OWNER'S MANUAL

# HOW TO HAVE MORE FUN ON YOUR NEW E-CARGO BIKE



# Tips for riding safer on your electric cargo bike

#### Make darn sure your front wheel is on right and tight.

Check it before every ride. Seriously. If you're not sure how the wheel attaches, the details are inside. See the <u>Check the wheels section on page 3-7</u>.

#### You only get one brain.

Helmets are really inexpensive compared to the cost of crashing without one. We're gonna preach now: just wear one — you and all passengers.

#### Avoid anything that can get stuck in your wheels.

For example: a shopping bag, purse, backpack straps, or sticks on the pathway. If your wheel stops suddenly, you're going to have a bad time.

#### Check your bike lights on every ride.

Using lights on every ride, even when the sun is shining, is the single best way to stand out to motorists. Power up your bike and make sure that your lights are on before pedaling away.

#### Keep a balanced load.

If your bike has a cargo box, center the weight of your gear for better bike handling. Don't forget to secure your load so your groceries and gear make it from point A to B safely.

#### Secure your most precious cargo.

Always double-check that seatbelts are fastened correctly when you're transporting kids by bike.

#### Park on level, firm ground.

Make sure your kickstand is on a hard surface before loading or unloading your bike (and if your model has a dropper post, lower it for easier mounting and dismounting).

#### Stay powerful, friends.

Follow the guidelines contained in the manual for charging your e-bike battery. We're not saying you can't pedal your e-cargo bike without assistance, but trust us— it'll be a lot more fun with a boost.

#### If it doesn't feel or sound right, get it checked out.

Just like planes, bikes are easier to fix before you take off. Your local bike shop is there to help.

#### We'll take care of you. No matter what.

If you ever have a problem your local shop can't solve, connect with Customer Care and we'll do everything we can to help.

#### Read the rest of this manual.

We've been on roads and trails since 1976, and that's taught us a lot of stuff worth sharing.

For the most up to date information, please refer to the online version of this manual found on <u>trekbikes.com/manuals</u>.

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# First things first

We know you want to get out there and ride. Before you do, it's important that you complete steps 1 & 2 below. They won't take long.

# 1. Register your bike

Registration records your serial number (which is important if your bike is ever lost or stolen), and serves as a means of communication with Trek if there are any safety alerts about your bicycle. If you have questions about your bicycle, even years down the line, in just seconds your registration lets us know exactly which bike we're discussing, so we can give you the best service possible.

To register your bike, go to the **Support** section at the bottom of the home page at <u>trekbikes.com</u>. It's quick and easy.

# 2. Read this manual, keep this manual

This manual covers the Trek electric cargo bicycles and essential safety information. It contains useful information for the life of your bicycle: how to ride safely, and how and when to do basic inspections and maintenance. Keep it for the life of your bicycle. We also recommend that you keep your proof of purchase along with the manual in case you need to make a warranty claim.



trekbikes.com/manuals

Even if you've ridden a bicycle for years, it's important that you read and understand the information in this manual before riding your new bicycle. You can read it here or online in the **Support** section at the bottom of the home page at <u>trekbikes.com</u>.

Also read the Bosch Electric Bicycle Owner's Manual available online in the **Support** section of trekbikes.com.

# 3. Go online for more great info

You'll find the most current and detailed information, including FAQs, maintenance schedules, troubleshooting guides, and how-to videos online at <u>trekbikes.com</u>. Scroll down to the **Support** section at the bottom of the home page.

# 4. Accessories for your new bike

This manual only covers your bike with original equipment. All accessory installation, removal, and maintenance information is in separate manuals available on your e-cargo bike's page at <u>trekbikes.com</u>.

# A note about warnings

As you read this manual, you'll see gray warning boxes like this:

**A** WARNING! Text in a gray box with the safety alert symbol will warn you about a situation or behavior that could cause severe injury or death.

The reason for these warnings is that we don't want you — or your loved ones, or your bicycle — to get hurt.

We want you to have fun on your e-cargo bike.

We know what it's like to tip over at a stop sign, to bloody our knuckles while fixing a chain, to crash on slick pavement. We've done it all. At best, those mishaps aren't fun. At worst, you could get hurt.

So please pay attention to the warnings. It's our way of letting you know we care about your safety.

This manual complies with these standards: ANSI Z535.6; AS/NZS 1927:1998, CPSC 16 CFR 1512, and ISO 4210-2.

# CHAPTER 1

# **Safety**

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# **Important safety information**

Read this important safety information before riding your bicycle.

# Safety for you

A bicycle can't protect you in an accident.

The most common cause of injury on a bicycle is falling. In a crash or impact, it is not uncommon for your bicycle to sustain damage and for you to fall. Cars have bumpers, air bags, and crumple zones. Bicycles do not. If you fall, your bicycle may not prevent injury.

If you are involved in any kind of impact or crash, check yourself and any passengers thoroughly for injuries. Then have your bicycle thoroughly inspected by your bike shop before you ride it again.

# **Know your limits**

A bicycle can be dangerous, especially if you try to ride beyond the limits of your ability. Know your skill level and don't ride beyond it.

## Handle with care

Some parts of your bicycle can injure you if mishandled. There are sharp points, for example, on the teeth of the chainrings and some pedals. Brakes and their parts get hot. Rotating wheels can cut skin and even break bones. Clamps and pivoting parts such as brake levers can pinch, as can the chain/belt where it runs onto sprocket teeth.

E-bike components are especially designed for normal use as described in this manual and the comprehensive e-bike manual. Electric cables, connectors, battery dock, battery, and the remote can be damaged if handled incorrectly.

## Think safety

Follow these essential safety precautions to reduce your risk of harm when riding your bicycle.

Stay tuned to your environment and avoid dangerous situations which are usually obvious (traffic, obstacles, drop-offs, and so on), but sometimes are not.

### **Avoid misuse**

Examples of misuse include jumping your bicycle; riding over sticks, debris, or other obstacles; performing stunts; riding in severe off-road terrain; riding too fast for conditions, or riding in an unusual manner. These and other misuses add to the stress on each part of your bicycle.

A WARNING: Your risk of injury increases when you use your bicycle in an incorrect manner. Misuse can add stress to your bike. High stress can cause the frame or a part to break and increase your risk of injury. To decrease your risk of injury, use your bicycle in the manner for which it was designed.

# Gear up

- We advise you to wear a helmet when riding your bicycle to reduce the risk of head injury in an accident. You should comply with local rules. Make sure your helmet fits properly and meets the required safety standards.
- Dress appropriately. Loose clothing or accessories can get caught in your wheels or other moving parts and cause you to fall (e.g. pants leg in the chainring).
- Make sure all loose straps are secured.
- Increase your visibility by wearing fluorescent apparel during daylight and reflective apparel at night. On a bike, the unique up and down pedaling motion is what makes you recognizable on the road. At night, highlight your feet, ankles, and legs with products that feature reflective materials. During daylight, wear fluorescent socks, shoes, covers, or warmers.
- Use front and rear lights, day and night. Make sure your reflectors are clean and properly positioned.

A WARNING: Reflectors, which function only when light shines on them, are not a substitute for lights. Riding in dark conditions or at times of poor visibility without adequate lighting is extremely hazardous.

### **Ride smart**

Know your skill level and do not ride above it.

- Do not ride distracted. Using a mobile phone, music player, or similar device while riding can lead to an accident.
- Do not ride too fast. Higher speed creates higher risk, and results in higher forces if a crash occurs. You may be surprised at the power of an e-bike.
- Cargo and passenger weight affect cornering and speed. Braking distances and the time to come to a stop may be increased.
- Do not ride hands-free. Always keep at least one hand on the handlebar.
- Do not ride while intoxicated or while using medications that can make you drowsy or less attentive.

