

User Manual

Cyon / Siryon / Hydra

FORESTAL

Introduction

You are about to embark on a journey that combines nature and technology. Thank you for choosing Forestal.

Your new Forestal is the combination of many years of design and development by a team of passionate bicycle lovers, and we're extremely grateful that you have chosen to join us. We hope that you enjoy riding your new Forestal as much as we have producing it for you. Take to the trails, hit the road, and enjoy our unique fusion of nature and technology.

At Forestal we consider sustainability at every step, this is why we have developed our packaging to be reusable. Using high-quality packaging ensures your bike arrives in perfect condition and also enables you to reuse the box for transportation or storage.

This manual will serve you as a general guide on how to unbox, assemble, use and maintain your bicycle. It will also provide you with general information on liability, safety and keep you aware of potential dangers that may occur when operating your bicycle.

This manual contains useful safety information that will help you to understand your bicycle. We strongly recommend that you read it.

Before your first ride, please download Forestal Sync by scanning the QR CODE below. To activate the warranty and safety features it is necessary to register your bike via the Forestal Sync APP.



For any questions, please don't hesitate to contact us by email contact@forestal.com or by phone +376 737 704

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Illustration of Symbols

Meaning and explanation of symbols:



Tip symbol

Provides the user with additional knowledge on the subject.



Note symbol

Provides important information to avoid potential problems.



Information symbol

Provides additional information that will help users to understand the situation more clearly.



Caution symbol

Warns about a situation that can cause potential material damage if users don't follow the instructions.



Warning symbol

Warns about a situation that can cause serious physical injury, death, and/or heavy material damage if one does not obey the safety instructions.



Attention symbol

Take special care of the object or action.



Disclaimer symbol

Statement of clear liability.

General Safety

To ensure safety, quality, and reliability, use only original parts or Forestal authorized parts for repair and replacement.



Use your bicycle responsibly within the limits of your capabilities. Mountain biking and road riding is considered as dangerous activity and can result in injury, even at slow speeds. Stunt riding, jumping your bicycle, riding at high speeds, racing, and other types of extreme riding is considered extremely dangerous, and increases your risk of injury and/or death. Even with the most advanced safety gear, you could become seriously injured or killed when stunt riding, jumping, riding at high speeds or competing.

To decrease your risk of injury, know your limits, use your bicycle correctly, and always wear appropriate safety equipment and before every ride, inspect your bicycle for irregularities or loose parts. If you notice anything strange or suspicious such as deep scratches, squeaks from components/frame, or a sudden drop in performance of electrical components of your bicycle, please contact us or your nearest Forestal representative for further advice.



Make sure to follow the traffic rules and regulations of the country where you are intending to use your bicycle. You will be able to find out more information from local authorities.



Never exceed recommended measurements on tyre width or maximum and minimum insertions of the seat post. Adhere to all torque and sizing specifications for press fits and thread fits. Over-tightening can damage threads or cause parts to fail. Failing to follow these instructions can result in serious injuries or damage to the bicycle.

Maintenance schedule

[illegible]

This list provides some guidelines, but is not to be considered a complete inspection from arising. Following these guidelines will help maintain the performance of your bicycle and prevent more serious problems from arising. It is important to remember that service intervals can vary depending on climate, trail conditions and riding cadence. For service instructions for your specific components, visit the manufacturer's website. If you detect any problems with your bike, and you are not able to repair them, take your bike to your authorized dealer for service problems.

Battery safety handling and charging



Do not try to open or burn the battery!



Do not operate the battery if it is damaged.



Avoid submersing or washing the battery with excessive water.



Do not manipulate the battery.



Do not expose the battery to direct sunlight / heat.



Do not puncture the battery!



A damaged battery can be flammable and dangerous and should be replaced immediately.



Do not short-circuit by connecting the opposite poles with any metal component.



Batteries may lose their capacity over time which may lead to a drop in the performance of your bicycle. Batteries that lose significant capacity need to be replaced since it may affect performance or correct use of other electrical components.



Forestal provides the battery specification printed on its label based on conservative measurements of performance, but also reserved additional capacity to extend the life of the battery and ensure the battery stays in its optimal condition during its lifetime.



Do not charge the battery if the battery temperature is more than 30°C. By doing so, you are risking permanent damage and warranty avoidance



Used batteries may contain harmful substances which, if not properly stored or disposed of, could damage the environment and your health. After replacing a battery, you are obligated to dispose of the old battery appropriately. For disposal of used batteries from Forestal bicycles, contact us at contact@forestal.com



Battery politicy

The high performance 360 Wh Aurora battery is perfectly integrated with the lightweight Alpha Box frame and the Twin Levity suspension's efficient kinematics. It uses 3500 mAh battery cells, known for their high performance, long life, and resistance to charge capacity reducing memory effect, making them the perfect choice for compact batteries.

Battery handling

Handling the batteries safely and responsibly is crucial for personal and environmental safety. By avoiding complying with these recommendations in battery handling, you are elevating the risk of suffering property damage, injuries and/or death.



If the battery is damaged in any form or shape, internally or externally, please stop using it immediately and follow the battery storing, handling, and recycling procedure.



Short-circuiting the battery will lead to inevitable damage to the battery and potentially damage to property and/or personal health.



By manipulating the battery in any form or shape, meaning by trying to open, repair, or modify the battery physically or by using unauthorized software, you are causing potential damage to the battery itself, property, and/or personal health.



Even the Aurora batteries are IP63 waterproof rated, by submerging the batteries with the open charging port, you are risking a short circuit which inevitably leads to damage to the battery and potentially damage to property and/or health.



Puncturing the battery with any kind of sharp objects or drills will lead to inevitable damage to the battery and potentially damage to property and/or personal health.



Overloading the battery through the whole body length, width or height can lead to body deformation and malfunction of the cells or control board and ultimately to battery malfunction.



By exposing the battery to direct sunlight you are increasing the possibility of cell damage due to a high temperature and damage to a plastic part on the control board or body construction.



It's strictly prohibited to deposit any type of battery in the garbage can. In the case of high-voltage batteries like Aurora batteries, please follow the instructions on safely handling, storing, and recycling.



In this illustration you will find short specifications and characteristics of the Forestal Aurora Battery, together with the bar-code that indicates the unique serial number for every battery. Bar-code stickers with a serial number should not be removed in any instance. This serial number is matching with serial number in the battery management software and will help to identify the battery details.

Storing the batteries

Every spare battery from Forestal is shipped fully enclosed in a vacuum bag, charged in between 40% and 100% of its full capacity, and physically protected by individual packaging.

Forestal highly recommends to store spare batteries inside specific battery storage racks, which are temperature-stable, sealed and protected against fire.

For storage purposes, it is recommended to remove the external packaging but always keep the vacuum bag. If a battery is damaged or has a known malfunction like a battery that was previously used, reported, and exchanged under the warranty conditions, or if they were simply at the end of their lifecycle, it is strongly recommended to store these batteries in a safety battery storage rack before recycling.

It's highly recommended to store the batteries at a temperature from 10°C – 20°C and never charge them if the outside temperature is below 0°C or above 40°C.

Recycling

Batteries with any kind of defect should not be charged further or tried forcefully to discharge or manipulate. It is highly recommended that these batteries are recycled with the professional recycling company in your area in the shortest possible date. Since rules and regulation for recycling high-capacity batteries vary from country to country, professional recycling companies can assist you on this matter with the latest and most accurate information.



Forestal is not responsible for handling, storing, or recycling the batteries at any location outside the Forestal Group location.

Warranty

At Forestal we are committed to providing a first-class brand experience, not only by creating the most innovative and extraordinary products but also by being close and accessible to our customers when they need us the most.

For this reason, we are offering a Global Warranty policy for users who register their bicycle through Forestal Sync App:

Frame warranty: 7 Years

Normally you will read “lifetime warranty”, but this is related to the material’s lifetime. According to our research, we consider 7 years to be the optimal lifespan for carbon fibre.

Paint and graphics: 2 Years

Under any circumstances except physical damage due to the careless use of the bicycle.

F60-S1: 2 Years

We recommend our motor maintenance to be performed at any Forestal-approved dealer/shop/distributor.

Aurora battery: 2 Years

Warranty period of 2 years of use or 300 charging cycles of the battery. After fulfilling one of this two conditions, warranty will be considered as expired.

Smart Dashboard and Smart Trigger: 2 Years

Under any circumstances except physical damage due to the careless use of the bicycle.

Other Forestal branded components: 2 Years

Under any circumstances except physical damage due to the careless use of the bicycle.

The rest of the non-Forestal components will be covered by the warranty of its related third party suppliers and manufacturer. Information about the conditions will be included with each bicycle.

Consumable parts including but not limited to tyres, bearings, brake pads, chains, chainrings, and cassettes are not covered by the warranty.

Incorrect use or modification to the bicycle frame, motor, and battery in any way that may change its design or intended use and operation may lead to voiding the warranty.

The warranty will begin from the moment in which the bicycle is delivered to its first owner but also, the warranty is transferable, taking into consideration that it will be calculated from the delivery date to the original owner.

Transferring the bicycle’s ownership and warranty from one user to another can be achieved via the Forestal App, where a unique confirmation code will be sent to both parties to approve the transaction.

From that point, the second user will become the registered owner of the bicycle and by that they gain all consumer rights and possession of the eventual warranty claims.

Rewind Programme

Forestal wants to make sure that our customers stay with the brand, therefore we are offering special pricing for those who are not eligible for a warranty. The Rewind Programme helps users to “go back in time” to avoid that precise moment in which their Forestal bicycle was severely damaged. You will find more information on the warranty page of our website. If you would like to take advantage of the Rewind Programme or have any questions please email us at contact@forestal.com and our customer service team will gladly assist you.



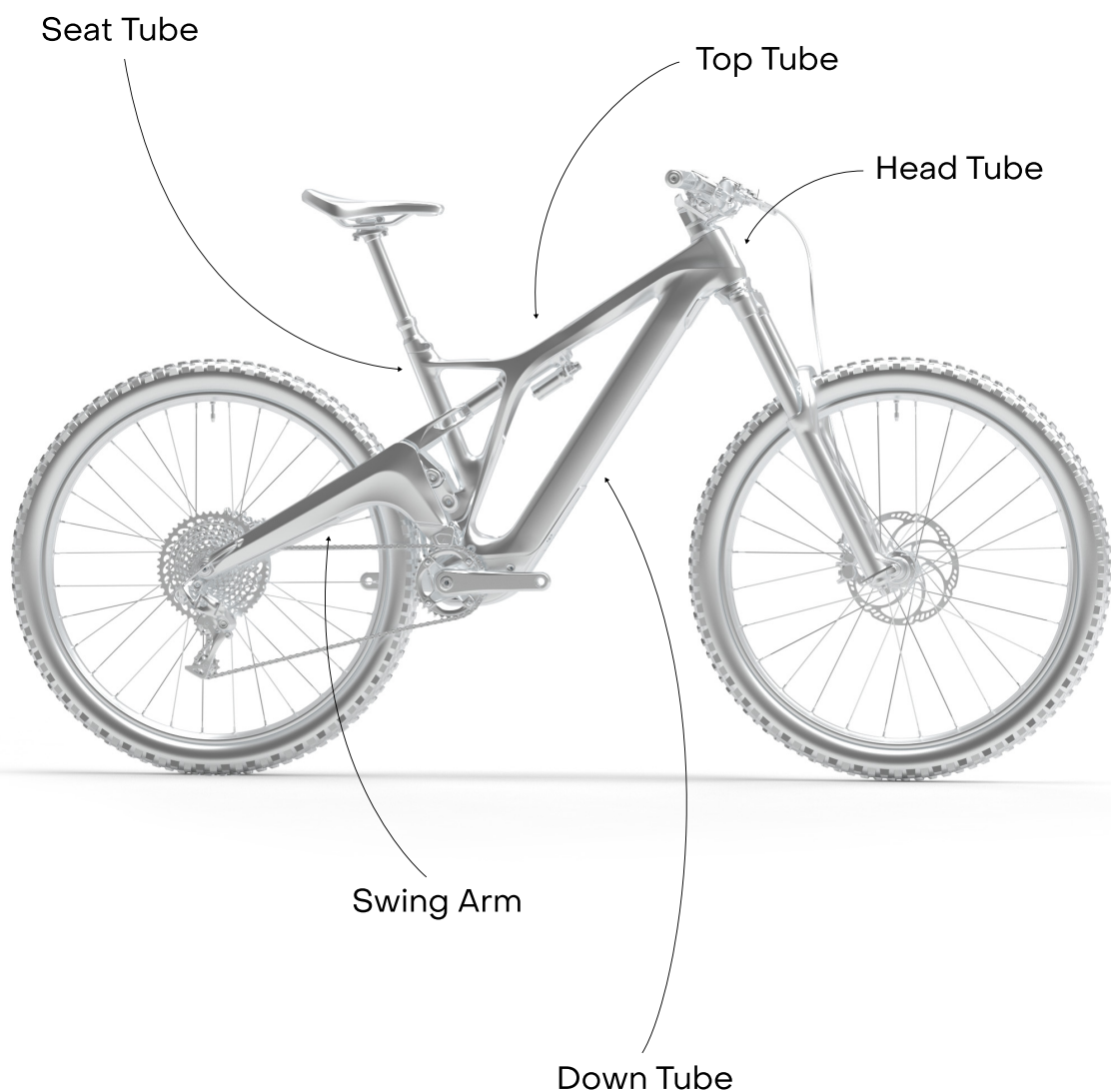
It is necessary to register your bicycle before the first ride in order to activate the warranty, and be able to use all benefits of rewind programme.

Technical Characteristics

In this chapter, you will be familiarized with the characteristics of your bicycle.

