English

# Habit Neo Moterra

# **Owner's Manual Supplement**

### 

Read this supplement. It contains important safety and use information. Keep it for future reference.

cannondale

### **Safety Messages**

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



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.

#### The following symbols are used in this manual:

Symbol	Name	Description
I NGU 2 B	NGLI-2 synthetic grease	Apply NGLI-2 synthetic grease.
And the second s	Anti-Sieze Lubricant	Apply Permetex® Anti-Sieze Lubricant
ACAB GELD	Carbon gel	Apply carbon gel (friction paste) KF115/
2	Medium-strength removable thread lock	Apply Loctite® 242 (blue) or equivalent.

### **Cannondale Supplements**

This manual is a "supplement" to your <u>Cannondale</u> <u>Bicycle Owner's Manual</u> and the Cannondale <u>Electric Bikes Owner's Manual Supplement</u>.

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: www.cannondale.com.

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### **Contacting Cannondale**

#### **Cannondale USA**

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

#### Cycling Sports Group Europe B.V

Mail: Postbus 5100 Visits: Hanzepoort 27 7570 GC, OLDENZAAL, Netherlands service@cyclingsportsgroup.com

#### International Distributors

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

### 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.

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# SAFETY INFORMATION

### Important Composites Message

#### 

Your bike (frame and components) is made from composite materials also known as "carbon fiber."

All riders must understand a fundamental reality of composites. Composite materials constructed of carbon fibers are strong and light, but when crashed or overloaded, carbon fibers do not bend, they break.

For your safety, as you own and use the bike, you must follow proper service, maintenance, and inspection of all the composites (frame, stem, fork, handlebar, seat post, etc.) Ask your Cannondale Dealer for help.

We urge you to read PART II, Section D. "Inspect For Safety" in your <u>Cannondale</u> <u>Bicycle Owner's Manual</u> BEFORE you ride.

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

### Inspection & Crash Damage Of Carbon Frames/Forks

#### 

#### After A Crash Or Impact:

Inspect frame carefully for damage (See PART II, Section D. Inspect For Safety in your

Cannondale Bicycle Owner's Manual.

Do not ride your bike if you see any sign of damage, such as broken, splintered, or delaminated carbon fiber.

# Any of the following may indicate a delamination or damage:

- · An unusual or strange feel to the frame
- · Carbon which has a soft feel or altered shape
- · Creaking or other unexplained noises,
- Visible cracks, a white or milky color present in carbon fiber section

Continuing to ride a damaged frame increases the chances of frame failure, with the possibility of injury or death of the rider.

### **Intended Use**



The intended use of all models is ASTM CONDITION 4, All-Mountain.

#### 

Understand your bike and its intended use. Using your bike the wrong way is dangerous.

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

### Servicing

#### WARNING

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

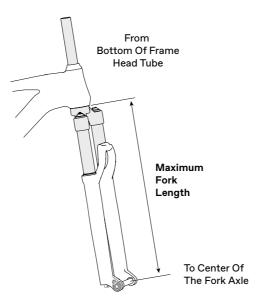
Special tools, skills, and knowledge may be required. Improper mechanical work increases the risk of an accident. Any bicycle accident has risk of serious injury, paralysis or death.

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

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### **Maximum Fork Length**

Maximum Fork Length is an important frame safety testing specification for front suspension mountain bikes. You must observe the measurement when installing headset parts, headset adapters, installing and adjusting a fork, and selecting replacement forks.



#### 

You must select a replacement fork not only based on head tube diameter but the critical factor of frame maximum fork length.

**Do not exceed maximum fork length.** Exceeding the MAXIMUM FORK LENGTH limit can overload the frame causing it to break while riding.

Your retailer MUST follow and observe this specification for your bike. For Maximum Fork Length specifications for Cannondale bicycles, see <u>www.cannondale.com</u>.

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

### Tire Size x Maximum Width

#### 

Observe the Tire Size x Maximum Width for your bike found in the "Specifications" page of this manual.

Mounting the wrong size tires can result in the tires hitting the fork or frame when riding. If this happens, you can lose control of your bike and you can be thrown off, a moving tire can be stopped because it touches the fork or frame.

Do not mount oversized tires, ones that rub or hit the fork or frame, ones that result in too little clearance, or ones that can hit the fork or frame when the suspension is fully compressed or when riding.

Take care that the tires you select are compatible with your bike's fork or frame design. Also, be sure to follow the manufacturer's recommendations of your front fork and rear shocks.

