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### **Multi-Channel I/R Remote Control Box:**

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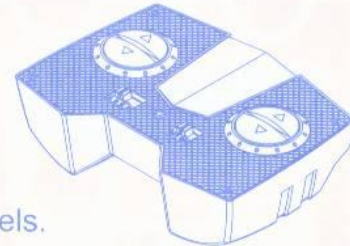
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# Multi-Channel I/R Remote Control Box

## 1 Product Introduction:





- I/R remote control box with four channels.  
Set up the different channels by switching the left-hand slide switch.
- By using infrared, the unit can control 2 motors to turn forward and backward.
- Four units can play together by setting different channels.




### Power source required:


Voltage/Electronic/Mechanical: 4x 'AA' batteries (not included)


## 2 Tools You May Need:


Long Nose Pliers	Diagonal Cutter	Screwdriver	4xAA Batteries
			


## 3 Mechanical Parts List:

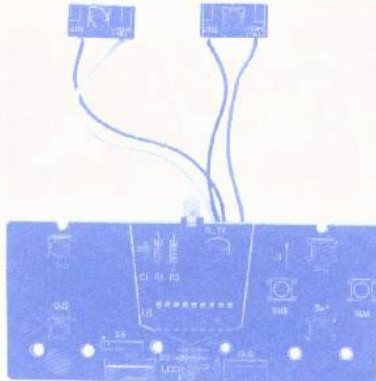
<b>P1</b>	<b>Battery terminal-1</b>		Qty	2
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<b>P2</b>	<b>Battery terminal-2</b>		Qty	2
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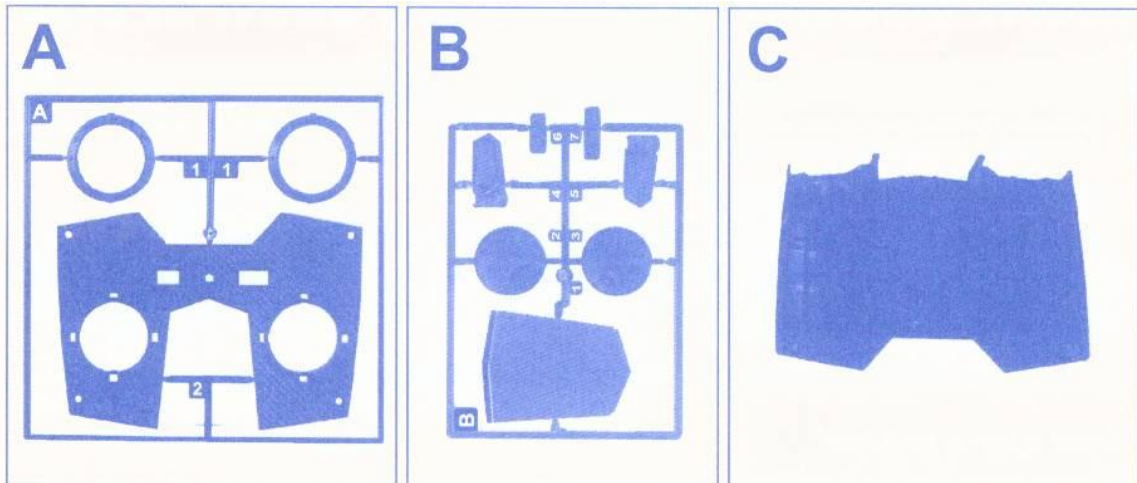
<b>P3</b>	<b>Battery terminal-3</b>		Qty	2
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<b>P4</b>	<b>Tapping screw</b>		Qty	4 (2.3x7)
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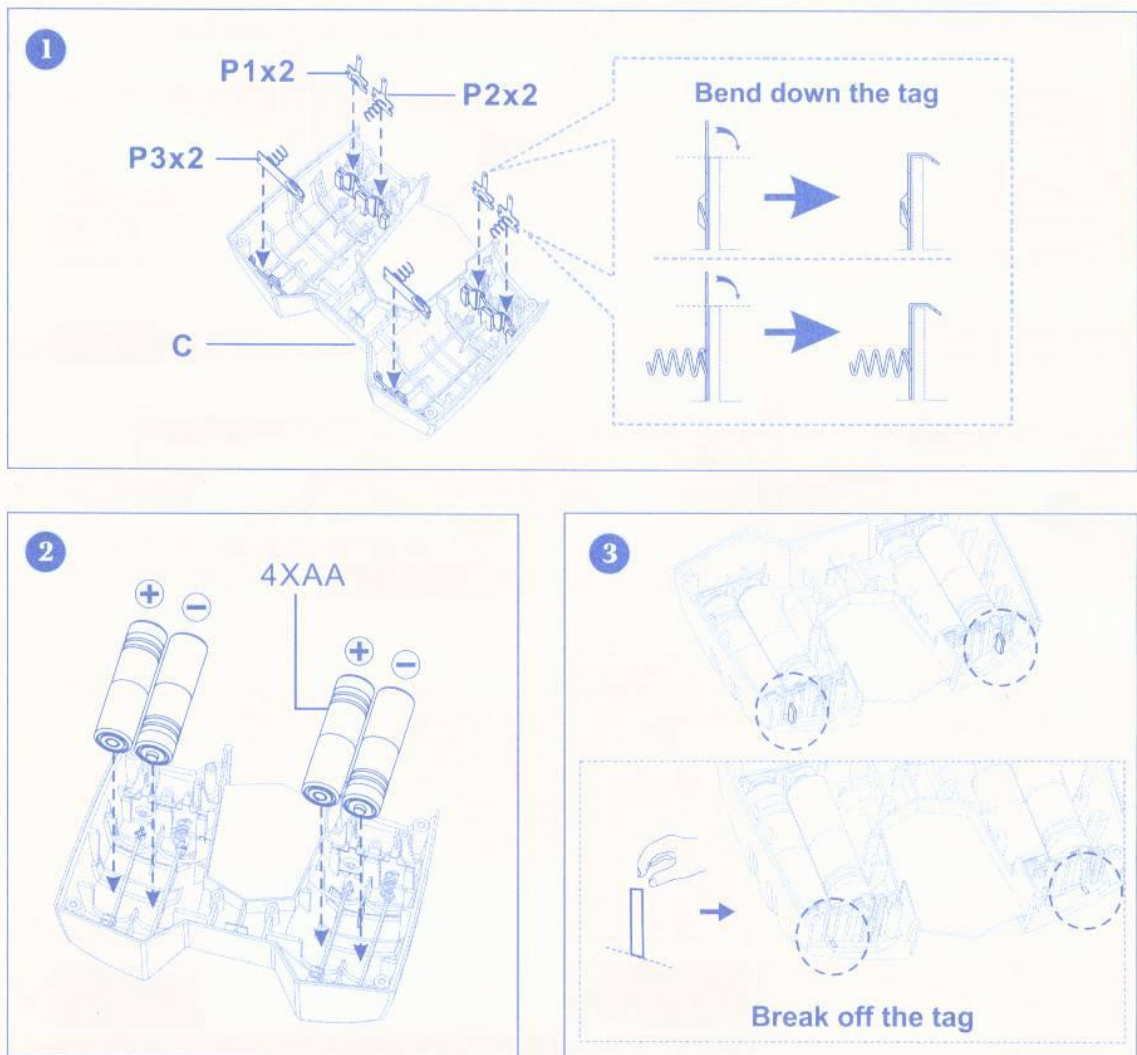
<b>P5</b>	<b>Tapping screw</b>		Qty	4 (2.6x7)
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<b>P6</b>	<b>PC Board</b>			
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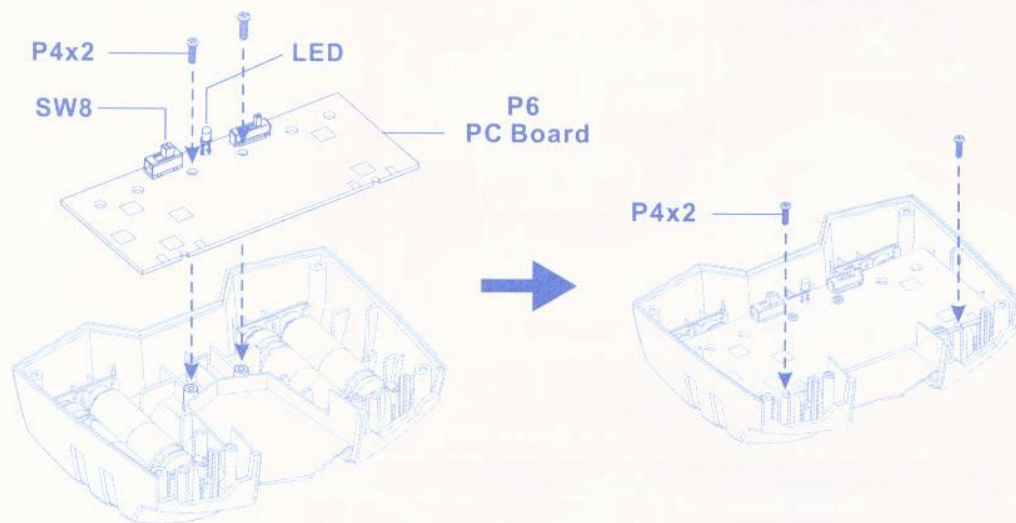




## 5 Mechanical Assembly:

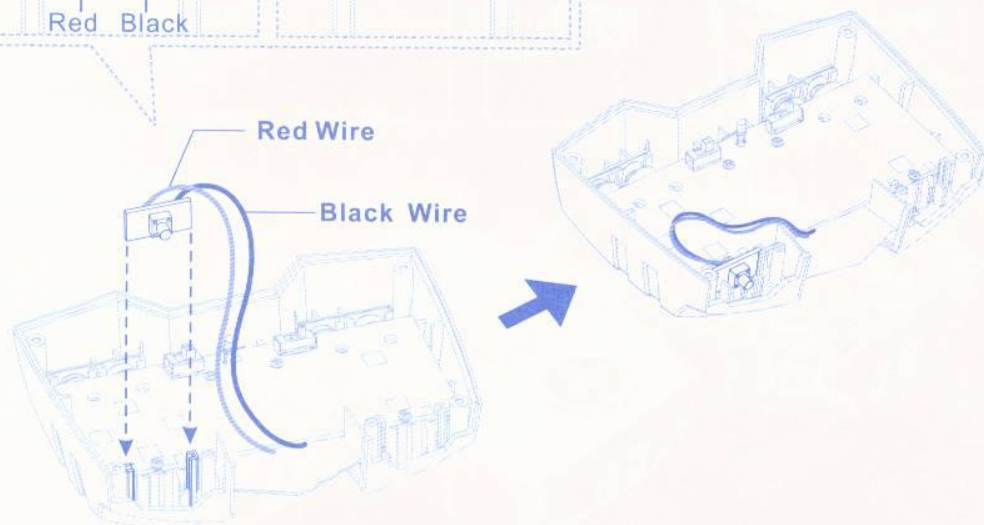
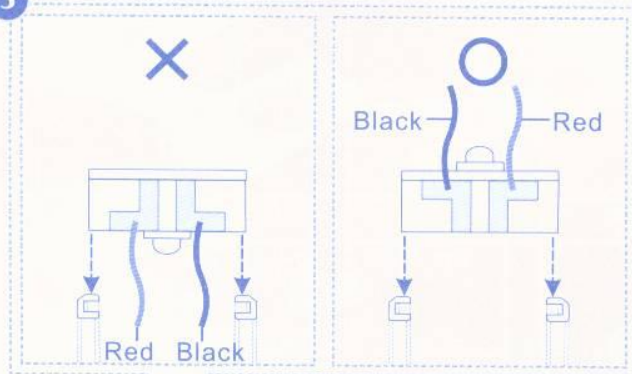


