



KNIGHT[®]
C U S T O M S



CJ-7 driver – Hayley manual

Items required

Sold separately

You will need 2 micro servos and a 3 or 4 channel receiver / transmitter to complete the assembly. We recommend Hitec HS-55 Feather Servo 7.5g Hybrid I.C. servos.

We recommend using scale winch rope to articulate the arms.

A regular hot glue gun or instant glue can be used to fix required parts in place.

NOTE: Using other micro servos may require more modifications to ensure the servo spline location is the correct offset to the 3D printed parts.



3D printer set up

Your purchase includes all the STL files to complete the assembly. G-codes are also included in the download. These G-codes are a recommended starting point for those new to 3D printing or just looking for a quick start.

The G-codes can be sent directly to your printer and come with our recommended settings, orientation & supports for printing in PLA filament. Unless otherwise stated, we recommend Bambu Lab PLA Matte for best results.

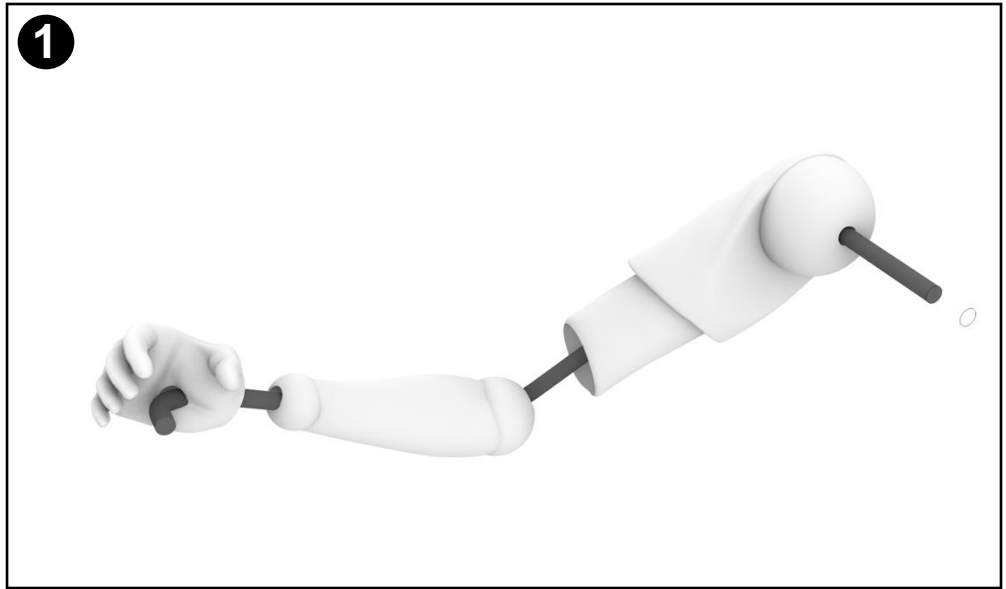
G-codes are Included for the Bambu Lab (X1) & Prusa series of printers. The Prusa G-codes should also work on other printers such as the Ender series of printers that have a print bed 20x20cm or larger.

1

Driver arm assembly

Thread the cord through the right arm to join the two parts together.

