



Velo Porter 2

two position bike rack

Specifications

Dimensions and Capacities:

Benefit:

27 inches deep from the back of the pivot plate assembly to forward edge of rack in the deployed position. 56 inches wide.	All bikes fit into the rack in exactly the same manner.
The carrier accommodates all bicycle types with a wheel size of 16 inches or larger, excluding tandems and recumbents.	This accounts for the majority of the bicycles commonly used.
Lifting weight to operate the rack is less than 20 pounds.	Lifting weight allows easy operation of the rack and falls well below OSHA and NIOSH limits
The carrier is able to support up to a 250 pound centrally located static load when it is deployed and the vehicle is not moving.	The design takes into account some misuse, including having someone climb onto it to gain access to a mirror or window.
The carrier accommodates tire widths up to three inches.	Addresses growing trend of wide mountain bike tires.
The carrier accommodates a maximum wheelbase of 48 inches.	This accommodates the majority of bicycles.

Safety and Construction:

Benefit:

The carrier employs two Injection molded composite wheel trays.	Provides added measure of safety due its flexibility. Lighter weight than the conventional steel design.
The rack is Modular constructed.	Allows certain components to be replaced due to collision damage or abuse. Eliminates the need to replace entire rack.
The main frame is one piece bent tubular constructed.	Reduces welds providing more corrosion resistance along with increased strength and rigidity.
The front wheel stop and support arm assembly are integrated.	Supports modularity concept allowing damaged parts to be quickly and easily replaced.
Injection molded support arm handle with two points of tire contact on 700c wheels.	Provides multiple points of contact on most popular wheel diameters while also accommodating wheels ranging from 16 inches to 29 inches in diameter.
The carrier contacts the bicycle's tires only - no contact is made with the frame of the bicycle.	This assures the user a scratch free trip every time.
The carrier, when stowed allows the safe operation of the coach by locking in place via the latch pin in the pivot plate assembly quadrant.	Keeps bikes safe and secure while the coach is in motion and the rack in place when not in use.
All outside corners of the rack are rounded.	Rounded corners are friendly to users' legs when loading and unloading their bicycle. This also reduces wear on bus washing systems.
The carrier does not have any straps or cords to attach the bicycle.	No straps or cords to wear out during the service life of the unit, further minimizing maintenance costs.
A minimum number of parts are used on the carrier, and there are no loose parts.	Easy to maintain and simple to understand. Eliminates the risk of losing a valuable part rendering the rack unusable.
All hardware is made of stainless steel	Ensures a long corrosion free existence.
The carrier is equipped with a user activated "release latch" with injection molded ergonomic handle to deploy the carrier.	This keeps the rack stowed until the user chooses, again reducing the risk of injury. The injection molded handle provides comfortable stowing and deployment while reducing weight.
The carrier is mounted to the front of the bus and has a deployed and stowed position.	Increases rack and bicycle visibility for the operator and allows the bus to retain its maneuverability when in the stowed position.
The carrier, when in use does not interfere with access panels or windshield wipers.	We designed the rack to fit as close as possible all the while reducing interference with the face of the coach, including, wipers, vents and access panels.
The bicycle rack support arm is self-storing, retained in the stored position by a latch.	The support arm requires no action from the bicycle rider for proper storage. The arm is simply pulled away from the bicycle tire and released. The latch prevents the support arm from hitting the front of the bus when the carrier is folded up.
The mounting bracket has multiple holes for changing the height of the bike rack.	This allows the installer to customize the load and approach angle height specific to the coach and in some cases specific to particular transit routes.
The carrier does not employ the use of any surface lubrication	This "dry" operation eliminates the need to lubricate moving parts. Eliminating the need for liquid lubricants greatly reduces the likelihood of binding due to road debris build-up in moving parts.
The pivot plate assembly is designed to accept all Sportworks mounting brackets in a like manner.	Allows for compatibility between different types of transit coaches.

Operation:

Benefit:

The carrier is oriented to load and unload from the "curb-side" or front of the vehicle.	Ensures the user is in a safe location when using the rack.
The carrier is clearly marked with easy to follow instructions for operation.	Educates the user as to the correct orientation of the bike when loading, further ensuring the shortest loading and unloading time possible.
Specific orientation of the pedals is not required when using the rack.	Decreases potential damage to the bicycle being loaded and to an already loaded bicycle and reduces load and unload time.
The bicycles may be independently loaded and unloaded.	Allowing the user to remove only their bicycle, further enforcing quick loading and unloading.

© 2005 SPORTWORKS NORTHWEST INC. PATENT 5,692,659 AND 6,053,336 OTHER PATENTS PENDING
 – MADE IN THE U.S.A.

15540 Woodinville Redmond Rd NE #A-200 · Woodinville, WA 98072 · 425-483-7000 · fax 425-488-9001 ·
www.bicycleracks.com · e-mail lisaf@sportworks.com or mikew@sportworks.com