



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



**LEGO® THE LORD OF THE RINGS:  
RIVENDELL #10316 LIGHT KIT  
INSTALLATION GUIDE**

# Light My Bricks



## LEGO® THE LORD OF THE RINGS: RIVENDELL 10316 INSTALLATION GUIDE

Hi There!

We're here to help you get started on the LEGO®

The Lord of the Rings: Rivendell 10316 Light Kit.

This PDF details the instructions for the LED light kit only. If you are wishing to purchase this product, please [click here](#) to view the product page.

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

Have fun and enjoy!







## PACKAGE CONTENTS:

### Individual Bags



- 8x White 30cm Bit Light
- 6x Cool White 30cm Bit Light
- 1x Warm White 30cm Large Bit Light
- 1x Orange 30cm Large Bit Light
- 1x Light Blue 30cm Large Bit Light
- 3x Light Blue 30cm Bit Light
- 15x White 30cm Micro Bit Light \*
- 4x White 15cm Micro Bit Light
- 2x Wireless Power Connectors

### Connecting Cables



- 7x 5cm Connecting Cable
- 3x 15cm Connecting Cable
- 2x 30cm Connecting Cable
- 3x 50cm Connecting Cable \*

### USB Power Cable



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

### Mixed Components 1



- 4x 2-Port Expansion Board
- 4x 6-Port Expansion Board
- 1x 8-Port Expansion Board

### Mixed Components 2



- 3x 4-Port Micro Expansion Board
- 2x 8-Port Micro Expansion Board \*
- 16x Adhesive Square \*

### Mixed Components 3



- 3x Flicker Effects Board
- 1x Pulse Effects Board

\* Indicates components which include spares



## PACKAGE CONTENTS:

### Mixed Components 4



- 2x Skeleton Arm Bent w/ Clips at 90 Degrees - Black
- 1x Brick 1x1 w/ Stud On One Side - Black
- 2x Brick 1x1 w/ Technic Hole - Black
- 1x Bracket 1x1 - Light Grey
- 2x Bracket 1x1 Inverted - Black
- 1x Round Brick 1x1 - Trans Clear
- 2x Round Brick 1x1 - Black

### Mixed Components 5



- 12x Round Plate 1x1 Open Stud - White
- 12x Round Plate 1x1 Open Stud - Black
- 2x Round Plate 1x1 - Trans Clear
- 2x Round Plate 1x1 - Trans Yellow
- 2x Round Plate 1x1 Open Stud - Trans Orange
- 2x Round Plate 1x1 Open Stud - Pearl Gold

### Mixed Components 6

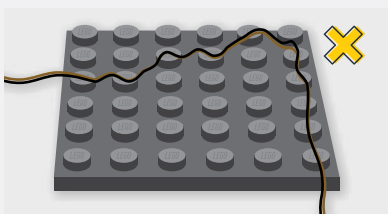
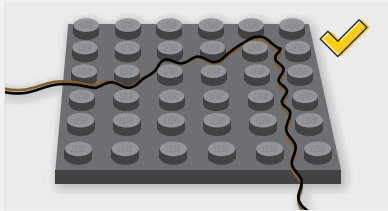


- 2x Round Plate 2x2 w/ Rounded Bottom - Trans Clear
- 3x Skeleton Arm Bent w/ Clips Horizontal Grip - Black
- 5x Plate 1x2 - Black
- 8x Plate 1x1 Rounded w/ Handle - Black
- 1x Plate 1x2 w/ Handle - Black

## Contents

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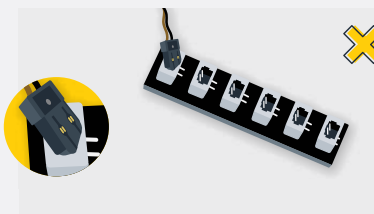
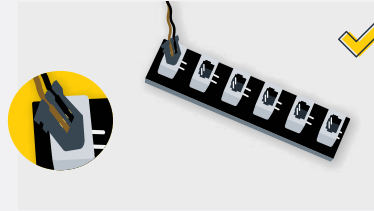
## Before You Begin



### 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.*

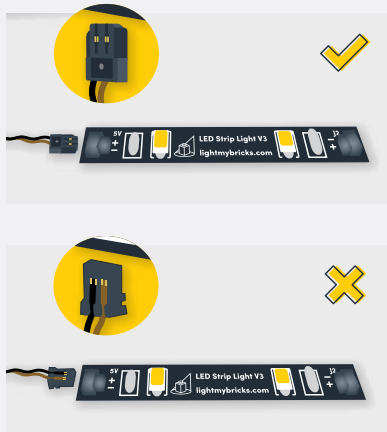


### Connecting Cable Connectors To Expansion Boards

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.



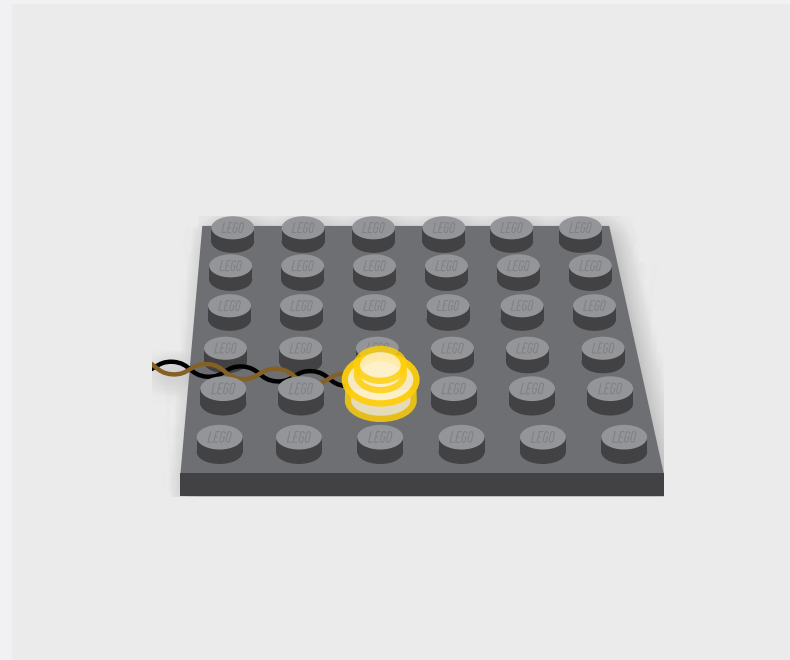
### Connecting Micro Cable Connectors To Micro Expansion Board Ports

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.



# Before You Begin

## The Symbols Used In This Guide

When going through the following guide you will come across symbols and formats that will assist with the installation of your light kit. Take notice of them as each has a specific purpose.

### Light Kit Component

This is the most important image format as it indicates which part to use from the Light Kit. Make sure you pay close attention to which part is shown.

White 30cm Bit Light



### Connect

Used when you need to connect a LEGO piece or LMB component.



### Disconnect

Used when you need to remove a LEGO piece/ section or LMB component.



### Directional

Used to show where to route cables, place components, or move them.



### Bend/Pivot

Used when a component needs to be bent, or part folded or pivoted.



### Turn/ Flip

Will be found in the top left corner when the set needs to be rotated or flipped.



### Twist/ Braid

Seen when a set of cables need to be grouped and twisted together.



### Power On Test

Found at the end of a major step to test the lights. Will be located in the top left corner.



### Note

Notes will be found alongside the instruction photos and explain what to do.



# Before You Begin

## Repeat Step

Repeat the previous step eg. Make a spotlight, then make a second spotlight.



## Connect Focus

Used to highlight a hard to see area where a component is being connected.



## Disconnect Focus

Used to highlight a hard to see area where a component is being disconnected.



## General Focus

Used to highlight a hard to see area where a component needs to be acted on.



## General Note


This is a sample note that is used anywhere in this guide. It will explain a difficult section where photos are hard to illustrate or easily confused.

## Connect Note

The green coloured note is used when the topic focuses on a component being connected, like the shown Power Bank.

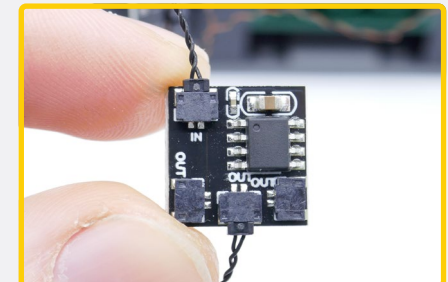
## Disconnect Note


The red coloured note is used when the topic focuses on a component being disconnected or like here, the removed pieces.



**NOTE**

Take the 5cm Connecting Cable from the 4-Port Micro Expansion Board and route it into the "IN" port of the Flicker Effects Board






**NOTE**

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





**NOTE**

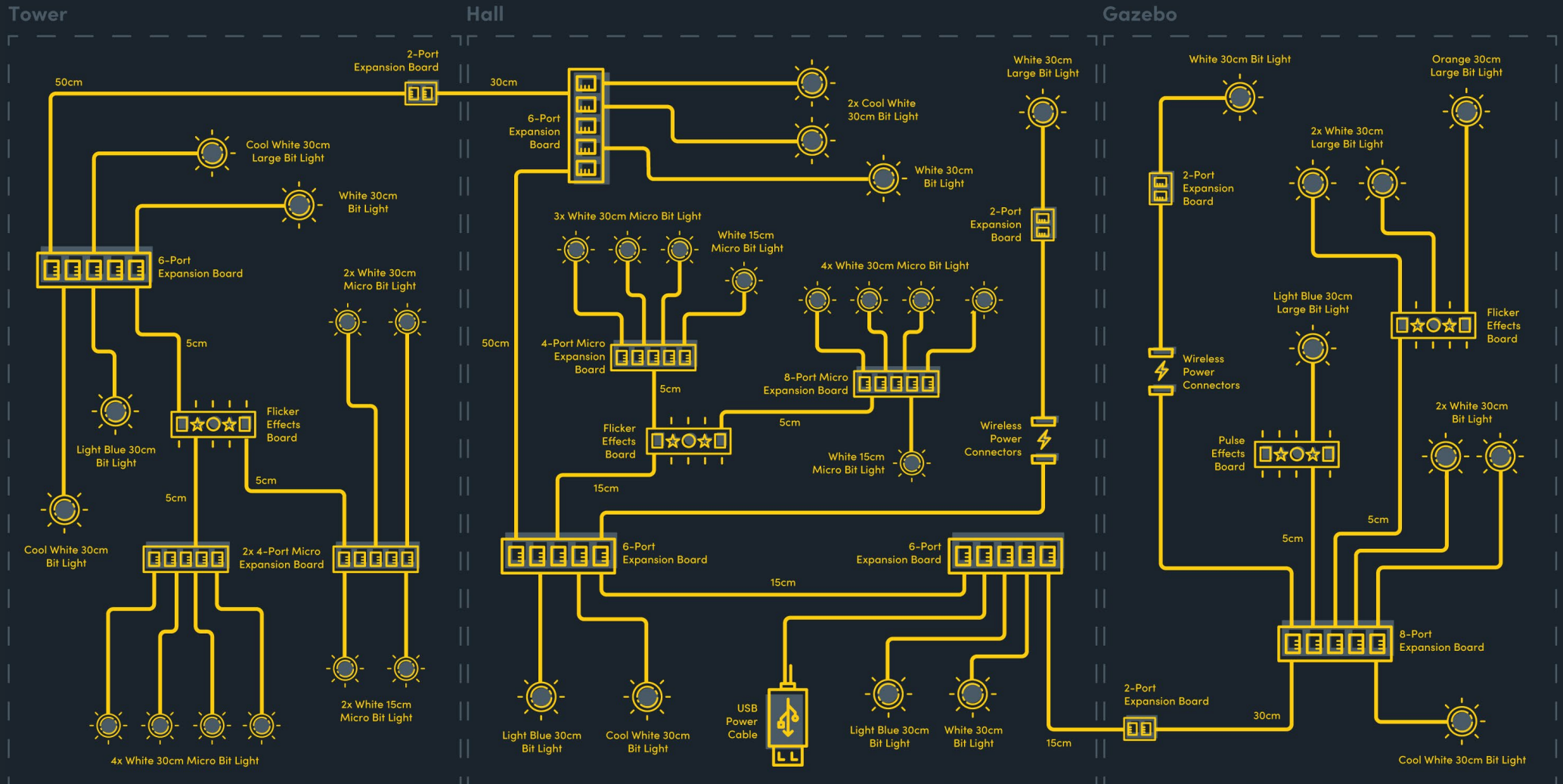
You should have these parts left over that were removed from the LEGO set







# BLUEPRINT





## 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.

1

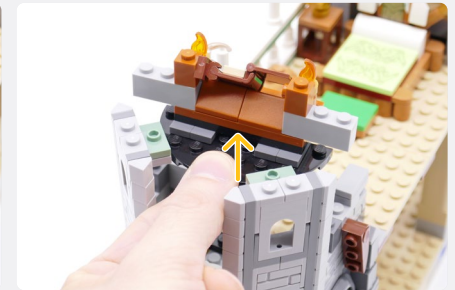
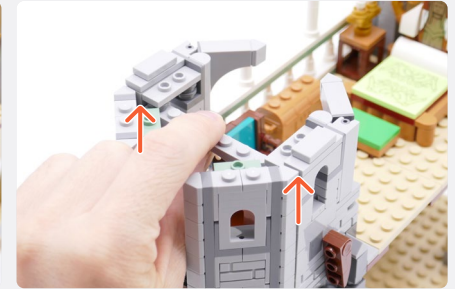
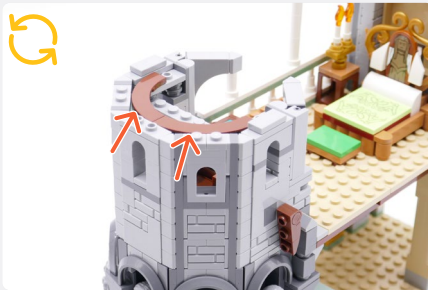


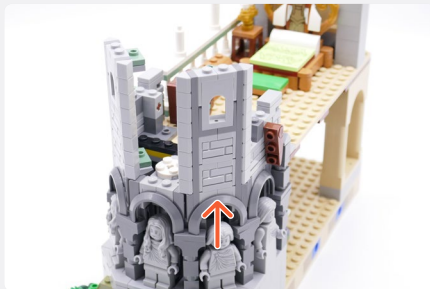
2





3





**4**



Round Plate 1x1 Open Stud - Black

Light Blue 30cm Bit Light

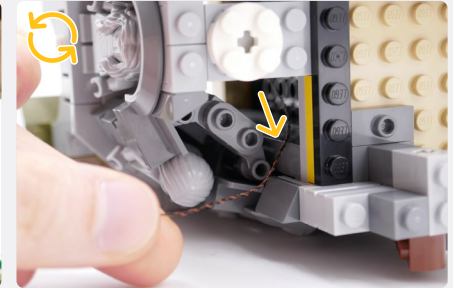
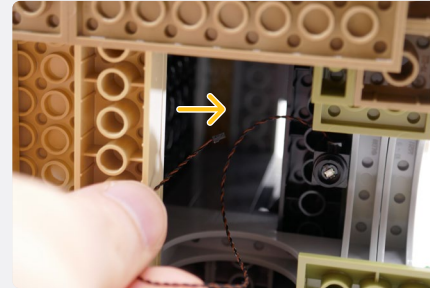
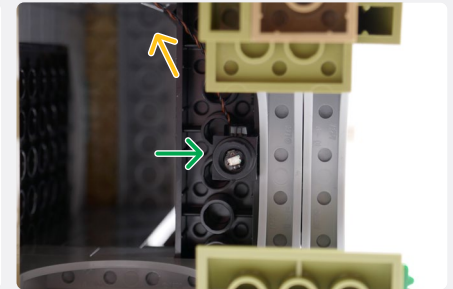
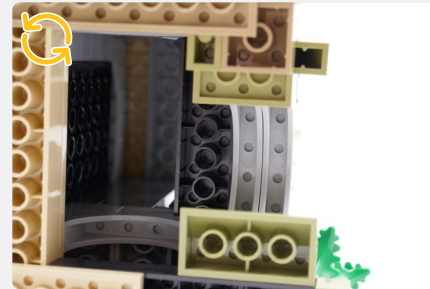




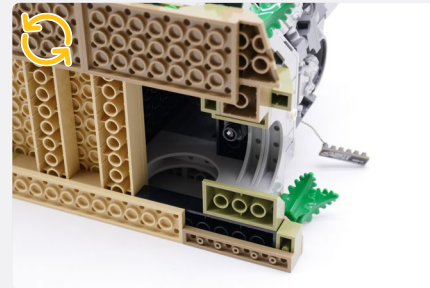
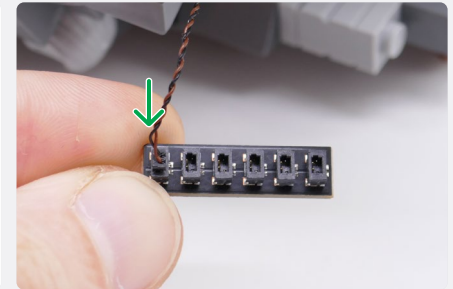
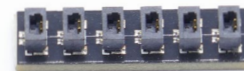
Brick 1x1 Mod W/ Stud On Side - Black



5



6-Port Expansion Board





**6**

Round Plate 1x1 Open Stud - Black



Cool White 30cm Bit Light



Arm Skeleton, Bent W/ Clips Horizontal Grip - Black



Plate 1x1 Mod Rounded W/ Handle - Black



Plate 1x1 Mod Rounded W/ Handle - Black

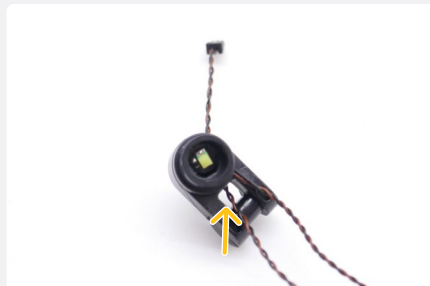
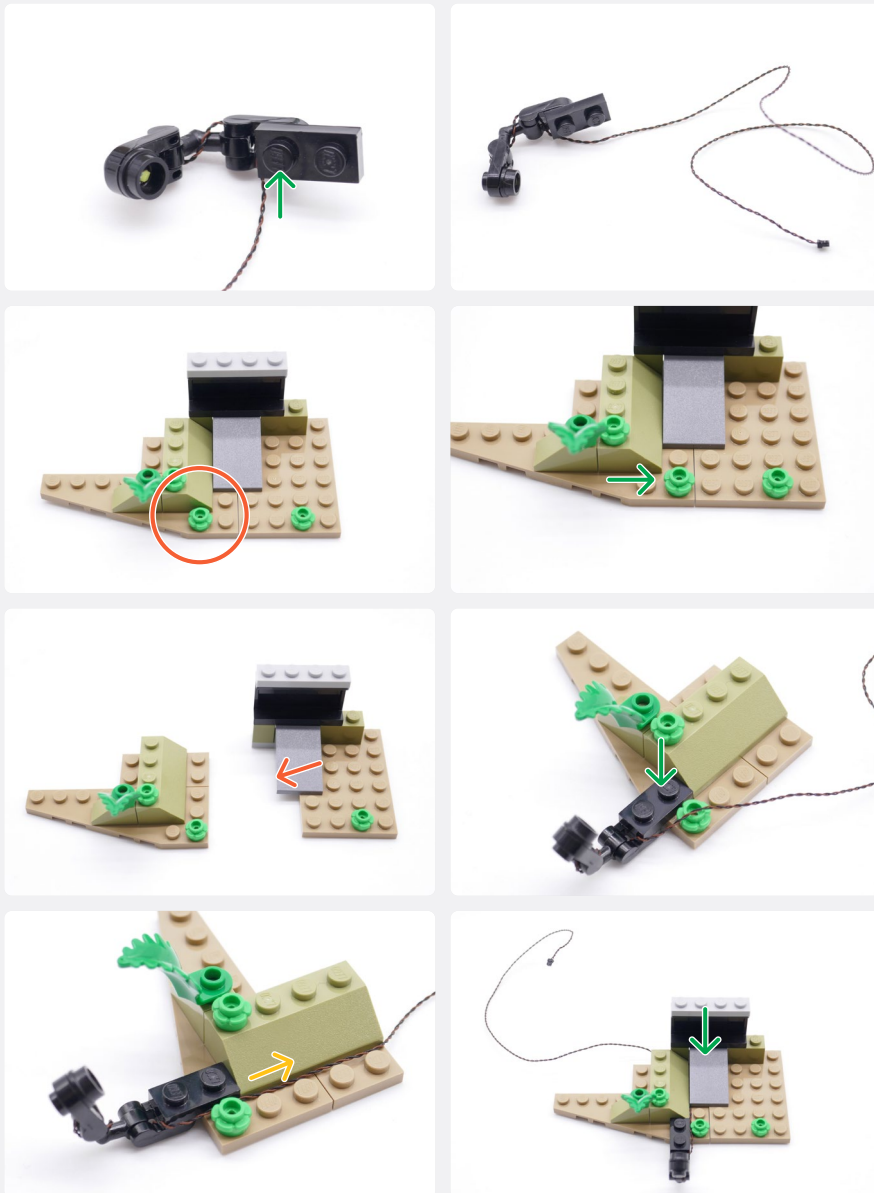


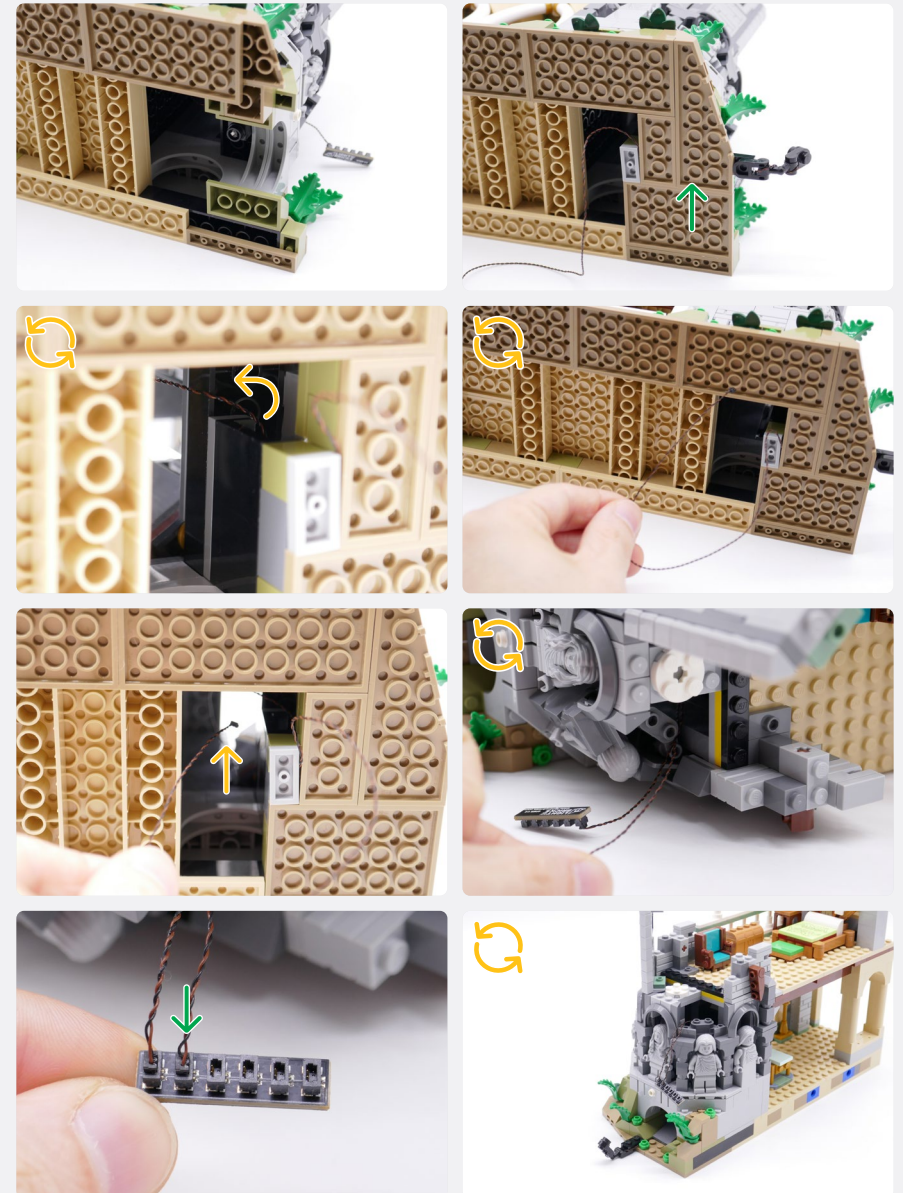
Plate 1x2 - Black



**7**

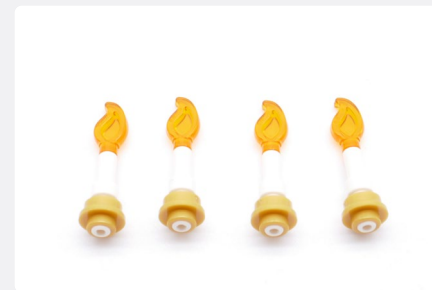


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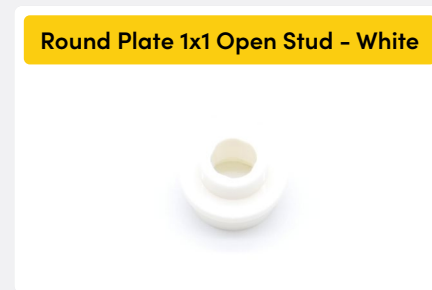


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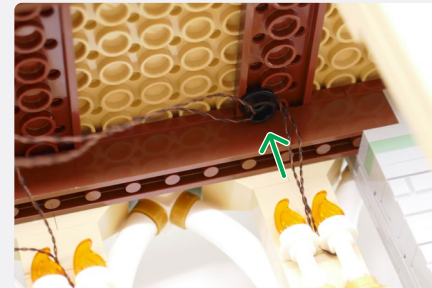
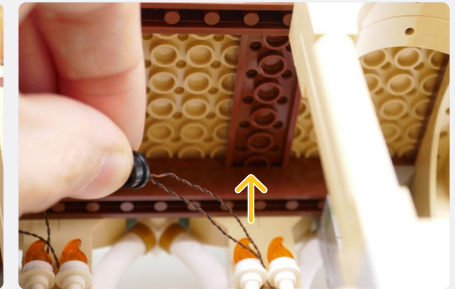
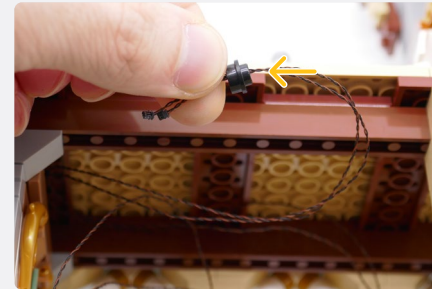
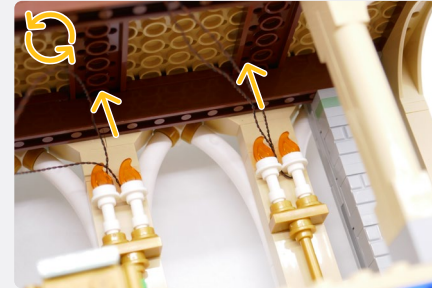
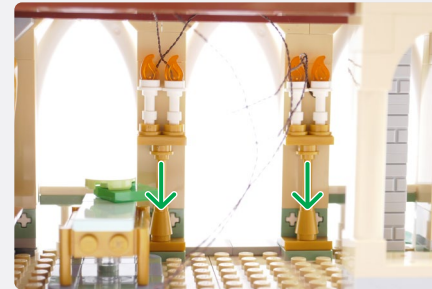