#### When you are considering tires for your bike consider...

The actual measured size of a tire may be different than its sidewall marking. Each time you mount a new tire, take the time to inspect the actual clearance between the rotating tire and all parts of the frame. The U.S. Consumer Product Safety Commission (CPSC) requires at least 1/16" (1.6 mm) tire clearance from any part of the bike. Allowing for lateral rim flex and a wheel or rim that is out-of-true will likely mean choosing a rear tire that provides even more clearance than the CPSC recommends.

Ask your dealer for the right tires for your bike and its particular components!

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

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### **Rear Shocks**

#### 🛕 WARNING

Select only compatible shocks and forks for your bike. Do not modify your bike in any way to mount one.

Have your shock or fork installed by a professional bike mechanic

Riding with the wrong rear shock can damage the frame. You could have a serious accident. Make sure the total travel, eye-to-eye length, and stroke length of the rear shock you select meet the "Specifications" listed in this manual.

When selecting different shocks or forks for your bike, make sure that the shock or fork you select is compatible with your bike's design and how you will use your bike.

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

### **Minimum Seat Post Insert**

#### 🛕 WARNING

Make sure at least 100 mm of the seat post is inserted into the frame at all times.

Failure to insert the seat post at least 100 mm can place a very high stress on the seat tube top tube junction causing the frame to fail while riding.

Remove the seat post. Measure 100 mm from the bottom of the seat post. Use a permanent marker to mark the post at 100 mm.

When adjusting the seat post height in the seat tube, never adjust the seat post so that the line you mark is above the top edge of the seat tube.

You must also be aware that bicycle seat posts are permanently marked by the manufacturer with a "minimum insert" line on the seat post itself. You must not rely on this marking as an indication of the proper minimum seat post insertion depth.

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

### **IDENTIFICATION / SERIAL NO.**



To register your bike: go to the **Product Registration** section of our website at <u>www.cannondale.com</u> (Actual bike appearance will differ)

#### **Record YOUR Serial Number here:**

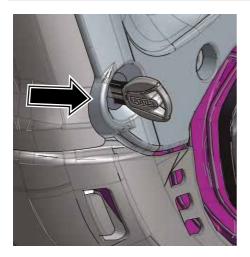
1. Drive Unit

- 2. Battery
- 3. Drive Control Unit
- 4. Speed Sensor (left side)
- 5. Rear Cassette

- 6. Front Chain Ring
- 7. Battery Key Lock (left side)
- 8. Bike Serial Number/ID

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# KEY



This illustration shows a key inserted in the battery lock mechanism located on the left side of the bike.

A key is used to secure the wheel and battery lock mechanism.

The drive system may be activated by this same key. Please consult the drive system owner/operator manuals to determine.

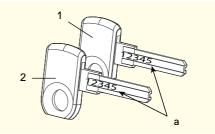
Please record the key serial number for future use and key replacement.

If your keys are ever lost or stolen, or you would like additonal spares, please contact the key manufacturer indicated in the "Frame Specifications" in this manual.

#### Please Note:

After lots of rides and washing, the battery lock can 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.

#### **Record YOUR Key Serial Number here:**



- 1. Main Key
- a. Serial Number

2. Spare Key

NOTICE

Don't ride with key in 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.

# **TECHNICAL INFORMATION**

### **Specifications - Habit NEO**

Frame

<sup>1</sup> ASTM F2043 <sup>2</sup> 2006/42/EC (EU) <sup>3</sup> AB 1096 (USA)

Item	Specification
Rear Travel	130 mm
Head Tube	UPR: 1-1/8 in LWR: 1-1/2 in
Headset	FSA Orbit C-40-ACB
Bottom Bracket: Type/ Width	Bosch Drive Unit
Front Derailleur	N/A
Seat Post: Dia./Binder	31.6 mm / 34.9 mm
🛦 Min. Seat Post Insert	100 mm
▲ Tire Size x Max. Width (measured)*	29 in x 2.6 in
A Max. Fork Length:	547 mm
Rear Shock: Eye-To-Eye / Stroke / Bushing Width	210 × 50 mm / FT: 8×20mm RR: Bare
Recommended Sag:	25%,
Chain Guide	N/A
Brakes: Mount Type / Min/Max Rotor Dia.	Post Mount /180 mm / 203mm
Rear Hub	Maxle TA / 148 × 12mm/ 180 mm length
Ai Offset	Rear Wheel: 3 mm offset to NDS, SRAM Chainring: +6 mm offset, Hollowgram SpideRing: Ai Offset
▲ Intended Use <sup>1</sup>	ASTM CONDITION 4, All-Mountain
A Max. Weight Limit Total (rider+all equipment):	300 lbs / 150 kg
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\* Measure the actual width of the tire mounted and inflated on the specific rim. Note that a measured size may be different from the tire's labeled sidewall size.

