Owner's Manual

for Gocycle® G2

Version December 2015

CONTENTS

1 Disclaimer, Copyrights and Trademarks 1

1.1 Original Instructions, Translations and Updates 1

1.2 Disclaimer 1

1.3 Copyright Notice 1

1.4 Trademarks 1

1.5 Standards and Conformity 2

2 Safety 3

2.1 General Warning 3

2.2 Intended Use 3

2.3 Modifications and Refinishing 3

2.4 Maximum Design Limit 4

2.5 Riding in Low Light Conditions 4

2.6 Stopping the Gocycle 4

2.7 Riding in Wet, Cold or Icy Conditions 5

2.8 Limited Life Span 5

2.9 First Ride 6

2.10 Steerer Stop 6

3 Warranty 7

3.1 Warranty Registration 7

3.2 Gocycle Frame Number 7

4 Recommended Assembly Sequence 8

4.1 Pre-ride Checks and Service Interval 11

4.2 Warning! Take Care during Assembly 12

4.3 Handlebar Height and Reach Adjustment 13

4.4 Assembling the G2 Seatpost Tool Holder 18

4.5 Assembling the Front and Rear Reflectors 21

4.6 Assembling the Bell 25

4.7 Gocycle Quick-Fit Accessories 26

4.8 Gocycle Registration 27

4.9 Gocycle App Installation – Frequently Asked Questions 28

5 Gocycle Lithium Battery 30

5.1 Important Information: Lithium-Ion Batteries 30

5.2 Getting to Know Your Gocycle Lithium Battery 30

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5.3 Gocycle Lithium Battery: Usage 31
5.4 Gocycle Lithium Battery: Care and Maintenance 35
5.5 Shipping and Handling of Lithium Batteries 36
5.6 Battery Pack Disposal 36

6 Operation 37
6.1 Familiarising Yourself with Gocycle Dashboard Display 37
6.2 Understanding Electronic Gear Shifting 37
6.3 Riding Modes 38
6.4 Energy Consumption Meter 44
6.5 Maximising Your Gocycle's Motor Performance and Reliability 44
6.6 Heat and Over-Temperature Protection 45

7 Maintenance and Adjustments 47
7.1 Maintenance and Service Centre Location 47
7.2 Service interval 47
7.3 Visual Inspection Guide – (Every 3 Months/ 500 Miles) 47
7.4 Cleaning and Preventing Corrosion 49
7.5 Lubrication 50
7.6 Checking for Cracking and Fatigue Failures 50
7.7 Adjusting the Shifting 55
7.8 Adjusting the Brakes 56
7.9 Adjusting the PitstopWheel Quick Release Cam Levers 68
7.10 Tyres 73
7.11 Adjusting the Headset 74
7.12 Adjusting the Stem Quick Release Lever 77
7.13 Adjusting the Bearings on the Rear Hub 79

8 Troubleshooting 82
8.1 Unknown Gear State: Gears Will Not Shift 82
8.2 Gears Will Not Shift Down Automatically 82
8.3 Diagnosis Modes 83
8.4 LED Reference Tables 88

9 Contact Information 89

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1 DISCLAIMER, COPYRIGHTS AND TRADEMARKS

1.1 Original Instructions, Translations and Updates

Original instructions are produced in English language. Translations of the original instructions to other languages may take place, however Karbon Kinetics Ltd accepts no responsibility for any errors or misinterpretation of information as a result of such translation.

Visit www.gocycle.com/manuals to check for any new revisions or updates to this manual.

1.2 Disclaimer

The specifications, information and performance of the Gocycle and other products manufactured by or sold under license granted by Karbon Kinetics Limited and featured in this document may change without notice. The use of this information or products and the conditions under which the products are used are the sole responsibility of the buyer and/or the rider. It is the buyer's and/or rider's responsibility to determine the correct and safe selection of settings and conditions of use of the products and to periodically check the products for secure and proper operation. To the extent that the law permits, any liability which may be incurred as a result of the use of a product manufactured by or sold under license granted by Karbon Kinetics Limited is limited to the cost of repairing or replacing the failed product or component at the discretion of Karbon Kinetics Limited, either within or outside of warranty periods, and does not extend to any loss or damage which may be caused as a consequence of misuse or failure of the products. Damages to the product, other property or any persons are the responsibility of the buyer and/or rider. By using this product manufactured by or sold under license granted by Karbon Kinetics Limited, you are stating that you have read this disclaimer and agree to hold Karbon Kinetics Limited, its owner/s and any of its employees or directors free from all liabilities, that you agree you are using and operating the product at your own risk, and that no warrantees or guarantees are made by Karbon Kinetics Limited, expressed or implied, on performance or operation.

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1.5 Standards and Conformity

Gocycle is an electric power assisted cycle developed in accordance with:

2006/42/EC	The Machinery Directive
2004/108/EC	The Electromagnetic Compatibility Directive

and is in conformity with the applicable requirements of the following documents:

EN 15194:2009+A1	Cycles - Electrically power assisted cycles - EPAC Bicycles
EN 14764:2005	City and trekking bicycles - Safety requirements and test methods

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2 SAFETY

2.1 General Warning

This manual contains many warnings and cautions, which if ignored, may increase the risk of injury to you as a rider, may cause damage to the product or may invalidate the warranty. We recommend that you read and understand this manual in its entirety, prior to your first ride. Before riding your Gocycle you must visit www.gocycle.com/safety for up to date important safety related information.Riding any bicycle involves the risk of product damage, serious injury or even death. Such risks are increased in busy, urban environments with moving traffic. By choosing to ride a Gocycle, you assume the responsibility for these risks, and it is important that you know how to ride responsibly and to exercise proper maintenance to minimise such risks and potential damage. Do not try to ride beyond the limits of your ability or the limits of the Gocycle.

We strongly recommend that you learn more about the inherent risks associated with riding bicycles and suggest that you:

- Ask your local bike retailer for information or instruction on safe cycling.
- Ride within your means and ability.
- Attend a training session or safe cycling workshop run by many local bike clubs, police departments, schools or government support groups.
- Search "bicycle safety" online for reference information.

Skills of riders can vary; for example, it takes a highly skilled rider to travel at high speeds and/or close to obstacles, cars or other cyclists. Do not ride in a manner that exceeds the limits of your ability.

2.2 Intended Use

Gocycle is an electric bicycle developed and designed for commuting usage and/or simple riding in fair weather and at speeds relevant to safe and appropriate travel in an urban or suburban environment. Where applicable, the product meets the minimum requirements outlined in EN 14764:2005 and EN 15194. Abusive riding styles or inappropriate use will invalidate any warranty protection offered in this agreement.

WARNING! Understand your Gocycle and its intended use. Using your Gocycle in the wrong manner or for the wrong purpose can be dangerous and may impact the service life of the product.

The Gocycle is a power-assisted bicycle intended for sensible use by physically competent riders. If you have any concerns or doubts about your use or enjoyment of such a product due to a medical condition, an illness or if you are recovering from treatment for a condition or illness, you should consult your doctor regarding the suitability of the product for you. If you are the user of an implanted medical device such as a pacemaker or defibrillator, you agree to seek appropriate advice from the manufacturer of such device prior to the usage of Karbon Kinetics Limited products.

2.3 Modifications and Refinishing

WARNING! Do not modify or refinish your Gocycle or Gocycle components in any way. Such modifications or refinishing will void any applicable warranty.

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Modifications can cause damage which can increase the risk of failure and accident which may result in serious injury or death. Refinishing can hide structural damage, such as fatigue cracks or structural problems which may also result in an accident.

2.4 Maximum Design Limit

WARNING! This product has been designed with a maximum recommended weight limit of 100kg (220lbs) for the rider, clothing and all luggage, and is intended for use on paved roads. For rider and luggage weight 100-115kg (220-250lbs): riding style, road condition, tire pressures and luggage position may reduce product service life. Luggage weight should not exceed 10% of total rider and luggage weight. Never exceed rider and luggage weight of 115kg (250lbs) at any time. Exceeding this limit will void all warranties and may result in the product being unsafe for operation.

2.5 Riding in Low Light Conditions

In low light conditions at night, dawn, dusk or during adverse weather conditions such as fog, the visibility of cyclists is dramatically reduced.

WARNING! Never ride a bicycle in low light conditions without appropriate front and rear lights fitted and "on" (illuminated) that meet or exceed the national standards of the country in which it is being ridden.

We recommend that you consult the relevant national safety organization or a reputable cycle dealer on what the minimum recommended lighting requirements are in your particular country or region.

- For reference when selecting lights, your Gocycle has a 34.9mm diameter seat post and upper handlebar stem. We recommend that you choose a light with a variable length strap mounting system.

The following are additional recommendations:

- Wear bright, reflective clothing such as reflective vests, leg and arm bands
- Ensure that your Gocycle is equipped with correctly positioned reflectors (see 4.5 Assembling the Front and Rear Reflectors)

2.6 Stopping the Gocycle

The Gocycle is equipped with front and rear hydraulic disk brakes, operated by two levers on the handlebars (shown). Before riding, it is important to familiarise yourself with which brake lever operates the front brake and which operates the rear brake. Proper use of your brakes will slow and bring your Gocycle to a safe and controlled stop.

WARNING! To slow or stop the Gocycle in normal operation, apply the brakes appropriately. In the event that an emergency stop is required, apply the brakes appropriately and in a safe and controlled manner until you have brought the Gocycle to a complete stop. Do not release the brakes until it is safe to do so.

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Aggressive use of the brakes may cause your Gocycle to skid, potentially resulting in loss of control. Anticipate your need to stop and slow using appropriate pressure on the brake levers.

2.7 Riding in Wet, Cold or Icy Conditions

Under wet, cold or icy conditions, the stopping power of your brakes and tyres (as well as the brakes of other vehicles sharing the road) is dramatically reduced. This makes it harder to control speed and easier to lose control. It also makes skidding during turning more likely. Ride more slowly and cautiously when in wet weather. If it is cold, near or below the temperature when water freezes, be careful of ice on the roads which could be dangerous.

WARNING! Wet or icy conditions impair traction, braking and visibility, both for the cyclist and for other vehicles sharing the road. The risk of an accident is dramatically increased in wet conditions.

To make sure that you can slow down and stop safely in wet conditions, ride more slowly and apply your brakes more gradually than you would under normal, dry conditions.

We do not recommend riding in heavy rain or standing water, but we do understand that this is not always avoidable. If your Gocycle gets wet, clean and dry it within 15 minutes of heavy wet weather riding. See 7.4 Cleaning and Preventing Corrosion for more information.

2.8 Limited Life Span

WARNING! Bicycles have a limited life span for safe operation and are not indestructible.

As with all mechanical components, bicycle components are subject to wear and high stresses. Different materials and components may react to wear, stress or fatigue in different ways. Exceeding the useful life of your Gocycle may be hazardous.

The expected life span of a Gocycle or Gocycle component will vary with the material and construction of the frame and components, the maintenance that is received over its life and the type and amount of riding. Any unusual or abusive riding style, such as off-road cycling, competitive riding, stunt cycling, jumping or riding at excessive speed and braking hard, can accelerate wear and fatigue of components to the point where premature and sudden failure of a component may occur without warning and risk of injury is increased.

Any form of crack, scratch or change of colouring in highly stressed areas indicates that the life of the component has been reached and you should replace it before any further use.

See Section 7.6 Checking for Cracking and Fatigue Failures for parts of the Gocycle that require visual inspection from time to time.

An impact to your Gocycle, either major or minor, can cause stress and fatigue on the Gocycle and its components or compromise the integrity of the electronics, including the battery, electronic controller, motor drive system or wiring. In the event of an accident and if safe to do so put your battery into sleep mode. (see Section 5.3.4.) Check for visual damage before continuing to ride the Gocycle. If the Gocycle has sustained damage other than light cosmetic scratches such as dented, cracked, bent or misaligned components, do not ride your Gocycle until it has been inspected by an authorised Gocycle service centre. If you are not comfortable inspecting your Gocycle, consult techsupport@gocycle.com.

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2.9 First Ride

WARNING! First familiarise yourself with the modes of operation, controls and performance of your Gocycle before venturing onto busy streets.

We strongly recommend that you familiarise yourself with your new Gocycle by first riding it in a controlled environment, away from potential hazards such as moving traffic and obstacles. It is important to become familiar with the modes of operation, controls, brakes and the different performance characteristics inherent in the electric motor.

WARNING! Your braking efficiency will increase during the first few rides as your brake disks and pads "bed in". To accelerate the increase in braking performance, perform a number of controlled stops under hard braking.

2.10 Steerer Stop

Your Gocycle is fitted with a steerer-stop to prevent over-rotation of the handlebars, which would cause the internal cables to be stressed under tension. Do not attempt to force your handlebars past 90 degrees from straight.

CAUTION! Do not attempt to rotate the handlebars beyond 90 degrees from straight.

Never over-rotate the handlebars. Damage caused by ignoring the warning will not be covered under warranty.

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3 WARRANTY

Please view current warranty terms and conditions at www.gocycle.com/terms.

3.1 Warranty Registration

For your continued satisfaction and safety whilst riding your Gocycle, we strongly encourage you to register your Gocycle with us. Doing so will enable us to contact you with important product safety-related information, should the need arise.

In the event that you wish to make a warranty claim, you must provide your original proof of purchase (sales receipt or order confirmation). Keep this information in a safe place. Before we can process a warranty claim, you must have registered your Gocycle.

Please visit www.gocycle.com/safety to register your Gocycle in order to stay informed of important safety notices.

3.2 Gocycle Frame Number

Your Gocycle comes with a unique identifier called a frame number, positioned on the rear of the Gocycle. An example is shown below:

Your Gocycle frame number will be required when registering your Gocycle, making a warranty claim or making contact with Karbon Kinetics Ltd. Make a note of your frame number and keep it in a safe place.

