



Preparation/Maintenance Manual

It is essential that you read this manual in its entirety before riding your bike for the first time to ensure that your bike is properly assembled and safe to ride. It is also imperative that you maintain and use your bike in accordance with this guide. Failure to maintain your bike may void your warranty and also compromise your safety.

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Cycle Maintenance:

It is very important to keep your bike clean and properly lubricated. Your bike and its components will last longer and perform better if properly maintained. Dirt and grit if left unchecked will cause undue wear and tear to the mechanical parts of the bike. If you do not properly maintain your bike, this may affect your warranty.

Do NOT use a hose or pressure washer on your bike.

To properly maintain your bike, you will need bike degreaser, a stiff bristled brush, cycle lubricant, a rag and a bucket of water. These items should all be available at your local bike dealer.

1. Spray the chain, gears, derailleurs, brake callipers, cranks and wheel rims with degreaser and leave to soak for a few minutes. Be careful not to get degreaser on pads or braking surfaces as this will reduce their effectiveness. We recommend using a Shimano degreaser aerosol.
2. Scrub the above parts with the stiff bristled brush. Pedalling backwards while holding the brush against the chain is a good way to clean the chain. Alternatively you can purchase a chain cleaning tool from around £10.
3. Rinse these parts with water.
4. Wipe the rest of the bike down with mild soapy water and then rinse. Be careful not to get any water in or near the electrical components. Do NOT use a high pressure hose.
5. Allow approximately 30 minutes for the bike to dry and then lubricate the chain, gears, derailleurs and brake calliper pivots. Use only bicycle-specific lubricants for your bike. Do not use multi-purpose oils as these will attract dirt and cause premature wear to the bike components. A suitable lubricant is Shimano's WS-8121 Wet Lube.

If you ride in the rain, you should repeat steps 4 and 5 above when you complete your journey.

Maintenance before and after every ride:

Is the derailleur in the correct position i.e. vertical and not bent inwards or outwards? Is the saddle secure? Are the wheels true? Are the hubs and/or quick release clamps tight? Are the tyres inflated to the correct pressure (they should be around 45psi)? Are the pedals tight? Are the brakes working? **Are the crank bolts tight?** Are the handlebars tight? Are the bolts supporting the rear carrier tight? Any loose components or wear issues must be corrected before riding.

Maintenance after every 100 miles: Clean the bike as per the above, lightly lubricate the chain, freewheel cogs and rear derailleur pulley wheels. Wipe off any excess lubricant. Squeeze the spokes to check for any loose ones (especially important if your motor is a hub-motor).

Maintenance after every 6 months: You should check that all bearings are tight i.e. bottom bracket, pedals, wheels and headset, also check for wear, apply grease around the bottom bracket to prevent water ingress. Check for signs of rust and treat if necessary. Squeeze the spokes to check for any loose ones. If your bike needs any further work that you cannot carry out yourself or you need any replacement mechanical parts, take your bike to your local bike dealer.

Note: Any components that are replaced during the course of maintaining the bike must be replaced with the same specification as the original part.

Battery Care:

All Woosh bikes come with a modern light-weight lithium battery.

Some care is needed to ensure your battery performs at its best and lasts as long as possible. All batteries age over time, meaning that the range you get will gradually decrease as the battery gets older, so to ensure you get the most from your battery, follow the instructions below.

Charge the battery once or twice per week as needed, it is better to keep the battery topped up than to allow it to run completely flat as this will shorten its lifespan.

Do NOT charge the battery in extremely cold conditions. On most of our bikes, the battery can be removed from the bike and then charged indoors. Remember to allow the battery to warm up to room temperature before charging.

If the battery is not in regular use i.e. over the winter, you should charge the battery for around 15 minutes every few weeks. This will slow the aging process and will help the battery to last. When the bike is to be put back into service, fully charge the battery to prepare it for regular use.

General battery care:

Do not attempt to open the outer casing of the battery.

Do not attempt to repair the battery.

Do not immerse the battery in water.

Keep the battery away from children.

Do not drop, pierce or otherwise damage the battery.

Ensure the battery is not exposed to temperatures above 55 degrees Celsius or extreme humidity.

