



Jones Bikes Frameset Supplemental Manual

Thank you for your purchase of a Jones Bikes frameset, you now own one of the most versatile framesets ever made! This supplemental manual contains information specific to your Jones Bikes frameset that will help you get the most out of every ride. We understand that manuals aren't usually very interesting, but this one has some really useful information in it, so please take the time to read it! Please refer to the User Manual for warnings and cautions, as well as general bicycle information not included here.

We recommend that only an experienced bicycle mechanic builds this frameset into a bike, and that they tune and maintain that bike. If you feel competent to do this yourself, you accept responsibility for anything that may happen as a result of improper assembly, maintenance, or any other oversight. We do not provide full instructions or information for you to assemble, tune, or maintain the bike. It is important to do this work correctly to have a safe, reliable, and fun bicycle. When in doubt take the bike to your Jones Dealer and have them check it out!

Bicycle riding always involves risks and dangers including but not limited to death and serious neck or spinal injuries.

Wearing a helmet and riding within your limits can reduce your risk of harm, but the risk can never be eliminated.

By riding this bicycle you assume the all the risks and hazards incidental to bicycling and you release, and hold harmless Jeff Jones, Jeff Jones Bicycles and Mud Springs LLC with respect to injury, disability or death.

This bike does not have lights or reflectors. Do not ride at night without light and reflectors. Please refer to the User Manual for more information.

Basic Information about you Jones Bikes Frameset:

Note: This frame is not compatible with suspension forks or suspension corrected rigid forks. Installing anything other than a Jones Bikes fork designed for the specific model you are working with can change the geometry of the bicycle and ruin the amazing handling that the Jones Geometry is known for, potentially leading to a crash and injury.

EBB

Your bike includes a Bushnell eccentric bottom bracket (EBB), which allows you to adjust chain tension when using the frame to build a singlespeed or internal gear hub-equipped bicycle. It also allows you to adjust the bottom bracket height if you use smaller wheels (such as 27.5).

Make sure you grease the moving parts of the EBB where it contacts the frame, and the threads of the expansion bolt before installing it. Refer to Bushnell EBB instructions for more detailed information.

Be sure to check it after the first few rides. It will need to be tightened after settling in.

The EBB can be rotated to change the bottom bracket height. For standard wheels (29x2.4" for the Jones 29, and 29x3.0" for the Jones Plus), we recommend setting the EBB at its lowest setting.

For complete installation and maintenance instructions for the Bushnell EBB, check out www.bushnelltandems.com/eccinstructions.pdf.

Seatpost and seat tube area

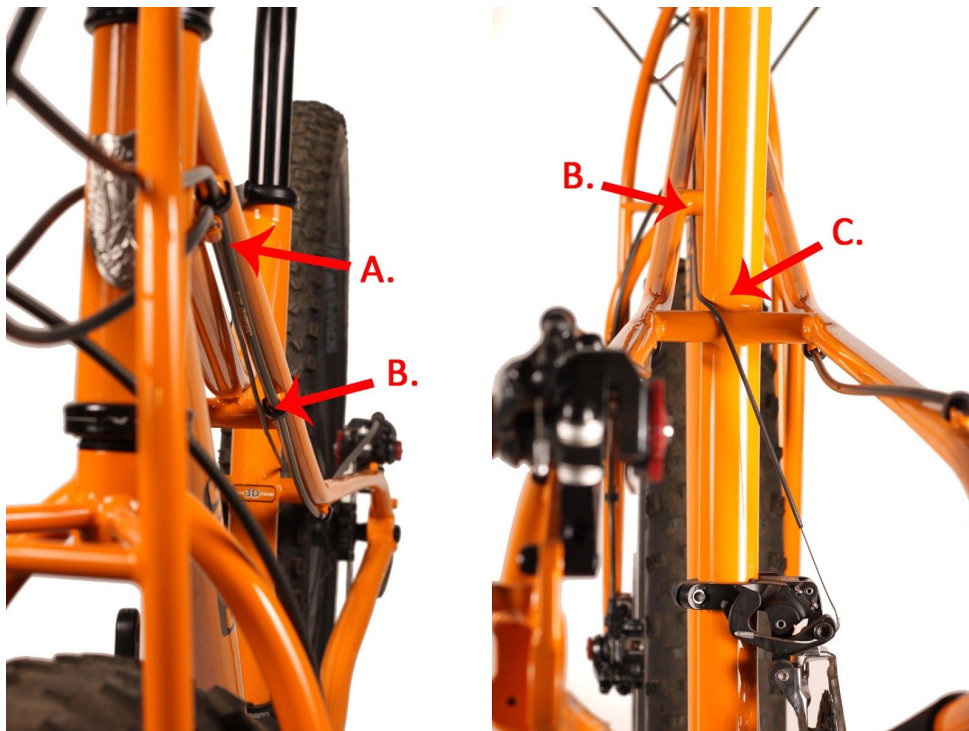
Your bike uses a 27.2mm seatpost. For Jones 29 frames, we usually recommend a seatpost with 15-25mm of setback. For Jones Plus frames, we usually recommend a zero-offset seatpost. Some taller riders will find that they want a setback seatpost on the Plus, and some smaller riders will find that they need a zero-offset seatpost on a Jones 29 frame.

