

#214



Operation manual

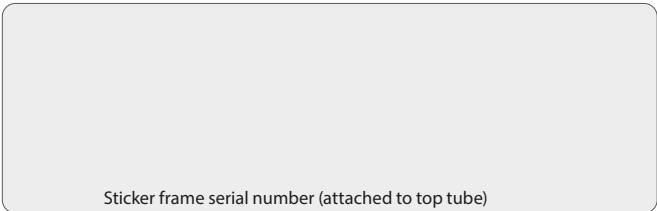
Trike Hybrid

Legal notice

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Pending System GmbH & Co. KG
Ludwig-Hüttner-Straße 5-7
95679 Waldershof
Deutschland
Telephone: +49 (0) 9231-97 007 80
Fax: +49 (0) 9231-97 007 199
E-mail: info@cube.eu
Internet: www.cube.eu

23_HY-P4-C3__Trike Hybrid, 1, en_US
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Sticker frame serial number (attached to top tube)

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1 About these original instructions

Dear Customer,

we would like to congratulate you on your choice of a Trike Hybrid from our company and thank you for your trust.

With the purchase of this Trike Hybrid, you have acquired a high-quality, environmentally friendly means of transport that you will enjoy whilst promoting your health.

Your specialist bicycle dealer is also very important for you after advice and final assembly. The dealer is your contact for maintenance, inspections, conversions and repairs of all kinds.

If you have any questions about our product, please contact your specialist bicycle dealer.

Overview



- 1 Frame
- 2 Seatpost
- 3 Saddle
- 4 Seatpost clamp
- 5 Soft top
- 6 Box
- 7 Rear light
- 8 Mudguard
- 9 Tyre
- 10 Rim
- 11 Spoke
- 12 Hub
- 13 Brake disc

- 14 Brake
- 15 Chain
- 16 Chainguard
- 17 Kickstand
- 18 Chaining
- 19 Engine
- 20 Crank arm
- 21 Suspension fork
- 22 Headset
- 23 Stem
- 24 Front light
- 25 Brake lever
- 26 Display
- 27 Remote
- 28 Handlebars
- 29 Shifter
- 30 Grip

1.1 Conventions

1.1.1 Descriptions



CAUTION

The symbol for danger of burns indicates high temperatures above 45°C (coagulation of protein), which can cause burns in humans.



DANGER

The yellow warning triangle in combination with the signal word "Danger" indicates dangers that can lead to severe personal injury (up to death).



WARNING

The yellow warning triangle in combination with the signal word "Warning" indicates dangers that can lead to slight personal injury and damage to property.



NOTICE

The exclamation mark (without triangle) alerts you to information that requires special attention.



1.1.2 Positional designations

Whenever these original instructions refer to "right," "left," "front" or "rear," this information always refers to the position of the cyclist (in the direction of travel).

1.1.3 Definition of terms

Definition of terms

Trike Hybrid	Whenever these original instructions refer to "Trike Hybrid" in general, it refers to any of the models described here.
EPAC	E lectrically P ower A ssisted C ycles). All Trike Hybrid models described in these original instructions belong to the EPAC class of cycles.
Wobble	A concentricity deviation on the rim is colloquially referred to as a "wobble".
bar	Common unit for air pressure.
Torque	Also called tightening torque. Indicates how "firmly" a screw is tightened.
DIN EN ISO	German Institute for Standardization. European standard
Specialist bicycle dealer	Our company only allows selected bicycle dealers to sell and repair our products.
=	
Authorised specialist bicycle dealer	Whenever these original instructions refer to "bicycle dealer" in general, they specifically mean specialist bicycle dealers authorised by us.
Manual force	The force that an average adult person with moderate to medium effort applies with one hand.
HWK	In Germany: Chamber of Trade
IHK	In Germany: Chamber of Commerce
Nm	newton-metre; Unit for torque
psi	pound per square inch; American unit for pressure;

	1 psi = 0.06894 bar
StVO	German Road Traffic Act (Straßenverkehrsordnung)
StVZO	German Road Traffic Licensing Regulations (Straßenverkehrszulassungsordnung)
Correct screw connection	The "Correct screw connection" term refers to the condition in which the screw heads are firmly in contact with the part over their entire surface. 
Screw connection, not correct	A loose screw is often indicated by a protruding screw head. 

1.1.4 Figures



NOTICE

The figures shown in these original instructions are for illustrative purposes and apply to all model versions of the Trike Hybrid.

1.2 General notes on these original instructions



DANGER

Dangers if the original instructions are not observed!

Failure to observe these original instructions can lead to dangerous cycling situations, falls, accidents and material damage.

- In addition to these original instructions, make sure that you have all documents that may be applicable in your national language (↔ *Chapter 1.2.2 "Additionally applicable documents" on page 7*).
- Before using your Trike Hybrid Trike Hybrid for the first time, please read the original instructions and any other applicable documents carefully.
- Keep the original instructions (including the applicable documents) and pass them on together with your Trike Hybrid if you ever sell it or give it away.
- In addition to these original instructions, you will receive a separate delivery certificate for your Trike Hybrid. Make sure that all fields in the delivery certificate are filled out completely. It is your responsibility to check your Trike Hybrid as prescribed and to have any work done on it.
- If parts of this original operating manual are not clear to you, consult your bicycle dealer.

1.2.1 Scope of validity

These original instructions were prepared on the basis of the DIN 79010-2020:02 standard. It applies exclusively to Trike Hybrid models from our company from model year 2023 onwards.

These original instructions are only valid if they were enclosed with the Trike Hybrid from our company when it was purchased.



DANGER

Dangers due to (unfamiliar) technical innovations!

New technical findings may lead to changes in the models, their operation and to new models themselves.

- Ask your specialist bicycle dealer about the accuracy and validity of these original instructions.
- Have your specialist bicycle dealer confirm that you have received the correct set of documents (original instructions and component instructions) for your Trike Hybrid.

1.2.2 Additionally applicable documents

With the constant development in the bicycle sector, the range of components that you can use with your Trike Hybrid is also growing. It is therefore almost impossible to produce generally applicable original instructions that describe all available components in detail.

For this reason, it is possible that these original instructions – in addition to the delivery certificate – are accompanied by one or more separate component instructions.



NOTICE

The enclosed **component instructions** contain **detailed information** from the component manufacturer on the respective component and are part of the **overall scope of the original instructions**.

- Refer to the delivery certificate to find out whether the original instructions for your Trike Hybrid includes additional separate component instructions.

2 For your safety



NOTICE

In this chapter, you will find information on **intended use**, important **safety instructions** and a list of (unavoidable) **residual risks**.

2.1 Use your Trike Hybrid as intended



DANGER

Danger if not used as intended!

Your Trike Hybrid is designed for a specific intended use.

The structure, material characteristics, etc. are also designed for this specific intended use.

If you use your Trike Hybrid in some manner other than intended, this may result in material failure, malfunctions of important assemblies (such as the brakes), etc.!

- Observe all information on the intended use in ➔ *Chapter 2.1.1 "What is your Trike Hybrid designed for?" on page 8* and ➔ *Chapter 2.1.8 "Accessories and conversions" on page 10*
- Never use your Trike Hybrid in any manner besides that described here / in any unintended manner.
- Consult your bicycle dealer if you have questions regarding the intended use of your Trike Hybrid.

2.1.1 What is your Trike Hybrid designed for?

Your Trike Hybrid is designed as a means of transporting persons and loads. Depending on the model, you can use the box of your Trike Hybrid as intended for:

- transporting children and luggage (objects) (**Trike Family Hybrid**).
- transporting large luggage (objects) and dogs (**Trike Cargo Hybrid**).

The tests which your Trike Hybrid or its components have undergone were completed in accordance with DIN 79010-2020:02.

2.1.2 Who may ride your Trike Hybrid?



NOTICE

Your Trike Hybrid is designed for one (single) rider. The rider steers and propels the Trike Hybrid.

The following requirements must be fulfilled for the intended use:

- The seating position (saddle/handlebars) of the Trike Hybrid is adjusted correctly for the rider.
- The rider has the right height/stature for the Trike Hybrid. If you have questions, please consult your bicycle dealer.
- The rider (including clothing) weighs a maximum of 115 kg (= maximum rider weight).
- The rider is at least 16 years old. Persons younger than 16 may not operate this Trike Hybrid themselves as the rider.

2.1.3 How may you ride your Trike Hybrid?

- Sit with your buttocks on the saddle or stand on the pedals, riding out of the saddle.
- Hold the grip of the left handlebar with your left hand, and the grip of the right handlebar firmly with your right.
- Do not take your hands off the handlebars while riding. Your Trike Hybrid is not suitable for hands-free riding!
- Use the Trike Hybrid with or without an e-drive.
- Use your Trike Hybrid only as a means of transportation, as described in this original operating manual.
- Observe the information in ➔ *Chapter 7.9 "Using the Box (Trike Hybrid Family)" on page 36* and ➔ *Chapter 7.10 "Using the box (Trike Cargo Hybrid)" on page 42* for transportation.
- When riding in traffic, observe state and national regulations.

2.1.4 How can you use the box?



WARNING

The box is part of the **intended use** of your Trike Hybrid. The **box** and the **top frame** may **never be removed or modified**.

**NOTICE**

Observe the information on the **permitted total weight** of your Trike Hybrid and the **maximum additional load** (see ➔ *Chapter 3.3 "Permissible total weight" on page 15* and ➔ *Chapter 3.4 "Maximum additional load" on page 15*)

The box of the Trike Family Hybrid is designed to transport:

- **Children** aged 9 months to 7 years who can sit independently and who have a max. body weight of 22 kg.
- **Objects/cargo**

The box of the Trike Cargo Hybrid is designed to transport:

- **Objects/cargo**
- **Dogs** with a maximum body weight of up to 50 kg.

**NOTICE**

The additional load in the box (children, dogs, cargo) may **not distract** or **interfere with** the rider.

Also observe the complete information in ➔ *Chapter 7.9 "Using the Box (Trike Hybrid Family)" on page 36* and ➔ *Chapter 7.10 "Using the box (Trike Cargo Hybrid)" on page 42* for transportation.

2.1.5 What requirements apply to luggage racks/child seat/trailers?

**NOTICE**

Observe the information on the **permitted total weight** of your Trike Hybrid ➔ *Chapter 3.3 "Permissible total weight" on page 15*.

Luggage rack

Your Trike Hybrid is suitable for retrofitting with a front luggage rack.

Front luggage racks you can use with your Trike Hybrid are suitable for transporting light cargo (such as a bicycle basket).

- Contact your bicycle dealer for information on suitable front luggage racks you can use with your Trike Hybrid.
- Observe the information in ➔ *Chapter 7.11 "Using the front carrier" on page 47* for using the front luggage rack.

Child seat

Your Trike Hybrid is **not** designed for use with a child seat.

The permitted total weight would be exceeded with the additional weight of a child seat and child.

**NOTICE**

The box of your Trike Family Hybrid is intended only to transport children!

Bicycle trailers

Your Trike Hybrid is **not** designed for use with a bicycle trailer.

2.1.6 On what surfaces may you ride your Trike Hybrid?

All of the bicycles our company makes are divided into categories that specify the uses for the specific bikes.

Your Trike Hybrid is a **category II** bicycle, and is accordingly suitable for **riding on paved surfaces**, like:

- asphalt streets and cycling paths,
- paths covered in sand, gravel or similar materials (such as forestry roads, dirt roads),
- surfaced hiking trails where there are no or few roots, thresholds, stones or steps.

