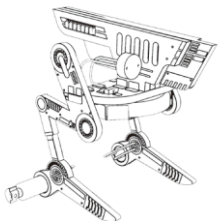
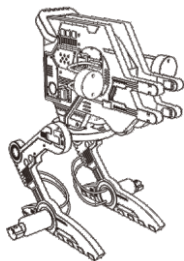


NANO BOTS



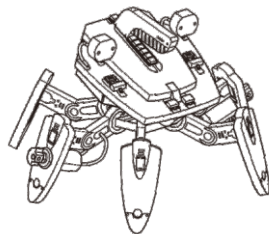
2L1G

PAGE 8



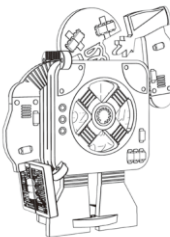
2L4G

PAGE 18



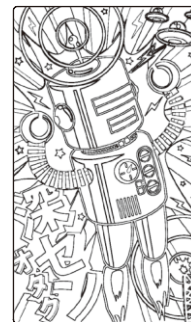
6L1G

PAGE 28



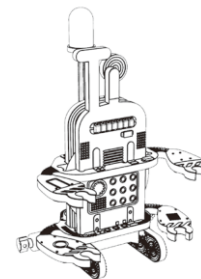
TM

PAGE 44



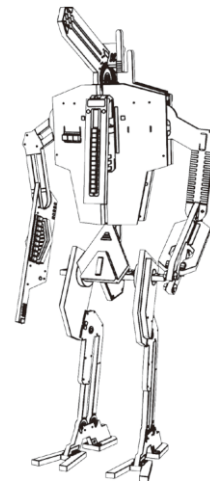
OTAKU

PAGE 40



WO01

PAGE 52



MAT001

PAGE 62



SMALL
COMPONENTS



CLIPPING
ELEMENTS



ADULT
SUPERVISION



CHOKING
HAZARD



USE GLASSES
WHEN SOLDER



USE
GLOVES



FUN PCB



THIS
CAN HELP



THIS
MIGHT HELP



THIS
TOO

RoHS

YES
WE DO

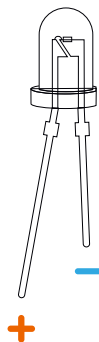
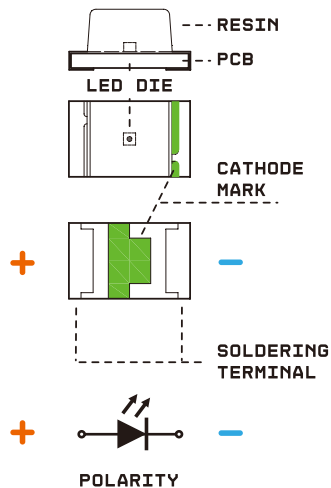


SO GREEN



TIP TO RECOGNIZE THE
+ PLUS FROM THE **- MINUS**
ON SMD LEDS

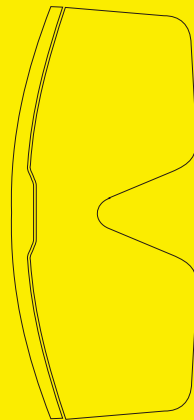
- MINUS HAS A **GREEN**
TRACE ON IT



TOOLS YOU NEED



TWEEZERS



PROTECTIVE
GLASSES



SOLDER
WIRE



FILING
TOOL



SOLDERING
IRON




ROTARY
TOOL



BATTERY


NOT INCLUDED


ALL COMPONENTS




SMD LED IC BLINKING

RED

SCHEMATIC IMAGE 


MOUNTING IMAGE 


HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.32**




SMD LED IC BLINKING

RGB

SCHEMATIC IMAGE 


MOUNTING IMAGE 


HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.33**



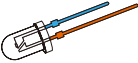
SMD LED

YELLOW

SCHEMATIC IMAGE 


MOUNTING IMAGE 


HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.30**



LED TH THROUGH-HOLE

RED

SCHEMATIC IMAGE 

MOUNTING IMAGE 

HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.24**

**CREATE CUSTOM LOOK
FOR YOUR OWN ROBOT:**

**USE ANY LED COLOR
YOU WANT IN
PARTICULAR PLACE!**





RESISTOR

300 hm [Ω]

SCHEMATIC IMAGE 

MOUNTING IMAGE 

HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.38**



RESISTOR

1 k hm [Ω]

SCHEMATIC IMAGE 

MOUNTING IMAGE 

HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.38**



RESISTOR

90 hm [Ω]

SCHEMATIC IMAGE 

MOUNTING IMAGE 

HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.38**



PHOTODIODE

SCHEMATIC IMAGE 

MOUNTING IMAGE 

HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.44**



VIBRATION MOTOR

SCHEMATIC IMAGE 

MOUNTING IMAGE 

HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.42**



TRANSISTOR

SCHEMATIC IMAGE 

MOUNTING IMAGE 

HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.46**



BATTERY HOLDER

SCHEMATIC IMAGE 

MOUNTING IMAGE 

HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.28**

2L1G

NANO BOT

INSTRUCTION MANUAL

COMPLEXITY



VIDEO
INSTRUCTIONS



GEEKCLUB.COM

COMPONENTS FOR 2L1G



x12

SMD LED IC BLINKING

RED

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.32**



x4

SMD LED

YELLOW

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.30**



x2

RESISTOR

1 k hm $[\Omega]$

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.38**



x2

PHOTODIODE

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.44**



x2

VIBRATION MOTOR

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.42**



x2

TRANSISTOR

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.46**



x1

BATTERY HOLDER

SCHEMATIC
IMAGE



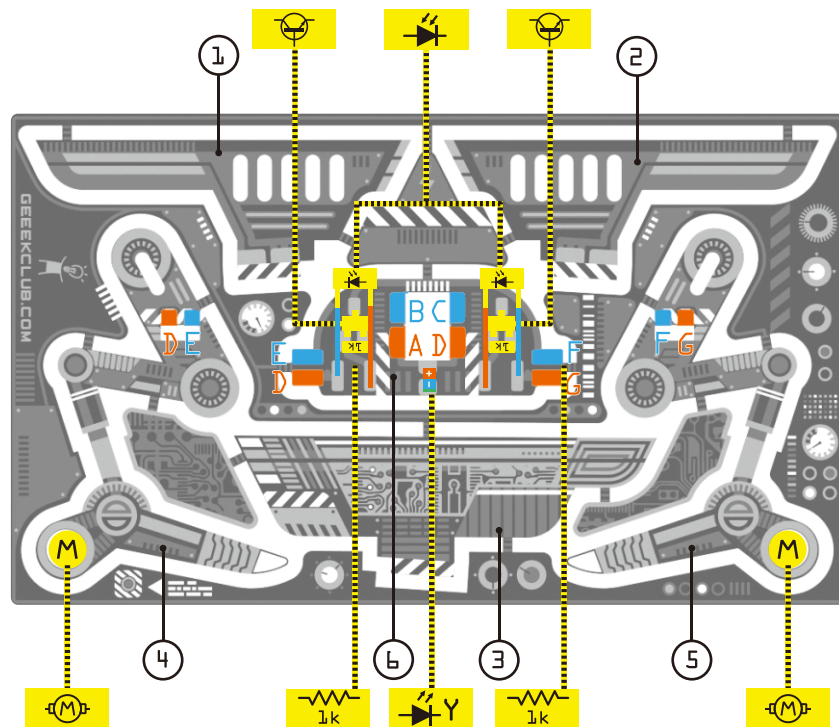
MOUNTING
IMAGE



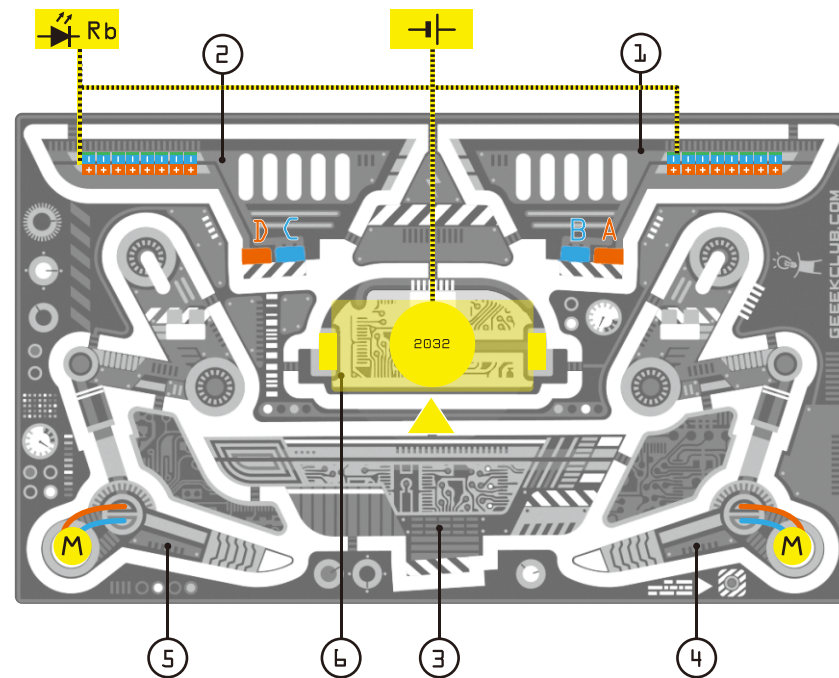
HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.28**

2L1G

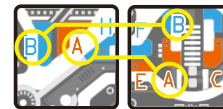
FRONT

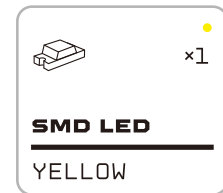
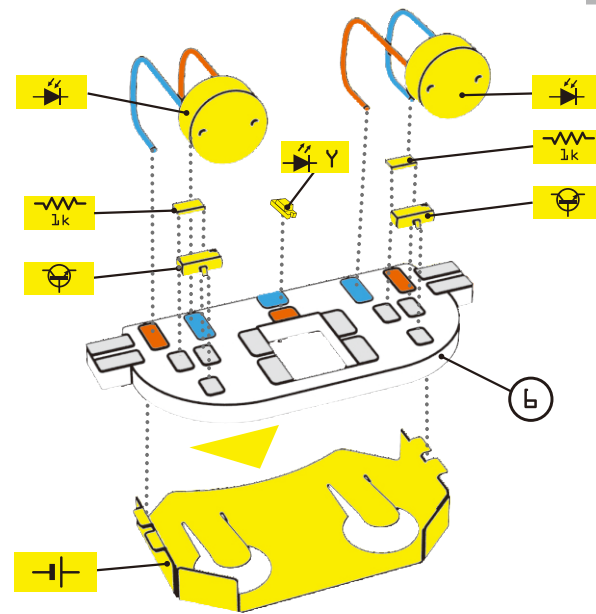
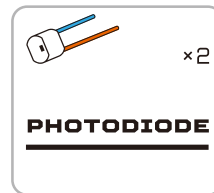
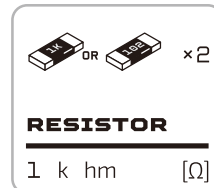
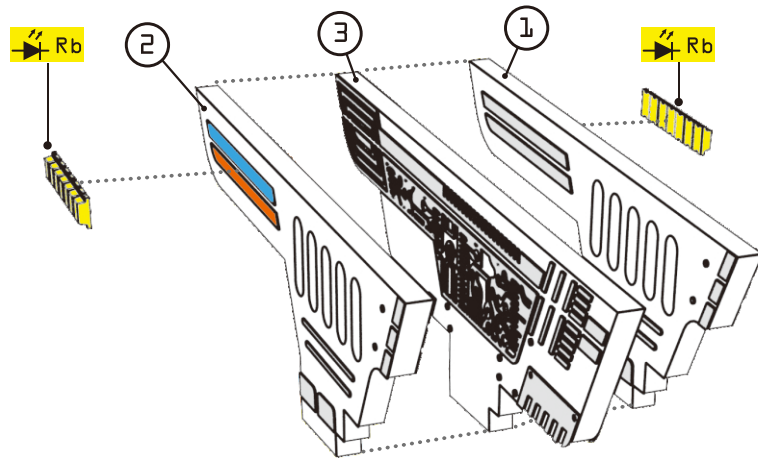


