



FOLDING SERIES Owners Manual



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Warranty

All bikes must be registered within 14 days of purchase either online or by post using the form that is supplied with the cycle or on the Dawes website. Failure to do this will result in the warranty being void.

For 3 years

All rigid alloy frames and forks

For 1 Year

All suspension frames, all paintwork and decals

All carbon fibre frames and forks, all original parts, suspension forks and rear suspension units unless these parts are covered in service by a UK distributor.

Non-Dawes branded components

All non-branded Dawes components such as Rockshox, Shimano, Avid and SR Suntour are all covered by the original manufacturer's warranty. Whenever a fault occurs to a non-Dawes branded product you should contact the UK distributor for that brand to arrange a replacement or repair.

This warranty does not cover

Normal wear and tear proper assembly
Improper follow up maintenance

Installation of parts or accessories not originally intended for, or compatible with, the bicycle sold.

Damage or failure due to accident, misuse, excessive load, abuse or neglect.

Labour and transportation charges for the part replacement or changeover.

This warranty is applicable from the date of purchase for the original owner only, who must produce proof of purchase and register their cycle in order to validate any claim. Claims must be submitted through your original retailer, unless the original retailer is no longer trading or no longer a Dawes dealer.

No bike is indestructible and no claims will be accepted for damage due to improper use, competition use, stunt riding, ramp jumping, leaping or similar activities. Our bikes conform to the BS 6102/1: 1992 and BS EN 14766:2005 Mountain bicycles, BS EN 14764: City and trekking bicycles, BS EN 14781: Racing bicycles and EN 14765: Bicycles for young children (size 435mm-635mm, seat height to ground).

The company reserves the right to change or amend any specification without notice. All information and specifications within this brochure are correct at time of printing. Please refer to our website for the latest information: www.dawescycles.com

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Your Responsibility

In this leaflet we describe and illustrate how to ride safely and keep your bicycle in a safe, trouble free operating condition.

Owner's Responsibility and Important Points - These are clearly marked to indicate that it has been manufactured to conform to one of four new European bicycle safety standards, these standards have been developed and introduced into Europe and the UK to ensure that bicycles manufactured in compliance with them will be as safe as is practically possible, please refer to the BS EN sticker on your bicycle frame for the relevant safety standard. Before you ride your bicycle ensure that you are fully aware as to the type of use and the specification BS EN safety standard that your new bicycle has been designed and manufactured to by understanding the specific usage descriptions given below.

BS EN 14764 City & Trekking Bicycles – (permissible total weight of rider + luggage + bicycle = 105kg)

These bicycles are intended for use on public roads, paths or cycle tracks that are in good condition. Check with your dealer or manufacturer with regard to the suitability of your bicycle for such conditions and carry out maintenance checks as advised within this manual.

Your Bike



1. Handlepost adjustment quick release
2. Handlebar quick release*
3. Brake lever
4. Handlepost latch
5. Frame latch
6. Seat post quick release

*Fitted to selected models only

Folding your bike

- Loosen the quick release lever that secures the handlebar*. (see image 1)
- Grip the handlebar and rotate the handlebar anti-clockwise so the brake levers point vertically. (see image 2)
- Using the quick release lever located on the stem, raise the stem to the minimum insertion mark. This will allow the handlebar to clear the front axle once folded.
- Lift the small catch located on the handlebar latch and pull the latch towards you. (see image 3)
- Make sure to pull the latch so that the hook releases from the stem. (See image 4)
- Fold the handlebar down.
- Squeeze the internal section of the pedal and push down to fold the pedals.
- Loosen the quick release seat clamp and lower the saddle to its lowest point, tighten the quick release again to secure the seatpost.
- Rotate the small plastic retaining clip on the frame latch to allow the lever to be released. Now open the frame latch so it is fully open. (see image 5)



*Fitted on selected models only.

Night Riding

Riding a bike at night requires the rider to be more alert than riding during the day. A cyclist can be very difficult for motorists and pedestrians to see. Riders should ensure that their bikes are well illuminated and that reflective clothing is used. Please consult your local dealer for more information regarding riding at night.

WARNING- Reflectors are not a substitute for required lights. Riding at dawn, dusk, night or any other times of poor visibility without an adequate bicycle lighting system and without reflectors is dangerous and may result in serious injury or death. Bicycle reflectors are designed to pick up and reflect car lights and streetlights in a way that may help you to be seen and recognised as a moving cyclist.