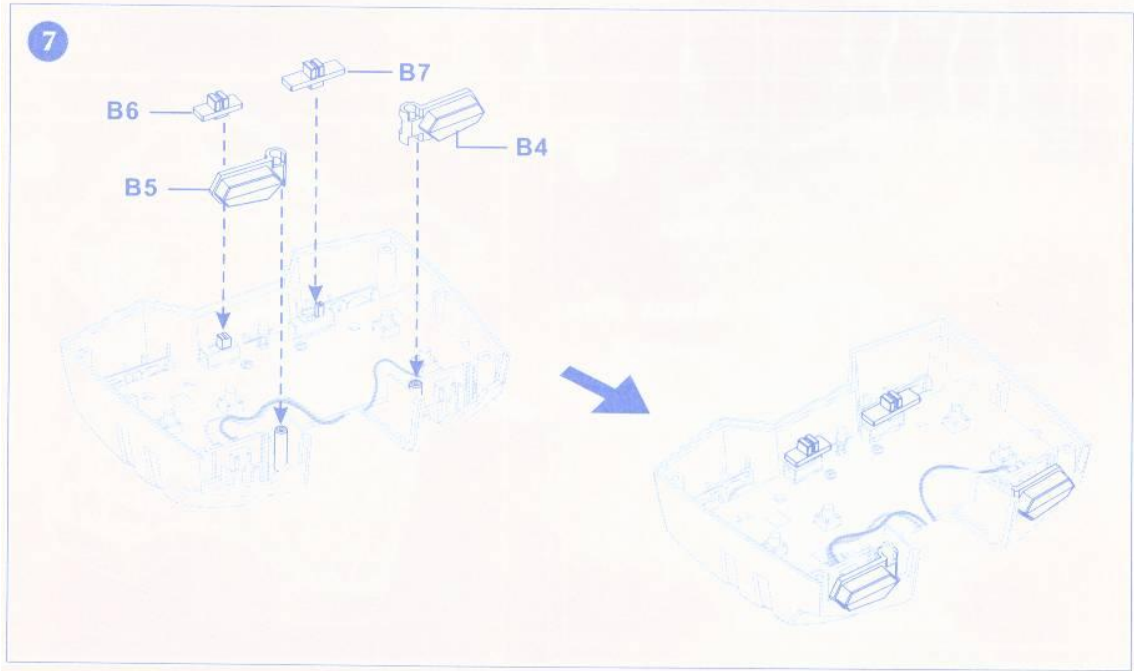
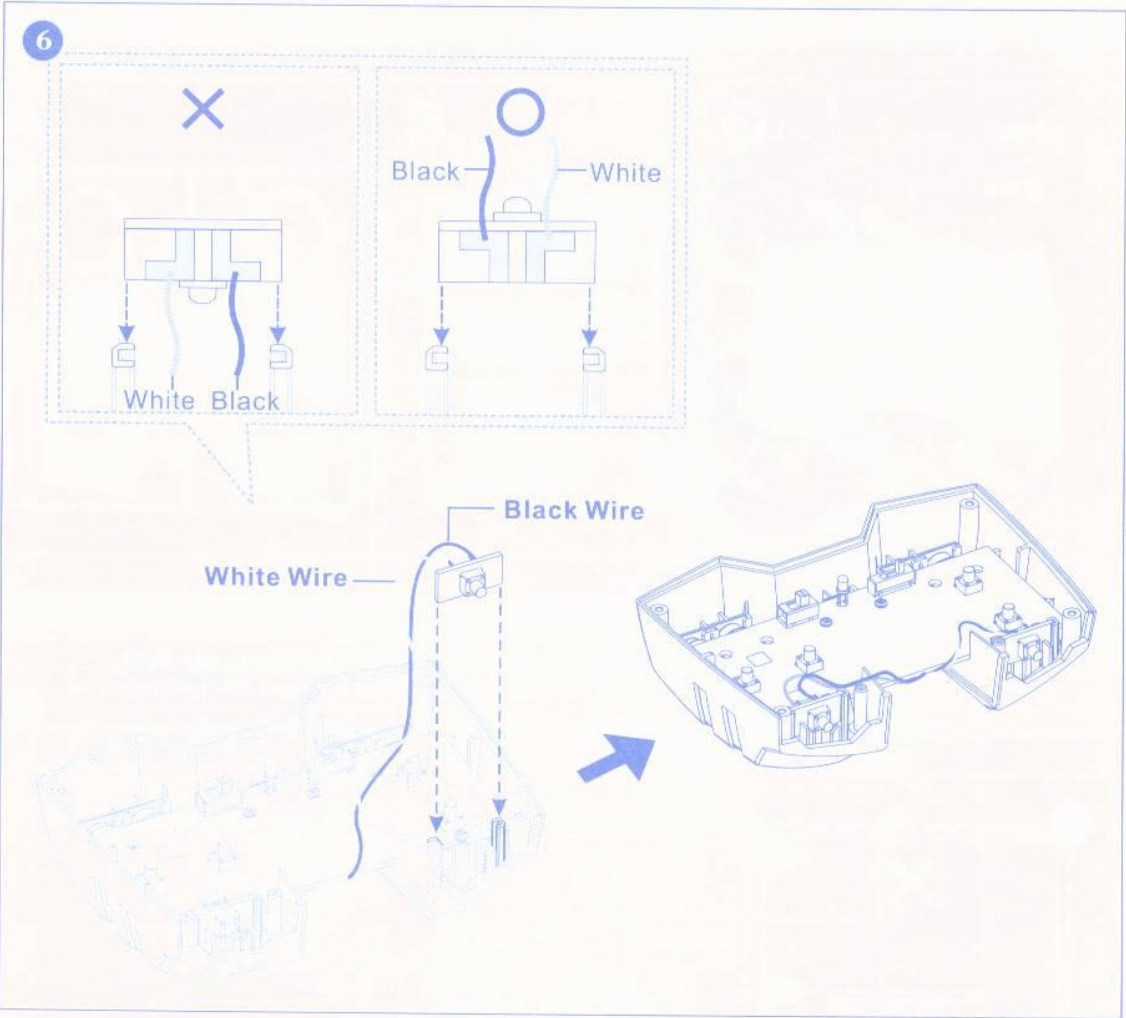
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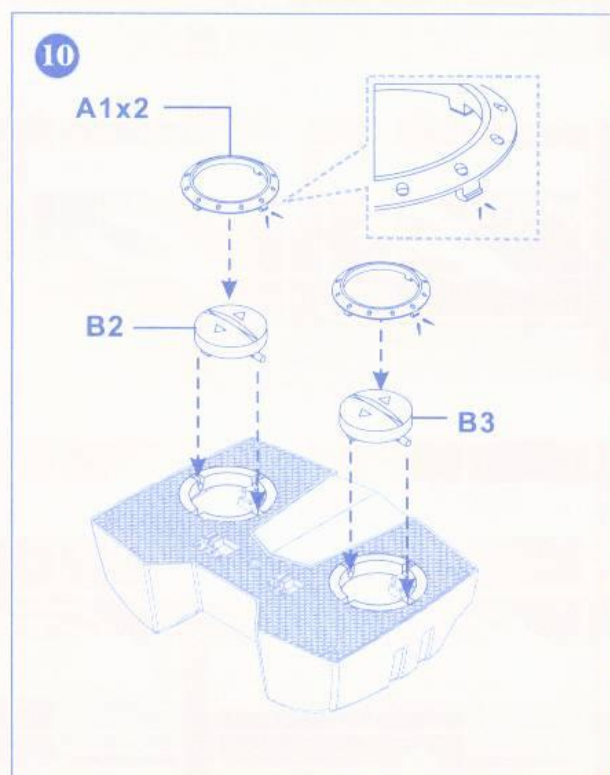
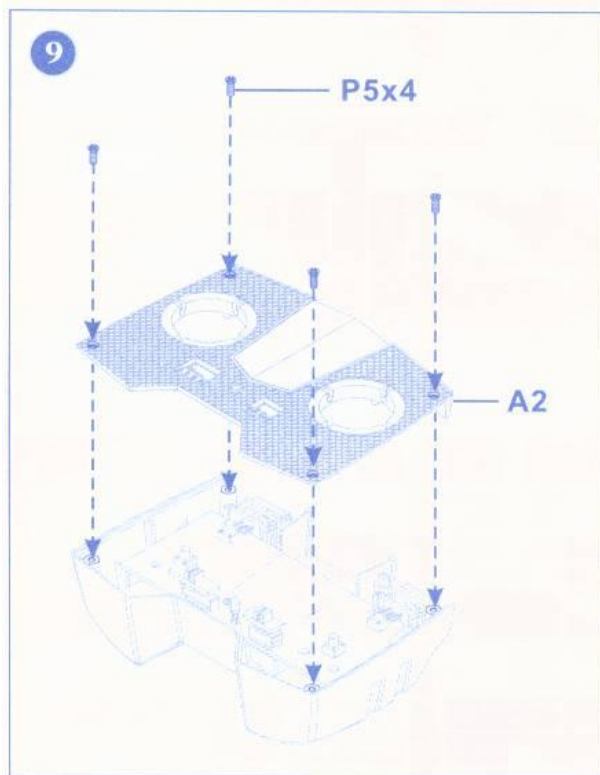
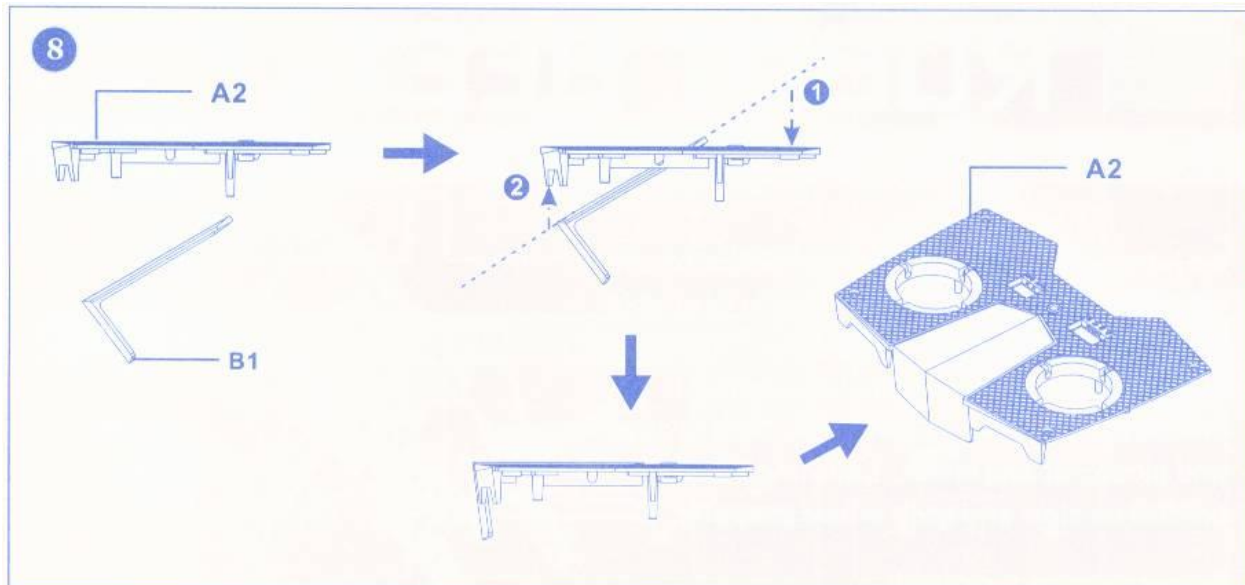


Turn ON the power switch (SW8 to right position), use 4pcs P4 to screw the PC board tightly until the red LED light turns on.

5







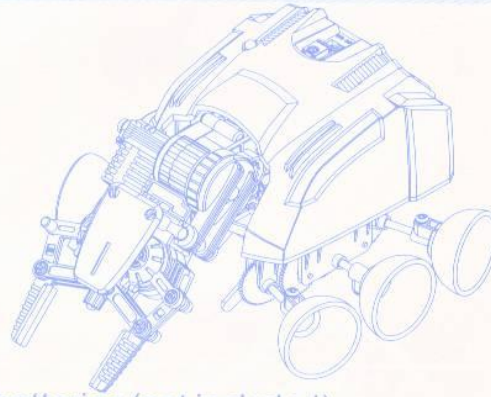
**11** Finished Product



# ROBOT BEETLE

## 1 Product Introduction:

An infrared remote control mechanical beetle which provides 4 different channels to enable 4 beetles to play together. 6 wheels have it moving forward, backward, left and right smoothly. 2 motors to control its claw to open and close, lift and lower. Learning how to control its claw and grab article properly.



### Power source required:

Voltage/Electronic/Mechanical: 4x 'AA' batteries (not included)

## 2 Tools You May Need:



## 3 Mechanical Parts List:

P1	Motor	Qty
		1

P2	Motor	Qty
		1

P3	Motor	Qty
		1

P4	Motor	Qty
		1

P5	Pinion Gear 8T	Qty
		2

P6	Gear With Shaft(Green)	Qty
		2

P7	Gear With Shaft(Orange)	Qty
		4

P8	Gear 44/18T(Blue)	Qty
		4

P9	Gear 48/18T(White)	Qty
		2




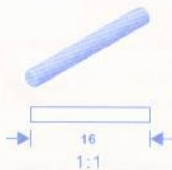
P10	Gear 32/10T(Gray)	
	Qty	
		4


P11	Helical Gear 32/10T(Brown)	
	Qty	
		2


P12	Clutch Gear 32T(Blue)	
	Qty	
		2

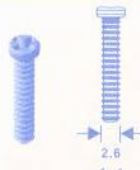
P13	Output Gear 10T(Black)	
	Qty	
		2


P14	Round Shaft	
	Qty	
		3 (2x20)


P15	Round Shaft	
	Qty	
		1 (2x16)

P16	Eyelet	
	Qty	
		6


P17	Tapping Screw	
	Qty	
		32 (3x7)


P18	Tapping Screw	
	Qty	
		3 (2.6x14)


P19	Tapping Screw	
	Qty	
		5 (2.3x7)


P20	Tapping Screw	
	Qty	
		2 (2x12)


P21	Screw	
	Qty	
		5 (3x11)

P22	Screw	
	Qty	
		3 (3x16)

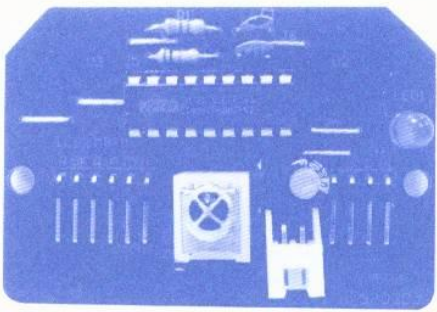
P23	Battery Terminal	
	Qty	
		2

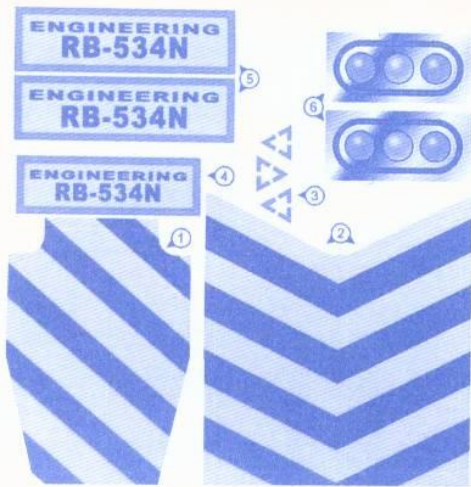
P24	Battery Terminal With Connector	
	Qty	
		1

