



CYCLING FACT SHEET No. 89

Quick-release wheels save time

Quick release wheels use a lever-operated cam system with a hollow axle that enables removal from the forks in seconds without the need for tools.

The mechanism was invented by Italian Tullio Campagnolo in 1927, after having to forfeit a race when he was unable to loosen the wing nuts on his front wheel to repair a puncture.

Quick-release wheels make life easier for cyclists, but they must be used correctly to ensure rider safety. The lever part of the mechanism should always be on the left side of the bike.

A common mistake by novices is to turn the lever like a nut in order to tighten the wheel. In actual fact, the lever should be moved more like a swinging door and usually has the words OPEN and CLOSED stamped on either side to indicate its current position.

The steps for removing a quick-release front wheel are:

1. Disconnect the brake cable so that the blocks separate, or deflate the tyre. This will make it easier to remove the wheel.
2. Pull the quick-release lever outwards. The word OPEN should be visible.
3. Loosen the nut on the opposite side to the lever slightly by hand.
4. Lift out the wheel.

The steps for replacing a quick-release front wheel are:

1. Position the wheel so that it sits snugly in the fork slots (drop-outs).
2. Tighten the nut on the opposite side to the lever by hand.
3. Push the quick-release lever inwards. This should require a firm press and the word CLOSED will be visible.
4. Reconnect the brake cable and make sure the blocks are lined up correctly with the rim.



The procedure for removing a quick-release rear wheel is the same, except that the bike should be in a gear that places the chain on the smallest rear cog. Similarly when replacing the rear wheel, you start by resting the chain on top of the smallest rear cog.

Using a stand to hold the frame will make it easier to work on the bicycle. Lubricate the quick-release mechanism once a month to keep in good order.

Most quick-release wheels with disk brakes use the same removal and replacement procedure as cable brakes. However, if you encounter a problem, check with your local bike shop for advice.

This fact sheet is one of a series dealing with the use of bicycles for recreation and transport in Western Australia. The series looks at a range of cycling-related topics including ride routes, touring tips, maintenance, safety, road rules, insurance and product reviews. It is not to be construed as the provision of legal advice or advice about insurance products.

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