

# Varibike Trike Manual

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Dear Customer,

We would like to congratulate you on your choice of a VARIBIKE trike from our home and thank you for your confidence.

By buying this Varibike trike you have purchased a high quality, powerful and very healthy means of transportation.

To maintain the security, the full operational capability as well as the quality standard of your Varibike trikes it needs your attention as well as care and maintenance.

In this case you should use this manual as a guide.

Please read this manual carefully before first use.

Thus you avoid risks to yourself and any errors or damage to your Varibike trike.

If you have any questions about Varibike trike, please contact your VARIBIKE dealer.

He is also your contact for maintenance, inspections, modifications and repairs of all kinds.

Have fun with your Varibike trike, best wishes from your VARIBIKE-TEAM.

## **ABOUT THIS MANUAL**

If you do not follow these instructions, this can lead to dangerous riding situations, falls, accidents and material damage.

Please take the time to read the manual and the instructions for individual components carefully before your first ride. If you are unsure about anything, please contact your Varibike dealer or Varibike directly. This manual is not a repair handbook; it is intended to provide safety guidelines and a little insight into bike technologies. Particularly

important safety aspects are highlighted by symbols!

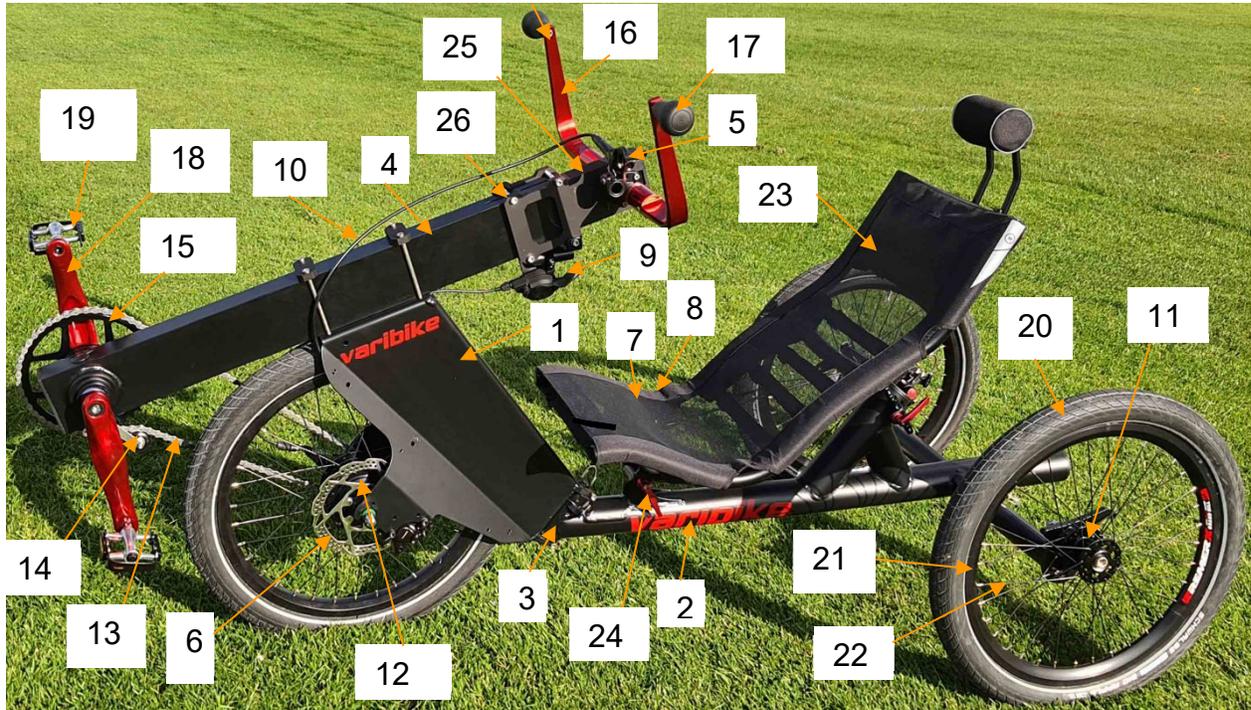


Keep your manual and give it to other persons together with the Varibike, if you give it away or sell it. It is in your responsibility to check and maintenance your Varibike in the said manner.

This manual is not to learn to drive Varibike trike. There are only given hints and tips.

## Overview

Picture: Varibike trike and its features



1. Front frame
2. Rear frame
3. Frame/steering axle
4. Front beam
5. Front brake lever
6. Disc-brake
7. Rear brake lever
8. Rear brake lever holder
9. Control buttons
10. Cabels
11. Hub
12. Gear unit
13. Drive chain
14. Chain tensioner
15. Chain ring
16. Arm cranks
17. crank handles
18. Leg cranks
19. Pedal
20. Tire
21. Rim
22. Spokes
23. Seat
24. Seat clamp
25. Telescopic tube
26. Telescopic tube clamp

You can use these illustrations to find most of the components of your Varibike. These are, however, only examples. Your individual Varibike may have a different construction – particularly if you purchased it with optional features. This user's manual is only valid for Varibikes – it does **not** apply to bikes intended for use in areas governed by traffic regulations.

### Purpose of Varibikes

The Varibike trike is a compact bike comprising a drive unit and a trike. The user lies in the trike and propels using crank movements with their arms and/or legs. The trike assists the user with their mobility. It is easier to cover longer distances with ergonomic movement processes (similar to using a handbike) and it is also possible to take bicycle tours with pedestrians.

This expands the activity radius. The downhill speed can be regulated via the trike's braking systems, so that downhill slopes can be travelled on safely.

When varibiking, the seating posture in the seat as well as the static straighten the spinal column are promoted by a physiologically sensible and ergonomic training of your upper body and legs. Moreover, the shoulder joints are relieved sufficiently compared with the usual propulsion of a wheelchair using the handrims. In the medium term, the body musculature is built up and thus, possible consequential harm that may be caused by propelling only on the one side (only via the handrims) is counteracted effectively. For safety reasons, the trike may only be operated by persons who

- have been trained in its use by the dealer or Varibike.
- can move and control their hands and arms so that they are able to operate the controls and perform the full steering movement without restrictions while driving.
- are physically and mentally capable of safely operating the device in all operating situations and can meet the legal requirements for use on public roads.

### **Terrains for Varibike trikes**

Varibike trikes are specifically designed for the use on roads.

**Varibike trikes** are specifically designed for their intended use. This comprises riding on various roads. It is not designed for off road use.

Exposing your Varibike trike to extreme conditions in excess of these can lead to damage and personal risk. Neither Varibike, nor their representatives may be held liable for any damage or personal injury caused by inappropriate use of your Varibike trike.

Use the Varibike trike on paved surfaces. Avoid riding on unpaved or loose surfaces (e.g. on loose gravel, in sand, mud, snow, ice or through deep puddles of water), as this may result in incalculable risks. The Varibike trike must be equipped in accordance with road traffic regulations when driven on public roads and spaces.

The maximum permitted load of the Varibike trike in its standard design is a 120 kg payload.

Individual customisation can be made to accommodate a higher load. Please ensure that the load limit is not exceeded when transporting objects.



We recommend: To use the safety pennon or warning flag when participating in public traffic with the Varibike trike otherwise there is an easy risk of being overseen due to the very low sitting position.



*Figure 1: Safety pennon in order to improve safety in public traffic (fixing to the trike seat frame)*



We recommend: To use hip strap. The hip strap prevents the user from slipping forwards (slipping in the riding direction) when travelling and thus offers safe retention in the Varibike trike.

## **Assembly after shipping**

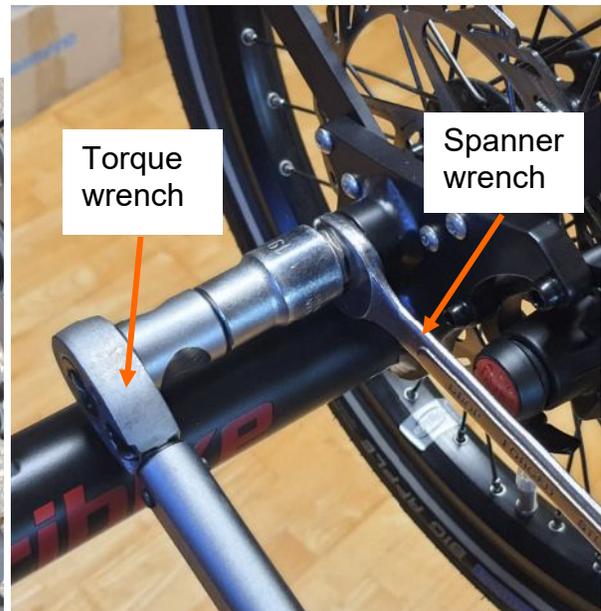
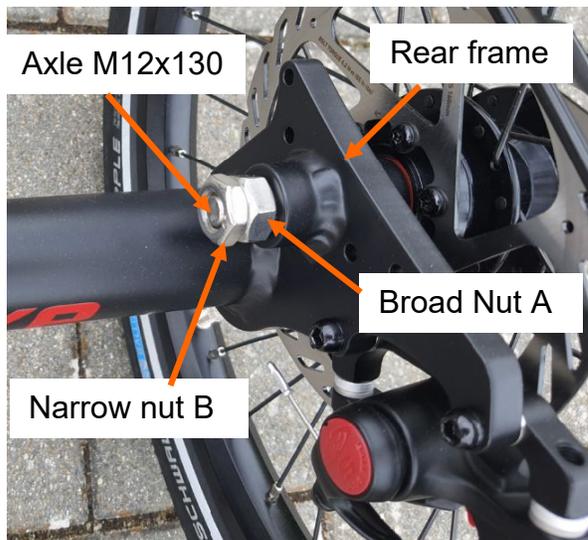
### **You need this**

- 2 persons (only to put in the steering axle)
- allen keys
- open-end-wrench
- torque wrench

**NOTE:** If you are not skilled to do the “assembly after shipment”, or if you are not sure, than leave the “assembly after shipment” to a bike mechanic (preferable a recumbent bike mechanic).