P25	Battery Terminal With Wire	
	Qty	
		1

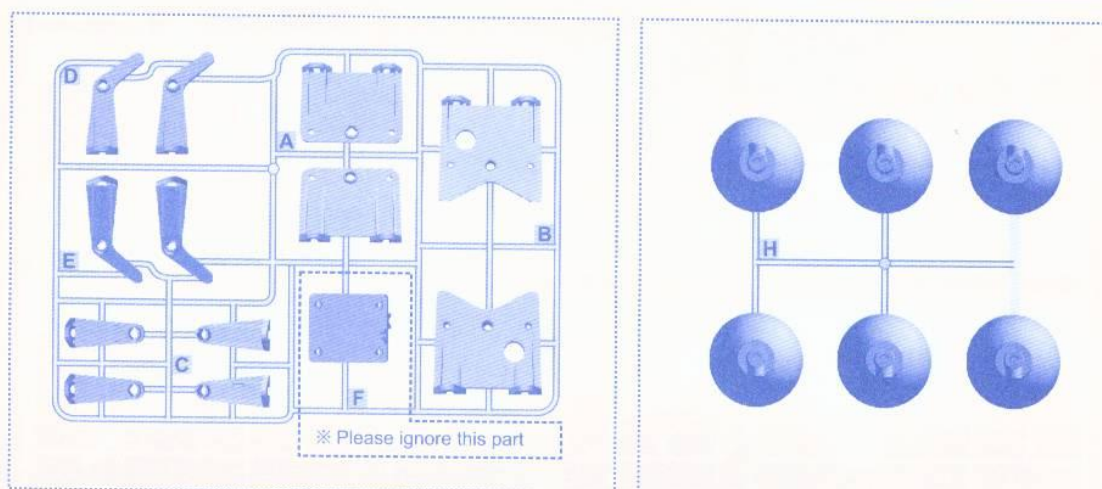
P26	LED With Wire	
	Qty	
		1

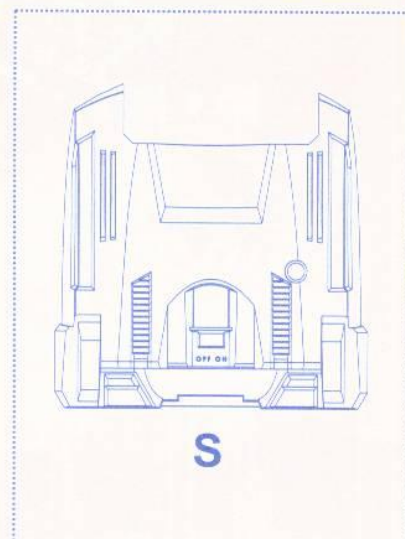
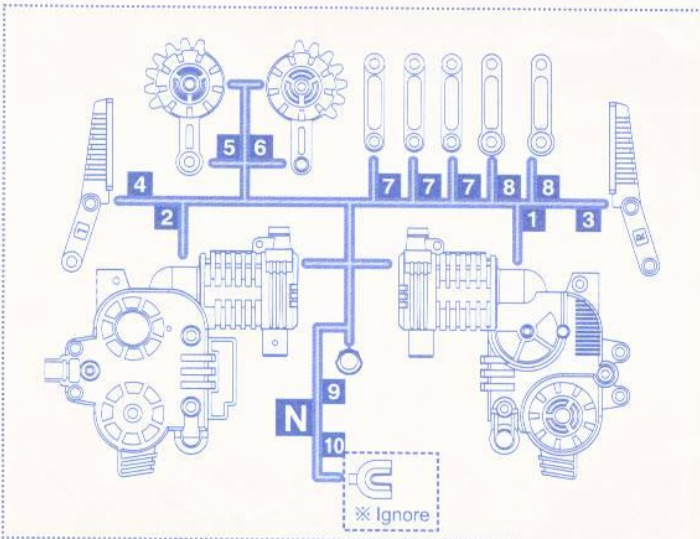
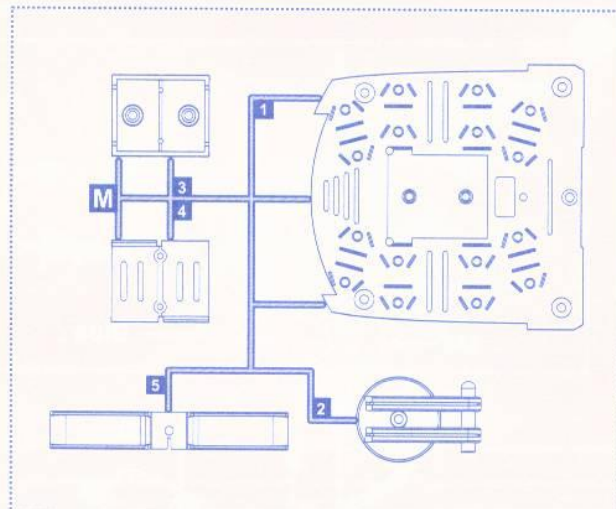
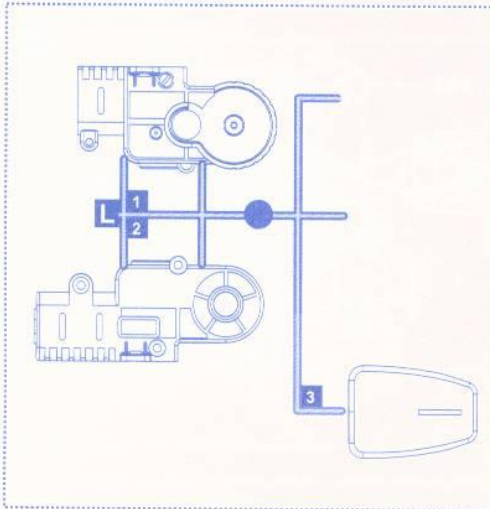
P27	Sponge	
	Qty	
		2

P28	PC Board	Qty
		1

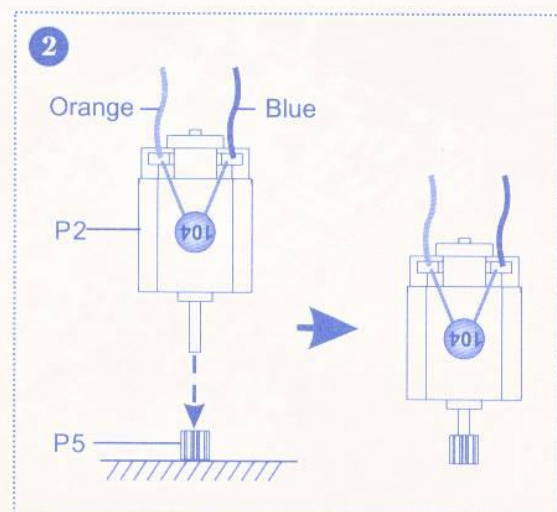
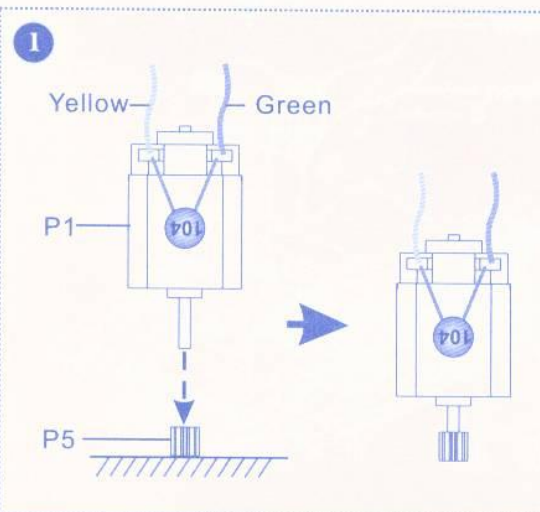
P29	Sticker	Qty
		1

#### 4 Plastic Parts:



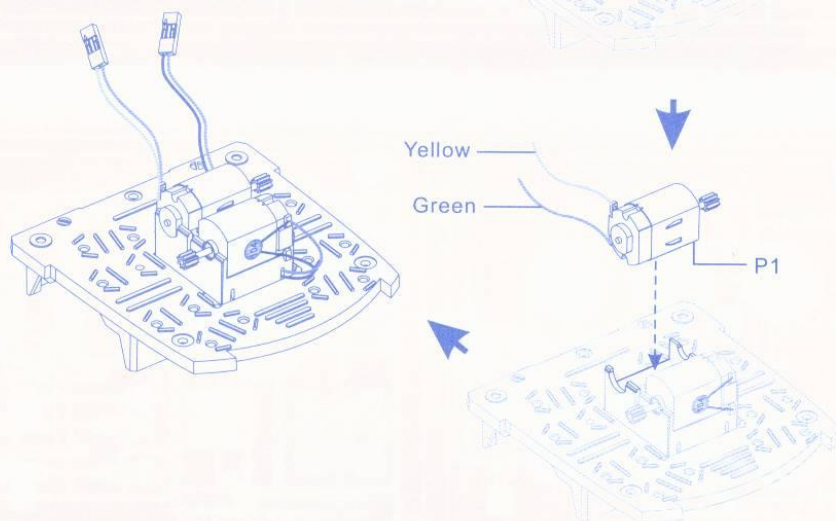
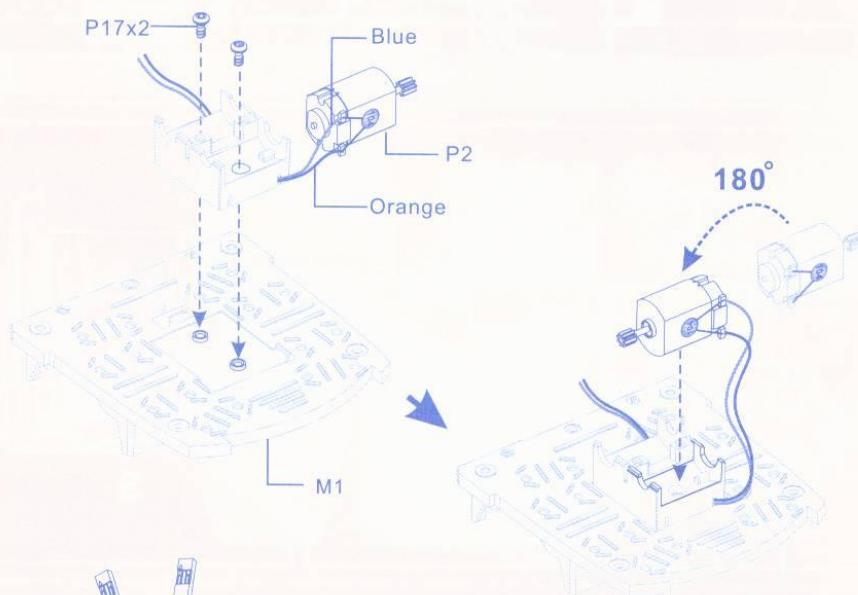
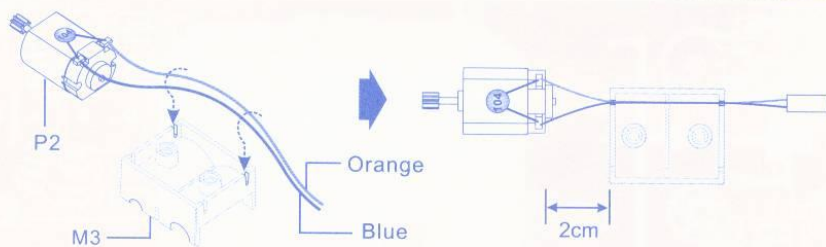


