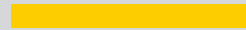




**LIGHT<sup>MY</sup>  
BRICKS**



**LEGO OPTIMUS PRIME #10302  
LIGHT KIT  
INSTALLATION GUIDE**

# Light My Bricks



## LEGO OPTIMUS PRIME 10302 INSTALLATION GUIDE

Hi There!

We're here to help you get started on the LEGO Optimus Prime 10302 Light Kit.

This PDF details the instructions for the LED light kit only.

If you run into any issues, please refer to the troubleshoot-ing section towards the end of this guide.

Have fun and enjoy!

INSTALLATION GUIDE



# PACKAGE CONTENTS:



- 4 x Orange 30cm Bit Light
- 4 x Cool White 30cm Bit Light
- 8 x Yellow 15cm Bit Light \*
- 1 x Blue 30cm Bit Light
- 2 x Red 30cm Bit Light
- 1 x Blue 30cm Large Bit Light
- 1 x Cool White 30cm Large Bit Light
- 1 x Warm White Light String



- 4 x 8-Port Expansion Board \*
- 7 x 2-Port Expansion Board
- 1 x Pulse Effects Board
- 1 x Flicker Effects Board
- 1 x Gun Effects Board
- 2 x Wireless Power Connectors



- 2 x 5cm Connecting Cables
- 7 x 15cm Connecting Cables
- 1 x 50cm Connecting Cables



- 1x USB Power Cable  
(Power Source not Included)

# ASSORTED BRICKS:



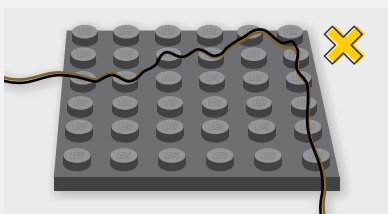
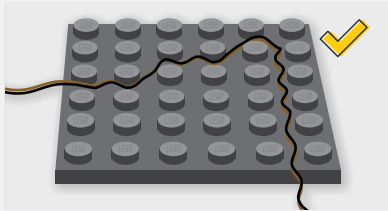
- 2 x 1x1 Round Plate - Trans Dark Blue
- 4 x 1x1 Round Plate Open Stud - Trans Orange
- 8 x 1x1 Round Plate - Trans Orange
- 4 x 1x2 Plate - Red
- 2 x 1x2 Plate - Trans Red
- 3 x 1x2 Plate - Trans Clear
- 1 x 2x2 Plate W Rounded Bottom - Trans Clear
- 1 x 1x1 Round Plate Open Stud - Black
- 1 x 1x1 Bracket - Light Grey
- 1 x 1x2 Plate - Black
- 1 x 2x2 Plate - Dark Grey

\* Indicates components which include spares

## Contents

Before You Begin	5
Blueprint	8
Instructions	10
Final Product	64
Troubleshooting	65
Contact	70

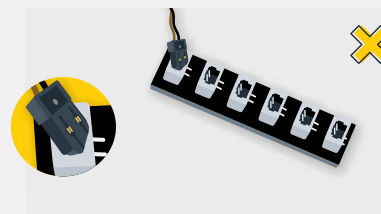
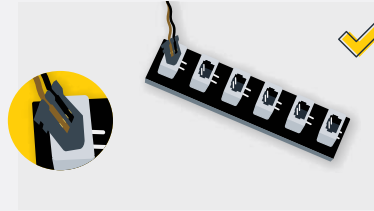
## Before You Begin



### Laying cables in between and underneath bricks

Cables can fit in between and underneath LEGO® bricks, plates, and tiles providing they are laid correctly between the LEGO® studs. Do NOT forcefully join LEGO® together around cables; instead ensure they are laying comfortably in between each stud.

*CAUTION: Forcing LEGO® to connect over a cable can result in damaging the cable and light.*

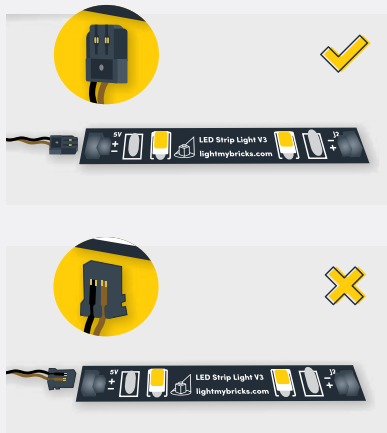


### Connecting Cable Connectors To Expansion Boards

Take extra care when inserting connectors to ports of Expansion Boards. Connectors can be inserted only one way. With the expansion board facing up, look for the soldered “=” symbol on the left side of the port. The connector side with the wires exposed should be facing toward the soldered “=” symbol as you insert into the port. If a plug won’t fit easily into a port connector, do not force it.

*Incorrectly inserting the connector can result in bent pins inside the port or possible overheating of the expansion board when connected.*

## Before You Begin



### Connecting Cable Connectors To Strip Lights

Take extra care when inserting connectors to ports on the Strip Lights. Connectors can be inserted only one way. With the Strip Light facing up, ensure the side of the connector with the wires exposed is facing down. If a plug won't fit easily into a port connector, don't force it. Doing so will damage the plug and the connector.



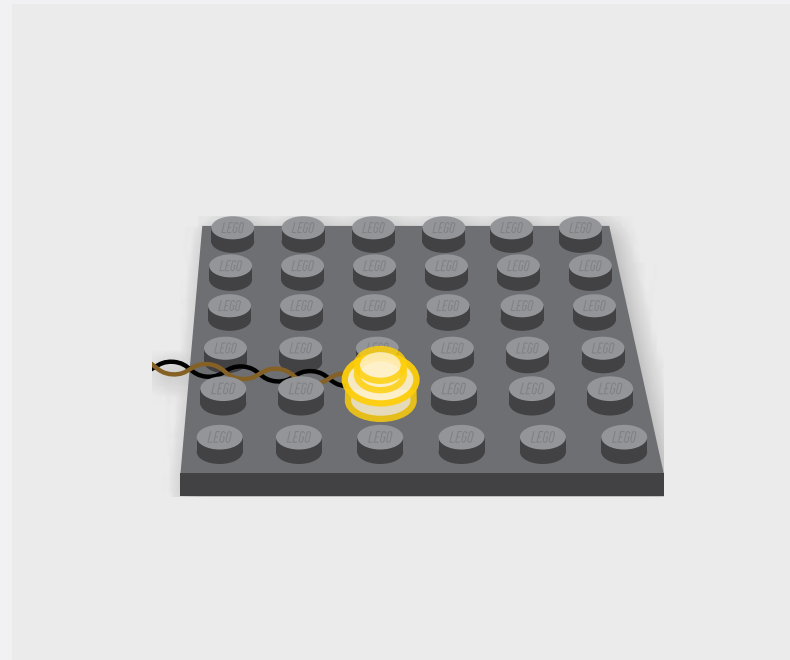
### Connecting Micro Cable Connectors To Micro Expansion Board Ports

Take extra care when inserting the micro connectors to micro ports of Micro Expansion Boards. Connecting Micro Bit Lights to Micro Expansion Boards is similar to connecting lights and cables to Strip Lights. With the expansion board facing up, ensure the side of the connector with the wires exposed is facing down. If a plug won't fit easily into a port connector, do not force it. Use your fingernail to push the plastic part of the connector to the micro port.

## Before You Begin

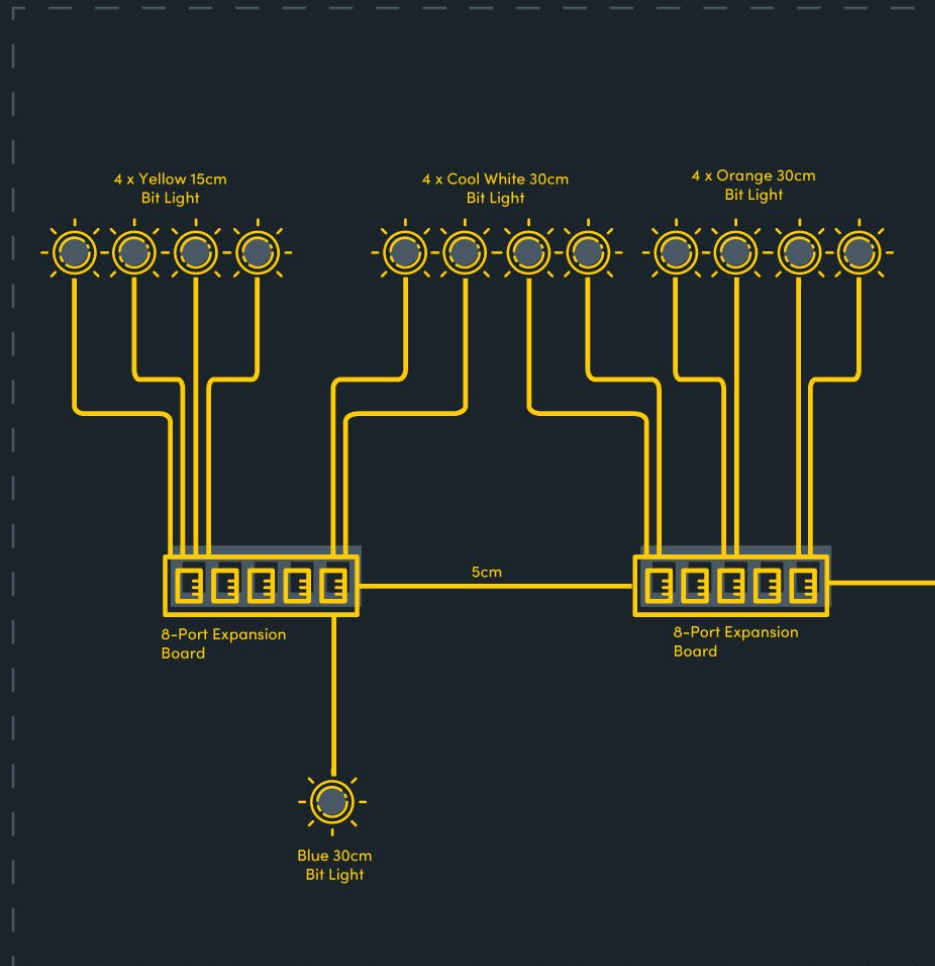
### Installing Bit Lights Under Lego® Bricks And Plates

When installing Bit Lights under LEGO® pieces, ensure they are placed the correct way up (Yellow LED component exposed). You can either place them directly on top of LEGO® studs or in between.

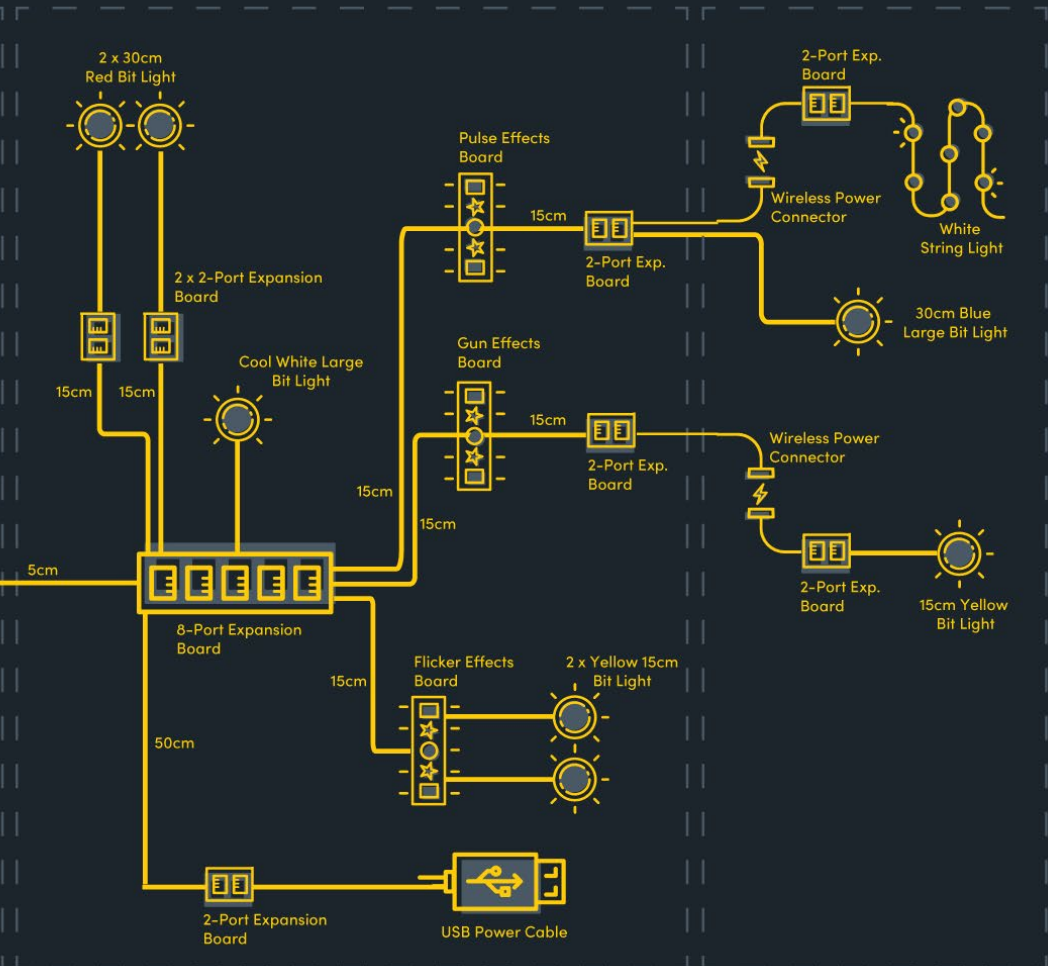


# BLUEPRINT

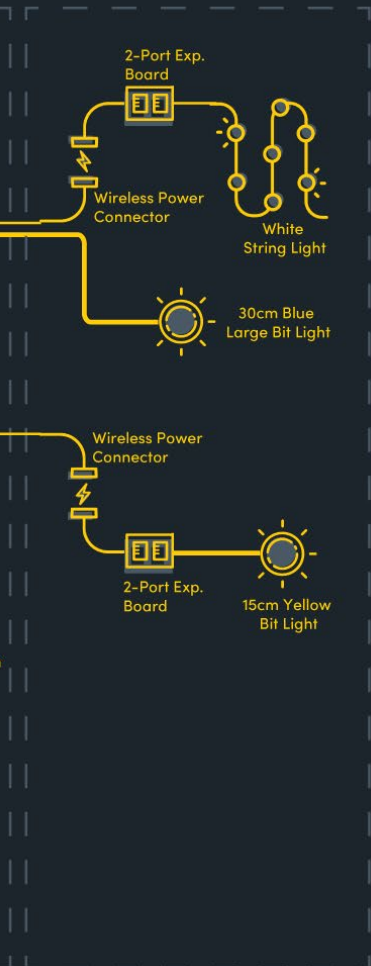
## Autobot Mode - Part 1



## Part 2



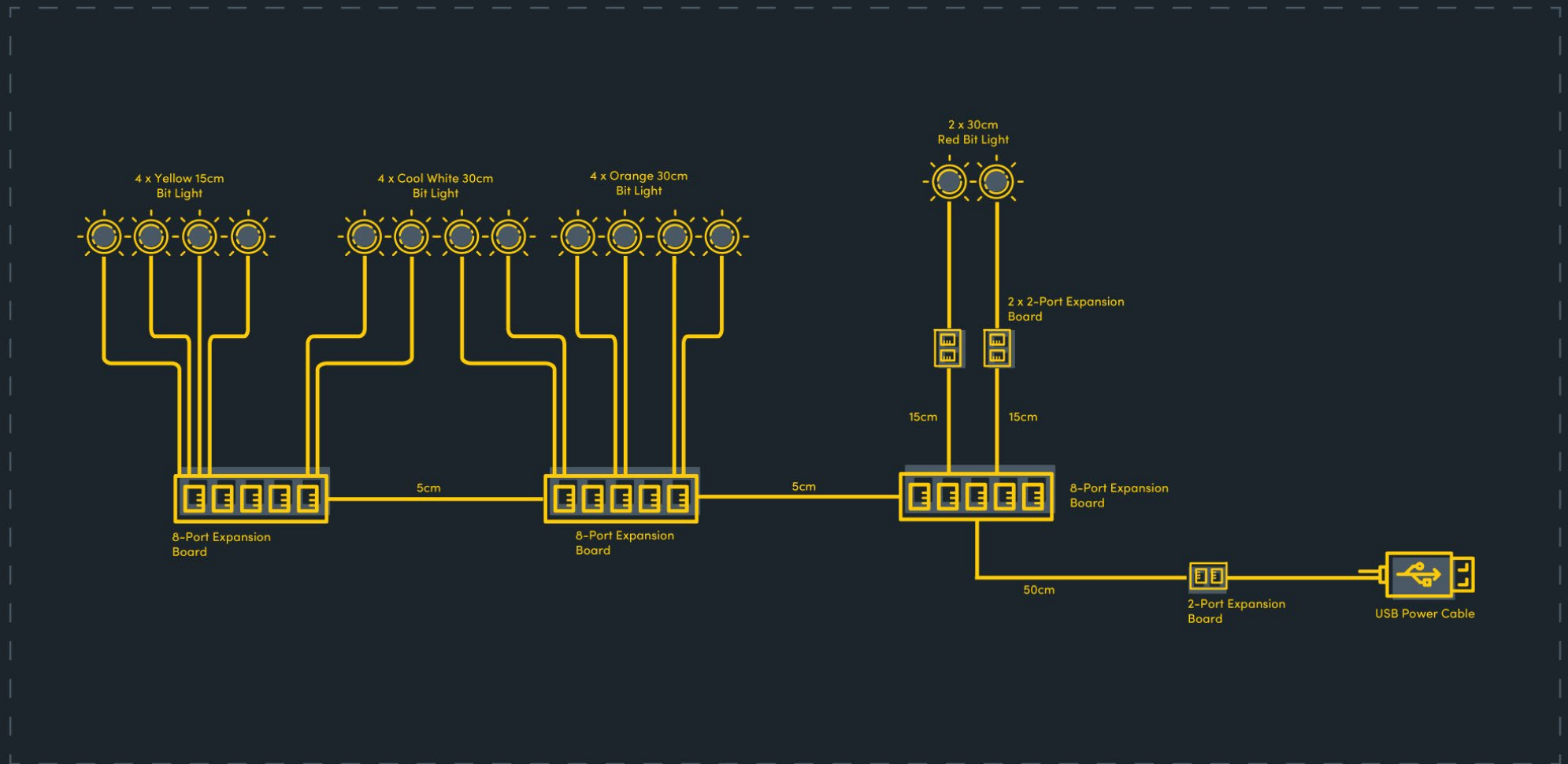
## Weapons





# BLUEPRINT

## Truck Mode





## INSTRUCTIONS

To ensure a smooth installation of your light kit, please read and follow each step carefully. If you run into any issues, please refer to the online troubleshooting guide.

*Instructions for Autobot Mode: Page 11-50*

*Instructions for Truck Mode: Page 51-63*





## AUTOBOT MODE INSTRUCTIONS

Light Kit Guide for installation into Autobot Mode.

If you intend to display your Optimus Prime 10302 in Autobot form, follow the instructions bellow.



