MEGA MK4 CARBON BIKE MANUAL 4 TIMES EWS OVERALL WINNING BIKE

\*NUKEPROO

# CONGRATULATIONS!

Congratulations on your Mega purchase and welcome to the Nukeproof family! You will soon be swinging your leg over a 4x EWS overall winning machine, ridden by the legendary Sam Hill.

This manual will help you get familiar with your Mega and a helpful resource for maintaining and setting up your bike. Please read this manual carefully to help maintain and enjoy your Mega to its fullest. If you have any doubts or queries with the set-up, use, or maintenance of your Mega, please consult with an authorised dealer. To find the full dealer listing, please visit <u>www.nukeproof.com</u>.

Please ensure you read the General Bike Manual as well before use of your new Mega.

We hope you enjoy the ride!

# CONTENTS

- SECTION 1 UNBOXING BIKE
- SECTION 2 ASSEMBLING BIKE
- SECTION 3 SUSPENSION
- SECTION 4 MAINTENANCE AND CARE
- SECTION 5 SPECIFICATIONS/SIZING/GEOMETRY/ASSEMBLY/SPARES
- SECTION 6 WARNINGS
- SECTION 7 WARRANTY

# 1 - UNBOXING YOUR NEW MEGA

For consumer-direct customers: your new Mega is delivered in a specifically-designed bike box and wrapped in protective material. Your new bike will need minor assembly to complete. It will come with a number of Nukeproof tubeless valves and reflectors; additional items will depend on the dealer you have purchased the bike from and the specific components installed to your bike. Some Nukeproof dealers will provide pedals and basic tools with the bike on delivery, typically a pedal wrench and hex key set.

### PACKAGING ON ARRIVAL



Bike will arrive in large carboard box, box size will depend on where you bought your bike.



Remove cardboard front wheel support from box – this will now allow you to remove the bike.



Open end of box carefully. Remove parts box and set aside.



Carefully pull bike out of box. If possible, get someone to hold the box as you lift the bike. If your box has been stapled, please remove staples to prevent paint damage.





The bike will be carefully wrapped before shipping to prevent any damage in transit. If any damage is found, report directly to your dealer. Carefully remove protective wrapping. Please dispose of it appropriately and recycle where possible.



Parts content will vary with dealer, but at a minimum you will get tubeless valves, reflectors, bell, component manuals, fork tokens depending on the make and model of fork, and spare cable-ties for cable routing. Basic tools for assembling bike and pedals are supplied at the discretion of the dealer.

# 2 - ASSEMBLING YOUR MEGA

This section details how to get your Mega ready for setting up and riding out of the box. This will be relevant for consumer-direct bikes – generally the following will be done already if purchased and collected through a local authorised Nukeproof dealer.

# FIT BARS





Unscrew face plate bolts from stem with a 4mm Place bars to stem and align faceplate. hex key, remove stem face plate and bolts, set aside safely for installing later.



Screw the bolts to the stem, start with the top bolts and move to the bottom bolts. Ensure bolt torque is evenly spread around all four bolts before fully tightening. Reference the torque details on the stem.



Adjust the roll of the bars at this point to your personal preference. Ensure the bars are still centered when adjusting.

Once you have adjusted the roll of your bars, the controls can be changed to suit rider preference.





The angles of the brakes, shifter, dropper lever can be changed to your preference.

The controls can be moved laterally along the bars as well to suit rider preference and suit the position of your hands.

All Nukeproof pedals are standard 9/16 x 20BSA threading so are compatible with all modern cranks.

### **Tools Required**

- 8mm Hex Key (All pedals) Or 15mm Spanner (Alloy pedals only)
- Torque Wrench
- Grease

### How to determine the difference between the left and right pedal

This step is very important, failure to install the pedals on the correct side of the bike will cause irreparable damage your crank and pedal.

### Alloy pedals

Alloy pedal axles are marked "L" indicating the left pedal (non-driveside) and "R" indicating the right pedal (drive-side).



Left Pedal

Right Pedal

## Plastic Pedals

Plastic pedal bodies have an "L" moulded in the body indicating the left pedal (non-driveside) and "R" moulded indicating the right pedal (driveside).

The axles are also different, the left axle has a ring indented around the lip of the axle whereas the right does not.









Right Pedal

MEGA MK4 CARBON BIKE MANUAL 2023 | 9



1. Check the threads on your crankarm are clean and have no damage.



3. Line the pedal up to the driveside crank, place your 8mm hex key through the driveside crank and into the back of the pedal axle. Start to turn the hex key in a clockwise direction (as you look at the crank towards the handlebars). There should be no resistance as you turn the hex key, if there is resistance STOP immediately and check you are fitting the correct pedal and the threads are correctly aligned between the axle and crank. Do not force the pedal into the crank.



2. Take your RIGHT pedal and grease the axle.



4. Take your LEFT pedal and grease the axle.





5. Line the pedal up to the non-driveside crank, place your 8mm hex key through the nondriveside crank and into the back of the pedal axle. Start to turn the hex key in a anticlockwise Your pedals are now fitted and safe to ride. direction (as you look at the crank towards the handlebars). There should be no resistance as you turn the hex key, if there is resistance STOP immediately and check you are fitting the correct pedal and the threads are correctly aligned between the axle and crank. Do not force the pedal into the crank.

