

Parts for: Skeleton and Animatronic Mechanisms

Cats Menagerie
by Catherine Arnold

The following table lists the parts needed to create one basic animatronic skeleton with moving head and jaw mechanisms. This list does not contain parts or software needed to control the animatronic (i.e. the controller box and related electronics), as those are provided in a separate sheet.

****DISCLAIMER**** While I have done my best to balance this project between being easy and affordable, it does require a commitment of time and money. You assume full responsibility for all risks involved in this project.

I am volunteering my time to make these sheets and tutorials as accessible as possible and I ask for your patience and understanding as we both learn along the way. And most importantly, I hope you have a wonderful time and enjoy this project as much as I have!!
-Cat from Cat's Menagerie LLC

Enjoying the project? Consider supporting the channel on Patreon! <https://www.patreon.com/CatsMenagerie>

Follow along tutorials and more at youtube.com/CatsMenagerie

Videos and Images of this Project

[Full Pirate Skeleton Show](#)
[Original Tutorial - Part 1](#)
[Original Tutorial - Part 2](#)
[Helmsman Software](#)
[Various Images](#)



Keep in mind:

> Prices and availability are subject to change on all items listed below

> Some links are affiliate links, meaning that I may make a commission if you purchase from them

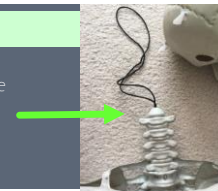
> Pay attention to quantities of the items you need!! # Needed is the number of this item you will need for each skeleton. # In Package tells you how many of these items come in each purchase.

Group	Item	Description	Link	# Needed	# in Package	Version
Skeleton	5ft Posable Skeleton	The skeleton itself	** SEE DETAILS BELOW **	BUY THE SKELETON FIRST. IT CAN BE HARD TO FIND THE RIGHT VERSION. DETAILS BELOW.		
Motors	Servo: HS-65HB	Motor that moves the jaw	https://www.servocity.com/hs-65	1	1	Stock
	Servo: HS-425BB	Motors that move the head	https://www.servocity.com/hs-42	2	1	Stock
Connectors/Hardware	Swivel Connect	Connects the jaw and the motor	https://www.dubro.com/product	1	1	2-56 Swivel Ball Link (QTY/PKG 1)
	Ball Link	Also for connecting the jaw to the motor	https://www.dubro.com/product	1	1	N/A
	EZ Connector	Connects the head to the motors	https://www.dubro.com/product	2	2	E-Z Connector for Rod or Cable (QTY/PKG 2)
	Control Horn	Also for connecting head to the motors	https://www.dubro.com/product	2	2	N/A
Extend distance between character and controller	2-56 Rod	Used for moving the head and jaw	https://www.dubro.com/product	2	6	(Should be 30in long. The 1.2in rods are too short for this project)
	Sending Board	Used to extend distance between the animatronic and the controller	https://www.servocity.com/cat6-s	1	1	N/A
	Receiving Board	Used to extend distance between the animatronic and the controller	https://www.servocity.com/cat6-r	1	1	N/A
	Ethernet Cable	Used to extend distance between the animatronic and the controller	https://www.monoprice.com/pro	1	1	As long as you want it to be. I like using 50ft.
Bracket	Male/Female Servo Wire	Used for connecting jaw servo to receiving board	https://amzn.to/3fHThsQ	1	10	N/A
	Steel Sheet	Used to make the bracket to hold motors on the skeleton's back	https://amzn.to/3l7sdVc	1	1	N/A
	Screws	Used to connect bracket to skeleton	https://amzn.to/3pccEgM	4	100	N/A

5ft Posable Skeleton - Buy this first!!

Part of what makes this project simple is that we can easily use this kind of skeleton's neck connector as a universal joint. That means we don't have to install any special joint there. Simply tie a knot in the string at the top of the head and let the head loosely swivel around on this point.

Not every plastic skeleton has this. If you do not wish to stray from the tutorial and install a joint in the neck, make sure you buy a skeleton that has this specific kind of connection between the head and neck.



Examples of skeletons that **DO WORK** for this project:

Manufacturer	Link
SUNSTAR	https://amzn.to/34BD075
SUNSTAR (Chrome)	https://www.walmart.com/ip/5-Skeleton-Steel
AW	https://amzn.to/2SSbQ0K
XONOR	https://amzn.to/3uGPmAv
COSTWAY	https://www.walmart.com/ip/Costway-5-4ft-H
GYMAX	https://www.walmart.com/ip/Gymax-Full-Body
FUN EXPRESS (Mermaid)	https://amzn.to/3vXyx69
FORM NOVELTIES	https://amzn.to/3pzNF71



*The availability of these skeletons changes often. If the linked ones above do not work, look for skeletons similar to the ones pictured here

Skeletons that **DO NOT WORK** for this project:

Manufacturer	Link
** CRAZY BONEZ	https://amzn.to/3l7XbIM
JOYIN	https://amzn.to/34YtRks
GRANDIN ROAD	https://www.grandinroad.com/5-skeleton-fig



**Crazy Bonez is currently very popular. You are likely to see this kind of skeleton the most often.

