ShadowMega RADZ  
Drilling Instructions

09/02/2020

# Preparations

## Assemble the two Case Shells

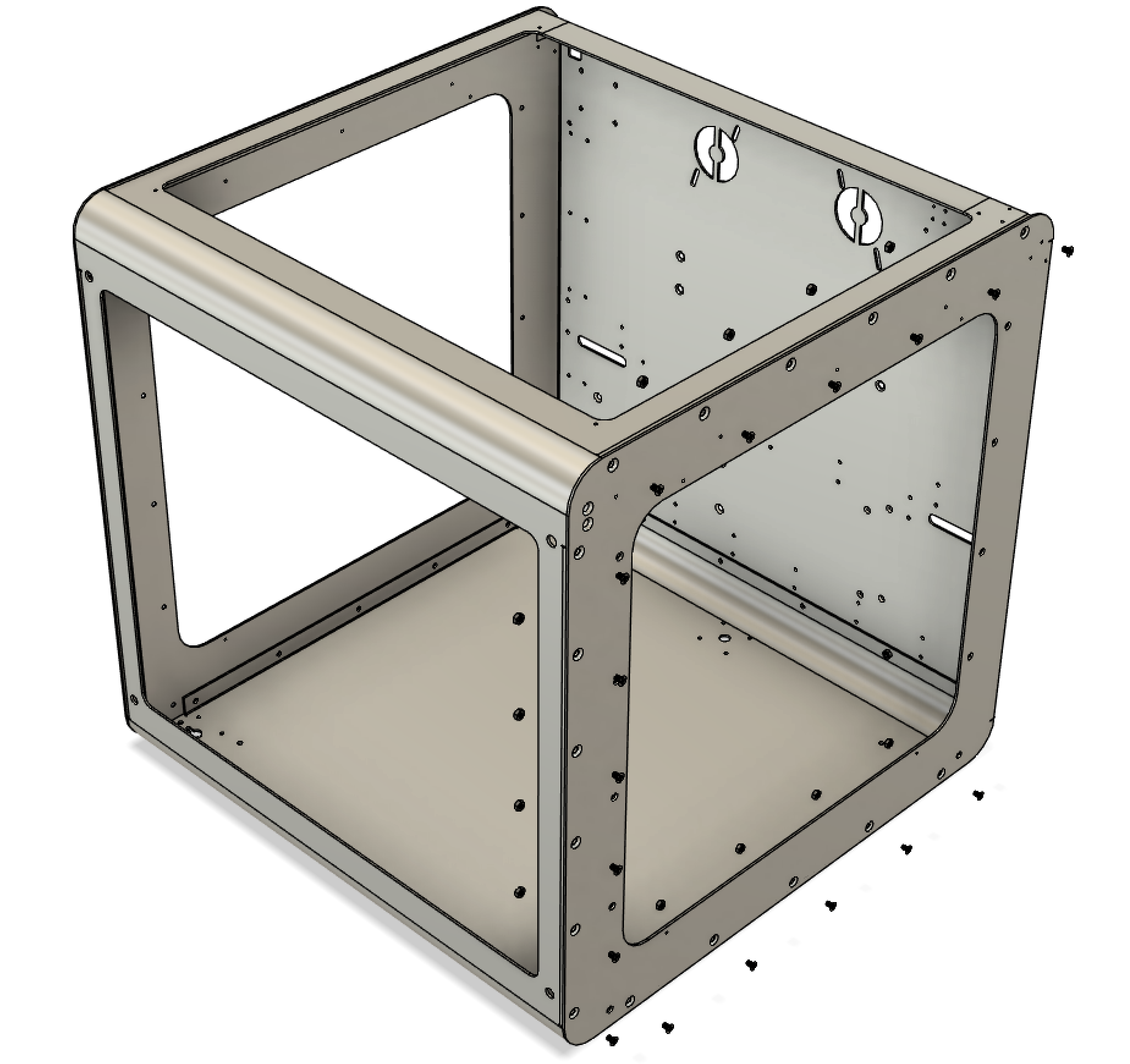
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|  | As the first step, we need to put the two case shells together and fix it in place with some M4 screws. If your printer is already assembled, remove all the Z motion parts and the top cover standoff (if fitted). The goal is to have a sturdy frame that we can drill into without deforming parts of it. |

A close up of a device

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## Screw Shells together

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|  | If the Case is already put together, you can either choose to keep it that way or drill out the rivets and replace them with M4 x 6mm countersunk screws with hex nuts. Do not tighten any of the nuts until all the screws are in place. If your case is still unassembled, use M4 x 6mm countersunk screws with hex nuts along the top, the front edge, and the bottom to fix the two shells in place. Do this on both sides. At the back, use 4 x M4 x 8mm pan head Screws with hex nuts to fix the back radius in place. Make sure the case is squared up and start tightening the screws. Start with the four pan head screws in the back, tightening them from the edge of the case inwards. Then tighten the screws in the side corners while making sure the case is still square. After that, tighten all the other screws. Verify once more that the case is square. |



A picture containing bird, sitting, clock, boat

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## Drilling Instructions

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|  | When drilling through the templates, make sure you hold the drill as perpendicular to the case as possible. Use high drill speed and drill with one quick push. Try not to ream out the template.  All drill sizes in this document are specified in metric units. Here is an imperial substitution list if metric drills are not available.   |  |  | | --- | --- | | Metric Drill Size | Imperial Drill Size | | 3.5mm | **9/64** (3.5719mm) or **1/8** (3.175mm) | | 4.5mm | **11/64** (4.3656mm) or **3/16** (4.7625mm) | | 13mm | **1/2** (12.7mm) or **33/64** (13.09624mm) | |

## Drill Front Stepper Holes

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|  | The first set of holes to drill are the front stepper holes. For that, screw the front stepper template to the outside of the case with two M4 x 25mm countersunk screws with a hex nut on the inside of the case. Once the template is solidly fitted on the case, drill through the empty holes, expect for the ones marked with red X below.   * Drill the four 3.5mm holes around the bigger center hole * Drill the 10mm center hole * Drill the two 4.5mm holes towards the center of the case.   Unscrew the template, rotate it 180deg and mount it on the opposite front corner. Repeat the same drill order as with the first corner. |

A picture containing table

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## Drill Front Floor Holes

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|  | Screw the floor template on from the outside of the case using two M4 x 25mm countersunk screws with hex nuts on the inside of the case.   * Drill through the two inner holes with a 4.5mm drill. |

A close up of a device

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## Drill Back Side Holes

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## Drill Back Floor Holes

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## Drill Back Stepper Holes

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## Drill Back Wall Holes

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## Final Processing

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