



KHYBER V1 - MULTI PIVOT RACK

ASSEMBLY INSTRUCTIONS

BEFORE YOU BEGIN




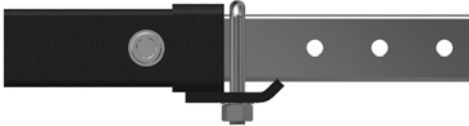
1. WARNING - THE MAST AND PIVOT ASSEMBLY CAN ROTATE AND MAY CAUSE SERIOUS INJURY IF NOT HANDLED CORRECTLY. ENSURE THE LOCKING PIN IS INSERTED TO PREVENT ROTATION BEFORE HANDLING THE ASSEMBLY.



2. A bottle of **thread lock compound** has been supplied, and **must be applied to all bolts (nuts already assembled need to be removed to apply thread lock)**. It is required to prevent the bolts galling so must be used. Galling is more likely with power tools, so always use hand tools for assembly and disassembly.
3. Washers have a sharp side and a smooth side. Install all washers so the sharp side is facing the nut or bolt head, and the smooth side is against the anodized aluminum parts. This will prevent the washer from damaging the anodized finish on your rack.
4. It is best to build the rack in a stand. If one is not available, the rack can be built on the vehicle starting with the hitch spigot. Help from a partner is advised for lifting and holding components in place before they are secured with bolts. Be careful when assembling on or around your vehicle as loose components may fall and damage the vehicle.
5. The bike rack and its components are built to last a lifetime. Because of this, they are very heavy. Make sure to handle them with care and attention at all times.

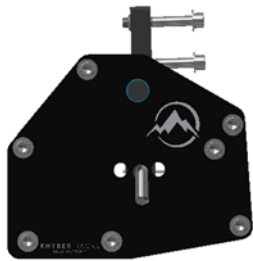
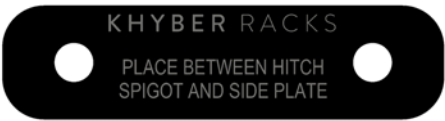
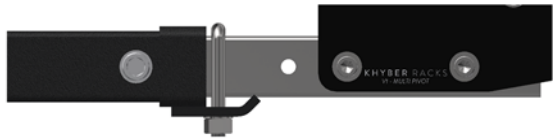
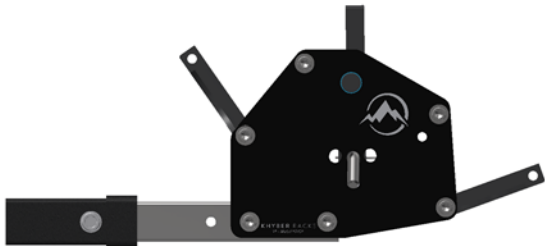
TIP: when removing the rack from your vehicle, we recommend removing the top bar and basket assembly first. This will make it much easier to handle and store.



