

THE CITY AND TREKKING BIKE MANUAL



UK



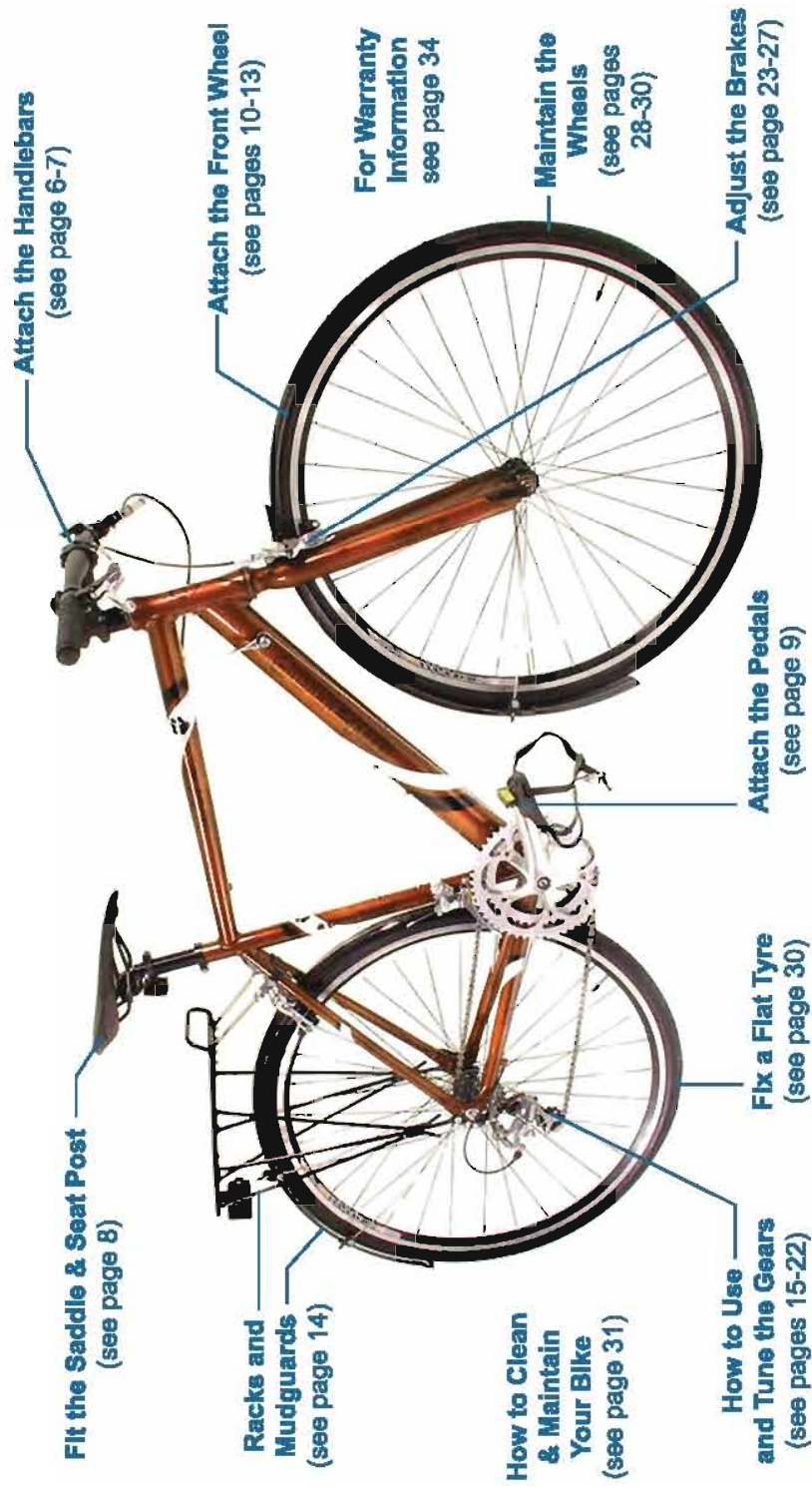
SILVERFOX

muddyfox



QUICK REFERENCE GUIDE

Use this guide to quickly find the information you need to get your bike on the road and keep it there!



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You are advised to look over the contents of this manual as all of the information provided will be useful to you at some point in time during the life time of your cycle.

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For information about how to maintain and adjust the suspension system on your cycle please refer to the manufacturer's information supplied with your bicycle.



ABOUT THIS MANUAL



This manual has been designed to help you assemble and maintain your bicycle with the minimum of trouble. The manual contains all the information you will need, as well as some other information that you may find useful.

If you have any difficulty finding the information you need, have a look at the **QUICK REFERENCE GUIDE** on page i and the **CONTENTS** page ii. If you still have unanswered questions please contact our Customer Care Team on:

0845 129 9248 or customer@universalcycles.plc.uk



WARNING! These points are extremely important and should be read, understood and implemented before attempting to ride your bicycle. Failure to follow these instructions could result in serious injury or even death

Important points and warnings have been highlighted throughout this manual. You are advised to read and follow the instructions given. Examples of what these warnings look like are on the left.



IMPORTANT: These points are also very important and should be read and understood before riding your cycle

The points vary in importance and have been colour-coded accordingly:

Red **WARNING!** symbols are the most critical, followed by the Yellow **IMPORTANT** symbol and finally the Green **NOTE** symbol.



NOTE: These points should be read and understood as the information may be useful to you

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Manual Code: EN14764-01

ABOUT YOUR BIKE


Your new bicycle has been manufactured to a very high standard, and has been tested to and complies with the following British and European Mountain Bike Safety Standards:

BS EN 14764:2005 City and Trekking Bicycles. Safety Requirements and Test Methods

and

BS6102: Part 1:1992

BS EN 14764 specifies safety and performance requirements for the design, assembly, and testing of bicycles and sub-assemblies intended for use on public roads, and lays down guidelines for instructions on the use and care of such bicycles. The tests have been designed to ensure the strength and durability of individual parts as well as of the bicycle as a whole, demanding high quality throughout and consideration of safety aspects from the design stage onwards. It applies to bicycles that have a maximum saddle height of 635 mm or more and that are intended for use on public roads. It does not apply to mountain bicycles and racing bicycles, delivery bicycles, recumbent bicycles, tandems and bicycles designed and equipped for use in sanctioned competitive events.

 **WARNING!** While your bike has been designed according to the above safety standards you are reminded that incorrect use of your cycle (such as sanctioned competition events, stunting, jumping or acrobatic manoeuvres) may result in injury and may void your warranty (see page 34 for details)

Near the bottom of the seat tube (the tube on your frame that links your saddle to your pedals) you will find a small sticker that has information about your bike. This sticker will state the model number of your cycle and the standard to which it complies. See the examples below:

Model Code
This is the manufacturer's code for your model of bike. Quote this number when speaking to our Customer Care Team

Hand Made
All bicycles made by Universal Cycles are assembled by skilled bicycle builders

Safety Standard
This confirms which Safety Standards your bike complies to

Model BP32619HTRV

BUILT HAND

EUROPEAN & BRITISH SAFETY STANDARD
BS EN 14764:2005
BS 6102: Part 1: 1992
Exclusively distributed by
UNIVERSAL CYCLES PLC UK

 **WARNING!** Your bicycle is designed to carry the following weights:

26" Cycles: Bike + Rider + Luggage.....115kgs (18 stone)
24" Cycles: Bike + Rider + Luggage.....85kgs (13 stone)
20" Cycles: Bike + Rider + Luggage.....65kgs (10 stone)

Note: Deducting the bicycle weight gives the permissible weight of rider + luggage

QUICK ASSEMBLY GUIDE

Follow these four steps to get your bike assembled and running straight out of the box!

1

STEP 1: Take the cycle out of the box and remove all packaging. For more information about your cycle's packaging see page 4 and 5.



Locate and attach the handlebars. For more information about how to fit the handlebars see page 6 and 7.



STEP 2: Fit the seat post into the seat tube of the frame. For more information see page 8.



WARNING! Insert the seat post at least to the Minimum Insertion Mark



STEP 3: Attach the pedals

 **NOTE:** Left and right pedals have different threads



- Look out for these stickers on the cranks they show which way to tighten the pedals.
See page 9 for more information



STEP 4: Attach the front wheel (see pages 10-13) and check the bike over before riding (see page 3)



BEFORE-YOU-RIDE GUIDE

3

Before every ride perform the following checks to ensure that your bike is well maintained and safe to ride:



Is the saddle secure?

Try and twist the saddle in the seat tube while standing next to the bike (see page 6)

Check the wheels:

1. Are they true? Lift each wheel off the ground and spin it. Check to see if the rim moves from side to side (see page 28)
2. Are the hubs tight? Take hold on the top of the tire and try to move it from side to side. You will be able to feel if there is any free play in the hub (page 28)
3. Are the tyres inflated? Squeeze the tyres. They should be firm

Are the pedals tight? Use a 15mm spanner to check that the pedals are tight. See page 8 for information.

