



**LIGHT^{MY}
BRICKS**



**LEGO® HEAVY-DUTY TOW TRUCK
#42128 LIGHT KIT
INSTALLATION GUIDE**

Light My Bricks



LEGO® HEAVY-DUTY TOW TRUCK 42128 INSTALLATION GUIDE

Hi There!

We're here to help you get started on the LEGO® Heavy-Duty Tow Truck 42128 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: ASSORTED BRICKS:



- 1x Rotating Bit Light
- 1x White Strip Light
- 4x Cool White 15cm Bit Light
- 6x White 30cm Bit Light
- 2x Warm White Large 30cm Bit Light
- 12x Orange 30cm Bit Light*
- 2x Blue 30cm Bit Light



- 3x 6-Port Expansion Board
- 2x 8-Port Expansion Board*
- 1x 12-Port Expansion Board
- 1x NC Push Board
- 1x Multi-Effects Board

3x Adhesive Squares



- 2x 30cm Connecting Cable*
- 3x 15cm Connecting Cable
- 3x 5cm Connecting Cable



1x USB Power Cable
(Power Source not Included)

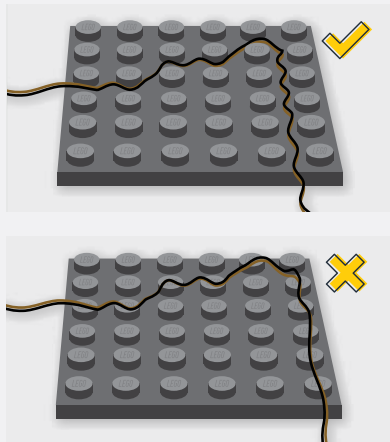
- 2x Round Plate 1x1 Open Stud - Black
- 2x Round Plate 1x1 - Trans Red
- 6x Round Plate 1x1 - Trans Orange
- 6x Round Plate 1x1 - Trans Clear
- 3x Technic Pin 1/2 - Light Grey
- 1x Cone 1 x 1 W Top Groove - Trans Orange
- 2x Plate 1x1 Mod Rounded w Handle - Black
- 2x Tile 1x1 W Clip Round Edges - Black
- 2x Brick 1x8 - Light Grey
- 2x Bracket 1x2-1x4 - Light Grey

* Indicates components which include spares

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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.

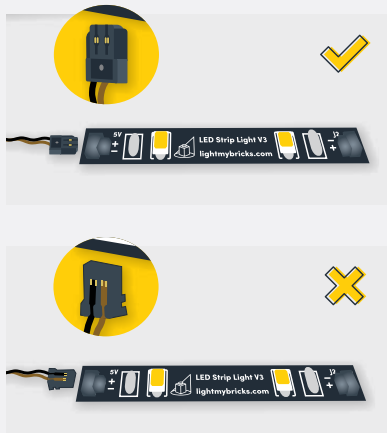


Connecting Cable Connectors To Expansion Boards

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.

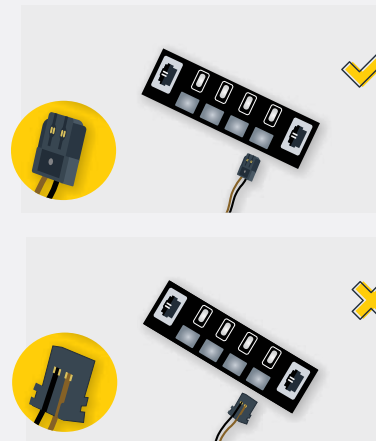
Incorrectly inserting the connector can result in bent pins inside the port or possible overheating of the expansion board when connected.

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.



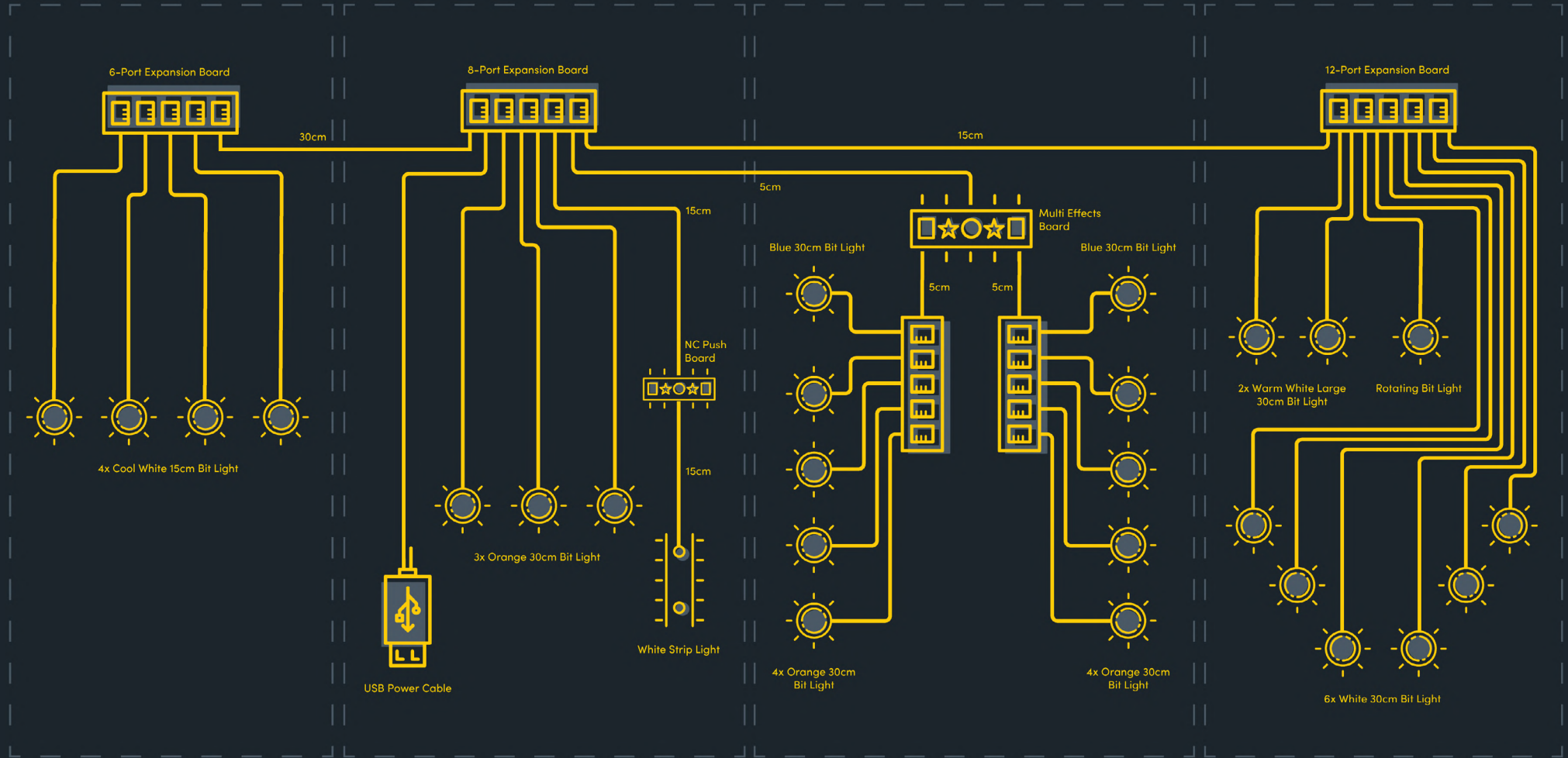
BLUEPRINT

Steps 1-5

Steps 6-11

Steps 12-18

Steps 19-28





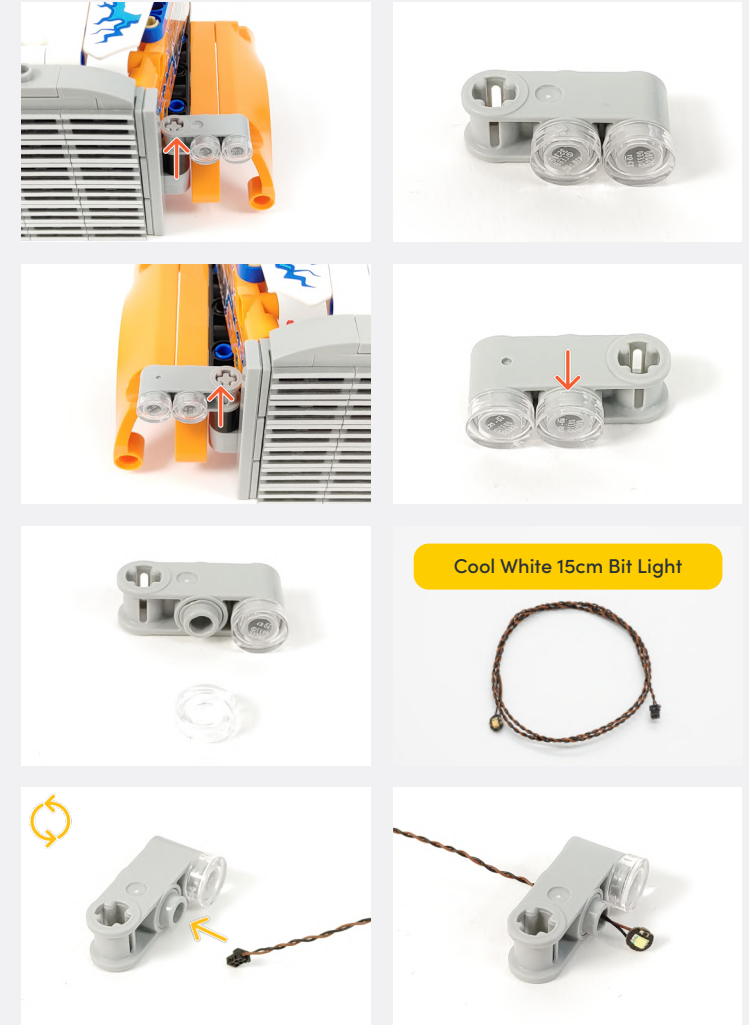
INSTRUCTIONS

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



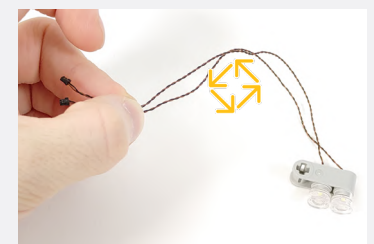
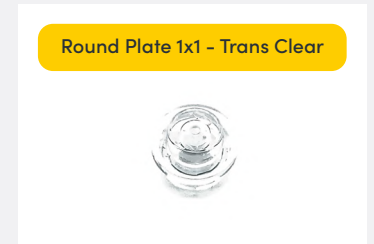
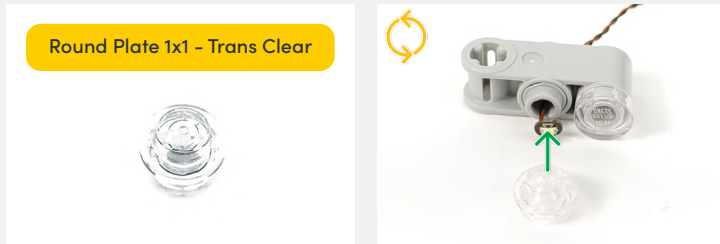
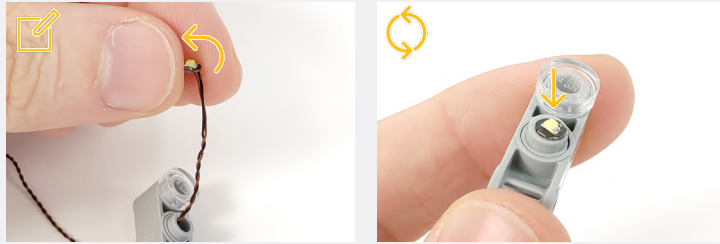
2



Cool White 15cm Bit Light

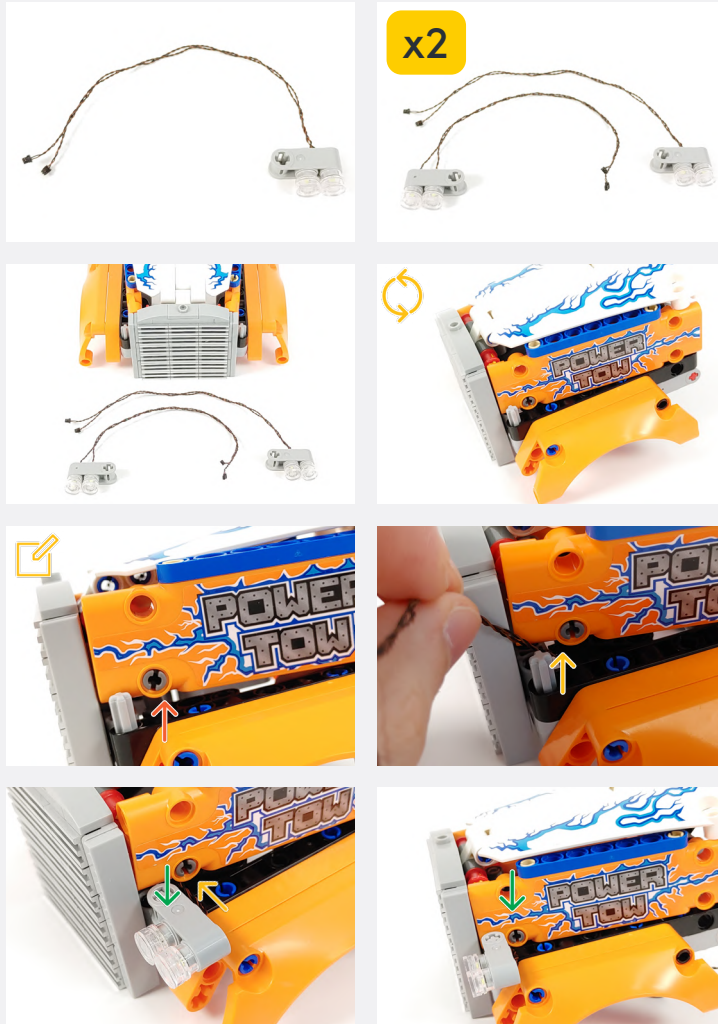
Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID ✨ POWER ON TEST 📝 NOTE ICON