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4 Recommended Assembly Sequence

If you have received your Gocycle *without the pedals assembled*, please follow the instructions below to complete the assembly.

Parts required:

Seat tube bush—included

Pedals (pair)—included

Tools required:

15mm pedal spanner (recommended with torque gauge)—not included

Assembly:

Remove the red cap from the frame as shown.

Place the seat tube bush into the frame as shown here.

Next find the right-hand pedal (marked with 'R') and by hand, screw into the right-hand crank arm.

Now using a 15mm pedal spanner and holding the left-hand crank arm, tighten fully to 35–40Nm.

Next find the left-hand pedal (marked with 'L') and by hand, screw into the left-hand crank arm.

Now using a 15mm pedal spanner and holding the right-hand pedal, tighten fully to 35–40Nm.

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Gocycle® Essentials

Gocycle® G2 frameset (battery inside frame)
PitstopWheel® x 2
Saddle and seat post assembly

Small parts:

- 4mm Allen key
- Rubber dust cap
- Lockshock pin

Gocycle G2R model shown (box contents may vary)

Gocycle® Assembly

Hold the Gocycle as shown on a non-marking surface

Beware of trapping fingers in handlebar folding mechanism!

Unfold handlebar stem to the position shown

Rotate handlebar in the direction shown

Continue to unfold handlebar as shown and align the front hole in the folding mechanism

Insert the quick release through the handlebar stem and rotate clockwise to tighten

The quick release should begin to feel harder to close as it reaches a 90-degree position

The quick release should remain in the closed position as shown

Insert the saddle and seat post assembly into the frame as shown

Ensuring that the seat post is inserted up to the minimum insertion mark, tighten the securing bolt to 5Nm using a 4mm Allen key

After tightening, insert the rubber dust cap into the frame as shown

Swing the Cleandrive downwards as shown (*hint*: gently hold your foot on the Cleandrive as you lift the frame as shown)

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Carefully lower the Gocycle downwards so the Cleandrive continues to rotate backwards

Align the Lockshock™ body with the Lockshock plunger as shown

Continue lowering the Gocycle until the Lockshock is fully inserted

Rotate the pedals to the position demonstrated (right pedal up) and carefully lay the Gocycle flat

Attaching the Front and Rear PitstopWheel®

While holding all three cam levers fully open, mount wheel to front hub

Close each cam lever as shown

Open and close EACH cam lever to check that it is adjusted and operating as shown. Consult the Owner's Manual if adjustment is needed. NEVER ride with any cam "loose" or if the resistance when closing or opening is not even for all cams.

Ensure all cam levers are closed, listening for a "click" from each

While holding all three cam levers fully open, mount wheel to rear hub

Close each cam lever as shown

Open and close EACH cam lever to check that it is adjusted and operating as shown. Consult the Owner's Manual if adjustment is needed. NEVER ride with any cam "loose" or if the resistance when closing or opening is not even for all cams.

Ensure all cam levers are closed, listening for a "click" from each

Final Assembly

With the Gocycle upright, press down on the saddle and insert Lockshock pin as shown

Select preferred saddle height. Tighten the clamp to 5Nm. *(DO NOT exceed the minimum insertion mark on the seat post)*

Recommended saddle height should allow you to touch the ground with both feet while seated

Before riding, consult the *Gocycle Operation Guide* and perform the *Gocycle Pre-ride Checks*

Please read the *Gocycle Owner's Manual* completely before riding your Gocycle

IMPORTANT ASSEMBLY ADVICE! Continue reading for important assembly advice, including how to register your Gocycle. Unless you register your Gocycle, after 60 miles (100 km), your Gocycle motor will cease to operate. See Section 4.8 Gocycle Registration.

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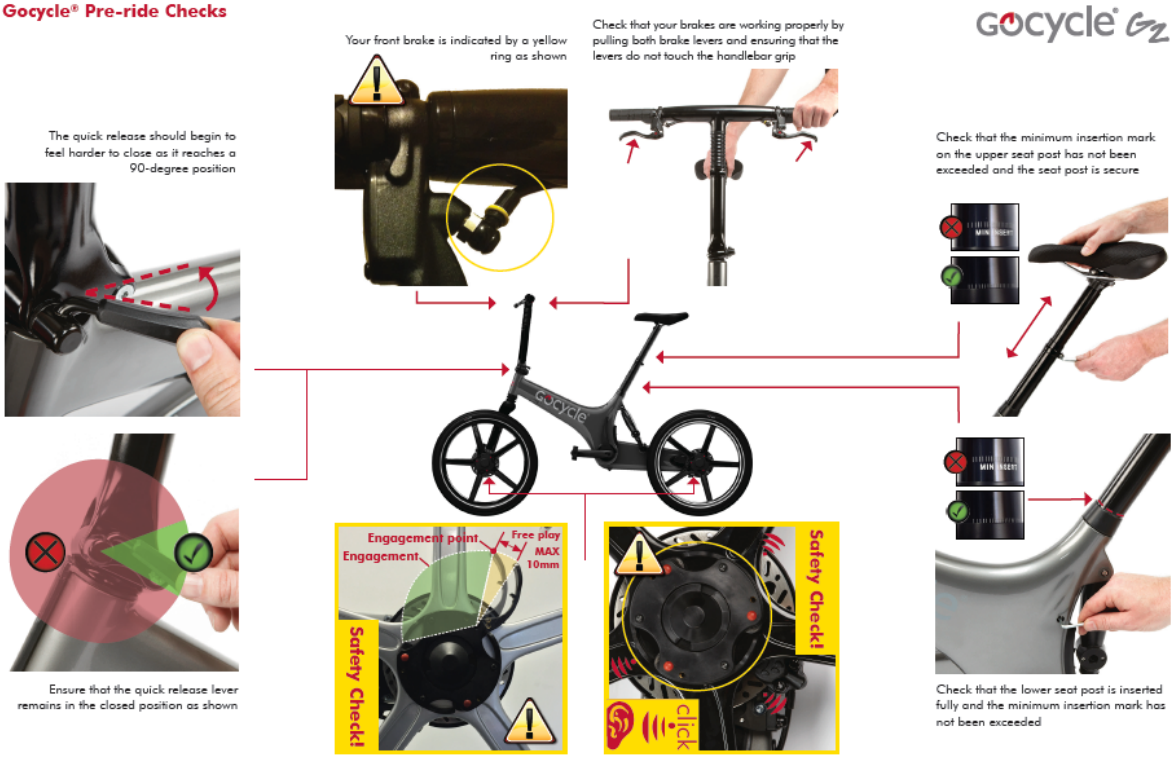
4.1 Pre-ride Checks and Service Interval

Before riding your Gocycle you must complete the pre-ride checks. This will ensure your safety and that your Gocycle is operating optimally.

Gocycle® Pre-ride Checks



Additional Pre-ride Checks

- Check front and rear tyre pressure and condition.
- Check the lights (where fitted). If the product has been fitted with front and rear lights, check that the lights are operating properly and according to the *Gocycle Owner's Manual*.
- Check that you do not exceed the rider weight limit. This product has been designed with a maximum recommended weight limit of 100kg (220lbs) for the rider, clothing and all luggage, and is intended for use on paved roads. For rider and luggage weight 100-115kg (220-250lbs): riding style, road condition, tyre pressures and luggage position may reduce product service life. Luggage weight should not exceed 10% of total rider and luggage weight. Never exceed rider and luggage weight of 115kg (250lbs) at any time. Exceeding this limit will void all warranties and may result in the product being unsafe for operation.

If you have any reason to believe that your Gocycle is not functioning properly, or that you are aware that your Gocycle has been damaged in any way, do not ride it.

If you answer "no" to any of the questions, you should not ride your Gocycle and should seek advice from an Authorised Gocycle Reseller.

1. Have you read and understood the *Gocycle Owner's Manual*?
2. Are you wearing an approved cycle helmet and, if necessary, other appropriate protective clothing such as protective eye glasses and gloves?
3. Are you visible to other road users?
4. Have you fitted the Gocycle with approved front and rear reflectors for the country of operation?
5. If riding in low light levels, have you fitted the Gocycle with approved front and rear lights?
6. If it is raining or the roads are wet or icy, are you aware that the risks of injury are greater and that you should adjust you riding style to suit the conditions?
7. Have you properly assembled your Gocycle as per the recommended Gocycle *Assembly Guide*?
8. Have you confirmed that both brakes are functioning properly and you know which lever operates the front and rear brakes?
9. Have you confirmed that there are no loose connections or missing bolts and your tyres are filled with air to the recommended tyre pressure?
10. Have you checked www.gocycle.com/safety for important technical bulletins and/or safety notices that may apply to your Gocycle?

Gocycle® Service Interval Guide

Recommended Service Interval	Performed by	Distance Ridden	Time
Pre-ride checks	Owner	Before each ride	Before each ride
First service	Authorised Gocycle Reseller	After first 100 miles or 160km	Two months after first ride
Visual inspection	Owner	Every 500 miles or 800km	Every three months
Visit www.gocycle.com/safety	Owner		Every three months
Check and update to latest firmware version	Owner		Every three months
Annual service	Authorised Gocycle Reseller	Every 2000 miles or 3200km	Annually

Note: Any Gocycle purchased in a used condition should have a full service completed by an Authorised Gocycle Reseller prior to riding and a first Authorised Gocycle Reseller Service should follow.

Please read the *Gocycle Owner's Manual* completely before riding your Gocycle

techsupport@gocycle.com Register your Gocycle at www.gocycle.com/safety to stay informed of important safety notices and to activate your warranty **www.gocycle.com**

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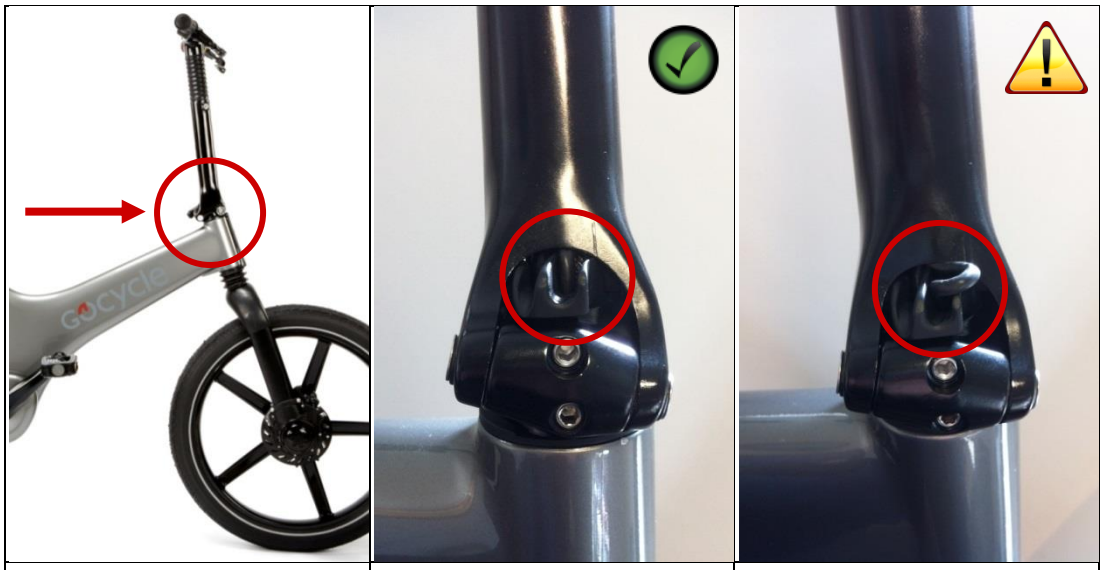
4.2 Warning! Take Care during Assembly

When folding the handlebar stem there is potential for the internal cabling to be pinched by the folding mechanism. Severe pinching may compromise the integrity of the cabling, which in the worst case may cause the product to not function correctly.



Location	Correct cable positioning	Caution! Incorrect positioning

Thoroughly inspect the handlebar folding mechanism when folding/unfolding, taking care not the pinch any internal cabling (pictured). Never force the handlebar stem. If a cable is positioned incorrectly, STOP and ensure the cable is repositioned before continuing.

During assembly or disassembly, do not over-fold the Cleandrive more than is necessary to engage or disengage the Gocycle Lockshock™. Over-folding the Cleandrive can cause the internal cables to become taut and in some cases may result in cables becoming disconnected, ultimately affecting the operation of the product.

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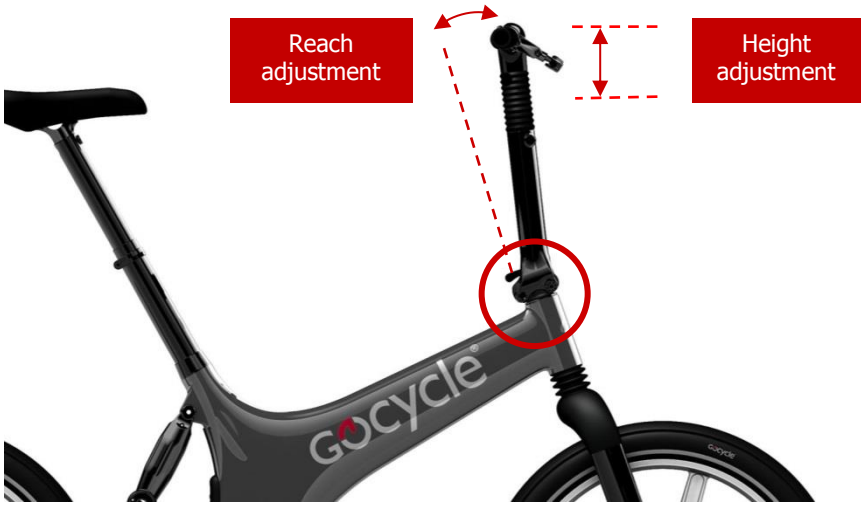
4.3 Handlebar Height and Reach Adjustment



In addition to Gocycle's patented Vgonomic adjustment (changing the effective cross-bar length when lowering or heightening the saddle), it is also possible to make further adjustments to accommodate most riders comfortably by changing the handlebar height and reach.