Are the handlebars tight? Check that the stem clamp bolts and Ahead bolts are tight (see Attaching the Handlebars on pages 6-7)

Are the brakes working? Stand next to the bike and pull the front brake. Next push the bike forwards to check if the brakes are effective. Do the same for the rear brake (see pages 23 to 27 for more information)

Is your bike clean? You should regularly clean your bike. For more information see Cleaning Your Bike on page 31.

Are the Mudguards and Racks Secure? See page 14

WARNING! Anything loose or worn should be rectified BEFORE riding



IMPORTANT: Your bike needs regular maintenance to keep it running smoothly and to prevent premature wear of components. Failing to maintain your bike may affect your warranty. For more information about your warranty see page 34

TAKING YOUR BIKE OUT OF THE BOX

When you take your new bike out of the box you should check that you have all of the parts shown below. If you are missing any parts contact Customer Care (see page 32)

1. Wheel Axle Protectors (see page 5 for more details)

3. Cable Ties (see page 5 for more details)

Front Wheel
Cable tied to the frame

Rear Wheel
Already fitted to the cycle

2. Cardboard Tubing (see page 5 for more details)

Handlebars
Usually cable tied to the frame

Forks usually packed facing backwards to reduce the amount of space they take up.

NOTE: Remove the front wheel with care as the left crank is placed through the spokes of the front wheel

IMPORTANT: Ensure that the forks are facing in the correct direction: If you have V-brakes they should be on the front, and if you have disc brakes that should be on the left hand side of the bike

Pedal box includes tools and Quick Release if you have one (see pages 10-11)

Saddle

4. Fork Brace (see page 5)

REMOVING THE BIKE FROM ITS PACKAGING

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Your new bicycle has been carefully wrapped and packaged to protect it from damage on it's journey to you. All of the packaging material needs to be removed before you start to assemble the bike. Below are details of the various types of packaging used:



1. a) Wheel Axle Protectors Plastic hat-shaped pieces that protect the wheel axles, b) Stem Caps short tubes that protect the end of the stem



IMPORTANT: If your bike has wheel nuts (see page 10 to find out if it does) ensure that they are not discarded with the Wheel Axle Protectors. Pull these protectors off rather than unscrewing them.



2. Cardboard and Paper Tape Used to protect the frame, forks and saddle from possible scratches or marks caused by two components rubbing together. Paper tape tears easily and is used so that you do not need to use a knife or blade to remove it.



3. Cable Ties Have been used to secure the front wheel and handlebars in place next to the frame. This reduces any movements of components and omits the risk of damage to the cycle



4. Fork Brace This is a hard plastic part that protects the fork dropouts from being damaged if the carbon sustains an impact.



IMPORTANT: Take care not to cause damage when using sharp tools to remove packaging



CARE FOR YOUR ENVIRONMENT PLEASE RECYCLE AS MUCH OF THE PACKAGING AS POSSIBLE

ATTACHING THE HANDLEBARS

First check which type of stem your bicycle has - it will either be an A-Head Stem (below) or a Quill Stem (see page 8), and then follow the instructions for your stem.

1. Loosen the **Stem Cap Bolts** from the stem and remove the **Stem Cap**

NOTE: Some Quill Stems (see page 7) have stem caps similar to A-Head stems

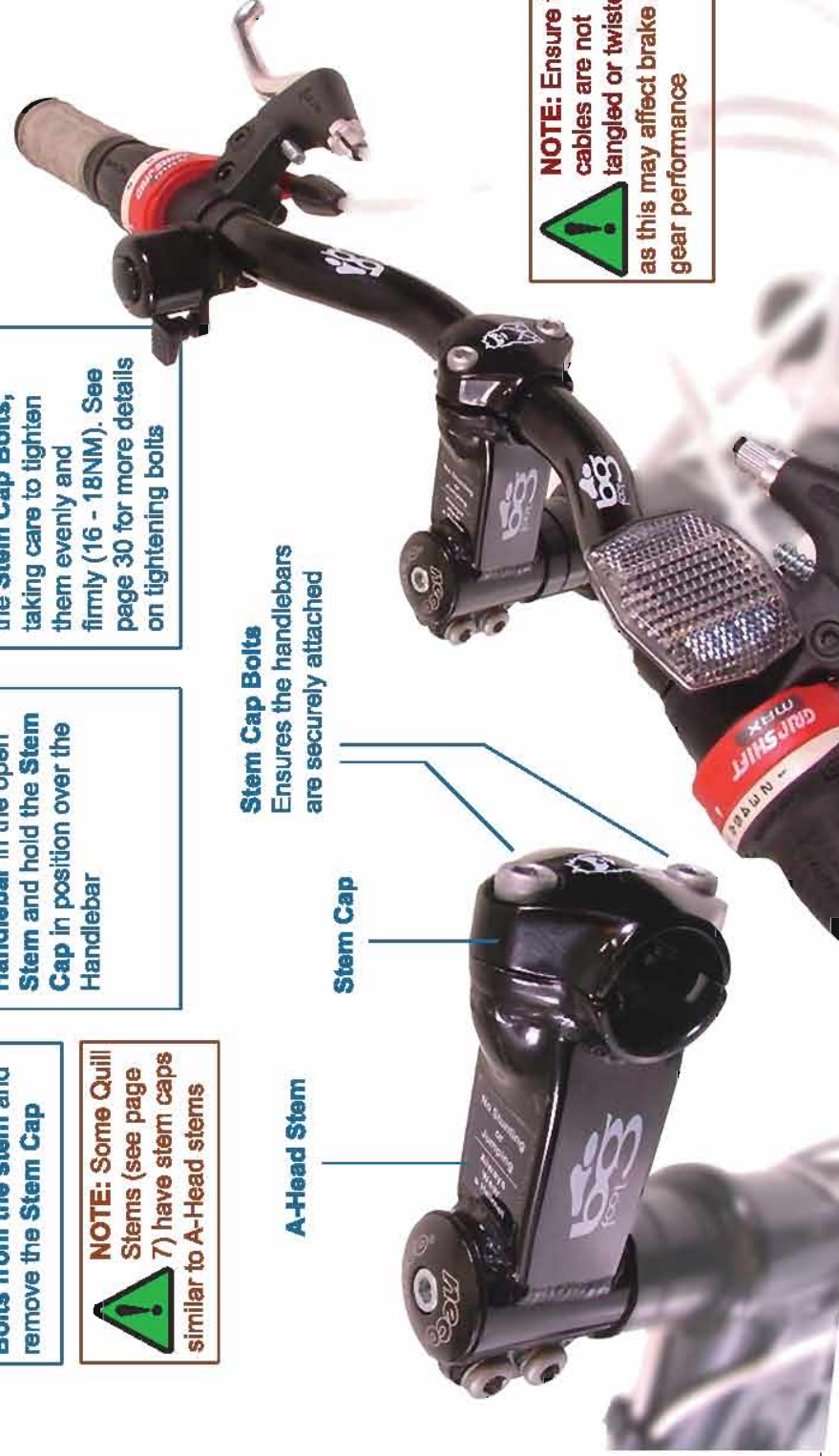
2. Place the centre of the **Handlebar** in the open **Stem** and hold the **Stem Cap** in position over the **Handlebar**

3. Carefully replace the **Stem Cap Bolts**, taking care to tighten them evenly and firmly (16 - 18NM). See page 30 for more details on tightening bolts

Stem Cap Bolts
Ensures the handlebars are securely attached

Stem Cap

A-Head Stem



NOTE: Ensure the cables are not tangled or twisted, as this may affect brake & gear performance

ATTACHING A QUILL STEM

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Quill stems are secured in place using an Expander Bolt and Wedge Nut, shown in the diagram below). Follow the steps below to ensure that your handlebars are fitted correctly and securely:

1. Locate the handlebars and remove all packaging from the handlebars

2. Insert the stem into the head tube. Ensure that the wedge nut is aligned with the stem

3. Align the bars with the front wheel, and ensure that they are facing forwards.

4. Tighten the stem bolt firmly (15-17Nm) using the Allen wrench provided



NOTE: Ensure that the cables are not tangled or twisted, as this may affect performance

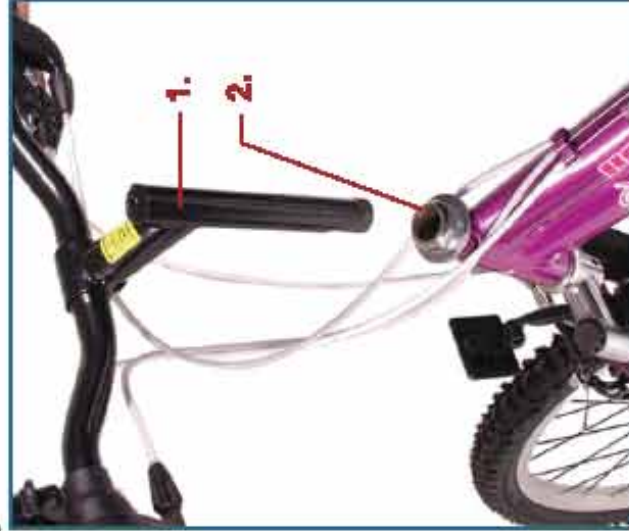
Handlebar Clamp & Bolt



Expander Bolt

Minimum Insertion Mark

Wedge Nut



ATTACHING THE SADDLE AND SEAT POST

The saddle and seat post support the rider's weight and need to be assembled and fitted into the bicycle frame correctly. Special attention should be paid to the **Minimum Insertion Mark** on the seat post. Follow these instructions to correctly fit your saddle for optimum comfort and safety.