Lightly bend the led cable to be flat with the headlight



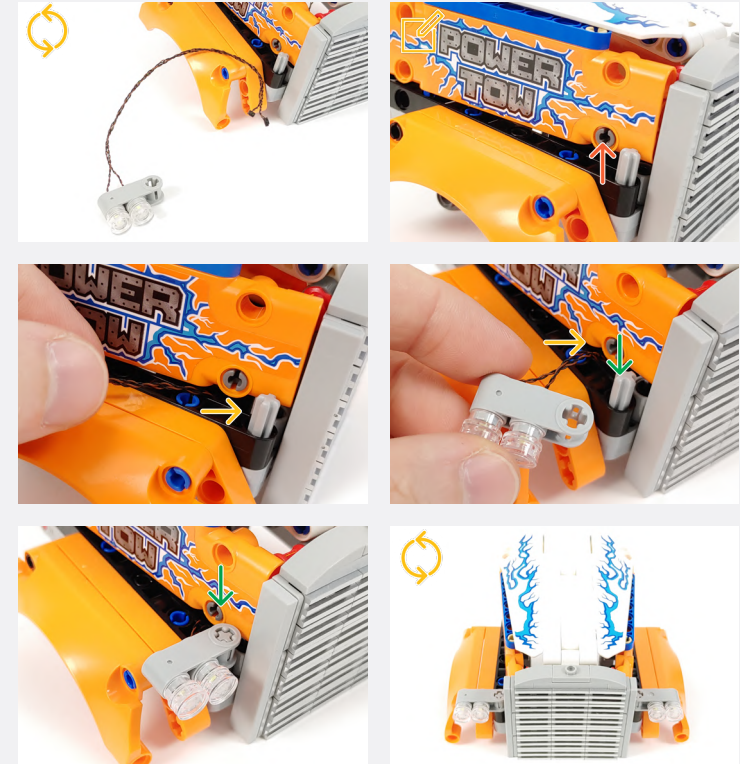
Legend DISCONNECT CONNECT / RECONNECT TURN / FLIP DIRECTIONAL TWIST / BRAID POWER ON TEST NOTE ICON

3



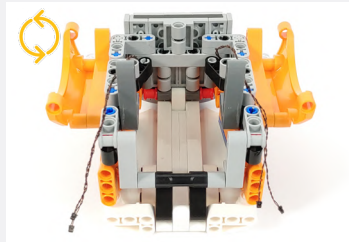
✍ Partially disconnect the "Power Tow" piece enough to allow a cable to fit through

✍ Partially disconnect the "Power Tow" piece enough to allow a cable to fit through



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

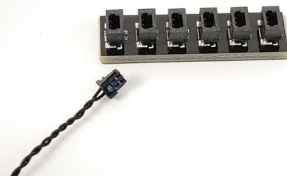
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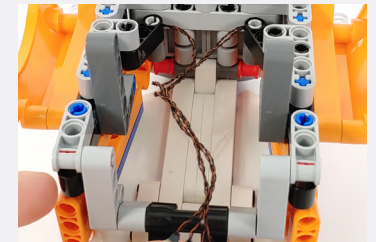
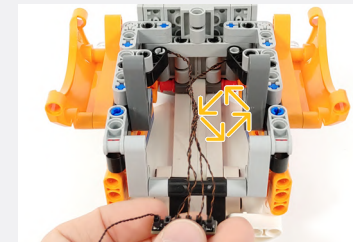
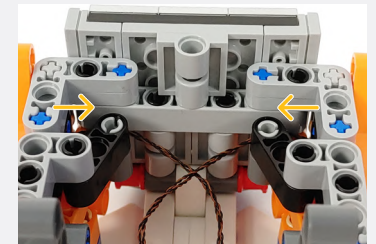
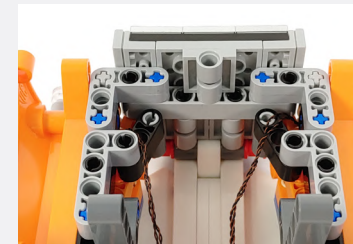
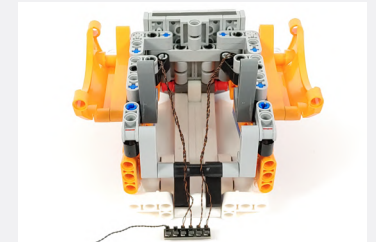
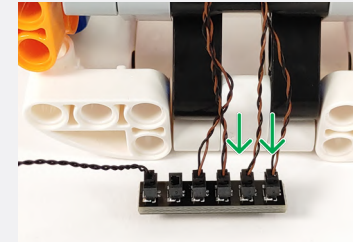
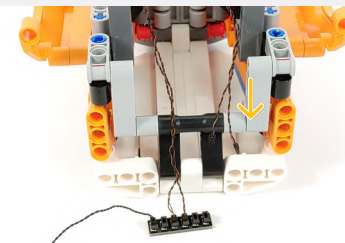
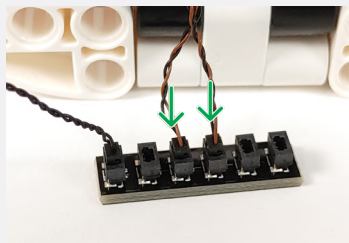
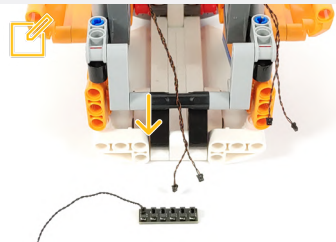
6-Port Expansion Board



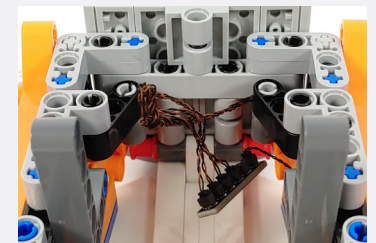
30cm Connecting Cable



✂ Connect the cables from the headlights into the Expansion Board



✂ Exclude the 30cm Connecting Cable when twisting the wires



Legend



CONNECT / RECONNECT



TURN / FLIP



DIRECTIONAL



TWIST / BRAID



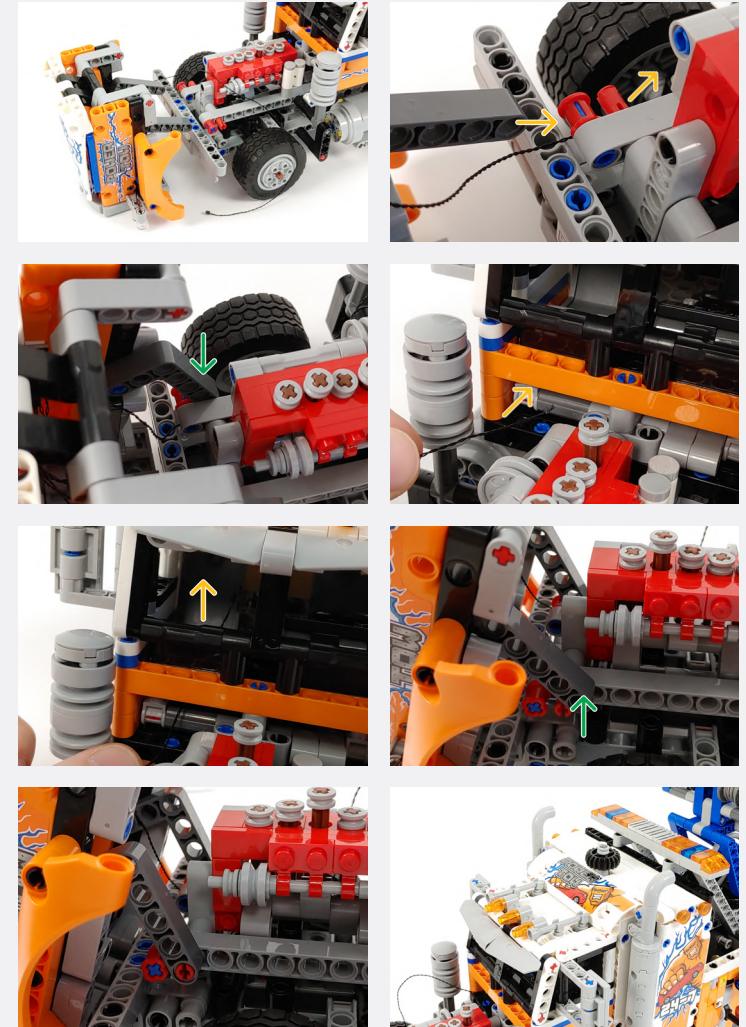
POWER ON TEST



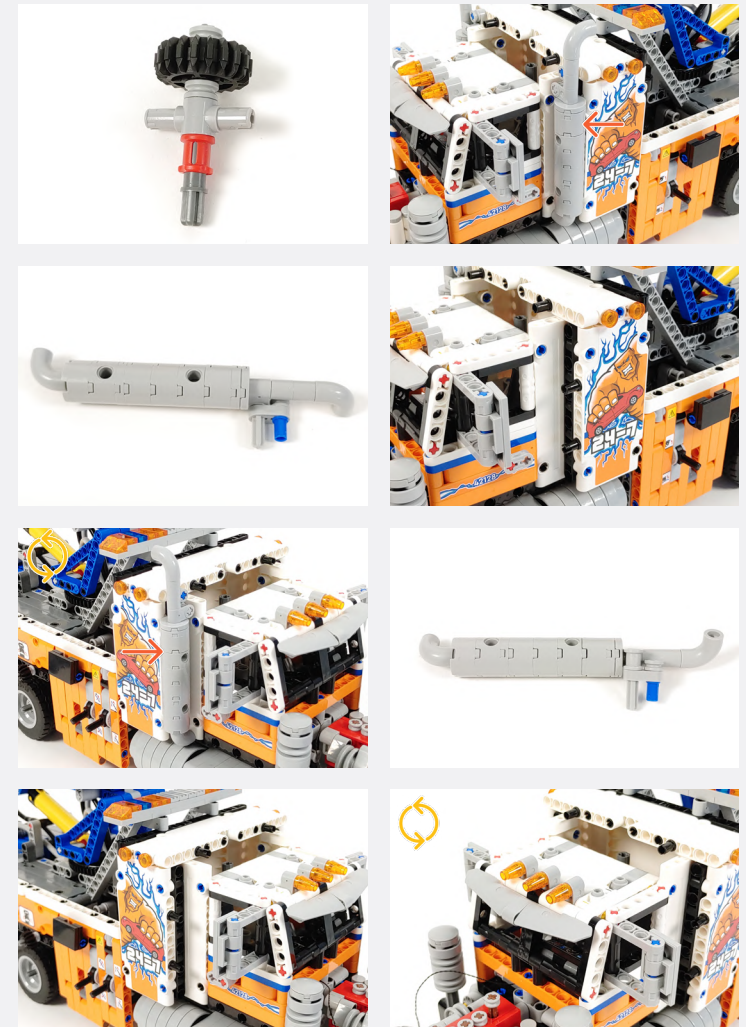
NOTE ICON



5

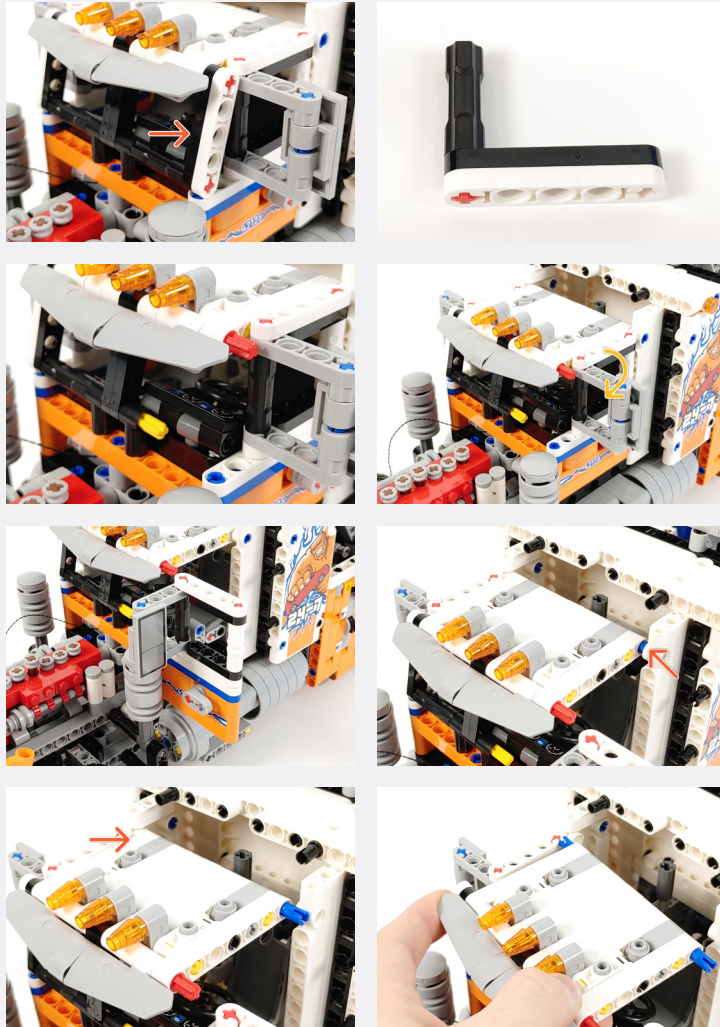


Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↺ TWIST / BRAID * POWER ON TEST 📝 NOTE ICON

