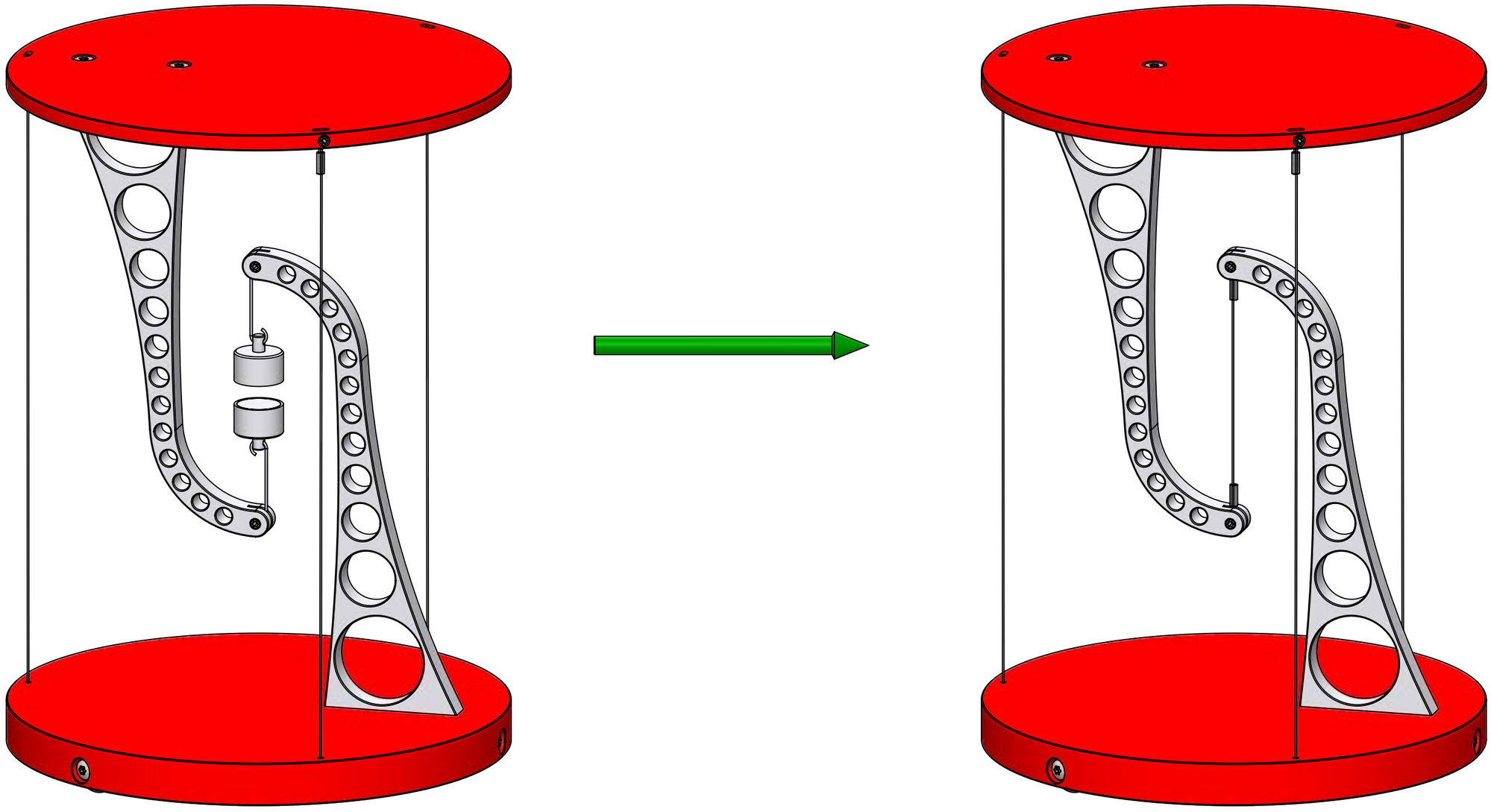
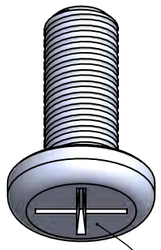
Tensegrity table magnets to centre wire conversion instructions

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

Conversion time should be approximately 10-15 minutes.

