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GROUPTEST

CYCLING JOURNALIST **STEVE WORLAND** REVIEWS CLIPLESS PEDALS

'Off-road' pedals

In our second article on clipless pedal systems, cycling journalist **Steve Worland** looks at recessed-cleat pedals – for mountain biking, touring, commuting and more

SHIMANO

WHEN THE FIRST SPD (Shimano Pedalling Dynamics) pedals were introduced to mountain bikers in 1990, off-road pedal choice had been fairly evenly split between BMX-style and double-sided touring-style pedals fitted with toe clips and straps. Shimano's new pedals instantly became known as 'clipless', as they had no toe clips or straps.

Mountain bikers and cyclo-cross racers quickly embraced the idea of being securely attached to clipless pedals, but it took a while for Shimano's SPD pedals and shoes (followed closely by a handful of rivals) to gain general favour with more leisurely riders. 'Mountain bike' pedals are the best clipless choice for anyone who also needs to walk in their bike shoes, such as tourers and commuters. Two-bolt 'MTB' cleats will fit on many road bike shoes too.

1 Entry & exit

Clicking in or out is a quicklylearned process that very soon becomes second nature. In most cases, releasing the cleat in your shoe's sole from the pedal is achieved with a heel twist, in either direction. Shimano's 'Multi-release' shoe cleats also allow you to pull out vertically, which is good for clipless novices, and Shimano have just announced a new easier-release pedal option.

2 Cleat position

MTB type clipless shoes have a two-bolt cleat-fix system set into a recess in the shoe sole. Most riders initially fit the cleat straight and central in the fitting area then finetune the position to suit pedalling style. The cleat clicks into the pedal's sprung mechanical retention system as you push the shoe down, and in some cases slightly forward, with a natural step-on feel.

3 Spring tension

Spring tension on most pedals is adjustable. You can opt for a more or less secure feel and an easier or more difficult release. Some riders prefer to feel securely attached for sprinting, climbing and bumpy terrain, others prefer an easier release. An extra tip for easier release is to make sure the pedals and cleats are clean and lightly lubricated.

4 Float

The pedal spring retention force is usually independent of the release angle but some pedals offer more 'float' than others: this allows the shoe to swivel a few degrees before it releases from the pedal. A lot of riders find that having a few degrees of float can help dodgy knees.

5 Sole stiffness

Pedalling efficiency gets a notable boost when stiffsoled bike-specific shoes are attached to the pedals. It's easy to understand why spring loaded pedals and cleated shoes have become so popular for all types of riding.

6 Recessed cleat

The big difference between roadspecific clipless pedals (tested in the last issue) and MTB/generaluse clipless pedals is that these are designed for use with recessed cleats. So while the shoes still come in all manner of shapes, stiffnesses and other performance attributes, they are all much easier to walk in that road-specific shoes.



SHIMANO M785 XT TRAIL SPD £79.99

There are lots of double sided pedals that are compatible with Shimano SPD cleats. Prices reflect both construction quality and weight, and weights reflect the materials used as well as the size of the cage around the central part of the pedal. At the price peak of the SPD-compatible market are the likes of Ritchey V4 'Titanium' pedals, weighing in at about 250g a pair, or Shimano's 310g top-end XTR model. With SPDs, Shimano's comprehensive range wins out at every price point in terms of durability combined with price. At £34.99, the 375g M520 would be our recommended pick of the mid range crop. If price is less crucial to you, we'd recommend the 390g M785 XT Trail pictured: it has the advantages of basic SPDs plus a tough cage/platform around the pedal centre that some riders prefer for the extra shoe support it provides. For those who prefer a soft release we'd recommend Shimano's 'Multi-release' cleats, which disengage when you roll or twist the shoe in any direction. **madison.co.uk**

Deservedly popular, with lots of model options and lots of tension adjustment

LOCKED IN?

The idea of not being able to disengage instantly from pedals is initially scary. But clipless pedals are, for most riders, no more scary than going from flat pedals to toe clips and straps. That said, different types of pedals do require different amounts of force to engage or disengage. Lighter and weaker riders may be best served by Shimano SPDs, which can be set to release very easily.



CRANK BROTHERS CANDY 2 £69.99

Crank Brothers' basic minimalist 'Eggbeater' pedals have four entry points for the shoe cleat. As with SPD pedals, entry and exit is easy once you've done a couple of rides to get used to the feel. The cleat is like Shimano's SPD cleats but the two are not compatible. The Candy adds a tough resin cage/platform to the basic Eggbeater without a big weight increase: the Eggbeater version of the 315g Candy 2 tips scales at about 35g less. We like the caged version because it adds extra support to the soles of the more casual recessed-cleat shoes. You can achieve most of that support with very stiff soled shoes aimed at competitive MTB riders, but very stiff soled shoes are often more expensive and are not as comfy for off the bike use. Candys appeal to riders who want low weight and more free-float than SPDs on the pedal/shoe interface. Servicing is easy but spring tension is not adjustable. Bearing durability is better than it used to be but is still not great for riders who use them in poor conditions. **2pure.co.uk**

A good choice if you like a lighter attachment feel and a little side to side 'float'

TIME ROC ATAC £51.99

Time's ATAC pedals have been around for long enough to build an excellent reputation for durability. They're also popular with riders looking for more free-float, both lateral and angular, than Shimano SPDs. While ROC ATACs might be overkill in their build for most road riders, the non-adjustable low spring tension and easy-to-access retention bars have proven very popular with a lot of riders, especially those who suffer from knee problems. Some MTB riders have found that the retention bars can be easily damaged on rock strikes but obviously that's not an issue for road use. The ROC's wide resin body offers a bigger shoe platform than basic SPDs or Eggbeaters and they're more reliable than anything else out there if you're on and off the bike and get mud on your cleats. The versions we tested weigh 380g but you can spend more on low weight versions if you feel the need. **chickencycles.co.uk**

A simple, durable, mud-shedding option for riders wanting a stable platform and generous float



Bebop cleats hold the retention spring instead of the pedal



BEBOP £74.99

Like Speedplay pedals, Bebops are a departure from the norm in that the cleats hold the retention spring instead of the pedals. In normal road riding conditions they're great very easy to click into and twist out of, with a free float feel that some love, some hate. The cheapest chromoly steel spindled models tested here weigh 213g a pair, plus 75g for the cleats, which is about 25g heavier than most SPD cleats. The lighter stainless steel spindle models and much lighter titanium spindle versions cost a lot more. All are easy to service, with tough needle and ball sealed cartridge bearings, push-down entry and twisteither-way release. Downsides? The low stack height means you usually need to trim part of raised grip soles for axle clearance, making cleat set-up more fiddly than usual, and they're prone to mud blockage if you plan to use them off road. Long term durability is good and you can fit the cleats to road-specific shoes as well as SPD-style shoes. **eurobike.uk.com**

Lightweight and minimalist but fitting the cleats can be fiddly in some shoes