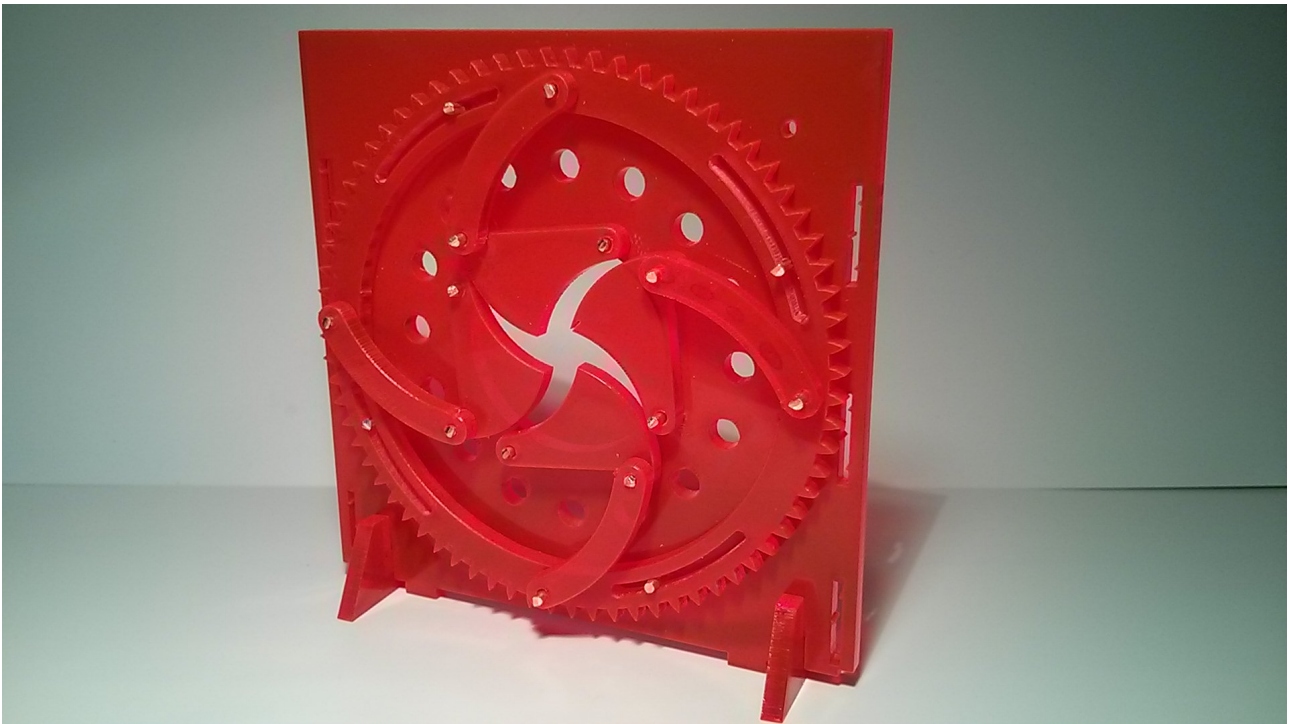


These instructions brought to you by TakUnderhand, ably assisted by Hreikin and Stoof (all of YakTribe.org).



Iris lock part descriptions

Parts

Description



Door



Door arm



Winding handle



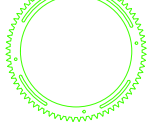
Winding gear type 1



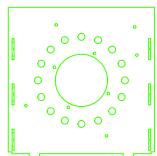
Winding gear type 2



Winding gear type 3



Main gear



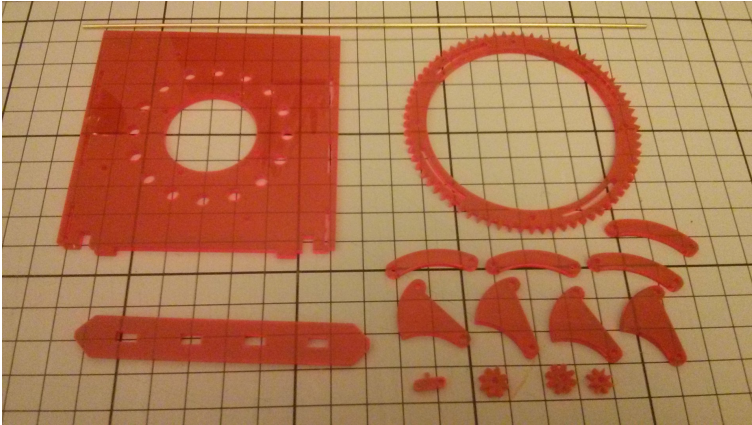
Door frame bulkhead



Door feet (two options)

