



BRIDGING LADDERS INSTRUCTIONS FOR ASSEMBLY AND USE



Thank you for purchasing a set of Bridging Ladders from Crux Offroad. These lightweight aluminum bridging ladders with a unique patent pending design will help you get through ditches or up ledges that could otherwise be impassable. They will also assist in extracting your vehicle from sand, mud, snow or high-centered situations. Please read through the following document entirely before assembling or using the bridging ladders and take note of all cautions and warnings. Crux Offroad bridging ladders have a one year warranty against manufacturer defects if the product is assembled and used as directed. The warranty is void if the product is misused or used in ways other than as directed, and does not cover surface finish or appearance.

WARNING:

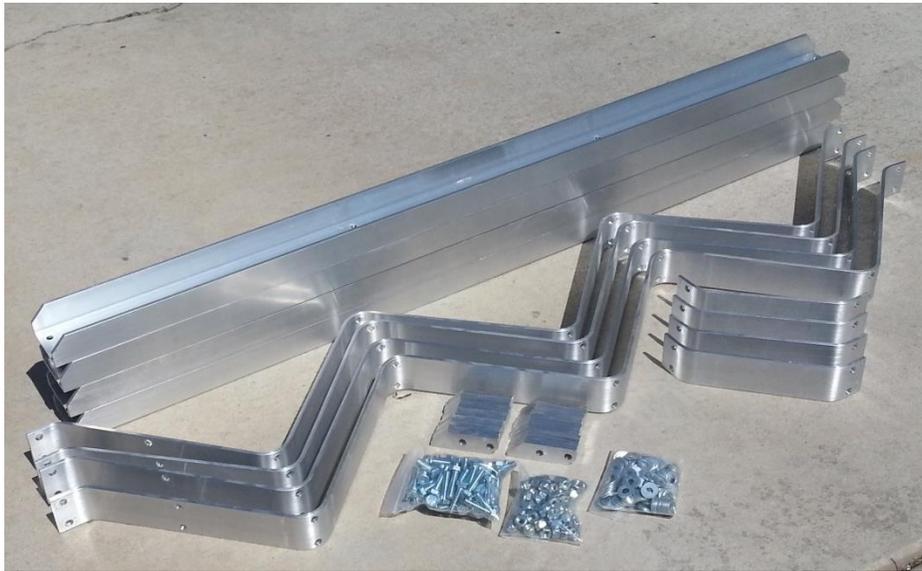
The environment in which this product is to be used inherently contains less stable or controlled ground surfaces which may lead to dangerous vehicle operating conditions. This includes, but is not limited to, ice and snow covered ground, mud, sand, sloped ground surfaces, ruts, gullies, washouts and ledges. It is the responsibility of the user of this product as well as all others in the surrounding area to ensure that this product is used in a safe manner to prevent vehicle damage and/or bodily injury or death. Always cross the bridging ladders in a slow and controlled manner.

WARNING:

This product has components that must be assembled by the purchaser/end user. Proper assembly is crucial for safe and effective use of this product. Carefully follow the assembly instructions to ensure correct arrangement of components and bolt torque.

CAUTION:

This product may develop burrs or sharp edges if it makes contact with hard or abrasive surfaces during use. Wear gloves at all times and take care while assembling and handling this product.

IN THE BOX:

<u>Qty</u>	<u>Description</u>
4	48" Side Rails
4	48" Cross Treads
4	9" End Treads
24	3" Grip Cleats
60	5/16" x 1-1/4" bolts
60	5/16" locking nuts
168	5/16" flat washers

Assembly Instructions:

Assembly time is approximately one hour. The tools required for assembly are a 1/2" socket and wrench and a torque wrench capable of 20 ft-lbs. Always use a flat washer between the bolt head or nut and the items being fastened.