When riding, all wheels must be in **constant contact with the surface** or may lose contact only briefly due to small uneven areas like roots.

Riding maneuvers such as the following are expressly **not allowed**:

- jumps,
- riding on one or two wheels,
- riding hands-free,
- (heavy) braking causing one of the rear wheels to lose contact with the ground.

2.1.7 What statutory regulations apply to riding with the Trike Hybrid?



NOTICE

Your Trike Hybrid may not be used on public traffic routes without equipment required under the StVZO (German Traffic Regulations).

To conform to the current StVZO, your Trike Hybrid must have the following equipment features. These are only an example excerpt of the required features:

- two independently functional brakes,
- a bell,
- battery-operated lighting for the front (white light) and rear (red light) conforming to the StVZO,
- reflectors/reflective strips on the tires according to the StVZO.

- Please see the StVZO when riding in Germany for the full wording of the regulations.
- When using the bikes outside of Germany, observe the traffic regulations applicable in your country.
- If you have questions regarding statutory regulations, please contact your bicycle dealer or responsible authority.

2.1.8 Accessories and conversions

Many riders enjoy converting their bikes to meet their specific needs. Forks, saddles, handlebars, pedals, brakes, tires, suspension elements – there are many ways to modify a bicycle. This is the case for the Trike Hybrid as well, although the scope of these changes is different due to its design.



NOTICE

Work on the Trike Hybrid, including work that may seem simple, requires **thorough training** knowledge, and **solid experience**.

Work and conversions to your Trike Hybrid which are completed improperly, or using improper accessories may cause **dangerous riding situations, crashes, accidents and property damage**.

In case of manipulations, or unapproved modifications to the Trike Hybrid, **any** liability, warranty and **guarantee claims** against the **manufacturer and dealer will expire**.

If you comply with the following specifications, you can equip your Trike Hybrid with suitable accessories.

- Only use ISO-certified accessories. Bicycle computers and bottle holders are excepted, if they are selected and installed by a bicycle dealer. When choosing accessories, consult your bicycle dealer.
- Never exchange or modify components if modifying or exchanging these components is expressly prohibited by the manufacturer.

Our company prohibits the exchange/retrofitting of the following components:

- Stem,
- Seat post,
- Suspension fork,
- Brake system incl. brake discs,
- Wheels (exception: tires, see below).

Always note:

- The handlebars may only be exchanged by a bicycle dealer for a suitable ISO-certified handlebar (➔ Chapter 4.5 "Handlebars, handlebar stem" on page 20).
- Tires may only be exchanged for tires with the same or a higher load-bearing capacity according to manufacturer approvals.
- Retrofitting or converting the E-drive is not permitted on any model of the Trike Hybrid! No software manipulation (tuning) or similar is permitted.
- The characteristics of all parts of your Trike Hybrid may **not** be changed.
- Have all installation, conversion, service and other work on your Trike Hybrid be carried out only by your bicycle retailer.

**NOTICE**

Please note that the person who carries out modifications to the Trike Hybrid will be liable for them.

2.2 Avoiding typical dangers / Safety instructions

The use of your Trike Hybrid is naturally associated with certain risks. In the following sections, you will find corresponding safety instructions.

- Follow the safety instructions to reduce the general risks when using your Trike Hybrid.

2.2.1 Dangers due to faulty final assembly

**DANGER**

Danger in case of improper final assembly of the Trike Hybrid!

Improper final assembly of your Trike Hybrid can lead to dangerous cycling situations, falls, accidents and material damage.

- Have your specialist bicycle dealer confirm the correct final assembly and the adjustment of the correct seat position for you.

2.2.2 Dangers for certain groups of people (e.g. children)

**DANGER**

Danger when used unattended!

Children or persons with physical or mental health conditions may not be able to correctly assess or handle dangerous situations in connection with the Trike Hybrid.

- Observe the information in the original instructions for the electric drive.
- Hold the Trike Family Hybrid securely with both hands when children enter the box or when you sit children in the box.
Never allow children to enter the box unattended or sit unattended in the box.
Never lock the soft top when children are in the box, either while riding or when stationary.
- Children must not play with the battery and charger or handle them unattended.
- Secure your Trike Hybrid and place it so that children/unauthorised persons cannot access it.

2.2.3 Dangers when (first) cycling with your Trike Hybrid



DANGER

Danger due to unfamiliar handling of the Trike Hybrid!

Your Trike Hybrid behaves differently than a regular bicycle in many ways due to its design, electric drive and higher weight.

If you are not used to cycling the Trike Hybrid or underestimate its differences, this can lead to dangerous cycling situations, falls, accidents and material damage.

- Familiarise yourself with the operation and handling of the components of the electric drive using the original instructions for the electric drive.
- Practice cycling your Trike Hybrid in a suitable environment away from traffic.
- When getting to know your Trike Hybrid, try out different typical cycling situations such as:
 - Kicking off and braking
 - Navigating corners and turning
 - Cycling with the box fully loaded and empty, etc.
- Never ride your Trike Hybrid no handed!

Hold the handlebars securely with both hands while cycling. Only take one hand off the handlebars when necessary (e.g. hand signal when turning) and hold the handlebars securely with the other hand while doing so. Never take both hands off the handlebars at the same time!

An unfavourable combination of speed, payload and ground conditions can affect the steering behaviour of your Trike Hybrid. This can lead to dangerous cycling situations (accident, fall, etc.).



DANGER

Danger for inattentive and careless cyclists!

Riding your Trike Hybrid requires your attention – especially when cycling on the road.

Incautiousness, lack of consideration and failure to take precautions can lead to dangerous cycling situations, falls, accidents and material damage.

- Observe the applicable traffic regulations in your country.
- Keep yourself informed about and observe any applicable national regulations for transport and cargo bikes.
- Wear a helmet when cycling.
- Ride with foresight and defensiveness.
- Do not ride under the influence of alcohol or if you are otherwise intoxicated (e.g. after taking medication, anaesthesia, etc.).
- Ride in such a way that you have your Trike Hybrid under control at all times and can react correctly in a sudden dangerous situation.
- In wet conditions, the effect of the brakes may diminish. The braking distance increases.
- When cycling the Trike Hybrid, wear suitable clothing that does not restrict your freedom of movement or visibility.
- Only ride with close-fitting leg-wear. Wide items of clothing can get caught on the Trike Hybrid and lead to serious falls.
- Do not exceed the permissible total weight (⇒ *Chapter 3.3 "Permissible total weight" on page 15*).

2.2.4 Hazards during handling



DANGER

Danger due to incorrect handling!

Compared to a regular bike without electric drive, your Trike Hybrid is, among other things, heavier, bulkier and probably more complex to operate (electric drive).

You may therefore want or need to handle your Trike Hybrid completely differently to a conventional bicycle.

- Pay particular attention to the safety relevant specifications of the electronic components of the drive system (charger and battery). These can be found in the original instructions of the electric drive.
There is a **risk of electric shock** if electronic components are handled improperly!
- Your Trike Hybrid is heavy and bulky: if necessary, please ask for help if you need to lift your Trike Hybrid, e.g. for adjustment work or testing.
- Do not take your hands off the handlebars while cycling. An unfavourable combination of load distribution and road surface may cause steering wobble. If you hold the handlebars securely, you reduce the associated risks.
- Do not ride over high curbs or ledges with your Trike Hybrid and avoid tight corners.



CAUTION

Risk of burns on contact with heated components!

After longer descents the brake discs can be very hot. The components of the electric drive (battery, motor unit) can also heat up during operation.

Contact with heated components can cause burns!

- Do not touch the brake discs immediately after a descent. Let the brake discs cool down before touching them.
- To check the temperature, tap the respective component very briefly with your naked finger: If it feels hot, wait a few minutes and repeat the test until the component has cooled down.
- With regard to a possible risk of burns on contact with components of the electric drive, please refer to the information in the manufacturer's instructions for the electric drive.

2.2.5 Dangers due to improper care, maintenance and repair



DANGER

Danger if work is carried out improperly on the Trike Hybrid!

Correct and regular care and maintenance help to maintain the cycling comfort and safety of your Trike Hybrid.

If you carry out work on the Trike Hybrid without the necessary expertise, this can lead to malfunctions of important assemblies (e.g. brakes) etc.!

- Observe the instructions for regular cleaning and care as well as for regular maintenance work and intervals (see ➔ *Chapter 10 "Cleaning and maintaining the Trike Hybrid" on page 52* und ➔ *Chapter 15 "Inspections/service plan" on page 56*).
- Contact authorised bicycle dealers exclusively for any queries and repairs.
- Have your Trike Hybrid checked by your bicycle dealer after a fall/ accident or if your Trike Hybrid has been overloaded.
Please also refer to ➔ *Chapter 9 "After a fall or accident" on page 52*.

2.3 Residual risks

Naturally, you cannot take every danger into account and therefore cannot avoid every dangerous situation.

Even if all safety instructions are taken into account, unavoidable residual risks remain for you as cyclist of your Trike Hybrid, e. g.:

- Unexpected cycling manoeuvres or misconduct of other road users,
- Sudden changes in the road surface (e. g. due to black ice),
- Unforeseen material defects/unforeseen wear and tear can lead to material breakage or malfunctions.



NOTICE

Be **careful** when using/cycling on your Trike Hybrid.

This allows you to **detect dangerous situations** early on and **react** accordingly.

3 Scope of delivery, technical data

3.1 Scope of delivery

- Complete bicycle (in some cases without pedals)
- Total scope of the original operating manual (=this document "original operating manual" plus delivery document and all relevant component manuals from manufacturers whose parts are installed).

3.2 Identification/type plate

The following information can be found on your Trike Hybrid:

- Designation of the series/class and type,
- Serial number on the underside of the frame (consists of year/month of manufacture and manufacturer abbreviation),
- Permissible total vehicle weight for the Trike Hybrid (➔ *Chapter 3.3 "Permissible total weight" on page 15*),
- Maximum permissible payload for the box (➔ *Chapter 3.4 "Maximum additional load" on page 15*),
- Information/markings of the electric drive components.



NOTICE

If a front carrier has been retrofitted, the indication for its maximum payload is located on the rack itself (as an embossing).

3.3 Permissible total weight



NOTICE

The permissible total weight is a **fixed, unchangeable value** that must not be exceeded!

Please also note the information in **↪ Chapter 3.4 "Maximum additional load" on page 15.**

The following example calculation shows which **influencing factors** must be taken into account for the determination of the actual total weight.

Example calculation

	tare weight of the Trike Hybrid
+	body weight of the rider (with clothing)
+	weight of the payload in box
+	weight of additional luggage (e.g. backpack/luggage bags)
+	Weight of additional attachments
≤	Permissible total weight

The unladen weight of your Trike Hybrid model and the maximum permissible total weight are shown in the following table.



NOTICE

To find out **which model** your Trike Hybrid is, please refer to the **delivery certificate**.

Unladen weight	Permissible total weight
Trike Family Hybrid 75 kg	220 kg
Trike Cargo Hybrid 70 kg	220 kg



NOTICE

Please note that the **unladen weight** specified here is the weight in the **basic equipment**.

If you subsequently replace **components** or add **attachments** to your Trike Hybrid, the **unladen weight** of your Trike Hybrid will **change**.

