

# Light My Bricks: LEGO Kessel Run Millennium Falcon 75212 Lighting Kit





The following page is instructions for the Light My Bricks LEGO Kessel Run Millennium Falcon (75212) LED lighting kit. You purchase this kit on our <u>official website</u>.

To ensure a trouble-free 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**.

This user guide is also available to download in **PDF format here**. Package contents:

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#### **Package Contents:**

- 6x White 15cm Bit Lights
- 3x Flashing White 15cm Bit Lights
- 2x Red 30cm Bit Lights
- 1x Blue 30cm Bit Lights
- 5x White Strip Lights
- 1x Multi Effects Board
- 1x Flicker Effects Board
- 2x 6-Port Expansion Boards
- 1x 30cm Connecting Cable
- 2x 15cm Connecting Cables
- 4x 5cm Connecting Cables
- 1x AA Battery Pack (requires 3x AA Batteries)
- 1x Flat Battery Pack (requires 2x CR2032 Batteries)

#### **LEGO Pieces:**

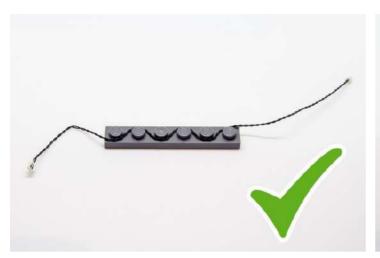
- 2x Trans Light Blue Round Plate 1x1
- 1x Trans Clear Round Plate 1x1

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### Important things to note:

### 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.



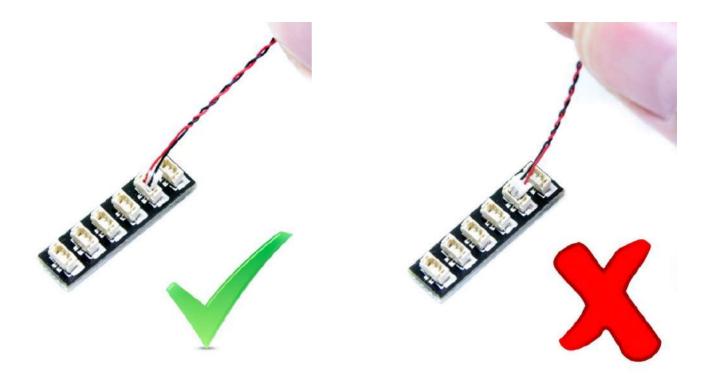




CAUTION: Forcing LEGO® to connect over a cable can result in damaging the cable and light.

#### **Connecting cable connectors to Expansion Boards**

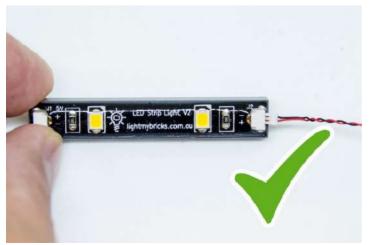
Take extra care when inserting connectors to ports of Expansion Boards. Connectors can be inserted only one way. With the expansion board facing up, look for the soldered "=" symbol on the left side of the port. The connector side with the wires exposed should be facing toward the soldered "=" symbol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

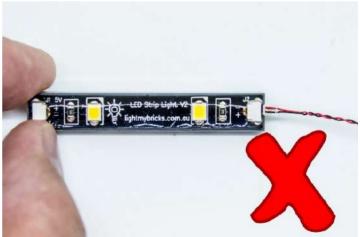


Incorrectly inserting the connector can can result in bent pins inside the port or possible overheating of the expansion board when connected.

### **Connecting cable connectors to Strip Lights**

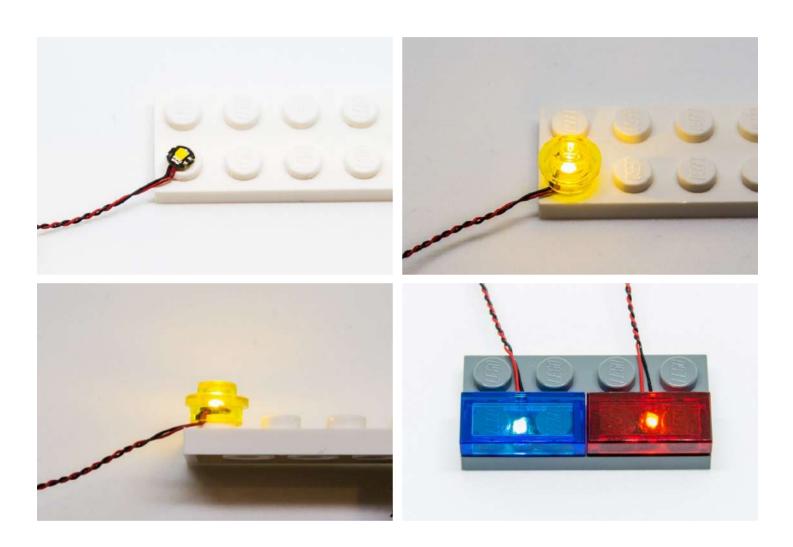
Take extra care when inserting connectors to ports on the Strip Lights. Connectors can be inserted only one way. With the Strip Light facing up, ensure the side of the connector with the wires exposed is facing down. If a plug won't fit easily into a port connector, don't force it. Doing so will damage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





### Installing Bit Lights under LEGO® bricks and plates.

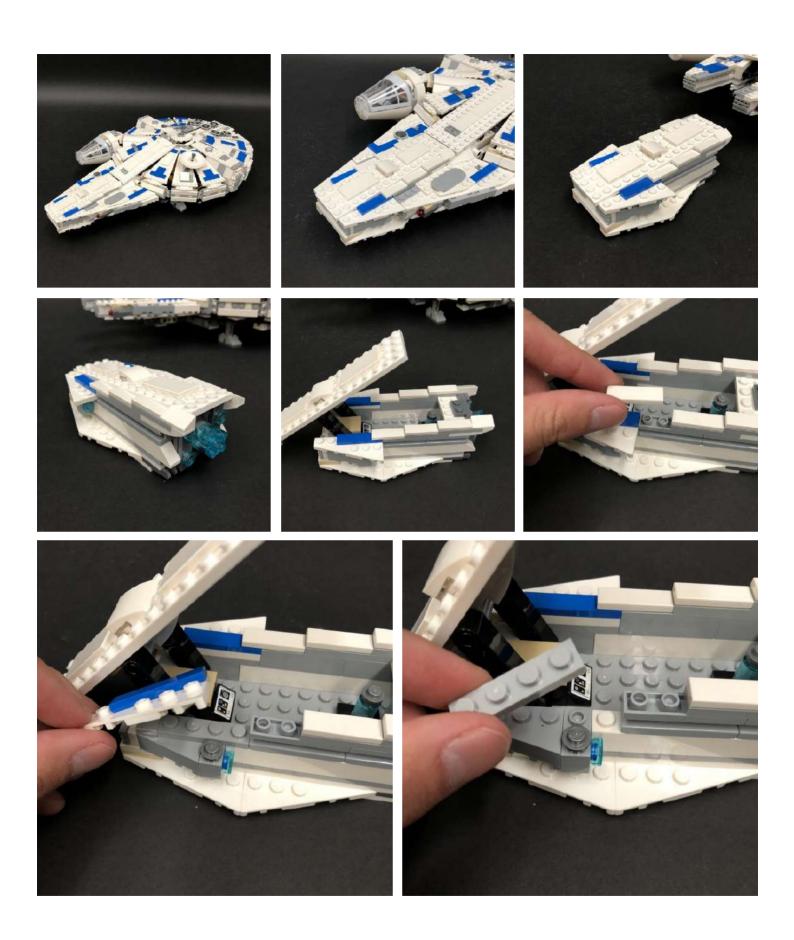
When installing Bit Lights under LEGO® pieces, ensure they are placed the correct way up (Yellow LED component exposed). You can either place them directly on top of LEGO® studs or in between.