CAUTION- Check reflectors and their mounting brackets regularly to make sure that they are clean, straight, unbroken and securely mounted. Have your dealer replace damaged reflectors and straighten or tighten any that are bent or loose. If you choose to ride under conditions of poor visibility, check and be sure you comply with all local laws about night riding, and take the following strongly recommended additional precautions:

- Purchase and install a dynamo or battery powered head and taillight that meet all local regulatory requirements and provide adequate visibility
- Wear light coloured, reflective clothing and accessories, such as a reflective vest, reflective arm and leg bands, reflective stripes on your helmet, flashing lights attached to your body and/or your bicycle
- Make sure your clothing or anything you may be carrying on the bicycle does not obstruct a reflector or light and securely mounted reflectors
- Make sure that your bicycle is equipped correctly with reflectors

If riding in traffic

- Be predictable. Ride so that drivers can see you and predict your movements
- Be alert. Ride defensively and expect the unexpected

First

All folding bicycles are intended for use on paved roads only. Folding bikes are not intended for use trails, and should not be used for jumps, stunts or other extreme sports. Make sure your bicycle is used for its intended purpose as the misuse may lead to the failure of some component or part.

Bike Fit

- Is the bike the right size? If your bicycle is too large or too small for you, it may cause you to lose control and fall. If your new bike is not the right size, ask your dealer to exchange it before you ride it.
- Is the saddle at the right height? If you adjust your saddle height follow the minimum insertion instructions on page 11
- Are the saddle and seatpost securely clamped? A correctly tightened saddle will allow no saddle movement in any direction.
- Are the stem and handlebars at the right height for you? If not see page 12. Can you comfortably operate the brakes? If not you may be able to adjust the angle and reach
- Do you fully understand how to operate your new bicycle? If not, before your first ride, have your dealer explain any functions or features that you do not understand

Safety First

- Always wear an approved helmet when riding your bike and follow the helmet manufacturer's instructions for fit, use and care
- Do you have all the other required and recommended safety equipment? It's your responsibility to familiarise yourself with the laws of the area where you ride and to comply with all applicable laws
- Riders weight and luggage should not exceed 105kg (230lbs)
- Are the wheel rims clean and undamaged? Make sure the rims are clean and undamaged along the braking surface and check for excess rim wear. Periodically inspect your rims for excessive wear and if you have any question on whether or not your rims are safe, have them inspected by a bicycle dealer
- Handlebar and saddle alignment. Make sure the saddle and handlebar stem are parallel to the bike's centreline and clamped tight enough so that you can't twist them out of alignment
- Handlebar ends. Make sure the handlebar grips are secure and in good condition. If not, have your dealer replace them. Make sure the handlebar ends are plugged. If not, have your dealer plug them before you ride.

This Manual

This manual is not intended as a comprehensive guide to bicycling and maintenance. It cannot teach you all the mechanical skills you need to repair a bicycle nor can it teach you all the skills you will need to ride a bicycle. This manual has a great number of tips and advice for the specific bikes it comes with. If you are ever unsure of how to maintain your bike, visit a dealer and ask for advice.

Safety

The Basics

Warning- It is your responsibility to familiarise yourself with the laws where you ride and to comply with all applicable laws, including properly equipping yourself and your bike as the law requires.

Observe all local bicycle laws and regulations. Observe regulations about bicycle lighting, licensing of bicycles, riding on pavement, laws regulating bike path and trail use, helmet laws, child carrier laws, and special bicycle traffic laws. It is your responsibility to know and obey your country's laws.

- Always check the safety of your bike before you ride it
- Be thoroughly familiar with the controls of your bicycle: brake (page 13), pedals (page 6 & 16), shifting (page 17)
- Be careful to keep body parts and other objects away from the sharp teeth of chain rings, the moving chain, the turning pedals and cranks, and the spinning wheels of your bicycle.

Riding Safety

- You are sharing the road or path with others – motorists, pedestrians and other cyclists. Respect their rights
- Ride defensively. Always assume that others cannot see you
- Look ahead and be ready to avoid
 - Vehicles slowing or turning, entering the road or your lane ahead of you, or coming up behind you
 - Parked car doors opening
 - Pedestrians stepping out
 - Children or pets playing near the road
 - Potholes, sewer gratings, railroad tracks, expansion joints, road or pavement construction, debris and other obstacles
- Ride in designated bike lanes, on designated bike paths or as close to the edge of the road as possible, in the direction of the traffic flow or as directed by local governing laws
- Stop at stop signs and traffic lights; slow down and look both ways at street junctions.
- Use approved hand signals for turning and stopping
- Never ride with headphones
- Never carry a passenger
- Never hitch a ride by holding on to another vehicle
- Don't weave through traffic or make unexpected moves
- Observe and yield the right of way
- Never ride your bicycle while under the influence of alcohol or drugs

Safety continued

- If possible, avoid riding in bad weather, when visibility is obscured, at dawn, dusk or in the dark, or when extremely tired. Each of these conditions increases the risk of accident

Wet Weather Riding

Warning- Wet weather impairs traction, braking and visibility, both for the bicyclist and for other vehicles sharing the road. The risk of an accident is dramatically increased in wet conditions.