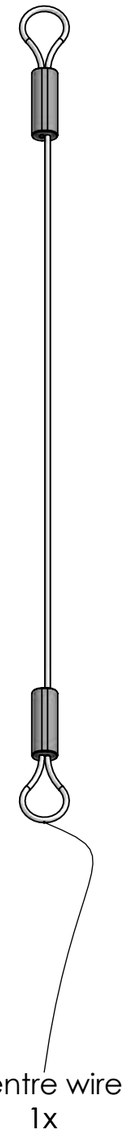


Hex key
1x



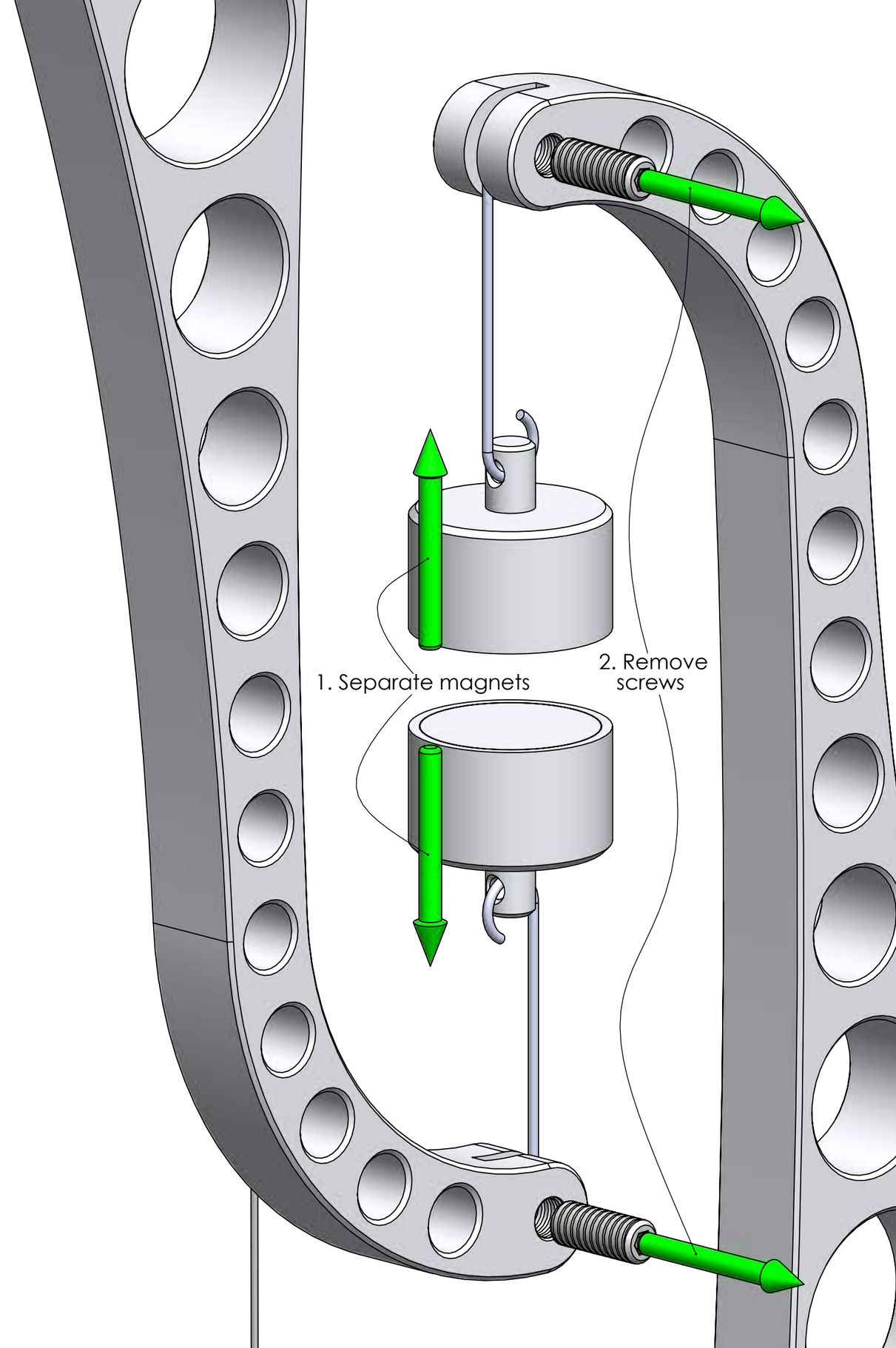
Assembly screw
2x

Assembly plate
1x



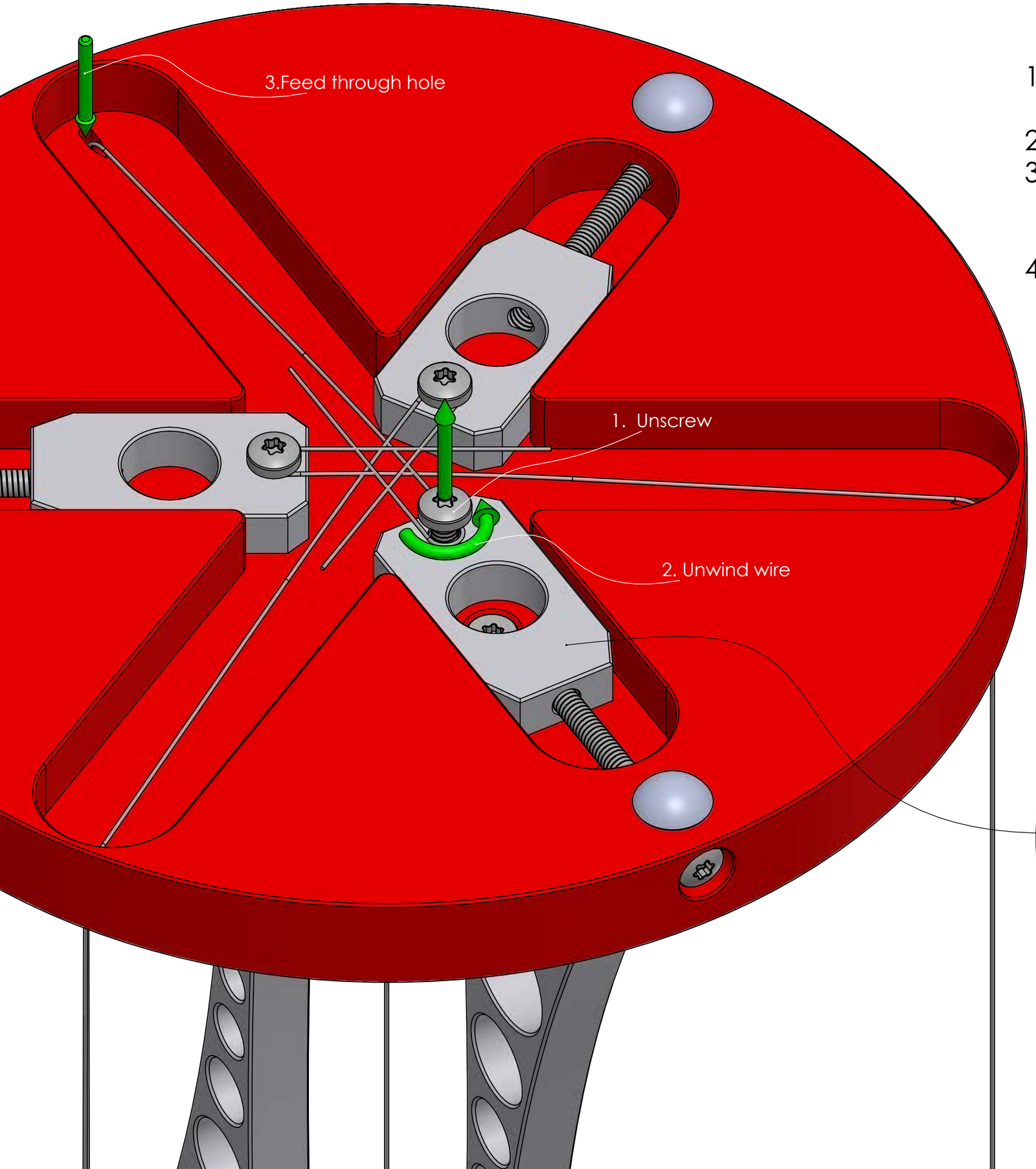
Centre wire
1x

Torx driver
1x



1. Carefully push the top plate and base towards each other so that the magnets pull apart far enough to go loose. The outer wires will also go loose, take care that they do not become entangled with the arms.
2. Using the hex driver unscrew the two grub screws from the arms. Retain the screws for re-fitting later.
3. Remove the wire loops and magnets.

