

# Light My Bricks



## LEGO® Ghostbusters™ Ecto-1 #10274 Light & Sound Kit Installation Guide



Hi There!

We're here to help you get started on the LEGO® Ghostbusters Ecto-1 (10274) Light & Sound Kit.

This PDF details the instructions for the LED light & sound 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:**

- 11 x Cool White 30cm Bit Lights
- 13 x Cool White 15cm Bit Lights
- 4 x Yellow 15cm Bit Lights
- 4 x White 15cm Bit Lights
- 8 x Red 30cm Bit Lights
- 1 x Blue 30cm Bit Light
- 1 x Green 30cm Bit Light
- 4 x 6-Port Expansion Boards
- 2 x 12-Port Expansion Boards
- 3 x Multi Effects Boards (3PFX)
- 2 x Rotating Sequence Boards (RSB)
- 8 x 5cm Connecting Cables
- 2 x 15cm Connecting Cables
- 1 x 50cm Connecting Cable
- 1 x USB Power Cable (Power Source not Included)

**LEGO PIECES:**

- 1 x Black Plate 2x8
- 3 x Black Plate 2x6
- 2 x Dark Bluish Grey Plate 1x4
- 1 x Plate 1x6 (any colour)
- 1 x Dark Bluish Grey Plate 2x2
- 1 x Dark Bluish Grey Brick 2x2
- 4 x Black Round Brick 1x1 w open stud
- 1 x Trans Clear Tile 1x2

**EXTRA COMPONENTS INCLUDED WITH THE LIGHT & SOUND KIT:**

- 1 x Remote Control & Sound Board
- 1 x Remote Control
- 1 x IR Receiver w/ 30cm Cable
- 1 x Audio Speaker w/ 15cm Cable
- 1 x Micro SD Memory Card (128MB)
- 1 x Micro USB Cable (to transfer audio files from PC)

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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.

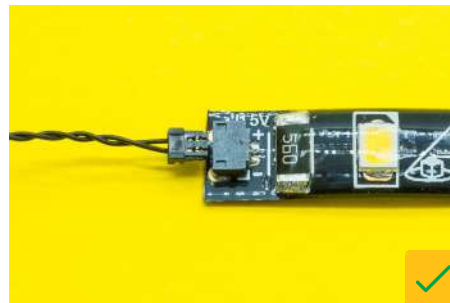
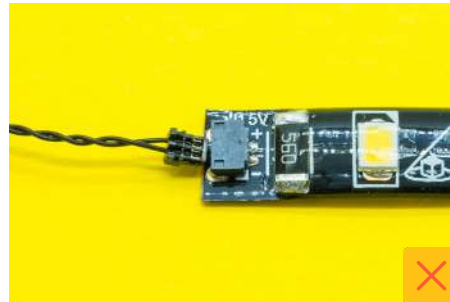
*Incorrectly inserting the connector can result in bent pins inside the port or possible overheating of the expansion board when connected.*



# Before You Begin

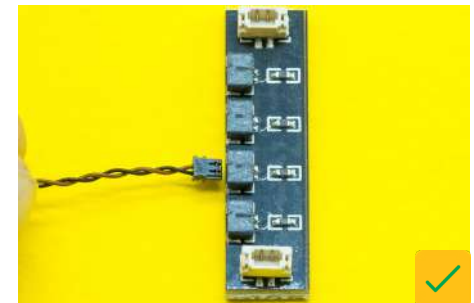
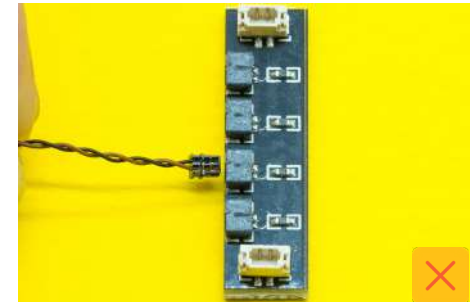
## CONNECTING CABLE CONNECTORS TO STRIP LIGHTS

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

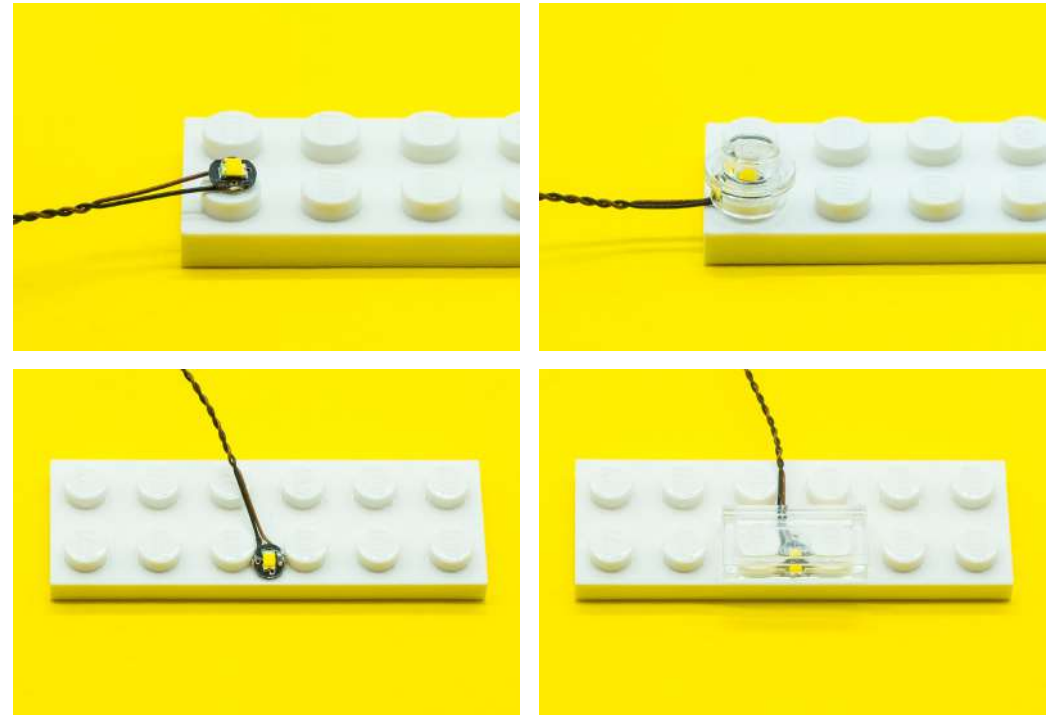
Take extra care when inserting the micro connectors to micro ports of Micro Expansion Boards. Connecting Micro Bit Lights to Micro Expansion Boards is similar to connecting lights and cables to Strip Lights. With the expansion board facing up, ensure the side of the connector with the wires exposed is 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.



# Instructions

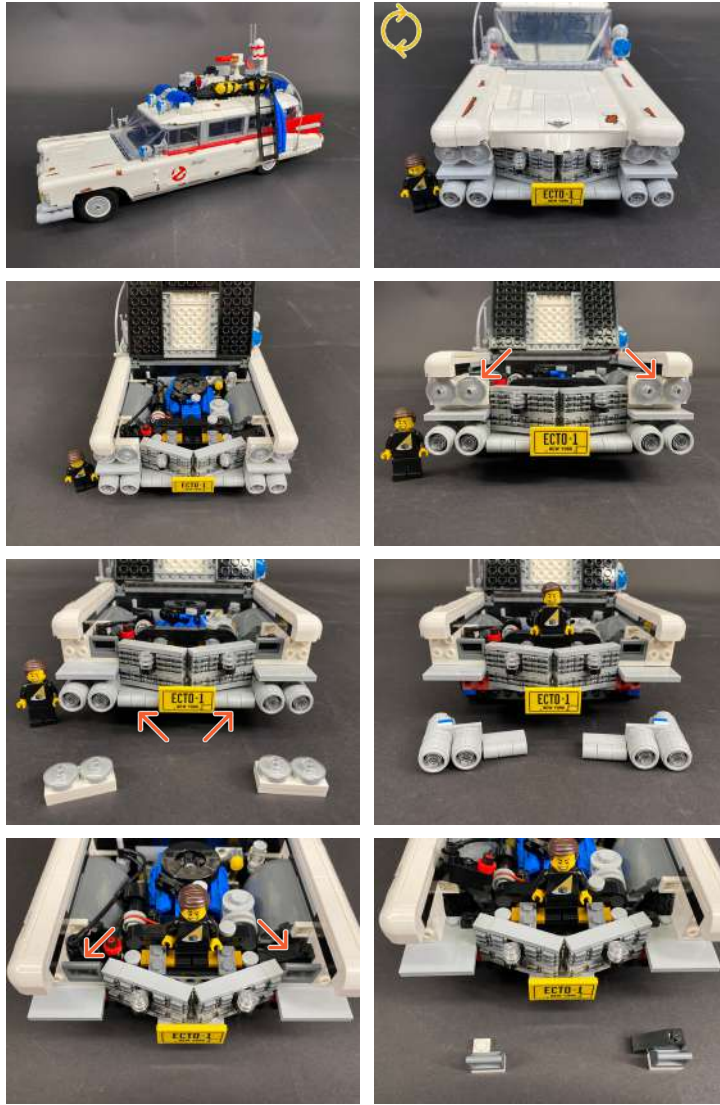


To ensure a smooth installation of your light kit, please read and follow each step carefully.

If you run into any issues, please refer to the online troubleshooting guide.



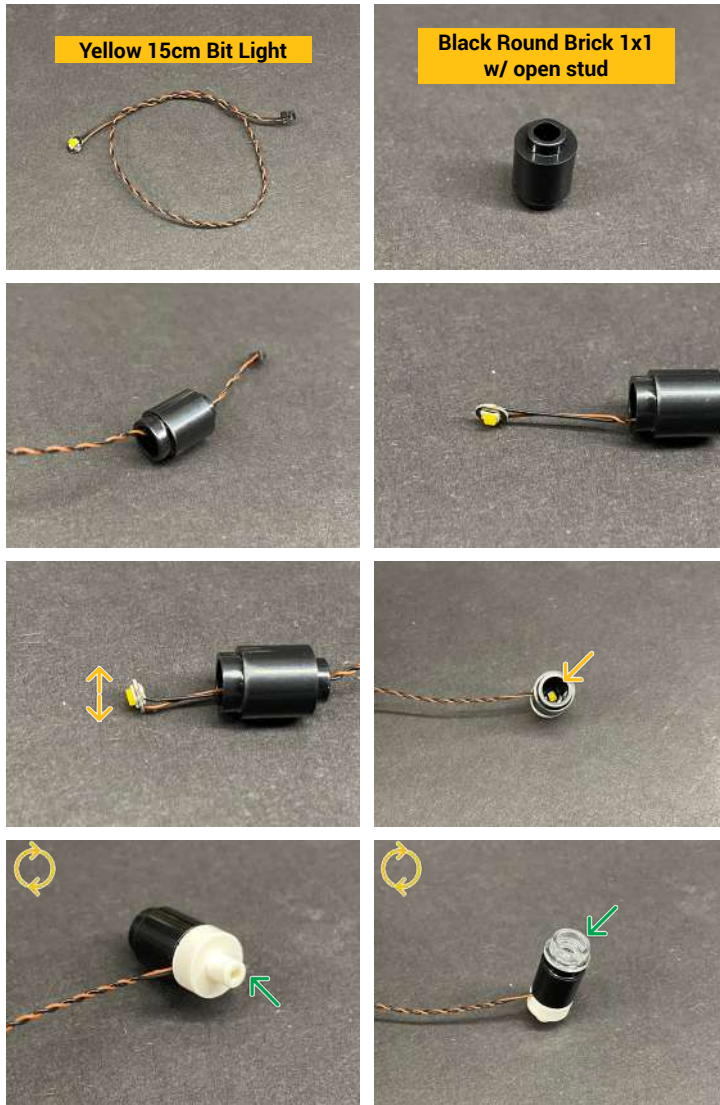
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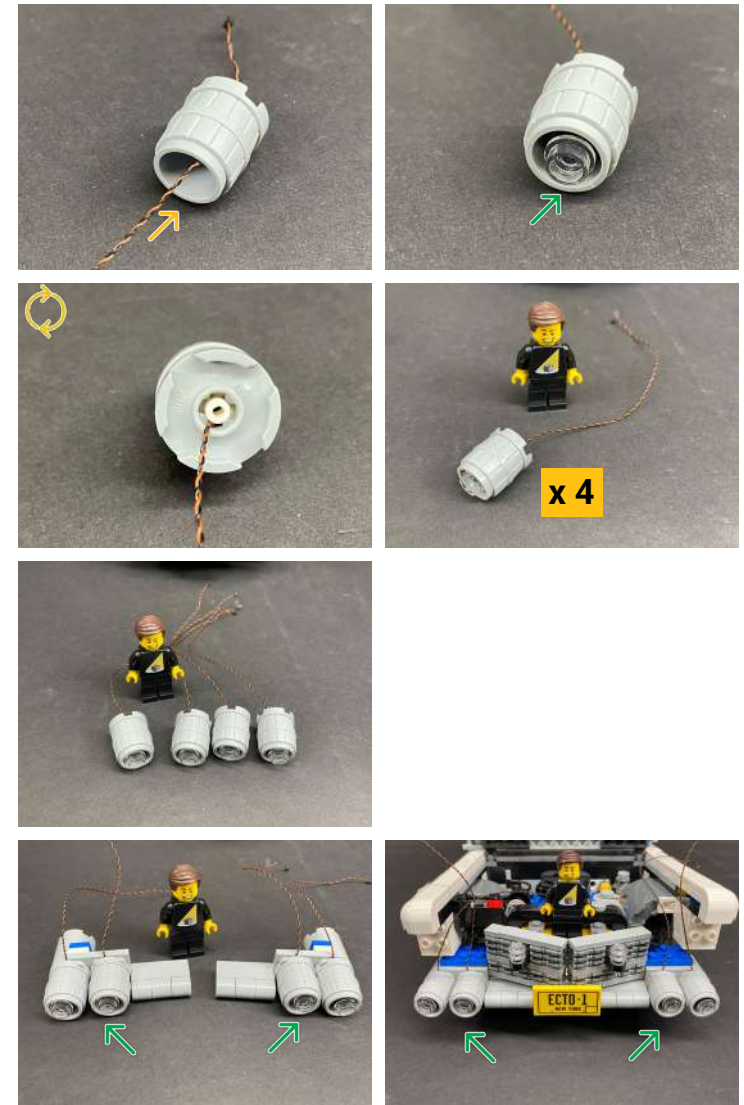
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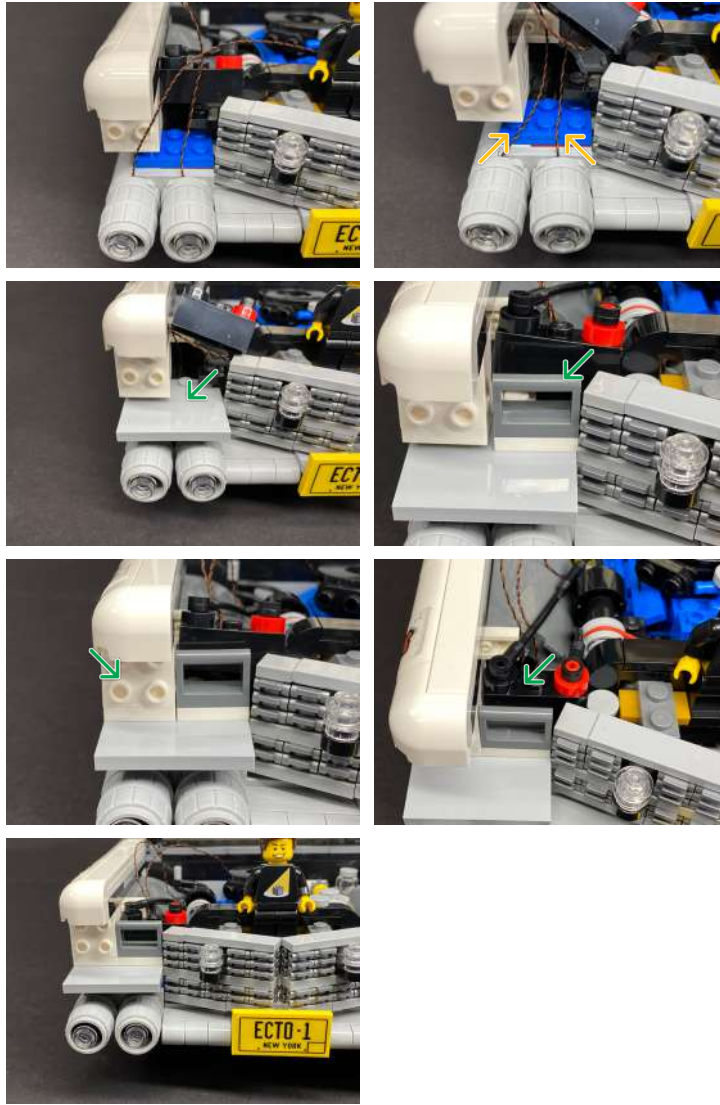




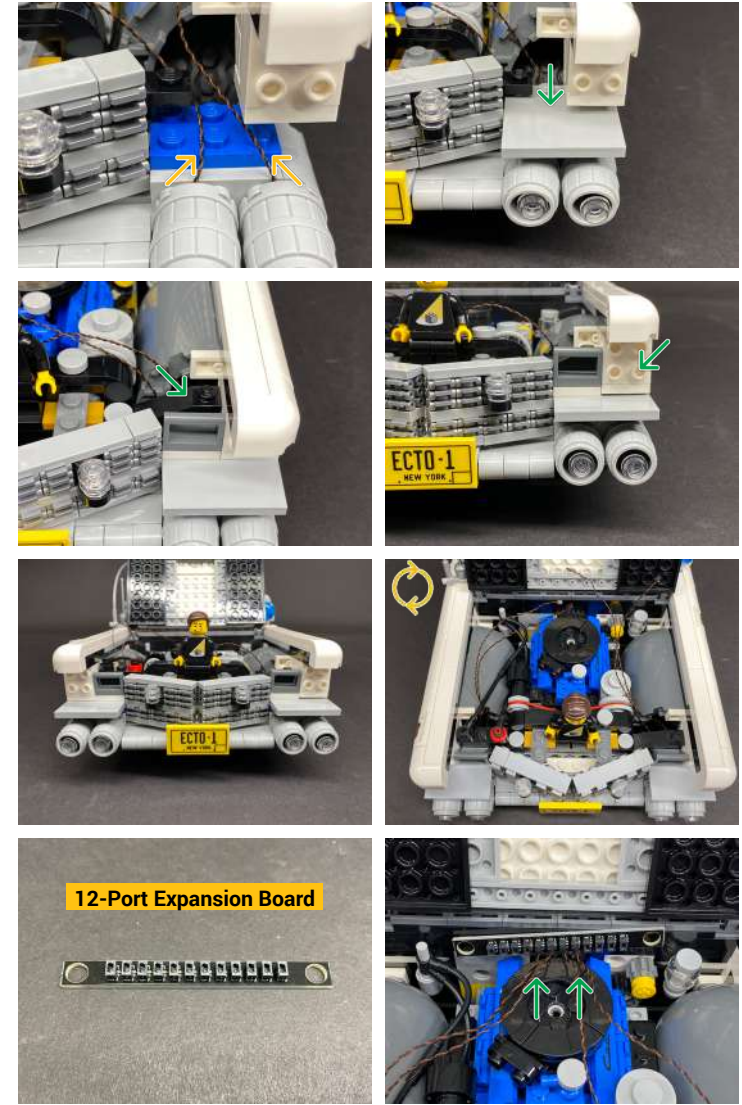


3





# 4



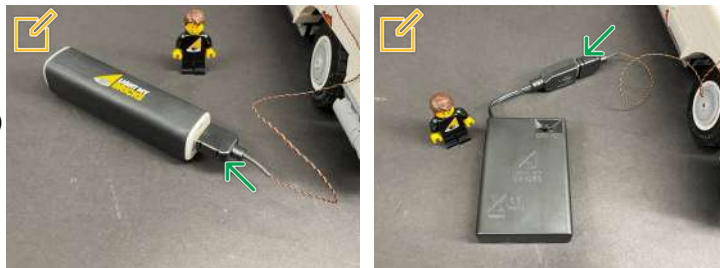


LEGEND: DISCONNECT | CONNECT / RECONNECT | TURN / FLIP | DIRECTIONAL | TWIST / BRAID | POWER ON / TEST

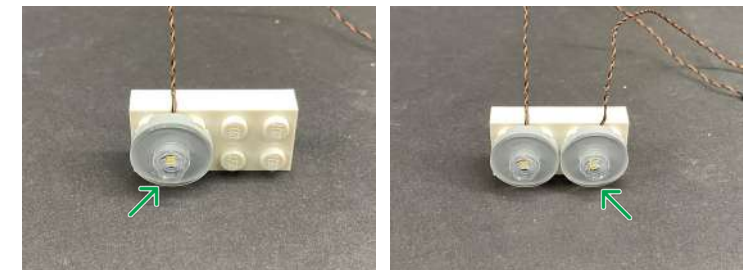
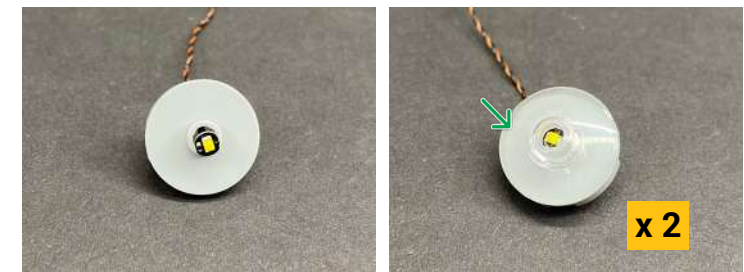
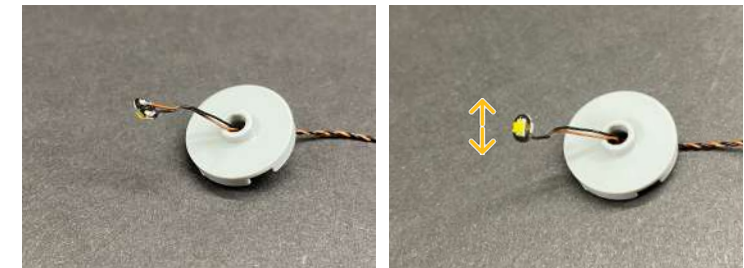
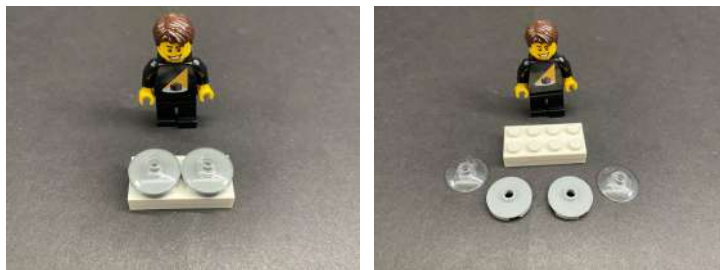
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Connect to a USB Power Bank, USB Battery Pack or Wall Adaptor (each sold separately)



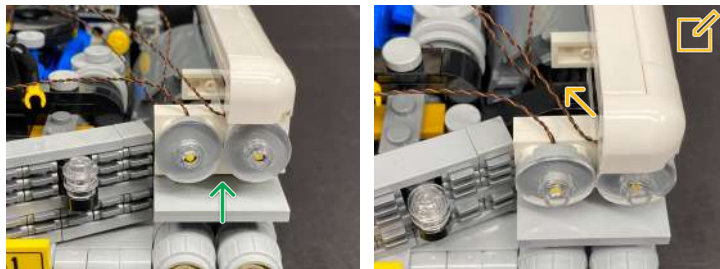
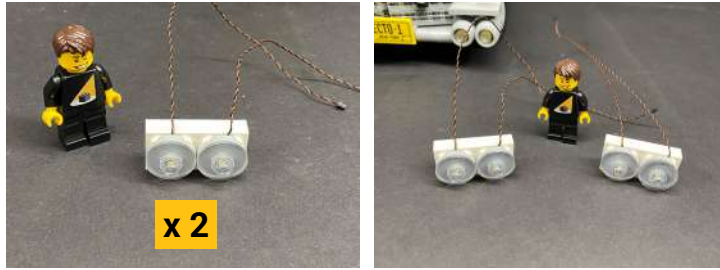
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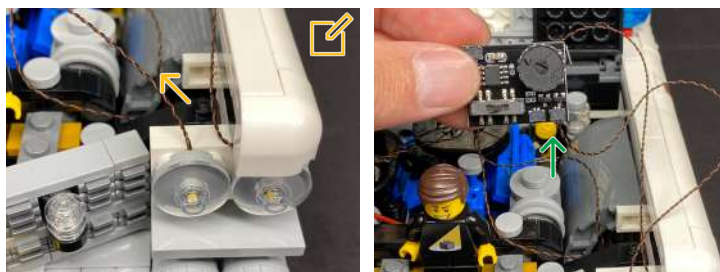
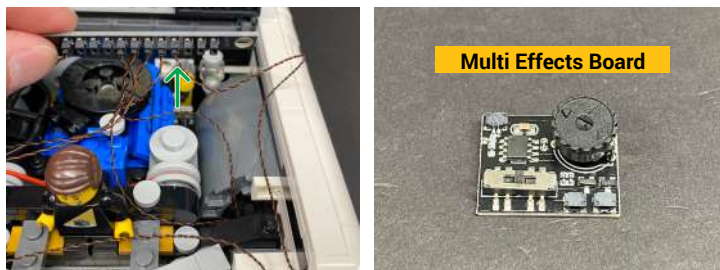
If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion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

7

Headlight cable from the far right side

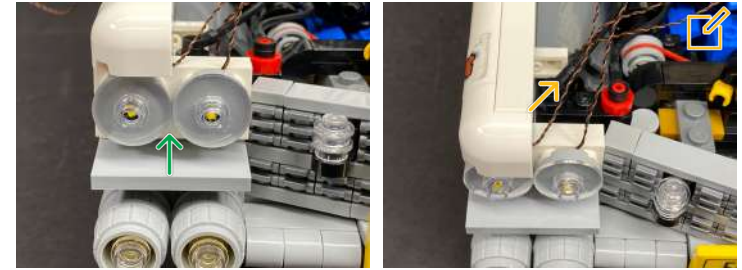


Headlight cable from the inside.

