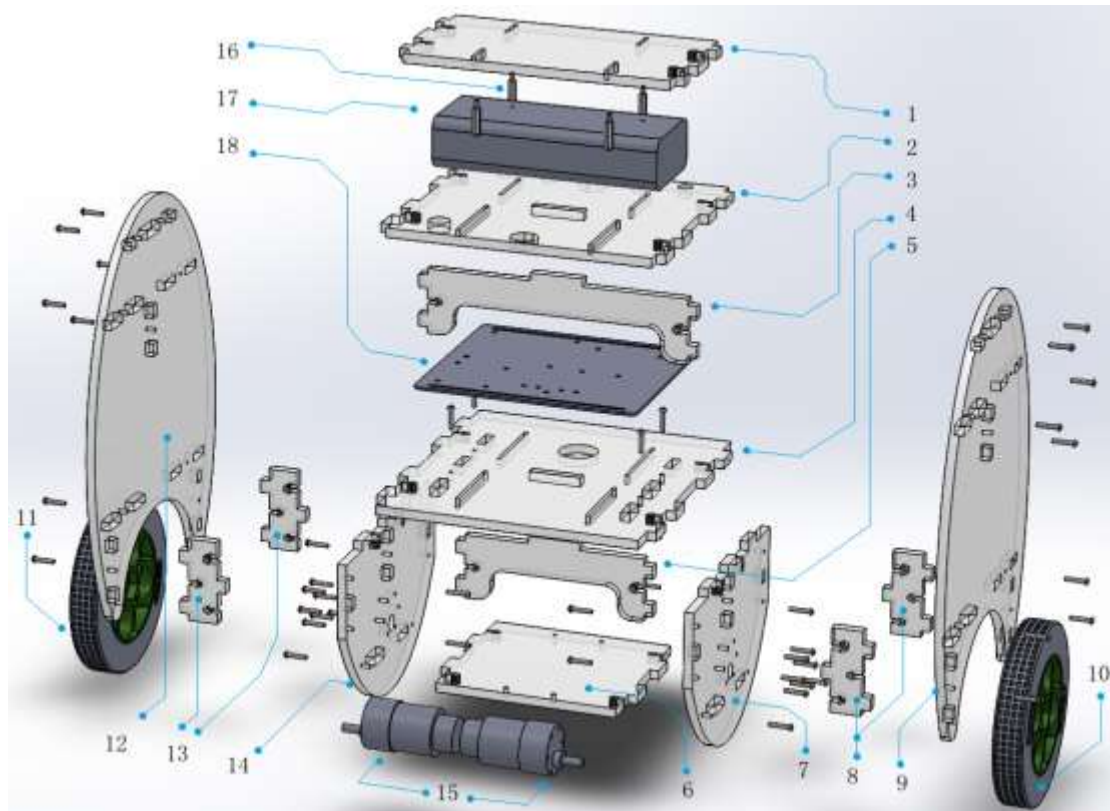


Self-balance Robot Assembly Diagram

(V0.3 2013/5/27 By kent)

According to this diagram, you can assemble this robot by yourself, after that, you can programming this robot and test it follow the self-balance robot test book.

