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# Hybride***bicycle***

Instruction manual

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# 1. Introduction

## **Congratulations with the purchase of your Batavus bicycle.**

Carefully read these instructions and keep them ready to hand for future reference. Always follow the instructions and tips included in this manual.

This manual contains tips and instructions that will make cycling more comfortable and safe. However, the manufacturer cannot exclude any damage being caused, despite carefully following these instructions and tips. No rights can be derived from this manual (except the guarantee granted herein). The manufacturer shall not be liable for any damage, unless this results from stipulations included in imperative law.



### **Consult your dealer:**

- In case of questions and/or complaints;
- For the annual maintenance of your bicycle (preferably before the beginning of the winter or prior to a holiday tracking trip).



### **Clean:**

- Exclusively use hot water with a mild liquid soap and a cotton cloth for the large surfaces;
  - Grease aluminium, chromium and steel parts with acid-free vaseline to avoid oxidation.
  - Not allowed:
    - strong, chemical agents, such as bleach, ammonia or soda;
    - garden hose or high-pressure spraying pistol to prevent damaging the pivoting points running in bearings.
- These are splash-water resistant, but not waterproof;
- When cleaning the bicycle, prevent water from penetrating the inner legs of the suspension forks.

### **Explanation of icons:**



Caution: consult your dealer



Caution / warning

## 2. Guarantee

### Guarantee conditions for Batavus bicycles

If you want to make use of the Batavus guarantee, you always have to be able to hand over the receipt and the 'Certificate of Ownership' to the dealer and/or to Batavus bv. The guarantee conditions will be given below. For guarantee matters you can always contact the Batavus dealer, who knows how to handle these in conformity with the guarantee conditions.

#### Article 1 Guarantee

- 1.1 Batavus bv guarantees that Batavus bicycles are free from construction and/or material faults and/or corrosion, all this insofar this results from these guarantee conditions.
- 1.2 The guarantee can only be appealed to by the first owner of the Batavus bicycle concerned.
- 1.3 The guarantee will become null and void in accordance with the stipulations in articles 3.1 and 5.1.
- 1.4 The guarantee is not transferable.
- 1.5 The guarantee granted by Batavus on the basis of these conditions shall be without prejudice to the possibility to call the seller to account on the basis of the normal, legal stipulations of the Civil Code.

#### Article 2 Term of guarantee

- 2.1 10 years guarantee for construction and/or material faults of Batavus frames and non-suspension forks.
- 2.2 The same guarantee applies for a period of 2 years to suspension forks, shock absorbers and all other parts, except the parts mentioned in section 2.4.
- 2.3 A guarantee period of 2 years applies to paintwork of frame and fork for corrosion from the inside.
- 2.4 No guarantee applies to wearing parts, such as tyres, chain, chain wheels, freewheel, rear gears, cables and brake pads, unless construction and/or material faults are involved.
- 2.5 A guarantee period of 2 years applies to other painted and chromium parts for corrosion, provided that the bicycle has been properly maintained.

#### Article 3 Guarantee exclusions

- 3.1 The guarantee will become null and void in the following cases, to the discretion of Batavus:
  - a. Incorrect and/or careless use of the bicycle and non-intended use;
  - b. The bicycle has not been maintained in conformity with the information in this manual;
  - c. Technical repairs have been carried out incompetently;
  - d. Parts mounted afterwards do not correspond with the technical specifications of the bicycle concerned or have been mounted incorrectly;
  - e. If the certificate of ownership, showing that the bicycle has been completed and checked before delivery to the customer, is not present or has not been signed by the recognised Batavus dealer.
- 3.2 Further, Batavus bv explicitly does not accept any liability for damage to (parts of) the bicycle resulting from:
  - a. Faulty adjustment/tension of handle bars, stem, saddle, saddle post, derailleur set, brakes, quick couplings of the wheels and saddle;
  - b. Untimely replacement of parts, such as brake/shifter cables, brake pads, tyres, chain and gears;
  - c. Climatic influences, such as normal weathering of paintwork or chromium corrosion.

#### **Article 4 Guarantee on parts**

- 4.1 All parts that Batavus bv has determined to contain a material and/or construction fault will be repaired or compensated to the discretion of Batavus bv during the guarantee period. Any (dis)mounting costs shall be at the expense of the owner.
- 4.2 Contrary to the stipulations in the previous section, the labour costs will be at the expense of the manufacturer as well in case of material and/or construction faults in frames and forks for a period of 3 years after the purchasing date.
- 4.3 Transport costs of the bicycle and/or parts from and to Batavus bv will be at the expense of the owner, unless the part involved is covered by the guarantee.
- 4.4 If a certain part is covered by the guarantee and the original part is no longer available, Batavus bv will provide at least an equivalent alternative.

#### **Article 5 Submit a claim**

- 5.1 Claims with respect to this guarantee shall – while offering the bicycle or the part concerned – be submitted through the Batavus dealer who sold the bicycle. Simultaneously, the receipt as well as the certificate of ownership delivered with the bicycle shall be handed over to the dealer.
- 5.2 If the owner has moved or the dealer is no longer available, Batavus bv will give the nearest Batavus dealer on request.

#### **Article 6 Liability**

- 6.1 A guarantee claim accepted by Batavus bv does not automatically imply that Batavus bv also accepts liability with respect to any damage suffered. The liability of Batavus bv will never exceed what is described in these guarantee conditions. Any liability of Batavus bv for consequential damage is explicitly excluded. The stipulations in these conditions shall not be valid if and insofar this results from stipulations included in imperative law.

## 3. Safety

### 3.1 Using the bicycle

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- Adhere to the traffic rules.
- Make sure that the equipment of your bicycle complies with the legal minimum requirements.
- Avoid heavy shocks and extreme loads.
- Avoid improper use, such as overstraining and dismounting or personally modifying parts – consult your dealer.
- Are all bolts and nuts still tight?
- Dismounting or cutting through lines is not allowed with a hydraulic brake. This is because the internal fluid (usually oil) is under great pressure.



#### Part

#### Check and consult your dealer, if necessary

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<b>Saddle</b>	Watch the coat length! When getting off, the coat can be caught behind the saddle and this may cause an unsafe situation.
<b>Handle bars</b>	Do not adjust the handle bars while cycling. Always get off first. For models with a handle, it is not allowed to open the handle without pressing the safety lock first. Do not hang a child's seat, bags or other things on the bend in the handle bars. The maximum handle bar load is 5 kg.
<b>Child's seat</b>	General instruction: mount a child's seat at the rear of the bicycle. A child's seat at the front will affect the steering behaviour. If you have a child's seat at the front anyway, make sure that it has been attached to the headset or the stem.
<b>Grips</b>	Immediately replace torn or loose grips.
<b>Pedals</b>	Be careful with hard and/or leather soles. Especially when it rains or under wet weather conditions there is a risk of slipping off the pedals. Wear shoes with sufficient grip.
<b>Brakes</b>	The braking distance will be longer under wet weather conditions. During long(er) descents it is safer to brake in a modulated way to avoid overheating of the brake pads. Never use the front brake only. The front wheel may easily block, causing you to fall.
<b>Lighting</b>	Do not switch on the dynamo while cycling. Exception: the dynamo switch on the handle bars allows this.
<b>Luggage carrier</b>	Not allowed: transport persons on the luggage carrier. Make sure that a bag placed on the luggage carrier cannot get caught in the rear wheel. Make sure that your heels cannot touch the bicycle case while cycling. Evenly spread the luggage. The maximum load is mentioned on the luggage carrier itself.
<b>Bicycle stand</b>	Not allowed: sit on or ride the bicycle while it is on the bicycle stand. In case of a child's seat: first take the child off the child's seat and then put the bicycle on the bicycle stand.

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Caution: consult your dealer when the above-mentioned items are not OK and/or in case of loose, bent or damaged parts.



When tightening bolts and nuts the correct torque is of major importance. We recommend you to consult your dealer for your own safety.

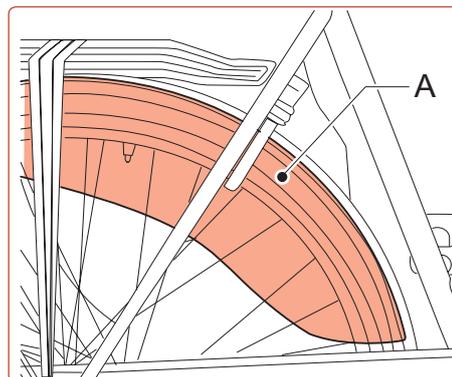
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## 3.2 Safety provisions

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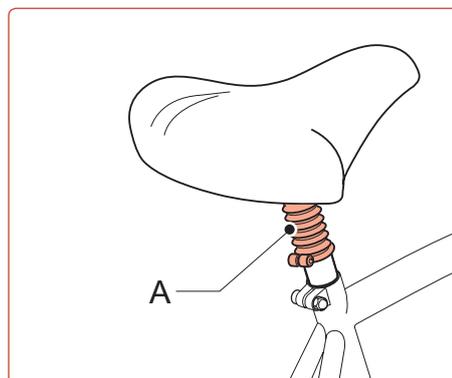
### Dress guard

Some bicycle models have been provided with a dress guard (A).



