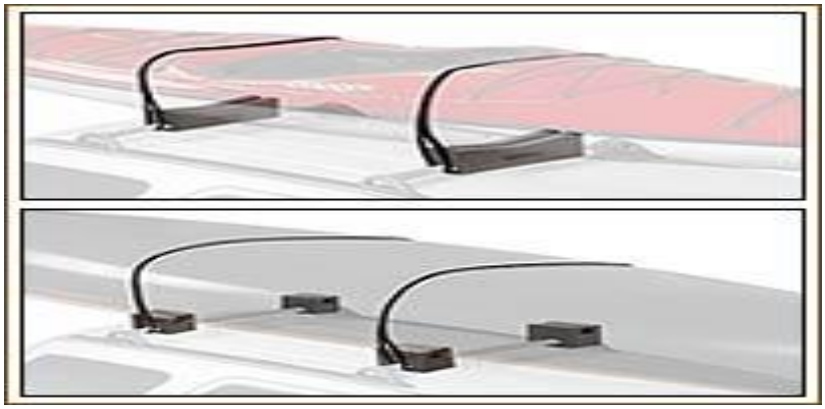
Kayak Racks- 2019 Summary

Now that you have decided to purchase a kayak, the task is to get it from the store to your house and from there to the water. The basic idea is to transport your kayak in a safe and secure manner, avoiding damage to either your car or the kayak.

First some definitions: **Rails** are factory installed accessories that may be on your vehicle. They run along the length of your roof, front to back, on either side. **Crossbars** run perpendicular to the rails and attach to either factory installed rails or accessory attachment points provided by rack system manufacturers. Cars with factory rails often have factory crossbars which can be used with kayak saddle systems. Some factory crossbars are removable and can be replaced with rack system crossbars. Add-on crossbars may be stronger than the factory crossbars or may have other advantages such as positioning. If you have factory rails and crossbars of sufficient strength and suitably placed, you can save a significant amount of money. **The Rack System** consists of everything needed to transport your kayak, possibly including the attachment points or feet, towers, cross bars, and the saddles or cradles that hold your kayak. Rack systems may have optional accessories such as locks, extensions to make loading easier, fairings to reduce wind resistance and noise, etc. Rack systems can often be used for more than transporting a kayak. Other rack accessories may allow you to transport bicycles, skis, canoes, wind surfers, luggage carriers, paddleboards, etc.

You have a choice of a much less expensive and possibly temporary solution or a more expensive permanent solution. Probably the cheapest method is the use of foam blocks, which can fit over the factory bars or directly on the roof of your car. If your car has factory crossbars that are far enough apart, this may suffice, even for a long term solution. Check your owner's manual to determine if the factory rack is rated for the load.



It is not recommended that you strap foam blocks directly on the roof of your car except occasionally or temporarily. The blocks, particularly if there is any grit or sand, will damage the paint fairly quickly. If using the factory bars, the kayak can be strapped to those. It is best to support the kayak near the internal bulkheads, as these are the strongest points. If the bars are too close together, it places a lot of strain on the kayak and rack when traveling. If strapping the kayak directly to the roof, you will need long straps that will pass through the open doors before closing, **not** through the windows.

The main manufacturers of commercial kayak rack systems are Thule http://www.thule.com , Yakima http://www.yakima.com/ , and more recently Malone http://www.maloneautoracks.com/ . These are not by any means the only manufacturers, but they have a long track record of manufacturing rack systems to fit most vehicles. If you go to any kayaking magazine or search on-line you can find many others. If you go to Thule's, Yakima's or Malone's web sites they will guide you through selecting a custom system fitting your vehicle, if a system can fit it. A typical system will consist of a component to attach directly to the vehicle, sometimes using existing factory rails, crossbars, or rain gutters, possibly a set of crossbars other than the factory ones, an optional locking system, and a pair of saddles or other means to actually carry the kayak. There may be many options depending on the vehicle and your personal preferences. **Naturally, you chose a vehicle that is designed to carry a kayak!** If all else fails, there is the option of a trailer designed to carry kayaks, or other custom rack options.

If you have found that a long sea kayak is not for you, for instance you just want a shorter boat for fishing, photography, or exploring smaller creeks, you might just be able to just throw it in the back of a pickup or larger SUV. Inflatable kayaks are another option. There are also foldable kayaks, and even a hard shelled kayak that is designed to be broken down into three sections. These tend to be expensive and a bit heavy, although they may work for you.

There are many saddle or cradle types to choose from. The primary one is the basic saddle. You need two points of support, generally as close to the internal bulkheads as possible, or about one third the distances from the bow and stern. You can go with two pairs of saddles,

which is the basic setup. With these you can often load from the side, usually with two people, or possibly from the back by yourself or with another person.