1. Remove all packaging from the saddle and seat post and fit the reflector if necessary

2. Insert the seat post into the frame at least to the **Minimum Insertion Mark**. Fasten securely (9-12Nm)

Saddle Rails give the saddle strength

Standard Saddle Clamp attaches the saddle to the top of the seat post

Standard Seat Post tapered to fit into the saddle clamp

Reflector

Minimum Insertion Mark

WARNING! The seat post **MUST** be inserted at least up to the **Minimum Insertion Mark**

3. Adjust the tilt of the saddle by loosening and adjusting the saddle clamp so that it is approximately horizontal - see image below and right. You can also slide the saddle forwards or backwards on the saddle rails. Tighten firmly (9-12Nm)

4. Adjust the height of the saddle so that the rider can touch the ground on tip-toes and the leg is slightly bent when the pedal is at the bottom of the stroke. This is the most efficient saddle position.

Micro-adjustable Saddle Clamp and Seat Post



NOTE: If you use a rear-mounted child seat and have a sprung saddle, ensure that the springs are covered

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ATTACHING THE PEDALS

! WARNING: YOUR PEDALS ARE DIFFERENT

1. Your pedals and crank arms have been colour-coded:

LEFT = RED
RIGHT = GREEN

(Left and Right are determined by sitting on the bike)

Match the left pedal to the left crank, and the right pedal to the right crank.

Left Pedal
Tightens Anti-Clockwise

Right Pedal
Tightens Clockwise



2.



Left Crank Arm

Once you have matched the pedal to the correct crank arm you should double check the tightening direction:

Left Crank
Tightens Anti-Clockwise



Right Crank
Tightens Clockwise



3. When you are ready to fit the pedals peel the crank arm label away to reveal the threaded hole. Tighten the pedal as far as possible with your fingers. Use the tool provided to tighten them firmly (see page 30)



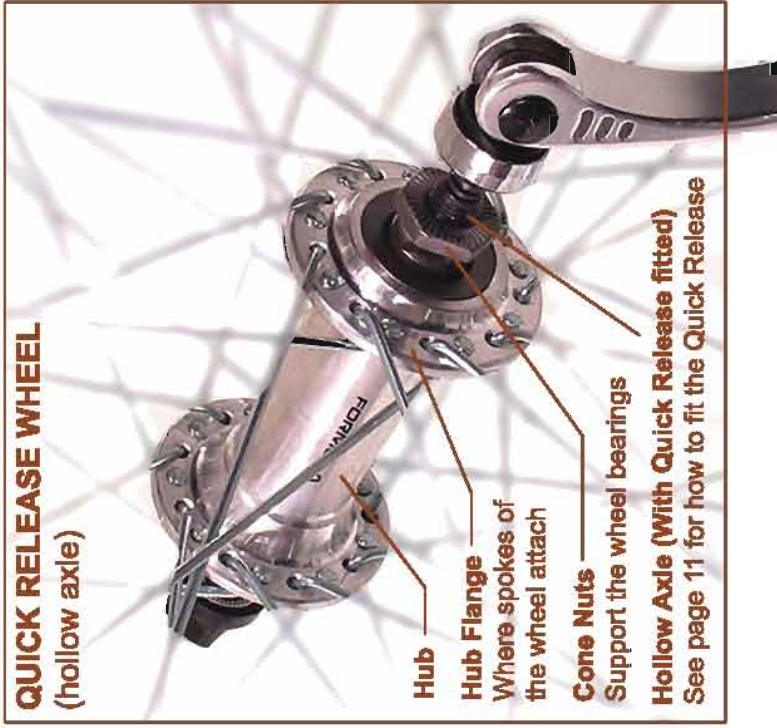
NOTE: Remove the pedal & crank arm labels once the pedals have been fitted

WHAT TYPE OF WHEEL DO YOU HAVE?

Check if you have a Quick Release wheel or a wheel with a Nuted Axle, as this will determine how you attach your wheels to your bicycle.



IMPORTANT! If your wheel has a hollow axle you have quick release wheels, as shown below left. If you have a solid axle your wheel will be attached using wheel nuts, shown below right.



USING A QUICK RELEASE SKEWER

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if your wheel has a hollow axle it is a Quick Release Wheel, and is attached to the bike with a Quick Release Skewer, like the one shown below. The Quick Release mechanism allows the wheel to be removed quickly and without the need for any tools.



! IMPORTANT: When securing a wheel in position the Quick Release lever is Closed (locked) by flipping the lever from a position where it is curved outwards (Open) to a position where it is curved inwards (Closed), as shown in the diagram below:

OPEN

CLOSED

To release a wheel, flip the lever to the position where it curves outwards

How to Fit a Quick Release Mechanism to your wheel:

- 1. Remove the Nut & one Spring from the Skewer**
- 2. Insert the Skewer through the wheel Axle**
- 3. Refit the Spring**
- 4. Re-thread the nut onto the skewer**

HOW TO ATTACH A QUICK RELEASE WHEEL

Once you have fitted your Quick Release Skewer to your wheel (see page 11 for more information) you will need to attach the wheel to the bicycle. This is how you do it:

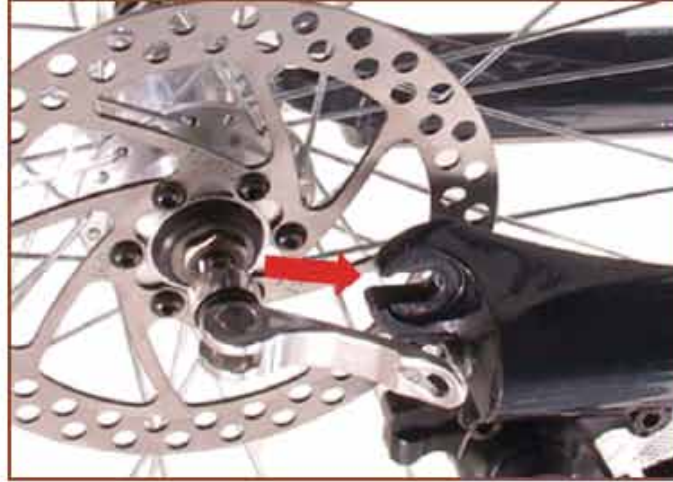
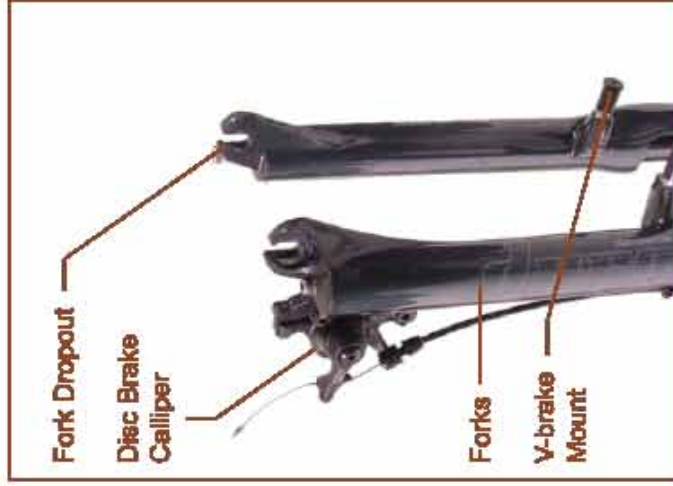
1. Start by turning the cycle up side down, so that it is resting securely on the saddle and handlebars, with the forks pointing upwards as in the image below.

