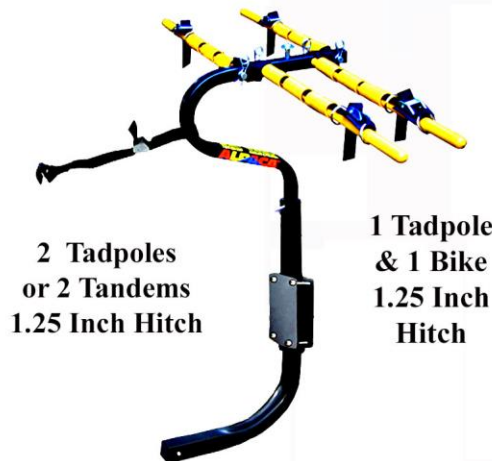




Alpaca Carriers, Inc. manufactures multi-purpose carriers or racks in Kimball, Minnesota. The carriers feature a patented system of pins that can be easily relocated on a frame along with our patented Alpaca Cinch™, a fastening system that self adjusts to articles of any shape or size, making our carriers very versatile, and easy to use.



OPTIONAL
Rise Shank
Adapter



2 Tadpoles
or 2 Tandems
1.25 Inch Hitch

1 Tadpole
& 1 Bike
1.25 Inch
Hitch



1 Bike or
1 Tandem
1.25 Inch
Hitch

1 Tadpole
1.25 Inch
Hitch

1500 2TADPOLE 1.25RSA
1500 1TADPOLE 1.25RSA

Alpaca Trike & Bike Carriers™

**We have a carrier line designed to
carry a combination of trikes & bikes.**

Alpaca Carriers, Inc.
14087 State Hwy 15
Kimball, MN 55353

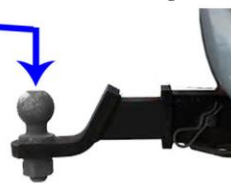
Protected by US Patent
#6,772,929 B1

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Ed Stein

Why the hitch tongue load rating is reduced by 50% with all Alpaca Racks.

Tongue weight for a hitch is calculated at the location of the ball mount that comes with the hitch. It is the weight pushing down on the hitch.



Tongue load
1500 2 Tadpole 2
Fits 2 inch hitches.



Tongue load
1500 2 Tadpole Adaptable
1.25-2 inch hitch adapter
choice will determine
distance from vehicle.



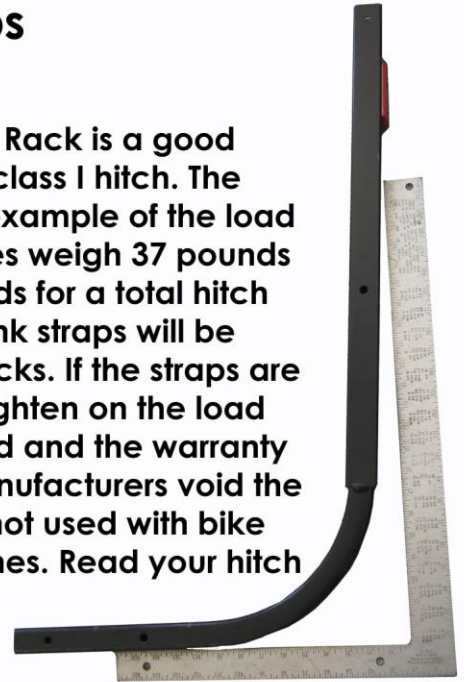
Tongue load
1500 2 Tadpole Adaptable
Hitch riser choice will
determine distance from
vehicle and hitch size
rack will work with.

A trike rack is an extension of the hitch. The distance the rack extends from the hitch is determined by the vehicle and the item carried. If this distance is more than the location of the ball on the ball mount that comes with the hitch, the capacity of the hitch is reduced by 50% to compensate for the added leverage exerted on the hitch. The same load in the same position behind the vehicle, with racks of equal weight exert the same tongue load on the hitch with or without an adapter. In the examples above the racks with the adapters weigh a few pounds more, so technically the weight of the trikes would need to be reduced to compensate for the added rack weight. When hitch adapters are used, the reduction should technically be more for an adapter that extends 10 inches than one that extends 6 inches. These capacities are a guide. Plenty of choices are available for trikes that are small and light enough or have front tires that can be removed to make them light enough for vehicles with class 1 hitches. Plenty of vehicles are available with class II/III hitches that can handle larger longer trikes. Match the load to the vehicle. With class II/III hitches use the restrictions on the rack. The Fat Tire Tadpole Trikes and 'Vehicle to Carrier' Straps documents provide specific examples.