BACK



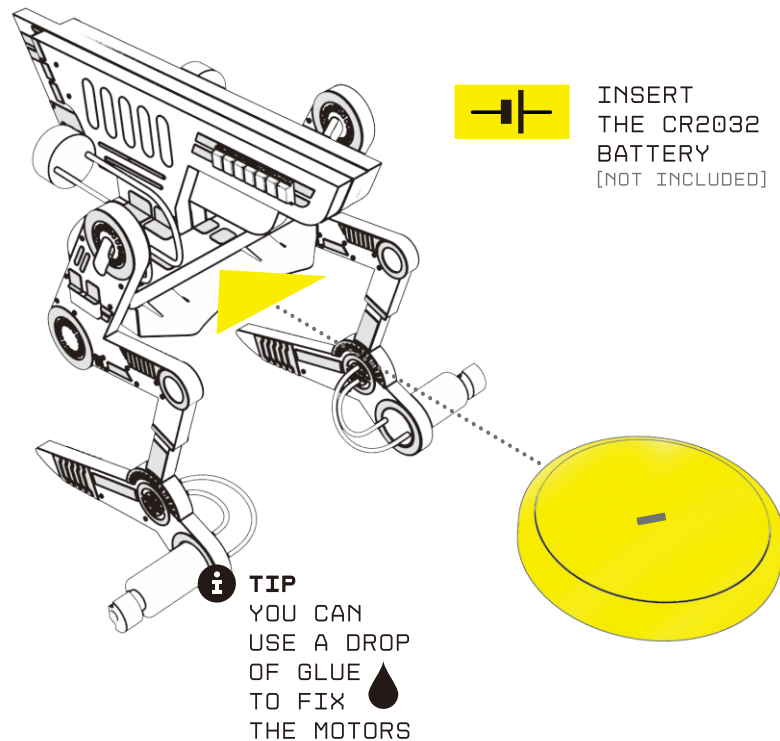
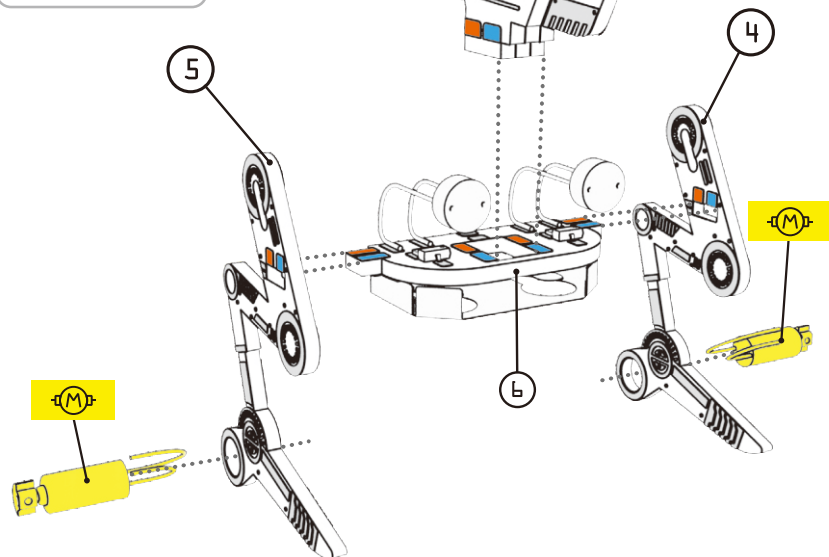
SOLDER
+ A WITH A,
- B WITH B,
ETC...







×2

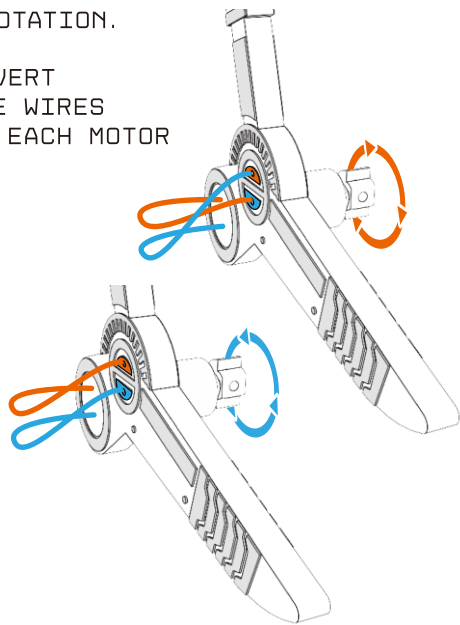
**VIBRATION
MOTOR**


2L1G

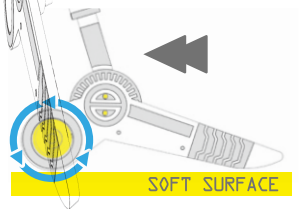
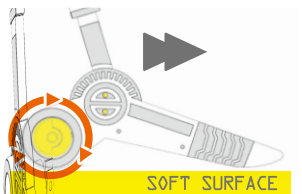
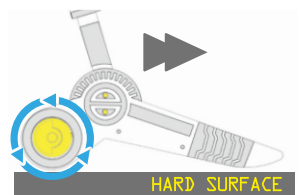
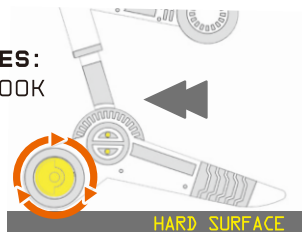


i **TIP** TO CHANGE
THE MOTOR
ROTATION.

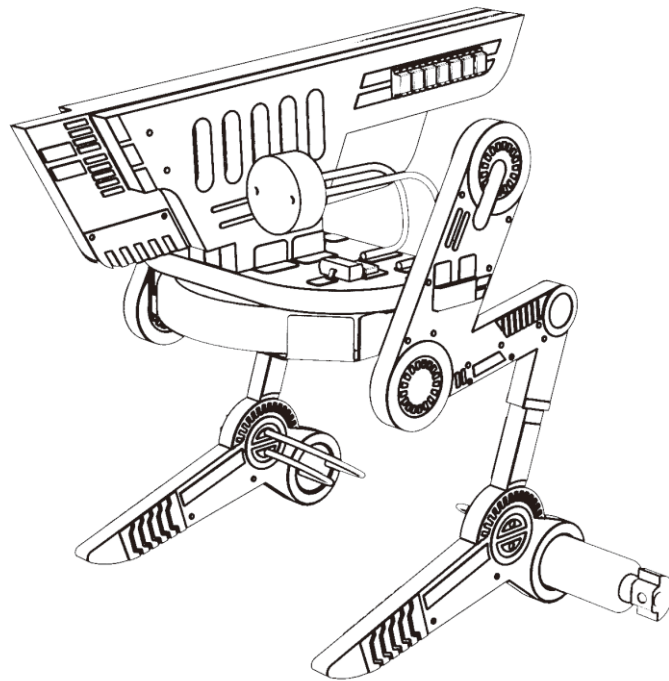
INVERT
THE WIRES
OF EACH MOTOR



**YOU CAN TRY
DIFFERENT SURFACES:
PAPER / WOOD / BOOK
COVERS... ETC.**



WELL DONE

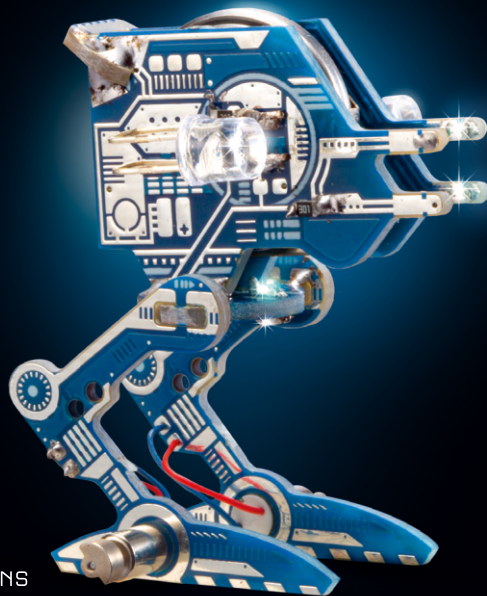


2L4G

NANO BOT

INSTRUCTION MANUAL

COMPLEXITY



VIDEO
INSTRUCTIONS



GEEKCLUB.COM

COMPONENTS FOR 2L4G



x4

SMD LED IC BLINKING

RED

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.32**



x2

SMD LED

YELLOW

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.30**



x4

SMD LED IC BLINKING

RGB

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.33**



x4

OR

x2

RESISTORS

SCHEMATIC
IMAGE

300 hm
1 k hm



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.38**



x2

VIBRATION MOTOR

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.42**



x2

TRANSISTOR

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.46**



x1

BATTERY HOLDER

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.28**



x2

PHOTODIODE

SCHEMATIC
IMAGE



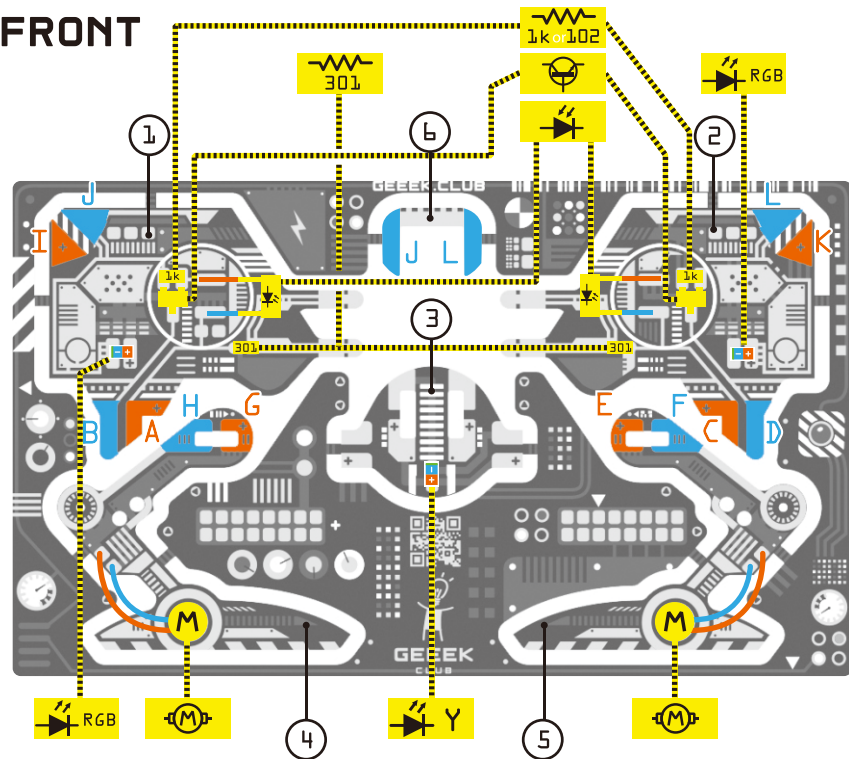
MOUNTING
IMAGE



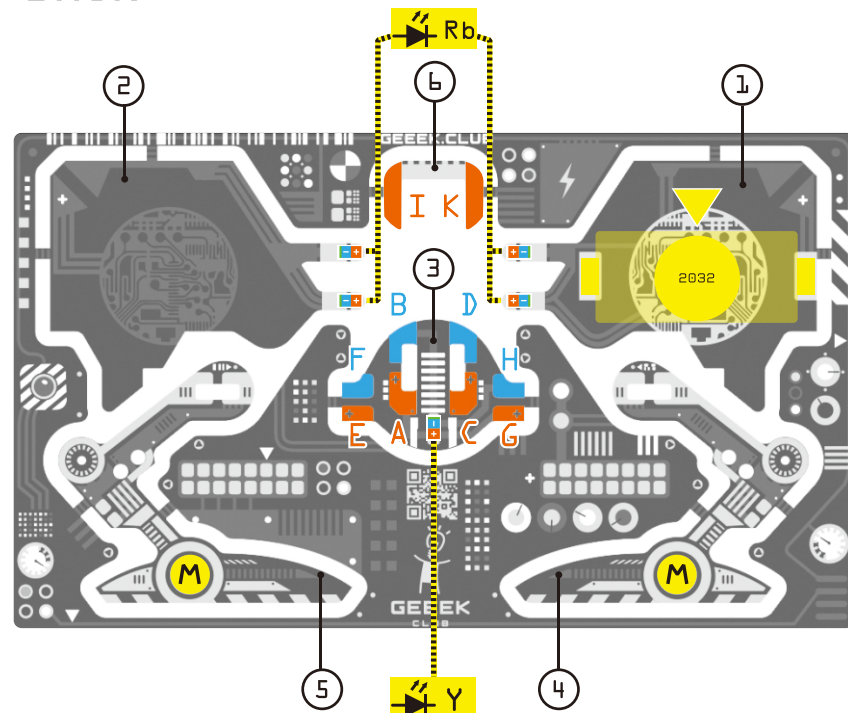
HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.44**

2L4G

FRONT



BACK

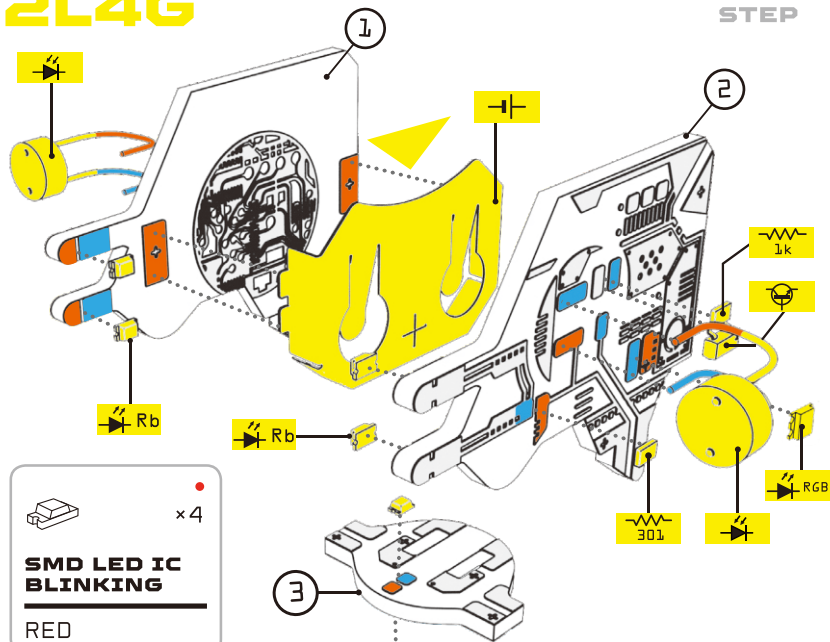


SOLDER
+ A WITH A,
- B WITH B,
ETC...



