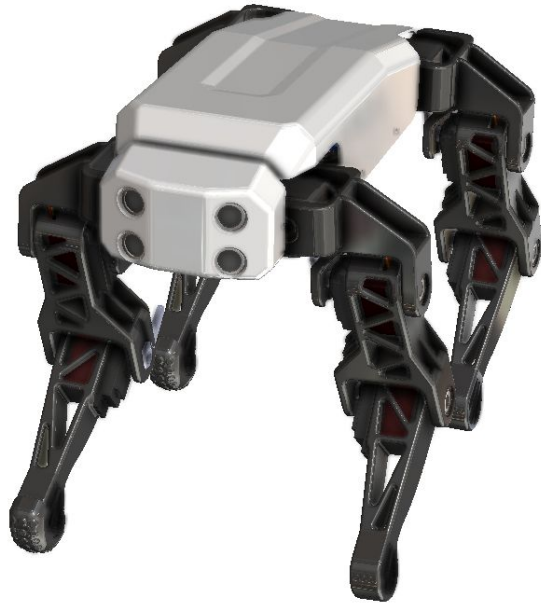
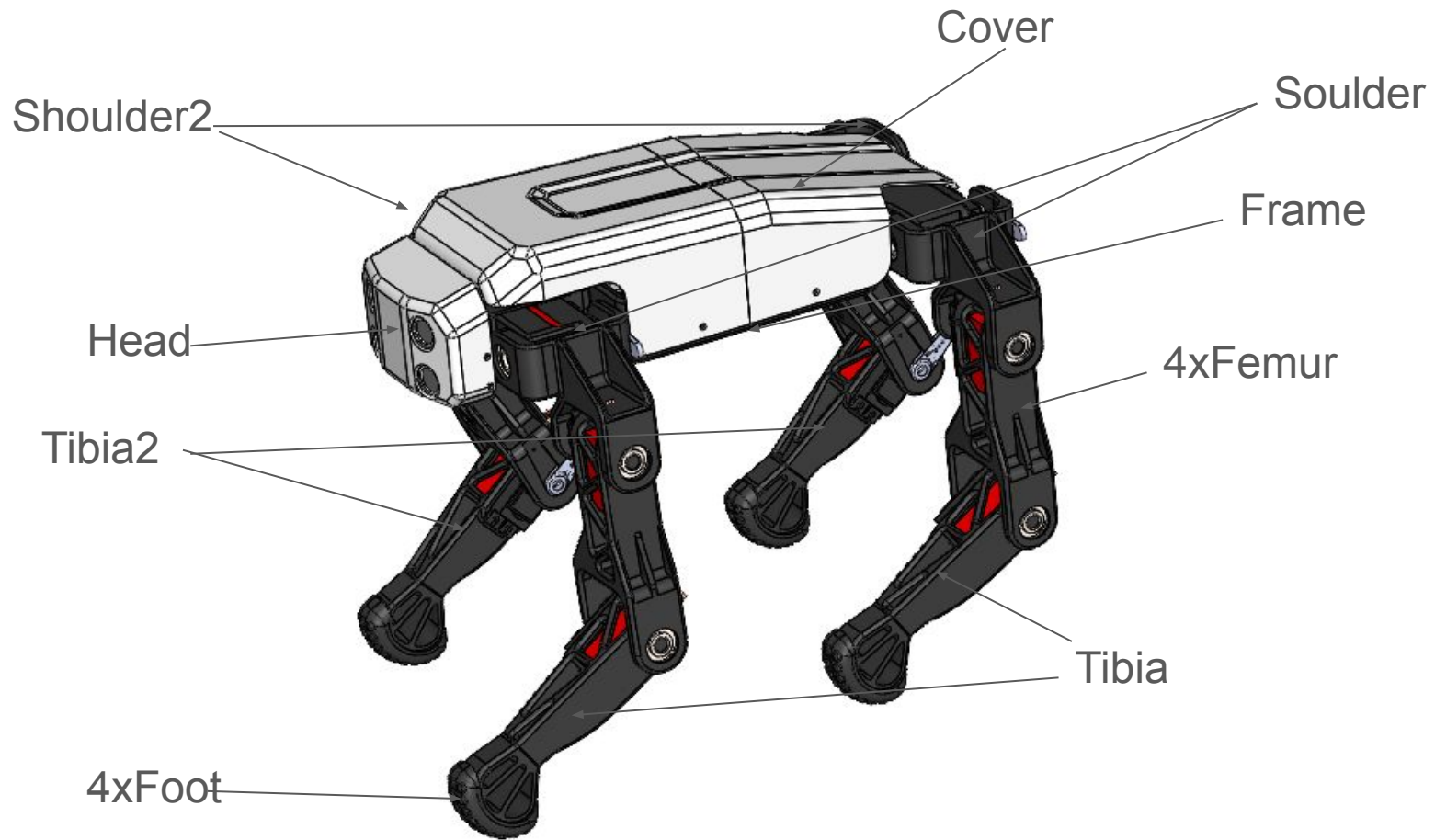