### Drive

Platform / Region Specification		Habit N	Habit N	eo / US		
Intended Use Condition <sup>1</sup>	ASTM Condition 4			ASTM Co	ASTM Condition 4	
Model Code	C65150M	C65250M	C65350M	C65450M	C65250M	C65450M
Model Name	Habit Neo 1	Habit Neo 2	Habit Neo 3	Habit Neo 4	Habit Neo 2	Habit Neo 4
EPAC Type <sup>2</sup> / E-Bike Class <sup>3</sup>		N	/A		Cla	ss 1
EPAC according to		EN 1	5194		N	/A
Drive-Assist System	Bosch Performance Line CX			Bosch Performance Line CX		
Battery	Bosch PowerTube 625 Wh		Bosch PowerTube 500 Wh		Bosch PowerTube 625 Wh	Bosch PowerTube 500 Wh
Range Extender	N	/Α			N/A	
Display	Bosch	n Kiox	Bosch Purion		Bosch Kiox	Bosch Purion
Max. Power, Continuous		25	O W		250 W	
Max. Speed	25 km/h			20 mph		
Max. Weight, Rack	N/A			N/A		
EPAC Max. Weight	22.1 kg	22.8 kg	21.3 kg	22.3 kg	50.2 lbs.	49.2 lbs.
Max. Weight, Total	150 kg			330 lbs.		
Drive-Assist Owners Manual	https://www.bosch-ebike.com/de/service/downloads/					

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### **Specifications - Moterra**

#### Frame

<sup>1</sup> ASTM F2043 <sup>2</sup> 2006/42/EC (EU) <sup>3</sup> AB 1096 (USA)

Item	Specification		
Rear Travel	160 mm		
Head Tube	UPR: 1-1/8 in LWR: 1-1/2 in		
Headset	FSA Orbit C-40-ACB, No. 42		
Bottom Bracket: Type/ Width	Bosch Drive Unit		
Front Derailleur / Chain Ring	N/A / 34T Max.		
Rear Derailleur	Shimano Standard		
Seat Post: Dia./Binder	31.6 mm / 34.9 mm		
▲ Min. Seat Post Insert	100 mm		
Tire Size x Max. Width (measured)*	S: 27.5 in x 2.8 in MD-XL: 29 in x 2.6 in MOTERRA SE: S.: 27.5 in x 2.5 in MOTERRA SE: MD-XL: 29 in x 2.5 in		
A Max. Fork Length:	S: 561 mm, MD-XL : 582 mm		
Rear Shock: Eye-To-Eye / Stroke / Bushing Width	230 mm / 65 mm / FT: 8×20mm, RR: Bare		
Recommended Sag:	25%,		
Chain Guide	N/A		
Brakes: Mount Type / Min/Max Rotor Dia.	Post Mount /180 mm / 203 mm		
Rear Hub	148 mm, M12 × 1.75 × 180 mm		
Ai Offset	Rear Wheel: 3 mm offset to NDS SRAM Chainring: +6 mm offset Hollowgram SpideRing: Ai Offset		
▲ Intended Use <sup>1</sup>	ASTM CONDITION 4, All-Mountain		
A Max. Weight Limit (Total (rider+all equipment):	300 lbs / 150 kg		

\* Measure the actual width of the tire mounted and inflated on the specific rim. Note that a measured size may be different from the tire's labeled sidewall size.

### Drive

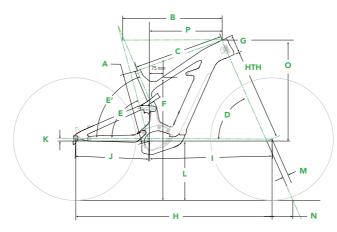
Platform / Region Specification	Moterra / EU			
Intended Use Condition <sup>1</sup>	ASTM Condition 4			
Model Code	C65100M	C65120M	C65200M	C65300M
Model Name	Moterra 1	Moterra SE	Moterra 2	Moterra 3
EPAC Type <sup>2</sup>		EN 1	5194	
EPAC according to		N	/Α	
Drive-Assist System	Bosch Performance Line CX			
Battery	Bosch Power	Tube 625Wh	Bosch Powe	rTube 500Wh
Range Extender		N	/Α	
Display	Bosch Kiox		<b>Bosch Purion</b>	
Max. Power, Continuous		250	) W	
Max. Speed		25 k	m/h	
Max. Weight, Rack	25 kg			
EPAC Max. Weight	23.3 kg	24.0 kg	23.2 kg	21.9 kg
Max. Weight, Total	150 kg			
Drive-Assist Owner's Manual	https://www.bosch-ebike.com/de/service/downloads/			

