



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

Your one-stop reference for all Niner Bikes technical information, setup guides, warranty and related data.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

WELCOME TO THE BIG REVOLUTION!

Call me Ishmael.

Ha, just kidding.

This is your complete guide to the Niner Bikes line of frames and bicycles. If you read this, you have bettered about 95% of the buying public. In fact, opening the first page and doing anything more than giving it a cursory glance means that you are way ahead of the curve. Congratulations!

This document contains some pretty important information that will help you care for and adjust your Niner frame. It also contains information that will help you to get the most out of every Niner product. We understand that you would rather be riding than reading, so we will try to be as brief and succinct as possible, while also giving you clear answers to your questions.

We offer a warranty on all Niner products - the specifics are contained in this document. You must register your warranty to receive full benefits.

Besides that, get out on your Niner bike, have an amazing adventure, and keep the rubber side down!

The Niner Crew



This symbol denotes critical information or processes that deserve extra attention.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

CONTENTS

WELCOME	3
GEOMETRY PHILOSOPHY & BASIC INFO	4
FRAME CARE & MAINTENANCE - STEEL	5
FRAME CARE & MAINTENANCE - ALLOY, CARBON & FULL SUSPENSION	6
POST-CRASH SAFETY INSPECTION	7
NINER WARRANTY & CRASH REPLACEMENT	8
GEOMETRY KEY, FRAME SIZE SELECTION & COMPONENT SELECTION	9
GEOMETRY & SPECIFICATIONS: WFO 9	10
GEOMETRY & SPECIFICATIONS: RIP 9 RDO	11
GEOMETRY & SPECIFICATIONS: RIP 9	12
GEOMETRY & SPECIFICATIONS: JET 9 RDO	14
GEOMETRY & SPECIFICATIONS: JET 9 CARBON	15
GEOMETRY & SPECIFICATIONS: JET 9	16
GEOMETRY & SPECIFICATIONS: AIR 9 RDO	18
GEOMETRY & SPECIFICATIONS: AIR 9 CARBON	19
GEOMETRY & SPECIFICATIONS: AIR 9	20
GEOMETRY & SPECIFICATIONS: EMD 9	22
GEOMETRY & SPECIFICATIONS: ROS 9	24
GEOMETRY & SPECIFICATIONS: SIR 9	25
GEOMETRY & SPECIFICATIONS: MCR 9	27
GEOMETRY & SPECIFICATIONS: ONE 9	25
NINER VERSION CHART - WHAT YEAR IS MY NINER?	30
BEARING & TORQUE SPECS	34
ENDURO™ BEARINGS	35
ABOUT CVA™ SUSPENSION	36
SAG SET UP FOR NINER FULL SUSPENSION MODELS	38
HEADSET SPECIFICATIONS	39
ABOUT TAPERED HEADTUBES	40
CROWN RACE +5MM	41
RUNNING YOUR SIR 9 OR AIR 9 CARBON AS A GEARED BIKE	42
AIR 9 CARBON CABLE ROUTING	43
AIR 9 CARBON CABLE ROUTING (GORE)	45
JET 9 RDO/JET 9 CARBON CABLE ROUTING	48
RIP 9 RDO/JET 9 RDO/JET 9 CARBON CABLE ROUTING	52
AIR 9 RDO CABLE ROUTING	55
BB30 AND PF30 EXPLAINED	57
CYA IDENTIFICATION GUIDE	58
CYA INSTALLATION	59
BIOCENTRIC COMPATIBILITY	60
BIOCENTRIC INSTALLATION	61
SINGLESPEED GEARING INFORMATION	62
SEATPOST INSTALLATION	63
NINER CARBON & STEEL FORK SPECIFICATIONS	64
NINER CARBON FORK INSTALLATION	65
MAXLE LIGHT INSTALLATION	68



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY PHILOSOPHY & BASIC INFO

How is Niner's geometry like dessert?

When considering bike frame options, we often hear riders ask questions like "what headtube angle does this frame have?" or, "what is the seat angle?". While these are important numbers to consider, we would like to encourage you to step back and consider the whole frame when evaluating geometry. In fact, we would like to have you consider the whole bike build.

Think of bicycle geometry like you think of a cake. Cakes need flour, sugar, butter and eggs - if the chef alters the ratio, the taste and texture will vary. The same goes for bicycles - a frame designer that considers only one angle is creating a cake with only one ingredient in mind. It is essential that every tube length and every angle be evaluated in concert with the rest of the frame design and with the anticipated specifications of the complete bike in mind.

Now, there is room for variation in any recipe, and a good chef will know where they can have some fun with new ingredients. Perhaps one cake will contain chocolate, another might be made with carrots - everybody has a favorite. There is room for a lot of personalization in bike set up, too, but in the end, every bike still fits within a set of parameters that defines the geometry philosophies of the frame builder.

So, how does Niner geometry fit into this "cake" theory? Because we only build 29ers, we are able to make bikes in every flavor while everyone else is still learning how to turn on the oven. For every model, whether it is our lightest cross country hardtail or our burliest full suspension bike, we have considered how each angle or length will interact with big wheels to affect the finished build and in the end, how that finished build will affect the riding experience of every Niner owner.

The best way to evaluate any geometry is to ride the bikes. We know that in head to head comparisons, Niner's geometry will shine through. Demo a Niner and see for yourself.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

FRAME CARE & MAINTENANCE - STEEL

Niner Bikes STRONGLY recommends that you apply Frame Saver® to your new steel frame. Please follow the manufacture recommendations for application. You may see some rust within the frame already; this is only minor and not cause for alarm, hysterics, or nights of lost sleep. After installing the Frame Saver® all will be good again. We would have installed Frame Saver® prior to shipping but it is a combustible material and would require us to have to change our storage facility to meet the ventilation needs set forth by the city. We would also have to substantially increase the shipping costs to you due to the increased packaging required by Federal Law. Following is an article by Peter Weigle re-printed with permission:

Out of Sight, Out of Mind - Rust Never Sleeps

Steel frames rust, that's all there is too it. They rust when scratched, chipped, or abraded in any way. Most people know this. What they don't know is that steel frames also rust from the inside out.. The steel inside the frame is almost always left raw and unprotected. If a little moisture enters the frame, the environment within will resemble a terrarium. The humid air and water droplets will be attacking the steel and you won't even know it. Left untreated, the frame will be destroyed.

To help prevent rust inside steel tubes, Frame Saver® was developed. It is a product that was long overdue. It coats the inside of the steel tubes protecting them from the corrosive elements that find their way there. True, bicycles have been around for 100 years and there are plenty of early examples of frames that have lasted lifetimes without rust, so why all the fuss now? Because in the last couple of decades there have been major changes in materials, equipment, and bike usage that have made internal frame protection even more important.

Today's high performance frames are being made with extremely thin walled tubing compared to frames of the past. There used to be a safety margin should the tubes rust. Not any more! There are a few construction details found in some frames that have trapped water and caused premature failures. Frame builders who do repair work, painters and mechanics, are seeing a higher incidence of rust-throughs these days, and it is only going to get worse, unless these frames are rustproofed on the inside. Most new bikes are equipped with sealed bearings, which mean fewer overhauls and fewer chances to look in the bottom bracket to see what is going on. After many carefree miles, many mechanics and owners are shocked when they pull the bottom bracket bearings and find rust-colored sludge, or flakes of rust, inside the shell. Hopefully, it's not too late to save a frame in this condition.

Mountain bikes are supposed to be used in extreme conditions. Stream crossings, fall, winter, and early spring rides all involve water. Even if you don't ride in the rain or cross raging rapids, moisture still finds its way into a frame. Take your bike out of a warm house on a cool, damp day, or on a hot day return your bike to a cool, damp basement for storage and what happens? As the warm air inside your frame cools and contracts, it pulls in the damp air past the seat post, threads, and vent holes. This may only be a minute amount, but do this many times over the course of the season and the cumulative effect can be devastating.

It would be misleading to suggest that every steel frame is a risk because there are many factors involved. It is impossible to tell from the outside, which frames are screaming for attention. Why take a chance? With the cost of bikes these days, think of it as cheap insurance. Prevention is easy. An application of Frame Saver® will add years to a frame's life and peace of mind to its owner. May you both ride happily into the next millennium and beyond.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

FRAME CARE & MAINTENANCE - ALLOY, CARBON & FULL SUSPENSION

Caring for your Carbon, Alloy (Aluminum) or Scandium Niner frame is a simple affair: use common sense as your guide. Keep your frame clean, check your frame and components in between rides for unusual wear and tear, and give it a nice shine every once in a while so that it knows you care. In addition, it's important to check your frame regularly for cracks or sign of physical trauma. This is, of course, much easier to do with a clean frame. We suggest using a non-toxic cleaner designed for bicycles when cleaning your frame - Pedros and Simple Green both make good products. Use a nice, clean, soft rag or old t-shirt for cleaning to avoid abrasion. Don't use high pressure washers, as this may drive grit and/or water into your bearings and components.

Additionally, the Niner's carbon frames include features such as titanium guards on the driveside of the bottom bracket and one 3M guard on the driveside seatstay to protect from chain damage. The A9C also includes a chainstay protector. It is imperative that people running gears should use some sort of chainstay protector to keep chain slap from damaging the chainstay. Each carbon frame also includes a large strip of anti-ballistic 3M tape that we recommend using for downtube protection. Please see the section on post-crash inspection for tips on how to regularly inspect your frame for safety.

Niner full suspension bicycles need a few extra maintenance steps. Check the fasteners on your linkage every few rides. Make sure that all fasteners are torqued to 65 in/lbs with blue Loctite. Carefully follow the use instructions from Loctite. A smooth quiet ride depends upon bearings. Replace every 200 hours of ride time.



POST-CRASH SAFETY INSPECTION

After a crash or significant impact:

1. Check yourself for injuries, take care of them to the best of your ability. Seek medical help if necessary.
2. Next, check your bicycle for damage on the spot. Do not ride if any problems are detected.
3. Bring your bike to your Niner dealer for professional inspection. The entire bike must be inspected for damage - this may require disassembly, depending upon the dealer's recommendation. Err on the side of caution.

▲ A crash or impact can put extraordinary stress on a bicycle, causing it to fail or to fatigue prematurely. Components suffering from stress fatigue can fail suddenly with no warning, causing loss of control, serious injury or death. This applies to all components, not just those made or manufactured by Niner Bikes.

Inspection of frame, fork and components:

Cracking is one of the most obvious signs of damage in all frame and fork materials. Inspect your entire bicycle for cracks or splintering. If any part of the bicycle is cracked or splintered, discontinue use immediately, as a crack may lead to catastrophic failure.

Delamination is serious damage that can occur in composites such as carbon fiber. Composites are made from layers of fabric and delamination means the layers of fabric are no longer bonded together. Do not ride any component or frame that is delaminating. These are some delamination clues:

1. Cloudy or white areas. This kind of blemish looks different from the ordinary undamaged areas, opaque and cloudy instead of glossy and transparent.
2. Bulging or deformation. If delamination occurs, the surface shape may change. A bump, bulge or soft spot may be apparent.
3. A difference in sound when tapping the surface. Gently tapping an undamaged composite with a coin should produce a consistent sound, usually hard or sharp. Delaminated areas may sound duller than other areas.

Unusual Noises can be caused by cracks or delamination. Think of such noises as a serious warning signal. A well-maintained bicycle will be quiet and free of creaks or squeaks. Investigate and locate the source of any noise. The sound may not be a crack or delamination but should be fixed before riding.

Misalignment cannot be corrected by attempting to bend the frame. Do not attempt to realign bent Niner frames.

▲ Do not ride a frame or component with any delamination or cracks. Riding a delaminated or cracked frame or component could lead to complete failure with risk of injury or death. Please ensure that the damaged component is destroyed, not re-sold.



NINER WARRANTY & CRASH REPLACEMENT

Niner Bikes will warranty carbon products with the C5 Warranty for a minimum period of five (5) years from the date of purchase for the original owner only.

Niner Bikes will warranty all non-carbon fiber frames and parts for material defects and workmanship for a minimum period of two (2) years from the date of purchase for the original owner only.

This warranty is subject to approval by Niner Bikes and is only valid for bicycles damaged under normal use. This warranty does not extend to Darwinian usage of the frame. It does not cover paint/finish issues, minor dents, or issues arising from normal wear and tear. This limited warranty applies to the frame only. All other components are covered under the warranty from the manufacturers of said components. This warranty is void if the frameset was not purchased new, through an authorized Niner Dealer or if it was not assembled correctly.

Upon purchase of a Niner frame, bicycle or components, owner is required to register their warranty online with Niner Bikes. Owner must retain a copy of their receipt from an authorized Niner Dealer - in the event they do require warranty service, this proof of purchase will be requested by Niner.

Should the frame be determined to be defective by Niner Bikes, Niner will repair or replace the frame at Niner's sole discretion. Niner will not pay for any labor charges associated with the warranty of said frame, but will pay for shipping of the frame to and from Niner's headquarters. To exercise this warranty, please call or email Niner Bikes as soon as a problem arises. Niner will make every effort to repair/replace a warranty claim in a timely fashion and keep you riding. It would be helpful if you timed your warranty claim with a massive snow storm or torrential rain storm so that you don't notice that your bike is un-rideable.

Warranty Procedure:

1. If you have a potential warranty claim, the best, fastest approach is to take your bike to your Niner dealer/distributor and have them process it for you.
2. If you are unable to work through your Niner dealer, please contact warranty@ninerbikes.com or call us directly at 1-877-646-3792 to begin the warranty process.
3. If we determine that your frame is covered under warranty, and is deemed needing replacement, not repair, you may choose to receive a free equivalent replacement frame or you may upgrade to a different frame at a reduced cost.

Crash Replacement Procedure:

For those of you who bring honesty, integrity and a sense of responsibility for your actions, and who are honest with us about how the frame came to be in it's current 'crashed' state (for example: dude, I totally just drove my bike into the garage), or if your bike is outside the warranty period. We have a no fault, no questions asked 'crash replacement' policy. Niner Bikes does offer a crash/accident replacement program - 20% off a replacement frame.

To take advantage of our crash replacement program, see your Niner dealer.

▲ STUNT RIDING WARNING:

Off road riding is extremely dangerous. Some downhill riders and freeriders reach speeds similar to motorcycles, thus face similar risks and hazards. When engaging in these activities, you, your bicycle and your safety equipment must be in perfect condition. We recommend that at all times you wear appropriate safety gear, including, but not limited to an approved helmet, full finger gloves, body armor and protective footwear.

Not every bicycle is built for every bicycling activity. Please consult your Niner dealer to ensure that you have the right bicycle and equipment designed for the style of riding you intend to do.

No bicycle is indestructible. Downhill racing, severe off-road riding, jumping and stunt riding increase stress levels on every part of your bicycle. Frames or parts under high stress may fail causing you to lose control or fall. Because of the risk involved, Niner recommends that you conduct a thorough inspection of your bicycle, including frame and components before each ride. If you fall while riding, inspect yourself for injury first, then carefully inspect your bicycle for any damage that may have occurred as a result of the crash. When inspecting your bicycle for damage, look for:

- bent or broken components, such as the handlebar, stem, seatpost, pedals.
- dents, cracks, scratches, deformation or discoloration.

Because damage may be internal or hidden, if any of these signs appear, no matter how small they are, stop riding your bicycle and take it to an authorized Niner dealer for further inspection.

Safety should always come first. Always ride within your ability and with the proper safety equipment.

Stunt riding, severe off road riding, jumping or downhill riding is very dangerous and the rider voluntarily assumes the risk that the bicycle frame and/or its components will bend or break and voluntarily assumes the risk of injury or death.

Niner does not warranty the bicycle or components for such activities and expressly disclaims all warranties including the warranty of fitness for particular purpose and merchantability.

Although many catalogs, advertisements and articles about bicycling depict riders racing, jumping, stunt riding, and or riding hard off-road, this activity is extremely dangerous, increases the riders risk of injury or death and potentially increases the severity of any injury. The action depicted is performed by experts with many years of training and experience. Even with this experience, cyclists who engage in such activity are often severely injured. It is also foreseeable that during some jumps, stunts or races that the rider will exceed the design capacity of the frame or components, which may result in something on the bicycle breaking or bending, which could result in serious injury or death.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY KEY, FRAME SIZE SELECTION & COMPONENT SELECTION

Does the setup of my Niner affect how it will perform and/or handle?

Yes. All of the items in the list below (and myriad unlisted choices) can help you to customize your Niner's ride feel and fit:

- Frame size selection
- Fork Travel/Length
- Fork setup
- Wheel retention devices (Maxle/QR, etc.)
- Rear suspension set up
- Stem length & bar width
- Wheel & tire selection & set up

You have many choices as to what components you choose to use with your Niner bike. You also have many choices to make when it comes to how you set up these components. The choices you make can dramatically alter the character of your bicycle. In general, this is a good thing.

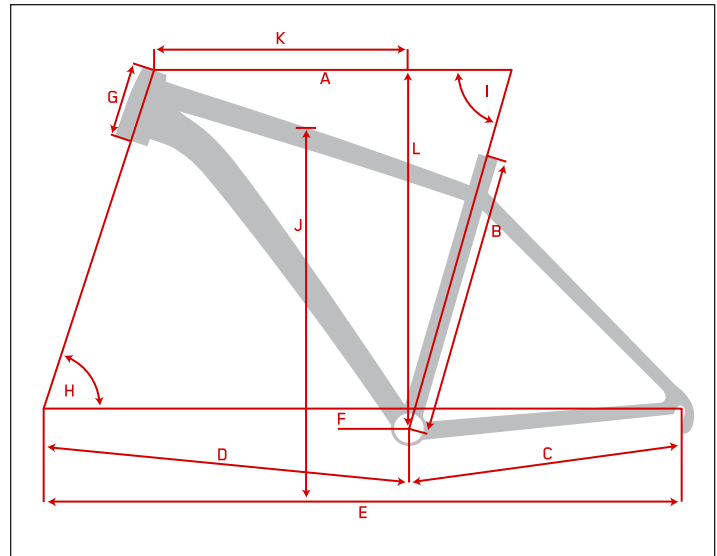
However, We cannot predict every new product that may come to the market and as such we cannot guarantee that every future product will be compatible with our frames.

For basic size recommendations see the chart to the right. For additional advice or for further info on component selection and set up, see your Niner dealer.

HEIGHT RECOMMENDATIONS				
XS (available in select models)	S	M	L	XL
5'0"-5'5" 1.53-1.65m	5'3"-5'9" 1.6-1.75m	5'8"-6' 1.73-1.83m	5'11"-6'3" 1.8-1.91m	6'3"-6'7" 1.91-2.01m

For riders who fall between sizes we recommend sizing down for a more maneuverable ride or sizing up for more stability.

The best way to determine which size is for you is to test ride a Niner at one of our dealers or demo events.



Geometry key:

- (A) EFFECTIVE TOP TUBE LENGTH
- (B) SEAT TUBE LENGTH
- (C) CHAINSTAY LENGTH
- (D) FRONT CENTER
- (E) WHEELBASE
- (F) BB DROP
- (G) HEAD TUBE LENGTH
- (H) SEAT TUBE ANGLE
- (I) HEAD TUBE ANGLE
- (J) STANDOVER
- (K) REACH
- (L) STACK



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY & SPECIFICATIONS: WFO 9

WFO 9	UNITS	A - TT LENGTH		B - SEAT TUBE LENGTH	C - CHAINSTAY LENGTH	D - FRONT CENTER		E - WHEELBASE		F - BB DROP		G - HEAD TUBE LENGTH		H - HEAD TUBE ANGLE		I - SEAT TUBE ANGLE		J - STANDOVER HEIGHT		K - REACH		L - STACK	
		140	160			140	160	140	160	140	160	140	160	140	160	140	160	140	160	140	160	140	160
SM	MM	587	590	406	455	687	694	1141	1149	22	14	120	69.0	68.0	74.0	73.0	718	727	408	397	623	630	
MD	MM	603	606	457	455	704	714	1158	1167	22	14	120	69.0	68.0	74.0	73.0	750	760	425	414	623	630	
LG	MM	622	626	508	455	724	731	1178	1186	22	14	130	69.0	68.0	74.0	73.0	787	795	442	430	632	640	
XL	MM	641	644	559	455	744	752	1198	1206	22	14	145	69.0	68.0	74.0	73.0	826	833	456	445	647	654	

SM	INCH	23.1	23.2	16.0	17.9	27.0	27.3	44.9	45.2	22	14	120	69.0	68.0	74.0	73.0	28.3	28.6	16.1	15.6	24.5	24.8
MD	INCH	23.7	23.9	18.0	17.9	27.7	28.1	45.6	45.9	22	14	120	69.0	68.0	74.0	73.0	29.5	29.9	16.7	16.3	24.5	24.8
LG	INCH	24.5	24.6	20.0	17.9	28.5	28.8	46.4	46.7	22	14	130	69.0	68.0	74.0	73.0	31.0	31.3	17.4	16.9	24.9	25.2
XL	INCH	25.2	25.4	22.0	17.9	29.3	29.6	47.2	47.5	22	14	145	69.0	68.0	74.0	73.0	32.5	32.8	18.0	17.5	25.5	25.7

*Geometry measurements are shown for 140mm and 160mm travel forks. Note that the increased height and offset of the Fox 34 140mm fork results in approximately .5° slacker angles(H,I) and .4" (12mm) longer Wheelbase(E).

WFO 9 SPECIFICATIONS & COMPATIBILITY
73mm threaded BB width
Shock size: 7.875"(200mm) x 2.25"(57mm) - 5.5"(140mm) travel
Shock mounting hardware: 21.86mm x M6
Shock SAG: 25% (which will move the o-ring 14.5mm down the shaft)
ISCG 03 (ISCG old) mounting tabs
30.9mm seat post, 350mm length recommended
34.9mm seat collar
"D" mount direct high mount front derailleur, bottom pull
1.125"-1.5" taper head tube with "inset or zero stack" style headset, 44mm upper, 56mm lower (headset not included) Cane Creek standard description: ZS44/28.6 ZS56/40
Enduro Max sealed bearings - (6x) 28x15x7mm, (2x) 24x12x6mm
142mm x 12mm rear spacing (replacement hangers, 135mm x QR axle kits available)
Small, medium, large and XL have one bottle mount inside the front triangle
TT cable guides for dropper posts
Can fit up to a 2.5" tire (tire size varies by brand, some tires may not fit)
Compatible with standard 3x chainring systems and Truvativ Hammerschmidt
SRAM recommended 2x chainring configs: 26/39T or lower
SRAM XX1 recommended max chainring: 36T. Q-Factor: 168mm
SHIMANO XT recommended 2x chainrings: 28/40T or lower
SHIMANO XTR recommended 2x chainrings: 26/38T. We do not recommend the use of 40T (48.8mm chain line) cranks because the large chainring may contact the frame.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY & SPECIFICATIONS: RIP 9 RDO

RIP 9 RDO	UNITS	A - TT LENGTH		B - SEAT TUBE LENGTH	C - CHAINSTAY LENGTH	D - FRONT CENTER		E - WHEELBASE		F - BB DROP		G - HEAD TUBE LENGTH	H - HEAD TUBE ANGLE		I - SEAT TUBE ANGLE		J - STANDOVER HEIGHT		K - REACH		L - STACK	
		120	140			120	140	120	140	120	140		120	140	120	140	120	140	120	140	120	140
SM	MM	587	592	406	450	660	666	1108	1111	29	22	100	70.5	69.5	73.5	72.5	701	705	408	398	603	610
MD	MM	603	608	459	450	677	684	1126	1133	29	22	120	70.5	69.5	73.5	72.5	748	751	419	409	622	629
LG	MM	622	627	509	450	697	703	1145	1152	29	22	130	70.5	69.5	73.5	72.5	779	788	435	425	631	638
XL	MM	641	646	559	450	717	723	1165	1172	29	22	145	70.5	69.5	73.5	72.5	814	823	450	440	646	653

SM	INCH	23.1	23.3	16.0	17.7	26.0	26.2	43.6	43.7	1.1	0.9	3.9	70.5	69.5	73.5	72.5	27.6	27.8	16.1	15.7	23.7	24.0
MD	INCH	23.7	23.9	18.1	17.7	26.7	26.9	44.3	44.6	1.1	0.9	4.7	70.5	69.5	73.5	72.5	29.4	29.6	16.5	16.1	24.5	24.8
LG	INCH	24.5	24.7	20.0	17.7	27.4	27.7	45.1	45.4	1.1	0.9	5.1	70.5	69.5	73.5	72.5	30.7	31.0	17.1	16.7	24.8	25.1
XL	INCH	25.2	25.4	22.0	17.7	28.2	28.5	45.9	46.1	1.1	0.9	5.7	70.5	69.5	73.5	72.5	32.0	32.4	17.7	17.3	25.4	25.7

*Geometry measurements are shown for 120mm and 140mm travel forks. Note that the increased height and offset of the Fox 34 140mm fork results in approximately .5° slacker Angles(H,I) and .4" (12mm) longer Wheelbase(E).

