

chike

the cargobike

Operating Instructions



1st edition, 2017, english version

©2017 chike GmbH & Co.KG Printing errors, mistakes and technical changes reserved

All product names mentioned in this manual are trademarks or registered trademarks of the respective title holder.

The current version of this manual can be downloaded for personal use in pdf format on <http://chike.de>

Printed on chlorine-free paper

Structure of manual

General information	p.1
----------------------------	------------

Before the first ride	p.5
------------------------------	------------

Before every ride	p.11
--------------------------	-------------

After the last ride	p.15
----------------------------	-------------

Operation	p.17
------------------	-------------

Care and Maintenance	p.29
-----------------------------	-------------

Appendix	p.45
-----------------	-------------

A

B

C

D

E

F

G

Contents

A. General information

chike	1
chike kids	1
chike cargo	1
About this manual	1
Riding on public roads (Germany)	2
Permissible loads	3
Intended Use	3



B. Before the first ride

Adjusting the riding position	5
Learning how to ride	6
For first owner	8





C. Before every ride




Visual and functional checks	11
Loading	12

D. After the last ride

Battery 	15
Frame and bicycle components 	15




E. Operation

Brakes	17
Tilt lock	18
Gear shift 	19
Gear shift 	19
Cabin 	20
Adjusting the belt system	20
Buckling up of the children	20
Closing the cabin	20
Load platform 	21
Load distribution and securing	21
Wall	21
Systainer mounting system	21
Euroboxes for frame mount	22
Assembly	22
Attaching the boxes	22
Detaching the boxes	22


Stem	22
Electric drive system 	23
Components	23
Attach and detach the cycle computer	23
Power on the drive system	24
Charging the battery	25
Assist level	26
Gear shift	26
Walk assist mode	26
Traveling range	26
Light system 	27
Light system 	27
Miscellaneous topics	27
Fenders	27

I I

F. Care and Maintenance

Braking system	29
Gear shift	30
Chassis	31
Wheels	34
Cabin 	34
Transport platform 	35
Chain	35
Lighting system	37
Wear parts	37
Spare parts	37
Cleaning	37
Pedelec variant 	38
Maintenance list	39
chike -pass	41
Inspection verification	42

G. Appendix

Tightening torques of certain screws	45
Technical specifications	46
EC Declaration of Conformity 	48



General information



chike is a cutting edge compact cargo bike for which driving pleasure, safety and useful features are the first priorities. The innovative design makes optimum use of the available space. With a length of less than 2m and a width of only 73cm, chike easily fits on narrow cycle paths and passes all standard doors. Nevertheless, it offers a lot of space for anything you want to transport. The tilting suspension technology makes the chike extremely agile which is a great benefit, especially in narrow down town areas.

chike kids

Whether for the daily trip to the kindergarten, going shopping with your children or the weekend excursion into nature, chike kids is the ideal companion for you and your family! Despite its small overall width of just 73 cm, chike's seat width of 70 cm offers enough space for two larger children without having to fight for every inch.

The cabin made of Cordura fabric protects in any weather. Through the large windows your children have a great panoramic view. And through the small window in the roof, you always have them in view. The five-point belts offer maximum safety and can be used flexibly for a child in the middle or two children

next to each other.

chike cargo

Whether for business needs or private use, chike cargo carries you and your goods quickly to any destination. Without a car. And also the annoying search for parking space is avoided. Despite its compact outer dimensions, chike has a large loading capacity. With a length of 90 cm and a width of 72 cm, the transport platform offers plenty of space for everything you can imagine to transport. Embedded into the platform, airline rails serve as a fixing point for straps to easily and securely fix your freight. With the help of optional walls the transport platform is quickly transformed into a transport box with a height of 35 cm and a loading capacity of about 200 litres.

Thanks to its modular design, you can easily convert your chike at a later time. Whether from kids to cargo or vice versa, chike adapts to your changing life situation.

About this manual

The present operating instructions ensures, that you are able to handle your chike in a safe way. It was created with the utmost care and handles all relevant topics. Be sure that you also received a copy of the more specific instruction

manuals for brakes, shifters and drive system released by the respective component manufacturers. Please also carefully read these additional manuals as they explain the operation and maintenance of the respective components in detail.

If there are any further questions after reading this manual or there is an issue that is not covered in this manual, please feel free to contact your local dealer where you purchased your **chike**.

Please note the following points:

➔ Read these operating instructions carefully before using your **chike** for the first time. Due to the innovative technology of **chike**, even experienced bicycle enthusiasts will find important new information in this manual.

➔ Different sections of this manual are specific to certain model variants of **chike**. These sections are marked as follows:

: Pedelec version only

: Non-electrical version only

: Kids version only

: Cargo version only

It is sufficient to only read the sections relevant to your variant.

➔ Keep these operating instructions in a safe place in order to have them at hand if needed.

➔ Provide these operating instructions to every user of your **chike**.

➔ Use section *Inspection verification* on page 42 to document the services carried out.

➔ If you resell your **chike**, please include these operating instructions.

➔ For damages which occur because these operating instructions were not respected, **chike GmbH & Co.KG** will not assume liability.

➔ The latest version of this manual can be found on the Internet at <http://chike.de> in the download area.

In order to quickly identify important information and potential dangers, these are labeled in the text as follows:



chike.

This symbol highlights a useful hint that to profit even more from your



chike or may cause minor injuries.

This symbol marks a warning. Ignoring this warning may damage your



severe damage to your **chike** and serious injury or death to the driver and passengers.

This symbol describes a danger. Ignoring this instruction can result in

Riding on public roads (Germany)

While the pedelec variant is equipped with a permanently mounted StVZO¹-compliant lighting system powered by the motor battery, the non-motorized version is delivered without a lighting system. To be allowed to use your non-motorized **chike** on public roads even

in the dark, you have to equip it with a lighting system. We recommend a battery powered headlamp and a battery powered tail light. Your dealer, where you bought your chike, will be pleased to help you in this regard.



The electrically assisted version of your chike conforms to the European pedelec norm EN 15194 (average engine power <250W, maximum assistance speed 25 km / h) and may therefore be used like a normal bicycle without insurance, driving license in countries belonging to the EU (EU directive 2002/24/EC). It may be ridden on public roads according to the traffic rules applicable to bicycles. Nevertheless please check, whether there are additional restrictions applying to your specific country. Your chike dealer will assist you in this regard



Even if it is not obligatory to wear a helmet, we nevertheless recommend that you always wear a helmet for your own safety when riding your chike.

Permissible loads

Your chike is designed for the following maximum payloads:

maximum total weight	200kg
Payload cabin 	60kg
Payload transport box 	80kg
maximum rider weight	100kg
Payload Euro box	12kg ¹
tare weight	from 30kg ²

Please note that if permitted payload and permitted driver weight are maxed out, the permissible total weight would be exceeded. Such a loading scenario is therefore not allowed!



Exceeding the permitted payloads can damage your chike and cause serious accidents. In addition to the individual load limits, always respect the permissible total weight!

Intended Use

chike cargo bikes are designed for use on roads or paved roads. Driving on rough terrain, driving on stairs or driving over high curbs can cause severe damage to your chike.

In the kids version, your chike is designed to carry a maximum of two children.

Make sure that the transported children or loads are always properly secured.

In particular, make sure that your children do not come into contact with moving parts of your chike while riding.

Never leave your children unattended in your chike kids.

The seating system of your chike kids is suitable for children who are able to sit upright unaided. Due to the suspension and the tilt chassis, the forces acting on the transported children are generally small compared to transporting them in a child trailer. chike can be retrofitted with the baby supporters of common child trailer manufacturers, so that even smaller children are seated safely and

¹ each right and left

² depending on features

comfortably. Likewise, chike offers a mounting adapter for MaxiCosi baby carriers. If you have doubts about whether your toddler can already be transported in chike, please seek the advice of your pediatrician.

Make sure that your children are appropriately dressed to temperature and feel comfortable during the ride.

Before each trip, make sure that you do not exceed the maximum payload and the maximum total weight (see section *Permissible loads* p.3) .

