

PURE FREE E-BIKE Set-up & Care Guide

PURE Electric





Welcome to the Set-up & Care Guide for your Pure Free e-Bike.

This guide explains how to get started on your Pure Free e-bike and features some important information specific to these models.

Please read this document along with the full owner's manual supplied with the e-bike, which covers essential safety, maintenance and care information. Both manuals are necessary for you to use your new e-bike safely and to understand how best to care for your e-bike now and in the future.

Thank you for purchasing a Pure e-bike and joining our green revolution!

Pure Electric is determined to make a real, meaningful impact on the way we all travel every day. You've just joined us in the fight for cleaner air for everyone.

There are also detailed manufacturer's information documents supplied with the bike to be read and kept for reference.

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SECTION 1

Quick-Start Assembly Instructions

Setting up your new e-bike

Our technicians have thoroughly checked and assembled your new e-bike, packing it carefully inside the box. It's almost ready to ride – just follow the easy instructions below, charge up your battery, pump up your tyres, and you'll be ready to go!



1.

Remove the e-bike and the spares pack from the box*.

* We strongly recommend that you keep the main box and packaging for at least 30 days in case you need to return the e-bike.



2.

Ensure that the stem bolts are in place. They shouldn't be fully tightened yet.



3.

With the bolts still not fully tightened (loosen them a little if you need to), adjust the height of the stem, ensuring that the maximum height marker is not showing.



4.

Line up the handlebar with the wheel facing directly forward, so that from above the bar is at a 90° angle to the front wheel.



Double check that the handlebars are still 90°to the front wheel, then tighten the stem bolt (A) to secure it into position. If you have a torque wrench, tighten to 15-20Nm (NOTE: the bolts securing the handlebar (B) should only be tightened to 5-6Nm). If you don't, aim to firmly tighten by hand **without** straining to your full strength.



6.

Check that the stem is secure by placing the front wheel between your legs and twisting the handlebars. If the bars and wheel move out of the 90° alignment, you will need to realign and tighten the stem bolts further.



7.

To adjust the angle of the handlebar stem, first fully loosen the bolt on the underside of the stem (1). Then, loosen the bolts on the side of the stem (2). Move the bars to the angle you want, then tighten bolt (1) carefully to lock the position. After this, tighten bolts (2) firmly (up to 10-15Nm if you have a torque wrench).

8.

Using your fingers, begin to fit the pedals to the matching colour-coded cranks, turning the left pedal anti-clockwise, and the right pedal clockwise to fit. Once the pedals are loosely installed, tighten with the supplied 15mm spanner - be careful not to damage the threads by forcing the pedal in. Pedals should be tightened very firmly (30-40Nm if you have a torque wrench).



Adjust the saddle height by loosening the quickrelease latch found on the seat clamp. Raise the saddle to a comfortable height (you may need to make a few adjustments before finding a comfortable height for you), then tighten the quick-release latch until the seatpost is secure.

10.

Make sure that you fully charge your e-bike before riding it. This will help to prolong the long-term life of the battery. You should achieve full charge in 4.5 to 6 hours.

HOURS

Pure Free Step - Securing the basket



1.

First, secure the basket to the upper bracket using the two nuts, washers and bolts supplied ('upper' fittings, as shown). Be sure that the bolt head is facing inside the basket.

Use the washers supplied underneath the bolt head so that the plate is well supported. Tighten clockwise to secure, firmly but not to the limit of strength.





The metal basket support is already attached. You can adjust it by loosening the front wheel nuts a little to move the support to the correct position under the basket if you need to. Remember to tighten the nuts when you're done.

3.

Position the metal plate against the basket support to hold it to the underside of the basket. Thread the bolts in from the top, and tighten evenly so that the plate has even gaps each side, then tighten fully. Use the nuts provided to tighten up against the plate*.

* NOTE: Check the bolts securing the basket after the first few rides and periodically afterwards. Bolts may loosen in use and pose a risk of the basket moving or becoming detached, causing loss of contents and a potentially serious accident for you and/or other road users.

Pure Free Step – Securing the front light



Bolt the light to the basket support as shown. Adjust the angle so that the lens is facing forward and gently tighten the nut and bolt until it is secure and fixed in place, but can still be adjusted as needed. When you are satisfied with the position, tighten the bolt a little more to secure it firmly.



2.

