



# BICYCLE MOUNT

MOUNTING BICYCLES ON CEILING  
WITH FOUND PARTS FROM LOCAL HARDWARE STORES

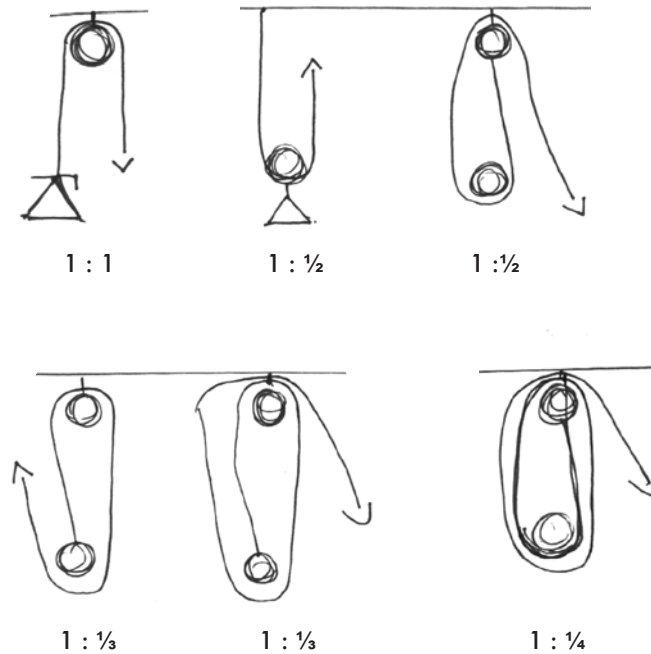
- 1 Pulley concept
- 2 Types of combinations
- 3 Space planning
- 4 Pulleys & Parts
- 5 Single point
- 6 Double point
- 7 Anchor

## Pulley concept

A pulley is a wheel with a grooved rim around which a rope passes through. It acts to change the direction of a force applied to the cord and is chiefly used to raise heavy weights.

Illustrated are the basic load ratio of the pulleys in combination. The load, in theory, is significantly lighten when more combination pulleys are involved.

Some other factors also affect the pulling load, but it's possible to lift a 20 kg bicycle with abit of muscle safely.



VERSION 2.0 120524

© COPYLEFT, FREE IDEAS FOR FREEING PEOPLE  
 AUTHOR JEFFREY LIM / VILLAGE BICYCLES  
 BOOKLET DESIGN [HTTP://STUDIO.25.MY/](http://studio.25.my/)

## Pulley concept/types of combinations

There are many different combinations to work from, the basic idea is to keep it as simple as possible, as functional as it is aesthetic.

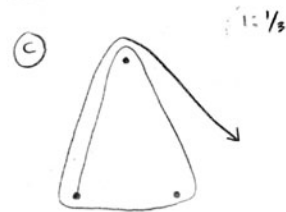
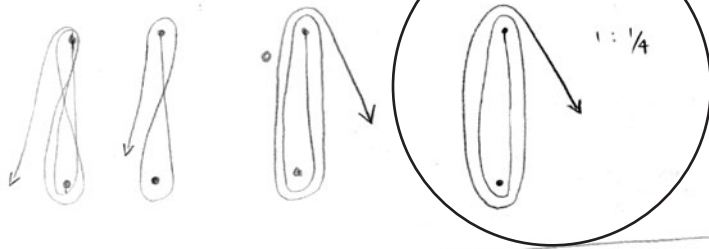
Illustrated are sketches of different combinations, single and multiple points. Distributing of load at top and bottom are some factors to consider, as certain bicycles have different weight distribution between front and rear. It is important to securely attach the bottom points to bicycle.

It is also important that the rope should not cross each other in the setup, as it will fray and weaken.