Frame anatomy

Every bicycle frame consist of the following parts:



Geometry chart Cyon



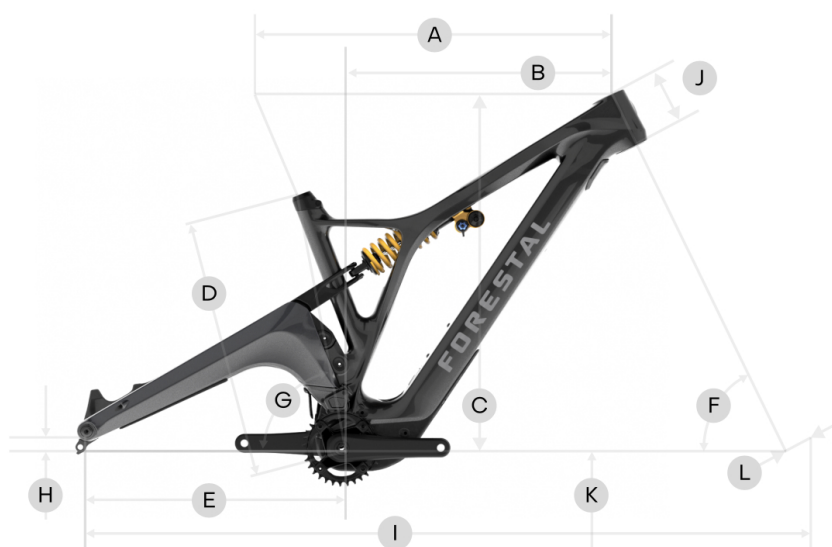
		S	M	L	XL
A	Top tube horizontal	577 mm	603 mm	633 mm	657 mm
B	Reach	430 mm	455 mm	480 mm	500 mm
C	Stack	611 mm	616 mm	625 mm	638 mm
D	Seat tube length	415 mm	430 mm	465 mm	500 mm
E	Chainstay horizontal	435 mm	435 mm	445 mm	445 mm
F	Head tube angle	65.5 °	65.5 °	65.5 °	65.5 °
G	Seat tube angle	76.6 °	76.6 °	76.6 °	76.6 °
H	BB drop	-30 mm	-30 mm	-30 mm	-30 mm
I	Wheel base	1176 mm	1203 mm	1242 mm	1268 mm
J	Head tube length	95 mm	100 mm	110 mm	125 mm
K	BB height	346 mm	346 mm	346 mm	346 mm
L	Fork offset	42 mm	42 mm	42 mm	42 mm

Geometry chart Siryon



	S	M	L	XL
A Top tube horizontal	579 mm	609 mm	648 mm	673 mm
B Reach	428 mm	458 mm	488 mm	508 mm
C Stack	612 mm	612 mm	625 mm	639 mm
D Seat tube length	420 mm	430 mm	465 mm	500 mm
E Chainstay horizontal	436 mm	436 mm	446 mm	446 mm
F Head tube angle	64°	64°	64°	64°
G Seat tube angle	77°	77°	77°	77°
H BB drop	-25 mm	-25 mm	-25 mm	-25 mm
I Wheel base	1208 mm	1238 mm	1284 mm	1311 mm
J Head tube length	95 mm	95 mm	110 mm	125 mm
K BB height	353 mm	353 mm	353 mm	353 mm
L Fork offset	51 mm	51 mm	51 mm	51 mm

Geometry chart Hydra



		S	M	L	XL
A	Top tube horizontal	571 mm	603 mm	639 mm	660 mm
B	Reach	418 mm	449 mm	479 mm	499 mm
C	Stack	619 mm	619 mm	632 mm	646 mm
D	Seat tube lenght	420 mm	430 mm	465 mm	500 mm
E	Chainstay horizontal	436 mm	436 mm	446 mm	446 mm
F	Head tube angle	63 °	63 °	63 °	63 °
G	Seat tube angle	76 °	76 °	76 °	76 °
H	BB drop	-18 mm	-18 mm	-18 mm	-18 mm
I	Wheel base	1212 mm	1242 mm	1288 mm	1315 mm
J	Head tube length	95 mm	95 mm	110 mm	125 mm
K	BB height	360 mm	360 mm	360 mm	360 mm
L	Fork offser	46 mm	46 mm	46 mm	46 mm

Sizing Chart

Small

Recommended height
<165 cm

Medium

Recommended height
165 cm – 177 cm

Large

Recommended height
177 cm – 187 cm

Extra Large

Recommended height
> 187 cm



Size recommendations are based on a standard fit. For advice about sizing please feel free to contact our customer service team at contact@forestal.com.

Alpha Box Frame

In this chapter, you will be familiarized with the characteristics of the Alpha Box frame:

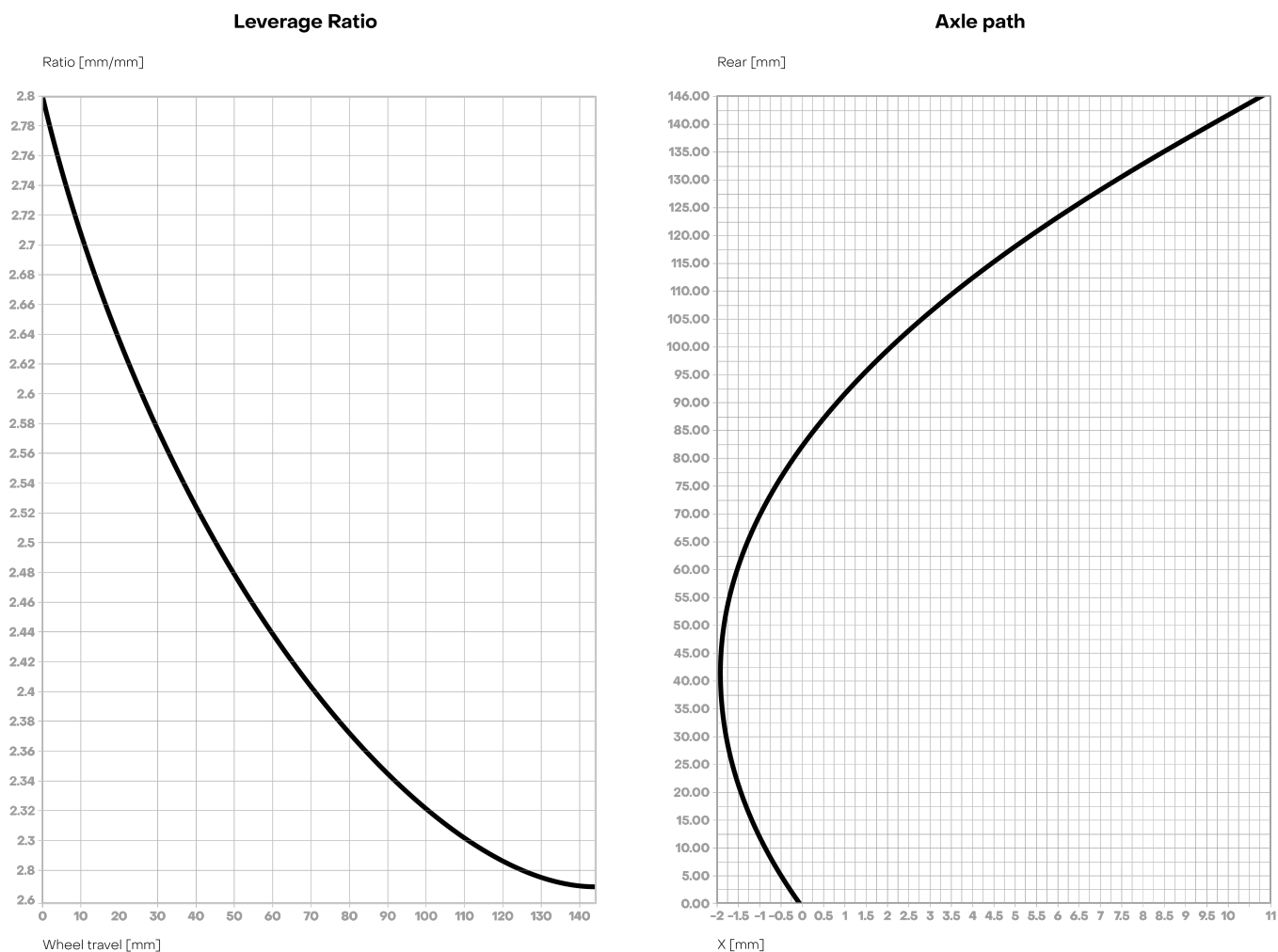


Alpha Box front triangle



Swing Arm + Twin Levity linkage

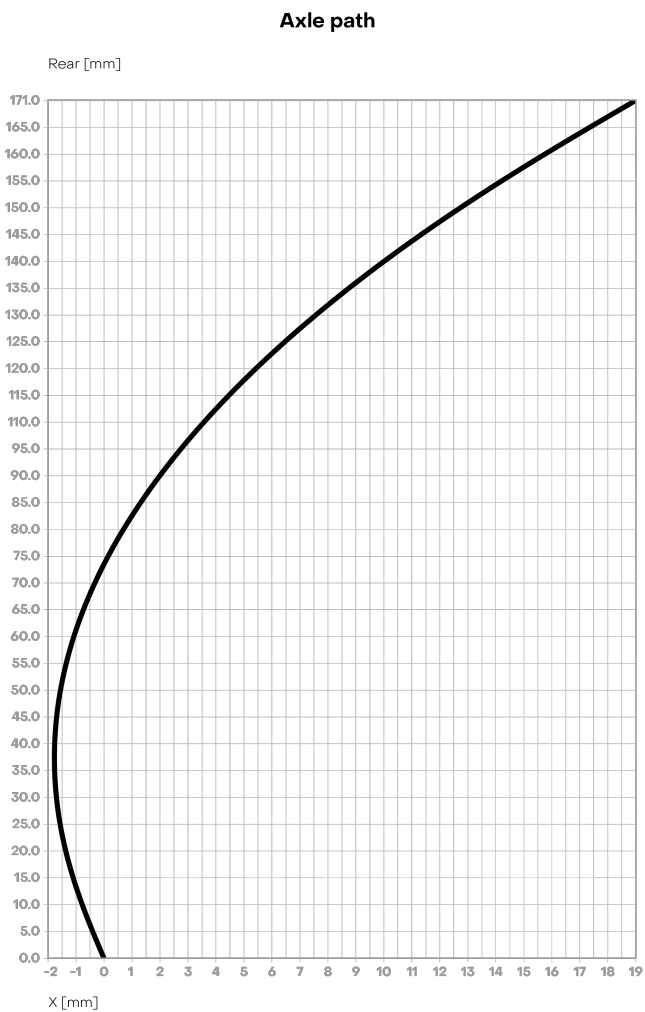
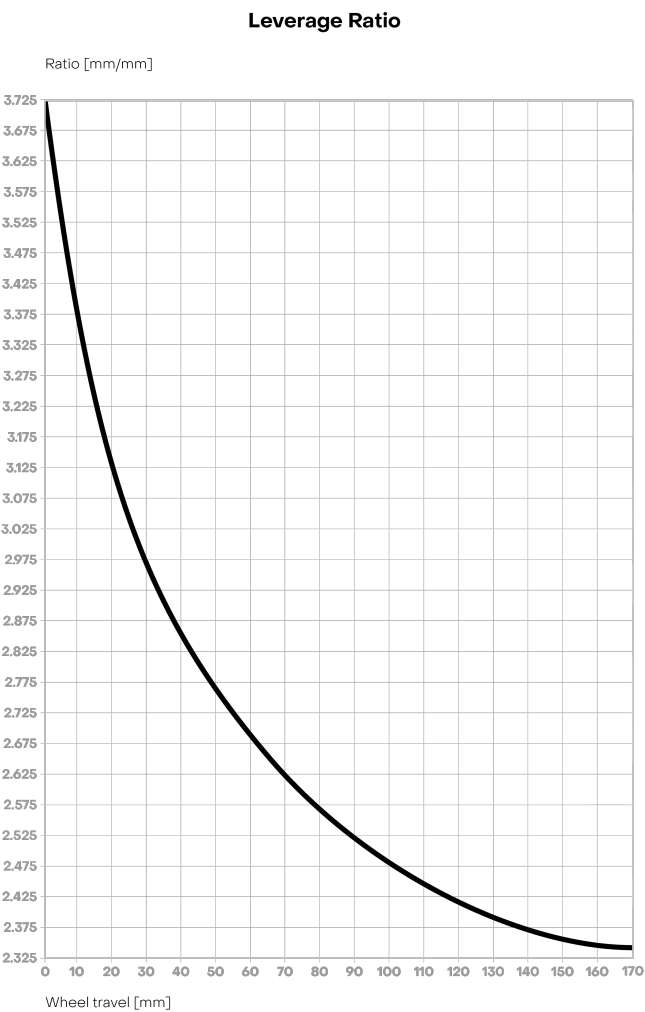
Suspension curve Cyon



Rear spacing Cyon



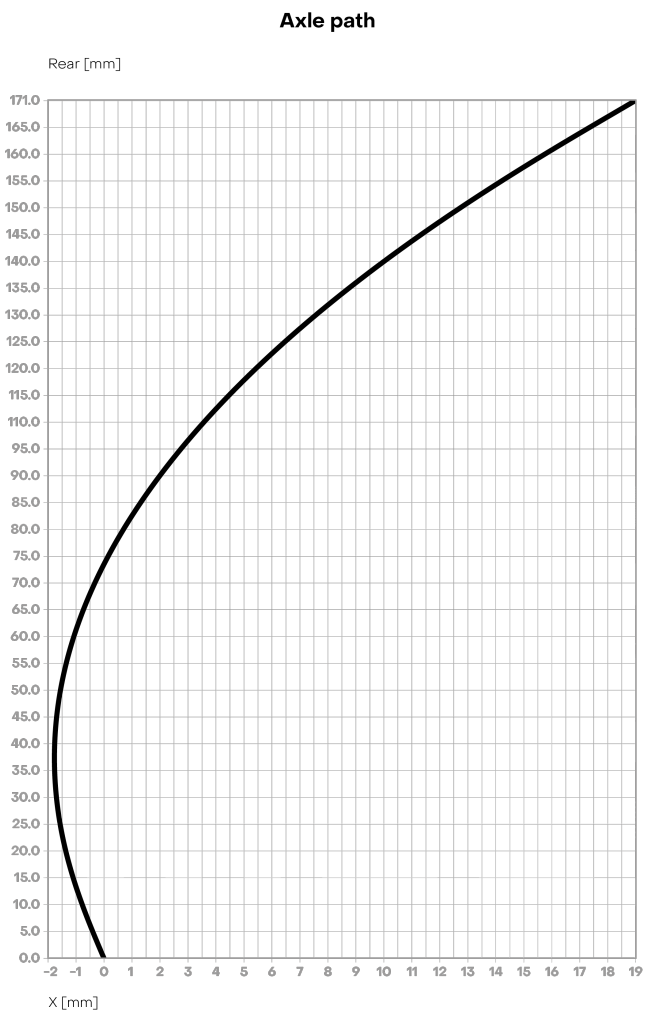
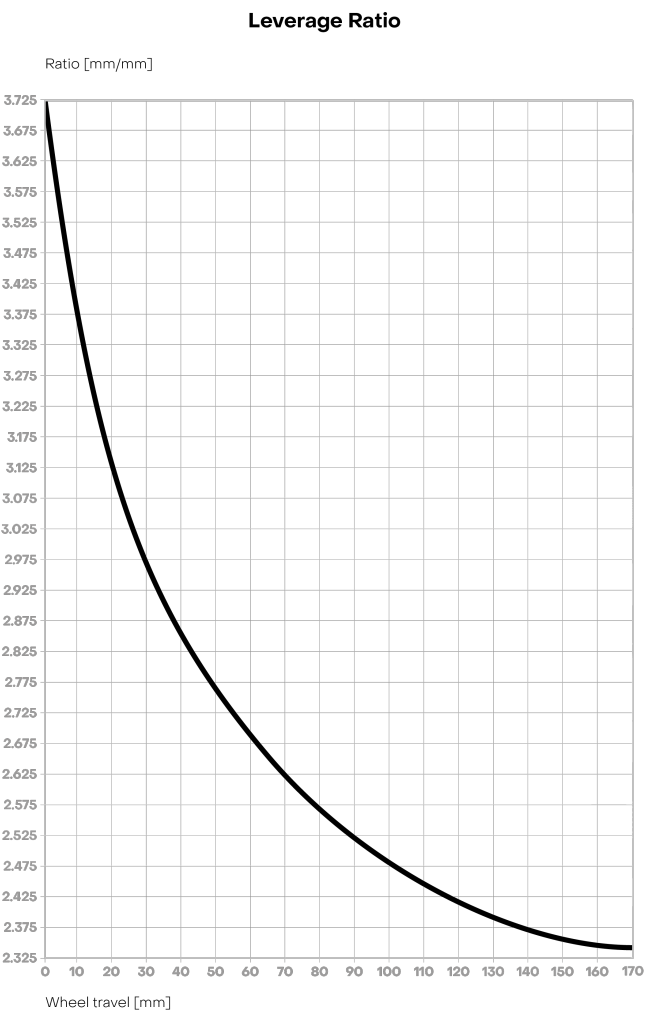
Suspension curve Siryon