### Drive

Platform / Region	Moterra / US			
Intended Use Condition <sup>1</sup>	ASTM Condition 4			
Model Code	C65100M	C65120M	C65200M	C65300M
Model Name	Moterra 1	Moterra SE	Moterra 2	Moterra 3
EPAC Type <sup>2</sup>		Cla	ss 1	
EPAC according to		N	/Α	
Drive-Assist System	Bosch Performance Line CX			
Battery	Bosch Power	Tube 625Wh	Bosch Powe	rTube 500Wh
Range Extender		N	/A	
Display	Bosch Kiox		Bosch Purion	
Max. Power, Continuous		250	) W	
Max. Speed		20 r	nph	
Max. Weight, Rack	N/A			
EPAC Max. Weight (kg)	51.3 lbs.	52.9 lbs.	51.1 lbs.	48.3 lbs.
Max. Weight, Total	330 lbs.			
Drive-Assist Owner's Manual	https://www.bosch-ebike.com/de/service/downloads/			

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### **Geometry - Habit NEO**



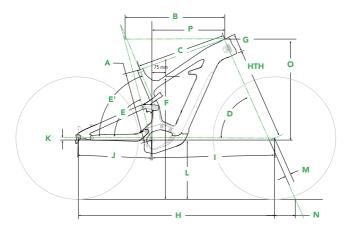
#### Dimensions = centimeter/inches

		S	м	L	XL
А	Seat Tube Length	40.0/15.7	43.0/16.9	46.0/18.1	51.0/20.1
в	Top Tube Horizontal	58.7/23.1	61.0/24.0	63.7/25.1	66.5/26.2
С	Top Tube Actual	53.6/21.1	55.6/21.9	58.2/22.9	61.2/24.1
D	Head Tube Angle	66.5°	*	*	*
Е	Seat Tube Angle Effective	75.0°	*	*	*
E'	Seat Tube Angle Actual	67.5°	68.0°	68.2°	68.5°
F	Standover	74.0/29.1	75.5/29.7	77.0/30.3	78.0/30.7
G	Head Tube Length	10.0/3.9	11.0/4.3	12.0/4.7	13.0/5.1
н	Wheelbase	118.1/46.5	120.5/47.4	123.4/48.6	126.3/49.7
I	Front Center	72.8/28.7	75.2/29.6	78.1/30.8	81.0/31.9
J	Chain Stay Length	45.5/17.9	*	*	*
К	Bottom Bracket Drop	3.8/1.5	*	*	*
L	Bottom Bracket Height	34.2/13.5	*	*	*
М	Fork Rake	5.1/2.0	*	*	*
Ν	Trail	10.9/4.3	*	*	*
0	Stack	60.5/23.8	61.4/24.2	62.3/24.5	63.3/24.9
Р	Reach	42.5/16.7	44.5/17.5	47.0/18.5	49.5/19.5
HTH	Head Tube Height	54.1/21.3	*	*	*
	Rear Travel	13.0/5.1	*	*	*
	Recommended Sag %	25%	*	*	*

\* Indicates same.

All Specifications subject to change without notice.

### **Geometry - Moterra**



#### Dimensions = centimeter/inches

	Size	S	М	L	XL
Α	Seat Tube Length	41.0/16.1	44.0/17.3	47.0/18.5	51.5/20.3
В	Top Tube Horizontal	58.7/23.1	61.4/24.2	63.8/25.1	66.6/26.2
С	Top Tube Actual	52.2/20.6	55.2/21.7	57.8/22.8	61.2/24.1
D	Head Tube Angle	66.0°	*	*	*
D	MOTERRA SE	65.0°	*	*	*
Е	Seat Tube Angle Effective	75.0°	*	*	*
E'	Seat Tube Angle Actual	67.0°	*	*	*
E	MOTERRA SE	66.0°	*	*	*
F	Standover	73.9/29.1	74.9/29.5	75.5/29.7	77.8/30.6
G	Head Tube Length	10.0/3.9	11.0/4.3	12.0/4.7	13.0/5.1
н	Wheelbase	118.4/46.6	122.1/48.1	124.7/49.1	127.6/50.3
I	Front Center	73.5/28.9	77.2/30.4	79.7/31.4	82.7/32.6
J	Chain Stay Length	45.0/17.7	*	*	*
K	Bottom Bracket Drop	1.0/0.4	1.8/0.7	*	*
L	Bottom Bracket Height	35.1/13.8	36.2/14.2	*	*
М	Fork Rake	4.4/1.7	5.1/2.0	*	*
N	Trail	11.3/4.4	11.3/4.5	*	*
0	Stack	58.5/23.0	61.9/24.4	62.9/24.7	63.8/25.1
Р	Reach	43.0/16.9	44.8/17.6	47.0/18.5	49.5/19.5
HTH	Head Tube Height	54.9/21.6	57.1/22.5	*	*
	Rear Travel	16.0/6.3	*	*	*
	Shock Eye-to-Eye	23.0/9.1	*	*	*
	Rear Stroke	6.0/2.4	*	*	*
	Recommended Sag %	25%	*	*	*

\* Indicates same.

