



U.S. RACK,™ Inc. - 2850 Falcon Drive, Madera, CA 93637 - 1-888-877-2257

INSTRUCTIONS for the ALASKAN LADDER RACK

WARNING: Do NOT attempt to install or use this rack without following all instructions.

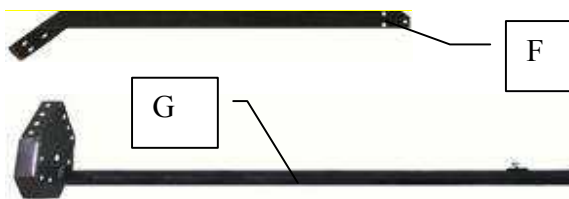
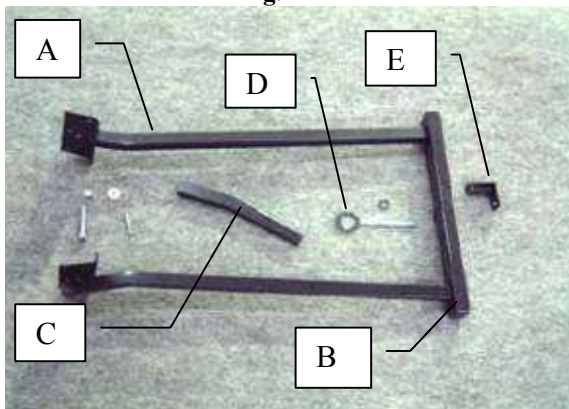
SPECIFICATIONS and SAFE LOADING REQUIREMENTS

The Alaskan Ladder Rack is intended for use only upon pick-ups with cargo beds between 54” and 66” wide as measured from the inside of the top rail of the cargo bed. It is designed to the inside lip of conventional fleet side truck bedrails and to carry ladders, kayaks, lumber, or other items not exceeding the strength of the lumber used for the crossbars or 400 lbs. whichever is LESS.

This rack is designed to carry loads, which are spread across the width of the crossbars and shared between the front and rear crossbars. It is NOT designed to carry loads where a force of over 100 lbs. is concentrated on any space less than 12 inches wide along any crossbar, where over 150 lbs is concentrated on either wooden crossbar or where a force of over 100 lbs is loaded on the steel crossbar at the front of the rack. The loading specified is based upon an overall rack length of 10 feet with at least 6 feet over the bed. Thus, the maximum length of the extension over the cab should not exceed 4 feet. Extending beyond this length or shortening the length over the bed will reduce the front bar load capacity proportionally. This product is not warranted for use off-road or on unimproved or poorly maintained or bumpy roads. All loads must be tied securely to the rack to prevent them from vibrating or sliding forward, backward, laterally or being blown off or broken by wind. Loads extending beyond the rear bumper of the vehicle must be designated with a red flag during daylight or red light during darkness in accordance with the state vehicle code. Do not install this rack on any truck where it interferes with required lighting devices. U.S. Rack does NOT warranty any automotive product and does not warranty truck bed rails against damage caused by the weight of excessive loads being applied to them when the rack is installed on a vehicle. U.S. Rack is not responsible for injury or property damage resulting from this rack being improperly installed or loaded, nor is it responsible for injury or property damage resulting from loads or parts of loads falling or being blown from vehicle.

BE SAFE: Carrying any load can be hazardous. Make sure all parts of all loads are securely tied down against unexpected winds and vibrations caused by road hazards such as potholes. Check each time you install or load the rack, as well as daily, to ensure that all connections, including bolts, nuts, and screws are tight and in good condition. Avoid roll over by ensuring that loads are not top-heavy. Loads should be placed so the center of mass of the load is no closer than 18 inches from the sides of rack. Transport high loads with GREAT CAUTION to prevent them from striking low overhead objects or tipping during turns, abrupt stops, or high winds.

