Using Your Bike Friday®

OSATA

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The story behind OSATA

A note from Bike Friday Co-Founder Alan Scholz:
Thank you for purchasing our Bike Friday OSATA. Your bike is an example of the wonderful empowering relationships we have with our customers.

The idea of an adjustable frame bicycle came from our service expert Tim Link, who mentioned to me that a number of customers over the years expressed interest in the ability for multiple users to share the same Bike Friday.

That idea simmered in my head for awhile. Then our local Safe Routes to School Coordinator Shane MacRhodes stopped by one day to discuss a idea of his.

The school program that teaches kids to ride safely uses fleet bicycles. Most of them are built in China, and Shane wanted to see if he could get a bike built right here in Oregon.

Knowing the challenges of fitting bikes to a class of middle schoolers of various sizes and shapes, those two ideas came together. Thus, the birth of the OSATA.

OSATA stands for One Size Adjusts to All Types. Families can share bikes. Rental fleets don’t have to be so large. And school kids can learn on a bike that fits.

I hope you enjoy your ride,
Alan Scholz
The growth of OSATA

*From School Training bike to a full line*

Since its inception as a superior bicycle training bike, the OSATA family has grown.

It is now Bike Friday’s fastest packing bicycle for travel. The typical pack time after you have learned the basics is 10-15 minutes. That’s all it will take to get the OSATA packed into a TravelCase and ready to fly.

The OSATA is now available in a Road version, Touring version, City / Hub gear version and even a long Cargo Bike version.

All OSATAs have multi-person fit capability and come at Bike Friday’s most affordable prices, starting less than $500.

The OSATA Road version is a lightweight, responsive Bike Friday with 1 3/8th inch tires and plenty of gears.
Anatomy of an OSATA

- Handlebars
- Brake Levers
- Stem Riser
- Upper Stem Riser Bolt
- Lower Stem Riser Bolt
- Headset
- Headtube
- Fork
- OSATA Pinch Bolts
- OSATA Rear End
- OSATA Front End
- Locking Headset Space
- Seat Mast
- Seat Post
- Saddle
- Quill Stem
- BIKE FRIDAY
- Performance that Packs.
Anatomy of a OSATA: Closeups
Welcome to the Community

Congratulations!
You have just purchased the finest travel bicycle available today. Your bike has been carefully designed and constructed for your personal travel needs. All of our bikes are manufactured in our Eugene, Oregon factory by real cyclists who care about our customers and our products.

Please take your time reviewing this manual before you assemble your new Bike Friday. You will find your new bicycle to be simple and reliable anywhere you go!

If You Need Help . . .
If you need technical assistance with any Green Gear® Cycling product, or are unclear on the proper operation of your Bike Friday, please call us and a Service Technician will help you get back on the road. Our toll-free number in the US and Canada is 800-777-0258; international is +1-541-687-0487. Normal business hours are 8:30 a.m. to 5:30 p.m. Monday through Friday, and 9 a.m. to 4 p.m. Saturdays, Pacific Time. You can also email service questions to service@bikefriday.com.
Because we understand the needs of world travelers, we offer 24-hour technical support in emergencies. If necessary, please call our regular number and our answering service can forward you to a Service Technician on call.

Extra Accessories
We also sell an extensive line of bicycle and travel accessories. Whether you are riding the local back roads or venturing into foreign lands we have the gear you need. Call us for information on spare tires, tubes, replacement parts, fenders, racks, bags, or other items to complete your Travel System. You can purchase these products from our online store: www.store.bikefriday.com

More Information
To check out our products, find other useful information, discover Bike Friday events and Yak with other Bike Friday owners on the bulletin board, go to our main website at: www.bikefriday.com
Blue skies and happy trails from Green Gear Cycling
A Word on Safety

Bicycles are a lot of fun, but improper use can result in harm. Please, always ride safely!

- Always wear a helmet.
- Follow the rules of the road, and be courteous.
- Use front and rear lights after dark.
- Dress appropriately for the weather, the season, and lighting conditions. Be seen!
- Always carry a spare tube, patch kit, pump and a tool kit.
- Keep your bicycle in good shape.
- Check your tire pressure before every ride.
- Make sure all quick releases are secure.
- Have your bicycle routinely serviced for trouble-free travels.

Your Tools

All Bike Friday bicycles are delivered with a combination 5/6mm S-wrench [right] that is attached to your water bottle cage. This wrench should get your new bike on the road (along with your own pedal wrench). Leave it in your bottle cage so that you always have it handy.

All bikes ordered with a TravelCase™ suitcase also come with a tool pouch [right]. In the tool pouch you will find some cotton gloves to keep your hands clean, a folding tool set, and a 4mm ball-end driver.

We also sell more extensive tool kits for home repair work. We encourage you to learn how to work on your own bike. If you are not familiar with bicycle maintenance, consider taking a local class. It will improve your confidence and self-sufficiency as you venture across the globe.
Unpacking your OSATA

Unpacking Your OSATA From a Box or TravelCase

Opening your box or TravelCase may present an intimidating sight, particularly if you ordered many accessories. Do not worry; we work hard to keep our products as simple as possible. We recommend finding a quiet area and some room to spread out.

This manual will address the fundamentals of packing, assembly and adjusting techniques. However, because your bicycle was built for you, you might discover that your bike was packed at the factory slightly different than the one in this manual.

You do not, however, have to repack your bike in exactly the same fashion as this manual suggests. You may find a better way of stowing your accessories and we encourage you to experiment.

Your OSATA should only require minimal assembly. It will take approximately 15-45 minutes and require a basic level of technical skill.

You will need a 5/6mm hex wrench (included), a 15mm open wrench (or pedal wrench) and a pair of scissors (or better yet wire cutters, snips or diagonal cutters) to cut zip ties.