4.3.1 Handlebar Reach Adjustment

Open the quick release lever, as shown.

Undo the quick release lever (anticlockwise).

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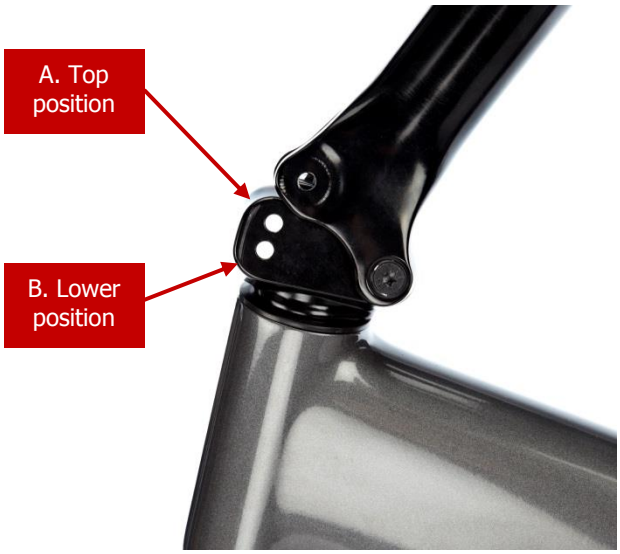
Completely remove the quick release.



The handlebar stem adjuster has two positions:

Use the top position for aft adjustment. (Shorter rider: least reach, handlebars closest to saddle).

Use the lower position for forward adjustment. (Taller rider: greatest reach, handlebars furthest from saddle).

Align the desired position and re-insert the quick release, as shown.

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With the quick release inserted, rotate clockwise to tighten

Close the quick release lever. The lever should feel harder to close at it reaches a 90- degree position.

4.3.2 Handlebar Height Adjustment

Undo and remove the handlebar stem bolt using a Torx tool, as shown.

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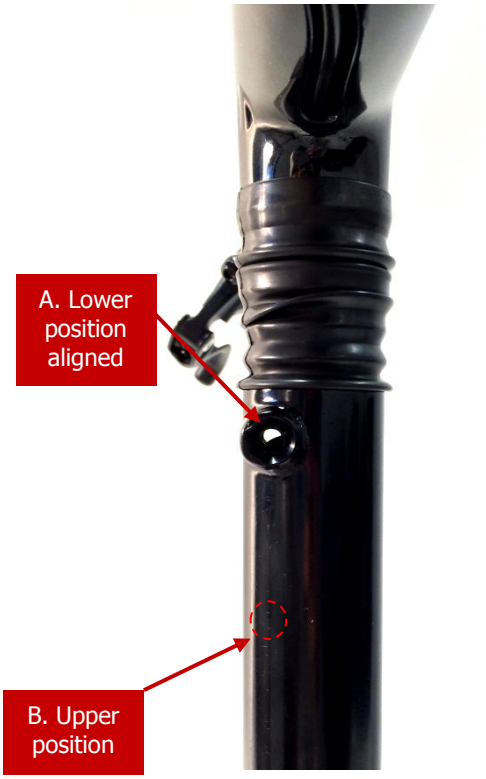
Lift the rubber dust cover to expose the lower position.

Note! Hole "B. Upper position" denotes the maximum height of the handlebar stem.

Push down to align the lower position



Ensure the bolt hole and stem upper position or lower position hole are fully aligned.

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Reinsert the stem bolt and tighten to a torque of 6-8 Nm.

CAUTION! Ensure the bolt passes through either "A. Lower position" or "B. Upper position" hole of the stem upper.

Tidy the rubber dust cover.

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4.4 Assembling the G2 Seatpost Tool Holder

1.1. Orientate the Tool Holder as shown

1.2. Locate the Snap Rail Tool Holder (B) above the saddle rails as shown.

1.3. Apply pressure onto the right hand side of the Snap Rail Tool Holder (B) until this side is properly located onto the right saddle rail.

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1.4. Apply pressure onto the left hand side of the Snap Rail Tool Holder (B) until this side is properly located onto the left saddle rail.

1.5. Confirm both sides of the Snap Rail Tool Holder (B) are properly located onto the saddle rails.

1.6. Push the Snap Rail Tool Holder (B) towards the front of the saddle.

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1.7. Insert the 4mm Allen key (A) supplied with the Gocycle.

Tool Holder installation is complete.

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4.5 Assembling the Front and Rear Reflectors

Front and rear reflectors are supplied as standard with your Gocycle and can be found in the small parts bag.

To install the rear reflector:

Mount the rear reflector on the upper seat post

CAUTION! Do not assemble the rear reflector too close to the saddle as it may be obscured by clothing

Open the rear reflector bracket

Place the bracket around the upper seat post and tighten, using a screwdriver, to secure in a position as shown

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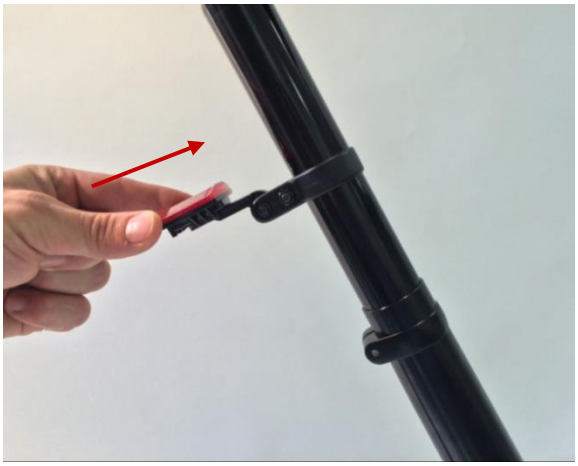

Mount the rear (red) reflector onto the bracket and listen for a "click"

Adjust the bracket to ensure that the reflector is vertical

Fix the assembled reflector in a vertical position as shown

To install the front reflector:

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Lift the rubber stem cover to expose the upper handlebar stem

Open the reflector bracket

Place the bracket around the upper stem and tighten, using a screwdriver, to secure in the position as shown

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Mount the front (white) reflector onto the bracket and listen for a "click"

Adjust the bracket to ensure that the reflector is vertical

Fix the assembled reflector in a vertical position as shown

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4.6 Assembling the Bell

Bell and O-ring for mounting bell

(*Supplied in small parts bag*)

Loop the rubber O-ring over the bell as shown

Insert the base of the bell through the gap between the brake hose and handlebar, as shown

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Stretch the rubber O-ring over the base of the bell to secure it in place

Assembled bell

Check that the bell is orientated such that it can be easily rung whilst riding

4.7 Gocycle Quick-Fit Accessories

Gocycle is readied for quick-fit accessories, including mudguards, kickstand and integrated light kit.

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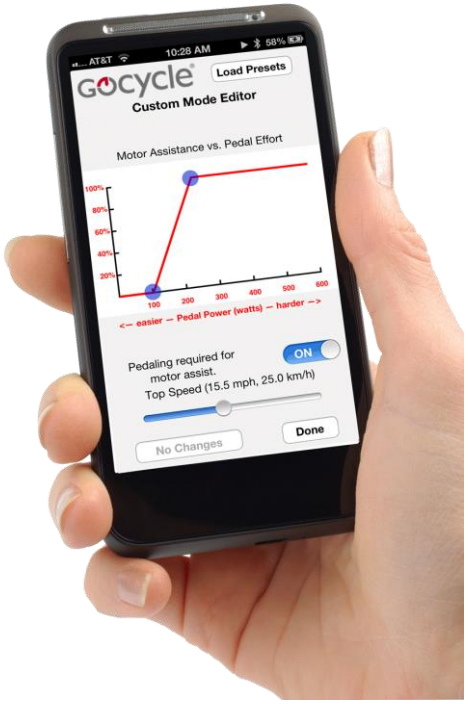
For more details about these and other available accessories, including purchasing information and assembly guides, visit www.gocycle.com.

4.8 Gocycle Registration

IMPORTANT: YOUR GOCYCLE REQUIRES REGISTRATION!
Unless registered, after 60 miles (100 km), your Gocycle motor will cease to operate.

4.8.1 GocycleConnect App Registration: Benefits



Gocycle is enabled with *Bluetooth*® wireless technology and requires the Gocycle App to connect via a smart device. Download and install the GocycleConnect App to your Apple or Android device to enjoy numerous benefits including:

- Read live battery charge state
- Odometer and resettable trip counter
- Resettable calories burned counter
- Update your Gocycle to the latest firmware
- Upload your Gocycle Data Log to assist with fault diagnosis
- Anti-theft: Disable your Gocycle if stolen
- Stay updated with important safety announcements

You can personalise the settings via the App and save the settings to suit your riding style and assistance preferences, including:

- Pedal effort required for motor to start
- Pedal effort required for maximum motor assistance
- Maximum speed
- Pedalling required for motor assistance ON/OFF

Odometer Recording

Gocycle has a sophisticated odometer which measures and records the total distance covered. Like with a car, this information cannot be overwritten. It is therefore possible to determine how far you have travelled with your Gocycle since new.

4.8.2 Pre-Registration: Delivery State Explained

Gocycle is shipped in *Delivery State* and will require registration via the GocycleConnect App to gain full functionality. *Delivery State* allows 60 miles (100 km) of normal usage before the motor will cease to operate. You must register your Gocycle within this distance to remove the restriction and avoid loss of motor function.

When stationary and not in use for more than 60 seconds, the dashboard will flash, displaying the delivery distance used. The greater the number of LEDs, the closer it is to the point that the motor will cease to operate. One LED equals approximately 3 miles (5 km).

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All Delivery Distance Used
(Motor will cease to operate)

No Delivery Distance Used
60 miles (100km) remaining

Pre- Registration: Delivery State	
Dashboard Display	LEDs "FLASH"
LEDs Indicate	Delivery Distance Used (More LEDs = More Distance Used
Motor Restricted?	Motor will cease to operate when all LEDs are flashing

4.8.3 After Registration: Normal Operation

When stationary and not in use for more than 60 seconds, the dashboard will display scrolling LEDs. This is a screensaver and the Gocycle is in *Standby*.

After Registration: Normal Operation	
Dashboard Display	LEDs "SCROLLING" back and forth
LEDs Indicate	Screensaver – Gocycle in *Standby*
Motor Restricted?	No restriction

4.9 Gocycle App Installation – Frequently Asked Questions

How do I register the Gocycle and gain normal operation?

ANDROID APP ON Google play Available on the App Store

Download and install the Gocycle Connect App from either the Apple App Store or Google Play for your Apple iOS or Android device. Follow the registration directions. For more details, see www.gocycle.com/app.

NOTE! You must complete the registration before fully using the delivery distance to avoid loss of motor function.

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I do not have a smart device. What can I do?

Your Gocycle Reseller will be able to assist you with your registration. Request registration assistance from your Gocycle Reseller at your place of purchase.

Why do I need to register my Gocycle?

Your safety is our utmost priority. Aside from taking advantage of the numerous benefits that the GocycleConnect App has to offer, registration also ensures that you are kept up to date with any important service and maintenance announcements.

From time to time, we need to make you aware of important announcements regarding the correct maintenance and servicing of your Gocycle. We may also have to send you important safety related information relating to your particular Gocycle.

NOTE: Please ensure that email junk filters and safe sender settings are updated on your system to enable receipt of email from techsupport@gocycle.com. We will not use the contact information provided for any other purpose other than providing safety information as described above.

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5 GOCYCLE LITHIUM BATTERY

5.1 Important Information: Lithium-Ion Batteries

The following important information applies to your Gocycle lithium battery. Read carefully to ensure the proper and safe operation and storage of the battery.

- Your battery has been designed for use only with a generation-two (G2) Gocycle. Do not use the battery with any other product.
- Your battery is intended to remain within the Gocycle frame at all times and should be removed only by a Gocycle-approved service centre or with the assistance and approval of a Gocycle technical support executive.
- Do not short circuit, disassemble, damage or modify the battery.
- Do not expose the battery to fire or high temperatures over 40°C (104°F).
- Do not expose the battery to water or moisture. Water can corrode or damage the internal battery safety devices and cause the battery to overheat, ignite, rupture or leak.
- Do not drop or subject the battery to strong impacts. Impacts can damage the internal battery safety devices and cause the battery to overheat, ignite, rupture or leak.
- Only use the specified charger. An inappropriate charger may cause damage or injury through fire or electric shock.
- Do not leave the battery unattended whilst charging.
- Only use, charge or store the battery in an environment with ambient temperatures between 0°C and 40°C (32°F and 104°F) and a humidity of 45% to 85% RH.