6. With both pedals now on the crank arms, tighten to 30Nm with a torque wrench.

Once you have installed pedals to your bike, you can accurately adjust your saddle height and angle. If you are experiencing roll in your hips when at full leg stretch, the saddle is too high. The ideal saddle height will put your leg at approximately 30 degrees. This may take some trial and improvement to get exactly right for you. Please ensure when adjusting the saddle height, the dropper cable does not get snagged. If the post is raised and the dropper stops locking into position and free to move without activating the lever, there is tension on the dropper cable. Pull the outer cable through the frame to alleviate this.

#### ADJUST SADDLE HEIGHT



To adjust the height of the saddle, loosen the seat clamp bolt with a 5mm hex key, adjust to correct height, and then retighten.



To get a starting point for your saddle height, stand beside your bike and adjust the height to your hip bone.



Sit on the bike with assistance from another person or leaning against a secure structure. Pedal to the 6 o'clock position to identify if the saddle height is suitable and you can begin to adjust to suit your preference. Do not exceed the minimum insertion depth marked on the post.

#### ANGLE





The saddle angle can be adjusted by loosening and tightening the saddle rail clamp bolts with a 5mm hex key. Saddle angle is personal preference and subjective to each rider. A good starting point is to have the saddle at horizontal and adjust as you spend more time on your bike.

To lower the nose of the saddle, loosen the rear bolt and tighten the front bolt. To raise the nose of the saddle, loosen the front bolt and tighten the rear bolt. Please ensure both bolts are tight once adjustment has been made. Please ensure the bolts are not loosened too much as the clamp parts may become unseated and fall out.

#### POSITION

The saddle can be moved forward and backwards to suit the rider preference. To adjust the saddle, position the two clamp bolts need loosened. Start in the middle of the adjustment range and with time on the bike move forward or backwards to suit.



Ensure the saddle stays within the adjustment range of the rails to avoid damage.

## ADJUSTING STEM HEIGHT

The stem height can be made higher or lower to suit rider preference. The headset spacers can be placed below or above the stem. Do not add too many additional spacers under the stem, as both stem bolts must be clamping fork steerer. If you are unsure on this process, please consult with your authorised Nukeproof dealer to complete the work.



Loosen and remove top cap bolt and cover with a 5mm hex key.



Remove stem and place spacers to your preference – in this example, the two spacers below the stem raise height. Both spacers can be placed above the stem to lower height if needed.

Loosen both stem steerer clamp bolts with a 4mm hex key.



Install stem to steerer, replace top cap and bolt and tighten with 5mm hex key. If steering becomes stiff, top cap bolt is overtightened.



Straighten stem and retighten stem steerer clamp bolts with a 4mm hex key.

All of our adult complete bike's are supplied with tubeless tape installed, tubeless valves and tubeless compatible tyres to make tubeless conversation fast and simple. This guide will take you through the steps to make your bike tubeless.

### **Items Required**

- Tubeless pump
- · Tubeless Sealant
- · Tubeless valves
- Tools to remove wheels (Usually 5mm / 6mm hex for thru axles)
- Tyre levers (not essential with good tyre fitting technique)



1. Remove your wheel from the bike.



3. Loosen presta value nut and push to deflate the inner tube.



2. Remove valve cap



4. When the tube is deflated, remove the nut holding the valve in place.



5. Unseat tyre by pushing the bead to the centre of the rim. Do this on both sides of the tyre



7. Push the valve through the rim and remove the inner tube.



6. Remove one side of the tyre by taking the bead over the rim.



8. Get your tubeless valve and get it ready to install. At this point also double check that the tubeless tape is still correctly stuck down and not damaged. If it has been damaged the rim will need retaped.



10. Put the o-ring on the valve.



9. Push the valve through the valve hole.



11. Fit the tubeless valve nut and tighten.



13. Add tubeless sealant as per sealant manufacturer recommended amount.



15. Connect your tubeless pump to the valve.



12. Start to refit the tyre, leave 1/4 open.



14. Finish fitting tyre. Make sure the bead is pushed to the centre of the rim as this will make it much easier.



16. Charge the tubeless pump cannister and then release air blast.



17. Pump tyre until it is correctly seated. There is a moulded line in most tyres which must be visible and uniform the whole way round. the tyre



18. Reinstall valve cap.



19. Lift your wheel and shake it to get the sealant all round the tyre.

20. Refit your wheel to the bike following the manufacturer's instructions.

### A couple of points to note:

It can take a couple of rides for the sealant to get fully around the tyre settle. Don't be alarmed if you need to top up the air pressure a couple of times between rides. The tyre shouldn't lose pressure during your ride.

Some tyres will seep sealant from the sidewalls. This should settle after the tyre has been used and generally happens on cheaper sealants so we do recommend using a good quality sealant

If you have an air leak at the rim, it will generally appear to happen at the valve but is most likely to be an issue with the tape. If the air is escaping at the valve then its getting past the tape somewhere and you will need to check your tape is not damaged.

\*In some cases, if you have mail ordered, your chosen authorised Nukeproof Dealer may have shipped the bike without wheels installed. Please reference the following to install wheels with thru-axles to your bike.

