

Adventure Neo Allroad

Owner's Manual Supplement

 **WARNING**

**READ THIS SUPPLEMENT AND YOUR
CANNONDALE BICYCLE OWNER'S MANUAL.**

Both contain important safety information. Keep both for future reference.

Safety Messages

In this manual, particularly important information is presented in the following ways:

DANGER

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

Indicates a hazardous situation which, if not avoided, may result in death or serious injury.

NOTICE

Indicates special precautions that must be taken to avoid damage.

Cannondale Help Center

Our online Help Center contains helpful resources to consult about our bikes.



<https://cannondale.zendesk.com/hc/en-us>

Bike Registration

To register your bike:
Go to the Product Registration section of our website at www.cannondale.com



Bike serial number location shown on page 9.

Cannondale Supplements

This manual is a “supplement” to your [Cannondale Bicycle Owner’s Manual](#).

This supplement provides additional and important model specific safety, maintenance, and technical information. It may be one of several important manuals/supplements for your bike; obtain and read all of them.

Please contact your Authorized Cannondale Dealer immediately if you need a manual or supplement or have a question about your bike. You may also contact us using the appropriate country/region/location information.

You can download Adobe Acrobat PDF versions of any manual/supplement from our website: <http://www.cannondale.com>.

Contacting Cannondale

Cannondale USA

1 Cannondale Way
Wilton, CT 06897, USA
1-800-726-BIKE (2453)

Cannondale Europe

Geeresteinselaan 57
3931JB Woudenberg
The Netherlands
PH: 00.31.541.200374

International Distributors

Consult our website to identify the appropriate Cannondale Dealer for your region.

CONTENTS

General Safety Information.....	1-8
Identification	9
Technical Information	10-21
Replacement Parts.....	22-23
E-Bike Maintenance.....	24-28

Your Cannondale Dealer

To make sure your bike is serviced and maintained correctly, and that you protect applicable warranties, please coordinate all service and maintenance through your Authorized Cannondale Dealer.

NOTICE

Unauthorized service, maintenance, or repair parts can result in serious damage and void your warranty.

Drive System

WARNING

MANUFACTURER’S INSTRUCTIONS - In addition to this supplement, you must read and follow the manufacturer’s instructions for all components of the drive-assist system:

Drive Unit	Battery
Display/Control Unit	Charger

Manufacturers’ instructions contain important operations, service and maintenance information.

General Safety Information

Intended Use



The intended use of all models is
ASTM CONDITION 2,
General Purpose Riding.

What is an E-Bike?

Electric bikes, also known as “E-Bikes,” are bicycles equipped with an electric pedal-assist drive system. An E-Bike IS NOT a moped or motorcycle. E-Bikes share components common with pedal-only bikes.

What is a Drive System?

The drive-assist system consists of a drive unit, a battery, a computer control, and various electronic components (harness wires, sensors, and switches). There are many different drive-assist systems for differing uses and bike types. Likewise there are various drive-assist system manufacturers (Shimano, BOSCH, Bafang, Yamaha, etc.).

How does the Drive System work?

It is important to know that when the drive-assist system is turned ON, the drive unit engages to provide power only while you are pedaling.

The amount of power provided by the drive unit depends on your pedaling force and on the assistance mode/level you set with the handlebar control unit. At anytime, if you stop pedaling, the drive-assist will disengage.

In all modes/levels, the drive-assist system power reduces progressively and cuts off as the bike reaches the maximum allowable speed. The drive-assist re-engages when speed drops below the maximum allowable speed as long as the pedals are turning.

Whenever the drive-assist system is turned OFF, you can pedal the bike normally. The drive system will not engage.

WARNING

Understand your bike, its drive-assist system, and the intended use of both. Using your bike the wrong way is dangerous.

Please read your Cannondale Bicycle Owner's Manual for more information about Intended Use and Conditions 1-5.

Servicing

WARNING

This supplement may include procedures beyond the scope of general mechanical aptitude.

Special tools, skills, and knowledge may be required. Improper mechanical work increases the risk of an accident. Any bicycle accident has risk of serious injury, paralysis, or death.

To minimize risk we strongly recommend that owners always have mechanical work done by an Authorized Cannondale Dealer.

Compliance/Regulation



WARNING

YOU MUST OBEY ALL LOCAL LAWS & REGULATORY REQUIREMENTS - It is your responsibility to identify and to follow all local laws and regulations necessary for legal compliance. Compliance with local regulations is critical to the safety of the rider and of others where the bike is used.

Here are some important specifications related to compliance with local laws:

VEHICLE CLASS - A definition (California, USA) of the different types of E-Bikes, E-Bike labeling, and legal use areas, including any required additional equipment, registration, and applicable rider age restrictions.

VEHICLE CATEGORY - A definition of the European Union of the different types of an E-Bike, who may use them and where they may be used, necessary additional equipment such as lighting and signaling devices, as well as any necessary insurance and licensing.

OBSERVE MINIMUM OPERATOR AGE - Follow any national, state, or local laws for any minimum age restrictions for the operator of the E-Bike.

Ask your local Authorized Cannondale Dealer for more information about operating an electrically-assisted pedal bicycle in your area.

Operation

WARNING

Always wear an approved bicycle helmet and all other protective gear (e.g., gloves, pads, and cycling shoes).

Importance of practice & rider training - before you ride this bike, practice riding in a safe area free from hazards. Take time to learn the bike's controls and performance. Practice the controls and to gain the experience necessary to avoid the many hazards you will encounter while riding.

Do not ride "hands-off" - Keep your hands on the handlebars when riding the bike. If you remove your hands from the handlebar while riding, you can lose control of the bicycle and crash.

