

Tractor/Semitrailer W/Quad group



11" steering tire (two tires on axle = 13,200# @ 600# per inch. Rating is 6800# per tire = 13,600# Two axles (axles 1-2) spaced 12' = 40,000# (10 ton) or 36,000# (9 ton)

Three axles (axles 1-2-3) spaced 16'-4'' = 48,000# (example of an internal table weight)

Two axles (axles 2-3) spaced 4'-4" = 34,000#

Four axles (axles 4-5-6-7) spaced 12'-5" = 50,000#

----within the 4 axle rear group the following distribution of weight is----

Three axles (axles 4-5-6) spaced 8'-1" = 42,000# unless single tires (size or rating) allow less.*

Three axles (axles 5-6-7) spaced 8'-5" = 42,000# unless single tires (size or rating) allow less.*

Six axles (axles 2-3-4-5-6-7)spaced 26'-9" = 70,500# (internal table weight calculation – (monitor this weight closely as it will often be much less than the individual axles would be individually allowed)* Seven axles spaced 38'-9" = 80,000#

Axles 4 and 5 are single tire axles with a 255mm tire rated at 5,000# per tire (10,000# per axle). The rear group would use maximum allowable weight as follows:

Axle 4 = 10,000 # (rated weight)

Axle 5 = 10,000 # (rated weight)

Axle 6 = up to 20,000 pounds on a 10-ton (18K on a 9 ton) but the group weight cannot be exceeded Axle 7 = up to 20,000 pounds on a 10-ton (18K on a 9 ton) but the group weight cannot be exceeded The **rear group** is allowed 50,000# (from the weight chart for 4 axles at 12 feet.

Note that if the 50,000# were used on the last group, only 20,500# could be carried on axles 2 & 3 (tandem drivers) as the internal bridge for the last six axles is only allowed 70,500# by the weight table. To maximize the rear "quad" weight at 50,000# AND the tandem (drivers) weight at 34,000# could cause not only an overweight of maximum legal (80,000#) but an internal weight violation of the last 6 axles of 13,500#. The individual axles may not be overweight, however the consecutive axle limits (internal table weights) would be exceeded.

*Anytime you have a difference of weight on the same axle(s), use the lesser weight.

June 2009 © Greg Hayes. All Rights Reserved