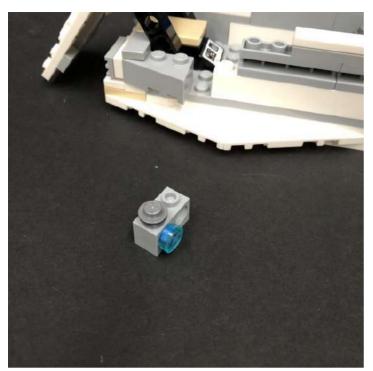
OK, Let's Begin!

#### **Lighting the Escape Pod**

1.) The first section we will light up will be the escape pod. To start, disconnect this from the main ship and then disconnect the following pieces from the front left.

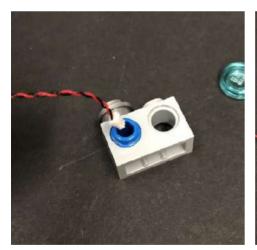


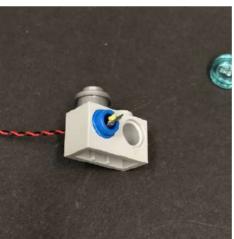
Disconnect the 1x2 technic brick and then disconnect the trans-light blue tile from the back of it.

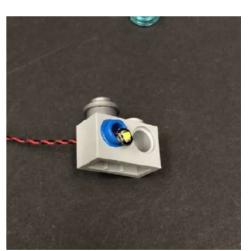




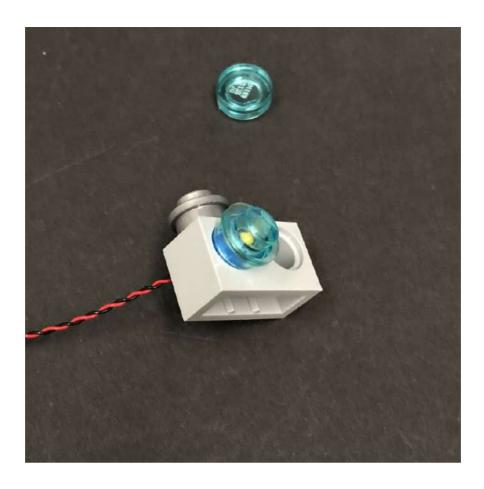
2.) Take a **White 15cm Bit Light** and then thread the connector side through the blue technic pin. Thread it all the way through until the Bit Light is right up against the technic pin, then bend the Bit Light slightly so that it sits flat.



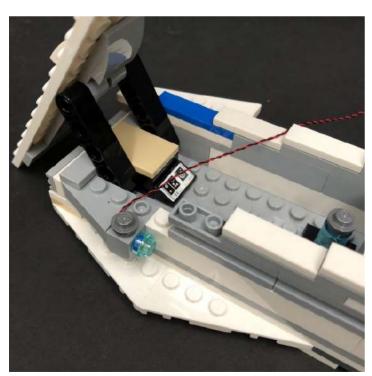


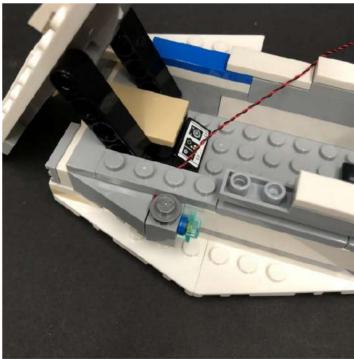


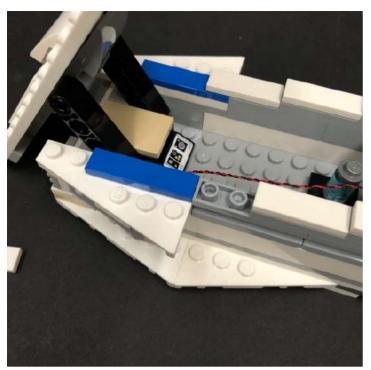
Secure the Bit Light in place by connecting a provided **LEGO Trans Light Blue plate 1x1** over the top.

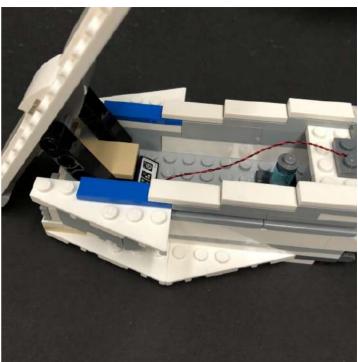


3.) Reconnect the 1x2 Technic brick back to the escape pod and then reconnect pieces we removed earlier.



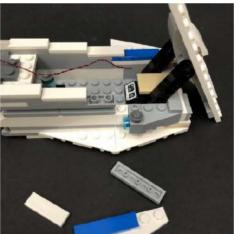




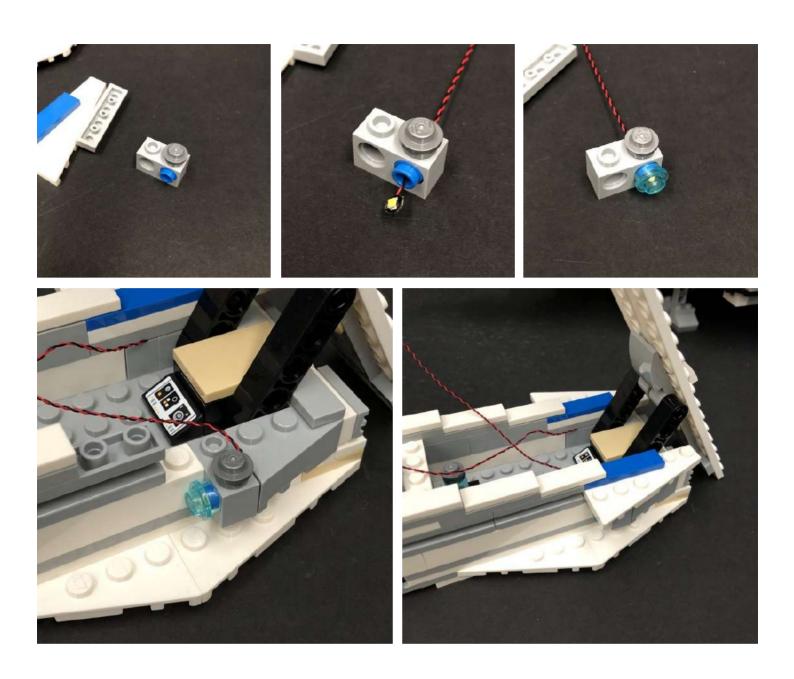


4.) Repeat previous steps to install another **White 15cm Bit Light** to the right side of the escape pod.