The other option is a pair of saddles in the front and a pair of rollers in the back. This setup can aid in loading your boat, depending on your vehicle. You, or a friend, lift the front of your boat onto the rollers and then you push it up from the back. Both setups depend on how tall you are, how tall your vehicle is, and how far back your rear saddles or rollers are located. In both these cases the kayak usually sits upright on the saddles or rollers. Some systems allow the back crossbar to be slid back temporarily to clear the back of the roofline.

Another cradle option is what is called a J-rack, where the kayak is mounted on its side. The advantage of this system it takes up less room on the roof. It is good for a smaller vehicle for fitting more than one kayak or additional gear, or on a larger vehicle for fitting more than two kayaks. It requires mounting the kayak from the side of the vehicle, and in many cases requires two people to load it. It can be difficult for shorter people or people with taller vehicles. More expensive models fold down when not in use.

The most expensive method, but the easiest for one person, is the load−assist saddle system. These rack systems attach to the vehicle or rack system cross bars. They unlatch and swing down from the side of the vehicle so that the cradles are about waist high and vertically oriented. The kayak is simply placed onto the cradles on its side, strapped down, and then, with a spring assist, swung back onto the roof of the vehicle with the kayak ending up upright like a standard pair of saddles.

You may need a short step ladder to load a boat depending on your height or the height your vehicle. There are also devices that hang on the rear tire or from your door latches that act as a step to help you tie down the kayak.

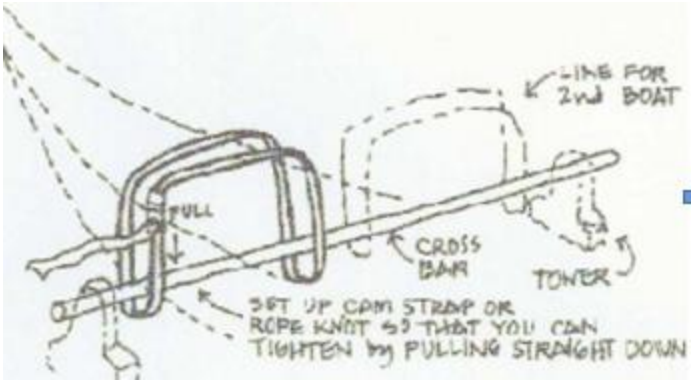
Some people carry their boats upside down in the saddles. With this method the boat must be loaded from the side.

Suggestions:

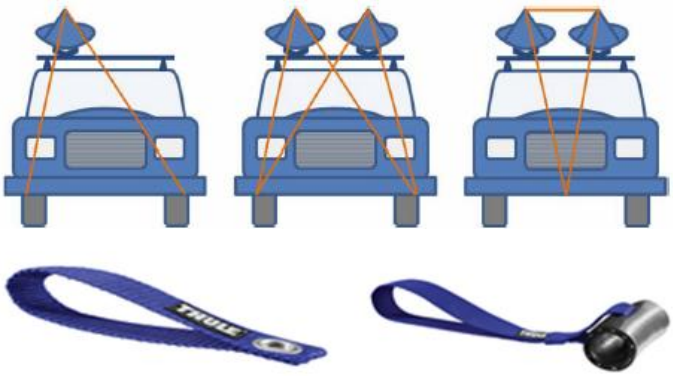
- Follow installation instructions for rack systems carefully. **A missed step can cause catastrophic failure.** Some dealers will install these for you if you buy from them.
- Always rinse sand and dirt off the hull of a composite, fiberglass, carbon fiber, or Kevlar boat before transporting it to avoid abrading the gel coat. Felt, carpet, closed cell foam, or other materials on the saddles can reduce hull wear. Most saddles and J-bars come with these pads.
- Watch yourself when lifting or moving a kayak. It's relatively heavy and awkward. Use your legs, not your back. If at all possible, have a friend help you. Be especially careful on windy days.
- Strap down the kayak snugly and check straps frequently for looseness and wear. Don't over tighten.
- Use bow and stern tie downs. Again, don't over tighten but check that they are snug. Tie downs can cause wear on plastic bumpers and painted surfaces. Sleeve lines appropriately. Clear vinyl or latex tubing works. It is a second line of defense and **required** by most rack manufacturers for warranty coverage.
- Check all rack components frequently for wear or looseness.
- **Know and watch the height and length of your loaded vehicle** when entering garages, going under other overhead obstructions, parking, or backing up!
- Never leave a kayak unattended on the roof of your vehicle if not strapped down. It doesn't take much wind to blow a kayak off a roof.
- If your kayak overhangs your vehicle by more than a foot or so, attach some sort of brightly colored flag or streamer to the stern. DOT and DMV rules are byzantine regarding this requirement, but a simple flag or streamer is generally enough to avoid a costly ticket.
- **When securing your boat allow no interruptions!** A missed step can result in disaster.