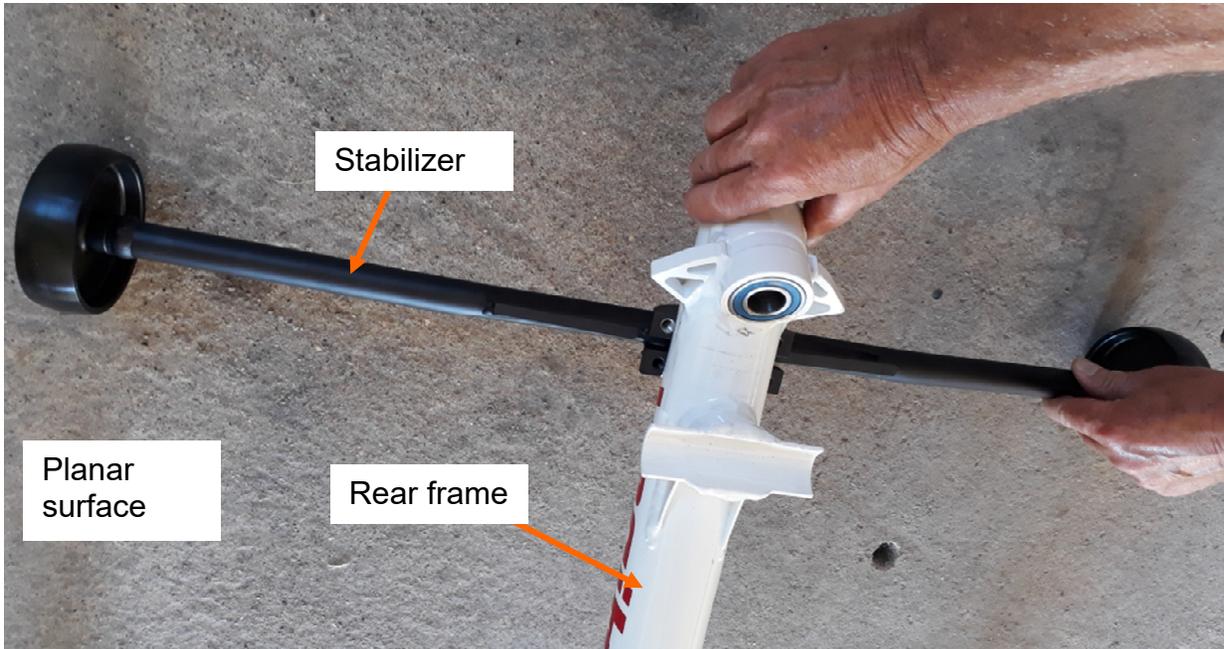
### Mount the rear wheels

- Put in the rear wheels, each with its axle M12x130mm, into the holes of the rear frame. The disc rotor of the right wheel shows towards the frame.
- Tighten the broad nut A with a torque of 15Nm.
- Screw on by hand the second narrow nut B
- **Counter-fix nut A with nut B:** Hold the nut A with a spanner wrench and tighten the second nut B with a torque wrench with 45Nm

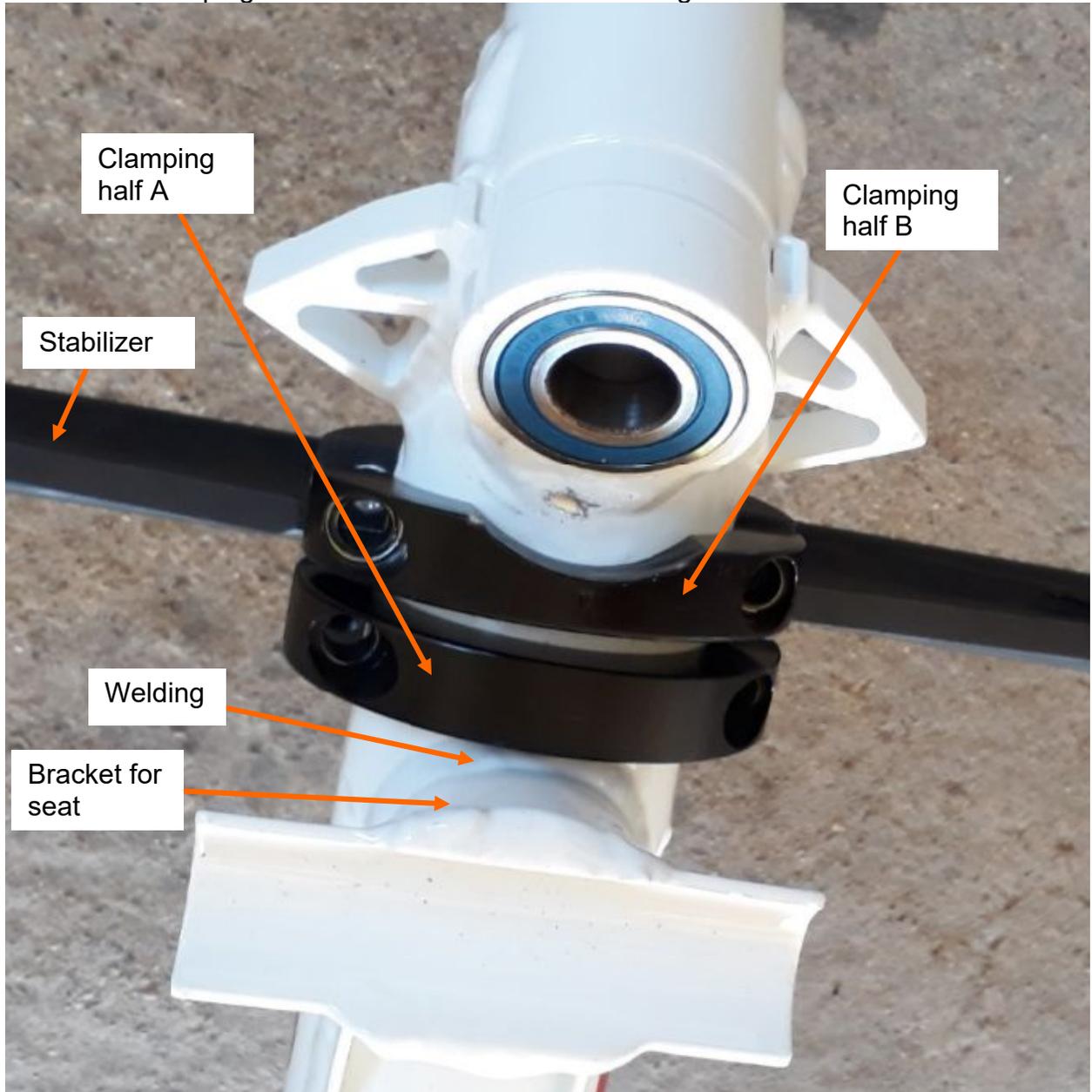


**Option: Mount the stabilizer.**

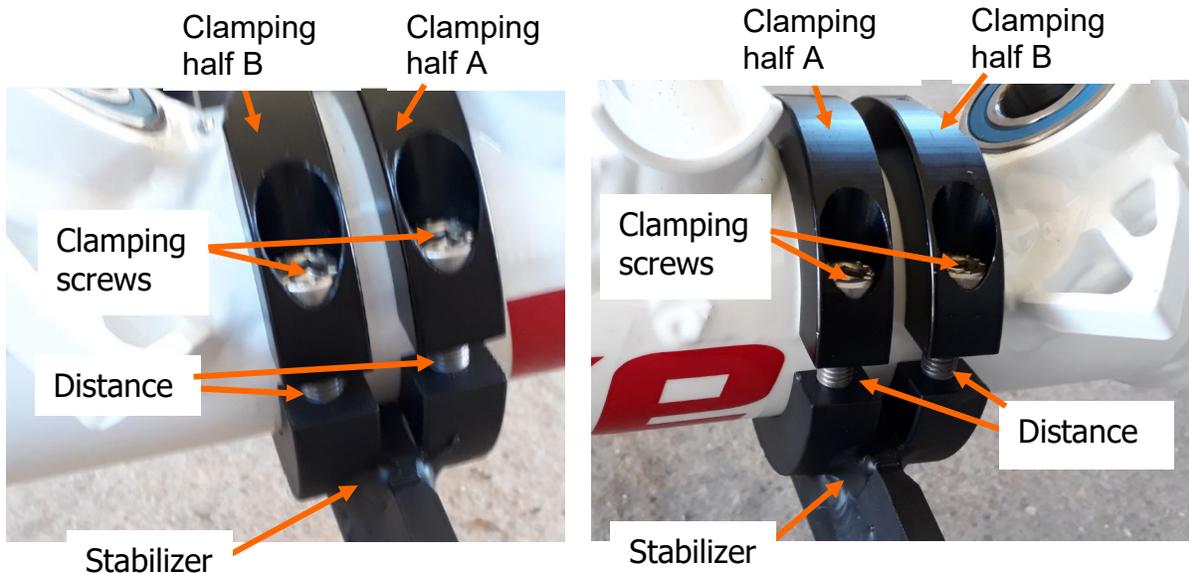
- Choose a planar surface for the mounting of the stabilizer on the rear frame. Put the stabilizer under the rear frame.



