



# Components to be Manufactured

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## INTRODUCTION

This guide will outline the components that aren't included as part of the kit and need to be manufactured by you or outsourced.

Internally at REA we 3D Printed all of the components listed on our Makerbot Method X using a mix of ABS, PLA and PETG filaments.

Hints:

- Where possible use dissolvable support material to improve the quality of the part and aid in the removal of the support material.
- It is worth looking into the infill percentage that you use to print the parts to adjust the buoyancy of the parts to help trim the Submarine.
- We would recommend sealing the parts before using them on the Submarine as most 3D Printed parts will absorb water which will affect the trim of the Submarine. Filaments like PETG can help with this as it has very good layer adhesion helping the part self seal.



### TOOLS:

- [3D Printer](#) (1)
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## Step 1 — Download STL Files



- [Ballast Tank Pump Mount v1.1.stl](#)

## Step 2 — Ballast Tank Pump Mount



- This will mount the peristaltic pump to the end cap of the Ballast Tank.
- Once printed clean off any support material whether that be breakaway support or dissolvable support.
- ① The part is now ready for the assembly guides.

All the parts for the Ballast Tank assembly are now ready to be assembled. [Click here to see the guides for assembly](#)