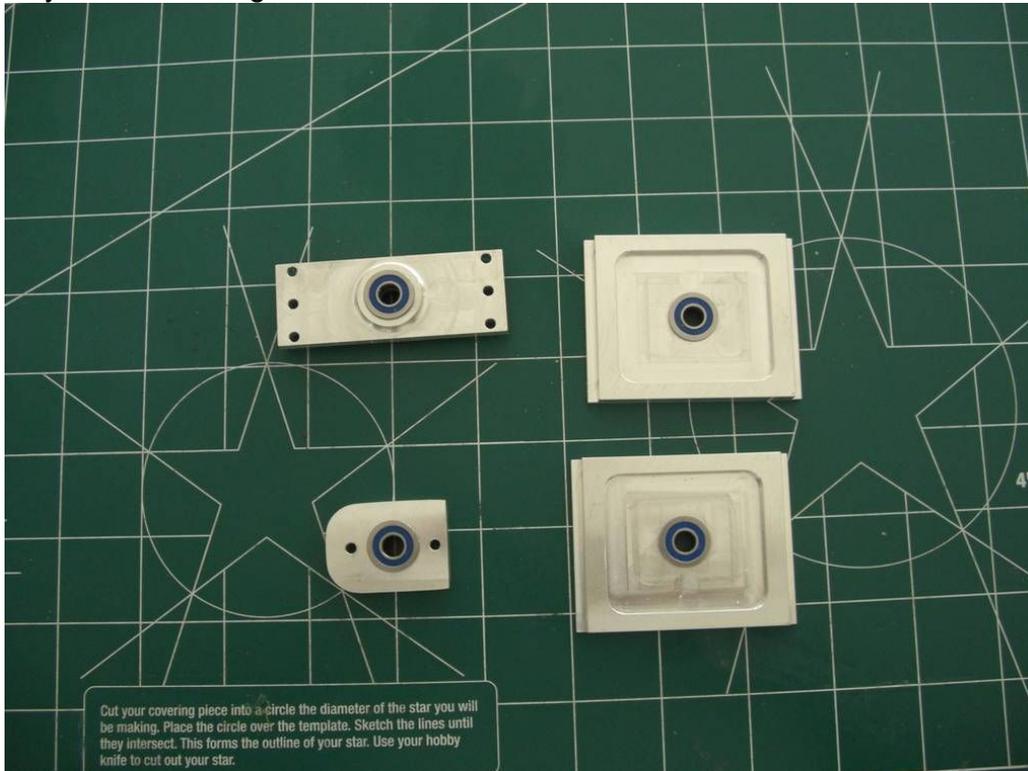


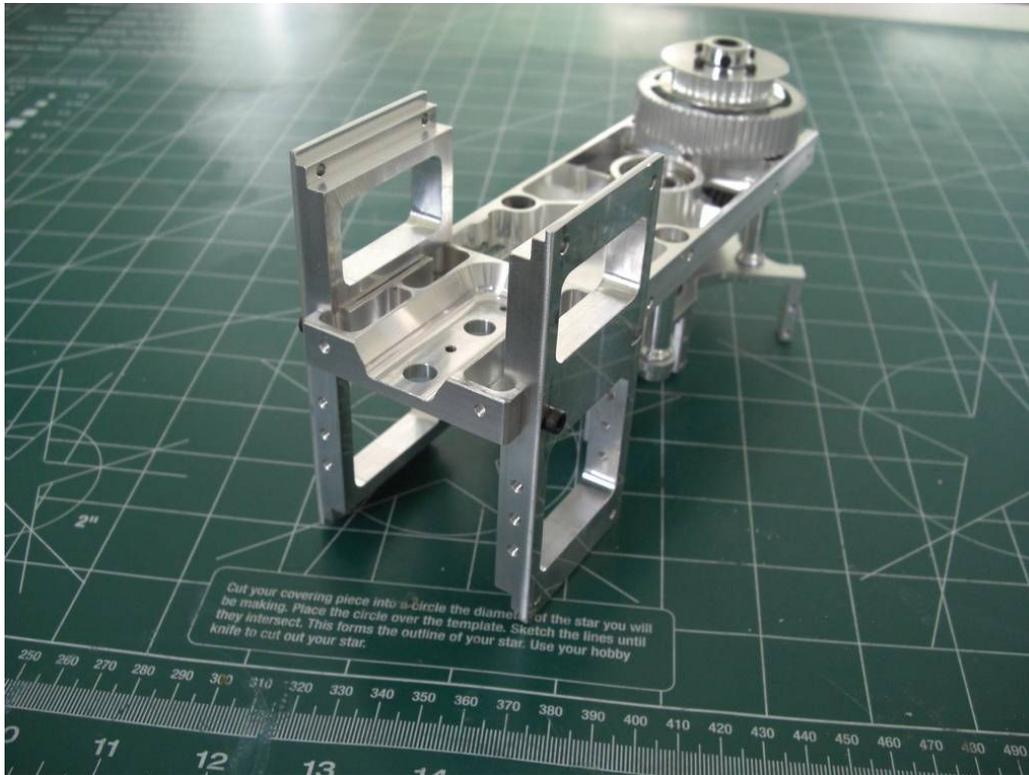
Goblin Raise up

Assembling the tail raise up adapter is pretty simple. Start by fitting the 5 bearings into the various holders. If you