



BLACKBOROW RACK & LOADING INSTRUCTIONS

RETAILER: All instruction materials MUST BE provided to the end user.

At Salsa, we believe that a sense of adventure makes life better. The bicycle can be so much more than just a bike; it's a path to new places, new people, and amazing experiences.

Thank you for your purchase. We hope it makes a good riding experience even better!

Salsa. Adventure by bike®.

⚠ WARNING: CYCLING CAN BE DANGEROUS. BICYCLE PRODUCTS SHOULD BE INSTALLED AND SERVICED BY A PROFESSIONAL MECHANIC. NEVER MODIFY YOUR BICYCLE OR ACCESSORIES. READ AND FOLLOW ALL PRODUCT INSTRUCTIONS AND WARNINGS INCLUDING INFORMATION ON THE MANUFACTURER'S WEBSITE. INSPECT YOUR BICYCLE BEFORE EVERY RIDE. ALWAYS WEAR A HELMET.

The Blackborow frame is not compatible with other off-the-shelf rear bicycle racks. The rear rack is designed specifically to mount to the Blackborow frame and is not compatible with other bicycle frames.

Failure to read and follow all of the safety warnings included in these instructions could cause a crash and serious injury

Compatibility and Intended Use

The Blackborow Frame and Rack are the foundation pieces of a fat-tired bicycle that is intended to be used in off-road applications. The frame and rack are specifically designed to be used together and allow an increased carrying capacity over a traditional off-road touring bicycle and rack system. On average, depending on setup, this increase is approximately two (2) rear pannier's worth of gear. Although Blackborow is capable of carrying a heavier load than most traditional off-road touring bikes, it performs best in off-road situations when the load is kept to a modest amount (lightweight specialist equipment) and is packed strategically as described in these instructions. Blackborow is particularly suited to carrying large-volume, lightweight loads like winter-weight sleeping systems, winter clothing, fishing gear, and extra food.

- The Blackborow frameset is not designed or intended to be a cargo bike capable of hauling extremely large or heavy loads, nor is it designed to haul "live" cargo
- The rear rack is designed to carry four (4) rear bicycle panniers. Most common panniers can be mounted
- The Blackborow frame is compatible with 26 x 3.8–4.33" tires on up to 100 mm rims, or 29 x 2.3–3.0" tires



Intended for ASTM 3 conditions, defined as rough trails, rough unpaved roads, rough terrain, and unimproved trails that require technical skills.

Jumps and drops should not exceed 24" (61 cm).

NOT INTENDED for hardcore freeriding, extreme downhill, dirt jumping, slopestyle, or very aggressive or extreme riding.

⚠ SAFETY WARNINGS:

- Do not exceed the load limit of any additional accessory bag or additional accessory rack
- Some combinations of front rack/bag systems may feature load limits, that when combined with the rear rack limit of 50 kg (110 lb), could exceed the 84 kg (185 lb) total load limit. Never exceed the cumulative 84 kg (185 lb) limit, regardless of these components limits
- **Total Bike Capacity = 191 kg (420 lb)** This is the cumulative weight of the rider, their gear, water, food, and the bags/ panniers/containers it is housed in that are carried by the bicycle, rear rack, and rider. This does not include the bicycle itself, or the weight of any additional mounted racks
- If the rider weight plus Total Load Capacity stated below exceeds this limit, the Total Load Capacity must be reduced so as to not exceed 191 kg (420 lb)
- **Total Load Capacity = 84 kg (185 lb)** This is the cumulative weight of all gear, water, food, and the bags/panniers/containers they are housed in that are carried by the bicycle and all rack/bag systems. This does not include the bicycle itself, or the weight of any additional mounted racks, or the rider
- **Rear Rack Capacity = 50 kg (110 lb)** This is the cumulative weight of all gear, water, food, and the bag/ pannier/containers it is housed in, that is attached to the rear rack

Tools Required

Torque wrench with 6 mm hex key

Parts List

- Blackborow Frame
- Blackborow Rack
- Blackborow Rack Mount Kit
 - Four (4) M8 x 1.25-28L high-strength, coated, steel socket head cap screws
 - Four (4) stainless steel nuts with nylon inserts

⚠ WARNING: Use only the hardware provided to mount the rear rack to the frame. Use of other hardware may lead to failure or the rack coming loose, leading to a crash and serious injury. Replacement hardware kits are available from Salsa-authorized dealers. Follow the steps outlined below.

