



# Briike User Manual



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Spinal Life  
Healthy Living Centre





## About the Brike

The Brike is a three wheeled, battery power assist, pedal cycle for transporting the rider and a passenger in a wheelchair, or a fixed seat.

The Brike has been designed with a very comfortable upright riding position for great vision and a relaxed feel. The seated passenger is in a lower, up-front position for an exhilarating 'wind in your face' cycling experience.

The rider's pedal input is enhanced by the drive unit, which adds up to 95 Nm of torque. This allows the rider to maintain a comfortable speed, delivering an enjoyable riding experience for both the rider and passenger. The drive unit is matched with Shimano's robust 5 speed internal rear hub and 700C rear wheel and tyre. The front wheels have heavy duty 20inch rims and tyres with 20mm front axles to ensure a solid feel.

Dual Tektro disc brakes on the front and a Shimano disc brake on the rear provide exceptional stopping performance, for safety and control.

The wheelchair loading is via a unique, rear loading fold down ramps for a secure loading experience. The wheelchair tie-down strap and lap seat belt are the same as used to secure wheelchairs within vehicles, providing added passenger security and safety.

This overall Brike package enables both rider and passenger to experience the freedom and joy of cycling together.

## General Specifications

Designed and manufactured in Australia

Designed to the applicable requirements of the following relevant Australian standards: (noting that there is not an Australian Standard directly applicable to a three wheeled, two person eBike)

- AS1927:2010 (bicycle standard)
- AS15194:2016 (eBike standard)

Warranty – 12 months on faulty parts or workmanship

Refer to the eDrive unit owner's manual for specific information

## Dimensions

Dimension	Wheelchair version	Rickshaw version
Length	2400mm	2400mm
Height	1150mm	1300mm
Width	1060mm	900mm
Mass	70kg	70kg

## Usage Specification

Rider and passenger combined mass: 200kg, passenger mass includes the mass of the wheelchair where applicable.

Speed: 20kph max - power assist cuts out over 20kph

Designed to be ridden on sealed roads and bike paths. Not designed for off-road applications.

## Component Specification

eDrive power assist drive unit

- 250 Watt power assist
- Five power settings selectable from the handlebar mounted control unit
- 95Nm torque up to 20kph
- 540Watt hour rechargeable battery
- Shimano 5 speed internal hub gears
- 700C rear wheel
- 20" heavy duty front wheels and tyres with heavy duty 20mm front axles
- LED rear light
- Tektro lockable dual front disc brakes
- Shimano hydraulic rear disc brake
- Australian precision-made steel frame

## Brike Operation

### Battery charging:

- A battery charger is supplied with the Brike that plugs into 240V power outlet
- The battery can be charged on the Brike, or removed from the Brike for charging
- Battery range is dependent on the level of power assist, terrain, and load carried.

### Preparation for riding:

- Adjust the seating position so that the rider's feet can touch the ground when seated.
- The quick release lever swings backward to open and forward to close



**Warning: Ensure that the seat post is inserted past the minimum insertion marks.**

- Inflate tyres to the maximum pressure as indicated on the side of the tyres
- Check all components are functioning as expected and securely fastened

## Riding:

**Warning:** Remain seated when riding and turn carefully.

Tricycles, including the Brike can tip when cornering. Remaining seated and slowing for corners will reduce the chance of the Brike tipping over.

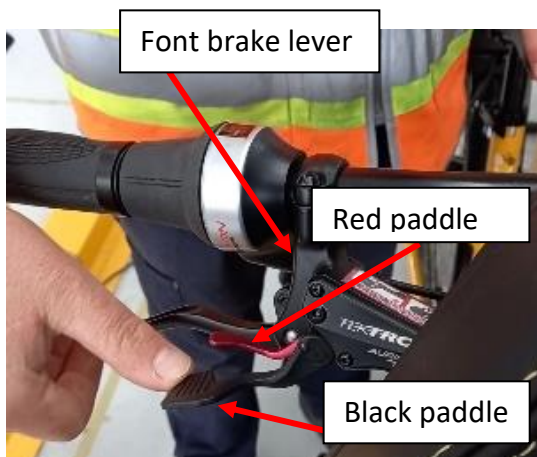
**Warning:** Ensure that there are no loose items hanging that could catch in the wheels or chain.