Do not use the bike in an environment where temperatures are less than minus 5 or greater than 55 degrees Celsius

Storage of Your Bike:

Your bike can be ridden in the rain but should be wiped down after, and should be stored in a dry place when not in use—ideally in a shed, garage or locker. If this is not possible, you should at the very least purchase a weatherproof cover for your bike to protect it from the elements when not in use.

If you leave the bike exposed to the elements, moisture/condensation can build up in areas such as the LCD and may eventually cause a failure. We regret that we are unable to honour our warranty on any bike stored outside without a cover. Replacement parts can still be provided but will be charged for and can be expensive — a replacement KingMeter LCD for example costs £4 plus postage.

Seat-Post/Saddle Adjustment:

It is important to ensure that your seat is correctly adjusted to ensure your comfort, safety and efficiency. Adjusting the saddle height is very simple to do, this single adjustment to your bike can provide the greatest benefit. Having your saddle too high is worse than setting it too low.

The first step to determining the correct height for your saddle is to measure your inseam leg measurement. You should do this with your feet shoulder-width apart and without footwear.

As a guide, the saddle height should be 109% of your inseam length (the Lemond method) as measured from the axle to the top of the seat. To get this measurement multiply your inseam by 1.09 i.e. for someone with an inseam measurement of 76cm, you would need to calculate 76×1.09 . This would give you a measurement of approximately 83cm. Apply this measurement as indicated in RED on the image below.



It may be necessary to fine-tune the height to get the absolute best position, if this is the case, you should make small incremental adjustments of a cm or two rather than larger adjustments.

The angle of the saddle itself should ideally be neutral i.e. parallel to the ground, but most cyclists ride with the nose of the saddle slightly raised or lowered to aid their comfort. If you experience discomfort, change the angle of the seat to the neutral position.

To adjust the angle of your saddle, you need to loosen the clamp on the underside of the saddle. This is done with a 6mm hex wrench. Be careful not to loosen it too much. Once you have adjusted the angle to suit, retighten the hex bolt to secure the saddle in position.

On Woosh bikes the seat-post is secured by way of an adjustable clamp. To ensure your seat-post is held firm, the clamp should be adjusted using the barrel adjuster so that it is difficult (but not impossible) to close the clamp.

The seat-post (generally towards the lower third) will have a marking on the post itself showing the minimum amount of the post that must remain inserted into the frame. You must not raise the post beyond this marker.

Brakes:

All Woosh bikes are configured so that the left lever activates the rear brake and the right lever activates the front brake. The most commonly used brake types are disc brakes and direct-pull cantilever rim brakes (aka V-brakes). Your bike will have either of these types or possibly both depending on the model of bike. You must ensure that your brakes are correctly adjusted and maintained.

Setting up/adjusting V-brakes:



There are two areas that may need to be adjusted when setting up your brakes. These are the cable tension and the spring balance. The cable tension determines how close the pads are to the wheel rim. To set the distance, loosen the brake cable anchor bolt (aka cable pinch bolt) and adjust the cable tension so that the pads are as close to the rim as possible without actually rubbing on the rim. To make further finer adjustments, use the barrel adjuster bolt (shown below). Clockwise = less tension, anti-clockwise = greater tension. If the wheel is rubbing but only in specific places, you will need to adjust the spokes a little to true your wheel.

The spring balance is adjusted using the spring tensioning screws on either side, you should use these screws to adjust the distance of the pads so that they are an equal distance from the rim i.e. if one of the pads is closer, turn the tension screw clockwise on this arm a quarter of a turn and then pull the lever a couple times and recheck, adjust as required.

The spring balance screws are also used to balance the arms, so that they are the same distance from the rim to ensure efficient braking performance. Properly adjusted arms will result in less wear to the rim. As well as having the arms properly adjusted, you must also ensure that the pads make full contact with the rim when engaged and do not touch the tyre.



Setting up/adjusting mechanical disc brakes:



Calliper Mount Bolt

Barrel Adjuster

Calliper Arm

Cable Pinch Bolt

Calliper Mount Bolt

Disc Brake Rotor

Brake Cable

First, loosen the cable pinch bolt so that the calliper arm is not under any tension. The next step is to adjust the position of the callipers so that the disc sits centrally between the callipers. To do this, loosen the two mounting bolts and then move the calliper body into the correct position ensuring that the disc sits centrally, and then tighten the calliper mount bolts. With the disc now sitting centrally, you should adjust the position of the pads so that they are as close as possible to the disc without actually rubbing it. Move the calliper arm towards the cable adjuster bolt until the pad is almost touching the disc, and then hold in position, and secure in place by tightening the pinch bolt to 6Nm. Spin the wheel and check that the pad is not rubbing on the disc. It is likely that you will need to make further finer adjustments using the barrel adjuster bolt. There is an additional barrel adjuster on the brake lever on the handlebars.