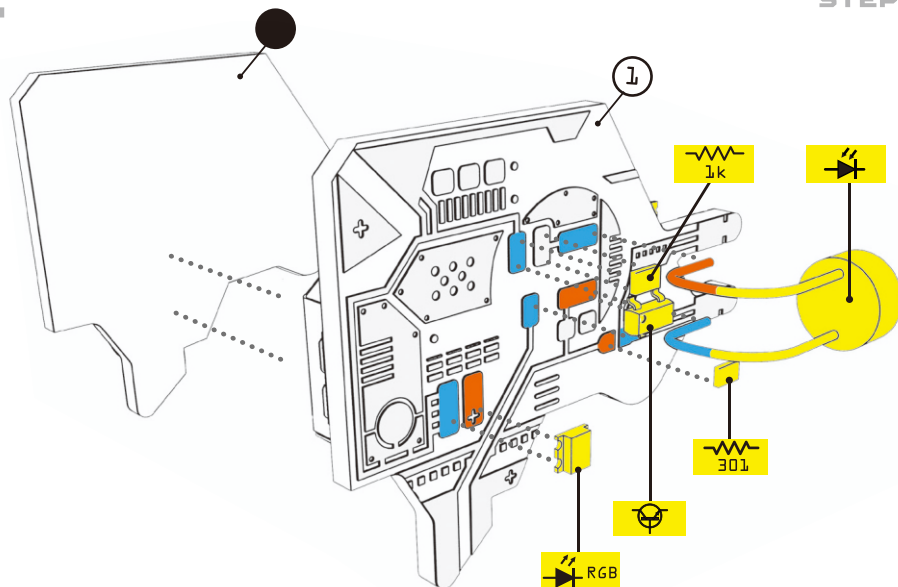
2L4G

STEP 1



22

STEP 2



23

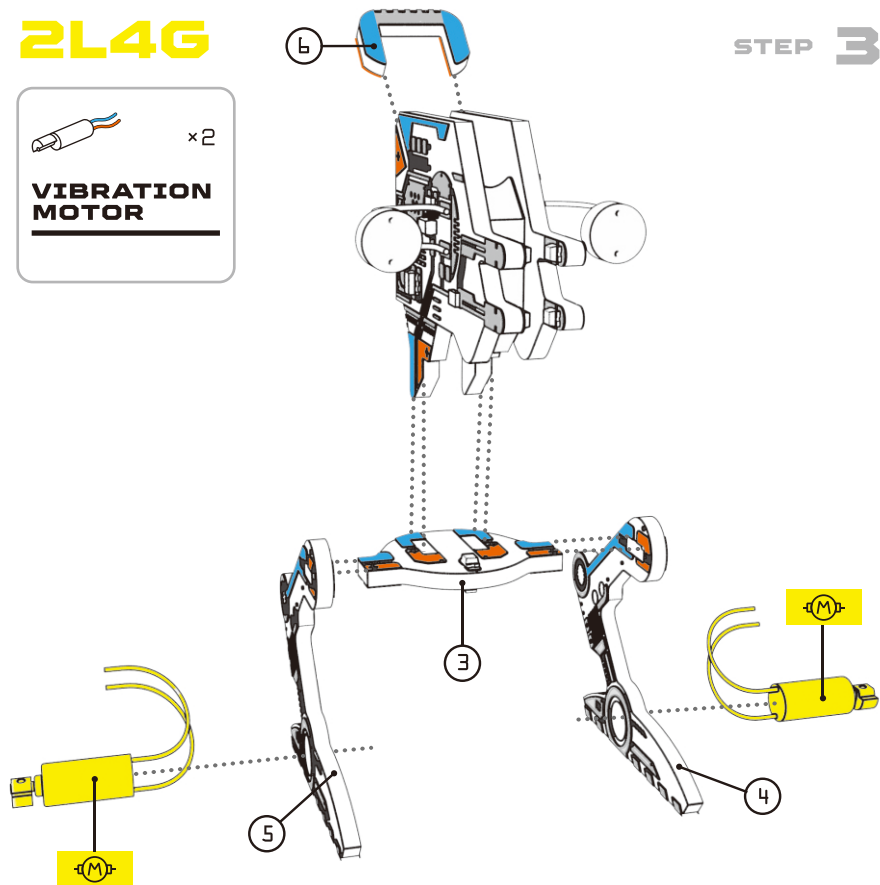
2L4G



x2

**VIBRATION
MOTOR**

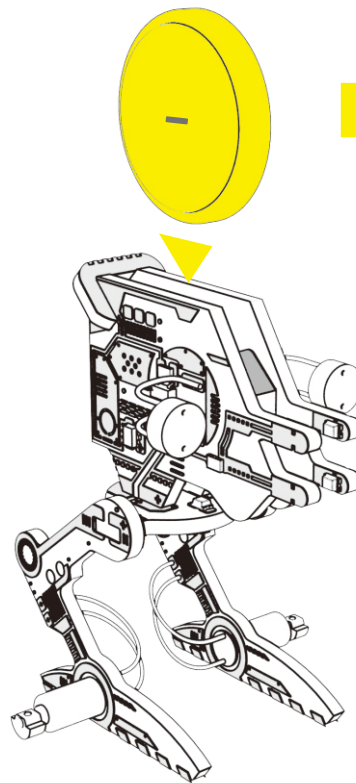
STEP 3



STEP 4



INSERT
THE CR2032
BATTERY
[NOT INCLUDED]

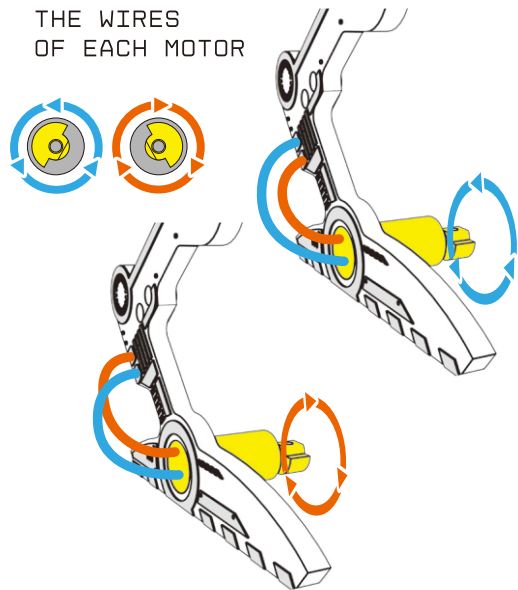


i TIP
YOU CAN
USE A DROP
OF GLUE
TO FIX
THE MOTORS

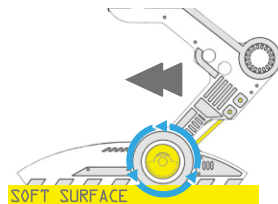
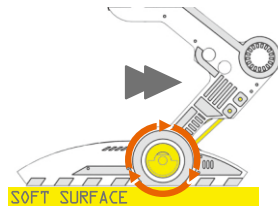
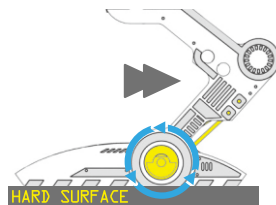
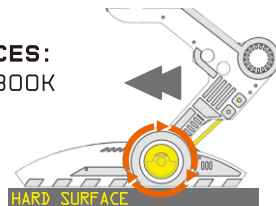
2L4G

i **TIP** TO CHANGE
THE MOTOR
ROTATION.

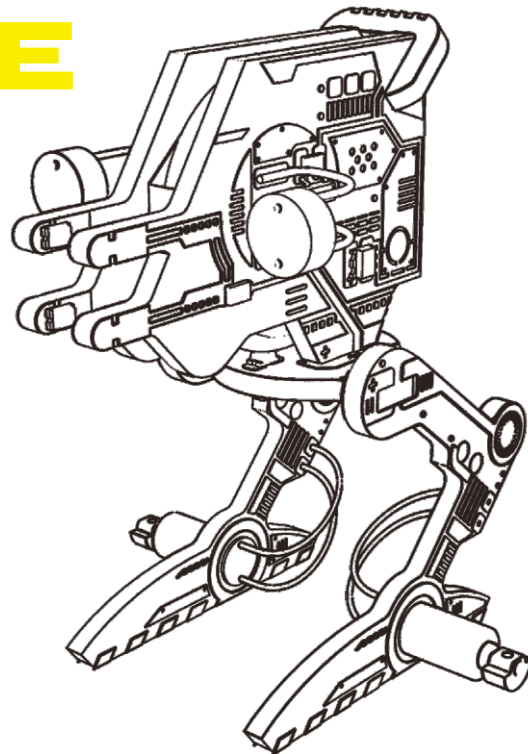
INVERT
THE WIRES
OF EACH MOTOR



**YOU CAN TRY
DIFFERENT SURFACES:
PAPER / WOOD / BOOK
COVERS... ETC.**



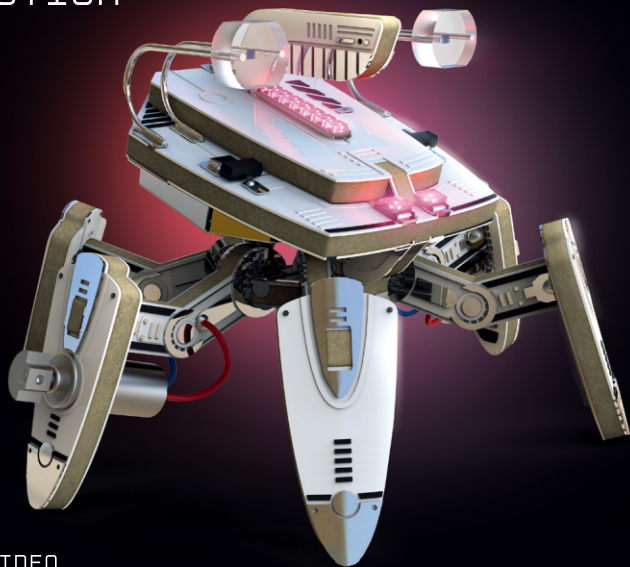
WELL DONE



6L1G

NANO BOT

INSTRUCTION MANUAL



COMPLEXITY



COMPONENTS FOR 6L1G



x12

SMD LED IC BLINKING

RED

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.32**



x4

SMD LED

YELLOW

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.30**



x2

RESISTOR

1 k hm $[\Omega]$

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.38**



x2

PHOTODIODE

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.44**



x2

VIBRATION MOTOR

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.42**



x2

TRANSISTOR

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.46**



x1

BATTERY HOLDER

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.28**



VIDEO
INSTRUCTIONS



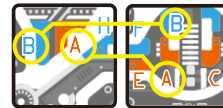
GEEKCLUB.COM

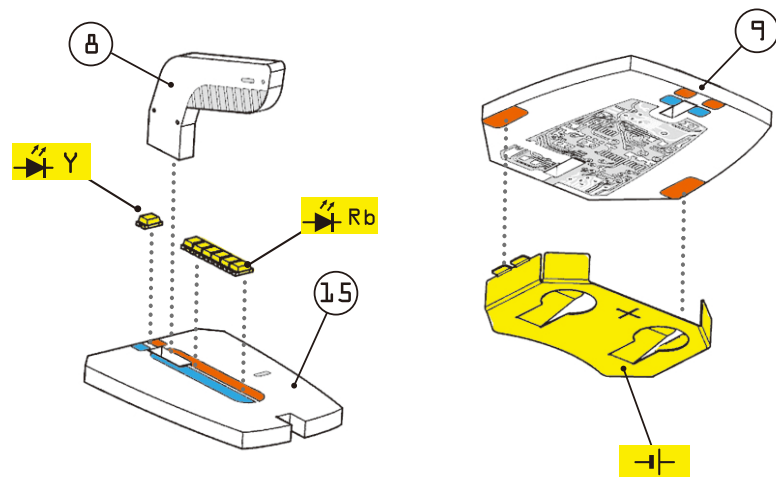





BACK

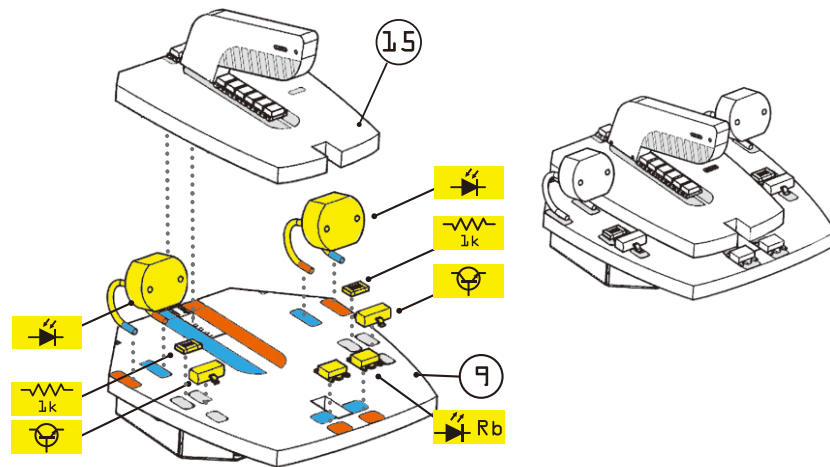






SOLDER
+ A WITH A,
- B WITH B,
ETC...