Use the supplied zip ties to fix the light wire to the basket support and to the basket body as shown. Be sure that the wire isn't in danger of catching on the brakes or tyre.

Care tips for you & your e-bike







1. Keep your tyres pumped

You'll get fewer punctures and better e-bike performance.

2. Care for the battery

You'll increase the range and the life of your e-bike.

3. Remove your battery

> Remove when not in use for longer periods or when locking your bike.



4. Lubricate!

...occasionally to reduce friction and wear.



5. Ride safely and responsibly

We advise wearing a helmet and using lights, while always following the law in your local area.

SECTION 2 Systems Overview



Getting started – the display unit

Your Pure Free Step / Free City display unit has three buttons as shown below in grey:





2 Functional overview

2.1. Switching on and off

To power on, press the small power button on the battery indicator display (at the rear upper side of the **battery casing**). The green LED next to the power button will show 25, 50, 75 or 100% charge status. When the battery is on, you can press P on the handlebar display which will cause the display unit to switch on and show how much charge is in the battery.

To power off, press and hold **P**.

If the e-bike is not used for a period of time, the display and power will automatically turn off.

2.2 Main form and operation

The display unit includes:

1. Power Assist (PAS) level display:

Displays the current assistance level. When the system is turned on the default power level is level 1. Press the **MODE** button to cycle through assistance modes 0-3. Power level 0 indicates no assistance, while level 3 indicates maximum assistance.

2. Battery level:

Displays the current charge. When the battery is fully charged, the LED display will show 4 LEDs, which will go out one by one as the power level drops. When the last indicator starts flashing, the battery needs charging. If this happens when riding, we recommend switching the power off and riding home without power to protect the battery.

3. 6km/h 'Walk-assist' mode:

'Walk-assist' mode helps you to walk with the e-bike, providing assistance at 6km/h without pedalling. Hold the **MODE** button for more than 2 seconds and the e-bike will go into 'walk-assist' mode. This function is **only** to be used when pushing the e-bike.



Full

100%

75%

50%

Empty 25%

4. Lights:

Press the **LIGHT** button to turn on the front and rear lights. Press it again to turn off the lights.

Troubleshooting error messages and related checks

If there's a fault in the electronics of the e-bike, the display will flash LEDs to indicate the nature of the problem. The fault must be resolved before the e-bike can be used. As a general rule, the first check you can perform is to see if the cables are in good condition and connected. Accidental disconnection is a common cause of most faults.

Number	Display	Fault description	Check items and measures
1	PAS level 1 light flashing	Abnormal current	 Check the wiring between the controller and the motor. Have the controller replaced.
2	PAS level 1 light flashing	Throttle error	This error message is displayed for information purposes only. If displayed, restart the unit. If this does not clear the error, have the display unit replaced by contacting your local Pure Electric store, or contacting customer services for support.
3	PAS level 1 light flashing	Motor phase error	 Check the controller cable Have the controller replaced.
4	PAS level 1 light flashing	Hall sensor (magnetic sensor in motor) error	 Check the motor cable. Have the motor replaced.

Number	Display	Fault description	Check items and measures
5	PAS level 1 & 3 lights flashing	Abnormal braking	 Release the brake, power down andturn back on. Check the brake cable cut-out at the brake lever. Check general brake function.
6	PAS level 1 light flashing	Abnormal braking	 Release the brake and turn it on. Check the brake cable cut-out at the brake lever. Check general brake function.
7	All PAS lights flashing	Abnormal communication	 Charge the battery. Have the battery replaced.
8	All battery indication and level lights flash at the same time	Power On/Off button sticking	 Power down and restart Check button function or display unit integrity
9	All battery indication lights flash	6kmh mode button sticking	 Power down and restart Check button function or display unit integrity
10	All of the battery indication lights and PAS level lights flash alternately	Register error	 Possible overheating Replacement of controller Replacement of crank sensor

* NOTE: If you require support or replacement parts and fitting, please don't hesitate to contact your local store to book in for a service, or Pure customer services.

4 Frequently asked questions

Q: Why can't I turn the e-bike on?

A: The power button on the battery needs to be turned on first – there's a small button on the upper rear of the battery, and when switched on a green LED will indicate the charge level. When this green LED is on, then press the power button on the display unit to switch on the e-bike's systems.