To adjust the other pad, use a 5mm Allen key to turn the fixed pad adjustment bolt on the back side of the callipers (see photo below). Turn this bolt clockwise until it almost touches the disc, spin the wheel to ensure it does not rub and adjust as necessary to ensure there is no rubbing.



Fixed pad adjustment bolt

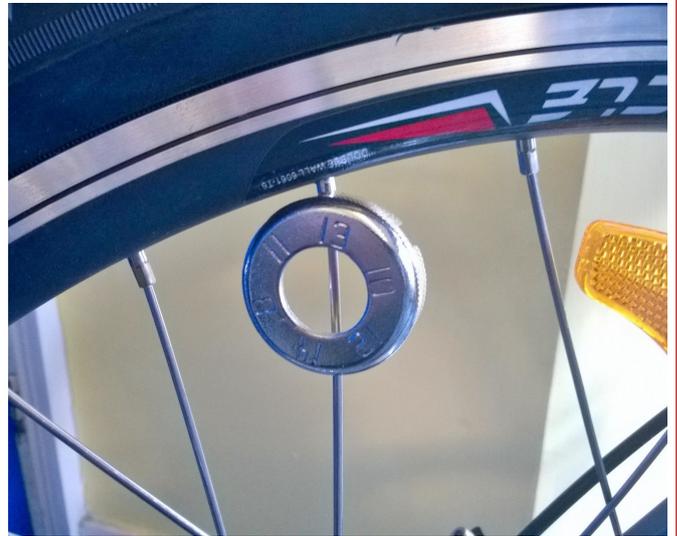
On some models, the fixed pad adjustment is by means of a disc (red in the example below). You can turn this with your fingers, you do not need any tools for this adjustment on these brake types.



Wheel Maintenance:

Rim wear:

If your bike has rim brakes, you should regularly check the “wear groove” on the wheel rim. On the rim is a small groove etched into the metal of the rim. When the rim is worn as deep as the groove, you will need to replace the rim/wheel. Do not ride your bike if the rim/wheel needs replacing.



Spoke Maintenance:

The tension of the spokes will change during normal use, but if the balance of the tension across the spokes changes significantly, the wheel may develop a wobble/buckle. You should check the tension of the spokes regularly using a tensiometer or by lightly pinging each spoke like you would a harp. Any spokes that are significantly more loose than the others should be tightened. There will be some variation in the tension of the spokes, this is normal. Do not over tighten the spokes as this will likely result in a wheel that is not true. You can check how true the wheel is by lifting the wheel off the ground and spinning it to see if there is a wobble. You should be able to correct minor buckles just by using the supplied spoke tool i.e. if your wheel wobbles towards the right, you would need to tighten the spoke nipples (approx. 1/4 clockwise turn each time) on the left side along the buckled section, and loosen the nipples on the right side by a similar amount. Spin the wheel to check your progress each time you make an adjustment, you will likely need to repeat the process several times until the buckle is corrected. The spoke tool shown above-right has several notches machined into it for various spoke nipple sizes, make sure you use the correct notch (usually 13 on Woosh models) or you may damage your nipples :) If you have uneven spokes and/or need further advice or assistance, you should contact your local bike dealer.

The tyres, tubes and rims used on your bike are standard sizes and so you should contact your local bike dealer when the time comes to replace them. If you have a hub motor and the rim is worn on the motor wheel and needs replacing, contact Woosh for assistance.

Derailleur

Important notes about the derailleur (for models that have them).

The derailleur is a relatively fragile part that features on many modern bikes, and if not properly looked after can easily get damaged and/or cause damage to other components at the rear of your bike. **You should inspect the condition and position of the derailleur each time you use your bike.** The derailleur should hang vertically beneath the cogs, in line with the selected gear and should not lean in towards the rear wheel/spokes, or lean outwards away from the wheel. You should perform these checks with the bike in 1st gear i.e. on the largest sprocket (when the derailleur is closest to the spokes of the rear wheel). If the derailleur is touching the spokes or is very close to touching them, you should not ride the bike until this issue is corrected. Woosh Bikes will not provide replacement parts under warranty or cover any associated costs as a result of the derailleur impacting on the spokes.

