Packing and Unpacking the Rodriguez Toucan Travel Tandem Bicycle

Robert & Maureen O'Hara, September 2007

When packing or unpacking, it is best to do it inside if possible. If you are working on carpet (in your hotel room, for example) spread some newspaper to keep from getting grease on the carpet. Hotel soap does only a fair job of getting grease out of a carpet.

Packing (Disassembly)

- 1. Remove trunk bag, front kit, trip computer, pump.
- 2. Flip bicycle to rest on handlebars.
- 3. Remove chains, put in plastic bags. Now go wash your hands.
- 4. Release brakes and remove wheels. Remove "skewers" from wheels (don't lose the springs), screw them back together and put in plastic bags.
- 5. Remove crank arms with the big black hex wrench and cover with padding.
- 6. Unscrew brake and shift cable connectors. Unbolt shift cable holders from down tube. Now is a good time to wipe down the frame with a paper towel to remove any dirt or grease.
- 7. Place bicycle on side, right (derailleur) side up.
- 8. Remove stoker handlebars. Remove stoker and captain seats, cover posts with plastic bags. Cover stems with padding.
- 9. Unscrew captain handlebars, unscrew fork top cap and remove it, placing it on a clean surface. Remove captain handlebars.
- 10. Remove spacers and place them next to the top cap. Remove brake hanger and place them next to the spacers. Remove final spacer, bearing cover, bearing flange, and bearing. Place them next to the brake hanger.
- 11. Remove the front fork from the frame. The bottom bearing should come out with the fork.
- 12. Drop fork pieces back on the fork in this order: top bearing, bearing flange, bearing cover, spacer, break hanger, all other spacers. Screw top cap onto the fork to hold them all in place. Cover fork with padding: steer tube and right fork blade, then left fork blade.
- 13. Unscrew frame connectors with the special wrench, and cover each center tube section with padding. Cover the front frame with head tube pad, then top tube, then boom tube, then down tube, finishing with captain seat tube pad.
- 14. Unscrew derailleur and cover with padding. Cover the rear frame with boom and keel nubs pad, then the right seat stay, then left seat stay, then stoker seat post, then right chain stay, finishing with left seat stay.
- 15. Place the wrenches in a plastic bag. Go wash your hands again.

Now you are ready to put the parts in the cases.

What Goes in Each Case

The following packing list makes the two suitcases almost identical in weight, about 41 pounds each.

Case 1

- Two wheels (with spacer on each one)
- Two handlebars
- Three frame tubes
- Two stoker cranks
- Captain right crank
- Two chains (in plastic bags)
- Tools (in plastic bags)
- Pump

Case 2

- Front frame
- Rear frame (with rack attached)
- Fork
- Two seats on posts
- Captain left crank
- Front kit bag and trunk for rack

Throw in a couple of extra rags.

Unpacking (Assembly)

- 1. Remove all of the parts from the cases and lay them out. Get the tools out of the bag.
- 2. Unwrap front frame: captain seat tube pad, then down tube, then boom tube, then top tube, finishing with the head tube pad. As you remove each pad, build a "book" of pads by sticking the Velcro together. This way they will be in the right order when you disassemble the bicycle. Unwrap rear frame: left chain stay pad, then right chain stay, then stoker seat post, then left seat stay, then right seat stay, then boom and keel nubs, finishing with the derailleur pad. Unwrap the fork: steer tube and right fork blade pad, then left fork blade pad.
- 3. Assemble frame. First connect the tubes to the back frame, then connect the tubes to the front frame. Hand tighten first, then use the wrench. Don't over tighten!
- 4. Attach derailleur to the right rear frame. There is a tab on the derailleur where it attaches to the frame. It goes to the back of the bicycle. Once you have the mounting bolt started, rotate the derailleur toward the back of the bicycle (counterclockwise) to ensure the tab is in the right position.

- 5. Unscrew fork top cap, then remove all of the components except the bottom bearing and place them on a clean surface, in order. Insert the fork into the front frame (fork blades on the bottom, the same as the derailleur). Place the components on the fork post: top bearing, bearing flange, bearing cover, spacer, break hanger (it points down), then all other spacers. Now place the captain handlebars on the fork post, then screw in the top tube and lightly tighten it. Don't tighten the handlebars yet.
- 6. Install captain and stoker seats, lightly tighten the bolts. Install stoker handlebars and lightly tighten them.
- 7. Flip bicycle upside down and balance on handlebars.
- 8. Bolt shift cable stays to down tube. The shift cable coming from the left handlebar controls the front derailleur, the cable coming from the right handlebar controls the rear derailleur. Connect the shift cable splitters using your fingers. Turn the longer side of the splitter to screw them together. Make sure the cables are routed through their guides on the frame. Connect the rear brake splitter in the same way.

 Insert the skewers into the wheels. The quick release handle goes on the left side of the bicycle, opposite the cogs. Install both wheels and tighten the quick release connectors.

10. Hook up the front and rear brake cables, and make sure they are routed through their guides on the frame. Buttons on the brake levers release them to make this step easier.

- 11. Attach the four crank arms using the large black hex wrench. Make sure the pedals are 180 degrees apart!
- 12. Attach the timing chain, making sure the pedals are lined up.
- 13. Attach the rear chain. See picture for routing. Wash your hands.
- 14. Flip the bicycle upright.
- 15. Align then tighten the captain handlebars, captain seat, stoker handlebars, stoker seat. Check all other bolts for tightness. Check shift and brake cables to make sure they are routed properly.
- 16. Test ride, checking shifting, braking, and steering.

