

ORIGINAL INSTRUCTIONS CARGO HYBRID

MODEL YEAR 2022



CUBE ORIGINALBETRIEBSANLEITUNGEN CUBE ORIGINAL OPERATING INSTRUCTIONS

Impressum

Hersteller:

Pending System GmbH & Co. KG Ludwig-Hüttner-Straße 5-7 95679 Waldershof Germany www.cube.eu Info@cube.eu FON + 49(0) 9231-97 007 80 FAX + 49(0) 9231-97 007 199

Technische Redaktion: PlusDocu GmbH Rappstraße 20 20146 Hamburg Germany www.plusdocu.com Info@plusdocu.com FON +49(0) 40-537 983 960

Aufkleber Rahmenseriennummer



Service:

1st inspection

date)
()
stamp	
Signature of the dealer	J

3rd inspection

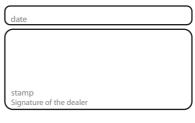
date stamp Signature of the dealer

5th inspection

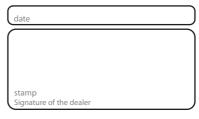
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stamp Signature of the dealer

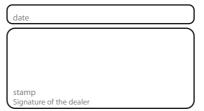
2nd inspection



4th inspection



6th inspection



Due to legal regulations with regards to the duty to provide information for recalls, as well as warranty and guarantee obligations, this delivery certificate should be issued before or upon handing over a purchased bicycle. The retailer must talk the customer through all details of the delivery certificate, fill it out, and sign it. By signing this certificate, the retailer confirms that they have inspected the bicycle according to the following checklist and have instructed the customer on how to use the bicycle correctly according to the operating manual. Retailer information: A copy of the completed document which has been signed by both contractual parties should be retained by the retailer for administrative purposes.

Following pa	rts have b	een checked i	n detail:			
Lighting system	9	Handleba	rs	Pedals		Check the screw connections
Brand						
Туре						
Frame number					Material	
Extra equipment					Material frame	
					Material seat post	
Category					Frame number	
Series					Model year	
Date of purchase					Colour	
Retailer / seller						
Name of retailer						
Company						
Street						
Post code / city						
Country						
Telephone / fax:					E-Mail:	
)		The Origina	should re	emain in the	se Original Ir	nstructions

DELIVERY CERTIFICATE

Customer / purchaser	
Name	
Surname	
Street	
Post code / city	
Telephone	

Extra component Instruction/ Handbook are also delivered

Shifting system	Rear shock	
Brake system	axel system	
Suspension fork	Pedals	Signature of the Customer



The bicy	/cle is	finally	assembled	by:
----------	---------	---------	-----------	-----

and will be hand out in a roadworthy condition.

Location			
Date			
Stamp Signature of th	ne dealer		

The Original should remain in these Original Instructions

Overview



- 01 Chain ring/chain rings
- 02 Crank with pedal (right and left)
- 03 Mid-drive motor
- 04 Chain
- 05 Rear derailleur (only in case of a derailleur system)
- 06 Sprocket/sprockets
- 07 Shifter
- 08 Brake lever
- 09 Brake disc (on front and rear wheel)
- 10 Hub (on front and rear wheel)
- 11 Seat post
- 12 Seat clamp
- 13 Frame

6

- 14 Suspension fork
- **15** Wheels (= front and rear wheels)
- 16 Handlebars
- 17 Handlebar stem
- 18 Head set on handlebars
- 19 Head set on steerer tube clamp
- 20 Steering rod
- 21 Box
- 22 Kickstand
- **23 Rear carrier** (= optional accessory)
- 24 Headlight
- 25 Rear light
- 26 Mud guard (on front and rear wheel)

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Dear Customer,

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

With the purchase of this Cargo 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.

1 About these original instructions

- 1.1 Conventions
- 1.1.1 Description



RISK OF BURNS!

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



WARNING!

The red warning triangle in combination with the signal word "Warning" indicates dangers that can lead to <u>severe personal injury</u> (up to death).



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

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

1.1.2 Positional designations

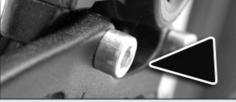
Whenever these original instructions refer to "right," "left," "front" or "rear," this information always refers to the position of the cyclist (in the direction of travel).

1.1.3 Definition of terms

Cargo Hybrid	Whenever these original instructions refer to "Cargo Hybrid" in general, it refers to any of the models described here.
EPAC	Electrically Power Assisted Cycles All Cargo Hybrid models described in these original instructions belong to the EPAC group.
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 = Authorised specialist bicycle dealer	Our company only allows selected bicycle dealers to sell and repair our products. 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.
нwк	In Germany: Chamber of Trade

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ІНК	In Germany: Chamber of Commerce
Nm	Newtonmeter; Unit for torque
psi	Pound per square inch; American unit for pressure; 1 psi = 0.06897 bar
StVO	German Road Traffic Act (Deutsche Straßenverkehrs- ordnung)
StVZO	German Road Traffic Licensing Regulations (Deutsche Straßenverkehrs- zulassungsordnung)
Correct screw connection	The "Correct screw con- nection" term refers to the condition in which the screw heads are firmly in contact with the part over their entire surface.
A SH	



Screw connection, <u>not</u> correct A loose screw is often indicated by a protruding screw head.



The technical terms used for components and their parts can be found in the overview (see *"Overview" auf Seite 5*) or in the individual pictures.

1.1.4 Figures

	The figures shown in these original
!	instructions are exemplary and apply
	to all model versions of the Cargo Hybrid.

1.2 General notes on these original instructions

WARNING!

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 (see chapter 1.2.2, "Additionally applicable documents").
- Before using your Cargo 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 Cargo 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 Cargo Hybrid. Make sure that all fields in the delivery certificate are filled out completely. It is your responsibility to check your Cargo 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 Area of validity

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

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

WARNING!

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 topicality 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 Cargo 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 Cargo 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.

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 Cargo Hybrid includes additional separate component instructions.

2 For your safety

In this chapter, you will find information

 on intended use, important safety instructions and a list of (unavoidable) residual risks.

2.1 Use your Cargo Hybrid as intended

WARNING!

Dangers if <u>not</u> used as intended!

Your Cargo Hybrid is designed for a specific use.

Design, material properties, etc. are designed for this intended use.

If you use your Cargo Hybrid for purposes other than those for which it is intended, such misuse can lead to material failure, malfunctions of important assemblies (e.g. brakes) and other issues!

- → Observe all information on intended use in chapters 2.1.1 "What is your Cargo Hybrid designed for?" – 2.1.8 "Accessories and conversions".
- → Never use your Cargo Hybrid in any way other than described here/not for its intended purpose.
- → Consult your bicycle dealer if you are uncertain about the intended use of your Cargo Hybrid.

2.1.1 What is your Cargo Hybrid designed for?

Your Cargo Hybrid is designed as a means of transport for transporting or taking along children and luggage (objects).

The tests of your Cargo Hybrid or the tests of the components were carried out according to the standard DIN 79010-2020:02.

2.1.2 Who can drive your Cargo Hybrid?

Your Cargo Hybrid is designed for one (single) cyclist. This cyclist controls and drives the Cargo Hybrid.

The following requirements must be met for proper use:

- The seat position (seat/handlebars) on the Cargo Hybrid is correctly adjusted for the cyclist.
- The cyclist has the right height/stature for the Cargo Hybrid. If you are unsure, ask your specialist bicycle dealer.
- The cyclist (including clothing) weighs a maximum of 115 kg (= maximum cyclist weight).
- The cyclist is at least 16 years old. Persons younger than 16 years of age are not allowed to drive this Cargo Hybrid themselves/operate it as cyclist.

2.1.3 How may you drive your Cargo Hybrid?

- Sit with your rear end on the saddle or ride in a cradle-to-cradle position, i.e. with a standing pedalling motion.
- → Hold the left grip of the handlebars with your left hand and the right grip of the handlebars with your right hand.
- ➔ Do not take your hands off the handlebars while cycling. Your Cargo Hybrid is not suitable for hands-free cycling!
- → Use the Cargo Hybrid with or without the electric drive.
- Use your Cargo Hybrid exclusively as a means of transport as described in these original instructions.
- → When transporting children or luggage, observe the information in chapter 7.11 "Using the box".
- Observe the national and regional regulations when cycling in road traffic.

