U.S. RACK,™ Inc. - 2850 Falcon Drive, Madera, CA 93637 - 559-661-3050

INSTRUCTIONS for WOODY RACK ON TOYOTA TACOMA and TUNDRA with DECK RAIL SYSTEM and for the NISSAN FRONTIER AND TITAN with UTILI-TRACK SYSTEM

WARNING: Do NOT attempt to install or use this rack without following all instructions.

SPECIFICATIONS and SAFE LOADING REQUIREMENTS

These instructions are intended for use only upon the Toyota Tacoma or Tundra with Deckrail System or the Nissan Titan or Frontier with Utili-Track system. This rack is designed to contain cargo within the bed of the truck and to carry aloft ladders, boats, canoes, kayaks, lumber, or other cargo not exceeding 300 lbs.

This rack is designed to carry loads, which are spread across the width of the support spans and shared evenly between the front and rear spans. It is not designed to carry loads where a force of over 50 lbs. is concentrated on any space less than 12 inches wide along either span or where a force of over 250 lbs overall is loaded on either the front or back truss. This product is not warranted for use off-road or on unimproved or poorly maintained or bumpy roads. All loads must be tied down securely to the rack to prevent them from vibrating or sliding forward, backward, laterally or being blown off or broken by wind. U.S. Rack does NOT warranty any automotive product and does not warranty truck bed rails against damage caused by the weight of excessive loads being applied to them when the rack is installed on a vehicle. **U.S. Rack is not responsible for injury or property damage resulting from the rack being improperly installed or improperly loaded, nor is it responsible for injury or property damage resulting from loads or parts of loads falling or being blown off a vehicle.** Loads extending beyond the rear bumper of the vehicle must be designated with a red flag during daylight or red light during darkness in accordance with the state vehicle code.

BE SAFE: Carrying any load can be hazardous. Make sure all parts of all loads are securely tied down against unexpected winds and vibrations caused by road hazards such as potholes. Check each time you install the rack, load the rack, as well as daily to ensure that all connections are tight. Avoid roll over. As with all racks, ensure that loads are not top-heavy. Loads should be placed so that the center of mass of the load is no closer that 24" from the sides of the rack. High loads must be transported with GREAT CAUTION to prevent loads from striking low overhead objects and from tipping during turns, abrupt stops, or high winds.

INVENTORY

Your safety is paramount. Before assembling the rack, inventory and inspect all parts. Visually check each part to ensure it corresponds to the inventory list and check all welds for signs of cracking or weakness. If you do not have all the correct parts, or if any parts appear to be defective; STOP; do NOT install the rack. Contact customer service at 1-888-877-2257 to replace missing or defective parts. If you have any questions about installation, call customer service.