Rear spacing Siryon



Suspension curve Hydra



Rear spacing Hydra



Seatpost insertion

Frame size	S	M	L	XL
Max. seatpost insertion	280 _{mm}	290 _{mm}	360 _{mm}	395 _{mm}
Min. seatpost insertion	80 _{mm}	80 _{mm}	110 _{mm}	110 _{mm}

The seatpost maximum extension mark is located on the backside of itself and should not be exceeded in any case. If the seat post mark and minimum frame insertion depths differ from each other, always use the longer measurement. If the maximum insertion point is reached, don't force the seat post deeper into the frame. By forcing the seatpost deeper, you can damage the frame and seat post cable.



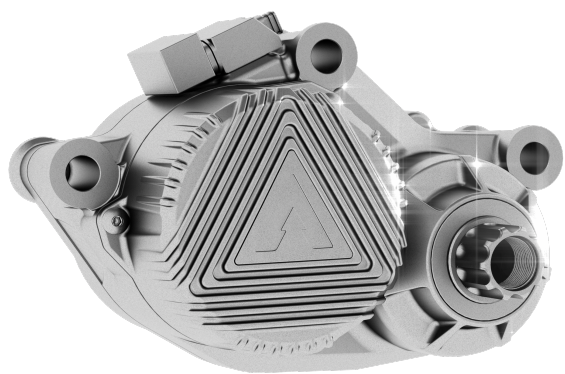
Maximum seatpost insertion depth is measured from the top of the rubber part of the seat tube and it refers to measurements in the frame.



Minimum insertion mark is located from the backside of the seatpost and should not be exceeded in any case.

F60-S1 Motor

In this chapter, you will be familiarized with the technical specifications of the motor:



F60-S1 is Forestal’s electric motor unit with 250 W of power and 60 Nm of torque. It’s most efficient at a cadence range of 80-100 rpm. It is IP67 graded which means it can be submerged at a depth of 1 m in water for 30 minutes. It uses the standard ISIS axle with a standard 104 BCD chainring. Outer case is built from Magnesium and Titanium. These materials are also used for key internal components. With dimensions of 165 x 105 x 147 mm, it weighs 1.95 kg and is one of the lightest motors in its category.

Specifications of the motor

Most efficient cadence range	80-100 <small>rpm</small>
Power	250 <small>W</small>
Torque	60 <small>Nm</small>
Protection	IP 67
Weight	1.95 <small>kg</small>
Dimensions	165 x 105 x 147 <small>mm</small>
Axle type	ISIS <small>axle</small>
Chainring type	104 <small>BCD</small>

Aurora Battery

In this chapter, you will be familiarized with the characteristics of the Aurora Battery:



The high performance 360 Wh Aurora battery is perfectly integrated with the lightweight Alpha Box frame and the Twin Levity suspension's efficient kinematics. It uses 3500 mAh battery cells, known for their high performance, long life, and resistance to charge capacity reducing memory effect, making them the perfect choice for compact batteries.

Specifications of the battery

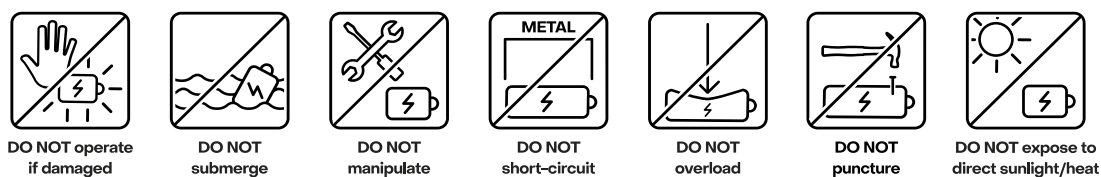
Power	52 _v
Voltage	360 _{Wh}
Charging time	Rapid charge 100% in 90 _{min}
Weight	1.8 _{kg}
Dimensions	350 x 72 x 50.5 _{mm}
Type of number of cells	28 Samsung cells
Operating battery temperature	-20 to 60 °C
Storage battery temperature	-20 to 60 °C
Charging battery temperature	0 to 45 °C
Dust resistance	IP6X



Safe trip home: once the battery reaches 0 %, you can still cover a distance of 3 km with 100 m of elevation to reach home with motor assistance.



Please note that it will take between one and three complete charging cycles for batteries to achieve their optimum performance.



Store the battery for no more than 3 months without charging. Used batteries may contain harmful substances which, if not properly stored or disposed of, could damage the environment and your health. After replacing a battery, you are obligated to dispose of the old battery appropriately. In case of battery damage, don't use it in the bicycle, but hand it over to the nearest Forestal distributor or appropriate electronic waste bins.

Specifications of the charger



	Input	Output
Voltage	100 - 240 _v	59.8 _v
Amperage	3.5 _{A max.}	4 _A
Frequency	50 - 60 _{Hz}	50 - 60 _{Hz}
Power	235.2 _w	235.2 _w

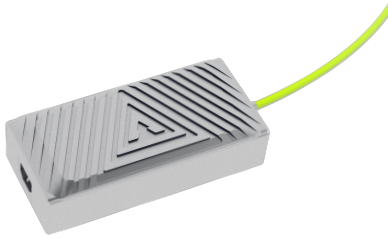


Charging battery temperature should be from 0 to 45°C.

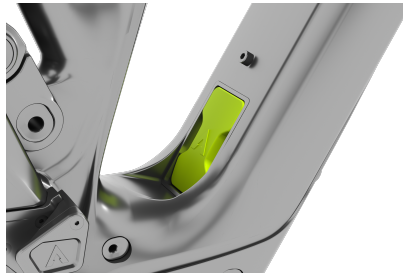


Depending on the age and state of the battery, rapid charge technology charges Aurora to 80% in just 84 minutes.

How to charge



Connect the charger into the wall socket.



Push the plastic cover on top of the motor to uncover the charging port.



Connect the charger to the Rosenberger charging port.

Charging signals

By following the signals, you will know at what stage charging is at.



If the charger is connected to the power but not connected to the bicycle, it will flash green.



The charger logo will glow red when the battery is charging.



When the battery is fully charged, the charger will glow green.



If there is an error during charging / communication error, the charger will flash red.



Before every charging cycle, cool down the battery below 30°C. Not doing so, you are risking permanent battery damage.



After opening and closing the charging port, bicycle will automatically turn on. In this case, using the power button on the smart trigger is not necessary.



Before the first ride, please fully charge your bicycle! This bicycle uses electronic components and high-performance Lithium-Ion batteries. Please take the time to inspect the components and display regularly. Occasionally monitor the charging process. Batteries are considered dangerous flammable material, therefore make sure you carefully follow the user manual instructions. Charge your bicycle according to the manufacturer specifications by using only the originally provided charger. Failure to do so may result in malfunction and serious injuries.

Battery consumption and range



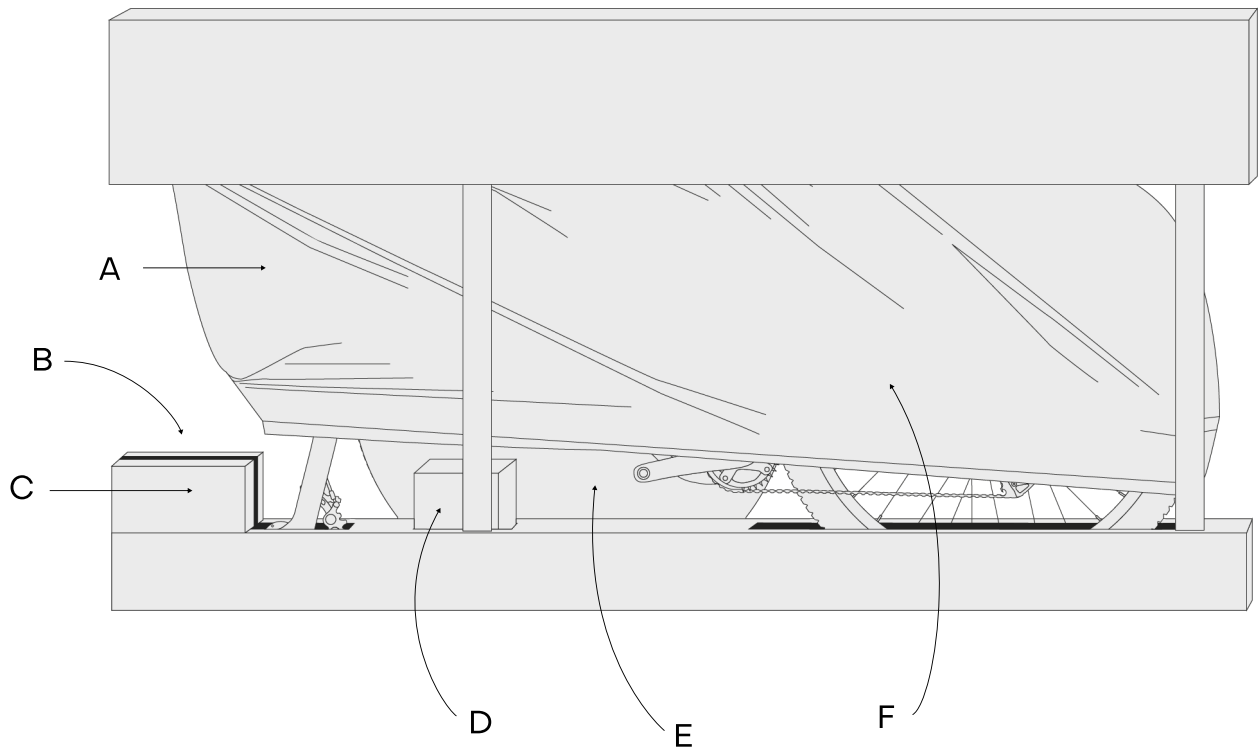
F60-S1 system can cover up to 50 km (31.6 mi) with 1400 m (4593 ft) of vertical climb for a 90 kg (198 lbs) rider in Eco mode.



Please note that the range can vary greatly from different factors such as tyre profile, tyre pressure, general condition of the bicycle and the battery, weather conditions, outside temperature, terrain conditions, the rider's weight, and preferred cadence while pedaling.

Bicycle Parts

Content of the B2C bicycle box

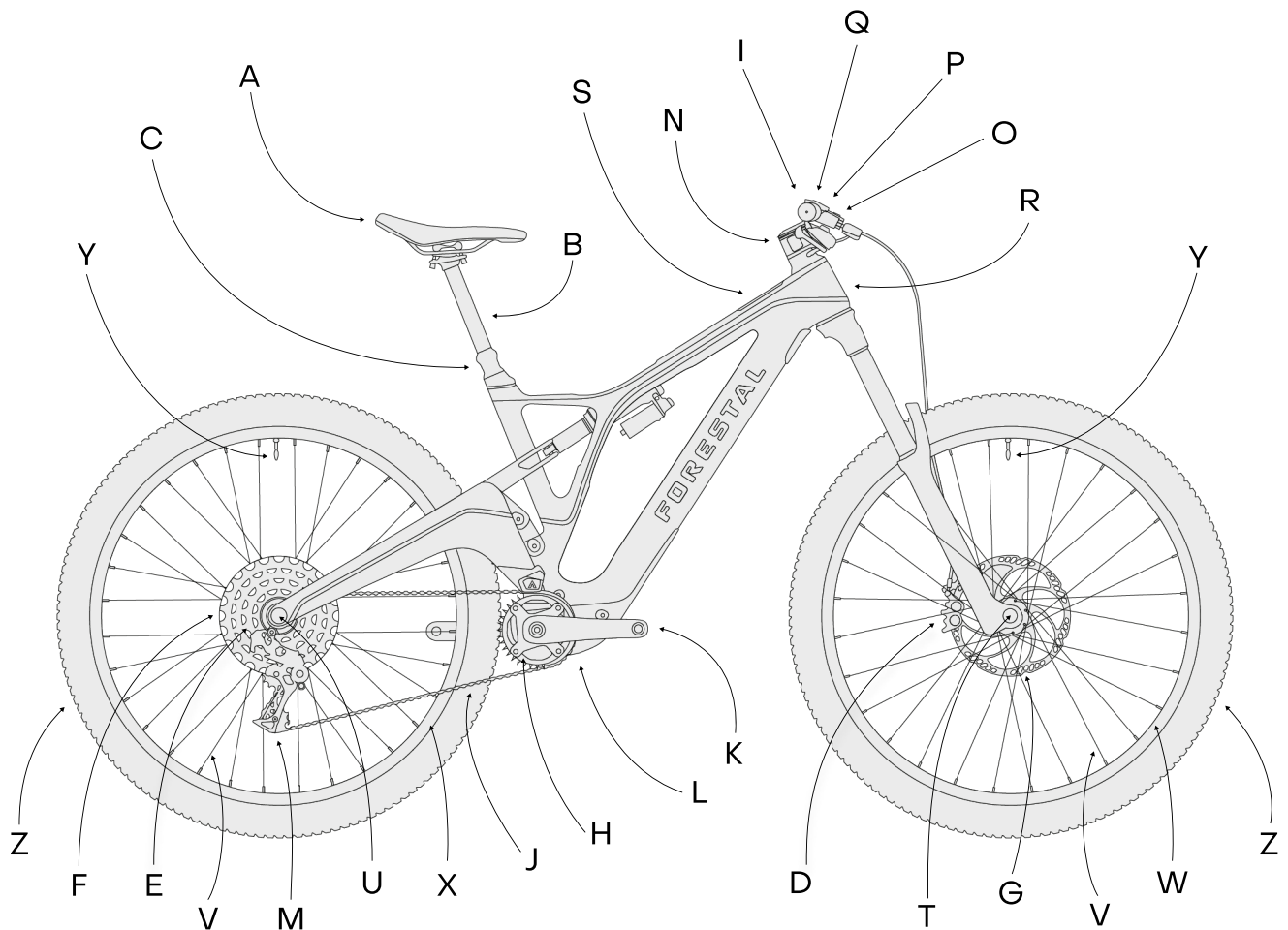


- A** Forestal bicycle
- B** Security strap
- C** Accessory Box:
 - Lezyne x Forestal tool
 - Monkey's sauce
 - User Manual
 - Reflectors kit
 - Lights
 - Warranty docs.
- D** Aurora battery charger's box
- E** Front wheel
- F** Forestal x Únic textile bike cover



If bicycle is bought directly from Forestal's website, you can expect unpacking procedure as shown in the illustrations, together with an additional accessories inside the box.

