1 MTB Assembly Guide

How to use this Guide

EN14766.UK.V3

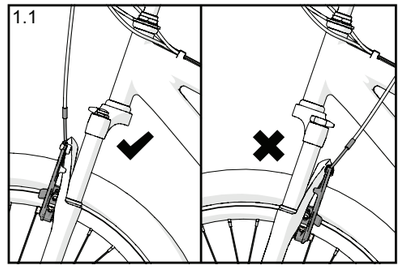
Please read this guide completely before assembling your bike.

WARNING! These points are extremely important and should be read, understood and implemented before riding your bicycle. Failure to observe these warnings may result in serious injury and/or damage to the bike.

NOTE! These notes should be read and understood as the information may be useful to you in assembling of this bike.

NOTE! Representative images are used throughout this guide, Your bike may differ from that shown.

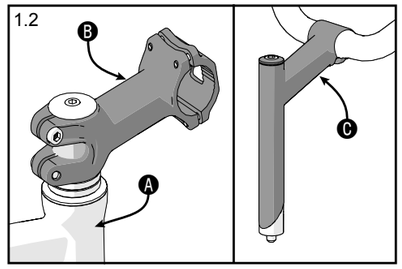
1. Attach Handlebars



1.1 Realign the forks.

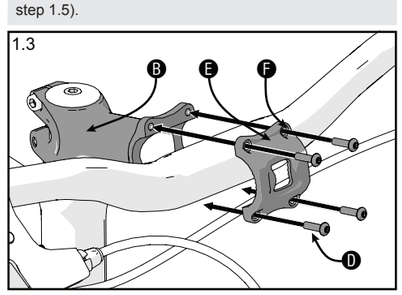
WARNING! When assembling the handlebars and stem, make sure the forks are assembled correctly with the front brakes facing forward or with the disc brake on the left (when seated on the bike).

NOTE! Ensure the cables are not tangled or twisted, as this may effect brake and gear performance.



1.2 Identifying the stem type.

Your new bicycle will have either a A-Head Stem Ⓑ (proceed to step 1.3) or a Quill Stem Ⓒ (proceed to step 1.5).



1.3 Remove stem clamp plate.

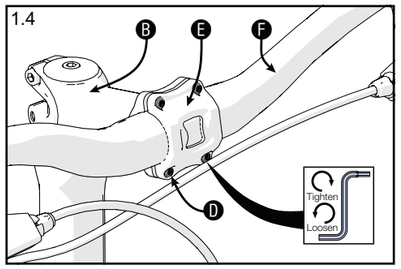
Loosen the stem cap bolts Ⓓ from the stem and remove the stem cap Ⓔ.

Place the centre of the handlebar Ⓕ in the open stem Ⓑ and hold the stem cap Ⓔ in position over the handlebar Ⓕ.

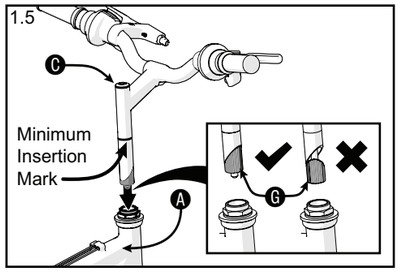
1.4 Secure stem bolts.

Replace the stem cap bolts Ⓓ taking care to tighten them evenly and firmly (12-14Nm for 2 bolt stems and 10-12Nm for 4 bolt stems).

(Proceed to stage 2)



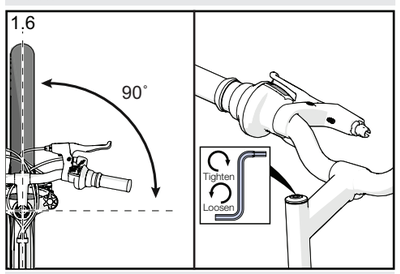
WARNING! When assembling the handlebars and stem, make sure it is inserted beyond the **Minimum Insert Mark.** Failure to observe this warning may result in serious personal injury.



