wattbike

ASSEMBLY & SERVICE MANUAL

1. Important Safety Instructions

The Wattbike has been designed in accordance with current safety standards and any features which may cause injury have been avoided or made as safe as possible. Incorrect repairs and any structural modifications may endanger the safety of the user. Please read and adhere to the following safety instructions:

Assembly

- Keep children and bystanders away from the Wattbike during assembly
- Do not assemble the Wattbike outside in wet or damp weather or in a damp environment as this may cause damage to the performance computer and measurement system
- Make sure that assembly is done in an appropriate workspace
- Some aspects of assembly will require two people, these will be identified with this symbol 
- Some aspects of assembly will require tools, 6mm Hex Allen Key and Multi Spanner, these will be identified with this symbol 
- Do not try and change the design or functionality of the Wattbike. This could compromise safety and void the warranty
- Do not use the Wattbike until it has been fully assembled
- Do all assembly steps in the sequence given in this manual
- Replacing any components (except the saddle and pedals) with non Wattbike components may compromise safety and may void the warranty.

General

- The Wattbike should be regularly examined for any damage or wear and regular maintenance should be performed as outlined in this manual
- Do not insert any object, hands or feet into any opening on or underneath the Wattbike
- Do not attempt to remove any covers or modify your Wattbike unless it is part of a recognized maintenance programme as outlined in this manual
- Do not use a USB cable longer than 3 metres
- Do not charge the battery unless the Wattbike Performance Computer is **OFF**
- Do not stand on or kick any part of the Wattbike
- Do not extend the saddle or handlebar height above the minimum marking. The saddle height range is 59 cm to 84 cm. The handlebar height range is 55 cm to 74 cm
- Broken, damaged or worn components may endanger safety or reduce the lifetime of the Wattbike and should be replaced immediately
- Multiple Wattbikes should not be stacked together. A reasonable distance should be maintained between each Wattbike. During use the recommended minimum distance between Wattbikes is 1 metre.

Using the Wattbike

- Discuss your health programme and fitness regimen with your doctor or a suitably qualified healthcare professional before embarking on an exercise programme. Base your programme of exercise on the advice given by your doctor. Incorrect or excessive exercise may damage your health
- Stop exercising on the Wattbike if you feel dizzy or faint
- Exercise slowly until you reach a level of comfort
- Only use the Wattbike for its intended purpose, as described in this manual, improper use may result in injury
- Do not let unsupervised children operate the Wattbike
- Do not use without appropriate footwear (cycling or training shoes)
- Do not use outside in wet or damp weather or in a damp environment as this may cause damage to the performance computer and measurement system
- Ensure the Wattbike is positioned on a stable base and is properly levelled.

Warning

Your Wattbike is designed for exercise and training in a commercial and consumer environment by adults and children. For your safety the Wattbike should only be used for it's intended purpose. Any other use of the Wattbike is prohibited and may be dangerous. The manufacturers cannot be held liable for damage or injury caused by improper use of the Wattbike.

- The Wattbike is heavy (55kg). Make sure you hold it securely whilst fitting the rear and front foot, when lowering it to the ground and when moving it around. It is recommended that two adults are used to assemble and move the Wattbike.
- The Wattbike is designed for a maximum user weight of 330lb (23.6st) /150kg. DO NOT exceed the maximum user weight.
- The Wattbike should not be used by adults/children under 150 cms tall or with an inside leg measurement of less than 60 cms.
- Heart rate monitoring systems may be inaccurate. Over exercise may result in serious injury or death. If you feel faint stop exercising immeadiately.
- Do not push yourself to excess. Use common sense when cycling.

2. Assembly and Set Up

Instructions for Assembly

Tools required: 6mm Hex Allen Key and Multi Spanner (17mm, 15mm & 14mm).

The Wattbike must be assembled with due care by at least two adults. If in doubt call upon the help of a technically qualified person.

The Wattbike is 654mm wide, 1230mm long and has a maximum height of 1300mm.

When taking the Wattbike out of the packing box do not lift or carry the Wattbike bike using the plastic covers – take a firm hold of the frame and steel handlebar and saddle stems - two adults are needed to lift the Wattbike.

The Wattbike is heavy – 55kg. Make sure you hold it securely whilst fitting the rear and front feet, when lowering it to the ground and when moving it around.