When using your chike on public roads, be sure to comply with all legal obligations to be fulfilled.

Using your chike in poor visibility or in the dark requires the use of an approved lighting system.

Do not make any modifications to your chike. Use only original replacement parts and accessories.

All usage and maintenance instructions described in this operating manual are part of the intended use.

chike GmbH & Co. KG assumes no liability or warranty if you use your chike in any other way than its intended use.

B

Before the first ride

Having received your **chike**, you will undoubtedly be eager to try it out. Before you go on public roads with your **chike**, however, you should first become familiar with its driving characteristics. On the one hand, your **chike** has a higher weight than a common bicycle. On the other hand you have to get used to sitting on a tricycle, which nevertheless tilts and thus has the driving dynamics of a two wheeled bicycle. Like a bike, you have to balance your **chike** in order to not roll over. After a few minutes you get used to the new exciting driving experience and will not want to go back to your old bike.

If you respect the following tips and guidelines, you will enjoy using your **chike** and it will greatly simplify your everyday life!



Please do not make your first riding attempts on frequented public roads in order to avoid endangering yourself and other road users. Do not transport children in your **chike** until you feel completely safe riding your **chike**.

Adjusting the riding position

The right seating position is crucial for a fatigue-free and efficient riding. The seating position of your **chike** is set

up by adjusting the saddle height and handlebar position. The saddle height is adjustable by means of a quick-release seat clamp. To adjust the stem, you need a suitable Allen key. For stability reasons a quick-release adjustable stem was not an option. The various adjustments are explained in more detail below.



Before riding your **chike**, make sure that the quick release seat clamp and the bolts of the stem are properly tightened! Check the tight fit of the saddle and the handlebars!

➔ Adjusting the saddle position

To properly adjust the height of the saddle, put the right pedal into its lowest position, have a seat on the saddle and place the right heel on the right pedal. In this position your leg should be fully stretched. To adjust the saddle height, you must first loosen the quick release seat clamp. Then you can move the saddle to the desired height. Make sure that the seat post is not pulled out too far. There is a marking on the seat post, which must not be visible but disappear inside the seat tube of the frame. If there is no marking, the seat post must be at inserted into the seat tube at least 10 centimetres. After adjusting the seat height, always check the tightness of the seat post by trying to twist the saddle. If it twists, the seat post clamp has to be closed more tightly. If the seat post is difficult to move in the seat tube when the quick release is open, first try to

clean the seat post and seat tube. If this does not solve the problem, do not use brute force, but contact your dealer.



The seat post must be inserted at least to the marking or 10cm into the seat tube and the quick release seat clamp must be firmly closed. Otherwise, the seat post or the seat tube may break.



Do not attach luggage racks or panniers to your seat post or seat tube as they are not designed for this purpose and could break in extreme cases.

→ Adjusting the handlebar position

Your chike is equipped with an angle-adjustable stem. By changing the stem angle, the distance between the saddle and the handlebar can be adjusted (see section *Stem* p.22). The factory-set handlebar position should suit most drivers. Not all possible positions are permissible: adjusting the stem too much to the front, may cause the handlebars to collide with the cabin.



After each adjustment of the handlebars, please check that they have enough clearance. Make sure that the handlebars can be turned to the left and right limit positions and that this does not cause the shifter cables and brake hoses to become pinched, kinked or stretched!

Learning how to ride

The riding style of chike rather corresponds to the balanced riding of a two-wheeled bicycle than to riding a non tilting tri-cycle. For your first tries, it is best to choose an extensive area without any obstacles until you learned to master your chike safely.

→ Starting to ride

When you park your chike you lock the tilting. This prevents chike from tipping over to the right or left hand side and thus corresponds in function to the side stand of a common bicycle. Likewise, the parking brake of the front wheels is activated. This will prevent chike from rolling off on sloping terrain when parked. To start riding first release the parking brake (see section *Brakes* p.17) and the tilt lock (see section *Tilt lock* p.18). Make sure that the tilting is indeed released by tilting your chike a little to the left and right.



Keep in mind, that your chike can tilt sideways and finally fall over if the tilt mechanism is not locked. When not riding, always try to hold your chike in an upright, balanced position. Otherwise higher forces may be required to restore its upright position, especially when loaded.

To start riding, put one pedal in forward position and place the corresponding foot onto it. Then push off with the other foot on the ground, to gain some speed. Finally put the second foot on the pedal and accelerate by pedaling. As with a normal two-wheeled bike you need

a certain speed to balance your **chike**. The higher the speed, the easier it will be to balance. Nevertheless, you should make your first driving attempts within a moderate speed range.

➔ Stopping

Keep in mind that **chike** tilts sideways and therefore needs to be balanced like a two wheeled bicycle. To stabilize the upright position of your **chike** when stopping put one or both feet from the pedals and place them on the ground. If you stop for a long time, it may be advantageous to block the tilt mechanism (see section *Tilt lock* p.18). To do this, your **chike** must be in an upright position. With the tilt lock engaged, you no longer have to actively balance your **chike**. However, be sure to release the tilt lock before starting to ride again.

➔ Braking

Your **chike** is equipped with high quality hydraulic disc brakes. Please check the correct functioning of the brakes before each ride. The two front brakes are operated simultaneously with the left brake lever, the rear brake is operated with the right brake lever. Familiarize yourself with this mapping. Further information about the braking system can be found in section *Brakes* p.17 and section *Braking system* p.29.



The braking power of the disc brakes on your **chike** might be much higher than you are used to from your previous bicycles. Therefore please carefully test the brakes of your **chike** before the first ride!



Please note that unfavourable ground conditions (wetness, slipperiness, gravel, sand, ...) as well as high loading can significantly increase the braking distance!



During the braking process, the discs and callipers heat up. Do not touch the hot parts because this can lead to severe burns.

➔ Parking

To park your **chike**, lock the tilt mechanism (see section *Tilt lock* p.18) and engage the parking brake (see section *Brakes* p.17). By doing this your **chike** can neither fall over nor roll away. If possible, put your **chike** in a place where it is protected from rain and weather. Secure your **chike** with a high-quality bicycle lock to achieve the greatest possible protection against theft.

➔ Parking

In addition, remove the central display unit from your **chike** (see section *Attach and detach the cycle computer* p.23). This prevents the use of the electric drive by unauthorized persons and the display unit from being stolen.

➔ Carrying children

Your **chike** is designed to carry one or two children. In order for these to be transported safely, the following rules must be observed

- Always buckle up your children with the supplied seat belt system (see section *Buckling up of the children* p.20).

- Make sure to load your **chike** such that it is optimally balanced: if you only have one child with you, use the middle seat, with two children use the right and left seats. The necessary repositioning of the seat belt straps is quick and easy (see section *Adjusting the belt system* p.20)

➔ **Carrying loads**

The cargo version of your **chike** is equipped with a load platform that offers various load attachment options. Take advantage of these possibilities and secure the transported objects against slipping or falling. The shift of the center of gravity caused by slipping of the load can lead to critical driving situations. Store heavy objects as far back as possible on the transport platform. When distributing the load, make sure that your **chike** is balanced as well as possible.

➔ **Riding without load or children**

If you do not carry any loads with your **chike** the front wheels are relatively lightly loaded. As a result, when cornering fast, your **chike** tends to understeer. In extreme cases, the front wheels lose grip which can lead to a loss of control. In the unloaded state, drive carefully and cautiously approach the possible cornering speeds.

➔ **Passing curbs and stairs**

If you push your **chike** over very high curbs or steps, it may happen that the lower end of the steering tube hits the curb. This should absolutely be avoided as the steering tube is not designed for such impacts. The more loaded your **chike**, the more critical it is.

Common curbs (up to approx. 14cm) can be easily passed by your **chike**. However high curbs at bus and tram stops as well several steps in a row (stairs) are more critical. In the latter case, not only the lower end of the steering tube but also the down tube may collide with the upper edge of the staircase. Therefore, carefully approach the maximum step height that can be passed without collision. If you have to pass very high obstacles, such as stairs in the hallway, it is helpful to increase the ground clearance by lifting the rear wheel.