Rear Rack Installation

⚠ SAFETY WARNINGS:

- Do not modify the rear rack in any way. Hardware included with the rack must be used
 - The bicycle may behave differently (particularly with regard to steering and braking) when the rear rack is loaded
 - Make sure your load is evenly balanced and secure before every ride; always secure loose straps or cords or anything else that may get caught in the wheel prior to riding
1. Rest the rear/lower mounting hoods of the rack on the catches of the frame mounting tabs (Fig. 1, Step A).
 2. Rotate the rack forward and down until the upper mounting hoods line up with the upper frame mounting tabs (Fig. 1, Step B).

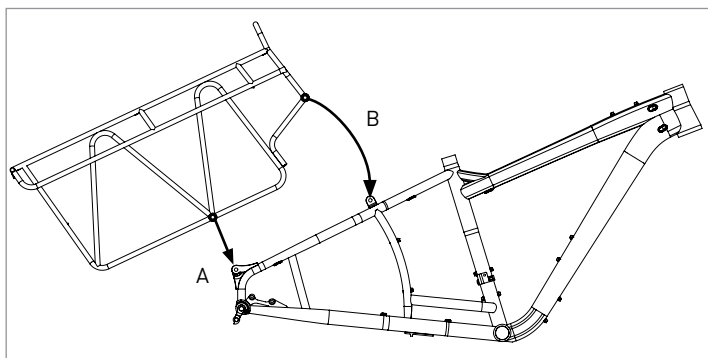


Figure 1

3. Insert one of the socket head cap screws through the upper mounting hood and upper frame tab to temporarily hold the rack in place, allowing you to use both hands for the remaining steps.
4. Insert two of the three remaining socket head cap screws through both the right and left lower mounting hoods and frame tabs, and loosely thread on fixing nuts for each. Make sure the fixing nuts are aligned and seated into the hex broaches on the back of the frame tabs. Do not fully tighten yet.
5. Repeat Step 4 using remaining socket head cap screw, two fixing nuts, and the previously installed bolt from Step 2 to secure the rack at the upper mounts.
6. Using a torque wrench with a 6 mm hex key bit, tighten all four rack fixing bolts to 10 Nm (Fig. 2).

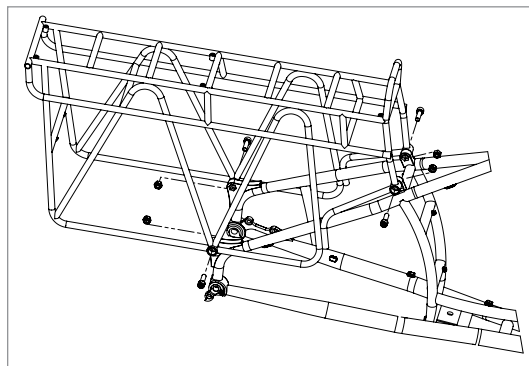


Figure 2

Suggested Pannier Attachment to the Rear Rack

The Blackborow Rack is designed to carry four (4) panniers (two per side) as well as additional gear on the top deck. The rack will fit most rear pannier styles and sizes, including Salsa's Rear (27 L) Touring Panniers.

NOTE: Salsa Front (14 L) Touring Panniers do not fit the rear rack.

