

Model 103D Bike Rack

WARNING: Bikes or rack falling in road can cause serious accidents resulting in bodily injury - do not use rack on any vehicle on which it can not be properly mounted as described in this instruction sheet.

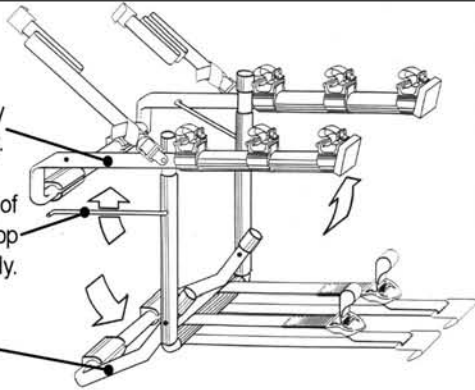
- Top hooks must be completely hooked over solid metal edges at top/front of trunk lid or rear door - never hook to rain gutters, roof racks, vertical rear glass, rubber or plastic moldings.
- Mount rack only with bottom feet on a rigid surface of car (never on glass), and with bottom foot assembly completely extended. Never use on trailers or front of vehicle.
- Never carry more than 3 bikes (**max. capacity: 100 lb.**) - no tandems, mopeds, or recumbents. Bikes must be securely tied to rack - use individual bike tie-down straps or additional straps if necessary. Car tail lights must remain visible.
- Drive conservatively, especially over bumps (never off-road). Check periodically during use that all straps are tight and bikes are secure.
- Do not use if any part of rack is damaged or missing. Contact R. A. Allen Co., Inc. for replacement parts.

Caution: Use Allen 103D only in accordance with local motor vehicle and traffic regulations.

- To avoid damage to rear door or trunk, do not open trunk or rear door when hooks or rack are in place.
- Install rack and load bicycles only at a safe distance away from moving traffic.
- Only rubber feet and hooks should come into contact with car. Do not allow metal parts of rack or bicycles to scratch car's finish.
- Make sure that all of rack and bicycles are kept at a safe distance from road and hot exhaust.
- Remove rack from car when not in use.

A. Setting up rack:

1. Fold out top-foot/ carry arm assembly.
2. Insert pins at ends of wire struts into holes in top foot assembly.
3. Completely fold out bottom-foot assembly.



B. Mounting rack on vehicle:

1. Make sure that contact surfaces between car and rubber feet are thoroughly clean and free of any dirt, and that all rubber feet remain properly spaced during use.

Drawing A



Drawing B



2. Only thread top straps through metal buckles as shown in **Drawing A**. Never thread straps through first slot in metal buckles as shown in **Drawing B**.

4. Set length of top straps to position rack with its carry-arms inclined slightly upwards (above the horizontal), and high enough to keep bikes away from road and exhaust [for drawing of rack on sedan style vehicle, see page 2 of instructions].

5. After length of top-strap is set, tie a half-hitch knot at each metal buckle as shown in

Drawing A.

6. Once rack is installed, bottom foot assembly must be held against vehicle in its completely open position.

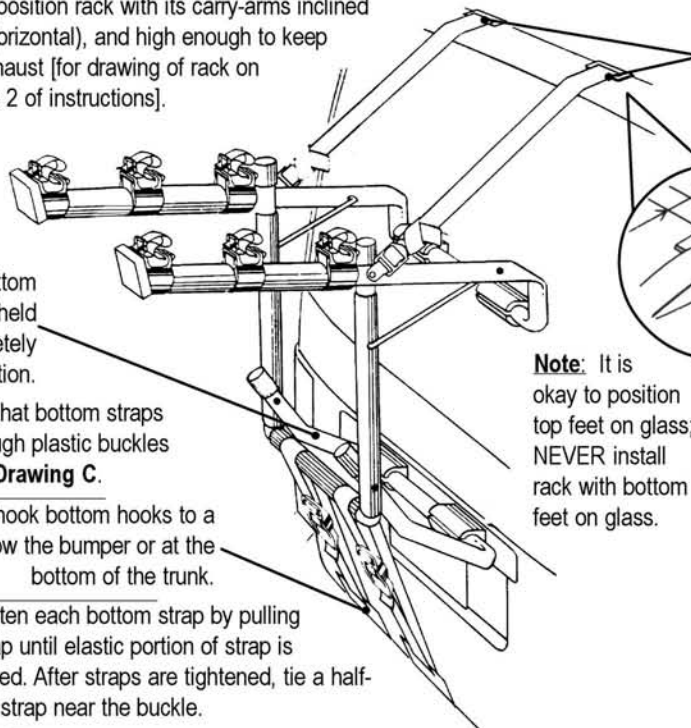
Drawing C



Note: Make sure that bottom straps are threaded through plastic buckles only as shown in **Drawing C**.

7. Completely hook bottom hooks to a metal edge below the bumper or at the bottom of the trunk.

8. Completely tighten each bottom strap by pulling on free end of strap until elastic portion of strap is completely stretched. After straps are tightened, tie a half-hitch knot in each strap near the buckle.



3. Top hooks must be completely hooked over solid metal edges at top of trunk, rear door, or hatchback. Never hook to rain gutters, roof racks, vertical rear glass or plastic moldings. Open trunk/ hatch slightly for easiest attachment of hooks. Be careful that hooks do not bind when trunk/ hatch is opened or closed.

Note: It is okay to position top feet on glass; NEVER install rack with bottom feet on glass.