Never drive hands-free and always hold the handlebar with both hands if possible.

Otherwise even small obstacles and bumps can in extreme cases lead to a loss of control and to serious accidents.

For first owner

Please observe the following measures in order to enjoy your **chike** for a long time.

➔ **Preparing the brakes**

To ensure that the brand-new brake pads can take full effect, they must be initially prepared. For this purpose, some full emergency braking operations must be performed. The exact procedure is described in section *Braking system* p.30. Please follow these instructions to ensure that the maximum braking power is available in any dangerous situations right from the start.

➔ **Retightening the bolts**

Due to the loads and movements during driving, it may happen that some screws of your newly assembled chike settle and loosen. Your dealer will check all bolts within the first inspection and will retighten them with the correct torque if necessary. Be sure to seize this opportunity and have the inspection documented in your inspection certificates, p. 42. In later operation, the screws usually do not loosen anymore.

Before every ride

Visual and functional checks

Before each ride take a short time for a visual and functional checks of your chike. This will prevent you from using it in an unsafe condition.



Many parts of your chike are subject to heavy strains and wear and tear. Any kind of cracks, grooves or color changes in highly stressed areas indicate that the component is damaged and should be replaced.

➔ Brake system

Are the brake hoses not pinched or bent?

Are there no leaks on the brake hoses?

Check the brakes by pressing the brake levers. Even at full force it should not be possible to pull the brake levers all the way to the handlebar! With the brake levers pulled, the rotation of the wheels of your chike should be completely locked! Check this by pulling your chike forwards and backwards!

➔ Tire pressure

Is the tire pressure of the front and rear wheels sufficient?



Operating your chike at too low tire pressure can lead to unsafe handling and may damage the tires of your chike.

➔ Wheels

Are the front and rear wheels tightly fixed to the frame?

Are there no cracked or loose spokes?

Are the tires undamaged and have enough profile?

➔ Seat post

Is the seat post inserted into the seat tube at least to the mark, or at least 10centimetres?

Is the quick release on the seat tube sufficiently tightened such that the saddle does not rotate when a force is applied?

➔ Stem

Are the screws which fix the angle of the stem correctly tightened?

Is the stem adjusted in a way that there is enough clearance for your steering movements? Check this by turning the handlebars to the right and left steering limit (see also section Stem p.22)!

➔ Tilt lock

Do all positions of the tilt-lock grip shift work properly?



Be sure to release the tilt lock before driving!

Driving with a blocked

tilting mechanism can damage your **chîke** and will lead to uncontrollable driving behaviour resulting in serious accidents!

➔ Screw connections

Make sure all screws are properly tightened. Noise or unusual driving behaviour may indicate loose screws .

In the early stage after assembly, it is possible that screw connections still loosen. Your dealer will check this within the first inspection and tighten the screws to the correct tightening torques if necessary. Afterwards the screws should not loosen . If this happens anyhow, please have the reason checked by your dealer!



Loosened or insufficiently tightened screws can damage your **chîke** and cause serious accidents!

➔ Frame and chassis

Make sure that all frame and chassis parts have no visible damage such as cracks or bumps! If you notice any damage, let your dealer check and repair your **chîke** before using it again.



Damaged components can suddenly fail during your ride and thus lead to serious accidents!

➔ Cabin

Is the fabric of the cabin undamaged?

Is the belt system properly fixed to the

cabin? Do the straps show no signs of damage or wear?

Loading

The correct loading is a basis for a comfortable and safe handling. On the one hand the load securing is important. On the other hand, care must be taken to distribute children and loads as even as possible, so that the **chîke** does not tilt too much on one side.



A maximum of two children may be carried. Children must always be strapped and wear a bicycle helmet. The carried children must not be older than 7 years.



Pay attention to a symmetrical distribution of the loads. When transporting a single child, it should be strapped in the middle position.



When transporting loads they must be secured by straps or the like so that they remain in place in the case of extreme driving situations, such as an emergency braking.



The use of additional transport devices, such as rear wheel carriers or child seats is not permitted unless explicitly approved by chike .



Respect the maximum payloads, see section *Permissible loads* on page 3

Your chike has been designed to last for a long time. With good care it will accompany your life for many years to come. Nevertheless, the time will come when a repair is no longer possible or does not make sense from an economical or ecological point of view. Then your chike must be decommissioned and properly disposed of, so that the raw materials used can be returned to the resource cycle.

Battery

Disused batteries must be collected separately in accordance with European Directive 2006/66 / EC and recycled in an environmentally sound manner. Your chike dealer will help you with the proper disposal of your battery.



Never discard the battery of your pedelec chike into the household waste.



To ship the battery by post parcel is usually not allowed! If in doubt, ask your shipping service provider!

Frame and bicycle components

According to EU Directive 2012/19 / EU, unusable electrical and electronic equipment must be recycled in an environmentally sound manner. This includes the electronic components as well as the drive unit of your chike . Likewise, this directive also applies to the battery charger. In Germany, you can pass your chike at the end of its life span free of charge to an appropriate municipal collection point, where it is properly disposed.

This chapter describes in detail how to operate and use the various parts of your chike .

Brakes

chike is equipped with high quality hydraulic disc brakes on all three wheels. The right and left front disc brakes are operated together with the brake lever on the left hand side of the handlebar (see fig. 1, p. 17). The front disc brakes have a locking function. To activate



Figure 1. : Parking brake

①: Brake lever ②: Locking lever

the parking brake pull the brake lever ① as far as possible to the handlebars. Then pull the locking lever ② outwards. Check that the front wheels are actually locked by pushing your chike forward and backward.



Always activate the parking brake when parking your chike . Otherwise, it might unintentionally roll away on sloping ground and subsequently cause accidents and damage.

To release the parking brake, first pull the brake lever ① as far as possible to the handlebar. This relieves the locking lever ② so that it can be pushed back inwards with relatively little force.

The rear disc brake is operated with the brake lever on the right hand side of the handlebar.



The most powerful braking effect is achieved by the front brakes. For this reason the front brakes should be use with preference! However, avoid locking up the front wheels as this will make you loose control over your chike and may lead to accidents.



On very long steep descents with high load, your brakes can overheat due to the permanently applied high braking power. Overheating can lead to a sudden total of the brakes. To prevent overheating, do not let the brakes grind permanently, but brake in intervals. Make stopovers to allow the brakes to cool down.

Tilt lock


Your **chike** comes with a tilt adjustment system that has three levels of tilt control. The levels can be selected using the grip shift lever on the left side of the handlebar (see fig. 2, p. 18). The grip shift lever has 7 or 8 indexed positions, however only three of which have a function assigned to. The intermediate non functional shifting positions are indicated by the symbol . This symbol may only be shortly visible while changing the tilt adjustment levels. Changing the



Figure 2. : Grip shift tilt lock

various tilt control levels is only possible if **chike** is oriented perpendicular to the ground (see fig. 3, p. 18). If for example the ground is sloping to the left hand side, please tilt your **chike** to the left hand side as well in order to change the tilt control levels.



Before changing tilt control levels, orient your **chike** perpendicular to the ground. Otherwise it is impossible to change the tilt control levels.

If you experience a high resistance when trying to twist the grip shift lever in order to change the tilt control level, most probably your **chike** is not properly oriented. Do not apply brute force to the grip shift lever, but try to find the proper orientation of your **chike** by slightly tilting it to the right and left, simultaneously applying a moderate twisting force to the grip shift lever. High actuating forces may reduce the life time of the grip shift lever or even lead to damage



Figure 3. : Perpendicular orientation to change tilt control levels.

《》 completely free tilting. **chike** can be tilted without any aligning torque up to its maximum tilt angle (around $\pm 21^\circ$). This tilt control level mostly corresponds to the riding characteristics of a common two wheeled bicycle.

《》 Using this tilt control level, **chike** is still able to tilt around 21° to each side, however with increasing tilt angle you will experience an increasing aligning torque, which pushes **chike** into its upright position. This level is especially suited when transporting high loads with **chike**. Some people may also find it more easy to do their first riding attempts on **chike** using this level. The choice between completely free tilting and tilting with

alignment torque is often purely a matter of taste.

