

Wabo

轨道平衡机器人

GYRO MONORAIL SCIENCE KIT

GE-637

Assembly & Instruction

Manual

组装说明手册

Keep the manual for future reference.



科学玩具

MAKING LEARNING PLAYING

手作乐趣 • 无毒环保 • 专利研发

亲子同乐 动手玩科学

科学玩具行销全球 20 余国，拥有欧、美、日、澳、中国...等多国专利注册，符合中国台湾ST玩具、中国 CCC 等安全认证，专业研发获得国际多项殊荣。

结合科学原理，DIY实做、模型美学，启发孩童想像力与创造力，是玩具也是教具，组模型也组思绪。

三倍乐趣 启动大脑神经元



1

手做模型组装

搭配好工具
训练手眼协调力



2

科学动力学习



3

多样创意玩法



6 合一风车小精灵



3 合一发条时钟



8 变太阳能机器人



Wabo

轨道平衡机器人

GYRO MONORAIL SCIENCE KIT

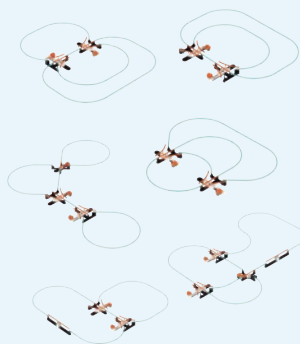
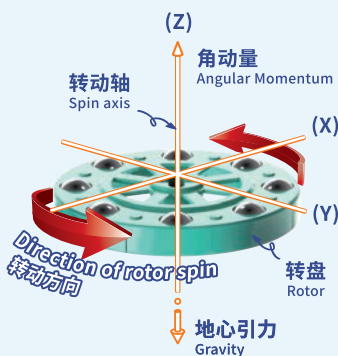
更多玩法
Scan me



 陀螺仪原理
Gyroscope Effect

 无限轨道组合
Unlimited Track Combo

 三种机关变换
3 Transform Devices

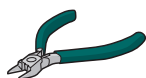


轨道平衡机器人 Wabo The Robot

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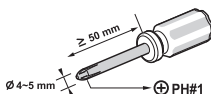
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自备工具 Tools You May Need



斜口钳 Diagonal Cutter

推荐尺寸 Recommended Size



⊕ 螺丝起子 Screwdriver



卫生纸 Tissue Paper

建议碱性电池 Alkaline batteries are recommended

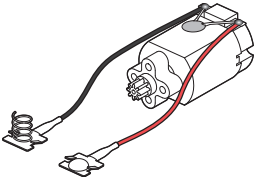
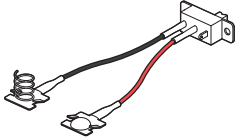


电池 1.5Vx2 Alkaline Battery x 2

零件清单 Mechanical Parts List

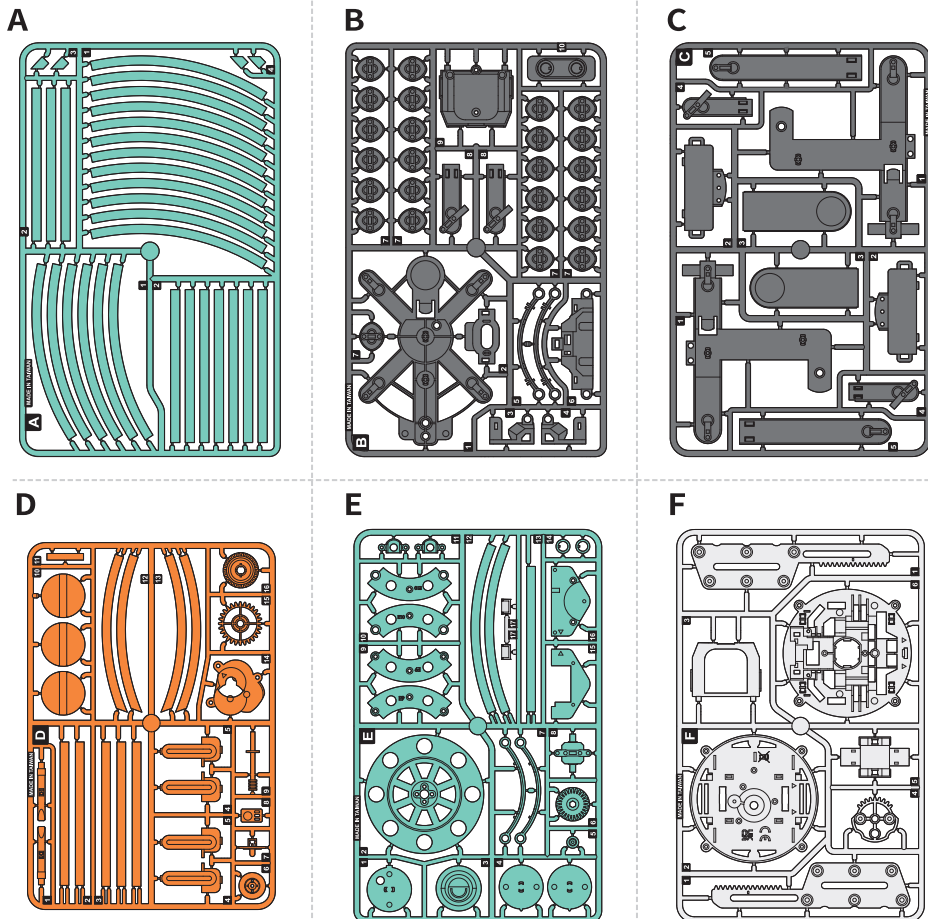
! 部分产品有锐利边角, 组装时请特别注意 Product contains functional edges and sharp points.

P1	齿轮 Gear (粉红色 Pink)	P2	齿轮 Gear (绿色 Green)	P3	齿轮 Gear (黄色 Yellow)		
 1 pc		 1 pc		 1 pc			
P4	螺丝 Tapping Screw	P5	小螺丝 Small Tapping Screw	P6	大螺丝 Big Tapping Screw		
  1:1 27 pcs		  1:1 1 pc		  1:1 2 pcs			
P7	短圆轴 Round Shaft (Short)	P8	长圆轴 Round Shaft (Long)	P9	钢球 Steel Ball	P10	橡胶圈 Rubber Wheel
  1:1 3 pcs		  1:1 2 pcs		 8 pcs		 1 pc	

P11 马达电源线 Motor with Battery Terminal	P12 开关电源线 Switch with Battery Terminal	P13 油包 Oil Bag
 1 pc	 1 pc	  请只要在指定位置上油 Please oil ONLY the parts as instructed, but not others. 1 pc

塑料模型零件 Plastic Parts

! 请依照组装步骤将所需的零件剪下，请勿提早剪下零件，以免混淆。
Cut the plastic parts when they are required. Do not cut them in advance.



小技巧提醒 Read It Before Assembly



组装前须知 Must-know

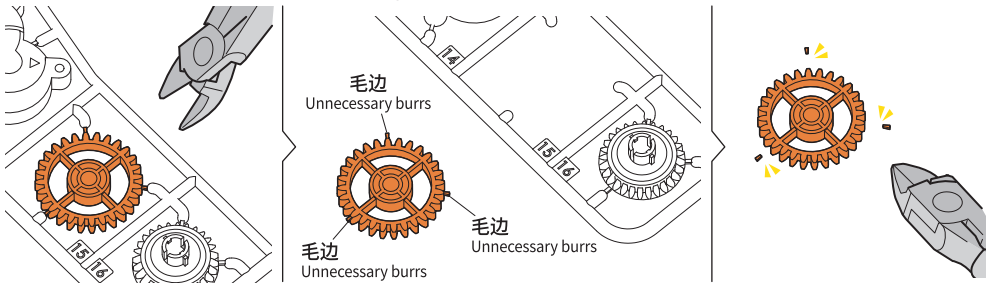
请详读以下组装小技巧 Please read through and follow the tips below before assembly.

请将毛边修剪干净 Remove burrs



毛边务必修剪干净, 以免游玩时动作失常。

Please cut off the burrs clean, or the product might not work functionally.



请勿使用以下方式 Please do not



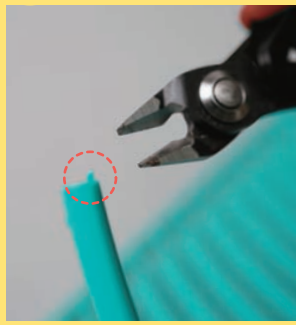
用剪刀剪
Cut with scissors



用手拧
Twist it with your hand



用剪切后会留毛边的手钳
The cutter which leaves burrs



小提醒 Reminder

建议使用专业模型钳
Suggest using model cutters



PM-200



PM-202

锁紧螺丝 Fasten tapping screws



请使用正确尺寸的起子锁螺丝。螺丝务必要锁紧, 倘若螺丝未锁紧, 可能会导致组装崩解或是产品无法正常使用。

Use corresponding (size-compatible) screwdriver. Please lock screws all the way down to the bottom. If they are not fastened tightly enough, parts may come off. The product may consequently not work.



正确
Correct



错误
Incorrect

底座组装 Lower Body Assembly

1

卫生纸
Tissue Paper

P13

D9

E3



正确
Correct



错误
Incorrect

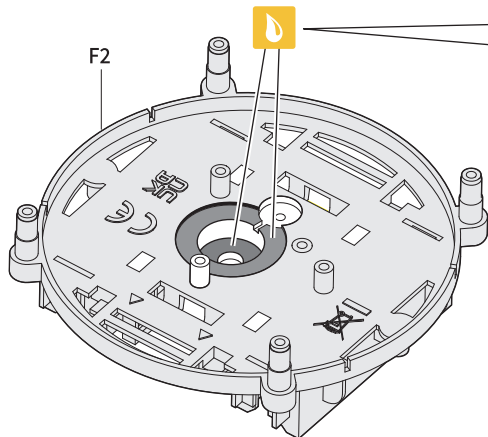
请小心勿洒出 Do not spill becareful.



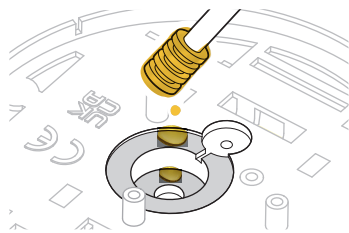
= 上油
Apply Oil

注意: 只在 指示处上油

Note: Oil the parts when 指示处 appears.



① 滴少许油 Drop a little bit of oil.



② 依图指示位置(黄色范围)上油
Apply oil to the position as shown.



