







### 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 nonly 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 of 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 loose 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 steen.

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.





The brand new Snabb platform was designed with the aim to optimise function, weight and reliability. Impressing the public with gimmicks, "patents" and "systems" was not on our list. So here it is - beautiful, light, strong and fast. We took into account that NS Bikes customers are usually tough, aggressive riders and expect our products to hold up to seasons of abuse. But at the same time we made sure that everyone, including our team riders will be happy with the performance on race day.

The Snabb comes in two versions, specifically designed for Enduro or Trail use. The Snabb E has 163mm of travel and is low, long and slack. It utilises a heavy duty tubeset that will hold up to the most aggressive DH runs. The Snabb T is best described as an aggressive trail bike with a slightly steeper head angle, 143mm of travel, modern geometry and tough but lightweight construction. Both bikes will rip up and down mountains, and the choice between the models is up to you to decide which character suits your style best.

Geometry: Both frames have very long front ends, but the compact chainstays keep the wheelbase at bay. The Snabb E comes with a slack 66 degree head angle and slightly longer chainstays to help keep the bike stable and higher descending speeds. It's designed to be used with a 160-170mm fork. The Snabb T will work best with a 140 to 160mm fork which give a respective 67.5 - 66.0 degree head angle.

Suspension and kinematics: the frames have a good amount of anti-squat into the horst-link design, perfect for 1X drivetrains which tend to produce more squatting than traditional 2X setups. After many prototypes we achieved our desired suspension curves which make for a fantastic ride that gives a feeling of support but at the same time allows full range of travel to be used. The 4-bar Horst link suspension has a significant amount of rearward axle movement which helps to absorb square faced bumps. The system, unlike most other designs on the market (including virtual pivot designs) it is immune to brake jack (i.e. the torque generated by the brakes will not cause the suspension to stiffen).

The Snabb E1, T1 and the aftermarket frames are equipped with the latest Rock Shox Monarch RT3 Debonair shocks with a linear spring curve and amazing small bump sensitivity. However the suspension characteristics are very neutral and the frames will also work well with most air shocks on the market.

### SPECS SNABB E

rear wheel travel: 163mm (6.5") recommended fork travel: 160-170mm AL6061-T6 + AL6066-T6 custom formed and butted tubes smooth 'double pass' welding in all critical areas rear shock: 216x63mm (5.5x2.5"), mounting hardware: front 22.2 x 8 mm, rear 22.2 x 8 mm internal or external cable guide option head tube: tapered 1.5 ZS (ID 44/56mm), headset included with frame. headtube length: S size: 110mm, M size: 120mm, L: 130mm fits forks with standard 1-1/8" or tapered 1.5 - 1-1/8" hub spacing 142 x 12mm. NS axle included IS-2000 disc brake mount, max rotor size: up to 200mm BB: threaded 73mm with ISCG-05 mounts biggest chainring: up to ~38t rear derailleur: removable hanger included front derailleur: low direct mount S3 seat post/clamp: 31.6mm / 34.9 stealth cable route in seat tube for dropper post maximum tire size recommended: 27.5" x 2.4" weight (w/o shock, w/o axle): ~3.05kg

note on sizing: we recommend the S size for riders up to 172cm, M size for 170 – 182cm and the L size for riders over 180cm.

Available with shocks: Rock Shox Monarch RT3 Debonair

## SPECS SNABB T

rear wheel travel: 142mm (5.5") recommended fork travel: 140-160mm AL6061-T6 + AL6066-T6 custom formed and butted tubes smooth 'double pass' welding in all critical areas rear shock: 200x57mm (7.9x2.24"), mounting hardware: front 22.2 x 8 mm, rear 22.2 x 8 mm internal or external cable guide option head tube: tapered 1.5 ZS (ID 44/56mm), headset included with frame. headtube length: S size: 110mm, M size: 120mm, L: 130mm fits forks with standard 1-1/8" or tapered 1.5 - 1-1/8" hub spacing 142 x 12mm. NS axle included IS-2000 disc brake mount, max rotor size: up to 200mm BB: threaded 73mm with ISCG-05 mounts biggest chainring: up to ~38t rear derailleur: removable hanger included front derailleur: low direct mount S3 seat post/clamp: 31.6mm / 34.9 stealth cable route in seat tube for dropper post maximum tire size recommended: 27.5" x 2.3" weight (w/o shock, w/o axle): ~2.9kg

note on sizing: we recommend the S size for riders up to 172cm, M size for 170 – 182cm and the L size for riders over 180cm.