It is possible for debris such as twigs/sticks etc. to get caught up in the mechanism and cause damage, obviously this is beyond our control and would not be covered by your warranty.

The repair bill in the case where a derailleur has impacted the spokes can be significant. This exclusion is in line with other bike retailers, whether they be for regular or electric bikes.

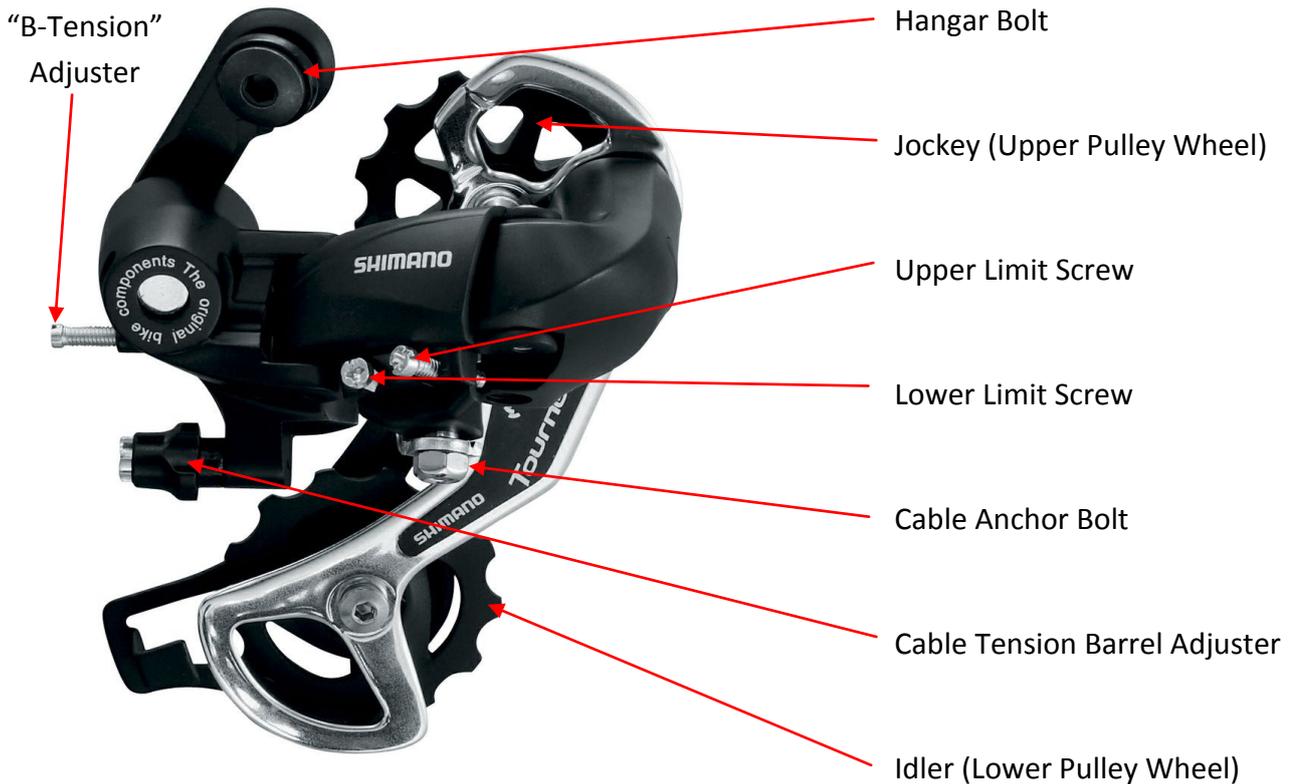
If you find yourself in the situation where the derailleur has impacted on the wheel/spokes, you should contact us initially and we should then be able to determine if your local bike shop will be able to repair the bike for you or whether it needs to come back to us (rare cases only).



Derailleur Adjustments:

The gears are made up of between 6 to 8 cogs of various sizes and a rear derailleur. The derailleur is operated by the gear shifter on the right side of the handlebars via a cable. When the shifter is operated, the derailleur moves the chain from one gear to the next.