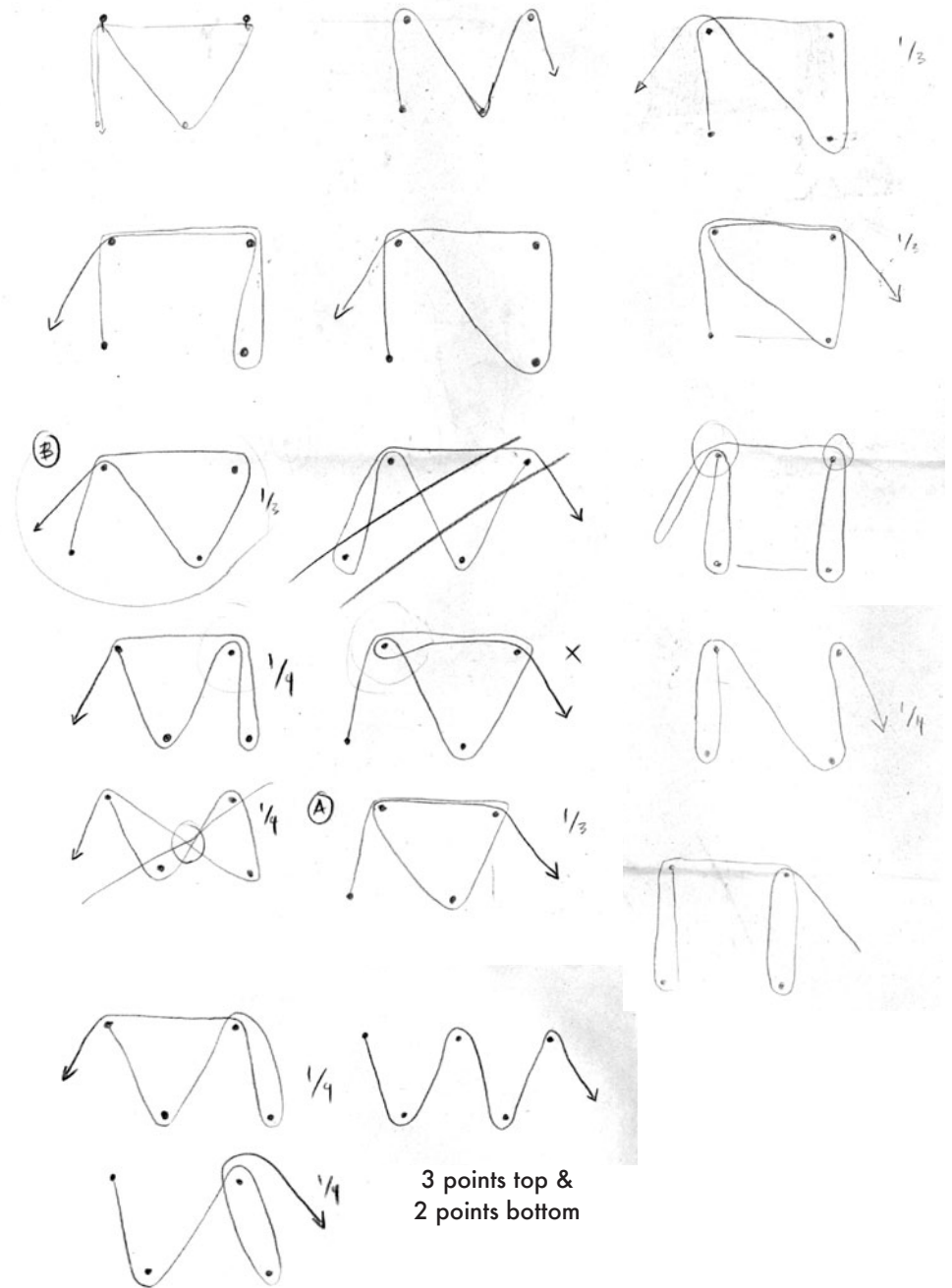


2 points  
top & bottom

1 point  
top & bottom



1 point top &  
2 points bottom



3 points top &  
2 points bottom

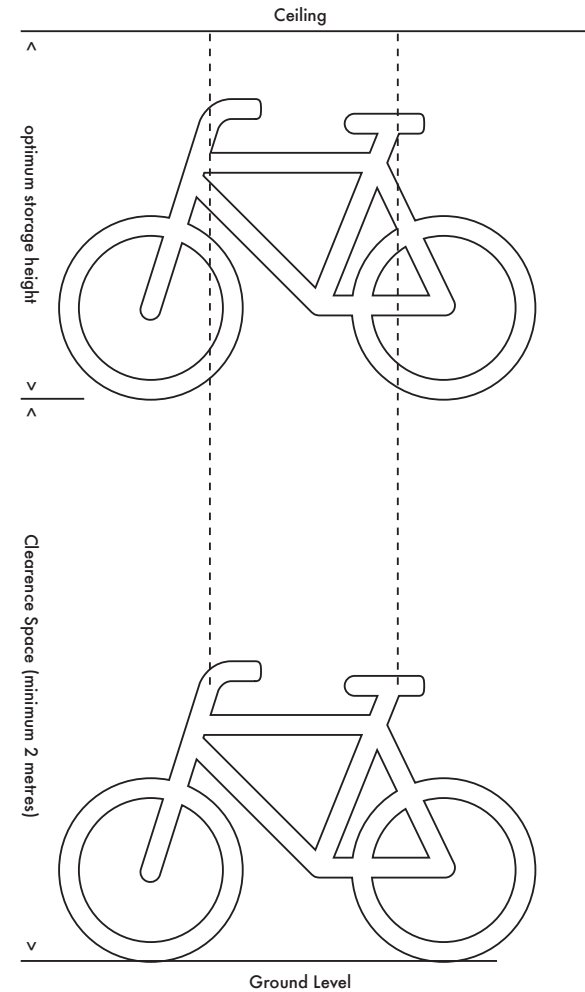
## Space planning

Clearence Space around the bicycle is crucial for a safe and easy access. It is important that nothing permanent should be in the way of the bicycle at the top or on the ground.

A minimum clearence of atleast 2 metres off ground level.

Measure overall height of bicycle, add about 30 cm for Mechanical Space to get the Optimum Storage Height. Subtract that with the Ceiling height from Ground Level to find out if there is enough Clearence Space.

The best areas to hook the bicycle are handlebar at the headpost, the rear of the saddle, or the top tube. This is just a guide, feel free to experiment.