are using a belt drive output, you will only have 3 bearings.

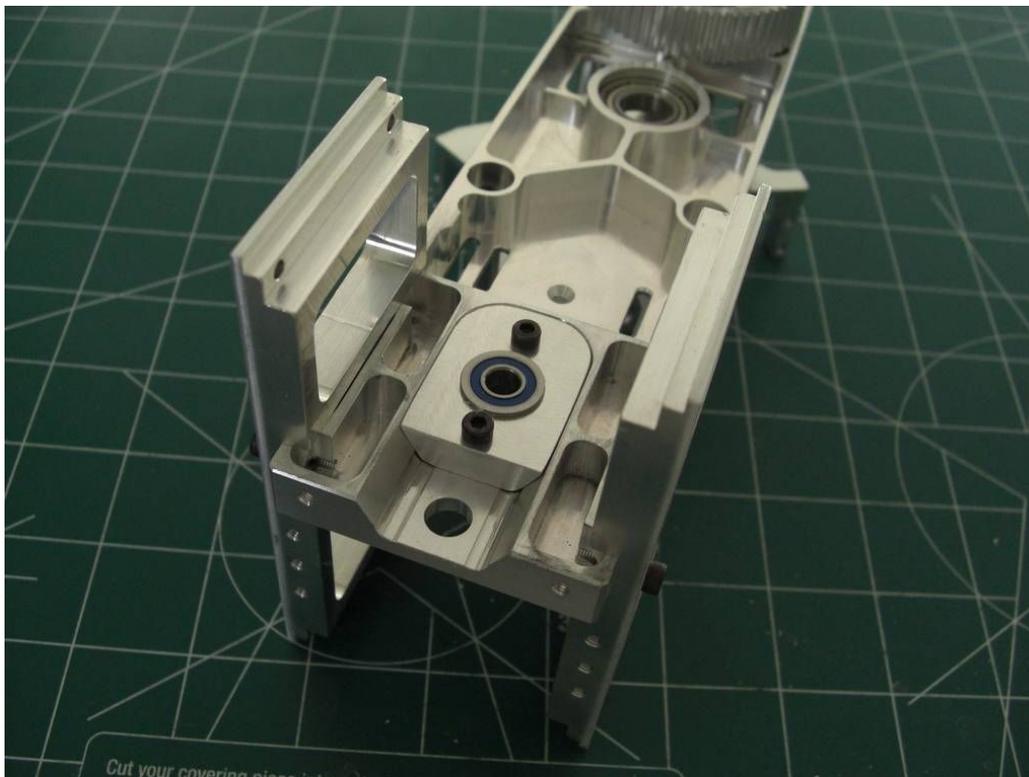


Note which side the bearings go into in the various plates. The tail drive adapter has a bearing in each side.