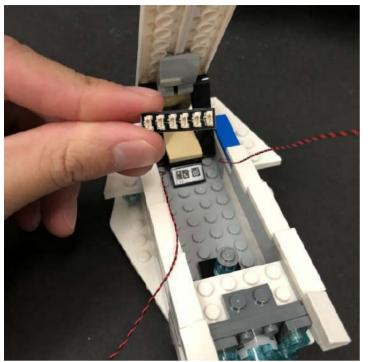


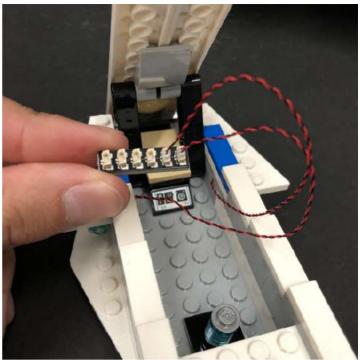




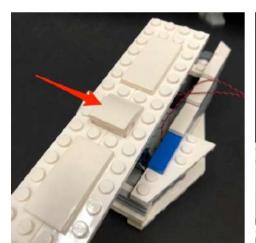


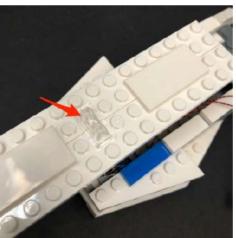
5.) Take a **6-Port Expansion Board** and connect both bit lights to the available ports.

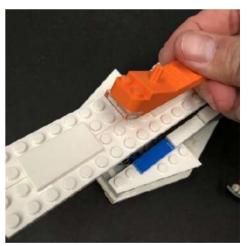




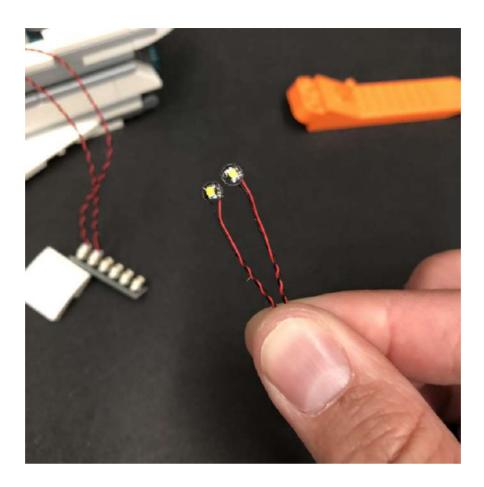
6.) Disconnect the following white 2x2 tile from the centre of the main door then use a LEGO removal tool to disconnect the Trans Clear 1x2 Plate.



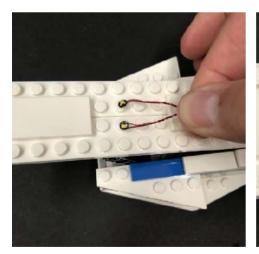


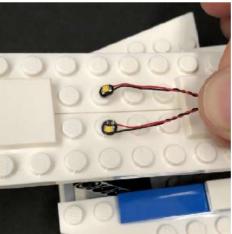


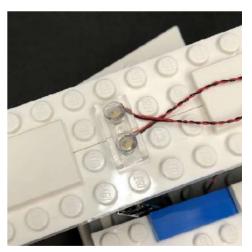
7.) Take **2x White 15cm Bit Lights** and then hold them together as shown below.



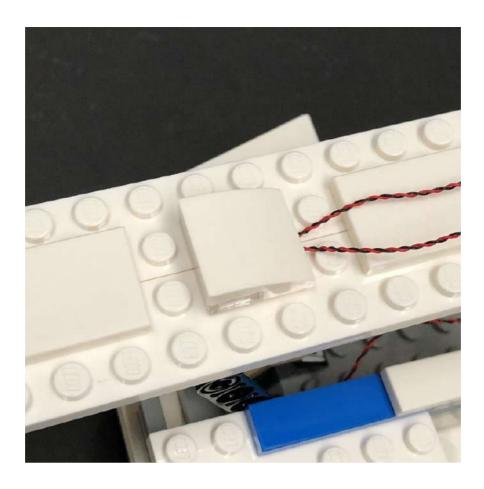
With the cables facing toward the back, place both lights over the following studs (underneath where the trans clear 1x2 plate was) and then reconnect the Trans Clear 1x2 Plate over the top.



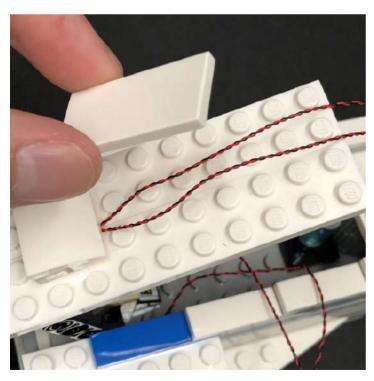


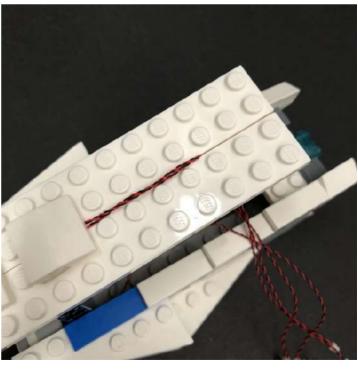


Reconnect the white LEGO 2x2 tile over on top.

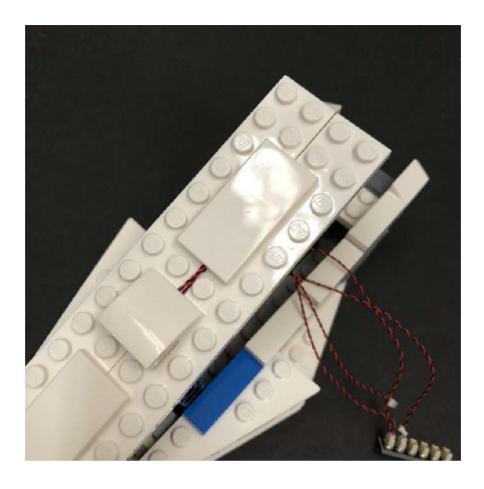


8.) Disconnect the 2x4 tile toward the back and then carefully slip the cables in between the two long LEGO plates as shown below.

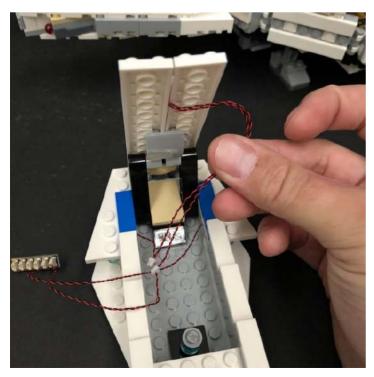


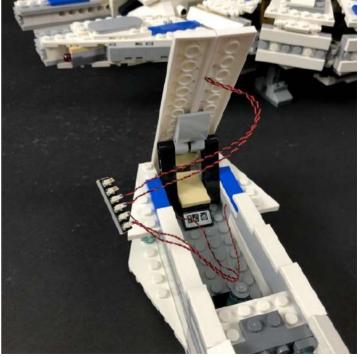


Reconnect the 2x4 tile over the top.

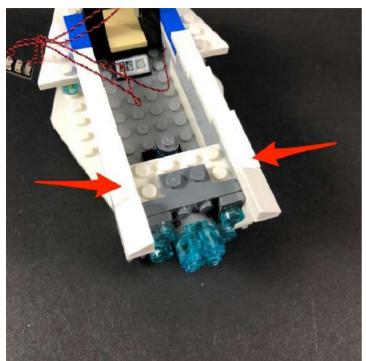


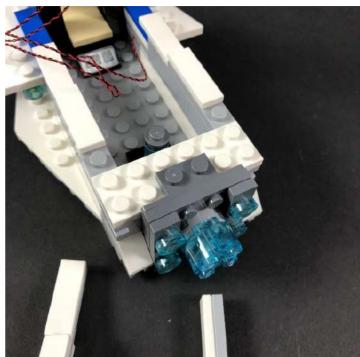
9.) From underneath the main door, take the two cables and connect them to spare ports on the expansion board.