1.5 Insert the Quill stem.

Loosen the stem bolt Ⓒ to allow the wedge nut Ⓖ to move freely.

Insert the stem Ⓒ into the head tube of the bike Ⓐ, Ensuring that the wedge nut Ⓖ is correctly aligned with the stem.



1.6 Secure the quill stem.

Adjust the handlebars and stem Ⓒ to the desired height and align with the forks as shown.

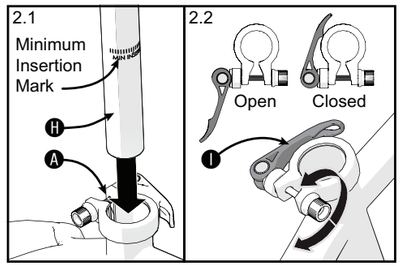
Using the supplied hexagonal key, tighten the stem bolt firmly (15-17 Nm).

2. Attaching the Saddle

WARNING! When assembling the seatpost, make sure it is inserted beyond the **Minimum Insert Mark.** Failure to observe this warning may result in serious personal injury.

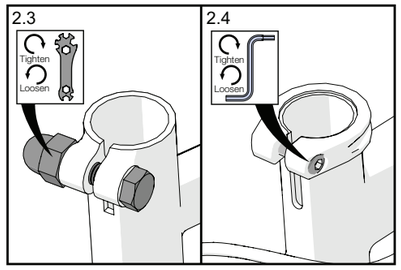
2.1 Insert the seatpost and saddle.

Insert the seat post Ⓗ into the seat tube Ⓐ.



2.2 Quick release seatpost clamp.

If your bike is fitted with a quick release seat post clamp then fasten with the release lever Ⓘ. For more information on the correct use of a quick release then read section 5.



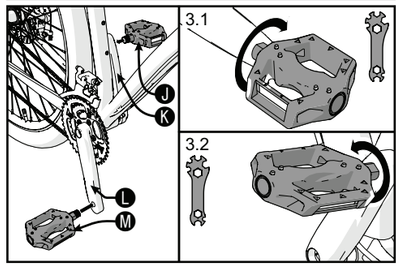
2.3 Securing seatpost (bolted)

If your bike is fitted with a regular bolted seatpost clamp then tighten the seatpost nut firmly (16-18 Nm) using the supplied tools.

2.4 Securing seatpost (Allen Key)

If your bike is fitted with an Allen keyed seatpost clamp then tighten the seatpost bolt firmly (8-10 Nm) using the supplied tools.

3. Attach Pedals



WARNING! The Pedals are Different, they have different threads for each side of the bicycle.

NOTE! Your pedals are in a separate box within the main packaging.

NOTE! The pedals Ⓙ Ⓜ and the crank arms Ⓚ Ⓛ have colour coded stickers to indicate which pedal matches which crank. To prevent damage to the threads, only tighten the pedals in the direction indicated.

3.1 Fitting the right hand pedal.

Locate the right hand pedal Ⓜ, this will have a **green** sticker attached.

Locate the right hand crank arm Ⓛ, this will also have a **green** sticker attached.

Remove the sticker from the crank Ⓛ.

Insert the threaded shaft of the right hand pedal Ⓜ into the threaded hole of the right hand crank arm Ⓛ.

Tighten the pedal Ⓜ using only your fingers clockwise in the direction of the colour coded sticker.

Fully tighten using the supplied multitool (40Nm).

3.2 Fitting the left hand pedal.

Locate the left hand pedal Ⓙ, this will have a **red** sticker attached.

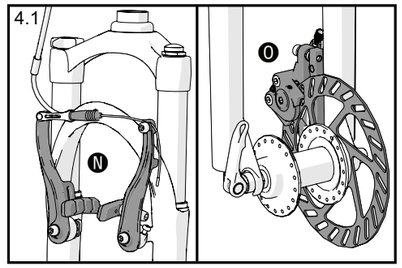
Locate the left hand crank arm Ⓚ, this will also have a **red** sticker attached.

