English

# Cargowagen Neo

# Owner's Manual Supplement

READ THIS SUPPLEMENT AND YOUR CANNONDALE BICYCLE OWNER'S MANUAL. Both contain important safety information. Keep both for future reference.

**MINIMUM OPERATOR AGE: 16+** 

cannondale

# Safety Messages

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

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

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

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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 <u>www.cannondale.com</u>



Bike serial number location shown at "Identification."

#### **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; you must 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)

#### CSG Europe (Woudenberg)

Cycling Sports Group Europe B.V. Geeresteinselaan 57 3931JB Woudenberg Niederlande

#### International Distributors

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

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#### 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/or void your warranty.

# **Drive System**



#### 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** 

Batterv

Display/Control Unit Charger

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

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# **Ebike Safety Information**

# What is an Ebike?

Electric bikes, also known as "ebikes," are bicycles equipped with an electric pedal-assist drive system. An ebike IS NOT a moped or motorcycle. Ebikes share components common with pedal-only bikes.

#### What is a Drive-Assist 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-Assist System Work?

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 any time, if you stop pedaling, the drive-assist system will dis-engage. 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.

## WARNINGS

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.

# **Compliance/Regulation**

# WARNINGS

**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 Ebikes, Ebike labeling, and legal use areas, including any required additional equipment, registration, and applicable rider age restrictions.

**VEHICLE CATEGORY** - A definition within the European Union for the different types of Ebikes, 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** - Persons under age 16+ may lack the necessary judgment and skill to safely operate the Ebike, potentially resulting in damage to the Ebike, damage to other property, serious injury, and/or death. Follow all national, state, and local, which may require a rider be older than 16+.

ASK YOUR LOCAL AUTHORIZED CANNONDALE DEALER FOR MORE INFORMATION ABOUT OPERATING AN EBIKE IN YOUR AREA.

# Servicing

### WARNINGS

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

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# Operation

### WARNINGS

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 Ebike, practice riding in a safe area free from hazards. Take time to learn the bike's controls and performance. Practice the controls and 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 Ebike. 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 Ebike. You must anticipate this change in speed and react appropriately depending on the riding conditions such as 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 ebike 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 ebike or its parts.

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

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

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**Wired system control**: If the drive-assist 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 Ebike, 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-assist system is controlled using radio frequencies without physical attachment. Therefore, ON/OFF activation controlled by the drive-assist system's software. Please consult the drive-assist system manufacturer's instructions for information on preventing accidental activation or on restarting the drive-assist system in the event of a recovery from a drive-assist 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 Ebike. To determine if coverage is provided, you should contact your insurance company or agent. Also, make sure your Ebike is insured and registered according to the local laws.

**Ride sensibly and safely around others** - The application of power by means of the drive-assist system 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.

**Ebikes are heavier than ordinary bikes** - Always park the Ebike in a suitable safe area away from children, cars or animals that may come into contact with it. Park the Ebike 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 Ebike.** If you ride through water you can lose control of the Ebike or the drive-assist system can become disabled or damaged.

# **Batteries & Chargers**

### DANGER

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

If your Ebike lithium-ion battery has been immersed or soaked by severe storm flooding or by water leakage in your home, or sustains very hard impact, you should immediately put that battery outdoors. Choose a place that, should the battery catch fire, the fire will not ignite a building or vehicle, or be any sort of safety risk. These large capacity batteries, containing enough energy to propel a rider 20 MPH or faster for many miles, will release that energy as heat when short-circuited upon being immersed. Immersed or soaked batteries are very dangerous - they must be moved out of your house or building immediately and to a safe location and be monitored.

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**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 AND TRANSPORTATION** - When the battery is not in use in the Ebike, its transportation is subject to hazardous materials regulations. 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**

### WARNINGS

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.

# Commuting

## WARNINGS

**EQUIPMENT** - Any bicycle, including an Ebike, 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 Ebike as a commuting vehicle is no less dangerous than operating an ordinary pedal bike or automobile. Ebikes are not designed to protect you in a crash. DO NOT assume the Ebike or its drive capability will protect you or keep you from being involved in a serious accident.

**NIGHT RIDING**- Riding at night on an Ebike 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 THE EBIKE WITH A VERY HIGH DEGREE OF AWARENESS AND PRECAUTION TO ONLY REDUCE THE RISK OF DEATH OR OF SERIOUS INJURY.

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# Cargo EBike Safety

#### WARNINGS

#### **RIDE WITH MAXIMUM CAUTION.**

- 1. **NEVER** carry passengers or cargo at high speeds.
- 2. ALWAYS ride at reduced speeds, and ride in control.
- 3. ALWAYS practice good common sense.
- 4. ALWAYS limit your speed to the maximum recommended speed stated in the manufacturer's instructions of the passenger seating / trailer system.
- 5. ALWAYS follow local signage and information posted for speed limits of the routes/lanes you ride.
- 6. **NEVER** ride in automobile traffic lanes with passengers and cargo. Ride in bike-only routes and bike paths.
- 7. **NEVER** travel at high or maximum drive-assist speed with passengers or cargo. Riding at high speeds with passengers or cargo is extremely dangerous.

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

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#### RIDING AT NIGHT CAN BE VERY DANGEROUS.

- 1. **NEVER** carry passengers on this Ebike at night or in low-visibility or low-light conditions.
- 2. Read the topic "riding at night" in your Cannondale Bicycle Owner's Manual for more information on the many hazards of riding at night.

# Cargo Bike Characteristics (1 of 3)

### WARNINGS

#### INTENDED USE OF THIS CARGO BIKE:

- The intended use of all models is ASTM CONDITION 1, Cargo EBikes.
- Cargo Ebikes are intended to be ridden on paved roads only.
- Cargo Ebikes are designed with racks and can be fitted with passenger seating, cargo carrying containers, panniers, and other accessories.
- Cargo Ebikes are not intended to be ridden off-road, in rough conditions, or for mountain biking.