Assembly instruction

ROKI quadruped ROBOT



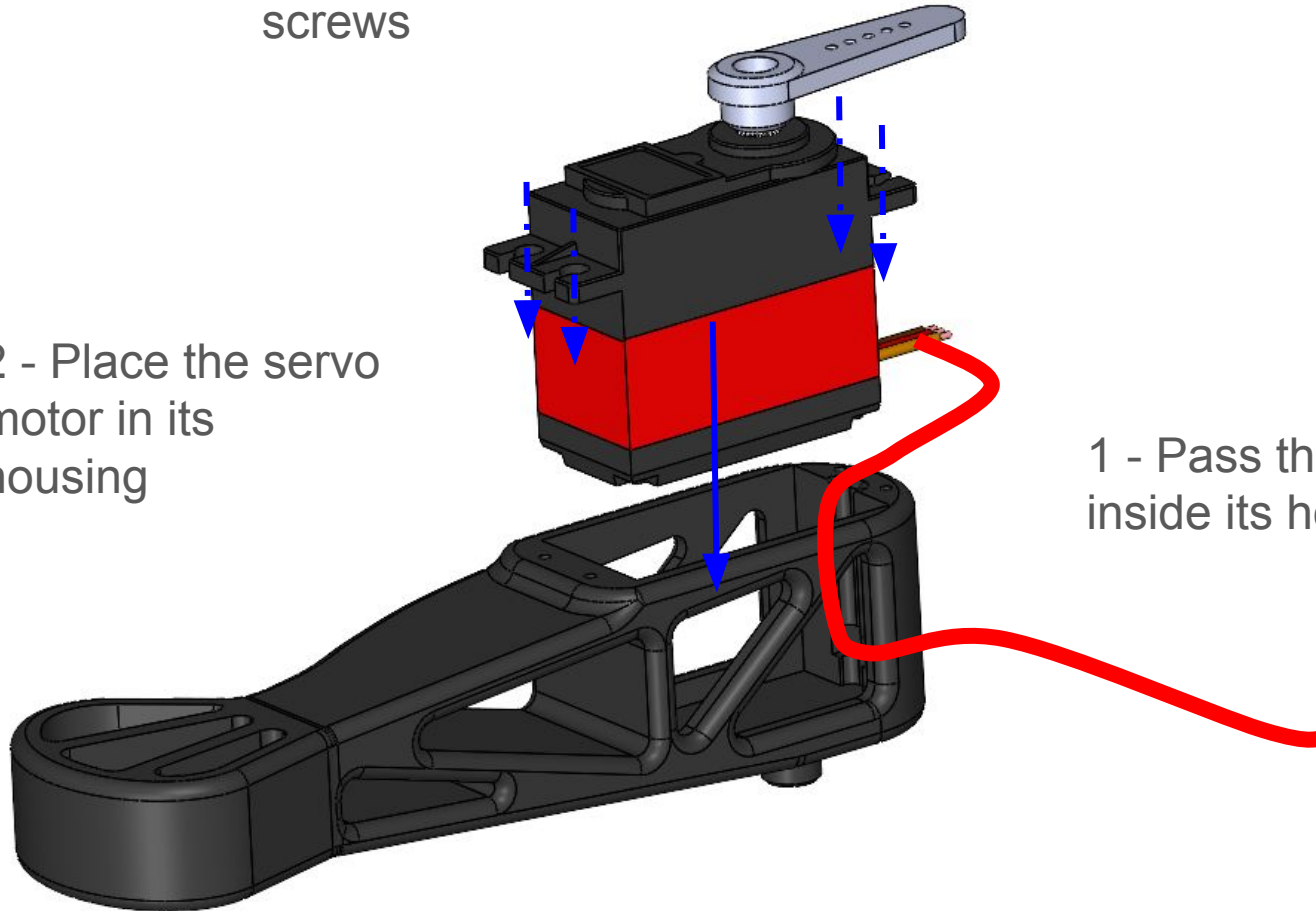


4x TIBIA

3 - Screw in the 4
screws

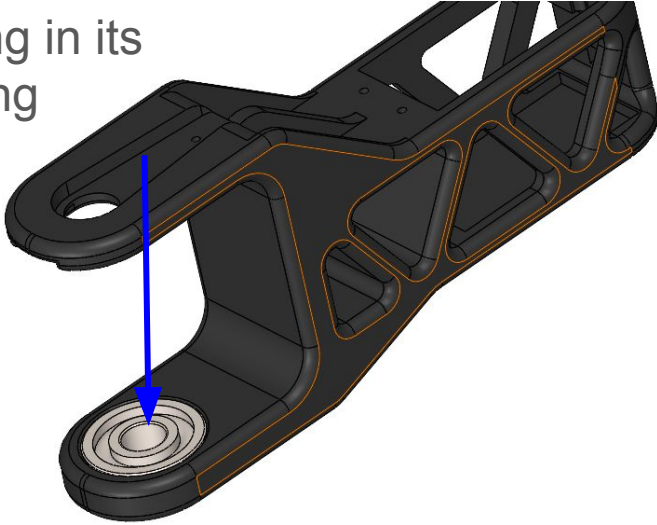
2 - Place the servo
motor in its
housing