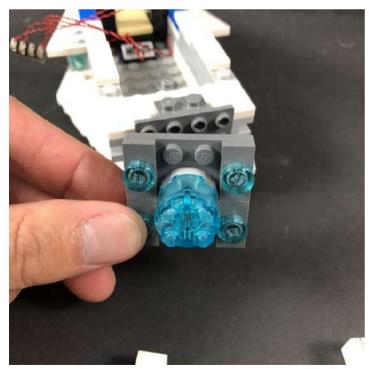


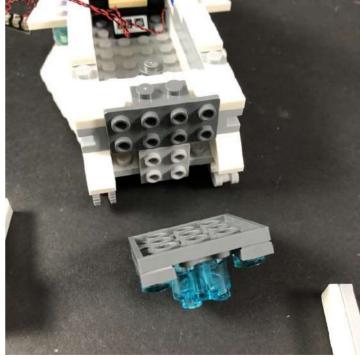
### 10.) Disconnect the following sections from the back of the escape pod:

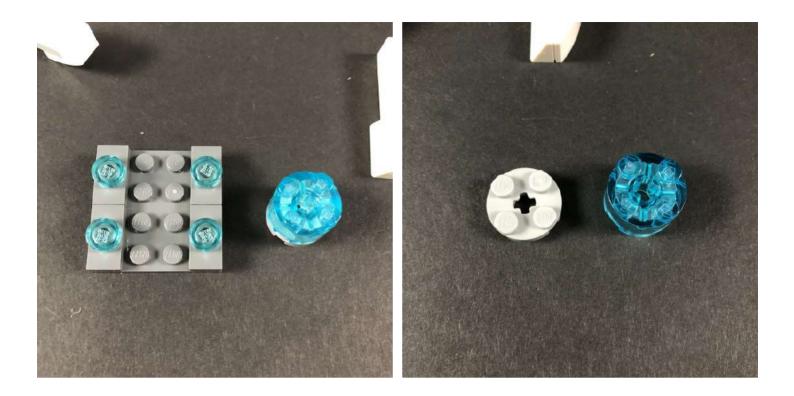




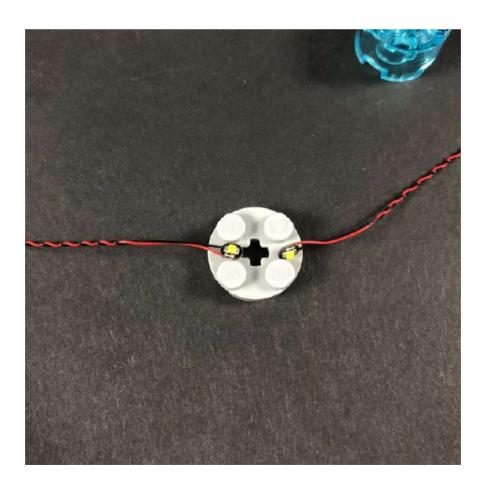
Disconnect and disassemble the middle section from the back piece as per below:





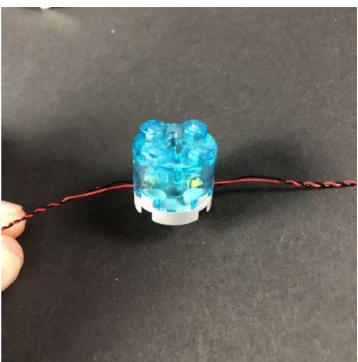


11.) Take another **2x White 15cm Bit Lights** and place each in between studs with each cable facing outward.

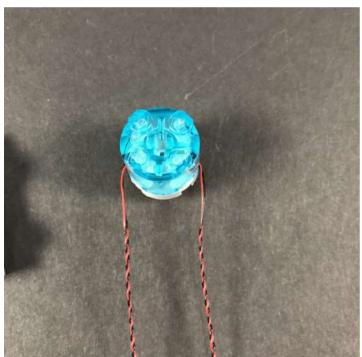


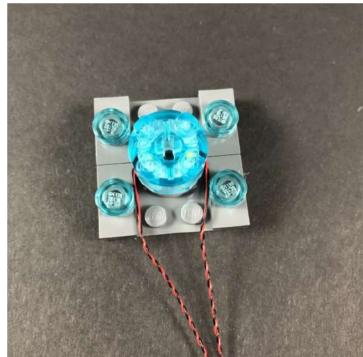
Reconnect the trans light blue 2x2 round brick





12.) Bend both cables down before reconnecting this to the back piece.

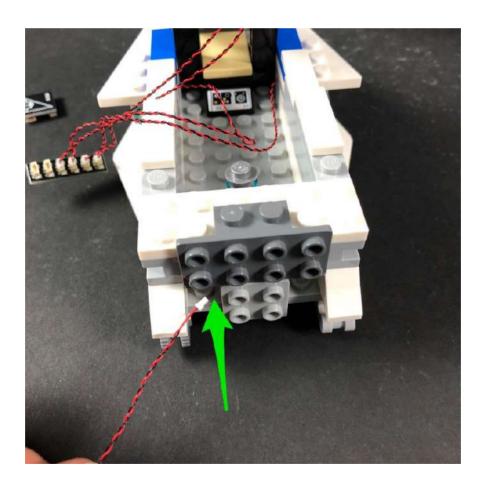




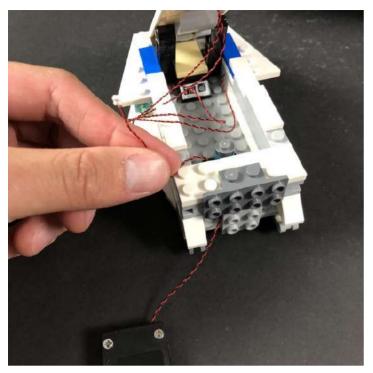
13.) Take the **Flat Battery Pack** and insert 2x CR2032 Batteries to it. Thread the battery pack cable through the back of the escape pod in the space at the bottom left corner.

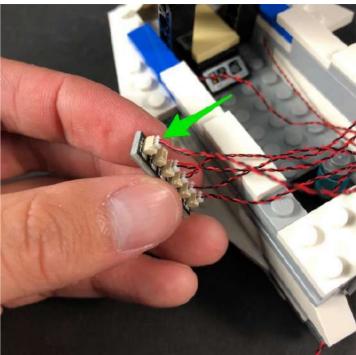




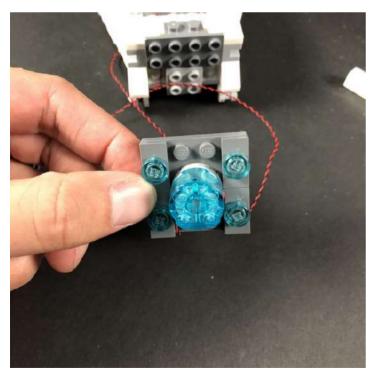


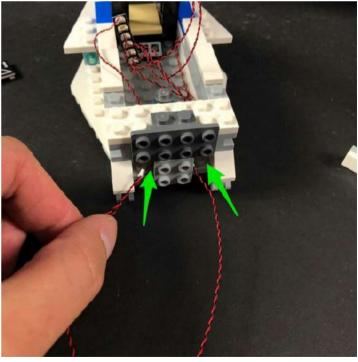
Pull it all the way through and then connect it to a spare port on the 6-port expansion board.

