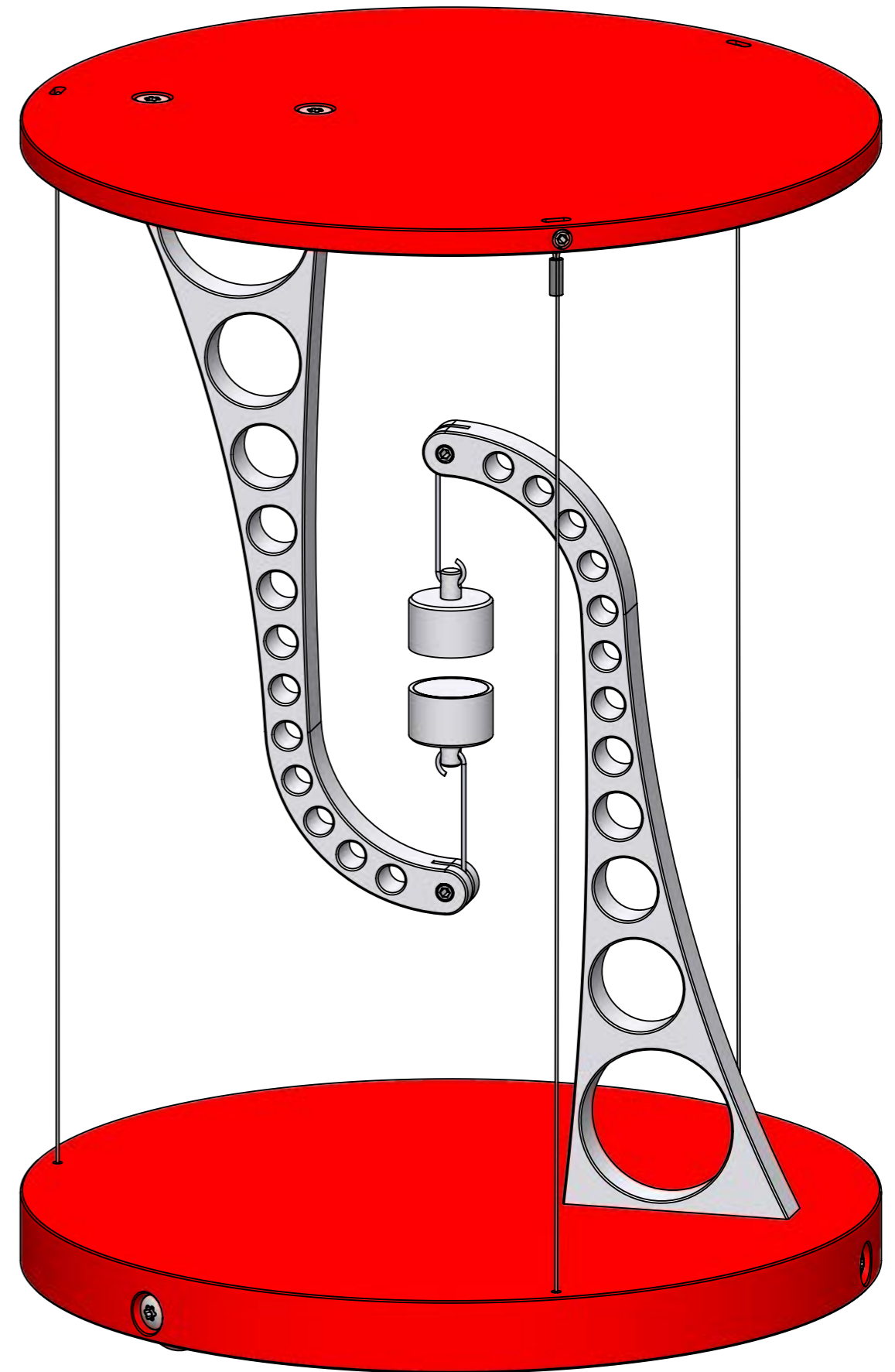


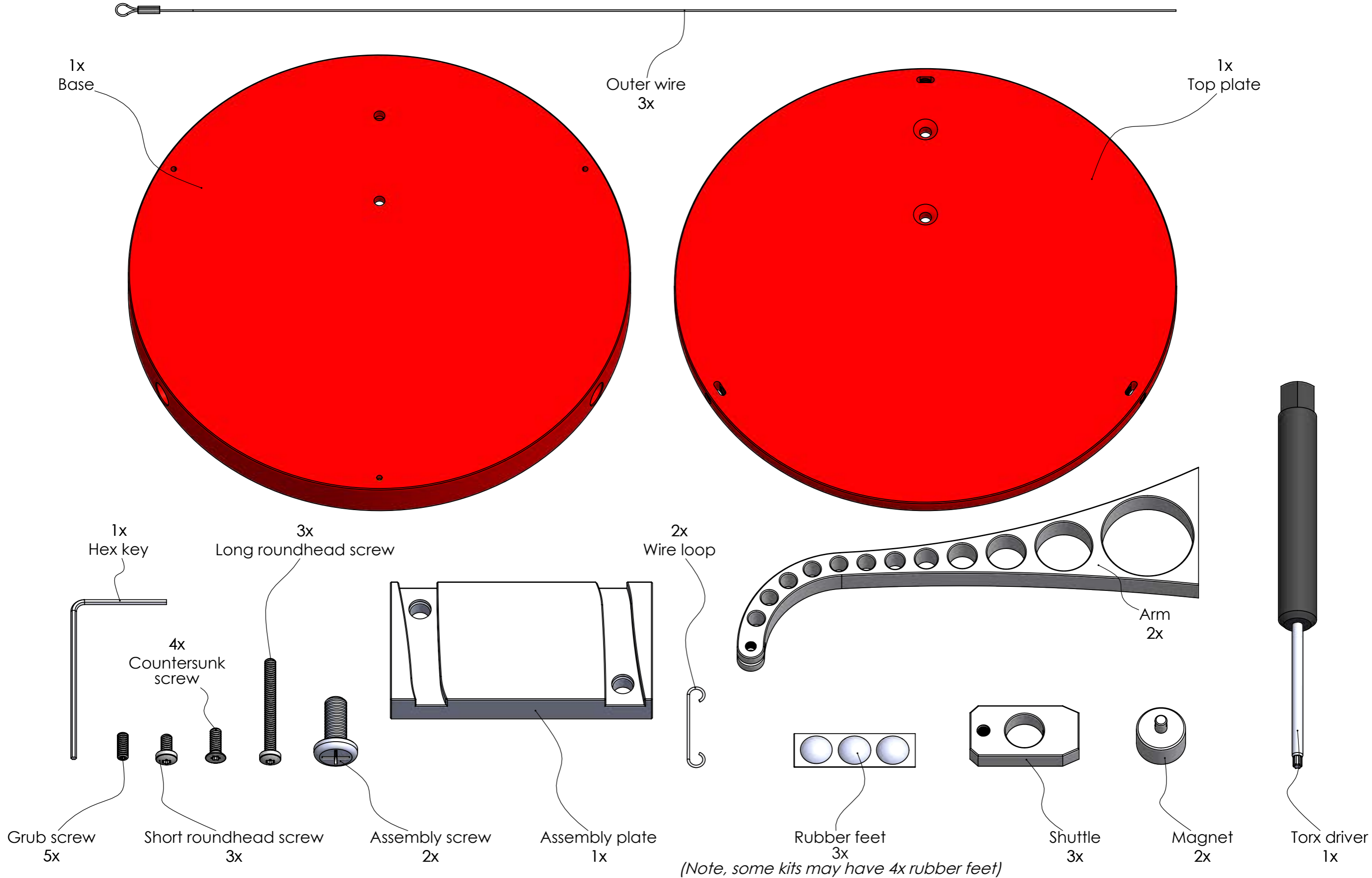
Tensegrity table with centre magnets assembly instructions

These instructions are for the centre magnets version of the Tensegrity table.

Please read all the way through the assembly instructions to familiarise yourself with the process before you start and pay close attention to the alignment of all the parts in the diagrams.

