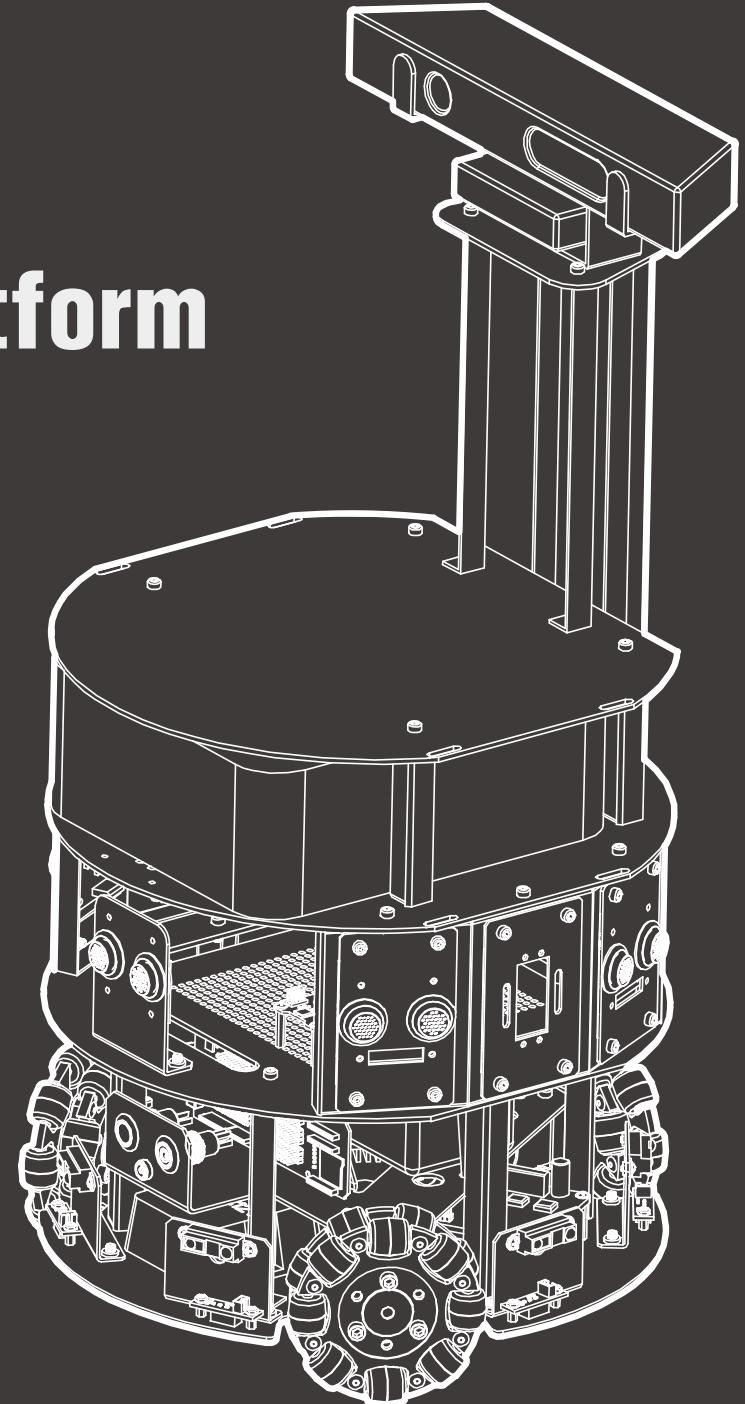
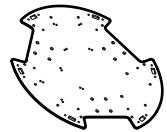


