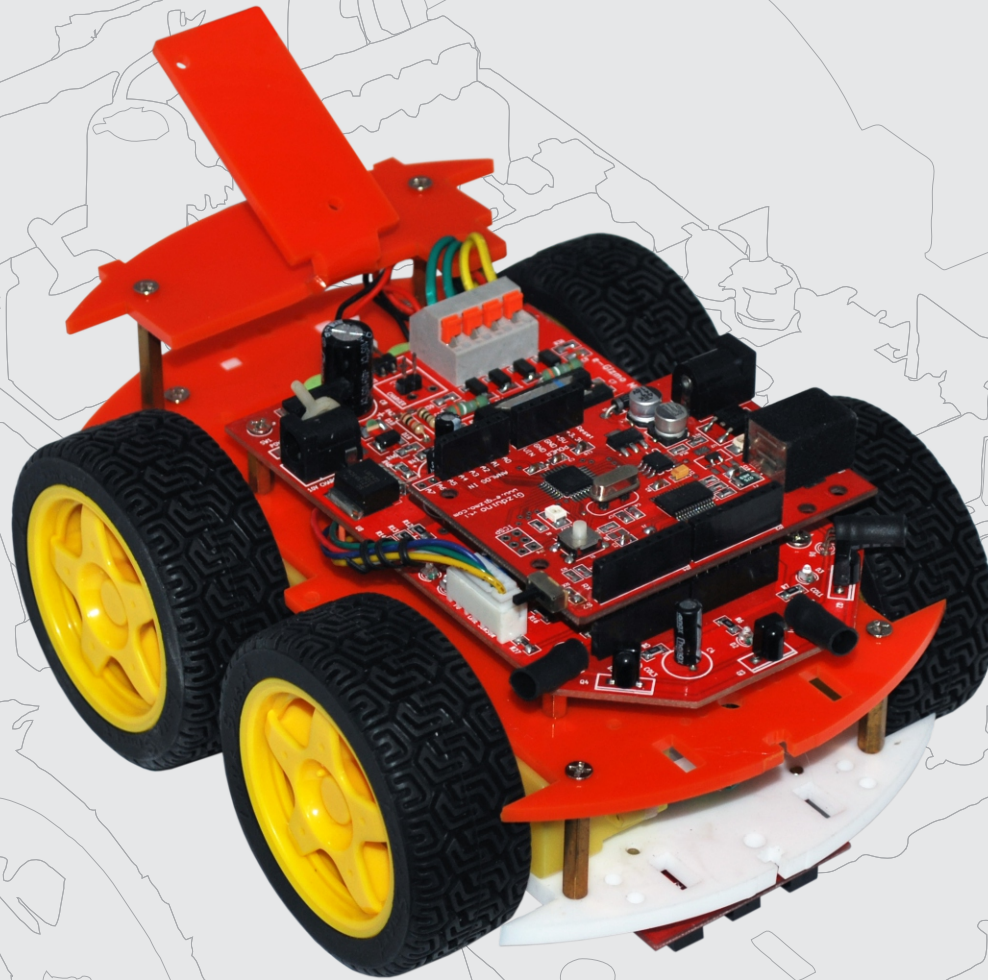


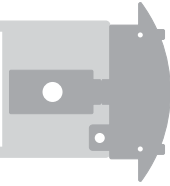
# E-BOT 4X4 ASSEMBLY MANUAL





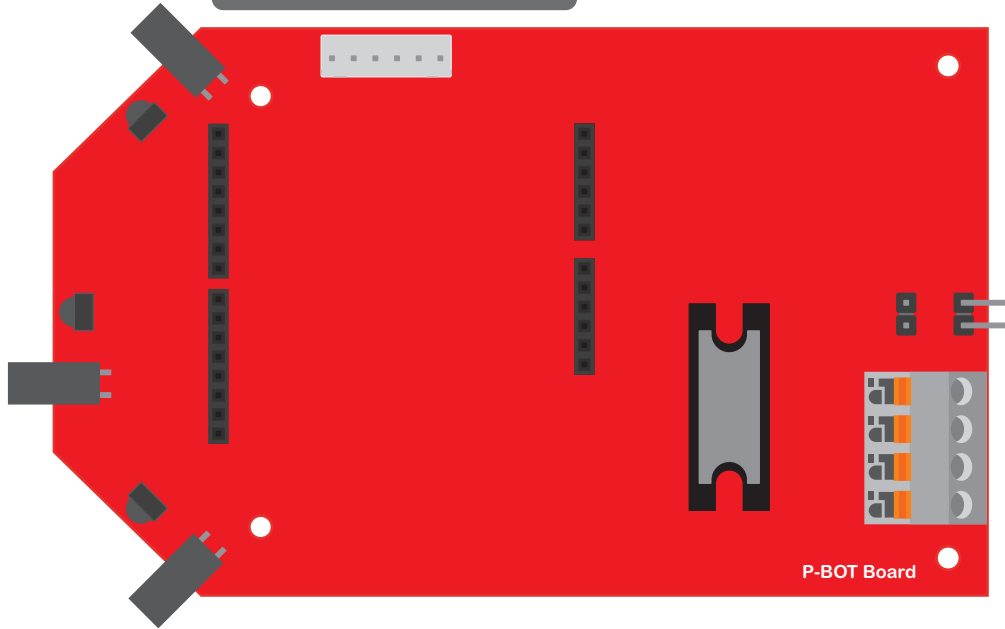
-BOT

4X4  
MOBILE ROBOT

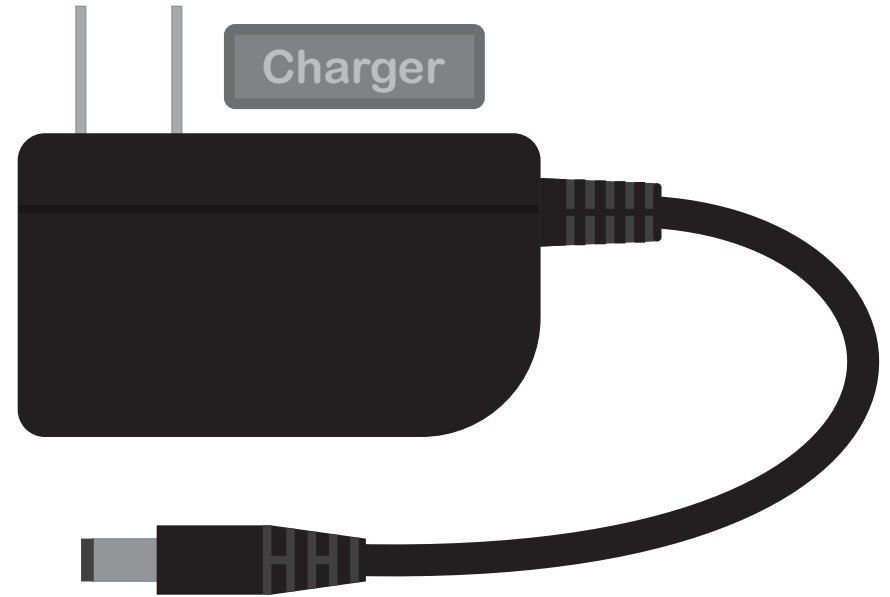


## PARTS CHECK LIST

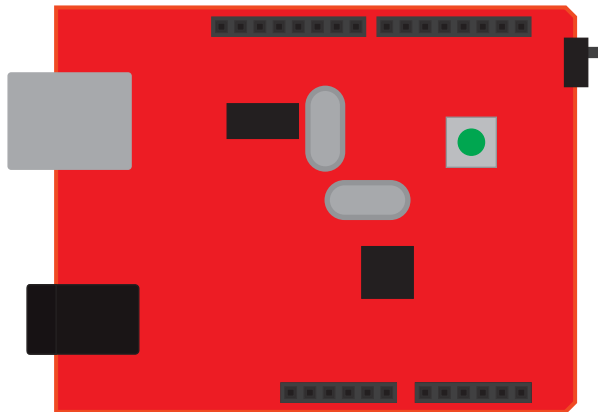
PBOT Board



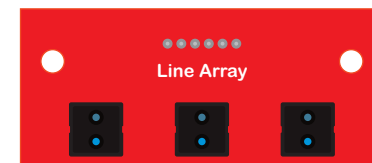
Charger



gizDuino 168

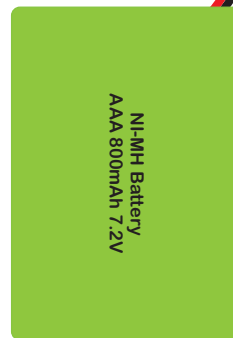


Line Array



NI-MH Battery  
AAA 800mAh 7.2V

Battery



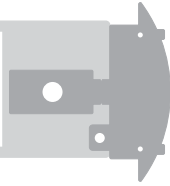
Line Array

Line Array



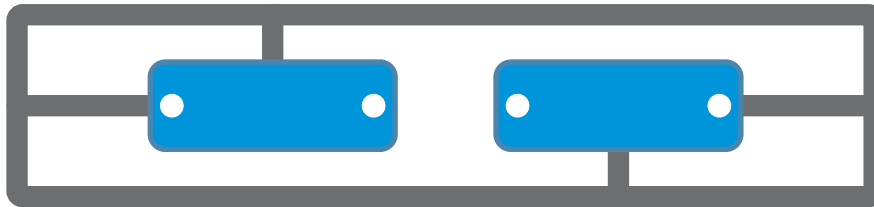
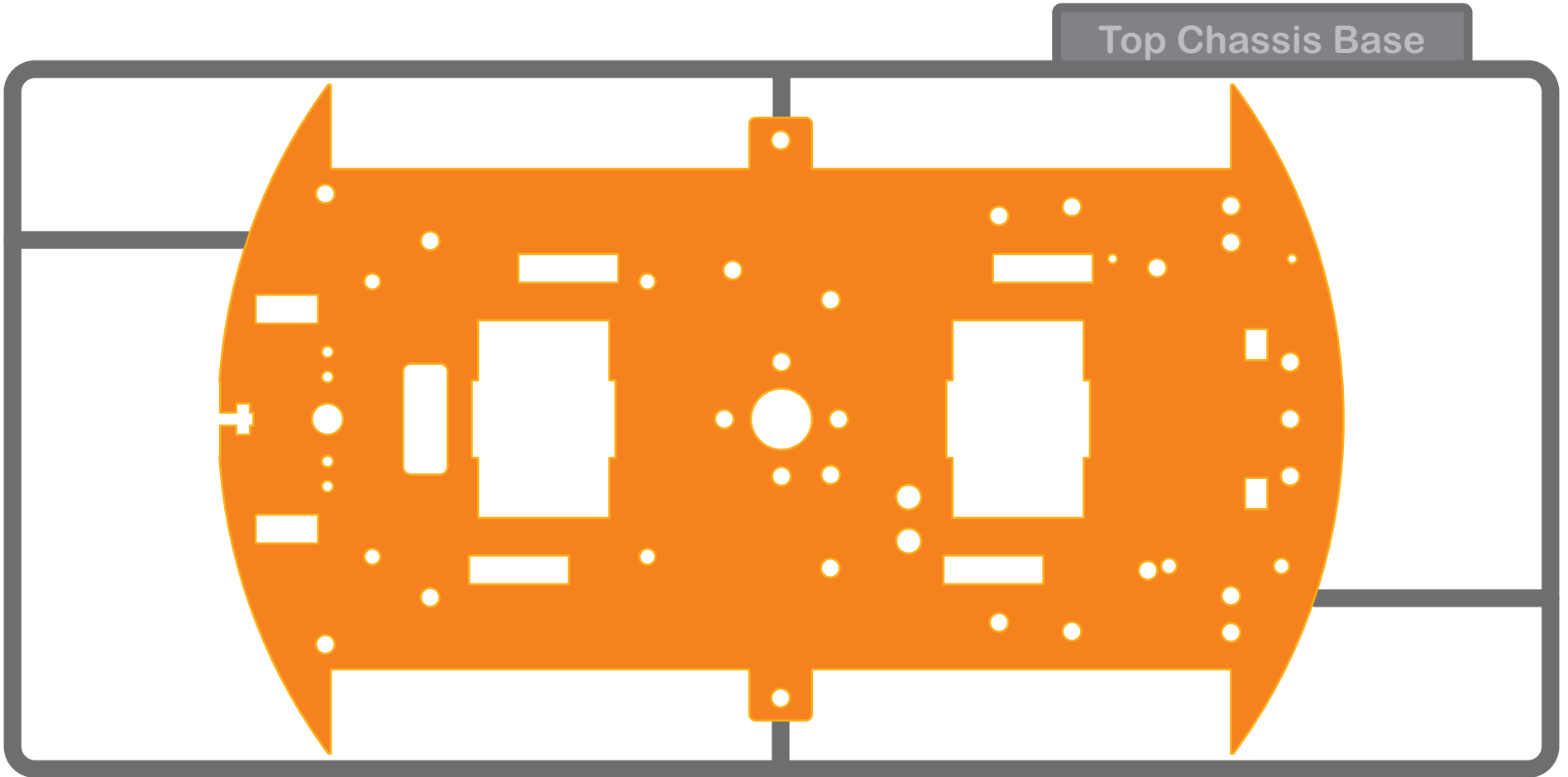
-BOT