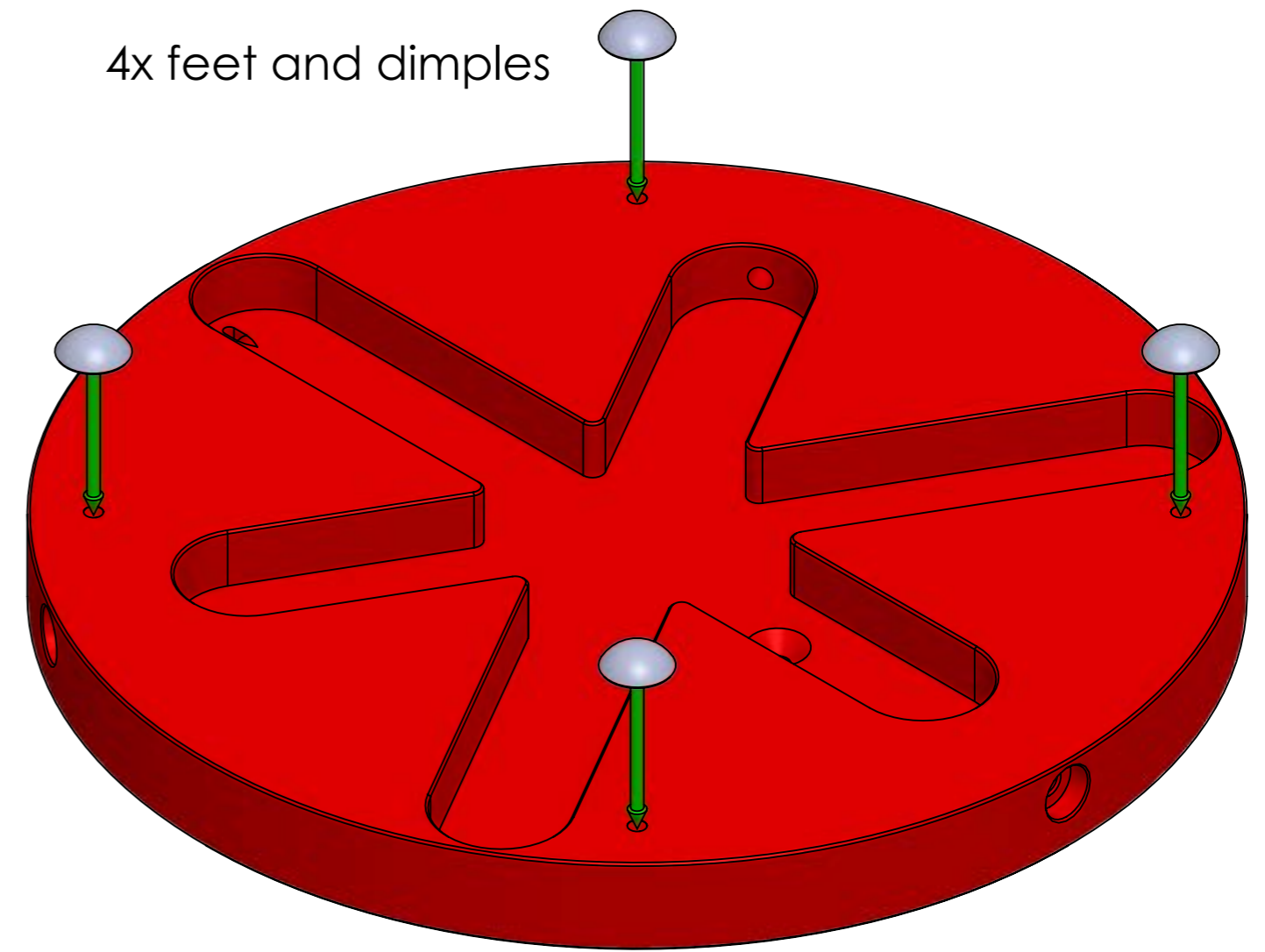
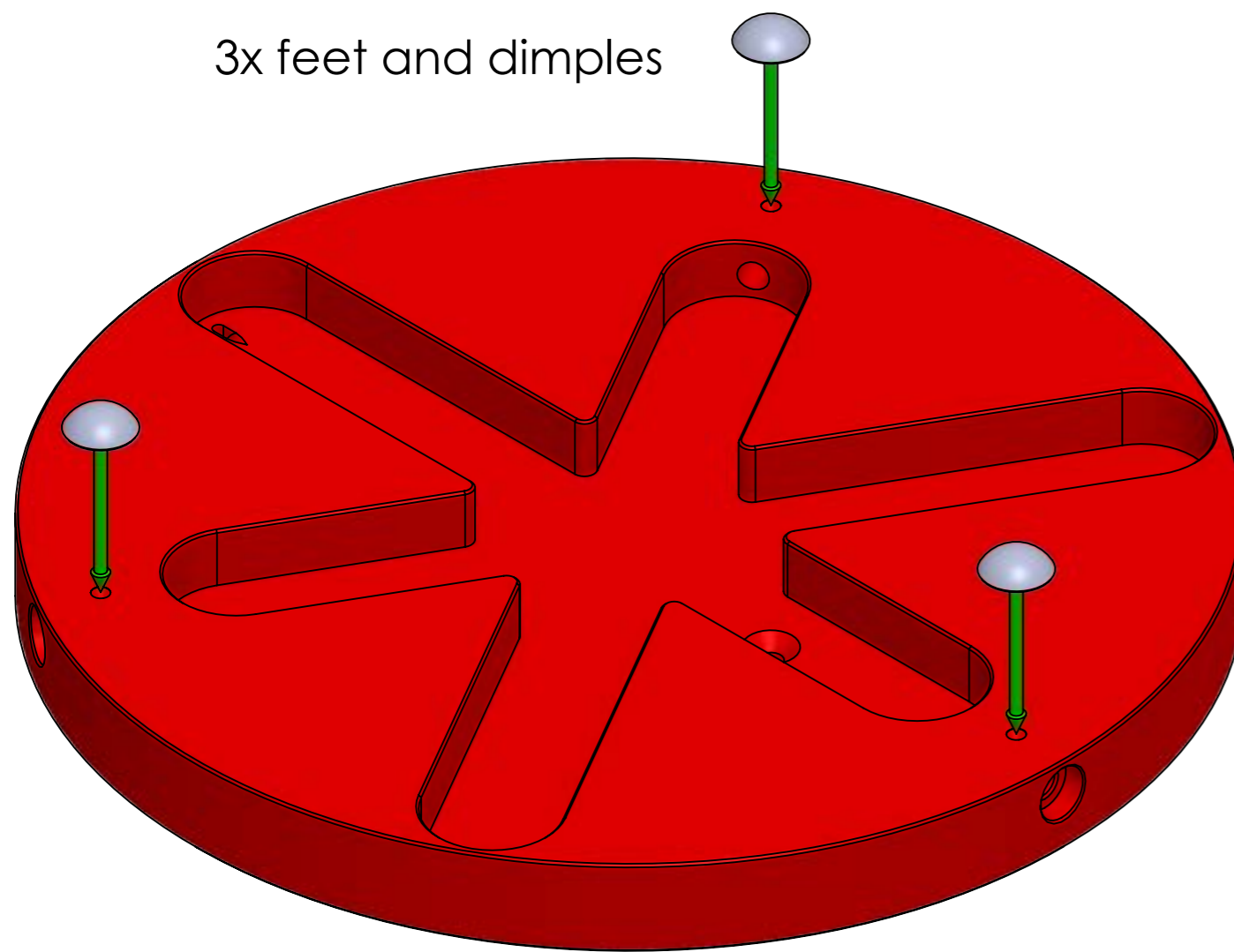
Assembly time should be approximately 15-20 minutes.

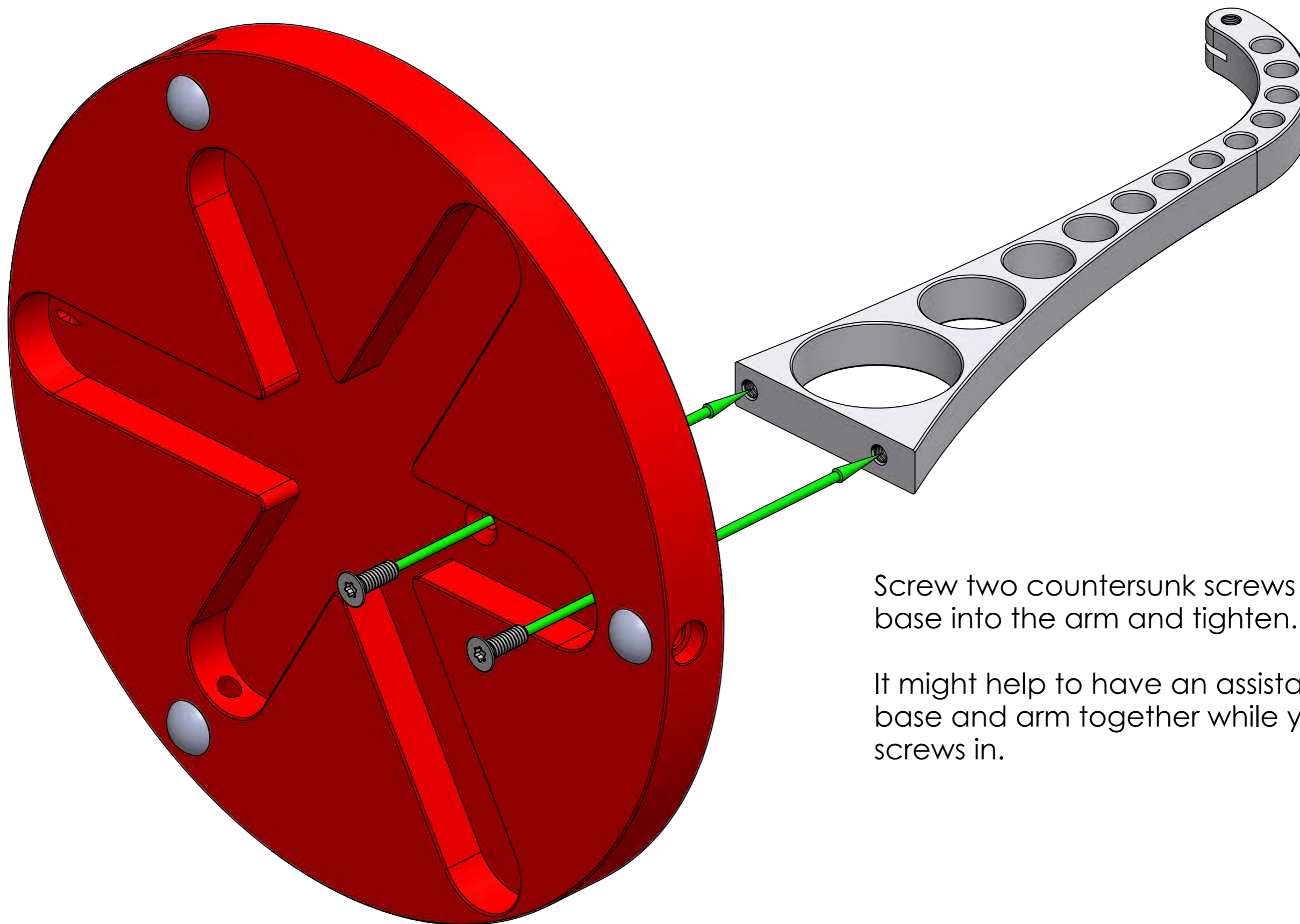




Note, some kits have three rubber feet and dimples, some have four rubber feet and dimples

Peel the backing off the adhesive rubber feet and stick them over the dimples on the bottom of the base.



