

# **DESIGN AND ROBOTICS + ROBOTICS AND DESIGN**

## **GROUP 3**

De Luca Valerio - Massacci Paolo -  
Mastrandrea Matteo - Wang Siyi

Relatori:

Bonarini Andrea -  
Romero Maximiliano Ernesto

2022-2023



**perfetti  
sconosciuti**



# CHARACTER

We decided to create our robot and his emotions after Lele (played by Valerio Mastrandrea).

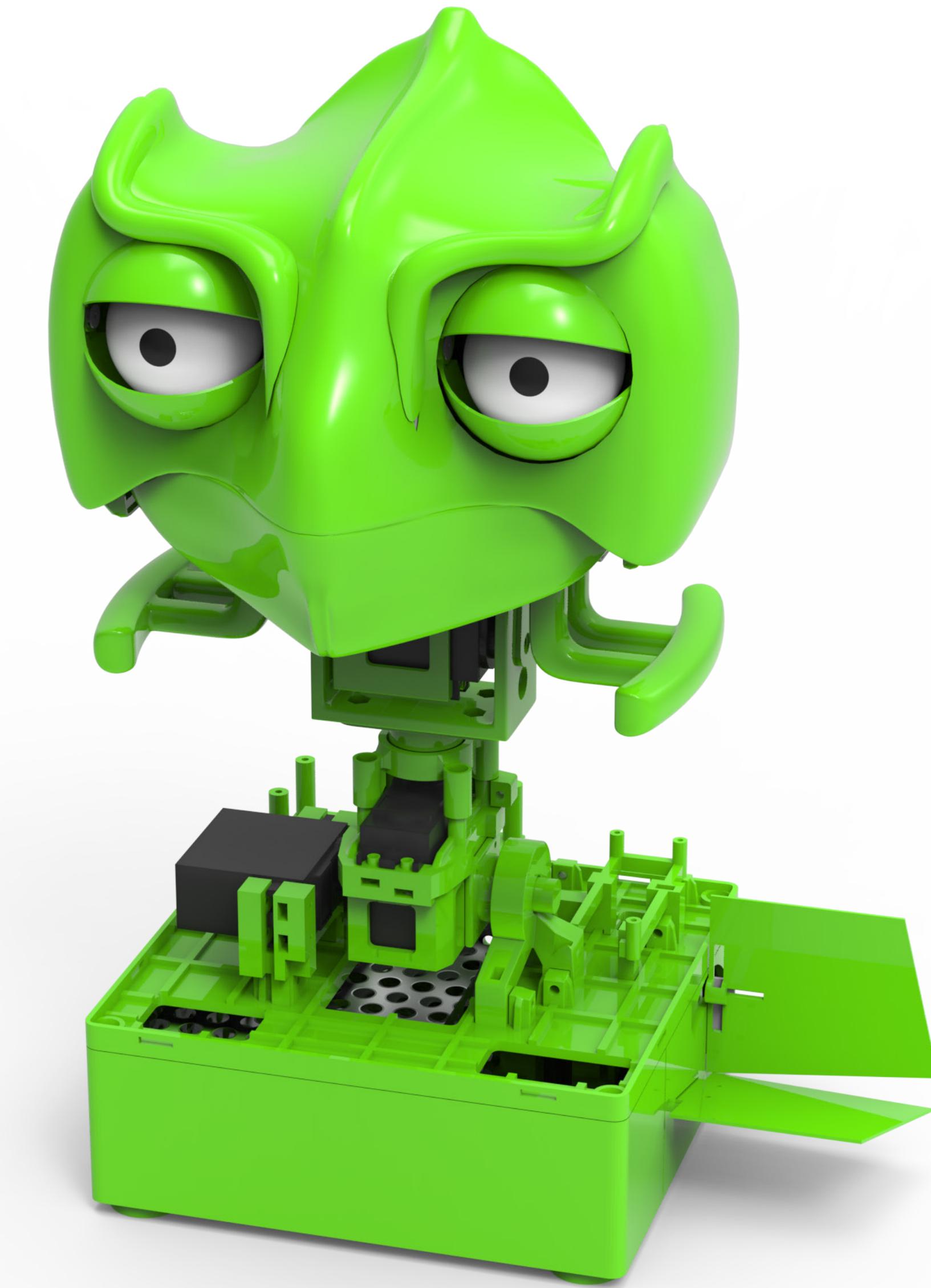


# ANIMAL

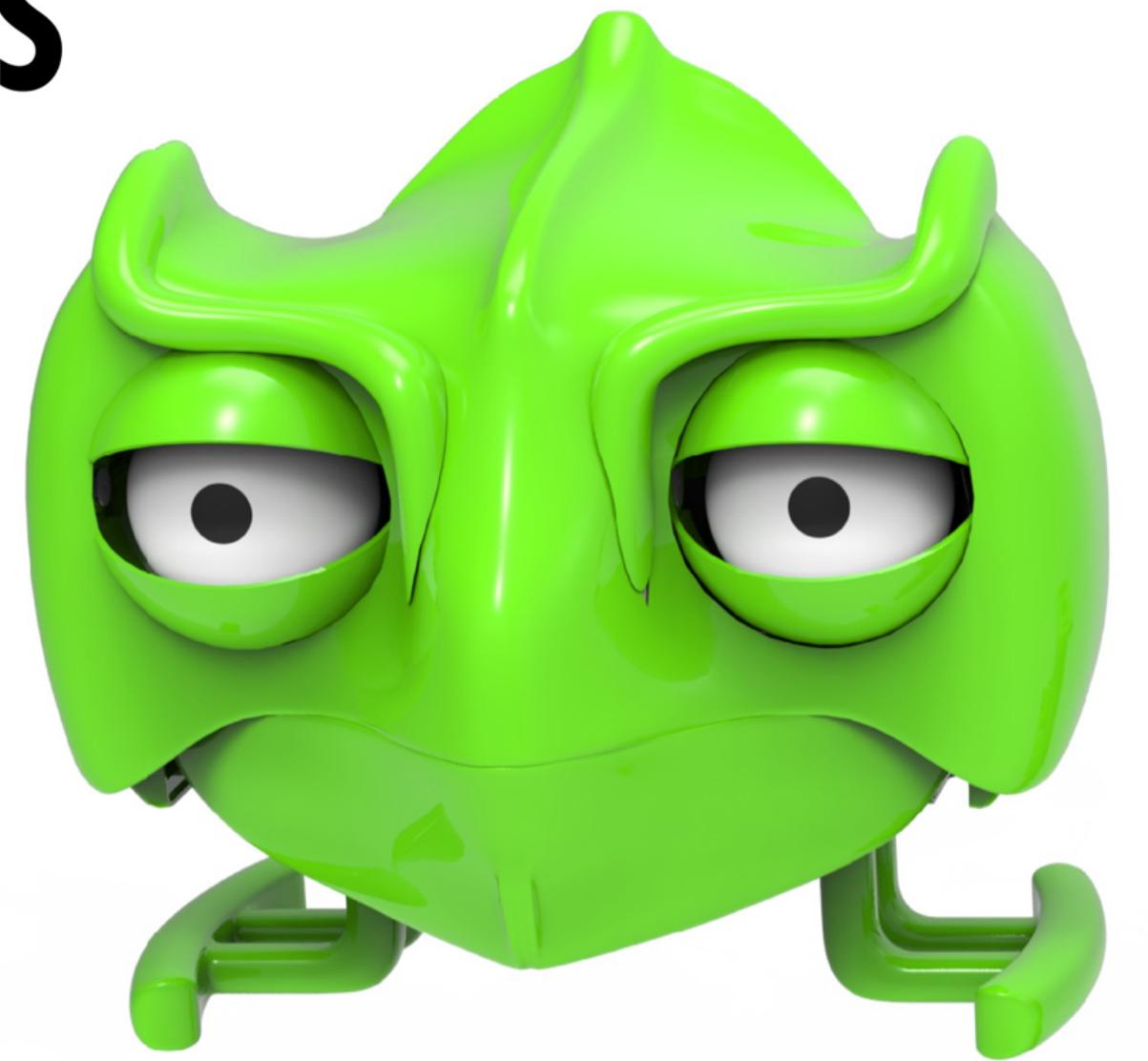
To express emotions and give a twist to the project we shaped our robot like a chameleon.



