


NS
BIKES

DEFINE



DEFINEAL
TECH MANUAL





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WARNINGS AND IMPORTANT INFORMATION

ATTENTION: Please read this manual carefully. It contains important safety information!

WARNING: Extreme riding is a very dangerous sport; it requires an amazing amount of skill. By engaging in this type of activity, you are accepting the risk of possible injury or even death. Even the best bike will not help you land a clean trick if you lack the skills. Even the best protective gear will not guarantee complete safety. Remember that in this kind of riding, you can only trust your own abilities and you must accept the inherent risk. While riding you can reach significant speeds and therefore face significant hazards and risks. Inspect your bicycle and equipment carefully and be sure that it is in perfect condition before each ride. If possible consult with area site personnel, expert riders and race officials on conditions and equipment advisable. Always wear appropriate safety gear, including an approved full face helmet, full finger gloves, body armour, bright, visible clothing that is not so loose that it can be tangled in the bicycle or objects at the side of the road or trail, shoes that will stay on your feet and will grip the pedals (make sure that shoe laces cannot get into moving parts, and never ride barefoot or in sandals). Always use protective eyewear, to protect against dirt, dust and bugs.

WARNING: Some of the service procedures require specialist tools and good mechanical skills. Therefore, to minimize the risk of serious or even fatal accidents, maintenance and assembly work on your bike should be carried out by an authorized bicycle workshop.

IMPORTANT NOTICE: This manual is not intended as a comprehensive use, service, repair or maintenance manual. Please consult your dealer for advice and your dealer may also be able to refer you to classes, clinics or books on bicycle use, service, repair or maintenance.

WARNING: The frame box contains instructions for components made by third parties. You must study these carefully and follow the directions before riding your bike. Make sure you read and follow the suspension set up and service instruction manual provided by the manufacturer. If the instruction manual has not been provided, please contact your dealer or the manufacturer.

WARNING: Failure to maintain, check and properly adjust the suspension system may cause suspension malfunction, in result of which you may lose control and fall.

WARNING: Introducing changes in the suspension adjustment can alter the handling and braking characteristics of your bicycle. It is forbidden to change the suspension adjustment unless you are thoroughly familiar with the suspension system manufacturer's instructions and recommendations; you should always check for changes in the handling and braking characteristics of the bicycle after the suspension has been adjusted by taking a careful test ride in a safe area.

WARNING: As with all mechanical components, the frame is subjected to wear and high stresses. Different materials and components may react to wear or stress fatigue in different ways. If the design life of a component has been exceeded, it may suddenly fail possibly causing injuries to rider. Any form of crack, scratches or change of colour in highly stressed areas indicate that the life of the component has been reached and it should be replaced.

GENERAL RIDING INFORMATION

Riding a bicycle can be dangerous. You must keep this in mind and be cautious at all times.

See and be seen. Use lights and reflective clothing in low light conditions.

Always wear a helmet when riding. It can save your life.

Always conduct a pre-ride check (detailed information can be found further in this manual).

Never ride the bicycle if you observe any technical problems or have any doubts about the proper functioning of any elements in the bicycle.

Keep the bike clean and well maintained.

Carry a pump, spare inner tube, patch kit, and a basic tool kit - you may need this in the case of a flat tire or other common mechanical problem that is usually easy to fix if you have the right tools. Ask your dealer for advice on this issue.

If your bicycle is equipped with gears, you can choose a gear combination that is most comfortable for the riding conditions. Gears will allow you to maintain a constant rate of pedaling. Use lower gears for going uphill and higher gears for going downhill. Ease up on your pedaling pressure when you shift gears. Ask your dealer to give you more advice on this issue.

Be careful with the brakes - they can be powerful and if activated too aggressively, may cause a crash. You should spend some time to get a better feel of the brakes on a side road or empty parking lot before the first ride. Avoid riding too fast, especially downhill. It is easy to lose control of the bicycle and crash at high speeds, and also you will find it very difficult to slow down especially if the hill is steep.

If your bike has been equipped with suspension, the increased speed you may develop will also increase the risk of injury. For example, front of the bike may dive on the suspension fork while hard braking. You can easily lose control and fall if you are not prepared for this. Please, learn how to operate your suspension system safely.

Thanks to the suspension the wheels can follow the terrain better, which improves control and comfort. This improved capacity may provide opportunity for riding faster, but you should be careful not to mistake the enhanced capabilities of the bicycle for your own riding skills. Improving skills takes time and practice.

Protect your bike from theft. Purchase a lock and never leave your bike unlocked while unattended, even if you are planning to be away from it for just a few minutes.