# HCR-Mobile Robot Platform

## (Omni-Directional)



## Essential Parts



**A1** x1



**A2** x3



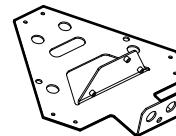
**A3** x3



**A4** x3



**A5** x6



**A6** x1



**A7** x2



**A8** x1



**A9** x1



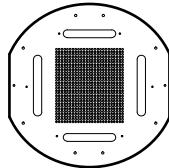
**A10** x1



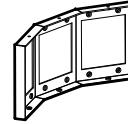
**A11** x1



**A12** x6



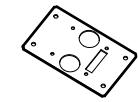
**A13** x1



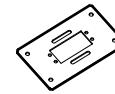
**A14** x2



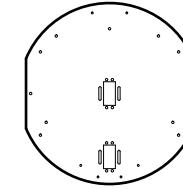
**A15** x2



**A16** x4



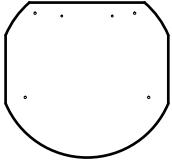
**A17** x2



**A18** x1



**A19** x4



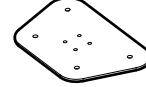
**A20** x1



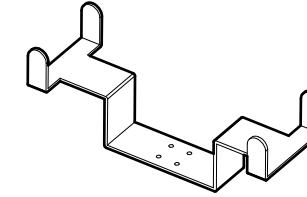
**A21** x2



**A22** x2



**A23** x1



**A24** x1

# Fastenings



**B1** x72

M3x6mm  
Pan Head Screws



**B2** x96

M4x10mm  
Inner Hexagon Screw



**B3** x3

M4  
Nut



**B4** x8

M5x12mm  
Pan Head Machine Screw



**B5** x12

M6x12mm  
Inner Hexagon Screw



**B6** x12

M6  
Flat Washer



**B7** x12

M6  
Split Lock Washer



**B8** x12

M6  
Nut



**B9** x4

M3x20mm  
Standoff



**B10** x12

M3x6mm  
Standoff



**B11** x22

M3  
Nut



**B12** x8

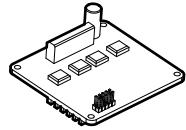
M3  
Nylon Flat Washer



**B13** x10

M3x22mm  
Pan Head Machine Screw

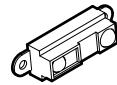
## Optional Accessories



**C1** x2



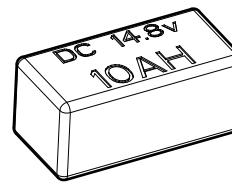
**C2** x1



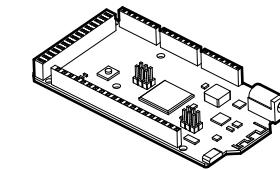
**C3** x6



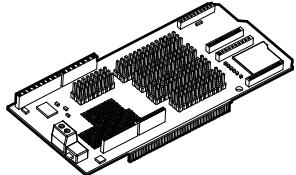
**C4** x6



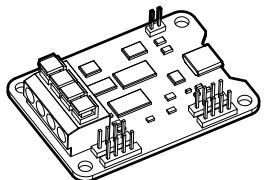
**C5** x1



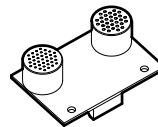
**C6** x1



**C7** x1



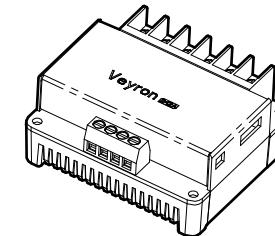
**C8** x1



**C9** x6



**C10** x12



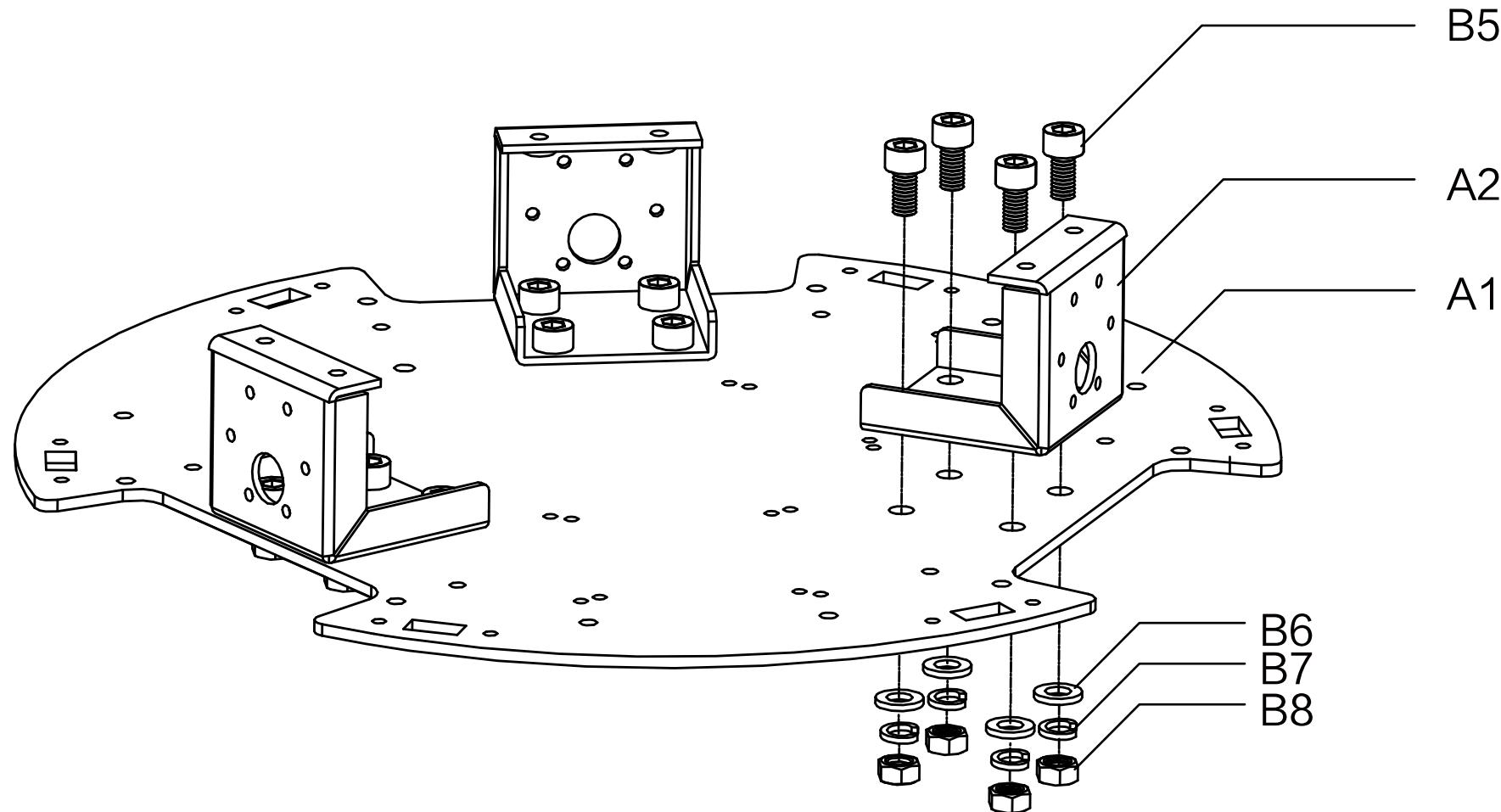
**A11** x2

## Tools List

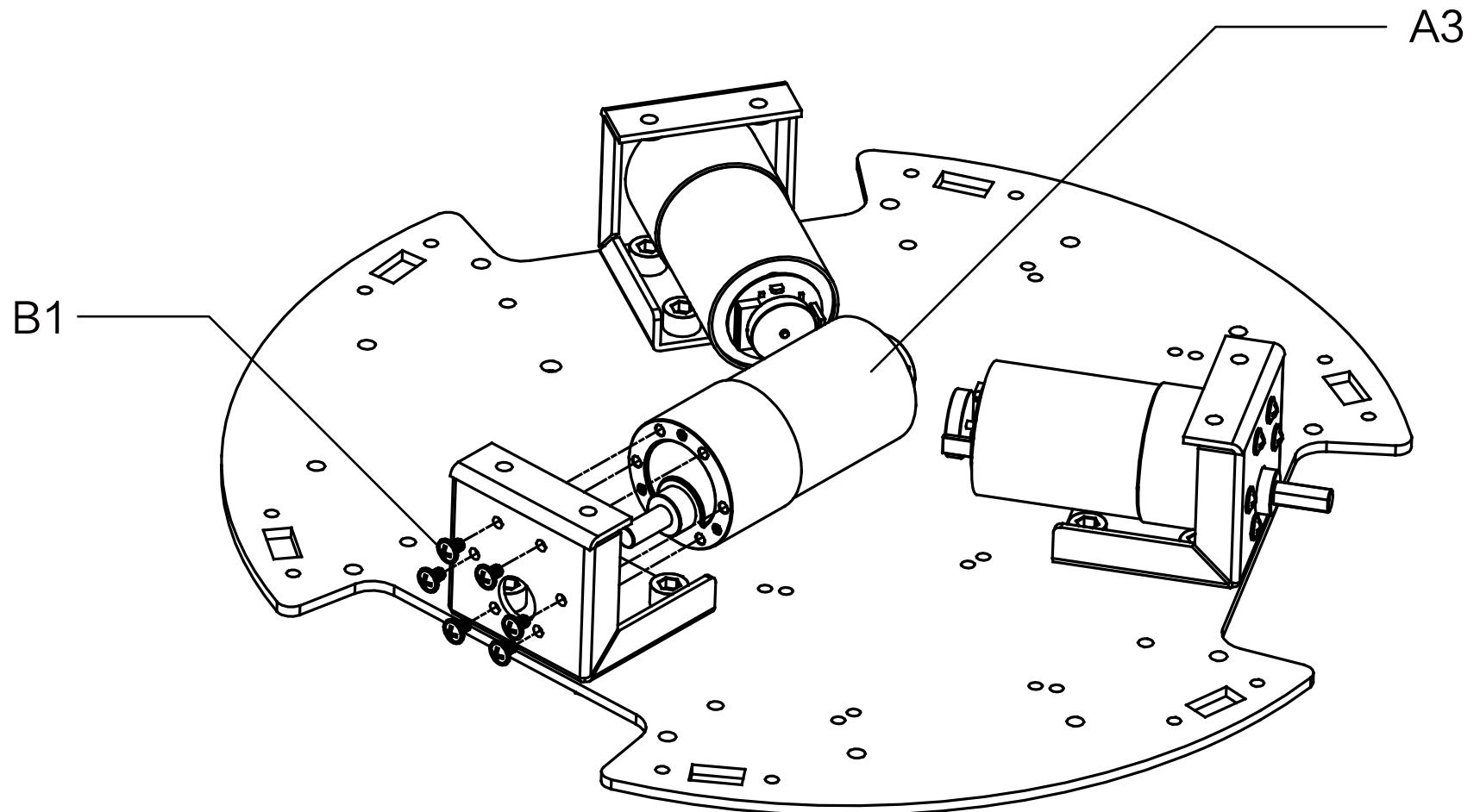
<b>Essential Tools</b>	Multi-Purpose Screwdriver	Open Spanner	Allen Wrench
<b>Optional Tool</b>	Electric Soldering Iron	Wire Stripper	Pliers

# 1

## Mount Motor Brackets

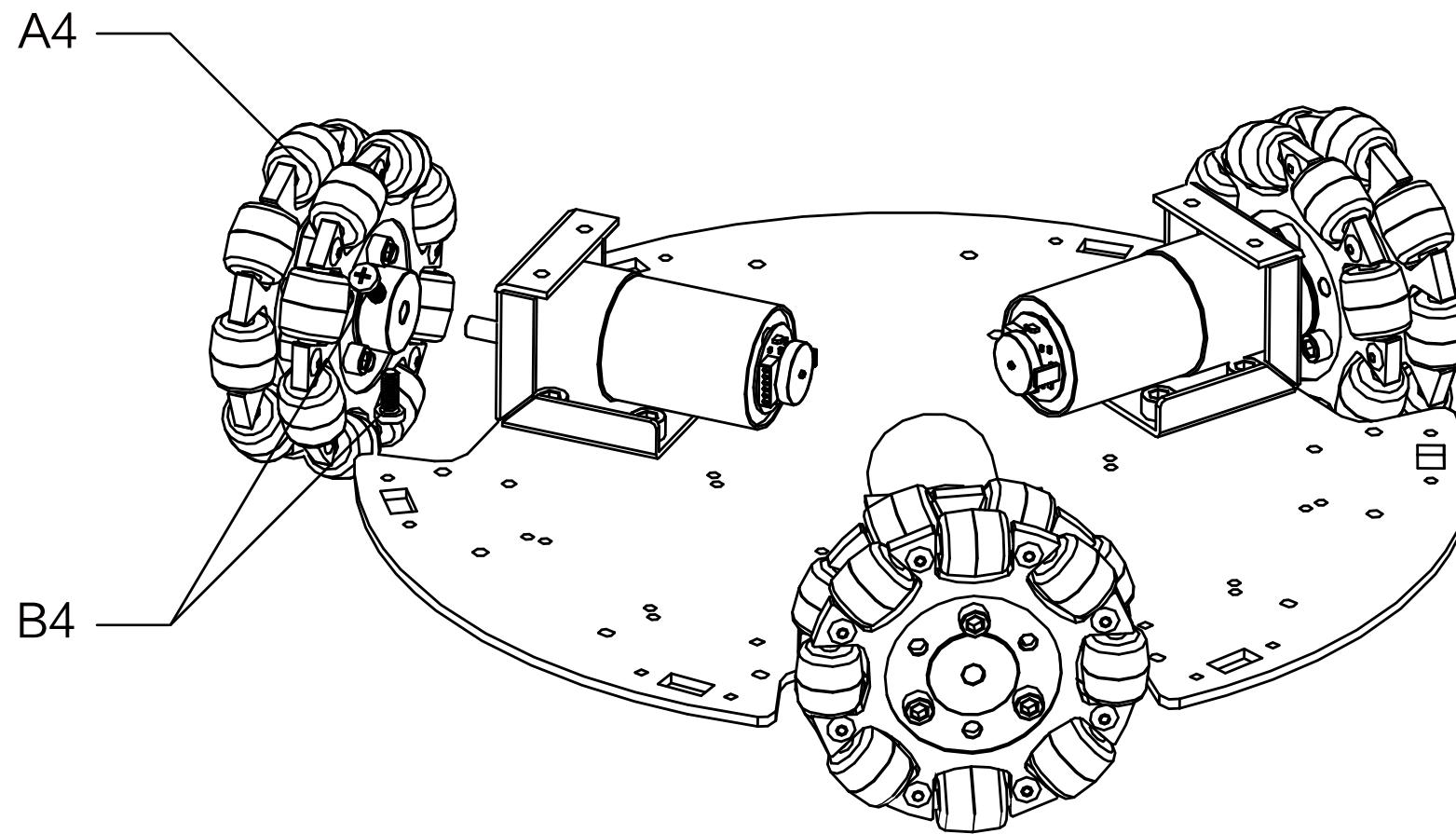


The vertical plane of the motor mount (A2) should strictly match the edge of the base (A1) to ensure further installation of A6.