- Be cautious if riding with a large group. Riding close to other riders reduces visibility with the road and can cause you to lose control of your bicycle.
- Do not ride in a manner not specified for your bicycle type (see <u>Safety for the</u> <u>bike on page 1-13</u>).

Be aware that other road users may not expect that an e-bike can ride faster than a normal bike. Riding faster may also increase the risk of an accident.

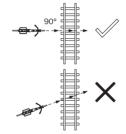
### **Avoid hazards**

Watch for cars, pedestrians, and other cyclists. Assume others do not see you and be prepared to avoid them or their actions such as opening a door in your path.

Ride carefully. Ride only on bike paths or paved roads. Avoid rocks, branches, or depressions.

Do not ride with a loose object or pet's leash attached to the handlebar or other part of your bicycle.

Watch for and avoid road hazards like potholes, drain grates, soft or low shoulders, or debris that could impact your wheels, make your wheels slide, cause your wheels to "lock up," or catch your wheels in a rut, all of which could cause you to lose control. If you're uncertain of the road conditions, walk your bike. When you cross railroad tracks or drain grates, approach them carefully and cross them at a 90-degree angle to keep your wheels from getting caught in the ruts.



### **Respect the weather**

Take extra precautions when you ride in wet or snowy weather, because the grip of your tires is greatly reduced.

Braking distances increase in wet weather. In wet weather, apply your brakes earlier and use extra caution than when riding in dry conditions.

# Listen to your bike

If your bicycle behaves in an unusual manner (it shakes or wobbles, for example), or you hear an unusual noise, immediately stop riding the bicycle and identify the problem.

After any crash or impact, have your bike shop thoroughly inspect your bicycle. Damage to your bicycle may not be readily visible. Repair any problem before riding again.

### **Plan ahead**

It's a real drag to have a flat tire or other mechanical problem when out on an enjoyable bike ride. We suggest to carry a pump, spare inner tube, patch kit, tools, a spare battery, or a charger for your battery. Be ready to fix your bike so you can return safely from your ride.

## Follow the rules

It is your responsibility to be aware of the laws that apply where you ride. Observe all laws and regulations regarding e-bikes, bicycle lighting, riding on roads or paths, helmets, passenger transport, and traffic. **Duick start** 

# Safety for others

# **Transporting children**

Take these precautions to give young riders the safest, best experience possible.

Trek cargo bikes are designed to accommodate children if desired: rear cargo in the rear; front cargo in the front. Cargo bikes are not designed to transport adult passengers.

Children must only be transported using approved child carriers, or the optional Trek accessories intended for transporting children.

**Rear cargo bike:** when children ride on the back of this bike, we recommend they wear closed-toe shoes.

**NOTE:** Not all locations allow carrying passengers when riding on public roadways. Consult your local authorities for the laws in your location. Ensure initially and re-check from time to time that the child's height and weight do not exceed the maximum capacity of an individual seat. See page 1-14\_for weight limits.

Ensure there are no sharp objects which the child can touch, e.g. frayed cables.

Follow all provided instructions to ensure children are properly restrained prior to each ride. When Trek child carrying accessories are used, all included instructions and warnings must be followed, and all required equipment must be fitted. Instructions for all accessories can be found on trekbikes.com/manuals.



trekbikes.com/manuals

**A** WARNINGS: Failure to follow these warnings could result in serious injury or death.

- If you allow a child to ride in a seat or trailer attached to a bicycle, be extra vigilant to
  ensure the child's safety.
- Never leave a child unattended in a child seat or trailer. The bicycle could fall over and injure the child.
- Reduce your speed.
- Never carry anything which obstructs your vision or your complete control of the bicycle, or which could become entangled in the moving parts of the bicycle.
- Prior to transporting children, the rider must explain the dangers of moving parts (wheels, brake rotors, derailleurs, drive train) to child passengers, and warn them to keep fingers and all other appendages clear of moving parts at all times.
- Do not rely on the kickstand for balance when a child is on the bicycle.

#### Child carriers/trailers

- Read and follow the instructions that came with your child seat, trailer and any accessory you add to the bike.
- Keep in mind the maximum allowed load of your bicycle when attaching a child seat on a rear rack.
- Adding a child carrier to your bicycle adds weight and raises the center of gravity, which can make the bike take longer to stop, become hard to control, and be easier to tip over. Take extra care when balancing, braking, and cornering with a child carrier. Tipping over or loss of control may lead to severe injury or death to you or your child passenger.

- Child carrier manufacturers have different mounting systems which may or may not be compatible with the racks on your e-cargo bike. If you are unsure, contact the child carrier manufacturer.
- If you attach a rack or seat that is incompatible, it could come loose or come off unexpectedly, cause the child to come in contact with moving parts or fall, and lead to severe injury or death.
- Do not mount a clamp to a bicycle frame that is not equipped for it. The frame material may become damaged resulting in unsafe conditions.
- Check the seat attachment or connection to your bike before every ride.

#### Dress children for the ride

- Make sure the child wears protective gear, especially an approved, properly fitted helmet whenever possible. Make sure to comply with local laws.
- Dress children riding in the cargo area warmer than you dress yourself and protect them from the weather.

# Using the front cargo bike child seats

The front cargo bike comes equipped with two reclining child seats.

The seats are designed for children from approximately 1 year old who:

- Can sit up straight on their own, and
- Can support their head on their own.

The maximum child size for each seat: 25kg/55lbs and 118cm/46in.

**WARNINGS:** Failure to follow these warnings could result in serious injury or death.

- Always use the full seat harness when a child is in the seat and ensure the harness is securely buckled.
- Ensure the harness is not too tight or too loose around the child. You should be able to fit your hand between the child and the straps.

#### **Head support**

- The head support is designed to support the heads of children who fall asleep while seated.
- The head support is removable. Simply remove the two fasteners in the back of the seat.

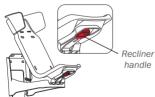


#### **Recline the seats**

- The reclined positions are designed for additional child comfort.
- The seats have three positions: straightup, 10° recline, and 20° recline.



- The recline handle is child-proof: a smaller handle is tucked inside a larger handle for adult operation.
- Reach past the larger handle to the smaller handle, and pull forward and up to recline or straighten the seat.

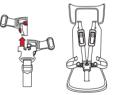


#### IMPORTANT:

- When reclining the seat, the shoulder straps will loosen. You must re-tighten the shoulder straps after reclining.
- Before moving the seat back to the straight-up position, loosen the shoulder straps. Re-tighten the straps once the seat is in the other position.

#### Adjust the harness

- Use the hole options in the seat backrest to adjust the harness closest to your child's shoulder height.
- Adjust the waist and shoulder straps to fit children correctly.

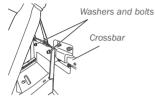


Buckle the harness when not in use.

#### Remove/Install the child seats

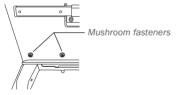
#### Remove

- 1. Put the seat in the fully reclined position.
- 2. Remove the two bolts and washers behind the seat.



3. Pull the seat up (to release from the mushroom fasteners) and out of the cargo box.

NOTE: The mushroom fasteners should remain in place.



#### Install

- 1. Put the seat in the fully reclined position.
- 2. At an angle, use the lower openings to mount the seat on the two mushroom fasteners.
- 3. Push the seat frame backwards to align the two upper holes with the crossbar holes.
- Install the two washers and bolts in the crossbar. Torque the bolts to 25Nm.

A WARNING: Reapply threadlocker All reused-fasteners with pre-applied threadlocker must be cleaned with isopropyl alcohol and have new threadlocker applied before re-assembly. If threadlocker is not applied, the fasteners may loosen which could damage the bicycle and result in injury to the rider.

- 5. Move the seat to the straight-up position.
- If installing both seats, put the first seat in the 0 degree position to best access the fasteners for the second seat.

# Safety for the bike

We build our bicycles to last a long time — with a little help from you. Follow these safeguards to keep your bicycle in good shape for the long haul.