- · Nukeproof bikes typically will use thru-axles.
- Insert the wheels to the fork and frame dropouts, ensure the rotors are aligned with the calipers to avoid damage when installing. For the rear wheel please ensure the gears are in the smallest sprocket and pull the derailleur rearwards to give more room for install. Ensure the hub endcaps are seated correctly in the dropouts for a secure fit.
- Apply a little grease to the axle and threads and push through the dropouts and hubs until axle cannot be pushed further.
- Tighten the thru-axle clockwise to the Nm found on the axle. If no Nm is displayed, please consult with your Nukeproof Dealer.
- If the thru-axle is stiff when installing, it may be cross-threading. Stop immediately and check seating of hubs and dropouts. Any further concerns, please consult with your Nukeproof Dealer.
- If the forks have pinch bolt dropouts, reference the fork manufacturer guides for correct installation.
- If the thru-axles have quick release levers, please reference the axles manufacturer's instructions for correct install.
- Ensure the correct tools are used when fitting and removing thru-axles. If you are unsure, please consult with your Nukeproof Dealers.
- · Ensure the thru-axles are checked before and after each ride to ensure they are tight.
- Riding with loose thru-axles can result in loss of control, injury and death.
- If you are unsure on fitting wheels with thru-axles, please consult with your Nukeproof Dealer.



Your bike may be delivered without the front wheel installed.



Tighten axle fully to fork manufacturers torque specification with a 6mm hex torque wrench.



Insert front wheel and seat hub axle endcaps with fork dropouts, aligning disc with brake caliper and inserting front thru-axle.



Your bike may be delivered without the rear wheel installed.



Put gears into smallest sprocket position and unlock derailleur clutch mechanism. Insert rear wheel and seat hub axle endcaps with frame dropouts, aligning disc with brake caliper and align chain and cassette.





Insert axle fully to frame and lightly tighten with a 5mm hex key

Tighten rear axle fully to 10NM with 5mm hex torque wrench and engage derailleur clutch.



# MEGA CARBON FRAME FEATURES

Now that your bike is assembled, you can familiarise yourself with the following frame features on your Mega Carbon.

# Frame Design Details:

- 1. Full UD Carbon Fibre T700/800 monocoque frame
- 2. Seat tube designed to allow maximum seat post insertion
- 3. User friendly cable routing. Tube in Tube Internally piped cable routing (Carbon frame only)
- 4. UK PROOF MUD/TYRE CLEARANCE ON SS/CS.
- 5. MAX TYRE SIZE: 2.75"=2.6" / 29"=2.5"
- 6. Boost 148mm hub spacing



# Frame Design Details:

- 1. Collet Main Pivot for stiffness and security
- 2. Sram UDH Gear Hanger
- 3. Sealed bearings used throughout for increased durability
- 4. Gear accessory mount on underside of TT
- 5. Threaded 73mm Bottom Bracket
- 6. 750mm Water bottle now fits inside the front triangle
- 7. 3D Contoured Rubber frame protection for SS/CS/DT to protect and silence your ride
- 8. Carbon frames come with clear paint protection kit to protect your paintwork



# GETTING FAMILIAR WITH YOUR BIKES CONTROLS ONCE ASSEMBLED -

Nukeproof adult bikes are all equipped with powerful modern disc brake systems. Disc brake systems offer exceptional control and power. Please note, power will improve with some use once the pads and discs have bedded in. Ensure you familiarise which lever operates the front or rear brakes. Your dealer will set the brakes to what is typically used in your country, but please check lever orientation or get the brakes set to your preference by your dealer. Adjust the position of the brake levers so the lever is in a comfortable position and easy to pull. This is shown in the assembly guide. Brake performance will vary with riding terrain and weather conditions, so familiarise yourself with your brake's performance in different conditions.

The gears on the bike are operated by shifter/s on the handlebars, moving through the range of gears by clicking up and down the shifter paddles will help with pedalling in different terrains. Gear shifter position can also be adjusted, as shown in the set-up guide. Ensure the shifter/s are in a position they are easily accessible and use. Ensure when shifting you are pedalling smoothly forward, do not shift and pedal backwards. Pedalling backwards can damage the gears and result in an accident.

When initially getting familiar with your brakes and gears, please ride in a familiar location in good conditions while wearing a helmet. If you experience any issues with your brakes and gears, immediately stop riding and consult with an authorised Nukeproof dealer for maintenance or repair.

# 3 - SUSPENSION

This section will help you set up, understand and maintain your Mega's suspension. If you have any doubts, please consult with an authorised Nukeproof Dealer.

The MK4 Mega features a traditional 4-Bar Horst link layout but an all new kinematic compared to previous Mega models. The MK4 has a progression of 17% with a leverage ratio of 2.6. Designed to be more subtle off the top, whilst remaining supportive and progressive though the rest of the range. It has a higher average ratio to improve sensitivity and reduce the forces required for breakaway movement.

The MK4 has stronger mid-stroke support for better cornering, pumping and pedalling performance. Another key feature is a reduced overall progression from sag, allowing the MK4 to be much more tuneable for the rider with the use of volume spacers.

The new kinematic is designed to have higher levels of anti-squat for climbing gears, but this reduces as you drop down the cassette. The result is a bike that is more confidence-inspiring everywhere on the hill. It behaves itself on the climbs but can still be thrashed through the roughest and most technical terrain on the way back down.

To get the most out of your Mega you will need to set up and maintain your suspension. Suspension maintenance is specialist work – we recommend you use official service centres and observe regular service intervals as detailed in the manufacturer's user guides. Before your first ride, the suspension will need to be adjusted. The recommended sag for the Mega is 30-35%, seated with riding kit on. You will need a shock pump to set your sag. The rebound and compression settings are subjective to terrain, riding style and rider preference. Adjust the settings as you ride to find what works best for you.

- Before setting up your suspension, please read the full manual for your shock and fork. FOX
  provides a QR code on their 2022 onwards forks and shocks. Scan the code and all specific
  tuning and service guides will be provided. SRAM includes set-up guides for forks and
  shocks in one document. Rockshox service documents are model specific and linked below.
- For our limited edition Sprung series frames with EXT, FAST and PUSH shocks, set-up guides are available on <u>Nukeproof Technical Support</u> page.
- Remember when setting your rear shock, the lock-out is in the off position.