# CAMALELE

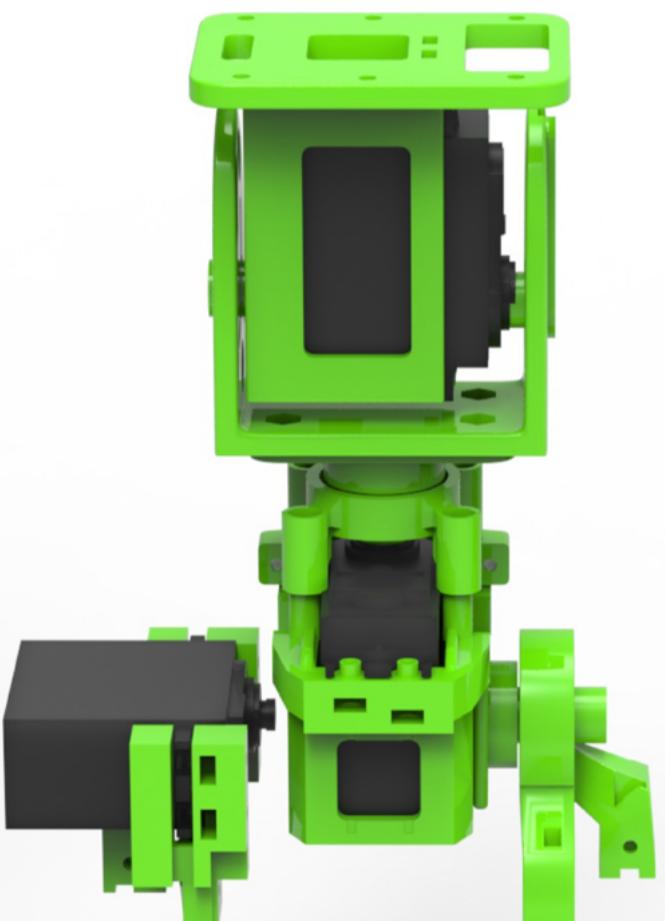


**3 PIECES**

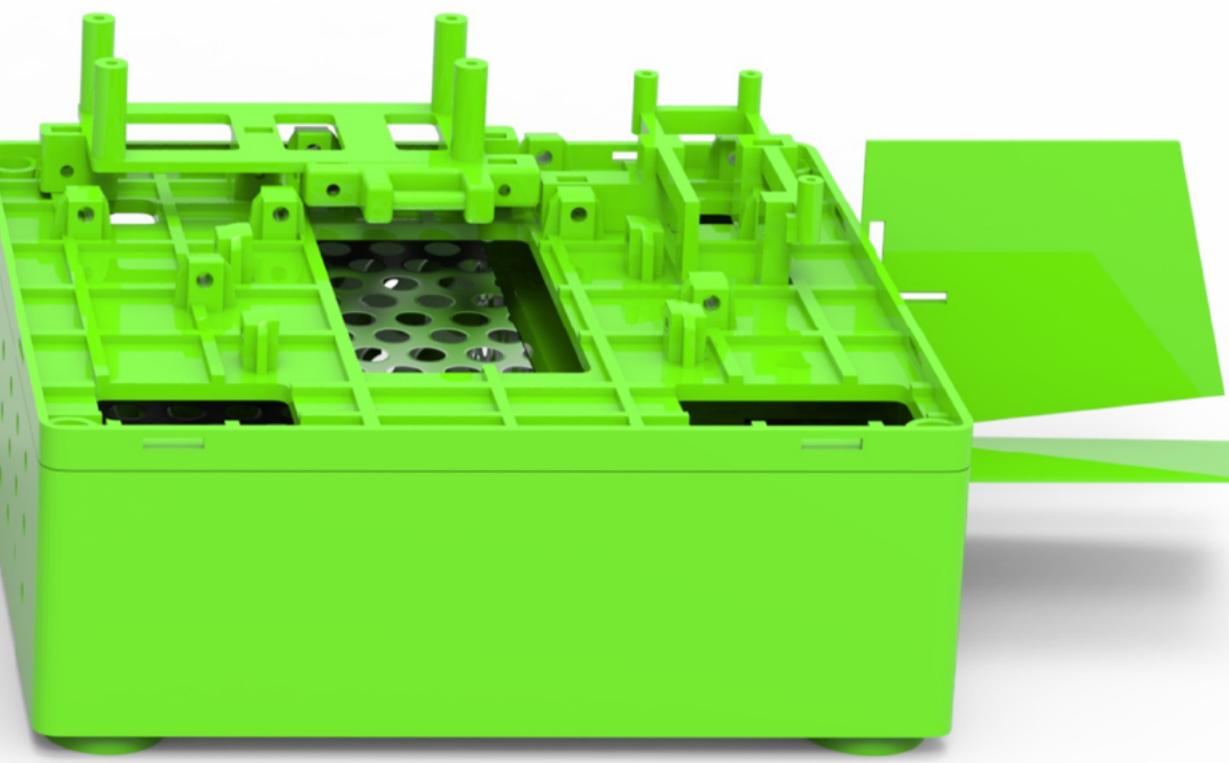