'Vehicle to Carrier' Straps



The 1500 2 Tadpole 1.25RSA Rack is a good choice for a vehicle with a class I hitch. The trikes pictured are a good example of the load this rack can carry. The trikes weigh 37 pounds each and the rack 26 pounds for a total hitch load of 100 pounds. Two trunk straps will be included with all 1.25RSA racks. If the straps are not used, the bend will straighten on the load support like the one pictured and the warranty will be void. Some hitch manufacturers void the hitch warranty if straps are not used with bike racks, even on class III hitches. Read your hitch manual.



There was a concern the straps pulling at this angle could bend the trunk lid. If no location on the vehicle is adequate for the straps do not use the rack.



With Alpaca Trike & Bike Racks there is wind load determined by vehicle speed, wind speed, wind direction and the surface area the wind hits. Wind load adds to tongue weight unless a 'vehicle to carrier' strap is used.



A long shackle padlock or eyebolt can be used in one of the height adjustment holes to create an eyelet to attach the straps lower on the rack. It is best to use one strap pulling sideways and the other forward as pictured.

The 1500 2 Tadpole 1.25RSA Rack carries the load close to the location the tongue weight is calculated, a 1.25 inch hitch could technically carry more weight when this rack is used. The dilemma is 1.25 inch tube that supports the load cannot handle the extra weight. This rack extends the load at least an additional 6 inches more than the hitch ball mount on class I 200 pound tongue load hitches. With class 1 hitches, keep the load including the weight of the rack close to 100 pounds and use 'carrier to vehicle' straps.

Assembling the 1500 2Tadpole 1.25RSA Carrier

Insert the load support tube into your receiver hitch or Rise Shank Adapter, align holes insert hitch pin through the hole, and slide hitch pin clip into hole in hitch pin. If you are using a Rise Shank Adapter insert it into your hitch, align holes insert another hitch pin through the hole, and slide hitch pin clip into hole in hitch pin.

We check every component of every carrier before we ship to make sure they work as intended. We also slide each support tube into a hitch to make sure it fits. The tubing used for 1 1/4-inch hitches has close tolerances, but can vary by .020. The majority of the time the carrier will slide into your hitch and you are set to go. There are rare occasions when the support tube will not fit the hitch. The best thing to do in this situation is to first file the inside of the hitch removing any burrs and rust. If this does not solve the problem file or sand the paint from the support tube until it fits.

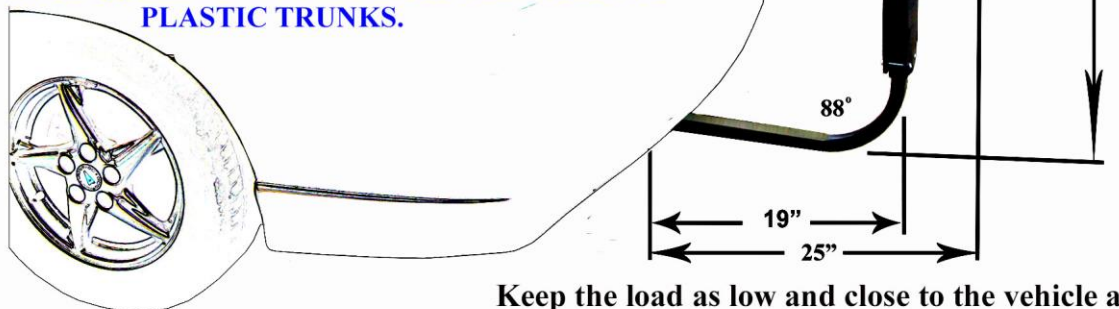
Attach spring buckle strap to side slot of the rear tire holder. Put screws through holes in rear tire holder as shown, put nuts on screws, slide tire holder over support tube to desired position as shown in photo. Do not over tighten screws.