1 - Pass the wire
inside its housing

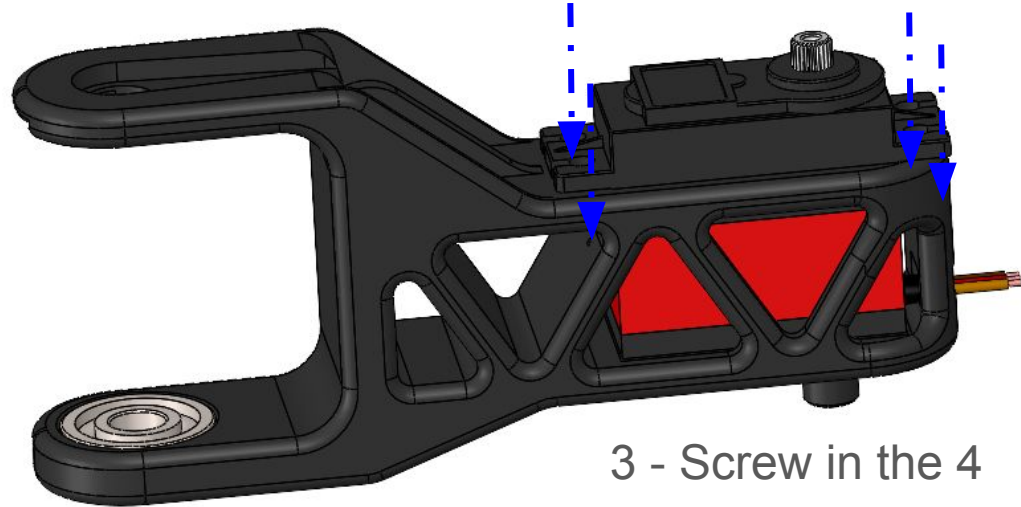


4x FEMUR

1 - Place the ball bearing in its housing

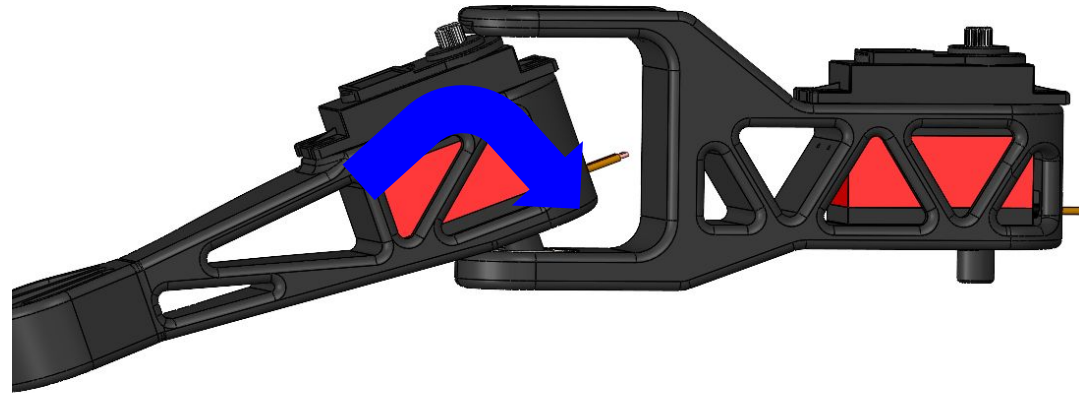


2 - Place the servo motor in its housing



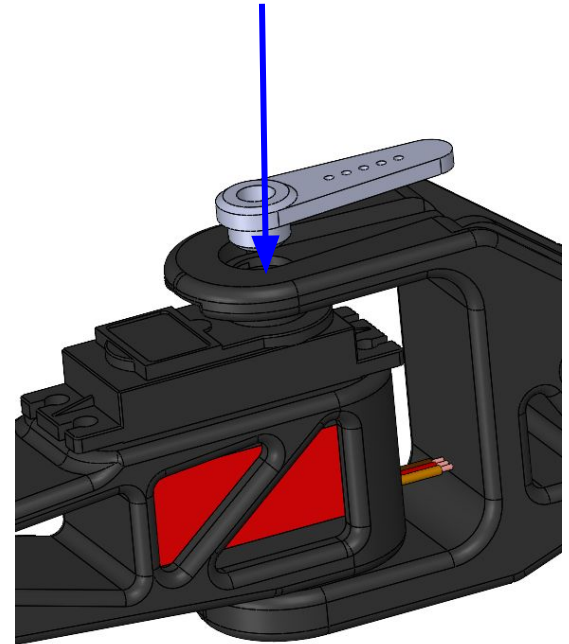
3 - Screw in the 4 screws