2

请先对照尺寸
Scale reference

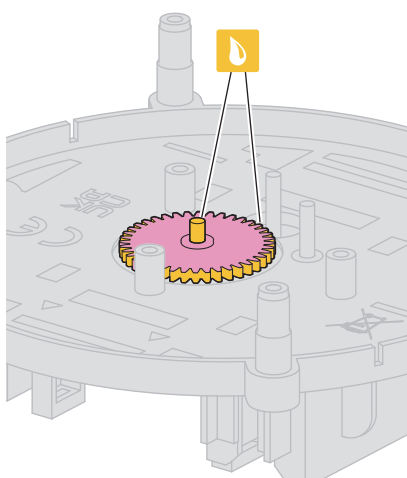
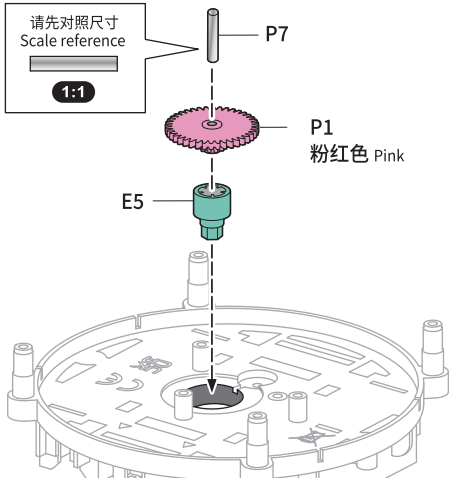
1:1

P7

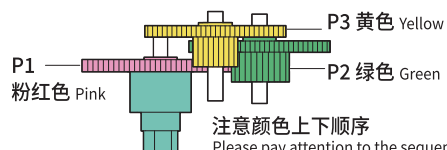
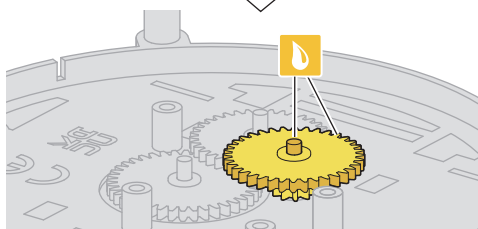
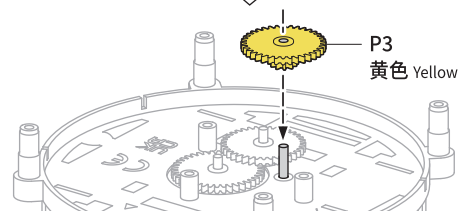
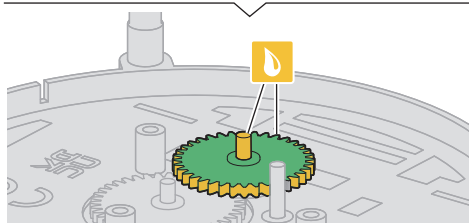
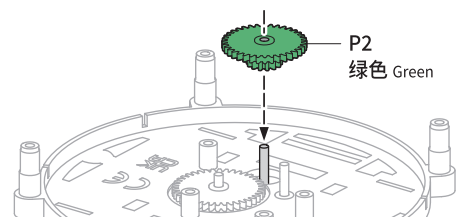
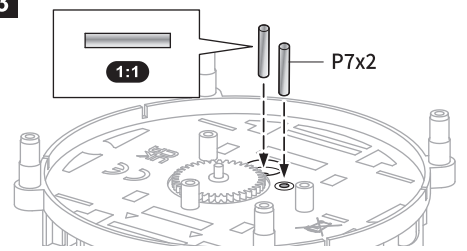
P1

粉红色 Pink

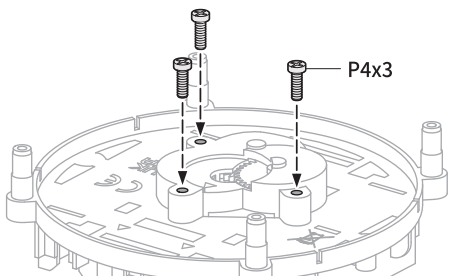
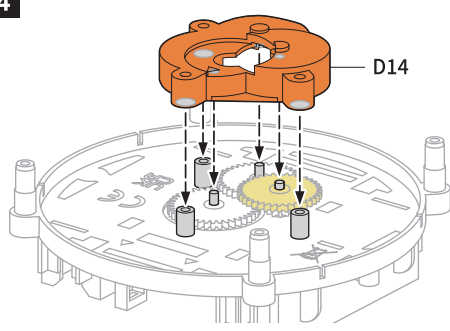
E5



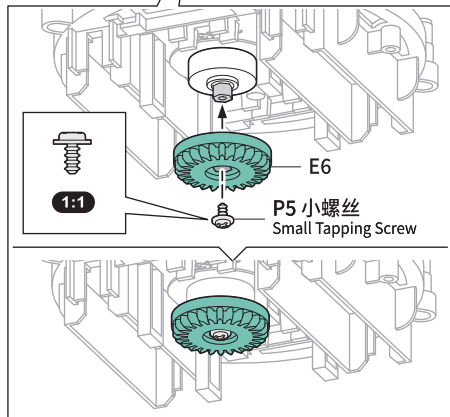
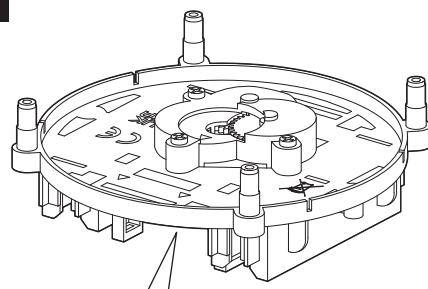
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4

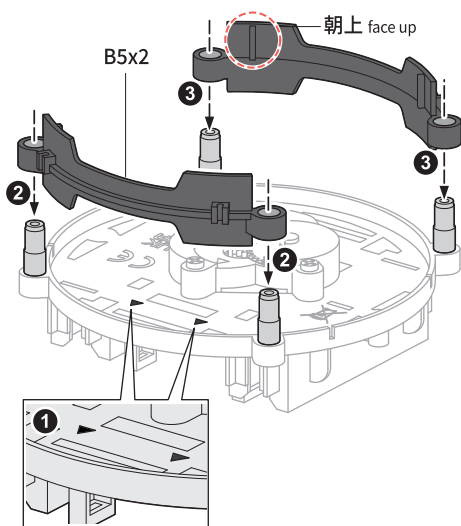


5



6

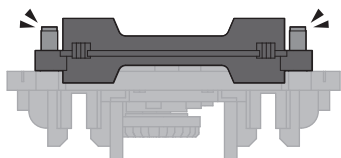
组装时请确认B5与箭头的相对位置
Please pay attention to the arrow placement while assembling B5.



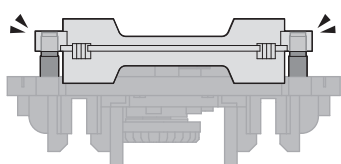
确认两边白柱有突出才是正确方向
Make sure you can see the top of white stubs at two sides.



正确
Correct

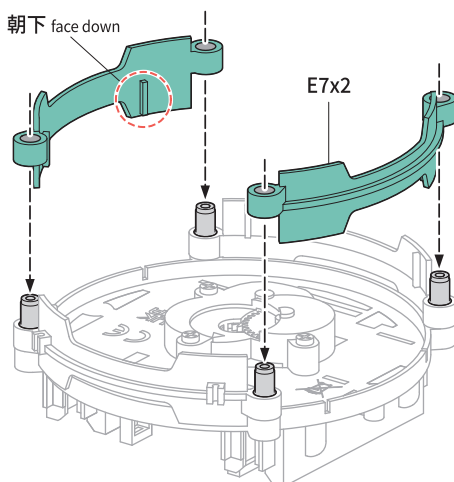


错误
Incorrect

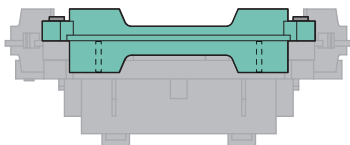


7

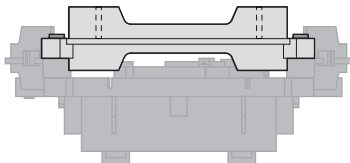
请注意B5与E7上下方向勿装错
Please do not place B5&E7 upside down.



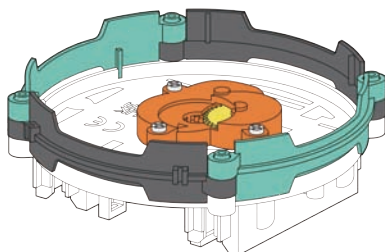
正确
Correct



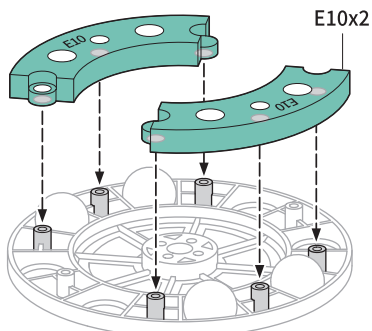
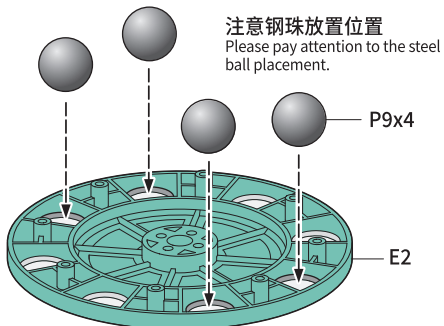
错误
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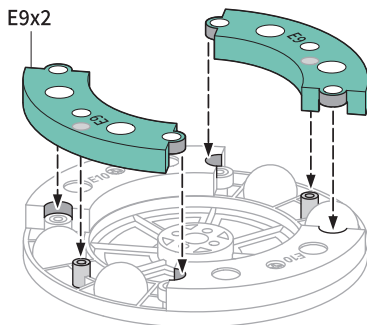
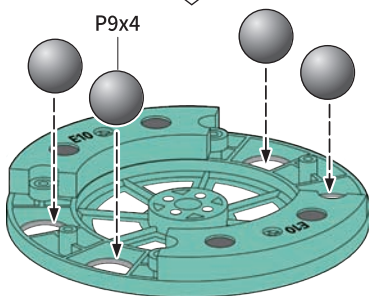
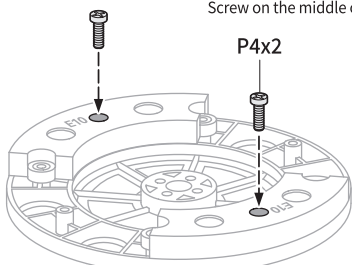
8



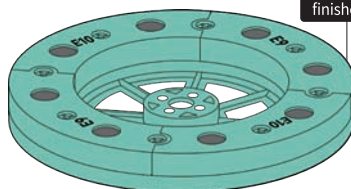
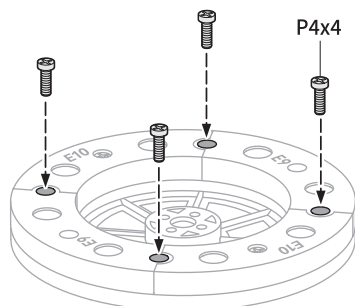
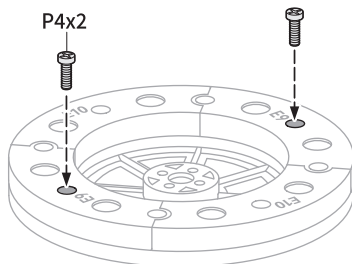
底座组装完成!
Lower Body assembly finished!



先锁上中间的螺丝
Screw on the middle one first.