FRAME INFORMATION

The beautiful carbon define is now available in metal. It was a big challenge to translate the complex lines of this bike to another material, and we have sweated every detail of this high-end alloy frame to make it as light and as sexy as possible. Some of the unique features include an adjustable bb height and semi-integrated cable guides - a practical and elegant solution of the internal / external cable routing dilemma. The define features unique semi-internal cable routing - a solution that is elegant and easy to service. The geometry is adjustable via the shock mount which allows the bottom bracket to be raised or lowered. Big sealed pivots keep it stable and guarantee long periods of smooth, service free function. There are a few things that we borrowed directly from the snabb - and that is the kinematics of the 4-bar suspension that everyone loves (pinkbike: "there is so little pedal-induced bobbing at play here that it sort of boggles the mind"). The most modern enduro and trail bikes on the market is available with carbon or alloy frames.

ADJUSTABLE BB HEIGHT



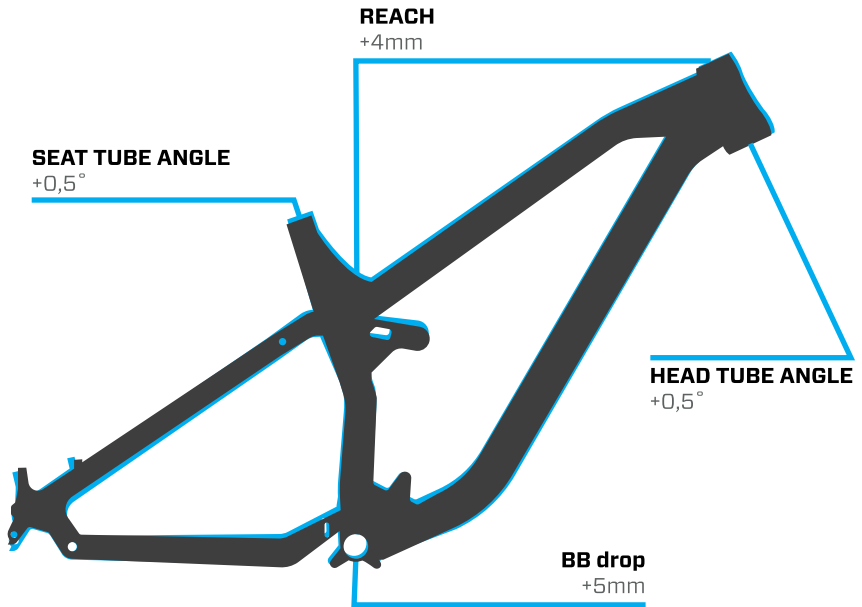
You can raise the BB height by 5mm from the stock settings by using the adjustable shock mount or you can completely transform the bike by changing the shock mount & shock.

HYBRID CABLE ROUTING



The cables appear to be threaded through the downtube and chainstay... But actually, they are only hidden in a special channel in the construction. Easy to replace anytime, anywhere!

FLIP-CHIP SETTING



■ LOW POSITION
FLIP-CHIP

■ HIGH POSITION
FLIP-CHIP



LOW

FLIP

HIGH

TECHNICAL SHEET / SPECS

DEFINE AL 130

rear wheel travel: 130mm
recommended fork travel: 140-150mm
frame material: AL6061-T6 + AL6066-T6
rear shock: 185x55mm
mounting hardware: 20 x 8 mm, trunion
cable routing: semi-internal
head tube: tapered 1.5 IS (IS 42 / IS 52)
headtube length: S: 110mm, M: 120mm, L: 130mm
fits forks with standard 1-1/8" or tapered 1.5 - 1-1/8"
hub spacing 148 x 12mm, NS axle included

post-mount direct 160mm disc brake mount,
max rotor size: up to 200mm
BB: BSA 73mm
biggest chainring: up to ~36t
rear derailleur: removable hanger included
seat post/clamp: 31.6mm / 34.9 (clamp included)
 stealth cable route in seat tube for dropper post
maximum tire size recommended: 29" x 2.5", depends
 on tire manufacturer

DEFINE AL 150

rear wheel travel: 150mm
recommended fork travel: 160-170mm
frame material: AL6061-T6 + AL6066-T6
rear shock: 205x62.5mm
mounting hardware: 20 x 8 mm, trunion
cable routing: semi-internal
head tube: tapered 1.5 IS (IS 42 / IS 52)
headtube length: S: 110mm, M: 120mm, L: 130mm
fits forks with standard 1-1/8" or tapered 1.5 - 1-1/8"
hub spacing 148 x 12mm, NS axle included

post-mount direct 160mm disc brake mount,
max rotor size: up to 200mm
BB: BSA 73mm
biggest chainring: up to ~36t
rear derailleur: removable hanger included
seat post/clamp: 31.6mm / 34.9 (clamp included)
 stealth cable route in seat tube for dropper post
maximum tire size recommended: 29" x 2.5", depends
 on tire manufacturer