RIP 9 RDO SPECIFICATIONS & COMPATIBILITY
73mm English threaded BB width
Removable ISCG 05 mounting tabs
Shock size: 7.875"(200mm) x 2.0"(51mm) - 4.9"(125mm) travel
Shock mounting hardware: 21.84mm x M8
Shock SAG: 25% (which will move the o-ring 12.5mm down the shaft)
30.9mm seat post, 370mm length recommended
34.9mm seat collar
S3 (low) direct mount front derailleur, bottom pull
1.125"-1.5" tapered head tube with "inset or zero stack" style headset, 44mm upper, 56mm lower, Cane Creek standard description: ZS44/28.6 ZS56/40
Enduro Sealed ACB Black Oxide - (6x) 36"x45"x38mm, Enduro Max Black Oxide bearings - (2x) 24x12x6mm
142 x 12mm rear spacing
Small has one bottle mount under the downtube. Medium, large and XL have one inner triangle bottle mount and one under the DT bottle mount.
Titanium frame guards
Can fit up to a 2.4" tire (tire size varies by brand, some tires may not fit)
Compatible with standard 3x chainring systems
SRAM recommended 2x chainrings: 26/39T or lower
SRAM XX1 recommended max chainring: 36T. Q-Factor: 168mm
SHIMANO XT recommended 2x chainrings: 28/40T or lower
SHIMANO XTR recommended 2x chainrings: 26/38T. We do not recommend the use of 40T (48.8mm chain line) cranks because the large chainring may contact the frame.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY & SPECIFICATIONS: RIP 9

RIP 9	UNITS	A - TT LENGTH		B - SEAT TUBE LENGTH	C - CHAINSTAY LENGTH	D - FRONT CENTER		E - WHEELBASE		F - BB DROP		G - HEAD TUBE LENGTH	H - HEAD TUBE ANGLE		I - SEAT TUBE ANGLE		J - STANDOVER HEIGHT		K - REACH		L - STACK	
		120	140			120	140	120	140	120	140	120	140	120	140	120	140	120	140	120	140	
SM	MM	587	591	406	455	660	666	1114	1121	29	22	105	70.5	69.5	73.5	72.5	704	712	407	397	608	615
MD	MM	603	607	458	455	677	683	1131	1137	29	22	120	70.5	69.5	73.5	72.5	743	752	419	408	622	629
LG	MM	622	626	509	455	697	703	1150	1157	29	22	130	70.5	69.5	73.5	72.5	779	788	435	425	631	638
XL	MM	641	645	559	455	716	723	1170	1177	29	22	145	70.5	69.5	73.5	72.5	811	819	450	439	646	653

SM	INCH	23.1	23.3	16.0	17.9	26.0	26.2	43.9	44.1	1.1	0.9	4.1	70.5	69.5	73.5	72.5	27.7	28.0	16.0	15.6	23.9	24.2
MD	INCH	23.7	23.9	18.0	17.9	26.7	26.9	44.5	44.8	1.1	0.9	4.7	70.5	69.5	73.5	72.5	29.3	29.6	16.5	16.1	24.5	24.8
LG	INCH	24.5	24.6	20.0	17.9	27.4	27.7	45.3	45.6	1.1	0.9	5.1	70.5	69.5	73.5	72.5	30.7	31.0	17.1	16.7	24.8	25.1
XL	INCH	25.2	25.4	22.0	17.9	28.2	28.5	46.1	46.3	1.1	0.9	5.7	70.5	69.5	73.5	72.5	31.9	32.2	17.7	17.3	25.4	25.7

*Geometry measurements are shown for 120mm and 140mm travel forks. Note that the increased height and offset of the Fox 34 140mm fork yield approximately .5° slacker Angles (H,I) and .4" (12mm) longer Wheelbase (E).

RIP 9 SPECIFICATIONS & COMPATIBILITY
73mm English threaded BB width
ISCG 05 mounting tabs
Shock size: 7.875"(200mm) x 2.0"(51mm) - 4.9"(125mm) travel
Shock mounting hardware width and drilling: 22mm x M8
Shock SAG: 25% (which will move the o-ring 12.5mm down the shaft)
30.9mm seat post, 370mm length recommended
34.9mm seat collar
S3 (low) direct mount front derailleur, top pull
1.125"-1.5" tapered head tube with "inset or zero stack" style headset, 44mm upper, 56mm lower Cane Creek standard description: ZS44/28.6 ZS56/40
Enduro Max sealed bearings - (8x) 26x17x5mm
142x12mm rear spacing
Small has one bottle mount under the downtube. Medium, large and XL have one inner triangle bottle mount and one under the DT bottle mount.
Can fit up to a 2.4" tire (tire size varies by brand, some tires may not fit)
Compatible with standard 3x chainring systems
SRAM recommended 2x chainrings: 26/39T or lower
SRAM XX1 recommended max chainring: 36T. Q-Factor: 168mm
SHIMANO XT recommended 2x chainrings: 28/40T or lower
SHIMANO XTR recommended 2x chainrings: 26/38T. We do not recommend the use of 40T (48.8mm chain line) cranks because the large chainring may contact the frame.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY & SPECIFICATIONS: RIP 9 (v2 hydroformed alloy, discontinued)

RIP 9	UNITS	A - TT LENGTH		B - SEAT TUBE LENGTH	C - CHAINSTAY LENGTH	D - FRONT CENTER		E - WHEELBASE		F - BB DROP		G - HEAD TUBE LENGTH		H - HEAD TUBE ANGLE		I - SEAT TUBE ANGLE		J - STANDOVER HEIGHT		K - REACH		L - STACK	
		120	140			120	140	120	140	120	140		120	140	120	140	120	140	120	140	120	140	
SM	MM	587	591	406	455	661	668	1114	1122	29	21	115	70.5	69.5	73.5	72.5	705	715	406	395	613	620	
MD	MM	603	608	457	455	677	686	1131	1140	29	21	120	70.5	69.5	73.5	72.5	741	753	418	409	617	625	
LG	MM	622	626	508	455	696	702	1150	1156	29	21	130	70.5	69.5	73.5	72.5	779	786	436	426	628	634	
XL	MM	641	645	559	455	715	721	1168	1175	29	21	145	70.5	69.5	73.5	72.5	818	824	450	440	641	648	

SM	INCH	23.1	23.3	16.0	17.9	26.0	26.3	43.9	44.2	29	21	115	70.5	69.5	73.5	72.5	27.8	28.1	16.0	15.6	24.1	24.4
MD	INCH	23.7	23.9	18.0	17.9	26.7	27.0	44.5	44.9	29	21	120	70.5	69.5	73.5	72.5	29.2	29.6	16.5	16.1	24.3	24.6
LG	INCH	24.5	24.6	20.0	17.9	27.4	27.6	45.3	45.5	29	21	130	70.5	69.5	73.5	72.5	30.7	30.9	17.2	16.8	24.7	25.0
XL	INCH	25.2	25.4	22.0	17.9	28.1	28.4	46.0	46.3	29	21	145	70.5	69.5	73.5	72.5	32.2	32.4	17.7	17.3	25.2	25.5

*Geometry measurements are shown for 120mm and 140mm travel forks. Note that the increased height and offset of the Fox 34 140mm fork results in approximately .5° slacker angles(H,I) and .4" (12mm) longer Wheelbase(E).

RIP 9 SPECIFICATIONS & COMPATIBILITY
73mm threaded BB width
Shock size: 7.875"(200mm) x 2.0"(50mm) - 4.5"(117mm) travel
Shock mounting hardware: 21.86mm x M6
Shock SAG: 25% (which will move the o-ring 12.5mm down the shaft)
30.9mm seat post, 350mm length recommended
34.9mm seat collar
34.9 front derailleur, high mount, bottom pull
1.125"-1.5" taper head tube with "inset or zero stack" style headset, 44mm upper, 56mm lower (headset not included) Cane Creek standard description: ZS44/28.6 ZS56/40
Enduro Max sealed bearings - (6x) 28x15x7mm, (2x) 24x12x6mm
135mm x QR rear spacing (replacement hangers, 142mm x 12mm axle kits available)
Small frame has one bottle mount under the down tube. Medium, large and XL have one inner triangle bottle mount and one under the DT bottle mount
TT cable guides for dropper posts
Can fit up to a 2.5" tire (tire size varies by brand, some tires may not fit)
Compatible with standard 3x chainring systems
SRAM recommended 2x chainrings: 26/39T or lower
SRAM XX1 recommended max chainring: 38T. Q-Factor: 168mm
SHIMANO XT recommended 2x chainrings: 28/40T or lower
SHIMANO XTR recommended 2x chainrings: 26/38T. We do not recommend the use of 40T (48.8mm chain line) cranks because the large chainring may contact the frame.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY & SPECIFICATIONS: JET 9 RDO

JET 9 RDO	UNITS	A - TT LENGTH		B - SEAT TUBE LENGTH	C - CHAINSTAY LENGTH	D - FRONT CENTER		E - WHEELBASE		F - BB DROP		G - HEAD TUBE LENGTH	H - HEAD TUBE ANGLE		I - SEAT TUBE ANGLE		J - STANDOVER HEIGHT		K - REACH		L - STACK	
		100	120			100	120	100	120	100	120		100	120	100	120	100	120	100	120	100	120
XS	MM	559	562	381	455	633	639	1086	1092	35	27	100	71.0	70.0	74.5	73.5	672	679	393	383	590	597
SM	MM	578	580	406	455	652	658	1105	1112	35	27	110	71.0	70.0	74.5	73.5	690	696	409	399	600	607
MD	MM	595	598	457	455	663	668	1116	1122	35	27	120	71.5	70.5	74.5	73.5	715	721	422	413	612	618
LG	MM	615	618	509	455	689	694	1141	1148	35	27	130	71.5	70.5	74.5	73.5	738	745	444	434	621	628
XL	MM	635	638	559	455	708	714	1161	1168	35	27	145	71.5	70.5	74.5	73.5	766	773	459	449	635	643

XS	INCH	22.0	22.1	15.0	17.9	24.9	25.2	42.8	43.0	1.4	1.1	3.9	71.0	70.0	74.5	73.5	26.5	26.7	15.5	15.1	23.2	23.5
SM	INCH	22.8	22.8	16.0	17.9	25.7	25.9	43.5	43.8	1.4	1.1	4.3	71.0	70.0	74.5	73.5	27.2	27.4	16.1	15.7	23.6	23.9
MD	INCH	23.4	23.5	18.0	17.9	26.1	26.3	43.9	44.2	1.4	1.1	4.7	71.5	70.5	74.5	73.5	28.1	28.4	16.6	16.3	24.1	24.3
LG	INCH	24.2	24.3	20.0	17.9	27.1	27.3	44.9	45.2	1.4	1.1	5.1	71.5	70.5	74.5	73.5	29.1	29.3	17.5	17.1	24.4	24.7
XL	INCH	25.0	25.1	22.0	17.9	27.9	28.1	45.7	46.0	1.4	1.1	5.7	71.5	70.5	74.5	73.5	30.2	30.4	18.1	17.7	25.0	25.3

*Geometry measurements are shown for 100mm and 120mm travel forks.

JET 9 RDO SPECIFICATIONS & COMPATIBILITY
73mm PF30 BB width
PF30 BB adaptable to threaded via adapters
Shock size: 7.5"(190mm) x 2.0"(50mm) - 4"(100mm) travel
Shock mounting hardware: 21.84mm x M6
Shock SAG: 25% (which will move the o-ring 12.5mm down the shaft)
31.6mm seat post, 400mm length recommended
34.9mm seat collar
S3(low) Direct mount front derailleur, bottom pull
1.125"-1.5" tapered head tube with integrated (Campy style) headset (headset included) Cane Creek standard description: IS42/28.6 IS52/40
Enduro Max Black Oxide sealed bearings - (8x) 22x10x6mm
135mm x QR rear spacing
Small, medium, large and XL have one inner triangle bottle mount and one under the DT bottle mount
Titanium frame guards
Can fit up to a 2.4" tire (tire size varies by brand, some tires may not fit)
Compatible with standard 3x chainring systems
SRAM recommended 2x chainrings: 26/39T or lower
SRAM XX1 recommended max chainring: 38T. Q-Factor: 168mm
SHIMANO XT recommended 2x chainrings: 28/40T or lower
SHIMANO XTR recommended 2x chainrings: 26/38T. We do not recommend the use of 40T (48.8mm chain line) cranks because the large chainring may contact the frame.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY & SPECIFICATIONS: JET 9 CARBON

JET 9 CARBON	UNITS	A - TT LENGTH		B - SEAT TUBE LENGTH		C - CHAINSTAY LENGTH		D - FRONT CENTER		E - WHEELBASE		F - BB DROP		G - HEAD TUBE LENGTH		H - HEAD TUBE ANGLE		I - SEAT TUBE ANGLE		J - STANDOVER HEIGHT		K - REACH		L - STACK	
		100	120			100	120	100	120	100	120		100	120	100	120	100	120	100	120	100	120	100	120	
XS	MM	559	562	381	455	633	639	1086	1092	35	27	100	71.0	70.0	74.5	73.5	672	679	393	383	590	597			
SM	MM	578	580	406	455	652	658	1105	1112	35	27	110	71.0	70.0	74.5	73.5	690	696	409	399	600	607			
MD	MM	595	598	457	455	663	668	1116	1122	35	27	120	71.5	70.5	74.5	73.5	715	721	422	413	612	618			
LG	MM	615	618	509	455	689	694	1141	1148	35	27	130	71.5	70.5	74.5	73.5	738	745	444	434	621	628			
XL	MM	635	638	559	455	708	714	1161	1168	35	27	145	71.5	70.5	74.5	73.5	766	773	459	449	635	643			

XS	INCH	22.0	22.1	15.0	17.9	24.9	25.2	42.8	43.0	1.4	1.1	3.9	71.0	70.0	74.5	73.5	26.5	26.7	15.5	15.1	23.2	23.5
SM	INCH	22.8	22.8	16.0	17.9	25.7	25.9	43.5	43.8	1.4	1.1	4.3	71.0	70.0	74.5	73.5	27.2	27.4	16.1	15.7	23.6	23.9
MD	INCH	23.4	23.5	18.0	17.9	26.1	26.3	43.9	44.2	1.4	1.1	4.7	71.5	70.5	74.5	73.5	28.1	28.4	16.6	16.3	24.1	24.3
LG	INCH	24.2	24.3	20.0	17.9	27.1	27.3	44.9	45.2	1.4	1.1	5.1	71.5	70.5	74.5	73.5	29.1	29.3	17.5	17.1	24.4	24.7
XL	INCH	25.0	25.1	22.0	17.9	27.9	28.1	45.7	46.0	1.4	1.1	5.7	71.5	70.5	74.5	73.5	30.2	30.4	18.1	17.7	25.0	25.3

*Geometry measurements are shown for 100mm and 120mm travel forks.

JET 9 CARBON SPECIFICATIONS & COMPATIBILITY
73mm PF30 BB width
PF30 BB adaptable to threaded via adapters
Shock size: 7.5"(190mm) x 2.0"(50mm) - 4"(100mm) travel
Shock mounting hardware: 21.84mm x M6
Shock SAG: 25% (which will move the o-ring 12.5mm down the shaft)
31.6mm seat post, 400mm length recommended
34.9mm seat collar
S3(low) Direct mount front derailleurs, bottom pull
1.125"-1.5" tapered head tube with integrated (Campy style) headset (headset included) Cane Creek standard description: IS42/28.6 IS52/40
Sealed cartridge bearings - (8x) 22x10x6mm
135mm x QR rear spacing
Small, medium, large and XL have one inner triangle bottle mount and one under the DT bottle mount
Titanium frame guards
Can fit up to a 2.4" tire (tire size varies by brand, some tires may not fit)
Compatible with standard 3x chainring systems
SRAM recommended 2x chainrings: 26/39T or lower
SRAM XX1 recommended max chainring: 38T. Q-Factor: 168mm
SHIMANO XT recommended 2x chainrings: 28/40T or lower
SHIMANO XTR recommended 2x chainrings: 26/38T. We do not recommend the use of 40T (48.8mm chain line) cranks because the large chainring may contact the frame.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY & SPECIFICATIONS: JET 9

JET 9	UNITS	A - TT LENGTH		B - SEAT TUBE LENGTH		C - CHAINSTAY LENGTH		D - HORIZ. CHAINSTAY		E - FRONT CENTER		F - WHEELBASE		G - BB DROP		H - HEAD TUBE LENGTH		I - HEAD TUBE ANGLE		J - SEAT TUBE ANGLE		K - STANDOVER HEIGHT		L - REACH		M - STACK	
		100	120					100	120	100	120	100	120		100	120	100	120	100	120	100	120	100	120	100	120	
XS	MM	559	562	391	455	454	632	637	1084	1091	35	27	100	71.0	70.0	74.0	73.0	699	705	392	381	591	597				
SM	MM	578	581	406	455	454	651	657	1104	1111	35	27	110	71.0	70.0	74.0	73.0	707	714	408	398	600	607				
MD	MM	595	598	458	455	454	663	669	1116	1122	35	27	120	71.0	70.0	74.0	73.0	748	755	422	411	611	619				
LG	MM	615	618	508	455	454	684	689	1136	1143	35	27	130	71.0	70.0	74.0	73.0	784	792	439	428	621	629				
XL	MM	635	638	559	455	454	704	710	1157	1164	35	27	145	71.0	70.0	74.0	73.0	820	828	455	445	635	643				

XS	INCH	22.0	22.1	15.4	17.9	17.9	24.9	25.1	42.7	43.0	1.4	1.1	3.9	71.0	70.0	74.0	73.0	27.5	27.8	15.4	15.0	23.3	23.5
SM	INCH	22.8	22.9	16.0	17.9	17.9	25.6	25.9	43.5	43.7	1.4	1.1	4.3	71.0	70.0	74.0	73.0	27.8	28.1	16.1	15.7	23.6	23.9
MD	INCH	23.4	23.5	18.0	17.9	17.9	26.1	26.3	43.9	44.2	1.4	1.1	4.7	71.0	70.0	74.0	73.0	29.4	29.7	16.6	16.2	24.1	24.4
LG	INCH	24.2	24.3	20.0	17.9	17.9	26.9	27.1	44.7	45.0	1.4	1.1	5.1	71.0	70.0	74.0	73.0	30.9	31.2	17.3	16.9	24.4	24.8
XL	INCH	25.0	25.1	22.0	17.9	17.9	27.7	28.0	45.6	45.8	1.4	1.1	5.7	71.0	70.0	74.0	73.0	32.3	32.6	17.9	17.5	25.0	25.3

*Geometry measurements are shown for 100mm and 120mm travel forks.

JET 9 SPECIFICATIONS & COMPATIBILITY
PF30 Bottom Bracket Shell (73mm width)
Shock size: 7.5"(190mm) x 2.0"(50mm) - 4"(100mm) travel
Shock mounting hardware width: 22.2mm x M6
Shock SAG: 25% (which will move the o-ring 12.5mm down the shaft)
30.9mm seat post, 370mm length recommended, compatible with external routing dropper posts
34.9mm seat collar
S3 (low) direct mount front derailleur, top pull
1.125" - 1.5" tapered headtube with integrated (Campy style) headset (headset included) Cane Creek standard description: IS42/28.6 S52/40
Enduro Max sealed bearings - (8x) 22x10x6mm
142x12mm rear spacing
Extra Small has one bottle mount under the downtube. Small, Medium, Large and XL have one inner triangle bottle mount and one under the DT bottle mount.
Can fit up to a 2.35" tire (tire size varies by brand, some tires may not fit)
Compatible with most standard 1x, 2x and 3x chainring systems.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY & SPECIFICATIONS: JET 9 (v2 hydroformed alloy, discontinued)

JET 9	UNITS	A - TT LENGTH		B - SEAT TUBE LENGTH	C - CHAINSTAY LENGTH	D - FRONT CENTER		E - WHEELBASE		F - BB DROP		G - HEAD TUBE LENGTH	H - HEAD TUBE ANGLE		I - SEAT TUBE ANGLE		J - STANDOVER HEIGHT		K - REACH		L - STACK	
		80	100			80	100	80	100	80	100		80	100	80	100	80	100	80	100	80	100
SM	MM	587	591	406	450	635	640	1082	1089	35	27	115	72.0	71.0	73.5	72.5	693	700	409	398	601	608
MD	MM	603	607	457	450	651	658	1099	1107	35	27	120	72.0	71.0	73.5	72.5	727	735	424	413	606	613
LG	MM	622	626	507	450	676	684	1124	1132	35	27	130	72.0	71.0	73.5	72.5	763	772	446	435	615	623
XL	MM	641	645	558	450	696	703	1144	1152	35	27	145	72.0	71.0	74.0	72.5	802	810	461	450	630	638

SM	INCH	22.7	22.9	16.0	17.9	25.7	25.9	43.5	43.8	1.4	1.1	4.3	72.0	71.0	73.5	72.5	27.2	27.4	16.1	15.7	23.6	23.9
MD	INCH	23.4	23.6	18.0	17.9	26.1	26.3	43.9	44.2	1.4	1.1	4.7	72.0	71.0	73.5	72.5	28.2	28.4	16.6	16.2	24.1	24.4
LG	INCH	24.2	24.4	20.0	17.9	27.1	27.3	44.9	45.2	1.4	1.1	5.1	72.0	71.0	73.5	72.5	29.0	29.3	17.5	17.1	24.4	24.7
XL	INCH	25.0	25.2	22.0	17.9	27.9	28.1	45.7	46.0	1.4	1.1	5.7	72.0	71.0	74.0	72.5	30.1	30.4	18.1	17.7	25.0	25.3

*Geometry measurements are shown for 80mm and 100mm travel forks.

JET 9 SPECIFICATIONS & COMPATIBILITY
68mm threaded BB width
Shock size: 6.5"(165mm) x 1.5"(37mm) - 3"(80mm) travel
Shock mounting hardware: 21.86mm x M6
Shock SAG: 25% (which will move the o-ring 9mm down the shaft)
30.9mm seat post, 350mm length recommended
34.9mm seat collar
34.9 front derailleur, high mount, bottom pull
1.125"-1.5" taper head tube with "inset or zero stack" style headset, 44mm upper, 56mm lower (headset not included) Cane Creek standard description: ZS44/28.6 ZS56/40
Enduro Max sealed bearings - (8x) 24x12x6mm
135mm x QR rear spacing (replacement hangers available)
Small, medium, large and XL have one inner triangle bottle mount and one under the DT bottle mount
Can fit up to a 2.5" tire (tire size varies by brand, some tires may not fit)
Compatible with standard 3x chainring systems
SRAM recommended 2x chainrings: 26/39T or lower
SRAM XX1 recommended max chainring: 38T. Q-Factor: 168mm
SHIMANO XT recommended 2x chainrings: 28/40T or lower
SHIMANO XTR recommended 2x chainrings: 26/38T. We do not recommend the use of 40T (48.8mm chain line) cranks because the large chainring may contact the frame.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY & SPECIFICATIONS: AIR 9 RDO

AIR 9 RDO	UNITS	A - TT LENGTH		B - SEAT TUBE LENGTH	C - CHAINSTAY LENGTH	D - FRONT CENTER		E - WHEELBASE		F - BB DROP		G - HEAD TUBE LENGTH	H - HEAD TUBE ANGLE		I - SEAT TUBE ANGLE		J - STANDOVER HEIGHT		K - REACH		L - STACK	
FORK (MM)*		80	100			80	100	80	100	80	100		80	100	80	100	80	100	80	100	80	100
SM	MM	587	590	394	439	639	644	1071	1077	62	54	106	72.0	71.0	74.0	73.0	702	706	414	404	600	608
MD	MM	603	606	419	439	656	660	1087	1094	62	54	110	72.0	71.0	74.0	73.0	722	726	428	418	610	617
LG	MM	622	626	483	439	675	680	1107	1113	62	54	126	72.0	71.0	74.0	73.0	776	781	443	433	624	631
XL	MM	641	645	533	439	695	700	1127	1133	62	54	145	72.0	71.0	74.0	73.0	818	823	457	446	643	651

SM	INCH	23.1	23.2	15.5	17.3	25.2	25.4	42.2	42.4	2.4	2.1	4.2	72.0	71.0	74.0	73.0	27.6	27.8	16.3	15.9	23.6	23.9
MD	INCH	23.7	23.9	16.5	17.3	25.8	26.0	42.8	43.1	2.4	2.1	4.3	72.0	71.0	74.0	73.0	28.4	28.6	16.9	16.5	24.0	24.3
LG	INCH	24.5	24.6	19.0	17.3	26.6	26.8	43.6	43.8	2.4	2.1	5.0	72.0	71.0	74.0	73.0	30.6	30.7	17.4	17.0	24.6	24.8
XL	INCH	25.2	25.4	21.0	17.3	27.4	27.6	44.4	44.6	2.4	2.1	5.7	72.0	71.0	74.0	73.0	32.2	32.4	18.0	17.6	25.3	25.6

*Geometry measurements are shown for 80mm and 100mm travel forks.

