

#### **ROOF RACK INSTALLATION INSTRUCTIONS (ALL RAIL LENGTHS)**





1549 US Highway 21 South Sparta, NC 28675 336-372-2545 customerservice@perrycraft.com www.perrycraft.com



### ROOF RACK INSTALLATION INSTRUCTIONS (ALL RAIL LENGTHS)



Before contacting/returning this product to your place of purchase, contact *Perrycraft, Inc.*® at 336-372-2545 for any technical questions, problems, missing parts, etc., upon opening your product and verifying all parts are present.

**RETURNS:** Any product to be returned must be returned to the place of purchase, and is subject to the seller's returns policy. DO NOT return to Perrycraft unless instructed to do so in writing.

#### **IMPORTANT NOTES:**

**RACK LOCATION:** Perrycraft's products are manufactured to be installed into the skin of the roof panel of vehicles. They are not designed to line up or be installed at the factory fitment points available on some vehicles. **INSTALLATION HARDWARE:** The included hardware pack contains screws for securing this rack to a sheet metal roof or metal surface. To install this rack on fiberglass or composite camper tops, tonneau covers, or Jeep<sup>©</sup> tops, please contact your seller to purchase hardware pack HWDSTC-UV, or call 336-372-2545 to purchase directly from *Perrycraft, Inc.*®

SIDE RAIL CURVATURE: Perrycraft, Inc.® manufactures racks and rails that are size specific, not vehicle specific. Therefore, the bow of the rails (front to back) may need adjusting. Place the rails (without the stanchions) on the roof in the desired location. Ideally, the rails should match the roof curvature. The ends of the rails should touch the roof and the center should be no more than 3/16" off the roof surface. The rails can be adjusted (more bow or less bow) by placing the ends of the rails on supports and either pressing down from the top (to take away bow), or pressing down from the bottom (to add more bow). Rails are heat treated aluminum, therefore, very strong. Several attempts of adjustment may be required to get the correct curvature.

### **ITEMS NEEDED (NOT INCLUDED)**

- Measuring Tape •
- Masking Tape
- Marker
- Drill
- 1/8" and 3/16" Drill Bits
- **Phillips Screwdriver**

- Hammer
- Adjustable or 7/16" Wrench
- Rag and Cleaner for roof

Retain these instructions. They are useful if contacting Perrycraft for information, parts, or service.

### CONTENTS:

- 2 Side Rails (Rails will be 2" shorter than last two numbers of part number (ex. SQ5550-B, rails are 48")
- 2 Cross Bars (Either 55", 62", or 70")
- 4 Stanchion Assemblies
- 1 Hardware pack
  - $\circ$  4 1/4" Stainless Steel Flat Washer
  - $\circ~$  1 3/16" Allen Wrench
  - 8 #10 x 1/2" Truss Phillips Screw Black Waxed (8 screws for 40" rails, 10 for 50", 12 for 60", 14 for 70", and 16 for 80")
  - $\circ~$  4 #10 x 3/4" Pan Phillips Screw Waxed
  - $\circ \quad 4-1/4'' \ x \ 20$  Stainless Steel Nylon Lock Nut
  - 4 1/4" x 20 x 7/8" Stainless Steel Socket Head Cap Screw
  - $\circ \quad$  4 3/16" x .469 Aluminum Drive Rivet
  - 4 SportQuest Rail Bracket Knob
  - 4 SportQuest Rail Bracket
  - 4 SportQuest/SporTrek Rail End Cap
  - 4 SportQuest/SporTrek Rail Tie Down Loop
  - 4 SportQuest Stanchion Plug
  - 4 SportQuest Cross Bar End Cap

## ASSEMBLY AND INSTALLATION:

SportQuest<sup>®</sup> racks can be configured in two specific ways, Pass-Through Fit or Stanchion Fit. Pass-Through Fit is using the cross bars in the purchased length and letting them pass through the stanchions. However, they can be cut down to any desirable length. Stanchion Fit is cutting the cross bars to fit exactly into the stanchions and installing the stanchion plugs to get a more factory style look. The included hardware and plugs will either be utilized for the Stanchion Fit configuration, or will be discarded if choosing Pass-Through. The cross bar end caps will be discarded if choosing the Stanchion Fit.

