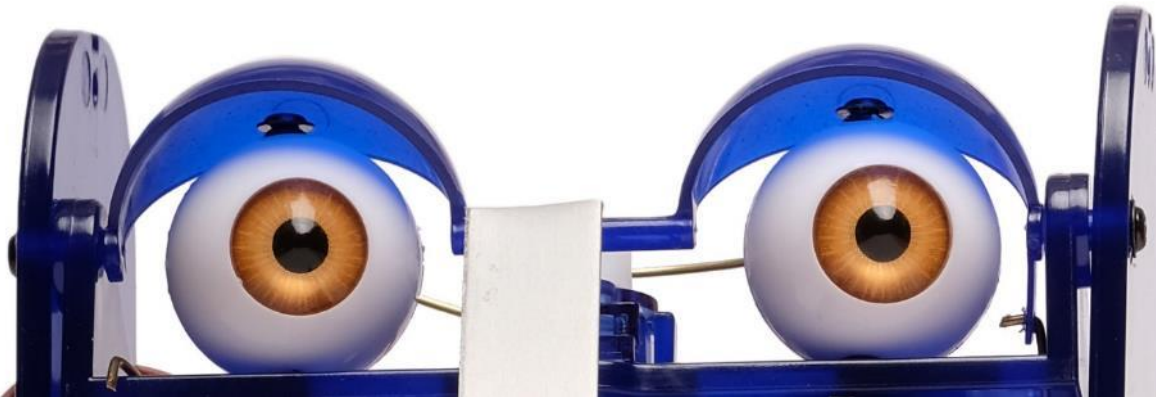




Making Instructions

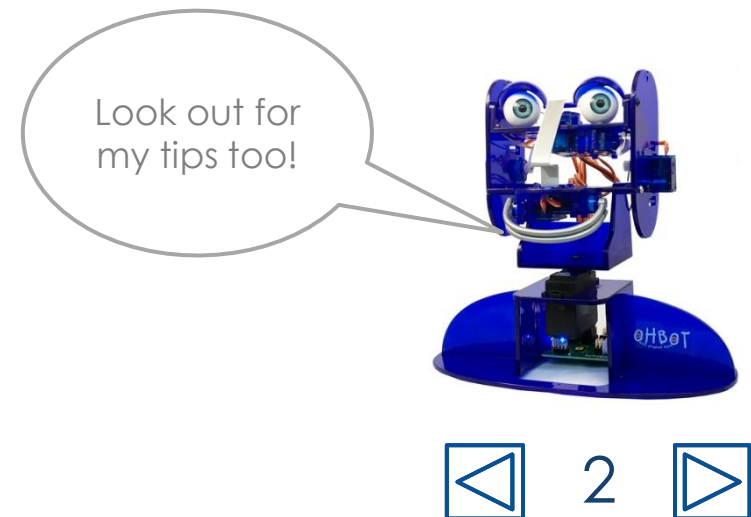
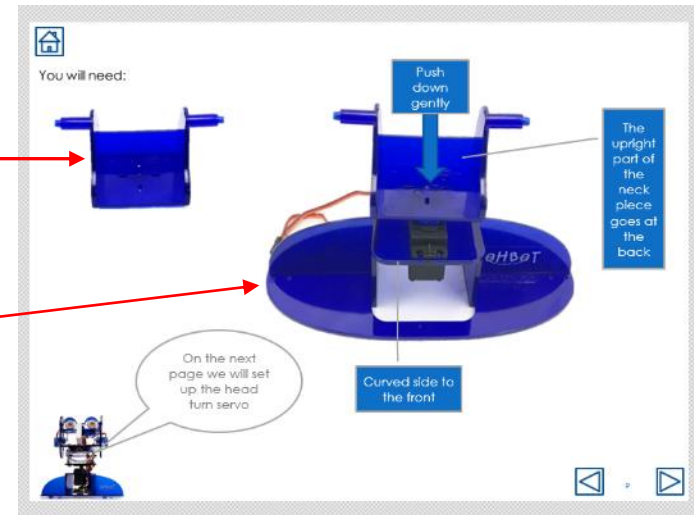
Part 1





Instructions

- Each page is a step in constructing Ohbot
- The parts needed are shown on the top left of each page
- If you need tools it will show this too
- The main picture or pictures show how to assemble



Feet

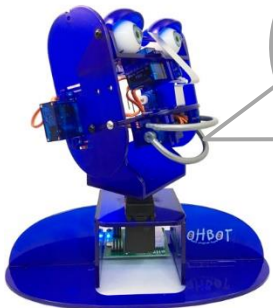
You will need:



underside of base



Nice work! I don't want to brag, but Ohbots do have two more feet than you do!



3





Neck turn motor

You will need:



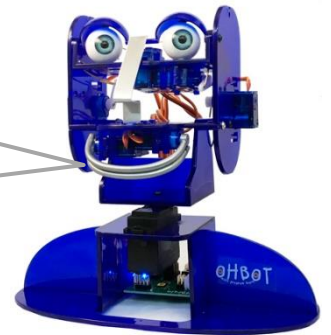
1. Place the base so that the Ohbot sticker is facing toward you



Ohbot sticker

2. Thread the motor's cable through the big hole on the top of the base then put the motor in so that the writing on the label is the right way up.

This motor allows me to shake my head. No really, it does!



4



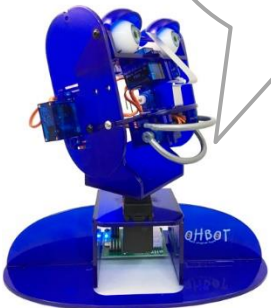


Fixing the neck turn motor

You will need:



Don't chop your finger off while cutting the ties. Just saying!



back

1. Attach the motor to the base using the cable tie (shown in green).

2. Chop off the end of the cable tie

front

3. Attach the motor to the base using the cable tie

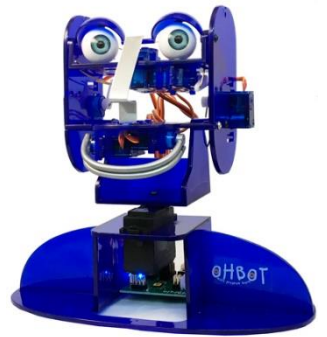
4. Chop off the end of the cable tie





Attaching the neck

You will need:



6





Setting up the neck turn motor

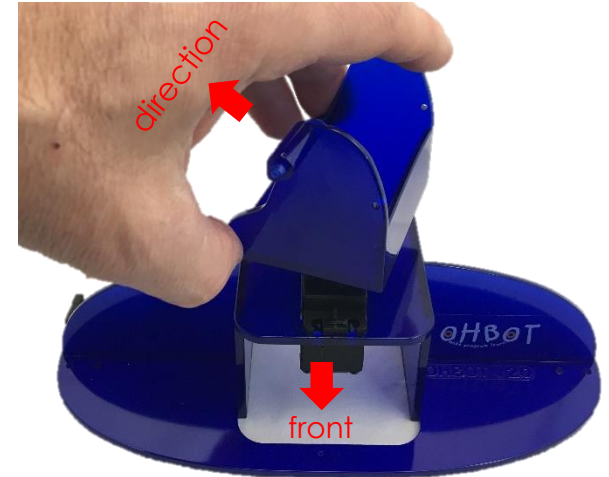
1. Make sure the base is facing you with the Ohbot sticker to the front. Gently turn the neck piece clockwise as far as it will go



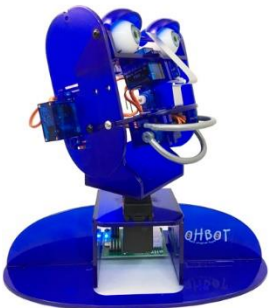
2. Lift off the neck piece



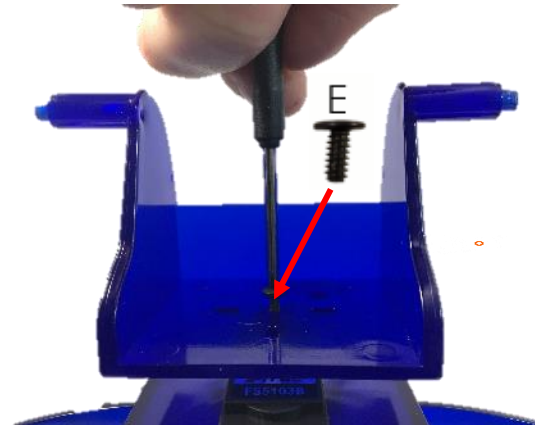
3. Orient the neck piece in the position shown, then push it back onto the motor