Take care not to damage the frame while cutting zip ties.

[Note: Depending on the components you have purchased with your Bike Friday, your specific model may require other tools for adjustments.]
Assembling your OSATA

Open the box or TravelCase and remove the bike from the container. Remove the bubble wrap or felt covers and lay the disassembled bike out on front of you.

Connect Front and Rear Frame Sections
With a hand holding the front and rear sections respectively, insert the front (male) section into the rear (female) section of the main frame. Ensure that the snap / spring button slips into one of the 4 holes.

Remove Fork/Frame Spreaders
The PVC tubing in between your fork legs and rear dropouts are intended to help prevent damage when traveling. They are held in place with wheel quick release skewers. Open the quick release, unthread the knurled nut, and put the spreaders in the tool pouch for future use.

Install the Rear Wheel
Release (spread open) the rear brake and make sure you are in the highest gear (largest #) on the right side (rear) shifter. [SEE PAGE 12 FOR BRAKE RELEASE OPERATION] To install the rear wheel, grasp the derailleur body and pivot it backward to make it easier to insert the wheel into the dropouts. When putting the rear wheel into the dropout, align the chain with the smallest cog of the cassette. Fasten the rear quick release skewer (or rear axle bolts on a Dual Drive hub).
Assembling your OSATA

Install Front Wheel QR
Open the front brake release, then position the front wheel making certain that the wheel axle is fully seated in the front dropouts.

Now install the quick release from the fork spreader on the front wheel. Make certain that there is one spring per side of the hub axle and that the small end of the spring is pointing toward the center of the hub. Loosely thread on the knurled nut for now.

Mechanic’s Tip: If you are ever unsure of the proper direction of the front tire, looking down at the tire, the tread should be oriented so that it is pointing forward. Often the tread is in a arrow-ish pattern and this makes it easy to point it in the forward direction. The quick release levers, front and back are to be placed on the non-drive side of the bicycle.

Easy Pack Mast
The OSATA bicycle models have a seatmast that telescopes out of the lower seat tube. Install the seatmast into the seat tube. Note the minimum insertion mark etched at 4” from the bottom on the mast. This is the minimum amount of the mast that must be inserted (overlapped) in the frame. Tighten the bolt on the seatmast clamping collar.
Using a Quick Release

Using Those Nifty Quick Releases
On a cold and snowy day in the 1927 Gran Premio della Vittoria, a tired and numb Tullio Campagnolo struggled with the frozen wing nuts on his rear wheel while trying to change gears. In a moment of frustration and inspiration Campagnolo envisioned the modern quick release. The bicycle world was transformed.

The quick release is one of those simple but great inventions that really makes life better. However, if used incorrectly, you can potentially endanger yourself. Although a reliable and safe product, some people have been injured because they didn’t know how to properly use this elegant device. Your Bike Friday OSATA has several of them. If you are not familiar with their operation, PLEASE study these directions carefully. If you are still unclear on their operation, call us or contact your favorite local bike shop before you ride!

Quick Release Operation
A quick release is a simple cam with a lever that swings through an arc that is square to the axle. As the lever moves, the cam clamps the wheel to the frame, or secures the frame joint. It is not a wing nut to be rotated around the axle.

The tension on the quick release is controlled by how tight the knurled nut on the other end is set. Only wheel quick releases have the small cone-shaped springs. Note that the small ends of the springs face toward the center of the hub.

Quick Release Maintenance
We recommend adding a few drops of light oil to the lever where it enters the cap several times per year. This will keep your quick release working smoothly for years.
Using a Quick Release

Adjust Knurled Nut
With the wheel installed and the axle properly seated in the frame (or the frame joint closed), position the quick release lever so that it is in line with the axle. Then turn the knurled nut on the other side clockwise until it is snug. When the quick release is properly adjusted, you should be able to freely swing the quick release lever for the first half of its arc, at which point the lever should offer resistance.

Continue Closing QR
Using the palm of your hand press the quick release lever through the rest of its arc until the lever is closed and parallel to the wheel. You should feel very firm resistance when the quick release is properly adjusted (the lever may even leave a light imprint in the palm of your hand).

Double-Check!
Ideally, the quick release lever should be facing the rear, or upward. Levers that are facing forward can catch on any number of things and be accidentally opened.
Assembling your OSATA

Reconnect Linear Pull Brakes / V-Brunes

to close the V-brake to the riding position, while fac-
ing the brake, with your left hand (index finger and thumb), grab the noodle carrier and with your right hand grab the noodle and slip the noodle tip into the slot on the noodle carrier.

If you cannot get enough “slack” to put the noodle tip into the noodle holder, then the brake cable may need to be loosened a bit. See the next step for instructions to add some slack to the cable. Repeat this procedure on the rear brake.

Mechanic’s Tip: Sometimes the cable housing can come unseated either where it enters the noodle or where the housing enters the brake lever barrel adjuster. If the housing is unseated, it will not be possible insert the noodle tip into the noodle holder. In fact, it will make the process quite frustrating; make sure the housing is properly seated at both ends.

Fig. 9 V-brake open.

Fig. 10 Grab the noodle carrier.

Fig. 11 Slip noodle into slot.

Fig. 12 V-brake closed.
Adding Cable Slack to V-Brakes

To increase slack in the brake cable, you can turn the barrel adjuster on the brake lever. The barrel adjuster is the knurled bolt that the cable housing goes through as it enters the brake lever. Turn this adjuster clockwise (inward toward the brake lever) to loosen the cable. Conversely, if you want to bring the brake pads closer to the rim to compensate for cable stretch from use, unscrew the barrel adjuster away from the brake lever. Note: Some models may have a lock nut on the adjuster, which will need to be loosened first.

ALWAYS DOUBLE CHECK YOUR BRAKES BEFORE RIDING.