It is necessary to adjust the derailleur from time to time to keep the gears operating at their best and changing smoothly. You will need to check the limit-screws and the cable tension. There are two limit-screws, one marked 'H' for high, and the other 'L' for low. These screws are used to correctly align the derailleur with the highest and lowest gears. Correctly adjusted limit-screws will also prevent the chain from going past the highest and lowest cogs and getting jammed.



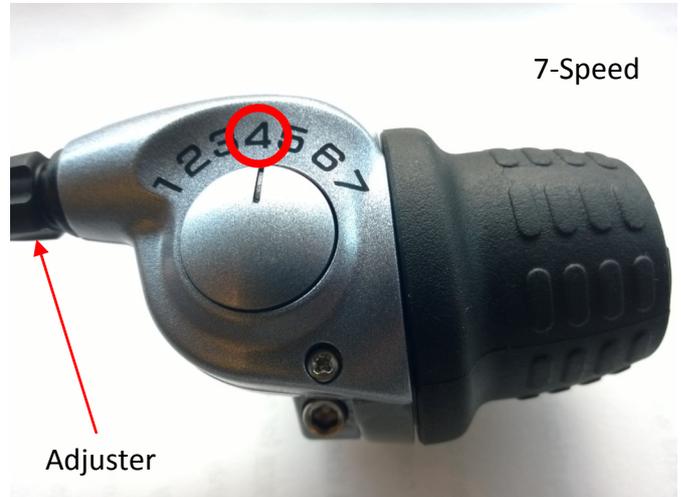
1. Try to move the chain to the lowest gear (largest cog) and then adjust the lower (L) limit screw until the small gear wheels line up vertically with the lowest gear.
2. Move the chain up to the highest gear (smallest cog) and adjust the upper (H) limit screw until the small gear wheels are vertically aligned with the highest gear.
3. Use the barrel adjust located at the rear of the derailleur to make fine adjustments. Sometimes all that is needed to prevent clicking gears is half a turn in one direction or the other. But in the situation where the gears change smoothly from high to low but not from low to high, the cable tension is too high. Release the tension on the cable slightly by rotating the barrel adjuster slightly clockwise, and then recheck the operation of the gears. It may be necessary to make further small adjustments with the barrel adjuster until it is 100%.

If there is slackness in the chain, it may be necessary to adjust the "B-Tension" adjuster screw to take up the slack. If the screw is too loose, the jockey will bump on the largest sprocket when the bicycle is in the lowest gear.

Nexus Hub Gear Adjustments:

The Shimano 3-speed hub uses a bell crank and pushrod for shifting as opposed to a concentric pulley on the 7-speed hub.

The Nexus hub gears can be easily adjusted, but you first have to ensure that you are in the correct gear before making any adjustments. For the 3-speed hub, you need to select the 2nd gear on the shifter, and for the 7-speed hub, you need to select the 4th gear.



3-Speed Hub: The yellow indicator on the paddle should be between the two lines (see below left) .

7-Speed Hub: The two red (sometimes yellow) lines should be aligned (see below right).



3-Speed Hub: To adjust the position of the yellow indicator on the paddle, using a 10mm spanner, loosen the lock nut to free the adjustment knob, and then turn the knob to align the indicator, you may need to use the spanner to adjust the knob if it's tight. Tighten the lock nut when you're done.

7-Speed Hub: Use the adjuster indicated above on the 7-speed shifter to align the markings. Turn one way, and if the markings move further apart, simply turn it the other, adjust as necessary until the markings are aligned.

If your Nexus hub requires more significant adjustment, you should have your nearest bike dealer perform this maintenance.

Nexus Hub Brake Adjustments:

3-Speed Nexus Hub—There are two positions where you can make quick and easy adjustments to your brakes. The first is the adjuster on the brake lever, and the second place where an adjustment can be made is just forward of the rear axle on the underside of the chain-stay on the left side of the bike.



Loosen the lock nut, then adjust as necessary, anti-clockwise to increase the tension. Once any adjustments have been completed, tighten the lock nut. These instructions apply to both the lever adjustment and also the adjustment at the rear.

7-Speed Nexus Hub—As with the 3-speed hub, you can adjust the brakes in two places, on the brake lever, and also at the rear of the bike just forward of the rear axle on the underside of the chain-stay on the



Loosen the lock nut, then adjust as necessary, anti-clockwise to increase the tension. Once any adjustments have been completed, tighten the lock nut. These instructions apply to both the lever adjustment and also the adjustment at the rear.

