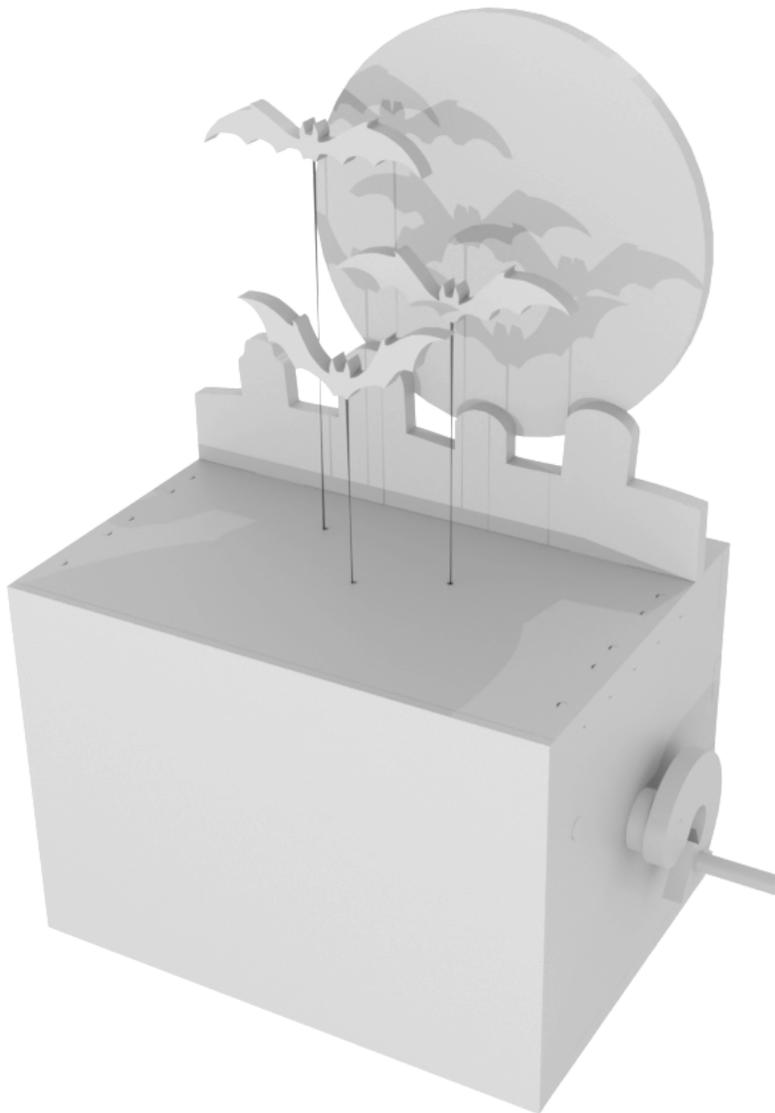




Gone Batty Automaton



If you prefer not to read the instructions...

I don't like reading instructions. I put together a step-by-step 15 minute video on how to assemble the Gone Batty automaton kit.

Use the QR code below to go straight to the post on my website where you will find the latest version of these instructions, a video tutorial and helpful tips and tricks on how to troubleshoot any common problems.

