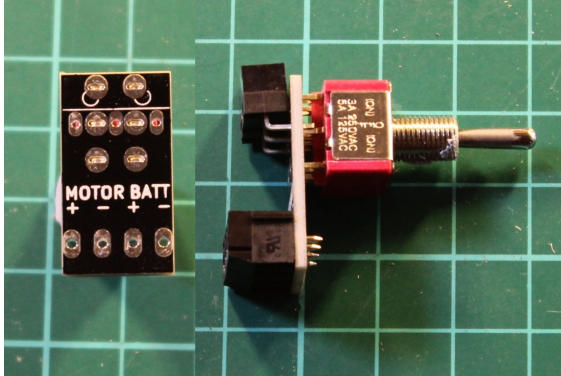
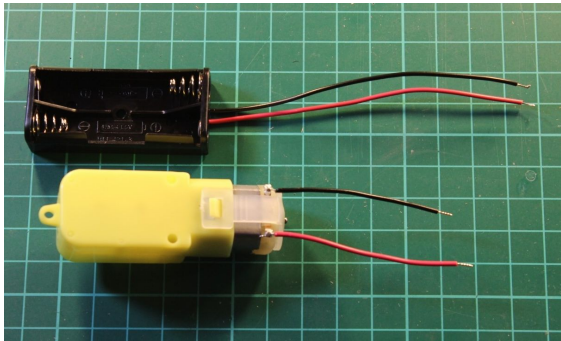
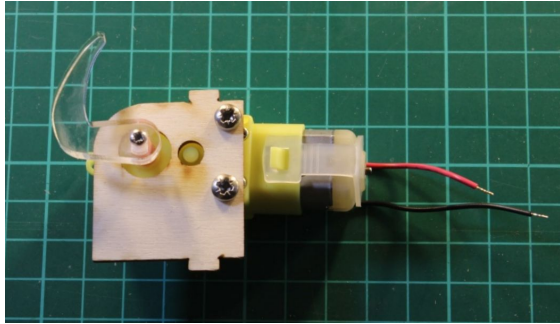
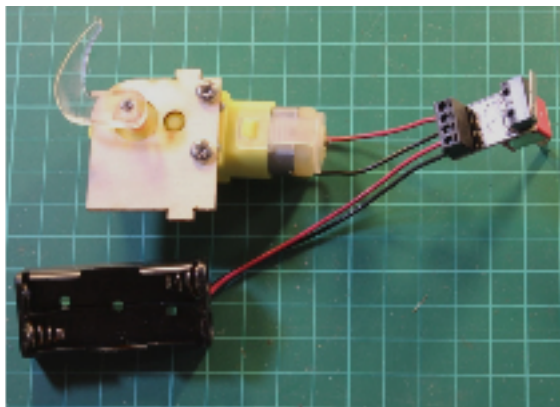
 <p>A3</p>	<h3>Kit Components</h3> <ul style="list-style-type: none"> • Wooden Box Skin and Flap • 2 Wooden Box Sides • AAA Battery Box • Geared Motor • Black PCB • Microswitch • Screw Terminals • Toggle Switch • Acrylic Motor Hammer • 2 Large Motor Screws • 1 Small Hammer Screw • Wooden Spacer • Wooden Motor Mount
	<h3>Step 1: Solder the Electronic Assembly</h3> <p>Push the toggle switch into the PCB, there is a white rectangle drawn on the silk screen to show where the switch goes (The photo shows the side to solder from). The holes are intentionally tight, the switch legs should sit flush in the PCB</p> <p>The limit switch should sit tight against the board on the opposite side of the switch. Solder this from the same side as the toggle switch.</p> <p>The screw terminals fit all the way through the board and are soldered from the top of the board.</p>
	<h3>Step 2: Prepare the Motor and Battery Holder</h3> <p>Cut a length of red and black wires from the battery holder, somewhere between and third and a half. Strip the wires on the battery holder and tin the ends.</p> <p>Strip and tin the ends of the shorter red and black wires. Connect the red wire and black wire offcuts to the motor as shown.</p>



Step 3: Fit Motor Mount and Hammer

Use the two larger screws to fix the geared motor to the motor mounts. The motor shaft should pass through the motor mount.

Use the smaller screw to fix the hammer to the output shaft. The hammer has an engraved section which should be aligned to the motor shaft. Don't forget to remove the plastic backing before screwing the hammer down.



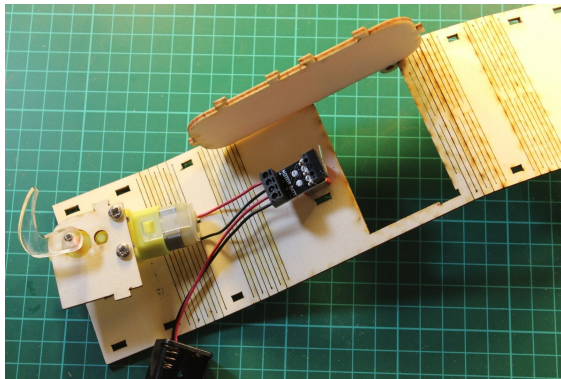
Step 4: Connect the Electronic Assembly

Use a small screwdriver connect the motor and the battery holder to the screw terminals on the electronic assembly.

The red wire from the motor goes to the motor + connection and the black wire goes to the motor - connection.

The red wire from the battery holder goes to the Batt + connection and the black wire goes to the Batt - connection.