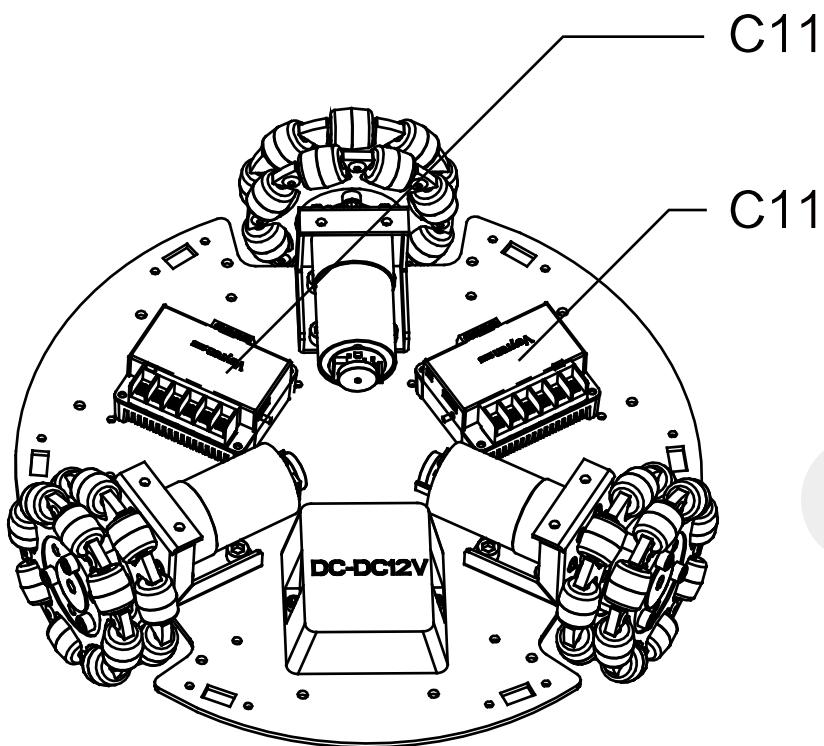
**3**

## Install Omni-Wheels

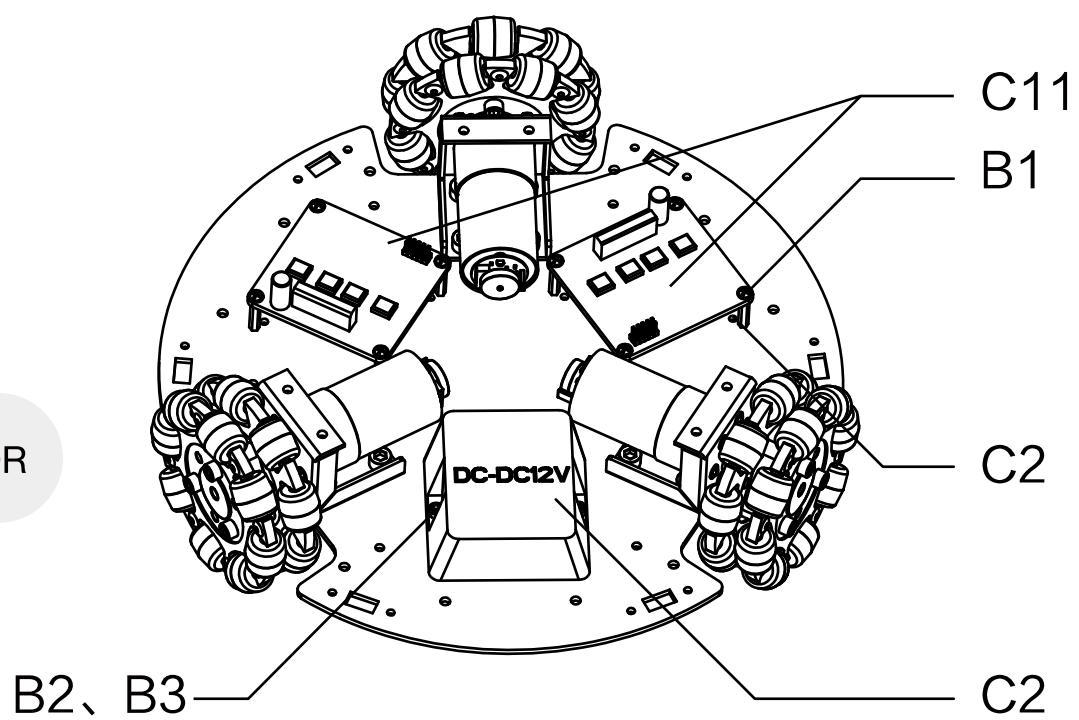


## Mount Motor Drive Modules/Two types to choose from

4



OR

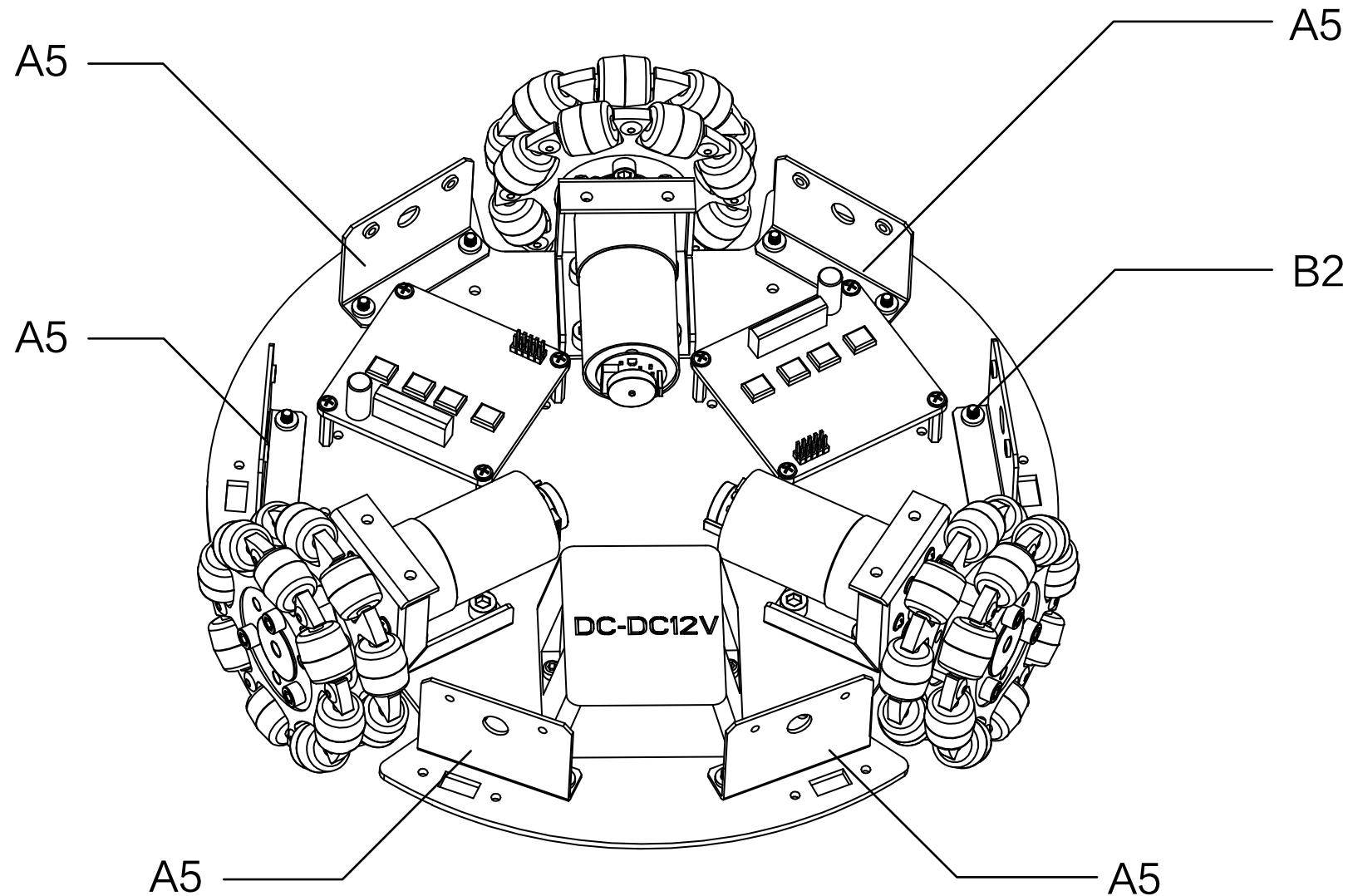


C11(Veyron 12A motor drive)  
Use M3x25mm screws(B14) Secure with M3 nuts(B3)

B1 ( Use M3\*6 Screws to connect both sides of the secure standoff )  
B2,B3(secure with M4 nuts from bottom side)

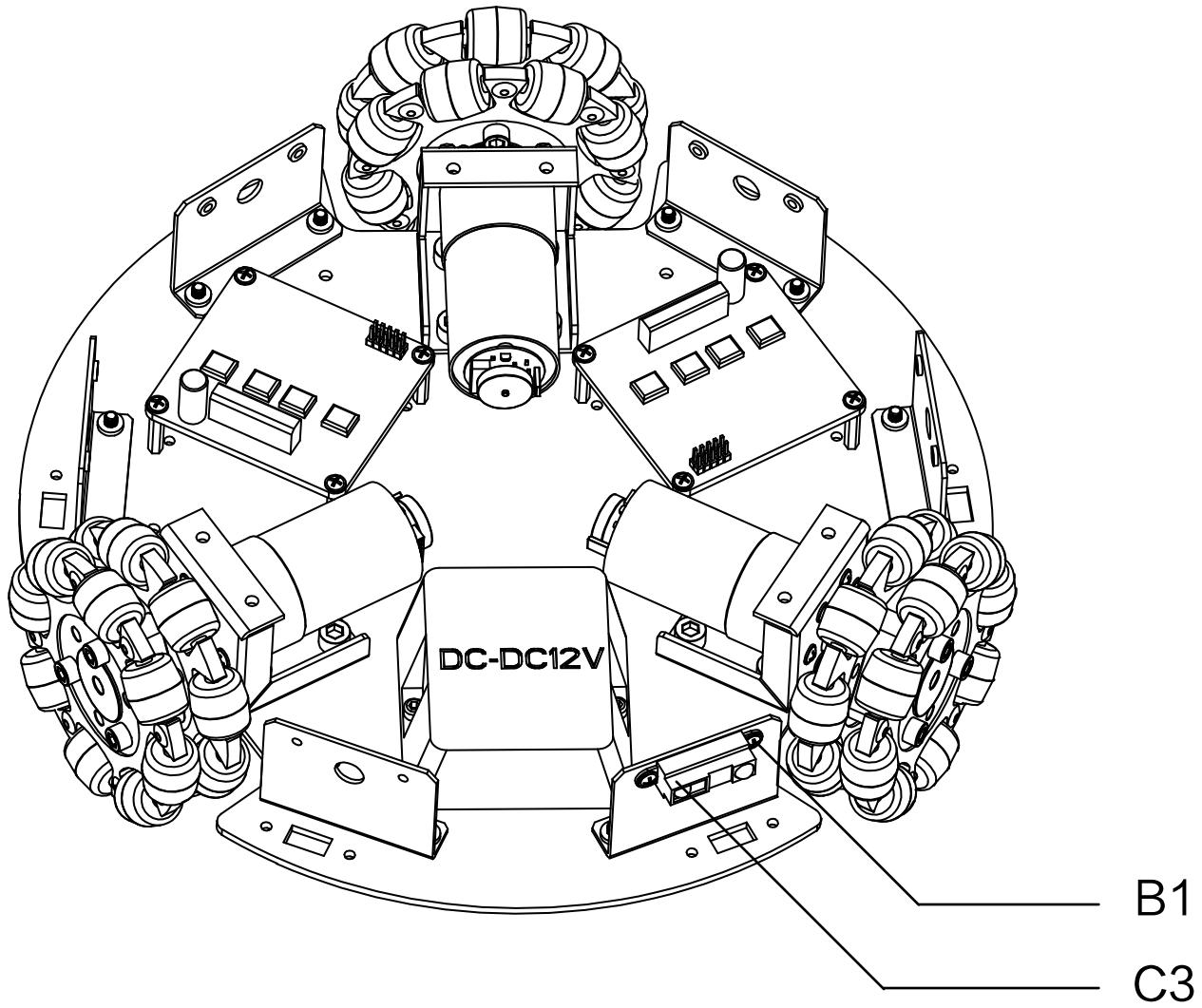
# 5

## Install Infrared Brackets



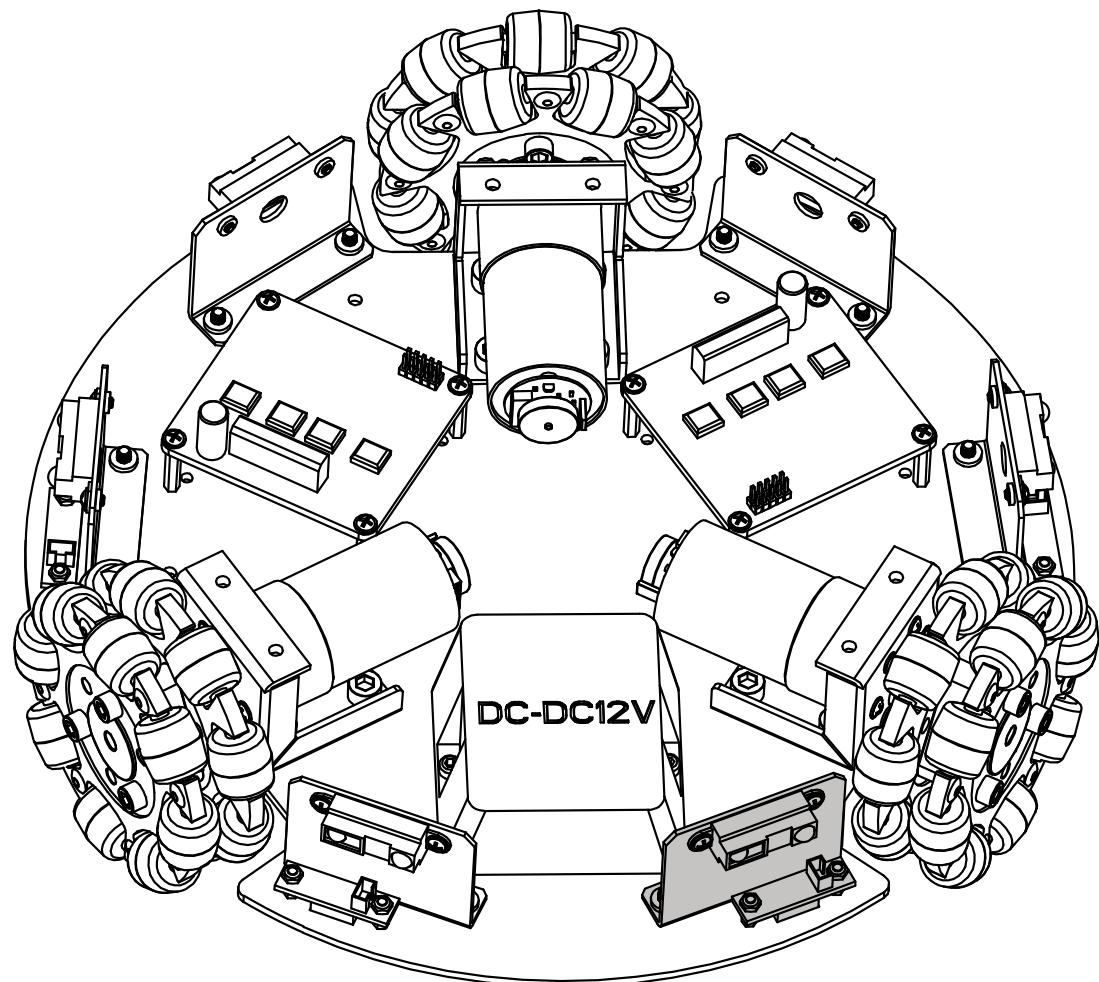
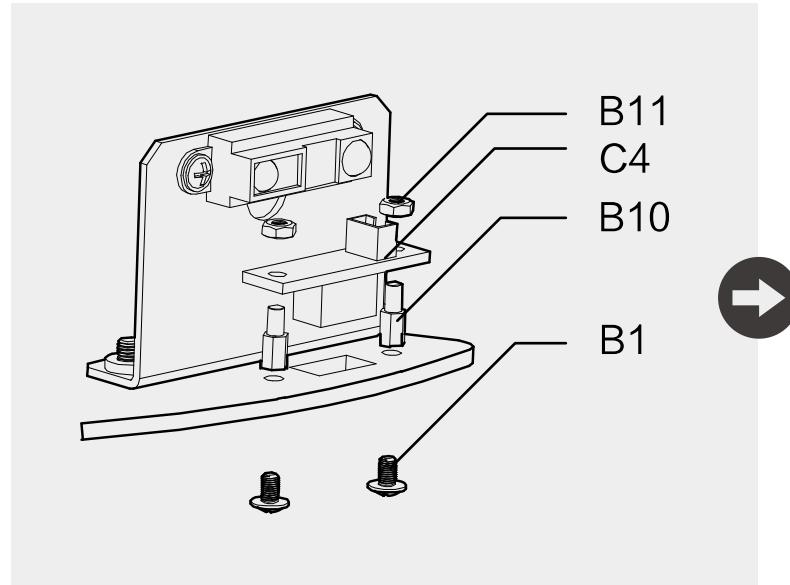
## Install Infrared Sensors(Optional Parts)