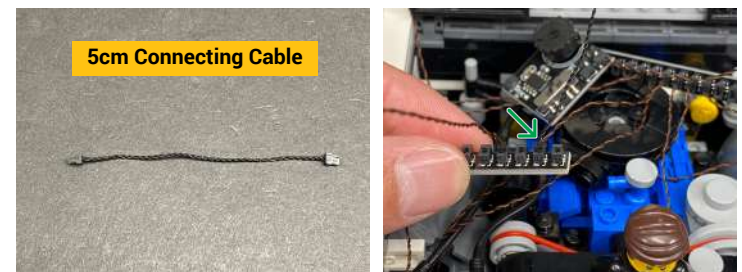
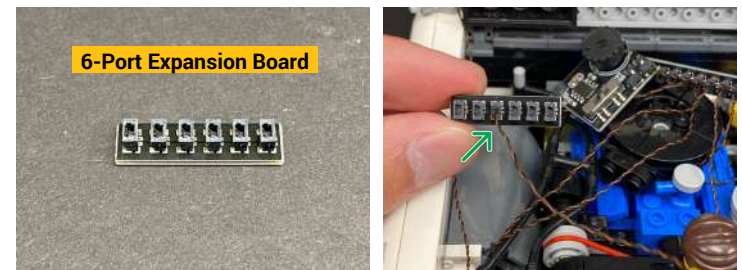


8

Headlight cable from the far left side




Headlight cable from the inside

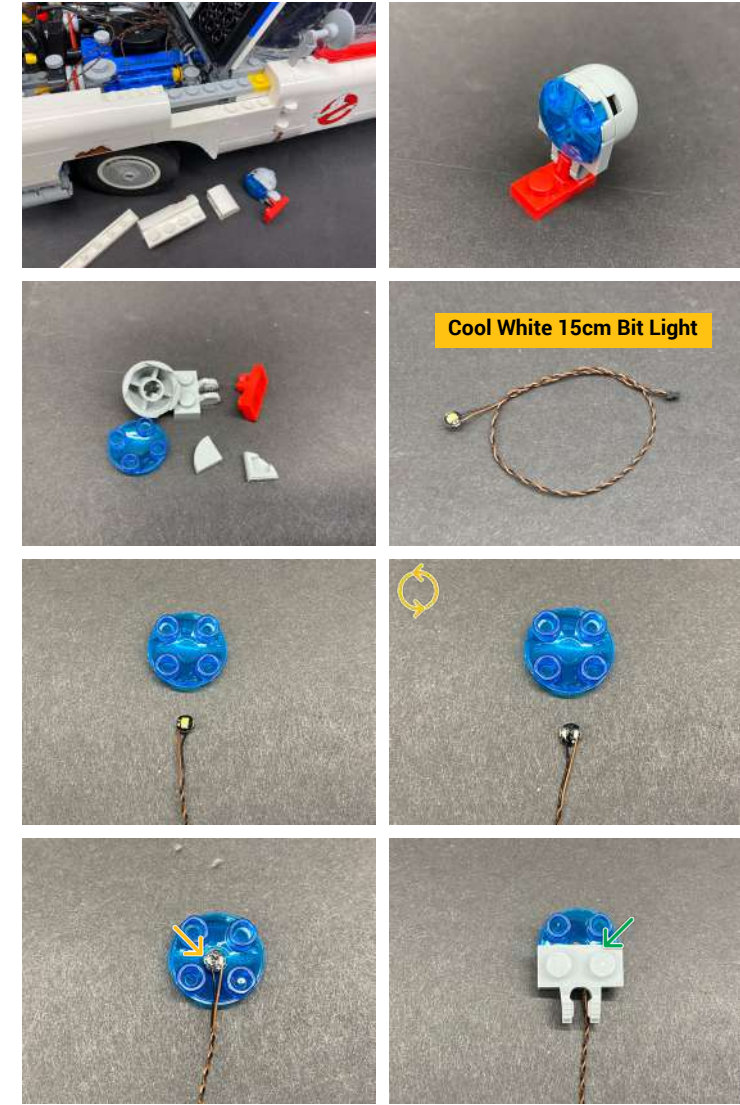
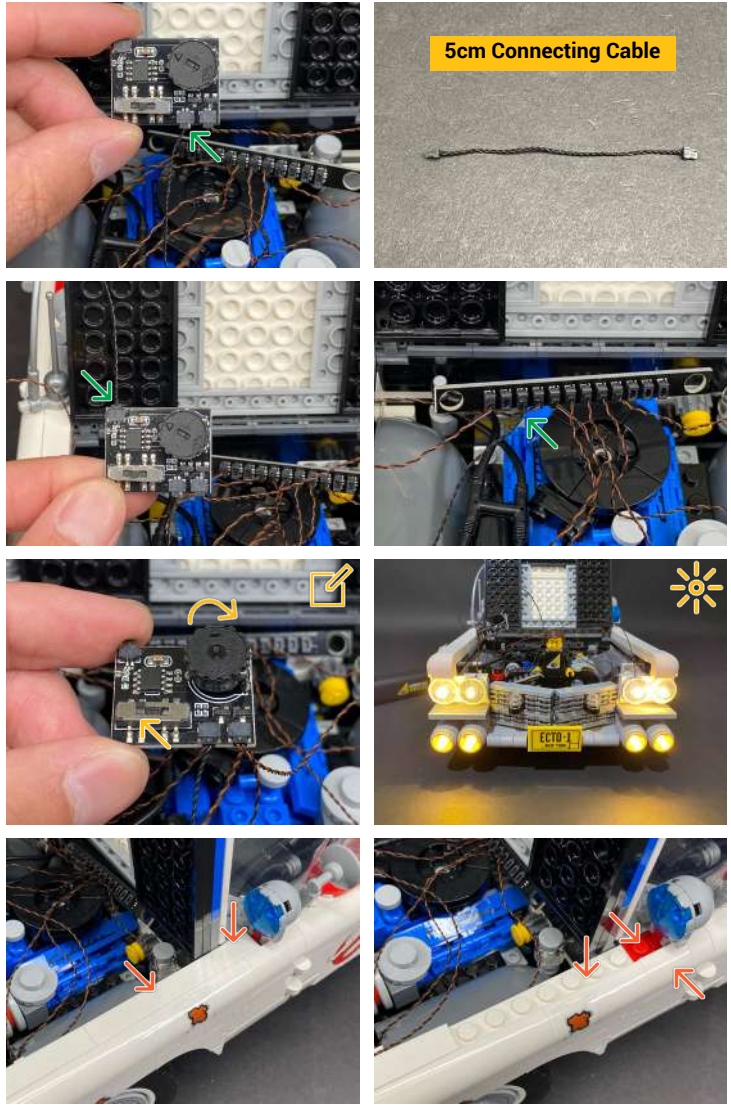





LEGEND:  DISCONNECT |  CONNECT / RECONNECT |  TURN / FLIP |  DIRECTIONAL |  TWIST / BRAID |  POWER ON / TEST

# 9

 Flick the switch to the far left for "Pulse" Effect.  
Adjust the speed wheel to the middle for a moderate speed

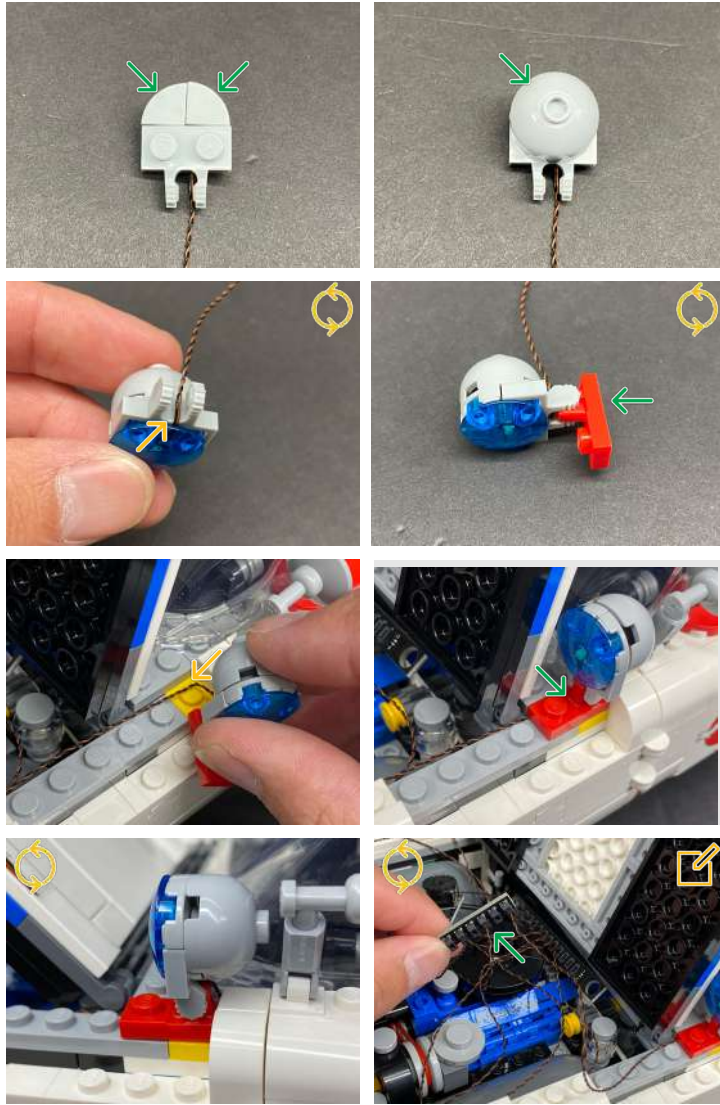



 If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion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



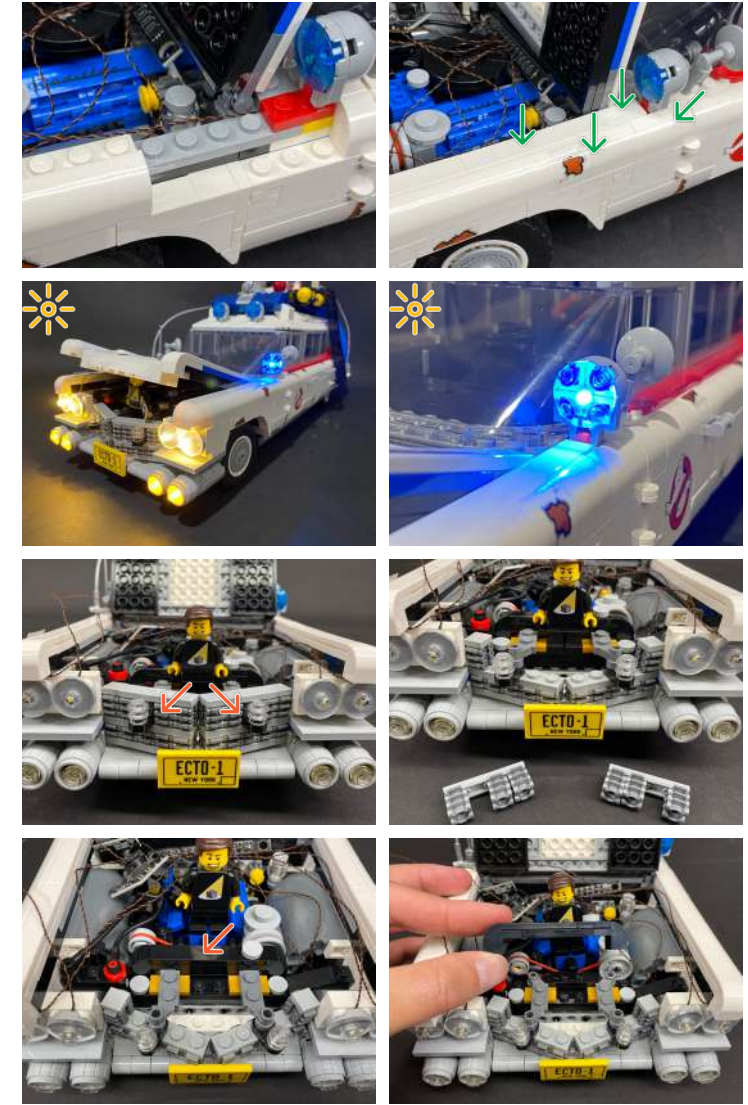
LEGEND: |  DISCONNECT |  CONNECT / RECONNECT |  TURN / FLIP |  DIRECTIONAL |  TWIST / BRAID |  POWER ON / TEST


# 10



 Connect the Cool White 15cm Bit Light to the 6-Port Expansion Board.

# 11



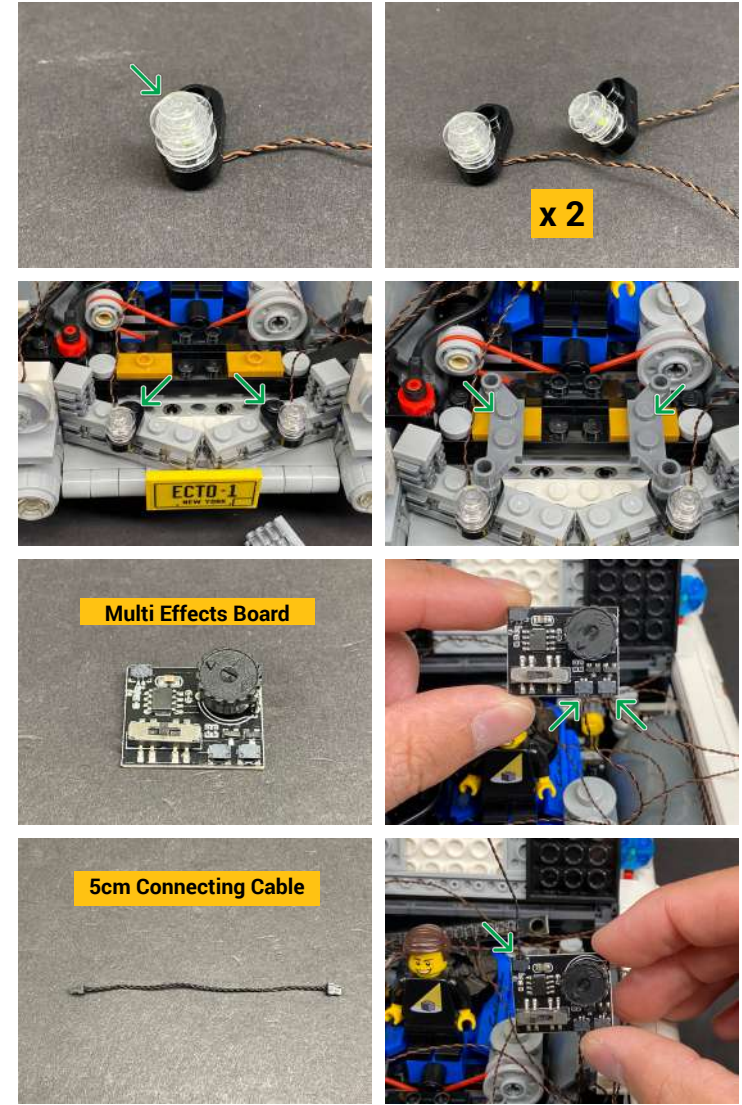
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# 12




# 13

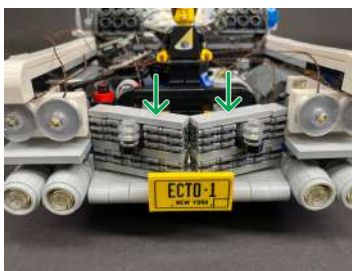
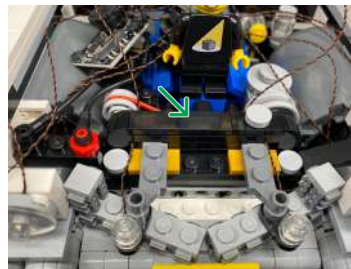
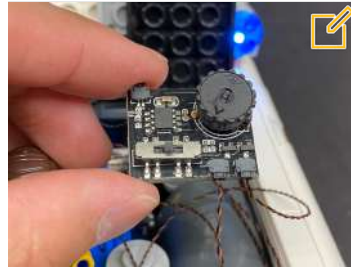
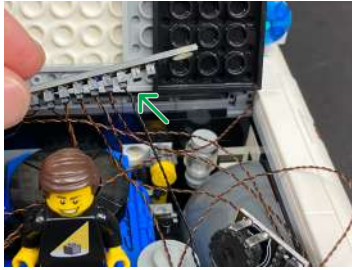





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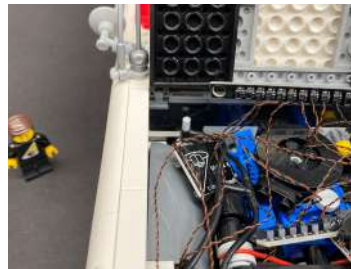
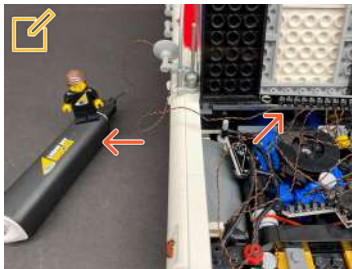
 Flick the switch to the middle for "Emergency" Effect.

Adjust the speed wheel to the left for desired flash rate

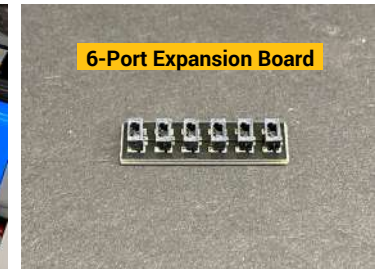
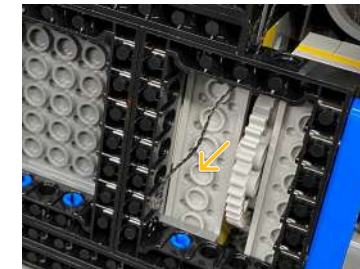
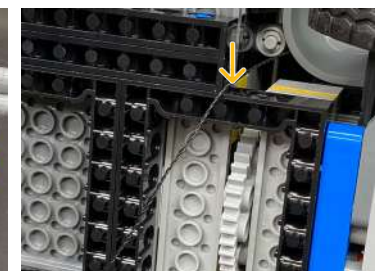
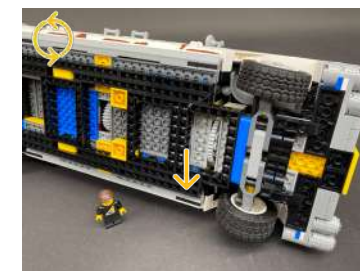
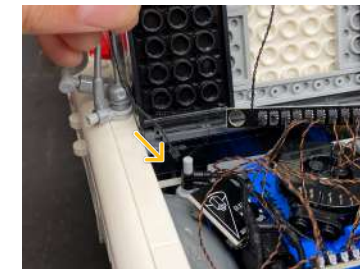
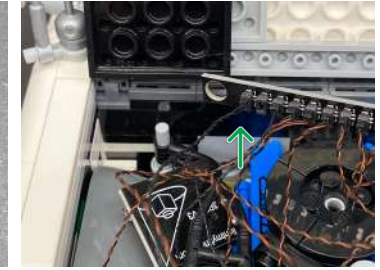
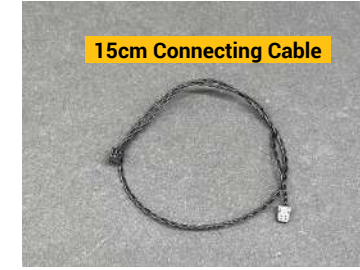



# 14

 Disconnect the USB Power Cable

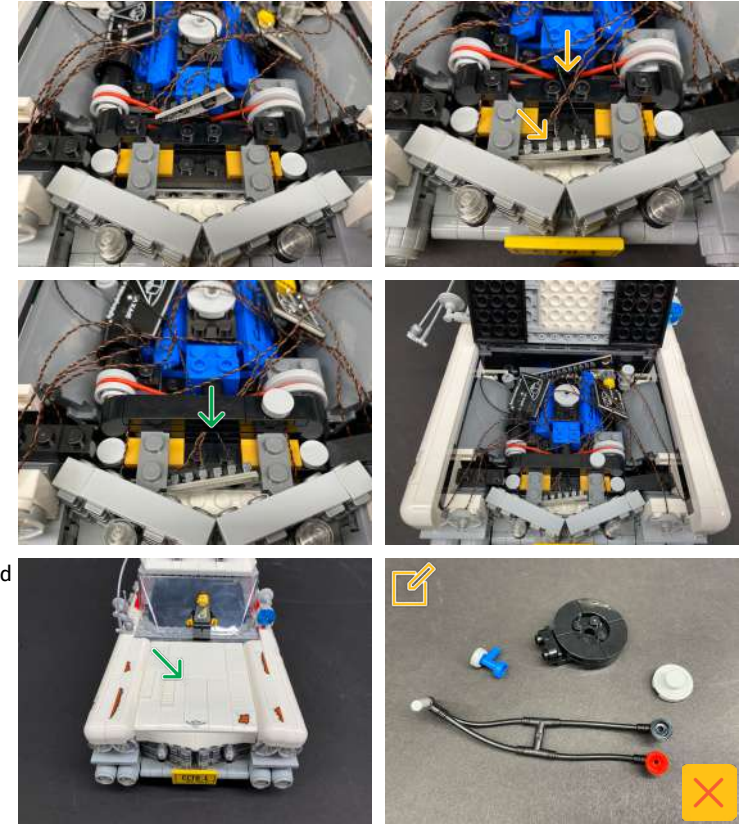
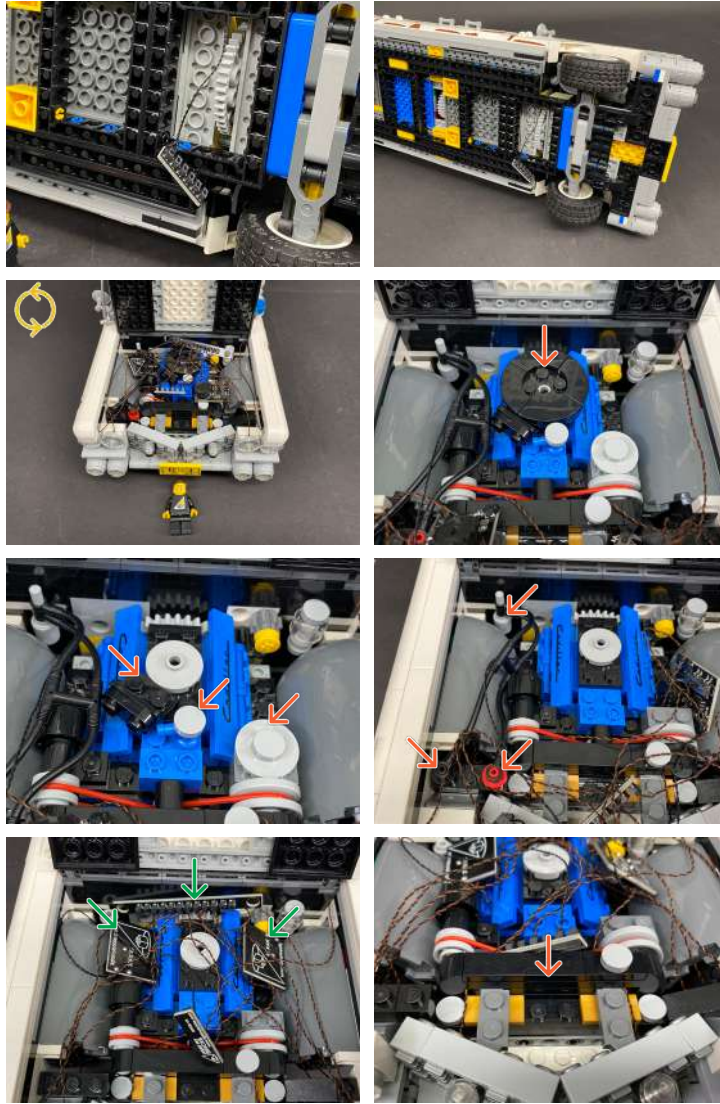



# 15



 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 on our online troubleshooting guide.