1- place the TIBIA
in the ball bearing
of the FEMUR as
photo bellow

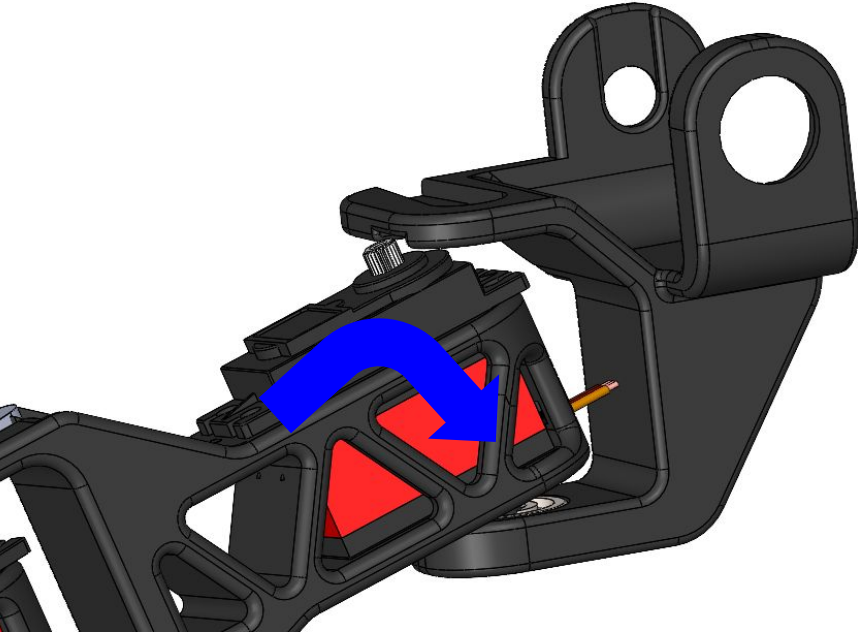


4x FEMUR

2 - fix the servo
arm through the
femur

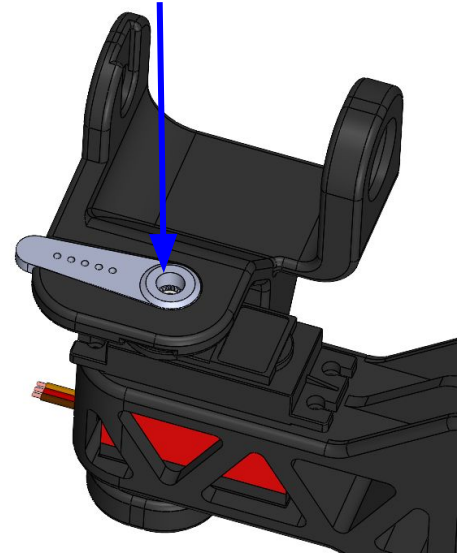


1- place the
FEMUR in the ball
bearing of the
shoulder as photo
bellow