2.1 Unpacking Small Parts

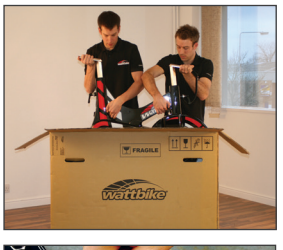
Leaving the main body of the Wattbike in the box, unpack and lay out all the items from the packaging and ensure that you have all the items below:

Manuals and software for the Wattbike can be downloaded at **wattbike.com/software**

1. Rear foot (no wheels attached)
2. Front foot (wheels attached)
3. Right & Left pedals - These are a combination pedal SPD and toe clip options.
4. Recreational Wattbike saddle (Race saddles are available as optional extra)
5. Handlebars with Wattbike Performance Computer bracket attached
6. Wattbike Performance Computer
7. 4 x 6cm bolts, washers and nuts for the rear and front leg
8. Saddle bottom plate (smaller plate), adjustment lever and washer
9. Saddle slider
10. Handlebar bottom plate (larger plate), adjustment lever and washer
11. 2 x 25 mm thumb screws for fixing the Wattbike Performance Computer to the handlebar bracket
12. Plug-in battery charger
13. 3m USB cable

2.2 Unpacking Main Body of the Wattbike

With a suitable assistant, lift the Wattbike out of the box holding the Wattbike as shown in the image, and lower gently onto the ground. Do not let go of the Wattbike as without the front and back foot the Wattbike is not yet fully stable.

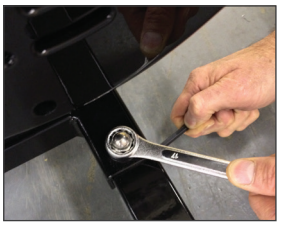


2.3 Attach the Rear Foot

Ask your assistant to lift the rear of the Wattbike up and align the 2 holes in the rear foot with the 2 holes in the frame of the bike. Please do support the weight of the Wattbike on the fan cage at the front of the bike. Push the bolt up through the hole in the foot and frame place the washer over the thread of the bolt and then thread the nut onto the bolt and tighten using the 6mm Hex Allen Key for the bolt and 17mm spanner for the nut.

Gently lower the Wattbike to the floor.

2.4 Attach the Front Foot



Ask your assistant to lift the front of the Wattbike so the weight is supported by the rear foot. Align the 2 holes in the front foot with the 2 holes in the frame of the Wattbike. Push the bolt up through the hole in the foot and frame place the washer over the thread of the bolt and then thread the nut onto the bolt and tighten using the 6mm Hex Allen Key for the bolt and 17mm spanner for the nut.

Gently lower the Wattbike to the floor.

2.5 Attach Pedals

Screw the right pedal onto the right crank. Tighten securely using a 6mm Hex Allen Key or a spanner. Repeat for left hand pedal, take care as this is a left hand thread. **Take care not to cross the thread.**

2.6 Attach Saddle

Raise the saddle stem post to mark 12 to give sufficient height to work.

Thread the spring washer and saddle bottom plate onto the adjustment lever. Place the saddle slider on top of the stem to the furthest backward adjustment point, and screw the saddle bottom plate and adjustment lever and large spring washer up into the saddle slider. Tighten securely but **do not over tighten.**

Attach the saddle to the saddle slider, make sure it is straight and level, then tighten securely but **do not over tighten.**

2.7 Attach Handlebars

Raise the handlebar stem post to mark 13 to give sufficient height to work.

NOTE - Be careful when adjusting the stem height not to disturb the Wattbike cable.

It is easier with an assistant. Ask your assistant to hold the handlebars in place on top of, and towards the furthest forward adjustment point of the handlebar stem.

Thread the adjustment lever and large spring washer up through the hole of the handlebar bottom plate up into the handlebars. Tighten securely **but not too tightly**.

2.8 Attach Wattbike Performance Computer

Secure the Wattbike Performance Computer (WPC) to the bracket using the 2 x 25mm thumb screws. Tighten securely (but not too tightly).

Plug the sensor cable into the back of the Wattbike Performance Computer making sure the pins and guide ridge line up. When securing the cable **DO NOT** turn the whole cable assembly, **ONLY** turn the knurled section highlighted in the photo, right.

NOTE - The Wattbike Performance Computer should always be switched off when attaching the cable.

Sockets

There are four sockets on the back of the Wattbike Performance Computer

- **SENSOR** – to connect the WPC to the Wattbike
- **CHARGE** – to connect the 12V battery charge adapter
- **USB (B)** – to connect the Wattbike to a PC (do not use a USB cable of more than 3m in length)
- **USB (A)** – Memory stick
- **RJ45** – to connect another Wattbike monitor for local racing

2.9 Saddle and Handlebar Horizontal and Vertical Set Up

The saddle and handlebars can be moved horizontally and vertically using the adjustment levers.

NOTE – The adjustment levers on the Wattbike are of a ratchet type, to move the lever, without turning the thread, pull the lever outwards.

There are two adjustment levers on the frame of the Wattbike to set the height of the saddle and handlebar stems, and two adjustment levers to set the horizontal position of the saddle and handlebars.