# 16



 Discard disconnected pieces



# Remote Control & Sound Kit Add-On



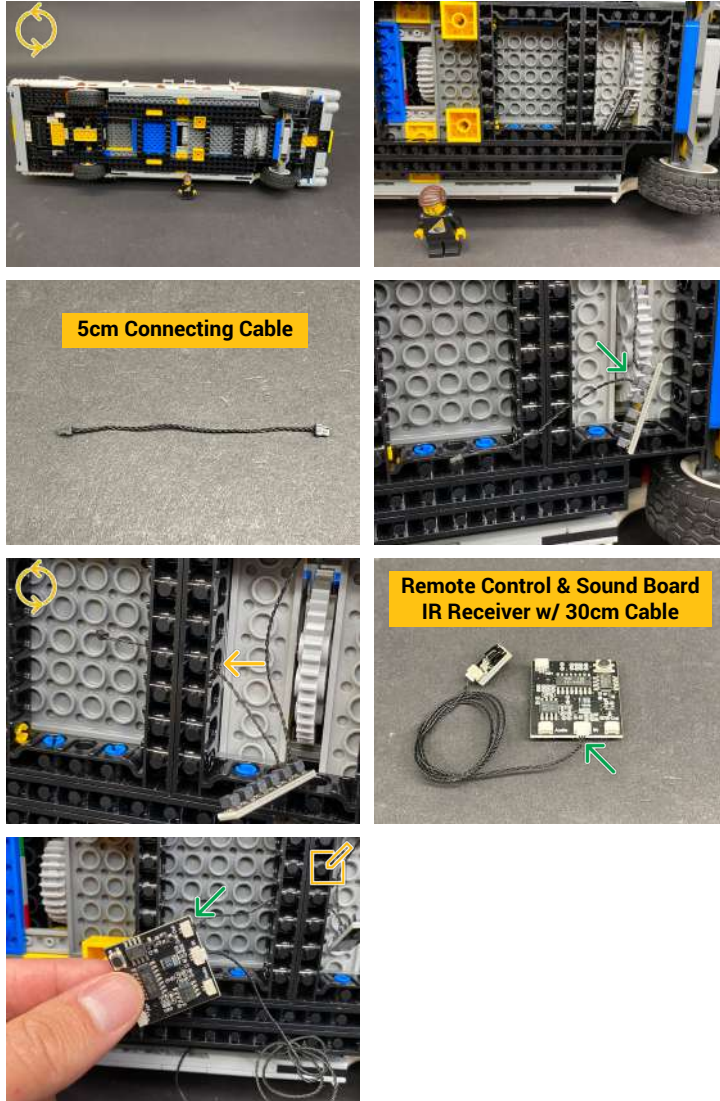
If you have purchased the Light My Bricks Ecto-1 Light & Sound Kit please continue on to step RC1.




If you have purchased the Light Kit only, please [click here](#) to skip to step LK1.

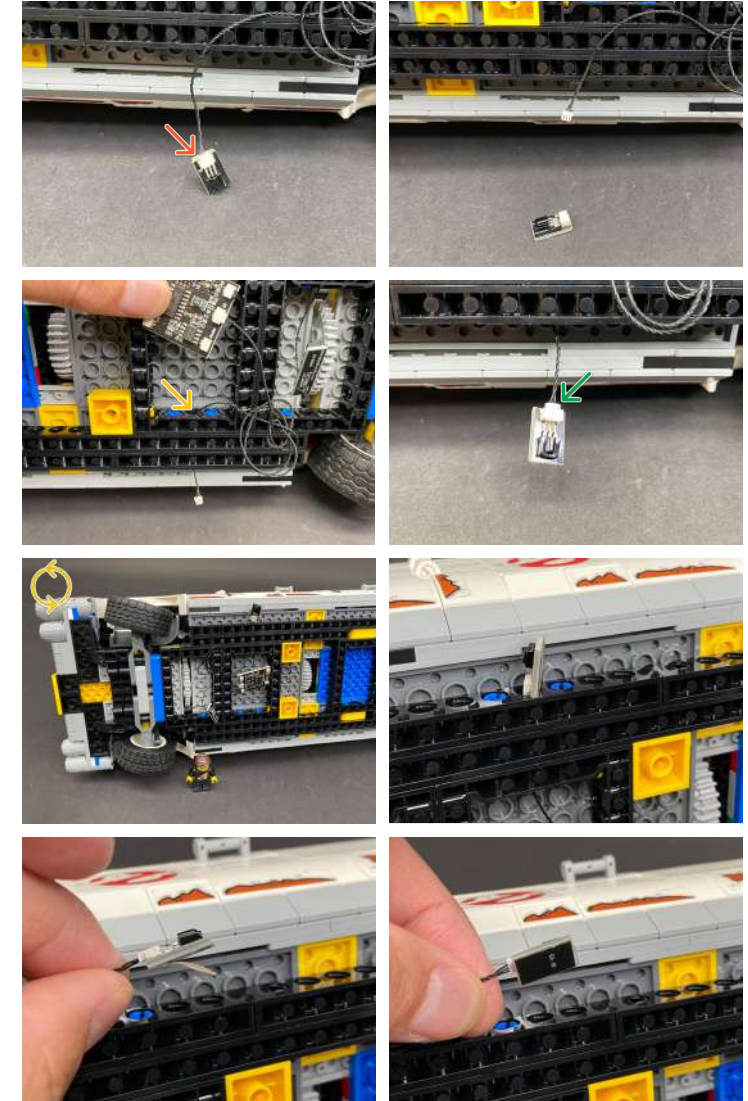
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# RC1.



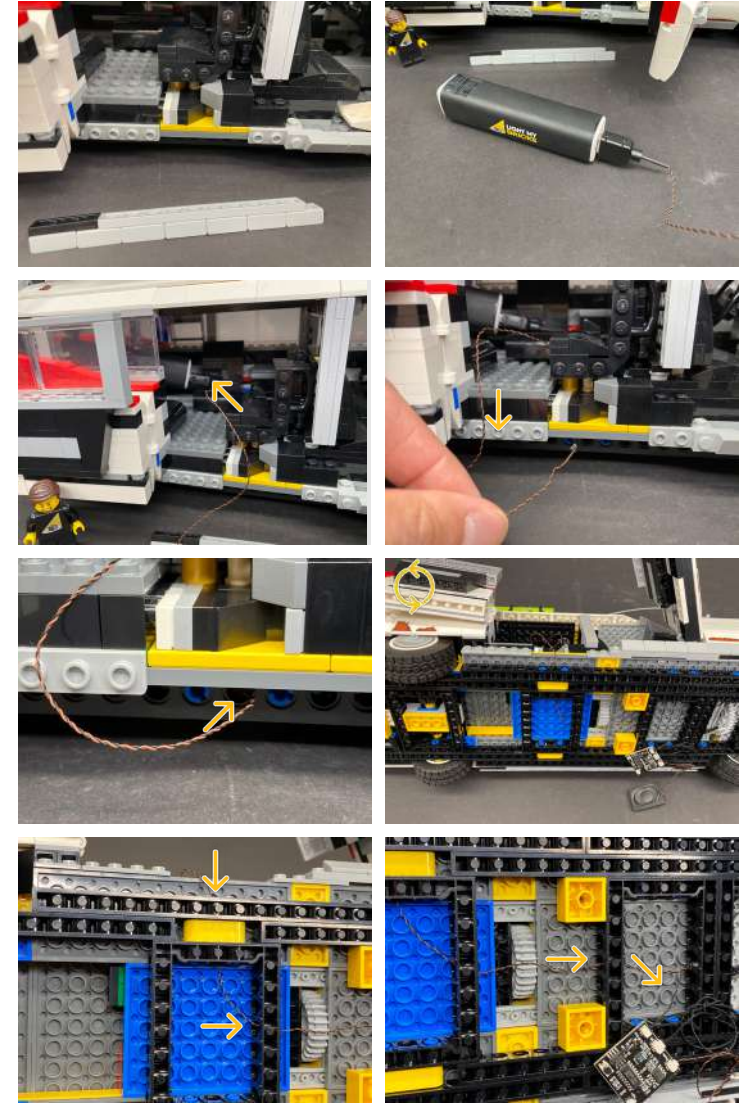
 Connect to the **OUT** port on the Remote Control Board

# RC2.



 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 on our online troubleshooting guide.


# RC3.






LEGEND:  DISCONNECT |  CONNECT / RECONNECT |  TURN / FLIP |  DIRECTIONAL |  TWIST / BRAID |  POWER ON / TEST





 Remote Tag

 Point Remote Control toward IR Receiver

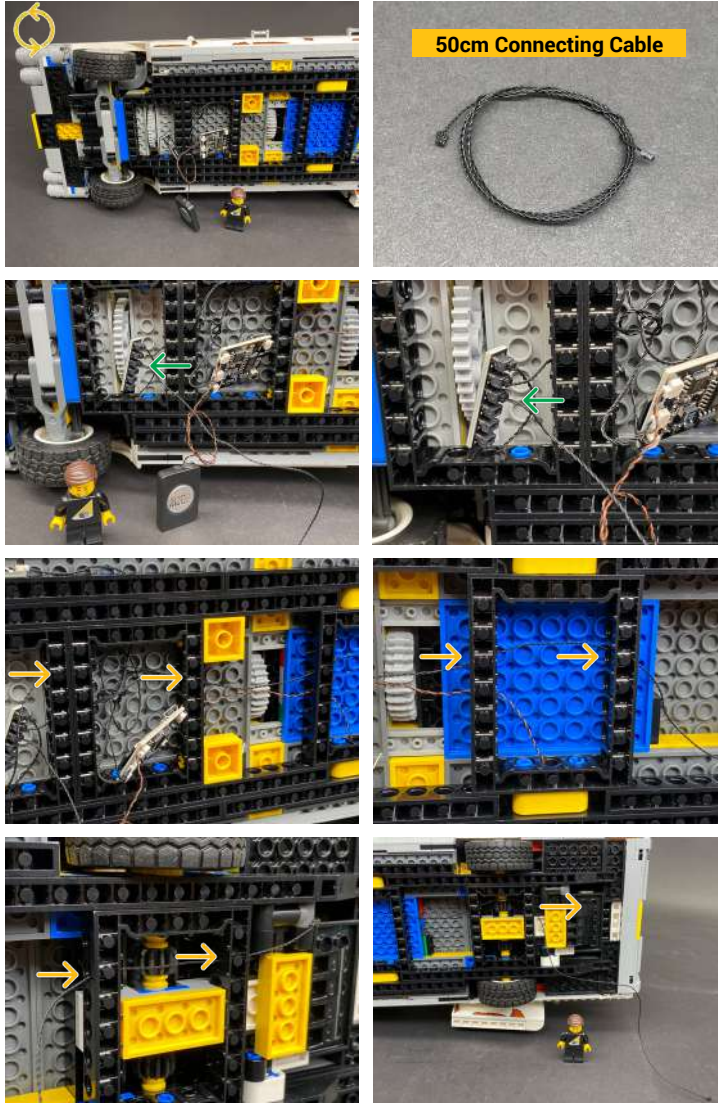
# RC4.



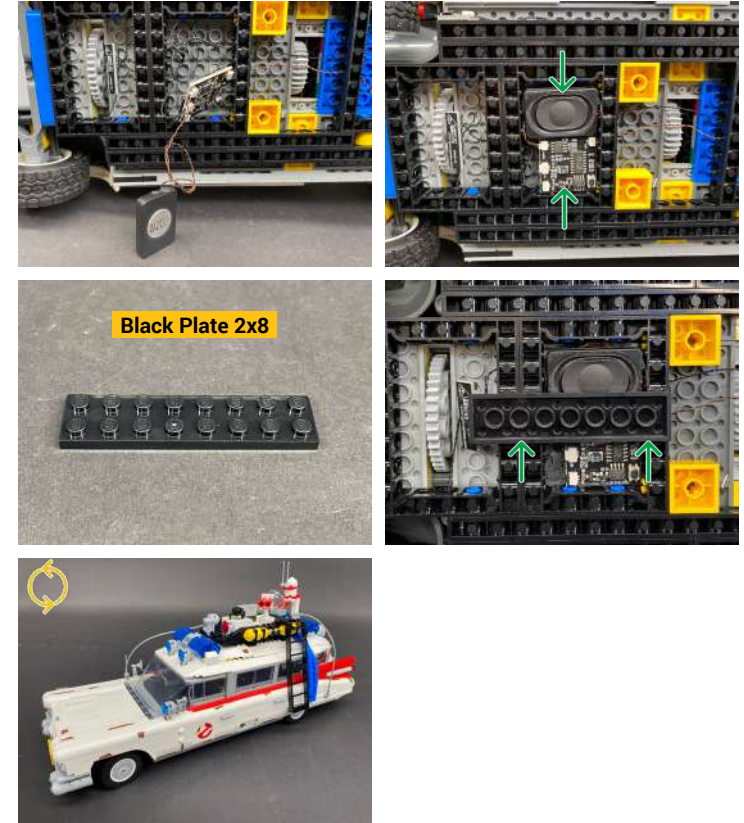
 [Click here for instructions on how to load your desired MP3 files onto the provided Micro SD Card.](#)

 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 on our online troubleshooting guide.

# RC5.



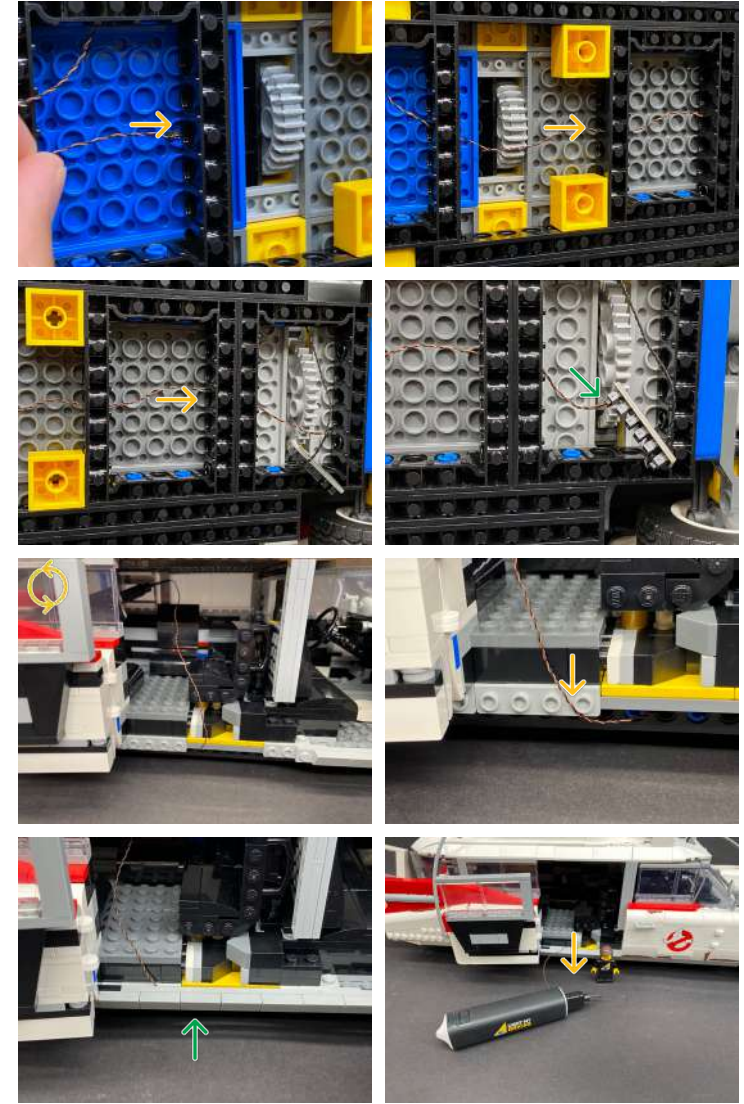
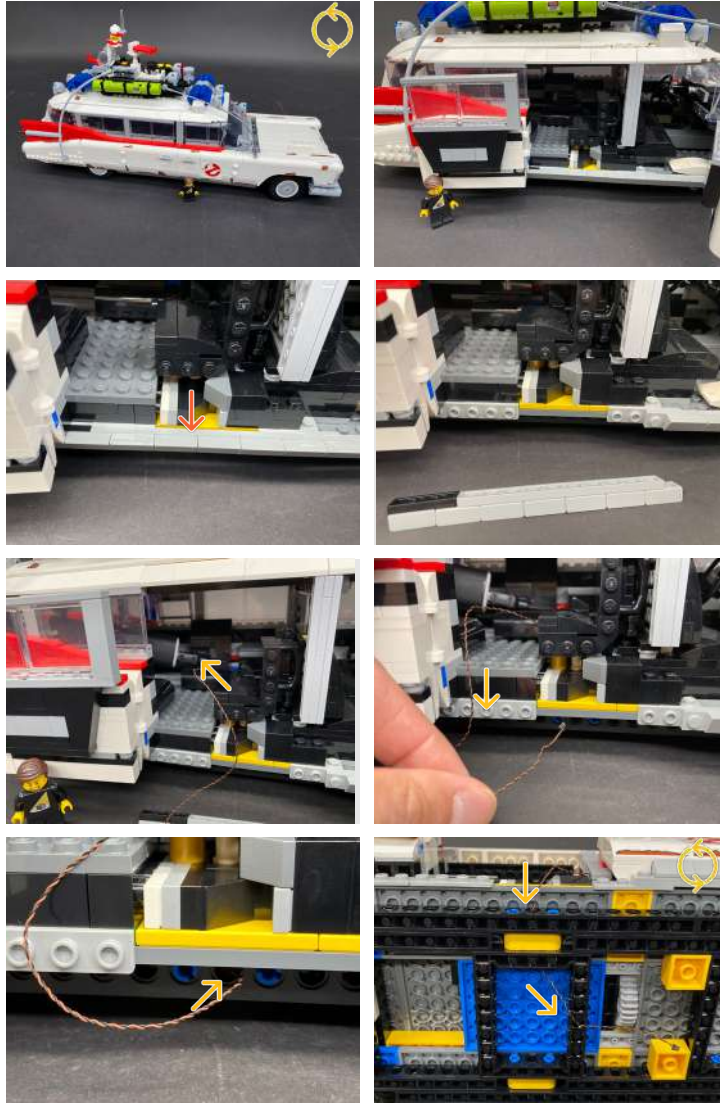
# RC6.



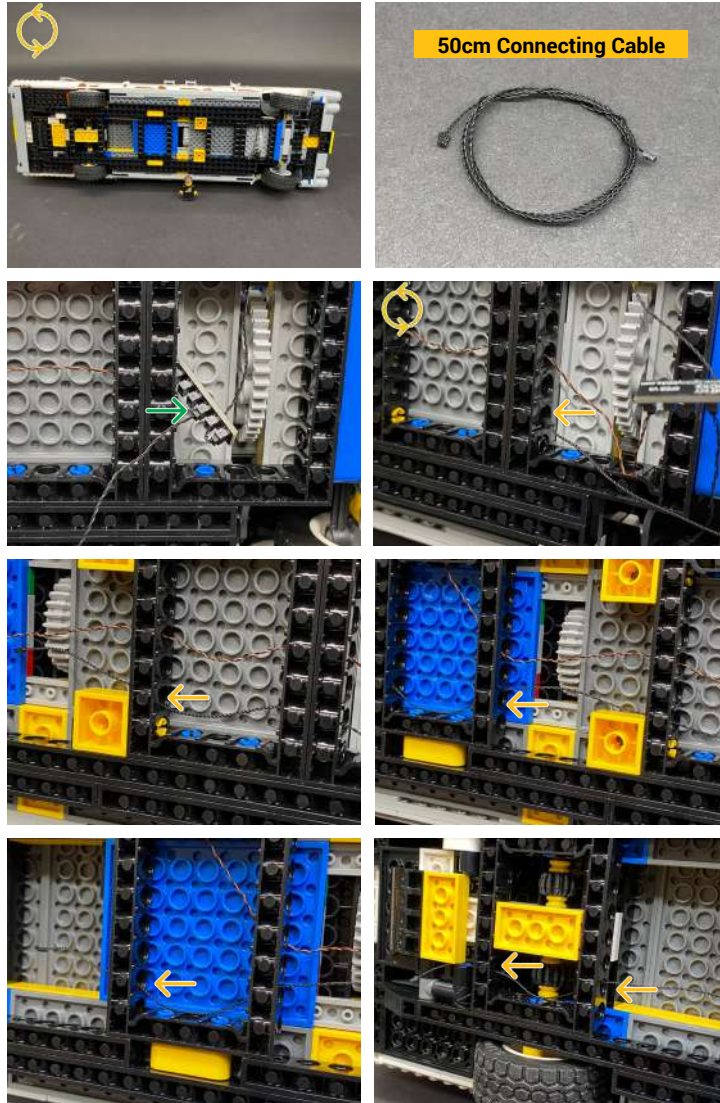
[Click Here](#) to proceed to step 17.