DEFINE AL 160

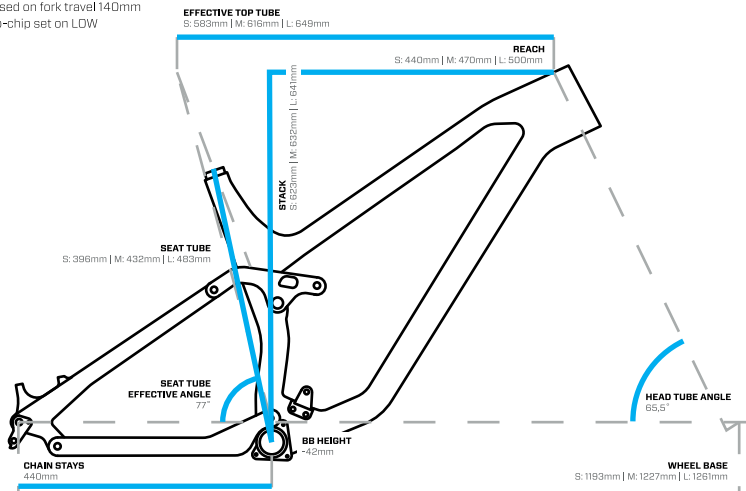
rear wheel travel: 160mm
recommended fork travel: 170-180mm
frame material: AL6061-T6 + AL6066-T6
rear shock: 205x65mm
mounting hardware: 20 x 8 mm, trunion
cable routing: semi-internal
head tube: tapered 1.5 IS (IS 42 / IS 52)
headtube length: S: 110mm, M: 120mm, L: 130mm
fits forks with standard 1-1/8" or tapered 1.5 - 1-1/8"
hub spacing 148 x 12mm, NS axle included

post-mount direct 160mm disc brake mount,
max rotor size: up to 200mm
BB: BSA 73mm
biggest chainring: up to ~36t
rear derailleur: removable hanger included
seat post/clamp: 31.6mm / 34.9 (clamp included)
 stealth cable route in seat tube for dropper post
maximum tire size recommended: 27.5" x 2.5", depends
 on tire manufacturer

GEOMETRY METRIC

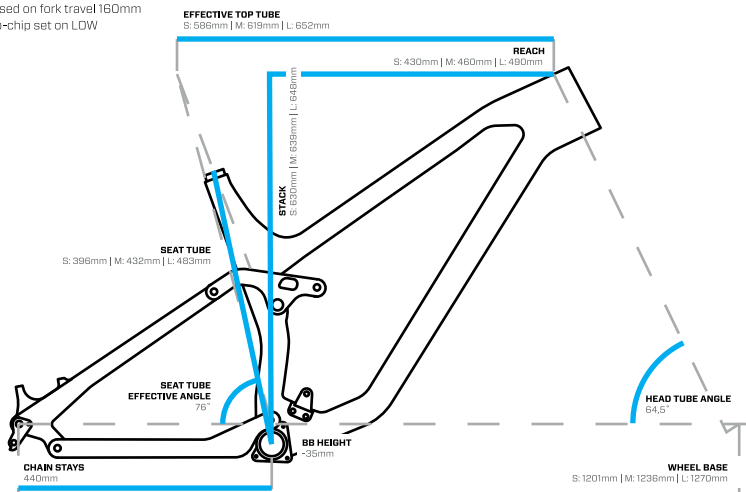
DEFINE AL 130

based on fork travel 140mm
flip-chip set on LOW



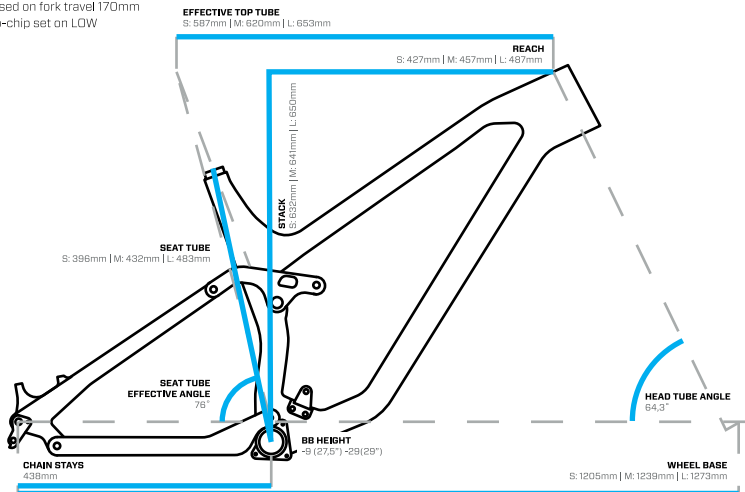
DEFINE AL 150

based on fork travel 160mm
flip-chip set on LOW



DEFINE AL 160

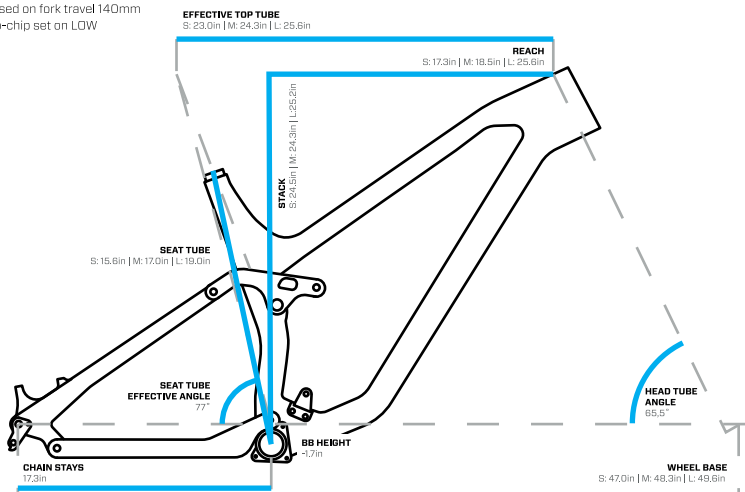
based on fork travel 170mm
flip-chip set on LOW