If you still can't turn the system on and you're sure the battery has charge, check the wires and the display connectors are all connected. If there is damage or reconnection doesn't resolve the issue, please contact us via email, online chat, or visit your nearest Pure Electric store for assistance.

Q: The display shows a fault code?

A: Please check section 2.3 of the Set Up & Care Guide for fault codes. If the basic checks don't resolve the issue or aren't possible for you to perform, please contact us via email, online chat, or visit your nearest Pure Electric store for assistance.

Q: The electrical system has no response, what should I do next?

A: A long press of the power button for more than 2 seconds should reset the system. If it doesn't and you still can't turn the e-bike on and you're sure that the battery is charged, check the wires and connections for any damage or disconnection. If there is damage or reconnection doesn't resolve the issue, please contact us via email, online chat, or visit your nearest Pure Electric store for assistance.

Gears and the drivetrain

Your Pure Free Step / Free City e-bike uses a 7-speed Shimano Tourney[™] transmission. The gears are selectable by a twist action of the Shimano RevoShift[™] grip on the right handlebar grip.

- The chain will benefit from cleaning and re-lubricating from time to time. Don't over lubricate – apply just enough bike chain lubricant to prevent excess noise in use.
- Wash with a degreaser, warm water and a soft brush to remove debris from the chain, sprocket and chainring.
- Do not use aggressive degreasers near to the pedal, chainset of hub bearings as this may cause accelerated wear of the components.

• Once dry, lubricate with a little light oil or a wax 'dry' lubricant. Apply sparingly and rotate the pedals backwards a few revolutions before wiping off any excess with a cloth.

Serious injury could occur if body parts were to be dragged in between the chain and teeth of the system. Take particular care when rotating the cranks while cleaning the bike in this area.

Watch out for loose trouser legs near the drive system – a chain guard is fitted but it cannot completely avoid the risk of clothing becoming caught in the drive system.

SECTION 3 Caring for your e-bike



Battery removal and general care

Battery unit layout:



The battery is removed by unlocking it – don't attempt to forcibly remove the battery without unlocking it first. Be sure that it's fully in place and secured before riding – make sure that the key is turned fully to the right and removed.

When removing the battery or handling, avoid dropping the battery as this can damage the cells and cause malfunction.

When re-fitting the battery, be sure to give it a firm push into position. There's no need to force it, just enough pressure to be sure that the connections are made and that the locking pin can engage and lock the battery in place before riding.

Riding with the battery unlocked may cause it to disconnect over a bump, losing power until it's refitted correctly. Always make sure the battery is locked in place before riding.

6.1 Guidelines for safe use and optimised battery life

- Only use the supplied charger to charge the battery.
- Store the battery in a cool, dry location.
- To maintain maximum capacity during long term storage, the optimum charge level for the lithium-ion battery is around 40%.
 However, fully charged is better than empty

 a stored flat battery may not accept charge in future.
- Charge the battery for 1 to 1.5 hours per 2-month period while unused (see charging information below).
- Avoid washing all over with a hose. The battery casing is rated to IPX2, and is not designed to withstand constant spray.

- Don't connect the positive and negative terminals directly this will cause a short circuit.
- Do not expose the battery to high temperature e.g. close to central heating radiators, direct sunlight or inside a car on a hot day.
- Do not place the battery in water or expose to salts, solvents, acids or bases.
- Avoid prolonged exposure to elements. It's waterproof and suitable for wet weather cycling, but it's not designed to be stored outdoors for extended periods.
- Never disassemble the battery.

6.2 Charging and battery operation

The charger supplied with the Pure Free City and Free Step is an intelligent lithium battery charger. The charger has protections including current overload, short circuit, temperature protection and minimum charging limit protection. This safeguards against fire and damage related to charging.

This charger has CE certification and is suitable for use in mainland Europe. It is only to be used indoors and has an operating range of 0 to 30 degrees Celsius for ambient temperature. The charger supplies 2A current to the 8.7Ah 36V 313Wh battery. Charging time to full capacity is around 6 hours with 80% charge taking around 4.5 hours.

6.3 Charging function – indicator lights

Condition	Dependant on	Light Indication
Connected and ready to charge, not connected to battery	Connected to mains power supply, empty or semi- charged battery	Red
Completed charging	Connected to mains plug and fully charged battery	Turns to green

When the battery charger shows a green LED indicating a fully charged battery, disconnect the charger from the mains before disconnecting the charger from the battery.