All Specifications subject to change without notice.

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# **Powertube Battery**

The drive system battery (3) is housed within the bicycle downtube.

The battery can be charged via the charge port (7) or removed for charging.

#### To remove the battery:

- 1. Secure the bike upright to prevent it from falling over.
- 2. Make sure the bike drive system is OFF.
- 3. Turn the battery cover knob (1) counterclockwise to release the battery cover (2) from the frame.
- 4. Insert the key (4) into the key slot (9).

Turn the key clockwise to permit the release of the battery.

5. Press in on the battery release tab (b) located on the lower part of the battery.

Once pressed, the battery will be allowed to slide out from the lower battery mount.

#### To install the battery:

- 1. Secure the bike upright to prevent it from falling over.
- 2. Turn the key clockwise to release the lower battery frame latch.
- 3. Insert the upper battery so that the battery socket engages with the upper frame connector (5).

4. Press in on the lower part of the battery and turn the key clockwise to lower the latch.

Turn the key counter-clockwise to re-engage the lower locking mechanism (6).

- 6. Remove the key.
- 7. Install the battery cover (2) and secure it with the cover knob (1).

#### NOTICE

Do not ride the bike without the battery cover installed. Dirt, water and other contaminants can enter frame and/or damage the battery.

#### 

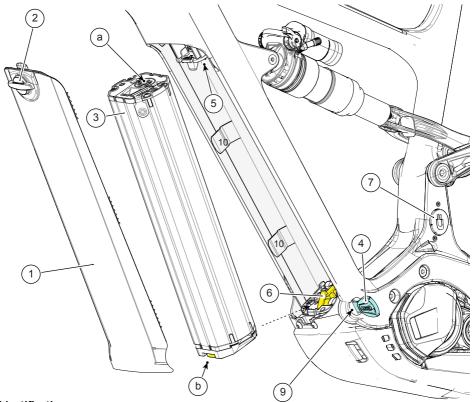
Periodically, check to make sure the battery is securely mounted inside the frame.

Check the battery after any fall or impact. Check for loose or damaged parts.

Use only the specified battery. Do not modify the battery or other parts.

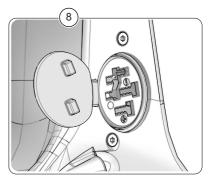
If you take the battery out, replace and secure the battery cover on the frame.

If damage is found; do not ride the bike. Have any damaged part replaced with a new one. Contact your Cannondale Dealer.



#### Identification

- Battery Cover
  Cover Knob
- 3. Battery
- 4. Key
- 5. Frame Connector
- Lower Battery Latch
  Charge Port Cover
- 8. Charge Port
- 9. Key Slot
- 10. Cable Clip (routing)
- a. Battery Socket
- b. Battery Release Tab



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### **Battery Charging Port**

The battery charging port is located on the left side of the bicycle at the lower end of the seat tube.

The charging port enables the battery to be charged while installed in the bicycle.

# To connect to the charger cable to the port connector:

- 1. Place the bike and charger in a secure area where both will remain undisturbed while the battery is charging.
- 2. Lift up the battery port cover.
- 3. Attach the specified charging cable. Do not use other chargers

Follow the manufacturer's charging instructions for the duration of charging.

4. Disconnect charger cable from the port connector and replace cover.

Make sure cover is seated fully into the frame opening.

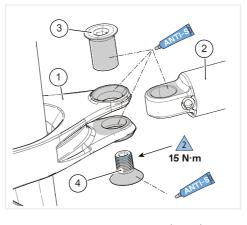
5. Disconnect the charger from its source of power.

# **WARNING** Follow the drive system manufacturer's instructions for charging and handling the battery. Be sure to inspect the condition of the battery in accordance with

of the battery in accordance with manufacturer's specifications before charging.

Incorrect charging or handling can result in a fire, explosion resulting serious injury or death.