GEOMETRY IMPERIAL

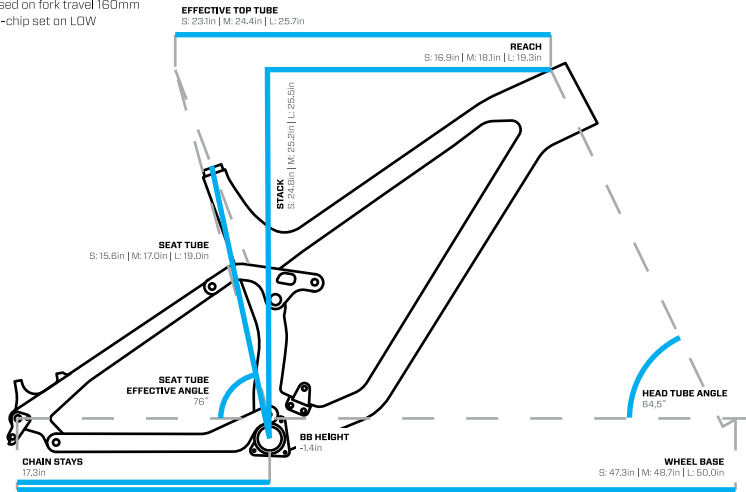
DEFINE AL 130

based on fork travel 140mm
flip-chip set on LOW



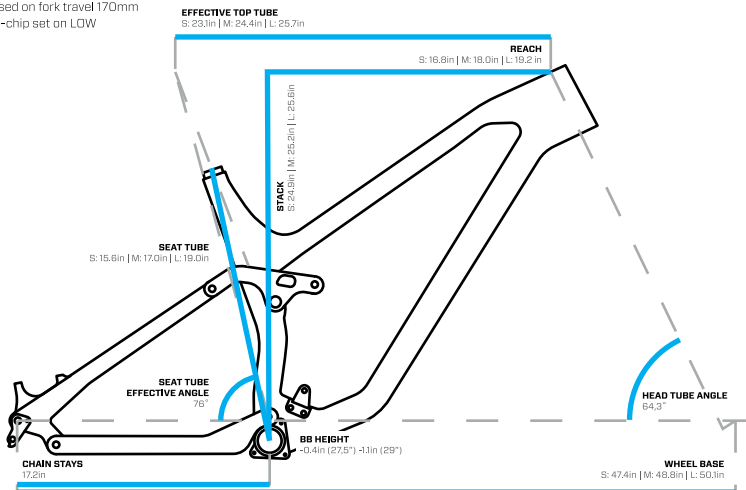
DEFINE AL 150

based on fork travel 160mm
flip-chip set on LOW

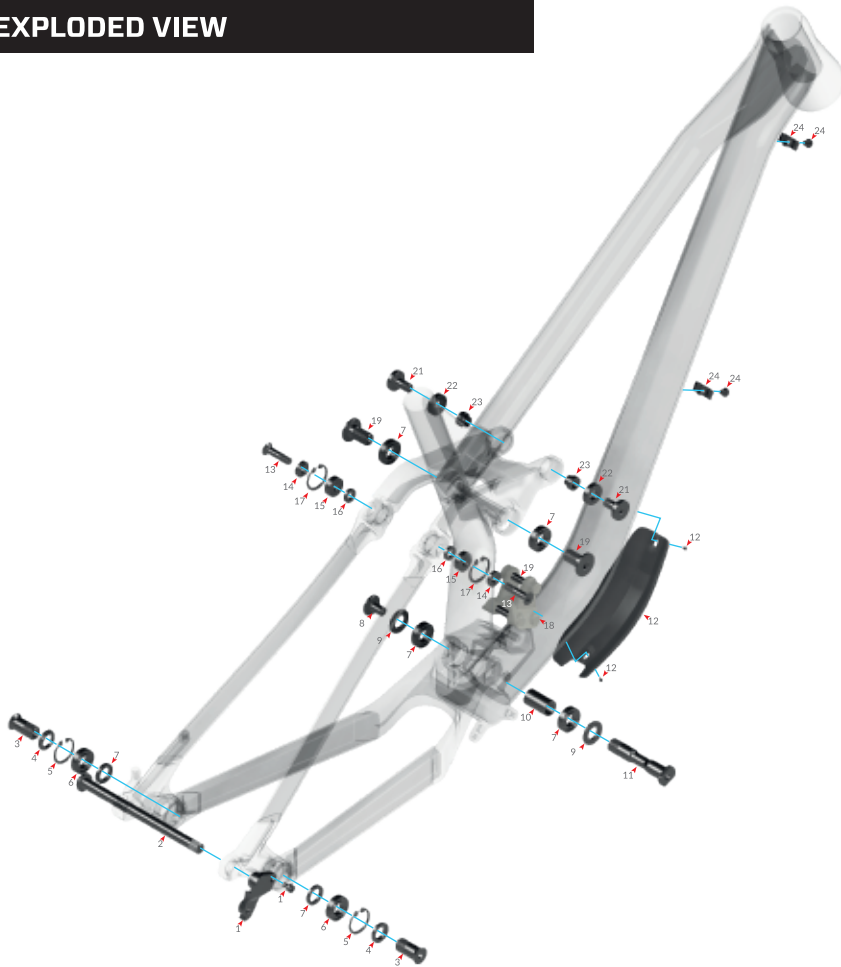


DEFINE AL 160

based on fork travel 170mm
flip-chip set on LOW

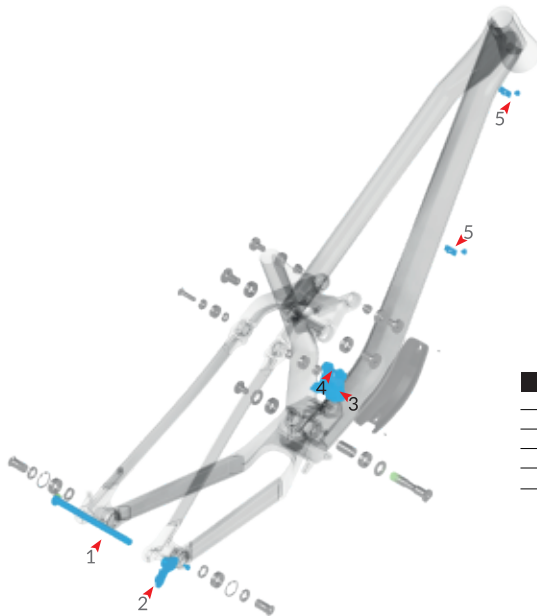


EXPLODED VIEW

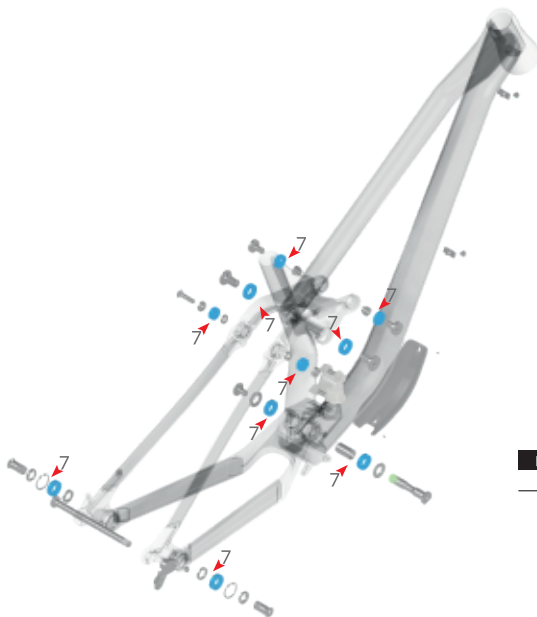


Nr	PART	CODE	Nr	PART	CODE
1	hanger + bolt	SP-140	13	SS clevis bolt	SP-076
2	axle 148x12 (174L)	SP-079	14	SS clevis outer washer	SP-077
3	horst link bolt	SP-193	15	SS rocker bearing	608 (Ø8*Ø22*7T) SP-150
4	horst link washer	SP-193	16	SS clevis inner washer	SP-077
5	horst link c-clip	SP-193	17	SS clevis c-clip	SP-077
6	horst link bearing	6902-2RS (Ø15*Ø28*7T) SP-150	18	shock mount	SP-151 / SP-152
7	horst link washer	SP-193	19	Ti shock mount bolt (1 pc.)	SP-195
8	main pivot bolt	SP-194	20	rocker arm bolt	SP-075
9	main pivot washer	SP-194	21	trunion bolt	SP-163
10	main pivot spacer	SP-194	22	trunion bearing	6902-2RS(Ø15*Ø28*7T) SP-150
11	main pivot axle	SP-194	23	trunion washer	SP-150
12	DT protector + bolts	SP-195	24	cableguides + bolts (4 pcs.)	SP-196