2.1.4 How do you use the box?

- The box belongs to your Cargo Hybrid as
- intended. The box and the upper frame must never be removed or modified.

Observe the information on the **permissible total weight** of your Cargo

Hybrid and the maximum payload (see chapter 3.3 "Permissible total weight (Cargo Hybrid)" and 3.4 "Maximum payload").

The box is designed for the transport of

• **children** aged 9 months to 7 years, who can sit independently.

Please also refer to chapter 7.11.1 "If you transport children in the box".

- **Objects/luggage** (up to 60 kg). Please also refer to chapter 7.11.2 "If you transport objects/luggage in the box".
 - Children and/or luggage must **not** distract or obstruct the cyclist (e.g. obstruct visibility).

2.1.5 What applies to rear carriers/child seats/bicycle trailers?

Please observe the information on the per-

missible total weight of your Cargo Hybrid (see chapter 3.3 *"Permissible total weight (Cargo Hybrid)"*).

Rear carrier

Your Cargo Hybrid is suitable for retrofitting with a rear carrier.

Rear carriers that you can use with your Cargo Hybrid are suitable for carrying light luggage (e.g. in a bicycle basket).

- → Ask your specialist bicycle dealer about suitable rear carriers/child seats that you can use with your Cargo Hybrid.
- → For the use of the rear carrier, please observe the information in chapter 7.12 "Using the rear carrier".

Child seats

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

With the additional weight of a child seat including the child, the permissible total weight would be exceeded.

Only the box of your Cargo Hybrid is intended to carry children!

Bicycle trailer

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

2.1.6 On which surface are you allowed to drive your Cargo Hybrid?

All bicycles of our company are divided into categories, which specify the field of application of the respective bicycle.

Your Cargo Hybrid corresponds to a **Category** II bicycle and is therefore suitable for **trips on paved roads**, such as:

- Asphalt roads and bike paths
- Roads that are secured by sand, gravel or similar materials (e.g. forest roads, field paths)
- Fortified hiking trails on which roots, thresholds, stones and recesses are not or only slightly present

When cycling, both wheels must be in **constant contact with the ground** or may only briefly lose contact with the ground due to minor unevenness such as roots.

Expressly **not allowed** are cycling manoeuvres such as:

- Jumps
- Doing wheelies
- Hands-free cycling
- (Sudden) braking where the rear wheel loses contact with the ground

2.1.7 What legal requirements apply to cycling the Cargo Hybrid?

Your Cargo Hybrid may not be used on public roads without equipment according to StVZO.

To comply with the current StVZO, your Cargo Hybrid must have the following equipment features, among others:

- Two independently operating brakes
 - A bell

I

- Battery-powered lighting for the front (white light) and rear (red light) in accordance with StVZO
- Reflectors/reflective strips on the tyres according to StVZO.
- → The full text of the regulations can be found in the StVZO for journeys in Germany.
- ➔ For use outside Germany, please observe the traffic regulations applicable in your country.
- → If you have any questions about the legal regulations, please contact your bicycle dealer or the relevant authorities.

2.1.8 Accessories and conversions

Many cyclists want to rebuild their bike and adapt it to their specific needs. Fork, seat, handlebars, pedals, brakes, tyres, suspension elements – there are many ways to modify a bike afterwards. This also applies to the Cargo Hybrid, although to a different extent due to its design.

Always keep in mind, however:

Working on the Cargo Hybrid, even work that seems to be easy, requires **sound training**, **in-depth knowledge** and **a wealth of experience**.

Improperly performed work and modifications to your Cargo Hybrid and the

use of unsuitable accessories can lead to dangerous cycling situations, falls, accidents and material damage.

> If the Cargo Hybrid is tampered with or altered in any way, all **liability, guarantee** and **warranty claims** against the manufacturer and dealer are **void**.

If you comply with the specifications listed below, you can equip your Cargo Hybrid with suitable accessories.

 Only use ISO-certified accessories. Exceptions are bicycle computers and bottle cages if they are selected and fitted by a specialist bicycle dealer.

Consult your specialist bicycle dealer when selecting accessories.

 Never exchange or modify components for which this is expressly prohibited by the manufacturer.

Our company prohibits the exchange/ changeover for the following components (see picture):

- · Stem and Speedlifter
- All components of the steering assembly, such as steering rod, steering shaft, fork clamp, etc. (exception: handlebars, see below)
- Seat post
- Fork
- Brake system, including brake discs
- Wheels (exception: tyres, see below).



Bild: Assemblies/components highlighted in red must not be exchanged

- → The handlebars may only be replaced with suitable ISO-certified handlebars by a specialist bicycle dealer (see chapter 4.6 "Handlebars, handlebar stem").
- ➔ Tyres may only be replaced with tyres of equal or higher load capacity in accordance with the manufacturer's approval
- → Retrofitting or converting the electric drive is **not** permitted on all Cargo Hybrid models! In addition, no manipulation of the software or the like (tuning) is permitted.
- ➔ The composition of all parts of your Cargo Hybrid must **not** be changed.
- ➔ Have all mounting, conversion, service and other work on your Cargo Hybrid carried out exclusively by your bicycle dealer.

Please note that the person who makes changes to the Cargo Hybrid is also liable for them.

2.2 Avoid typical dangers - Safety instructions -

The use of your Cargo 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 Cargo Hybrid.

2.2.1 Dangers due to faulty final assembly

WARNING!



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

Improper final assembly of your Cargo 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)



WARNING!

Danger when used unattended!

Children or physically/psychically impaired persons may not be able to correctly assess or handle dangerous situations in connection with the Cargo Hybrid.

- → Observe the information in the original instructions for the electric drive.
- ➔ Hold the Cargo Hybrid securely with both hands when children enter the box or when you place children in the box.

Never allow children to enter the box unattended or sit unattended in the box.

- → Children must not play with the battery and charger or handle them unattended.
- → Secure your Cargo Hybrid and place it so that children/unauthorised persons cannot access it.

2.2.3 Dangers when (first) cycling with your Cargo Hybrid



WARNING!

Danger due to unfamiliar handling of the Cargo Hybrid!

Your Cargo 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 Cargo 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 Cargo Hybrid in a suitable environment away from traffic.
- → When getting to know your Cargo Hybrid, try out different typical cycling situations such as:
 - · Kicking off and braking
 - Navigating curves and turning
 - Driving with fully loaded and with empty box, etc.

→ Never ride your Cargo Hybrid handsfree!

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 Cargo Hybrid. This can lead to dangerous cycling situations (accident, fall, etc.)



WARNING!

Danger for inattentive and careless cyclists!

Driving your Cargo 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 valid traffic regulations in your country.
- → Keep yourself informed about and observe any applicable national regulations for transport and load wheels.
- → Wear a helmet when cycling.
- → Drive with foresight and defensiveness.
- → Do not drive under the influence of alcohol or if you are otherwise intoxicated (e.g. after taking medication, narcotics, etc.)
- → Drive in such a way that you have your Cargo Hybrid under control at all times and do not get into trouble in case of sudden dangerous situations.
- ➔ In wet conditions, the effect of the brakes may diminish. The braking distance increases.
- → When cycling the Cargo Hybrid, wear suitable clothing that does not restrict your freedom of movement or visibility.
- Only ride with tight-fitting legwear. Wide items of clothing can get caught on the Cargo Hybrid and lead to serious falls.
- → Do not exceed the permissible total weight (see chapter 3.3 "Permissible total weight (Cargo Hybrid)").

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2.2.4 Hazards during handling

WARNING!

\land

Danger due to incorrect handling!

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

You can therefore or have to handle your Cargo Hybrid sometimes completely different than you are used to from other bicycles.

→ Pay particular attention to the safetyrelevant 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 Cargo Hybrid is heavy and bulky: Let us help you if you need to lift your Cargo 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 the steering to swing up. If you hold the handlebars securely, you reduce the associated risks.

 Do not drive over high curbs or heels with your Cargo Hybrid and avoid tight corners.