Also in the kit: a piece of 1.5mm diameter rod, to make the hinges.

Step 1: Lay out the parts, check they are all present:

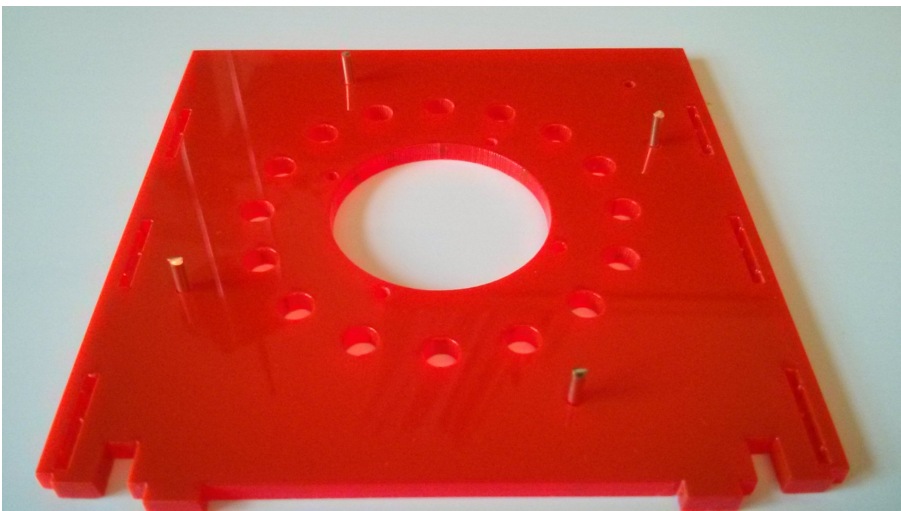


Step 2: Cut the brass rod into small sections:

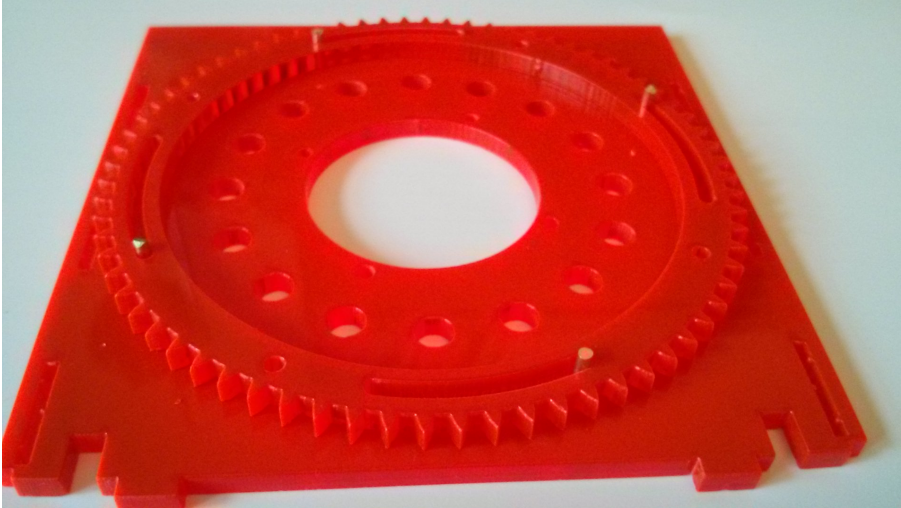
- Brass rod can be sharp! Please be careful.
- There should be sixteen sections, each 8mm long
- Be sure to file the ends flat - otherwise they may scratch the surface of the door frame bulkhead



Step 3: No glueing yet! First we are going to check all the pieces fit together. Fit four pins to the door frame bulkhead. These are the guide pins.