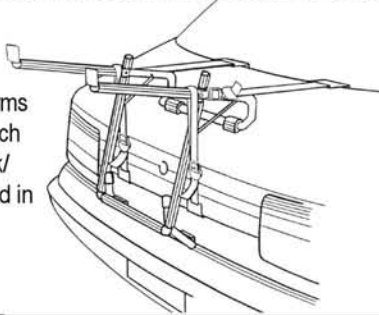
- 3A. To secure top hooks on vehicles without adequate clearance at the top edge of rear trunk/ hatch: Unthread top straps from metal buckles and open rear trunk/ hatch. Place top hooks inside of vehicle (just inside of top edge of rear trunk/ hatch). **Carefully** close rear trunk/ hatch on top straps, making certain that hooks do not bind between frame and rear door. Important: with rear door closed, pull top straps to bring hooks up tight against inside of vehicle. Re-thread top straps through metal buckles as shown in **Drawing A**. Mount rack on vehicle.

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C. Alternate method #1 for Bottom Straps:

Use if there is no metal edge below bumper for attachment of hooks.

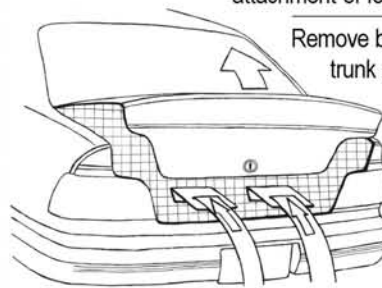
Loop bottom straps over carry-arms near the top metal buckles. Attach hooks to lower edge of rear trunk/hatch; tighten straps as described in section B.



D. Alternate method #2 for Bottom Straps:

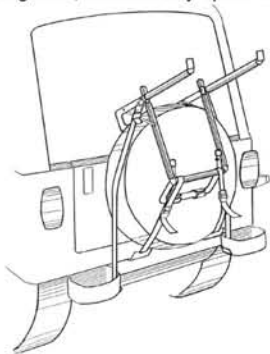
Use if there is no metal edge below bumper or on the trunk for attachment of lower hooks.

Remove bottom straps from rack. Open trunk slightly and place bottom hooks just inside trunk/hatch. Carefully close trunk on bottom straps. Pull straps to bring hooks against inside of trunk. Mount rack onto car, rethread straps and tighten as described in section B.



E. Mounting rack onto spare tires:

Never use rack on oversized tires, or trailers. Make sure that spare tire is securely mounted to vehicle and that it is fully inflated. Before mounting rack, remove any spare tire cover that may be damaged by rack.



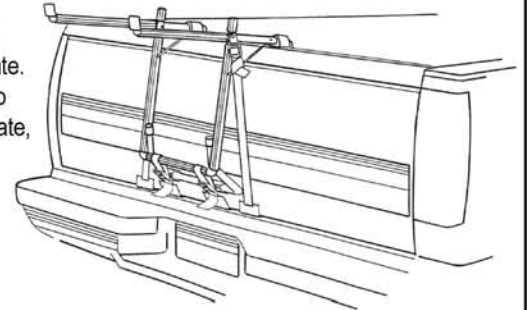
Hook bike rack's top-foot assembly over top of spare tire so that top feet are positioned completely behind tire. Top straps go down each side of tire. Secure all 4 hooks to a metal edge below spare tire. Completely tighten all straps. With off-center spare tires, make sure that bikes do not extend beyond side of car.

F. Mounting rack onto pickup trucks:

Make sure that tailgate is securely latched.

Position top 2 rubber feet so that they will be against the top edge of the tailgate.

Hook rack's top-foot assembly over tailgate. Secure all 4 hooks to bottom edge of tailgate, then completely tighten all straps.



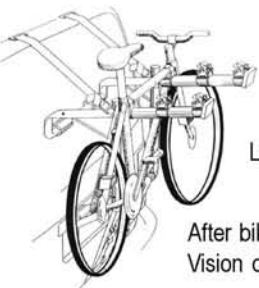
G. Loading bicycles onto rack:

Remove all loose items from bikes (pumps, bags, etc.) and check that all quick-release hubs are tight. Never carry more than 3 bikes (max. capacity: 100 lb.). Car tail lights must remain visible.

Load first bike with its chain and gears facing away from rack. Make sure that bikes do not come into contact with car (rotate inside pedal if necessary). Rotate tie-down cradles to accommodate women's style frames.

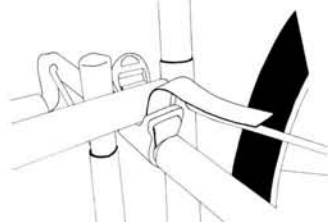
Load subsequent bikes in alternating directions. For best weight distribution, load heaviest bikes first with lighter bikes on outside. Add padding between bike contact points.

After bikes are loaded, check and retighten all straps, making sure that rack is still firmly held against car. Vision out of rear window may be restricted - use side mirrors accordingly, especially when backing up.

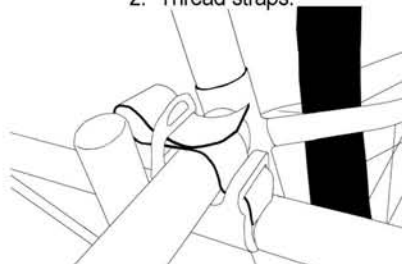


H. Securing bikes to rack: All bikes must be securely tied to rack. Use individual bike tie-down straps or additional straps if necessary.

1. Place bikes in tie-down cradles.



2. Thread straps.



3. Pull tight.

