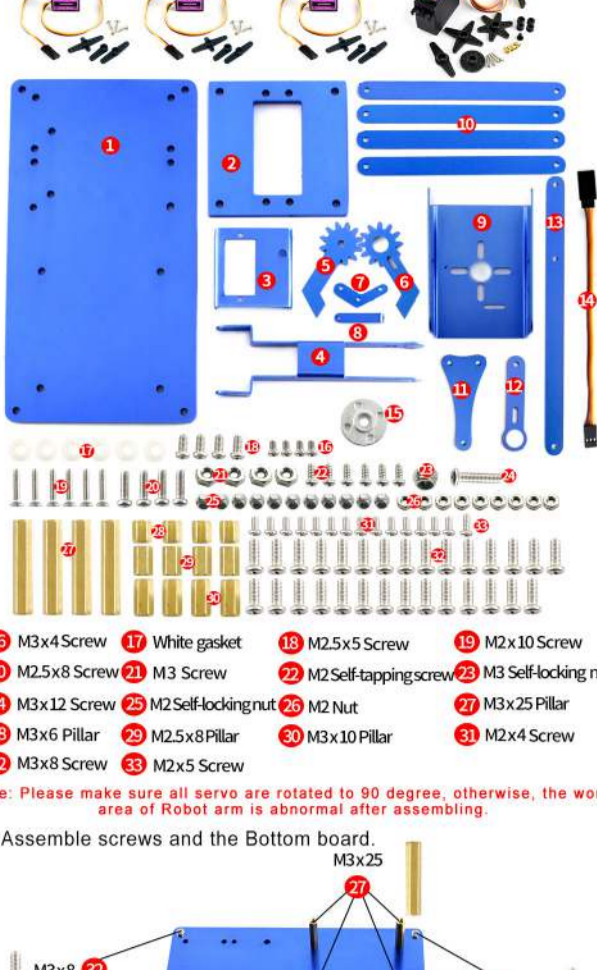


Robot Arm Assembly

MG90S Servo x3

MG996R Servo x1



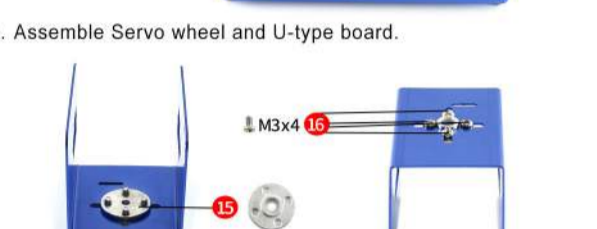
- 16 M3x4Screw 17 White gasket 18 M2.5x5 Screw 19 M2x10 Screw
- 20 M2.5x8 Screw 21 M3 Screw 22 M2Self-tapping screw 23 M3 Self-locking nut
- 24 M3x12 Screw 25 M2Self-lockingnut 26 M2 Nut 27 M3x25 Pillar
- 28 M3x6 Pillar 29 M2.5x8Pillar 30 M3x10 Pillar 31 M2x4 Screw
- 32 M3x8 Screw 33 M2x5 Screw

Note: Please make sure all servo are rotated to 90 degree, otherwise, the work area of Robot arm is abnormal after assembling.

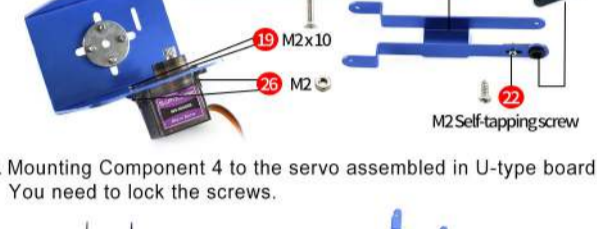
1. Assemble screws and the Bottom board.



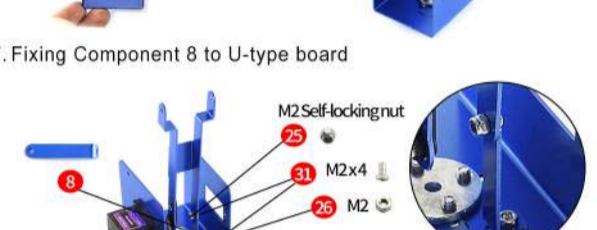
2. Assemble MG996R servo and Component 2.



