

From left to right: After cleaning and drying the tyre and tube, invert the tyre and apply tubular rim cement evenly around the inside in an area that corresponds to the external tread. Lightly inflate the tube to give it shape, put it in the tyre, fit the tyre/tube combo, inflate to about 20psi to check the beads are seated and the tyre runs true, then inflate to normal pressure. Once done, you can remove the valve core, add sealant and reinflate. The tyre/tube combo can be removed and refitted without loss of sealant. As the tube is glued into the tyre, you can use tyre plugs when needed.

need to address tyre sidewall porosity or to complete the seal between tyre and rim.

## HOW TO DO IT

You'll need a detachable (not tubular) tyre, an innertube with a removable valve core, tubular tyre cement and tubeless tyre sealant. Ideally the tube should need to stretch slightly to fill the tyre; don't use one that is too wide as it will bunch up inside the tyre. I used Continental tubular cement (**conti-tyres.co.uk**), which can readily be applied in a thin, even layer. You may also need one of the various tubeless repair kits (see page 69) in case you get a puncture the sealant won't fix.

• Wash the tyre to remove any residual mouldrelease agent and the tube to get rid of any talc, both of which will impair adhesion. Car shampoo and a rinse will do the job. Dry both the tyre and tube.

• Ideally, invert the tyre so the inside surface is accessible for gluing. The job is easier if you have a suitable support for the tyre.

• Apply a thin coating of tubular cement to the inside surface of the tyre over an area corresponding to the tread cap on the outside. (The unglued section of sidewall will allow the corresponding part of the tube to be moved aside for easy removal and installation of the tyre/tube assembly.) Allow the cement to dry until slightly tacky. Don't glue the tube.

• Revert the tyre to its correct, tread-outward shape. Lightly inflate the tube so it holds its shape but doesn't expand and place the tube inside the tyre pocket. It should rest lightly in the tyre. Do not try to make it stick firmly yet.

• Place the wheel inside the tyre and tube with the valve in the rim hole, then fit each bead inside the rim in turn as if fitting a regular tyre and tube. The tube should now be sitting inside the tyre but without pressing against the glued inner tyre surface. • Check the tyre is evenly spaced around the rim and inflate the tube to about 20psi. The aim is to ensure the tube expands against the inside of the tyre without a twist or kink, which can distort the tyre. Check the tyre beads are seated correctly and that the tyre runs true, then inflate fully. This will stick the tube firmly to the inside of the tyre.

• Deflate the tyre/tube system, remove the valve core and add sealant. You'll need about half the usual amount as it does not need to seal the tyre/ rim interface or any tyre sidewall porosities. Inflate to your preferred pressure. Then ride.

## **SOME CAVEATS**

I won't be gluing tubes inside the tubeless-ready tyres on my tubeless rimmed wheels, mainly because there's no point adding the weight of a tube to a system that, for the most part, works better without it. Whether stuck to the tyre carcass or not, a tube adds a layer of rubber that cannot help but add to tyre stiffness, increasing rolling resistance and reducing ride comfort. As noted, adding a tube to an all-tubeless system can make tyre fitting a real pain.

A faux tubeless innertube is as vulnerable to a pinch flat as a regular one, making the idea of little use to anyone running low inflation pressures off road.

What about a cut beyond the repair capacity of a plug? The faux tubeless innertube can be peeled from the tyre without much trouble, the tyre booted and a spare tube used as usual. (As with tubeless, the tyre must be inspected for embedded thorns showing on the inside, which will puncture a new tube.)

I will be gluing innertubes inside tubelessready tyres for use on non-tubeless rims (I've already done it with some Rene Herse tyres) and inside conventional clincher tyres for use on tubeless and conventional rims (such as the Grand Bois Hetre pictured).

Faux tubeless is something anyone can do at home. It provides tubeless levels of anti-flat performance without the need for the tyre and rim technology.

## Off-the-shelf solutions

Innertube-specific sealants generally contain smaller granules, which can joggle together more closely than those in regular sealants and are said to be able to seal holes of up to 3mm – the length of a cut, presumably.





Examples

They last longer than tubeless sealant, with Slime claiming a twoyear working life and Muc-Off saying the sealant will last the life of the tube. Slime is also available in prefilled tubes in a range of sizes. Members get a 20% discount with Muc-Off (cyclinguk. org/muc-off).

Users generally report favourably on performance, the only downsides being added weight, which can be 90g per tube, and the mess left in the tyre should the sealant fail to seal the puncture. Unlike faux tubeless, tyre plugs can't be used.