Step 4: Fit the main gear over the guide pins



Step 5: Still no glueing!
Fit the door hinges to the inner holes:

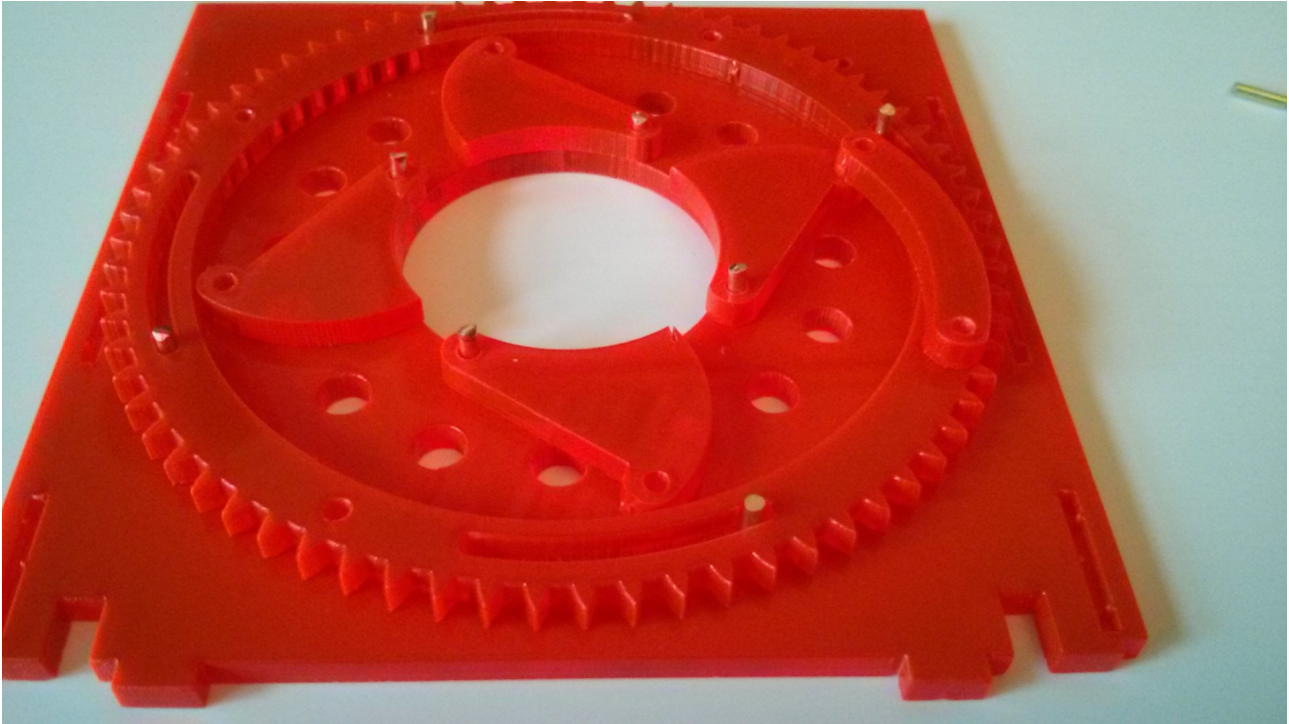


Step 7: Still no glueing!
Fit the doors to the door hinges:



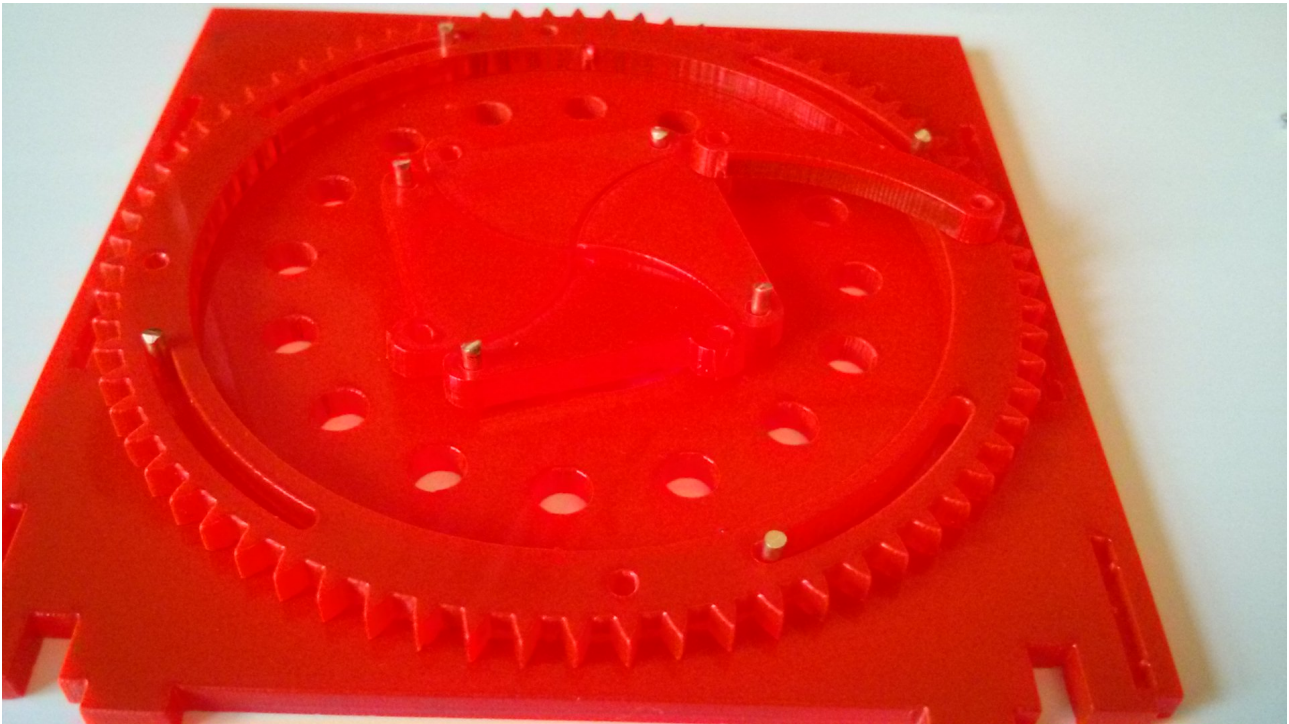
Step 8: Check the mechanism in the Open position:

- Position the doors in the open position
- Rotate the main gear fully clockwise
- Check that the door arm will fit between the door and the main gear



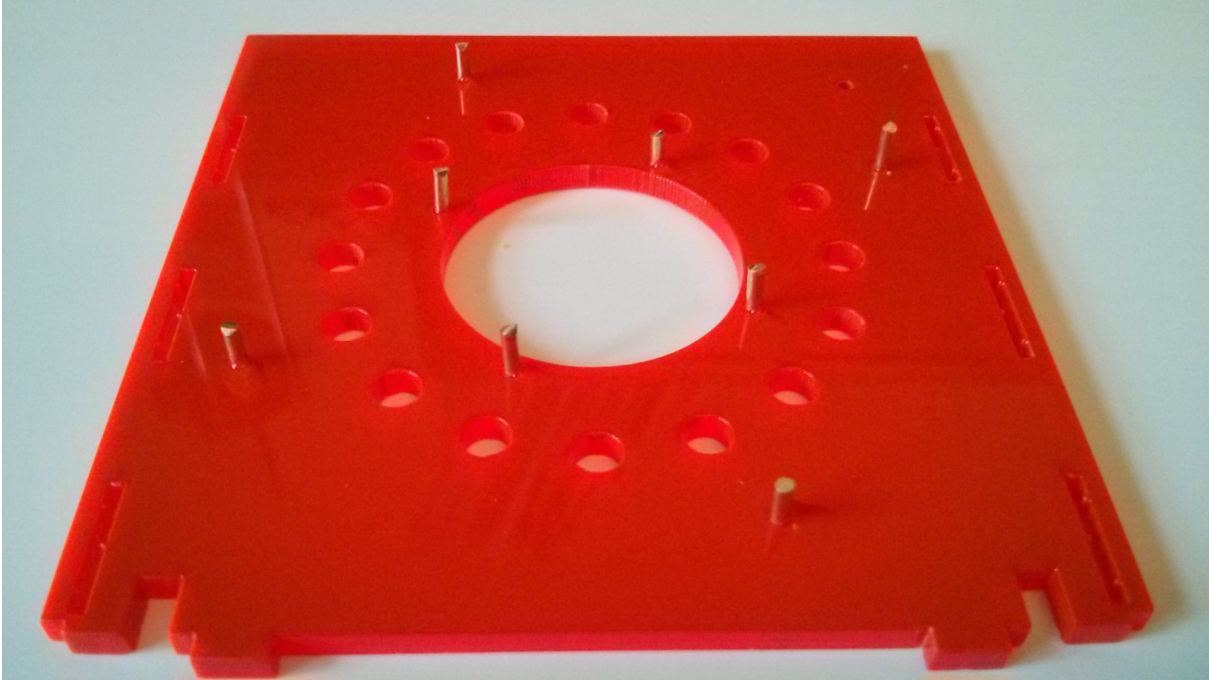
Step 9: Check the mechanism in the Closed position:

- Position the doors in the closed position
- Rotate the main gear fully anti-clockwise
- Check that the door arm will fit between the door and the main gear



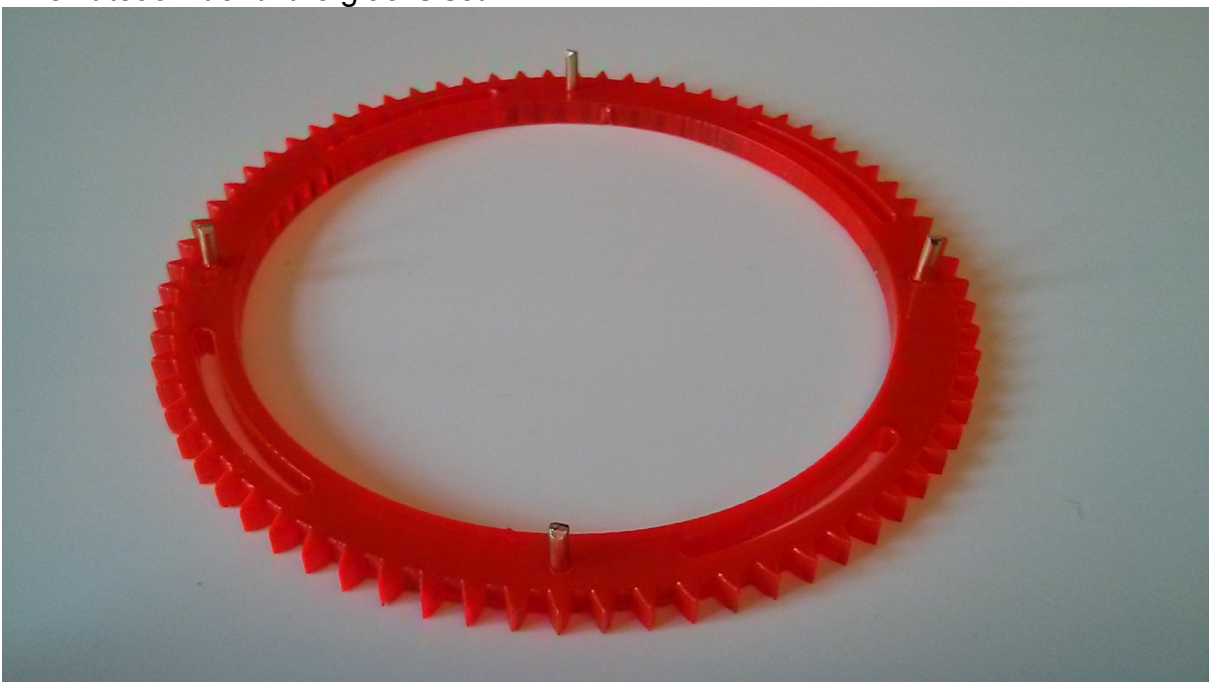
Step 10: Fixing the guide pins and the door hinges:

- Remove the doors, the door arm and the main gear
- Set the pins in place
- Glue with a tiny dab of superglue, from this side
- Check the pins are straight
- Don't touch it until the glue is set!