You will need:



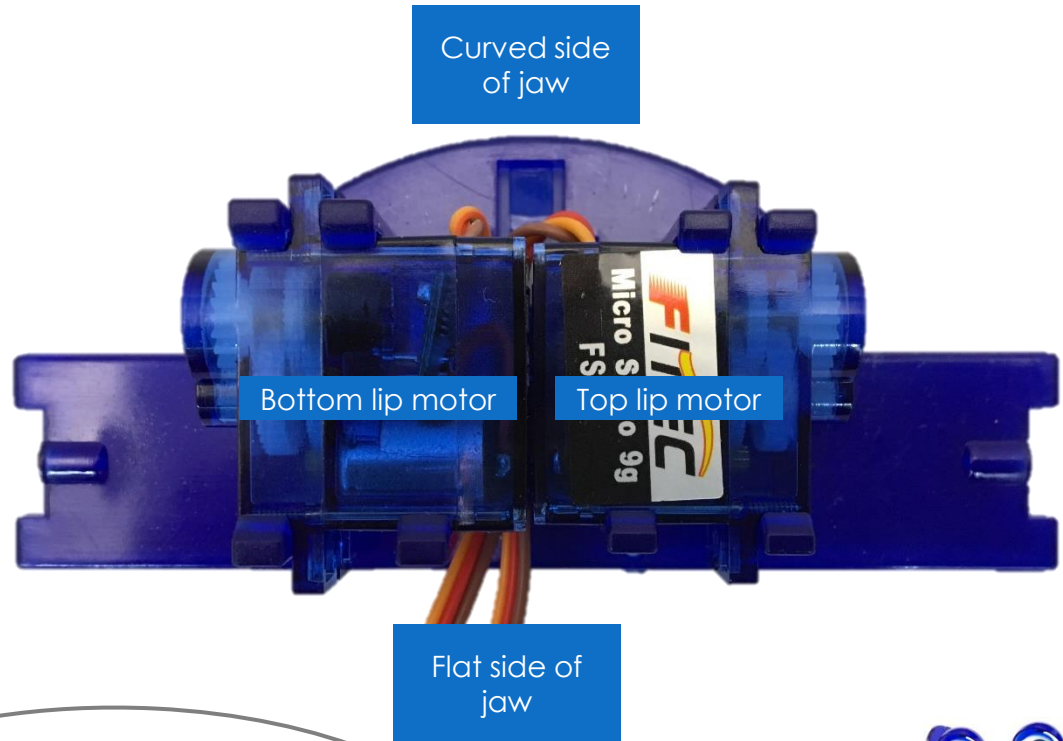
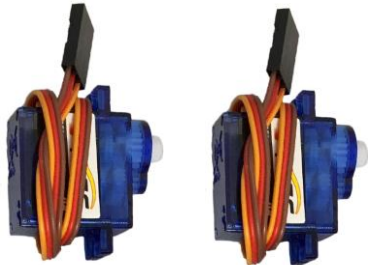
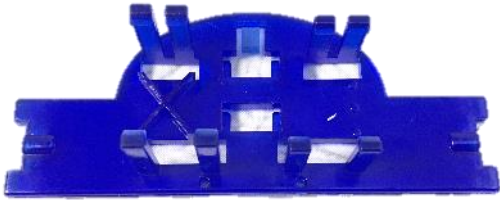
4. Screw the neck piece onto the motor



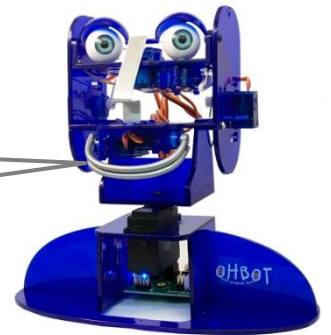


Attaching lip motors

You will need:

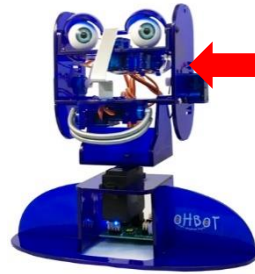


Make sure the wires come out of the motors on the curved side of the jaw and go underneath the bottom lip motor. Label the wires for the top and bottom lip to make them easier to identify later.



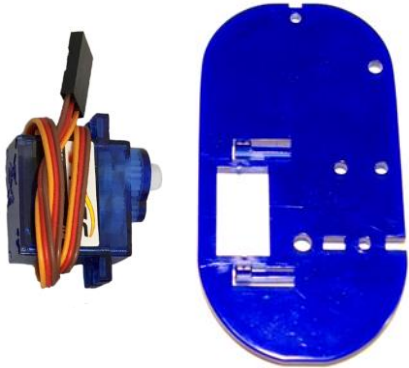


Fixing left cheek motor



left cheek

You will need:

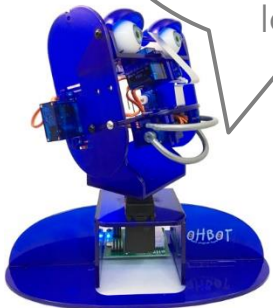


1. Orient the motor with the cable coming out towards the top of the cheek. Thread the cable through the hole.

2. Push the motor through at an angle, starting with the end of the motor where the cable comes out

3. Clip the motor in place

It's easy to muddle right and left cheeks later. Why not label this one 'Ohbot's lovely left cheek' so you can find it later.

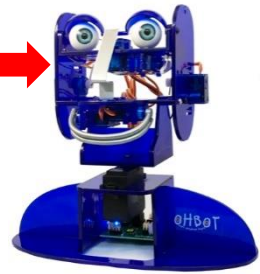




Fixing right cheek motor

You will need:

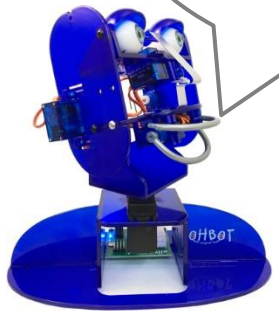
right cheek →



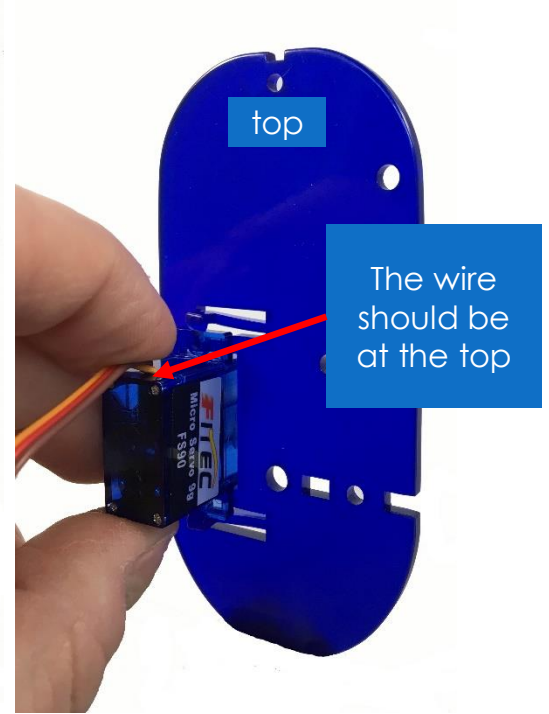
1. Orient the motor this way round, with the wire coming out of the motor to the top of the cheek.