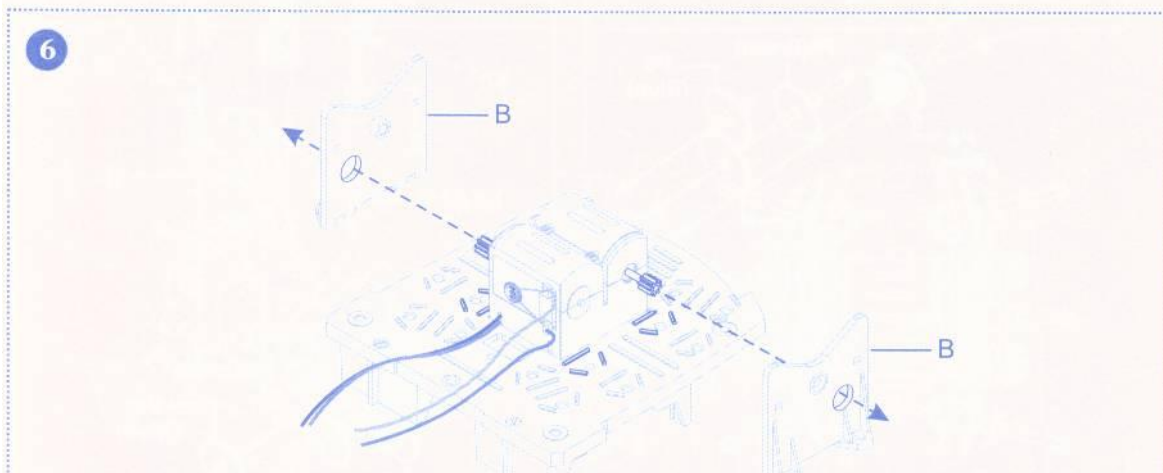
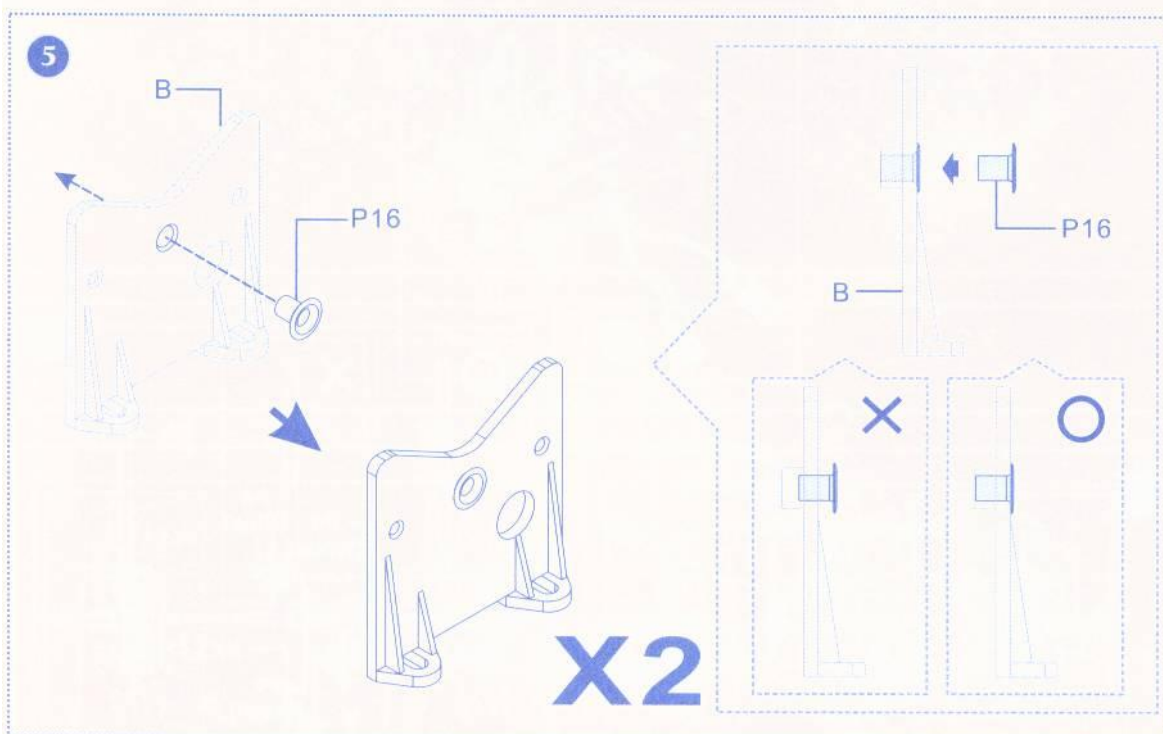
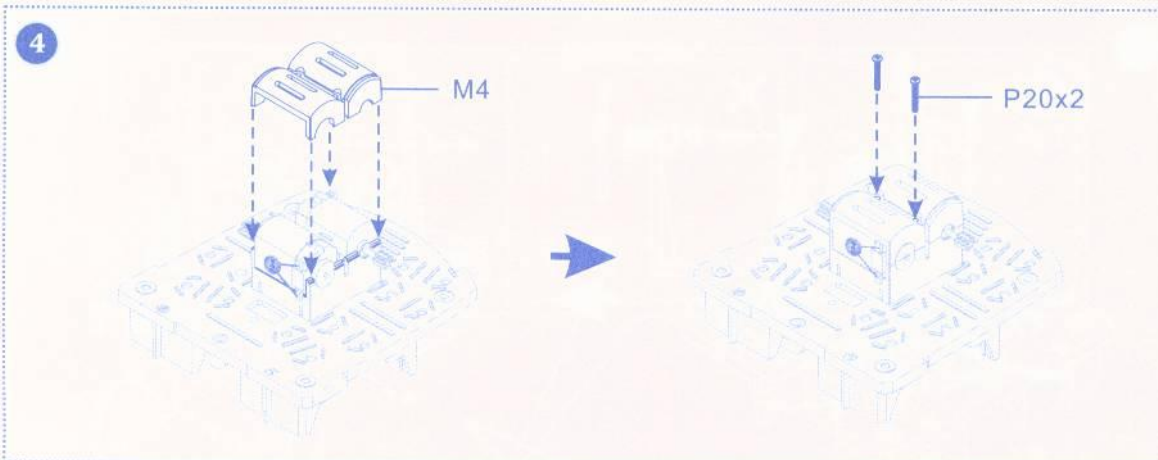
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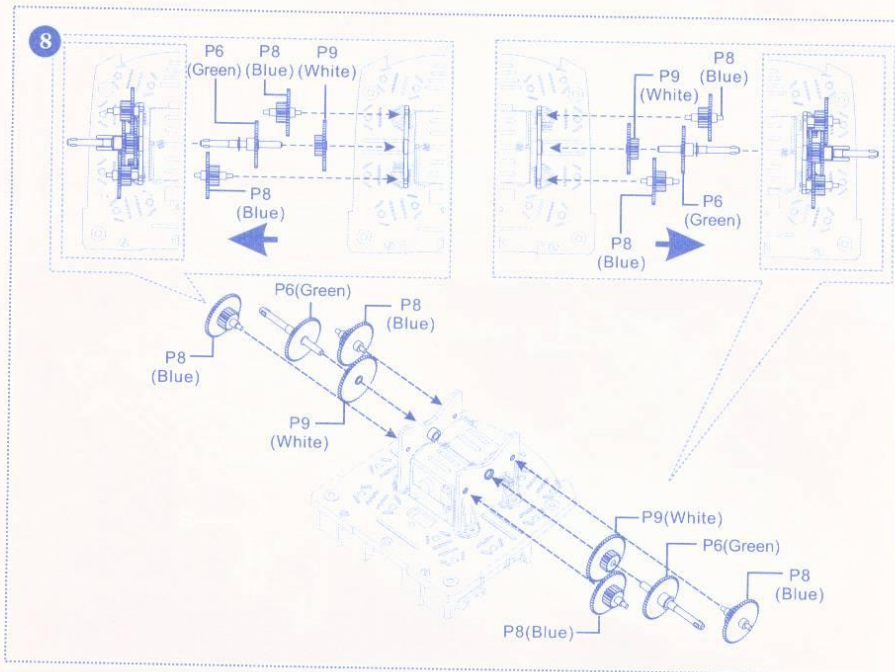
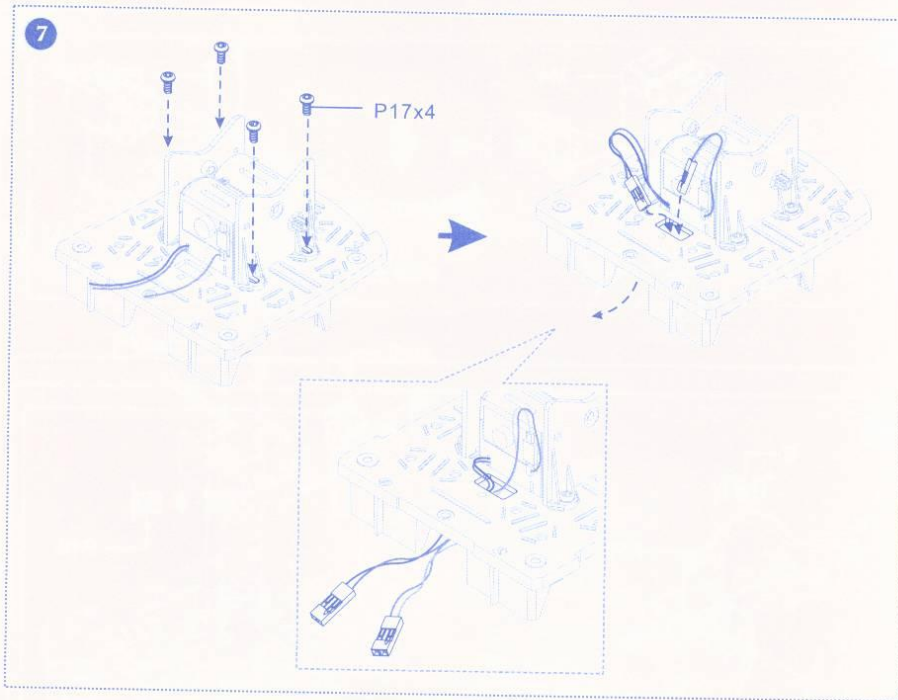




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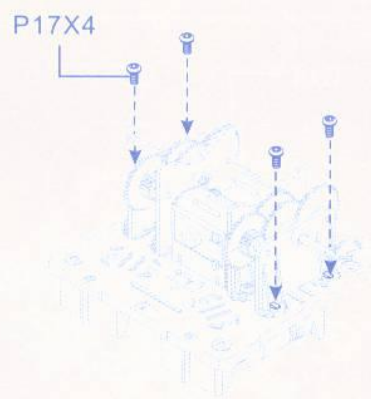
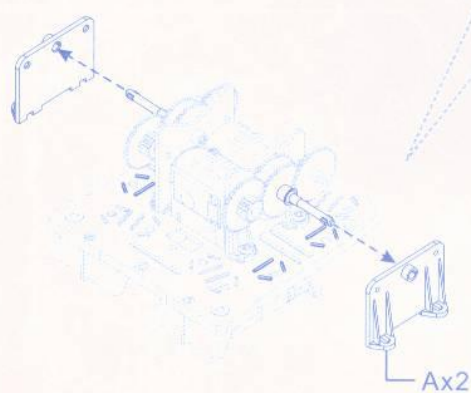
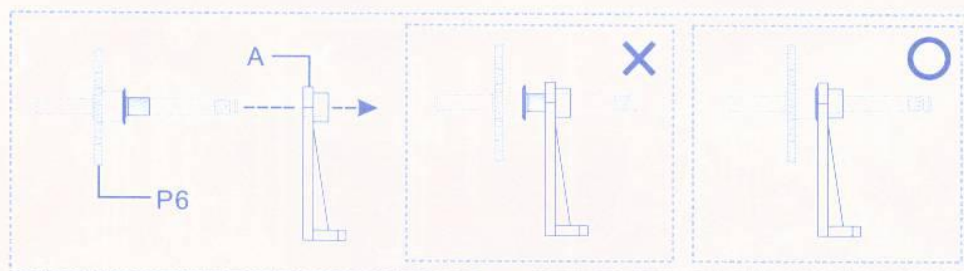




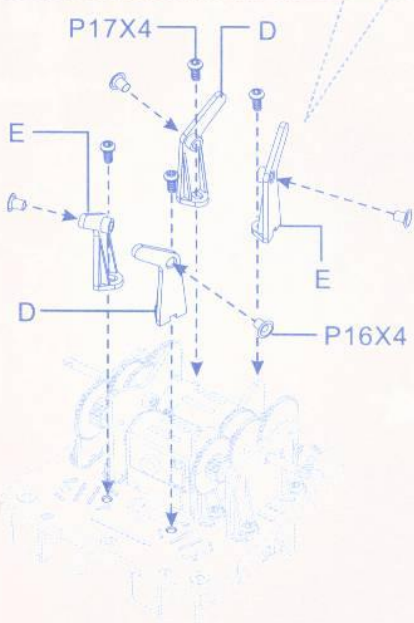
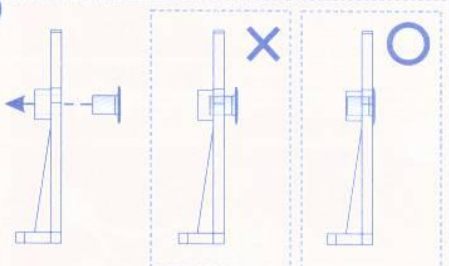




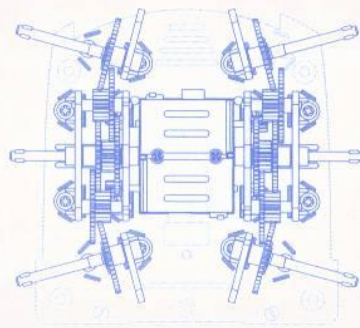
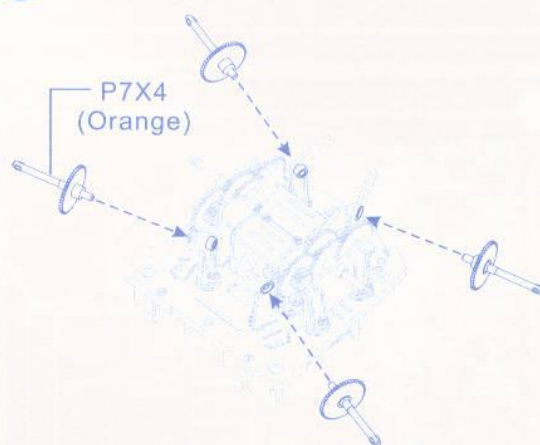
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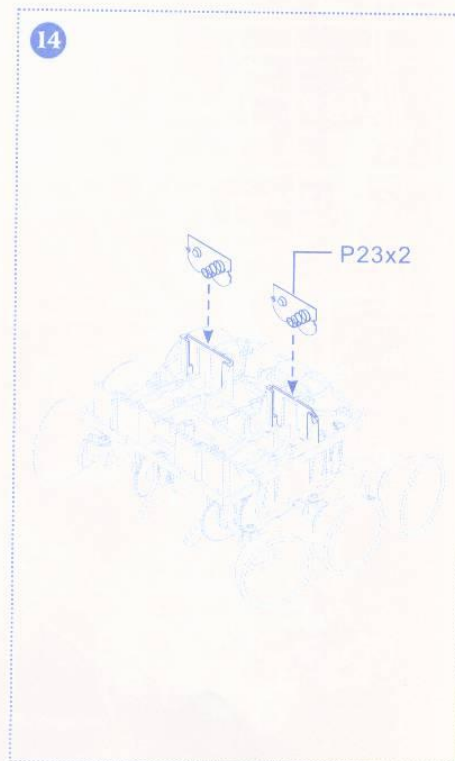
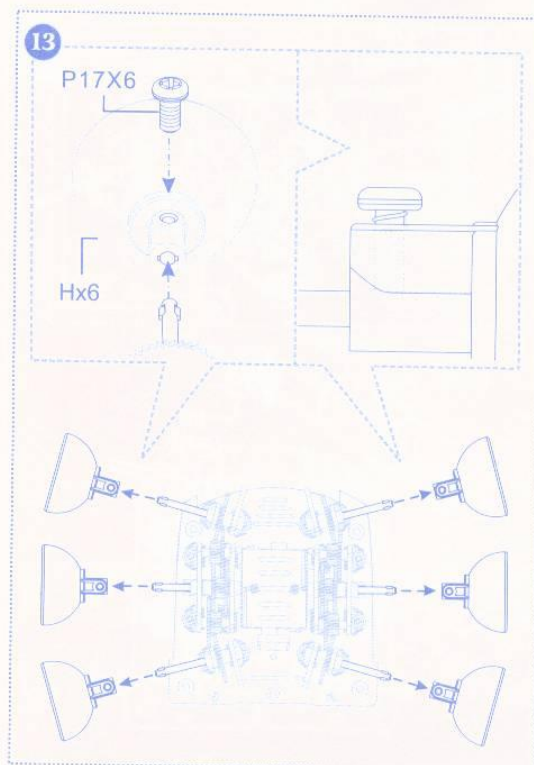
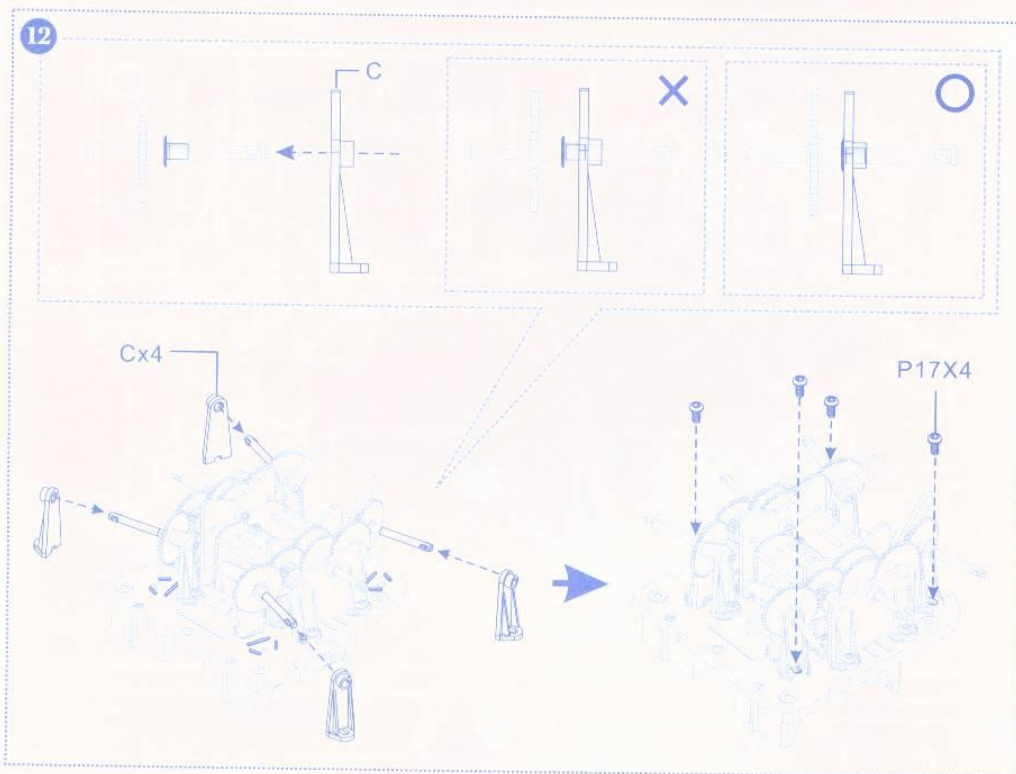