4X4  
MOBILE ROBOT

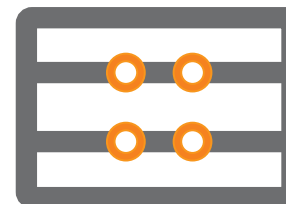


## PARTS CHECK LIST

Top Chassis Base



2Pcs Battery Support

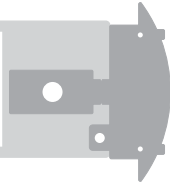


Line Array Spacer



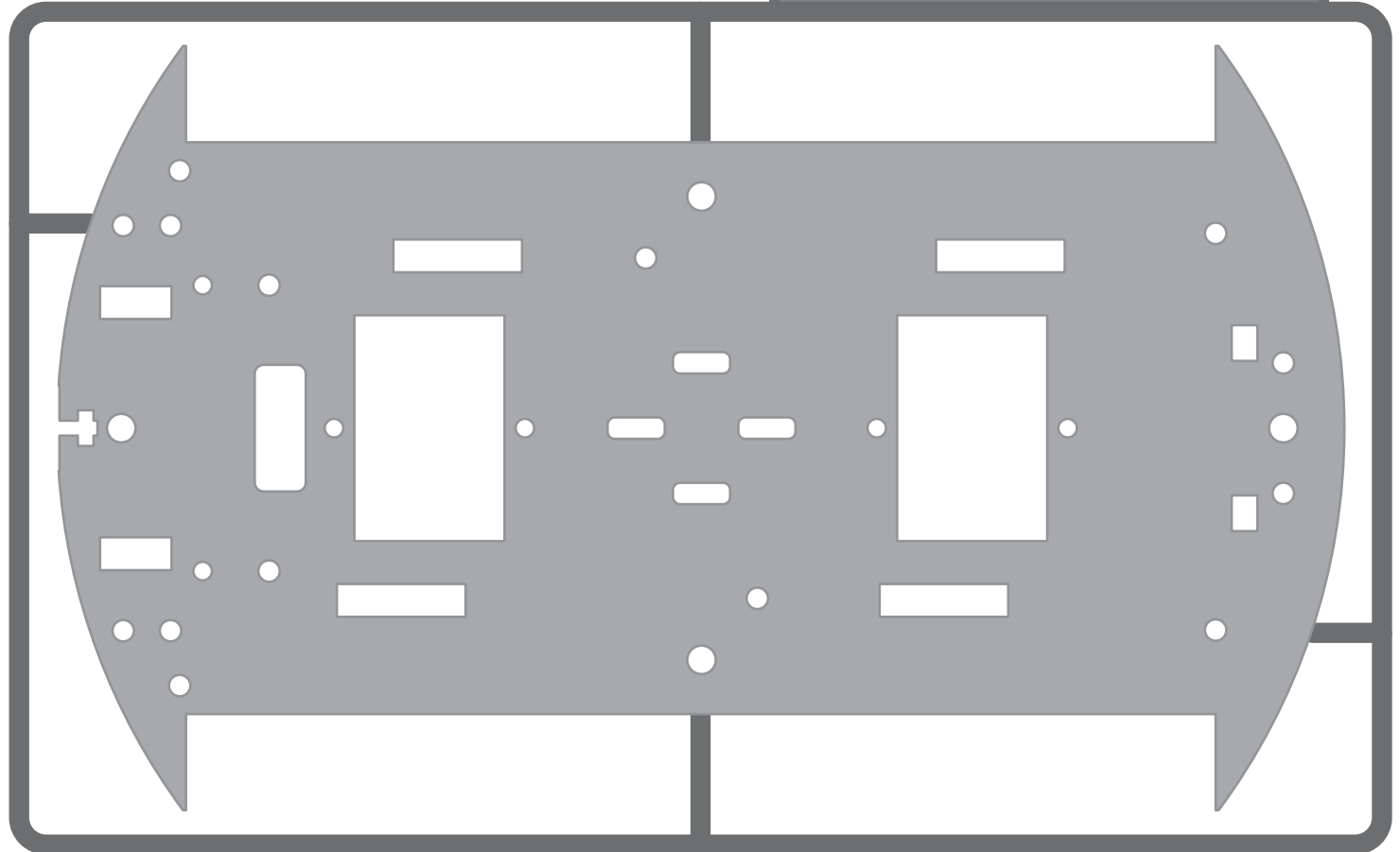
-BOT

4X4  
MOBILE ROBOT

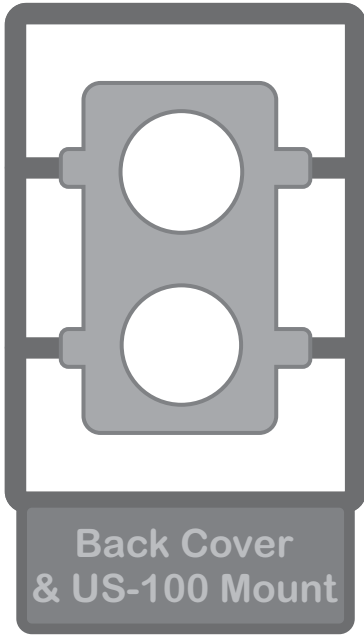


## PARTS CHECK LIST

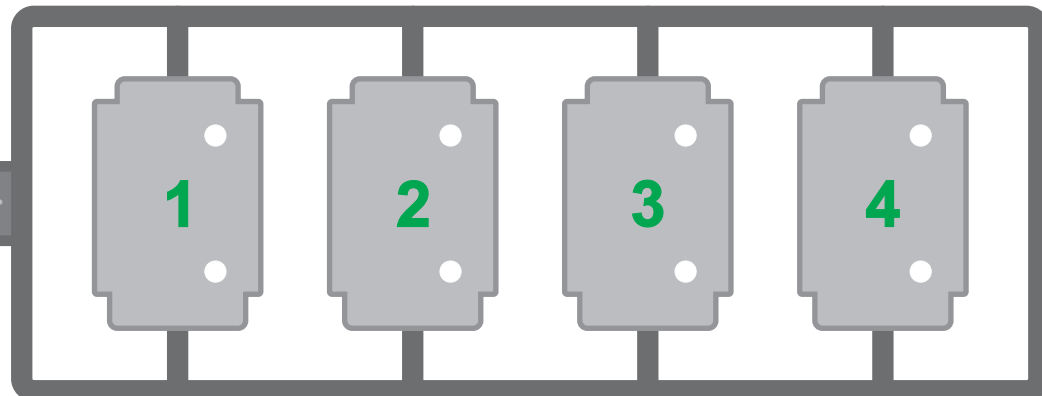
Bottom Chassis Base



Back Cover  
& US-100 Mount



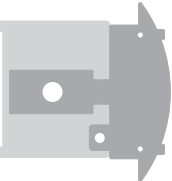
4Pcs Motor Holder



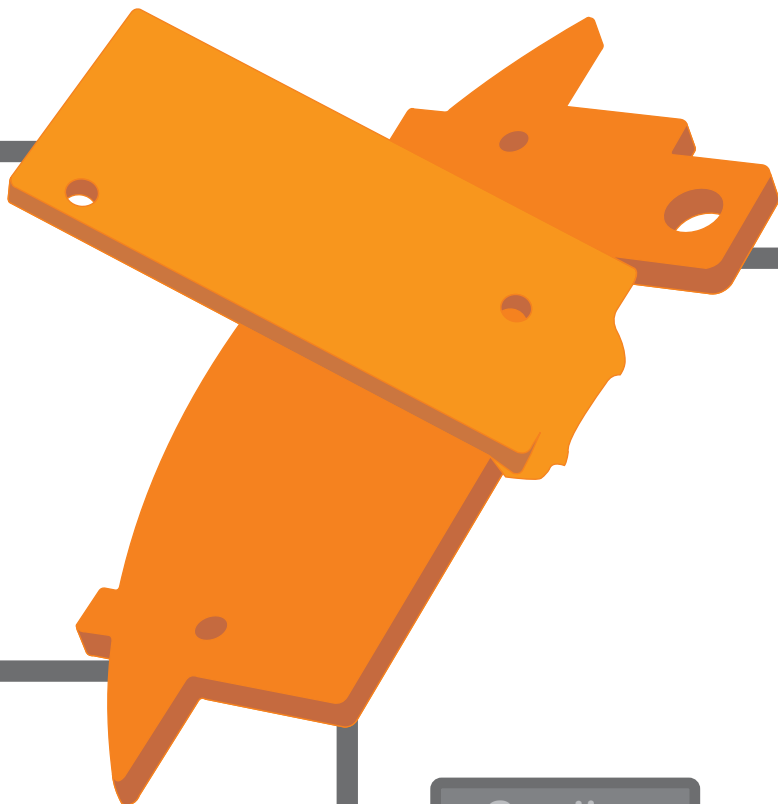


-BOT

4X4  
MOBILE ROBOT

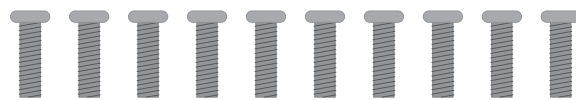


## PARTS CHECK LIST



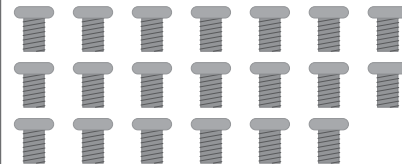
Spoiler

Screw

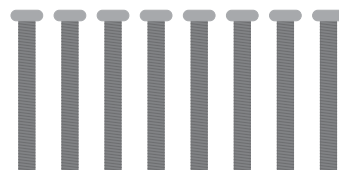


10Pcs 3X10

Screw



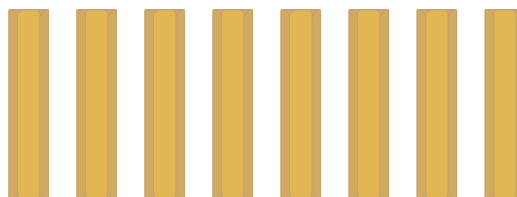
20Pcs 3X6



Screw & Nut

2X15

Brass Stud



8Pcs M3X25

Brass Stud



4Pcs M3X13

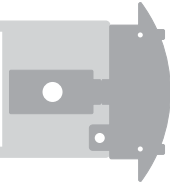
222mm Stranded Wire





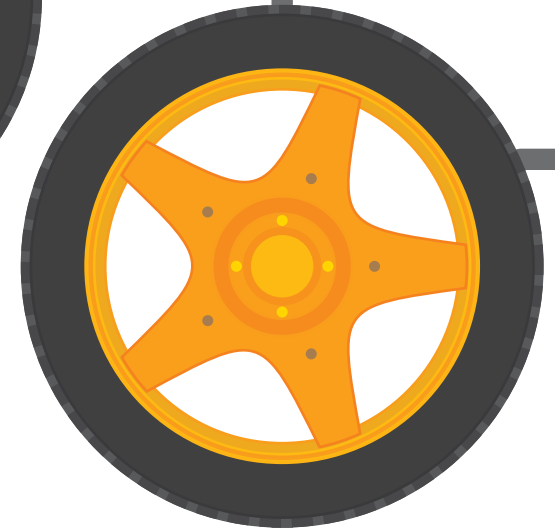
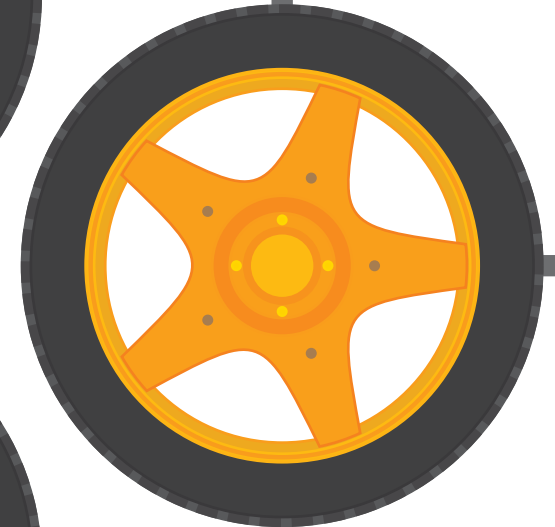
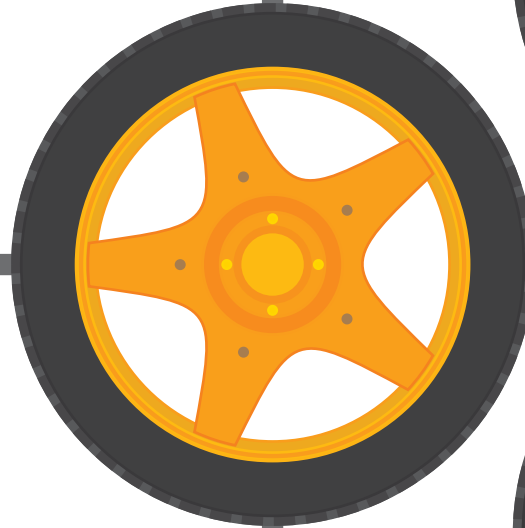
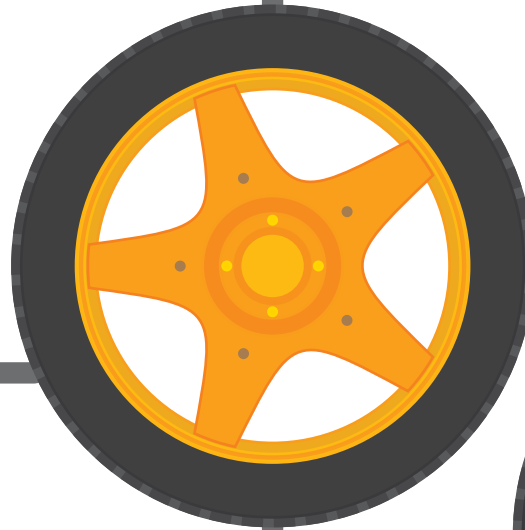
-BOT

4X4  
MOBILE ROBOT

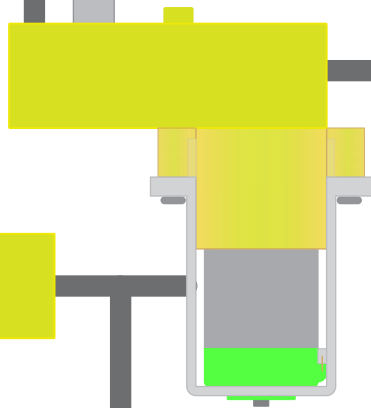