3.4 Maximum additional load

When formulating the "maximum additional load," we must differentiate between:

- the maximum permitted **additional load** for the **box** **↪ Chapter 3.4.1 "Maximum additional load for the box" on page 15**
- vs.**
- the maximum permitted **additional load** for your **Trike Hybrid** (total) in consideration of the permitted total weight for your Trike Hybrid **↪ Chapter 3.4.2 "Maximum additional load depending on the permitted total weight (example calculations)" on page 16.**

The maximum permitted additional load for your Trike Hybrid (total) includes all loads transported with the Trike Hybrid, including the luggage you transport on a retrofit luggage rack or in a backpack.

3.4.1 Maximum additional load for the box



DANGER

Danger due to modifications to the box

If you make unauthorized modifications to the box or attempt to remove the box, this can cause unforeseen hazardous situations.

- Never remove or modify the box and/or top frame.

The maximum additional load for the box of your Trike Hybrid is:

- 44 kg for transporting children in the Trike Family Hybrid.
- 48 kg for transporting loads in the Trike Family Hybrid.

- 50 kg for transporting loads in the Trike Cargo Hybrid.
- 50 kg for transporting dogs in the Trike Cargo Hybrid.

To determine the **actual** maximum permitted **additional load** for the box, you must include not only the load capacity of the box but also the permitted **total weight** for your **Trike Hybrid**.

- When determining the **actual** maximum permitted **additional load** in the box, note the examples in ➔ *Chapter 3.4.2 "Maximum additional load depending on the permitted total weight (example calculations)" on page 16.*

3.4.2 Maximum additional load depending on the permitted total weight (example calculations)

Depending on the design of your Trike, you will find information for some components of your Trike Hybrid on the maximum weight load for the individual components.

If all of these theoretically permitted individual load capacities were met, you would generally exceed the permitted total weight for your Trike Hybrid:

Calculation with theoretically permitted individual load capacities

Empty weight of the Trike Family Hybrid 750:
+ 75 kg

Max. rider weight:
+ 115 kg

Max. additional load in box (family variant incl. child seat):
+ 44 kg

Max. additional load of permitted luggage rack models:
+ 20 kg

Total weight of the Trike Family Hybrid 750:
= 254 kg (permitted total weight exceeded by 34 kg)

Result/conclusion:

The actual total weight (254 kg) would exceed the permitted total weight (220 kg) in this case.

You may not use your Trike Hybrid in this case!

The following example calculations no. 1-3 show how you can determine the maximum additional load depending on the permitted overall load for your Trike Hybrid.

Example calculation no. 1

Empty weight of the Trike Family Hybrid 750:
+ 75 kg

Actual rider weight:
+ 101 kg

Actual box additional load:
+ 44 kg

Actual total weight of the Trike Family Hybrid 750:
= 220 kg (permitted total weight reached)

Result/conclusion for example calculation no. 1:

The actual total weight (220 kg) would be the permitted total weight in this case. **You may use the Trike Hybrid in this case, but may not transport any additional load** (for instance on a luggage rack)!

Example calculation no. 2

Empty weight of the Trike Family Hybrid 750
+ 75 kg

Actual rider weight:
+ 99 kg

Actual box additional load:
+ 25 kg

Empty weight of luggage rack:
+ approx. 1 kg

Actual luggage rack additional load:
+ 20 kg

Actual total weight of the Trike Family Hybrid 750:
= 220 kg (permitted total weight reached)

Result/conclusion for example calculation no. 2:

The actual total weight (220 kg) would be the permitted total weight in this case. Since the box is not loaded with the full weight of the maximum permitted additional load for the box, the additional load can be transported on the luggage rack.

You may use your Trike Hybrid in this case!

Important note: The empty weight of the luggage rack (as a retrofit attachment) must be included in the calculation.

Example calculation no. 3

Empty weight of the Trike Cargo Hybrid 750:

+ 70 kg

Actual rider weight:

+ 80 kg

Actual box additional load:

+ 49 kg

Empty weight of luggage rack:

+ approx. 1 kg

Actual luggage rack additional load:

+ 20 kg

Actual total weight of the Trike Cargo Hybrid 750:

= 220 kg (permitted total weight reached)

Result/conclusion for example calculation no. 3:

The actual total weight (220 kg) would be the permitted total weight in this case. If the (lower) rider weight permits, the box and luggage rack can each be loaded with the full weight for their maximum additional load.

You may use your Trike Hybrid in this case!

Important note: The empty weight of the luggage rack (as a retrofit attachment) must be included in the calculation.

3.5 Screw connections and torques



DANGER

Danger if work is carried out improperly!

If you tamper with bolts or connections not mentioned here, you may unknowingly damage your Trike Hybrid or even impair its construction/stability.

This can lead to unforeseeable dangerous situations.

- Please refer to the following overview, which screws or bolts you can tighten yourself tighten them yourself if they have these have loosened.
- If, e.g. when checking your Trike Hybrid, you discover that bolts have loosened that are **not** listed in the following overview, consult your bicycle dealer immediately.
Do not use your Trike Hybrid until the screw connections have been tightened by your bicycle dealer.



NOTICE

Screw connections, that are not in the following overview may only be tightened/fixed by a specialist bicycle dealer.

You may retighten the following screw connections yourself – **under consideration of the corresponding torques** – if the screw connection has loosened:

Part	Manufacturer	Model/type	Connection	Type of connection	Tightening torque (Nm)
Seat post	Satori	Sorata	Seat clamp	1 screw	9-10
			Height adjustment of the seat post	Quick release	
	Aluminium frame	Seat post clamp on the frame	1 screw	8-10	
Cable guide screw				1 screw each	1.5

4 Structure and functions

4.1 General Information/ Model Overview



NOTICE

The Trike Hybrid is currently available in **two model versions**: the Trike Family Hybrid and Trike Cargo Hybrid. The model versions are available with **two different battery capacities**.

Model name	Equipment features (excerpt)
Trike Family Hybrid 750	Kids' bench and cover, 1x battery (750 Wh).
Trike Family Hybrid 1500	Kids' bench and cover, 2x batteries (1500 Wh).
Trike Cargo Hybrid 750	Cargo cover, 1x battery (750 Wh).
Trike Cargo Hybrid 1500	Cargo cover, 2x batteries (1500 Wh).



NOTICE

Please see the **delivery document** for the model of your **Trike Hybrid**.

4.2 Electric drive



NOTICE

Detailed information on the e-drive and its components can be found in the **original instructions for the electric drive**.

Your Trike Hybrid is equipped with an electric drive and belongs to the class of electrically assisted bicycles (EPAC).

The electric drive consists of different components. The core of the drive is the electric motor, which is supplied with energy for operation by at least one battery.

The electric drive supports you when pedalling up to a maximum speed of 25 km/h. If you reach a speed of more than 25 km/h, the electric motor stops supporting you and you drive the Trike Hybrid exclusively with muscle power.

As soon as your speed drops below 25 km/h, the electric motor starts up again and supports you when pedalling.

The electric motor is controlled by at least one control element (e.g. on the handlebars). This allows you to set, among other things, how strongly the electric motor supports you when pedalling (assist level).



NOTICE

Observe the original instructions for the electric drive.

4.3 Brakes



NOTICE

The disc brakes must be run in. They will achieve their full braking power only after running in is complete (see → Chapter 5.2 "Get to know your Trike Hybrid" on page 22).

Your Trike Hybrid has two independent disc brakes: one disc brake brakes the front wheel, and the other disc brake brakes the two rear wheels.

The disc brake on the rear wheels also has a parking lever, so you can always safely park the Trike Hybrid.



Fig. 1: Brake disc on front wheel



Fig. 2: Brake disc on rear wheel

Both disc brakes are operated with the associated braking levers (hydraulic).

The left brake lever operates the front wheel brake, and the right brake lever operates the rear wheel brake.



Fig. 3: Brake lever on handlebar

4.4 Shifting

Hub gear system (Enviolo)

Your Trike Hybrid is equipped with a hub gear system.

The hub gear system allows you to continuously adjust the gear ratio to the cycling conditions and thus enjoy optimum cycling comfort.

High ratio (=high gear):

High effort when pedalling, low cadence.

Low ratio (=low gear):

Low effort when pedalling, high cadence.

For the number of gears of your hub gear system, please refer to the indication on the hub body or on the shift lever.

4.5 Handlebars, handlebar stem



DANGER

Dangers if the components are not replaced properly!

Due to its design, the steering assembly of your Trike Hybrid is usually more complex than that of a regular two-wheeled bike (without box).

The handlebars and handlebar stem of your Trike Hybrid must meet special requirements and must not be replaced without further precautions.

If, for example, you intend to combine a longer handlebar stem with wider handlebars, this circumstance could lead to a blockage or complete loss of function of the steering and/ or brakes!

- Always keep in mind, however: The handlebars and/or handlebar stem may only be replaced with suitable **ISO-certified** components by a **specialist bicycle dealer**.



Fig. 4: Handlebars with handlebar stem

4.6 Suspension fork

Your Trike Hybrid has front suspension damping in the form of a suspension fork.



Fig. 5: Suspension fork

- Please also refer to ➔ Chapter 7.4 "Adjusting the suspension fork" on page 33.

4.7 Box

Your Trike Hybrid includes a box for transporting children or objects/luggage (Trike Family Hybrid) or a box for transporting larger cargo and dogs (Trike Cargo Hybrid).

The components in your Trike Hybrid are designed to fit together perfectly. This is the case in particular for the model-specific box and frame (or frame structure) of your Trike Hybrid. Because of this, no modifications may be made to the box itself or the frame structure. Modifications to the box or frame structure could impact the overall structure, and therefore the safety of your Trike Hybrid.

The box has a metal frame structure and cladding made of robust EPP, a material used in motorcycle helmets and other applications.

The box is intended to always be used with the cover mounted. The cover protects the load or passengers (children/dog) in the box from the weather (such as wind, rain) and from objects (flying stones, insects). In addition, the lockable cover provides protection against unauthorized access to the load.



Fig. 6: Closed cover, key inserted in lock

- To lock or open the cover, turn the key either counter-clockwise or clockwise.
- Never lock the cover when children/dogs are in the box, neither while riding nor while stopped.

To transport children in the Trike Family Hybrid, install the child seat included in the scope of delivery or available as an option into the box of the Trike Family Hybrid. The child seat and attachment system used to install the child seat in the box are specially designed for the Trike Family Hybrid and its box. Transporting children in the Trike Cargo Hybrid is always prohibited due to the intended use of the vehicle (no matter whether with or without a child seat).

- Only use the original child seat designed and approved by the manufacturer of the Trike Hybrid with the Trike Hybrid. Do not use any other child seat with the Trike Family Hybrid.

Do not try to install a child seat in the Trike Cargo Hybrid. The Trike Cargo Hybrid is not approved/suitable for transporting children.

The child seat is equipped with a belt system to buckle up the child(ren) and can be used as a single or double seat.

Parts of the belt that are not in use can be stored in an opening under the bench in some models.



Fig. 7: Seat buckles in opening.

5 Before using for the first time

5.1 Getting your Trike Hybrid ready to ride



DANGER

Dangers due to improper handling/testing!

A Trike Hybrid that is not ready for cycling can lead to dangerous cycling situations, falls, accidents and material damage.

The same danger exists if you are not yet familiar with your new Trike Hybrid and its operation.

- Handle your Trike Hybrid carefully from the beginning and follow the instructions regarding the (regular) inspection of your Trike Hybrid.