Slide the tadpole frame top into the coupling on the tadpole support tube to the desired setting as shown, align holes, use the 3/8-16 X 2.25 inch grade 5 bolt, a washer on each side & nylon lock nut provided to tighten the connection. A long shackle padlock can be used to attach straps or provide a loop for a cable lock.

Warning: When loaded, the carrier will exceed the height of most vehicles. Do not go where there is not enough clearance.

Warning: Remove luggage bags from trikes before transporting.

The trunk straps provided are used to reduce the leverage and stress on the carrier, hitch and vehicle. Be sure to attach the flat hook to a point on the vehicle strong enough for the forces applied. **DO NOT ATTACH THE STRAP TO PLASTIC TRUNKS.**



Keep the load as low and close to the vehicle as possible.

Rise Shank Adapter for 1.25 RSA Trike & Bike Carriers

The Rise Shank Adapter will work with the Alpaca 1.25RSA Trike & Bike Rack Models. The 3/8 inch bent pin and clip included with the rack is used at the location of the rack. The 'vehicle to carrier' straps included with the rack are necessary. The straps add strength to the rack, reduce leverage at the hitch, while reducing sway and rattle.

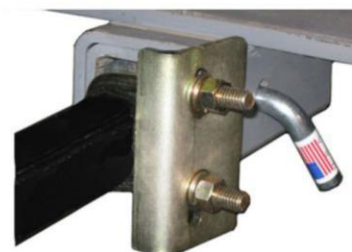


(OPTIONAL) Anti-Sway Device Assembly & Use

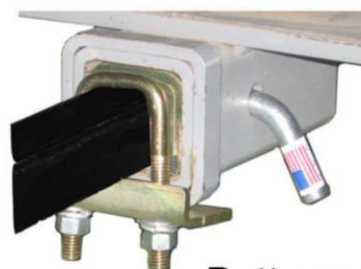
Slide U-Bolt through the slotted holes in the compression plate as shown.



Put flat washer, lock washer and nut on each side of U-bolt.



Side use



Bottom use



The anti-sway device is used to tighten the support tube against the receiver hitch reducing sway and rattle. This will work with any 1 1/4 or 2-inch receiver hitch, ball mount or rack. It can be used on the side or bottom of the hitch. Specify the hitch and support tube size and we will furnish the correct U-bolt.

The 1500 1.25RSA Carriers Reduce Ground Clearance Issues.

We shortened the Support Tube for the 1.25-inch carrier 6-inches to bring the load closer to the vehicle and added a hole so the Tadpole Frame Top can be rotated 1/4 turn. This was the original prototype of our Tadpole Carrier. The result is a new line of carriers for vehicles with ground clearance issues.



The 1500 1TADPOLE 1.25RSA Carrier pictured above is set up so a single trike is centered on the hitch. There will be more ground clearance and less stress on the vehicle and hitch. The trunk straps included with this rack are necessary. The trunk straps add strength to the rack, reduce movement and reduce leverage on the hitch.



The 1500 2TADPOLE 1.25RSA is a great way to carry trikes with a sedan or coupe. It moves the load closer to the vehicle and in many situations you still have access to the trunk by simply turning the front tires on the trike. Tadpole Trikes can be carried behind most vehicles without the Rise Shank Adapter. Do not purchase the adapter until you are sure you need it.



Rise
Shank
Adapter

When added ground clearance is needed, and the load gets too close to the vehicle, the Rise Shank Adapter can be added to the 1500 2TADPOLE 1.25RSA Carrier. If an adapter is needed the 1500 2 Long Tadpole Adaptable Rack is a better choice. The optional Anti-Sway Device 1.25 can be used to reduce movement within the hitch, but with 1.25 inch hitches, 'vehicle to carrier' straps work better. If your trike is long, with a 26 inch rear tire and your vehicle is small call 1-877-350-3361 or e-mail alpaca2@msn.com before you order. It may be better to customize a 1.25RSA Rack for your situation.

Attaching Pins to Alpaca Trike & Bike Racks

Go to www.alpacacarriers.com and watch the videos. The frames and some components on Alpaca Racks will differ to accommodate different items, hitches and vehicles, but the racks are based on the same system of pins and cinches. The combination of videos will help understand how to use the Alpaca Racks. The video Attaching Pins & Cinches to the Alpaca 1700 Road Trip Adventure Rack demonstrates how to attach a through pin and a cinch to a rack with no strap clip.