6



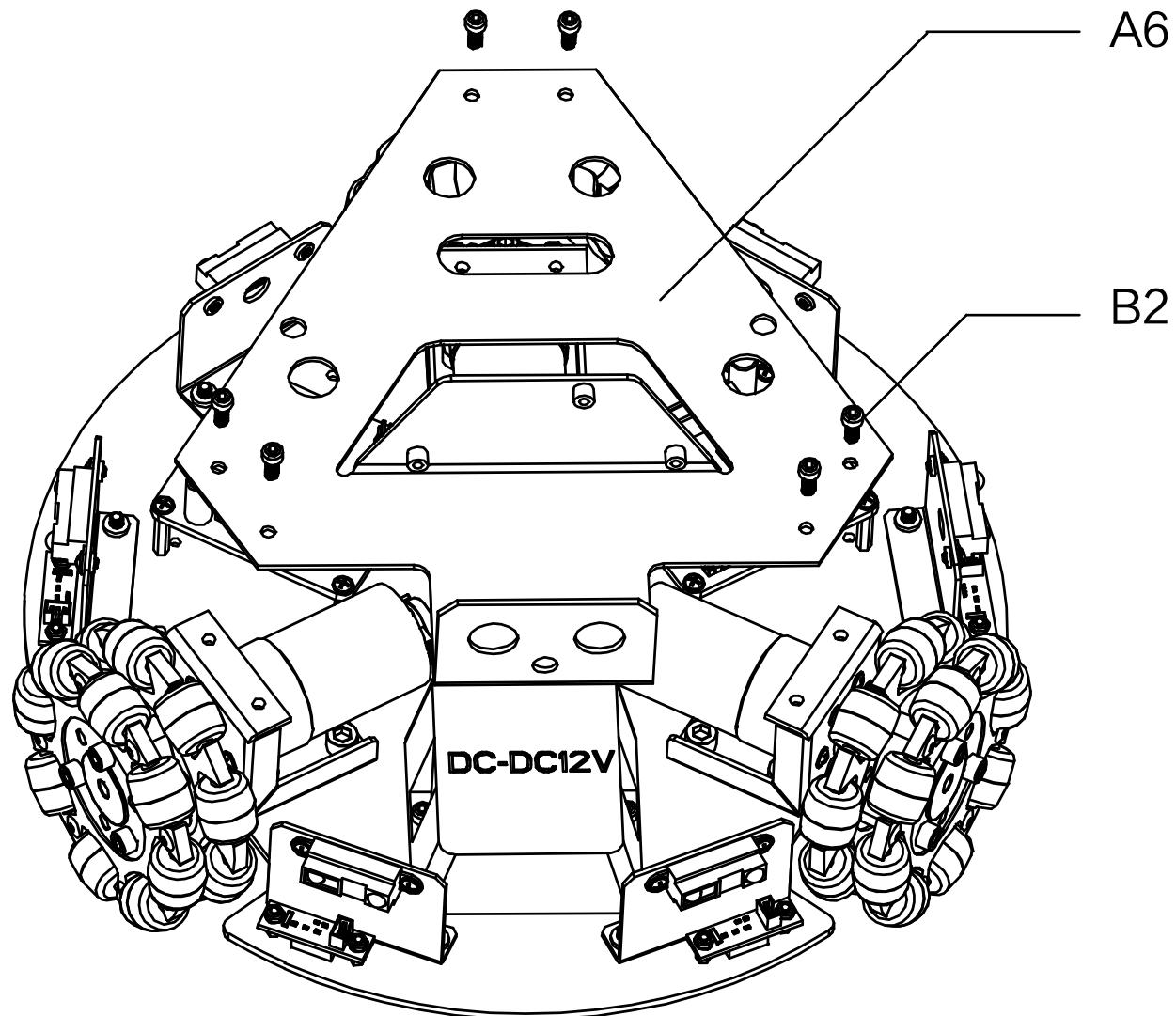
# 7

## Install Anti-Drop Sensors(Optional Parts)



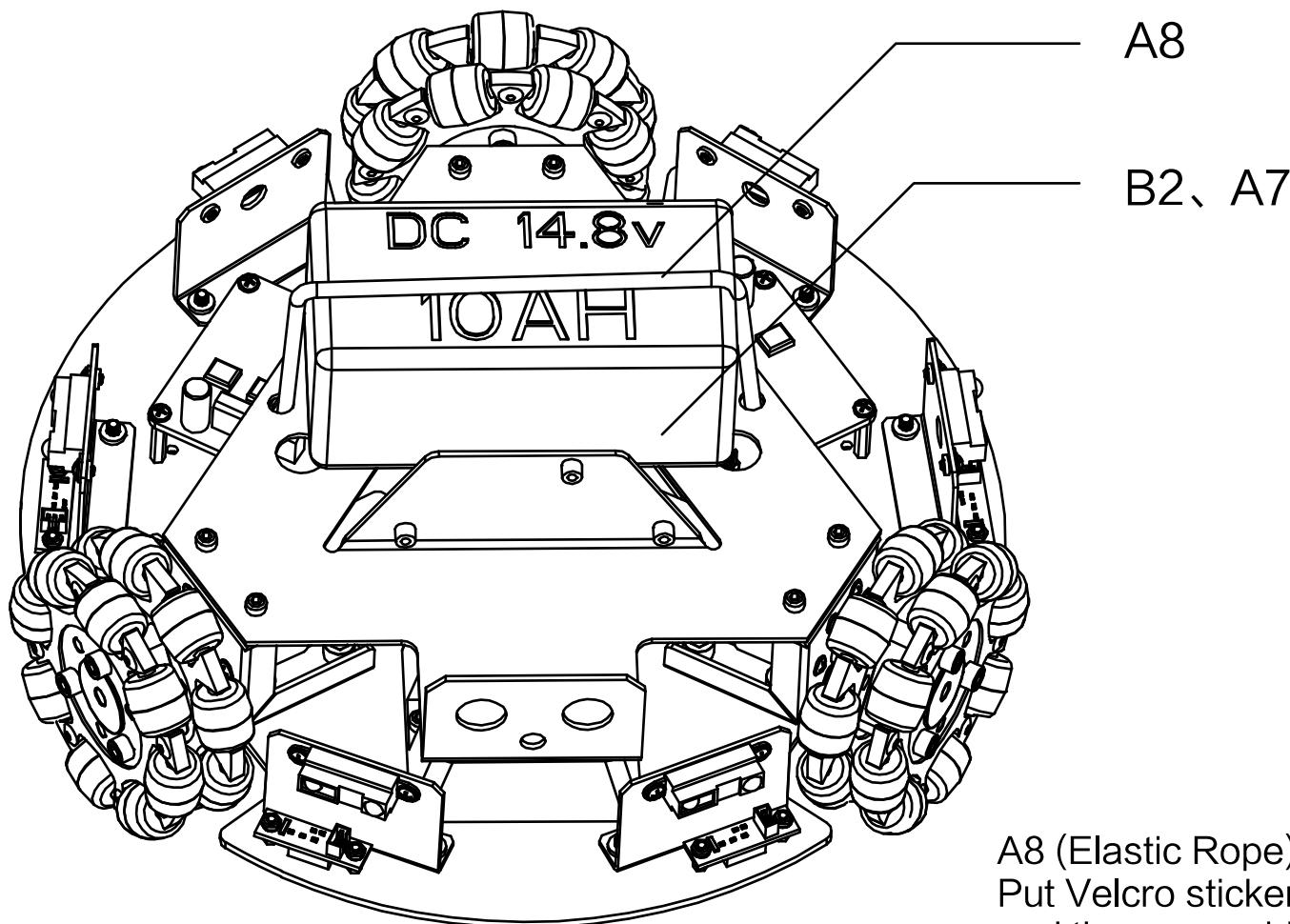
Install Mounting Plate

8



# 9

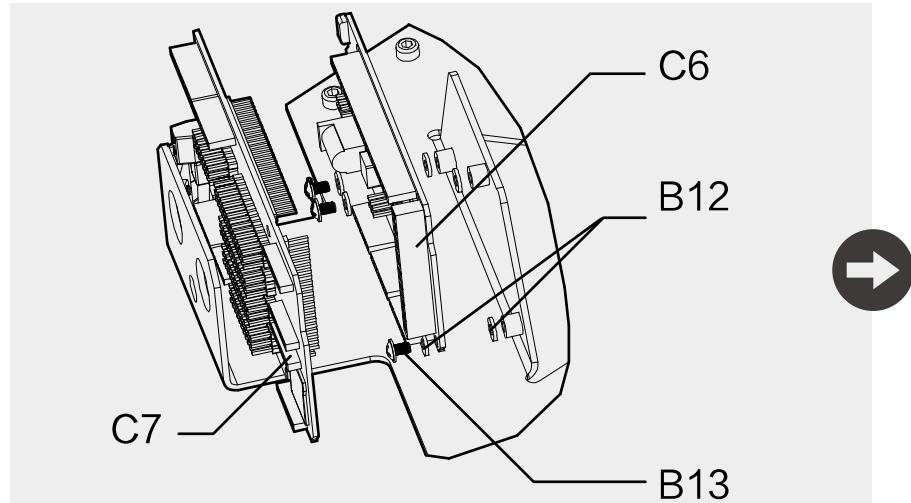
## Install Battery(Optional Parts)



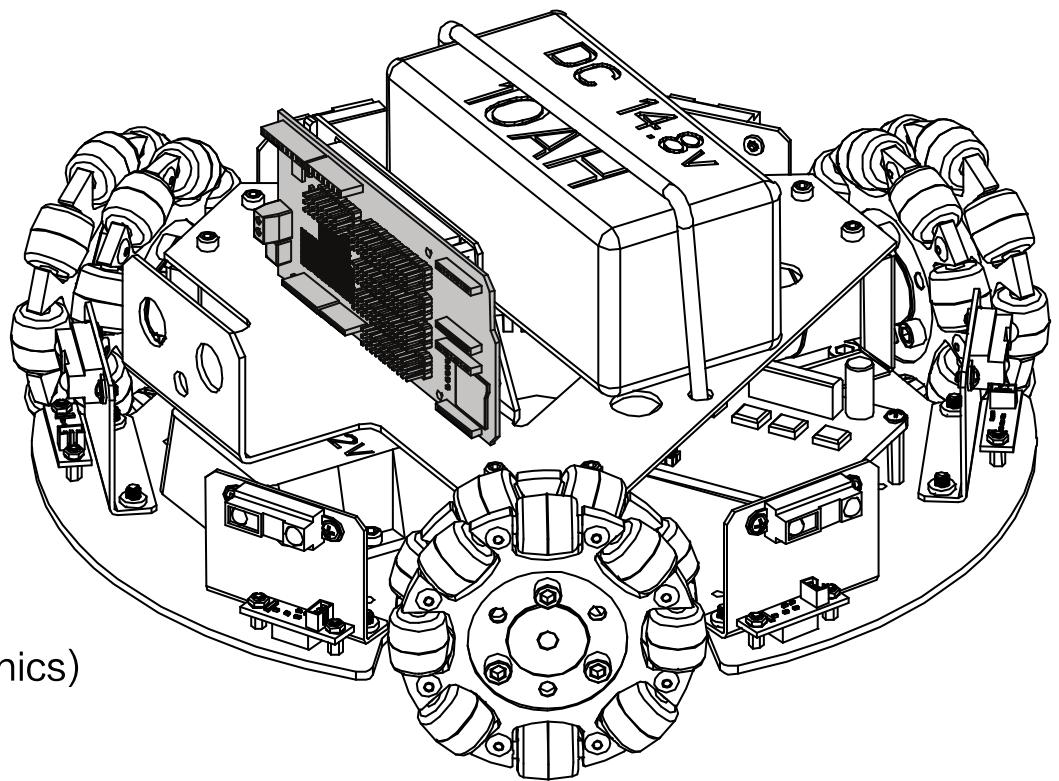
A8 (Elastic Rope)

Put Velcro stickers onto the back side of the battery holder  
and the upper side of the base plate)