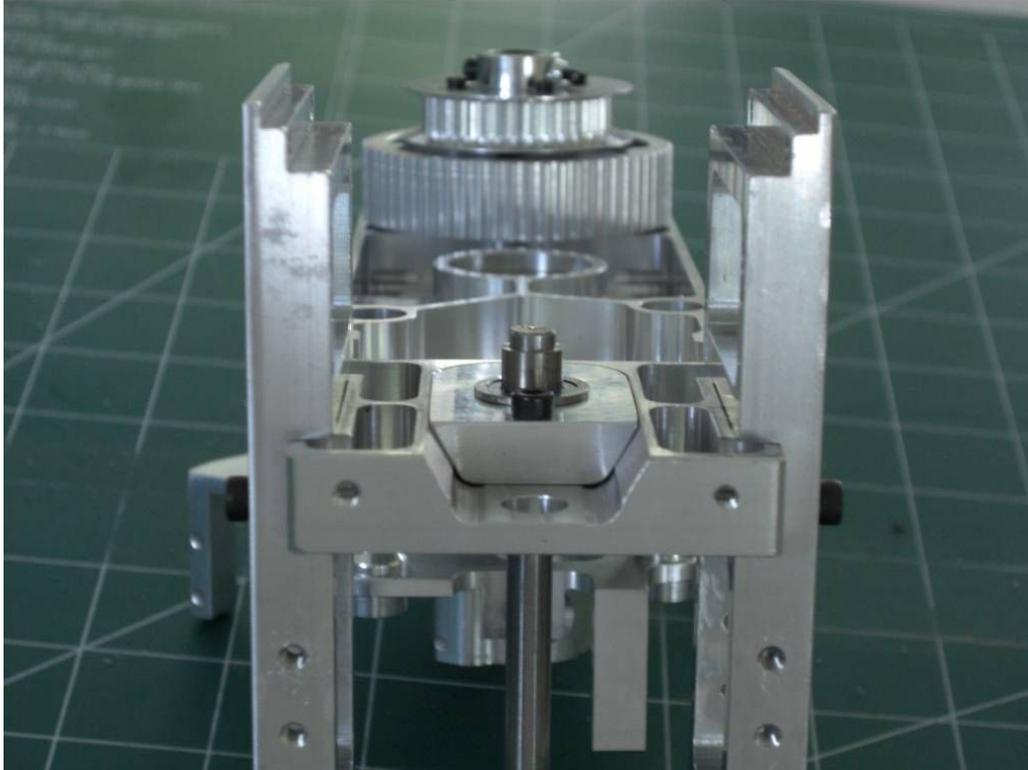
Next fit the two side plates. SAB quality varies in the thickness of the chassis as it is not important to them so we designed the slot to fit the smallest we have measured. It is very probable you may have to relieve the frames with a little sandpaper to get the side frames to fit smoothly, but they **MUST NOT ROCK** so don't take too much off. Fit the 3mm x 10 cap screw but do not lock it down nor use any loctite until the whole job is finished except for the center bearing holder.