Refer to Figure 3 while reviewing the following bullet points about suggested attachment points for panniers to the rear rack:

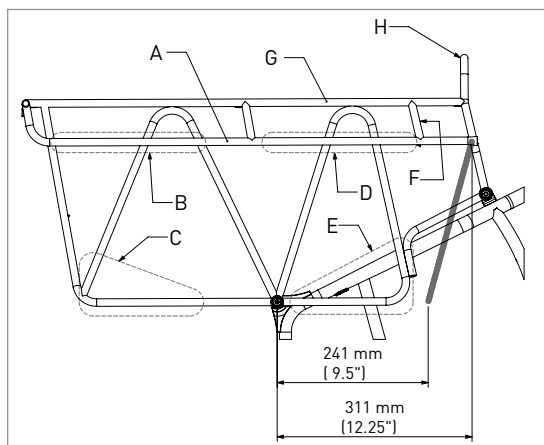


Figure 3

- A. This outboard rail, running the length of the rack, 65 mm (2.5") below the upper deck is intended to be the pannier/bag mounting rail. Using this rail for the panniers/bags leaves the entire upper deck area free for mounting top loads.
- B. The rearward panniers should have the clips aligned to attach in this general location.
- C. The rearward panniers' lower mount will attach somewhere in this area, depending on style.
- D. The forward panniers should have the clips aligned to attach in this general location.
- E. The forward panniers' lower mount will attach somewhere in this area, depending on style.

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- F. To maintain adequate clearance between the rider's heel and forward panniers, they should not be attached in front of this rail, and the user should check to make sure any portion of the pannier does not extend past the rail. This limit can vary by foot size, footwear type, and crankarm length.
- G. Use the upper deck rails for attaching items to the top of the rack.
- H. The loop rail at the front of the rack makes a good hand grip to aid in moving the bicycle around when the rider is dismounted.

Most panniers have adjustable upper hooks. These may need to be adjusted so as not to interfere with bracing members of the rear rack, while keeping the panniers in the correct location relative to the front/back half of the rack. Generally, one of the two upper hooks can be located directly adjacent to one of the various brace members of the rack, effectively eliminating movement of the pannier along the rail in one direction. To eliminate movement of the pannier along the rail in the opposite direction, wrap a narrow strip of duct tape (3–4 times) around the mounting rail on the opposite side of the hook. This will “lock” the pannier in the desired location and you will also have some tape in case an emergency repair of some type is needed.

Suggested Loading Strategy for Blackborow

Refer to Figures 4 and 5, which show a Blackborow bicycle configured in just two of the many pannier/bag/accessory combinations possible.