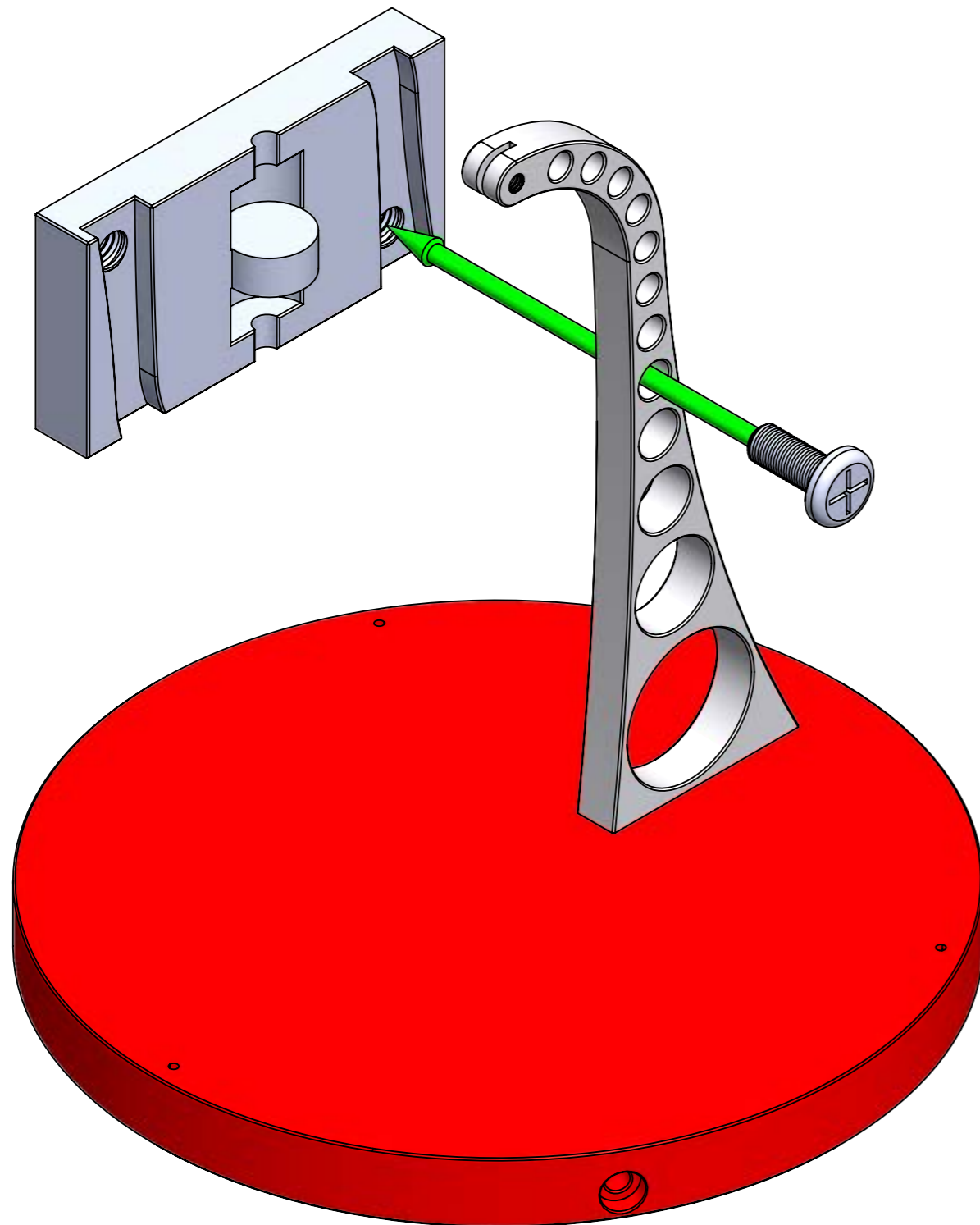


Screw two countersunk screws through the base into the arm and tighten.

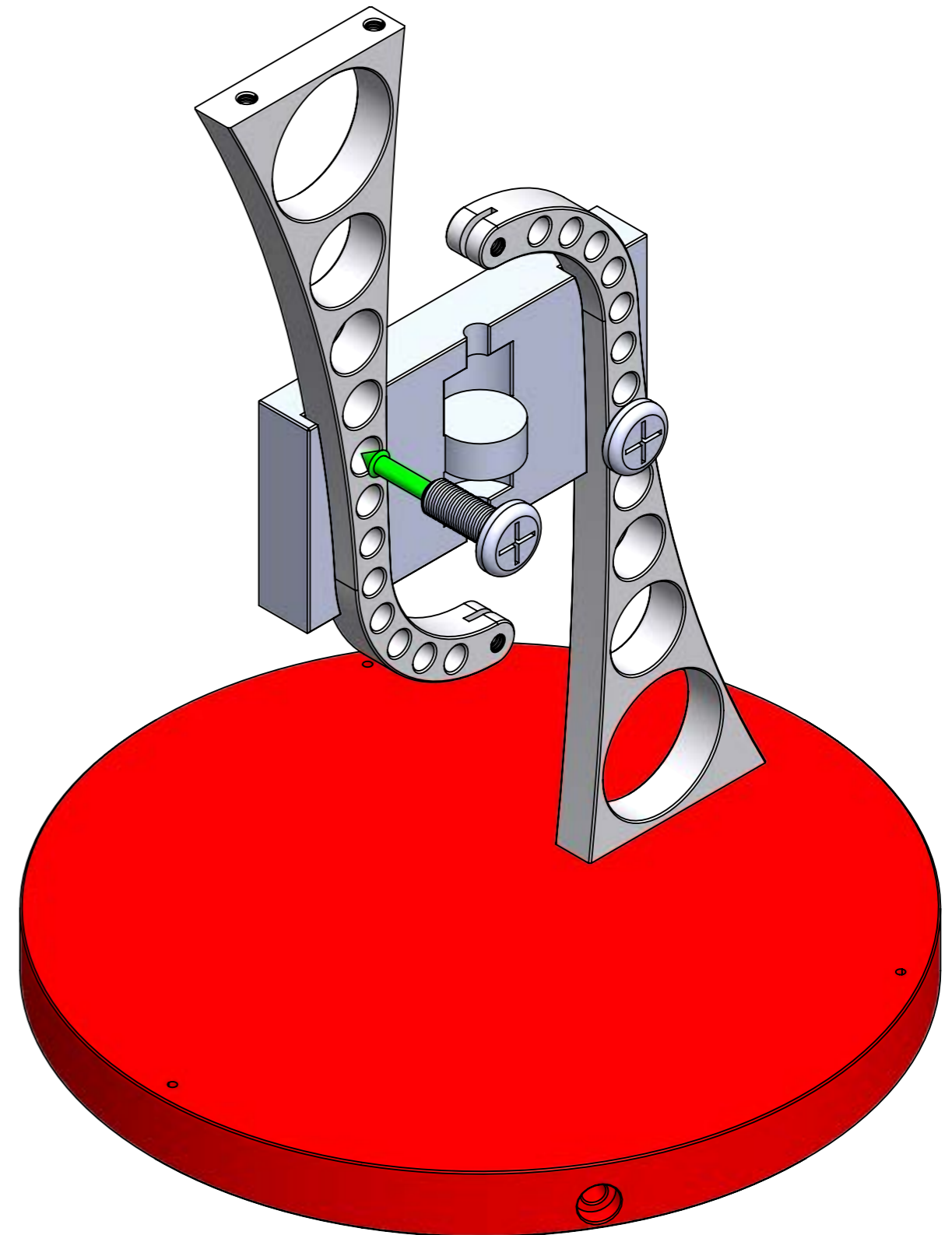
It might help to have an assistant hold the base and arm together while you screw the screws in.

Fit the slot in the assembly plate over the lower arm and screw one assembly screw through the arm into the assembly plate.