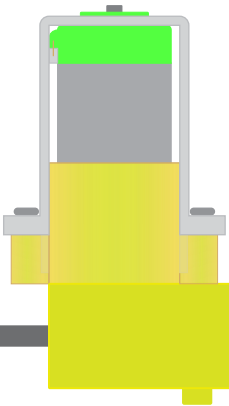
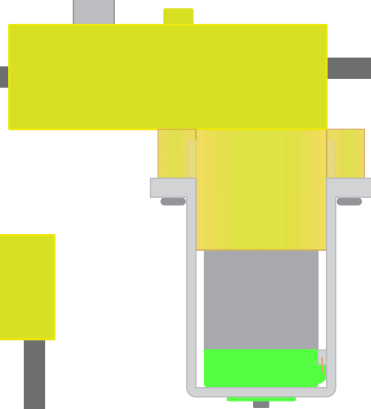
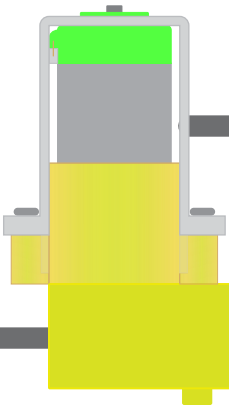


## PARTS CHECK LIST

4 Pcs e-Wheel



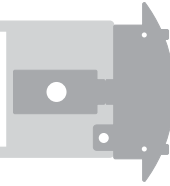
4 Pcs 6V DC Motor





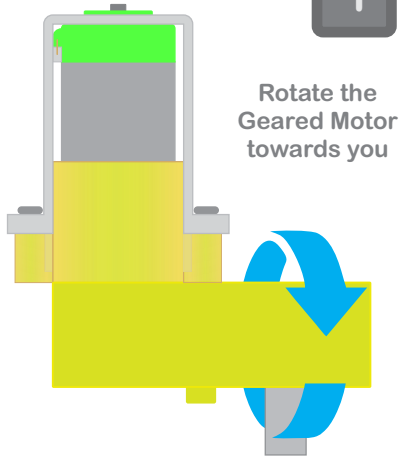
# -BOT

4X4  
MOBILE ROBOT

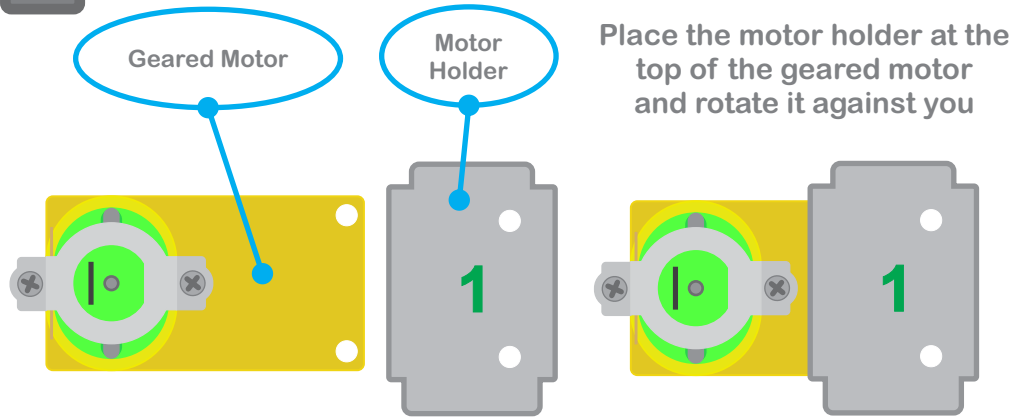


## ASSEMBLY PROCEDURE MOTOR & WHEEL

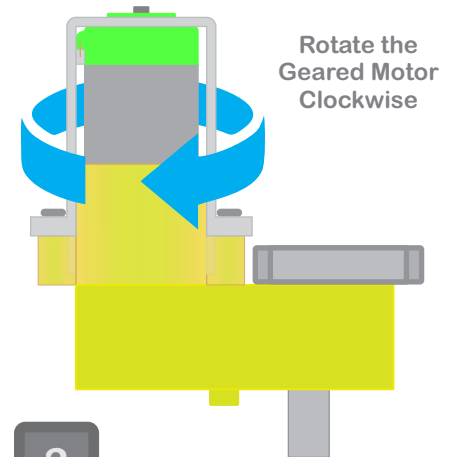
1



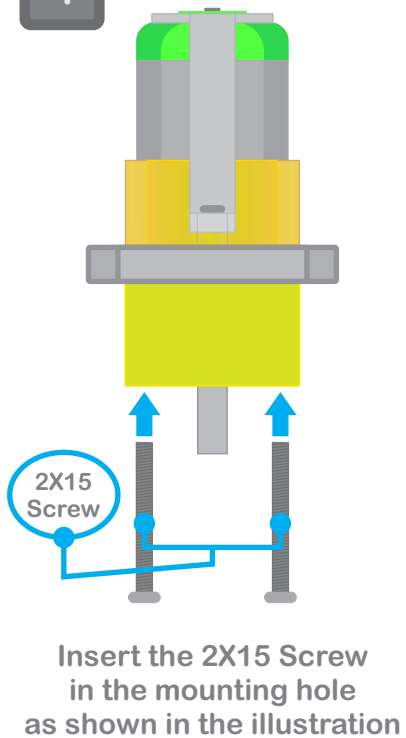
2



3



4



Place the nut at the tip of the screw

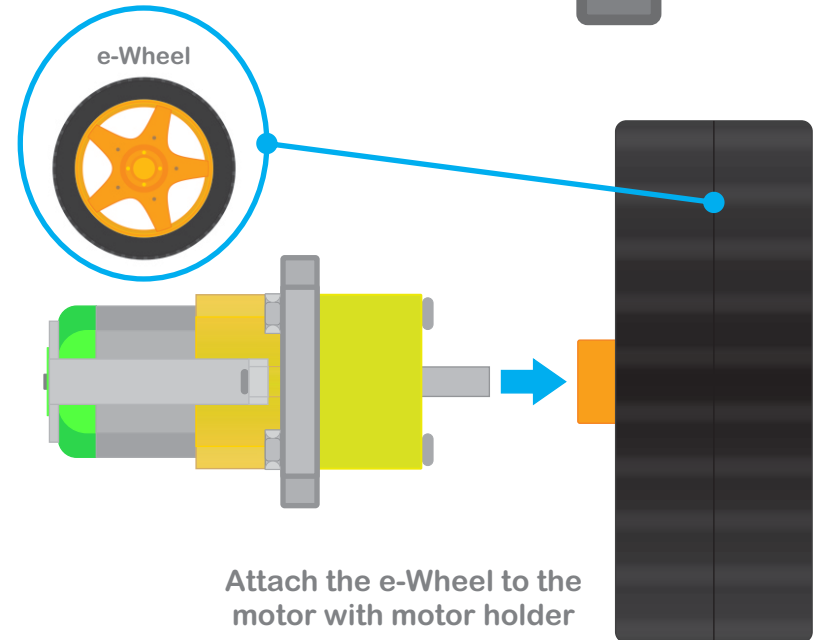
NUT

Tighten the Screw and Nut using a Phillips screw twist it clockwise to tighten

5



6

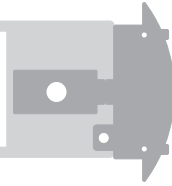


Repeat all the steps for motor, motor holder, and e-wheel 2,3,& 4



# -BOT

4X4  
MOBILE ROBOT



## ASSEMBLY PROCEDURE MOTOR & WHEEL

For this step, we need a soldering iron and soldering lead and a little soldering experience to proceed.



Caution!

Soldering Iron is a tool used to melt leads and apply it to a circuit board.

Contact to soldering tip and barrel may cause skin burn.

Assistance from experienced person is **STRICTLY** advised.