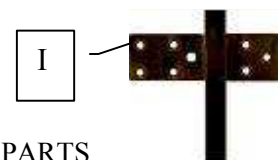
Fig. 1



The Alaskan Rack has 9 major parts:

- A. Legs (x4 right and x4 left)
- B. Bases (x4)
- C. Top Extensions (x4)
- D. Eye-Bolts (x4)
- E. L-shaped clamps (x4)
- F. Brace (right and left)
- G. Female Crossbar
- H. Male Crossbar
- I. Connector Bracket (x2 right and x2 left)

Also included: Plastic washers (x4)
 Metal washers (x20)
 5/16-18 Carriage bolts (x4)
 5/16-18 Button head cap screws (x6)
 5/16-18 Nylon locknuts (x4)
 3/8-16 Nylon locknuts (x4)
 Wood screws (x88) and Allen wrench



NOTE THAT SCREWS AND SMALL PARTS MAY BE FASTENED TO OTHER PARTS.

INVENTORY

Your safety is paramount. Before assembling the rack, inventory and inspect all parts. Visually check each part to ensure it corresponds to the inventory list and to check all welds for signs of cracking or weakness. If you do not have all the correct parts, or if any parts appear to be defective, or if this rack appears not to be the correct model for your truck, STOP; do NOT install the rack. Contact customer service at 1-888-877-2257 to replace missing or defective parts. If you have any questions or concerns about installation, call customer service.

ASSEMBLY

You will need a tape measure, pencil, and an electric drill with 3/8-inch bit.
READ THROUGH ALL INSTRUCTIONS ONCE BEFORE YOU DO ANYTHING!

It is necessary to inventory all parts first and then assemble a few of the parts before installing the rack on the truck. Refer to the photos as you assemble this rack.

1. **Attach the Legs to the Bases.** Note that there are right-side and left-side Legs. They are mirror images of each other. Pick up a right-side Leg and a left-side Leg and hold them vertically with the drilled plates facing each other and the bottom of the Legs flaring outward away from each other. You will depress the snap buttons at the bottom of each Leg and insert the Legs into the square holes until the buttons snap out inside the Base, but first you must orient the Legs in relation to the Base. Note that the plates attached to the top of each of the Legs project farther on one side than the other. Orient the Legs so that when they are inserted into the Bases, the LONG end of each plate is on the same side of the Base as the short circular tube. If you insert the Legs incorrectly, remove the plastic end-caps to access the snap buttons and try again. When completed the assembly should appear as in Fig. 1, above.

2. **Select lumber.** Select either a 2 x 4 or 2 x 6 piece of lumber for the crossbars of your rack. Ensure that each piece of lumber is a good, strong, straight length of fir that does not have large knots or other defects that could weaken its strength. Using 2 x 4's will make the top of the crossbars about 26-1/2" above the top of your bedrails. Using 2 x 6's will make them two inches taller. Measure the width of your truck bed, where you intend to place the rack. Measure from the INSIDE edge of the bedrail on one side to the INSIDE edge on the opposite side. Caution: Many pickup beds are narrower at the rear of the bed than at the front, so take separate measurements near the front of the bed and near the rear. After measuring the width of the bed, select a piece of lumber that is at least 4 inches longer than the width of your bed.



Fig. 2



Fig. 3

INSTALLATION

3. **Attach legs to the lumber.** Slip one end of a length of lumber between the opposing faces of the leg plates. Note that there is a lip on the bottom of each plate. Place the wide side of the lumber against the plates with the bottom edge of the lumber resting on the lip at the bottom of each plate. Slide the lumber until one end of the lumber extends 1-1/2" beyond the end of the plates and the small circular tube on the Base is facing toward the long side of the lumber. Using a pencil, mark the wood at the center of the square hole in the plate, then remove the wood. Using an electric drill with a 3/8" bit, drill a hole at right angles through the wood at the location marked. After drilling the hole measure from the center of the hole along the length of the lumber and mark a vertical line across the width of the lumber. The distance from the hole to this line should be equal to the distance between the bedrails of your truck MINUS 6 inches. After marking the vertical line on the lumber, drill a second 3/8" hole through the wood on this line the same distance up from the bottom of the lumber as the other hole. Re-insert the wood between the plates, align the square holes in the plates with the holes in the wood and loosely attach all together. Insert one carriage bolt into each hole and attach a metal washer and nylon locknut on the other side.