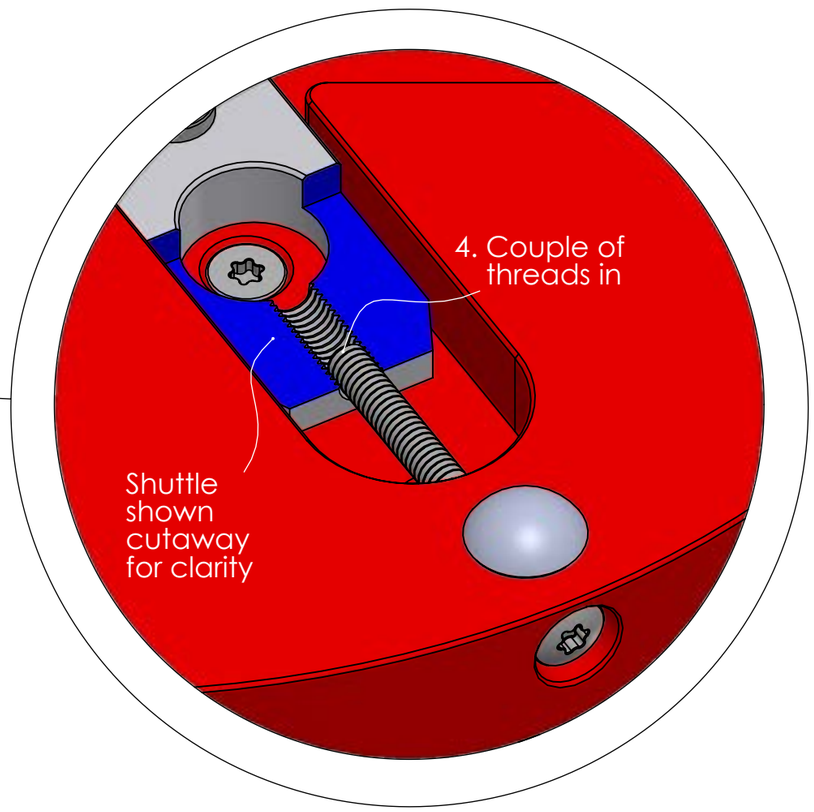
When the magnets are separated do not allow them to snap together again, they could damage themselves or injure you. You can carefully and slowly bring them together with a sideways sliding motion for safe keeping.



1. Unscrew the short roundhead screw a couple of turns.
2. Unwind the outer wire from the screw.
3. Feed the outer wire out through the hole in the base, leave it attached to the top plate.
4. Unscrew the long roundhead screw from the shuttle completely and then screw it back in a couple of turns.

Repeat for the other two wires and shuttles.