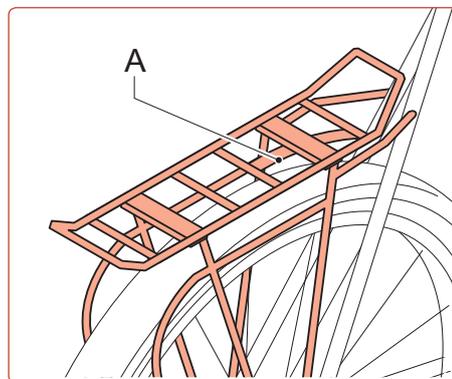
### Spring cover

Some bicycle models have been provided with a spring cover (A) around the suspension saddle post to protect the hands of children sitting at the back of the bicycle in a child's seat.



### Luggage carrier

There are various types of luggage carriers. The maximum load (in kg) is mentioned on the carrier (A).



## 3.3 Transport by car

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Remove all accessories that may loosen from the bicycle by vibration (pump, bidon, bicycle computer, etc.). Switch off the batteries of the automatic rear lamp.

### Check:

- Whether the bicycle carrier has been correctly mounted;
- Whether its lighting is functioning well;
- Whether the registration plate is clearly visible;



- Make sure that the bicycle cases, especially the flaps, have been tightened well and cannot be blown up by the wind.
- Check the ball pressure of the towing hook of your car.

## 4. Checklist

### 4.1 Before you leave or after a fall

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- Adhere to the traffic rules.
- Make sure that the equipment of your bicycle complies with the legal minimum requirements.
- Avoid heavy shocks and extreme loads.
- Avoid improper use, such as overstraining and dismantling or personally modifying parts – consult your dealer.
- Are all bolts and nuts still tight?
- Dismounting or cutting through lines is not allowed with a hydraulic brake. This is because the internal fluid (usually oil) is under great pressure.



#### Part

#### Check and consult your dealer, if necessary

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#### Handle bars

Have the grips been attached well?  
Are the handle bars or the stem bent or damaged after a fall?  
In case of an adjustable stem, check if this has been locked properly.  
Do you feel vibrations in the handle bars?

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#### Child's seat

Has the child's seat been attached well?

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#### Brakes

Do the cables not show any kinks or frays?  
Are the brake pads clean, free from grease and not worn?  
Is the braking power sufficient? (This is sufficient when you can squeeze the brake grips no further than one quarter to half.)

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#### Wheels

Is the wheel not buckled?  
Are there no loose spokes?  
In case of aluminium rims with a 'Safetyline': is the strip visible or is the groove still there?  
Is the tyre pressure sufficient?  
Is the running surface of the tyres not worn? Does it not show any weak spots or bubbles?  
Is the side reflector of the tyres clean?

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#### Lighting

Do the front and rear lamps function?  
Have the lamps been attached well?  
Is the cable insulation OK?  
Does the dynamo not skid?

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#### Gears

Do all gears work?  
Does a gear spontaneously skid or do you hear any cracking?

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#### Pedals

Are the reflectors clean?  
Do the pedals have sufficient grip?  
Can you just feel some play in the pedals?  
Are the pedals fixed well to the cranks?

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#### Luggage carrier

Has the luggage carrier been fastened well?

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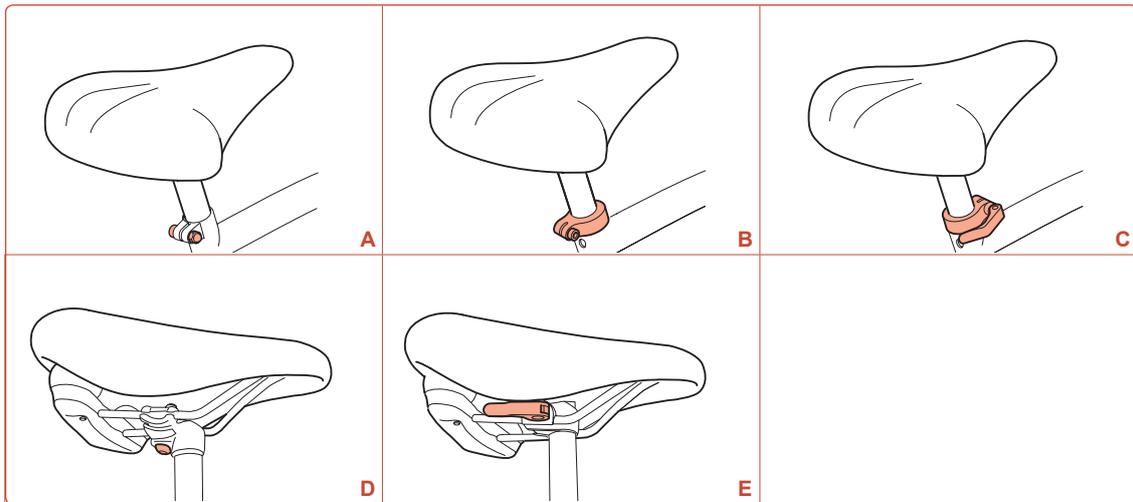
Caution: consult your dealer when the above-mentioned items are not OK and/or in case of loose, bent or damaged parts.



Caution: when tightening bolts and nuts the correct torque is of major importance. We recommend you to consult your dealer for your own safety.

## 5. Saddle

### Saddle types



- A Height adjustment with frame bolt (see 5.2)      D Position adjustment with saddle bolt (model with 1 or 2 bolts) (see 5.6)
- B Height adjustment with clamping ring (see 5.3)      E Position adjustment with quick coupling (see 5.7)
- C Height adjustment with quick coupling (see 5.4)



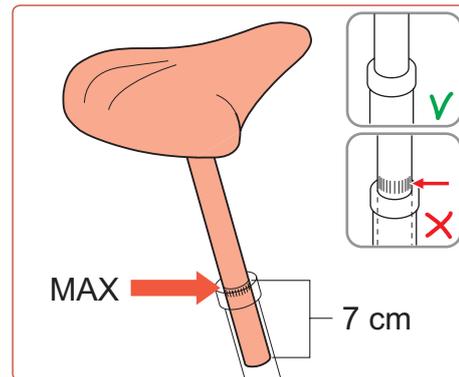
- Watch out for rough surfaces when parking the bicycle to avoid damaging the saddle.
- Saddle surfaces may come off because of weather influences. Use a saddle cover to protect the saddle.

## 5.1 Height adjustment, general

### Safety mark



Do not adjust the height of the saddle post beyond the safety mark (A). The saddle post must be inserted in the frame tube for more than 7 cm.



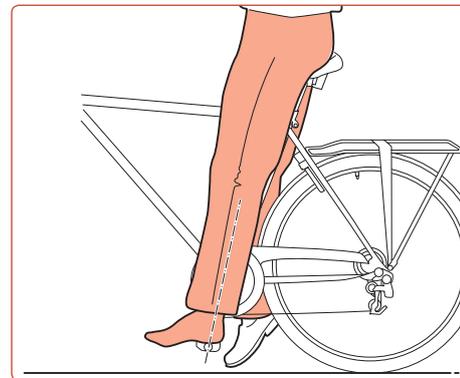
### Sitting position

For a comfortable sit the procedure given below can be useful:

1. Put off your shoes.
2. Mount the bicycle.
3. Hold the crank in line with the seat tube.
4. Place your heel on the pedal.
5. You must just be able to stretch your leg.

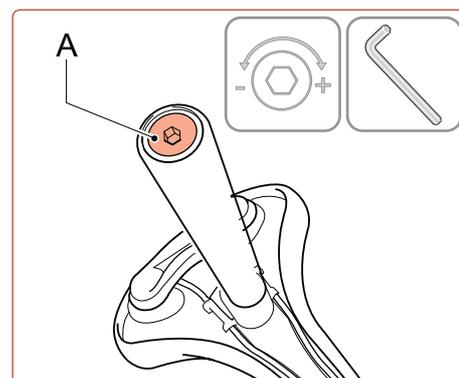


A too high seat will make you slide on the saddle and your back protest. A too low seat will cause irritation at the back of your knees.



### Set the suspension power of the saddle post

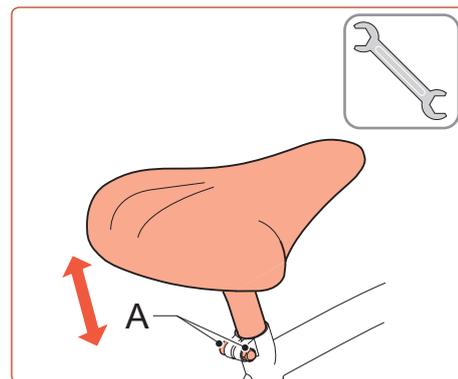
1. Take the saddle post with the saddle off the frame tube.
2. Turn the socket screw (A) to set the suspension.
  - turn clockwise to increase the tension
  - turn counterclockwise to decrease the tension
3. Re-insert the saddle post into the frame tube.



## 5.2 Height adjustment with frame bolt

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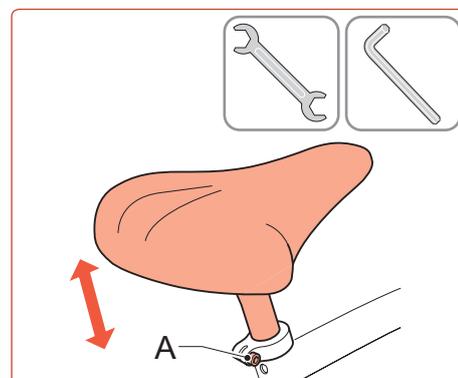
1. Loosen the bolt (A).
2. Adjust the height.
3. Tighten the bolt.