If the steering linkage of your Cargo Hybrid touches down, in the worst case you will not be able to steer any more and/or the steering assembly will be damaged.



RISK OF BURNS! Risk of burns on contact with

heated components!

After longer downhill runs 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

WARNING!

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

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

If you carry out work on the Cargo 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 Cargo Hybrid" and 15 "Inspections/ service plan").

- → Contact authorised bicycle dealers exclusively for any queries and repairs.
- Have your Cargo Hybrid checked by your bicycle dealer after a fall/ accident or if your Cargo Hybrid has been overloaded.

Please also refer to chapter 9 "After a fall or accident".

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 Cargo Hybrid, e.g:

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

Be **careful** when using/cycling your Cargo 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 (without pedals to some extent)
- Original instructions including delivery certificate, as well as all other relevant component instructions from manufacturers whose parts were installed.

3.2 Identification/type plate

The following information can be found on your Cargo 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 Cargo Hybrid (see chapter 3.3 "Permissible total weight (Cargo Hybrid)")
- Maximum permissible payload for the box (see chapter 3.4 "Maximum payload")
- Information/marking of the electric drive components.

If a rear carrier has been retrofitted,

the indication for its maximum payload is located on the rack itself (as an embossing).

3.3 Permissible total weight (Cargo Hybrid)

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

On the basis of the specified permissible

total vehicle weight **you determine** the **maximum permissible payload** for your Cargo Hybrid.

Please also note the information in chapter 3.4 "Maximum payload".

The **actual total weight** of your Cargo Hybrid including all influencing factors such as cyclist weight, payloads etc. must be **less than or equal to** the **permissible total weight** for your Cargo Hybrid. The following example calculation shows which **influencing factors** must be taken into account for the determination of the actual total weight.

+	Intrinsic weight of the Cargo Hybrid Body weight of the cyclist (with clothing)
+	Weight of the payload in the box
'	• • • •
+	Weight of the additional luggage (e.g. backpack/luggage)
+	Weight of additional attachments
≤	Permissible total weight

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

!	To find out which model your Cargo Hybrid is, please refer to the delivery certificate .
---	---

Intrinsic weight	Permissible total weight		
Cargo Hybrid 48 kg	220 kg		
Cargo Sport Hybrid 46 kg	220 kg		
Cargo Dual Hybrid 51 kg	220 kg		
Cargo Sport Dual Hybrid49 kg220 kg			

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

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

3.4 Maximum payload

The wording "maximum payload" must distinguish between:

- the maximum permissible payload for the box (= design load capacity of the box) (see 3.4.1 "Maximum payload for the box").
 vs.
- the maximum permissible **payload** for your **Cargo Hybrid** (in total) considering the permissible total weight for your Cargo Hybrid (see 3.4.2, Maximum payload depending on the permissible total weight (calculation examples)").

The maximum permissible payload for your Cargo Hybrid (in total) includes all loads that are transported with the Cargo Hybrid, including, for example, luggage that you transport on a retrofitted rear carrier or in a backpack.

3.4.1 Maximum payload for the box

WARNING!



I

Dangers in case of changes to the box!

The Cargo Hybrid is designed as a means of transport for people and objects. If you modify the box provided for this purpose or even remove it from the frame, this can lead to unforeseeable dangerous situations.

→ Never disassemble or modify the box and/or the upper frame.

The **theoretically** maximum permissible **payload** for the box of your Cargo Hybrid is **60 kg**.

The **maximum payload** in the **box**, i.e. the weight of the load (children or objects) must **not exceed 60 kg**.

The specification of "60 kg" refers to the load capacity/construction of the box, not to the Cargo Hybrid as a whole. This means that the box of your Cargo Hybrid can basically withstand a load (children/objects) weighing up to 60 kg.

In order to determine the **actual** maximum permissible **payload** for the box, you must take into account not only the load capacity of the box but also the permissible **total weight** for your **Cargo Hybrid**.

If you would exceed the permissible total weight for your Cargo Hybrid with a payload of 60 kg in the box, the actual maximum permissible payload is less than 60 kg.

→ To determine the actual maximum permissible payload in the box, observe the examples in chapter 3.4.2 "Maximum payload depending on the permissible total weight (calculation examples)".

3.4.2 Maximum payload depending on the permissible total weight (calculation examples)

Depending on the design of some components of your Cargo Hybrid, you will find information on the maximum weight with which you may load the respective component.

If all these theoretically permissible individual load capacities are fully utilised, you will usually exceed the permissible total weight for your Cargo Hybrid:

Calculation with theoretically permissible individual load capacities

Intrinsic weight of the Cargo Dual Hybrid:

+ 51 kg

Max. cyclist weight:

+ 115 kg

Max. payload of box:

+ 60 kg

Max. payload of permissible rear carrier models:

- + 20 kg
- Total weight of the Cargo Hybrid:
- = 246 kg (permissible total weight exceeded by 26 kg)

Result/conclusion:

The actual total weight (246 kg) would in this case exceed the permissible total weight (220 kg). You must not use your Cargo Hybrid in this way! The following calculation examples no. 1-3 show how to determine the maximum payload for your Cargo Hybrid depending on the permissible total weight.

Calculation example no. 1			
	Intrinsic weight of the Cargo Dual Hybrid:		
+	51 kg		

+ 109 kg

Actual payload of box:

+ 60 kg

- Actual total weight of the Cargo Hybrid:
- = 220 kg (permissible total weight reached)

Result/conclusion on calculation example no. 1: In this case, the actual total weight (220 kg) exceeds the permissible total weight).

You may use the Cargo Hybrid in this way, but you may not transport any other load (e.g. on the rear carrier)!

Calculation example no. 2

Intrinsic weight of the Cargo Dual Hybrid:

- + 51 kg
- Actual cyclist weight:
- + 109 kg Actual payload of box:
- + 39 kg
 - Intrinsic weight of the rear carrier:
- + Approx. 1 kg
 - Actual payload of the rear carrier:
- + 20 kg
 - Actual total weight of the Cargo Hybrid:
- = 220 kg (permissible total weight reached)

Result/conclusion on calculation example no. 2: In this case, the actual total weight (220 kg) exceeds the permissible total weight).

Since the box is not loaded with the full weight of the maximum permissible payload for the box, the additional load can be transported on the rear carrier.

You must not use your Cargo Hybrid in this way! Important: The intrinsic weight of the rear carrier (as a retrofitted attachment) must be taken into account.

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Calculation example no. 3

- Intrinsic weight of the Cargo Dual Hybrid:
- + 51 kg
- Actual cyclist weight:
- + 88 kg

Actual payload of box:

+ 60 kg

Intrinsic weight of the rear carrier:

+ Approx. 1 kg

Actual payload of the rear carrier:

- + 20 kg
- Actual total weight of the Cargo Hybrid:
- = 220 kg (permissible total weight reached)

Result/conclusion on calculation example no. 2:

In this case, the actual total weight (220 kg) exceeds the permissible total weight). If the (lower) cyclist weight permits, the box and rear carrier can each be loaded with the full weight of your maximum permitted payload.

You must not use your Cargo Hybrid in this way! Important: The intrinsic weight of the rear carrier (as a retrofitted attachment) must be taken into account.

3.5 Screw connections

3.5.1 Which screw connections may you tighten yourself?



I

WARNING!

Danger if work is carried out improperly!

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

This can lead to unforeseeable dangerous situations.

- Please refer to the following overview to find out which screws you can tighten yourself if they have become loose.
- → If, e.g. when checking your Cargo Hybrid, you discover that bolts have loosened that are **not** listed in the following overview, consult your bicycle dealer immediately.

Do not use your Cargo Hybrid until the screw connections have been refastened by your bicycle dealer.