#### HOW CARGO BIKES ARE DIFFERENT:

Cargo Ebikes are very different from ordinary bikes or Ebikes. Cargo Ebikes are significantly heavier and can carry significant weight. Carrying extra weight significantly increases time required for braking, acceleration, turning, balancing, etc. The effects of weight increase further when riding in adverse conditions, such as when roads are wet or slick. The weight of a cargo Ebike can slow acceleration.

Climbing or descending on a weighted cargo Ebike is also more challenging. Travelling with extra weight on hills and on steep slopes can quickly become dangerous for you and for passengers if you lose control of the Ebike.

#### HOW TO OPERATE CARGO EBIKES SAFELY:

- Ride with maximum caution.
- Practice and learn first by riding with light cargo in a flat, open area that's free of obstacles before attempting to ride with passengers and cargo.
- STAY OFF steep hills, and wet, loose, slippery, and/or unstable surfaces.
- Reduce speed before turning.

# Cargo Bike Characteristics (2 of 3)

### WARNINGS

#### HOW TO OPERATE CARGO BIKES SAFELY: (continued)

- Ride with increased awareness.
- Allow time to read the road ahead to ensure sufficient reaction time.
- With extra weight on your Ebike, it's more important than ever to use both front and rear brakes. Always engage the rear brake first to prevent excessive strain on the front wheel and fork and to prevent loss of control. Ensure both front and rear brakes are properly adjusted, maintained, and applied.
- Using the front brake by itself can cause excessive stress on components, damage to the Ebike and parts, loss of control, injury, or death. Always apply the rear brake before applying the front brake, using both brakes for all operations.
- Load cargo as low on the bike as possible to keep the Ebike's center of gravity low to improve stability.
- **DO NOT** remove or obscure the reflectors on your Ebike.
- The front light and rear red light should be on at all times while riding. These lights can increase your visibility to others.
- You may be required by law to install different lighting or reflectors or items required for compliance in your riding area. Please consult with a professional bicycle mechanic about lighting and equipping your bicycle.

# Cargo Bike Characteristics (3 of 3)

### WARNINGS

#### IMPORTANCE OF SECURING LOADED CARGO:

- Ensure cargo loads are properly secured and periodically check that nothing loosens, risks interfering with any moving parts, or risks touching or dragging on the ground.
- When carrying heavy loads or passengers, plan your routes to avoid hills and other hazards.
- It is always the rider's responsibility to ensure cargo or passengers loaded on the Ebike will
  not interfere with the rider's ability to safely operate the Ebike.
- As the rider, keep your hands on the handlebar and controls so that you can operate all controls. **DO NOT** hold or carry cargo in your hands. **DO NOT** handle or hold bags or shoulder packs while operating the Ebike.

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

## Pets

#### WARNINGS

We recommend that you **DO NOT** carry pets on your Ebike. Transporting a pet on any bike will place you, your passengers, and your pet at risk of injury or death in the event of an accident.

A pet may distract you, affect bike balance, interfere with moving bike parts, etc. It's impossible to anticipate many possible hazardous situations that can occur while riding with a pet.

If you choose to carry a pet on your bike, use a pet-specific carrier only on the rear rack. Never carry pets on the front rack. Follow the pet carrier manufacturer's instructions regarding installation and use.

# YOU, PASSENGERS, OR A PET ON ANY BIKE CAN BE SEVERELY INJURED, PARALYZED, OR KILLED IN AN ACCIDENT IF YOU IGNORE THESE WARNINGS.

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# **Carrying Passengers - Rear Rack**

### WARNINGS

#### Why A Rack Alone Is Not A Passenger Seat

The rear rack is only a support structure. An approved seat system is needed in order to carry a passenger. A child seating system will include the seat (s), mounting parts, guards, padding, buckles, and straps needed for restraint as well as any fixtures on which to locate a passenger's hand and feet. The rack alone does not have any of these requirements and must not be used alone as a seat.



#### Different Passenger Seating Types

Child seats are available in different configurations for different passenger numbers, ages, weights, types, and size. This manual does not include child seat installation or manufacturer-specific instructions. This manual does include child seat Option information for Young Children and Older Children on the following pages.

- Your selection of seating system and Option must be appropriate to the passenger(s).
- **DO NOT** carry a passenger or permit them to ride on the bike without a compatible seating system installed.
- **DO NOT** carry any passengers on or mount any seating on any other part of this bike including the front rack or front handlebar/stem.
- Total passenger weight and seating must not exceed the loading capacity limit of the rear rack. See "Specifications" in this manual.

If you have questions about the appropriateness of any seating system for any passenger please:

- Consult with a professional bicycle mechanic about installation of compatible passenger seating systems.
- Consult with a medical professional about medical advice regarding passenger health and safety in seating.

# **Carrying Passengers - Child Seating**

### WARNINGS

# Only Use Child Seats Approved for use by Cannondale on this Bike

Cannondale authorized child seats for this bike are the listed in the "Specifications" section of this manual.

The child seats listed have been found by us to be compatible with the rear rack's two attachment methods: the two Thule EasyFit windows (in the top of the rack) or the 16mm outer rail.



#### **Thule Instructions**

**Always read and follow** all Thule safety, installation, use, and maintenance instructions for the child seats. It is your responsibility to locate the child seat instructions. This manual does not include child seat instructions



If you do not understand the Thule instructions, **DO NOT** install or use the seating on the Ebike. Take the Ebike to a professional bicycle mechanic for installation and for more information and guidance. **Failure to comply with the Thule instructions can lead to serious injury or death of the passenger/rider.** 

All child seats installed must meet the EN 14344 standard; **Cannondale does not authorize or approve the use of any other child seat other than those listed in the "Specifications" section of this manual.** If you attach a child seat that is incompatible and/or one that does not meet the EN 14344 standard, it could come loose or come off unexpectedly, cause the child to come in contact with moving parts or fall off, and lead to severe injury or death.