LEGEND: → DISCONNECT

→ CONNECT / RECONNECT



TURN / FLIP

→ DIRECTIONAL



TWIST / BRAID



POWER ON / TEST



LEGENDE: → TRENNEN

→ VERNINDEN / WIEDERVERBINDEN



WENDEN / KIPPEN

→ DIRECTIONAL



DREHEN / VERDREHEN



EINSCHALTEN / TESTEN



LÉGENDE: → DÉCONNECTER

→ CONNECTER / RECONNECTER



TOUR / INCLINAISON

→ DIRECTIONNEL



TORSION / TRESSER



POWER ON / TEST



LEGGENDA: → SCOLLEGARE

→ CONNETTI / RICONNETTI



ROTARE / INCLINARE

→ DIREZIONALE

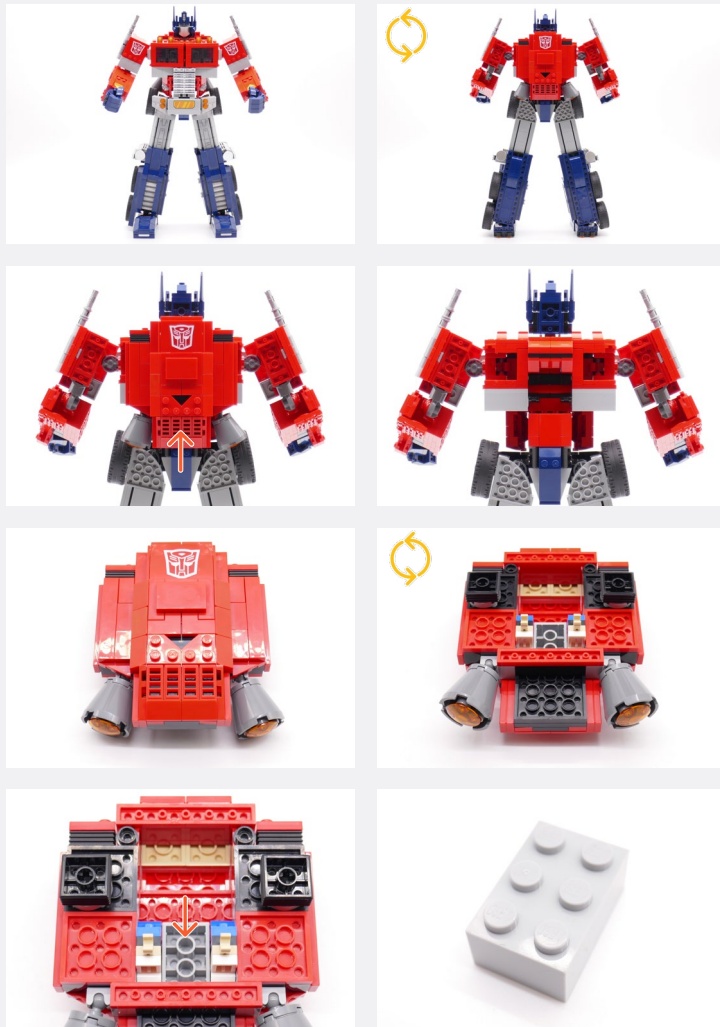


TWIST / TRECCIA

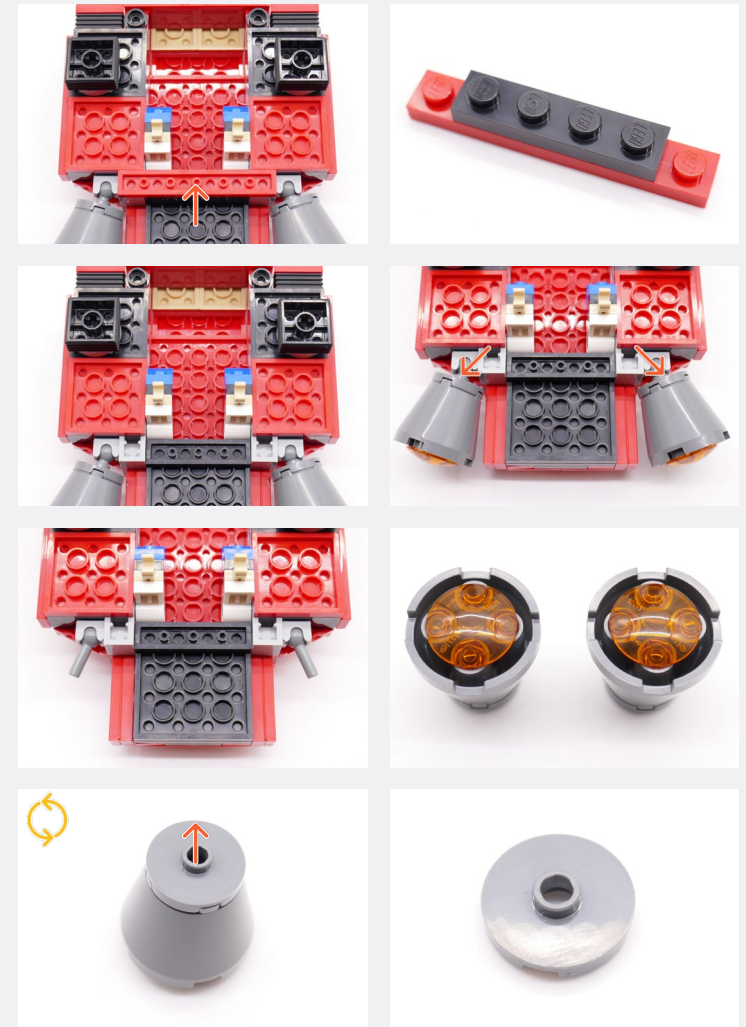


POWER ON / TEST

**1**

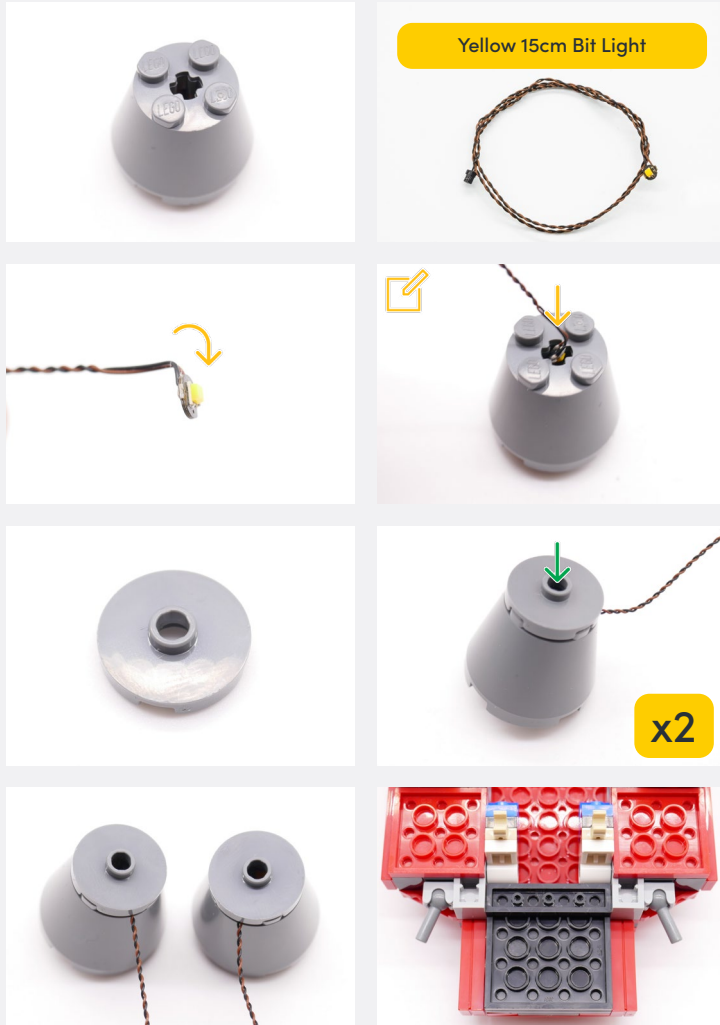


**2**



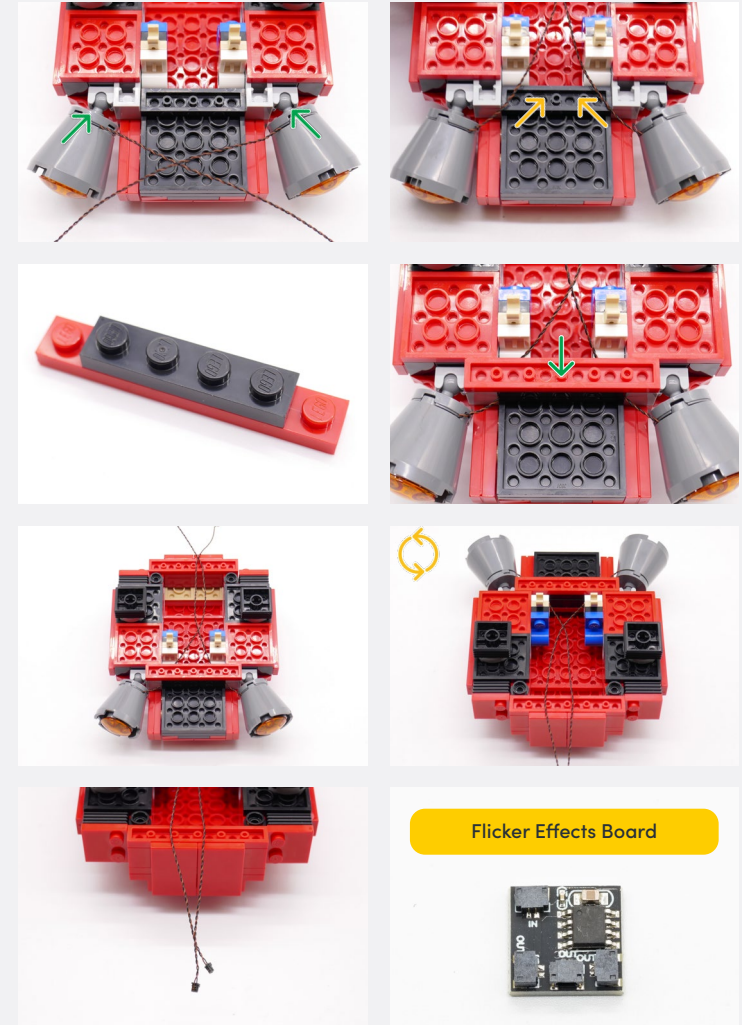
**Legend**

- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON



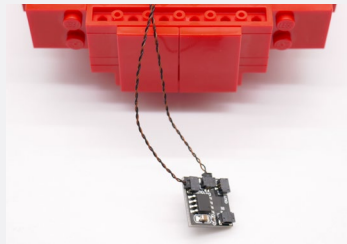
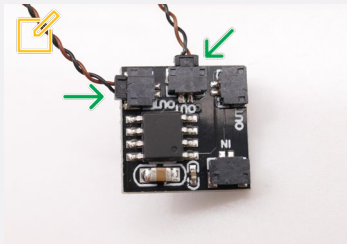
Push the Bit Light all the way down to the Orange 2x2 Plate w/ Rounded Bottom

**3**



**Legend** → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↺ TWIST / BRAID ✨ POWER ON TEST 📝 NOTE ICON

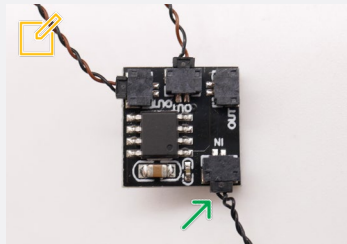
✂ Connect the two Bit Lights to the 'OUT' port of the Flicker Effects Board



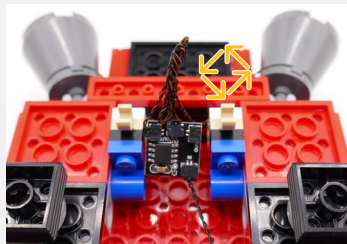
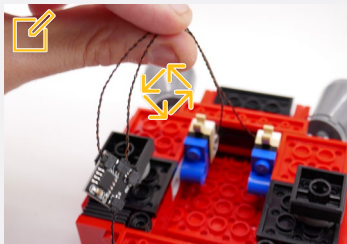
4

USB Power Cable

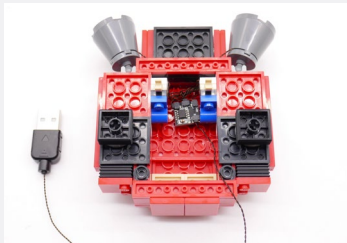
✂ Connect the USB Power Cable to the 'IN' Port of the Flicker Effects Board



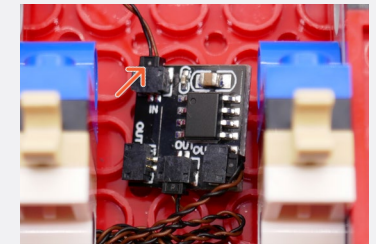
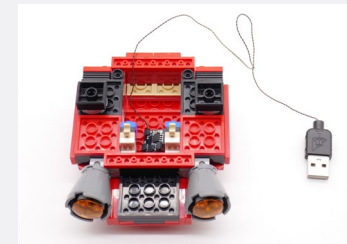
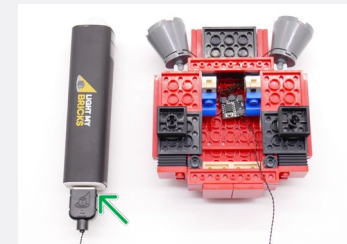
✂ Twist the cables but exclude the USB Power Cable



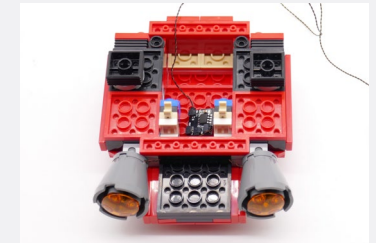
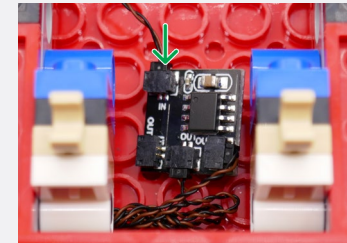
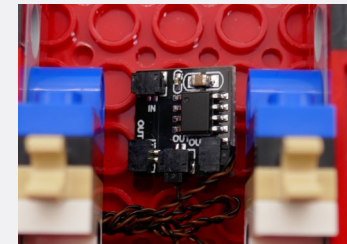
✂ Connect to a power source - 5V USB Power Bank, 5V USB Wall Adaptor, or USB to AA Battery Pack (sold separately)



5



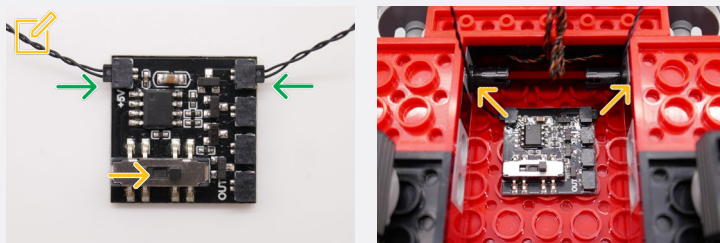
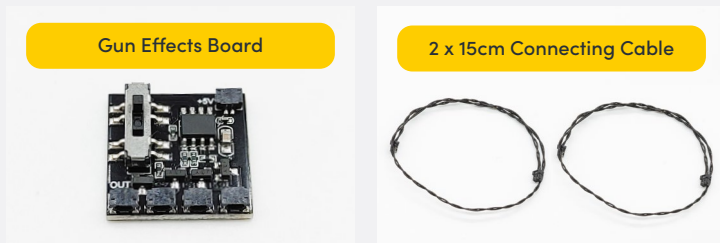
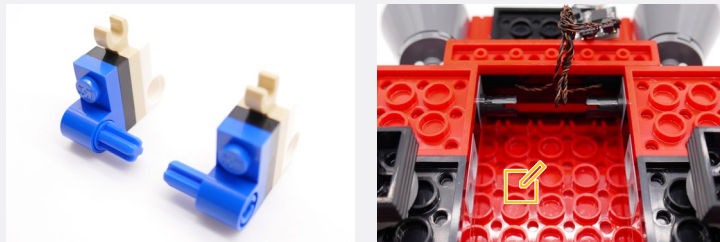
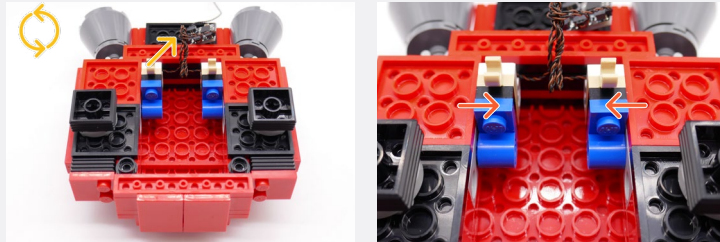
15cm Connecting Cable



Legend

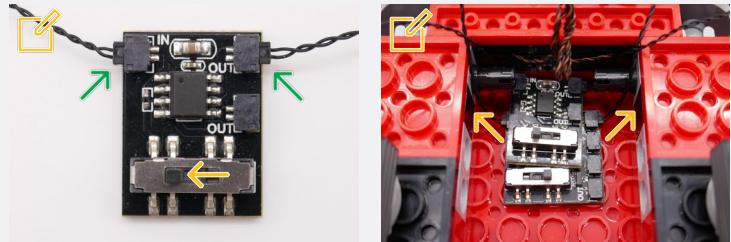
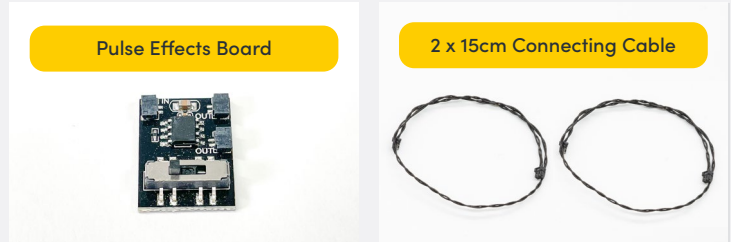
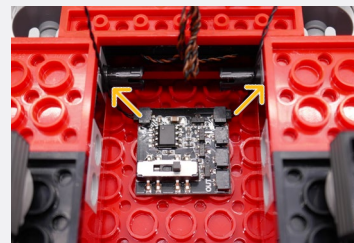
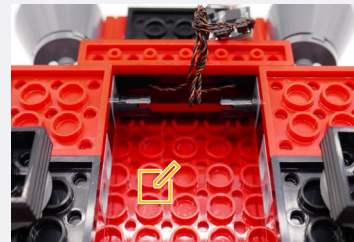
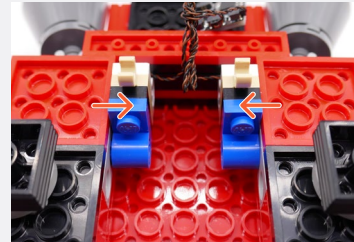
- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON

## 6



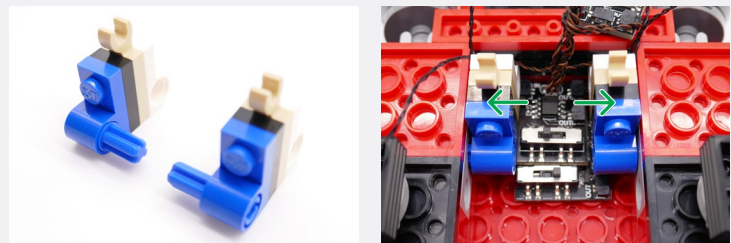
Connect a 15cm Connecting Cable to the '5V+' port and the other 15cm Connecting Cable to an 'OUT' port of the Gun Effects Board

Push the switch to the right



Connect a 15cm Connecting Cable to the 'IN' port and the other 15cm Connecting Cable to an 'OUT' port of the Pulse Effects Board

Push the switch to the left



Ensure the cables connected to the 'IN' port are going towards the left side of the jetpack


Ensure the cables connected to the 'OUT' port are going towards the right side of the jetpack

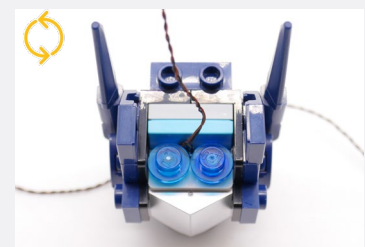
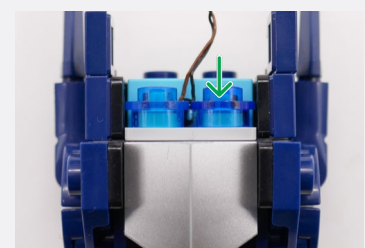
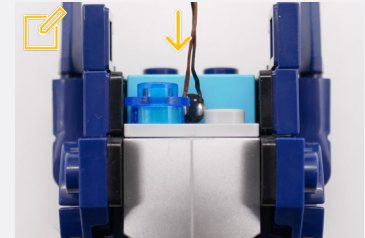
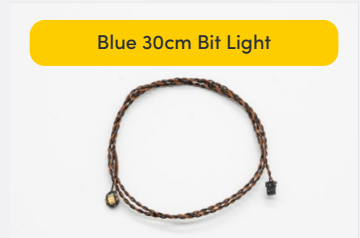
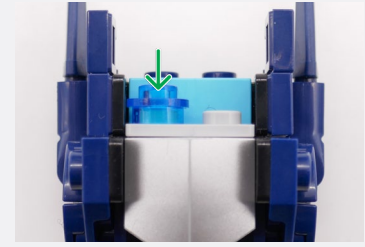
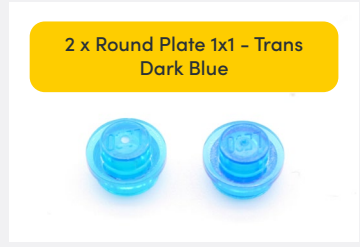
## Legend

- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON

**7**



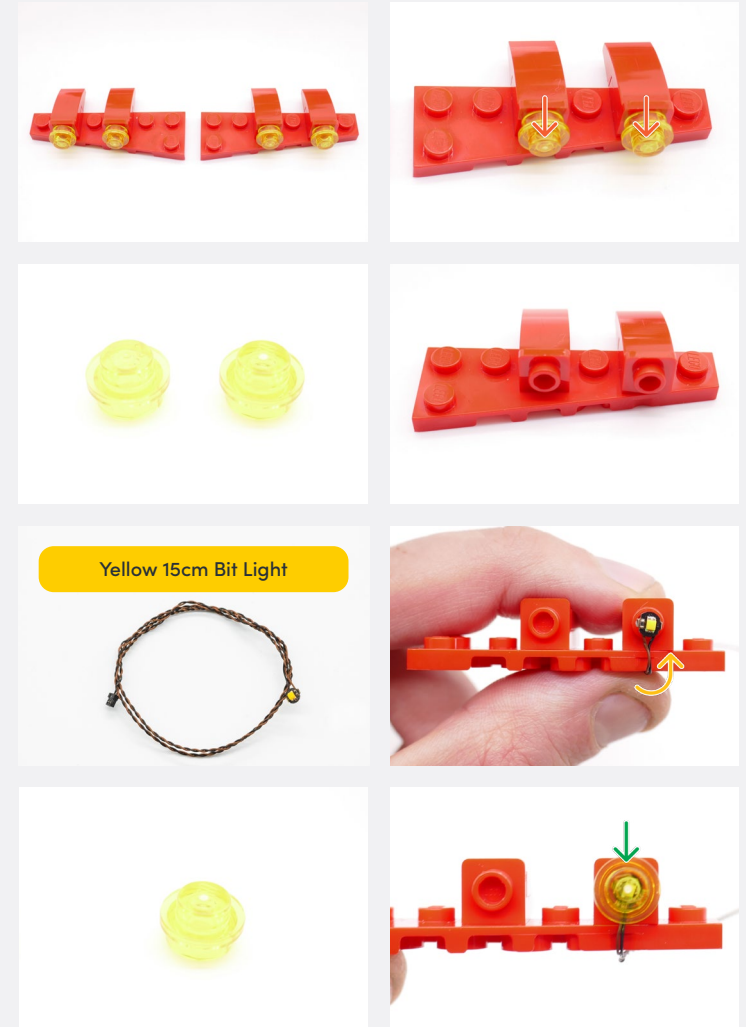
 Make sure Bit Light is positioned facing backward



**Legend**    DISCONNECT    CONNECT / RECONNECT    TURN / FLIP    DIRECTIONAL    TWIST / BRAID    POWER ON TEST    NOTE ICON

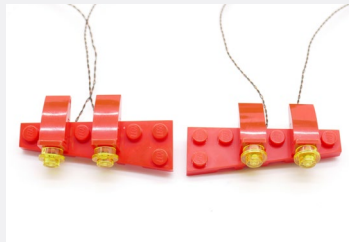
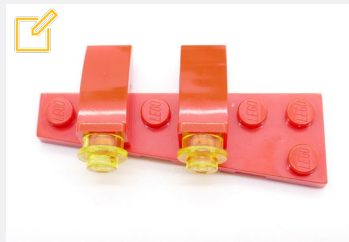
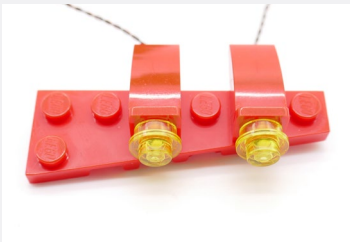
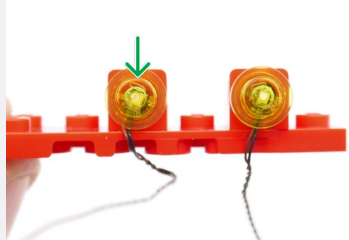
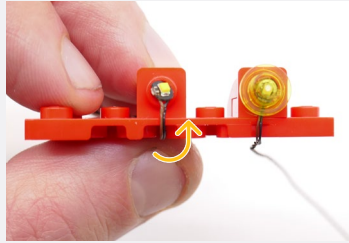


**8**



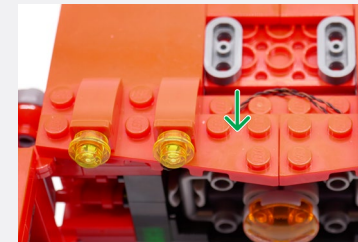
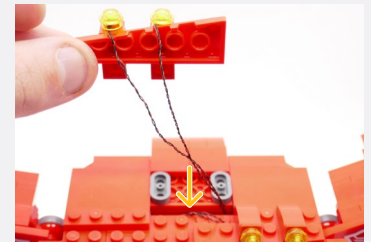
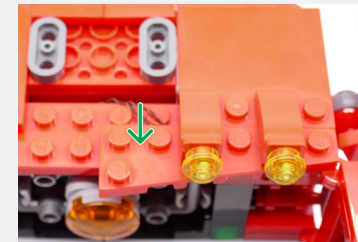
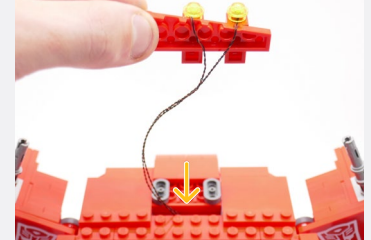
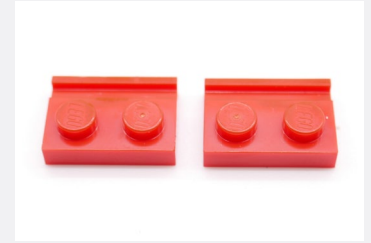
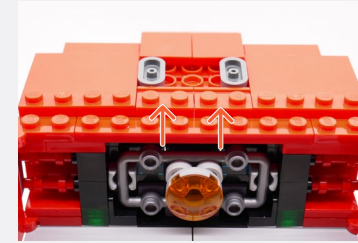
**Legend**    → DISCONNECT    → CONNECT / RECONNECT    ↻ TURN / FLIP    → DIRECTIONAL    ↻ TWIST / BRAID    ✨ POWER ON TEST    📝 NOTE ICON

Yellow 15cm Bit Light



Repeat step 8 for the opposite side

9

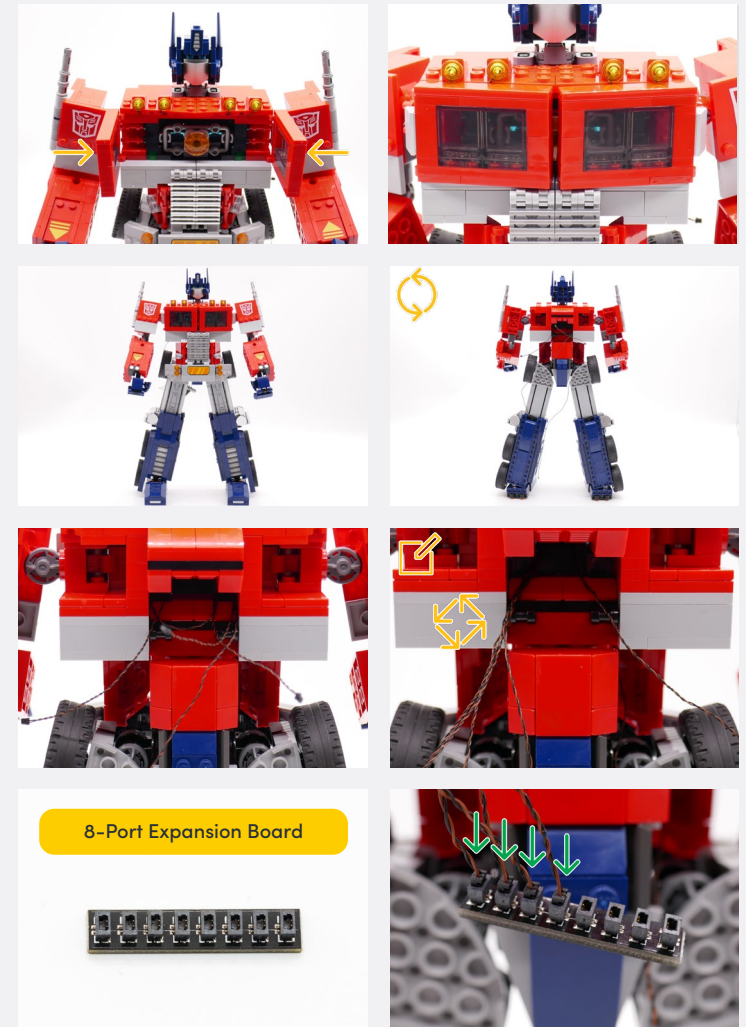



**Legend** → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID \* POWER ON TEST 📝 NOTE ICON

**10**



**11**



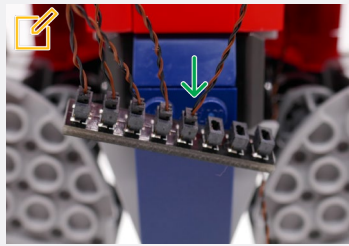
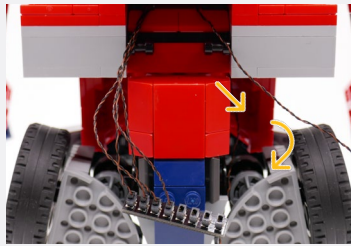
 Twist the four Yellow 15cm Bit Lights

