

Publication: Machinery Market**Date:** 14/9/2017**Circulation:** 24,000**Media category:** Trade**Web:** Print

Innovative vehicle accessory

There is growing demand for a device that will allow people to take their bikes with them wherever they go, but design engineer Craig Broadbent — the founder of Milton Keynes-based Auxtail — says that the traditional methods of fixing a bike carrier to a car are not ideal. Recognising this as a business opportunity, he devised a more-secure solution: EasyRide2. This is connected to a fitting attached to the car's hidden — but very strong — bumper beam, so it can support more weight than the traditional tow-bar approach. It is also lighter and costs less to produce.

In order to protect the cycle frame, Mr Broadbent decided to use the wheels and tyres as the anchor points for securing the bike to the carrier. After designing the tyre grip using CAD and Finite Element Analysis tools, he reached the stage where prototypes of the three main components were required — and chose Proto Labs Ltd (www.protolabs.co.uk). “Although we looked at other suppliers, we were impressed with what Proto Labs could offer us. The company's track record for rapid prototyping and 3-D printing in the automotive sector made it the obvious partner, along with its interactive quotation system.”

Auxtail defined the material, process requirements and delivery time-frame, then sent its CAD models to Proto Labs on-line. While the original design for the EasyRide2 remained largely unchanged, the two companies exchanged ideas to refine the product before the final manufacturing decision. “We have established what I consider to be a very good relationship with Proto Labs. Future plans include developing a three-bike version of the product, with other rear fixing options under consideration.”