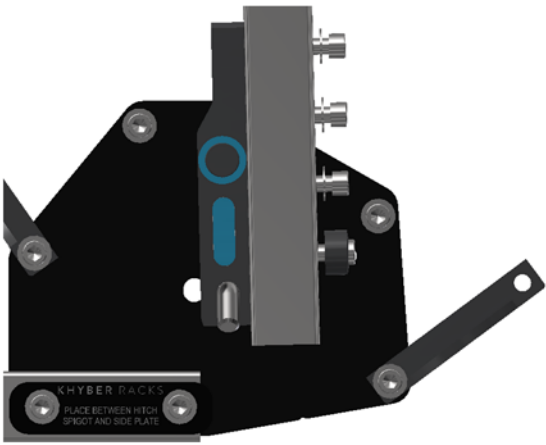


<p>STEP ONE – Clean Hitch Receiver</p> <p>Scrape any debris or corrosion with a blade screwdriver or similar. Ensure the hole for the pin/bolt is smooth inside, as any swarf from drilling will interfere with the rack spigot. Liberally grease inside. Regrease periodically to prevent the spigot from seizing inside the receiver hitch.</p>	
<p>STEP TWO – Install Anti-Rattle Cube</p> <p>Remove the bolt from the cube. Liberally apply silver anti-seize to the cube threads. Place the spring in the recess on the cube, and slide into the end of the hitch spigot so that it lines up with the large single hole. The spring should be positioned on the same side as the nut for the M16 hitch bolt. This part will be used to eliminate hitch slop.</p>	
<p>STEP THREE – Insert Spigot and Bolt</p> <p>Insert the spigot into the receiver.</p> <p>Take the M16 bolt you just removed from the threaded cube. Insert through one washer, then through the hole in your hitch (from the side opposite the spring on the cube) and thread through the cube inside the spigot. Torque to 80Nm (very tight).</p> <p>Wipe residual silver anti seize from the end of the bolt threads and apply the thread lock compound. Then add a washer, split ring and nut. Torque to 80Nm. Check for tightness regularly.</p> <p>Install the U-Bolt/plate with the bent section of the plate touching the spigot. Apply threadlock and torque to 80Nm.</p> <p><i>Depending on how much clearance you have to the ground, you may wish to trim the U-bolt (some users have bent the U-bolt after hitting water bars). If you decide to trim them, make sure the nuts are already installed or you may not be able to get them back on if you damage the thread.</i></p>	 <p>Spigot. Notch faces down. Threaded cube and spring should be inserted and lined up with the single large hole shown on the left.</p> 



<p style="text-align: center;">NOTE:</p> <p>A locking hitch pin is not compatible with the anti-rattle device (hitch cube). Like most racks, the Khyber Rack is bolted to the spigot with 2 bolts, and locking the spigot to the vehicle only prevents the spigot from being removed.</p> <p>So we chose offroad performance over a device that offers virtually no protection.</p>	
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<p>STEP FOUR – Locate Lower Pivot Box</p> <p>Please note: ALL bolts/nuts need to be assembled with the supplied thread locking compound. This includes the ones that are partially assembled. This section is partially assembled to make it easier to determine how it is assembled.</p>	
<p>STEP FIVE – Locate Spacer</p> <p>There is a 1.5mm thick spacer inside the Lower Pivot Box Assembly that needs to be fitted between the spigot and the side plates. It doesn't matter which side of the spigot you choose.</p>	 <p>Install between spigot and side plates (during next step)</p>
<p>STEP SIX – Choose Mounting Holes</p> <p>Determine if you need the rack mounted on the fore or aft holes (diagram is mounted in aft holes).</p> <p>You will mount the mast in the next step, so do not tighten bolts yet.</p>	 <p>Mount as close to the vehicle as practical to reduce overhang. Install spacer plate at same time.</p>
<p>STEP SEVEN – Create Access to Pivot</p> <p>Remove the top bolts of both stiffener blocks. This will allow you to rotate them out of the way, to provide access to the pivot block to insert the nuts and bolts through the mast in the next step.</p>	



<p>STEP EIGHT – Install Mast A second person will make life easier. The mast has a high or low setting for a difference of 50mm. Image shows the mast in the low setting.</p> <p>Top 3 bolts are M12x85 and pass through the 1.5mm washers. Bottom bolt is M12x90 and passes through the round aluminum stopper. Torque bolts to 60Nm</p> <p>Return stiffener blocks to original position and torque remaining M12 bolts to 60Nm.</p>	 <p>Side plate is not shown for clarity, no need to remove it.</p>
<p>STEP NINE – Install Top Yokes Fit the top yokes to the mast using the M10x80 bolts, but don't tighten yet. Check that the washers are oriented per step six.</p>	
<p>STEP TEN – Install Top Bar Fit the top bar to the yokes with the long side to the left. The logo is positioned on the left side facing you. Check the washers are oriented per step six. Torque all four M10x80 bolts to 30Nm.</p> <p><i>Note: For even numbered racks (2, 4, 6) you may find it easier to install the basket that is located over the mast first (see next step).</i></p>	



STEP ELEVEN – Install Baskets

All the parts for fitting the baskets are in a single ziplock bag (you will find 2 types of black nylon spacers, a stainless steel plate and the M10x70 nuts and bolts).

Drop the bolts through the top of the basket (use the ellipse hole for the left bolt). No washer is required under the bolt heads at the basket.

Use the large black nylon spacer between the basket and top bar, and the small black nylon spacer and the stainless steel plate between the nuts and the top bar.