A note about straps:

Bungees and rubber tie downs like you see truckers use are not recommended. They have an unfortunate tendency to fail suddenly without warning. Nylon straps are far stronger and usually show signs of wear long before they fail. Check straps frequently for tightness and signs of wear. If worn, replace. Most nylon straps have a tensile strength of over 1000 lbs. Even in a catastrophic crash, it is more likely that the rack system will fail before the straps will break. Tighten straps snug, but do not tighten to the point that the hull of the kayak is deformed. Over tightening can cause small cracks in the gel coat of a glass or composite kayak. In a plastic kayak, especially in hot weather, it can cause permanent deformation (oil canning). If you are proficient with knots, rope can be used, but most opt for the convenience of nylon straps. If using rope, don't use a stretchable type of rope. Tie the boat down using the most secure point available, such as the factory rail or crossbar as opposed to the saddle. Avoid sharp edges.

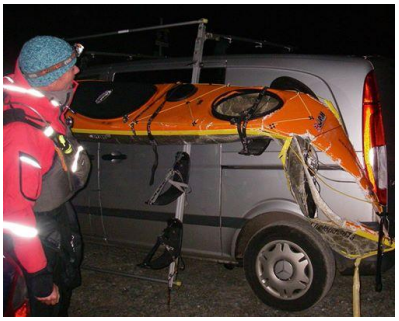


Bow and Stern Tie-Downs:



These are a second line of defense, and **are required for warranty coverage by most rack manufacturers.** They also reduce strain on the rack system. They should be used on both the front and rear. They can be attached to car towing eyes, bumpers, frames, tow hitches, etc. You can also make or buy straps that are designed to attach to existing bolts under the hood or be held in place by a closed hood or trunk where they will provide an anchor point for the tie-downs. To protect your car from being scratched by the tie-down lines, sleeve them with soft vinyl or latex tubing if they contact painted surfaces. Bow and stern tie-downs are now included with many rack systems. Avoid hot exhaust components.

Always tie off or otherwise secure the loose ends of any straps or lines. Loose ends are noisy, prematurely wear the straps or lines, and risk getting caught by a tire or other object. A snagged strap can break a composite boat or permanently deform a plastic one. It can also pull a boat or rack off the car!



In the picture on the left on the previous page we see the result of two errors. Firstly there were no front and rear tie downs. Secondly, he became distracted and neglected to strap down the front of the boat. The boat lifted up and the whole rack was torn off his vehicle. The result is shown leaning on the side of his van after he recovered it from the middle of the road. Note that the rear strap is still holding the boat to the rack. In the picture on the right, the front tie down was improperly secured and was caught by the front tire. The front of the boat was folded down to the windshield, destroying the boat and breaking the windshield. Straps and lines are usually stronger than your boat!

A personal preference if using older style Thule and Yakima systems:

The older styles, while still available are considerable less expensive than the Yakima Whisbar® and Thule Aeroblade® systems. With these, in my opinion, I have found that the Thule square cross bars are superior to the Yakima round bars. With Yakima round bars, the saddles or rollers, no matter how often you tighten them, tend to eventually loosen and rotate on the bars, especially if you load your boat from the back. On the other hand, many of the Thule saddles have a vertical angle adjustment. Again, no matter how often you tighten them, this adjustment comes loose and the saddle falls flat, resulting in little side to side support. Yakima saddles and rollers do not have this unnecessary adjustment, and most have break-off tabs so that they will fit square Thule cross bars. Therefore, I recommend a Thule rack system with the square cross bars and Yakima saddles or rollers if not going with the newer systems. Check before going with this suggestion as Thule and Yakima are constantly modifying their components. Yakima and Thule have now come out with new rack systems with new aerodynamic flattened oval crossbars that should eliminate the rotation problem. This requires a whole new system. They are not compatible with the old round or square bar systems. As kayaking becomes more popular, other manufacturers are coming out with more products as well.

Pictured, Yakima's new Whisbar® installed on a factory rail. A marked improvement over the round bars. Thule has countered with a similar Aeroblade® system. Both are designed to reduce wind noise. They are more expensive than the older rack systems. I suspect that the older systems will be eventually phased out. These are not compatible with some of the older style rack system's components.

Cost:

This can be a bit of a shock. Foam blocks on factory crossbars, with straps and front and rear tie-downs can cost less than $70. If you can use factory crossbars: Saddles or J-bars, which may or may not come with straps and tie-downs are $90-200 per pair. You need two pair of saddles, or one pair each of saddles and rollers. Rollers are $90-120 per pair. If you need to add a complete rack system: Feet or towers are $180-240 per set of four. Optional lock cores are $60-65 for a set of four. Crossbars depending on length and type are $90-250 per pair. A complete rack system probably averages $500-600, but with other accessories the rack system can be adapted to other uses like bicycles, skis, paddle boards, wind surfers, luggage carriers, etc. A Hullavator® or lift-assist system can cost $575 or more and usually requires a complete matching rack system in addition to the Hullavator® itself.