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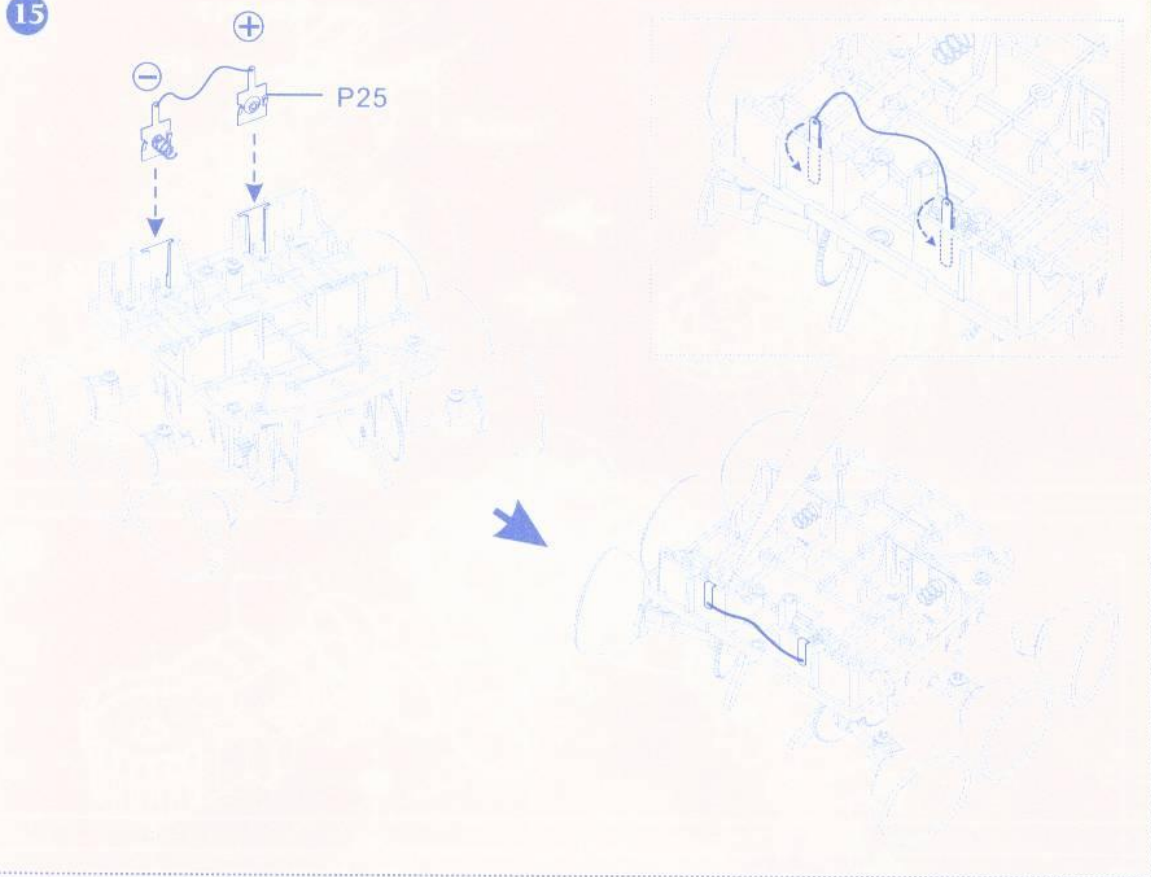


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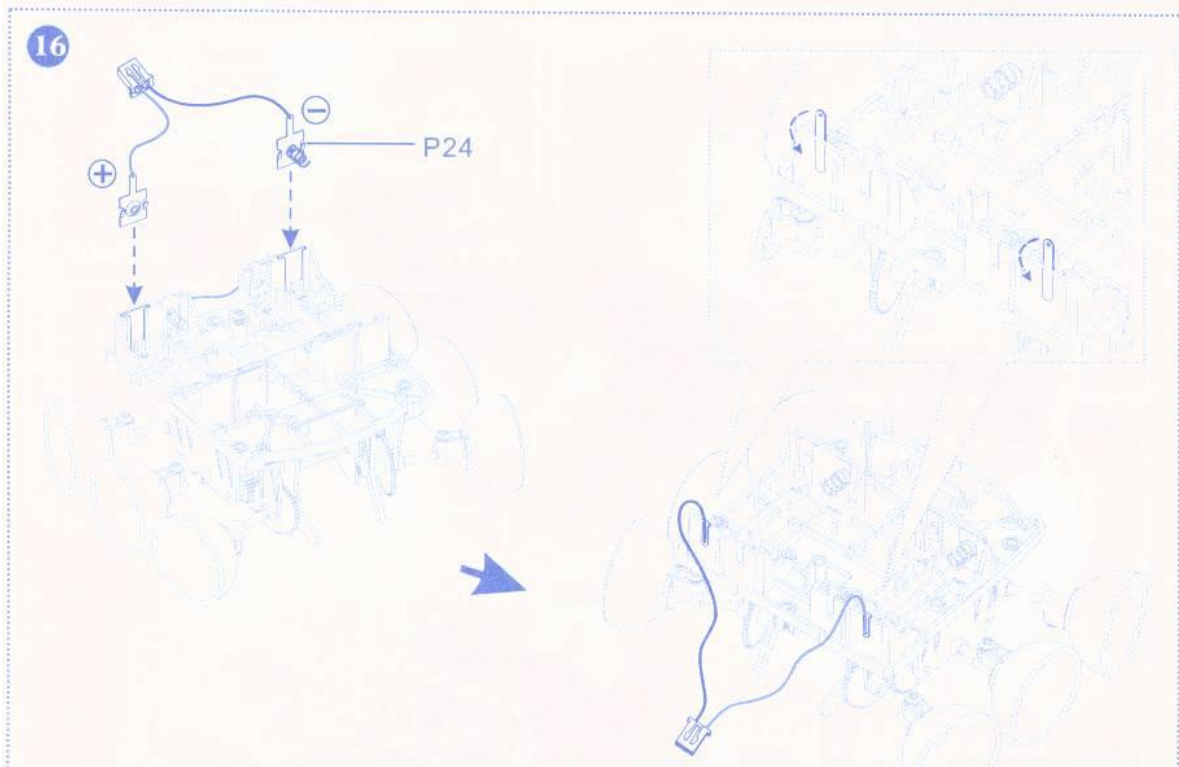




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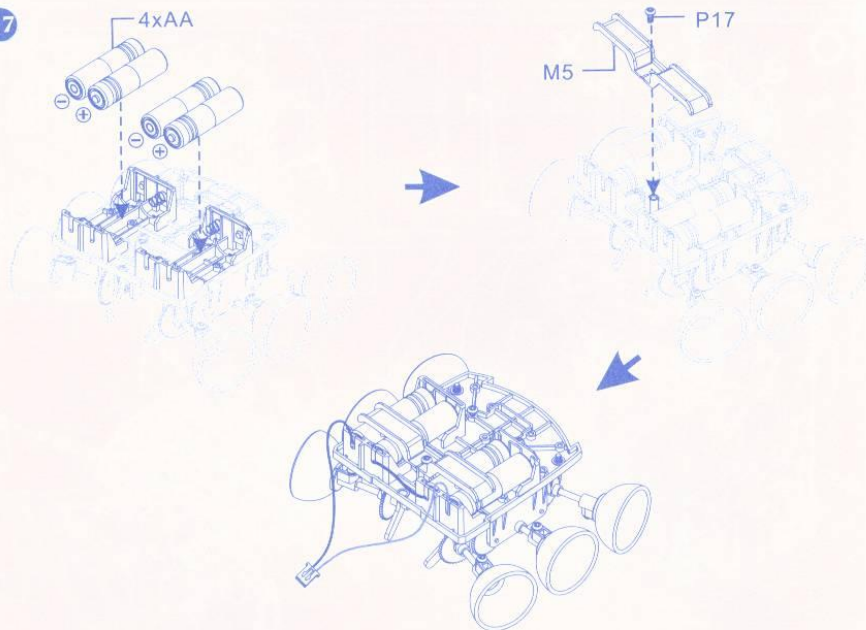


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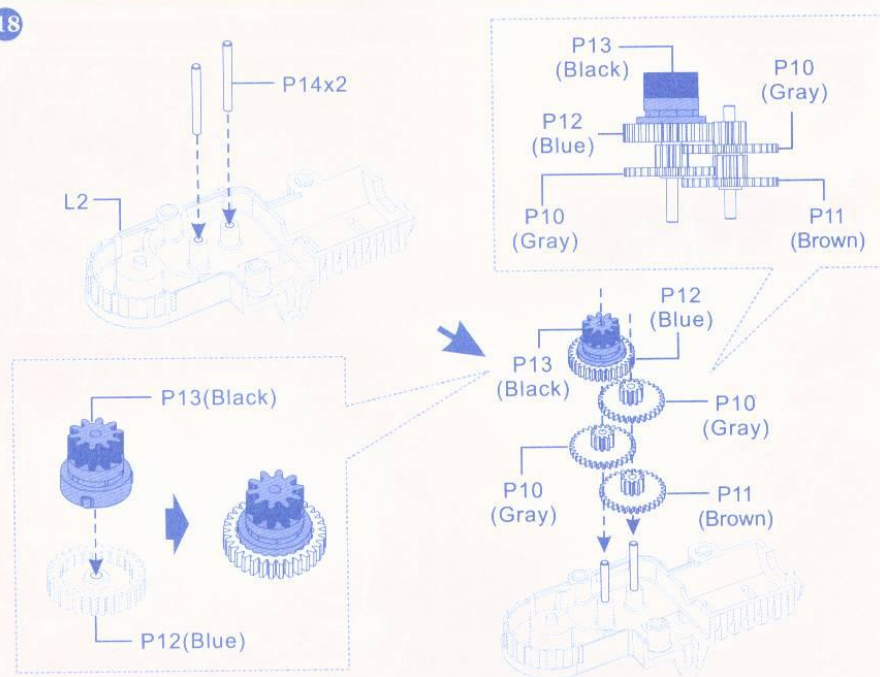