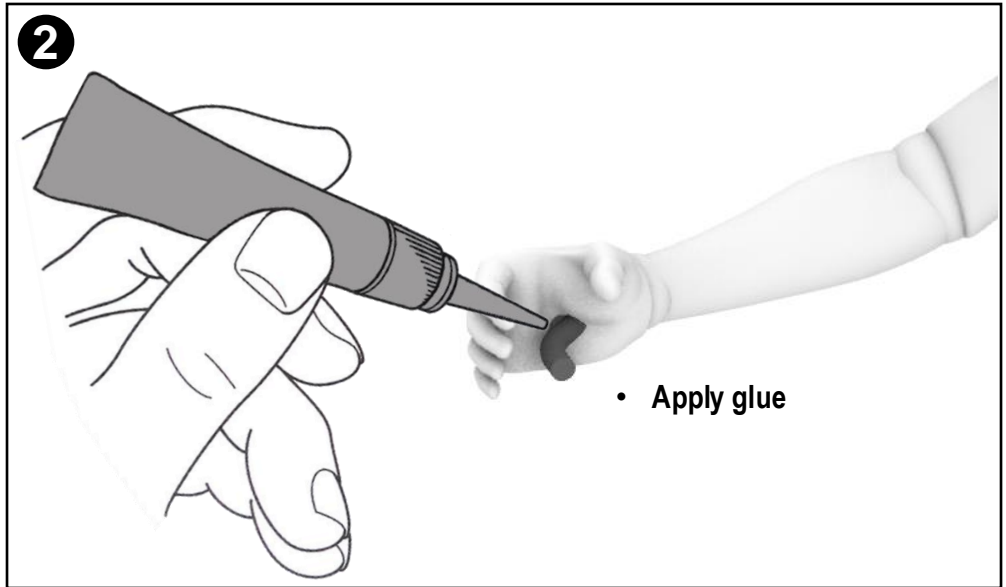
NOTE: We recommend using scale winch rope to articulate the arms



2

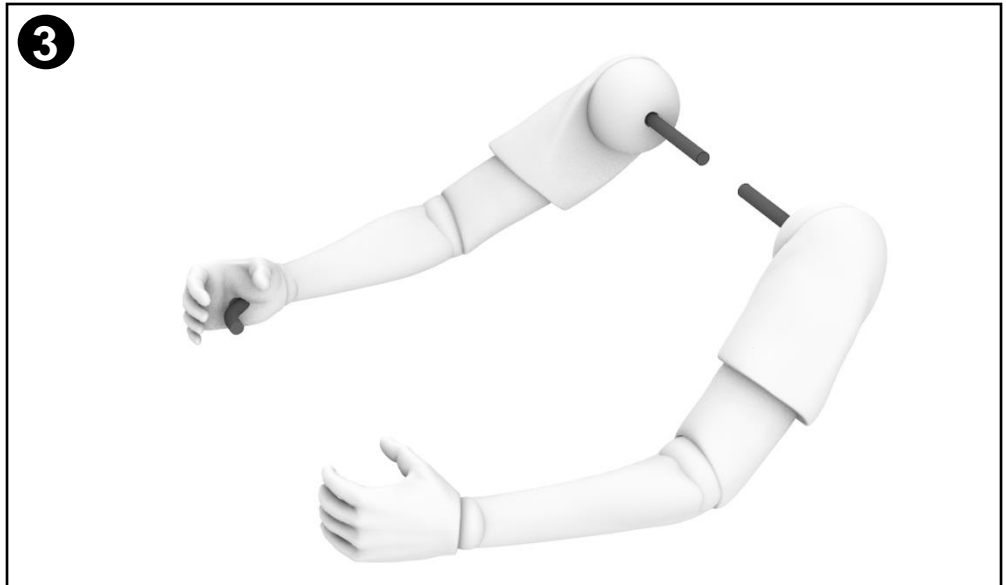
Glue the cord to the hand being sure the joints move smoothly.

NOTE: Do not glue the cord at the other end.