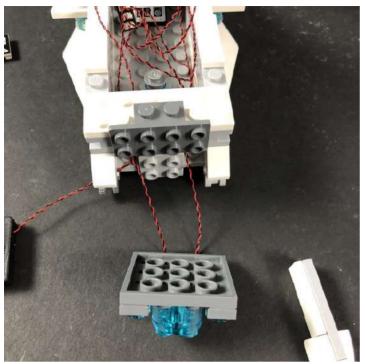


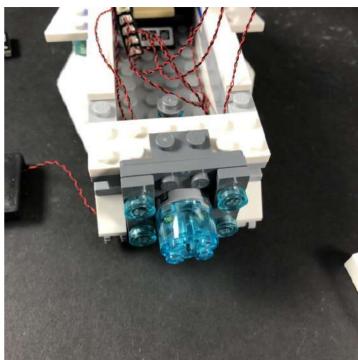


14.) Take the back piece and then thread each bit light cable through the corner space on each side, then reconnect this back piece as per below

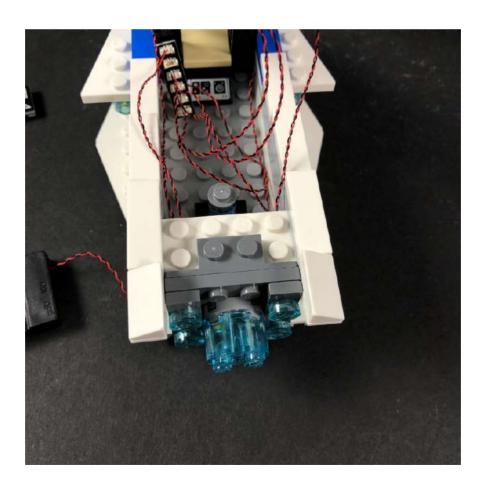




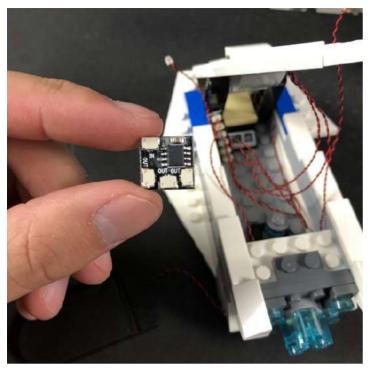


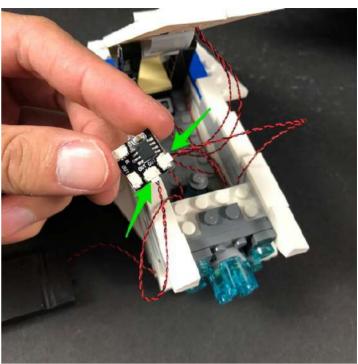


15.) Reconnect surrounding pieces we removed earlier.

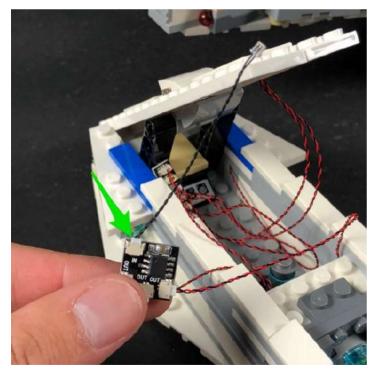


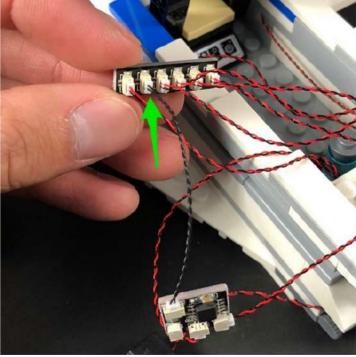
16.) Take the **Flicker Effects Board** and then connect the two cables from the back light to the OUT ports



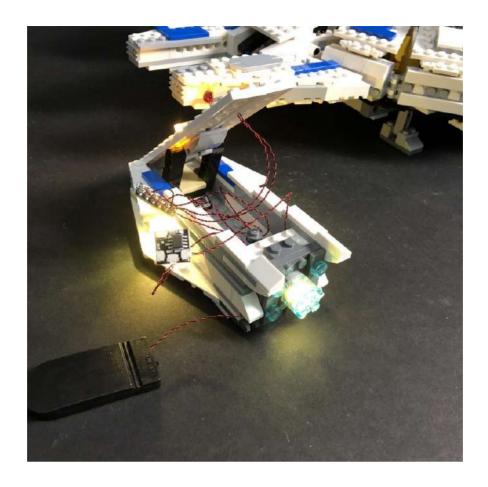


17.) Take a **5cm Connecting Cable** and connect this to the IN port on the flicker effects board. Connect the other side of the cable to the remaining port on the 6-port expansion board.

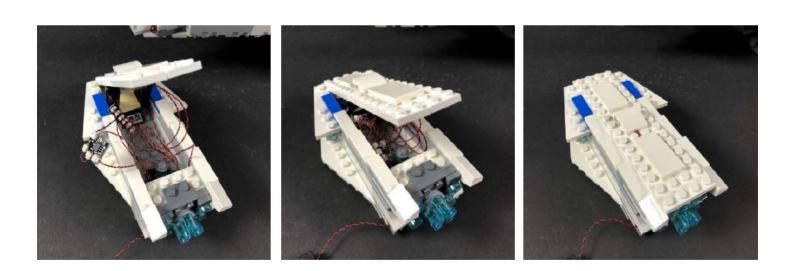




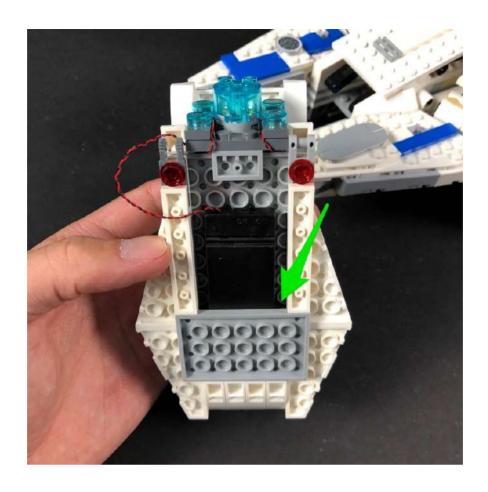
Turn the battery pack ON to test all lights are working OK (including the flicker effect for the back jet)



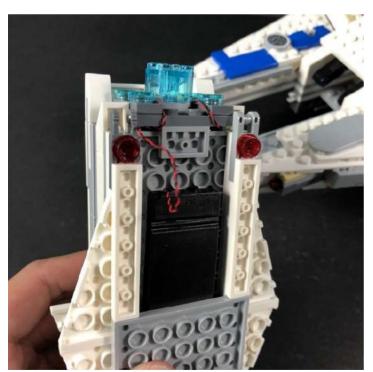
18.) Neatly place all the cables and boards inside the escape pod and then close the door.