## 5.3 Height adjustment with clamping ring

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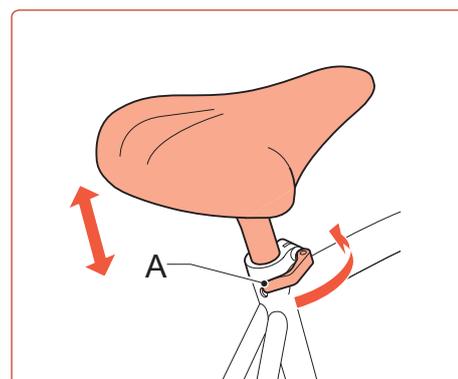
1. Loosen the bolt (A).
2. Adjust the height.
3. Tighten the bolt.



## 5.4 Height adjustment with quick coupling

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1. Loosen the quick coupling (A).
2. Adjust the height.
3. Tighten the quick coupling.



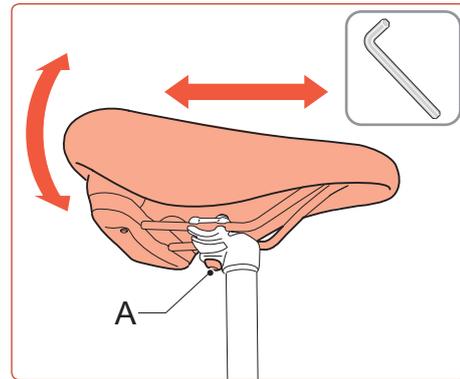
## 5.5 Position adjustment with saddle bolt

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1. Loosen the bolt(s) (A).
2. Set the position (tilt).
3. Tighten the bolt.



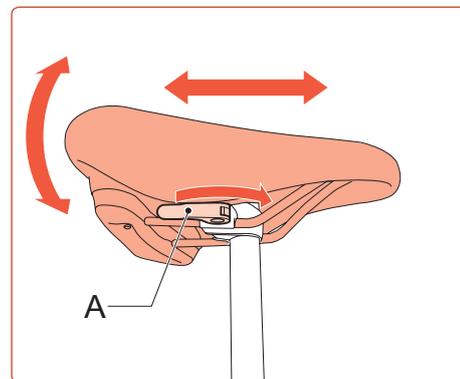
A model with 2 bolts is available as well.



## 5.6 Position adjustment with quick coupling

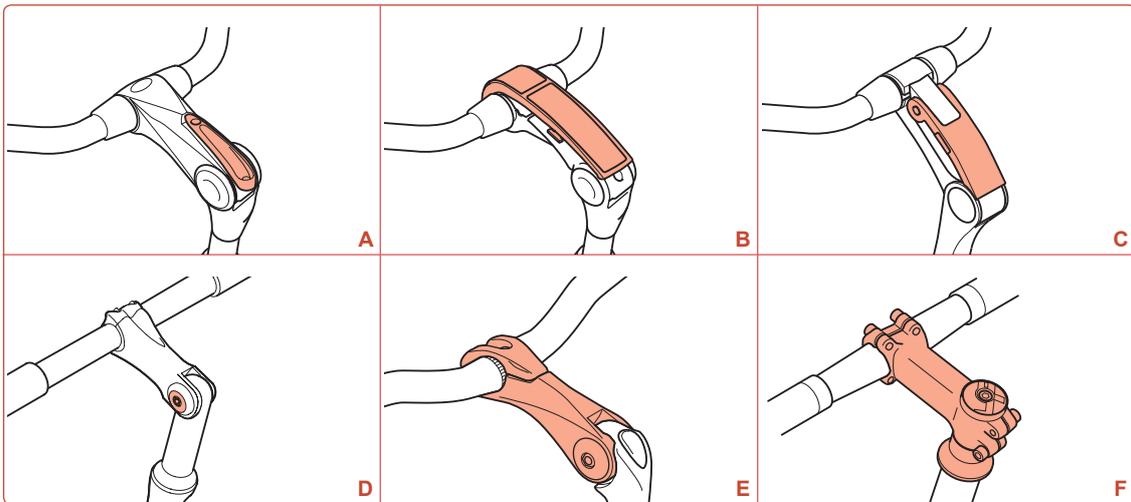
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1. Open the quick coupling (A).
2. Set the position (tilt).
3. Close the quick coupling.



## 6. Handle bars

### Handle bar types

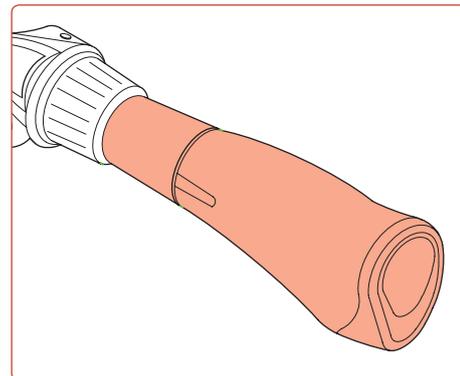


- A Batavus Ergo Matic (no use of tools) (see 6.2)
- B Batavus Ergo Matic Plus stem (no use of tools) (see 6.3)
- C Batavus Ergo Matic 3 (no use of tools) (see 6.4)

- D Hybrid (use of tools) (see 6.5)
- E Adjustable Aheadset (see 6.6)
- F Integrated stem (Aheadset) (see 6.7)



The position of the handle bars and the stem determine the sit, in particular the position of the back and the pressure of the hands on the grips. The grips have an ergonomic shape.

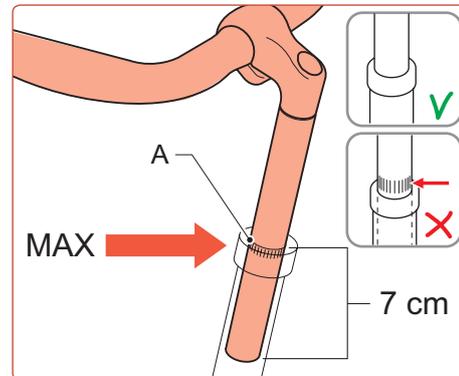


## 6.1 Adjustment, general

- ! Check whether the brake and the shifter cables are not too tight and make sure that the cables are not pinched. This may affect the shifting, braking and steering.

### Safety mark

- ! Do not adjust the height beyond the safety mark (A). The saddle post must be inserted in the frame tube for more than 7 cm. Make sure that the handle bars are straight with respect to the front wheel.



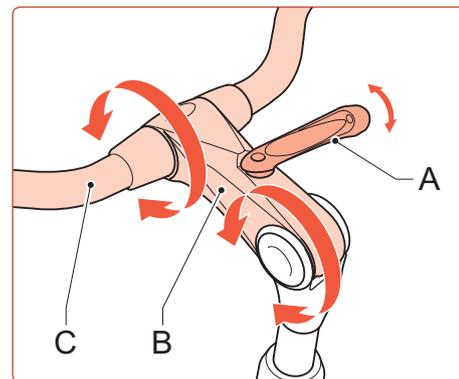
## 6.2 Adjust handle bars of Batavus Ergo Matic

### Tilting of the stem/handle bars

1. Loosen the handle (A) clockwise. With this both the tilting of the stem and the handle bars can be adjusted in one operation.
2. Tilt the stem (B) and the handle bars (C) to the required position.

- ! Make sure that the handle bars are exactly in the middle.

3. Turn back the handle after having made the adjustment..

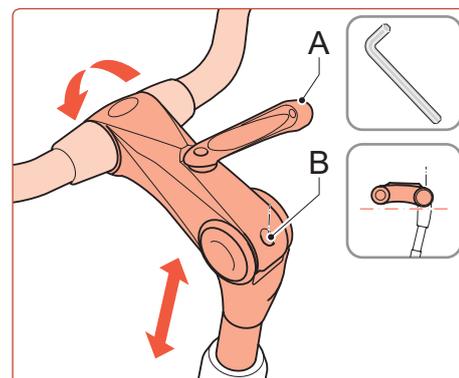


### Height of the stem

1. Loosen the handle (A) clockwise.
2. Tilt the stem in a horizontal position.
3. Loosen the bolt (B) a few turns. Use a socket head wrench with a long handle for this.
4. Set the height of the stem.

- ! Watch the max. mark on the stem.

5. Tighten the bolt.
6. Turn back the handle after having made the adjustment.



### Set the clamping force of the handle

- ! Caution: consult the dealer when you notice any movement in the handle bars when getting on or off the bicycle. The dealer can adjust the clamping force.

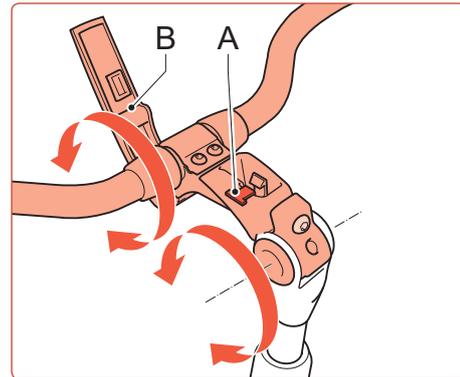
## 6.3 Adjust handle bars of Batavus Ergo Matic Plus stem

### Tilting of the stem/handle bars

1. Press the safely lock (A) and open the handle (B) by moving it up.  
Now both the tilting of the stem and the handle bars can be adjusted in one operation.