#### Yoke / Shock Eyelet



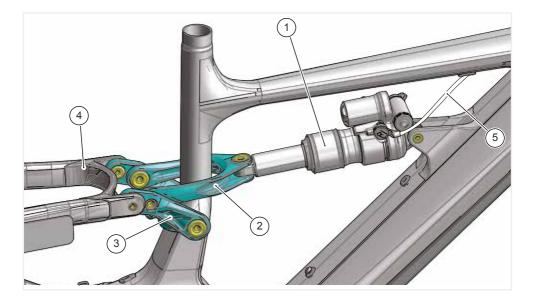
1. Yoke 2. Shock

- 3. Bolt (female)
- 4. Bolt (male)

The following is standard maintenance and should be repeated as often as necessary to ensure a quiet bike.

- Disconnect the rear shock from the yoke, and clean the yoke bolts, eyelet and the shock eyelet surfaces with isopropyl alcohol and a clean shop towel.
- Apply anti-seize thread lubricant (Permatex®) to the grey shaded surfaces shown above. This includes the inside chamfer on the yoke bolts. Do not use grease; grease does not perform as well as anti-seize.
- 3. Clean the smaller (male) yoke bolt and apply a 3 mm wide band of Loctite 242 (blue) at the first few threads.
- Tighten to 15 N-m. Hold the large (female) yoke bolt with an inserted hex key and tighten the smaller (male) yoke bolt.

### **Rear Shock**



#### Set Up

1. Set the air pressure according to shock manufacturer's recommendation for your body weight.

Follow the shock manufacturer's instruction for pressurizing the shock.

- 2. Slide the O-ring against the shock wiper seal.
- 3. Sit on the bike in a normal riding position with your hands on the handlebar and feet on the pedals so that your weight compresses the rear shock.

4. Measure the SAG. Adjust the air pressure in the shock to achieve the correct SAG measurement.

Add air to decrease sag.

Release air to increase sag.

Recommended Sag 25%

#### Identification

- 1. Rear Shock
- 2. Yoke
- 3. Link
- 4. Seat Stay
- 5. Remote Housing

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# LockR

Be sure to support the bike or swingarm to prevent personal injury or bike damage when removing/disconnecting linkages of an axle.

#### To remove the LockR from the frame:

- 1. Loosen the screw 4-6 turns using a T25 Torx key.
- 2. Tap head of screw with a rubber mallet to un-seat the wedge bolt located on the opposite side.
- 3. Remove the screw and wedge bolt from the still installed axle.
- 4. If the wedge did not come out with the screw, insert a 5 mm hex key and turn to free and remove it. If wedge still sticks insert a wooden or plastic dowel into the drive side and drive it out.
- 5. To remove the axle itself, on non-drive side, insert a 6 mm hex key into the axle on the non-drive side and and turn counter-clockwise until it can be removed.

#### To install the LockR from the frame:

1. Disassemble and clean all parts of the LockR axle. Do not install it assembled.

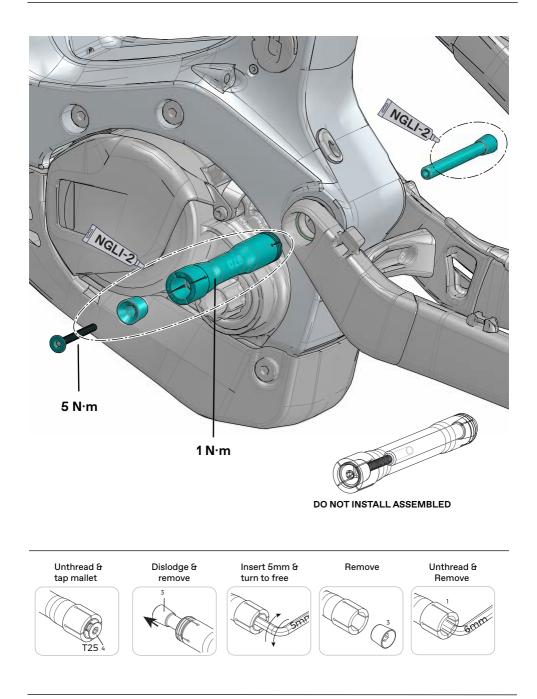
Inspect the parts for damage (burrs, scratches, deformity, wear). Replace the entire LockR assembly if any damage is found.

- 2. Apply a light coating of a high-quality bicycle bearing grease to all parts.
- 3. Align the linkage and bearing and insert the threaded end of the pivot axle (1) into the non-drive side.
- 4. Tighten the inserted pivot axle to 1 Nm using a 6 mm hex key fitted torque wrench from the non-drive side.