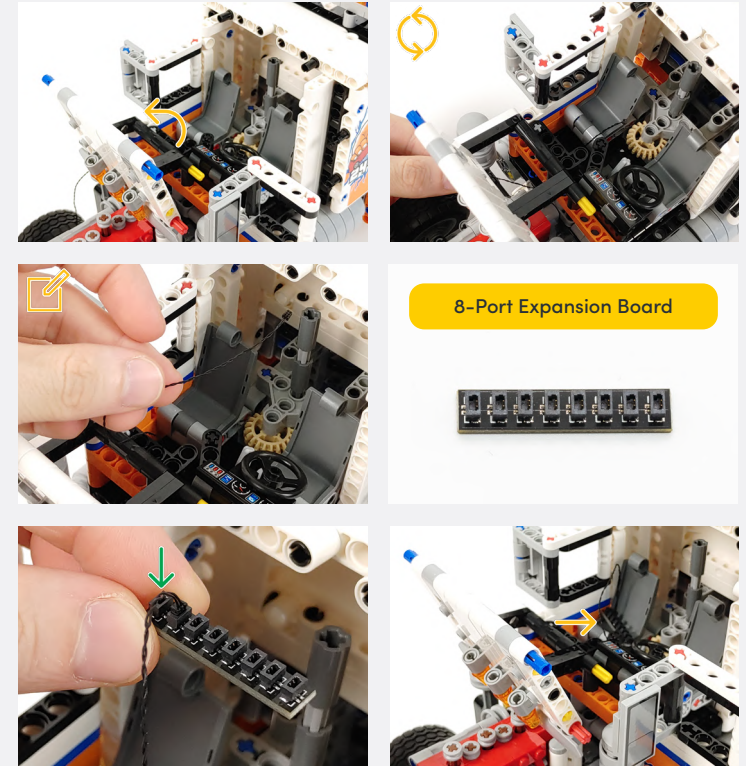


Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↗↘ TWIST / BRAID ✨ POWER ON TEST 📝 NOTE ICON

6



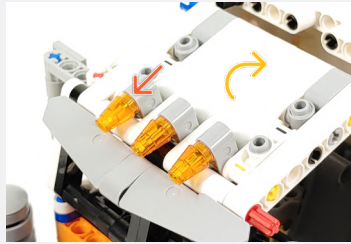
📌 Connect the cable from Step 5 to the Expansion Board



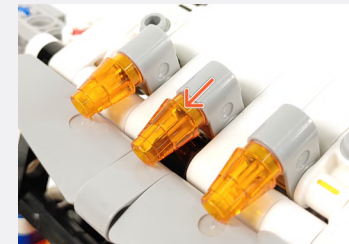
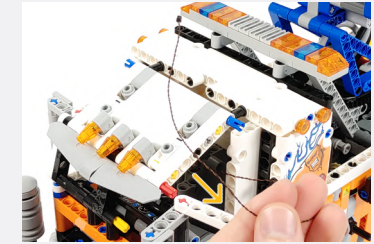
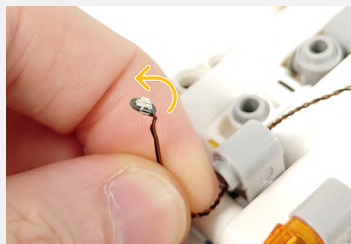
8-Port Expansion Board

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

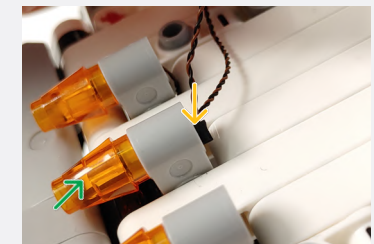
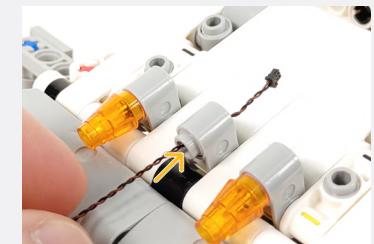
7



Orange 30cm Bit Light



Orange 30cm Bit Light



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

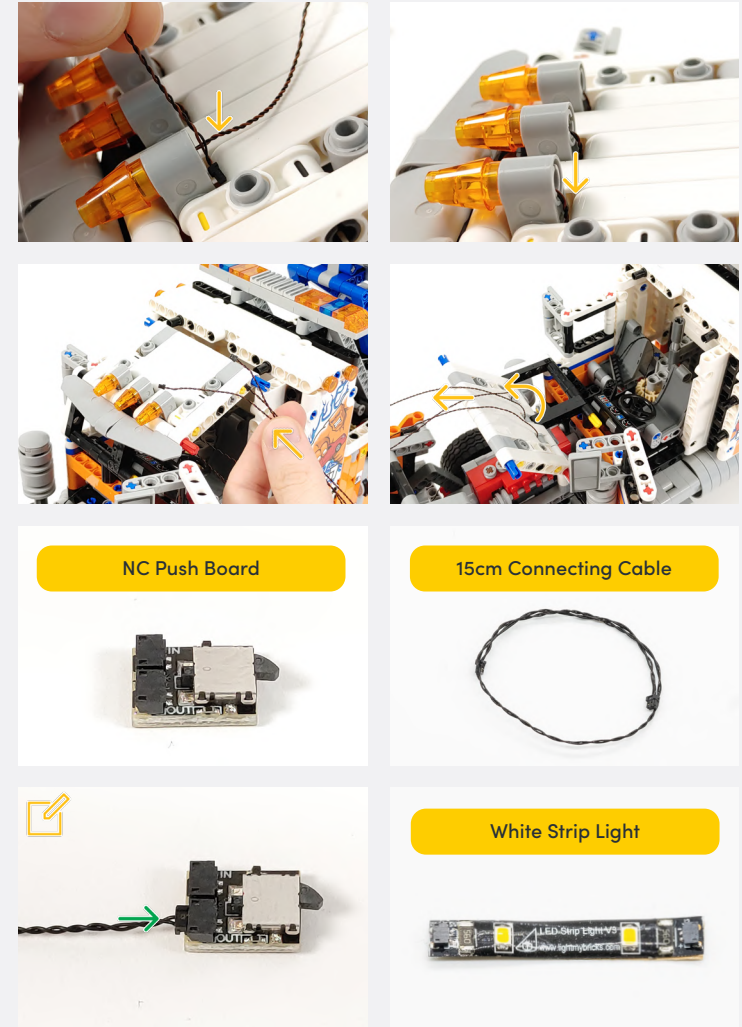


Orange 30cm Bit Light

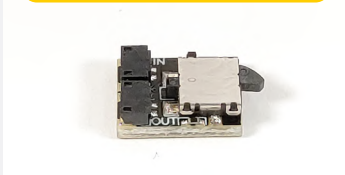


8

✂ Connect the 15cm Connecting Cable to the "OUT" port of the NC Push Board



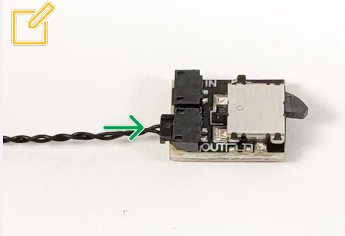
NC Push Board



15cm Connecting Cable



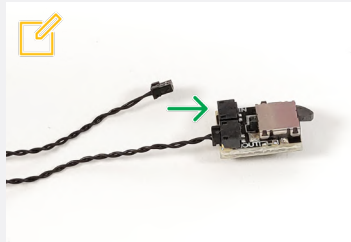
White Strip Light



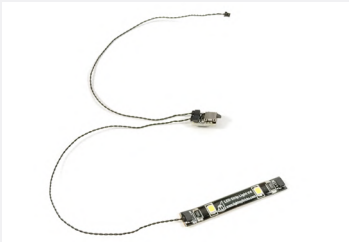
Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID * POWER ON TEST 📌 NOTE ICON



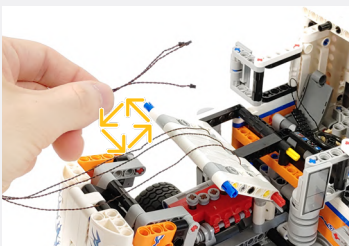
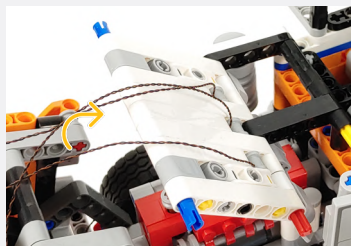
15cm Connecting Cable



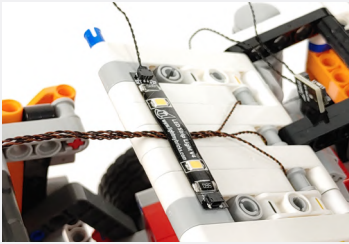
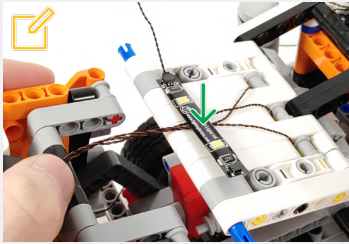
Connect the 15cm Connecting Cable to the "IN" port of the NC Push Board



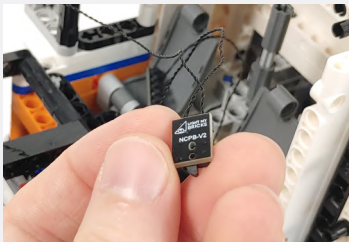
9



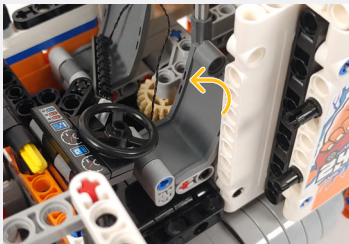
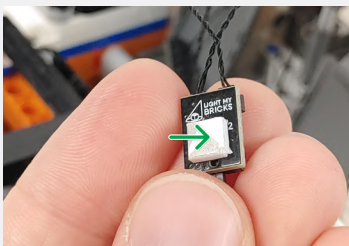
Stick the Strip Light over the cables



10

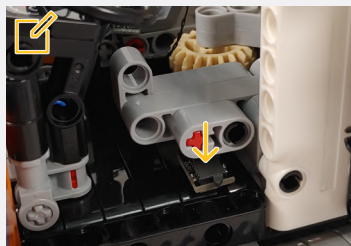
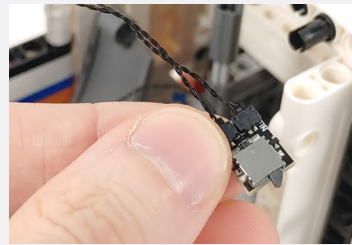
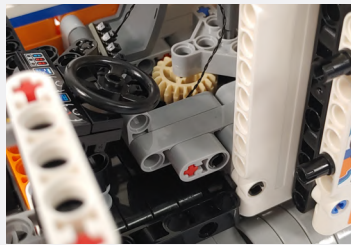
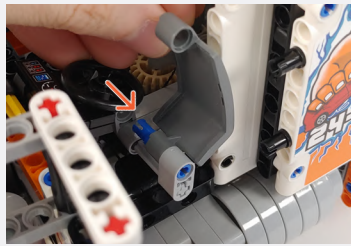


Adhesive Square



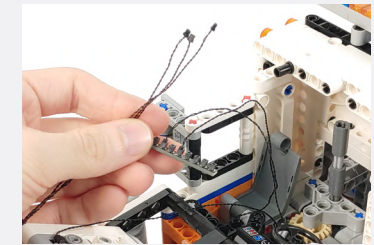
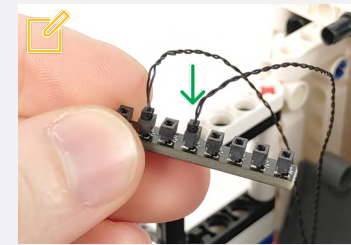
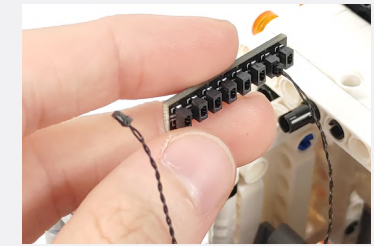
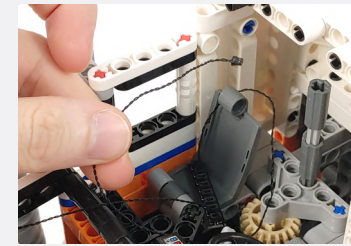
Legend

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

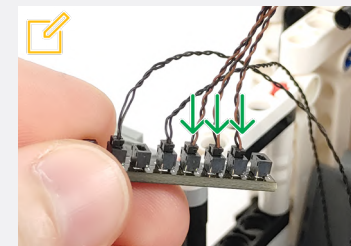


Press down the Board to ensure it sticks well

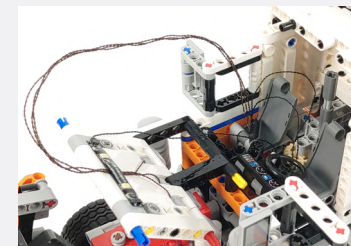
Make sure the Board is slightly poking out



Connect the cable from the NC Push Board

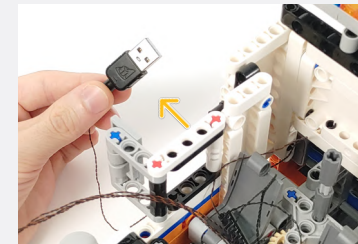
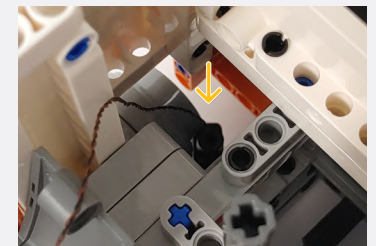
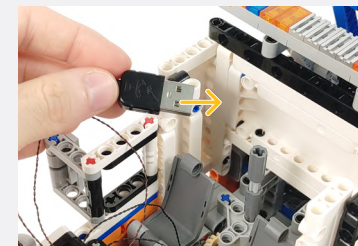
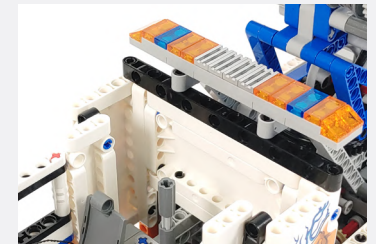
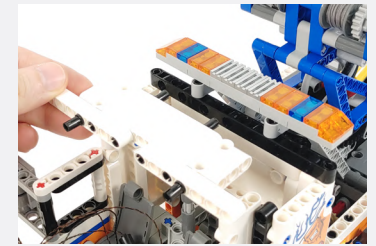
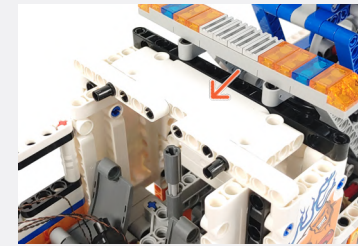
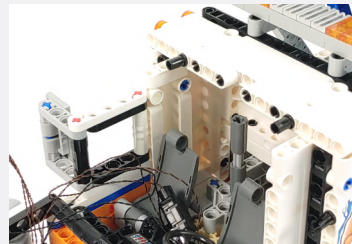
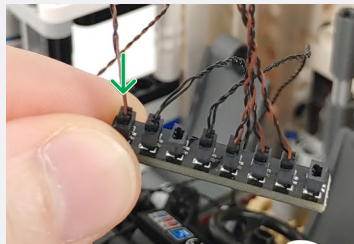
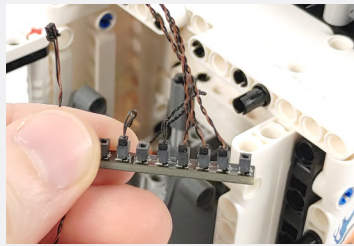


