# How to Pack A Bicycle Box

Correct Packing of Your Bicycle Ensures That All parts Arrive Together And Undamaged at Your Destination.

Ken Hart

## **Before You Start**

# 1) Size Considerations

There are three styles of bicycle box.

# 1) Big Box,

leaves both wheels on the bike.

Often used by bicycle companies to ship new bicycles via trucking companies.

Approx. size: 70" L X 34" H X 8" W

The box is "Double Oversize" for most Airlines and UPS and is not recommended.

2) Medium Box, leaves rear wheel on the bike. Often used to ship new bicycles via UPS. Approx. size: 55" L X 34" H X 10" W

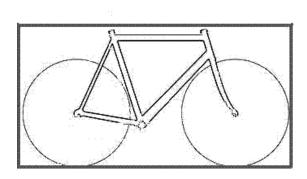
The box is "Single Oversize" for most Airlines and UPS. This size cardboard box is available from bike shops.

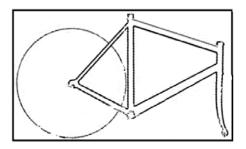
3) Small Box, removes both wheels from the bike. Often used to ship new bicycles via UPS. Approx. size: 45" L X 34" H X 12" W

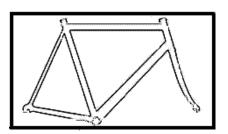
The box is "Standard Size" for most Airlines and UPS. Most shipping cases are this size.

These boxes do vary in size, so if your bike is on the large size, you may need to make sure that your bike will indeed, fit within the bike box that you have.

For the purposes of this article, we are only going to talk about the "Small Box", where both wheels are removed. This is the size that most, if not all, of our athletes are using.









## 2) Tools Needed

- A) Medium weight & size bag (about 5 gal size) to put parts into.
- B) Pipe insulation from hardware store to wrap around frame tubes, for 1" diameter pipe, 6 feet.
- C) Pipe insulation from hardware store to wrap around frame tubes, for 1/2" diameter pipe, 6 feet.
- D) Wrench for removing / installing pedals ( Usually 15mm, or 9/16", or 6mm allen, or 8mm allen)
- E) Wrench for removing / installing seatpost (Usually /2", or 4mm allen, or 5mm allen, or Quick Release)
- F) Wrench for removing / installing stem / bars ( Usually 4mm allen, or 5mm allen, or 6mm allen)
- G) Packing Tape or Duct Tape
- H) 1 gallon size Ziploc bag for smaller parts
- I) Spoke wrench, to touch up wheel alignment during reassembly at destination.
- J) Old towel, for cleaning and padding.

## **Before You Start**

Get a permanent marker and Write your name, address, and phone number on two 3 x 5 cards.

Take some clear packing tape, and attach one card to the inside of the bike case, and one card to the outside of the bike case.

# Going To a Bike Shop

If you are going to have a bike shop pack your bicycle, most of these procedures will be done by them. They will not, however, do ALL of these procedures. Talk to your bike shop, about what you will need to bring when the bicycle is packed. Obviously, you need to bring your bicycle and case. You should also bring the A) bags and B) pipe insulation, as well as the towel from above. We will have a bike shop helping us to reassemble the bicycles, so unless you have some non-standard parts on your bicycle, you should not need to pack any tools for reassembly.

Give your bike shop a call. They can tell you which items to bring, and which parts are non-standard. Also ask your shop how long they will need to package the bike. This time of year, bike shops are busy, and may require up to one week lead time to disassemble and pack.

## 3) Prepping the Bike

Wipe down / clean the bike, paying extra attention to remove any grime on the chain, derailleurs and crankset. Use electrical tape, or a sharpie marker to mark the height of the seatpost and stem. Shift the chain into the largest chainring (front), and the smallest cog (rear).

# **Breaking Down the Bike**

Remove all loose items from the bicycle and place them in a single pile. Things such as seat bag, frame pump, water bottle, etc...

Remove the bike computer and add it to the pile

Remove the front wheel of the bicycle.

If it is a bolt-on wheel, tighten the nuts snugly against the axle spacers, so that they are not lost in transit. If it is a guick release wheel, remove the skewer, and add it to the pile.

Put the front fork spacer into the fork dropouts.

Remove the seatpost from the frame, leaving the seat attached to the post. Snug-up the seatpost binder bolt, to ensure it is not lost in transit. Add the seatpost with seat to the pile.