Remove the sticker from the crank Ⓚ.

Insert the threaded shaft of the left hand pedal Ⓙ into the threaded hole of the left hand crank arm Ⓚ. Tighten the pedal Ⓙ using only your fingers anti-clockwise in the direction of the colour coded sticker.

Fully tighten using the multitool (40Nm).

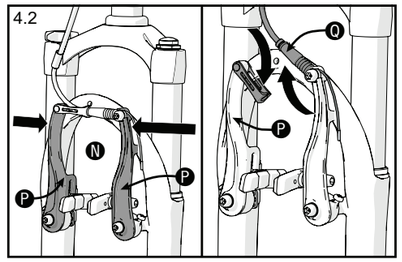
4. Attach Front Wheel



4.1 Identifying the brake type.

If your bike is equipped with V-brakes Ⓝ then continue below, if it has disc brakes Ⓞ then proceed to step 4.7.

NOTE! Before the front wheel can be installed, the front brake must be disconnected. This allows the front tyre to pass between the brake pads during assembly.

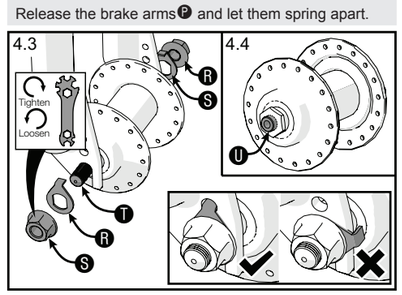


4.2 Disconnect the front brake.

Squeeze the two brake arms Ⓟ of the front brake Ⓝ together with one hand.

Using your other hand, pull the guide pipe and cable Ⓠ across and up to release it from the right hand brake arm Ⓟ.

Release the brake arms Ⓟ and let them spring apart.



4.3 Insert the wheel.

Insert the axle Ⓣ of the front wheel into the slots at the bottom of the front forks.

Securing the wheel. (Nutted Axles)

Loosen the wheel nuts Ⓢ on both ends of the front wheel axle Ⓣ, so that they slide over the fork dropouts.

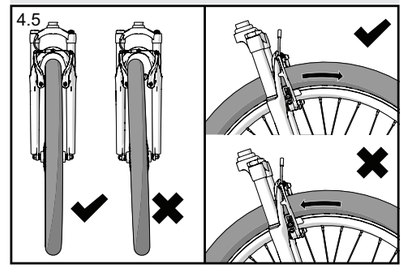
If your bike is fitted with tabbed washers Ⓡ then ensure that they guided into their catch hole above the axle.

Tighten the nuts Ⓢ very tightly (22-25Nm) using the supplied multitool.

4.4 Quick release spindles.

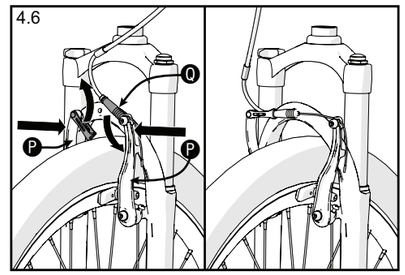
If your front wheel axle Ⓤ is hollow and has no wheel nuts Ⓢ then this bike is fitted with a quick release spindle.

To secure the wheel then fasten with the release lever. For more information on the assembly and correct use of a quick release wheel spindle then read section 5.



NOTE! Ensure the wheel is centralised in the forks before tightening wheel nuts or quick release spindle.

NOTE! Some tyres have a “Direction of Rotation” arrow on their side. When the front wheel is assembled, the arrow should be pointing in the direction the wheel will rotate.