Fig. 1

Fig. 2

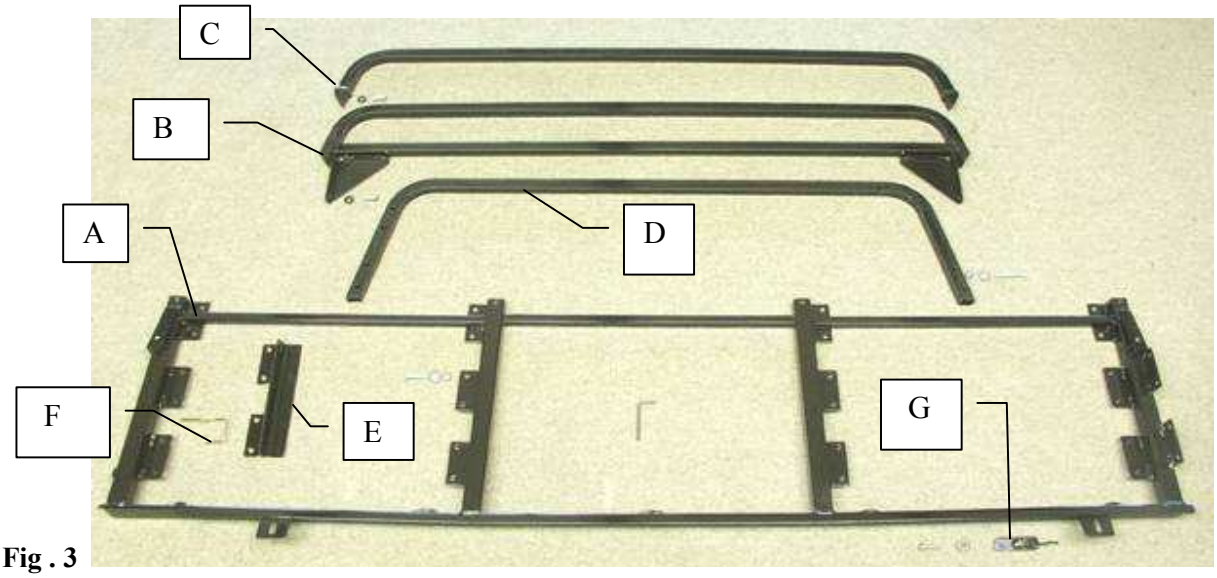

Fig . 3

The Woody Rack consists of the parts shown in Fig. 3:

A. Side Frame (x2)
B. End Truss (x2)
C. Overhead Spanner (x2)
D. End Bar (x2)
E. Tailgate Angle (x2)
F. Latch Pin (x2)
G. Insert Plate (x2)
H. Hardware which is included: 3/8-16 x 1" Button Head Cap Screws (x8), 3/8-16 x 1.25" Button Head Cap Screws (x4), Black nylon washers (x12), 5/16-18 x 1.25" carriage bolts (x48), 5/16-18 x 2.25" carriage bolts (x16), 5/16-18" hex nuts (x64), 5/16" metal washers (x64), Allen wrench (x1).

NOTE THAT SCREWS AND SMALL PARTS MAY BE FASTENED TO OTHER PARTS.

ASSEMBLY and INSTALLATION

Read ALL instructions through once BEFORE you do anything!

1. **Attach End Trusses to Side Frames**. See Fig. 4. After inventorying and inspecting all parts, examine the Side Frames (A). Notice that each has a rail at the bottom with metal tabs each containing an oval hole. Stand up the frames so that they are parallel and about 4 feet apart with the metal tabs on the inside. Insert the pointed ends of each End Truss down into the tubes on each end of the Side Frames. Orient the triangle shaped gusset with the flat surface on the outside; align the gusset holes with the threaded hole in the inside the Frame. Insert a 1-inch screw with nylon washer into the hole and tighten with the Allen wrench.

Fig. 4

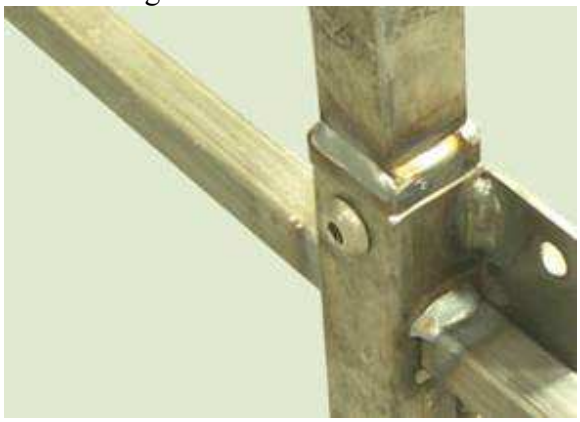

Fig. 5

2. **Attach Overhead Spanners to Side Frames.** See Fig. 5. Place the each end of the Overhead Spanners into the tops of opposing vertical tubes in the Side Frames. Insert a 1-inch screw with nylon washer into the hole and tighten with the Allen wrench. When completed, your rack should appear as in Fig. 6.