Connect the cables that come from underneath the Strip Light



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

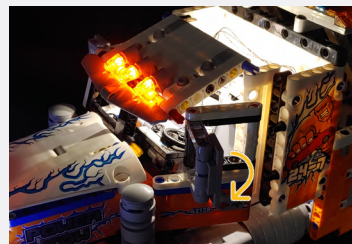
11



Legend

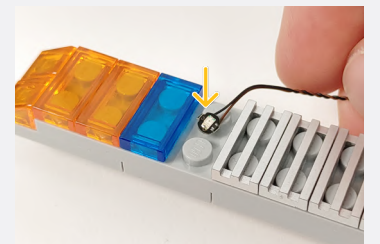
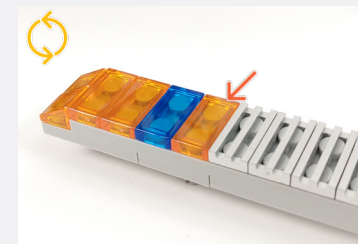
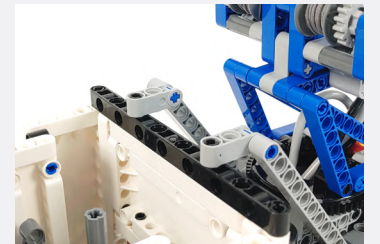
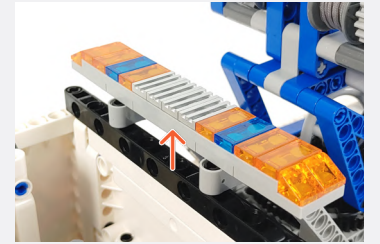
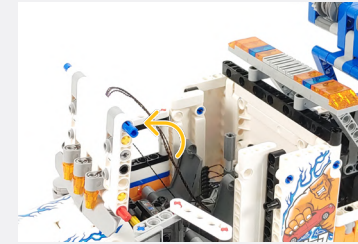


If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion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



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

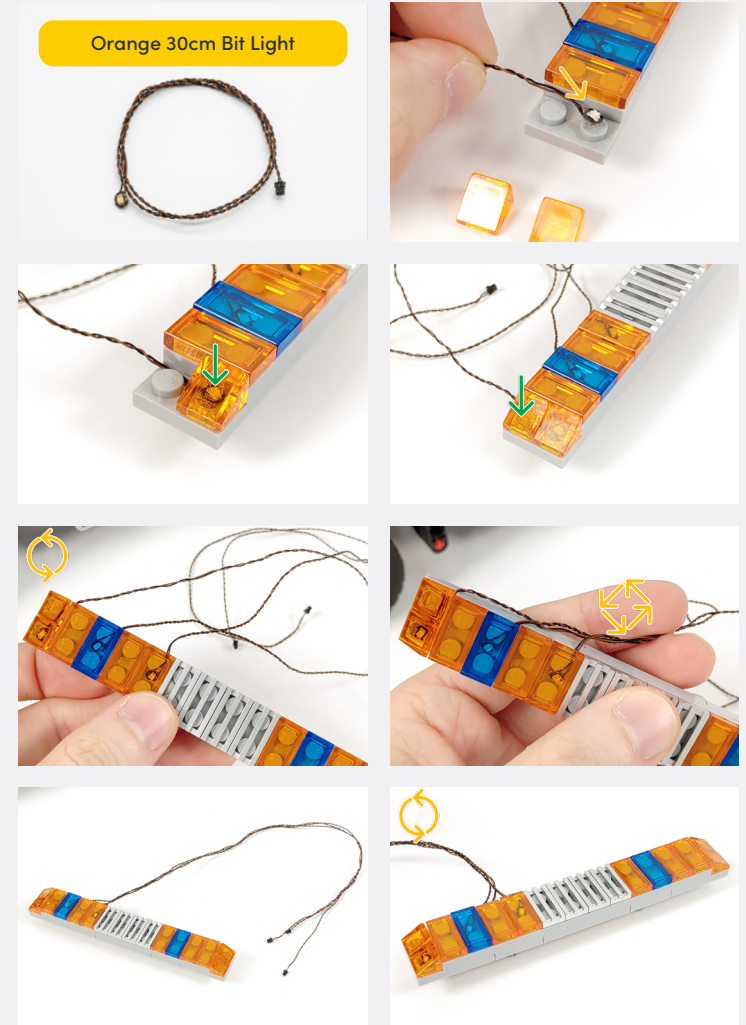
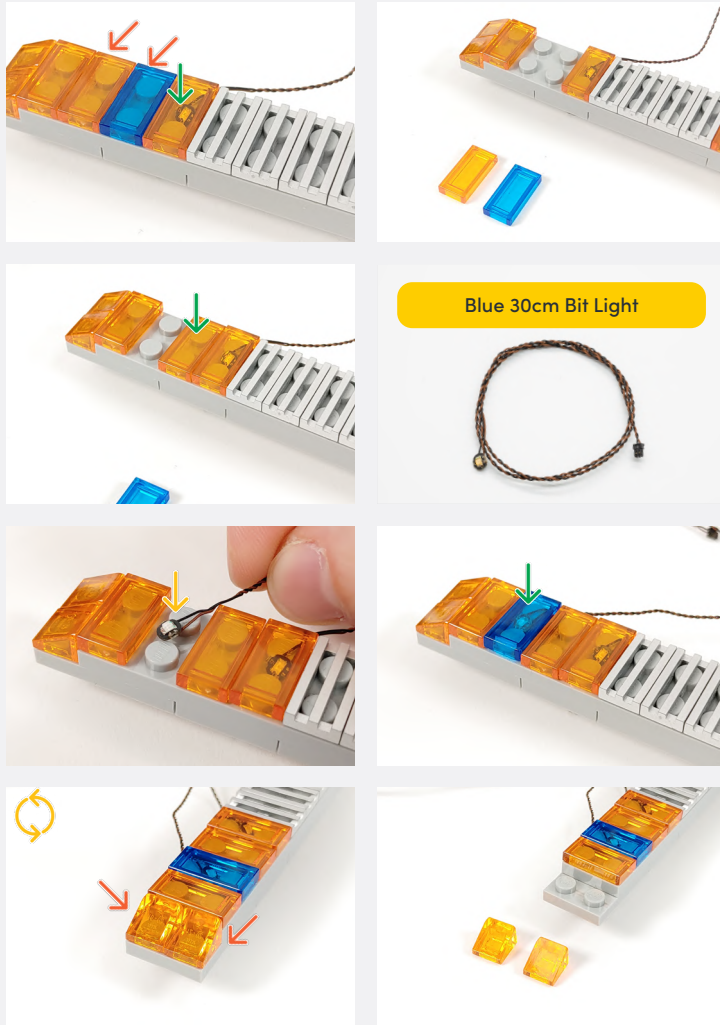
12



Orange 30cm Bit Light

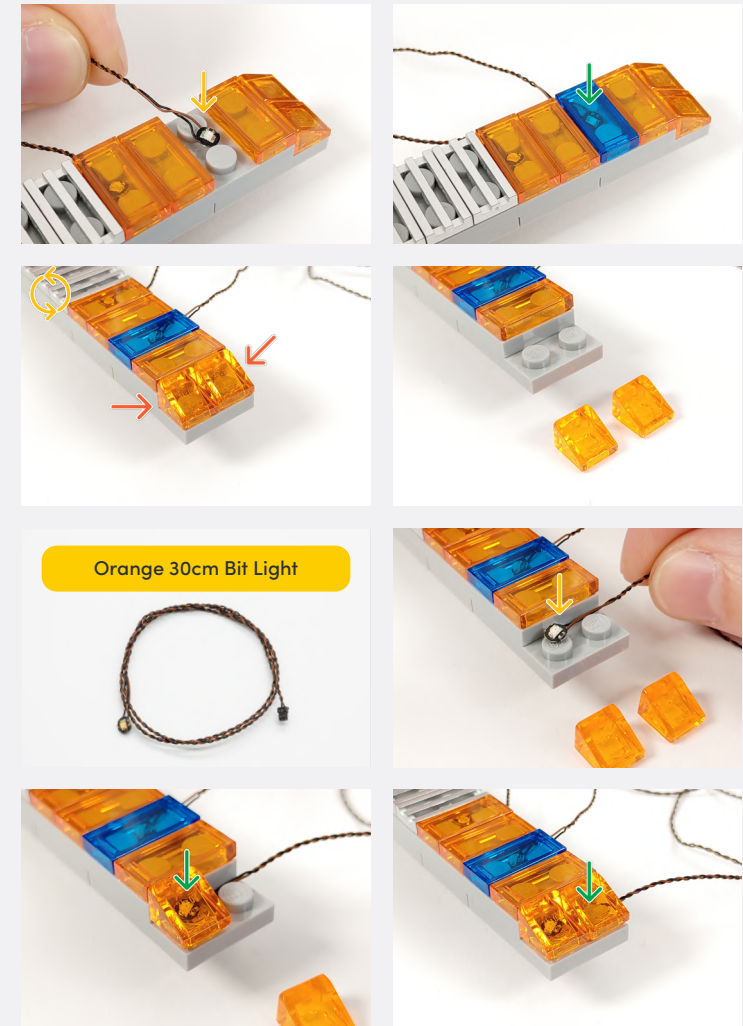
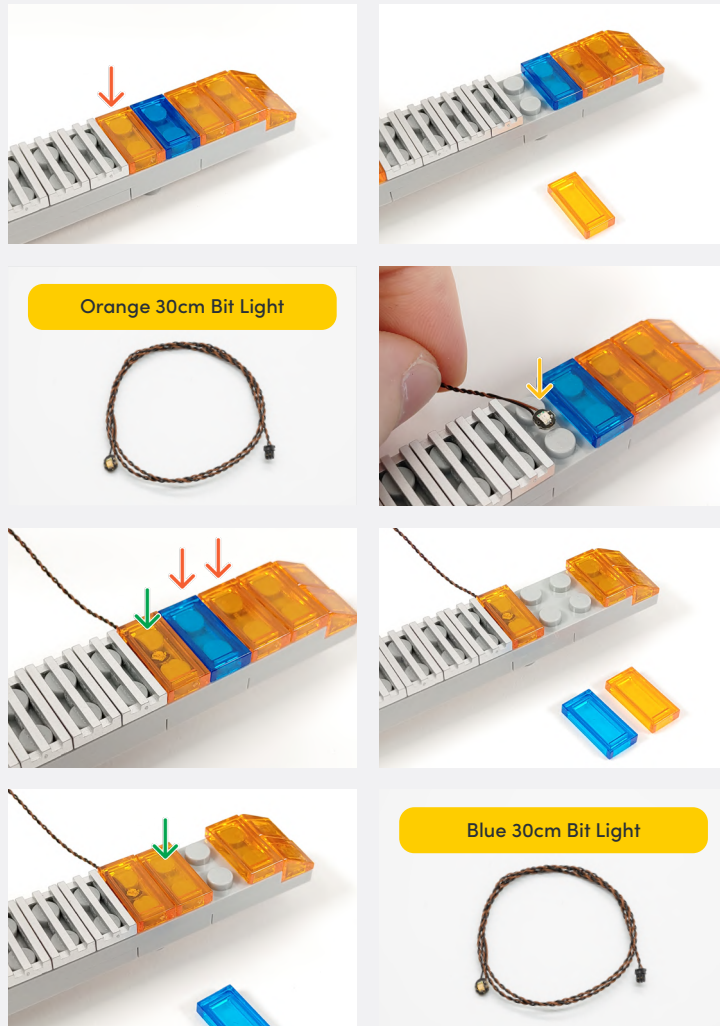