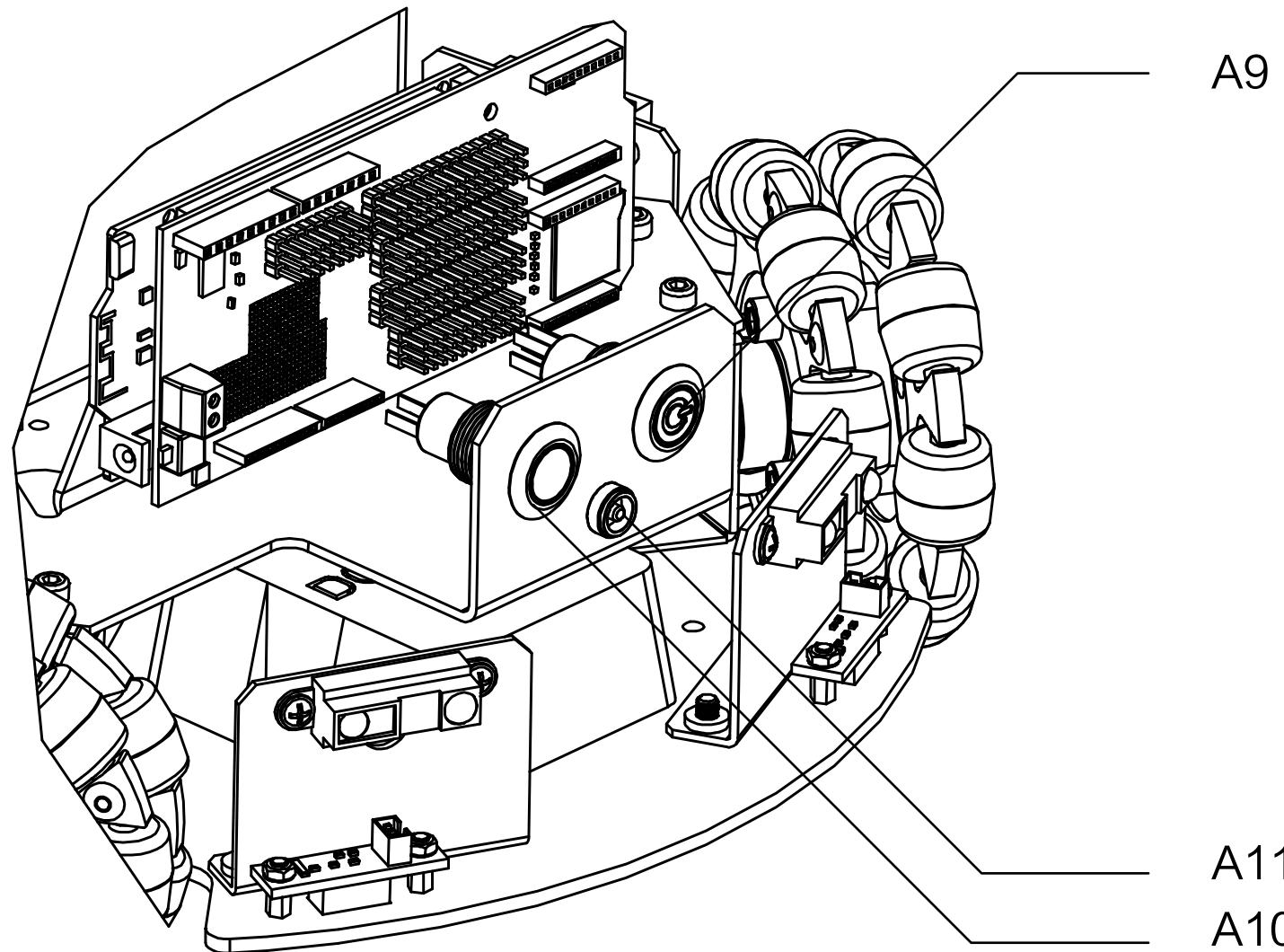
Install Microcontroller(Optional Parts) **10**

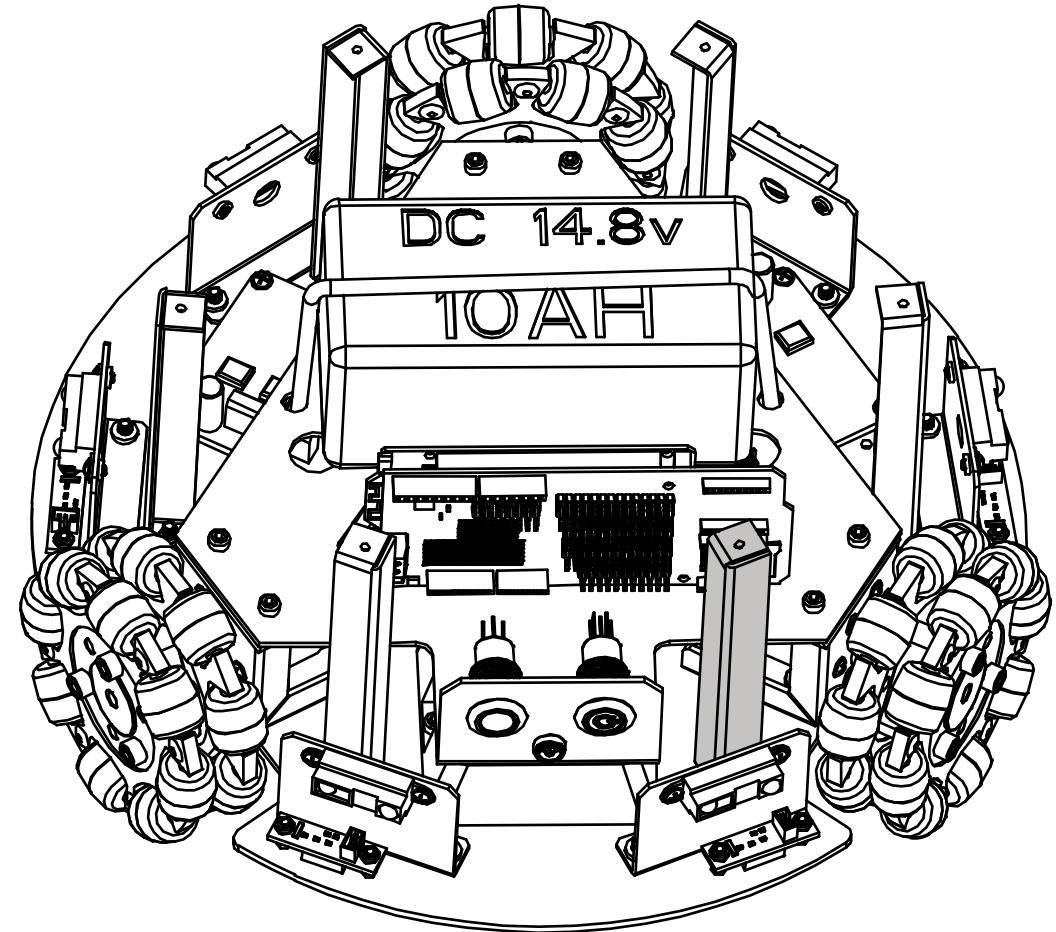
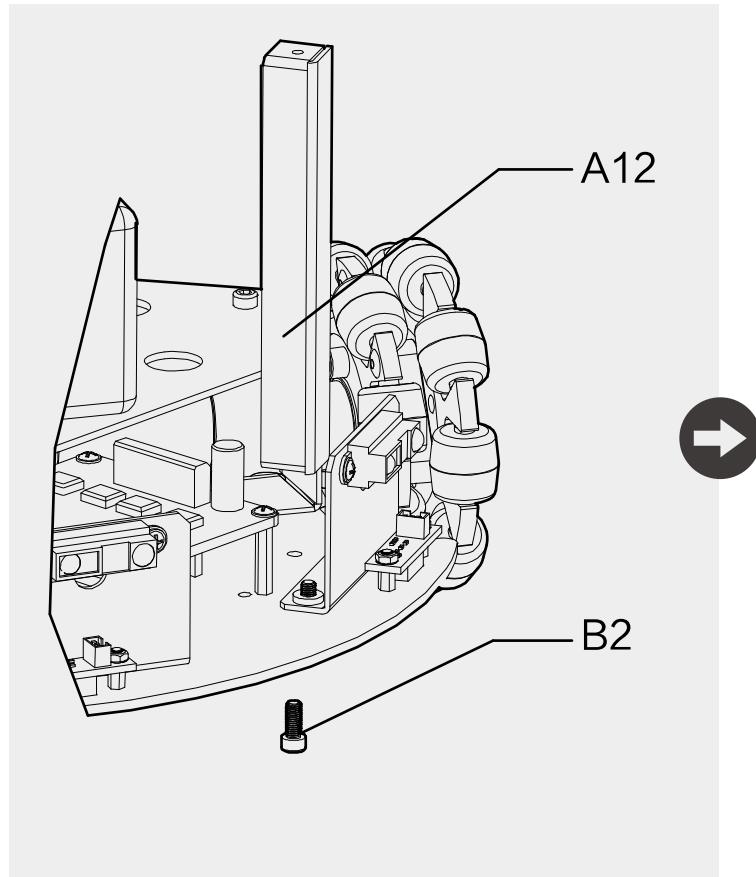


B12 (Use nylon spacers to prevent damage to electronics)