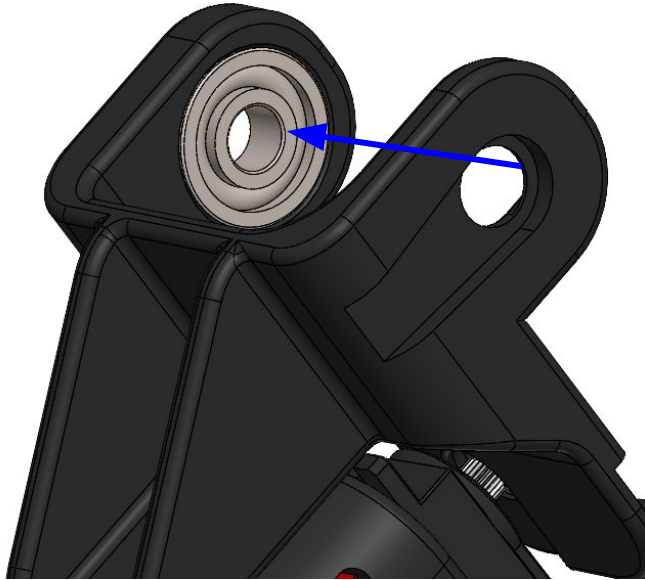
4x shoulder

2 - fix the servo
arm through the
shoulder



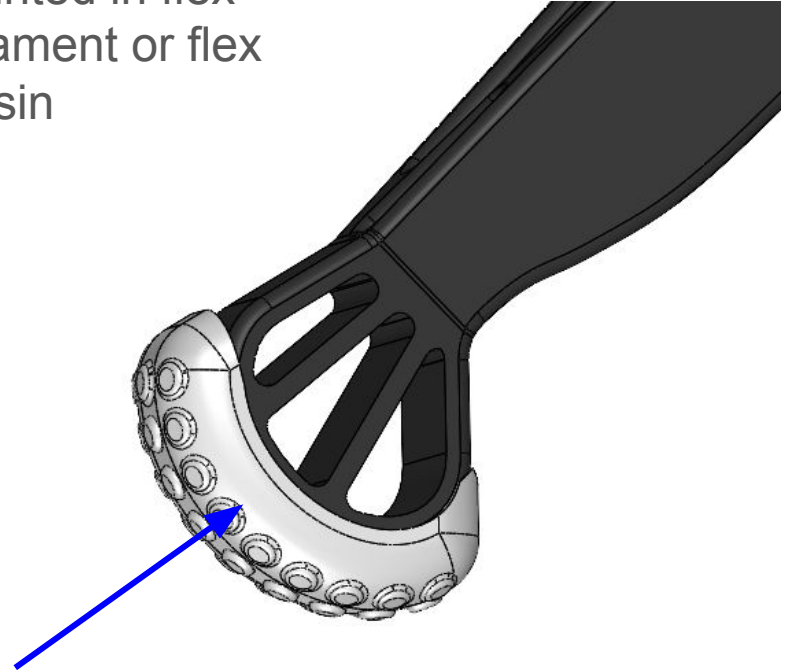
4x shoulder

3- Place the ball bearing inside its housing



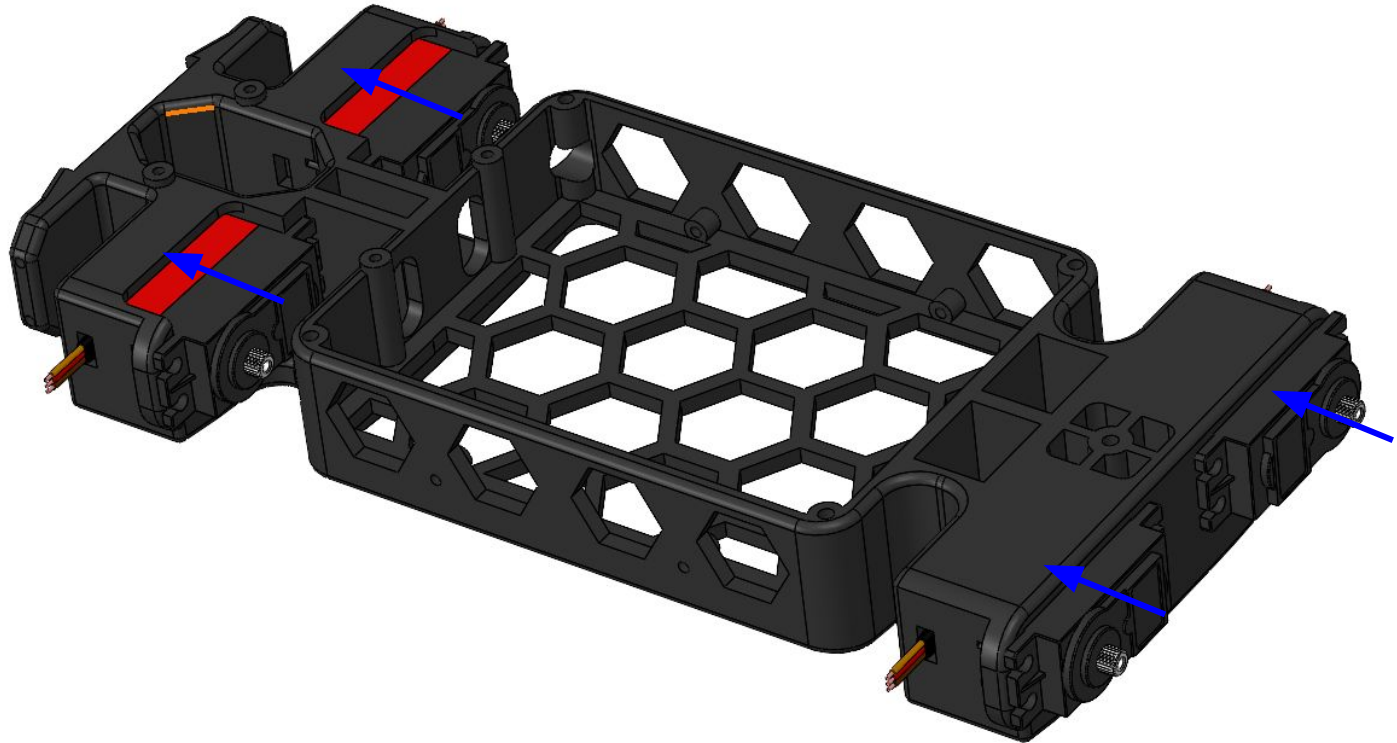
4x foot