Bicycle parts



- A** Saddle
- B** Seatpost - \varnothing 31.6
- C** Seatclamp - \varnothing 34.9
- D** Front brake caliper - Post Mount
- E** Rear brake caliper - Post Mount
- F** Cassete - 12 speed XD body
- G** Disc - 6 bolt
- H** Chainguide - Direct Mount
- I** Chainring - 104 BCD
- J** Chain - 114 Chain eyes
- K** Pedals
- L** Crankset - ISIS
- M** Rear derailleur - 12 speed

- N** Stem - \varnothing 31.8
- O** Brake lever
- P** Handlebar - \varnothing 31.8
- Q** Shifter - 12 speed
- R** Headset - ZS56/ZS56
- S** Display - 3.2"
- T** Front hub - 110 x 15 mm
- U** Rear hub - 148 x 12 mm
- V** Spokes
- W** Front rim - 31.5 inner width
- X** Rear rim - 29.5 inner width
- Y** Valve - Presta
- Z** Tyres - 29"

Unboxing and Assembly B2C

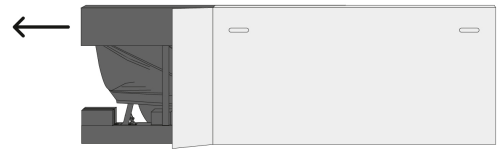
Congratulations, you have successfully reached your bicycle's assembly stage. Please follow the steps carefully in order to safely assemble your bicycle.



Forestal's bicycle box and packaging are fully recyclable and we strive to minimise the use of single-use plastics.



1. Open the side of the box



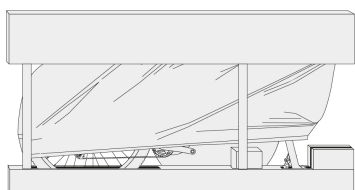
2. Open the upper cardboard cover from the front and pull your bicycle by the handlebar to slide it out of the box.



Follow the instructions on the box to open it from correct side.



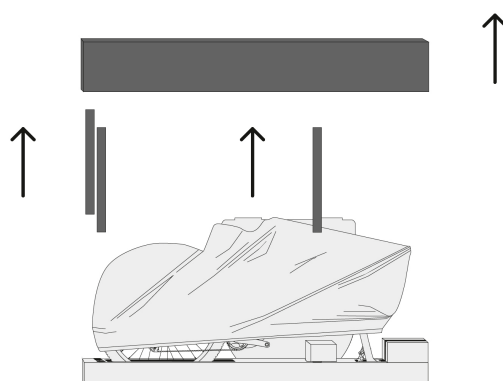
Put the other part of the box to one side.



3. Visual representation of box contents.



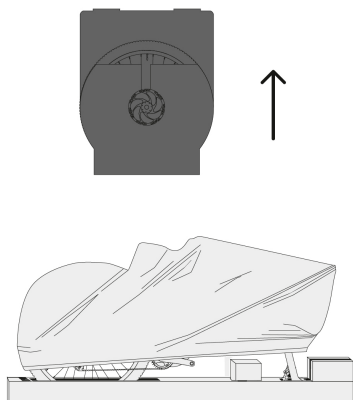
Inside you will find the Accesories Box, Cover, Bicycle and the Charger.



4. Remove the upper cardboard from the handlebar and saddle area.



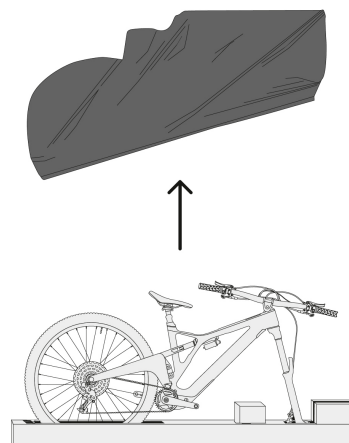
Your Forestal package can be used for travel so retain all cardboard parts.



5. Remove the front wheel from the packaging, and lay it to one side.



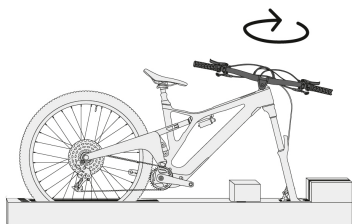
Save all carboard parts for later use.



6. Remove the textile cover from the bicycle.



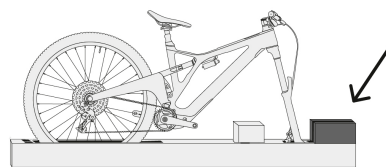
The textile cover will protect your bicycle when transporting or storing it.



7. Turn the handlebar and align it with the fork.



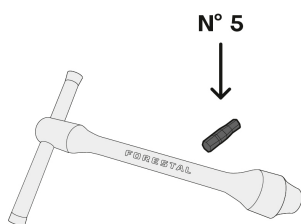
Hold the fork in place by securing it with your feet while turning the handlebars!



8. Open the accessories box and find the tool bag.



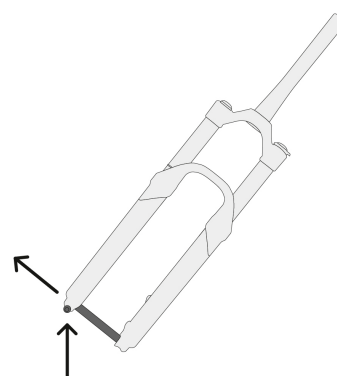
Explore the accessory box.



9. Install hex key n°5 on the torque tool and tighten the stem bolts to 7.2 Nm of torque.



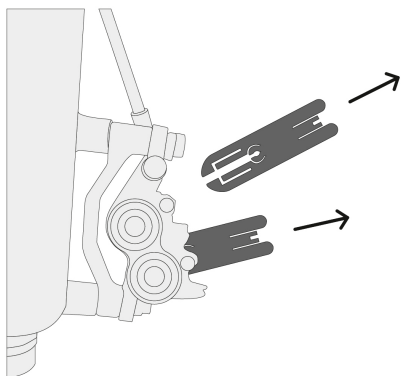
Torque values are printed on the side of the stem.



10. Remove the axle from the fork with a 5/6 mm hex key.



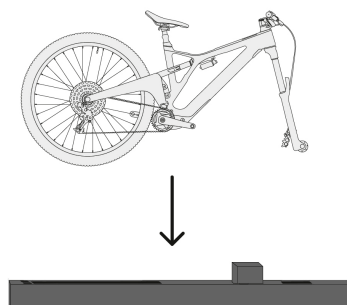
Some forks can have securing bolt underneath the axle.



11. Remove safety plastic from the front brake calipers by pulling it out.



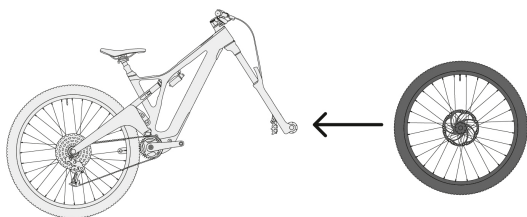
Leave the safety plastic in the accessories box, you may need it at a later date.



12. Remove bicycle from the cardboard base.



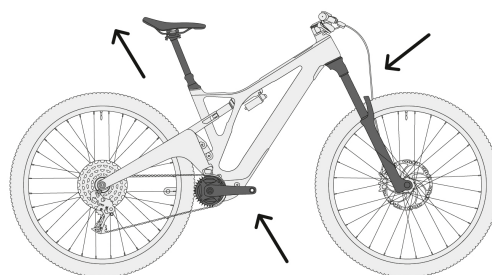
Remember that the charger box is located inside, don't throw it away.



13. Insert the wheel into the suspension fork and reinstall the axle.



Hold the front wheel in one hand and with the other, lift the front end of the bicycle.



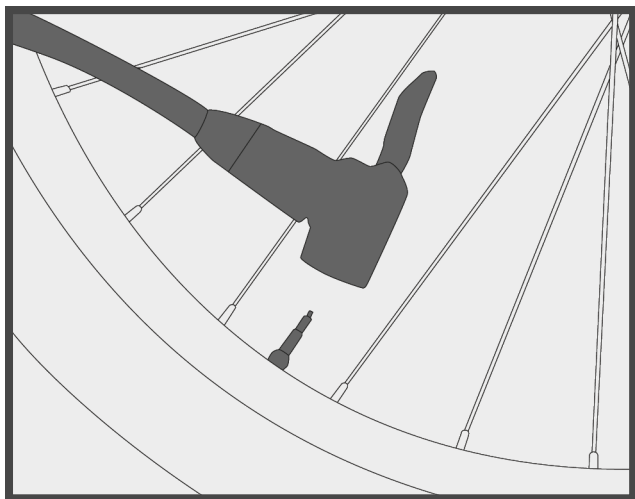
14. Adjust your bicycle to your preferences.



Install pedals, adjust seat height and suspension.

Setting Up Your Bicycle

In the next few steps, you will learn how to adjust your bicycle to unlock the full potential and fully enjoy your ride.



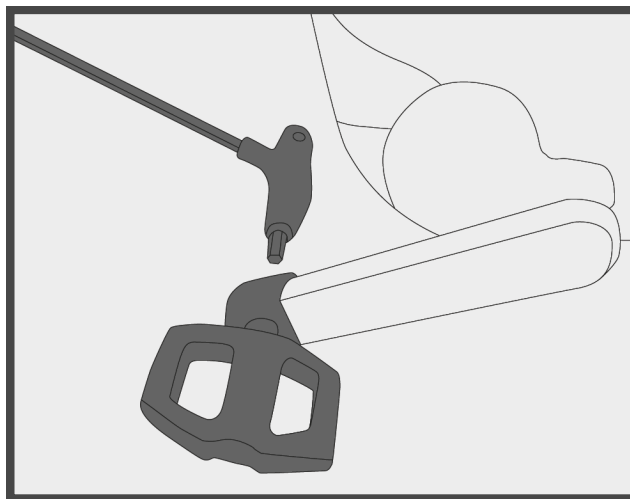
Inflate the tyres.



Tyre pressure should be between 1.6 bar (23.2psi) and 3.6 bar (52.2psi). Please do not inflate the tyres beyond the maximum pressure as indicated on the tyre. The optimal tyre pressure depends on the rider's weight, the terrain and personal preferences.



Please occasionally check your tyre pressure as low tyre pressure may lead to lack of control and a major risk of damaging your tyres, tubes, rims and a sudden tyre pressure loss. On the other hand, too high tyre pressure may lead to a significant lack of grip, lack of comfort and control, and risk of damaging the tyre.



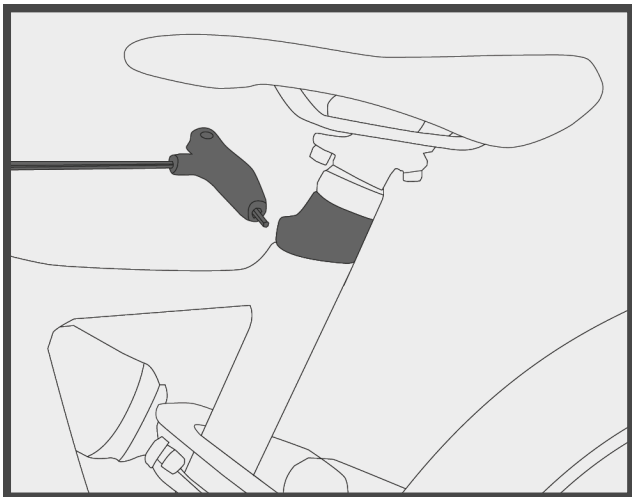
Install the pedals.



Left and right side pedal threads are different. The left pedal is a non-drive side pedal and it should be threaded counter-clockwise. The right side pedal has a regular thread and it is threading clockwise.



Pedals are not included in the box.



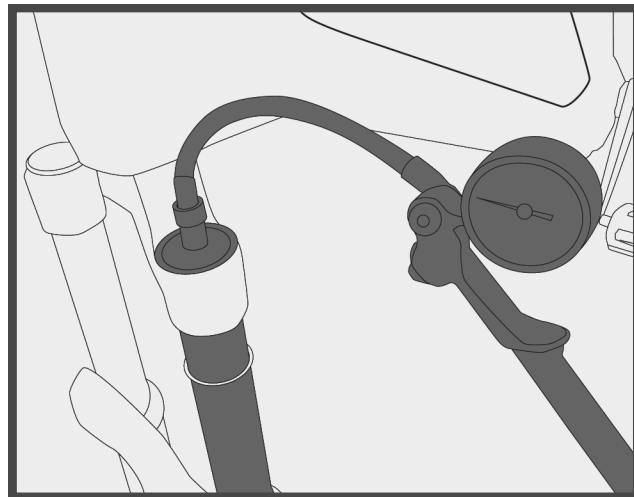
Adjust the seat height.



Extend the dropper post by pressing the left lever with the left thumb, then adjust the approximate height of the seat, and tighten the saddle with 4mm hex key. Sit on the seat and assess the height by placing your heel on the pedal and rotating the crank to the lowest position. If the leg is fully extended while your heel is on the pedal and you are sitting comfortably on the seat, this means you have the right seat height. If not, please repeat the process until you reach the correct seat height.