Through Pin 36



These pins are used for loads when two 5-inch or two 10-inch pin spacings are needed. One sleeve can be slid on the pin as pictured above, then the pin is slid through the desired hole in the frame top before the second sleeve is slid onto the other side of the pin. The sleeves hold the pins in place.

If you hold onto the sleeve at the location of the steel pin it will not slide on, push the sleeve from the end. To remove the sleeve pull it against the hole from the opposite side.

The same material is used on the other pins and spacers, but it is not binded to the pin. The sleeves, are easy and inexpensive to replace. They will not be as durable if cut with a sharp object. The sleeve may move slightly in warm conditions, but will be difficult to remove when temperatures are below 60 degrees.

One of these pins can be used with two of the standard pins to create a different combination of spacings if necessary, however these pins are 1.5 inches longer.



Carrier Pin 18

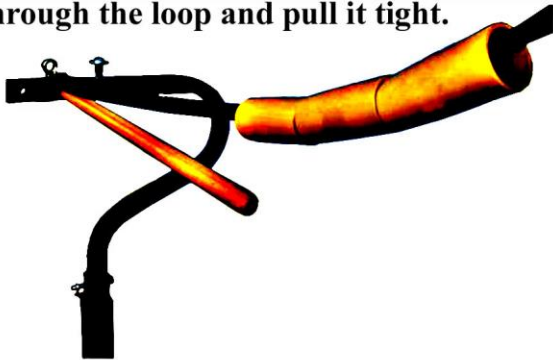


Slide pins through the desired holes from the preferred direction, insert double loop hitch pin clips into the grooves in the pins.

Attaching Alpaca Cinch™ to Trike & Bike Carriers

Go to www.alpacacarriers.com and watch the videos. The frames and some components on Alpaca Racks will differ to accommodate different items, hitches and vehicles, but the racks are based on the same system of pins and cinches. The combination of videos will help understand how to use the Alpaca Racks. The video Attaching Pins & Cinches to the Alpaca 1700 Road Trip Adventure Rack demonstrates how to attach a through pin and a cinch to a rack with no strap clip.

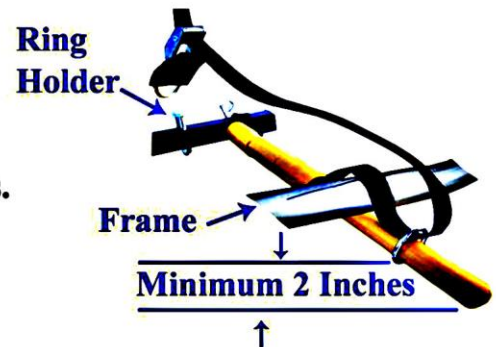
Slide the loop on the end of the strap over the pin and against the carrier frame, run the other end of the strap around the carrier frame from the bottom so the strap is on the side of the pin toward the center of the rack between the double loop hitch pin clip and the frame. Take the end without the loop, run it through the loop and pull it tight.



The desired number of spacers are slid over the end of the strap to space the trike from the carrier frame and other trike. With delta trikes start with two spacer/pin on the top pins and three spacers/pin on the bottom pins. Make the necessary adjustments after you try the trikes on the carrier.

Then slide the spacers over the end of the pin. They hold the strap close to the pin and the trike at the desired location on the pins. The spacers remain on the pin. Slide a steel ring onto the strap.

Press the clasp on the cam-buckle, slide the end of the strap through the opening from the bottom as shown and let go of the clasp. The cinch is ready to use. Repeat the process for the other cinches.



After the carrier is set up with the desired number of spacers and the buckle is attached to the strap as shown, the carrier is ready to load.

The cinch is quick and easy to use. Load the trike or bike, run the strap over the frame, slide the ring over the end of the pin to the frame, pull the strap tight, run the strap back over the frame, hook the ring on the short strap with the cambuckle over the ring holder and tighten the strap. Repeat for all cinches. This method of cinching will hold the trike or bike very secure and can be used for other items. The pin must extend at least 2-inches past the last ring and the strap must be tight enough so the last ring or spacer cannot slide off the end of the pin for the item to be secure.