6.4 Troubleshooting – Charging

Fault description	Check items and measures
The power indicator light does not illuminate.	A. Check the power supply is UK or EU mains AC supply.B. Check the connection.

6.4 Trouble Shooting – Charging (cont.)

Fault description	Check items and measures
The charging indicator light is not lit	Check the battery condition – when the on button is pressed does the green light come on? If not the battery may be fully discharged and if left in this condition for too long it may not accept charge again.
The charging indicator light is always red.	The battery may be damaged – seek the advice of a professional and do not attempt to dismantle the battery.

7 Cleaning and wet-weather use

Take care when cleaning this bike. Avoid washing the battery all over with a hose. The battery casing is not designed to withstand constant spray. The electrical components are water resistant in normal use, but a jet wash can overpower seals and force water into electrical components or bearings.

The rear battery unit also houses the controller which needs to stay cool so the battery carrier is

air-vented underneath. The following conditions may direct water inside the battery carrier which may get onto electrical contacts:

- Being on a car roof or boot rack in the rain
- Washing the rack battery area with a hose
- Heavy, prolonged rain or storage outdoors

8 Essential maintenance

8.1 Brakes

The Pure Free Step / Free City has cable-operated rim brakes that will need adjustment as the pads wear. This is a job to leave to a trained mechanic as the brakes are an obvious safety feature. If the brake pads wear down too far without adjustment there will be a lack of brake power or the brake lever may contact the bars without applying sufficient braking force. A failure to stop you when you need to will cause a serious accident. There are barrel adjusters on the brake levers and brake callipers that can adjust for some pad wear if you feel the levers are getting closer to the bar before the brake engages – turn the barrel adjusters half a turn or more anti-clockwise to take up some slack in the cables.

If the brakes have worn pads, need adjustment of the cable tension or anything else that's more than a couple of turns of the barrel adjusters, get it booked in for a service at your nearest Pure Electric store. Don't adjust your brakes unless you have experience of brakes servicing already – your brakes are a critical safety feature.

Rims are subject to wear as well as the pads, they just wear more slowly. The rim sidewall has

8.2 Tyres

Tyre pressure is important. The right pressure is more comfortable and increases your battery range - it also optimises control and safety. Always stick to the recommended pressures indicated on the sidewalls of the tyres. You don't need to inflate them to a very high pressure tyres roll with lower resistance and greater grip when they're at the right pressure, not when they're as firm as possible.

indicator lines. When these are worn off it means the thickness of the rim is no longer safe. This must be checked at main service intervals, once a year under normal use or after every third set of pads is fitted as a general guide.

Check your tyres before each ride and check them for cuts or imbedded objects such as small pieces of glass regularly to avoid inconvenient punctures that might cause a loss of control and an accident.

8.3 Wheel, crank and headset bearings

The wheels/hubs and pedal cranks or chain set of your Pure Free Step / Free City run on bearings that need periodic maintenance. A looseness or side-to-side play in the hub or chain set area indicates a worn bearing and should be serviced or replaced before any damage is done by riding a loose bearing.

The headset bearing should allow the front wheel to steer freely. With the e-bike stationary and only the front brake applied, rock the bike gently back and forth - any looseness in the headset will be felt as a knocking in that area. Should this looseness be felt, get it checked over and serviced at your nearest Pure Electric store.

9 Pre-ride safety checks

Before every ride, check your e-bike as follows:

- Check that the tyres are correctly inflated (tyre pressure range 40-75PSI)
- Check that the wheels spin freely and there are no obstructions or points of wear.
- Check that the brake function is good roll the bike forwards and apply the brakes to check they work as normal.
- Check that the wheel axle bolts are tightened (10Nm front, 15Nm rear).
- Check that the bolts securing the seat post in ٠ the frame and the bars and stem are all tight (5-6Nm in the case of seat post, handlebar and stem bolts). While holding the wheel between your knees you can try twisting the bars to one side to check the bars are done up sufficiently tight.