Legend DISCONNECT CONNECT / RECONNECT TURN / FLIP DIRECTIONAL TWIST / BRAID POWER ON TEST NOTE ICON



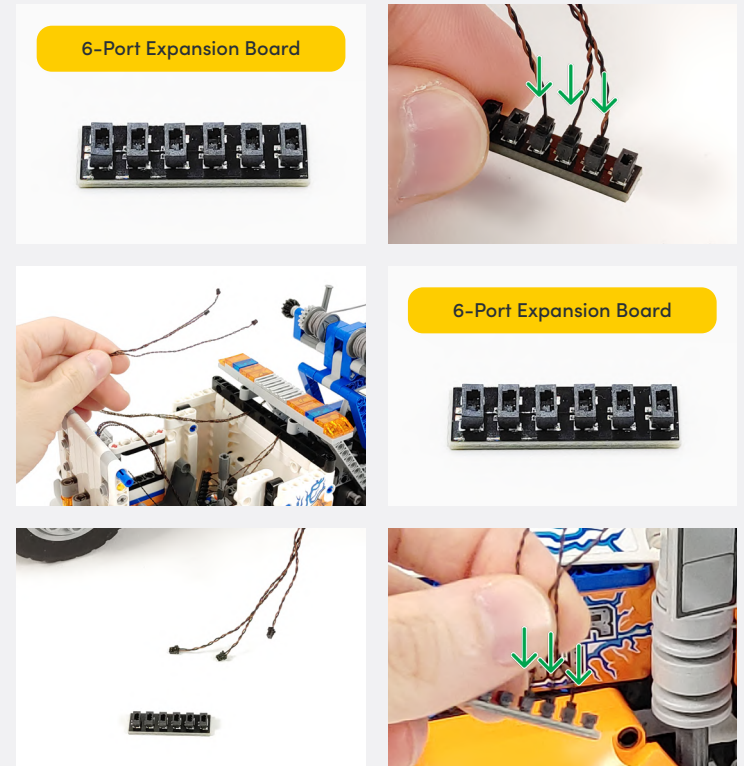
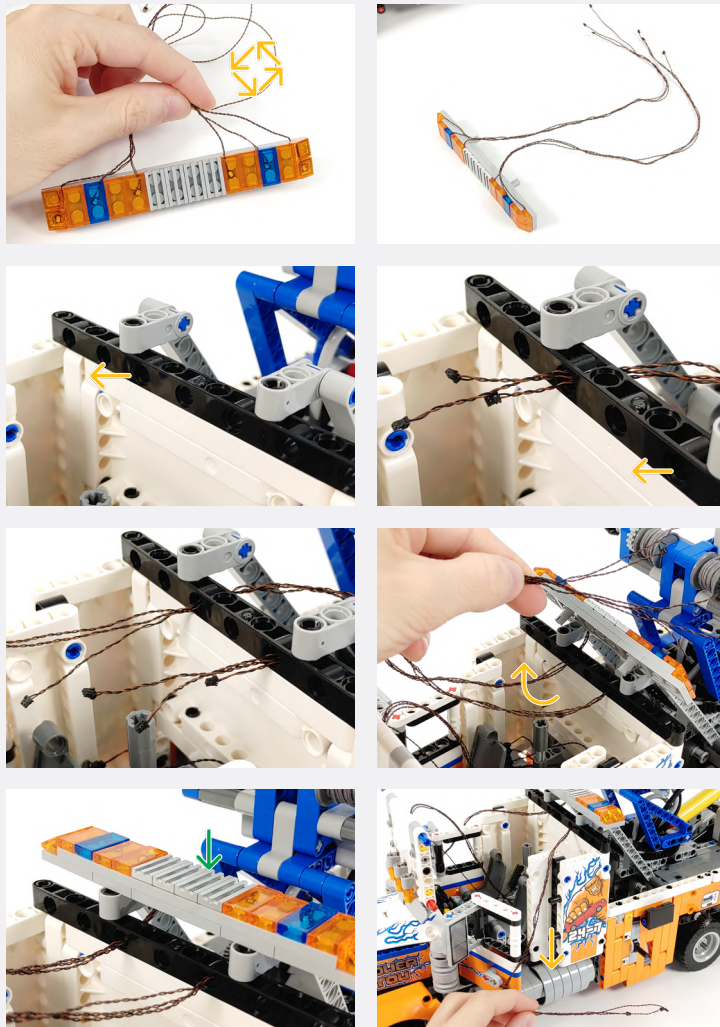
Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID ✨ POWER ON TEST 📝 NOTE ICON

13



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

14



Legend

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

15

Orange 30cm Bit Light

Round Plate 1x1 - Trans Orange

Orange 30cm Bit Light

16

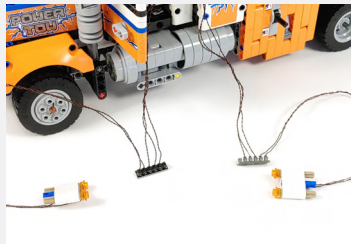
Round Plate 1x1 - Trans Orange

x2

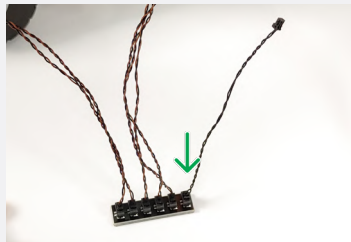
Connect one pair of Bit Light cables to one of the 6-Port Expansion Boards, and the second pair of Bit Lights to the other

Legend

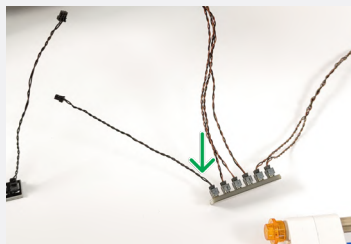
- DISCONNECT
- CONNECT / RECONNECT
- ↻ TURN / FLIP
- DIRECTIONAL
- ↻ TWIST / BRAID
- ✳ POWER ON TEST
- 📝 NOTE ICON



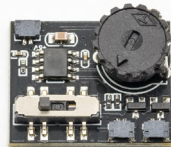
5cm Connecting Cable



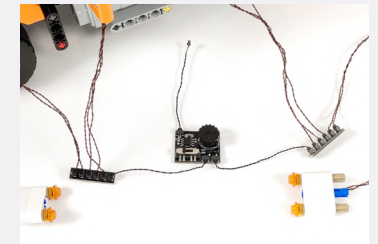
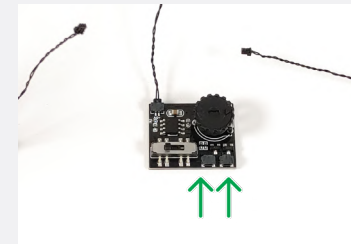
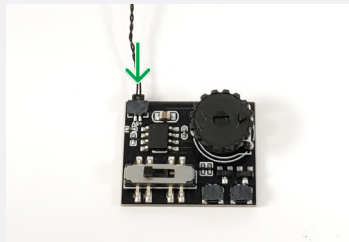
5cm Connecting Cable



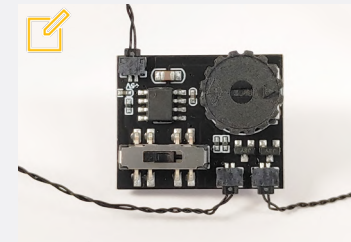
Multi Effects Board



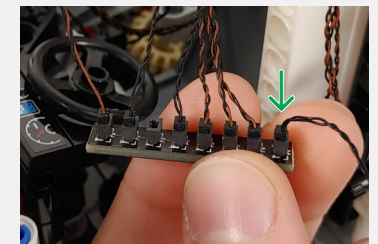
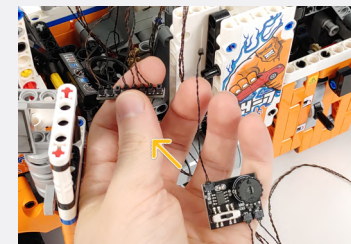
5cm Connecting Cable



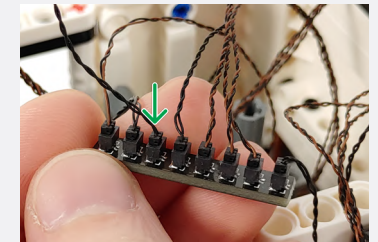
📌 Set the dial and switch to these positions if you want smooth pulsing



📌 Or set the dial and switch to these positions if you want fast flashing



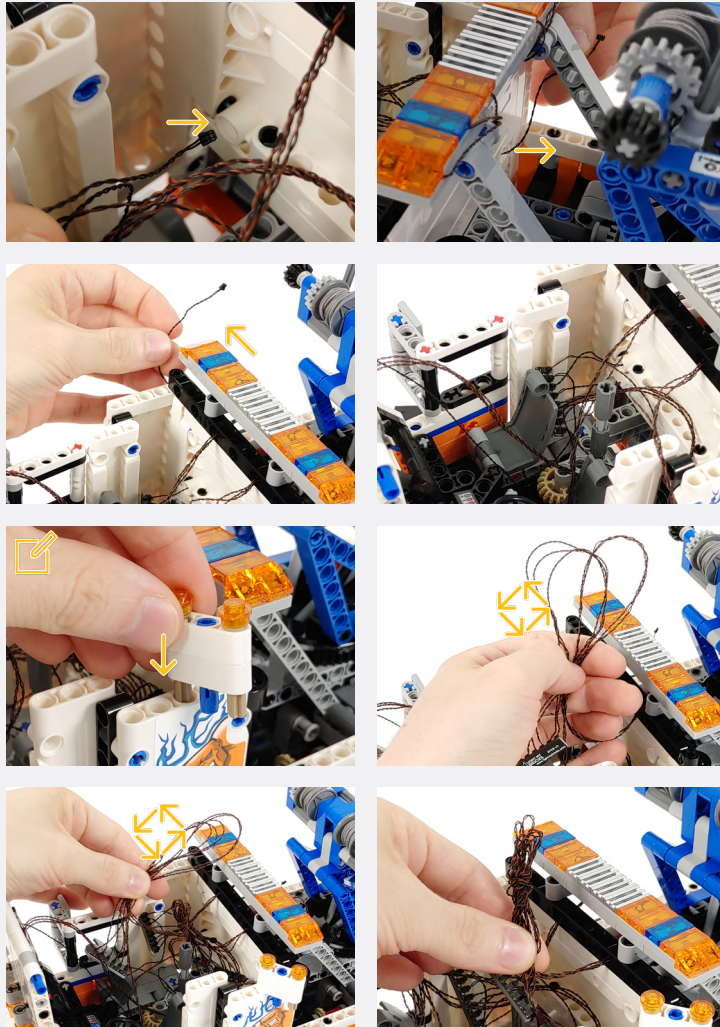
15cm Connecting Cable



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

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.

17



Place this part on the opposite side of the top lights to have them alternate flashing. Check this on the next power on test

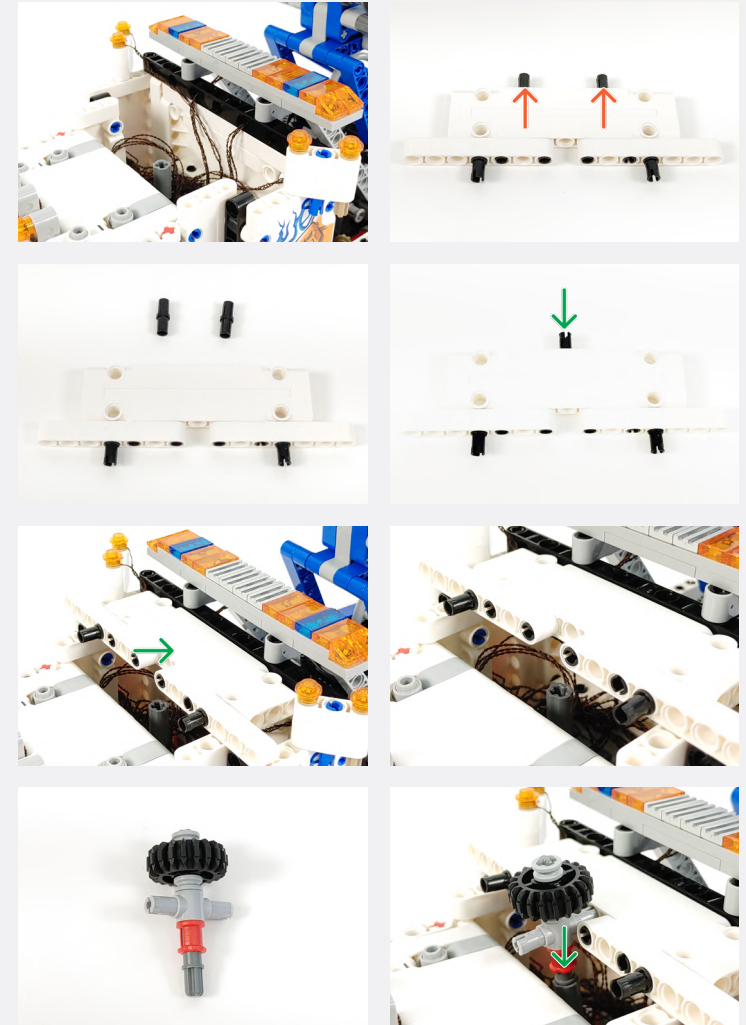
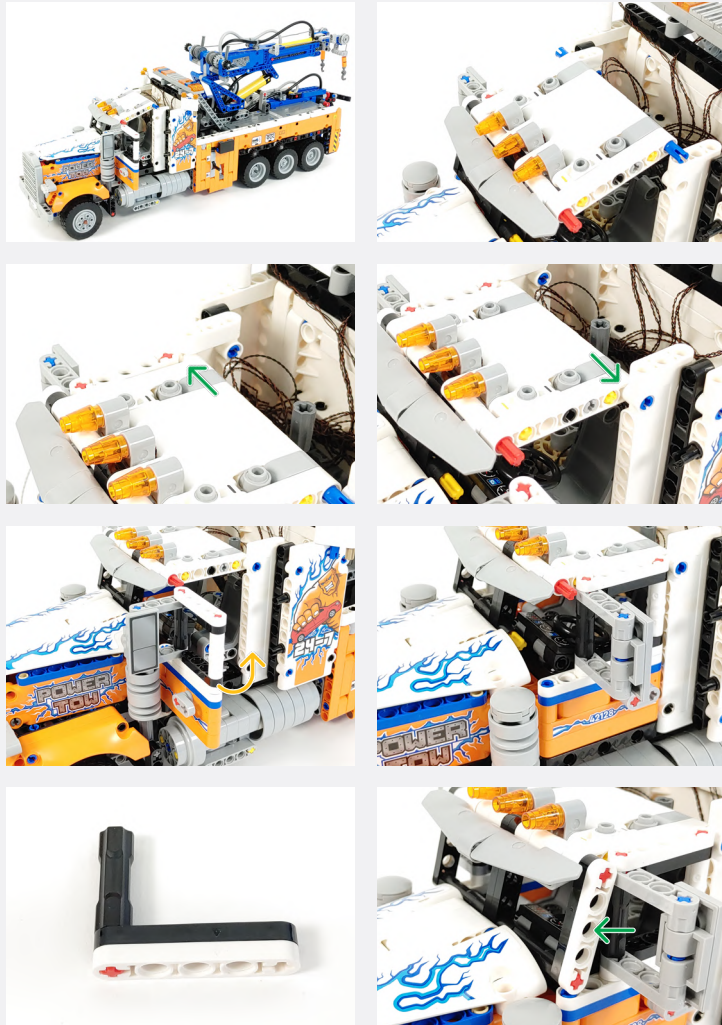
Connect the other end to a 5V USB Power Bank, 5V USB Wall Adaptor, or USB to AA Battery Pack (sold separately)