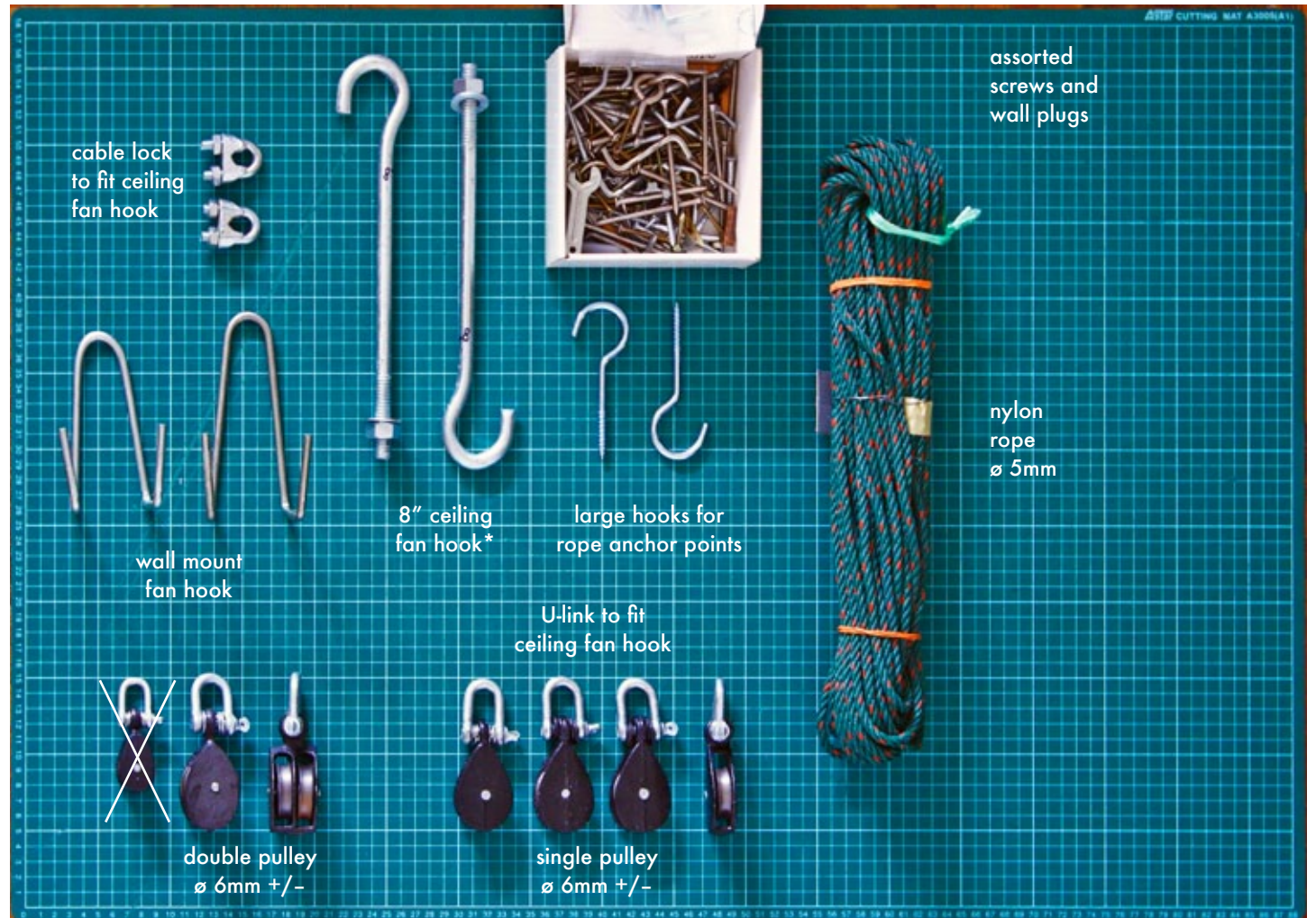


## Pulleys & Parts

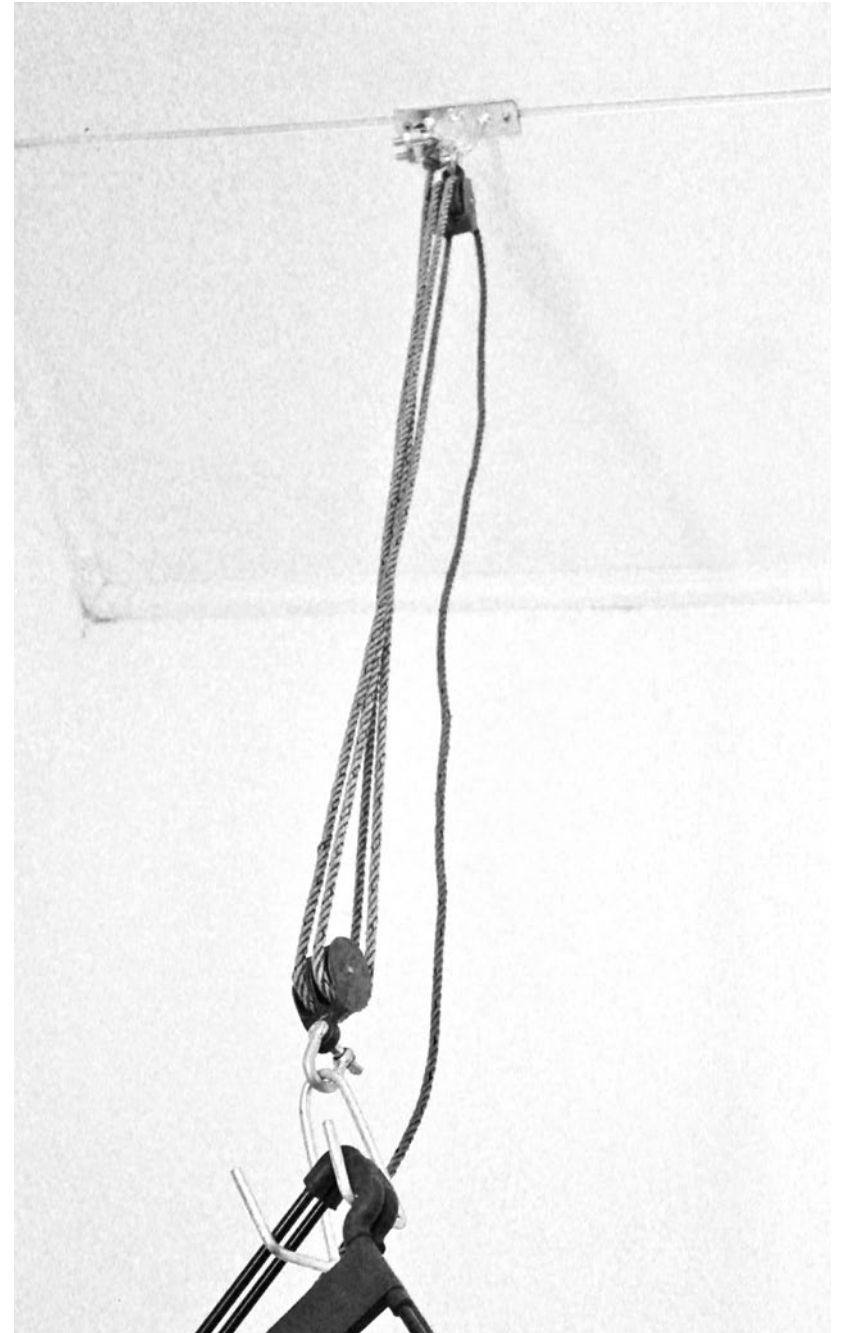
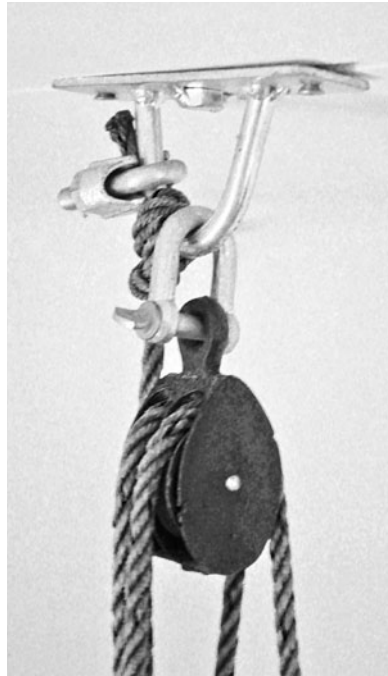
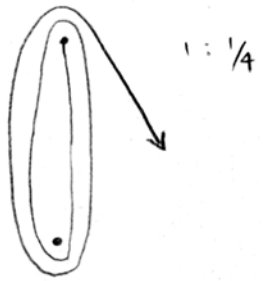
These parts are easily found at any local hardware store.