Changing the assistance level while riding: Changing the drive-assistance level while riding will increase or decrease the acceleration of the bike. You should anticipate this change in speed and react appropriately depending on the riding conditions such as on slippery trails, tight turns, or unstable or uneven surfaces. Set assistance level to "eco" (lowest assist) or to "off" before descending technical trails (e.g., tight downhill switchbacks).

When not riding: Turn the drive system off to prevent unauthorized use.

Do not ride the e-bike without the battery. Make sure the battery is fully charged before every ride to help ensure adequate battery power for necessary lighting and for the drive system.

Do not remove any lighting or reflectors and do not ride if they do not work.

Do not allow children to operate or to come into contact with the e-bike or its parts.

Only turn the drive system on when you are seated ready to ride.

Accidental activation: Always disconnect the battery from the bike before working on the bicycle. If you transport the bike by car or by airplane, obey local regulations regarding transporting a bicycle with a drive system battery. Accidental activation of the bicycle drive system can result in serious injury.

continued next page

continued from previous page...

Wired system control: If the drive system control device is detached from the mount or if the cables are disconnected or damaged, the drive system will automatically shut off. If this happens, you will have to stop the bike, turn the system off, re-attach the computer to the base, and then turn the system back on to resume operation.

Wireless system control: In wireless control systems, the operation of the drive system is controlled using radio frequencies without physical attachment. Therefore, ON/OFF activation is determined by software programming. Please consult the manufacturer's instructions for information on preventing accidental activation or on restarting the drive system in the event of a recovery from a drive system fault.

Your insurance policies - Your insurance policies (e.g., liability, property, and injury) may not provide coverage for accidents involving the use of this bicycle. To determine if coverage is provided, you should contact your insurance company or agent. Also, make sure your e-bike is insured and registered according to the local laws.

Ride sensibly and safely around others - the application of power by means of the electric motor assist means that riders can reach high speed. Riding faster increases the risks of serious accidents.

Watch out for other vehicles, cyclists, pedestrians, and animals where you ride. Always operate under control and at a safe speed. Others may not be aware of you. It is your responsibility to anticipate and to react to avoid accidents.

E-bikes are heavier than ordinary bikes - always park the bike in a suitable safe area away from children, cars or animals that may come into contact with it. Park the bike so that it cannot fall over and possibly result in injuries.

Do not ride into or attempt to ride through water or to submerge any part of the bike. If you ride through water you can lose control of the bike or the drive-assist system can become disabled or damage.

You can be severely injured, paralyzed, or killed in an accident if you ignore these warnings.

Batteries & Chargers

DANGER

Battery Damage Following: Flooding, Water-Intrusion, Submersion, Very Hard Impacts

If your electric bike lithium battery has been immersed or soaked by severe storm flooding, or water leakage in your home, you should immediately put that battery outdoors. Choose a place that, should the battery catch fire, the fire will not ignite a building, a vehicle or be any sort of safety risk. These large format batteries, containing enough energy to propel a rider 20 MPH or more for many miles, will release that energy as heat when they short circuit upon being immersed. Maybe not immediately, but they are very dangerous and must be removed to a safe location and monitored. If immersed or soaked, get them out of the house or building now!

WARNING

REPLACEMENT - Only use the battery pack and charger indicated in the "Specifications" section of this supplement. Do not use other batteries or chargers. Do not use the charger to charge other batteries.

PREVENT DAMAGE - Do not drop the battery or charger. Do not open, disassemble, or modify the battery or charger. There are no user-serviceable parts inside.

Keep the battery out of intense sunlight and away from heat. Excessive heat will damage the battery.

Keep battery away from paper clips, coins, keys, nails, screws, or other small metal items to prevent shorting exposed battery contacts. Shorting battery contacts can cause severe burns, fire, or an explosion.

STORAGE & TRANSPORTATION - When the battery is not in use in the bicycle, its transportation is subject to hazardous materials regulation. Special packaging and labeling requirements may exist. Contact local authorities for specific requirements. Never transport a damaged battery. Insulate battery contacts before packaging. Package the battery inside a shipping container to prevent damage. The battery must be removed before flying and may be subject to special handling by the air carrier.

CHARGING - Bring the battery and charger indoors and allow to reach room temperature before charging. Make sure charger and A/C outlet are the same voltage.

Locate both charger and battery indoors in a clean, dry area with good ventilation to charge. Make sure the area is free from combustibles to avoid fire from sparks or from over-heating. Keep charger ventilation openings unobstructed. Do not cover the charger or the battery.

Disconnect the battery from the charger unit when fully charged. Do not leave a fully-charged battery connected to the charger. Unplug the charger from the wall outlet when not in use.

Maintain the battery and the charger as directed by the manufacturer's instructions.

DISPOSAL - Battery pack and charger contain regulated materials and must be disposed/discarded in accordance with national and/or with local laws. Do not discard the battery/charger into fire, into water, or into ordinary household waste/garbage. Instead, take to a waste facility/recycler.

FAILURE TO OBSERVE THESE WARNINGS CAN RESULT IN ELECTRICAL FIRES, EXPLOSIONS, SEVERE BURNS, OR ELECTROCUTION.

No Modification

WARNING

DO NOT MODIFY THIS BICYCLE/DRIVE SYSTEM IN ANY WAY FOR ANY REASON.

Doing so can result in severe damage, in faulty or in dangerous operating conditions, or in violation of local laws.

Dealers and Owners **MUST NOT** change, alter, or modify in any way the original components of the bicycle or drive-assist system (e.g., the specified sizing of the gear ratios, i.e., the front chainrings and rear cogs).