2. Lower the two ends of the wheel axle into the fork dropouts, taking care to guide the rotor into the disk calliper if you have disk brakes. If you have V-brakes ensure that they are released (see page 23 for details)

3. Tighten the Quick Release skewer to secure the wheel in place (for details on locking a Quick Release lever see page 11)



NOTE: Make sure that the wheel is seated squarely in the fork dropouts



HOW TO FIT A WHEEL WITH A NUTTED AXLE

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Wheels with nudded axles are the easiest to fit, and this is how you do it:

1. Start by turning the bicycle upside-down, so that it rests securely on the saddle and handlebars.



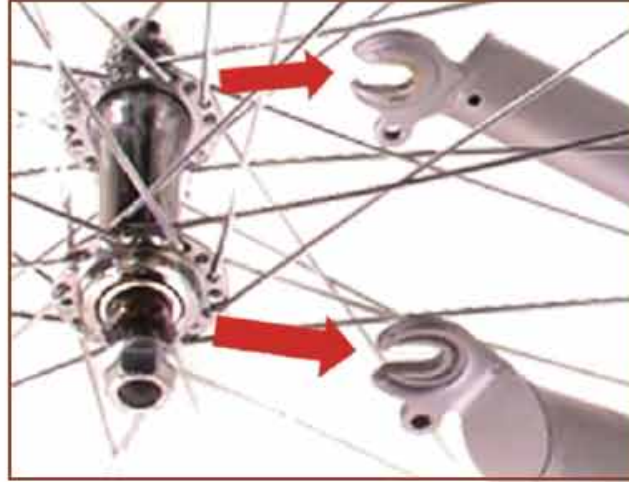
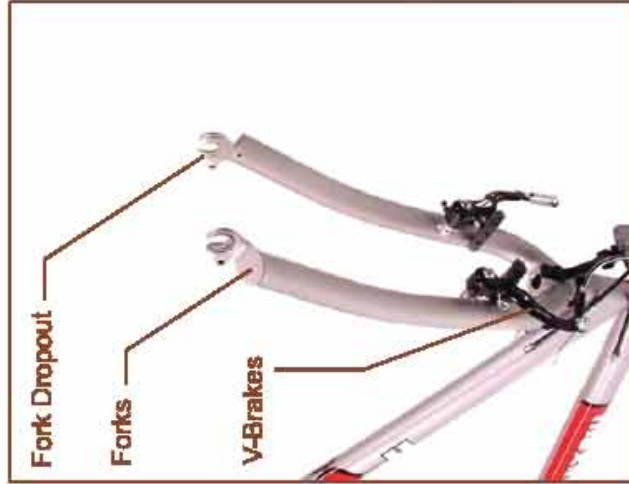
NOTE: If you have V-type brakes ensure that they are unhooked. See page 23

2. Loosen the wheel nuts so that they are positioned on the ends of the wheel axle. Check that the wheel is the correct way round (there is a small forward-pointing arrow embossed on the side of the tyre). Lower the wheel between the forks and slot the wheel axle into the jaws of the fork dropouts.



IMPORTANT! Remember to reset the brakes. For more details see page 23

3. Ensure that the wheel is seated evenly in the dropouts. Tighten both wheel nuts tight (22-25Nm, see page 30) using the tool provided.



NOTE: Check that your bike is correctly assembled (see the guide on page 3)

ATTACHING RACKS AND MUDGUARDS

Some bicycles are manufactured with the eyelets ready for mudguards and racks to be fitted. Mudguards are fitted over the wheels to prevent water and dirt spraying the rider. Racks are usually fitted over the rear wheel and are used to securely carry small pieces of luggage.

Rear Racks are normally attached near the rear dropout and near the top of the seat stays.

Front Mudguards are usually fitted to the fork dropout and the front brake mount.



IMPORTANT: ensure that all fixings are secure and that there is sufficient clearance between the tyre and guard before riding your bike. If you are fitting after-market components, check that they are compatible with your bicycle before riding it.

Rear Mudguards are usually attached at the rear dropout, the rear brake and immediately behind the bottom bracket.

HOW TO CHANGE GEARS

The gears on your bike are changed by operating the Gear Shifters on the handlebars. There are two main types of Gear Shifters: Twist Shifters (shown below) and Trigger Shifters (shown on the next page).

TWIST SHIFTERS

Operated by rotating the shifter forwards or backwards

The Left Gear Shifter operates the Front Gears which are attached to the cranks (pedal arms).

The Left Brake Lever operates the Rear Brake.



Grips

Textured to prevent your hands from slipping

Left Hand Twist Shifter

Rotate towards the L (away from yourself) to select a Lower gear.

Rotate towards the H (towards yourself) to select a Higher gear.

The indicator shows which gear is selected

Gear Cable

With Barrel Adjuster to fine tune the gears. Only make small adjustments when using this barrel adjuster



IMPORTANT: Do not change gear while the bike is stationary. You should always turn the pedals when changing gear

The Right Gear Shifter operates the Rear Gears.

The Right Brake Lever operates the Front Brake.



Brake Cable

With a barrel adjuster to finely tune the cable tension. Only make small adjustments to the cable tension

Right Hand Twist Shifter

Rotate downwards and towards yourself to select a Lower gear.

Rotate the shifter upwards and away from yourself to select a Higher gear.

The numbers show which gear is selected

Brake Lever



Positioned within easy reach for your hand without having to lift it off of grips

HOW TO CHANGE GEARS

The gears on your bike are changed by operating the Gear Shifters on the handlebars. There are two main types of Gear Shifters: Twist Shifters (shown on the previous page) and Trigger Shifters (shown below).

TRIGGER SHIFTERS

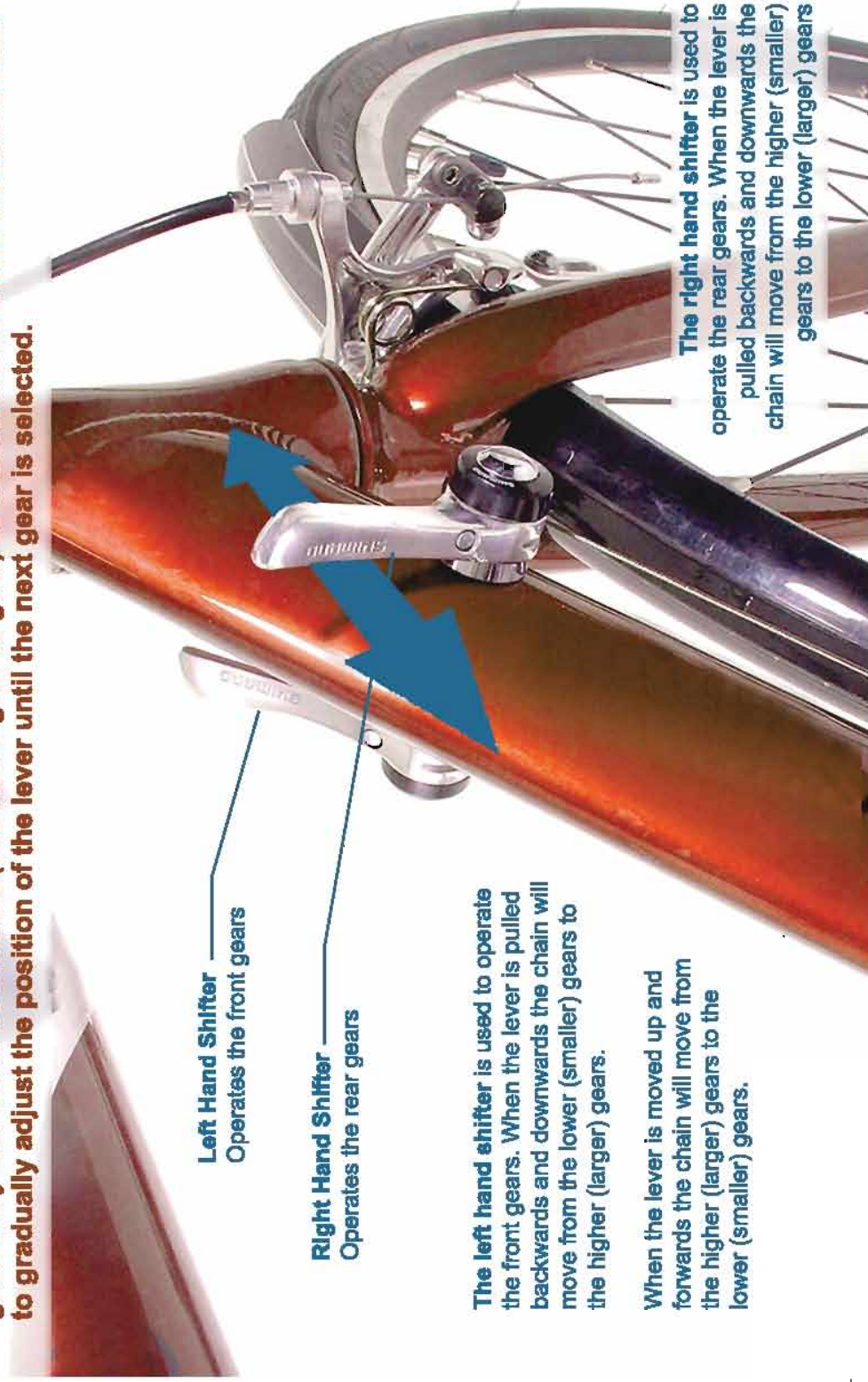
Usually have two levers per shifter: one lever moves the gear up and one moves the gear down