Observe the minimum and maximum insertion on the dropper post and never exceed it. By exceeding it, you are risking frame damage and injuries.



Adjust suspension pressure.



Adjust suspension pressure only with a high-pressure suspension pump. The air chamber for Rock Shox and Fox front suspension is located on top of the left leg while Öhlins uses the right leg for its air chamber assembly. Unscrew the protective cap from the top and attach the suspension pump.



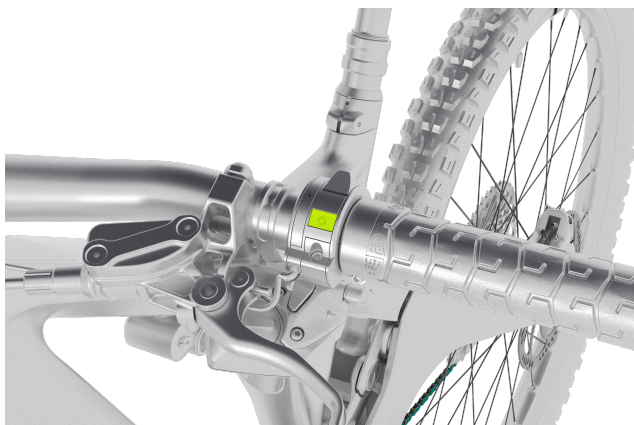
Rear suspension air valve is usually located on the side of the shock.



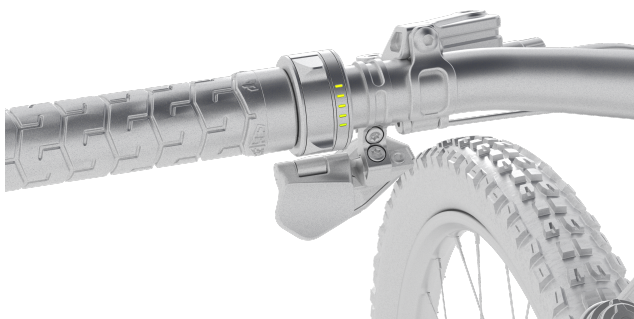
Air pressure in air forks and shock need to be precisely adjusted to your weight before the first use of the bicycle. You can find detailed instructions on how to set up your suspension air pressure in our Suspension setup guide in: www.forestal.com/usermanuals

Starting The Bicycle

In the next few steps, you will learn how to start your bicycle for the first time and become familiarized with the software of the F60-S1 system.



1. Press and hold the smart trigger button for 5s and then let go.



2. Wait for the led lights of the smart trigger and the display to turn on and for the system to boot.



Before the first ride, please fully charge your bicycle!



The initial start-up time may be between 40-50 seconds. When starting your bicycle for the first time a QR code will appear on the display and you will be obligated to first register your bicycle by scanning that QR code.



Completely turning off the bicycle is only possible through the smart trigger power button. If you turn off the display through our Smart Dashboard's feature, the bicycle will still provide support and assist you depending on which assistance mode you chose.

Dashboard explanation

From the main screen, you will find ongoing training information, current speed and the current status of the bicycle. From this touch screen, you can swipe horizontally and vertically to access other screens for more specific information.

Assistance modes

The assistance mode highlighted in white is the assistance mode which the user is currently in.

Time of day

Current time of the day.

Screen lock

Press and hold lock icon for 5s to lock the display's touch screen.

Map

Swipe right to see the map.

Distance

Distance travelled.

GPS

Current status of the GPS signal coverage.

Current battery level

Pressing the battery level bar will lead you to the screen with more detailed status of the current ride.

Elapsed time

Overall time since training started.

Settings

Swipe left to enter into the settings.

Velocity

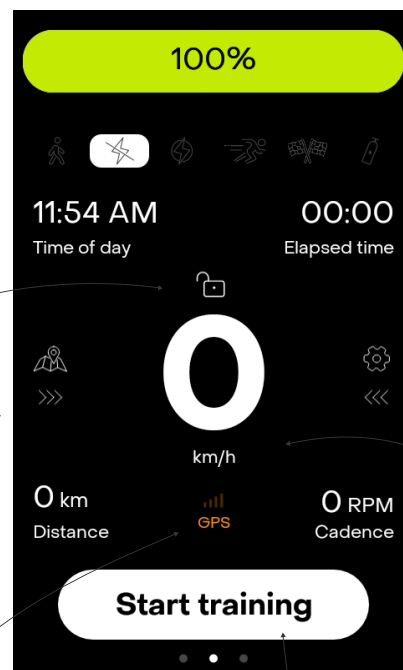
Current speed.

Heart rate

Current heart rate.

Start / Stop training

Start, pause or stop a training session.

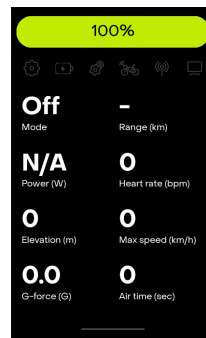


Dashboard menus



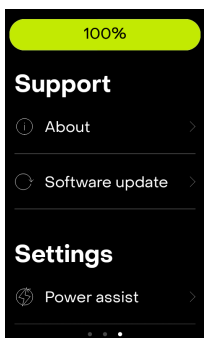
Map

Training map and course display.



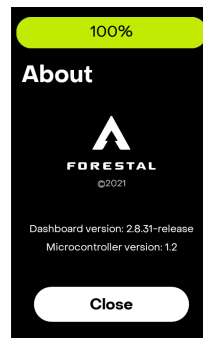
Ride details

This screen shows all the relevant information about the ongoing ride.



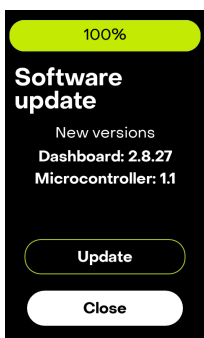
Support

Find out all about legal treatment, applied certificates and new bicycle firmware updates.



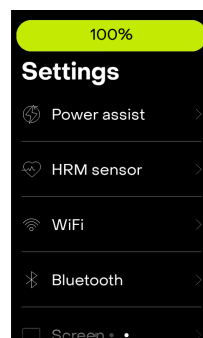
About

Copyright information and current software version.



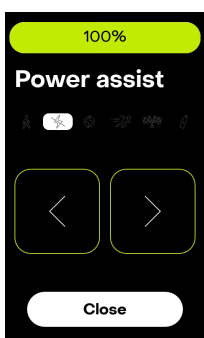
Software update

Software updates must be done with WiFi internet connection. When the device is updated the message “Checking for updates, please wait...” changes to “Your device is updated”.



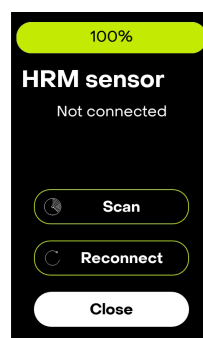
Settings

Settings menu from which you can access the adjustments of every feature.



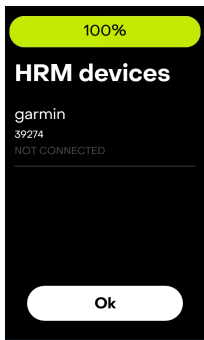
Power assist

Manually adjust motor power and change assistance modes with just a click.



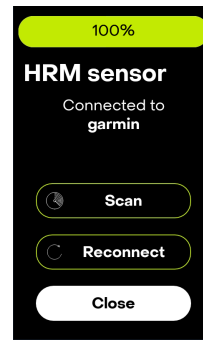
HRM sensor

Menu from which you can search and connect/reconnect to new HRM devices and see information about already paired devices.



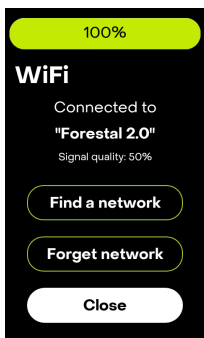
HRM devices

List of available devices.



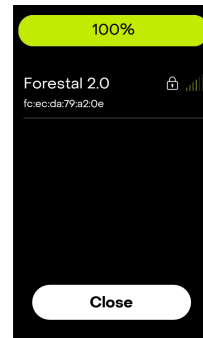
HRM sensor

Menu from which you see connected HRM devices.



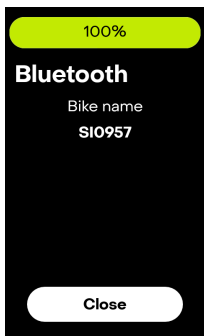
WiFi

Indication of WiFi connection. Your bicycle is connected to the WiFi through Forestal's smartphone app installed on your mobile phone. Signal strength is indicated in percentages.



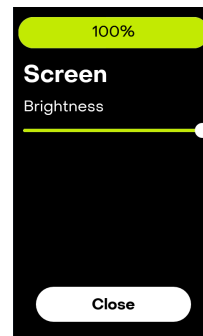
WiFi

List of available WiFi networks.



Bluetooth

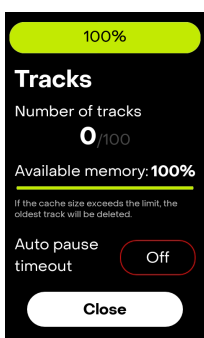
Screen in which you can change the name of your bicycle. It also shows the users connected through the app and your bike ID number.



Screen settings

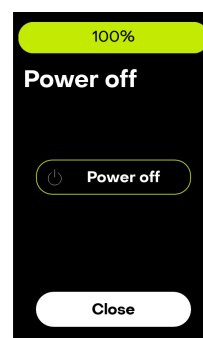
Configuration of different screen options:

- Screen brightness
- Auto-lock
- Auto-lock time



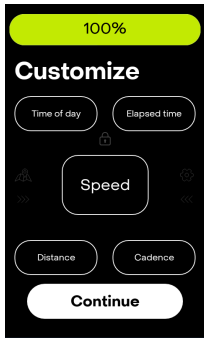
Tracks

This screen shows the number of saved tracks as well as the maximum size of the cache memory available.



Turn off the display.

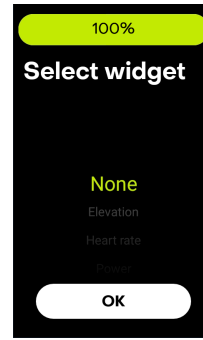
After this action, you can still use your Forestal with or without assistance, changing modes through smart trigger.



Home screen customization

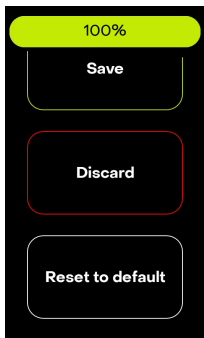
Adjust the configuration of each widget on the screen:

- Time of day
- Elapsed time
- Speed
- Distance
- Cadence



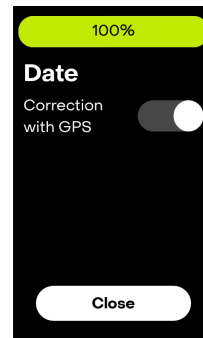
Screen customization widgets

Chose between different functions of every widget on the main screen.



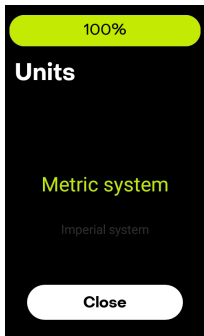
Home Screen Customization

Save widget configuration.



Date

Turn on/off GPS time and date correction.









Units

Change between Metric and Imperial unit systems.

Support levels

F60-S1 system has 5 support levels. Each level will seamlessly support you as you ride no matter your fitness level. You can see the current assist level at the top of your screen just under the battery level bar.

Assistance modes

	Walk assistance	Off the bike assistance while pushing the bike
	No assistance	No assistance
	Eco	Low assistance
	Sport	Medium assistance
	Race	High assistance
	Nitro	Maximum assistance



Forestal pedal-assisted bikes with F60-S1 motors can be used as regular bicycles as the motor is completely decoupled from the cranks when assistance is not engaged or when the bicycle is turned off.



Using Nitro mode can be dangerous for inexperienced riders. Please use it only when you are comfortable riding in Race mode first.



Avoid using Nitro mode for more than 15 minutes on steep climbs if the outside temp is above 30°C. Failure to do so can significantly increase the temperature of the motor unit which may lead to severe damage to electronic components.

Explanation of the Smart trigger

Forestal Smart trigger is an ergonomic control for toggling between assistance modes.

The design integrates seamlessly into the cockpit of each Forestal bike and is in easy reach of your thumb.



Hold the power button for 5s until the led lights turns on.

By default, the system will first show the battery level in the green led light.

By pressing the + and - controls you can quickly toggle between support levels. As you change modes, white LED lights will glow on the smart trigger to indicate which assistance level you are currently in.

To activate walk assist mode, press and hold the “-” control. The LED will turn blue and the bicycle will begin to move forward. Releasing the “-” button will automatically disengage walk assist and the bicycle will stop.

Maintenance and Transport

Regular maintenance will prolong the life of your bicycle and ensure it is safe to ride.



Make sure to regularly clean your bicycle and check for wear. Replace worn parts as necessary.



Use only original Forestal parts available from the Forestal website.



Never use a high-pressure washer near electronic, pivots, or suspension components of the bicycle.



Do not clean components with excessive water. If the internal electrical parts are infected with water, the insulator may corrode which could lead to a power drain or other electrical problems.



Using non-neutral soap solutions may lead to colour change or colour distortion on some plastic parts of the bicycle or carbon frame.

Cleaning the bicycle

Never use a high-pressure washer near electronic parts. Bear in mind that this is still bicycle with electronic part and need to be treated like any electronic device. Failure to follow these instructions can lead to damage to electronic system.