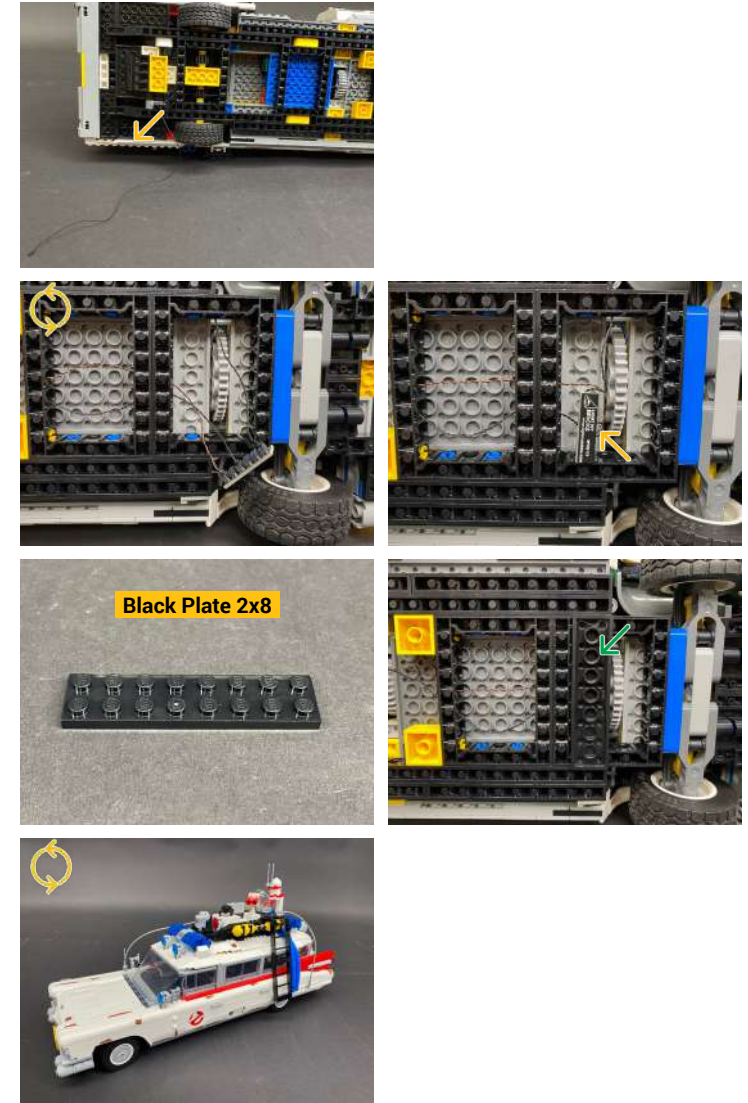
# LK1.



# LK2.



# LK3.



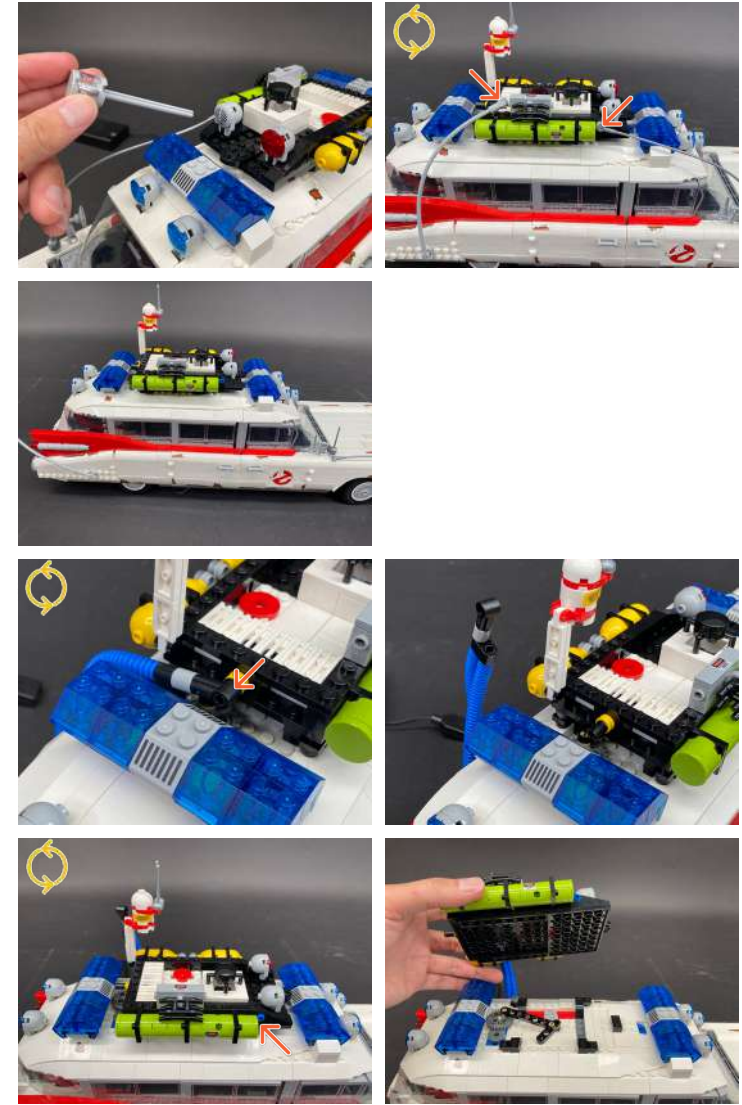



LEGEND:  DISCONNECT |  CONNECT / RECONNECT |  TURN / FLIP |  DIRECTIONAL |  TWIST / BRAID |  POWER ON / TEST

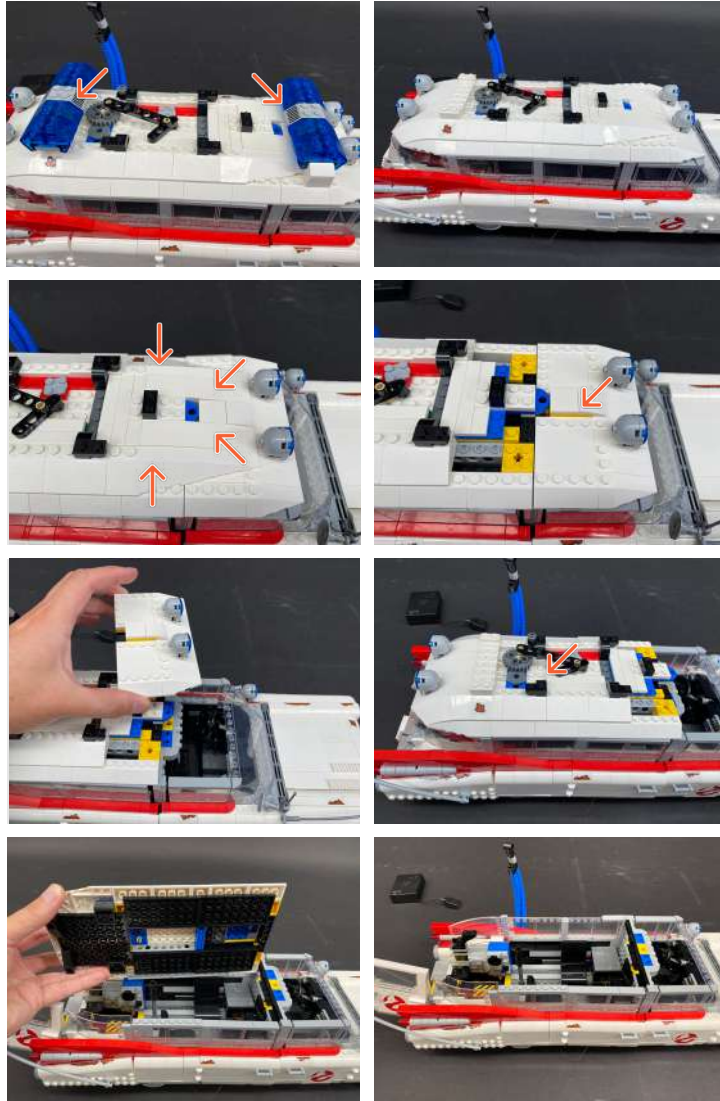
# 17.



# 18.



 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 on our online troubleshooting guide.



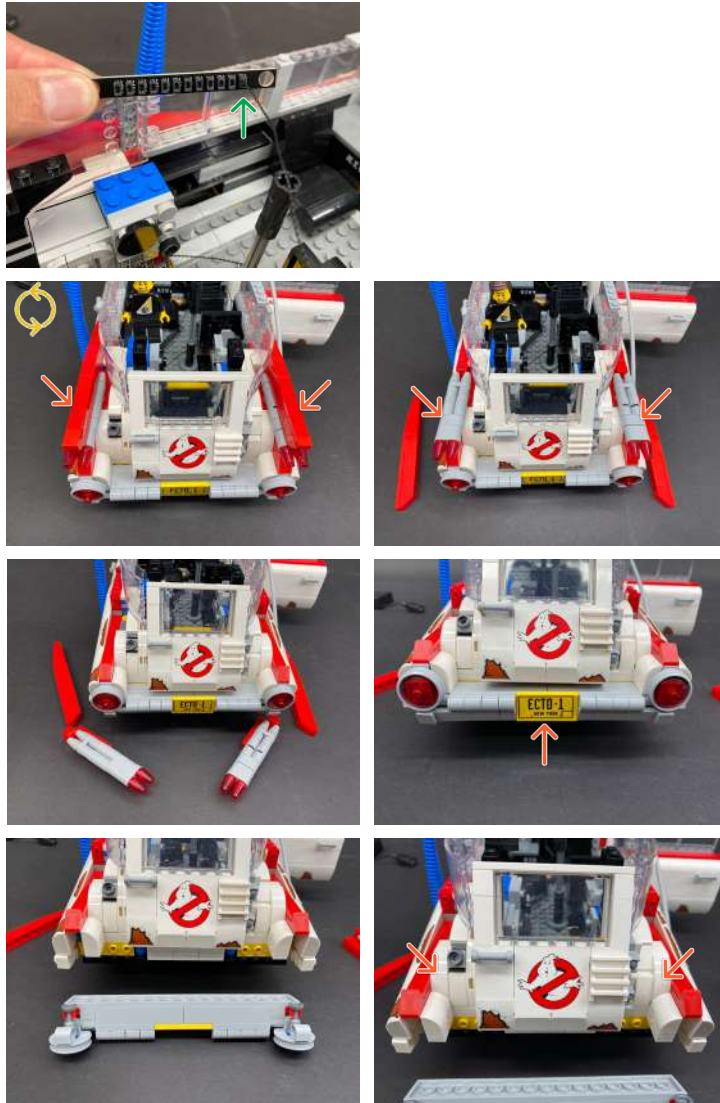
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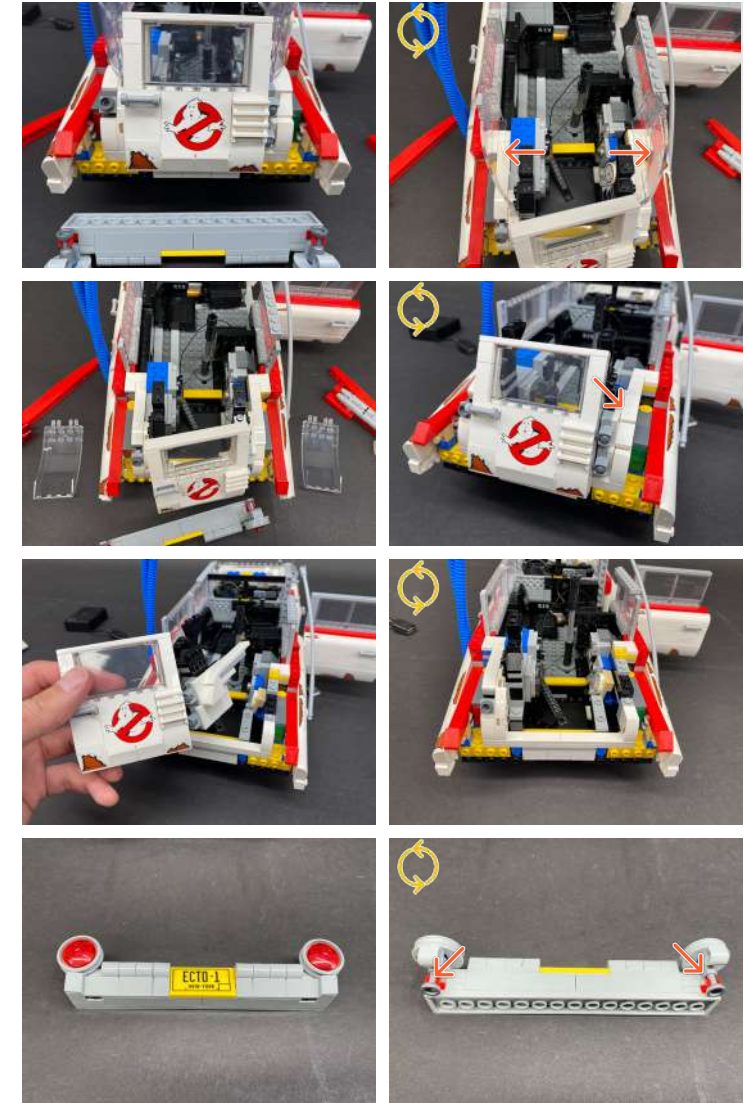



LEGEND: |  DISCONNECT |  CONNECT / RECONNECT |  TURN / FLIP |  DIRECTIONAL |  TWIST / BRAID |  POWER ON / TEST

# 20.

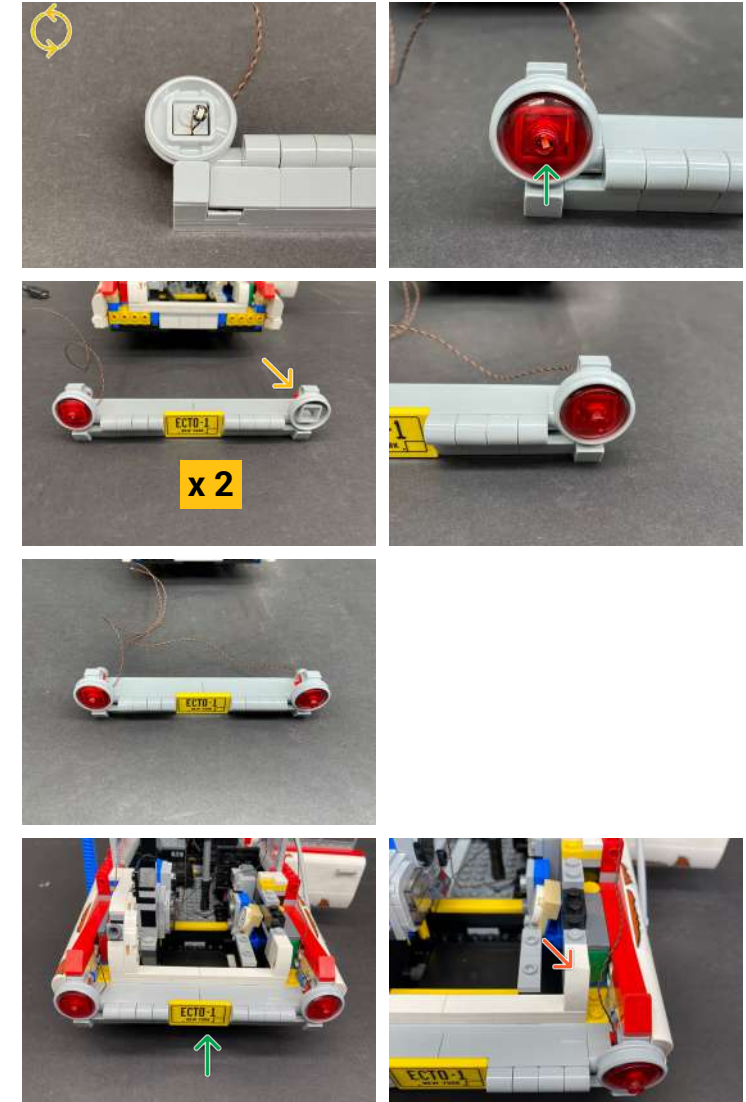
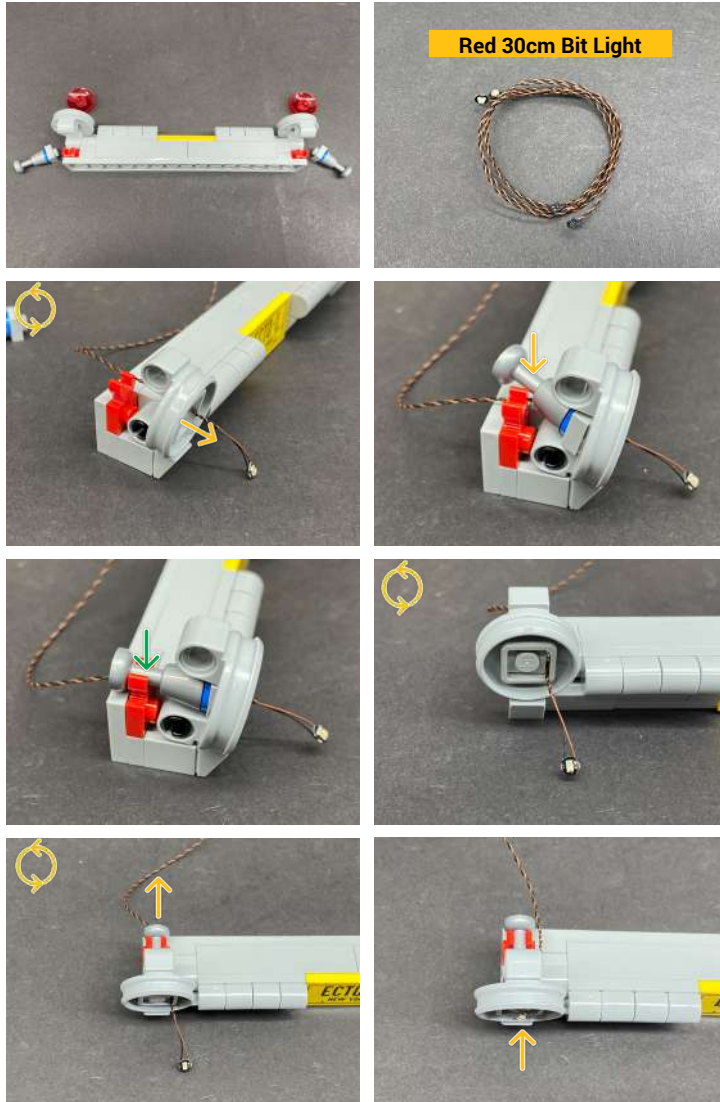


# 21.




 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 on our online troubleshooting guide.

LEGEND:  DISCONNECT |  CONNECT / RECONNECT |  TURN / FLIP |  DIRECTIONAL |  TWIST / BRAID |  POWER ON / TEST

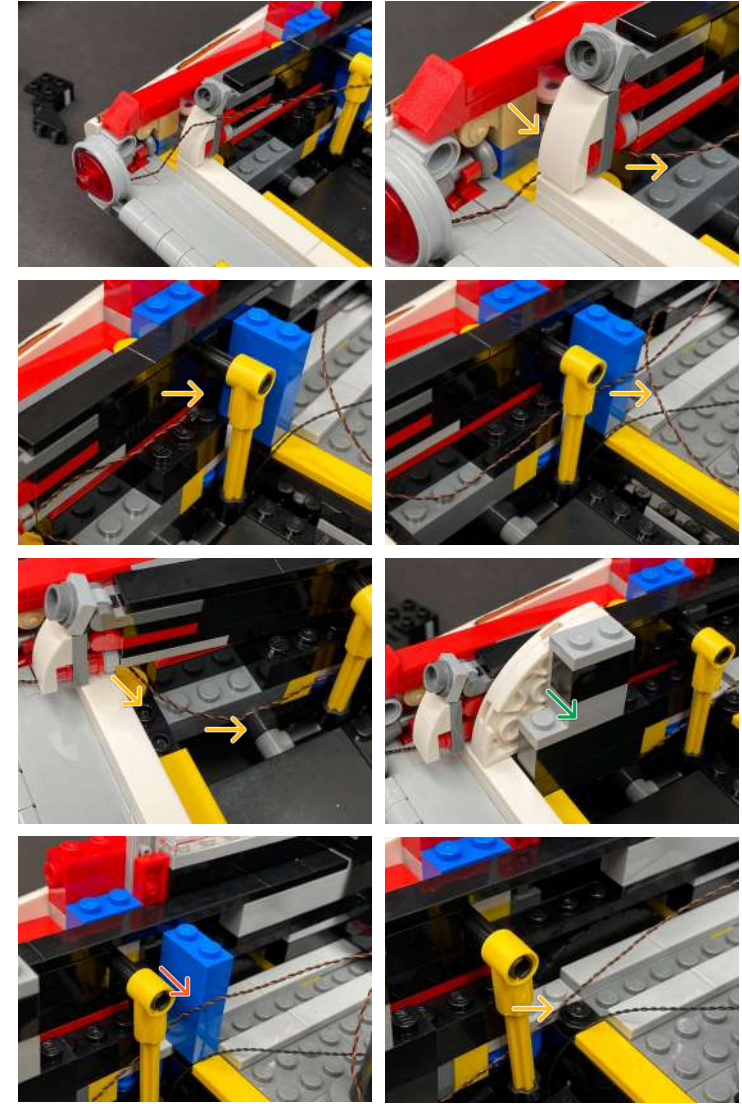
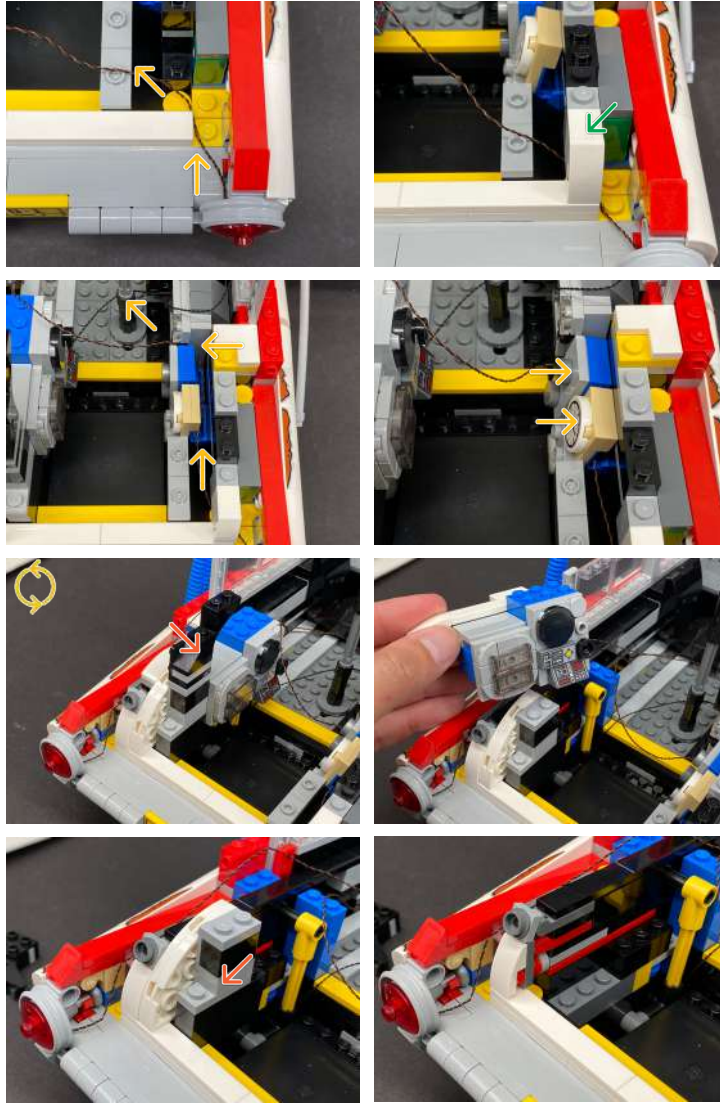


# 22.

 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 on our online troubleshooting guide.