# **Carrying Passengers - Options**

#### WARNINGS

#### **Passenger Definitions**

Cannondale defines child passengers in the following way:

Passenger Type	Ages	Weight Limit
Young Children	10 mo 6 yrs.	US/CANADA: 9-18 kg, 20-40 lbs OTHER REGIONS : 9-22 kg, 20-48.5 lbs
Older Child	Over 6 yrs. Height: Legs/ feet long enough to be supported by running boards. (p/n K13013).	ALL REGIONS: 22-33 kg , 48.5-72.5 lbs.

#### **Carrying Options**

Cannondale approves only the following passenger carrying options in authorized seats:

Option 1	Young Children (Maximum of 2 Young Children together at one time)
Option 2	Older Child (Maximum of 1 Older Child at one time)
Option 3	Young Child & Older Child (Maximum of 1 Young Child & 1 Older Child together at one time)

Options 1-3 are described on following pages. To transport passengers under any of these Options, all requirements of the respective options must be followed.

For each approved passenger carrying option, the Total Maximum Weight (bike + rider + passenger(s) + cargo) of the bike must not be exceeded. Additionally:

- The weight limit of the rear rack must not be exceeded.
- The weight limit of the child seats must not be exceeded.
- The total weight of passengers and cargo must be under 80% of the rider's weight.

#### Option I (outside Germany)

Young Children (Maximum of 2 Young Children together at one time)

#### CargoWagen Neo Surround Rails (CP1803U10OS) not installed, choose...

#### Two Young Children:

Install two <u>Thule Yepp Maxi</u> (model 12020211) child seats mounted in the rear rack's built-in EasyFit windows

- OR -

#### Two Young Children:

Install two <u>Thule Yepp 2 Maxi (model 12021201</u>) child seats mounted to the rear rack's outer 16mm rail.

- OR -

#### **One Young Child:**

Install one <u>Thule Yepp Nexxt Maxi (model 12080215</u>) child seats mounted to the rear rack's outer 16mm rail.

#### CargoWagen Neo Surround Rails (CP1803U10OS) installed, choose ...

#### Two Young Children:

Install two <u>Thule Yepp Maxi</u> (model 12020211) child seats mounted in the rear rack's built-in EasyFit windows

- OR -

#### One Young Child:

Install one <u>Thule Yepp 2 Maxi (model 12021201</u>) child seats mounted to the rear rack's outer 16mm rail.

- OR -

#### **One Young Child:**

Install one <u>Thule Yepp Nexxt Maxi (model 12080215</u>) child seats mounted to the rear rack's outer 16mm rail.

Cargo EBike Safety Carrying Passengers - Options

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### Option I (Germany)

#### Young Children 1 Maximum

# With or without CargoWagen Neo Surround Rails (CP1803U10OS) installed, choose...

#### **One Young Child**

Install one <u>Thule Yepp Maxi</u> (model 12020211) child seat mounted in the rear rack's built-in front EasyFit window.

- OR -

#### **One Young Child**

Install one <u>Thule Yepp 2 Maxi (model 12021201</u>) child seat mounted to the rear rack's outer 16mm rail forward of the rear wheel axle.

- OR -

#### One Young Child

Install one <u>Thule Yepp Nexxt Maxi (model 12080215)</u> child seat mounted to the rear rack's outer 16mm rail forward of the rear wheel axle.

Option II	Older Child
(outside Germany)	(Maximum of 1 Older Child at one time)
(outside Germany)	

- Installation of one or two CargoWagen Neo Seatpad (CP1653U10OS) and installation of the CargoWagen Neo Surround Rails (CP1803U10OS) according to the instructions is required
- CargoWagen Neo Surround Rails must have bicycle handlebar bar tape installed according to the instructions.
- The running board (p/n K13013) must be installed .
- The older child passenger's leg length must be long enough so that the passenger's feet are supported on the running boards while seated, no exceptions.
- Two seat pads may be installed. However, you must ensure that the older child passenger sits with his/her weight always centered over or forward of the rear wheel axle. Older child passengers must not be seated on seat pads on the rear of the rack.

Option II	Older Child
(Germany)	(Maximum of 1 Older Child at one time)

- Installation of one CargoWagen Neo Seatpad (CP1653U10OS) and the CargoWagen Neo Surround Rails (CP1803U10OS) according to the instructions are required, no exceptions.
- The single seat pad must be mounted to the rear rack forward of the rear wheel according to the instructions.
- CargoWagen Neo Surround Rails must have bicycle handlebar bar tape installed according to the instructions.
- The running board (p/n K13013) must be installed .
- The older child passenger's leg length must be long enough so that the passenger's feet are supported on the running boards while seated, no exceptions.
- Ensure that the older child passenger sits on the single seat pad with his/her weight forward of the rear wheel axle. Older child passengers must not be seated on seat pads on the rear of the rack.

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#### Option III (outside Germany only)

Young Child & Older Child (Maximum of 1 Young Child & 1 Older Child together at one time)

#### CargoWagen Neo Surround Rails (CP1803U10OS) required...

#### **One Young Child:**

Install one <u>Thule Yepp Maxi</u> (model 12020211) child seat mounted in either of the rear rack's built-in EasyFit windows

- OR -

Install one <u>Thule Yepp 2 Maxi (model 12021201)</u> child seat mounted to either the front or rear portion of the rear rack's outer 16mm rail.

- OR -

Install one <u>Thule Yepp Nexxt Maxi</u> (model 12080215) child seat mounted to either the front or rear portion of the rear rack's outer 16mm rail.

#### Older Child:

Seatpad mounted to either the front or rear portion of the rear rack's outer 16mm rail.