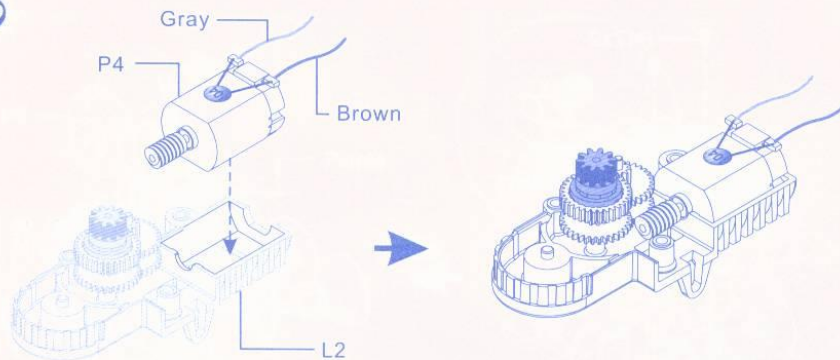
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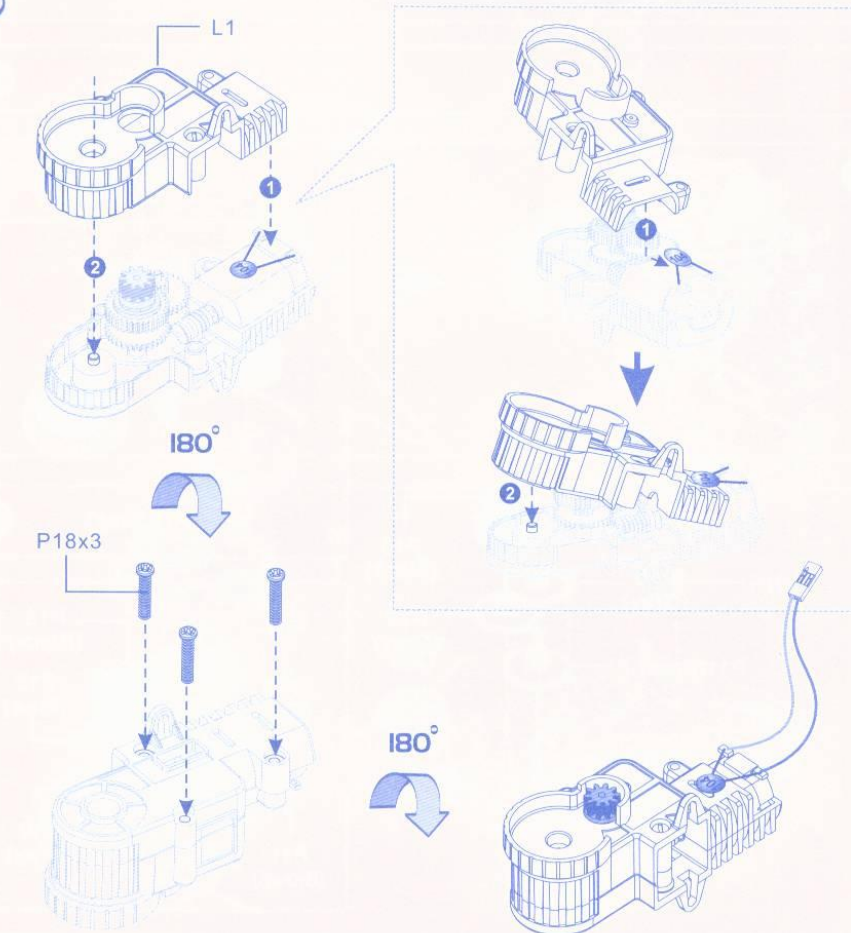
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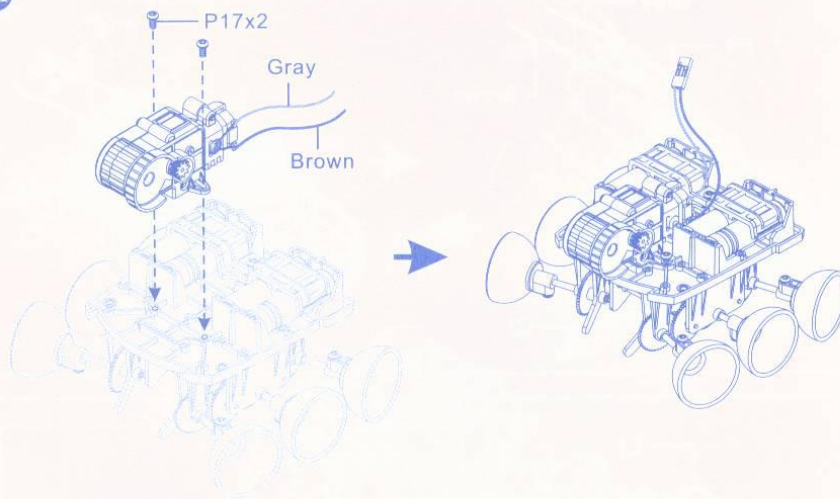
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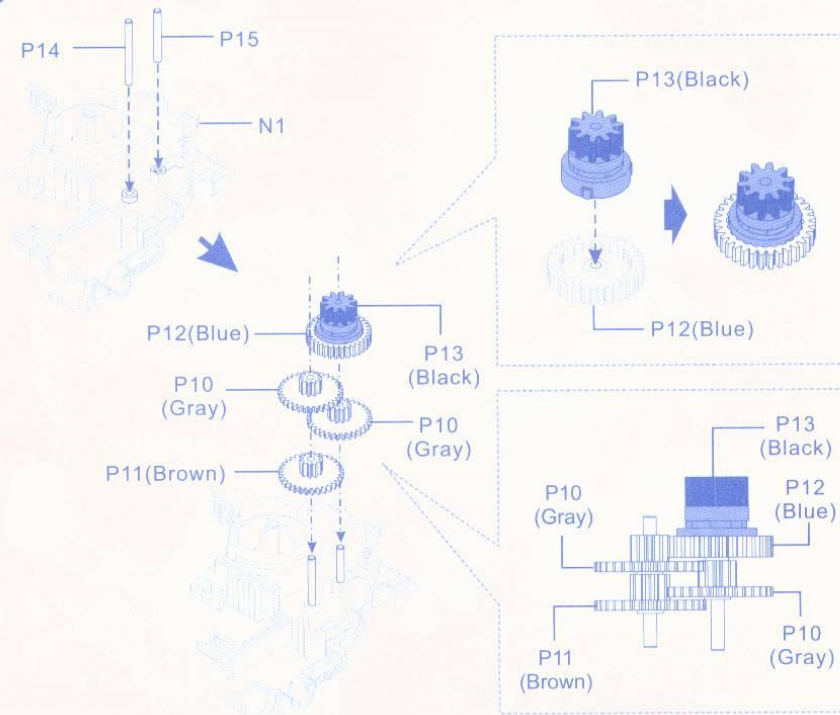


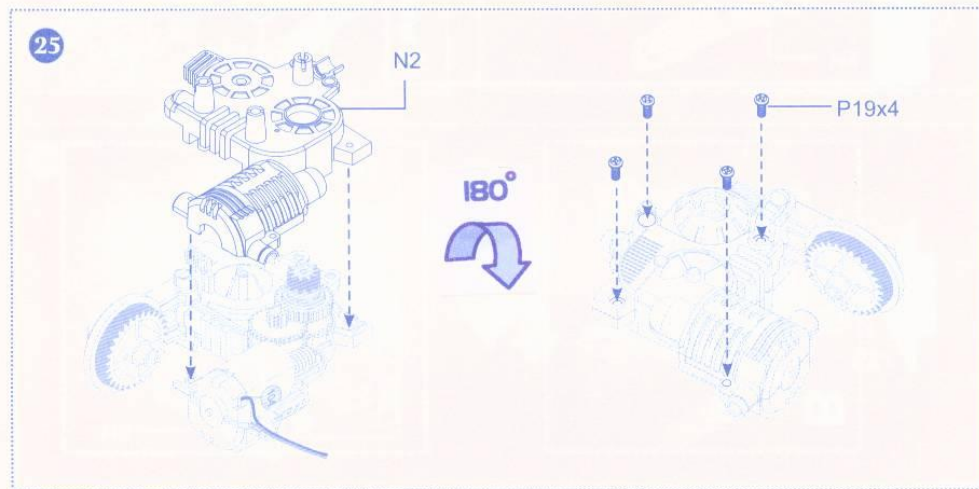
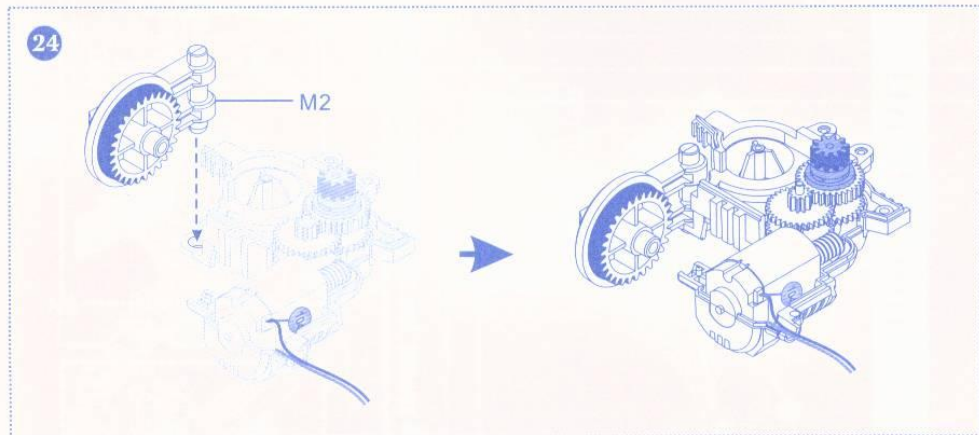
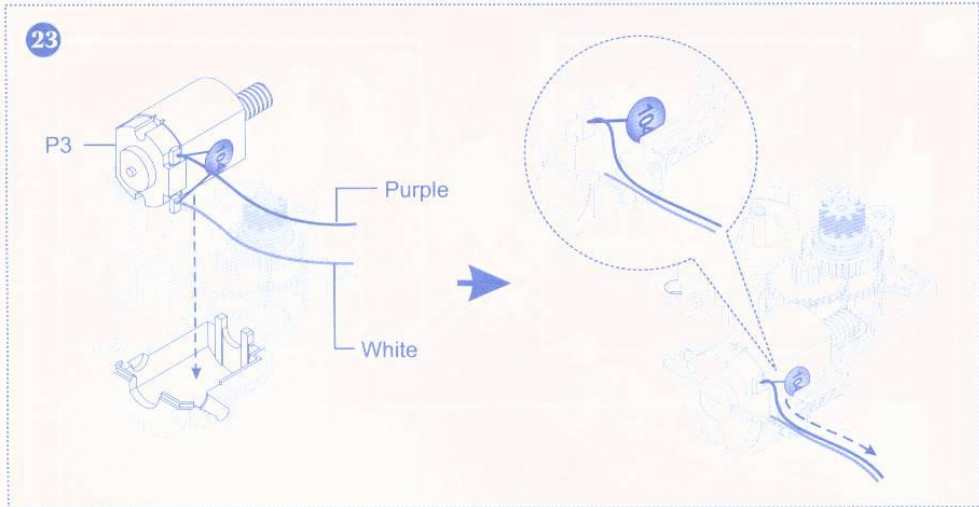


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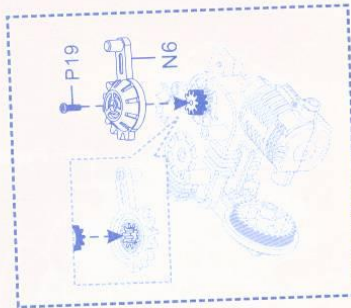
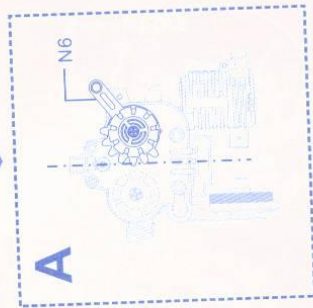
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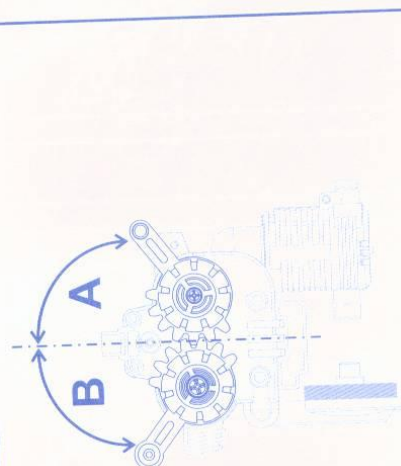


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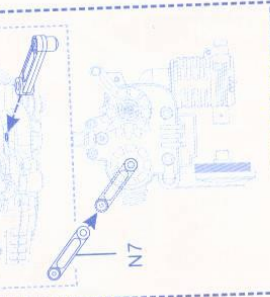
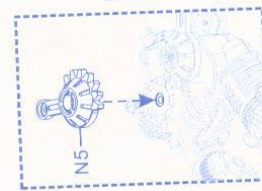
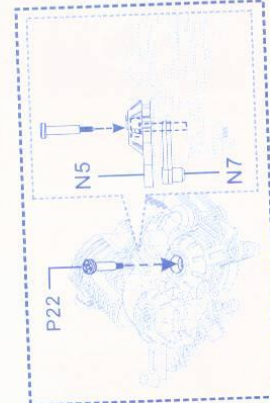
Step 1



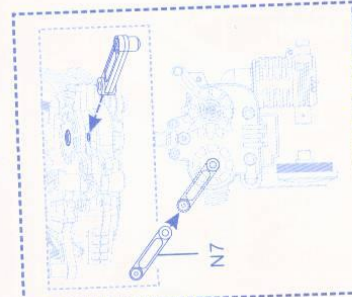
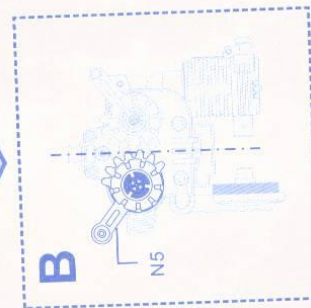
Important!



A and B must be same distance to the central.

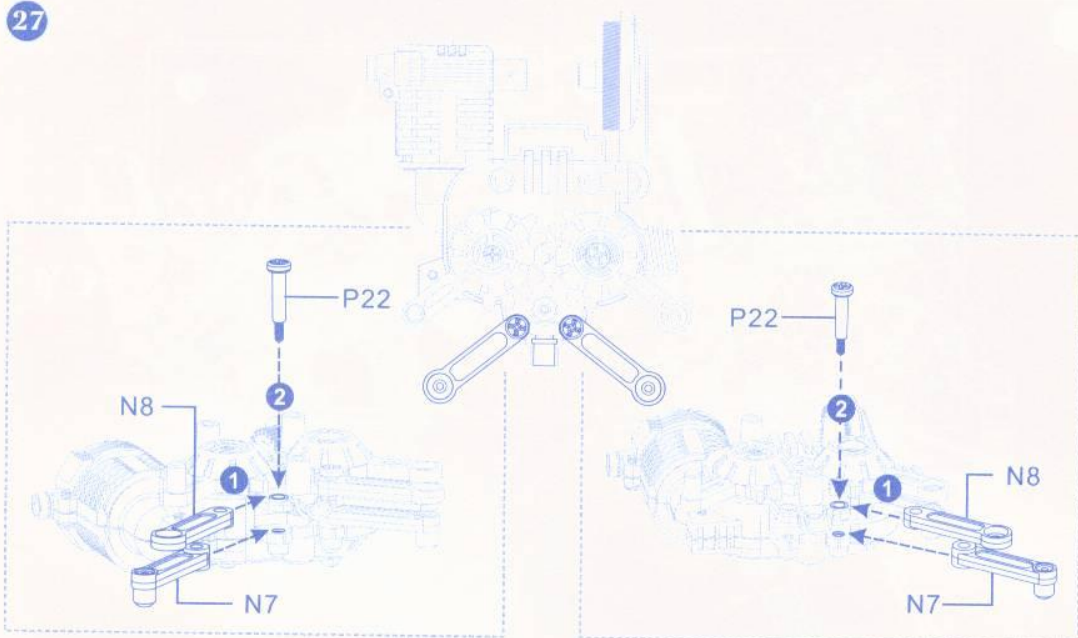


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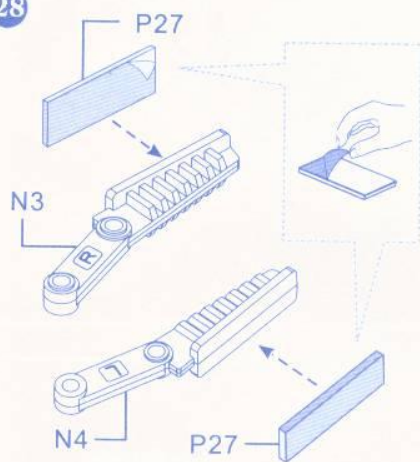