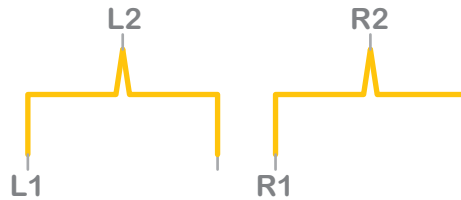
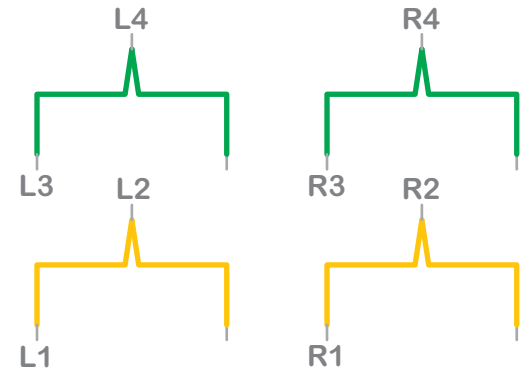
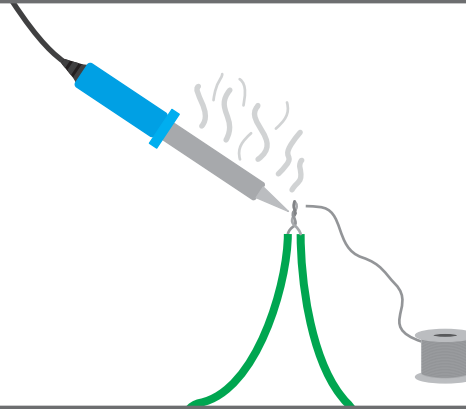
**HOT SURFACE!**



Grab 2pcs of stranded wire (same color) and twist the wire's strands.

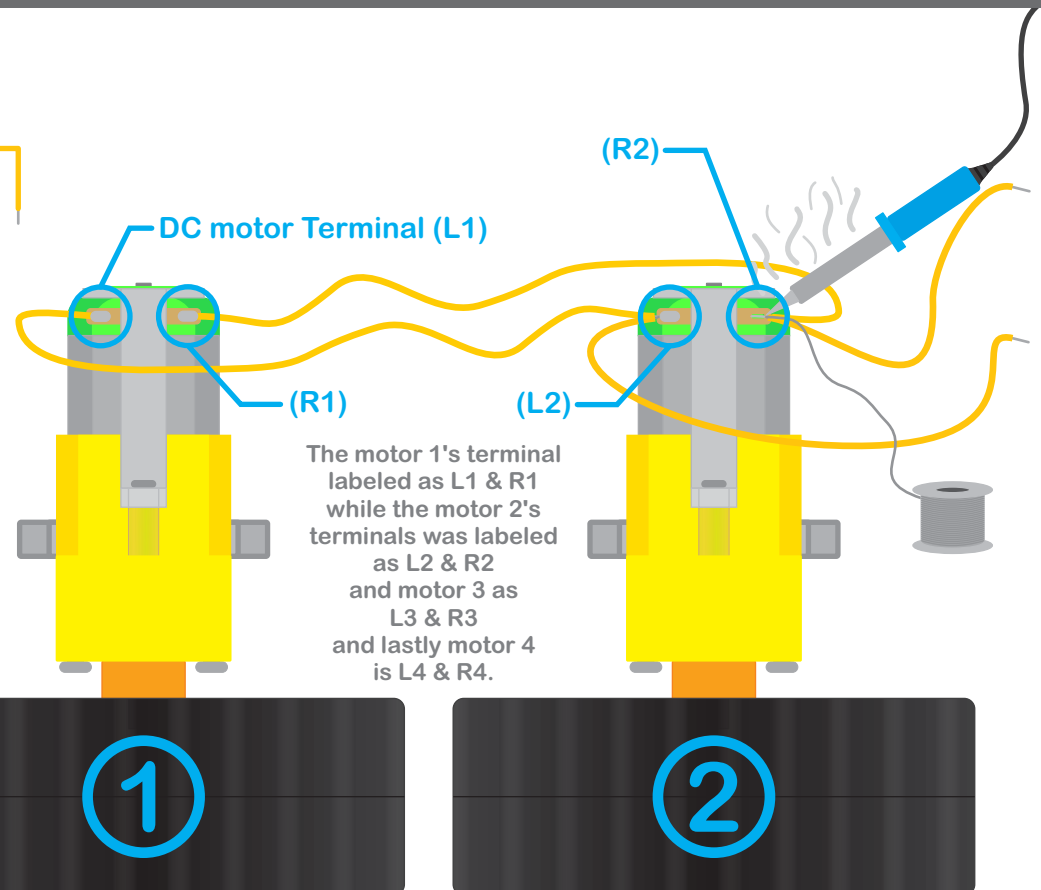
After twisting, solder the twisted strands to make it inseparable and easy solder joint for later.

Do this to all 8 stranded wires



Solder the wires to their corresponding motor terminals.

Motor number can be seen at the motor holder.



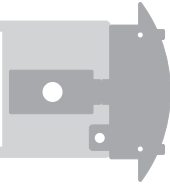
The motor 1's terminal labeled as L1 & R1 while the motor 2's terminals was labeled as L2 & R2 and motor 3 as L3 & R3 and lastly motor 4 is L4 & R4.



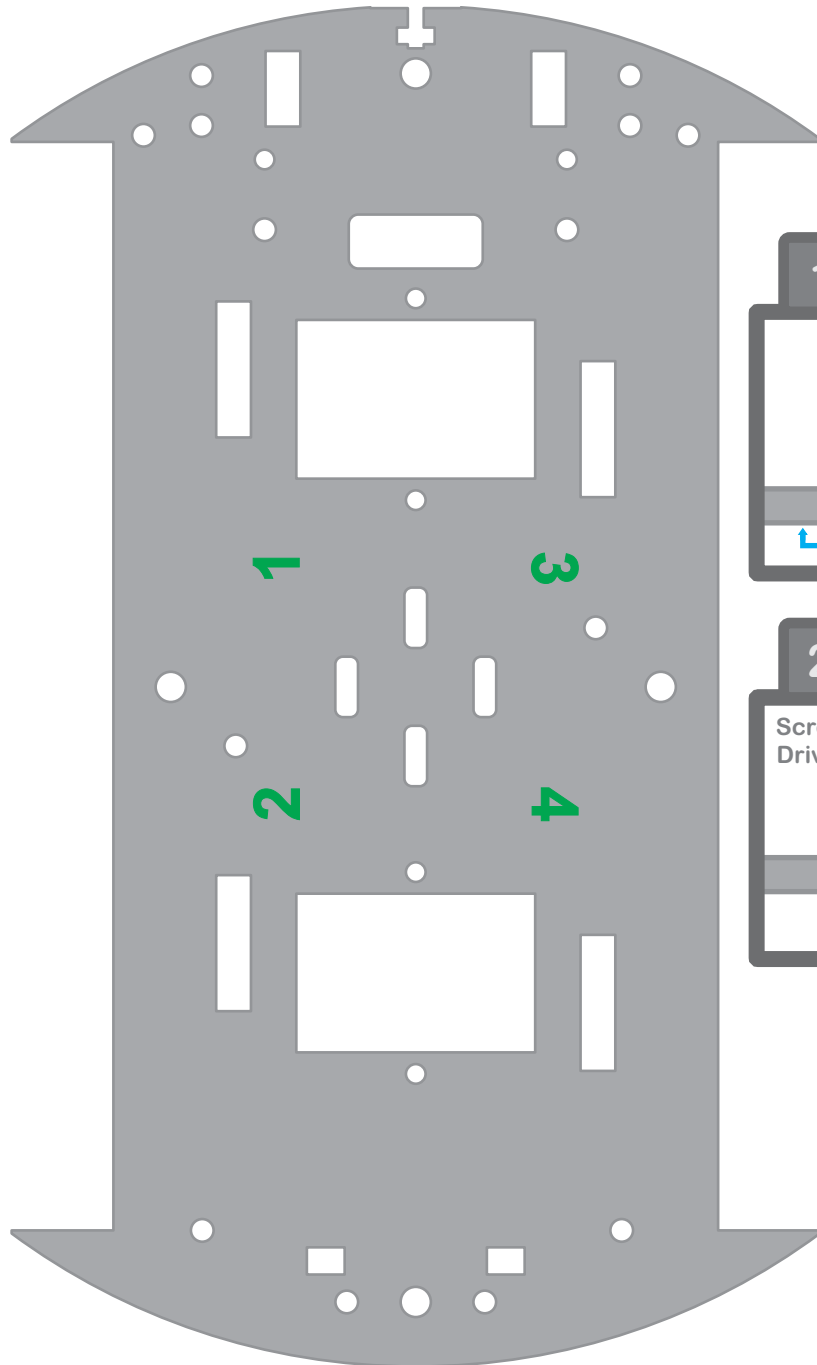


-BOT

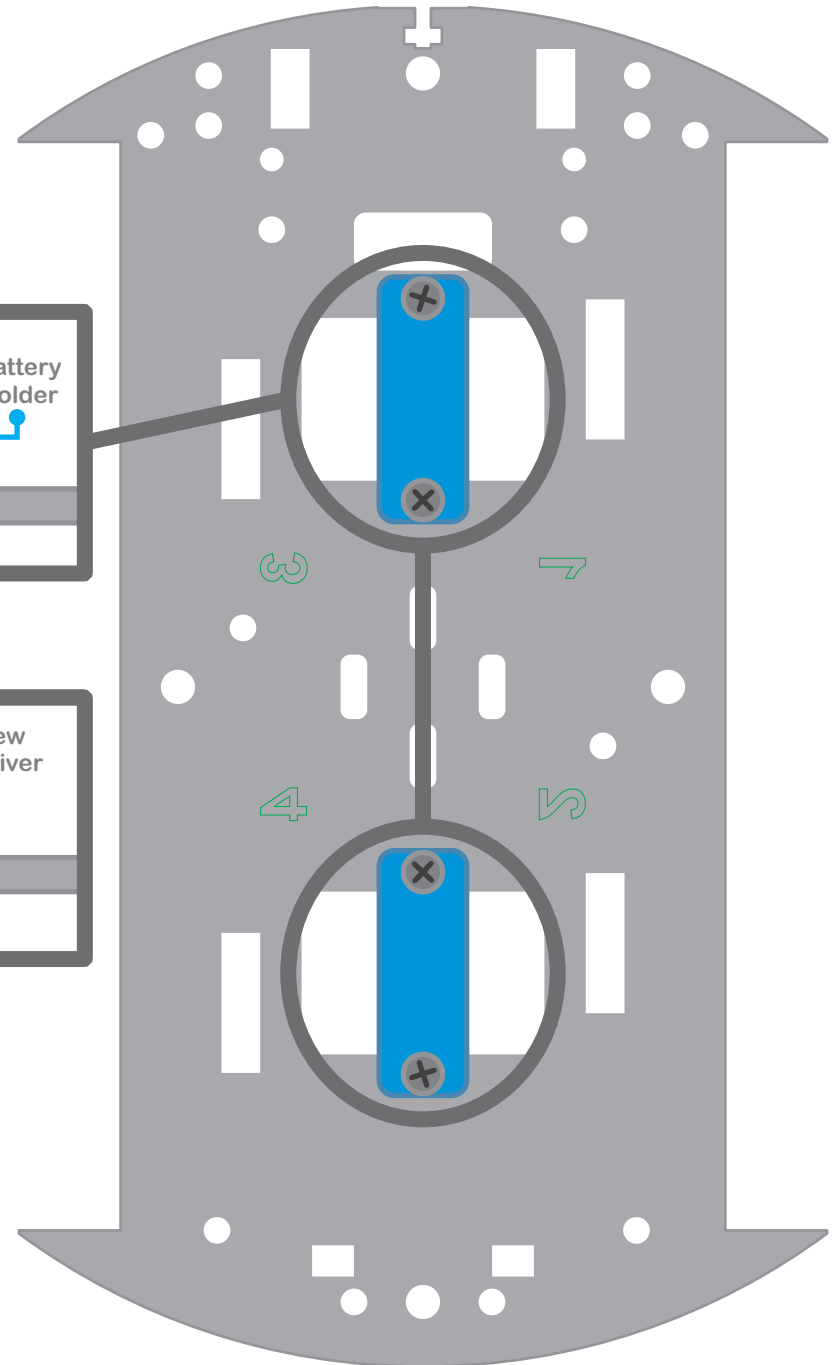
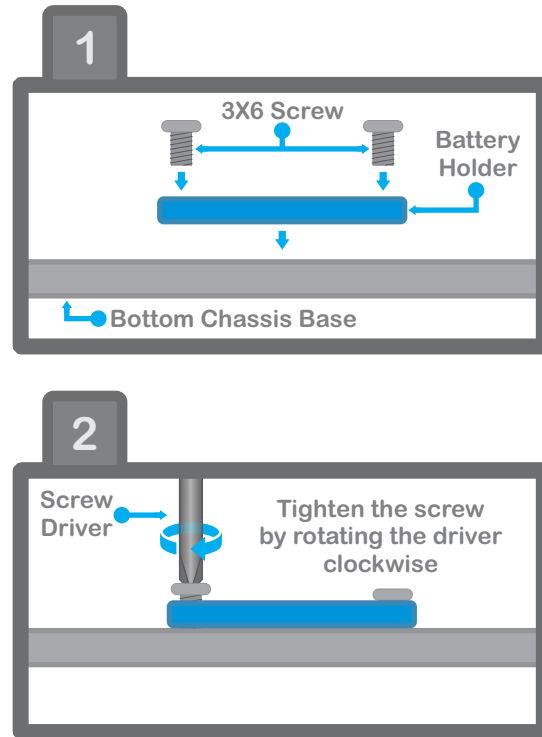
4X4  
MOBILE ROBOT