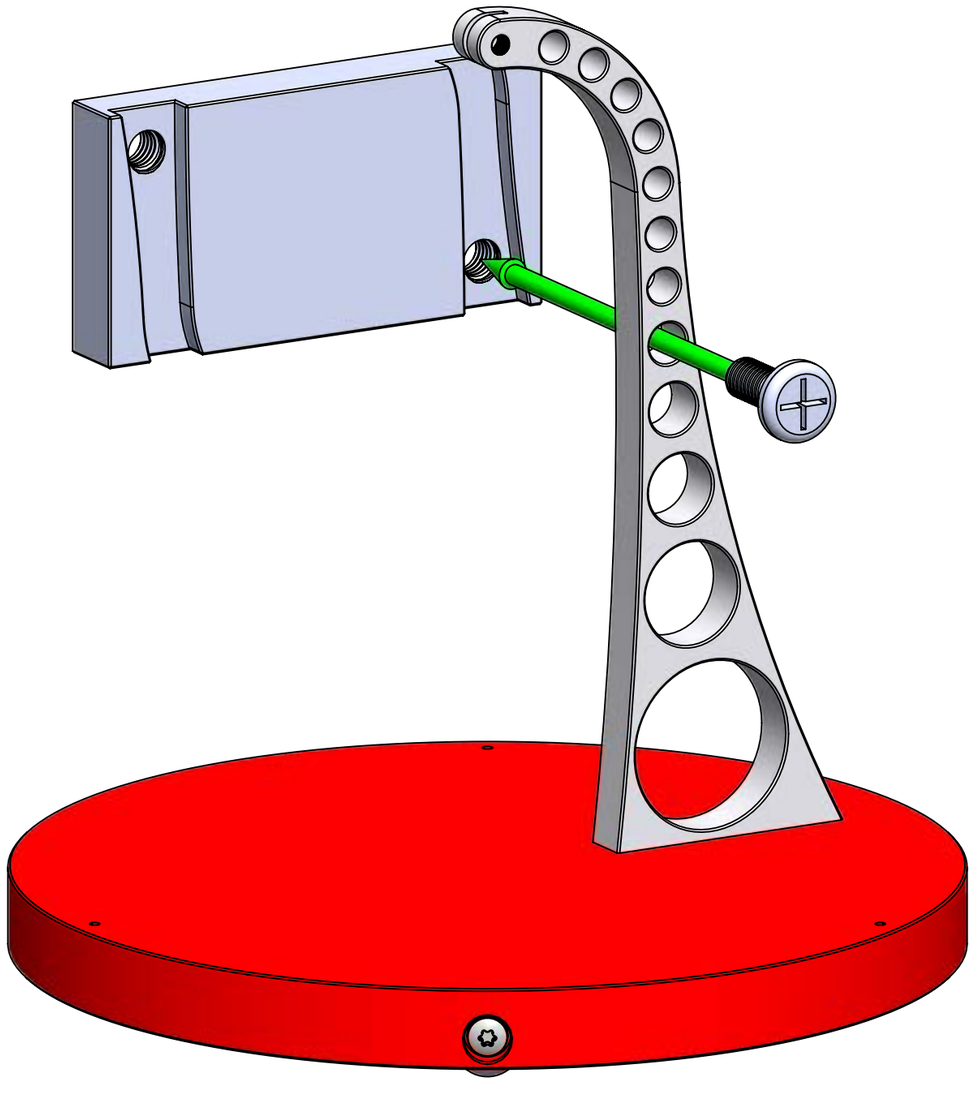
Detail view after re-fitting screw

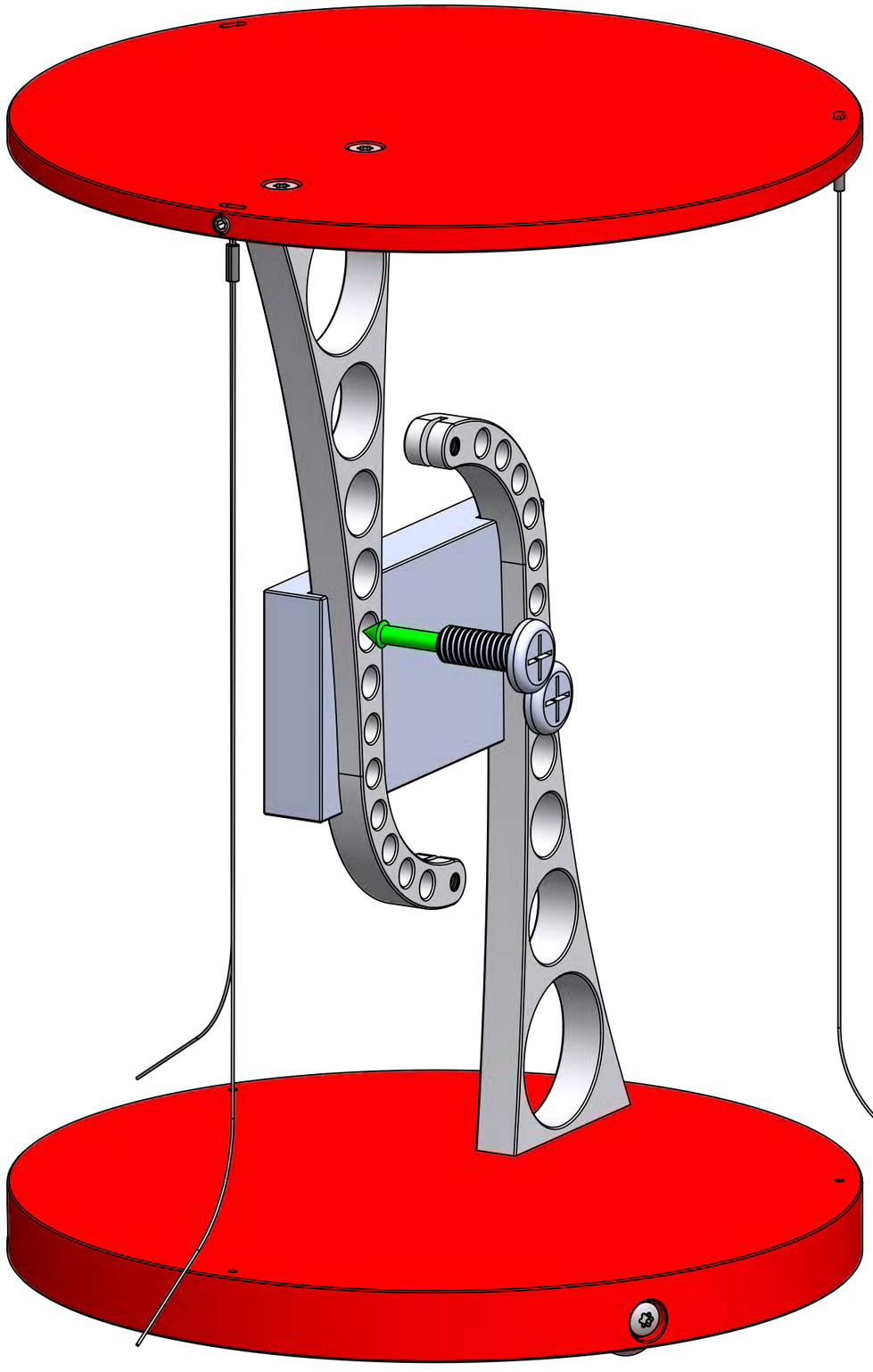


Fit the slot in the assembly plate over the lower arm and screw one assembly screw through the arm into the assembly plate.