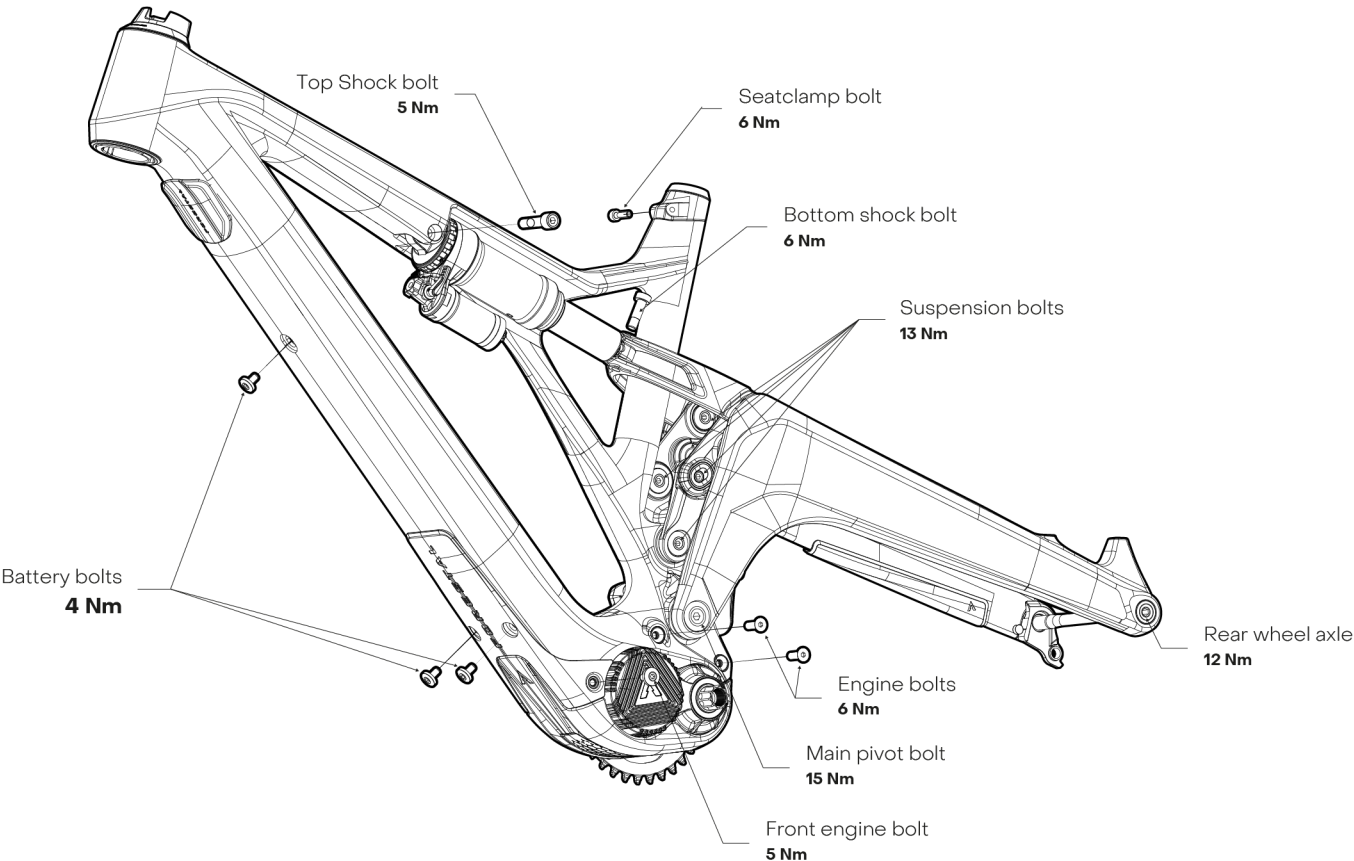
Cleaning the drivetrain parts

Chain and drivetrain parts are the most exposed moving parts of the bicycle. By keeping them clean you are preventing premature wear and tear of the chain and drivetrain sprockets. You can clean the chain and drivetrain parts with a dedicated chain degreaser. Make sure that while cleaning, degreaser, oil or grease doesn't come into contact with disc/rotors and brake pads! After cleaning ensure a quality lubricant is used on the drivetrain.

Software maintenance

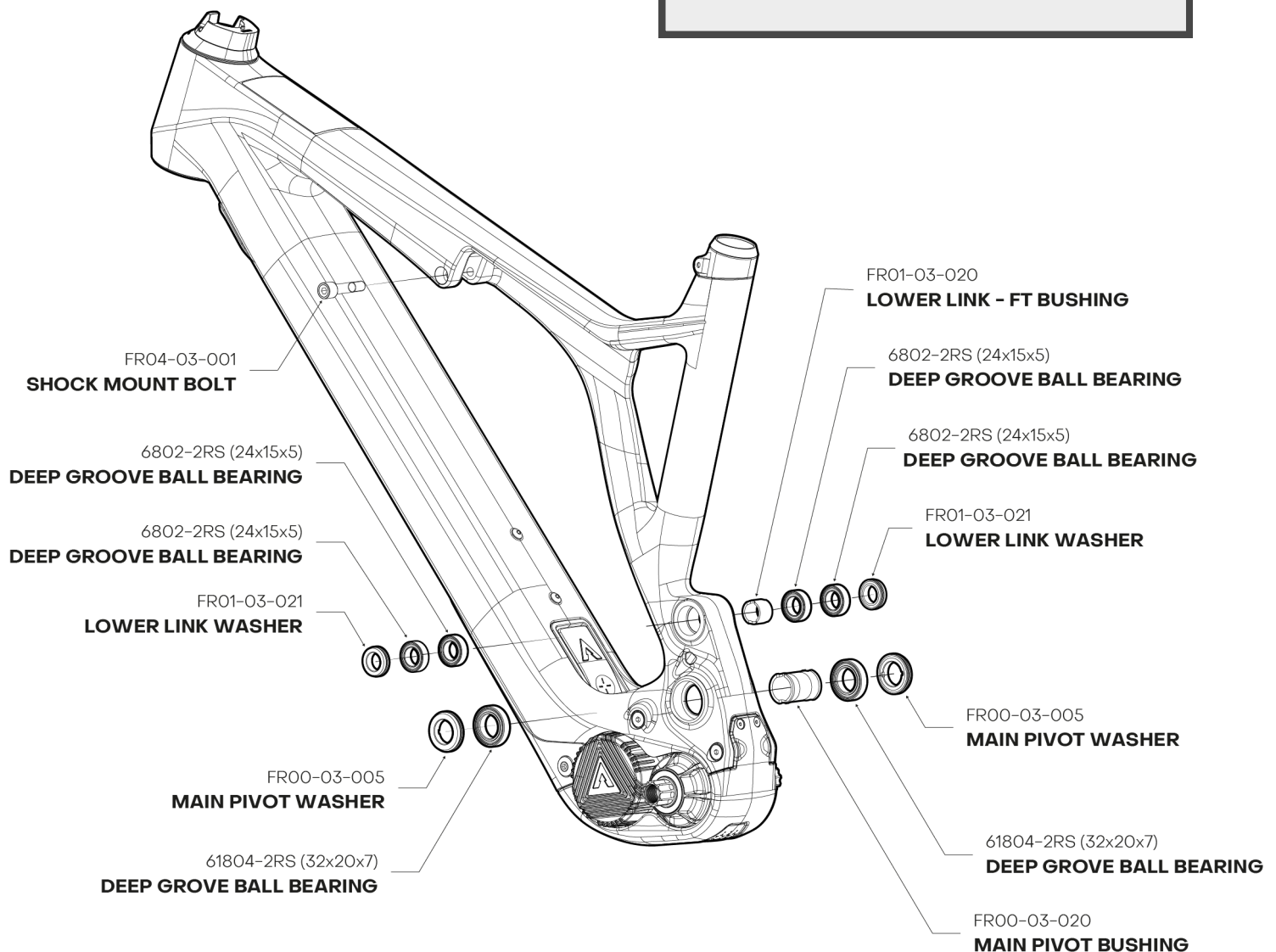
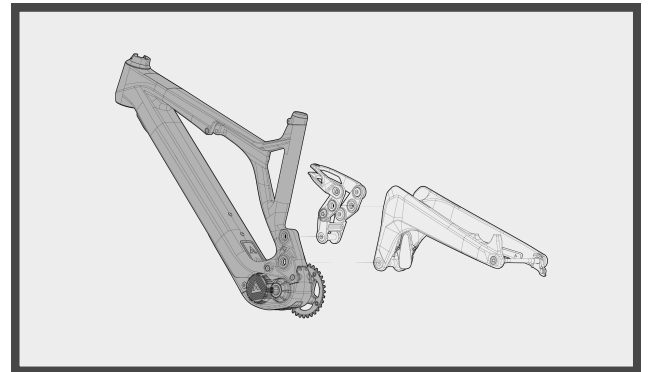
We will occasionally provide you with system updates which we strongly recommend you download and install on your bicycle as soon as they are available. These system updates will make your bicycle more efficient and secure. Updates can also be performed through your smart device via the Forestal Sync APP.

Torque diagram and tables Cyon



Torque recomendation - Frame	Newton-metre (Nm)	Pound-foot (lbf·ft)
Top Shock bolt	8 Nm	5.9 lbf·ft
Seatclamp bolt	6 Nm	4.4 lbf·ft
Bottom Shock bolt	6 Nm	4.4 lbf·ft
Suspension bolt	13 Nm	9.6 lbf·ft
Real wheel axle	12 Nm	8.9 lbf·ft
Main pivot bolt	15 Nm	11.1 lbf·ft
Motor bolts	6 Nm	4.4 lbf·ft
Front motor bolt	5 Nm	3.7 lbf·ft
Battery bolts	5 Nm	3.7 lbf·ft

Torque diagram and tables Cyon

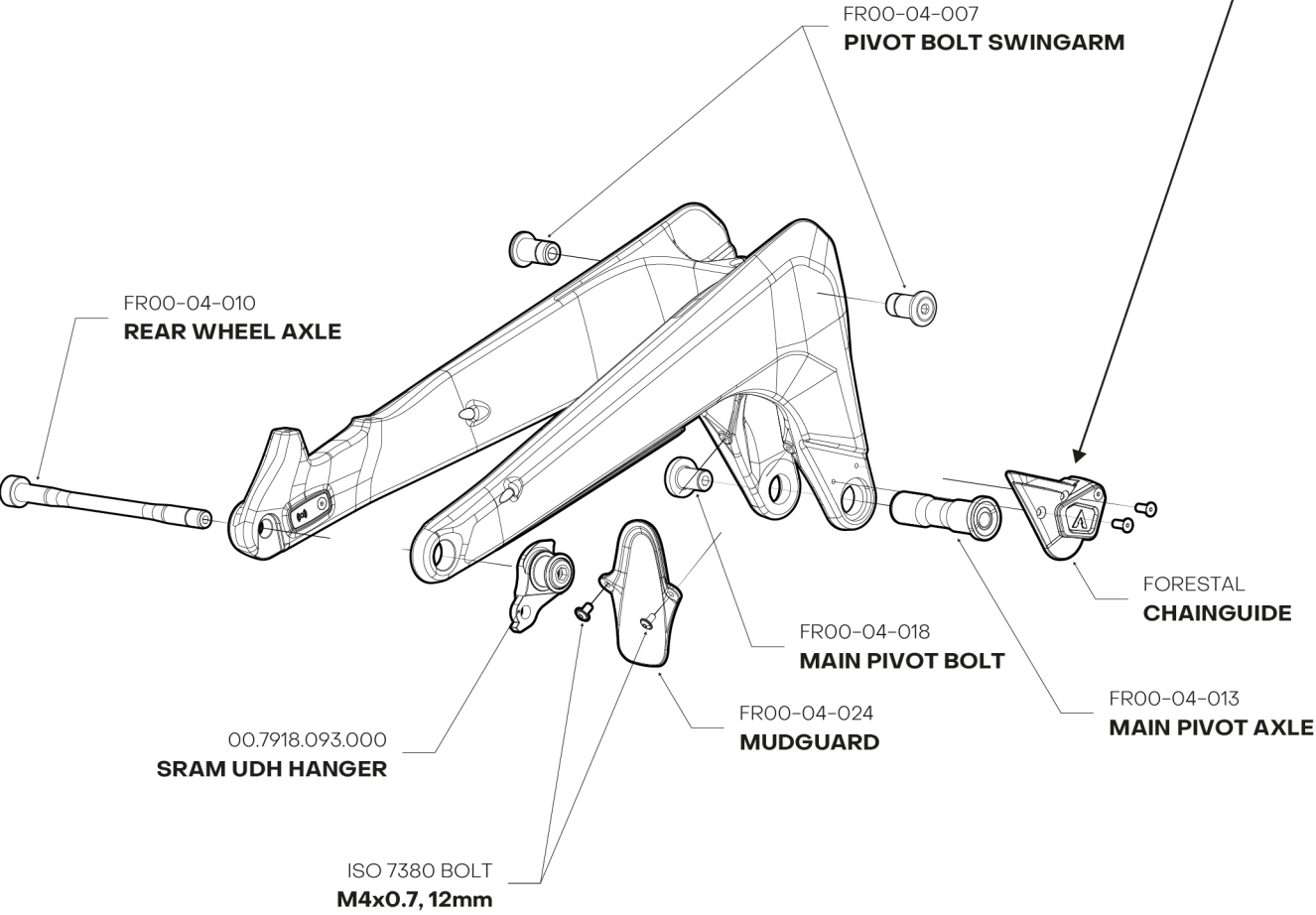
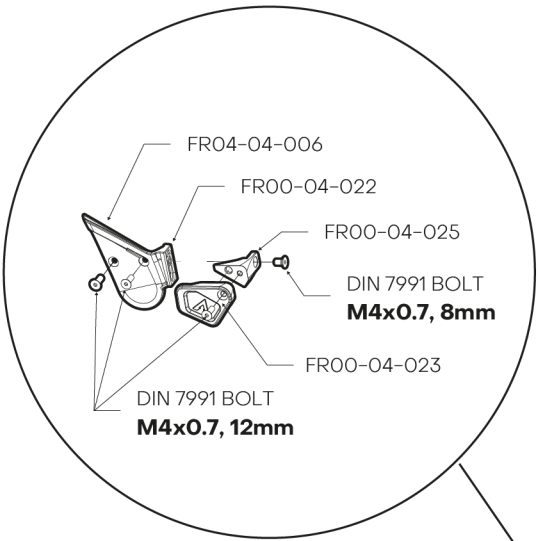
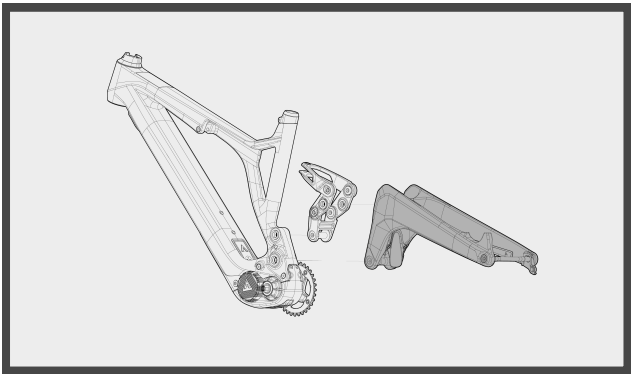


Before assembly, apply a thin coat of grease to the bolt body as well as blue thread-locker on bolt threads.



Use only the original Forestal parts available from the Forestal website.