# ASSEMBLY PROCEDURE BODY CHASSIS



Bottom Chassis Base (Top Surface)



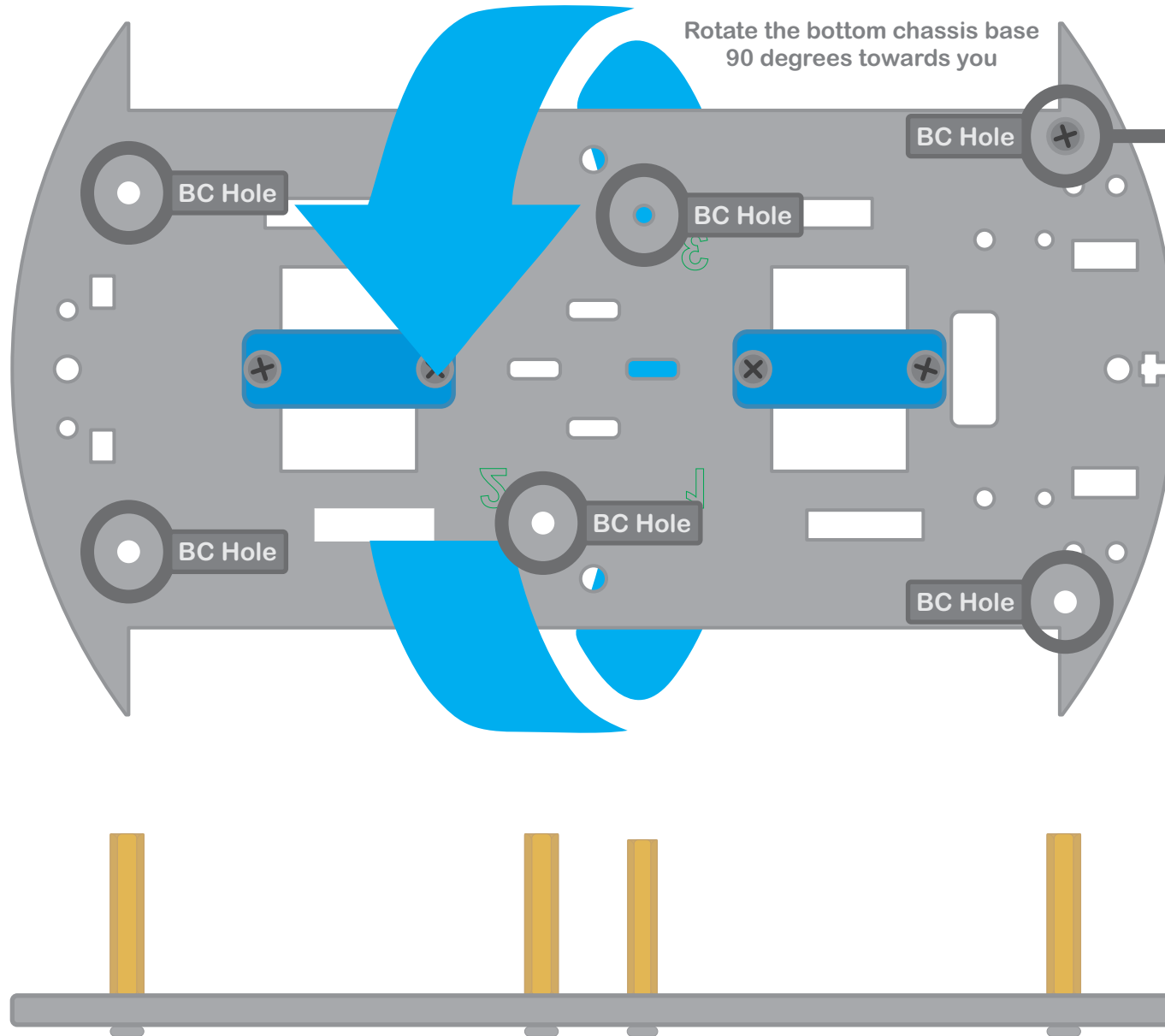
Bottom Chassis Base (Bottom Surface)



-BOT

4X4  
MOBILE ROBOT

# ASSEMBLY PROCEDURE BODY CHASSIS



1

Brass Stud M3X25

Bottom Chassis (Top Surface)

Bottom Chassis (Bottom Surface)

3X10 Screw

2

Tighten the screw and  
Brass Stud by  
rotating the driver  
clockwise

Do this step to all "BC Holes"