SECTION 4 Warranty Information



General Specification

Model	Pure Free Step / Free City e-bike – certified UK and EU road-legal Pedelec/EPAC according to EN 15194 : 2017
Weight	Free City 21kg / Free Step 23kg
Motor	250W brushless rear hub motor, 36V
Battery	8.7Ah 36W
Drivetrain	Shimano Tourney™ RevoShift™
Chainset	42T chainring, 170mm crank arms
Bottom bracket	Square Taper, BSA threaded, 68mm shell, 122.5mm axle length.
Brakes	V-brakes
Tyres	700 x 38 or 40C
Inner tubes	700 x 35-45C, Schrader (car) valve type
Rims	700 x 19C, 36 hole, double wall box construction with CNC sidewalls
Headset	Zero-stack / semi-integrated type for 44mm ID head tube and 1 1/8" threaded steerer steerer. SHIS reference - upper ZS44/28.6, lower ZS44/30
Front hub	Ball bearing type



Your Pure Free Step / Free City is a 250W / 25kph limited 'EPAC' by EN15194:2017 testing definitions. It conforms to EN15194:2017 and CE and UKCA declarations.

For the safe use and durability of this e-bike it's important to understand what type of use we've designed and tested it for. That use is described as follows:

ASTM Classification for riding conditions Class 1 - Paved roads. This is a set of conditions for the operation of a bicycle on a regular paved

surface where the tyres are intended to maintain ground contact.

The Pure Free Step / Free City is a road-going e-bike. It can be used on even and well-surfaced tracks or dedicated cycle paths that are designed for everyday cycle transport. It is not intended for off-road or 'cyclocross' use where the wheels may leave contact with the ground or the terrain may include steeper gradients than normally found on roads, rocks or similar rough obstacles, very uneven surfaces or loose and slippery ground.

Use of this e-bike outside of the conditions described above may risk a loss of control and injury, or cause damage to the bike and invalidate your warranty terms.



🕑 Warranty terms

Your purchase of this e-bike includes a statutory warranty against non-conformity defects in material and in workmanship which begins from the date you physically receive the e-bike.

Additionally, your purchase also includes a seller's warranty starting on the same date as detailed below:

- Electronics components, suspension forks or suspension units are covered by a 2-year warranty term for non-conformity.
- Frames and rigid forks are covered by a 3-year warranty term for non-conformity.

This warranty covers the cost of labour for repairing non-conformities carried out at a Pure Electric store. This warranty requires you to a free safety check at any of our Pure Electric stores that should be completed within 6 weeks of use of your product to ensure that it is functioning efficiently, for example checking the function and interaction of componentry fitted to your e-bike. Please call your nearest Pure Electric store to book this health check. Failure to have this check performed may invalidate the seller's warranty.

Your warranty cannot be used if the part which is submitted for servicing:

- Demonstrates signs of misuse or mishandling as a result of not following the instructions set out in the product manual(s). This includes but is not limited to inappropriate use, maintenance or storage, or the opening, disassembly or modification of the e-bike with non-licensed or non-original parts or by a non-licensed person.
- Demonstrates signs of crash damage such as having been involved in accident or reckless / intentional damages.

Normal wear and tear is not covered by your warranty.

If you have a question related to this warranty, contact Pure Electric so we can discuss the available options. Please retain your proof of purchase for reference when making enquiries on this warranty. We may also request the serial numbers from the frame or other components to assist with production traceability and verification.

Declaration of conformity

PURE electric

UK DECLARATION OF CONFORMITY

Pure Electric 10 Wapping Road, Bristol BS1 4RW

As the manufacturer we hereby declare that the Pure Free Step and Free City E-bikes, serial number range

ZRJ210404097 to ZRJ21405410

and

DM21H00001 to DM21H02080

Are produced in 2021 in compliance with the essential requirements of the following Regulations:

Supply of Machinery (Safety) Regulations 2008

Electromagnetic Compatibility Regulations 2016

And with the following Harmonised Standards:

BS EN 15194:2017

Authorised Signatory on behalf of Pure Electric

Paul Jaques, Head of Quality 26 October 2021



PURE ELECTRIC

EU DECLARATION OF CONFORMITY

Pure Electric 10 Wapping Road, Bristol BS1 4RW

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ZRJ210404097 to ZRJ21405410

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Are produced in 2021 in compliance with the essential requirements of the following Regulations:

Directive 2006/42/EC (Machinery)

Directive 2014/30/EU (EMC)

And with the following Harmonised Standards:

EN 15194:2017

Authorised Signatory on behalf of Pure Electric

Paul Jaques, Head of Quality

26 October 2021



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