REPLACEMENTS

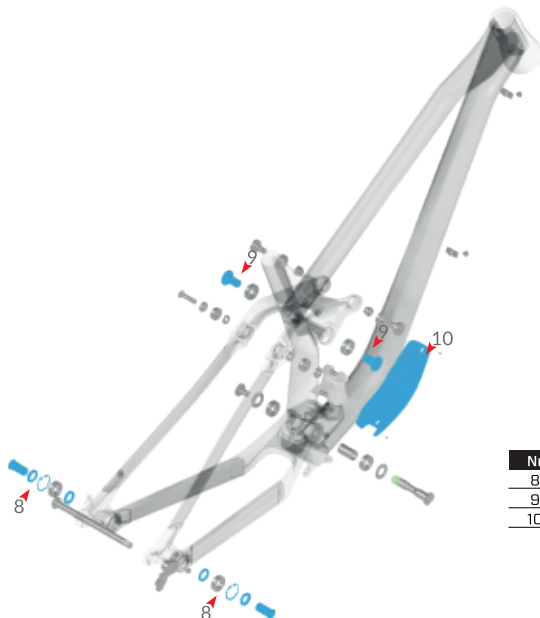


Nr	KIT	CODE
1	hanger	SP-140
2	axle 148x12 (174L)	SP-079
3	shock mount 130/150	SP-151 / SP-152
4	shock mount bolts	SP-195
5	removable cableguide	SP-196

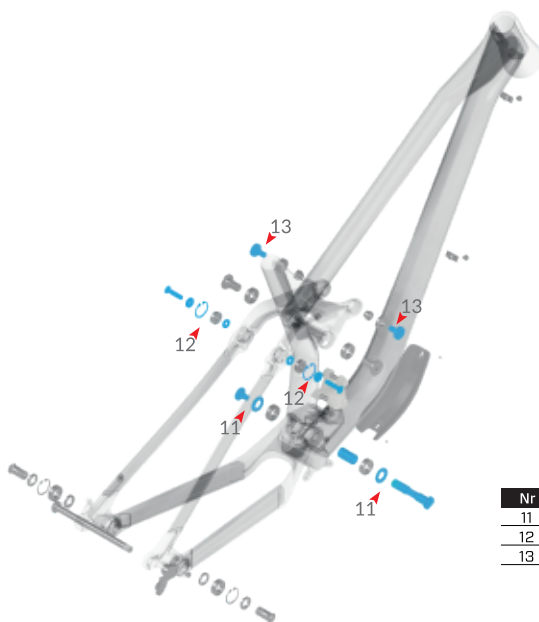


Nr	KIT	CODE
7	bearings	SP-150

REPLACEMENTS



Nr	KIT	CODE
8	Horst link hardware	SP-193
9	rocker arm bolts	SP-075
10	downtube protector	SP-195



Nr	KIT	CODE
11	main pivot axle & bolt	SP-194
12	SS clevis hardware	SP-077
13	alloy Trunion bolts	SP-163

SPARE PARTS

ACCESSORIES:

- ChainStay Slapper protector 2 pc. (SP-197)
- seatpost clamp 34.9 (SP-144)

SUSPENSION SETTINGS

Suspension settings are a matter of personal preference. Some riders like it plush, some like it firm. However here are some suggestions of shock settings that you can use as basic guidelines. Typically, the Defina should run with about 20% to 30% sag. To measure sag, push the bottom-out bumper up the shock shaft until it meets the body of the shock. Gently stand up on the pedals with all your weight on the bike (fully kitted up with body armour, helmet, neck brace, hydration pack, etc. – it's important to make the situation as 'real world' as possible to give you the most accurate results) and note how far the bumper displaces

REAR WHEEL MOUNTING INSTRUCTION

The Synonym frame is compatible with 148x12 thru-axle hubs. For proper rear wheel installation please follow the instructions:

- make sure the wheel is aligned and the disc sits properly in the brake caliper
- put the wheel into the dropouts with the chain set up correctly on a cassette
- put the 12mm axle through and tighten properly with 6mm allen key

FRAME SIZE RECOMMENDATIONS

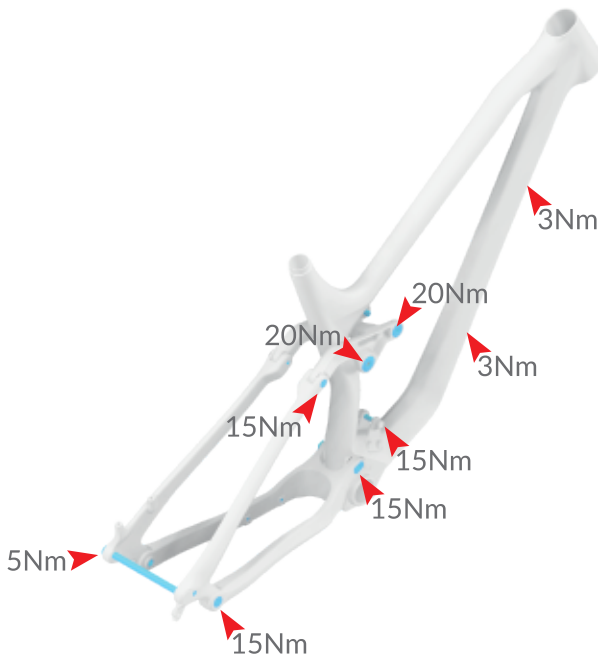
note on sizing: we recommend the S size for 160 - 170cm, M size for 170 - 182cm and the L size for riders over 180cm.