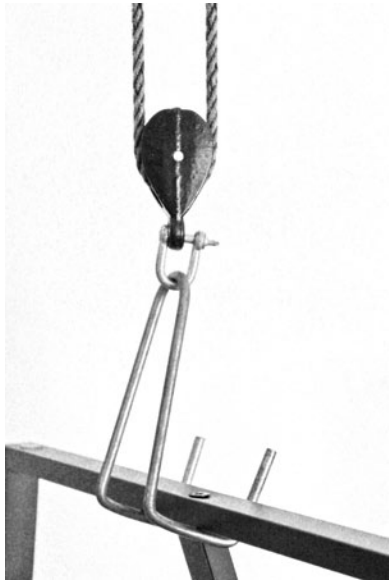
It is important to get all of them together or bring parts of it along to make sure they all fit.

Documented on the left are some of the parts used, though they might be named differently.

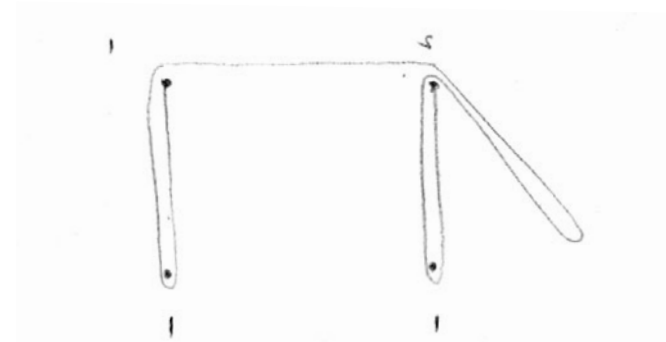


Single point combination





Double point combination



Anchor points

