

Hitch Terminology:

GTW = Gross Trailer Weight - the weight of the trailer fully loaded

TW = Tongue Weight - the weight put on the hitch ball by the trailer coupler

WC = Weight Carrying - tow rating capacity of a hitch without a weight distribution system

WD = Weight Distributing - tow rating capacity of a hitch when using a weight distribution system

To select the right hitch for your vehicle:

1. Check the towing capacity of you tow vehicle.
2. Determine the gross trailer weight (GTW) of your tow item.
3. Select the class of hitch rated for you vehicle.

Hitch Ratings Chart

Vehicle Type>>	Compact Cars	Mid-Size Cars	Full-Size Cars Mini-Trucks & Vans	Full-Size Trucks, Vans & SUV's
Hitch Class Rating				
Class I WC GTW - Up to 2,000 lbs. WC TW - Up to 200 lbs	Light Duty	Light Duty	Light Duty	Light Duty
Class II WC GTW - Up to 3,500 lbs. WC TW - Up to 350 lbs		Medium Duty	Medium Duty	Medium Duty
Class III WC GTW - Up to 5,000 lbs. WC TW - Up to 500 lbs			Heavy Duty	Heavy Duty
Class IV WC GTW - Up to 7,500 lbs. WC TW - Up to 750 lbs WD GTW - Up to 12,000 lbs. WD TW - Up to 1,200 lbs			Heavy Duty	Heavy Duty
Class V WC GTW - Up to 12,000 lbs. WC TW - Up to 1,200 lbs WD GTW - Up to 14,000 lbs. WD TW - Up to 1,400 lbs				Extra Heavy Duty

NOTE: Never tow a trailer with a gross trailer weight greater than the vehicle manufacture's rating. It could cause damage to the vehicle's engine transmission and frame and could void the manufacture's warranties. A higher class of hitch doesn't increase the vehicle's tow capacity.

In the U.S. vehicle hitches are rated for a maximum tongue weight and maximum gross trailer weight under the SAE J684 Standard. Maximum tongue weight is the maximum weight the hitch can safely carry when the load weight is placed directly on the center of the hitch ball. A hitch rack load is different from a trailer tongue load because the load is cantilevered outward from the hitch ball center and places more dynamic load and stress on the hitch.

Some hitch manufactures rate some 200 pound tongue load hitches like the one pictured below as a two bike carrier capacity hitch. Others put a divot in the receiver tube so bike carriers and accessories made for larger hitches will not fit. I would not recommend using the Alpaca Trike Racks with one of these hitches. The Alpaca Compact Carrier will work fine with two bikes.

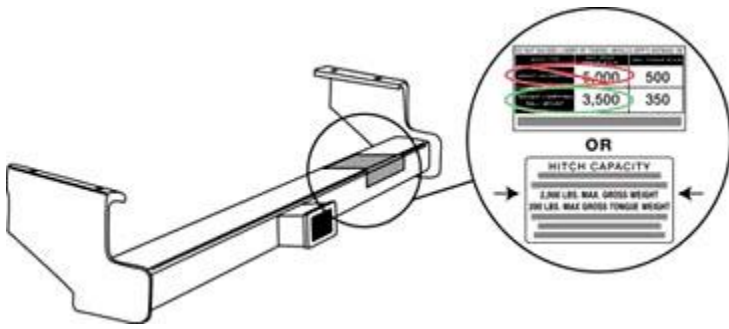


The 200 pound tongue load hitch like the one pictured below are made like the stronger class II hitches that bolt to the frame of the vehicle. I have not seen any manufactures put a two bike limit on these hitches, but some hitch manufactures require the use of a rack-to-vehicle stabilizer strap with a 200 pound tongue load capacity hitch on some vehicles. Their reason for the strap is to prevent bouncing and jarring that bike racks usually experience when hitting bumps from twisting your hitch or damaging the frame of your vehicle. Many of these frame mounted 200 pound tongue weight hitches are capable of hauling two small light trikes with the uses of a rack to vehicle stabilizer strap.



Ask the specialist installing the hitch if your vehicle and hitch are adequate for the load you intend to carry. We do not manufacture install or rate hitches

Check your vehicle owner's manual and all documentation provided by the hitch manufacturer/installer for information about the hitch and towing for your particular vehicle When checking the weight ratings of your hitch, check carefully and do not confuse the weight ratings stamped on other towing accessories such as hitch balls or ball mounts with the actual weight rating of your hitch.



Maximum weight ratings of hitches are normally stamped or decaled on the hitch itself.

FAQ's

Since every vehicle and load are different, below are the answers to some frequently asked questions, hopefully the information provided here helps you determine if an Alpaca Rack is the best choice to meet your needs.

Question:

Why are some 200 pound tongue weight rated class I hitches adequate to carry two trikes while others are not?

