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GROUPTEST

CYCLING JOURNALIST MATT BRETT REVIEWS CLIPLESS PEDALS

Road pedals

In the first of two articles on clipless pedal systems, cycling journalist **Mat Brett** examines the roadie's favourite: raised-cleat road pedals

clipless is the somewhat confusing name that got stuck on modern clip-in pedals to distinguish them from pedals with (toe) clips and straps. While traditional quill pedals also used a shoe plate, modern cleats are quite different: they engage more like ski bindings, and the foot can be released by twisting the heel outwards. Toe clips are not required to hold the foot on the pedal – hence clipless. The first clipless pedals had a raised cleat on the bottom of the shoe. Road pedals still do.

1 Clipless mechanism

The clipless mechanism – the part that attaches the cleat to the pedal – is usually a spring-loaded hinge on the pedal, although in the case of Speedplay the mechanism is on the cleat. Some pedals, such as the Look and Shimano models featured here, come with tension adjustment so you can alter the amount of force needed to release the cleat. It's simply a matter of turning an Allen bolt. If you're getting used to clipless pedals for the first time, you'll probably want to set it so that you can free your foot as easily as possible

2 Float

Float refers to the amount you can move your foot while the cleat remains attached to the pedal. With most pedal systems you can get cleats that allow you to alter the angle of your foot a certain amount through the pedal stroke, and other cleats that fix your foot position. Some systems, notably Time's, also allow a degree of side-to-side movement (i.e. along the pedal axle). Most people prefer to have some float for a more natural pedalling action and the avoidance of injury. With Speedplay's pedal system you can customise the float.

5 Pedal body

Manufacturers use various materials for the pedal body – the Shimano pedal here is alloy, for example, while the Look is composite – although they're all fairly durable. With some pedals, when the pedal body becomes worn, there's nothing you can do about it, but the Shimano pedal featured (on the right) comes with a steel plate across the centre that is designed to be replaced when it becomes worn.

4 Bearings

Most pedals spin on bearings that are very well sealed so you rarely, if ever, need to open them up for maintenance. The Speedplays do require re-greasing every few months, but it's just a matter of unscrewing the end cap and pumping fresh grease in. With any pedals, the bearings will eventually wear out. They're usually replaceable, though not in the case of the Time pedals featured here.

5 Cleats

The cleats bolt to the bottom of your shoes and provide the anchoring point with your pedals. Most roadpedal systems (Look, Shimano and Time, for example) use the same three-bolt pattern for attaching cleats; nearly all road shoes are compatible although the cleats themselves are not interchangeable. Mountain bike and shoes use a two-bolt cleat-mounting system and the cleats are recessed into the sole, so you can't fit road cleats — although MTB cleats usually fit road shoes.

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The two carbon fibre Cannondales tested this issue are just the kind of bikes for pedals like these.



LOOK KEO CLASSIC £69.99

These lightweight pedals (334g, including cleats and fittings) come with composite bodies that are more durable than they look. They might pick up the odd scuff but theyll carry on working fine for ages. A simple Allen bolt adjusts the spring tension (from 8-12NM); you can set them to hold onto your cleat firmly or to allow easy release, whichever you prefer. Clipping in comes with a positive click so you're never in any doubt whether your cleat is engaged, while twisting out is equally distinct. The body spins on two mini roller bearings and a needle bearing and it's easy to remove the axle, without any special tools, if anything needs replacing. The standard grey cleats that come with the pedals give you 4.5° of float, although you can opt for either 9° or fixed if you like. Rubbery sections on the bottom of the cleats help keep you upright when walking; these eventually wear out or come away with use. A new pair of cleats will set you back £19.99. Look Keo pedals cost from £54.99 to £274.99 per pair. **fisheroutdoor.co.uk**

A solid, reliable design with easily adjusted spring tension





The advantage of raised road cleats is that they allows a bigger interface between the shoe and pedal, which is stiffer and more stable. Sports cyclists appreciate this. The obvious disadvantage is that walking is impractical. While some form of antislip component on the cleats will help you stay upright when walking to and from your bike, if you plan to walk more than a few steps (e.g. for touring, mountain biking or perhaps commuting) you want recessed-cleat pedals. We'll be looking at those next issue.



SHIMANO SPD-SL PD-5700 £59.99

Shimano's 105-level pedals aren't the lightest option (392g, including cleats and fittings) but they're a high-quality choice. The alloy body is tough and a stainless steel plate across the centre provides more durability. Even if you wear that plate down, it's replaceable so you don't need to buy new pedals. The large platform size, particularly the generous width, reduces pressure and provides lots of stability as you pedal. Engagement and release are both snappy and you can easily adjust the spring tension of the binding with an Allen key. Little indicators on the back of each pedal mean it's simple to set them evenly. The pedals turn on two ball bearings that are well sealed away so they require very little maintenance. If you do need to remove the axle, you'll have to get a special tool, but it costs just £1.99. Shimano's cleats offer 3* of float in each direction although a fixed version is available too. Replacement cleats cost £19.99 a pair. Shimano SPD-SL pedals cost from £39.99 to £219.99 per pair. madison.co.uk

A tough, high-quality option that offers lots of stability



TIME RXS FIRST £59.99

You get a generous amount of float with these pedals (340g, including cleats and fittings), making them a good option if you have joint problems with more restrictive designs. You can move your feet a small amount (2.5mm) laterally while remaining clipped in and angle them up to 5° in either direction. The composite body doesn't guide the cleat in quite as well as either the Look or Shimano design if your foot-angle is wildly off, but as long as you're there or thereabouts clipping in is easy enough and the wide release angle means you'll never unclip accidentally. Although the cleats have what Time call 'non-skid stabilizers', they can be quite slippery on wet roads, so keep walking to a minimum. The bearings are waterproof, the cap over the top of them being bonded in place, but they can't be replaced if you wear them out. On the plus side, that means that aside from occasionally cleaning the pedals, there's no maintenance to worry about. New cleats cost £19.99. Time RXS pedals cost from £59.99 to £134.99 per pair. chickencycles.co.uk

Maintenance-free pedals that come with a generous helping of float



SPEEDPLAY ZERO CHROMOLY £109.99

Speedplays are unusual in that the retention mechanism is on the multi-part cleat rather than on the pedal. That means the pedal body can be much smaller than usual so you get loads of cornering clearance without any loss of stability. The body is dual-sided too, so you never have to flick it over to clip in. The cleats fix to your shoes with four bolts rather than three so, unless you have Speedplay-specific soles, you need to use the adaptors that come with your pedals (the total weight is 342g with the adaptors, 304g without). It's a more complicated process than normal but you can customize the float from fixed up to a maximum of 15°. Many people love Speedplays for that freedom of movement. At £39.99, replacement cleats are double the price of those from the other brands here although the metal bottom plate ensures that durability is good. You need to keep the cleats lubricated and pump fresh grease into the bearings every few months. Speedplay Zero pedals cost from £109.99 to £299.99 per pair. **i-ride.co.uk**

Double-sided pedals with loads of cornering clearance and adjustable