 <p>The Left Gear Shifter operates the Front Gears. The Left Brake Lever operates the Rear Brake</p>	<p>Grips Textured to prevent your hands from slipping</p> <p>Left Hand Trigger Shifter Push the Thumb Lever to select a Higher gear. Pull the Finger Lever to select a Lower gear.</p> <p>Most systems have an indicator that shows which gear is selected</p> <p>Gear Cable With Barrel Adjuster to fine tune the gears. Only make small adjustments when using this barrel adjuster</p>
 <p>The Right Gear Shifter operates the Rear Gears. The Right Brake Lever operates the Front Brake.</p>	<p>Brake Cable With a barrel adjuster to finely tune the cable tension. Only make small adjustments to the cable tension</p> <p>Right Hand Trigger Shifter Push the Thumb Lever to select a Higher gear. Pull the Finger Lever to select a Lower Gear</p> <p>Most Systems have an indicator that shows which gear is selected</p> <p>Brake Lever Positioned within easy reach for your hand, without having to lift it off of the grips</p>

HOW TO USE DOWN-TUBE SHIFTERS

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Down-tube shifters are two small levers on either side of the down-tube that are used to change gear. They will either be indexed (click from gear to gear) or friction-based where the rider needs to gradually adjust the position of the lever until the next gear is selected.



Left Hand Shifter —
Operates the front gears

Right Hand Shifter —
Operates the rear gears

The **left hand shifter** is used to operate the front gears. When the lever is pulled backwards and downwards the chain will move from the lower (smaller) gears to the higher (larger) gears.

When the lever is moved up and forwards the chain will move from the higher (larger) gears to the lower (smaller) gears.

The **right hand shifter** is used to operate the rear gears. When the lever is pulled backwards and downwards the chain will move from the higher (smaller) gears to the lower (larger) gears

HOW TO USE THE GEARS

Knowing when and how to use your gears is essential if you are to get the most from your bike.

The gears on your bike are specified to make riding your bike easy and enjoyable. While riding you can select an appropriate gear by moving the chain between the various front and rear gears.

This bike is in the **LOWEST GEAR** which is best for going **UP HILL**.

Notice that the chain is on the **LARGEST GEAR at the BACK,** and the **SMALLEST GEAR at the FRONT.**



IMPORTANT: You should never ride with the chain 'crossed' (i.e. in the largest gear at the back and large gear at the front, or vice versa)

Rear Derailleur

Moves the chain across the rear gears (See page 20).

Chain on the Lowest Gear

Biggest gear at the back, smallest at the front

Front Derailleur

Moves the chain from chain ring to chain ring at the front



YOUR BICYCLE has been assembled with a range of gears to help you ride more efficiently whether you are going up hill or down.

This bike is in the **HIGHEST GEAR**, which is the fastest gear and best used for going **DOWN HILL**.

The chain is on the **SMALLEST GEAR at the BACK**, and the **LARGEST GEAR at the FRONT**.

Rear Gears

Bikes can have up to 10 rear gears. The larger ones are for riding up hill, and the smaller ones are for riding on flat terrain or cycling down hill.

Chain on the Highest Gear

Smallest gear at the back, biggest gear at the front

Front Gears

The larger gear is for going down hill, and the smaller gear is for riding up hill. Bicycles usually have up to 3 front gears.



IMPORTANT: If you hear prolonged grinding sounds coming from your gears or your gears are not changing smoothly, you may need to tune the front and rear derailleurs. See pages 20 and 21 for details



ADJUSTING THE REAR DERAILLEUR

The rear gears are made up of between 5 & 9 small cogs of various sizes and a rear derailleur. This derailleur is connected to the right hand gear shifter on the handlebars via a cable. When the shifter is operated the derailleur moves the chain between gears

The rear derailleur must be adjusted from time to time to keep the gears changing smoothly. This is done by checking the Upper (H) and Lower (L) limit screws are set correctly, and then adjusting the cable tension.

1. Try to move the chain to the Lowest Gear (largest). Adjust the Lower (L) limit screw until the small gear wheels in the derailleur lines up vertically with the Lowest Gear.
2. Move the chain to the Highest Gear (smallest). Adjust the Upper (H) limit screw until the small gear wheels are vertically aligned with the Highest Gear.
3. Locate the Barrel Adjuster (which is either where the gear cable attaches to the rear derailleur or where the cable leaves the shifter - see page 15-16). If the gears change smoothly from High to Low but not from Low to High, the cable tension is too high. Release the cable slightly by turning the Barrel Adjuster clockwise and recheck the gear changing performance.



NOTE: if your gears make a grinding sound you should check your gears and tune them if needed



ADJUSTING THE FRONT DERAILLEUR

The front gears consist of up to three large cogs attached to and driven by the cranks and a front derailleur. The derailleur is operated by the left hand gear shifter via a gear cable.

For details about how Upper and Lower limit screws affect derailleur performance see page 22

- Derailleur Clamp
- Front Derailleur
Moves the chain between the gears
- Lower (L) Limit Screw
Stops the chain dropping off the Lowest Gear
- Upper (H) Limit Screw
Prevents the derailleur pushing the chain past the Highest Gear
- Lowest Gear
- Highest Gear
- Bottom Bracket
Attaches the cranks to the frame
- Cranks

Similar to the rear derailleur, the front derailleur function can be tuned by adjusting the upper and lower gear limit screws, and the cable tension.

1. Move the chain to the Lowest Gear at the front and the Lowest Gear at the rear. Adjust the Lower (L) limit screw until the derailleur is close to, but not touching the chain.
2. Move the chain onto the Highest Gear at the front and the Highest Gear at the back. Adjust the Upper (H) limit screw so that the chain does not touch the derailleur.
3. Locate the Barrel Adjuster (where the cable leaves the shifter - see page 15-16). If the gears do not change from Low to High easily, rotate the Barrel Adjuster Anti-clockwise approximately half a turn to increase cable tension. Recheck the gear performance.

If the gears do not change from High to Low reduce the cable tension



NOTE: You may have to make this adjustment more than once to correctly set the gears.

HOW DERAILLEURS WORK

When the gear shifters on the handlebars are operated the derailleurs move the chain from gear to gear. The derailleurs and gear shifters are connected via a cable. The distance that the derailleurs move can be adjusted using the High and Low Limit Screws (see pages 20 and 21).

The image below is of a front derailleure, taken from the inside. It shows how the Upper and Lower screws make contact with small plates within the derailleure and limit the distance that the derailleure can travel. The range of movement can be changed by screwing these screw in or out.

Low Limit Screw
Prevents the derailleure shifting the chain past the low (small) gears

Upper or High Limit Screw
Stops the derailleure moving the chain past the high (large) gears

When the cable is pulled back and forth (1) by the gear shifter the derailleure pivots and makes contact with the High and Low limit screws (2). The position of these screws dictates the range of the derailleure

Gear Cable
Makes the derailleure move when the shifter is operated

Cable Pinch Bolt



V-BRAKES

V-Brakes are simple and very effective rim brakes. They consist of two individually sprung levers that are pulled together by a cable. This action presses a brake pad against the rim and slows the bike down.



Cable Pinch Bolt
Secures the Cable to the right hand lever

Brake Cable
Operates the brake lever arms when the brake lever on the handlebars is pulled

Cable Guide Pipe (J-Pipe)
Hooks into the left hand lever and connects the two levers so that they both move towards the wheel when the lever is pulled

Brake Pads
Usually made of rubber, these rub against the rim to slow the wheel

V-Brake Lever Arm
Move inwards to press the brake pads against the rim of the wheel

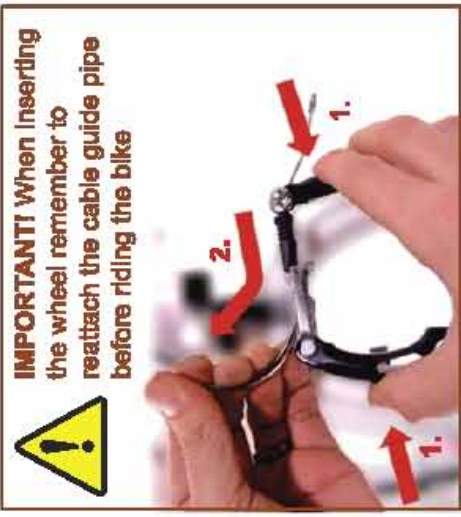
Brake Pad Adjustment Bolt
Allows the position of the pad to be adjusted

V-Brake Mount
Part of the frame of fork that the V-brake attaches to

Spring Tension Screw
Adjusts spring strength for each lever

The V-brake lever arms **MUST** be disconnected to allow the tyre to pass between the brake pads when the wheels are fitted or removed:

1. Squeeze the two lever arms together with one hand
2. Pull the guide pipe across and then upwards to unhook it from the left hand lever. This will allow enough room for the wheel to be inserted or removed.