The saddle height range is 59 cm to 84 cm. The handlebar height range is 55 cm to 74 cm.

NOTE – Do not extend the saddle or handlebar height above the minimum marking.

The horizontal saddle and handlebar adjustment has a range of 6cm for both. Measure from the back of the saddle block for saddle adjustment, and the front of the handlebar block for handlebar adjustment.

We reserve the right to carry out preliminary assembly work at the Wattbike factory. The Wattbike and all its components are subject to constant, innovative quality assurance. We reserve the right to perform technical modifications.

Please keep the Wattbike original packaging so that it can be used, if necessary to transport the Wattbike at a later date. Always store packing material in a way that will not cause any danger. Keep plastic bags away from children.

3. Wattbike Set Up

The correct set up is crucial to maximise performance, prevent injury and ensure the most comfortable riding on your Wattbike. The correct sequence for set up is, saddle height, horizontal saddle position, handlebar height and horizontal handlebar position. Before starting, ensure that your saddle is horizontal, use a spirit level if necessary.

3.1 Saddle Height

The easiest way to get a rough height for the saddle height is to stand the rider next to the bike with the heel pushed into the back stabiliser, and then lift the saddle up so that the top of the saddle is level with the boney protrusion of the hip.

Sit the rider on the Wattbike and align the crank arms with the seat post, place the heel of the foot on the crank arm nearest the floor – the leg should be straight (but not locked out).

When clipped in (or with feet in the toe clips) and with the pedal at its longest stroke (inline with the seat post) there should approximately 150 - 155 degrees bend on the knee. The rider should be able to 'drop the ankle'.

Raise/lower the saddle height to get the correct leg position. **ALWAYS DISMOUNT THE WATTBIKE BEFORE MAKING ADJUSTMENTS TO THE SADDLE.**

Now get the rider to pedal backwards, they should be able to complete rotations with only a slight rocking of hips and without the legs locking out.

3.2 Saddle Horizontal Position

With the feet clipped in (or in the toe clips) bring the crank arms parallel to the floor, drop a plumb line from the inside of the knee, in the indentation next to the patella - it should bisect the pedal spindle. Adjust the saddle fore/aft to ensure that the knee is over the pedal spindle.

NOTE – if you need to move the saddle fore/aft severely, you may need to raise/lower the saddle to compensate

The difference between the forward and back positions of the saddle fore/aft adjustment is 6 cm

3.3 Handlebar Height (saddle to handlebar difference)

Adjust the handlebar height so that it is no more than 4 to 10 cm lower than the saddle height (depending on fitness and flexibility, a higher handlebar height may be more comfortable) – for general exercise classes the saddle and handlebars should be at the same height - Use a long spirit level from the saddle across to the handlebar to set this height.

Once the handlebar height has been set, check it by asking the rider to lift their hands off the handlebars – they should be able to hold position.

NOTE – with the saddle and handlebar both set at maximum height there is a saddle to handlebar difference of 7 cm – for safety reasons do not go above minimum markings – extra long stems are available which increase the settings by 10 cm.

3.4 Handlebar Horizontal Position

Ask your participant to place their hands on top of the handlebars and bring the crank arms parallel to the floor – drop a plumb line from the elbow, it should fall through the inside of the knee, in the indentation next to the patella and should bisect the pedal spindle – adjust handlebars fore/aft to get the correct position. **ALWAYS DISMOUNT THE WATTBIKE BEFORE MAKING ADJUSTMENTS TO THE SADDLE OR HANDLEBARS.**

An alternative method is to look at the angle of the back which should be at 45° parallel to the floor with an upper arm to torso angle of 90°.

The difference between the forward and back positions of the handlebar fore/aft adjustment is 6 cm.

By following these simple steps the rider will be placed in the optimum position for both comfort and effective cycling technique. Any slight variation in correct set up will alter the alignment of the joints, muscles and subsequently technique. Ensure that you follow these simple steps with every new rider and recap where required with your existing, regular riders.

3.5 Correct Positions

Overall riding position

Tri-bar

Drops

4. Wattbike Performance Computer

Operating the Wattbike is very easy. Simply sit on the Wattbike, turn on the Wattbike Performance Computer (WPC), select 'Just Ride', press **ENTER** and start pedaling. The Wattbike Performance Computer will start immediately and show the 'Main menu'. Learning how to adjust the resistance levels and familiarizing yourself with the WPC is just as easy.

The Wattbike Performance Computer is fitted with a rechargeable battery and does not require an external power supply. When cycling at a cadence of 50 r/m and above the battery is recharged with the help of an integrated generator. It can also be recharged using an external plug-in battery charger although the need for external recharging is almost eliminated by the addition of the generator. You should recharge your Wattbike Performance Computer using the external plug-in battery charger once per month. ALWAYS charge the battery with the Wattbike Performance Computer switched off and only use the battery charger supplied with your Wattbike, failure to do so may damage the rechargeable batteries. The WPC can only operate with the original factory supplied accu-batteries. Please contact your Wattbike distributor if you experience any battery problems.

