

# Plan **"Filebutler"**





## Disclaimer

Tools may be dangerous and may cause severe injuries! If you operate tools, make sure that you are allowed and able to safely do so. Please read the entire present document before you start following the instructions. Attention Invention is not liable for physical or economic damages eventuating when rebuilding the items specified therein.

In case you rebuild this invention for private usage, at least in Germany you cannot infringe any third parties' patent rights! However, if you consider selling or using embodiments of this invention for commercial application please make sure not to infringe any third parties' protective right. Ask your patent attorney if you have questions in this regard!

## **Tools:**



- Folding rule
- Pen
- Saw
- Drill
- Screwdriver



## Parts:



- Copy holder
- Guiderail (20 cm (7 to 8 inches) travel)
- Plywood, metal or plastic sheet
- Short wood screws short
- 2 metal screws and nuts
- 4 Neodymium magnets (about 10 mm diameter) countersunk with bore
- Anti-slip mat / rubber feet
- Hard wood strip

## Let's get started!

First of all, make sure that your keyboard can be located at any position below the copy holder as it is. We will raise the file support of the copy holder only by a couple of millimeters.

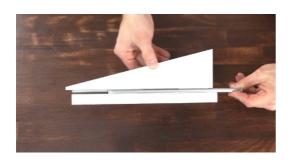


Depending on your guiderail, we can re-use all of the copy holder or only need to build an additional support. In case the support is thick enough, just cut a strip (about 20 mm i.e. 1 inch) off from each side of the support.





Now you can screw the first part of the guiderail into the strip and the second part of the guiderail into the support.



Positioning and using of the file butler will be way easier if both strips are connected e.g. by a thin sheet of plywood, metal or plastic. In addition, this provides a higher overall stability.



You also may have to extend the lower part of the file support in a backwards direction in order to prevent the file butler from tipping if brought into the rearwards position. This is because unlike the prior art the invention facilitates about 20 cm (7 to 8 inches) of travel of the support.



Now determine the distance to travel by experiment: Locate the new lower support of your file butler at the position where you wish the upper part of the file butler to stop in the front most position.





Usually, this position is near the front edge of your keyboard or even the front edge of your desk. In order to prevent the file butler from tipping towards you in the front most position, the front edge of the new lower support may stand back from this position, but no longer than 6 to 7 centimeters (2,5 in).



Position the zero of your ruler right at the front most position. Now push the upper part of the file butler back to where you wish it to stop if pushed towards your monitor. Typically, this position corresponds to the rear edge of your keyboard.



Read your ruler at this position. It should correspond to the distance between the front edge of your desk and the rear edge of your keyboard or to the depth of your keyboard only.





You wish these positions to be locked in place, so look for an appropriate position to arrange the neodymium magnets and a corresponding ferromagnetic metal part. For example, an iron angle attached to the lower part of the new support and two magnets located at the respective positions at the upper part of the support will do the job. You may also use the guiderails or extensions to attach the magnets.



In case your copy holder is not already provided with an anti-slip component, position the rubber feet at the front most and rear most positions beyond the strips of your new support. Make sure that all rubber feet make contact with your desk.

Now, check the function of your file butler! Does it ride smoothly? Do the rubber feet prevent slipping? Is the force of the magnet sufficient? You can lower the magnetic force by putting a variable number of stickers on the surface of the respective magnet.





Examples for other additional features of the file butler are depicted below. In case you make other improvements I would be happy receiving pictures as soon as you have finished your personal embodiment of the file butler.



Wooden stop with adjustable height



Plexiglas® Version resting on guide rails accommodated in aluminum profile