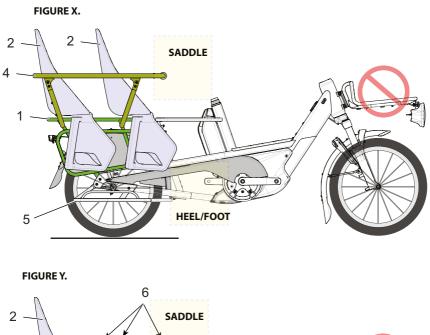
Cargowagen Surround Rails to have bicycle handlebar tape installed..

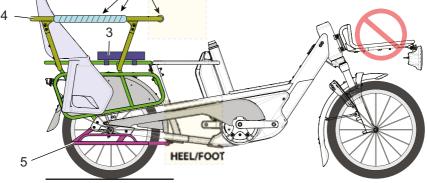
# **Child Seating Figures**

**Figure X.** on the following page depicts two authorized young child seats mounted to the rear rack. The optional surround rail is shown installed.

**Figure Y.** depict on the following page depicts one young child seat and seating pad installed on the rear rack. In the case of seating page, the surround rail (4), handlebar tape (6), and foot rest (5) MUST be installed for the passenger seated on the seating pad.

**IMPORTANT:** The shaded areas depict clearance locations. In the **HEEL/FOOT** area, keep passengers and cargo from interfering with the operator rotating the pedals. In the **SADDLE** area, maintain clearance between the passenger and bike operator's ability safely mount and dismount the bike.





#### Identification

- 1. Rear rack
- 2. Authorized Child Seat
- 3. Cannondale Seatpad
- 4. Cargowagen Surround Rai

- Running board/footrest
   Handlebar tape

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# Your Responsibilities and Passenger Risks (1 of 2)

### WARNINGS

DO NOT RISK CHILD OR PASSENGER SAFETY BY ALLOWING INEXPERIENCED RIDERS OR RIDERS WITH INADEQUATE MATURITY, MENTAL CAPACITY, JUDGEMENT, AND AWARENESS TO USE THIS EBIKE.

- This bike IS NOT A TOY and must not be operated by children.
- Passengers on the bicycle are subject to the same risks of injury or death as a bike rider in the event of an accident.
- No part of this bicycle is intended to provide crash or impact protection for you or your child passengers. The inherent risks involved in bicycling are the same for rider and for passengers. See your Cannondale Bicycle Owner's Manual, "Section A. Important Safety Information."
- UNDERSTAND that carrying passengers is subject to regional, local, or national laws. You
  must comply with any/all laws when using the bicycle. Compliance is your responsibility.
- **NEVER** leave child passengers unattended. Passengers must be attended to at all times by the adult operator of the bike. The adult must assist and supervise passengers entering and leaving the bike and seating. Passenger safety and well-being is the first responsibility of the adult bike operator.
- All passengers carried on the bike and the rider MUST wear a bicycle-specific helmet that fits them well. Passengers must wear appropriate clothing. Remember to dress child passengers warmer than you dress yourself and protect them from the weather.
- **DO NOT** subject passengers to inclement or hazardous conditions while riding.
- **DO NOT** carry infants younger than 10 months in a bicycle seat or in backpacks or frontpacks on a bike.

# Your Responsibilities and Passenger Risks (2 of 2)

### WARNINGS

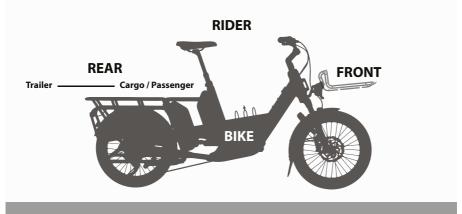
- **NEVER** ride in automobile traffic lanes with passengers and cargo. Ride in bike-only routes and bike paths.
- All passengers must be alert and awake during the ride. They must be able to independently hold up their head unaided and comfortably withstand the bike motion, bouncing, or vibration typical of normal riding for the duration of the ride.
- Explain to your child passengers the rules of the ride. They should remain seated without shifting or moving about, standing up, or otherwise shifting their weight.
- Running boards are for passenger foot use when seated. Standing on the running boards or straddling the racks is unsafe and can result in damage.
- A seating system can have features to aid in body/head support of passengers. However, the adult operator must monitor and safeguard the health of a passenger.
- **DO NOT** leave passengers in the seating/on the bike with the kickstand down.
- You must learn to compensate for the handling effects due to passenger weight.
- Check passenger seating before every ride. DO NOT carry passengers if you find broken, damaged, loose, or missing parts. Have any problems corrected before allowing passengers to use seating. Have passenger seating inspected annually by a professional bicycle mechanic.

Cargowagen Neo OMS

# **Total Maximum Weight Limit**

#### WARNINGS

This Ebike's Total Maximum Weight Limit is found in the "Specification" section of this manual. The total maximum weight limit includes the combined weight of all the following:



RIDER + BIKE + FRONT + REAR

RIDER - the body weight of the rider including clothing, helmets, personal items, and riding gear.

**BIKE** - the weight of the complete bike.

**REAR** - the total combined weight of all the following: passengers, cargo, trailer and trailer cargo. This includes the weights of any accessories, anything placed on the bike as cargo, seating, cycling bags, panniers, water bottles, a trailer, or anything else.

**FRONT** - the total weight of anything placed on the front rack, including the front rack.

The total maximum weight limit does not suggest all riders should load the bike to this limit. Always limit cargo loads to no more than 80% of rider body weight.

# **Trailer Attachment**

This bike has a bicycle trailer connection mounting point located on the left side rear dropout. This connection is for compatible bicycle trailers only.