Assembly Diagram

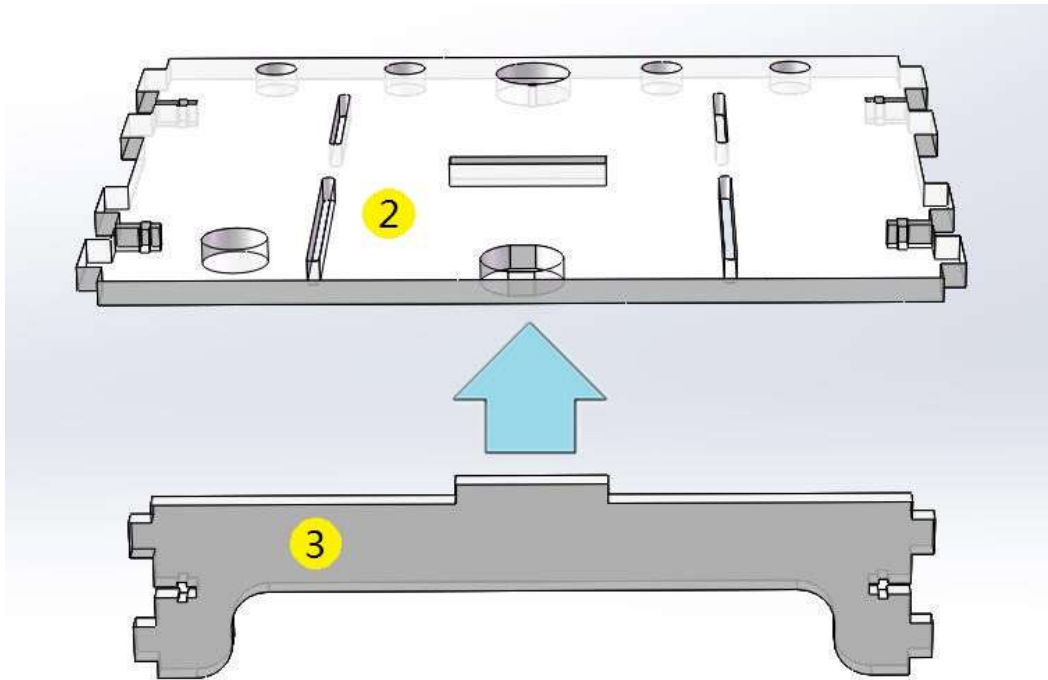


Part List

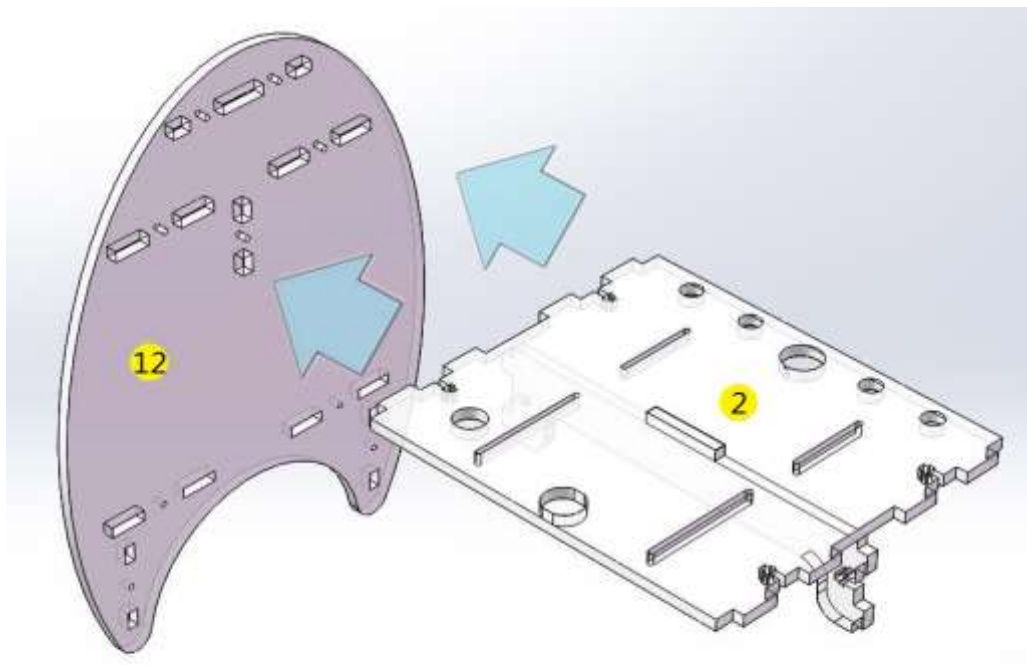
- | | |
|----------------------------|----------------------------|
| 1. Cover Platform | 10. Wheel(Right) |
| 2. Upper Lever | 11. Wheel(Left) |
| 3. Beam of Upper Lever | 12. Side Board(Left) |
| 4. Lower Lever | 13. Motor Holder1 (Left) |
| 5. Beam of Lower Lever | 14. Motor Holder2(Left) X2 |
| 6. Bottom Lever | 15.DC Motor(with encoder) |
| 7. Motor Holder1 (Right) | 16. Battery Holder |
| 8. Motor Holder2(Right) X2 | 17. Battery |
| 9. Side Board (Right) | 18.Electronic Platform |

1. First

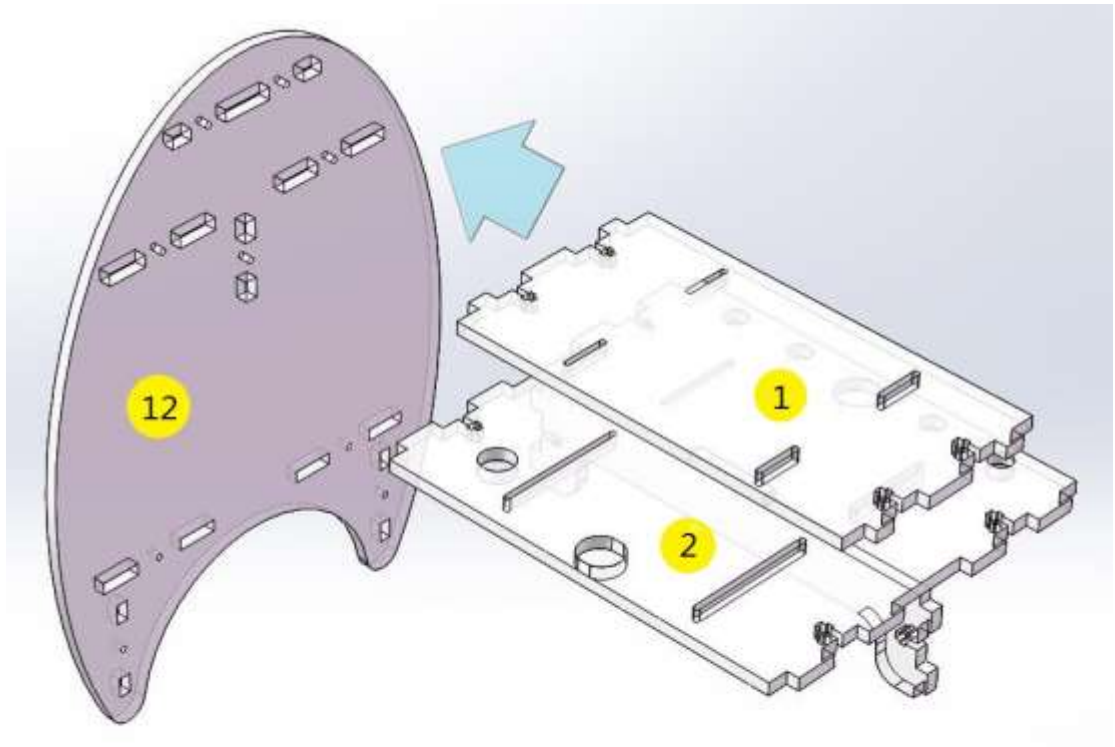
Attention: Make sure all scrub side of the acrylic board is up , do not fix the screws too tight before all of acrylic board assembled.