4. **Attach first side of Rack to lumber tightly.** Pick up the rack and place it atop the bedrails of the truck at the desired location. Align the round tubes in each base with the inside lip of each bedrail. Place a metal washer then a black nylon washer on each eye-bolt. Insert eye-bolts down through the round hole in each Base. Hold each L-shaped clamp so that the portion of the clamp with the hole is horizontal and the portion of the clamp with the rubber top points upward. Align the hole in the clamp with the bottom of the eye-bolt and place the rubber top under the bedrail. Thread the Eye-bolt into the hole in the clamp and tighten until the rubber bumper makes firm contact with the under-side of the bedrail. When satisfied with the mounting of the Bases ensure that each crossbar is even and centered over the bed. Tighten the nuts on each carriage bolt then insert and tighten **just 3** wood screws through each leg plate to ensure it is rigidly attached to wood. *If you have an over-the-rail bedliner you may have to cut a hole in your bedliner to allow the clamp to pass under the bedrail. If you have purchased a bedliner kit, mark your bedliner adjacent to where the eye-bolt hangs down. Use the hole-saw to drill a hole with its center 2-1/2" below the top of your bedliner. When you remove your rack, use the round plastic caps to plug the holes. **Warning:** Be careful that you cut very gently. Drilling through too hard will cause you to scratch your bedrail. Pull back your bedliner to inspect before cutting to ensure there are no obstructions under the bedrail.*

5. **Complete mounting and use rack without overhead extension.** *If you do not wish to install the Side Beams that extend over the cab, you may still use the rack.* If you do not intend to install the Side Beams, insert the Top Extensions down into the open end at the top of one of the Legs at each corner of the rack until firmly seated. Insert the 1" square plastic caps into the tops of the other legs. After mounting your rack, if you find that the lumber on one side projects out farther than on the other side, cut off the excess lumber to make them even. Before driving your truck ensure the Top Extensions are tapped firmly in place. These extensions are held in place only by friction and can work loose especially on bumpy roads. They are intended only as guides for load placement and CANNOT be relied upon to prevent loads from sliding off the side of your rack. You must tie all cargo down securely with ropes or ratchet straps to the eye-bolts or other secure tie-down locations on your truck. Four 3/8" nylon lock nuts have been included to apply to the bottom of the eye-bolts for extra security. These must be applied to prevent the eye-bolts from loosening on bumpy roads. To use your rack as a sawhorse, unscrew and remove the eye-bolts, and remove the rack from your truck. Remove the Top Extensions if desired.



Fig. 4



Fig. 5



Fig. 6



Fig. 7

6. **Attach the Extension Brackets.** Examine an Extension Bracket. Notice that it consists of a plate with several holes drilled in it and a vertical tube welded to one side. Notice also that there are two types of Brackets and they are mirror images of each other. If the four Top Extensions are installed, replace them with the four Extension Brackets. To do this insert the end of the 4-inch-long tube on the Bracket into the top of

one of the legs, and orient the Brackets so the flat part of the Bracket is on the outside of the rack. After inserting the Extension Brackets push them down into the top of the leg several inches until they are snug, but not so tightly that they are hard to remove. Try to adjust the Brackets so they all extend the same distance above the top of the legs. Using a 3/8-inch bit, drill a hole from the outside of the rack through the tube about one inch from the top of the Leg and through the tube of the Extension Bracket inside of it. Insert a cap screw with washer and nylon lock nut to bolt the two together as shown in Fig. 8.