Always set your sag when the bike is on a level surface and ensure you have something to steady yourself with or a person to hold the handlebars while you sit on the bike.



Please make incremental suspension set-up changes to ensure the bike riding characteristics are predictable and controllable. Set the rebound and compression adjusters at mid-point and add and remove clicks to suit.

### MANUFACTURER ONLINE SET-UP AND SERVICE GUIDES



FOX Set-Up & Service Guides

Rockshox Set-Up & Service Guides



Always set your sag before rebound and compression is adjusted.

# SHOCK SIZE / TUNE / UPGRADING

If you wish to change your shock for an upgrade or a different model to your preference, please consult with your suspension supplier to ensure the shock is the correct size and the tune suits the kinematics of the Mega. The following details will help with fitting a new shock and ensuring the tune is suitable.

## SIZE

29/297/275 - 230x62.5mm Bearing End (230x65mm shock can be used, but stroke will need a 2.5mm spacer)

**Note:** a standard eyelet shock without a bearing end can be used with the correct hardware size. Please ensure the hardware matches the shock and the required size for the frame. If a bearing end shock can be sourced, this would be preferential to ensure the smoothest suspension action.

#### HARDWARE

Front – 25x8mm / Rear 30x8mm

#### TUNE

When purchasing a new shock, the provider will need a tune to suit the Mega suspension kinematics, the following charts provided will need referenced by your suspension provider.

The MK4 kinematics has been updated to work with lower forces before sag and higher forces after sag. This increases sensitivity from zero travel for better small bump absorption and traction and still ensures more mid stroke support for aggressive riding and hard hits. The MK4 has an excellent balance between small bump, traction, stability, and hard hits with predictable feel throughout the full travel range.



# ANTI-SQUAT AND ANTI-RISE

The MK4 Mega has been designed for improved anti-squat with good mid-stroke support – this is the winning combination for climbing traction. However, anti-squat should never prevent suspension from working well over rough terrain. Therefore, it is designed with higher levels of anti-squat in climbing gears (however still relatively low) that drops off in descending gears to give you a bike that behaves itself on the climbs yet provides ultimate suspension performance on the way back down. Climbing gear 32/50T Anti-Squat is 102%, in descending gear 32/10T Anti-Squat reduces to 65%.

The MK4 is also slightly more active under braking with lower anti-rise figures compared to previous Mega models. This helps to keep good traction when heavy on the brakes in rough terrain.



The fork length also detailed as axle to crown (A-C) cannot be exceeded. Maximum A-C for the Mega is 596mm. Using a fork that exceeds the A-C may lead to frame failure and injury. Using a longer axle to crown fork will void warranty. The bike is designed with a 170mm in mind, 180mm can be used if the A-C is not exceeded.

# 4 - MAINTENANCE AND CARE, TO KEEP YOUR MEGA RUNNING PROPER

Nukeproof bikes and components are designed to be hardwearing and corrosive resistant, but to ensure the bike looks and runs its best, some general maintenance will be required. This will prolong the lifespan of components and ensure your safety. If you have any doubts, please consult with the dealer you purchased the bike from or any authorised Nukeproof Dealer.

### BEFORE YOU RIDE

Please inspect your bike before each ride to ensure your bike is in full working order. If there are any issues you cannot resolve yourself, please consult with a local reputable mechanic and escalate to an authorised Nukeproof dealer if needed. Any small concern with your bike could develop into a further issue and ruin your ride or become a safety concern. If you have any doubts, please seek advice from your dealer.

### FRAME AND FORK

Please do a visual check of your frame and fork. If you see any cracks or sharp dents, please contact your dealer immediately for inspection and do not ride your bike. If you hear any unusual noises or creaks, please have your bike inspected by a reputable mechanic and escalate to your dealer if needed.

Check all pivot points and bearings for signs of play. If any play is detected, please check the pivot bolts for the correct torque – this process is detailed within this document. If all torques are correct and play is still present, your frame bearings may have perished. This document details the bearings required for the frame. Please use a reputable mechanic or authorised dealer to replace.

### DRIVETRAIN AND BRAKES

Please ensure your drivetrain is cleaned and lubricated often to avoid premature wear. Any unusual noises from your drivetrain would suggest gear indexing needs adjustment If parts have perished, become loose or damaged, please have the bike inspected. Gear cables are perishable parts and will need changed periodically depending on use and riding conditions. The brakes should be inspected often for pad and rotor wear and changed when required. Ensure the brakes are operating correctly before use and ensure there is no play in the calipers and rotors. If play is found, please torque fitting bolts to manufacturers respective guidelines. Brakes will need to be bled occasionally– how often is dependent on conditions, riding style, and terrain.

# WHEELS AND TYRES

Check wheel axles before each ride to ensure they are not loose – if loose, tighten to torque specification. Check wheels for bearing wear/play, damage, loose spokes, and trueness. Wheel bearings are a perishable part and will need changed occasionally, this can be identified by rough/ noisy bearings, play, and drag in the freehub. Please consult with a mechanic or authorised Nukeproof dealer to replace bearings and ensure spoke tension. If the rim is damaged/cracked, please refrain from riding your bike and consult with an authorised dealer for a replacement. Tyres will need checked for damage and wear. Cuts in the tread and sidewalls can lead to a tyre failure and will need to be replaced. Ensure tyre pressure is within range to the manufacturer specification found on the sidewall.