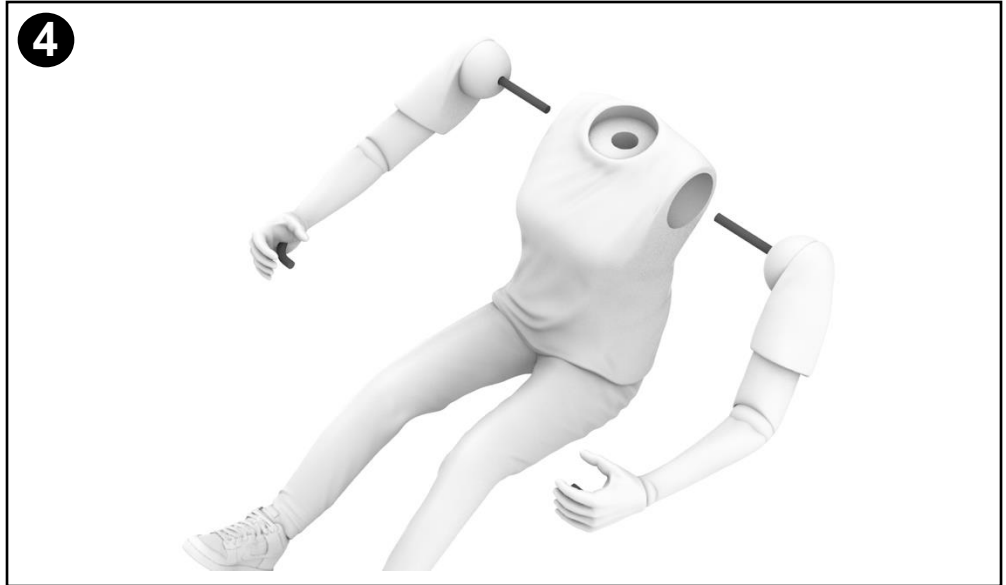
3

Repeat for the left arm



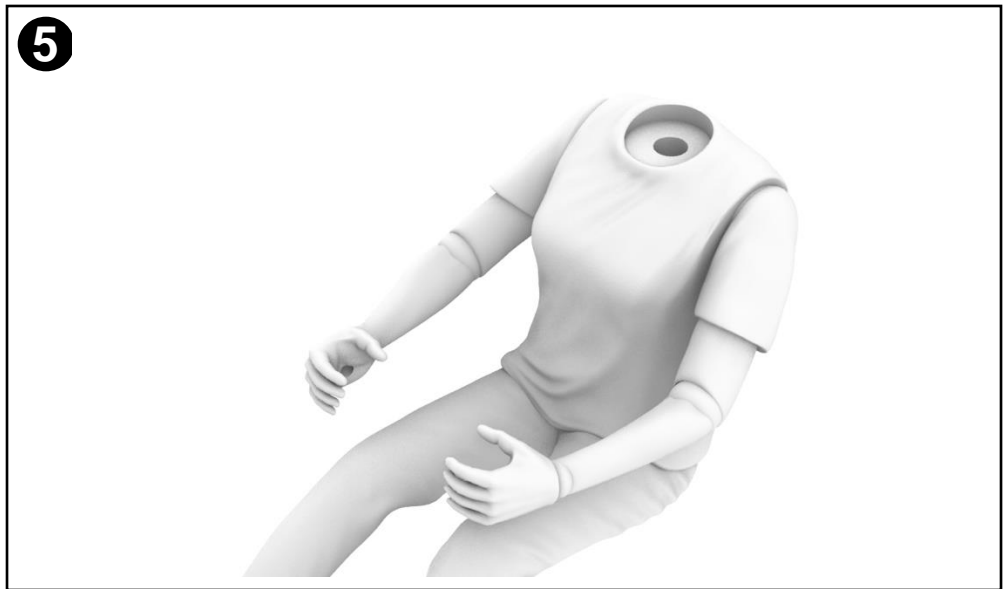
4

Insert cord of both arms into the driver arm sockets.



5

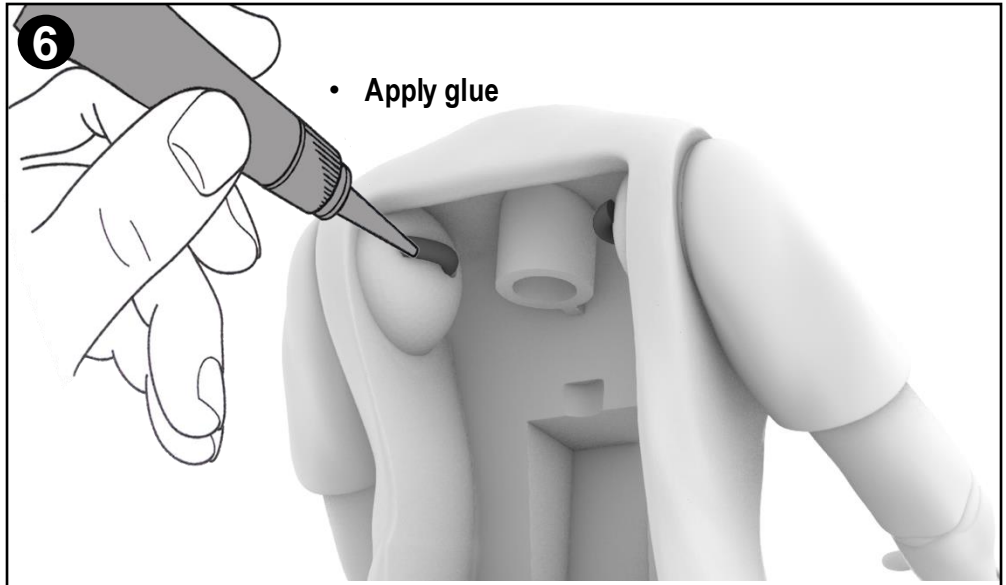
Pull cords tight to ensure both arms are located in the socket and can move freely.