先锁上中间的螺丝
Screw on the middle one first.

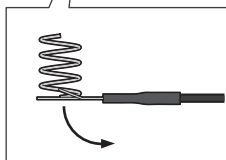
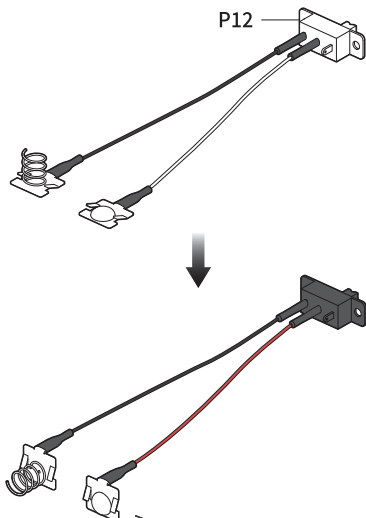


转盘组装完成
Rotor assembly finished.

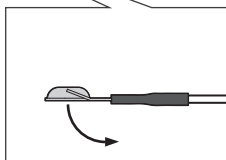
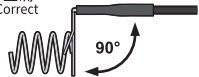
机器人组装 Body Assembly

1

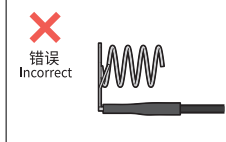
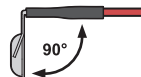
注意折的方向 Please pay attention to bending direction.
向下折角90° Fold down 90°



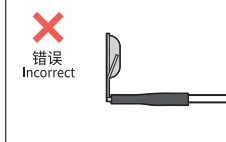
正确
Correct



正确
Correct

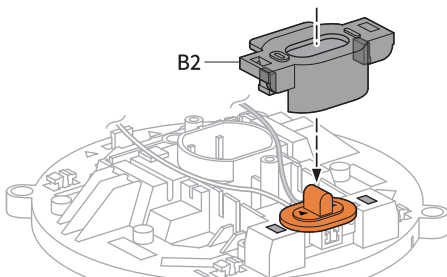
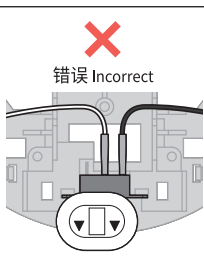
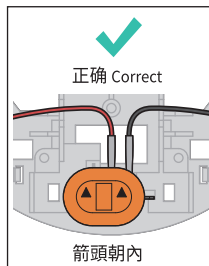
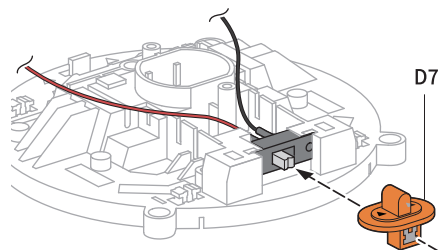
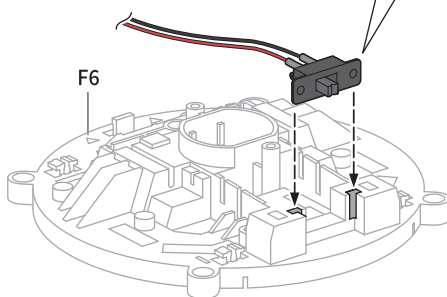
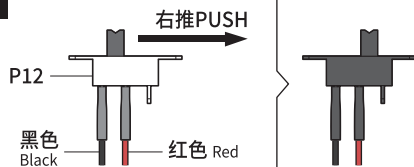


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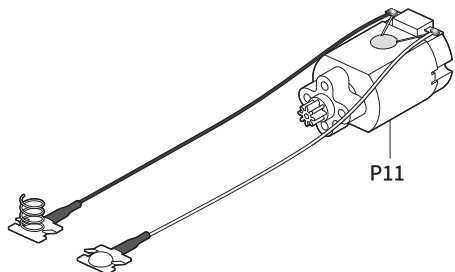
错误
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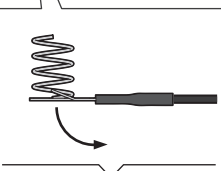
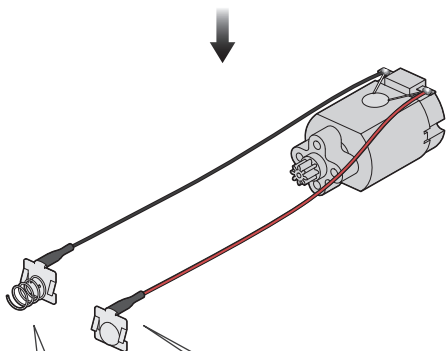


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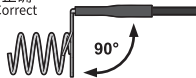
注意折的方向 Please pay attention to bending direction.
向下折角90° Fold down 90°



P11



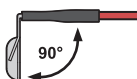
正确
Correct



错误
Incorrect



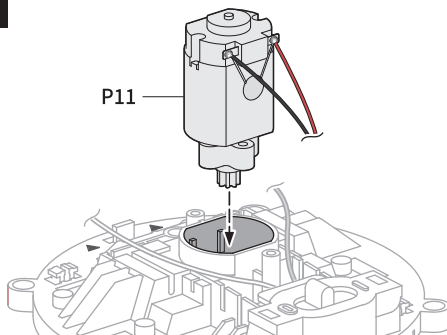
正确
Correct



错误
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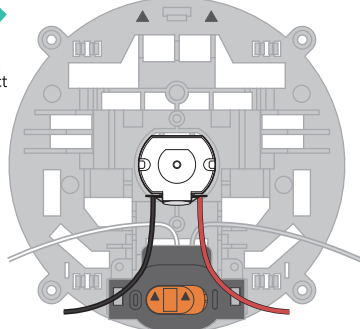


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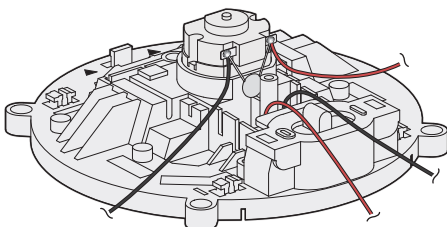
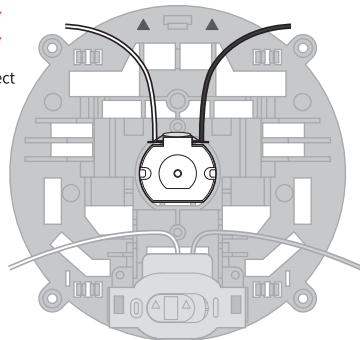


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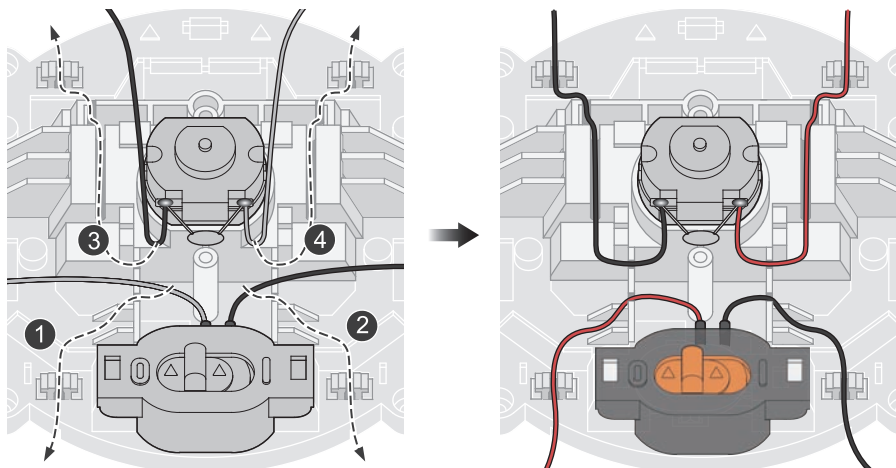
正确
Correct



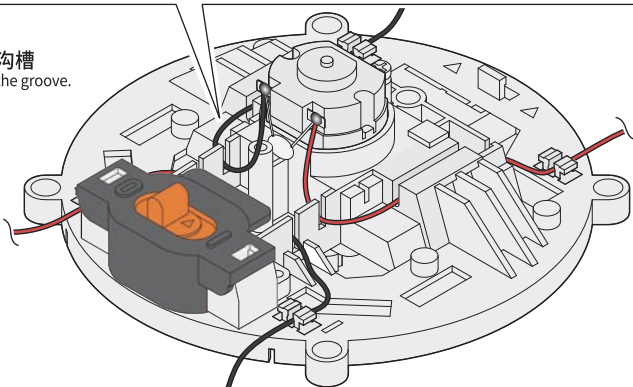
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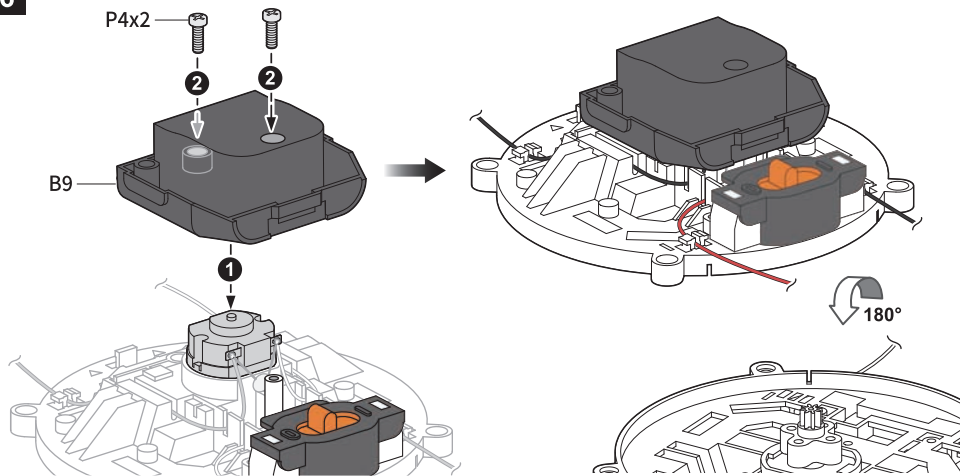
5



将4条电线卡入沟槽
Tuck the wires into the groove.