Overview: The Bridging Ladders may be assembled with the legs of the Side Rails facing in or out. If the legs face in the overall width is 16" and the tread area is 12" wide. This is recommended for tires up to a 285 mm or 11.5" section width. If the legs face out the overall width is 18" and the tread area is 15" wide. This is recommended for tires over 285 mm or 11.5" section width, or for additional stability with

all tire widths. The position of the Grip Cleats will change depending on which option is chosen. A washer is required between the Grip Cleats and the Side Rails to provide space for the bridging ladders to be able to stack on one another. Loosely assemble all the parts of the bridging ladder before tightening any bolts. Tighten bolts starting in the center and working out toward the ends.

Step by Step instructions:

Option #1: Side Rail legs facing in; 16" wide overall, Cleats installed on outside of Rails.



Option #2: Side Rail legs facing out; 18" wide overall, Cleats between Rails and Cross Treads.



Decide on the assembly option to use and then loosely assemble the parts together, always using a washer under the bolt head and nut. The Grip Cleats should always be positioned so the large chamfer faces toward the ends of the ladder. This means the Cleats on one half of the ladder will face one way, and the other half will face the other way.

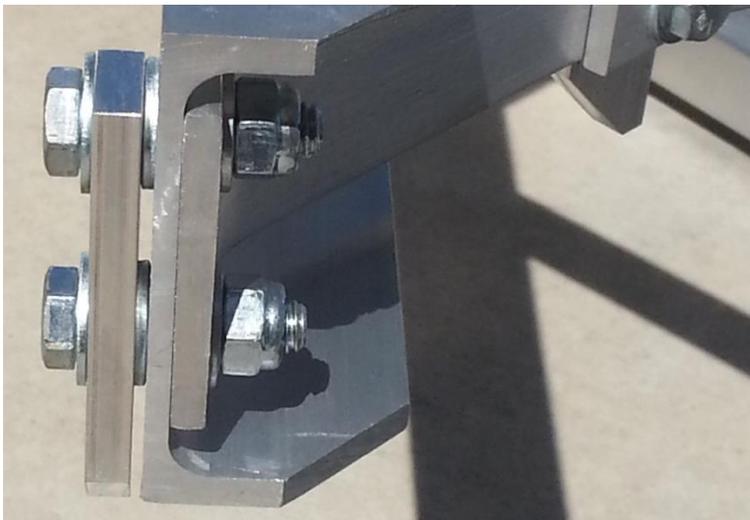
Loosely assemble the Cross Treads to the Side Rails with Cleats in position (Rail legs out shown):



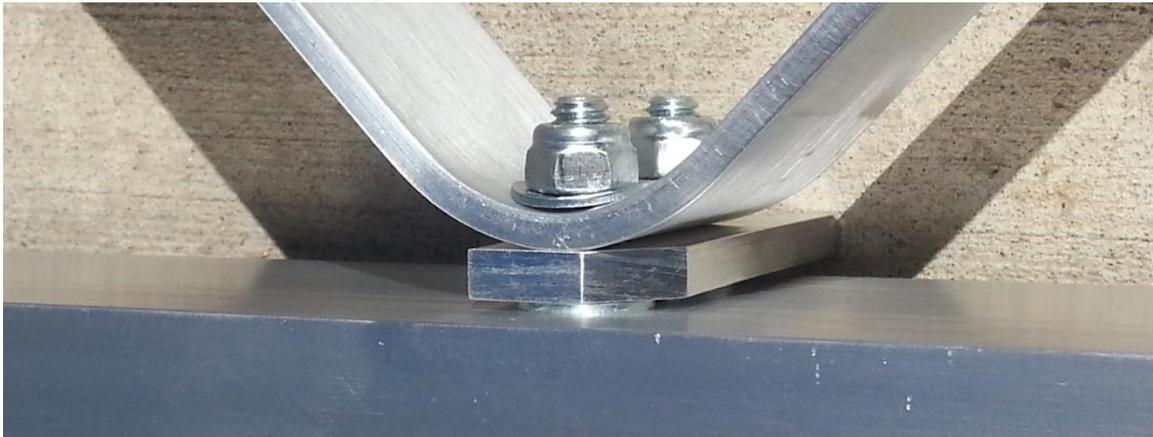
To assemble with Rail legs in, position Cleats on the outside of Rail and oriented as shown:



Use washers between Cleats and Side Rails as shown:



To assemble with Rail legs out, position Cleats on the inside of Rail with washers as shown.