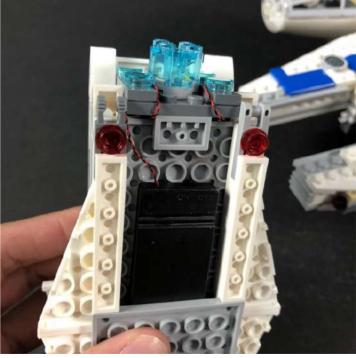


19.) Tuck the flat battery pack in underneath the escape pod in between the grey plates.

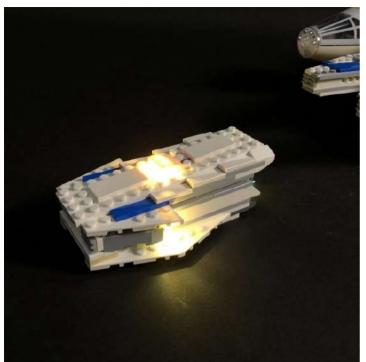


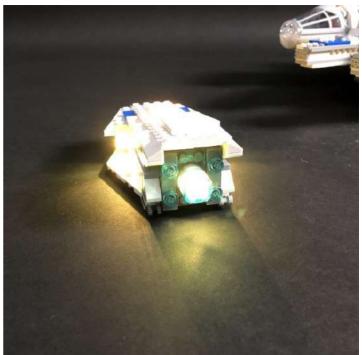
Pull in any excess cable from the battery pack.





This completes installation of the lights for the Escape Pod.





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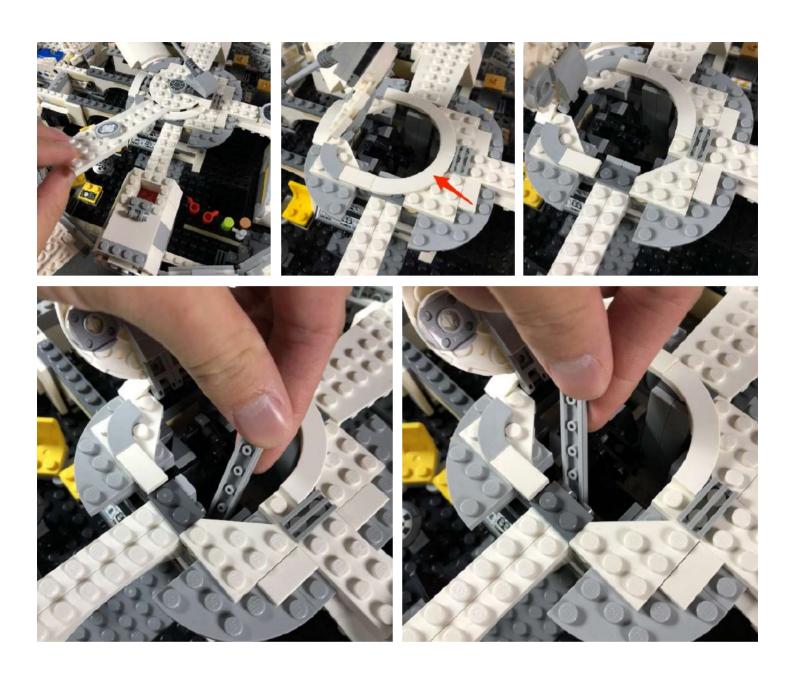
### **Lighting the Kessel Run**

1.) Open up the Kessel Run and then disconnect the following pieces from the left side of the ship.

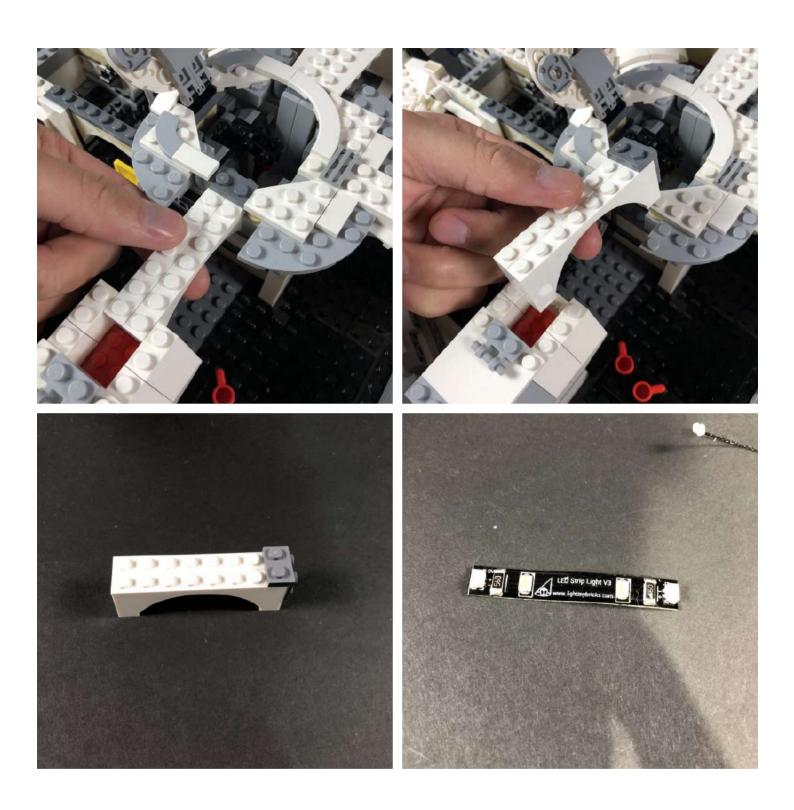




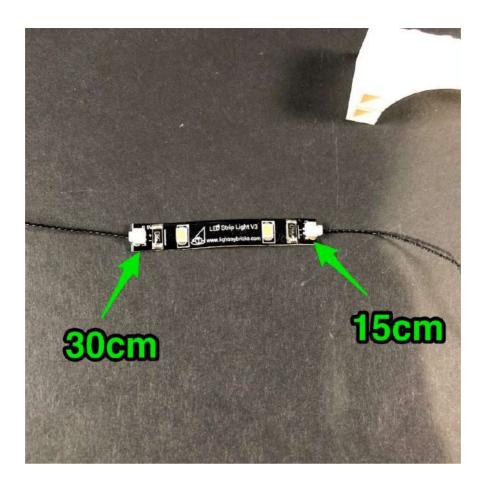




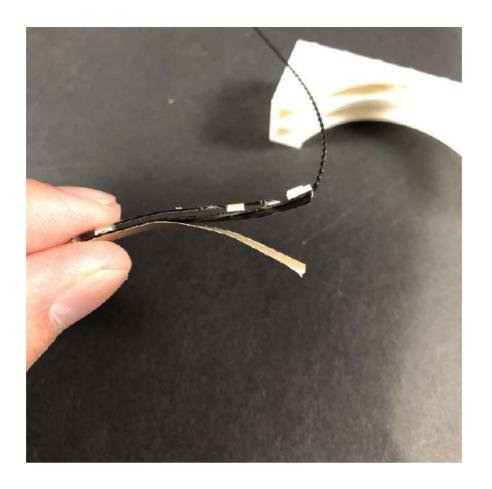
Disconnect the two white arch pieces and then take a **White Strip Light**.



2.) Connect a  $\bf 30cm$  Connecting Cable to the left port of the strip light and then connect a  $\bf 15cm$  Connecting Cable to the right port .