Available with shocks: Rock Shox Monarch RT3 Debonair

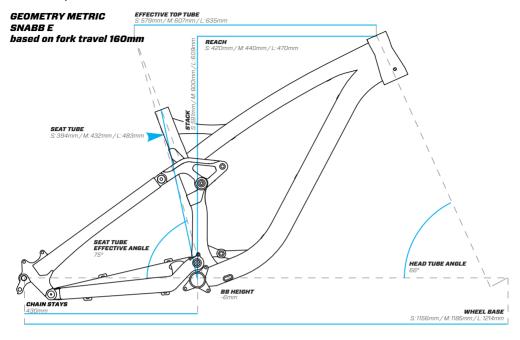


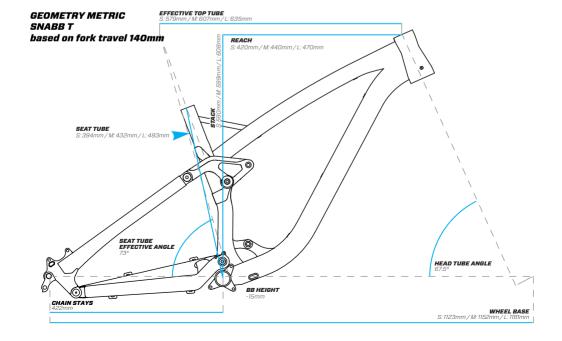
SNABB T

SNABB E

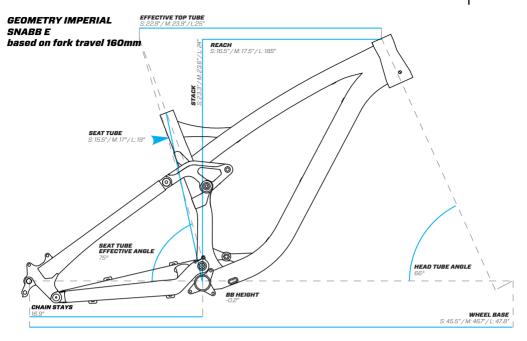


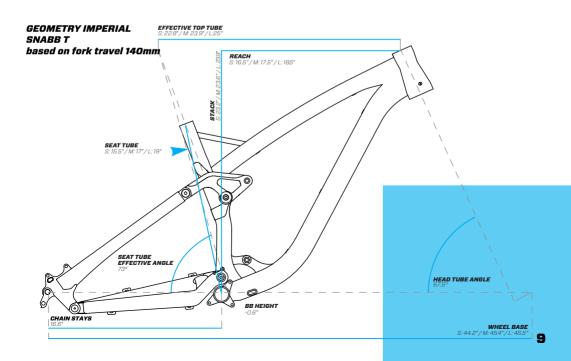






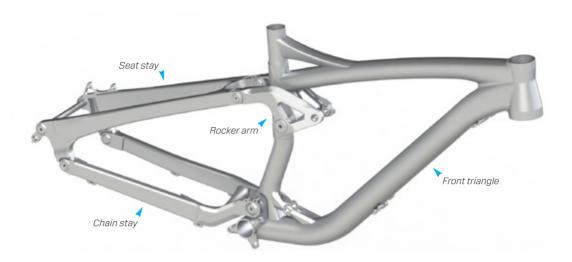






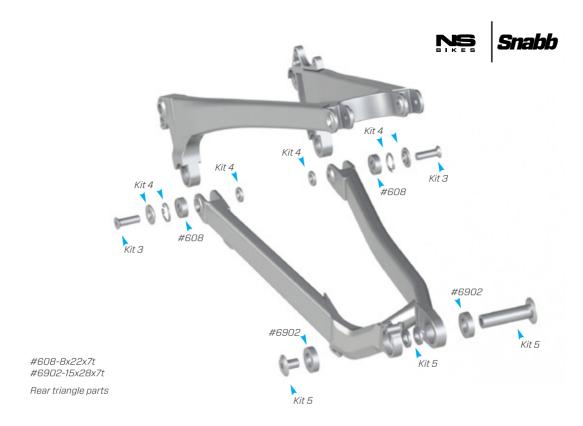


# EXPLODED VIEW



Frame main parts







#608-8x22x7t #6902-15x28x7t Rocker arm parts



#### REPLACEMENTS

#### PARTS:

- Snabb Rocker arm (2 sides)
- Snabb Kit1: Shock bolts & nuts (2 sets)
- Snabb Kit2: Rocker bolts & C-clips (2 sets)
- Snabb Kit3: Clevis bolts (2pcs set for 1 link)
- Snabb Kit4: Bearing hardware (4pcs set for 1 link)
- Snabb Kit5: Main pivot axle & bolt
- Snahh Kit6: NS 142mm axle
- Snabb Kit7: Derailleur hanger (w/bolt)