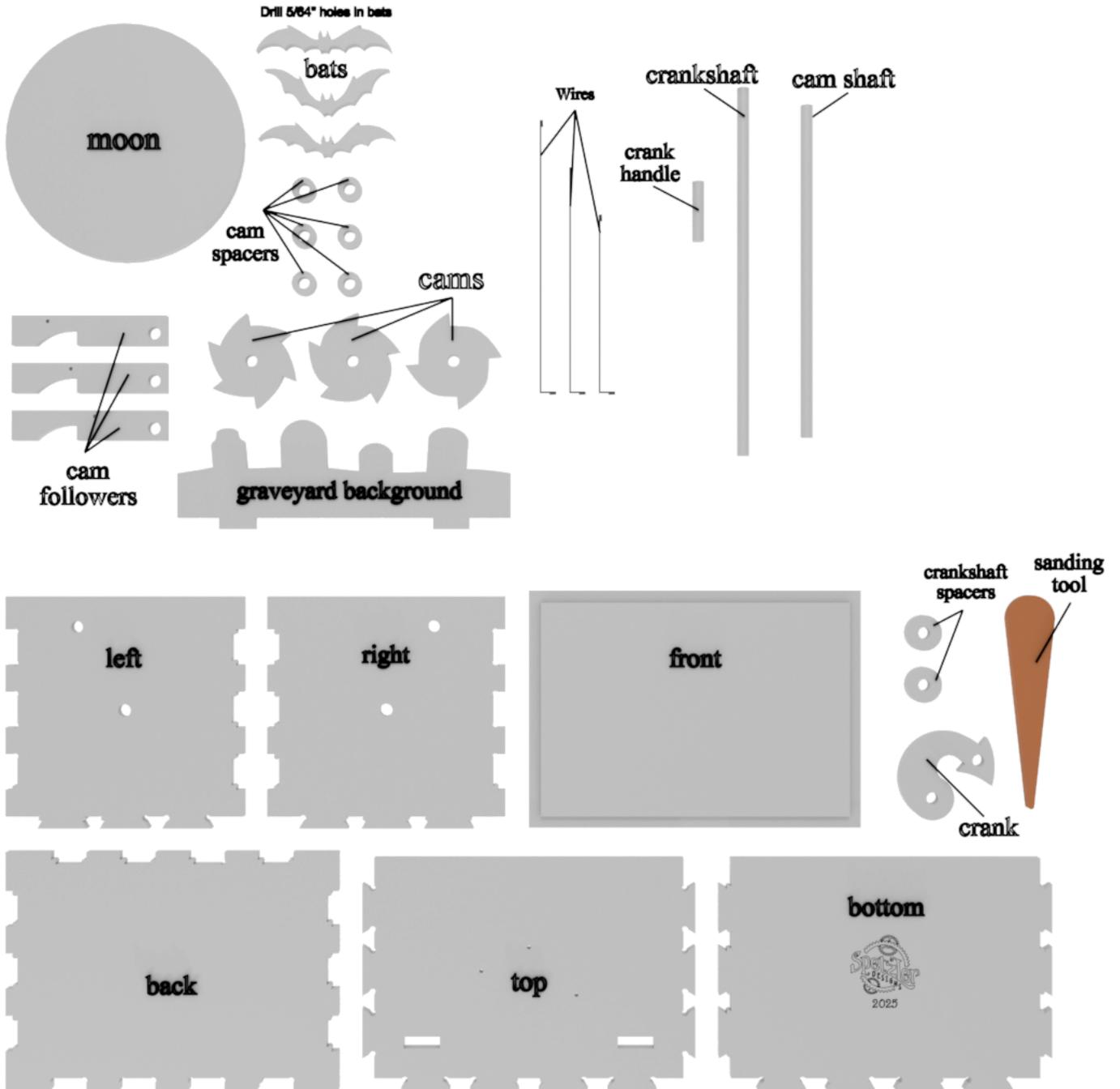
You can also see how other automata kit builders have finished (and added other surprises) to their kits to get your creative juices flowing.



<https://spetzlerdesigns.com/gone-batty-automaton>

Parts Layout

(I recommend you tear this page out so you can identify the parts as you read the instructions)



Parts List

- Box assembly
 - 2x Side pieces
 - Back piece
 - Front piece
 - Bottom piece
 - Top piece
- Crank assembly
 - 7³/₄ inch crankshaft (¹/₄ inch dowel)
 - Crank (arrow shaped)
 - 2x Crankshaft spacers (³/₄ inch diameter ring)
 - 1¹/₄ inch crank handle (¹/₄ inch dowel)
 - 4 tooth cam
 - 5 tooth cam
 - 6 tooth cam
- Cam Assembly
 - 7 inch camshaft (¹/₄ inch dowel)
 - Cam spacers (x6)
 - Cam followers (x3)
- Bats (x3)
- 4 inch wire
- 5 inch wire
- 6 inch wire
- Graveyard background