Round Plate 1x1 Open Stud - White

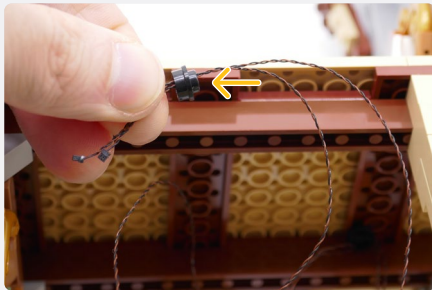
White 30cm Micro Bit Light



**10**

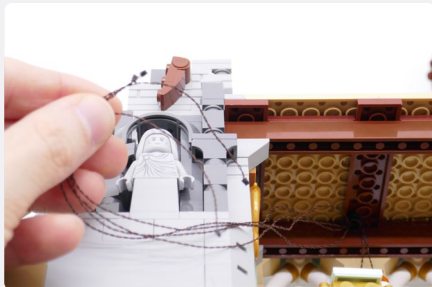
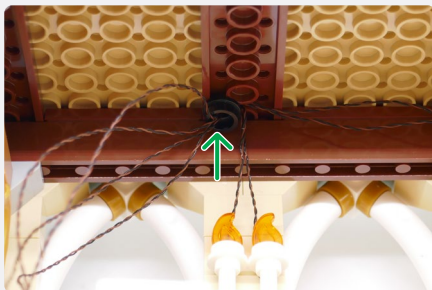
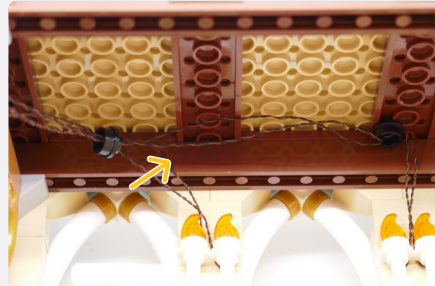
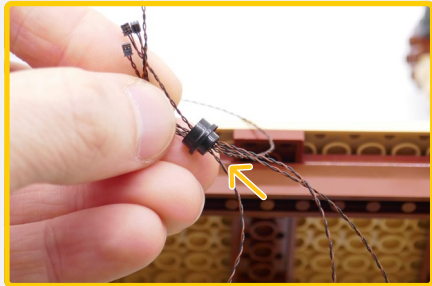





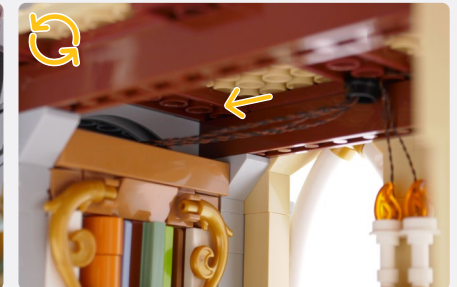
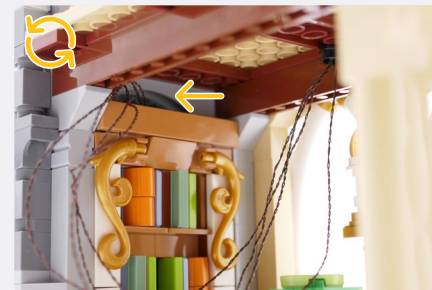
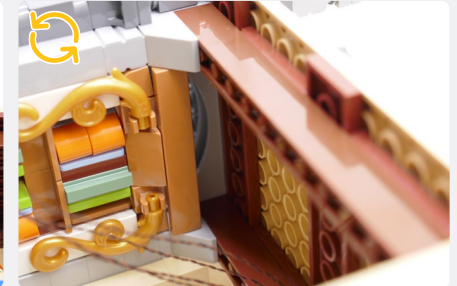
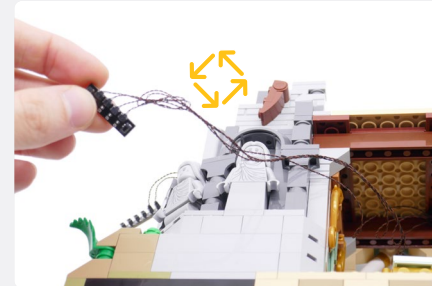
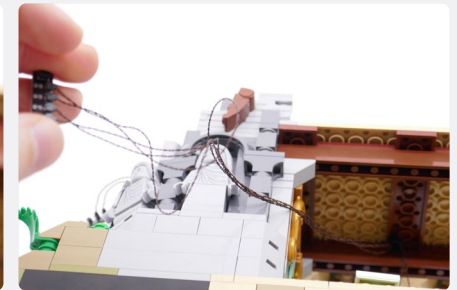
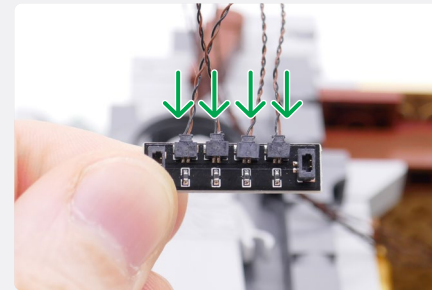


 **NOTE**

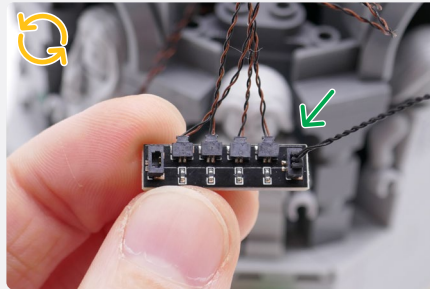
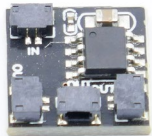
Thread all 4 Micro Bit Light cables through the following Round Plate w/ Open Stud



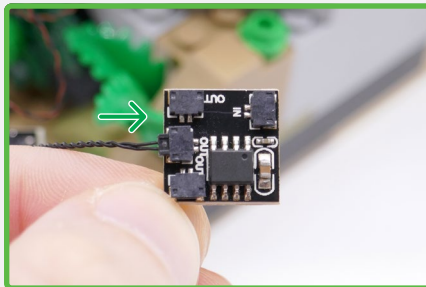
**4-Port Micro Expansion Board**

11

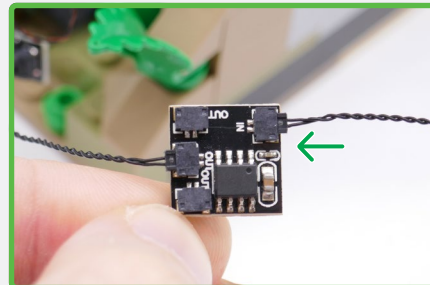
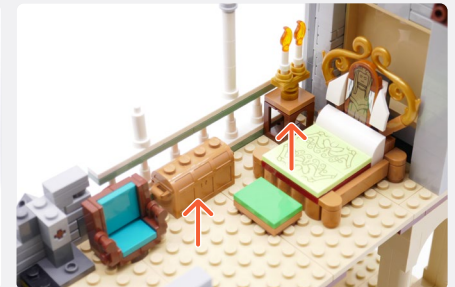
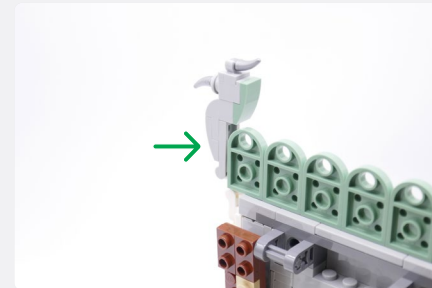
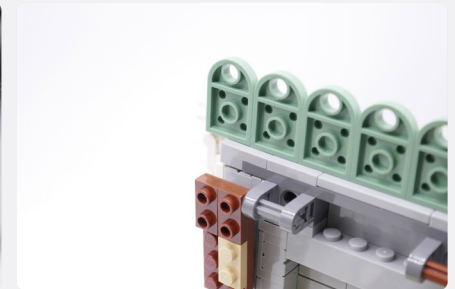
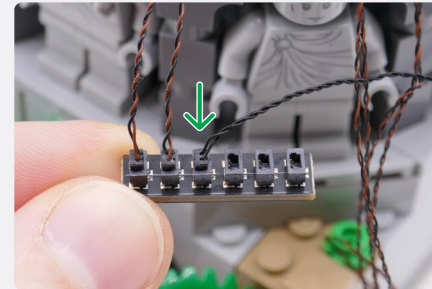
**12**
**5cm Connecting Cable**

**Flicker Effects Board**

**NOTE**

Connect the 5cm Connecting Cable from the 4-Port Micro Expansion Board into the "OUT" port of the Flicker Effects Board


**5cm Connecting Cable**

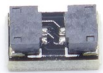
**NOTE**

Connect a new 5cm Connecting Cable into the "IN" port of the Flicker Effects Board


**13**




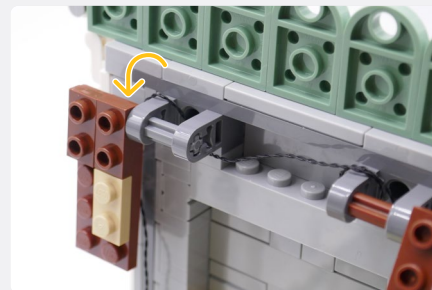
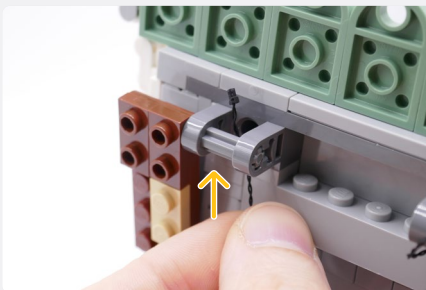
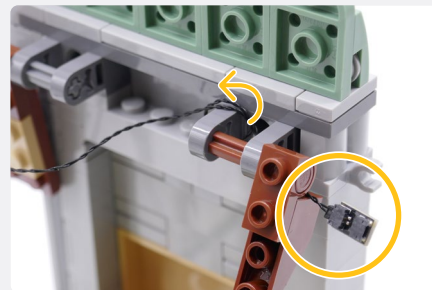
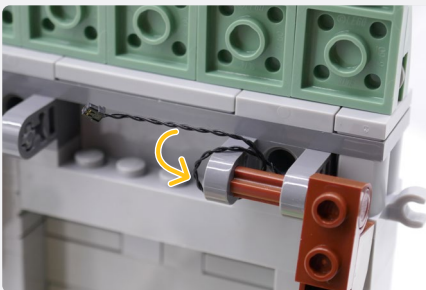
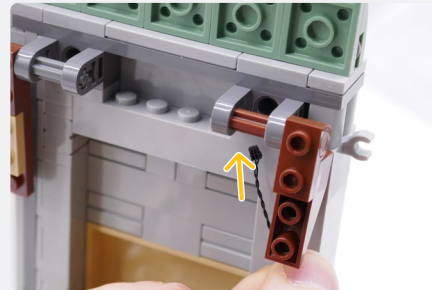
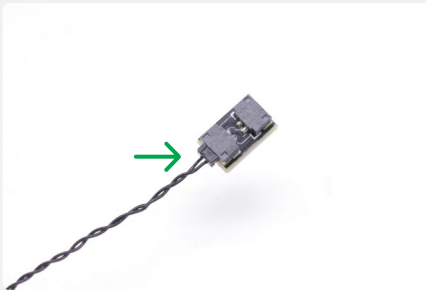
2-Port Expansion Board



50cm Connecting Cable



14

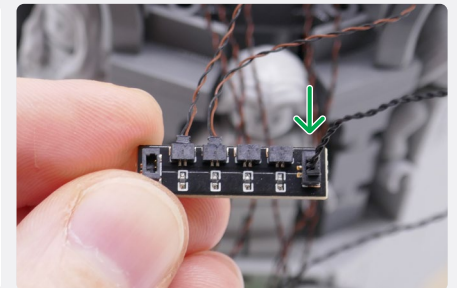
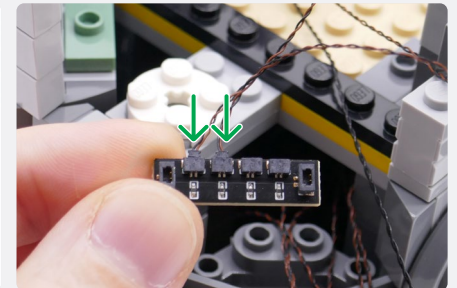
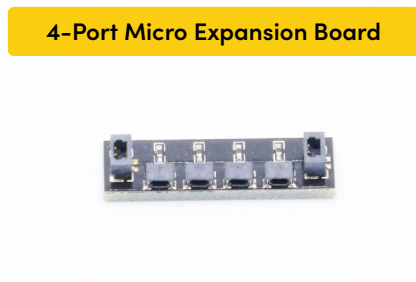
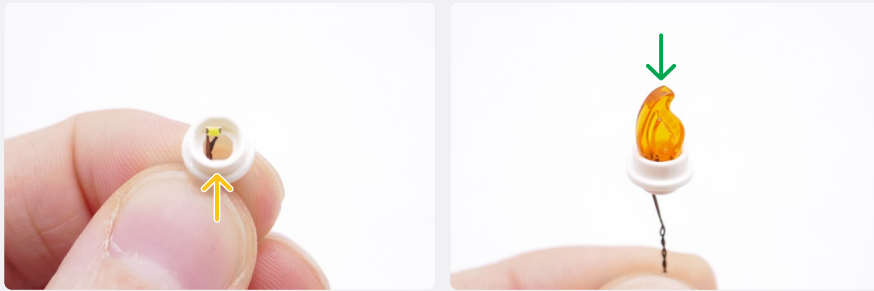


Round Plate 1x1 Open Stud - White



White 30cm Micro Bit Light

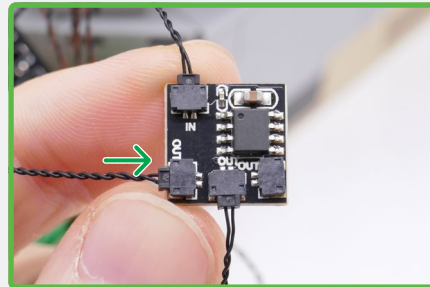




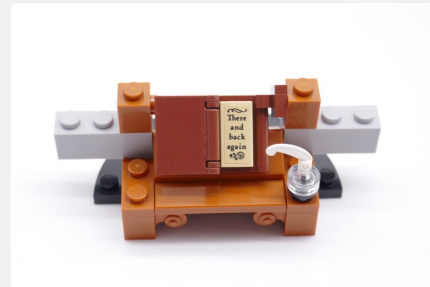
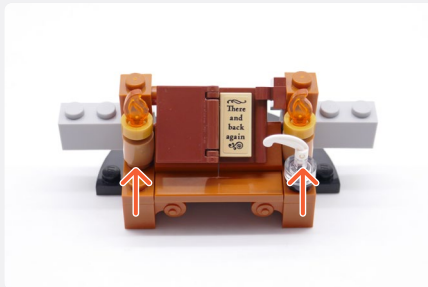
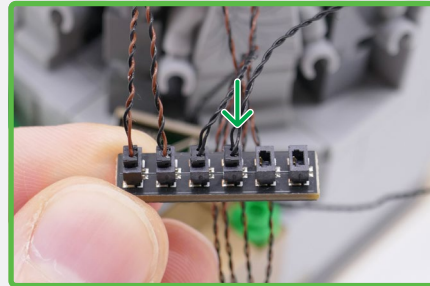
**15**


**NOTE**

Connect the 5cm Connecting Cable from the 4-Port Micro Expansion Board into the "OUT" port of the Flicker Effects Board


**NOTE**

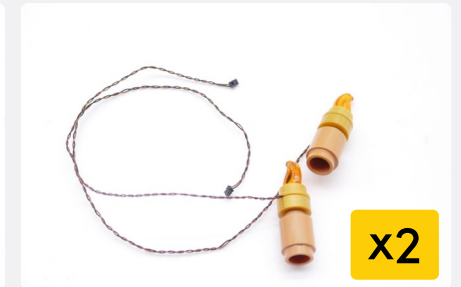
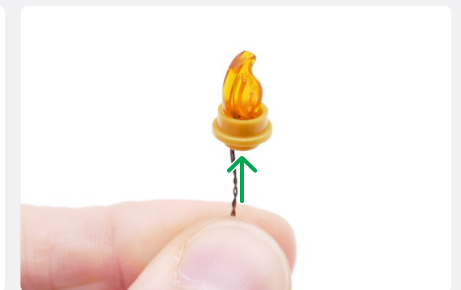
Connect the 50cm Connecting Cable that from the 2-Port Expansion Board into the 6-Port Expansion Board



Round Plate 1x1 Open Stud - Gold

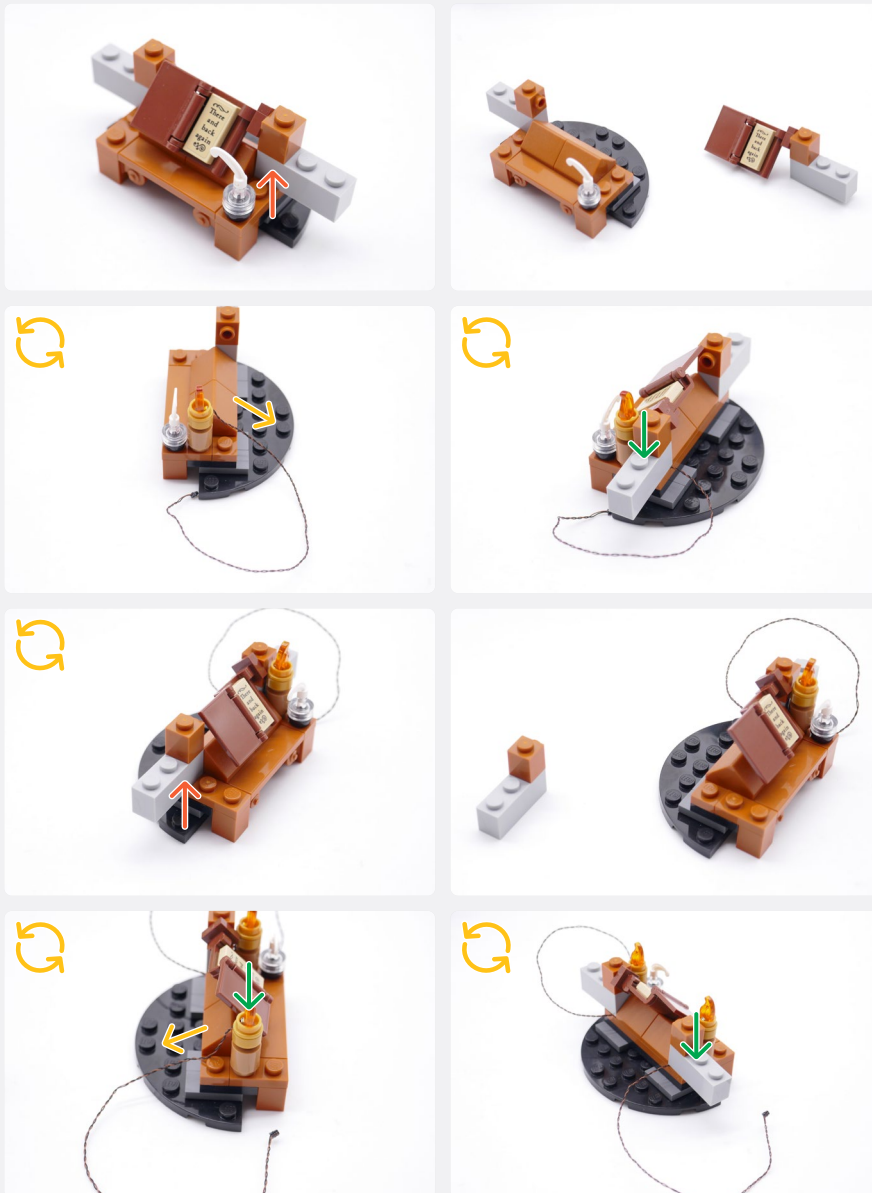


White 15cm Micro Bit Light

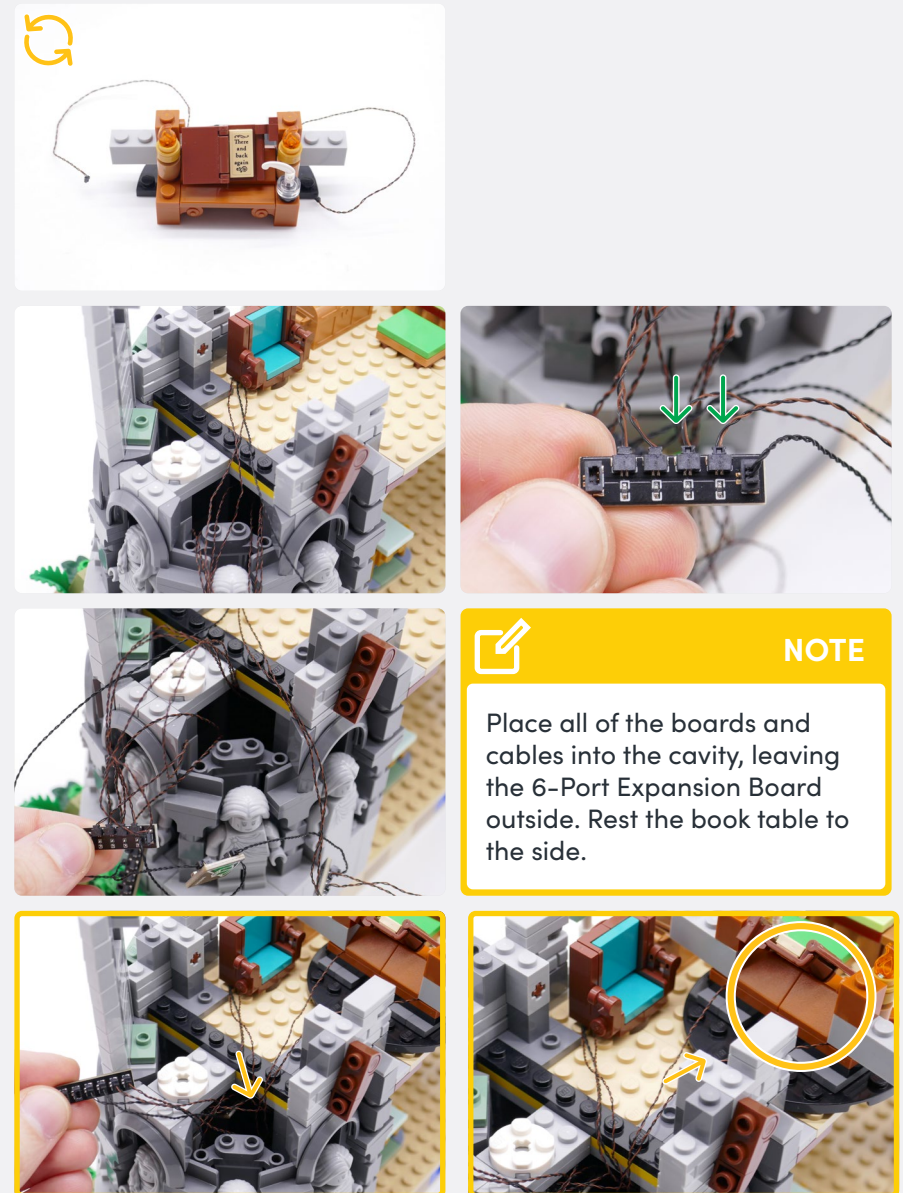





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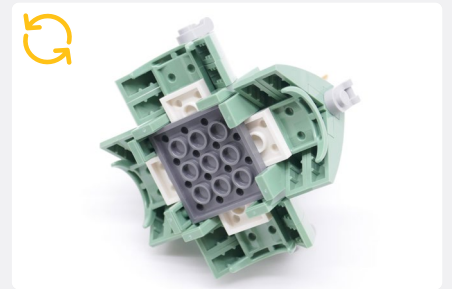
18



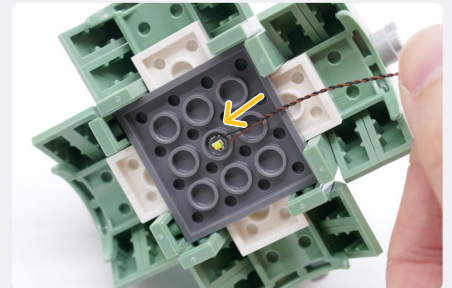
 **NOTE**

Place all of the boards and cables into the cavity, leaving the 6-Port Expansion Board outside. Rest the book table to the side.