### ACCESORIES:

- Internal cable routing kit
- Neoprene CS protector
- Protective self-adhesive foil
- NS shock mounting hardware (fits: RS, MZ, FOX)
- headset (fits standard and taper steer tubes)
- removable cablequides

### 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 quidelines.

Typically, the Snabb 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 Snabb frame is compatible with 142x12 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 8mm allen key
- secure the axle with 2,5mm allen key bolt on the right side of the axle

## INSTRUCTION: GENERAL INFO

Fork: The Snabb E is designed to work with a single crown Enduro/FR forks with up to 180mm of ravel. The Snabb T is designed to work with a single crown Trail/Enduro forks with up to 160mm of travel. Use of different style of forks or forks with longer travel may result in frame failure, possible injury or even death.

Rear shock: The Snabb E is designed to work with 216x63mm (8.5x2.5") Enduro/FR shocks. The Snabb T is designed to work with 200x57mm (7.9x2.25") Trail/Enduro shocks. Use of different style of shocks or shocks with different length may result in frame failure, possible injury or even death.

Headset: The Snabb frames come with a tapered head tube with 1.5 ZS (bottom: 56mm ID\*/top: 44mm ID) and 110/120/130mm stack height. It fits forks with standard 1-1/8" or tapered 1.5 - 1-1/8" steerer tubes. The headset added to the frame works with both 11/8" and 1.5" steerers as there are two crown races included. The headset comes with two top-caps: 8mm and 15mm, to suit riders personal preferences. Additional headset spacers can be added between the headset and the stem/crown. Don't cut your steer-tube too low! The process of mounting headsets in the frame should be done by a qualified mechanic.

\*Please note that headsets with OD55 mm bottom cups or other internal headsets won't fit. Only headsets with a bottom cup with 56m OD will work with the Snabb frame. The use of a wrong type of headset can be dangerous & can damage the frame

BB: The frame is designed to work with 73mm bottom bracket size only and will accept conventional threaded, external BB standards such as SRAM GXP, Shimano BB73 or FSA MegaExo. Before installation make sure that the BB is clean, lightly greased, free of dirt and paint. The installation process should be carried out according to the BB manufacturers instructions.

Chainring sizes: The frame is designed to work with chainrings up to 36t. For Sram Narrow-Wide chainrings use up to 34t. Max chainring size is only an approximate reference It can vary depending on the manufacturer, model, cranks & BB used.

Biggest tire: The Snabb E will fit tires of maximum 27.5 x 2.35". The Snabb T will fit tires of maximum 27.5 x 2.3". Note that these numbers are for reference only as the size and shape of the tire can vary depending on the manufacturer and rim width.



Brake compatibility: The frame is disk brake compatible and it comes with an International Standard IS-2000 disc brake mount. it will fit discs up to 180mm.

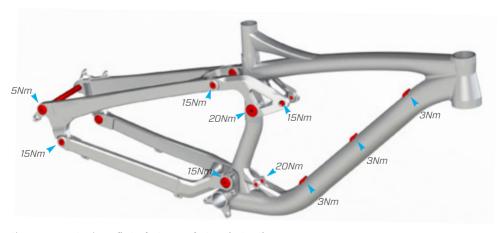
Seatpost & seatclamp: The frame works with 31.6mm seatposts. Cable routing for internal type dropper-posts avaible. Do not extend the seat post above the minimum insertion mark. Maximum seat insertion is 200mm for S, 240mm for M and 280mm for L size. Seatclamp ID must be around 35mm.

WARNING: It is important to make sure that the rear tire won't touch the saddle when suspension reaches it's maximum amount of travel. To check that please compress rear suspension fully without the spring installed onto the rear shock.

### 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 loose 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.

DO NOT lubricate any of the pivot points. High quality self lubricating Teflon has been applied in the factory. Tightening torque for various bolts on the frame:



For other components please first refer to manufacturer instructions.

### ACCESORIES:

The neoprene CS protector should be placed over the rear-derailleur cable to protect it and the frame from the chain.

Self-adhesive protective foil set might be used to additionally protect the down tube.