Under wet conditions, the stopping power of your brakes (as well as the brakes of other vehicles sharing the road) is dramatically reduced and your tyres don't grip nearly as well. This makes it harder to control speed and easier to lose control. To make sure that you can slow down and stop safely in wet conditions, ride more slowly and apply your brakes earlier and more gradually than you would under normal dry conditions.

Fit

Saddle Position

Correct saddle adjustment is an important factor in getting the most performance and comfort from your bicycle. If the saddle position is not comfortable for you, see your dealer.

1. The saddle can be adjusted in three directions. 1) Up and down, 2) Front and back, 3) Saddle angle

Up and down adjustment

To check for the correct saddle height:

- Sit on the saddle
- Place one heel on a pedal
- Rotate the crank until the pedal with your heel on it is in the down position and the crank arm is parallel to the seat tube

If your leg is not completely straight, your saddle needs to be adjusted. If your hips must rock for the heel to reach the pedal, the saddle is too high. If your leg is bent at the knee with your heel on the pedal, the saddle is too low.

Once the saddle is at the correct height, make sure that the seat post does not project from the frame beyond its “Minimum Insertion” or “Maximum Extension” mark.

Warning- If the seat post projects from the frame beyond the “Minimum Insertion or “Maximum Extension” mark, the seat post may break, which could cause you to lose control and fall.

Front and back adjustment.

The saddle can be adjusted forward or backward to help you get the optimal position on the bike. Ask your dealer to set the saddle for your optimal riding.

Saddle angle adjustment.

Most people prefer a horizontal saddle; but some riders like the saddle nose angled up or down just a little. Your dealer can adjust the saddle angle.

Small changes in the saddle position can have a substantial effect on performance and comfort. To find your best saddle position, make only one adjustment at a time.

Warning- After any saddle adjustment, be sure that the saddle adjusting mechanism is properly tightened before riding. A loose saddle clamp or seat post binder can cause damage to the seat post, or can cause you to lose control and fall. A correctly tightened saddle adjusting mechanism will allow no saddle movement in any direction. Periodically check to make sure that the saddle adjusting mechanism is properly tightened.

Fit continued

Handlebar Height and Angle

Warning- The handlepost “Minimum Insertion” mark must not be visible above the top of the headset. If the handlepost is extended beyond the “Minimum Insertion” mark the stem may break or damage the steerer tube, which could cause you to lose control and fall.

Handlebar Position

The position of the handlebar should be set to allow comfortable and easy reach of both gear and brake levers. When riding, your weight should be so balanced that your hands rest lightly on the handlebars. This prevents strain on your wrists and forearms when pedalling. If you alter the riding position, remember to tighten all nuts and bolts securely.

Refer to the recommended torque values on page 24

Brakes

Riding with improperly adjusted brakes or worn brake pads is dangerous and can result in serious injury or death.

Applying brakes too hard or too suddenly can lock up a wheel, which could cause you to lose control and fall. Sudden or excessive application of the front brake may pitch the rider over the handlebars, which may result in injury or death.

Some bicycle brakes, such as linear-pull brakes (V-brakes) are extremely powerful. Exercise particular care when using them.

See the manufacturer's instructions for operation and care of your brakes. If you do not have manufacturer instructions, contact your dealer or brake manufacturer.

Brake controls and features

It's very important to learn and remember which brake lever controls what brake. Your bike will come already set and adjusted so that the left brake lever controls the rear brake. The right lever controls the front brake. Make sure your hands can reach and squeeze the brake levers.

How brakes work

The action of a rim-actuated brake on a bicycle is a function of the friction between the brake surfaces – usually the brake pads and wheel rim. To make sure that you have maximum friction available, keep your wheel rims and brake pads clean and free of dirt, lubricants, waxes or polishes.

Brakes are designed to control your speed, not just stop the bike. Maximum braking force for each wheel occurs at the point just before the wheel “locks up” (stops rotating) and starts to skid. Once the tyres skid, you actually lose most of your stopping force and completely lose directional control.