# **Ride it right**

Your e-cargo bike is designed for riding on a paved surface where the tires are always on the ground.

A WARNING: If your use of a bicycle applies more stress than for which it is intended, the bicycle or its parts can be damaged or broken. A bicycle that has damage could decrease your control and cause you to fall. If you are not sure of the limits of the bicycle, consult your bike shop.

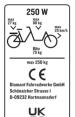
# Load it right

Your e-cargo bike is designed for a maximum amount of weight. To make sure you don't overload your bike, refer to:

- The maximum weight capacity of the components and the bike. See the weight information on page <u>1-14</u>, which can also be found on a sticker on your bike.
- The maximum load rating of your tires, found on the side wall of each tire.

**IMPORTANT:** A cargo bike is heavier than a typical bicycle. Take care when riding and with the kickstand when not riding so that you or your passengers or cargo do not get trapped under the bike in the event of a tip-over.

### ២ Front cargo weights



Trek Bicycle Corporation Ltd. 9 Sherbourne Drive, Tilbrook, Milton Keynes, UK MK7 8HX Rear rack max: 27kg / 60lb

Cargo box max: 80kg / 176lb

Bike weight: 75kg / 165lb

Total max:

(rider + cargo + trailer + bike) 250kg / 550lb

## Rear cargo weights



Cargo max: 72kg / 158lb NOTE: Two passengers or loads at 36kg / 79lbs each, not one load at 72kg / 158lbs.

Front rack max: 9kg / 20lb

Bike weight: 31kg / 68lb

#### **Total max:**

(rider + cargo + trailer + bike) 200kg / 440lb

# **Riding with cargo**

#### **Changes in handling**

A combination of factors – including the structural rigidity of the frame, individual component strength, steering behavior, and weight distribution – affect the bike's handling. Riding with a heavy load, requires more effort to balance and more time to brake.

There is a strong relationship between the weight of the rider and the amount of cargo the rider can comfortably balance and ride with. In general, cargo weight should be no more than 80% of the rider's weight.

Get familiar with riding a loaded cargo bike in a safe area before riding on public roads.

#### **Cargo positioning**

Position cargo so the center of gravity is as close to the centerline of the bike as possible.

Place cargo as low as possible in the cargo box, panniers, and racks.

Balance the load. Have an equal amount of weight on either side of the bike centerline and also fore/aft. Lopsided loads can pull the bike to one side.

Make sure the cargo does not block the reflectors or lights.

#### Securing cargo

Make sure your cargo is secured. If using straps, make sure they are rated for the weight of your cargo, with all loose ends secured.

#### **Checking for interference**

- Make sure you have enough space to sit properly, pedal, and steer the bike without any interference.
- Cargo should not interfere with normal operations of the brakes and shifter.
- Long or large objects should be positioned far enough from the pedals to avoid foot strikes.
- Tall or large objects in the front of the bike should not block your vision.
- If you cannot position cargo to fulfill ALL the above requirements, do not attempt to ride with cargo.

# Lifespan

A bicycle is not indestructible, and its parts will not last forever. Our bicycles are made to withstand the stress of "normal" riding because those stresses are well known and understood.

However, we cannot predict the forces that might occur if you use your bicycle in competition, if you ride in extreme conditions, if it is involved in an accident, if it is used for rentals, or if it is used in other ways that apply undue high stress or fatigue loads.

With damage, the life of any part can be drastically reduced and may fail without warning. The safe life of a part is determined by its construction, materials, use, maintenance, rider weight, speed, terrain, and environment (humidity, salinity, temperature, etc.), so it is not possible to give an accurate timetable for replacement.

Any crack, scratch, or change of color in a high-stress area indicates the part (including the frame, fork, or cargo area) has reached the end of its life and should be replaced. If you are not sure or you don't feel comfortable inspecting your bicycle, consult your bike shop. A WARNING: A bicycle is subjected to wear and high stress. Different materials and parts may react to wear or stress fatigue in different ways. If the design life of a part has been exceeded, it may suddenly fail.

For a maintenance schedule, see the **Bike** Service and Repair Packages on the Product support section on trekbikes.com.



trekbikes.com

# **Modifications and accessories**

Modifications to your bicycle can make it unsafe. Each part of your new bicycle has been carefully chosen and approved. The safety of accessory or replacement parts, and especially how those parts attach and interface with other parts of the bicycle, is not always apparent. For this reason, you should only replace parts with original equipment manufacturer parts. If you are not sure what parts are approved, ask your bike shop.

Examples of modifications include this partial list:

- Physically altering existing parts (sanding, filing, drilling, etc.)
- Removing safety equipment such as reflectors or secondary retention devices
- · Using adapters for brake systems
- · Installing unapproved accessories
- · Changing parts

Changing components or adding unapproved accessories is done at your own risk. Before installing any component or accessory, including but not limited to a different size tire, a replacement fork, fenders, a different lighting system, a luggage rack, a child seat, a trailer, etc., check with your bike shop to make sure it is compatible with your bicycle. Be sure to read, understand and follow the instructions that accompany the products you purchase for your bicycle.

Check all accessories to make sure they're correctly and securely attached.

New components or accessories could interfere with the operation of your bicycle's controls, including the steering, shifting, braking, pedaling, or rotation of the wheels. Always verify that any new product you purchase for your bicycle does not interfere with these functions.

If you change your saddle to one with exposed springs and you attach a child seat to the rear of your bicycle, exposed saddle springs could injure a child's fingers. Cover the springs or use a saddle that does not have springs.

#### **A** WARNINGS: Failure to follow these warnings could result in serious injury or death.

- Changing the components on your bike with other than genuine replacement parts may compromise the safety of your bicycle and may void the warranty. Check with your bike shop before changing the components on your bike.
- Any accessory or component attached to, on or near a rotating wheel poses a risk
  of contacting or stopping the wheel, leading to a crash resulting in serious injury or
  death. Before every ride check to ensure that all such accessories and components, and the fasteners used to attach them, are securely mounted to your bicycle.
- A sudden stoppage of the front wheel can cause the bike to stop unexpectedly and abruptly. This may cause the rider to be launched over the handlebar, resulting in serious injury or death.
- If your bicycle's controls are impaired or compromised due to the use of incompatible accessories or components, the bicycle may stop unexpectedly, or you may lose control of your bicycle and crash, resulting in serious injury or death.

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# Parking, storing, and transporting your bike

#### **Kickstand**

You should always use the kickstand when parking your cargo bike.

Strive to park your bike on a firm, level surface. If a level surface is not possible, park your bike facing uphill. If you park facing downhill, the kickstand could be overcome by the weight of the bike alone or a small push. Maximum parking incline should not exceed 8%.



#### Rear Cargo bike

#### Take the bike off the kickstand

- 1. Hold the handlebar grip closest to you.
- 2. With the other hand, pull up on the saddle and push the bike forward.
- 3. The spring loaded kickstand will rotate up and out of the way.



#### Put the bike on the kickstand

- 1. Hold the handlebar with one hand and the saddle with your other hand.
- 2. Push down on the end of the kickstand with your foot.
- 3. Pull backward with both hands.



4. Check that the bike is secure on the fully extended kickstand.



#### Take the bike off the kickstand

**NOTICE:** Make sure your bike is unlocked before taking it off the kickstand. Otherwise there is a chance the lock will bend or snap the spokes of your rear wheel.

- 1. Use the seat dropper post to put the saddle in the lowest position.
- With your feet on the ground and your hands on the handlebar grips, apply the rear brake and push the bike forward. The spring loaded kickstand will rotate up and out of the way.



**NOTE**: Depending on your cargo and/or passengers, one foot on either side of the bike may be the best practice.

**NOTICE:** To avoid contact, pay attention to the kickstand as it rotates up.

#### Put the bike on the kickstand

- 1. Use the seatpost dropper lever to put the saddle in the lowest position.
- 2. Make sure there is nothing behind you for 30cm / 1ft.
- With your feet on the ground and your hands on the handlebar grips, push down on the end of the kickstand with your foot.
- 4. With your hands on both handlebar grips, pull the bike backwards.