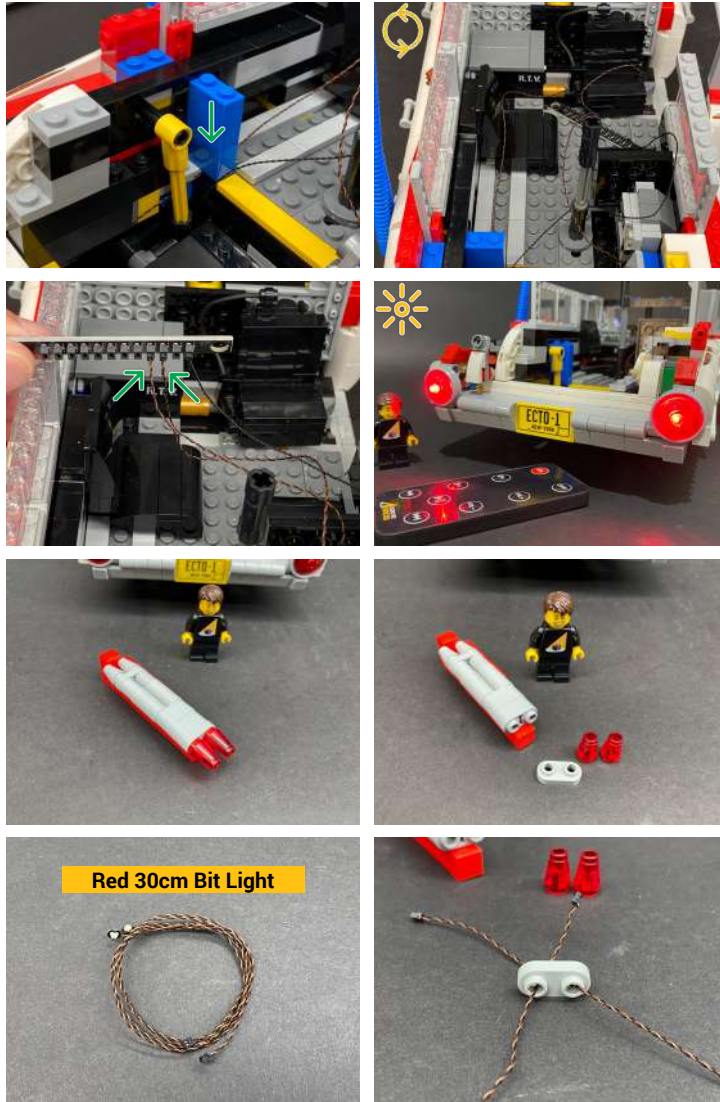


# 23.





LEGEND: | → DISCONNECT | → CONNECT / RECONNECT | ↻ TURN / FLIP | → DIRECTIONAL | ↻ TWIST / BRAID | ☀ POWER ON / TEST

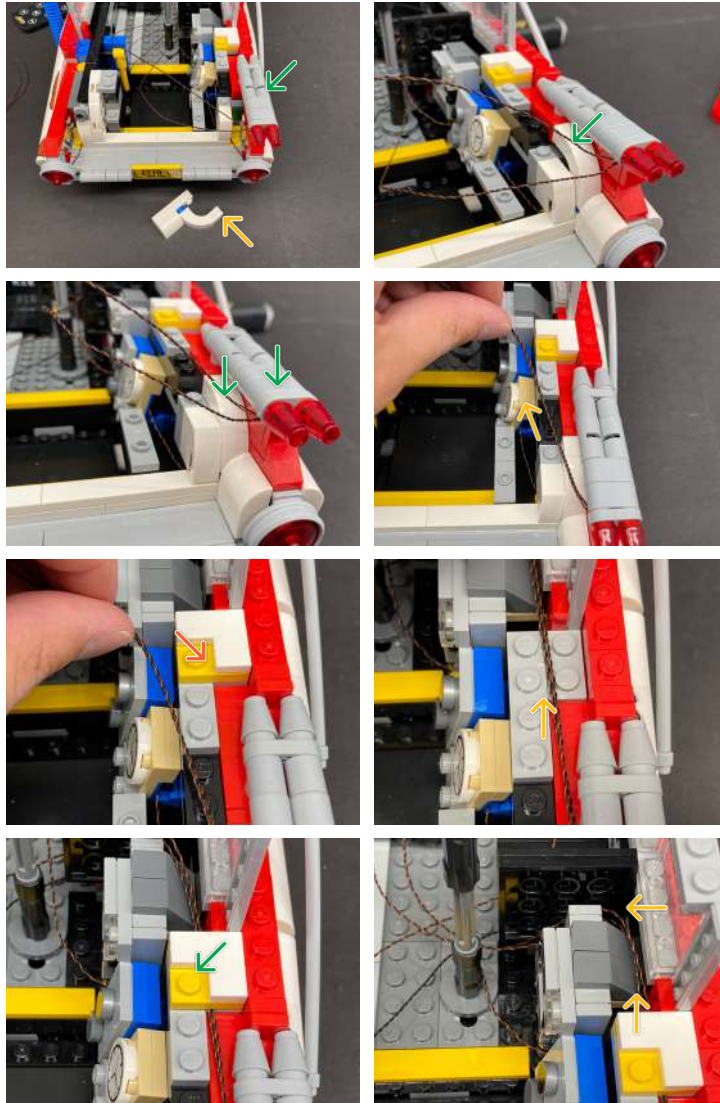


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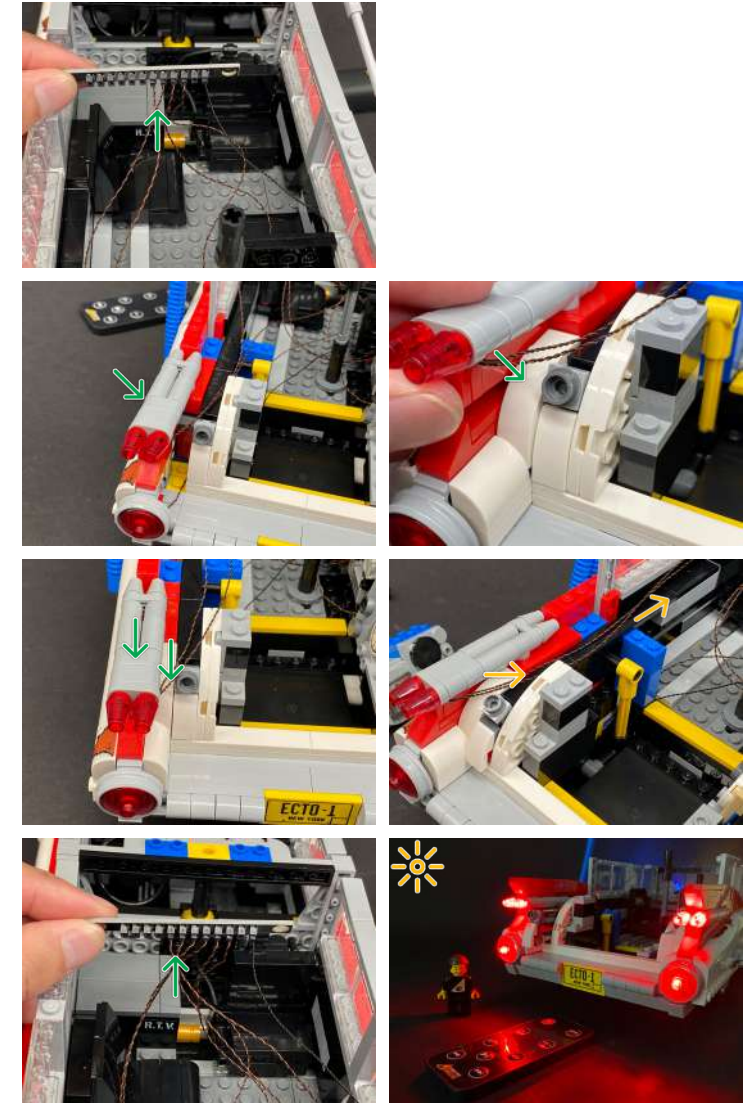
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LEGEND:  DISCONNECT |  CONNECT / RECONNECT |  TURN / FLIP |  DIRECTIONAL |  TWIST / BRAID |  POWER ON / TEST

# 25.



# 26.

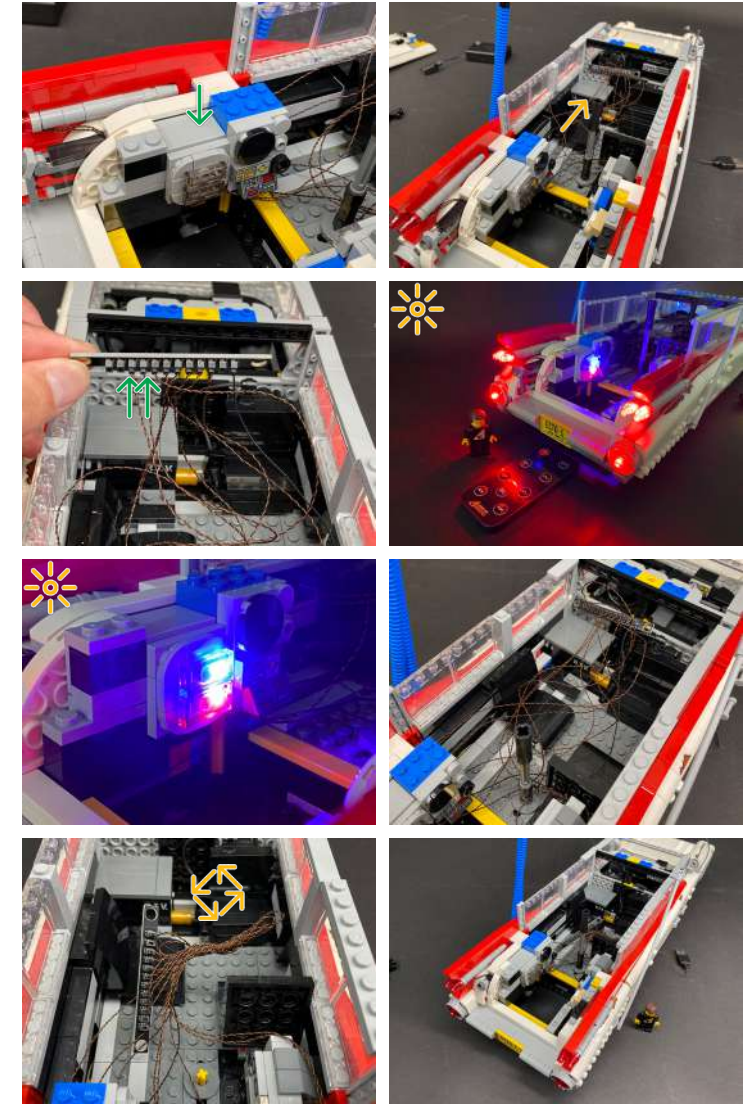
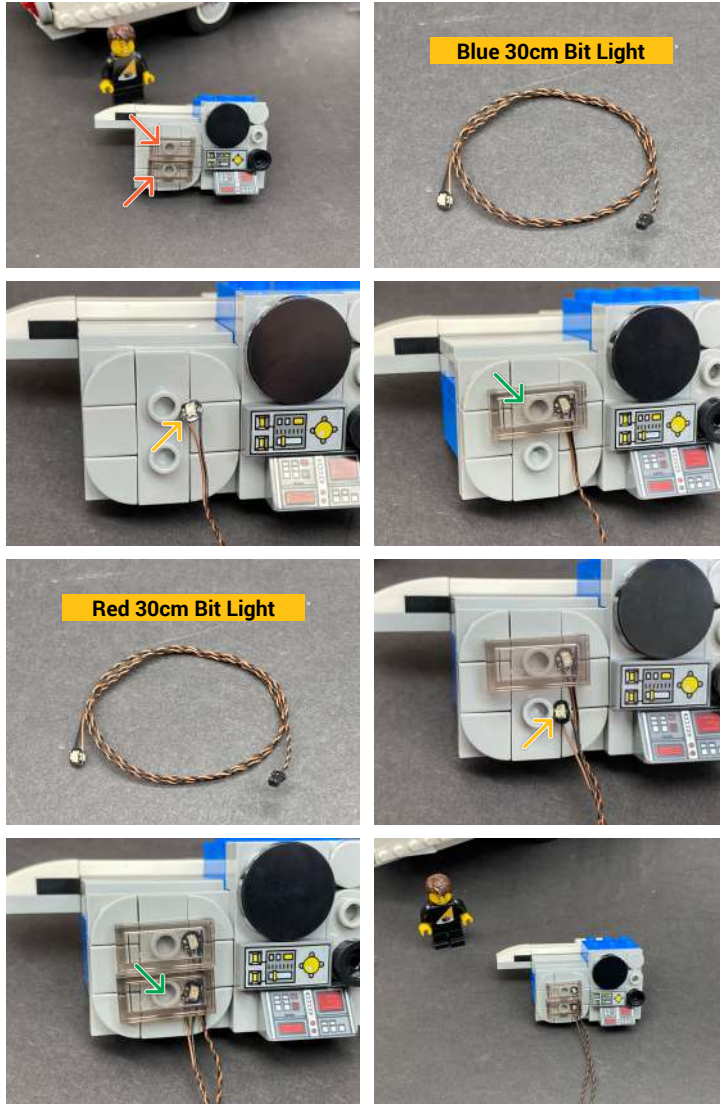



 If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion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







LEGEND:  DISCONNECT |  CONNECT / RECONNECT |  TURN / FLIP |  DIRECTIONAL |  TWIST / BRAID |  POWER ON / TEST

# 27.



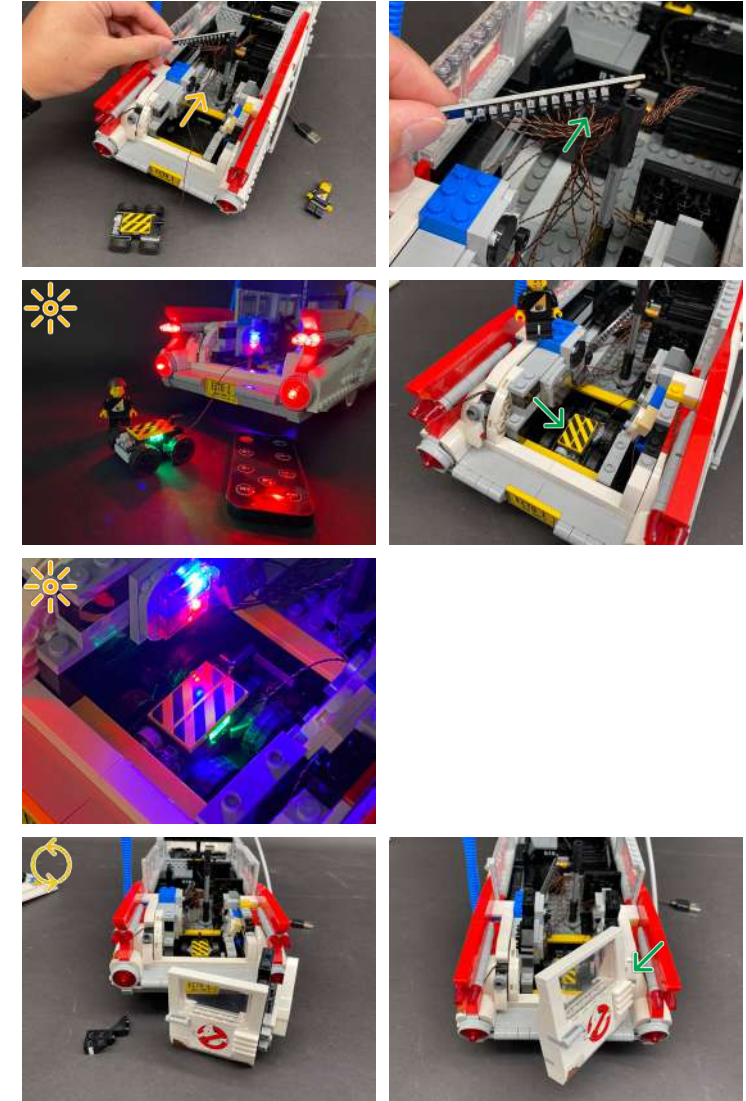
 If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion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


LEGEND:  DISCONNECT |  CONNECT / RECONNECT |  TURN / FLIP |  DIRECTIONAL |  TWIST / BRAID |  POWER ON / TEST

# 28.



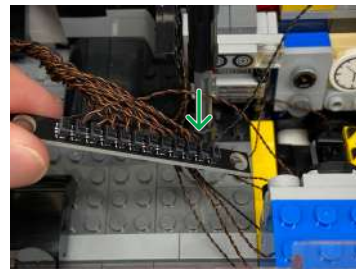
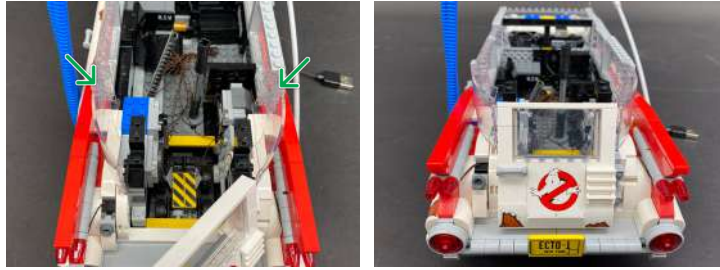
# 29.




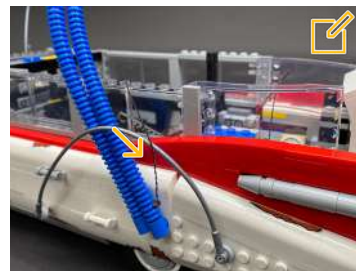
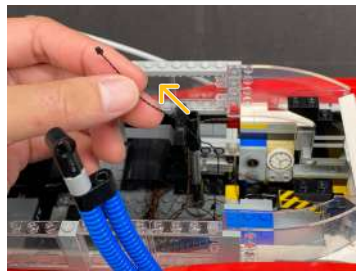
 If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion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



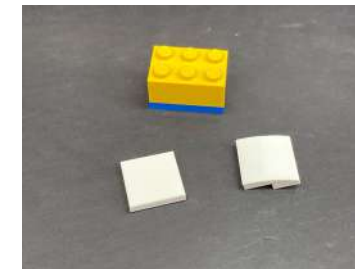
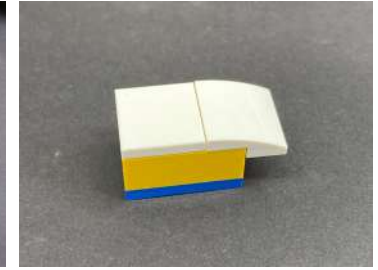
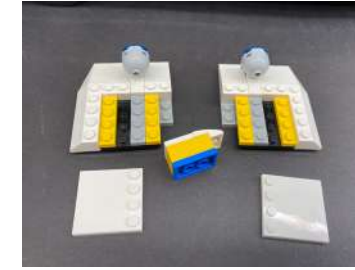
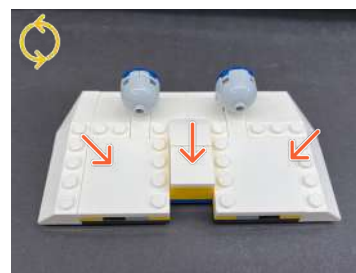
# 30.



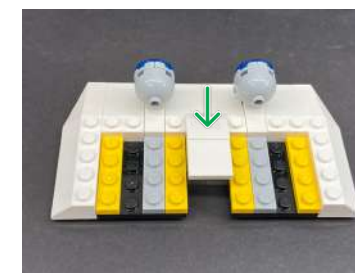
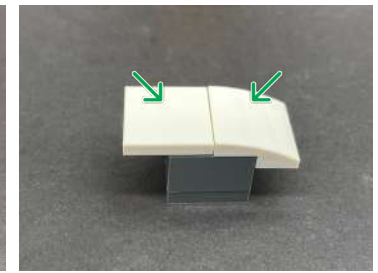
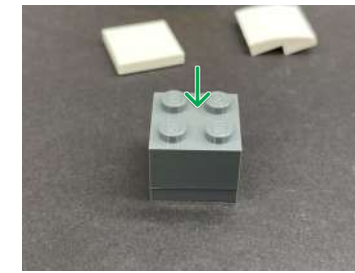
 Pull the 15cm Cable up and then leave it aside for now. We will connect this up at step. 38




# 31.

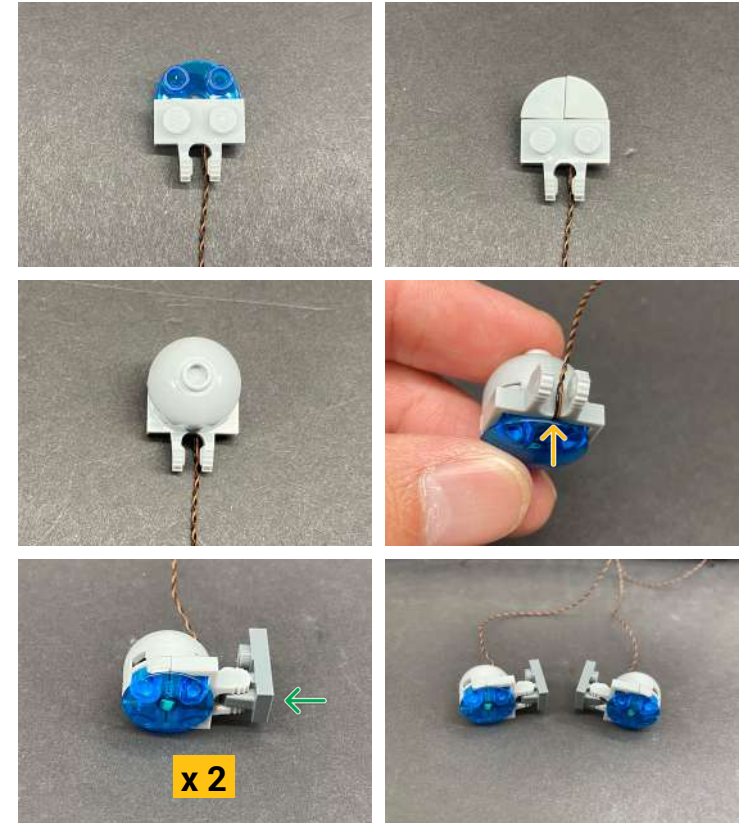


Dark Bluish Grey Brick 2x2  
Dark Bluish Grey Plate 2x2



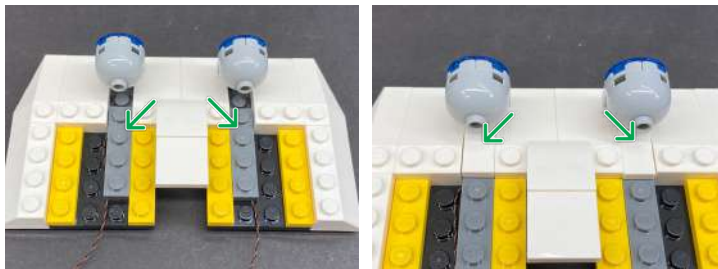
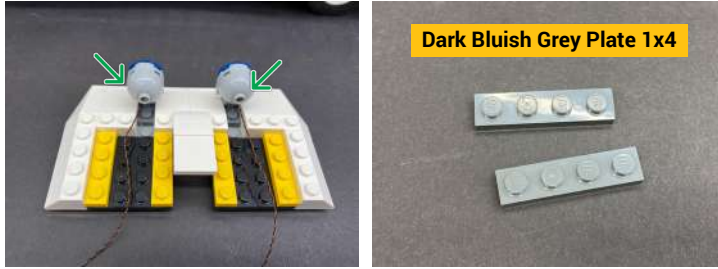
# 32.


 Keep the two 1x6 Plates for step 39.