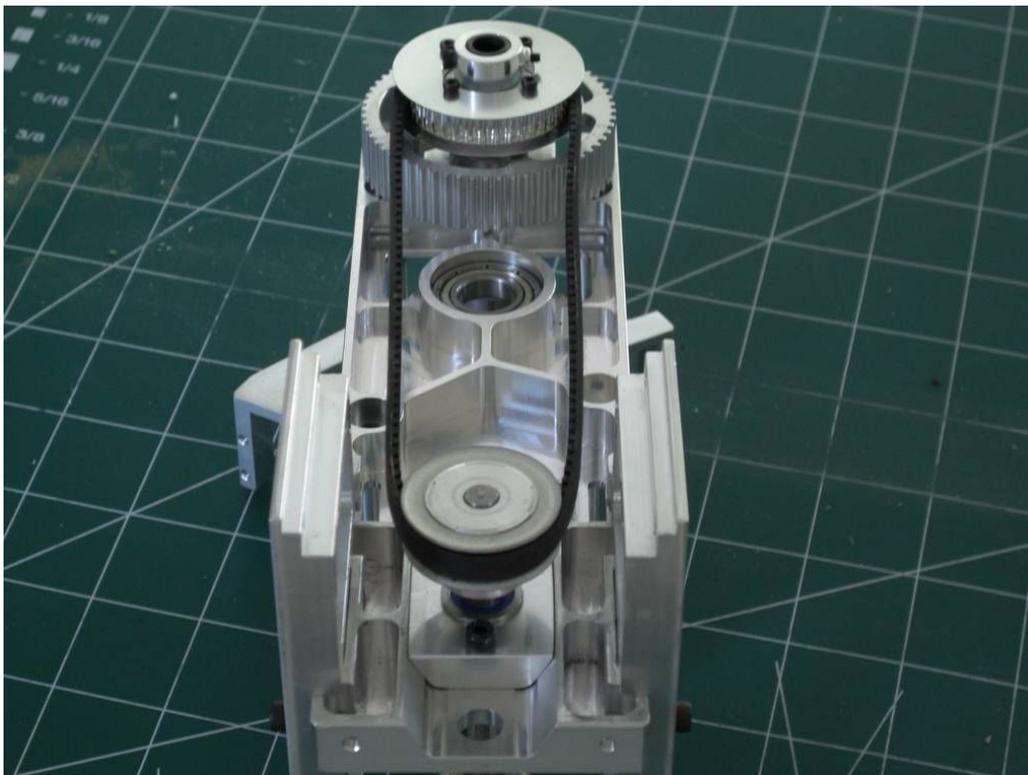
Now add the center bearing in its curved holder and fix it with 3mm x 10 cap screws with loctite.



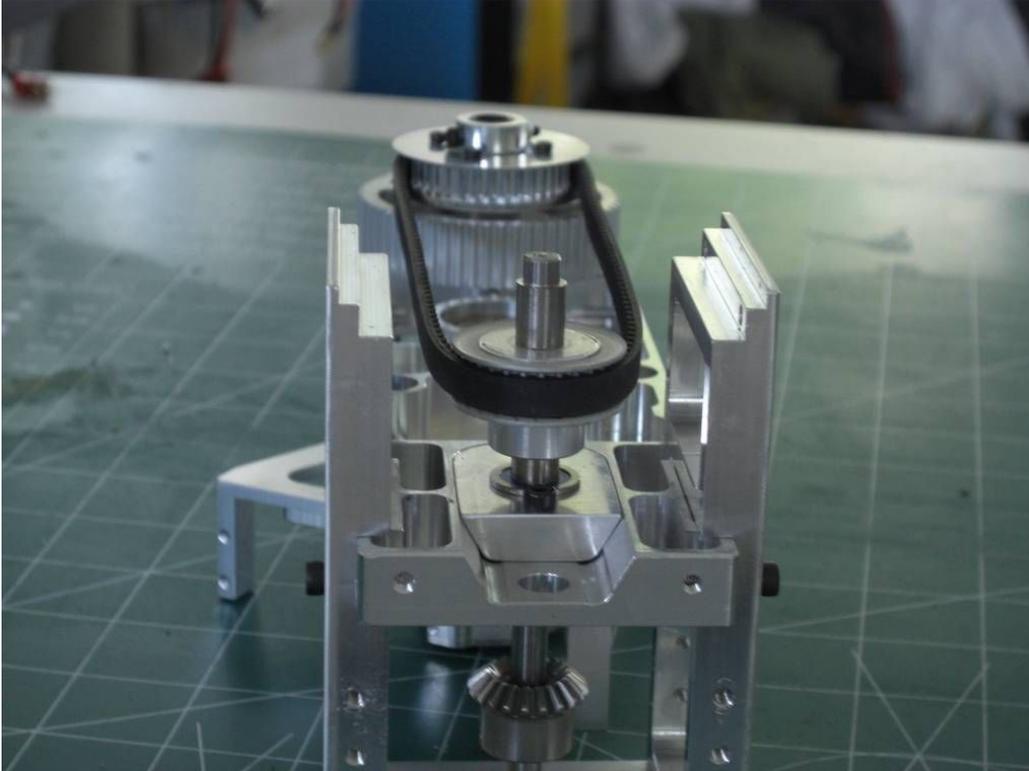
Slide the shaft through the bearing and slip the 5mm spacer on



