- To designate steer axle steered by the driver – Click on **STEER AXLE**
- To designate a self-steering drop axle - Click both **STEER and DROP AXLE**
- To designate a non-steering drop axle – Click only **DROP AXLE**



# Axle Spacing Calculator Glossary

- **Calculate** – Once you have entered the required values, click “Calculate” to display permitted and legal weights.
- **Permitted Weight** - These fields will automatically populate with the maximum weights allowed per axle. Keep in mind there are other factors to consider (spacing, number of tires, tire size) Example: Each axle of a tandem is allowed 22,000 lbs. maximum but the two axles together can not exceed 43,000 lbs. because that is the tandem weight limit.
- **Total Permitted and Legal Weights**  
These fields will populate with the maximum weights allowed for the configuration using tire size, axle spacings and axle weights.
- **Remember**: This will be for normal loads, to see if a permit for the desired weight can be issued for a specific vehicle combination. This tool cannot be used on loads such as the cranes, grandfathered vehicles and 8 tire axles. It also cannot be used for super loads. Super loads are limited not only by RCW weights but each bridge structure that the load affects on its route.
- **More Axles**: Click to display additional axles if you require more than 10 axles.  
**Axle Restrictions and Remarks**  
This field will populate with the weight limits per axle groups listed.