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Challenge’s latest three-wheeler, the Alizé, has a folding frame and plenty of luggage carrying options, but does the ride match its looks? We rode a pre-production trike to find out.

BACKGROUND
Almost exactly two years ago (in Issue 25) we reviewed the Challenge Concept trike, the first three-wheeler from the well-established Netherlands manufacturer of recumbent bikes. While impressed by the styling and design details, I had some reservations about the very direct steering.

By the following year Challenge had added accessories (mudguards, racks etc.) to their original Concept design, and also offered underseat luggage to improve the handling.

And now, two years on, the Alizé folding trike brings together all of these developments, plus a few additional refinements, as we’ll see. Our review machine was a late pre-production prototype, and the component specification is very much provisional.

It should be available via dealers by the time you read this. Prices (in the Netherlands at least) will start at €2090 with 27-speed derailleur transmission. As with the previous trike, a range of transmission options, brake upgrades and accessories are available – contact Challenge or dealers for full details.

FIRST IMPRESSIONS
Striking red powdercoating does the Alizé no harm at all in the looks department, but it’s the oversleep of the frame which defines its appearance. The angled, aero cross-section beams to the front wheels define the direction of travel in a very visual sort of way. It drew admiring comments not just from the various recumbent enthusiasts who tried it, but also from “general public” onlookers – to an unusual extent for a trike. If you’re wary of the attention being on a recumbent being watched, it does help if reactions are more positive than not.

The aluminium frame folds in the middle, with a large and solid central pivot between the two sections. A quick-release locks the mechanism, but it’s safe to ride even without this done up, as the rider’s weight acts to keep the trike unfolded.

The rear suspension swingarm doesn’t use the frame folding pivot, but a second one a few inches back. The shock unit is linked to the frame via a linkage, designed, so Challenge, to both look tidy and to offer the correct response characteristics. It certainly allows the lines of the frame to continue in an uninterrupted curve.

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The transmission is a triple-speed centre-pull unit. There were a few small refinement issues, as we’ll see. The heavy-duty chain pulley allows for fine adjustment on the bottom bracket, but it’s safe to ride even without this done up, as the rider’s weight acts to keep the trike unfolded.

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The final luggage option is the “AeroPod” tail bag from Angletech in the USA, which simply slips over the back of the seat. One seat wasn’t sized to suit, so it sat a bit low over the rear wheel (to be fixed for production bikes). It’s a neat luggage solution for day riding, and even has some aerodynamic benefit. It’s also super-easy to lift off and take into a shop or café with you.

The transmission is a triple-chambered derailleur system. The components for production bikes weren’t finalised as we went to press, so I won’t detail them here: check the Challenge website or ask their dealers. The standard disk brakes are still the excellent mechanical BB7s from Avid (hydraulic upgrade options are available).

With that all out of the way, let’s look at a few of the design details which Challenge have developed since the first version we tested two years ago.

First up is the steering. Rather than attach the bars direct to the kingpins, the folding trike uses a more conventional underseat steering arrangement. It’s neatly executed with black anodised clamps providing angle adjustment for the handlebars (but no width adjustment on ours).

Connecting the bars to the kingpins assemblies are some very pretty aero-section track rods. As you can probably see, these have two internal chambers. One accepts the front brake code for the sheave into which the red end ball joints are, in turn, threaded. This double thread arrangement gives easy tracking adjustment. The other hollow is for the brake cable – it enters a few inches from the kingpin end, and exits at the trike centreline.

This really contributes to the ’clean’ appearance at the front of the trike. The rest of the cables coming off the handlebars are also tidy, running in wide loops below the bars. These cable loops are the closest thing to the road surface below the trike, but this caused no problems in use.

The front hubs on the previous version were already pretty thin, but with hard-to-obtain straight spokes, perhaps less than practical. The new version employs ‘normal’ bent spokes, and the slotted design lets you replace even the inside spokes without taking off the brake disk. The new design also incorporates throughs for the extractor sleeve – see later. All three wheels are the 20” (406) size. Our machine was fitted with the very fast and light Schwalbe Kojak slicks.

Weight as tested (without any carrier rack fitted) was just precisely 10 kg – rather more than most people who rode it would have guessed. Challenge say that the current frame is ‘bombproof’, and they do have plans in future for further weight reductions.
The 'Smart Car boot' test seems de rigeur for recumbent trike manufacturers keen to prove the transportability of their trikes. Challenge duly produced a picture of the trike in one (not shown here). While this folding functionality is very welcome, there are a few caveats. It can be quite awkward actually doing the fold or unfolding: you really need to lift the trike which takes some strength. With the wheels off, it’s difficult to keep the chain or chainrings from touching the ground – not something you really want to do if you’re folding it up in a madly-lay-by. Take a bit of old carpet with you for such occasions.

Mudguards attach to the brake carriers, so they’ll come off the frame with the wheels, but remain attached by the cables – and mudguards flopping around are perhaps not the easiest things to wrangle if space is tight. You can always put the carriers back on the axles, as we’ve shown, which keeps things tidy, but the mudguards would then be vulnerable. Best, perhaps, to keep the wheels on at all possible. To be fair, all folding trikes struggle with mudguards.

If you’ve fitted the large rear carrier rack, then the fold doesn’t achieve much size reduction. But it works well with either the small rack or the slip-on tailbone, as these come away with the seat.