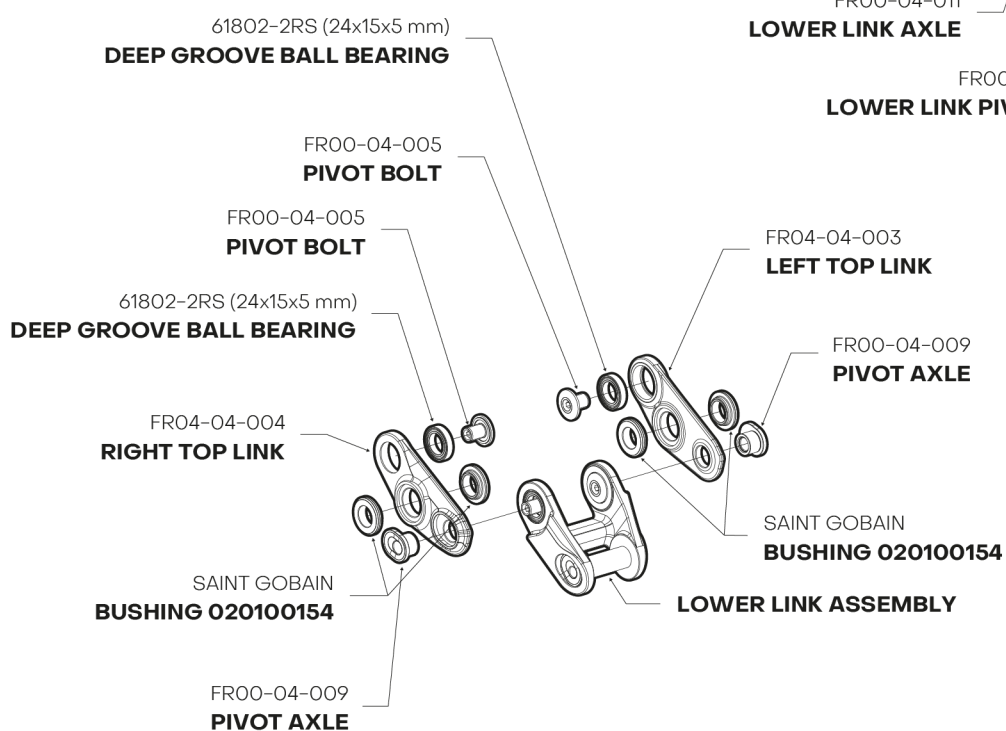
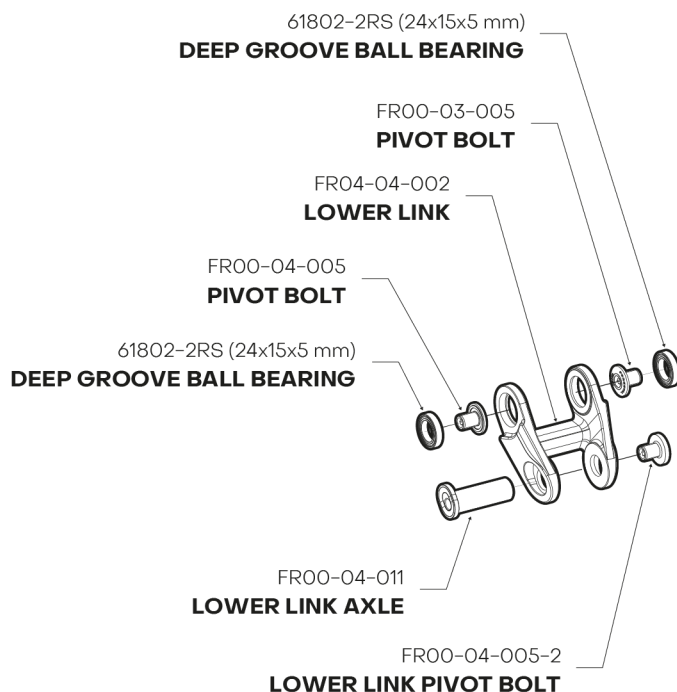
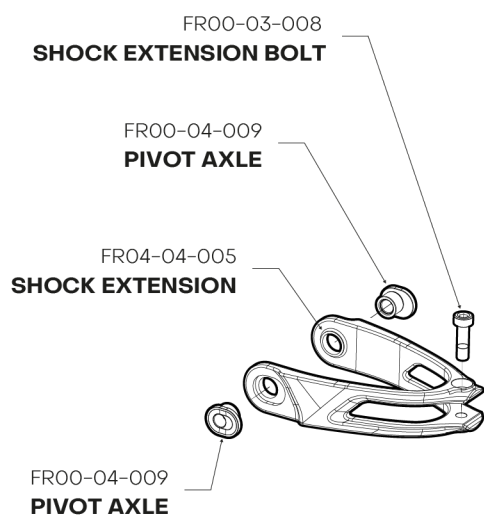
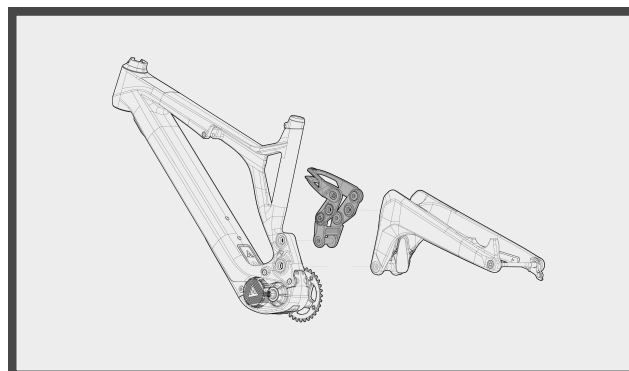
Torque diagram and tables Cyon



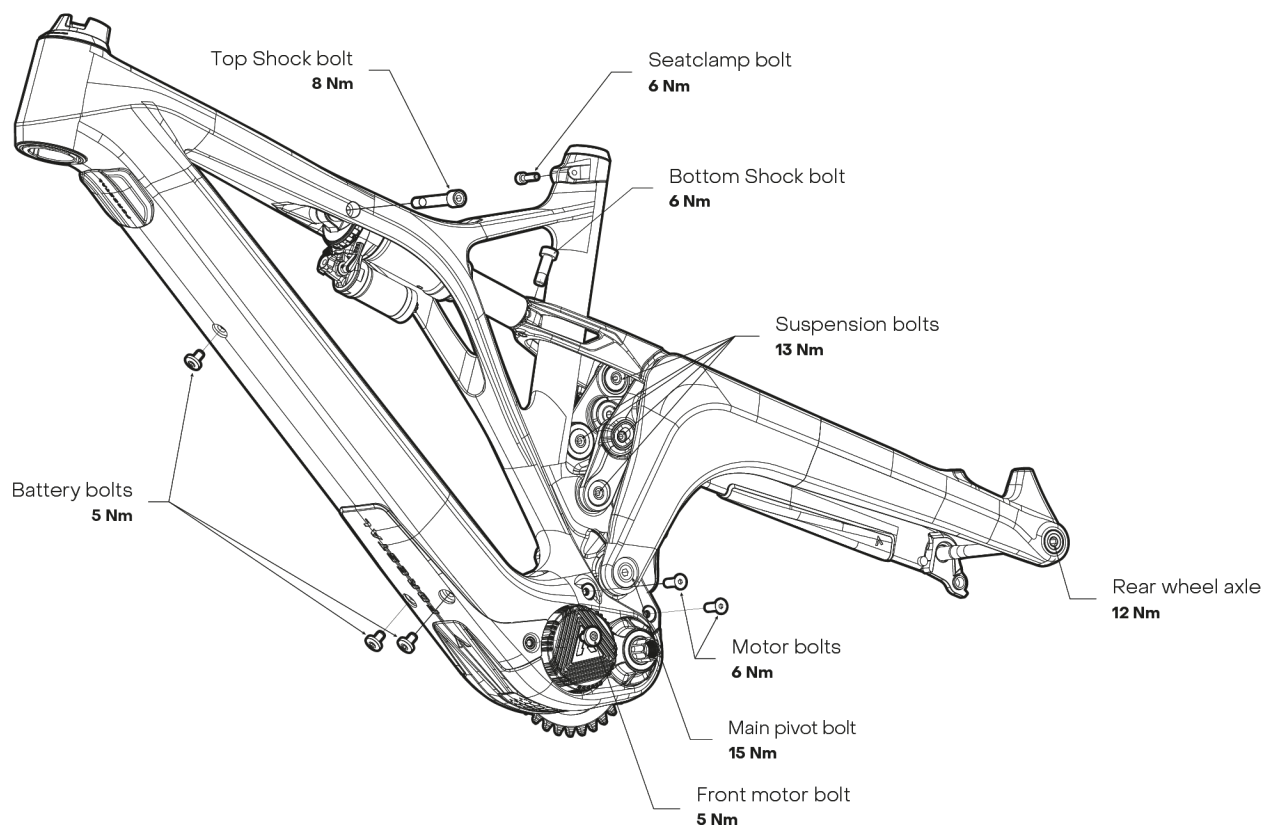
Torque diagram and tables Cyon



Always use blue thread-locker whenever you assemble the linkage.



Torque diagram and tables Siryon / Hydra



Torque recommendation - Frame

Newton-metre (Nm)

Pound-foot (lbf·ft)