**8-Port Expansion Board**

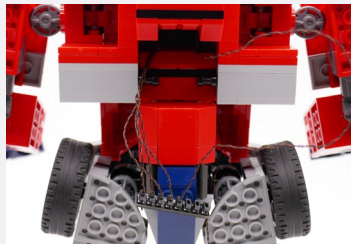
**Legend**

-  DISCONNECT
-  CONNECT / RECONNECT
-  TURN / FLIP
-  DIRECTIONAL
-  TWIST / BRAID
-  POWER ON TEST
-  NOTE ICON

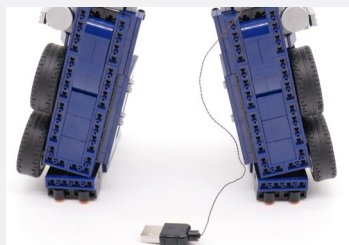
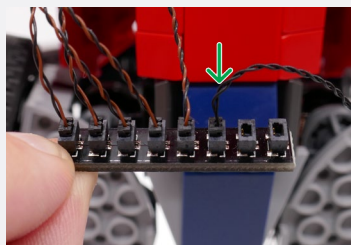
✍ Connect the Blue 30cm Bit Light from the head



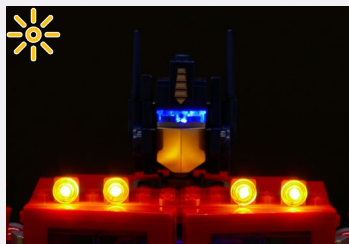
**12**



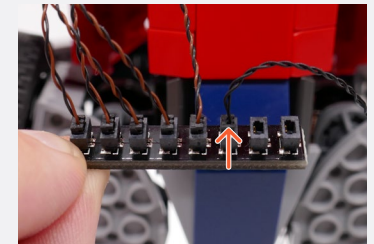
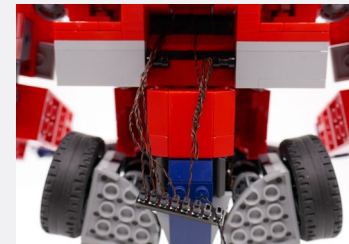
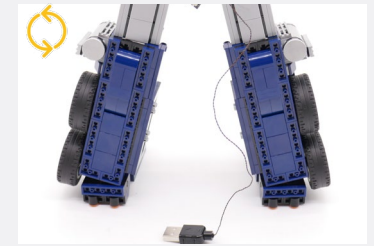
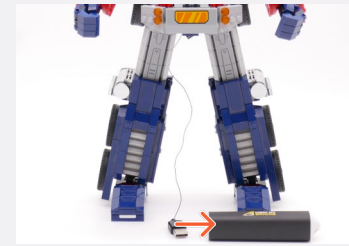
USB Power Cable



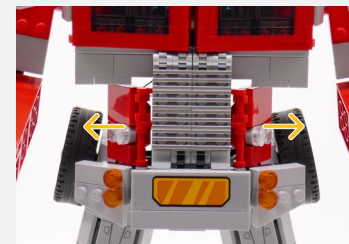
✍ Connect the other end to a power source



**13**



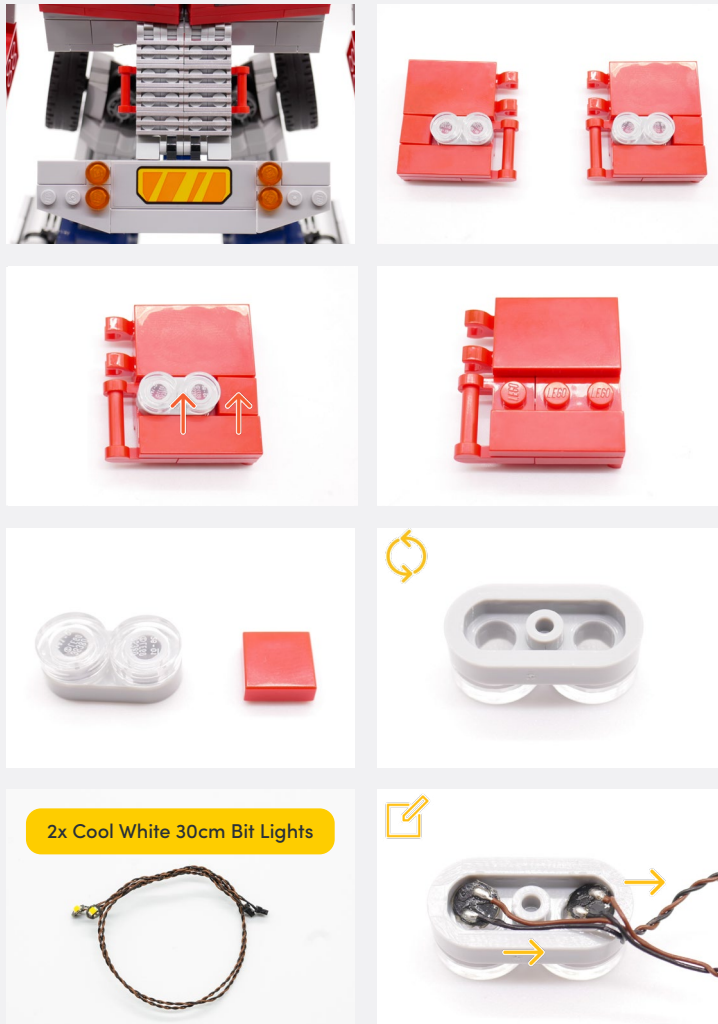
**14**



**Legend**

- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON

**15**

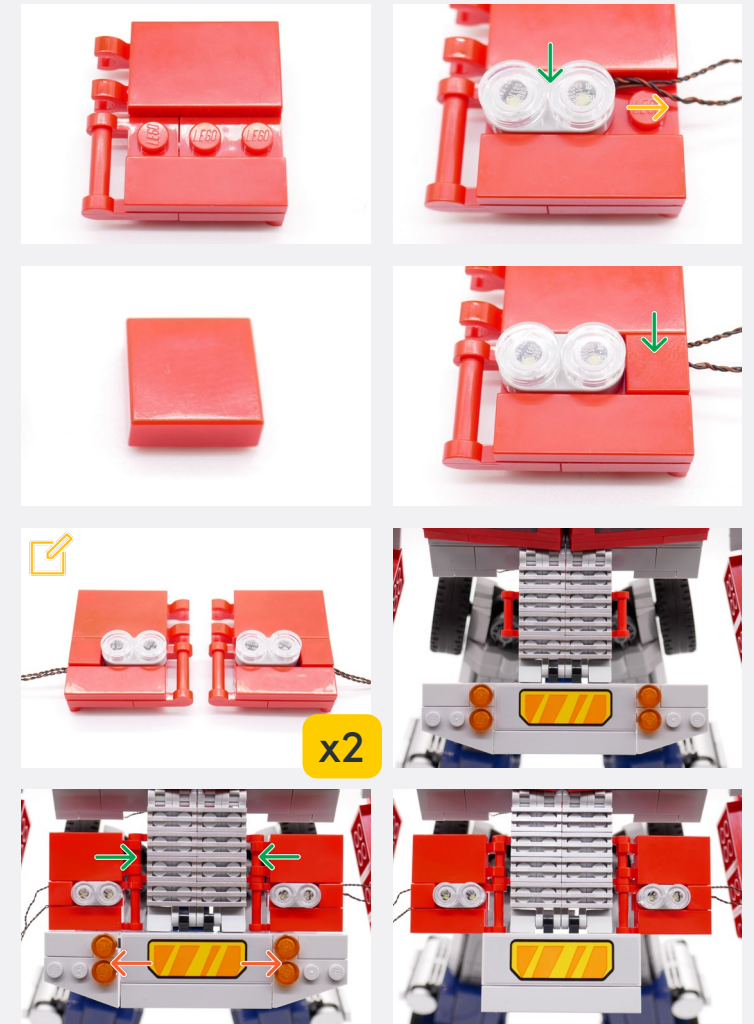


Ensure the LED is facing downwards

2x Cool White 30cm Bit Lights

Repeat step 15 to mirrored side

**16**



Repeat step 15 to mirrored side

x2

**Legend**

- DISCONNECT
- CONNECT / RECONNECT
- ↻ TURN / FLIP
- DIRECTIONAL
- ↻↻ TWIST / BRAID
- ✳ POWER ON TEST
- 📝 NOTE ICON

**17**

<p>Orange 30cm Bit Light</p>	
<p>Round Plate 1x1 - Trans Orange</p>	

Repeat Step 17 for the opposite side

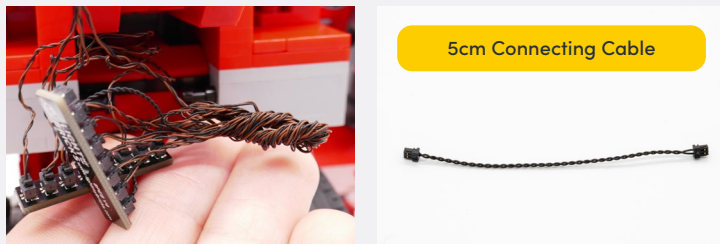
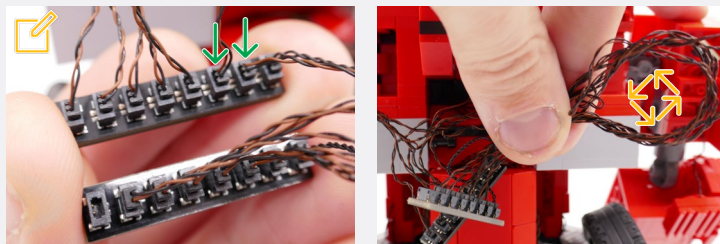
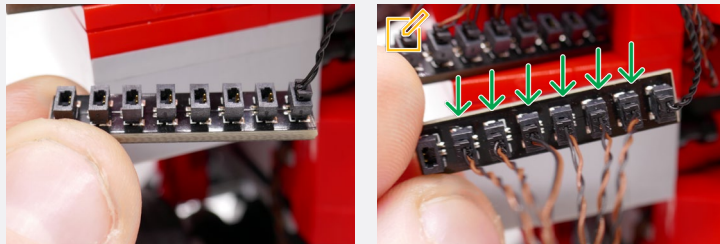
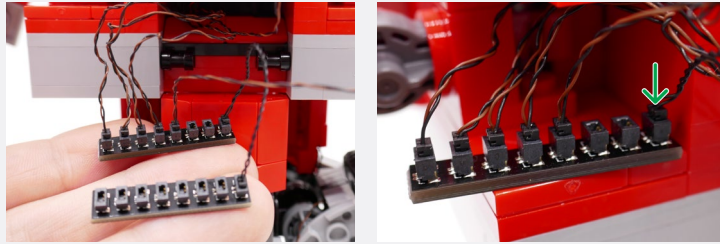
**18**

<p>Orange 30cm Bit Light</p>	
<p>Round Plate 1x1 - Trans Orange</p>	

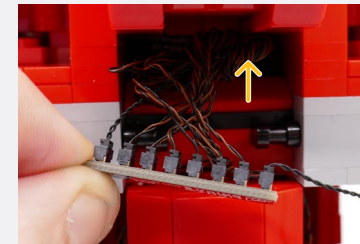
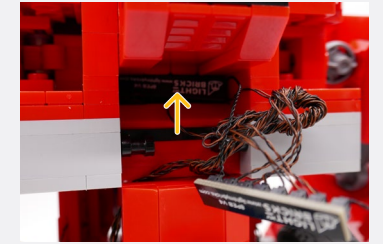
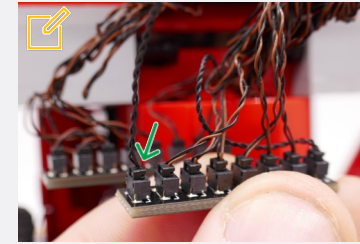
**Legend**

- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON

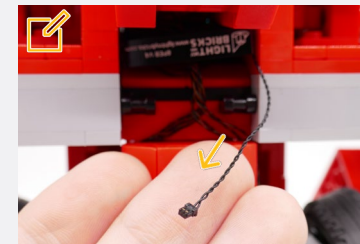




✍ Connect the 5cm Connecting Cable to the remaining port on the 8-Port Expansion Board



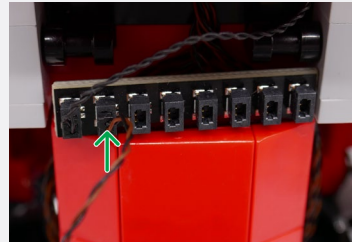
✍ Ensure the 5cm Connecting Cable is freely hanging out after fitting the Expansion Boards into the gap



**Legend** → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID ✨ POWER ON TEST ✍ NOTE ICON



20

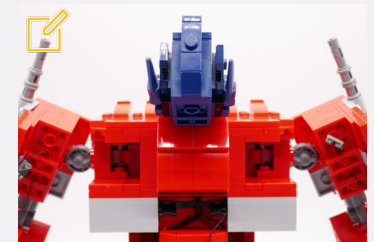
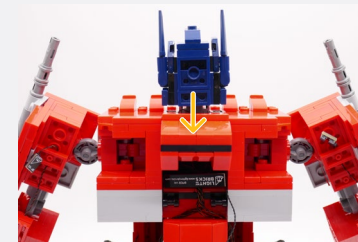
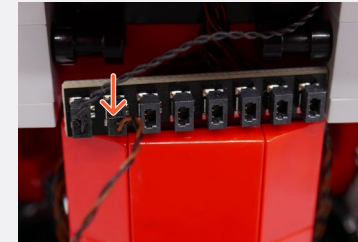


Connect the other end to a power source

21



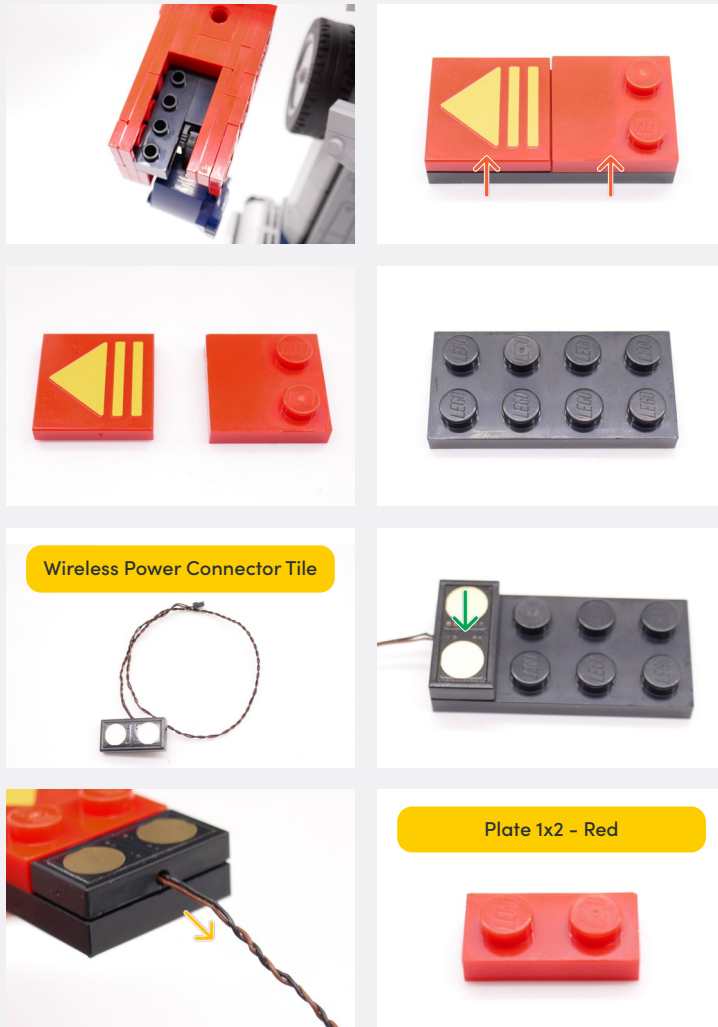
Optional - Tilting head back will help to hold expansion boards in cavity



22

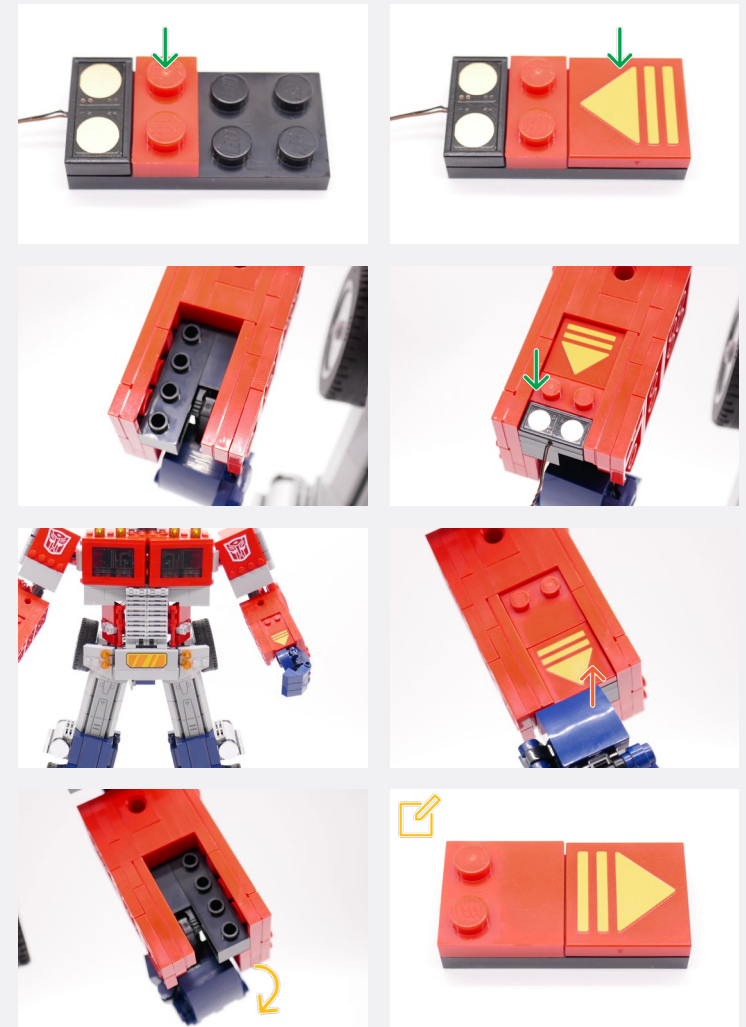


**Legend**    → DISCONNECT    → CONNECT / RECONNECT    ↻ TURN / FLIP    → DIRECTIONAL    ↻ TWIST / BRAID    ✨ POWER ON TEST    📝 NOTE ICON



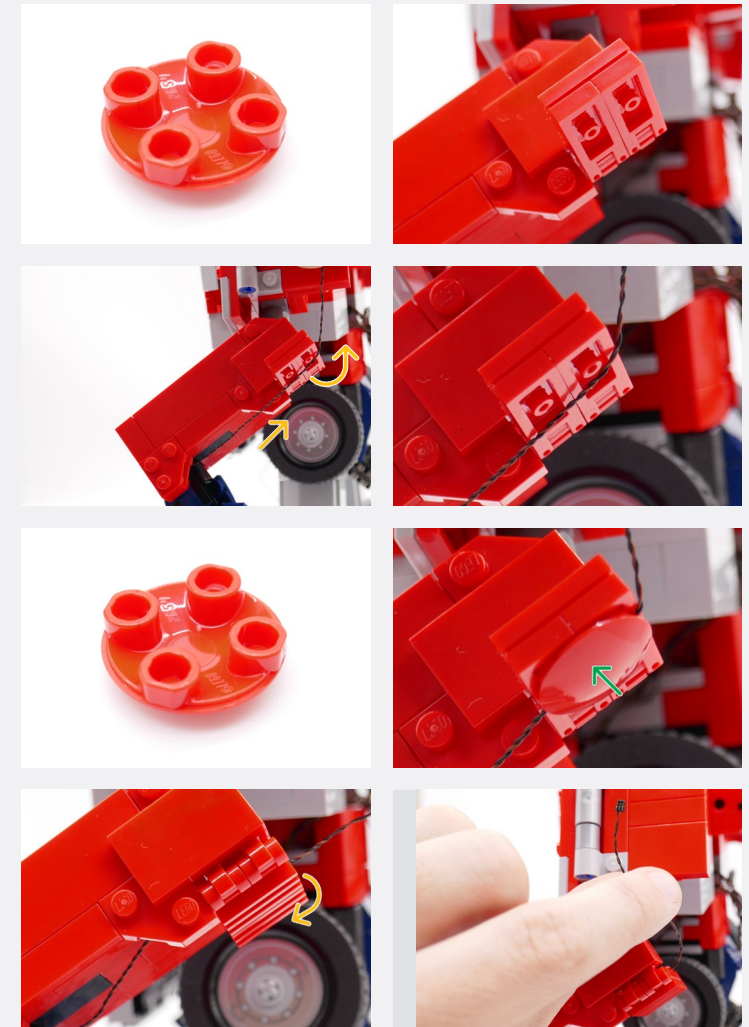
**23**

Rebeat step 22 for the opposite side



**Legend**

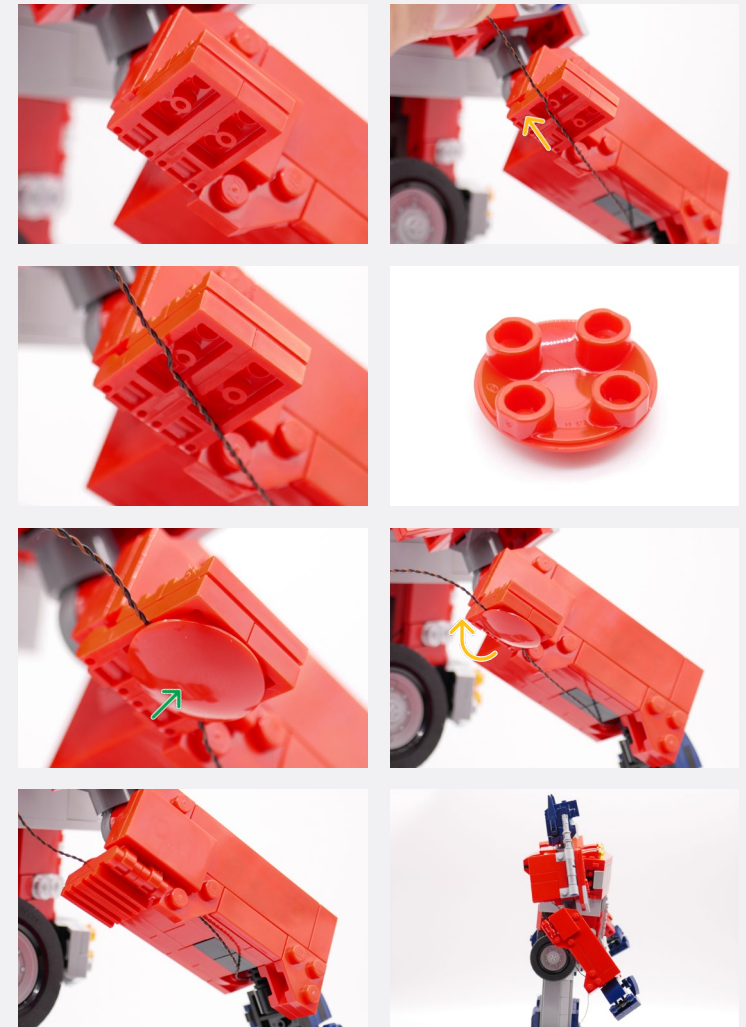
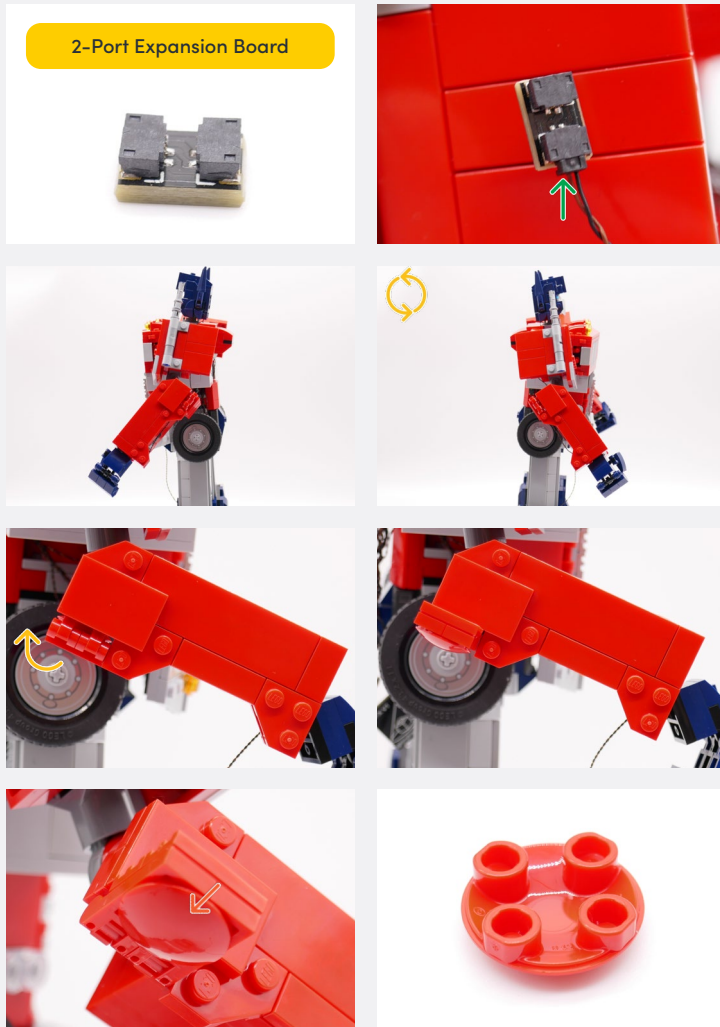
- DISCONNECT
- CONNECT / RECONNECT
- ↻ TURN / FLIP
- DIRECTIONAL
- ↻ TWIST / BRAID
- ✳ POWER ON TEST
- 📝 NOTE ICON