*HEAD*

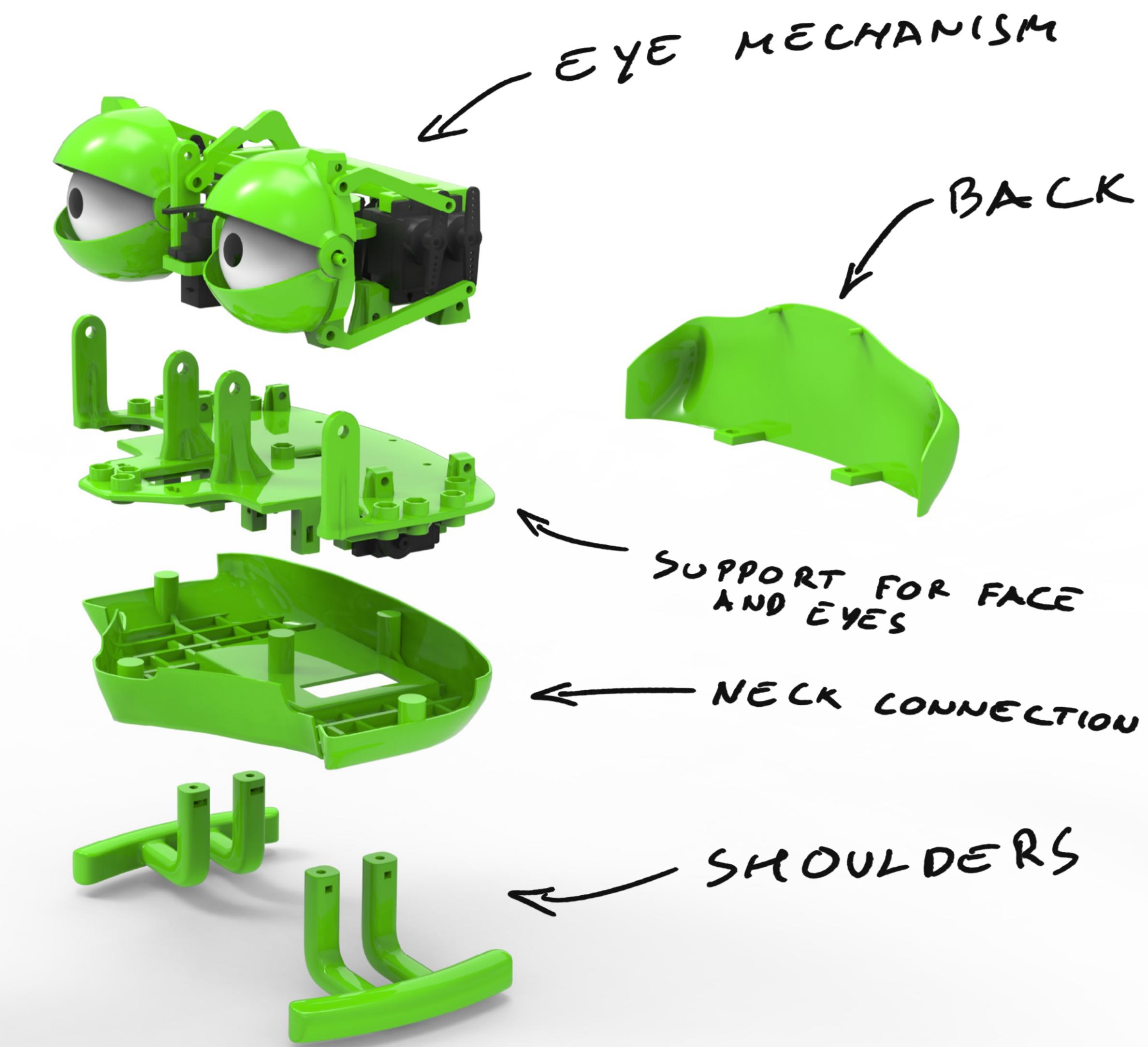
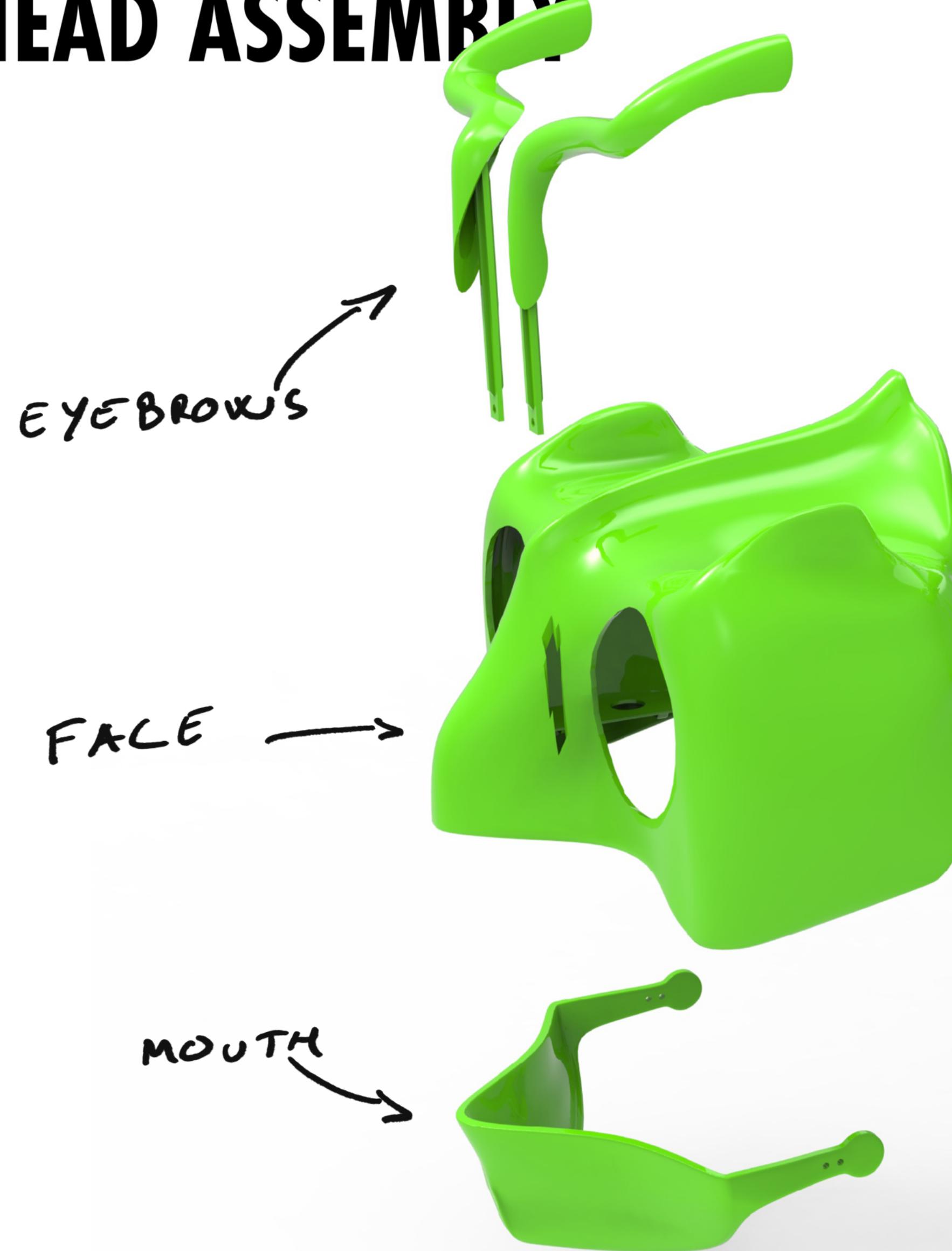
*NECK*