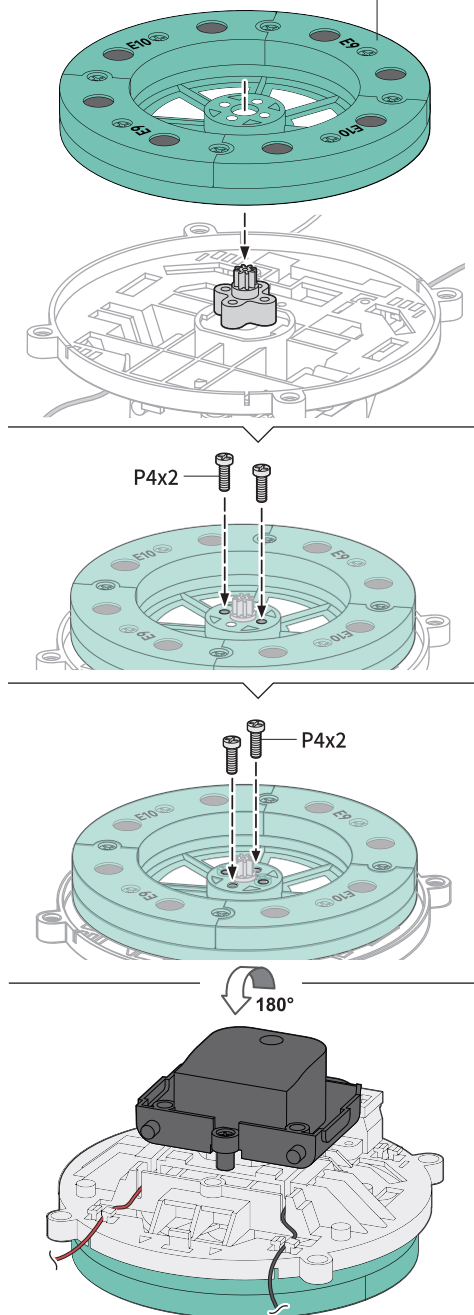


6



7

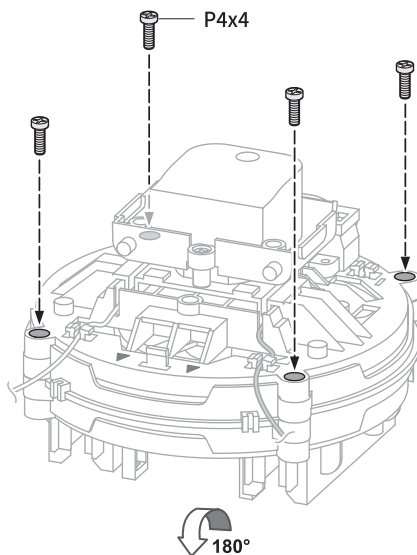
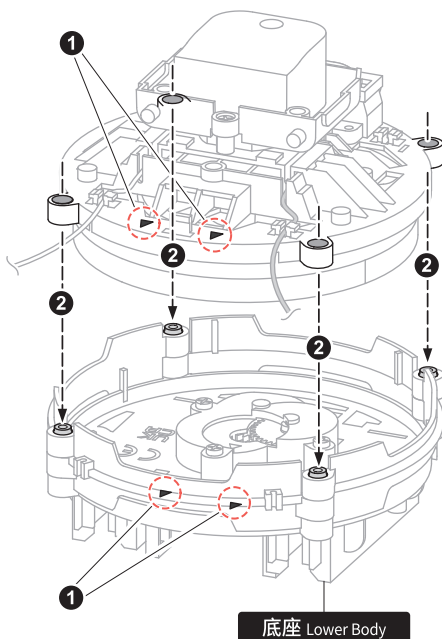
轉盤 Rotor



8

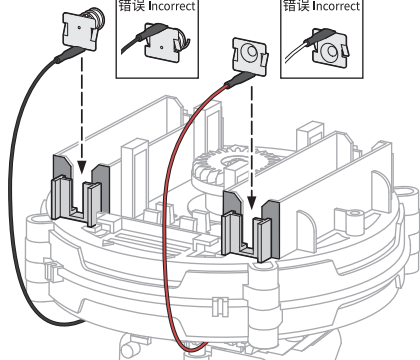
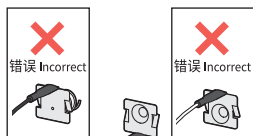
与底座组合时请确认箭头方向需一致

Please align the direction of arrows when combining it to the Lower Body.

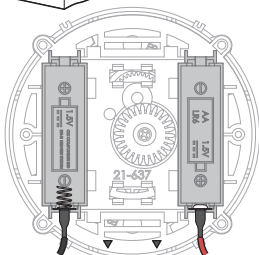
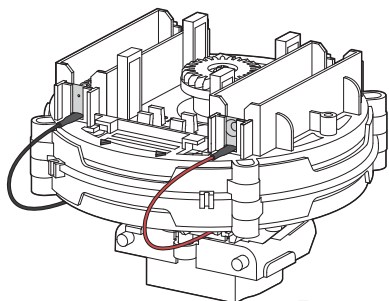
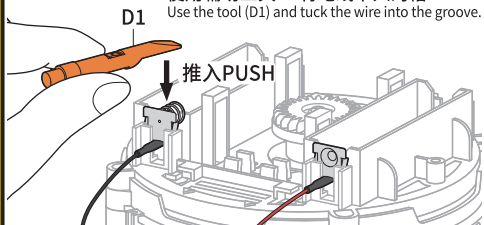


9

! 注意安装方向, 电线应在下方
Please be aware of the wire should be on the bottom.

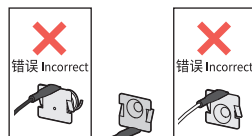


使用辅助工具D1将电线卡入沟槽
Use the tool (D1) and tuck the wire into the groove.

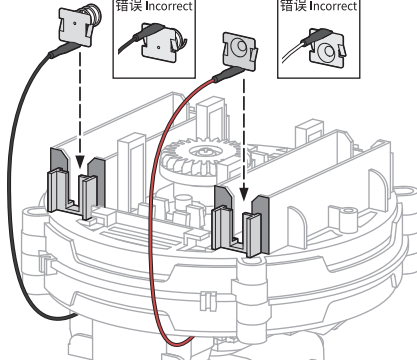


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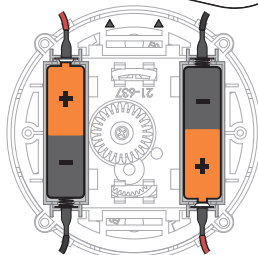
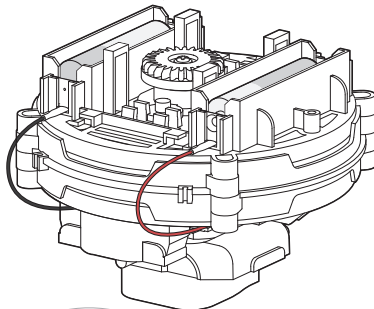
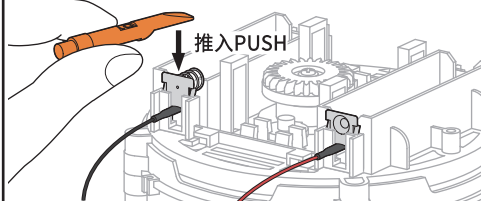
! 注意安装方向, 电线应在下方
Please be aware of the wire should be on the bottom.



180°

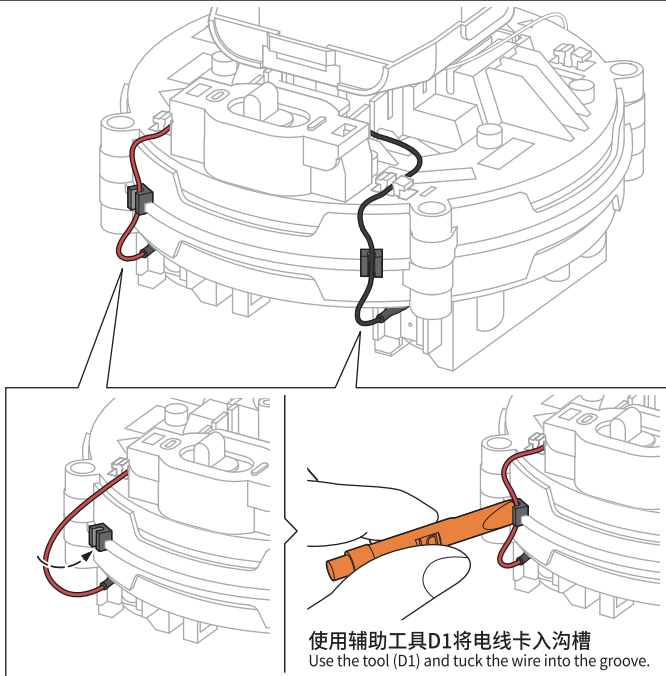


使用辅助工具D1将电线卡入沟槽
Use the tool (D1) and tuck the wire into the groove.