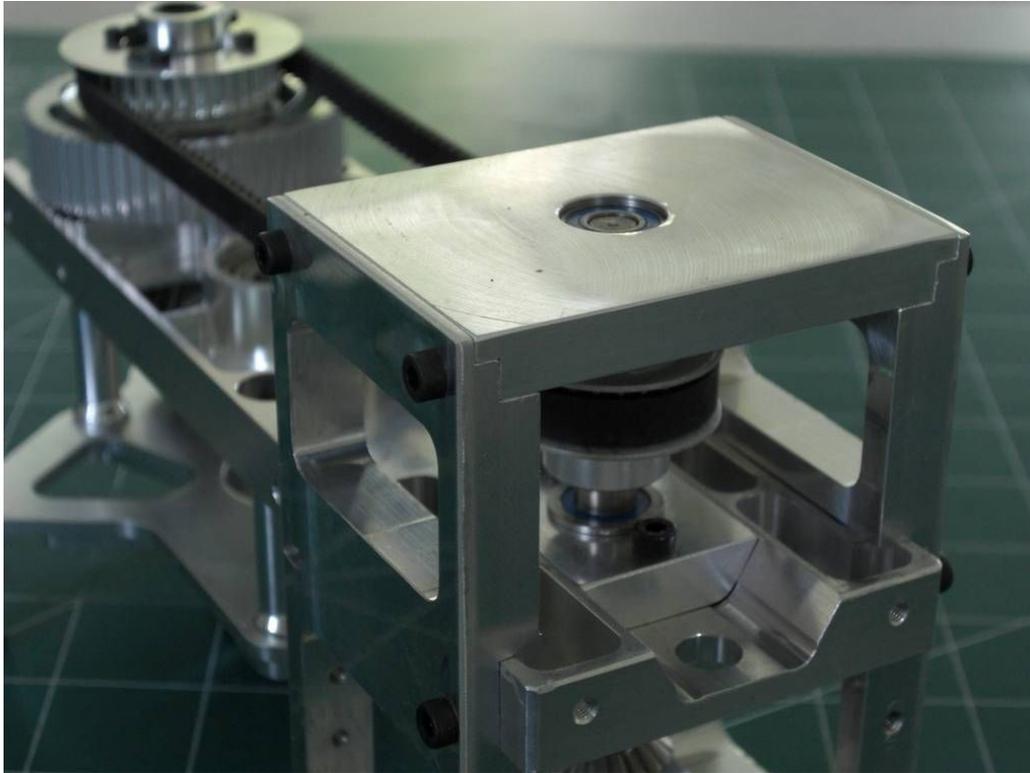
Put the belt over the drive pulley and over the driven pulley and slide the driven pulley onto the 6mm shaft. Push the shaft up through the pulley.