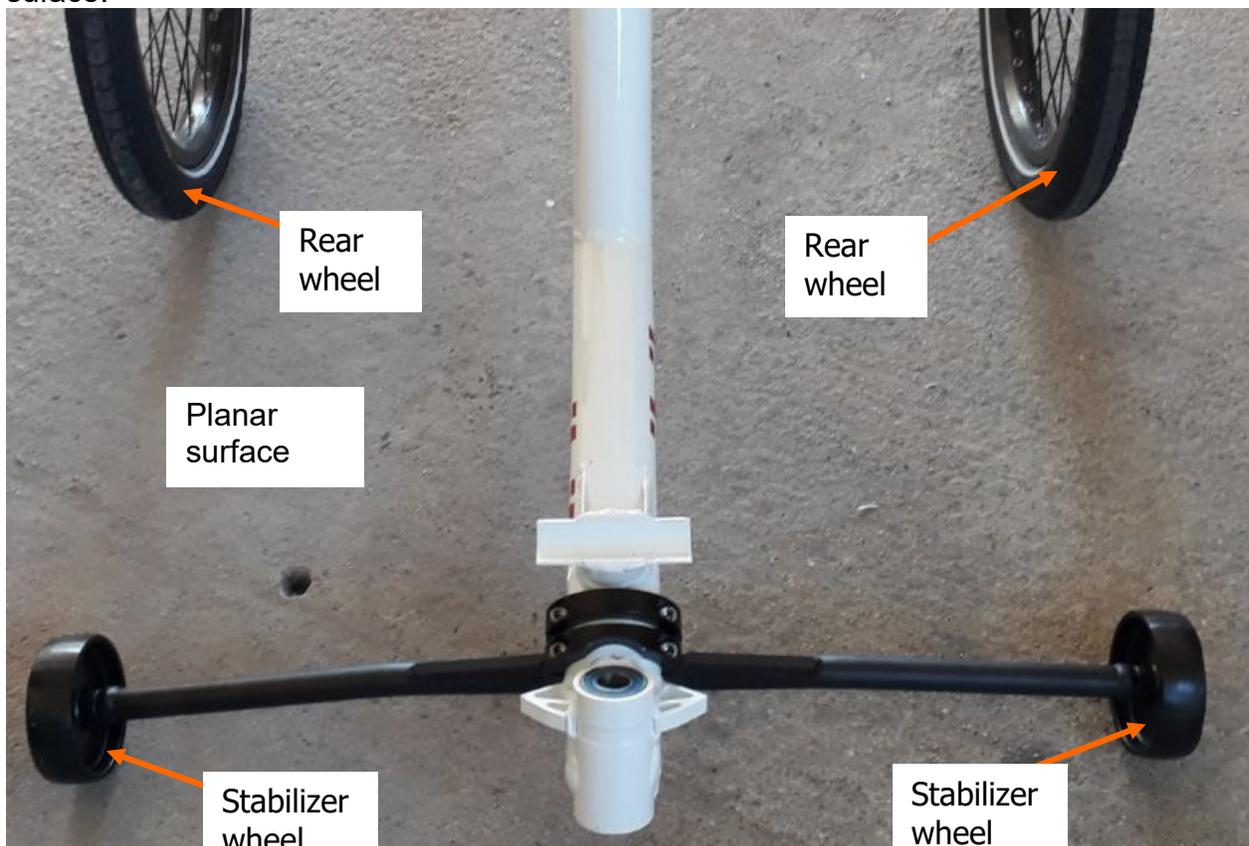
- Put on the clamping halves on top.
- The clamping half **A** must be close to the welding of bracket for the seat.



- Screw in the clamping screws on both sides and at the same time keep about equal distances between the stabilizer and the clamping halves.
- Tighten the 4 clamping screws of the clamping halves with a torque wrench with 14 Nm.

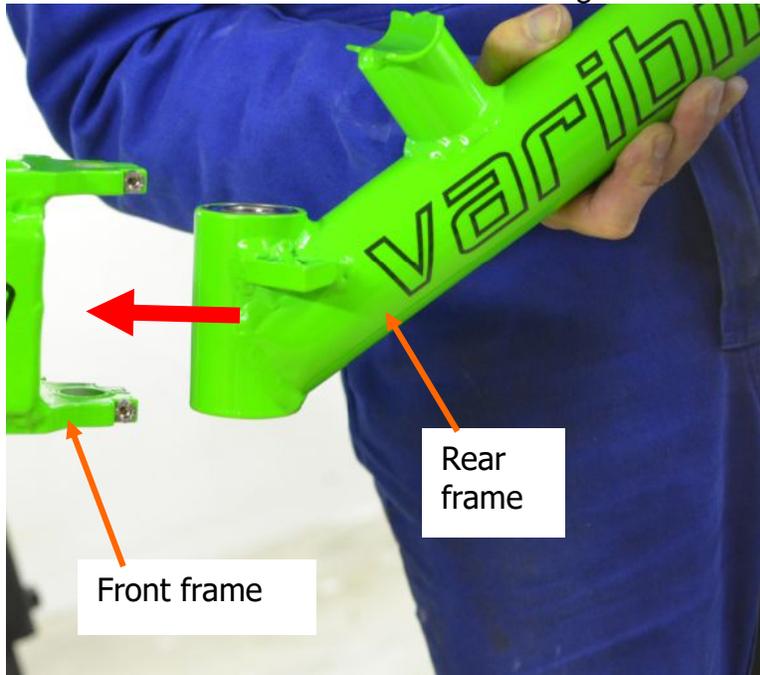


When it is done correctly, the rear wheels and the stabilizer wheels touch the planar surface.



### Put front and rear frame together

To put the front frame and the rear frame together you need 2 persons.  
One person is holding the front frame. The other person is holding the rear frame.  
Put the front frame and the rear frame together

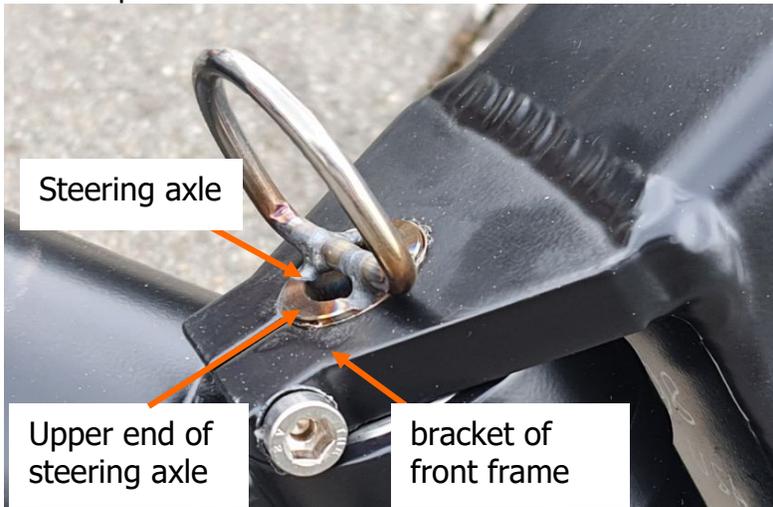


Put some grease on the steering axle and put the steering axle into the hole. The steering axle holder must be on top.

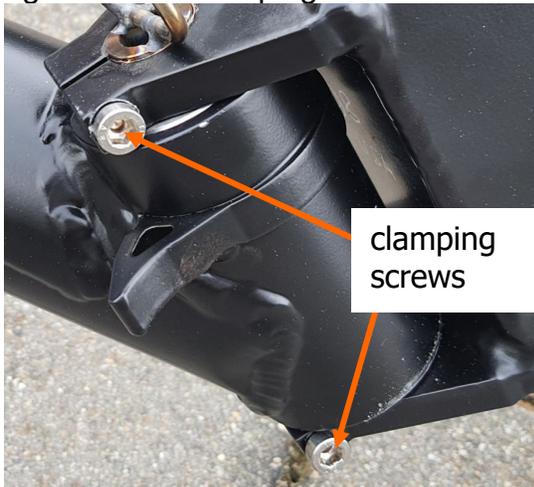


Push the steering axle completely in the hole. Note: it helps when turn the axle while pushing.