6

Both right and left cord can be glue in place inside the body as shown.

NOTE: be careful not to get glue into the shoulder joint area.



7

Driver head install.

Install head posts onto the body.



8

Driver head servo install.

The servo will need to have the left tab removed to make the servo fit. We recommend using hot glue to hold the servo in place.

NOTE: Be sure your servo is centered before assembly.

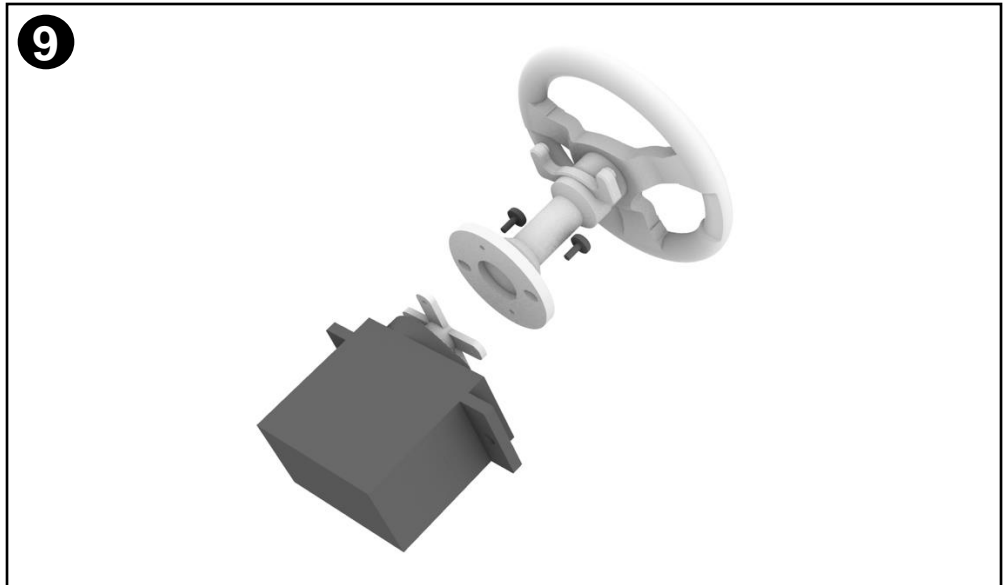


9

Steering servo install.

The steering wheel should be mounted to the stock servo horn on the micro servo. Use the screws provided with the servos.

NOTE: Be sure your servos are centered before assembly.



16

Congratulations, your driver is complete.

NOTE: Now is a good time to connect to your receiver & electronics to make sure everything is moving correctly.

16



17

Optional seat to help your set up.

You can print the test seat to ensure everything works correctly.

NOTE: If you want to install the steering servo into the stock CJ-7 interior you will have to fabricate your own mount.

17



Congratulations, your CJ-7 driver – Hayley is complete.

Servo set up: There are a few ways to connect your servos to your transmitter depending on the channels available and the features of your transmitter. The simplest way is to use servo lead y-connectors to connect all steering servos to the steering channel. For best results use a channel for each servo and the mixing function on the transmitter to program each servo movement depending on your specific needs.

Note: We recommend Bambu Lab PLA Matte for best results, however PLA has a lower melting point and you should not leave your interior stationary in direct sunlight for extended periods. Doing so might cause parts to warp or deform.