Attempts to “hot-rod” or to “improve” the speed of the bike are dangerous to the rider. Use only specified Cannondale and/or manufacturer drive-assist service and replacement parts.

Side Stand

WARNING

Do not sit on the bicycle with the stand down. Kickstand is not designed to support the weight of a person.

Make sure kickstand is up before riding.

To prevent toppling over, park your bike on a level surface; lower the stand.

Commuting

WARNING

EQUIPMENT - Any bicycle, including an E-Bike must be properly equipped for commuting including any legally-required lights, signals, and registrations. Ask your Authorized Cannondale Retailer if commuting is within the scope of your bike’s intended use and if your bike is properly equipped for commuting.

DANGERS - Operating an E-bike as a commuting vehicle is no less dangerous than operating an ordinary pedal bike or automobile. E-Bikes are certainly not designed to protect you in a crash. Do not assume the bike or its drive capability will protect you or keep you from being involved in a serious accident.

NIGHT RIDING- Riding at night on an E-Bike or on a pedal-only bike is very hazardous.

Read the topic “Riding at Night” in your Cannondale Bicycle Owner’s Manual for more information on the many hazards of riding at night.

You must operate with a very high degree of awareness and precaution to only reduce the risk of death or serious injury.

About Racks & Bags

WARNING

LOADING LIMIT (TOTAL): Loading limit for a front or rear rack is marked on the rack. Do not overload the rack. Do not carry a passenger. A rack is not a seat.

UNDERSTAND THAT ADDING RACKS WILL AFFECT HOW YOUR BIKE HANDLES; YOU MUST COMPENSATE. A loaded rack bag will affect the handling (e.g., steering, stability, braking, acceleration, etc.) of your bike. You must learn to compensate for the handling effects of the loaded items. If you use multiple racks and/or cycling bags, distribute all weight across racks evenly.

DO NOT MODIFY: The rack or bike frame must not be cut, drilled, or modified in any way.

PERIODIC INSPECTION REQUIRED: The rack and frame mounting points must be periodically inspected for damage as part of your routine bicycle maintenance.

SECURE RACK/BAG CONTENTS: You must make sure that all items placed on the rack or in a bags are secure and cannot be thrown out or shifted while riding. You must prevent any parts of the contents, the straps, or the tie-downs used to secure the rack contents including those of the bag from interfering with your ability to steer the bicycle or to use any of its controls. **REMOVE ALL** items in the rack, and bags on the bike should be removed when the bicycle is placed on an automobile rack. Make sure the strap ends/hooks are secured at the frame or rack tie-down points. Make sure nothing such as loaded item or straps or ties used to secure the load can come loose and entangled in the wheel.

YOU CAN BE SEVERELY INJURED, PARALYZED, OR KILLED IN AN ACCIDENT IF YOU IGNORE THESE WARNINGS.

Trailer, Child Carriers or Child Seats

WARNING

Do not attach a trailer, a child carrier or a child seat to this bicycle or its front/rear racks. Attachment of a trailer, a child to this bicycle can result in a serious accident leading to serious injury or death. Please read "Child Carriers" in your [Cannondale Bicycle Owner's Manual](#) Now.

Identification

Drive System Parts of Your E-Bike



Identification

- | | | |
|-----------------------------------|--------------------------|-----------------------|
| 1. Drive Display - HMI | 4. Battery | 8. Bike serial number |
| 2. Handlebar drive control switch | 5. Motor controller | |
| 3. Throttle Assist thumb lever | 6. Drive Hub | |
| | 7. Bottom bracket/sensor | |

Technical Information

Frame Specifications

Item	Specification
Model	Adventure Allroad, Allroad EQ, Allroad S
Head Tube	UPR:1-1/8", LWR: 1-1/2"
Headset	ZS44 top, ZS56 bottom
Bottom Bracket: Type/Width	BSA Threaded/73mm
Front Derailleur	None
Seat Post: Dia./Binder	30.9mm/34.9mm
▲ Min. Seat Post Insert	65mm
Max. Seat Post Insert	LSTH SM: 300mm LSTH MD: 185mm STD MD: 185mm STD LG: 190mm
Tire Size x Max. Tire Width	27.5"x2.6" (measured)
Brakes: Mount Type / Min./Max. Rotor Dia.	Post mount/160mm/180mm
Axles: Type/Length	RR: Bafang Hub Motor, FT (Rigid Fork Only): QR/100×9mm
Max. Fork Length	490mm
Fork Offset	50mm
▲ Intended Use	ASTM CONDITION 2: General Purpose Riding
▲ Max. Weight Limit: Total (Rider+All Equipment+cargo)	305lbs/138kg