Note- Make sure that no oil or lubrication touches your brake pads or the bicycles rims braking surfaces. Please replace worn brake shoes only with factory authorized brake replacements.

Caution- Before riding test your brakes. Make sure that the quick release mechanism is returned to its normal correct position; otherwise your brakes will not operate effectively.

Brake block replacement- V-Brakes

All brake blocks are provided with grooves that indicate the wear on each block. When the grooves are worn down to a flat surface, replace the blocks (in pairs) immediately.

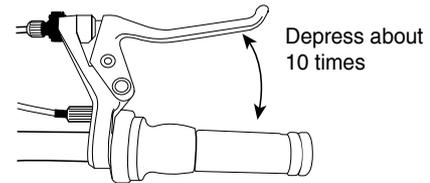
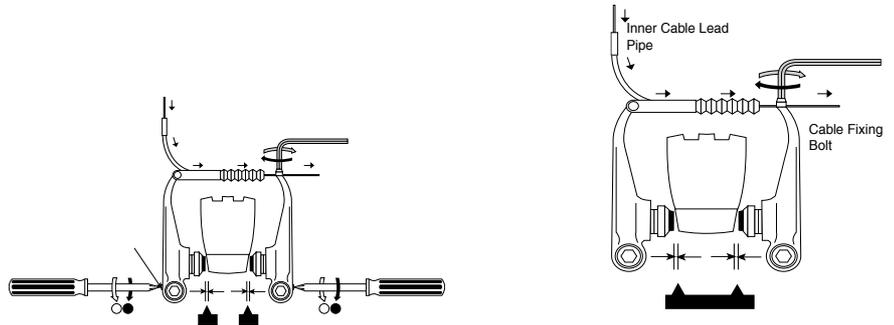
V-Brake System

Inner Cable Quick Release

To Release the brake inner cable from the V - brake, squeeze the two brake arms together until the brake blocks contact the rim and remove the inner cable pipe from the cable end bracket. To re-connect again squeeze the two brake arms together and relocate the inner cable pipe in the cable end bracket.

Inner Cable Adjustment

1. Pass the inner cable through the inner cable lead, and after setting so that the total of the clearances between the left and right shoes and the rim is 2mm, tighten the cable-fixing bolt.
2. Adjust the balance with the spring tension adjustment screws.
3. Depress the brake lever about 10 times as in normal brake operation and check that everything is operating correctly and the shoe clearance is correct before using the brakes. Reset rear brake quick release mechanism and check brake for proper operation



Rim Wear Line Limit Indicator

Visible safety line

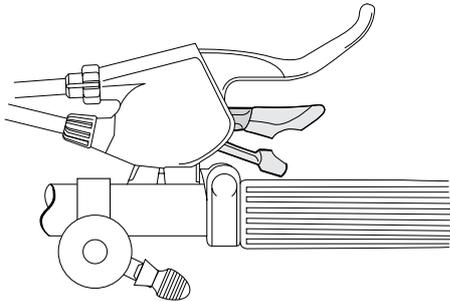
This type of safety line is already machined and is visible in the aluminium braking surface. When the rim has been subjected to extended braking and the rim surface is sufficiently worn to warrant replacement, the safety line will disappear and the rims braking surface will be one continuous smooth surface.

THE RIM MUST BE REPLACED BY A PROFESSIONAL CYCLE MECHANIC BEFORE THE BIKE IS RIDDEN.

 **Warning-** Do not attempt to ride the cycle until you are absolutely sure that all quick release levers are fully closed and securely tightened.

Fitment of Bell

- 1 Remove the screw from bell clamp
- 2 Position in a convenient spot near the left hand or right hand handlebar grip.
- 3 Replace screw & tighten
- 4 Rotate the “Ping Arm” to a comfortable position.



Position bell on left hand or right hand side of the handlebar as required.