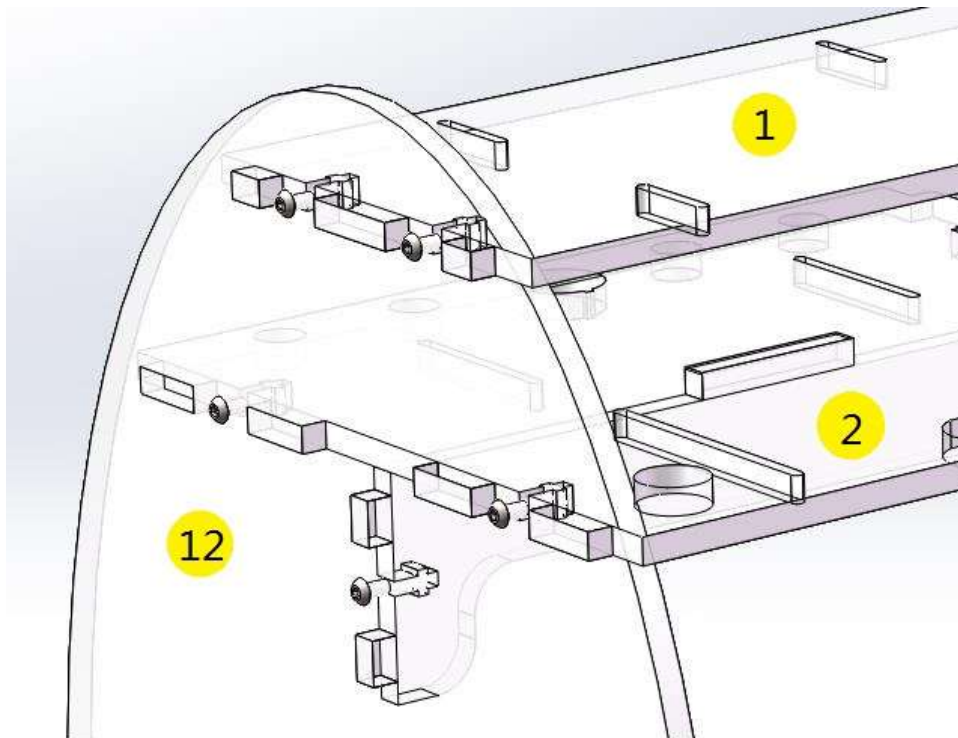
1. Fix the No.3 part into the notch of the No.2 part



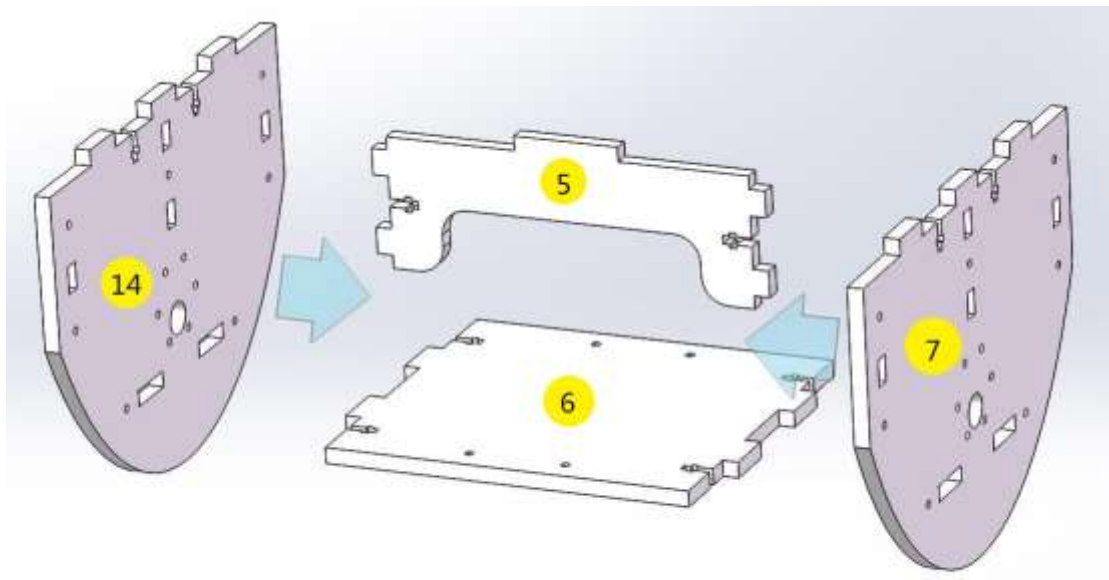
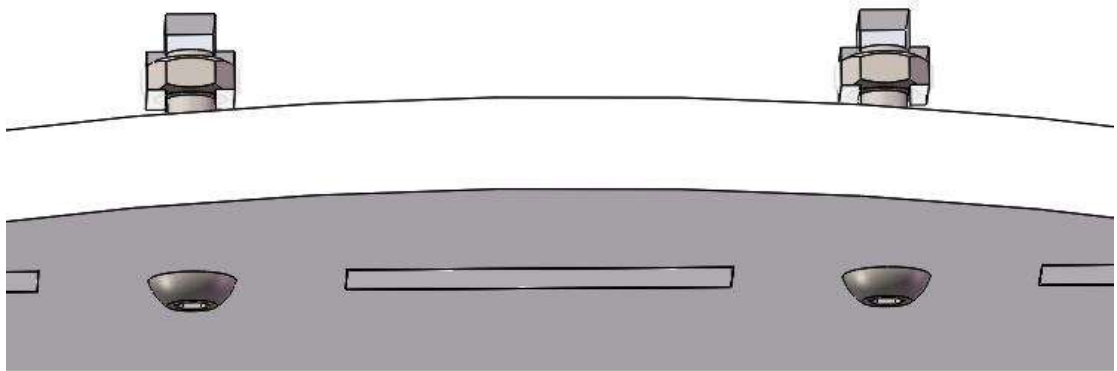
2. Then fix the No.2 part into the notch of the No.12 part.