AIR 9 RDO SPECIFICATIONS & COMPATIBILITY
73mm PF30 BB width
PF30 BB adaptable to threaded via adapters
Not compatible with aftermarket EBB systems
31.6mm seat post size, 400mm length recommended
34.9mm front derailleur, high mount, bottom pull
34.9mm seat collar size
1.125"-1.5" tapered head tube with integrated (Campy style) headset (headset included) Cane Creek standard description: IS42/28.6 IS52/40
Small frame has one bottle mount inside the front triangle. Medium, large and XL have two bottle mounts inside the front triangle
Replaceable derailleur hanger
Titanium chain drop and chain suck protection pieces
Protective 3M tape under DT
Integrated aluminum head badge for internal, full-housing cable routing
135mm QR rear spacing
Can fit up to a 2.4" tire (tire size varies by brand, some tires may not fit)
Compatible with standard 3x chainring systems
SRAM recommended 2x chainrings: 26/39T or lower
SRAM XX1 recommended max chainring: 32T. Q-Factor: 168mm
SHIMANO XT recommended 2x chainrings: 28/40T or lower
SHIMANO XTR 2x is not recommended. Both versions (40t/48.8mm chain line and 38t/46.6mm chain line) position the large chainring in a way that it may contact the frame.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY & SPECIFICATIONS: AIR 9 CARBON

AIR 9 CARBON	UNITS	A - TT LENGTH		B - SEAT TUBE LENGTH	C - CHAINSTAY LENGTH	D - FRONT CENTER		E - WHEELBASE		F - BB DROP		G - HEAD TUBE LENGTH	H - HEAD TUBE ANGLE		I - SEAT TUBE ANGLE		J - STANDOVER HEIGHT		K - REACH		L - STACK	
		80	100			80	100	80	100	80	100		80	100	80	100	80	100	80	100	80	100
SM	MM	586	589	394	439	646	651	1078	1085	62	54	106	71.0	70.0	74.0	73.0	705	710	410	400	600	608
MD	MM	603	606	419	439	653	657	1084	1091	62	54	110	72.0	71.0	74.0	73.0	727	732	424	414	610	617
LG	MM	622	626	483	439	672	677	1104	1110	62	54	126	72.0	71.0	74.0	73.0	780	786	439	429	624	631
XL	MM	641	645	533	439	692	697	1124	1130	62	54	145	72.0	71.0	74.0	73.0	823	829	453	442	643	651

SM	INCH	23.1	23.2	15.5	17.3	25.5	25.7	42.5	42.7	2.4	2.1	3.9	71.0	70.0	74.0	73.0	27.8	28.0	16.2	15.7	23.6	23.9
MD	INCH	23.7	23.9	16.5	17.3	25.7	25.9	42.7	43.0	2.4	2.1	4.3	72.0	71.0	74.0	73.0	28.6	28.8	16.8	16.4	24.0	24.3
LG	INCH	24.0	24.6	19.0	17.3	26.5	26.7	43.5	43.7	2.4	2.1	4.9	72.0	71.0	74.0	73.0	30.7	30.9	17.3	16.9	24.6	24.8
XL	INCH	25.2	25.4	21.0	17.3	27.3	27.4	44.3	44.5	2.4	2.1	5.7	72.0	71.0	74.0	73.0	32.4	32.6	17.9	17.5	25.3	25.6

*Geometry measurements are shown for 80mm and 100mm travel forks.

** Geometry measurements are shown for BB in line with seat tube, BioCentric will change geometry depending on position.

AIR 9 CARBON SPECIFICATIONS & COMPATIBILITY
73mm BB width (with inserts installed)
CYA BB shell is compatible with Niner BioCentric EBB and CYA inserts for geared use
BioCentric is compatible with external bearing cranksets only
31.6mm seat post size, 400mm length recommended
34.9mm front derailleur, high mount, bottom pull
34.9mm seat collar size
1.125"-1.5" tapered head tube with integrated (Campy style) headset (headset included) Cane Creek standard description: IS42/28.6 IS52/40
Small and medium frame have one bottle mount inside the front triangle and one mount under the downtube. Large and XL have two bottle mounts inside the front triangle
Replaceable derailleur hanger or SS insert
Geared version includes choice of CVA BB inserts, titanium chain drop and chain suck protection pieces, cable routing chuck/bolt, derailleur hanger and chainstay protector
Singlespeed version includes BioCentric and SS dropout insert
Protective 3M tape under DT
135mm QR rear spacing
Can fit up to a 2.4" tire (tire size varies by brand, some tires may not fit)
Compatible with standard 3x chainring systems
SRAM recommended 2x chainrings: 26/39T or lower
SRAM XX1 recommended max chainring: 32T. Q-Factor: 168mm
SHIMANO XT recommended 2x chainrings: 28/40T or lower
SHIMANO XTR 2x is not recommended. Both versions (40t/48.8mm chain line and 38t/46.6mm chain line) position the large chainring in a way that it may contact the frame.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY & SPECIFICATIONS: AIR 9

AIR 9	UNITS	A - TT LENGTH		B - SEAT TUBE LENGTH		C - CHAINSTAY LENGTH		D - FRONT CENTER		E - WHEELBASE		F - BB DROP		G - HEAD TUBE LENGTH		H - HEAD TUBE ANGLE		I - SEAT TUBE ANGLE		J - STANDOVER HEIGHT		K - REACH		L - STACK	
		80	100			80	100	80	100	80	100		80	100	80	100	80	100	80	100	80	100	80	100	80
SM	MM	587	590	394	439	650	655	1082	1088	62	54	105	71.0	70.0	74.0	73.0	719	724	414	404	600	608			
MD	MM	603	607	419	439	656	660	1088	1094	62	54	110	72.0	71.1	74.0	73.0	739	744	428	418	610	617			
LG	MM	622	626	483	439	675	680	1107	1114	62	54	125	72.0	71.0	74.0	73.0	790	796	443	433	624	631			
XL	MM	641	645	533	439	695	700	1127	1134	62	54	145	72.0	71.0	74.0	73.0	831	837	457	446	643	651			

SM	INCH	23.1	23.2	15.5	17.3	25.6	25.8	42.6	42.9	2.4	2.1	4.1	71.0	70.0	74.0	73.0	28.3	28.5	16.3	15.9	23.6	23.9
MD	INCH	23.8	23.9	16.5	17.3	25.8	26.0	42.8	43.1	2.4	2.1	4.3	72.0	71.1	74.0	73.0	29.1	29.3	16.9	16.5	24.0	24.3
LG	INCH	24.5	24.6	19.0	17.3	26.6	26.8	43.6	43.9	2.4	2.1	4.9	72.0	71.0	74.0	73.0	31.1	31.3	17.4	17.0	24.6	24.8
XL	INCH	25.3	25.4	21.0	17.3	27.4	27.5	44.4	44.6	2.4	2.1	5.7	72.0	71.0	74.0	73.0	32.7	33.0	18.0	17.6	25.3	25.6

*Geometry measurements are shown for 80mm and 100mm travel forks.

AIR 9 SPECIFICATIONS & COMPATIBILITY
73mm PF30 BB width
PF30 BB adaptable to threaded via adapters
31.6mm seat post size, 400mm length recommended
34.9mm front derailleur, high mount, top pull
34.9mm seat collar size
1.125"-1.5" tapered head tube with integrated (Campy style) headset (headset included) Cane Creek standard description: IS42/28.6 IS52/40
Small frame has one bottle mount inside the front triangle. Medium, large and XL have two bottle mounts inside the front triangle
Replaceable derailleur hanger
135mm QR rear spacing
Can fit up to a 2.4" tire (tire size varies by brand, some tires may not fit)
Compatible with standard 3x chainring systems
SRAM recommended 2x chainrings: 26/39T or lower
SRAM XX1 recommended max chainring: 34T. Q-Factor: 168mm
SHIMANO XT recommended 2x chainrings: 28/40T or lower
SHIMANO XTR 2x is not recommended. Both versions (40t/48.8mm chain line and 38t/46.6mm chain line) position the large chainring in a way that it may contact the frame.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY & SPECIFICATIONS: AIR 9 (SCANDIUM, discontinued)

AIR 9	TT LENGTH 80/100*	SEAT TUBE LENGTH	CHAINSTAY LENGTH	FRONT CENTER 80/100*	WHEELBASE 80/100*	BB DROP 80/100*	HEAD TUBE LENGTH	HEAD TUBE ANGLE 80/100*	SEAT TUBE ANGLE 80/100*	STANDOVER HEIGHT 80/100*
S (inches)	23.1/23.2	15.5	17.3	25.5/25.6	42.4/42.7	2.4/2.1	3.1	71°/70°	74°/73°	27.8/28
S (mm)	586/589	393	439	646/651	1077/1084	61/53	80	71°/70°	74°/73°	705/710
M (inches)	23.75/23.9	16.5	17.3	25.7/25.9	42.7/42.9	2.4/2.1	3.5	72°/71°	74°/73°	28.6/28.8
M (mm)	603/606	419	439	653/657	1084/1090	61/53	90	72°/71°	74°/73°	727/731
L (inches)	24.5/24.6	18.5	17.3	26.5/26.7	43.5/43.7	2.4/2.1	4.1	72°/71°	74°/73°	30.3/30.5
L (mm)	622/625	469	439	672/677	1104/1110	61/54	105	72°/71°	74°/73°	769/774
XL (inches)	25.25/25.4	21	17.3	27.2/27.4	44.2/44.5	2.4/2.1	4.7	72°/71°	74°/73°	32.3/32.6
XL (mm)	641/644	533	439	692/696	1123/1130	61/54	120	72°/71°	74°/73°	820/826

*Geometry measurements are shown for 80mm and 100mm travel forks.

SPECIFICATIONS & COMPATIBILITY:

- 73mm BB width
- 31.6mm seatpost size
- 34.9mm seat collar size (not included)
- 34.9mm front derailleur, low mount, top pull
- standard 1.125" external bearing headset (not included).
Cane Creek standard description: EC34/28.6|EC34/30
- Replaceable derailleur hanger
- Size Small has one inner triangle bottle mount and one under the downtube bottle mount
- Size Medium, Large and XL have two inner triangle bottle mounts
- 135mm QR rear spacing
- Stainless steel laser cut head badge
- Can fit up to a 2.4" tire (tire size varies by brand, some tires may not fit)
- Compatible with standard 3x chainring systems
- SRAM recommended 2x front chainring configs: 26/39 or lower
- SHIMANO XT recommended 2x front chainring configs: 28/40 or lower
- Shimano XTR double cranks have a non-standard chainline and are not recommended.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY & SPECIFICATIONS: EMD 9

EMD 9	UNITS	A - TT LENGTH		B - SEAT TUBE LENGTH	C - CHAINSTAY LENGTH	D - FRONT CENTER		E - WHEELBASE		F - BB DROP		G - HEAD TUBE LENGTH	H - HEAD TUBE ANGLE		I - SEAT TUBE ANGLE		J - STANDOVER HEIGHT		K - REACH		L - STACK	
		80	100			80	100	80	100	80	100		80	100	80	100	80	100	80	100	80	100
XS	MM	572	574	356	439	650	640	1066	1073	62	54	100	71.0	70.0	74.0	73.0	685	688	401	390	596	604
SM	MM	587	590	394	439	650	655	1082	1088	62	54	105	71.0	70.0	74.0	73.0	719	724	414	404	600	608
MD	MM	603	607	419	439	656	660	1088	1094	62	54	110	72.0	71.1	74.0	73.0	739	744	428	418	610	617
LG	MM	622	626	483	439	675	680	1107	1114	62	54	125	72.0	71.0	74.0	73.0	790	796	443	433	624	631
XL	MM	641	645	533	439	695	700	1127	1134	62	54	145	72.0	71.0	74.0	73.0	831	837	457	446	643	651

XS	INCH	22.5	22.6	14.0	17.3	25.6	25.2	42.0	42.2	2.4	2.1	3.9	71.0	70.0	74.0	73.0	27.0	27.1	15.8	15.4	23.5	23.8
SM	INCH	23.1	23.2	15.5	17.3	25.6	25.8	42.6	42.9	2.4	2.1	4.1	71.0	70.0	74.0	73.0	28.3	28.5	16.3	15.9	23.6	23.9
MD	INCH	23.8	23.9	16.5	17.3	25.8	26.0	42.8	43.1	2.4	2.1	4.3	72.0	71.1	74.0	73.0	29.1	29.3	16.9	16.5	24.0	24.3
LG	INCH	24.5	24.6	19.0	17.3	26.6	26.8	43.6	43.9	2.4	2.1	4.9	72.0	71.0	74.0	73.0	31.1	31.3	17.4	17.0	24.6	24.8
XL	INCH	25.3	25.4	21.0	17.3	27.4	27.5	44.4	44.6	2.4	2.1	5.7	72.0	71.0	74.0	73.0	32.7	33.0	18.0	17.6	25.3	25.6

*Geometry measurements are shown for 80mm and 100mm travel forks.

EMD 9 SPECIFICATIONS & COMPATIBILITY
73mm threaded BB width
31.6mm seat post size, 400mm length recommended
34.9mm front derailleur, high mount, top pull
34.9mm seat collar size
1.125"-1.5" taper head tube with "inset or zero stack" style headset, 44mm upper, 56mm lower (headset not included) Cane Creek standard description: ZS44/28.6 ZS56/40
Small frame has one bottle mount inside the front triangle. Medium, large and XL have two bottle mounts inside the front triangle
Replaceable derailleur hanger
135mm QR rear spacing
Can fit up to a 2.4" tire (tire size varies by brand, some tires may not fit)
Compatible with standard 3x chainring systems
SRAM recommended 2x chainrings: 26/39T or lower
SRAM XX1 recommended max chainring: 34T. Q-Factor: 168mm
SHIMANO XT recommended 2x chainrings: 28/40T or lower
SHIMANO XTR 2x is not recommended. Both versions (40t/48.8mm chain line and 38t/46.6mm chain line) position the large chainring in a way that it may contact the frame.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY & SPECIFICATIONS: EMD 9 (ROUND TUBES, discontinued)

EMD 9	TT LENGTH 80/100*	SEAT TUBE LENGTH	CHAINSTAY LENGTH	FRONT CENTER 80/100*	WHEELBASE 80/100*	BB DROP 80/100*	HEAD TUBE LENGTH	HEAD TUBE ANGLE 80/100*	SEAT TUBE ANGLE 80/100*	STANDOVER HEIGHT 80/100*
S (inches)	23.1/23.2	15.5	17.3	25.5/25.6	42.4/42.7	2.4/2.1	3.1	71°/70°	74°/73°	27.8/28
S (mm)	586/589	393	439	646/651	1077/1084	61/53	80	71°/70°	74°/73°	705/710
M (inches)	23.75/23.9	16.5	17.3	25.7/25.9	42.7/42.9	2.4/2.1	3.5	72°/71°	74°/73°	28.6/28.8
M (mm)	603/606	419	439	653/657	1084/1090	61/53	90	72°/71°	74°/73°	727/731
L (inches)	24.5/24.6	18.5	17.3	26.5/26.7	43.5/43.7	2.4/2.1	4.1	72°/71°	74°/73°	30.3/30.5
L (mm)	622/625	469	439	672/677	1104/1110	61/54	105	72°/71°	74°/73°	769/774
XL (inches)	25.25/25.4	21	17.3	27.2/27.4	44.2/44.5	2.4/2.1	4.7	72°/71°	74°/73°	32.3/32.6
XL (mm)	641/644	533	439	692/696	1123/1130	61/54	120	72°/71°	74°/73°	820/826

*Geometry measurements are shown for 80mm and 100mm travel forks.

SPECIFICATIONS & COMPATIBILITY:

- 73mm BB width
- 31.6mm seatpost size
- 34.9mm seat collar size (not included)
- 34.9mm front derailleur, low mount, top pull
- standard 1.125" external bearing headset (not included).
Cane Creek standard description: EC34/28.6|EC34/30
- Replaceable derailleur hanger
- Size Small has one inner triangle bottle mount and one under the downtube bottle mount
- Size Medium, Large and XL have two inner triangle bottle mounts
- 135mm QR rear spacing
- Stainless steel laser cut head badge
- Can fit up to a 2.4" tire (tire size varies by brand, some tires may not fit)
- Compatible with standard 3x chainring systems
- SRAM recommended 2x front chainring configs: 26/39 or lower
- SHIMANO XT recommended 2x front chainring configs: 28/40 or lower
- Shimano XTR double cranks have a non-standard chainline and are not recommended.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY & SPECIFICATIONS: ROS 9

ROS 9	UNITS	A - TT LENGTH		B - SEAT TUBE LENGTH		C - CHAINSTAY LENGTH		D - HORIZ. CHAINSTAY		E - FRONT CENTER		F - WHEELBASE		G - BB DROP		H - HEAD TUBE LENGTH		I - HEAD TUBE ANGLE		J - SEAT TUBE ANGLE		K - STANDOVER HEIGHT		L - REACH		M - STACK	
		120	140					120	140	120	140	120	140			120	140	120	140	120	140	120	140	120	140	120	140
SM	MM	578	581	394	427	418/423*	677	683	1098	1105	56	49	100	68.0	67.0	74.0	73.0	709	712	396	386	634	632				
MD	MM	595	598	431	427	418/423*	695	701	1116	1123	56	49	110	68.0	67.0	74.0	73.0	730	733	411	400	643	641				
LG	MM	614	617	471	427	418/423*	716	722	1136	1144	56	49	125	68.0	67.0	74.0	73.0	783	787	426	415	657	655				
XL	MM	633	636	534	427	418/423*	737	743	1158	1165	56	49	145	68.0	67.0	74.0	73.0	833	839	439	428	675	674				

SM	INCH	22.8	22.9	15.5	16.8	16.5/16.7*	26.7	26.9	43.2	43.5	2.2	1.9	3.9	68.0	67.0	74.0	73.0	27.9	28.0	15.6	15.2	25.0	24.9
MD	INCH	23.4	23.5	17.0	16.8	16.5/16.7*	27.4	27.6	43.9	44.2	2.2	1.9	4.3	68.0	67.0	74.0	73.0	28.7	28.9	16.2	15.7	25.3	25.2
LG	INCH	24.2	24.3	18.5	16.8	16.5/16.7*	28.2	28.4	44.7	45.0	2.2	1.9	4.9	68.0	67.0	74.0	73.0	30.8	31.0	16.8	16.3	25.9	25.8
XL	INCH	24.9	25.0	21.0	16.8	16.5/16.7*	29.0	29.3	45.6	45.9	2.2	1.9	5.7	68.0	67.0	74.0	73.0	32.8	33.0	17.3	16.9	26.6	26.5

*BioCentric II in max rearward/forward position. Geometry measurements are shown for 120mm and 140mm travel forks. Note that the increased height and offset of the Fox 34 140mm fork yield approximately .5° slacker Angles (I,J) and .4”(12mm) longer Wheelbase (F).

ROS 9 SPECIFICATIONS & COMPATIBILITY
73mm BB width (with BioCentric II installed)
BioCentric II is compatible with external bearing cranksets only
Direct mount front derailleur, high mount, top pull, removable front derailleur mount
Tabs under BB shell for custom MRP XCG Bash Guard - available separately at www.ninerbikes.com
31.6mm seat post size, compatible with internal and external dropper post routing
34.9mm seat collar size
44mm headtube. Tapered headset with internal (ZS) top cup and 1.5" external bottom cup (included with frame). Cane Creek standard description: ZS44/28.6 EC44/40
All sizes have one bottle mount in the front triangle
Replaceable derailleur hanger or SS insert
142 x 12mm Maxle rear spacing
Can fit up to a 2.35" tire (tire size varies by brand, some tires may not fit)
Compatible with most standard 1x, 2x and 3x chainring systems. Max 1x chainring size 32T with BioCentric II in rear position - Max 38T with BioCentric II in forward position.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY & SPECIFICATIONS: SIR 9

SIR 9	UNITS	A - TT LENGTH		B - SEAT TUBE LENGTH		C - CHAINSTAY LENGTH		D - FRONT CENTER		E - WHEELBASE		F - BB DROP		G - HEAD TUBE LENGTH		H - HEAD TUBE ANGLE		I - SEAT TUBE ANGLE		J - STANDOVER HEIGHT		K - REACH		L - STACK	
		80	100			80	100	80	100	80	100		80	100	80	100	80	100	80	100	80	100	80	100	
SM	MM	589	592	393	440	646	651	1078	1085	56	49	100	70.8	69.8	73.3	72.3	711	716	405	395	614	620			
MD	MM	605	609	419	440	658	664	1089	1096	56	49	110	71.3	70.3	73.3	72.3	732	736	418	409	622	637			
LG	MM	624	628	483	440	678	684	1109	1115	56	49	125	71.3	70.3	73.3	72.3	785	790	433	423	645	652			
XL	MM	643	647	546	440	696	701	1128	1135	56	49	145	71.3	70.3	73.3	72.3	836	842	446	436	659	671			

SM	INCH	23.2	23.3	15.5	17.3	25.4	25.6	42.4	42.7	2.2	1.9	3.9	70.8	69.8	73.3	72.3	28.0	28.2	15.9	15.6	24.2	24.4
MD	INCH	23.8	24.0	16.5	17.3	25.9	26.1	42.9	43.1	2.2	1.9	4.3	71.3	70.3	73.3	72.3	28.8	29.0	16.5	16.1	24.5	25.1
LG	INCH	24.6	24.7	19.0	17.3	26.7	26.9	43.7	43.9	2.2	1.9	4.9	71.3	70.3	73.3	72.3	30.9	31.1	17.0	16.7	25.4	25.7
XL	INCH	25.3	25.5	21.5	17.3	27.4	27.6	44.4	44.7	2.2	1.9	5.7	71.3	70.3	73.3	72.3	32.9	33.1	17.6	17.2	25.9	26.4

*Geometry measurements are shown for 80mm and 100mm travel forks and include external lower headset cup

** Geometry measurements are shown for BB in line with seat tube, BioCentric will change geometry depending on position

SIR 9 SPECIFICATIONS & COMPATIBILITY
73mm BB width (with BioCentric installed)
BioCentric is compatible with external bearing cranksets only
27.2mm seat post size, 400mm length recommended
28.6mm front derailleur, high mount, bottom pull
29.6mm seat collar size
Tapered headset with internal (ZS) top cup and 1.5" external bottom cup. Cane Creek standard description: ZS44/28.6 EC44/40
Small has one bottle mount in the front triangle. Medium, large and XL have two bottle mounts inside the front triangle
Replaceable derailleur hanger or SS insert
142 x 12mm Maxle rear spacing
Can fit up to a 2.4" tire (tire size varies by brand, some tires may not fit)
Compatible with standard 3x chainring systems
SRAM recommended 2x chainrings: 26/39T or lower
SRAM XX1 recommended max chainring: 36T with BioCentric forward. Q-Factor: 168mm
SHIMANO XT recommended 2x chainrings: 28/40T or lower
SHIMANO XTR 2x is not recommended. Both versions (40t/48.8mm chain line and 38t/46.6mm chain line) position the large chainring in a way that it may contact the frame.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY & SPECIFICATIONS: SIR 9 (traditional headtube/dropouts, discontinued)

SIR 9	UNITS	A - TT LENGTH		B - SEAT TUBE LENGTH		C - CHAINSTAY LENGTH		D - FRONT CENTER		E - WHEELBASE		F - BB DROP		G - HEAD TUBE LENGTH		H - HEAD TUBE ANGLE		I - SEAT TUBE ANGLE		J - STANDOVER HEIGHT		K - REACH		L - STACK	
		80	100			80	100	80	100	80	100		80	100	80	100	80	100	80	100	80	100	80	100	
SM	MM	587	590	393	445	642	650	1073	1083	60	52	90	71.5	70.5	74.0	73.0	706	711	410	402	608	615			
MD	MM	603	606	418	445	654	659	1085	1091	60	52	100	72.0	71.0	74.0	73.0	728	732	426	415	620	626			
LG	MM	622	626	483	445	674	678	1104	1111	60	52	110	72.0	71.0	74.0	73.0	780	786	442	431	629	637			
XL	MM	641	645	546	445	693	698	1124	1130	60	52	130	72.0	71.0	74.0	73.0	832	838	456	444	648	656			

SM	INCH	23.1	23.2	15.5	17.5	25.3	25.6	42.2	42.6	2.4	2.0	3.5	71.5	70.5	74.0	73.0	27.8	28.0	16.1	15.8	23.9	24.2
MD	INCH	23.7	23.9	16.5	17.5	25.7	25.9	42.7	43.0	2.4	2.0	3.9	72.0	71.0	74.0	73.0	28.7	28.8	16.8	16.3	24.4	24.6
LG	INCH	24.5	24.6	19.0	17.5	26.5	26.7	43.5	43.7	2.4	2.0	4.3	72.0	71.0	74.0	73.0	30.7	30.9	17.4	17.0	24.8	25.1
XL	INCH	25.2	25.4	21.5	17.5	27.3	27.5	44.3	44.5	2.4	2.0	5.1	72.0	71.0	74.0	73.0	32.8	33.0	18.0	17.5	25.5	25.8

*Geometry measurements are shown for 80mm and 100mm travel forks.

** Geometry measurements are shown for BB in line with seat tube, BioCentric will change geometry depending on position.

SIR 9 SPECIFICATIONS & COMPATIBILITY
73mm BB width (with BioCentric installed)
BioCentric is compatible with external bearing cranksets only
27.2mm seat post size, 400mm length recommended
28.6mm front derailleur, high mount, bottom pull
29.6mm seat collar size
Traditional 1-1/8" external bearing headset (not included) Cane Creek standard description: EC34/28.6 EC34/30
Small, medium, large and XL have two bottle mounts inside the front triangle
Replaceable derailleur hanger or SS insert
135mm QR rear spacing
Can fit up to a 2.4" tire (tire size varies by brand, some tires may not fit)
Compatible with standard 3x chainring systems
SRAM recommended 2x chainrings: 26/39T or lower
SRAM XX1 recommended max chainring: 36T with BioCentric forward. Q-Factor: 168mm
SHIMANO XT recommended 2x chainrings: 28/40T or lower
SHIMANO XTR 2x is not recommended. Both versions (40t/48.8mm chain line and 38t/46.6mm chain line) position the large chainring in a way that it may contact the frame.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY & SPECIFICATIONS: MCR 9

MCR 9	UNITS	A - TT LENGTH		B - SEAT TUBE LENGTH		C - CHAINSTAY LENGTH		D - FRONT CENTER		E - WHEELBASE		F - BB DROP		G - HEAD TUBE LENGTH		H - HEAD TUBE ANGLE		I - SEAT TUBE ANGLE		J - STANDOVER HEIGHT		K - REACH		L - STACK	
		80	100			80	100	80	100	80	100		80	100	80	100	80	100	80	100	80	100	80	100	
SM	MM	587	590	393	445	642	650	1073	1083	60	52	90	71.5	70.5	74.0	73.0	706	711	410	402	608	615			
MD	MM	603	606	418	445	654	659	1085	1091	60	52	100	72.0	71.0	74.0	73.0	728	732	426	415	620	626			
LG	MM	622	626	483	445	674	678	1104	1111	60	52	110	72.0	71.0	74.0	73.0	780	786	442	431	629	637			
XL	MM	641	645	546	445	693	698	1124	1130	60	52	130	72.0	71.0	74.0	73.0	832	838	456	444	648	656			

SM	INCH	23.1	23.2	15.5	17.5	25.3	25.6	42.2	42.6	2.4	2.0	3.5	71.5	70.5	74.0	73.0	27.8	28.0	16.1	15.8	23.9	24.2
MD	INCH	23.7	23.9	16.5	17.5	25.7	25.9	42.7	43.0	2.4	2.0	3.9	72.0	71.0	74.0	73.0	28.7	28.8	16.8	16.3	24.4	24.6
LG	INCH	24.5	24.6	19.0	17.5	26.5	26.7	43.5	43.7	2.4	2.0	4.3	72.0	71.0	74.0	73.0	30.7	30.9	17.4	17.0	24.8	25.1
XL	INCH	25.2	25.4	21.5	17.5	27.3	27.5	44.3	44.5	2.4	2.0	5.1	72.0	71.0	74.0	73.0	32.8	33.0	18.0	17.5	25.5	25.8

*Geometry measurements are shown for 80mm and 100mm travel forks.