Top Shock bolt

8 Nm

5.9 lbf·ft

Seatclamp bolt

6 Nm

4.4 lbf·ft

Bottom Shock bolt

6 Nm

4.4 lbf·ft

Suspension bolt

13 Nm

9.6 lbf·ft

Rear wheel axle

12 Nm

8.9 lbf·ft

Main pivot bolt

15 Nm

11.1 lbf·ft

Motor bolts

6 Nm

4.4 lbf·ft

Front motor bolt

5 Nm

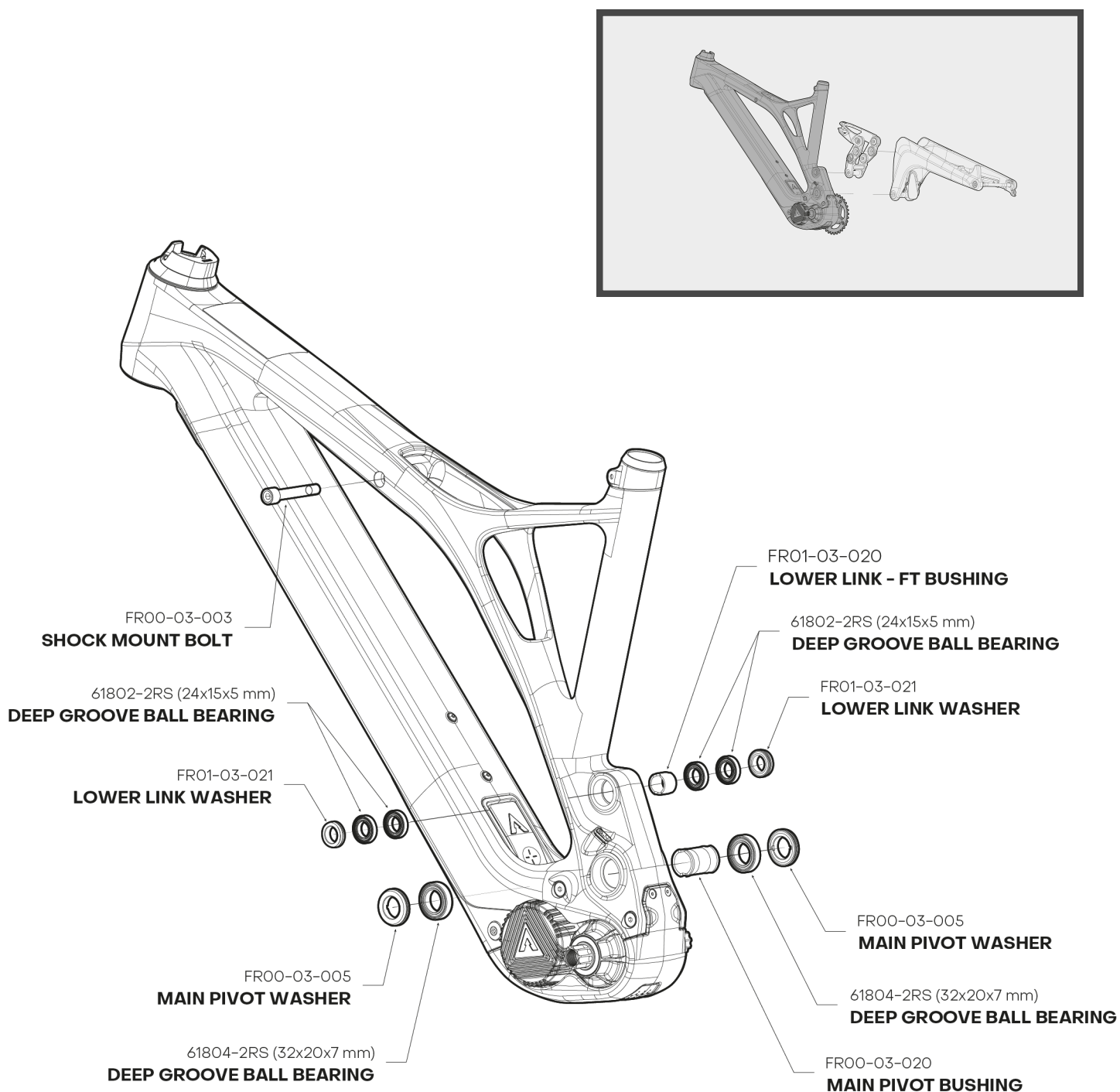
3.7 lbf·ft

Battery bolts

5 Nm

3.7 lbf·ft

Torque diagram and tables Siryon / Hydra

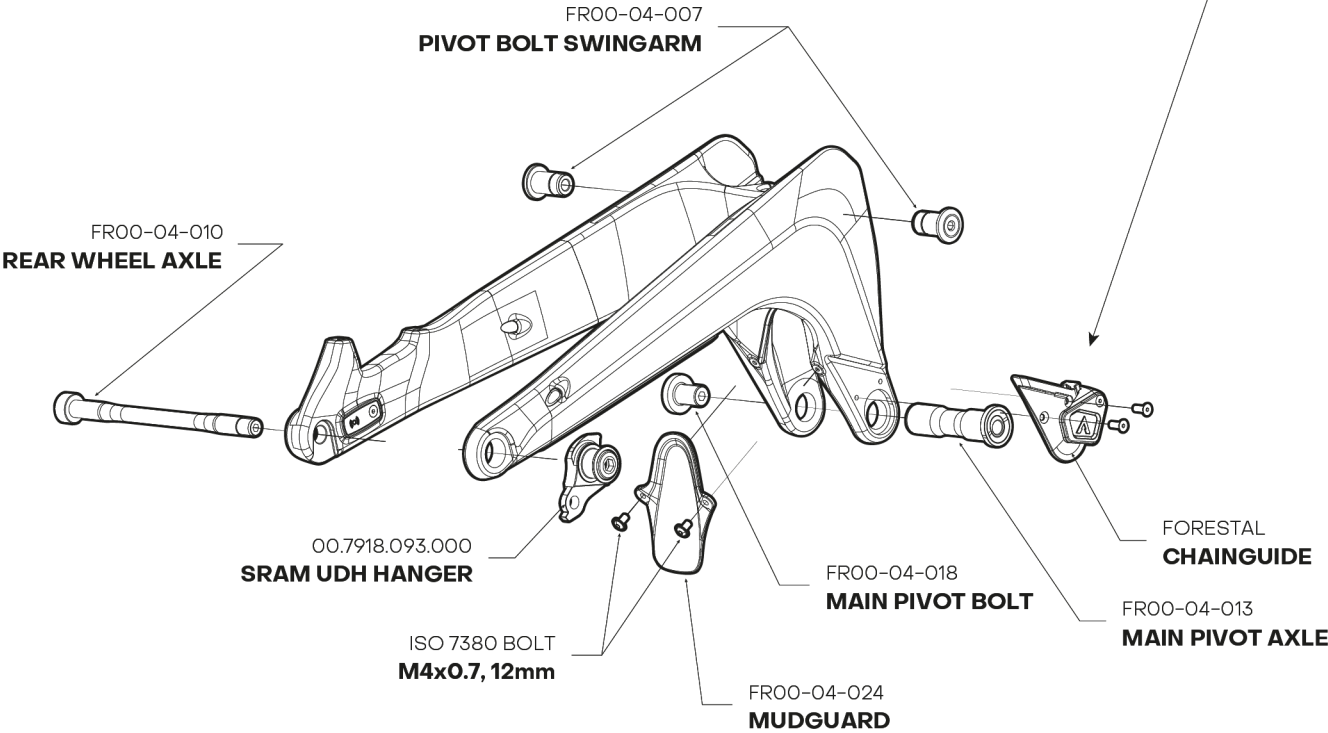
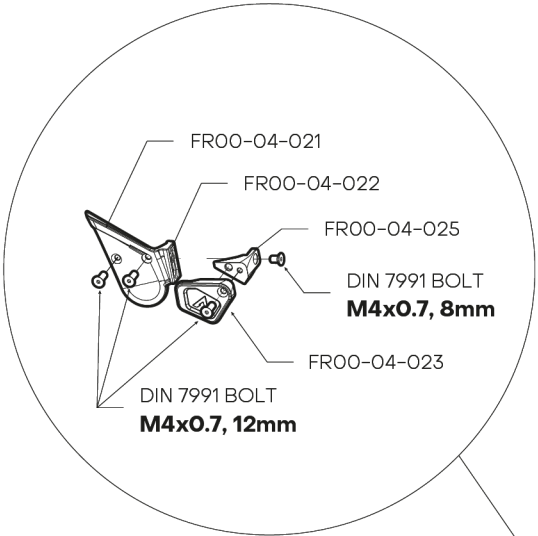
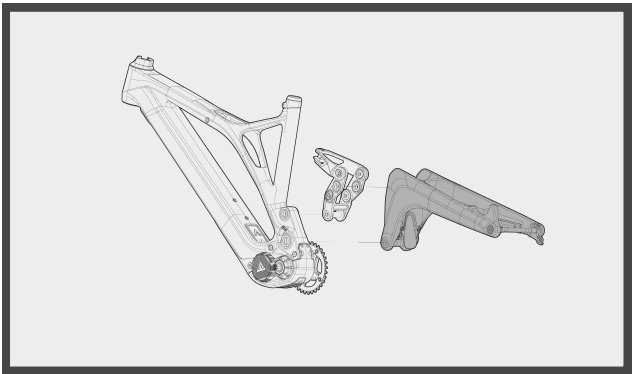


Before assembly, apply a thin coat of grease to the bolt body as well as blue thread-locker on bolt threads.



Use only the original Forestal parts available from the Forestal website.

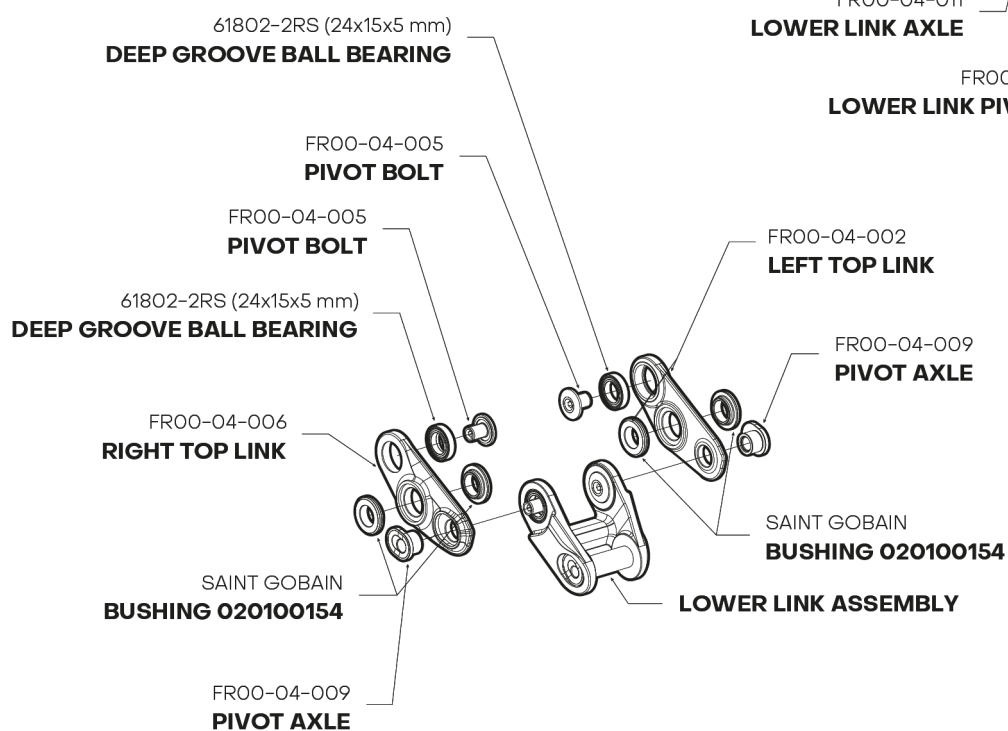
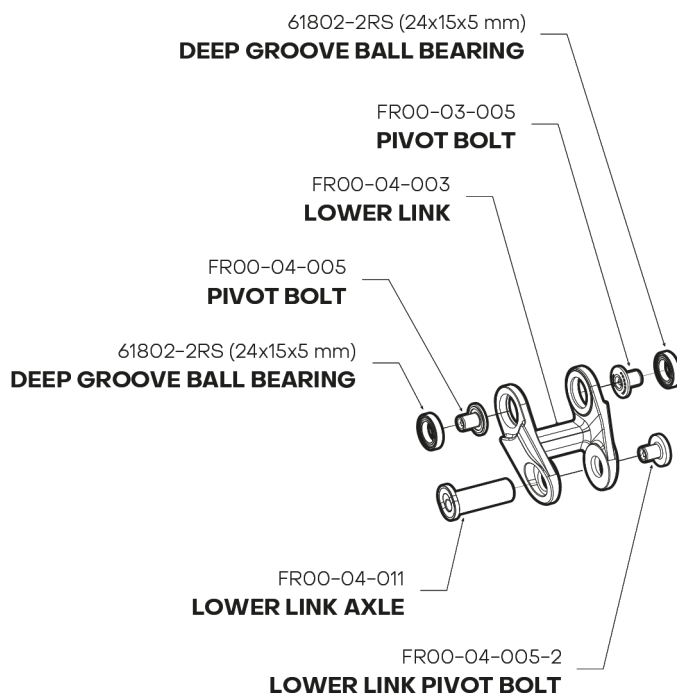
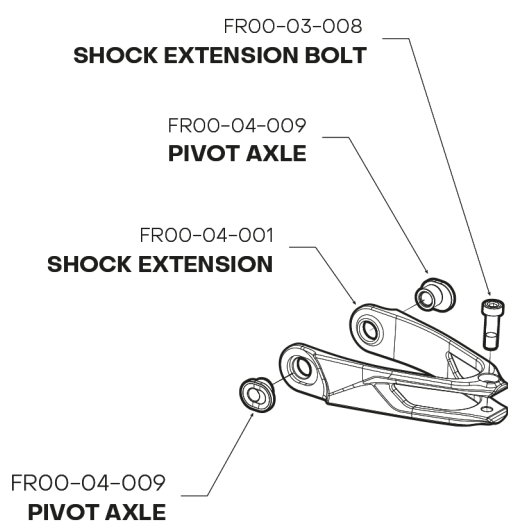
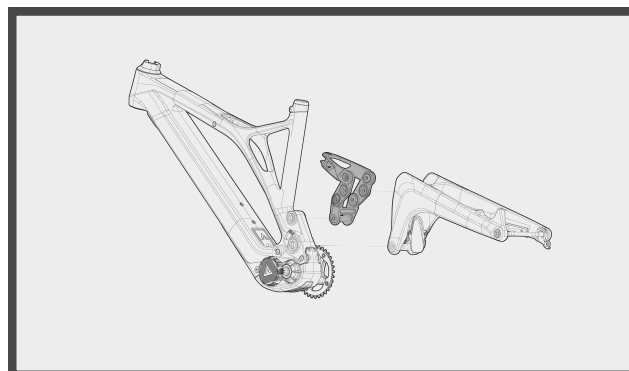
Torque diagram and tables Siryon / Hydra



Torque diagram and tables Siryon / Hydra



Always use blue thread-locker whenever you assemble the linkage.



Components torque table

Torque - Components	Newton-metre (Nm)	Pound-foot (lbf·ft)
Lock-on grips	2.5 – 4 Nm	1.8 – 2.9 lbf·ft
Shifter to handlebar	2.5 – 4 Nm	1.8 – 2.9 lbf·ft
Brake lever to handlebar	4 Nm	2.9 lbf·ft
Headset Stem top cap	5 Nm	3.7 lbf·ft
Stem to handlebar clamp	6 Nm	4.4 lbf·ft
Stem to steering tube	7.2 Nm	5.3 lbf·ft
Seatpost bolt	5 Nm	3.7 lbf·ft
Wheels thru axle	40 Nm	29.5 lbf·ft
Cassette retainer	40 Nm	29.5 lbf·ft
Disc brake rotor to hub	6 Nm	4.4 lbf·ft
Disc brake caliper to frame / fork	6 Nm	4.4 lbf·ft
Rear derailleur fixing bolt	11 Nm	8.1 lbf·ft
Derailleur cable bolt	5 Nm	3.7 lbf·ft
Cranks to motor	48 – 55 Nm	35.4 – 40.5 lbf·ft
Chainring bolts	8 – 9 Nm	5.9 – 6.6 lbf·ft
Pedals to the cranks	30 Nm	22.1 lbf·ft

This list provides some guidelines but is not to be considered a complete representation of needed service. Following these guidelines will help maintain the performance of your bicycle and prevent more serious problems from arising. For service instructions and torque values for your specific components, visit the manufacturer's website.

Storing the bicycle

We recommend that you protect your bicycle from outside elements and store it in a clean and dry place at a temperature from 10 – 25 °C (50 – 77 °F). Before storing your bicycle for a longer period of time, it is recommended that you clean the whole bicycle, lubricate all moving parts and deflate the tyres to about the half of the normal tyre pressure.

Transportation

Whether it is for travelling, warranty or maintenance purposes, we strongly recommend you to use your bicycle's eco-friendly box. You can re-pack your bicycle in it by using all the packaging parts that originally came with the bicycle and by following packing/unpacking procedure. In case of transportation by air, make sure to contact your particular airline for further advice.

Battery transportation

It is important to note that airlines have restrictions on electronic components such as batteries. It is only allowed to travel with up to 100 Wh lithium-ion battery in your checked bag. Therefore, we recommend you to contact your particular airline if you want to transport your bicycle by air to find out more information about the different rules and restrictions regarding this subject. Transporting the battery by land transport will require battery to be packed in secure transport box to avoid potential damage. Some particular transport companies have different packaging rules for dangerous goods so please contact your desired one for more details.

Disclaimers & Warnings

Please read the user manual carefully and follow all the recommended procedures.

By following this, you are extending the lifespan of your bicycle and preventing potentially dangerous situations and injuries to you or third parties.



Forestal is not responsible for any damage or injuries caused to you or third parties by the use or incorrect assembly of this bicycle or any product contained in this box.



The user manual is subject to change without previous notice. We will always try to improve the methods and the quality of our information and processes that are contained in this manual to provide a better user experience.



Use only original spare parts and Forestal parts that you can find on:

www.forestal.com/shop



Incorrect use or modifications to the bicycle frame, motor, and battery in any way affecting the design or intended use and operation will lead to voiding the warranty and render your bicycle not in compliance with the applicable consumer rights and regulations.

Declaration of Conformity

Forestal bicycles are manufactured in Andorra, in full compliance with the harmonized standards and beyond.

With this declaration of conformity, the Manufacturer:

FORESTAL GROUP S.L.U.

Carretera d'Arinsal – BORDA DEL PRAT DE LA FONT

AD400 ARINSAL

ANDORRA



Declares that following products manufactured in the year 2021

with the Brand Forestal, and models:

Hydra Halo / Hydra Diode

Siryon Halo / Siryon Neon / Siryon Diode / Siryon Edition one

Cyon Halo / Cyon Neon / Cyon Diode

Cygnus Halo / Cygnus Neon / Cygnus Diode

Aryon

Aryon SC

have been manufactured in accordance to satisfy the requirements of the norm below stated and follow the standards hereby listed:

ISO 4210:2015

EN 15194:2017

EN 17404:2022

ISO 12100:2010

2006/42/EC

Our internal Production Quality Control system complies the requirements of the Standard ISO 9001, and assures the fulfillment of the standards mentioned in this declaration of conformity targeting higher security levels than such standards require.

A handwritten signature in black ink, appearing to read 'Rafael Gil-Pérez Redondo', written over a horizontal line.

Andorra, 1st of May 2021

Rafael Gil-Pérez Redondo
General Manager

Thank you

for your purchase and for
becoming an essential part of the
Forestal team.

#BeTrueToYourNature

#RideForestal

If you have any questions, please do not hesitate in
contacting us as we will gladly help you.

Customer Service

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