2- Glue the foot pad, they must be printed in flex filament or flex resin

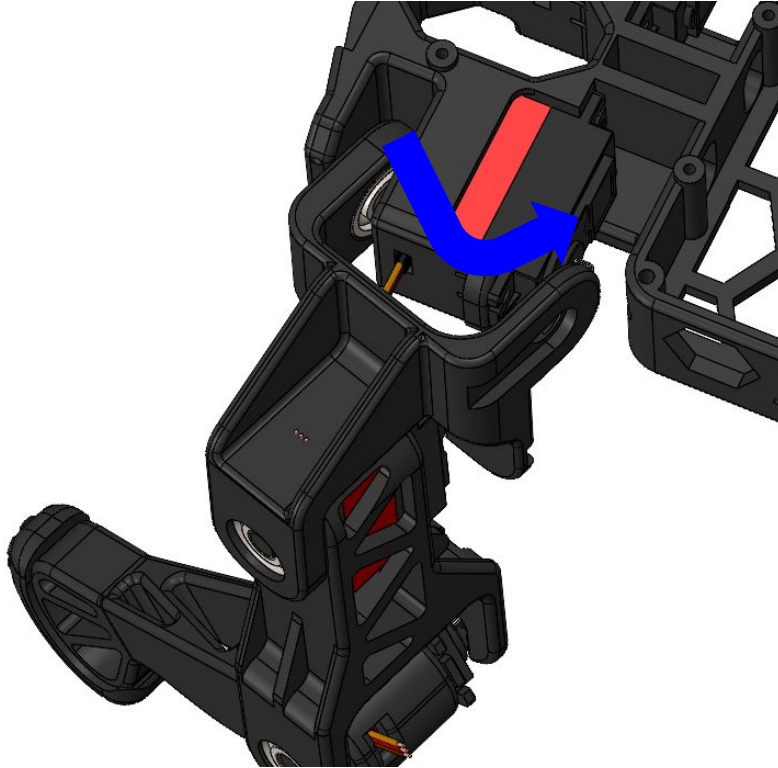


1- Place all servo motor inside their housings and screw them

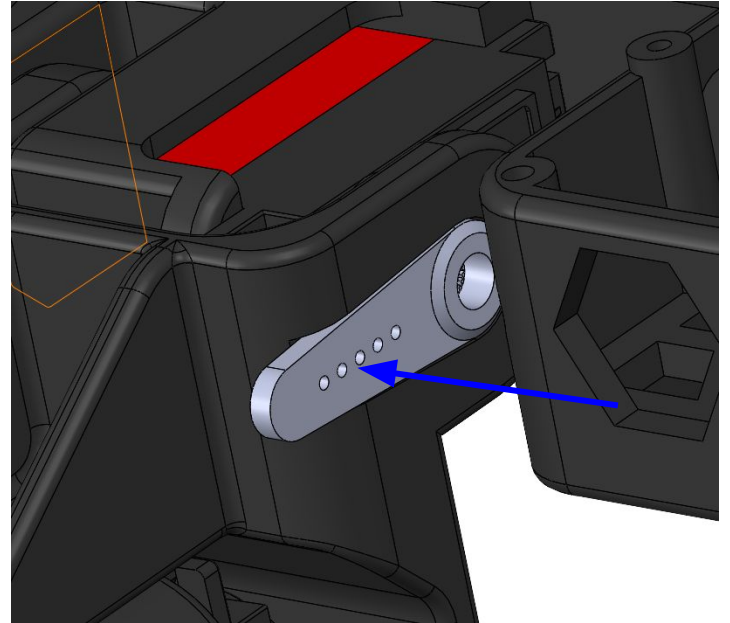
Frame



1- Mounts the 4
legs on the fram
as photo below

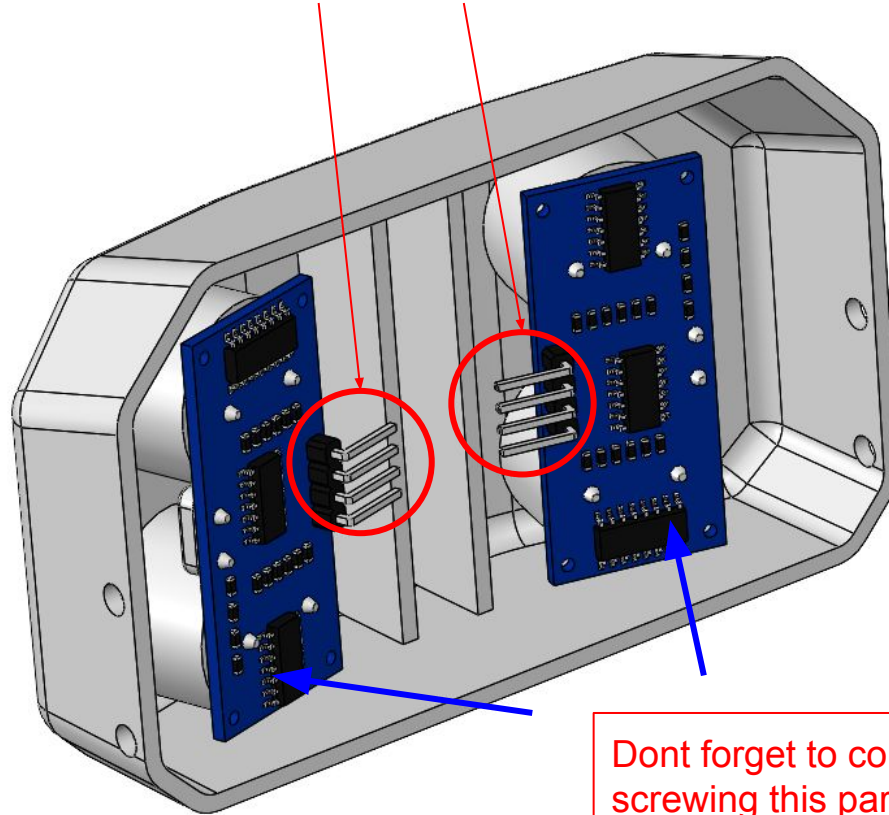