Legend

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

18



Legend

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

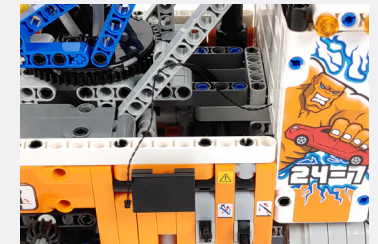
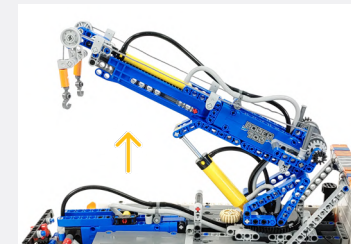


Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↔ TWIST / BRAID ✨ POWER ON TEST 📌 NOTE ICON

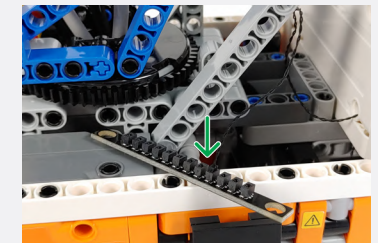


19

Use the orange tiles that were removed earlier



12-Port Expansion Board



Black Round Plate 1x1 w/ Open Stud

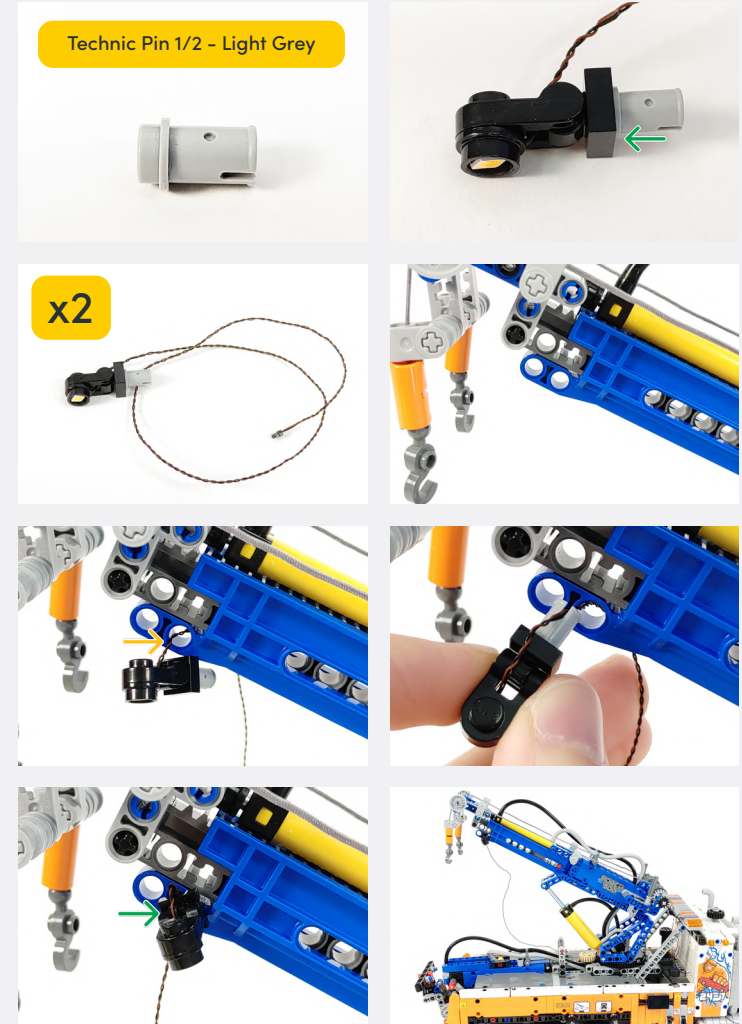


Warm White 30cm Large Bit Light



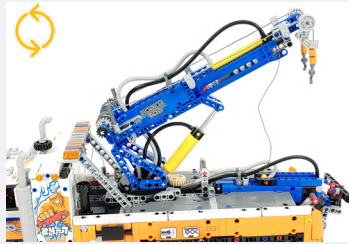
Legend

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



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

20



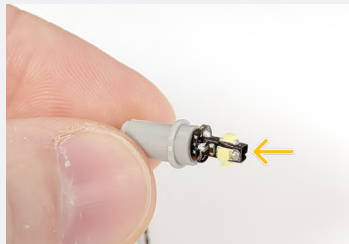
Technic Pin 1/2 - Light Grey



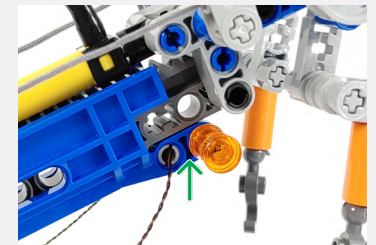
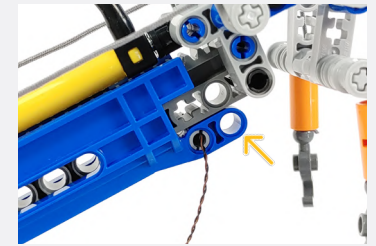
Rotating Bit Light 30cm



Cone 1 x 1 w/ Top Groove - Trans Orange



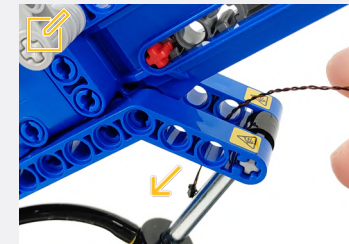
Use the orange tile that was removed earlier



Slightly disconnect the Technic piece



Grab the cable from the spotlight and thread it through

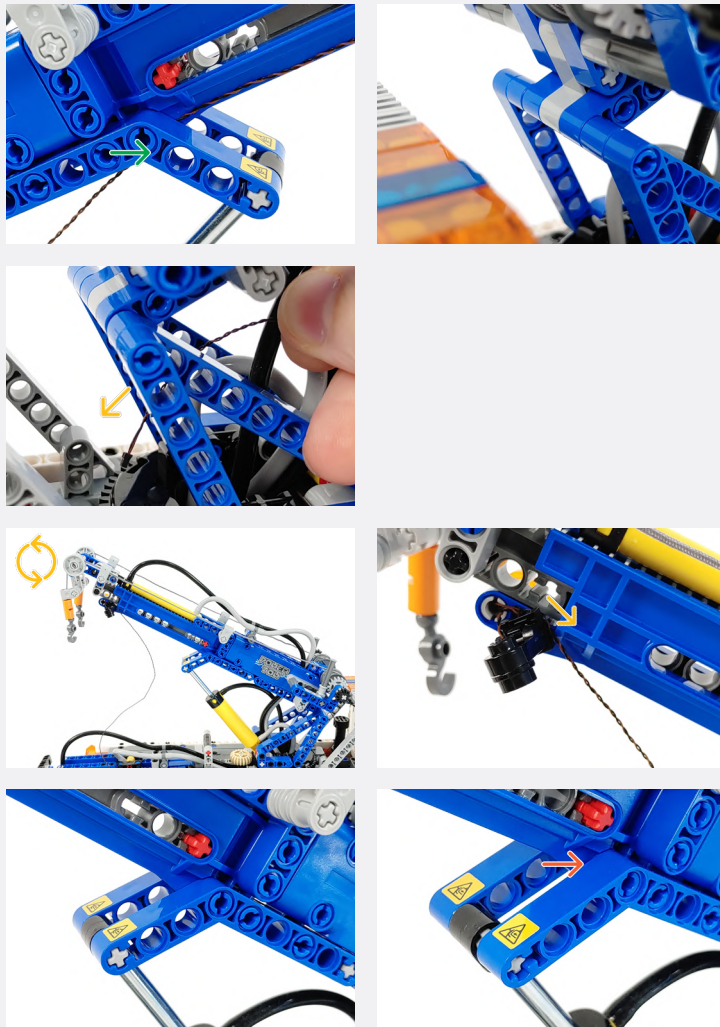


Pinch the cable in between the two Technic pieces

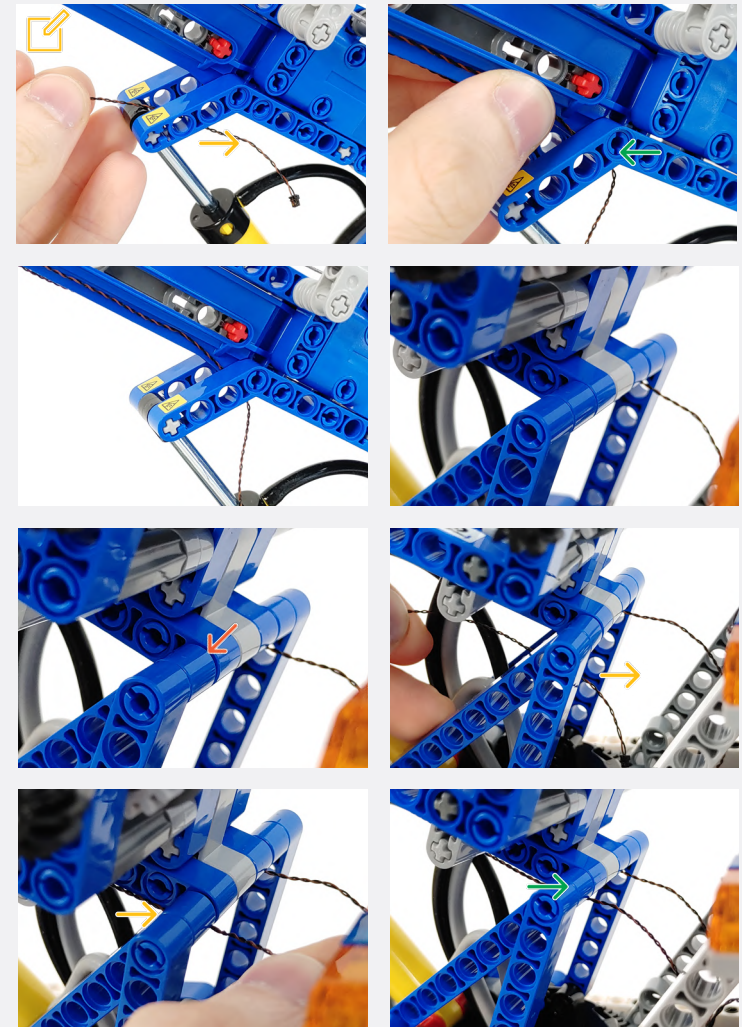
Legend

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

21



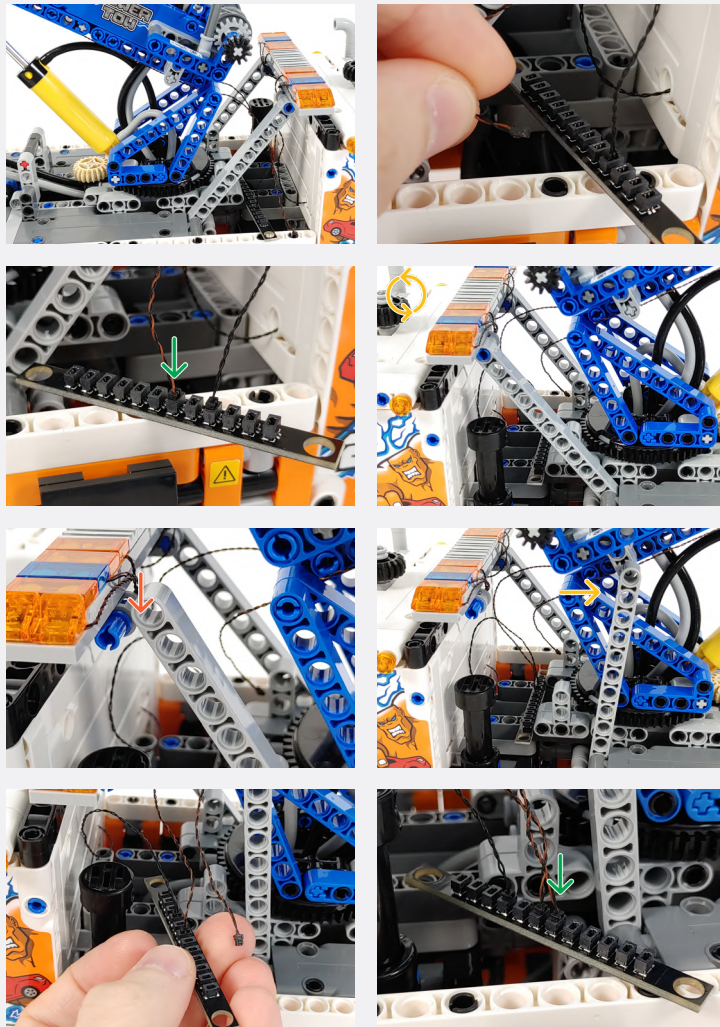
✎ Grab the cable from the Rotating Bit Light and thread it through



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

📌 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.