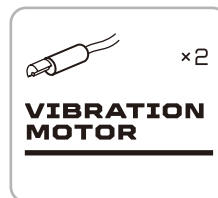
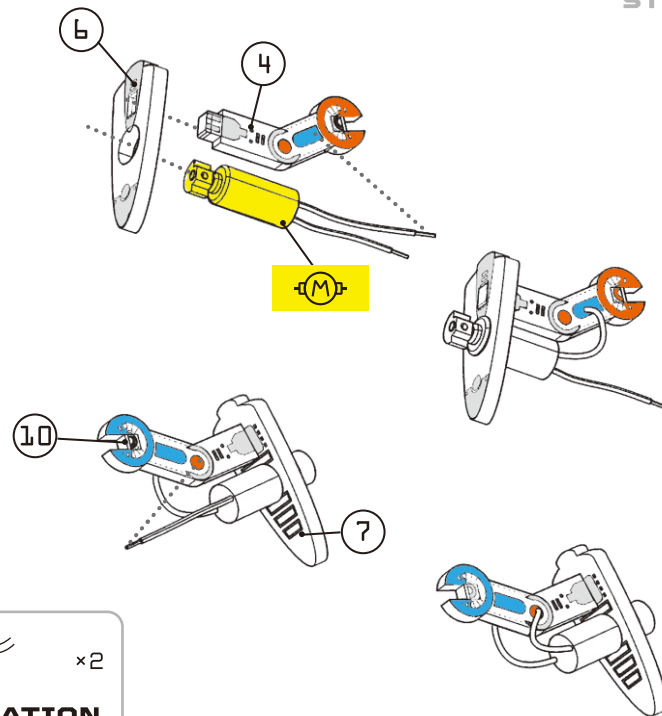
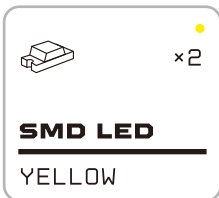
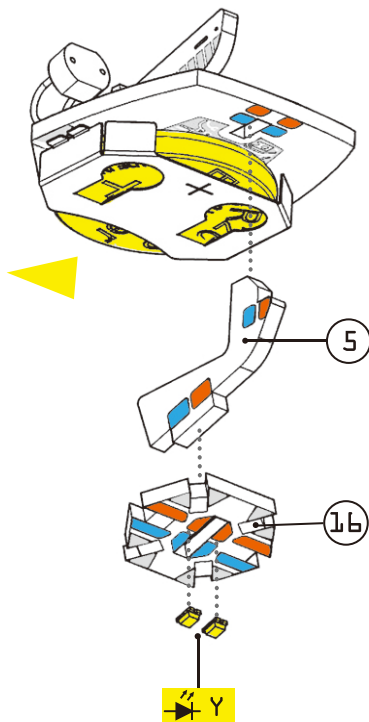




	x1		x6		x1
SMD LED		SMD LED IC BLINKING		BATTERY HOLDER	
YELLOW		RED			

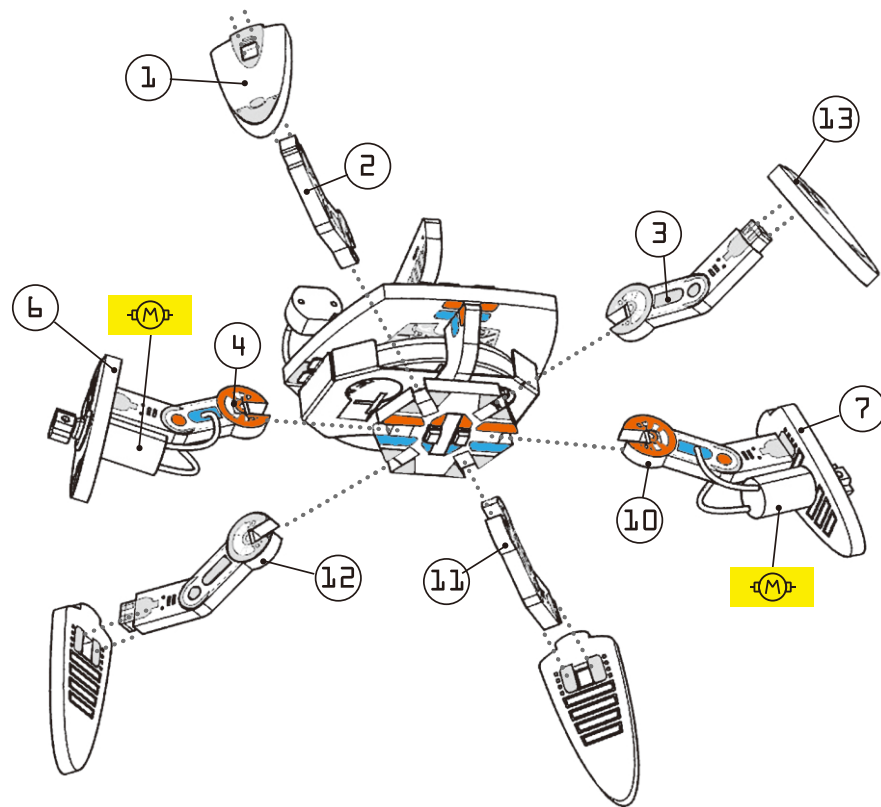


	x2		x2		x2		x2
PHOTODIODE		RESISTOR		TRANSISTOR		SMD LED IC BLINKING	
		1 k hm [Ω]				RED	



6L1G

STEP 5



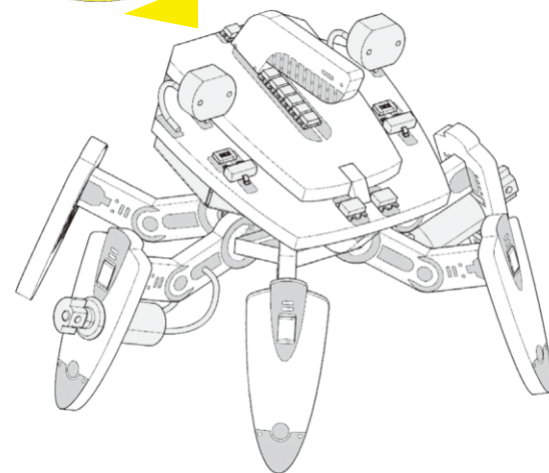
36

WELL DONE

STEP 6



INSERT
THE CR2032
BATTERY
[NOT INCLUDED]



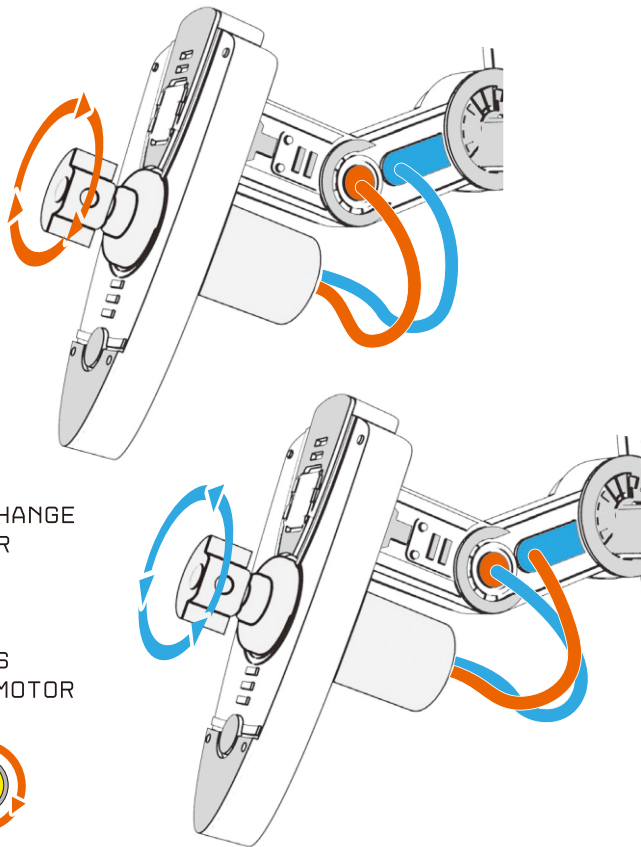
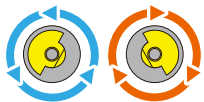
i TIP
YOU CAN
USE A DROP
OF GLUE
TO FIX
THE MOTORS

37

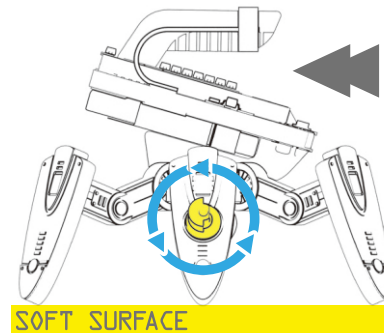
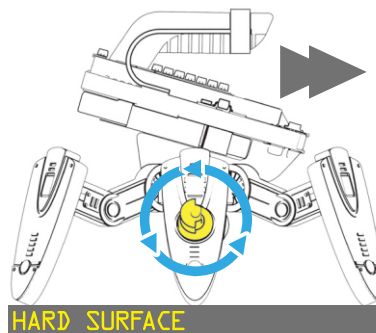
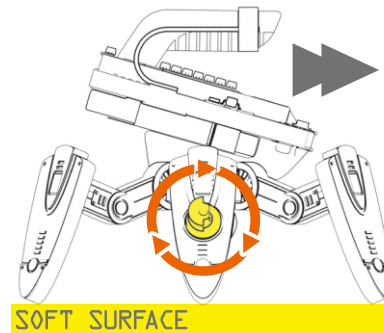
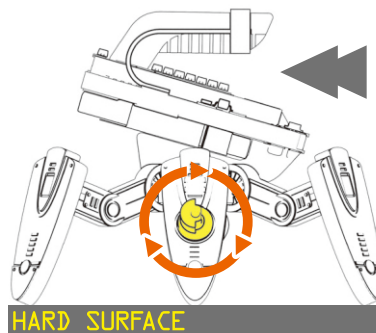
6L1G

i **TIP** TO CHANGE
THE MOTOR
ROTATION.

INVERT
THE WIRES
OF EACH MOTOR



YOU CAN TRY DIFFERENT SURFACES:
PAPER / WOOD / BOOK COVERS... ETC.



OTAKU

NANO BOT

INSTRUCTION
MANUAL

COMPLEXITY



VIDEO
INSTRUCTIONS



GEEKCLUB.COM

COMPONENTS FOR OTAKU



x12

**SMD LED IC
BLINKING**

RED

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.32**



x4

SMD LED

YELLOW

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.30**



x4

**SMD LED IC
BLINKING**

RGB

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.33**



x3

RESISTOR

90 hm [Ω]

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.38**



x1

**BATTERY
HOLDER**

SCHEMATIC
IMAGE

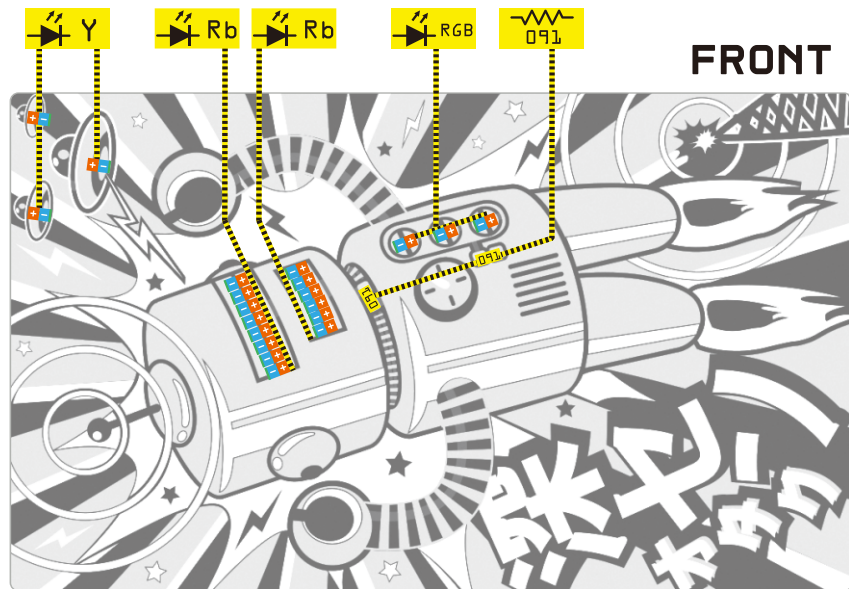






MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.28**

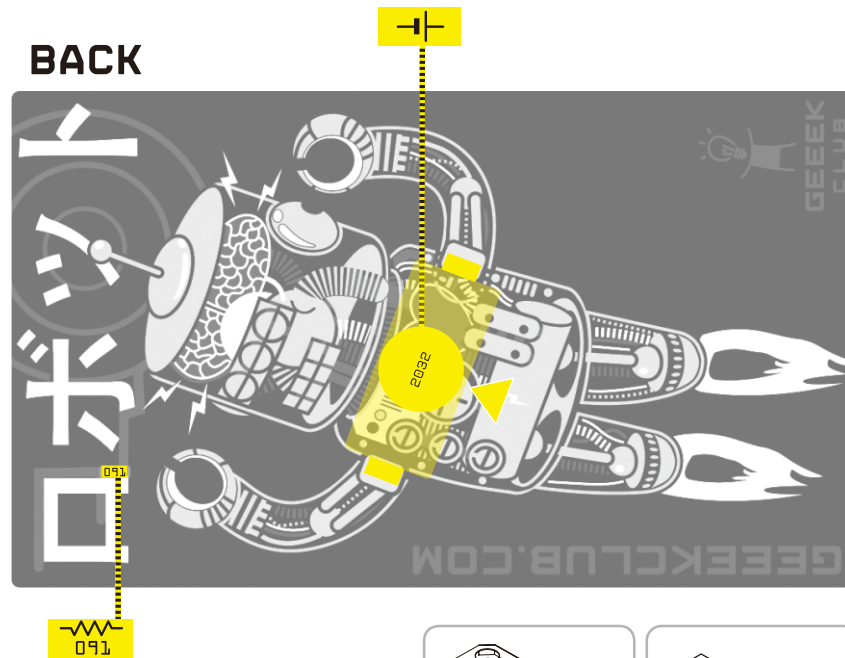
OTAKU





 x2	 x12	 x2	 x2
SMD LED	SMD LED IC BLINKING	SMD LED IC BLINKING	RESISTOR
YELLOW	RED	RGB	90 hm [Ω]