Stem Safety Check

If you look carefully at the base of your stem from the underside, you will see a pin hidden under the clamping collar. This pin must engage the slot in the back of the fork’s steerer tube (the unpainted tube sticking up from the frame’s headtube.) Additionally, the stem should be fully seated onto the fork steerer tube.
Assembling your OSATA

Mount the Stem Riser
Slide the bottom of the stem riser onto the fork steerer tube, keeping the stem riser’s lower clamp forward so the hidden stem pin will engage the slot in the fork. Gently press the stem all the way down. You should feel it “bottoming out” on the end of the slot. Once the lower stem riser is in place, tighten lower stem riser bolt. NOTE: Do not adjust the locking headset spacer.

Double Check Your Steering System Integrity:
Now is a good time to double check your steering system. Try standing in front of your bike with your front wheel between your legs. Twist the bars to make sure everything is secure, that the bars do not turn independent of the fork /front wheel.
Assembly: Pedals

Pedal Thread Directions
Bike pedals have two different thread directions. The right pedal has a right-hand (clockwise) thread, and the left pedal has a left-hand (counterclockwise) thread. Pedals are usually stamped with an R or L on the pedal axle near the threads.

Always grease your pedal threads on new pedals before their first installation.

Installing Pedals
Mechanic’s Tip: The quick and easy way to remember which way to thread your pedals on is applicable to either side of the bike [SEE PHOTO ABOVE]. You can put a wrench on the pedal’s wrench flats, and using a back pedaling motion will screw the pedals on. Use grease before threading pedals.

Note: We recommend starting thread engagement with your hands instead of a wrench (see below), so use this tip as a practical way to know which way to begin threading the pedals.

Thread in the Pedals
Using your finger, start the pedal threads into the proper crank arm. Be careful not to cross-thread the pedals! Once the pedal threads are started, you may use a wrench to finish threading them in, and then tighten securely.

Mechanic’s Tip: The threads on a pedal are steel (hard) and the threads on a crank arm are aluminum (soft). It is very important that the pedal is tightly secured to the crank arm. With grease on threads there is no need to over tighten. If the pedals are not tightly secured, the “slop or play” in the connection will allow the steel threads to rip out the aluminum crank threads. Your bicycle may have shipped with a set of pedal washers. For some cranks, the use of the washer in between the pedal and the crank arm creates a more solid and secure base or foundation for the pedal to contact the crank arm with. If included, use them!
Double Check Your Friday!

At this point your bike should be ready to ride. However, before you ride away, be sure to double-check your assembly.

- Are the handlebars tight?
- How about the stem and pedals?
- Are the quick releases all secure?
- Is the saddle secure and at a reasonable angle?
- Are the handlebar and control levers in a proper place and clamped tight?

Although we always inflate the tires at the factory, check your tire pressure for proper inflation. Under-inflated tires not only wear faster and are more prone to flats, but they also add rolling resistance.

Be sure to have at least the 5/6mm S wrench in the mono tube bottle cage for quick roadside adjustments. If you have the folding tool, take it with you. You will probably want to stop and adjust saddle height and the angle, as well as perhaps adjust a few other items during your first ride or two.

Mechanic’s Tip: Grease is your friend. Be sure to keep a light film of grease on any intersecting bike parts. This will help to prevent corrosion, facilitate disassembly, and eliminate annoying noises. Areas include: OSATA Main Frame coupling joint, seatposts, saddle rails, handlebars, stems, pedal threads and seatmast. Doing this a couple of times per year during routine maintenance should be enough. Wipe off any excess or visible grease. Also be sure to lightly grease all bolt threads on your bicycle as you repair or upgrade components. Lubricating your bolts will allow you to adequately tighten the fasteners and keep them from seizing in the future.
How to Adjust Your OSATA to Fit Each Individual Rider

The OSATA is adjustable to a wide range of riders. Adjustments can be made to the main frame (frame size) as well as the seatmast / saddle height and stem / handlebar height.

Frame Size: The OSATA frame can be adjusted between a 46 cm and 58 cm in 4 cm increments. Additional adjustments can be made by swapping out the stem with one of a different projection.

If you are comfortable with your current bike, you can use that measurement as a guideline for your frame adjustment. If you experience pain in your neck, shoulders, back or knees from your current bike, you might want to go to a bike shop that offers fitting. They can find the correct size to set your OSATA to for a perfect fit.

Saddle Height: Proper saddle height is important in preventing injuries as well as increasing riding efficiency and comfort. A rough rule of thumb method for determining proper saddle height is when the pedal is in the 6 o’clock position, your leg should have a slight bend in it with the ball of your foot centered on the pedal, your knee almost fully extended (but not quite). A quick way of achieving this is to raise your saddle in small increments until you notice your leg is fully extended in the 6 o’clock position and then lower the saddle slightly. Rocking your hips to be able to reach the pedals during the pedal stroke is to be avoided.

Special Feature: If you require the saddle to be lower than the current lowest setting, you can purchase a shim and seatpost from Bike Friday so the seat post is usable directly inserted into the mainframe without the use of the seatmast.
Adjusting OSATA: Handlebar

Handlebar Height: This is a subjective preference. Handlebar height can be classified into three general categories: 1) bars below saddle; 2) bars level with saddle; 3) bars higher than saddle.

For reference you can use an existing comfortable bike or you can try out the three settings and see which one works best for you.

Do note that humans tend to acclimate to whatever position we are given to the point that we may subsequently be set up with a properly sized bike and it will feel improper.

You may find it quite constructive to try a few positions, just be sure to try them out for more than a few minutes because that initial period may feel awkward, but possibly because you have acclimated to incorrect sizing.

The beauty of the OSATA is the ability to try and use a wide range of positions on the bike.

Stem Riser, Headset Spacer Anatomy

Fig. 21 Loosen lower stem riser.