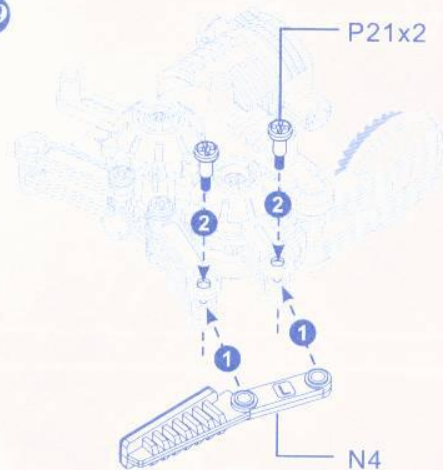
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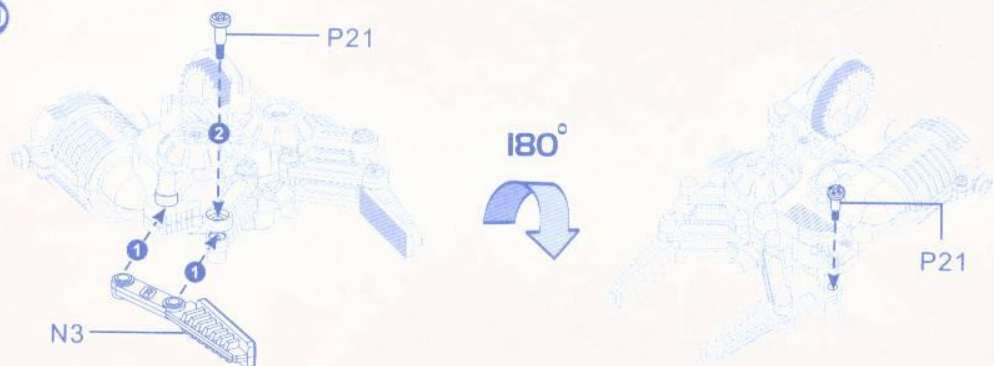
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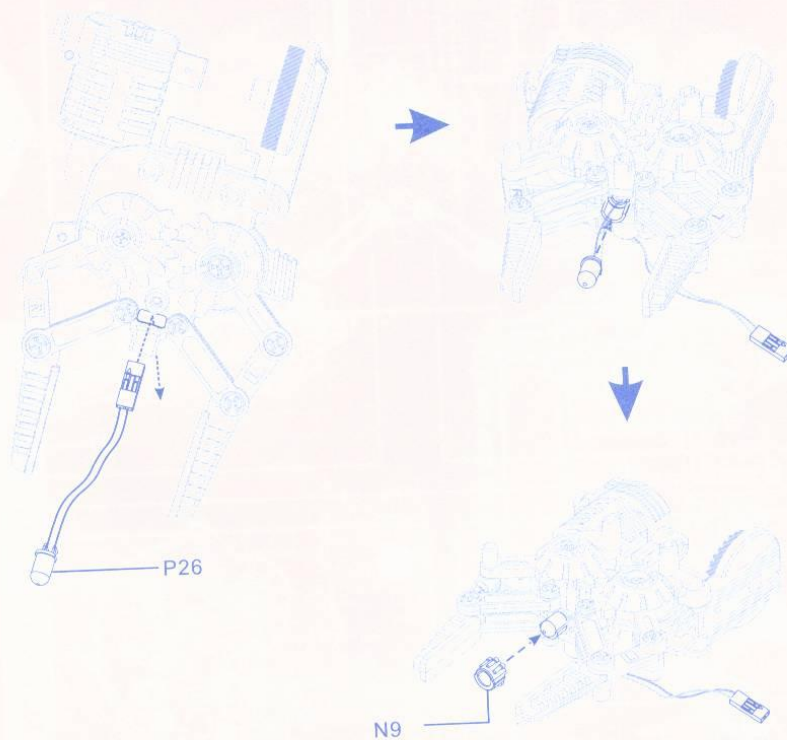
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30



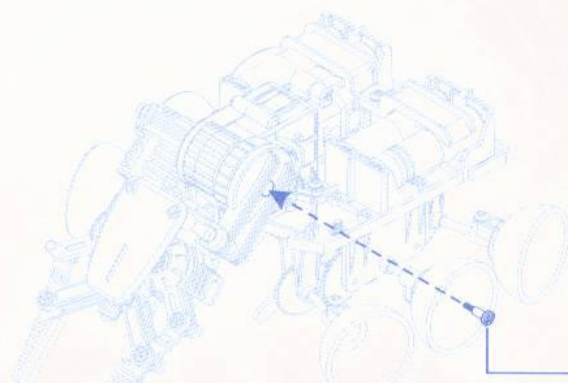
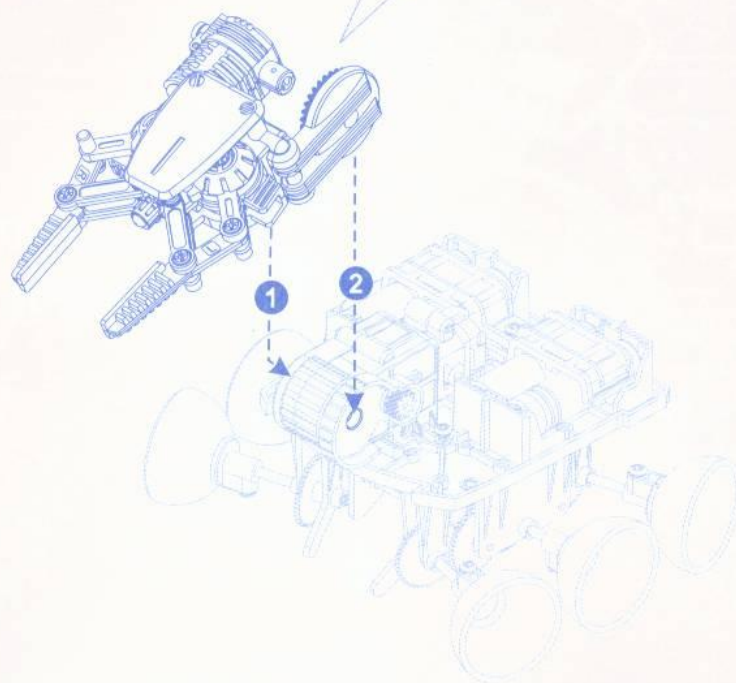
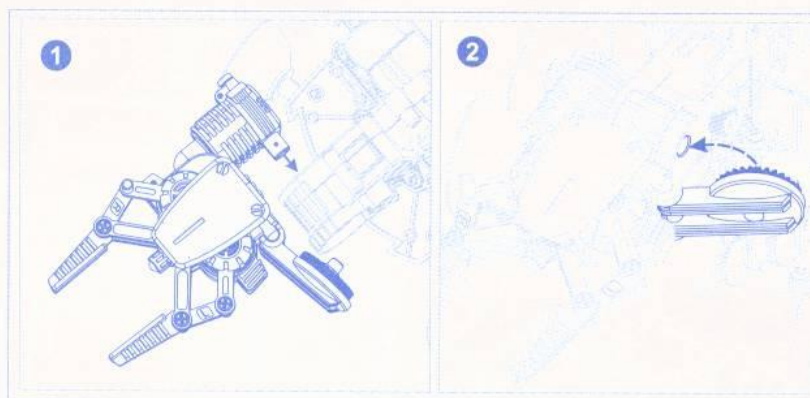
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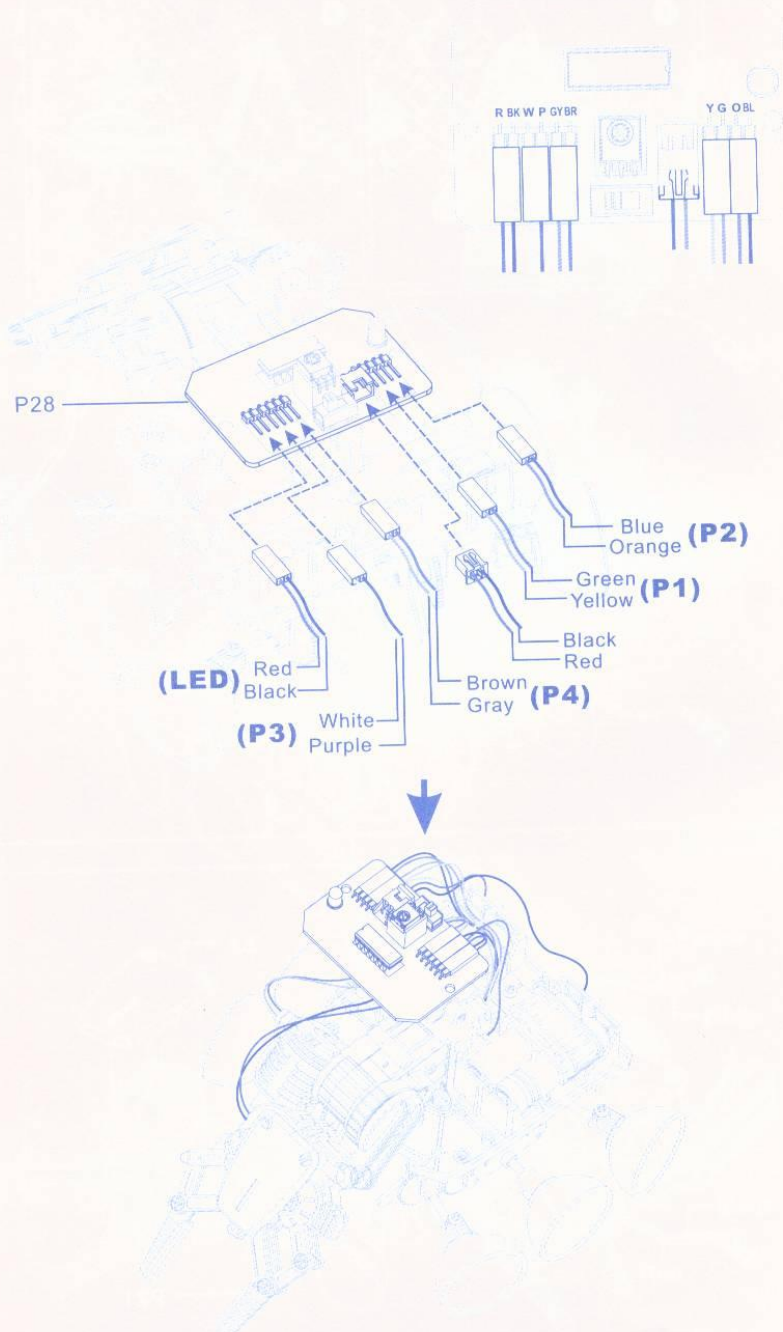
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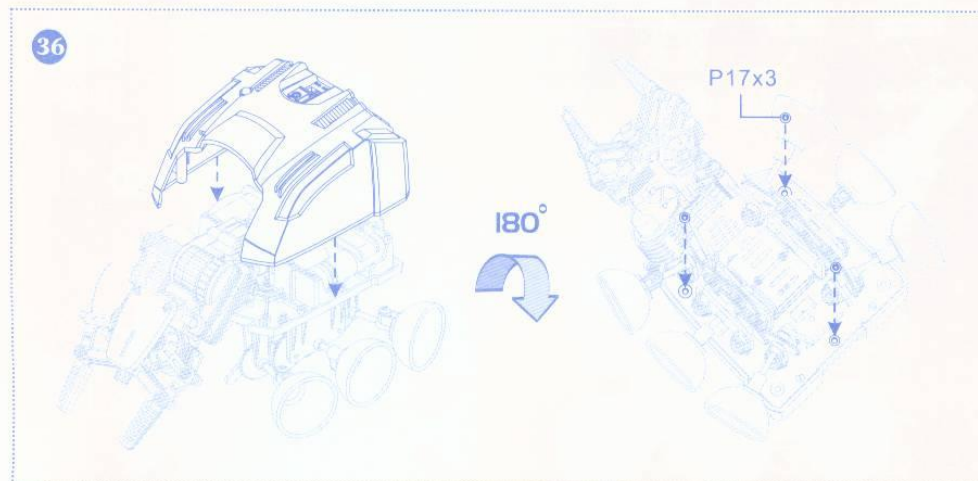
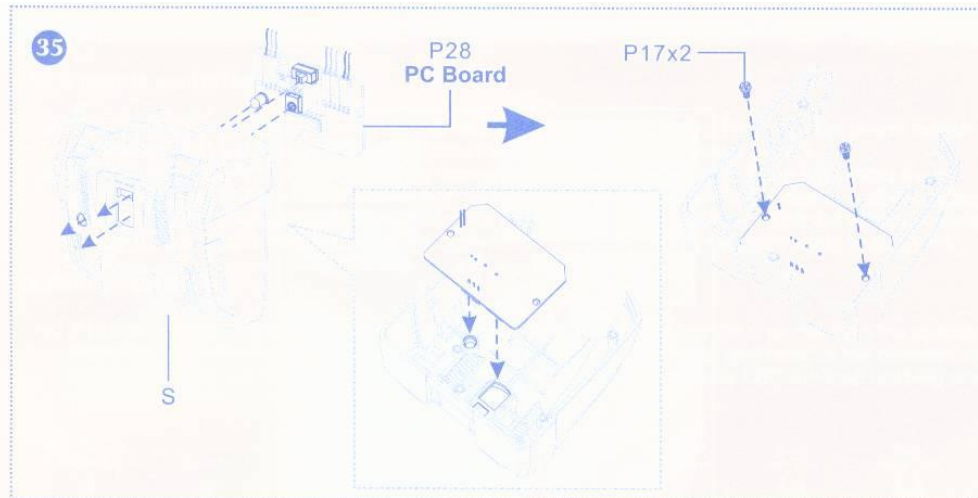
L3