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

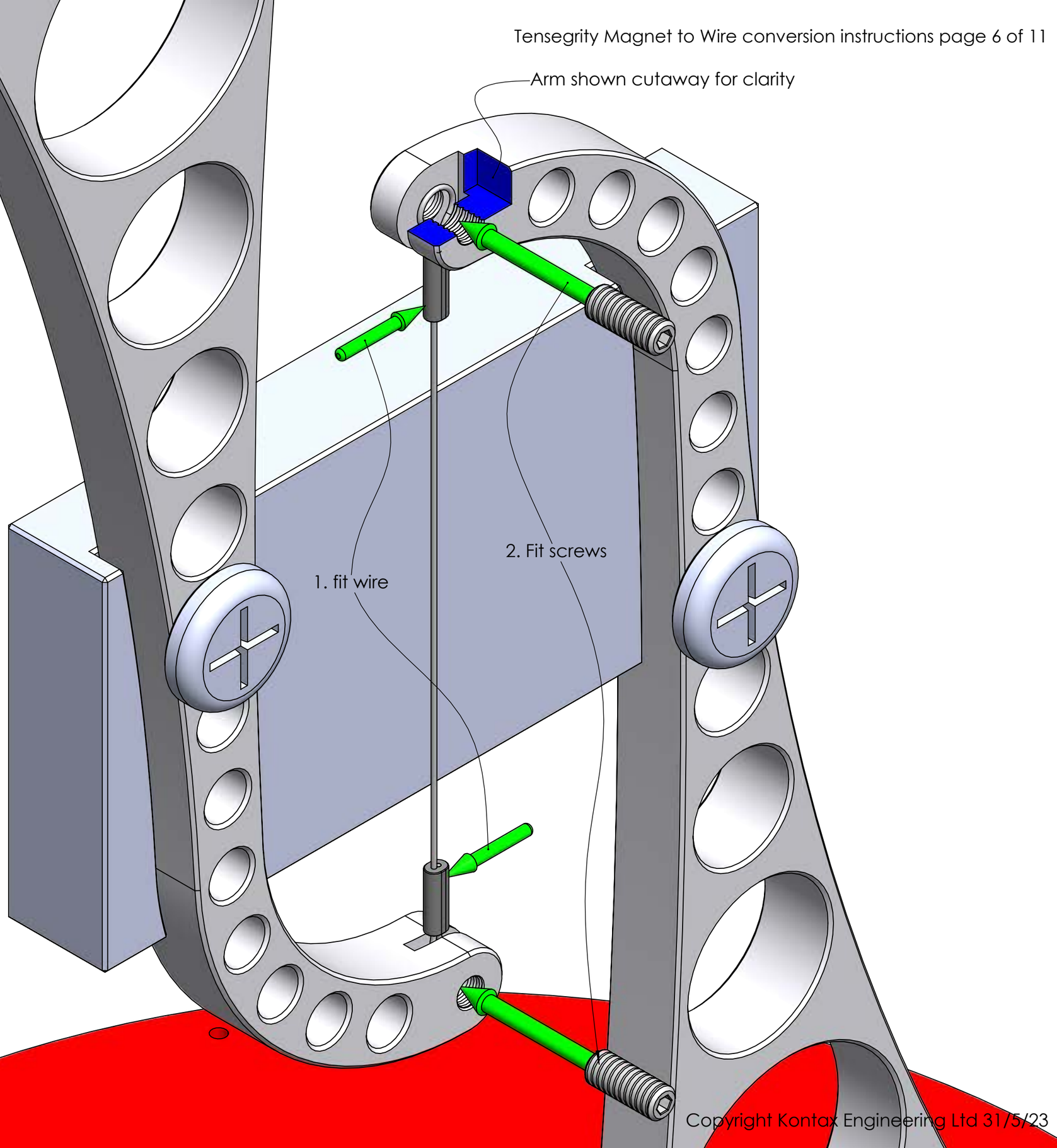




1. Fit the centre wire into the slots in the ends of the arms.

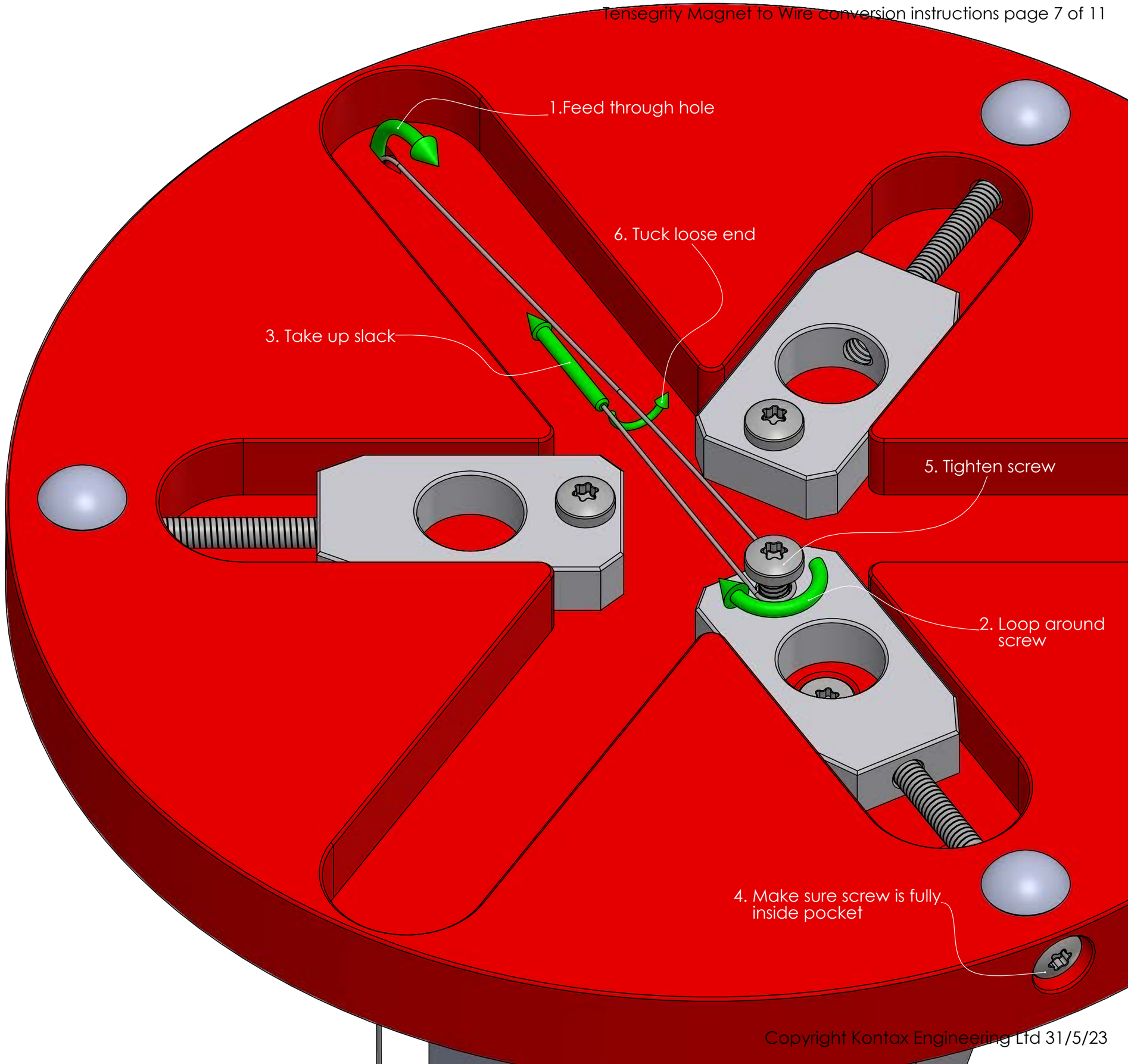
2. Using the hex driver screw two grub screws into the arms, going through the loops on the wire.