42

BACK



 x1	 x1
BATTERY HOLDER	RESISTOR
	90 hm [Ω]

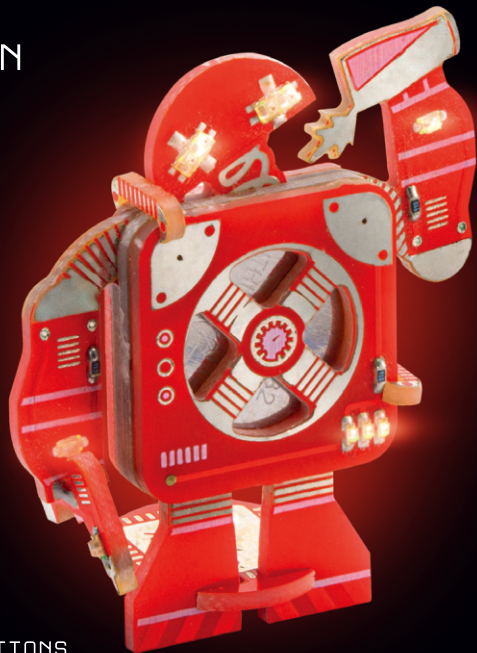
43

TM

NANO BOT

INSTRUCTION MANUAL

COMPLEXITY



VIDEO
INSTRUCTIONS



GEEKCLUB.COM

COMPONENTS FOR TM



x4

SMD LED IC BLINKING

RED

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.32**



x10

SMD LED

YELLOW

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.30**



x4

SMD LED IC BLINKING

RGB

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.33**



x2

RESISTOR

90 hm [Ω]

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.38**



x5

RESISTOR

300 hm [Ω]

SCHEMATIC
IMAGE



MOUNTING
IMAGE

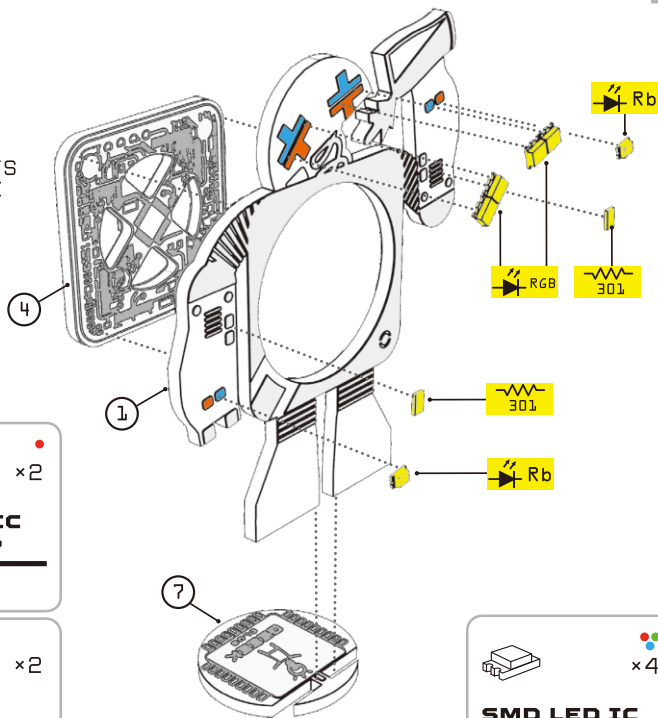


HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.38**

STEP 1

△ ○ □

ALIGN PARTS
WITH THESE
SYMBOLS
TOGETHER



x2

SMD LED IC BLINKING

RED



x2

RESISTOR

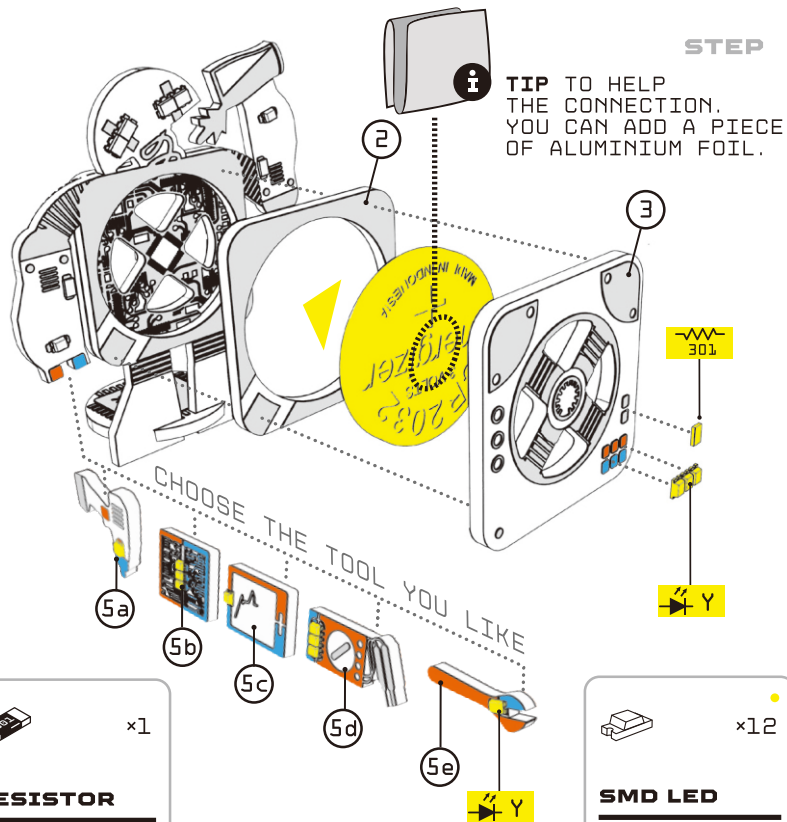
300 hm $[\Omega]$ 

× 4

SMD LED IC BLINKING

RGB

STEP 2



TIP TO HELP THE CONNECTION, YOU CAN ADD A PIECE OF ALUMINIUM FOIL.

CHOOSE THE TOOL YOU LIKE



YD



x1

RESISTOR

300 hm $[\Omega]$ 

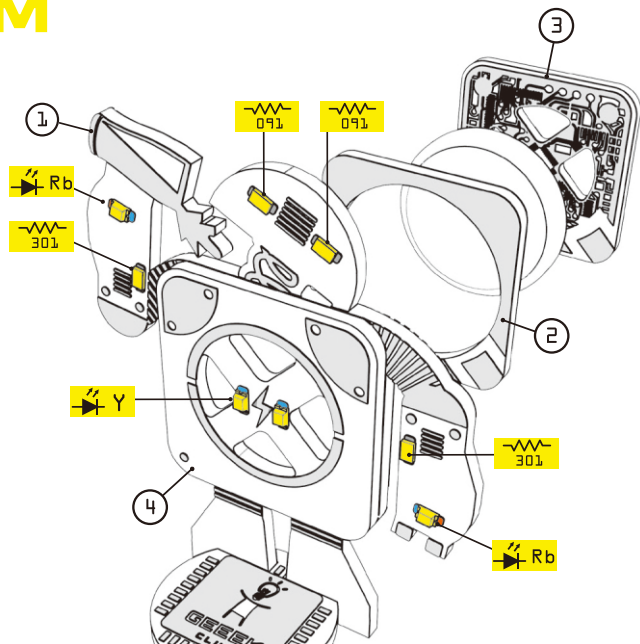
×12





SMD LED

YELLOW

TM

STEP 3



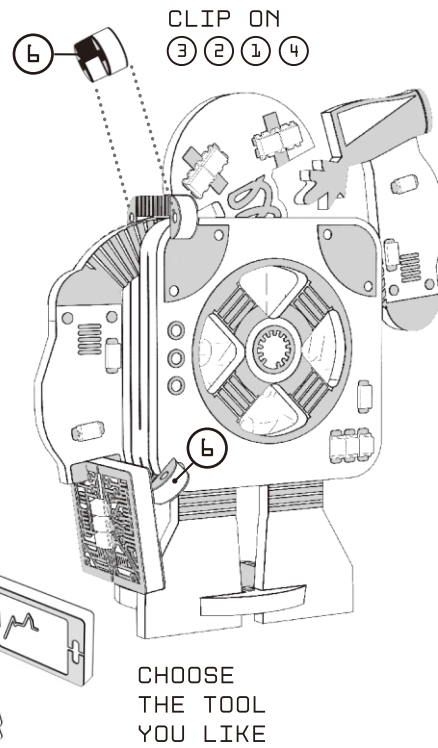
	x2		x2		x2		x2
SMD LED		SMD LED IC BLINKING		RESISTOR		RESISTOR	
YELLOW		RED		300 hm [Ω]		90 hm [Ω]	

WELL DONE

STEP 4



INSERT
THE CR2032
BATTERY
[NOT INCLUDED]

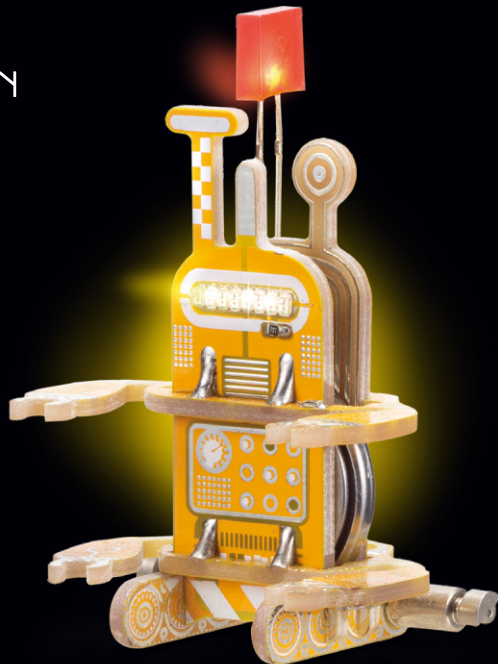


WOOL

NANO BOT

INSTRUCTION MANUAL

COMPLEXITY



VIDEO
INSTRUCTIONS



GEEKCLUB.COM

COMPONENTS FOR WOOL



x12

SMD LED IC BLINKING

RED

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.32**



x4

SMD LED IC BLINKING

RGB

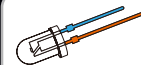
SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.33**



x1

LED TH THROUGH-HOLE

RED

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.24**



x4

RESISTOR

90 hm [Ω]