#### NOTICE

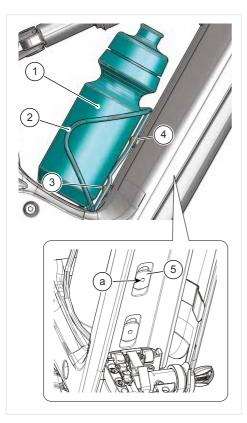
Use a calibrated torque wrench. Exceeding 1  $N \cdot m$  will result in permanent damage to the LockR pivot system.

- Insert the wedge bolt (2) into the drive side of the axle and insert the small end of the wedge
  (3) into the non-drive side axle head.
- 6. Thread the screw (4) into wedge bolt with a wrench and tighten to 5.0 Nm.



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### Water Bottle Cage Bolts



- 1. Water Bottle
- 2. Cage
- 3. Bolts (2X)
- 4. Rail Nut (battery)
- 5. Rail Bolt
- a. Bolt end

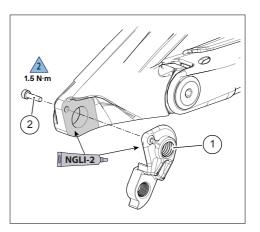
#### NOTICE

The supplied water bottle bolts should be used to install most water bottle cages.

If different bolts are used, check to make sure they do not protrude inside the the frame. This can result to damage to wiring, battery, or other interior components.

### **Rear Derailleur Hanger**

Anytime the RD Hanger is replaced due to damage or a crash, clean the dropout and also check for any damage.



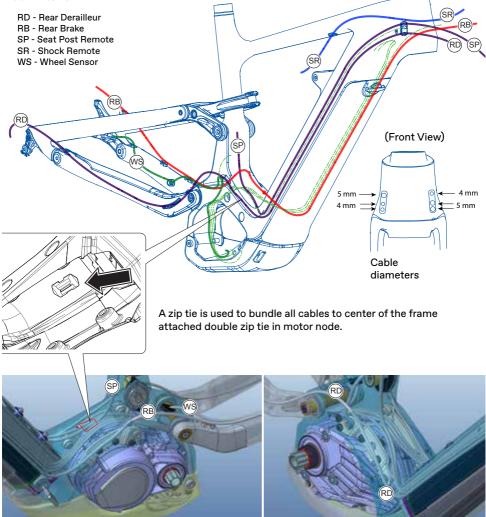
1. RD Hanger 2. Screw

### Protectors

Inspect the frame protectors often. Make sure they are securely mounted and in good condition. If damaged or missing, have them replaced by your Cannondale Dealer. See Replacement Parts.

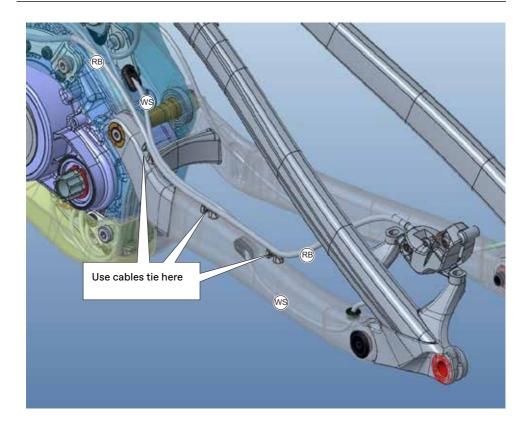
### **Cable Routing**



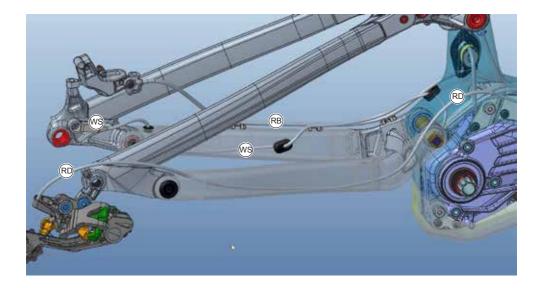


**Please Note:** Do not attempt to work on the cable routing yourself. Due to the complex nature of the parts and the level of disassembly required to gain access, have any repairs or replacements of the cables or hoses parts identified performed by an authorized Cannondale e-bike service center.

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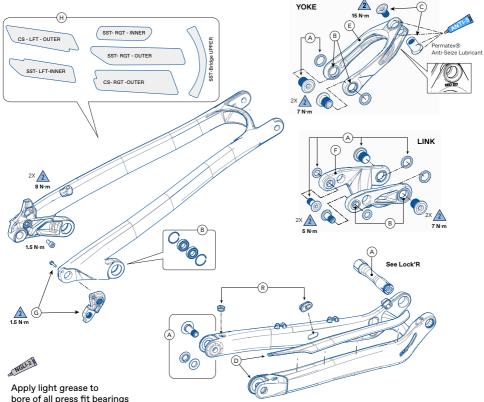
- The rear brake (RB) hose and the wheel sensor (WS) exit the frame node and are both fixed to the first two chainstay cable guide.
- The wheel sensor (WS) routing enters the chainstay and exits just before the sensor located on the inner surface of the dropout.