The screws should pass cleanly through the loops on the ends of the wire and screw down flush with the arms. If they feel tight as you screw them in do not force them. Back the screws off, reposition the loops and try again.

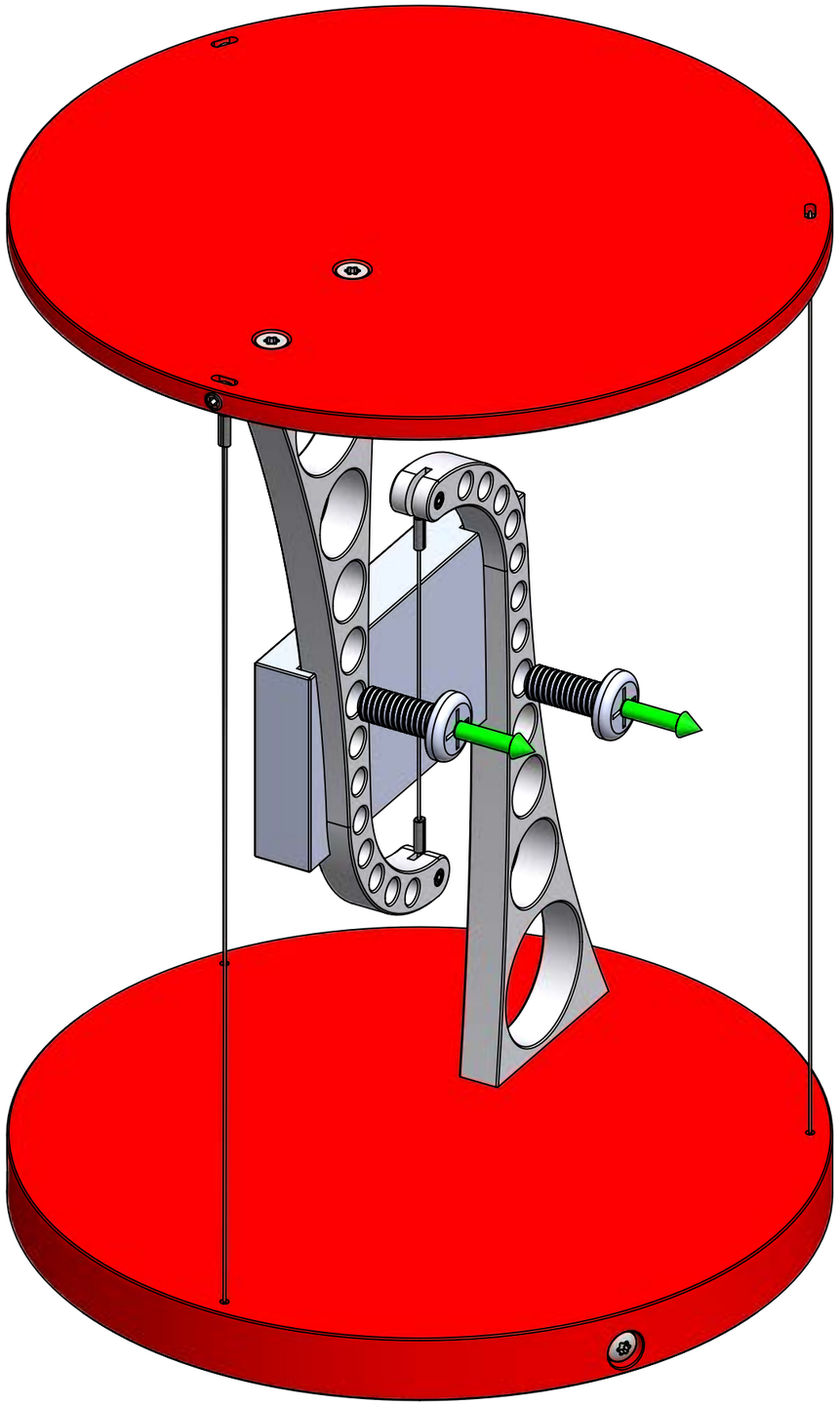


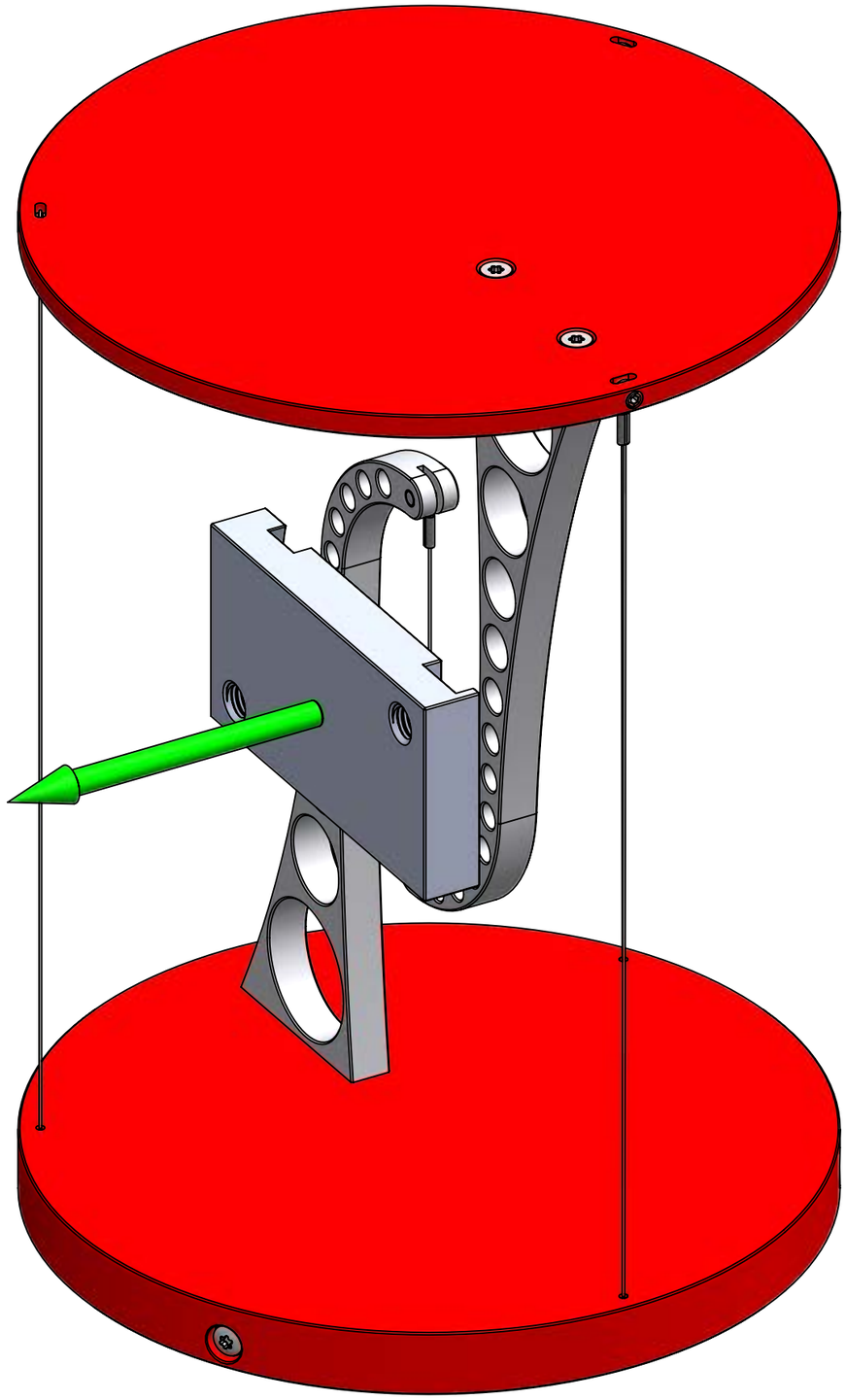
1. Feed one outer wire through its matching hole in the base.
2. Loop the wire fully around its opposite shuttle screw. The wire should go a full 180° around the screw.
3. Pull firmly enough to take up **all** the slack in the wire but **not** tight like a guitar string. The wire should be straight all 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. When they are all fitted you can tuck the excess lengths underneath.