* Locking headset spacer. This static spacer is for headset adjustment. DO NOT loosen this bolt unless you are disassembling the fork from the frame OR if you are adjusting the headset bearings.

* Lower stem riser bolt. This bolt is used to affix the stem riser to the fork / frame.

* Upper stem riser bolt. This bolt allows you to adjust the height of the handlebars.

Mechanic’s Tip:

The minimum insertion mark is QUITE important. It indicates the minimum amount of overlap of the two tubes that is safe, any amount of overlap less than this (if the entire minimum insertion mark is showing) is NOT SAFE.
Adjusting OSATA: Handlebars

Fig. 22 Loosen upper stem riser.

**Adjusting Handlebar Height.**

Loosen the upper stem riser bolt, adjust the height as needed and re-tighten. If you are having difficulty adjusting the height with the upper stem riser bolt loose, you may find that also loosening the lower stem bolt will make it easier to change the height. Just remember to tighten both bolts when done. **DO NOT LOOSEN THE LOCKING HEADSET SPACER.**

**NOTE:** There is a “minimum insertion” mark etched about 4” from the bottom of the stem riser, this is the amount of material that must be inserted for safe use.

**Quill Stem Adjustments**

**NOTE:** For customers that have a “quill” style stem, you have an extra set of height adjustments with the quill stem. To loosen the quill stem, loosen the main bolt.

You are likely going to have to “un-wedge” the internal wedge in the quill stem. This can be done in one of two ways:

- **Stand in front of the bike, with your legs surrounding the front wheel to prevent it from turning,** turn the handlebars, you should feel it all of a sudden give and now the bars will turn independent of the wheel.

- **Unscrew the bolt that runs in the center of the stem (toward the fork). Continue until the head of the bolt sticks up a bit and with a mallet (or a hammer and a piece of wood to prevent any deformation of the bolt head), strike the bolt head in a downward motion toward the fork. This will unseat the wedge allowing you to adjust or remove the stem.**

Fig. 23 Quill Stem adjustment.  
Fig. 24 Quill Stem unwedge.
Adjusting OSATA: Main Frame

Adjusting the Main Frame Sizing

Adjusting the main frame size can be done by one person but is easier with two. If you are encountering any resistance depressing the button, getting the button to pop back out or telescoping the frame in and out, wiggling the two sections (up and down or a rotating motion) will make your life much easier.

Your OSATA should have come with grease in this area, over time you might need to re-apply some to make the sizing task easier. Embrace the grease.

One Person “Archer” Technique (*archer because the hand position resembles an archer’s stance*)

Make Frame Larger

- Loosen the two Main Frame pinch bolts that secure the clamps on the telescoping main frame.
- Depress the spring loaded button, move the male and female portion of the frame side by side slightly so that the button remains depressed so you can continue with the adjustment.

Mechanic’s Tip: Wiggle it a bit if you are encountering resistance. Alternatively, if you are encountering resistance, putting your hand on the bottom of the rear section where the binder bolts are, pushing up a bit will free up the binding sensation you are feeling (creating up and down movement between the front and rear sections). The Two-Person technique can be easier.
Adjusting OSATA: Main Frame

Fig. 28 Wiggle.

Make Frame Larger (cont.)
- Kneeling in front of the bicycle while facing it, place one hand on the seatmast a few inches above where it enters the main frame and the other hand on the stem riser right above the headset and push or pull with a concurrent twisting or wiggling motion. IT IS ALL ABOUT THE WIGGLE!

Make Frame Smaller
Same steps as above but push frame parts together instead of pulling them apart.

Alternative One Person “Gravity” Technique (if you are having difficulty sizing the bike, this technique may be easier, some bikes this seems to work better on than others).

Make Frame Larger
- Loosen the two Main Frame pinch bolts that secure the clamps on the telescoping main frame.
- Depress the spring loaded main frame button, move the male and female portion of the frame side by side slightly so that the button remains depressed. Wiggle it a bit.

Fig. 29 Main Frame Pinch Bolts.
Adjusting OSATA: Main Frame

Make Frame Larger (cont.)
- Lift the front wheel so it is close to being directly above the rear wheel.
- With one hand on the stem riser and one hand on the fork, lift the bike until the rear wheel is off the ground and the rear half should slide downward.

Make Frame Shorter
- Same steps as above but push downward on the headtube (parts of the frame separating the fork and the stem riser where the headset is mounted on either end).

Two Person Technique (easiest method)

Make Frame Larger
Rear person: Stabilize the rear end while the front person pulls the bike away to make larger.

Concurrently:
- Depress the spring loaded button with the left hand.
- Put your right foot in front of the rear tire (to prevent the rear wheel / rear end from moving forward).
- Apply downward pressure and place your right hand at the bottom of the seatmast.
Adjusting OSATA

Two Person Technique, Make Frame Larger (cont.)

- Front person: Stand facing the front of the bike.
- Place one hand on the fork blade, the other hand on the stem riser.
- Using a twisting motion, pull on the bike until it clicks into the desired position.

Make Frame Smaller

- Same steps as above but push frame parts together instead of pull apart.

Adjusting the Headset

The OSATA uses a unique bearing preload system that can be adjusted with or without specialized tools. The installed system will hold or secure a headset adjustment, but you will need either a specialized or improvised tool to adjust the headset preload, for instance if the headset adjustment seems loose or overly tight.

A headset can be adjusted into one of three states:

Loose When you grasp the front brake and try to move the front wheel forward and backward, you feel “play” or slop in this connection. This suggests the bearings are loose.

Tight While raising the bicycle in the air with the front wheel lower than the back wheel, very lightly turn the stem to one side and see if, the stem / wheels returns to the forward position smoothly. If the stem / wheel’s movement is notchy and not smooth, the headset bearings are too tight.