Slide the 10mm spacer onto the shaft

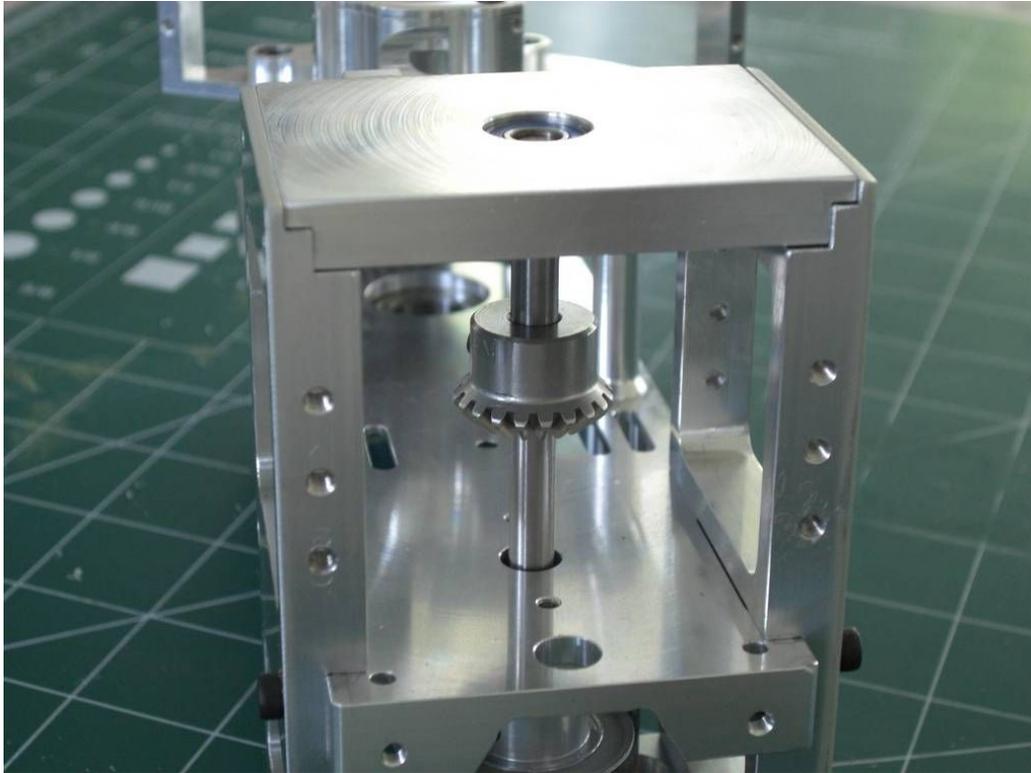


Now fit the top bearing plate and slide the side plates to get the shaft approximately vertical.

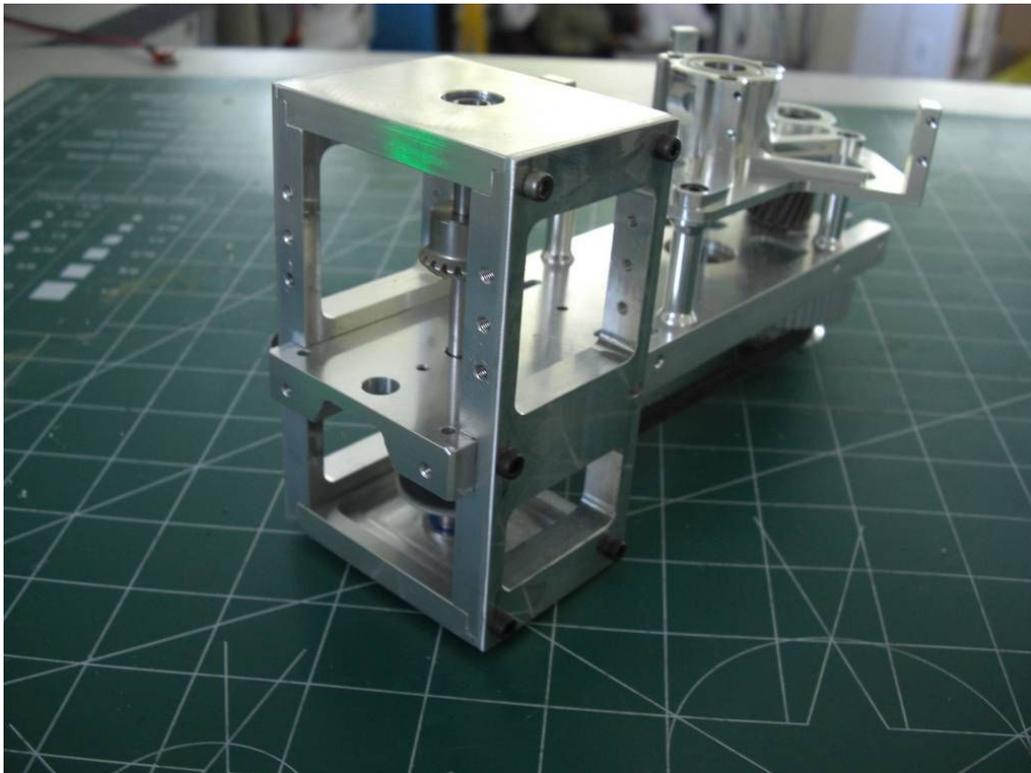


Fit the 4 3mm x 10 cap screws and snug them down. The pulleys should turn smoothly and there should be no up and down play for the driven pulley. Tighten the set screws in the driven pulley, enough to stop the pulley sliding up and down on the shaft.