5. Check that the bike is secure on the fully extended kickstand.

### Park or store your bike safely

- Do not park your bicycle unless you secure it to a fixed object with a bike lock that resists bolt cutters and saws. Lock the battery in place or for optimal safety, remove the battery and put it in a safe place.
- See the <u>E-System Quick Start</u> section or the online Bosch Electric Bicycle Owner's Manual for proper battery storage.
- Park your bicycle where it cannot fall or roll away. Any fall can cause damage to your bicycle or property around you.
- Incorrect use of a bicycle parking rack could bend your wheels and damage brake or electric system cables.
- Rear cargo bike: Do not rest your bicycle on its derailleur. The derailleur could bend or dirt could get on the drivetrain.
- Protect your bike from the elements when possible. Rain, snow, hail, and even direct sunlight can damage your bicycle frame, finish, or parts.
- Before you put away your bicycle for an extended time, clean and service it and apply frame polish.

# Quick start

# Protect your bike's finish

The finish or paint on your bicycle can be damaged by chemicals (including some sports drinks) or abrasive contact. Dirt can scratch or remove paint (and even frame material) especially where a cable rubs or a strap is placed around a tube. Use adhesive padding to prevent rubbing in critical spots.

#### Avoid excessive heat

Do not exceed 140°F (60°C) temperature exposure to your bicycle.

#### Keep it clean

Clean your bicycle with water or mild detergent and a non-abrasive sponge if your bicycle is very dirty. Never spray your bicycle using high pressure, and never spray directly onto bearing points or electrical parts. Never use harsh chemicals or alcohol wipes to clean your bike. See Five easy fixes every rider should know on page 4-9 for more details on washing your bicycle.

# Quick start

# A warning about servicing your bike

If you need to replace any bike parts (worn brake pads, for example, or broken parts from an accident), visit your bike shop or the **Equipment** section of <u>trekbikes.com</u>.

Special tools and skills are necessary for the servicing of your bicycle. For your safety, if a repair or adjustment is not specifically listed in this manual, only your bike shop should make that repair.

A WARNING: Many bicycle service and repair tasks require special knowledge and tools. Do not begin any adjustments or service on your bicycle until you have learned from your bike shop how to properly complete them. We recommend that significant mechanical repairs be carried out by a qualified bicycle mechanic. Improper adjustment or service may result in damage to the bicycle, or an accident that can cause serious injury or death. Your safety depends on the correct maintenance of your bicycle. If a repair, adjustment, or software update (for your e-bike system) is not specifically listed in this manual, only your bike shop should make that repair.

After any repair or accessory installation, check your bicycle as shown in <u>Before</u> every ride on page <u>3-6</u>.

# CHAPTER 2

# E-System Quick Start

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# **Important e-bike information**

We're partners in protecting the earth, so you need to properly use, maintain, and dispose of electrical components.

**WARNING:** A short circuit in the electric system and/or damage to the battery might lead to over-heating. In an extremely rare case, a battery that has been severely impacted could potentially catch fire.

**CAUTION:** Any unauthorized modification (tampering) of your e-bike system is prohibited. If you suspect your e-bike has been tampered with, or you experience a change in the speed at which your pedal assistance cuts off, stop riding and contact an authorized Trek retailer for assistance.

# Turn the bike ON or OFF



Press and release Q.

**Note:** The e-system will automatically turn off if the bike is not moved, nor any buttons pushed for 10 minutes.

# **Battery**

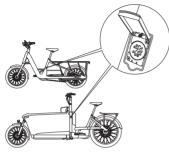
## **Charge the battery**

- The battery is supplied partially charged. For best performance, fully charge the battery before riding your e-bike.
- The battery can be charged while installed on the bike or off the bike.
- · LEDs indicate the level of battery charge.
- While the battery is charging, the top LED on the remote and the LEDs on the battery will flash.

**WARNING:** Be safe. Follow these safety warnings when charging your battery:

- Only charge the battery with a Bosch smart system charger. Using the wrong charger risks the life of the battery and presents a potential fire hazard.
- Only use the charger in dry, indoor areas.
- Do not leave a charging battery unattended.
- When the battery is fully charged, disconnect the charger from the battery and wall socket.

#### On the bike



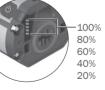
Blue bar = 20% White bar = 10% \_\_\_\_\_ 4 blue LEDs + 1 white LED = 81% to 90% charged



Low battery indicator The bottom two LEDs change color. 2 orange: 30% to 21% 1 orange: 20% to 11% 1 red: 10% to reserve 1 red flashing: reserve to empty

#### Off the bike

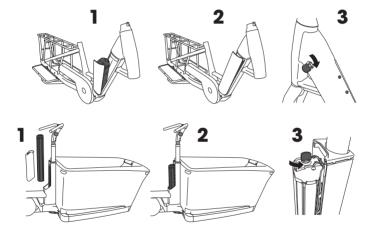




## Install or remove the battery

Before installing or removing the battery, make sure the battery and remote are OFF. No LEDs should be illuminated on either component.

Install:  $1 \ge 2 \ge 3$  Remove:  $3 \ge 2 \ge 1$ 



2-4

# Quick start

# Store the battery

#### A WARNING: Store the battery properly

If you won't be riding your e-bike for 3 months or more, remove the battery from the bike, and take the following steps to properly store it.

- Store your e-bike battery in a dry, ventilated location that is away from moisture, heat sources, and combustible or easily flammable objects.
- Store your battery at the recommended temperature. Storing your battery outside of this range could damage the battery, affect its performance, or cause the battery to catch fire.



- Monitor the battery charge. Keep the battery charged to a minimum of 30% to 60%. The battery can be damaged by deep discharge.
- When the battery charge is restored, remove the battery from the charger. Do not store your battery connected to the charger.

# **Pedal assistance**

You've got places to be and people to see, so get going.

## Select an assist mode



Before you start pedaling or while you are pedaling



#### Assistance stops when:

- You stop pedaling
- You reach the maximum assist speed (Maximum speeds vary by region.)

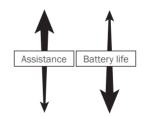
#### Assistance restarts when:

- You start pedaling again
- You are pedaling and your speed drops below the maximum assist speed

Riding



Red = eCargo Purple = Auto Blue = Tour+ Green = Eco Off



# Quick start

# Walk assistance

Walk assistance provides a little push for those times when you are walking or pushing your bike. Shifting your bike into a higher gear increases the speed of walk assistance, up to approximately 4pmh/ 6kph.

A WARNING: Walk assistance should only be used when you are walking your bike. Never use walk assistance when you are riding your bike, or in situations where the wheels are not touching the ground.

Press and hold the 📝 button.

While holding the button, walk the bike forward or backward to activate walk assistance.





For safety, the lights will always turn ON when the bike is ON. The light button will not turn the lights ON or OFF.

# **Connect your phone**



### Download the app



Use the eBike Flow app to keep track of your distance traveled, battery status, current speed, and to help you navigate your way,

The eBike lock feature turns your phone into a digital lock for your bike. To learn more and download the app, go to Google Play or the App Store. Then follow the instructions in the app.

### Attach your phone



## Charge your phone



# CHAPTER 3

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# Quick start

# Before your first ride

Make sure your bicycle is ready for use before your first ride.

# Know before you go

There's a lot of great information about your bike's e-system. Before your first ride, be sure to read and follow the information in the <u>E-System Quick Start</u> section in this manual and the comprehensive Bosch manual for your bike, available on Trek's manuals page: <u>trekbikes.com/manuals</u>.



trekbikes.com/manuals

# Stay within the weight limit

Your bicycle has weight limits. See Front cargo weights and Rear cargo weights on page 1-14.