 Make sure that the handle bars are exactly in the middle.

2. After having made the adjustment, close the handle (B) until you hear a click.

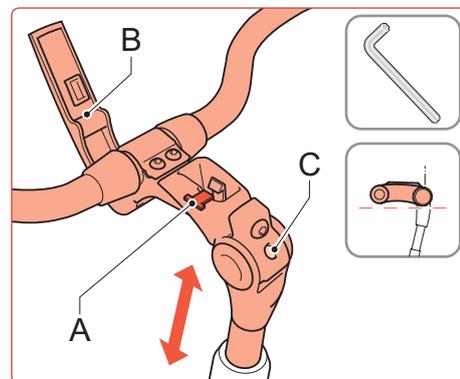


### Height of the stem

1. Press the safely lock (A) and open the handle (B) by moving it up.
2. Tilt the stem in a horizontal position.
3. Loosen the expander bolt (C). Use a socket head wrench with a long handle for this.
4. Tap the expander bolt down and loose with a plastic-headed hammer.
5. Set the height of the stem.

 Watch the max. mark on the stem.

6. Tighten the expander bolt.
7. After having made the adjustment, close the handle (B) until you hear a click.



### Set the clamping force of the handle

 Caution: consult the dealer when you notice any movement in the handle bars when getting on or off the bicycle. The dealer can adjust the clamping force.

 You can add a bicycle computer to this model. Contact your Batavus dealer for this.

## 6.4 Adjust handle bars of Batavus Ergo Matic 3

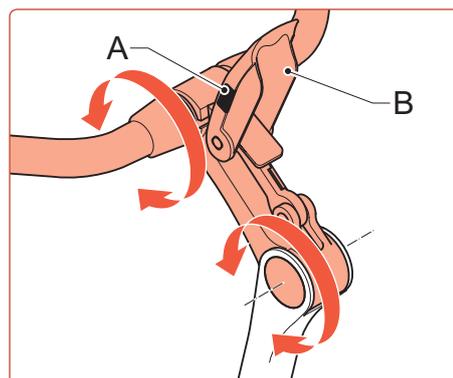
### Tilting of the stem/handle bars

1. Press the safely lock (A) and open the handle (B) by moving it up. With this both the tilting of the stem and the handle bars can be adjusted in one operation.
2. Tilt the stem and the handle bars to the required position.



Make sure that the handle bars are exactly in the middle.

3. After having made the adjustment, close the handle (B) until you hear a click.



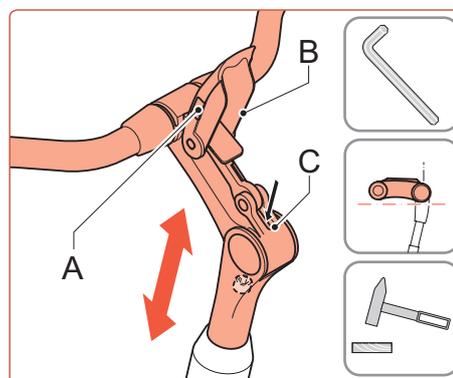
### Height of the stem

1. Press the safely lock (A) and open the handle (B) by moving it up.
2. Tilt the stem in a horizontal position.
3. Loosen the expander bolt (C).
4. Tap the bolt down and loose with a plastic-headed hammer. If necessary, use a board.
5. Set the height.



Watch the max. mark on the stem.

6. Tighten the expander bolt (C).
7. After having made the adjustment, close the handle (B) until you hear a click.



### Set the clamping force of the handle



Caution: consult the dealer when you notice any movement in the handle bars when getting on or off the bicycle. The dealer can adjust the clamping force.

## 6.5 Adjust Hybrid model

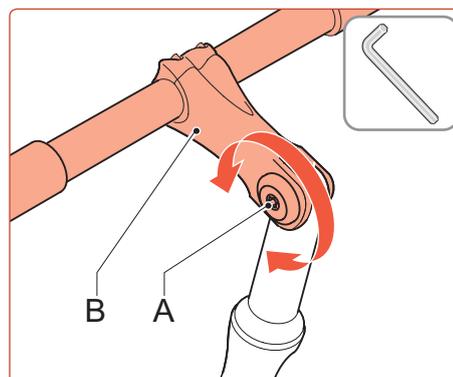
### Tilting of the stem/handle bars

1. Loosen the bolt (A).
2. Tilt the stem and the handle bars (B) to the required position.



Make sure that the handle bars are exactly in the middle.

3. Tighten the bolt



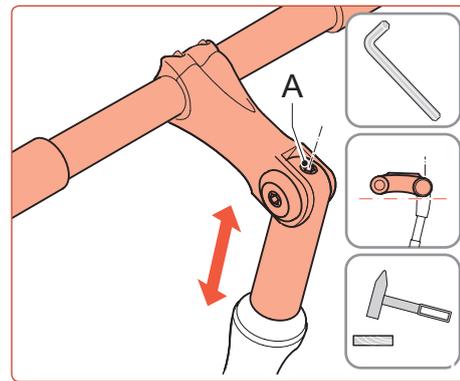
### Height of the stem

1. Tilt the stem in a horizontal position, see above.
2. Loosen the expander bolt (A).
3. Tap the bolt down and loose with a plastic-headed hammer. If necessary, use a board.
4. Set the height.



Watch the max. mark on the stem.

5. Tighten the expander bolt (A).



## 6.6 Adjust adjustable Aheadset

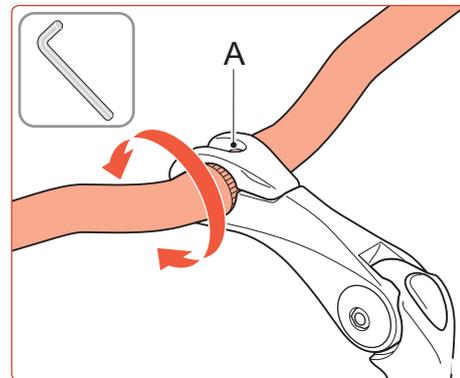
### Tilting of the handle bars

1. Loosen the socket screws (A).
2. Tilt the handle bars to the required position.



Make sure that the handle bars are exactly in the middle.

3. Tighten the socket screws.



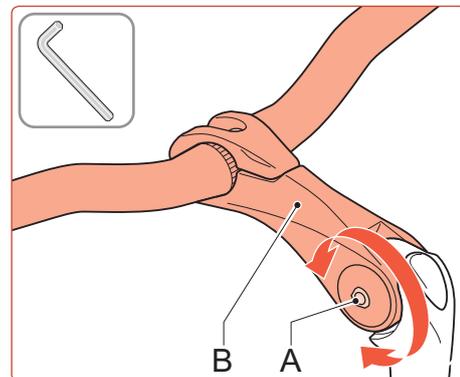
### Tilting of the stem/handle bars

1. Loosen the bolt (A).
2. Tilt the stem and the handle bars (B) to the required position.



Make sure that the handle bars are exactly in the middle.

3. Tighten the bolt.



## 6.7 Adjust integrated stem (Aheadset)

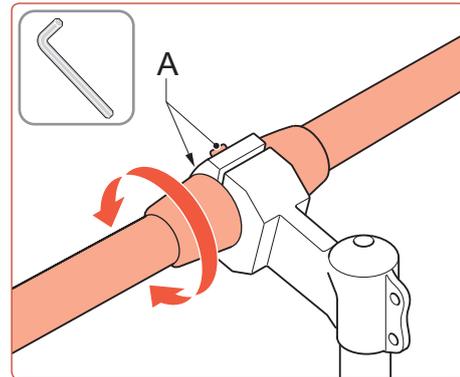
### Tilting of the handle bars

1. Loosen the socket screws (A).
2. Tilt the handle bars to the required position using the two bolts at the front/on top.



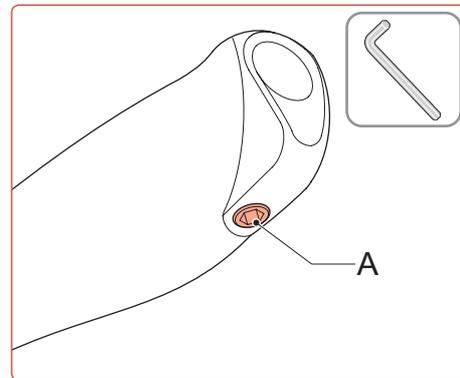
Make sure that the handle bars are exactly in the middle.

3. Tighten the socket screws.



## 6.8 Adjust Batavus Ergo Grip

1. Loosen the socket screw (A) a few turns.
2. Put the handle bars into the correct position.
3. Carefully tighten the socket screw.



## 6.9 Adjust the suspension fork

Proportionally adjust the spring force using buttons (A) and (B)\*.

Some suspension forks have caps. You can easily remove these using, for example, a coin.

Not all suspension forks can be adjusted.