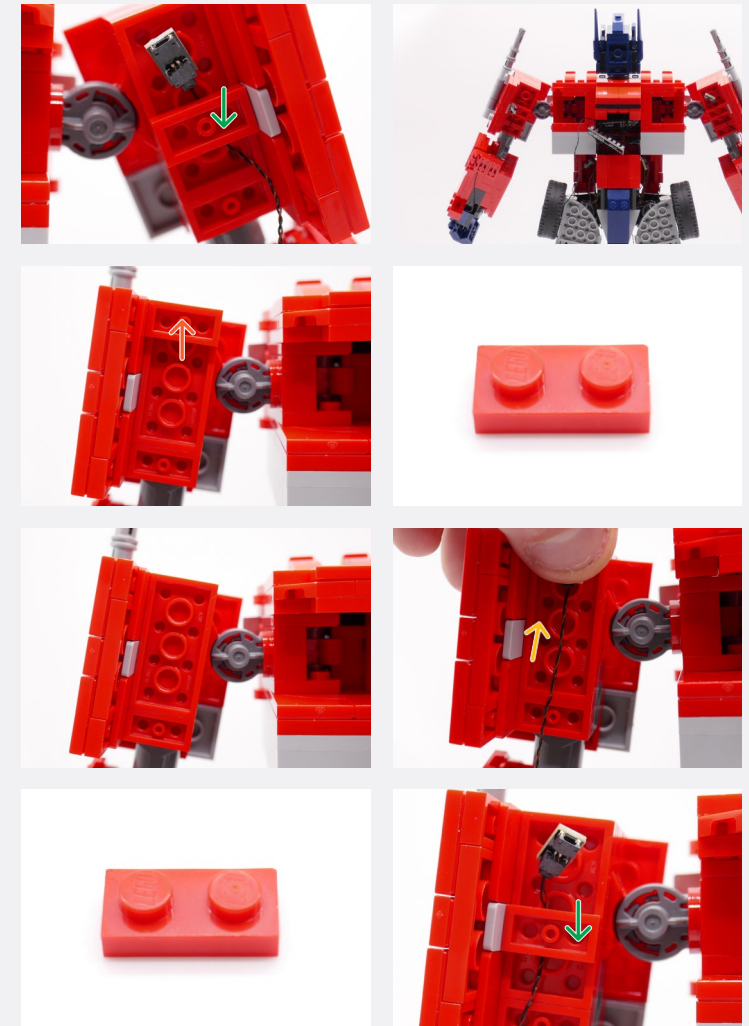
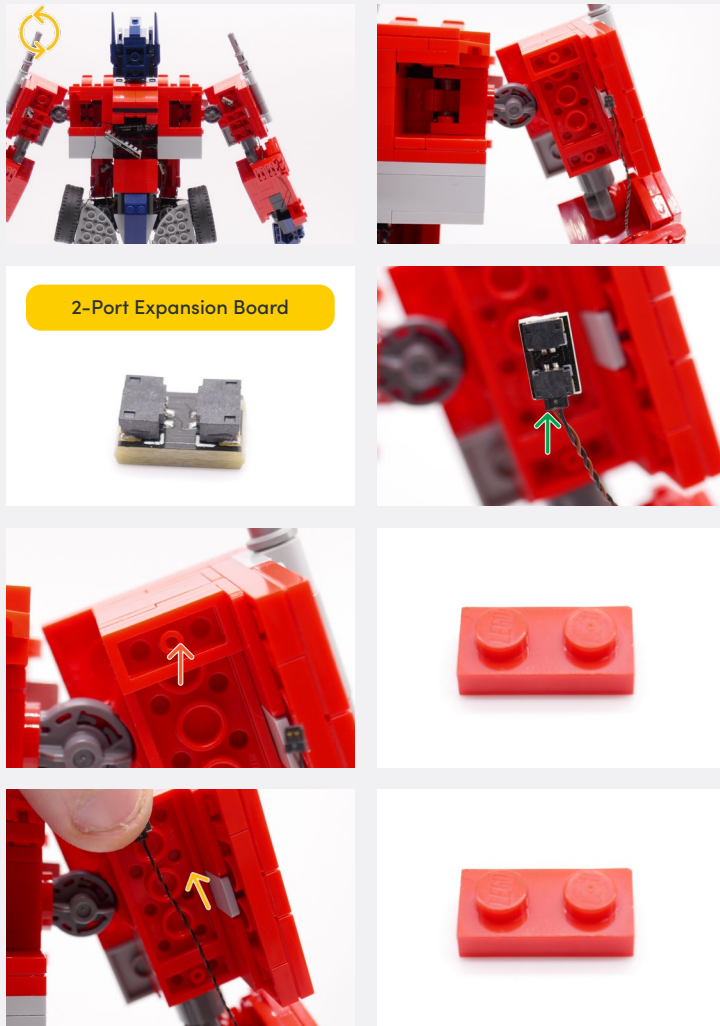
24

**Legend**    → DISCONNECT    → CONNECT / RECONNECT    ↻ TURN / FLIP    → DIRECTIONAL    ↻ TWIST / BRAID    \* POWER ON TEST    📝 NOTE ICON

25



**Legend**    → DISCONNECT    → CONNECT / RECONNECT    ↻ TURN / FLIP    → DIRECTIONAL    ↻ TWIST / BRAID    ✨ POWER ON TEST    📝 NOTE ICON

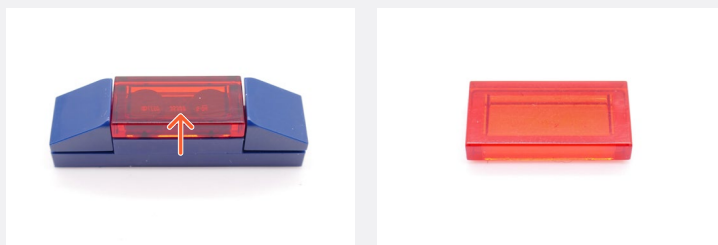
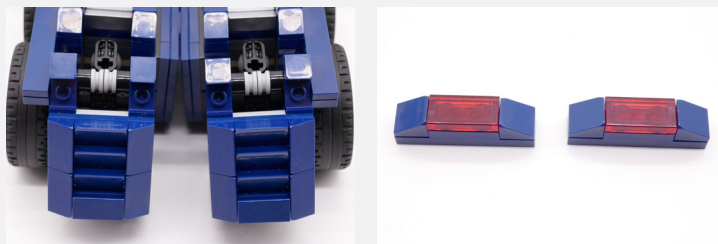
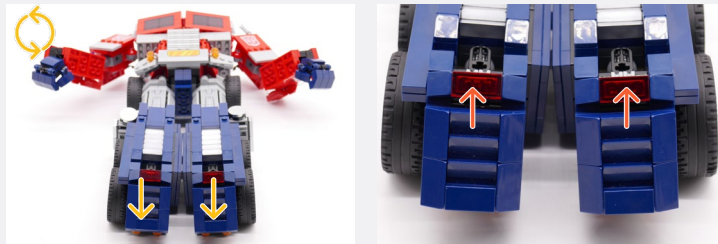


26

Legend

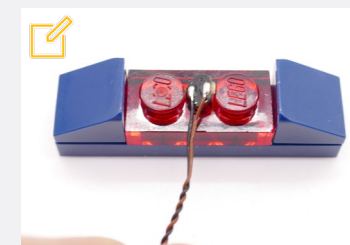
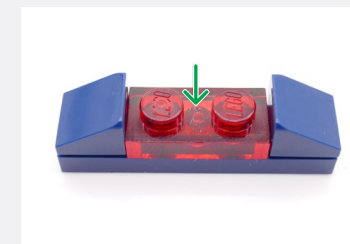
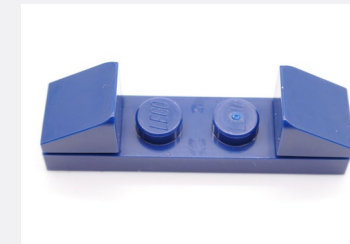
-  DISCONNECT
-  CONNECT / RECONNECT
-  TURN / FLIP
-  DIRECTIONAL
-  TWIST / BRAID
-  POWER ON TEST
-  NOTE ICON

27



28

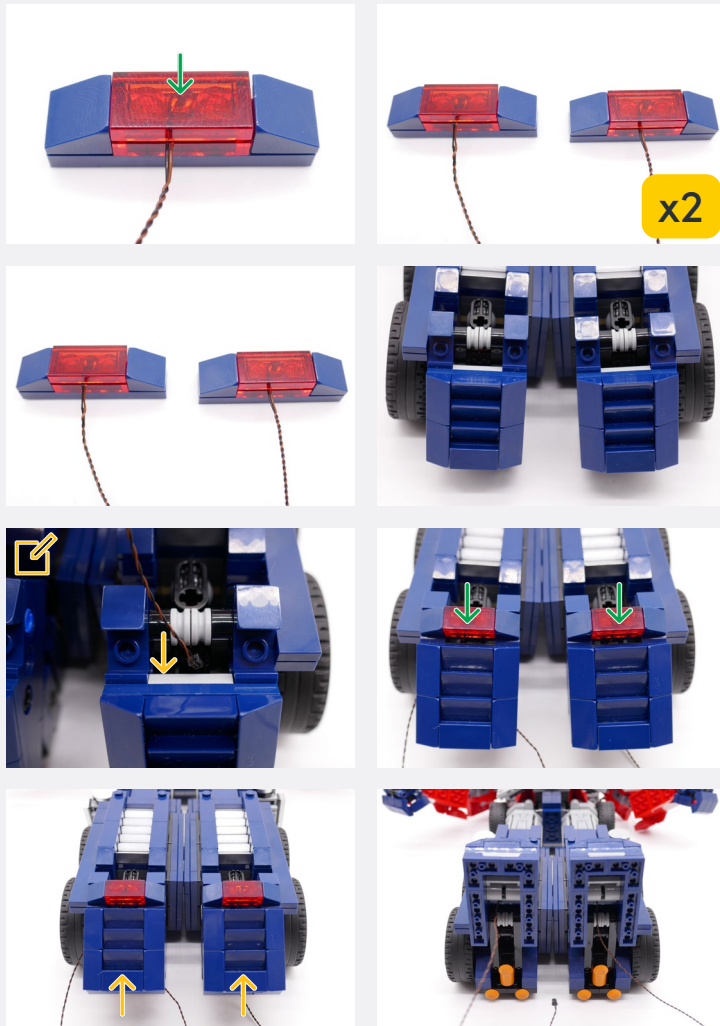
Ensure the LED is facing downwards



Legend

- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON

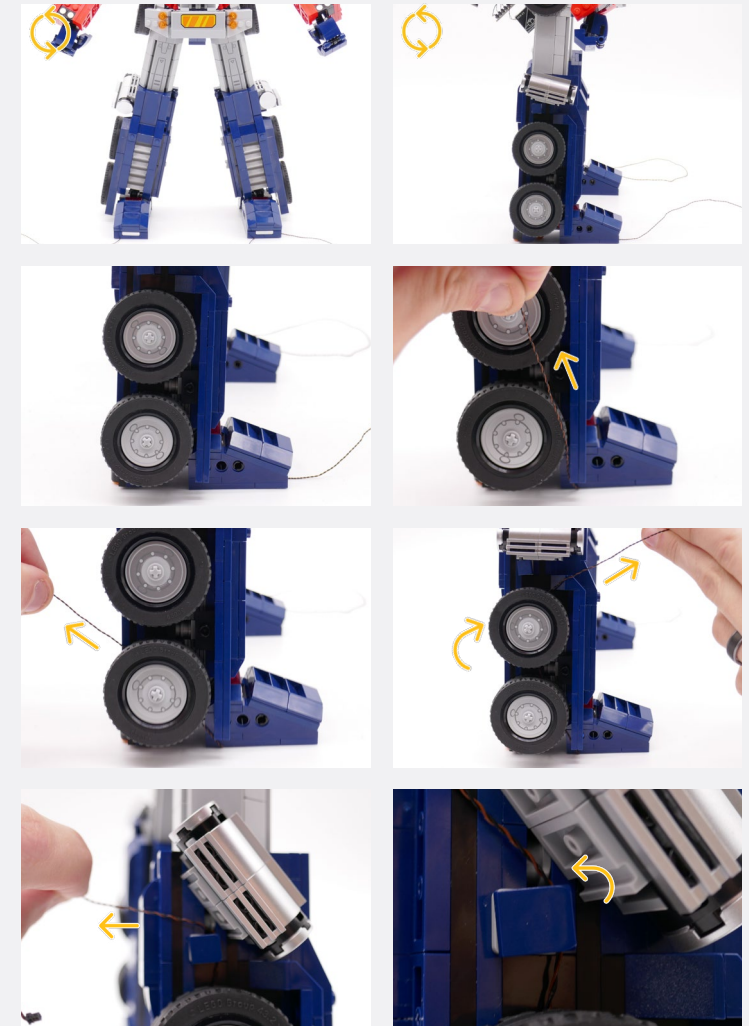
**29**



Thread the cable through for both the left and right foot

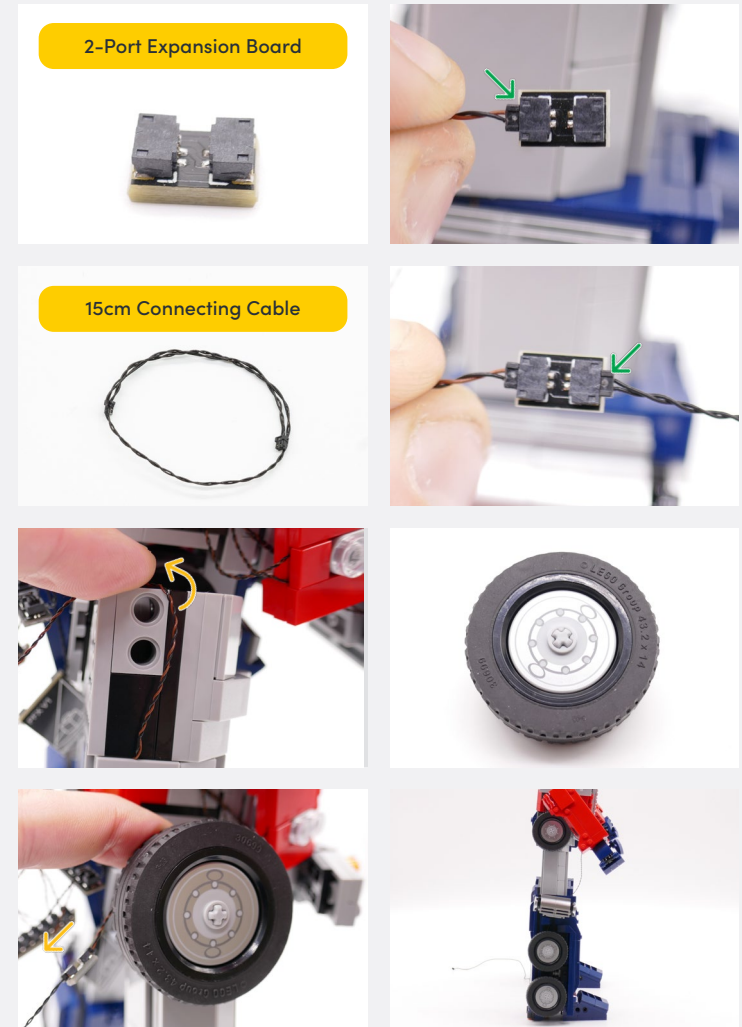
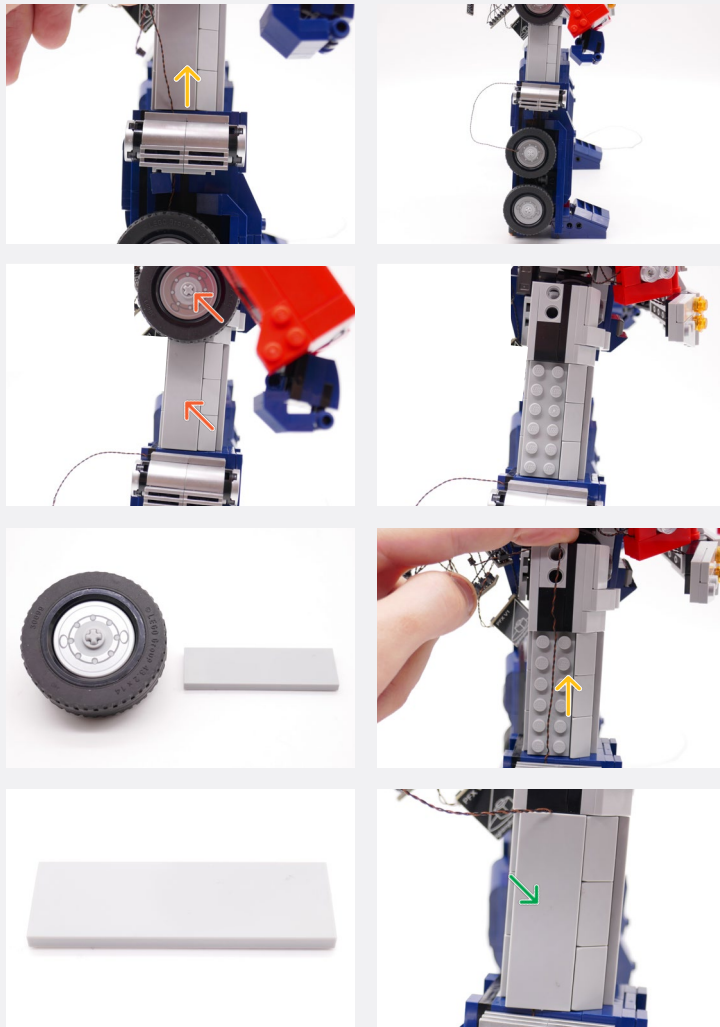
x2

**30**



**Legend**

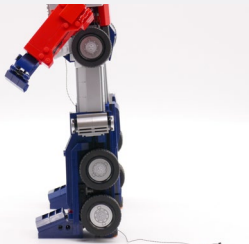
- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON



**Legend**    → DISCONNECT    → CONNECT / RECONNECT    ↻ TURN / FLIP    → DIRECTIONAL    ↻ TWIST / BRAID    ✨ POWER ON TEST    📝 NOTE ICON

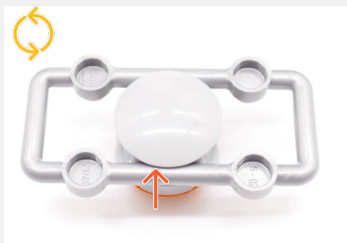
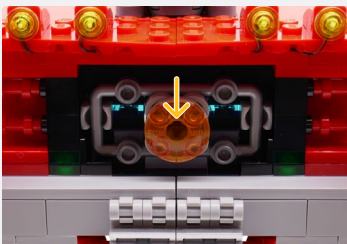


**30**

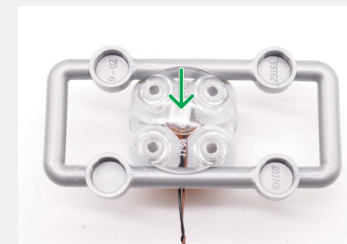
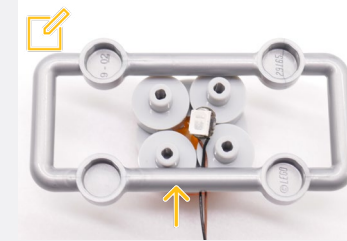


Repeat Step 29 for the opposite side

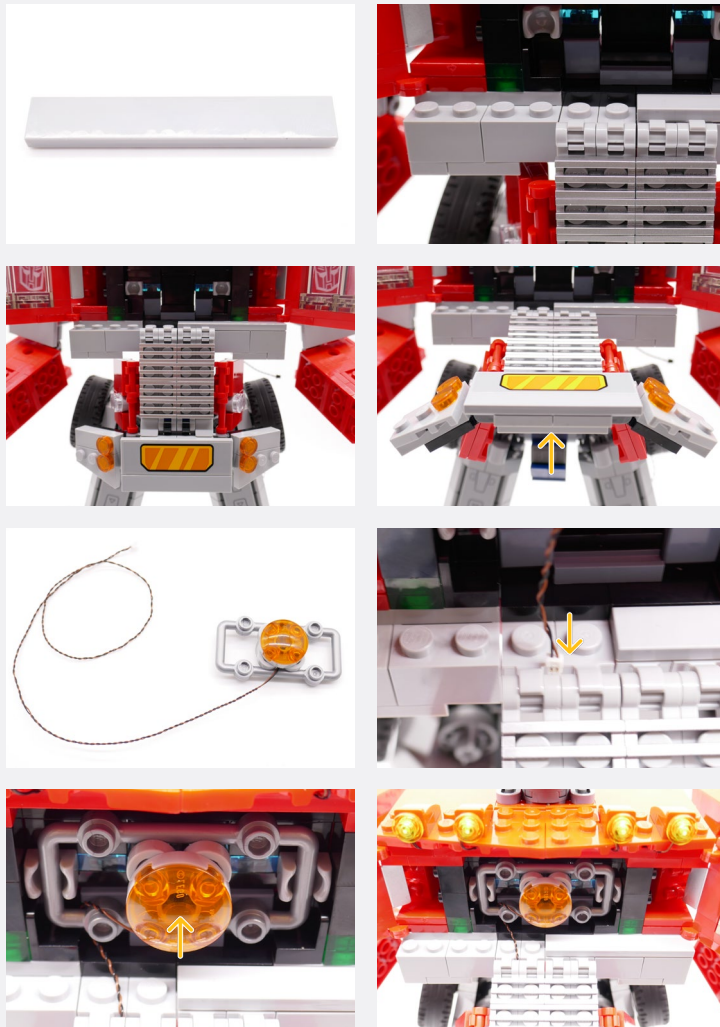
**31**



Place the LED facing up while ensuring the cable goes underneath bar

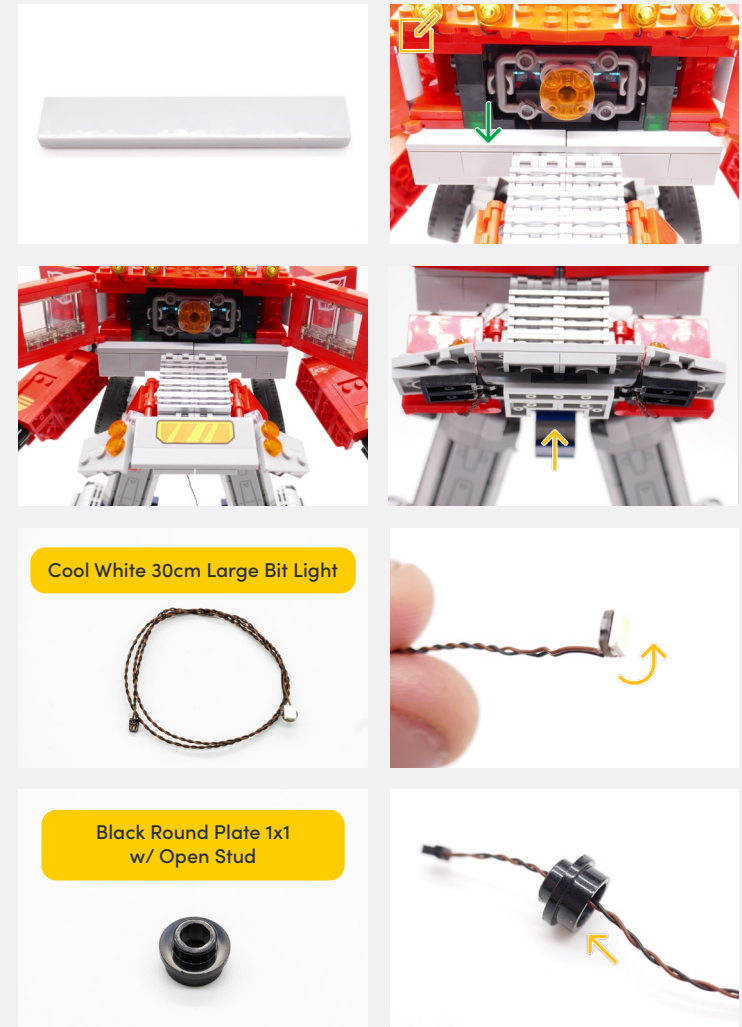


**Legend** → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID \* POWER ON TEST ✍ NOTE ICON



If you have trouble reconnecting the tile, slightly disconnect the brick beneath

32



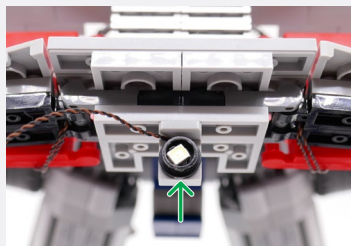
Cool White 30cm Large Bit Light


Black Round Plate 1x1 w/ Open Stud

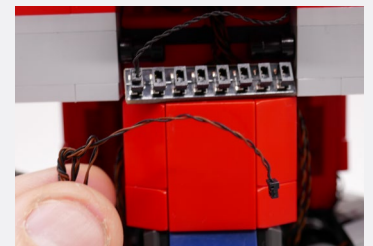
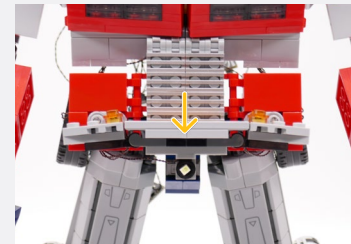
**Legend** DISCONNECT CONNECT / RECONNECT TURN / FLIP DIRECTIONAL TWIST / BRAID POWER ON TEST NOTE ICON