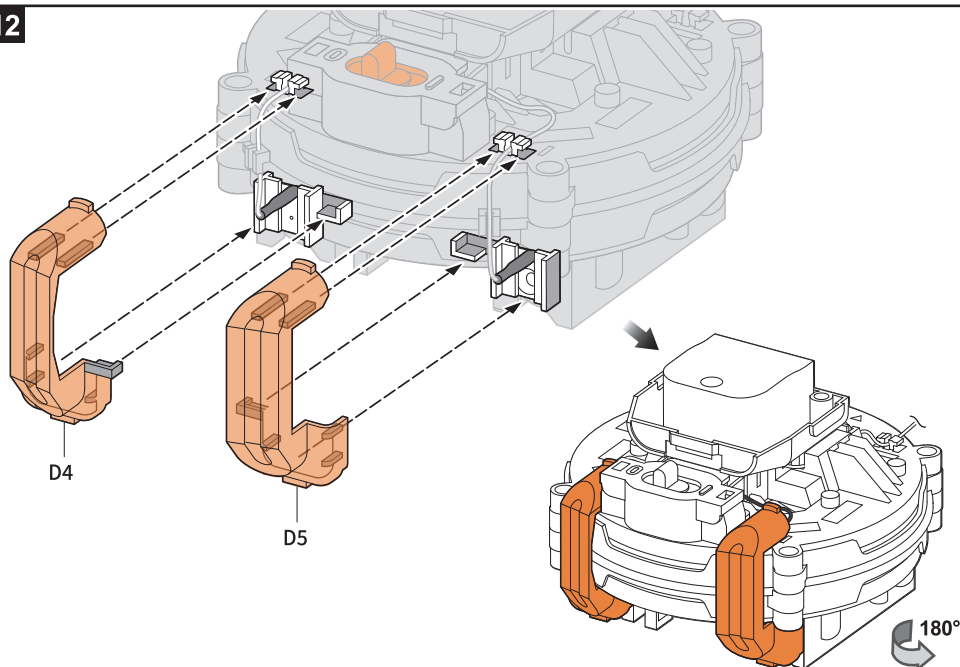


安装电池
Install batteries

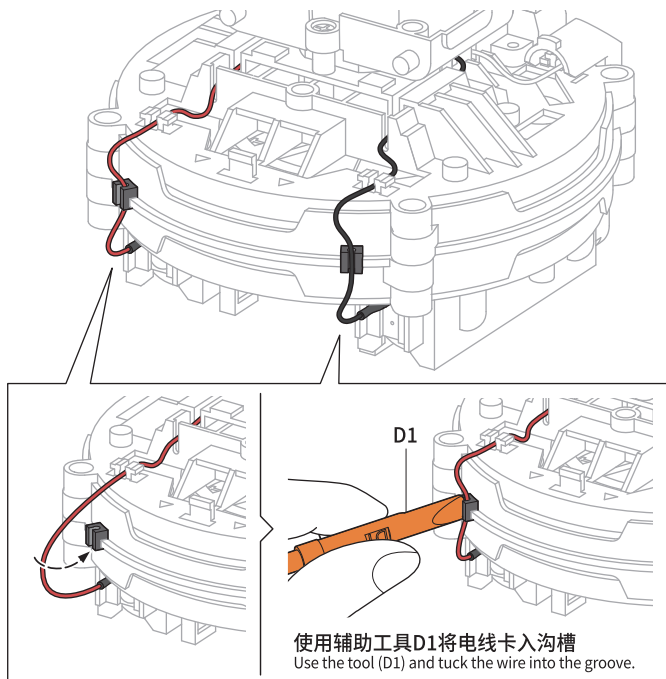
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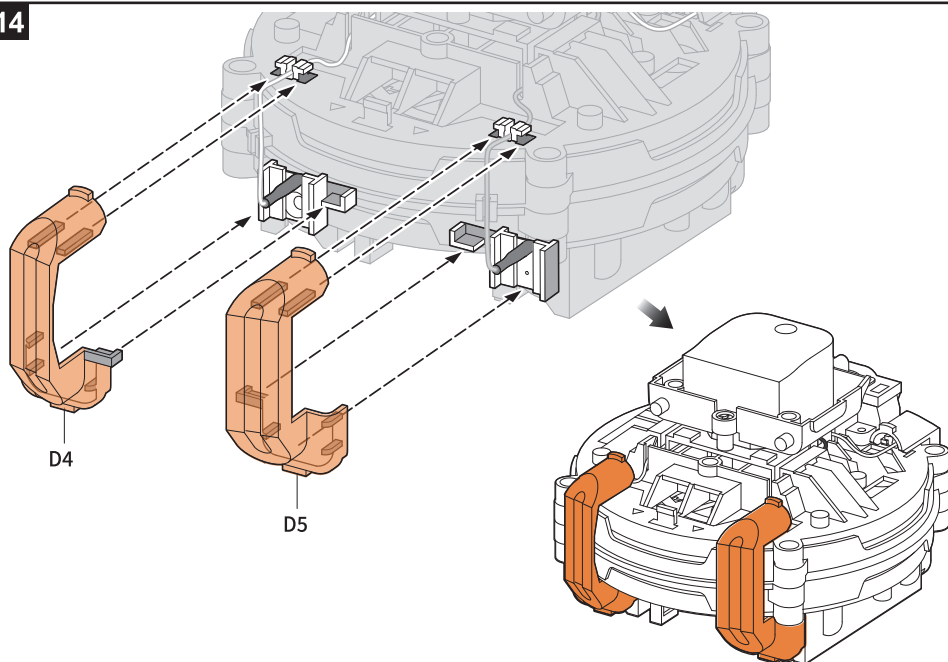
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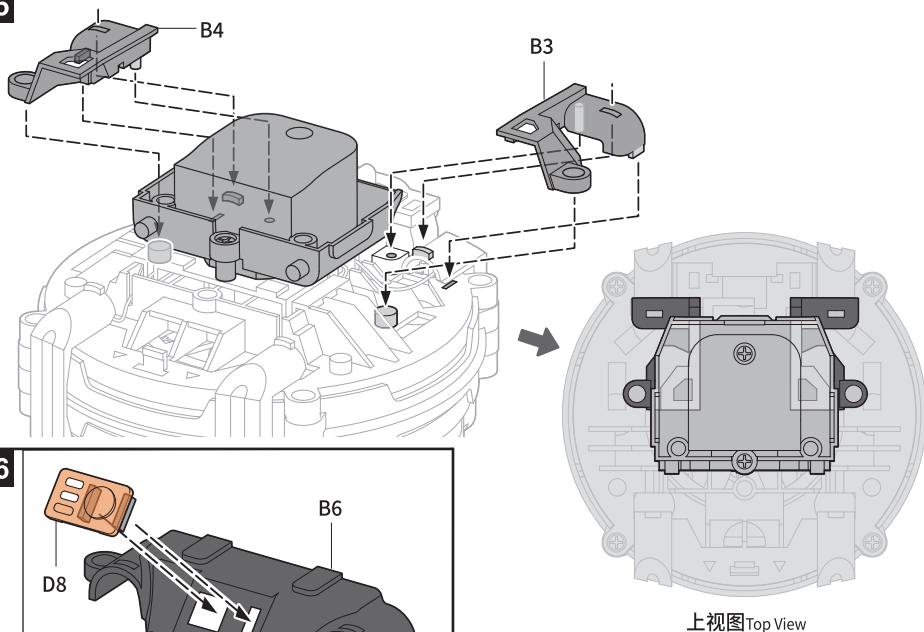
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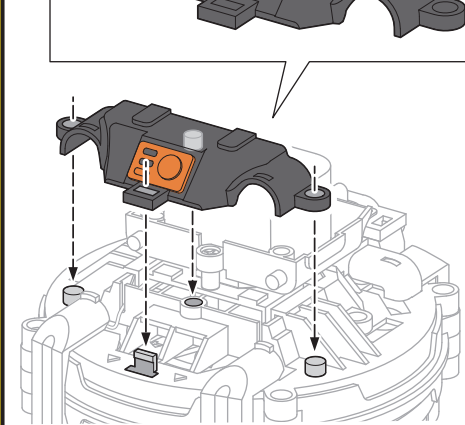
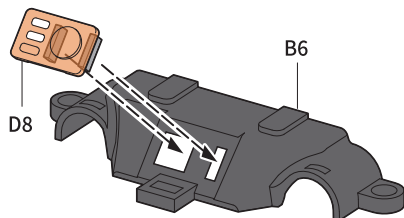
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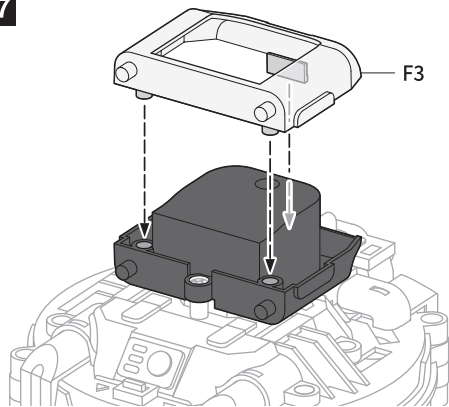
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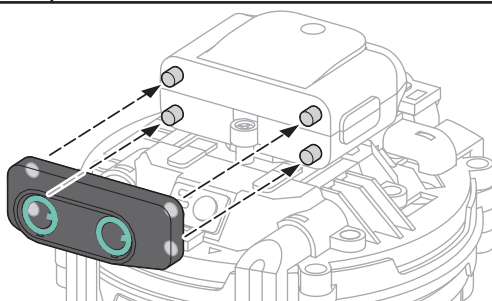
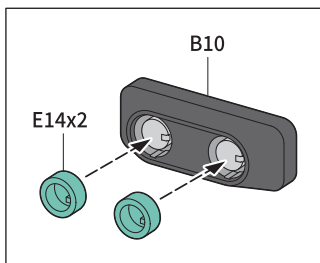
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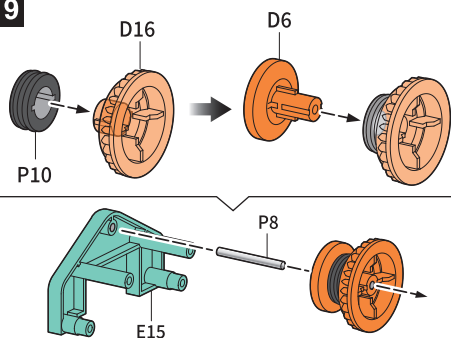
17



18

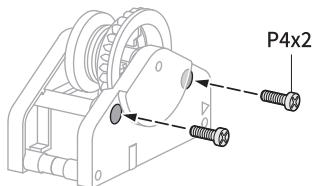
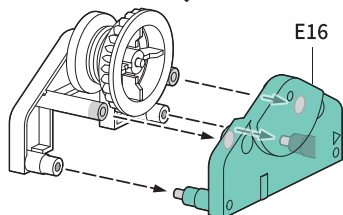
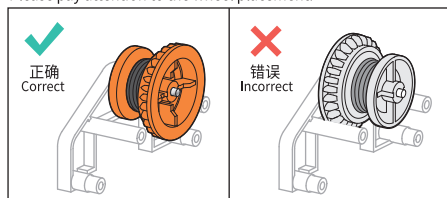


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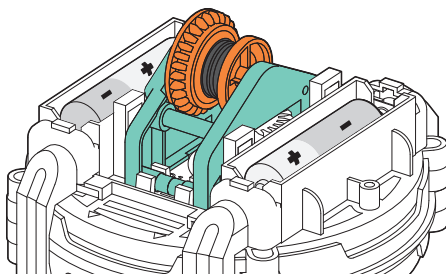
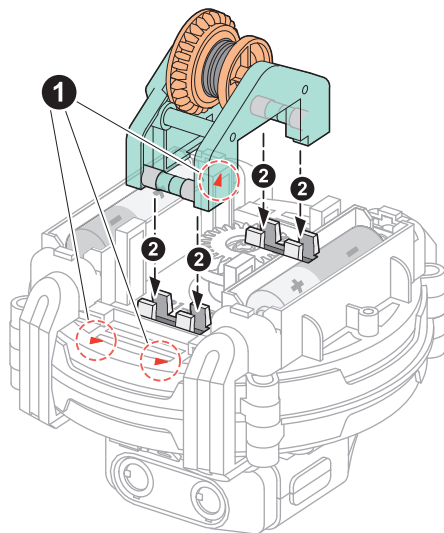
注意滚轮的方向

Please pay attention to the wheel placement.

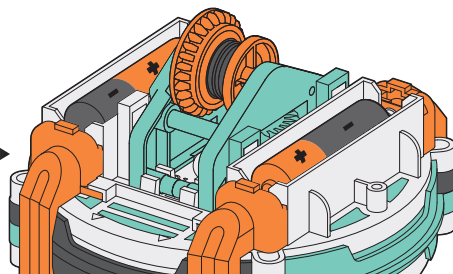
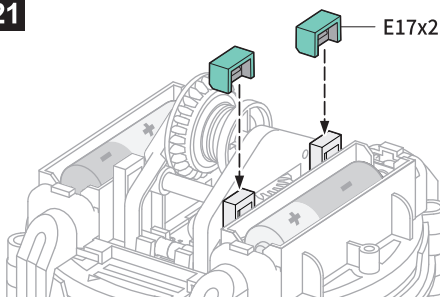


20

组合时请注意箭头的相关位置
Please pay attention to direction of arrows.