4.6 Refit the front brake.

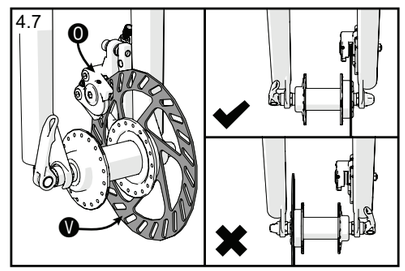
If your bike is equipped with V-brakes Ⓝ then continue below, if it has disc brakes Ⓞ then proceed to step 4.9.

Squeeze the two brake arms Ⓟ of the front brake Ⓝ together with one hand.

Using your other hand, locate the guide pipe and cable Ⓠ into the retaining plate slot on the right hand arm Ⓟ.

Release the brake arms Ⓟ and let them spring apart.

NOTE! Check that the front wheel rotates freely, if it does not , the front wheel may not be located centrally between the forks. Alternatively the front brakes may need adjusting. (See section 6)



4.7 Disc brake alignment.

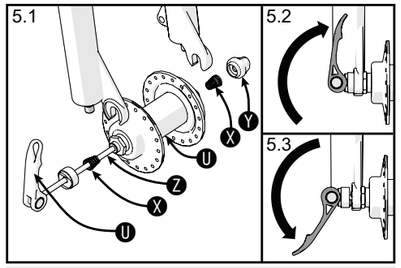
If your bike is equipped with disc brakes Ⓞ then take care to guide the disc rotor Ⓥ into the disc brake caliper Ⓞ when fitting the front wheel.

5. Quick Release

If your bicycle is equipped with quick release wheels then you will need to fit the spindle before attaching the front wheel.

Remove all packaging, you will find the quick release spindle in the same box as the pedals.

Your Seatpost clamp may also use a quick release, follow these instructions for its correct usage.



5.1 Wheel quick release

Remove the nut Ⓨ and the one of the springs Ⓧ from the skewer Ⓩ.

Insert the skewer Ⓩ through the wheel axle Ⓤ.

Refit the spring Ⓧ and the cap Ⓨ onto the skewer Ⓩ.

5.2 Securing a quick release.

When securing a wheel in position, the quick release lever Ⓤ is closed as shown. (Not by rotating the lever!)

In most case this will be moving it from where it curves outward to a position where it curves inwards.

5.3 Releasing a quick release

To release, move the quick release lever Ⓤ 180° to its open position.

Adjusting a quick release

With the wheel in the frame, open the quick release lever Ⓤ. Whilst holding the lever Ⓤ, turn the nut Ⓨ until you can feel some resistance against the forks.

Try and close the lever Ⓤ, if you can only close it halfway then, open it and unscrew the nut Ⓨ slightly again. Repeat this adjustment until you can fully close the lever Ⓤ but with some effort so that it embosses the fork ends when closed in the locked position.

Safety Information

WARNING! This bike has been manufactured in accordance with the EN 14766 standard to ensure your safety. This bike should only be used for recreational use. Under no circumstances should it be used for competitive cycling, stunting, jumping or acrobatic manoeuvres. These types of cycling may result in serious personal injury and damage to the bike.

WARNING! This bike has been designed for trail, cross country and uphill riding, it should not be used for extreme forms of riding such as hardcore mountain, freeriding, downhill or dirt jumping, etc.

WARNING! Always wear a helmet when riding the bike. The helmet should be the correct size and conform to European Standard EN1078.

WARNING! Always obey local traffic laws.

WARNING! National legal requirements may apply when riding your bicycle on public roads, this can include, but not limited to, lighting and reflectors.

WARNING! Always take extra care when riding in wet, foggy, windy or icy conditions. The brakes may not be as effective and braking distances may be increased.

WARNING! Always wear suitable cycling clothing when riding. Loose clothing which may get caught in moving parts should be avoided.

WARNING! The bike is only suitable for use by riders (including any panniers and/or luggage) with a weight less than 115Kg (254lb).

WARNING! The front and rear tyres must be fully inflated before attempting to ride the bike, under no circumstances should the tyres be inflated above the maximum pressure indicated on the side of the tyres.