Bracket 1x1 - Light Grey



 Pull Cool White 30cm Large Bit Light from step 32 to the back from the side



33

Legend



CONNECT / RECONNECT



TURN / FLIP



DIRECTIONAL



TWIST / BRAID

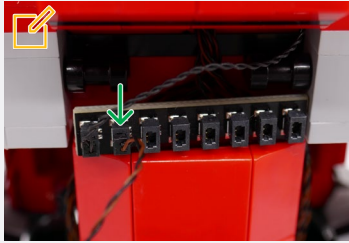


POWER ON TEST



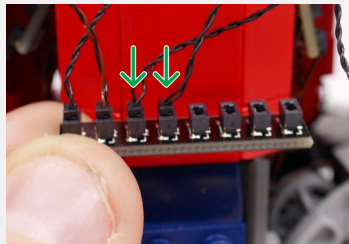
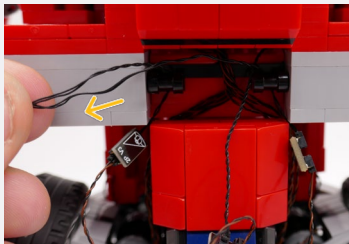
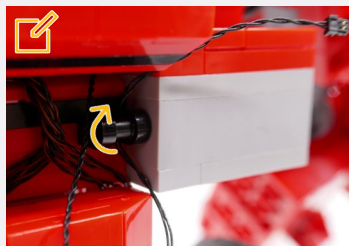
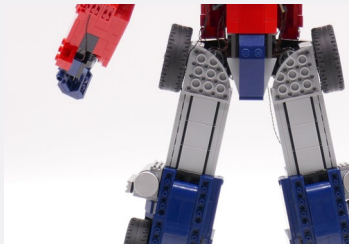
NOTE ICON

✎ Connect the Cool White 30cm Large Bit Light to the 8-Port Expansion Board

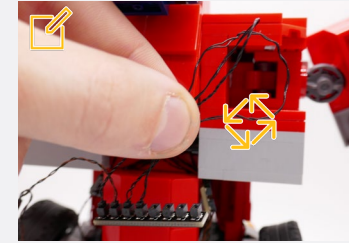


### 34

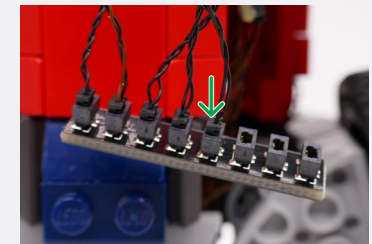
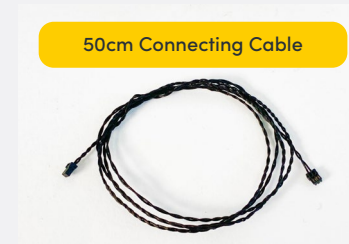
✎ Connect the 15cm Connecting Cables from both the right and left leg to the 8-Port Expansion Board



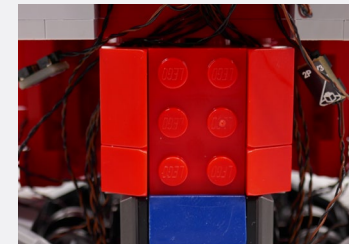
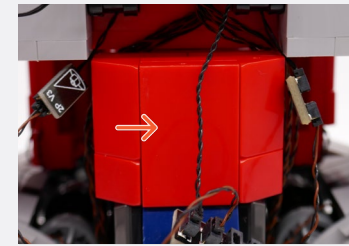
✎ Twist the loose cables connect to the Expansion Board



50cm Connecting Cable



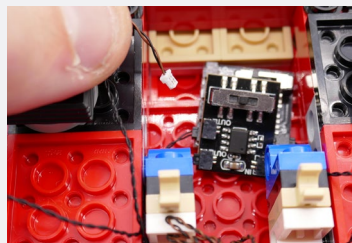
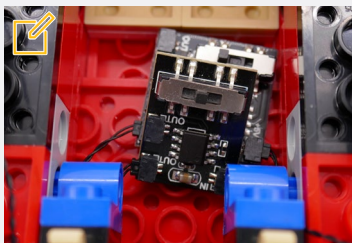
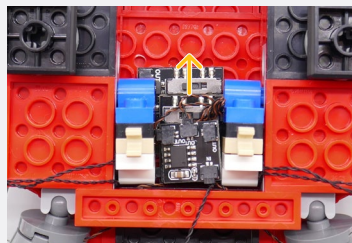
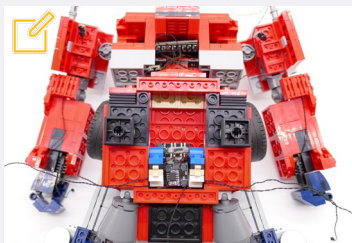
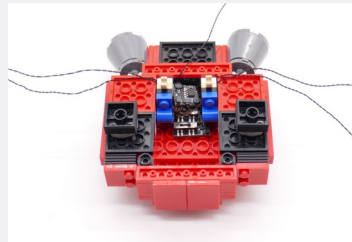
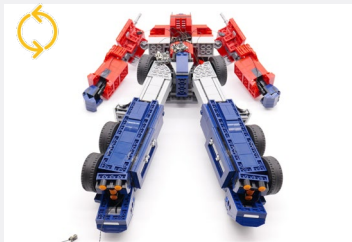
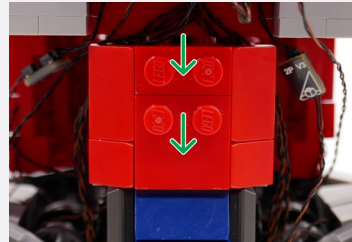
### 35



#### Legend

- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON

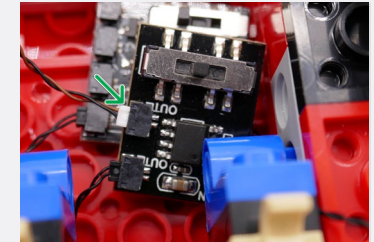
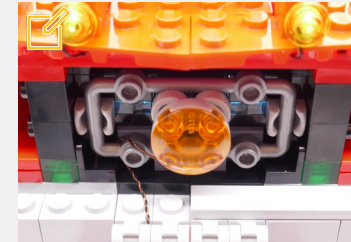
**36**



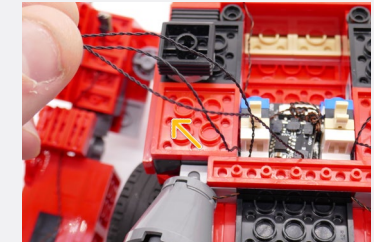
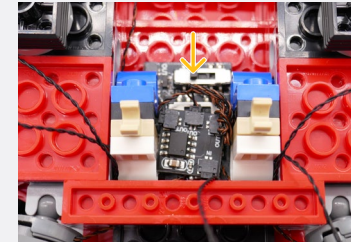
Place the jetpack on Optimus Prime's back so it is easy to connect the cables

Pull the Pulse Effects Board slightly forward

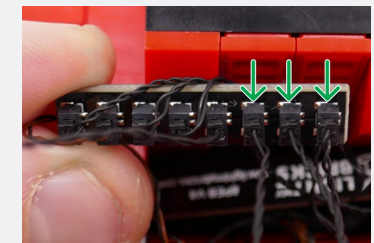
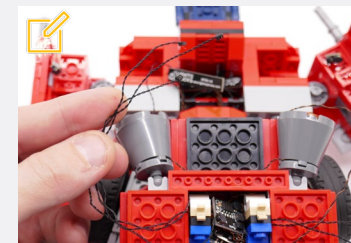
Connect the Bit Light cable from centre chest piece into the 'OUT' port of the Pulse Effect Board



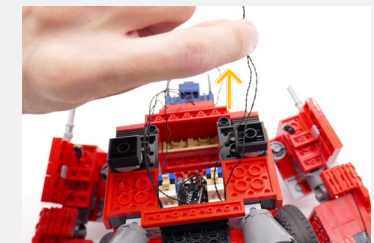
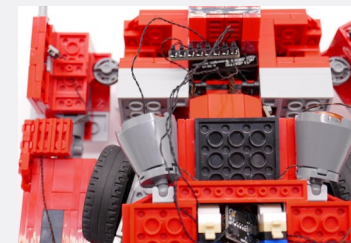
**37**



Locate the three Connecting Cables plugged into the 'IN' port of the three Effects Boards and connect them to the 8-Port Expansion Board



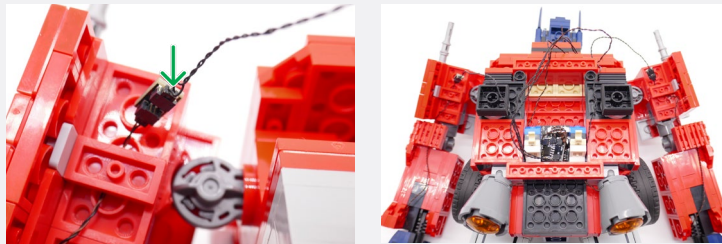
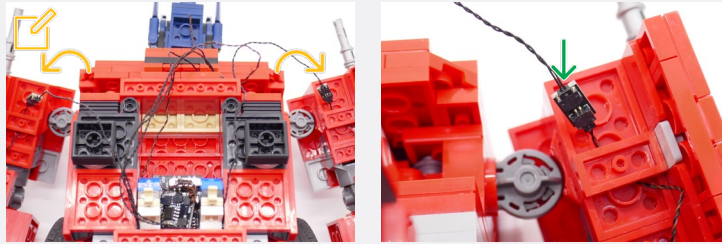
**38**



**Legend**

- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON

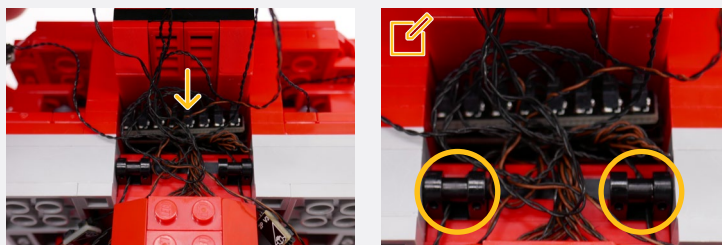
Connect the last two Connecting Cables coming from the 'OUT' port of Effects Boards into the 2-Port Expansion Boards on the arms



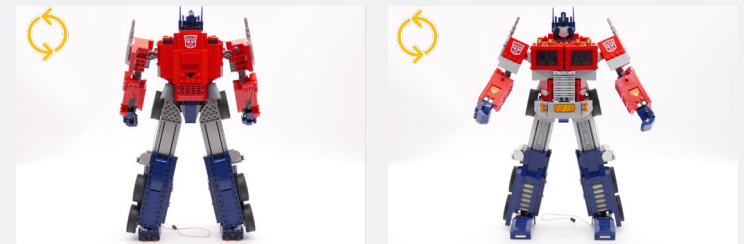
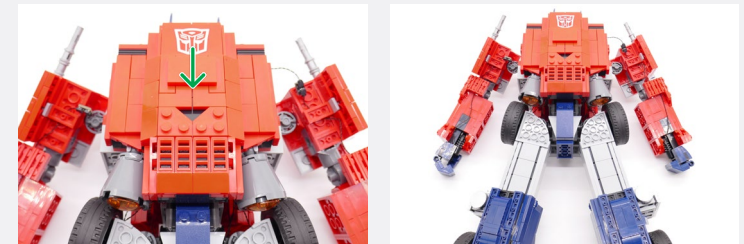
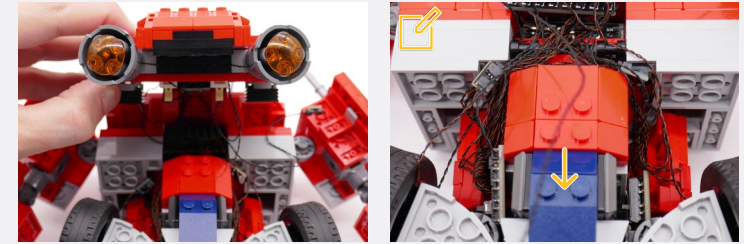
39



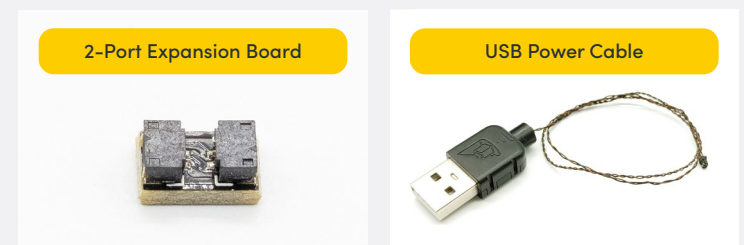
Push the cables and remaining board into the cavity - ensure no cables are in the way of clips



Make sure 50cm connecting cable is hanging down from the back before clipping on jetpack



40



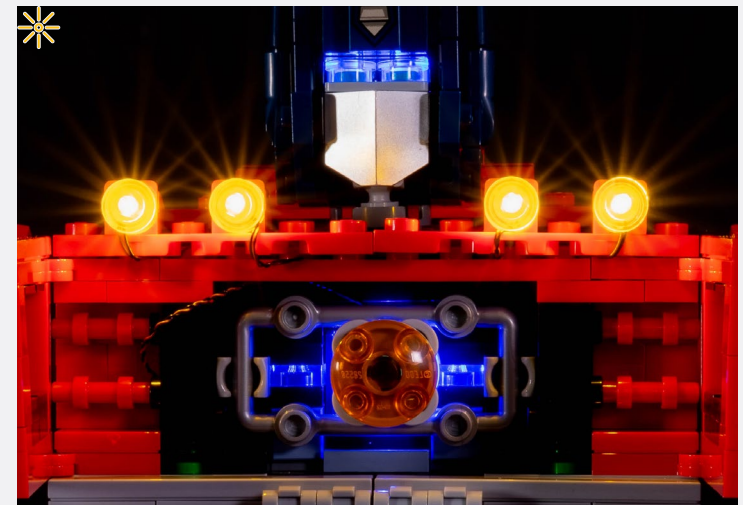
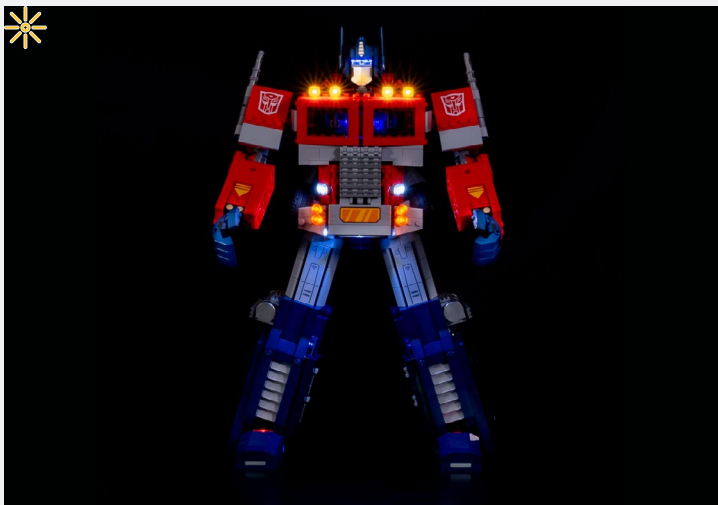
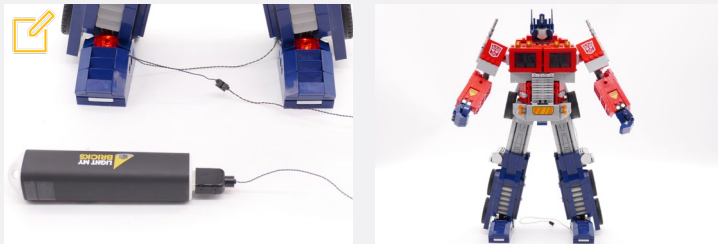
Legend

- DISCONNECT
- CONNECT / RECONNECT
- ↻ TURN / FLIP
- DIRECTIONAL
- ↻↻ TWIST / BRAID
- ✳ POWER ON TEST
- 📌 NOTE ICON

✍️ Connect 50cm connecting cable and USB power cable to 2-port expansion board

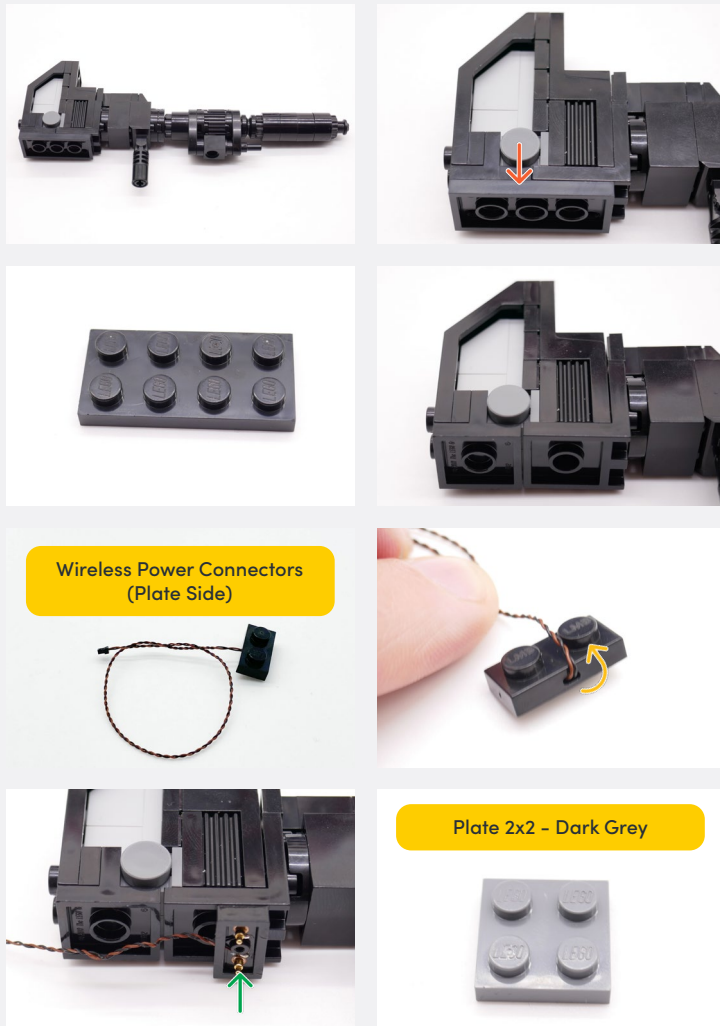


✍️ Connect the other end to a USB Power Bank/power source



**Legend**    → DISCONNECT    → CONNECT / RECONNECT    ↻ TURN / FLIP    → DIRECTIONAL    ↻ TWIST / BRAID    ✨ POWER ON TEST    ✍️ NOTE ICON

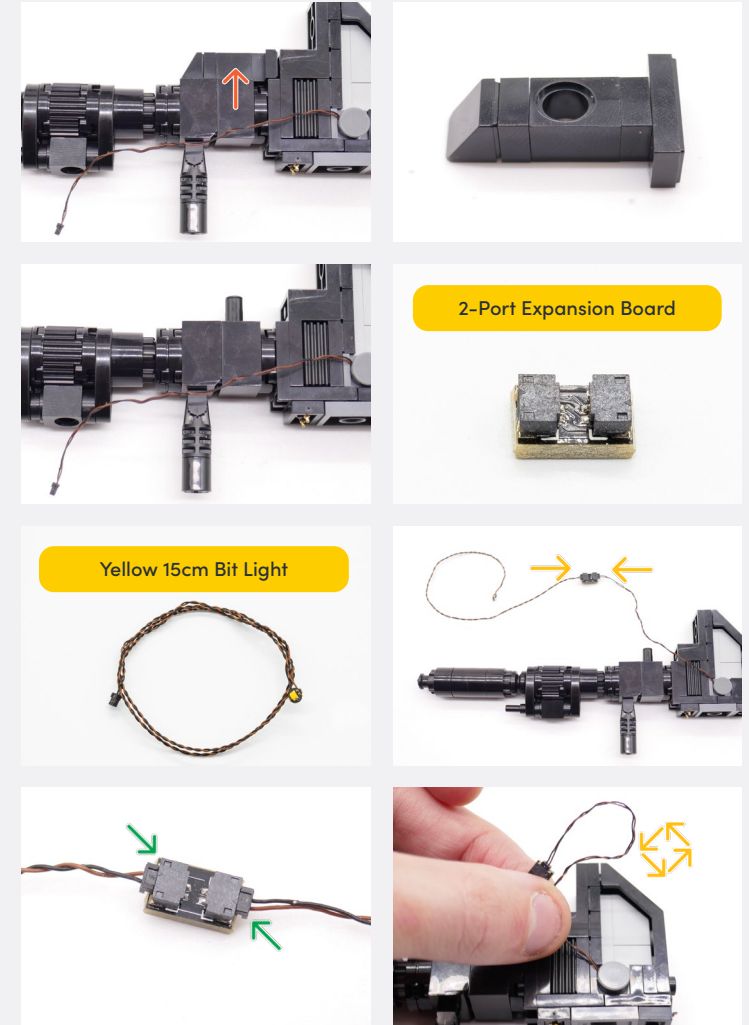
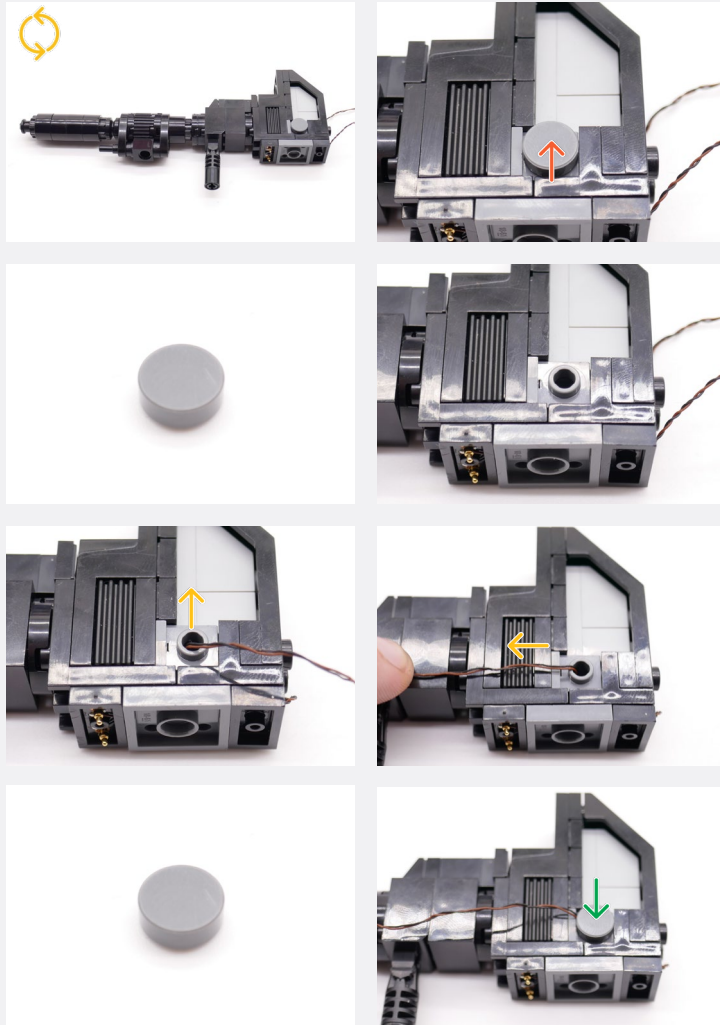
41