5.2 Getting to Know Your Gocycle Lithium Battery

1	LED 1
2	LED 2
3	LED 3
4	LED 4
5	Button (for battery charge test and changing battery mode)
6	Charging port

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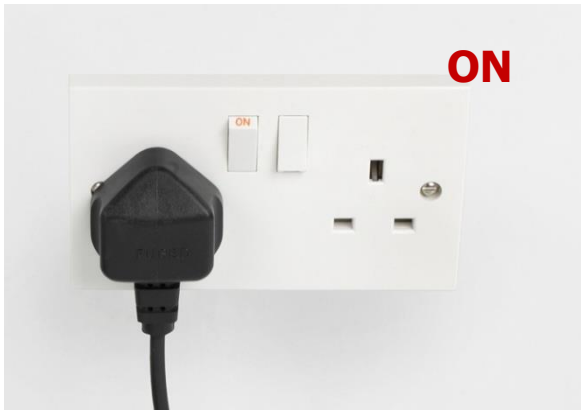
5.3 Gocycle Lithium Battery: Usage

5.3.1 Proper Charging Sequence

Open the rubber charging port cover, as shown

While holding open the rubber charging port cover, insert the charging lead as shown



Plug the charger into mains electricity and turn on (where applicable)

The charger light will turn orange to indicate charging

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Charge time up to 5.5 hours

DO NOT LEAVE THE BATTERY ON CHARGE FOR MORE THAN 24 HOURS.

The battery charge level is displayed on the Gocycle dashboard. (See 6.1 Familiarising Yourself with Gocycle Dashboard Display for more information). When fully charged, the dashboard will display 10 LEDs on the left side.

When the battery is fully charged (10 LEDs showing on the dashboard display), turn off the mains electricity.

Remove the charging lead and replace the rubber charging port cover

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BEST PRACTISE! With the battery fully charged and the charger disconnected, turn the battery off by placing it into Sleep Mode. See section 5.3.4 Returning the Battery to Sleep Mode for more information.

Ensure that the rubber charging port cover is in place before riding.

5.3.2 Battery Operation Mode (Wakes the Battery for Use)

The battery must be in *Operation Mode* before you can use your Gocycle. If the battery is not in *Operation Mode*, the Gocycle will not function, the gears will not shift and the motor will not work.

To wake the battery for use:

Press the button until the LEDs begin to flash

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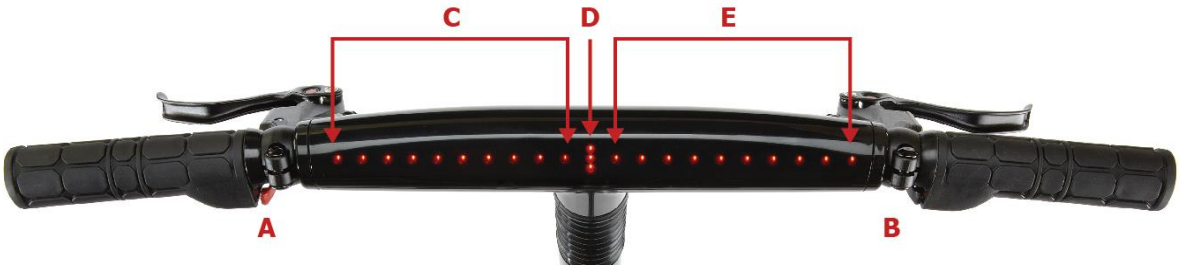
The two left LEDs (1,2) will begin to flash while the battery is waking up

The LEDs on the dashboard will light up to confirm that the Gocycle is on and ready to use

5.3.3 Checking Your Battery Charge Level

The battery charge level will show on the dashboard display during riding. If the Gocycle is stationary (including when on charge) for more than one minute (60 seconds), the display screen saver will be shown. Press either button to view the charge state.



A	Red power button
B	Electronic gear shift
C	Battery charge indicator/mode reference
D	Gear selection display
E	Speed display

The battery charge level is displayed in area **C**, shown above. Each LED represents approximately 10% of battery charge, with 10 LEDs = 100%, 3 LEDs = 30% etc.

During riding when using the motor, the battery charge level will decrease over time, with fewer LEDs displayed accordingly. The Battery Low Level Indicator is represented by one flashing LED. When this is displayed, the Gocycle will default to Power Save mode. See 6.3.2.5 Power Save for more information.

5.3.4 Returning the Battery to Sleep Mode

BEST PRACTICE: The Gocycle will use power when stationary and in *Operation Mode*, or while the charger light is green. This will drain the battery. Best practice is to enter *Sleep Mode* to conserve battery—when not in use and the battery is fully charged.

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NOTE: the battery will never enter *Sleep Mode* if the charger is plugged in. To enter *Sleep Mode*, first disconnect the charger.

Press and hold the button until the right LEDs (3,4) begin to flash

LEDs (3,4) will continue to flash whilst the battery enters S*leep Mode*

All LEDs (1,2,3,4) will flash to confirm that the battery has entered S*leep Mode*

The LEDs will then remain off

When in *Sleep Mode* no LEDs will display on the dashboard

5.3.5 Automatic Sleep Mode

The battery will enter *Sleep Mode* automatically if not in use for 15 hours. Check that the battery is in *Operation Mode* before attempting to ride. If the Gocycle is plugged into the charger, it will never enter *Sleep Mode*. Best practice if you have a green light on your charger or you have 10 LEDs on the dash is to unplug the charger and put the Gocycle battery into *Sleep Mode*. This will ensure that your battery will not be slowly depleted.

5.4 Gocycle Lithium Battery: Care and Maintenance

Batteries do not last forever. As with lithium-ion batteries found in most battery-powered products, the Gocycle lithium-ion battery will slowly deteriorate over time. Lithium-ion batteries begin to degrade from the point of manufacturer due to a chemical reaction that gradually causes the internal

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impedance of the cells to increase—in time reducing the ability of the battery to deliver its charge. For this reason, a new battery will always perform better t
han one that is six months old.

To maximise the potential lifespan of your Gocycle battery, follow these guidelines:

- Before first use, ensure that your battery is fully charged.
- The fuel readings on the dashboard and the capacity of the battery pack may vary during initial usage. After ten discharge and charge cycles, the battery and fuel indicators will become more consistent.
- Your battery will go into over discharge protection mode if it is discharged to a critically low level. Recharge your battery as soon as possible after it becomes fully discharged. A battery will be permanently damaged if left for an extended length of time in a fully discharged state.
- Heat accelerates the degradation of batteries. Avoid operating or storing the battery in high temperatures when possible.
- Once your battery displays less than two 2 LEDs, charge your battery within 48 hours. Place the battery on charge, and when the charge is complete, press the sleep button. Do not allow a nearly depleted battery to be unused for more than one month. The battery will slowly discharge until it becomes fully discharged, and this will permanently damage the battery cells.

When you are not using the Gocycle, we strongly recommend that you put the battery into *Sleep Mode*. See 5.3.4 Returning the Battery to Sleep Mode, for more information. Do not leave the battery on charge. When fully charged, unplug the charger and return the battery to Sleep Mode.

5.5 Shipping and Handling of Lithium Batteries

Like any lithium-ion battery, the Gocycle lithium-ion battery is classified as Miscellaneous Class 9 Dangerous Goods, and as such, must be packaged, shipped and handled in accordance with the strict guidelines laid out by the relevant international regulatory bodies for air, sea and road transport.

Never attempt to transport your lithium-ion battery by air, without first seeking the prior approval of your airline. Never return your battery to Karbon Kinetics Ltd without first making contact with techsupport@gocycle.com. Do not discard any of the battery packaging materials.

5.6 Battery Pack Disposal

When your Gocycle lithium battery has reached the end of its service life, you must recycle or dispose of it properly:

- Do not dispose of batteries with general household waste.
- When your battery no longer holds a charge, contact your local waste disposal or environmental agency for advice on disposing of a lithium-ion battery.
- Lithium-ion batteries are classified as Miscellaneous Class 9 Dangerous Goods. Consult your local authority for further advice on storage, handling and shipping.

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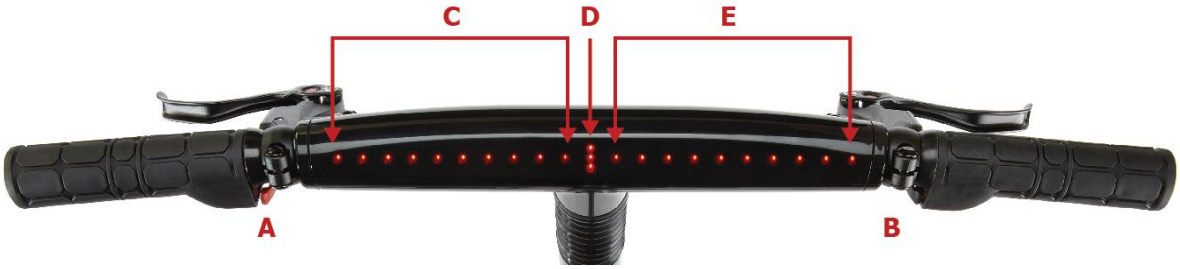
6 OPERATION

6.1 Familiarising Yourself with Gocycle Dashboard Display



A	Red power button
B	Electronic gear shift
C	Battery charge indicator/mode reference/energy consumption meter
D	Gear selection display
E	Speed display

NOTE: If the Gocycle is stationary (including when on charge) for more than one minute (60 seconds), the display screen saver will be shown. Press either button to view the charge state.

6.2 Understanding Electronic Gear Shifting

Your Gocycle is equipped with electronic shifting. Whilst riding, single click button **B** to shift up a gear. Your Gocycle also includes a predictive downshift feature (see 6.2.1 Turning Predictive Shifting ON/OFF to read how to turn off this feature). When slowing down, your Gocycle will automatically downshift from 3rd gear to 2nd gear (at speed 7 LEDs) and from 2nd gear to 1st gear (at speed 3 LEDs). It is possible to override the automatic downshift by **pressing and holding** button **B** for 1 second to shift down.

WARNING! Electronic shifting can appear to be sensitive compared to traditional mechanical shifting. Familiarise yourself with upshifting and downshifting before riding on busy roads or in traffic.

Take extra care when wearing gloves. Gloves will reduce the sensitivity of your fingers and thumbs and may cause an unwanted gear selection.

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Electronic Shifting: Use Button "B"	
Single click	Change up a gear; e.g., from 2nd to 3rd
Press and hold (1 second)	Change down a gear; e.g., from 3rd to 2nd

6.2.1 Turning Predictive Shifting ON/OFF

Select mode 17

Press button **B** to select between ON/OFF

(Predictive shifting ON—represented by a "+" as shown)

(Predictive shifting OFF—represented by a "-" as shown)

Save your preference by pressing and holding button **A**—the riding mode will flash to confirm exit

Mode	Predictive shifting ON/OFF
LED Mode Display	17
Mode Description	Allows user to turn predictive shifting ON/OFF

6.3 Riding Modes

You can operate your Gocycle in different modes to suit your personal riding style. The motor assistance will start and stop at different speeds—you can control this with either the red power button (**A**) or the rider pedal input, or a combination of both. See 6.3.1 Riding Modes Reference Table for more information.

Before selecting your desired mode, it is important to ensure that you are selecting a mode which is legal within the territory in which you are riding.

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WARNING! Select a riding mode which is legal in the country of use. If in doubt, consult your local transport authority. Modes 1, 2, 3 and 4 meet EN 15194 which has been adopted by most countries within the European Union.

The following sections explain the differences between the riding modes and how to select them. NOTE: In addition to riding modes 1 through 4, your Gocycle comes pre-programmed with a number of helpful modes to assist with gear shift adjustment and fault-finding. You should not attempt to ride your Gocycle, unless prompted by mode instructions, in any other mode preinstalled on your Gocycle.

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6.3.1 Riding Modes Reference Table

			Starting and Stopping the Motor			Motor Operating Speed (No. of LEDs) (E)				Controlling Motor Speed			
Mode No.	Mode Name	Dashboard LED Display	How to Start Motor	How to Stop Motor	Continuously Press Red Button to Operate the Motor	No Motor	Motor Start	Power Reduces above this Speed (Power Taper Speed)	No Motor	Pedal Input Controls Motor Power	Red Button for Full Motor Assist	Low Battery Warning (1 LED Flashing)	Meets EN 15194 Regulations
1	*City*		Light pedal effort	Stop pedalling or reduce pedal effort	X	0–1	2	5	8+	√	√	Motor will not operate unless red button is pressed	√
2	*Eco*		Medium pedal effort	Stop pedalling or reduce pedal effort	X	0–1	2	5	8+	√	√	Motor will not operate unless red button is pressed	√
3	*On Demand*		Pedal + press button	Stop pedalling or release button	√	0–1	2	5	8+	X	√	Motor will not operate unless red button is pressed	√
4	*Eco + (Custom)*		Medium/high pedal effort	Stop pedalling or reduce pedal effort	X	0–1	2	5	8+	√	√	Motor will not operate unless red button is pressed	√
			Customisable via App (see www.gocycle.com/app for more information)										

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6.3.2 Selecting a Riding Mode

Refer to the table in 6.3.1 Riding Modes Reference Table.

To view current mode of operation, press and hold buttons **A** and **B**. The current mode of operation, displayed by a number of LEDs, will show on the dashboard display (**C**).

To select a riding mode, press and hold buttons **A** and **B** until all LEDs flash, then release both buttons. The mode will then be shown on the dashboard display (**C**). Click button **B** repeatedly until you reach the number of LEDs which represent your desired mode (**C**). To save the mode, press and hold button **A** until LEDs flash and then release the button.

WARNING! Do not attempt to change a riding mode whilst in motion. Attempting to change the mode whilst riding will severely impair rider concentration and will dramatically increase the chance of an accident, which may result in injury to the rider or even death.

6.3.2.1 *City* Mode

√ EN 15194

City mode utilises your Gocycle's torque sensor, with the motor assistance level controlled by rider pedal input. (Hard pedalling = high motor assistance, soft pedalling = less motor assistance).

In this mode, within the motor operating speed and whilst the rider is providing pedal input, the motor will start automatically and will continue to operate until the maximum speed is reached. For maximum motor assistance, press and hold the red power button.

Above the maximum motor speed, the motor will stop. There is no need to press the red power button. When the pedals cease to rotate or with reduced pedal input, the motor will stop.