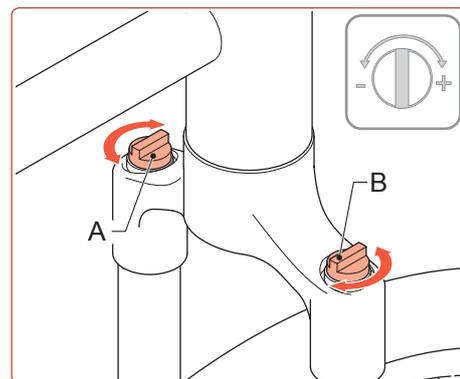
The adjustable forks can be recognised by the mark '+' and '-' with arrow.

+ = tighter, so more rigid

- = more loose, so suspension is felt more clearly



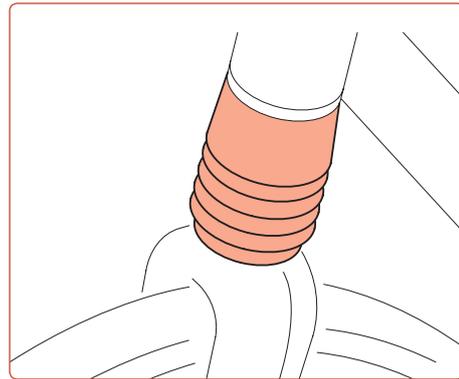
\* A and B are also available in notched models. Here use, for example, a coin to turn them.



## 6.10 Headshock suspension

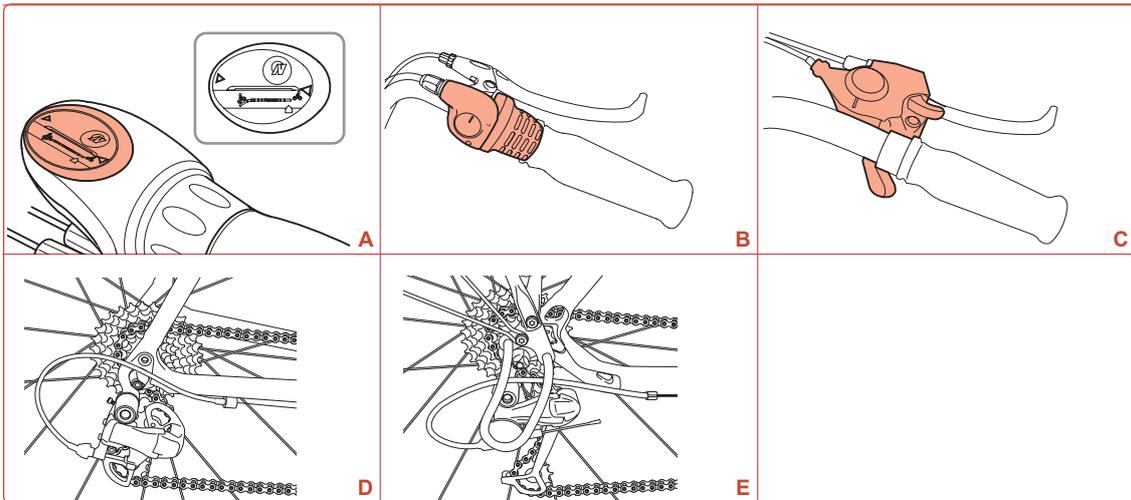
---

Headshock suspension placed above the fork.



## 7. Gears consult your dealer

### Gear types

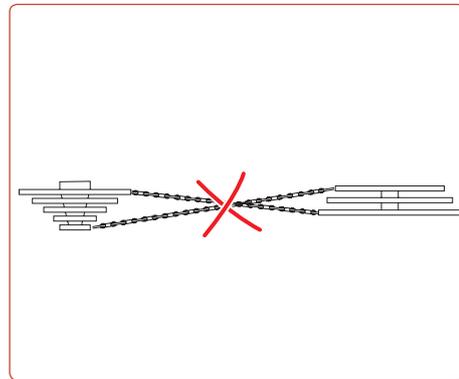


- |  |   |
|--|---|
| A NuVinci, variable gear hub               | D Derailleur and toothed blades                 |
| B Derailleur shift (using a rotary switch) | E Derailleur and toothed blades with hoop guard |
| C Derailleur shift (using a handle)        |   |

**!** It is better to select a lighter gear than a gear that is just a bit too heavy in order to spare your back and knees as much as possible. Use the heavier gears for descents or when the wind is coming from behind. Release the pressure on the pedals while shifting. In this way you can smoothly shift and you save the mechanism.

- Caution: consult your dealer:**
- Models with 3x7, 3x8 and 3x9 toothed blades. Leave the adjustment of derailleur, shifts and chain to you dealer.
  - In case of problems with shifting, cracking or squeaking sounds.

- !** **With a derailleur:**
- Make sure that the chain is as parallel as possible to the frame while cycling.
  - Avoid a diagonal chain line to prevent premature wear.
  - Let the chain slide onto other toothed blades using the shifts on the handle bars. Operate the front derailleur that makes the chain go to toothed blade 1, 2 or 3 with your left hand. Operate the rear derailleur that makes the chain end up on toothed blade 1-7, 8 or 9 (dependent on the model) with your right hand. While shifting, keep pedalling calmly and with less force. The small toothed blade at the front combined with the large toothed blade at the rear is the lightest gear. The large toothed blade at the front combined with the small toothed blade at the rear is the heaviest gear.



## 8. Chain

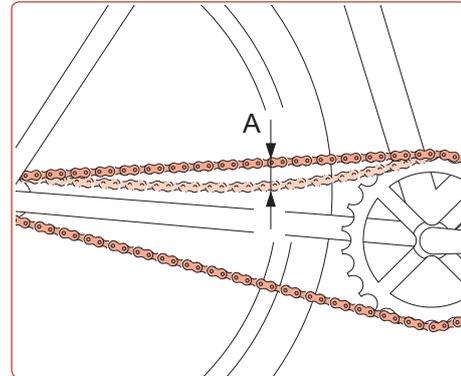


Caution: consult the dealer for cleaning and maintenance of the chain.  
Your dealer sells special cleaning agents.

### Play

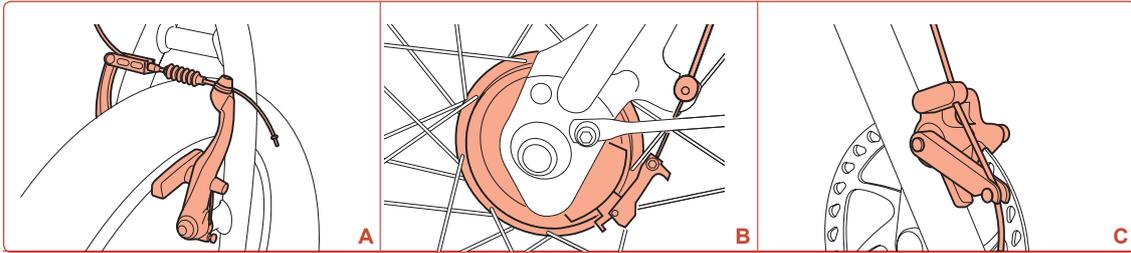


Caution: consult the dealer when the play (A) of the chain is more than 2 cm. The chain is too slack then.



## 9. Brakes consult your dealer

### Brake types



- A V-brake (rim brake) (see 9.1)
- B Roller brake (see 9.2)
- C disc brake (see 9.3)

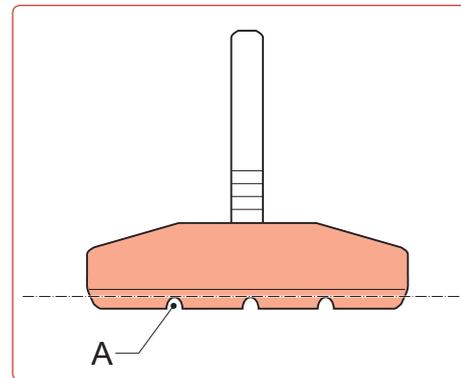


Caution: consult the dealer in case of problems with the brakes. Good and safe brakes are of vital importance.

### Brake pads



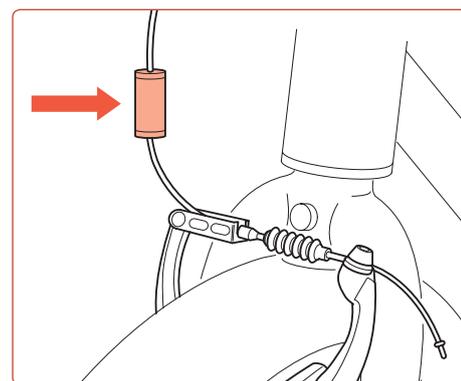
Caution: consult the dealer when the brake pads are worn (when the slant grooves of the brake pads (A) have worn out). Replace the brake pads in this case.



### 9.1 V-brakes



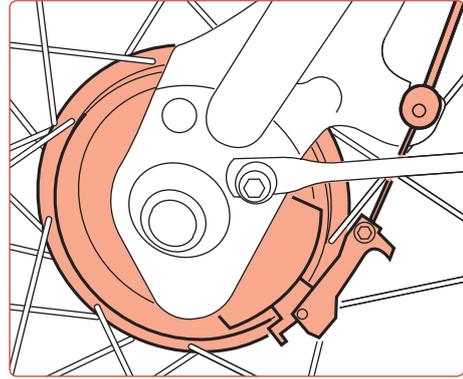
With some models a so-called 'Power modulator' or braking power modulator (A) controls the braking power of the V-brakes. This helps to prevent excessive braking and makes the brake safer to use.