Purple

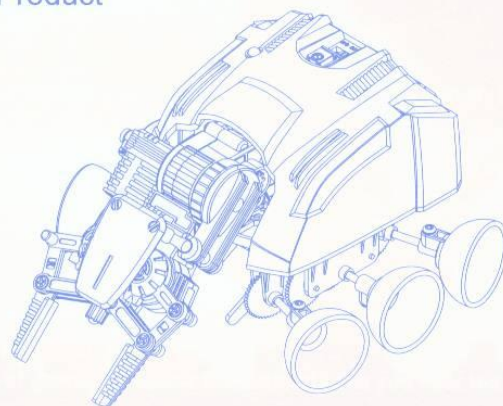


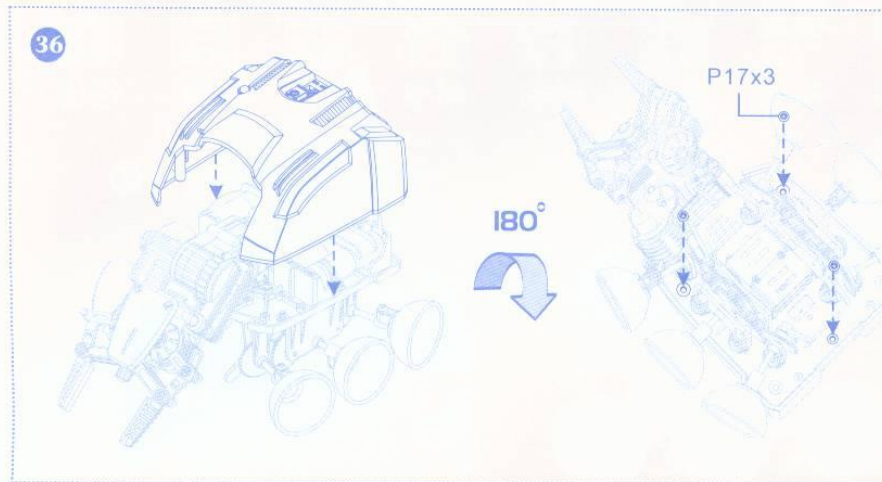
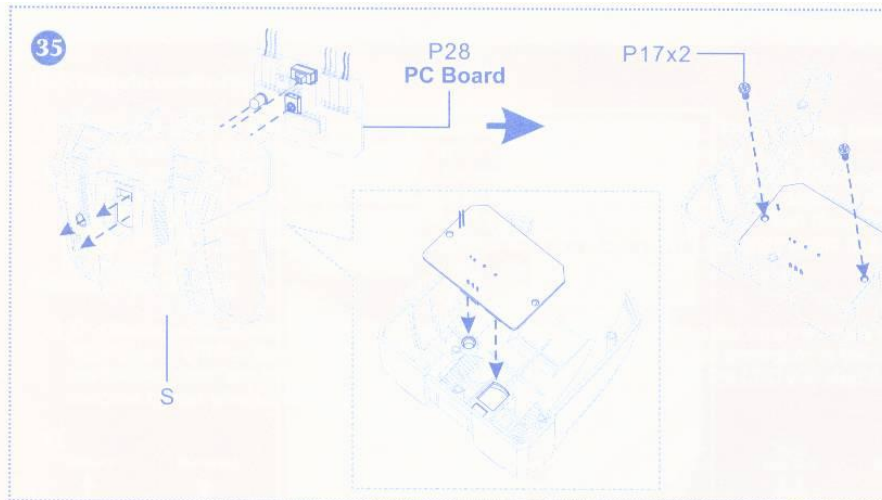




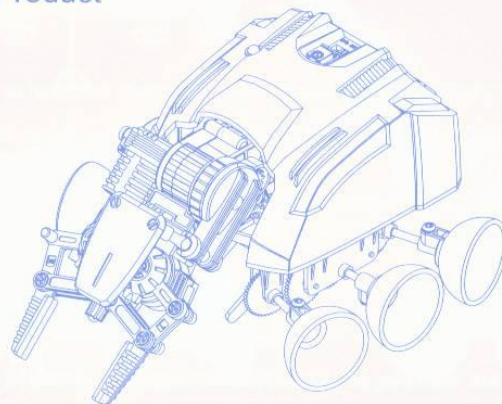


**37** Finished Product





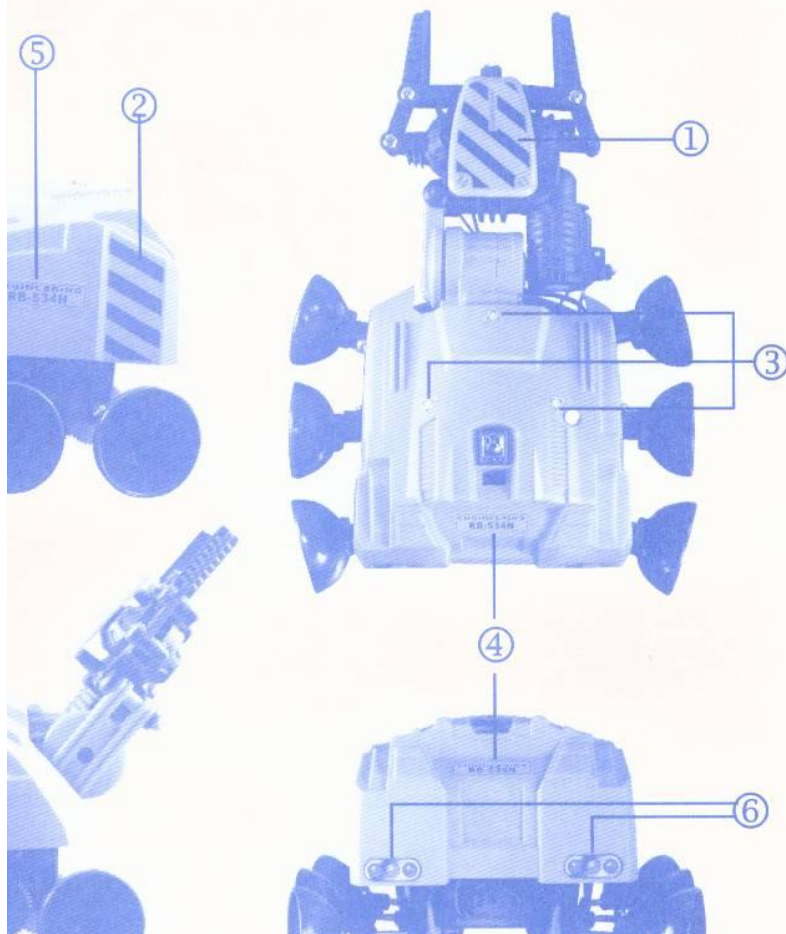
**37** Finished Product







P29



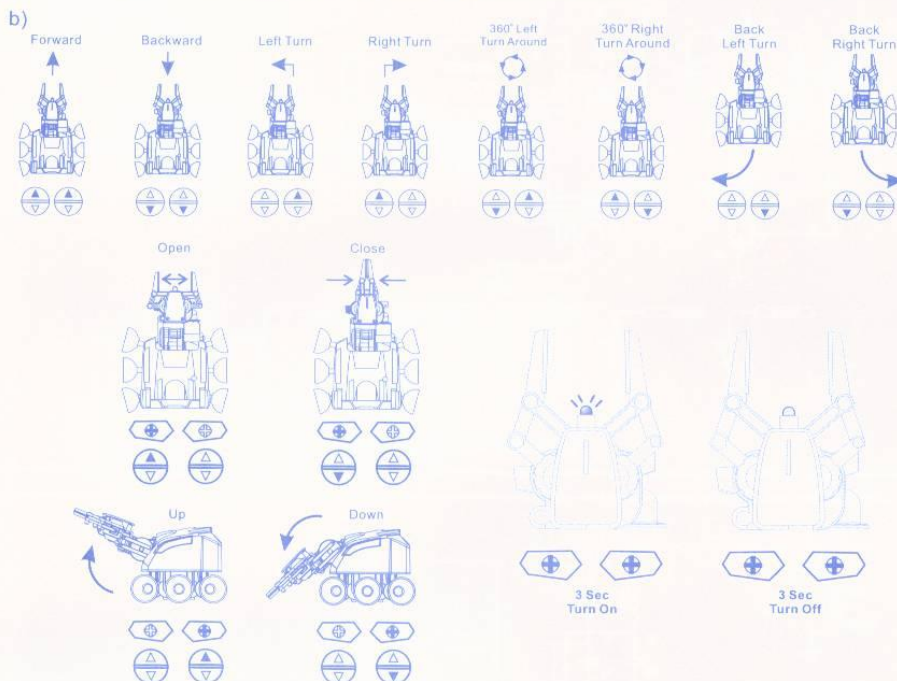
## 7 How it works:

### 1. I/R remote control box:

- Select the channel first by sliding the left-hand switch to A, B, C or D. Then turn the power switch on, the red LED will light. (The channel won't be changed once the power is on.)
- The 4 buttons(▲, ▼) control its moving: forward, backward, left or right. Push right-hand front Button(⊕) and right side ▲ or ▼ button together to control its claw up and down. Left-hand front button(⊕) and left side ▲ or ▼ button to have its claw open and close. Push the 2 front buttons ⊕ together for 3 seconds, its headlight will turn on, push them 3 seconds again to turn it off.

### 2. Mechanical Beetle:

- The Mechanical Beetle has a built-in receiver module and it will learn the channel from the remote controller. Turn the power on, the red LED will flash. Point the remote controller in the direction of the Beetle, push any button of the remote controller for 3-5 seconds, the LED will stop flashing and become lighter when it receives signal from the remote controller.



- The Beetle needs to learn the channel from the remote controller every time the power is turned on.
- To set a different channel, both the remote controller and the Beetle need to be turned off, then follow step 1 a) and 2 a) again.
- If there are 2 or more players (maximum for 4), please note to set up the channel one by one. Make sure the other Beetles are powered off when anyone is setting up the channel. If the Beetles have already learned the channel, leave the power on, it won't learn another channel again.
- The two gearboxes used for claw equipped with safety gear, when the claw open, close, up or lower to the maximum position, and user keeps pushing the buttons, the safety gear will start to work to protect the gearbox and make 'da, da, da...' sound.

**To extend the life of gearbox, release the buttons once you hear the safety gear emit the 'da, da, da' sound.**

### 8 Troubleshooting:

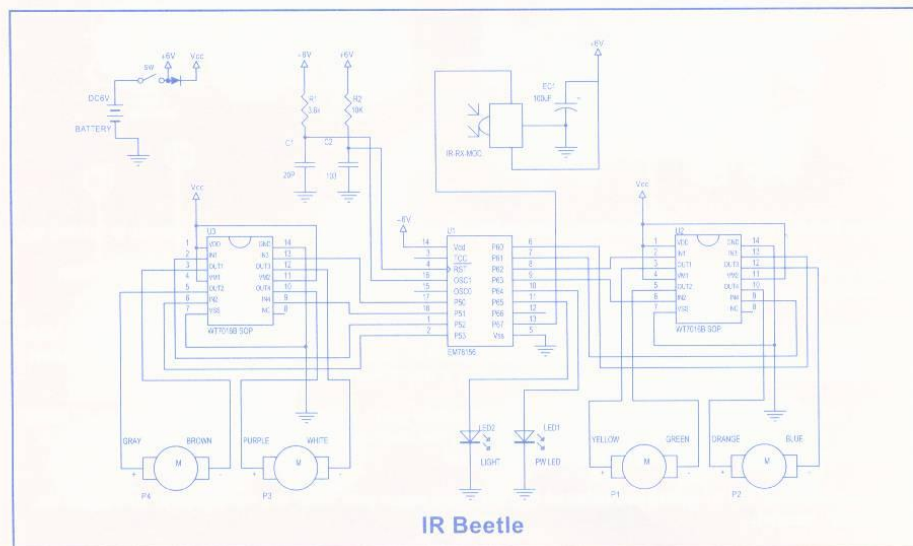
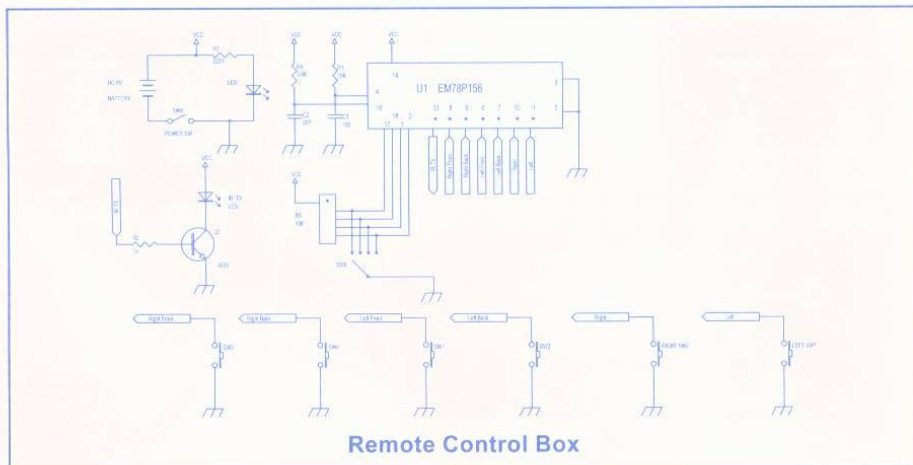
### 1.I/R remote control box:

Check if the battery terminals are contacted properly to the PCB, also check if the batteries are inserted correctly. Make sure the PCB is screwed tightly to the case. (Refer to ④ on page 3)

## 2.Mechanical Beetle:

- a) Ensure all wirings are correct.
- b) If Beetle moves wrong direction when you push the remote controller, check if the wiring of P1, P2 are reversed. (Refer to 34 on page 24)
- c) If its claw works oppositely, check if the wiring of P3, P4 are reversed. (Refer to 34 on page 24)
- d) If the headlight doesn't light, check if the wiring of LED is correct. (Refer to 34 on page 24)

### 9 Circuit Diagram:





- Removal and replacement of batteries should be carried out by an adult or under adult supervision.
- Do not attempt to recharge non-rechargeable batteries. Rechargeable batteries must be removed from the toy before recharging.
- Avoid short circuiting the contacts in the battery compartment or the battery terminals.
- Remove exhausted batteries from the product to avoid leakage.
- Do not mix used batteries and new batteries or batteries of different types.
- Use of rechargeable batteries or mercury oxide batteries are not recommended for this product.

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