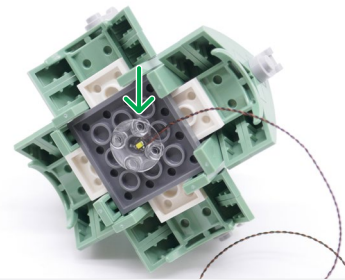
White 30cm Bit Light



19

20

Plate 2x2 W/ Rounded Bottom - Trans Clear



Round Plate 1x1 Open Stud - Black



Cool White 30cm Bit Light



Plate 1x1 Mod Rounded W/ Handle - Black

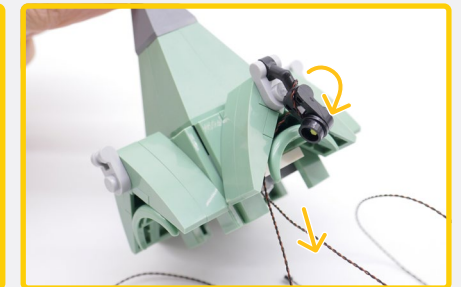


Arm Skeleton, Bent W/ Clips At 90 Degrees - Black



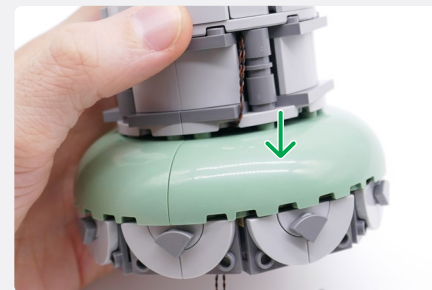
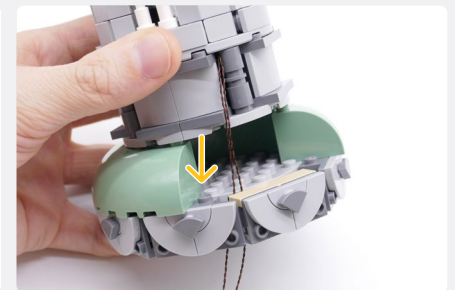
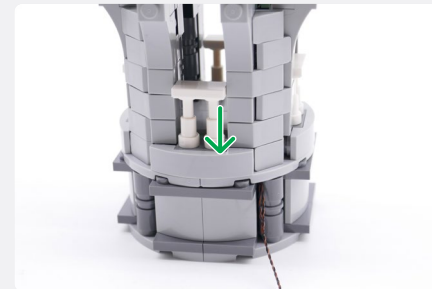
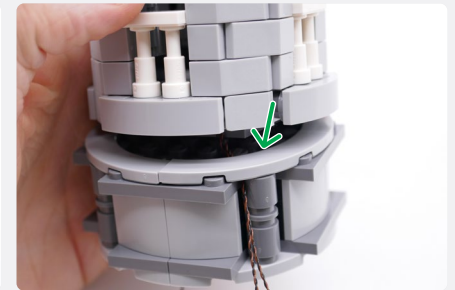
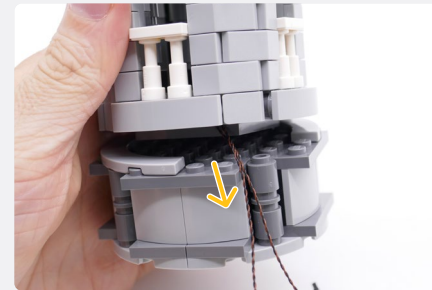
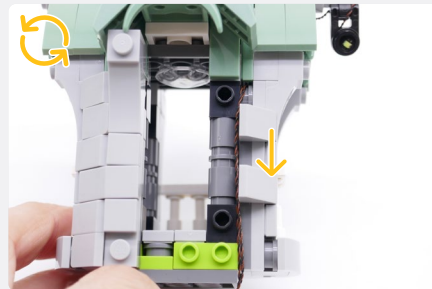
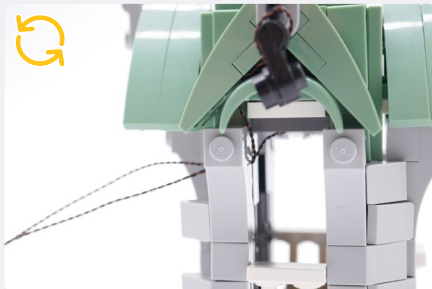
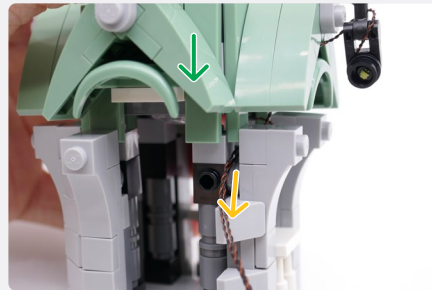
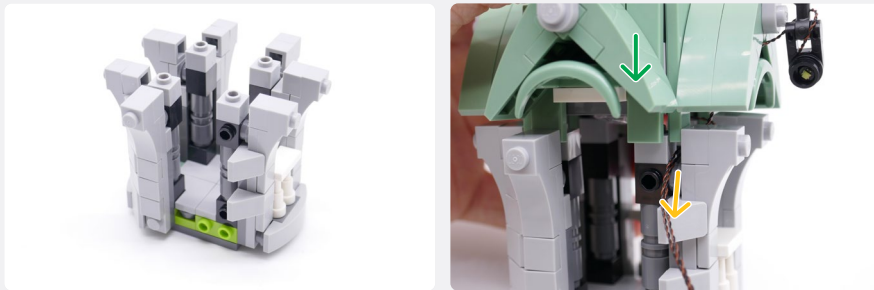
NOTE

Push the spotlight down while ensuring the cables run out in the same direction



21

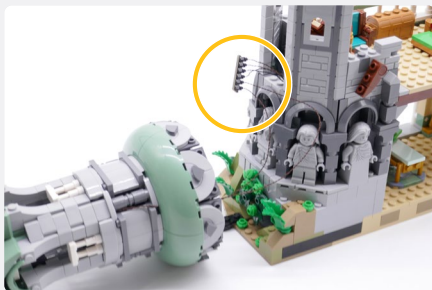
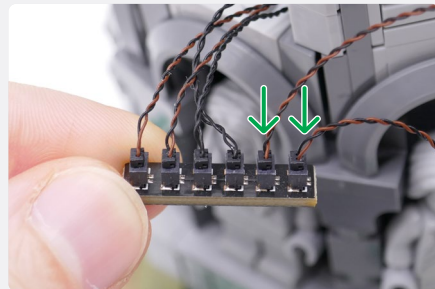
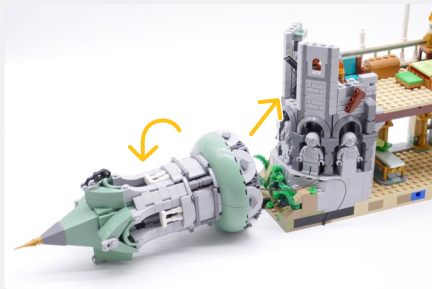




22

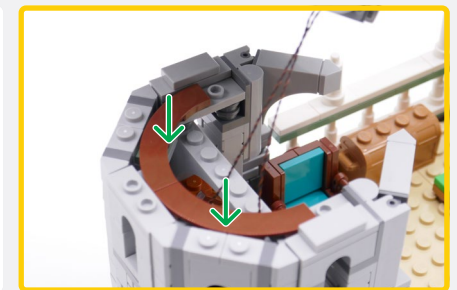
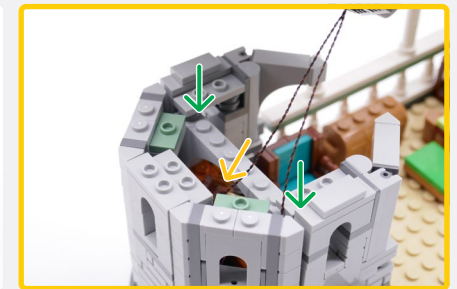


23



**NOTE**

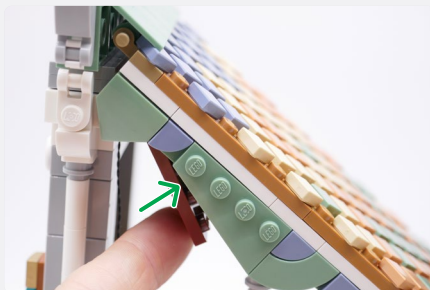
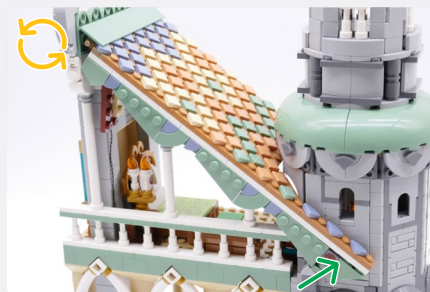
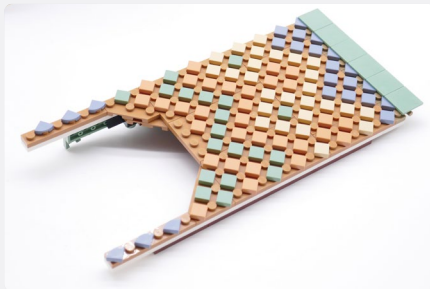
Hold the tower section up when connecting the following pieces back on. Run the cables behind the arch piece.



**NOTE**

Ensure the tower is reconnected with the Spotlight side positioned as shown

24

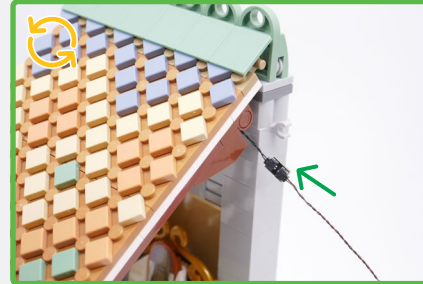


## USB Power Cable



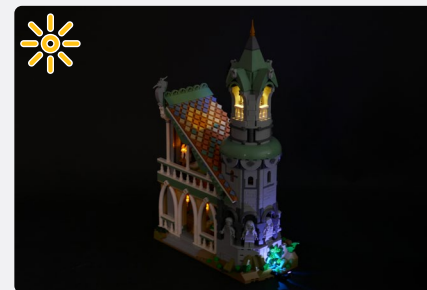
## NOTE

Connect the USB Power Cable to the 2-Port Expansion Board to test the lights. It will be disconnected afterwards to be used in the next section.



## NOTE

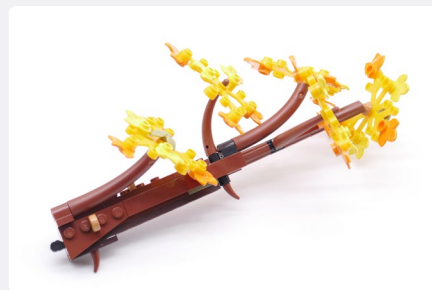
Connect to a 5V USB Power Bank, 5V USB Wall Adaptor, or USB to AA Battery Pack (sold separately)



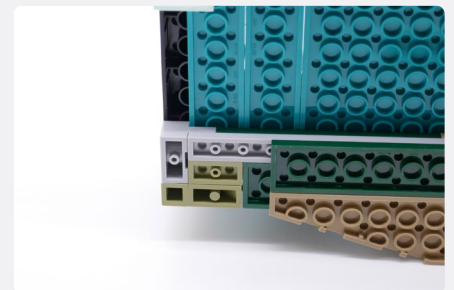
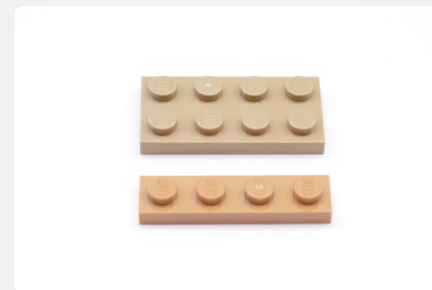
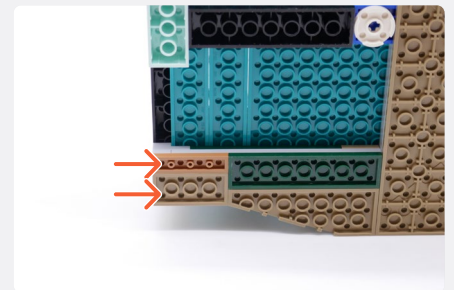
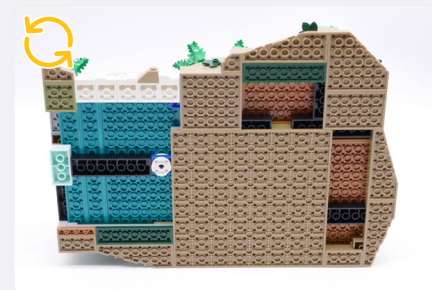
! If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion board issues in our troubleshooting section. i



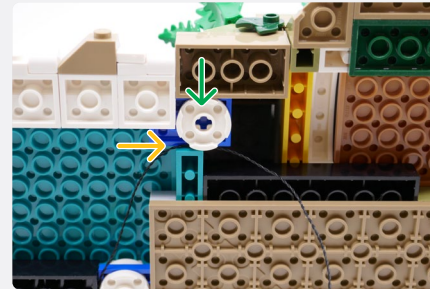
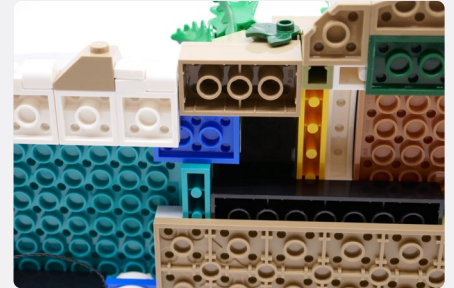
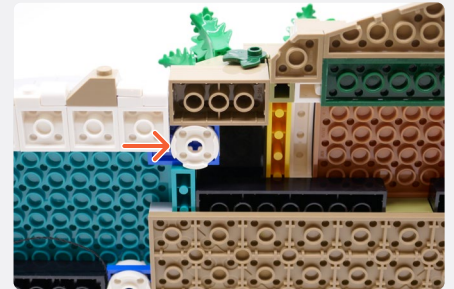
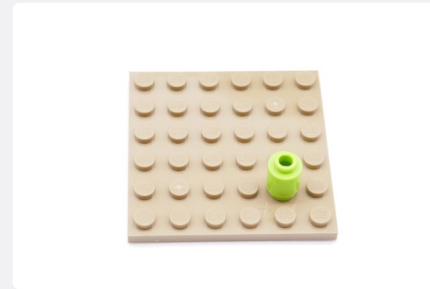
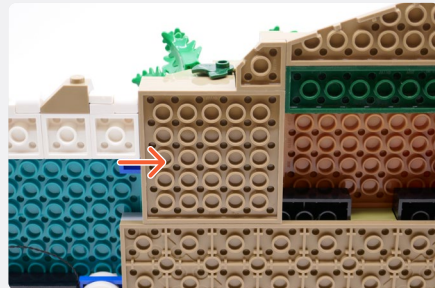
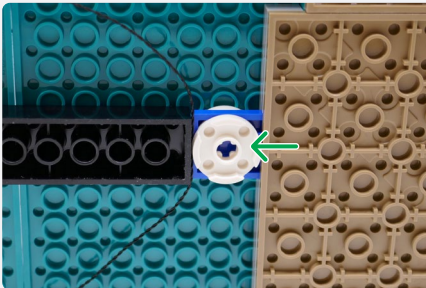
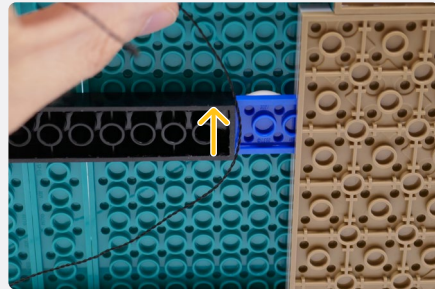
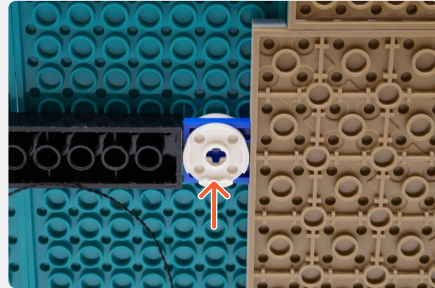
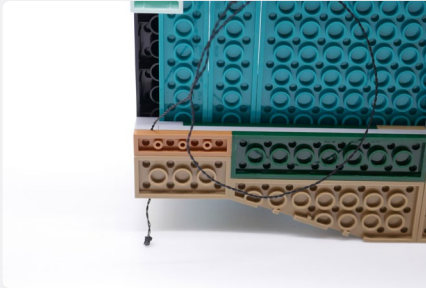
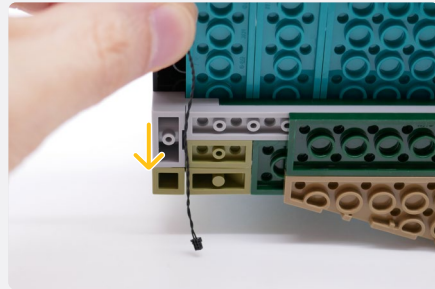
**25**



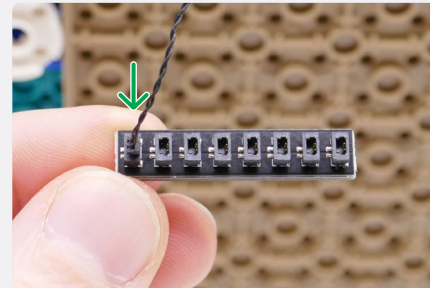
**26**



**30cm Connecting Cable**

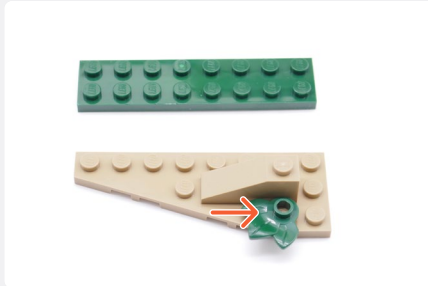
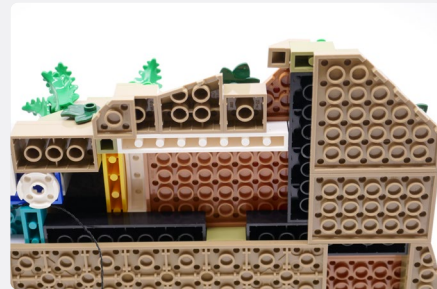
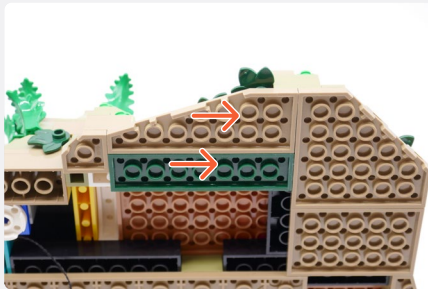


**8-Port Expansion Board**





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Round Plate 1x1 Open Stud - Black

Cool White 30cm Bit Light



Plate 1x1 Mod Rounded W/ Handle - Black



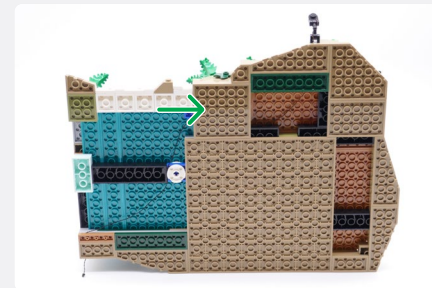
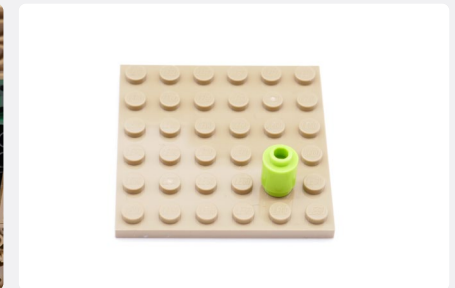
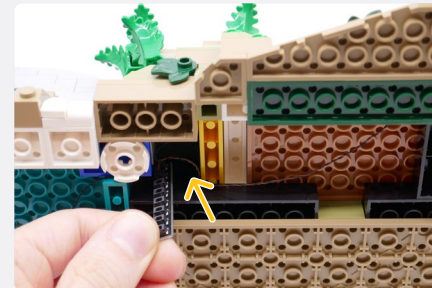
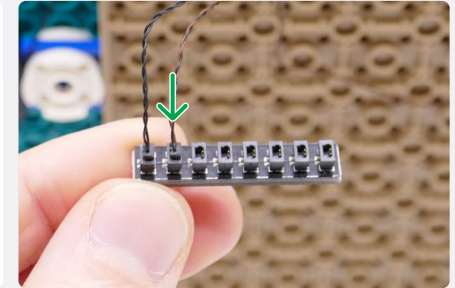
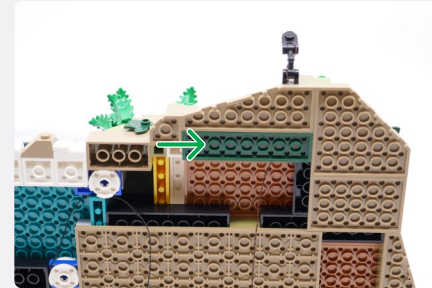
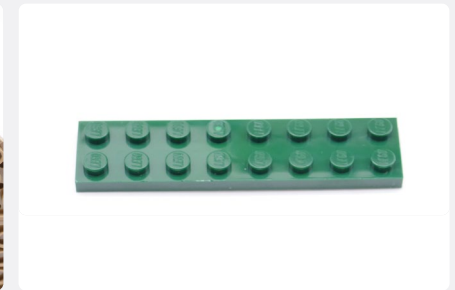
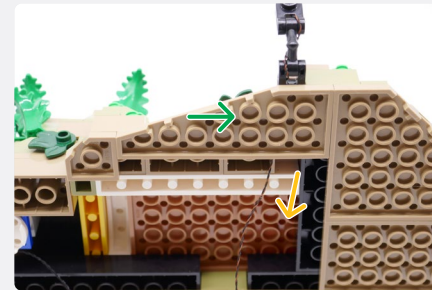
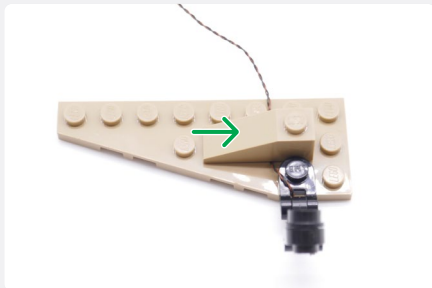
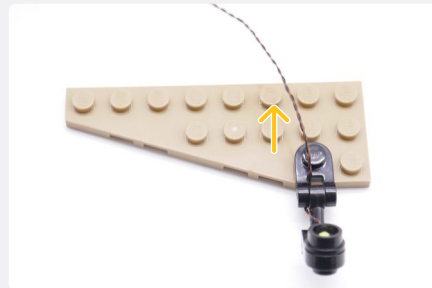
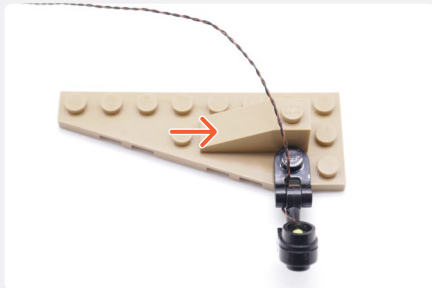
Arm Skeleton, Bent W/ Clips Horizontal Grip - Black



Plate 1x1 Mod Rounded W/ Handle - Black







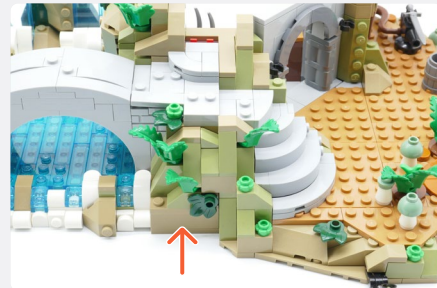
28

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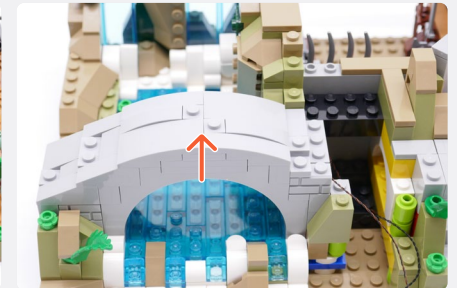


 **NOTE**

Use the LEGO Removal Tool to assist in disconnecting the following sections



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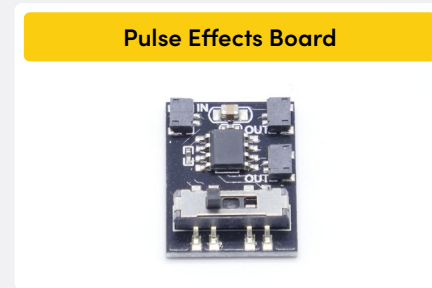
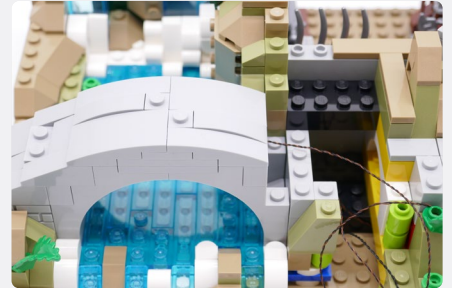
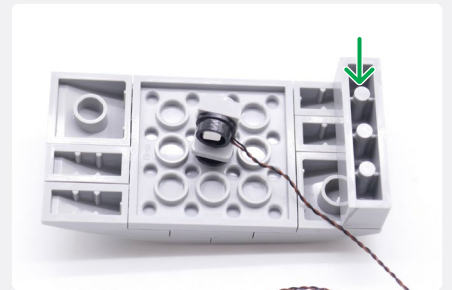
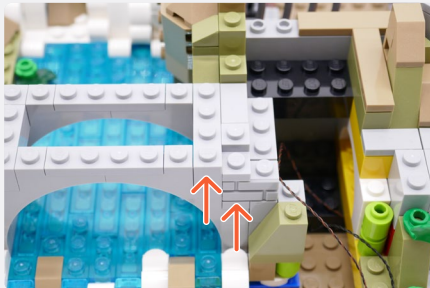
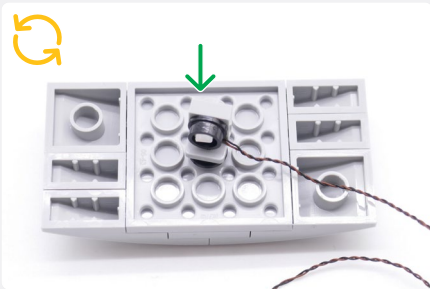
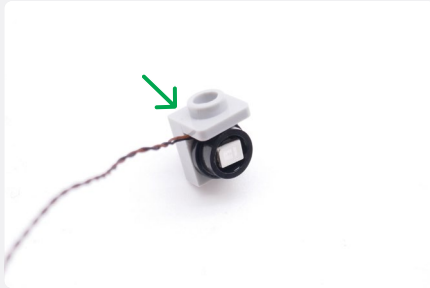
Round Plate 1x1 Open Stud - Black



Light Blue 30cm Large Bit Light



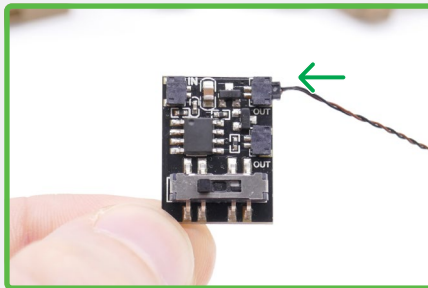




**NOTE**

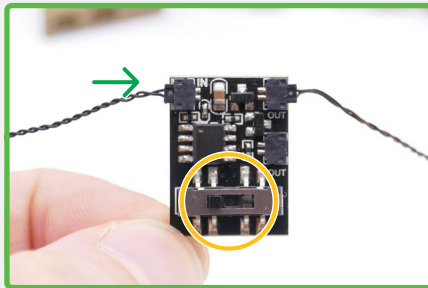
Connect the Blue Large Bit Light into the "OUT" port of the Pulse Effects Board

**31**



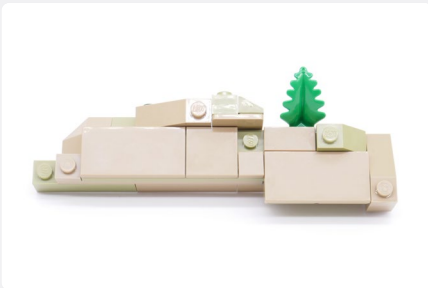
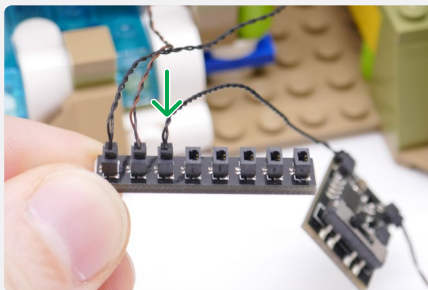
**NOTE**

Connect the 5cm Connecting Cable into the "IN" port of the Pulse Effects Board



**NOTE**

Ensure the switch on the Pulse Effects Board is in the indicated position

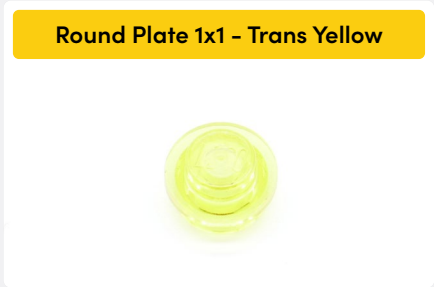


**White 30cm Bit Light**

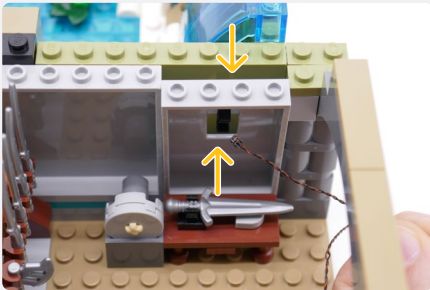




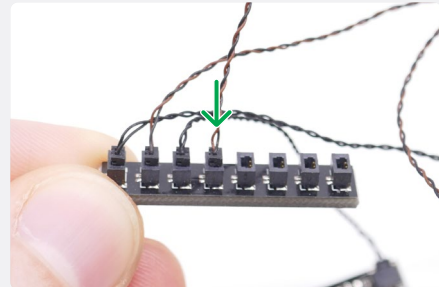
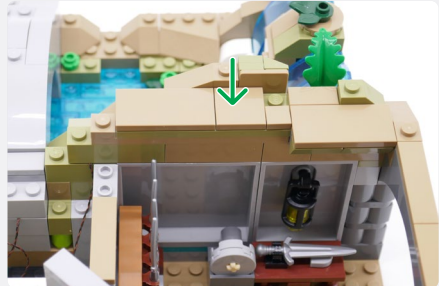
Round Plate 1x1 - Trans Yellow