The WPC links with a Garmin or Suunto ANT Sport heart rate chest belt for heart rate display, or uncoded polar belts.

ANT+

This product is ANT+™ certified and recieves data from ANT+ compatible heart rate sensors, and transmits bike data to other ANT+ display devices or apps that recieve bike power or combined speed & cadence data.

HR PWR S&C

Visit **www.thisiant.com/directory/**

Warning

- Heart rate monitoring systems may be inaccurate. Over exercise may result in serious injury or death. If you feel faint stop exercising immeadiately.

There is a **RESET** button on the back of the Wattbike Performance Computer – this should only be used if the Wattbike Performance Computer display stops working or shows inconsistent data.

NOTE – You will not lose any data saved in the Memory if you activate the RESET button. If in doubt contact your local Wattbike distributor.

5. The Wattbike Unique Dual Braking System

The braking system is classified as 'unadjustable', although both the air brake and magnetic brake are adjustable manually.

Air Brake Damper Lever

The Wattbike features a unique patent protected dual braking system to recreate the feel of cycling on the flat and whilst climbing.

The air brake damper lever recreates the feel of cycling on the flat using different resistances. The 'gear lever' can be moved from '1 through to 10' where '1' represents the lightest gearing and '10' the heaviest. The damper lever regulates the flow of air entering the flywheel. By increasing the aperture the flow of air and the resistance is increased.

For most workout situations the rider will only need to apply the air brake damper lever. The resistance can be adjusted during a workout, just as on a road cycle without compromising the validity of the data.

Magnetic Brake Lever

The magnetic resistance lever rotates clockwise through one complete turn and is marked '1' through '7' where '1' represents no magnetic resistance and '7' maximum magnetic resistance.

The combination of both air and magnetic resistance means that the wattbike can be used for high cadence low wattage at one extreme and low cadence high wattage at the other.

6. Preventative Maintenance and Troubleshooting

The Wattbike is constructed from high performance components and is designed to be almost maintenance free and should withstand heavy usage. If you notice any unusual symptoms, such as loud noises or grinding during operation, stop using your Wattbike and contact your local Wattbike distributor.

Do not use corrosive or abrasive materials to clean the equipment. Ensure that such materials are not allowed to pollute the environment.

Daily Maintenance

To ensure your Wattbike stays in first class condition remove all sweat, dust, dirt or other substances by using a clean, soft cloth and a non-abrasive liquid cleaner. Wipe down the exterior covers and frame, saddle, handlebar and Wattbike Performance Computer.

Make sure that the handlebar stem and saddle stem are not over the MIN markers.

Weekly Maintenance

Vacuum the floor under and around the Wattbike.

Inspect the feet bolts, saddle and handlebar sliders and Wattbike Performance Computer bracket for looseness. Tighten as necessary.

Inspect the saddle and handlebar stem adjustments. Tighten as necessary. Check that the pedals are secure. Tighten as necessary.

Ensure that no sweat/ liquid is pooling on the metalwork or covers.

Lubricate, using a 3-In-One Multi-Purpose Spray Oil or similar product, the thread of the locking and adjustment levers.
Check the battery level on the WPC, from Main Menu, Properties, and then Battery. If the level is below 50% charge using the external charger for a period of 8-12 hours. We recommend that you do this every 1-2 weeks.

Monthly Maintenance

Check for smooth and quiet operation of all moving parts.

Check your WPC firmware version in the **Properties** section. Compare to the latest WPC firmware version at **wattbike.com** and update if necessary.

Six Monthly Maintenance

Using a 3-In-One Multi-Purpose Spray Oil or similar product lubricate the chain. To do this use place the straw of spray lubricant between the cover and the chain ring close to the chain itself. Spray gently down towards the floor and rotate the crank anti clockwise twice.

Set the Zero State on the monitor. From **Main Menu**, **Settings**, **Device Setting**, select **Set Zero State**.

Rotate the cranks anticlockwise 2 turns and then press **Enter**.

7. Calibration

The Wattbike is factory calibrated and does not need further calibration. It is recommended that you set the **zero state** on a regular basis.

Select **Settings**, then **Device Settings**. Select **Set Zero State** then press **Enter**.

Rotate the pedals backwards for a few revolutions to unload the Wattbike. The cranks should be unladened and in a horizontal position.

Press **Enter** – the monitor will automatically set zero.

The Wattbike Warranty and Regulatory Information can be found at **wattbike.com/warranty**

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