Torque to 25Nm

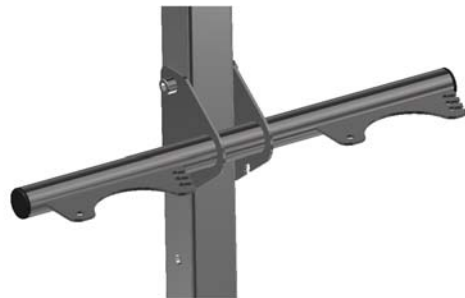


Use black nylon spacers above and below the top bar, and the stainless plate above the nuts.

STEP TWELVE – Install Lower Bar

Attach the rear wheel bar using two M10x70 bolts. There are 2 positions available for the rear wheel bar. The higher position is only required if you are loading kids or BMX bikes. Longer bikes will also work in the high position, but if you're always carrying adult size mountain bikes, the lower position is generally preferred.

Torque to 30Nm.



NOTE: Notch for bottle opener is positioned to the lower right.



STEP THIRTEEN – Install Rope Ties

Attach the ropes by threading through the closed holes in the baskets and rear wheel holders. Tie a knot at each end so they don't fall out.

WARNING: THE ROPE MUST BE INSPECTED REGULARLY AND BEFORE LOADING BIKES ON THE RACK. IF THE ROPE IS FRAYED OR DAMAGED, IT MUST BE REPLACED BEFORE LOADING AS FAILURE TO DO SO MAY RESULT IN THE BIKES FALLING OFF THE RACK, CAUSING A SERIOUS ACCIDENT TO OTHER ROAD USERS, PROPERTY DAMAGE, INJURY OR DEATH.



OPTIONAL – Limiter Bolt

You may wish to install the optional M12x95 bolt that limits the ability of the rack to move forward past the vertical position, to prevent hitting the back window of your vehicle. It will still allow you to lay the rack backward. The hole is marked on the right plate as “LIMITER”.



FINAL – VERY IMPORTANT!

Double check torque on all bolts. All M12 bolts should be torqued to 60Nm and M10 bolts on the top plate should be torqued to 30Nm, and basket bolts to 25Nm. 16mm Hitch bolt torque both the bolt and nut to 80Nm separately.

Check all bolts regularly to make sure they are at the correct torque.

WARNING: FAILURE TO ENSURE THAT ALL BOLTS ARE TORQUED AT THESE RECOMMENDED LEVELS MAY RESULT IN THE RACK AND LOADED BIKES FALLING OFF, CAUSING A SERIOUS ACCIDENT TO OTHER ROAD USERS, PROPERTY DAMAGE, INJURY OR DEATH.

Your rack is now ready to load.



LOADING INSTRUCTIONS

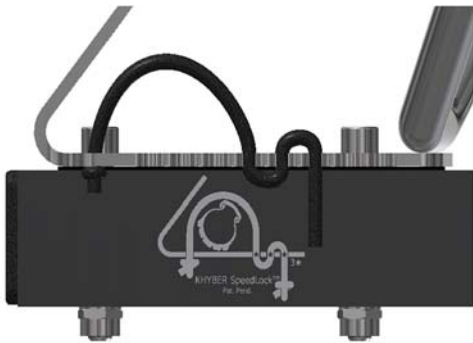
Load bikes from left to right, and unload right to left.

Stand on the right side of the bike, and grab the middle of the fork leg and middle of the seat tube. Lift and drop the front wheel into the basket.

Secure the front and then rear wheel using the SPEEDLOCK™ tie downs before loading the next bike.

MTB tires: Place the tire as far into the folded corner of the basket as possible.

Road/Gravel/narrow tires: Route the rope through one of the slots first, to keep the tire away from the corner of the basket. This prevents the tire sidewall from touching the metal edge which may damage the tire, and prevents the spokes from resting on the basket tubing, which may damage the spokes. See diagram below for details.