# Adjust your saddle to a comfortable height

#### Test that you have the right height

Sit on the saddle with your foot on the lower pedal and your leg slightly bent.

If your leg is bent more than slightly, your seat should be adjusted up.

If you can't reach the pedal, your seat should be adjusted down.



Incorrect



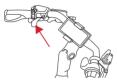
Correct

3-2

#### Adjust the saddle height

#### 🔞 🐜 Front Cargo

Your bike has a lever on the handlebar to adjust your seat height up or down. Talk to your bike shop if you're not familiar with a dropper post.



Press the seat dropper post lever:

- With weight on the seat, the seat will move down.
- With no weight on the seat, the seat will move up.



Your bike has a two piece telescoping seatpost to adjust your seat height up or down. The upper post has a built-in stop and cannot be removed from the lower seat post. We suggest you first adjust the top portion to fit the shortest rider. Then as needed, adjust the bottom portion to fit taller riders.



#### NOTICE: Minimum seatpost insertion.

To avoid damage to the seatpost or bike frame, do not position the saddle beyond the minimum insertion line on the seatpost. If you can't properly position your saddle, see your bike shop.



The seatpost minimum insertion line.

### **Bed-in your brakes**

New disc brakes have a bed-in (burn-in) period, and the braking force will gradually increase as the burn-in period progresses. This process will ensure the most consistent and powerful braking feel along with the quietest braking in most riding conditions.

A WARNING: The bed-in process requires you to perform heavy braking. You must be familiar with the power and operation of disc brakes. Braking heavily when not familiar with the power and operation of disc brakes could cause you to crash, which could lead to serious injury or death. If you are unfamiliar with disc brakes, you should have the bed-in process performed by your bike shop.

- Accelerate the bike to a moderate speed, then firmly apply the brakes until you are at walking speed. Repeat approximately twenty times.
- Accelerate the bike to a faster speed, then firmly apply the brakes until you are at walking speed. Repeat approximately ten times.
- 3. Allow the brakes to cool prior to any additional riding.

# Quick start

# Inspect your stem 🚲

The rear cargo bike has a direct-connect stem that attaches the handlebar to the steerer tube, which is attached to the fork. There must be one spacer above and below the stem. If you have questions about your stem or steerer tube, contact your bike shop.

Special tools and training are necessary to align, adjust, and torque your stem, so only your bike shop should do this. Do not attempt to make the adjustments yourself as these changes may also require adjustments to the shifter, brake levers, and cables.

A WARNING: An incorrect headset and stem assembly, and incorrect torque can cause damage to the fork's steerer tube, possibly causing the tube to break. If the steerer tube breaks, you could fall.

# Adjust your handlebar

Handlebar position is important for control and comfort. You point the handlebar and the bike follows.

# Get to know your bike

For the most possible enjoyment from your bicycle, see <u>Basic riding technique</u> on page 3-12 to familiarize yourself with:

- Pedals
- Brake levers
- · Shifting
- Suspension (if equipped)
- The cargo area (accessories and weight limits)

You will enjoy yourself more if you have a comfortable and confident ride.

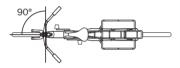
# **Before every ride**

Before riding your bicycle and before loading with cargo or passengers, perform a safety check on level ground and away from traffic. If any part doesn't pass the safety check, fix it or have your bike serviced before riding.

# **Pre-ride checklist**

#### □ Check the handlebar

• Make sure the bar is at 90 degrees to the wheel.



- Check that the handlebar is tightened sufficiently so that it will not twist out of alignment and does not rotate in the stem. The correct torque is printed on the stem. See your local bike shop if you need assistance to properly align your handlebars or tighten the stem bolts.
- Make sure that no cables are pulled or caught when you turn the handlebar from side to side.

- Front cargo bike: Make sure the front wheel responds to turning left and right. Steering on this bike is accomplished through a complex steering cable system. If the front wheel doesn't respond to handlebar turning or if steering is delayed, visit your bike shop before you ride.
- (EA) Rear cargo bike: Make sure the front stabilizer is attached and secure to prevent the handlebar from over-rotating.

3-6

#### Check the wheels

- Check rims and spokes for damage. Give the wheel a spin. It should spin straight through the fork (front) and chainstays/seatstays (rear), and not contact the brake pads.
- Lift your bicycle and hit the tire with a solid blow. The wheel should not come off, be loose, or move from side to side.

A WARNING: A wheel attachment device that is not properly secured can allow the wheel to loosen or come off, suddenly stop the wheel, decrease your control, and cause you to fall, resulting in serious injury or death. Ensure the axle is not interfering with any part of the bicycle and is fully secured.

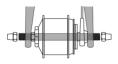
#### Thru axle wheel attachment:

Check that the axles are properly adjusted and fully secure in the dropouts.



#### **Bolt-on wheel attachment:**

Check that the axle is properly adjusted and fully seated in the dropouts.



Make sure your dealer has given you the manufacturer's instructions, and follow those when installing or removing a thru axle wheel. If you don't know what a thru axle is, ask your dealer.

The thru axle length, diameter, and thread pitch must match the specifications of your frame, fork, and wheel hubs. Always install or remove your wheel in accordance with the thru axle manufacturer's instructions and consult the manufacturer if you have questions.

If you intend to replace the thru axle, make sure the new thru axle is compatible with your bicycle. Do not remove the thru axle from your bicycle and use it on a different bicycle, as it may not be compatible and will not properly secure your wheel.

The thru axle is inserted through the unthreaded hole in the frame or fork's dropout, through the wheel hub, and is threaded directly into the opposing dropout by tightening the thru axle. Please refer to the manufacturer's instructions for specific information about your thru axle's operation, including correct torque specifications.

#### Check the tires

Use a tire pump with a gauge to make sure your tires are inflated within the recommended pressure range. Do not exceed the pressure limit as stated on the side of the tire or rim; whichever is lowest.

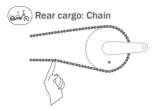
**NOTE:** It is better to use a hand or foot pump than a service station pump or electric compressor. The latter are more likely to allow for over-inflation, which can cause the tire to blow out.

**WARNING:** Never inflate a tire beyond the maximum pressure marked on the tire's sidewall.

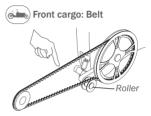
A WARNING: Never ride a tire inflated below the minimum pressure marked on the tire's sidewall. Tire pressure below the minimum may cause a flat tire and/ or the tire to detach from the rim while riding, resulting in a loss of control or crash causing serious injury or death, as well as damage to the tire, tube, and/or wheel rim.

#### □ Check the chain or belt

Make sure your chain or belt is in good condition and has the correct tension.



Check that the chain has no: kinks or rust, and no broken pins, plates, or rollers.



Check that the belt teeth and belt roller are not worn: the belt teeth must engage with the teeth on the front and rear rings, and the belt must stay inside the roller sides.

#### Check the tension:

- 1. Shift to the smallest rear cog (rear cargo).
- Rotate the pedals to four different positions and measure the slack at these four positions and take the average. There should be between 6-12mm / 0.25-0.50in total vertical movement in the middle of the chain or belt. Trek recommends the use of a belt-tension gauge for best results.

**NOTE:** If there is a large difference between measurements, the front sprocket may be misaligned. See your bike shop for this adjustment.

See Chain/Belt on page 4-6 for maintenance instructions.

#### □ Check the saddle and seatpost

- Make sure the saddle is in line with the center of the bike.
- Check that the saddle rails or collar is tightened sufficiently so that it will not twist out of alignment or move or tilt up and down.

#### $\hfill\square$ Check the brakes

- While standing still, make sure you can apply full braking force without the brake lever touching the handlebar. (If the lever touches, your brakes may need adjustment.)
- Check that the front wheel brake is working properly. Ride the bike at slow speed and apply the front wheel brake. The bike should come to an immediate stop.
- Repeat the process with the rear wheel brake.
- Disc brakes have a rotor and calipers. Pads inside the caliper squeeze the rotor to slow the wheel but can get very hot during use. Do not touch them immediately after riding.