Assembly and installation will include placing the rails and end caps parallel on the roof and marking the hole locations, removing the rails and drilling holes at the marked locations, cleaning the roof and installing the rails and end caps, then assembling and installing the cross bar assemblies.

### PASS-THROUGH CONFIGURATION:

1. Slide 2 Tie-Down Loops onto the middle of each Rail.

2. Place rails onto roof in desired location (approximately 2-3 inches forward of the back hatch joint) and running parallel with each other.

- For a smooth roof, the rails should be placed out as close as possible to the weld joint (or close to the plastic strip running front to back), while remaining on the flat part of the roof and parallel with each other.
- For vehicles with ribbed roofs, the rails should be placed on a plateau or in a valley near the outer edges that is wide enough for the rails, while remaining on a flat part of the roof and parallel with each other.

3. Tape rails to roof, making sure to avoid hole locations. Also, place end caps on the ends of each rail.

4. Mark hole locations and remove rails and end caps.

5. Drill pilot holes where marked using 1/8'' drill bit going no deeper than 1/2'', being careful not to penetrate interior headliner. Clean roof, removing all drill chips.

6. Place rails back onto roof, lining up with drilled holes. Using hand screwdriver, secure rails to roof using supplied  $#10 \times 1/2$ " truss head waxed screws. Do not overtighten. Snug is enough.

7. Using hand screwdriver, secure end caps to roof using  $#10 \times 3/4''$  pan head waxed screws. Do not overtighten. Snug is enough.

8. Install two stanchions on each rail by hooking the stanchion bracket under the rail lip, sliding the connecting arm of the stanchion assembly on top of the stanchion bracket, and inserting the bracket knob into the stanchion bracket. Place the assemblies (one forward and one back) directly across from the other and tighten the knob.

9. Insert cross bars into stanchions and center, so that the same amount of cross bar is sticking out of each stanchion. Using a short pencil or marker, mark the hole closest to the center of the vehicle on the underside of each stanchion. This is where a hole will be drilled and the rivet will be driven in order to connect the cross bars to the stanchions.

10. Remove cross bars, turn them over, and place on a non-marring surface.

11. Drill 3/16" hole at marked locations, being careful to only drill through half of the cross bar (not all the way through both walls).

12. Insert drive rivets into holes and hammer the pins until flush with the rivet head.

13. Install cross bar end caps.

14. Reinstall cross bar assemblies back onto rails. If installed correctly, cross bar assemblies should be able to move to various positions along rails. Tighten bracket knobs when satisfied with location of cross bars.

### **STANCHION FIT CONFIGURATION:**

1. Slide 2 Tie-Down Loops onto the middle of each Rail.

2. Place rails onto roof in desired location (approximately 2-3 inches forward of the back hatch joint) and running parallel with each other.

• For a smooth roof, the rails should be placed out as close as possible to the weld joint (or close to the plastic strip running front to back), while remaining on the flat part of the roof and parallel with each other.

3. Tape rails to roof, making sure to avoid covering hole locations. Also, place end caps on the ends of each rail. 4. Mark hole locations and remove rails and end caps.

5. Drill pilot holes where marked using 1/8'' drill bit going no deeper than 1/2'', being careful not to penetrate interior headliner. Clean roof, removing all drill chips.

6. Place rails back onto roof, lining up with drilled holes. Using hand screwdriver, secure rails to roof using  $#10 \times 1/2^{"}$  truss head waxed screws. Do not overtighten. Snug is enough.

7. Using hand screwdriver, secure end caps to roof using  $#10 \times 3/4''$  pan head waxed screws. Do not overtighten. Snug is enough.

8. Measure and make note of outside to outside dimension of rails. This measurement should be the same along the entire length of the rails.