### 

- Install only compatible bicycle trailers that meet the EN 15918 standard.
- If you attach a trailer that is is incompatible, it could come loose or come off unexpectedly and lead to severe injury or death.
- This manual does not include any instructions for mounting or for using a bike trailer or carrying passengers in a trailer.
- Many different trailers and trailer manufacturers exist. It is important to your safety that you have any potential trailer attachment evaluated by a professional bicycle mechanic. A professional mechanic can install, service, and inspect a trailer. A professional mechnical can also help you by examining all the accessories of your bike and how they may work together safely or possibly conflict.
- If you intend to use a bicycle trailer you must carefully read and follow the trailer manufacturer's installation, use, and maintenance instructions.
- **DO NOT** modify the bike in any way including the frame, running boards, rear rack, or the trailer itself in order to attach a trailer.
- A trailer and the load placed on it will influence the bicycle handling and control. To reduce the risk of being involved in a trailering accident, you must understand the dynamics of towing a trailer and be able to control a bicycle with an attached trailer. Trailering requires increased awareness and requires more time and distance to slow down and to stop. Also, a trailer will track inside the line of the bicycle when making turns.
- Practice trailering in flat, open and safe areas where you have adequate time to learn new skills. Before riding in everyday conditions, make sure you are proficient with starting, stopping, steering, braking, and turning with a trailer.
- The trailer weight and items on a trailer are to be calculated as part of the Total Maximum Weight Limit. Do not exceed the limit.

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# About Guards, Fenders, and Covers

#### WARNINGS

The various guards, fenders, and covers installed on this bicycle are necessary safety items intended to prevent rider/passenger or cargo contact with moving parts or hazards. See "Service Parts."

DO NOT remove guards or ride without them. Check guard condition before each ride. DO NOT ignore any cracked, broken, or missing parts or rubbing, rattling, or other sounds. Have damaged parts replaced before riding by a professional bicycle mechanic.

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

## About Bike Racks / Bike Bags

**RACK LOAD LIMIT**: The maximum loading limit for the front and/or rear rack is found in the "Specifications" section of this manual or marked on the rack. DO NOT overload a rack.

**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 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.

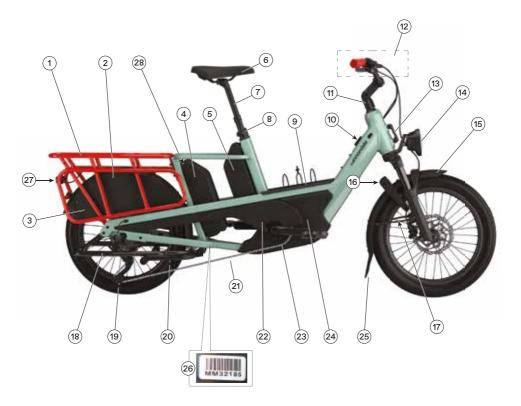
**SECURE RACK/BAG CONTENTS:** You must make sure that all items placed on the rack or in bags are secure and cannot be thrown out or shift while riding. You must prevent any parts of the contents, the straps, or the tie-downs used to secure the rack contents, including those of the bag, from interfering 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 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 items or straps /ties used to secure the load, can come loose and entangled in the wheel.

# Identification

Parts of Your Ebike

# Identification

# Parts of Your Ebike



#### Identification

- 1. Rear rack
- 2. Rear fender
- 3. Spoke guard
- 4. Battery 2
- 5. Battery 1
- 6. Saddle
- 7. Seat post
- 8. Seat post clamp
- 9. Storage compartment
- 10. Charge port

- 11. Stem
- 12. Handlbar controls
- 13. Front rack mount
- 14. Front light
- 15. Front fender
- 16. Wheel Lock
- 17. Fender support
- 18. Running board/footrest
- 19. Chain Tensioner/Rear Derailleur

- 20. Kickstand
- 21. Drive chain
- 22. Chain guard
- 23. Drive motor
- 24. Motor guard
- 25. Fender flap
- 26. Bike serial number
- 27. Rear light

Cargowagen Neo OMS

# **Technical Information**

### **Frame Specifications**

Item	Specification
Head Tube	UPR:1-1/2", LWR: 1-1/2"
Headset	Semi-Integrated, 1.5" Straight – ACROS Blocklock ZS56 top, ZS56 bottom
Bottom Bracket: Type/Width	Bosch Drive Unit
Front Derailleur	N/A
Seat Post: Dia./Binder	31.6mm/34.9mm
▲ Min. Seat Post Insert	100mm
Max. Seat Post Insert	290mm
▲ Specified tire (front/rear) Use only tires intended for cargo load rating.	Schwalbe Pick-Up Perf, Super Defense, Twinskin, 60-406 B/B+Rt Hs609 Addix E 2×67epi 36b
Tire Size x Max. Tire Width	Front: 20" x 2.6" (measured) Rear: Derailleur 20" x 2.15" (measured), IGH 20" x 2.35" (measured)
Max. Fork Length	404.8mm
Brakes: Mount Type / Min./Max. Rotor Dia.	RR: Post Mount/203mm/203mm
Axles: Type/Length	RR: Maxle TA/148 × 12mm x 1.75P, 180mm Overall Length
Chain Line	55mm
Rear Wheel Offset	5mm - externally-geared rear derailleur 3mm - internally-geared rear hub
▲ Intended Use	ASTM CONDITION 1: Cargo Bikes
▲ Total Maximum Weight Limit (Bike + Rider + Passengers+ Cargo + Accessories/ Trailer)	200kg, 441 lbs
Rear Rack	Maximum load capacity : 80kg, 176 lbs
Front Rack	Maximum load capacity: 15kg, 33 lbs
Bike weight (1 battery)	39 kg, 85 lbs

Authorized Child Seats (Mount directly to rear rack only, use no adapter): <u>Thule Yepp Maxi</u> (model 12020211), <u>Thule Yepp 2 Maxi</u> (model 12021201), <u>Thule Yepp Nexxt Maxi</u> (model 12080215)