Just right No play and rotates smoothly.
Adjusting OSATA: Headset

Tap Adjust Method (Using Improvised Tools)

Remove the seatpost from the seatmast and the seatmast from the bike and the collar from the seatmast.

Mechanic’s Tip: Mark the seat-post (where it enters the seat-mast) and seatmast (where it enters the main frame) with a piece of electrical tape. This will allow you to re-assemble the post and mast to the previous seat height.

Remove the stem riser and O rings (if applicable) from the steerer tube, let them hang beside the bike.

Loosen the locking headset spacer (note, with this clamp loose, the fork and headset can easily fall apart unexpectedly.) It should be just loose enough to turn with your fingers, but not any looser.

Remove excess space between the headset pieces. Do this by lifting the fork a few inches off the ground with one hand on the fork leg while the other hand pushes down on the headset fixed clamp.

Tighten the locking headset spacer slightly so there is some resistance on the bolt, but not fully tight.
Adjusting OSATA: Headset

Tap Adjust Method (cont.)
Place the seatmast over the steerer tube.
While lifting upward on the fork with one hand, tap downward on the seatmast to compact / add preload to the headset with a mallet or block of wood and hammer.
Tighten the headset fixed clamp, install the stem riser (fully tightening the bolts), and check headset adjustment.
Repeat as necessary

Fig. 37 Strike Seatmast.

OSATA Headset Press Tool, available from Bike Friday (with specialized tools)
Remove the stem riser and, O rings (if applicable) from the steerer tube. Let them hang beside the bike.
Loosen the headset fixed clamp.

Fig. 38 Headset Press Tool.
Adjusting OSATA: Headset

OSATA Headset Press Tool (cont.)

Remove the washer and nut from the bottom of the tool. [Figure 39]
Slide the rest of the tool, from the top, allowing the 1¼” tubing to cover the portion of exposed steerer tube. [Figure 40]

From the bottom, move the washer onto the rod and thread the nut onto the rod.

With a 10mm wrench (or adjustable wrench) hold in place the nut while tightening the bolt head with a hex wrench, creating bearing preload. It is helpful to evaluate the headset adjustment with the tool still in place.

Fully tighten the locking headset spacer. [Figure 41]

Remove the tool, reassemble and test for bearing adjustment. Repeat if necessary.
Packing: Into a TravelCase

Packing your OSATA into a TravelCase

As you might already know, your Bike Friday conveniently packs into a hard shelled airline accepted suitcase. As you pack your bike more often and become more familiar with the process, your packing times will likely decrease over time. Expect to spend between 15-60 minutes packing your bike in a TravelCase (once you are familiar with the process).

Remove your Accessories, Set your Derailleur

Before disassembling and packing your Bike Friday OSATA, remove all extra accessories including racks and water bottle cages. Items that may remain on the bike include your cycle computer mount, or pump.

Shift the rear derailleur to its smallest cog, [hardest gear].

Remove the Pedals

Loosen your pedals with a pedal wrench. The right pedal unthreads in a counter-clockwise direction and the left pedal unthreads in a clockwise direction. (Remember that both pedals turn toward the rear of the bike.) Place the pedals in the blue felt bag labeled “pedals.”

Separate Main Frame

Loosen the OSATA Main Frame pinch bolts and separate the two halves of the main frame. Depress the spring button, hold the front wheel above the rear wheel and use gravity to assist in the separation of the main frame. If this does not happen easy, refer to the previous section entitled “Adjusting the Main Frame Sizing” for tips.
Packing: Brakes

Remove the Seatmast (and seatpost as one complete unit)
Loosen the seatmast clamping collar and remove the mast. The saddle can remain attached to the seatpost and the seatpost in the mast.
The mast, however, will fit better in the TravelCase if you collapse the seatpost in the mast (loosen the seatpost collar bolt, collapse the seatpost into the mast and then lightly tighten the seatpost collar clamp).

Open Front and Rear Brakes
If you have V-brakes, grasp the noodle carrier with your left hand, and with your right hand, grasp the noodle and move the noodle tip up and to the left of the carrier, moving the noodle out of the slot in the carrier.
If you cannot release the noodle from the noodle holder, then the brake cable may need to be loosened a bit.
See instructions to add some slack to the cable on page 12.
Packing: Front Wheel

Remove the Front Wheel
After removing the front wheel, close the brake again. Remove the quick release from the axle by undoing the knurled nut. Be careful not to lose the small cone-shaped springs. Put the quick release through the fork spreader (the short PVC dowel), and thread on the knurled nut again. Both small cone shaped springs should be on the quick release shaft (with the cone points oriented inward).

Fig. 46 Remove the front wheel.

Remove the Rear Wheel
After removing the rear wheel, close the brake again. Remove the quick release from the axle by undoing the knurled nut. Be careful not to lose the small cone-shaped springs.

Install the Fork Spreader
Slip the fork spreader between the dropouts on the fork, and lightly tighten the quick release. The fork spreader will help prevent damage to your fork when traveling.

Fig. 47 Install fork spreader.