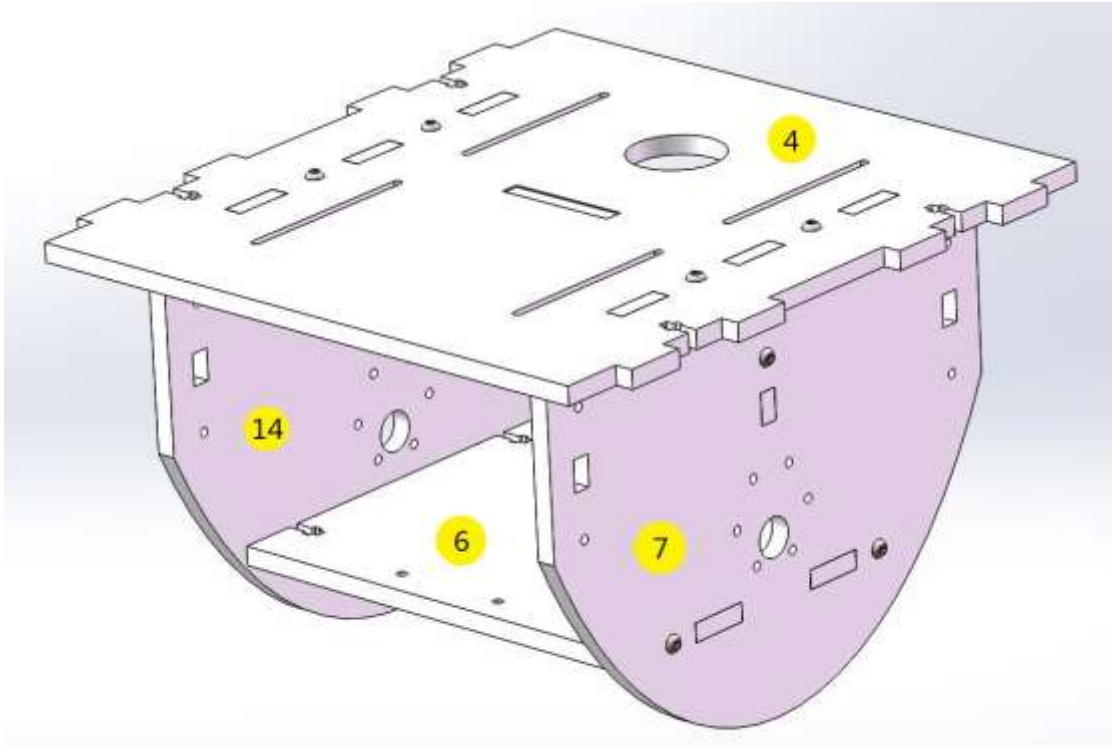
3. Fix the No.1 part into the notch of No.12



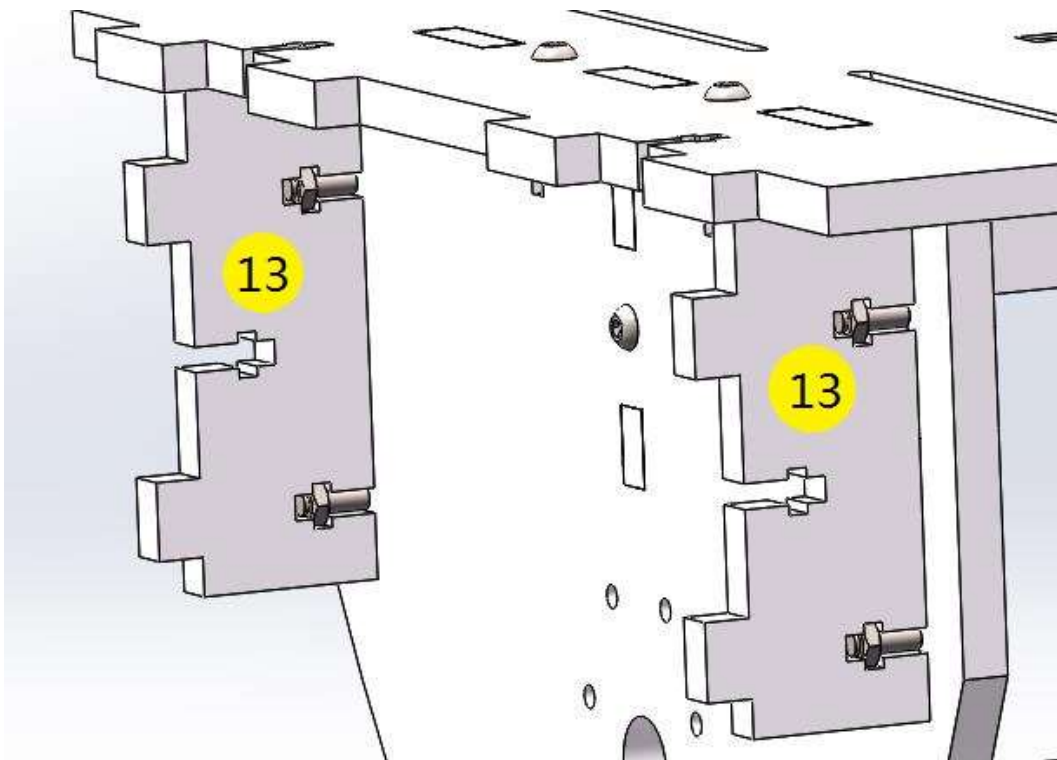
4. Fix all of the Screws on the No.12 part



