



Trilogy™

Three position bike rack p/n 100546

Features & Benefits

- The rack contacts bike tires only – no contact to frame means no damage to bicycles
- The rack doesn't require any straps or cords to retain bike – this translates to quick loading and unloading keeping it simple for the passenger and the bus on time
- A minimum number of parts are used on the rack – easy to maintain and simple to understand
- The rack accommodates tire sizes from 20" to 29"/700c and up to a 44" wheel base – fits the majority of commonly used bikes
- Lifting weight to operate the rack is less than 30lbs – this falls well below OSHA and NIOSH limits

Available Options

- Stainless Steel P/N 100567
- Advertising Frame Kit, 13 x 32 P/N100756
- Multi-Language Decals-P/N various
- Deployment Kit-P/N 100546-DPLY
- Or 100501 for existing rack
- Ten Second Bracket (TSB)-P/N various
- Various powder coat color options

Bid Specifications

Dimensions and Capacities	Benefit
1) The bicycle rack shall be capable of carrying three bicycles.	Allows customers with bicycles to access the transit system.
2) The three bicycle rack shall not be greater than 30 inches deep nor more than 96 inches wide.	Shares similar deployed distance as our two position racks while adding an additional bike. Rack width is within standard vehicle width.
3) The bicycle rack shall accommodate bicycles with wheel sizes from 20 inches to 29 inches, excluding tandems and recumbent bicycles.	Accommodates the majority of bicycle <u>wheel</u> sizes
4) The bicycle rack shall accommodate bicycles with a wheelbase dimension of up to 44 inches.	Accommodates the majority of bicycle <u>frame</u> sizes
5) The bicycle rack shall accommodate tire widths up to 2.35 inches.	Accommodates most mountain bike tires.
6) The bicycle rack shall be 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.
Safety and Construction	Benefit
1) The carrier contacts the bicycle's tires only - no contact is made with the frame of the bicycle.	With no contact points on the frame there is a minimal chance of damage to bicycles on the rack.
2) 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.
3) Finish on mild steel parts is powder coated to resist corrosion. Stainless steel is also available and recommended for harsher climates and conditions.	Durable, time tested finish and materials that retain their good looks and protect the rack from corrosion.
4) Continuous support shall be provided for the rear wheel of the bicycle allowing it to be rolled into the position closest to the bus without lifting	Allows the rider to easily load and unload a bicycle in the position closest to the bus by rolling it into position rather than being forced to lift it into position risking possible back injury.
5) The bicycle rack shall be mounted to the front of the bus and shall have a deployed and a stowed position.	Increases rack and bicycle visibility for the operator and allows the bus to retain its maneuverability when in the stowed position.
6) The bicycle rack shall latch securely in both the stowed and the deployed positions.	Keeps bikes safe and secure while the coach is in motion and the rack securely stowed when not in use.
7) The bicycle rack shall contact the bicycle's tires only - no contact shall be made with the frame of the bicycle.	This assures the bicycle rider a scratch free trip every time.
8) All outside corners of the bicycle rack shall be rounded.	Rounded corners are friendly to users' legs when loading and unloading their bicycle. This also reduces wear on bus washing systems.
9) Attaching a bicycle to the rack shall not require the use of any straps or cords.	No straps or cords to wear out during the service life of the unit, further minimizing maintenance costs.
10) The bicycle rack, when in use shall not interfere with bus access panels or windshield wipers.	The rack fits as closely as possible all the while reducing interference with the face of the coach, including, wipers, vents and access panels.
11) The bicycle rack support arm shall be self-storing and retained by a magnet, requiring no action from the bicycle rider for proper stowage.	The arm is simply pulled away from the bicycle tire and released. The magnet prevents the support arm from hitting the front of the bus when the bicycle rack is folded up.
12) The bicycle rack shall be compatible with a mounting bracket that can be completely removed from the bus in less than ten seconds.	Allows the rack with the bracket attached to be quickly removed from the bus in the field for towing or in the shop for seasonal removal or repair.
13) Maintenance of the bicycle rack shall not require the use of any surface lubrication.	Eliminating the need for liquid lubricants greatly reduces the likelihood of binding due to road debris build-up on moving parts.
14) The bicycle rack shall be designed specifically for commercial transit use and not for consumer use.	The transit environment will quickly destroy a rack made for occasional consumer use.
15) The bicycle rack manufacturer shall have a sum of at least 10,000 racks installed at a minimum of 50 transit agencies in North America.	This insures the bicycle rack is a product which is proven in the marketplace
16) The bicycle rack shall include a warranty against manufacturing defects for a period of one year.	The manufacturer stands behind the product.
Operation	Benefit
1) The bicycles shall be able to be loaded and unloaded independent of each other.	Allows the user to remove only their bicycle, further promoting quick loading and unloading.
2) The bicycle rack shall be designed such that the bicycle rider is encouraged to load and unload the bicycle from either the "curb-side" or front of the vehicle.	Ensures the bicycle rider is in a safe location when using the rack.
3) Lifting weight to stow the bicycle rack shall be less than 30 pounds.	Allows easy one-hand operation and falls well below OSHA and NIOSH limits.
4) The bicycle rack shall be 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.
5) Orientation of the pedals by the bicycle rider shall not be required when using the rack.	Decreases potential damage to the bicycle being loaded and to a previously loaded bicycle. Reduces load and unload time insuring schedule compliance.
6) The bicycle rider shall be able to move the bicycle rack from the deployed to the stowed position or the reverse using only one hand.	Allows the bicycle rider to deploy the rack for loading or to stow the rack while using the other hand to hold their bicycle. This also reduces load and unload time insuring schedule compliance.