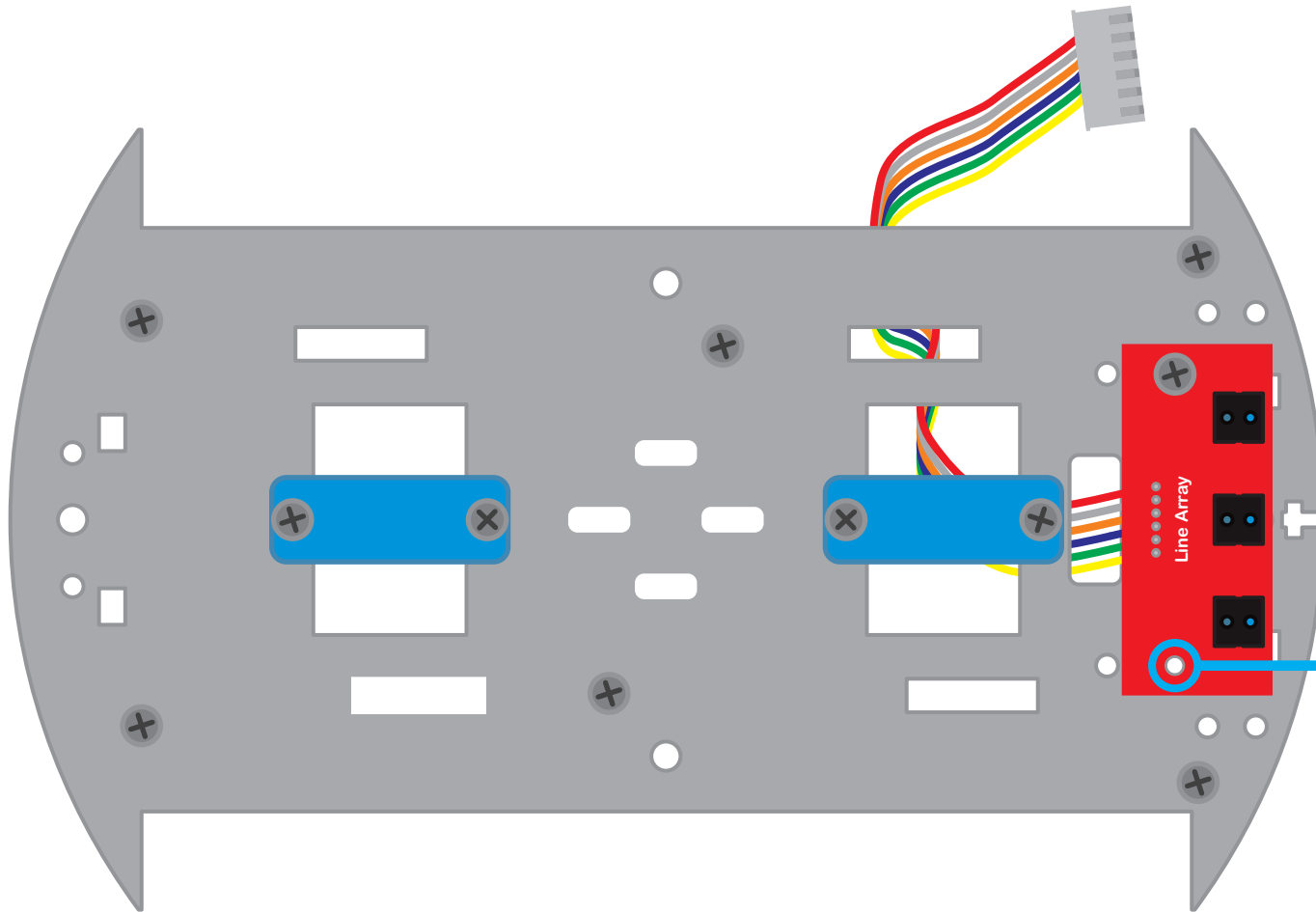
Screw  
Driver



-BOT

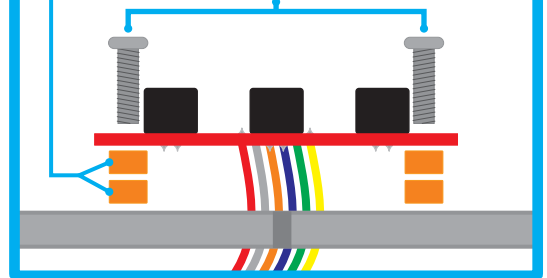
4X4  
MOBILE ROBOT

# ASSEMBLY PROCEDURE LINE SENSOR



1

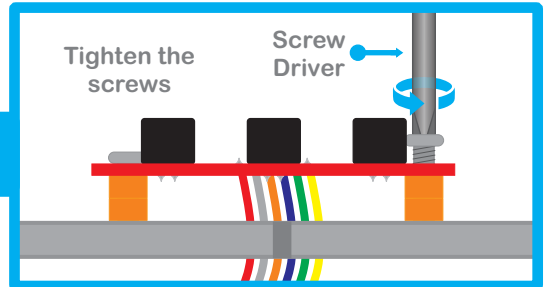
Line Array Spacer  
3x10 Screw



2

Tighten the  
screws

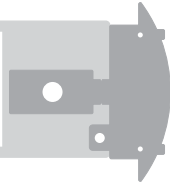
Screw  
Driver



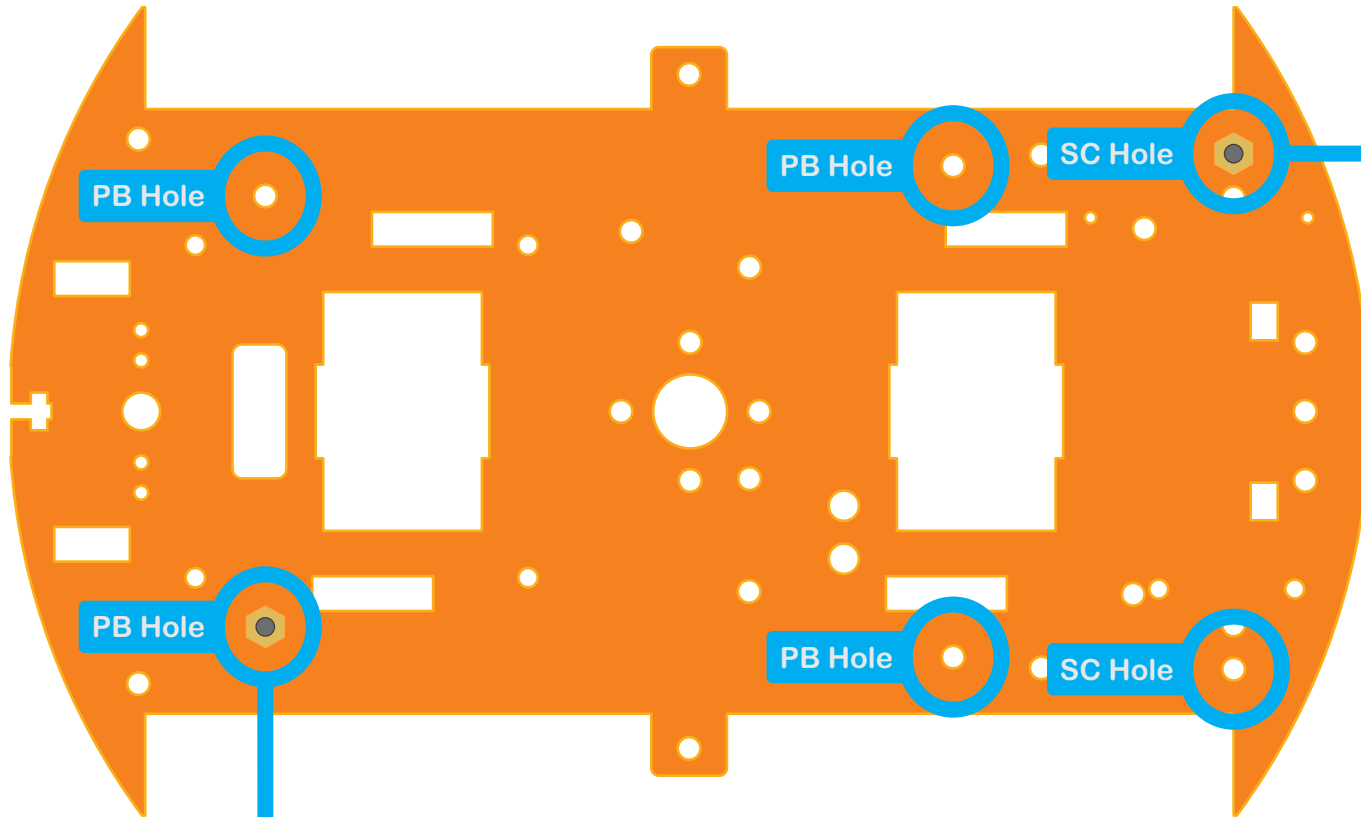


-BOT

4X4  
MOBILE ROBOT



# ASSEMBLY PROCEDURE BODY CHASSIS



1

Brass Stud M3X25  
Bottom Chassis  
(Top Surface)

Bottom Chassis  
(Bottom Surface)  
3X6 Screw

2

Tighten the screw and  
Brass Stud by  
rotating the driver  
clockwise

Do this step to all  
"SC Holes"

Screw Driver

1



Brass Stud M3X13  
Bottom Chassis (Top Surface)



Bottom Chassis  
(Bottom Surface)  
3X6 Screw

2

Tighten the screw and  
Brass Stud by  
rotating the driver  
clockwise

Do this step to all  
"PB Holes"

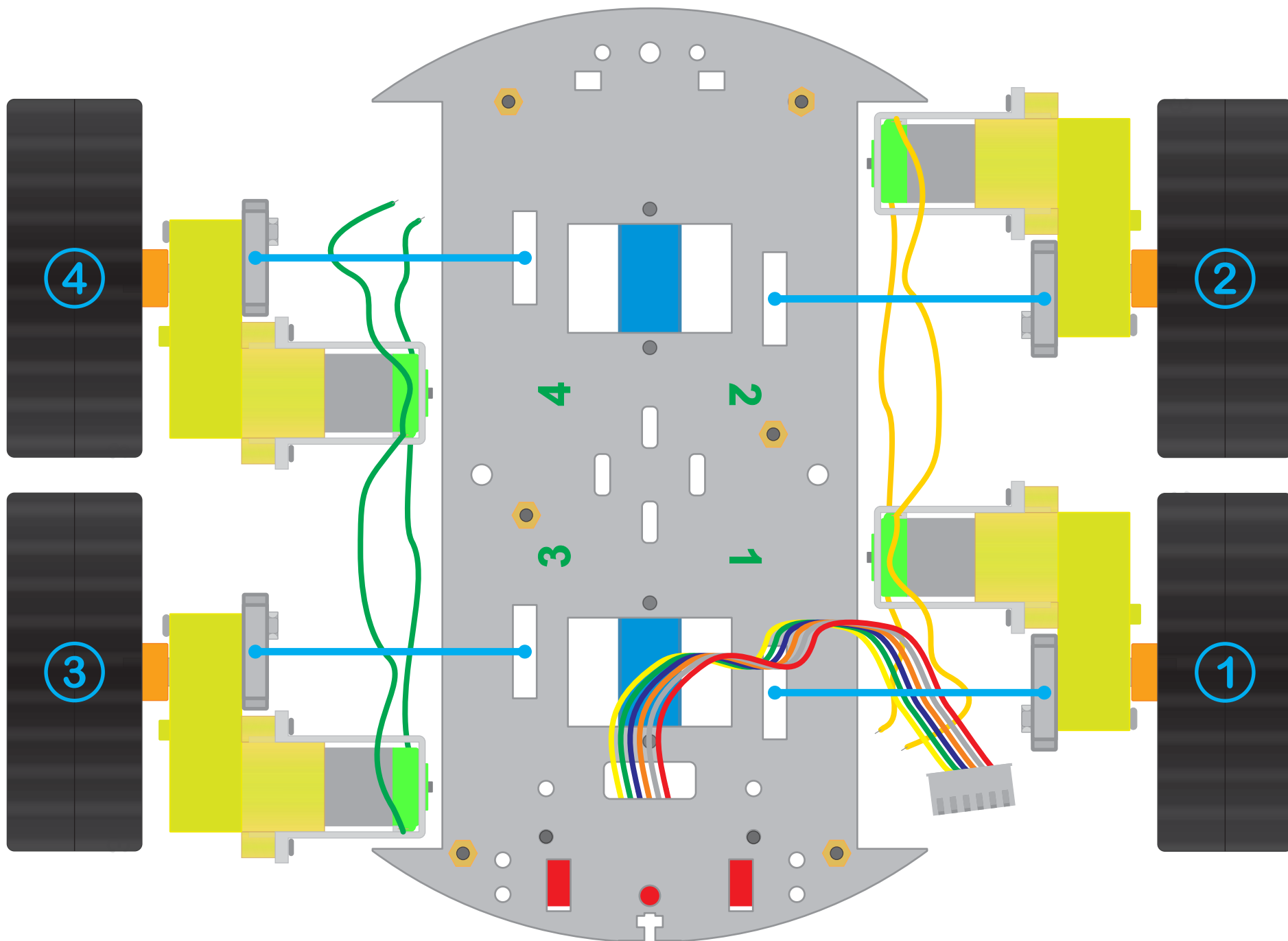
Screw Driver



-BOT

4X4  
MOBILE ROBOT

# ASSEMBLY PROCEDURE BODY CHASSIS

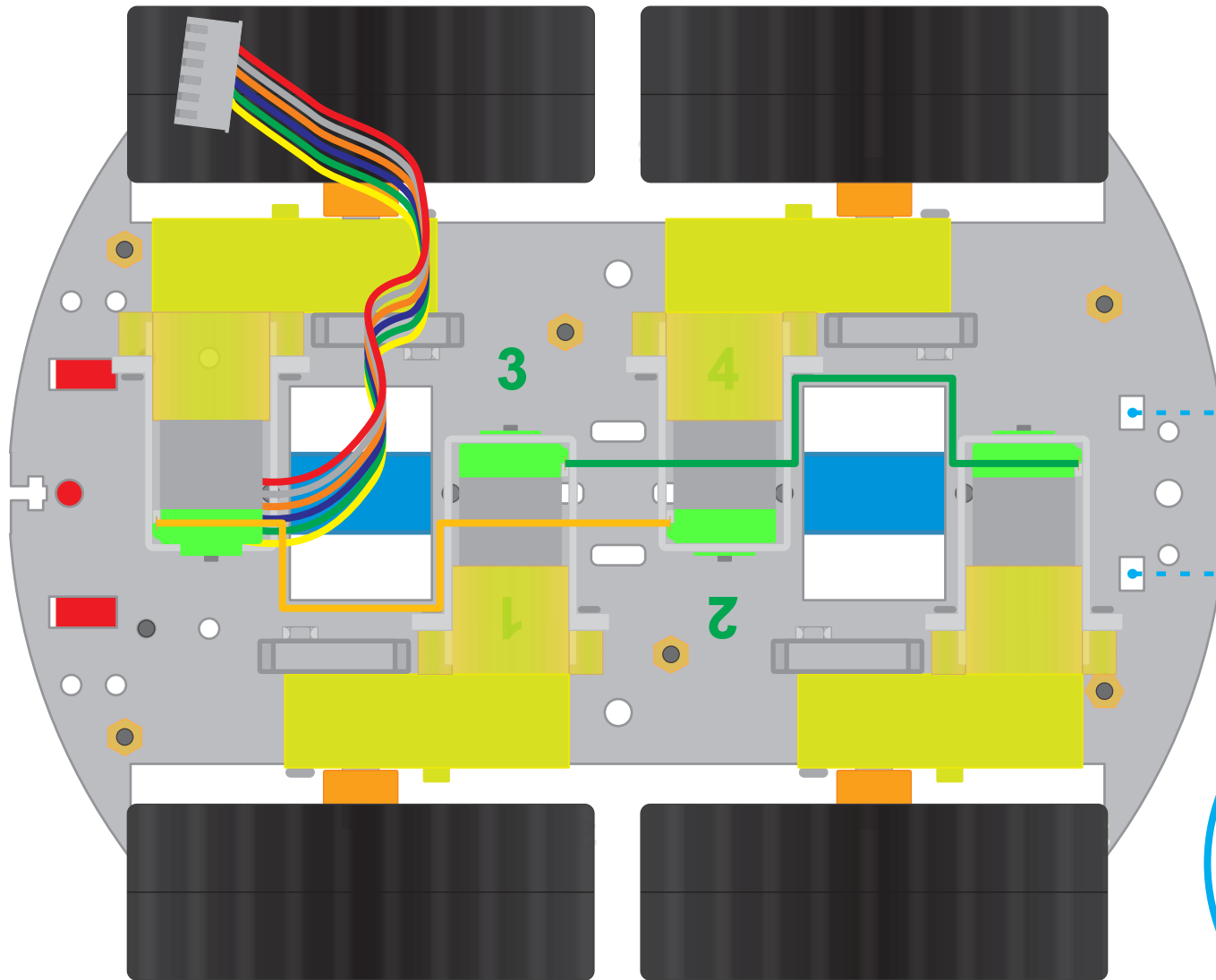




-BOT

4X4  
MOBILE ROBOT

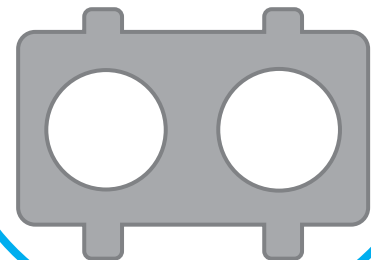
# ASSEMBLY PROCEDURE BODY CHASSIS



Fit in the back cover to the  
bottom base illustrated in the  
image.