The steering axle must be completely in the hole -> the upper end of the steering axle must be planar with bracket of the front frame.



Tighten the 2 clamping screws with a torque wrench with 8 Nm.

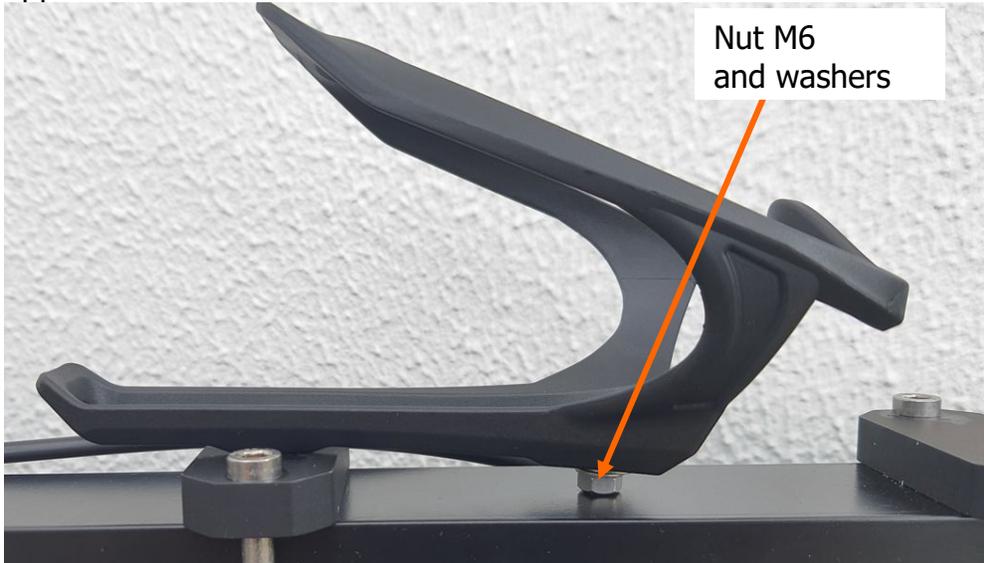


**Option: Mirror**

- Adjust the mirror that you have a good mirror view to your rear.
- Tighten the clamping screw of the mirror.

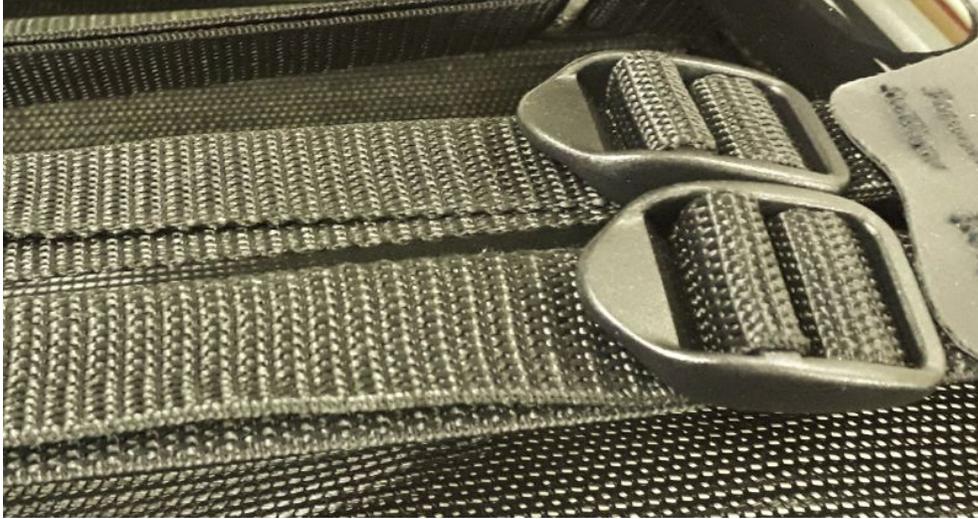
**Option: Water bottle holder**

Mount the water bottle holders with screws M5 with a torque wrench with 3Nm. The upper water bottle holder has one nut M6 and two washers between holder and frame.

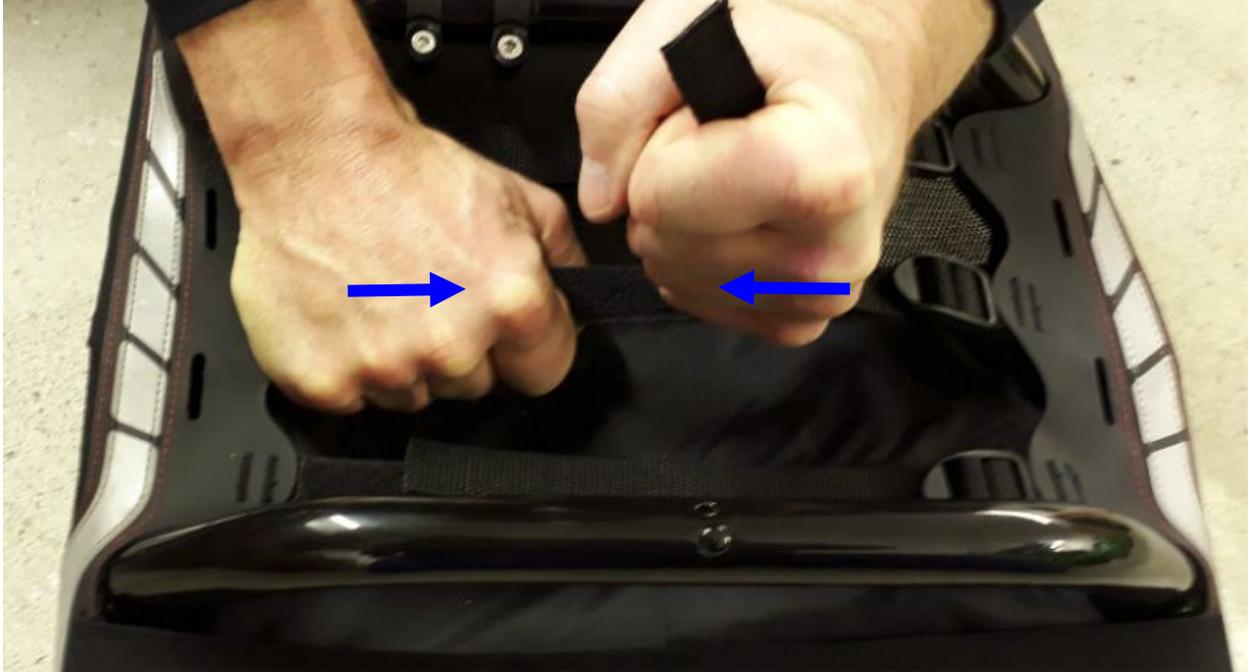


### Seat

Put on the seat cover. With the straps like this.



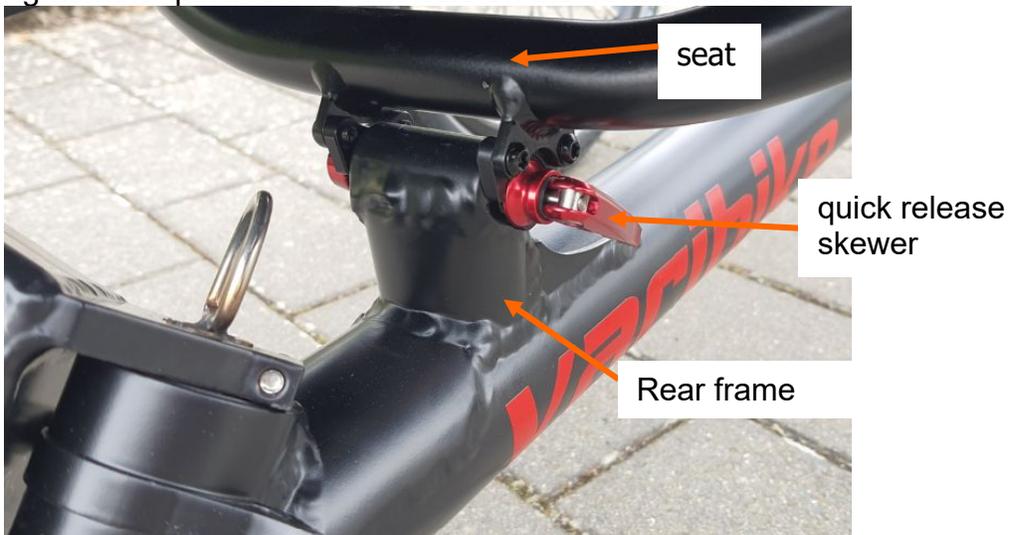
and tighten the straps strongly by pulling at the strap with both hands against each other (see arrows).



Put the seat on the rear frame.



Tighten the quick release skewer  
Tighten the quick release skewers on the front of the seat.



Both quick release skewers must be tightened.

Mount the rear brake lever.