See our SUPPORT webpage for more information at www.cannondale.com

# **Drive System Specifications**

Models		
C67153U10OS 20 U Cargowagen Neo SGE OS		
Item	Specification	
Ebike CLASS	3	
Ebike maximum allowable speed	28 mph/45kmh	
Drive Display	Bosch, KIOX 300, BHU3600	
Drive Unit, model no.	Bosch, BDU3781/	
Drive Battery, model no.	Bosch, BBP3555	
Battery Charger, model no. Bosch, BPC3410		

Models			
C67103U10OS 20 U Cargowagen Neo 1 MDN OS C67253U10OS 20 U Cargowagen Neo 2			
Item Specification			
Ebike CLASS	1		
Ebike maximum allowable speed	15mph / 25kmh		
Drive Display	Bosch, KIOX 300, BHU3600		
Drive Unit, model no.	Bosch, BDU3741		
Drive Battery, model no.	Bosch, BBP3550		
Battery Charger, model no.	Bosch, BPC3400		

Models			
C67503U10OS 20 U Cargowagen Neo AM SGE OS (x)	C67453U10OS 20 U Cargowagen Neo ID SGE OS (X)		
C67353U10OS 20 U Cargowagen Neo EU SGE OS (X)			
Item Specification			
Ebike CLASS	1		
Ebike maximum allowable speed	20 mph/32kmh		
Drive Display	Bosch, KIOX 300, BHU3600		
Drive Unit, model no.	Bosch, BDU3741		
Drive Battery, model no.	Bosch, BBP3550		
Battery Charger, model no.	Bosch, BPC3400		

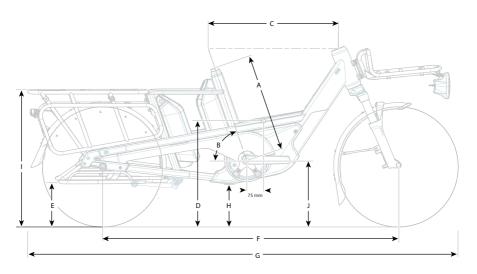
# **Bosch Drive System Manuals**

https://www.bosch-ebike.com/us/help-center/manuals/



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# Geometry

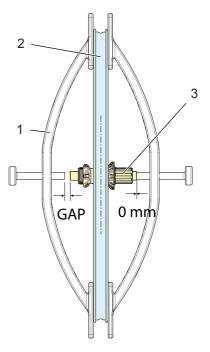


#### Dimensions = centimeters

	Size	1		
Ø	Wheel Size (inches)	20"		
А	Seat Tube Length	44		
В	Seat Tube Angle (degrees)	71 °		
С	Horizontal Cockpit Length	56.3		
D	Step-Over Height	47.5		
E	Running Board Height	20.5		
F	Wheelbase	133		
G	Overall Length	191		
Н	Ground Clearance	18		
I	Rear Rack Height	60		
J	Bottom Bracket Height	29.9		
	Width at Widest Point	77.5 (handlebar)		
	Overall Height	116 (extended handlebar)		

## **Rear Wheel Offsets**

Туре	Offset	GAP
External-geared rear derailleur	5mm	10mm
Internal-geared rear hub	3mm	6mm



#### Identification

- 1. Alignment tool
- 2. Wheel rim
- 3. Wheel hub

To produce the offset, a gap that is two times the specified offset should be present using the wheel alignment tool as shown above.

#### NOTICE

Incorrect wheel offset can damage your frame.

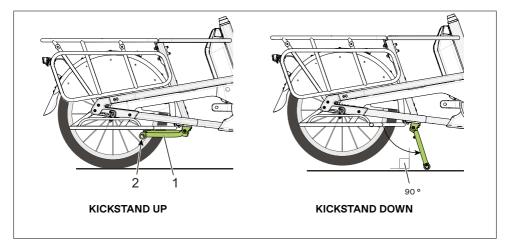
A standard-dish or incorrect offset rear wheel assembled on this frame will result in insufficient tire clearance, leading to rubbing and serious frame damage. This kind of damage is not covered by the Cannondale Limited Warranty.

Building/Trueing a Wheel:

If you choose to build or to true a rear wheel for use on this bike, make sure the specified offset is present. Consult with your Cannondale Dealer if you have any questions.

Cargowagen Neo OMS

# Kickstand



Raise or lower the kickstand while dismounted standing at the side of the bike supporting upright until the kickstand is down.

To lower the kickstand (1), press down on the kickstand shoe (2) with your foot until the kickstand leg reaches the stop. When fully lowered kickstand legs will be angled slightly forward as shown above.

To raise the kickstand, stand at the side of the bike. Hold the bike upright and cause the bike to roll forward. This will allow the kickstand spring tenstion to automatically raise the kickstand legs to the position shown above left.

## 

To prevent toppling over, park your Ebike on a stable and level surface; then lower the kickstand.

The kickstand is not designed to support the weight of seated operator or passengers. **DO NOT** sit on the Ebike with the kickstand down. **DO NOT** allow passengers to remain seated on the bike when the kickstand is down. Sitting on the Ebike with the kickstand down may result in the Ebike tipping over. Always ensure the kickstand is completely in the upright position before riding, or completely down before leaving the bike unattended.

Inspect the kickstand before each ride to make sure it operates correctly. Have any kickstand problems or damage corrected before riding. **DO NOT** ride the bike with a damaged kickstand.

# **Service Information**

This section of the manaual contains Replacement Parts available for your bike. This section also contains tightening torque and part diagrams. This information is technical in nature and for reference only.