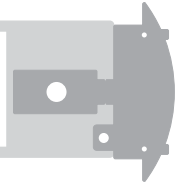
Back Cover & US-100  
Mounting Panel



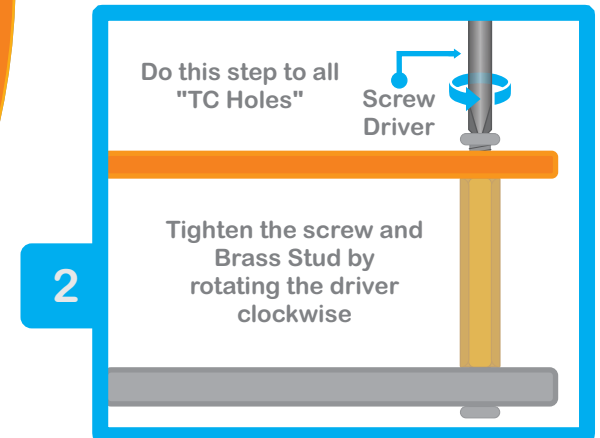
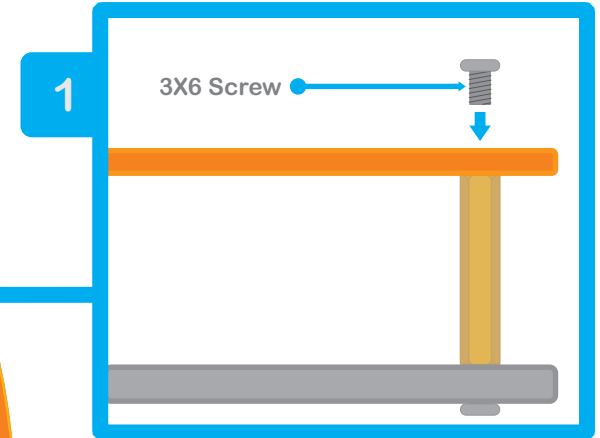
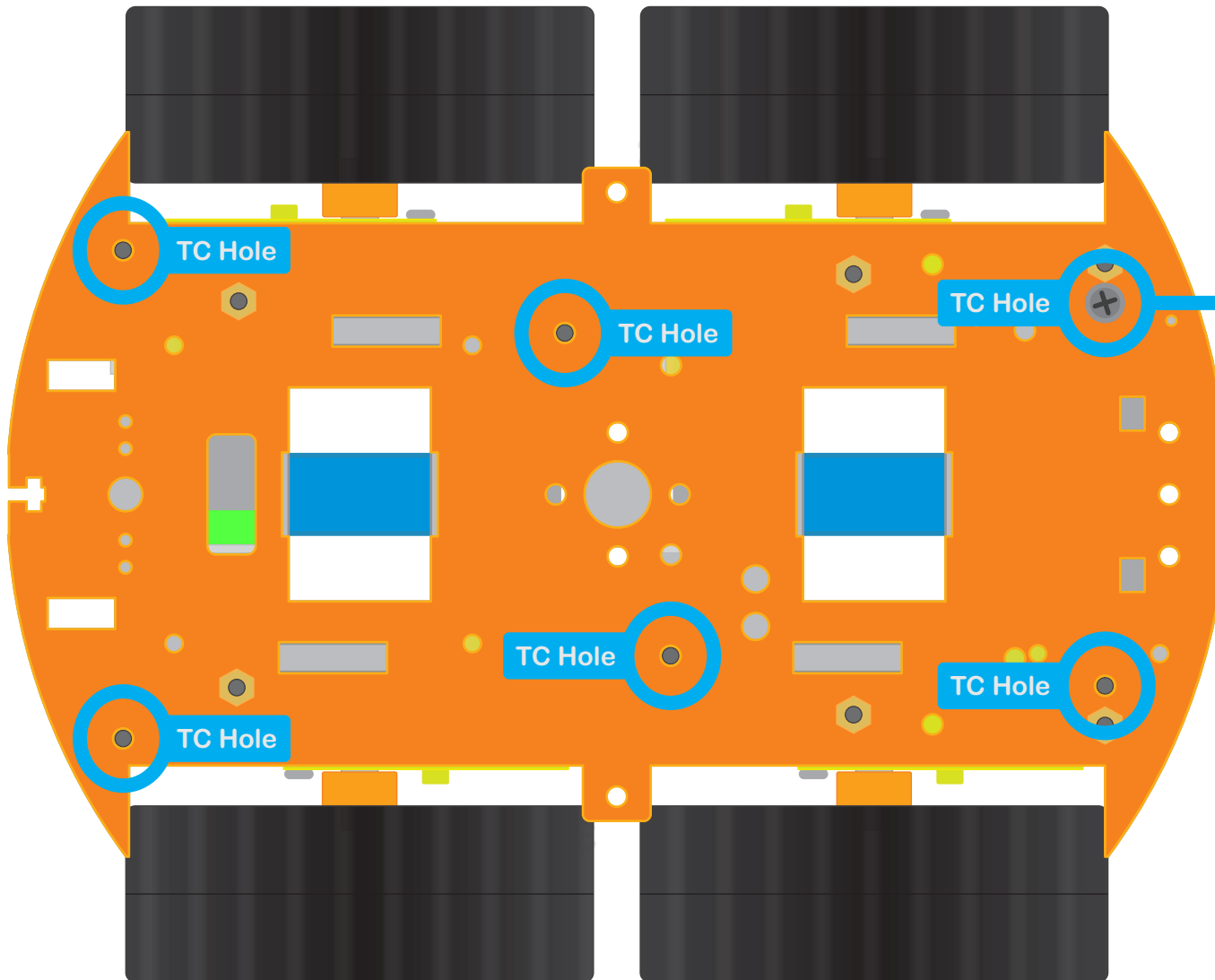