Screw connections that are not listed

- 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	Type of connection				
	Seat clamp				
Cootinent	Standard seat clamp				
Seat post	Monolink seat clamp				
	Seat post clamp on the frame				
Upper frame screw connection					
Bottle holder fastening screws					
Cable guide screw					
Rear carrier fastening					

Part	Manufactu- rer Model/type		Connection	Type of connection	Tightening torque (Nm)
	CUBE	Performance post	Seat clamp	2 screws	7
Seat post	Aluminium frame c		Seat post clamp on the frame	1 screw	5-8
Upper frame screw connection				8 screws	6–8
Bottle holder fastening screws				2 screws	3
Cable guide screw				1 screw	1.5
Rear carrier fastening				1 screw each	6

3.5.2 Torques and screw connections

4 Structure and functions

4.1 General Information/ model overview

The Cargo Hybrid is currently available in **four** different **model versions**.

Model desig- nation	Model number	Equipment features (excerpt)	
Cargo Hybrid	689200 689210 689220	Disc brake, hub gear system, 1× battery (500 Wh)	
Cargo Sport Hybrid	689300 689310 689320	Disc brake, derailleur system, 1× battery (500 Wh)	
Cargo Dual Hybrid	689250 689260 689270	Disc brake, hub gear system, 2× battery (1000 Wh)	
Cargo Sport Dual Hybrid	689350 689360 689370	Disc brake, derailleur system, 2× battery (1000 Wh)	

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

4.2 Electric drive

Detailed information on the e-drive

- and its components can be found in the
- original instructions for the electric drive.

Your Cargo Hybrid is equipped with an electric drive and belongs to the group 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 Cargo 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 (support level).

→ Observe the original instructions for the electric drive.

4.3 Brakes

Disc brakes must be run in. The full

braking power develops only after the running-in procedure (see chapter 5.2 "Getting to know your Cargo Hybrid").

Your Cargo Hybrid has two independent disc brakes on the front and rear wheel hubs.



Bild: Brake disc on the front wheel



Bild: Brake disc on the rear wheel

Both disc brakes are operated with the corresponding brake levers (hydraulic).



Bild: Brake lever on the handlebars

4.4 Gearshift

Depending on the model, your Cargo Hybrid has:

• A derailleur system (of the brand *Shimano*)

or

• a hub gear system (of the brand *Enviolo*).

4.4.1 Derailleur system (Shimano)

The derailleur system provides you with the optimum gear for every speed and makes it easier to cope with inclines, among other things.

The transmission ratio of the chain (= the gear) results from on which chain ring the chain runs at the front and on which sprocket the chain runs at the rear.



Bild: Sprocket with rear derailleur on rear wheel

You change the transmission ratio of the chain (shift to a different gear) by changing the chain ring and sprocket combination.

<u>High transmission (= high gear):</u>

High effort when pedalling, low cadence.

Low transmission (= low gear):

Low effort when pedalling, high cadence.

Determine the number of gears of your derailleur system as follows:

	Number of chain rings (front)				
×	Number of sprockets (rear)				
= Number of gear					
Example:					
2 chain rings \times 10 sprockets = 20 gears					

4.4.2 Hub gear system (Enviolo)

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

The continuously variable hub gear system works with NuVinci[®] technology. Using the so-called planetary gear in the rear wheel hub, you change the transmission ratio of the chain (shift continuously).

High transmission (= high gear):

High effort when pedalling, low cadence.

Low transmission (= 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 Frame

In the frame construction of your Cargo Hybrid, we have already integrated a frame lock for future development. This frame lock serves only to insert the bicycle belt when converting from chain to belt drive.

Since, due to the design, no Cargo Hybrid model can/may be converted from chain to belt drive, there is currently no need to open or change the frame lock.

- → Never open/use/change the frame lock.
- → Contact your bicycle dealer for information if/when a conversion from chain to belt drive is possible for your Cargo Hybrid.

4.6 Handlebars, handlebar stem

WARNING!

Dangers if the components are not replaced properly!

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

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

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 ISOcertified components by a specialist bicycle dealer.

The handlebars and handlebar stem components are optimally adapted to the special operating characteristics of your Cargo Hybrid. With the additionally installed Speedlifter, you can quickly and comfortably adjust the handlebar height (see chapter 7.2 "Adjusting the handlebar height").



Bild: Handlebars with handlebar stem (including Speedlifter)

4.7 Suspension fork

Your Cargo Hybrid has a spring-loaded front fork, a so-called suspension fork.



Bild: Suspension fork

Please also refer to chapter 7.5 "Adjusting the suspension fork".

4.8 Box (and optional accessories)

Your Cargo Hybrid has a box for transporting children or objects/luggage. Box and frame or overall construction are optimally matched, therefore no changes may be made to the box or the overall construction.

To be able to cope with everyday use, the box is made of robust EPP, a material that is also used for motorcycle helmets.

The box has slots in the individual components for fastening, for example, tensioning belts for load securing.

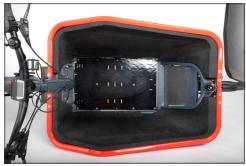


Bild: Box interior with fixing slots

You can equip the **box** with additional **accessories** to adapt it even better to your usage pattern. Accessories for the box include the following:

- Seats
- Safety belts

- Rain cover
- Isofix fastening system
 - Consult your **specialist bicycle dealer** to **find out** about suitable **accessories** for the **box** of your Cargo Hybrid.

5 Before using for the first time

5.1 Getting your Cargo Hybrid ready for cycling

WARNING!



Dangers due to improper handling/testing!

A Cargo 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 Cargo Hybrid and its operation.

- → Handle your Cargo Hybrid carefully from the beginning and follow the instructions regarding the (regular) inspection of your Cargo Hybrid.
- 1. Have your bicycle dealer confirm the correct final assembly and check the readiness of your Cargo Hybrid for cycling.

You may make certain **fine adjustments** and **small changes** yourself. Please also note the information in chapter 7, Adjusting and using the Cargo Hybrid".

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

 If you memorise the correct condition of your Cargo Hybrid when new, you will
 be able to recognise deviations from the correct condition more easily later.
 Self-made photos can be a valuable help.

5.2 Getting to know your Cargo Hybrid

For inexperienced cyclists, the general risk of accidents and injuries increases massively.

- → Familiarise yourself step by step with the functions and cycling characteristics of your Cargo Hybrid so that you can use your Cargo Hybrid safely.
- ➔ In particular, make yourself familiar with the function and operation of the following components.

Brakes

- Memorise the assignment of the brake levers. Which brake lever actuates the front brake, which brake lever actuates the rear brake?
- → Familiarise yourself slowly with the braking performance of your Cargo Hybrid on safe terrain.

The brakes have a strong braking effect. Excessive use of the brake levers can cause the respective wheel to lock and thus cause a fall.

- Make sure that the load distribution of the load in the box also affects the braking performance of your Cargo Hybrid.
- Retract your disc brakes. To run in your disc brakes, follow the instructions in the component instructions of the brake manufacturer.
 - Disc brakes must be run in. The full braking power develops only after the running-in procedure.

Electric drive

- Memorise the handling of the control element.
 What adjustments can you make while cycling and how?
- → Familiarise yourself slowly with the different levels of support of your Cargo Hybrid on safe terrain.

Observe the information in the manufacturer's original operating manual of the electric drive

regarding setting options, performance, etc.

Steering

 Please note the special design features in the steering of your Cargo Hybrid.

If you steer and brake hard at the same time or drive too fast with little weight (unloaded box) on loose ground (e.g. gravel), the front wheel can break away when you turn.

Box

 Pay attention to how the load in the box influences the handling of your Cargo Hybrid.

What is the cycling behaviour of your Cargo Hybrid when you drive with a fully loaded box? How is the cycling behaviour with only partially or not at all loaded box?

→ Practice cycling with the cargo you are likely to transport most often with your Cargo Hybrid in everyday life.

What influence the load in the box has on the handling of your Cargo Hybrid also depends on what it is: Is the load moving (e.g. children)? How is the load distributed (a heavy object or uniform distribution?)? etc.

→ If you primarily want to transport your child(ren) with the Cargo Hybrid Practice cycling in the box with your children.

If children are not used to cycling in the pit, are anxious or do not remain calm in the pit, this can lead to dangerous cycling situations, falls and accidents.

6 Before every trip

6.1 Checking Cargo Hybrid as a whole



WARNING! Dangers if the check is omitted!