P locks the tilting mechanism in the upright position. This level is intended for wheeling or parking your chike . It is also helpful for longer stops, e.g. at traffic lights, as you no longer have to actively balance out your chike when the tilting is locked. To park your chike , switch the tilt control level to **P** and engage the parking brake (see section *Brakes* p.17)



Never ride with engaged tilting lock out (Level **P).** If the tilting is locked, it is no longer possible, to safely turn into corners . More over, riding with locked tilting mechanism may damage the frame and suspension. Before starting to ride, please check, that the tilting is not locked by slightly tilting your chike to both sides.

Gear shift

Your chike is equipped with an 8-speed internally geared hub by Shimano. Changing gears is done with the RapidFire lever located on the ride hand side of the handlebar.

To change to a higher gear press the lever which is facing to you with your thumb.

To change to a lower gear pull the lever which is facing away from you with your index finger.

Gear shift

The pedelec version of your chike is equipped with a electrically operated DI2 8-gear internally geared hub by Shimano. Shifting gears is done with the switch at the right hand side of the handlebar ⑤, fig. 8, p. 24 and fig. 4, p. 19. There are two gear shifting modes, *automatic shifting* and *manual shifting*. To change between automatic and manual shifting, press the button ①. The chosen mode is shown in the central display. In mode *automatic* the proper gear is chosen automatically based on various parameters like speed and cadence. In mode *manual* the gears are chosen by the rider. Also in automatic mode, you can shift to a higher or lower gear manually. To choose a lower gear press the button ③, to choose a higher gear, press the button ②.

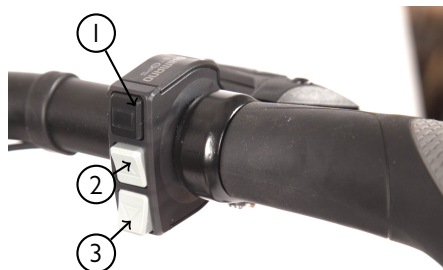


Figure 4. : Switching Gears Shimano STEPS Di2

- ①: Mode switch
- ②: Switch up-shift
- ③: Switch down-shift

Cabin

The cabin of the kids version is designed and optimized to carry children. However, it is also possible to transport shopping bags or beverage crates in the footwell. In that case, appropriately secure the load against unintended movements.

Adjusting the belt system

In order to have optimal driving characteristics a balanced load distribution is important. Therefore, when transporting a single child, please use the central seating position. The cabin is equipped with a five point harness. The various straps are attached to the cabin by quick release buckles. Use these buckles to adjust the harness from the central position (one child) to the left and right position (two children).

Buckling up of the children

First you have to adapt the shoulder straps to the height of your child. To this end move the upper buckles of the shoulder straps into a position approximately 3cm above the shoulder of your sitting child. Next, position the 3 point buckle between the legs of your child and attach the corresponding buckles of the shoulder straps to it. Then tighten the shoulder straps. Finally put the waist belt around the waist of your child, close the buckles and tighten the belt.

Closing the cabin The cabin is closed by pulling the left and right zip all the way down. Then the lower part of the top is fixed to the cabin by clipping the rubber straps over the corresponding



Figure 5. : Harness for one child



Figure 6. : Harness for two children

pins. The top is equipped with an elastic window and a fly screen. In good weather you can open the window separately and fix in in a convoluted state to the top.



When transporting children at least the fly screen has to be always closed when riding in order to avoid stirred up small objects to harm your children's eyes.

Load platform

The cargo version of **chike** provides a platform, large enough to transport four Euro-boxes of size 30cmx40cm or two Euro-boxes of size 30cmx40cm and one Euro-box of size 60cmx40cm, respectively. In order to securely attach your load to the platform, it is equipped with three Airline rails, which serve to mount various fastening elements. An easy to mount wall is also available, transforming the platform into a box of size 90cm x 70cm. Finally there are fixation elements to easily place and fix Systainers onto the platform.

Load distribution and securing

In order to have the most easily controllable handling it is important to place heavy loads as centred as possible and as far back on the platform as possible. Additionally, care has to be taken to properly fix the loads onto the platform or inside the box. To this end use straps fixed to the Airline rails.



Never transport children or adult persons on the cargo platform. It is not intended for this purpose.

Wall To transport loose items, like shopping bags, a wall is available, which is easy to mount without any tools. The wall is attached to the platform by performing the following steps:

- ➔ First make sure that all four door bolts embedded into the platform are in open position.
- ➔ Then position the front and rear wall with the coarse side facing inwards into the grooves on the front and rear side of the platform. Try to position the walls as centred as possible.
- ➔ Next position the left side wall with the rough side facing inwards into the respective groove on the platform. Keep the wall slightly tilted outwards on the upper side and pay attention that the hooks of the front and rear wall slide into the respective recesses of the side wall.
- ➔ Push down the side wall as far as possible and close both door bolts on the left hand side.
- ➔ Mounting the right side wall is done in the same way .

Systainer mounting system

Systainers can be easily attached to the platform with the help of some plastic fasteners. These fasteners are plugged into the respective holes on the transport platform and prevent the Systainers from sliding on the platform.

To finally fix the Systainers, they are tightened onto the platform with straps attached to the Airline rails.

Euroboxes for frame mount

The optionally available Euroboxes of size 300mm x 400mm x 270mm provide additional storage space of about 50l. To use the boxes mounting bolts have to be mounted to the frame. The Euroboxes are then attached to your **chike** with an easy to use toolless quick fix system.

Assembly In case you ordered the Euroboxes together with your **chike** the mounting bolts are already installed. However, if you order the boxes afterwards, please respect the installation instructions which are provided with the boxes.

Attaching the boxes Move the boxes sideways to the frame such that the recesses of the mounting rails on the box match the mounting bolts attached to the frame. Then slightly press the box against the frame and move it forward (in direction of riding, until the locking plate snaps into place. Check that the box is securely fixed by pushing it backwards.

Please observe, that the right and left box are different. The locking plate always has to point to the rear.

Detaching the boxes Pull the locking plate as far as possible outwards (towards the box) and push the box forward (in direction of riding) until it is released and can be moved away from

the frame.

Stem

Your **chike** has an angle-adjustable stem.

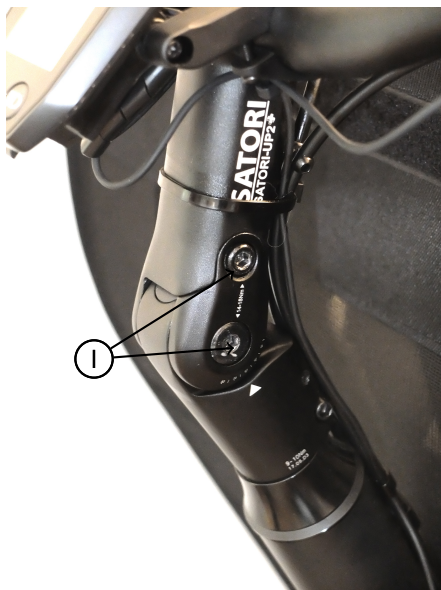


Figure 7. : Stem

- ①: Bolts angle adjustment
- ②: Bolts handlebar clamp bracket

Loosen the angle-adjustment bolts ① two to three turns to adjust the angle of the stem. This allows to adapt the distance between saddle and handlebars to your needs. Finally tighten the bolts ① with a torque of 14-15 Nm.

Changing the angle of the stem in generally also requires to rotate the handlebars. To this end loosen the bolts of the handlebar clamp bracket ② and rotate the handlebars to the desired position. Take care that the handlebars are centered and that the clamping bracket of the stem is positioned in the clamping area of the handlebars. Then tighten the bolts ② with a torque of 5-6 Nm.

After adjusting the stem and handlebars make sure that the handlebars can be turned to the right and left steering limit (about 40° in each direction). To this end place your hands on the handlebar grips and put your fingers around the brake levers. This way you make sure that in all steering positions, there is enough clearance for your hands. Please also check, that in all steering positions the brake hoses, shift cables and electric wires (pedelec version) are neither kinked nor stressed nor clamped.