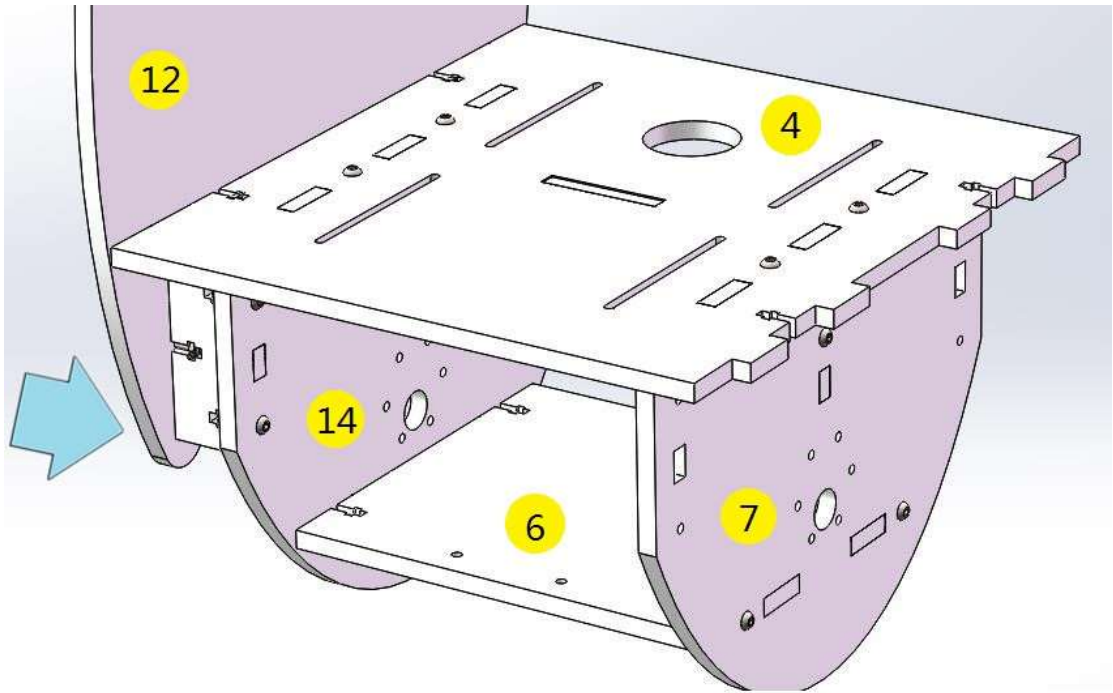
5. Fix each side of both No.5 part and No.6 part to the notch of both No.14 part and No.7 part



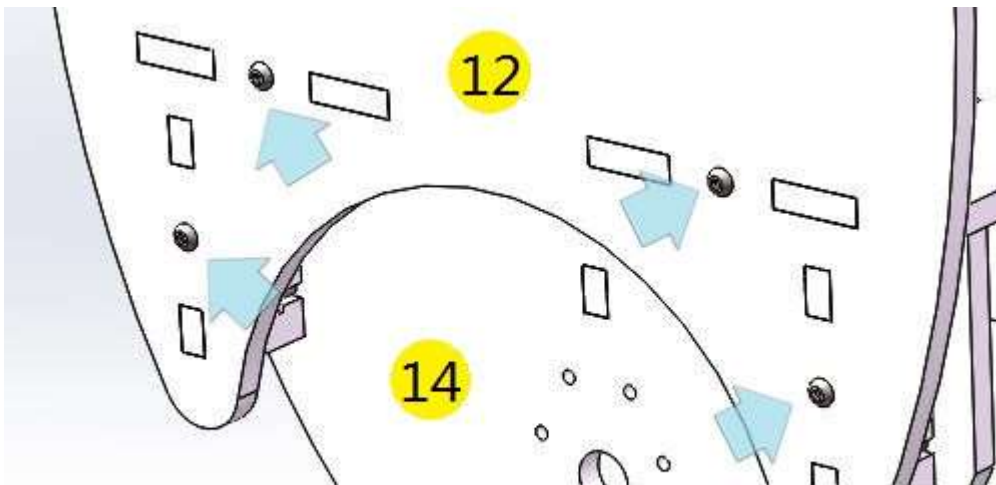
6. Fix both No.14 and the No.5 part into the notch of the No.4 part. And fix the screws on.