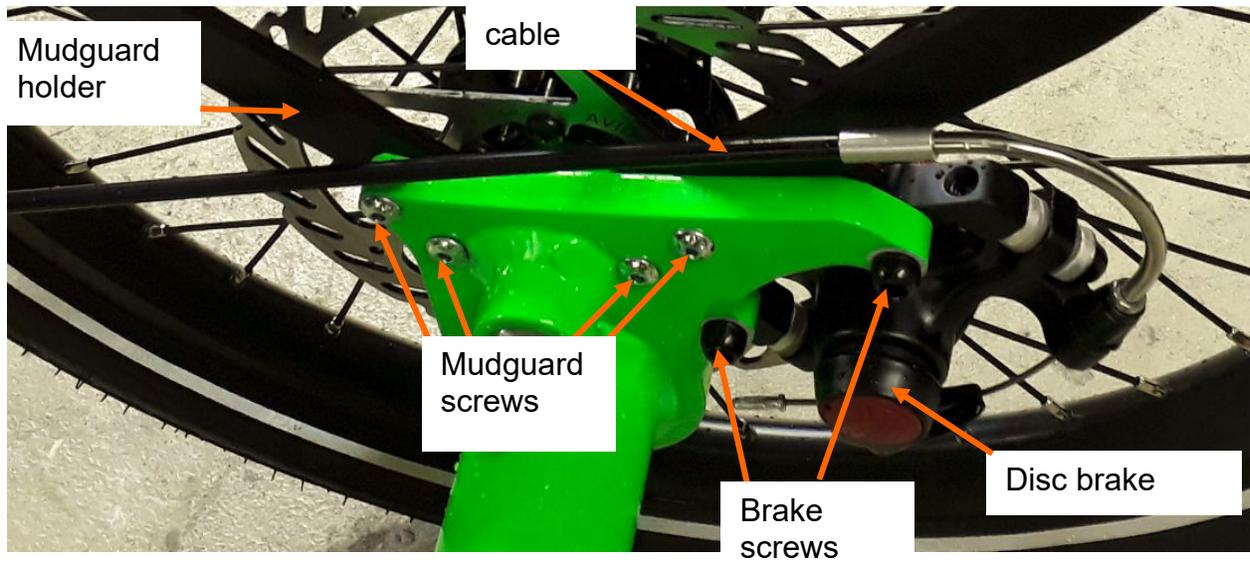
### Mudguard holders and rear brake

Mount the mudguard holders.

Mount the rear disc brake with the cable on the left side of the mudguard holder.

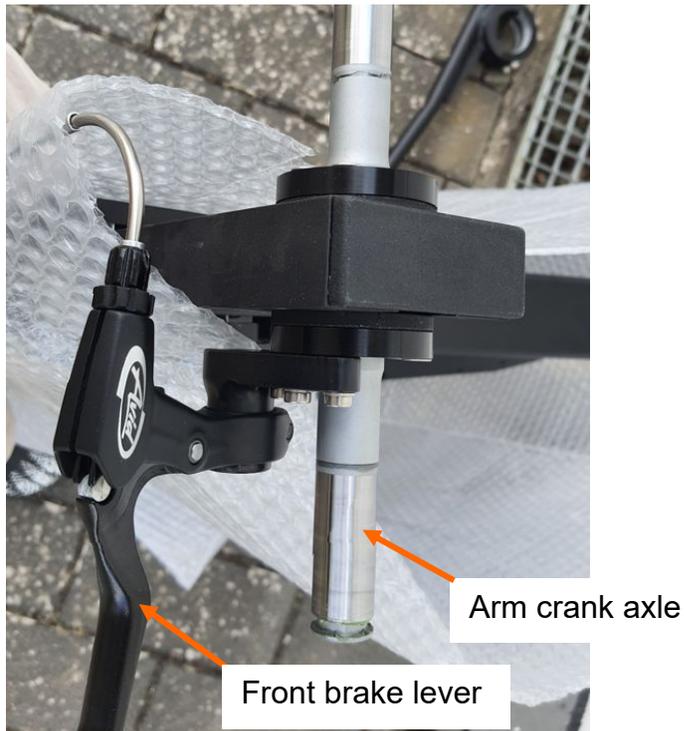
Tighten the 2 brake screws M6 with a torque wrench with 7Nm.

Tighten the 4 mudguard screws M5 with a torque wrench with 3Nm.



### Front brake Lever

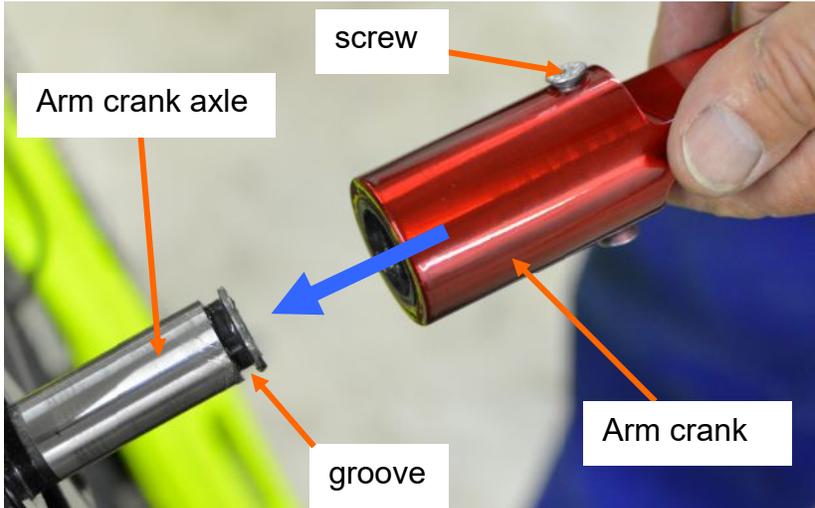
Mount the front brake lever



### Arm cranks

Put the arm cranks on the arm crank axle. The the wrapping of the arm cranks are labeled with left and right.

To make shure that the arm crank is all the way on the arm crank axle – screw out one screw and have a look inside -> **the screw hole must be aligned with the groove.**

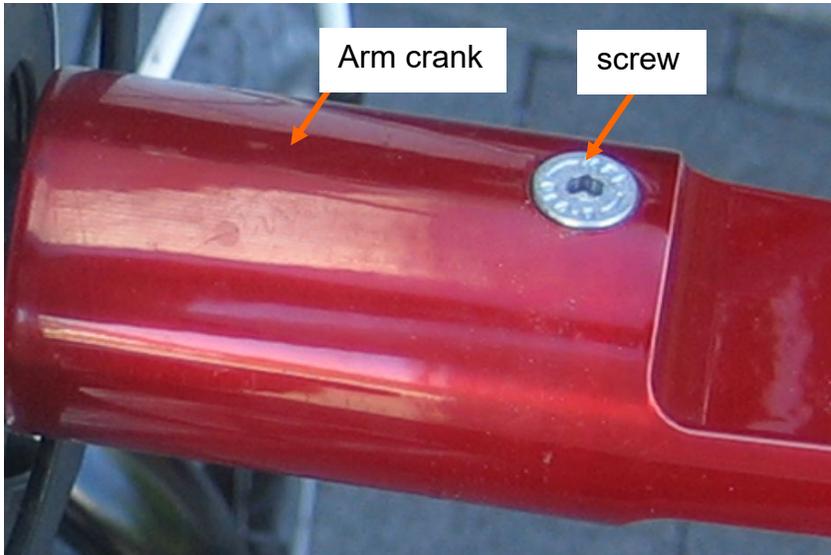


Each arm crank has 2 screws.

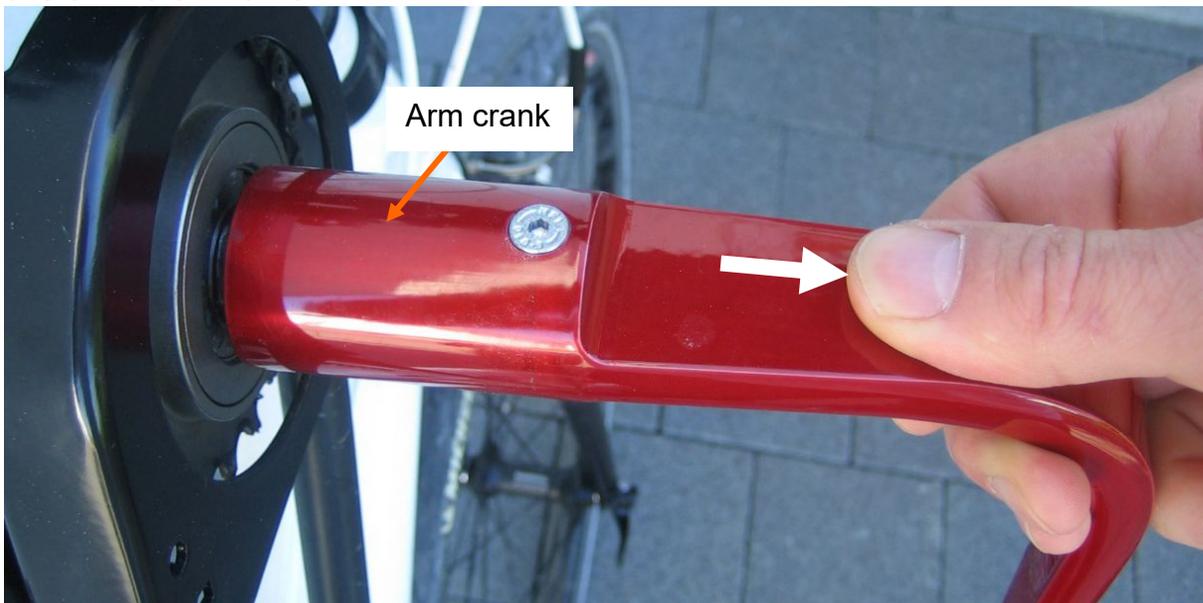
Tighten the screws of the arm cranks with a torque wrench with 4Nm.