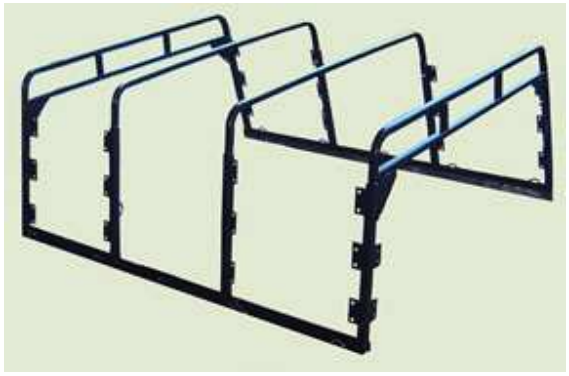

Fig. 6

Fig. 7

3. **Attach Wood Slats to Side Frames.** The Woody Rack can be mounted and used without adding wooden slats to the outside of the Side Frames. The End Trusses are quite strong and can support cargo weighing up to 250 lbs aloft. Since there are tie-down loops on the base rail on each side, cargo can be tied down to hold it in place. To contain cargo more effectively, however, it is possible to add three wooden slats on each side of the rack, to add two on the front, and two on the back. We recommend using commonly available 1 x 4 oak slats (cut thickness is actually ¾" x 3-1/2"). These should be stained and then coated with marine varathane or other exterior coating to preserve the wood after they are cut and drilled but before the slats are attached to the rack. To cut the slats to length measure the distance from the outside of the front of the rack to the outside of the back of the rack and cut each slat to that length. After they are cut, clamp each slat to the Side Frame or otherwise position them horizontally so that they align with the plates with the holes drilled in them. Ensure the slats are parallel and the distance between them is equal and that they don't stick out on either the front or the back of the rack. Center the slats on the plates and mark the holes from the inside. Remove the slats from the Side Frames and using an electric drill with 5/16-inch wood bit drill straight through the slats. Be careful to drill gently through the board as you reach the exterior surface to avoid splintering the surface of the wood. Temporarily install the slats using 1.25-inch long carriage bolts from the outside with a metal washer and nylon lock nut on the inside. When completed, the sides of the rack should look similar to Figs. 1 and 2. *For addition protection against the weather, it is possible for you to have a custom tarp made for your rack to protect the contents in your bed from the weather, as shown in Fig. 7.*
4. **Install Rack on Truck.** Place you rack on your truck. Notice that there is a hole in the vertical stanchions on one end of the Side Frames. This is the rear of the rack. After positioning the rack on the truck, slide the insert plates into the end of the track on the side of your bed as shown in Figs. 8, 9, and 10. Align the hole in the insert plate with the oval hole in the Side Frame and attach with a 1.25-inch screw with nylon washer. Tighten with the Allen wrench firmly, but not so tightly that you damage the threads.

Fig. 8

Fig. 9

Fig. 10

Fig. 11

Fig. 12

5. **Attach Wood Slats to Front.** To cut the bottom slat for the front of the rack requires you to clamp or hold the slats in position so that they align with the bottom slats on the side and extend across the front and past

the slats on each side. Mark the front slat by tracing a pencil on the OUTSIDE of the slats on both sides. Notice that the marks you make will not be perpendicular to the length of the board but rather, it will be slanted. When the slat is cut it will conform to the angle and cover the ends of the side slats. Cut, drill, and temporarily install the bottom front slat, then repeat the process with the slat above it.

6. **Attach the Front End Bar.** The front End Bar is included for optional installation. If it is installed, the End Bar can contain loads being carried in the bed to prevent them from contacting the back of the cab, while allowing better rear view visibility than a slat would allow. To install the Front end bar, position it like a horseshoe with the open side down on the inside of the front slats. Center it and align the holes with the corresponding slats and mark the slats through the holes. Before drilling, look in the rear view mirror, and see if it is necessary to reposition the bar for better visibility. Drill the slats using the 5/16-inch bit and install it using 8 carriage bolts 2.25-inches long with metal washers and nuts as in fig.13. Once the bar is attached to the front slats, it is possible to create a "window" by cutting out the portion of the upper slat between the sides of the bar. This increases visibility but reduces strength. See fig. 14.