### HEADSET

If there is play from the headset when the front brake is applied, this is a sign the bearings have perished, or an adjustment is required. To adjust the headset, loosen the two stem steerer bolts, tighten the top cap bolt and then retighten the stem steerer bolts again. This will pull the headset together and remove play. If the play continues, please contact an authorised dealer for replacement bearings or an inspection. Please note if the headset is overtightened, the steering may become stiff.



#### GENERAL

Pre-ride, check the following: check all bolts are tight and comply with the torque values detailed in this document, check all 3rd party components installed to your bike are installed according to their respective manufacturer's instructions, check that suspension is correct pressure and within range of manufacturer's recommendations and tyres are within pressure range of manufacturers detail found on the sidewall. All bearings are perishable parts and wheels/headset/bottom bracket/ frame bearings will need checked and changed periodically. If you think a bearing has perished prematurely, please consult with your dealer for warranty inspection.

Cleaning your bike regularly will help maintain its appearance as well as prolonging the life of wear and tear parts. Allowing dirt to collect on the bike will reduce the lifespan of components, increase chances of unnecessary damage, and make visual inspection difficult. We recommend biodegradable cleaning products and do not use a pressure washer. Using a pressurised washer can cause water ingress, damage components and flush out bearing/pivot grease. Please lubricate your drivetrain after cleaning, wiping off any excess lubricant. Avoid any lubricants contaminating brakes pads and rotors.

### SERVICE LIFE

Your bike is subject to wear and tear, normal for all mechanical components. The service life is subjective to several factors: materials, design, rider weight, how often the bike is used, aggressiveness of the riding, terrain, environment, and maintenance. Regular cleaning, maintenance and periodical inspection by a reputable mechanic will prolong the service life of your bike and its installed components.

### PAINT REPAIR

If you chip or scratch your frame paint, please contact info@nukeproof.com for details on paint repair.

#### FRAME NUMBER

The frame number is found on the underside of the bottom bracket shell. Please take and note of this number and images to ensure your bike can be identified if lost, stolen and for warranty.



All available Mega frame spares and Nukeproof component spare parts are available through any authorised dealer, first port of call will be your dealer, but any authorised Nukeproof dealer can assist. 3rd party components and spares can be found through respective dealer networks and your Nukeproof dealer.

# > Nukeproof Dealers

> Shimano Dealers

> SRAM/RockShox

In the unlikely case you need to make a warranty claim and damage is caused by poor maintenance and care, the warranty claim may be rejected. If you have any doubt on how to maintain and care for your new Mega, please consult with your dealer. In the event of a crash, please inspect your bike and if you have any concerns, please seek advice from your dealer.

# 5 - SPECIFICATIONS/SIZING/GEOMETRY/ASSEMBLY/SPARES

The following section has exploded diagrams and specifications for 275/297/290 Mega MK4 Carbon. It is essential you reference diagrams and specifications for parts compatibility, maintenance, and sizing of bike. If there is any doubt, please consult with an authorised *Nukeproof Dealer*.

#### EXPLODED DIAGRAM



Mega 275 Carbon	
Material	Ultra Strong T700/800 Monocoque Carbon Fibre
Fork Travel	170mm (RS 180mm)
Axle to Crown	562mm (RS 572mm)
Fork Offset	46mm
Shock Travel	165mm
Wheels Size	27.5"
Max Tyre Size	2.5"
Shock Size	230x65mm
Shock Hardware F	25x8mm
Shock Hardware R	30x8mm
Sizing	S/M/ML/L/XL
Headtube	44-56mm Tapered Semi-Integrated
Headset	ZS44-28.6 - T2 / ZS56/40 - B8
Bearings Required	2x NP-5 (6902 2RS), 4x NP-7 (6800 2RS), 4x NP-9 (61802-2RS1 EXTENDED)
Seatpost	31.6mm (Internal Routing for Dropper Seatpost)
Seat Clamp	36.4mm
BB	Threaded 73mm BSA
Rear Hub	Boost 148x12mm
Rear Axle	Sram Maxle Stealth M12x1.75 180mm
Chain Guide	ISCG05
Brake Mount	160mm Direct Post
Protection	3D Contoured Rubber Frame Protection for DT/SS/CS

#### Mega 290 Carbon

Material	Ultra Strong T700/800 Monocoque Carbon Fibre
Fork Travel	170mm (RS 180mm)
Axle to Crown	582mm (RS 591mm)
Fork Offset	44mm
Shock Travel	160mm
Wheels Size	29"
Max Tyre Size	2.5"
Shock Size	230x62.5mm
Shock Hardware F	25x8mm
Shock Hardware R	30x8mm
Sizing	M/L/XL
Headtube	44-56mm Tapered Semi-Integrated
Headset	ZS44-28.6 - T2 / ZS56/40 - B8
Bearings Required	2x NP-5 (6902 2RS), 4x NP-7 (6800 2RS), 4x NP-9 (61802-2RS1 EXTENDED)
Seatpost	31.6mm (Internal Routing for Dropper Seatpost)
Seat Clamp	36.4mm
вв	Threaded 73mm BSA
Rear Hub	Boost 148x12mm
Rear Axle	Sram Maxle Stealth M12x1.75 180mm
Chain Guide	ISCG05
Brake Mount	160mm Direct Post
Protection	3D Contoured Rubber Frame Protection for DT/SS/CS