**Legend**

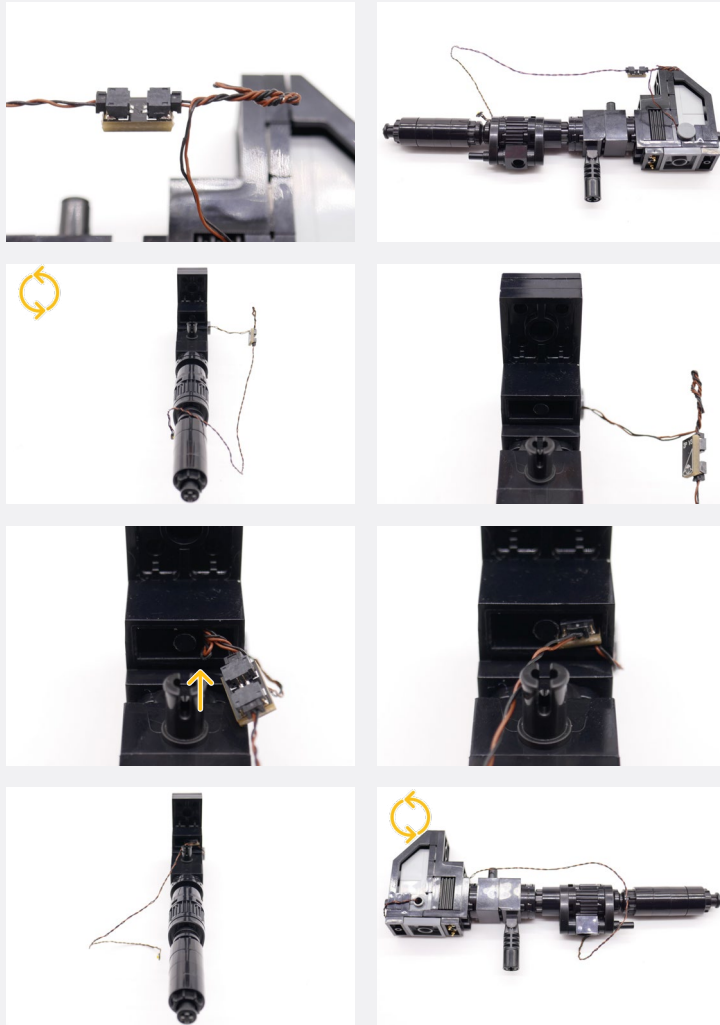
- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON





**Legend**

- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON



**42**

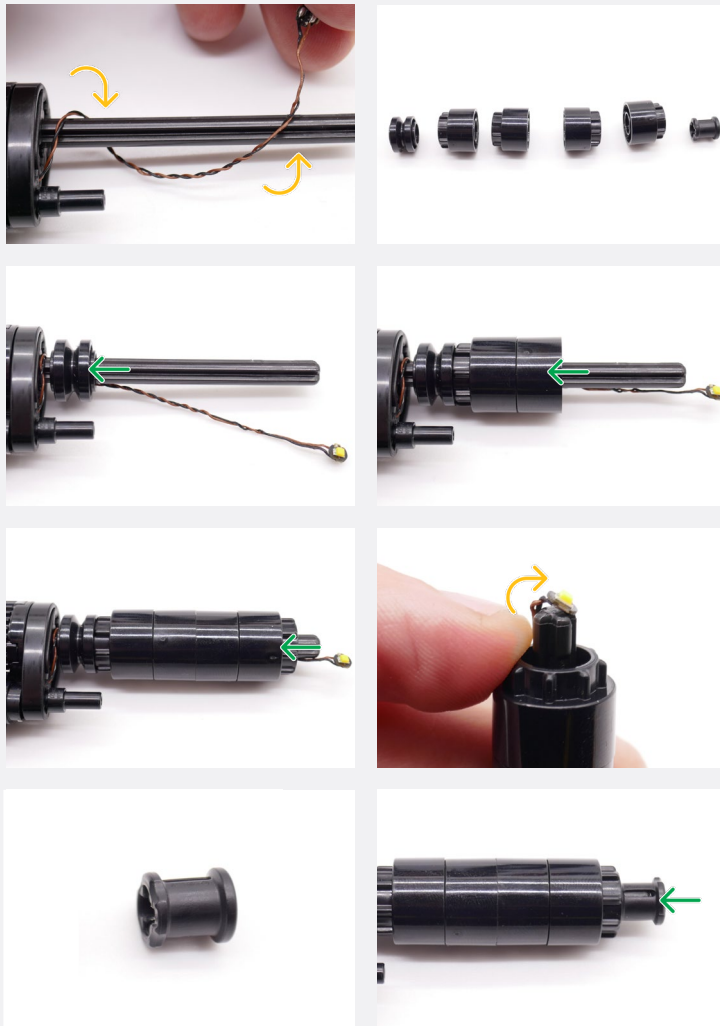


**Legend**    → DISCONNECT    → CONNECT / RECONNECT    ↻ TURN / FLIP    → DIRECTIONAL    ↻ TWIST / BRAID    ✨ POWER ON TEST    📝 NOTE ICON



**Legend**

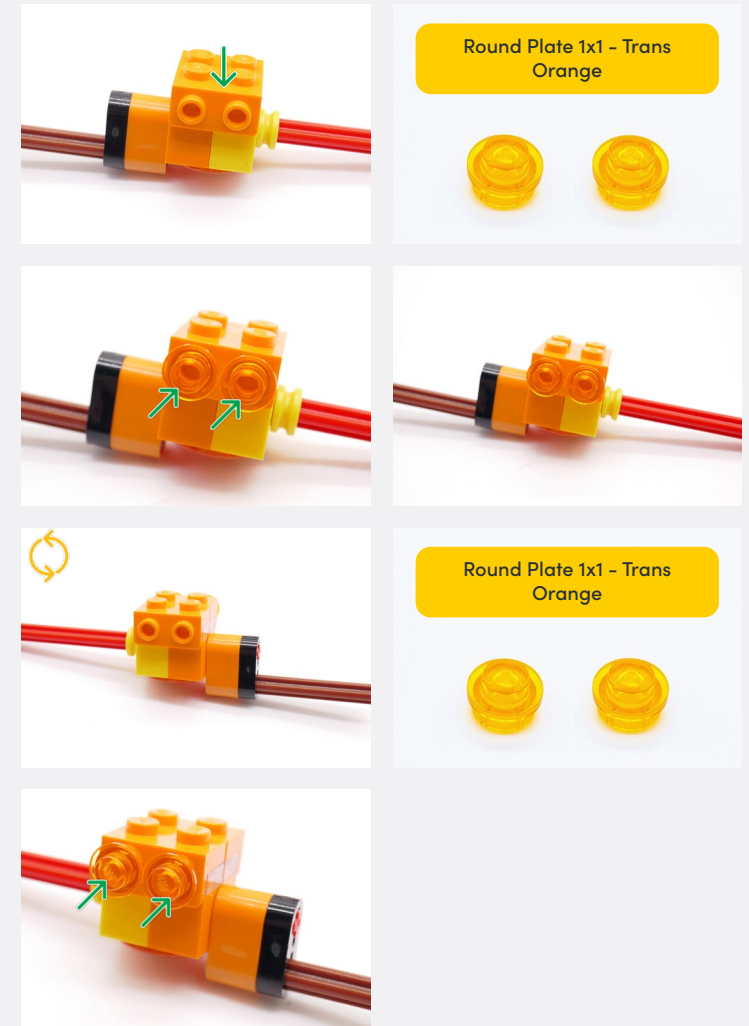
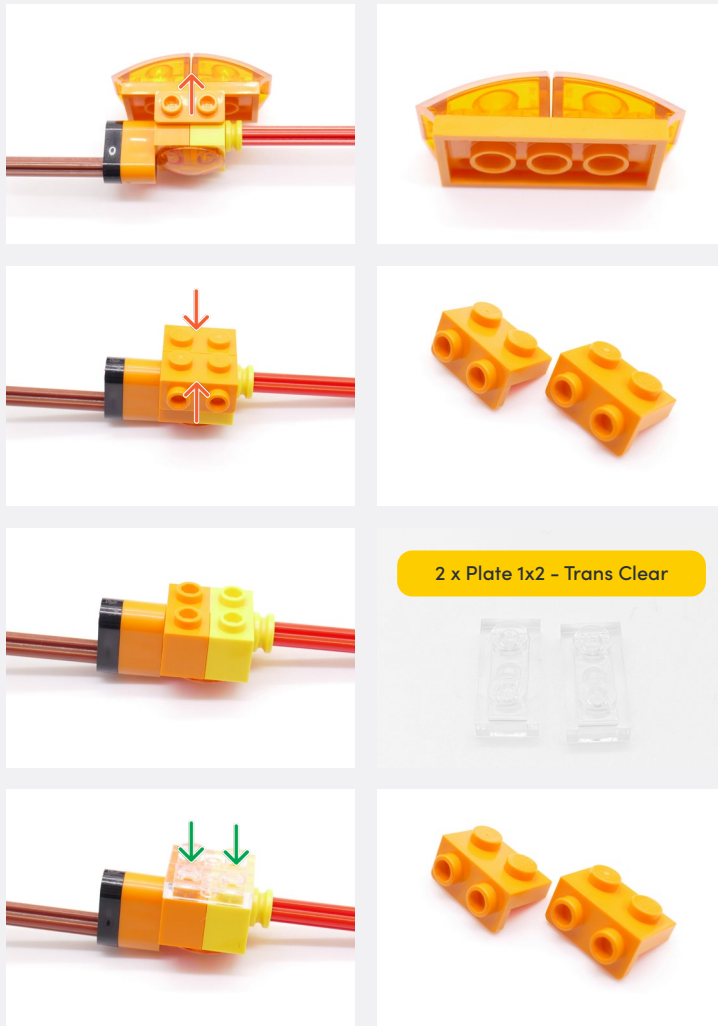
- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON



**43**

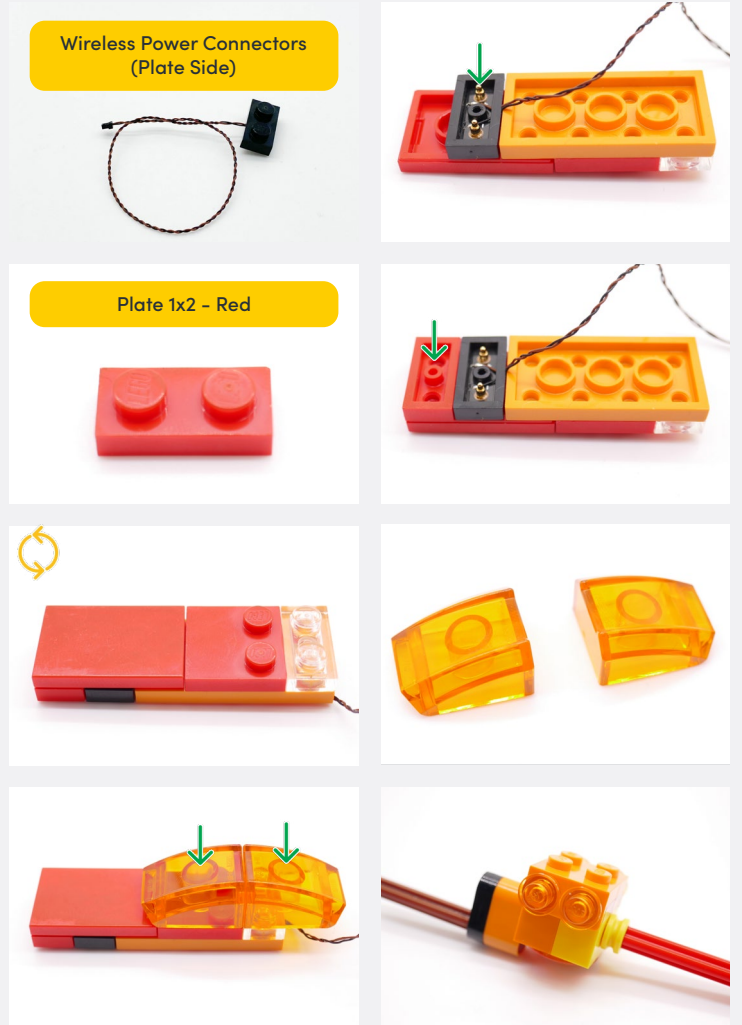
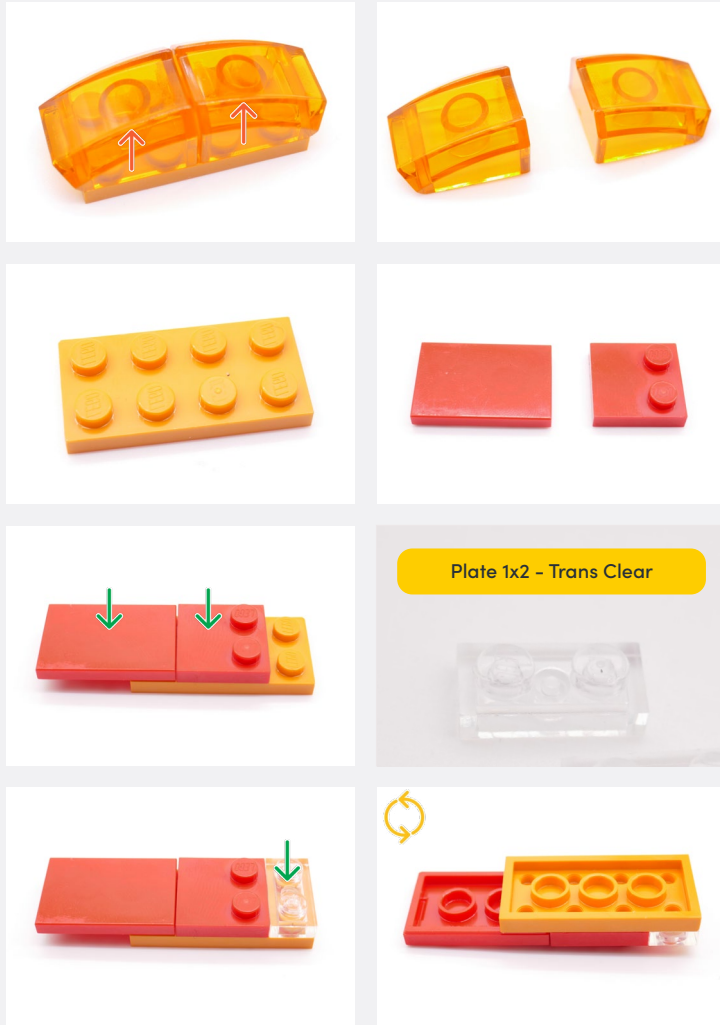


**Legend** → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID \* POWER ON TEST 📝 NOTE ICON

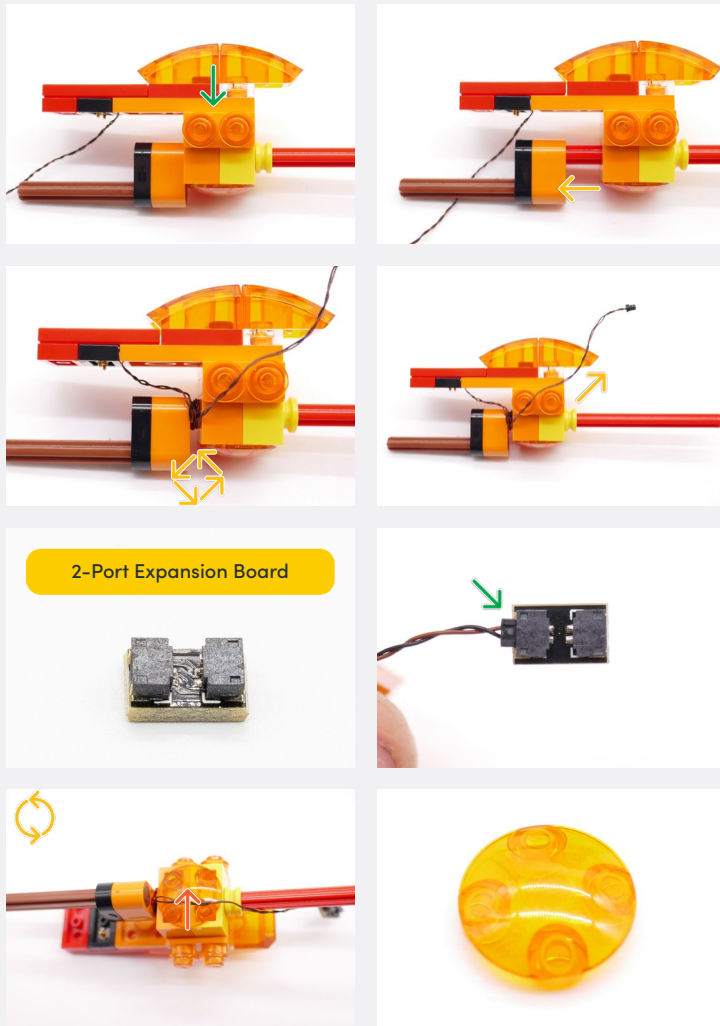


**Legend**

- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON



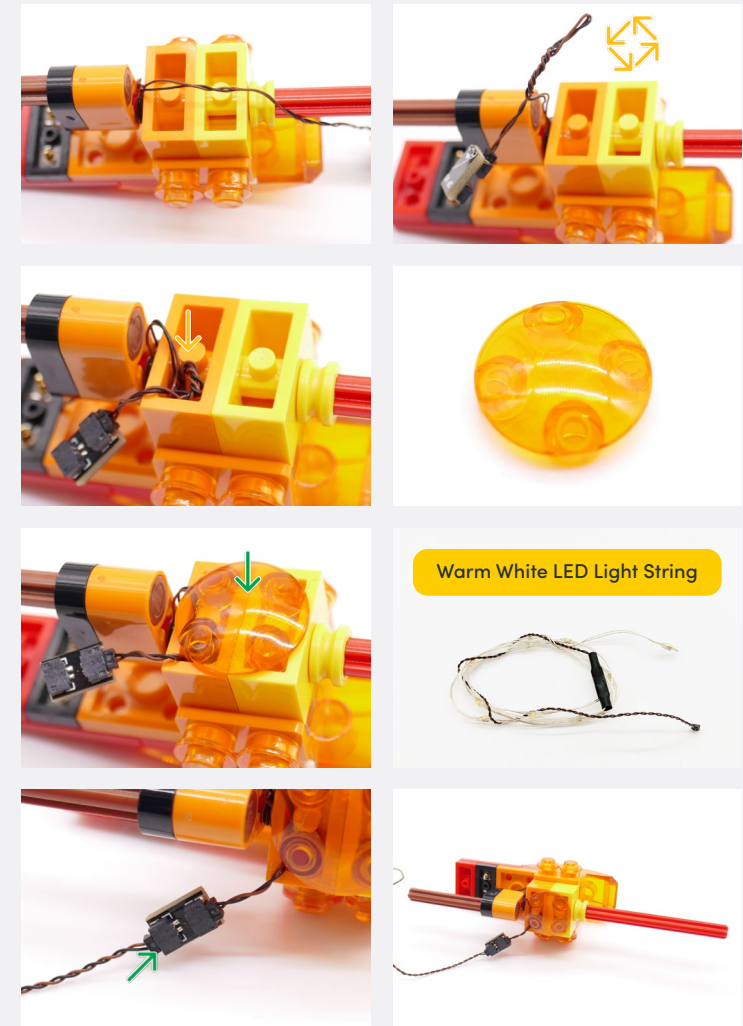
**Legend**   DISCONNECT   CONNECT / RECONNECT   TURN / FLIP   DIRECTIONAL   TWIST / BRAID   POWER ON TEST   NOTE ICON



2-Port Expansion Board



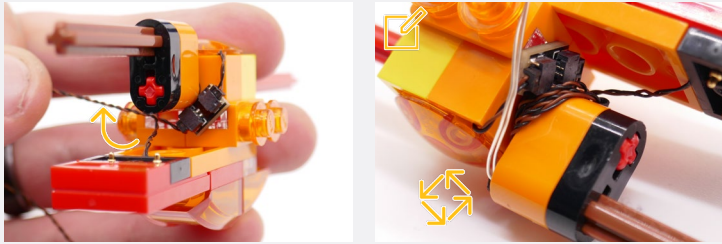
**44**



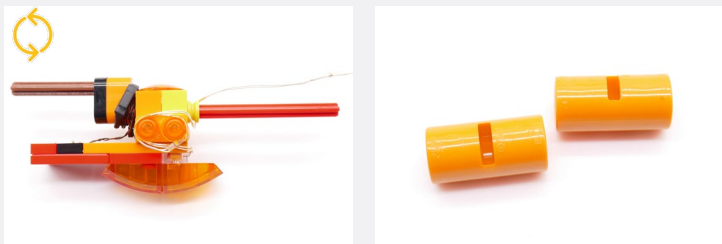
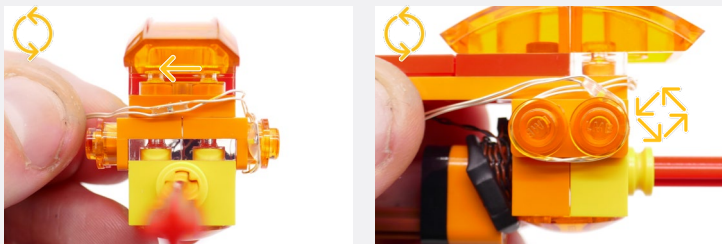
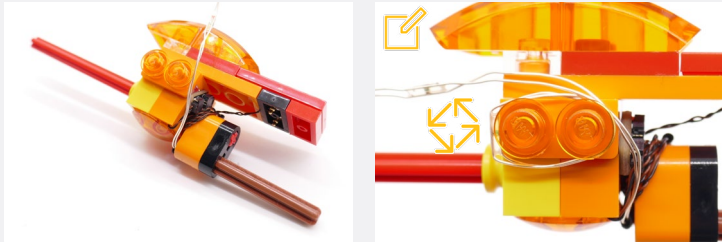
Warm White LED Light String

**Legend** → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID \* POWER ON TEST 📝 NOTE ICON

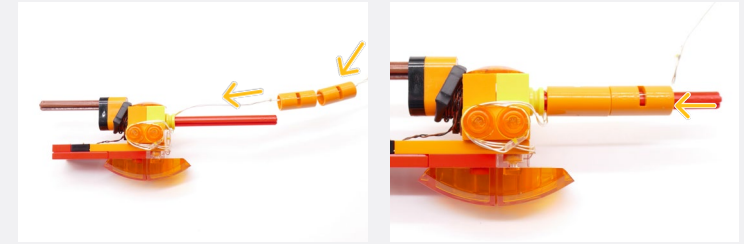
✂ Twist Light String wire (only wire) around Red Technic Axle as shown



✂ Wrap the cable around the Orange Round Plate - 1x1

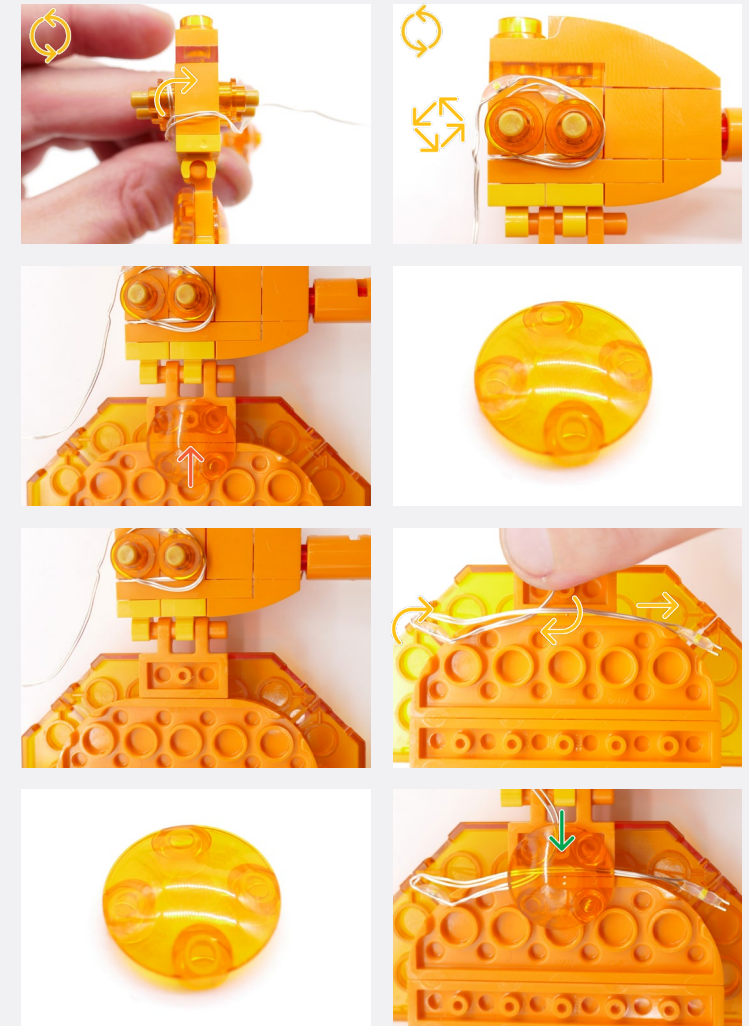


✂ Remove the panel from both sides



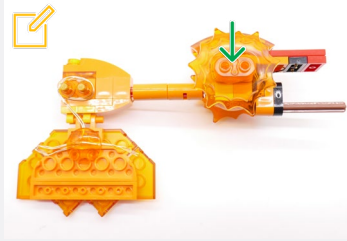
**Legend**    → DISCONNECT    → CONNECT / RECONNECT    ↻ TURN / FLIP    → DIRECTIONAL    ↗ TWIST / BRAID    \* POWER ON TEST    ✂ NOTE ICON





**Legend** → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID \* POWER ON TEST 📝 NOTE ICON

✍️ Reconnect the panel piece on both sides

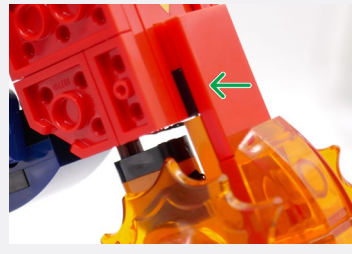


**45**

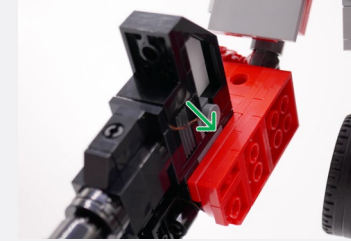
✍️ Depending on which way you've wired the arms, you may need to swap the weapons around



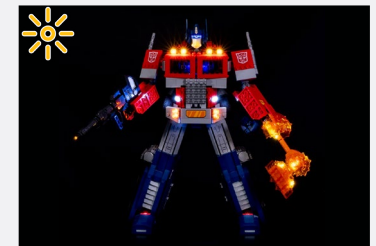
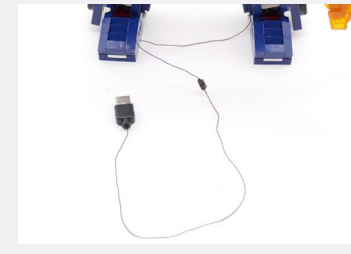
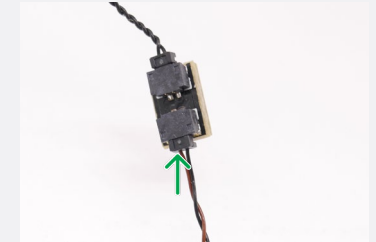
The gun should have the Gun Effects



The axe should have the Pulse Effects



USB Power Cable



**Legend**

- ➔ DISCONNECT
- ➞ CONNECT / RECONNECT
- ↻ TURN / FLIP
- ➞ DIRECTIONAL
- ↻ TWIST / BRAID
- ☀️ POWER ON TEST
- ✍️ NOTE ICON



## TRUCK MODE INSTRUCTIONS

Light Kit Guide for installation into Truck Mode.