-BOT

4X4  
MOBILE ROBOT



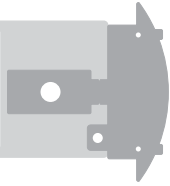
# ASSEMBLY PROCEDURE BODY CHASSIS





-BOT

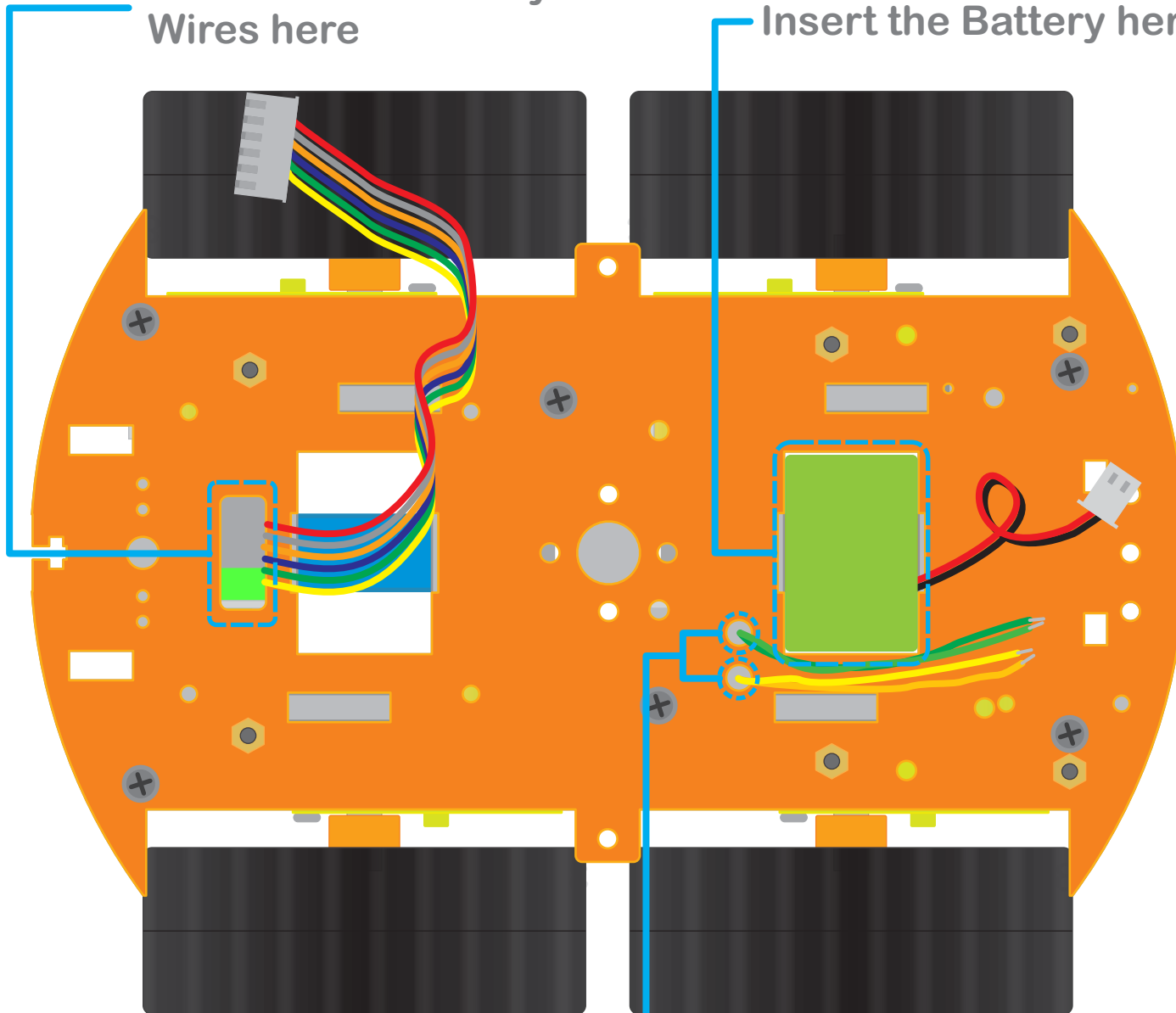
4X4  
MOBILE ROBOT



# ASSEMBLY PROCEDURE BODY CHASSIS

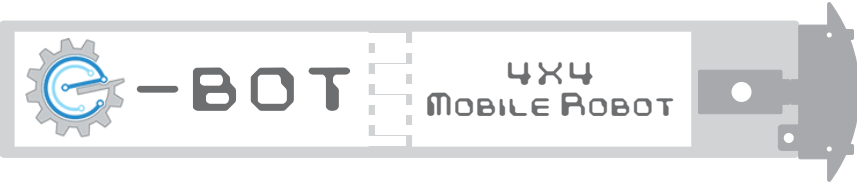
Insert the Line Array  
Wires here

Insert the Battery here



Insert the Motor Wires here

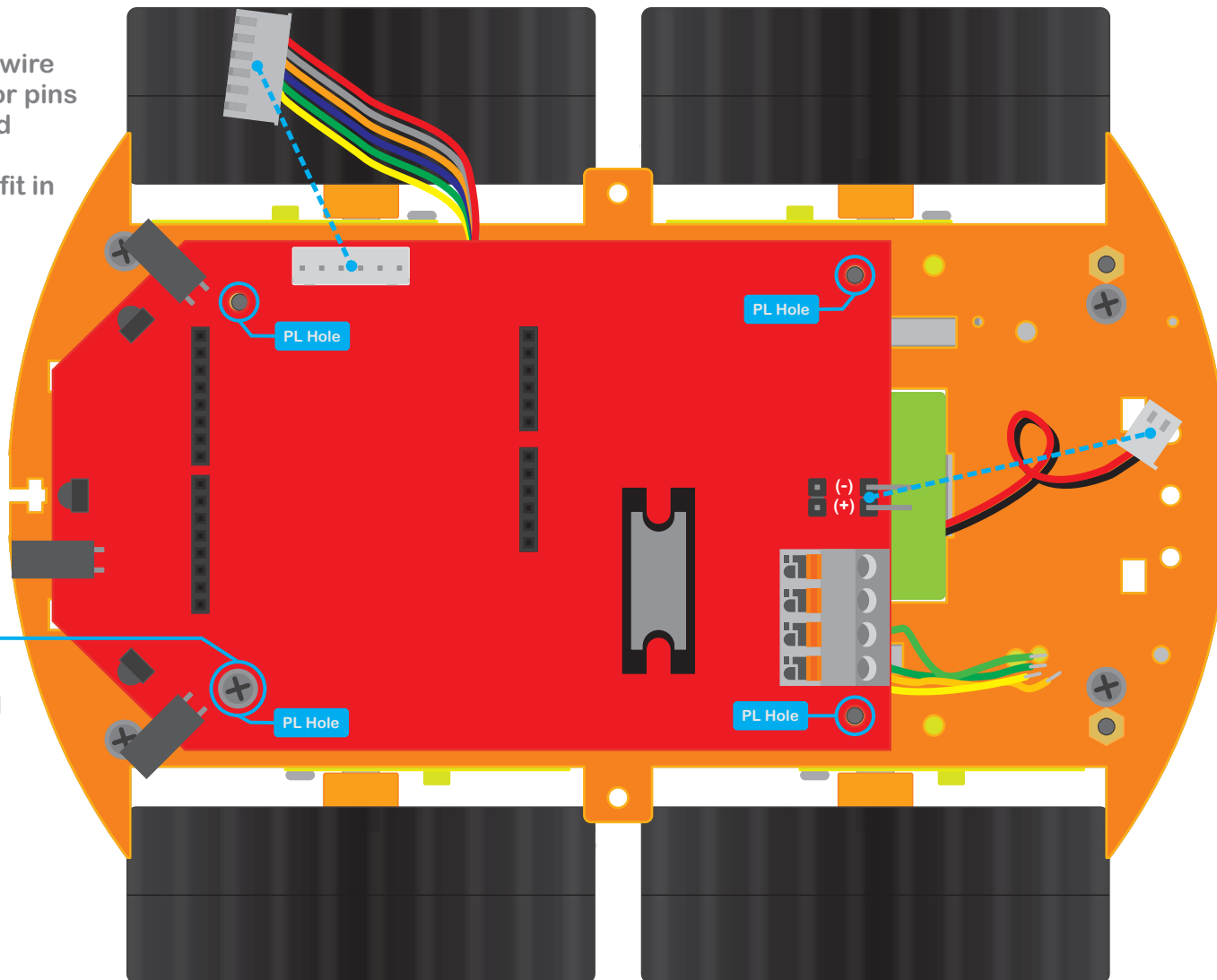




# ASSEMBLY PROCEDURE

Insert the Line Array wire  
to the Line Array Sensor pins  
of the PBOT board

Note: the wires wont fit in  
if it is inverted



Insert the Battery wire  
to the power pins  
of the PBOT board

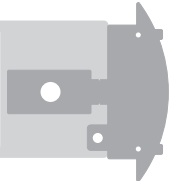
Note: Make sure the  
polarity of the wire  
is correct. the red wire  
is for positive and black  
for negative.

Lock the PBOT Board  
using the 3X6 Screw  
in all "PL Hole"

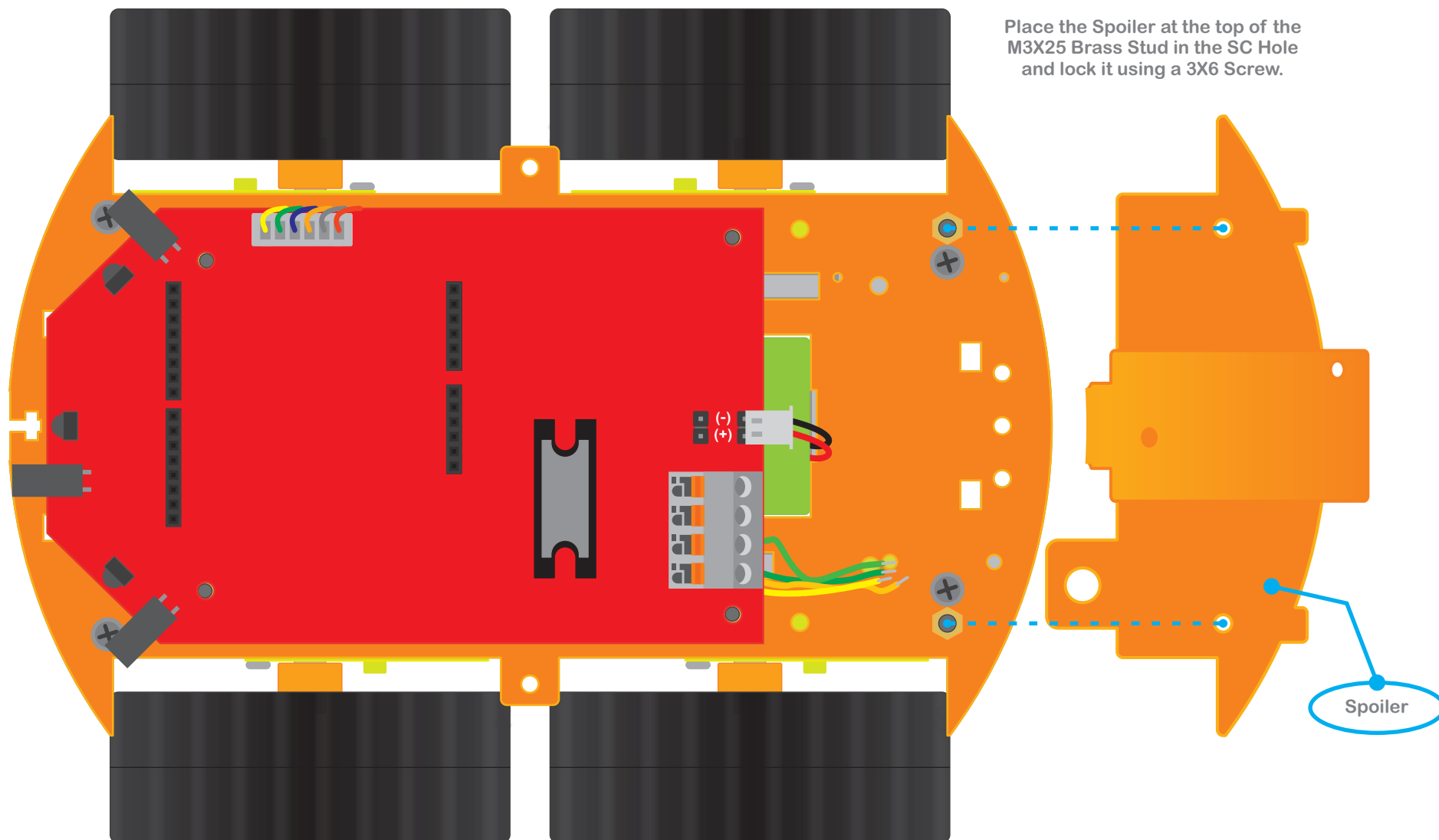


-BOT

4X4  
MOBILE ROBOT



## ASSEMBLY PROCEDURE

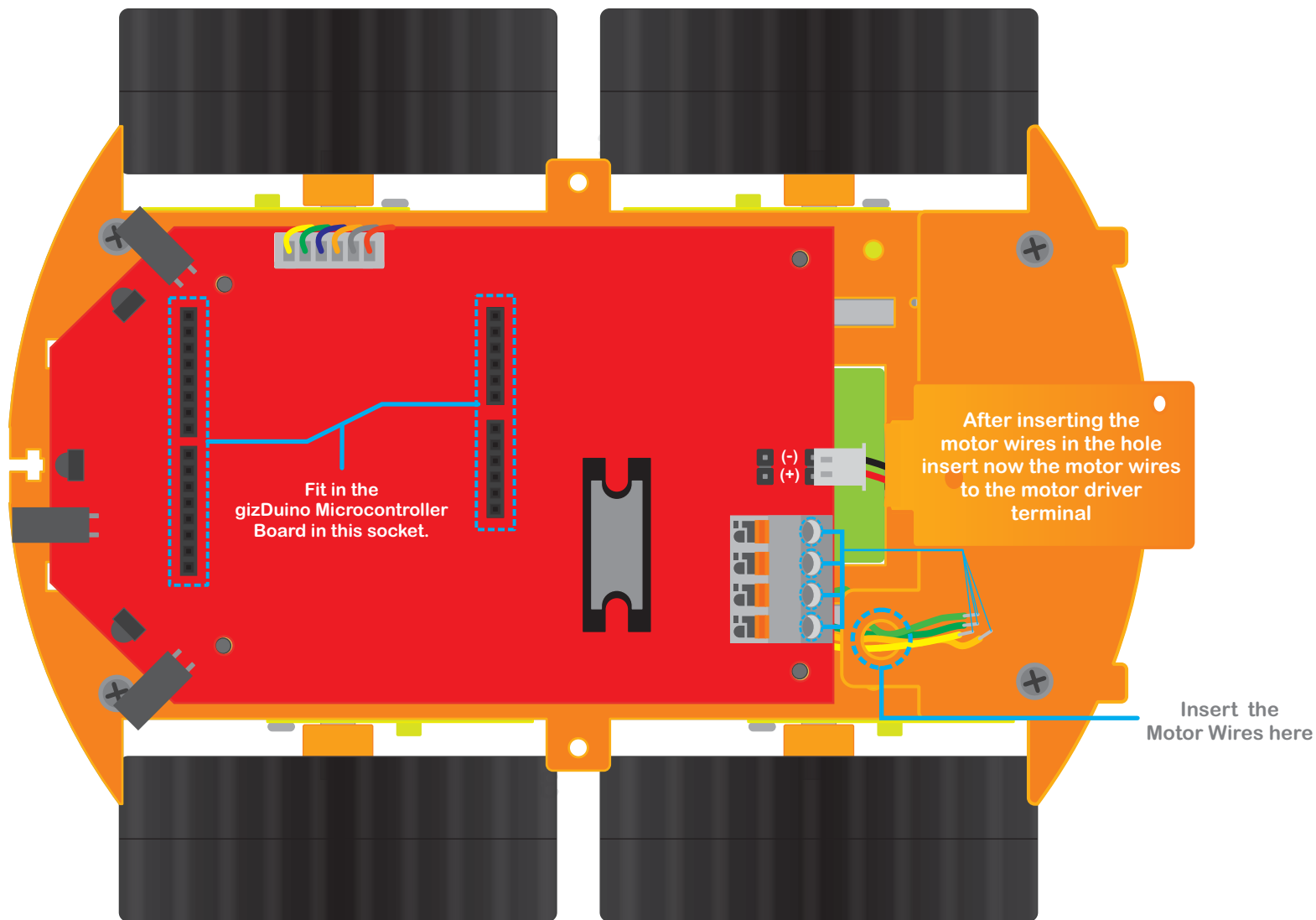


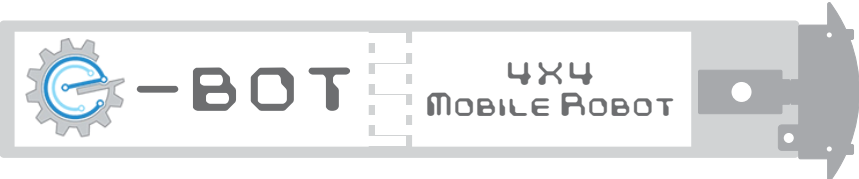


-BOT

4X4  
MOBILE ROBOT

## ASSEMBLY PROCEDURE





ASSEMBLED E-BOT

E-BOT ASSEMBLY COMPLETE

