

Part 1 - Dimension Limits

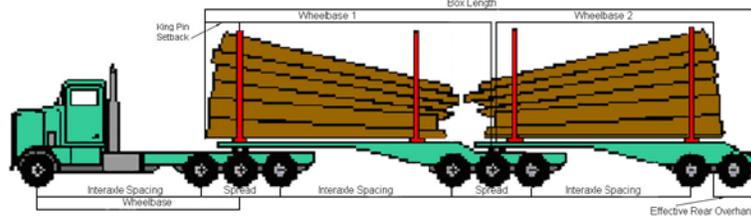


Figure 1 – Tridem Drive B-Train

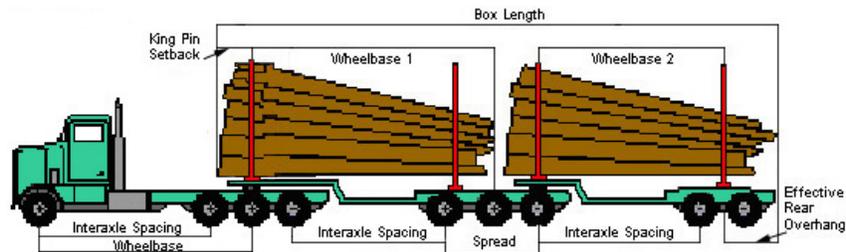


Figure 2 – Tridem Drive Double Pole B-Train – No Hinge

DIMENSION	LIMIT
Overall Length	Maximum 26.0 metres
Overall Width	Maximum 2.6 metres
Overall Height	Maximum 4.15 metres
Box Length	Maximum 20.0 metres
Tractor	
Wheelbase	Minimum 6.6 metres / Maximum 6.8 metres
Tridem Axle Spread	Maximum 2.8 metres
Tridem Axle Semi – Trailer (Front)	
Length	Maximum 16.2 metres
King Pin Setback	Maximum 2.0 metres
Wheelbase 1	Minimum 6.25 metres / Maximum 12.5 metres
Tridem Axle Spread	Minimum 2.4 metres / Maximum 3.1 metres
Track Width	Minimum 2.5 metres / Maximum 2.6 metres
Tandem Axle Semi – Trailer (Rear)	
Length	Maximum 16.2 metres
King Pin Setback	Maximum 2.0 metres
Wheelbase 2	Minimum 6.25 m / Maximum 12.5
Tandem Axle Spread	Minimum 1.2 m / Maximum 1.85 m
Track Width	Minimum 2.5 m / Maximum 2.6 m
Effective Rear Overhang	Maximum 35% of trailer wheelbase
Interaxle Spacings	
Single Steer to Tandem Axle	Minimum 3.0 metres
Tandem Axle to Tridem Axle	Minimum 5.5 metres
Tridem Axle to Tridem Axle	Minimum 5.5 metres

A vehicle equipped with a tridem drive axle group is regulated by [Commercial Vehicle Dimension and Weight Regulation AR315/2002 Section 1\(xx\)](#).

“**tridem axle group**” means an axle group, on a trailer, consisting of any 3 consecutive axles of a vehicle where the axles are evenly spaced over a distance of not less than 2.4 metres and not greater than 3.7 metres, but does not include a lift axle in the down position or a single steer axle;

A tridem axle is only allowed on a trailer so the tridem axle group on a truck or truck tractor would be considered a quantum axle group. Commercial Vehicle Dimension and Weight Regulation AR315/2002 Section 1(jj)

“**quantum axle group**” means an axle group other than a single, tandem or tridem axle or axle group;

Maximum weight without a permit for a quantum axle is

- (i) 9100 kilograms for a quantum axle group consisting of 2 axles;
- (ii) 17 000 kilograms for a quantum axle group consisting of 3 or more axles with 12 or more tires;
- (iii) 15 000 kilograms for a quantum axle group consisting of 3 or more axles with fewer than 12 tires;

Commercial Vehicle Dimension and Weight Regulation AR315/2002 Section 9(1)(g)

A tridem drive permit exempts the vehicle from sections of Commercial Vehicle Dimension and Weight Regulation AR315/2002 and provides allowances for dimensions and weight and regulates the use of a tridem drive axle.