Please de-grease and clean the surface of the frame before applying the protective foil on your frame.



### **EXTERNAL CABLE ROUTING**

Cables should be attached on the upper side of the down tube into the shock cage (see Fig. 4, 5). From here the brake cable should go on the non-drive chainstay and up to the caliper, the rear derailleur cable should go on along the chainstay directly to the derailleur. The rear shock has to be disassembled for this operation.

### INTERNAL CABLE ROUTING

The Snabb frame has an option of running the cables inside the frame.

In order to avoid damage of the cables and the steertube we added a kit of protectors for internal routing (see Fig. 1): -Headtube groomets (2pcs)

-Steertube protectors (2pcs: each one working with specific standard:: 1& 1/8" or taper 1.5" to 1 & 1/8" steertubes)



Fig.1 Snabb frame internal cable routing kit

Cable installation procedure:

For this process you will need to disassemble the brake hose and/or derailleur cable and remove the fork from the head tube.

- 1/ Mount the rubber grommets in the head tube (Fig. 2). They will protect the cable being kinked on the head tube entrance.
- 2/Insert the cable and / or hose into the head tube. The cables coming from the left side of the handlebar should enter the right hole, and the cables coming from the right side should enter the left hole.
- 3 / As on Fig. 3 lead cables on each side of the steertube to the downtube. Use the correct steertube protector for your steertube



Fig. 2 Headtube rubber grommet protector



Fig 3. Internal cable rounting inside the headtube. Steertube protector.

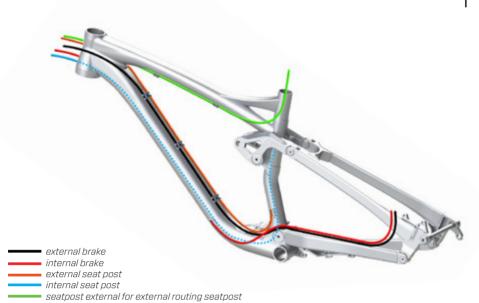


Fig. 4 Internal and external routing diagram [brake and seat post]





### 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.



## **BOX CONTENTS:**

- SNABB frame
- NS thru axle
- headset (2 crown races, 2 top caps)
- NS shock hardware
- internal cableguide kit
- neoprene CS protector
- self-adhesive protective foil for down tube
- tech manual





#### NS BIKES WARRANTY

- 1. 7ANNA sp. z o.o. sp. k. (hereinafter on referred to as 7ANNA), manufacturer of NS Bikes, warrants all new full suspension frames for a period of 3 years.
- 2. If any defects are noticed in the product, the Customer must stop using it immediately and should report this to the dealer that sold it within 14 days. Using a damaged product 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 for all products plus a filled in warranty card for frames (which includes the following information: date of purchase, serial number of frame, customers name and name of dealer).
- 4. The warranty applies only to the original owner and is not transferable.
- 5. Claims under this warranty should be made through the dealer where the product was purchased.
- 6. The warranty is valid only if the component is sold by an authorized dealer and assembled by a qualified bicycle mechanic.
- 7. The warranty does not cover:
- normal wear and tear
- bearings
- labour charges for replacing parts,
- paint and decals,
- problems that result from excessive loads occurring during extreme riding or from bad riding technique,
- problems that result from incorrect assembly or installation.
- cost of travel or shipment to and from an authorized dealer such cost, if any, shall be borne by the original owner

### 8. This warranty is void if:

- the warranty card is filled in incorrectly or incompletely.
- any modifications have been made to the product by the customer,
- damage has been caused by external parts that have been incorrectly assembled on the frame,
- the product had not been used, maintained or repaired according the manufacturers instructions,
- the product was transferred to any third party.
- 9. Directions on how to deal with warranty cases shall be provided by the distributor of the product in the region where it was purchased.
- 10. 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 NS full suspension frames for a period of 3 years 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 only applies to components made by 7ANNA.
- 11. 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 of 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.



Frame model	:	PROOF OF PURCHASE - WARRANTY CARD
Frame serial number	:	
Shock serial number (if any)	:	
Price	:	
Date of purchase	:	
I certify that I am acquainted w	vith the actual specification of the	Dealer's stamp
bicycle (this can be slightly different than that published by the distributor).		
Buyer's signature	:	NS
Dealer's signature	:	BIKES

manufactured by: 7anna sp. z o.o. sp. k., Raciborskiego 123, 80-215 Gdansk, POLAND tel +48 520 18 04 / mobile + 48 533 01 90 80

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!