2. Clip in place

This motor allows me to roll my eyes. I know it's not polite, but Ohbots only do what they are programmed to do



top



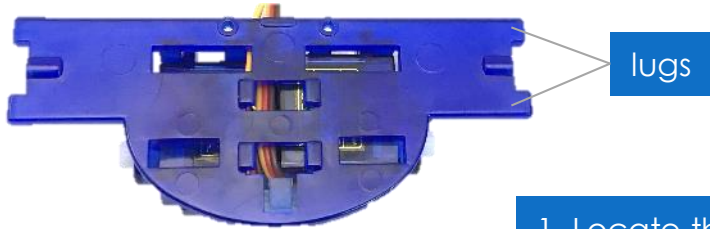
top

The wire should be at the top



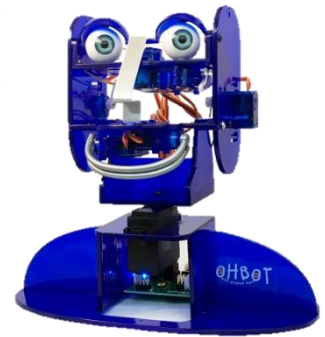
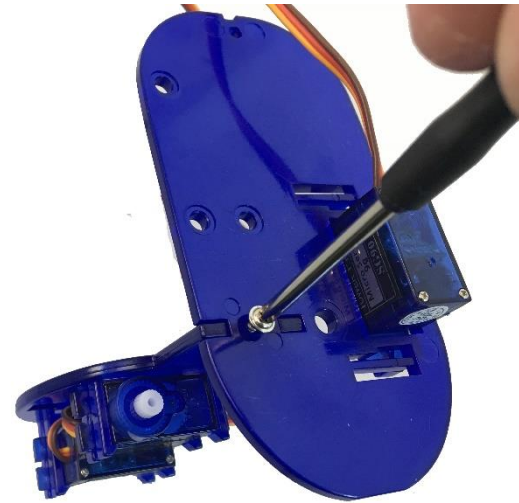
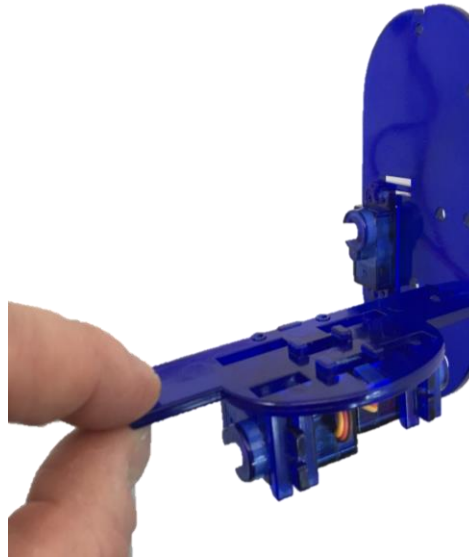
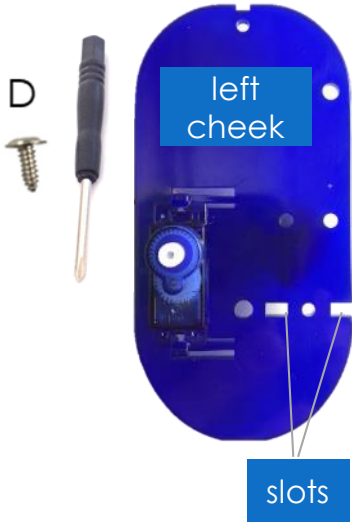
Attach the left cheek to the jaw

You will need:



1. Locate the lugs of the jaw in the slots on the cheek

2. Fasten the screw

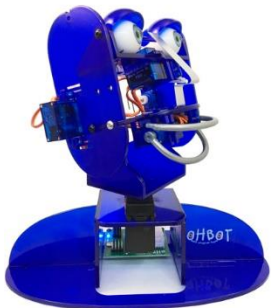
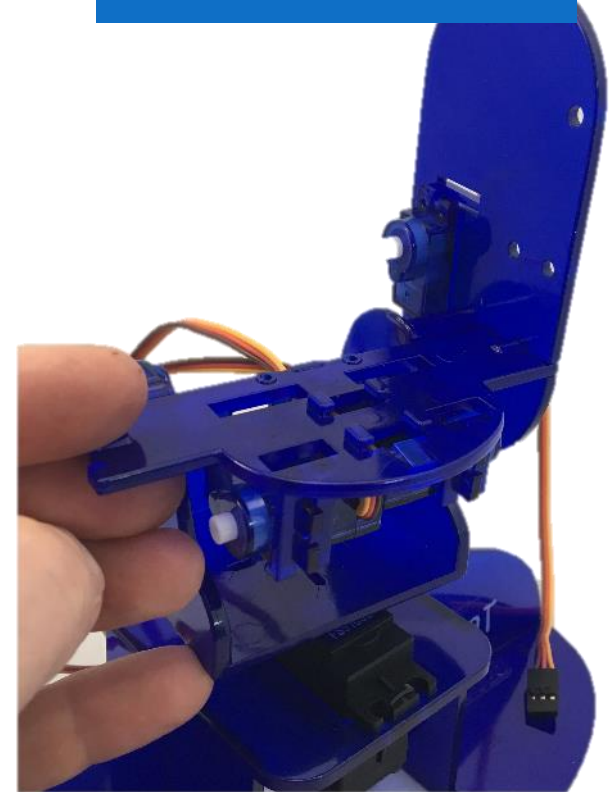
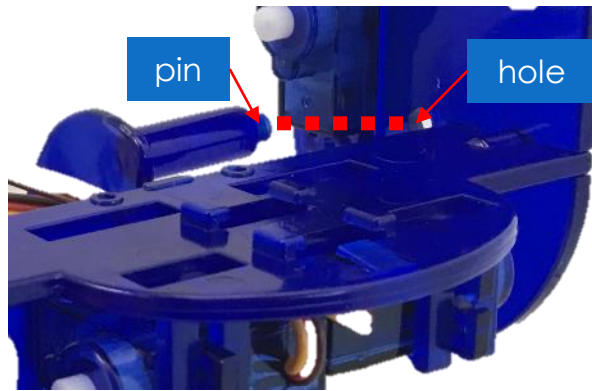
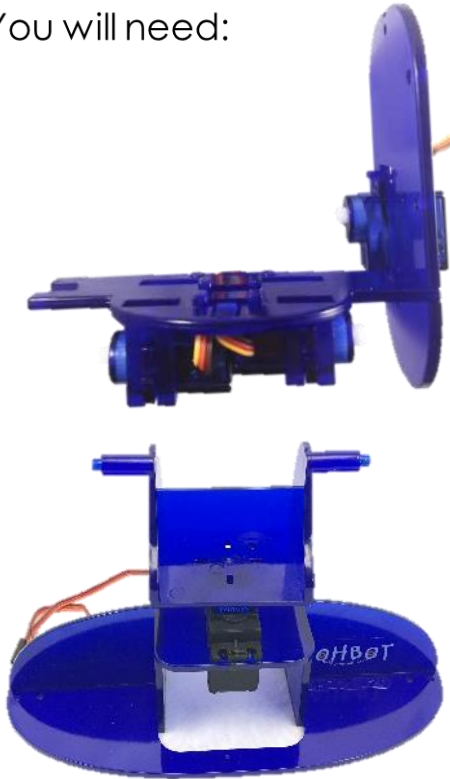


Locating the jaw and cheek on the neck

You will need:

1. Locate the pin on the neck in the hole in the left cheek

2. Hold in place ready for the next step

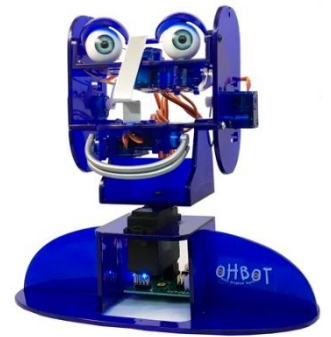
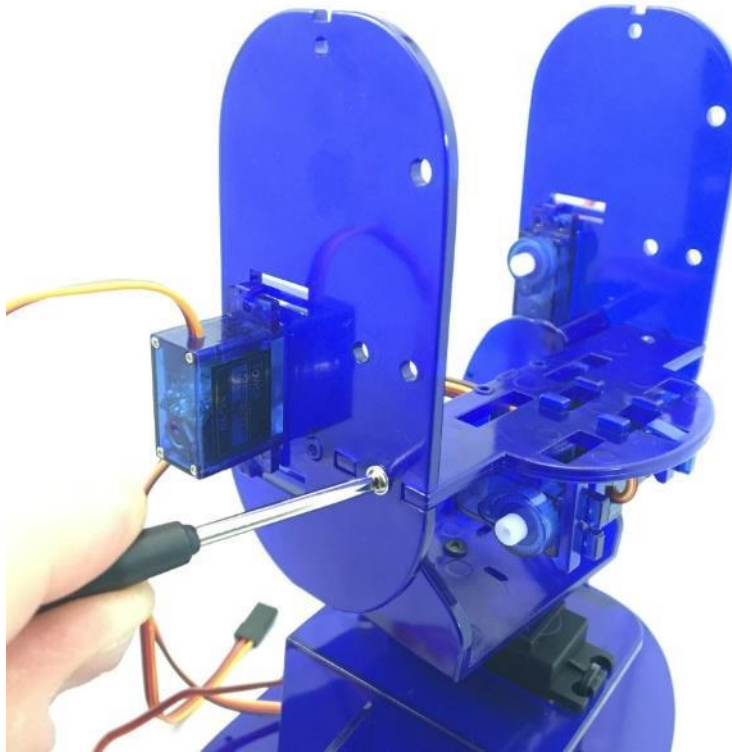




Attaching the right cheek to the jaw

You will need:

D



13

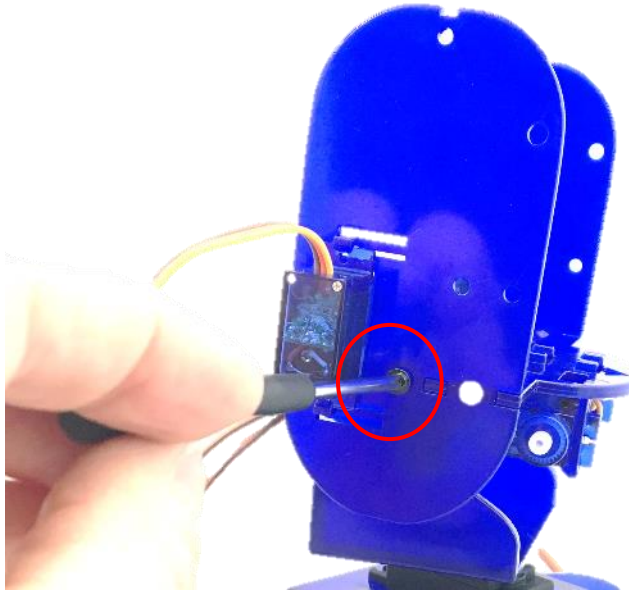


Fixing the cheeks to the neck

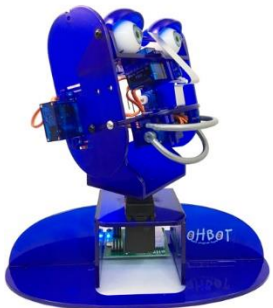
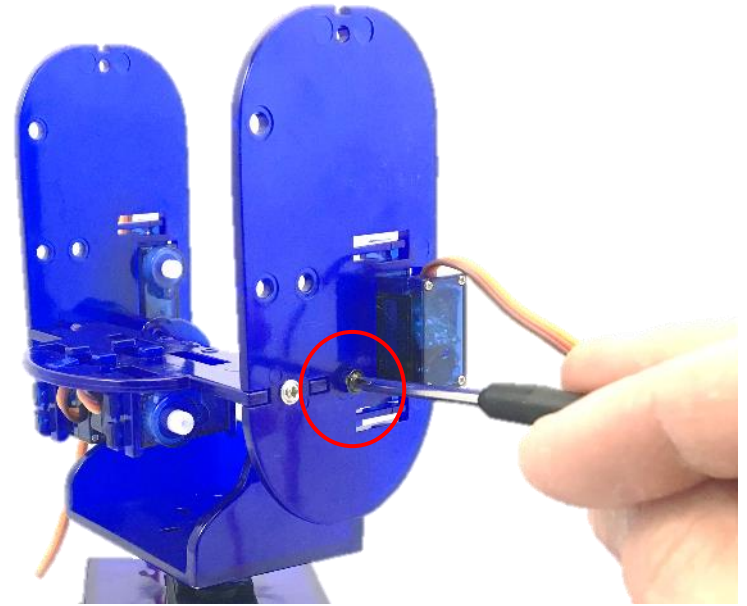
You will need:



1. Use screw to fasten the right cheek to the neck



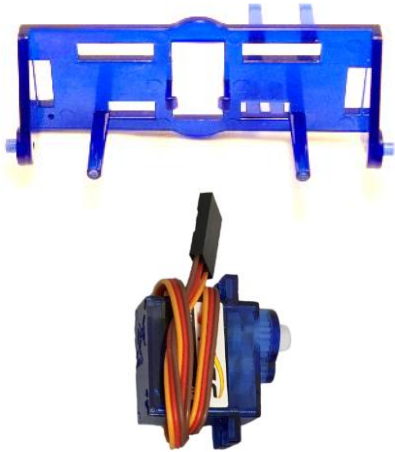
2. Do the same for the left cheek



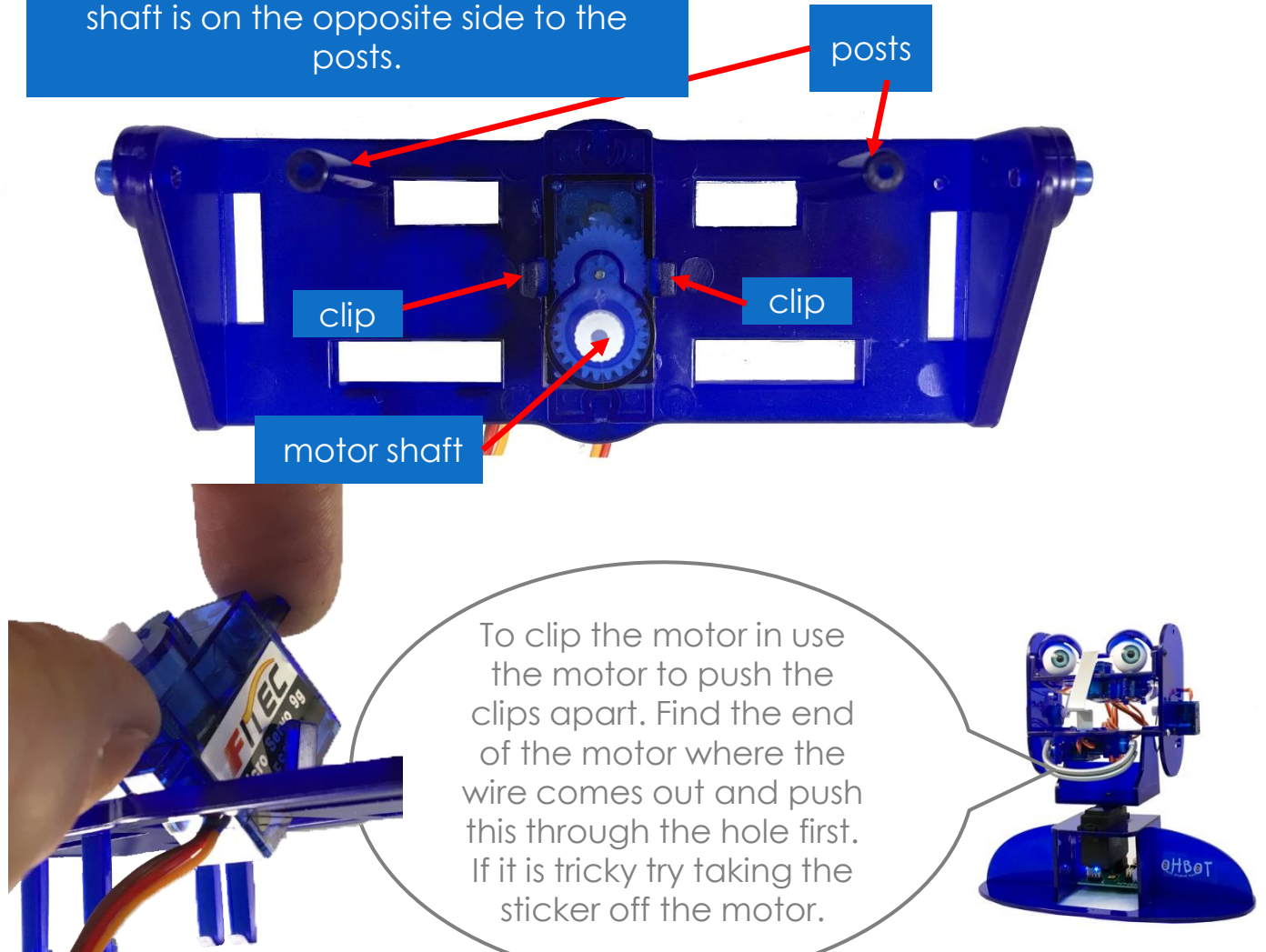


Fixing the eye turn motor

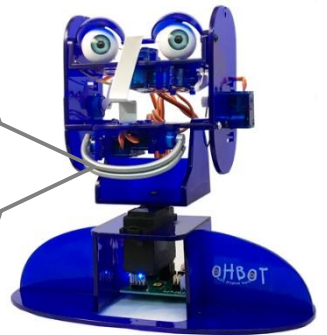
You will need:



Place the motor so that the motor shaft is on the opposite side to the posts.



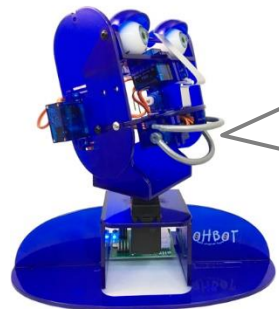
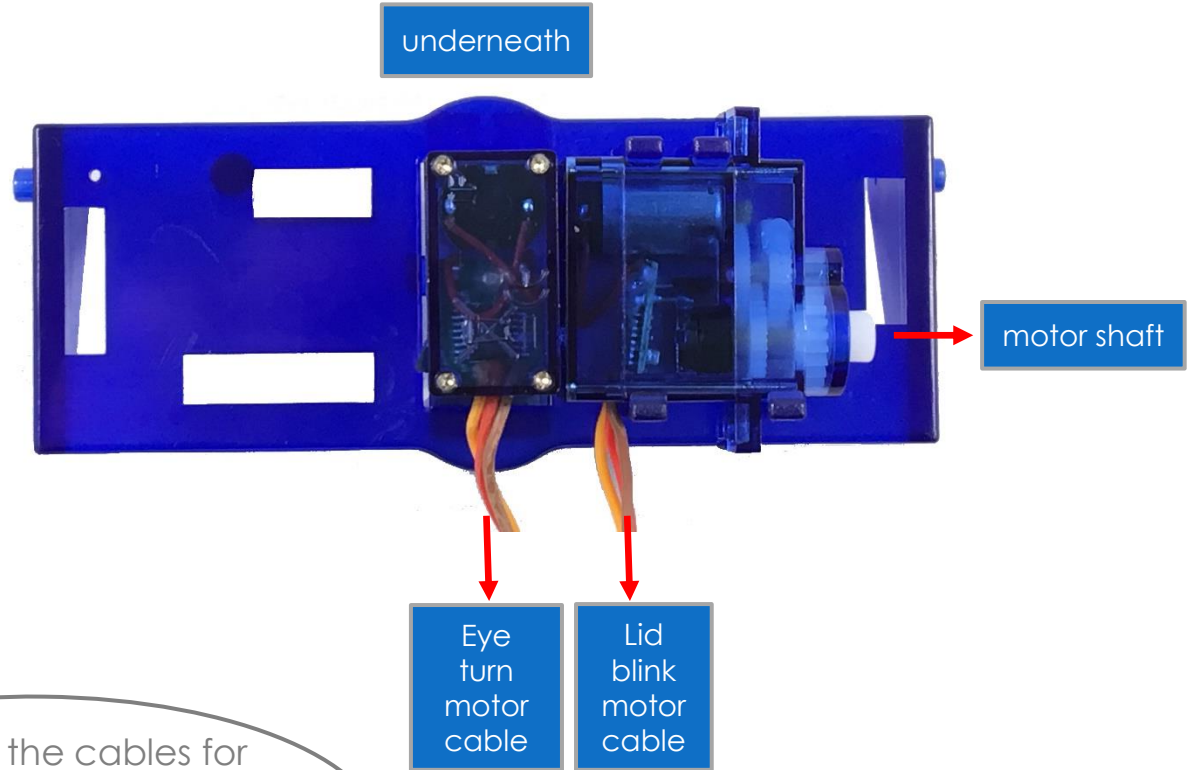
To clip the motor in use the motor to push the clips apart. Find the end of the motor where the wire comes out and push this through the hole first. If it is tricky try taking the sticker off the motor.





Fixing the lid blink motor

You will need:



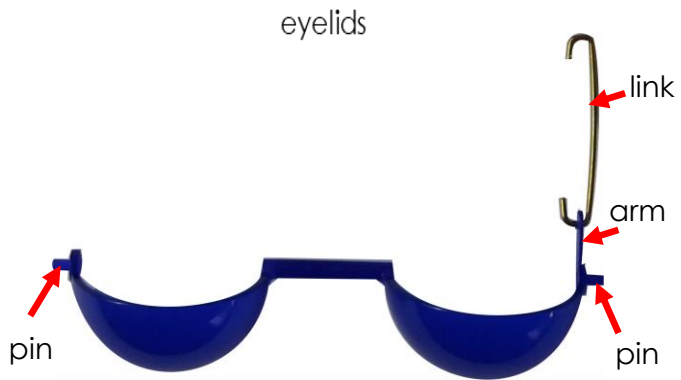
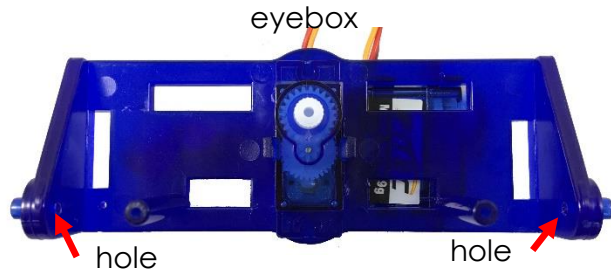
Make sure the cables for both the eye turn motor and the lid blink motor come out on the same side.



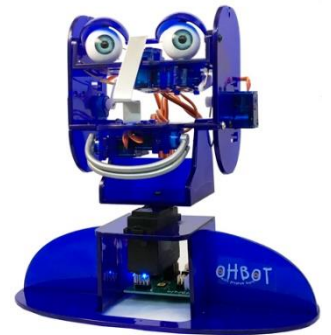
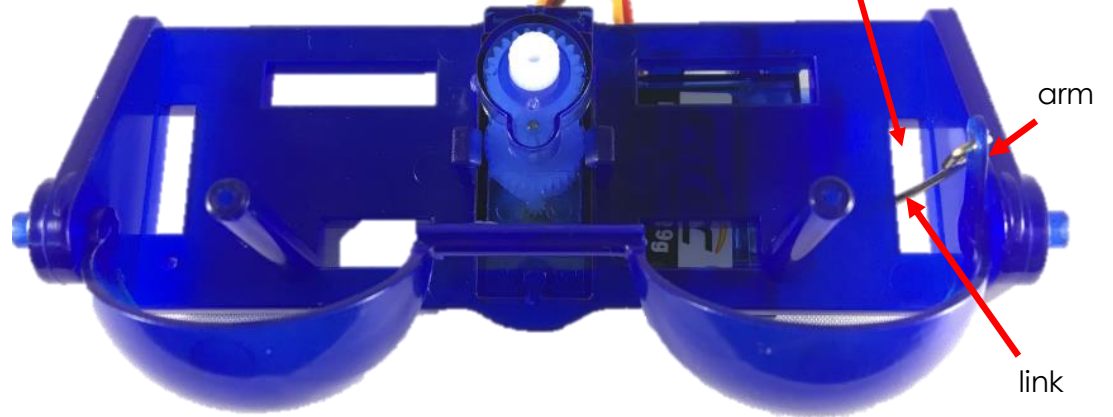