MCR 9 SPECIFICATIONS & COMPATIBILITY
73mm threaded BB width
27.2mm seat post size, 400mm length recommended
28.6mm front derailleur, low mount, top pull
29.6mm seat collar size
Traditional 1-1/8" external bearing headset (not included) Cane Creek standard description: EC34/28.6 EC34/30
Small, medium, large and XL have two bottle mounts inside the front triangle
Replaceable derailleur hanger
135mm QR rear spacing
Can fit up to a 2.4" tire (tire size varies by brand, some tires may not fit)
Compatible with standard 3x chainring systems
SRAM recommended 2x front chainring configs: 26/39 or lower
SHIMANO XT recommended 2x front chainring configs: 28/40 or lower
SHIMANO XTR 2x is not recommended. Both versions (40t/48.8mm chain line and 38t/46.6mm chain line) position the large chainring in a way that it may contact the frame.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY & SPECIFICATIONS: ONE 9

ONE 9	UNITS	A - TT LENGTH		B - SEAT TUBE LENGTH		C - CHAINSTAY LENGTH		D - FRONT CENTER		E - WHEELBASE		F - BB DROP		G - HEAD TUBE LENGTH		H - HEAD TUBE ANGLE		I - SEAT TUBE ANGLE		J - STANDOVER HEIGHT		K - REACH		L - STACK	
		80	100			80	100	80	100	80	100	80	100	80	100	80	100	80	100	80	100	80	100	80	100
SM	MM	587	590	394	439	650	655	1082	1088	62	54	105	71.0	70.0	74.0	73.0	719	724	414	404	600	608			
MD	MM	603	607	419	439	656	660	1088	1094	62	54	110	72.0	71.1	74.0	73.0	739	744	428	418	610	617			
LG	MM	622	626	483	439	675	680	1107	1114	62	54	125	72.0	71.0	74.0	73.0	790	796	443	433	624	631			
XL	MM	641	645	533	439	695	700	1127	1134	62	54	145	72.0	71.0	74.0	73.0	831	837	457	446	643	651			

SM	INCH	23.1	23.2	15.5	17.3	25.6	25.8	42.6	42.9	2.4	2.1	4.1	71.0	70.0	74.0	73.0	28.3	28.5	16.3	15.9	23.6	23.9
MD	INCH	23.8	23.9	16.5	17.3	25.8	26.0	42.8	43.1	2.4	2.1	4.3	72.0	71.1	74.0	73.0	29.1	29.3	16.9	16.5	24.0	24.3
LG	INCH	24.5	24.6	19.0	17.3	26.6	26.8	43.6	43.9	2.4	2.1	4.9	72.0	71.0	74.0	73.0	31.1	31.3	17.4	17.0	24.6	24.8
XL	INCH	25.3	25.4	21.0	17.3	27.4	27.5	44.4	44.6	2.4	2.1	5.7	72.0	71.0	74.0	73.0	32.7	33.0	18.0	17.6	25.3	25.6

*Geometry measurements are shown for 80mm and 100mm travel forks.

** Geometry measurements are shown for BB in line with seat tube, BioCentric will change geometry depending on position.

ONE 9 SPECIFICATIONS & COMPATIBILITY
73mm BB width (with BioCentric installed)
BioCentric is compatible with external bearing cranksets only
31.6mm seat post size, 400mm length recommended
34.9mm seat collar size
1.125"-1.5" tapered head tube with integrated (Campy style) headset (headset included) Cane Creek standard description: IS42/28.6 IS52/40
Small frame has one bottle mount inside the front triangle. Medium, large and XL have two bottle mounts inside the front triangle
Replaceable SS insert
Optional Gear Kit (removable downtube guides and hanger) allows for full-length cable housing and 1x9/10 drivetrains
135mm QR rear spacing
Can fit up to a 2.4" tire (tire size varies by brand, some tires may not fit)
Compatible with standard 3x chainring systems
SRAM recommended 2x chainrings: 26/39T or lower
SRAM XX1 recommended max chainring: 34T with BioCentric forward. Q-Factor: 168mm
SHIMANO XT recommended 2x chainrings: 28/40T or lower
SHIMANO XTR 2x is not recommended. Both versions (40t/48.8mm chain line and 38t/46.6mm chain line) position the large chainring in a way that it may contact the frame.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

GEOMETRY & SPECIFICATIONS: ONE 9 (SCANDIUM, discontinued)

ONE 9	TT LENGTH 80/100*	SEAT TUBE LENGTH	CHAINSTAY LENGTH	FRONT CENTER 80/100*	WHEELBASE 80/100*	BB DROP 80/100*	HEAD TUBE LENGTH	HEAD TUBE ANGLE 80/100*	SEAT TUBE ANGLE 80/100*	STANDOVER HEIGHT 80/100*
S (inches)	23.1/23.2	15.5	17.3	25.5/25.6	42.4/42.7	2.4/2.1	3.1	71°/70°	74°/73°	27.8/28
S (mm)	586/589	393	439	646/651	1077/1084	61/53	80	71°/70°	74°/73°	705/710
M (inches)	23.75/23.9	16.5	17.3	25.7/25.9	42.7/42.9	2.4/2.1	3.5	72°/71°	74°/73°	28.6/28.8
M (mm)	603/606	419	439	653/657	1084/1090	61/53	90	72°/71°	74°/73°	727/731
L (inches)	24.5/24.6	18.5	17.3	26.5/26.7	43.5/43.7	2.4/2.1	4.1	72°/71°	74°/73°	30.3/30.5
L (mm)	622/625	469	439	672/677	1104/1110	61/54	105	72°/71°	74°/73°	769/774
XL (inches)	25.25/25.4	21	17.3	27.2/27.4	44.2/44.5	2.4/2.1	4.7	72°/71°	74°/73°	32.3/32.6
XL (mm)	641/644	533	439	692/696	1123/1130	61/54	120	72°/71°	74°/73°	820/826

*Geometry measurements are shown for 80mm and 100mm travel forks.

** Geometry measurements are shown for BB in line with seat tube,

BioCentric will change geometry depending on position.

SPECIFICATIONS & COMPATIBILITY:

- 73mm BB width
- 31.6mm seatpost size
- 34.9mm seat collar size (not included)
- standard 1.125" external bearing headset (not included)
Cane Creek standard description: EC34/28.6|EC34/30
- Dedicated singlespeed drop outs
- Size Small has one inner triangle bottle mount and one under the downtube bottle mount
- Size Medium, Large and XL have two inner triangle bottle mounts
- 135mm QR rear spacing
- Stainless Steel laser cut head badge
- Can fit up to a 2.4" tire (tire size varies by brand, some tires may not fit)
- The Niner EBB is designed for use with external bearing cranksets only.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

NINER VERSION CHART

AIR 9 RDO	v1.0
Dates Sold	2012–Present
Frame Material	Carbon
Seatpost Size	31.6 x 400mm
Seat Clamp Size	34.9mm
BB Shell Width	73mm Press Fit 30
Front Derailleur	34.9mm Bottom Pull, High Mount
Max Tire	2.4
Max Rotor	185mm
Head Tube	Tapered
Headset	Integrated (IS 42/28.6 IS 52/40)
Colors	N. Green, Licorice Black

WHAT YEAR IS MY NINER?

It's a question we hear all the time, with good reason! The bike industry standard is to implement graphic and construction changes annually whether they are necessary or not. Niner chooses to update models when there is a reason to do so: a new technology, changes in industry standards or to take advantage of new materials and construction techniques. These Version Charts document these updates and provide an archive of specifications for older models. If you don't see your frame listed or have any questions just give us a call: 877-NINERXC

AIR 9 CARBON	v1.0	v1.1
Dates Sold	2010-2012	2012–Present
Frame Material	Carbon	Carbon
Seatpost Size	31.6 x 400mm	31.6 x 400mm
Seat Clamp Size	34.9mm	34.9mm
BB Shell Width	73mm (w/ CYA insert or BioCentric)	73mm (w/ CYA insert or BioCentric)
Front Derailleur	34.9mm Bottom Pull, High Mount	34.9mm Bottom Pull, High Mount
Max Tire	2.4	2.4
Max Rotor	160mm	185mm
Head Tube	Tapered	Tapered
Headset	Integrated (IS 42/28.6 IS 52/40)	Integrated (IS 42/28.6 IS 52/40)
Head Badge	Magnesium (integrated housing stops)	Aluminum (ferrule housing stops)
Colors	N. Orange, Arctic White, Licorice Black	N. Orange, Arctic White, Licorice Black

AIR 9	v1.0	v1.1	v1.2
Dates Sold	2008–Prior	2009-2011	2011-2012
Frame Material	Scandium	Scandium	Scandium
Chainstay	Oval Stay	Cloverleaf Stays	Oval Stays
Seatpost Size	31.6 x 400mm	31.6 x 400mm	31.6 x 400mm
Seat Clamp Size	34.9mm	34.9mm	34.9mm
BB Shell Width	68mm	73mm	73mm
Front Derailleur	34.9mm Top Pull, Low Mount	34.9mm Top Pull, Low Mount	34.9mm Top Pull, Low Mount
Max Tire	2.2	2.4	2.4
Max Rotor	160mm	160mm	160mm
Head Tube	1-1/8"	1-1/8"	1-1/8"
Headset	1-1/8" Traditional Threadless	1-1/8" Traditional Threadless	1-1/8" Traditional Threadless
Colors	Raw, N. Orange, N. Green	Atomic Blue, Raw, N. Green	Aircraft Grey, Arctic White, Raw, N. Orange

AIR 9 (cont.)	v2.0
Dates Sold	2011–Present
Frame Material	Hydroformed Aluminum
Chainstay	Hydroformed
Seatpost Size	31.6 x 400mm
Seat Clamp Size	34.9mm
BB Shell Width	73mm Press Fit 30
Front Derailleur	34.9mm Top Pull, High Mount
Max Tire	2.4
Max Rotor	185mm
Head Tube	Tapered
Headset	Integrated (IS 42/28.6 IS 52/40)
Colors	Licorice Black Anodized, Arctic White, N. Orange



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

NINER VERSION CHART

EMD 9	v1.0	v1.1	v2.0
Dates Sold	2008–Prior	2009-2011	2011–Present
Frame Material	Aluminum	Aluminum	Hydroformed Aluminum
Seatpost Size	31.6 x 400mm	31.6 x 400mm	31.6 x 400mm
Seat Clamp Size	34.9mm	34.9mm	34.9mm
BB Shell Width	68mm	73mm	73mm
Front Derailleur	34.9mm Top Pull, Low Mount	34.9mm Top Pull, Low Mount	34.9mm Top Pull, High Mount
Max Tire	2.2	2.4	2.4
Max Rotor	160mm	160mm	185mm
Head Tube	1-1/8"	1-1/8"	Tapered
Headset	1-1/8" Traditional Threadless	1-1/8" Traditional Threadless	Zero Stack (ZS44/28.6 ZS56/40)
Colors	Licorice Black, Root Beer	Moondust, Tamale Red, Root Beer	Matte Licorice Black, Tamale Red

ONE 9	v1.0	v1.1	v1.2
Dates Sold	2008–Prior	2009-2011	2011-2012
Frame Material	Scandium	Scandium	Scandium
Chainstay	Oval Stays	Cloverleaf Stays	Oval Stays
Seatpost Size	31.6 x 400mm	31.6 x 400mm	31.6 x 400mm
Seat Clamp Size	34.9	34.9	34.9
BB Shell Width	68mm w/set screw EBB installed	73mm w/ BioCentric installed	73mm w/ BioCentric installed
BB Type	Set Screw EBB (Ti Bolts)	BioCentric	BioCentric
Max Tire	2.2	2.4	2.4
Max Rotor	160mm	160mm	160mm
Head Tube	1-1/8"	1-1/8"	1-1/8"
Headset	1-1/8" Traditional Threadless	1-1/8" Traditional Threadless	1-1/8" Traditional Threadless
Colors	Tamale Red, N. Orange, Godzilla Green	Atomic Blue, Raw	Raw, N. Green

ONE 9 (cont.)	v2.0
Dates Sold	2012–Present
Frame Material	Hydroformed Aluminum
Chainstay	Hydroformed
Seatpost Size	31.6 x 400mm
Seat Clamp Size	34.9
BB Shell Width	73mm w/ BioCentric installed
BB Type	BioCentric
Max Tire	2.4
Max Rotor	185mm
Head Tube	Tapered
Headset	Integrated (IS 42/28.6 IS 52/40)
Colors	Licorice Black Anodized, N. Orange

SIR 9	v1.0	v1.1	v2.0
Dates Sold	2008–Prior	2009-2012	2012–Present
Frame Material	Steel	Steel	Steel
Seatpost Size	27.2 x 400mm	27.2 x 400mm	27.2 x 400mm
Seat Clamp Size	29.6mm	29.6mm	29.6mm
Front Derailleur	28.6mm front derailleur, high mount, bottom pull	28.6mm front derailleur, high mount, bottom pull	28.6mm front derailleur, high mount, bottom pull
BB Shell Width	68mm w/ set screw EBB installed	73mm w/ BioCentric installed	73mm w/ BioCentric II installed
BB Type	Set Screw EBB (Ti Bolts)	BioCentric	BioCentric II
Max Tire	2.2	2.4	2.4
Max Rotor	160mm	160mm	185mm
Rear Axle Spacing	135mm QR	135mm QR	142mm Maxle
Head Tube	1-1/8"	1-1/8"	44mm
Headset	1-1/8" Traditional Threadless	1-1/8" Traditional Threadless	1-1/8" /1.5" Traditional Threadless
Colors	N. Orange, Root Beer, Solid Gold, Godzilla Green, Tamale Red	N. Green, Moondust Grey, Rootbeer, Solid Gold	Tamale Red, Arctic White



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

NINER VERSION CHART

MCR 9	v1.0	v1.1
Dates Sold	2008–Prior	2009–Present
Frame Material	Steel	Steel
Seatpost Size	27.2 x 400mm	27.2 x 400mm
Seat Clamp Size	29.6mm	29.6mm
Front Derailleur	28.6mm Top Pull, Low Mount (top swing)	28.6mm Top Pull, Low Mount (top swing)
BB Shell Width	68mm	73mm
Max Tire	2.2	2.4
Max Rotor	160mm	160mm
Head Tube	1-1/8"	1-1/8"
Headset	1-1/8" Traditional Threadless	1-1/8" Traditional Threadless
Colors	N. Orange, Root Beer, Solid Gold	N. Orange, Root Beer, Solid Gold, N. Green, Moondust Grey

JET 9 RDO	v1.0	v1.1	v1.2
Dates Sold	2011-2012	2012	2012
Frame Material	Carbon w/ Alloy Link	Carbon w/ Alloy Link	Carbon w/ Carbon Link
Seatpost Size	31.6 x 400mm	31.6 x 400mm	31.6 x 400mm
Seat Clamp Size	34.9mm	34.9mm	34.9mm
Front Derailleur	Direct Mount (SRAM S3 or Shimano E2) Bottom Pull	Direct Mount (SRAM S3 or Shimano E2) Bottom Pull	Direct Mount (SRAM S3 or Shimano E2) Bottom Pull
BB Shell Width	73mm Press Fit 30	73mm Press Fit 30	73mm Press Fit 30
Max Tire	2.4	2.4	2.4
Max Rotor	185mm	185mm	185mm
Head Tube	Tapered	Tapered	Tapered
Headset	Zero Stack (ZS44/28.6 ZS56/40)	Integrated (IS 42/28.6 IS 52/40)	Integrated (IS 42/28.6 IS 52/40)
Rear Axle Spacing	135mm QR	135mm QR	142mm Maxle
Colors	N. Orange, Licorice Black, Arctic White	N. Orange, Licorice Black, Arctic White	N. Green

JET 9 CARBON	v1.0
Dates Sold	2012
Frame Material	Carbon w/ Alloy Link
Seatpost Size	31.6 x 400mm
Seat Clamp Size	34.9mm
Front Derailleur	Direct Mount (SRAM S3 or Shimano E2) Bottom Pull
BB Shell Width	73mm Press Fit 30
Max Tire	2.4
Max Rotor	185mm
Head Tube	Tapered
Headset	Integrated (IS 42/28.6 IS 52/40)
Rear Axle Spacing	135mm QR
Colors	Moondust Grey

JET 9	v1.0	v2.0	v2.1
Dates Sold	2007–2009 (If you have this version please call 877-NINERXC)	2010	2011–Present
Frame Material	Aluminum	Aluminum (Hydroformed)	Aluminum (Hydroformed)
Seatpost Size	30.9 x 350mm	30.9 x 350mm	30.9 x 350mm
Seat Clamp Size	34.9mm	34.9mm	34.9mm
Front Derailleur	34.9mm Bottom Pull, High Mount (bottom swing)	34.9mm Bottom Pull, High Mount (bottom swing)	34.9mm Bottom Pull, High Mount (bottom swing)
BB Shell Width	68mm	68mm	68mm
Max Tire	2.2	2.4	2.4
Max Rotor	160mm	160mm	160mm
Head Tube	1-1/8"	Tapered	Tapered
Headset	1-1/8" Traditional Threadless	Integrated (IS 42/28.6 IS 52/40)	Zero Stack (ZS44/28.6 ZS56/40)
Colors	Licorice Black, N. Green, Arctic White	Raw, N. Orange, Licorice Black, N. Green	Raw, Licorice Black, N. Orange



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

NINER VERSION CHART

RIP 9	v1.0	v1.1	v1.2
Dates Sold	2006 - 2007	2007 - 2008	2008
Frame Material	Aluminum	Aluminum (Gusseted Seat Tube)	Aluminum (Gusseted Seat Tube)
Seatpost Size	31.6 x 350mm	31.6 x 350mm	30.9 x 350mm
Seat Clamp Size	34.9mm	34.9mm	34.9mm
Front Derailleur	34.9mm Top Pull, High Mount (bottom swing)	34.9mm Top Pull, High Mount (bottom swing)	34.9mm Top Pull, High Mount (bottom swing)
BB Shell Width	68mm	68mm	68mm
Max Tire	2.2	2.2	2.2
Max Rotor	185mm	185mm	185mm
Head Tube	1-1/8"	1-1/8"	1-1/8"
Headset	1-1/8" Traditional Threadless	1-1/8" Traditional Threadless	1-1/8" Traditional Threadless
Pivot Axles	Aluminum	Steel	Steel
Rear Axle Spacing	135mm QR	135mm QR	135mm QR
Colors	Hi-Ho Silver, Atomic Blue	Hi-Ho Silver, Atomic Blue	Hi-Ho Silver, Atomic Blue

RIP 9 (cont.)	v2.0	v2.1
Dates Sold	2009 - 2011	2011–Present
Frame Material	Aluminum (Hydroformed)	Aluminum (Hydroformed)
Seatpost Size	30.9 x 350mm	30.9 x 350mm
Seat Clamp Size	34.9mm	34.9mm
Front Derailleur	34.9mm Bottom Pull, High Mount (bottom swing)	34.9mm, Bottom Pull, High Mount (bottom swing)
BB Shell Width	73mm	73mm
Max Tire	2.4	2.4
Max Rotor	185mm	185mm
Head Tube	Tapered	Tapered (1 degree slacker)
Headset	Integrated (IS 42/28.6 IS 52/40)	Zero Stack (ZS44/28.6 ZS56/40)
Pivot Axles	Anodized Aluminum	Anodized Aluminum
Rear Axle Spacing	135mm QR, 135mm Maxle	135mm QR, 135mm Maxle, 142mm Maxle
Colors	N. Orange, Raw, Milk Dud, Licorice Black	Raw, Tamale Red, Licorice Black

WFO 9	v1.0	v1.1
Dates Sold	2009 - 2011	2011–Present
Frame Material	Aluminum (Hydroformed)	Aluminum (Hydroformed)
Seatpost Size	30.9 x 350mm	30.9 x 350mm
Seat Clamp Size	34.9mm	34.9mm
Front Derailleur	Direct High Mount ("D" mount)	Direct High Mount ("D" mount)
BB Shell Width	73mm w/ISCG 03 tabs	73mm w/ISCG 03 tabs
Max Tire	2.4	2.4
Max Rotor	203mm	203mm
Head Tube	Tapered	Tapered (1 degree slacker)
Headset	Integrated (IS 42/28.6 IS 52/40)	Zero Stack (ZS44/28.6 ZS56/40)
Rear Axle	135mm QR, 135mm Maxle, 142mm Maxle, 150mm Maxle	135mm QR, 135mm Maxle, 142mm Maxle, 150mm Maxle
Colors	Milk Dud, Arctic White	Licorice Black, Fridge Green

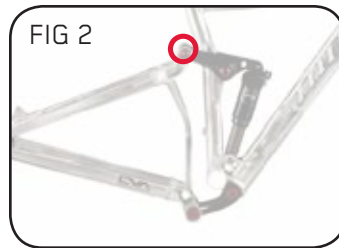
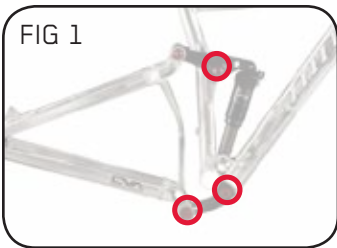


NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

BEARING & TORQUE SPECS

FRAME	LOCATION	BEARING	QTY	BEARING DIMENSION (MM)			PIVOT AXLE TORQUE SPEC		
				OD	ID	WIDTH	NM	IN-LB	FT-LB
JET 9	ALL	6901-2RS	8	24	12	6	7	62	5.2
JET 9 RDO	ALL	6900-2RS	8	22	10	6	9*	79*	6.6*
RIP 9 & WFO 9	LOWER LINK/FORWARD UPPER LINK (FIG 1)	6902-2RS	6	28	15	7	7	62	5.2
	REAR UPPER LINK (FIG 2)	6901-2RS	2	24	12	6	7	62	5.2



* Some Jet 9 RDO pivot bolts are marked 6NM but we have increased the recommended torque spec to 9NM to avoid loosening.

FRAME OR PART	LOCATION	TORQUE SPEC		
		NM	IN-LB	FT-LB
RIP 9 & WFO 9	M6 DERAILLEUR HANGER/DROPOUT INSERT BOLTS	4	35	2.9
AIR 9 RDO, AIR 9 CARBON & JET 9 RDO	DERAILLEUR HANGER CHAINRING-STYLE BOLT	6	53	4.4
JET 9 RDO	FRONT DERAILLEUR INTEGRATED MOUNT BOLTS	3	27	2.2
OTHER MODELS	DERAILLEUR HANGER/DROPOUT INSERT BOLTS	3	27	2.2
ALL CVA MODELS	M6 SHOCK MOUNT BOLTS	6	53	4.4
ALL	NINER SEAT COLLAR	4	35	2.9
ALL	WATER BOTTLE BOLTS	3	27	2.2
BIOCENTRIC	M8 X 25MM FIXING BOLT	21.5	190	15.8
BIOCENTRIC 2	M6 X 16MM FIXING BOLTS (2)	12	106	8.8



ENDURO BEARINGS



Niner specifies quality Enduro® MAX Bearings as original equipment on select CVA™ frames. RDO models go one step beyond, utilizing Magnetite Black coated bearings. While we could easily save a few dollars on generic units, we feel that using the best bearings available is part of what makes a Niner a Niner.

You can buy complete replacement bearing sets from your Niner dealer or individual bearings and bearing tools directly from Enduro® (www.endurobearings.com).



ENDURO® MAX

“MAX” is Enduro’s trademarked “full complement” bearing. These are application-specific bearings which have no retainers, allowing more balls to be packed inside of the cartridge. Compared to their caged counterparts, MAX bearings have an increased load capacity of 40% or more. They are ideally suited to high-load, low rotation applications (such as suspension pivots).

THE BALLS are made from chromium steel. These high precision Grade 10 balls are 10/1,000,000” from exactly round in sphericity. For comparison, component manufacturers often use grade 25 balls in their top-level components. When talking ball grade, the smaller the number, the “rounder” the ball.

THE RACES are vacuum de-gassed 52100 high carbon chromium alloy steel, hardened to Rockwell C-62.