SCHEMATIC
IMAGE



MOUNTING
IMAGE



HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.38**



x2

VIBRATION MOTOR

SCHEMATIC
IMAGE



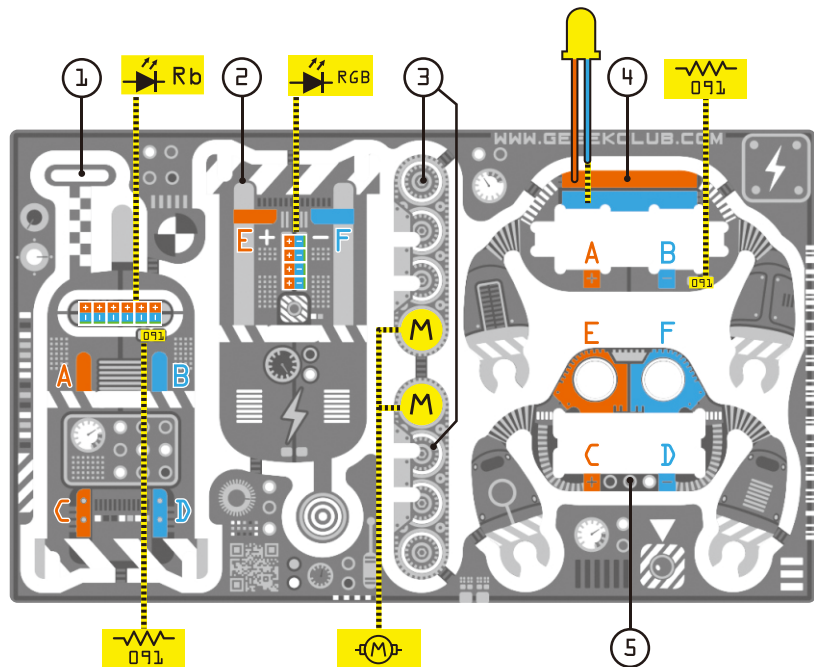
MOUNTING
IMAGE



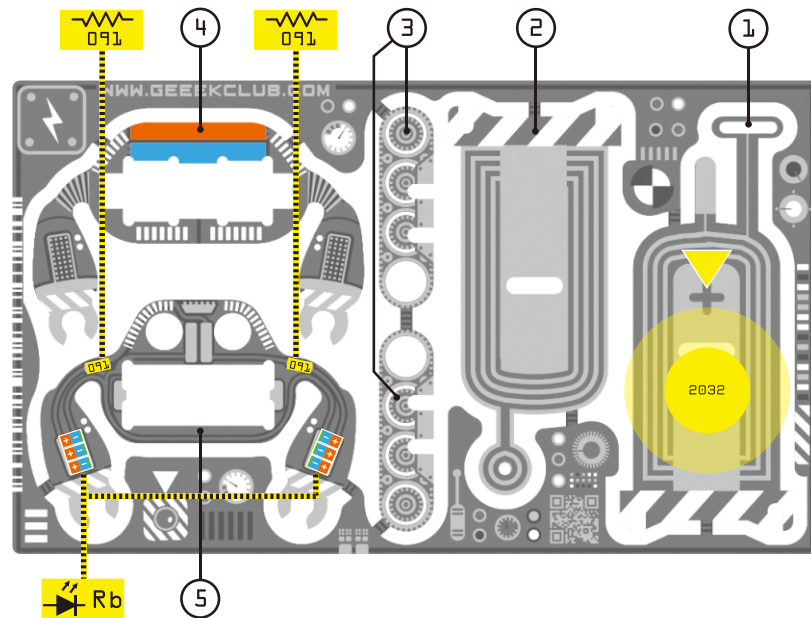
HOW TO SOLDER
LOOK INTO
EDUCATION MANUAL **P.42**

WOOL

FRONT

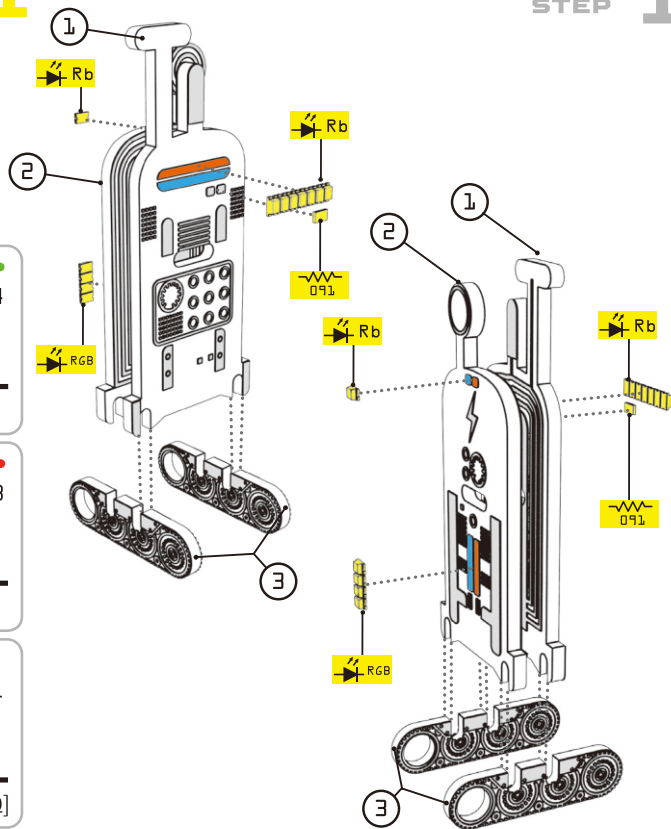
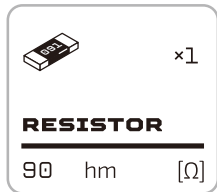
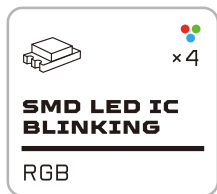


BACK

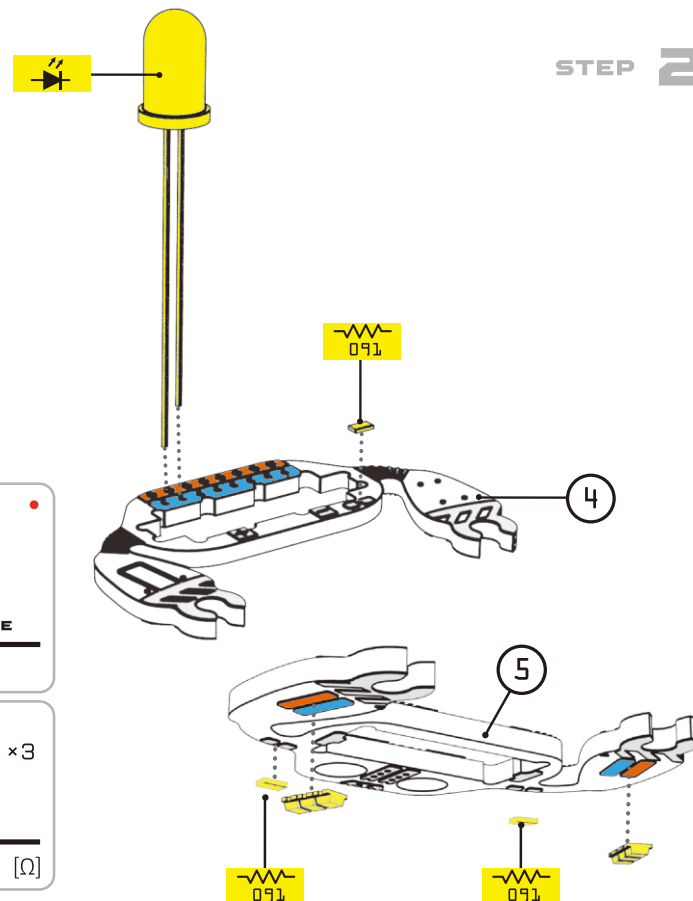
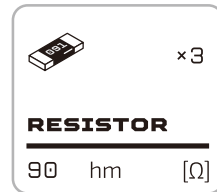
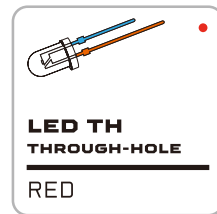


WOOL

STEP 1

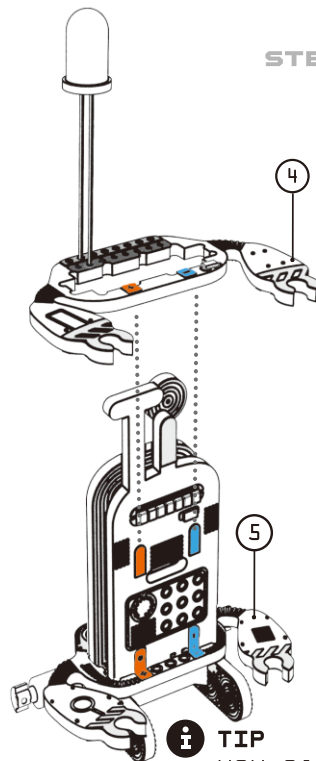
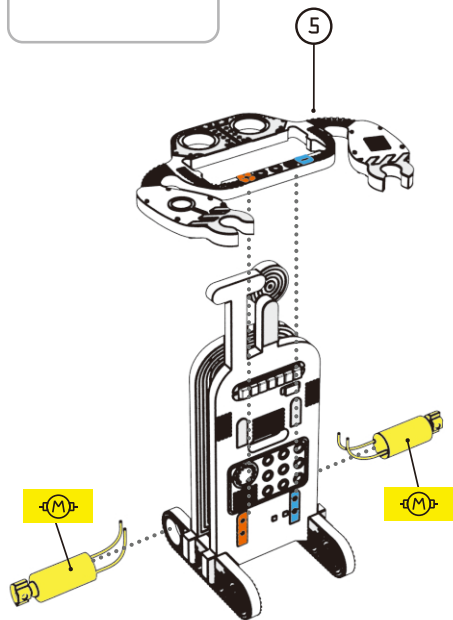
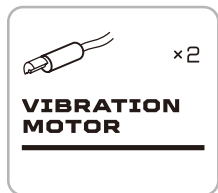


STEP 2



WOOL

STEP 3



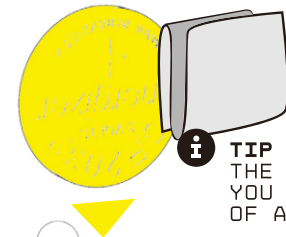
i **TIP**
YOU CAN
USE A DROP
OF GLUE
TO FIX
THE MOTORS

WELL DONE

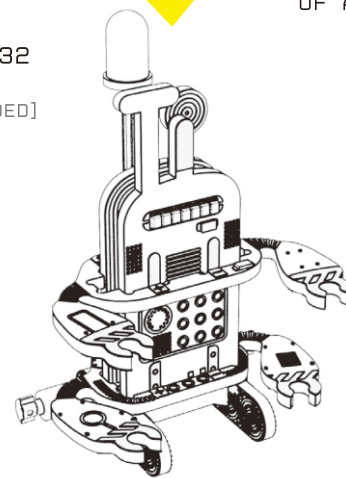
STEP 4



INSERT
THE CR2032
BATTERY
[NOT INCLUDED]

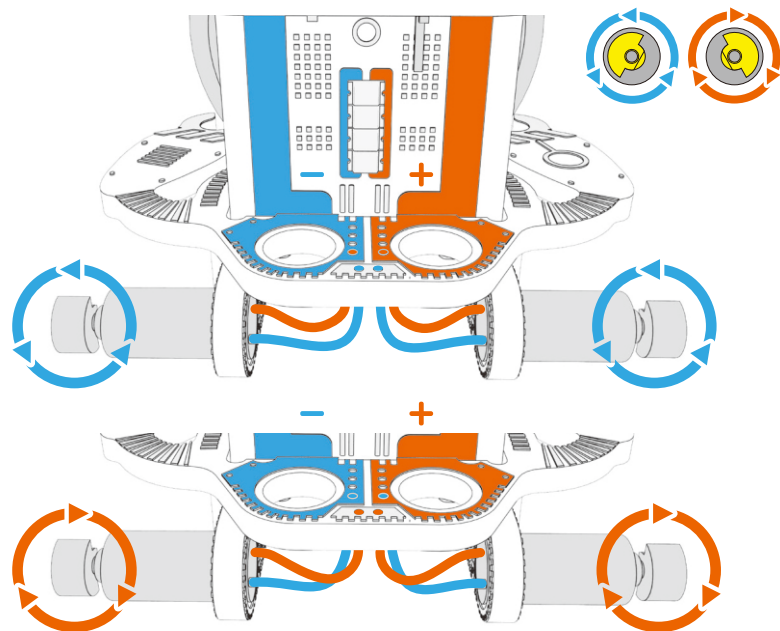


i **TIP** TO HELP
THE CONNECTION,
YOU CAN ADD A PIECE
OF ALUMINIUM FOIL.



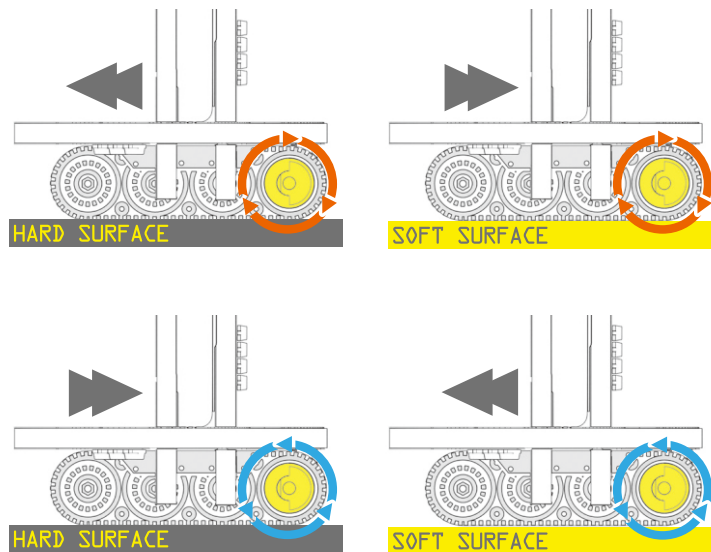
WOOL

i TIP TO CHANGE
THE MOTOR ROTATION.



INVERT THE WIRES
OF EACH MOTOR

YOU CAN TRY DIFFERENT SURFACES:
PAPER / WOOD / BOOK COVERS... ETC.