Click on the link to view a copy of the [tridem drive permit conditions](#)

“**effective rear overhang**” means the longitudinal distance from the turn centre of the rear axle group of a commercial vehicle to the rearmost point of

- (i) the vehicle, or
- (ii) the load on the vehicle,

whichever is the greater distance;

as defined in [Commercial Vehicle Dimension and Weight Regulation 315/2002](#) Section 1(p)

“**kingpin setback**” means the longitudinal distance from the centre of the kingpin to the front of the semi-trailer or the load, whichever is further forward, excluding any auxiliary equipment attached to the front of the semitrailer that is not designed for the transportation of goods;

as defined in [Commercial Vehicle Dimension and Weight Regulation 315/2002](#), Section 1(z).

“**trailer wheelbase**” means the longitudinal distance from the centre of the kingpin on a semi-trailer, the centre of the turntable on a full trailer or the centre of the hitch device on a pony trailer, to the trailer turn centre;

as defined in [Commercial Vehicle Dimension and Weight Regulation 315/2002](#), Section 1(ww).

“**truck tractor wheelbase**” means the longitudinal distance from the centre of the steering axle or twin steer axle group located on a truck tractor to the turn centre of the drive axle group located on the truck tractor;

as defined in [Commercial Vehicle Dimension and Weight Regulation 315/2002](#), Section 1(aaa).

Double Pole – B-Train

The double pole configuration without a hinge is a B-train - a combination of a tractor and two pole frame trailers. The lead trailer is a tridem towed by a pole-frame connected by means of a fifth wheel to the tractor unit. The main purpose of the pole-frame is to steer the tridem. The tridem consists of three equally spaced axles, with one suspension system: The second trailer also consists of a pole-frame connected to the preceding vehicle by means of a fifth wheel. While it may be an efficient and effective configuration in some applications, it may not be suitable unit for all applications. (Figure 2 and 2a)

Part 2 - Weight Limits

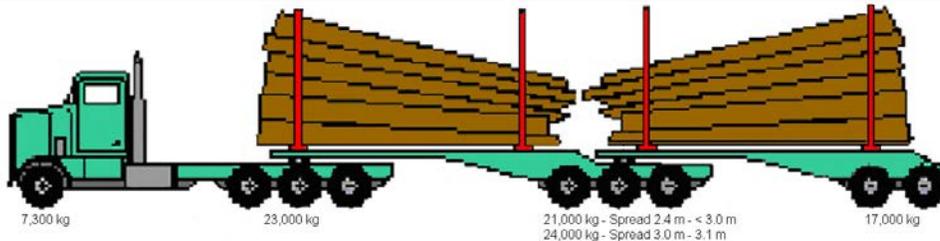


Figure 1a – Tridem Drive B-Train

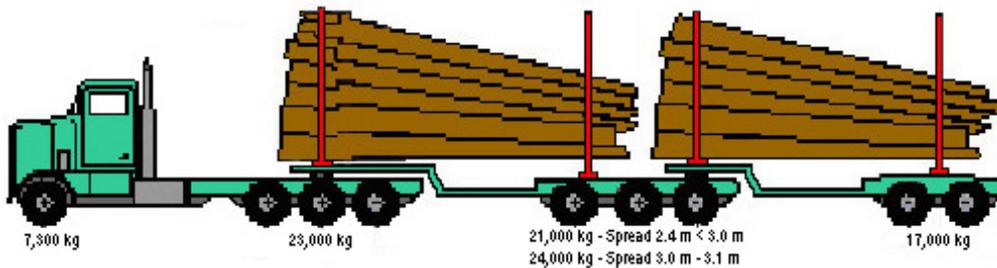


Figure 2a – Tridem Drive Double Pole B-Train

WEIGHT	LIMIT
Steering Axle	Maximum 7,300 kg Steering Axle must have a minimum weight of 27% of the drive axle weight at all times
Tridem Drive Axle – Dual tires	Maximum 23,000 kg Carrier must have a valid tridem drive permit otherwise weight is limited to 17,000 kg
Tridem Trailer Axle – Dual tires	
Dual tires with axle spread from 2.4 m to less than 3.0 m	Maximum 21,000 kg
Dual tires with axle spread from 3.0 m to 3.1 metres	Maximum 24,000 kg
Tandem Trailer Axle – Dual tires	
Tandem axle – Dual tires	Maximum 17,000 kg
Gross Vehicle Weight Limits	63,500 kg subject to minimum interaxle spacing.