TIGHTENING TORQUE

Correct tightening forces on fasteners, nuts, bolts, screws on your bicycle are crucial. Too little force, and the fastener may not hold securely. Too much force, and the fastener can strip threads, stretch, deform or break. Either way, incorrect tightening force can result in component failure, which can cause you to lose control and fall. If in any doubt, or if any problems are found during the pre-ride check you should immediately seek professional advice from a professional bicycle mechanic.

Study the manuals of the suppliers of the suspension fork, rear shock, and other parts that come with this frame. Do not ride the bicycle until all problems have been resolved. Riding a bicycle with any defects can be a hazard to your health and life! Unless you are a very competent bicycle mechanic, do not attempt to execute any of these adjustments yourself. Seek advice at your local bicycle shop. The rear suspension bolts (rear shock and pivots) have been tightened in the factory with specific torque. In case of re-adjustment extreme care should be taken when re-tightening them.

Tightening torque for various bolts on the frame:



For other components please first refer to manufacturer instructions.

MAINTENANCE & PERIODICAL SAFETY CHECKS

DO NOT RIDE THE BICYCLE IF IT YOU SEE ANY DEFECTS.

Take care of your frame and you will enjoy it for a longer time. Before every ride you should always make a pre-ride check. It should include the following points: clean the frame (note that high-pressure washing may cause damage to some components on the bicycle so it should be avoided if possible) and examine it CAREFULLY for any indications of potential failures including cracks, corrosion, dents, paint peeling and any other indications of potential problems, inappropriate use or abuse. If anything suspicious is found, contact your local bike dealer for a proper inspection. These are important safety checks and very important to help prevent accidents, injury and shortened product lifespan.

Things to check before each ride:

- all frame bolts are correctly tightened – refer to # TIGHTENING TORQUE
- wheel to frame & fork connections - this is critical for your safety. If you have axle bolts they should be tightened according to the manufacturer's specification. If you have a quick release make sure that it is set to the CLOSED position, and that there is a reasonable amount of resistance applied.
- steering system. The steering system includes: handle bar, stem, headset and fork. All elements should be connected firmly for riding safety. If you wish to make any adjustments yourself, be warned that incorrect setup can be very dangerous and we always advise you to seek professional advice for this! Check headset looseness, check stem to handlebar connection and stem to steertube connection. Check the connection between the handlebars and stem. Try pushing the handlebars up and down - there should be no movement between these two elements. Check the headset for eventual free play (stand next to the bicycle, apply the front brake and push forwards and backwards, there should be no play between the frame and fork). If any play is found contact your local bike shop. Do not attempt to make any adjustments yourself. If you are confident that you can do this yourself then adjust the steering system according to the headset/stem manufacturer instructions. All parts of the stem should be regularly checked for damage or cracks. If you find anything suspicious, contact an experienced bike mechanic immediately. A defective steering system can cause serious injury or death.
- bottom bracket connection to the frame. There should be no play between the frame and bottom bracket.
- the connection between the cranks and bottom bracket.
- the connection of the pedals to the cranks.
- chain line and chain tension.
- derailleur connection with the frame and make sure the function is proper before every ride.
- brake clamp to frame & fork connection.
- the general condition of rear shock and front fork (take special note of any cracks or deformations).
- shock / fork pressure (for air shocks). Refer to the # SUSPENSION SETTINGS and manufacturers instruction. Make sure the SAG doesn't exceed the reasonable limit. Make sure the air pressure does not exceed limits provided by shock / fork manufacturer
- clean rear shock & forks stanchion tubes.
- brake cables and their housing for kinks, rust, broken strands or frayed ends. If you notice any damage, you should ask a bicycle shop to replace the cables immediately. Damaged cables can seriously impede braking efficiency.

For information about servicing the shock and other parts like the headset mounted on the bike it is necessary to follow manufacturers instructions closely. The user manual for the additional parts are supplied in the frame box.