MAT001

COMPLEXITY



NANO BOT

INSTRUCTION
MANUAL



COMPONENTS FOR MAT001

 x30	 x10	 x4	 x1
SMD LED IC BLINKING	SMD LED	SMD LED IC BLINKING	BATTERY HOLDER
RED	YELLOW	RGB	
SCHEMATIC IMAGE  Rb	SCHEMATIC IMAGE  Y	SCHEMATIC IMAGE  RGB	SCHEMATIC IMAGE 
MOUNTING IMAGE 	MOUNTING IMAGE 	MOUNTING IMAGE 	MOUNTING IMAGE 
HOW TO SOLDER LOOK INTO EDUCATION MANUAL P.32	HOW TO SOLDER LOOK INTO EDUCATION MANUAL P.30	HOW TO SOLDER LOOK INTO EDUCATION MANUAL P.33	HOW TO SOLDER LOOK INTO EDUCATION MANUAL P.28



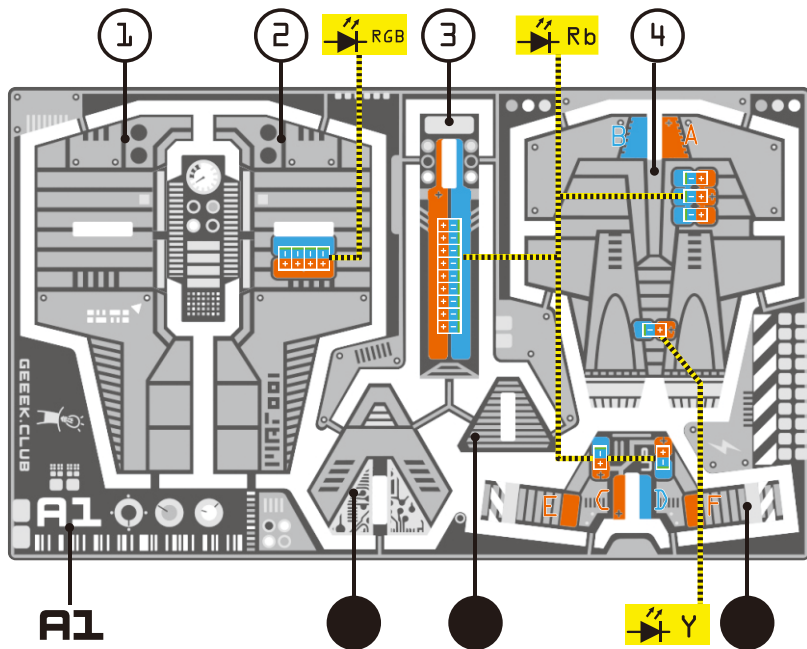
VIDEO
INSTRUCTIONS



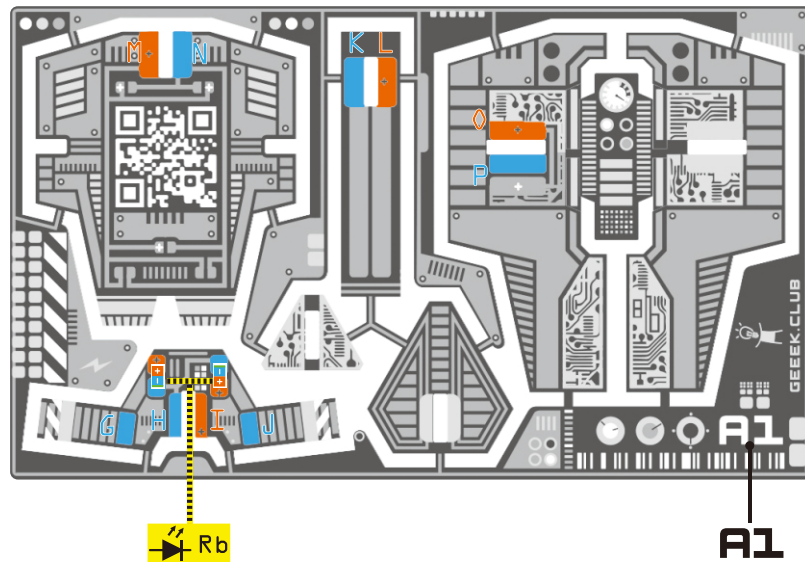
GEEKCLUB.COM

MAT001

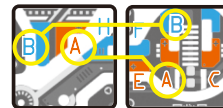
FRONT: A1



BACK: A1

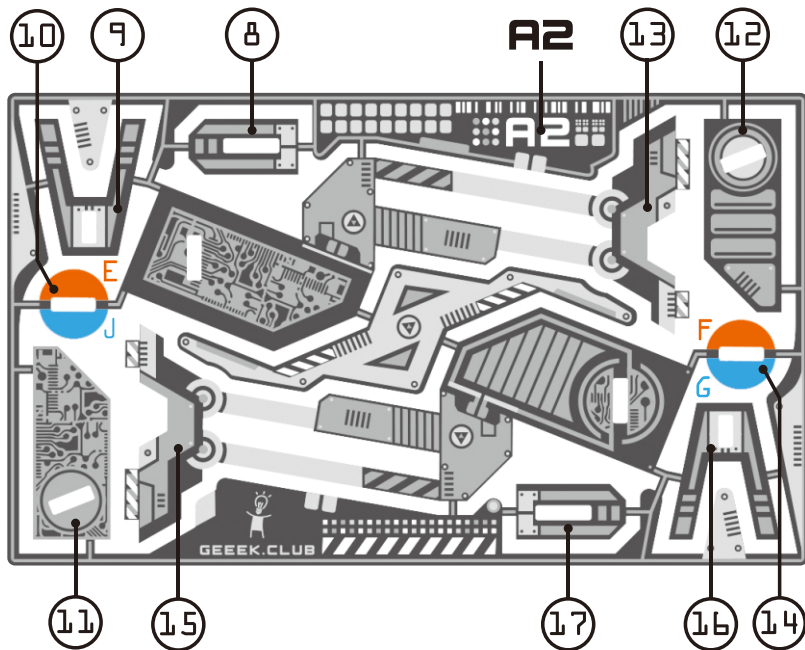


SOLDER
+ A WITH A,
- B WITH B,
ETC...

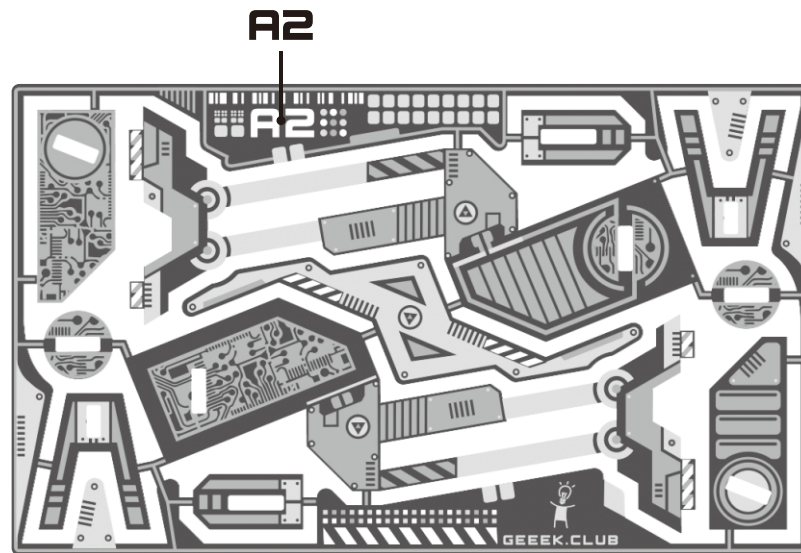


MAT001

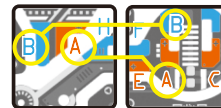
FRONT: A2



BACK: A2

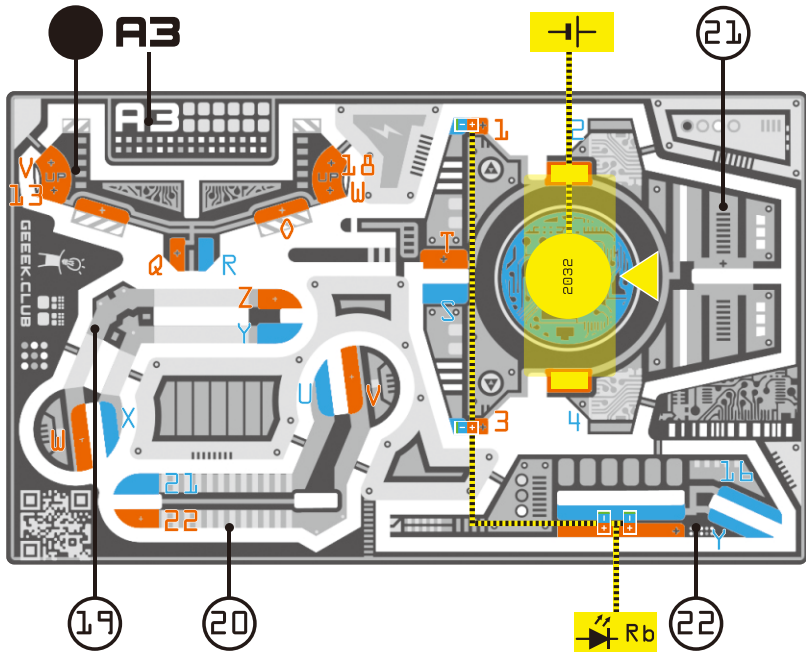


SOLDER
+ A WITH A,
- B WITH B,
ETC...



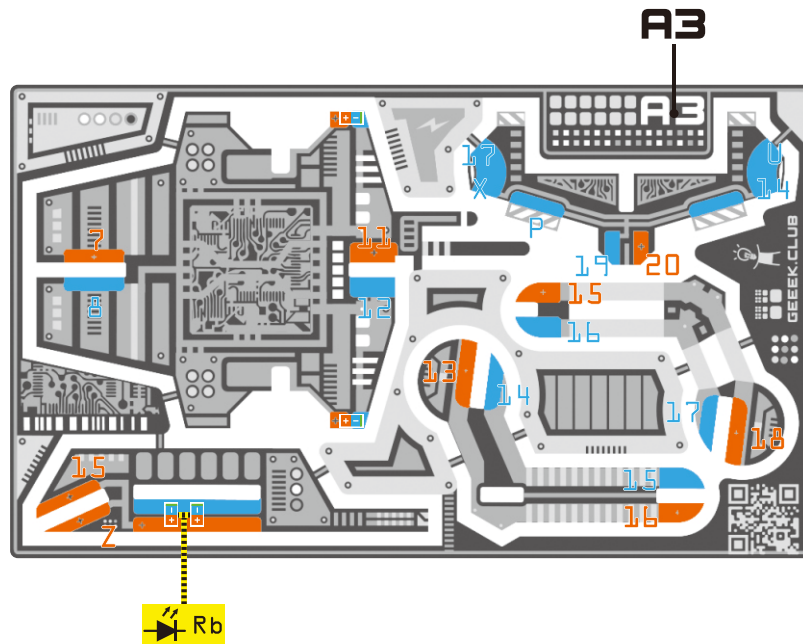
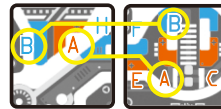
MAT001

FRONT: A3



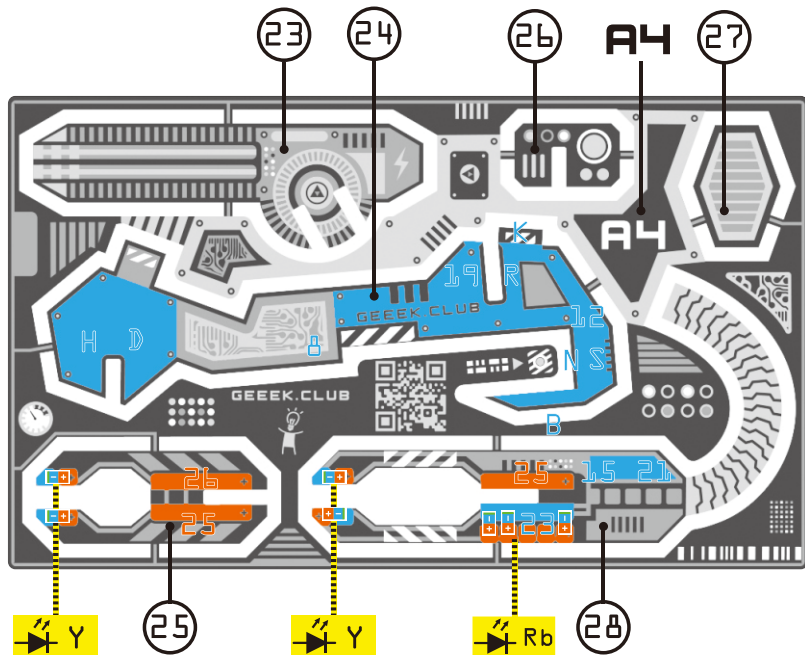
BACK: A3

SOLDER
+ A WITH A,
- B WITH B,
ETC...