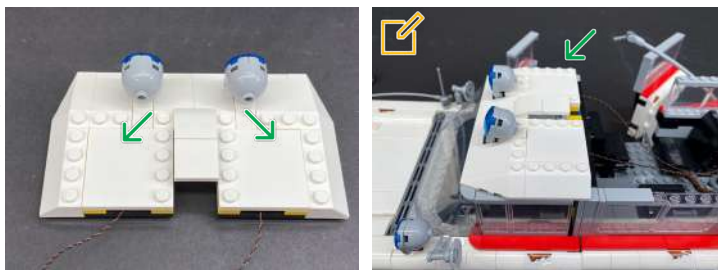




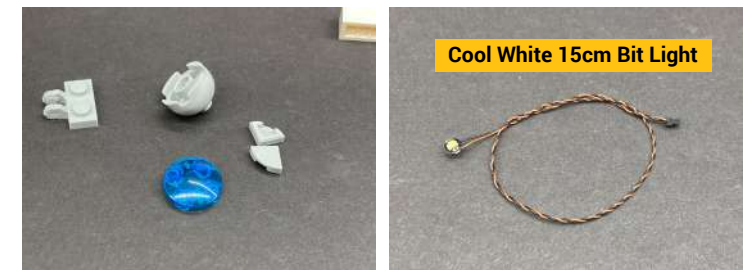
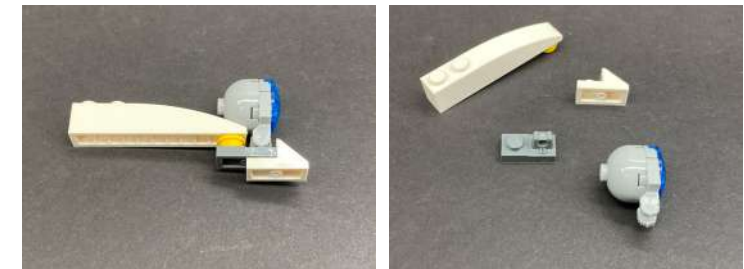
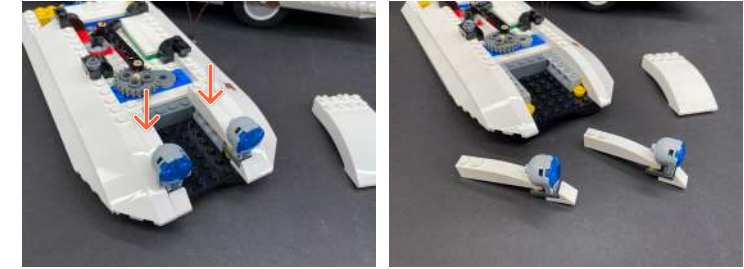
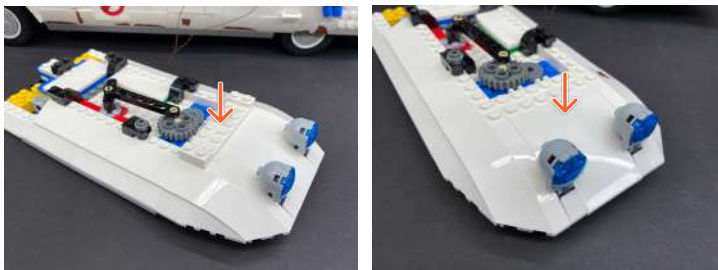
# 33.



 Securely reconnect roof and leave the Bit Light cables disconnected for now. These will be connected in step 37.

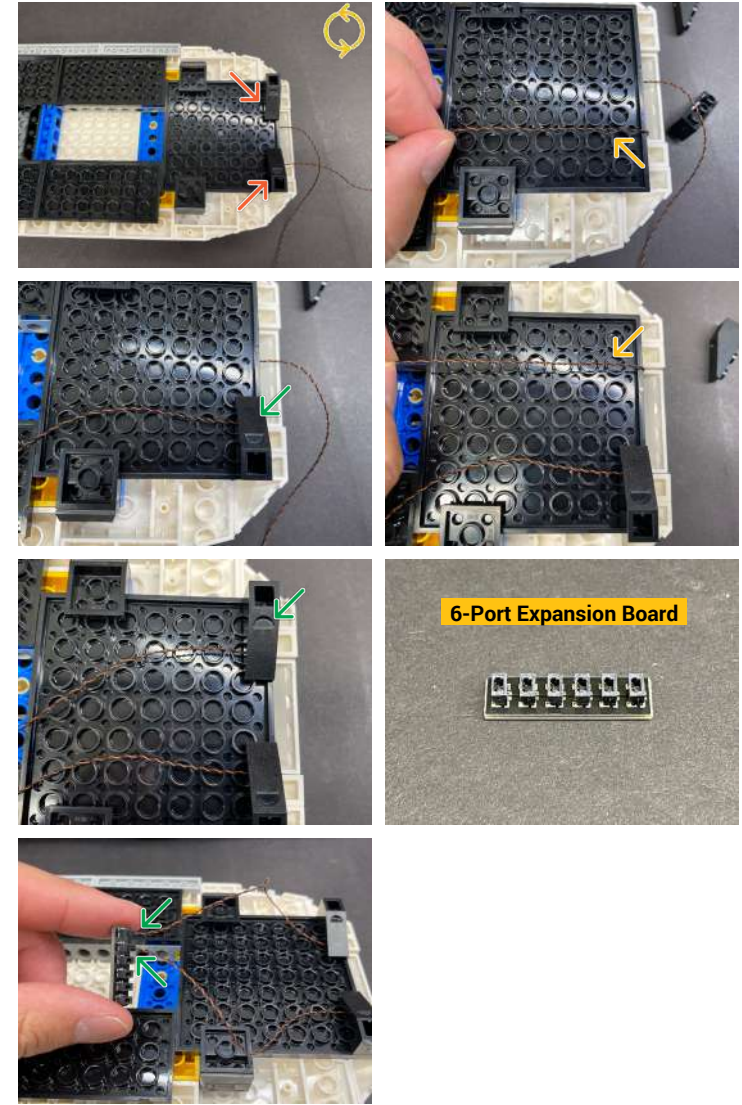
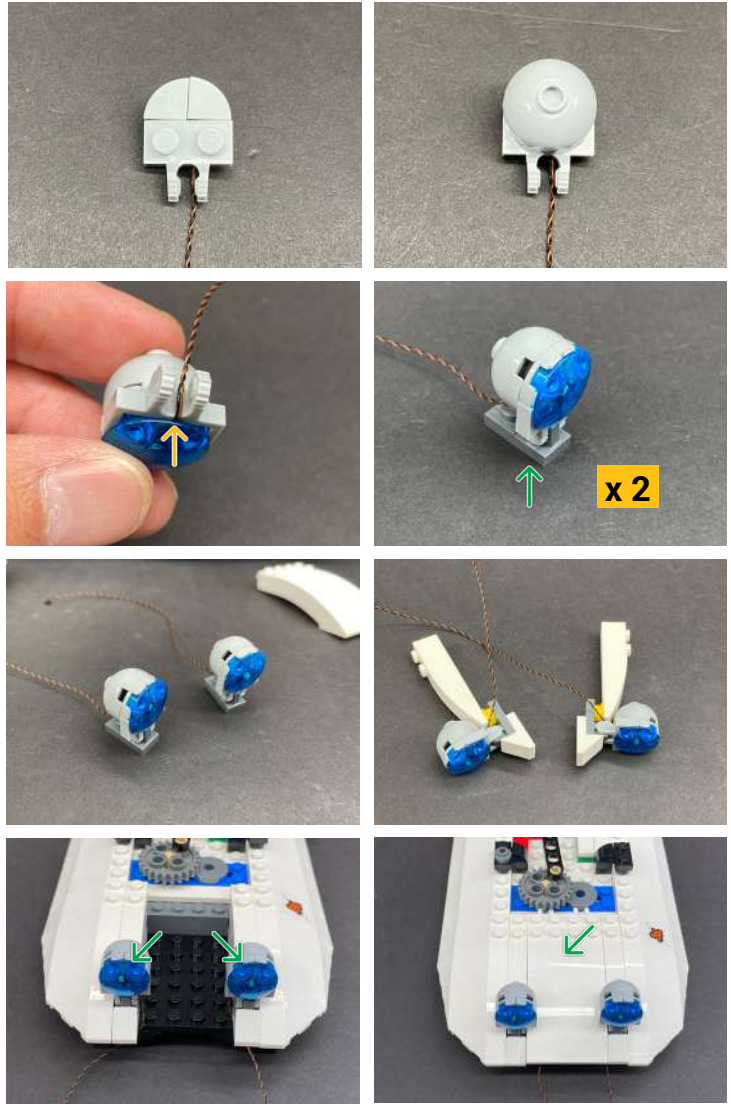


# 34.

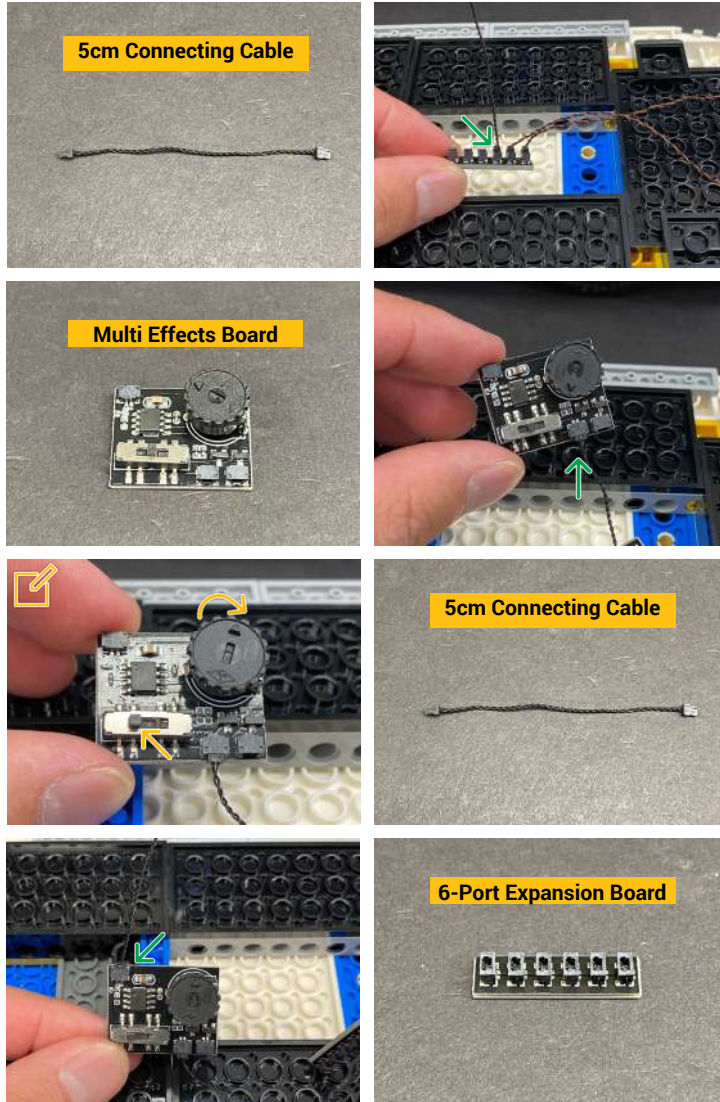




# 35.



# 36.



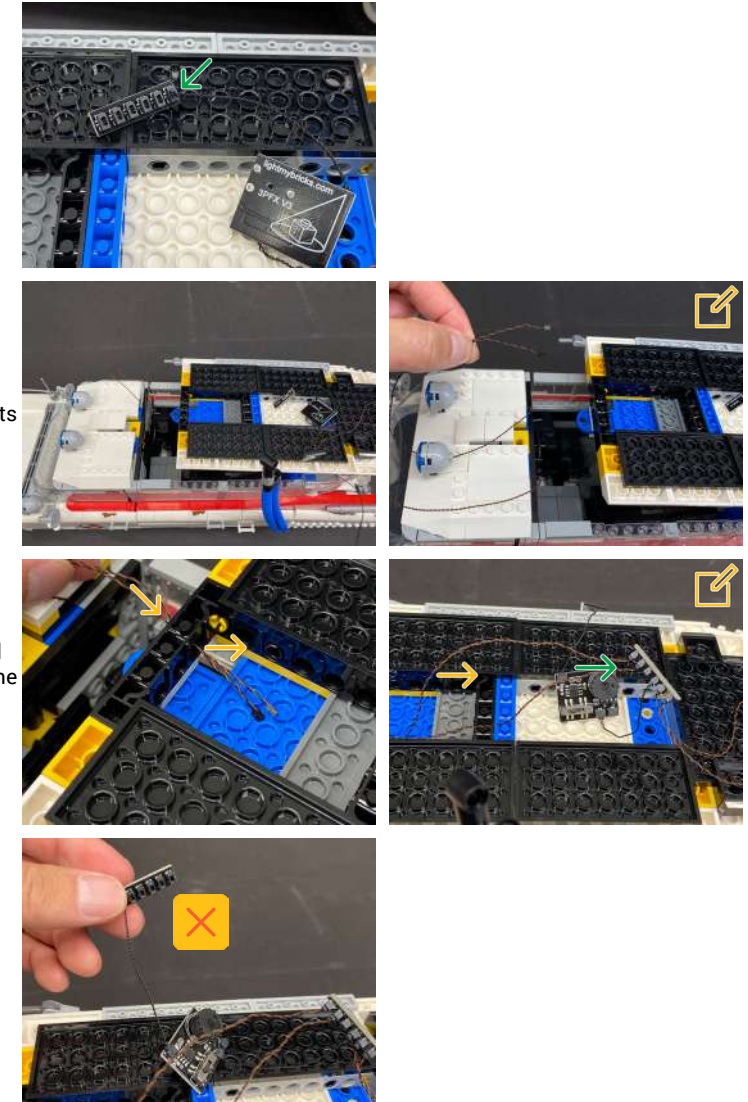
Flick the switch to the far left for "Pulse" Effect.

Adjust the speed wheel to the middle for a moderate speed

# 37.

Locate the 2x Cool White 30cm Bit Lights from step 30.

Ensure you connect the 2x Cool White 30cm Bit Lights to the expansion board from step. 35 NOT the board from previous step

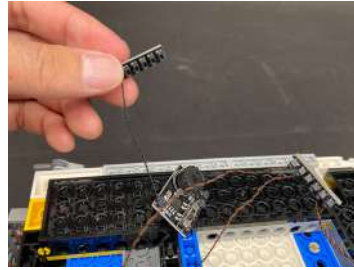
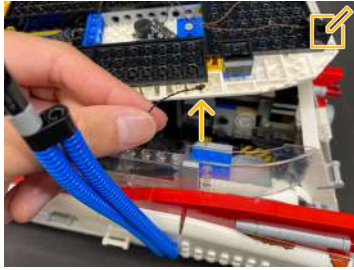




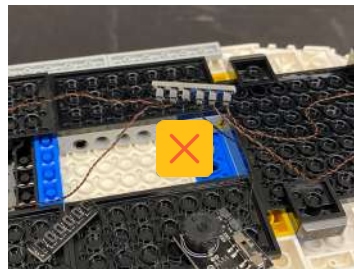
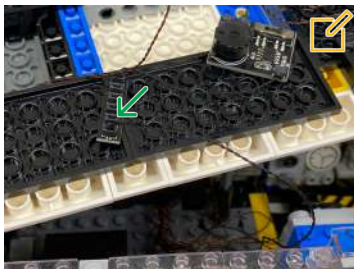
LEGEND: DISCONNECT | CONNECT / RECONNECT | TURN / FLIP | DIRECTIONAL | TWIST / BRAID | POWER ON / TEST

# 38.

Pull up the 15cm Connecting Cable from the 12-Port Expansion Board



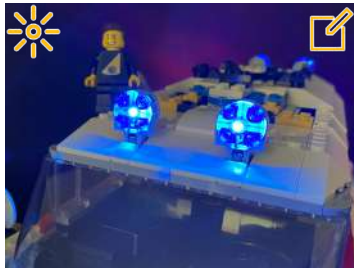
Ensure you connect the 15cm Cable to the 6-Port Expansion Board from step. 36 NOT from step. 35



Do not securely reconnect the roof yet.

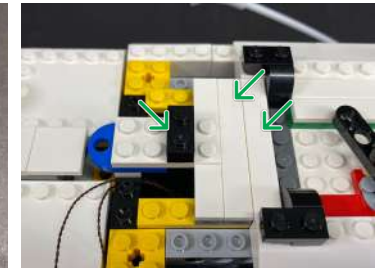
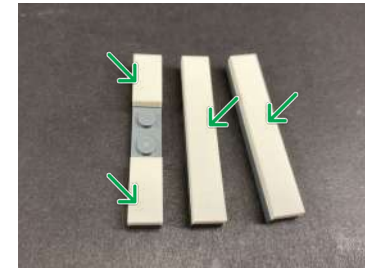
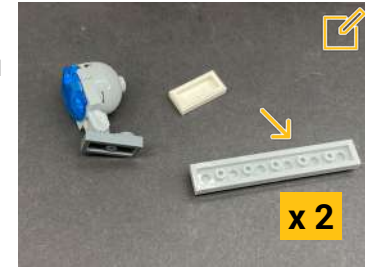
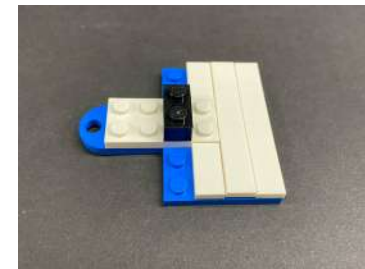
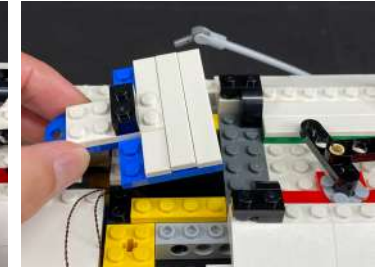
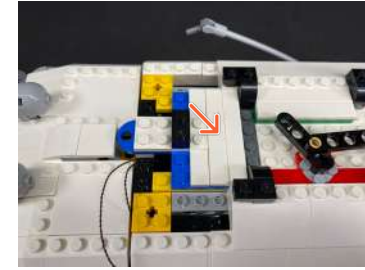


The 4 roof lights should be pulsing in sync



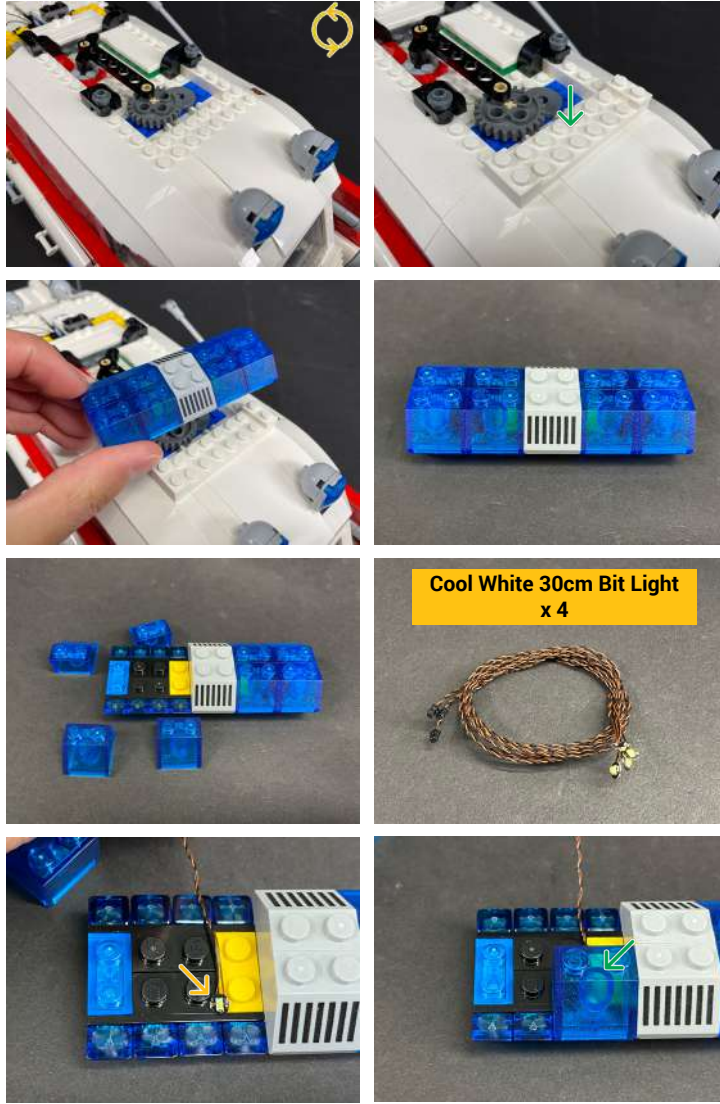
# 39.

Take the two 1x6 plates we removed from step 32, as well as an extra provided 1x6 plate



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 on our online troubleshooting guide.

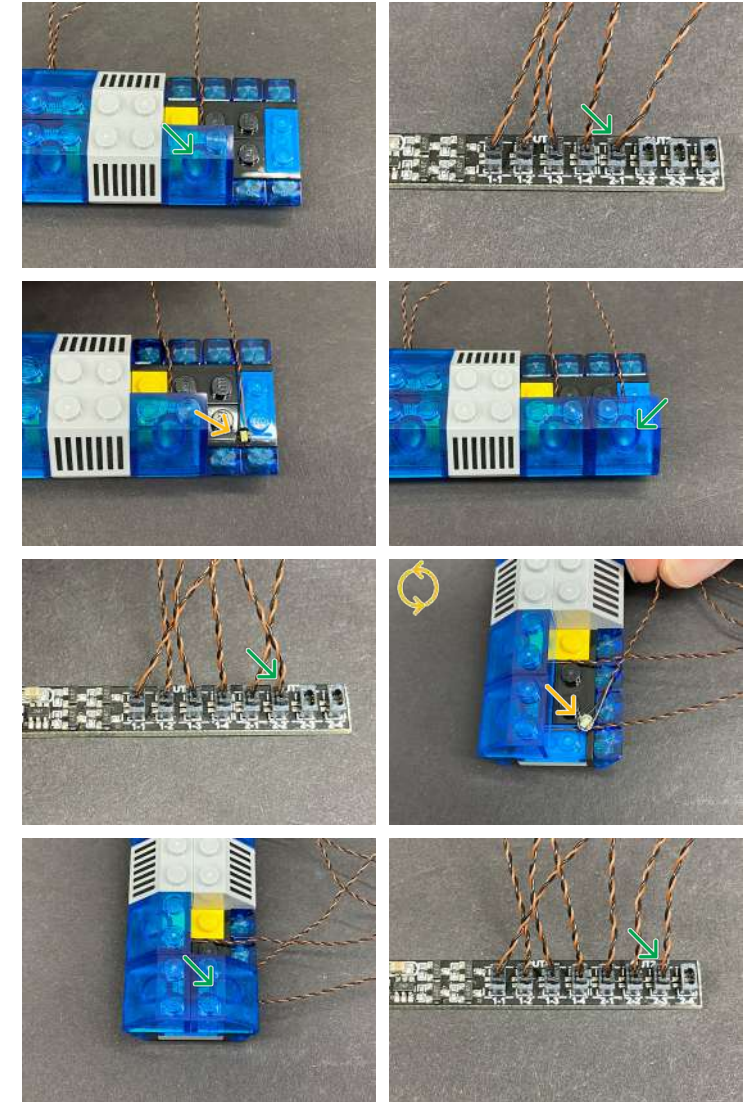
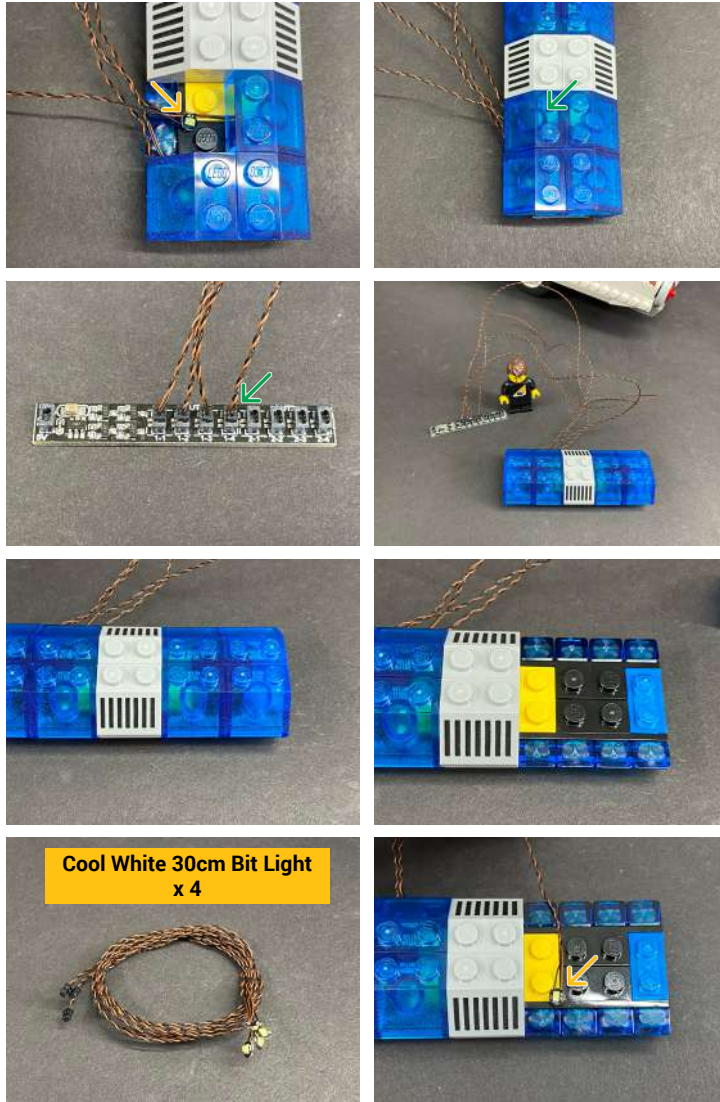
# 40.