MTB Tires

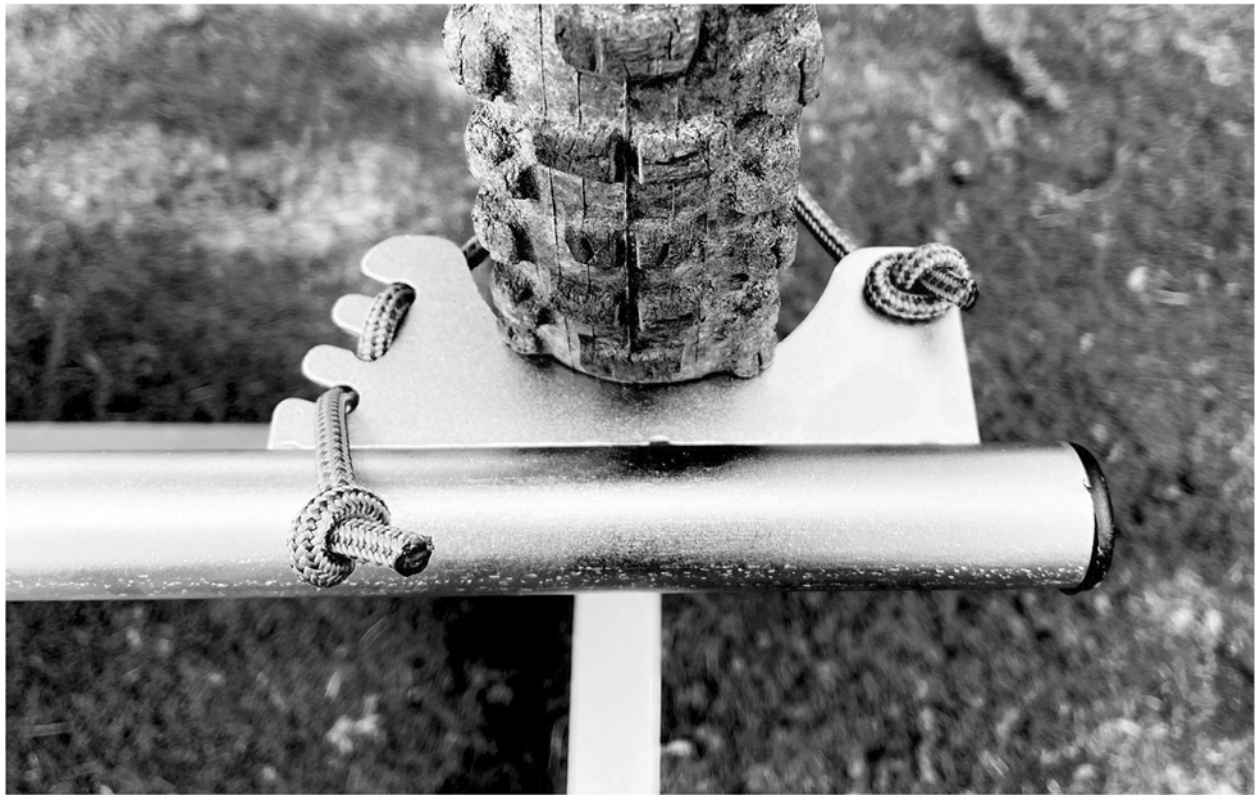


Road/Gravel/Narrow Tires



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The rear wheel must be secured using all 3 slots on the rear wheel mount.

WARNING: THE ROPE MUST PASS THROUGH THREE ADJACENT SLOTS TO BE SECURE. FAILURE TO DO SO MAY RESULT IN THE BIKE FALLING OFF THE RACK, CAUSING A SERIOUS ACCIDENT TO OTHER ROAD USERS, PROPERTY DAMAGE, INJURY OR DEATH. USE THE SLOTS IN THE FRONT WHEEL BASKET THAT ARE MOST SUITABLE FOR THE TIRE SIZE.

Do not operate the vehicle without securing both wheels!



CARING FOR YOU RACK

One of our primary goals is to address corrosion issues by choosing premium materials and adding surface treatments that resist corrosion and increase the lifespan of the rack.

The frame is made from anodized 6061-T6 Aluminum, while the mast, wheel baskets and rear wheel holder are 304 Stainless Steel, which brings a level of corrosion resistance that is far superior to powder coated steel. With the stainless parts, we go two steps further by sandblasting then electropolishing them. All hardware is also 304 Stainless Steel.

The hitch spigot is made from A500 Grade C structural steel for the highest strength. Unfortunately, Stainless Steel is not suitable for this application, so we've applied the best treatments to resist corrosion; sandblasted then hot dip galvanized.