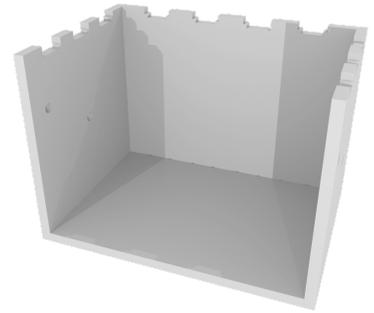
Also included in kit

- Sanding stick
- Glue
- These Instructions

Assembly Instructions

Box (sides & back, then bottom)

- Attach the side panels of the box to the panel labeled “back”
Note: it is important that the labels are on the outside of the box and the flat sides of the box pieces are all on the same side of the box (the front). The left and right pieces are interchangeable, but the labels should be on the outside of the box
- Attach the bottom piece
- Set aside the top and front piece to be attached later

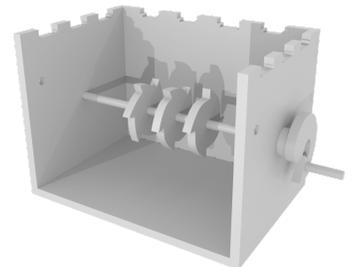


Crankshaft assembly

- Glue one of the crankshaft spacers and the arrow shaped crank on the crankshaft. The crankshaft goes in the center hole of the crank (the hole at the base of the arrow).
Note: Make sure that the crank points in a clockwise direction. The crankshaft spacer goes between the box and the crank to keep the crank from rubbing on the box.
- Glue the crank handle into the hole located in the crank arrow head.
- Insert the crankshaft through the right side of the assembled box. The crankshaft goes through the hole that is in the center of the side of the box. Put the 3 cams on the crankshaft before putting the crankshaft through the left side of the box.



- Note: Don't glue the cams on the crankshaft yet. Also, it's critical that the cams are facing the correct direction, so compare your cam direction to the image to the left. You can put the cams in any order, the less teeth that are on the cam the slower the bat will “flap”.*
- Once you have all 3 cams in place and in the order you want, put the crankshaft through the left side of the box and glue the remaining crankshaft spacer on the end of the fully inserted crankshaft to keep it from pulling back into the box.
Note: Make sure that your crankshaft spacers are not so tight that the crankshaft will not turn and that there's not a lot of play side to side (a little wiggle is just fine). You don't want to accidentally glue the crankshaft so it doesn't rotate.



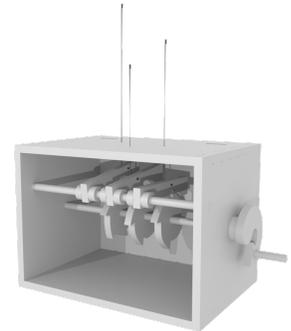
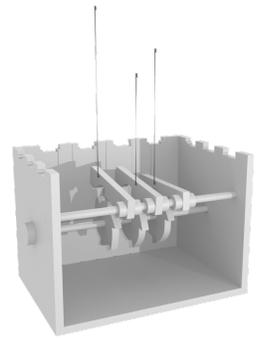
Camshaft assembly

- Insert the camshaft half way into the box through the camshaft hole (the hole that is not centered on the side of the box)
- Slide on the camshaft spacers & cam followers in the following order → spacer | cam follower | spacer. You'll do this 3 times.

Note: the small wire holes in the cam followers go in the following order from left to right: farthest from the camshaft, closest to the camshaft & in between the two. You can use the location of the holes in the top of the box as a reference to make sure you have them in the right order. The holes in the top of the box should match the holes in the cam followers from front to back.