Fig. 13

Fig. 14

7. **Attach Wood Slats to Rear.** Pick up and examine the Tailgate Angle. This is part E shown in Fig. 3 and is also shown with the Latch Pin in Fig. 16 from a different perspective. Notice that the Tailgate Angle has two drilled plates to which the slats may be attached. When the two slats are properly attached to the Angles they form a removable gate. Notice also that a hole is drilled through the middle of each Angle, which can receive the Latch Pin. Examine Figs. 15, 16, and 17. Fig. 13 shows the rear of the rack on the passenger side as seen from inside the bed. The vertical stanchion shows two notable features. The first is a hole which corresponds to the hole in the Tailgate Angle; the second is an L-shaped bracket upon which the bottom of the Angle rests, when the gate is attached. Fig. 17 shows how the rack will look when the gate is attached and the Latch Pin is engaged as seen from inside the bed. To attach the wood slats first attach the Tailgate Angles to the stanchions at the end of the Side Frames by placing the bottom of the Angle into the rest and inserting the latch pin to hold the angle in place. Next position, measure, and cut the slats in the same manner as in paragraph 4, above. After cutting, it is necessary to drill holes in the slats to attach them to the Angles. However, <u>Do NOT drill the holes at the center of the mark.</u> Drill the holes about 1/8-inch closer to the midline of the truck. This will mean that the Angles will be about ¼ inch closer to each other and will provide a little space to allow the gate to be lifted up over the top of the L-shaped bracket so the gate can be more easily removed when latch pin is removed.
Note: it may be necessary to remove a portion of wood from back of the bottom of the bottom slat if it makes contact with the L-shaped bracket. When attached the gate should rest fully down in the bracket

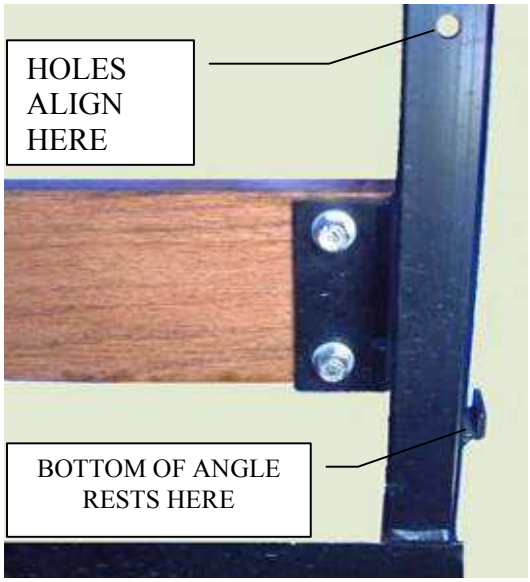

Fig. 15

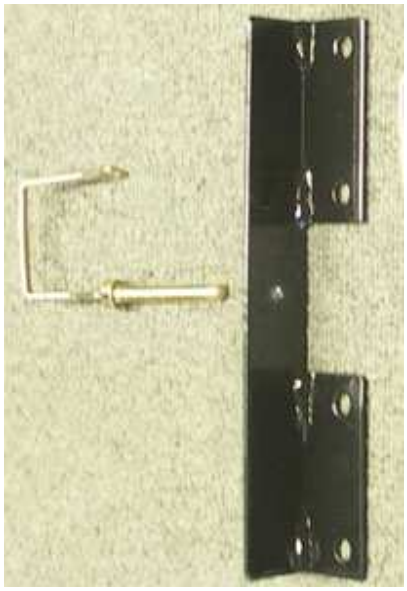

Fig. 16

Fig. 17

8. **Attach the Rear End Bar.** The rear End Bar is included for optional installation. If it is installed, the End Bar can contain loads being carried in the bed to prevent them from falling out of the back, while allowing better rear view visibility than a slat would allow. To install the rear End Bar, position it like a horseshoe with the open side down on the inside of the front slats. Center it and align the holes with the corresponding slats and mark the slats through the holes. Before drilling, look in the rear view mirror, and see if it is necessary to reposition the bar for better visibility. Drill the slats using the 5/16-inch bit and install it using 8 carriage bolts 2.25-inches long with metal washers and nuts. Once the bar is attached to the back slats, it is possible to use it as a handle. See again figs. 13 and 14.
9. **Check for Safety.** Check all connections to ensure that all nuts, bolts, and pins are fully tightened. Check periodically to ensure all fasteners and all cargo you are carrying remain tight.

WARRANTY

U.S. Rack™ products are warranted for a period of one year against all structural defects in materials and workmanship provided that they are assembled, installed, and used in accordance with all manufacturer's specifications and instructions. U.S. Rack **cannot warrant the powder-coating** on its products. Normal use of any powder-coated rack and exposure to weather can result in scratching of the surface, exposing metal below; therefore, maintenance on your rack will be required. To prevent rust, spot paint any scratches or breaks in the surface with a high quality metal paint. Merchandize must be returned in the original box and packaging. See return policies and procedures at http://www.usrack.com/service.shtml