9. Square cut cross bars 6 - 1/2'' less than noted measurement. If measurement is 44'', cross bars will be cut to 37-1/2'' inches. File or sand ends of cross bars to remove any burrs.

10. Install stanchion plugs into all four stanchions using 1/4"-20 x 7/8" cap screws, 1/4" flat washers, and nylon lock nuts.

11. Insert cut cross bars into stanchions so they butt against stanchion plugs. Turn cross bars upside down and drill 3/16" hole through remaining hole on stanchion, being careful to only drill through half of the cross bar (not all the way through both walls).

12. Insert drive rivets into holes and hammer the pins until flush with the rivet head.

13. Reinstall cross bar assemblies back onto rails. If installed correctly, cross bar assemblies should be able to move to various positions along rails. Tighten bracket knobs when satisfied with location of cross bars.

#### NOTES AND WARNINGS:

- For vehicles with ribbed roofs, the rails should be placed on a
- plateau or in a valley near the outer edges that is wide enough for the rails, while remaining on a flat part of the roof and parallel with each other.
- All fasteners, knobs, and securing methods should be checked frequently and tightened as necessary.
- It is recommended that the cross bars and any accessories be removed when not transporting items and before entering a car wash.
- Do not use rack if a part is cracked or broken. Contact *Perrycraft, Inc.*<sup>®</sup> by phone at 336-372-2545 or e-mail to <u>techsupport@perrycraft.com</u> for assistance with purchasing a new component.
- External roof racks do not increase the GVWR of the vehicle. Total occupant and cargo load should not exceed the manufacturer's rated vehicle capacity.
- Maximum load for this rack is 180 pounds, evenly distributed on the cross bar assemblies Torque applied to any straps, cords, etc. holding down gear or equipment also increases the "load weight" to the cross bars and roof.
- Large or flat items such as plywood, ladders, lumber, hang gliders, canoes, kayaks, etc., can trap air and create wind lift. Secure the ends of long objects directly to the front and back bumpers or tie-down positions.
- Bulky or tall loads can create tremendous horizontal wind resistance from headwinds and crosswinds. Extreme caution should be used when transporting such loads.

# Perrycraft, Inc.® Warranty Agreement

### Three Year Limited Warranty

**Perrycraft, Inc.**<sup>®</sup> warrants this product against defective materials and workmanship to the original owner for a period of three (3) years from purchase/install date. This warranty is not valid if product is transferred to another person. **Perrycraft, Inc.**<sup>®</sup> provides no warranty and accepts no liability for normal wear and tear, incorrect installation, damage to vehicles, property, and/or equipment, nor damage arising from improper use. The sole remedy under this warranty agreement is replacement of component parts during the warranty period. You may be required to send in the component in question (at your expense) to have the part evaluated for a warranty claim.

If you have a warranty issue, and for faster service, please email a digital photo of the product/component in question, a brief description of the situation, and a copy of your purchase receipt to <u>techsupport@perrycraft.com</u>. Our staff will contact you as soon as possible to resolve the issue.

## **Registering Your Perrycraft Product**

Thank you for your purchase of our product. Our goal is to manufacture quality products that meet or exceed your expectations. We want to make sure the product you have is registered with us in case there are any issues that may arise. Please register your product by sending an email to <u>customerservice@perrycraft.com</u> with your name, product purchased, purchase date, install date (if different than purchase date), phone number, and a scanned copy of your receipt. We promise not to send spam emails, but may contact you periodically with updated product information, questions about your usage for research purposes, or safety information.

**Perrycraft, Inc.**<sup>®</sup> does not assume responsibility for style or size of rack installed, improper rack installation, exceeding rack load limit, load securing methods, vehicle roof strength, wind lift or any other factors beyond its control. Wind noise is a definite when carrying items on top of a vehicle. It is also possible with nothing on the bars. Sometimes wind noise can be alleviated by moving the front cross bar toward the rear of the vehicle. If wind noise persists, remove cross bars when not transporting items, or a wind fairing may need to be purchased and installed.