Attaching the eyelids

You will need:



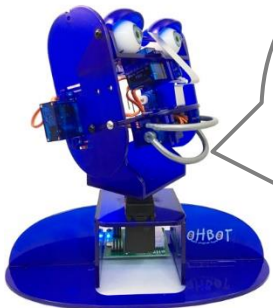
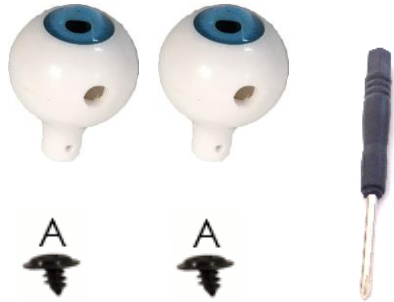
Thread the link through this hole before clipping in the eyelid



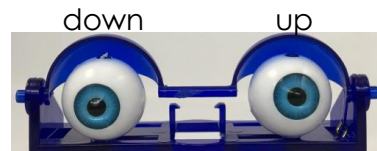
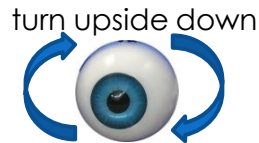


Attaching the eyeballs

You will need:



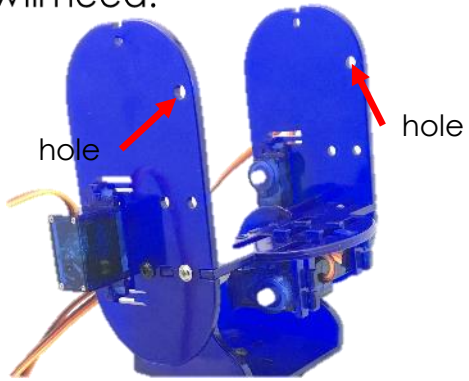
If you find one of Ohbot's eyes is looking up and the other one down turn one of the eyeballs up the other way.





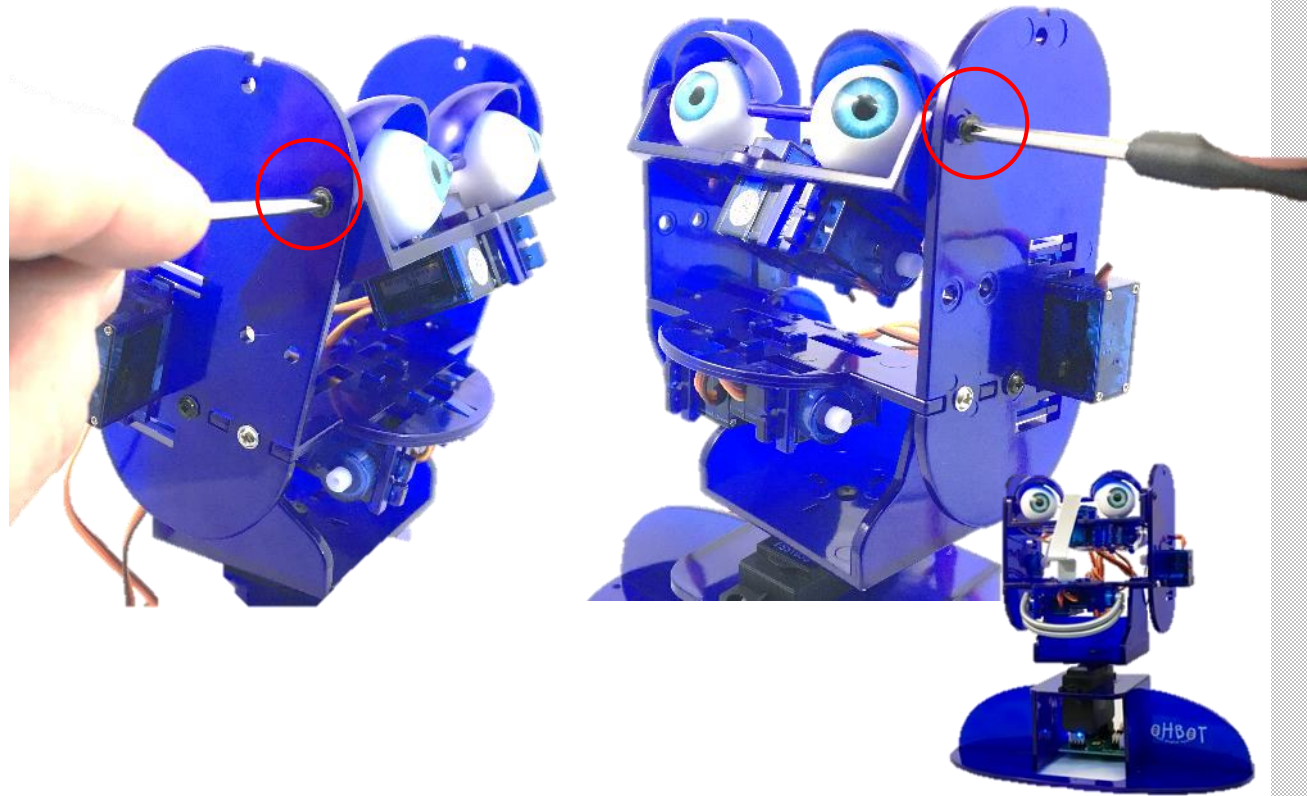
Attaching eyebox to the cheeks

You will need:



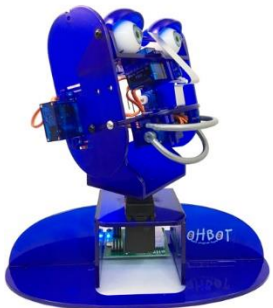
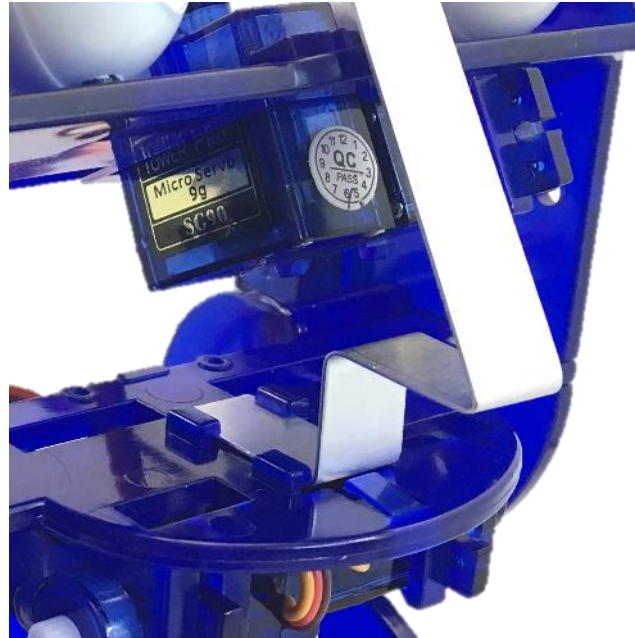
1. Put the pins for the eyebox into the holes shown on the cheeks

2. Use screws to attach each cheek to the eyebox.



Nose fitting

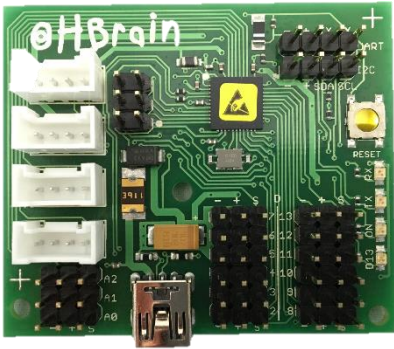
You will need:



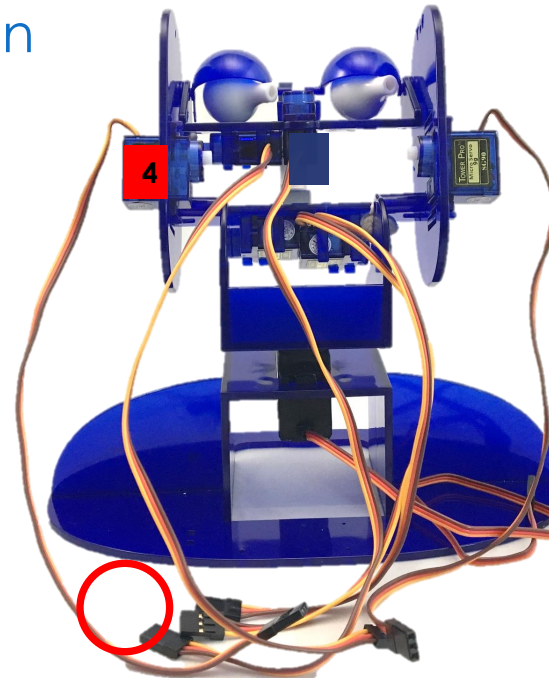


Connecting motor 4 to Ohbrain

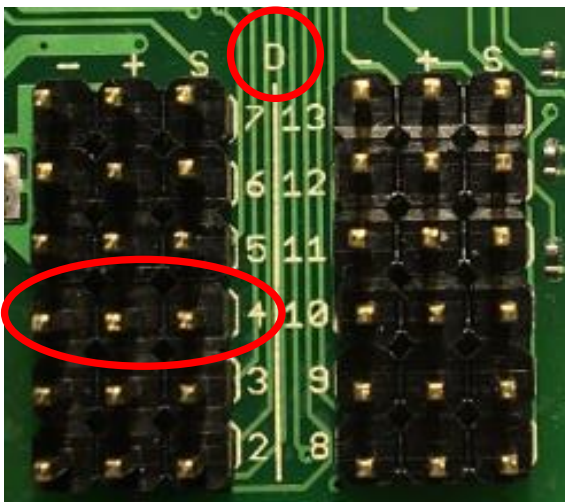
You will need:



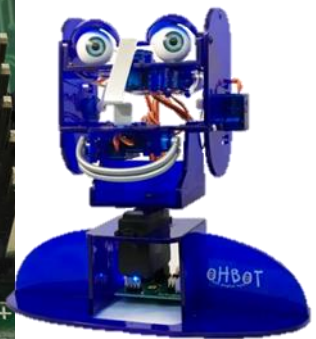
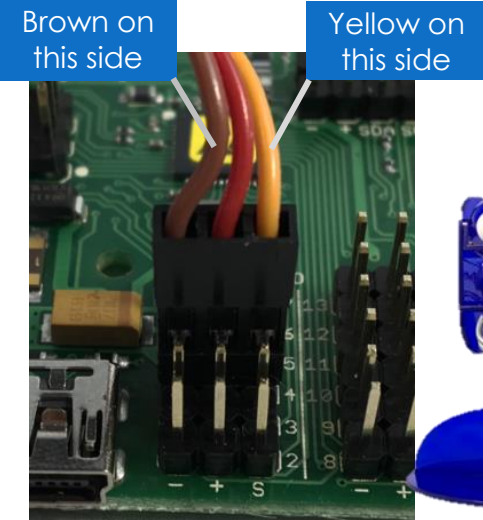
Find the socket
at the end of the wire for the motor marked. **4**



2. On the Ohbrain board locate the set of pins marked D4.



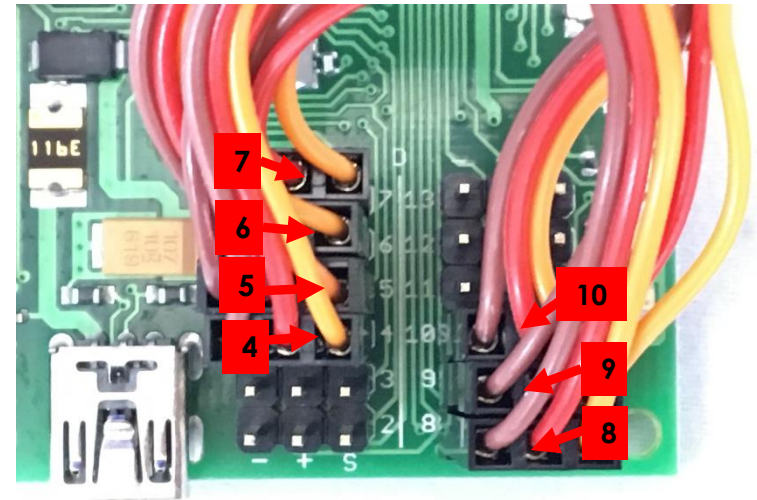
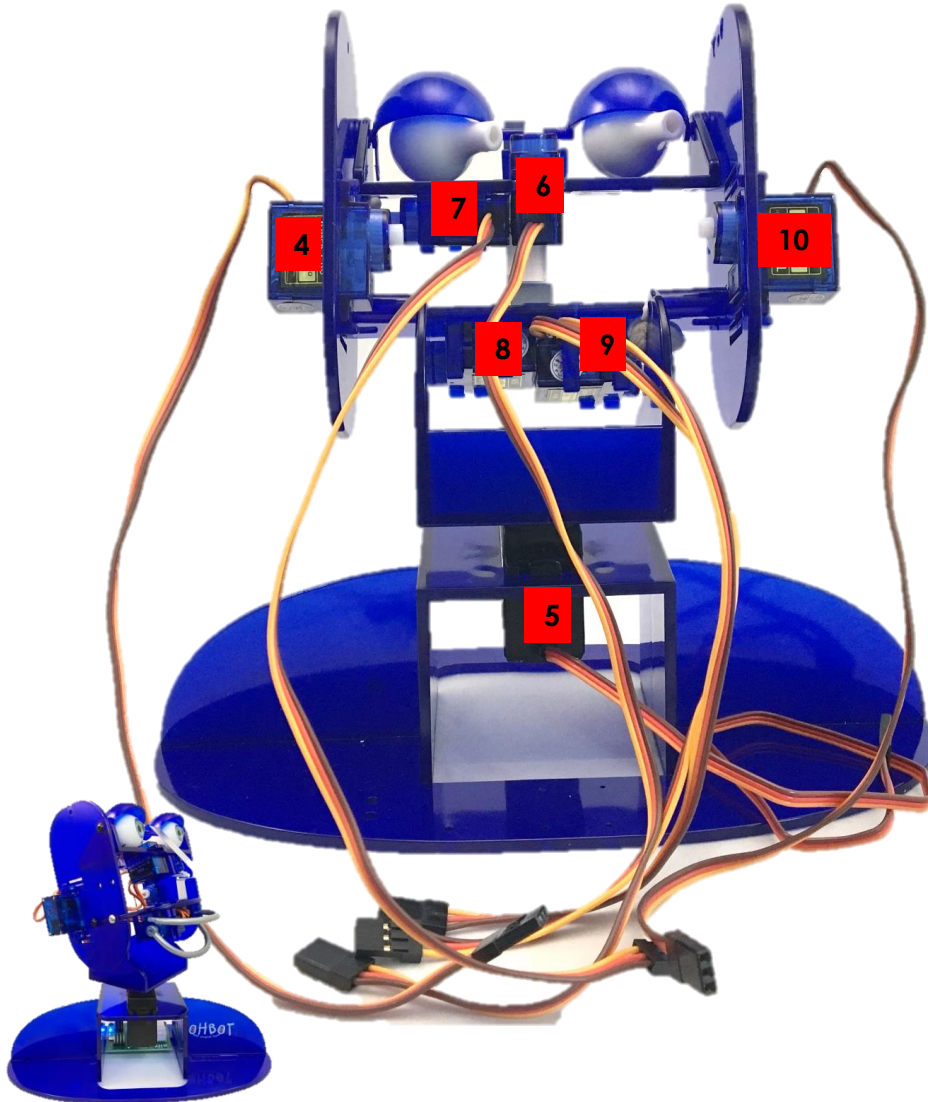
3. Attach the socket to the pins marked D4. Make sure the brown wire is to the left (-) and the yellow wire is to the right (S)



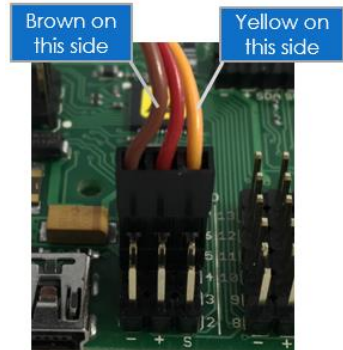


Connecting motors to Ohbrain

Find the socket for each motor in turn and plug it into the matching D numbered pins on the Ohbrain circuit board. Motor 5 goes to D5, Motor 6 to D6, Motor 7 to D7, Motor 8 to D8, Motor 9 to D9 and Motor 10 to D10.