#### □ Check the cables

- Make sure all cables and housings are properly secured to the frame or fork so they cannot interfere with or get caught on moving parts.
- Check reflectors, lights, and accessories
- Check that all reflectors are clean.
- Make sure wheel reflectors are positioned parallel with the wheel rims.
- Make sure all reflectors are visible when cargo is in place.
- Make sure your front and rear lights and any other accessories are securely attached, properly positioned, and working properly.
- Position your lights parallel to the ground.

#### $\hfill\square$ Check your battery and e-system

 Check that your battery is locked in the dock and fully charged, and your remote/display, and electrical system are functioning properly.

□ Check your suspension (if applicable)

 Adjust your suspension for your use, and make sure that no suspension component can "bottom out" or be fully compressed. Suspension adjustment instructions (pre-load adjustment) are available in the Support section of trekbikes.com.

#### □ Check your pedals

- Make sure your pedals and shoes are clean and free of debris that could affect your grip or interfere with the pedal system.
- Grab your pedals and crank arm and wiggle to see if there's any looseness. Also spin the pedals to make sure they rotate freely.

#### Check the surface temperature of seats

• Before placing cargo or passengers on seats, check the surface to avoid extreme temperatures.

# Lighting

Your e-cargo lighting system consists of a front light and rear light. The lights improve visibility of the road and surroundings to the rider and improves your visibility to other people. The lights are powered by the Bosch e-bike battery.

So you don't get stuck out in the dark, the equipped lights will continue to light your way for two hours after the battery can no longer provide pedaling assistance.

# Know the local laws

Many locations require that lights are used in conditions of reduced visibility. Additionally, some locations have specific requirements regarding the lights used on your bike while riding on the road. Make sure you understand lighting requirements in your location before you ride, and consult your local authorities if you have questions.

**NOTE:** Without the Bosch battery mounted on the bike, the e-cargo lighting system does not work.

# **Basic riding technique**

Use the following tips and techniques to get the most out of your riding experience.

## **Turning and handling**

Wet, debris-strewn, or uneven pavement will affect the handling of your bicycle. Paint (crosswalks, lane lines) and metal surfaces (grates, manhole covers) can be especially slippery when wet. Try to avoid sudden changes in direction on less-thanideal surfaces.

**WARNING:** Proper steering system setup is essential. An improperly set or maintained steering system can result in an unsafe ride and may lead to injury or death.

Front cargo: Make sure the front wheel responds to turning left and right. Steering on this bike is accomplished through a steering cable system. If the front wheel doesn't respond to handlebar turning or if steering is delayed, visit your bike shop before you ride.



**Rear cargo:** Be careful of "toe overlap." When you turn the handlebar at very slow speeds, your foot could overlap or touch the front wheel or fender. Reposition your foot or do not pedal when you ride slowly with the handlebar turned.



# Starting 🐱

A WARNING (Rear cargo): When starting to ride, be aware of your foot position in relation to the rear footrests and panniers (if fitted). If your feet remain planted as the bike starts to move or you take a long push-off stride to start, the footrest or panniers may come in contact with your leg or foot, resulting in an injury or fall. Always utilize the bike's assistance to start. Start off with the left or right pedal between the 9 and 11 o'clock position and use the pedals and assist system to get moving. As soon as you start moving, lift your other foot off the ground and place on the pedal once stable.

# Stopping

Always ride with a safe distance between you and other vehicles or objects to give yourself adequate room to stop. Adjust distances and brake forces to suit riding conditions, speeds, cargo load, and low light or nighttime situations.

For safest braking, use your brakes smoothly and evenly. Look ahead and adjust your speed in advance to avoid hard braking.

Be aware of your bicycle's braking power and don't ride beyond it. If you want more or less braking power without modifying the brake system, consult your bike shop.

Wet, debris-strewn, or uneven pavement will affect how your bike reacts to braking. Take extra care when braking under less-than-ideal road conditions. Keep it smooth, and allow more time and distance for stopping.

Stopping distances increase with heavier loads, particularly when riding on sloping roads or cornering. So brake more gently and earlier when loaded with cargo/ children.

# Braking

Before riding, make sure you know which brake lever controls which brake (front or rear), as these may be set up specific to market regulations.

Apply both brakes at the same time.

The front brake provides more stopping power than the rear, so do not use it too forcefully or too abruptly. Gradually add pressure to both brakes until you slow to the desired speed or stop.

A WARNING: Using the front brake only could cause passengers and/or cargo to pitch forward. Brake force applied to the front wheel suddenly or too fully could lift the rear wheel off the ground or cause the front wheel to slide out from under you. This will decrease your control and cause you to fall.



**Note:** Your brakes may be set up with the front brake on the right.

# Shifting gears

The gears on your bicycle allow you to pedal comfortably in different conditions — like riding up a hill, pedaling into a headwind, or riding fast on flat terrain. Select the gear that is most comfortable for the conditions; a gear that lets you pedal at a constant rate. Use the proper technique for your bike.



#### Rear cargo: derailleur

A WARNING: Improper derailleur shifting technique could cause your chain to jam or come off, causing you to lose control and fall.

A derailleur moves your chain from one gear to another. You shift gears by changing the position of a shift lever (also called a shifter), which controls the derailleur.

Shift gears only when the pedals and chain are moving forward.

Decrease the force on the pedals as you shift gears. Reduced chain tension helps the chain shift gears quickly and smoothly, which decreases chain, derailleur, and gear wear. To prevent dropping or jamming the chain or missing a gear, do not shift gears when you ride over bumps.

Front cargo: internal gear hub (IGH) For best shifting, let off some pressure on the pedals at the time of shifting. Too much tension on the belt prevents the correct operation of the gear change mechanism and could damage the mechanism.

The IGH system allows you to shift while the bike is not moving — for example, you could shift into a lower gear at a stop sign for easier startup.

# Pedaling

Your bike is equipped with flat pedals. They don't require special footwear, and your feet are free to move on and off the pedal.

# CHAPTER 4

# Maintenance

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# Keep your bike running like new

Technological advances continue to make bicycles more complex. It's impossible for this manual to provide all the information required to properly repair and maintain your bicycle.

To help minimize the chances of an accident and possible injury, it's critical that you have your bike shop perform any repair or maintenance not specifically described in this manual.

The longer you neglect maintenance, the more it becomes critical. Your bike shop can help you decide your maintenance requirements.

After initial use, new bicycles should be checked. As an example, cables stretch through use, and this can affect the operation of shifting, steering, or braking. Approximately two months after you purchase your new bicycle, have your bike shop fully check it. Have your bike shop fully service your bicycle each year even if you did not ride your bicycle much. Before each ride, perform an inspection as outlined in <u>Before every ride on page</u> <u>3-6</u>.

See the **Bike Service and Repair Packag**es section of <u>trekbikes.com</u>.



trekbikes.com

Maintenance schedules are based on normal use. If you ride your bicycle more than the time indicated, perform maintenance more frequently than recommended. If a part malfunctions, check and service it immediately, or consult your bike shop. If a part has wear or damage, replace it before you ride your bicycle again.

## Inspection

As listed in the Maintenance schedule, perform the following inspections and maintenance when indicated.

If your inspection shows your bike needs maintenance, visit the **Support** section at trekbikes.com for further instructions and helpful videos, or see your bike shop for service.

## **Check tightness**

Your new bicycle left the shop with bolts and connections properly tightened — but those bolts and connections loosen over time. This is normal. It's important to check and adjust them to proper torque specifications.

### Know your torque specs

Torque is a measure of the tightness of a screw or bolt.