## 9.2 Roller brake

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When a roller brake has been applied, the bicycle can still move a bit forwards and backwards. This may feel as if the brake has not been adjusted correctly. However, this play is inherent in this type of brakes. This play avoids dangerous situations as much as possible.

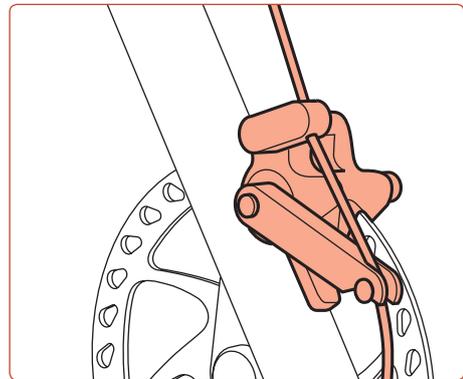


## 9.3 Disc brake

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 With a disc brake regularly wipe the disc dry and clean with, for example, a dry cloth.

 Caution: consult the dealer for precise adjustment of the disc brakes.



## 10. Wheels



The following items are important for smooth running:

- Properly pumped up tyres; the tyre pressure is mentioned on the side of the tyre (bar or psi)
- Tightly tensioned spokes;
- Well-adjusted hub without play.



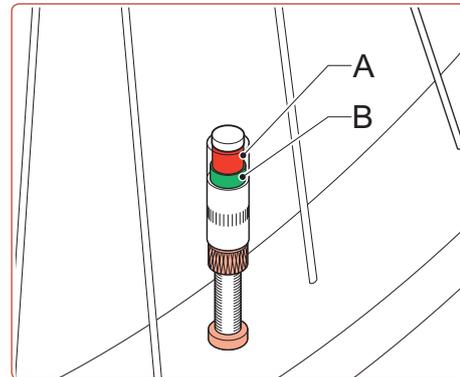
Caution: consult your dealer:

- For regularly checking the tension of the spokes.
- For removing/placing a rear wheel.

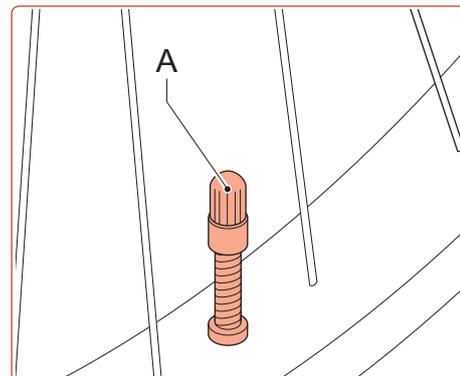
### Pressure indicator

Some models have been provided with a pressure indicator indicating when the tyre needs extra pumping up.

- (B) is visible when the pressure is sufficient.
- When the tyre needs pumping up, only (A) will be visible.



### Dutch valve model

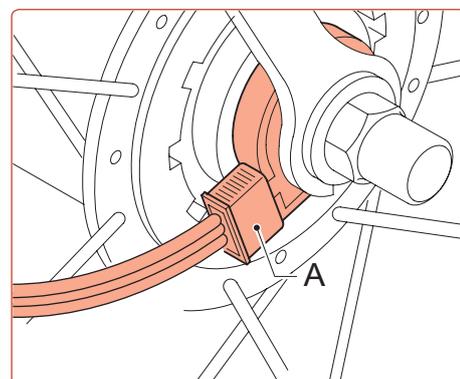


## 10.1 Front wheel with hub dynamo



Caution: consult your dealer when faults occur with the hub dynamo or when the front wheel needs to be removed.

Never loosen the connector (A) yourself.



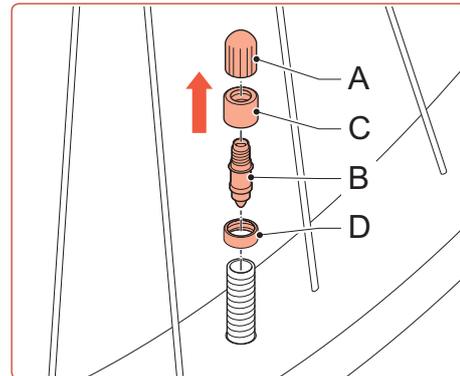
## 10.2 Repair a puncture

### Preparation

1. Make sure that the wheel with the flat tyre can turn freely.
  - Put the bicycle upside down (on a blanket or the like to avoid damage);
  - in case of wheels with a quick coupling, the entire wheel can be removed.Make sure to protect the bicycle against damage.
2. Check the outside of the tyre and remove any cause of the puncture.
  - small stones;
  - pieces of glass (be careful for cutting);
  - a nail.

### Step 1

1. Remove the valve cap (A).
2. Remove valve (B) by loosening nut (C).
3. Remove nut (D).

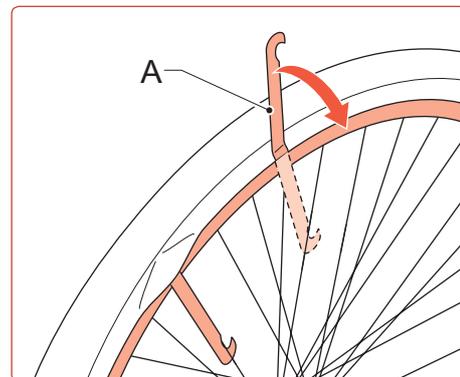


### Step 2

1. Push the edge of the tyre to the centre of the rim.
2. Place the first tyre lever (A) between the tyre and the rim. Not close to the valve because of a risk of damage.

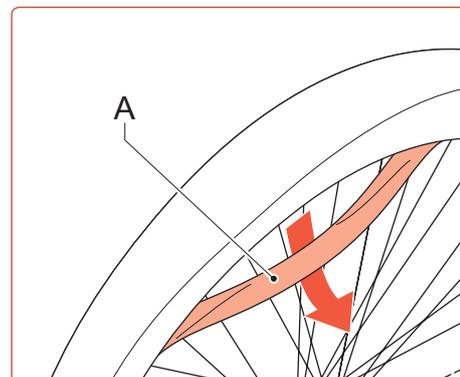
 Caution: Be careful with respect to the tyre levers slipping off.

3. Secure the tyre lever behind a spoke.
4. Place the second tyre lever further back on the tyre and secure it behind a spoke.
5. Place the third tyre lever two spokes further again.
6. Loosen the tyre manually and check the inside of the tyre for sharp objects. Be careful for cutting.
7. Remove any found sharp object.



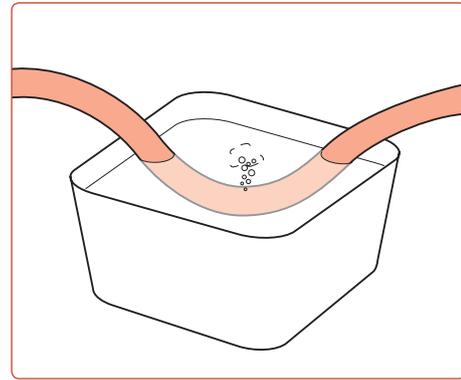
### Step 3

1. Press the valve inward.
2. Pull the inner tube (A) outward.



#### Step 4

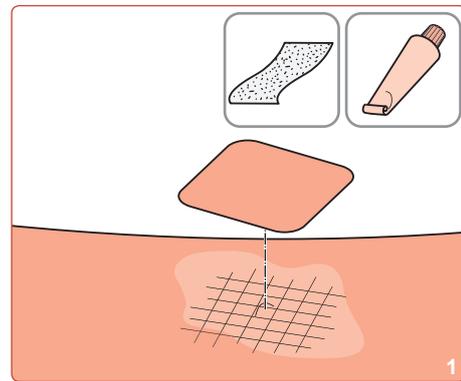
1. Pump up the inner tube.
  - In case of a large puncture: you can hear the air escape.
  - In case of a smaller puncture: submerge the inner tube in water (for example in a bucket).
2. Dry the inner tube.
3. Mark the puncture with a ball pen.



#### Step 5

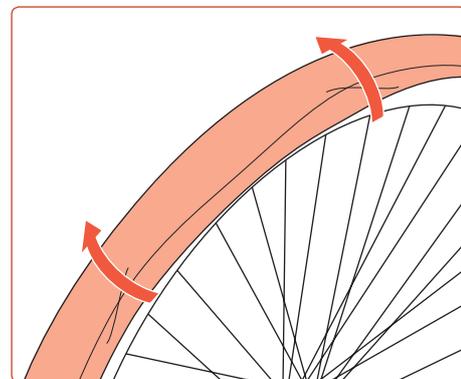
Repair the tube following the instructions included in the tyre repair set. With most sets the instructions below will suffice:

1. Clean the place of the puncture with sandpaper.
2. Let the air release from the inner tube.
3. Apply glue/solvent on an area that is slightly larger than the sticker.
4. Let the area dry one to two minutes.
5. Remove the backing from the sticker.
6. Tightly press the sticker onto the puncture.