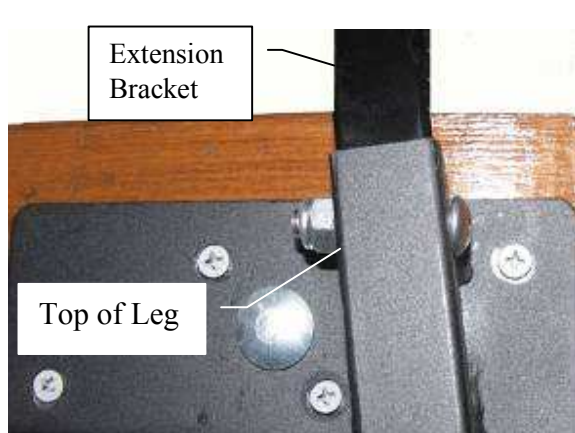


Fig. 8

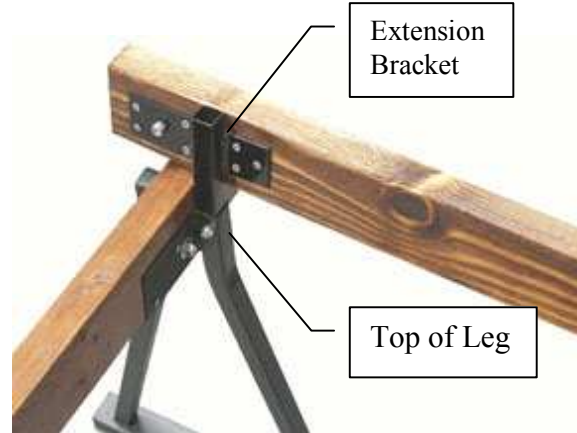


Fig. 9

7. **Add Side Beams.** After adding the Extension Brackets and bolting them into the tops of the Legs, add the driver's Side Beam. To do this first select a good, solid, straight piece of 2 x 4 fir about 10 feet long to be the Side Beam. Place it on top of the left end of the two wooden crossbars on the OUTSIDE of the Extension Brackets. Place it so that the back end of the Side Beam sits atop the back wooden crossbar as shown in Fig. 9, the mid-section of the beam sits atop the front crossbar, and the remaining length extends forward along and above the left side of the cab of the truck. Using a 3/8-inch bit, drill through the center of the large hole in each of the Extension Brackets. Place a metal washer on a 5/16-18 x 2" button head cap screw and insert it through the wood and through the large hole in the Extension Bracket. Place another washer and a nylon locknut onto the threaded end. Attach the front crossbar in the same manner as the back crossbar. Install the passenger's Side Beam in the same manner as the driver's side. When you have completed adding the second Beam, the rack should appear as in Fig. 10



Fig. 10



Fig. 11

8. **Add Metal Crossbar.** Examine the Female Crossbar (G) and the Male Crossbar (H). Notice that the Female has a nut welded to the outside with a set screw in it. Loosen the set screw and insert the male tube into the female tube. Adjust the width so that the shaped metal ends can fit between the front ends of the Side Beams. Notice that the shaped metal ends can be oriented so that they can be placed on the end of the Beams as shown in Figure 11. In order to do this, however, it is necessary to first cut the top corner of the Beams at an angle. Use the shaped metal ends, themselves, as a template to draw the cut lines on the inside face of the beams; then cut the corners. After again placing the shaped metal ends on the Beams, and using the 3/8" bit, drill another hole through the beam. Fasten the Front Metal Crossbar in place with the cap screws in the same manner as the Extension Brackets were attached. After tightening all of the cap screws, adjust the metal crossbar to a width that doesn't stress the Beams. Ensure that both wooden crossbars are parallel to each

other and to the metal crossbar, then tighten the set screw on the Metal Crossbar. After this is accomplished, install the wood screws in all of the unused holes in the Extension Brackets and Metal Crossbar.

9. **Add Braces.** Examine the Braces and notice that they are mirror images of each other. One will form a brace between the passenger's Side Beam and the front wooden crossbar and one will form a brace between the driver Side Beam and the front wooden crossbar. Place the end with three holes flat against the underside of one of the Side Beams and the other end with the face against the vertical surface of the front wooden crossbar. Attach the brace with wood screws as shown in Fig. 12. Install the second brace ensuring that both braces together form symmetrical angles and appear as shown Fig 13. When completed, you Alaskan Ladder Rack should appear as in Figure 14, below.



Fig. 12



Fig. 13



Fig. 14

WARRANTY for the ALASKAN LADDER RACK

U.S. Rack™ products are warranted for a period of one year against all structural defects in materials and workmanship provided that they are assembled, installed, and used in accordance with all manufacturer's specifications and instructions. U.S. Rack **cannot warrant the powder-coating** on its products. Normal use of any powder-coated rack and exposure to weather can result in scratching of the surface, exposing metal below; therefore, maintenance on your rack will be required. To prevent rust, spot paint any scratches or breaks in the surface with a high quality metal paint. **Merchandise must be returned in the original box and packaging.** See return policies and procedures at <http://www.usrack.com/service.shtml>