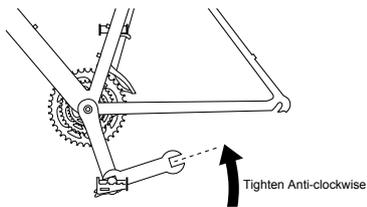
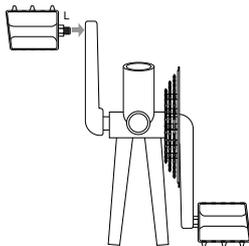
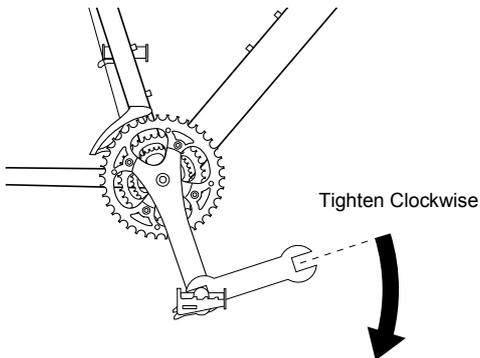
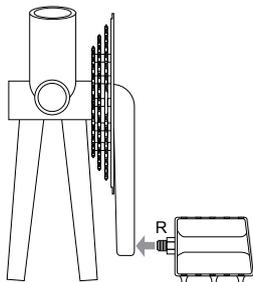
Pedal Fitment



WARNING



Check for the letters "L" or "R" on the ends of the pedals to show which side the pedal needs to be fitted to.



Folding your pedals

To fold the pedals on your bike, do the following:

1. Squeeze the internal section of the pedal. Shown in grey on Fig A
2. Whilst still squeezing the internal section push the pedal down. Shown in grey on Fig B

To unfold the pedal pull the pedal body up and the pedal will click back into place.

⚠ WARNING- The pedals contain a spring to assist the folding mechanism. Please keep a firm grip of the pedal when folding and unfolding.

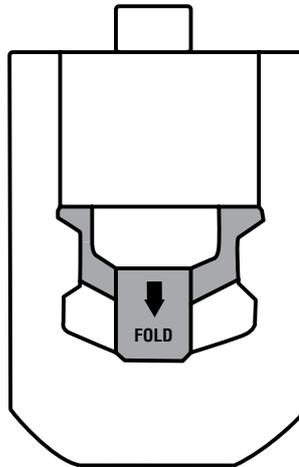


Fig A

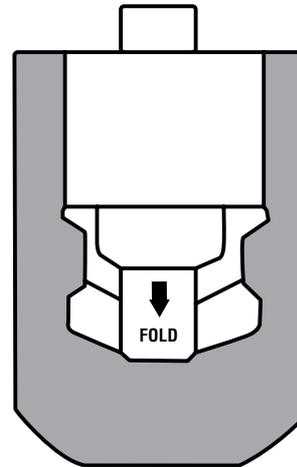


Fig B

Shifting Gears

Your multi-speed bicycle will have a derailleur drive train, an internal gear hub drive train or in some special cases a combination of the two.

How a Derailleur Drive Train Works

If your bicycle has a derailleur drive train, the gear changing mechanism will have:

- A rear cassette or freewheel sprocket cluster
- A rear derailleur
- Usually a front derailleur
- One of two shifters
- One, two or three front sprockets called chain rings
- A chain drive

Shifting Gears

There are several different types and styles of shifting controls, levers, twist grips, triggers, combination shift/brake controls and push buttons. Ask your dealer to explain the type of shifting controls that are on your bike, and to show you how they work.

A downshift is a shift to a “lower” or “slower” gear, one that is easier to pedal. An upshift is a shift to a “higher” or “faster” harder to pedal gear. To select a gear that will make pedalling easier on a hill, make a downshift in one or two ways; shift the chain down (the gear “steps” to a smaller gear at the front) or shift the chain up (the gear “steps” up to a larger gear at the rear). So at the rear gear cluster, what is called a downshift actually moves the chain up to a larger gear. The way to keep things straight is to remember that shifting the chain in towards the centre line of the bike is for accelerating and climbing and is called a downshift. Moving the chain out or away from the centre line of the bike is for speed and is called an upshift.

Whether upshifting or downshifting, the bicycle derailleur system design requires that the drive chain be moving forward and be under at least some tension. A derailleur will shift only if you are pedalling forward.

Shifting the Rear Derailleur

The right shifter controls the rear derailleur.

The function of the rear derailleur is to move the drive chain from one gear sprocket to another. The smaller sprockets on the rear wheel gear cluster produce higher gear ratios. Pedalling in the higher gears requires greater pedalling effort, but takes you a greater distance with each revolution of the pedal cranks. Using them requires less pedalling effort, but takes you a shorter distance with each pedal crank revolution. There are two screws or limit screws on the rear derailleur body that limit the travel of the rear derailleur. Tightening the rear derailleur high gear adjustment screw keeps the chain

from shifting off the small (high) gear that is on the rear axle. Tightening the rear derailleur low gear adjustment screw keeps the chain from shifting off the large (low) gear into the rear wheel. Moving the chain from a smaller sprocket of the gear cluster to a larger sprocket results in a downshift. Moving the chain from a smaller sprocket on the chain rings to a larger sprocket results in what is called an “upshift”. In order for the derailleur to move the chain from one sprocket to another, the rider must be pedalling forward.