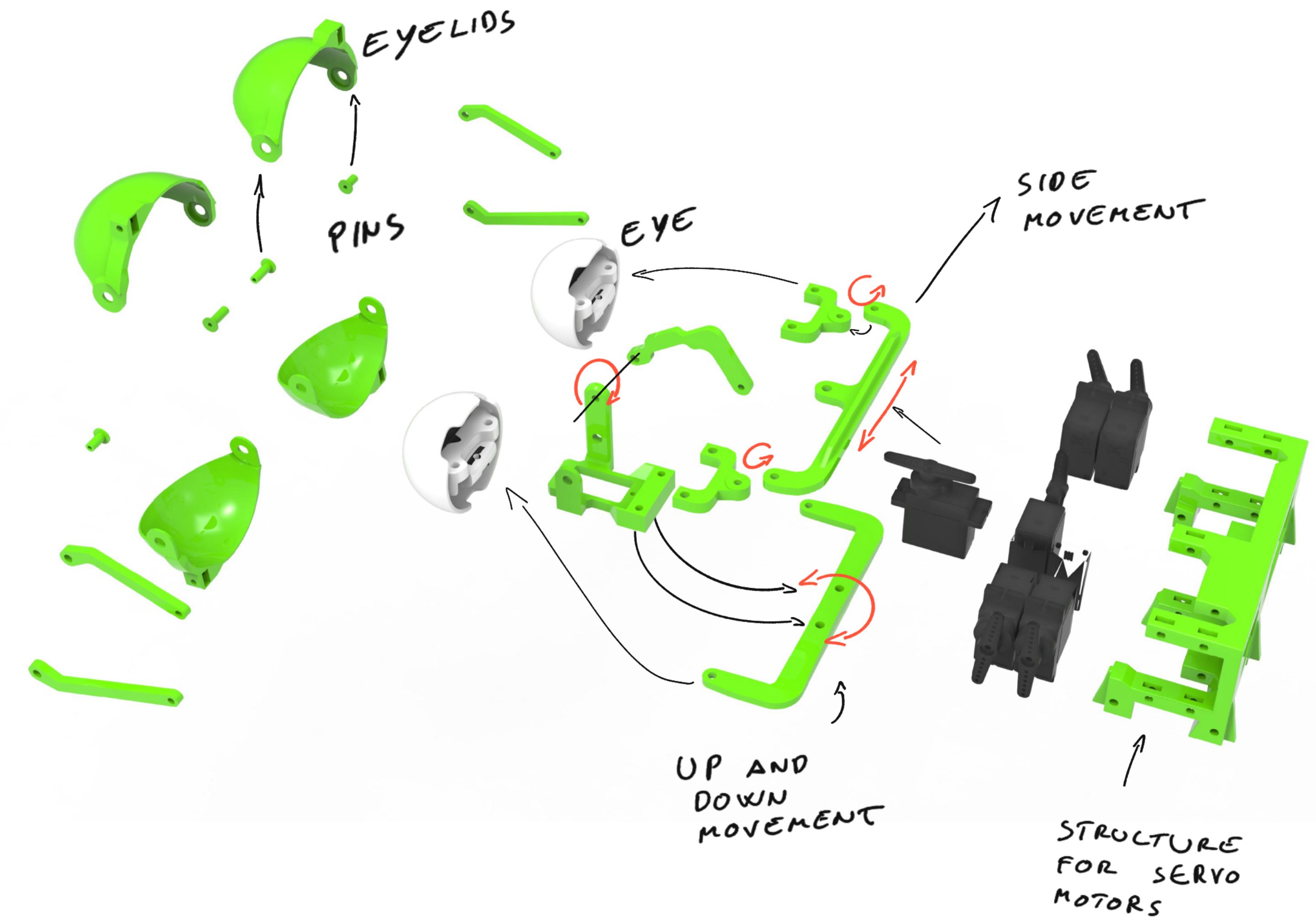
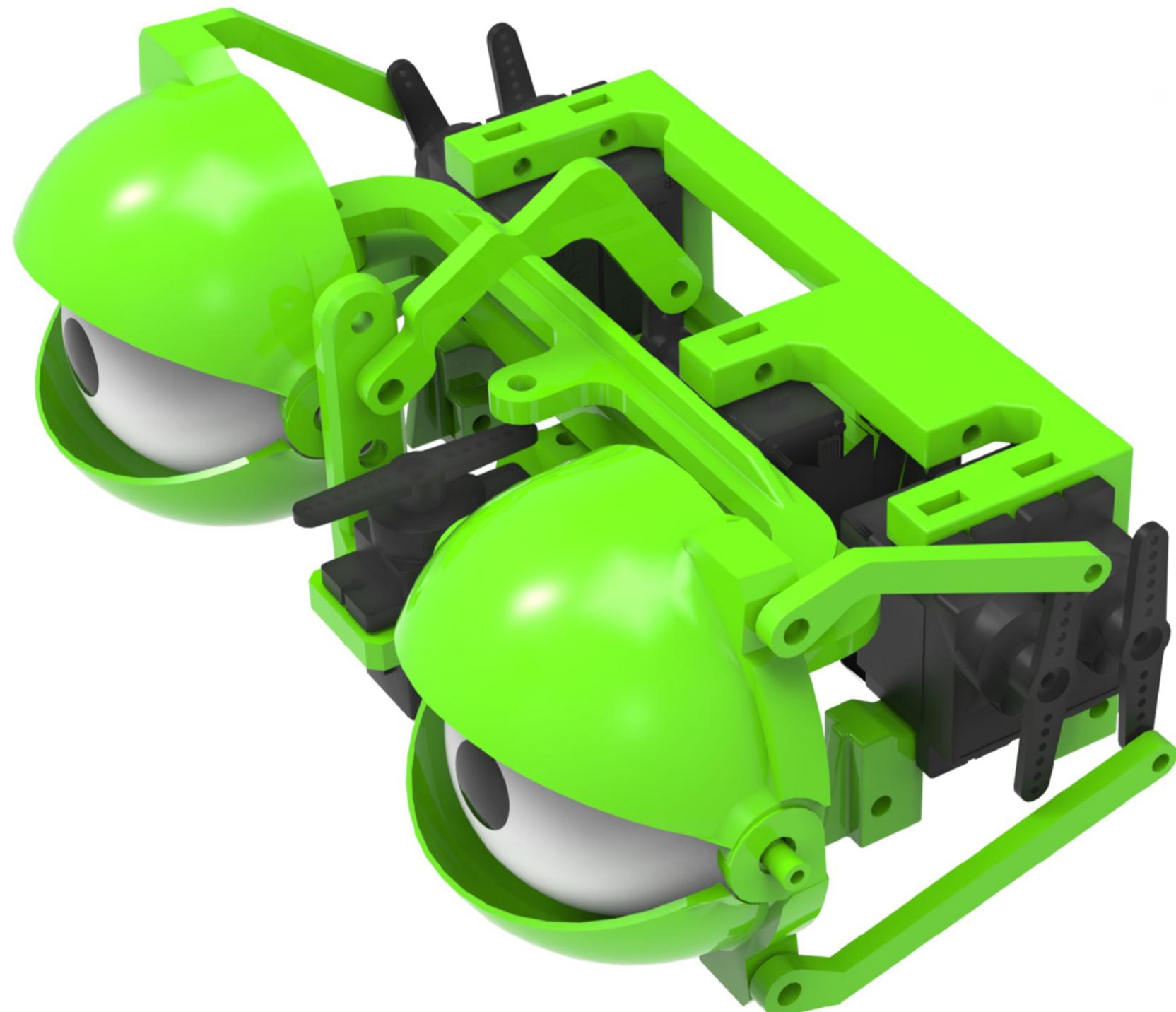
*BASE*