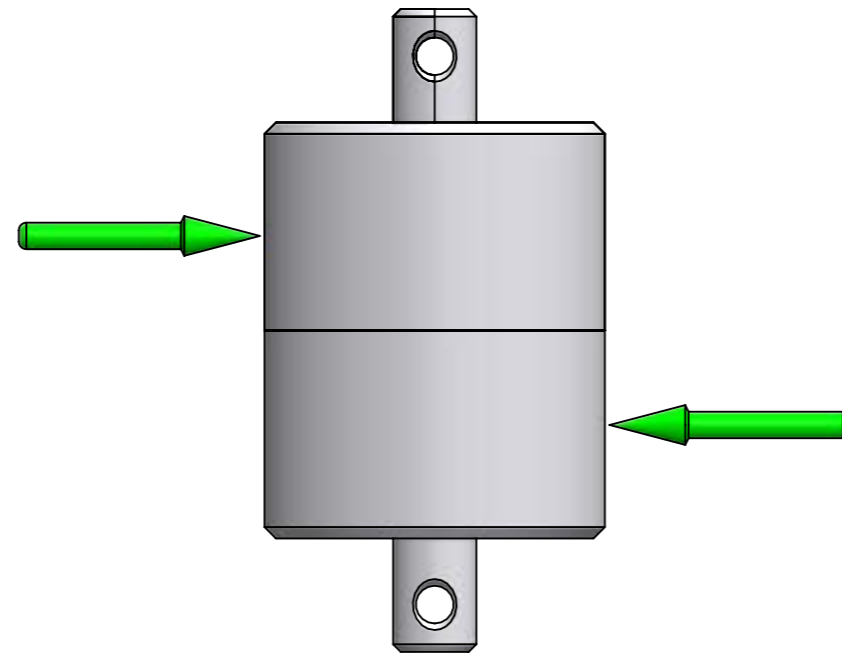
You should be able to screw it in using your fingers, but if not you can use a small cross-point screwdriver. Do not tighten too much or you risk marking the arm.



Fit the second arm into the slot in the assembly plate and screw one assembly screw through the arm into the assembly plate.

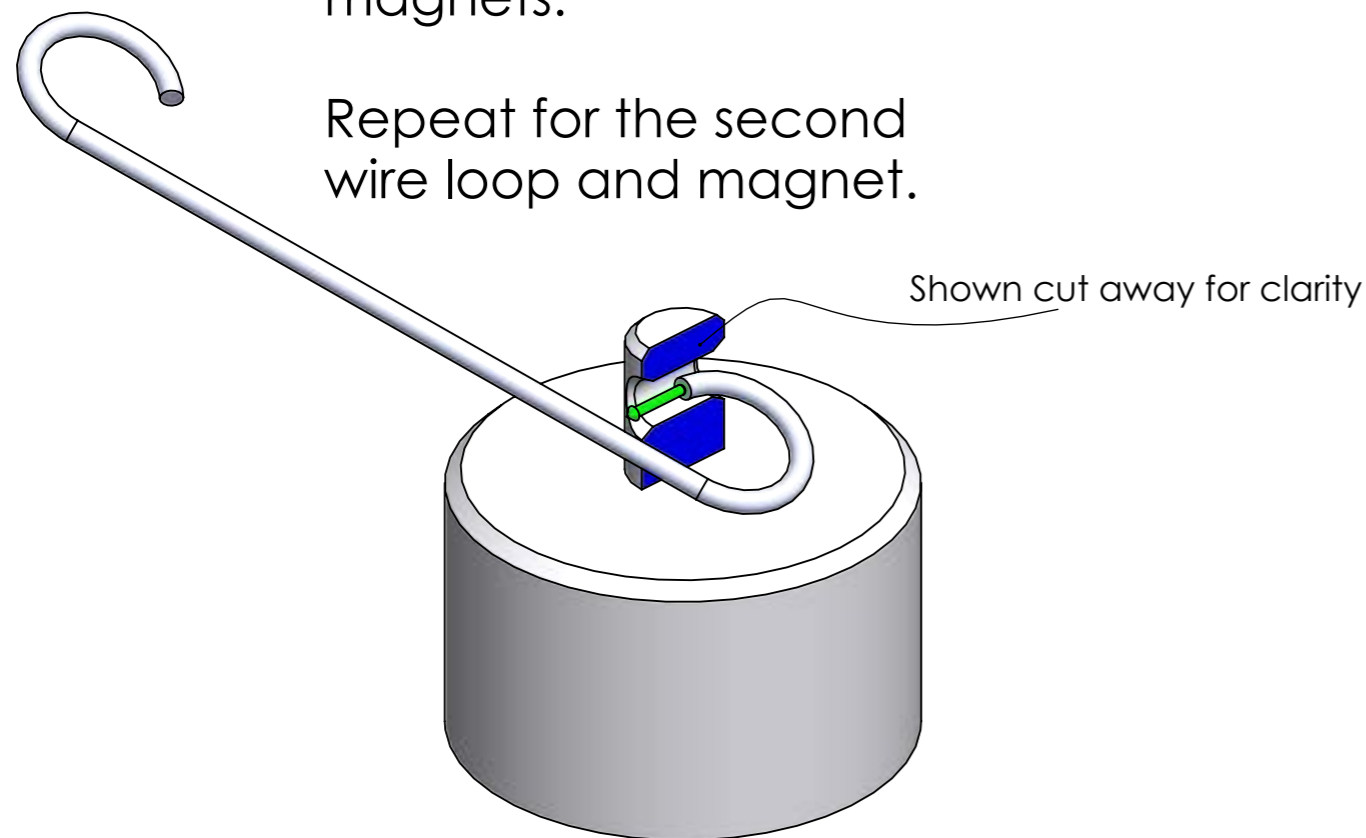


MAGNET SAFETY: When separating the magnets use a sideways sliding motion. When separated do not allow them to snap together, they could damage themselves or injure you.

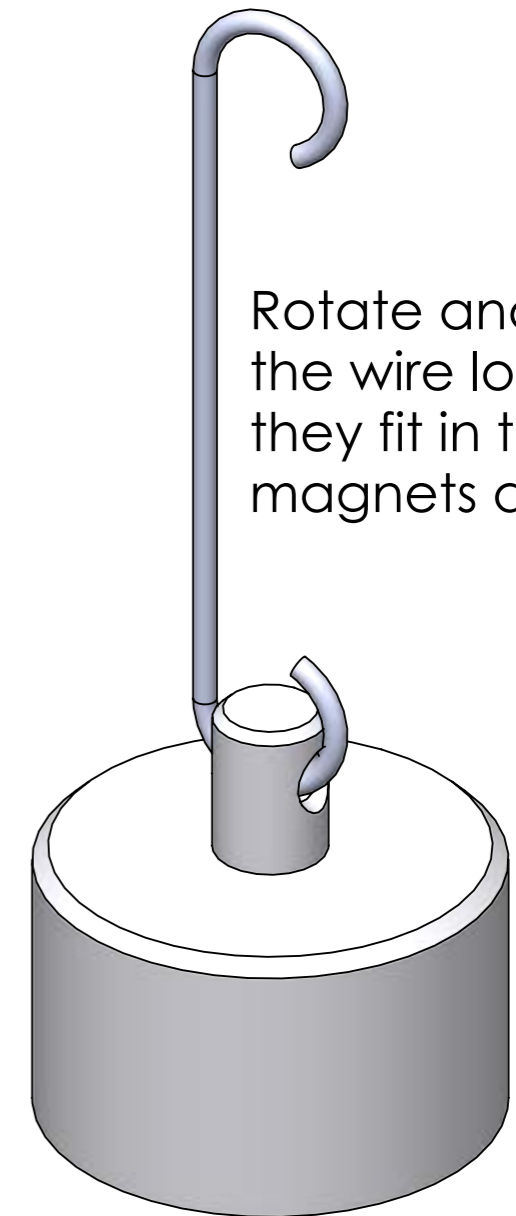


Fit one wire loop through the hole in one of the magnets.

Repeat for the second wire loop and magnet.