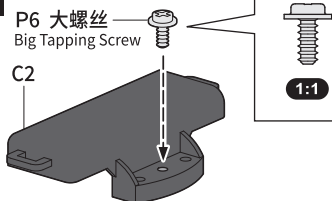
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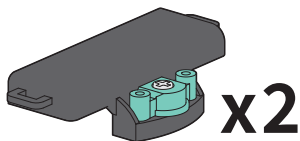
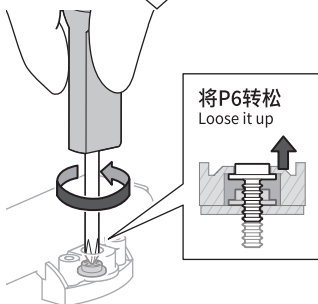
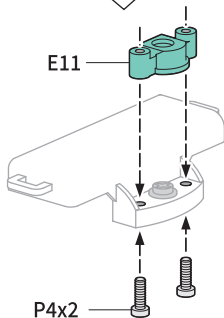
22

P6 大螺丝
Big Tapping Screw

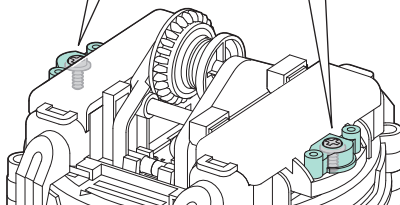
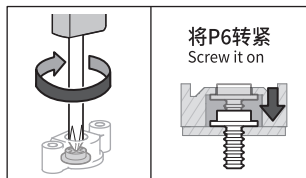
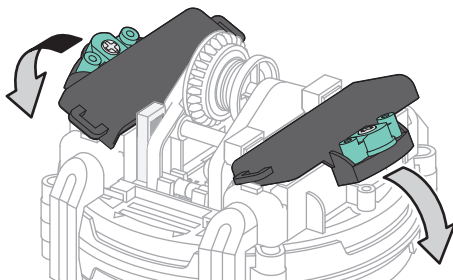
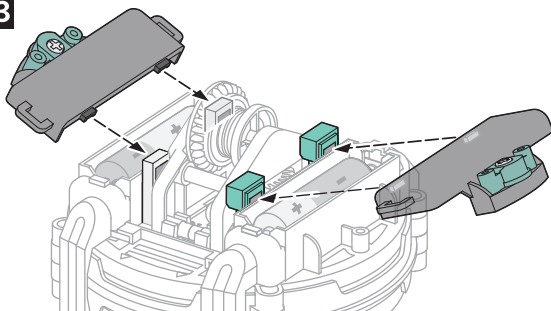
C2



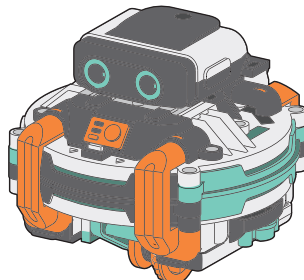
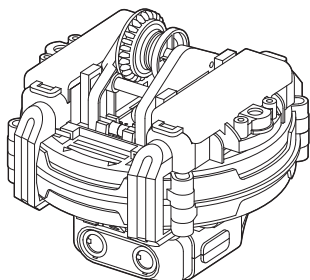
E11



23

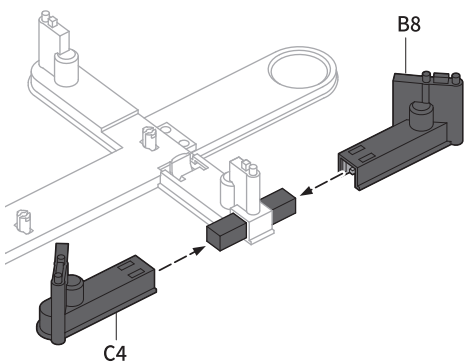
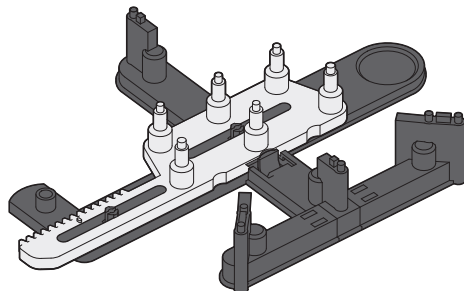
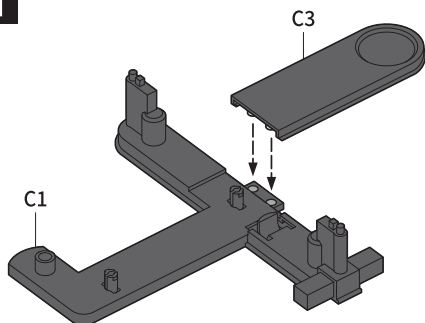


24

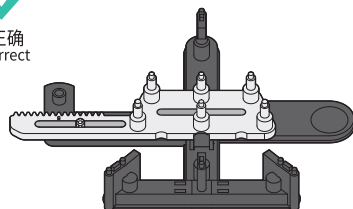


三岔路转向器组装 3-Way Splitter Assembly

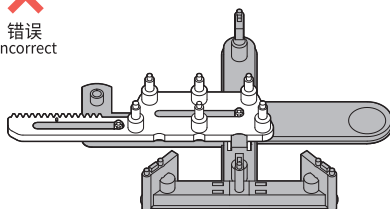
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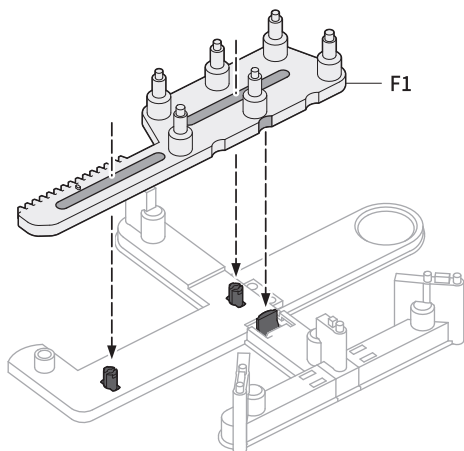
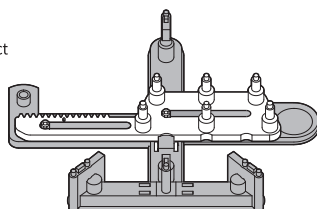
正确
Correct



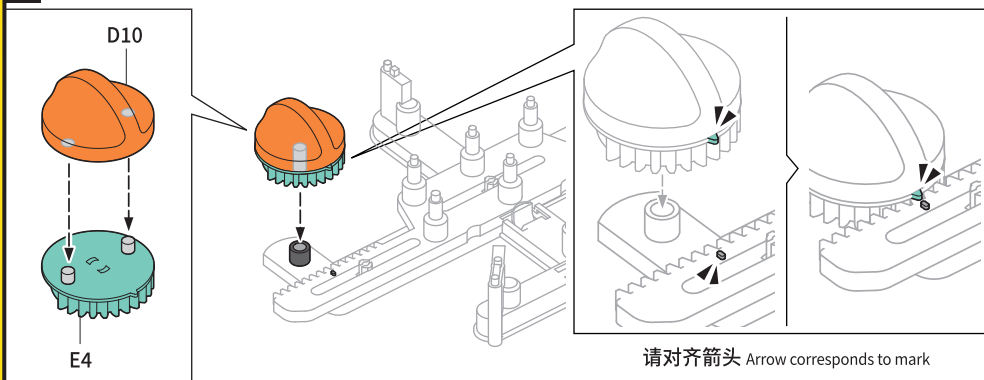
错误
Incorrect



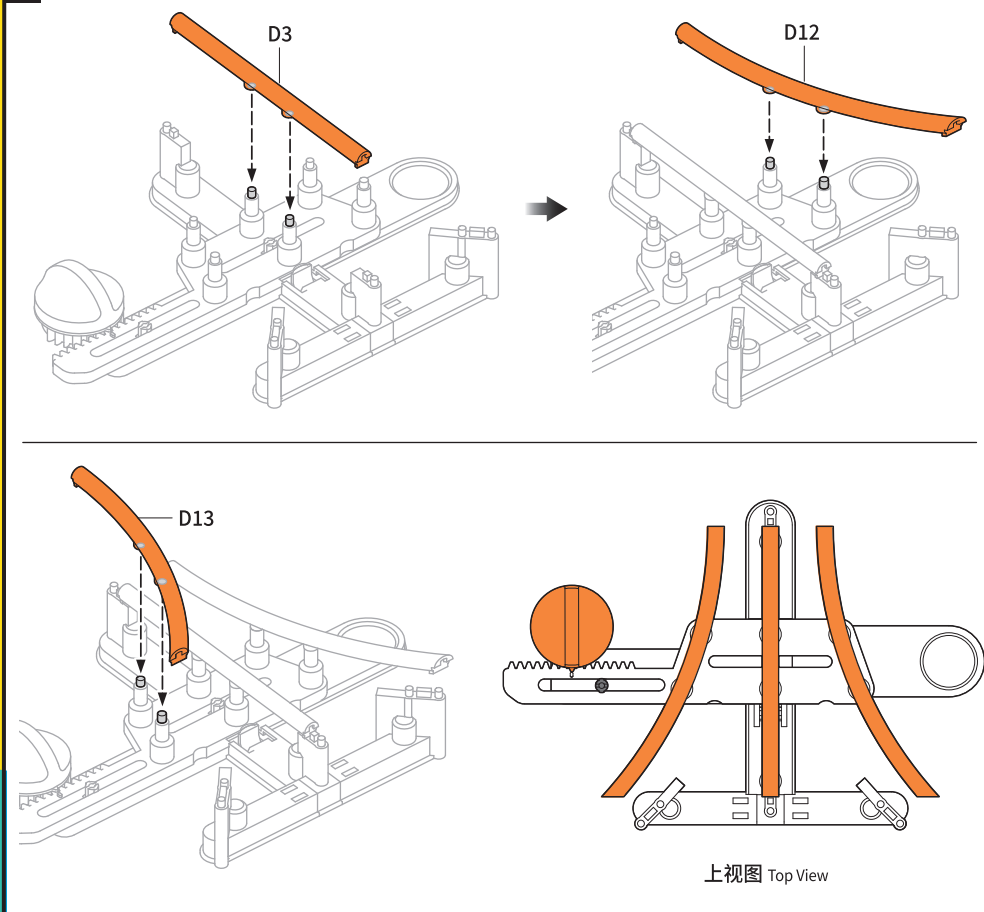
错误
Incorrect



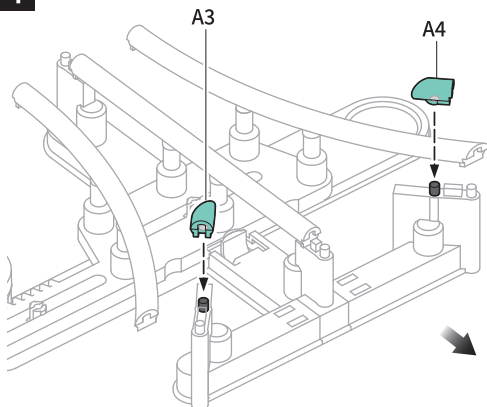
2



3



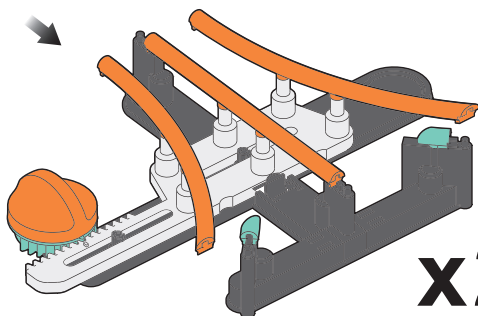
4



正确
Correct

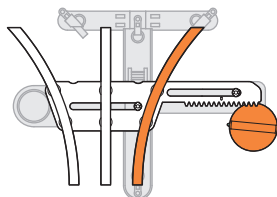
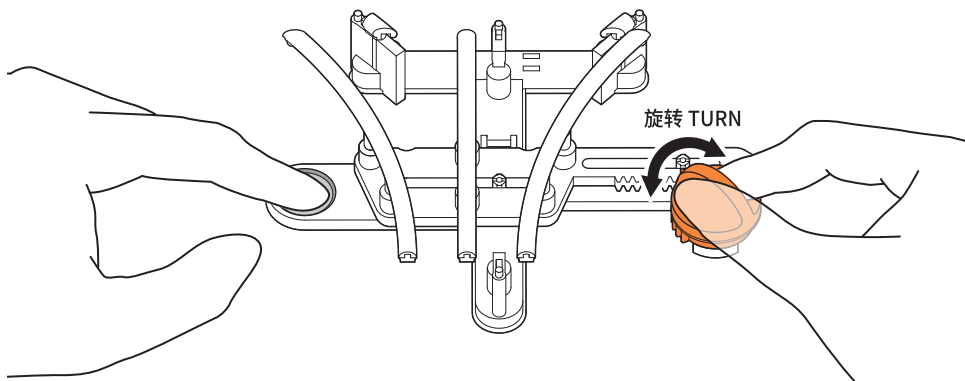