22

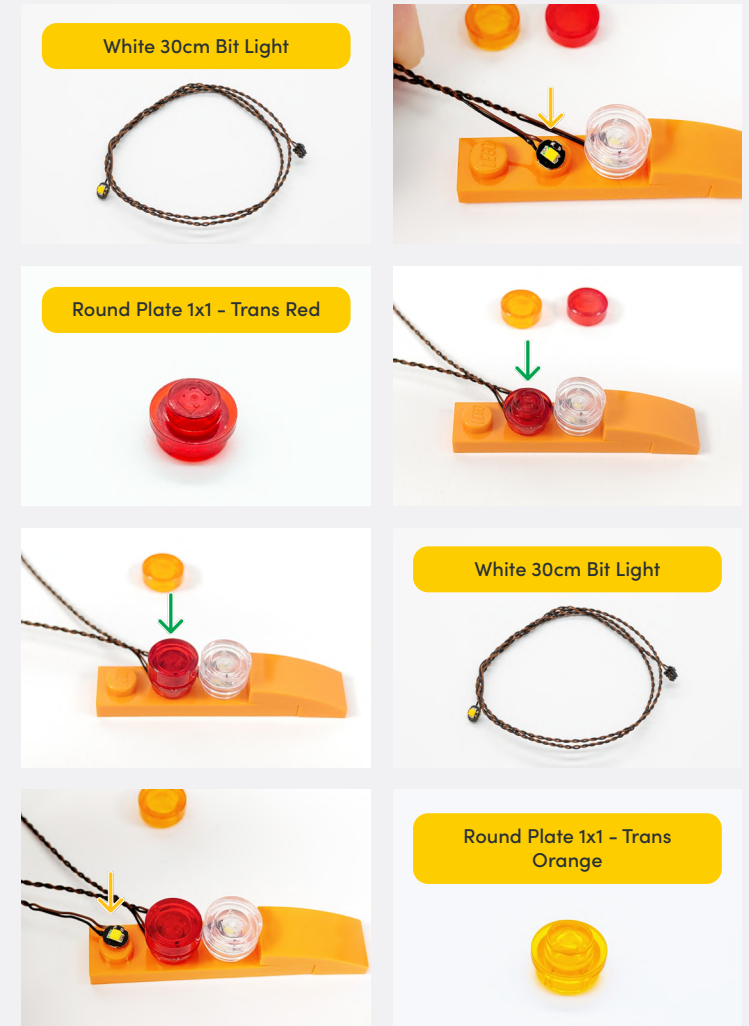
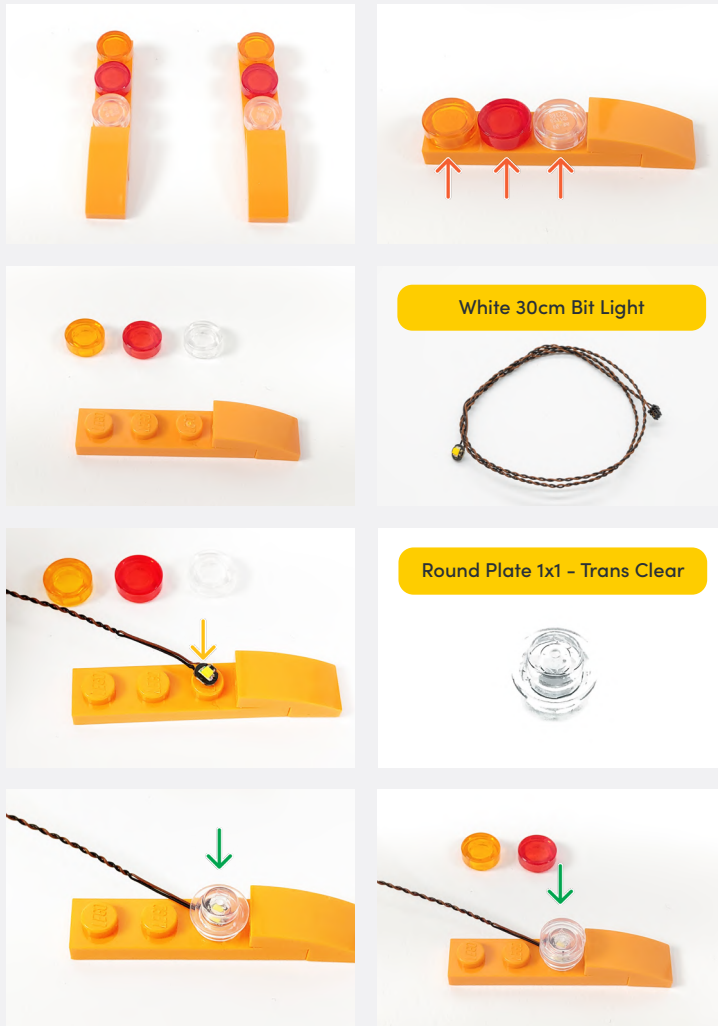


📌 Connect the other end to a 5V USB Power Bank, 5V USB Wall Adaptor, or USB to AA Battery Pack (sold separately)



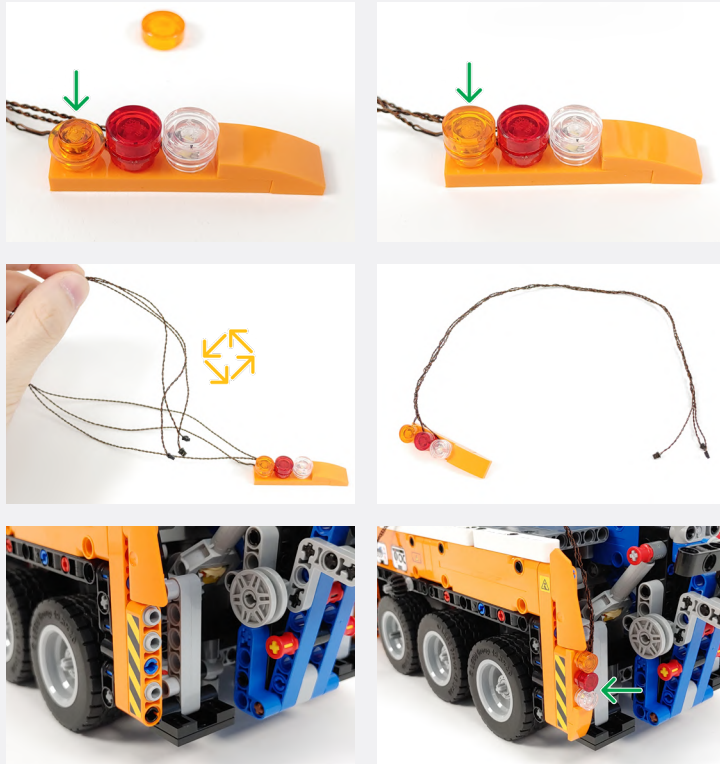
23

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

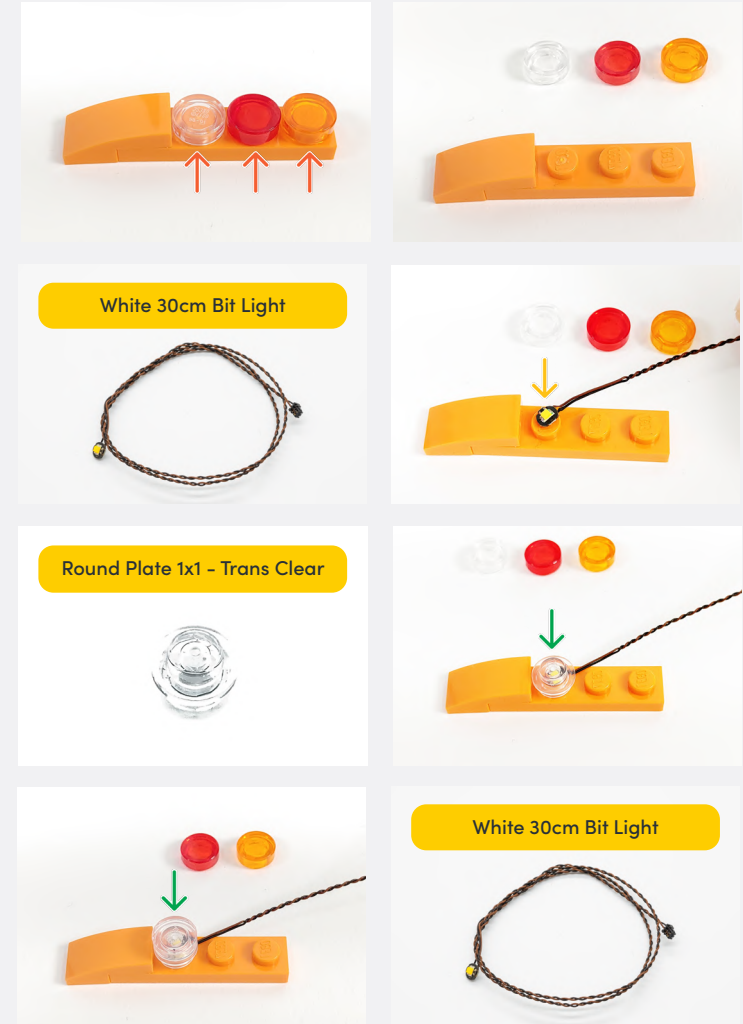


Legend

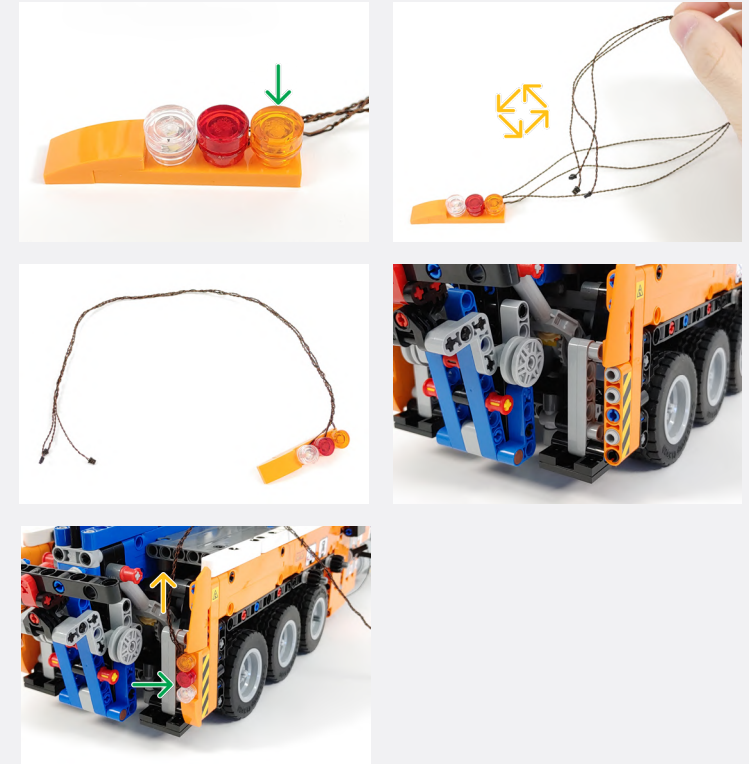
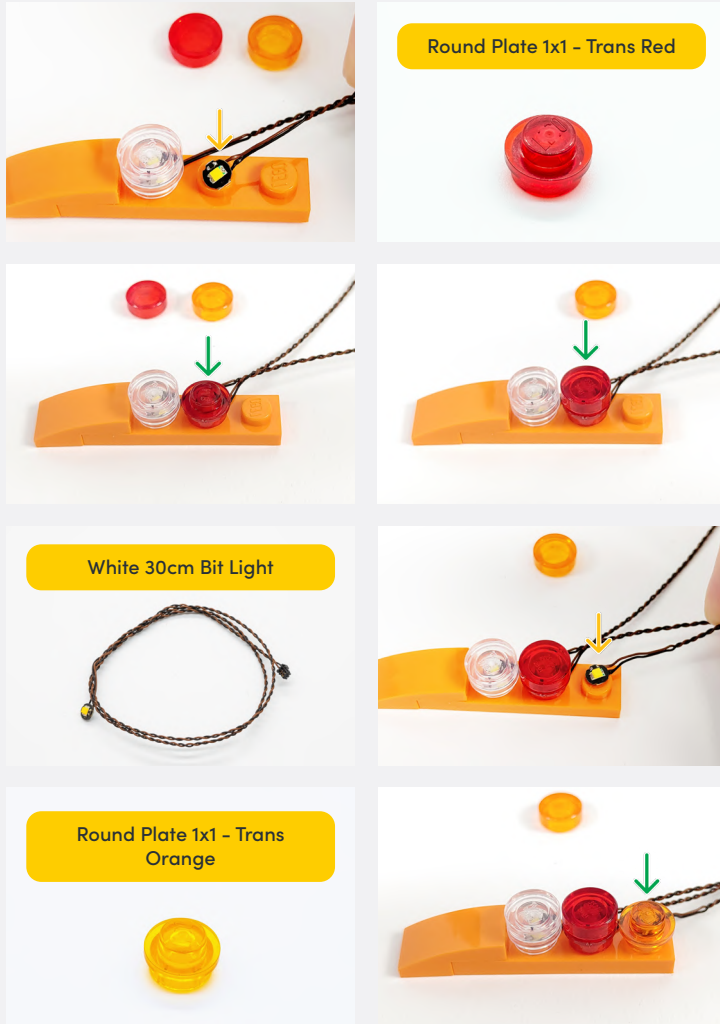
- DISCONNECT
- CONNECT / RECONNECT
- ↻ TURN / FLIP
- DIRECTIONAL
- ↻ TWIST / BRAID
- ✳ POWER ON TEST
- 📝 NOTE ICON



24



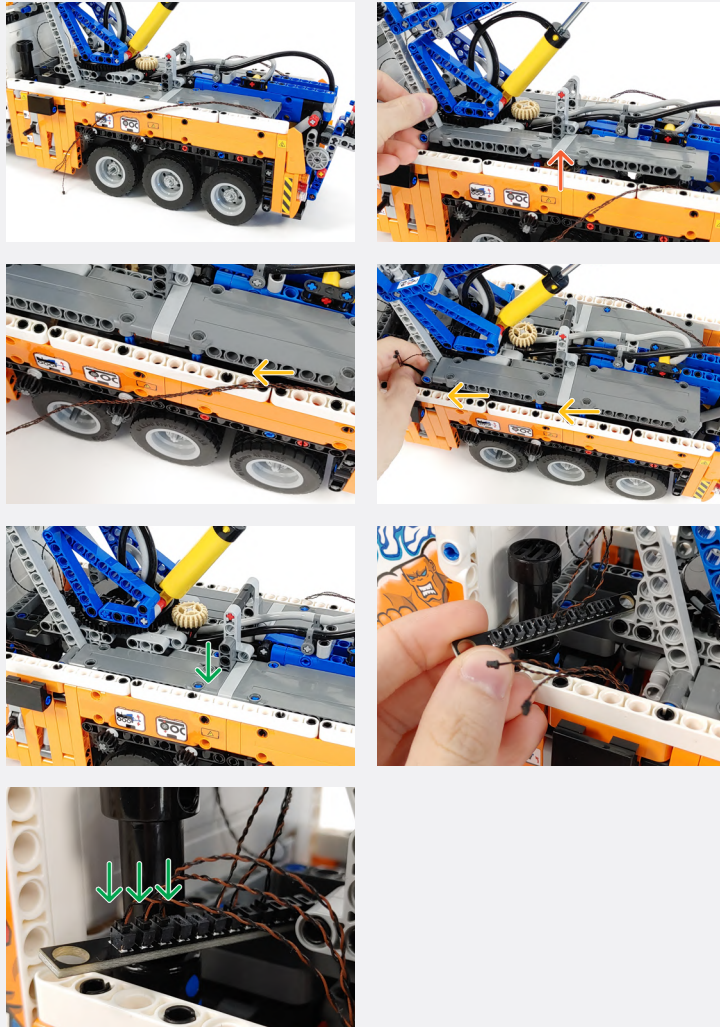
Legend → DISCONNECT → CONNECT / RECONNECT ↻ TURN / FLIP → DIRECTIONAL ↻ TWIST / BRAID ✨ POWER ON TEST 📝 NOTE ICON