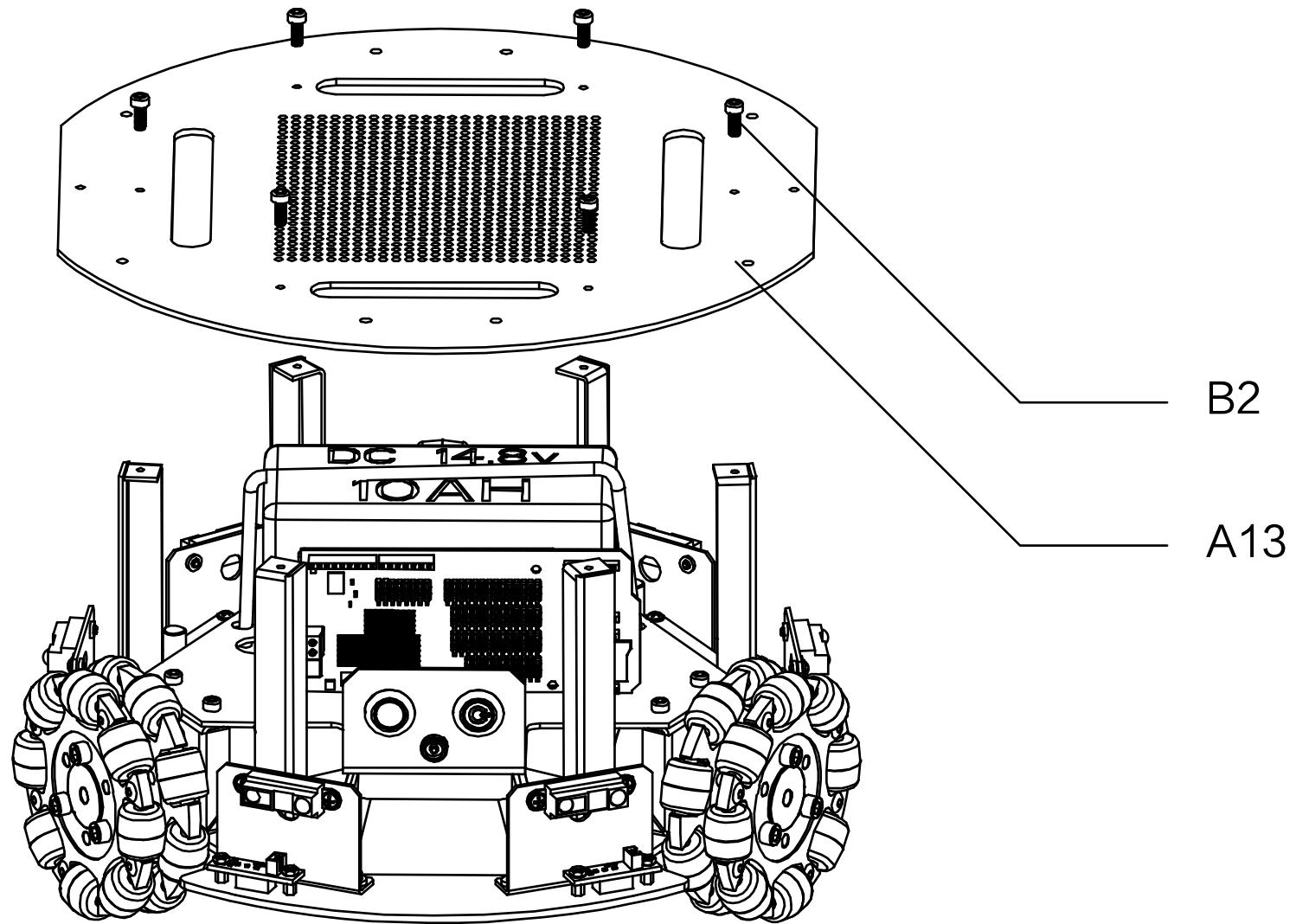
## 11 Install Switches and Sockets

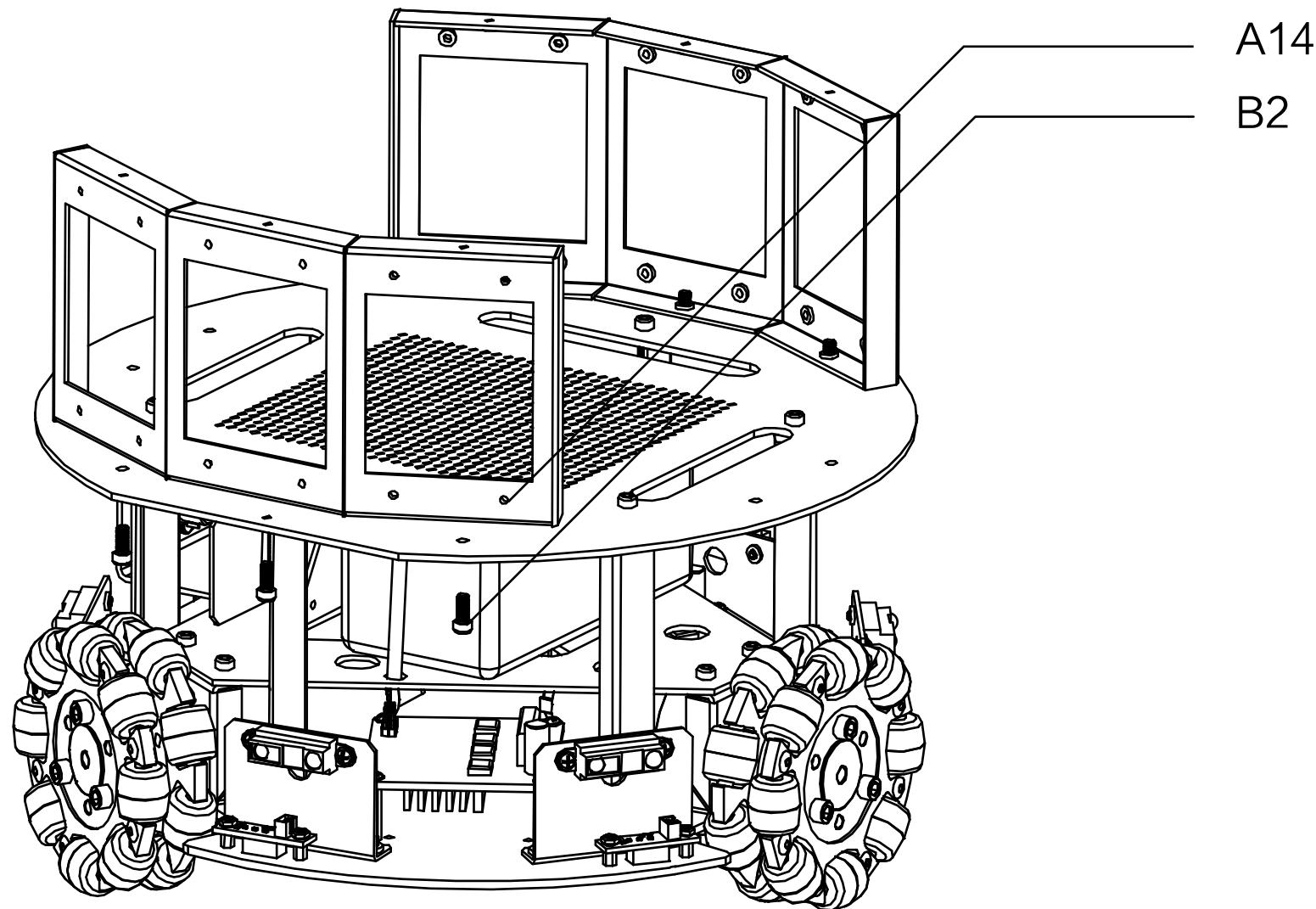




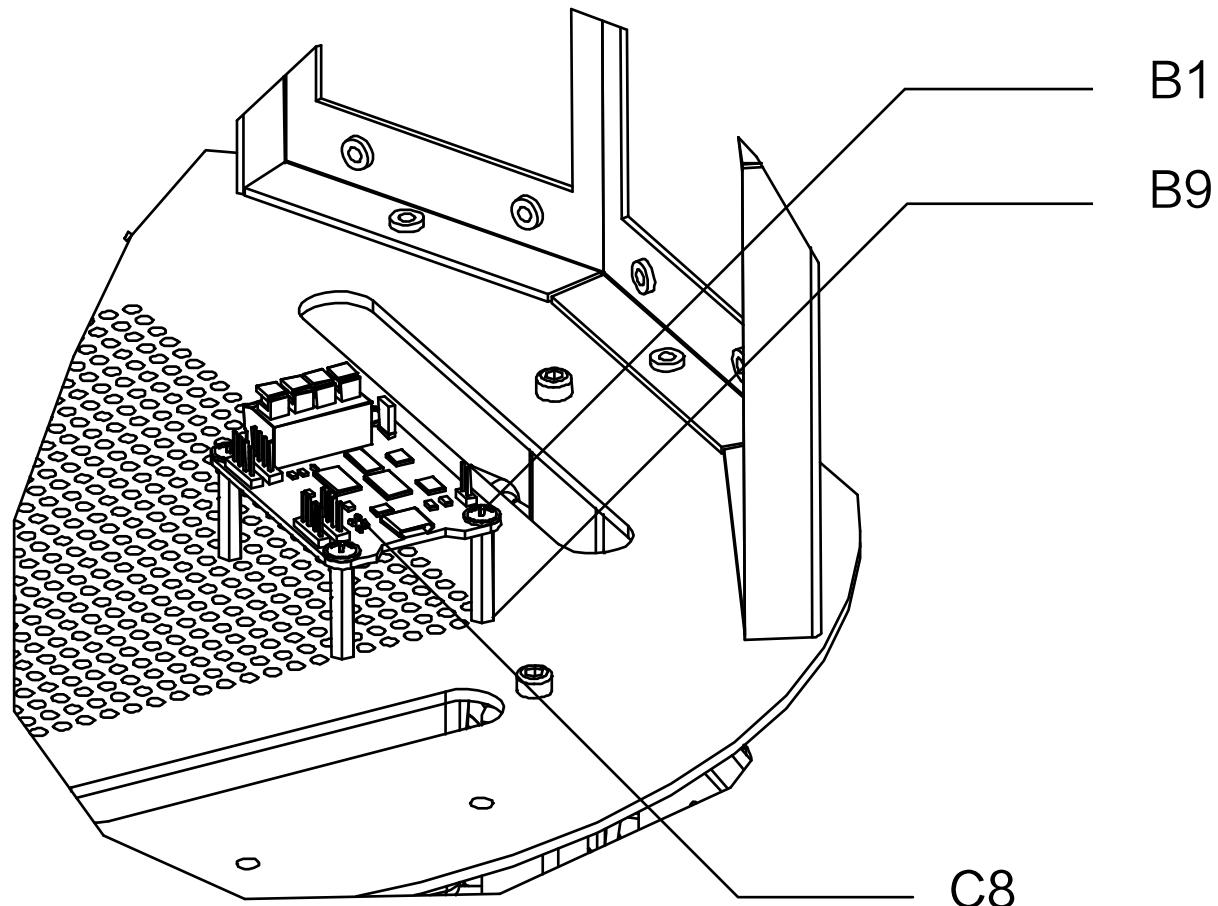
Before installing any further structural parts, you need to install a few electric components in advance.