# 275 Frame Only



		SMALL	MEDIUM	LARGE	X-LARGE	X X - L A R G E
A	REACH	435	460	480	500	520
В	STACK	591.48	600.47	618.44	627.43	636.42
С	EFFECTIVE TOP TUBE LENGTH	566.13	593.12	611.45	633.36	655.27
D	SEATTUBE LENGTH	380	410	440	470	500
E	EFFECTIVE SEATTUBE ANGLE	77.5"	77.5"	78'	78'	78"
F	SEATTUBE ANGLE (ACTUAL)	71°	71°	71.5°	71.5"	71.5"
G	SADDLE HEIGHT AT SADDLE OFFSET	650	700	750	800	850
Н	SADDLE OFFSET AT SADDLE HEIGHT	154.84	170.16	178.28	193.18	208.08
1	HEADTUBE LENGTH	100	110	130	140	150
1	HEADTUBE ANGLE	64-	64"	64°	64°	64"
K	CHAINSTAY LENGTH	435	435	435	435	435
L	FRONT CENTRE	759.77	789.16	817.92	842.31	866.69
М	WHEELBASE	1194.66	1224.04	1252.81	1277.19	1301.58
N	BOTTOM BRACKET DROP	10	10	10	10	10
0	BOTTOM BRACKET HEIGHT	350	350	350	350	350
Р	STAND OVER HEIGHT ALLOY/ STAND OVER HEIGHT CARBON	725.49/728.77	724.6/728.28	726.15/726.9	728.82/728.13	733.51/735.61
0	FORK TRAVEL	170	170	170	170	170
R	TRAIL	134.42	134.42	134.42	134.42	134.42
S	FORK OFFSET	37	37	37	37	37
T	AXLE TO CROWN	562	562	562	562	562
U	MAXIMUM SEATPOST INSERT (ALLOY/CARBON)	216/250	245/250	270/255	301/274	330/293

S 📃	150CW/5' 2' + 159CW/5' 7'
м	1870W/S161 - 1770W/S1101
L	175CW/5" 9" - 185CW/6"
XL	180CW/6'- 190CW/6' 4"
XXL	1910W/6* 3* - 2810W/6* 7*

# 297 Frame Only



	SMALL	MEDIUM	LARGE
(A) REACH	430	455	475
(B) STACK	621.16	621.16	639.22
(C) EFFECTIVE TOP TUBE LENGTH	567.71	592.71	610.87
(D) SEATTUBE LENGTH	380	410	440
(E) EFFECTIVE SEATTUBE ANGLE	77.5"	77.5"	78'
(F) SEATTUBE ANGLE (ACTUAL)	71"	71'	71.5"
(G) SADDLE HEIGHT AT SADDLE OFFSET	650	700	750
(H) SADDLE OFFSET AT SADDLE HEIGHT	142.22	158.59	166.66
(I) HEADTUBE LENGTH	100	100	120
(J] HEADTUBE ANGLE	64'	64'	64'
(K) CHAINSTAY LENGTH	435	435	435
(L) FRONT CENTRE	758.5	783.5	812.11
(M) WHEELBASE	1192.48	1217.48	1246.09
(N) BOTTOM BRACKET DROP	30/10	30/10	30/10
(O) BOTTOM BRACKET HEIGHT	345	345	345
(P) STAND OVER HEIGHT	721.75/725.16	720.28/724.41	721.3/722.92
(Q) FORK TRAVEL	170	170	170
(R) TRAIL	132.33	132.33	132.33
(S) FORK OFFSET	42	42	42
(T) AXLE TO GROWN	584	584	584
(U) MAXIMUM SEATPOST INSERT	250 M M	250 M M	255MM

#### 297

s	159CM/5'2" - 169CM/5'7"			
М		167CM/5'6" - 177CM/5'10"		
ι			175CM/5'9" - 185CM/6'	

# 290 Frame Only



		SMALL	MEDIUM	LARGE	X-LARGE	XX-LARGE
Α	REACH	430	455	475	495	515
В	STACK	621.16	621.16	639.22	648.24	657.27
C	EFFECTIVE TOP TUBE LENGTH	647.71	592.71	610.87	632.79	654.71
D	SEATTUBE LENGTH	380	410	440	470	500
E	EFFECTIVE SEATTUBE ANGLE	77.5°	77.5	78°	78.	78'
F	SEATTUBE ANGLE (ACTUAL)	71°	71°	71.5*	71.5*	71.5°
G	SADDLE HEIGHT AT SADDLE OFFSET	650	700	750	800	850
Н	SADDLE OFFSET AT SADDLE HEIGHT	142.22	158.59	166.66	181.58	196.49
1	HEADTUBE LENGTH	100	100	120	130	140
J	HEADTUBE ANGLE	64	64	64	64	64
К	CHAINSTAY LENGTH	440	440	440	440	440
L	FRONT CENTRE	758.5	783.5	812.11	836.42	860.72
М	WHEELBASE	1197.48	1222.48	1251.09	1275.39	1299.7
N	BOTTOM BRACKET DROP	30	30	30	30	30
0	BOTTOM BRACKET HEIGHT	345	345	345	345	345
Р	STAND OVER HEIGHT ALLOY/ STAND OVER HEIGHT CARBON	721.75/725.16	720.28/724.41	721.3/722.92	720.73/730.78	726.77/736.07
Q	FORK TRAVEL	170	170	170	170	170
R	TRAIL	132.33	132.33	132.33	132.33	132.33
S	FORK OFFSET	42	42	42	42	42
T	AXLE TO CROWN	582	582	582	582	582
U	MAXIMUM SEATPOST INSERT (ALLOY/CARBON)	216/250	245/250	270/255	301/274	330/293

s	159CM/5' 2" - 169CM/5' 7"			
м	167CM/5' 6" - 177CM/5' 1	1 <b>0</b> "		
L		175CM/5" 9" - 185CM/6"		
XL			183CM/6' - 193CM/6' 4"	
XXL				191CM/6°3°-201CM/6°7°

# AVAILABLE SPARE PARTS

The following is the available spares for the Mega, all are available through authorised Nukeproof Dealers. Anything you need that is not listed, please consult with a dealer.