## **Service Kits**

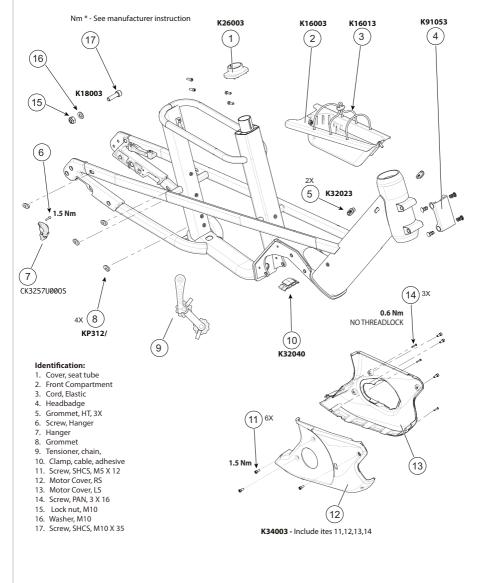
Item	Kit #	Kit Description	VIEW No.
	K13003	Cargowagen Neo Rack	2
	K13013	Cargowagen Neo Rack Running Boards	7
	K34003	Cargowagen Neo Motor Cover	0
	K11003	Cargowagen Neo Chainguard	5
	K16003	Cargowagen Neo DT Storage Compartment	0
	K11013	Cargowagen Neo Chain Guide	5
	K34083	Cargowagen Neo Clear Frame Protection	3
	K17003	Cargowagen Neo Kickstand	1
	K26003	Cargowagen Neo Seat Tube Cover	0
	KP312/	Open Oval Grommet x10	0
	K32023	DT 3Cable Grommets	0
	K32040	DT Adhesive Cable Guide Qty 3	0
	CK3257U00OS	Derailleur Hanger TA ST SS 015	0
	K11063	Cargowagen Neo Fender FT	6
	K11073	Cargowagen Neo Fender RR	7
	K11083	Cargowagen Neo Spoke Guards RR	7
	K11093	Cargowagen Neo Lock/FT Fender Hardware	6
	K13023	Cargowagen Neo RR Rack Hardware	2
	K11103	Cargowagen Neo RR Fender Hardware	2
	K24043	Cargowagen Rear Brake Rotor Guard	2
	K91053	Removable Headtube Badge	0
	K18003	Cargowagen Neo Trailer Hitch Mount	0
	K35053	1.5 Semi Int BlockLock HS 28.6/56-56/40	
	K16013	Cargo Neo Elastic Cord	0
	CP1803U100S	Surround Rail	7
	CP1653U10OS	Cargowagen Neo Seat Pad	

"--" - Item not pictured

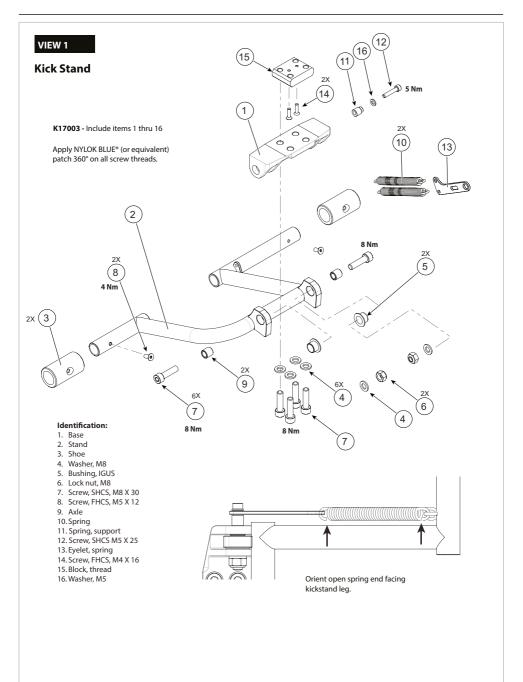
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#### VIEW 0