1. → Have your bicycle dealer confirm the correct final assembly and check the readiness of your Trike Hybrid for cycling.



NOTICE

You may make certain **fine adjustments** and **small changes** yourself. Please note the information in ➔ *Chapter 7 "Adjusting and using the Trike Hybrid" on page 31.*

2. → Have your bicycle dealer adjust the correct saddle position for you.
3. → Do not use your Trike Hybrid until your bicycle dealer has familiarised you with the technology and operation of your Trike Hybrid through instruction.
4. → Perform a test on your Trike Hybrid as described in the sections of ➔ *Chapter 6 "Before every trip" on page 23.*



NOTICE

If you familiarise yourself with the **correct condition** of your Trike Hybrid **on delivery (new condition)**, you will be able to recognise **deviations** from the correct condition **more easily later**.

Self-made **photos** can be a valuable help.

5.2 Get to know your Trike Hybrid



NOTICE

The **general** risk of accidents and injuries **is significantly increased** for untrained riders.

- Familiarize yourself with the functions and riding characteristics of your Trike Hybrid step by step so that you can use your Trike Hybrid safely.
- In particular, familiarize yourself with the function and operation of the following components.

Brakes

- Memorize the arrangement of the brake levers. Which brake lever activates the front wheel brake, and which activates the rear wheel brake? To do so, activate the corresponding brake lever multiple times while standing still: you can observe the brake pads opening and closing on the brake disc in question.
- Slowly familiarize yourself with the braking power of your Trike Hybrid in a safe area. The brakes are very powerful. Pressing the brake levers too hard can cause the corresponding wheel to be blocked and result in a crash.
- Also, note that the load distribution in the box will impact the braking behavior of your Trike Hybrid.
- Run in your disc brakes. When running in your disc brakes, observe the information in the brake manufacturer's component manual.



NOTICE

Disc brakes must be run in. They **will achieve their full braking power** only **after** being **run in**.

E-drive

- Memorize how to use the operating element.

Which settings can you change while riding, and how?

- Slowly familiarize yourself with the different support levels of your Trike Hybrid in a safe area. Observe the information in the E-drive manufacturer's original operating manual regarding setting options, power levels, etc.

Steering

- Observe the design-specific features of the steering on your Trike Hybrid.
If you complete strong steering and braking maneuvers at the same time, or ride too quickly on a loose surface (such as gravel) with too little weight (box without load), the wheels can lose their grip on the surface and swerve.

Box

- Observe how the load in the box influences the riding behavior of your Trike Hybrid.
How does your Trike Hybrid ride when you have a fully loaded box?
How does it ride with the box loaded partially, or with no load?
- Practice riding with the load you will most likely be transporting on an everyday basis with your Trike Hybrid.
How the load in the box influences your Trike Hybrid's riding characteristics will depend on what the load is. Does the load move (such as children/dog)? How is the load distributed (one heavy object, or distributed evenly)? etc.
- If you primarily want to transport your child(ren) with the Trike Family Hybrid: practice with your children riding in the box.
If children are not used to riding in the box, are fearful, or do not stay seated calmly in the box, this can cause dangerous riding situations, crashes, and accidents.
- If you want to transport a dog or multiple dogs with the Trike Cargo Hybrid: practice with your dog what they should do when riding and when getting in and out if necessary. If dogs are not used to riding in the box, are fearful, or do not stay seated calmly in the box, this can cause dangerous riding situations, crashes, and accidents.
- Familiarize yourself with how to use the cover (opening/closing) and, if applicable, the child seat (safety belt system etc.) so you can act quickly if necessary.

6 Before every trip

6.1 Checking the Trike Hybrid as a whole



DANGER

Dangers if the check is omitted!

A Trike Hybrid that is not ready for cycling can lead to dangerous cycling situations, falls, accidents and material damage.

There is a possibility that your Trike Hybrid may have fallen over during the unattended time or that strangers may have tampered with it.

- Before each journey, check that your Trike Hybrid is safe to ride.
- Contact your bicycle dealer immediately if you notice that the actual condition of the Trike Hybrid deviates from the target condition.
- Only use your Trike Hybrid again when it has been properly repaired by your bicycle dealer.

- Perform a **visual inspection** of the entire Trike Hybrid.

In the process, check the following:

- all fixing screws for a **correct screw connection**.
- the entire Trike Hybrid for dents, chipping, deep scratches and other mechanical **damage**.
- whether **loose parts** have become caught somewhere on the Trike Hybrid, e. g. twigs, pieces of fabric.
- whether the reflective strips on the tyres are clean and clearly visible. If the tyres do not have reflective strips, clearly visible, clean reflectors must be fitted.

- If necessary, **remove** loose parts (e. g. twigs) and **check** whether, for example, your wheels have been damaged by the loose parts.

- Fix** screw connections that have loosened, if these are **screw connections that you are allowed to tighten yourself** (see *Chapter 3.5 "Screw connections and torques" on page 18*).

4. → If necessary, clean the reflective strips on the tyres or clean and attach spoke reflectors.

If the reflective strips are no longer visible or it is not possible for you to securely reattach the spoke reflectors, consult your bicycle dealer immediately.



NOTICE

Always make sure that the **reflective strips** on the tyre or alternatively spoke reflectors in accordance with **StVZO** on your Trike Hybrid are **present**, securely **fastened** and **not covered or dirty**.

5. → Contact your **specialist bicycle dealer** if the visual inspection reveals defects of any kind which you cannot remedy as described here.

6.2 Checking the wheels



NOTICE

Front and rear wheels are also called wheels.

Your Trike Hybrid has three wheels: one front and two rear wheels.

Each wheel consists of the following:

- **Hub,**
- **Brake Disc,**
- **Spokes,**
- **Rim,**
- **Rim tape**
- **and tyres.**

6.2.1 Checking the installation

1. → Vigorously shake both wheels at right angles to the direction of travel:
- The wheels must not move in the clamp mechanism.
- No cracking or crunching noises must be audible.
2. → Contact your bicycle dealer if the inspection reveals defects.

6.2.2 Checking the rims

- Check the rims for wobbling:
- To do so, lift up your Trike Hybrid and turn the front and rear wheels in turn. Pay attention to the distance between the frame stay or fork leg.
- The maximum permissible deviation per revolution is 2 mm.

6.2.3 Checking the spokes

1. → **Check** the spokes on the front and rear wheels regularly.
- All spokes must be tight and undamaged.
- Even individual spokes that have become loose or damaged can cause consequential damage.



NOTICE

Do not use your Trike Hybrid if spokes have become **loose** or **damaged** or if **spokes are missing!**

2. → Consult your bicycle dealer if spokes have become loose or damaged.

6.2.4 Checking the tyres



DANGER

Risk of a burst tyre or sudden loss of pressure!

If the valves are tilted, the valve base can break off while cycling, which causes a sudden loss of pressure in the tyre.

Incorrect tyre pressure reduces cycling comfort and in the worst case the tyre can burst at full speed.

- Check the tyres of your Trike Hybrid regularly as described here.
- Only carry out the work on the tyres mentioned here yourself if you have the necessary expertise.
- If you do not have the necessary expertise for certain work or are unsure, contact your bicycle dealer.

1. → Check the valve position.

The valves must point towards the centre of the wheel. Angled valves can shear off while cycling, causing a sudden loss of pressure in the tyre (= the air escapes abruptly, high risk of accident/fall).

Correct incorrectly aligned valves if you have the necessary expertise or consult your specialist bicycle dealer.

2. → Check the air pressure.**NOTICE**

The **optimum air pressure** depends on the **type of tyre** with which your Trike Hybrid is equipped.

As a rule, you will find an indication of the **maximum permissible air pressure** directly on the **rims** (sticker) and **tyres** (printed on).

If you are unsure, ask your specialist bicycle dealer.

**NOTICE**

Some air pressure values are given in "psi."

You can use the following table to convert the values.

psi	30	40	50	60	70	80
bar	2.1	2.8	3.5	4.1	4.8	5.5

**NOTICE**

The higher the body weight, the higher the tyre pressure must be.

- Check the air pressure with a tyre pressure gauge. Simple devices often accompany bicycle inner tubes, high-quality devices are available in specialist shops.
- Observe the relevant operating instructions for handling the tyre pressure gauge or have your specialist bicycle dealer show you how to use it.

3. → If necessary: **Correct the air pressure, taking into account the maximum permissible air pressure for rims and tyres.**

- Excessively **low air pressure**: Increase the air pressure with a suitable pump.
- Excessively **high air pressure**: Release an appropriate amount of air through the valve and then check the air pressure again.
- Using a **bicycle pump with pressure gauge**, you can check the air pressure while inflating: First let some air out of the tyre and then increase the air pressure to the desired level.

**NOTICE**

There are **different types of valves**.

All valves can be covered with a dust protection cap. After removing the cap, both **Schrader** and **Dunlop valves** can be pumped up by placing the pump head directly on the valve.

With the **Scloverand valve**, you must first unscrew the small locknut from the valve as far as it will go, and after pumping, screw it all the way back towards the valve.

If necessary, your specialist bicycle dealer will show you how to operate the valves on your tyres.

4. → Check the tyre tread.

The tyre rubber must be present over its entire surface with the original profile.

Consult your bicycle dealer if you find that the tread pattern is worn or if you do not know how to check the tyre tread correctly.



NOTICE

Always pay attention to an optimal tyre profile.

With a **worn profile**, the general **risk of accidents and injuries** increases massively.



Fig. 8: Optimum tyre tread (left); Worn tyre tread (right)

5. → Check your tyres for **external damage** and **wear**.

- The tyre fabric under the rubber layer must not be visible.
- There must be no bulges or cracks.

6. → Check the **mounting** of your tyres.

- Lift the front and rear wheels and turn them by hand. The tyre must run true. There must be no vertical or lateral runout.

6.3 Checking the saddle and seat post



DANGER

Danger if the minimum insertion depth is not observed!

If the insertion depth is too shallow, the seat post may come loose.

A loose seat post can lead to dangerous cycling situations, falls, accidents and material damage.

- Make sure that the seat post is inserted to the correct depth (see → Chapter 7.1.2 “Note the minimum insertion depth of the seat post” on page 31).

Check the **seat and seat post** for tightness.

- Try to twist the seat and seat post into the frame with your hands. The seat and seat post must not be able to be twisted.
- Try to move the saddle in its clamp by using opposite up and down movements with manual force.
- If the saddle and/or seat post can be moved, tighten them (see → Chapter 7.2 “Adjusting the seat position” on page 32 and → Chapter 7.3 “Adjusting the seat height” on page 32).

6.4 Checking the handlebars and handlebar stem



DANGER

Risk if damaged or tampered with.

The handlebars and handlebar stem are very important components for your cycling safety.

Damage and alterations as well as errors in assembly can result in very serious falls.

- If you discover defects on the handlebars or the handlebar stem or if you have doubts about them, you must not continue to use your Trike Hybrid under any circumstances.
 - Under no circumstances should you attempt to remedy defects in the handlebars or handlebar stem yourself or attempt to replace the components yourself.
- Contact your specialist bicycle dealer if you discover any defects in the handlebars or handlebar stem.

1. → If necessary, **align the handlebar stem and handlebars correctly**:

The handlebar stem must be aligned parallel to the front wheel rim for the check, while the handlebars must be at right angles to the front wheel rim.