THE SEALS are “LLU” medium/high contact labyrinth type, with 2 sealing lips which fit into a matching groove on the inner race. The outer sealing lip repels dirt and water while the inner sealing lip retains the grease. In MAX bearing applications, such as suspension pivots, we are more concerned about keeping contaminants on the outside and lubrication on the inside than we are about reducing seal friction. This makes the LLU a perfect match for the MAX cartridge.

ENDURO® MAX with MAGNETITE BLACK COAT

Black Oxide coating is a special coating process that neutralizes steel against oxidation and corrosion while preserving the precision tolerances of the bearing. The Magnetite Black Coat works well with the hardest chromium steel (more durable than stainless steel) while adding good corrosion resistance. These bearings are MAX type, which means 40% more balls are filled into the bearings and we use the same LLU seals. Enduro® packs these bearings with Almagard 3752 Extra High Pressure Grease which acts as a pillow between the ball and race for high impact forces. Almagard 3752 is extremely water resistant and sticky so that it will not displace.





NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

ABOUT CVA™ SUSPENSION - (U.S. PATENT NO. 7,934,739)

1. CVA™ IS NOW PATENTED (U.S. PATENT NO. 7,934,739)

CVA™ is an award-winning suspension design and now it is recognized with a US Patent.

2. THE ONLY 29ER SPECIFIC SUSPENSION DESIGN

CVA™ is the only suspension designed with 29ers in mind. For those seeking big wheels and CVA™ performance, Niner is the way to go. You won't find this design on other bikes.

3. EFFICIENT PEDALING IN ALL CHAINRINGS

CVA™ is designed to be efficient in all chainrings. Because of the location of the lower pivot (under the BB) chain torque effectively isolates and cancels out the forces acting to create inefficiency in pedal stroke.

4. POSITIVELY REVIEWED - AROUND THE WORLD

CVA™ equipped Niner Bikes have garnered praise on the forums and in magazines around the world. Real rider experience supports our system's superiority for your 29er experience. See our website or the next page for more reviews.

ABOUT CVA™ SUSPENSION:

Niner's own Constantly Varying Arc, or CVA™, suspension design is not just another version of the same old thing. It's unique to Niner, designed in-house, specifically for 29" wheels.

Although CVA™ does resemble some of the other parallel link bikes, CVA™ works very differently to isolate pedaling forces and remain fully active under all conditions. Many current suspension designs, especially some parallel link suspension designs, maximize efficiency by concentrating their 'instant center' pivot location at or around the middle chainring. These designs assume that most of your pedaling will be done in the middle chainring and so are designed around this effective pivot location. This also means that there is some compromise to the suspension's pedalability when NOT in the middle chainring (or when using a 2x10 set up). The better the design, the less noticeable these compromises are.

In order to isolate pedaling forces in a broader range of gearing choices, the CVA's™ 'instant center' location is in front of the drivetrain. With the lower pivot under the bottom bracket, the force at the rear axle resulting from chain tension pulls the two linkages in opposite directions in all gear choices, effectively isolating the drivetrain from the rear triangle. In other words, when a rider cranks on the pedals, the chain is trying to pull the lower link down and away from the bottom bracket, and the upper link in its regular rotational path. Since the rear triangle is one piece, the result of these opposing forces cancels each other out, leaving the only outlet for chain-induced torque being rotation of the rear wheel, where it's most wanted.

Past the rearward-most position at sag, the axle path moves in towards the bike at a gradual, constantly varying arc, which insures that there is minimal chain growth throughout the length of travel. This also means minimal pedal feed back in the drivetrain while cycling the suspension, again, essentially isolating it from the fully active movement of the suspension design.

Another key component to CVA™ suspension's active design is the low leverage ratio of shock stroke to suspension movement. This low leverage ratio decreases the amount of air or spring weight needed for any rider weight, which translates to smoother, more effective damping and less drag on the seals.

Ultimately, there are many variables in suspension – we believe that we have created a strong, 29er specific system, and that the best way to test it is to go out and ride a Niner full suspension bike.

WWW.NINERBIKES.COM/DEMO



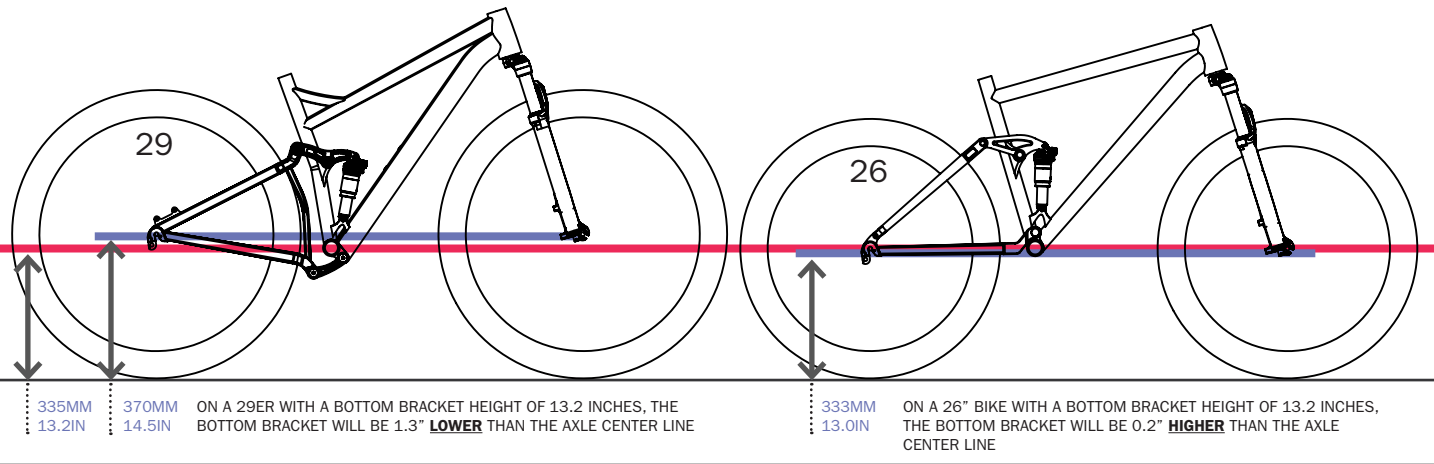
NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

ABOUT CVA™ SUSPENSION - (U.S. PATENT NO. 7,934,739)



This drawing shows the relationship between the bottom bracket and the center axle line. The red line represents equal 13.2" bottom bracket height on both 26" and 29" MTBs. The blue line represents the center line of the axle on each bike. Note: all suspension designs up until the development of CVA™ were designed around 26" wheel and the 26" wheel bottom bracket to axle center line relationship.





NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

SAG SET UP FOR NINER FULL SUSPENSION MODELS

MODEL	SHOCK STROKE LENGTH	20% SAG	25% SAG	30% SAG
JET 9	1.5"/37mm	0.3"/7mm	0.38"/9mm	0.45"/11mm
JET 9 RDO	2"/50mm	0.4"/10mm	0.5"/12.5mm	0.6"/15mm
RIP 9 RIP 9 RDO	2"/50mm	0.4"/10mm	0.5"/12.5mm	0.6"/15mm
WFO 9	2.25"/57mm	0.5"/11mm	0.6"/14.5mm	0.7"/17mm

Sag set up is critical to correct rear suspension function. Niner recommends between 20-30% sag on all models. As travel increases into the more extreme style frames, more sag can be used (in other words, 30% on the WFO 9 is a good amount of sag). Niner recommends starting with 25% sag on each model. The chart below will give you measurements for each Niner full suspension model and is a great starting point to rear suspension setup. Niner recommends consulting your local bicycle dealer for help in understanding suspension setup. While sag is an important measurement to insure your suspension is setup correctly, there are many more adjustments that can be made to your suspension components to insure that your're getting the most out of your suspension. Please consult the owner's manuals of those suspension components for a full understanding of the different adjustments that can be made.

To adjust sag with an air sprung shock, it will require the use of a specific 'shock pump'. Please insure that you have purchased the correct pump from your local bike shop. On the rear shock, there is a rubber o-ring that will be pushed on the stancion by the shock body. This o-ring will indicate how much sag you have in your rear suspension. Insure that the o-ring is pushed all the way up against the shock body, mount your bike with your full riding gear on (to mimic riding weight) and without bouncing get off your bike. The distance the o-ring traveled from the shock body is the amount of 'sag' you have on your system. Consult the graph below for proper measurements of correct sag per model. With your shock pump, either increase or decrease pressure in the air spring to reach the desired sag amount.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

HEADSET SPECIFICATIONS

MODEL	YEAR	HEADSET SPEC	OPTIONS	ANGLESET COMPATIBILITY	ANGLESET OPTIONS	HEADSET NOMENCLATURE
ONE 9	2005-2011	EC34/28.6 EC34/30				Standard 1-1/8" threadless headset
ONE 9	2012-Present	IS42/28.6 IS52/40	IS42/28.6 IS52/30**			Integrated 1-1/8" upper 1.5" lower
AIR 9	2006-2011	EC34/28.6 EC34/30				Standard 1-1/8" threadless headset
AIR 9	2012-Present	IS42/28.6 IS52/40	IS42/28.6 IS52/30**			Integrated 1-1/8" upper 1.5" lower
EMD 9	2006-2011	EC34/28.6 EC34/30				Standard 1-1/8" threadless headset
EMD 9	2012-Present	ZS44/28.6 ZS56/40	ZS44/28.6 ZS56/30**	ZS44/28.6 ZS56/30***	ZS44/28.6 EC56/40†	Internal (ZS) 1-1/8" upper 1.5" lower
SIR 9	2006-2011	EC34/28.6 EC34/30				Standard 1-1/8" threadless headset
SIR 9	2012	ZS44/28.6 EC44/40				Internal (ZS) 1-1/8" upper 1.5" external lower
MCR 9	2006-2011	EC34/28.6 EC34/30				Standard 1-1/8" threadless headset
AIR 9 RDO	2012	IS42/28.6 IS52/40	IS42/28.6 IS52/30**			Integrated 1-1/8" upper 1.5" lower
AIR 9 CARBON	2009-Present	IS42/28.6 IS52/40	IS42/28.6 IS52/30**			Integrated 1-1/8" upper 1.5" lower
JET 9	2010	IS42/28.6 IS52/40	IS42/28.6 IS52/30**			Integrated 1-1/8" upper 1.5" lower
JET 9	2011	ZS44/28.6 ZS56/40	ZS44/28.6 ZS56/30**	ZS44/28.6 ZS56/30***	ZS44/28.6 EC56/40†	Internal (ZS) 1-1/8" upper 1.5" lower
JET 9 RDO	2011	ZS44/28.6 ZS56/40	ZS44/28.6 ZS56/30**	ZS44/28.6 ZS56/30***	ZS44/28.6 EC56/40†	Internal (ZS) 1-1/8" upper 1.5" lower
JET 9 RDO	2012-Present	IS42/28.6 IS52/40	IS42/28.6 IS52/30**			Integrated 1-1/8" upper 1.5" lower
RIP 9	2006-2008	EC34/28.6 EC34/30				Standard 1-1/8" threadless headset
RIP 9	2009-2010	IS42/28.6 IS52/40	IS42/28.6 IS52/30**			Integrated 1-1/8" upper 1.5" lower
RIP 9	2011	ZS44/28.6 ZS56/40	ZS44/28.6 ZS56/30**	ZS44/28.6 ZS56/30***	ZS44/28.6 EC56/40†	Internal (ZS) 1-1/8" upper 1.5" lower
RIP 9 RDO	2013	ZS44/28.6 ZS56/40	ZS44/28.6 ZS56/30**	ZS44/28.6 ZS56/30***	ZS44/28.6 EC56/40†	Internal (ZS) 1-1/8" upper 1.5" lower
WFO 9	2009-2010	IS42/28.6 IS52/40	IS42/28.6 IS52/30**			Integrated 1-1/8" upper 1.5" lower
WFO 9	2011	ZS44/28.6 ZS56/40	ZS44/28.6 ZS56/30**	ZS44/28.6 ZS56/30***	ZS44/28.6 EC56/40†	Internal (ZS) 1-1/8" upper 1.5" lower

* lower external cup for using a taper steerer tube in a 44mm ID ZS head tube

** denotes the ability to run a straight 1 1/8" fork in our tapered head tubes

*** CURRENT (as of 10/2010) availability of angleset headsets require the use of straight 1 1/8" forks, offsets include 0, 0.5, 1, 1.5 degrees

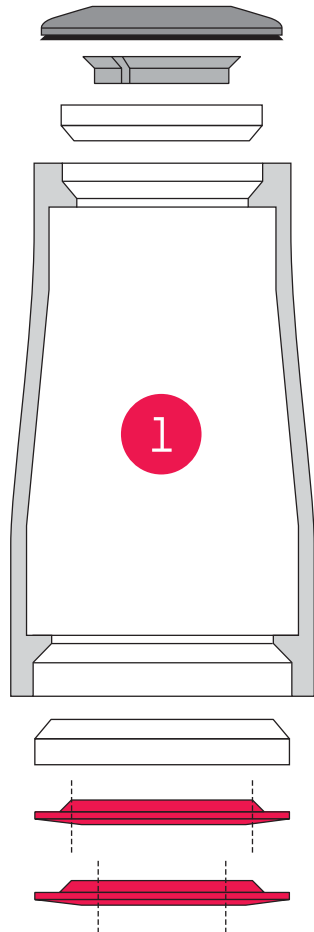
† Available after 2011, uses an external cup lower WITH a taper steerer tube, offsets include 0, 0.5, 1, 1.5 degrees



ABOUT TAPERED HEADTUBES

INTEGRATED, TAPERED (IS STYLE)

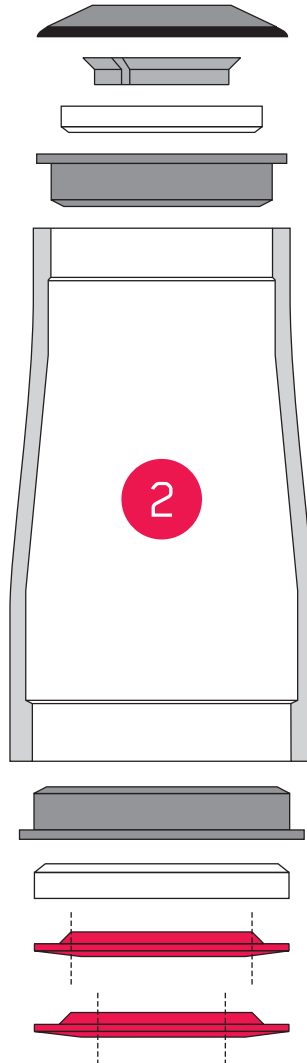
TOP = 1-1/8" INTEGRATED (IS)
45°x45° ø41.8mm Angular Contact Bearing
(Campy CF or Cane Creek ISI Standard)



BOTTOM = 1.5" INTEGRATED (IS)
36°x45° 52mm Angular Contact Bearing
(IS Standard)

INTERNAL, TAPERED (ZS STYLE)

TOP = 1-1/8" INTERNAL (ZS)
44mm Inside Headtube Diameter
(AKA Chris King Inset)



BOTTOM = 1.5" INTERNAL (ZS)
56mm Inside Headtube Diameter

What's with that weird head tube?

Your new Niner frame was designed with a tapered head tube. What exactly does this mean?

We feel that this new standard offers so many advantages over a traditional headtube design that it's going to become the obvious choice for most riders. This design can be used with a matching tapered steerer fork or paired with a traditional 1.125" steerer. We hope after familiarizing yourself with the tapered headtube you will agree that it:

1. increases frame stiffness and strength with more tube contact area and increased diameter.
2. decreases headset installation time and weight with no cups to press (Integrated IS Style)
3. allows for head angle customization through Cane Creek Angleset compatibility (Internal ZS Style)
4. looks really cool!

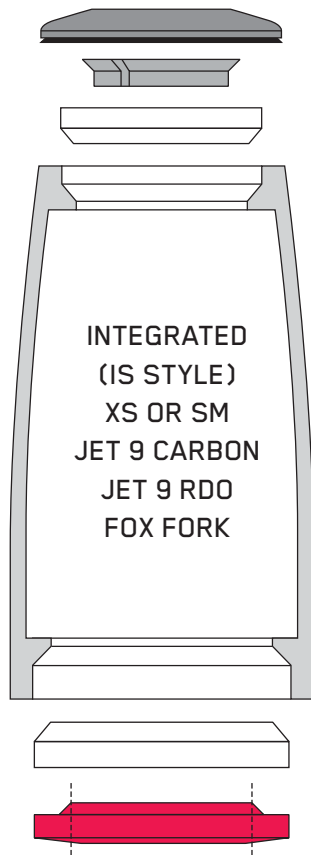
The height of the new tapered headtube with headset installed is identical to our frames with traditional headtubes with a Chris King headset installed. No need to worry about a different stack height if you are using your old 1-1/8" fork.

The crown race is the only part that needs to be switched to use either a tapered steerer fork or a traditional 1-1/8" steerer fork.

Both types of crown race are available from the Niner store at www.ninerbikes.com.



INTEGRATED HEADTUBE CROWN RACE +5MM



Crown Race +5mm for Headset

The damper knob of certain Fox forks may contact the downtube when the handlebars are turned and could cause severe frame damage. This crown race installed between the lower bearing and frame eliminates this possibility.

AFFECTED FRAMES: This Crown Race +5mm is only necessary for frame/fork combos that meet the following criteria:

- Jet 9 Carbon or Jet 9 RDO with Integrated Headset/Headtube (to identify, see previous page or view the slideshow on our website) <http://www.ninerbikes.com/taperedheadtube>
- XS or SM frame size
- Fox Float or Talas Series Fork

Contact your Niner Dealer to obtain the crown race or call Niner Customer Service at 1-877-NINERXC.



RUNNING YOUR SIR 9 OR AIR 9 CARBON AS A GEARED BIKE

Your SIR 9 or Air 9 Carbon frame came shipped to you with the rear SS insert piece installed in the right side drop out. This alloy piece is designed to be used with the frame when running it as a singlespeed so there is no ugly derailleur hanger cluttering up the otherwise sleek look of a frame without gears, derailleurs, or cables.

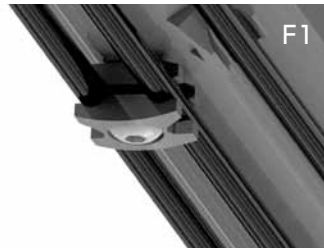
When running the SIR 9 or Air 9 Carbon as a geared bike, the singlespeed insert piece will need to be exchanged with the correct derailleur hanger (Included with the SIR 9 frame, included with the Air 9 Carbon geared kit)

Derailleur hanger installation is simple. Change the hanger out so that you now have a place to bolt your rear derailleur.

For the SIR 9 only, the BioCentric position needs to be adjusted for geared riding. Set the BioCentric to 3:00 (when looking at the bike from the drive side, or right, of the frame). This is the forward-most position. This ensures that the front derailleur achieves the best possible alignment with the chainrings.

Cable routing for the SIR 9 is under the downtube. Use the provided clamshell cable mounts (F1) to secure the housing on the underside of the downtube. Each mount will consist of two pieces that cradle the housing and bolt that attaches to the downtube to hold the housing securely in place. The housing passes underneath the bottom bracket shell and is held in place with another mount that is used for both pieces of derailleur housing and the rear brake line (F2). The front derailleur housing routes upward to the front derailleur housing stop. The rear housing runs along the bottom side of the drive side chainstay and can should be secured using a zip tie at each end of the chainstay and with the provided Velcro chainstay protector.

Instructions for running gear housing and cables for the Air 9 Carbon are provided in the following section.



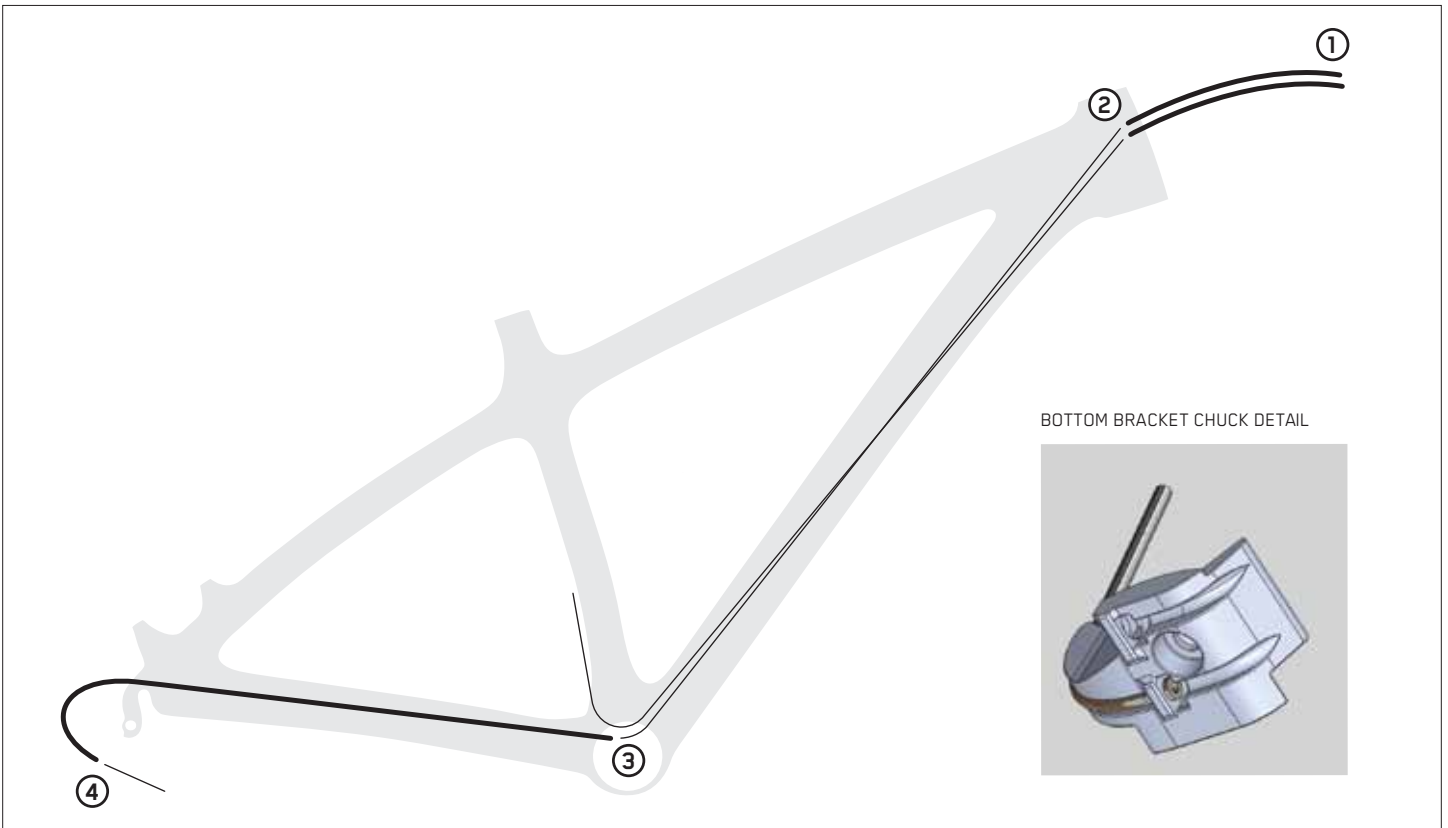










NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

AIR 9 CARBON CABLE ROUTING

DIAGRAM OVERVIEW



①	FRONT & REAR	 4MM SHIFTER
②	FRONT & REAR	  4MM FOR HEADBADGE WITH HOUSING STOPS
②	FRONT & REAR	  4MM FOR HEADBADGE WITHOUT STOPS
③	FRONT ONLY	 FRAME BB CHUCK
③	REAR ONLY	 4MM BB CHUCK
④	REAR ONLY	 4MM



AIR 9 CARBON CABLE ROUTING

INSTRUCTIONS

Required Parts:

- (2x) Shifter Cables (not included)
- New 4mm Cable Housing (enough to run from shifter to the head tube badge and from the rear derailleur to the BB shell)
- Old Cable Housing for use as a guide tool (not included)
- (2x) Nosed Ferrules for Cable Stop Headbadge (included in kit below) or
- (2x) Cable End Stops for Headbadge without stops (not included)
- (4x) 4mm Housing Ferrules (not included)
- (1x) Nylon Cable Guide kit –
 - Bolt-On Nylon Cable Guide
 - Guide Tube (snaps into the cable guide and runs up the front derailleur ramp)
 - Nosed Ferrules for Cable Stop Headbadge
 - Rubber Seal (goes over the Guide Tube after the tube is in place)
- Your favorite beer (definitely not included)

Rear Derailleur:

1) **GETTING READY** - With the fork, bars, controls, and CYA adapters removed from the frame, install the bolt-on cable guide inside the BB shell so the guide tube comes out of the front derailleur cable hole on the back of the seat tube. Use a shifter cable threaded into the seat tube exit hole as a guide for the tube (F3). Make sure to install the bolt that holds it in place (F4).

2) **INSTALL THE REAR HOUSING** - Run a piece of 4mm housing (approx. 540mm for SHIMANO, 500mm for SRAM) through the chain stay from dropout end to the bottom bracket shell. Install a 4MM ferrule on the housing at the BB shell and insert the end into the bolt-on cable guide. Install a 4mm ferrule at the derailleur end (F5).

3) **CREATE A CABLE GUIDE** - Insert a piece of old housing through the bottom bracket until it can be pulled out the bottom of the head tube (F6).

4) **INSTALL THE CABLE** - Trim 4mm shifter housing to correct length from the shifter to the opposite hole in the head badge (F7) and install the correct ferrule type for your headbadge (F1 or F2 - see diagram on previous page). Thread shifter cable through the shifter housing into the head tube badge and all the way through the piece of old housing (F8).