**Security check:** All screws of the arm cranks must be completely inside the arm cranks.



Also check: Pull at the arm cranks -> both arm cranks must hold and stay on the arm crank axle.



## Commissioning

The Varibike trike will be handed over to you ready for use by a Varibike dealer or a field representative or by a trike consultant from Varibike.

Finally, you will be completely instructed in the use of the Varibike trike based on this manual included in delivery.

Alternatively you will get the Varibike trike delivered. In this case you make the commissioning yourself based on this manual included in delivery.

During the initial commissioning of the Varibike trike, drive at very low speed and become accustomed to the driving characteristics of the Varibike trike. Always adapt the speed and driving manoeuvres to match your own abilities, the external circumstances and the legal regulations. You will get a feel for how to drive the Varibike trike safely after a short time. Before driving up or down slopes or hills with the Varibike trike, you should be proficient in the safe handling of the Varibike trike on the flat.

## Before your ride

### ► Safety First – for your own safety

Varibike triking, just like any other sport, has its own risks and sources of injury. Please consider these rules for safe cycling. The use of a Varibike trike in regulated road traffic is governed by locally mandatory traffic laws and regulations (Road Traffic Act, Highway Code or similar). These regulations must be strictly adhered to when using a Varibike trike in public traffic situations. Many communities and countries have their own regulations concerning the use of bicycles and trikes on tracks and trails. Please always comply with the regionally applicable regulations for the use of forestry/countryside tracks.

In several European countries, protective helmets are mandatory. The Varibike-Team recommends the use of protective headgear as a matter of principle. This is the best possible protection, even for rides, which may not appear to be dangerous at first sight. The majority of head injuries can be avoided or prevented. The fit of the headgear, strap adjustment and correct fastening is decisive. A good helmet must fit tightly without pressure points. Take care to buy a helmet, which complies with safety standards.

Important factors/aspects when choosing a helmet:

- Standards – ANSI, SNELL, ASTM and CE certification.
- Make sure that the size matches the circumference of your head as closely as possible.
- Make sure your helmet is sufficiently ventilated – Risk of overheating!
- Soft straps and safe, easy to open fastenings.

For reasons of safety, we do not recommend the wearing of loose trousers or loose jackets. A loose right trouser leg or jacket arms can easily be caught in the chain /chain ring/crank system. Use protective cycle clips or tapes if appropriate.

Before you set out, think about when it gets dark. We recommend accessory lamps, front (white) and rear (red). Clothing with reflective panels or strips is also to be recommended.

Whatever your cycling ambitions, always ride carefully and avoid unnecessary risks, for your own sake and the safety of others. Accept that even Varibike trikes have their limits, and respect this with an appropriate riding style.

VARIBIKE TRIKES are pure sports equipment and thus not approved as a transport for use on public roads, streets and squares.

VARIBIKE TRIKES are not StVZO or StVG (Austria) or VTS (Switzerland) compliant.

If you want to drive your VARIBIKE TRIKE in public transport, you must retrofit it according to the equipment regulations of the country (eg, reflectors, lights, bell, etc.).

You are responsible for the safe condition and comply with the appropriate regulations of the country of your Varibike trike equipment.

Please consult your dealer.

### Getting used to your Varibike trike

Your new Varibike trike may ride, steer, brake and have a different gear change when compared with your previous bike. This is particularly the case when it is your first Varibike trike. Take some time to get used to it, and ride with particular care in this phase! The VARIBIKE TRIKE can be steered by shifting the front frame to the right or to the left side by using your arms and/or your legs.

Take your time to get used to this Varibike trike steering and please drive especially cautious during this time.



Try out your new gears on an open, traffic free space, if possible. If you have never used click or safety pedals and the appropriate shoes before, then you must get used to the lock and release procedures, preferably while standing. First of all, read the pedal system instructions carefully. You are particularly prone to accident risks if your new Varibike trike has a totally different braking system. Modern brakes may have a much stronger, and more immediate braking effect than the brakes you have previously been used to! It is also possible, that the right and left brake levers now operate different brakes. Try it out first - carefully! Please also read our "Notes on components".

### Before you ride

Keep your eyes and ears open! Most potential trike defects can be seen or heard beforehand. Listen for unusual noises during your ride, clicks, and rattles, rubbing noises or vibrations. Try and locate the source, or consult your dealer. Many potentially expensive repairs can be avoided if the cause is located at an early phase!

You should run a basic function check on your Varibike trike bike before each ride!

Including:

1. Test your steering for tight fit. Here, the steering bearings must not show any play.
2. Test your steering for free swiveling, that means that the steering can be swiveled freely to the complete right side (until the right limit stop) and to the complete left side (until the left limit stop).
3. Check the arm crank freewheel according free run in the opposite direction and snapping the arm crank Freewheel in cranking direction.
4. Check the entire bike for notches, cracks, outbreaks, deep scratches or other mechanical damage.
5. Check the tightness of quick-releases, quick release skewers, clamps, bolts and screws.
6. Check the stable condition of the seat and back upholstery.
7. Check the chain tension of the synchron chain. The chain must be tight and straight tensioned on both sides.
8. Check your tyre pressure, valve seating and tyre condition.
9. Ensure that your feet cannot slip from the pedals and make contact with the drive wheel when using the trike, if necessary by using a special fixation device.
10. Check the mounting of the wheels. Agitate all wheels across the driving direction. The wheels must not move in the clamp. There should be no audible creaking or rattling noises.
11. Check your rims for wear and/or braking damage. Check disc-brake pad thickness of the disc-brakes.
12. Check the function of the back paddle brake and the hand brake. If all brakes are not fully functional, no trips may be taken.  
**!! It must not be possible to pull the hand brake lever through to the hand brake holder!!**
13. Drop your Varibike trike vertically from a low height. Listen for rattling noises and check if necessary. Also, check all bearings and connections.



**IMPORTANT: Do not ride your Varibike trike if any of these checks is negative! In case of doubt, consult your dealer! A defective Varibike trike is dangerous and can lead to serious accidents and injuries to yourself and others!**

**IMPORTANT: To avoid damage to your Varibike trike, observe the maximum permissible total weight of 140 kg**

### Braking

Please note that braking efficiency is significantly impaired under wet and/or dirty conditions, particularly in the case of rim braking systems.

### Accessories/spares

Please note: If you intend to replace parts of your Varibike trike, or attach accessories, this may affect the safety and ride characteristics of your Varibike trike. Consult your dealer and use only quality Varibike trike parts. Unsuitable or inferior accessories or spares, or incorrect installation, can result in personal risks. We cannot be held liable for any resulting injury or damage.

All repairs should be carried out by your dealer. Take your Varibike trike in for a regular inspection (at least once a year). This will prevent and avoid unnecessary risks.



**Important note** on the use of quick releases (including quick release skewers). Certain parts of your Varibike trike are held in place by quick releases, these allow simple replacement of components and fast adjustments. On Varibike trikes, among others, the wheels and the seat are secured in this way. Please note: an incompletely or incorrectly locked quick release can result in the loss of the fixed component, and may result in serious accidents with a high risk of injury!

## Safety driving instructions

- Always have both hands at the crank handles while driving. Except when braking. For braking you take the right hand off the right crank handle and apply with this hand the rear brake. With the left hand apply the front brake. For braking always use both brakes, the front brake and the rear brake.
- Use particular caution when approaching stairs, edges, drops or other hazard areas.
- When driving round a curve, reduce your speed to a minimum.