NS BIKES WARRANTY

- 1.** 7ANNA Group Sp. z o.o. (hereinafter on referred to as 7ANNA), manufacturer of NS BIKES, warrants all its new bicycles against defects in materials and workmanship for a period of 2 years, paints and decals for a period of 1 year (excluding natural wear and mechanical damage).
- 2.** If any defects are noticed in the bicycle, the Customer must stop using the product immediately and should report this to the dealer that sold it within 14 days. Using a damaged bicycle will void the warranty, lead to more extensive damage and may pose a serious hazard to the rider's health and life.
- 3.** The warranty period starts from the day when the product is purchased. This purchase must be documented with the cash receipt plus filled in warranty card (which includes the following information: date of purchase, serial number of frame, name of bike model, customer's name and name of dealer).
- 4.** The warranty applies only to the original owner and is not transferable.
- 5.** Claims under this warranty MUST be made through the dealer where the bicycle was purchased.
- 6.** The bicycle should be submitted to a mandatory checkup between the 3rd and 5th week from date of purchase (or after 50km of riding) to an authorised bicycle dealer. The confirmation of this checkup should be documented in the warranty card. Failure to do this will void the warranty.
- 7.** The warranty is valid only if the bicycle is sold by an authorised dealer in a ready-to-ride condition.
- 8.** General Warranty replacement & repairs information
 - A) If a certain part of the bicycle requires replacement under this warranty, component functionally equivalent to the originals might be provided. It may not always be possible to provide parts that are identical. If a warranty claim for a painted part is granted, but this part is not available in the requested colour (either due to discontinuation of the colour line or due to out of stock situation) 7ANNA reserves the right to replace these parts with equivalent products in currently available finish.
 - B) If a damaged product requires repair, 7Anna is not obliged to provide information about the repair process and its technological details. 7anna provides a warranty for products that have undergone repair.
 - C) If a repair requires a replacement of parts, that have been succeeded by a newer generation on the market, the company is not obliged to provide the updated version of components.
- 9.** The warranty does not cover wear and tear of tires, chains, brake pads, bearings, cogs and chainrings. Wheel truing, lubricating, brake adjustment, drive train adjustment and other typical maintenance procedures are not covered by the warranty and must be conducted by a professional bicycle workshop at the cost of the customer. The warranty does not cover: mechanical damages to paint and decals, discoloration of the paint resulting from long-term exposure to weather conditions or aggressive cleaning chemistry used. Problems that result from excessive loads occurring during extreme riding or from incorrect riding technique. The warranty does not cover: the cost of travel or shipment to and from an authorised dealer. Such costs, if any, shall be borne by the original owner.
- 10.** This warranty is void if: the warranty card is filled in incorrectly or incompletely, any modifications have been made to the bicycle by the customer, damage has been caused by external parts that have been incorrectly assembled on the bicycle, the product had not been used, maintained or repaired according to the manufacturer's instructions, the bicycle had been sold disassembled, or only partially assembled, the product was transferred to any third party.
- 11.** Directions on how to deal with warranty cases shall be provided by the distributor of the product in the region where it was purchased.
- 12.** The Crash Replacement Warranty covers damage resulting from crashing, or excessive loads generated by things like casing jumps or throwing the bike. Such damage won't be covered by the normal warranty, however 7ANNA offers the possibility to replace the product for 50% of the original suggested retail price under the Crash Replacement policy. The conditions for this are: Crash Replacement applies to components made by 7ANNA that are mounted in the bikes, all Rondo frames for a period of 1 YEAR from the date of purchase, 7ANNA reserves the right to deny Crash Replacement without further explanations, Crash Replacement does not apply to parts damaged in other situations than in riding (for example Crash Replacement will not cover a part that has been damaged during shipping), Crash Replacement does not apply to complete bikes. It only applies to components made by 7ANNA that are mounted in the bikes.
- 13.** This limited warranty does provide the original owner with certain legal rights and recourse and the original owner may possess other rights or recourse, depending on the state, jurisdiction, country, or province. Please be informed that this is a final statement of the 7ANNA and all the remedies available to the original owner are stated herein. 7ANNA does not allow or authorise any entity (including authorised dealers) to extend any other express or implied warranties on its behalf. An original owner agrees that 7ANNA's liability under this warranty under no circumstances shall be greater than the original purchase price. In no event shall 7ANNA be liable for incidental or consequential damages. All other remedies, obligations, liabilities, rights, warranties, express or implied, arising from law or otherwise, including (but not limited to) any claimed implied warranty of merchantability, any claimed implied warranty arising from course of performance, course of dealing or usage of trade, and any claimed implied warranty of fitness, are disclaimed by 7ANNA and waived by the original owner. Some states, jurisdictions, countries, and provinces do not allow some or all the limitations set forth herein, or the exclusion or limitation of incidental or consequential damages. If any provision is found unenforceable, only that provision shall be stricken, and all others shall apply.

PROOF OF PRUCHASE - WARRANTY CARD**FRAME MODEL:** _____**FRAME SERIAL NUMBER:** _____**SHOCK SERIAL NUMBER (IF ANY):** _____**PRICE:** _____**DATE OF PURCHASE:** _____

I cetrify that I am acquainted with the actual specification of the bicycle (this can be slightly different that that published by the distributor)

BUYER'S SIGNATURE: _____**DEALER'S SIGNATURE:** _____**DEALER'S STAMP**

manufactured by: 7ANNA GROUP sp. z o.o., ul. Potokowa 20d, 80-283 Gdańsk, POLAND

Always wear a helmet when riding. It will not make you deathproof, but will increase your chances to avoid serious injury if you crash (and you WILL crash). A broken leg can be fixed A broken brain cannot! Even if you see some of our riders without a helmet, it's only because they are complete idiots!



www.nsbikes.com
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