错误
Incorrect

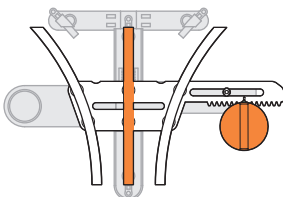


x2

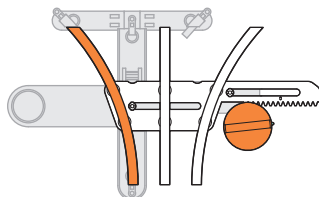
测试三岔路转向器 Test 3-Way Splitter



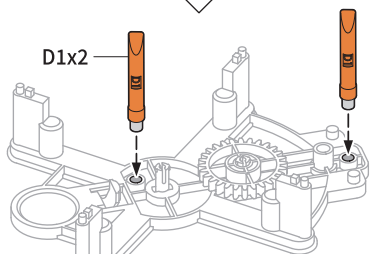
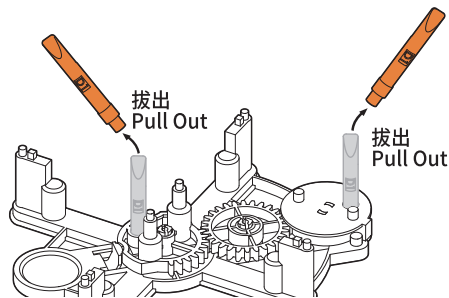
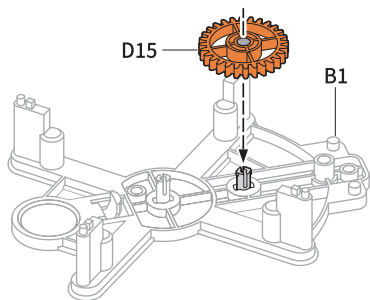
右线Right



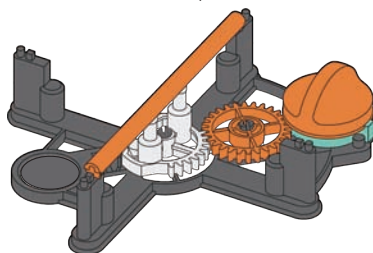
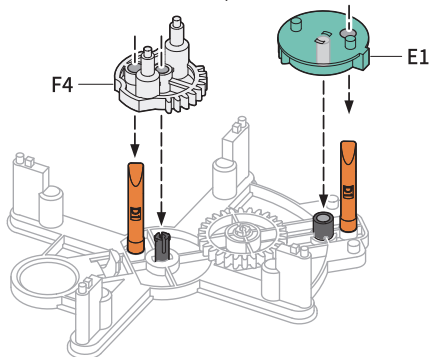
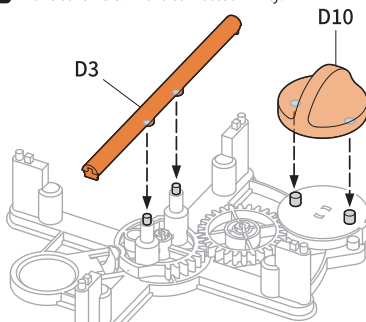
中线Middle



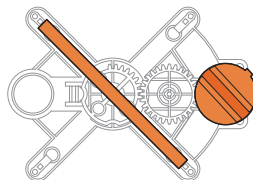
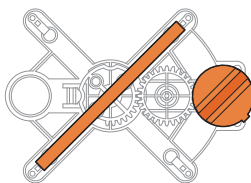
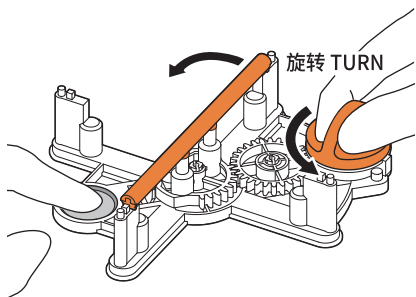
左线Left



! 确认D3和F4有紧密接合
Make sure D3 & F4 are connected firmly.

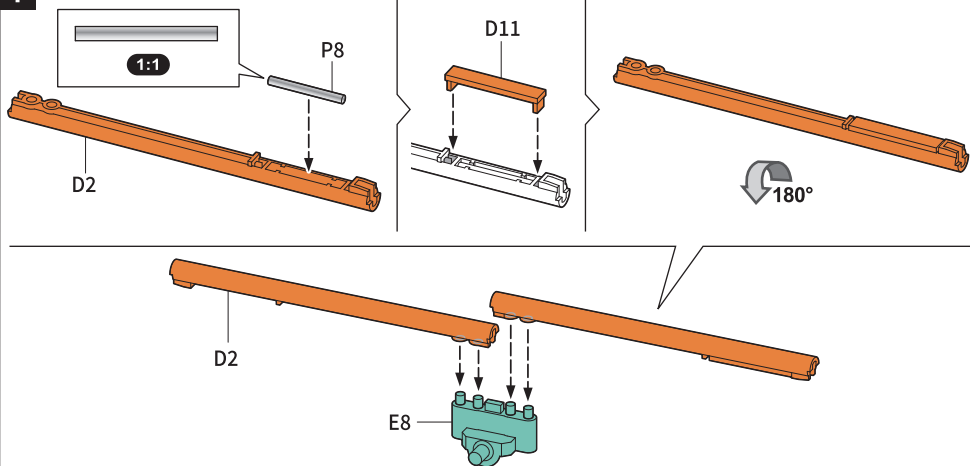


测试十字路口转向器 Test Cross Switch



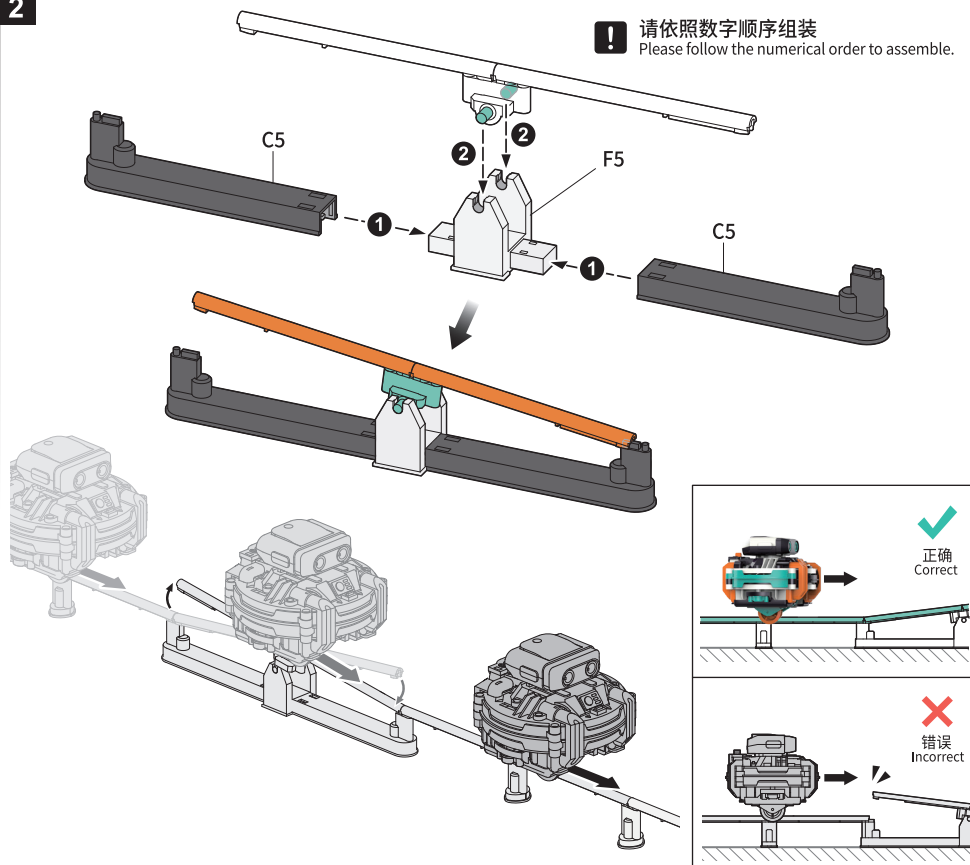
翘翘板组装 Seesaw Device Assembly

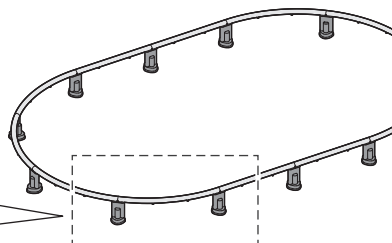
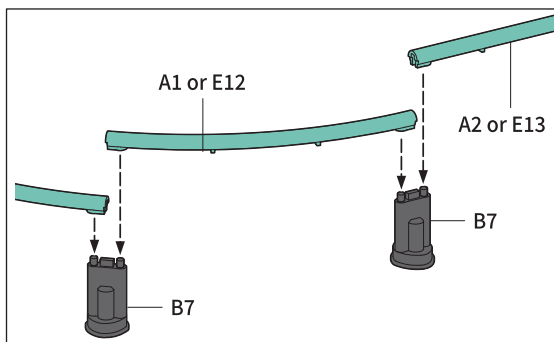
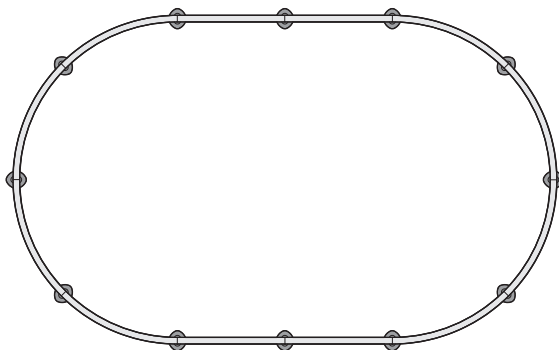
1



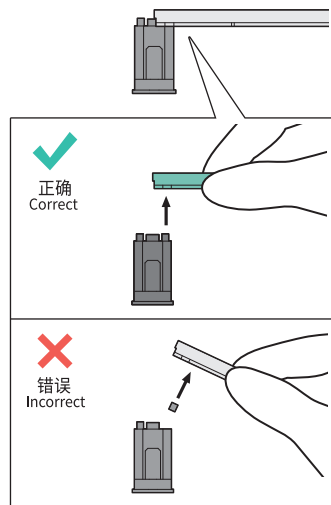
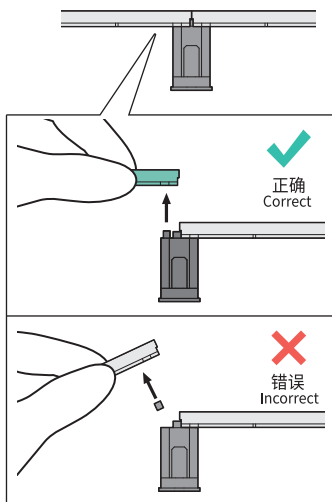
2

! 请依照数字顺序组装
Please follow the numerical order to assemble.