2- fix all motors
with servo arms



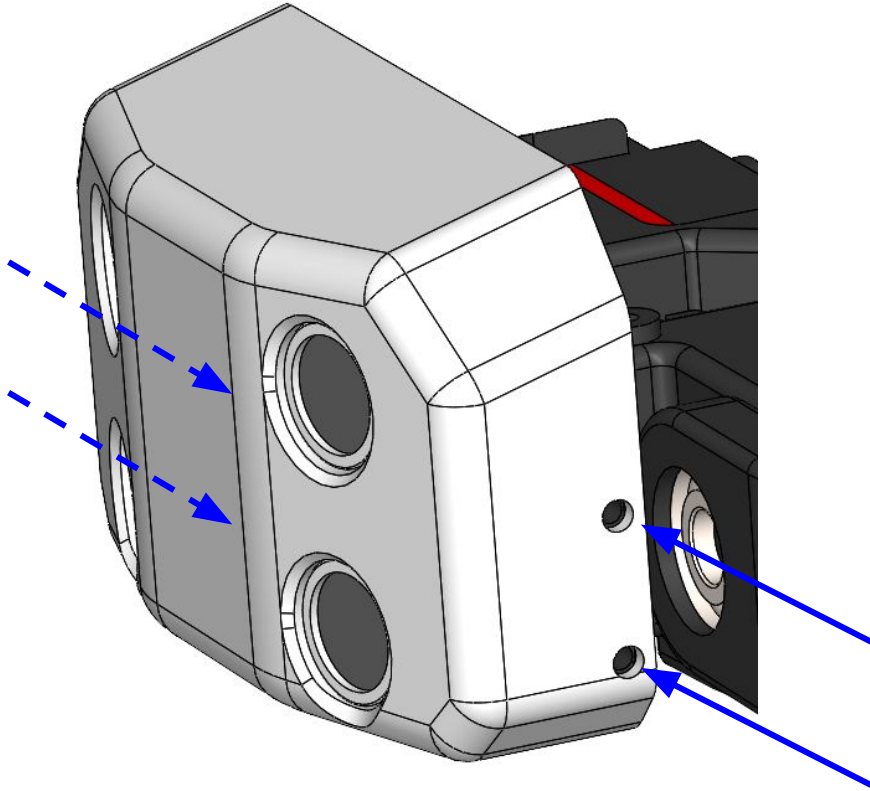
slightly bend the tabs of the card to
be able to connect the wires to it

1- place the
ultrasonics
sensors inside
head

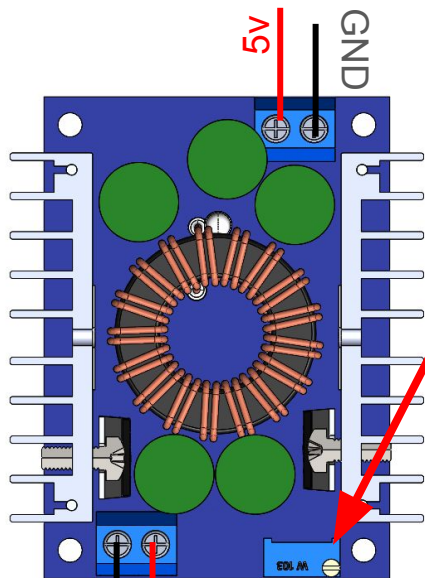
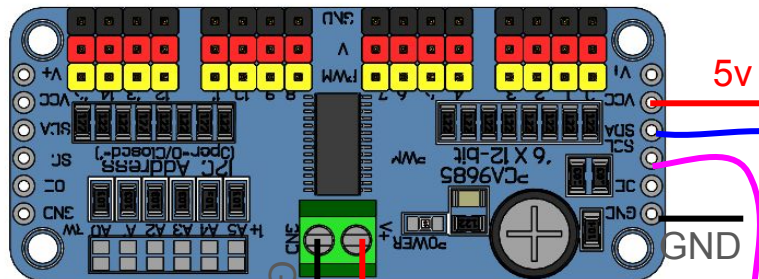