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

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

- ➔ Before each journey, check that your Cargo Hybrid is safe to drive.
- Contact your bicycle dealer immediately if you notice that the actual condition of the Cargo Hybrid deviates from the target condition.
- → Only use your Cargo Hybrid again when it has been properly repaired by your bicycle dealer.
- 1. Perform a **visual inspection** of the entire Cargo Hybrid.

In the process, check the following:

- all fixing screws for a correct screw connection.
- the entire Cargo Hybrid for notches, chipping, deep scratches and other mechanical **damage**.
- whether **loose parts** have become caught somewhere on the Cargo Hybrid, e.g. branches, fabric remnants.
- whether the reflective strips on the tyres are clean and clearly visible. Tyres without reflective strips must be fitted with clearly visible, clean reflectors.
- 2. If necessary, **remove** loose parts (e.g. branches) and **check** whether, for example, your wheels have been damaged by the loose parts.
- 3. Fix screw connections that have loosened, if these are screw connections that you are allowed to tighten yourself (see chapter 3.5.1 "Which screw connections may you tighten yourself?").
- 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.

Always make sure that the **reflective strips** on the tyre or alternatively spoke reflectors in accordance with **StVZO** on your Cargo 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

Front and rear wheels are also called wheels.

Your Cargo Hybrid has two wheels: one front and one rear wheel.

Each wheel consists of the following:

- Hub
- Brake disc
- Spokes
- Rim
- Rim strip
- and tyres.

If your Cargo Hybrid is equipped with a **derailleur system**, the **sprocket** or **sprocket set** is also located on the rear wheel hub.

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 clamping.

No cracking or crunching noises must be audible.

The axle nuts must be tightly screwed and the screw axle must be tightened with the printed torque (see chapter 3.5.2 "Torques and screw connections").

2. Contact your bicycle dealer if the inspection reveals defects.

6.2.2 Checking the rims

1. Check the rims for wear.

Contact your bicycle dealer to find out how to check the wear on rims without a wear indicator.

2. Check the rims for wobbling:

To do so, lift up your Cargo Hybrid and turn the front and rear wheels respectively. Pay attention to the distance between the frame strut or fork sheath.

The maximum permissible deviation per revolution is 2 mm.

6.2.3 Checking the spokes

1. **Check** the spokes on the front and rear wheel regularly.

All spokes must be tight and undamaged.

Even individual spokes that have become loose or damaged can cause consequential damage.

Do not use your Cargo 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

WARNING!

Risk of a burst tyre or sudden loss of pressure!

If the valves are tilted, the valve foot 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 Cargo 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. Tear off diagonally positioned valves while cycling, so that there is a sudden loss of pressure in the tyre (= the air escapes abruptly, high risk of accident/fall).

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

2. Check the air pressure.

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

As a rule, you will find an indication of

the maximum permissible air pressure directly on the rims (sticker) and tyres (tyre pressure).

If you are unsure, ask your specialist bicycle dealer.

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
psi	90	100	110	120	130	140
bar	6.2	6.9	7.6	8.3	9.0	9.7

- The higher the body weight, the higher the tyre pressure must be.
 - Check the air pressure with a tyre pressure gauge. Simple devices are often accompanied by 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.

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There are **different types of valves**.

All valves can be provided with a dust protection cap. After you have removed them, you can put the pump head directly on the so-called **car valve**, as well as the so-called **flash valve (Dunlop)**.

With the **Sclaverand (French) valve**, you must first unscrew the small locknut from the valve as far as it will go, and after filling, 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.



Bild: Optimum tyre tread (left); Worn tyre tread (right)

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.

Always pay attention to an optimal tyre profile.

- With a worn profile, the general risk of accidents and injuries increases massively.
- 5. Check your tyres for external damage and wear.
 - The tyre fabric under the rubber layer shall not be visible.
 - There must be no dents or cracks.

- 6. **Check** the **mounting** of your tyres.
 - Lift the front and rear wheels and turn them by hand. The tyre must run round. There must be no vertical or lateral runout.

6.3 Checking the seat and seat post

WARNING!

Danger if the minimum insertion depth is not observed!

If the insertion depth is too small, 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 (seat post and handlebar stem)").
- 1. Check the seat with 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, attach them (see chapters 7.3 "Adjusting the seat position" and 7.4 "Adjusting the seat height").'

6.4 Checking the handlebars and handlebar stem

WARNING!

Risk of damage and any manipulation.

The handlebars and handlebar stem are very important components for your cycling safety. Damage and changes to it 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 Cargo 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 handle-bars or handlebar stem.

→ Make sure that the handlebar stem is inserted to the correct depth (see chapter 7.1.2 "Note the minimum insertion depth (seat post and 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.



Bild: Stem and handlebars correctly aligned

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

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.
 - Then grasp the handlebars at both ends.
 - Try to twist the handlebars with hand force against the resistance (the wall/person) (check both directions)
 - 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 steering assembly

WARNING!

Risk of damage and any manipulation.

The steering assembly is very complex. Damage and changes to it as well as errors in assembly can result in very serious falls.

- If you discover defects on steering assembly parts or if you have doubts about them, you must not continue to use your Cargo Hybrid under any circumstances.
- ➔ Under no circumstances should you attempt to remedy defects in the steering assembly parts yourself or attempt to replace the components yourself.

Contact your specialist bicycle dealer if you discover any defects in the steering assembly parts.

1. Check that the steering assembly runs without play.

The following moving parts of the steering assembly shall have no play:

- Steering column/steering rod
- Steering rod/fork clamp

The steering assembly must only be able to move around the pivot points and must otherwise run without play.



Bild: Pivot points of the steering assembly

2. Check the bolts, nuts and split pins on the steering assembly for completeness.

All screws, nuts and split pins shown must be present (see picture)

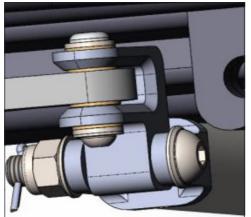


Bild: Steering with split pin

6.6 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 lever with the other hand.
- 2. Retighten the fixing screw(s) if attachments on the handlebars have become loose.

6.7 Checking the head set

The head set is the **bearing** of the **steerer tube in the head tube**.

Your Cargo Hybrid is equipped with two headsets: You must check both headsets!



Bild: Head set on handlebars



Bild: Head set on steerer tube clamp

1. Check the head set as described below.

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

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

There must be no play in the head set: There shall be no audible or palpable crackling. Crunching noises are also not allowed.

2. If you find that the head set has play, proceed as described below:

The head set on the handlebars has play:

 Adjust the head set correctly on the handlebars (see Speedlifter manufacturer's manual).

The head set on the handlebars has play:

 Contact your bicycle dealer to have the steerer tube clamping adjusted correctly.

6.8 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 deflects.

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 Cargo Hybrid at the front triple clamp. Take care not to move or damage the headlamp and fender.

The stanchions must not come loose from the dip tubes or from the triple clamp.

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

6.9 Checking the brakes

WARNING! 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.
 - Operate both brake levers to the stop 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.



Bild: Brake lever fully applied

- Try to push the Cargo Hybrid with the brakes applied. Both wheels must remain locked.
- 2. **Pull** the **brake calliper** alternately in all directions with manual force.

The brake calliper 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, chippings, deep scratches or other mechanical damage and the brake disc must be of the optimum thickness.



Bild: Information on the minimum thickness on the brake disc (1.8 mm)

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"):

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.

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

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

> Accordingly, **replacement brake pads** and **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.

6.10 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 plates, protruding rivet pins, etc. or have fixed, immovable chain links.

- 3. Check that the chain runs smoothly over the shifting rollers and does not jump.
- 4. Have the chain wear checked by a specialist bicycle dealer using a suitable measuring tool.



Bild: Chain wear gauge

6.11 Checking the electric drive components

Observe the separate original instruc-

- tions 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.

6.12 Checking the lighting

WARNING!

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 Cargo 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 Cargo Hybrid is parked.

The front headlight and the rear light must be on.



Bild: Headlight (front)



Bild: Rear light (rear)

6.13 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).
- 2. Check all screw connections of the box and make sure that the box is mounted securely and stably on the Cargo Hybrid.
 - Let one person hold the Cargo Hybrid and try to shake the box.