## 13 Install Plate

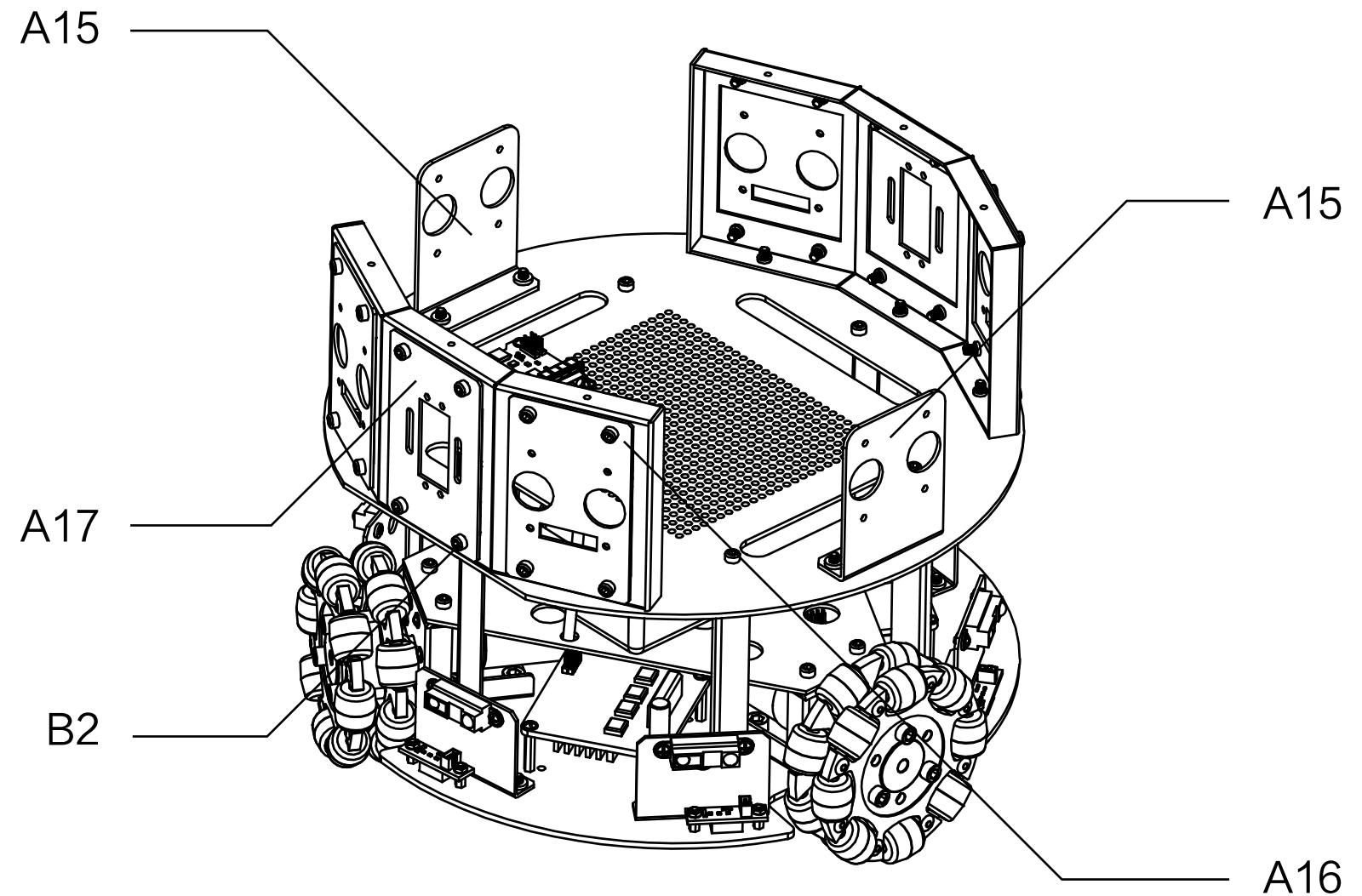




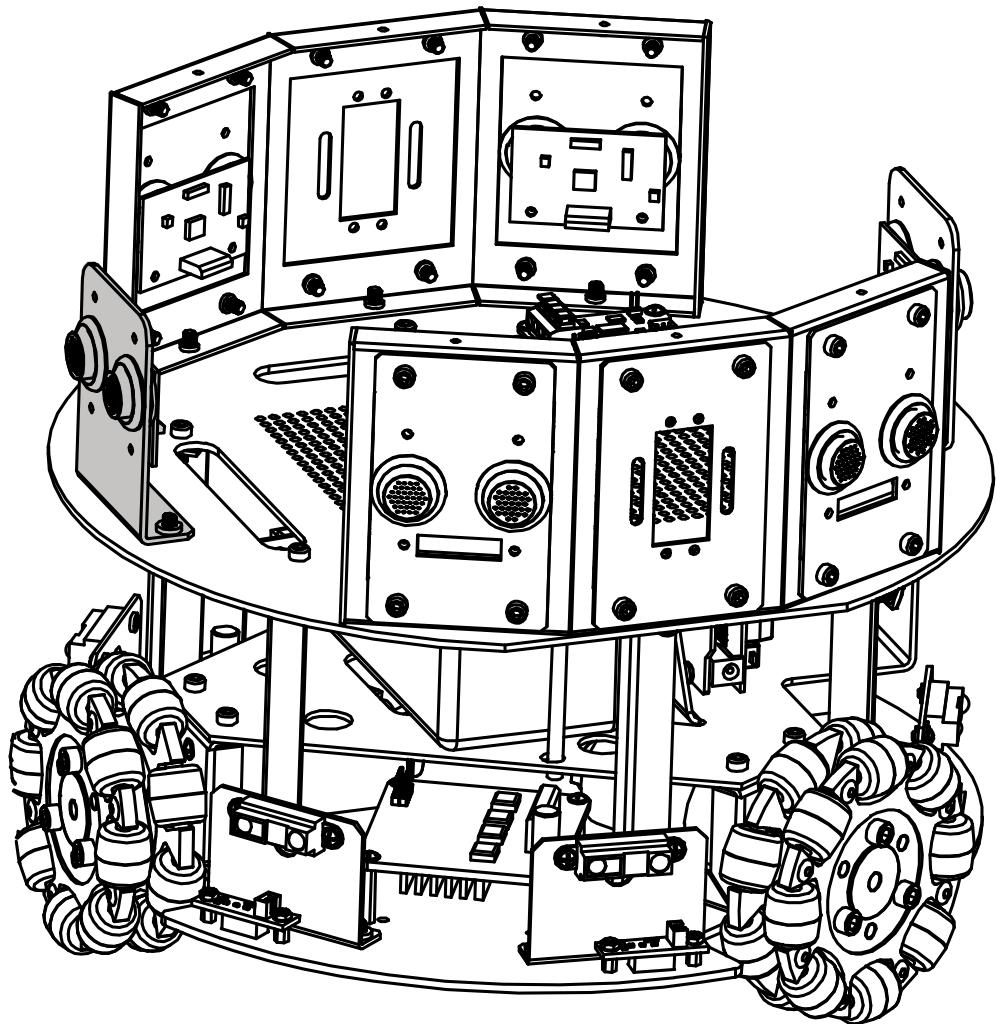
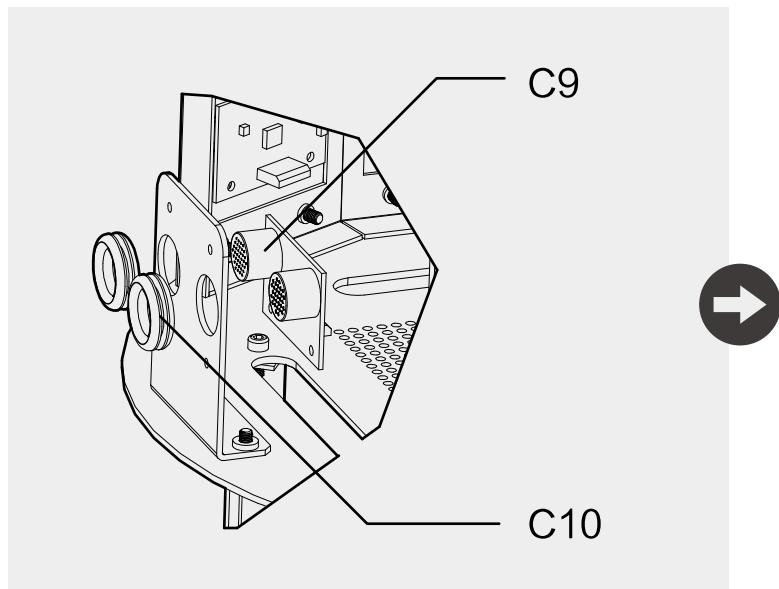
## 15 Install Conversion Board(Optional Parts)

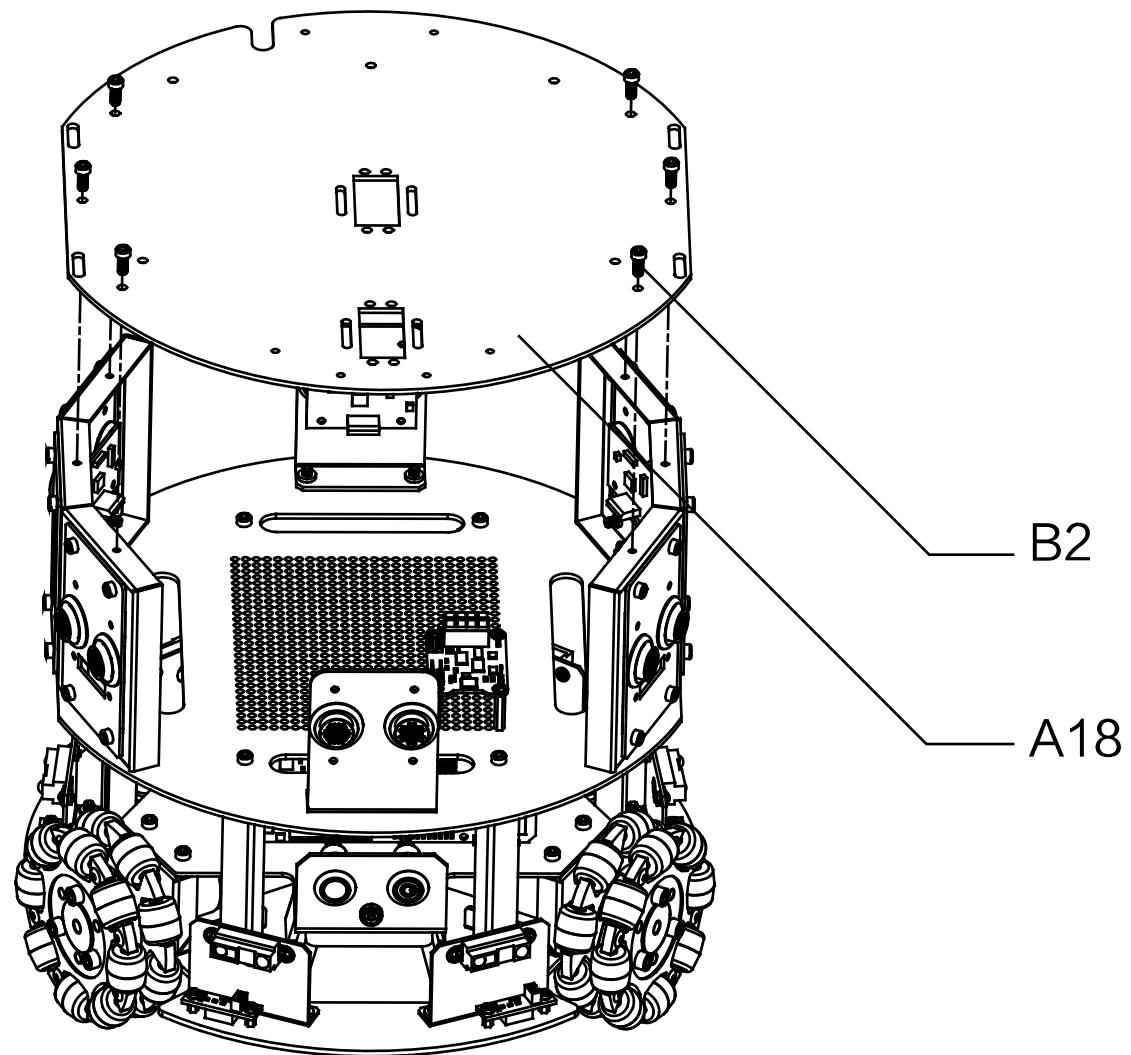


B1(Secure standoffs from top and bottom )

