

## The bike truck by Steven Muir May 2009

Alistair is attempting to live without a car. A growing family meant growing food storage requirements and a larger fridge which he purchased from Noel Leemings. The problem was how to get the 70kg load home without admitting car-free defeat and borrowing a friend's car & trailer or paying a delivery fee. The solution was to use Steven Muir's home built three wheel bike trailer. It is made from bent steel square tube (21mm & 25mm x 1.6mm) and 25x3mm angle, welded with an arc welder and finished with enamel paint. The tow bar is attached with a 12mm gate hinge & bolt, then a lighter hinge on the right with wooden brace to keep the tow bar from slopping laterally. The hitch is a 12mm rod end bearing and the wheels are 20" bike wheels rear and an old wheelchair castor for the front wheel.

The original plan was to lie the fridge on its side, however Alistair found on arrival that's not the done thing, and so it was placed upright on the trailer as per manufacturers requirements, with unused wooden boxes at the front. The boxes were intended to raise the fridge above the wheels as he was unsure if it would fit with packaging, but fortunately it squeezed in between the wheels ok. It was a slow journey home but it went smoothly and the fridge arrived home safely. Alistair then took the old fridge off to the secondhand dealers to dispose of it.



Fridge pickup from the distribution centre



Safe arrival at Alistair's house



Old fridge on it's way to it's new home (Clarence Blenheim rd intersection)



Alistair biking with the old fridge.

The front wheel design is currently poor, developing speed wobbles even at low speeds particularly when unloaded. It needs to be brought forward and the rake angle increased to prevent this. The previous incarnation of this trailer had a 12" bicycle wheel on front with forks re-welded at  $>45^\circ$  which worked better, but unfortunately it interfered with the load too much to be of use for load carrying. It was successful as a chariot on the recent walk for the planet (March 2009).



Steven with some passengers on the Walk for the Planet.

Steven also makes smaller light weight aluminium trailers and anyone who would like to borrow one to try it out is welcome to contact Steven Muir [steve@cycletrailers.co.nz](mailto:steve@cycletrailers.co.nz) or phone 3658238