

Non-Standard Cycles

As each individual with a disability has their own strengths and weaknesses, there are a wide range of non-standard cycles and adaptive equipment available to meet as many requirements as possible.

Leg powered cycles cater for people with limited upper body strength, but have partial or full use of lower limbs.

1. Tricycle

Tricycles have 3 wheels and offer an additional level of stability compared to regular two-wheel cycles. Tricycles are commonly used by people who have trouble with balance and are also useful for some people with intellectual disabilities. As a leg powered cycle, the tricycle caters for people with limited upper body strength, but have partial or full use of lower limbs.

Tricycles can be fitted with foot plates to assist riders in rotating the pedals.

Tricycles are available in upright or horizontal sitting positions.



2. Tandem

Tandem cycles are leg powered cycles, designed for two people to ride together and can be configured with either one rider in the front of the other or side by side.

Tandem bikes are useful for people who are blind or vision impaired.



3. E-cycles

Electrical assisted bicycles assist riders to cycle longer distances in greater comfort by reducing the physical effort required. Standard and non-standard cycles can be retrofitted with E-assist attachments.

4. Handcycles

The pedals on a handcycle are moved by the rider's hands which power and steer the bike. Most handcycles have 3 wheels (some have 4 wheels) and are often used by people with little to no body mobility.

Off-road handcycles are often used for adaptive mountain bike riding on off-road terrain. Choice of off-road mountain bike is dependent on the rider's strength, balance and ability, choice of off-road trails to be cycled, preferred riding style and cost.

- a) Recumbent Handcycle
- b) Kneeling Handcycle
- c) Gravity Quad bike

<https://breaktheboundary.com/resources-services/equipment-explained/>
refer to this website for details.

5. Recumbent cycles

Recumbent cycling position may place less stress on the riders back, knees and hip joints. They are available in 2-wheel or 3-wheel versions.

6. Wheelchair tandem

Wheelchair tandems ensure that participation in cycling activity is available is available to everyone, including people who may not have the required strength or control or confidence to cycle independently.



References:

We Love Cycling. 2018. What you need to know about inclusive cycling for anyone with a disability

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