5) **RUN CABLE THROUGH GUIDE** - Pull the old housing out of the frame to expose the shifter cable. Thread the end of the cable into the cable guide and through the chain stay (F9).

Front Derailleur:

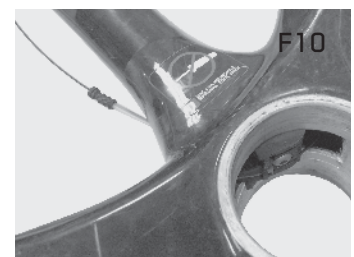
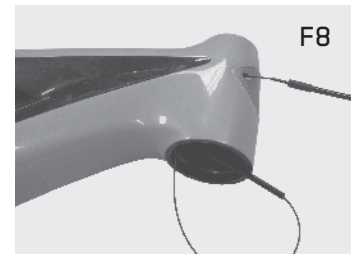
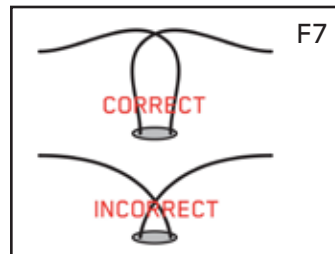
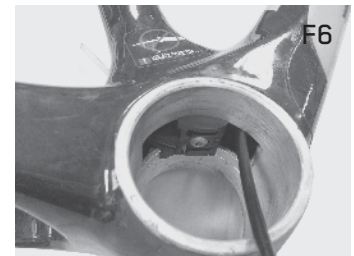
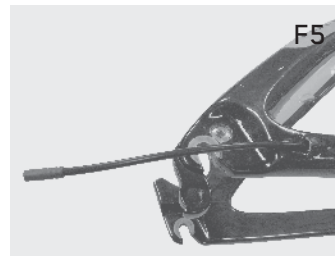
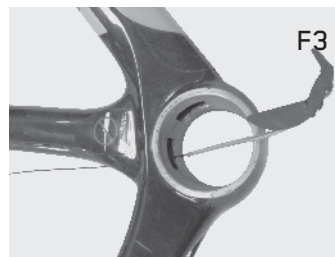
1) **CREATE A CABLE GUIDE** - Repeat the process used to install the rear shifter cable by inserting a piece of old housing through the bottom bracket until it can be pulled out the bottom of the head tube.

2) **INSTALL THE CABLE** - Trim 4mm shifter housing to correct length from the shifter to the opposite hole in the head badge (F7) and install the correct ferrule type for your headbadge (F1 or F2 - see diagram on previous page). Thread shifter cable through the shifter housing into the head tube badge and all the way through the piece of old housing (F8).

3) **RUN CABLE THROUGH GUIDE** - Pull the old housing out of the frame to expose the shifter cable. Thread the cable into the cable guide and through the guide tube (F10).

4) **INSTALL SEAL** - Push the rubber accordion seal onto the guide tube over the shifter cable. Install front derailleur.

You can now attach the cables to your derailleurs and adjust your system for perfect shifting! Drink your favorite beer in celebration and maybe give your frame a quick polish for tomorrow's ride.



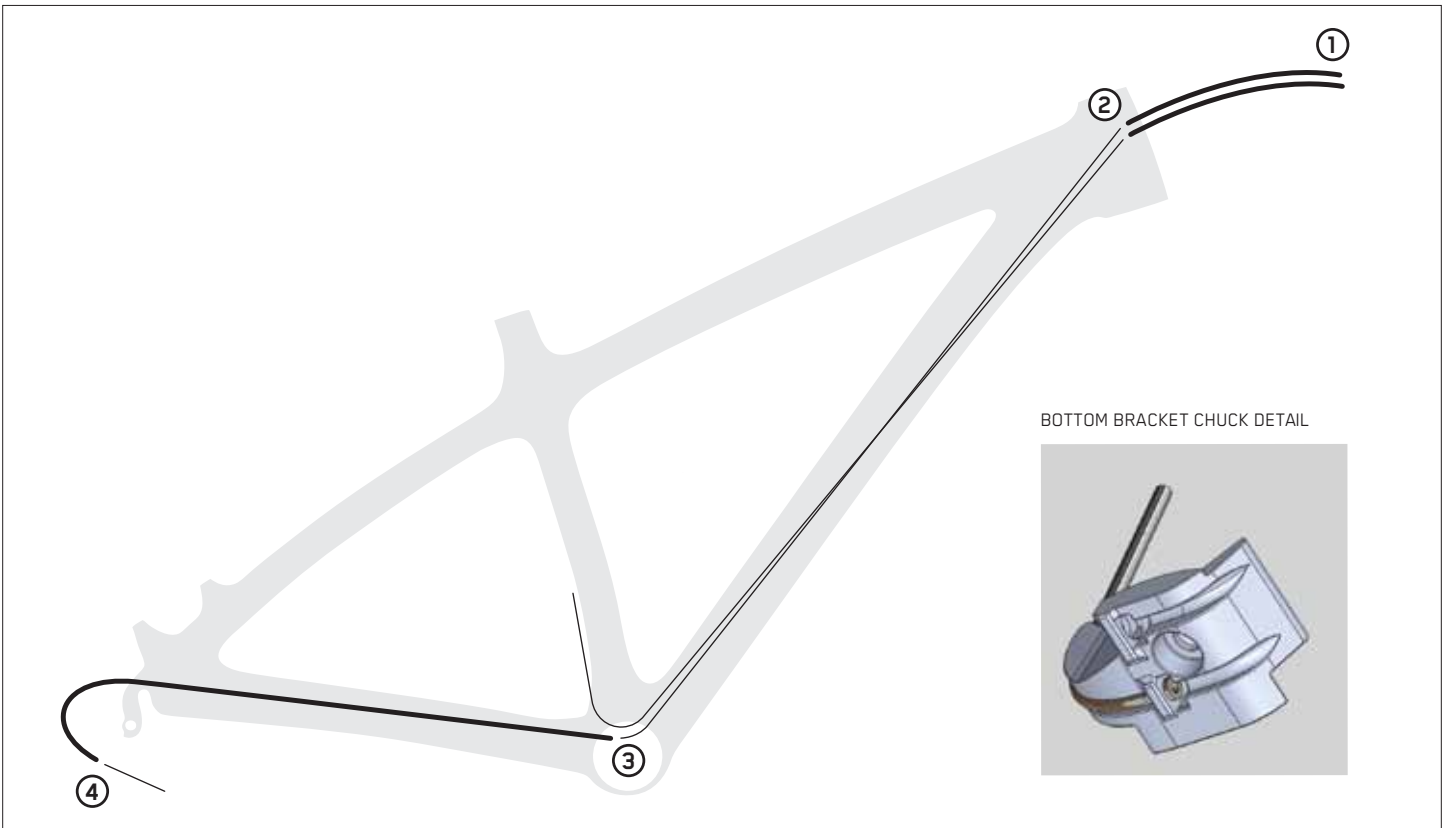


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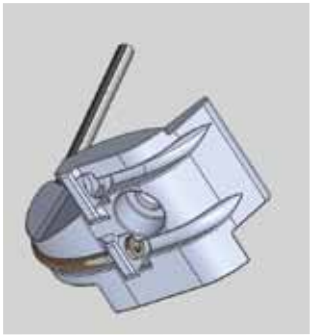
SPECIFICATION & SETUP GUIDE

AIR 9 CARBON CABLE ROUTING (GORE CABLES)

DIAGRAM OVERVIEW (GORE CABLES)



BOTTOM BRACKET CHUCK DETAIL



①	FRONT & REAR	
②	FRONT & REAR	FOR HEADBADGE WITH HOUSING STOPS
②	FRONT & REAR	FOR HEADBADGE WITHOUT STOPS
③	FRONT ONLY	
③	REAR ONLY	
④	REAR ONLY	



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

AIR 9 CARBON CABLE ROUTING (GORE CABLES)

INSTRUCTIONS - GORE

Required Parts:

- (1x) Air 9 Carbon specific GORE Cable Kit
- (1x) Old Shifter Cable to be used as a guide tool (not included)
- (2x) Cable End Stops for Headbadge without stops (not included)
- New 4mm Cable Housing (enough to run from both shifters to the head tube badge)
- (4x) 4mm Housing Ferrules (not included)
- (1x) Nylon Cable Guide kit
 - Nylon Cable Guide
 - Guide Tube (snaps into the cable guide and runs up the front derailleur ramp)
 - Rubber Seal (goes over the Guide Tube after the tube is in place)
 - 2x Nosed Ferrules (Not needed with GORE liner)
- Your favorite beer (definitely not included)

KEEP A CABLE INSIDE THE GORE LINER AT ALL TIMES WHEN ROUTING IT THROUGH THE FRAME. THIS PREVENTS KINKING THE LINER.

Rear Derailleur:

1) GETTING READY - With the fork, bars, controls, and CYA adapters removed from the frame, install the bolt-on cable guide inside the BB shell so the guide tube comes out of the front derailleur cable hole on the back of the seat tube. Use a shifter cable threaded into the seat tube exit hole as a guide for the tube (F3). Make sure to install the bolt that holds it in place (F4).

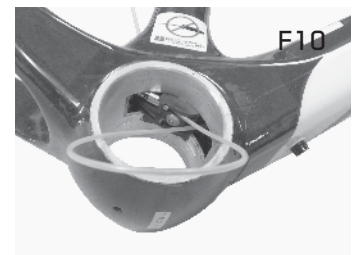
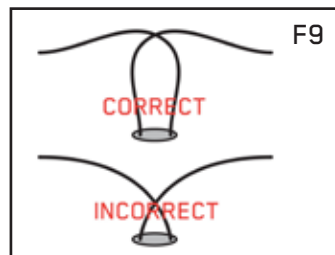
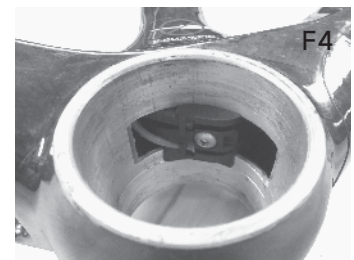
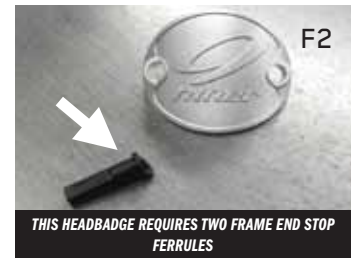
2) INSTALL THE REAR HOUSING - Run a piece of 5mm GORE housing (approx. 540mm for SHIMANO, 500mm for SRAM) through the chain stay from dropout end to the bottom bracket shell. Install a brass 5mm ferrule on the housing at the BB shell and insert the end into the bolt-on cable guide. Install a brass 5mm ferrule at the derailleur end (F5).

3) CREATE A CABLE GUIDE - Insert an old shifter cable through the bottom bracket until it can be pulled out through the headbadge (F6).

4) INSTALL THE LINER - Install the correct washer or cable housing ferrule on the liner according to head badge type (F1 or F2 - see diagram on previous page). Slide the liner into the badge over the guide cable (F7) until it just peeks into the bottom bracket shell (F8). Remove the guide cable from the liner.

5) INSTALL THE CABLE - Trim 4mm shifter housing to correct length from the shifter to the opposite hole in the head badge (F9). Route GORE shifter cable from the shifter through the cable housing into the liner at the head tube badge, pushing the cable all the way through the liner to the bottom bracket shell. Carefully guide the cable and liner into the 5mm GORE housing (F10) and gently push it through the housing without kinking the liner.

6) INSTALL SEAL - Install rear derailleur and trim the GORE liner where it exits the cable housing and derailleur's cable stop. Install short rubber seal on the guide tube over the shifter cable.





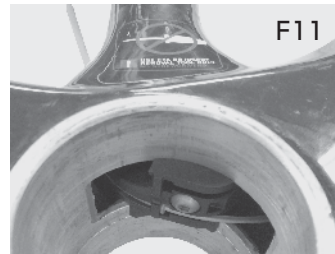
AIR 9 CARBON CABLE ROUTING (GORE CABLES, CONT.)

INSTRUCTIONS - GORE

Front Derailleur:

- 1) **CREATE A CABLE GUIDE** - Repeat the process used to install the rear liner by inserting a shift cable through the bottom bracket until it can be pulled out through the headbadge (F6).
- 2) **INSTALL THE LINER** - Install the correct washer or cable housing ferrule on the liner according to your head badge type (F1 or F2 - see diagram on previous page). Slide the liner over the guide cable (F7) until it comes out of the bottom bracket (F8). Gently pull the liner down until it seats in the headbadge and remove the guide cable.
- 3) **INSTALLING THE CABLE** - Trim 4mm shifter housing to correct length from the shifter to the opposite hole in the head badge (F9). Route GORE shifter cable from the shifter through the cable housing into the liner at the head tube badge, pushing the cable all the way through the liner.
- 4) **RUN LINER THROUGH THE GUIDE** - Thread the GORE cable/liner through the guide tube until it comes out of the seat tube exit hole. Be extra careful not to kink the GORE liner during this procedure (F11).
- 5) **INSTALL SEAL** - Push the rubber accordion seal onto the guide tube over the shifter cable. Install front derailleur.

You can now cable your derailleurs and adjust your system for perfect shifting! Drink your favorite beer in celebration and maybe give your frame a quick polish for tomorrow's ride.



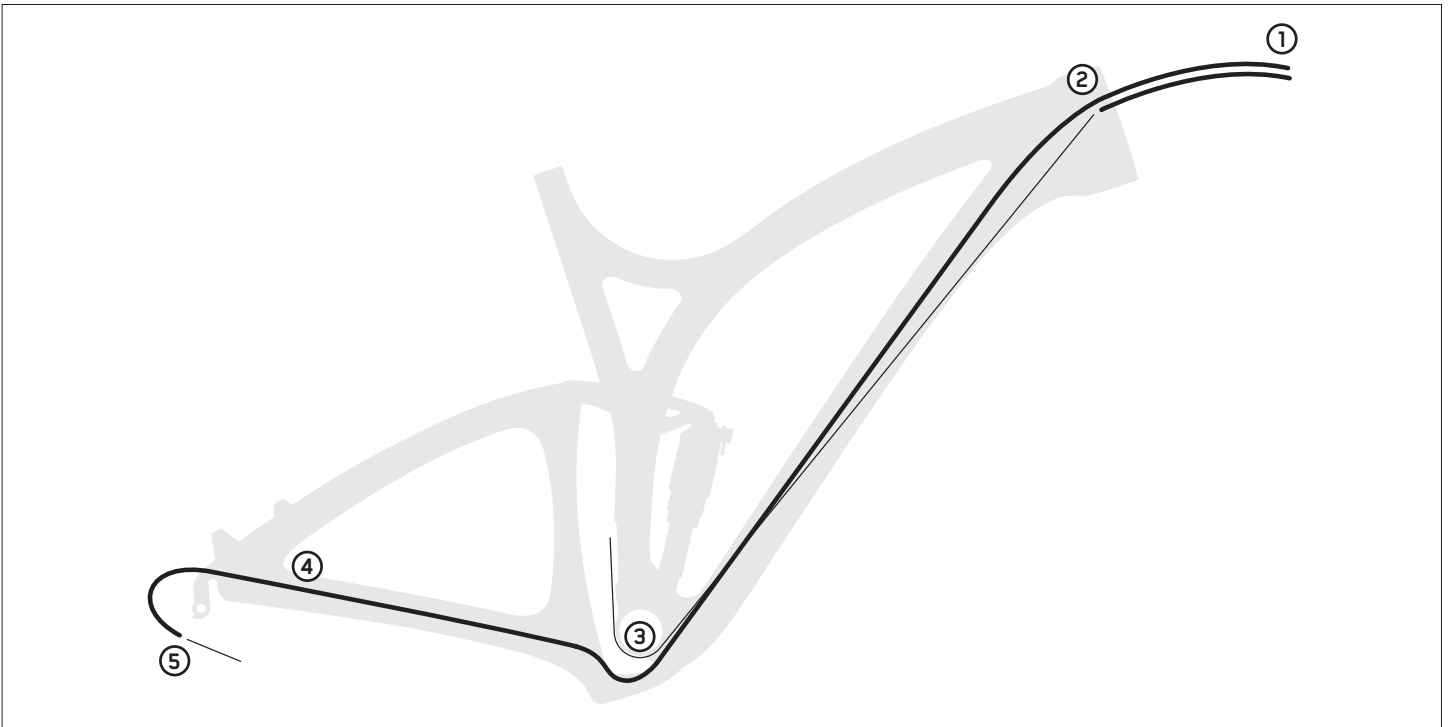


NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

JET 9 RDO / JET 9 CARBON CABLE ROUTING

DIAGRAM OVERVIEW - HEADBADGE WITHOUT CABLE STOPS



①	FRONT & REAR	
②	FRONT ONLY	FOR HEADBADGE WITHOUT STOPS
②	REAR ONLY	FOR HEADBADGE WITHOUT STOPS
③	FRONT ONLY	
③	REAR ONLY	
④	REAR ONLY	
⑤	REAR ONLY	



JET 9 RDO / JET 9 CARBON CABLE ROUTING

DIAGRAM OVERVIEW - HEADBADGE WITHOUT CABLE STOPS

Required Parts:

- (1x) BB cable chuck with 6MM through hole
- (1x) Tubing 100mm
- (1x) Stopper Washer
- (2x) Shifter Cables (not included)
- (2x) 4mm Cable Housing (enough for front shifter section and full length from rear shifter to rear derailleur)
- (3x) Cable Housing Shims (included) (see F1R)
- (3x) 4mm Standard Housing Ferrules (not included)
- (1x) Cable Housing Frame End Stop Ferrule (included) (see F1F)
- Your favorite beer (definitely not included)

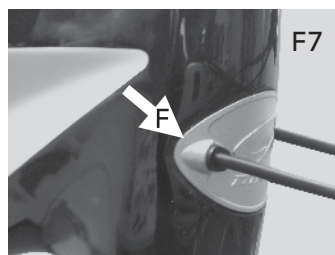
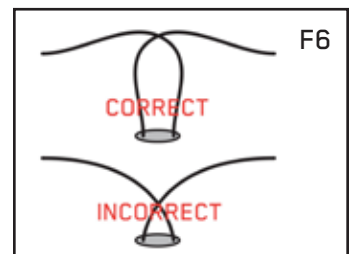
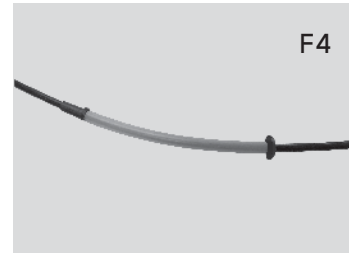
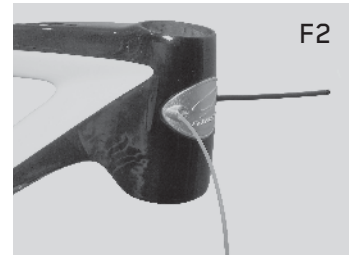
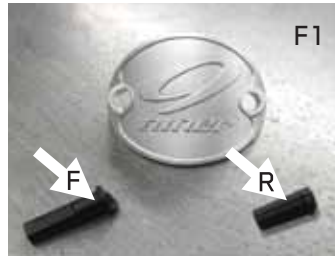
1) GETTING READY - Your frame comes with a temporary front shifter nylon guide tube installed in the downtube. Do not remove it, but carefully thread the upper end through the headbadge (F2). Remove the cable chuck at the bottom bracket to ease routing. This stock chuck will be replaced by the new chuck included in the kit. If your frame does not have the original nylon guide tube it is possible at this time to feed an old piece of cable housing up through the downtube to the headbadge for use as a front shifter cable guide. Remove the rear pivot linkage bolts at the lower link to ease cable routing access.

2) ROUTE THE REAR HOUSING - If your frame is new from Niner then it will already have a liner in the chainstay. Run a shifter cable through the liner from the BB end and pull the liner out of the frame. If your bike is already built, remove the rear housing but leave the cable inside the swingarm. The shifter cable will help guide the 4mm shifter housing through the stay (F3). Route the 4mm housing through the chainstay from back to front. When the housing reaches the BB, install a Cable Housing Shim, the 100mm tube and the Stopper Washer (F4). Pull enough housing through this assembly to feed through the new chuck, downtube, headbadge and to your rear shifter (F5). Fit the Cable Housing Shim firmly into the swingarm but leave the chuck out of the frame to allow for front shifter cable routing. Install a second Cable Housing shim in the remaining swingarm exit hole near the derailleur end. Install the housing into the rear derailleur end stop, cut to correct length and install 4mm plastic housing ferrule.

3) TRIMMING HOUSING - Install your headset, fork and handlebar per the manufacturer's directions. This will allow you to determine the correct housing length from your shifters to the headbadge. Cut front and rear housing to fit between front shifter and headbadge. Front and Rear housing should be crossed, long enough to allow bars to turn approximately 90 degrees (F6). Install a Cable Housing Shim (F1R) on the rear housing and a Cable Housing Frame End Stop ferrule (F7F) on the front housing.

4) THREADING THE FRONT SHIFTER CABLE - Thread the front cable through the shifter, cable housing ferrule and Cable Housing Frame End Stop Ferrule into the headbadge (F7F) and all the way through the downtube guide tube. Once the cable has exited the BB, pull the guide tube out of the frame and run the cable through the new BB Cable Chuck (F8). Attach the chuck using the supplied bolt. The cable may now be attached to the front derailleur (F9).

5) THREADING THE REAR SHIFTER CABLE - Thread your cables through your shifter, 4mm cable housing ferrule and cable housing to the rear derailleur (F10). Attach the shifter cable to the rear derailleur, trim the cable to length and adjust your drivetrain while drinking your beer!



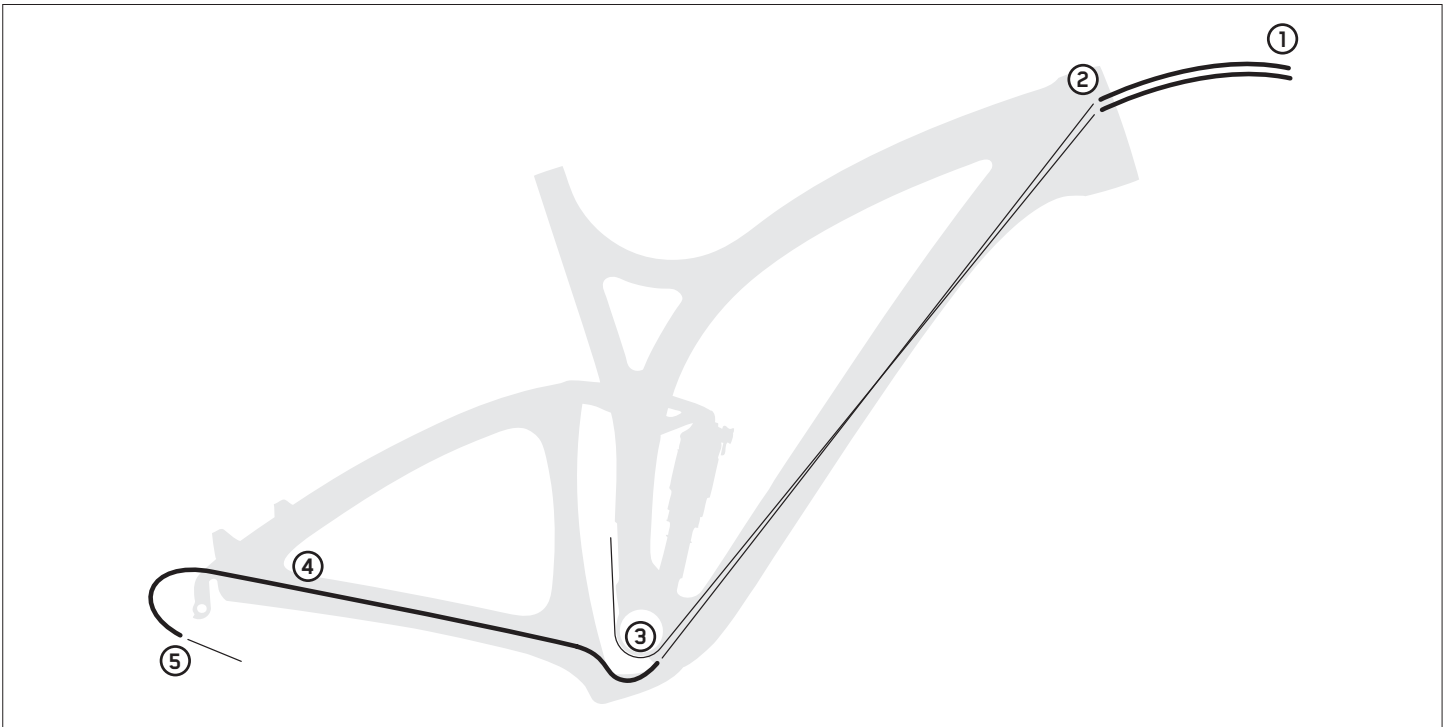





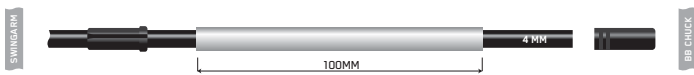


NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

JET 9 RDO / JET 9 CARBON CABLE ROUTING

DIAGRAM OVERVIEW - HEADBADGE WITH CABLE STOPS



①	FRONT & REAR	
②	FRONT & REAR	 FOR HEADBADGE WITH HOUSING STOPS
③	FRONT ONLY	
③	REAR ONLY	
④	REAR ONLY	
⑤	REAR ONLY	



JET 9 RDO / JET 9 CARBON CABLE ROUTING

INSTRUCTIONS - HEADBADGE WITH CABLE STOPS

Required Parts:

- (2x) Shifter Cables (not included)
- (2x) 4mm Cable Housing (enough for shifter sections and full length from BB to rear derailleur)
- (1x) Tubing 100MM
- (1x) Stopper Washer (not needed for Headbadge with Cable Stops)
- (2x) Cable Housing Shims (included) (see F1R)
- (6x) 4mm Standard Plastic Housing Ferrules (not included)
- Your favorite beer (definitely not included)

1) GETTING READY - Your frame comes with temporary nylon guide tubes installed in the downtube. Do not remove them, but carefully move them out of the way and install your headset, fork and handlebar per the manufacturer's directions. This will allow you to determine the correct housing length from your shifters to the headbadge. Housing should be crossed and cut long enough to allow bars to turn approximately 90 degrees (F2). You may wish to remove the rear pivot linkage bolts at the lower link to ease cable routing access.