Answer:

The hitch is capable of a 200 pound tongue load. This is a hitch rating. The attachment points to the vehicle or the vehicle may not be capable of handling the load. What you can transport is determined by the weakest component. On many vehicles if the hitch is not factory installed you must also subtract the weight of the hitch from the tongue load rating.

If you have not yet purchased a hitch, a 1 ¼-inch or 2-inch 300 pound tongue load rated Class II or stronger hitch is recommended. This rating is sturdy and offers many hitch accessory options (Class II is not available for all vehicles). If possible a 2-inch hitch is preferred as a 2-inch rack cost less, is stronger and more stable. The 2-inch rack doesn't require as many components to make up for the inadequacy of the hitch and smaller support tube on the 1 ¼-inch carrier. Overloading your hitch is dangerous and can lead to a serious accident as well as damage to your vehicle and hitch. Users of Alpaca Racks shall be solely responsible for determining the capabilities of their particular trailer hitch before using the racks. This includes determining and deciding the maximum weight carrying capacity for non-trailer loads and any requirement for stabilizer straps to help support the load. Always place safety first, and if you are unsure about the strength of your trailer hitch, consult with the hitch manufacturer or a trained professional trailer hitch installer.

Rack Ratings and Questions.

Question:

Can I carry a tadpole trike with power assist that weighs 60 pounds and two diamond frame bikes on a 1500 2TADPOLE 2 Alpaca Carrier?

Answer:

The rack should have no problem with this load as much of the weight will be close to the hitch, these 2-inch racks are very strong. It is not necessary, but if you get more movement than you like, add a rack-to-vehicle stabilizer strap to reduce the movement.

Question:

I have a 1 ¼ inch 300 pound tongue load rated hitch. Can I carry a tadpole trike and two diamond frame bikes with a 1500 2TADPOLE 1.25 Alpaca Carrier?

Answer:

There is big difference in the weight & size of trikes and bikes. The height adjustment necessary also enters into this determination. I carry this load a lot on a Pontiac Grand Prix with a 300 pound tongue load rated 1 ¼-inch hitch, that doesn't have much ground clearance. I use the stabilizer sideways and if there is not much weight in the trunk and no extreme driveways, it works very well. My trike weighs close to 40 pounds, one bike is a road bike, the other a mountain bike. I use the middle setting on the carrier which is necessary with most trikes. In this position the bikes carry higher than I would like. This is about a 90 pound total load. This is about the limit for this rack especially with rough roads or at freeway speeds with a strong wind, the trunk strap is necessary.

Question:

Which trike rack will carry diamond frame bikes?

Answer:

All of our racks will carry diamond frame bikes. With the Trike & Bike Racks locate the pins and cinches to carry a tadpole trike. If you are not carrying a trike the Alpaca Compact Rack is the best choice for bikes.

Question:

Can I carry a recumbent bike with a trike?

Answer:

There is such a big difference among recumbent bikes making it difficult to answer that question. Some could possibly be carried, but it would be a challenge to explain how to do it with so many unique variations. If you can figure out a way to adequately secure you're recumbent to the carrier, do it. Our Compact Rack is a much better choice for recumbent bikes.

Question:

Can I carry a wheelchair with an Alpaca Trike & Bike Rack?

Answer:

The Trike Racks will carry a wheelchair if it folds together, use the pin & cinch locations for tadpole trikes. You can also carry a trike with the wheelchair. The Compact Carrier will not work with a wheelchair. The pin location is too wide.

Question:

Can I carry two delta trikes that weigh 45 pounds each with a 1500 2DELTAS 1.25 Alpaca Trike Carrier with a 1 ¼- inch 300 pound tongue load rated hitch?

Answer:

Even with the extra weight of the Alpaca Delta Trike Carrier and two delta trikes, there is less stress on the vehicle and hitch than with two lighter tadpole trikes. The majority of the weight is closer to the hitch, so there is less leverage and less area catching wind. This load will carry very well and in many instances the trunk strap may not be necessary.

Question:

How do I determine if an Alpaca Trike Rack will work for me?

Answer:

First be sure your hitch and vehicle are adequate for the load you intend to carry. Then consider the driving and road conditions where you intend to use the rack. These racks are built very well and can handle some pretty tough conditions, including rough roads and strong winds. The trunk strap can be used to help stabilize the load and considerably reduce the leverage on the hitch in these conditions. As the weight and volume get farther from the hitch and the vehicle gets smaller, the actual load the carrier, hitch and vehicle can handle becomes smaller and the amount of movement increases. About 90 pounds on a 1 ¼-inch trike rack and somewhere around 120 pounds on a 2-inch rack are reasonable loads.

Question:

How many bikes can I carry with a Alpaca Compact Carrier?

Answer:

If your hitch is strong enough you can carry three bikes easily. In some instances four bikes can be carried if there are some smaller narrower bikes in the mix, but four is difficult because there are so many pedals and handlebars to deal with. This rack will easily carry two recumbent. It also can carry two bikes with a recumbent. No special attachments are needed for unique frame or ladies bikes.