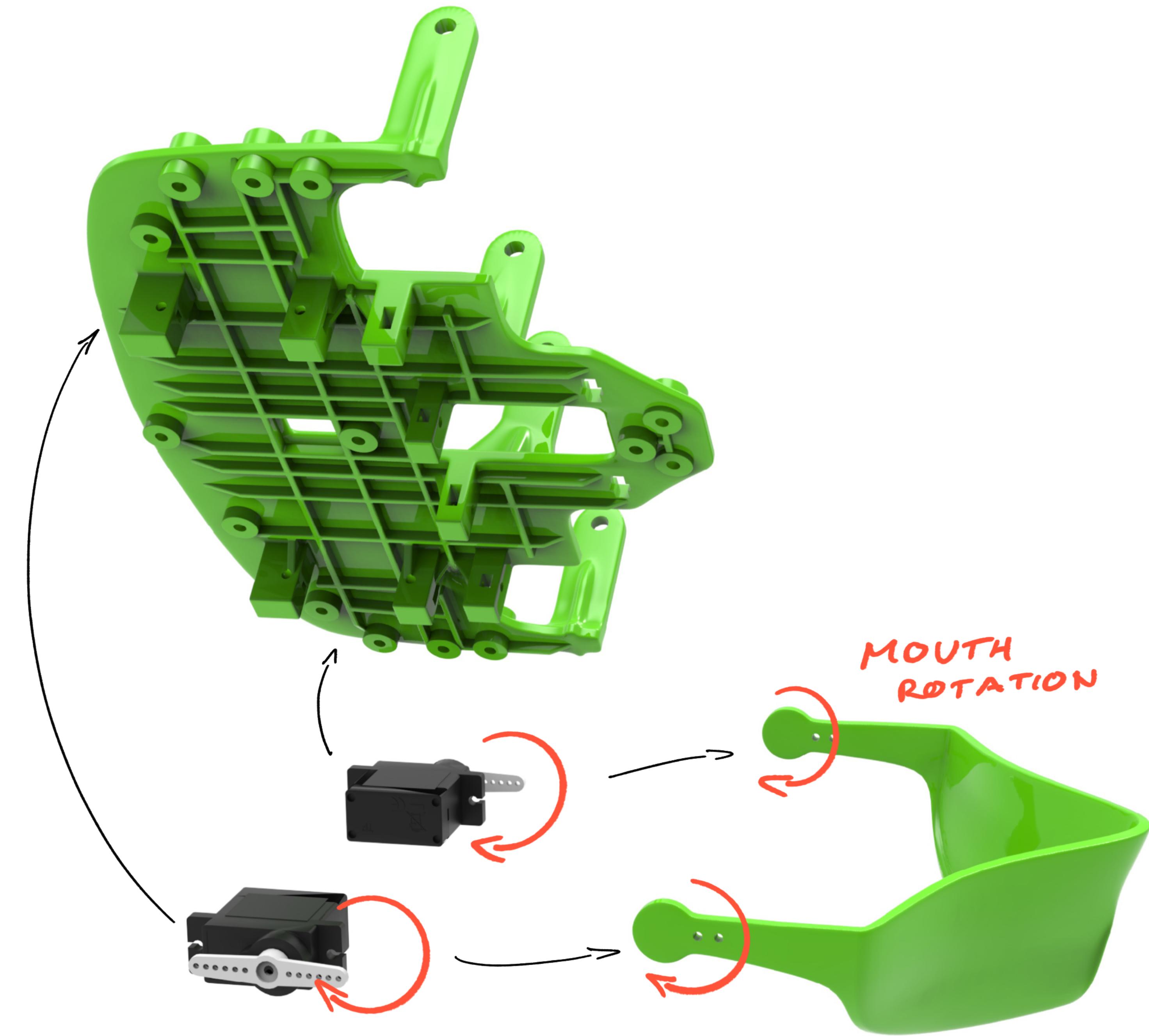
# HEAD ASSEMBLY



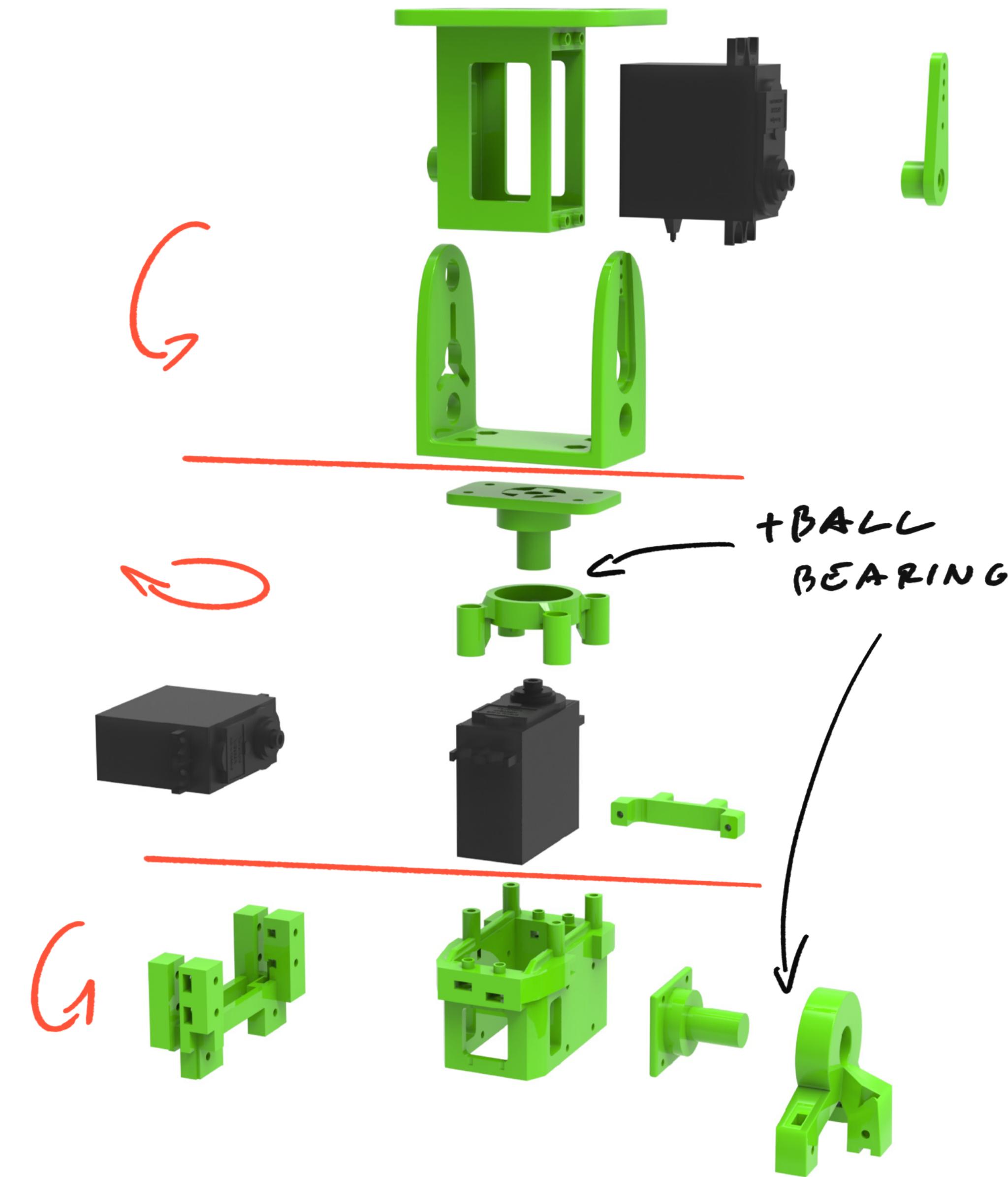
# EYES



# MOUTH



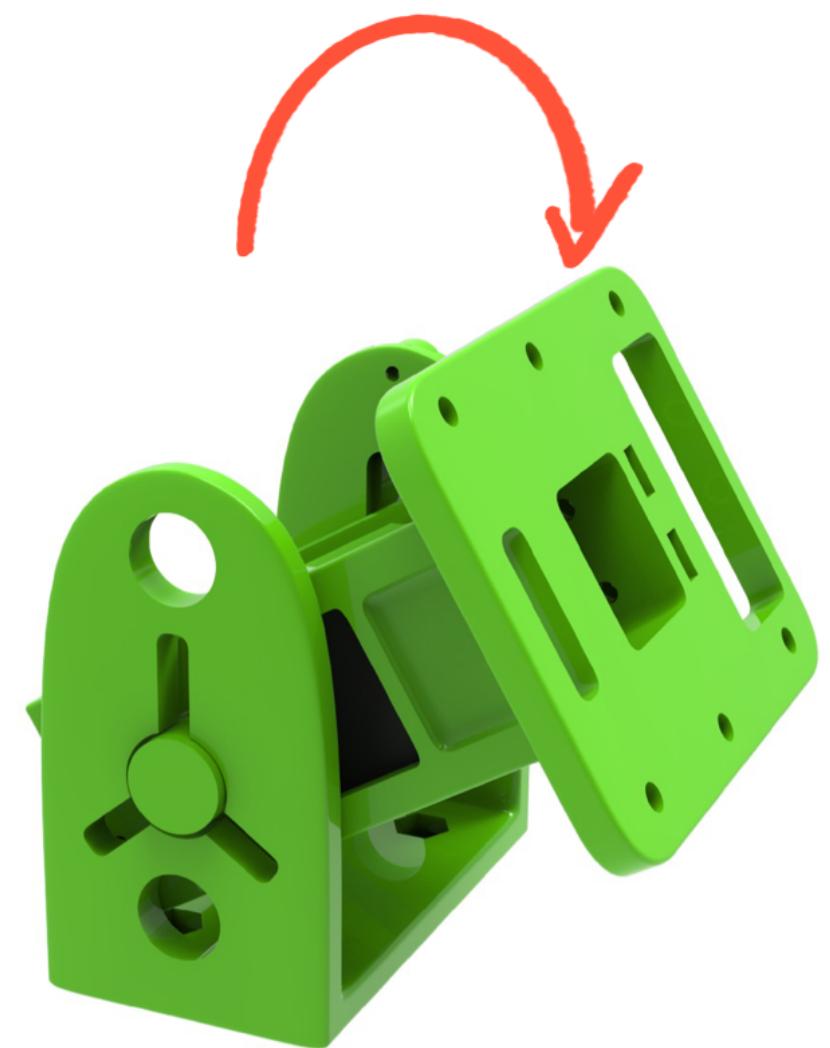
# NECK



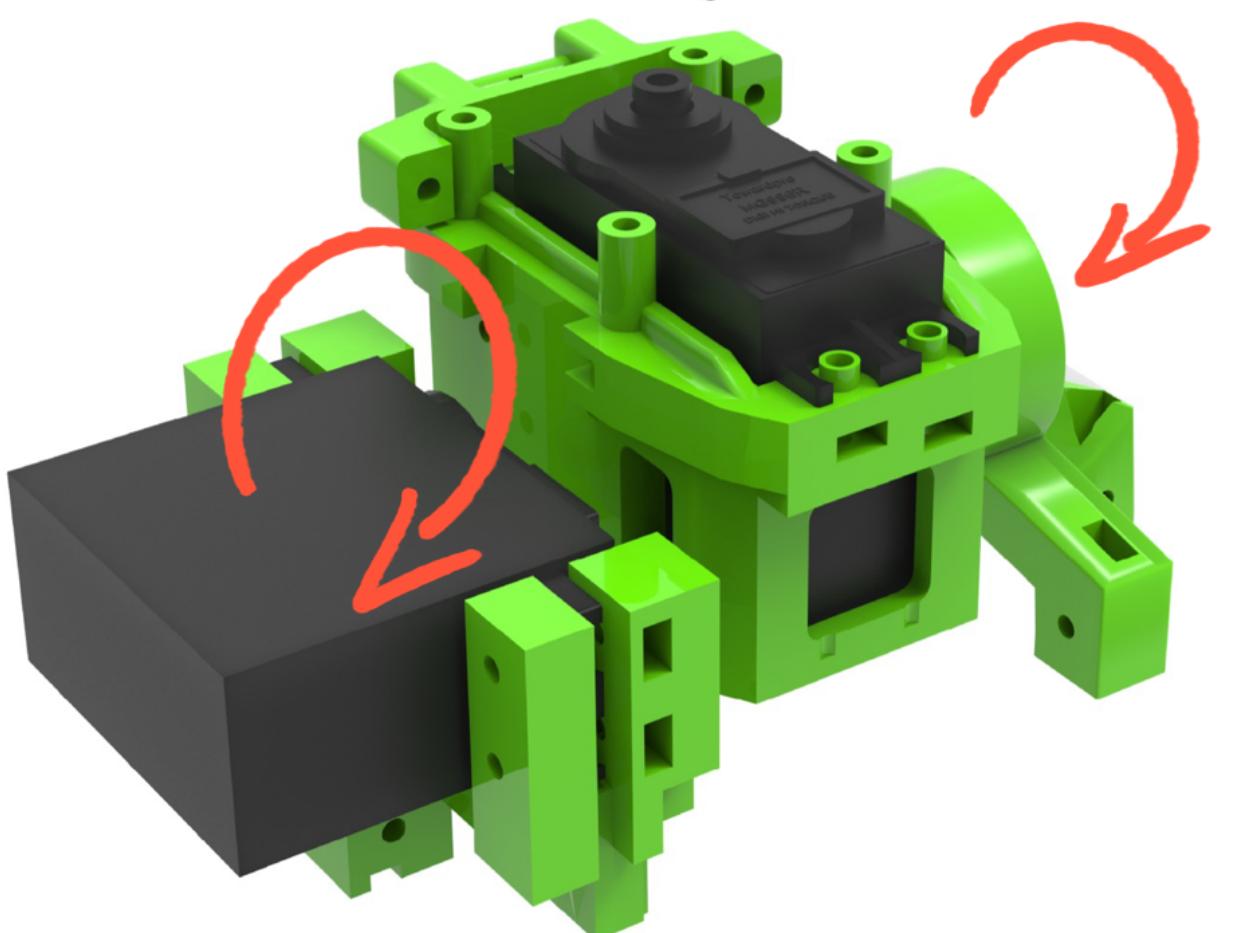
# NECK



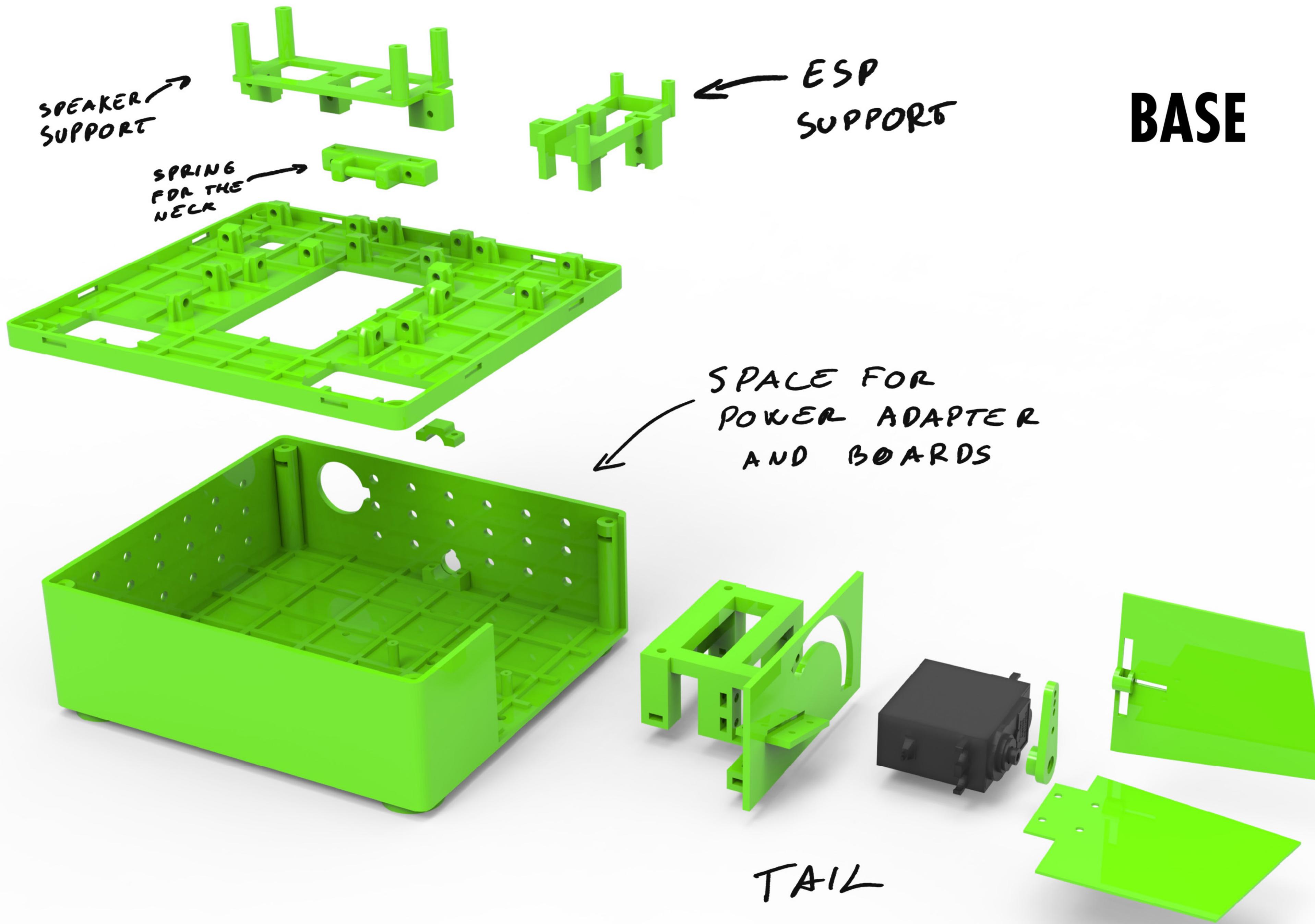
TILT THE  
HEAD



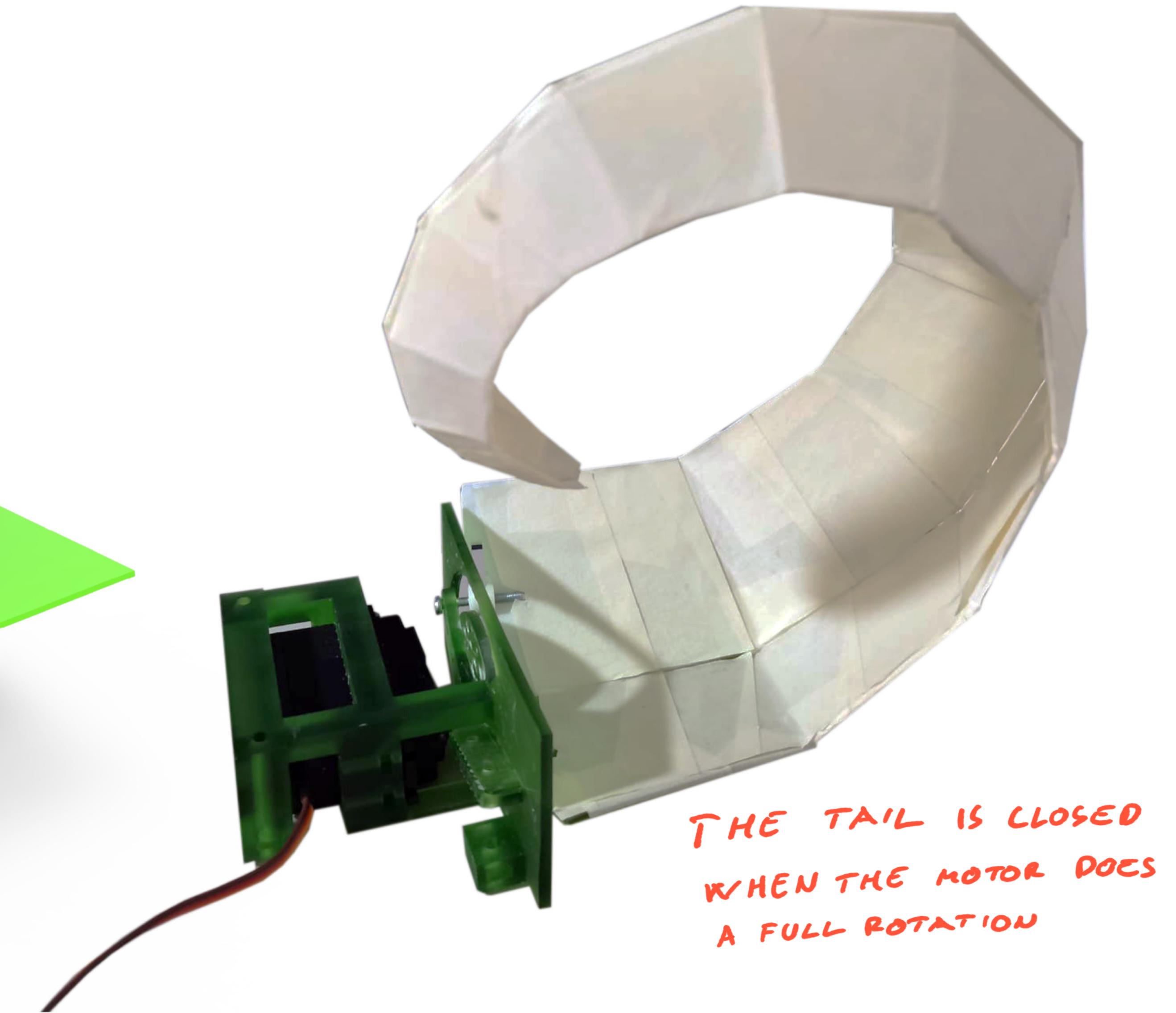