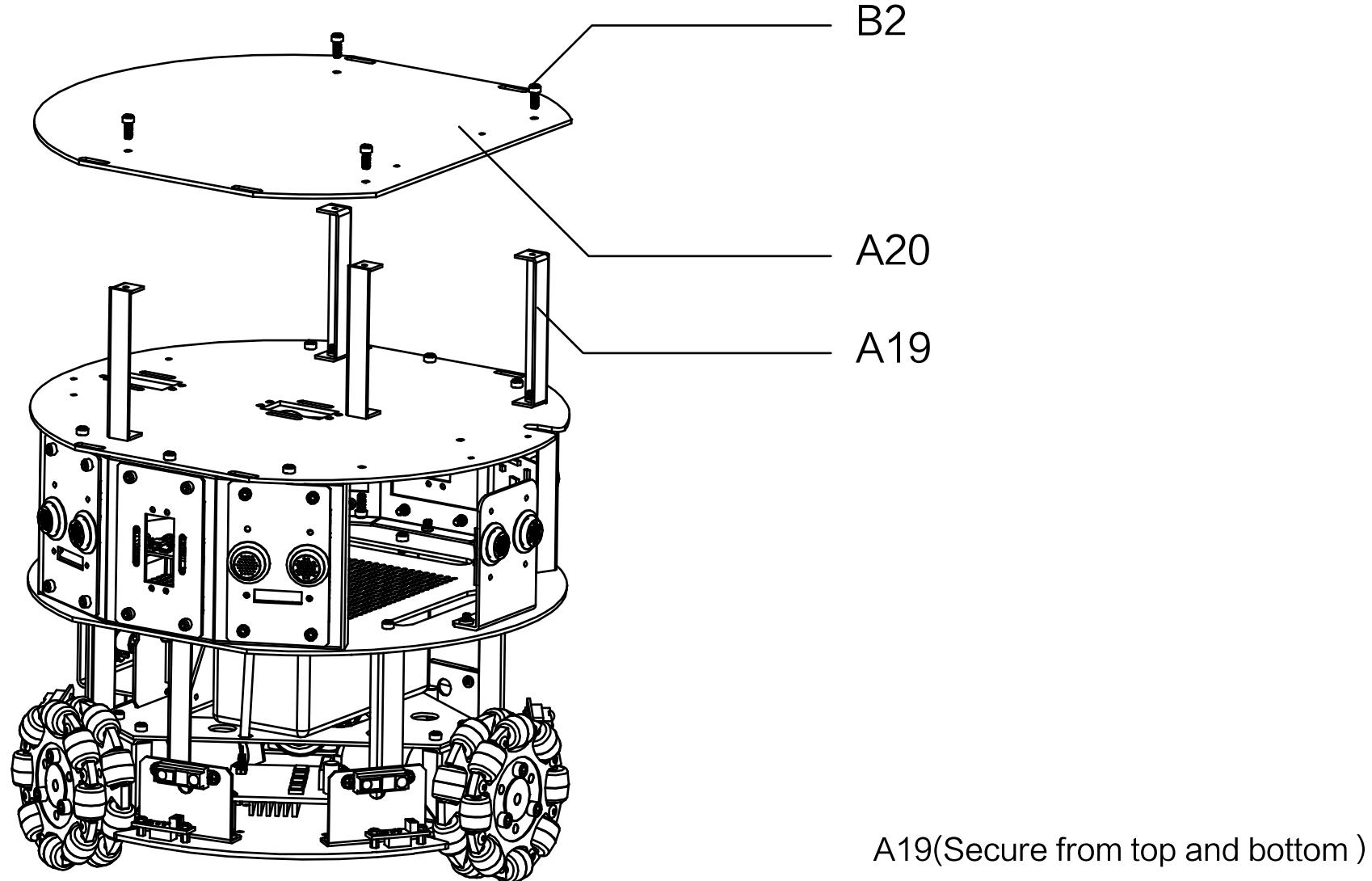


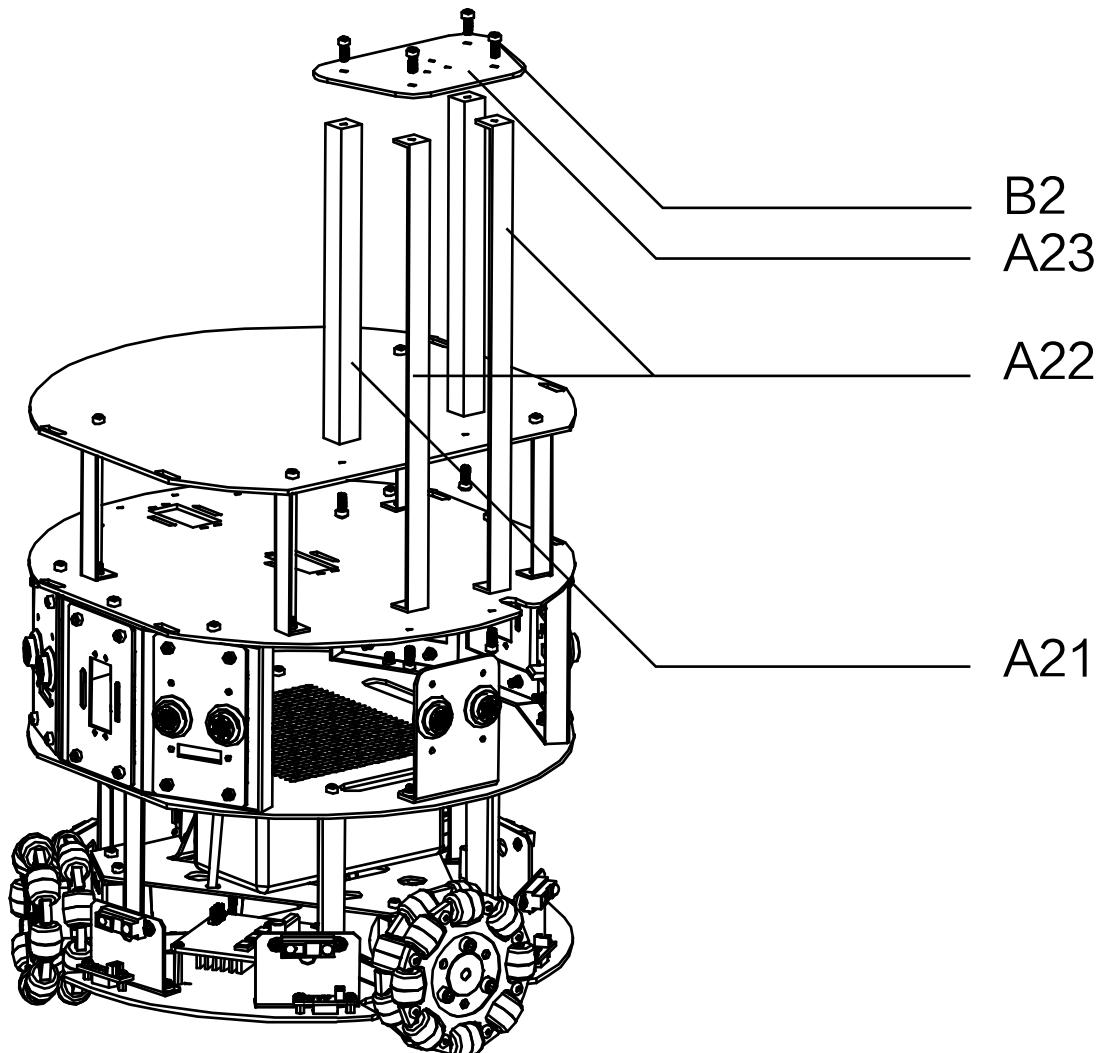
## 17 Install Ultrasonic Sensors(Optional Parts)



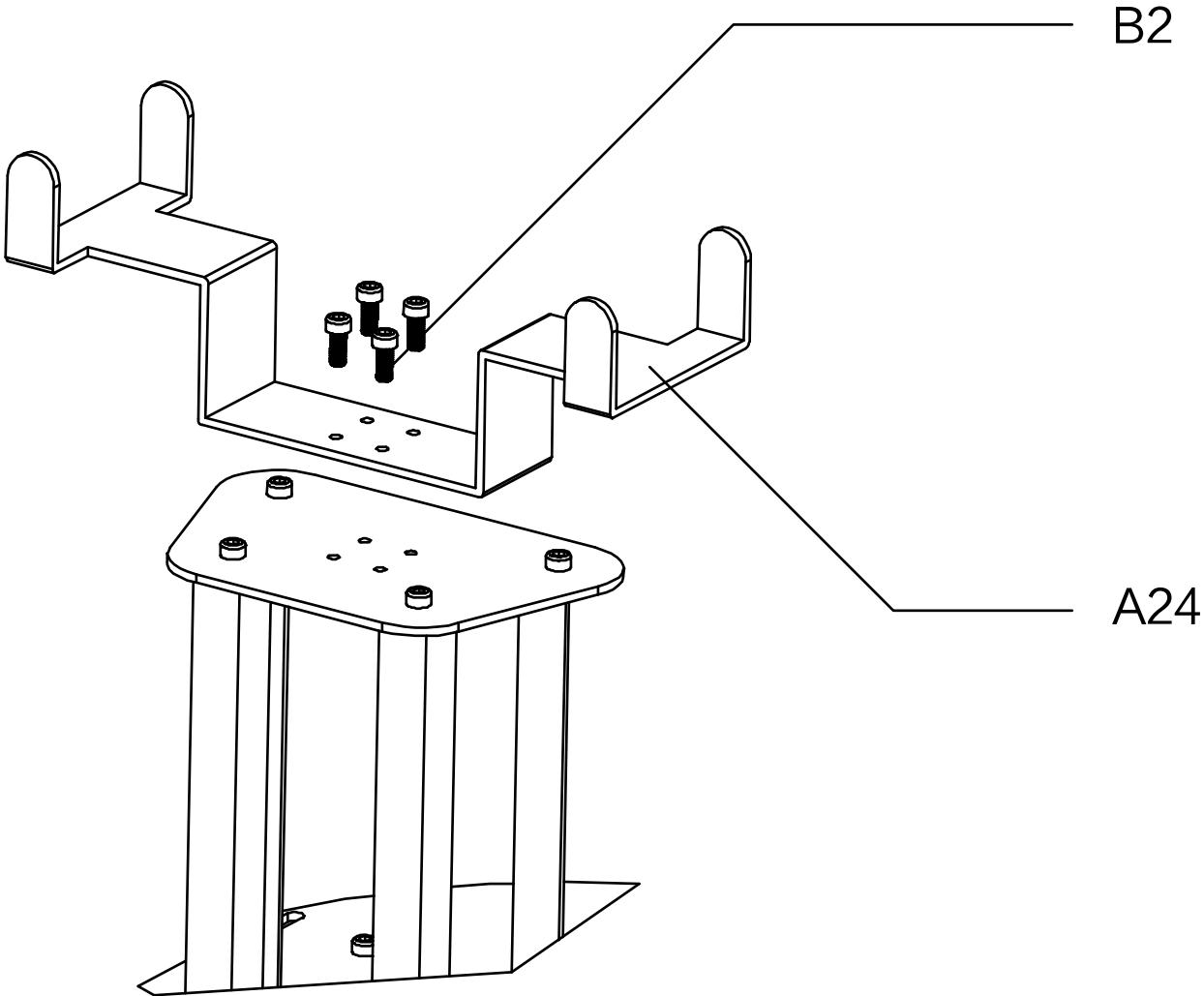


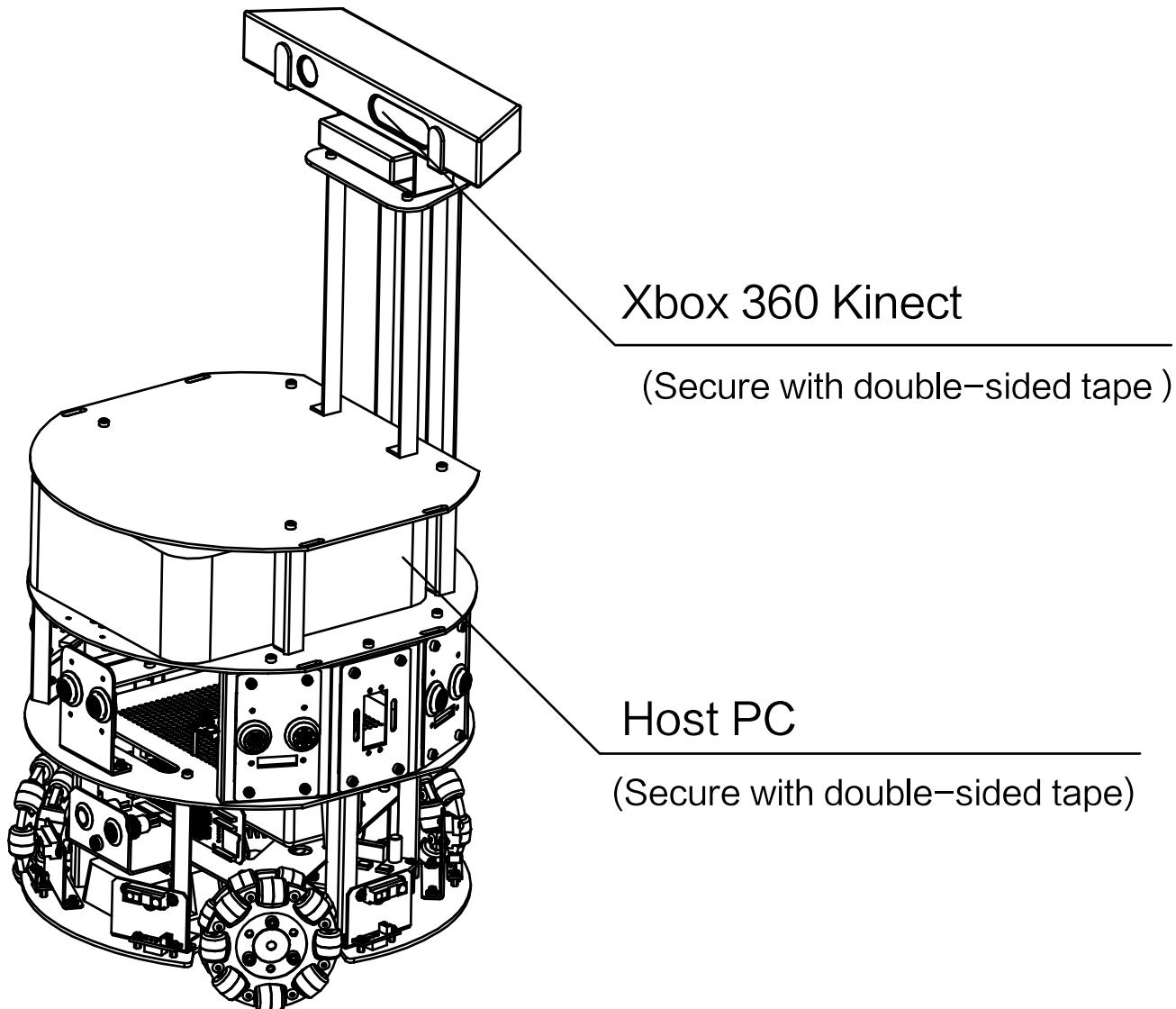
## 19 Attach Pillars and Plate





## 21 Install Kinect Bracket





Website: [www.dfrobot.com](http://www.dfrobot.com)

Tel: 86-21-61620183

Service: [Techsupport@dfrobot.com](mailto:Techsupport@dfrobot.com)

Address: Rm. 615, Bldg Y1, NO.112, Liangxiu Rd., Pudong, China

© DFRobot has the final authority of interpretation on this manual.