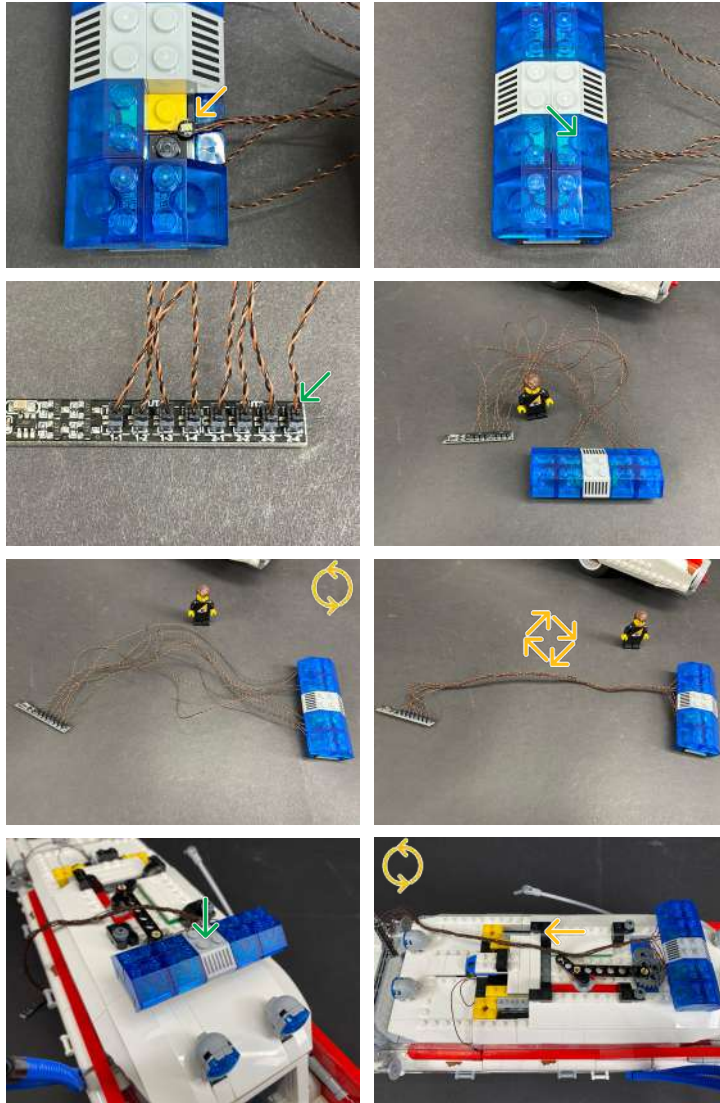
LEGEND:  DISCONNECT |  CONNECT / RECONNECT |  TURN / FLIP |  DIRECTIONAL |  TWIST / BRAID |  POWER ON / TEST

# 41.



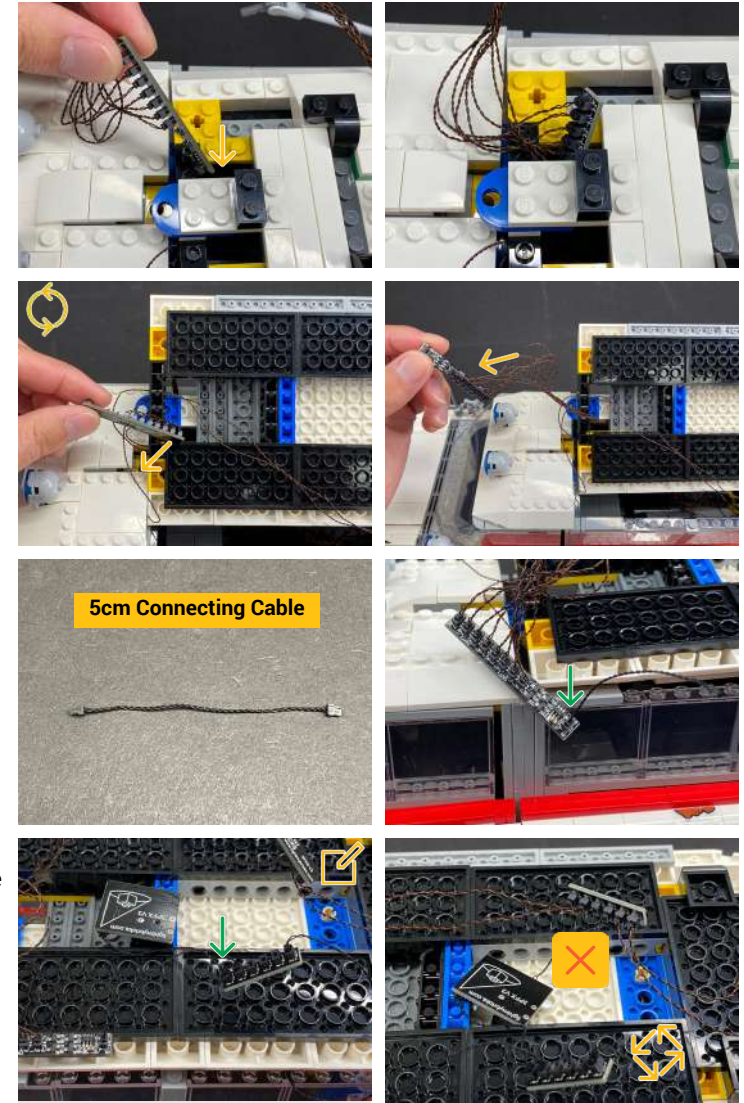
 If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion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

# 42.



# 43.

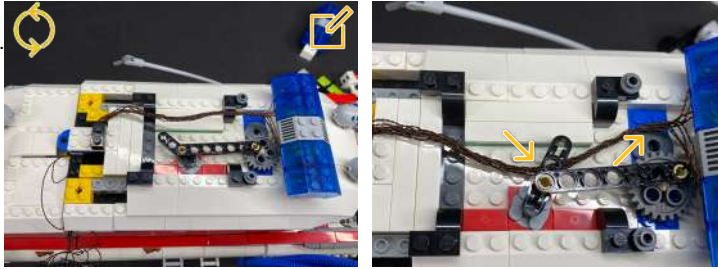
Ensure you connect the 5cm Cable to the 6-Port Expansion Board from step. 36 NOT from step. 35



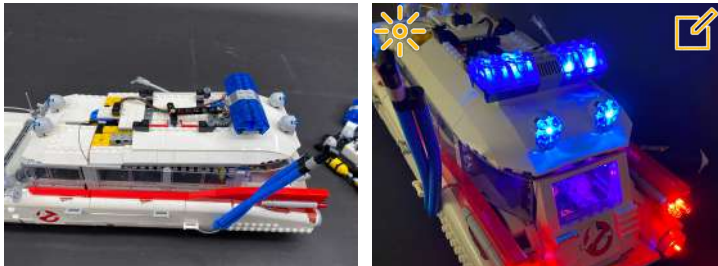


LEGEND: DISCONNECT | CONNECT / RECONNECT | TURN / FLIP | DIRECTIONAL | TWIST / BRAID | POWER ON / TEST

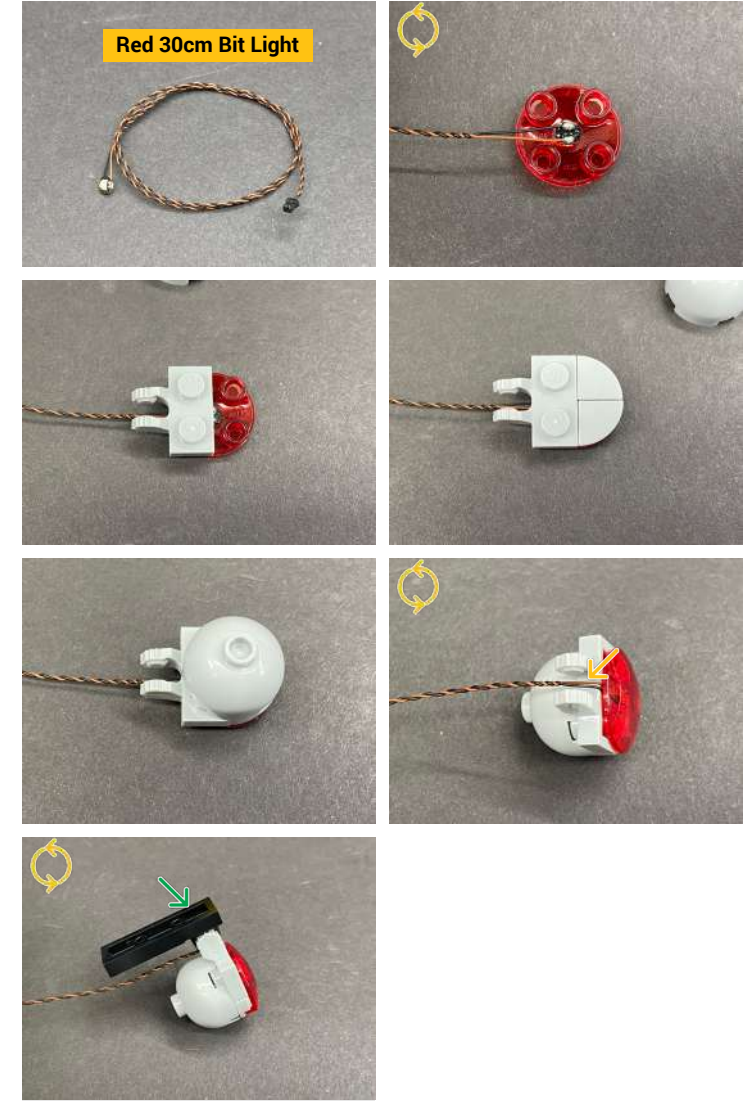
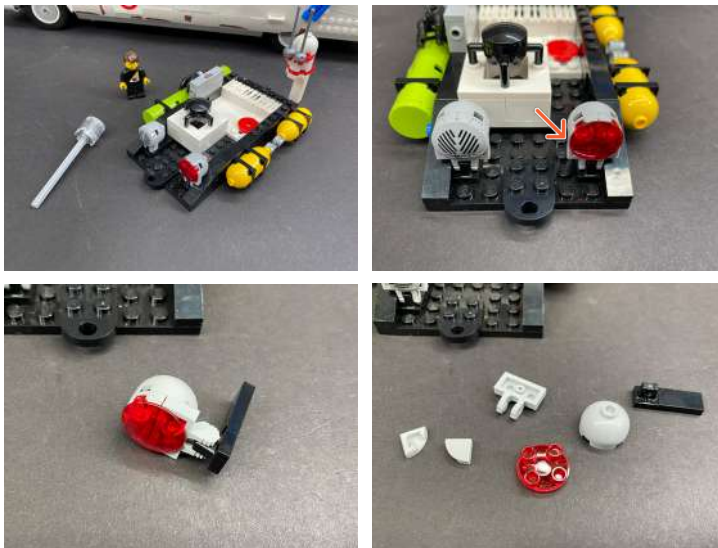
Do not securely reconnect the roof yet.



Siren lights on each side should be rotating in opposite directions

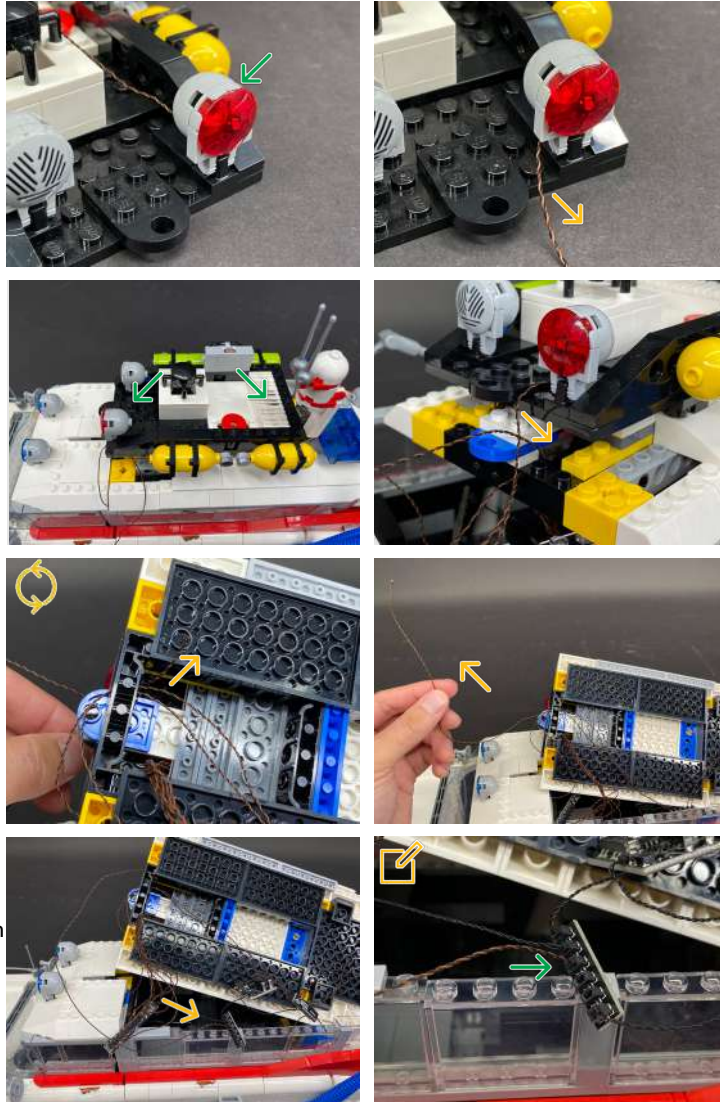


# 44.



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 on our online troubleshooting guide.

# 45.



Ensure you connect the Red 30cm Bit Light to the 6-Port Expansion Board from step. 36 NOT from step. 35

# 46.



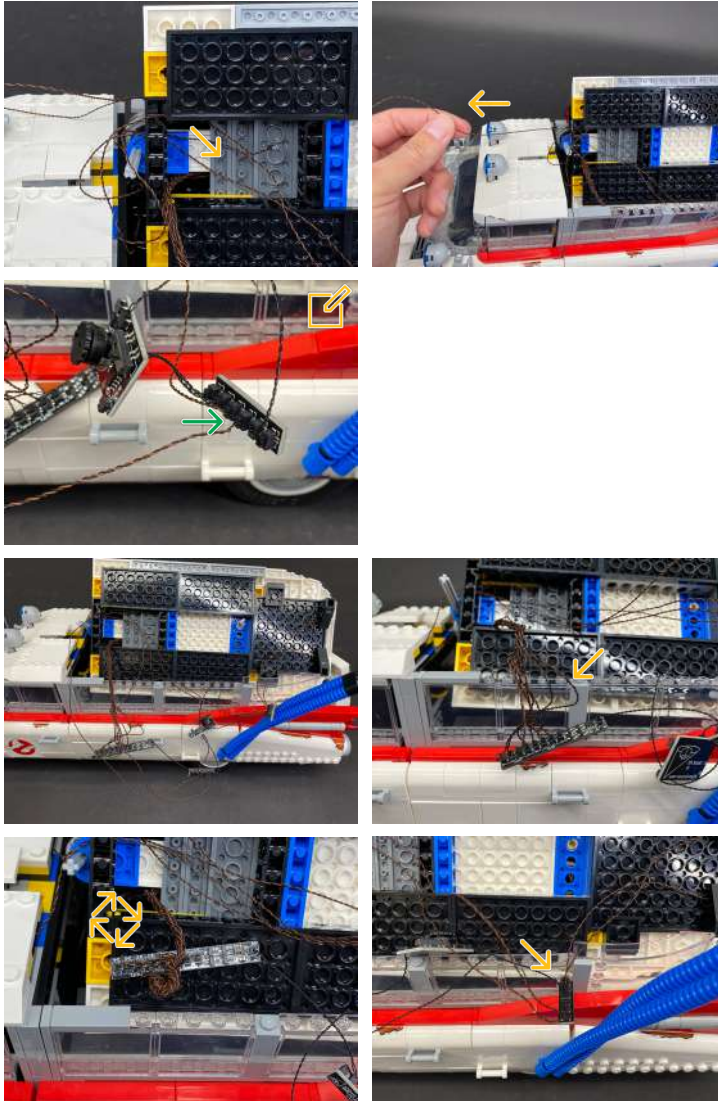
Cool White 30cm Bit Light

Do not connect axle pin all the way down yet



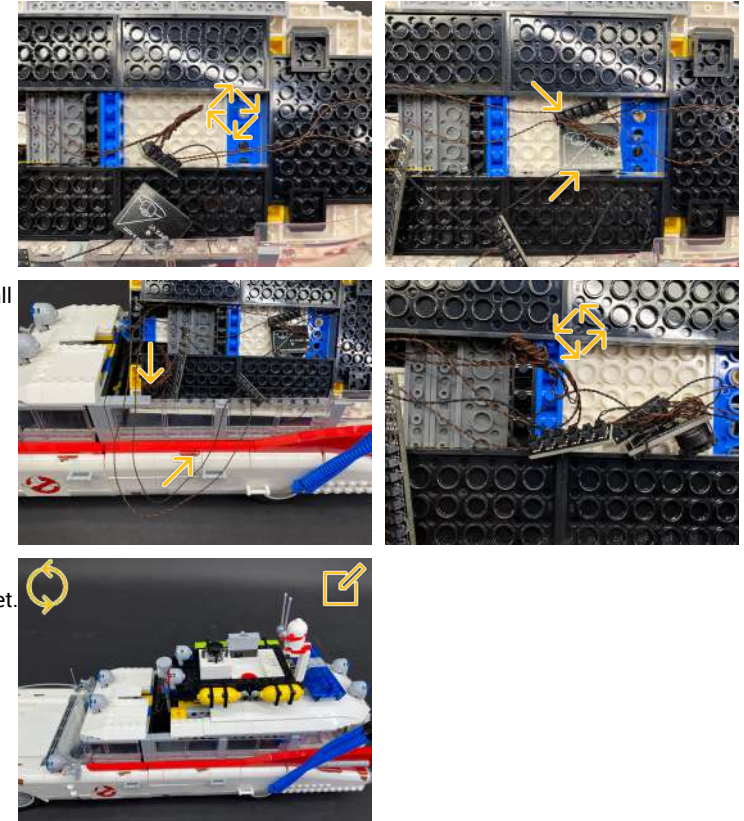
# 47.

Ensure you connect the Bit Light to the 6-Port Expansion Board from step. 36 NOT from step. 35

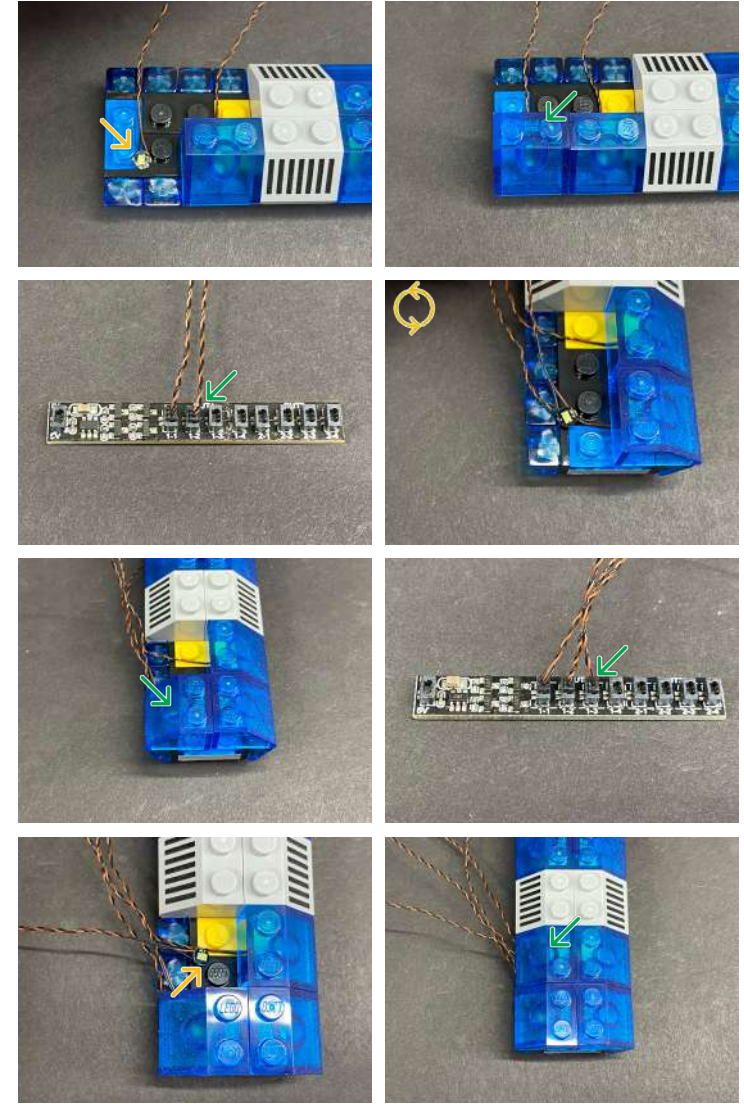
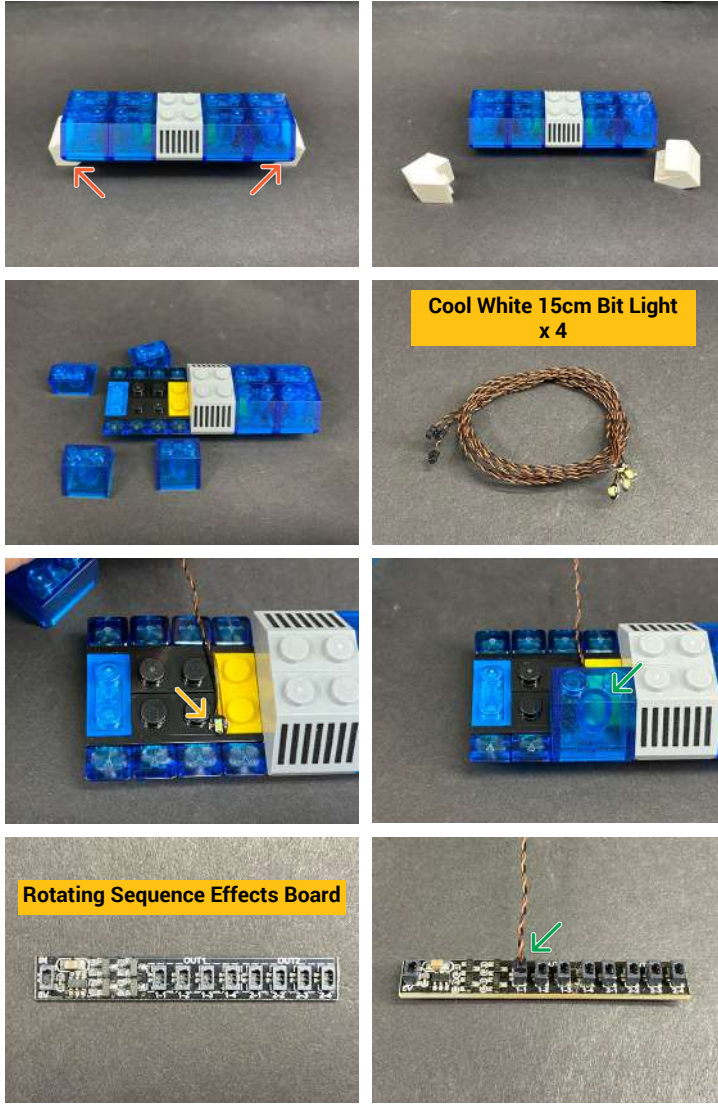


Pull the two cables all way down, then twist/braid them together closest to the expansion board

Do not securely reconnect the roof yet.