The box must be securely fixed and must not have any movement play.



Bild: Front box screw connections



Bild: Rear box screw connections

6.14 Checking the rear carrier

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

Observe the separate component instructions for the rear carrier. In it, you will find all detailed information of the component manufacturer.

WARNING!

Danger from loose parts!

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

 Contact your specialist bicycle dealer and have the rear carrier correctly fastened.

Do not use your Cargo Hybrid again until the rear carrier has been secured.

→ Shake the rear carrier by hand at right angles to the direction of travel.

The rear carrier fastenings must not become loose.

The rear carrier must not touch the tyre.

6.15 Checking the mud guards (wheel guards)

WARNING!

Danger from loose parts!

Loose mud guards can block the wheel and lead to serious falls.

 Contact your specialist bicycle dealer and have all mud guards correctly fastened.

Do not use your Cargo Hybrid again until the mud guards have been secured.

- 1. Check the mounting of your mud guards.
 - The mud guard and its fastening struts must not be bent or damaged.
 - While standing, move the front wheel vigorously back and forth using steering movements.
 - Carefully shake the mud guards with your hand.

The fastening struts must not become loose. No part of the mud guards may touch the wheels.

7 Adjusting and using the Cargo Hybrid

- 7.1 What you fundamentally need to take into consideration
- 7.1.1 Adjustments require expert knowledge

WARNING!

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

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

- → Only carry out the adjustment work on the Cargo 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 Cargo Hybrid itself for which you will find descriptions in this original operating manual or other applicable documents.
- → Please note: On all steering components (steering rod, steering shaft, fork clamp, etc.) you must not carry out any adjustment work or similar tasks!

Please also note the information in chapter 2.1.8 "Accessories and conversions".

→ 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 (seat post and handlebar stem)



WARNING!

Danger if the minimum insertion depth is not observed!

If the insertion depth is too small, 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 and handlebar stem.
- Never go below the minimum insertion depth of the seat post or handlebar stem.
- → If necessary, observe the information on the minimum insertion depth in the component instructions for the seat post or handlebar stem.

WARNING!

Danger if inserted to the wrong depth!

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

- Only carry out the adjustment work on the Cargo 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 Cargo 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.

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.



Bild: Marking for the minimum seat post insertion depth

Minimum insertion depth of the handlebar stem

Observe the separate component

- **instructions** for the **Speedlifter**. In it, you will find all detailed information of the component manufacturer.
- Please observe the information regarding the minimum insertion depth of the handlebar stem in the enclosed component instructions for Speedlifter.

7.2 Adjusting the handlebar height

Observe the **separate component instructions** for the **Speedlifter**. In it,

you will find all detailed information of the component manufacturer.

The handlebars of your Cargo Hybrid can be adjusted in height quickly and without the use of tools. In this way, you can spontaneously adapt the handlebar adjustment to the respective cycling situation as required.

- 1. Unfold the quick-release on the handlebar stem outwards.
- 2. Adjust the desired handlebar height by moving the stem up or down.

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Bild: Adjusting the handlebar height

Observe the **minimum insertion depth**

- of the handlebar stem (see chapter 7.1.2 "Note the minimum insertion depth (seat post and handlebar stem)").
- 3. Fix the adjustment by closing the quick-release on the handlebar stem again.
- 4. Make sure that the quick-release is in maximum contact with the handlebar stem and is securely closed.



Bild: Handlebars height fixed

7.3 Adjusting the seat position

To adjust the seat position, you need a

hexagon socket spanner and a torque wrench of the appropriate size.

To adjust the horizontal position or inclination of your seat:

- 1. Loosen the clamping bolts 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.
 - When changing the horizontal position,
 pay attention to the adjustment range on the seat struts.

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 3.5.2 "Torques and screw connections").

4. If the marking on the seat post cannot be found in chapter *3.5.2 "Torques and screw connections"* under "Tightening Torques," consult your specialist bicycle dealer.

7.4 Adjusting the seat height

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

The clamp is fixed with a **quick-release** lever.

lever.

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

- 1. Open the clamp by unfolding the quick-release on the seat tube to the outside.
- 2. Move the seat and seat post to the desired position for your seat height.

Observe the **minimum insertion depth** of the seat post (see chapter 7.1.2 "Note the minimum insertion depth (seat post and handlebar stem)").



Bild: Adjusting the seat height

- 3. Align the seat correctly:
 - The seat tip points in the direction of travel.
 - The guick-release is aligned in the direction of travel (see picture).
- Fix the clamp by closing the quick-release 4. on the seat tube.

Make sure that the quick-release is in maximum contact with the frame and is securely closed.



Bild: Fixed seat clamp

7.5 Adjusting the suspension fork

Observe the **separate component**

- instructions for the suspension fork.
- I In it, you will find all detailed information of the component manufacturer.

7.5.1 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.

> 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.

7.5.2 Adjusting the preload

You can adjust the preload of the suspension fork. To do this, compress the springs on the fork using the adjusting screw.

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

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

To **adjust** the preload and for **basic handling** → of the suspension fork, follow the instructions in the enclosed component instructions of the suspension fork manufacturer.

7.5.3 Locking/unlocking the suspension fork (lock function)

Using the lock function, you can guickly lock the suspension fork and guickly open it again.

The open suspension fork (= normal condition of the suspension fork) is movable and deflects when cycling. The locked suspension fork is rigid and does not compress when cycling.

To lock the suspension fork, turn the knob to the LOCK position.



Bild: Suspension fork locked (=LOCK)



Bild: Suspension fork open (=OPEN)

7.6 Adjusting the gearshift (only hub gear system/Enviolo)

Observe the **separate component instructions** for the **hub gear system**. In it, you will find all detailed information of the component manufacturer.

→ To adjust the hub gear system and for basic handling of the hub gear system, follow the instructions in the enclosed component instructions of the gear manufacturer.

7.7 Operating the electric drive

Observe the **separate original instruc-**

- **! tions** for the **electric drive**: In it, you will find all detailed information of the component manufacturer.
- → For adjusting and operating the electric drive and for the basic handling of the electric drive and its components, follow the instructions in the included original instructions of the drive manufacturer.

7.8 Operating the gearshift

7.8.1 Derailleur system (Shimano)

When operating the derailleur system, please observe the information in the

separate component instructions for the derailleur system: In it, you will find all detailed information of the component manufacturer.

7.8.2 Hub gear system (Enviolo)

When operating the hub gear system, please observe the information in the

separate component instructions for the **hub gear system**: In it, you will find all detailed information of the component manufacturer.

7.9 Operating the brakes

WARNING!

Danger when cycling without braking!

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

- → Familiarise yourself with the operation of the brakes.
- ➔ Determine which brake lever actuates the front or rear brake.

Operate the respective brake lever several times while standing still:

You can observe the opening and closing of the brake pads on the corresponding brake disc.

➔ Be careful not to brake and steer hard at the same time.

If you steer and brake hard at the same time or drive too fast with little weight (unloaded box) on loose ground (e.g. gravel), the front wheel can break away when you turn.

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

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

7.10 Operating the kickstand / parking

ATTENTION!

Danger in case of improper parking!

If you park your Cargo Hybrid in the direction of travel downhill, the kickstand can fold in automatically when the slope is -10% (or 5.7°).

The Cargo Hybrid can start up or tip over. This can result in damage to property and even personal injury if the Cargo Hybrid endangers road traffic or other road users.

→ Always park your Cargo Hybrid in the direction of travel uphill (= the front wheel points uphill).

7.10.1 Folding out the kickstand/parking the Cargo Hybrid

- 1. Stand next to your Cargo Hybrid and hold it with both hands on the handlebars.
- 2. Fold out the kickstand with your foot.
- 3. Place your foot against the kickstand and pull your Cargo Hybrid back a little bit.

The kickstand folds out completely when pulled back and simultaneously jacks up the front part of your Cargo Hybrid.



Bild: Folding out the kickstand

- 4. Lean your Cargo Hybrid carefully on the kickstand and release the Cargo Hybrid.
- 5. Check that the kickstand holds your Cargo Hybrid securely.