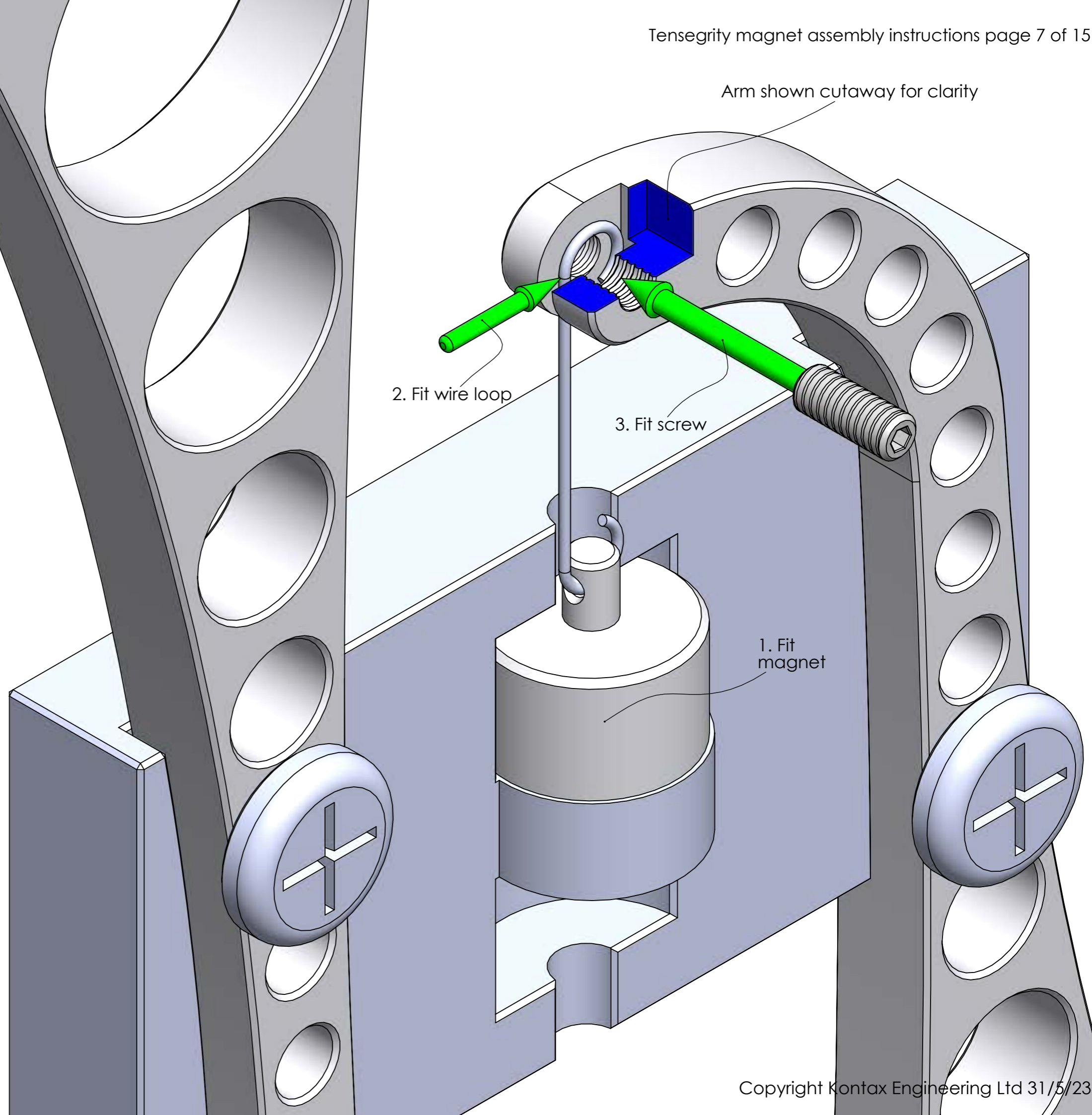
Rotate and twist the wire loops until they fit in the magnets as shown.



1. Fit one magnet and wire loop into the top pocket in the assembly plate.
2. Swing the wire loop into the slot in the arm.
3. Use the hex key to screw one grub screw into the arm until it is flush with the top face.

The screw should pass cleanly through the hook on the end of the wire loop and screw down flush with the arm. If it feels tight as you screw it in do not force it. Back the screw off, reposition the hook and try again.

Repeat for the second magnet. You will need to hold the first magnet in place with your finger when you fit the second magnet into the assembly plate.



Identify the top surface of the top plate, this is the side with the countersinks on the two holes.

Position the top plate over the arm with the top surface upwards and screw two countersunk screws through the top plate into the arm and tighten.

If the plate is the right way up the screws should fit slightly below the surface. If the plate is the wrong way up the screws will sit above the surface, in which case the plate will need reversing.

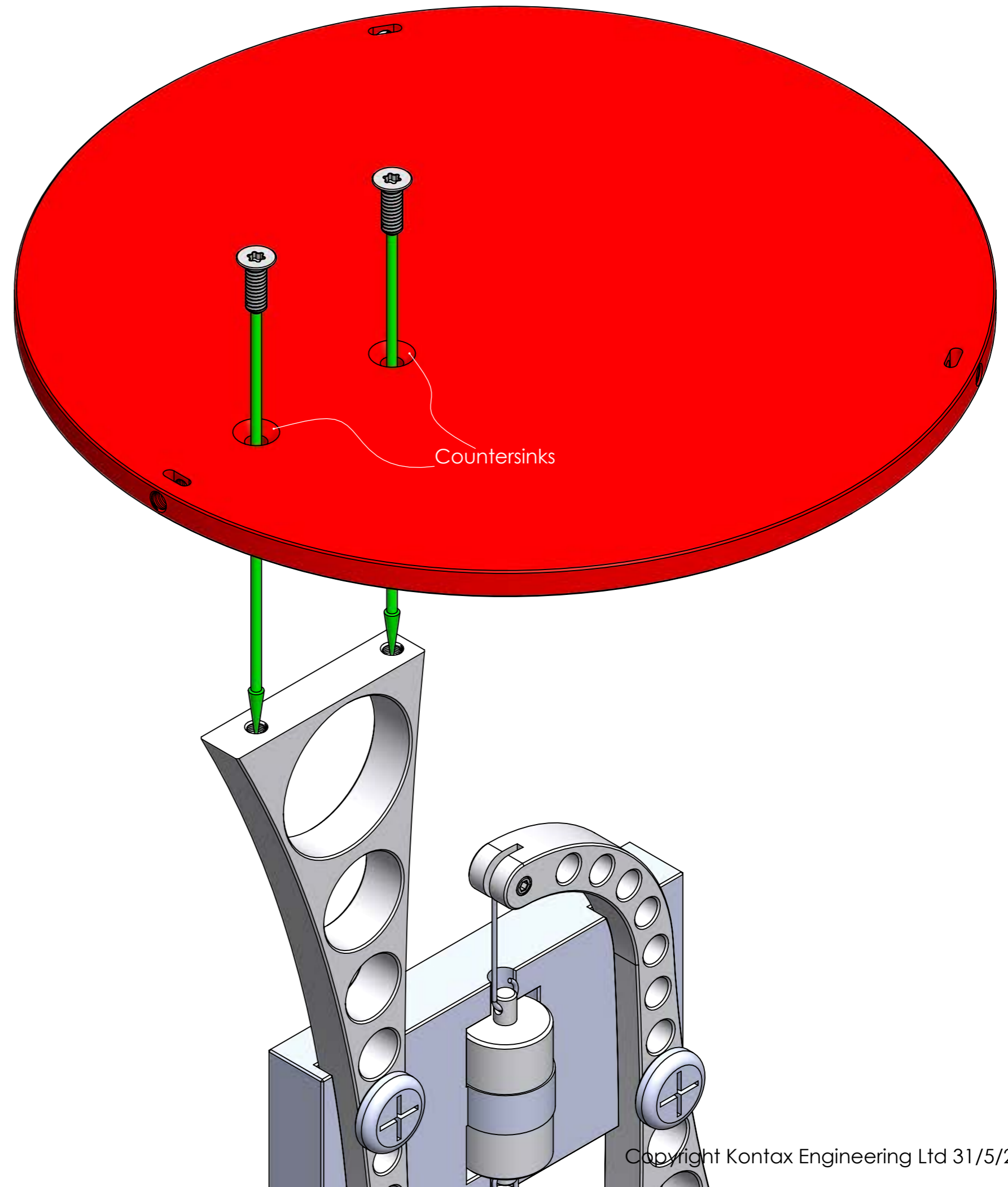




Plate shown cutaway for clarity

Fit one outer wire loop into one of the slots in the top plate. The loop should enter from the underside of the plate.

