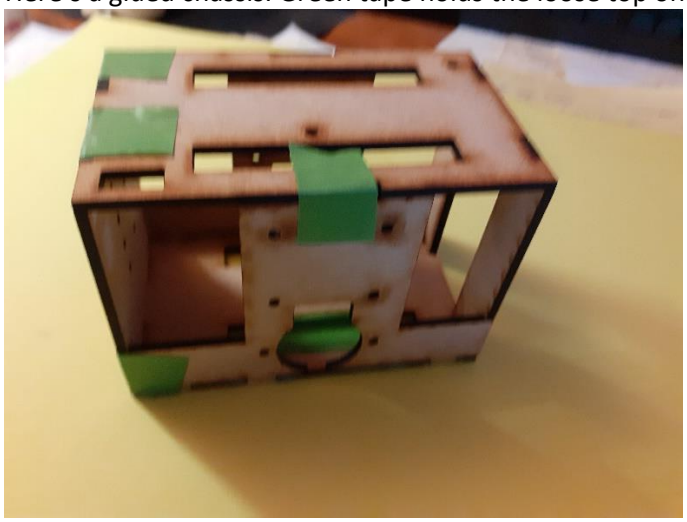
Building Harry

1 **Starting Point**

Here's a glued chassis. Green tape holds the loose top on. Pillars at rear are delicate



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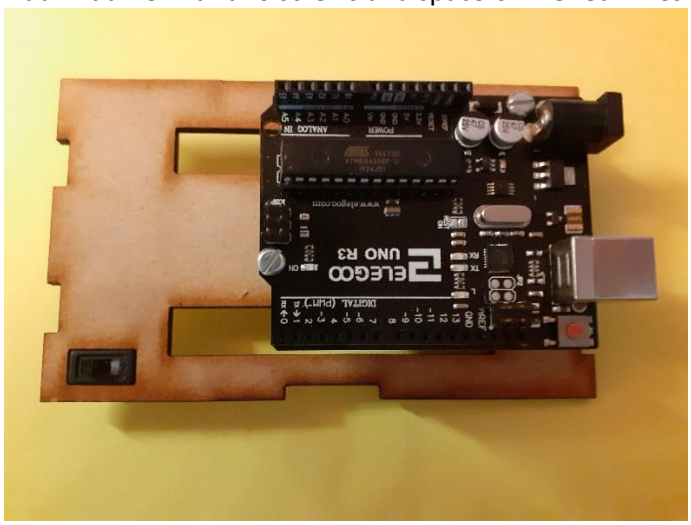
2 **Add Arduino** with two screws and spacers. The red wires soldered to the switch are delicate



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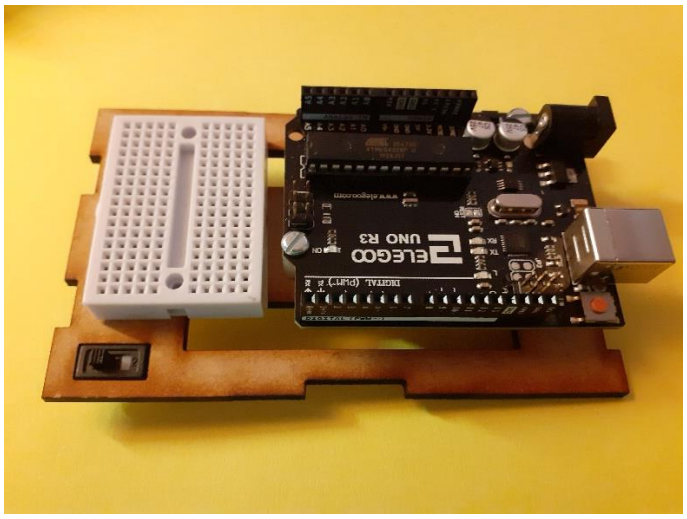
3 **Add the proto board**. Take care with the orientation



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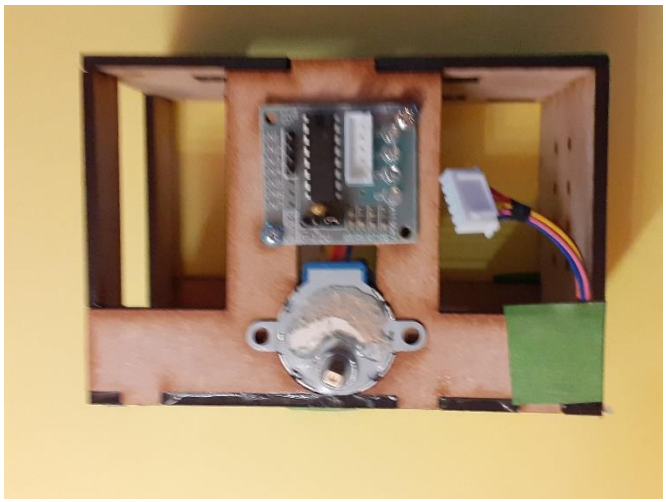
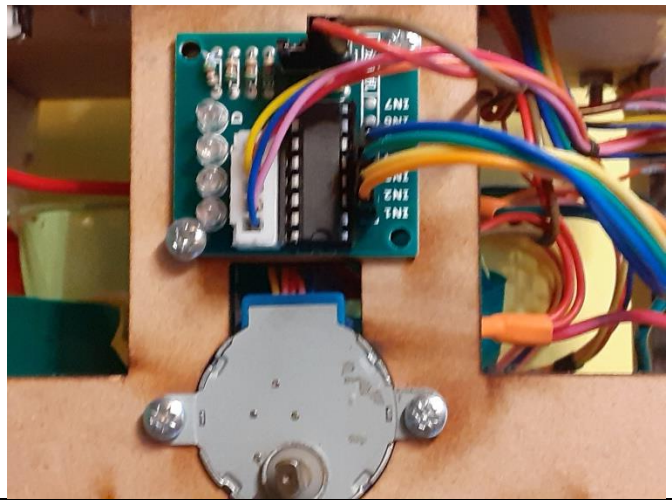
4 **Push in the stepper motors** from the outside. But first feed their wires through the hole so they can curl around back to the front. Fix the stepper driver board with 2 screws placed diagonally. Fix the motors with two screws.



5 **Wire up the motors**. At the top is the voltage supply; the red and brown wires should be fed through to the protoboard. Put both reds into the same column and two browns into another column. The colored wires are connected to the Arduino as shown in the table on the right.



Left Driver	Arduino
In1	8
In2	9
In3	10
In4	11
Right Driver	Arduino
In1	4
In2	5
In3	6
In4	7

6 **Add the wheels** and the caster – ask me to start the holes for the self-tapping screws, else you can have a go.

7 **Connect the barrel jack** to the protoboard, red in the same column as the motor reds and brown in the same column as the motor browns.

8 Connect the red wire from the **switch** to the red column on the protoboard. Connect the green wire with a crocodile clip to the brown column on the protoboard.

9 Ask me to check the wiring, then you may connect the battery. The red crock clip must go to the + terminal indicated by red tape.