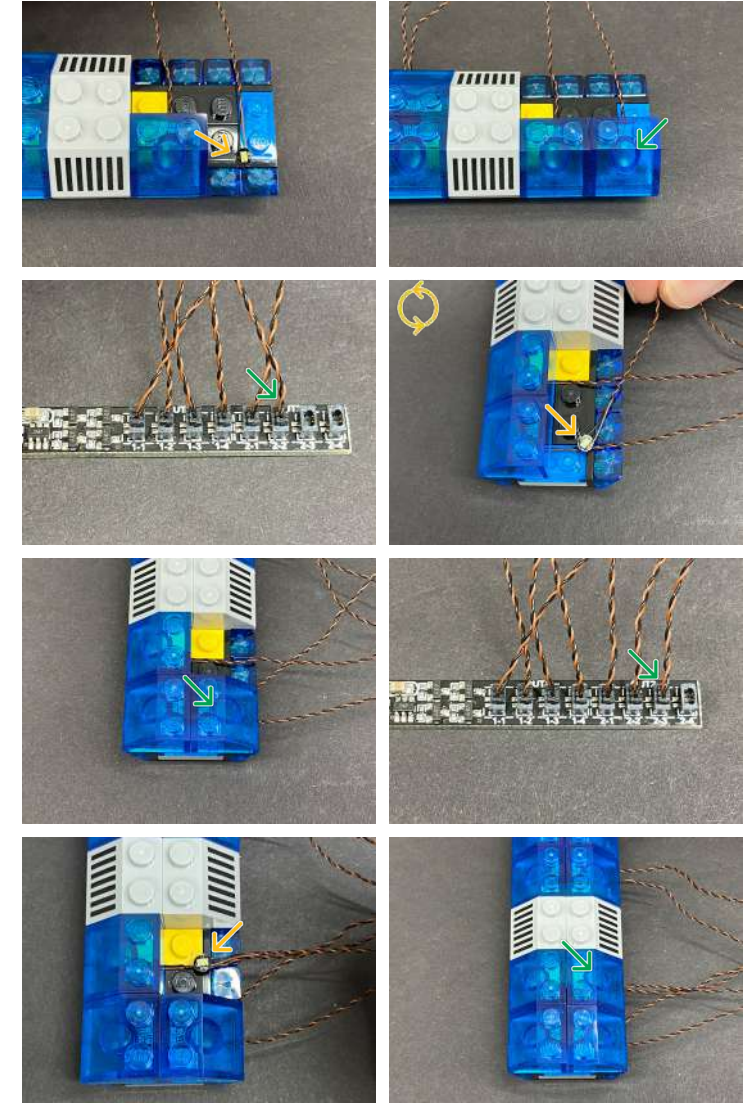
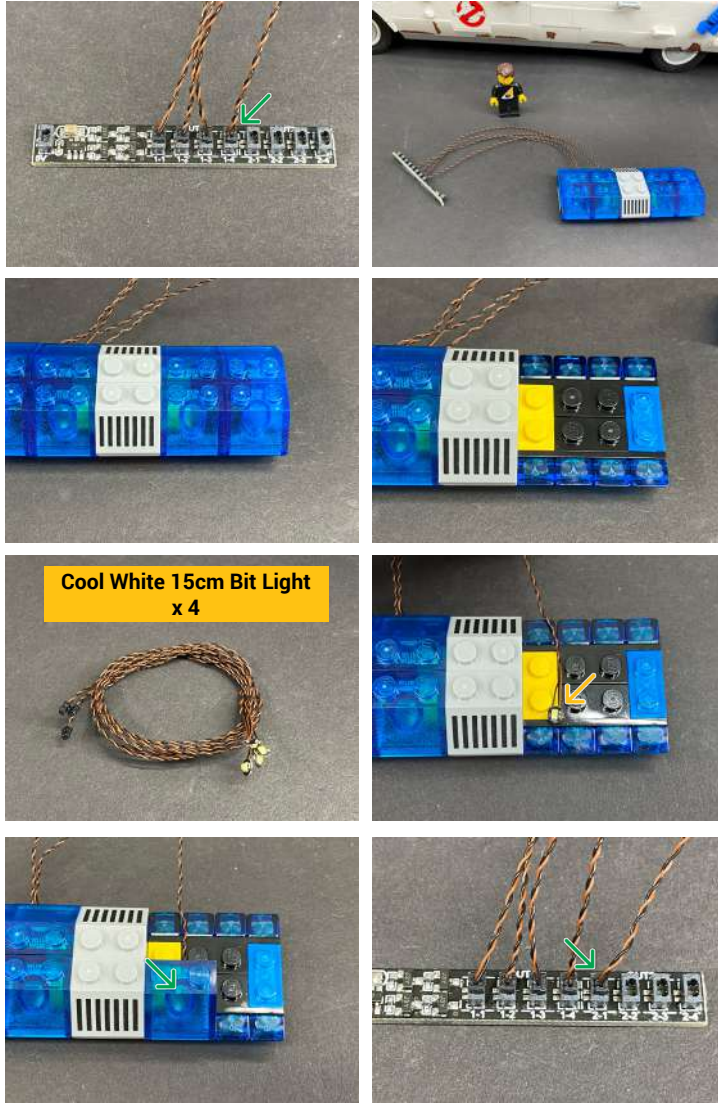


# 48.






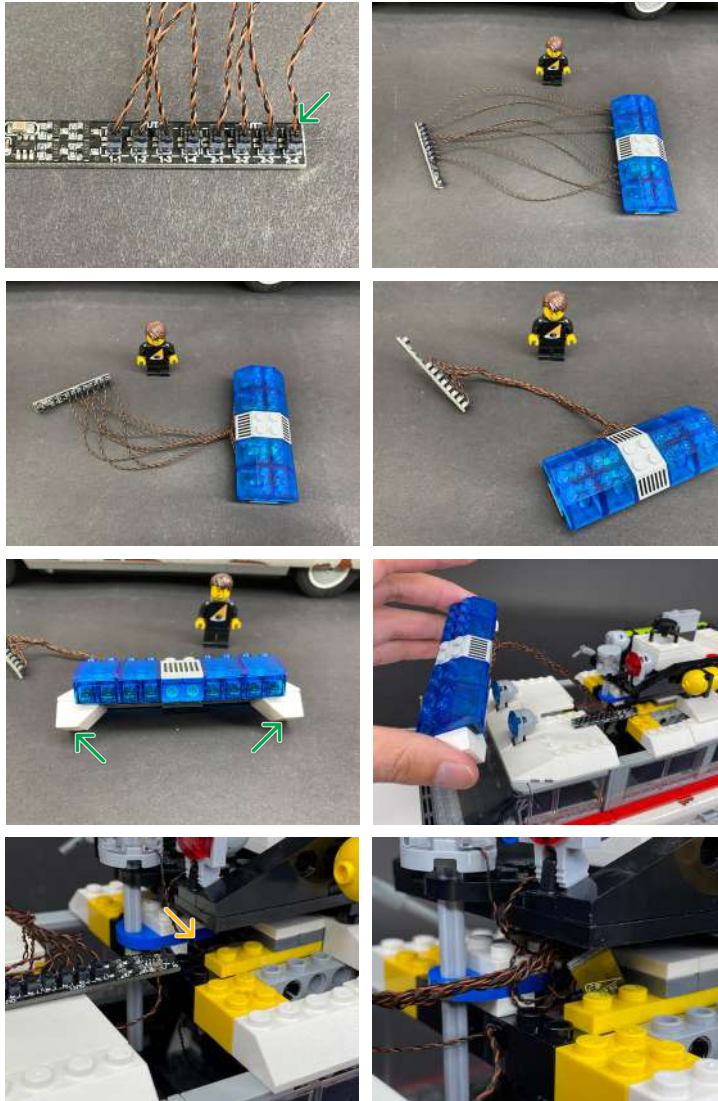
# 48. (con.)



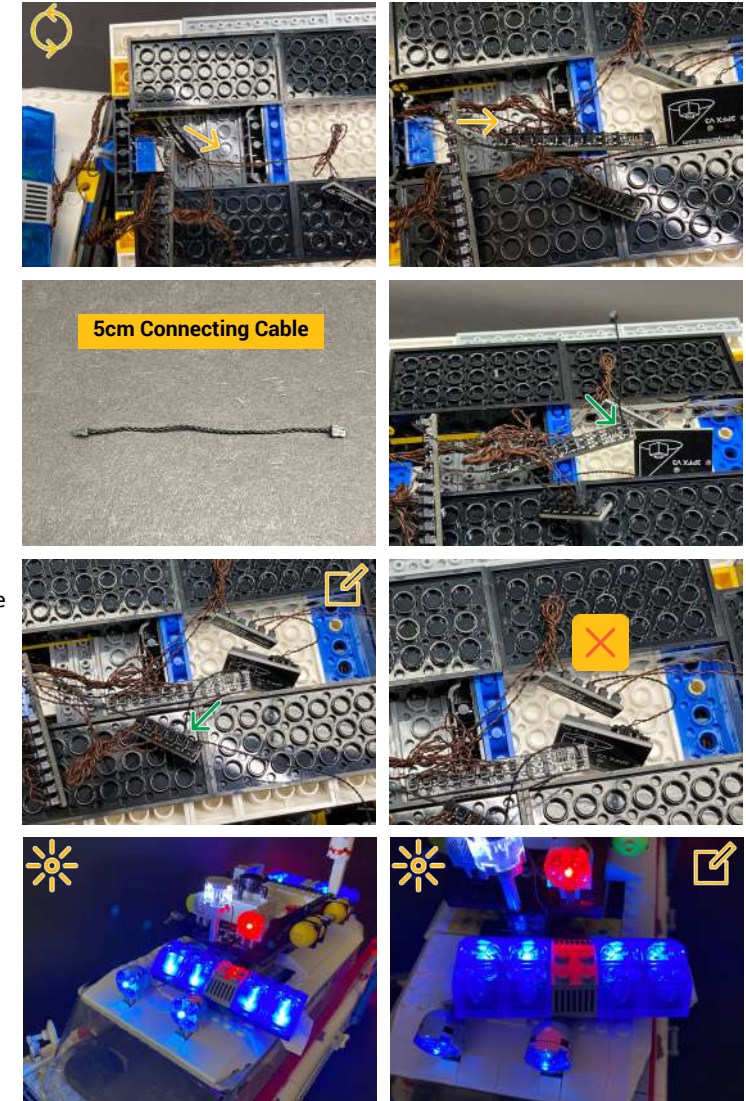



LEGEND:  DISCONNECT |  CONNECT / RECONNECT |  TURN / FLIP |  DIRECTIONAL |  TWIST / BRAID |  POWER ON / TEST


# 49.




# 50.




 Ensure you connect the 5cm Cable to the 6-Port Expansion Board from step. 36 NOT from step. 35

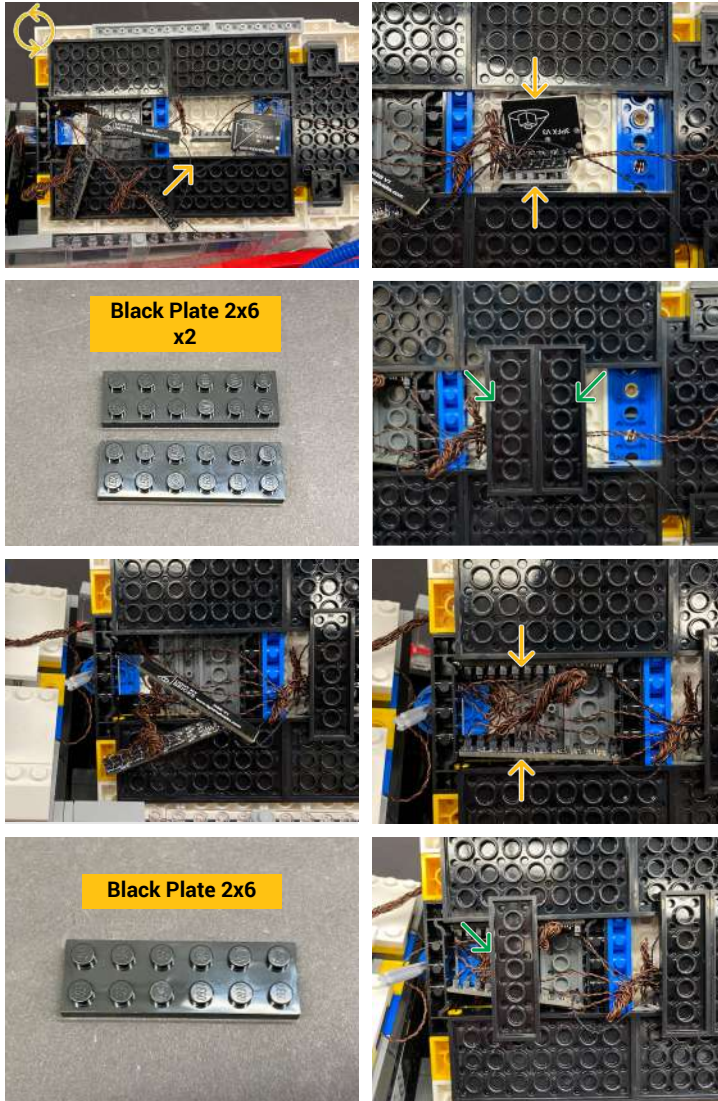
 Siren lights on each side should be rotating in opposite directions

 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 on our online troubleshooting guide.




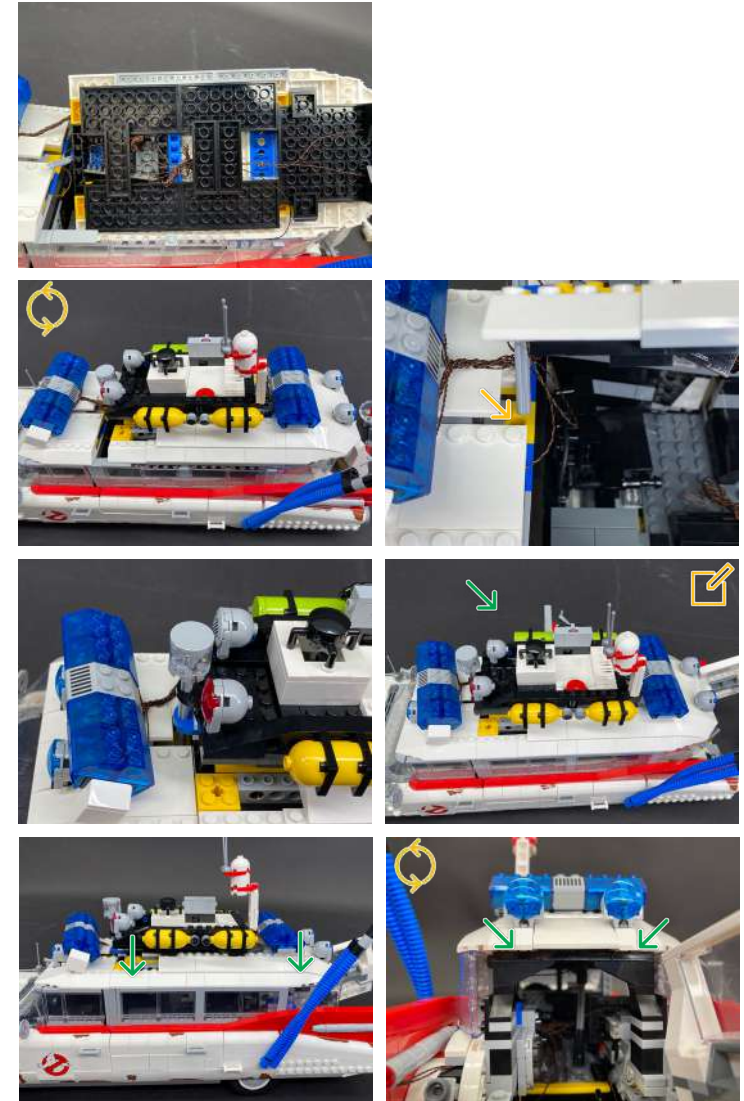
LEGEND:  DISCONNECT |  CONNECT / RECONNECT |  TURN / FLIP |  DIRECTIONAL |  TWIST / BRAID |  POWER ON / TEST


# 51.



# 52.

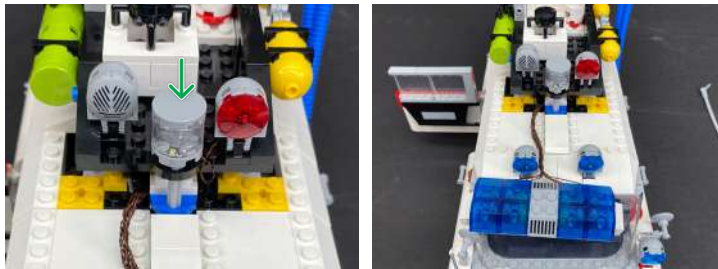
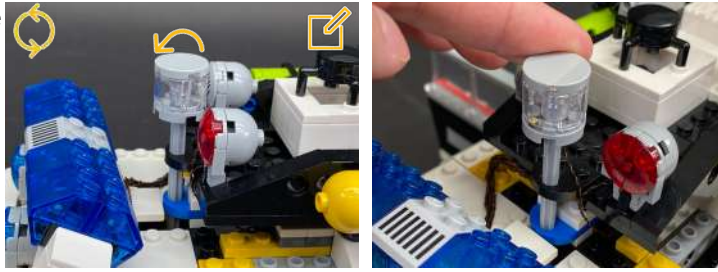
 Securely reconnect the roof.



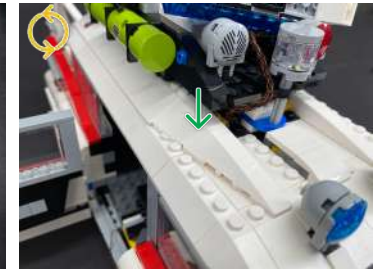
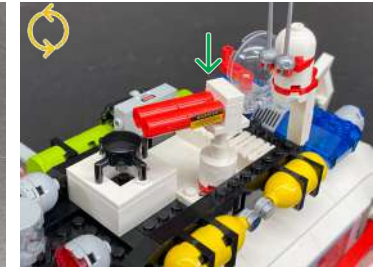
 If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing expansion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



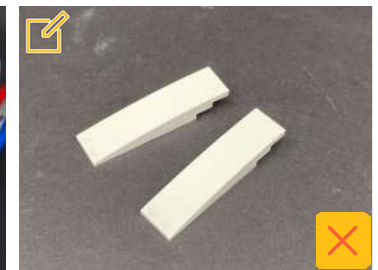
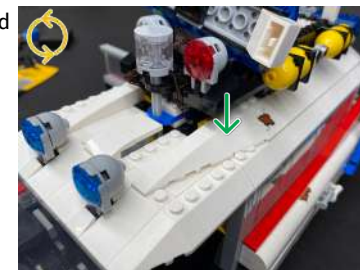
Ensure the Cool White Bit Light is facing forward. Adjust as required before pushing the axle pin all the way down



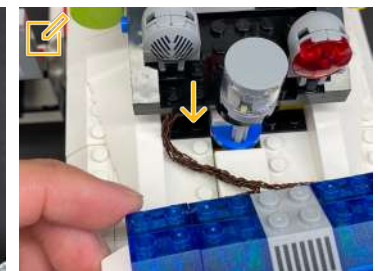
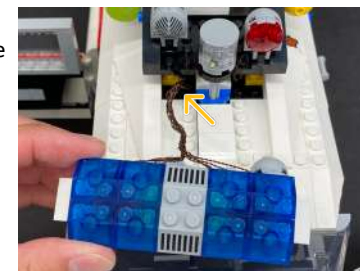
# 53.



Discard disconnected pieces



Thread the cables back down the space






LEGEND: |  DISCONNECT |  CONNECT / RECONNECT |  TURN / FLIP |  DIRECTIONAL |  TWIST / BRAID |  POWER ON / TEST

# 54.



# 55.



 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 on our online troubleshooting guide.

# Final Product

This finally completes installation of the Light My Bricks Ghostbusters Ecto-1 10274 Light & Sound 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.

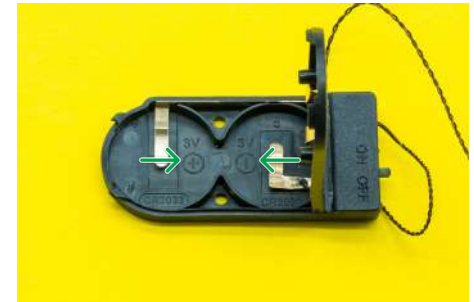
If the batteries have no power, replace the batteries.

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

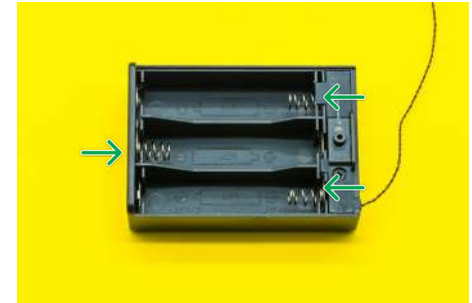
Inside the battery pack is a symbol indicating which side the (round) CR2032 battery should be inserted. In this case, for the stacked battery pack, ensure that BOTH batteries have the "+" symbol facing upwards.



## 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.

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



# Troubleshooting

## CHECK YOUR WIRES

In order for Light My Bricks components to fit in between and underneath LEGO® bricks, the components need to be very small.

Due to this nature, Light My Bricks components can be easily damaged when not handled correctly.

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

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

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



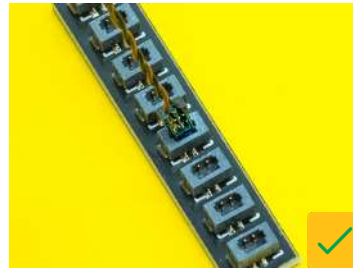


# Troubleshooting

## CHECK YOUR EXPANSION BOARD PORTS/ STRIP LIGHT PORTS / EFFECTS BOARD PORTS

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

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

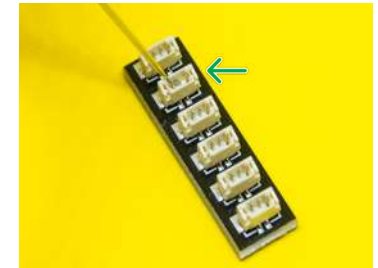
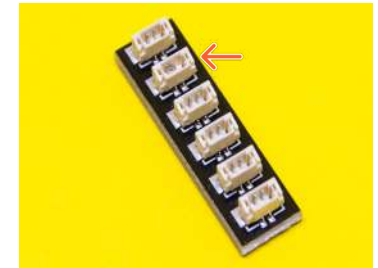


Not only will a light connected to the damaged port not work, but if the pins inside the port are bent to a point they are touching each other, this can result in all other lights in the system to stop working. This is a short circuit.

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

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

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



## Contact Us

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

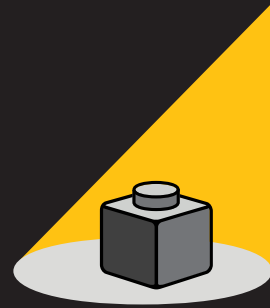
Alternatively, you can contact our Customer Services team by visiting our online support portal here.

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



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





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