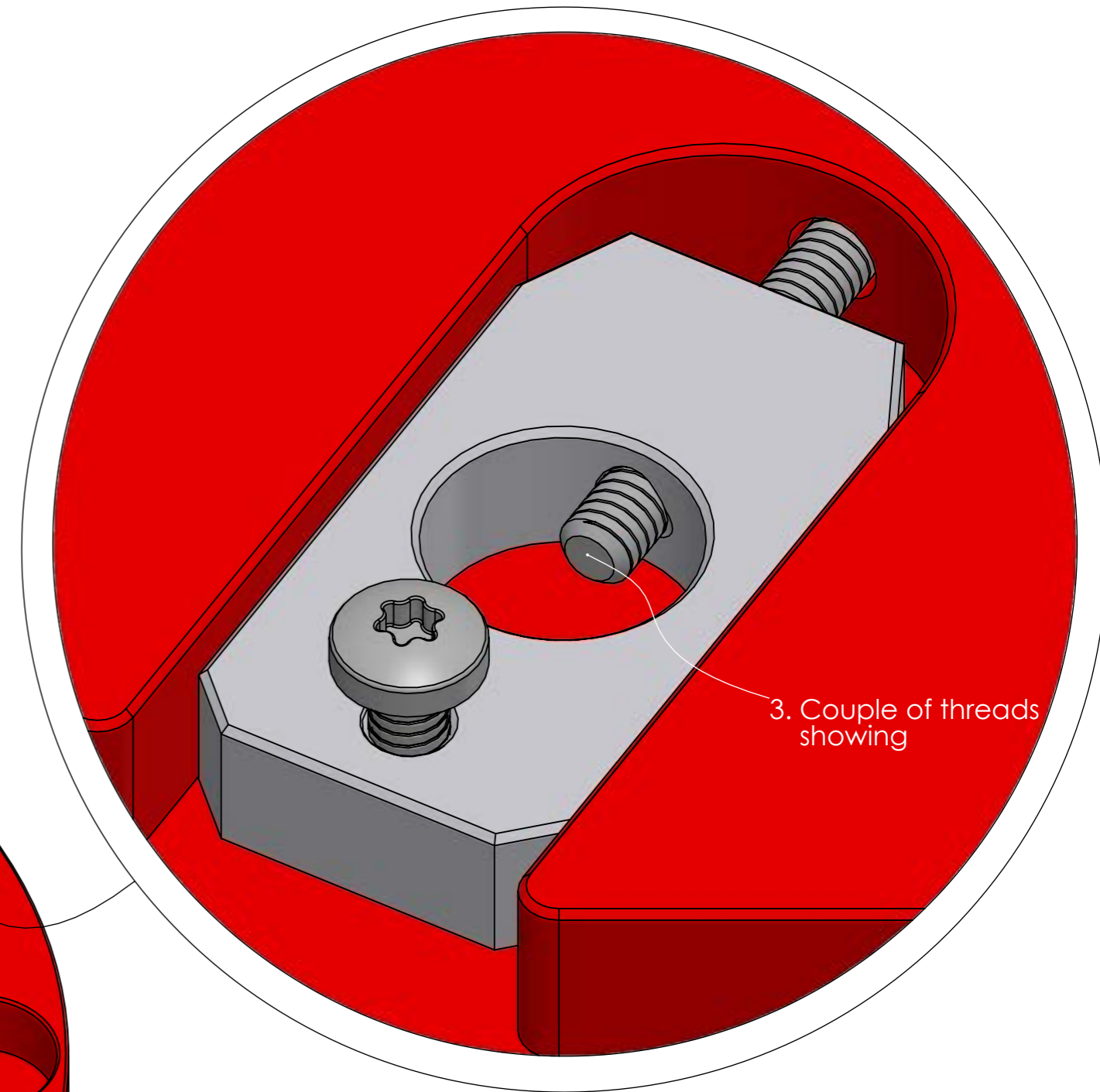
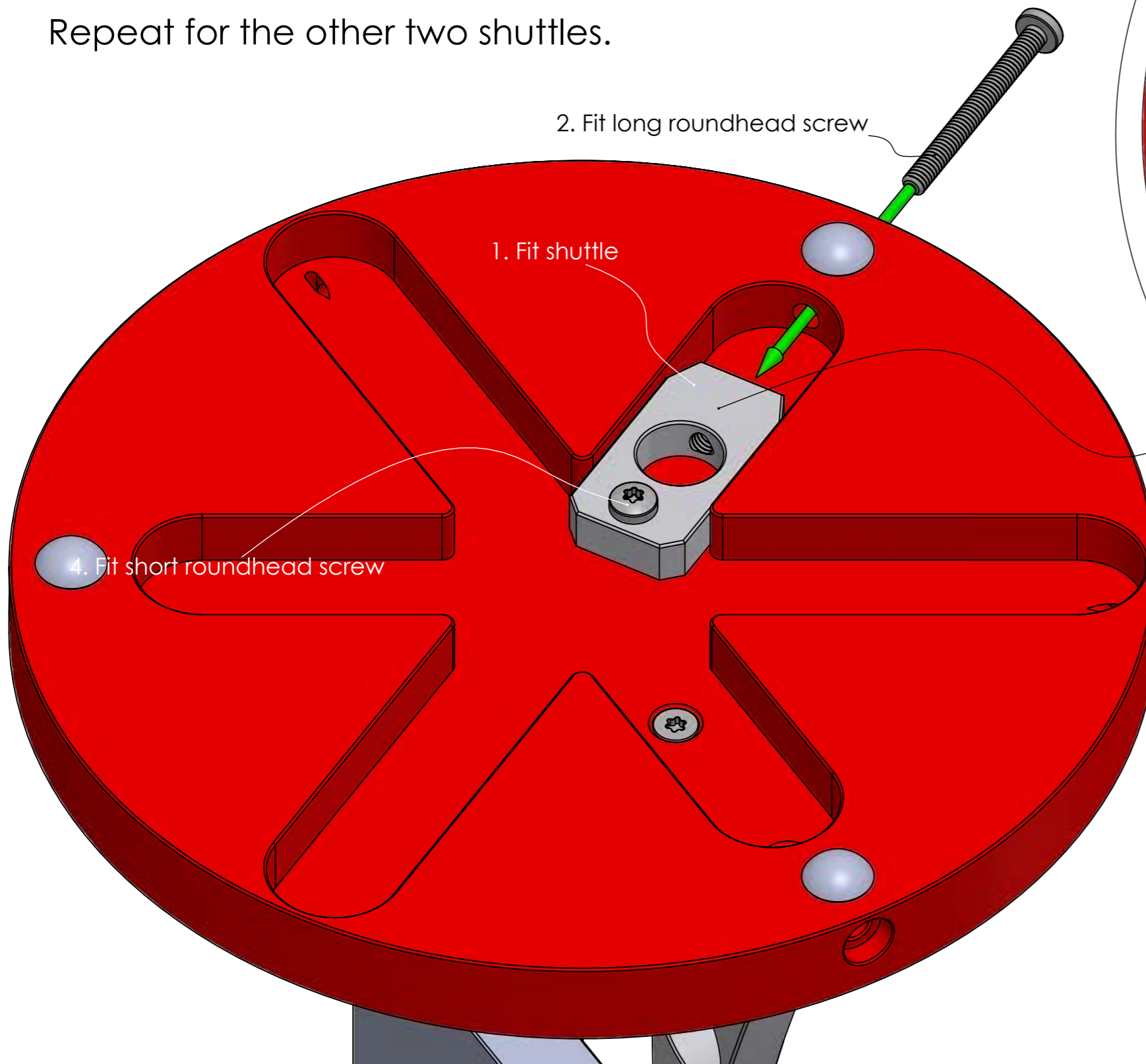
Using the hex key screw 1x grub screw into the plate, going through the loop on the wire.

The screw should pass cleanly through the loop on the end of the wire and screw down flush with the edge of the plate. If it feels tight as you screw it in do not force it. Back the screw off, reposition the loop and try again.

Repeat for the other two outer wires.

1. Fit one shuttle into a short slot in the base.
2. Fit one long roundhead screw through the hole in the edge of the base.
3. Screw the screw into the shuttle until a couple of threads are showing in the hole.
4. Screw one short roundhead screw into the shuttle a couple of turns.

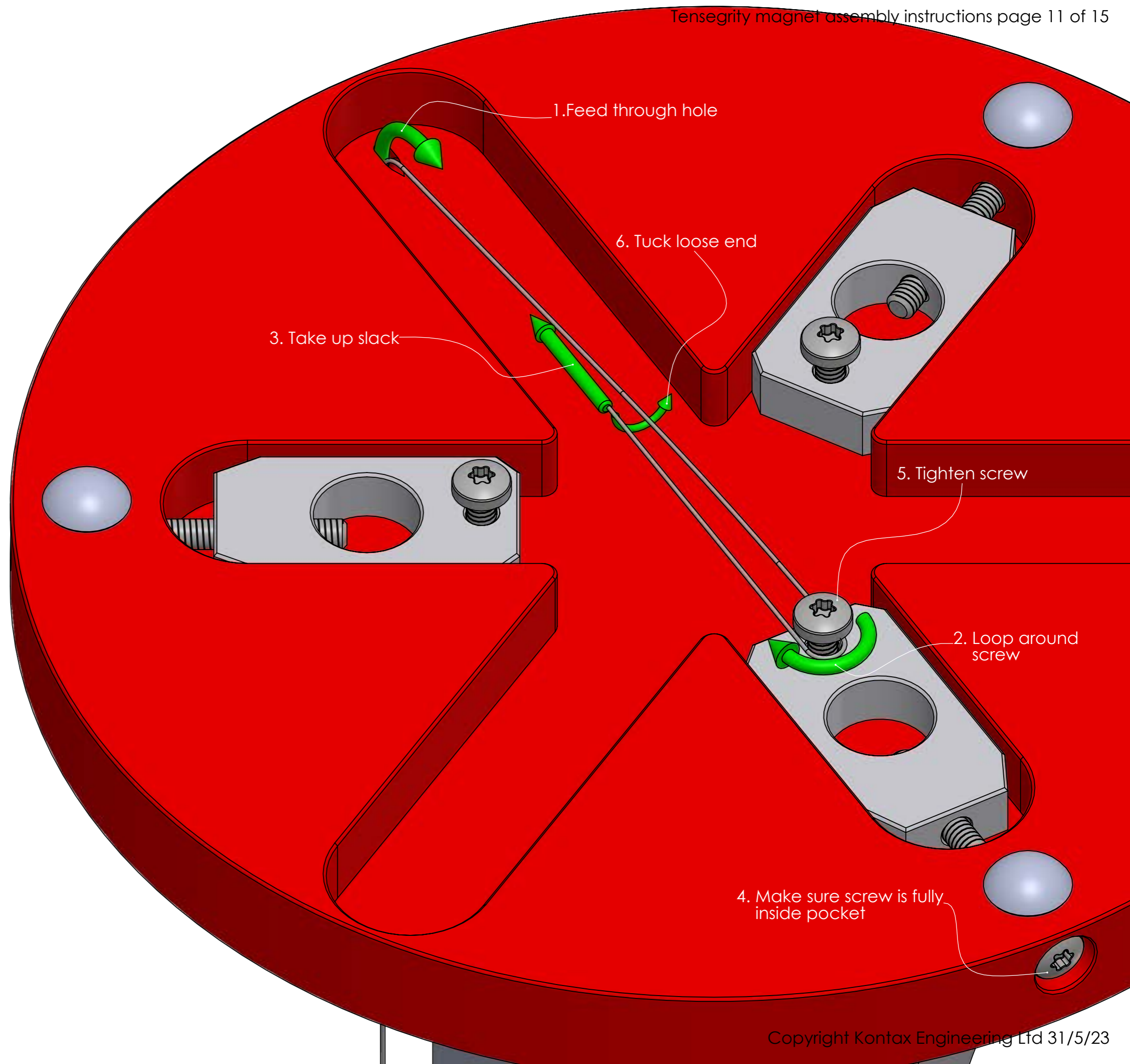
Repeat for the other two shuttles.