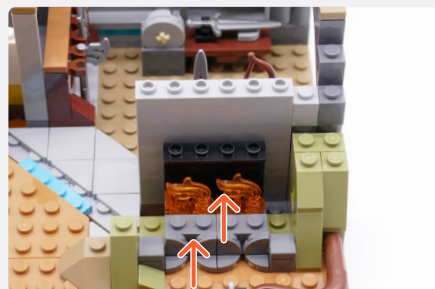


33



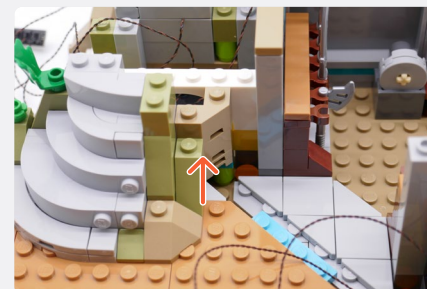
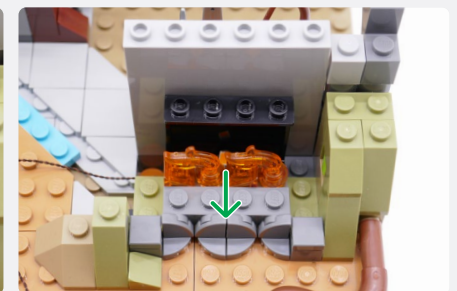
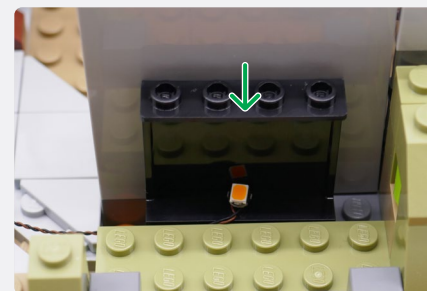
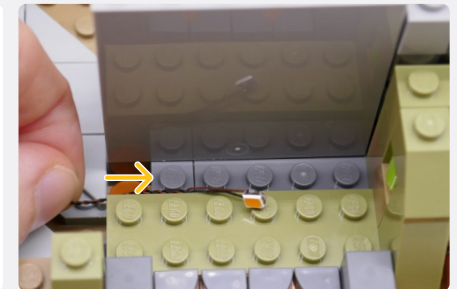
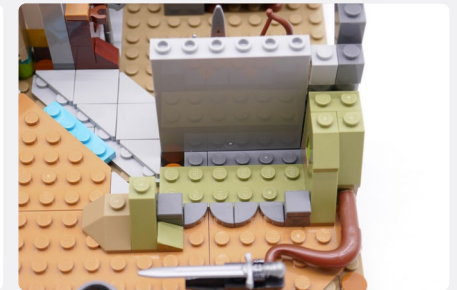
34



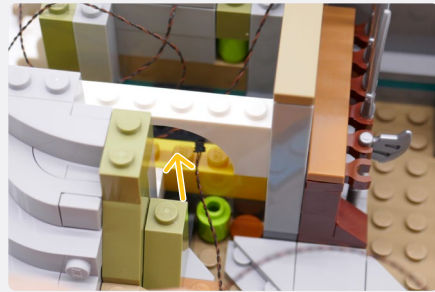
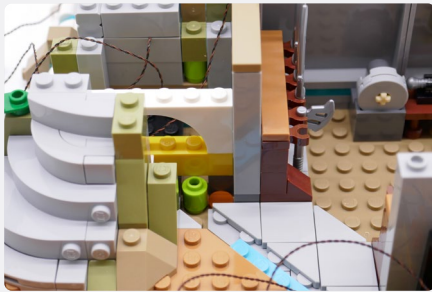


**35**

Orange 30cm Large Bit Light



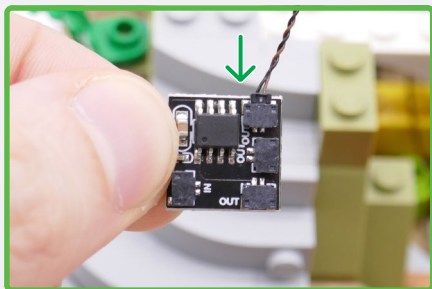




**Flicker Effects Board**

**NOTE**

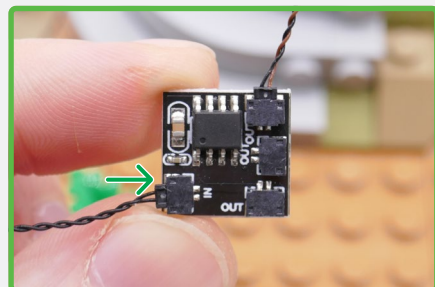
Connect the Orange 30cm Large Bit Light into the "OUT" port of the Flicker Effects Board



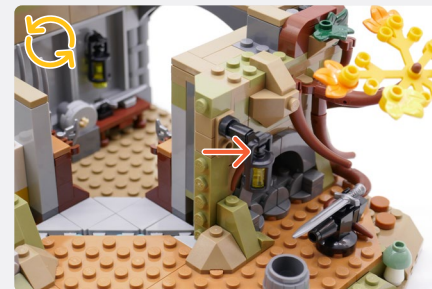
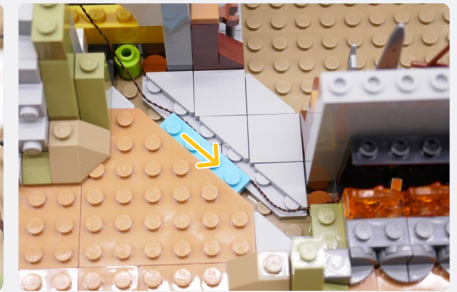
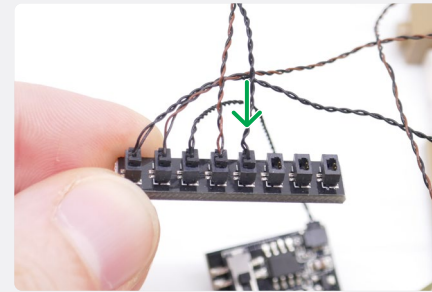
**5cm Connecting Cable**

**NOTE**

Connect the 5cm Connecting Cable into the "IN" port of the Flicker Effects Board

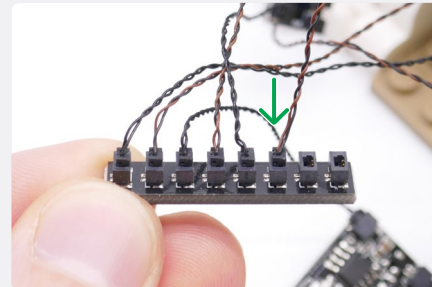
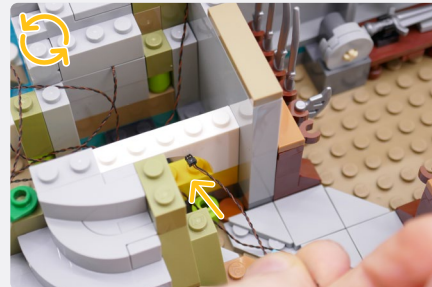
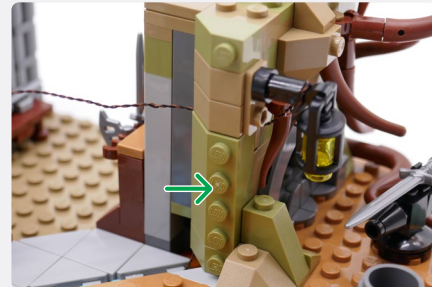
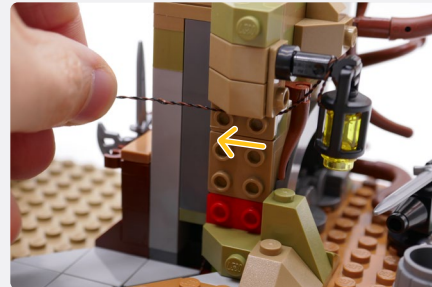
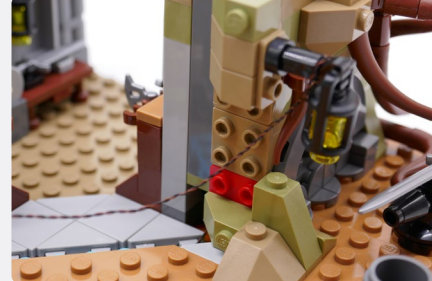
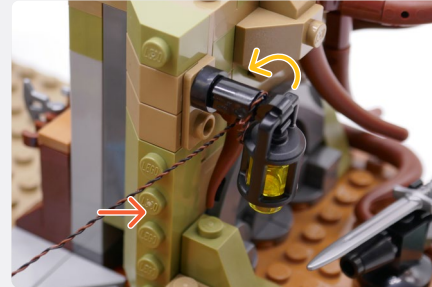
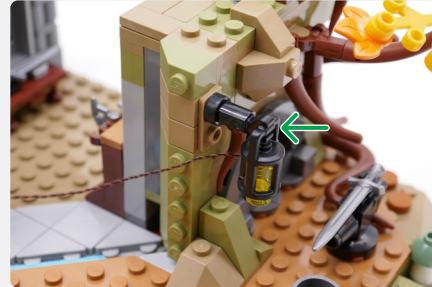
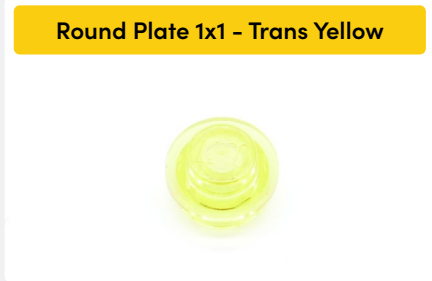


**36**

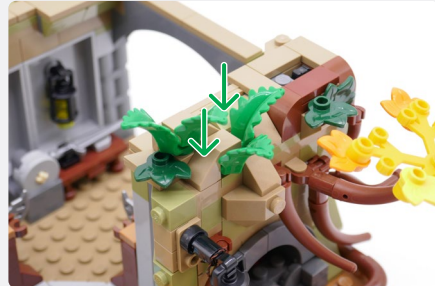
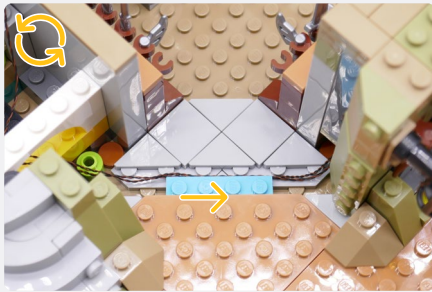


**White 30cm Bit Light**

**37**



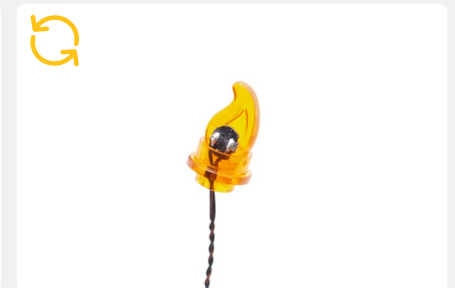
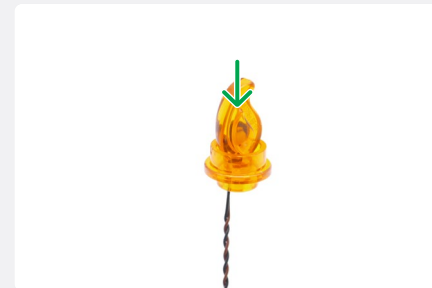
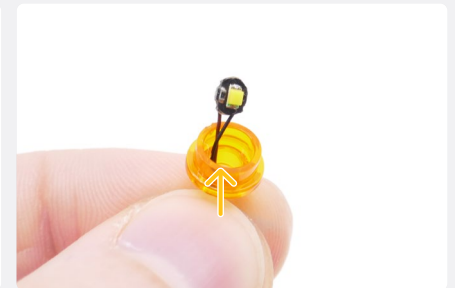




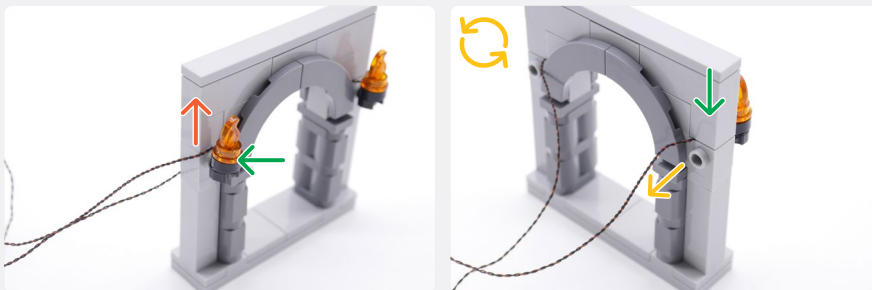
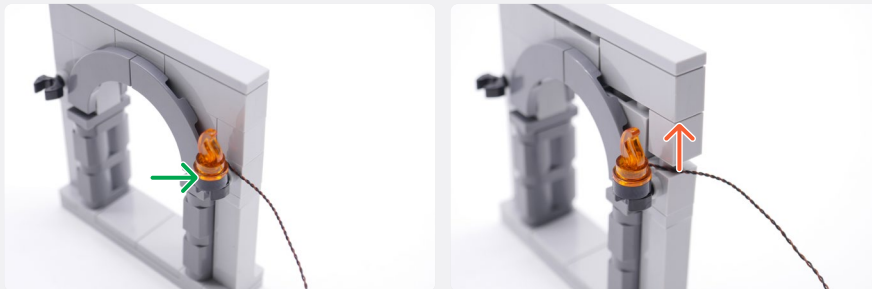
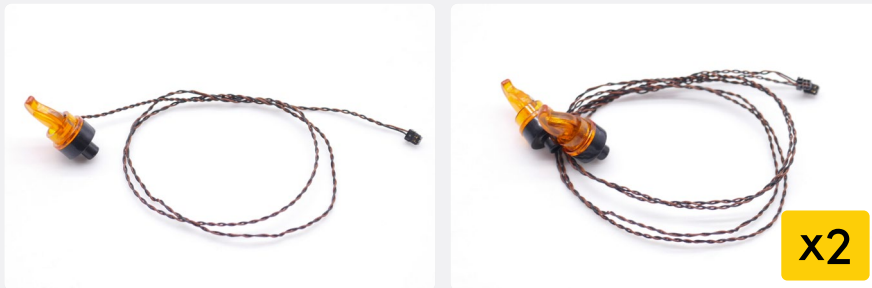
Round Plate 1x1 Open Stud - Trans Orange



White 30cm Bit Light

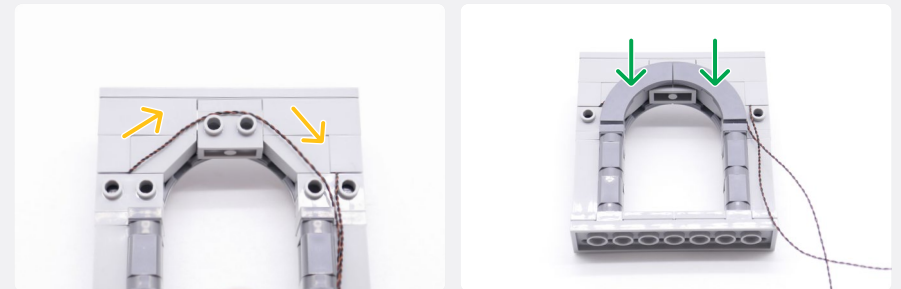


39



x2

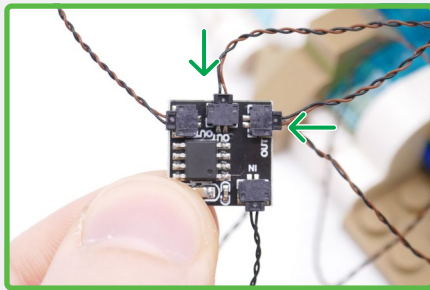
40



**NOTE**

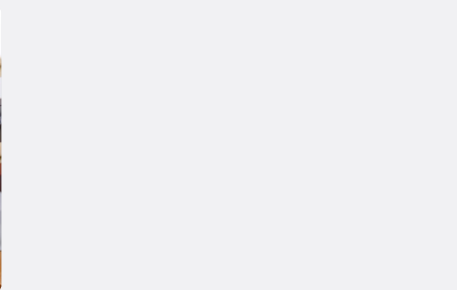
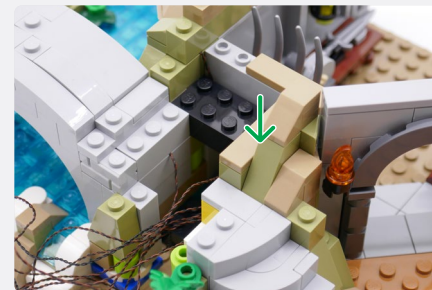
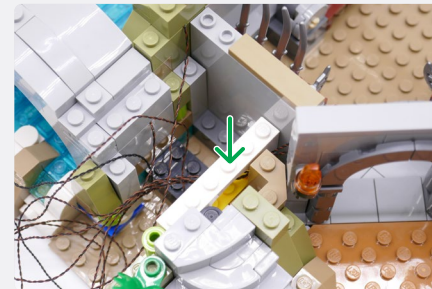
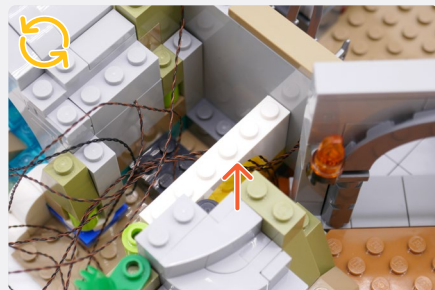
Connect the two White 30cm Bit Lights into the "OUT" ports of the Flicker Effects Board





**NOTE**

Slightly lift the light brown pieces if unable to get the archway back in place

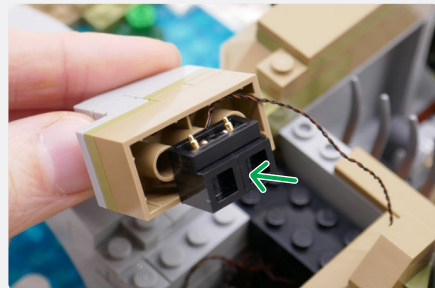
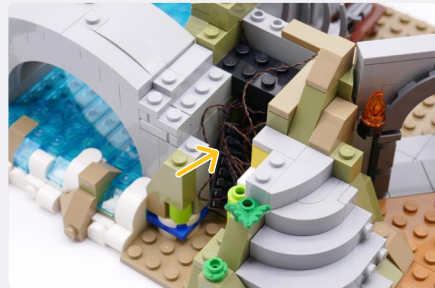
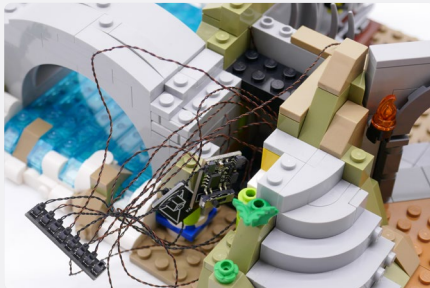
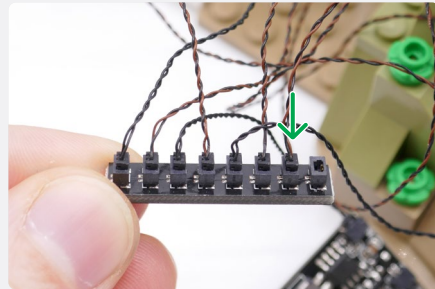
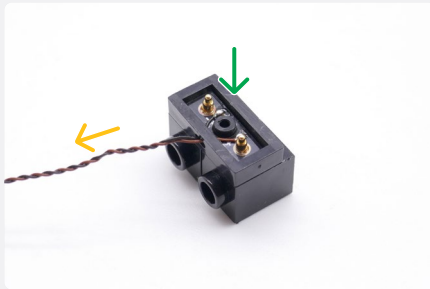


**41**

**Wireless Power Connector Plate**

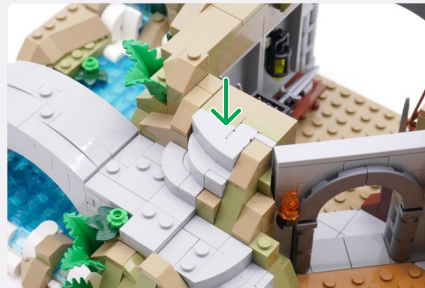
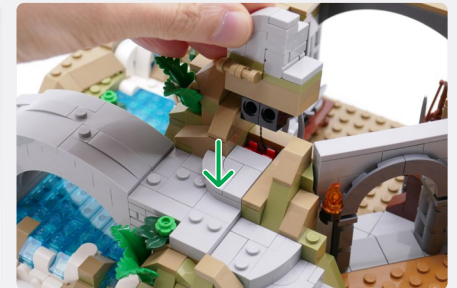
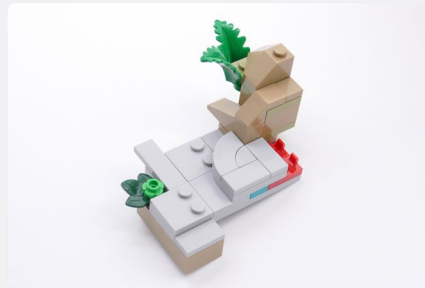
**2x Technic Brick 1x1 - Black**





**NOTE**

Hold the following section as shown



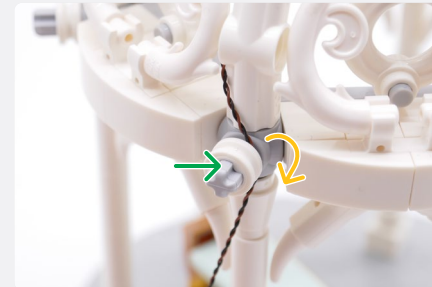
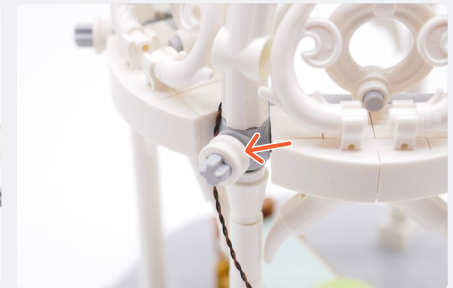
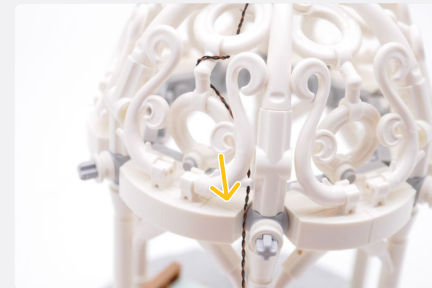
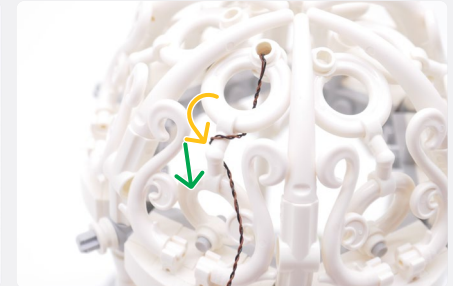
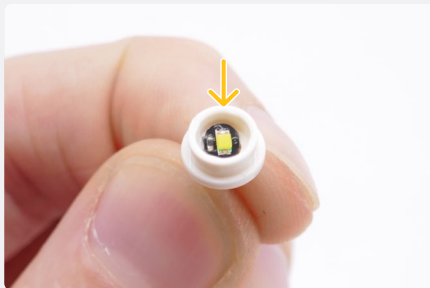
42



Round Plate 1x1 Open Stud - White

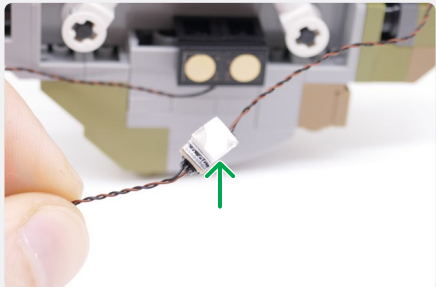
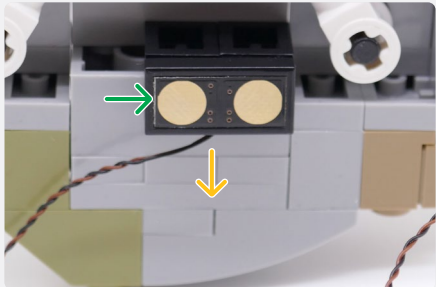
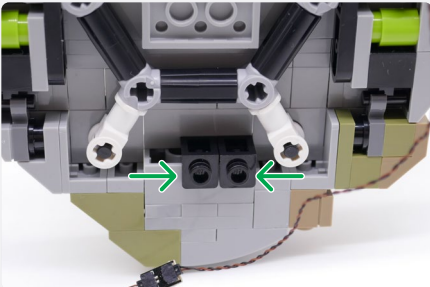
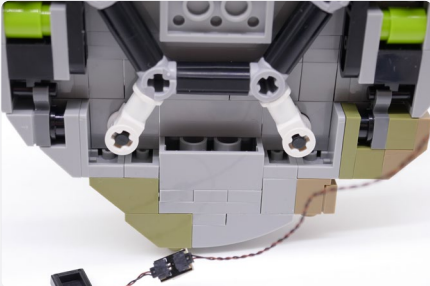
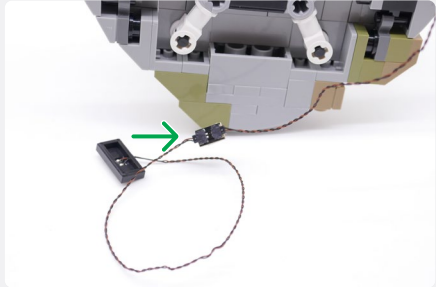
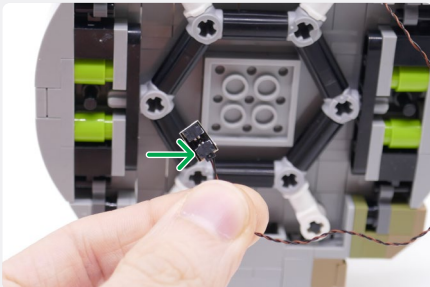
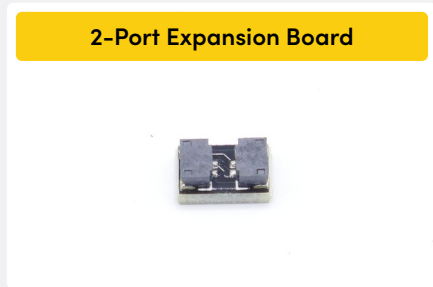
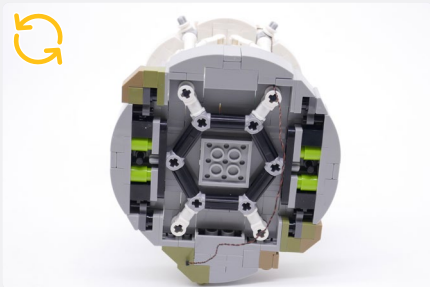
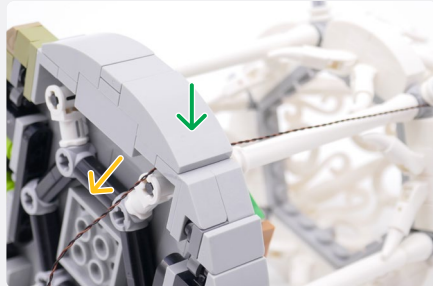
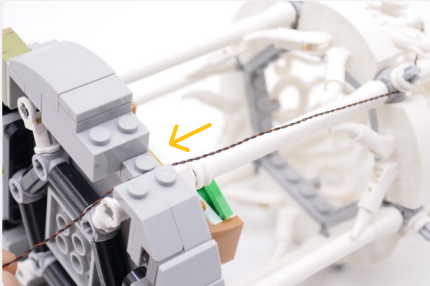
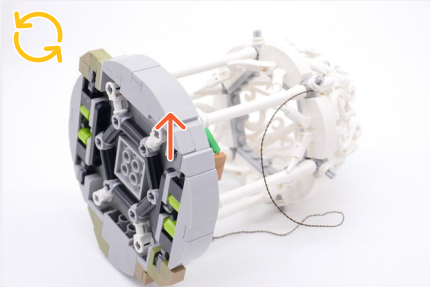