2) ROUTE THE CHAINSTAY - If your frame is new from Niner then it will already have a liner in the chainstay. Run a shifter cable through the liner from the BB and pull the liner out of the frame. This shifter cable will help guide the 4mm shifter housing through the stay. If your bike is already built, remove the rear housing but leave the cable inside the swingarm as a similar guide. Route the 4mm housing through the chainstay from back to front (F3). Push enough of the housing forward at the BB and install a Cable Housing Shim, the 100mm tube and a 4mm plastic housing ferrule on the end (F4). Do not fit the end into the cable chuck at this time but insert the shim firmly into the swingarm (F5) and trim the housing at the derailleur end to the correct length to fit in the rear derailleur cable stop. Install a second Cable Housing shim in the remaining swingarm exit hole and install a 4mm plastic housing ferrule on the end.

3) HEADBADGE FERRULES - Use standard 4mm plastic housing ferrules where the cable enters the headbadge (F6).

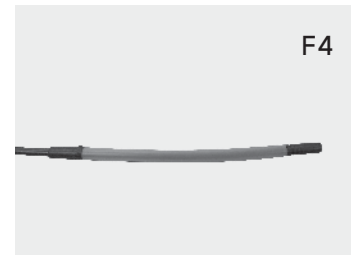
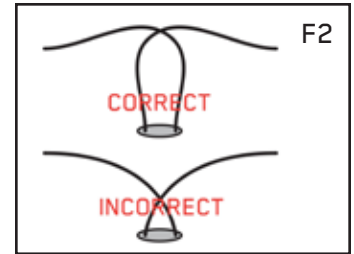
We do not recommend the use of metal cable housing ferrules.

Metal ferrules can damage the protective coating on the magnesium

- ▲ **Headbadge causing the ferrules to seize. This can also cause corrosion of the badge itself, as well as creaking of the metal-on-metal interface.**

4) THREADING THE CABLES - Remove the fork to gain access to the temporary nylon tubes and pull enough tubing out that the ends are accessible for cable routing. If your frame doesn't have the guide tubes, it is possible to use an old piece of 4mm housing inserted through the chuck hole and passed through to the headtube as a guide tube. Thread your cables through your shifter, cable housing ferrules and housing into the headbadge and all the way through the downtube guide tubes. Once the cables have exited the BB, pull these downtube guide tubes out of the frame. Be careful not to cross the cables more than once in the frame as it can cause poor shifting. Thread both cables through the cable chuck on the underside of the bottom bracket and reinstall the chuck, seating the rear housing ferrule in the chuck (F7). The front cable is now ready to be attached to the front derailleur (F8).

5) REAR HOUSING - Route the rear shifter cable through the housing to the derailleur and then seat the 4mm ferrules in the bottom bracket chuck and the rear derailleur (F9). Attach the shifter cable to the rear derailleur, trim the cable to length and adjust your drivetrain while drinking your beer!



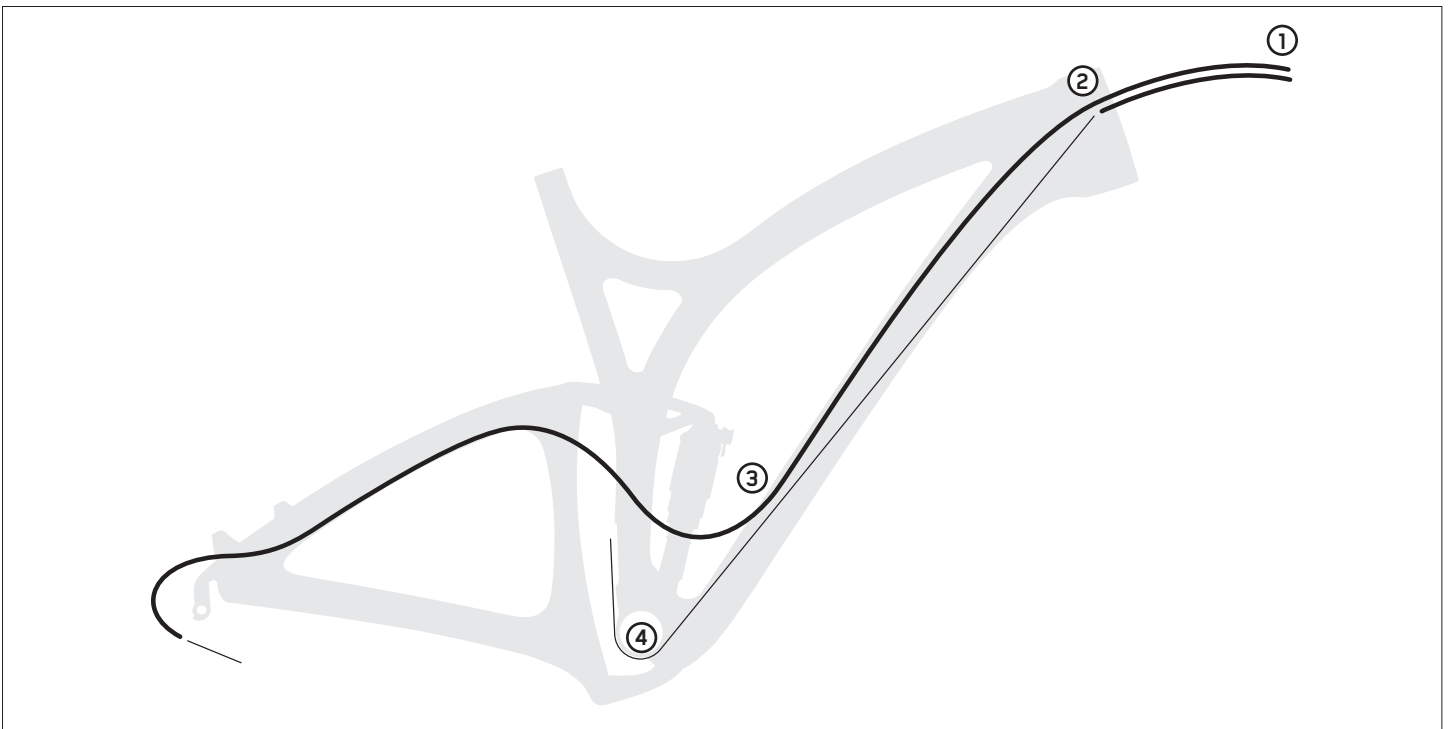


NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

RIP 9 RDO AND JET 9 RDO CABLE ROUTING

DIAGRAM OVERVIEW



①	FRONT & REAR	
②	FRONT ONLY	
②	REAR ONLY	
③	REAR ONLY	
④	FRONT ONLY	
⑤	REAR ONLY	



RIP 9 RDO AND JET 9 RDO CABLE ROUTING

INSTRUCTIONS

Required Parts:

- (2x) Shifter Cables (not included)
- (2x) 4mm Cable Housing (enough for front shifter section and full length from rear shifter to rear derailleur)
- (2x) Cable Housing Shims (included) (see F1R)
- (3x) 4mm Standard Housing Ferrules (not included)
- (1x) Cable Housing Frame End Stop Ferrule (included) (see F1F)
- (1x) Downtube Exit Port Cover (included)
- Your favorite beer (definitely not included)

This guide is for full suspension carbon frames that have a cable exit port on the top of the downtube near the lower shock mount.

1) GETTING READY - Your frame comes with a temporary nylon guide tube installed in the downtube. Do not remove it, but carefully thread the upper end through the headbadge. Remove the cable chuck at the bottom bracket to allow front derailleur cable routing. Remove the upper bolt on the shock. This allows the swingarm to move, improving access throughout the routing procedure. Make sure the nylon guide tube ends remain accessible for cable routing.

2) THREADING REAR DERAILLEUR HOUSING – Insert a long piece of housing through the Downtube Exit Port Cover near the lower shock mount and push through the downtube until it can be pulled through the headbadge (F3).

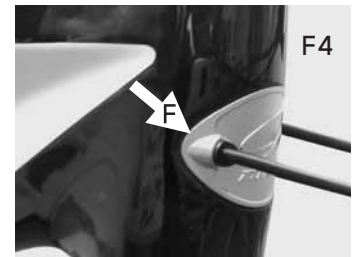
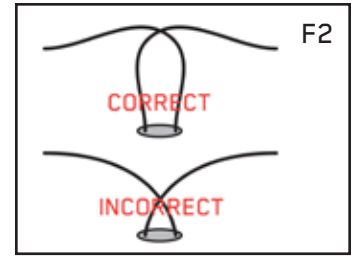
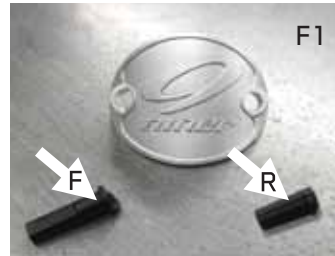
3) HEADBADGE FERRULES - Use the pictured black plastic 4mm Frame End Stop Ferrule (F1F) for your front derailleur to hold the housing in the headbadge. Your Rear derailleur will use a Cable Housing Shim (F1R).

4) FRONT HOUSING - Install fork, handlebar and shifters per the manufacturer's directions. This will allow you to determine the correct front housing length from your front shifter to the headbadge. Housing should be crossed and the front housing cut long enough to allow bars to turn approximately 90 degrees (F2). Thread the front cable through the shifter, cable housing ferrule and Cable Housing Frame End Stop Ferrule into the headbadge (F4) and all the way through the downtube guide tube. Once the cable has exited the BB, pull the guide tube out of the frame. Save the guide tubing as it can be reused to ease replacement of the derailleur cable by simply reversing the installation process.

5) REAR HOUSING - Install a 4mm ferrule on the shifter end and run the shifter cable through the shifter into the housing until it is seated in the shifter. Create enough of a loop at the headtube badge so it matches the diagram (F2). Install a Housing Shim over the housing at the headbadge (F1R). Install a second Housing Shim over the housing at the Downtube Exit Port Cover. Gently pull excess housing from inside the frame before seating this second shim (F6) to prevent vibration noise. Make a gentle bend in the housing and attach the housing to the seat stay (F7).

6) CUTTING TO LENGTH FRONT - Thread the front derailleur cable through the cable chuck on the underside of the bottom bracket and reinstall the chuck. The front cable is now ready to be attached to the front derailleur (F5).

7) CUTTING TO LENGTH REAR - Trim your housing so it fits correctly into your derailleur (make sure to pull the cable out so you do not cut both the cable and the housing) and attach the cable (F8). You can now trim your cable to length and adjust your drivetrain.



Images show RIP 9 RDO frame and Jet 9 RDO frame - routing procedure is identical for both.

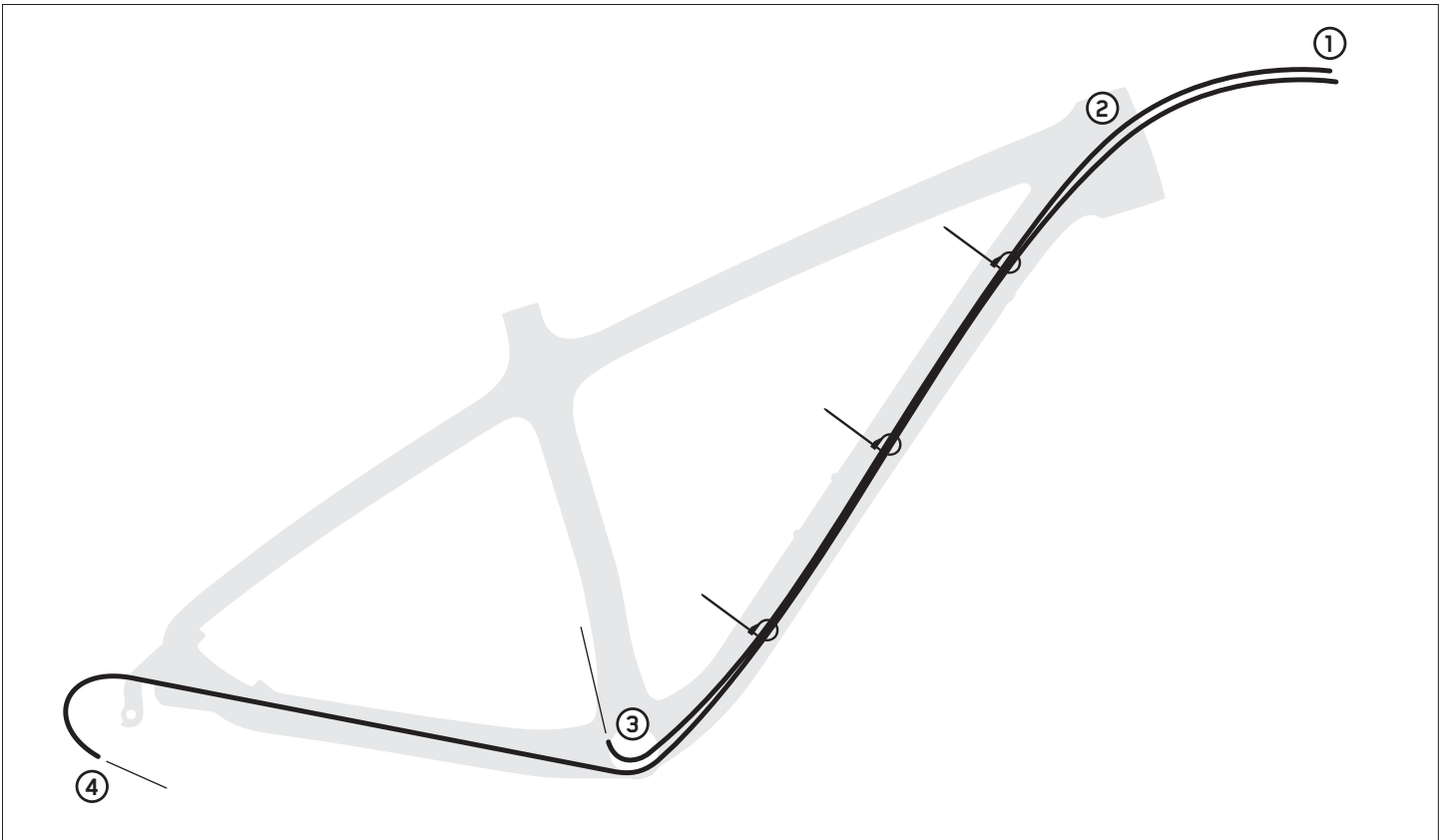


NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

AIR 9 RDO CABLE ROUTING

DIAGRAM OVERVIEW



①	FRONT & REAR	
②	FRONT & REAR	
③	FRONT ONLY	
④	REAR ONLY	



AIR 9 RDO CABLE ROUTING

INSTRUCTIONS

Required Parts:

- (2x) Shifter Cables (not included)
- (2x) Long sections of 4mm Cable Housing (enough for full-length internal routing from shifter to derailleur, not included)
- Old Shifter Cable to be used as a guide tool (not included)
- (3x) 4mm Housing Ferrules (not included)
- (3x) Cable Housing Anchor Shims (F1) (included)
- (6x) Medium Zip Ties
- Sealed Housing Ferrule (included)
- Rubber Seal (included)
- Your favorite beer (definitely not included)

Front Derailleur:

1) **GETTING READY** - With the fork, bars and controls installed, and with the bottom bracket removed from the frame, insert a bare shift cable in the drive side hole of the head tube badge (F2) until you can grab it through the bottom bracket shell.

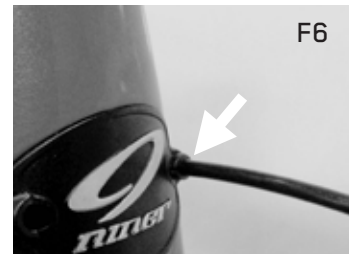
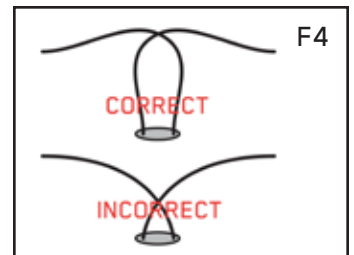
2) **THREADING THE HOUSING** - Install one of the long 4mm cable housing sections up through the BB shell using your shifter cable as a guide. Cinch a zip tie onto the housing approximately 12 inches from the shifter end and then install two more at even intervals as you thread the housing into the frame (F3). The zip ties act as springs and help keep the housing quiet inside the downtube.

3) **CUTTING TO LENGTH** - Once the housing and zip ties are inside the frame and the housing is projecting through the headbadge, temporarily remove the shifter cable and insert the lower end of the housing into the silver housing stop in the bottom bracket shell. Making sure the housing is fitting snugly against the inside bottom of the BB shell, trim the housing at the shifter leaving ample length (F4) to allow bars to turn approximately 90 degrees in each direction.

4) **INSTALLING FERRULES** - Install a regular 4mm housing ferrule on on the shifter end of the housing. Remove the lower end of the housing from the BB housing stop, pull it out of the bottom bracket shell slightly and install the sealed housing ferrule (F5). Install one of the Cable Housing Anchor Shims on the housing at the headbadge and seat it snugly inside the headbadge (F6).

5) **SEATING THE SEALED FERRULE** - To ease installation of the sealed housing ferrule into the BB housing stop, thread an old shifter cable from the outside in through the silver housing stop. Run the cable backwards through the housing for a few inches and this will act as a guide to help you work the sealed ferrule into position (F7). Slide the included rubber seal over the sealed housing ferrule tip (F8). The cable housing should be tucked neatly out of the way along the bottom of the BB shell (F9).

6) **CABLE INSTALLATION** - Run one of your new shifter cables through the front shifter and through the housing. Make sure the ferrules on both ends are seated properly and attach the cable to your front derailleur.





AIR 9 RDO CABLE ROUTING (CONT.)

Air9 RDO cable routing guide

Rear Derailleur:

1) **GETTING READY** - Insert a bare shift cable in the second (non-drive side) hole of the head tube badge (R1) until you can grab it through the bottom bracket shell. Continue to run the cable through the nylon tube that is inside the chainstay from the BB shell until it exits at the rear of the bike. Pull the nylon tube out of the frame leaving the cable in place as a guide (R2).

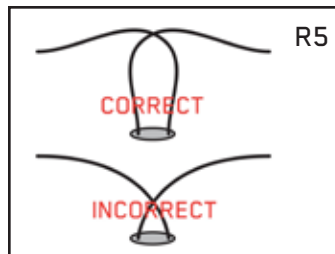
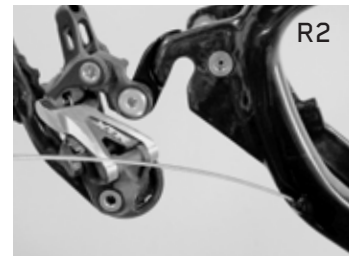
2) **THREADING THE HOUSING** - Thread the remaining long 4mm cable housing section through the chainstay to the BB shell using your shifter cable as a guide. As the housing passes through the BB (R3), cinch a zip tie onto the housing approximately 12 inches from the shifter end and then install two more at even intervals as you thread the housing into the frame.

3) **CUTTING TO LENGTH** - Once the housing and zip ties are inside the frame and the housing is projecting through the headbadge, temporarily remove the shifter cable and insert the end of the housing in the rear derailleur housing stop to check length (R4). Trim the housing at the shifter leaving ample length (R5) to allow bars to turn approximately 90 degrees in each direction.

4) **INSTALLING FERRULES** - Install a regular 4mm housing ferrule on on the shifter end of the housing. Remove the other end of the housing from the derailleur housing stop and install the last 4mm housing ferrule. Install one of the Cable Housing Anchor Shims on the housing at the headbadge (R6) and seat it snugly inside the headbadge. Install the last Cable Housing Anchor Shim on the housing where it exits the chainstay (R7) and seat it snugly inside the frame.

5) **CABLE INSTALLATION** - Run the remaining new shifter cable through the rear shifter and through the housing. Make sure the ferrules on both ends are seated properly and attach the cable to your rear derailleur.

6) **FINISHING** - Success! Both derailleurs are ready for adjustment. (R8)





BB30 AND PF30 EXPLAINED

THE ADVANTAGES TO USING A 30MM CRANK SPINDLE

The various BB30 systems are named for the diameter of the crank spindle. Compared to the standard 24mm spindle, a 30mm spindle can be made from aluminum rather than steel and offers increased stiffness with lower weight. Larger sealed cartridge bearings can offer increased durability over smaller units. The larger BB shell works well with purpose-shaped frame tubes that contribute greatly to frame strength.

SRAM PF30 (PRESS FIT 30)

Niner's Jet 9 RDO and new Air 9 frames use SRAM's PF30 bottom bracket standard. This system is not only light and stiff, it is also very easy to install. The PF30 bottom bracket uses nylon bearing cups that press into a 46mm bottom bracket shell. PF30 is compatible with any BB30 MTB crankset without adapters or modification.

COMPATIBILITY

What if you don't want to buy a BB30 crankset? SRAM offers an adapter that inserts in the PF30 shell and allows the installation of a standard threaded external cup bottom bracket. This adapter is compatible with standard threaded Shimano, SRAM/Truvativ GXP FSA and Race Face bottom brackets and 24mm spindle cranksets. Your Niner dealer can order this adapter from any SRAM distributor.

- ⚠ **PLEASE FOLLOW BB INSTRUCTIONS CAREFULLY WHEN USING THE PF30 ADAPTER. INCORRECT BB SPACER PLACEMENT CAN CAUSE DAMAGE TO YOUR NINER THAT IS NOT COVERED BY WARRANTY!**

ABOUT AFTERMARKET PF30 EBB UNITS

There are currently eccentric bottom bracket (EBB) units available from several sources that are compatible with PF30 bottom bracket shells. While these are approved for use with our aluminum frames, the clamping force could damage or destroy the bottom bracket shells of our carbon frames.

- ⚠ **DO NOT USE AFTERMARKET PF30 EBB UNITS WITH CARBON NINER FRAMES!**



The bearings and press-fit plastic cups of the PF30 system



The PF30 to BSA adaptor, showing the threads that allow the use of standard external bearing BB units.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

CYA IDENTIFICATION GUIDE

BB SYSTEM	CYA INSERT	BOTTOM BRACKET EXAMPLE PHOTO	NOTES & COMPATIBILITY ISSUES
BB30 NINER PART # 49-134-10-00-20 C-CLIPS NOT NECESSARY FOR BB INSTALLATION			Compatible with all BB30 (30mm spindle) style cranks and bearings. Press CYA Inserts into frame, then install BB bearings as per manufactures recommendations. Do not use C-Clips that are supplied with bottom bracket. Install cranks per manufacturers instructions. NOTE: Do not confuse BB30 with SRAM Press Fit 30. The outer diameter of the BB bearings is different, so you must use the corresponding CYA cups.
SHIMANO BB92 SRAM BB92 NINER PART # 49-135-10-00-20 BB89.5 AND BB92 ARE THE SAME STANDARD. BOTTOM BRACKETS COME WITH 2.5MM SPACER TO BE INSTALLED ON THE DRIVESIDE TO CONVERT BB89.5 TO BB92 STANDARD			Shimano MTB Press Fit Bottom Bracket for 92 or 89.5mm for Shimano HollowTech II MTB cranks. Set includes left and right hand cups, 2.5 mm spacer, inner cover, and inner O-rings. Compatible with 89.5 mm (with 2.5 mm spacer) and 92 mm shells. 41mm cup outer diameter. For cranks with integrated 24mm spindle. NOTE: These cups should be referred to as BB92 or BB89.5, which references the BB shell width (CYA cups are 89.5). BB90 is used exclusively on Trek frames where the bearing seats are molded directly into the carbon BB shell. For use on HollowTech-II cranks with integrated 24mm HT2 spindle. Press CYA Inserts into frame, then install Shimano BB and cranks per manufacturer's instructions.
			Truvativ/SRAM Press-Fit BB86/92 GXP Adapter Cups: For fitting SRAM and Truvativ GXP cranksets to frames with either a BB86-Road (86.5mm width) or BB92-MTB (89.5/92mm width) 41mm-ID press-fit, non-threaded bottom bracket shells (not for BB90-Trek, or BB30 systems). Includes 37x24x8mm bearing set with wave washer and bearing shields for use on Giga X Pipe cranks with integrated 24mm GXP spindle. The same CYA cups as above, but shown with the SRAM Press-Fit BB86/92 GXP Adapter Cups. For use with SRAM and Truvativ GXP cranksets. Press CYA Inserts into frame, then install GXP cups and cranks per manufactures instructions.
SRAM PRESS FIT 30BB NINER PART # 49-133-10-00-20			Compatible with all BB30 style cranks (30mm spindle) and SRAM PF30 BB. Press CYA Inserts into frame, then install PF30 cups and cranks per manufactures instructions. NOTE: Do not confuse BB30 with SRAM Press Fit 30. The outer diameter of the BB bearings is different, so you must use the corresponding CYA cups.
STANDARD THREADED BB SYSTEMS (EXTERNAL) ACCEPTS ANY 73MM WIDTH ENGLISH THREADED EXTERNAL BEARING BB SYSTEM. SHIMANO, CHRIS KING, ETC. NINER PART # 49-132-10-00-20			NOTE: Niner bikes does not recommend SRAM threaded GXP bottom brackets with the CYA system, they are not compatible. The BB92 insert is compatible with these cranksets, see above. Call Niner Customer Service with any questions related to this recommendation. 1.877.NINERXC
NINER BIOCENTRIC NINER PART # Black 49-131-09-00-20 Blue 49-131-09-00-80 Red 49-131-09-00-40 Silver 49-131-09-00-10			NINER RECOMMENDS AN EXTERNAL BEARING BOTTOM BRACKET SYSTEM WITH THE BIOCENTRIC.
DON'T FORGET THE SPECIAL CYA INSERT REMOVAL TOOL, AVAILABLE FROM NINER. DO NOT ATTEMPT TO REMOVE CYA INSERT WITHOUT THIS TOOL.			