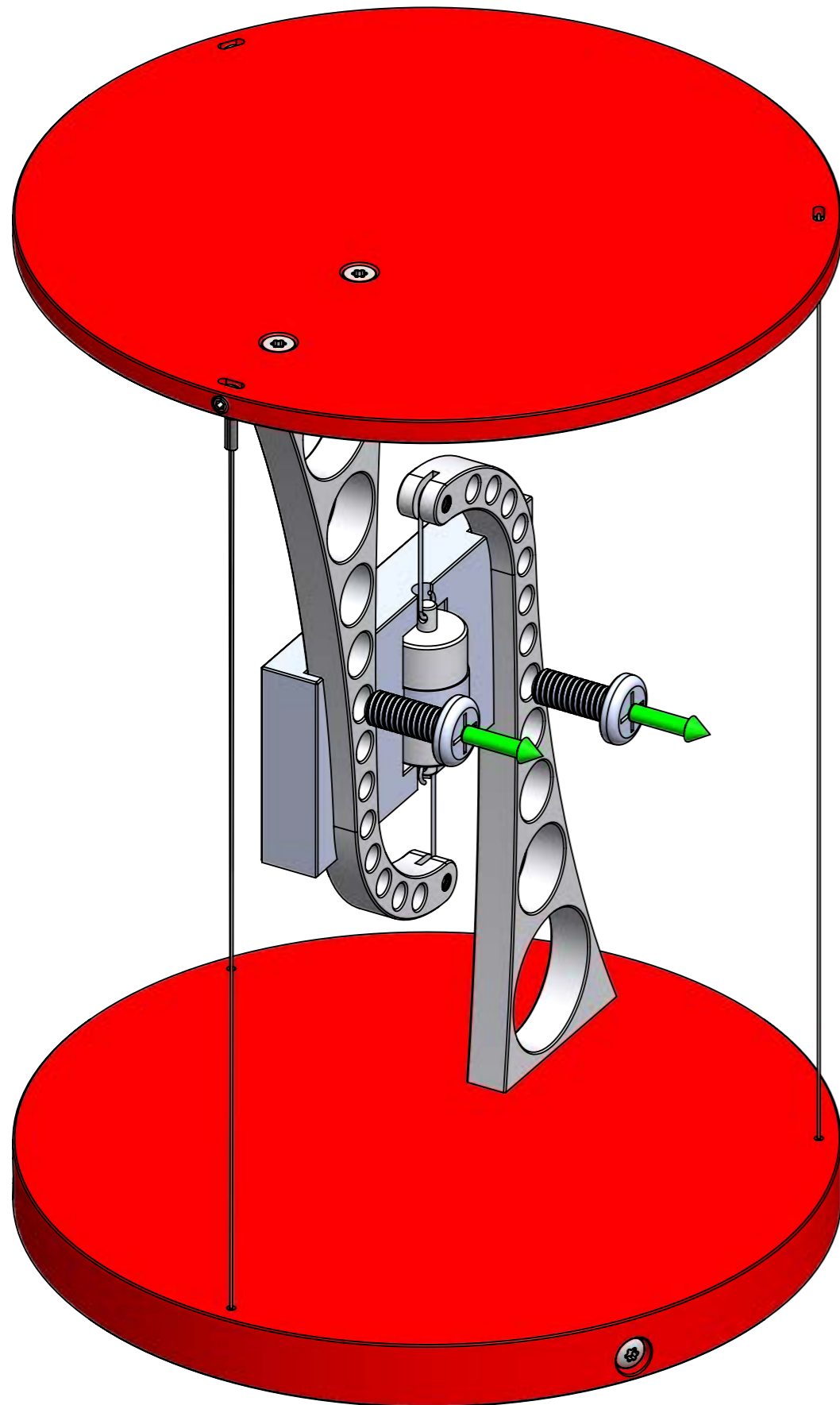


Detail view after fitting screws

1. Feed one outer wire through its matching hole in the base.
2. Loop the wire fully around its opposite shuttle screw. The wire should go a full 180° around the screw.
3. Pull firmly enough to take up **all** the slack in the wire but **not** tight like a guitar string. The wire should be straight all the way from the base to the top plate with no bends or kinks.
4. Make sure the long roundhead screw has been pulled fully into its hole.
5. Make sure the slack is still taken up and screw the shuttle screw down tightly onto the outer wire.
6. The loose wire end can be tucked underneath the straight section for tidiness.

Repeat for the other two outer wires.



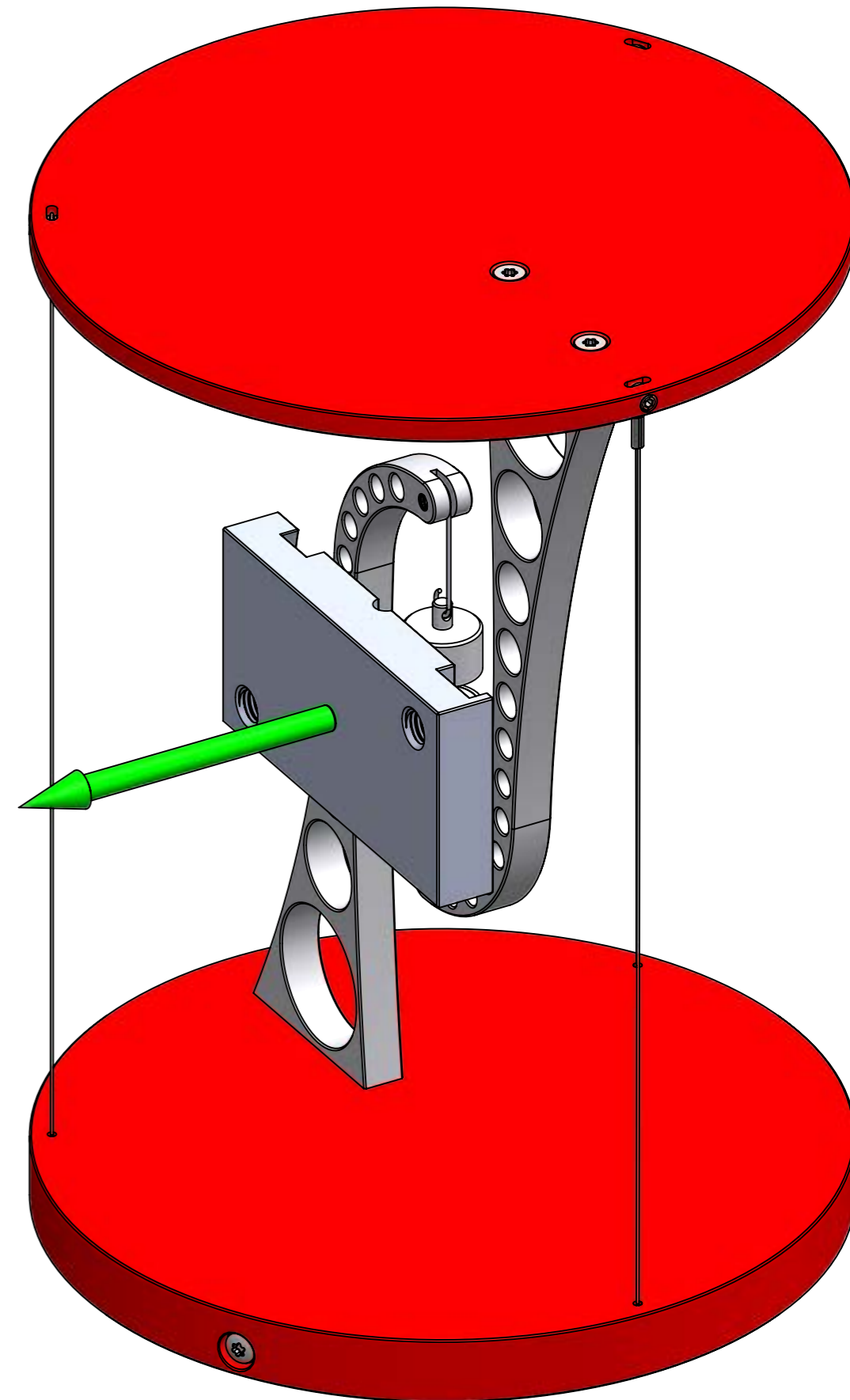


Remove the two assembly screws and then very carefully remove the assembly plate, the magnets will pull together slightly.

If the slack in the wires was taken up correctly in the previous stage then the magnets should have just enough pull to hold the table upright.

If the magnets come apart and the wire loops detach from the arms you should be able to slip the loops back over the grub screws in the arms and gently bring the magnets back near each other to hold the top plate in place.