Fig. 9: Stem and handlebars correctly aligned

2. → **Check the assembly of the handlebars and handlebar stem** as described below.



NOTICE

It **must not be possible to twist or move** any of the parts.

There must be **no cracking or crunching noises**.

- Lean the front wheel against a wall or let a second person hold the front wheel.

Try to twist the handlebars in the handlebar stem by hand.

3. → **Contact your specialist bicycle dealer** if you discover any **defects** in the handlebars or handlebar stem.

6.5 Checking the handlebar attachments

1. → Check shifters, brake levers and grips for their attachment.
- Hold the handlebars with one hand.
 - Try to turn the brake levers, shifters and grips with the other hand.
2. → Retighten the fixing screw(s) if attachments on the handlebars have become loose.

6.6 Checking the headset



NOTICE

The headset contains the bearings for the steerer tube to rotate in the head tube.



Fig. 10: Headset on handlebars

1. → Check the headset as described below.



NOTICE

It must be possible to steer the front wheel **freely** and **without play in both directions**.

- Stand next to your Trike Hybrid and hold it with both hands on the handlebar grips.
- Pull the front brake, keep it pulled.
- Push your Trike Hybrid back and forth with short, jerky movements.

There must be no play in the headset: There should be no audible or palpable knocking or any grating sounds.

2. → If you notice that the headset has play, contact your specialist bicycle dealer, to have the steerer clamp adjusted correctly.

6.7 Checking the suspension fork

Check your suspension fork as described below.

- Pull the front brake and keep it applied.
- Press with your body weight on the handlebars so that the suspension fork compresses.

The fork must spring in and out smoothly.

There must be no cracking or crunching noises.

- Clamp the front wheel between your legs and try to pull up the Trike Hybrid by the fork crown. Take care not to move or damage the headlamp and fender.

The stanchions must not come loose from the lower legs or from the fork crown.

For testing, also observe the instructions in the separate component instructions for your suspension fork.

6.8 Checking the brakes



DANGER

Danger of brake failure!

A malfunction of the brakes is life threatening.

- Check your brake system particularly carefully.
- Clean dirty brake discs immediately: Dirty brake discs can reduce the braking effect.

1. → **Check the function** of your hydraulic disc brake as described below.

- Press both brake levers as far as they will go while standing still.
- Make sure that the brake levers cannot be pulled completely onto the handlebar grip: There must always be a gap between the brake lever and the handlebar grip, even when the brake lever is pulled to the maximum limit stop.
- Try to push the Trike Hybrid with the brakes applied. All wheels must remain locked.



Fig. 11: Brake lever fully applied

2. → **Pull the brake caliper** alternately in all directions with manual force.

The brake caliper must not move.

3. → Check the tightness of your brake system:

- Operate the respective brake lever while standing still and hold it.
- Check the brake system from the brake lever through the lines to the brakes.

Hydraulic fluid must not leak out at any point.

4. → Check the brake disc for damage:
There must be no notches, chips, deep scratches or other mechanical damage and the brake disc must be of the optimum thickness.
5. → Lift the front and rear wheels and turn them by hand:
The brake disc must not have any lateral runout.
6. → Have the wear on the brake pads and the brake disc checked by your specialist bicycle dealer (see → Chapter 16 "Handover checklist" on page 57):
The brake disc must not fall below the minimum thickness. The minimum thickness can be found in the enclosed component instructions of the brake manufacturer.
7. → Check your brake discs for dirt, especially oil and grease.

**NOTICE**

Dirty brake discs must be **cleaned immediately**.

**NOTICE**

During multi-day trips, the brake disc and brake pads can wear heavily.

Accordingly, **replacement brake pads** can be helpful on such trips.

- Only carry out the replacement yourself if you are familiar with this work. For more information, consult your specialist bicycle dealer.
- If you are not able to carry out the replacement yourself, have it carried out by your bicycle specialist.

6.9 Checking the manual drive (chain)

1. → Check the chain ring for concentricity without lateral movements while standing.

The chain rings and sprockets must not have any lateral runout and there must be no foreign bodies between the individual chain rings/sprockets. Remove foreign bodies if this is easily possible.

2. → Check the chain for damage.
The chain must not be damaged at any point by e.g. bent chain link plates, protruding rivet pins, etc. or have fixed, immovable chain links.
3. → Check that the chain runs smoothly over the jockey wheels and does not jump.
4. → Have the chain wear checked by a specialist bicycle dealer using a suitable measuring tool.

6.10 Checking the electric drive components

**NOTICE**

Observe the **separate original instructions** for the electric drive: In it, you will find all detailed information of the component manufacturer.

- Perform a visual inspection of the electric drive components.
Check whether any components show visible damage.
- Refer to the original instructions for the electric drive to find out about the necessary test steps for the components of the electric drive.

6.11 Checking the lighting

**DANGER**

Danger if the lighting fails!

The failure of front headlights and rear lights can lead to dangerous cycling situations in darkness and/or poor visibility.

- Only use your Trike Hybrid in such visibility conditions if your lighting system is fully functional.

Check the function of your lighting as described below:

Switch on the light at the control element when the bike is parked.

The front headlight and the rear light must be on.



Fig. 12: Headlight (front)



Fig. 13: Rear light (rear)

6.12 Checking the box

Perform a **visual inspection** of the box.

Check whether the side walls of the box or the floor show **visible damage** (inside and outside).

6.13 Checking the front carrier



NOTICE

If your Trike Hybrid is equipped with a front carrier (optional), you must also check it regularly.

Observe the **separate component instructions** for the **front carrier**: In them, you will find all detailed information of the component manufacturer.



DANGER

Danger from loose parts!

Loose front carrier parts can block the wheel and lead to serious falls.

- Contact your specialist bicycle dealer and have the front carrier correctly fastened.
- Do not use your Trike Hybrid again until the front carrier has been secured.

- Shake the rear carrier by hand at right angles to the direction of travel.
 - The front carrier fastenings must not become loose.
 - The front carrier must not touch the tyre.

6.14 Checking the mudguards (wheel guards)



DANGER

Danger from loose parts!!

Loose mudguards can block the wheel and lead to serious falls.

- Contact your specialist bicycle dealer and have all mudguards correctly fastened.
Do not use your Trike Hybrid again until the mudguards have been secured.

- Check the mounting of your mudguards.



NOTICE

The mudguard and its fastening stays must not be bent or damaged.

- While standing, move the front wheel vigorously back and forth using steering movements.
- Carefully shake the front mudguard with your hand.
 - The fastening stays must not become loose.
 - No part of the mudguards may touch the wheels.

7 Adjusting and using the Trike Hybrid

7.1 Essential factors to take into consideration

7.1.1 Adjustments require expert knowledge



DANGER

Danger due to incorrect adjustment or operation of your Trike Hybrid!

Many adjustments to the Trike Hybrid require expert knowledge. If you carry out adjustment work on the Trike Hybrid without the necessary expertise, this can lead to dangerous falls, accidents and material damage.

- Only carry out the adjustment work on the Trike Hybrid described in these original instructions yourself if you have the appropriate basic technical knowledge and experience, as well as the appropriate tools.
- Only carry out adjustment work on the Trike Hybrid itself for which you will find descriptions in this original operating manual or other applicable documents.
- In case of doubt and/or if you have any questions, please contact your specialist bicycle dealer.

7.1.2 Note the minimum insertion depth of the seat post



DANGER

Danger if the minimum insertion depth is not observed!

If the insertion depth is too shallow, the inserted component may become unstable, break or come loose.

A loose seat post can lead to dangerous cycling situations, falls, accidents and material damage.

- Always ensure the correct insertion depth when adjusting the seat post.
- Never go below the minimum insertion depth of the seat post.
- If necessary, observe the information on the minimum insertion depth in the component instructions for the seat post.

Minimum seat post insertion depth

There is a mark on the seat post which indicates the minimum insertion depth of the seat post in the seat tube.

When the clamp is fixed, the marking on the seat post must not be visible, but must be in the seat tube.



Fig. 14: Marking for the minimum seat post insertion depth

7.2 Adjusting the seat position



NOTICE

To adjust the seat position, you need a hex bit socket and a torque wrench of the appropriate size.

To adjust the horizontal position or inclination of your seat:

1. → Loosen the clamping bolt by a few turns until the seat can be moved easily and/or the inclination can be adjusted.
2. → Move the seat to the desired position.



NOTICE

When changing the **horizontal position**, pay attention to the **adjustment range** on the **saddle rails**.

3. → Fix the adjustment by tightening the clamping screws as follows:

Tighten the clamping screws alternately by a quarter to half turn until the prescribed torque is reached (see chapter → Chapter 3.5 "Screw connections and torques" on page 18).

4. → If the marking on the seat post cannot be found in chapter → Chapter 3.5 "Screw connections and torques" on page 18 under "Tightening Torques," consult your specialist bicycle dealer.

7.3 Adjusting the seat height



NOTICE

The **telescopic seat post** is fixed with a **clamp** in the seat tube of the frame.

The clamp is fixed with an **integrated lever**.

When attaching an (additional) clamp (e.g. for anti-theft protection), observe the information in the manufacturer's instructions for the clamp.

1. → Loosen the clamp by turning the integrated lever counterclockwise.
2. → Bring the saddle with the seat post into the desired position for your saddle height.



NOTICE

Please note the minimum insertion depth of the seat post (see chapter → Chapter 7.1.2 "Note the minimum insertion depth of the seat post" on page 31).



Fig. 15: Adjusting the seat height

3. → The saddle nose points in the direction of travel.
4. → Fix the clamp by turning the integrated lever clockwise.

Make sure that the post is completely fixed, cannot be twisted and that the integrated lever of the saddle clamp is aligned in the direction of travel.



Fig. 16: Fixed seat clamp

5. → For further fine adjustment, the telescopic part of the seat post can still be adjusted to your needs.

To do this, open the quick-release lever of the seat post and adjust the height accordingly, then close the lever again completely so that the seat post is fixed.



7.4 Adjusting the suspension fork



NOTICE

Observe the **separate component instructions** for the **suspension fork**. In them, you will find all detailed information of the component manufacturer.

7.4.1 What is the total weight range?

Suspension forks with elastomers and/or steel springs are each suitable for a certain **total weight range** (= cyclist weight + luggage). This weight range usually covers a span of 20 kg.



NOTICE

The **weight range** for which the suspension elements in your suspension fork are suitable can be found in the separate **component instructions** of the suspension fork manufacturer and/ or consult your specialist bicycle dealer.

Contact your specialist bicycle dealer if your total weight is outside the specified range.

Your specialist bicycle dealer can replace the suspension fork elements if necessary and thus adapt them to your needs.

7.4.2 Adjusting the preload

You can adjust the preload of the suspension fork. To do this, increase the preload on the fork using the adjuster.



Fig. 17: Suspension fork preload adjuster

By changing the preload, the breakaway torque of the fork changes, i.e. with a higher preload the fork only compresses at higher operating forces.

If the fork is preloaded too much, the suspension travel will be reduced accordingly.

- To **adjust** the preload and for **basic set-up** of the suspension fork, follow the instructions in the enclosed **component instructions** of the suspension fork manufacturer.

7.5 Operating the electric drive



NOTICE

Observe the **separate original instructions** for the **electric drive**: In them, you will find all detailed information of the component manufacturer.

- For **adjusting** and **operating** the electric drive and for the **basic set-up** of the electric drive and its components, follow the instructions in the included **original instructions** of the drive manufacturer.