If you are going to use a belt drive output, fit the driver pulley to the other end of the shaft now and leave it loose to position later, Same with the gear if you are going to use shaft drive, but don't forget that the direction of the shaft depends on whether the gear is above or below the output gear.



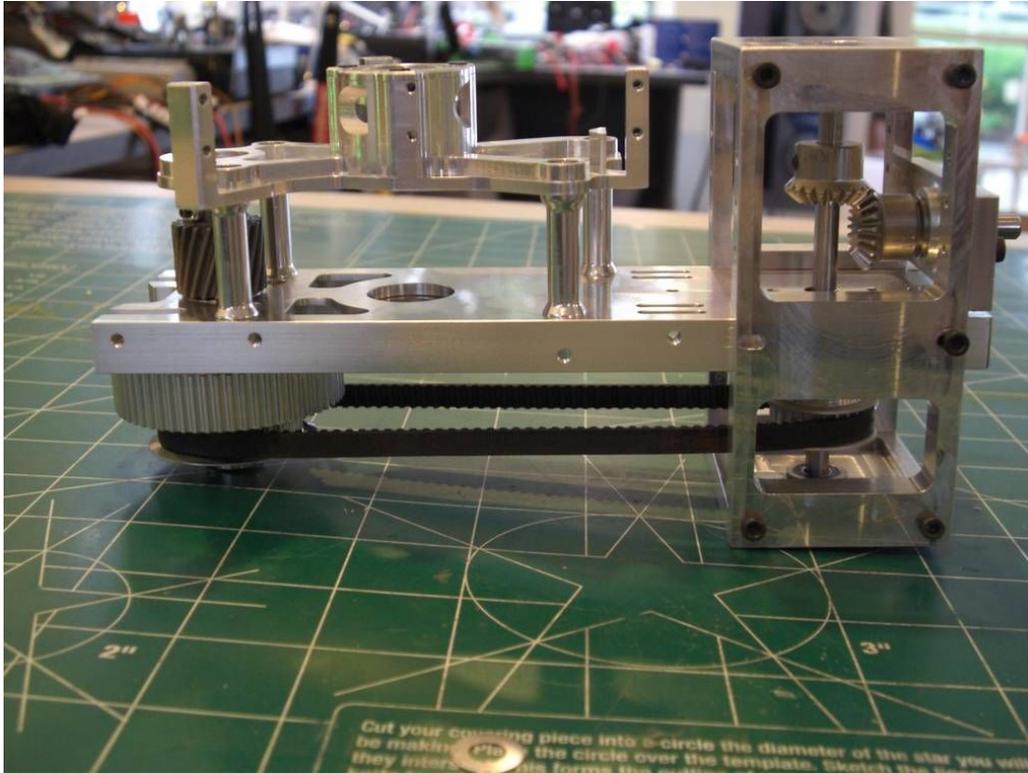
At this stage, insert the last 3mm x 10 cap heads and line the top plate with the holes by moving the side plates to get everything straight and smooth running. Snug the bolts down.



Finally assemble the output gear onto the output shaft. Shim washers have been provided to get a perfect mesh with the gear. Notice that the mounting plate bearing holders are different sizes to allow for perfect engagement.



Now mount the gear to the side plates using the 3mm x 8 cap head screws and adjust the gear mesh so there is no backlash and they run perfectly smoothly.



Once this is done, remove each screw in turn and add loctite and replace it, not forgetting the set screws in the pulley and gears. Tighten them firmly onto the flat and sparingly onto the side of the shaft to make it easy to remove them from the shaft if necessary.

Parts list

- 2 off short side frames
- 2 off bearing plates
- 1 off center bearing holder
- 3 off bearings
- 12 off 3mm x 10 cap head screws
- 1 off 26 tooth pulley with set screws
- 1 off drive belt
- 1 off 110mm x 6mm rod with flat
- 1 off 5 mm spacer 6mm diameter bore
- 1 off 10mm spacer 6mm bore

For belt drive,

- 1 off 26 tooth pulley with set screws

For shaft drive

- 2 steel gears
- 2 pointed end 4mm x 5mm set screws
- 2 bearings
- 2 packs shims
- 1 rear drive shaft bearing holder
- 1 35mm x 6mm shaft

4 x 3mm x 8 cap screws