Drive System Specifications

Allroad S

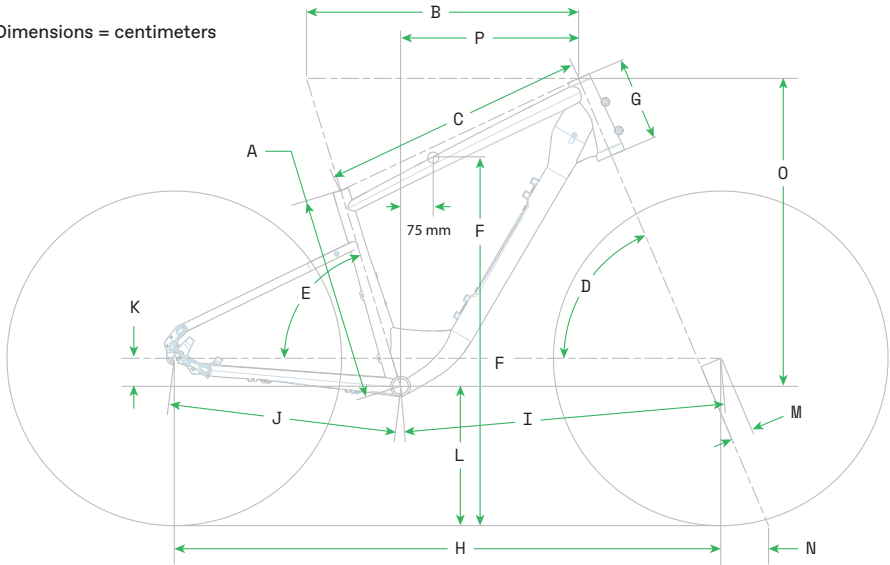
Item	Specification
Model Name	Adventure Allroad S
Ebike CLASS	3
Ebike maximum allowable speed	28 mph/45kph
Drive Display HMI	Bafang DPC10.CAN
Drive System Hub	Bafang G0900 750W
Drive Battery	HWT-1303-CW-S50 48V 720Wh
Battery Charger Model	MDA204A / 48V 2A
Drive controller	Bafang CRS307.1000.FC
Drive System Manuals	https://www.bafang-e.com https://cannondale.zendesk.com/hc/en-us

Allroad, Allroad EQ

Item	Specification	
Model	Allroad	Allroad EQ
Ebike CLASS	2	2
Ebike maximum allowable speed	20 mph/32kph	20 mph/32kph
Drive Display HMI	JYT S350	Bafang DP C11.CAN
Drive System Hub	Bafang G020 250 W	
Drive Battery	HWT-1--4-CW-B26, 36V 418Wh	
Battery Charger	MDA257 / 36V 2.0A	
Drive controller	Bafang CR S105.250.FC	
Drive System Manuals	https://www.bafang-e.com https://cannondale.zendesk.com/hc/en-us	

Geometry - Standard (STD)

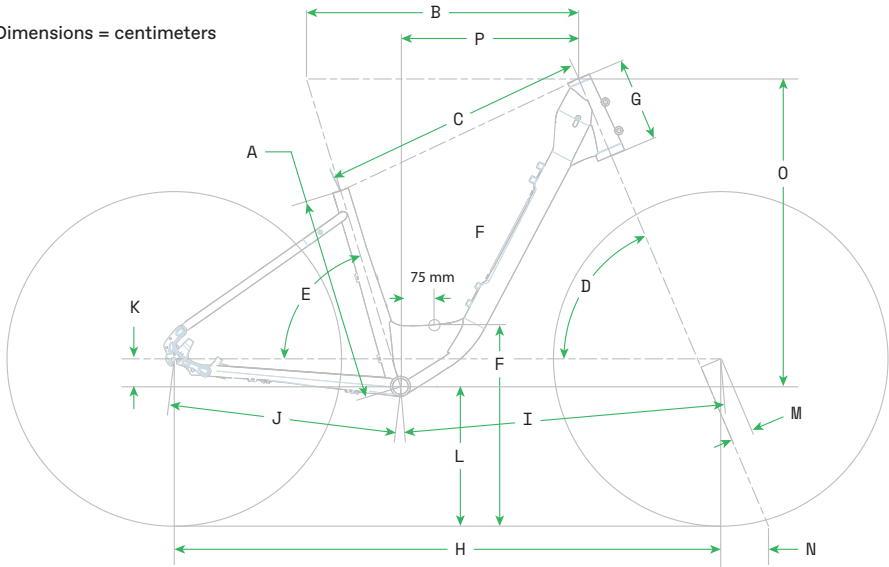
Dimensions = centimeters



	Size	MD	LG
∅	Wheel Size	27.5	27.5
A	Seat Tube Length	44.0	50.0
B	Top Tube Horizontal	58.5	61.0
C	Top Tube Actual	56.5	58.4
D	Head Tube Angle	67.0	67.0
E	Seat Tube Angle Effective	73.0	73.0
F	Standover	79.5	84.0
G	Head Tube Length	18.0	19.5
H	Wheelbase	117.4	120.0
I	Front Center	69.1	71.6
J	Chain Stay Length	49.0	49.0
K	Bottom Bracket Drop	6.0	6.0
L	Bottom Bracket Height	29.9	29.9
M	Fork Rake	4.6	4.5
N	Trail	25.5	25.6
O	Stack	66.2	67.6
P	Reach	38.3	40.3

Geometry - Low Step (LSTH)

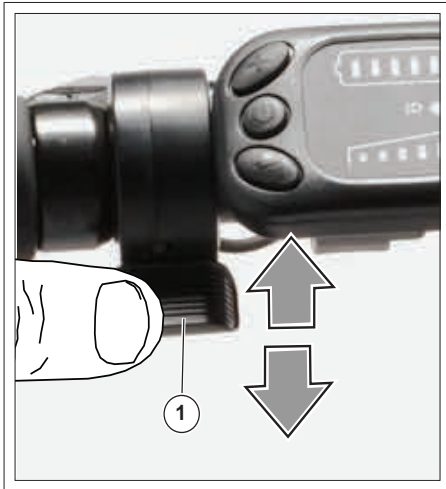
Dimensions = centimeters



	Size	SM	MD
∅	Wheel Size	27.5	27.5
A	Seat Tube Length	38.0	44.0
B	Top Tube Horizontal	55.5	58.5
C	Top Tube Actual	54.8	56.5
D	Head Tube Angle	67.0	67.0
E	Seat Tube Angle Effective	73.0	73.0
F	Standover	43.5	43.5
G	Head Tube Length	16.5	18.0
H	Wheelbase	114.3	117.4
I	Front Center	65.9	69.1
J	Chain Stay Length	49.0	49.0
K	Bottom Bracket Drop	6.0	6.0
L	Bottom Bracket Height	29.9	29.9
M	Fork Rake	4.6	4.6
N	Trail	25.5	25.5
O	Stack	64.8	66.2
P	Reach	35.7	38.3

Throttle Assist

The throttle assist thumb lever is located on the left handlebar.

