

Match the capacity of the hitch and vehicle to the load.

The following are considerations that will help you determine if your vehicle and hitch are adequate for an Alpaca Trike & Bike Carrier. After reading this, look at the examples provided on this website. The examples are more specific as to what works well along with some examples of problems, including the reason for the problem. Anytime you use a product you must become the expert on its use and capabilities and understand how its use affects any other product in the combination you put together. Products are available to solve most issues, but nothing will work if you start with a vehicle that is not adequate. Because of all the factors your situation becomes unique to you.

Use this as a guide to help you decide if your vehicle is adequate for your intended use. There is no distinct cutoff line. Every vehicle can be overloaded. You need to make your own decision depending on your intended use and you must include all factors and components in your decision, including the number of people in the vehicle, the weight associated with any items in the vehicle and driving conditions. As vehicles get smaller with better hitches it may be frustrating when you look in your vehicle operation manual and find you can carry two trikes, but only with one person in the vehicle.

Start with the hitch and carrier. If you have a 1 ¼-inch hitch, make sure it is rated for at least 200 pounds tongue weight (TW) and bolted to the frame or frame rail of the vehicle. With 1 ¼- inch hitches, recommendations will vary, but generally when you use a bike carrier on these hitches it is suggested that the weight of the carrier and bikes should not exceed 50% of the tongue load rating. We include a trunk strap with our smaller carriers to remove some of the leverage from the carrier and hitch, which makes it possible to carry two lightweight trikes. This will reduce movement and take a lot of stress off the vehicle, hitch and carrier. Under most conditions you will prefer to use the strap. If possible we suggest the bigger 2-inch hitch. In many instances the carrier and hitch will cost less, can carry a bigger load and will be more stable.

Next go to your vehicle operation manual and read the Loading Your Vehicle and Towing a Trailer pages. Information is also available on the driver door of your vehicle. Look for the Gross Vehicle Weight Rating (GVWR). This includes the weight of the vehicle, all occupants, fuel and cargo. Never exceed the GVWR for your vehicle or the Gross Axle Weight Rating (GAWR) for either the front or rear axle.

Look at the Tire-Loading Information Label, typically found on the rear edge of the driver's door. This label tells you the proper size, speed rating and recommended inflation pressures for the tires on your vehicle. It also gives you important information about the number of people that can be in your vehicle and the total weight you can carry. This weight is called the vehicle capacity weight and includes the weight of all occupants, cargo and non-factory-installed options.

Small Vehicles with a Carrier

The smallest vehicles that can be used with an Alpaca Carrier have 200 pound tongue weight rated 1 ¼-inch hitches bolted to the frame or frame rail of the vehicle. The load must be limited to about 90 pounds and a vehicle to carrier strap is necessary to reduce the leverage on the carrier and hitch. Vehicles with low ground clearance, (less than 8-inches from hitch to ground with an empty vehicle) have a higher risk of vehicle overload and ground clearance issues; however, depending on the vehicle suspension and where you intend to drive many of these vehicles will work well with a carrier. The carrier or vehicle may bottom out on steep driveways and rough roads.

Many of the crossover vehicles with the 200 pound tongue load rated hitches have a higher ground clearance than cars, making them a perfect match for our carriers and two light trikes.

Midsized Vehicles with a Carrier

Most vehicles with a 300 pound or higher tongue load rated 1 ¼-inch hitch work very well with our carriers. It is not difficult to overload these vehicles and some have low ground clearance so it is necessary to match the vehicle to your particular needs and driving conditions. Steep driveways can cause clearance issues. With light loads you can get by without the trunk strap, but it adds stability and is recommended.

Vehicles with 300 pound or higher tongue weight rated 2-inch hitches are ideal. With heavy loads and a high carrier adjustment the trunk strap can be used for added stability. Limit the load on the carrier to about 120 pounds.

Towing a Light Camper or Trailer While Using a Carrier

Large SUVs or pickups with 450 pound or higher tongue weight rated 2-inch or 2.5-inch hitches can be set up to tow a trailer or light camper while also using a carrier. Do not exceed the capacity of any component and watch your clearances.

Carrier Behind 5th Wheel Campers, Campers and Trailers

5th wheel campers, campers and trailers require at least a 300 pound tongue weight rated factory installed 2-inch hitch. The hitch and load need to be included in the design to balance the load. If not setup and loaded properly, many problems can arise and some dangerous conditions can be created.

Not enough weight on the tow vehicle hitch can cause the trailer to sway and bounce. Too much weight on the tow vehicle hitch can cause steering issues. With many campers, wind load can create a sway and bounce issue. Products are available to help with these problems. The camper experts need to set this up. The difference between working well and having a major issue can change with the distribution of weight within the unit. If you experience any of these conditions, get the rig off the road until the problem can be solved. A rear mounted camera is necessary to monitor the load. Less than a 300 pound tongue load rated hitch on a camper is not adequate.

Motor Home with a Carrier

Motor homes must have a 300 pound or higher tongue weight rated hitch. The biggest issue with motor homes is a rougher ride created because of the distance from the carrier to the rear tires. A receiver extension is usually necessary. Be sure to stabilize all connections. Use a 2-inch carrier, limit the load on the carrier to about 90 pounds and make sure the load is secure. Use extra straps if necessary. A rear mounted camera is necessary to monitor the load.

Motor Home with Carrier Towing a Car

Motor homes with 600 pound tongue weight / 6000 pound tow weight rated hitches or hitches with higher capacity can be used with a carrier while towing a light car. You must remain within the capacities of all components including the vehicle, and watch your clearances. When towing a car the hitch tow weight rating may become more important than the hitch tongue weight rating. This is simple to setup. When your hitch expert adds the necessary components to tow the car, start with a dual hitch extension. A rear mounted camera is necessary to monitor the load.

Questions?

The examples on our website should answer many of your questions. If you want to stop by the shop I am available by appointment. **For questions or to setup an appointment, e-mail alpaca2@msn.com, or call 320-398-2497. We do not install hitches, but can help with extensions or adapters, are experts at loading the carrier and can make modifications to the carrier to meet your needs.**

Motor Home and Camper Warranty

Because it is such a rough ride behind many motor homes and campers, we are not aware of any large bike carrier manufactures or bike shops that will warranty anything behind these vehicles, including the bikes on the carrier. In many situations it is such a rough ride the bikes get beat up, come loose or the carrier fails. We will warranty our 2-inch carriers behind RV's and campers for 1 year from the date of purchase to the original owner. They are well built and can handle the abuse. This warranty is limited to our carriers only. The carrier load must be limited to 90 pounds for the warranty to apply. Set the height adjustment as low as possible for your situation. We will replace any components of the warranted carriers that malfunction. The warranty does not apply to the load, so strap it tight (twist the last bike from side to side retighten the strap that loosens each time), it is a rougher ride behind these vehicles. A camera is necessary to monitor your load as you cannot see it in the rear view mirror.