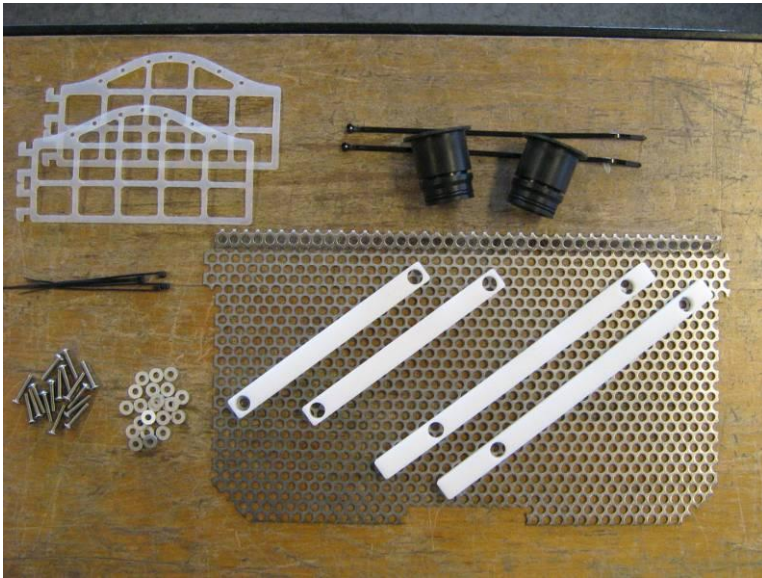
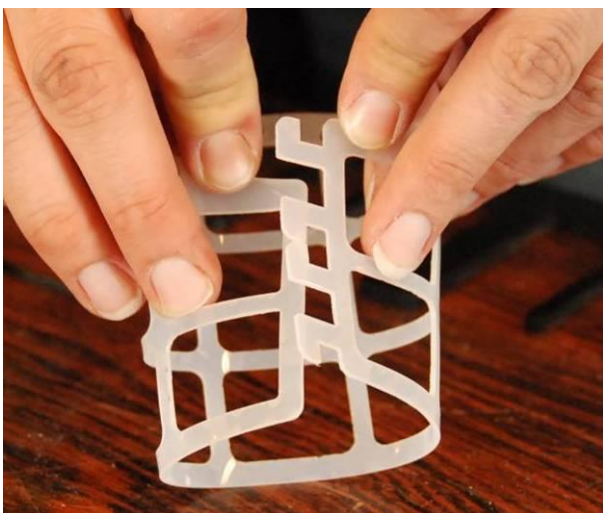


How to install the 'low WOB' kit

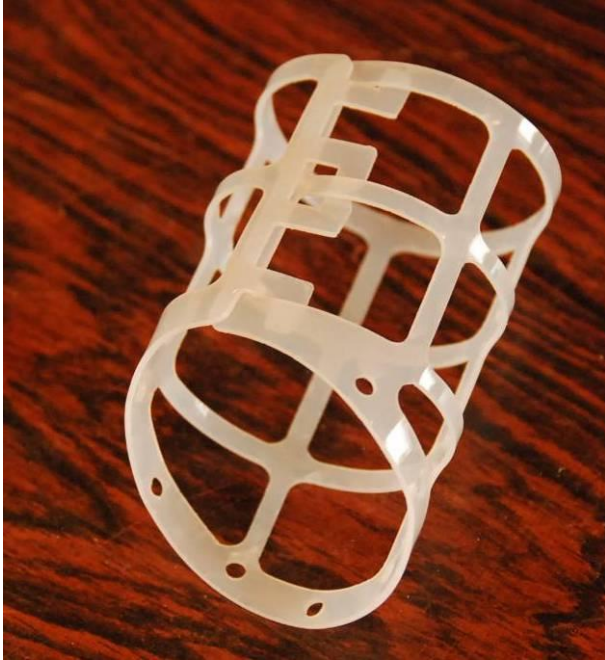


The kit contains:

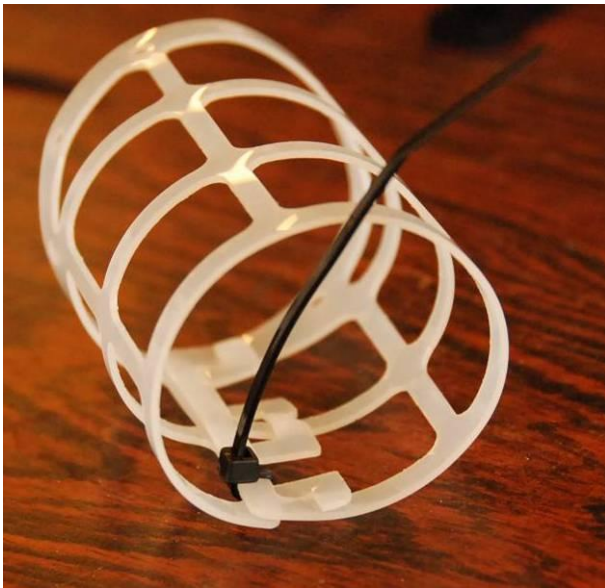
- * 2 grids (white) that are fixed at the inside of the counter lungs, next to the P-ports, to keep the counter lungs open so that gas can flow in and out easy
- * 2 straight connectors that replace the elbows in the breathing hoses
- * 4 spacers that are placed between the housing and the closing plate to increase the lung volume a bit, and to make an opening at the side/bottom of the housing to allow water flow in and out more easy when breathing
- * a stainless steel grid that keeps the counter lung away from the opening at the lower part of the housing, so that the opening is not blocked
- * washers that are placed around the screw on places where there are no spacers, to keep an opening between the closing plate and the housing
- * longer screws to mount the closing plate again
- * the necessary tie-raps



First the grid is assembled: bend it round so that the fixing hooks go from outside to inside.



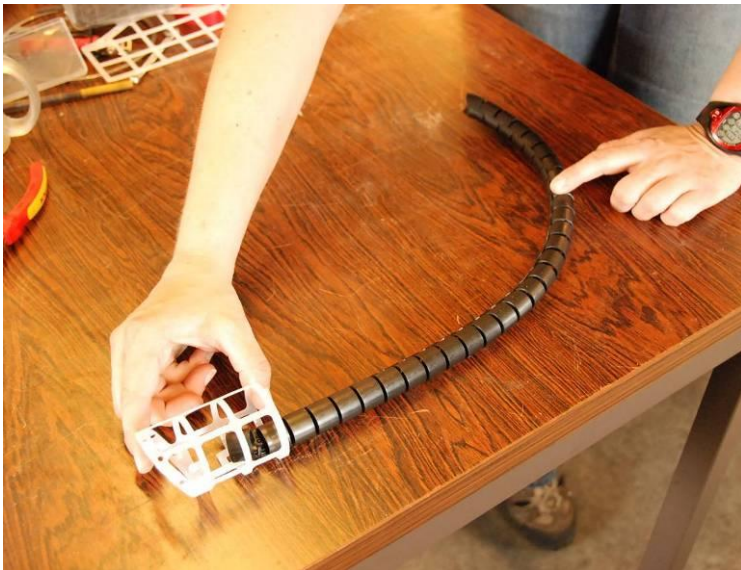
Now clip the hooks inwards so that the grid stay's round and..



... fix a small tie-rap so that the grid can not 'unclick' again: put the 'block' of the tie-rap on the inside of the grid, so that when cut off no sharp end can touch the counter lung.



This is the way the grid will be placed inside each counter lung.



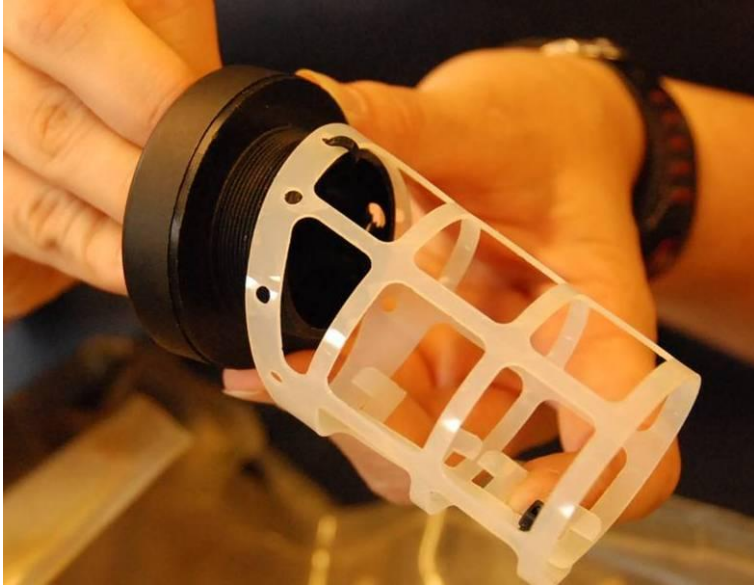
On the grid for the inhale lung, the anti-collaps tube is fixed, far enough away from the inclined side of the grid (the side of the P-plug): use a small tye-rap for this.