IMPORTANT! When inserting the wheel remember to reattach the cable guide pipe before riding the bike

WARNING! You should regularly check the condition of your brake pads. Replace them if needed.

WARNING! Do **NOT** over-apply the brakes - front brake in particular - as you may fall and injure yourself

ADJUSTING V-BRAKES

There are two variables that may need adjustment when setting up and fine tuning your V-brakes. These are the Cable Tension and the Spring Balance. This is how each is adjusted:

Adjusting the Cable Tension:

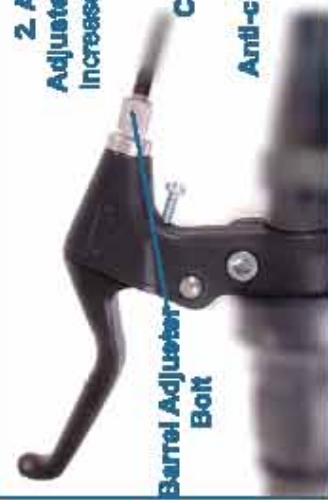
The cable tension determines how close the brake pads are to the rim. Start by adjusting the cable tension at the cable pinch bolt, and then make finer adjustments using the barrel adjuster bolt on the brake lever.

1. Loosen off the cable pinch bolt and re-adjust the cable position so that the brake pads are close to the rims. Retighten the cable pinch bolt



Cable Pinch Bolt

2. Adjust the Barrel Adjuster bolt (shown) to increase or decrease the tension.



Barrel Adjuster Bolt

Clockwise = Less Tension,
Anti-clockwise = More Tension

Adjusting the Spring Balance:

Once you are happy with the cable tension you may find that one lever arm (and therefore brake pad) is closer to the rim than the other. In this situation you will need to adjust the spring tension screws to balance the arms.

Turn the **LEFT** screw **CLOCKWISE** to **INCREASE** spring tension and move the brake arms towards the **LEFT**

Turn the **LEFT** screw **ANTI-CLOCKWISE** to **REDUCE** spring tension and move the brake arms towards the **RIGHT**



The same principle applies to the right hand screw

You will need to make similar and even adjustments to both springs

Left Spring Tension Screw

ADJUSTING THE BALANCE OF V-BRAKES

25

It is important to get the V-brake arms adjusted correctly. This is done by adjusting the spring balance screw on the outside of each arm near the pivot point (see page 23 and 24).

The brake arms should be positioned so that the brake pads are the same distance from the rim for the most efficient braking performance

The image below shows poorly adjusted V-brakes. The spring tension screws need to be adjusted. See page 24 for details

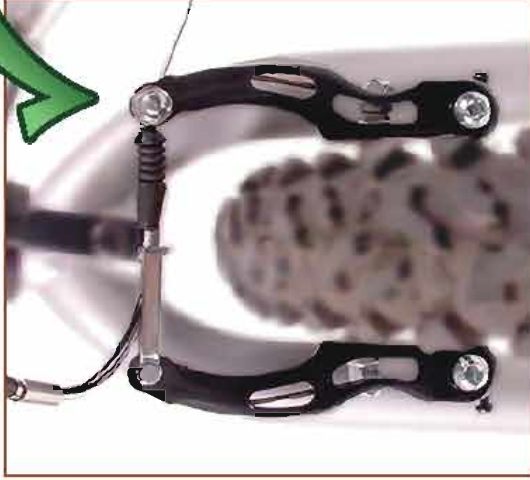
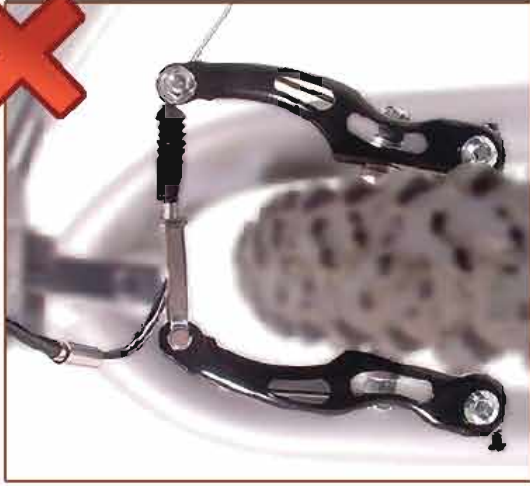
The image below shows well adjusted V-brakes. The levers are the same distance from the rim.

This ensures that the brake pads will apply a similar amount of force to each side of the rim. This minimises excess wear to the wheel

As well as having the V-brake arms correctly adjusted, the brake pads need to be correctly positioned.



Check that the pads make full contact with the rim, and do NOT touch the tyre. Ensure that all parts are tightened accordingly (see page 24)



 **NOTE:** Hydraulic Disc Brakes are not covered in this manual. For more information refer to the manufacturer's manual or your local bike shop

- Forks with disc brake mount
- Barrel Adjuster Bolt To adjust cable tension and fine tune braking performance
- Brake Calliper Mount Bolt Secures the calliper body to the brake mount
- Brake Calliper Mount Correctly positions the calliper body
- Brake Pad Bolt Holds the pads in place
- Quick Release
- Calliper Arm Pulled by the cable and activates the brake pads
- Cable Pinch Bolt
- Brake Calliper Mount Bolt
- Brake Cable
- Disc Brake Rotor

MECHANICAL DISC BRAKES (Cable-pull)

Disc Brakes need to be correctly aligned and have correct cable tension if they are to perform optimally.

To set the brake alignment:

1. Loosen off the two Brake Calliper Mount Bolts that secure the calliper body in position, so that the calliper can move from side to side.
2. Pull the brake lever on the handlebars to push the brake pads against the rotor. This will reposition the calliper in the correct position.
3. Tighten the Brake Calliper Mount Bolts

To set the cable tension:

1. Start by making large adjustments to the cable tension by releasing the cable from the Cable Pinch Bolt
2. Move the Calliper Arm towards the Cable Adjuster Bolt, and hold in position.
3. Re-attach the cable to the Calliper Arm by tightening the Pinch Bolt
4. Spin the wheel and check the brakes. You will probably need to make fine adjustments to the cable tension using the Barrel Adjuster Bolt.



NOTE: There is also an Adjuster Bolt on the brake lever on the handlebars. See page 15 for details

MECHANICAL DISC BRAKES: CHANGING THE BRAKE PADS

27 Your brake pads should be changed before the braking surface is worn.

Removing the old brake pads:

1. Remove the wheel from the bike to allow better access to the disc brake calliper
2. Remove the brake pad bolt, taking care not to loose the 'E'-clip that secures it in place
3. Use a flat-head screw driver to carefully lift the brake pads out of position. With some brake systems it is possible to remove the pad by gripping the disc tab with long-nose pliers.

Fitting the new brake pads:

4. Carefully slide the new pads into position in the brake calliper. Ensure that they are in exactly the same orientation as the old pads.
5. Replace the brake pad bolt (if you have one)
6. Loosen the Brake Pad Adjustment Bolt to allow space for the rotor to fit in between the new brake pads

IMPORTANT: You should check your brakes work effectively before attempting to ride the bike. See page 3

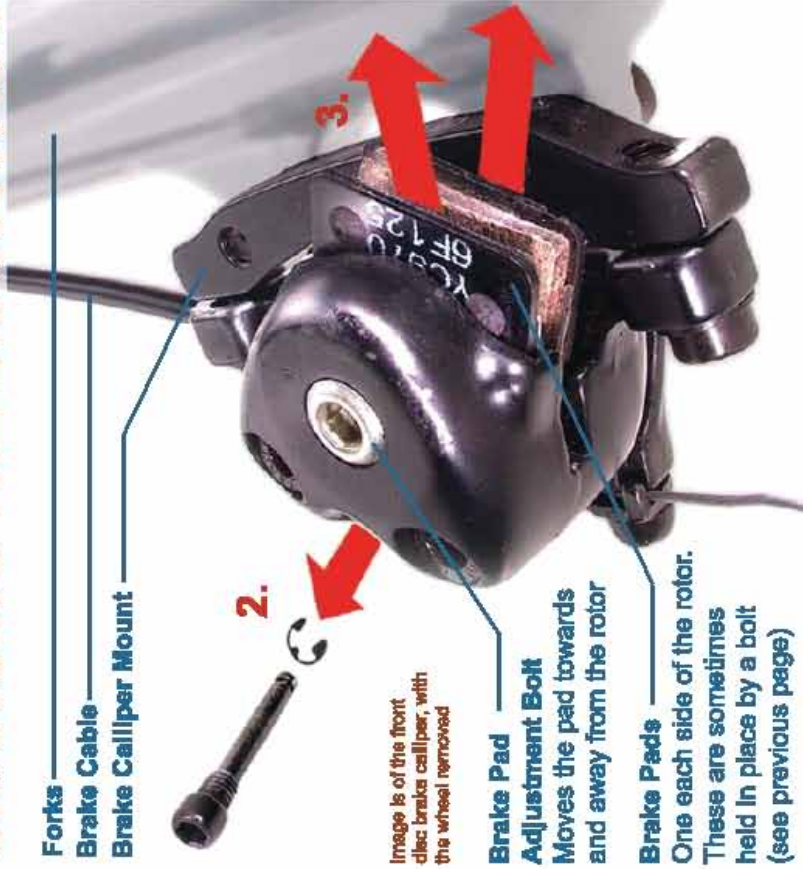


Image is of the front disc brake calliper, with the wheel removed



NOTE: Disc brake pads are unique to each particular type of disc brake calliper. Ensure that the replacement brake pads are identical to the old ones. Examples of different shaped brake pads are shown:



MAINTAINING YOUR WHEELS

Your wheels are the most vulnerable components of a bicycle and even under normal riding conditions they will come into contact with pot-holes, drains, kerbs etc. For safety reasons, it is very important that you regularly check your wheels. See the information below and the Before-You-Ride Guide on page 3 for details on which checks need to be carried out.

1. Rim Wear

If your bicycle has rim brakes (brakes that slow the bike by pressing brake pads against a rim) you should regularly check the Wear Groove on the rim. This is a small groove (see below) that is machined into the rim wall. When the rim wears as deep as this groove it is time to replace your wheels.

WARNING! Do not ride your bike if the wheels need replacing



Wear Groove

2. Spoke Tension

The spoke tension will change slightly with riding. If the balance of tension across the spokes changes too much the wheel may develop a buckle (see page 28 for wheel truing advice).

It is recommended that you check the spoke tension regularly. You can do this using a specialist tensiometer or by gently tapping each spoke with a screw driver and listening to the note it makes. If the sound is similar the tensions will be similar.

You can also check how true the wheel runs by holding the wheel off the ground and spinning it to see if there is a wobble.



NOTE: Contact your local bike shop or Customer Care (page 33) if you have uneven spokes and need further advice

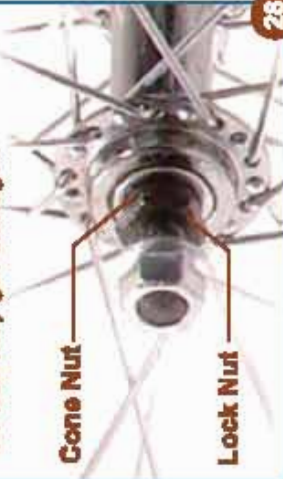
3. Cone and Lock Nut Adjustments

If during your pre-ride check you notice any sideways movement at the hub these nuts may need tightening. The cone and lock nuts are threaded onto the axle and secure the bearing cups in place. There is one of each on each side of the axle.

Tighten the cone nuts slightly first, then recheck the wheel. When you're happy tighten the lock nuts.



IMPORTANT: Do not over tighten these nuts as the wheel will not turn freely and the hub may get damaged



Cone Nut

Lock Nut

WHEEL TRUING

If your wheel is not true you will be able to see the rim moving from side to side as the wheel rotates. This is known as a buckle. This ranges from a very slight movement where the bike is rideable to a complete failure.

Either way you are advised to repair any buckle as soon as possible. Below is a guide on how to repair slight buckles. For more serious buckles you should take the wheel to a professional.


You will need a spoke key and a truing stand. If you have any trouble you should contact Customer Care or your local bike shop

1. **Remove the tyre and inner tube.** Set the wheel up in a truing stand and adjust the pointer so that it just brushes one side of the rim.

2. **Spin the wheel and locate the point where the buckle is.**
If the rim wobbles toward the left, you will need to tighten the left hand spokes along the buckled section very slightly - **approximately 1/4 turn each time**, and loosen the ones on the right by a similar amount.
Likewise, if the wobble is to the right you will need to tighten the right hand spokes in this area, and loosen the left hand ones.
Spin the wheel to check on your progress each time you adjust the spoke tension. You will have to repeat this process a number of times.



3. **Refit the tyre and inner tube when your wheel runs true.** If you can not true the wheel consult your local bike shop.

 It is highly recommended that a professional or qualified bicycle mechanic true your wheels as over tightening or loosening of spokes can cause your wheels to become severely buckled

USEFUL INFORMATION

How Tight is Tight?

The table gives information about how tight various parts of your bicycle should be tightened too. The Newton Meter (Nm) value shows the ideal range, although not everyone has access to a Torque Wrench, so a Guide has been developed as an indicator:

Part	Nm	Guide
Front Wheel Nuts.....	22 - 25.....	Tight (7 out of 10)
Rear Wheel Nuts.....	25 - 28.....	Very tight (8 out of 10)
Handlebar Expander Bolt.....	17 - 19.....	Very firm (6 out of 10)
Handlebar Clamp: 1 Bolt.....	16 - 18.....	Quite firm (5 out of 10)
Handlebar Clamp: 2 Bolt.....	12 - 14.....	Firm (4.5 out of 10)
Handlebar Clamp: 4 Bolt.....	8 - 10.....	Firm (4 out of 10)
A-Head Clamp Bolt.....	18 - 20.....	Very Firm (6 out of 10)
Seat Clamp Bolt or Nut.....	16 - 18.....	Quite firm (6 out of 10)
Seat Post Clamp Allen Bolt.....	8 - 10.....	Firm (4 out of 10)
Brake Cable Pinch Bolt.....	6 - 8.....	Firm (3.5 out of 10)
Crank Bolt or Nut.....	45.....	Very securely (9 / 10)
Pedals.....	40.....	Very securely (9 / 10)
Quick Release.....	Tight enough to secure the wheel	
V-brake Brake Blocks.....	8 - 10.....	Firm (4 out of 10)



How to Change an Inner Tube
if you have the misfortune of puncturing an inner tube you will need to remove and either repair or replace the inner tube. Follow these steps (diagram below):

Remove the Inner Tube:

- Use tyre levers to unseat the tyre along one side of the rim (1 and 2, below).
- Once the tyre is off the entire way around reach inside the tyre and carefully remove the inner tube.
- Take care not to damage the inner tube further.

Replace the Inner Tube:

- Inflate the inner tube slightly, so that it is has some shape and is not flat
- Insert the valve into the valve hole in the rim
- Carefully tuck the tube into the tyre
- Once this is in place start refitting the tyre by hand
- Only use the tyre levers to reseat the last section of the tyre (2, below).



IMPORTANT: Always check the inside of the tyre and rim for sharp objects before fitting the inner tube to prevent another puncture



NOTE: Check the tyre for correct inflation advice, and ensure that your tyres are inflated accordingly

MAINTAINING YOUR BIKE

Like all machines your bike will last longer and perform better if you maintain it properly.



NOTE: When you first use your new bike it will go through a breaking in period where brake and gear cables, and even wheel spokes will stretch or "seat". You should check your brakes and gears are working correctly after approximately 10 hours of riding, and you may need to make slight adjustments.

Maintenance Schedule:

1. Before and After Every Ride:

Give your bike a quick check over, as per the Before-You -Ride Guide on page 3

2. At Least Every 100miles:

Clean the bike and lightly oil the chain, freewheel cogs and rear derailleur pulley wheels. Wipe off excess oil. See the cleaning guide opposite.

3. Every 6 months:

In addition to washing the bike, you should check that all bearings (pedals, bottom bracket, wheels and headset) are tight and not excessively worn. Also, check the bike for signs of rust. Squeeze the spokes gently to see if there are any loose ones. Take your bike to your local bike dealer if your bike needs any further work or spare parts.



IMPORTANT: ONLY use bicycle-specific lubricants for your bike. These are available from all bike shops. Do NOT use multi-purpose oils or very light spray lubricants, as these will attract dirt and cause premature wear to components.

To clean your bike you will need (most of which is available from your local bike dealer):

- Bike Degreaser
- A large stiff-bristled brush
- Bicycle Lubricant
- A rag
- A bucket of water.

This is what to do:

1. Spray the chain, gears, derailleurs, brake callipers, cranks and wheel rims with the degreaser. Allow to soak for a few minutes
2. Scrub these parts with the brush.

TIP: Try pedalling backwards while holding the brush against the chain to clean the chain.

3. Rinse down these parts using the bucket
4. Wipe the rest of the bike down with mild soapy water and then rinse
5. Allow about 30mins for the bike to dry before relubricating the chain, gears, derailleurs and brake calliper pivot points.

Be careful not to get lubricant on the brake pads or braking surfaces, as this will reduce the effectiveness of your brakes.