Part - Mega Carbon	Diagram #	Part Code	Link
Protection Kit			Protection Kit
Horst Link Kit	13	2x FB-SUP-BD23	Horst Link Kit
	16	2x FB-SUP-B72	
	14	4x FB-SUP-B73	
Down Tube Protector	С	VLF-C-1124	Down Tube Protector
Shock Bolt Kit	3	2x FB-SUP-LK116	Shock Bolt Kit
	28	1x FB-SUP-LK115	
Chain Stay Protector 290	A	VLF-C-1122	Chain Stay Protector 290
Cable Guide Kit	1	1x FB-DAO-138	Cable Guide Kit
	2	2x FB-DAO-139	
	23	2x FB-SUP-LK182	
	24	2x FB-GAN-063	
Chain Stay Protector 297/275	A	VLF-C-1121	Chain Stay Protector 297/275
Main Pivot Kit	22	1x FB-SUP-LK122	Main Pivot Kit
	21	1x FB-SUP-LK112	
	11	2x FB-SUP-LK113	
	12	1x FB-SUP-LK111	
Seat Stay Protector	В	VLF-C-1123	Seat Stay Protector
Brake Mount Kit	20	2x FB-GAN-114	Brake Mount Kit
	19	1x FB-GUO-197	
UDH Stop Bolt	18	1x FB-GAN-127	Available through authorised Dealers
Lower Swing Link Kit	6	2x FB-SUP-LK117	Lower Swing Link Kit
	10	2x FB-SUP-LK118	
	7	2x FB-SUP-LK119	
	8	2x FB-SUP-B29	
Swing Link	27	1x FB-SUP-LK114	Swing Link
Upper Swing Link Kit	5	2x FB-SUP-LK120	Upper Swing Link Kit
	26	1x FB-LUO-072	
Bearing Kit	4	F6902 LLU MAX-EA	Available through authorised Dealers
	9	BB 6902 LLU MAX	
	15	BB F6802 LLU MAX	

# 6 - WARNINGS

### MINIMUM SEAT POST INSERTION

The seatpost installed to your bike will have a minimum insert line – do not exceed this line. Exceeding the minimum insert can lead to post and frame damage. If you find you need the saddle higher than the insert level allows, please consult with your dealer regarding frame sizing or a longer post. Damage to a seat post or frame caused by not adhering to the minimum insert line is not covered by warranty.

### MAXIMUM TYRE WIDTH

Do not exceed the fork and frame maximum tyre widths. The frame is designed to accept a tyre up to 2.6" and the fork's maximum tyre widths are detailed below. Please note some manufacturer tyre and rim combinations can be wider when fitted together, always check for clearance when tyres are changed to a different model. Tyre rub can damage frame and will not be covered by warranty if incorrect tyre size has been used.

- Fox 36 29" max tyre clearance 2.6"
- Rockshox ZEB max tyre clearance 2.8"
- · Rockshox Domain max tyre clearance 2.8"

## MAXIMUM AXLE TO CROWN AND TRAVEL OF FORK

The fork length also detailed as axle to crown (A-C) cannot be exceeded. Maximum A-C for the Mega is 596mm. Using a fork that exceeds the A-C may lead to frame failure and injury. Using a longer A-C fork will void warranty. The bike is designed with a 170mm in mind, 180mm can be used if the A-C is not exceeded.

### TOP TUBE

Under no circumstances should a workstand clamp be used with the top tube of the Mega frame. Due to the layup of the carbon, using a workstand clamp can crush the top tube and cause irreparable damage.

## TRANSPORT

Care is required when transporting your Mega. If using a car rack, ensure clamping is to wheels or fork and not the frame. Do not stack items on top of bike when loaded in a vehicle. Ensure the bike cannot move when transporting to avoid sudden movements and damage. Ensure rear wheel is always installed when transporting to avoid lateral loads on rear dropouts.

## DIRECT SUNLIGHT AND HEAT

Try to avoid exposing your bike to direct sunlight and excessive heat. This can damage the paint and fatigue plastic components.

## RIDER WEIGHT

Nukeproof bikes are designed and tested to ISO 4210 / EN 15194 standards; our bikes conform to the load tolerance of 120kg the standards require. If the user is over this weight when kitted, we would recommend regular inspection and maintenance to avoid issues. Please expect wear and tear parts to be replaced more often. 3rd party components may have different load and weight standards – if you have any concerns with components weight limits, please consult with your Nukeproof Dealer. We cannot guarantee the integrity of the bike and its components if the user is over 120kg.

#### LOOK AFTER YOURSELF

Always wear a helmet that meets legal safety standards when riding your Mega and additional protective equipment when required. Ensure you are riding your bike in accordance with local laws, with protective equipment, reflectors and lights installed when and where required.