If you intend to display your Optimus Prime 10302 in Truck form, follow the instructions below.



LEGEND: → DISCONNECT



CONNECT / RECONNECT



TURN / FLIP



DIRECTIONAL



TWIST / BRAID



POWER ON / TEST



LEGENDE: → TRENNEN



VERNINDEN / WIEDERVERBINDEN



WENDEN / KIPPEN



DIRECTIONAL



DREHEN / VERDREHEN



EINSCHALTEN / TESTEN



LÉGENDE: → DÉCONNECTER



CONNECTER / RECONNECTER



TOUR / INCLINAISON



DIRECTIONNEL



TORSION / TRESSER



POWER ON / TEST



LEGGENDA: → SCOLLEGARE



CONNETTI / RICONNETTI



ROTARE / INCLINARE



DIREZIONALE



TWIST / TRECCIA

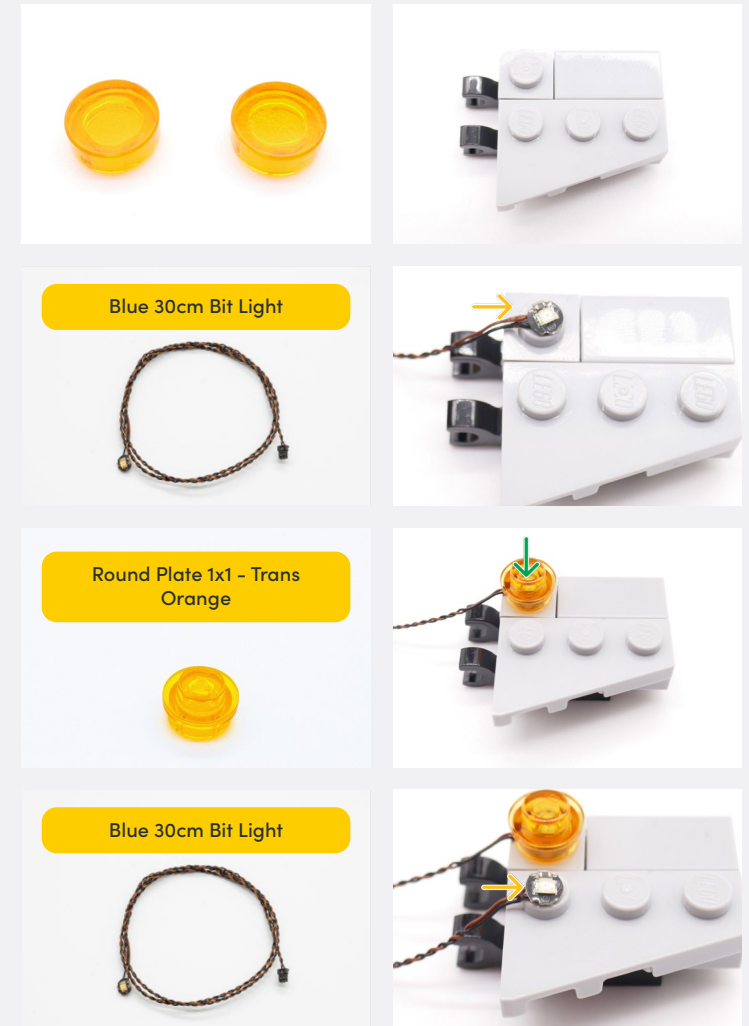


POWER ON / TEST

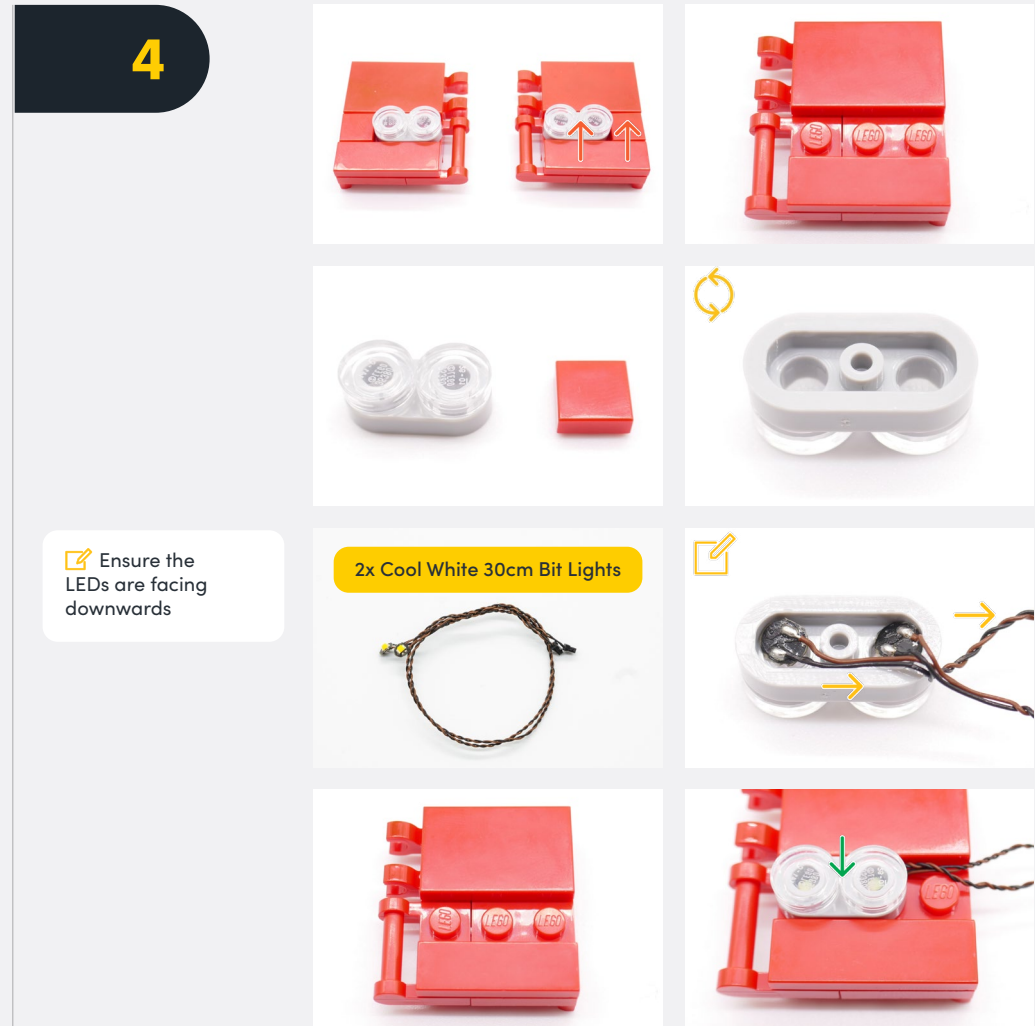
**1**



**2**

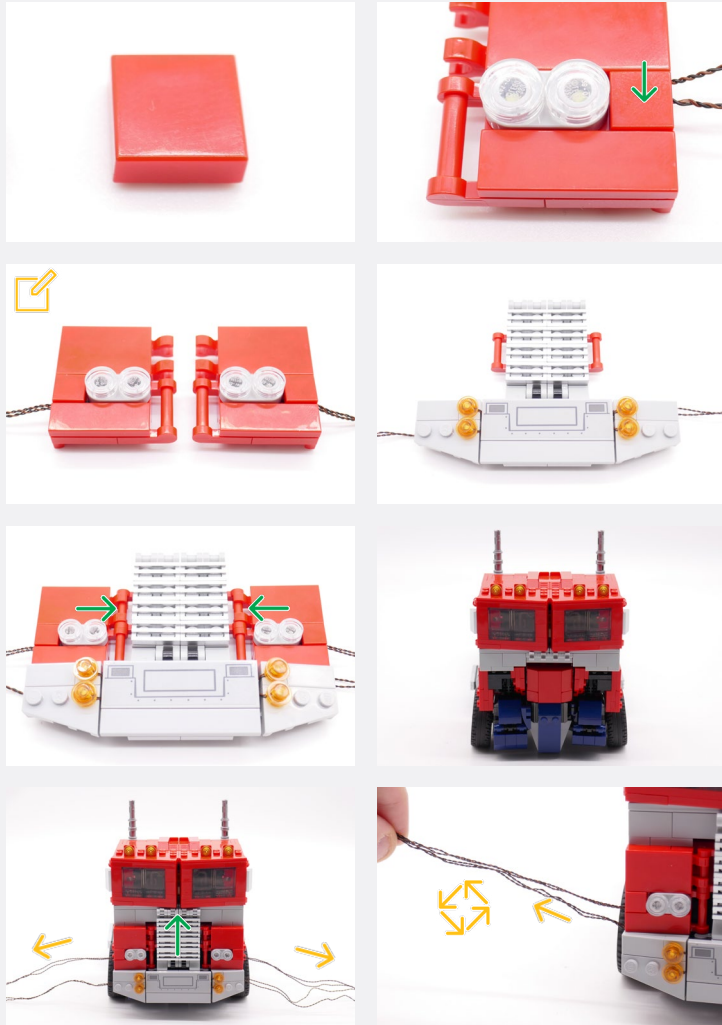


**Legend**   → DISCONNECT   → CONNECT / RECONNECT   ↻ TURN / FLIP   → DIRECTIONAL   ↻ TWIST / BRAID   ✨ POWER ON TEST   📝 NOTE ICON



**Legend**

- DISCONNECT
- CONNECT / RECONNECT
- ↻ TURN / FLIP
- DIRECTIONAL
- ↻↻ TWIST / BRAID
- ✳ POWER ON TEST
- 📝 NOTE ICON

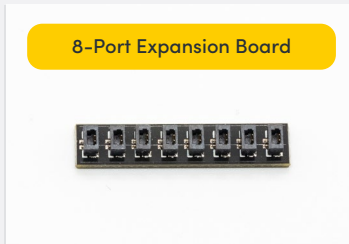
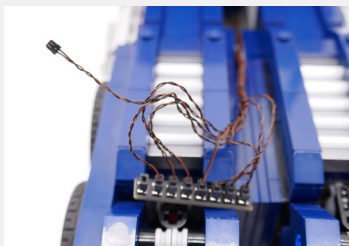
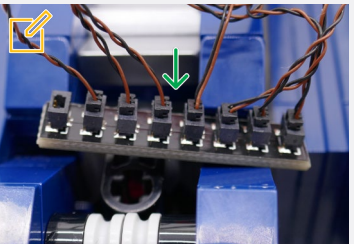
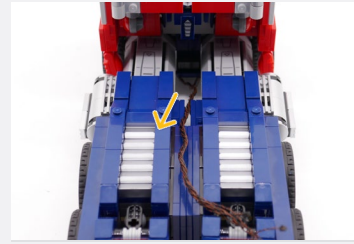


Repeat this step for the opposite side

**5**



**Legend**    → DISCONNECT    → CONNECT / RECONNECT    ↻ TURN / FLIP    → DIRECTIONAL    ↻ TWIST / BRAID    ✨ POWER ON TEST    📝 NOTE ICON

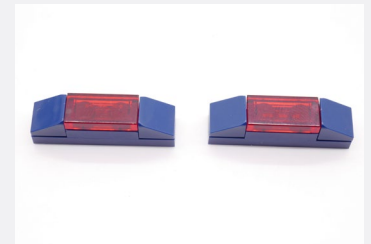
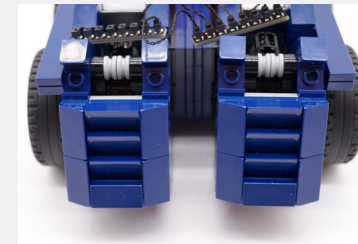
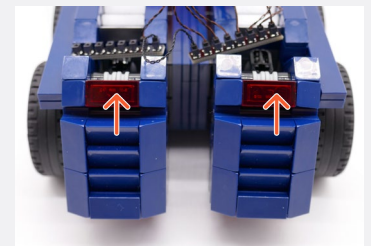
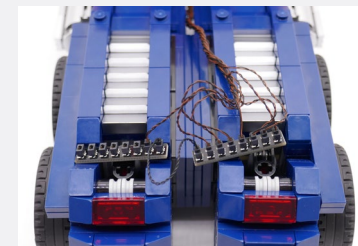
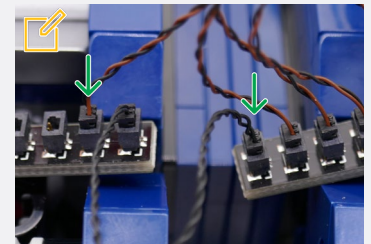
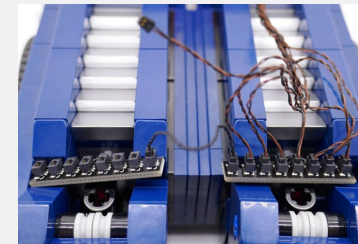


Connect Seven of the Eight Bit Lights to the 8-Port Expansion Board

6

Connect the other end of the 5cm Connecting Cable to the other 8-Port Expansion Board, while connecting the remaining Bit Light to any empty port

7



**Legend** DISCONNECT CONNECT / RECONNECT TURN / FLIP DIRECTIONAL TWIST / BRAID POWER ON TEST NOTE ICON

8

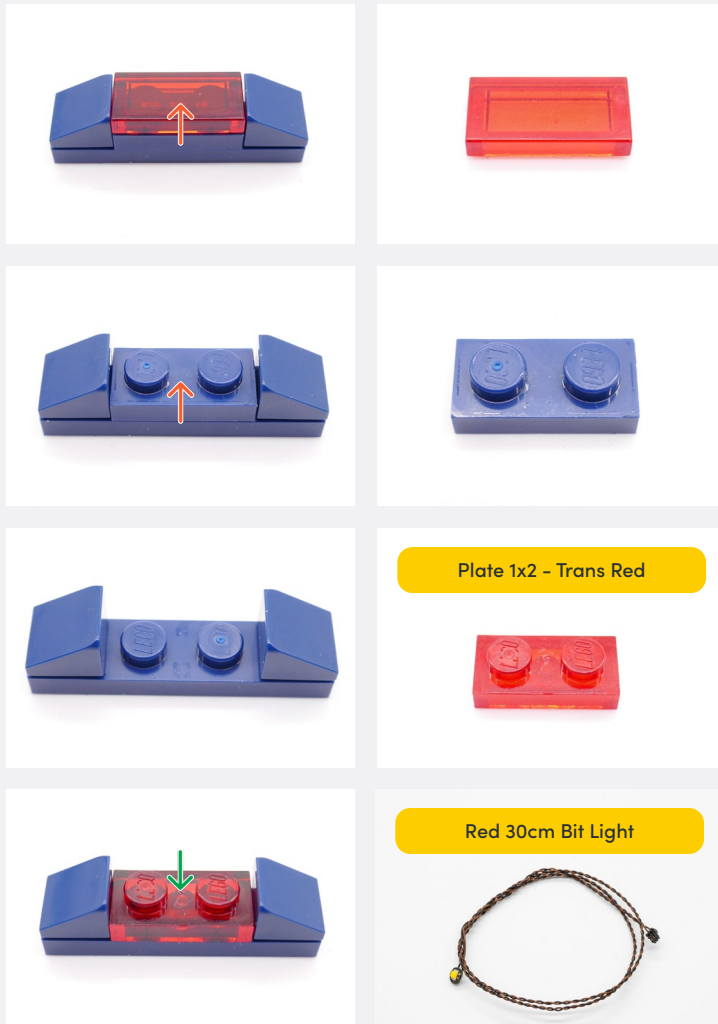
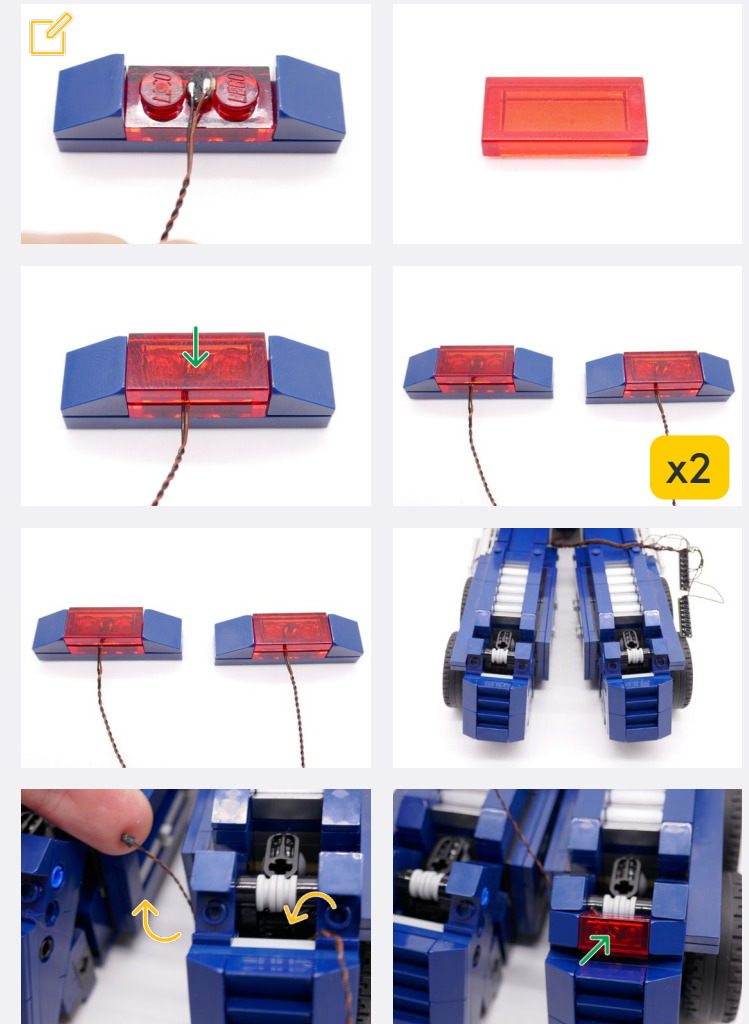


Plate 1x2 - Trans Red

Red 30cm Bit Light

Ensure the LED is facing downwards

9

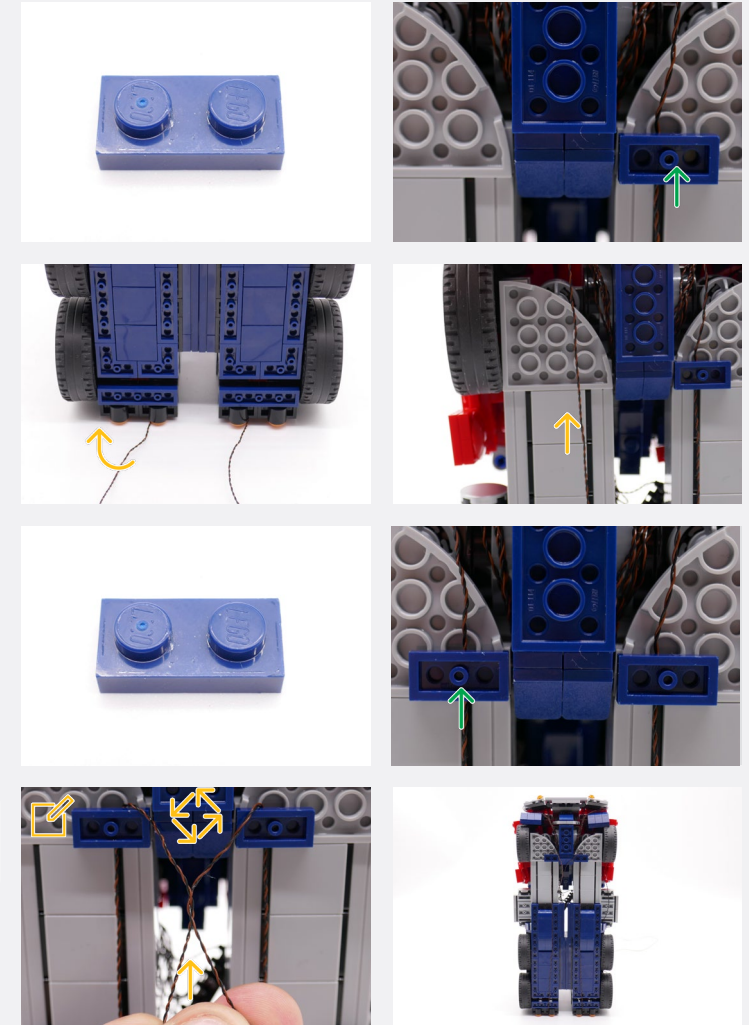
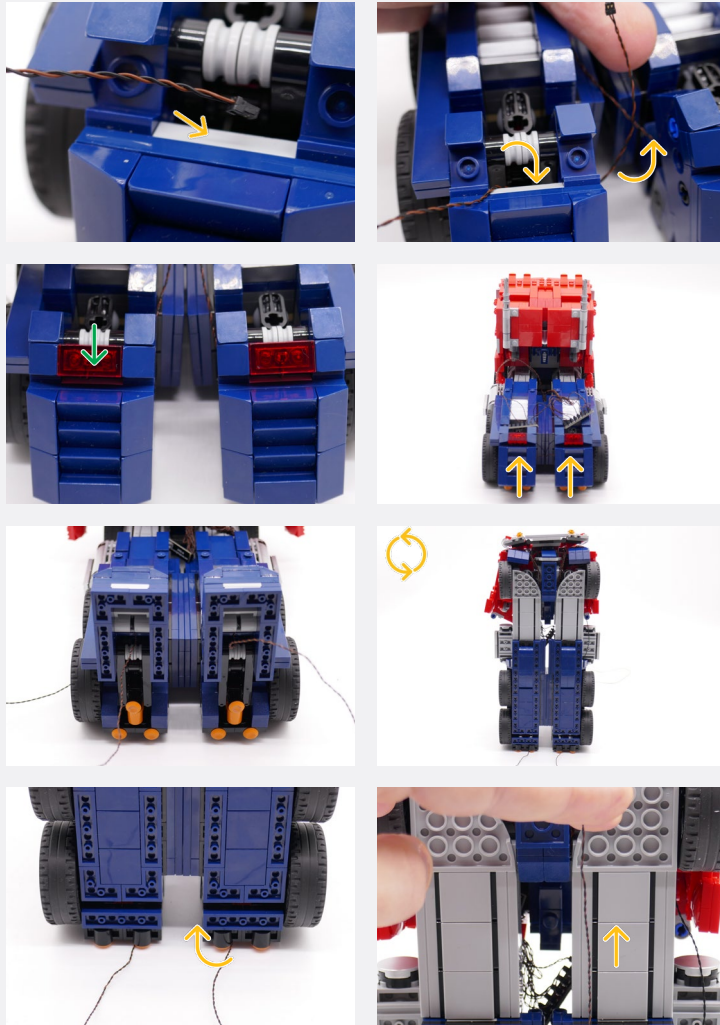


x2

**Legend** → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID \* POWER ON TEST 📝 NOTE ICON



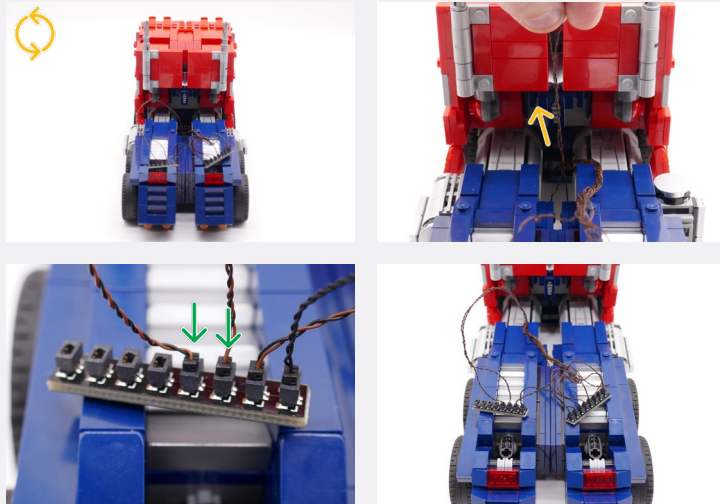
10



☑ Ensure to thread the cables through the gap as indicated

**Legend**    → DISCONNECT    → CONNECT / RECONNECT    ↻ TURN / FLIP    → DIRECTIONAL    ↻ TWIST / BRAID    ✨ POWER ON TEST    📌 NOTE ICON