3. Mounting servo to Bottom board, pay attention to the place of servo cable



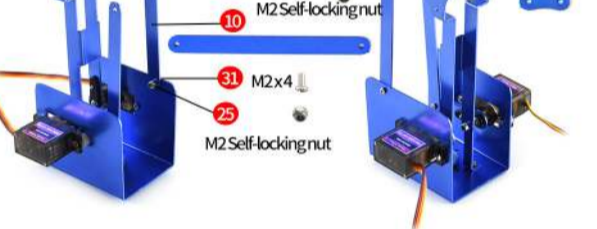
4. Assemble Servo wheel and U-type board.



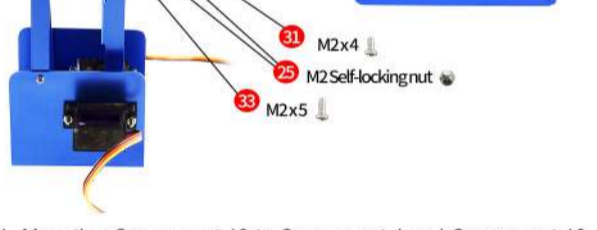
5. Assemble a MG90S servo and U-type board, and fixing the Single-side swing arm to Component 4



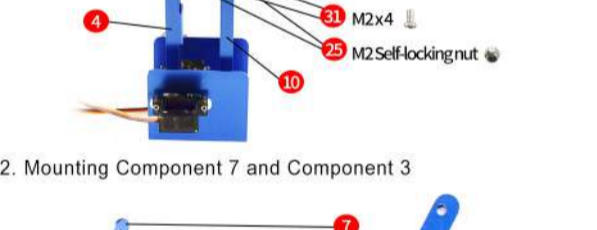
6. Mounting Component 4 to the servo assembled in U-type board. You need to lock the screws.



7. Fixing Component 8 to U-type board



8. Assemble 10 and 12 with another MG90S servo. and mounting it to U-type board



9. Fixing Component 10 to U-type board, then assemble Component 11 and Component 10.



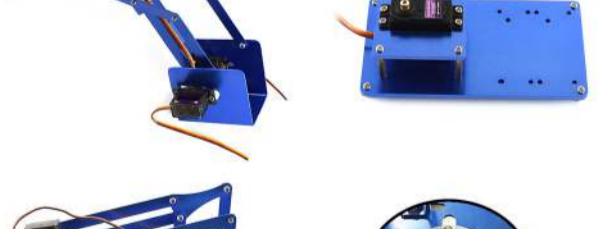
10. Fixing Component 11 to Component 10



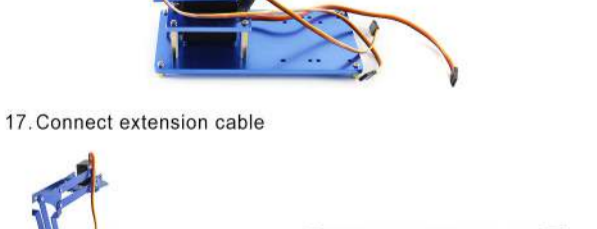
11. Mounting Component 13 to Component 4 and Component 10



12. Mounting Component 7 and Component 3



13. Then assemble the part of step 12 in the middle of Component 10 and Component 13



14. Assemble the last MG90S servo and Component 3



15. Mounting Component 5 and Component 6 on the Component 3



16. Mounting the part assembled above to Bottom board



17. Connect extension cable

18. Connect micro:bit

19. Connect Raspberry Pi

Cable Connection:
Connect pins to Channel 9, 1, 2 and Channel 3.
Codes should be modified as well if connection is changed
Yellow to yellow, red to red, black to black

Cable Connection:
Connect pins to Channel 9, 1, 2 and Channel 3.
Codes should be modified as well if connection is changed
Yellow to yellow, red to red, black to black