If there is too much slack in the outer wires the magnets might snap together. If they do you will need to slide them apart, refit the assembly plate and screws, and readjust the outer wires so there is no slack (refer to page 11).



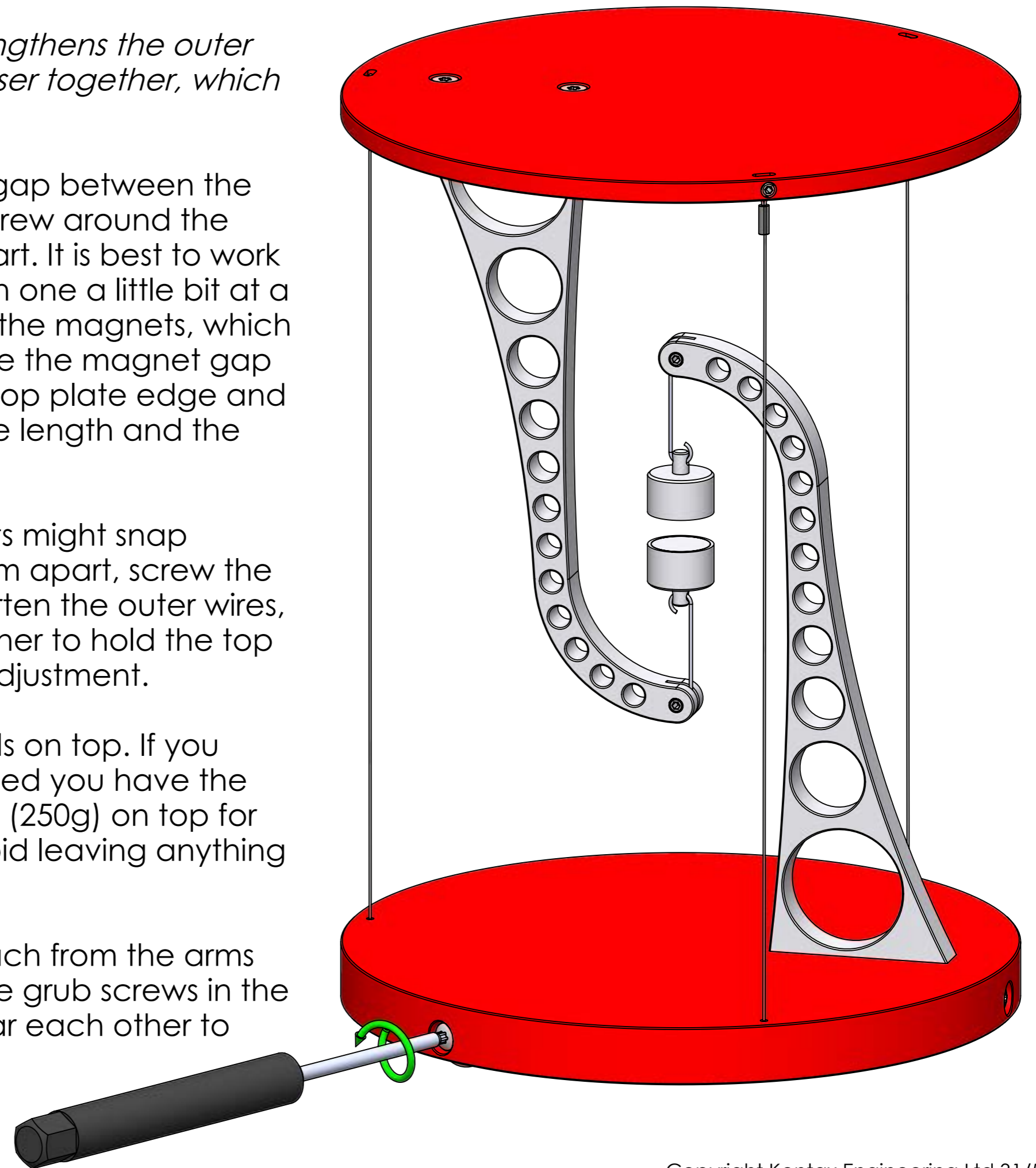
Note: *In the next step, undoing the screws lengthens the outer wires, which allows the magnets to move closer together, which increases the stability of the table.*

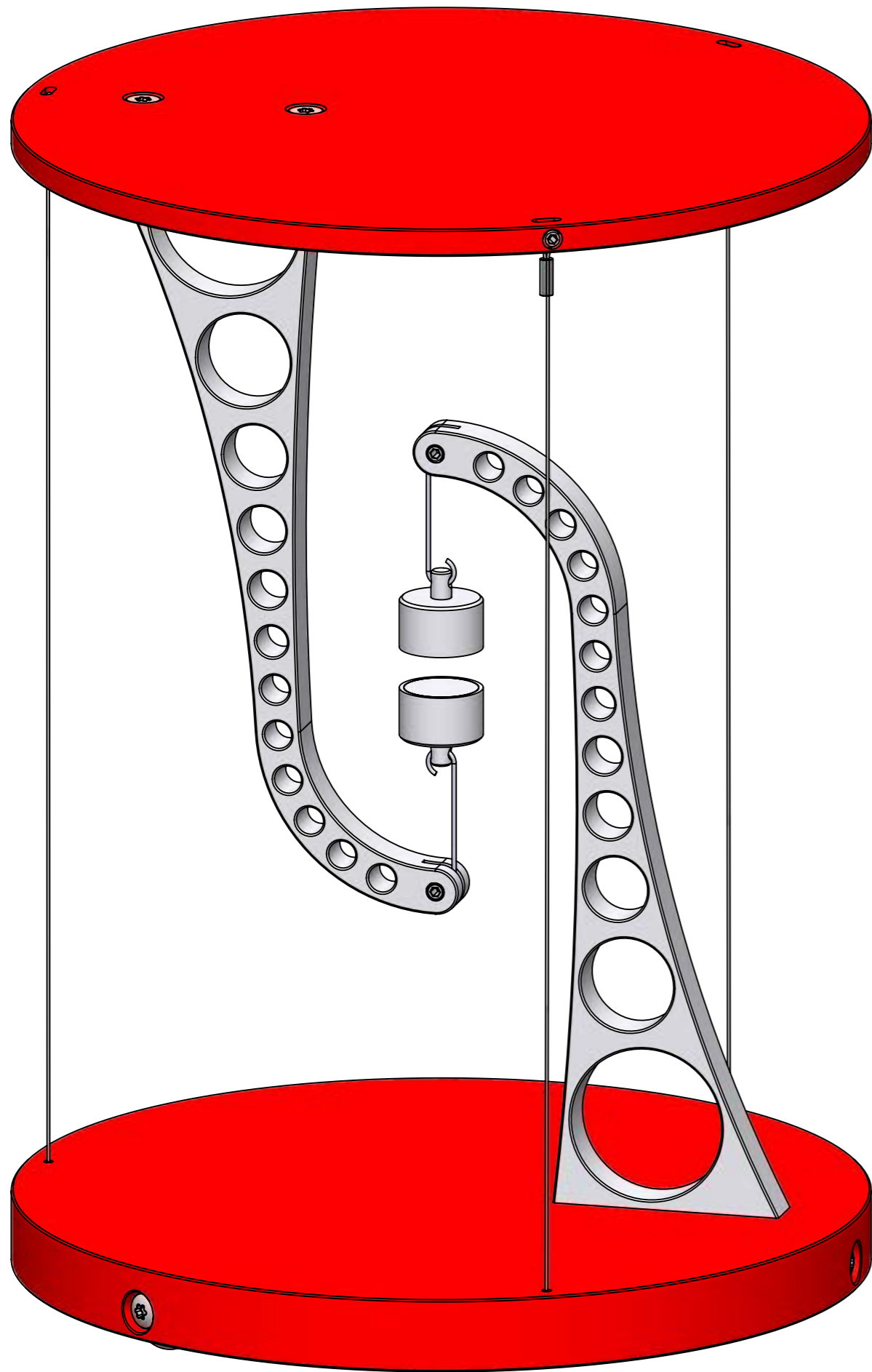
Now you need to set the correct amount of gap between the magnets. Use the Torx driver to undo each screw around the base until the magnets are about 2-3mm apart. It is best to work around the three screws in turn undoing each one a little bit at a time. A 2-3mm gap gives the optimal pull on the magnets, which will hold the top plate steady. When you have the magnet gap set correctly you can use a ruler against the top plate edge and fine tune the screws to get the wires the same length and the top plate horizontal.

If you undo the screws too much the magnets might snap together. If they do you will need to slide them apart, screw the screws around the base IN a few turns to shorten the outer wires, gently bring the magnets back near each other to hold the top plate in place and restart the magnet gap adjustment.

The table is not designed to carry heavy loads on top. If you overload it the magnets will pull apart. Provided you have the correct 2-3mm gap you can put light objects (250g) on top for brief demonstration purposes. It is best to avoid leaving anything on it permanently.

If the table collapses and the wire loops detach from the arms you should be able to slip them back over the grub screws in the arms and gently bring the magnets back near each other to hold the top plate in place.





Your Tensegrity table is now fully assembled.

If you need help with your table you can email us at:

support@stirlingengine.co.uk



Our workshop is located in the Thames Valley, United Kingdom and is staffed by a skilled team of 9 designers, machinists and assemblers. We have 4 CNC mills, 3 CNC lathes and 3 CNC mill-turn centres.