Government of **Western Australia**
Department of **Transport**

cycle instead

CYCLING FACT SHEET No. 48

Clipless pedals produce a better pedalling action

While ordinary sneakers are fine for a quick trip down to the local shop, anything longer and you really need to start thinking about buying some proper cycling shoes.

They are made with a stiffer sole than normal shoes and this helps spread the pressure from the pedal over a much larger area of the foot, creating a more comfortable ride.

Cycling shoes come in two main types – those designed for the traditional platform pedals, and those with a cleat on the sole that connects directly to a spring-loaded mechanism built into the pedal tread.

This latter type keeps the foot in constant contact with the pedal allowing the rider to pull up as well as push down on each rotation, thereby transferring more of their riding effort to the rear wheel.

A quick-release version of these so-called “clipless” pedals, was introduced in the 1980s using technology originally developed for downhill snow skiing.

The confusing name comes from the fact that earlier systems used a cumbersome metal toe cage or clip to keep the foot secured to the pedal. The clipless pedal did away with the need for this toe clip.

Today, they come in a wide variety of styles suitable for both road and mountain bike riding. Mountain bike clipless pedals are usually dual-sided so that the rider can clip into either side of the pedal – handy on rough tracks when you don’t want to be trying to find the side of the pedal with the clip.

The shoes designed for use with clipless pedals have a cleat embedded in the sole that enables the ride to quickly engage or disengage.

Most clipless pedal systems sold in Western Australia are disengaged by simply twisting your heel outwards.

Riders using these pedals and shoes for the first time may experience a few initial problems.

The physical act of clipping in and out of the pedal can take some getting used to, although the spring tension on most systems can be adjusted to make it easier.

Some riders experience sore knees when they first go clipless and this is often caused by using a system that permits too limited amount of sideways foot rotation on the pedal – called “float”. The more float that a system allows before the shoe becomes disengaged, the less stress is placed on the knee joint.

It used to be almost impossible to walk anymore than a few metres in shoes made for clipless pedals because the cleat was raised above the sole. However, more recent designs have the cleat recessed into the sole and you no longer see riders having to waddle like a duck into a shop or café.

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. You can find more cycling fact sheets online at www.transport.wa.gov.au/cycling

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