Despite this, harsh environments such as salted roads and coastal areas affected by sea spray can still cause surface corrosion and is not covered by warranty unless it creates a structural issue. If you are driving while roads are salted, we recommend storing the rack when not in use for extended periods and rinsing it after use to get the maximum lifespan and to keep the finishes looking as fresh as possible. We've taken the best steps possible to prevent corrosion, but salt is still the enemy.

If you experience surface tarnishing on the stainless steel components, we recommend the following:

Mix baking soda and water into a paste. Using a rag, apply the paste to the affected area. For small spots, scrub the area right away; for large spots let it sit for an hour, then scrub the affected area. Rinse the area with water and a clean rag. As a final step, clean the surface with a cleaner formulated for stainless steel.

The sooner you deal with tarnishing and apply a stainless steel cleaner, the less likely it is that it will return.



LIMITED LIFETIME WARRANTY

SCOPE:

Khyber Racks Ltd warrants that all Khyber Racks and parts manufactured by Khyber Racks Ltd are free from defects in materials and workmanship under normal use that affect the operation or safety of the rack subject to the limitations set out in this Limited Warranty. This Limited Warranty only applies to the original purchaser of the products who has retained proof of purchase and is not transferrable. This Limited Warranty shall be valid (a) during the period that the original purchaser owns the rack if it is used for personal or non-commercial purposes or (b) for a period of 3 years from the date of purchase if the rack is used for commercial purposes.

REPAIR OR REPLACEMENT

Khyber Racks Ltd. will, at its option, either repair or replace any part that proves defective by reason of improper workmanship or materials in accordance with the terms of this Limited Warranty. The replacement parts will be either new or refurbished to be functionally equivalent to new. The product or part must first be returned to Khyber Racks Ltd. as it may request and direct with freight prepaid.

EXCLUSIONS

This Limited Warranty does NOT apply to the surface finishes of the products, including the tarnishing of stainless steel and fading of anodizing. This Limited Warranty does NOT cover failures, malfunctions or damage that result from:

1. Failure to properly install, assemble, use or maintain the racks in accordance with the printed instructions provided and available at the time of purchase at www.khyberracks.com and this Limited Warranty.
2. Failure to heed warnings and cautions provided with the racks in the printed instructions provided, in this Limited Warranty and at www.khyberracks.com at the time of purchase.
3. Abuse, misuse, unauthorized repair, alteration, modification, natural disasters or abnormal mechanical or environmental conditions.
4. Loading bikes that weigh more than 24kg or 53lbs or that do not fit inside the wheel basket properly.
5. Loading any objects other than bikes on the rack.



6. Standing, climbing or hanging on to the rack after it has been installed.
7. Impact or collision.
8. Failure to inspect and replace wear and tear items including rope tie downs that are frayed or damaged before loading.

Khyber Racks are not designed or built for off-road use on the back of RVs and travel trailers; such use is NOT covered by this Limited Warranty and will be entirely at your own risk. The Limited Warranty will only apply to the on-road use of Khyber Racks that are installed on the back of RVs and travel trailers.

Rope tie downs that are supplied with the racks are made by Mammut and subject to wear and tear. They are NOT covered by this Limited Warranty. **WARNING: YOU MUST INSPECT THE ROPE BEFORE LOADING, AND ANY FRAYED OR DAMAGED ROPE MUST BE REPLACED PRIOR TO USE TO PREVENT ACCIDENT OR INJURY FROM EJECTED BIKES.**

LIMITATION OF LIABILITY

This Limited Warranty is the only warranty provided by Khyber Racks Ltd. Khyber Racks Ltd's sole liability to any original purchaser is set out in this Limited Warranty. No other express or implied warranties, including the warranties of merchantability and fitness for purpose shall apply, except as may be required by law. Khyber Racks Ltd. shall have no liability for any claims for lost profits or for special, incidental or, consequential, exemplary, aggravated and punitive damages.

LIFETIME CRASH REPLACEMENT PARTS PROGRAM

In the event of damage to the racks that is not covered by this Limited Warranty (such as damage from backing your rack into an object, contacting the ground in a ditch or being struck by another vehicle), Khyber Racks Ltd. offers a lifetime crash replacement parts program, where replacement parts will be made available at a discount, plus shipping. This program is only available to the original purchasers of Khyber Racks with proof of purchase, including original purchasers who use the racks for commercial purposes or off-road on the back of RVs or travel trailers.