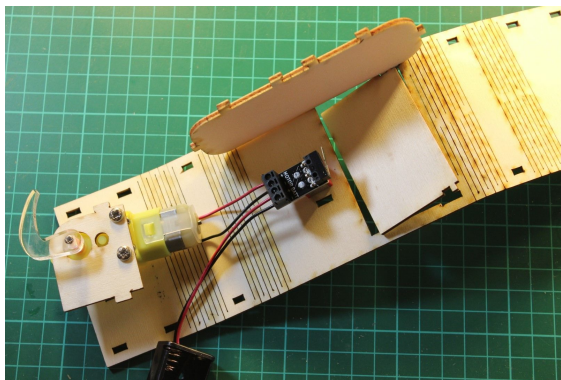
Ensure that the screw terminals are done up tightly.



Step 5: Fit Switch into Box Skin

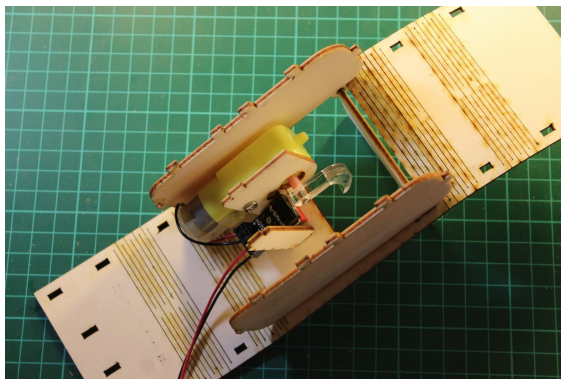
Use the nut and washer on the threaded section of the switch to secure the electronic assembly into place in the box skin.

Insert one of the box sides into the top of the box skin. The hoop on the box side should secure it into place temporarily.



Step 6: Fit the Box Flap

Put the flap into the skin making sure the pin sits in the hole on the side of the box. Leave the flap at a slight angle to make room for the other box side.

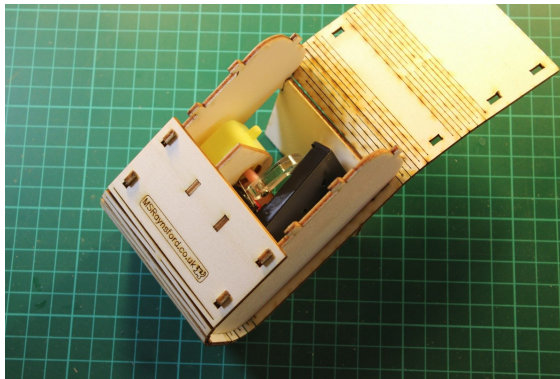


Step 7: Fit the Second Side and the Spacers

Place the pin of the flap into the hole on the second side panel then click the side panel into place in the box skin. The flap should open and close freely.

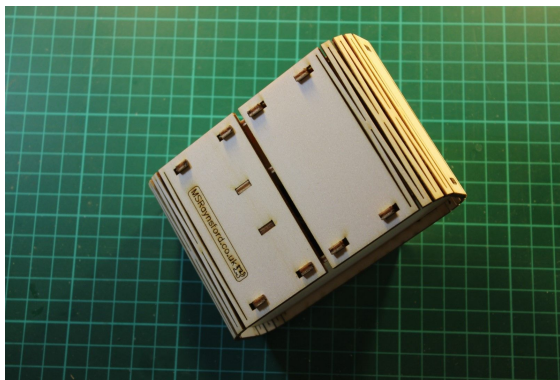
Fit the motor mount into the box skin with the hammer pointing down through the box flap.

Fit the wooden spacer into the box skin on the other side of the electronic assembly.

**Step 8: Wrap the Box Skin**

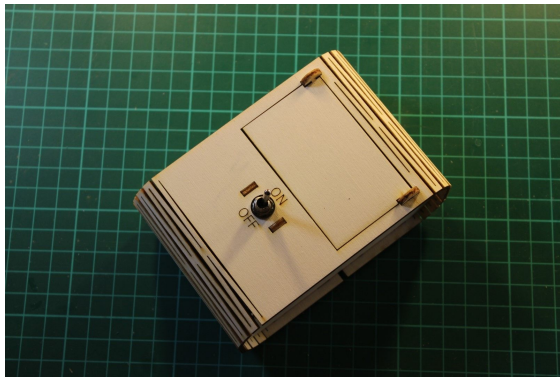
Wrap the bottom half of the box skin carefully around the box sides. The box skin will stretch into place but be careful not to stretch the skin too far because it will snap.

Once the box skin is folded all the way round it will clip into place on the box sides. Ensure that the motor mount and spacer sit align with the holes on the top and bottom of the skin.

**Step 9: Close the Box**

Wrap the top half of the box skin carefully around the top of the box, clip the skin into place on the box sides.

You will be able to access the battery holder through the box flap without having to unwrap the box skin. Insert some batteries and test the useless machine.

**Step 10: Troubleshooting**

The lid doesn't close by itself once the arm is back in the box.

Squeeze the sides of the box near the lid hinge, open and close the flap while squeezing. This should wear the hinge down a little bit and loosen the joint.

The motor does not turn in the right direction

Check to make sure that red and black wires from the motor and battery holder are connected the right way round, see step 2

The arm does not return inside the box

The micro switch on the electronic assembly may be touching the motor mount, try twisting the electronic assembly clockwise to provide more clearance between the two parts.