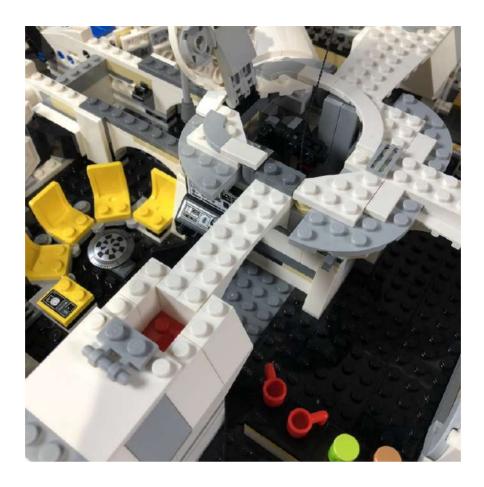
3.) Using it's adhesive backing, stick the strip light underneath the two white arch pieces in the following position. Ensure the 30cm Connecting cable is facing the left and the 15cm Connecting cable is facing the right.



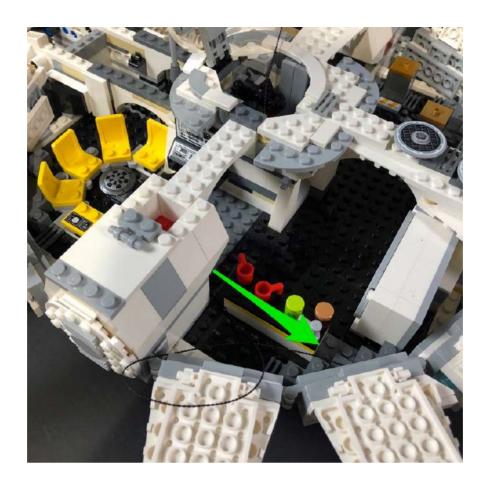




Reconnect the arch piece section ensuring the cables underneath are laid in between studs.



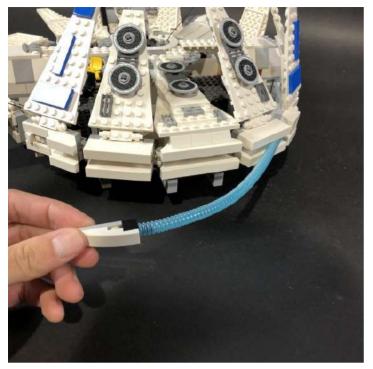
4.) Pull the 30cm connecting cable across and around the side of the ship toward the back.

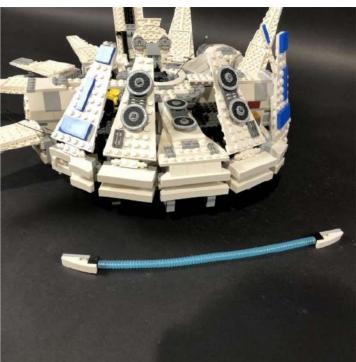


Reconnect surrounding pieces we removed earlier from the middle.



5.) Disconnect the long section from the back of the ship as per below:



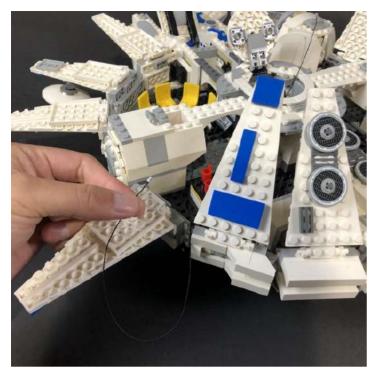


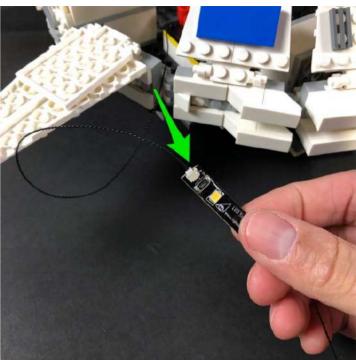
6.) Take **3x White Strip Lights** and **2x 5cm Connecting Cables**. Connect them all together as per below:



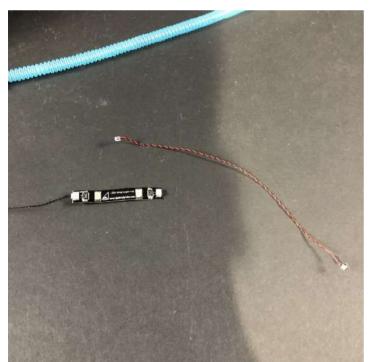


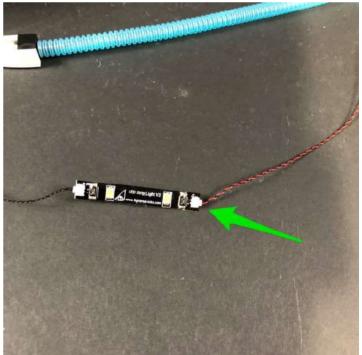
7.) Take the other end of the 30cm Connecting Cable from previous steps and then connect this to the end of one of the Strip Lights.





8.) Take a **Flashing White 15cm Bit Light** and connect it to the end of the Strip Light on the other side.

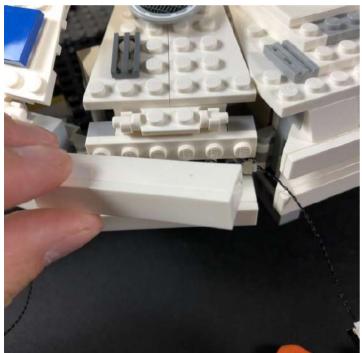




9.) Using the strip light's adhesive backing, stick each one to the following sections starting from the left side. You can disconnect surrounding sections to make it easier to stick down the strip lights.



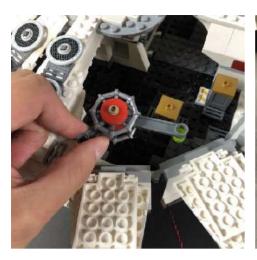




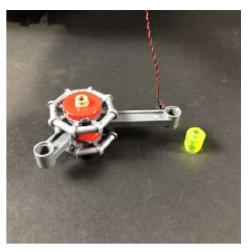




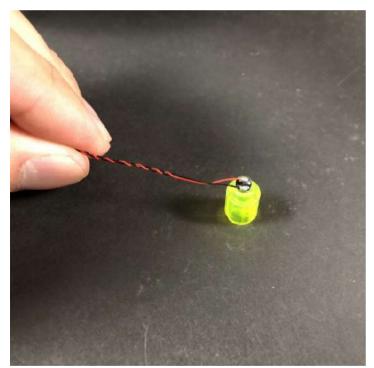
10.) Disconnect the hyperdrive section and then remove the trans light green brick.

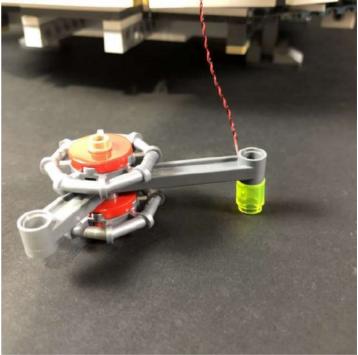




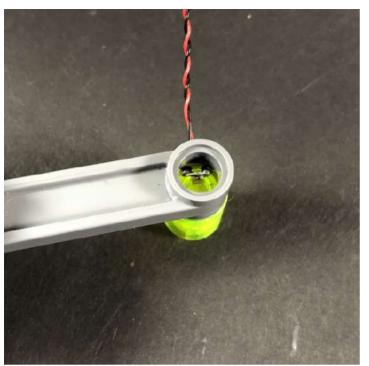


11.) Place the Flashing White 15cm Bit Light over the top of the trans light green brick (with LED facing down) then reconnect the hyperdrive section over the top to secure the light in place.