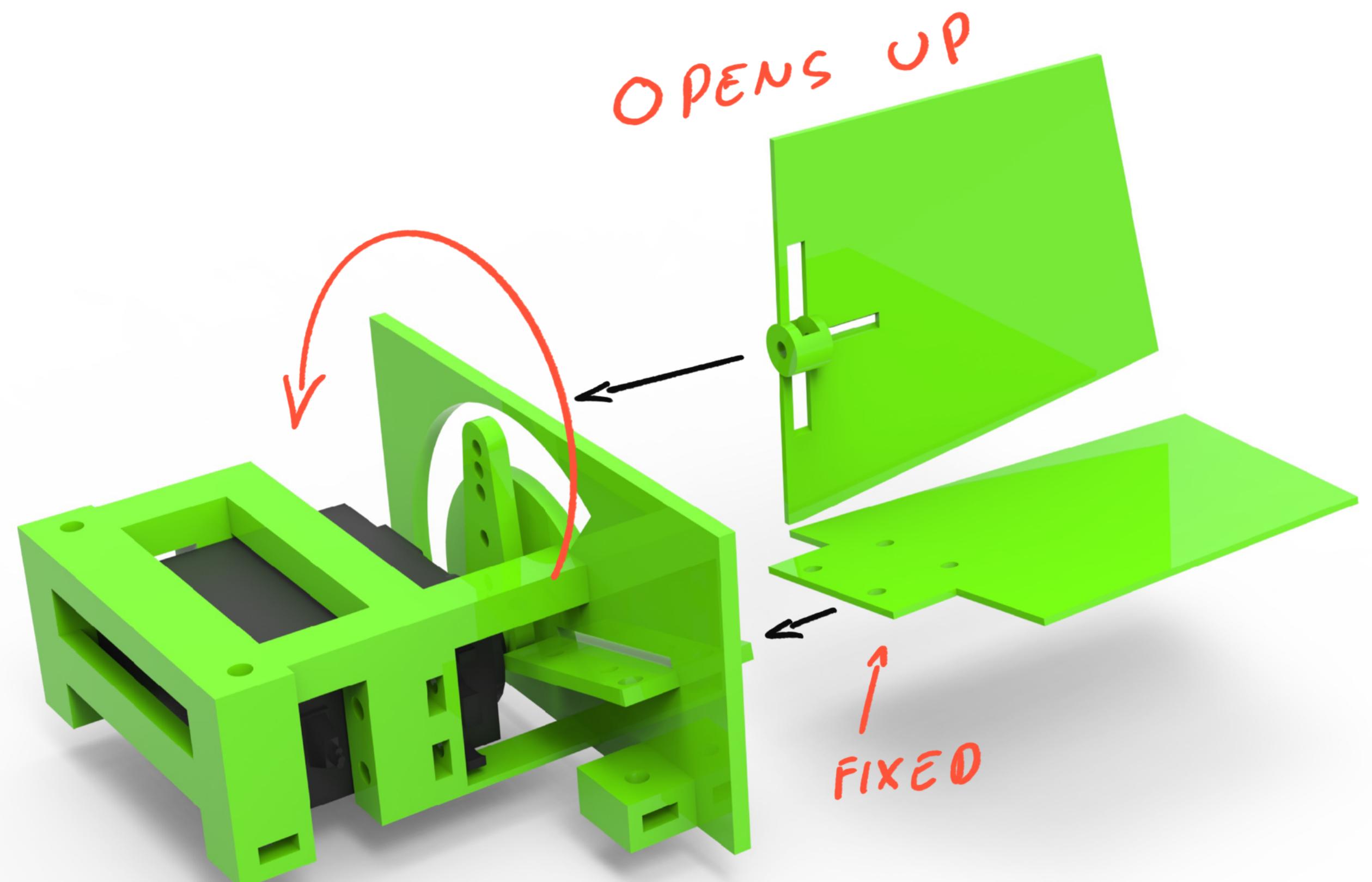
TILT ALL  
THE BODY



ROTATE  
THE HEAD



# TAIL



# **EMOTIONS**

HAPPY

ANNOYED

ANGRY

SAD

SHOCKED

CAUTIOUS

# CODE

```
if(state == HAPPY) if(do_happy(towards)) state = RESET_POSITION;

if(state == SAD) if(do_sad(towards)) state = RESET_POSITION;

if(state == ANGRY) if(do_angry(towards)) state = RESET_POSITION;

if(state == SHOCKED) if(do_shocked(towards)) state = RESET_POSITION;

if(state == CAUTIOUS) if(do_doubtful(towards)) state = RESET_POSITION;

if(state == ANNOYED) if(do_annoyed(towards)) state = RESET_POSITION;

if(state == READING_MESSAGE) {
    //num variable is 1 if G5 is sent from god, 2 if G6 is sent
    int num = ((message[1] < 58) ? message[1] - '0' : message[1] - 55) -4;
    if(play_song(num)) {
        client.print("GG\n");

        //logic when after reading a god message arriving to you
        if(num == 1) {
```

**THANK YOU FOR  
YOUR ATTENTION**