Steel frames use a 31.8mm seatpost clamp. Titanium frames use a 34.9mm or 35mm seatpost clamp. Your frame requires 100mm/4" of seat post in the frame. Any more than that can be cut off to save weight and make it possible to lower the seat more.

Front Derailleur

Jones Diamond 29 frames, and all Spaceframes, use a down-swing, top-pull front derailleur. Jones Diamond Plus frames use a top-swing, down-pull front derailleur. All frames use a band clamp style front derailleur. Steel frames have a 31.8mm seat tube diameter, and titanium frames have a 34.9mm seat tube diameter. You can use a dual pull front derailleur on the Jones 29 frames, but we like the top-pull-only style because they have more tire clearance.

To route the front derailleur cable guide tube on Spaceframes, cut the front derailleur cable housing to the correct length and install the appropriate ferrules. Then slide the guide tube over the cable until it hits the cable stop on the top tube, and seat the cable housing in the cable stop (A.). Route the guide tube (with cable inside) underneath the second top tube brace (B.), then between the two top tubes that extend to the rear of the bike to become the seat stays, over the brace at the seat tube, and around the back of the seat tube (C.) down to the front derailleur. See your dealer for more information.



Spaceframe front derailleur routing from the front (left photo), and from the rear (right photo).

Drivetrain notes for Jones Plus

Because of the wider tires on the Plus, there is less clearance between the rear tire and the chain. As a result, triple-chainring (3x) and standard double chainring (2x) cranksets won't work. We recommend using the Surly O.D. cranks (73mm BB version) for 2x gearing (mountain double) on the Plus with a 10 speed drivetrain, for which the Plus was designed. These cranks move the chainrings outboard, away from the bike's center line in order to give more tire clearance. For reference, standard mountain double cranksets position the teeth of the inner chainring at approximately 43mm from the centerline of the bike, whereas the Surly O.D. cranks put them at 51.4mm from the centerline. This gives the extra clearance that is needed. As new standards come out, such as the "Boost" standard, there are more crank options that will, in many cases work. For instance, a Shimano Boost crankset for mountain double (denoted by the addition of B2 to the part number) moves the position of the inner chainring out to 45.8mm from the centerline, which gives clearance for lower-volume 29x3" tires such as the Vittoria Bomboloni and Maxxis Chronicle, but not larger volume ones such as the Bontrager Chupacabra. Because this introduces a gray area where some tires fit and some don't, we only recommend using the Surly O.D. cranks on Jones Plus frames.

We also recommend using a 10-speed drivetrain on the Plus. In order to go to 11 speeds, drivetrain manufacturers added the extra cog to the inboard side of the cassette, so an 11 speed drivetrain has less tire clearance. While it *is* possible to use an 11 speed drivetrain on a Plus (especially if done with a combination of a "Boost" single-ring crankset), we find that having two front chainrings makes for a great way to get a wide gear-range on the Plus, while maintaining a better chain line. In areas where you don't need such a wide range, a 1x10 system works great.

On the Jones 29, 11 speed drivetrains and triple chainrings work fine because of the smaller tires. Check <http://www.jonesbikes.com/support/> for updates.

Truss Fork Installation

This covers Truss Fork installation using a Jones headset for truss forks. For other headsets, please refer to the notes that follow these instructions and check with your dealer or at www.jonesbikes.com/support/ to see the latest compatibility information.