WARNING! The motor will continue to operate while the rider exerts pedal effort and is travelling within the motor operating speed. To stop the motor, cease pedalling, or reduce pedal effort.

Mode	*City*
LED Mode Display	1
Red (Power) Button	Need not be pressed
Pedals	Control motor assistance level—must be turning
Motor Start	**Light** pedal effort
Maximum Motor Assistance	**Medium** pedal effort, or press and hold red power button
Top Speed (Motor Cut-Out Speed)	Up to 15.5mph (25km/h)

6.3.2.2 *Eco* Mode

√ EN 15194

Eco mode operates in the same manner as *City* mode, but the rider must pedal harder to gain assistance. Use this mode if you wish to conserve your battery and increase your range.

In this mode, within the motor operating speed and whilst the rider is providing pedal input, the motor will start automatically and will continue to operate until the maximum speed is reached. For maximum motor assistance, press and hold the red power button.

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Above the maximum motor speed, the motor will stop. There is no need to press the red power button. When the pedals cease to rotate or with reduced pedal input, the motor will stop.

WARNING! The motor will continue to operate while the rider exerts pedal effort and is travelling within the motor operating speed. To stop the motor, cease pedalling, or reduce pedal effort.

Mode	*Eco*
LED Mode Display	2
Red (Power) Button	Need not be pressed
Pedals	Control motor assistance level—must be turning
Motor Start	**Medium** pedal effort
Maximum Motor Assistance	**High** pedal effort, or press and hold red power button
Top Speed (Motor Cut-Out Speed)	Up to 15.5mph (25km/h)

√ EN 15194

6.3.2.3 *On Demand* Mode

In *On Demand* mode, the rider can simply choose whether or not to have motor assistance. Select this mode if you wish to ride the Gocycle without motor assistance—or assistance only when required.

In *On Demand* mode, within the motor operating speed and whilst pedalling, simply press and hold the red power button to start and maintain motor assistance. The motor will continue to operate until the maximum speed is reached, or until the pedals cease to turn, or until the power button is released. When the pedals cease to rotate or the power button is released, the motor will stop.

Note: Relying heavily on the motor assistance will dramatically reduce the range of your battery and increase the wear on your motor drive components. See 6.5 Maximising Your Gocycle's Motor Performance and Reliability for more information as to how to get the best out of your Gocycle.

WARNING! The motor will continue to operate while the red button is pressed and the pedals are rotating. To stop the motor, cease pedalling or release the red power button.

Mode	*On Demand*
LED Mode Display	3
Red (Power) Button	Press and hold for motor to operate
Pedals	Must be turning for motor to operate
Top Speed (Motor Cut-out Speed)	Up to 15.5mph (25km/h)

6.3.2.4 *Eco* + (*Custom* Mode)

The factory default setting for *Custom* mode is *Eco+*, which operates in the same manner as *Eco* mode, but the rider must pedal harder to gain assistance. Use this mode if you wish to further conserve your battery and increase your range.

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In this mode, within the motor operating speed and whilst the rider is providing pedal input, the motor will start automatically and will continue to operate until the maximum speed is reached. For maximum motor assistance, press and hold the red power button.

Above the maximum motor speed, the motor will stop. There is no need to press the red power button. When the pedals cease to rotate or with reduced pedal input, the motor will stop.

<table>
<tr><td>Mode</td><td>Custom</td><td>Eco+ (Factory Default)</td></tr>
<tr><td>LED Mode Display</td><td>4</td><td>4</td></tr>
<tr><td>Red (Power) Button</td><td rowspan="5">Customisable via Gocycle App

See www.gocycle.com/app for more information</td><td>Need not be pressed</td></tr>
<tr><td>Pedals</td><td>Control motor assistance level—must be turning</td></tr>
<tr><td>Motor Start</td><td>Medium/High pedal effort</td></tr>
<tr><td>Maximum Motor Assistance</td><td>High pedal effort, or press and hold red power button</td></tr>
<tr><td>Top Speed (Motor Cut-Out Speed)</td><td>Up to 15.5mph (25km/h)</td></tr>
</table>

Custom mode enables a rider to edit various mode settings including;

- Pedal effort required for motor to start
- Pedal effort required for maximum motor assistance
- Maximum speed
- Pedaling required for motor assistance ON/OFF
- Updating firmware
- Fault diagnosis

Gocycle is Bluetooth®-enabled and requires the Gocycle App to connect via a smart device. The user can personalize the settings via the App and save the settings to suit the user's riding style and assistance preferences.

For more information, please visit www.gocycle.com/app or contact your local reseller.

WARNING! It is possible to edit the *Custom* mode to deliver a speed that is greater than the maximum speed defined by the European EPAC standard EN 15194.

Consult your local transport authority for information on legal restrictions.

6.3.2.5 Power Save

Your Gocycle will default to *Power Save* when the battery has reached a low level. The mode is represented by the battery low level warning indicator (one flashing LED) on the dashboard display. All riding modes will default to *Power Save* mode when a low battery level is reached.

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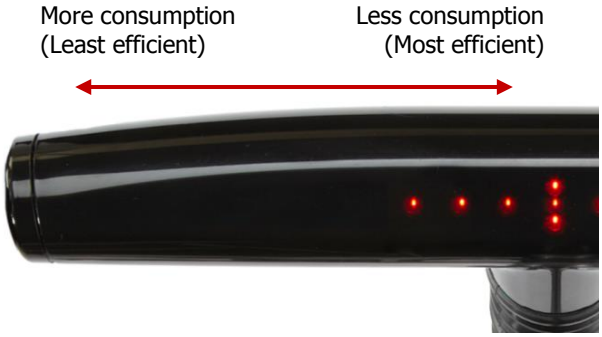
In the event that you enter *Power Save* mode, the motor will operate at a reduced power only when the red power button is pressed and the pedals are turning. If the pedals cease to turn, or the red power button is released, the motor will stop.

If you continue to ride in *Power Save* mode, the battery charge level will continue to decrease. When there are no battery charge level LEDs displayed in section **C**, the motor will not operate. Electronic gear shifting will continue to operate.

WARNING! If you have ridden your Gocycle at a low voltage, in *Power Save* mode, charge your battery within 12 hours. Failure to do so may result in permanent damage to your battery and will void your warranty.

6.4 Energy Consumption Meter

The energy consumption meter is available in all riding modes. Whilst riding and when the motor is in operation, the consumption of the battery is interactively displayed in place of the battery charge level (section **C** of your dashboard display).



The higher the number of LEDs displayed, the more power is being used by the motor and the faster your battery will drain. To maximise efficiency and reduce the amount of power that your motor is consuming, increase your pedal input.

When the motor is not in use, or if you are pedalling above the motor speed, the dashboard display will default to battery charge level.

6.5 Maximising Your Gocycle's Motor Performance and Reliability

Gocycle's electric motor is designed to boost performance in terms of getting you from point A to point B more quickly and with less effort. It is not designed for the motor power to be the sole means of propulsion.

As with a car, top speed and range (related to fuel consumption) are difficult to define as both factors are greatly affected by a large number of variables. For the Gocycle, this is including but not limited to rider weight (including clothing and luggage), tyre type, tyre pressure, terrain, surface texture, wind conditions and of course, how much pedal input the rider is providing.

The recipe is simple. Continual use of the motor assistance whilst riding and/or selecting a mode with a higher top speed will have a negative effect on the range of your battery. Using the motor assistance sparingly with maximum rider pedal input will ensure the best possible range.

To get the best out of your Gocycle, read carefully the following points:

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1. *Pedalling*: We recommend that for the best performance you continue to pedal at all times. The motor should be used to "top-up" or "boost" power. Not providing pedal input (when a riding mode allows) will dramatically reduce battery range.

2. *Excess weight*: Where possible, try to keep the total combined weight of clothing, luggage and accessories to a minimum. Overloading a Gocycle will reduce the battery range. Overloading will also affect your Gocycle's handling and increase the stresses on the clutch, gearbox and motor, potentially reducing the service life of the product.

3. *Tyres:* Ensure the tyres are correctly inflated. See 7.10 Tyres for more information.

4. *Riding style:* Where rough terrains (e.g., poor road surfaces, potholes, speed bumps, etc.) are unavoidable, you should adapt your riding style accordingly.

WARNING! Never use the motor when passing over obstacles such as ruts in the road or speed bumps, etc. Doing so will increase the stresses on the drive components and will reduce the service life of the product, possibly invalidating your warranty.

5. *Deceleration/braking:* Do not use motor power whilst decelerating or braking. Consciously using the motor assistance only when required will ensure the maximum possible battery range.

6. *Energy consumption meter:* Pay attention to your energy consumption meter. Whilst riding, when the motor is in operation, the power usage is interactively displayed in place of the battery charge level. The higher the number of LEDs displayed, the more power is being used by the motor and the faster your battery will drain. See 6.4 Energy Consumption Meter for more information.

7. *Wet conditions:* Gocycle is a British product, designed with British weather in mind. However, it is important that your Gocycle is dry before storage. A city atmosphere can be a corrosive environment made worse with high humidity. We recommend a simple check and towel-down (if necessary) after using your Gocycle in wet conditions. See 7.17.4 Cleaning and Preventing Corrosion.

6.6 Heat and Over-Temperature Protection

Gocycle's motor is extremely compact and lightweight. While this design offers benefits, certain drawbacks exist—specifically, the motor can get hot.

Gocycle's motor will get hot under normal operation similar to the exhaust pipe or engine of a motorcycle or moped.

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Caution! During and shortly after use, the motor area (highlighted) will be hot to touch!

WARNING! Extreme caution should be used when attempting to touch any part of the motor after it has been in operation—the same caution you would use in the kitchen with hot pots or pans or boiling water. We recommend that you do not attempt to touch the motor unless it has been switched off for at least five minutes.

The motor and controller are automatically protected against over-temperature operation. If the temperature of the motor or the controller gets too high, the power will be gradually reduced to prevent damage to these components. You may experience this condition for example riding up long steep hills while using full motor assistance. When over-temperature protection is in effect, the speed LEDs (E) will flash. When the temperature of the motor and/or controller has cooled adequately, the speed LEDs will cease to flash and full power will again be available.

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7 MAINTENANCE AND ADJUSTMENTS

7.1 Maintenance and Service Centre Location

In the event that you require maintenance and service please refer to your nearest authorized Gocycle service center. A list of approved service centers can be found at www.gocycle.com. Before attempting any maintenance on your Gocycle you must visit www.gocycle.com/safety for up to date important safety related information.

7.2 Service interval

Recommended Service Interval	Performed By	Distance Ridden	Time
Pre-Ride Checklist	Owner	Before each ride	Before each ride
Service	Authorised Gocycle Reseller	After first 100 miles/160 kms	2 months after first ride
Visual Inspection	Owner	Every 500 miles/800 kms	Every 3 months
Visit www.gocycle.com/safety	Owner		Every 3 months
Check and Update to latest Firmware Version	Owner		Every 3 months
Service	Authorised Gocycle Reseller	Every 2000 miles/3200 kms	Annually

7.3 Visual Inspection Guide – (Every 3 Months/ 500 Miles)

The following information details mandatory inspection points to be completed every 3 months/ 500 miles (whichever is sooner) of Gocycle ownership. This is to ensure your Gocycle is safe to ride and operating at peak performance. If you find any of the following items to be damaged or incorrectly adjusted then please seek immediate assistance from your nearest Authorised Gocycle Service Centre who will help rectify any issue. Do not adjust fixtures without first consulting the Owner's Manual or your Authorised Gocycle Reseller to ensure the correct adjustment is made. Incorrect adjustment could lead to premature failure of a component.

IMPORTANT: Check www.gocycle.com/safety for up to date Technical Bulletins that might affect your Frame Number.

NOTE: More frequent servicing may be required for Gocycles used in adverse conditions or with a more aggressive riding style.

1. Inspecting for Cracking and Fatigue Failures (Section 7.6)
2. Inspection of disc covers for damage (Front and Rear)
3. Hub Cap in position to prevent excessive dust contaminating Hub Gear

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4. All Cleandrive magform bolts present x 12, 4-6Nm (one located @ front of Cleandrive - check by folding)
5. Pivot block magform bolts present x 5, 4-6Nm
6. Check pedals are tight, 35-40Nm
7. Check crank bolts are tight, 35-40Nm
8. Check Stem Pinch bolt is tight, 7-8Nm (Section 4.3.2 for adjustment)
9. Ensure QR lever is correctly adjusted and closes with increasing force to keep handlebar clamped
10. Check steam adjuster bolts and top hats are present and tight, 7-8Nm
11. Check that headset is not loose. (Section 7.11 for adjustment.)
12. Check Cam Lever free play of all three cam levers on both wheels when fitted to the respective hubs (Section 7.9 for adjustment)
13. Check hub gear for excessive movement – (conducted after confirming all cam levers are adjusted correctly) (Section 7.13 for adjustment)
14. Check both brakes are operating correctly and levers cannot be pulled to the bar
15. Ensure Gocycle Firmware is up to date

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7.4 Cleaning and Preventing Corrosion

We do not recommend that you ride your Gocycle in heavy rain or store it in damp or wet areas. Please read 2.7 Riding in Wet, Cold or Icy Conditions for safety recommendations for riding in wet conditions.

If you do find yourself riding while it is raining, we recommend that you use the motor when safe to do so. Using the motor will allow heat to build up in the motor and the electronics, which will

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evaporate the water from these moisture-sensitive components. Use caution when you use the motor on wet roads, as the roads will be slippery and the motor may cause the front wheel to spin.

Water and moisture (especially spray from roads that are salted to reduce the formation of ice) can accelerate corrosion (rust) of the various metallic components on the Gocycle, and this will reduce the life of product. Leaving water and moisture on the Gocycle could also result in premature failure of the electronics, battery or motor system. The warranty will not cover premature failure as a result of corrosion through neglect.