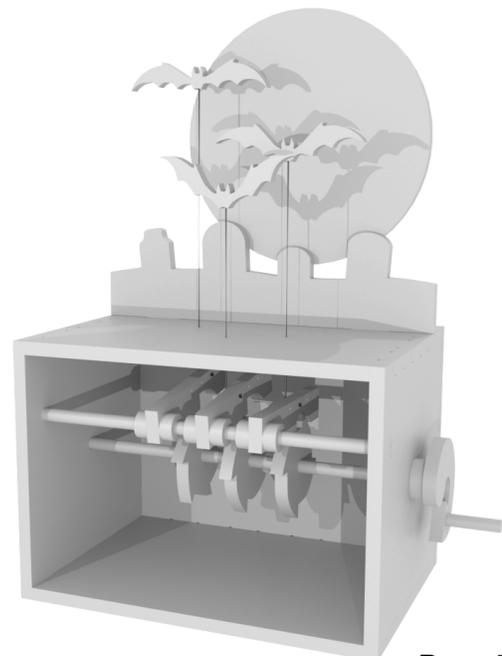


- Once you have all of the camshaft spacers and cam followers on the shaft, you can finish putting the shaft into the hole on the left side of the box. Check the photo to make sure it looks the same. If it looks right, then glue the camshaft in both holes in the side of the box. Don't glue the camshaft spacers to the camshaft yet.
- Put the "L" shaped ends of the wires through the small hole in the cam followers. You can put the wires in any order, but if you like the cascading look from back to front, put the wires in the following order: 6", 4" & 5". You may have to use the sanding tool to help press the wires through the holes in the cam followers - they are meant to be a little tight. Make sure they are pushed all the way in and rotate freely.
- Put the wires through the small holes in the top of the box. You may have to slide the cam followers and spacers along the cam shaft to get them to align with the holes as you secure the top in place on the box.
- With the top of the box in place, use the wires as a guide to line up the cam followers so that all of the wires are as straight up and down as you can get them. Once they are aligned, you can glue the camshaft to both of the box sides and glue the cam spacers in place. *Note: the cam followers need to be able to rotate freely on the camshaft, so make sure that the cam spacers are not too tight against the cam followers.*
- Align the cams with the cam followers. The cam followers should ride on the cams and if you have it all aligned properly, as you turn the crankshaft, the cam followers should go up and drop down with a clicking sound and all of the wires should go up and down through the holes in the lid without binding up.
- Once you have all of the cams aligned with the cam followers and the wires are all moving up and down, glue the cams to the crankshaft. You only need a tiny drop of glue to hold each piece. I find it's easiest if I move each cam over just a little, put a drop of glue on the crankshaft and then slide the piece back in alignment and over the drop of glue.



Final assembly

- Attach the bats to the top of each of the wires
- Glue the moon to the back of 2 or 3 of the gravestones (where you think it looks best)
- The graveyard scene has tabs that fit into the two slots in the top of the box to hold the graveyard background and moon in place
- The front of the box is optional and can be added to hide the mechanism that makes the bats fly. I tend to add it and paint it to match the rest of the base, but I don't glue it in place so that I can service the automaton and so that people can look at how the mechanism works if they want.



Decorating

I painted mine with acrylic paint to finish it off. You can do whatever you want to make your automaton unique! Don't forget that you can also decorate the inside of the box.

You're Finished!

I really hope you enjoyed assembling Gone Batty. Take some time to pat yourself on the back and then show it off to everyone!

If you have any trouble getting your automaton to work, I'm happy to help troubleshoot. First try checking the website for troubleshooting tips & tricks to try to solve your problem right away (you can use the QR code on the 2nd page of these instructions to get you directly to the right page or go to <https://spetzlerdesigns.com/gone-batty-automaton>). If you need to get some help from me directly, email gary@spetzlerdesigns.com and we'll figure out what to do to get your bats flapping away. Also, if you've lost or broken a part or just glued something in the wrong place and need a replacement, I have spare parts or can make them for you if necessary.

I have quite a few other kits of varying levels of difficulty. If you enjoyed making this one, I would suggest trying my other Halloween themed "Ghoul in the Graveyard" automaton. It's a little more difficult to assemble and makes use of wires hidden within the ghoul to make the arms reach out. It's a good introduction to using a somewhat passive mechanism that takes advantage of the movement of the ghoul to create an awesome arm raising effect.

There are more kits, tips, tricks, samples and ideas for modifying your new automaton to add more surprises to your automaton on my website [SpetzlerDesigns.com](https://spetzlerdesigns.com).

-Gary