Install the Rear Wheel Dropout Spreader
Secure with the rear wheel quick release lever or in the case of a Dual Drive hub you can use a zip tie.
Packing: Handlebars

Remove Stem Riser

Loosen the stem riser lower bolt and pull upward on the handlebars

NOTE: YOU WILL BE LOOSENING THE LOWER STEM RISER BOLT, BUT NOT THE LOCKING HEADSET SPACER. THIS IS IMPORTANT, IF YOU ACCIDENTALLY LOOSEN THE FIXED CLAMP, YOU MAY NEED TO READJUST YOUR HEADSET. [Pages 25-28]

Install Packing Materials on:

- Rear Derailleur
- Rear End
- Front End
- Stem Riser
- Handlebar
- Seatmast
- Saddle
- Pedals
- Chainstay, driveside (use the clear plastic piece of tubing)

SEE ILLUSTRATION ON PAGE 34
Packing: OSATA in TravelCase

Placing the OSATA into a TravelCase

Place the main frame protector (half of a crush protector) in the open end of the rear end half. [Figure 50]

Place the front end of the bike, with the head tube in the Northeast corner. Allow the handlebars to dangle outside, to the right of the case. [Figure 51]

Place the rear end of the bike in with the rear derailleur at the Southwest corner of the case. The rear end will fit somewhat diagonally into the case. Please make sure the non drive crank arm is not striking the fork. Point it toward the headset. [Figure 52]

Place the handlebars in the center of the case, bars toward the North, stem riser pointing South. [Figure 53]

Mechanics Tip: If you need more slack to arrange the handlebars, you can increase slack by carefully pulling the cable housing through the housing loops on the frame. Tip # 2: If needed, you can loosen the handlebar clamp bolt to allow you to rotate the bars to provide more flexibility in the fit of the bar controls in the case.
Place saddle / seatmast on West wall with the mast pointing East, through the rear end.

Install the crush protector. Place the bottom flange in the case in the most central spot as possible, install the rod and this then provides a guide as to the height of the case. [Figure 54]

FOR TRAILER OWNERS Install trailer frame, running the long section along the South edge. [Figure 55]

FOR TRAILER OWNERS Place one of the trailer wheels in the Northwest corner. [Figure 56]

Install the axle protectors on both wheels and place the rear wheel, cog up, onto the case, toward the East. Avoid the rear wheel axle resting directly on the chainring. Rotate the crank arm as necessary to let the wheel sit as low as possible. [Figure 57]
Place the front wheel in, overlapping the rear. You may need to offset it to the West a bit. You will likely need to nest the rear cassette cogs in the front wheel spokes and the front hub nested into the rear wheels’ spokes. [Figure 58]

FOR TRAILER OWNERS Place the second trailer wheel in the Northeast corner, above the rear wheel and below the front wheel. [Figure 58]

Place accessories such as a folding rear rack in any extra space.

Install the top flange of the crush protector.

Ensure all packed pieces sit below level of the crush protector’s top flange. [Figure 59]
Accessories: TravelTrailer

Your Trailer Parts
If you purchased a Travel Trailer with your bike, you should have two trailer wheels and two yellow felt bags with the tongue and axle. The bottom of your TravelCase should have three holes drilled in it if you ordered the trailer with your bike. If you ordered the TravelTrailer system separately, you will need to find the three dimple marks in the bottom of your case and drill them through with a ¼” drill. Please note the hole for the tongue (in contrast to the two holes for the wheel axle) is offset slightly. The reason for this is for the telescoping handle. There is a cable running down the center inside the aluminum tunnel; offsetting the bolt allows the bolt for the trailer to pass through the aluminum tunnel without striking the cable.

Remove Thumb Nuts
Remove the parts out of the felt bags and remove the thumb nuts and one of the washers from each of the three threaded bolts (leaving one washer over each stud post).

Install the Trailer Tongue
Turn the TravelCase upside down (while closed). Slip the hollow end of the tongue over the end of the T-piece. Take the trailer tongue and insert its bolt through the corresponding hole on the travel case (through the aluminum tunnel). Note: The gentle curve in the tongue is located on the same side as the side latch.
Connect the Axles
Slip the open ends of the axles over the “T” of the T-piece. Each axle will have a threaded bolt with a thumb nut and a flat washer. Pass the threaded bolts through the holes on the case.

Add the Thumb Nuts
Carefully stand up the case and open it. Inside the case, place one flat washer and one thumb nut over each threaded bolt and tighten them.

Wheel Axles
Remove the clevis pin and bolt from the socket of each end of the axle.
Install the Trailer Wheels
Insert the axle bolt through the recessed bearing side of the wheel. Once the bolt is in the wheel; the head of the bolt should be flush with the wheel, it should not stick out. If the bolt head sticks out, the wheel needs to be flipped around to the other side.

![Image of wheel bolt](image1.png)

Fig. 66 Install trailer wheels.

Insert the Axle and Wheel into the T Piece.
Note, both the T piece and the axle have a small hole in them, you will be lining up these holes and then placing the wheel pin through both holes.

![Image of axle and T piece](image2.png)

Fig. 67 Line up the holes.

Insert the Clevis Pin
Insert the clevis pin through the hole in the axle to secure the wheel. If the clevis pin does not readily slide through the holes, try rotating the bolt 180 degrees to provide better alignment of the holes.

![Image of clevis pin](image3.png)

Fig. 68 Insert the clevis pin.
Dual Drive Hub

Dual Drive Hub Specifics

Installing the Rear Wheel:
Install the rear wheel into the rear frame dropouts and bolt into place. With a small flat head screwdriver, screw the shift rod into the drive side end of axle. Depress the button on the click box and move the click box onto the end of the rear hub axle.

Removing the Rear Wheel:
To remove a Dual Drive hub, shift into gear one (low), push the button on the click box and pull the click box away from the wheel. Using a small flat screwdriver, remove the shift rod to protect against bending and other damage, and unbolt the wheel.

Bike Friday Service Overhauls

All of this, and the health of other components, can be checked by our mechanics during your optional yearly Overhaul.

A Bike Friday Overhaul includes:
• Check all components for wear and recommendations on replacements.
• Strip frame and clean components (optional solvent tank option).
• Clean and optional alignment of the frame.
• Replace stickers.
• New cables and housing.
• New bar tape, where applicable.
• Test ride and packing.