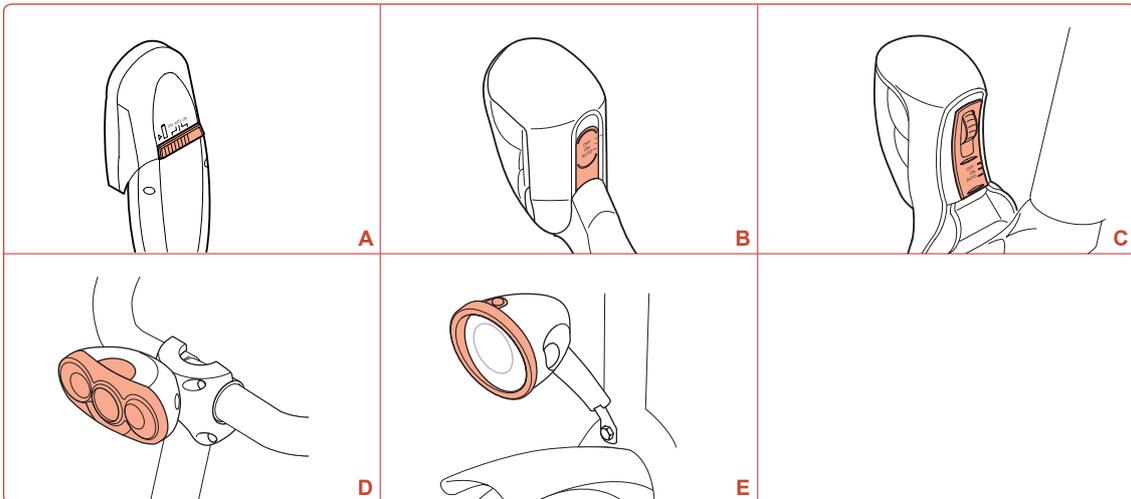
#### Step 6

1. Put back the inner tube into the tyre. The valve casing must come straight out of the rim hole.
2. Tighten the rim nut a few turns.
3. Tighten the valve.
4. Pump up the tyre a bit, making sure that the inner tube does not come out of the tyre.
5. Position the tyre. Use your hands.
  - When making use of tyre levers, there is a big chance of causing punctures.
  - Make sure that the inner tube is not pinched between the tyre and the valve.
  - At the valve area press the valve a bit towards the tyre and back again; this will make the inner tube 'jump' into the tyre.
6. Pump up the tyre.



# 11. Front lighting

## Head lamp types

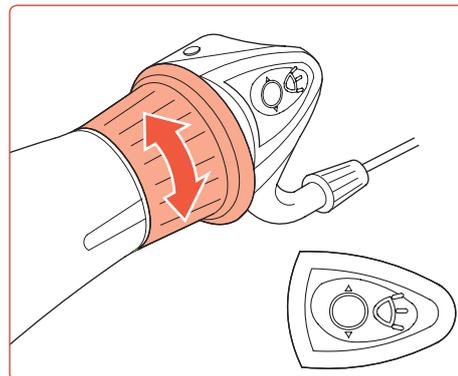


- A Hybrid head lamp on batteries (see 11.1)
- B Halogen or LED (on/off/auto switch on the head lamp) through (hub) dynamo (see 11.2)
- C Head lamp integrated in the fork (on/off/auto switch on the back of the head lamp) through hub dynamo (see 11.3)
- D Head lamp (on/off switch on the head lamp) with batteries (see 11.4)
- E Head lamp (on/off switch on head lamp) through (hub) dynamo (see 11.5)

## Dynamo switch

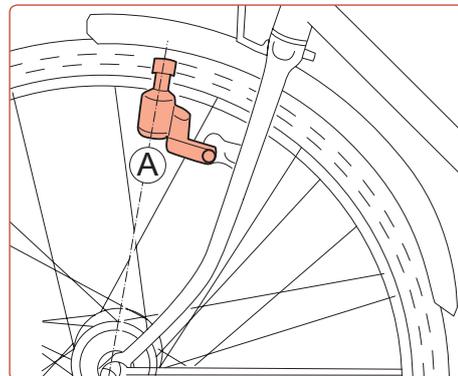


Some models have a dynamo switch on the handle bars.



## Dynamo

- Make sure that the grooves on the dynamo touch the side of the tyre as completely as possible.
- Make sure that the centre line (A) of the dynamo runs through the wheel shaft.
- When the dynamo is off, the space between the dynamo and the tyre must be 5 - 10 mm.

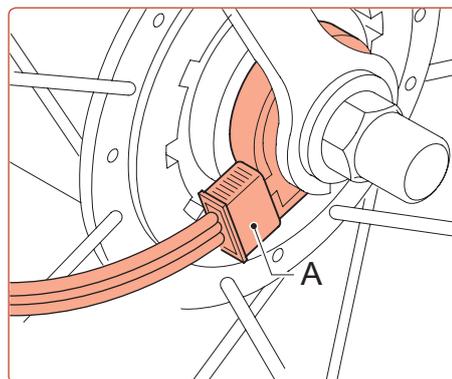


### Hub dynamo

The hub dynamo is a dynamo that has been integrated in the front hub. This hub dynamo is not only compact and light-weight, but electrically and mechanically much more efficient as well. The lighting system decreases the rolling resistance, is less sensitive to faults and does not skid.



Caution: consult your dealer when faults occur with the hub dynamo or when the front wheel needs to be removed. Never loosen the connector (A) yourself.

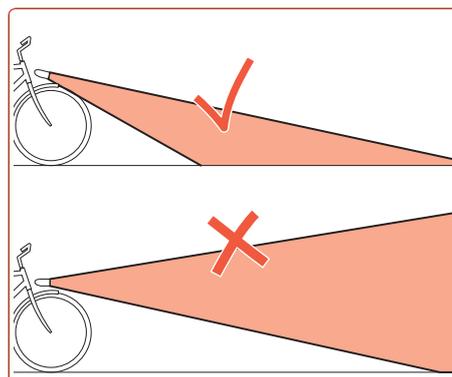


### Light beam

Make sure that the light beam illuminates the road before you and does not dazzle the oncoming traffic.



See the instructions of the lamp type for adjusting the light beam.



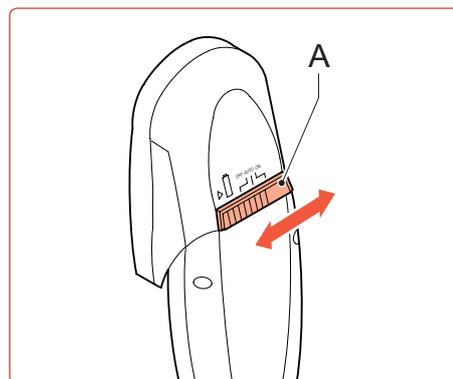
## 11.1 Hybrid head lamp

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### Switch on/off

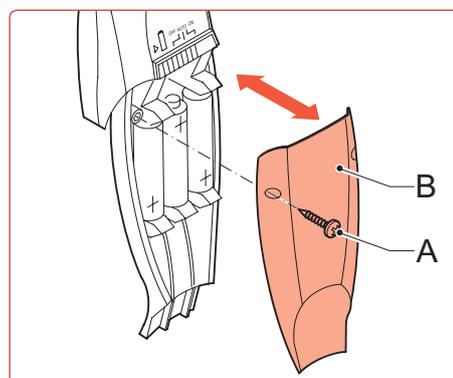
Set the switch (A) to On, Off or Automatic.

In the Automatic position, the lamp will be activated when there is no light and the bicycle is moving.



### Change the batteries

1. Loosen the screw (A).
2. Remove the cap (B).



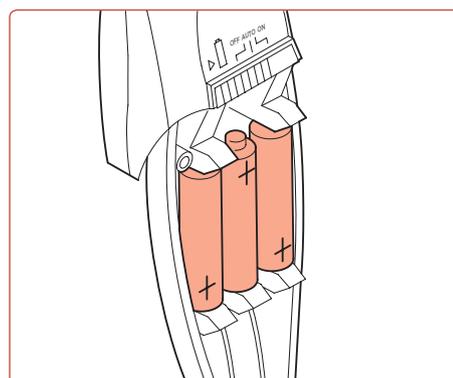
3. Change the batteries. Watch the + and - poles.



Caution: consult the dealer for replacing the lamp.



NB: empty batteries are chemical waste.



## 11.2 Halogen or LED

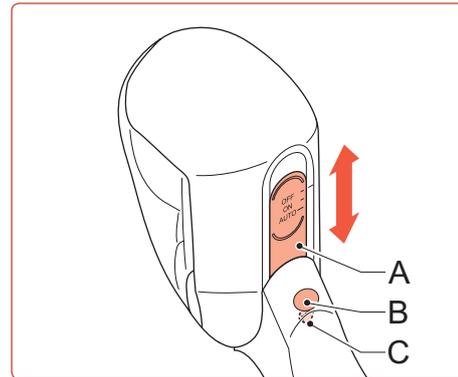
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### Switch on/off with 'autoswitch'

Set the switch (A) to On, Off or Automatic. In the Automatic position, the lamp will be activated when it gets dark and the bicycle is moving.

### Adjust the light beam

The nut (C) for adjusting the position of the light beam of the head lamp can be found below the cap (B).