Step 11: Glue the door arm hinges to the main gear:

- Keep the back end of door arm hinges inside the main gear. If the door arm hinges are set too low, they will scratch the door frame bulkhead.
- Set the pins in place
- Glue with a tiny dab of superglue, from this side
- Check the pins are straight
- Don't touch it until the glue is set!



Step 12: Glue the door hinges:

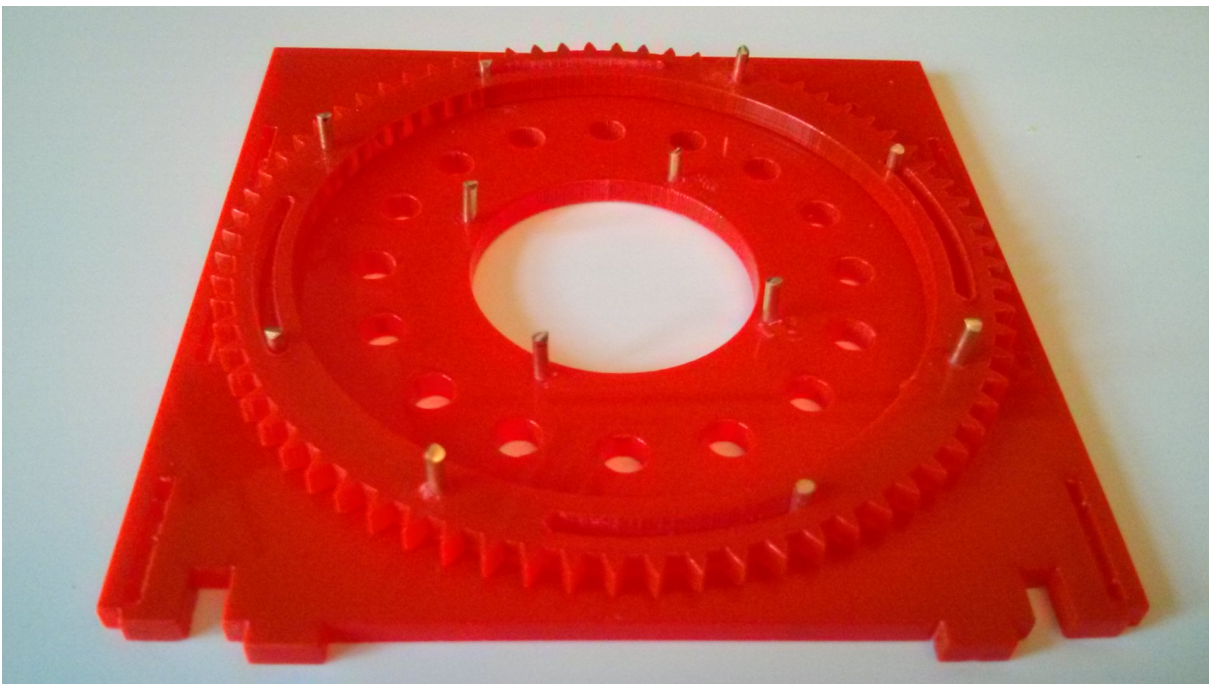
Set the pins in place

- Glue with a tiny dab of superglue, from this side
- Check the pins are straight
- Don't touch it until the glue is set!



Step 13: Now the glue is set, fit the main gear onto the guide pins:

- Rotate the main gear fully, in both directions. The main gear should rotate smoothly, without much effort.
- If this is not the case, you need step 14...



Step 14: Smooth rotation of the main gear.

Here are some reasons why the main gear might not be rotating smoothly:

- 1) The guide pins might not be straight
- 2) The door arm hinges might be poking through the back of the main gear (see step 11)
- 3) The gaps for the guide pins might need a little filing, following this picture:



Step 15: Finished!

- Fit all the parts together, using the door feet.



Bask in the glory of your newly completed Iris Lock Portal...