Electric drive system

The pedelec version of chike is equipped with the electric drive system STEPS by Shimano. The motor has a power of 250 Watt and assists you when pedalling up to a maximum speed of 25 km/h.

The internal gear hub of your pedelec chike is electrically shifted. the following

sections provide a short overview of the electric drive system.



Please also carefully read the original instructions of your Shimano STEPS E6000 drive system which are provided with your chike. They provide you the necessary information to safely use your pedelec- chike.

Components The electric drive system consists of several components (fig. 8, p. 24).

The **drive unit** or motor is a so called mid-mount motor (②, fig. 8, p. 24). It is positioned at the crank set.

The **cycle computer** (③, fig. 8, p. 24 and fig. 9, p. 25) is located in the centre of the handlebars at the stem. It displays various information like speed, remaining battery range etc. and serves to switch on the electric system as well as the lighting

The **battery** (①, fig. 8, p. 24 and fig. 10, p. 25) is mounted on the down tube.

There are two **switches** (④ and ⑤, fig. 8, p. 24 and fig. 11, p. 25) located at the right and left hand side of the handlebars. With the switch on the left hand side you can choose the assist level and change the display mode. The switch on the right hand side is used to shift gears and to switch between manual gear shift mode and automatic gear shift mode.

Attach and detach the cycle computer To attach the cycle computer slide it backwards onto the



Figure 8. : Pedelec components

- | | | |
|---------------------------|----------------------|--------------------------|
| ①: Battery | ④: Assist switch | ⑦: Motor unit Alfine Di2 |
| ②: Mid-mounted drive unit | ⑤: Gear shift switch | |
| ③: cycle computer | ⑥: Speed sensor | |

bracket until it snaps in. To detach the cycle computer slightly push the release lever ①, fig. 12, p. 25 downwards and then shift the display forward until it is released from the bracket.

keep pressing it for about 2 seconds. Alternatively, the system can be switched on and off in the same way using button ③, fig. 10, p. 25 located on the battery ①, fig. 8, p. 24.

Power on the drive system

To switch the drive system on and off, press the button ①, fig. 9, p. 25 on the cycle computer ③, fig. 8, p. 24 and



Figure 9. : Cycle computer

- ①: Power switch ③: Display area
- ②: Light switch



Figure 10. : Battery

- ①: Charge connector ③: Power button
- ②: Locking ④: Battery level indication



Do not apply any torque to the crank shaft when powering on the drive system. Otherwise the motor may start to run, which most probably is not desired in this situation.



Figure 11. : Assist switch

- ①: Display mode
- ②: Increase assist level
- ③: Decrease assist level



Figure 12. : Attaching the cycle computer

- ①: Release lever

Charging the battery To charge the battery plug the charging cable of the included battery charger into the into the charging socket ①, fig. 10, p. 25 at the battery mount. If you do not have the opportunity to charge the battery attached to your chike, detach the battery. To this end put the provided key into the lock at the battery mount ②, fig. 10, p. 25. Turn the key counter clockwise as far as possible and slide the front end of the battery to the left until it is completely released.



Please write down the key number of the battery lock in the respective line

of your **chike** passport on page 41. The number is imprinted on the key. Having the number you can contact your dealer to apply for a replacement key in case of loss.

When detached from **chike** the battery can be charged using the battery charger with the supplied plug adapter. More details are provided in the original instructions provided by Shimano which came with your **chike**.



The used batteries store a lot of energy.

Observe all operating and warning instructions of the enclosed instructions of the battery manufacturer to avoid any danger. Pay particular attention to the instructions on the label of the supplied charger.

The battery has a battery level indication ④, fig. 10, p. 25 consisting of five lamps. When the system is powered on the lamps indicate the battery level. When the system is powered off or the battery is released first press the button ③, fig. 10, p. 25 to switch on the battery level indication

Battery level	Display
0-20%	○ ○ ○ ○ ○
20-40%	● ○ ○ ○ ○
40-60%	● ● ○ ○ ○
60-80%	● ● ● ○ ○
80-100%	● ● ● ● ○
100%	● ● ● ● ●

Various other flashing and lighting patterns indicate possible malfunction.

Details can be found in the enclosed instructions of the drive system.

Assist level The electric drive system provides four assist levels, *OFF*, *ECO*, *NORMAL* and *HIGH*. In mode *ECO* the pedalling support by the electric motor is lowest while in mode *HIGH* you get maximal support. In mode *OFF* the electric assistance is switched off, however the system is still running, i.e. the display shows information, the lights can be switched on and the electric gear shift is working. You can switch between the various assist levels using the buttons on the shift unit ④, fig. 8, p. 24 located at the left hand side of the handlebars. Pressing the button ②, fig. 11, p. 25 increases the assist mode, pressing button ③, fig. 11, p. 25 decreases the assist mode finally turning off the electric assistance.

Gear shift Shifting the gears is done with the shift unit ⑤, fig. 8, p. 24 located on the right hand side of the handlebars. Details can be found in section *Gear shift* ⑦ p. 19.

Walk assist mode To activate the walk assist mode, first turn off the electric assistance. (assist mode *OFF*). Then pressing the button ③, fig. 11, p. 25 for a few seconds activates the walk assist mode. In walk assist mode, pressing button ③, fig. 11, p. 25 turns on the motor, without having to apply a torque to the crank set, thus assisting you to walk your **chike** at low speeds. Pressing the button ②, fig. 11, p. 25 exits the walk assist mode.

Traveling range The traveling range of a fully charged battery depends on various factors:

decreased travelling range	increased travelling range
high total weight	low total weight
frequent decelerating and accelerating	steady speed
high assist level	low assist level
headwind	tailwind
Uneven or soft ground	paved road
hilly terrain	flat terrain
low temperatures	high temperatures
high speed	low speed

Due to the higher weight and drag of your **chike** compared to common bicycles the travelling ranges shown on the cycling computer are to be taken with care. In general, the actual achievable travelling range is below these indications.



Get familiar with the achievable travelling ranges of your **chike** during some shorter trips, such that you are not caught off guard by an empty battery on a long trip far away from home .

cycle computer ③, fig. 8, p. 24.

Light system

The non electric version of **chike** does not come with any light system as standard. In order to be allowed to use it in dark on public roads you have to install an appropriate light system. We recommend a battery powered front and tail light.

Miscellaneous topics

Fenders Your **chike** is equipped with front and rear fenders as standard. The front fenders are exposed to high forces due to the single sided mounting. Please do not attach any additional parts like lights to the fenders, as their weight will further increase the loads on the fenders, which finally may lead to failure of the fender stays.

Light system

The pedelec version of **chike** is equipped with a high quality light system, consisting of a front light, a tail light and a rear reflector. It is in accordance with German legal traffic regulation. To turn the light system on and off press the button ②, fig. 9, p. 25 locate on the

To keep your **chike** in perfect condition, some care and maintenance is necessary. This will guarantee a safe and long-lasting usage and preserves the joy of using your **chike** for many years .



Only carry out maintenance work for which you have the necessary tools and expertise! If in doubt, have the maintenance carried out by your **chike** dealer!



Before carrying out any maintenance work, always remove the battery first, unless it is explicitly required for the maintenance work carried out!



If you manipulate the electrical system, your **chike** will no longer be safe to use. Using your **chike** with manipulated electric controls on public roads might be a criminal offence.

brakes regularly for wear. If the wear limit is reached, the brake pads and, if necessary, the brake disc must be replaced immediately. In particular, if you observe a decreasing braking power or scratching noise when braking, the brake pads must be checked and renewed if necessary. Depending on the load and driving style, the disc brakes wear off at different rates. Therefore, no general rule can be given after which distance a control and/or replacements should be carried out. It is better to check the condition of the brake pads more often than too rarely.



Falling below the wear limit can lead to total failure of your brake system.



Be sure to read the operating instructions provided by the brake manufacturer! If the operating instructions are not available, contact your dealer.

➔ Changing brake pads

For changing the brake pads, follow the instructions of the brake manufacturer.