WARNING! As with all mechanical components, the bike is subjected to wear and high stresses. Different materials and components may react to wear, stress or fatigue in different ways. If the design life of a component has been exceeded then it may suddenly fail, possibly causing injuries to the rider. Any form of crack, scratches or change of colouring in highly stressed areas indicate that the life of the component has been reached and it should be replaced.

2 Setup & Maintenance

Complete these checks before riding

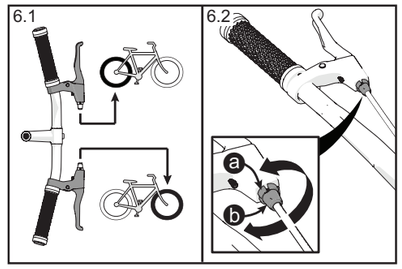
NOTE! The majority of your new bicycle's components have been assembled, adjusted and checked by trained professionals before delivery to you. However due to the transportation and reassembly it might be necessary to make some slight adjustments before riding to get the most from your bicycle and ensure the safety of the rider.

6. Brakes

NOTE! Your brakes will need adjusting before riding for the first time.

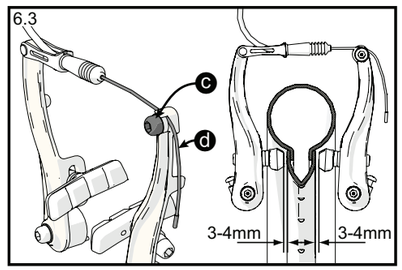
NOTE! Throughout the life of your bike, the front and rear brakes may need adjusting if the brake cable has stretched or the pads have worn down.

NOTE! Disc Brakes will require a bedding in period before they perform at their optimum.



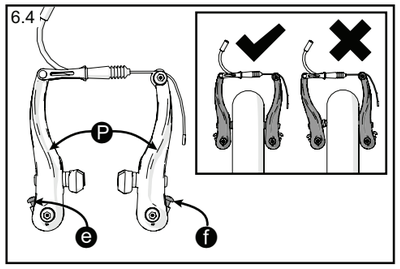
6.1 Brake use
The bicycle is fitted with front and rear brakes to stop the bike effectively.
The brakes are operated using two brake levers mounted on the handle bars. The left hand brake lever operates the rear brake and the right hand brake lever operates the front brake.

6.2 Minor brake adjustment (Disc & V-brakes)
If the brakes need adjusting then fine tuning can be done at the appropriate brake lever.
Unscrew the brake barrel adjuster ⓑ to increase or decrease cable tension.
To increase the tension and move the brakes closer to the rim, then turn the barrel adjuster ⓑ anti clockwise.
To decrease the tension and move the brakes further from the rim, then turn the barrel adjuster ⓑ clockwise.
Screw the lock nut ⓐ back against the body of the brake lever to prevent the adjuster moving.

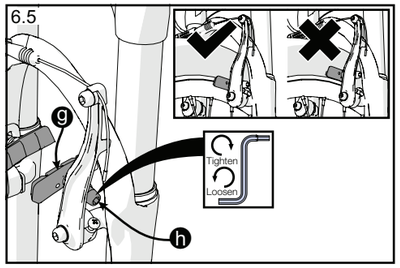


6.3 Adjusting V brakes
If further adjustment is required then the brake cable tension will need to be altered. This must be adjusted so that the brake blocks are close to the rim when no pressure is applied to the lever.
Loosen off the cable pinch bolt ⓒ using the tools provided, until the brake cable ⓓ is free to move.
Pull the cable ⓓ through the pinch bolt so that the brake blocks are approximately 3-4mm from the wheel rim.
Retighten the cable pinch bolt ⓒ whilst holding the brake cable ⓓ in position.