- When driving round a curve, lean with your upper body towards the centre of the curve. This reduces the risk of tipping.
- Do not ride parallel to slopes to avoid the risk of tipping.
- You may only drive on slopes where the Varibike trike can be safely controlled by steering and braking.
- Do not attach objects (e.g. carrier bags etc.) to the Varibike trike. These could prevent safe operation of the Varibike trike while driving.
- When driving on areas which are used for pedestrians keep a sufficient distance (at least the width of the Varibike trike) from the kerbs or other obstacles and other road users.
- When driving on public roads and paths, the provisions of the applicable road traffic regulations (e.g German StVO) must be observed.
- Avoid driving on unpaved or loose surfaces (e.g. on loose gravel, in sand, mud, snow, ice or through deep puddles of water).
- When travelling on bad paths (e.g. gravel, potholes) there is an increased risk of puncturing your tyres and also of tipping.
- If you encounter new driving situations which are new to you, approach them with great care. If you consider that the risk is too high, you must immediately stop driving and, if required, call for help to assist you getting yourself out from this situation. You must not do telephone calls while driving.
- When driving, never jerk the crank handles to the left or the right, as this may cause the Varibike trike to tip over sideways in certain circumstances.
- While driving, never grab onto the area of the wheels, in the area of the chain / sprockets /chain wheels or into other rotating parts; if you do this may cause injuries.
- If the situation allows it, you should carefully apply the brake. Abrupt braking can cause the upper body to fall forwards, this can result in injuries or loss of driving control.
- The Varibike trike is only designed for transporting persons and must not be used for any other purpose, e.g. by playing children or to transport goods.
- If the weight load on the drive wheel falls (e.g. when driving on slopes) or when driving on loose / slippery surfaces, the braking force of the wheel may be considerably reduced.
- The driving style and speed should be adjusted so that at all times the Varibike trike can be safely stopped by using the brakes.
- Braking in curves increases the risk of tipping. Better you brake before a curve.
- If you have the option stabilizer: Be aware - the stabilizer reduces the risk of tipping but is no guarantee against tipping. Therefore driving curves with a stabilizer wheel touching the ground should be no common driving practice. The stabilizer should be only used in emergency situations.
- Make sure that cables and lines are not kinked or caught up somewhere. This could damage them which could lead to the brakes and gear shift not functioning correctly. In this case, the Varibike trike must no longer be operated.
- When the trike is exposed to direct sun radiation or low temperatures for longer periods, take note that the parts of the Varibike trike may become very hot (>40°C) or very cold (<0°C).

## Regarding locations and situations and their safety

- The driver of the Varibike trike determines the route to be driven taking the instructions of this manual, their driving skills and physical abilities into consideration.
- The driving skills of the driver are particularly important in the following dangerous locations which are provided as examples; the Varibike trike's user must use their judgement before driving in such locations:
  - quay walls, landing and berthing locations, paths and locations close to water, unsecured bridges and dykes.
  - narrow paths, slopes (e.g. ramps), narrow paths on a slope, mountainous roads.
  - narrow and / or steeply sloping paths along roads or near cliffs.
  - ramps and lifting equipment on vehicles.

- routes which are slippery (e.g. covered in leaves, snow or ice).
- When driving in a circle or turning on hills or downward slopes, there can be an increased tendency to tip over to the side due to the changes in the centre of gravity. Therefore perform these driving manoeuvres with increased caution and only with slow speed. If required, the driving manoeuvre must not be done or only with the help of an assistant.
- When crossing roads, intersections and crossings, extreme caution is needed. Crossing rails in the road or at level crossings must never be undertaken when travelling parallel to them, as otherwise the wheels could become caught and thus result in the Varibike trike to tip over or being unable to manoeuvre.
- When driving on ramps and lifting equipment on vehicles, extreme caution is needed. During the lifting or lowering of a ramp or the lifting equipment, the brake should be operated. This prevents your Varibike trike from rolling away.
- The grip of the tyres on the road is reduced in the wet. There is a higher risk of slipping. Adjust accordingly your driving, braking and steering behaviour.

## Safety instructions for obstacles

- Driving on steps with the Varibike trike is forbidden.
- Obstacles like curb stones, for example, should always be negotiated driving forwards and by using the minimum speed required.
- The ground clearance determines the negotiable obstacle heights. When driving straight ahead the ground clearance is 9 cm.

## Notes on components

The following section contains information on the most important components of your Varibike trike. The emphasis is on practical information.

### Frames

Varibike trike frames are handmade from premium quality aluminum alloys. The frame is the heart of your Varibike trike. All Varibike trikes are constructed with frames to match the stresses of their intended use.



**Excessive stresses, accidents or falls may lead to potentially dangerous frame damage. If you should detect damage to your frame, or if you have had an accident or fall, please contact your dealer as soon as possible!**

### Steering

The steering on VARIBIKE TRIKE consists of the front frame and the rear frame that are pivotable connected by an axle. The steering angle is limited by a limit stop between the front and the rear frame.

### Rear brake

The rear brake aside the seat can also be used as parking brake by pressing the brake lever and then move the red lever in one of the notches in the brake lever holder. Check if the rear parking brake has enough braking force to brake the Varibike trike.

To disengage the parking brake just push the brake lever of the rear brake and then release it again.



**For braking always use both brakes, the front brake and the rear brake.**

## Safety instructions for brakes

- Before every ride, test your brakes while stationary with normal operating force. The wheels that are braked by the brakes must not be able to move when the brakes are applied.
- At regular intervals, check that all connections, lines and all screw connections of the brake system are tightened securely.

- At regular intervals, check that the brake pads are free from grease, oil or other contamination. In addition, the brake pad thickness and the brake disc thickness must be sufficient enough.
- Do not drive if your brake system is faulty in one of the previously listed points. Contact your Varibike mechanic immediately to arrange maintenance.

## Tires

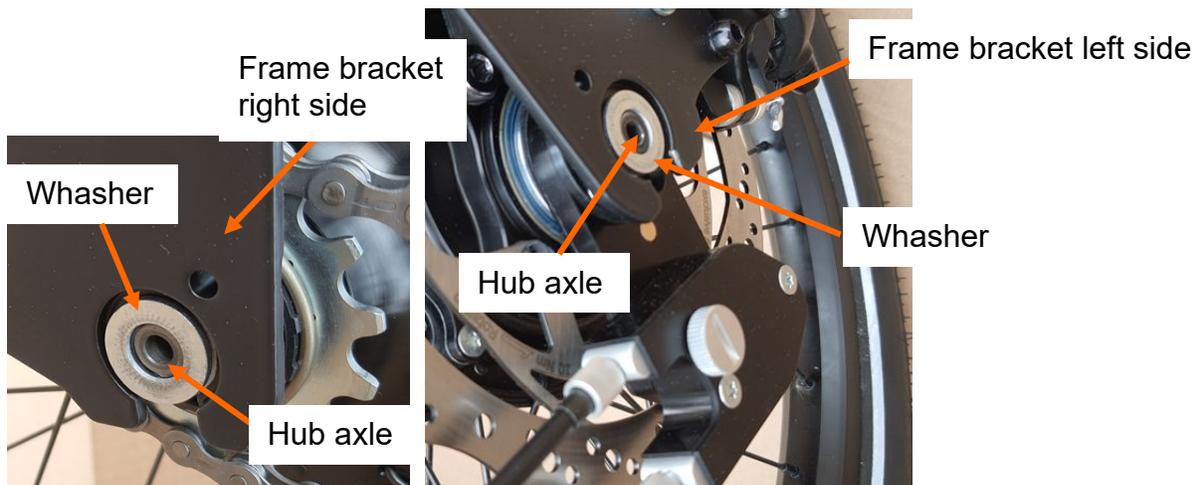
Use only tires of these type:

- Schwalbe Big Apple 20x2.00

Other tires have not been tested by us. The tire pressure should be about 2,5-3,5 bar.

## Front wheel (only with option Rohloff gear unit)

The front wheel is mounted with a quick release skewer. Before you mount the quick release skewer of the hub axle, insert a washer on both ends of the hub axle.



## Seat and seat frame

The seat and the seat frame a heavily loaded part. Externally they should not show any scratches, nicks or cuts, because this can cause breakage. Regularly check these parts for external damage.

In case of doubt a replacement is needed.

Note that the screws and quick releases (including quick release skewers) of the seat and the seat frame must be tightened to the specified torque. Is always preferred the manufacturer specifications. Otherwise it would be possible that the screwed connections and quick releases can loosen. This can lead to serious accidents.

## Drive system

The drive system has the task to optimally implement the resulting pedaling forces into forward motion. Therefore the bottom bracket (BB), crankset, drive chain, synchron chain, freewheel and freewheel sprocket (cassette) are perfectly coordinated at your Varibike trike. If parts are to be replaced, they must be compatible with the rest, otherwise malfunction may occur. Your dealer can advise you. In the following, we give advice to individual drive components.

## Freewheels

The Varibike trike has 3 freewheels:

- 2 arm crank freewheels
- 1 freewheel between the right leg crank and the chainwheels.

All freewheels are maintenance free.

## Gear unit

With the internal gear unit **Shimano Alfine**, **two gear shift levers** are used for changing gears. Press the bigger lever to switch in a slower gear. Press the smaller lever to switch in a faster gear.

## Chain ring unit

The varying length of teeth is not a result of manufacturing error; it serves, along with shift ramps, for smoother changing, particularly under load!

## Bottom bracket

The internal bearing of the Varibike bottom bracket is maintenance free and requires no re-greasing. Examine your bottom bracket for play every now and again. Check the tightness of the pedal cranks and the bottom bracket shaft. Avoid cleaning the bottom bracket with high-pressure water jet cleaners!

## Chain

The chain is, along with all shifting gear components, a classical wearing part. It requires care and maintenance (see appropriate section) and must be renewed in good time to avoid damage to other components. Check your chain regularly for elongation (stretching). Your dealer has special equipment for this purpose. Elongated chains can lead to the destruction of chain rings and gears! If you do need a new chain, make sure it is compatible with your gears, chain rings and sprockets.