Too much torque can stretch, deform, or break a bolt (or the part it attaches). Too little torque can allow the part to move and may lead to fatigue and breakage of the bolt (or the attached part).

A torque wrench is the only reliable method of determining correct tightness. If you do not have a torque wrench, you cannot properly inspect for tightness and should consult your bike shop.

The torque specification is often written on or near the bolt or part. If a part does not have a specification on it, check the service manual on <u>trekbikes.com</u>, or ask your bike shop. It shouldn't take more than a few minutes to check the following and adjust as necessary to proper torque specs:

- Saddle clamp bolt(s)
- · Seatpost clamp bolt
- · Stem bolts
- · Shift lever or shifter attachment bolts
- · Brake lever attachment bolts
- Brake bolts, front and rear, including any bolt that attaches a cable housing stop.

# Handlebar

Handlebars with grips that lock on with a mechanical connection must have adequate space to properly align the grips with the handlebar ends and be properly plugged so no portion of the handlebar end is exposed. Locking grips must be properly tightened to avoid movement.

#### Check that the handlebar:

- Is at the correct height and that you can reach the brake levers and shifters comfortably.
- Grips are secure (they shouldn't move or rotate).
- Grips, and brake and shifting controls are secure and allow the safe operation of your bicycle, including the ability to steer, brake, and shift without any interference.
- Extensions or bar ends are properly positioned and secure, and that bar caps or plugs are secure.

A WARNING: Improperly secured locking grips could lead to a loss of control or a crash, resulting in serious injury or death.

A WARNING: Loose or damaged handlebar grips or unsecured handlebar extensions can cause you to lose control, causing a crash resulting in serious injury or death.

A WARNING: A handlebar end that is not plugged or covered can result in severe injury or death in the event of a crash. Regularly inspect your bicycle and replace damaged or missing grips.

## Frame and fork

Examine your frame and fork, especially near junctions, and clamping or attachment areas.

Look and feel for signs of fatigue: dents, cracks, scratches, deformation, discoloration, unusual noises (e.g. chain/belt slap or brake rub during acceleration). If you find any, contact your bike shop before riding the bicycle.

# Wheels and tires

Check the tires for damage or a worn area. As a tire wears thin, it may become more susceptible to puncture. If a cut goes all the way through the casing, or any casing thread shows through the tread, replace the tire.

Have your bike shop fix or replace loose spokes or spokes with damage.

Only use wheels, tires, and tubes specifically approved for your bicycle, including design, width, and diameter. The tires for these bikes are specifically made for cargo bike applications.

A WARNING: Failure to use a compatible tire and rim combination can cause the tire to unexpectedly lose pressure and detach from the rim, resulting in a crash causing serious injury or death. Ensure the components are compatible according to the component manufacturers before installation.

If a hub feels loose or makes a grinding noise, your bearings may need attention. Only your bike shop should adjust bearings.

Resources

# **Brakes**

#### Check the brake pads for wear

- · Replace disc brake pads that are thinner than 1mm.
- · Check the thickness/wear of the disc brake rotors. The minimum thickness is often printed on the disc.

# Derailleur

Shift gears through all the sprocket combinations to make sure the derailleur operates correctly and smoothly, and the chain does not come off.

# Pedals

Wiggle the pedals to make sure they're secure on the crank arms. Rotate the pedals on the crank arm. If the pedals don't rotate smoothly, see your bike shop to adjust your pedal bearings.

If necessary, tighten your pedals. The right pedal is tightened clockwise. The left pedal is tightened counterclockwise. See your bike shop to tighten your pedals to the correct torque.

# Crank

Gently wiggle the crank arms and turn the crank (chainring) with the rear wheel off the ground.

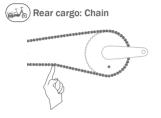
If the crank feels or sounds loose, or if you hear a grinding noise when you turn the crank. do not ride vour bicvcle.

If your inspection shows that your bike needs maintenance, take your bike to your bike shop for service.

# **Chain/Belt**

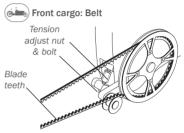
Check your chain or belt for tightness and wear.

- There should be between 6-12mm / 0.25-0.50in total vertical movement in the middle of the chain or belt.
- If your chain/belt has more vertical movement, see your bike shop for adjustment.



Replace the chain if it shows signs of wear or damage: kinks, rust, broken pins, plates, or rollers.

Clean and lubricate the chain (see Five easy fixes every rider should know on page 4-9).



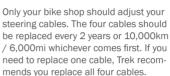
Replace the belt if it shows signs of wear: worn teeth, worn roller sides.

# Cables

#### Brake hoses and shifter cables

Check the cables for problems: kinks, rust, broken strands, or a frayed end. Cables should have an end cap to prevent fraying. Also check the cable housing for loose wire strands, bent ends, cuts, and worn areas. If there is a problem with a cable or housing, do not ride your bicycle. Unless you feel comfortable adjusting your wire cables, take your bicycle to your bike shop for service.

# Steering cables (front cargo)



Check all e-system wires and connectors for damage. Check the operation of the system and the smartphone grip for damage.



#### (on front cargo - sold separately on rear cargo)

If you are re-installing a fender, you must coat the top mounting bolt threads with new Loctite Blue 242 adhesive (or similar) with each installation.

**A** WARNINGS: Failure to follow these warnings could result in serious injury or death.

- Fender mounting bolts may become loose. To avoid loose bolts, coat the bolt threads with fresh threadlocker adhesive with each installation. Failure to use an adhesive on the bolts may result in a loose or detached fender contacting the tire causing an abrupt stop.
- When re-installing a fender, make sure you use the bolt(s) and all washers supplied with the bicycle or fender assembly. These bolts and washers have specific sizes and locking capabilities. Failure to properly install these bolts and washers may result in a loose or detached fender contacting the tire causing an abrupt stop.

# Five easy fixes every rider should know

We know not everybody is mechanically inclined ... but every rider should master these five basic skills. We cover the highlights below, but if you need a little deeper dive, you'll find how-to videos on the Trek Bike YouTube channel: <u>youtube.com/user/trekbikesusa</u>.



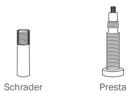
Properly inflated tires make for an enjoyable ride. Checking your tires for inflation and wear is your first step to improve your bicycle's performance.

#### Check your tire pressure

Use a tire gauge, or a pump equipped with a gauge, to check your tire pressure.

#### Inflate (or deflate) your tires

Use a hand pump to inflate your tires to the air pressure recommended on the sidewall of the tire or to the pressure recommended for the rim, whichever is lower. Make sure your pump is suitable for your valve.



With a Presta valve, you must loosen the top valve before trying to inflate the tire.

Do not over-inflate your tires. If your tire is over the recommended range, release air and recheck the pressure.

**NOTE:** It is better to use a hand or foot pump than a service station pump or electric compressor. The latter is more likely to allow for over-inflation, which can cause the tire to blow out.

# 2. Wash your bike

It just feels better to ride a clean bicycle. Not only does it look good, it will also add to the life of the bike. Constant attention to your bicycle's details will keep you up to date with maintenance as well.

All you need is a water hose, a bucket, mild soap, a soft brush, and a towel.

Wet your bicycle with the hose, then work with the brush from the top down using plenty of soapy water. Rinse the soap off and wipe it down.

**NOTICE:** High pressure water may damage bicycle parts. Do not clean your bicycle with a high-pressure washer. High pressure water might also seep into electric connectors, motors, controllers, or other parts of the electric system.

# 3. Degrease and lube your chain (Rear cargo)

Proper lubrication will keep your chain running smoothly and quietly and will prolong the life of your chain. We recommend you clean (degrease) the chain prior to lubrication.

#### Degrease

It's a dirty job so leave your dress clothes in the closet. You'll need a bike-specific degreaser (a biodegradable option is good). There are designated chain-cleaner tools, but you can also use a toothbrush.