## 11.3 Head lamp integrated in the fork

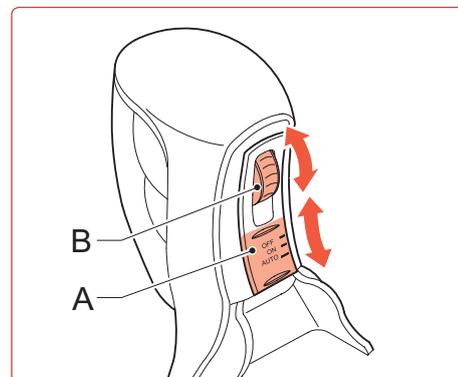
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### Switch on/off with 'autoswitch'

Set the switch (A) to On, Off or Automatic. In the Automatic position, the lamp will be activated when it gets dark and the bicycle is moving.

### Adjust the light beam

Adjust the position of the light beam using the wheel (B).



## 11.4 Head lamp with batteries

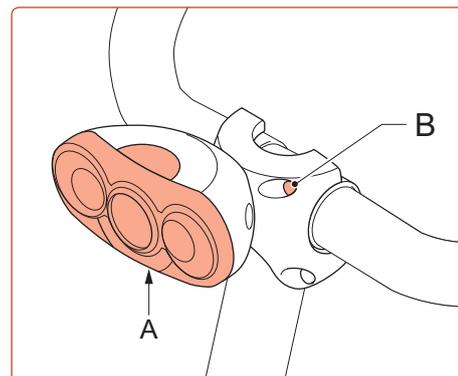
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### Switch on/off

Press the button (A) to switch the lamp on or off.

### Adjust the light beam

Adjust the position of the light beam using nut (B).



## 11.5 Head lamp through (hub) dynamo

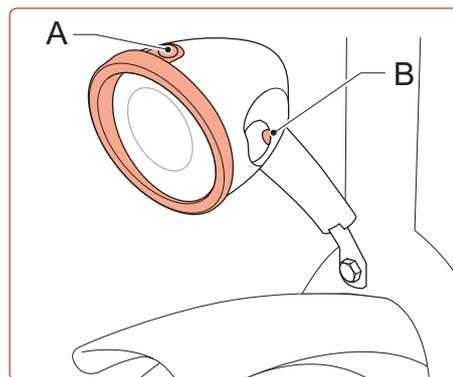
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### Switch on/off

Press the button (A) to switch the lamp on or off.

### Adjust the light beam

Adjust the position of the light beam using nut (B).



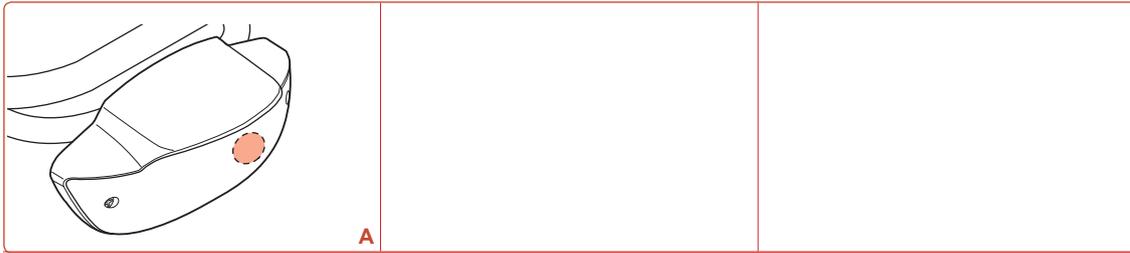
## 11.6 Faults in lighting

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Possible cause	Possible solution
The wire has been interrupted.	Check the wire for: <ul style="list-style-type: none"><li>• if it's attached to the lamp and the dynamo;</li><li>• corrosion;</li><li>• a piece of rubbed blank wire (short circuit) or split.</li></ul>
Batteries low.	Change the batteries.

## 12. Rear lighting

### Rear lamp types



A Autoswitch with batteries (including reflector). (see 12.1)

**!** In models provided with a parking light the condenser stores some energy. This will keep the light on for a while after you have stopped..

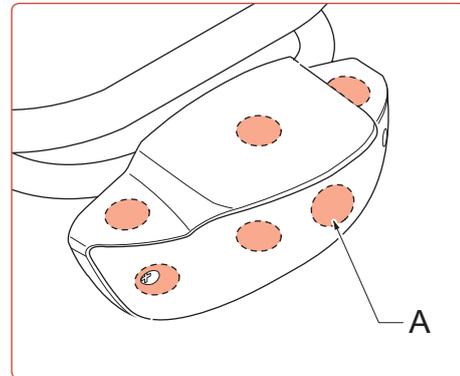
### 12.1 Autoswitch and batteries

#### ON/OFF or ON/OFF/AUTO with 'autoswitch'

In the Automatic position, the lamp will be activated when there is no light and the bicycle is moving.

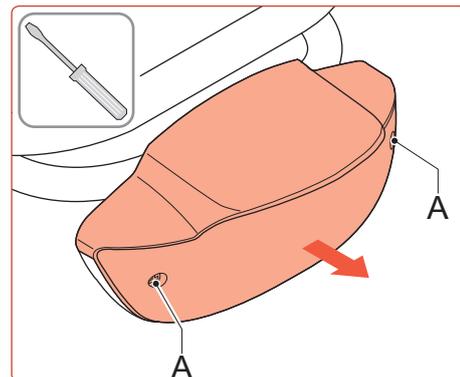
- press 1x: automatic position;
- press 2x: continuously on;
- press 3x: off.

**!** The switch (A) can be found on the bottom, on the side or on the reflector itself.



#### Change the batteries

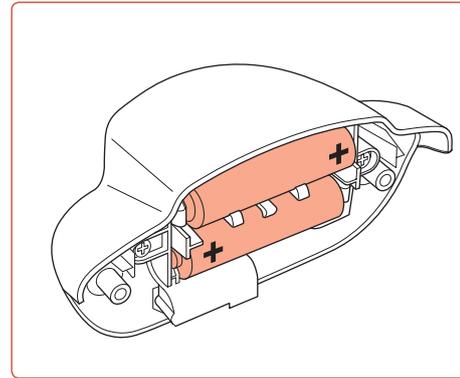
1. Loosen the screws (A).
2. Remove the lid.



3. Change the batteries. Watch the + and - poles.



NB: empty batteries are chemical waste.



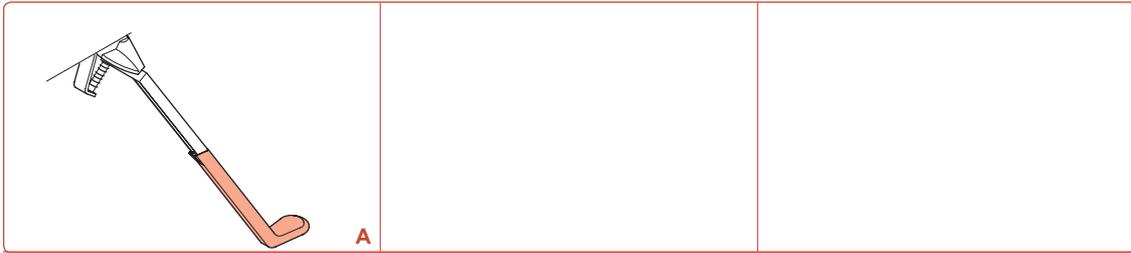
## 12.2 Faults in lighting

---

Possible cause	Possible solution
The wire has been interrupted.	Check the wire for: <ul style="list-style-type: none"><li>• if it's attached to the lamp and the dynamo;</li><li>• corrosion;</li><li>• a piece of rubbed blank wire (short circuit) or split.</li></ul>
Batteries low.	Change the batteries.

## 13. Bicycle stand

### Bicycle stand types



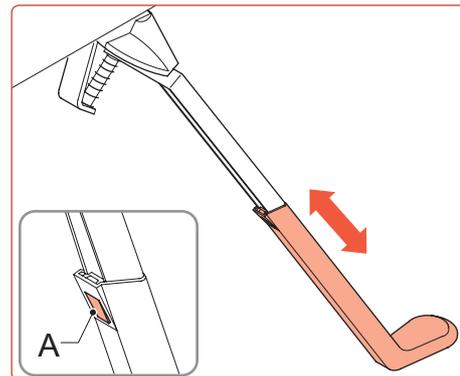
A Single stand (see 13.1)



Remove the shopping and take children out of the seats before putting the bicycle on the bicycle stand. And the other way around, first take the bicycle off its stand and then put children in the seats and place the shopping. In this way you prevent damage to the stand and the frame.

### 13.1 Adjust single stand

Press the button (A) and adjust the length of the stand.



## 14. Technical data

### 14.1 Torques

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In order to prevent the thread from getting damaged or loosened while cycling, tighten the bolts and nuts in accordance with the determined torques. The data in the table below are general target values.

<b>Item</b>	<b>Torque [Nm]</b>
Handle bars expander bolt	20 - 25
Dynamo bolt + self-locking nut	10
Saddle post bolt M8	20 - 25
Saddle post bolt M10	25 - 30
Stem bolt M6 for handle bars	12 - 13
Hub shaft nuts rear / SRAM	30 - 35
Hub shaft nuts rear / Shimano	30 - 40
Ergo Matic stem	25
Stem bolt M8 expander	15 - 20
Ergonomic grip	15 - 20



Caution: when tightening bolts and nuts the correct torque is of major importance. We recommend you to consult your dealer for your own safety.