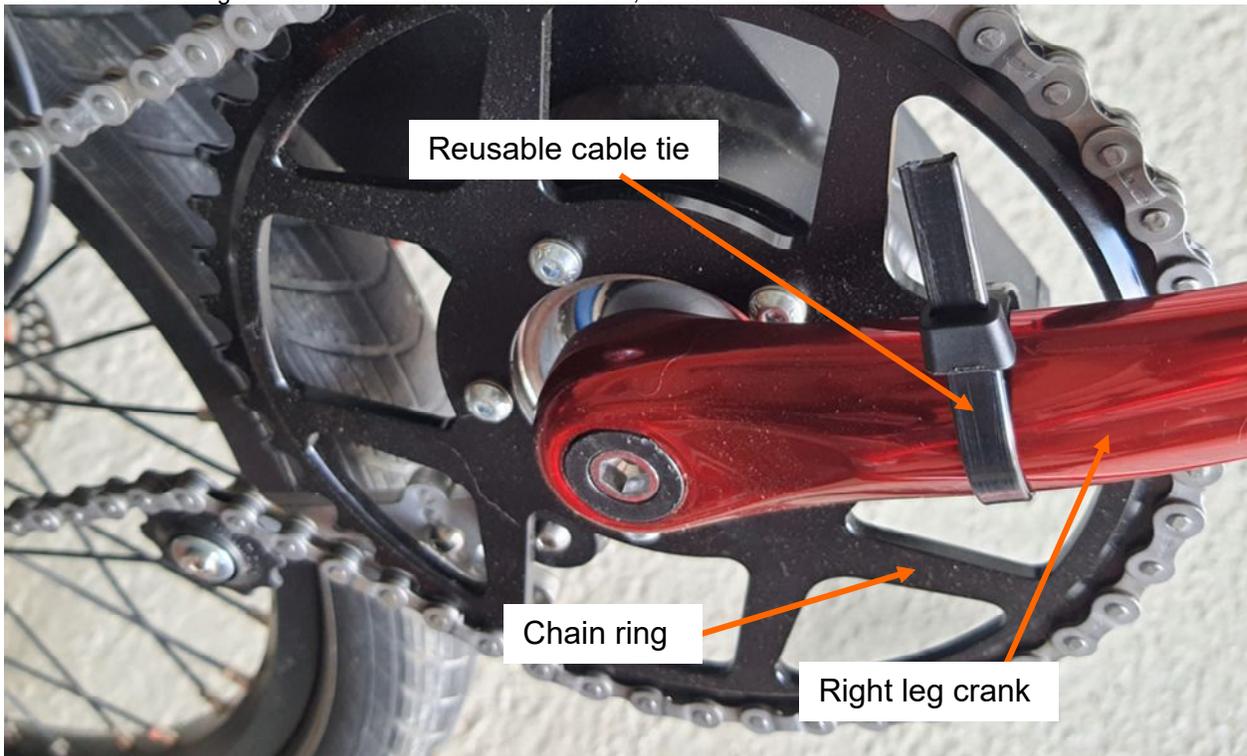
## Cable tie for connecting leg cranks with arm crank movement

You can connect the leg cranks to the arm crank movement with a cable tie.

The cable tie is a reusable type.

To connect the leg cranks with the arm crank movement, strap together the right leg crank with a spoke of the chain ring.

To disconnect the leg cranks from the arm crank movement, remove the cable tie.

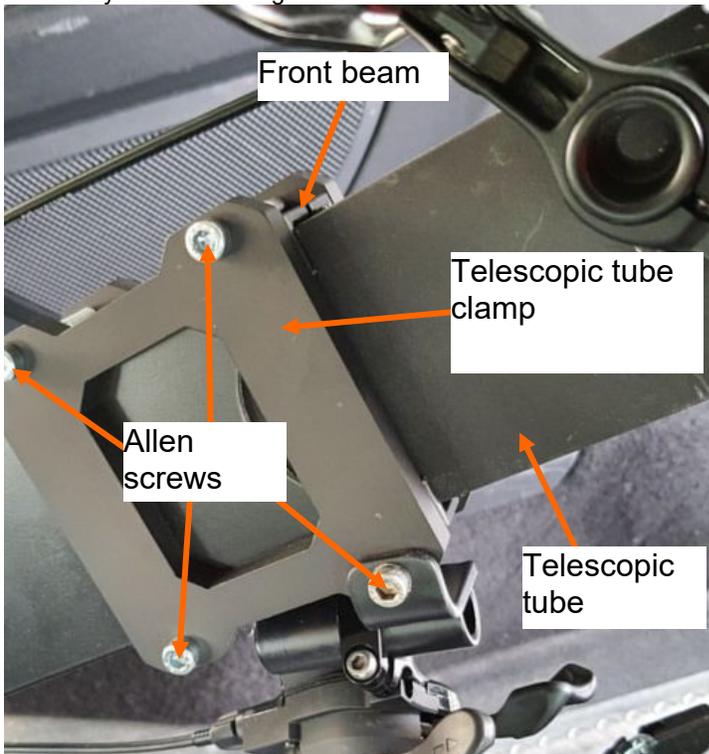


## Synchron chain

The synchron chain must be re-tensioned with elongation.

Procedure: (The best way is be 2 men or women. One holds the frame and the other adjusts the chain tension)

1. Open the 4 allen screws of the telescopic tube clamp
2. Tightening of the synchron chain: Person A holds the front frame. Person B pulls with his hands at the axle of the arm cranks until the synchron chain is tightened.
3. Tighten the allen screws of the telescope tube clamp with tightening **torque of 9 Nm**
4. Check if the sychron chain does not drag when turning the arm cranks. If the synchron chain drags, than tension the synchron chain again.



## Torques of components screws

Picture: Varibike trike components screws



always use a a torque wrench to tighten the screws.

Pos.	Screws of components	Torque [Nm]
1	leg cranks	35
2	pedals	25
3	telescope tube clamp	9
4	arm crank	4
5	steering axle clamping	8
6	arm crank handles	14
7	Beam clamp	9
	clamping halves of stabilizer (see page 8)	14

## TRANSPORTATION

- Ensure that the Varibike trike is in a fixed and stable position during transport.

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## ADJUST TO YOUR BODY SIZE

### ***Adjustment of the arm crank position***

The correct setting of the Varibike trike is important for the well-being and performance while varibiking. The arm cranks are mounted in a telescope tube. The adjustment of the telescope tube, and thus the crank position, should be performed exclusively by the manufacturer.

Maximum length 130mm that the telescope tube can be out of the frame.

### ***Adjustment of the leg crank position***

The correct setting of the Varibike trike is important for the well-being and performance while varibiking. The leg cranks are mounted in the bottom bracket. The adjustment of the bottom bracket, and thus the leg crank position, should be performed exclusively by the manufacturer.

## LEARNING VARIBIKE TRIKING

Varibike triking is different from normal triking. Varibiking triking has to be learnt, even good trike cyclists' have to learn it first.

Before you ride your Varibike trike, let your Varibike instructor teach you about riding a Varibike trike.

### ***Important advices regarding the steering.***

To steer the Varibike trike the front frame is swivelled to the inside of the curve. The more you tilt the front frame, the bigger is the steering angle.

### ***The steering of the Varibike trike can be achieved in different ways:***

1. Swivel the front frame with the legs.
2. Swivel the front frame with the arms
3. Swivel the front frame with the arms and legs.

### ***Advices for an easier learning:***

- Begin on a free plane area besides the traffic e.g. a parking lot without traffic and cars or a broad road without surrounding stones.
- Always keep enough distance to any obstacles or the end of the road surface.
- Begin varibike triking just by pedal with your legs and drive straight ahead.
- Drive at low speed
- Practice shifting gears and braking
- Always keep in mind that a trike can tip over to the side. Therefore when driving round a curve, reduce your speed to a minimum.
- To make a narrow turn use just your arms for steering.

## VARIBIKE TRIKE STORING FOR LONGER TIMES

Danger of Varibike trike damage!

Incorrect storage of your VARIBIKE trike can damage bearings and tyres and promote corrosion.

Please follow these advices:

1. Clean and maintain your VARIBIKE trike as prescribed before.
2. Store your VARIBIKE trike in a dry and dust-free room.
3. Use appropriate VARIBIKE trike stands (e.g. tripod or wall hooks). Please consult your bike dealer.
4. Every month: Put your Varibike trike with one or both wheels on the floor
  - Move the steering from side to side.
  - Lift your VARIBIKE trike and turn your wheels a couple of turns.
  - Spin your arm and leg cranks a couple of turns in counter wise direction.
  - When using again than carry out as prescribed in the chapter „Before you ride“.

## WARRANTY AND GUARANTEE

The warranty ends in these cases:

- for complaints that are attributed to the fact that you have changed parts that are not specified in the manual or that are no original spare parts approved by us.
- when defects result from the fact that the requirements of this manual have not been met or followed.
- changes to the Varibike trike without the prior consent of the manufacturer

### Impressum

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