

DIY Rear Rack



There's been some interest in the rear rack on our home made bike bag setup. I needed one for the fatbike so here we go...

Advantages:

1. Cheap and light
2. Takes a 8 - 12 litre drybag
3. No sway
4. No special tools to make
5. Fits with suspension seat post (as above) or can be made to fit in with dropper post

First thing to pay attention to is the mounting points. This design relies on rack mount bosses near the top of the seat stays where the bottom bolts onto. Without these some other clamp design will be needed to attach to the top of the seat stays.

What you need:

- 1.25m of 8mm solid aluminium rod
- A seat post collar or clamp that fits snugly around the seat post itself
- Two 20cm cable ties
- 2mm and 5mm drill bits and drill
- Hacksaw
- Hammer and hard surface for flattening aluminium
- Bench vise
- Something round and solid about 6cm diameter
- Marking pen

Bottom piece

- Cut 75cm length of aluminium rod
- Bend 75cm piece around round object till ends are as far apart as seat stay bosses



- Flatten ends parallel to each other by hammering till they are at least 10mm wide and about 2.5-3mm thick



I've got a handy anvil but you can use a vise or a piece of steel on a bench

- Drill holes for M5 bolts in flattened ends. Drill pilot holes with 2mm drill bit first to keep it accurate then use 5mm bit



Top piece

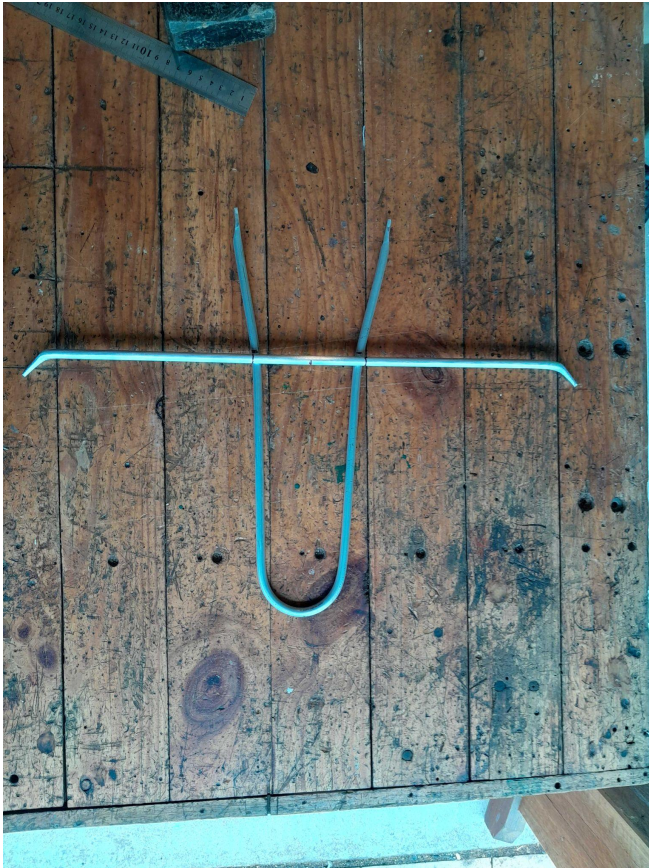
- Cut 50cm length of aluminium rod
- Bend 15mm of ends in vice to about 65° . Make sure they are bent in the same plane



(These are only 45° , I had to bend them further later)

- Flatten the ends in the same way but on the inside of the curve

- Measure and mark against the bottom piece. I've got the crossover about 12cm up from the bolt holes on the bottom piece



- Bend the top piece either side of the crossover in nice matching curves till the ends are about 3cm apart. This takes a fair bit of grunt if you are using a round surface like my little anvil. I also used a rubber mallet to make fine adjustments to the curves. If you don't care so much about even curves use a vise to do step wise bends.



Putting together

- Cable tie pieces together with top piece curving under bottom piece



- Get a seat post collar. For this one I used an seat post clamp from an old bike, filed off the lip on the inside and replaced the clamp bolt with a longer M5 bolt and nylon locknut



And...

Attach to bike