Here are some best practice recommendations:

- If your Gocycle has water on it, we recommend that you wipe it dry as soon as possible with a towel or dry cloth.
- The less you expose your Gocycle to moisture or water, the longer it will last.
- Keep your Gocycle inside your house, flat or garage.
- If you wish to clean the Gocycle, we recommend that you use a damp towel or cloth and mild liquid soap. First wipe down all areas with a damp towel, then wipe dry with a dry towel.
- To clean the rim and tyre, remove the PitstopWheel, soak the rim and tyre in a bucket of soapy water and then dry with a towel.

WARNING! Keep your Gocycle clean and dry at all times, where possible. Never spray the Gocycle with a hose or high-pressure cleaning system. Never use polishes, waxes or solvents to clean your Gocycle.

7.5 Lubrication

There is no need to regularly inspect, clean and lubricate the internal components of the Cleandrive®

The gearbox, rear hub, hub bearings and chain drive system (Cleandrive) are lubricated during production, and unless the Gocycle is regularly exposed to a high-humidity, corrosion-enhancing environment, these components will last the lifetime of the product.

7.6 Checking for Cracking and Fatigue Failures

As with a conventional bicycle, your Gocycle will not last forever. It is a mechanical item that under normal riding will be stressed, and eventually the parts will fatigue, cracks will develop and it will

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become unsafe to ride. The number of miles of riding a bicycle will endure cannot be predicted since there are many variables that affect product life including:

- Rider weight
- Riding style
- Tyre pressure and type
- Roughness of the road
- Whether or not the bicycle has been crashed or damaged in transit
- Whether or not the bicycle has been ridden over large bumps such as potholes or curbs
- The amount and weight of luggage carried
- The speed at which it has travelled
- Whether it has been subject to abuse or vandalism
- Time of exposure to ultraviolet radiation from the sun
- Storage conditions, such as ambient temperature and moisture levels

Responsible, safe riding and regular maintenance, such as within the guidelines of this manual, should afford many thousands of miles of operation of your Gocycle. Nevertheless, you must inspect the Gocycle every 500 miles to see if any of the components have cracks and need replacing. To do this, clean the Gocycle thoroughly with a damp cloth. Wipe away all dust or dirt. Look carefully at all the components under good lighting.

Important sites where cracking may initiate are shown in the images below. If a crack is more than 3mm long, do not ride the Gocycle and immediately contact techsupport@gocycle.com. Under normal conditions, items under warranty will be replaced.

WARNING! Failure to inspect the Gocycle thoroughly may have serious consequences and could result in serious bodily injury or even death.

Check for fatigue cracks where the spokes join the rim of the wheel

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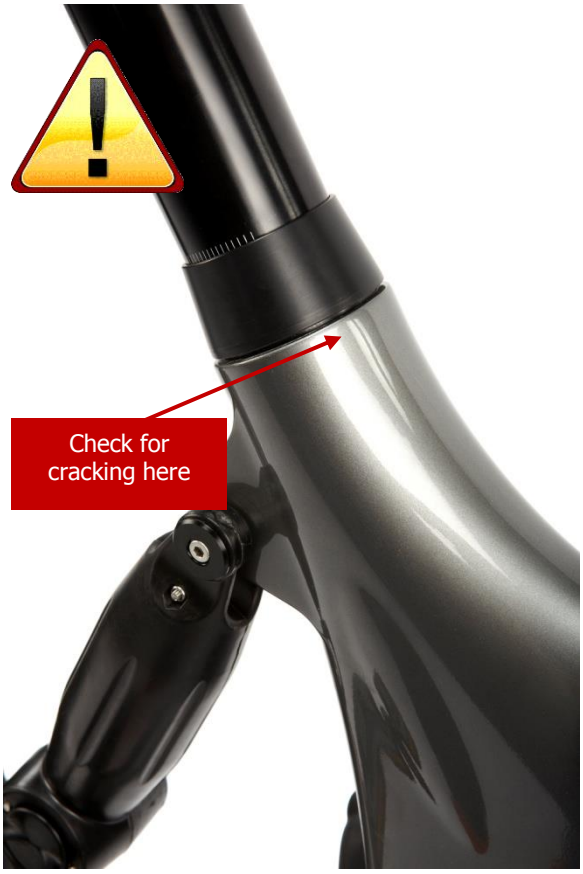

Check for fatigue cracking around the seat tube frame joint

Check the head tube junction for fatigue cracking

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Check the head tube junction for fatigue cracking

Check under the head tube junction for fatigue cracking

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Check the Lockshock plunger for signs of fatigue cracking

WARNING! When not properly assembled, the Lockshock plunger (the grey part as indicated at left) is susceptible to impact damage from a side load, for example when folding to take in or out of a car, transporting inside a building or through a doorway. If you suspect this has occurred, do not ride the Gocycle and contact Gocycle Tech Support.

Check the pivot block for signs of fatigue cracking. An indication of cracking of this component could be a loose Cleandrive that swings down easily or a sloppy feeling to the ride.

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WARNING! Should you discover a fatigue crack more than 3mm long, or should you suspect that a component may have received an impact in an unusual way—such as if the product has been dropped—do not ride your Gocycle and immediately contact techsupport@gocycle.com.

7.7 Adjusting the Shifting

From time to time, it might be necessary to adjust your shifting; for example, if you hear a noise from your rear hub or your Gocycle is not holding in gear. Your Gocycle's electronic shifting is calibrated during production, but you can recalibrate it by adjusting the servo electronically as follows:

Select mode 15

Once in mode 15, the display will show the gear selection and calibration either side of the factory default

Keeping the pedals still, select the gear that you are aiming to adjust with the gear select button **B**

Now take your Gocycle for a ride—whilst pedalling, adjust the gearing by pressing buttons **A** or **B** as necessary until the gear remains in place, with no noise from the rear hub

Press button **A** to move the servo position towards the lower gear

Press button **B** to move the servo position towards the higher gear

When a gear is properly adjusted and you are confident that you have successfully calibrated the gear, stop pedalling

If there is no further calibration necessary, go to the last step

If it is necessary to recalibrate other gears, repeat from the beginning

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To save the new calibration, press and hold both buttons **A** and **B** until the display flashes

Mode	E-Shift Adjustment
LED Mode Display	15
Mode Description	Allows calibration of the electronic shifting

7.8 Adjusting the Brakes

For information on how to bleed your Gocycle hydraulic brakes, please read carefully the brake manufacturer's instructions, included with your *Operation Guide* and *Assembly Guide*.

NOTE: The brakes will increase in power over the first 50 to 100 uses.

7.8.1 Bleeding the Brakes

As with all hydraulic brakes, for the best possible performance, we recommend that the hydraulic brakes on your Gocycle are bled every 12 months. We advise that your Gocycle brakes are bled by a skilled bicycle mechanic with experience with bleeding hydraulic cycle brakes.

WARNING! DOT 4 brake fluid can be an irritant when it comes into contact with human tissue. For skin contact, wash off the brake fluid in flowing clean water. For eye contact, the eye area should be irrigated with flowing water immediately and continuously for 15 minutes. Consult with medical personnel.

CAUTION! DOT 4 brake fluids will strip paint. Exercise caution to avoid brake fluid coming into contact with painted surfaces. If brake fluid does come into contact with painted surfaces, wipe the surface immediately and clean with an isopropyl alcohol.

Dispose of used brake fluid according to local laws.

For additional guidance, consult the manufacturer's instructions supplied.

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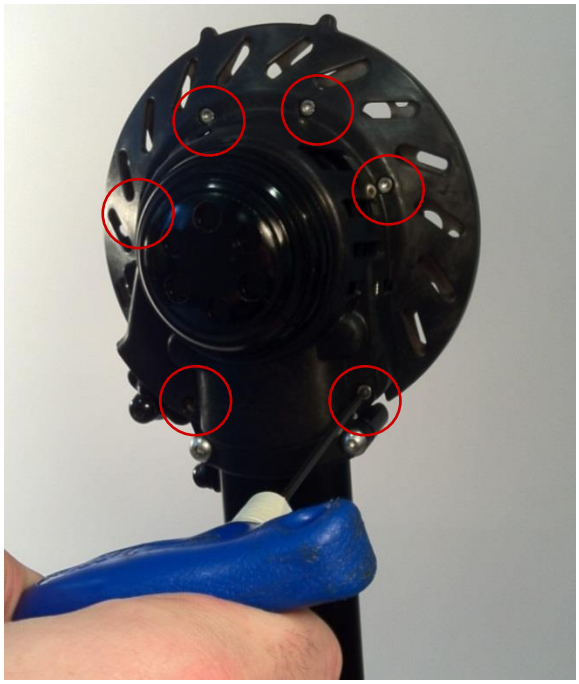
7.8.2 Replacing the Brake Pads

7.8.2.1 Replacing the Front Brake Pads



Locate and remove the six securing bolts on the motor cover

Remove the motor cover

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Locate and remove the two calliper securing bolts

Slide the calliper off the disk rotor

Compress the spit pin using a pair of pliers, as shown.

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With the split pin compressed, pull the pin out using a pair of pliers.

Carefully push the brake pads from the top of the calliper, as shown.

Pinch both brake pads and remove from the calliper. CAUTION! The pads are sprung. Be careful not to accidentally release the spring.

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Replace the brake pads as necessary before reassembly.

Replace the brake pads as necessary. Pinch together with the spring and reassemble into the calliper.

Replace the split pin to secure the brake pads in position.

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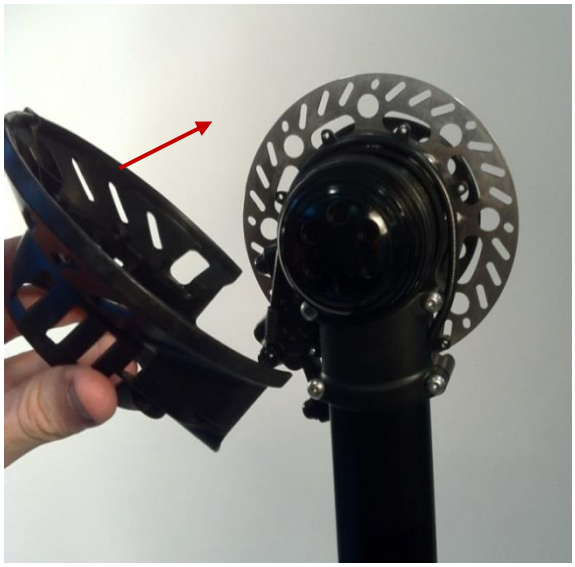
Using pliers, bend open the split pin to lock it in place.

WARNING! Do not attempt to ride your Gocycle without re-installing the brake pads and securing split pin.

Doing so may result in injury.

Replace the front brake calliper. Tighten the calliper securing bolts to a torque of 6–8Nm.



Replace the motor cover

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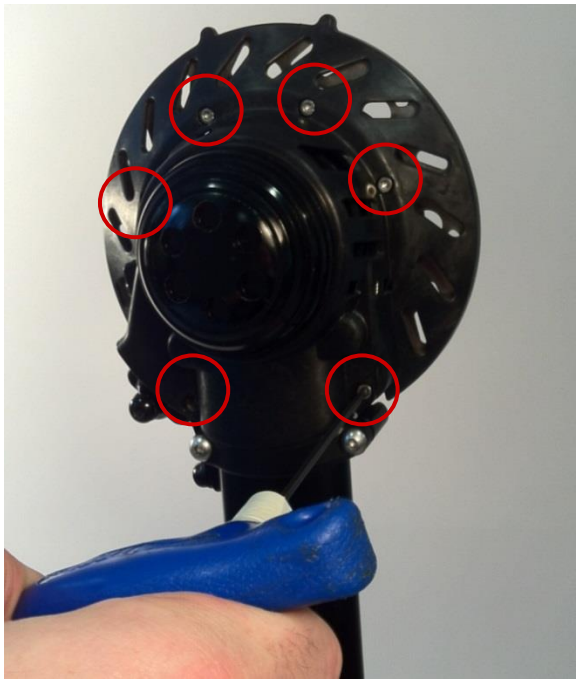

Replace the six motor cover securing screws. Tighten to a torque of 3–4Nm.

WARNING! The braking performance of new brake pads will increase over time. Ensure that you "bed-in" your brakes by performing a number of stops.

7.8.2.2 Replacing the Rear Brake Pads

Locate the two rear calliper securing bolts, shown.

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Remove the forward calliper securing bolt with an Allen key, as shown.

Remove the rear calliper securing bolt with an Allen key, as shown

Slide the calliper off the disk rotor.

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Compress the spit pin using a pair of pliers, as shown.

With the split pin compressed, pull the pin out using a pair of pliers.

Carefully push the brake pads from the top of the calliper, as shown.

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Pinch both brake pads and remove from the calliper. CAUTION! The pads are sprung. Be careful not to accidentally release the spring.

Replace the brake pads as necessary before reassembly.

Replace the brake pads as necessary. Pinch together with the spring and reassemble into the calliper.

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Replace the split pin to secure the brake pads in position.

Using pliers, bend open the split pin to lock it in place.

WARNING! Do not attempt to ride your Gocycle without re-installing the brake pads and securing split pin.

Doing so may result in injury.

Replace both calliper securing bolts. Secure to a torque of 6-8 Nm.

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Ensure that the brake calliper is parallel to the disk rotor when tightened.