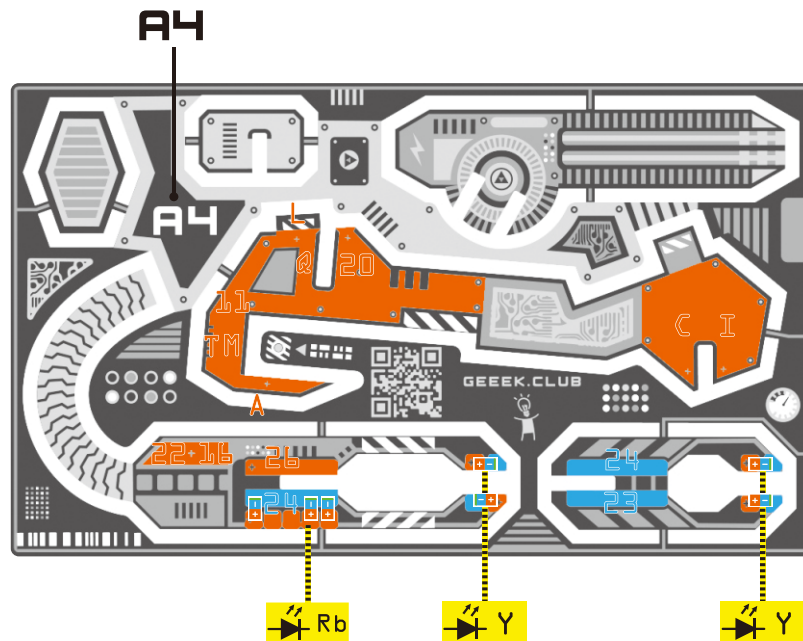


MAT001

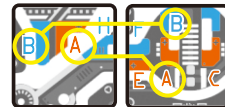
FRONT: A4



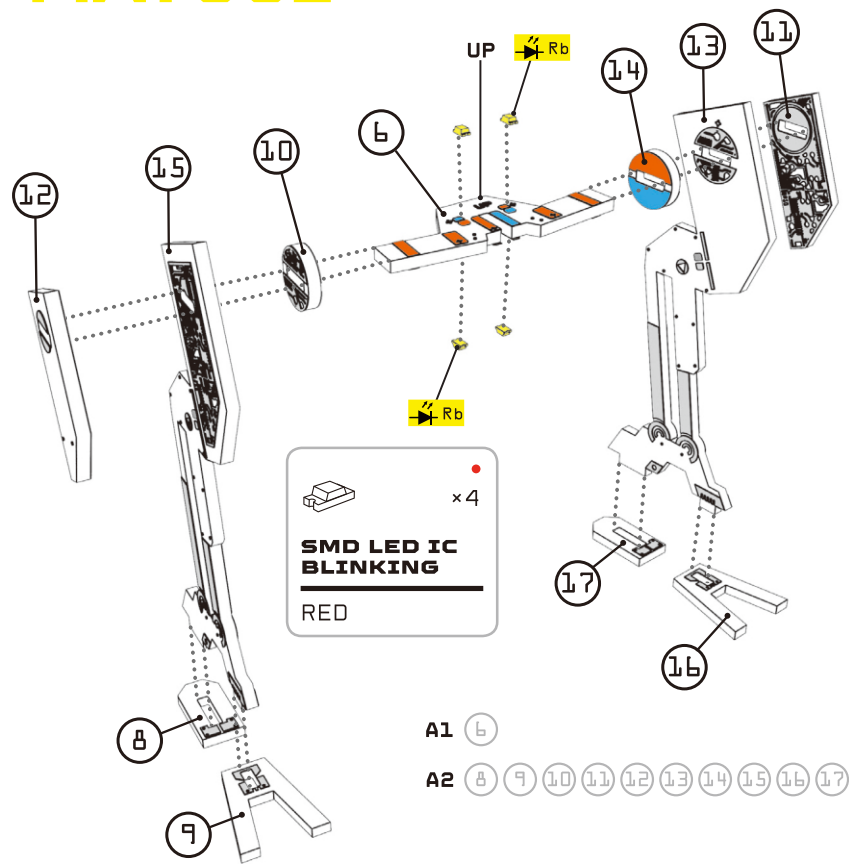
BACK: A4



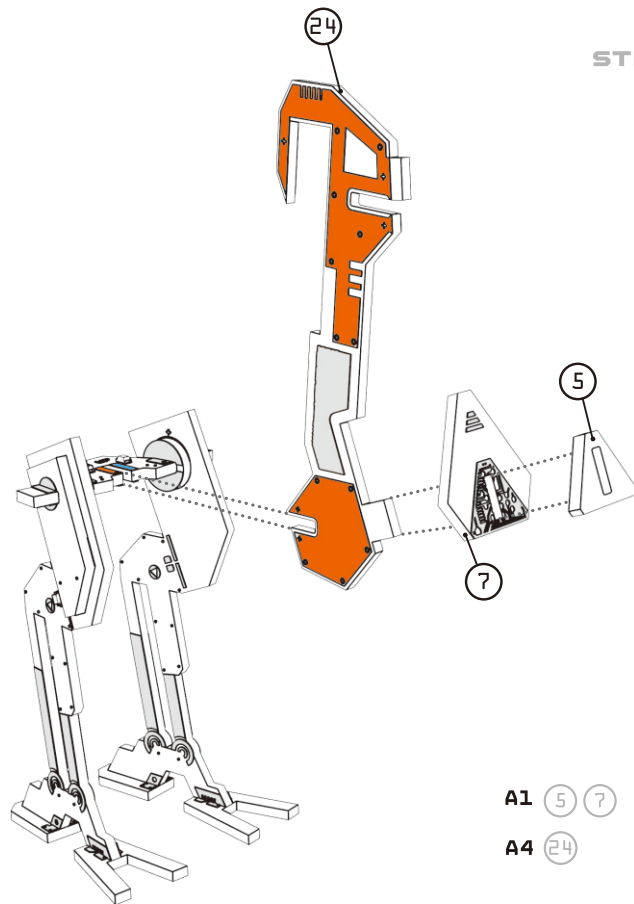
SOLDER
+ A WITH A,
- B WITH B,
ETC...



STEP 1

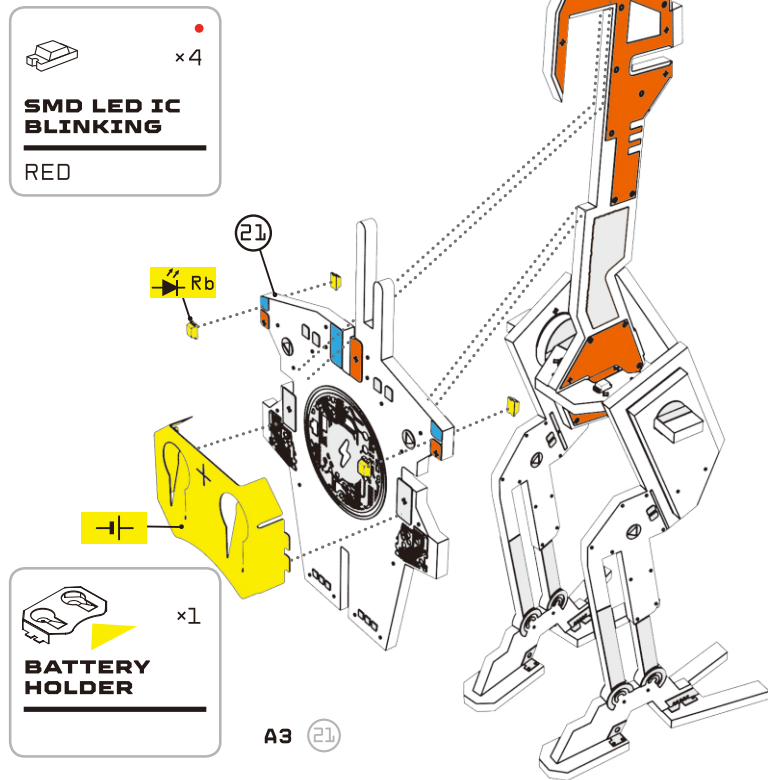


STEP 2

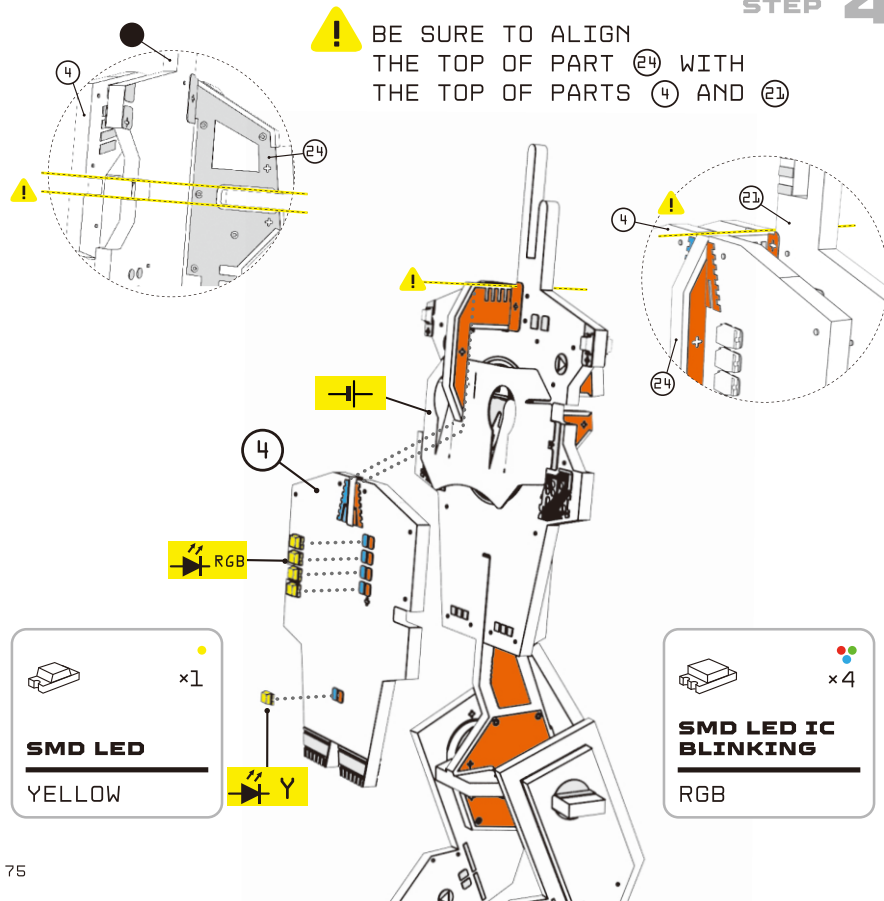


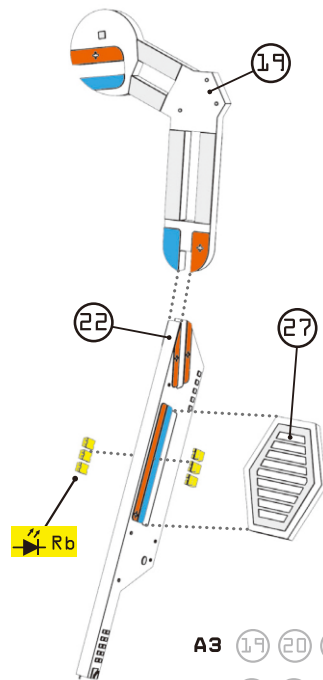
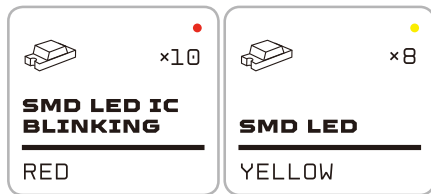
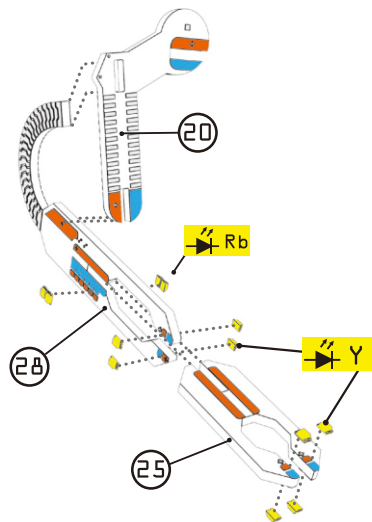
MAT001

STEP 3

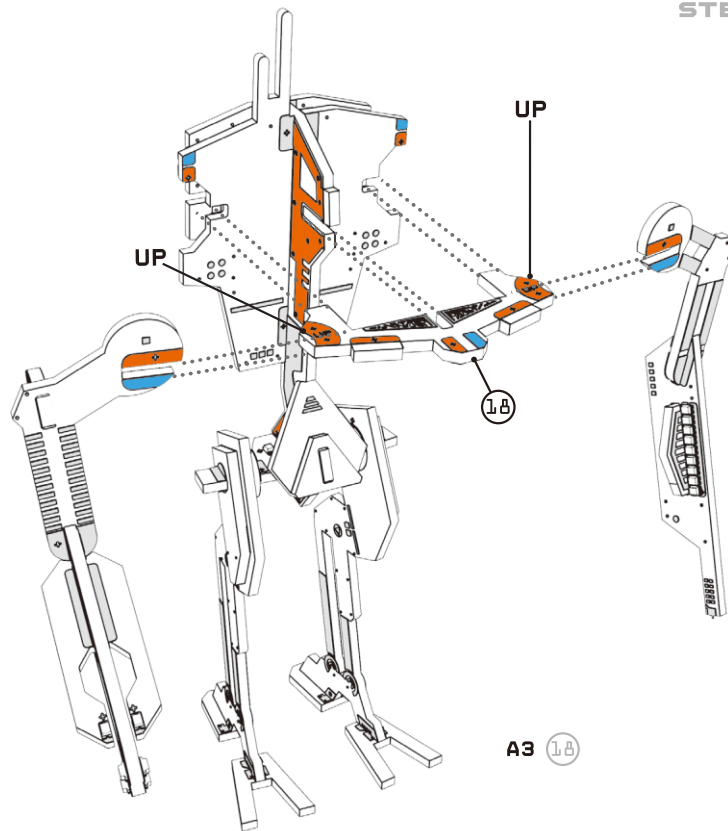


STEP 4





A3 19 20 22
A4 25 27 28



A3 18

STEP 7



STEP 8