7.6 Setting up and operating the shifting



NOTICE

Please note the **separate component manual** for the **hub gears**: In them you will find all the detailed information from the component manufacturer.

- To **adjust** the hub gears and for **basic handling** of the hub gears follow the information in the enclosed **component instructions** of the gear manufacturer.

7.7 Operating the brakes



DANGER

Danger when cycling without braking!

Incorrect operation of the brakes can lead to dangerous cycling situations, falls, accidents and material damage.

- Be careful not to brake and steer hard at the same time.
If you steer and brake hard at the same time or ride too fast with little weight (unloaded box) on loose ground (e.g. gravel), the front wheel can lose traction when you turn.
- Always secure the Trike Hybrid by tightening the parking lock lever:
 - if you park the trike hybrid (especially when parking on a slope),
 - when loading/unloading the box
 - when getting children/dogs in/out of the vehicle

The operation of the parking lever is explained in the chapter → *Chapter 7.8 "Operating the kickstand / parking brake" on page 34.*

- To apply the brake, pull the brake lever towards the handlebars.



NOTICE

You will achieve the best **braking effect** if you operate **both** brake levers in the correct dosage **at the same time**.

7.8 Operating the kickstand / parking brake

Park your Trike Hybrid / activate parking function



NOTICE

Danger in case of improper parking!

Ideally, park your Trike Hybrid on flat terrain.

If you park the bike on a slope, always park it in the direction of travel uphill (= front wheel points uphill).

1. → Stand next to your Trike Hybrid and hold it with both hands on the handlebars.
2. → Fold out the kickstand with your foot and tilt the front frame onto the stand.



3. → Activate the rear brake parking function by pushing the larger of the two levers away from the handlebars. The smaller lever automatically folds out as well.



4. → Turn the lever until you hear a click and it locks into place. The smaller lever springs away from the larger lever and locks in place.



5. → Pull the brake lever towards the handlebar until you hear several clicks.



- The parking function is now activated and the Trike Hybrid is safely parked.



Setting off/releasing the parking lever

1. → To release the parking function, push the smaller lever towards the larger lever.



2. → To fold in, pull both levers fully back towards the handlebars.
Be careful when doing this, as the wheels can now move freely again.



3. → Tilt the front frame and unload the stand, then fold it in with the foot.
➔ Your Trike Hybrid is now ready to ride.

7.9 Using the Box (Trike Hybrid Family)



WARNING

There is a risk of injury when used without a cover or with an open cover.

When the cover is removed or open, children can reach into moving parts of the Trike Family Hybrid (such as the rear wheel) while it is in motion, or can be hit and injured by objects such as flying stones or similar.

- Only use the box with the cover.
- Always ensure that the cover is closed and locked correctly before starting off.

The cover has ventilation openings and adjustable ventilation slots on the front and rear sides for ventilation.

- To open or close the adjustable ventilation slots, manually adjust the slats in the desired direction.



Fig. 18: Box ventilation openings

The plastic windows on both sides can also be opened for additional ventilation. The mesh underneath allows in more fresh air, while still preventing flying stones or similar from entering the box.

7.9.1 Opening the cover



WARNING

Risk of injury

If the foot board is not folded out correctly and engaged, the Trike Hybrid can tip over when a child gets in or out, or when the box is loaded.

- Always fold the foot board down completely and ensure it engages on the seat stay.

1. Press the two buttons on the cover.

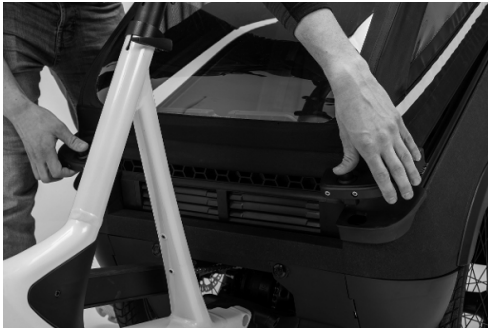


Fig. 19: Pressed buttons - cover open slightly

2. Lift the cover slightly.

- ➔ The lifting element lifts the cover further, until the cover is completely open.



Fig. 20: Cover opened, foot board folded in

3. Pull the foot board upward out of its locked position.



Fig. 21: Pulling the foot board upward

4. Lower the foot board down to the front.



Fig. 22: Unfolding the foot board

- ➔ Once you have the foot board unfolded completely, it will engage on the seat stay and stabilize the standing Trike Hybrid.



Fig. 23: Foot board folded out

7.9.2 Closing the cover

1. → Pull the foot board upward out of its locked position on the seat stay.



Fig. 24: Folding in the foot board

2. → Fold the foot board up completely, so that it is pointing upward vertically.
3. → Press the vertical foot board down to lock it in position.



Fig. 25: Pressing the foot board down to locked position

4. → Press the cover down carefully so that it lowers on to the box from above.

5. → To lock the cover in closed position, press the cover forward and down using some pressure so that it audibly engages on both sides.

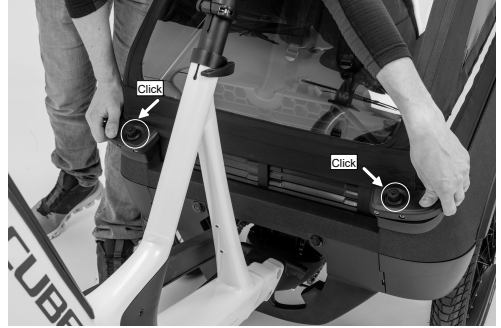


Fig. 26: Closed cover

7.9.3 Removing/attaching the cover



NOTICE

You can remove the cover to clean the interior of the box. However, always note that the Trike Hybrid may only be used with the cover mounted and completely closed.

To remove the cover:

1. → Fold the cover up → *Chapter 7.9.1 "Opening the cover" on page 37.*
2. → Press and hold the locking button on the splint and remove the splint from its guide.

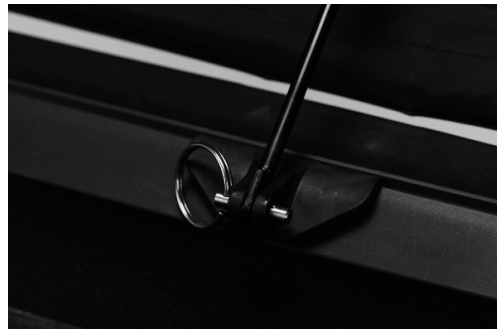


Fig. 27: Splint with safety button

3. → Unhook the pneumatic damper.

4. → Lift the cover out of the hinges on the box on both sides.

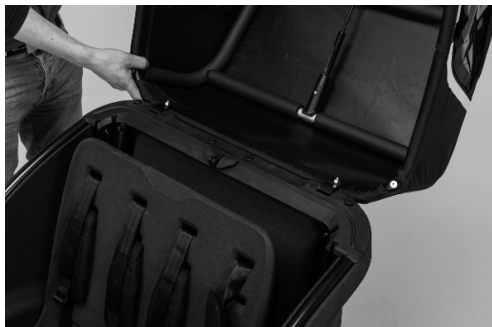


Fig. 28: Lifting the cover out of the hinge



Fig. 29: Cover lifted

To reattach the cover:

1. → Hook the cover in the hinges on the box on both sides.
2. → Hook the pneumatic damper back in place.
3. → Push the splint into its guide as far as it will go. Ensure that the locking button on the splint pops out and locks the splint securely.

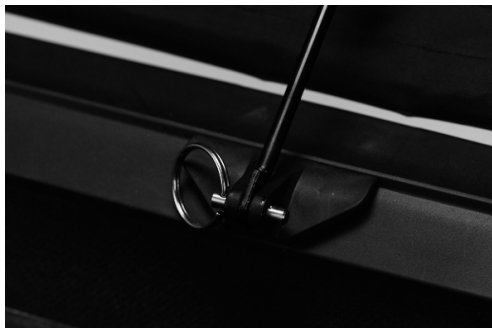


Fig. 30: Splint inserted

4. → Close the cover → Chapter 7.9.2 "Closing the cover" on page 38.

7.9.4 Installing the child seat in the box



WARNING

Risk of injury if the child seat is not installed securely.

If the child seat is not installed securely in the box or is not locked correctly, children may be injured during travel.

- Only use the child seat if it is installed securely and locked correctly.
- Do not use the child seat if it cannot be locked correctly. In this case, contact your bicycle dealer.



NOTICE

The child seat has recessed grips on the front and back.

1. → Pull the latches on the side rails forward to open the locking mechanisms.



Fig. 31: Latch pulled forward on rail, locking mechanism open

2. → Set the rear of the child seat in the box first.
The hooks on both rails must engage in the corresponding eyes in the box.



Fig. 32: Eyes for child seat in box

3. → Press down the front part of the child seat using some pressure, so that it audibly engages 2x on both sides.



Fig. 33: Pressing the child seat into the locking mechanism



NOTICE

The child seat has two locking stages on the front. The first lock only indicates the first, lighter locking stage. The child seat is not fully locked in the box until it has locked 2x on the front on both sides.

7.9.5 Using the child seat

1. → Set the child on the center seat (when using in a one-seat mode) or on one of the outer seats (when using in two-seat mode).



Fig. 34: Left: one seat - right: two seats



NOTICE

If you are using the child seat in one seat mode, tighten the two outer belts as far as possible. Loose belts could pose a safety risk to the child (risk of strangulation!).

2. → Position the shoulder belts of the belt system over the child's shoulders. The belt buckle is located between the child's legs.

3. → To **close the belt system**, insert the two tongues of the belt buckle into the belt lock together. The belt buckle will engage audibly in the belt lock.



Fig. 35: Inserting the belt buckles in the belt lock

4. → Check to ensure the shoulder belt is fitted properly.
Adjust the shoulder belt to the right length for your child if necessary.



NOTICE

Depending on the child being buckled in, the belt position can also be changed.

To change the belt position, contact a CUBE dealer.

5. → To **open the belt system**, proceed as follows:

Press the two unlocking buttons on the top and bottom of the buckle at the same time



Fig. 36: Opening the belt system

7.9.6 Removing the child seat from the box

1. → Pull the latches on the side rails forward to open the locking mechanisms.



Fig. 37: Latch pulled forward (open)

2. → Lift the front part of the child seat.



Fig. 38: Lifting the front of the child seat

3. → Unhook the rails of the child seat at the rear and remove the child seat from the box.



Fig. 39: Lifting out the child seat

7.9.7 Cleaning the child seat

1. → Clean the child seat as needed with warm water and a neutral cleaning agent if necessary.
2. → Then, allow the child seat to air dry completely.

7.10 Using the box (Trike Cargo Hybrid)



WARNING

There is a risk of injury when used without a cover or with an open cover.

If the cover is removed or open, dogs can jump out of the box while traveling or be hit and injured by objects like flying stones or similar.

- Only use the box with the cover.
- Always ensure that the cover is closed and locked correctly before starting off.

Always raise the front part of the cover when transporting dogs and large objects.

When this part of the cover is raised up, this expands the interior of the box upward. It is equipped with a mesh material and a plastic window → Chapter 7.10.4 "Adjusting the cover height" on page 45.

The box has adjustable ventilation slots on the foot board for ventilation.

- To open or close the adjustable ventilation slots, manually adjust the slats in the desired direction.