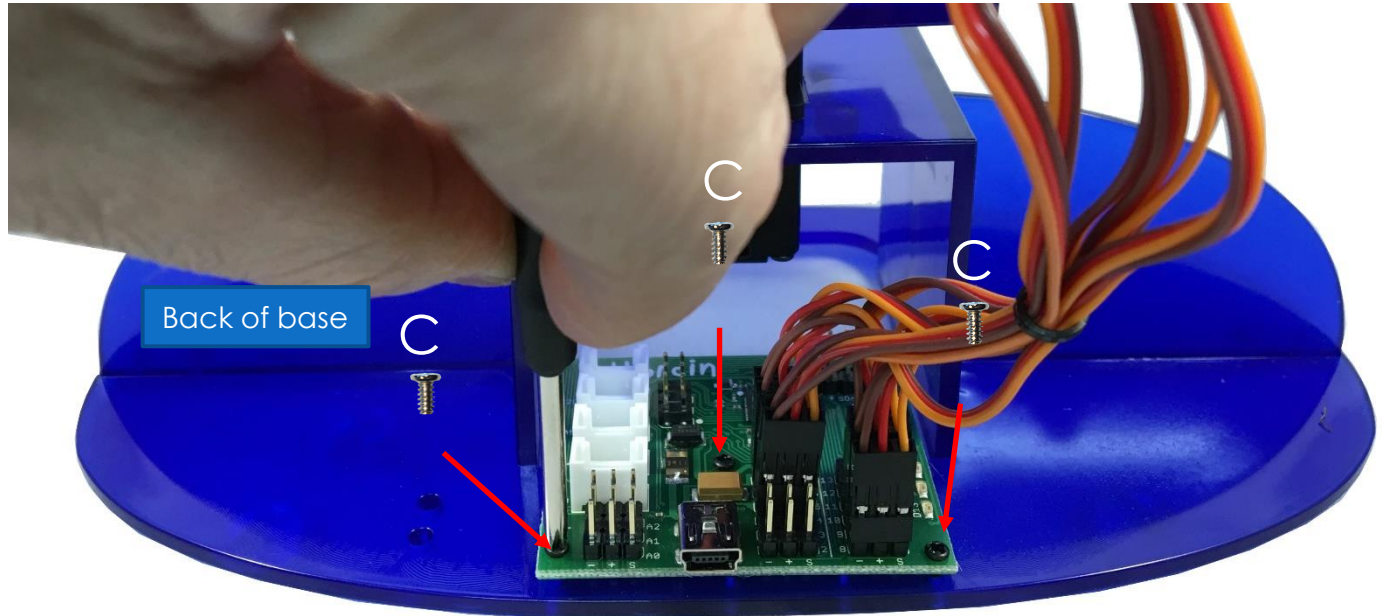
Take care to ensure that all sockets are connected this way:



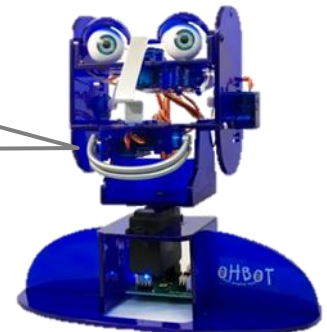


Fixing Ohbrain to the base

You will need:



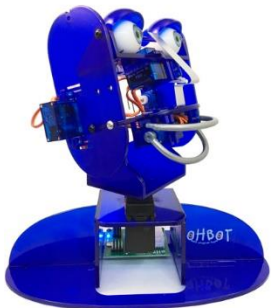
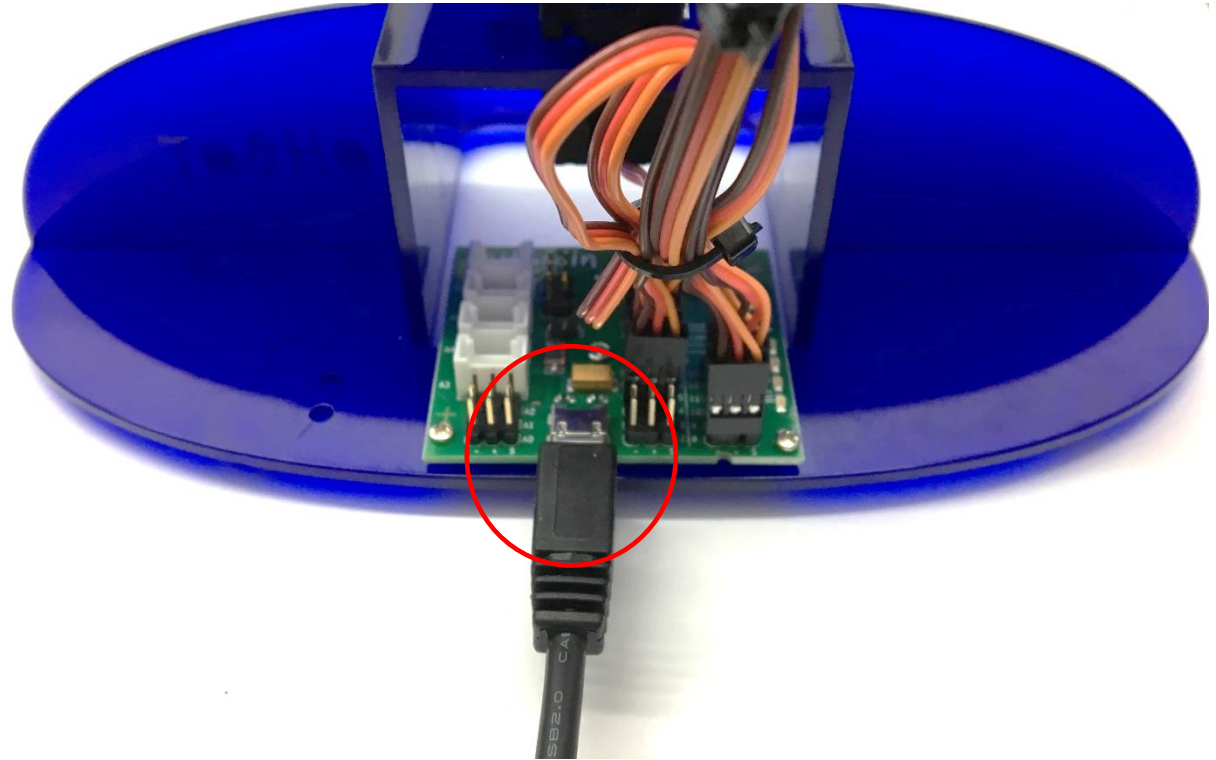
Don't do these up too tight, just tighten enough to stop the board being wobbly.





Connecting the cable to Ohbrain

You will need:





Install Ohbot software

Great, you've made it more than half way to a complete Ohbot.

Before continuing to Part 2 of assembly please install software. This is needed to set up the servo motors correctly.

Please go to www.ohbot.co.uk

>Get Started

>Ohbot Kit

>Install Software

Follow the instructions to install