A 9 axle b-train logging truck is a regulated vehicle. Gross Vehicle Weight (GVW) cannot exceed 63,500 kg.

An annual equipment exemption permit may be available to qualifying carriers which allows a 9 axle b-train to maximize regulated axle weights and exceed 63,500 kg GVW.

Log trucks must operate with a monthly licensing (MOLICLOG) permit for the annual equipment exemption permit weight to be valid. The permitted weight on the monthly licensing permit cannot be less than 71,300 kg.

Prior to issuance these permits, a carrier must be undergo a safety review and then be approved by Transport Engineering, Alberta Transportation. Contact the Forest Products Transportation Specialist at 403 340-4759 or the Central Permit Office at 1 800 662-7138 for further information.

The application form is available at

<http://www.transportation.alberta.ca/Content/docType276/Production/9and10carrierapp.pdf>

A copy of the attached conditions for this annual exemption permit is available for viewing at

<http://www.transportation.alberta.ca/Content/docType276/Production/9b.pdf>

To qualify for weights exceeding 65,000 kg, all trailers used in a 9 Axle B-Train configuration manufactured after October 1, 2012 will require a minimum track width of 2.9 metres.

Note: All axle weights are subject to minimum tire size. [See Steering Axle Weight Chart](#)

Maximum steering axle weight as per [Commercial Dimension and Weight Regulation AR 315/2002](#)

9(1) Subject to section 62 of the Act and section 12(1) of this Regulation, no person shall operate a commercial vehicle on a highway when

- (a) the gross weight on a tire exceeds the smallest of the following:
 - (i) 3650 kilograms;
 - (ii) the capacity determined by multiplying the cross section dimension of the tire in millimetres, as determined by the manufacturer's width shown on the tire, by 10 kilograms;
- (b) the gross weight on
 - (i) a steering axle exceeds
 - (A) in the case of a truck tractor, 5500 kilograms;
 - (B) [in the case of a truck, bus, picker truck, bed, truck or winch truck, 7300 kilograms.](#)

STEERING AXLE Tire Weight Chart for Trucks

ALLOWABLE STEERING AXLE WEIGHTS		ALLOWABLE STEERING AXLE WEIGHTS		PICKER STEERING WEIGHTS WITH ANNUAL PERMIT		
Tire Size	Single Steer	Tire Size	Single Steer	Tire Size	Tire Size	Single Steer
(inches)	Maximum Weight (kg)	(mm)	Maximum Weight (kg)	(inches)	(mm)	Maximum Weight (kg)
210	5, 100	285	5, 700			
211	5, 600	305	6, 100			
212	6, 100	315	6, 300			
213	6, 600	335	6, 700			
214	7, 100	365	7, 300			
215	7, 300	385	7, 300	215	385	7,700
216	7, 300	425	7, 300	216	425	8,500
218	7, 300	445	7, 300	218	445	9,100

- * See [log picker specifications](#) for maximum GVW with configurations equipped with picker trucks.
- * See [picker specifications form](#) to apply for a permit allowing steer axle weight to exceed 7,300 kg.
- * For picker trucks which have a multi-trip permit for the steering axle weight to exceed 7,300 kg, the permitted steering axle weight indicated on the permit shall apply. See copy of [Attached Conditions](#).
- * The carrier must have a valid TAC permit and County/MD approval to travel on local roads. Otherwise, the regulated weight on local roads is limited to 17,000 kg for tridem axles and 53,500 kg GVW.