Only use original spare parts from the brake manufacturer. If in doubt, let your dealer service the brakes of your **chike** .

Braking system

The brakes are subjected to heavy friction during each braking process. This causes signs of wear both on the brake pads and on the brake discs. Check the

➔ Changing brake disk

If the wear limit of the brake disc has been reached, please contact your dealer. He will professionally replace the brake discs.



More extensive maintenance work on your brake system should only be carried out by qualified persons. Improper maintenance can cause leaks or trapped air, which can lead to failure of the brake system.

➔ Bleeding the brake

If your brake no longer has a defined pressure point and feels spongy, there may be air in the hydraulic hoses. In that case the brake has to be bled. The exact procedure of bleeding is described in the instructions of the brake manufacturer. As properly bleeding the brakes requires some experience, it is best to ask your dealer to do this.



When servicing and cleaning your **chike**, make sure that no cleaning agents or oil gets in contact with the brake discs or brake pads as this would strongly decrease the braking power or even lead to a total failure of the brakes.

➔ Initially preparing the brake

After replacing the brake pads or brake disc, the brake has to be initially prepared to regain full braking power. Proceed as follows: Drive slowly approx. 50m with slightly applied brakes. As a result, the temperature of the brake pads and brake disc are increased. Then accelerate to about 25km / h and

brake with maximum braking power to standstill. Make sure that you do not endanger yourself or other road users during this process. Perform this process up to 10 times consecutively. After a few braking manoeuvres you should notice a significant improvement of the braking power.



Do not change the route of the hydraulic hoses of your brake system.

Incorrect routing may cause the hydraulic lines to be pinched or stretched, which can lead to leaks and failure of the brake system.



Regularly check the brake lines for kinks or leaks.

Damaged or broken brake lines can lead to a failure of the brake system and subsequently to serious accidents!



Never operate the brake levers with the wheels removed. As a result, the

brake pads would close and the brake disc can no longer be slid in the caliper.

Gear shift

Your **chike** is equipped with a Shimano Alfine 8-speed internal gear hub. A major advantage of the internal gear hub is the fact that the moving parts are encapsulated inside the hub and

thus protected from dirt. Compared to a derailleur system much of the maintenance tasks therefore are omitted. In the case of unprecise gear change, strange noise or slippage of the chain please let your dealer check the hub!



Carefully read the instruction manual by the manufacturer of the hub which was supplied with your chike .

➔ Adjusting the gears ⚙

Switch to 4th gear. In this gear, the two green markings ①, fig. 13, p. 31 on the hub must be aligned to each other. If this is not the case, turn the adjusting screw on the handle. Turning the adjusting screw clockwise moves the outer marking to the front, turning counterclockwise moves it to the rear.

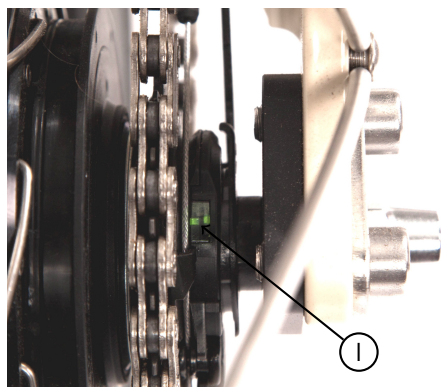


Figure 13. : Adjusting the Alfine 8 gear hub

①: Markings

➔ Maintenance

Larger maintenance work on the hub should be done exclusively by your dealer or a trained person.

Chassis

➔ Checking the toe angle

The toe angle is set correctly when the two front wheels are parallel and in forward direction when steering forward. If the toe angle is set correctly once, as it is during assembly, it normally should not change over time. If the toe angle changes noticeably this is an indication of damage to the chassis. In this case, please have your chike checked by your dealer. The toe angle is checked by

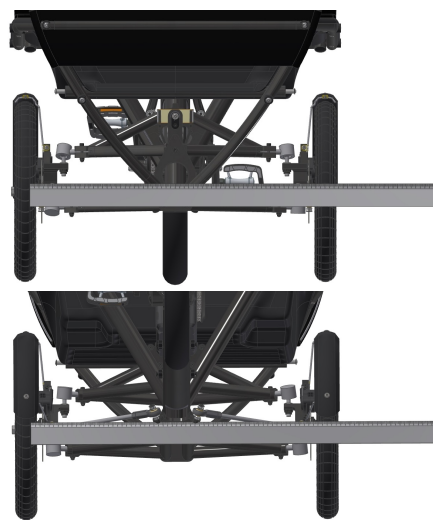


Figure 14. : Checking the toe angle

measuring the distance between the two front wheels in the front and at the back. To this end first rotate the handlebars, such that both wheels are facing forward. As a reference point for measuring use either the rim shoulder or a groove on the tire. Use the same reference points for both the distance measurement in the front and at the back.

If the measured distance is the same at

the front and at the rear, the toe angle is set correctly. If the two distances differ by more than 2mm, the toe angle must be readjusted.



A sudden change of the toe angle is an indication that some component of the chassis was deformed and thus might fail in further use. Therefore, if the toe angle is misaligned, let your chike be checked by your dealer before further use.



A wrong toe angle implies higher rolling resistance and higher tire wear. Please check regularly if the toe angle is still set correctly.

➔ Adjusting the toe angle

To adjust the toe angle, first lock out

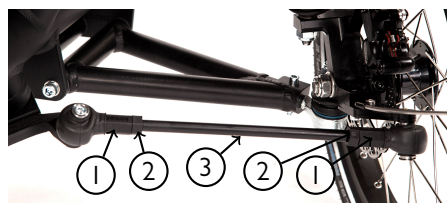


Figure 15. : Adjusting the toe angle

- ①: Tie rod ends
- ②: lock nut
- ③: tie rod

the tilt (see section *Tilt lock* p.18) and fix the handlebars in forward position. Then loosen both lock nuts ② of the tie rod ends ① of the right tie rod fig. 15, p. 32. Now turn the tie rod ③, until the right front wheel points exactly into forward direction. A counterclockwise rotation (when looking outwards)

moves rotates the front wheel to the left (inwards) a clockwise rotation to the right (outwards). When the wheel is properly aligned the tie rod has to be locked. To this end tighten the outer lock nut ② with 3Nm. Make sure, that the tie rod does not rotate w.r.t. the tie rod end while tightening the lock nut, as this would again misalign the toe angle. Having locked the outer tie rod

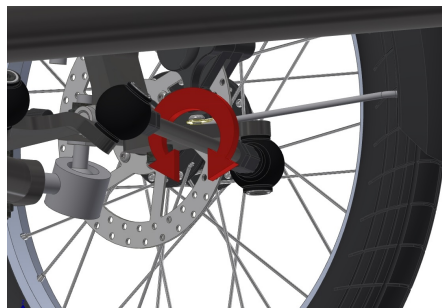


Figure 16. : Adjusting the angle between both tie rod ends

end, hand tighten the inner tie rod end's lock nut and rotate the tie rod as far as possible forward and backward fig. 16, p. 32. This assures that the right and left tie rod end have the correct angle (about. 30°) w.r.t. each other. Now fix the inner tie rod end by tightening the lock nut with 3Nm. make sure that the angle between both tie rod ends does not change while tightening the lock nut.

Now the left tie rod has to be adjusted. To this end loosen both lock nuts of the left tie rod. To properly adjust the toe angle, measure the distance between the rim shoulder of the left and right front wheel, once at the foremost position of the wheels and once at the rearmost position. The difference should be at most 2mm. If the difference is

bigger, it has to be compensated by turning the left tie rod. Rotating the tie rod counterclockwise (when looking outwards) increases the distance at the back and decreases the distance in the front and vice versa for a clockwise rotation. If both distances are equal the toe angle is correctly adjusted. Tighten the lock nuts in the same way as described for the right tie rod.



As adjusting the toe angle needs some experience and the proper tools

it is better to let your dealer do this. Damaged tie rods or improperly mounted and locked tie rod ends may render your chike uncontrollable, possibly leading to severe accidents.