Remove the two assembly screws and then remove the assembly plate, the table will be quite wobbly at this stage.





Note: *In the next step, tightening the screws shortens the outer wires, and undoing the screws lengthens the wires. Each screw will adjust the length of the wire that is directly opposite the screw.*

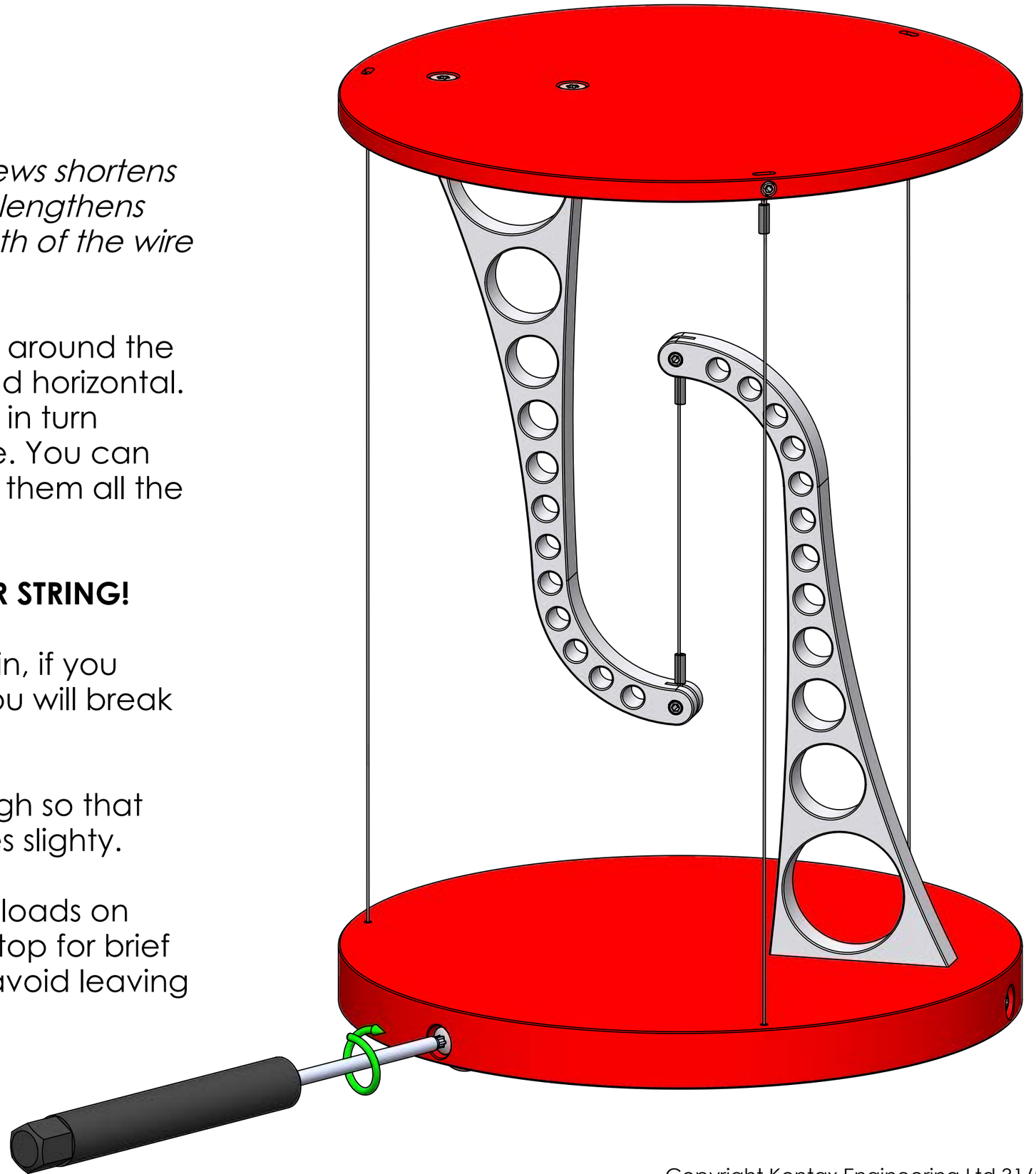
Use the Torx driver to tighten each screw around the base until the top plate is held steady and horizontal. It is best to work around the three screws in turn tightening each one a little bit each time. You can use a ruler against each wire to help get them all the same length.