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

CYA INSTALLATION

Getting Started:

YOU WILL NEED:

- NINER CYA BOTTOM BRACKET INSERT
- NINER BIKE FRAME compatible with CYA system
- CLEAN SHOP RAG
- ALCOHOL
- HEADSET PRESS COMPATIBLE WITH CARTRIDGE BEARING HEADSETS, SUCH AS PARK HHP-2

RECOMMENDED:

- A NICE COLD BEER

Step by step instructions for installing CYA inserts into a Niner frame with an EBB shell:

⚠ For Air 9 Carbon frames, cable routing **MUST** be done before CYA inserts are press fit into the frame. Please make sure to see the section on cable routing before pressing any CYA inserts into the Air 9 Carbon.

1. Cleaning the frame and CYA insert: The frame's bottom bracket shell and the insert must be totally free from lubricant or dirt. Clean using rag and alcohol. If these parts are not cleaned properly the residual lubricant may allow the insert to rotate in the shell.
2. USING A HEADSET PRESS, install ONE SIDE of the CYA inserts at a time. This will ensure that the inserts are going into the frame straight and true. Press the inserts into the bottom bracket of the frame until they bottom out. If you are using a BB system OTHER than the standard threaded bottom bracket, press this in next as per the manufacturer's specifications.
3. Follow the crankset manufacturers' instructions to complete assembly, treating the insert as a normal bottom bracket. Mount the cranks and front derailleur as per the manufacturers' instructions.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

BIOCENTRIC COMPATIBILITY

The BioCentric is only designed to fit in Niner frames. It can sometimes be made to fit into other manufacturer's frames but it will not work properly. The BioCentric clamps to the outside face of the EBB shell and because of that it requires that the EBB shell be precisely faced. This facing is something that can only be done at a machine shop, or in the case of Niner frames, at the time of manufacture.

⚠ Some older Niner frames may require extra steps for installation.

If you have a used/older frame or if your BioCentric has 130 in/lbs laser etched on the non-drive side shell, contact service@ninerbikes.com for instructions.

ABOUT AFTERMARKET PF30 EBB UNITS

There are currently eccentric bottom bracket (EBB) units available from several sources that are compatible with PF30 bottom bracket shells. While these are approved for use with our aluminium frames, the clamping force could damage or destroy the bottom bracket shells of our carbon frames.

⚠ DO NOT USE AFTERMARKET PF30 EBB UNITS WITH CARBON NINER FRAMES!



BIOCENTRIC INSTALLATION

INSTALLATION NOTES

The Niner BioCentric is subject to unusual forces and BB shells are frequently exposed to water and mud, making proper bottom bracket installation and maintenance particularly important. Regular grease or anti-seize compounds are not up to the task of keeping your BioCentric smooth and quiet, so we recommend that the BioCentric be installed with one of the following compounds:

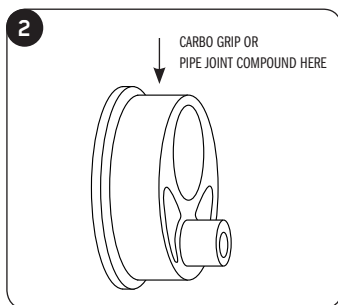
1. Oatey's Pipe Joint Compound – This Teflon-based paste offers the same benefits of Teflon tape but is significantly more durable and the paste consistency makes adjustments easier. This paste is inexpensive and readily available at hardware stores.
2. Effetto Mariposa Carbo Grip – Particularly tough creaking/slipping/contamination cases are nearly always solved with the use of a product from Effetto Mariposa called Carbo Grip http://www.cantitoeroad.com/effetto-mariposa-carbogrip?filter_name=carbogrip. Carbo Grip is an aerosol spray that was designed to prevent slipping between smooth surface bicycle parts. Since Carbo Grip is more expensive and not as widely available, we suggest trying Oatey's Pipe Joint Compound first.

These are the only two compounds that we recommend for use with the BioCentric. Grease, Carbon Assembly Compound or Anti-Seize can all promote slipping and/or creaking.

The preparation and assembly procedures are identical for both materials.

⚠ Some older Niner frames may require extra steps for installation. See a Niner Dealer or contact info@ninerbikes.com for installation instructions for used/older frames or if your BioCentric has 130 in/lbs laser etched on the non-drive side shell.

If you don't have the necessary tools or skills to install this component, take it to an authorized Niner dealer for installation. It's critical that it be installed correctly to ensure its longevity and functionality. If you have any questions or concerns about your product, don't hesitate to contact us through our web site or by emailing info@ninerbikes.com.



GETTING STARTED

YOU WILL NEED:

- NINER BioCentric & BIKE FRAME
- CLEAN SHOP RAG
- ALCOHOL
- CARBO GRIP or OATEY'S PIPE JOINT COMPOUND
- TORQUE WRENCH
- 6MM HEX WRENCH
- 5MM HEX WRENCH (BioCentric II)

Step by step instructions for installing the Niner BioCentric in a new Niner frame:

1. CLEAN FRAME AND BIOCENTRIC - The frame's bottom bracket shell and the BioCentric Bottom Bracket Insert must be completely free of lubricant or dirt. Wipe the shell and BioCentric thoroughly using a clean rag and alcohol.
2. PREPARE BIOCENTRIC - Apply a thin layer of Carbo Grip or Pipe Joint Compound to the shoulders of the BioCentric and inside the bottom bracket shell. Allow Carbo Grip to dry for a few minutes, it should be tacky but not wet.
3. INSTALL BIOCENTRIC - Carefully slide the two BioCentric halves into the frame, aligning them so that the M8 tension bolt may be installed. Grease the bolt head and threads to ensure the bolt does not bind and give improper torque readings. Torque the bolt to 190 in-lbs. Proper torque is critical, do not exceed 190 in-lbs.
4. INSTALL BIOCENTRIC II - Lightly grease the bolt posts of the non-driveside BioCentric II half. Carefully slide the two halves into the frame, aligning them so that the two M6 bolts may be installed. Grease the bolt heads and threads to ensure the bolts do not bind and give improper torque readings. Torque the bolts to 106 in-lbs. Proper torque is critical, do not exceed 106 in-lbs.

⚠ Over-tightening any BioCentric installed in an Air 9 Carbon frame can distort the bottom bracket shell and cause irreparable damage. This damage caused by improper installation is not covered under warranty!

5. INSTALL BOTTOM BRACKET AND CRANK - Install the bottom bracket cups and crankset per manufacturer's specification. Some chainring/bottom bracket spindle length combinations may cause interference with the chainstay. If this occurs you will most likely be able to rotate the BioCentric so that the bottom bracket is in a more forward position to eliminate the interference between the chainring and chainstay.

6. TENSION CHAIN - With the crank and bottom bracket properly installed it is time to set the chain tension. Loosen the BioCentric so that the unit may be rotated. One of the easiest ways to rotate the BioCentric is by inserting a 6mm hex wrench into the hole on the Drive Side. The wrench will slip between the spider arms of the crank, inside the chainring (6a). Use the crank to rotate the BioCentric by bracing the wrench against the spider of the crank. Once the proper tension is acquired torque the tension bolt to 190 in-lbs.

The BioCentric II can be rotated by inserting a 6mm wrench in the provided adjustment hole on the non-drive side (6b). Once the proper tension is acquired torque the BioCentric II tension bolts to 106 in-lbs.

Now that the BioCentric is installed it is time to go ride! Enjoy the quiet ride as the BioCentric holds your chain tension perfectly.



SINGLESPEED GEARING INFORMATION

We have designed our singlespeed compatible bikes to accept tires as large as 2.35" (actual measurement, not "claimed", some manufacturers 2.55" tires will fit with plenty of mud clearance). Because of this there is limited room between the chainring and rear chainstay and some larger chainrings will contact the chainstay.

⚠ CAUTION! We highly recommend using a 32 tooth front chainring for SS application. A larger chainring could contact the chainstays in certain EBB positions and could cause damage.

Most singlespeed setups requires that the front chainring be in the middle chainring position to maximize chainline. You can use a larger chainring if you mount it in the large chainring position on your cranks, however, this may cause chainline issues with some SS setups, specifically thread-on style freewheels.

On the facing page are gear ratio charts to help you find a chainring/cog combination that will mimic your current setup.

		26 INCH GEAR RATIOS				
		CHAINRING SIZE				
		29	30	32	34	36
COG SIZE	14	53.86	55.71	59.43	63.14	66.86
	15	50.27	52.00	55.47	58.93	62.40
	16	47.13	48.75	52.00	55.25	58.50
	17	44.35	45.88	48.94	52.00	55.06
	18	41.89	43.33	46.22	49.11	52.00
	19	39.68	41.05	43.79	46.53	49.26
	20	37.70	39.00	41.60	44.20	46.80
	21	35.90	37.14	39.62	42.10	44.57
	22	34.27	35.45	37.82	40.18	42.55

		29 INCH GEAR RATIOS				
		CHAINRING SIZE				
		29	30	32	34	36
COG SIZE	16	52.56	54.38	58.00	61.63	65.25
	17	49.47	51.18	54.59	58.00	61.41
	18	46.72	48.33	51.56	54.78	58.00
	19	44.26	45.79	48.84	51.89	54.95
	20	42.05	43.50	46.40	49.30	52.20
	21	40.05	41.43	44.19	46.95	49.71
	22	38.23	39.55	42.18	44.82	47.45
	23	36.57	37.83	40.35	42.87	45.39
24	35.04	36.25	38.67	41.08	43.50	

As an example, if you have a 32t chainring and 17t cog on a 26" bike, you will want to run a 32t chainring and 19t cog on your new Niner in order to have a very similar gear ratio with 29" wheels.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

SEATPOST INSTALLATION

FIT CHECK

Check the post/frame for correct fit. Seatposts are available in many diameters and correct sizing is critical - Niner specifies three common sizes: 27.2mm, 30.9mm and 31.6mm. They are not interchangeable. Check the specs for your Niner frame in the GEOMETRY & SPECIFICATIONS section of this document.

When checking fit, don't insert the post more than approximately two inches before removing it and following the FRAME PREP steps below.

FRAME PREP - ALUMINUM POST

Before inserting the post, inspect the end of the seat tube and the seat tube clamp slot for burrs or sharp edges that could damage the seatpost, resulting in post failure. Remove any burrs or sharp edges with 320/400 grit sandpaper.

Apply a thin film of grease to the post and inside the seat tube to ease installation, adjustment and removal. Mount the seat collar so the bolt tightens at the rear in a traditional manner.

FRAME PREP - CARBON POST

Before inserting the post, inspect the end of the seat tube and the seat tube clamp slot for burrs or sharp edges that could damage the seatpost, resulting in post failure. Remove any burrs or sharp edges with 320/400 grit sandpaper. Take extra care to smooth the sharp 90° corners around the slot cut in the seat tube as these edges can easily score or damage a carbon post. The seat tube MUST be free of all lubricants, use rubbing alcohol to carefully clean the inside of the tube and remove all traces of grease, dust or other compounds.

Apply a thin film of Carbon Assembly Compound (Tacx, FSA or other) to the post and inside the seat tube to ease installation, adjustment and removal. Mount the seat collar turned around 180 degrees so the bolt tightens at the front opposite the slot in the seat tube. This orientation better distributes clamping force around the carbon post and reduces the possibility of carbon seatpost damage.

⚠ Pinch fractures in a carbon post caused by the seat collar and seat tube are not covered by warranty, so please do not rush the frame preparation steps or exceed recommended torque specs.

ASSEMBLY

Insert post and tighten the seat collar bolt to the manufacturer's recommended torque. NINER seat collars should be tightened to 4Nm, 35 inch-lbs or 2.9 foot-lbs.



NINER ENCYCLOPEDIA >>

SPECIFICATION & SETUP GUIDE

NINER CARBON & STEEL FORK SPECIFICATIONS

	MATERIAL	STEERER TUBE	HUB AXLE	AXLE TO CROWN	OFFSET (RAKE)	BRAKE MOUNT	MAX ROTOR SIZE
RDO FORK	Carbon	Tapered (1.125-1.5")	15mm Maxle	470mm	45mm	post mount	185mm
CARBON FORK (TAPERED STEERER)	Carbon	Tapered (1.125-1.5")	9mm (QR)	470mm	45mm	post mount	185mm
CARBON FORK (STRAIGHT STEERER)	Carbon	1-1/8"	9mm (QR)	470mm	45mm	post mount	185mm
STEEL	Reynolds Steel	1-1/8"	9mm (QR)	470mm	45mm	IS Mount	N/A

CARBON FORK SPECIFICATIONS & COMPATIBILITY:

- Specialized/Roval wheels with proprietary oversized axle endcaps do not fit Niner Carbon Fork or RDO Fork dropouts
- Easton XC1 wheels, both geared and SS (since the front wheel is the same) do not fit the Niner carbon fork. This problem is limited to ONLY the XC1 wheelset. Easton's Haven wheels DO fit.
- Industry 9 wheels that use the convertible front hub (9mm QR / 15mm /20mm) need special end caps available through Industry 9

As standards in the mountain biking world are always changing, it is impossible to update the dropout of our fork to accommodate each new hub design. We are sorry for any inconvenience this may cause. Currently, these are the only issues we are aware of, but if you encounter any fit issues with hubs and the Niner carbon fork please call or email (service@ninerbikes.com).



NINER CARBON FORK INSTALLATION

Thank you for your purchase of Niner's Carbon rigid fork. We spent a lot of time on this fork, and are as excited as you are for you to get it on your bike and ride it. But hold on a sec, before you tear the box apart in excitement and install the fork, there are some things you need to know. This is one of the most advanced forks on the planet, and as such requires some care and understanding. Please read this manual thoroughly, we put it together for your safety.

If you don't have the necessary tools or skills to install this fork, take it to an authorized Niner dealer for installation. It's critical that this fork be installed correctly to insure its longevity and functionality. If you have any questions or concerns about your product, don't hesitate to contact us through our web site or by emailing info@ninerbikes.com.

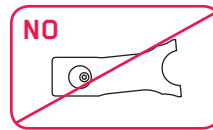
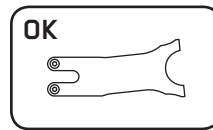
▲ WARNING: Bicycle forks are subject to wear and stress during their lifetime. If the fork's useful life is exceeded, it can suddenly and catastrophically fail, potentially causing serious injury or death to the rider. Scratches, cracks, fraying or discoloration are signs of stress-caused fatigue and indicate that the fork is at the end of its useful life and should be replaced. While the materials and workmanship of your fork are covered by warranty, this is no guarantee that the fork will last the full term of the warranty. Product life is directly related to the kind of riding you do and to the treatment to which you submit the bicycle and fork. The warranty is not meant to suggest the fork cannot be broken or will last forever - it only means that the fork is covered subject to the terms of the warranty. For warranty details visit www.ninerbikes.com. For more information relating to product life please consult with your dealer.

Frequent inspection of your fork is important for your safety. Perform a visual inspection of the fork and bicycle before every ride. Periodic detailed inspection of the bicycle is also important. How frequently this detailed inspection is needed depends upon you. Because your dealer and Niner Bikes cannot anticipate or track your use, you must take responsibility for bringing your bike to your dealer for periodic inspection and service. Your dealer can help you decide what frequency of inspection and service is appropriate.

Parts Included:
NINER CARBON FORK
COMPRESSION ADJUSTMENT PLUG
BRAKE HOSE CLIPS (2)
FSA ASSEMBLY COMPOUND

Recommended Tools:
HACKSAW AND 32TPI BLADE
HEADSET TOOLS
5MM HEX KEY (W/ TORQUE WRENCH ADAPTOR)
6MM HEX KEY (W/ TORQUE WRENCH ADAPTOR)
STEERER TUBE CUTTING GUIDE (PARK SG-6)
100-200 GRIT SANDPAPER
MASKING TAPE

Stem Compatibility and Preparation:



▲ The Niner carbon fork must be used with a circumferential clamp stem. Use of a pinch or wedge clamp style stem may cause damage to the steerer tube which may result in rider injury or death.

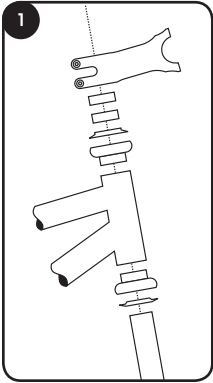
Before attaching your stem to the steerer tube, ensure that the inside of the stem is free of burrs or other defects that might score or scratch the steerer tube. Damaging the steerer tube could cause it to fail, resulting in rider injury or death.

(continued next page)



NINER CARBON FORK INSTALLATION (CONTINUED)

INSTALLATION:



1.1 Install headset as per manufacturer instructions.

1.2 Press headset fork crown race onto the fork race seat using crown race seating tool.

▲ When removing the crown race for any reason, use only a crown race removal tool such as the Park CRP-1

1.3 Insert fork steerer tube into head tube.

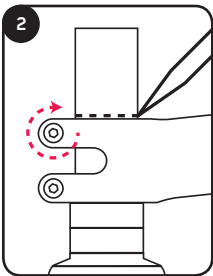
1.4 Slide the headset compression ring, top cover, spacers and stem onto the steerer tube.

▲ Do not exceed 40mm spacer stack height.

Do not place spacers above the stem. The stem must clamp the area reinforced by the compression adjustment plug installed in step 5.1

Do not use tall crown races or place spacers under the crown race to adjust head angle.

Do not grease the carbon steerer tube.

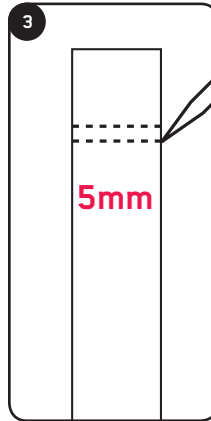


2.1 Ensure fork/headset assembly is snug and the stem is seated firmly against the headset top cover and spacers.

2.2 Tighten one stem bolt just enough to hold the stem in place.

2.3 Mark or scribe the steerer tube at the top edge of the stem.

2.4 Remove the stem from the steerer tube and the fork from the head tube.



3.1 Mark the steerer tube again, 5mm below the first mark. This offset allows for sufficient top cap compression. Any cut made higher or lower may result in a loose headset or insufficient clamping area.

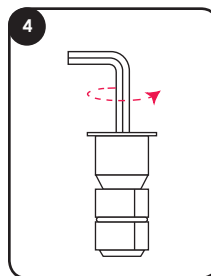
3.2 Wrap the steerer with masking tape immediately below the new cut line. This will reduce the likelihood of splintering during the cutting process.

▲ Use a steerer tube cutting guide such as the Park SG-6 to hold the steerer, DO NOT clamp the fork or steerer in a vice.

3.4 Using a 32tpi hacksaw blade, cut steerer at a 90° angle on the second measured mark. Wetting the blade will reduce dust.

3.5 Remove masking tape. Using sandpaper, remove all burrs from the trimmed steerer tube.

▲ The compression adjustment plug provided with this product is an integral and necessary component of the Niner carbon fork and must be installed correctly to maintain the structural integrity of the Niner carbon fork system. Failure to properly install the compression adjustment plug or use of a substitute part may result in the failure of the fork, resulting in bodily injury or death.

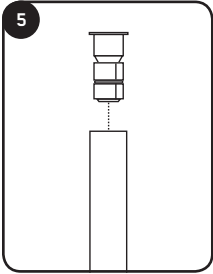


4.1 To prepare the compression adjustment plug, remove the carbon top cap with a 4mm hex wrench and loosen the internal 6mm bolt until the outer serrated pieces have retracted enough to slip the assembly into the top of the steerer tube.

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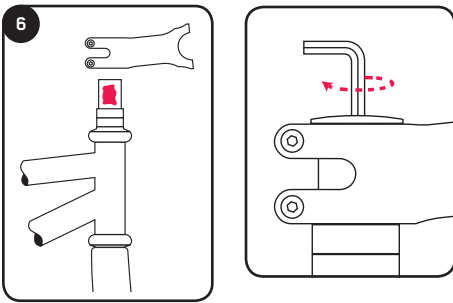


NINER CARBON FORK INSTALLATION (CONTINUED)



5.1 Install the plug into the steerer tube ensuring that the upper flange of the plug is sitting tightly against the top of the steerer tube.

5.2 Tighten the 6mm internal hex head to 7nm.



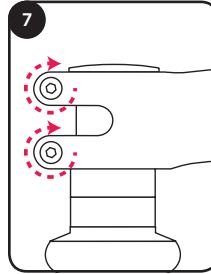
6.0 Re-assemble fork and headset as in Step 1.

6.1 Apply FSA assembly compound to the steerer in the stem clamp zone. This compound will increase friction and decrease the amount of force required to hold the stem firmly in place.

6.2 Install the stem and press the fork and stem together, compressing the headset. Check that there is about 2mm of space between the top of the stem and the top of the compression adjustment plug flange.

6.3 With a 4mm hex wrench, install the carbon top cap by threading it into the compression adjustment plug.

▲ This step “pre-loads” the bearings only. Tightening the top cap does not keep the headset from becoming loose. Be sure to complete Step 7 before riding!

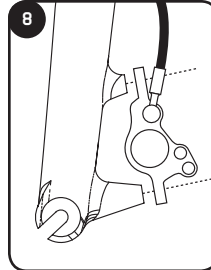


7.1 Attach front wheel to fork.

7.2 Align stem with front wheel.

7.3 Tighten both stem bolts to manufacturer's specifications.

▲ OVERTIGHTENING THE STEM may cause damage to the steerer tube which could result in failure leading to serious injury or death. Check the recommended torque spec for the stem bolts prior to final stem installation and do not exceed these torque specs.



8.1 Install the brake caliper per the manufacturers instructions.

▲ This fork is designed for a maximum rotor size of 185mm. Use of larger rotors will void the warranty and could lead to damage to the fork that may cause serious injury or death.



RDO FORK - Maxle THROUGH AXLE INSTALLATION

The Maxle quick release thru axle system allows the use of a 15 mm x 100 mm thru-axle hub for enhanced stiffness. The axle threads into the non-drive side fork dropout and compresses the hub between the non-drive and drive side fork legs. The axle is fixed in place in the lower leg by the Maxle quick release lever.

▲ Riding with an improperly installed wheel can allow the wheel to move or disengage from the bicycle, causing damage to the bicycle, and serious injury or death to the rider. It is essential that you:

- Ensure that your axle, dropouts, and quick release mechanisms are clean and free of dirt or debris.
- Ask your dealer to help you understand how to properly secure your front wheel using the Maxle quick release thru axle system.
- Apply the correct techniques when installing your front wheel.
- Never ride your bicycle unless you are sure the front wheel is installed properly.

1 INSTALLATION

Position your wheel in the lower leg dropouts. The hub should seat firmly in the dropouts. Be sure to position the disc brake rotor in the caliper. Verify that neither the rotor, hub, nor rotor bolts interfere with the lower legs. If you are unfamiliar with adjusting your disc brakes, see your brake manufacturer's instructions.

2 TIGHTEN

2.1 Place the Maxle lever in the open position. Ensure the lever engages with the corresponding slot in the axle. (FIGURE 1)

2.2 Slide the axle through the right side of the hub until it engages the threads of the left drop out.

2.3 To tighten the axle into the dropout, position the quick release lever in the slot on the axle flange and turn the axle lever clockwise until hand tight.

▲ Never use any other tool to tighten the axle into the lower leg. Over-tightening of the axle can damage the axle and/or the lower leg.

3 SECURE

3.1 Lift the lever out of the corresponding slot in the axle and rotate to a point 180 degrees from where you want the lever to be located in the closed position.

3.2 To lock the axle into the lower leg, close the Maxle quick release lever.

3.3 The quick release mechanism is an "over-center cam", similar to the quick release found on many bicycle wheels. When closing the lever, tension should be felt when the quick release lever is in the horizontal position (90 degrees to the lower leg), and the quick release lever should leave a clear imprint in the palm of your hand. If resistance is not felt at the 90 degree position and if the lever does not leave a clear imprint in the palm of your hand, tension is insufficient.

To increase tension, open the quick release lever and insert a 2.5 mm hex into the tension adjuster located in the center of the lever cam. (FIGURE 2) Turn the adjuster clockwise one click and re-check lever tension. Repeat until the quick release lever tension is sufficient.

Dirt and debris can accumulate between the dropout openings. Always check and clean this area when re-installing the wheel. Accumulated dirt and debris can compromise the security of the axle, leading to serious and/or fatal injury.

4 REMOVAL

4.1 Open the Maxle quick release lever and position it in the slot on the axle flange.

4.2 Turn the quick release lever counter-clockwise until the axle is disengaged from the threads on the fork dropout then slide the axle out of the hub.