White 30cm Bit Light



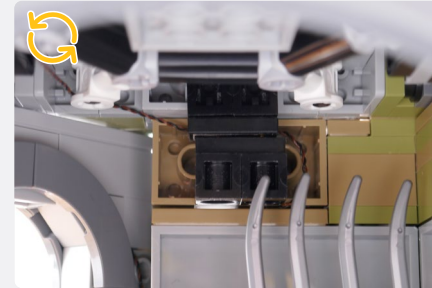
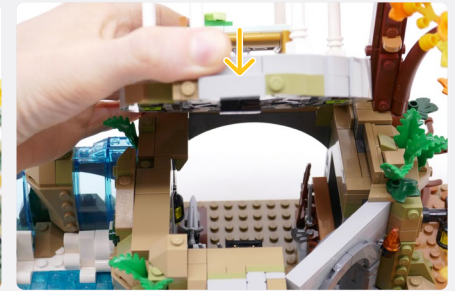
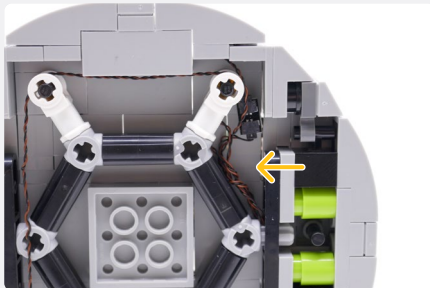
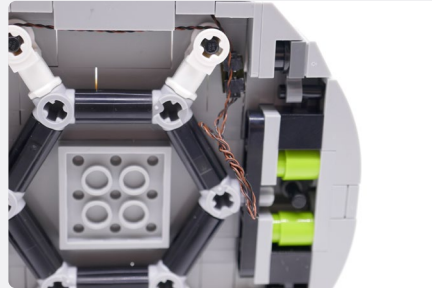
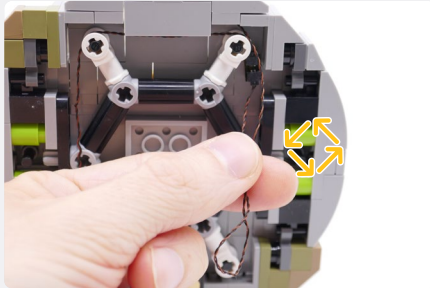
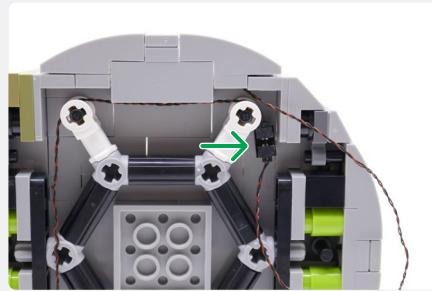
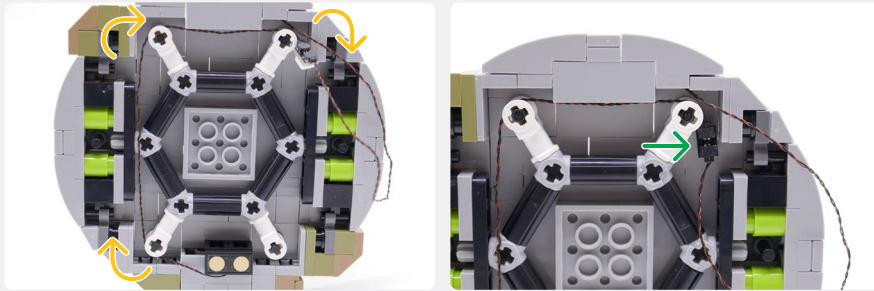


**43**





**44**



**2-Port Expansion Board**

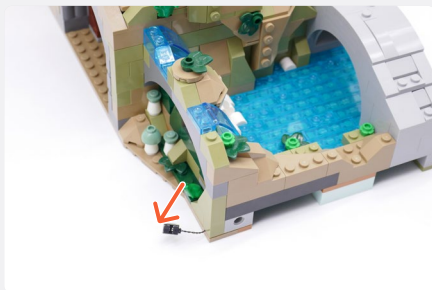
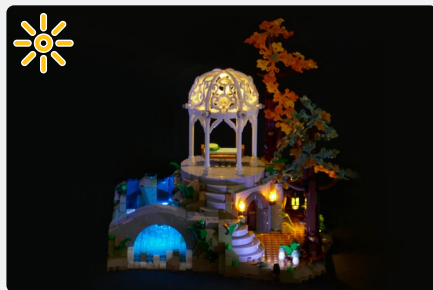
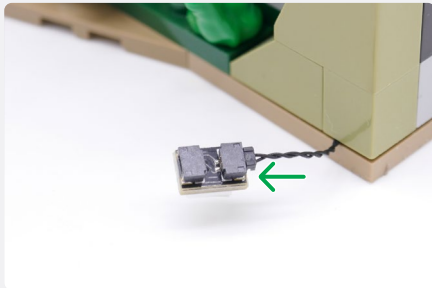
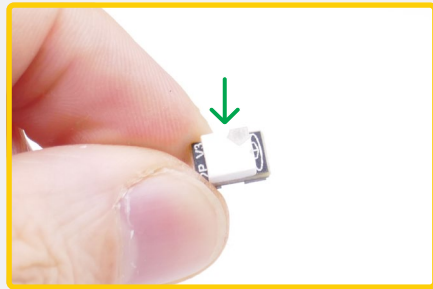


**Adhesive Square**

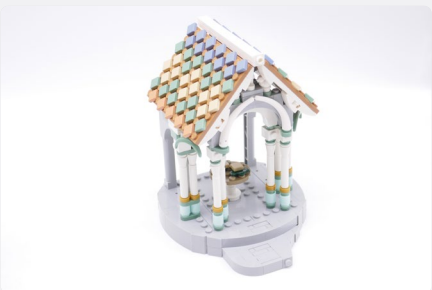


**NOTE**

Stick the Adhesive Square to the 2-Port Expansion Board but do not remove the peel yet, this will be in a later step.

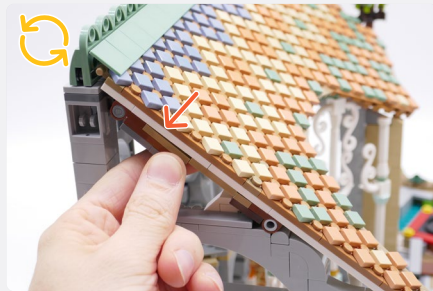



**45**





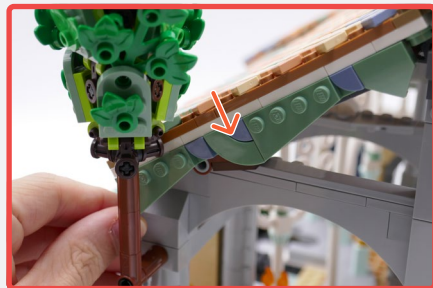
46



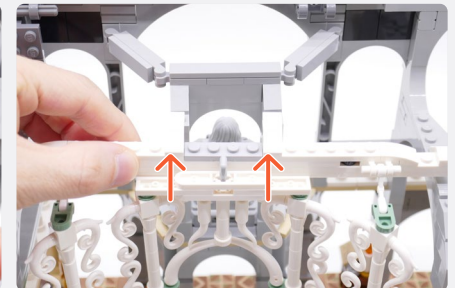
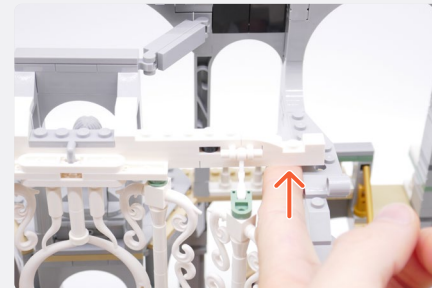
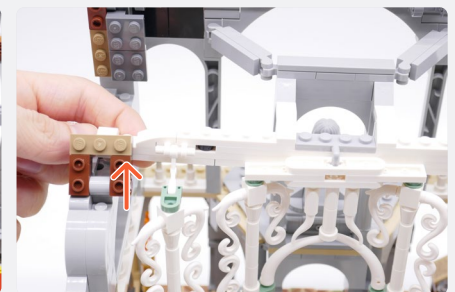
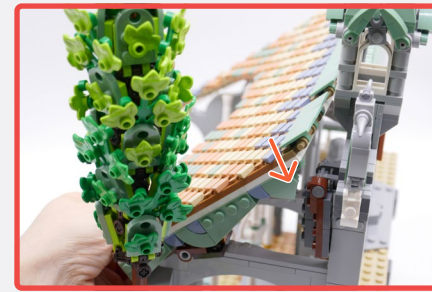


**NOTE**

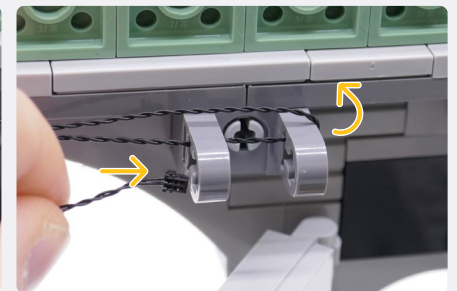
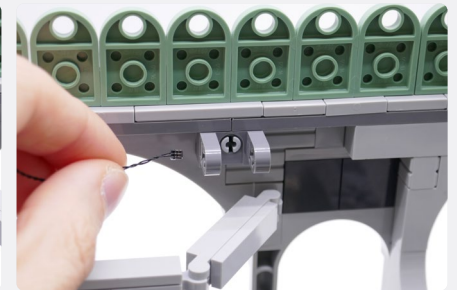
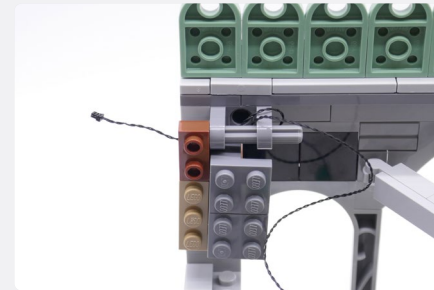
Be sure to hold the roof section when removing the connections as it will fall if not supported



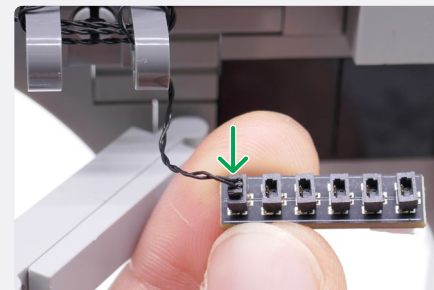
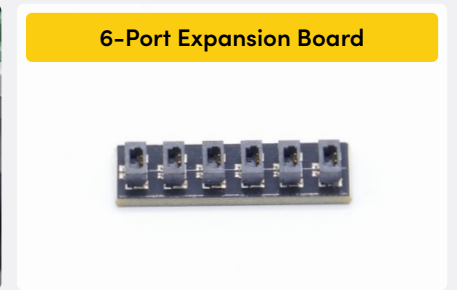
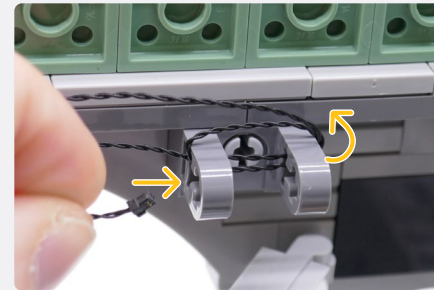
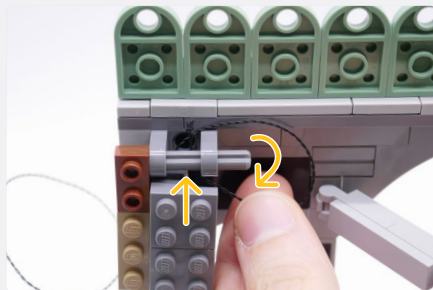
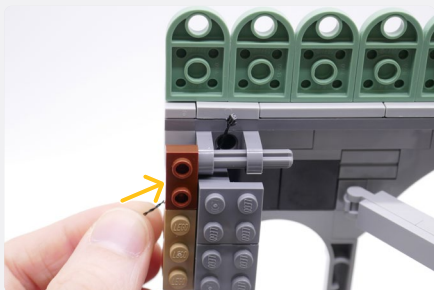
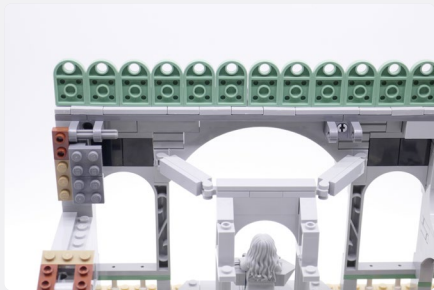
47







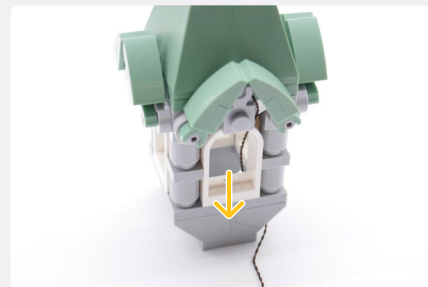
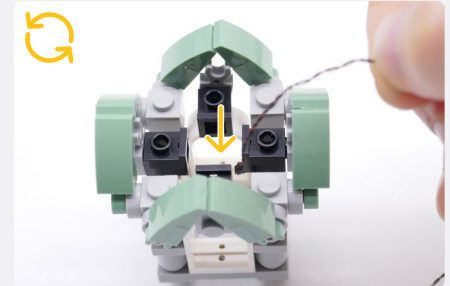
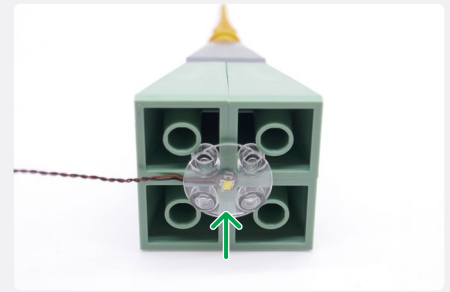
48



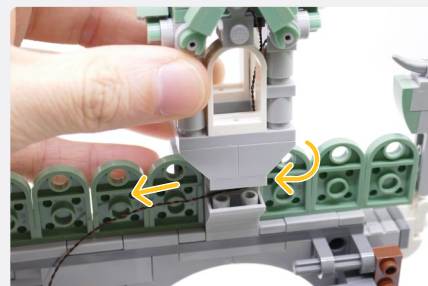
49



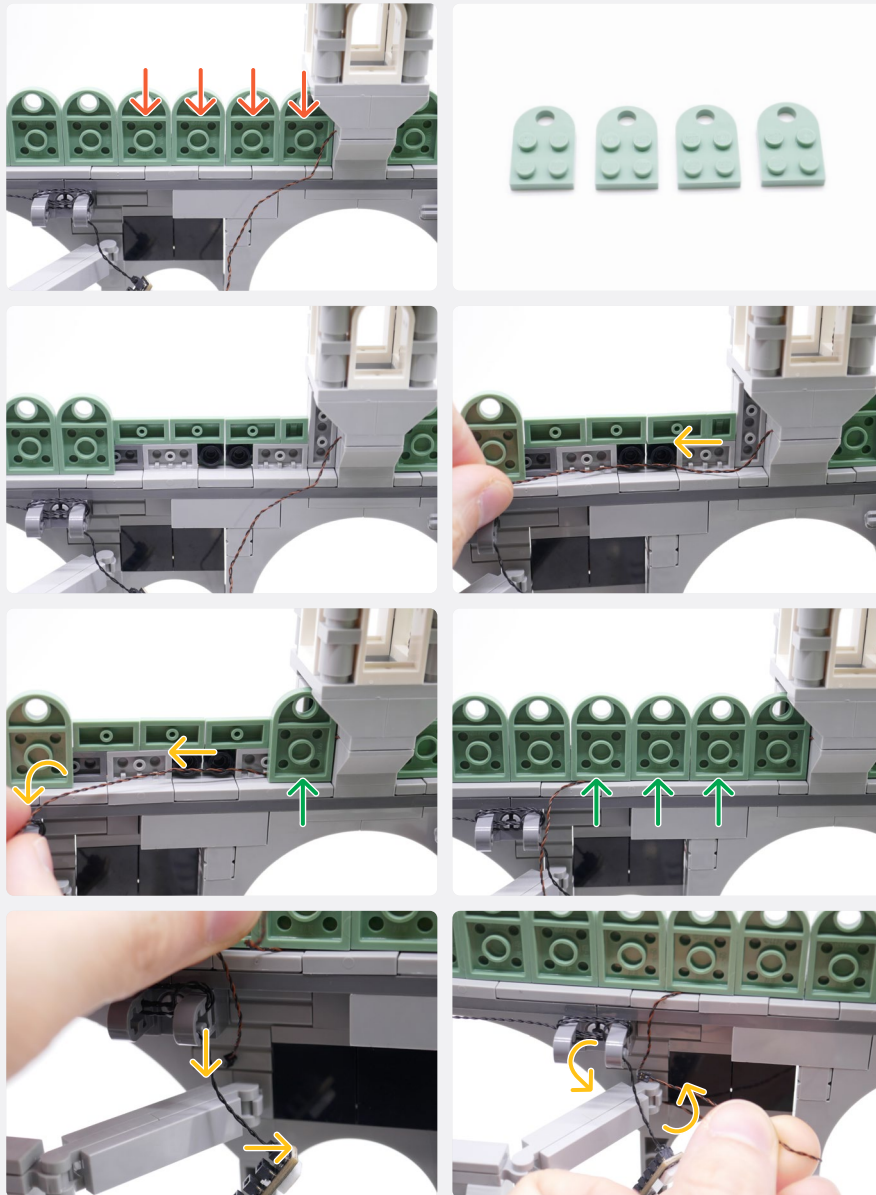
Plate 2x2 W/ Rounded Bottom - Trans Clear



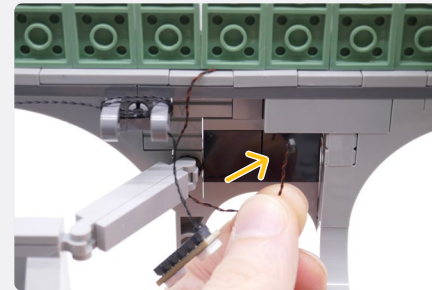
50



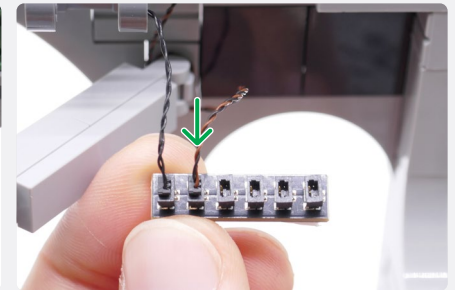




**51**



Round Plate 1x1 Open Stud - Black



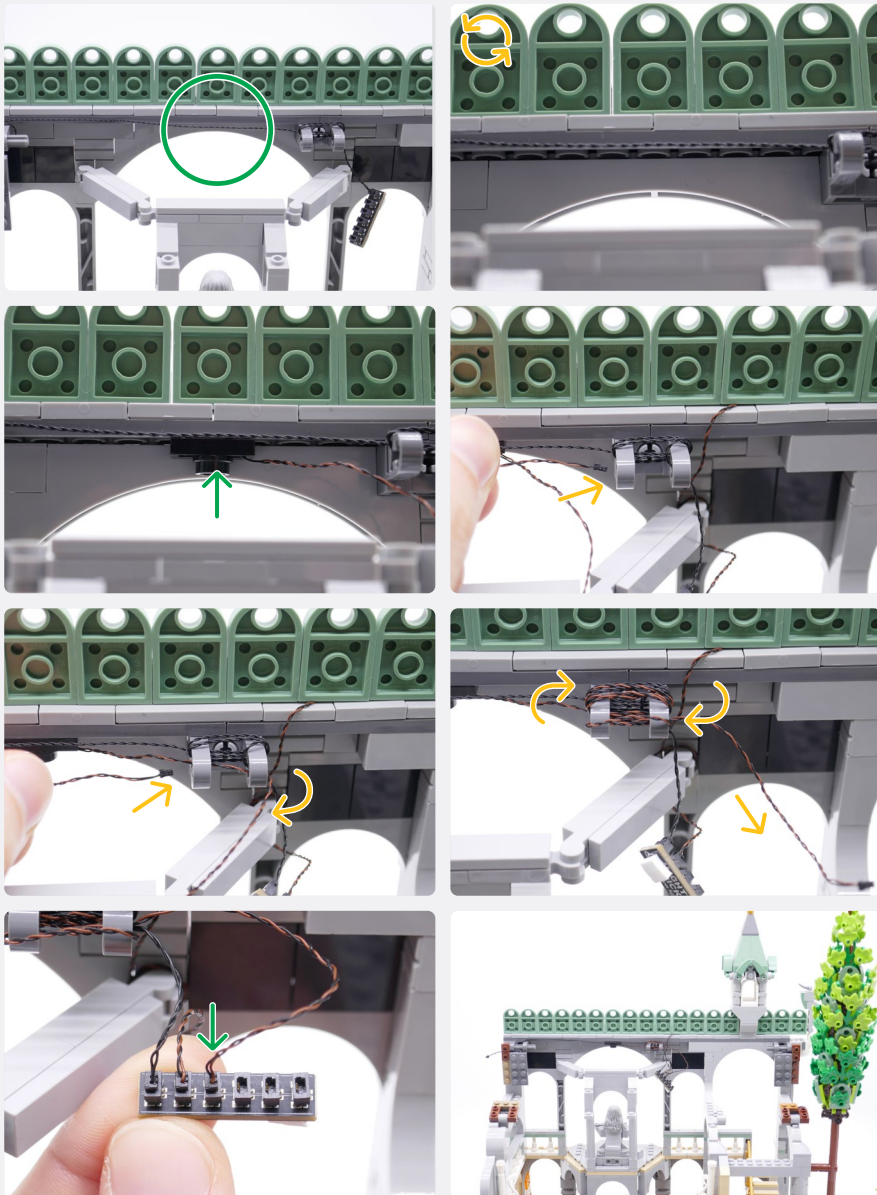
Cool White 30cm Bit Light



Plate 1x2 - Black







**52**

Round Plate 1x1 Open Stud - Black



Cool White 30cm Bit Light



Plate 1x1 Mod Rounded W/ Handle - Black

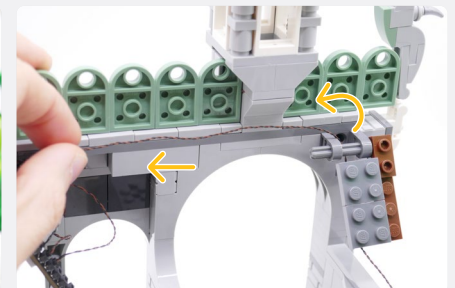
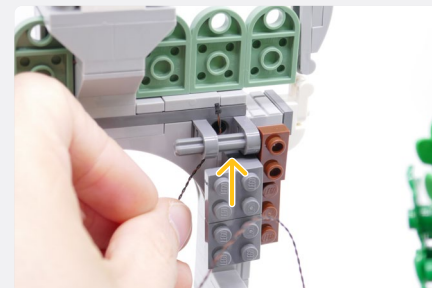
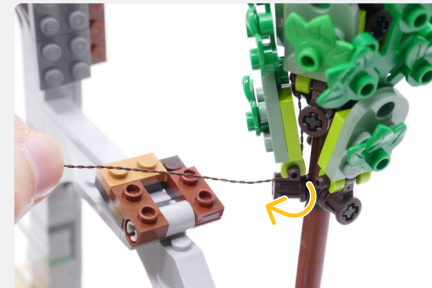
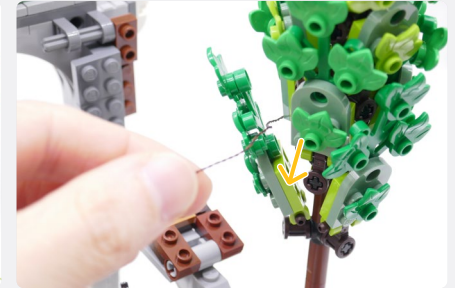
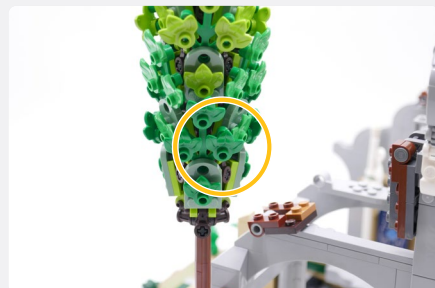
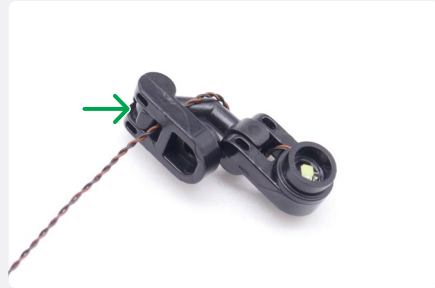


Arm Skeleton, Bent W/ Clips At 90 Degrees - Black





Plate 1x1 Mod Rounded W/ Handle - Black



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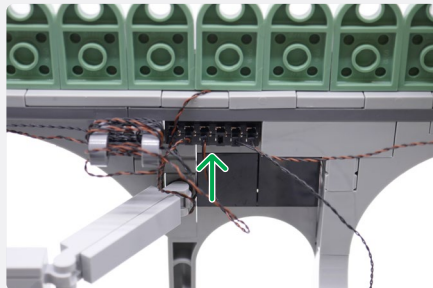
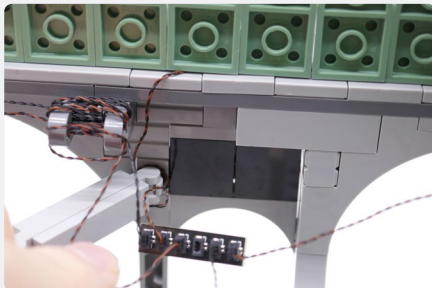
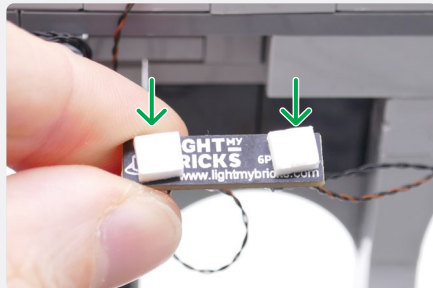
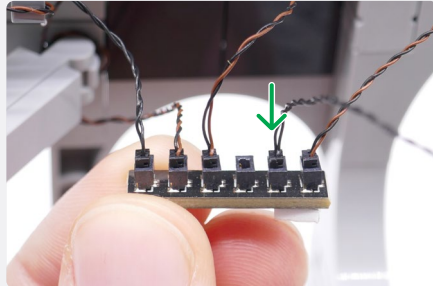
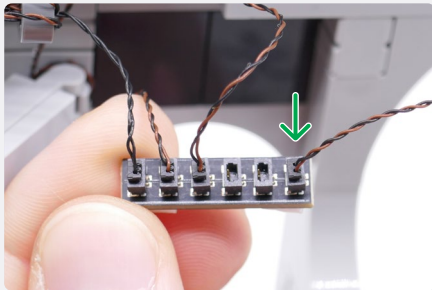