轨道拆卸How to Disassemble the Track

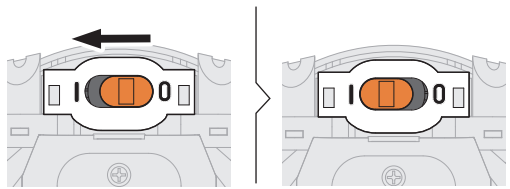


游玩方式How to Play

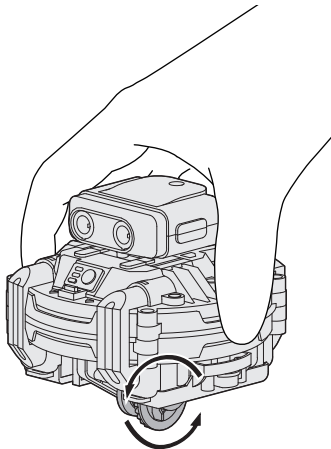


<https://www.prokits.com.tw/RobotKit/GE-637/>

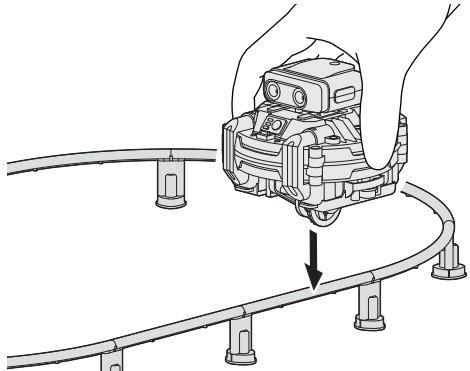
1 打开开关Switch on.



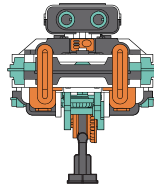
2 等马达运作约20秒 Allow the rotor to run 20 seconds.



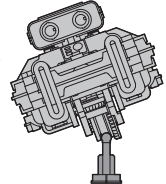
3 将机器人放到轨道上 Place WABO straight on the rail.



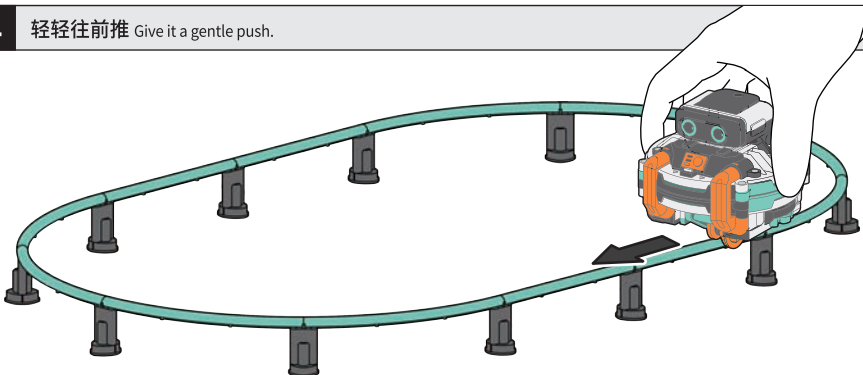
正确
Correct



错误
Incorrect



4 轻轻往前推 Give it a gentle push.



1



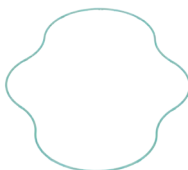
2



3



4



5



6



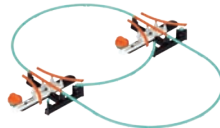
7



8



9



10



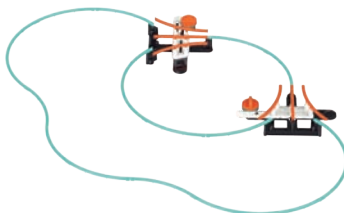
11



12



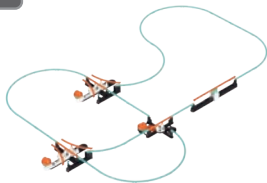
13



14



15



16



17



18



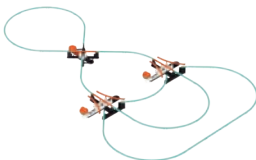
19



20



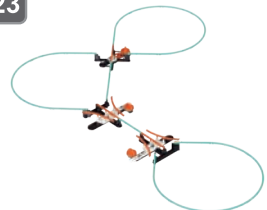
21



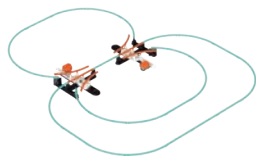
22



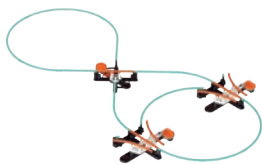
23



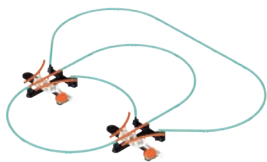
24



25



26



更多创意组合等你来发现!

More fun to be discovered!

你可以用轨道做无限组合，直走、转弯、绕圈，只要你能想像，任何形状都能变化，打造属于你独一无二的超级轨道。告诉你一个秘密，买越多组，变化乐趣更是无限放大喔！

Let's build an interesting monorail kingdom together with Wabo. You could also design your own unique one. Let's give it a try!



如需更换电池, 请参考第17页, 按步骤逆向执行。

To replace the battery, please refer to page 17 and follow the steps in reverse.

A

如果WABO更换新电池后仍无法正常运转, 请依以下步骤进行维修。

If Wabo fails to walk after the batteries are replaced, follow the steps below.

1. 将WABO重新启动, 开启后让马达转盘运转超过20秒后, 再把WABO放在直线轨道上前进 (请参考第24页步骤 **2~4**)

Re-boost Wabo. Allow the rotor to run 20 seconds, and place it straight on the rail. (refer to page 24, step **2** ~ step **4**)

2. 請確認E17有組裝 (請參考第16頁步驟 **21**) Make sure E17 is assembled. (refer to page 16, step **21**)

B

如果WABO启动后发出巨大的声音, 请将齿轮上油 (请参考第4~5页步骤 **1~3**, 并请遵循“拆卸技巧”拆开WABO)

If Wabo makes a loud noise after being activated, please oil the gears. (refer to page 4~5, step **1** ~ step **3**, and follow “Disassembly Tip”)

C

如果WABO启动后猛烈晃动, 请依以下步骤进行维修

If Wabo shakes violently after being activated, please follow the steps below.

1. 请确认B9有牢固锁上 (请参考第10页步骤 **6**) Make sure B9 is tightly screwed. (refer to page 10, step **6**)

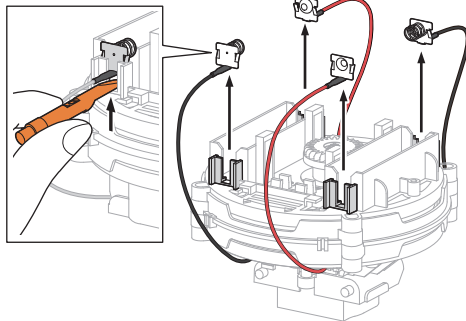
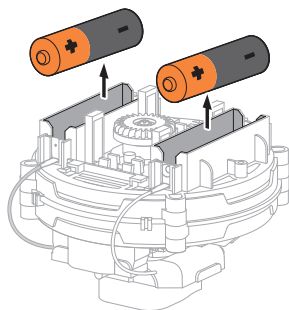
2. 请确认转盘上的所有螺丝都有牢固锁上 (请参考第7页, 并请遵循“拆卸技巧”拆开WABO)

Check if the screws on the rotor are screwed firmly. (refer to page 7, and follow “Disassembly Tip”)

3. 请将连接马达与转盘的螺丝重新锁紧。 (请参考第11页步骤 **7**)

Re-lock the rotor on the motor. (refer to page 11, step **7**)

拆卸技巧 Disassembly Tip



警告

Caution

内含小零件, 请勿让三岁以下孩童使用, 避免误食危险。
不可对着人脸和眼部冲撞, 避免造成意外伤害。

The toy contains small parts, please keep them away from children under 3 years old. Please keep attention on children while using cutting tools to avoid accidents.

太阳能系列



机械动力系列



盐水动力系列



空气动力



液压动力系列



会员服务

Member Service



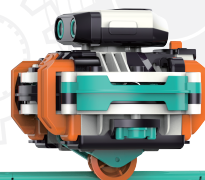
✓ 补配件申请
Accessories
Replacement



✓ 官方网站
Official Website

Wabco 轨道平衡机器人

GYRO MONORAIL SCIENCE KIT



● 电池移除或更换应由成人或在成人监督下进行。
Removal and replacement of batteries should be carried out by adults or under adult supervision.

● 请避免电池或电池连接器端子短路。
Avoid short circuiting the contacts in the battery compartment or the battery terminals.

● 充电电池应在成人监督下进行充电。
Rechargeable batteries are only to be charged under adult supervision.

● 充电电池在充电前应从玩具中取出。
Rechargeable batteries are to be removed from the toy before being charged.

● 请勿试图对非充电电池进行充电。
Do not attempt to recharge non-rechargeable batteries.

● 电池长期不用或电力耗尽时请取出以避免电池漏液。
Remove exhausted batteries from the product to avoid leakage.

● 请勿混用新旧电池及不同厂牌、种类的电池。
Do not mix used batteries and new batteries or batteries of different types.

● 请勿混合碱性、标准(碳锌)电池或充电(镍镉)电池使用。
Do not mix alkaline, standard (carbon-zinc), or rechargeable (nickel-cadmium) batteries.

● 电池放入前请先确认正确正负极性方向。
Batteries are to be inserted with the correct polarity.

● 本产品不能连接多于一个电源。
The toy is not to be connected to more than the recommended number of power supplies.

Pro'sKit®

Professional Science Kits

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PROKIT'S INDUSTRIES CO., LTD



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