Don’t hesitate to call Bike Friday’s Customer Service Department for help: 1-800-777-0258 (U.S.) or 1-541-687-0487 (world), or email Service@bikefriday.com
New Bike Maintenance

Like all bikes, your Bike Friday travel bike will go through a break-in period. After the first few weeks of riding you might find that your drive train doesn’t shift as crisply as it did when new, or perhaps the brakes are slightly loose. This happens as new cables stretch, housing compresses and parts wear in.

After the initial break-in period, but before a significant tour, it is important to have your Bike Friday bicycle professionally serviced at your local favorite bike shop. A new bike tune-up takes very little time and the small cost for the work is minor considering the improved performance and reliability it provides. Then, at least once a year and before any major tour, take your bike back to your local shop for another tune-up to be sure that it runs smoothly.

After a few years of use and a few thousand miles of riding, you might notice that the decals on your bike are starting to look worn and the paint has some scratches. Perhaps your bike doesn’t ride as smoothly as it used to, and the local bike shop can’t get it to function as well as you would like. We offer factory service programs including tune-ups, overhauls, and other repair work by our expert mechanics. A month or two before your next big ride, you may wish to send the bike back for a complete overhaul.

Visit our web site for repair packages, costs, and details at www.bikefriday.com/Service/. For those who plan ahead, we can generally offer the quickest repair turn-around during the winter months.
New Bicycle Tips and Maintenance Recommendations

Unlike other new bicycles purchased from a shop, your Bike Friday OSATA has been disassembled partly and placed in a suitcase or box. Then it was shipped across town, the country or the world.

As with any new bicycle, your Bike Friday will need several minor adjustments as it “settles in.” Knowing how to use barrel adjusters on brakes and derailleurs and adjust spring tension on brakes will help you through this settling in period. These skills are also handy for when you travel with your bike.

Your local bike shop can help, or, check out the excellent adjustment and repair guides at Park Tool Company’s website: http://www.parktool.com/repair.

The Initial Break-in Period

It is reasonable to expect that a new bicycle will have an initial break-in period where adjustments will need to be made after a hundred-ish miles. The following items may occur or need attention during this break in period:

- Brake and derailleur cables may stretch. You can perceive this as you squeeze the brake lever and you have to squeeze farther than previously OR you have to squeeze so far before the pads contact the rims that there is not sufficient braking force.
- Some bearing surfaces, notably some headsets, might settle in after some use. If they are properly adjusted after this initial break in period, they tend to then hold that adjustment for a much longer period of time.
- For square taper bottom bracket (and the corresponding crankset), it is a good idea to use an 8mm hex / Allen wrench to ensure the crank bolt is tight.
Bike Friday Maintenance

Maintenance

Maintenance frequency depends on how much you ride and under what conditions. Wet weather will hasten the need for lubing your chain and greasing bearings, for instance.

Ongoing Maintenance:
- Keep chain lubed.
- Maintain recommended tire pressure (prevents flats and provides the best ride feel).
- A few drops of oil around the hinges—where the bikes move when folding--will keep your fold smooth.

Every Time You Fold or Unfold:
- Cable housing routing—ensure that there are no kinks, none are pinched, or looped around a crank, etc.
- Bolts and quick releases are secure.
- Brake adjustment. Verify that the brake adjustment is proper.

Areas Requiring the Occasional Application of Grease:
- In the steerer tube, where the stem fits in. At least once a year, ideally twice a year. A light film of grease on the outside unpainted and exposed part of the steerer tube is also recommended.
- Inside the Easy Pack seat tube.
- Inside the seat mast, where the seatpost fits in.
- Inside the tandem joints where the mid-tubes of the stoker compartment are clamped.
- Inside the stoker’s adjustable stem, if you have one.

Overhauling the Bearings

The hubs and the headset are the last remaining components on modern bicycles that can have their loose bearings replaced with new ones and new grease. Most bottom brackets (and many hubs and headsets) have cartridge bearings and have a different procedure. For cartridge bearings, make sure they are properly adjusted to ensure a long life. [CONTINUED ON PAGE 44.]
Overhauling the Bearings [CONTINUED]
To increase their lifespan before replacement, cartridges can be serviced. Using a thin knife, you can peel back the rubber/plastic (metal in the case of Chris King) seal, clean out the old grease as much as possible, pack in new grease and reassemble.

Under wet riding conditions, overhauling loose ball bearings should be done every month, otherwise:
- Recommended at six months.
- Once a year if only a moderate amount of time was spent riding.
- Every two years if bike is rarely ridden.

Cables and Housing
Replace the brake/shift cables and their housing every year.

Components That Wear Out

The following is a rough guide on when to replace those parts on a bike that wear out with use.

Tires:
- When a smooth/bald spot begins to appear on the riding surface.
- When you are getting consistent flats.
- The sidewalls appear to no longer be structurally sound (dry rot, slashes, etc.).

Rims:
- For bikes with rim brakes, when the braking surface of the rim feels concave.
- Some rims have a “trench” running on the braking surface—this is the wear line. When this begins to disappear, it is time to replace.

Chain:
- Check at 1500-2500 miles, depending on riding conditions.
- Should be replaced after 3,000 miles.

Gates Carbon Drive Belt:
- Should be replaced after 10,000 miles.

Cassette:
- 10,000 miles if chain replaced frequently.
- If a new chain “skips” on any of the cassette cogs while riding, cassette is worn.
- Around 6,000 miles under hard use.
- Brake Pads: Most brake pads have a “wear line”. When the pad is worn down to this line, it is time to replace.
Traveling with your OSATA

Traveling with your Bike Friday on the airlines today will, for the most part, be as convenient as it was just a few years ago in the good old days. However, because of the need for extensive inspections required by the TSA, there are a few points to consider.

Do not lock your TravelCase when traveling by air with a non-TSA approved lock. All luggage must be inspected by TSA agents when checking in your luggage. TSA agents can, and have, broken open locked TravelCases. Even after the initial inspection, do not lock your case; we have had reports of subsequent inspections where the TravelCase lock was broken open.