Fig. 40: Box ventilation openings

The plastic windows can also be opened when the cover is raised for additional ventilation. The mesh underneath allows in more fresh air, while still preventing flying stones or similar from entering the box.

7.10.1 Opening the cover



WARNING

Risk of injury

If the foot board is not folded out correctly and engaged, the Trike Hybrid can tip over when the dog gets in or out, or when the box is loaded.

- Always fold the foot board down completely and ensure it engages on the seat stay.

1. Press the two buttons on the cover.



Fig. 41: Pressed buttons - cover open slightly

2. Lift the cover slightly.

- ➔ The lifting element lifts the cover further, until the cover is completely open.



Fig. 42: Cover opened, foot board folded in

3. Pull the foot board upward out of its locked position.



Fig. 43: Pulling the foot board upward

4. Lower the foot board down to the front.



Fig. 44: Unfolding the foot board

- ➔ Once you have the foot board unfolded completely, it will engage on the seat stay and stabilize the standing Trike Hybrid.



Fig. 45: Foot board folded out

7.10.2 Closing the cover

1. → Pull the foot board upward out of its locked position on the seat stay.



Fig. 46: Folding in the foot board

2. → Fold the foot board up completely, so that it is pointing upward vertically.
3. → Press the vertical foot board down to lock it in position.



Fig. 47: Pressing the foot board down to locked position

4. → Press the cover down carefully so that it lowers onto the box from above.

5. → To lock the cover in closed position, press the cover forward and down using some pressure so that it audibly engages on both sides.

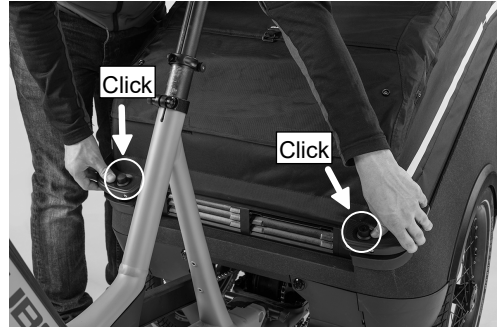


Fig. 48: Closed cover

7.10.3 Removing/attaching the cover



NOTICE

You can remove the cover to clean the interior of the box. However, always note that the Trike Hybrid may only be used with the cover mounted and completely closed.

To remove the cover:

1. → Fold the cover up *Chapter 7.10.1 "Opening the cover" on page 43.*
2. → Press and hold the locking button on the splint and remove the splint from its guide.

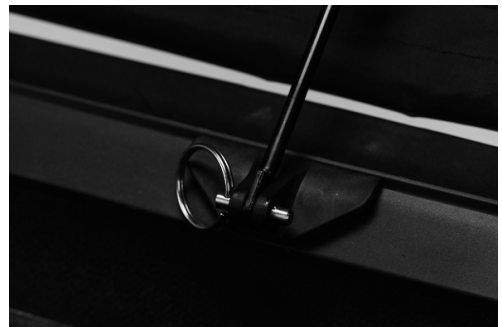


Fig. 49: Splint with safety button

3. → Unhook the pneumatic damper.

4. → Lift the cover out of the hinges on the box on both sides.



Fig. 50: Lifting the cover out of the hinge



Fig. 51: Cover lifted

To reattach the cover:

1. → Hook the cover in the hinges on the box on both sides.
2. → Hook the pneumatic damper back in place.
3. → Push the splint into its guide as far as it will go. Ensure that the locking button on the splint pops out and locks the splint securely.



Fig. 52: Splint inserted

4. → Close the cover → Chapter 7.10.2 "Closing the cover" on page 44.

7.10.4 Adjusting the cover height

Raising the cover

1. → Loosen the Velcro on the tarp from the cover.



Fig. 53: Loosen the Velcro on the cover.

2. → Open the cover → Chapter 7.10.1 "Opening the cover" on page 43.
3. → Press and hold the locking button on the strut of the cover and pull it out as far as possible.

Ensure that the locking button fully pops out of the provided drill hole and locks in place.



Fig. 54: Pulling out the strut

4. → Close the cover ↪ Chapter 7.10.2 "Closing the cover" on page 44



Fig. 55: Cover raised

Folding up the cover

1. → Open the cover ↪ Chapter 7.10.1 "Opening the cover" on page 43.
2. → Press and hold the locking button on the strut of the cover and collapse as far as possible.
Ensure that the locking button fully pops out of the provided drill hole and locks in place.



Fig. 56: Collapsing the strut

3. → Close the cover ↪ Chapter 7.10.2 "Closing the cover" on page 44
4. → Fasten the tarp using the Velcro on the cover.



Fig. 57: Fastening the tarp to the cover

7.10.5 Training your dog for transport in the Trike Cargo Hybrid



WARNING

If dogs are not used to riding in the box, are fearful, or do not stay seated calmly in the box, this can cause dangerous riding situations, crashes, and accidents.

- Get your dog used to the box and riding in it step by step.
- Always use the Trike Cargo Hybrid on flat ground.
- Be very patient when training your dog. Do not frighten / over-stress your dog during training!

Observe the following tips, which provide rough guidelines for training.

- Raise the cover before beginning training ↪ Chapter 7.10.4 "Adjusting the cover height" on page 45.
- Only transport your dog in the Trike Cargo Hybrid with the cover raised.

Getting to know the box

- Activate the parking lever ↪ "Park your Trike Hybrid / activate parking function" on page 34.
- Open the cover ↪ Chapter 7.10.1 "Opening the cover" on page 43.
- Use treats to encourage your dog to come closer to the box step by step.

- Have your dog get into the box from the front and then get back out of the box again. If possible, only give your dog treats when they are inside the box.
- Repeat the training until the dog can get into and out of the box easily and without fear.

**NOTICE**

Instead of allowing your dog to get into and out of the box themselves, you can also place the dog inside and remove them (for instance for smaller dogs).

Closing the cover

- Activate the parking lever ➔ *"Park your Trike Hybrid / activate parking function" on page 34.*
- Let the dog get into the box and then lower the cover about halfway (do not close fully).
- If possible, wait a moment before opening the cover once again.
- Repeat this training multiple times as needed.
- Once the dog can easily remain in the box with the cover halfway closed, close the cover the rest of the way slowly (repeating the training multiple times) until the dog can remain in the box calmly and without fear when the cover is closed all the way.

**NOTICE**

Do not move the Trike Cargo Hybrid with a dog in the box until the dog can remain in the box for some time easily and without fear with the cover closed while the bike is standing still.

Moving the Trike Cargo Hybrid**NOTICE**

Do not start to move the Trike Cargo Hybrid with a dog in the box until the dog has mastered the "Getting to know the box" and "Closing the cover" phases of training.

- Let the dog get into the box.
- Close the cover completely ➔ *Chapter 7.10.2 "Closing the cover" on page 44.*
- Release the parking lever ➔ *"Setting off/releasing the parking lever" on page 36.*

- Push the bike a little way, then a little further.
- Once the dog is used to being pushed in the Trike Cargo Hybrid easily and without fear, you can begin riding.

Start with shorter distances, then extend the length of your trips step by step.

7.11 Using the front carrier**7.11.1 Retrofitting the front carrier**

- ➔ Ask your specialist bicycle dealer about suitable front carriers that you can use with your Trike Hybrid.
- ➔ Have your specialist bicycle dealer fit the desired suitable front carrier to your Trike Hybrid.

7.11.2 Loading the front carrier**NOTICE**

The luggage carrier may be loaded with a maximum of 20 kg, provided that you comply with the permitted total weight for your Trike Hybrid (even with the additional load).

Therefore, when loading the rear carrier, observe the information on the **permissible total weight** of your Trike Hybrid and the **maximum payload** (see ➔ *Chapter 3.3 "Permissible total weight" on page 15* ➔ *Chapter 3.4 "Maximum additional load" on page 15*).

- ➔ Place your luggage in the middle of your carrier.
- ➔ Secure your luggage with a spring clamp or with a specially designed tensioning belt.
- ➔ Shake your Trike Hybrid after loading.

The luggage (or parts of it) must not:

- become loose.
- obstruct your freedom of movement when cycling.
- touch the wheels.
- Do not obscure your lighting and reflectors.

8 Malfunctions while cycling



DANGER

Danger in case of unprofessional maintenance!

If you perform maintenance work for which you are not authorised, this can lead to dangerous cycling situations, falls, accidents and material damage.

- Have abnormalities not listed in the following table checked immediately by your specialist dealer and, if necessary, rectified.
- If the listed measures do not remedy the problem, consult your bicycle dealer immediately.

8.1 Trike Hybrid (general cycling behaviour)

Fault description	Cause	Remedy
Unsafe or unstable cycling behaviour	Box is not securely fixed/screws on the box have loosened	Contact your specialist bicycle dealer immediately for remedy.
	Load is unevenly distributed/ not placed centrally in the box	Make sure that the weight is evenly distributed when loading.
	Load is insufficiently secured (e.g. against slipping)	Use tensioning straps or luggage nets to secure loose objects.
	Screw connections have loosened	Contact your specialist bicycle dealer immediately for remedy.

8.2 Electric drive



NOTICE

Observe the **separate original instructions** for the **electric drive**: In them, you will find all detailed information of the component manufacturer.

8.3 Shifting, manual drive (chain)

Fault description	Cause	Remedy
Unusual noises such as cracking, loud grinding and/or knocking	Drive/shifting components damaged	Contact your specialist bicycle dealer immediately for remedy.
Irregular resistance during pedalling	Drive/shifting components damaged	Contact your specialist bicycle dealer immediately for remedy.

8.4 Brakes

Fault description	Cause	Remedy
Brakes do not work	Brake not mounted correctly	Contact your specialist bicycle dealer immediately for remedy.
	Brake damaged	Contact your specialist bicycle dealer immediately for remedy.
Decreasing braking effect, brake lever can be pulled too far	Brake pads worn	Have brake pads replaced immediately by your specialist bicycle dealer.
	Hydraulic lines/brake system leaking	Contact your specialist bicycle dealer immediately for remedy.

8.5 Frame, seat post and suspension fork

Fault description	Cause	Remedy
Noises: Creaking, banging, grinding or similar sounds.	Frame and/or suspension damaged	Contact your specialist bicycle dealer immediately for remedy.
Seat post slips into the frame or twists	Tightening torque too low	Check and correct the tightening torque (see chapter → <i>Chapter 3.5 "Screw connections and torques" on page 18</i>).
	Incorrect installation	Fix the fastener/clamp (see chapter → <i>Chapter 7.3 "Adjusting the seat height" on page 32</i>).
	Seat post has too small a diameter	Install a seat post with the correct diameter.
Poor suspension performance	Suspension fork/preload not correctly adjusted	Adjustment and tuning according to the enclosed component operating instructions for the suspension fork (see chapter → <i>Chapter 7.4 "Adjusting the suspension fork" on page 33</i>).

Fault description	Cause	Remedy
Poor suspension performance	Suspension fork damaged	Contact your specialist bicycle dealer immediately for remedy.

8.6 Mudguards, lighting

Fault description	Cause	Remedy
Noises: Creaking, banging, grinding or similar sounds.	Mudguards or rear carrier have come loose	If the parts cannot be reattached, contact your bicycle dealer immediately for remedy.
Lighting partially or completely without function	Light LEDs have reached the end of their service life.	Contact your specialist bicycle dealer immediately for remedy.
	Cables damaged	Contact your specialist bicycle dealer immediately for remedy.