Apply the degreaser with a toothbrush or a chain-cleaner tool to the bottom length of the chain and pedal backwards. After degreasing, wash the chain with soapy water and a brush, rinse it clean, and allow to dry.

A WARNING: Do not get lubricant on disc brake rotors. Lubricant on brake surfaces can cause decreased braking function, and increase the possibility of an accident or injury. Wipe off any lubricant that contacts brake surfaces.

#### Lubricate

Use a bicycle-specific chain lubricant. Apply lubricant to each link pin as you slowly pedal backwards. Wipe off any excess lubricant.



**TIP:** Apply the lubricant to the bottom length of the chain and hold a rag under the chain. This will keep the lube from dripping on your chainstay (frame) or wheel and make the process less dirty.

## 4. Remove & replace your wheels

**NOTE:** With disc brakes, be careful not to press the brake lever after removing the wheel. This may close the brake pads making it difficult for the rotor to go back inside the pads.



#### Remove

**NOTE:** To make this easier, you may want to use a bike stand or lay the bike on its side.

- 1. Shift down to the smallest size gear.
- 2. Loosen and remove the thru axle from the wheel.
- Grab the derailleur body and push down, then back, and release the wheel from the dropouts.
- 4. Tilt the wheel and remove the chain from the rear gears. Set the wheel down with the gears up.

#### Replace

- Standing at the rear of the bike, grab the rear derailleur with your right hand and pull back and push down making sure the top of the chain drops over the first (or smallest) gear. Make sure the wheel axle fits all the way into the frame (dropouts) of the bicycle.
- Install and tighten the thru axle making sure that the axle is properly positioned within the dropouts.

# Front Cargo Rear wheel

A WARNING: The removal and re-installation of internal gear hubs requires special knowledge. Incorrect removal or assembly can result in gear failure, which can cause you to lose control and fall. If you're not comfortable performing this procedure, see your bike shop.

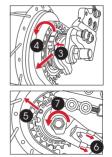
#### Tools:

- 2mm Allen wrench or needle-nose pliers
- 15mm socket or wrench

#### Remove

- Loosen the tension adjustment bolt to add slack to the belt (see <u>Chain/Belt</u> <u>on page 4-6</u>)
- 2. Use the handlebar shifter to move the hub interface. Turn the shifter until the hub interface is facing rearward.
- 3. Rotate the barrel adjusters at the shift lever counter-clockwise to create slack in the cable.
- 4. Rotate the latch and remove the lower cable stop from the hub interface.
- 5. Use the 2mm Allen wrench or needle-nose pliers to remove the upper cable stop from the hub interface.
- 6. Pull both cable housings out of the hub interface.

- Loosen the two hub nuts and move the security washers to the side, so these don't clamp in the dropout.
- 8. Remove the wheel from the dropouts.



#### Replace

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- 1. Reinstall the wheel back into the dropouts and tighten the hub nuts.
- 2. Rotate the wheel so the hub interface is facing rearward.
- 3. Use the 2mm Allen wrench or needle-nose pliers to reinstall the upper housing into the hub interface and reconnect the upper cable stop to the hub interface.
- Reconnect the lower cable stop to the hub interface and reinstall the lower cable stop to the hub interface.
- If you loosened the barrel adjusters during removal, rotate them clockwise to retighten.
- 6. Retighten the tension adjustment bolt to remove slack from the belt.

# 5. Remove & replace your tire

These instructions are written for standard tire systems with tubes. You can also view the video in the **Support** section on <u>trekbikes.com</u> or on the Trek Bike YouTube channel <u>youtube.com/user/trekbikesusa</u>.





trekbikes.com

youtube.com

#### Remove

- 1. Deflate the inner tube and remove the valve nut.
- 2. Loosen the tire from the rim.
- 3. Use your hands or tire levers to remove the tire from one side of the rim. Do not use a sharp object such as a screwdriver to remove the tire.
- 4. With one side of the tire removed, you can reach in and remove the inner tube.
- 5. To remove the tire completely use your hands or tire levers to remove the other side of the tire from the rim.

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#### Replace

- 1. Examine the tire, rim tape, and the rim for defects, dirt, or debris.
- 2. Inflate the inner tube just enough for it to take shape.
- 3. Place the inner tube in the tire so that it is inside the tire all the way around. Insert the valve stem through the hole in the rim.
- 4. With your hands only, push one side of the tire over the rim. Make sure the tube is now inside the rim and reinstall the valve nut.
- 5. Push the other side of the tire over the rim. Do not use a tire lever or sharp object. It could pierce the tire. Check both sides of the tire to make sure the inner tube is completely inside the tire.
- 6. Inflate the tire to the pressure indicated on the side of the tire. Do not over-inflate.
- 7. Check to make sure the tire bead is set on the rim.

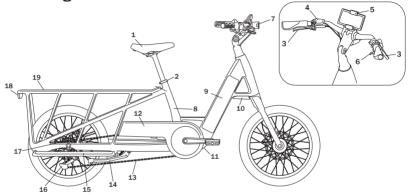
# CHAPTER 5 **Resources**

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# **Bike diagrams**

These diagrams include the basic e-cargo bike parts with original equipment only.

# **Rear Cargo**



- 1 Saddle
- 2 Seat post clamp
- 3 Brake lever
- 4 Remote
- 5 Smart phone grip
- 6 Shift lever
- 7 Front light
- 8 Frame sticker
- 9 Battery
- 10 Fork stabilizer

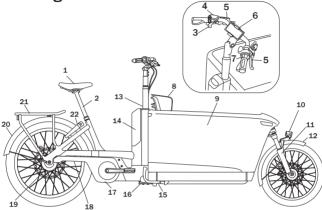
- 11 Drive unit
- 12 Chainguard
- 13 Chain
- 14 Kickstand
- 15 Footrest
- 16 Rear derailleur
- 17 Gears (cassette)
- 18 Rear light
- 19 Rear rack

#### Accessories

- · Family pack
- Fenders
- Front rack
- · Front panniers
- Rear panniers
- Range extender battery

Maintenance

## **Front Cargo**



- 1 Saddle
- 2 Dropper post
- 3 Dropper post lever
- 4 Remote
- 5 Brake lever
- 6 Smart phone grip
- 7 Twist shifter
- 8 Child seats
- 9 Cargo box
- 10 Front light
- 11 Suspension fork

- 12 Front fender
- 13 Frame sticker
- 14 Battery
- 15 Kickstand
- 16 Steering cables
- 17 Drive unit
- 18 Belt
- 19 Internal gear hub
- 20 Rear fender
- 21 Rack
- 22 Wheel lock

#### Accessories

- Bench seat
- · Child seat adapters
- · Rainfly

Safety

# Get to know your bike shop

The best way to ensure many happy hours of trouble-free cycling is to build a relationship with your favorite bike shop.

### The ultimate resource

This manual contains lots of valuable information about your bicycle – and there's even more in the **Support** section of <u>trekbikes.com</u>.

But a manual or a website can't fix a flat, tune your derailleur, correct your saddle height, pour you a cup of coffee, or wax endlessly about that one time when you almost won that one thing.

Locally owned bike shops are the heart and soul of cycling. Here's just a sampling of what they offer:

#### **Knowledgeable staff**

Bike shop staff aren't just sales-people. They're riders who use and understand the products they sell.

#### The right fit

Your shop can set up and adjust your bike to fit you, your riding style, and your preferences.

#### **Professional mechanics**

Service staff at your shop will keep your e-cargo bike in tip-top shape season after season.

#### Warranty service

If you have an issue with a product we sell, your bike shop is committed to making it right.

## A shop for every rider

We work with over 3,000 local bike shops in the US and hundreds more worldwide. Some specialize in racing, some cater to commuters, some are all about the trails – and many offer something for everyone. If you don't already have a favorite shop, the best place to find one is **Find a bike shop** under **Shop** on <u>trekbikes.com</u>.

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