Which Gear Should I Be In?

The combination of largest rear and smallest front gears is for the steepest hills. The smallest rear and largest front combination is for the greatest speed. It is not necessary to shift gears in sequence. Instead, find the “starting gear” which is right for your level of ability – a gear which is hard enough to let you start from a stop without wobbling – and experiment with upshifting and downshifting to get a feel for the different gear combinations. At first, practice shifting where there are no obstacles, hazards or other traffic, until you’ve built up your confidence. Learn how to anticipate the need to shift, and shift to a lower gear before the hill gets too steep. If you have difficulties with shifting, the problem could be mechanical adjustment. See your dealer for help.

How an Internal Gear Hub Drive Train Works

If your bicycle has an internal gear hub drive train, the gear changing mechanism will consist of

- A 3, 5, 7, 8 speed internal gear hub
- One or sometimes two shifters
- One or two central cables
- One front sprocket called a chain ring
- A drive train

Shifting Internal Gear Hub Gears

Shifting with an internal gear hub drive train is simply a matter of moving the shifter to the indicated position for the desired gear. After you have moved the shifter to the gear position of your choice, ease the pressure on the pedals for an instant to allow the hub to complete the shift.

Which Gear Should I Be In?

The numerically lowest gear (1) is for the steepest hills. The numerically largest gear (3, 5, 7 or 12 depending on the number of speeds of your hub) is for the greatest speed.

Chains

Single-speed and three-speed bicycles as well as many IGH (Internal Geared Hubs) equipped bicycles use a “1/2 x 1/8” chain that has a master link. To reinstall the “1/2 x 1/8” chain, turn the bicycle upside down and after reinstalling the chain, pull the rear wheel axle in a rearward direction. With rotation of the chain, any “tight spot” and a “loose spot” are due to inconsistent chain wheel roundness. Adjust the chain so there is no looseness when the chain is in one of its “tight spots.”

Derailleur equipped bicycles use a narrower “1/2 x 3/32” chain that has no master link. With a “1/2 x 3/32” chain, it is necessary most of the time to use a special tool to push a link pin out of the chain to separate and remove it. There are many methods of measuring the chain to determine if it is too worn. There are some excellent chain wear indicators for sale at bike shops. Since the chain rotates a lot more on the rear wheel than the front, please note that replacing the already badly worn chain may mean that you might also need to replace the rear wheel cassette or freewheel as well.

Transporting your Bike

Our suggestion for commuting and medium distance travel is that it is best to use a nylon carry bag.

Carrying

Carrying a 20-inch wheeled folding bicycle is quite easy for extra short to medium distance solutions. Simply grab the bicycle and carry by the saddles edge. When crossing a threshold, boarding a bus, train or airplane or stowing away the bike in an overhead compartment you will need to pick your bicycle up. When the occasion arises that you need to travel or commute and want your bicycle with you, feel confident knowing your bike is ready when you are. As 24” wheel folding bikes are larger than the 20” version they may have limited carrying and fit ability in public conveyance overhead compartments.

Service

Warning- Technological advances have made bicycles and bicycle components more complex, and the pace of innovation is increasing. It is impossible for this manual to provide all the information required to properly repair and/or maintain your bicycle. In order to help minimize the chances of an accident and possible injury, it is critical that you have any repair or maintenance that is not specifically described in this manual performed by your dealer. Equally important is that your individual maintenance requirements will be determined by everything from your riding style to geographical location. Consult your dealer for help in determining your maintenance requirements.

Warning- Many bicycle service and repair tasks require specialist knowledge and tools. Do not begin any adjustments or service on your bicycle until you have learned from your dealer how to properly complete them. Improper adjustment or service may result in damage to the bicycle or in an accident that can cause serious injury or death.

Service Intervals

Some service and maintenance can and should be performed by the owner, and requires no special tools or knowledge beyond what is presented in this manual.

The following are examples of the type of service you should perform yourself. All other service, maintenance and repair should be performed in a properly equipped facility by a qualified bicycle mechanic, using the correct tools and procedures specified by the manufacturer.