Dont forget to connect all wire before
screwing this part on the frame

1-Use screw $\varnothing 3 \times 8$
to screwing the
head on the frame



Wiring plan



Convert
your battery
to 5v

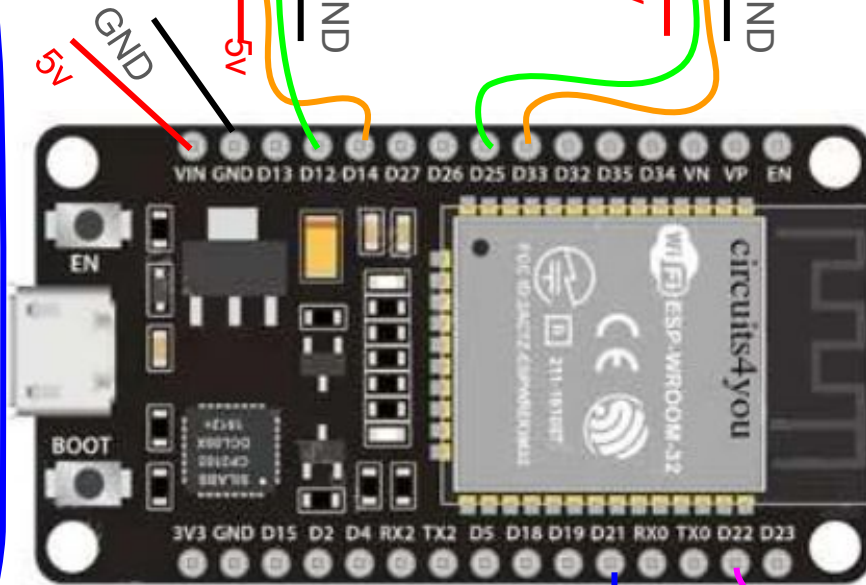
-battery

+battery

Left eye

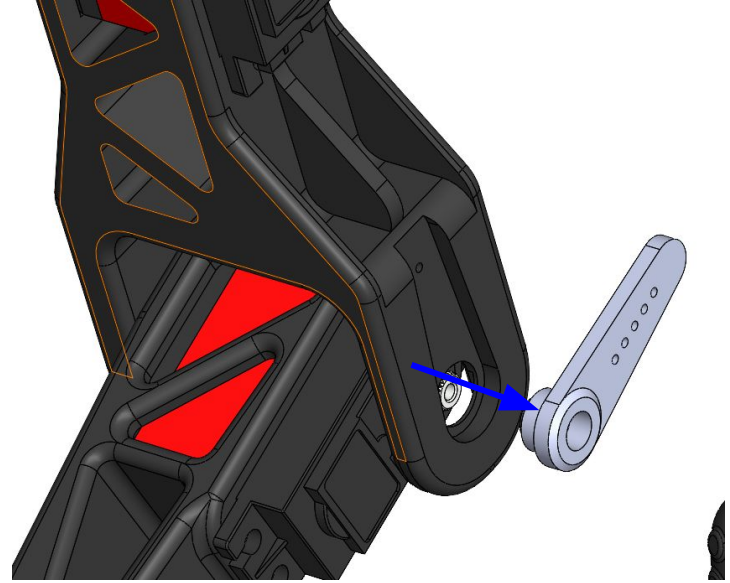


Right eye



First start

1 - On first startup you should initialize all 12 servos. You must first remove all the servo arms from each motor so as to leave each motor free to rotate.

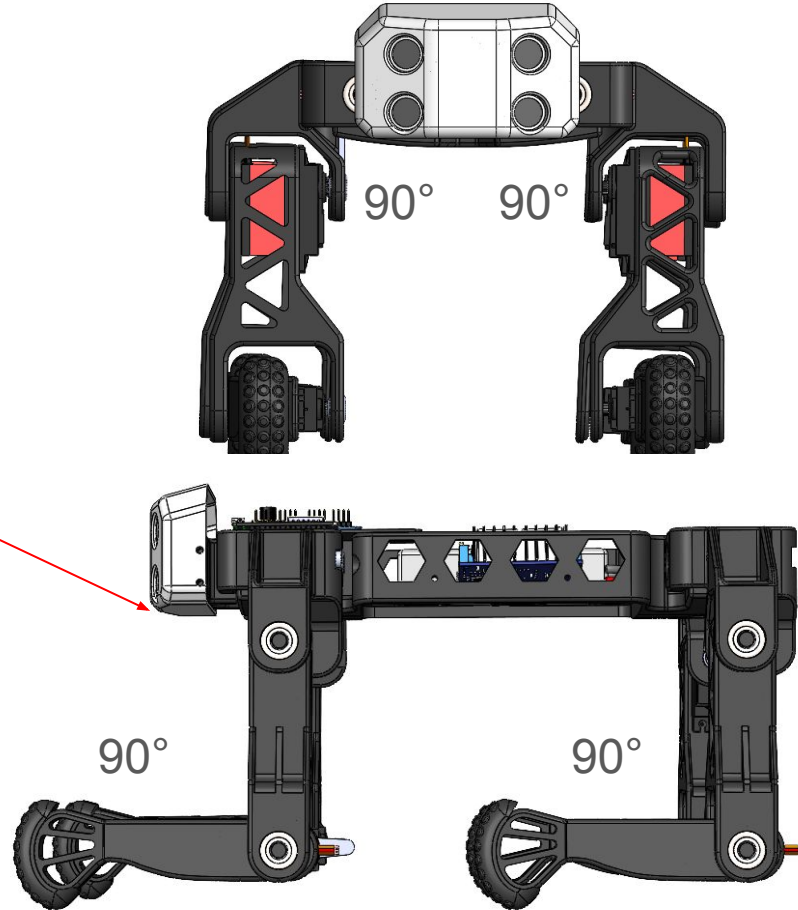


First start

2- Then upload the "initialization.ino" code to the esp32

3- Start the robot, all motors should initialize automatically at position= Shoulder: 90° / Femur: 90° / Tibia: 90° / Tibia2: 90°

4- then put the robot in position as shown in the picture then reattach the servo arms. Your robot is initialized



5- Now you can upload "Main_ROKI.ino in your ESP32.

6- Start the robot, connect your PC or smartphone to the wifi "ROKI001", type password "ROKI123456".

```
const char* ssid = "ROKI001"; // Nom du réseau  
const char* password = "ROKI123456"; // Mot de passe du réseau
```

7- to know the IP adress of ESP32, connect it to your computer and open the serial monitor, at starting the ESP32, the IP adress will appear



```
IP Address: 192.168.4.1  
left  
Oright  
0
```

8- Type this adress in your web browser