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# **REPLACEMENT PARTS**

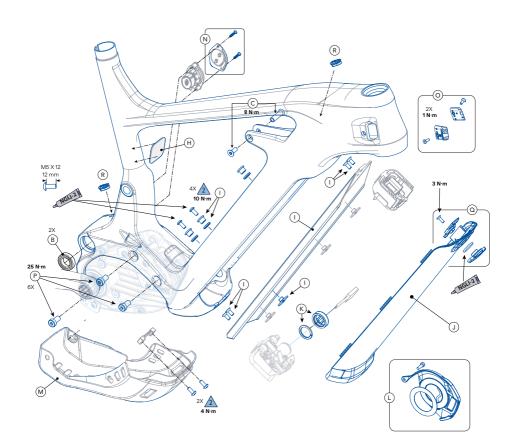
### Moterra Neo/ Habit Neo



bore of all press fit bearings during installation

ID	Part Number	Description
А	K36060	Habit Neo/Moterra Pivot Hardware
В	K36020	Habit Neo/Moterra MP CS SS Link Brgs.
с	K36079	Yoke Driven Shock Hardware
D	K34129	Chainstay and Horst Pivot Protectors
E1	K91030	Habit Neo/Moterra Yoke 120mm w/ BRGS Sizes: MD/LG/XL

ID	Part Number	Description
E2	K91040	Habit Neo/Moterra Yoke 110mm w/ BRGS Size: S
F	K91060	Habit Neo/Moterra Link 27.5/29 w/ BRGS
G	CK3257U00OS	Derailleur Hanger TA ST SS 015
н	K34220	Habit Neo/Moterra Clear Frame Protectors



### Moterra Neo/ Habit Neo

ID	Part Number	Description
I	K76000	Battery Rail DT Bottom Exit
J	K34040	Battery Cover DT Bottom Exit V2
к	K34050	Key Lock Cylinder
L	K34060	NDS Adhesive Motor Cover
М	K34070	Alloy Skid Plate w/Cover
Ν	K34159	Charge Port Cover V2

ID	Part Number	Description
0	K32250	Modulator Cable Guides 4-5-5
Р	K76010	Motor Mount Screws M8X16mm (QTY = 6)
Q	K76020	Skidplate/DT Battery Cover Catch
R	K32260	Habit Neo/Moterra Frame Grommets

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# SUPPLEMENTAL MAINTENANCE

This table is a supplemental maintenance list. Use it together with maintenance details found in :

- 1 Cannondale Bicycle Owner's Manual
- 2 Cannondale Electric Bikes Owner's Manual
- 3 All Drive System manufacturer's instructions
- 4 Any Component manufacturers' instructions

WHAT TO DO	HOW OFTEN
<b>CHECK:</b> Various frame abrasion protectors, drive system, shielding, secure attachment of battery and key covers.	AFTER FIRST RIDE
<b>INSPECT:</b> Clean and visually inspect entire bike frame/swingarm/ linkage assembly for cracks or damage. See "Inspect For Safety" in your Cannondale Bicycle Owner's Manual.	BEFORE AND AFTER EACH RIDE
<b>CHECK</b> : Tightening torques for compoents found in this supplement. Torque values are identified on the "Replacement Parts" page.	EVERY FEW RIDE OR AFTER EACH HARD RIDE.
Please have these procedures perfromed by your Cannondale Dealer: DISASSEMBLE, CLEAN, INSPECT, RE-GREASE, REPLACE WORN OR DAMAGED PARTS IN THE FOLLOWING	IN WET, MUDDY, SANDY CONDITIONS EVERY 25 HRS.
ASSEMBLIES:	IN DRY, CONDITIONS EVERY 50 HRS.
Main Pivot - LockR	
Chainstay/Seatstay Pivots	
Shock Link Assy	
ANY and ALL service affecting the drive system and related components	

#### **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.

Please ask your Cannondale Dealer to help you develop a complete maintenance program, a program which includes a list of the parts on your bike for YOU to check regularly. Frequent checks are necessary to identify the problems that can lead to an accident.

### **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.

### 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.

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#### CANNONDALE USA

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

#### CANNONDALE EUROPE

Mail: Postbus 5100 Visits: Hanzepoort 27 7570 GC, OLDENZAAL, Netherlands service@cyclingsportsgroup.com

#### CANNONDALE UK

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