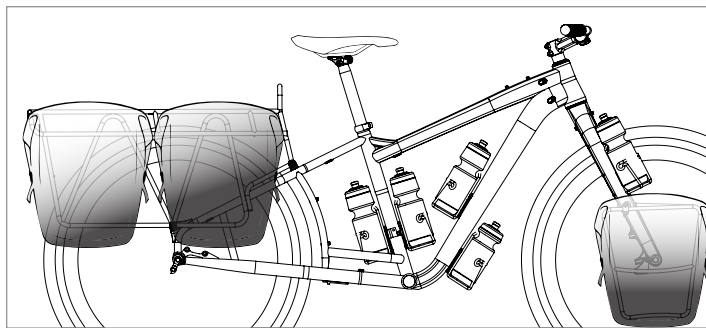


Figure 4

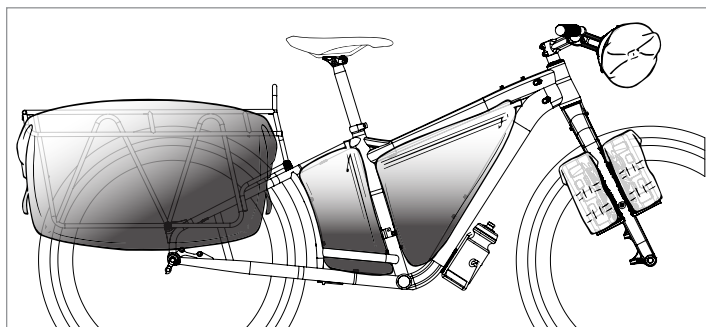


Figure 5

Regardless of packing style or method, Blackborow works best when the load is packed as low and as central to the bottom bracket as possible. The darker shaded areas in both figures illustrate where the majority of the carried load/gear weight should be located, and the lighter shaded areas where the lightest load/gear should be located. Handling of the bicycle is always better if a portion of the load can be distributed to the front wheel in some manner (via a front rack/cage system and/or handlebar bags).

Although the Blackborow is rated to carry up to 84 kg (185 lb) of gear, off-road singletrack handling/responsiveness is significantly reduced with this much weight. All efforts should be made to minimize gear and gear weight, as is common practice with any backpacking/ bikepacking endeavor, to maximize the handling, responsiveness of the bike, and maximize your enjoyment of the adventure. The increased carrying capacity of the Blackborow is not so much about hauling larger, heavier, more luxurious items like two-burner stoves, cast iron pans, and cases of beer, but rather, for providing more space and options for awkward items like sub-zero sleeping bags, insulated foam sleeping pads, and fishing rods with a reduced effort in the “packing puzzle” that is fitting all your gear onto a two-wheel bicycle. A concerted effort at sticking with a minimalist backpacking/bikepacking style gear list will result in the most enjoyable ride, and the quickest packing times.

Rear Rack 75/25% Loading Rule

The total load carried on the rear rack can not exceed 50 kg (110 lb). Proper loading of the rear rack is critical to handling. As a general rule of thumb, 75% or more of the rear rack load should always be on the forward (front half) portion of the rack. This keeps the majority of the load in front of the rear axle, which keeps the front wheel weighted, steering steady, and also reduces sway. For a four-pannier configuration this means that 37.5 kg (82.5 lb) of the weight should be carried by the two forward panniers and forward half of the top deck, and the rear panniers and top deck should carry just 12.5 kg (27.5 lb). This configuration will keep the handling of the bike as steady as possible. Use the rearward panniers and rearward top deck portion to carry high-volume, low-density items like sleeping bags, sleeping pads, and extra clothing, etc. These items are generally less than 2 kg (4.5 lb) each, and it is quite difficult if packing by this strategy to get more than 9 kg (20 lb) onto the rear half of the rack. Regardless of how much gear or how little gear is loaded to the rear rack, following a 75/25% ratio will result in the best handling. Use dividers or careful packing strategy to locate most of the heavy items as forward and as low in the bags as possible. Make sure items mounted to the rear rack's top deck or the mounting straps do not protrude below the deck rails and contact the rear tire, and secure loose straps so they cannot become entangled in the rear wheel.



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Frame Bag Loads

Frame bags that are fitted to the Blackborow's front triangle space and to the stowaway space behind the seat tube in front of the rear tire (refer to Figure 5) should be limited to 6 kg (13 lb) each 12 kg (26 lb) total. This is equivalent to six liters of water per bag, and depending on size and design, is likely more than these spaces can hold. The stowaway area behind the seat tube is an excellent space for water storage due to its low and central location. Always follow a bag's weight limit/ recommendation if it less than the suggested 6 kg (13 lb) limit of the frame. Salsa's EXP Series HT fatbike front triangle bags are direct fits for the Blackborow frame.

Bottle/Accessory Cages

⚠ WARNING: ALWAYS CHECK FOR ADEQUATE CLEARANCE BETWEEN THE FRONT TIRE AND/OR FENDER AND ANY ACCESSORY, FITTED TO THE ACCESSORY MOUNTS LOCATED ON THE UNDERSIDE OF THE DOWNTUBE, THROUGH THE ENTIRE STEERING RANGE. IF A SUSPENSION FORK IS FITTED, PERFORM THIS CHECK WITH THE FORK FULLY COMPRESSED.