WARNING! The braking performance of new brake pads will increase over time. Ensure that you "bed-in" your brakes by performing a number of stops

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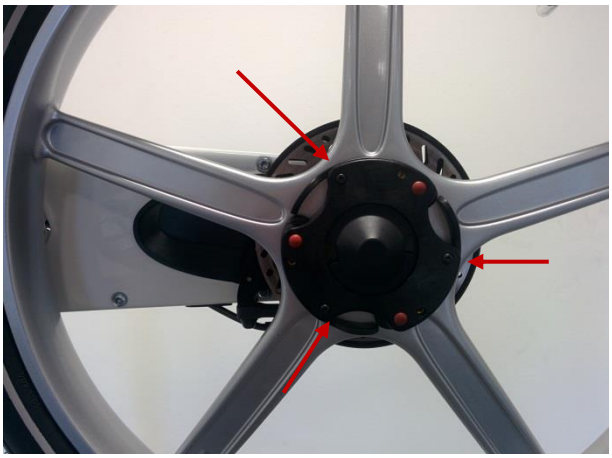
7.9 Adjusting the PitstopWheel Quick Release Cam Levers

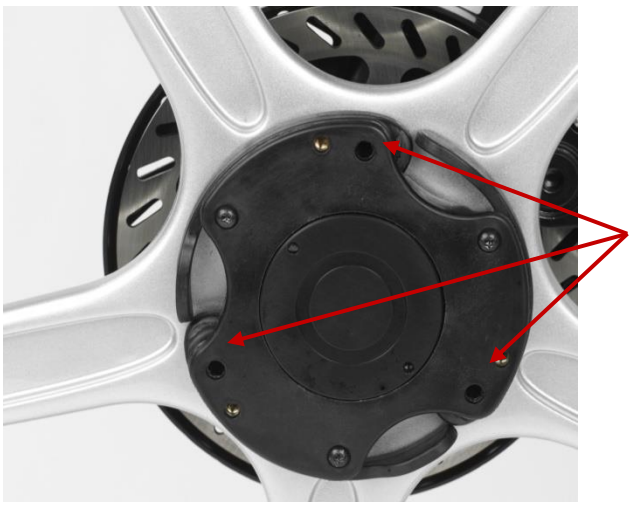
7.9.1 General Adjustment

All three Pitstopwheel quick release cam levers should have equal resistance when closing or opening. As per the pre-ride checks there must be a maximum of 10mm **free play** measured at the tip of the cam lever when open. In the event that the levers have different closing/ opening resistance or free play in excess of 10mm you must adjust the cam levers before riding.

Adjusting the Pitstopwheel cam levers is an important task throughout the lifetime of the product. Cam levers will settle after initial use and prolonged use will cause wear. As such the cam levers require vigilant attention and adjustment including checking every cam as part of the pre ride checks.



1. Locate the Pitstopwheel securely onto the hub and close all three cam levers. Take note of any differing engagement points and closing resistance.



2. Remove the red rubber grommets from the cam adjuster studs. This allows access to adjust the cam lever with a 4mm Allen key.

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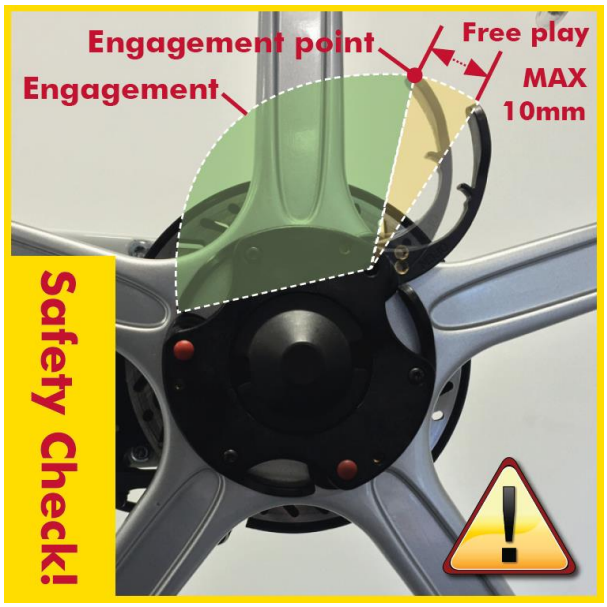
3. Keep 2 cam levers in the closed position and open one cam lever fully so that the back edge touches the next closed cam lever.



4. Lightly move the cam lever back and forth to gauge the extent of the **free play**.

Free play is defined as the portion of movement where there no noticeable pressure required to move the cam lever before it engages with the hub. It is measured at the tip of the cam lever.

5. If the **free play** exceeds 10mm at the tip of the cam lever, use the 4mm Allen key to reduce this.

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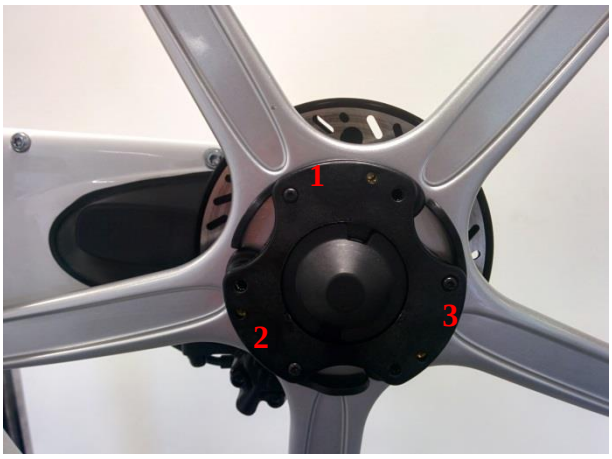
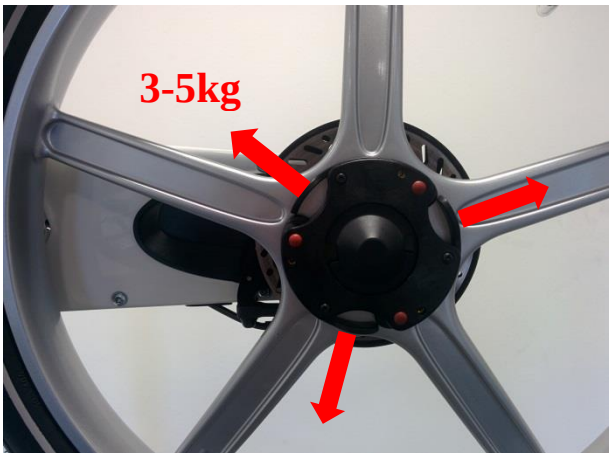
6. Insert the 4mm Allen key into the stud and turn **clockwise** to **reduce** the cam lever free play and **anticlockwise** to **increase** cam lever free play. Hold the cam lever lightly while turning the allen key in order to detect the **engagement point** and **Free play**. To check if the adjustment has corrected the free play, remove the allen key and close the cam lever to allow the system to set and then reopen and re-check **free play**. Adjust until you are satisfied that the **free play** is 10mm or less.



7. Repeat the process for the other two cam levers. Then complete one more full check of each cam lever to ensure that once adjusted and settled the resistance to close the cam levers is equal across the three levers.



8. Cross check reference: there should now be an equal resistance across all three cam levers requiring 3-5kg to open an individual cam lever.

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9. Ensure all cam levers are securely closed.

11. Repeat the process for the other wheel on the other hub.

NB: If you do swap wheels between hubs while riding ensure to check the cam lever free play again as there can be slight differences between front and rear hubs.

7.9.2 Checking for and Minimising Wear on the Front and Rear Hubs

Periodically remove the rear wheel to check for hub wear

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Periodically remove the front wheel to check for hub wear

Pay particular attention to the area indicated

To minimise the potential for hub wear:

Thoroughly clean and dry your Gocycle after every ride. See 7.4 Cleaning and preventing corrosion for more information.

- Correctly adjust your PitstopWheel cam levers. Check from time to time that their torque is within the guidelines stated in this manual and that all three on each wheel open and close with equal pressure.

- From time to time, consider moving the rear PitstopWheel to the front and vice-versa. Typically, in normal usage, the rear of a Gocycle will carry more load than the front, thus subjecting the rear hub, wheel and tyre to greater stresses. Periodically swapping the front and rear PitstopWheels will distribute wear more evenly. Note: When swapping the PitstopWheel, ensure that the tyre pressures remain within the guidelines stated in this manual. See 7.10 Tyres for more information.

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7.9.3 Fleet management and Tour Operators

If you operate a fleet of Gocycles that are lent to people who are not accustomed to the Gocycle or are running a tour operating service with the Gocycle as the chosen vehicle we would highly recommend fitting the tamper proof security bolts. This prevents tampering and reduces the chances of novice users from making a mistake when assembling the product that could potentially make it unsafe to ride.

If there is a requirement to fold the Gocycle and remove the wheels during use then the importance of the pre ride checklist must be taught to the operator of the Gocycle. Furthermore, all Gocycles must be PDI'd with cam lever adjustments completed before each and every handover to the tourist/ fleet user.

7.10 Tyres

Gocycle comes fitted as standard with specialised, high-performance tyres designed to give the best combination of low rolling resistance, light weight and puncture resistance. To maximise performance, we do not recommend that you use lower quality tyres than those supplied with Gocycle.

We recommend that you operate Gocycle with tyre pressures of 25–30 psi on the front and 40–50 psi on the rear. This will give the best balance of low rolling resistance and comfort. Running a relatively softer front acts as a "cushioning effect", reducing shock loads to the motor fork components—specifically the clutch and gearbox.

We do not recommend that you inflate the tyres to more than 60 psi. Inflation pressures greater than 60 psi will reduce comfort and the service life of the product.

WARNING! Inflating the front tyre to more than 30 psi places high shock loads into the motor drive system (motor, gearbox and clutch) whilst using the power on acceleration or over rough roads. Just like in a car as you would not accelerate rapidly on very rough roads, do not use motor power when going over potholes or speed bumps or similar obstructions in the road.

Operating the Gocycle with a front tyre pressure greater than 30psi and/or using the motor assistance on rough terrain, against these recommendations, will invalidate the warranty.

Whilst the Gocycle's front and rear PitstopWheel is easily interchangeable, ensure that you place the lower-pressure tyre on the front during assembly.

When changing a tyre, always use plastic tyre levers. Never use a metal tyre lever as you will damage the wheel rim.

Note the correct direction of the tread of the Gocycle tyre in relation to the wheels (see figure below).

In the event that you wish to use a lower performance tyre with increased puncture resistance, you can use any BMX-sized tyre (406x40-47) from 1.75" to 2". Ask a retailer for a recommendation for a suitable alternative.

WARNING! Bicycle tyres do not last forever. When the tread depth is critically low and the centreline grooves in the tyre have worn down in any part of the tyre, it may be dangerous to continue to ride on the tyre, and in this event, we recommend that you replace the tyre.

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Fitting the tyres and tyre tread orientation

7.11 Adjusting the Headset

From time to time it may be necessary to tighten the headset if it becomes loose. This process is explained by the following steps:

Check for loose headset. There should be no play in the steerer assembly.

Remove front wheel and carefully place Gocycle onto a non-slip surface. Grip the handlebars and rock forwards and backwards to check for any fore-aft movement between the handlebar stem fork assembly and the main frame as shown.

The connection of the handlebar stem fork assembly and the front frame should feel solid and only be free to rotate with respect to the main frame.

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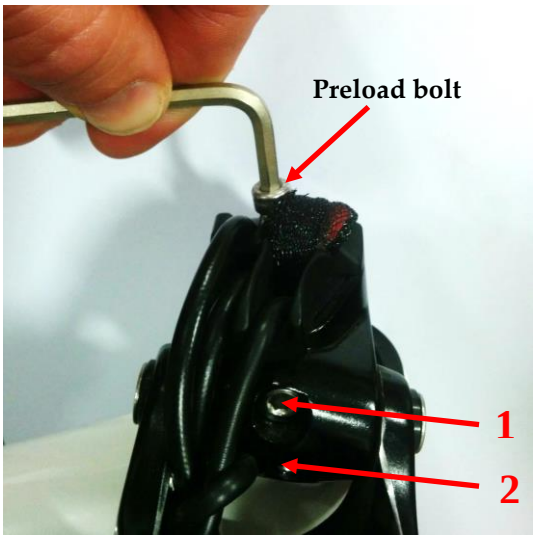
Open the quick release lever

Undo (anticlockwise) and remove the quick release lever

Loosen the top and bottom securing screws

WARNING: Do not exceed 15Nm torque to undo the screws. If screws cannot be removed seek assistance from your nearest authorised Gocycle service centre.



WARNING: Never adjust the preload bolt with grub screw 1 and 2 tight. Screws 1 and 2 must be loose before adjusting the preload bolt. If these cannot be undone seek assistance from your nearest authorised Gocycle service centre.

Ensuring that screws 1 and 2 are loose, adjust the preload bolt until there is no "play" felt in the steerer assembly - maximum 3Nm torque.

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Tighten the top and bottom securing screw to a torque of 8-10Nm.

Repeat this process on the top and bottom screws until a consistent torque is reached.

Insert and tighten the quick release (clockwise)

Close the quick release

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7.12 Adjusting the Stem Quick Release Lever

It is unlikely that you will need to adjust Steam Quick Release Lever, however in the event that you need to replace the lever you will need to adjust the clock nut on the opposite side of the stem adjuster to ensure the quick release lever closes with the correct force.

Undo the clock nut securing bolt using a 2.5mm Allen key

Remove the clock-nut as shown

Install the QR Lever and hold in the closed position, ensuring it is in the correct zone as demonstrated in the below photo.

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Open the QR Lever to 90 degrees and slowly rotate the clock nut until it stops against the handlebar stem lower. Rotate so that one of the holes in the clock nut aligns with the hole in the stem lower to allow the securing bolt to be refitted.

The QR should have roughly 120 degrees of **free play** before it beings to engage. The closing resistance should act over the remaining 60 degrees of movement till it is firmly shut in the correct location.