Remove the pedals and add them to the pile.

( Remember that one pedal is "normal" threaded, and one pedal is "reverse" threaded.)

Take the large size pipe insulation:

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Cut 3 sections to cover the main triangle of the frame. Use the sharpie marker to label each piece for the return trip. Cover the 3 tubes.

Cut 2 more sections, and cover the fork blades. Mark them accordingly with the sharpie.

## Take the smaller size pipe insulation:

Cut 2 sections to cover the seat stays of the frame. Mark them accordingly with the sharpie.

Cut 2 sections to cover the chain stays of the frame. Mark them accordingly with the sharpie.

## Removing the handlebars

If your bicycle has quick release brakes, open the releases to give more slack in the brake cables.

If you have a quill-style stem, loosen the stem bolt, and remove the stem from the fork. You may need to tap the bolt gently with a small hammer to get the stem to release from the fork. Once the stem is out of the fork, snug up the stem bolt so that the quill is not lost in transportation.

If you have a non quill-style style stem, remove the handlebars from the stem clamp. Once the handlebars are un-mounted, re-assemble the stem clamp and snug up the bolts so that the clamp is not lost in transportation.

With some bicycles, you may need to remove the front brake to get enough slack in the cable. If you need to do this, remember to keep the brake mounting bolts to remount the brake during reassembly.

Turn cranks so they are in a 3 o'clock – 9 o'clock position with the left one pointing forward.

## Remove the rear wheel of the bicycle.

If it is a bolt-on wheel, tighten the nuts snugly against the axle spacers, so that they are not lost in transit.

If it is a quick release wheel, remove the skewer, and add it to the pile.

Put the rear spacer into the fork dropouts.

#### Fix the chain

To keep the chain from flopping around, it needs to be tensioned.

There are several options. Some rear dropout spacers have a chain holder.

Other people just use the rear dropout spacer to tension the chain, even though it does not a spot for the chain. Finally, some use a bungee cord or toe-strap to keep the chain from moving around.

## **Putting the Pieces in the Case**

Using the picture below for reference put the bike in the bottom of the case. The chain and gears should be facing up, within the case. Use the foam piece that came with the case to protect the crankset in the bottom of the case.

Now comes the hard part. Find the location within the case where the handlebars will fit the best. This may be one of the following locations: A) wrapped around the top tube or fork, or B) Behind the forks, overlaying the top tube and downtube. Once you find a good location, fasten the bars with straps, ties or tape, so that it will not move within the case.

Lastly, put your tools into the parts bag. Seal up the parts bag, and put it into the main triangle of the frame. Make sure that there are no loose parts attached to the bicycle, and that any parts that ARE loose, are sealed up inside one of the bags. Use the straps inside the case to hold the bike and parts bag in place.

Spread out the towel, to cover the bicycle and bag of parts

Put the front wheel on top of the towel, and on top of the rear of the bicycle.

Use the straps in the lid to secure the rear wheel into the lid.

Carefully close the lid, checking for any parts that might be touching, or that might prevent the lid from closing. If you find any items that touch or prevent the lid from closing, open the lid and adjust the parts within the case, trying to improve the fit of the items within the case.

When nothing touches, and the lid closes, you are now ready to close up the case.

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## **Shipping Concerns**

The Airlines and UPS have a different shipping price for packages over 50 pounds. Your case with the bike loaded inside will weigh around 40 - 45 pounds. Put your case on a bathroom scale to determine its' weight. If the weight is under 50 pounds, you could put some other items in the case. Try adding things that will help protect the bike, such as extra socks, shirts, or jacket. Put these extra things inside a bag before putting them inside the bike box, so that they do not get chain grease on them. Try not to put too much into the bike box as this tends to bulge the BOX, and will draw attention from the shipper.

If the box is going by UPS or freight, the box should be locked with its' key. Don't forget to pack the key in your traveling bag, so that you have the key when you get to your destination.

If the box is going via airplane, do NOT lock the box, as airport security may need to open and inspect it. Add an extra 15 minutes to your airport time when traveling with the box, as it is a bit bulky, and may need special handling. If the baggage handler asks if the tires are deflated, say: "Yes". This is an urban legend, but many baggage handlers still believe it, and it is not worth the argument.

Do not forget to pack the following items separate from the bike case:

The keys to your case, especially for UPS or freight delivery) Bike Helmet, gloves, and shoes



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