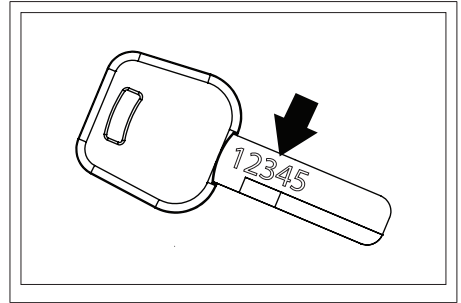


The throttle assist feature of the drive system activates the drive system without pedaling.

- Slowly press the lever down to progressively accelerate the bike.
- Hold the lever to maintain current acceleration.
- Slowly release the lever up to progressively reduce throttle assist.
- For safety reasons, the throttle will only engage after you begin pedaling. The throttle assist operates to maximum assisted speed rating of the drive system.

Battery Key

The key is used to lock/unlock the battery onto the battery rack.



Write Key Number here:

Key number is needed to purchase a replacement or duplicate key. Contact a Authorized Cannondale Dealer in your region. Be sure to have the key number available.

NOTICE

Don't ride with the key in the battery lock. Always remove the key from the lock after using it. Keys may be stolen or break off accidentally in the lock. Keep your spare key in a safe place.

Please Note:

After multiple rides and bike washes, the battery lock may become dry and difficult to use. To maintain, whenever you lubricate your bike chain, place a few drops of chain oil on the key, insert the key and operate the lock, then remove and wipe the key clean.

HWT - Battery Information

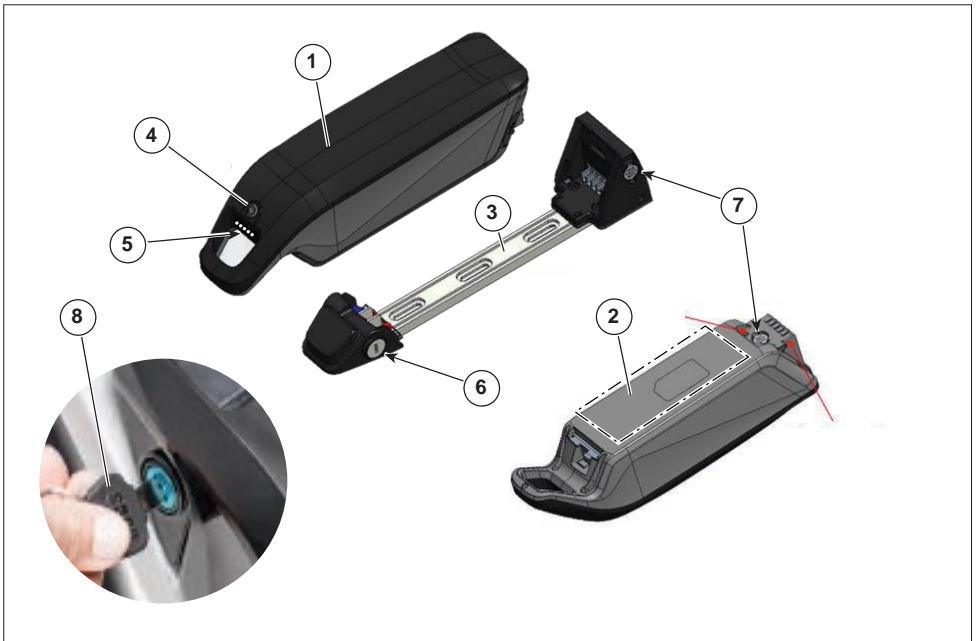
See also, Batteries & Chargers in “General Safety Information.”

This section provides operation and safety information for HWT 36V and HWT 48V batteries. Battery shape and color are same. A battery’s voltage and identification information is marked on the battery bottom.

Voltage rating	HWT Part Number	HWT Model Number
48 V	HWT-1303-CW-S50	911HWT1303ECW02
36V	HWT-1004-CW-B29	91HWT100ECW01

WARNING

The batteries and chargers of 36V and 48V systems are not interchangeable. You must use the correct battery and voltage rating for your e-bike. See “Specifications.”



Identification

- | | |
|----------------------|-------------------|
| 1. Battery | 5. LED indicators |
| 2. Label information | 6. Battery Lock |
| 3. Battery mount | 7. Charge port |
| 4. SOC button | 8. Key number |

Battery Power ON, Power OFF

The battery pack can be powered on and powered down in several ways as below. Make sure to power OFF the battery before installing the battery into the battery mount.

Mode	Methods
<p>Power ON (Wake Up)</p>	<ul style="list-style-type: none"> • The Power/SOC button wake-up: Please press the Power/SOC button to wake-up and power on the battery pack. • The HMI power button wake-up: Please press the HMI power button to wake up and power on the battery pack. • Charger-In wake-up: Please connect the charger to the battery pack. The charger will wake up and power on the battery pack.
<p>Power OFF (Shut down/ Ship mode)</p>	<ul style="list-style-type: none"> • The Power/SOC button: Please press the Power/SOC button and hold it for 3 seconds until all LEDs are flashing. And then release the button to power down the battery. • *Idle shut down mode: When the battery pack is idle for 1 minute the battery pack will enter shut down mode. • Under Voltage shut down mode: When the under voltage protection is triggered and there is no any release action for 30 seconds, the battery pack will enter the shut down mode.