8.7 Wheels and tyres

Fault description	Cause	Remedy
Wheels "bounce"	Tyre damage	Contact your specialist bicycle dealer immediately for remedy.
	Spoke broken	Contact your specialist bicycle dealer immediately for remedy.
Noises: Creaking, banging, grinding or similar sounds.	Foreign object is caught in the wheel	<ul style="list-style-type: none"> ■ Remove the foreign body. ■ Use your Trike Hybrid with special care afterwards. Have your Trike Hybrid checked by your bicycle dealer for any consequential damage.
	Damage to the wheel	Contact your specialist bicycle dealer immediately for remedy.
Spongy handling	Excessively low air pressure	<ul style="list-style-type: none"> ■ Increase air pressure (= inflate tyres) ■ If the same cycling behaviour occurs again soon afterwards, there is a slow puncture (see next line).
Increasingly spongy handling, very unusual rolling behaviour (you feel every little stone)	Flat tyre	<ul style="list-style-type: none"> ■ Replacement of tyre/inner tube. ■ Contact your bicycle dealer immediately for remedy and do not use your Trike Hybrid until then. <p>You must not replace the inner tube, tyre and rim tape for the Trike Hybrid yourself.</p>

9 After a fall or accident



DANGER

Danger from unrectified damage!

Damage after a fall or accident can lead to dangerous cycling situations, falls, accidents and material damage.

- Contact your bicycle dealer immediately after a fall or accident.
- Only continue to ride your Trike Hybrid when it has been properly repaired by your bicycle dealer.



DANGER

Danger from prohibited spare parts!

Prohibited spare parts may not meet the special requirements of your Trike Hybrid and may fail. These can lead to dangerous cycling situations, falls, accidents and material damage.

- Only use original spare parts.

After a fall, you must always replace the opened components listed below if hit during the impact:

- Handlebars,
- Handlebar ends,
- Handlebar stem,
- Crank.

All other components or parts must be checked and replaced if necessary by your specialist bicycle dealer.

10 Cleaning and maintaining the Trike Hybrid

Good care increases the life of your Trike Hybrid and its components. Therefore clean and maintain your Trike Hybrid regularly.



NOTICE

Before cleaning, remove the battery or batteries from your Trike Hybrid.

Observe the **original instructions** for the electric drive for cleaning and care of the **components of the electric drive**.



CAUTION

Danger due to incorrect care or incorrect cleaning agents!

Cleaning agents, lubricants and preservatives are chemical products.

Incorrect use can damage your Trike Hybrid.

- Use a gentle stream of water or a bucket of water and a sponge for wet cleaning.
Use only clean fresh or desalinated water. Salt water contributes to corrosion.
- Only use products that are expressly suitable for bicycles.
- Make sure that this agent does not attack paint, rubber, plastic, metal parts, etc.
For more information, consult your specialist bicycle dealer.
- Follow the respective manufacturer's instructions in the component manuals.

1. → Remove coarse dirt such as earth, stones, sand, etc. with a gentle stream of water.

2. → Let your Trike Hybrid dry out a little.

3. → Spray your entire Trike Hybrid with a suitable cleaning agent.

For many cleaning agents and light soiling, simply spraying on and rinsing off after the prescribed soaking time is sufficient.

Stubborn dirt can be removed after the soaking time, e.g. with a radiator brush before rinsing.

4. → Rinse the entire Trike Hybrid with a gentle stream of water and let it dry.

5. → Clean the chain as described below.

- Drip a suitable chain cleaning agent into a clean, lint-free cotton cloth and wipe the chain with it. Slowly operate the crank in the opposite direction to the drive direction.
- Repeat this process with a clean area of the cotton cloth until the chain is clean.
- Let the cleaning agent evaporate for about 1 hour.

If there is still cleaning agent between the chain links, the new lubricant is immediately decomposed and is therefore ineffective.

- Apply a lubricant suitable for bicycle chains sparingly to the chain links.
- Remove excess lubricant on the chain with a clean, dry and lint-free cotton cloth.

6. → Clean remaining heavily soiled areas by hand with a clean, lint-free cotton cloth using a suitable cleaning agent.



NOTICE

Clean and lubricate your chain as described after every ride in the wet, every longer ride on sandy ground, at the latest every 200 km.

7. → Spray the entire Trike Hybrid with suitable spray wax or a similar protective agent.

Exceptions:

- Brake blocks or brake pads,
- Brake discs,
- Grips, brake/shift lever,
- Saddle,
- Tyres.

8. → Polish your Trike Hybrid after the prescribed exposure time with a clean, lint-free cotton cloth.

9. → Clean brake pads and brake discs by hand with a clean, dry, lint-free cotton cloth using a suitable degreasing agent.

11 Trike Hybrid Transportation



NOTICE

The Trike Hybrid **may** never be removed, **even for transport!** **Like-wise**, the **box** may still **not be modified or removed!**

Removing the cover is an exception; this can be removed for transportation. → *Chapter 7.9.3 "Removing/attaching the cover" on page 38* → *Chapter 7.10.3 "Removing/attaching the cover" on page 44.*

You may only transport the Trike Hybrid **in one piece** (including box)!

1. → Remove the battery or batteries from your Trike Hybrid before transport.



NOTICE

Batteries must be transported separately. Also observe the information in the **original operating manual** for the **E-drive**.

2. → Remove any other optional attachments that could be damaged when transporting your Trike Hybrid (such as a smartphone holder).

3. → Transport your Trike Hybrid standing upright and secure it against falling over or slipping.

12 Decommissioning the Trike Hybrid for a longer period



CAUTION

Danger in case of incorrect storage!
Incorrect storage can damage bearings and tyres and promote corrosion.

- Please observe the following instructions.

**NOTICE**

Remove the battery or batteries from your Trike Hybrid if you are going to park it for a long time.

Observe the information about storage in the **original instructions** for the electric drive.

- Clean and maintain your Trike Hybrid regularly as described in chapter ➔ *Chapter 10 "Cleaning and maintaining the Trike Hybrid" on page 52.*
- Store your Trike Hybrid only in dry and dust-free rooms.
- Protect your Trike Hybrid against access by unauthorised persons or children.
- Check the brakes when you put your Trike Hybrid back into operation.
In case of longer periods of non-use, the disc brakes may have to be run in again.
In case of doubt, consult your specialist bicycle dealer.

13 End-of-life disposal

**NOTICE**

The integrated electric motor turns your Trike Hybrid into an **electrical appliance** that must be disposed of in accordance with national regulations.

Electrical and electronic devices as well as batteries and accumulators **must not be disposed of with household waste.**

As a consumer, you are legally obliged to return electrical and electronic equipment as well as batteries and accumulators at the end of their service life to the public collection points set up for this purpose or to specialist dealers.

**NOTICE**

Remove the battery or batteries from your Trike Hybrid before disposing of it.

Batteries must be disposed of separately!

Observe the **original instructions** for the electric drive for the disposal of the **components of the electric drive.**

14 Guarantee/warranty

14.1 Warranty

As a rule, we grant a 2-year warranty on all Cube frames and rigid forks from the date of sale as required by law.

Your contact for warranty claims is the dealer from whom you purchased our product.

14.2 Warranty services

In addition, we offer extended warranties some of our CUBE frames and rigid forks beyond the statutory warranty period as follows:

For some alloy frames and rigid forks, we grant 6 years warranty from date of sale.

Should a break occur within this period (from the date of sale), we undertake to replace this article with an identical or similar article.

We reserve the right to repair defective frames or parts, or replace them with the corresponding successor model.

If a frame of the same type is no longer available for a pending exchange of a frame, we reserve the right to supply a replacement frame, which may differ in shape and colour from the original frame.

There shall be no entitlement to delivery of goods of the same type.

Conversion work outside the statutory warranty period (2 years) will not be carried out free of charge or reimbursed by us.

14.3 Warranty conditions

The services exclusively relate to the frame and rigid fork and not to the paintwork and decor.

Costs for necessary add-on parts due to frame changes (e.g. front derailleur, headset, rear shock, etc.) are not included in the warranty and are to be borne by the customer.

14.4 The claim to warranty/ guarantee is invalidated

No claim may be made under warranty/guarantee in the following cases:

- In case of changes to the Trike Hybrid without prior consent of the manufacturer.
- In case of a retrofit of electric drives of any kind (e.g. front hub motor, rear hub motor, centre motor, etc.)
- In case of defects and damage:
 - Due to add-on parts (such as bags, locks, rack systems, etc.),
 - which are attributable to the fact that they have not complied with the specifications in these original instructions.
 - which are due to force majeure, accidents, improper use, repairs not carried out professionally, lack of maintenance / care or wear and tear.
 - which are due to improper use (see chapter ➔ *Chapter 2.1 "Use your Trike Hybrid as intended" on page 8*).
 - which are due to the fact that you have not used original specified parts or spare parts approved by CUBE when replacing components/parts.

15 Inspections/service plan



NOTICE

Have your **specialist bicycle dealer regularly** inspect your Trike Hybrid and carry out the necessary service work at the intervals specified here.

Type of inspection/ service work	Intervals: During normal use	During frequent use with maximum load/payload/heavy weights
First inspection	After 200 km or 2 months at the latest	After 100 km or 1 month at the latest
(Regular) follow-up inspections	Every 2000 km or 1x per year	Every 500 km or every 2 months
Check of spoke tension	Every 500 km or 1x per year	Every 250 km or every 2 months
Check of the brake pads	Every 400 km	Every 100 km
Check of brake discs	Every 400 km	Every 100 km
Check of chain wear	Every 500 km	Every 250 km
Exchange of handlebars and handlebar stem	After an accident/fall (see → <i>Chapter 9 "After a fall or accident" on page 52</i>)	After an accident/fall (see → <i>Chapter 9 "After a fall or accident" on page 52</i>)

16 Handover checklist

Brake inspection:

- Brake line routing
- Brake line check
- Brake pad adjustment
- Visual leak test of the brake system.
- Check of all fastening screws of the brake system.
- Test of function and correct operation of front and rear brake.

Shifting inspection:

- Shift cable routing
- Shift lever or grip shift set-up
- End stop set-up
- Cable tension adjustment
- Shifting function and smooth operation
- Check of all fastening screws of the shifting system.

Chassis inspection:

- Basic function and leak check of the front fork.
- Adjustment / smoothness of the headset bearing
- Check of all chassis screw connections

Wheel inspection:

- Concentricity and centring of the rims, concentricity and centring of the tyres.
- Check of spoke tension and air/tyre pressure.
- Correct installation and fixed position of the wheels.

Other inspections:

- Adjustment and correct tightening of the handlebars, handlebar stem and of the crank arms.
- Adjustment and correct tightening of the saddle seatpost, correct tightening of the handles.
- Correct installation of the assembly rivet of the chain.
- Functioning of lights (if applicable).
- Adjustment and correct tightening of the carrier, mudguards and kickstand (if applicable).
- Assembly and correct tightening of other attachment parts.

When handing over the bicycle:

- The purchased object was handed over in a complete and perfect condition including the operating manual.
- Verbal instructions were given on the safe use of the bicycle, particularly guidelines on running in the disc brake - if applicable.
- Reference was made to the respective instructions in the operating manual which are to be observed.
- Reference was made to the warranty obligations in the CUBE operating manual.

Please check off items after inspection

Comments

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Place, date

Retailer signature

.....

Purchaser signature (legal guardian for children under 18 years of age)