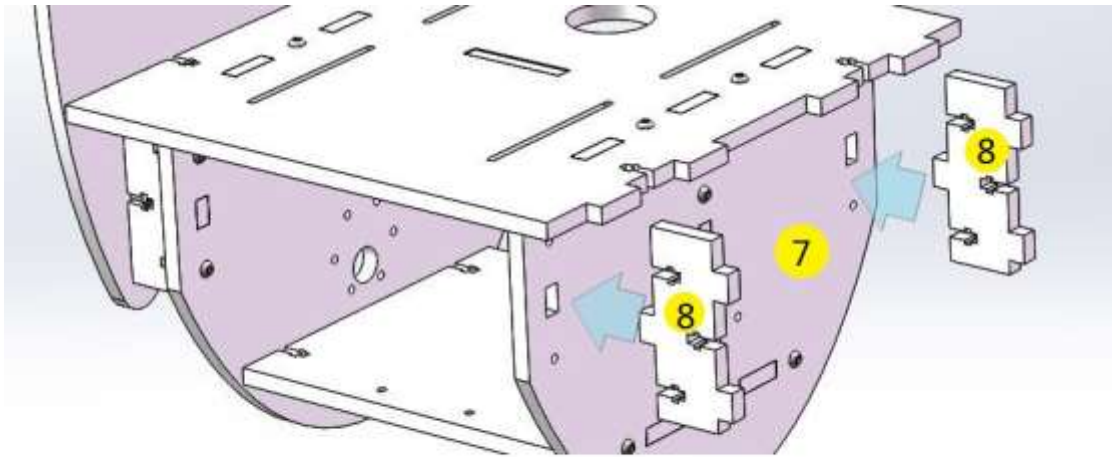


7. Fix the No.13 part into the notch of the notch of the No.14 part and

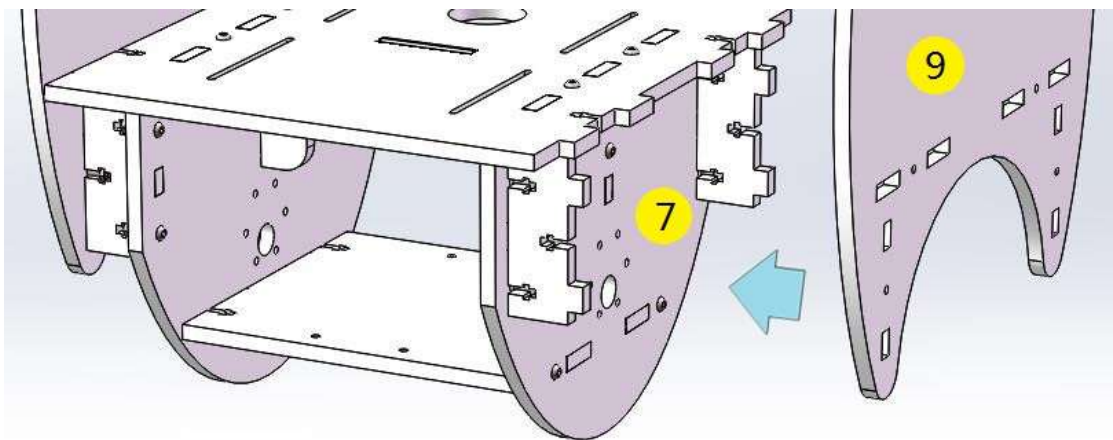


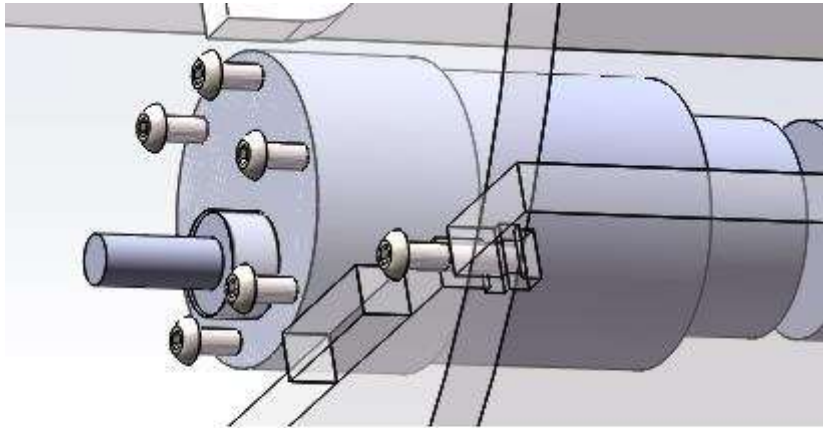
8. Fix all of the part which finished by the last step into the No.12 part.