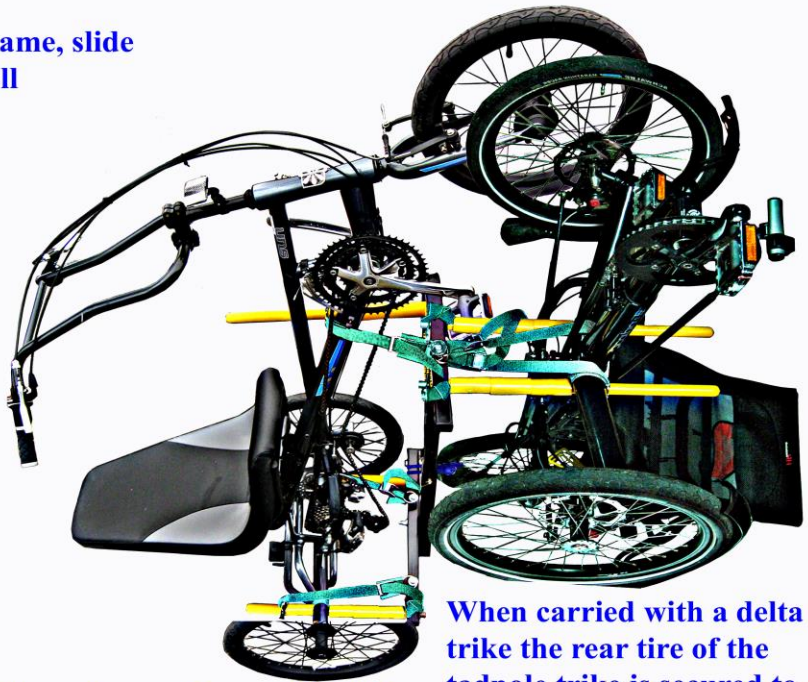
Using the Alpaca Cinch™ with Trikes & Bikes

Load the trike or bike, run the strap over the frame, slide the ring over the end of the pin to the frame, pull the strap tight, run the strap back over the frame, hook the ring on the short strap with the cambuckle over the ring holder and tighten the strap. Repeat with all cinches. This method of cinching can be used for all item.



A bike can be carried with a trike.

There may be situations when it is easier or better to use the cinching method shown bottom right picture. There is no right or wrong method. Every load is different. This carrier is built to last. Like a trailer if you can stay within the vehicle, hitch and carrier load limits and secure the item to the carrier you can carry it. If you feel an extra strap is necessary for your load use it.



In the cutaway view on the delta rear tire notice how a spacer is used to prevent the ring from touching paint if necessary.

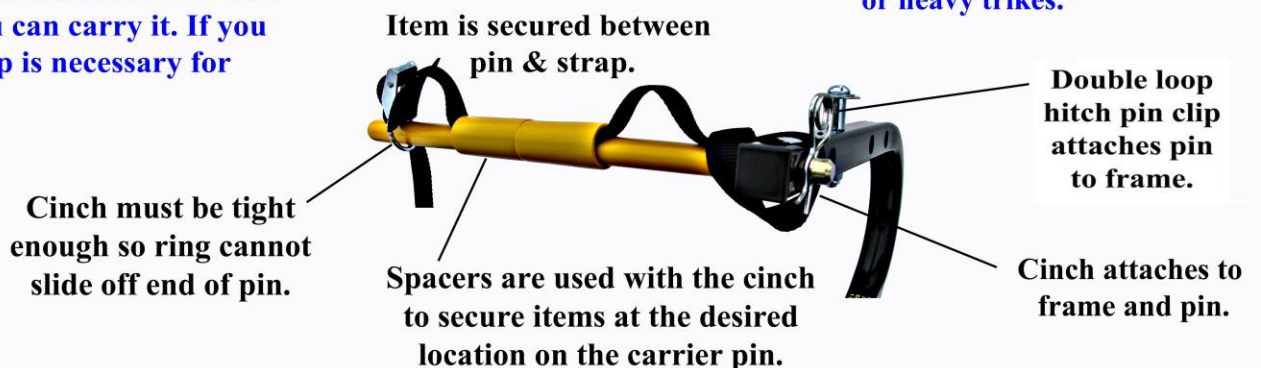
When carried with a delta trike the rear tire of the tadpole trike is secured to the delta attachment with the spring buckle strap provided.