**54**

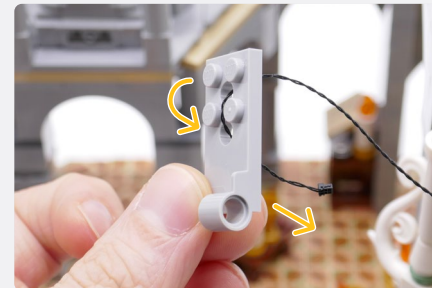
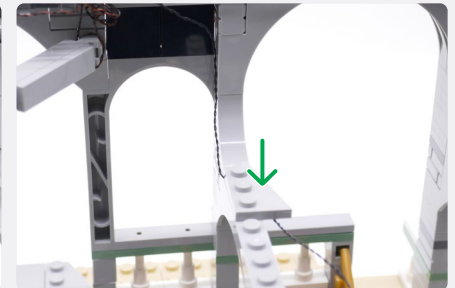
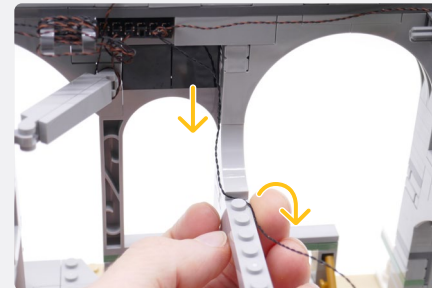
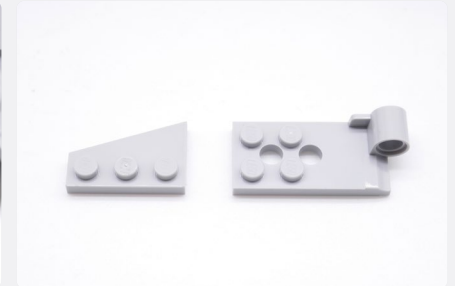
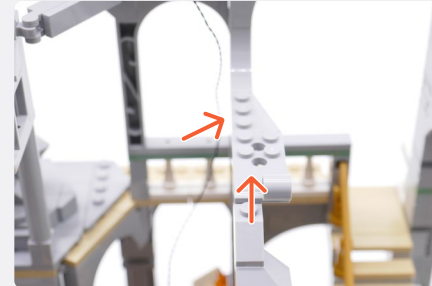
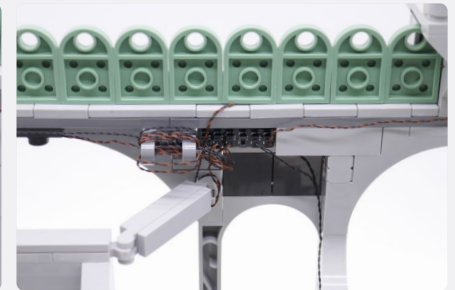
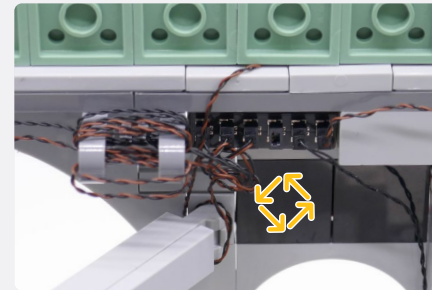
50cm Connecting Cable



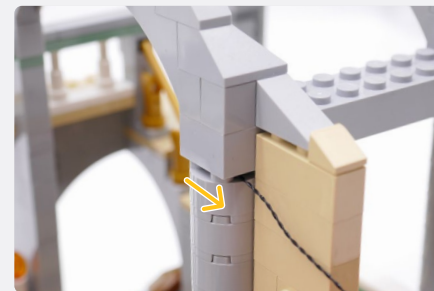
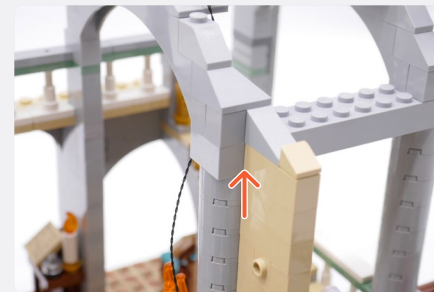
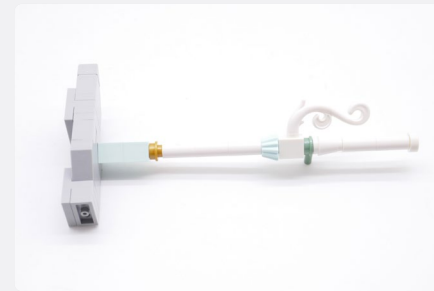
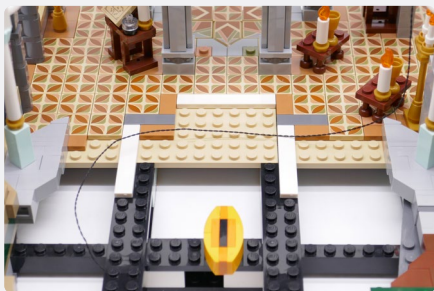
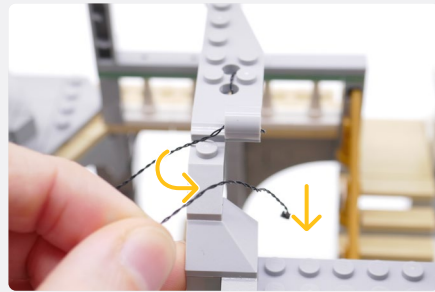
2x Adhesive Square



**55**



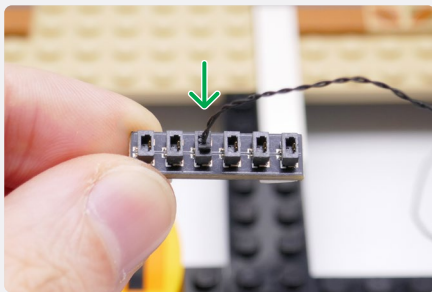




56

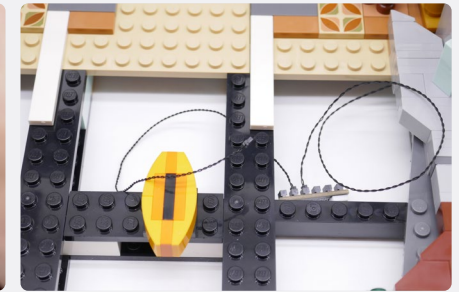
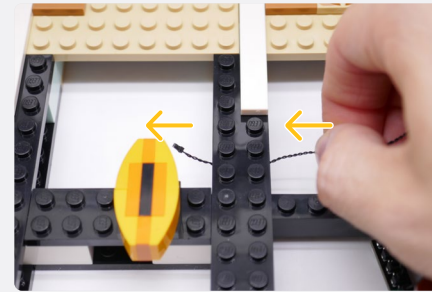
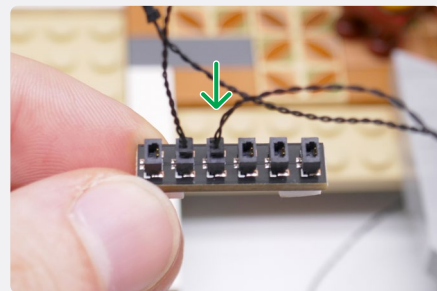


**6-Port Expansion Board**



**57**

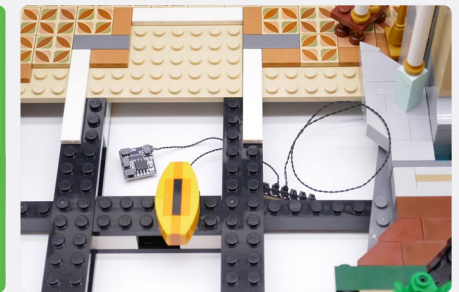
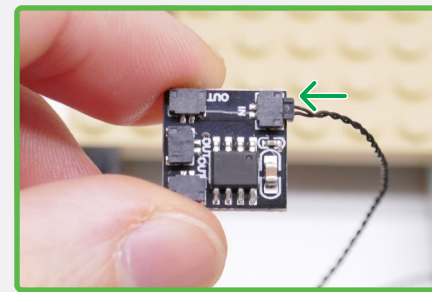
**15cm Connecting Cable**



**Flicker Effects Board**

**NOTE**

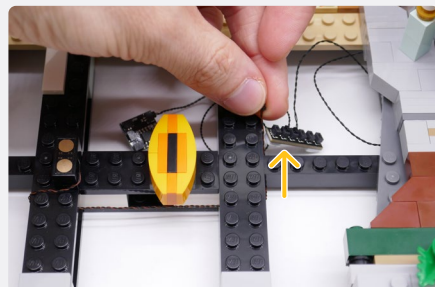
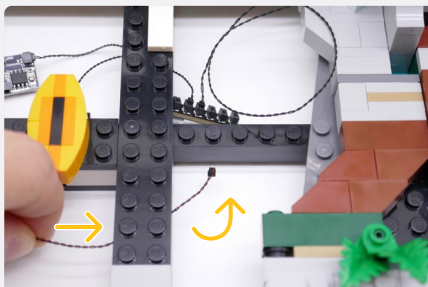
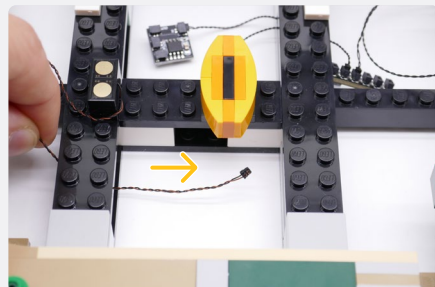
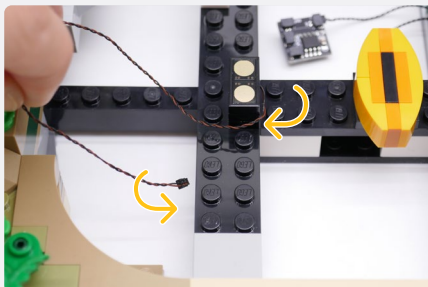
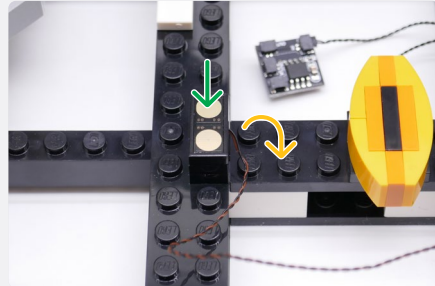
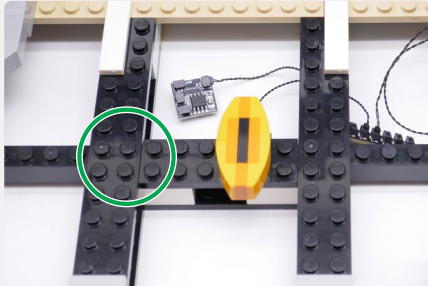
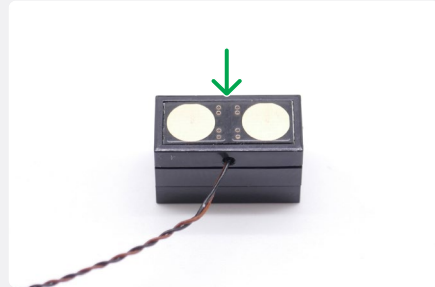
Connect the 15cm Connecting Cable into the "IN" port of the Flicker Effects Board



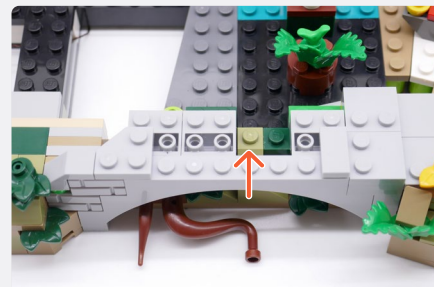
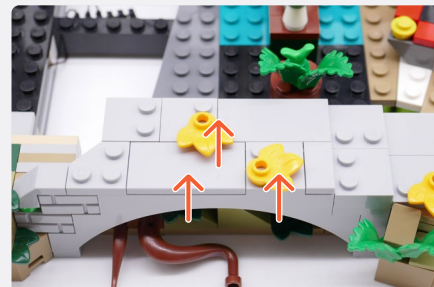
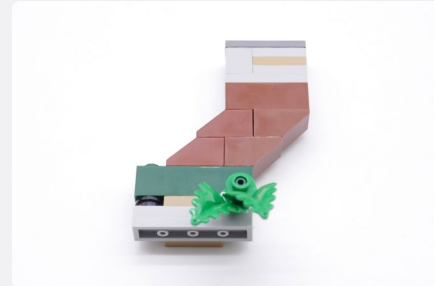
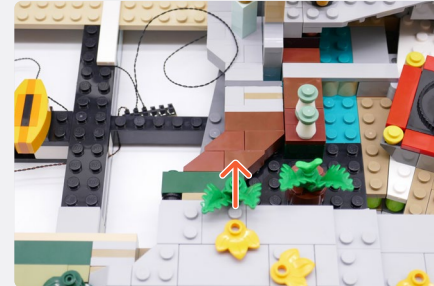
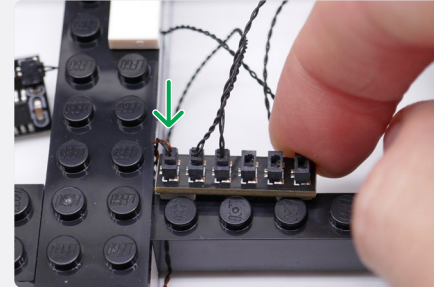
**58**

**2x Plate 1x2 - Black**





**59**





60

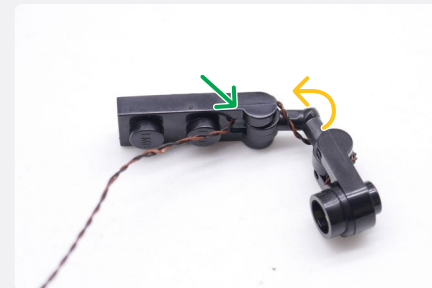
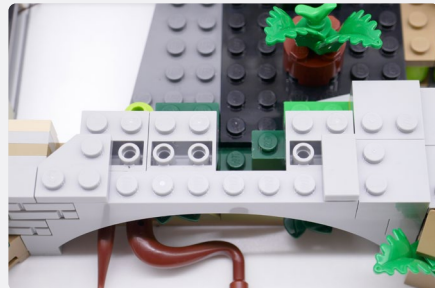
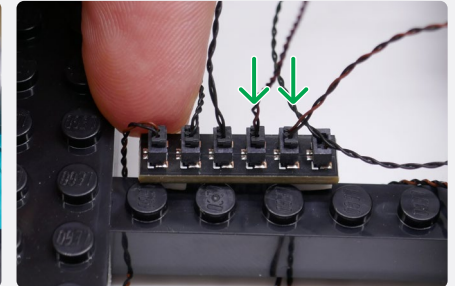
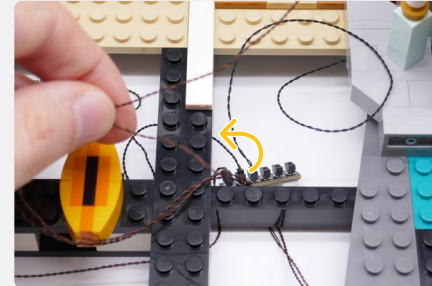
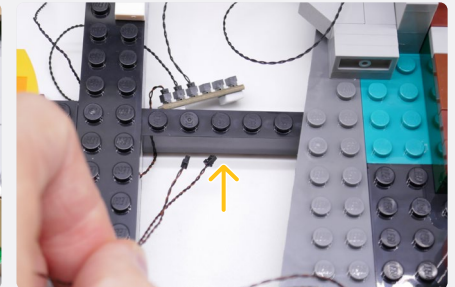
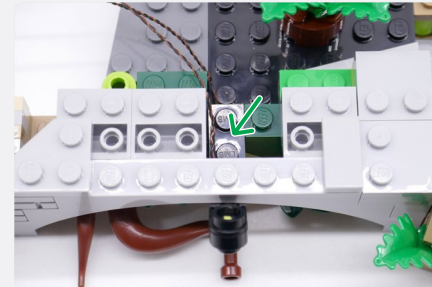
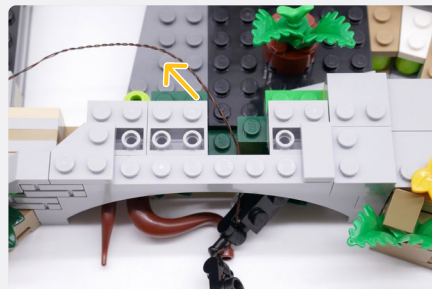
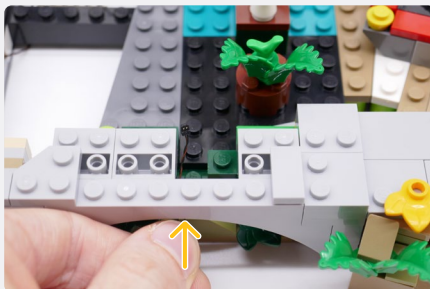




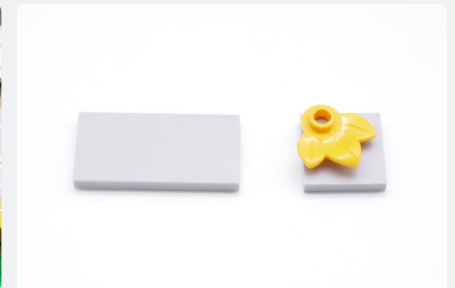
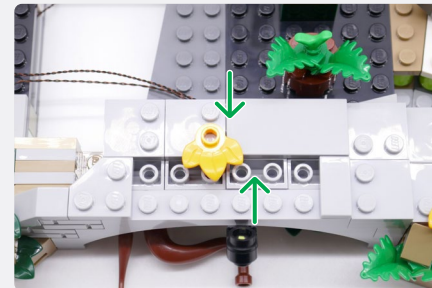
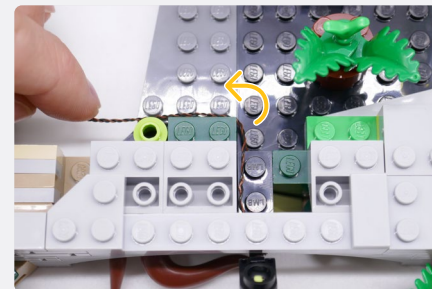
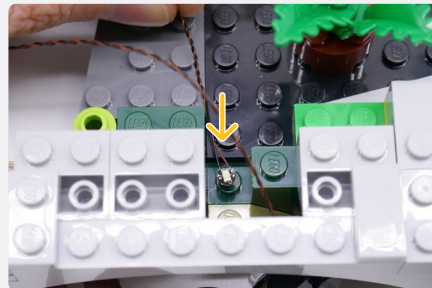
Plate 1x2 - Black



**61**



Light Blue 30cm Bit Light



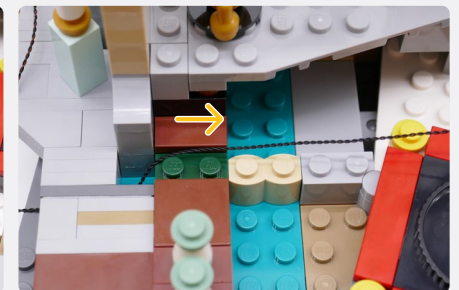
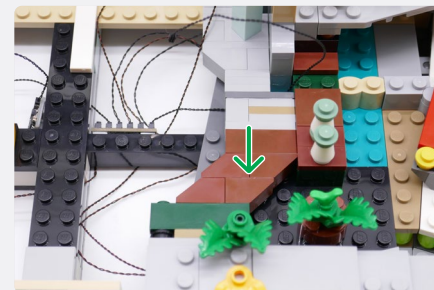
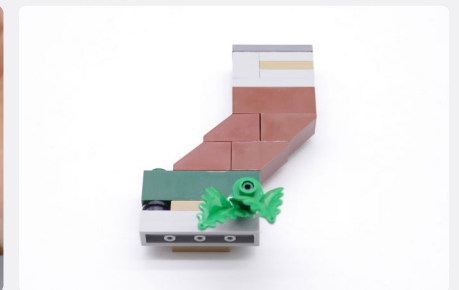
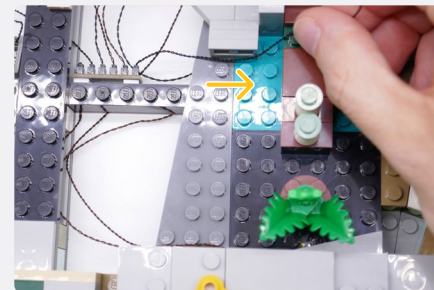
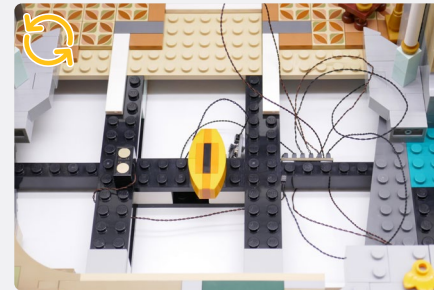
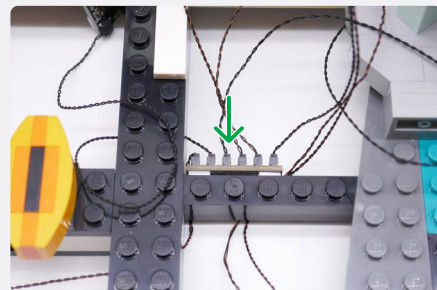
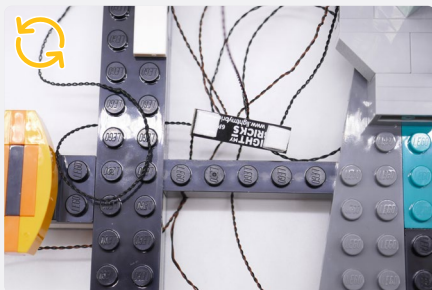
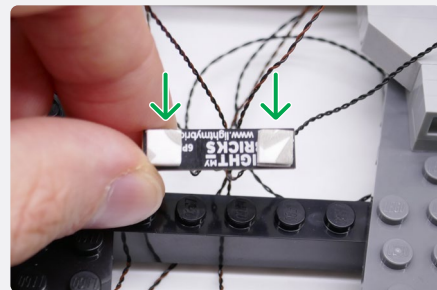
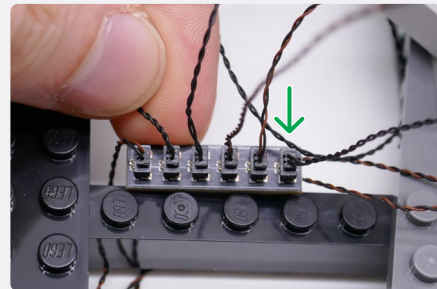


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15cm Connecting Cable

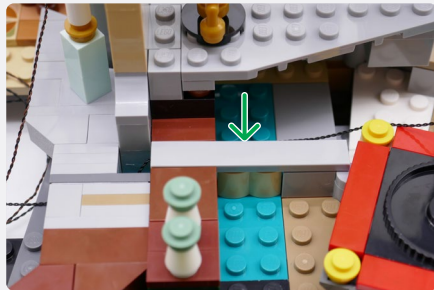


2x Adhesive Square

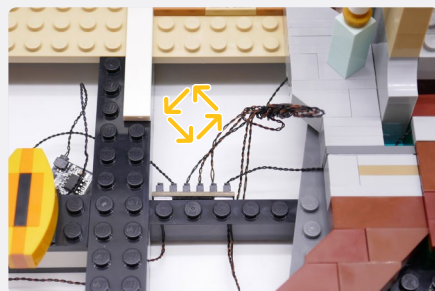
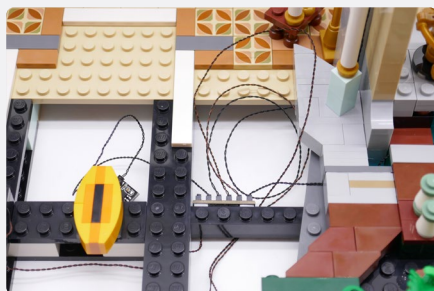
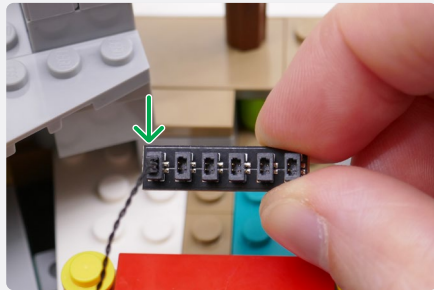




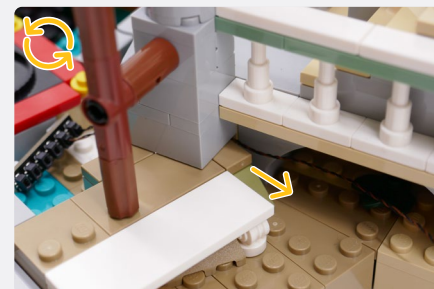
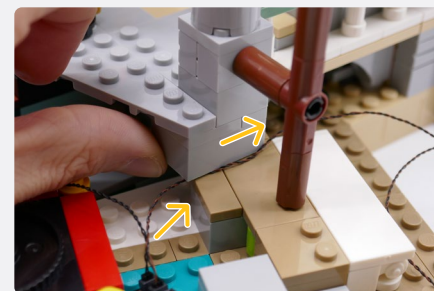
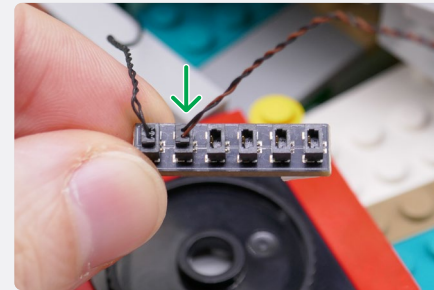
63



6-Port Expansion Board



USB Power Cable



64



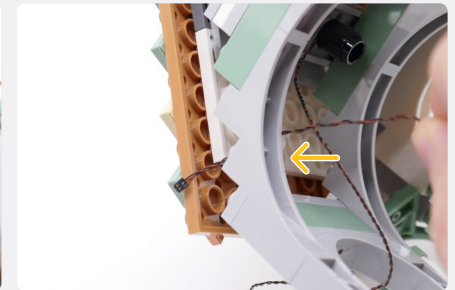
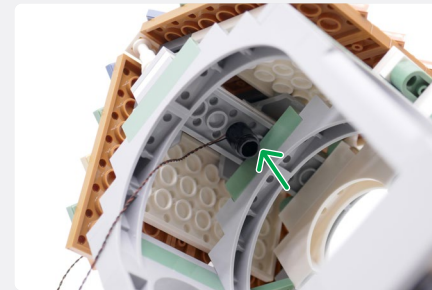
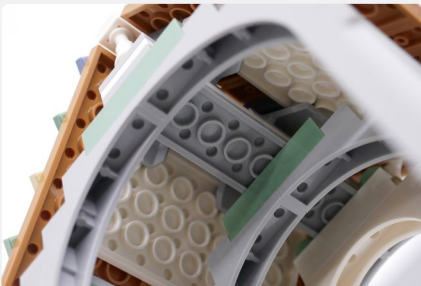
Brick Round 1x1 - Black