If it is too loose, rotate the clock-nut clockwise till the next hole aligns with the hole in the stem lower and recheck

Conversely if it is too tight rotate the clock-nut anticlockwise to the next hole and recheck.

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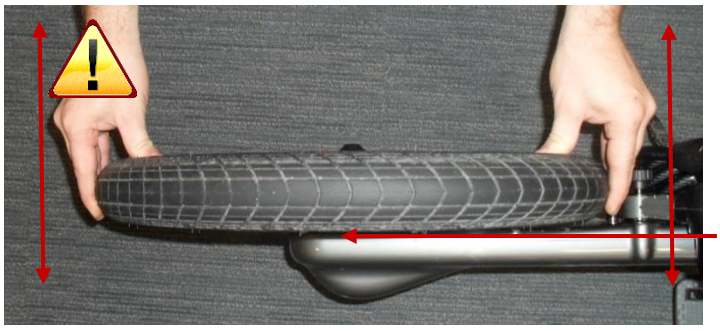
Once adjusted so that the closing resistance acts upon the final 60 degrees of movement in the QR reinstall the securing bolt using a 2.5mm Allen key.

7.13 Adjusting the Bearings on the Rear Hub

It is unlikely that you will need to adjust the bearings on the rear hub. However, in the event that the rear wheel develops play (more than 1mm at the rim) or it feels heavy to pedal (i.e., the hub is too tight), you may need to adjust the bearing cone.

WARNING! Check the hub gear bearing adjustment every 500 miles (800 km) or 6 months. Regular checks will ensure best possible performance for your Gocycle.

Failure to inspect the hub gear bearing adjustment may have serious consequences and could result in serious bodily injury or even death.



To check if adjustment is required, using gentle pressure, move the wheel at the rim side to side.

Some flex in the wheel is normal, but if you feel that the wheel is loose, you will need to adjust the bearing cone as shown below:

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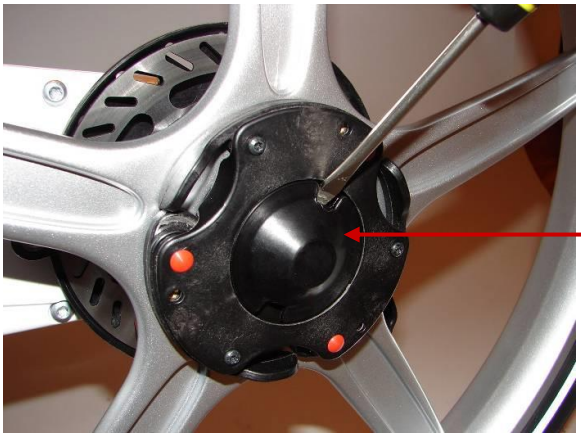
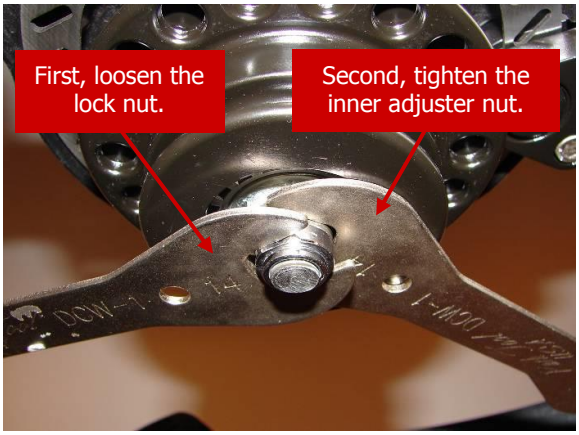


Remove the hub cap

Adjusting the rear hub gear bearing cups



Using (2) 14mm wrenches, adjust the rear hub gear bearing cups

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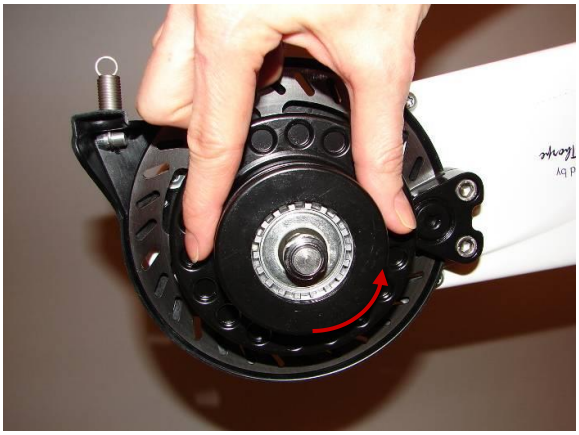
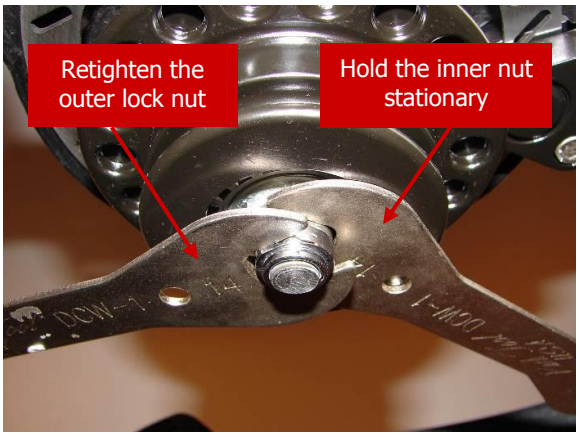


Between adjustments, check that the rear hub rotates in the freewheel direction. The bearing cup nuts should be tightened until the wheel does not have more than 1mm of "free" play at the rim, and the wheel is able to rotate freely. This is a matter of compromise and feel. If in doubt, consult Gocycle Tech Support for advice.



Retighten the outer lock nut. Note: after tightening the outer lock nut, the hub may need re-adjusting due to the nature of the tightening process. You may need to repeat this process until you have the desired freeness of rotation and minimal lateral play at the rim.

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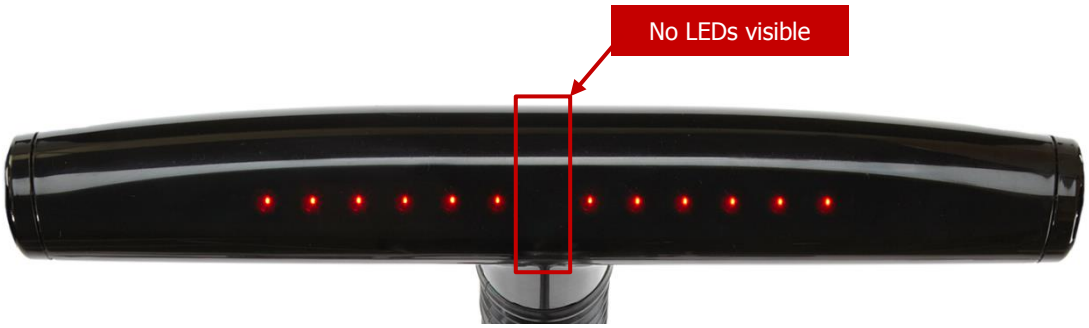
8 TROUBLESHOOTING

8.1 Unknown Gear State: Gears Will Not Shift

Symptom: No gear shift LEDs are visible on the dashboard display and it is not possible to shift between gears. The gears remain in the last selected gear.



Resolution: To return to normal shifting, stop riding and remain stationary for up to 5 seconds with both brakes applied. The Gocycle will reset to first gear and the gear shift LEDs will return to the dashboard.

8.2 Gears Will Not Shift Down Automatically

Symptom: Whilst decelerating, the gears are not shifting down automatically. Only when completely stopped does the Gocycle shift to first gear.

Resolution: Check that Predictive Shifting is ON. See 6.2.1Turning Predictive Shifting ON/OFF for more information.

Resolution: First confirm that Predictive Shifting is ON. The gear will only change automatically when decelerating from a speed greater than that at which the predictive shift is programmed to change (e.g., from 3rd gear to 2nd gear at speed 7 LEDs and from 2nd gear to 1st gear at speed 3 LEDs). If you shift to 3rd gear, but remain below speed 7 LEDs, when decelerating the shifting will not be automatic. Shift down manually by double-clicking the gear shift button, as you would with a computer mouse.

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8.3 Diagnosis Modes

Your Gocycle is pre-programmed with a number of modes to assist in fault diagnosis, should an issue occur. Should an issue arise, a Gocycle technical support executive may request you to perform a number of checks in an attempt to properly diagnose a problem. The following section is for reference.

Reminder! To select a mode, press and hold buttons A and B until all LEDs flash, then release both buttons. The mode will then be shown on the dashboard display (C). Click button B repeatedly until you reach the number of LEDs which represent your desired mode (C). To save the mode, press and hold button A until LEDs flash and then release the button.

8.3.1 Pedal and Wheel Sensor Physical Check

To check the sensors:

Select *Pedal and Wheel Sensor Physical Check*, mode 12.

Rotate the rear wheel.

When movement of the rear wheel is detected, one LED will light on the right-hand side of the dashboard display.

Note: When functioning correctly, in a full rotation of the rear wheel, the LED will flash four times.

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Now rotate the pedal cranks in a backwards direction, as shown.

When movement of the pedal cranks is detected, two LEDs will light on the left hand side of the dashboard display.

Note: When functioning correctly, in a full rotation of the pedal cranks, the two LEDs will flash eight times.

Exit by pressing and holding buttons **A** and **B**—the riding mode will flash to confirm exit.

Mode	Pedal and Wheel Sensor Physical Check
LED Mode Display	12
Mode Description	Checks the operation of the pedal and wheel sensors

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8.3.2 Motor Check

To check operation of red power button and motor:

Select *Motor Check*, mode 13.

Lift the front wheel so that is it off the ground.

Press red power button (**A**) to initiate the motor.

Note: In some cases you may have to repeatedly press and hold the power button to get the motor to drive continuously.

CAUTION! The motor will operate when the red power button is pressed.

Exit by pressing and holding buttons **A** and **B**—the riding mode will flash to confirm exit.

Mode	Motor Check
LED Mode Display	13
Mode Description	Checks the operation of the motor

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8.3.3 Pedal Torque Sensor Present Check

To check the presence and operation of the pedal torque sensor:

Select *Pedal Torque Sensor Present Check*, mode 14.

With both brakes held, apply pressure to the left hand (non-drive side) pedal crank.

When pressure is applied to the left-hand (non-drive side) pedal crank, the level of force detected will be represented on the dashboard display—applying greater pressure will turn off more LEDs.

Exit by pressing and holding buttons **A** and **B**—the riding mode will flash to confirm exit.

Mode	Pedal Torque Sensor Present Check
LED Mode Display	14
Mode Description	Checks for the presence and operation of torque sensor

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8.3.4 Pedal and Wheel Sensor Ratio Check

Follow the next steps to check function of the wheel and pedal sensors in all gears:

Place the Gocycle in a cycle stand, so the rear wheel and pedal cranks are free to turn.

Select *Pedal and Wheel Sensor Ratio Check*, mode 16.

One LED will flash to confirm that the Gocycle is ready for the test to begin.

Whilst applying light braking pressure to the rear brake, pedal forward at a recommended 40–60 rpm (revolutions per minute).

The Gocycle will automatically shift up from 1st to 2nd gear and from 2nd to 3rd gear.

Continue to rotate the pedals at a constant 40–60 rpm *for 25 complete* revolutions.

The results of the test will then be displayed on the dashboard display. You may be asked to report these to a technical support executive.

Exit by pressing and holding buttons **A** and **B**—the riding mode will flash to confirm exit.

Mode	Pedal and Wheel Sensor Ratio Check
LED Mode Display	16
Mode Description	Checks the operation of the pedal and wheel sensors in all gears

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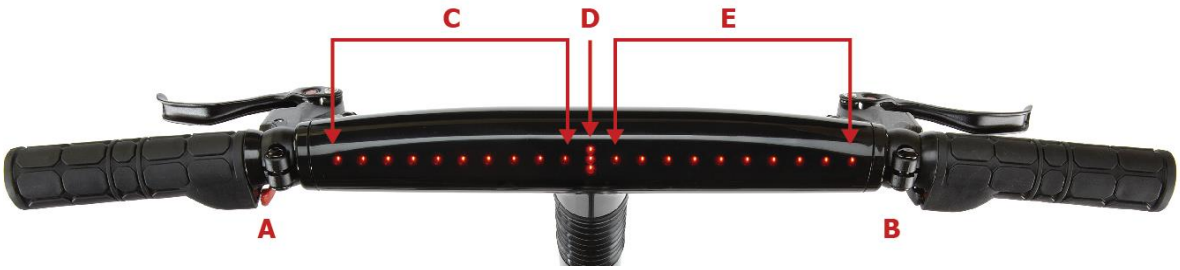
8.4 LED Reference Tables



8.4.1 Dashboard Display

C	D	E
Battery Charge Level (Displayed when motor is OFF)	Gear Selection	Speed
Energy Consumption Meter (Displayed when motor is ON)	Gear Selection	Speed

8.4.2 Energy Consumption Meter

More LEDS	Greater consumption
Less LEDS	More economical

8.4.3 Battery Charge Level

10–2 LEDs	Full power	Motor will operate at full power
1 FLASHING LED	Power Save Mode	Motor will operate at reduced power. See 6.3.2.5 Power Save.
0 LED		Motor will not operate

8.4.4 Speed

See 6.3.1 Riding Modes Reference Table for more information.

When over-temperature protection is in effect, the speed LEDs (E) will flash and the power will gradually be reduced to prevent damage to these components. When the temperature of the motor and/or controller has cooled adequately, the speed LEDs will cease to flash and full power will again be available. See 6.6 Heat and Over-Temperature Protection for more details.

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9 CONTACT INFORMATION

Gocycle is a product of Karbon Kinetics Limited, a UK-registered company.

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