Do not carry a single large heavy trike as pictured above. This works fine with small light trikes.



This centered approach is a better way to transport a single large trike. With the load centered there will be less stress on the vehicle, hitch and rack. Use 'vehicle to carrier' straps with large or heavy trikes.

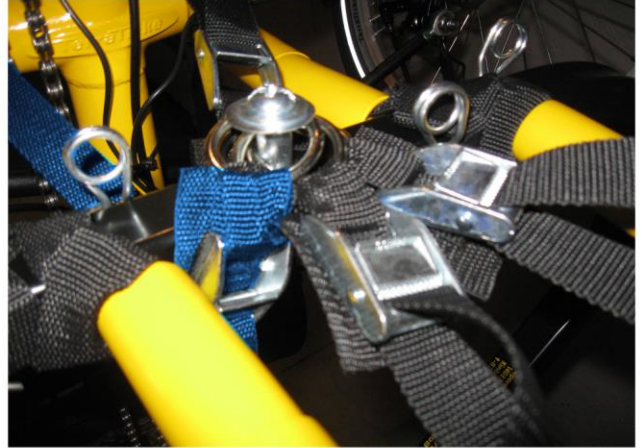


Cinch Possibilities.

Go to www.alpacacarriers.com. Watch the videos to learn how the cinch works. The pictures show variations of the cinch that will help in some situations.



The method used in most situations. Steel ring goes over end of pin, tight against object, strap takes direct path to ring holder, ring on end of strap placed over ring holder and strap is tightened.



Run the last strap (the blue one in this picture) under the frame, then hook the ring over the ring holder, when pulled tight all rings are secure to the ring holder.



Hooking the ring so the buckle faces down makes the strap easier to reach for tightening high loads.



When it is too difficult to get back to the ring holder go over the end of the pin.

Do not get hung up on the idea that everything needs to be done a certain way. The load dictates what you do. The difference between our cinch and a strap used to secure an item to a trailer, the ring has infinite adjustment on the pin, forcing the strap to perfectly conform to the item carried, making it much more secure. Choose the straightest return path to the ring holder for the strap that avoids the obstacles and tightens the bikes to the carrier. Sometimes it is better to hook the ring over the end of the pin. A simple adjustment or change can make a huge difference, especially on larger loads. People do different things to adapt the carrier to their particular situation. You are responsible for your load, do what works for you. If you intend to carry multiple items on a set of pins, go to www.alpacacarriers.com; Alpaca Compact Carrier; Using the Cinch.

Warning: This carrier has been designed to carry trikes & bikes on vehicle receiver hitches. User must inspect components for tightness, wear, deformation, cracks or elongation before each use. It is the user's responsibility to attach the carrier correctly to the vehicle, and secure the articles to the carrier. The manufacturer and seller expressly disclaim any and all liability for personal injury, property damage, or loss whether direct, indirect or incidental, resulting from the incorrect attachment, improper use, inadequate maintenance, or neglect of the carrier.

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Toll free: 1-877-350-3361
Protected by US patent
6,772,929 B1

LIMITED WARRANTY

Alpaca Carriers, Inc. warrants this product to the first consumer to be free from defects in material and workmanship under normal use for a period of twelve (12) months from the date of purchase. Alpaca Carriers, Inc.'s sole responsibility under this warranty is limited to the repair or replacement of any defective part of such product. The cost of such replacement, including labor and parts, but excluding shipping, is the responsibility of Alpaca Carriers, Inc. This warranty is void if this product has been subject to any unauthorized modification, use with any unauthorized attachment, device or feature, accident, neglect, misuse, or any event other than ordinary use. Failure to use 'vehicle to carrier' straps will void the warranty on 1.25RSA Racks. Consumer must provide proof of purchase to validate warranty.

Alpaca Carriers, Inc. does not warrant the products of any third party manufacturer, which may be supplied with this product, and the purchaser agrees to look only to such third party for any warranty claim relating to such product. ALPACA CARRIERS, INC. LIMITED WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.