* idle means discharge or current is less than 30mA

Charging




The battery pack can be charged while it is mounted on the bike or while it is removed from the bike.

To charge on the bike - Bring the bike to an area where it can be connected to the specified charger and remain undisturbed during the charging time. Open the charge port cover and connect the charger connector to the battery rack. Plug-in the charger to its source of power and charge the battery. When charging is complete, unplug the charger, then remove the charge connector from the battery rack and close the port cover.

When the battery is off the bike, under the same conditions noted above, connect the charger directly to the charge port on the back of the battery. Remove and unplug the charger and the battery when charging is completed.

Battery Charge Level - Indicator LED

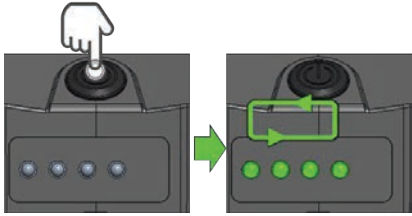
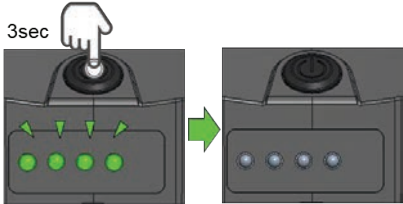
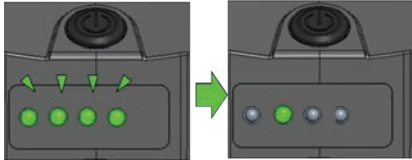
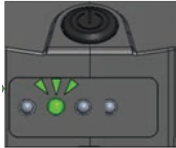
When powered-up, the battery's current state of charge is indicated at the battery by the LEDs as follows:

LEDs	State of Charge (SOC)
	75% to 100%
	50% to 75%
	25% to 50%
	10% to 25%
	Less than 10%

NOTICE

The battery pack SOC level should be kept at 30% to 50% for long term storage and charged every 6 months to avoid excessive discharge and reduce battery pack life.

Battery Special Indication - LEDs

Special Indication		
	<p>Active mode</p>	<p>Press the HMI power button to power on (Discharge wake-up function). LED1~LED4 will flash in sequence and then flash back from the 4th to the 1st LED</p>
<p>3sec</p> 	<p>Shut down mode</p>	<p>Press and hold Power/SOC button for 3 seconds until all LEDs are flashing, release the button then all the LEDs will turn off.</p>
<p>30sec</p> 	<p>Discharge over current & Short circuit protection</p>	<p>All LEDs will flash for 30 seconds then 3rd LED will stay on.</p>
	<p>Over/Under temperature protection</p>	<p>The 3rd LED will keep flashing.</p>

Battery Removal

1. Power off battery pack by pressing and holding the power button for three seconds.

When the LED lights flash, the power is off.



2. Insert the battery key and turn counter-clockwise to release the battery lock.



3. Lift the battery up and out of the frame battery mount and remove the battery.

While the battery is removed, be sure to handle it carefully, in order to prevent exposing it to damage or hazards where stored or charging.



Battery Installation

1. Power off battery pack by pressing and holding the power button for three seconds.

When the LED lights flash, the power is off.



2. Insert the key and turn it clockwise to move the pin of the locking mechanism so that it is extended out as shown.



3. Put the lower end of the battery pack onto the battery frame connector area.



4. Hold battery on the handle area and do not touch the power switch button.



5. Push the battery pack downward until it clicks (audible) into the locking mechanism and the battery pack is fixed securely.
6. Remove the key.



Battery Error / Problem Conditions

The following table can be used to interpret battery error condition or problems:

No.	Issue	Error	Procedure
1	The battery pack can be turned on, but the battery pack does not work normally. The tri-color LEDs will flash in red, green and blue sequentially)	The battery pack voltage is too low (UV)	Check battery pack output voltage. If the voltage is lower than: 48V battery - 36.4V 36V battery - 28V Please charge battery.
		The battery pack voltage is too high (OV)	Stop charging the battery pack immediately! Check if the charger is the correct or specified on and discharge the battery pack until the over-voltage protection is released.
		Over current or short circuit protection is triggered (DOC/SC)	All LEDs are flashing for 30 seconds then the 3rd LED will stay on. Please press the Power/SOC button to turn on the battery pack. If the LEDs are flashing 30 seconds again, please remove the battery pack from the bike and check the motor controller and external devices.
		The battery pack temperature is too high (OT)	The 3rd LED will be flashing; please wait for battery to cool down until the over-temperature protection automatic release.
		The battery pack temperature is too low (UT)	The 3rd LED will be flashing; please wait for battery to warm up and only charge the battery afterward.

No.	Issue	Error	Procedure
2	Battery is not charging normally when connected to the charger	The battery pack voltage is too high (OV)	Do not charge the battery pack! Check if the charger is the specified item and undamaged. Discharge the battery until the over-voltage protection is released.
		Charging over current protection (COC)	Remove the charger from battery and check if charger is damaged. If the charger is damaged, replace it before attempting to charge the battery. Press Power/SOC button to restart battery.
		The battery pack temperature is too high (COT)	The 3rd LED will be flashing; please wait for the battery to cool down until the over temperature protection automatic released.
		The battery pack temperature is too low (CUT)	If the temperature is too low, please wait for the battery to warm up. Only charge the battery afterward.
3	Shut down while riding	The battery pack voltage is too low (UV)	Check battery pack output voltage. If the voltage is lower than: 48V battery - 36.4V 36V battery - 28V Please charge battery.
		Over current or short-circuit protection is triggered (DOC/SC)	All LEDs are flashing for 30 seconds then the 3rd LED will stay on. Please press the Power/SOC button to turn on the battery pack. If the LEDs are flashings for 30 seconds again, please remove the battery pack from the bike and check the motor controller and external devices.
		The battery pack temperature is too high (DOT)	The 3rd LED will be flashing; please wait for the battery pack to cool down to the over-temperature protection release.