You may ask to be present during the inspection, however, you may not touch your bike or TravelCase once you have handed it over to the TSA. By asking to be present, you may be able to give some repacking tips to a very busy agent. Alternatively, you may wish to provide your contact information so if any questions arise in regards to the packing of your luggage, you can be a resource for TSA.

When traveling by air, you might consider not over-packing your TravelCase. With some practice it is quite possible to get a tremendous amount of gear into your TravelCase; however this only obscures the inspector’s view and they will deconstruct your carefully packed case.

Consider using extra straps, bungee cords, or toe straps, etc. to bundle the packed bike together as one unit instead of multiple, separable layers. This way an inspector can remove the bike as one piece, look it over, and replace it back into the case quickly and accurately.

Consider taking a photo(s) of how the packed bicycle fits in the TravelCase. Any information to make the TSA agent more successful in re-packing an inspected piece of luggage is to your advantage. Photos can be taped to the inside surface of the TravelCase, viewable when the case is open. This can increase the likelihood the TravelCase is properly packed AFTER the inspection, reducing the risk of future damage.

Observe airline luggage weight limitations. For domestic flights (including domestic legs of international flights), the checked luggage needs to weigh less than 50 pounds. For international flights, the checked luggage limit is 70 pounds. Luggage which exceeds these limitations may be charged an excess baggage fee.

Check with the airlines for regulation updates.
Warranty Information

We at Green Gear Cycling, Inc. (Bike Friday) want you, the customer, to be happy with your new bicycle. If for any reason you are dissatisfied with a new bicycle purchased directly from us (not a dealer), you may return the bicycle to us for a full refund, less all shipping charges. In all cases, the return shipping charges are your responsibility. To take advantage of this guaranty, you must notify our service department (800.777.0258 / service@bikefriday.com) within 30 calendar days of your receipt of your bike of your intent to return the bike, and we must receive it in our possession within 35 calendar days of you taking delivery of the bike. We also accept returns on parts within 30 days as long as the part is unused and undamaged. Processing your refund usually takes 2-6 weeks from the time that we receive back your returned item(s).

We want your bicycle to work for you, and in order for your bicycle to work well, it should fit. We’ll need some help from you to ensure that your new Bike Friday fits you well, specifically by providing us with the measurements of your best fitting bike (if you own a bike that fits well) and a description of how you feel on this bike. Additionally, you will be asked for some personal measurements with a required accuracy within 1/4” (5mm) and 3 pounds (1.35kg) - your current weight (not your ideal weight) - as well as a description of your riding style and the places you most likely envision riding your new Bike Friday. Our Consultants can guide you through the process of obtaining and interpreting this information.

Armed with this data, we can guarantee the fit of your new Bike Friday if (1) we are matching exactly the dimensions from your current, best fitting bicycle, or (2) we build a Bike Friday from your body measurements that includes our optional “fit stem” program. If you choose to have us build a bike for you that is sized in any other way, the bike will be sized per that method and built in a manner that allows for later fine-tuning of the sizing should you choose, at your expense, to pursue a more exacting fit.

As part of the consideration for buyer’s purchase, buyer understands and agrees to the following: Green Gear Cycling warrants your bicycle frame set, including fork purchased from Green Gear Cycling or an authorized Green Gear dealer, against defects in workmanship and materials for the lifetime of the bicycle. This does not cover paint or powder coat finishes. Green Gear Cycling honors the original manufacturer’s warranty on parts and components against defects in manufacturing. Tubes and tires are sold as-is.
Warranty Information

This warranty is expressly limited to the repair or replacement of the defective frame, fork, or defective part at the discretion of Green Gear Cycling. This is the sole remedy of the warranty. This warranty applies only to the original owner and is not transferable.

Claims must be made through Green Gear Cycling or an authorized dealer. Proof of purchase is required. This warranty covers bicycles and components purchased outside of the United States only if purchased through an authorized Green Gear Cycling dealer.

This warranty does not cover normal wear and tear, improper assembly or maintenance, or installation of parts or accessories not originally intended or compatible with the bicycle as sold. Under no circumstance shall Green Gear Cycling be responsible for incidental or consequential damages.

This warranty gives you specific rights, and those rights may vary from place to place. This warranty does not affect the statutory rights of the consumer. The 30-day money back guarantee and warranty apply to bicycles and parts purchased directly from Green Gear Cycling, Inc., or from its authorized dealers. Except as provided herein, this product is provided “as is” without any additional WARRANTY of any kind, including the WARRANTY OF MERCHANTABILITY and the WARRANTY of FITNESS FOR A PARTICULAR PURPOSE, whether EXPRESSED or IMPLIED.

Pre-Owned Bike Guarantee

We at Green Gear Cycling, Inc. (Bike Friday) want you, the customer, to be happy with your pre-owned bicycle. If for any reason you are dissatisfied, you may return the bicycle to us for a full refund, less shipping charges. This applies to the purchases of pre-owned bicycles. In all cases, the return shipping charges are your responsibility. To take advantage of this guaranty, you must notify our service department (800.777.0258 / service@bikefriday.com) within 30 calendar days of your intent to return the bike, and we must receive it within 35 calendar days of you taking delivery of the bike. We also accept returns on parts within 30 days as long as the part is unused and undamaged. Processing your refund usually takes 2-6 weeks from the time that we receive back your returned item(s).

The sizing of the pre-owned bicycles are limited by their current construction. Bike Friday will, as part of the purchase price, replace the stem if necessary or allow for an upgrade to the “fit stem” program for a more exacting fit. No other modification to a pre-owned frame (including SatRday boom) is allowed. Any future corrections to the sizing will be borne by the purchaser.