Break-in Period

Your bike will last longer and work better if you break it in before riding it hard. Control cables and wheel spokes may stretch or “seat” when a new bike is first used and may require readjustment by your dealer. Your Mechanical Safety Check will help you identify some things that need readjustment. But even if everything seems fine to you, it is best to take your bike back to the dealer for a check up. Dealers typically suggest you bring the bike in for a 30 day check up. Another way to judge when it is time for the first check up is to bring the bike in after about 10 to 15 hours of on-road use. But if you think something is wrong with the bike, take it to your dealer before riding it again.

After Every Long or Hard Ride

If the bike has been exposed to water or grit, or at least every 100 miles, clean it by wiping it clean and lightly oil the chain with dry Teflon lubrication or a synthetic based chain lube. Then, very importantly, wipe off excess oil. For general cycle lubrication, we suggest using lightweight mineral based oil that is commonly available in most bike shops or hardware stores. If you have any further questions please talk to your dealer as an incorrect lubricant can damage the painted surfaces.

After every long or hard ride or after every 10 to 20 hours of riding

Squeeze the front brake and rock the bike forward and back. If you feel a clunk with each forward and backward movement of the bike, you probably have a loose headset. Have your dealer check it.

Lift the front wheel off the ground and swing it from side to side. If you feel any binding or roughness in the steering you may have a tight headset, have your dealer check it.

Grab one pedal and rock it towards and away from the centre line of the bike; then do the same with the other pedal. Anything feel loose? If so have your dealer check it.

Take a look at the brake pads. Starting to look worn or not hitting the wheel rim squarely? Time to have the dealer adjust or replace them

Carefully check the control cables and cable housings, any rust? Kinks? Fraying? If so have your dealer replace them.

Squeeze each adjoining pair of spokes on either side of each wheel between your thumb and index finger. Do they feel about the same? If any feel loose, have your dealer check the wheel.

Check to make sure that all parts and accessories are still secure, and tighten any that are not. When replacement parts are necessary, be sure to use factory authorized replacement parts from your local authorized dealer.

Check the frame, particularly in the area around all tube joints; the handlebars; the stem and the seat post for any deep scratches, cracks or discolouration. These are signs of stress-caused fatigue and indicate that a part is at the end of its useful life and needs to be replaced.

 **Warning-** Like any mechanical device, a bicycle and its components are subject to wear and stress. Different materials and mechanisms wear or fatigue from stress at different rates and have different life cycles. If a component's life cycle is exceeded the component can suddenly and catastrophically fail, causing serious injury or death to the rider. Scratches, cracks, fraying and discolouration are signs of stress-caused fatigue and indicate that a part is at the end of its useful life and needs to be replaced. While the materials and workmanship of your bicycle or of individual components may be covered by a warranty for a specified period of time by the manufacturer, this is no guarantee that the product will last the term of the warranty. Product life is often related to the kind of riding you do and to the treatment to which you submit the bicycle. The bicycle's warranty is not meant to suggest that the bicycle cannot be broken or will last forever. It only means that the bicycle is covered subject to the terms of the warranty.

Tyre care and wheel adjustments

To obtain maximum life and full benefit from your tyres, it is essential to maintain the recommended pressure indicated on the tyre sidewall. Unnecessary hard braking and skidding greatly reduces tyre life. Make sure your tyres do not come into contact with oil, petrol, paraffin or other rubber solvents. Make sure that your wheels run true and are in the correct alignment to avoid chafing the tyre sidewall against the bicycle frame or fork tubes. Tyres should regularly be inspected for wear and cuts. Check that the tyre tread pattern is clearly showing all around the outside edge of the tyre. Check there are not any breaks, cuts or uneven wear in the tyre. Tyres should be replaced if damaged. Tyre punctures can be caused by careless riding over sharp stones, holes in the road, or by hitting curbstones. If you are storing your bicycle for a long period of time, it is advisable to store the machine with the tyres off the ground to prevent them from becoming distorted. To inflate tyres, a foot pump or normal bicycle inflator fitted with a suitable valve connector should be used along with an accurate tyre pressure gauge. Wheels should be checked regularly for spoke tension. Perform this check more frequently if the bicycle is used on rough roads.

Front wheels

Caution:

Your front wheel comes with a retention device to keep the wheel axle from disengaging from the fork-ends if the wheel nuts are incorrectly assembled. The devices are of two types.

1. Small protrusions machined or formed on the outer face of the fork ends.
2. Shaped washers that contain a small tap/prong that engages in a hole within the fork-end.

Front wheel removal and replacement.