1. Ream and face the headtube.
2. Use a headset press to press headset cups into the frame. Note that they're both the same! And they don't have any markings for you to get straight!
3. Thread the three truss clamp bolts in until they have threads engaged, but are not threaded in any further, as this will begin to compress the clamps, making it difficult to insert the steerer tube.
4. Push the steerer tube in from the bottom of the fork and leave about 15mm exposed above the lower truss clamp.
5. Grease the cups liberally, and push the bearings into the grease, making sure that the bearing retainers are oriented correctly. Take the grease that squeezes out and use it to cover the bearings.
6. Put a 1.5mm spacer on the steerer, followed by the headset's lower split ring, followed by the headset cone assembly, making sure that the rubber seal is pressed on completely.
7. Set the top headset cone assembly and split ring on the top headset cup with bearings in place and don't forget to check the seal.

8. With lower bearings in place, slip the lower headset parts together and begin feeding the steerer up toward the top headset cup until it is exposed a few mm.
9. Put spacers in between the upper headset assembly and the upper truss clamp by pulling upward on the truss to stretch it a bit so that the spacers are tight and actually begin preloading the headset slightly (you don't need to really bend the fork, but you just don't want the spacers to be at all loose, as it will make tightening the headset difficult).
10. Feed the steerer the rest of the way up, usually by hitting it with a soft mallet from the bottom until it's flush with the bottom of the fork.
11. Tighten the lower two truss clamp bolts evenly to between 90 and 100 in-lbs (10-11.25 Nm), adjust the headset as usual, then tighten the upper truss clamp to approximately 65 in-lbs (6.78 Nm).
12. Tighten the stem to the manufacturer's recommended torque.

Note: You can place the spacers above or below the headset to affect the frame geometry a small amount. Place all the spacers above the headset for a lower bb and steeper angles (quicker feeling) or all below the headset for a higher bb and slacker angles (more laid back). As a rule, we set up the bikes as described above, with the bulk of the spacers above the headset. Just remember to keep at least one 1.5mm spacer underneath the headset at all times.

Truss fork headset compatibility information (intended for professional mechanics).

In order for a headset to work with the Jones truss fork, it must have what amounts to two upper headset assemblies. On different types of headsets this means different things: on Chris King headsets, you will need to replace the crown race with a "GripLock bearing cap", which is the same as what goes on the top of the headset assembly because the upper and lower cups and bearings are the same; on a Cane Creek headset, you can't do the same thing. In the latter example, you can purchase two complete upper headset assemblies for the 110 headset, and use those, but with Cane Creek's other headsets, the process is different. With the 40 and 10 models, you can use the plastic split ring that is available at our store at www.jonesbikes.com/store. For all other headsets the same follows, but it can be complicated, and in some cases, it's not possible to modify the headset to work with a truss fork. In any case, using a standard crown race will not work under *any* circumstances! For these reasons, we recommend using either a Jones headset for truss forks, or a Chris King NoThreadSet with the GripLock bearing cap in place of the crown race. For updates in compatibility and more information, please refer to <http://www.jonesbikes.com/support/>, and check check with your Jones Bikes Dealer.

Wheel Information

Up front:

The front quick release lever is easier to use and fits best on the right side of the fork, away from the disk. Be sure the wheel is all the way in the dropouts before tightening the quick release lever. The cam lever should be tight enough that when pushing it into the closed position, it leaves a mark on your hand, but if you are using an exposed-cam style quick release, it may take more force to get it tight enough.

Periodically cleaning and lightly lubing with a drop of lightweight lubricant can make is easier to tighten. This isn't necessary with an internal cam system like those from Shimano. On the thru-axle forks, follow the manufacturer's instructions to thread the axle in until the cam lever leaves a mark in your hand when pushing it into the "closed" position. Adjust the front cam lever so that it points toward the rear of the bike, or up, parallel to the fork blade.

There are two types of front hubs used on Jones bikes:

Jones 29 quick release forks use a 135mm QR front hub such as the Jones 135-F. Note that the disc spacing is front, not rear.

Thru-axle Jones 29 and Jones Plus forks use 142x15mm thru-axle hubs such as the Jones 135/142-F hub.

In the rear:

On quick release frames, put the cam lever on the non-drive side of the bike, and tighten it so that it is pointing directly backward if possible; otherwise put it in line with either the chain or seat stays. Follow the same guidelines as for the front quick release levers in order to determine the correct tightness of the rear cam lever. On thru-axle frames, the procedure is the same as for the front wheel. Position the cam lever so that it is out of the way, in line with the chain or seat stays or pointing directly rearward.

Tire Pressure and Size

Tire pressure is often overlooked, but it's an important part of getting your bike to ride optimally. There is a very basic, very common misconception about tire size and tire pressure that we've all heard, and it can be summed up as: "Narrow, high pressure tires are faster."