If the battery error is unresolved, you should remove the battery from the bike and immediately put that battery outdoors. Choose a place that, should the battery catch fire, the fire will not ignite a building, a vehicle or be any sort of safety risk.

Replacement Parts

Service Kits

Frame : Allroad S, Allroad, Allroad EQ

ID	Part Number	Kit Description
A	K33003	Derailleur Hanger QR ST SS 091
B	K34003	Neo E-HT Battery Skirt
C	K32000	Shift/Brake Keyhole Grommets
D	K32003	Neo E-HT Cable Guide
E	K34013	Neo E-HT Downtube Cover
F	K32013	e-Allroad DT Grommet Kit
G	K34233	Allroad Charge Port Cover

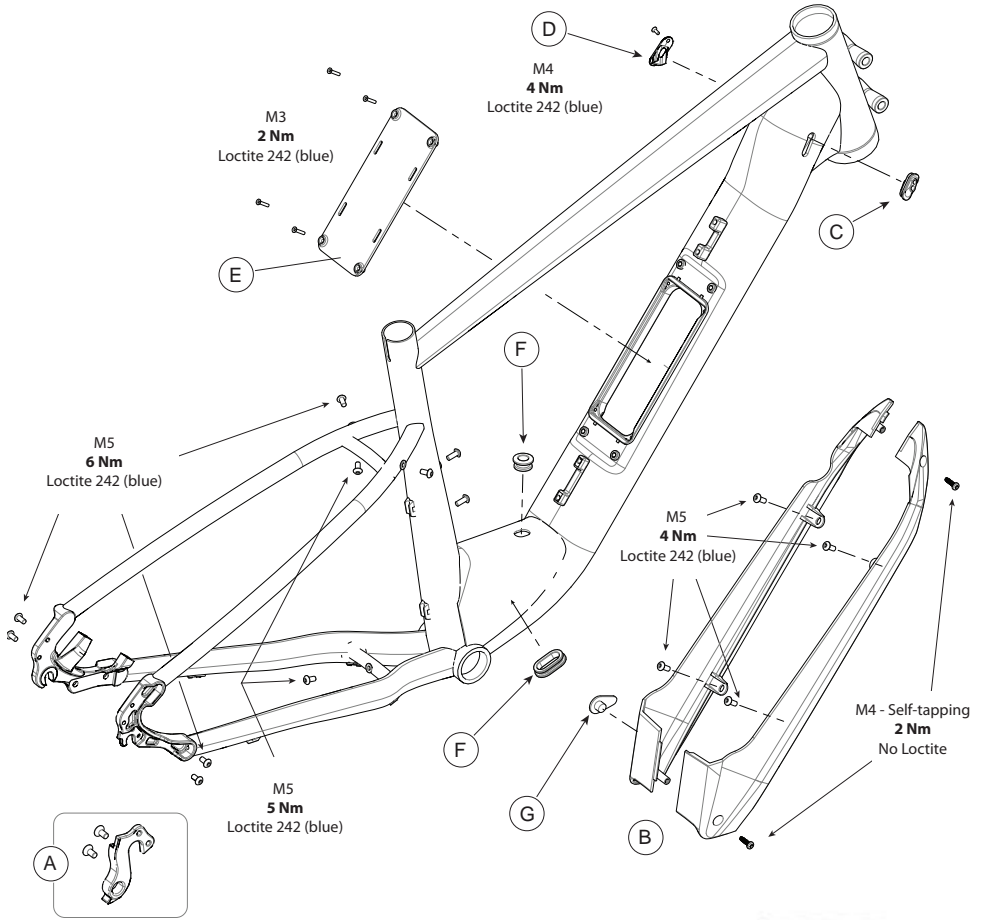
Drive System : Allroad S

ID	Part Number	Description
--	K74063	HWT 48V/3A Charger w/ JL 3pin US/Canada
Z	K73013	Bafang e-48v CANBUS HMI Display
--	K72013	Bafang e-48v CANBUS Motor Controller
--	K76044	Allroad Neo Battery Mount Bracket
--	K77013	Bafang e-CANBUS Cadence Sensor BSA73 BB
--	K8702365	Neo E-HT Disc FT Wh 110×15 6B 36h 650
--	K8703365	Neo E-HT Disc RRWh Motor 750w 6B 36h 650

Drive System : Allroad, Allroad EQ

ID	Part Number	Description
--	K74053	HWT 36V/2A Charger DC Jack 2.1 US/Canada
Y	K73023	Bafang e-36v CANBUS HMI Display
--	K72023	Bafang e-36v CANBUS Motor Controller
--	K72113	Bafang e-Allroad Throttle Button
--	K77013	Bafang e-CANBUS Cadence Sensor BSA73 BB
--	K8700365	Neo E-HT Disc FT Wh 100×9 QR 6B 36h 650
--	K8701365	Neo E-HT Disc RRWh Motor 250w 6B 36h 650

"--" - Item not pictured



A
M4
2 Nm
Loctite 242 (blue)



JYT S350



Y
DP C11.UART



Z
DP C11.UART



E-Bike Maintenance

Before and After Each Ride

To prevent accidental activation of the drive system, remove the battery from the bike for starting any mechanical work.