In lieu of frame bags, the Blackborow frame features a full complement of bottle/accessory cage bosses. Each frame can hold two bottles inside the front triangle and one on the back of the seat tube. The mounting bosses on the top of the toptube near the headtube are intended for the Salsa EXP Series toptube bag. This location is great for easy-access to frequently used items like food, camera, and cell phone. The bottle mount pattern on the bottom of the downtube can be used for a water bottle, but due to accumulation of dirt and possible contamination in this area, it is better to mount items like a fuel bottle, pump, or tool kit here. Regardless of what is mounted make sure it does not interfere with the front tire, front fender if one is fitted, and full steering range of the bicycle. If a suspension fork is fitted, perform this check with the fork at full bottom out.

Front End Loading

Total gear loads of less than 20 kg (44 lb) can be carried completely on the rear rack without significantly affecting the handling/balance of the bike as long as this load is located on the forward portion of the rack as described above. For total gear loads between 20–50 kg (44–110 lb), although the rear rack can handle the entire load, it is strongly suggested that some of this load be distributed to the front via a handlebar bag, front rack, or fork-mounted Anything Cages. For loads over the 50 kg (110 lb) rack limit and up to the 84 kg total limit, weight **MUST** be distributed to the front of the bike via frame bags, handlebar bags, front racks, and/or fork-mounted Anything Cages, as the load limit of the rear rack cannot be exceeded. When loading the front of the bike it is best to load the heaviest items closest to the front axle (in the bottom of pannier bags if a front rack is used) or in

Anything Cages mounted to the fork legs. If a handlebar bag is used, reserve this bag for high-volume, low-density items like clothes, tent, sleeping bag, etc. because its higher position has more influence on steering than the lower mounting position of Anything Cages and/or panniers.

Additional Accessories

The rear rack features six M5 x 0.8 bosses on the top rails which allow for a custom-made deck to be attached. Canvas, HDPE sheet stock, or wood make excellent deck materials and can help prevent gear on the deck from getting into the tire, as well as keep mud and debris from the rear tire getting on your gear. The Blackborow frame, rack, and fork are capable of having fenders attached, although no fenders for this application exist.

Please note that the user assumes all responsibility and risk if custom fenders, top decking, bags, or other accessories are mounted. Any such accessory mounted should maintain at least 6 mm or more of clearance from any rotating part and suitable "break away" connections should be employed in any fender's attachment design (most notably at the front wheel) to help prevent the fender getting caught in the wheel and suddenly arresting the wheel's movement, raising the risk of a fall and serious injury.

Ongoing Maintenance

Before every ride carefully inspect your bicycle and rear rack for signs of fatigue. If any part of the rack or bike shows signs of damage or fatigue, consult your dealer before riding the bicycle.

⚠ WARNING: Improper installation of bolts may lead to product failure, causing serious injury. Do not exceed specified torque values. Periodically inspect bolts and retighten if required. Frequently check to make sure that all of the rack hardware is properly torqued per these instructions. Check to make sure that the rack mounting bolts are properly tightened and secure the rack to the bicycle frame. Periodically check for any signs of cracking or failure and discontinue use if rack is damaged.

SERIAL NUMBER: _____

Write down the serial number for your Blackborow immediately. The number is stamped into the bottom of the bottom bracket shell. Having this number is imperative if your bike ever gets stolen or if you ever have questions about your frame.

Warranty

Proof of purchase is required before a warranty claim is processed. Salsa Cycles therefore strongly encourages warranty registration at salsacycles.com. Failure to register will not affect consumer rights under the limited warranty stated above, so long as the consumer can show in a reasonable manner proof of original ownership and the date the Salsa Cycles product was purchased.

If you have any questions contact warranty@salsacycles.com or visit salsacycles.com/support for more warranty information.

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For additional product and safety information go to salsacycles.com/safety