Disengage the brake quick release lever if your bicycle is so equipped. Loosen both axle nuts by turning it in a counter clockwise direction. Remove axle nuts, washers and axle retention device if fitted. Remove the front wheel. The axle cone bearing adjustment should permit smooth rotation of the wheel with the cone locknut securely fastened against the axle cone to prevent loosening.

Replace the front wheel between the fork blades ensuring that the projecting prong/tab of the retention device are securely fitted into the slot in the fork ends or with standard washers securely in position butting against the protrusions on the fork end. Securely tighten all wheel nuts ensuring that the wheel is central with the forks. Refer to page 25 for recommended torque settings.

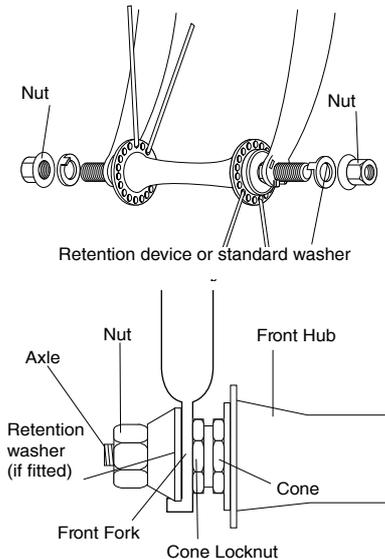
Note: Reset brake quick release mechanism and check brake for proper operation.

To Remove Rear Wheel

Move the chain onto the smallest rear sprocket. Loosen both axle nuts by turning in a counter clockwise direction. Pull the derailleur mechanism gear rearwards for additional clearance. Remove the rear wheel by sliding forward or down and out of the frame. To install the wheel, locate the top section of the chain on the small sprocket and replace the wheel into the frame by pushing back and centralising between the chainstays. While holding the wheel in this position tighten the axle nuts in a clockwise direction securely ensuring that the wheel is central with the chainstays. Refer to page 25 for recommended torque values.

The wheel should turn freely and have no side play.

Reset the brake quick release mechanism and check brake for proper operation.



Mechanical Checklist

Before each ride

- Check both wheel axles are secure in the frame & forks
- Check all quick release levers are fully closed and securely tightened
- Check tyres are within the recommended pressure limits as indicated on the side wall. It is good practice to carry tyre levers and a puncture repair kit at all times
- Check handlebar assembly is tight and rotates freely
- Check the function of the braking system while stationary
- Check the gear shifters operate correctly
- Rotate each wheel ensuring it rotates freely
- Check the saddle and seat post is secure and adjusted
- Check the pedals are secure and the chainwheel crank arms are free of lateral movement
- Check lights, reflectors and bell are all in good working order

Monthly and after long or hard rides, the following additional checks/maintenance should be completed

- Clean, degrease and lubricate your bike
- Inspect tyres for wear, damage and punctures
- Check no spokes are loose, broken or missing
- Hubs run smoothly with no sideways play

Annual service and inspection

If you have any doubts about completing and following service and inspection you must seek the services of the professional cycle technician at your local dealer. You can find your nearest dealer at www.dawescycles.com. It is good practice before commencing any service/inspection to thoroughly clean and degrease your bicycle.

Inspect

- Frame, forks and suspension parts for damage, cracks, corrosion and deformation
- Wheels for damage, balancing, spoke tension and rim wear
- Brake levers, brake blocks/pads, brake control cables and inner wire
- Chain for corrosion, stiff links and stretch. (Failure to maintain the chain will considerably reduce the performance and life span of the whole gear system).
- Chainwheel cranks are securely fastened to the axle at the correct torque
- Front and rear gears for damage, wear and alignment
- Disassemble headset, clean, re-grease and reassemble making sure to inspect bearings for wear
- Remove seat post from frame, clean and re-grease before refitting.

Torque Values

Description	Torque	
Stem expander bolt (where fitted)	20Nm	15lb-ft
Stem binder bolt (where fitted)	10Nm	8lb-ft
Stem assembly bolt	10Nm	8lb-ft
Brake fixing bolt	5Nm	4lb-ft
Front & rear axle nuts	30Nm	22lb-ft
Chain wheel securing bolt	38Nm	28lb-ft
Pedal	40Nm	30lb-f
Rear derailleur cable fixing bolt	4Nm	3lb-ft
Saddle clamp bolt (Hexagonal head)	20Nm	15lb-ft
Saddle clamp bolt (Allen head)	15Nm	11lb-ft
Handlepost allen head bolt	10Nm	8lb-ft
Front and rear reflector mounting nut	3Nm	2.5lb-ft



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