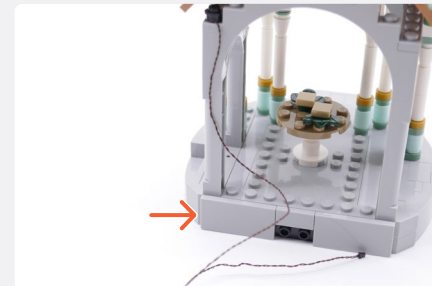
White 30cm Bit Light



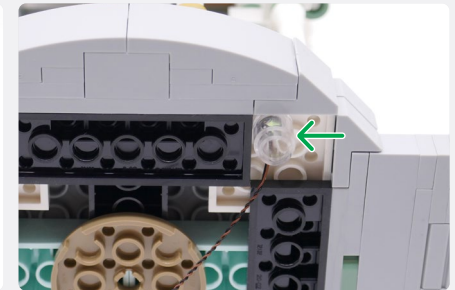
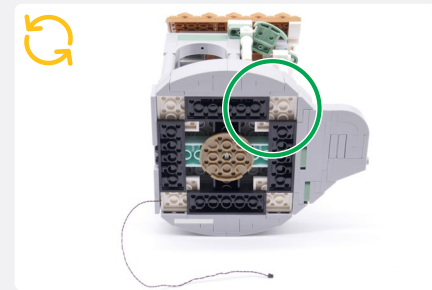
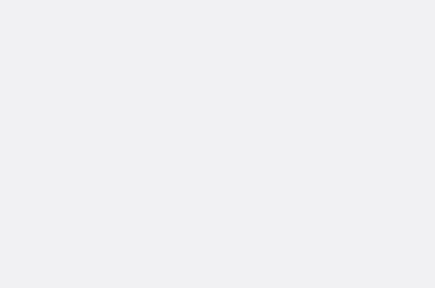
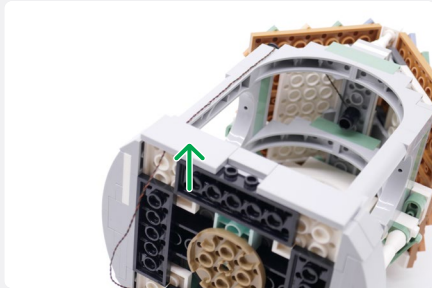
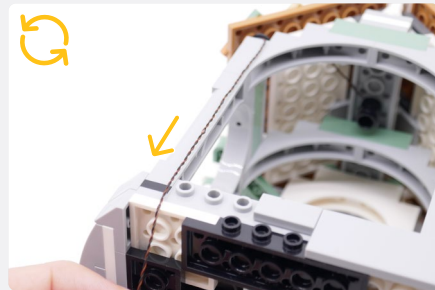
**NOTE**  
Position the LED as shown, ensuring it is close to the opening



Round Plate 1x1 Open Stud - Black







**65**

Brick Round 1x1 - Trans Clear

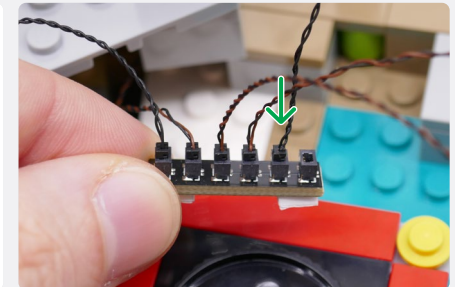
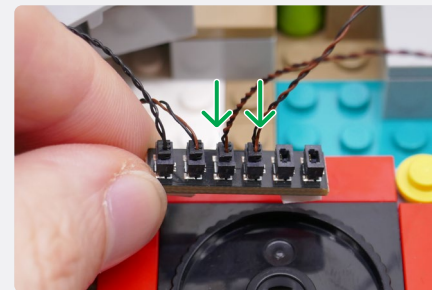


Light Blue 30cm Bit Light



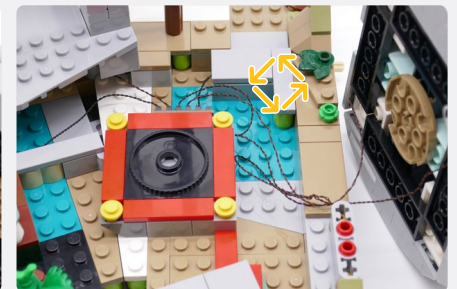
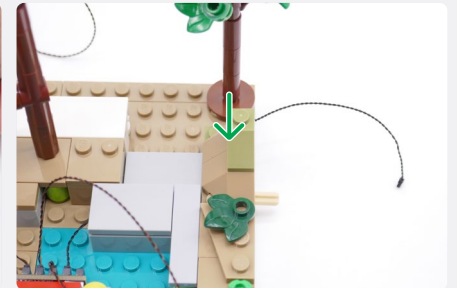
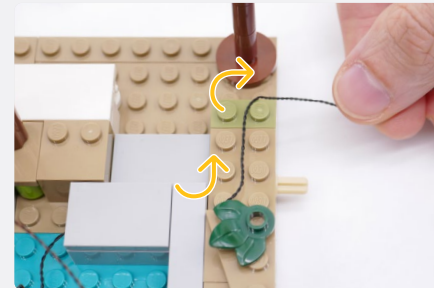
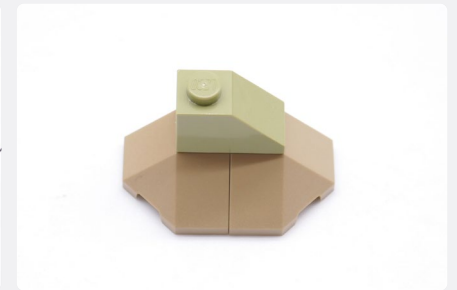
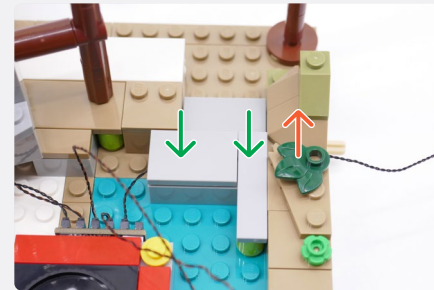
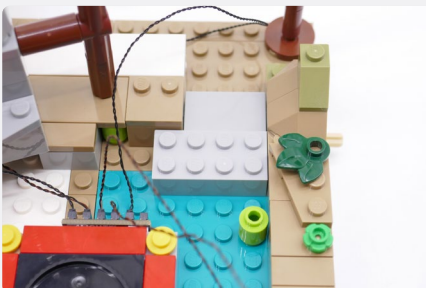
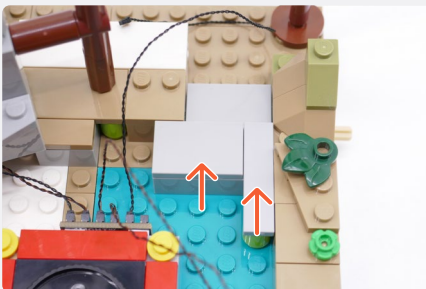
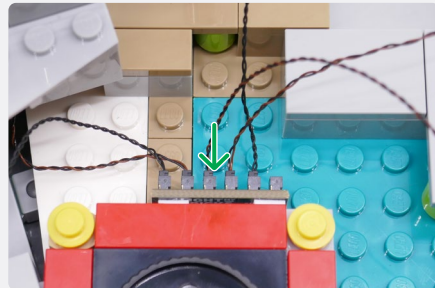
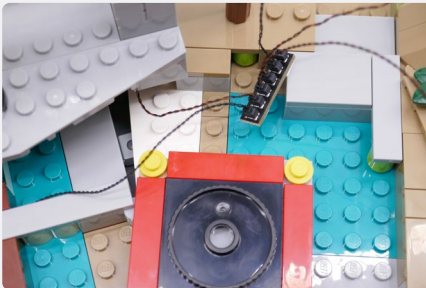
**66**

15cm Connecting Cable





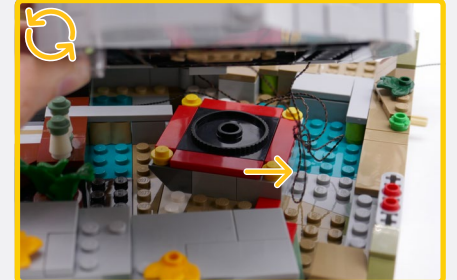
2x Adhesive Square

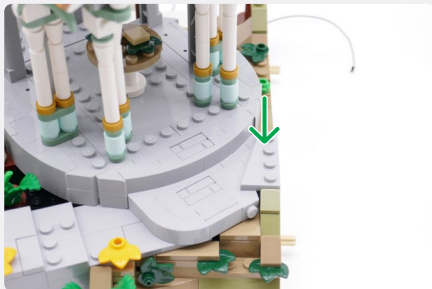



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NOTE

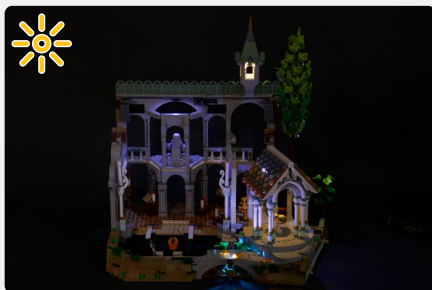
Ensure the cables are placed in the area around the red platform, so they do not get crushed in between






 **NOTE**


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



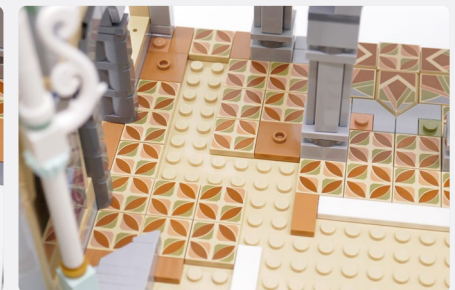
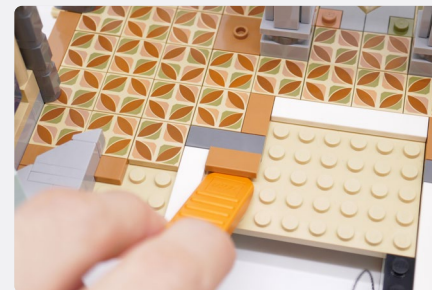
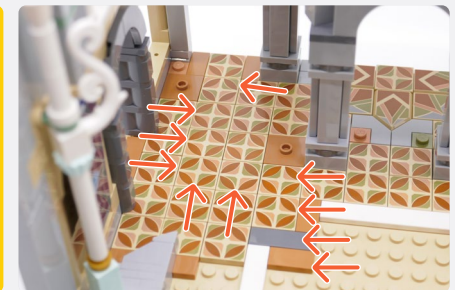
**!** If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion board issues in our troubleshooting section. 

# 68



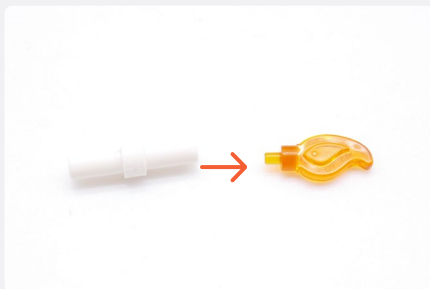
 **NOTE**

Use the LEGO Brick Separator Tool or similar to pry up the tiles and pieces

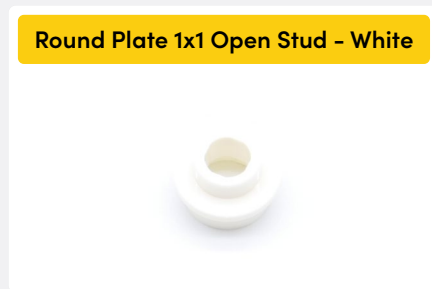




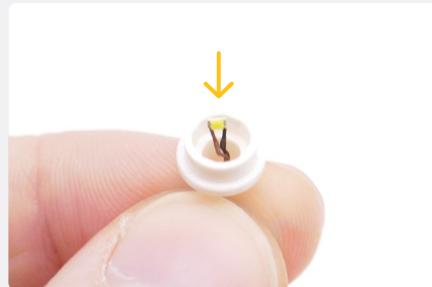
69



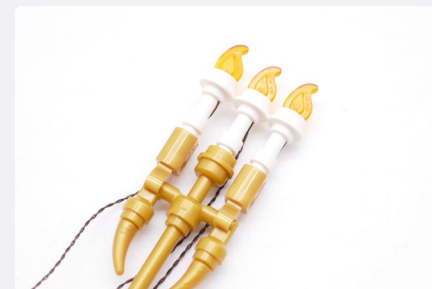
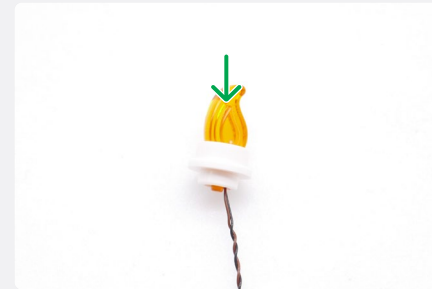
Round Plate 1x1 Open Stud - White



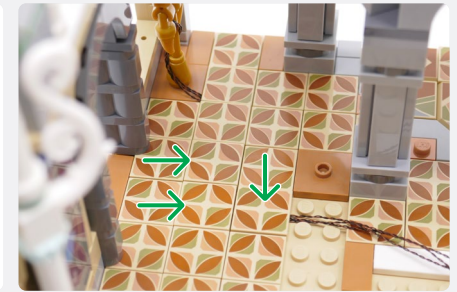
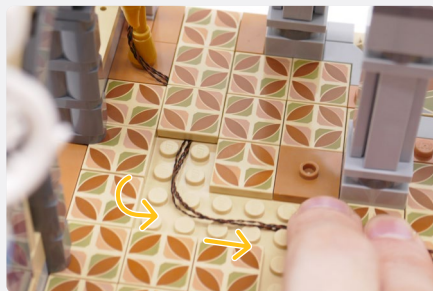
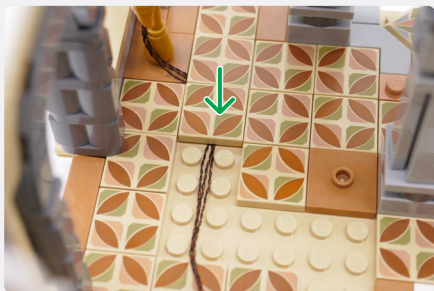
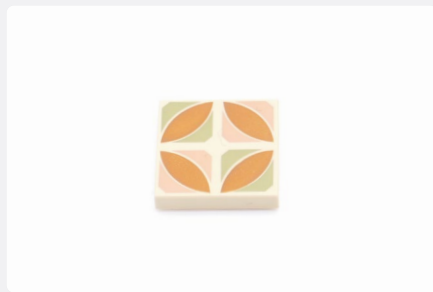
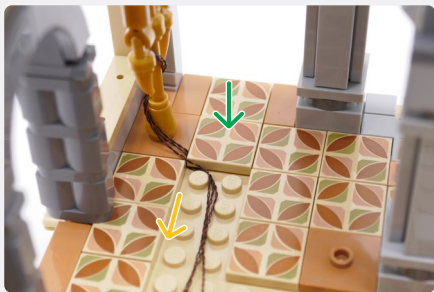
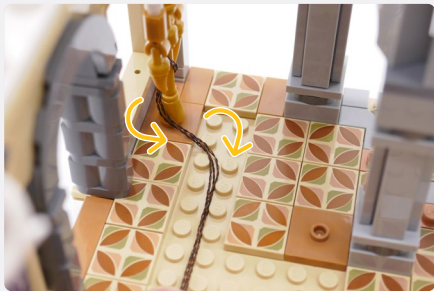
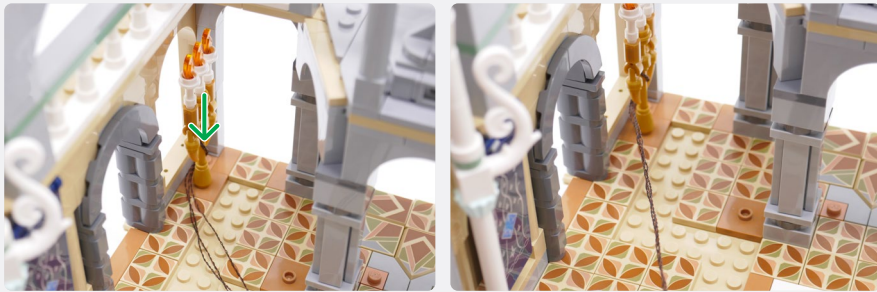
White 30cm Micro Bit Light



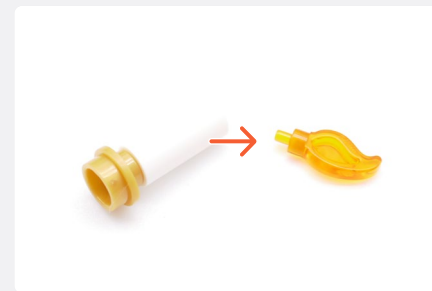
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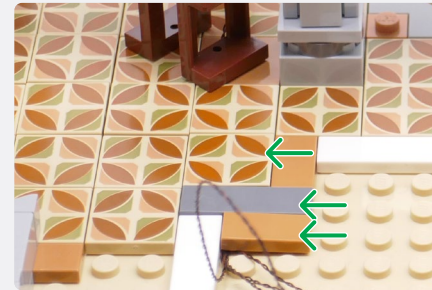
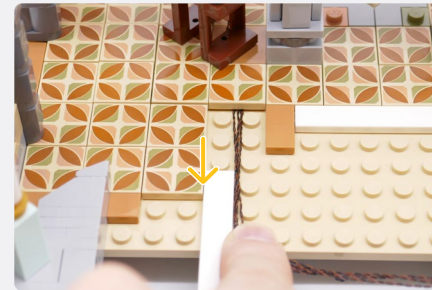
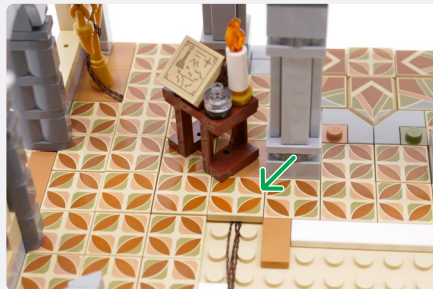
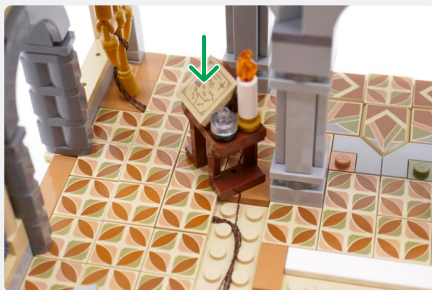
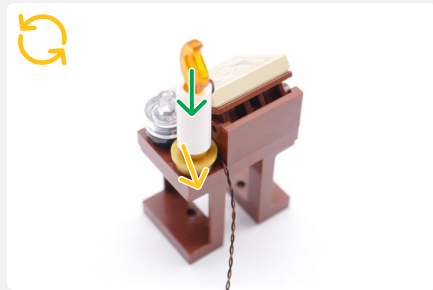
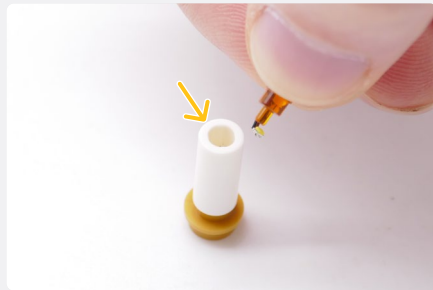
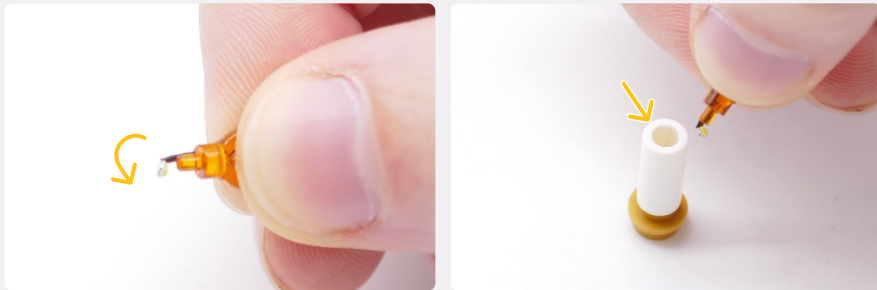






**71**





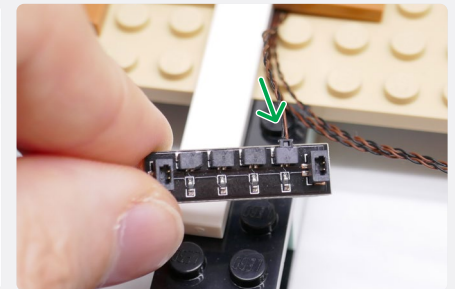
72

**NOTE**


Connect the shortest Micro Bit Light cable into a 4-Port Micro Expansion Board



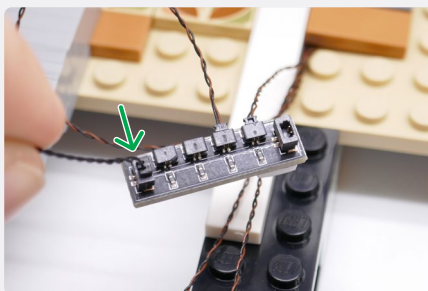
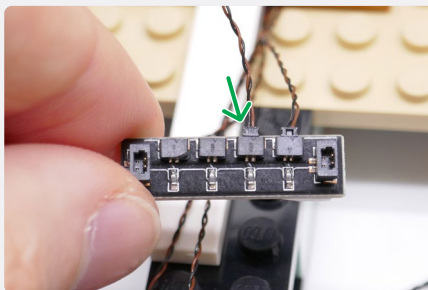
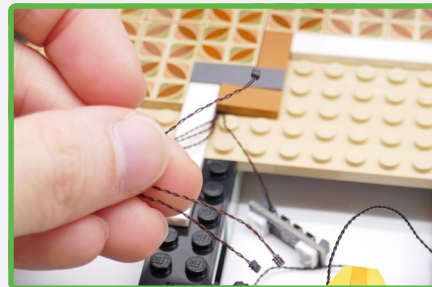
**4-Port Micro Expansion Board**






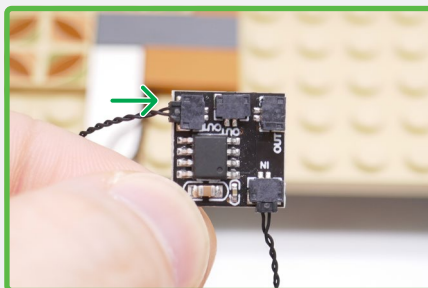
 **NOTE**


Connect ONE of the three remaining Micro Bit Light cables into the same 4-Port Micro Expansion Board



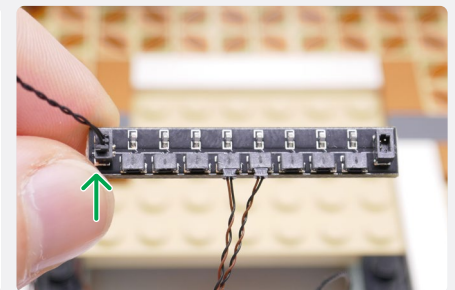
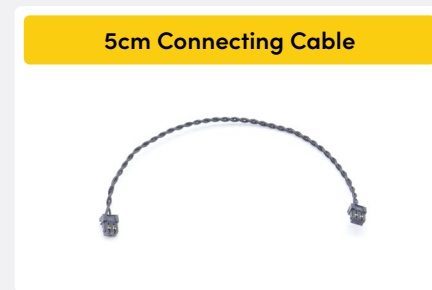
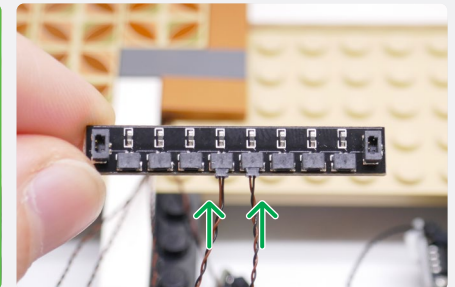
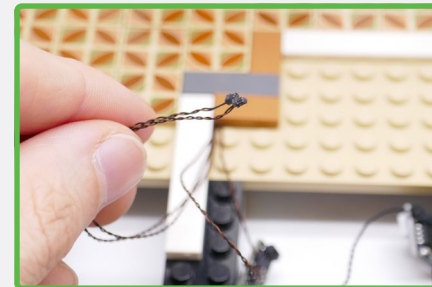
 **NOTE**


Connect the 5cm Connecting Cable into the "OUT" port of the Flicker Effects Board from Step 57



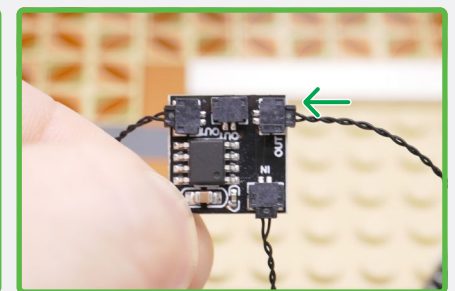
 **NOTE**

Connect the two remaining Micro Bit Light cables into an 8-Port Micro Expansion Board



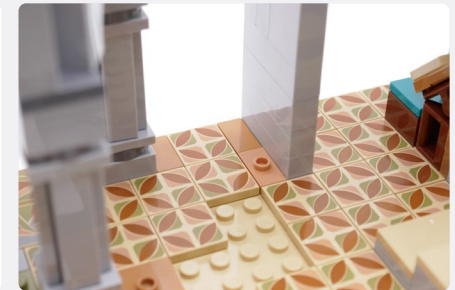
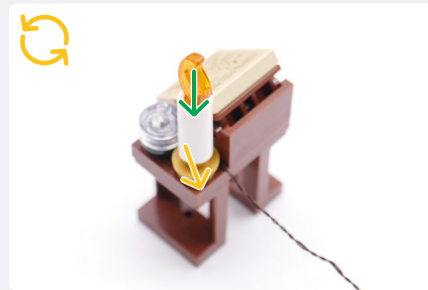
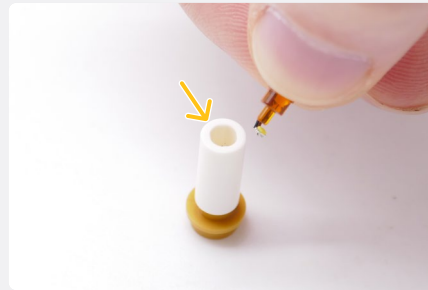
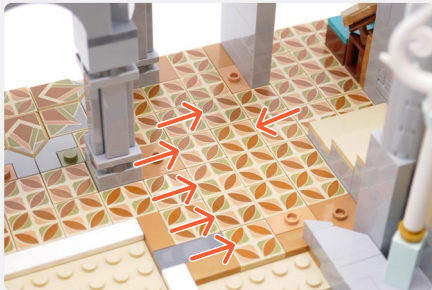
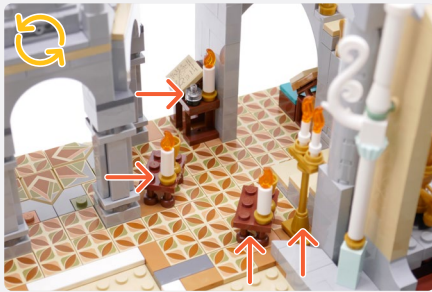
 **NOTE**