➔ Checking the tie rod ends

Please regularly check the wear of the tie rod ends. To this end move the tie rod end ①, fig. 15, p. 32 up and down with moderate force. If there is a play of more than 2mm in this direction, the tie rod end has to be replaced. Please contact your chike dealer.



Worn-out tie rod ends negatively effect the steering characteristics.

Therefore please have the tie rod ends replaced in case of wear as soon as possible.

➔ Checking the suspension element

chike is equipped with a sturdy elastomer suspension element that requires no special care and normally does not wear out or need to be

replaced. Nevertheless, check at regular intervals, whether the suspension elements shows any signs of wear, in particular whether the connection between the elastomer and the metal plates comes off. If this is the case, the suspension element must be replaced immediately.

➔ Replacing the suspension element

The suspension element covers the entire range of payloads from empty run to the maximum permissible load. An adaptation is therefore usually not required. The damper element needs to be replaced only in case of damage. To replace the damper element, it is best to fix your chike in a work stand. Lock out the tilting (see section *Tilt lock* p.18).

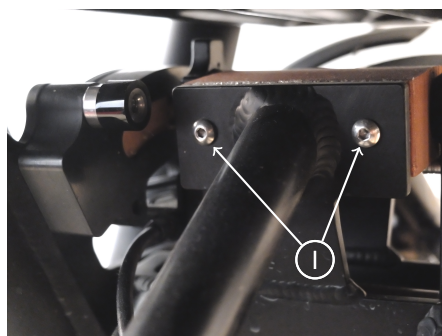


Figure 17. : Replacing the suspension element

①: Fixing screws suspension element

Then loosen the two screws on the right hand side ①, fig. 17, p. 33 and the two screws on the left hand sides, which fix the suspension element to the upper A-arms. Please hold the respective wheel while loosening the second screw on each side and then gently let the wheel come down up to the stop. Now

the suspension element is ready to be removed. To this end bend the left and right hand side of the suspension element upwards and then remove the element. The child version especially has very little clearance above the suspension element. Here it is best to unlock the tilting and to rotate the suspension element and the central part to which it is attached as far as possible to one side to get more clearance. Mounting the new suspension element is done analogously in reverse order. Tighten the screws with a torque of 2Nm.



Make sure that there are no external forces on the A-arms while working on the suspension element, as there is a risk of crushing when the A-arms move. Since replacing the suspension element requires expertise and the right tool, you should leave this task to your dealer.

Wheels

Your chike is equipped with high-quality wheels that are maintenance-free when used properly. Nevertheless, check regularly whether your wheels have a radial or axial run-out, no spokes are damaged and the spoke tension is not too low. To check the spoke tension, press together two spokes at a time of each side of the wheel with your thumb and forefinger. If individual spokes feel loose or if you notice different spoke tensions, please let the wheel be checked by your dealer.



Damaged spokes must be replaced immediately as they may lead to a total failure of the wheel.

Regularly check the tire for damage to the tread or side surfaces. If damage is visible, the tire must be replaced immediately.

As soon as the green or blue puncture protection on the tread of the tire is visible, the wear limit is reached. At the latest then the tire must be replaced.

The following tire types are permitted:

Front wheel	Rear wheel
Schwalbe Big Apple 16x2.00, ETRTO 50-305	Schwalbe Big Apple Plus 20x2.15, ETRTO 55-406

Cabin

The cabin is made of a sturdy aluminium construction covered with high-quality fabrics and a plastic tub in the seat and floor area. The materials are chosen so that longevity is granted even without further care. If sand, small stones or the like accumulate in the plastic tub or on the cushions, it is best to remove them with a common vacuum cleaner. Staining of the fabric cover or the plastic tub can be removed with a soft sponge and lukewarm water.



Only use water and, if necessary, mild soap to clean the cabin. Do not use any aggressive cleaning agents as these could damage the fabric covering.



Regularly check that the belt system is properly attached to the cabin and in impeccable condition. Damaged straps or buckles must be replaced immediately! An improperly fastened or worn belt system may break, loose or rupture in the event of an impact, resulting in serious injury to the child!



Regularly check that the plastic tub has no cracks or other damage! A damaged tub must be replaced immediately!

From time to time, check that the screws connecting the various cabin tubes have not loosened and, if necessary, retighten them to the specified torques (see section *Tightening torques of certain screws* p.<Pgrf2>). Under no circumstances should you exceed the specified torque, as otherwise the pipes may be deformed.

Transport platform

The transport platform consists of waterproof glued phenolic resin coated plywood. At the cutting, drilling and milling surfaces, the plate needs additional protection against penetrating moisture. Upon delivery, such protection is applied. However, due to mechanical stress and wear the sealing properties may be lost over time. Therefore, from time to time, check that the edge sealing is still in good condition and renew the sealing if necessary.

Chain

The chain of a cargo bike is exposed to high forces and therefore requires regular care and maintenance. Dirty chains are subject to increased wear.

Just as important as a well-cleaned and lubricated chain is the right chain tension. An incorrect chain tension has negative effects on the wear out of other parts such as sprocket or chain wheel. Furthermore, the chain can jump off the sprocket or chainwheel due to insufficient chain tension. Furthermore, the right chain tension is important for a precise shifting of the gear hub. Check the chain tension regularly and adjust it if necessary.

Due to the loads occurring during pedalling, the chain lengthens with time. Since the elongated chain links no longer optimally fit the teeth of the chainwheel and sprocket, these parts are subject to increased wear. Therefore, the chain must be replaced in good time. If the sprockets and / or the chainwheel are already worn out, it is advisable to replace them together with the chain.

➔ Cleaning

To clean the chain, first remove dirt and lubricants with a dry cloth. Now apply a suitable chain lubricant and let it act for a few minutes. Excess lubricant is then removed with a cloth.



When lubricating the chain, make sure that no lubricant gets in contact with the brake discs or brake pads and the tires as this would greatly reduce the braking power and the road grip of the tires.



When servicing the chain, always inspect the chainwheel and sprocket and clean them if necessary.

➔ Checking the chain tension

To check the chain tension, pull the upper chain strand up in the middle, fig. 18, p. 36. The deflection of the chain, symbolized by the red arrow, should be about 1cm to 1.5cm. Otherwise, the chain tension must be readjusted. Too high chain tension is just as bad as a too low chain tension!

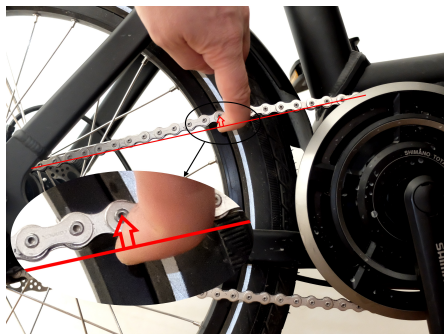


Figure 18. : Checking the chain tension

➔ Adjusting the chain tension

First loosen the two screws that hold the right and the two screws that hold the left rear fork end slider to the frame ①, fig. 19, p. 36. This allows the rear fork end slider to move horizontally together with the rear wheel. If you now pull the rear wheel backwards, the chain tension increases. The correct chain tension is achieved when the chain can be compressed in the middle by about 2cm. When tightening the screws of the drop out sliders, make sure that the

wheel is properly centred.



Figure 19. : Moving the rear fork end slider

①: rear fork end slider screws

➔ Checking chain elongation

We recommend to check the chain length every 1000km. The elongation of the chain can be determined with a standard calliper. Set the calliper to 118mm and put the two ends for the outer measurement in the free space between two rolls of the tensioned chain, most simply at the upper chain strand fig. 20, p. 37. Then slide the calliper apart until it touches the rollers. Now read off the distance. The 119.6mm measured in fig. 20, p. 37 correspond to a new chain. Up to a distance of 120.25mm the elongation of the chain is still in the tolerance range. If the distance is bigger, it is time to replace the chain. Chain wear gauges are also commercially available, making the determination of chain elongation even easier. If you do not want to do the check yourself, your bike dealer will be happy to assist you in checking and possibly changing the chain.



Figure 20. : Determination of chain elongation



The replacement of the chain requires special tools and expertise and should therefore be done by your dealer. Worn sprockets or chain wheels should also be replaced at the same time if necessary.