- Clean and visually inspect the entire bike for cracks or damage. See “Inspect for Safety” in your Cannondale Bicycle Owner’s Manual.
- Make sure the battery is fully charged. Follow the drive system charging instructions. Battery charge/discharge capacity will decline with usage. Have the older battery replaced when it fails to charge within the time indicated and/or to provide power reliably.
- Test the drive-assist system, make sure the drive system functions normally.
- If your e-bike model was equipped with a lighting system (e.g., brake lights, headlights, taillights, and/or number plate illumination), ensure each light functions properly.
- Check for proper function of the front and rear brakes. Brake pad and rotor wear is typically greater on e-bikes than on pedal-only bikes, requiring more-frequent inspection and replacement.
- Check tire pressures and the condition of the wheels. Ensure the tires are not damaged and do not have excessive wear. Ensure no wheel parts are broken or missing and that the wheels are firmly attached to the bike via secured skewers/axles.
- Confirm the drive chain is in good condition, is clean, and is well lubricated. Chain wear is typically greater on e-bikes than on pedal-only bikes, requiring more-frequent inspection and replacement. Ensure the gears operate normally throughout the entire range.
- Inspect the condition of the electrical cables, ensuring no kinks or abrasive wear. Check that cables near the dropouts are assembled properly to avoid contact with the brake rotors.

PROFESSIONAL BICYCLE MECHANIC	HOW OFTEN
Inspect and service the drive system and related components as defined by the drive manufacturer.	Minimum, annual.

 **WARNING**

Any part of a poorly maintained bike can break or malfunction leading to an accident where you can be killed, severely injured or paralyzed.

Frequent checks are necessary to identify the problems that can lead to an accident. See “Inspect For Safety” in your [Cannondale Bicycle Owners Manual](#).

Cleaning Your Bike

When cleaning your bike:

USE ONLY A MILD SOAP AND WATER SOLUTION. Clean water and a common dish washing liquid will work best.

COVER SENSITIVE AREAS WITH A CLEAN PLASTIC BAG. Secured temporarily with a rubber band or masking tape, a bag can prevent water damage to various bike components (bearings, electrical controls, connections and sensors, seals, fork / shock adjustment features).

SPRAY OFF BEFORE WIPING. To preserve the appearance of paint, finish, and decals, use a low pressure water hose to first spray off heavy soils and dirt.

CLOSE ALL COVERS.

NOTICE

DO NOT power wash or spray water under high pressure to clean. Power washing will force contaminants into parts where they will promote corrosion, immediately damage, or result in accelerated wear.

DO NOT use compressed air to dry.

DO NOT use abrasive or harsh chemical cleaner/solvents which can damage the finish or attack and destroy both the outside and internal parts.

When rinsing, avoid directing the spray directly at shock/fork adjusters or bearings.



WARNING

Do not clean the bicycle while connected to the charger. Move the bicycle to an area away from sources of electrical energy or electric appliances.

Keep water away from the electrical components. Do not soak or immerse the battery!!

Make sure the bike is secured upright and cannot fall over accidentally while you are cleaning it. Don't rely on the kickstand. Use a bicycle wheel-stand or work-stand to hold the bike upright while you are cleaning it.

Maintaining Your Bike

1. Read your **Cannondale Bicycle Owner's Manual** for information on the owner's responsibility for routine inspection and maintenance of your bike.

Consult with your Authorized Cannondale Dealer to create a complete maintenance program for your riding style, components, and conditions of use.

Follow the maintenance recommendations given by the component manufacturers for the various parts of your bike.

2. Recommended after the first 150 km, bring your bike to your Authorized Cannondale Dealer for an initial check-up. It should include checks of the drive-assist system, drive chain condition, proper shifting, accessories, wheels and tire condition, brakes, etc. This visit will help you establish a schedule for repeated visits appropriate for how and where you ride.
3. Every 1000 km, bring your bike into your Authorized Cannondale Dealer for a regular detailed inspection, adjustment, and replacement of wear items across the entire bike. E-bikes can wear out wheels, tires, drive chains, and brakes faster.

Maintaining Your Bike's Drive System

NOTICE

Drive-assist system components must only be serviced at an authorized service center. This will ensure the quality and safety of the drive-assist system.

Never attempt to open or to remove drive system parts from the frame or to work on them yourself. Other components of the drive system (e.g. drive chain, front chain ring, rear cassette, rear derailleur, and crank arm) must be serviced by an Authorized Cannondale Dealer.

Replacement parts must be identical to the original Cannondale specification for the bike. Failure to replace components with original specification can result in serious overload or in other damage to the drive unit.

Unauthorized opening or servicing of the drive unit will void the warranty.

www.cannondale.com
© Cycling Sports Group
2023 Adventure Neo AllRoad OMS
185533 Rev0 (03/23)

CANNONDALE USA

Cycling Sports Group, Inc.
1 Cannondale Way,
Wilton CT, 06897, USA
1-800-726-BIKE (2453)
www.cannondale.com

CANNONDALE EUROPE

Cycling Sports Group Europe B.V.
Geeresteinselaan 57
3931JB Woudenberg
The Netherlands
service@cyclingsportsgroup.com

CANNONDALE UK

Cycling Sports Group
Vantage Way, The Fulcrum,
Poole, Dorset, BH12 4NU
+44 (0)1202732288
sales@cyclingsportsgroup.co.uk