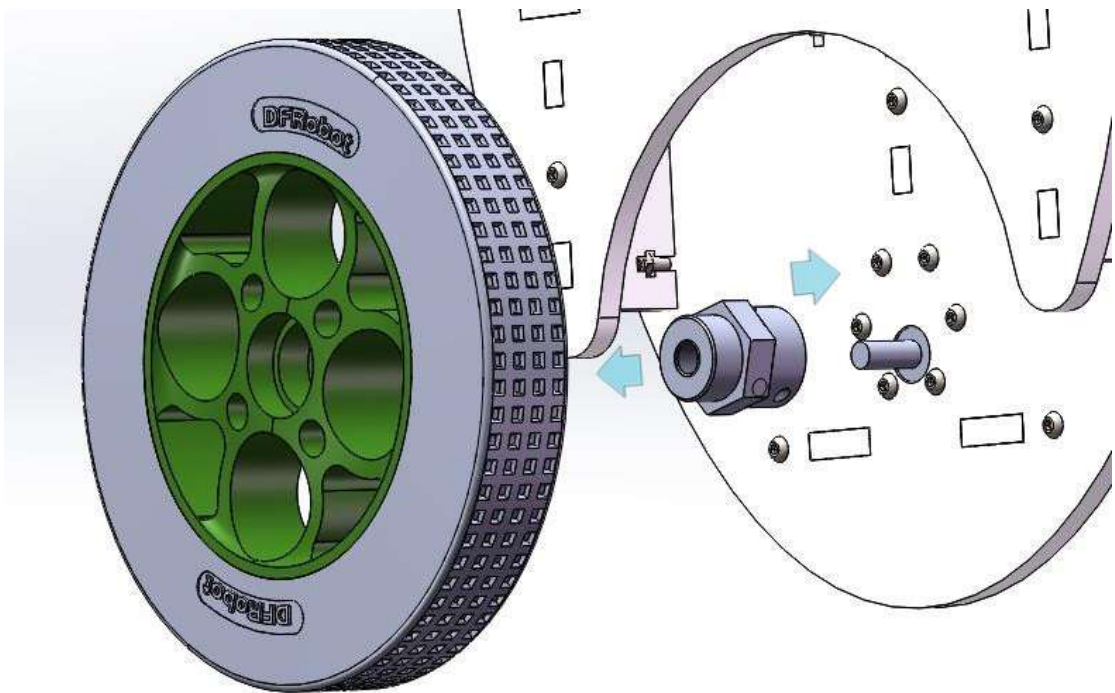


9. Do the same thing on the other side.

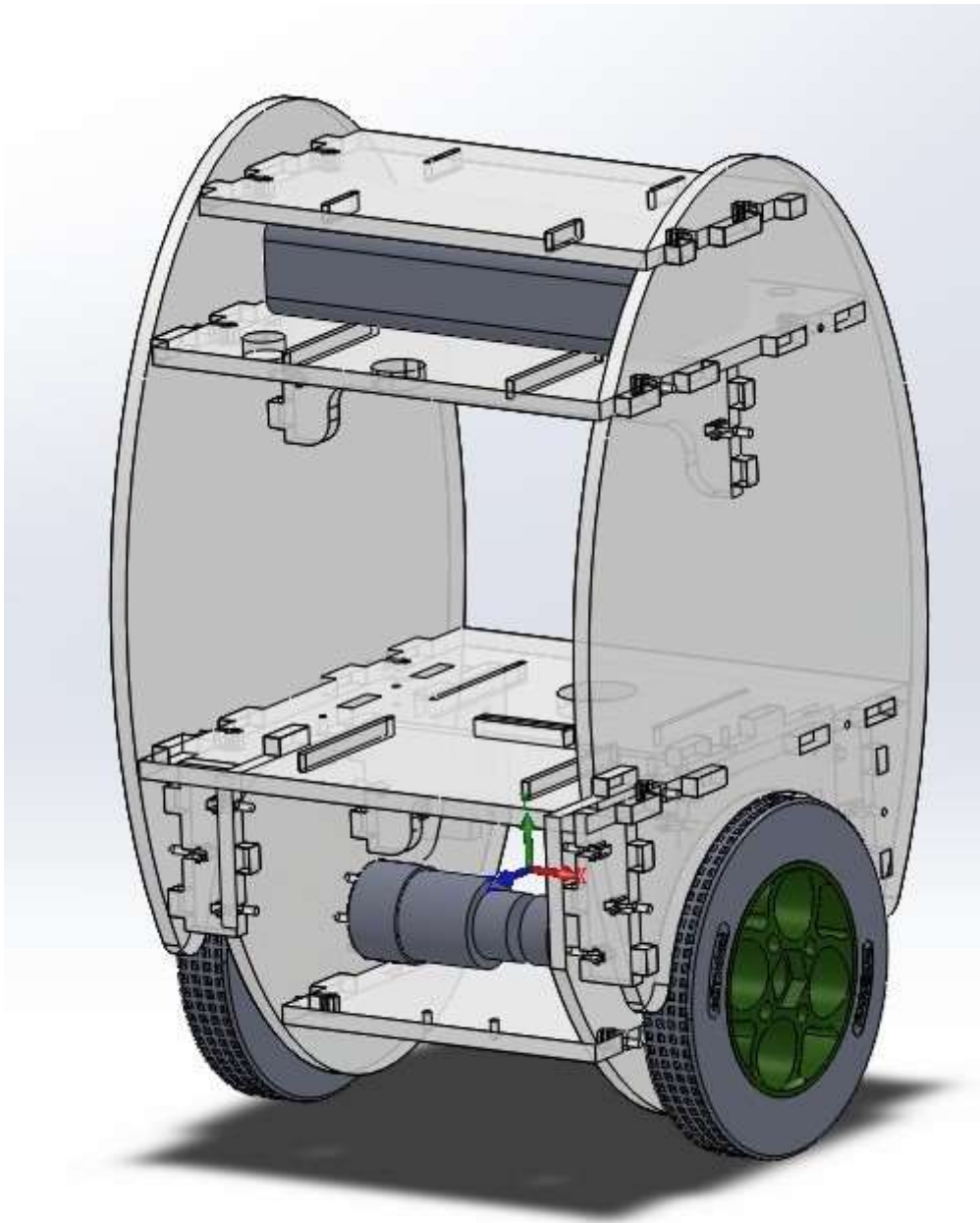




10. Fix the motors on the robot.



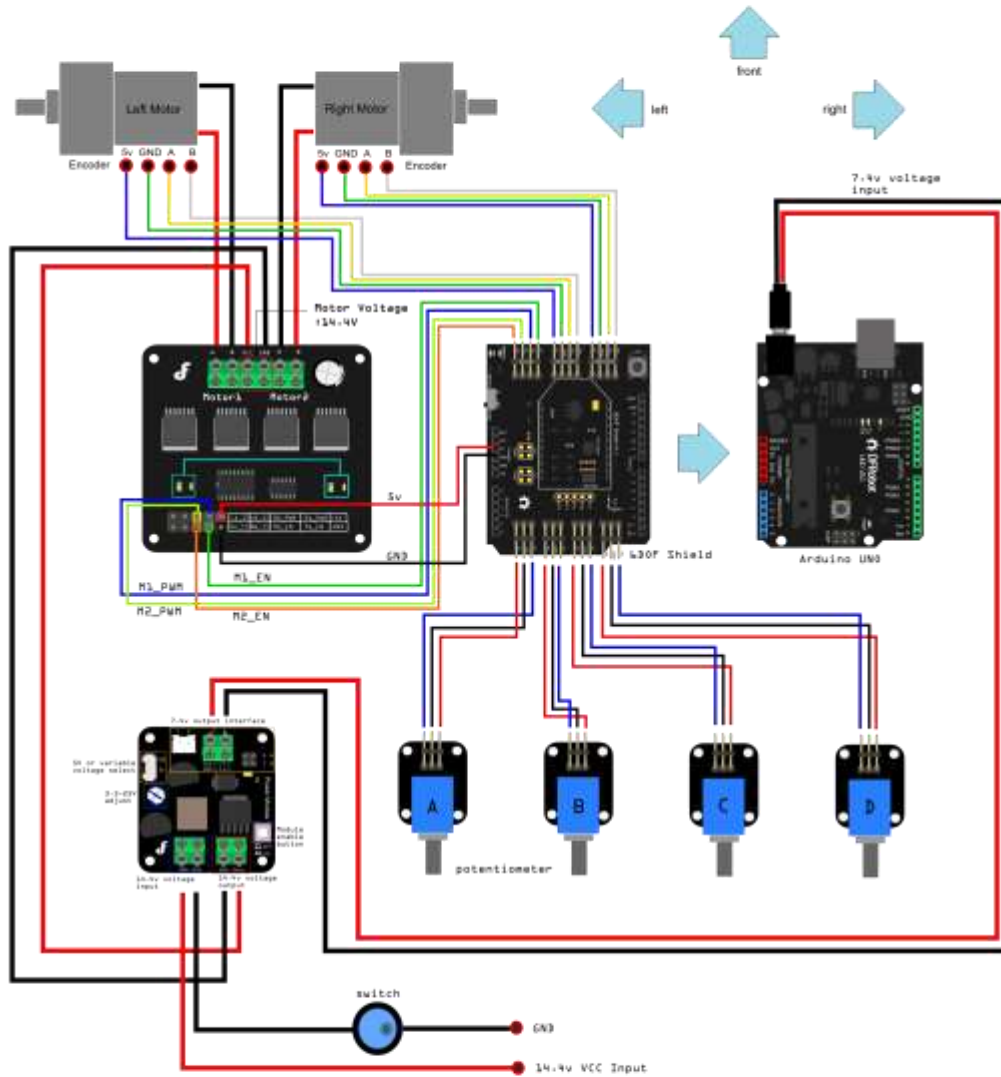
11. Fix on the wheels with couplings



Finished

2. Electronic Part

SCHEMATIC DIAGRAM



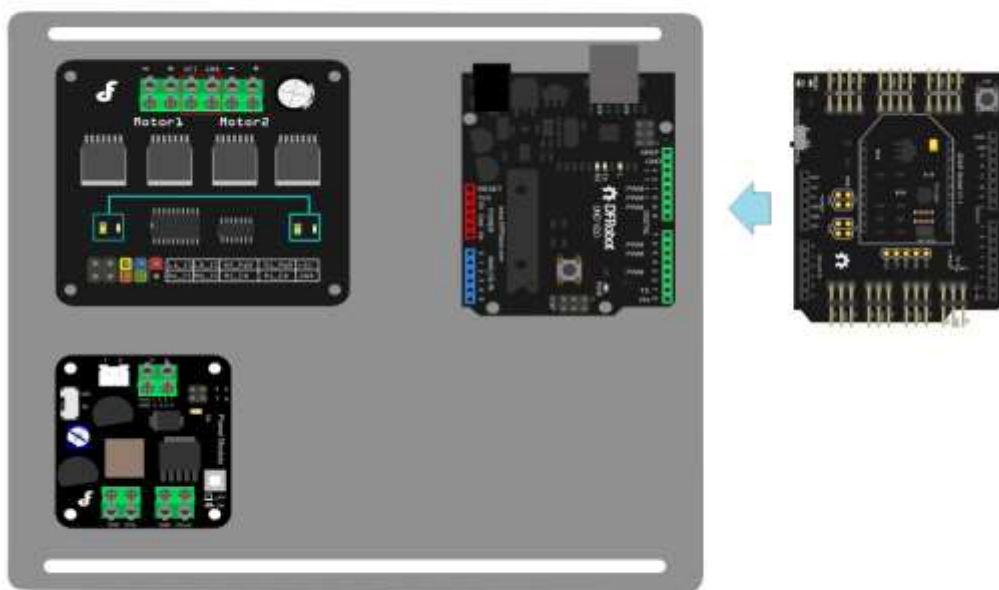
Design by kent

Part List

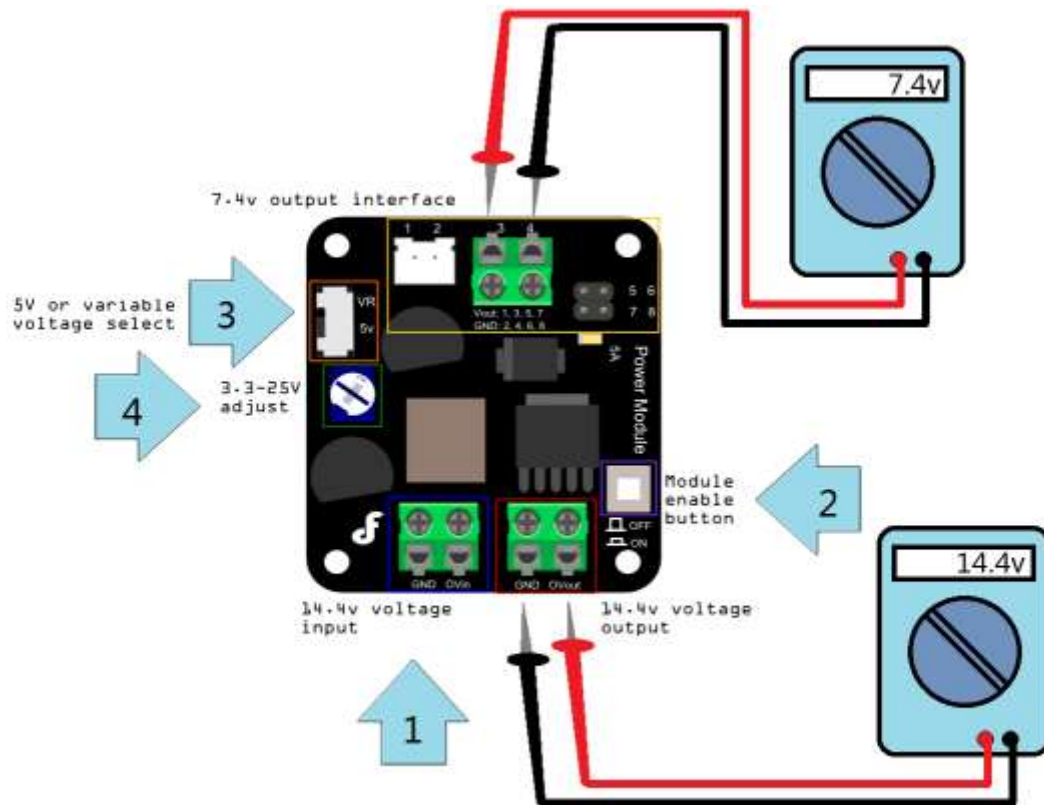
1. Arduino UNO
2. 6DOF Shield
3. DC-DC Power Module 25W
4. DC Motor Driver 2×15A - Lite
5. 12V Motor with encoder
- 6 .Switch
7. 参数调节电位器*4

Process

1. Fix all parts on the board and put the 6dof on the arduino UNO R3



3. Put on the battery and measure them



Now your balance robot kit is ready to work. Before the first use, please follow the instructions of the commissioning Manual