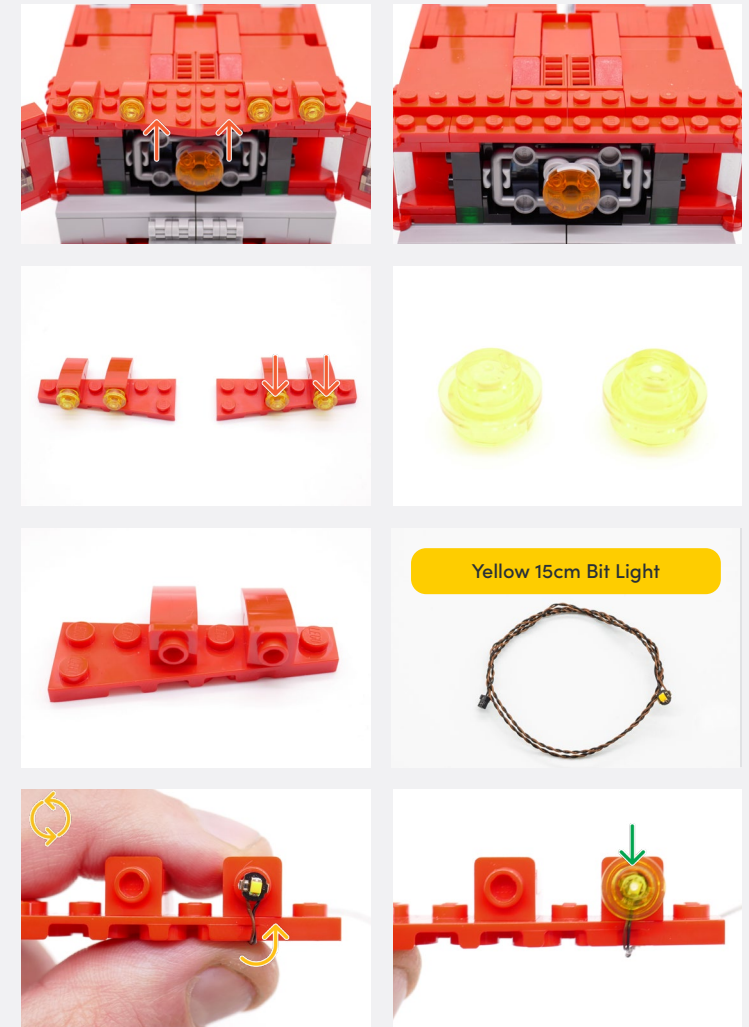
**11**



**12**

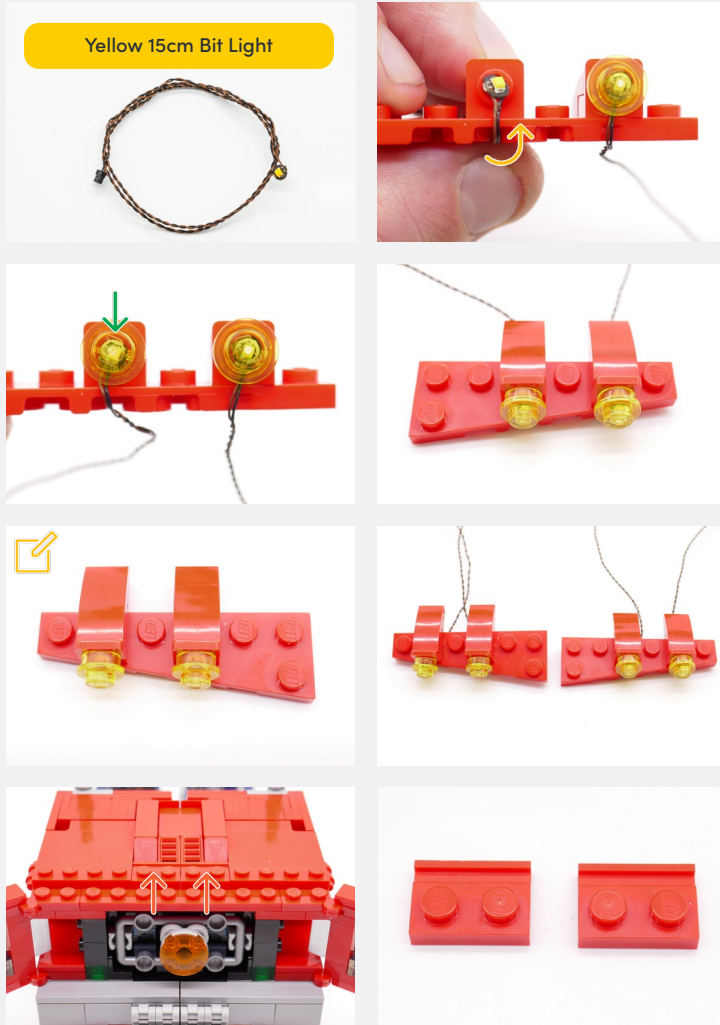



**13**



**Legend**

- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON



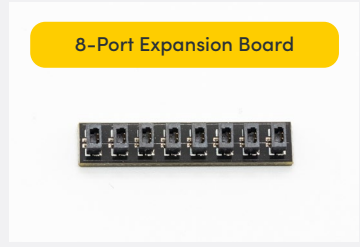
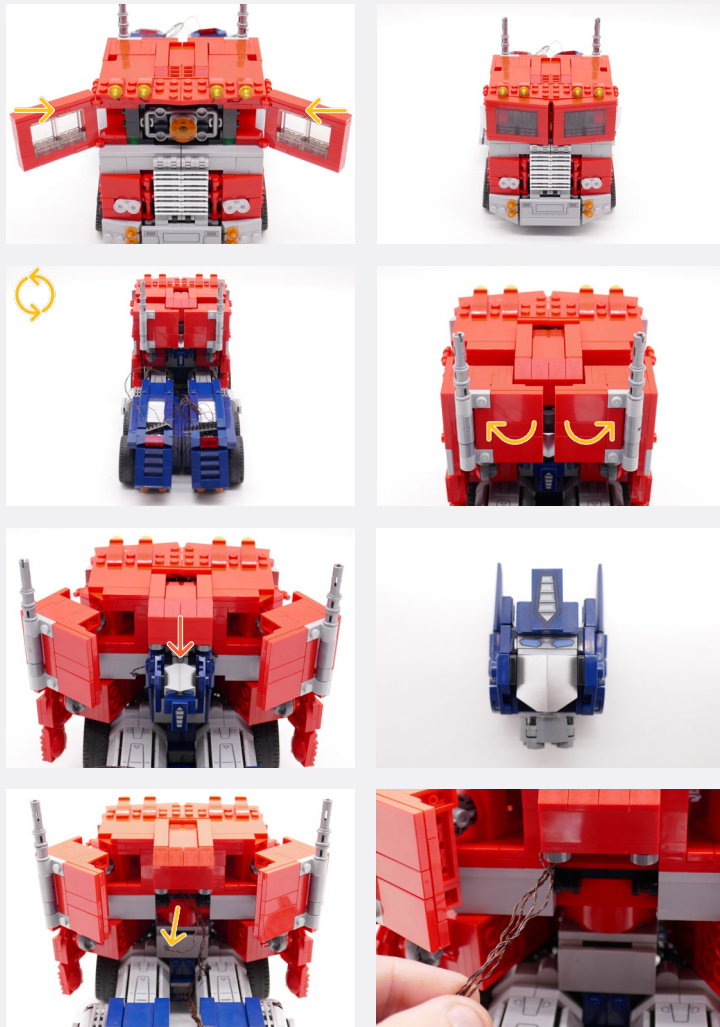
 Repeat this step for the opposite side


**14**

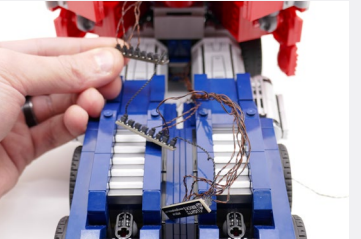
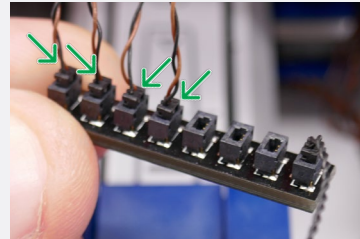
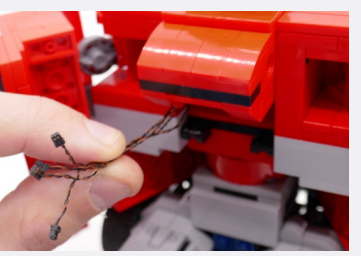
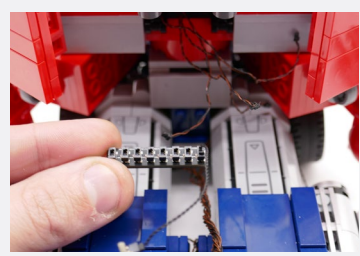
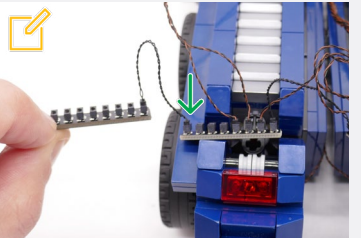
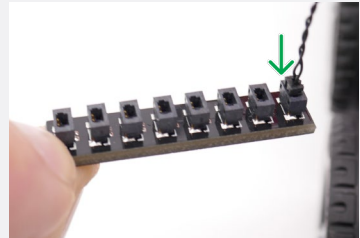


**Legend**    DISCONNECT    CONNECT / RECONNECT    TURN / FLIP    DIRECTIONAL    TWIST / BRAID    POWER ON TEST    NOTE ICON

**15**



 Connect the other end of the 5cm Connecting Cable to the 8-Port Expansion Board from Step 11



**Legend**    DISCONNECT    CONNECT / RECONNECT    TURN / FLIP    DIRECTIONAL    TWIST / BRAID    POWER ON TEST    NOTE ICON

16

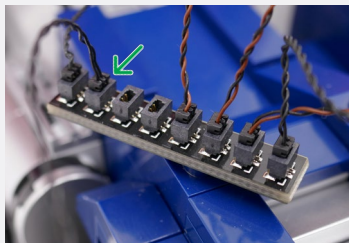
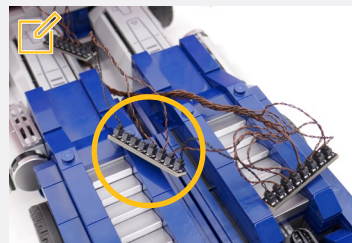
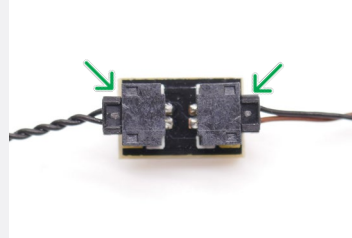
2-Port Expansion Board



50cm Connecting Cable



USB Power Cable



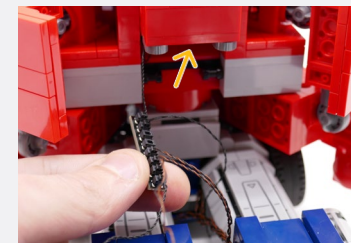
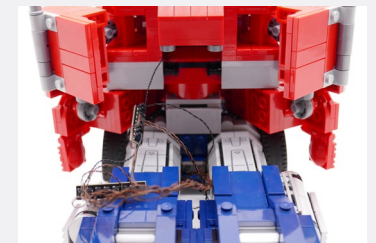
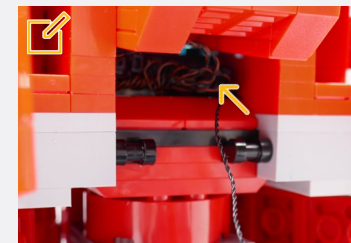
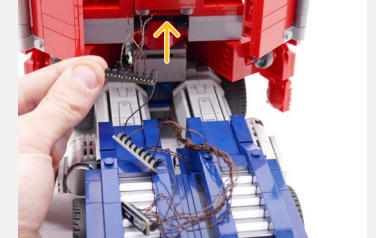
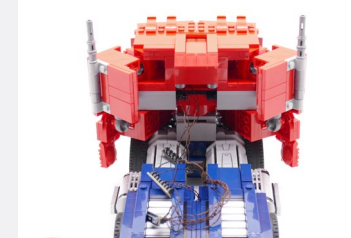
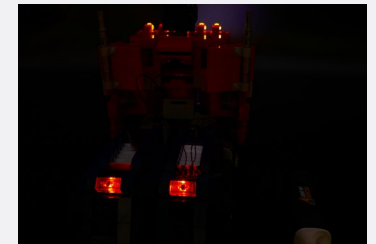
✂ Connect the 50cm Connecting Cable to this 8-Port Expansion Board

✂ Connect to a power source - 5V USB Power Bank, 5V USB Wall Adaptor, or USB to AA Battery Pack (sold separately)

17

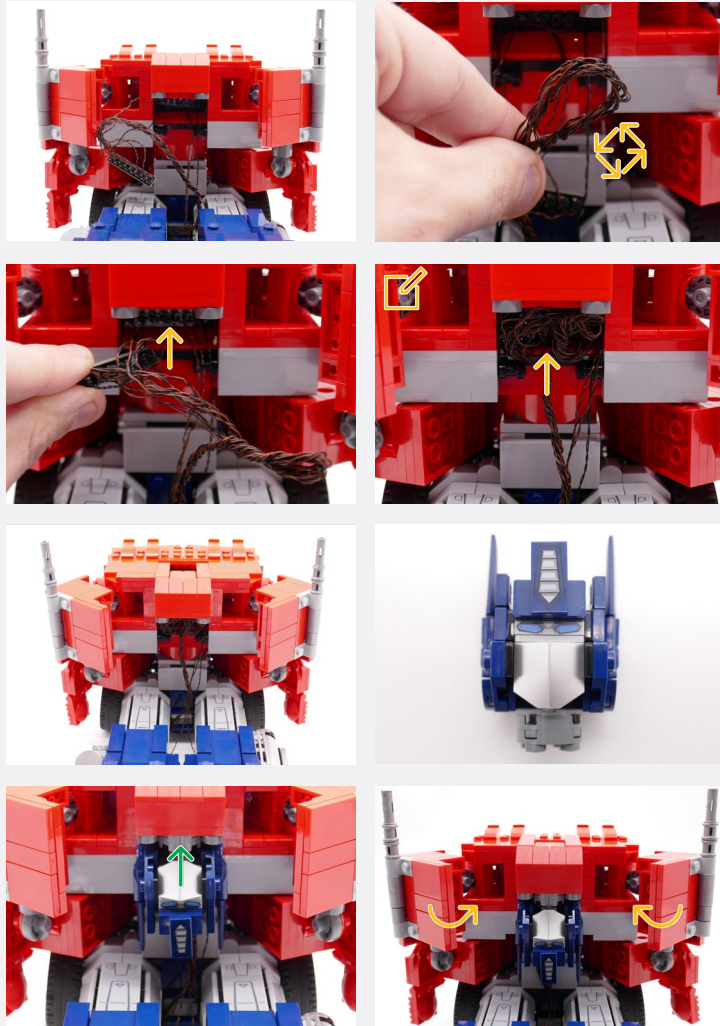
✂ Insert the first 8-Port Expansion Board into the cavity

✂ Insert the second 8-Port Expansion Board into the same cavity. Ensure to exclude the 50cm Connecting Cable



Legend

- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON



✍ Insert the final 8-Port Expansion Board into the same cavity, then the twisted wire

**18**



**Legend**   → DISCONNECT   → CONNECT / RECONNECT   ↻ TURN / FLIP   → DIRECTIONAL   ↻ TWIST / BRAID   ✨ POWER ON TEST   ✍ NOTE ICON



19

✍️ Connect to a power source - 5V USB Power Bank, 5V USB Wall Adaptor, or USB to AA Battery Pack (sold separately)



Legend    → DISCONNECT    → CONNECT / RECONNECT    ↻ TURN / FLIP    → DIRECTIONAL    ↻ TWIST / BRAID    ✨ POWER ON TEST    ✍️ NOTE ICON

## FINAL PRODUCT

This finally completes installation of the Light My Bricks  
LEGO Optimus Prime 10302 21332 Light Kit.







## TROUBLESHOOTING

Light My Bricks lighting kits contain individual components that are very small and can be easily damaged if not handled correctly.

To prevent unnecessary damage to components, we highly recommend that the User Guide section, **“Important things to note”** is read carefully. Follow the handling procedures in the User Guide to help prevent faults and damages to your Light My Bricks components.

If you are experiencing issues with your Light My Bricks set, watch our troubleshooting video or read on for a list of common causes to help you troubleshoot.

## Troubleshooting

**Firstly, ensure that the batteries have power using a battery charge gauge.**

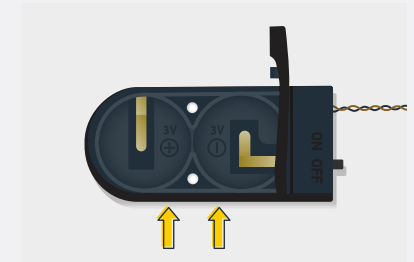
**If the batteries have no power, replace the batteries.**

**If the batteries still have power, check to see if the batteries have been inserted correctly into the battery pack.**

### Check For CR2032 Batteries Using The Flat Battery Pack

Inside the battery pack is a symbol indicating which side the (round) CR2032 battery should be inserted. Check that the “+” side of the battery pack has the battery with the “+” symbol facing downwards.

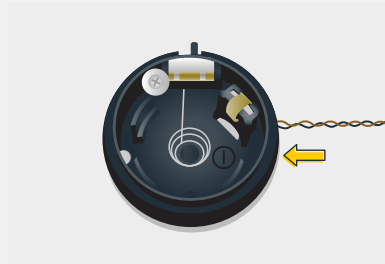
On the opposite side, the “-” side of the battery pack should have the battery flipped upside down, that is the “+” symbol facing upwards.



## Troubleshooting

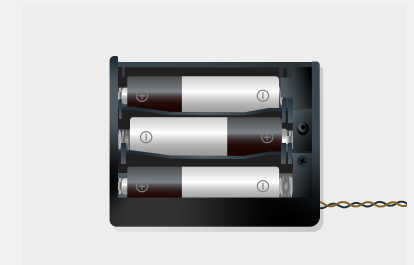
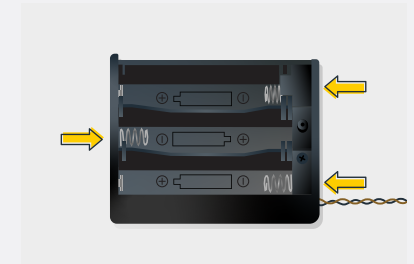
### Check For Cr2032 Batteries Using The Round Battery Pack

Inside the battery pack is a symbol indicating which side the (round) CR2032 battery should be inserted. In this case, for the stacked battery pack, ensure that BOTH batteries have the “+” symbol facing upwards.



### Check for AA batteries using the AA battery pack

Inside the battery pack are symbols indicating which direction the AA battery should be inserted. The flat side of the battery should be paired with the spring side of the battery pack.



If the batteries have been installed correctly and your kit still isn't operating correctly, the next step is to check the wiring.

# Troubleshooting

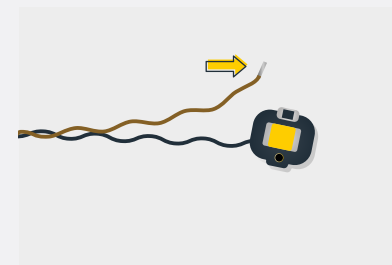
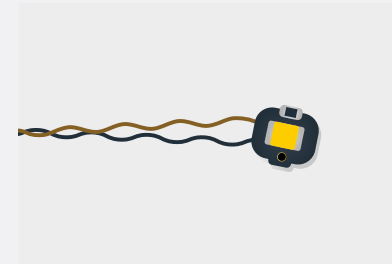
## Check Your Wires

In order for Light My Bricks components to fit in between and underneath LEGO® bricks, the components need to be very small. Due to this nature, Light My Bricks components can be easily damaged when not handled correctly.

Be careful when removing unpacked components out of the packaging and ensure not to forcibly pull at the wires as this can damage the soldering that attach the wires to the LEDs.

If the wiring is detached from the LED itself, the light will not operate.

When connecting lights to your LEGO set, check that there are no pinched wires underneath or in between bricks and plates. When the wires are pinched and the exposed wires are touching each other, this can cause a crosswire and the lights to not function correctly.



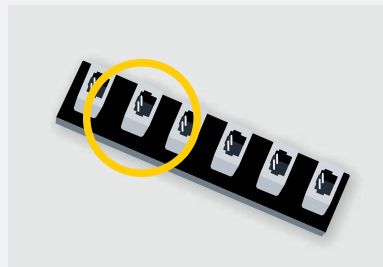
# Troubleshooting

## Check Your Expansion Board Ports/ Strip Light Ports / Effects Board Ports

It is important to note that connectors can only be inserted to the expansion board, strip light, or effects board ports in one direction.

Forcibly inserting connectors in the incorrect direction will result in damaging the pins inside each of the ports on your component board.

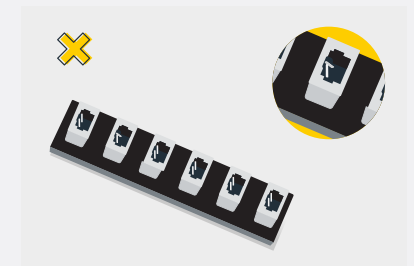
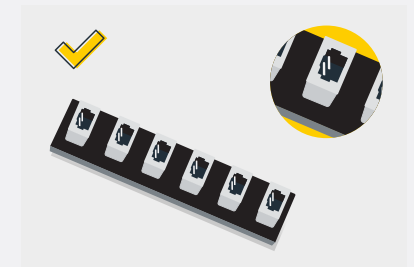
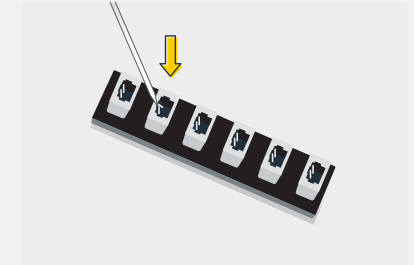
Not only will a light connected to the damaged port not work, but if the pins inside the port are bent to a point they are touching each other, this can result in all other lights in the system to stop working. This is a short circuit.



A short circuit can also result in overheating of the board, cable or batteries. If you suspect a short circuit, **DISCONNECT POWER IMMEDIATELY**. Batteries can fail, catch fire, or even explode if left connected to a short circuit for too long.

If you suspect you have a faulty component due to a bent pin, try the following steps:

If you look carefully inside each of the ports, each port contains 2 small pins that should be straight. You will be able to identify a faulty port if it has any bent pins.





## CONTACT US

If you have an enquiry regarding the online shop, our products or a general enquiry please refer to our Frequently Asked Questions webpage.

Alternatively, you can contact our Customer Services team by visiting our online support portal.

[support.lightmybricks.com](https://support.lightmybricks.com)

We thank you for purchasing this product and hope you enjoy!



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