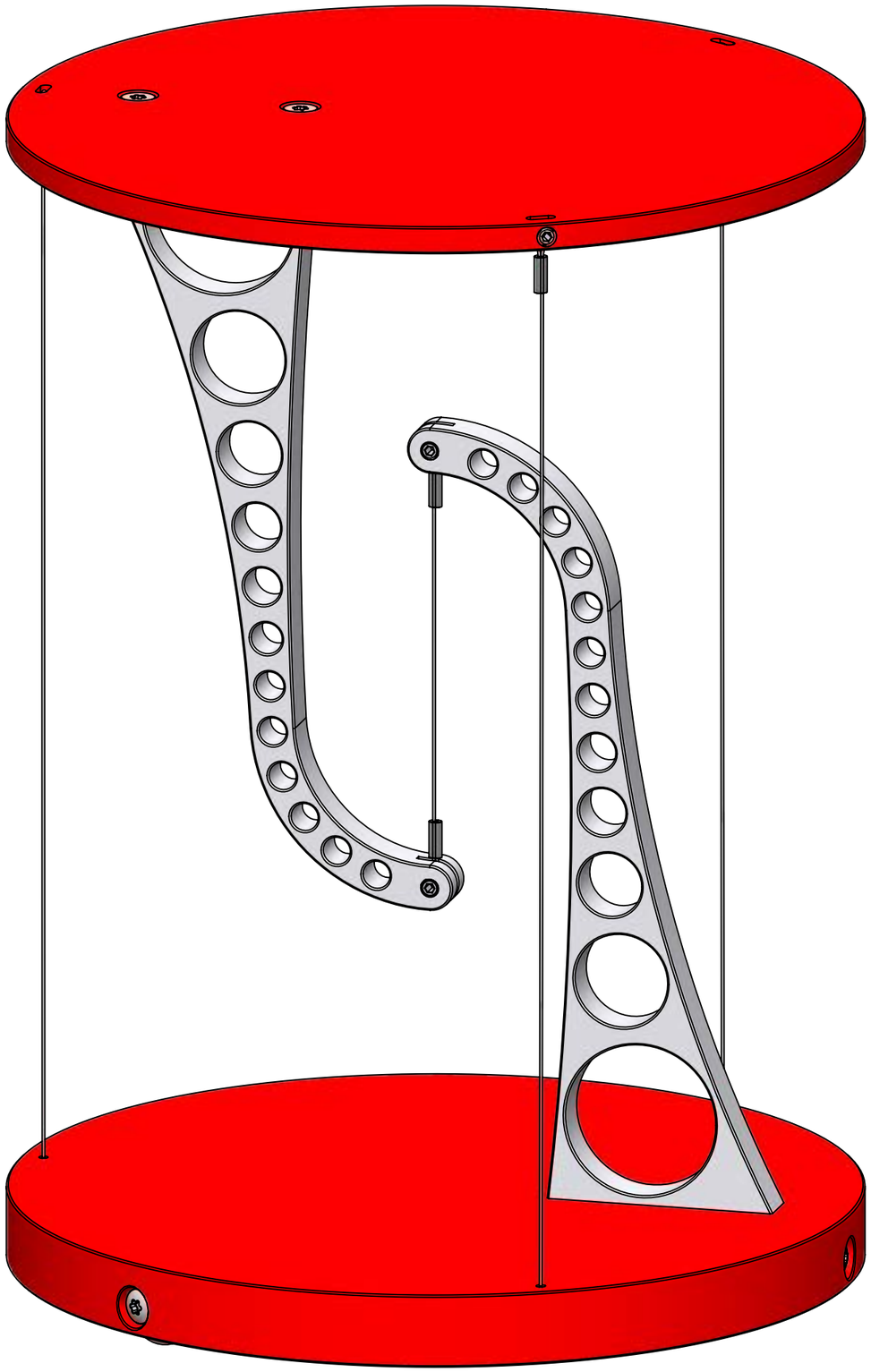
DO NOT TIGHTEN THE WIRES LIKE A GUITAR STRING!

The centre wire has an 8kg breaking strain, if you tighten the three outer wires too tighly you will break the centre wire.

The recommended tension is is just enough so that when you nudge the top plate it wobbles slighty.

The table is not designed to carry heavy loads on top. You can put light objects (250g) on top for brief demonstration purposes but it is best to avoid leaving heavy objects on it permanently.





Your Tensegrity Table wire conversion is now complete.

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.