Bild: Cargo Hybrid parked (on kickstand)

Use a **suitable lock** when parking your Cargo Hybrid to protect it from **theft** and

use by unauthorised persons.

7.10.2 Folding in the kickstand/cycling off

- 1. Stand next to your Cargo Hybrid and hold it with both hands. When holding on, you must grasp the handlebars with at least one of your hands.
- 2. Place one foot against the stand in the direction of travel and simultaneously push your Cargo Hybrid forward.

The kickstand folds in and rests against the frame.



Bild: Folding in the kickstand

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7.11 Using the box

7.11.1 If you transport children in the box

WARNING! Danger for children in the box!

If your Cargo Hybrid tips over while children are getting into or sitting in the box, the children could be seriously injured. Your Cargo Hybrid tips over onto a child with its full weight.

 Always hold your Cargo Hybrid securely with both hands when children enter/ exit the box or when you put children in/take them out of the box.

Please also refer to the further descriptions on how to get on/off in this chapter.

→ Never allow children to enter the box or sit in the box unattended.

WARNING!

Danger for and by travelling children!

Children cycling along are incomparably more likely to suffer serious injuries in accidents and falls than the cyclist himself.

If children travelling with you divert your attention from road traffic, this can lead to dangerous cycling situations, falls, accidents and material damage.

 Drive with special care when carrying children in the box of your Cargo Hybrid.

If you use the box with **optional accesso**ries (e.g. rain cover), follow the **separate manufacturer's instructions** for the accessory.

The following points must be observed when transporting children in the box of your Cargo Hybrid → If you let children get into/out of the box: Stand in front of the saddle in the direction of travel (both feet on the ground; the frame is between your legs) and hold your Cargo Hybrid securely with both hands on the handlebars.



Bild: Hold the Cargo Hybrid securely when getting in/out

→ If you transport children in the box who cannot get in/out on their own, have someone help them:

The cyclist secures the Cargo Hybrid as described above (see picture), while the other person places the child/children in the box.

- → Make sure that children cycling in the box always wear a suitable bicycle helmet.
- → Practice cycling in the box with your children.
- → Make sure that the weight distribution in the box is as balanced as possible.

Place a single child on the middle seat in the box.



Bild: Child in box

- Make sure that children travelling with you do not hold any body parts (e.g. arms) out of the box.
- → Secure the children in the box with the original seat belts from Cube (see chapter 4.8 "Box (and optional accessories)").



Bild: Cube safety belts in the box

- → Use suitable seats that you attach to the box to transport small children in the box.
- Make sure that children travelling with you are continuously strapped in during the journey.
- Please observe the information on the permissible total weight of your Cargo Hybrid (see chapter 3.3 "Permissible total weight (Cargo Hybrid)").
- Protect children travelling in the box against the weather, e.g. with sun protection, a rain cover and suitable clothing.



Bild: Rain cover mounted to the box

7.11.2 If you transport objects/luggage in the box

If you use the box with **optional acces**sories (e.g. tensioning belts), follow the separate manufacturer's instructions for the accessory.

 Secure luggage that you transport in the box of your Cargo Hybrid against slipping and falling out, e.g. with suitable tensioning straps.

The box has slots for the attachment of tensioning belts (see chapter 4.8 "Box (and optional accessories)").

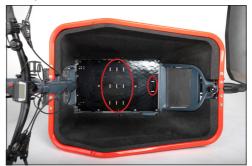


Bild: Slots in the box

→ Load the box so that the luggage does not restrict your view.

The luggage should not protrude beyond the side edges of the box.

- → Please observe the information on the permissible total weight of your Cargo Hybrid (see chapter 3.3 "Permissible total weight (Cargo Hybrid)").
- Make sure that the weight distribution in the box is as balanced as possible.

7.12 Using the rear carrier

7.12.1 Retrofitting the rear carrier

- 1. Ask your specialist bicycle dealer about suitable rear carriers that you can use with your Cargo Hybrid.
- 2. Have your specialist bicycle dealer fit the desired suitable rear carrier to your Cargo Hybrid.

7.12.2 Loading the rear carrier

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

- Therefore, when loading the rear carrier, observe the information on the **permissible total weight** of your Cargo Hybrid and the **maximum payload** (see chapter 3.3 "Permissible total weight (Cargo Hybrid)" and 3.4 "Maximum payload").
- 1. Place your luggage in the middle of your rack.
- 2. Secure your luggage with a tension flap or with a specially designed tensioning belt.
- 3. Shake your Cargo 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

WARNING!

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.

Problem	Possible causes	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.	
benaviour	 Load is unevenly distributed/ not placed centrally in the box 	→ Make sure that the weight is evenly distributed when loading.	
Dettling pairs	 Load is insufficiently secured (e.g. against slipping) 	→ Use tensioning straps or luggage nets to secure loose objects	
Rattling noises	Screw connections have loosened	→ Contact your specialist bicycle dealer immediately for remedy.	
The steering has play	Screw connections have loosened	→ Contact your specialist bicycle dealer immediately for remedy.	

8.1 Cargo Hybrid (general cycling behaviour)

8.2 Electric drive

Observe the separate original instruc-

tions for the **electric drive**: In it, you will find all detailed information of the component manufacturer.

8.3 Gearshift, manual drive (chain)

Problem	Possible causes	Remedy
Gear does not change at all or only improperly.	Shift lever not operated correctly	→ Renewed attempt
	Gearshift misadjusted	→ Contact your specialist bicycle dealer for remedy.
	 Too much pressure on the pedal and/or pedalling too slowly on steep inclines. 	 Repeat the shifting process in flat terrain. Switching while stationary: Raise rear wheel, operate crank in drive direction until the desired gear is engaged.
Chain (manual drive) blocked after or during shifting.	• Chain jammed	 Stop, operate the switch in the opposite direction, lift the rear wheel, turn the crank in the opposite direction to the drive direction. If the crank cannot be moved, under no circumstances use force. Contact your specialist bicycle dealer immediately for remedy.
Unusual noises such as cracking, loud grinding and/or beating	Drive/switching components damaged	→ Contact your specialist bicycle dealer immediately for remedy.
Irregular resistance during pedalling	Drive/switching components damaged	→ Contact your specialist bicycle dealer immediately for remedy.
Chain has come off	 Incorrect operation of the gearshift, gearshift misadjusted or damaged Generally possible under unfavourable conditions 	 Stop, lift the chain by hand onto the next sprocket, lift the rear wheel, operate the crank in the drive direction (only if smooth running is possible). If a repair is not possible in this way, contact your bicycle dealer immediately for remedy.
Chain jumps off after or during shifting	 Incorrect operation of the circuit (see component instructions for the circuit) Gearshift misadjusted or damaged Generally possible under unfavourable conditions 	 Stop, operate the switch in the opposite direction, lift the chain by hand onto the next sprocket, lift the rear wheel, operate the crank in the drive direction (only if it can be operated smoothly). If a repair is not possible in this way, contact your bicycle dealer immediately for remedy.
 Chain constantly comes off Permanently incorrect operation of the gearshift Gearshift misadjusted or damaged 		 Operate the gearshift exclusively as described in chapter 8.6 If the gearshift is being operated correctly, contact a specialist workshop immediately.

8.4 Brakes

Problem	Possible causes	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, bra- ke lever can be pulled too far	Brake blocks or brake pads worn	→ Have brake blocks or 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

Problem	Possible causes	Remedy
Noises: Crackling, beating, grinding or similar sounds.• Frame and/or suspensio 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 3.5 ",Screw connections").
Seat post slips into the frame or twists	Incorrect installation	→ Fix the fastener/clamp (see chapter 7.4 "Adjusting the seat height").
	Seat post has too small a diameter	→ Install a seat post with the correct dia- meter.
Deficient spring behaviour	 Suspension fork/preload not correctly adjusted 	→ Adjustment and tuning according to the enclosed component operating instruc- tions for the suspension fork (see chapter 7.5 "Adjusting the suspension fork").
Insufficient spring behaviour despite correct adjustment		→ Contact your specialist bicycle dealer immediately for remedy.