The ride
This is a well-built trike, quite a contrast to the almost skittish direct-steered Concept I tested two years ago. The steering is light and stable, as it should be, and it was easy to relax even at some speed. It’s worth noting that at around 50 cm over all width, the folding Challenge is just a touch wider than, say, an ICE QNT at 78 cm, but nominally exactly the same width as a HP Velotechnik Scooter or Greenspeed C7S. This sort of value is clearly at the ‘sweet spot’ between stability and the ability to squeeze through narrow gaps or doorways.

Seat height is around 28 cm, and the bottom bracket is around 40 cm off the ground (it varies slightly as you adjust the boom). The other noticeable improvement was one of speed and efficiency. The Kojak tyres were major contributors I’m sure, helped by a new, clean dual-carriage system with a single chain pulley. The frame felt rigid and solid against pedal pressure, too.

The brakes were brand new and needed a little wearing in to reach full power, but would stop the trike as hard as you dared after that – in the wet at least I could lock a wheel easily enough, or in the dry risk a ‘stoppie’. Braking from speed with just one hand (so only one wheel was being braked) resulted in a pull over to that side, but it was gentle and easily controlled. The parking brake buttons on the levers barely wet when in use... but that’s about the only niggle.

The rear suspension was unobtrusive, and even without any noticeable bounce from pedalling Challenge also suggests a ‘passive suspension’ effect from these cantileered, aero-section cross beams: they measured just 5 mm or so of movement at the kingpins in their tests, but perhaps that’s enough to soak up some vibration. It’s quite possible, and indeed the high-pressure Kojak didn’t sit quite ‘tooth’ too much. But how much of that was the seat cushion and how much the ‘spring’ effect is very hard to say.

Loading up some panniers and fitting them to the large rear rack had little effect on the handling, as is fairly typical for trikes. Clearly you feel the weight when accelerating or climbing, and of anything the trike feels even more ‘planted’ on the corners. I couldn’t detect any sway or flexes from the rack, anyway.

CONCLUSIONS
To a degree, the folding Alizé sees Challenge catching up with the competition. Greenspeed, HP Velotechnik and ICE have had folding or separable trikes for some time now, so the one-piece frame on the Concept was starting to look limiting. Any transport and storage can be a real issue for trikes, adding the folding feature was near essential to remain competitive.

The rear suspension and predictable understeer steering are also now almost ‘standard’ on the other current trikes. Challenge’s versions work well, as do the load-carrying options. With the mudguards (not tested, but as pictured) it’s now a fairly complete trike.

The price, at £2690 for the base model, is for UK buyers at least a rather tempting £2470 at current exchange rates (official UK prices not yet set). This is a step up from ICE prices (starting at just under £2000 currently) and Greenspeed (£2100 but broadly comparable with HP Velotechnik from £2400). Prices have risen in the UK recently for all brands – those importing from Europe are being clobbered by the strong Euro, and manufacturing buying parts from abroad are hit by the Taiwan dollar rate. Prices are still changing, so take this as ballpark only.

In any case, it’s not massively out of line with the competition and technically the Alizé looks like a really strong offering. It performs well, and just looks superb, to me and most of my friends at least.

If you’re not completely price-driven, there are so many good trikes out there now that looks and styling may be the deciding factor for more than a few buyers. There are still material differences between the various machines, and I’d always urge test-riding a selection before you buy, if at all possible.

Peter Eland
AVAILABILITY
Challenge Bikes: Tel +31 55 521 2405 or see www.challengebike.com

The trike is now available via Challenge dealers worldwide.

Ian Coulthard is looking to buy his first trike, after riding two-wheeled for some time. He tried the Alizé trike on a short, very wet ride around York. Firstly, it looks gorgeous! The aero section cross beams stand out, as does the rear fork. I especially liked the front hub design from an aesthetics point of view. The downside was the brake callipers, these being non-transparent, they looked wrong with the cables painting in different directions. This is a minor issue, but it just looked odd with all the lines of the rest of the machine.

Speaking of the brakes I found the trike had a degree of brake steer, although I can’t imagine this ever being a big problem. Much more annoying was the brake squeal. Whether this is down to newness or the conditions I’m not sure. They did feel more than powerful enough, though.

I couldn’t detect any pedal steer at all, although I didn’t get to really mash the pedals. In the big ring it felt good to me. Handling felt really good, hands off was no problem, no handshaker wobble, it just followed the camber of the road. I did expect it to lift a wheel, cornering reasonably hard without losing, but it never happened, the trike just tracked straight with no twitch.

Comfort felt excellent, I’m a fan of handshelled seats and this was one of the best I’ve tried, no complaints. Bottom bracket height felt perfect, in relation to seat height. Neither did I notice any rear and handlebar noise so the suspension must work - although something this light deserves an air shock, I think.

Despite a puncture, I was impressed with the tyres. The trike seemed to have very low rolling resistance, due in some part no doubt to its low overall weight.

As a boy, I wanted a no-compromise machine for fast day rides and I’d definitely buy this. As a rider I had only one reservation – about mudguard availability, now resolved – and honestly, if the price was competitive I could find a way to make my own if I had to. I’d compromise because it’s just so stunningly pretty!

Challengers need to be more visible, but from all accounts they will still draw a few theatres. I’m sure.

Ian Coulthard

Second Opinion