## General:

- It is important to only ride within your capabilities
- Slow for speed bumps, gutters and other hazards for passenger and rider comfort
- Be mindful of the overall width and turning circle when riding

## Brakes:

- The righthand brake lever operates the brakes on both front wheels simultaneously
- The lefthand side brake lever operates the brake on the rear wheel
- Avoid skidding the tyres when stopping to maintain safe control and limit tyre wear
- Warning, increased braking distance is required in wet weather and on loose or slippery surfaces



**To engage the lock** – push the black paddle down, and then squeeze the brake lever.

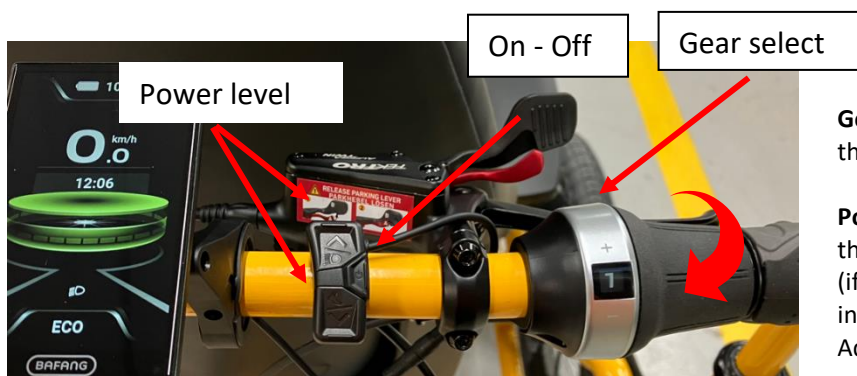
**To disengage** – push the red paddle down, then pull back the black and red paddles together.

## Gears:

- The rear hub gears are selected by the rotary handlebar grip on the righthand side – 1<sup>st</sup> gear is the lowest through to 5<sup>th</sup> gear.
- For the best riding experience start in the lowest gear (1), Adjust the gears to match the travelling speed when in motion and return to the lowest gear as you slow to a stop

## Power assist:

- The centrally mounted drive unit boosts the pedalling power of the rider.
- The level of boost is selected through the handle-bar mounted control unit
- Adjust the boost setting to suit your riding conditions
- Lower assistance will deliver the longest battery life whilst



**Gear select** – rotate the handgrip to change the gears.

**Power level** – activate by pressing and holding the on-off button.

(if no response – check that the battery switch is on)

Adjust with the up and down buttons.

## Passenger loading preparation (wheelchair)

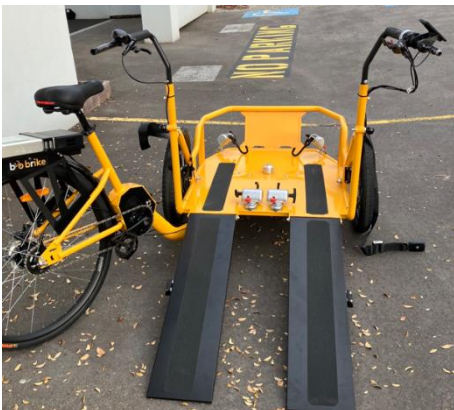
- A. Swing the rear of the Brike to one side and lock the front brake



- B. Unlock the handlebars and swing open
- C. Lower the ramps

## Passenger loading & securing (wheelchair)

- A. With one person on each side, roll the wheelchair up the ramp



- B. Lock the wheelchair wheels and use the tie downs to secure the wheelchair to the Brike
- C. Raise the ramps and lock in (the wheelchair position may need to be adjusted to enable the ramps to latch in position)
- D. Swing the handlebars into their closed positions and secure with the latch
- E. Fasten the seat belt around the occupant

## Passenger unloading (wheelchair):

To unload the wheelchair, complete the above steps in reverse order, taking care to control the wheelchair when unloading down the ramp.