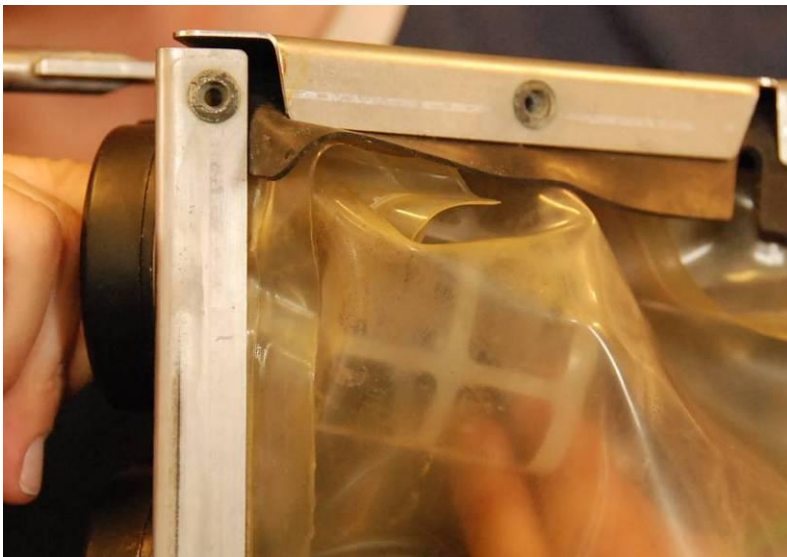
This is the way the grid + anti collaps tube is fixed inside the inhale lung.



In the exhale lung, only the white grid is mounted, the short black anti-collaps tube (if it was there) is not used any more.



To fix the grid to the P-port, use one of the holes on the outside of the grid, so that the inclination of the grid follows exactly the inclination of the top of the housing. Make sure that the grid comes OVER the threaded part of the P-plug: the tie-rop must go straight through the hole of the P-port straight into a hole of the grid. (Beware! The grid must of course be mounted when the P-port is fit on the housing: do not remove the P-port for mounting the grid)



Put the grid inside the lung, go with your hand inside and hold it in place, while fixing the tie-rop: this is not easy, but after some trying it will work ☺)
Do this now for the exhale lung and the inhale lung.



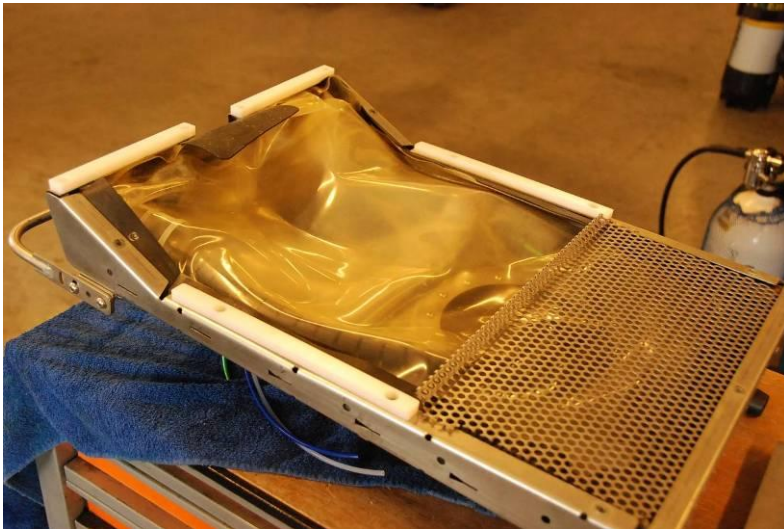
This is what it looks after mounting both the grids, and putting the counterlungs back in the correct place. For the ease of showing, the internal wiring of the cells was removed: this is not necessary for just mounting the 'low WOB' kit, you can just leave it where it is.



After mounting the grids the opening on the P-ports must look this way: clear open, no lung material in front of the opening. (the rest of the tye-rap is cut away to clear the opening complete)



Now put the stainless grid in place: the bottom side is put between the housing and the black liner, so that the sharp edges from the stainless grid never touch the counter lung. On the left and the right side the black liner protects the lungs from the sharp edges. The top side of the grid is bend upwards, so the grid can not be mounted inverse, and the 'soft side' of the grid is always on the side of the counter lungs. (soft side means: you feel that the grid has a sharp side and a soft side when you rub with your hand on the surface. The soft side is automatically the side touching the lungs)



Put the 4 spacers over the nuts of the housing and ...



... gently position the closing plate on the unit without moving the spacers.



Now close the complete unit again with the new screws: at the places where there is no spacer and where a 'venting' opening must be, washers are placed to keep the unit open. On units where the bottom side has the same height as the sides (picture above), 4 washers are placed. (do not over tighten the screws, no need to damage them!)



On units where the bottom part is lower than the side, use the washers that were already there for increased height.



Fix now all the screws, except on the top side where there is no spacer: no screw is needed there.



Install the new connectors on the breathing hose, replacing the elbows: for this you use the longer tye-rap. By replacing the elbow, the total length of the breathing hose comes a bit shorter, so it is necessary to fix the unit high on your back, as was shown during the course.



Same for the exhale side: to identify easy the exhale connector, you can put some red tape around the connector before fixing the tye-rap.