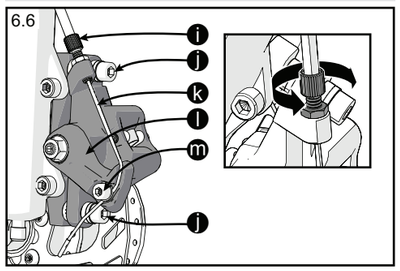
6.4 Adjusting V brake spring tension.
Over time, the brake arms can begin to lean to one side or another. This can be corrected by adjusting the spring tension of the individual brake arm.



If the brake arms Ⓟ are leaning to the left then tighten the right spring tension screw ⓔ.
If the brake arms Ⓟ are leaning to the right then tighten the left spring tension screw ⓕ.
Apply the brakes using the brake lever several times to centre the brakes and readjust spring tension if required.



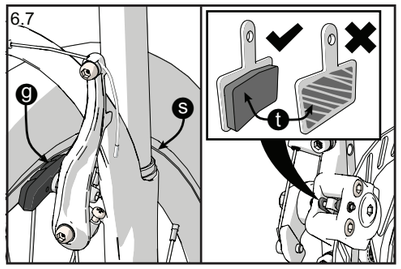
6.5 Adjusting V brake pads.
Check that the pads make full contact with the rim and do not touch the tyre. Ensure all parts are tightened correctly.
Loosen brake pad nut ⓗ using the appropriate tool until the brake pad ⓖ is able to move.
Align brake pad ⓖ with the wheel rim.
Retighten the brake pad nut firmly. (8-10 Nm)



NOTE! Disc Brakes will require a bedding in period before they perform at their optimum.

6.6 Aligning mechanical disc brakes.
Loosen the two brake calliper mount bolts ⓙ so that the brake calliper is able to move.
Pull the brake lever on the handlebars, this will push the brake pads against the rotor and move the calliper into the correct position.
With the brake lever pulled tight, retighten the brake calliper mount bolts ⓙ firmly. (10-12 Nm)

6.7 Adjusting mechanical disc brakes.
Loosen the cable pinch bolt ⓜ so that the brake cable ⓚ is able to move.
Move the Calliper arm ⓛ towards the cable adjuster bolt ⓘ and hold in position.
Retighten the cable pinch bolt ⓜ.
Spin the wheel and check the brakes, fine adjustments can be made by using the cable adjuster bolts ⓘ at both the brake calliper and brake lever.



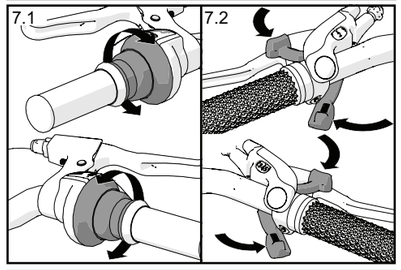
NOTE! All brakes should be checked before and after every ride.

NOTE! Disc brake advice based on common disc components, If your bike has disc brakes fitted then please see your individual manual regarding maintenance.

6.7 Inspecting V brakes.
Inspect the grooves on the braking face of the brake block ⓖ, releasing the brakes as shown in step 4.2 may be required. If the block has been worn smooth then replace it with an appropiate block.
It is also important to check the rim for wear, if the rim wear indicator ⓢ has been worn away at any point on the rim then the bike must not be ridden until the rim has been replaced.

6.8 Inspecting disc brakes.
Inspect the brake pads ⓣ within the disc brake body for wear, removing the wheel may aid inspection. If the pads ⓣ are low or have been worn away then the bike must not be ridden until they have been replaced.

7. Gears



NOTE! Do not change gear whilst the bike is stationary. You should always turn the pedals when changing gear.

NOTE! There are two main types of gear shifters: Twist shifters 7.1 and Trigger shifters 7.2.

NOTE! The left hand shifter operates the front gears and the right hand shifter the rear gears.

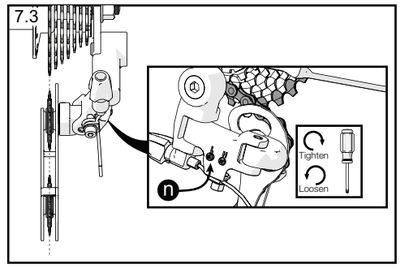
NOTE! Most systems have an indicator to show you which gear is selected.