## ON-ROAD RIDING

- Ensure all local traffic laws are obeyed when using your bike on-road.
- · Respect all other road users' journeys.
- Ride safely and be prepared for actions of other road users or road conditions that may jeopardize your safety or safety of other road users.
- · Do not allow yourself to be distracted while cycling on-road.
- Carry maintenance tools and spares to ensure you can complete your ride if a mechanical was to occur.

#### OFF-ROAD RIDING

- Off-road riding can be dangerous with a variety of terrain, conditions and hazards. Please
  ensure you have developed the adequate skill levels for the terrain you are riding and you
  are confident in your off-road abilities. Please get familiar with your bike, its handling and
  capabilities before riding off-road.
- Ensure the location you are riding is legal, you have a right to ride there, and no laws are being broken.
- Ensure you are wearing the appropriate safety equipment.
- Ride in groups to ensure your safety and make someone aware of your route and location.
- Carry maintenance tools and spares to ensure you can complete your ride if a mechanical was to occur.
- · Be respectful and courteous to other off-road users, respect their journey.
- · Be courteous to wildlife and the natural environment.
- Stay on designated trails to avoid unnecessary erosion.

# RIDING AT NIGHT

Be cautious when riding at night – riding at night can be more hazardous than daytime. At night, a rider is harder to see by drivers and pedestrians. Ensure you are wearing brighter clothing with reflective features. Please ensure you use reflectors and lights on your bike, and these comply with local laws. Reflectors are not a suitable alternative to lights; lights must be used along with reflectors at night. Ensure reflectors and light mounts are of sound condition and secure. Ensure lights are charged and are powered adequately. Ensure there is enough power for the duration of your journey.

# WET WEATHER RIDING

In wet weather conditions please ensure you are riding within your skill level and experience. Wet weather can reduce surface grip, reduce tyre traction, reduce visibility, and reduce braking performance. Contacts points on the bike may be slippery when wet – these include handlebar grips, brake levers, pedals, saddle, and shifters. Please consider these factors when riding in the wet to avoid loss of control and potential injury. Please ensure adequate wet weather clothing is used. Gloves and shoes suitable for wet weather riding will help with using the bike's controls and maintaining grip on the pedals.

# 7 - WARRANTY

### NUKEPROOF WARRANTY TERMS

Nukeproof warranties against manufacturing defects for the periods specified below. We will repair or replace any item verified as a legitimate warranty claim.

You can download the Nukeproof warranty claim form here.

### WHAT IS COVERED?

This warranty covers the original purchaser from defects in materials, paint, and workmanship from the original purchase date for a period as listed below:

- Nukeproof Frames = 5 Years (2016-CURRENT, excluding Downhill products)
- Nukeproof Components = 2 Years (lifetime on Carbon Handlebars)
- Fox Suspension = 2 years
- RockShox Suspension = 2 years
- Shimano Components = 2 years
- Sram Components = 2 years

Transfer of the item from the original purchaser to another person terminates this limited warranty and proof of purchase is required to validate the warranty period.

Where we repair or replace items under Warranty, they are covered for the remainder of the original warranty period and subject to the conditions outlined in the original warranty.

This limited warranty does not cover items used in rental operations or any defect caused by wear and tear, accident, neglect, improper handling, abuse, misuse, improper assembly, incorrectly performed maintenance or repairs, non-compliance with recommended maintenance and care procedures, racing or competition use.

NB: Bearings that fail due to contamination, misuse, improper, or lack of maintenance are not covered under warranty even if failure occurs within an unexpected time from date of purchase. Water ingress from power washing will invalidate this warranty. Stripped pedal threads on cranks are also not covered under warranty.

## CONSEQUENTIAL LOSS

Nukeproof is not responsible for direct, incidental or consequential damages resulting from any breach of warranty or condition or under any other legal theory, including but not limited to loss of use, loss of revenue, loss of actual or anticipated profits (including contracts) loss of the use of money, loss of anticipated savings, loss of business, opportunity, goodwill, reputation, any indirect or consequential loss.

# CRASH REPLACEMENT

Nukeproof understand that accidents do happen and endeavour to produce some of the most reliable products available. However, in the event of a crash, Nukeproof offer a crash replacement service on all frames within the term of their warranty period. A discounted replacement will be offered through the registered dealer where the product was purchased. In circumstances where the dealer is unable to fulfil the service, a crash replacement will be dealt with through the International Distributor directly <u>www.hotlines-uk.com</u>

#### HOW TO MAKE YOUR WARRANTY CLAIM

Complete the online form with as much information as possible and include images if you can. (Be sure they are in focus) A copy of this form must then be supplied to the retailer where the item was purchased for it to be logged and for a resolution to be offered through Nukeproof or one of its affiliated distribution partners.

If you are unable to provide an official Nukeproof warranty claim form, a letter or suitable document must be provided containing the following information:

## **Customer details:**

- Full name
- · Order reference or copy of shop receipt (with store name)
- · Telephone number
- · Address and Post Code
- · Email address

### Product details:

- · Model, Stock ID, Serial number
- · Photograph of the problem if possible
- · Description of the issue and how it happened

#### **Preferred Action to resolve:** (detail the resolution you want from your dealer)

Registering your bike - You do not need to register your bike for warranty, your dealer will have a record of the sale and keep any invoice/receipts supplied with the bike as proof of purchase.

#### **3RD PARTY WARRANTY**

Please familiarise yourself with the respective manufacturer's warranty policies. We endeavour to select and install the most reliable components for our bikes, any unlikely issues with the following 3rd party components please consult with your Nukeproof dealer and they will resolve with Nukeproof and the manufacturer on your behalf.

**\***NUKEPROOF