ROAD SAFETY



ALWAYS check that your bike is in full working order, especially your brakes, before taking your bike out onto the road. If your bike is not working as intended it may not be safe and could cause injury (see page 3 for details). Also, ensure that your cycle is of the correct size.



ALWAYS wear your helmet. Wearing other protective clothing such as gloves is also advised as they will help to protect you in the event of an accident. Wear high-visibility or at least light-coloured clothing when riding so that other road users will notice you more easily.



ALWAYS use the correct side of the road. In the UK, bicycles should travel on the left hand side of the road at all times. Never ride towards on-coming traffic. Obey all road traffic regulations in the same fashion as if you were driving a car.



When riding in the dark ensure that you have lights and reflectors - white on the front and red at the back. Also check that you have a white reflector on each wheel. Ensure that these are clean and in full working order.



When riding on the road ensure that you signal appropriately for motorists to understand what your intentions are, i.e. indicate when you are about to make a turn by holding your respective arm out.



Take extra care when cycling in wet weather as you may find that your brakes are not as effective and your braking distance is increased.

For more information on Road Safety please refer to the Highway Code or visit the website below:
www.direct.gov.uk

CUSTOMER CARE INFORMATION

Universal Cycles has a dedicated UK-based contact centre that can offer advice on assembly and all of your cycling needs. We can even help with any spare parts you wish to purchase.

0845 129 9248*

Monday to Friday from 8:30am - 6pm

Or alternatively email us at:

customerc@universalcycles.plc.uk



IMPORTANT: To assist our team in helping to solve any problems you may be experiencing please have the Model Code (see page iv), as well as date and place of purchase information to hand. It is recommended that you acquire genuine spares for friction parts that are likely to wear, in particular brake pads, tubes and tyres.



IMPORTANT: Ensure that you only use genuine replacement parts, especially for safety-critical components. As with all mechanical components, the bicycle is subjected to wear and high stresses. Different materials and components may react to wear or stress fatigue in different ways. If the design life of a component has been exceeded, 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.

* **Calls may be recorded or monitored for training purposes**

Universal Cycles supplies bicycles with all the tools required to safely assemble your cycle. Any subsequent repairs or maintenance that needs to be carried out must be completed by the owner. Work carried out on the bicycle personally or professionally will not be refunded. It is not advisable that you change the specification of your cycle by fitting aftermarket parts or modifying the frame, or use this cycle in competitions as this may invalidate your warranty.

PRODUCT REGISTRATION AND WARRANTY INFO

it's extremely rare for one of our hand built bicycles to fall you, however we require you to register your cycle in order to benefit from Universal's comprehensive warranty package. Just complete the Product registration form below and return to us. Our extended warranty package is available from just £10 per year! That gives you complete peace of mind, just in case there were any unusual mechanical defects.

PRODUCT REGISTRATION FORM

Name:	
Address:	
Town/City:	
County:	
Postcode:	
Telephone Number:	
Email Address:	
Model Code of Your Bicycle:	
Date of Purchase:	
Place of Purchase:	

Warranty Required (tick appropriate):

Gold (£10.00): **Standard (free):**

Return to: UNIVERSAL CYCLES PLC, Festival Leisure Park, Basildon, Essex, UK, SS14 3WB. In order to validate your warranty please enclose a copy of your Proof of Purchase. Please enclose a cheque made payable to "Universal Cycles PLC" for £10.00, if you wish to upgrade the warranty for your cycle. More Info: 0845 128 9248 / customers@universalcycles.plc.uk

The Universal Cycles Guarantee covers the following parts:

Bicycle Frames:

- Steel (rigid): Lifetime
- Steel (suspended): 5 Years
- Alloy (rigid): Lifetime
- Alloy (suspended): 5 Years

Bicycle Parts:

- All covered for a period of 1 year

You can extend your Parts Guarantee to 2 years from the date of purchase for a one-off £10 payment

The above listed warranties apply provided the bicycle has been correctly maintained and used with all due care and attention. In order to validate any claim that is made, it will be necessary to produce proof of purchase to the retailer or, in certain cases, direct to Universal Cycles PLC.

This warranty does not include labour and transportation charges.

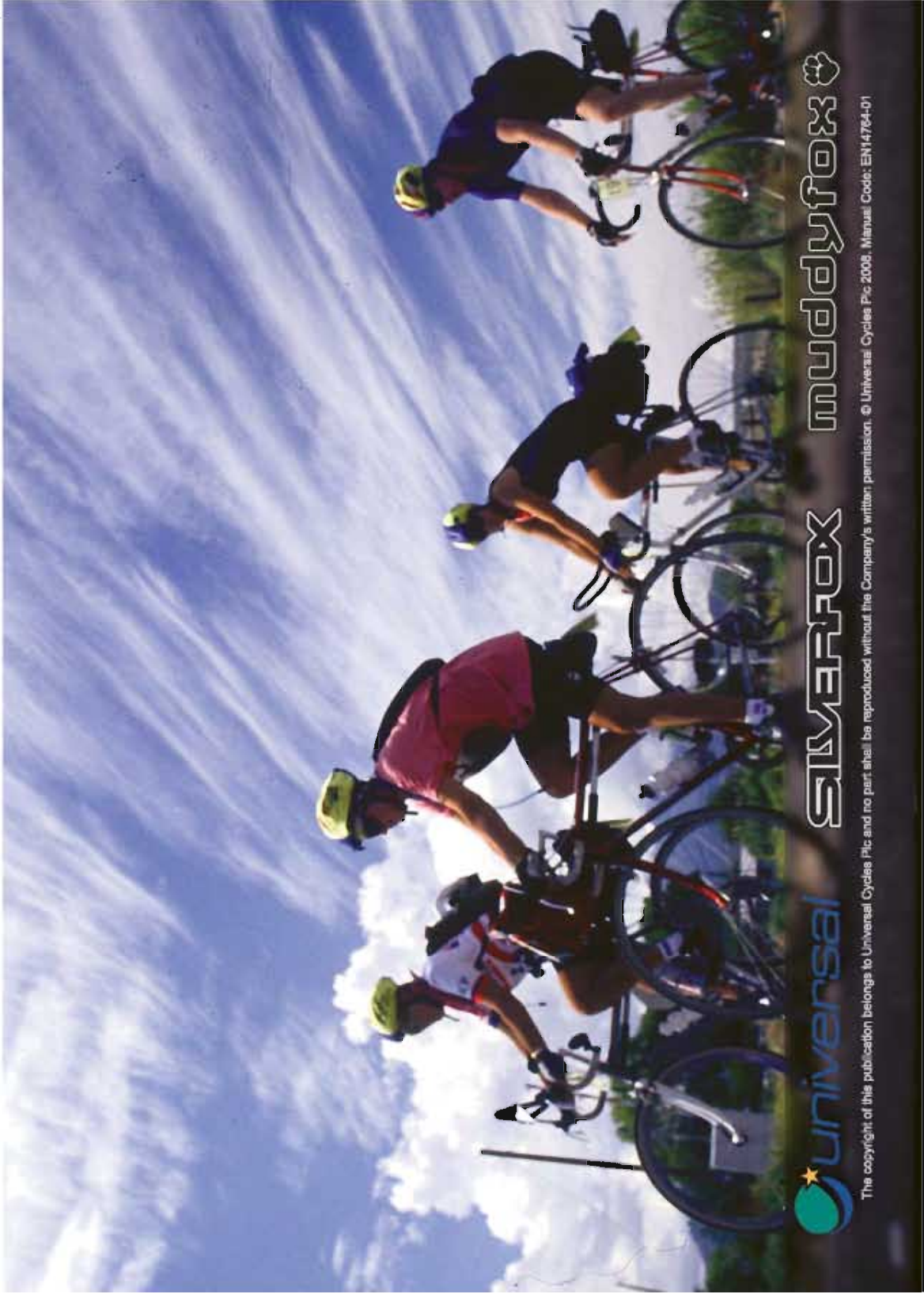
Universal Cycles PLC can accept no responsibility for consequential or special damage. This warranty applies only in the case of defective components and does not cover the effects of normal wear and tear or damage caused by accident, abuse, excessive loads, neglect, improper assembly, alteration from the original specification, improper maintenance or the addition of any item, component or accessory inconsistent with the original intended use of the bicycle.

No bicycle is indestructible! No claims will be accepted for damage caused by improper use, competitive use, stunt riding, ramp jumping,umping or similar activities.

Universal Cycles PLC reserves the right to amend any specification within the manual without notice. Please note, this Guarantee is not transferable and only applies to the original owner.

The customer's statutory rights are not affected by this warranty.

UNIVERSAL CYCLES PLC
Festival Leisure Park, Basildon, Essex, UK, SS14 3WB
Telephone: +44 (0)1268 247 000 Fax: +44 (0)1268 247 048
Registered in England No: 1339667



muddyfox 

SILVERFOX

 **universal**

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