7.1 Twist shifter - left hand
Rotate the inner grip away from yourself to select a lower gear and rotate the inner grip towards you to select a higher gear.

Twist shifter - right hand
Rotate the inner grip away from yourself to select a higher gear and rotate the inner grip towards you to select a lower gear.

7.2 Trigger shifter - left hand
Push the lower (thumb) trigger to select a higher gear and pull the upper (finger) trigger to select a lower gear.

Trigger shifter - right hand
Push the lower (thumb) trigger to select a Lower gear and pull the upper (finger) trigger to select a higher gear.



NOTE! Your Gears will need adjusting before riding for the first time.

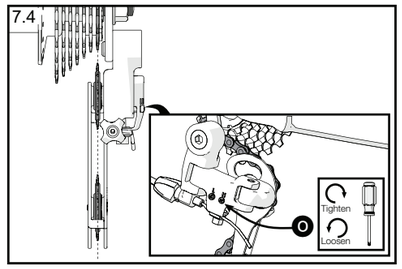
NOTE! Whilst riding the bike, if the gears fail to work correctly and/or become noisy, the rear derailleur may need adjusting.

7.3 Adjusting the rear derailleur

NOTE! The lowest gear combination is always the largest gear at the rear and the smallest gear at the front.

Select the lowest gear combination
Whilst raising the rear of the bike and rotating the pedals by hand, use the gear shifters to select the lowest gear.

Set position of lower limit screw
The lower limit screw ⓝ controls the position of the rear derailleur when the lowest gear is selected.
Using a screwdriver, rotate the lower limit screw ⓝ until the small wheels of the derailleur are vertically aligned below the lowest gear.
Turn the lower limit screw ⓝ clockwise to move the derailleur to the right (when viewed from the rear of the bike)
Turn the lower limit screw ⓝ anti-clockwise to move the derailleur to the left.

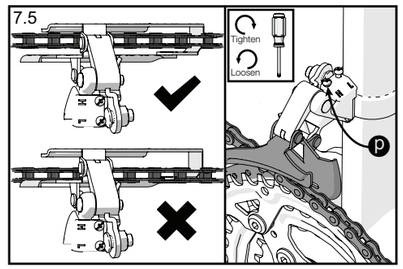


7.4 Select the highest gear combination

NOTE! The highest gear is always the smallest gear at the rear and the largest gear at the front.

Whilst raising the rear of the bike and rotating the pedals by hand, use the gear shifters to select the highest gear.

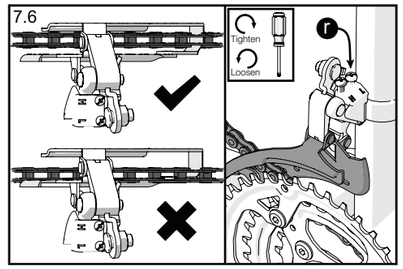
Set position of upper limit screw
The upper limit screw ⓞ controls the position of the derailleur when the highest gear is selected.
Using a screwdriver, rotate the upper limit screw ⓞ until the small jockey wheels of the derailleur are vertically aligned below the highest gear.
Turn the upper limit screw ⓞ clockwise to move the derailleur to the right.
Turn the upper limit screw ⓞ anti-clockwise to move the derailleur to the left.



7.5 Adjusting the front derailleur

Select the highest gear combination
Whilst raising the rear of the bike and rotating the pedals by hand, use the shifters to select the highest gears.

Set position of upper limit screw
The upper limit screw Ⓟ controls the position of the front derailleur when the highest gear is selected.
Using a screwdriver, rotate the upper limit screw Ⓟ until the front derailleur is almost touching the chain. The front derailleur must not touch the chain.
Turn the upper limit screw ⓝ clockwise to move the derailleur to the right (viewed from the rear of the bike)
Turn the upper limit screw ⓝ anti-clockwise to move the derailleur to the left.