#### Frame, Small Parts, Other

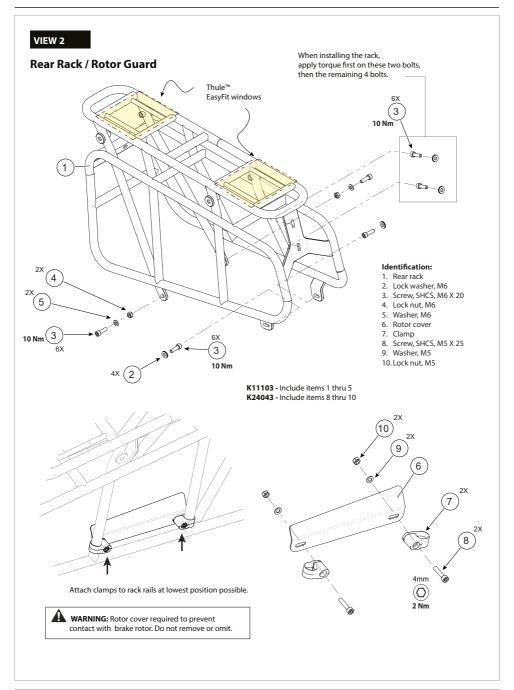


#### Service Information

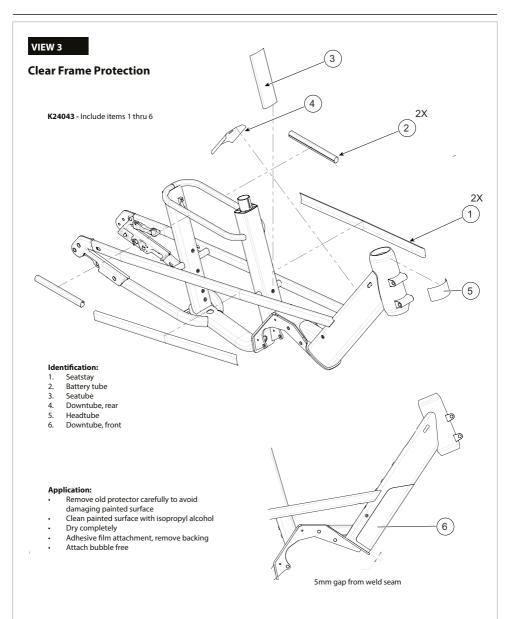


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### Service Information



#### **Service Information**



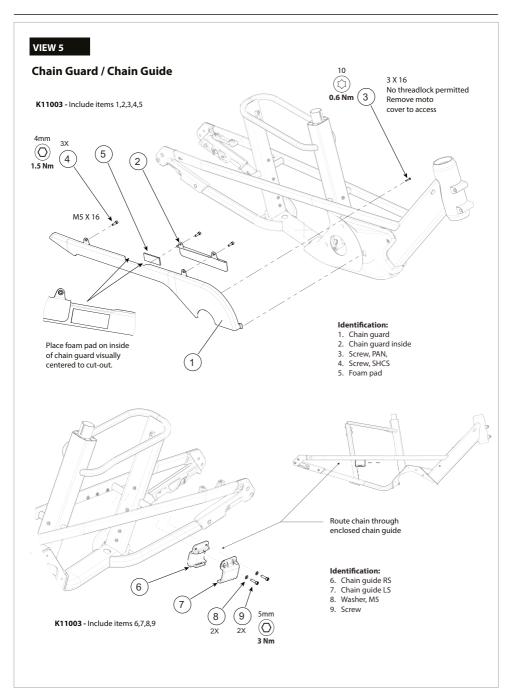
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Kickstand

## VIEW 4 **Running Board** K13013 - Include items 1,2,3,4,5 S 6X (4 M6 Lock Nut D 8X (2 M6 Washer 9 e 4X 0 ٢ 3 6 1 T 10 Nm M6 X 20 Q 10 Nm 1 2X Identification: 1. Running board 5 10 Nm 2. Washer, M6 3. Screw, SHCS M6 X 25 4. Lock nut, M6 5. Screw, SHCS

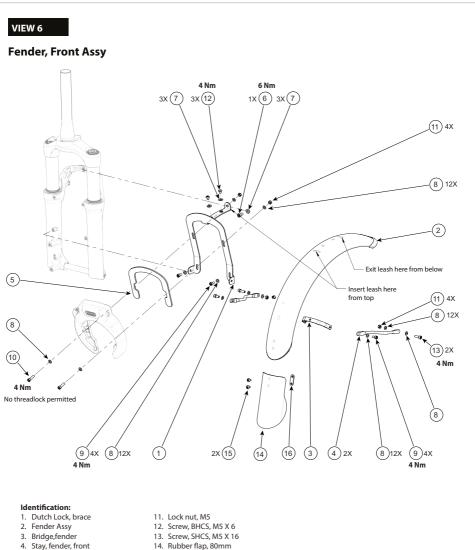
#### **Service Information**

Kickstand



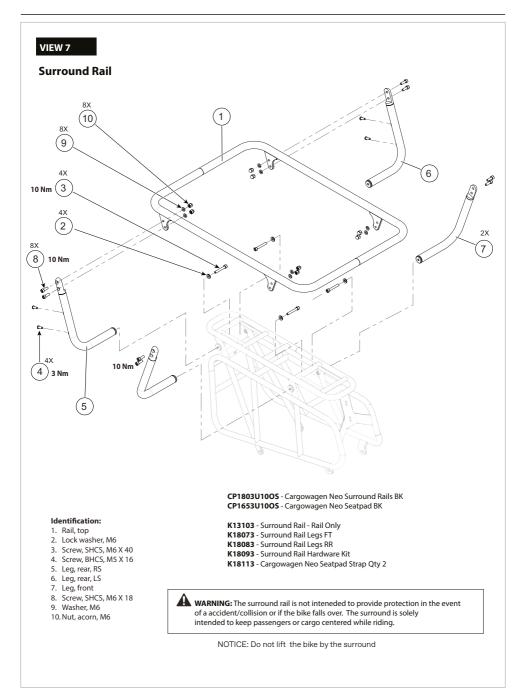
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Cargowagen Neo OMS



- 5. Foam pad, Dutch Lock
- 6. Screw, SHCS, M6 X 10
- 7. Washer, M6
- 8. Washer, M5
- 9. Screw, SHCS, M5 X 10
- 10. Screw, SHCS, M5 X 20
- 14. Rubber flap, 80mm
- 15. Screw, BHCS, M5 X 8
- 16. Thread plate

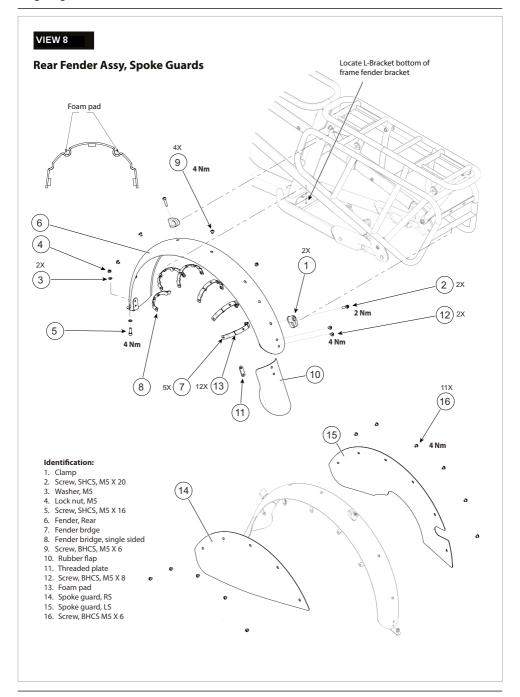
#### Service Information



Cargowagen Neo OMS

Service Information

Kickstand



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# Maintenance

## **Before and After Each Ride**

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

- Clean and visually inspect the entire Ebike for cracks or for 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 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 ebike 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 ebikes 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 ebikes 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 system manufacturer.	Minimum, annual.

#### 

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 <u>Cannondale Bicycle Owners Manual</u>.

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# **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 with masking tape, a bag can prevent water damage to various bike components (e.g., bearings, electrical controls, connections and sensors, seals, or 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 that 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 the outside and internal parts.

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

#### 

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. DO NOT 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**

 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.

- 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.
- 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. Ebikes 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

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