Assemble End Treads and Grip Cleats as shown, placing washers between Cross Rails and Cleats:



Once all the pieces have been loosely assembled snug the bolts up to eliminate any play, starting at the center of the bridging ladder and working out to the ends. Snug up the bolts for the End Treads last. Stack the two bridging ladders together and check the alignment of the Grip Cleats. The Cleats on the top and bottom ladders should be in alignment as shown below.



Torque all bolts to 20 ft-lbs, starting in the center and working out to the ends. Check the torque of the bolts after the first use of the bridging ladders and after every several uses thereafter.

Maintenance:

To clean, use a mild detergent and water. A scouring pad can be used on the aluminum in the lengthwise direction to remove more distinct markings. Use a fine file to remove any burrs or sharp edges that may have developed with use. Inspect the hardware periodically for proper torque and replace any bolts/nuts that appear heavily corroded or damaged.

Please read the following INSTRUCTIONS FOR USE found below.

CRUX OFFROAD BRIDGING LADDERS

INSTRUCTIONS FOR USE:

WARNING:

The purchaser/user assumes all liability in the use of this product. It is upon the user to assure that the product is used in a safe manner and that all others are out of harm's way in the event of unintended consequences during the use of this product.

WARNING:

Never exceed the load rating! It is very important to know the axle weights of the vehicle to be using the bridging ladders, so that the working limits of the bridging ladders are not exceeded. The maximum allowed axle weight is 4000 pounds, or 2000 pounds maximum per individual bridging ladder.

Whenever using the bridging ladders, operate the vehicle on the ladders in a careful and controlled manner. When the vehicle is crossing the bridging ladders, it is important that all the occupants of the vehicle use appropriate safety equipment such as seatbelts and anyone outside of the vehicle remain a safe distance away from the vehicle in the event that the vehicle, the terrain, the bridging ladders or any other object shift, slip, or undergo any other potentially harmful movement while crossing the bridging ladders.

To use the bridging ladders to cross depressions, gaps or washouts first make sure the bridging ladder is able to adequately span the gap. Place the ladders where needed and ensure the ground that the ends of the ladders are resting on is stable enough to not give way when the weight of the vehicle is applied. Also be sure the bridging ladders are placed in a way that they will not rock, tip or slip when the vehicle crosses them. Position the ladders parallel to each other and the vehicle, and at a distance apart from each other to match the track width of the vehicle. Drive the vehicle until the tires are almost onto the bridging ladders and then double check the position of the ladders.

Use a spotter outside of the vehicle to guide the driver over the bridging ladders, keeping the vehicle's driver side and passenger side tires centered on each respective bridging ladder. The spotter must use an appropriate communication method so the driver is directed in a clear manner. Employ similar techniques when using the bridging ladders to travel up or down ledges, taking extra care to place the ladders so they will not slide off the ledge when the vehicle is on them. Do not use the bridging ladders at an angle greater than 45 degrees from horizontal.

To use the bridging ladders as a traction aid place the ladders in front of or behind the tires in need of traction (depending on direction of travel). If the tires are not able pull onto the bridging ladders, material may need to be cleared away from around the tires to allow the ladders to sit lower, enabling the tire to more easily grip the bridging ladder. Avoid wheel spin while driving onto and over the bridging ladders. Steadily drive onto the bridging ladders and maintain forward motion until the vehicle has reached firm enough terrain to not get stuck again.

When crossing terrain that could potentially get the vehicle stuck such as boggy ground or deep sand, place the bridging ladders on the ground before crossing to stabilize the surface and distribute the load.

Comments or Concerns? Please send an email to info@cruxoffroad.com