## Brike Maintenance:

**Warning: The handlebar grips should be replaced if damaged, as bare tube ends have been known to cause injury. It is particularly important that they are checked regularly to ensure adequate protection for the ends of the handlebars are in place.**

- It is recommended that any significant mechanical repairs should be carried out by a skilled bicycle mechanic
- The brake systems are sealed hydraulic units – for brake maintenance refer to a skilled bicycle mechanic
- Lubricants are commonly available at most bicycle stores. It is recommended to use the following:
  - Grease – Only use grease expressly approved for bicycle chains
  - Chain lubricant – Only use lubricants expressly approved for bicycle chains
  - Brake fluid – Mineral brake fluid is required, suitable for Shimano or Tekro brake systems

## Service Schedule


500km / 6 monthly service inspection

1. Check fasteners are secure (tighten if required)
2. Check that the chain moves freely (clean and oil if required)
3. Check tyres are in good condition and inflated to max level (replace/inflate if required)
4. Check wear of brake pads and brake discs (replace if required)
5. Check spokes are tight and wheels true (tighten if required)
6. Check seat belt and tie down strap are free from damage/wear (replace if required)
7. Check the frame for cracks / deformation (replace / repair if required)
8. Check Brike overall for signs of damage

## Brike Service inspection items

Item	Requirement
<b>Front Wheels (RH &amp; LH)</b>	
Wheels true	+/- 2mm side to side and up and down
Spokes correctly tensioned	even tension - minimal deflection
Brake disc screws tight	brake disc screws tight
Brake disc	disc wear minimal - brake disc true and not damaged
Brake pad	brake pad wear minimal - brakes able to lock wheels
Brake calliper	aligned - no or minimal rubbing on disc
Brake calliper bolts	tightened to 8 - 10 Nm
Tyre	minimal wear, tread visible, no cracking or flat spots - valve cap in place
Front wheel hub	ensure rotating freely
Axle	tightened to 40 - 45 Nm
Reflectors	in place
Steering rods	bolts fastened and no sign of wear at wheel end and frame pivot end. Free from wear/ damage
Steering knuckles	free from wear or damage
Front brake - fluid level	check performance, bleed if required
Front brake lines	ensure free from damage and secured to steering rods and frame
<b>Wheels - Rear</b>	
Wheels true	+/- 2mm side to side and up and down
Spokes correctly tensioned	even tension - minimal deflection
Brake disc lock ring tight	tightened to 25-30Nm
Brake disc	disc wear minimal, brake disc true and not damaged
Brake pad	brake pad wear minimal
Brake calliper	aligned - no rubbing on disc
Brake calliper bolts	tightened to 8 - 10 Nm
Tyre	minimal wear, tread visible, no cracking or flat spots - valve cap in place
Rear wheel alignment	wheel centred in rear frame
Chain tension	not too tight - not too loose
Rear wheel hub	ensure rotating freely
Axle nuts	tightened to 35 - 40 Nm
Reflectors	in place

<b>Other</b>	
Carriers bolts/nuts tight	securely fastened
Rear sensor cable screw tight	securely fastened
Drive unit cover screws tight	securely fastened
Pedals tight	securely fastened
Crank bolts tight	tightened to 45-50Nm
Crank lock ring tight	tightened to 25-30Nm
Drive unit screws tight	tightened to 9-11Nm
Drive unit bolts tight	tightened to 25-30Nm
Electrical cables connected securely	confirm seated
Gear cable	cable in good condition - operational through full range of gears
Retractor bolt / nut tight	tightened to 15-20Nm
Centre pivot clamp screws tight	ensure centre pivot screw is torqued first, then clamp torqued.
Handlebar clamps	tightened to 20-30Nm
Handlebar items	aligned to suit riding position and tightened
Seat	straight and set to suit riding position and tightened
Seat pillar clamp	tightened to 5-7Nm
Seat clamp nuts	tightened to 5-7Nm
Tyre pressure	tyres inflated to requirement
Cable routing	cables free from damage and secure
Ramp hardware	attachments secure
Ramp / Footrest	free from damage, functional, bolts fastened 5 - 7Nm
Ramp latches	ramp latching functional
Passenger seat (Rickshaw)	Bolts fastened 15-20Nm
<b>Dynamic assessment</b>	
Test ride	steering OK
Test ride	gears OK
Test ride	front brakes
Test ride	rear brakes
Test ride	Edrive unit active
Test ride	robust check
Appearance	damage or wear and tear - no scratches or dirt



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