While we are used to equating a rough ride with a fast ride, this simply isn't true. If it were, we would still be riding bikes with solid tires! The one place where very narrow, high pressure tires make real sense is on the track, where the bikes are on a glass-smooth track, and aerodynamics is the main limiting factor. Likewise, in road racing, where making it into a breakaway is often helped by the ability to stage very rapid accelerations, small, high pressure tires are good because they are so lightweight. However, outside, in the world where most of us ride, there are bumps everywhere, and we aren't trying to get into the breakaway! With high pressures and small tires, every small imperfection in the road and trail gets transmitted to your body, which slows you down because there's nothing to absorb those bumps. Not only that, if you're getting beaten-up as you ride, you will get tired more quickly, whereas if you're comfortable and don't feel every little pebble and rut, you'll feel stronger for longer, and be able to focus more on putting energy into forward motion as opposed to just keeping yourself comfortable. Wider tires give you the extra air volume to absorb bumps while allowing us to have the benefits to efficiency and handling that come with a rigid bicycle. This is why we recommend using wider tires on our bikes!

Rim width is another factor in how a tire behaves, and we recommend using a 50mm rim with a 29x2.4" tire on the Jones 29 frames, and a 50-56mm rim with a 29x3.0" tire on the Jones Plus. This makes the sidewalls more vertical, giving the tire better support. What this means when you're riding your bike is that the tire won't have as much of a tendency to fold over under hard cornering as it would if the rim were narrow, and it will help the tire resist pinch-flats because the wide rim has to displace more air volume than a narrow one.

The ideal tire pressure will steer precisely without having the harsh, rough, slow ride that comes with high-pressure tires; it will soak up the small bumps and irregularities in the road, lowering the tire's rolling resistance, and increasing your comfort; it will provide cushion for your body during hard impacts without bottoming out and pinching; finally, it will allow the tires to conform to the ground in order to give the most traction without causing the bike to "self steer". Finding the correct tire pressure will be a matter of trial and error, but we encourage you to take the time to figure it out, because it will make your riding experience great!

As a starting place, we suggest these pressure ranges:

29x2.4" on 50mm rim: 14-20 PSI

29x3.0" on 50mm rim: 10-15 PSI

Heavier riders—especially those in rocky areas—will want to start on the high end of this range, and lighter riders on the low end, but you'll need to experiment. In any case, it's a good idea to check your tire pressure before each ride, and be sure to use an accurate gauge because few floor pumps have the fine measurement and accuracy that you'll need at under 20 PSI.

Bike Maintenance

While it's beyond the scope of this supplement to tell you everything you need to know about maintaining your bike, we'd like to offer a few tips that will make your bike work better and last longer:

Cleaning

Don't pressure wash your bike! It blasts grease out of bearings and replaces it with dirty water, which just doesn't lubricate them very well. Instead, if you have to wash your bike, use a low pressure garden hose and some dish soap. Put some soap in a bucket and use a soft brush to scrub the bike, before gently rinsing it. Try to avoid the bearings—especially the bottom bracket and hubs—and be ready to take the wheels off and clean everything very thoroughly afterward! Re-lube the chain and dry the bike off after washing it.

Lubing the chain

This is a basic, but very important and often-overlooked area. Following this technique will give you a well-lubed chain, and won't contaminate any other parts of the bike, which is very important. Make sure not to use spray-lube because overspray can get on the brake rotor, which will contaminate your brake pads, making the brake almost useless.

1. If the chain is very dirty, use a stiff brush to scrub it off. If you really want to get it looking new, you can remove the chain or use one of the many chain cleaning tools available to degrease your chain. The reason not to do this is that getting the degreaser completely *out*, and lubricant back *in* is very difficult. Therefore, it's often better to just use lubricant to clean your chain, as described next.
2. Once you've gotten the surface gunk off, shift into the big ring (if you aren't using a single ring in the front), and a small cog in the rear and, while you pedal the bike backwards with your right hand, apply lube from a squeeze-bottle just in front of the rear derailleur pulley until you can see that the full length of the chain has lubricant on it. Alternatively, you can put a single drop of lube on each roller of the chain.
3. After applying lube, continue pedalling backward for a minute or two to work the lube into the chain, then, using a rag, wipe the chain off while you pedal backward. Try to get all of the lube off.
4. If you really want to flush your chain and clean it more, you can simply repeat this process.

If you have any questions, please feel free to call.

Thank you and enjoy your rides!

Jeff

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For more technical information and manuals, go to www.jonesbikes.com/support/