8.6 Wheel guards, rear carrier, lighting

Problem	Possible causes	Remedy
Noises: Crackling, beating, grinding or similar sounds.	 Mud guards or rear carrier have come loose 	→ If the parts cannot be reattached, contact your bicycle dealer immediately for remedy.
Lighting partially or completely • LEDs of the illumination have reached the end of their lifetime.		→ Contact your specialist bicycle dealer immediately for remedy.
	Cables damaged	→ Contact your specialist bicycle dealer immediately for remedy.

8.7 Wheels and tyres

Problem	Possible causes	Remedy
Wheels "bounce"	Tyre damageSpoke broken	→ Contact your specialist bicycle dealer immediately for remedy.
Noises: Crackling, beating, grinding or similar sounds.	 Foreign matter is caught in the wheel 	 Remove the foreign body. Use your Cargo Hybrid with special care afterwards. Have your Cargo Hybrid checked by your bicycle dealer for any consequential damage.
	Damage to the wheel	→ Contact your specialist bicycle dealer immediately for remedy.
Sloppy cycling behaviour	Excessively low air pressure	 Increase air pressure (= inflate tyres) If the same cycling behaviour occurs again soon afterwards, there is a creeping flat tyre (see next line).
Increasingly spongy cycling behaviour very unusual rolling behaviour (you feel every little stone)	• Flat tyre	 → Replacement of tyre/inner tube. → Contact your bicycle dealer immediately for remedy and do not use your Cargo Hybrid until then. You must not replace the inner tube, tyre and rim tape for the Cargo Hybrid yourself.

9 After a fall or accident

WARNING!

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 Cargo Hybrid when it has been properly repaired by your bicycle dealer.

WARNING!

Danger from inadmissible spare parts!

Prohibited spare parts may not meet the special requirements of your Cargo Hybrid and may fail. A loose seat post can lead to dangerous cycling situations, falls, accidents and material damage.

 Only use original spare parts.
 In case of doubt, consult your specialist bicycle dealer.

After a fall, you must always replace the opened components listed below:

- 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 Cargo Hybrid

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

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

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

ATTENTION!



Danger due to incorrect care or incorrect cleaning agents!

Cleaning agents, lubricants and preservatives are chemical products. Incorrect use can damage your Cargo Hybrid.

- Use a gentle water jet 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 water jet.
- 2. Let your Cargo Hybrid dry out a little.
- 3. Spray your entire Cargo Hybrid with a suitable cleaning agent.

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

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

- 4. Rinse the entire Cargo Hybrid with a gentle water jet 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 joints.
- 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.
- 7. Spray the entire Cargo Hybrid with suitable spray wax or a similar preservative.

Exceptions:

- Brake blocks or brake pads worn
- Brake discs
- Grips, brake/shift lever
- Seat
- Tyres
- 8. Polish your Cargo Hybrid after the prescribed exposure time with a clean, lint-free cotton cloth.
- 9. Clean brake blocks, brake pads and brake discs by hand with a clean, dry, lint-free cotton cloth using a suitable degreasing agent.

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.

11 Transporting the Cargo Hybrid

	I	The Cargo Hybrid must never be dis- mantled for transport! Also the box must not be changed or removed!
		You may only transport the Cargo Hybrid in one piece (including box)!
1.	Be	fore transport, remove the battery or

batteries from your Cargo Hybrid.

Batteries must be transported separately.

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

- 2. If necessary, remove other optional attachments that could be damaged during transport of your Cargo Hybrid (e.g. smartphone cradle).
- 3. Transport your Cargo Hybrid upright and secure it against falling over or slipping.

12 Decommissioning the Cargo Hybrid for a longer period

ATTENTION!

Danger in case of incorrect storage!

Incorrect storage can damage bearings and tyres and promote corrosion.

Please observe the following instructions.

Remove the **battery** or batteries from your Cargo 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.
- Therefore clean and maintain your Cargo Hybrid regularly as described in chapter 10 "Cleaning and maintaining the Cargo Hybrid".
- → Store your Cargo Hybrid only in dry and dust-free rooms.
- → Protect your Cargo Hybrid against access by unauthorised persons or children.

 Check the brakes when you put your Cargo Hybrid back into operation.

In case of longer periods of non-use, the disc brakes may have to be rebraked.

In case of doubt, consult your specialist bicycle dealer.

13 End-of-life disposal

I

The integrated electric motor turns your Cargo 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.

Remove the **battery** or batteries from your Cargo 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 matter of principle, 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 extend some of our Cube frames and rigid forks beyond the legal warranty claim as follows:

For all frames and rigid forks, we grant 5 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.

A claim for delivery of goods of the same type does not exist.

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

14.3 Warranty conditions

The services only refer to the frame and rigid fork and not to the paintwork and décor.

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

14.4 The claim to warranty/ guarantee expires

In the following cases, the claim to warranty/ guarantee expires:

- In case of changes to the Cargo 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 attachment 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 2.1 "Use your Cargo Hybrid as intended").
 - which are due to the fact that you have not used original specified parts or spare parts approved by CUBE when replacing components/parts.

Inspections/service plan 15

Have your **specialist bicycle dealer regularly** inspect your Cargo Hybrid and

- I carry out the necessary service work at the intervals specified here.

Type of inspection/	Intervals:		
service work	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 the brake pads/ brake blocks	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	
Inspection of rear end bearing with fully spring- loaded frame, including inspection/regreasing of the needle bearing on the shock absorber (if available)Every 500 km or 1x per yearExchange of handlebars and handlebar stemAfter an accident/fall (see chapter 9 "After a fall or accident")As specified by the compo- nent manufacturer or at least every 5 years		Every 250 km or every 2 months	
		After an accident/fall (see chapter 9 "After a fall or accident") As specified by the component manufacturer or at least every 2 years	

16 Handover checklist

Check of assembly

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\bigcirc	Proper assembly according to the Cube assembly instructions for the Cargo Hybrid.	(\bigcirc	Basic functions and tightness of the front fork.
Check of the brakes:				Basic functions and tightness of the shock absorber;
\bigcirc	Brake cable laying.	(Adjustment / smooth running of the control
\bigcirc	Check of the brake cables.			head bearing; checking of all fixing bolts of the chassis components.
\bigcirc	Adjustment of the brake pads.	(\bigcirc	Check all screw connections of the rear end.
\bigcirc	Visual leakage test for hydraulic brake systems.	C	heck	of miscellaneous systems:
\bigcirc	Check of all fixing screws of the brake system.	(\bigcirc	Adjustment and tight fit of handlebars and stem, tight fit of crank and pedals.
\bigcirc	Function and effect of front and rear brakes.	(\bigcirc	Adjustment and tightness of seat and seat post tightness of the handles.
Chec	k of the gearshift:	(\bigcirc	Firm fit of the chain assembly rivet.
\bigcirc	Hub cable and shift cable laying.	(\bigcirc	Function of the lighting (if available).
\bigcirc	Adjustment of shifters or shift grips.	(\bigcirc	Adjustment and tight fit of rear carrier, mud guards and kickstand (if fitted).
\bigcirc	Adjusting the end stops (front derailleur/rear derailleur).	(\bigcirc	Assembly and tight fit of other attachments.
\bigcirc	Adjustment of the cable tension.	c	On de	livery of the Cargo Hybrid:
\bigcirc	Function and smooth running of the gearshift.	($\overline{)}$	The object of purchase was handed over completely and in perfect condition, inclu-
\bigcirc	Check of all fixing screws of the gear system.			ding operating instructions.
Check of the wheels:		(\bigcirc	A verbal instruction on fault-free use, in par- ticular on the running-in instructions for disc brakes – if available – has taken place.
\bigcirc	Concentricity and central centring of the rim; concentricity and seat of the rim.	(\bigcirc	Attention has been drawn to compliance with the relevant instructions in the operating
\bigcirc	Check the spoke tension; air/tyre pressure.		0	instructions.
\bigcirc	Correct installation and tight fit of the wheels.	(\bigcirc	Reference was made to the warranty conditions in the original CUBE operating instructions.
After working through the positions please tick off!				
Notes:				

Check of the chassis:

Signature of seller

Signature of buyer (for young people under 18 years of age, signature of legal guardian)