



Whitelee Ranger Service: Bicycle Safety Check

Before bringing your bike along on an activity or cycle ride at Whitelee Windfarm it's worth spending time making sure your bike is safe and up to the task because the tracks at the windfarm are hard on bikes! Regular maintenance will make sure you (hopefully) don't have any breakdowns – barring the odd puncture!

Tools needed:

- Bike allen/Hex-key set
- Spanners/Shifting spanner

Most if not all the bolts on your bike should have allen or hex head bolts that will need a bicycle allen key set for working on.

Safety Check:

1. Chain:

Make sure your chain is in good condition with no rust or sticking links and that its well oiled. If not, clean it with soapy water and a rag or brush or WD40 light oil, wipe clean with a rag and oil. To lubricate your chain after cleaning, use suitable bike chain oil – not WD40 or used engine oil etc!

2. Handlebar bolts:

Should be tight and not loose or finger tight. While working here, make sure the handlebar height is set correctly for you – you should not have to over-extend yourself to reach them nor should they be too high causing you to sit too upright on your bike.

3. Stem bolt:

Should be finger tight – do not over-tighten (as this will damage the bearings inside)!

4. Headset:

There should be no play in this when rocked. Any play found indicates a worn bearing and the bike should be taken to a bike shop. To check for play, apply the front break, put your hand at the point where the front forks go into the bike frame and try rocking the bike backwards and forwards. If you notice any movement here then a bearing may be loose. Try tightening the headset but if this dose not cure it, take your bike to a shop to be checked.

5. Quick release wheels (skewers) / wheel nuts:

If using quick release skewers, these should be securely in place. When locking these look for good pressure as soon as you start to clamp the skewer. A lack of resistance when locking the skewer may indicate the quick release is loose. Tighten at the nut opposite the quick release lever until the lever has more resistance – then lock the wheel securely in place.

If your bike has wheel nuts – ensure these are on tightly.

Also check for worn wheel bearings by holding the top and bottom of your wheel (when its on the bike as normal) and rocking it from side to side. If you can feel the wheel moving from side to side, a wheel bearing may be worn and you should take your bike to a shop to be checked thoroughly.



6. Tyres correctly inflated:

Make sure your tyres are in good condition with no bulges or cuts and with good tread left on them.

Mountain bike tyres should be inflated to around 40PSI. (The front tyre can be slightly less [35PSI] to provide better grip and steering.) If you do not have a pressure gauge – an adult pressing as hard as they can onto the tyre should be able to press their thumb/finger in only slightly.

7. Front & Back Brakes:

Depending on the style of brakes your bike has (discs or rubber wheel rim blocks), make sure they have enough braking material left and are in good condition.

Disc Brakes - For disc brakes, make sure the brake pads are in good condition with enough brake pad material left on them. Check that the brake disc is straight and not warped by spinning the wheel and checking visually with your eye.

Wheel rim blocks - make sure the rubber blocks aren't worn out unevenly or coming away from the metal housing that holds them in place. Make sure the brakes move evenly on both sides and aren't sticking. Check the rim of the wheel where the rubber blocks make contact – ensure the rubber blocks make good contact and look for any wear on the wheel rim. If the wheel rim is showing wear (grooved or with a bowl effect), you may need a new wheel.

8. Brake Cable Check:

Check and make sure any brake cables are working smoothly and as expected. If not, clean and lubricate them with the same oil as used on the chain. Any cables showing rust should be thoroughly checked and cleaned as rusty brake cables can easily snap (which isn't good!).

Hydraulic brakes – make sure there are no leaks

9. Pedals:

Check to make sure the pedals are on tightly. You will need a correctly sized spanner and allen-key set for this. Make sure the bolts holding the pedals on have no loose play in them. Caution – please note that the thread on the left pedal works in the opposite direction than the right pedal (e.g. opposite thread) so turning clockwise on the left pedal will loosen the pedal but on the right pedal going in a clockwise direction will tighten it!

10. Crank Bolts:

Check to make sure these are tight and that there is no play in the bearings here.

11. Seatpost:

Check that this is secure – you shouldn't be able to spin it or move it up or down. If it does move, tighten the bolt or quick release clamp. Also make sure that the seatpost and therefore the seat height is set correctly. As a rule of thumb, when in the seat and with one of the pedals fully down to the lowest point, your leg should be almost fully extended or straight – if not your seat is too high or low and will cause you problems! E.g. sore legs from working too hard or a sore back from having to bend over.

12. Saddle:

Ensure this is at the correct height as described before but also that it doesn't need adjusted forward or back on the rails to make the seating position more comfortable. Also check its not at an uncomfortable angle. Moving the seat back can help if your bike is now too small and there is no height adjustment left on the seat post for example.





13. Derailleurs:

Make sure the derailleurs are clean and working smoothly both at the rear sprocket and the front sprocket. Poorly operating derailleurs can cause the gears to jump. As a rule of thumb the rear derailleur should be in line with the cog the chain is on. If its not perfectly in line with this check the attachment point of the rear derailleur on the bike. The rear derailleur is attached by a small piece of metal that can bend if bashed. While working on the rear derailleur, oil the cable that operates this first making sure the chain is on the smallest cogs then removing the cable by popping it out of its retaining point on the bike frame (this will loosen the cable) allowing you to then clean and oil the cable before putting it back into place. If the cable is loose, tighten it so that it operates smoothly – but do not overtighten as this will cause gear jumping! On the front derailleur, the outside plate of the derailleur should be flush or in-line with the large cog. If its not, it may need adjusted.