Lighting system

Check regularly that the head light and the tail light of your **chïke** are working. Make sure that the headlight is properly adjusted such that you do not blind approaching traffic or pedestrians.

Wear parts

Most components of your **chïke** last a whole life cycle. However, some parts are subject to wear and must be regularly replaced and renewed. The achievable service life of these parts depends on the specific use of your **chïke** and the proper maintenance. The wear parts are

➔ Tires

- ➔ Brake pads
- ➔ Chain, chain ring and rear sprocket
- ➔ Battery 🔋
- ➔ Tie rod ends

These parts must be replaced when reaching the wear limit.

Spare parts

If any component of your **chïke** is damaged, you get the respective replacement parts from your dealer.


Cleaning

Regularly clean your **chïke**. Road salt in winter can especially lead to increased corrosion if it is not removed immediately. Just use a soft cloth or sponge and pure water. Do not use a pressure blaster because due to the high pressure water will pass into sealed areas and can cause damage there. In general, you do not need any additional cleaning products. For heavy grease or oil stains, you can use a standard cleaning product for bicycles. Make sure that the chosen product does not attack the paint surfaces.

Use the cleaning process to examine your **chïke** for possible damage such as deeper scratches, bumps, cracks, etc. If you notice any damage, please contact your dealer!

After cleaning your **chïke** and drying off the remaining water, we recommend that you preserve your **chïke**. To this end appropriate bicycle care products can be used. Follow the instructions of the

chosen product.

Pedelec variant  Water is conductive and causes short circuits if it gets into places where it is not intended to be. Although the pedelec drive system of your **chike** is designed to withstand heavy rain, it is not completely waterproof. Therefore, when cleaning with water, make sure that no running water reaches the components of the drive system. Individual water splashes are harmless. In particular, do not submerge your **chike** for washing. Ideally, use only a damp cloth around the Pedelec components. Again, do not use any aggressive cleaners, as they may possibly damage the insulation of the cables and cause short circuits.

Maintenance list

A

B

C

D

E

F

The following table lists the necessary maintenance procedures for your chike . Obviously you can always hand over maintenance work, which in principle can be carried out by yourself, to your dealer. The individual maintenance procedures are described in detail in chapter

Part	Maintenance	Interval	By
Tires	Checking tire pressure	before every ride	user
	Checking running surface and side walls for damage and sufficient profile	before every ride	user
	Changing tires	if necessary	user
brakes	Checking hydraulic hoses for damage, brake test	before every ride	user
	Checking brake pads	see section <i>Braking system</i> p.29	user
	Changing brake pads	if necessary	user
	Changing brake disk	if necessary	dealer
	bleeding brakes	if necessary	dealer
F. chain	Lubricate and check for wear	monthly	user
	changing	if necessary	dealer
chassis	Checking toe angle	see section <i>Chassis</i> p.31	user
	Adjusting the toe angle	if necessary	dealer
	Checking tie rod ends for play	before every ride	user
	Changing tie rod ends	if necessary	dealer
Wheels	Checking spoke tension and run-out	monthly	user
Steering	Checking that there is no play	before every ride	user
	Checking the handlebars for damage	before every ride	user

Model:



Frame colour:

☐ black☐ ivory☐ light blue☐ orange☐ light green☐ Special colour

Cushion colour :

☐ red☐ orange☐ light green☐ Special colour

Frame Number:

Key number :

Delivery Date

Dealer stamp and signature

Inspection verification

1. Inspection After 300km or three months from the date of purchase	Replaced or repaired parts, comments
Job number:	
Date:	
Stamp and signature of the dealer:	
<hr/>	
2. Inspection At the latest 2000km or one year from the date of purchase	Replaced or repaired parts, comments
Job number:	
Date:	
Stamp and signature of the dealer:	
<hr/>	

3rd Inspection After 4000km or two from the date of purchase	Replaced or repaired parts, comments
Job number:	
Date:	
Stamp and signature of the dealer:	

4. Inspection At the latest 6000km or three years from the date of purchase	Replaced or repaired parts, comments
Job number:	
Date:	
Stamp and signature of the dealer:	

5. Inspection

At the latest 8000km or four years from the date of purchase

Replaced or repaired parts, comments

Job number:

Date:

Stamp and signature of the dealer:

6. Inspection

At the latest 10000km or five years from the date of purchase


Replaced or repaired parts, comments

Job number:

Date:

Stamp and signature of the dealer:

Tightening torques of certain screws

During assembly, the screws of your  were tightened with the correct torques. Nevertheless, it may happen that certain screws have to be retightened due to setting processes. This is done by your dealer within the first inspection. Other screws must be loosened and tightened during maintenance or adjustment procedures. Always observe the tightening torques given in the table and never exceed them.

Part	Key	Tightening torque	Screws retention
Axle nut front wheels	Wrench 18	50 Nm	-
Axle nut rear wheel Alfine	Wrench 15	40 Nm	-
Fixing of the inner axles of the A-arms	Allen key 6	30 Nm	-
Ball joint to wheel carrier	Wrench 18	40 Nm	-
Ball joint to A-armr	Allen key 5	12 Nm	-
Fixing cabin to frame front bottom	Allen key 6	20 Nm	-
Fixing cabin to frame side	Allen key 5	12 Nm	-
Pedal to crank	Wrench 15	35-40 Nm	-
Angle adjustment stem	Allen key 5	14-15 Nm	-
Handlebar to stem	Allen key 4	5-6 Nm	-
Clamping stem to head tube	Allen key 5	9-10 Nm	-
Bolt load carrier	Wrench 18	12 Nm	medium strength
Lock nut tie rod ends	Wrench 15	3 Nm	-
Screws damper mounting	Torx 25	3 Nm	-
Connecting screws for cabin tubes	Allen key 4	5 Nm	-
Tie rod ends to steering tube and wheel carrier	Allen key 5	12 Nm	medium strength
Rear fork end slider	Allen key 6	18 Nm	-

A
B
C
D
E
F
G

Technical specifications

total weight	29 - 40kg ^l
length	185cm - 192cm ^l
width	74cm
height	110cm - 118cm ^l

^l depending on variant and features

A

B

C

D

E

F

G

Appendix

EC Declaration of Conformity

EG Konformitätserklärung



gemäß der Maschinenrichtlinie 2006/42/EG vom
17.05.2006, Anhang II A

Hiermit erklären wir, dass die nachstehend bezeichneten Produkte in ihrer Konzeption und Bauart sowie in den von uns in Verkehr gebrachten Ausführungen den Anforderungen der Maschinenrichtlinie 2006/42/EG entsprechen. Bei einer mit uns nicht abgestimmten Änderung des Produktes verliert diese Erklärung ihre Gültigkeit.

Hersteller

chike GmbH & Co.KG Tel.: +49 221 20464354
Neusserstr. 407 Fax: +49 221 94647113
50733 Köln e-mail: info@chike.de
Deutschland web: chike.de

Produkte

Produktnummer	Bezeichnung	Antriebssystem	Baujahr
CHKE-NF-0000-A0000M	chike e-kids	Shimano STEPS E6000	2017/2018
CHKE-NF-0001-A0000M	chike e-cargo	Akku Shimano KBTE6010LC Ladegerät Shimano KECE60001	2017/2018

Es wird Übereinstimmung mit folgenden Richtlinien/Bestimmungen erklärt:

2014/30/EU Elektromagnetische Verträglichkeit (EMV)
2014/35/EU Niederspannungs-Richtlinie

Titel der angewandten harmonisierten Normen:

DIN EN 15194:2015-06 soweit anwendbar, insbesondere die Abschnitte 4.3.7.4, 4.3.7.5,
4.3.7.6, DIN EN ISO 4210


Ort/Datum

Köln, 01.02.2018

Bevollmächtigter zur Ausstellung dieser Erklärung:

Manuel Prager, Geschäftsführer chike GmbH & Co.KG
Neusserstr. 407, 50733 Köln

Unterschrift


Manuel Prager

A

B

C

D

E

F

G

Appendix