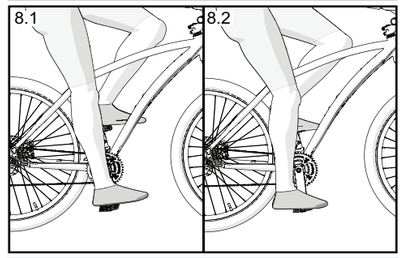


7.6 Select the lowest gear combination.

NOTE! The lowest gear combination is always the smallest gear at the front and the largest gear at the rear.

Set position of lower limit screw
The lower limit screw ⓡ controls the position of the front derailleur when the lowest gear is selected.
Using a screwdriver, rotate the lower limit screw ⓡ until the front derailleur is almost touching the chain. The front derailleur must not touch the chain.
Turn the lower limit screw ⓡ clockwise to move the derailleur to the right
Turn the lower limit screw ⓡ anti-clockwise to move the derailleur to the left.

8. Saddle Height



WARNING! When assembling the seatpost, make sure it is inserted beyond the **Minimum Insert Mark.** Failure to observe this warning may result in serious personal injury.

NOTE! Read section 2 for additional information regarding seat post fixings.

8.1 Initial seat adjustment
Sit on the seat in riding position without shoes, whilst someone else holds the bike upright.
Position the crank arms so they are parallel to the seat tube of the frame.
Loosen the seat post bolt or quick release.
Extend the seat post, until with your heel resting on the pedal, your extended leg is straight.
Tighten seat post bolt or quick release.

8.2 Correct seat height
After the adjustment and when wearing shoes, there should be a slight bend in your knee whilst in the proper riding position with the ball of your foot on the pedal.
You should be able to touch the ground on either side of the bicycle with the tips of your toes.

9. Suspension

NOTE! If your bike has front suspension forks fitted then please see your individual manual regarding maintenance and use.

NOTE! If your bike has rear suspension then please see your individual manual regarding maintenance and use of the shock unit.

10. Accessories

NOTE! If your bike has accessories, please see the individual manual regarding maintenance/use.

11. Routine Maintenance

WARNING! Only use the correct, genuine and appropiate replacement parts, especially for safety critical components, such as tyres, tubes and brakes.

NOTE! For advice on assembly or help finding spares then call our helpline on 0845 129 9248.

NOTE! It is recommended that the bike is serviced by a qualified bike technician every 12 months.

Before and after each ride.
Is the saddle secure?
Are the front and rear tyres inflated correctly?
Are the pedals tight?
Do the brakes work?
Do the handlebars Move?
Is the Bike clean?

Every month.
Check that the bike is clean.
Lubricate the chain using a suitable light oil.
Check that all parts of the bike are securely fitted.
Check that the tyres are in good condition.
Check the condition of the brake blocks/pads.
Check that the wheel spokes are tight.

Every 6 months.
Check the frame and forks for signs of damage.
Check the wheels are running true.
Check the front and rear gears for signs of damage.

Every 12 months.
Inspect and grease the wheel hub bearings.
Inspect and grease the headset bearings.
Inspect and grease the bottom bracket bearings.

12. Tightening Torques

Use the information below to ensure the correct torques are applied to your bicycle components during mainenance.

Fastener	(Nm)	Fastener	(Nm)
Front wheel nuts	22-25	Seat post clamp	
Rear wheel nuts	25-29	Bolt or nut	16-18
Quill stem bolt	17-19	Allen bolt	8-10
Handlebar clamps		Brake cable pinch nut	6-8
1 bolt	16-18	Crank bolt	45
2 bolt	12-14	Pedals	40
4 bolt	8-10	V-brake blocks	8-10
A-Head clamp bolt	18-20		

TECHNICAL SUPPORT:
0845 129 9248
Universal Cycles, Wigan, UK, WN5 0LD

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