

Terracycle

'Exquisite recumbent accessories' promises the website, but are Terracycle's after-market chain idlers and accessory mounts really worth the price? Their European importer, Icletta, sent us a selection to test...

BACKGROUND

Pat Franz started Terracycle in 1996, making their own custom-build recumbents. Over the years, though, demand for the in-house components used on their bike outstripped demand for the bike itself. An engineering-based company with extensive CNC facilities, they make everything in-house at their base in Portland, Oregon, USA.

Until recently their products were hard to get hold of in Europe, but German company Icletta, who also import ICE trikes, Arkel panniers and more, have now taken over distribution and have most items in stock. You can order direct from their online store (in English or German), or via many dealers.

We tested perhaps the best-known Terracycle products, the chain idlers and accessory mounts, but their product range goes much wider, with luggage-carrying add-ons for several popular recumbents, 'tail sock' fairings, recumbent stems/pivots and much more. Check their website for full details.

One final note – Terracycle were one of the fine companies who stepped up and supported with hard cash a fledgling, unproven magazine when it first started up, way back in 2000. See *Velo Vision* Issue 1 for their advert. It was and is appreciated, and I'm glad to finally get a chance to review their products properly.

Peter Eland



Chain Idlers

Almost every recumbent has them: those black plastic pulleys which divert the chain under seats or around frame tubes. Some riders never have a problem with the stock pulleys supplied by the original manufacturer, but there are some good potential reasons to upgrade. Perhaps the main reason is the



(usually) linked issues of noise and efficiency. With plain plastic pulleys, the chain runs on the tops of the links, and these aren't flat at all, typically with a bump over each chain pin. So the chain tends to drop slightly between the bumps, then rise again, as the chain passes over the pulley. This all causes vibration, noise, and that takes energy which is lost as 'inefficiency'.

Some manufacturers put a rubber O-ring onto their pulleys, the theory being that the pulley will then ride quietly on the O-ring, with contact being made by the chain rollers rather than the edges of the links. This works to some extent, but under any sort of load the O-ring

just squashes anyway, so you're back to noise and efficiency loss from the bumpy link edges.

Using a toothed cog, as Terracycle do, means instead that the chain meshes on the rollers, as it was designed to. Each tooth moves into position smoothly, and with no unnecessary vibration.

The idlers come in a wide range of configurations, including double idlers to handle both power and return runs of chain. Upgrade kits are available for many recumbents including Trice, Challenge,

BELOW: fitting a replacement idler to a Challenge trike.



Bacchetta, Catrike and more – if yours isn't listed, you can always ask. Or just use one of the standard idlers, as reviewed here. They come in 13, 14, 15 and 23 T sizes. The cogs are available in aluminium or, for a small premium, titanium, which is recommended for harder riders.

The idlers certainly look like a premium product, with an impeccable finish to the machined side-plates, which house the three stainless steel bolts holding it all together. The sprocket is sandwiched between two O-rings for further damping, and they employ twin high-grade bearings with (normally) a standard 8 mm bore, to suit most mounting bolts. The whole thing can be easily dismantled and any part replaced individually if necessary.

I fitted the 13T sprocket to replace the standard black plastic pulley on the Challenge Alizé trike reviewed last issue. After the review was written I'd had a problem with the pulley anyway: its central O-ring had failed, been drawn into the chain tube, and seized the transmission. Without the O-ring it still worked, but was rather more noisy.

The original chain guides did need some very minor tweaking with a file to stop a slight rub due to the different pulley profile, but it was basically an easy swap. For many bikes and trikes Terracycle will have a fitting kit so no DIY fettling will be required at all – check with them or Icletta.

In use, the new idler was noticeably quieter; it was probably more efficient too, but the difference was beyond the level which my legs could reliably discern. Otherwise it just did the job!

And so to the vexed issue of value. With prices from €79 for a power run idler (non-toothed return idlers are from €49) you could probably buy two or three standard black plastic pulleys for the money. There is a functional benefit though, in both noise (definitely) and efficiency

(I'm sure, but harder to measure), and that's probably worth having – especially if you race or put in lots of miles.

For the rest of us, though, who just amble along generally, the Terracycle idlers are in the 'nice to have' category. There is a distinct pleasure in using components which look fantastic, are beautifully made, and which can be maintained and have parts replaced 'for ever' – but only you will know how much that is worth to you. They do certainly add to the looks of a high-end recumbent...

As we go to press, Terracycle have just introduced a new series of 'Sports' idlers with fibre reinforced nylon side plates, rather than machined aluminium, and with aluminium cogs as standard. These will sell at prices from €49, certainly a chunk more affordable than the starting price of €79 for the idlers reviewed here. As the side plates are not load-bearing, the saving shouldn't affect function, just appearance. So perhaps these would be an even more attractive option as an upgrade.

Accessory Mounts

Fitting lights, computers, mirrors and the like has, for me at least, traditionally required a trip to the



shed for a rummage around in the 'bits box', followed by cobbling something together with old light mounts, bits of angle aluminium and cable ties. The result, as readers will have seen on my 'yellow bike' and others over the years, is generally functional but rarely pretty.

Terracycle's accessory mounts aim to offer a 'proper' and tidy way to mount such things, and in the most diverse locations. The system is based around modified Cateye clamps, available in all sizes from 1/2" to 1 1/4". These support two 'legs', in CNC-machined plate, which in turn



support a short section of 1" tubing onto which you can fit any manner of accessories. An optional 'tab' also provides a bolt location for dynamo lights, for example. The two legs can be set at any angle, and come in 50, 75 and 100 mm lengths. It's all held together with stainless steel hardware.

I tried the system first on my town tandem, where I wanted a backup rear light to go alongside the cheap dynamo system reviewed elsewhere in this issue. There was no obvious way to fit one until the Terracycle kit came along. As you'll see, the smallest clamps with shims just fit neatly onto the Tubus rack, providing a solid mounting point for the light bracket.

I fitted a set to the Challenge trike, too, to secure a Smart front battery light. Challenge do provide a tab on the bottom bracket, but it wouldn't then be easy to use the quick-release light mount. Again, as the pictures show, it was a neat job.

The basic 50/75 mm set is most popular, and costs €29.90 from Icletta. Sure, you can fix things on yourself for mere pennies, but this is a versatile and attractive system which won't spoil the looks of even the smartest machine.

CONTACTS

Terracycle: Tel +1 800 371 5871 or see www.terracycle.com
ICLETTA: Tel +49 6150 592 2966 or see www.icletta.com