If your Nexus hub brakes requires more significant adjustment, you should have your nearest bike dealer perform this maintenance.

Torque/Tightness Guide for Fixings:

Not everyone has a torque wrench, so use the table below as a guide to how tight the various fixings on your bike should be.

If you have any bolts that consistently work loose, then using a thread-lock fluid on the threads such as LOCTITE Threadlocker Blue 242 should help.

Part	Torque (Nm)	Tightness Guide
Pedals	40	Very tight (9 out of 10)
Crank Bolts	45	Very tight (9 out of 10)
Seat Clamp Bolt	16-18	Very firm (5 out of 10)
Brake Cable Pinch Bolt	6-8	Firm (4 out of 10)
Carrier Bolts	16-18	Quite firm (5 out of 10)
Front Wheel Nuts	22-25	Tight (7 out of 10)
Rear Wheel Nuts	25-29	Very tight (8 out of 10)
Quick Release Wheel		Tight enough to secure the wheel
Seat Post Clamp		Tight enough to secure the post
V-brake Brake Blocks	8-10	Firm (4 out of 10)
Handlebar Expander Bolt	17-19	Very firm (6 out of 10)

Handle Bars:

Attaching a quill stem. Quill stems are secured in place using an “expander bolt” and “wedge nut”. To fit the handle bars, ensure that the wedge nut is aligned with the stem and slide the stem into the head tube. Ensure that the stem is inserted at least as far as the minimum insertion indicator on the stem. If your handle bar is already clamped to the stem, ensure that the cables are not tangled or twisted. Align the bars with the front wheel and then tighten the expander bolt to around 15-18Nm.



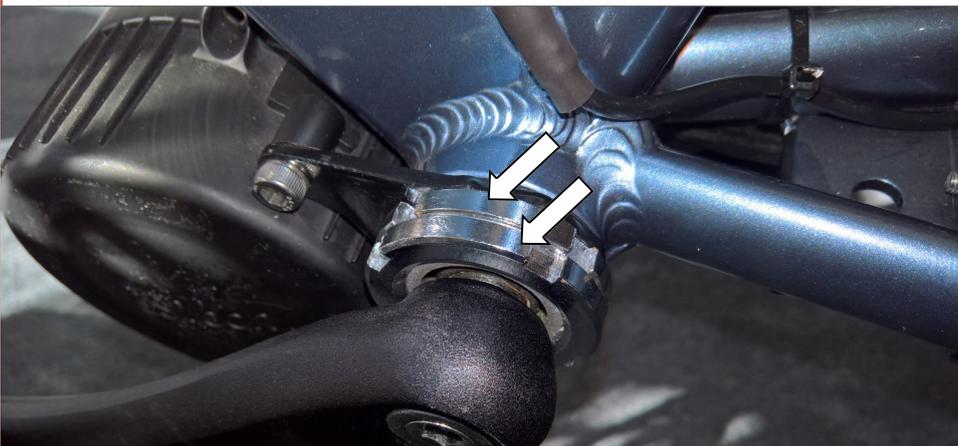
Expander Bolt

Minimum Insertion Mark

Stem Wedge\Wedge Nut

GSM Crank/Mid Drive Motors—(Woosh Bali)

You must regularly check the two lock nuts shown below and tighten them if necessary, a tool is normally offered at time of purchase for £5. This tool can also be provided post sale for the same cost, just give us a call if you need one, alternatively you can pick one up from your local bike shop. You need to tighten the inner nut first, and then the outer nut to lock it in place.



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Woosh Support:

Be sure to check the FAQ section on our website before calling as the answers to the most common queries are there and you may find that the solution to your problem is already online. If you *do* need to get in touch, our contact details are below.

It can sometimes be useful to *see* the issue you have, so if possible, email a couple of photos illustrating the problem and we'll normally get back to you within a an hour or two (on weekdays).

Support staff are not available at the weekends, though if you send an email or leave a phone message, it will normally be read and responded to on the following Monday morning.

Support articles and FAQ's: www.wooshbikes.co.uk/?support

Email: support@wooshbikes.co.uk

Telephone: [01702 684444](tel:01702684444) (If no-one is available to take your call, leave a brief message and contact no. and we will call you back as soon as we are able).