Legend

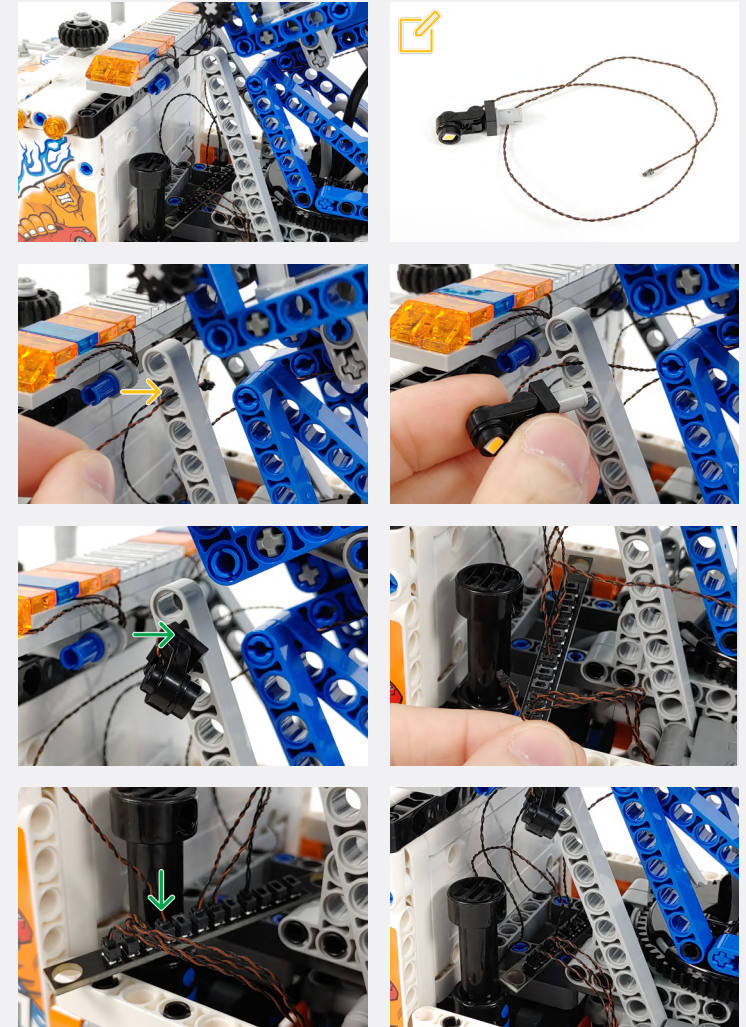
- DISCONNECT
- CONNECT / RECONNECT
- TURN / FLIP
- DIRECTIONAL
- TWIST / BRAID
- POWER ON TEST
- NOTE ICON

25



26

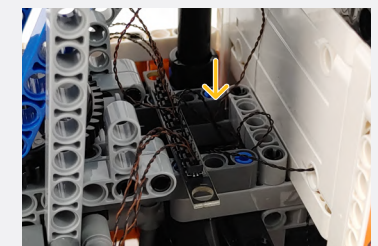
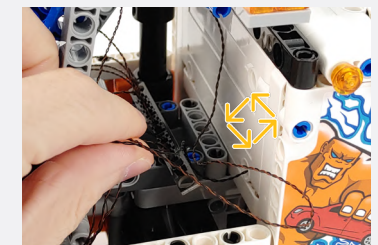
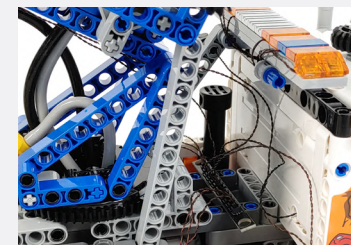
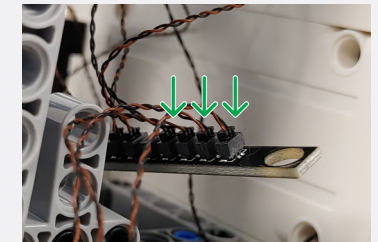
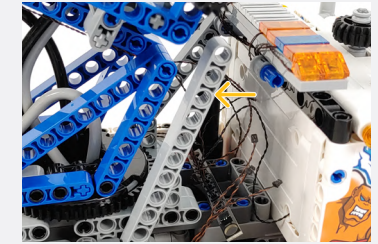
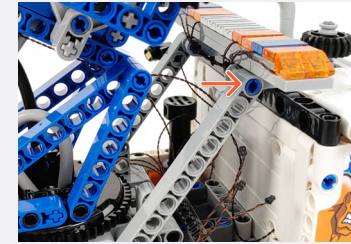
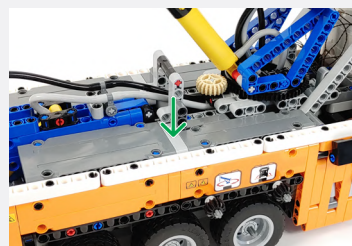
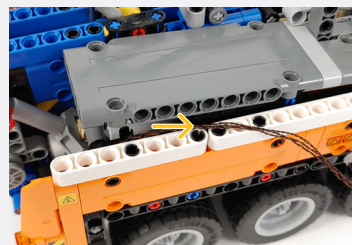
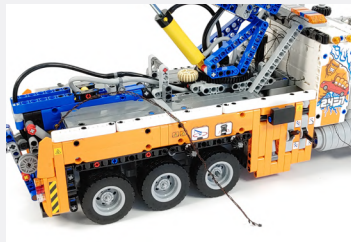
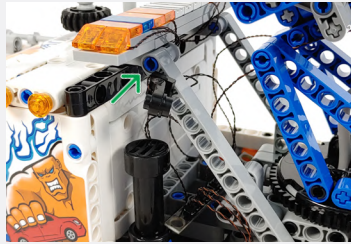
Use the Spotlight part you made from back in Step 19



Legend

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

27

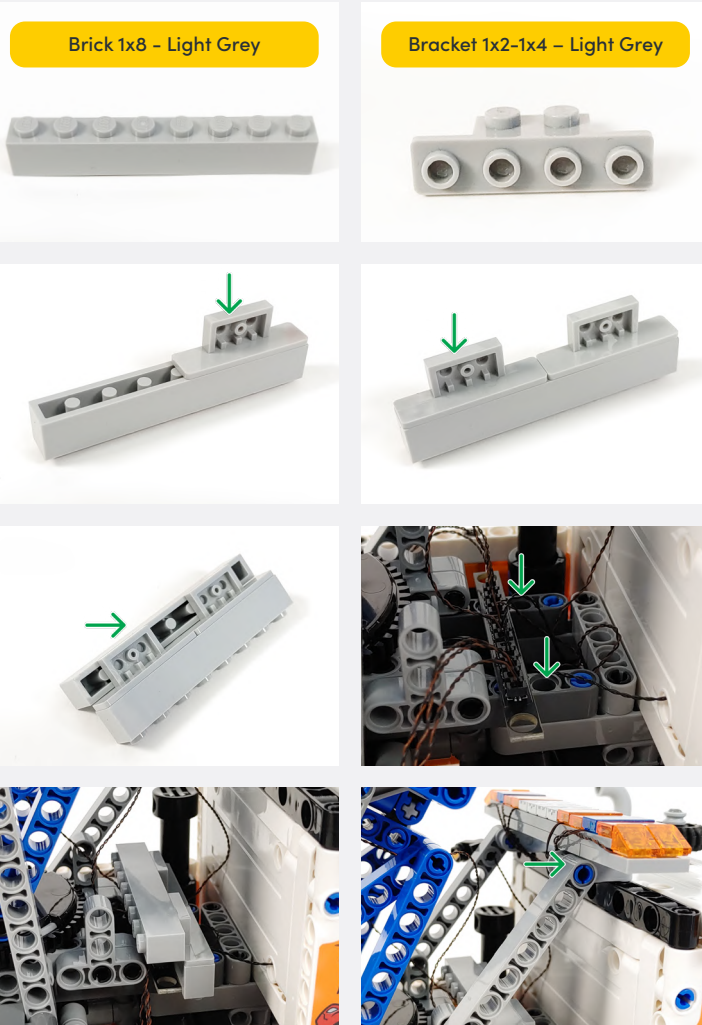


Legend



28

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.



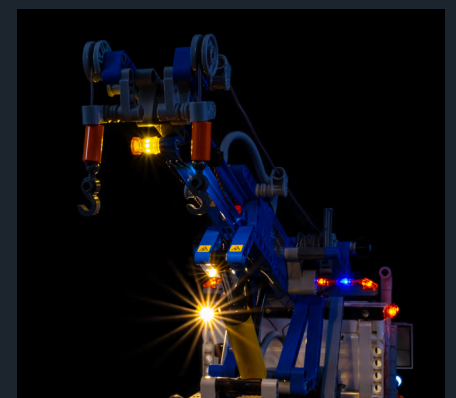
Connect the other end to a 5V USB Power Bank, 5V USB Wall Adaptor, or USB to AA Battery Pack (sold separately)



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

FINAL PRODUCT

This finally completes installation of the Light My Bricks Heavy-Duty Tow Truck 42128 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.

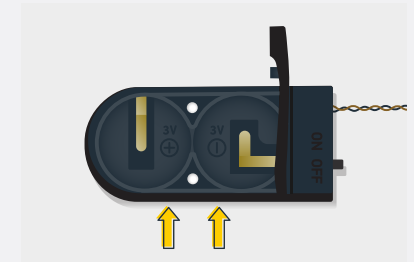
If the batteries have no power, replace the batteries.

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

Check For CR2032 Batteries Using The Flat Battery Pack

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

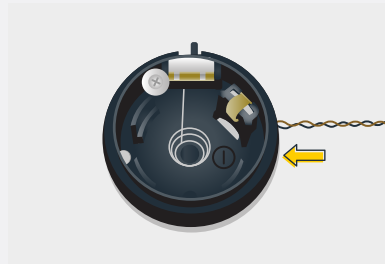
On the opposite side, the “-” side of the battery pack should have the battery flipped upside down, that is the “+” symbol facing upwards.



Troubleshooting

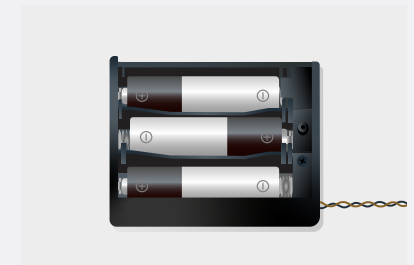
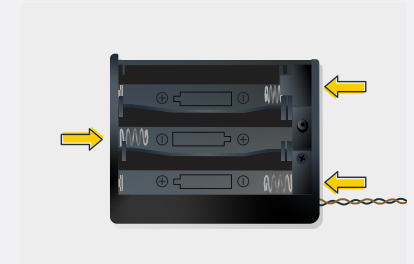
Check For Cr2032 Batteries Using The Round Battery Pack

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



Check for AA batteries using the AA battery pack

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



Troubleshooting

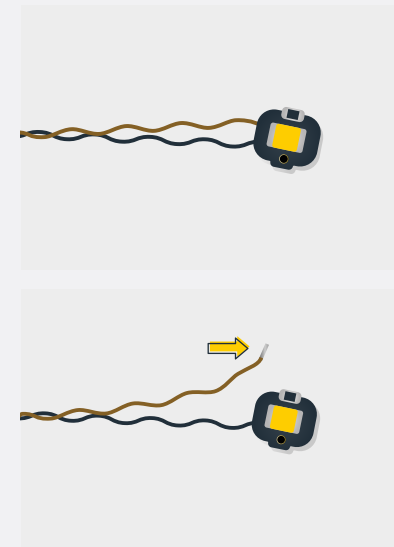
Check Your Wires

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

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

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

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



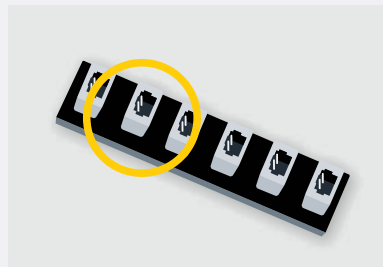
Troubleshooting

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

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

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

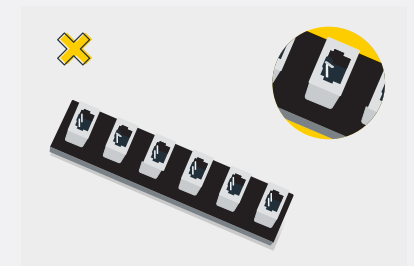
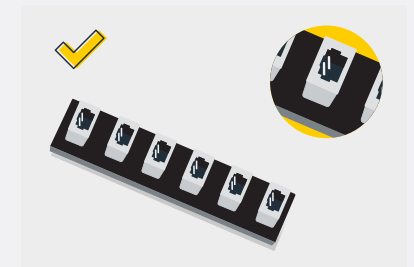
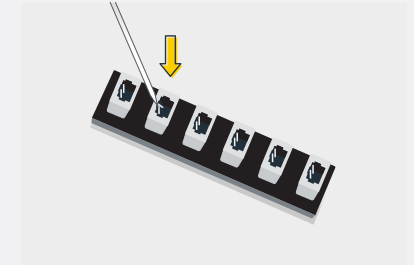
Not only will a light connected to the damaged port not work, but if the pins inside the port are bent to a point they are touching each other, this can result in all other lights in the system to stop working. This is a short circuit.



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

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

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





CONTACT US

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

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

support.lightmybricks.com

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



lightmybricks.com