Connect the 5cm Connecting Cable into the "OUT" port of the same Flicker Effects Board

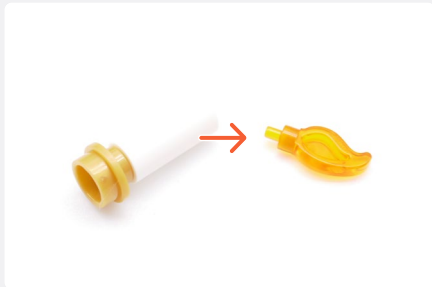
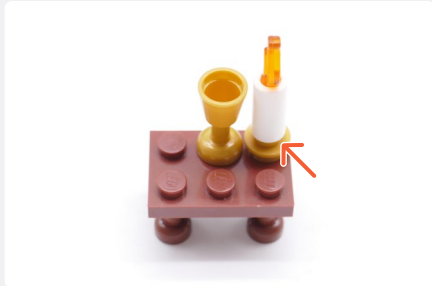
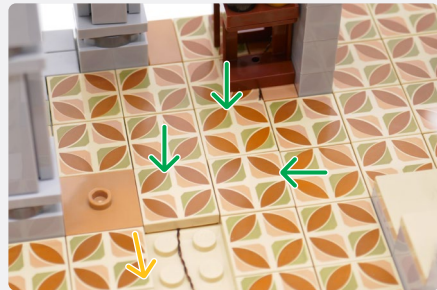




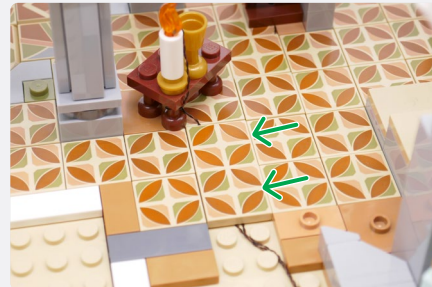
73



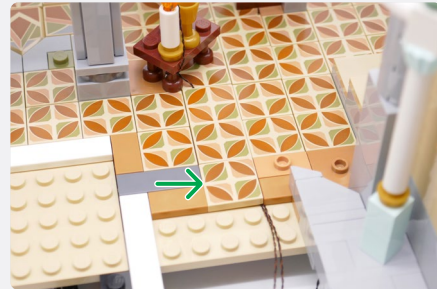
74



White 30cm Micro Bit Light



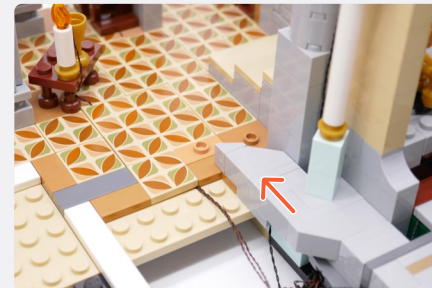
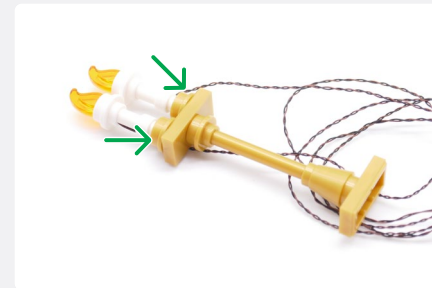
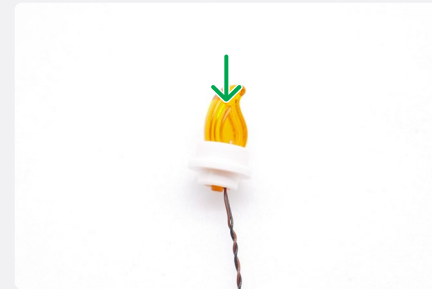
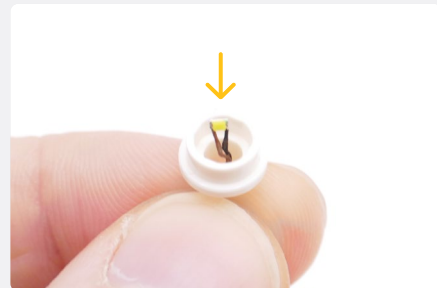
75



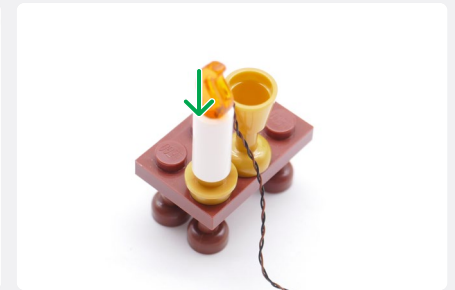
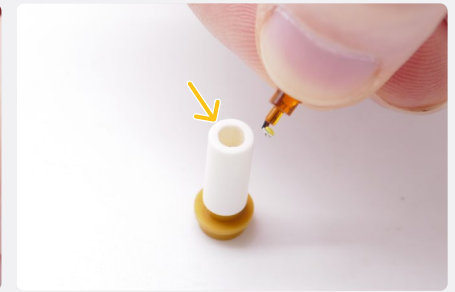
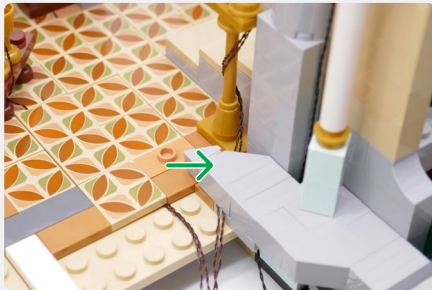
Round Plate 1x1 Open Stud - White



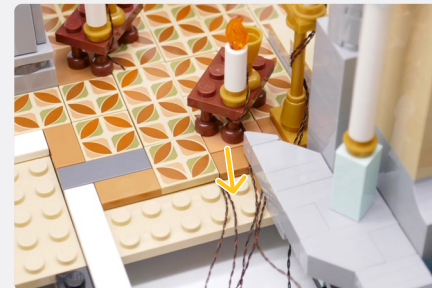
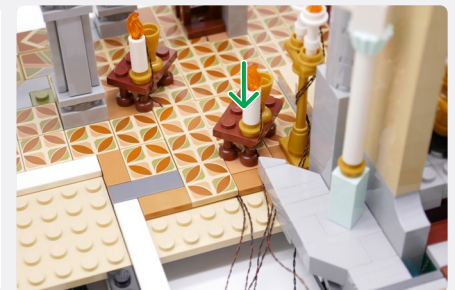
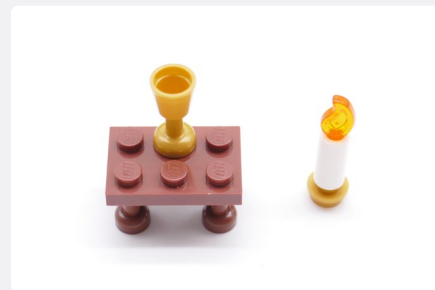
White 30cm Micro Bit Light



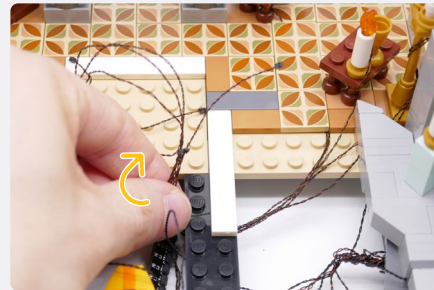
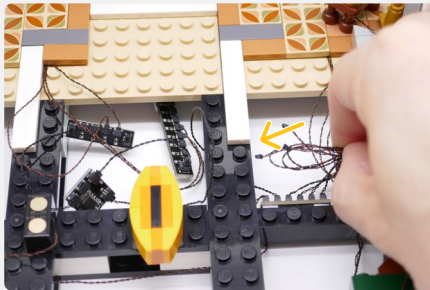




76

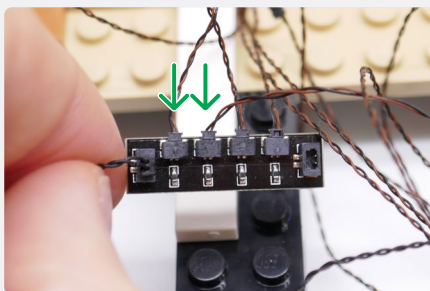
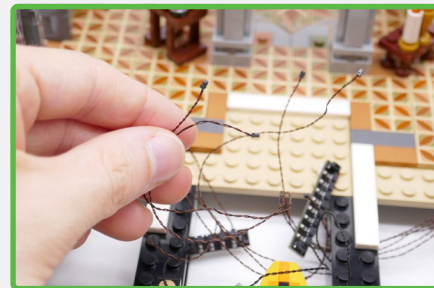


77



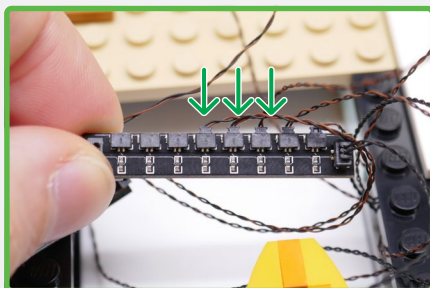
**NOTE**

Connect TWO of the longer Micro Bit Light cables into the 4-Port Micro Expansion Board



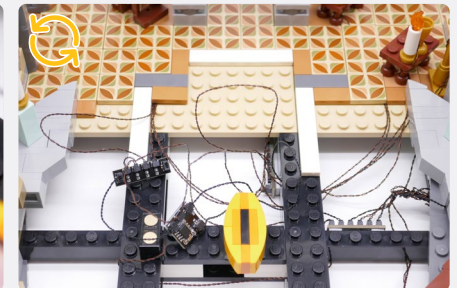
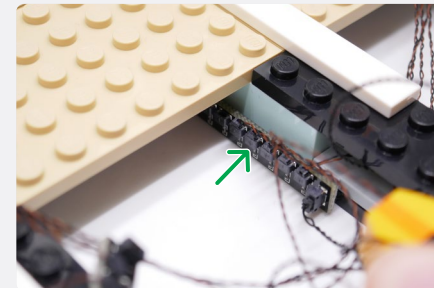
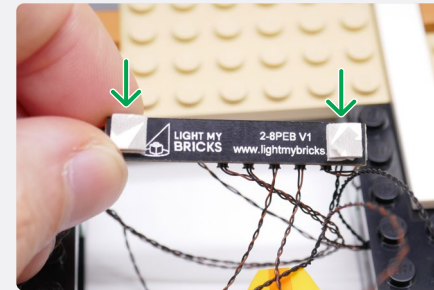
**NOTE**

Connect the remaining Micro Bit Light cables into the 8-Port Micro Expansion Board

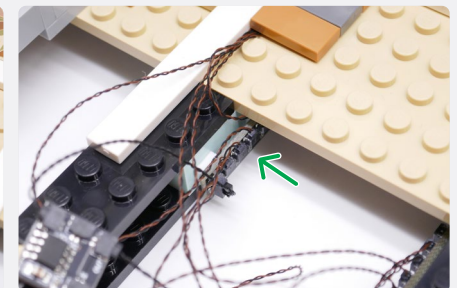
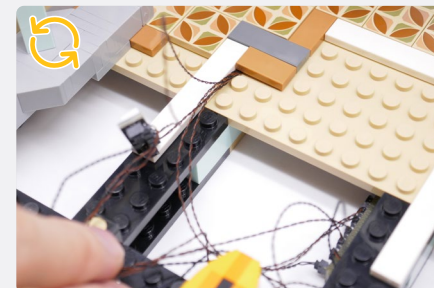
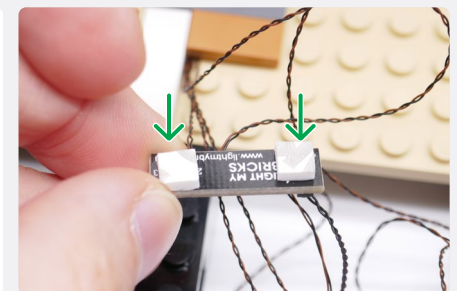


**2x Adhesive Square**

78

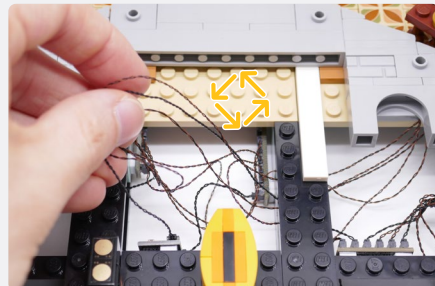
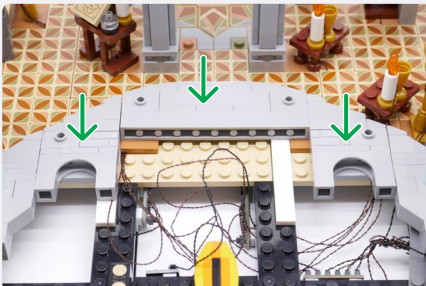
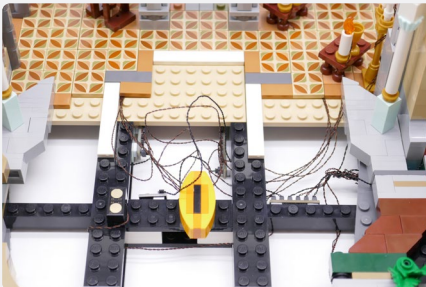
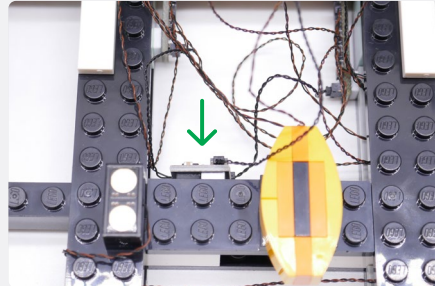
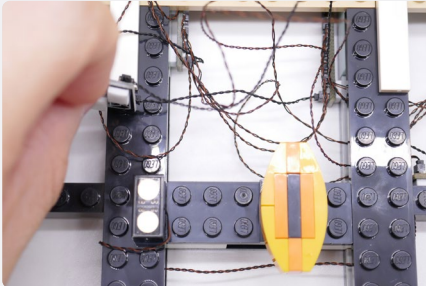
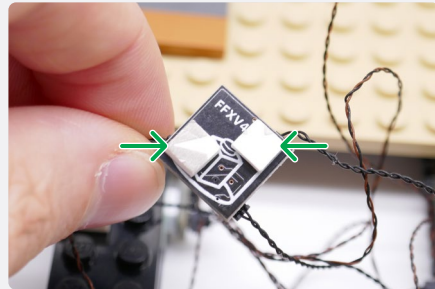


**2x Adhesive Square**

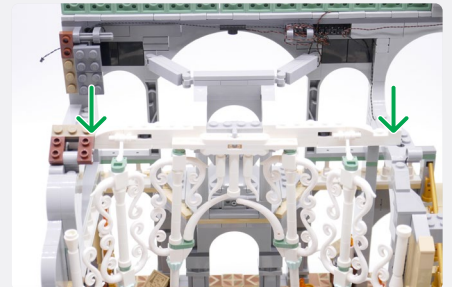
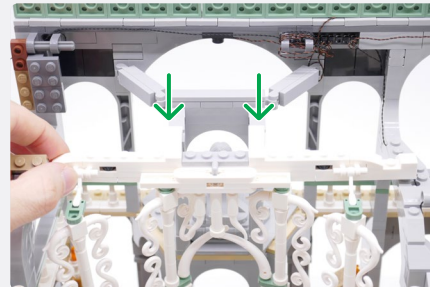
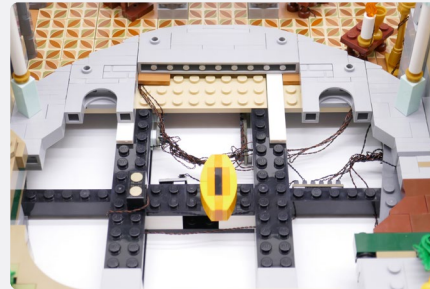




2x Adhesive Square



79







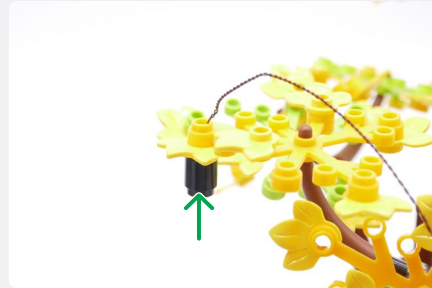
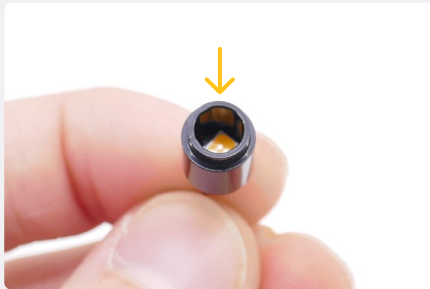
80


Brick Round 1x1 - Black



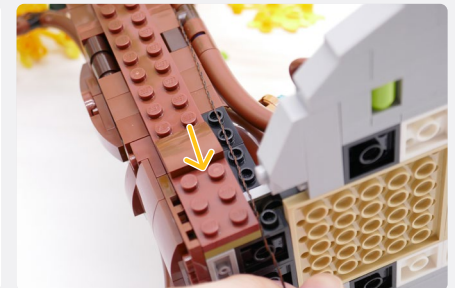
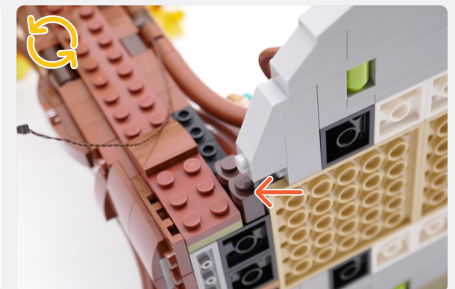
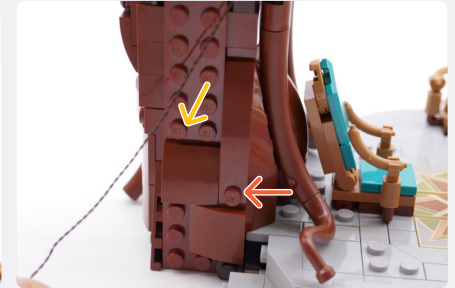
Warm White 30cm Large Bit Light





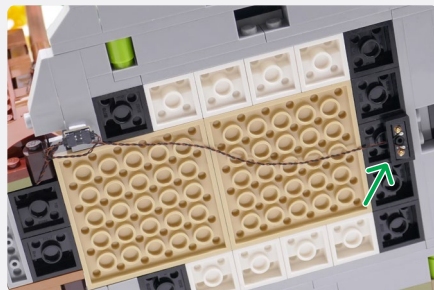
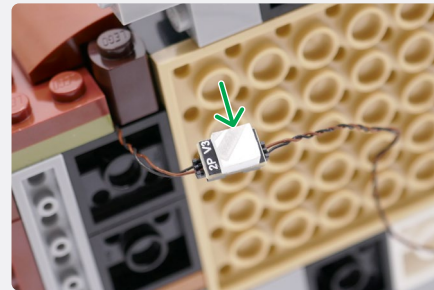
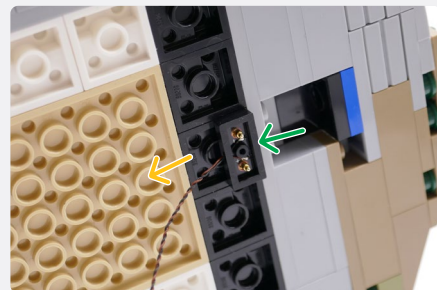
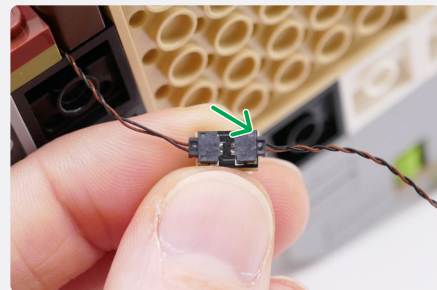
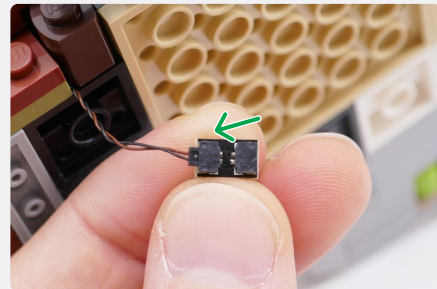
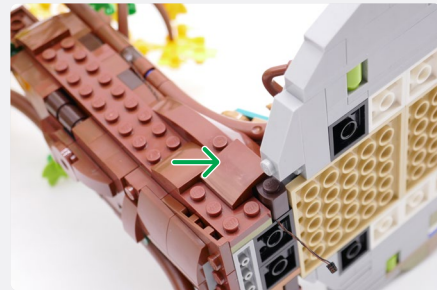
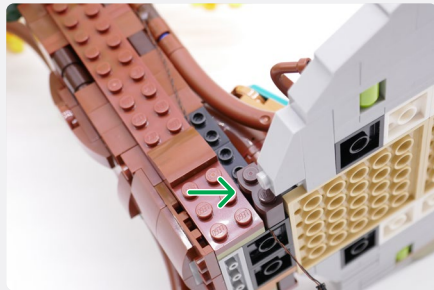
 **NOTE**

Ensure the Round Brick is positioned directly above the Ring podium as closely as possible





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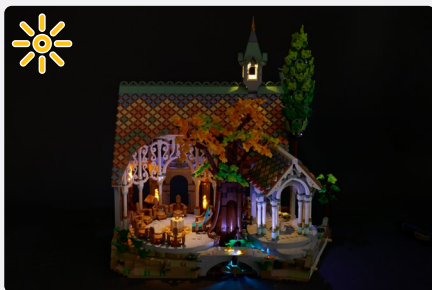
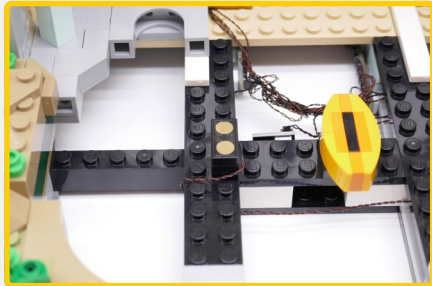


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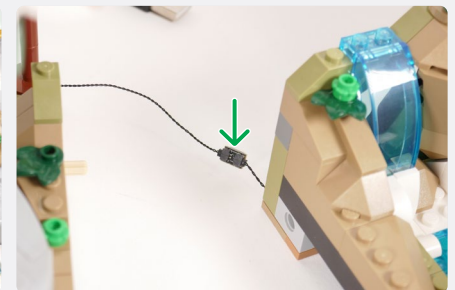
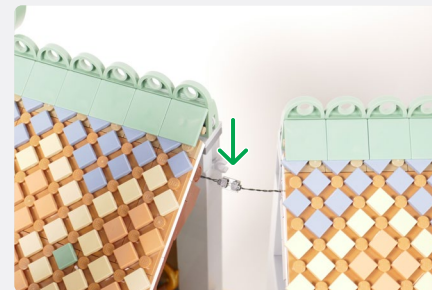
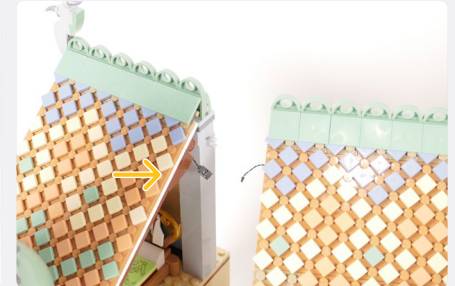
NOTE

Ensure the Wireless Power Connectors are lined up, and the cable is coming out from the same side



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! If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion board issues in our troubleshooting section. i





**NOTE**

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



! If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion board issues in our troubleshooting section. i



**NOTE**

You should have these parts left over that were removed from the LEGO set

**Removed Pieces**





## FINAL PRODUCT

This finally completes installation of the Light My Bricks

LEGO® The Lord of the Rings: Rivendell 10316 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 [here](#) 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.**

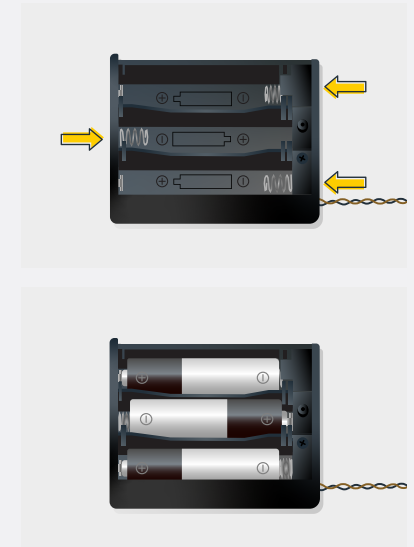
**If the batteries have no power, replace the batteries.**

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

### Check for 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

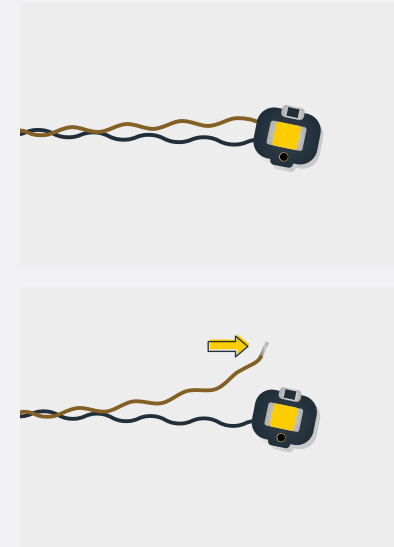
### Check Your Wires

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.





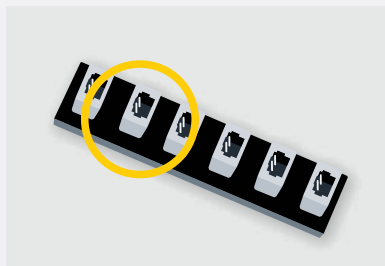
## Troubleshooting

### 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.

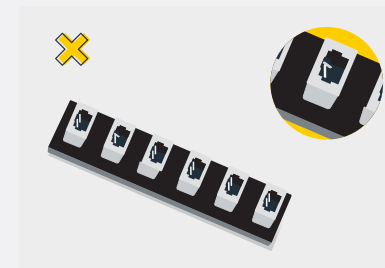
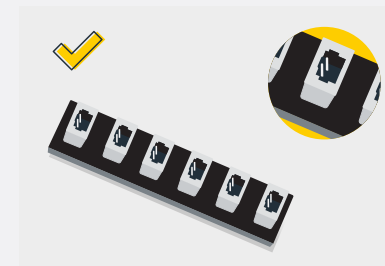
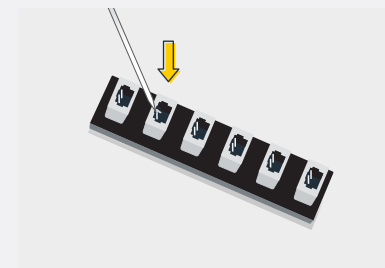
Not only will a light connected to the damaged port not work, but if the pins inside the port are bent to a point they are touching each other, this can result in all other lights in the system to stop working. This is a short circuit.



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

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