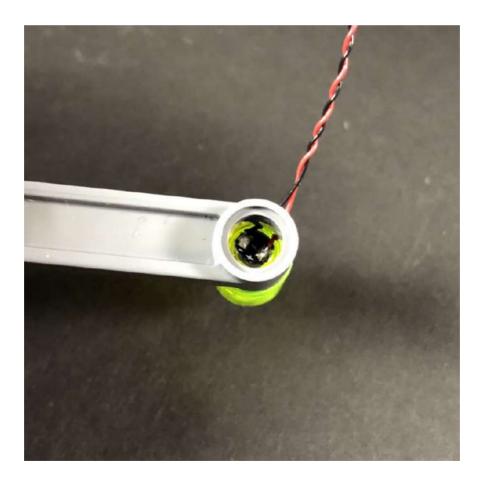




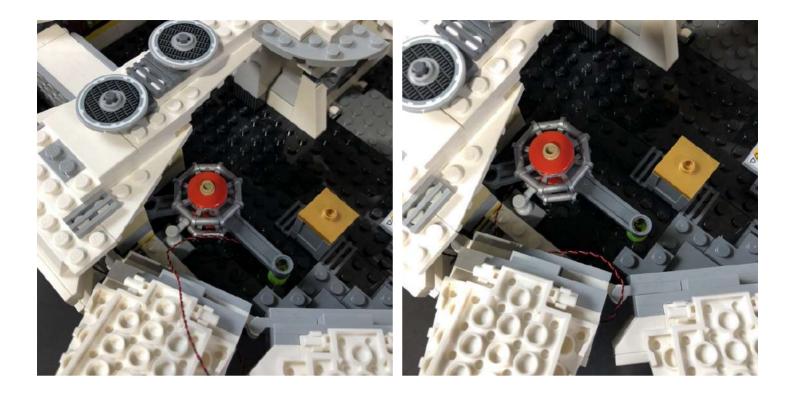
You will notice that the Bit Light is slightly bent up. Use a thin LEGO bar to push the component down so that the light is facing directly down.







12.) Reconnect the hyperdrive with bit light installed back to the kessel run and then neatly lay excess cable behind the unit.



13.) Pull excess cable from the first strip light back inside the kessel run then lay the cable in between studs underneath the following section.

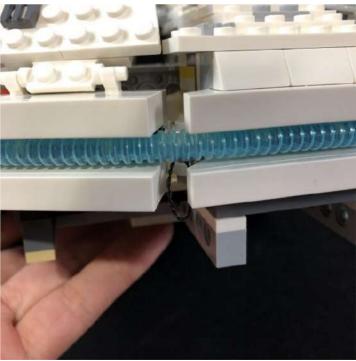


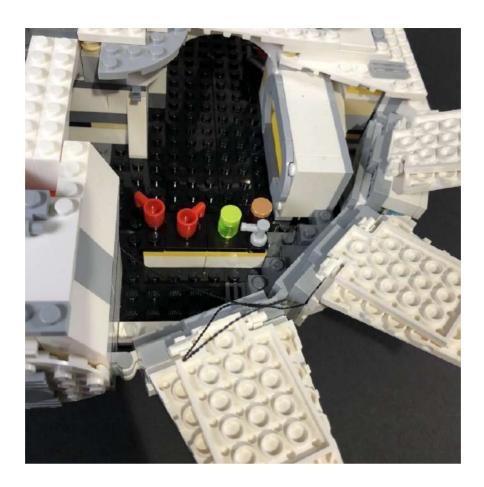




14.) Reconnect the back long section over the strip lights and then push down any excess connecting cables in between strip lights.



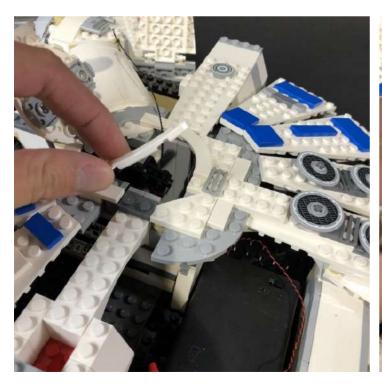




15.) Take the **AA Battery Pack** and insert 3x AA Batteries to it. Place the Battery Pack inside the Kessel Run towards the back in the following position (with battery pack cable at the top)

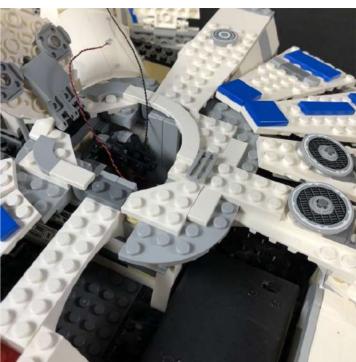


Disconnect the following sections to allow us to lay the battery pack cable down towards the centre of the Kessel Run underneath these sections before reconnecting them.

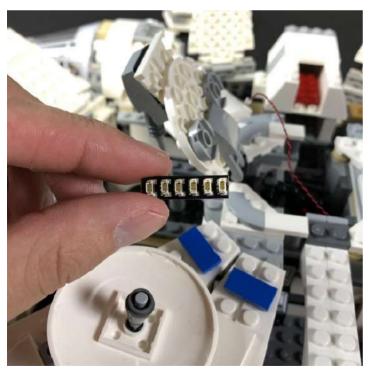


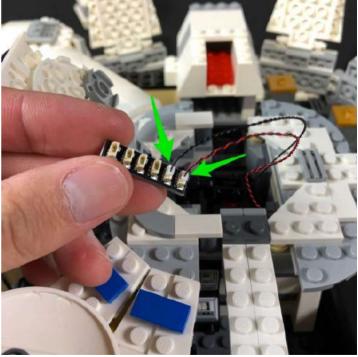






16.) Take a **6-port Expansion Board** and then connect the other end of the connecting cable from the very first Strip Light we installed as well as the Battery Pack cable to the available ports.

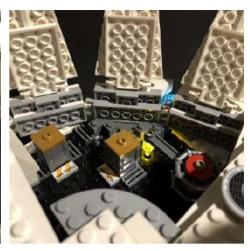




Turn the Battery Pack On to test that all lights we have installed so far are working OK.

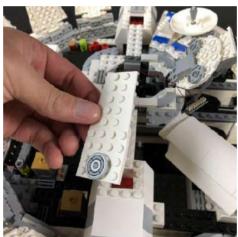


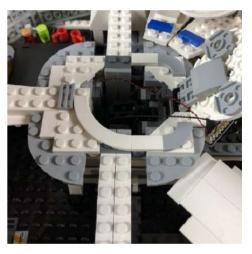


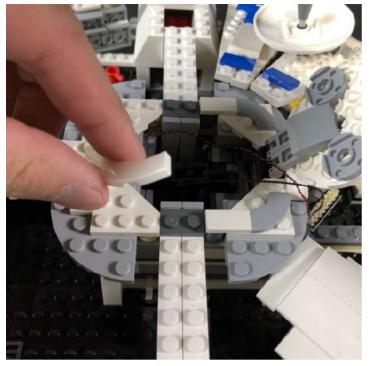


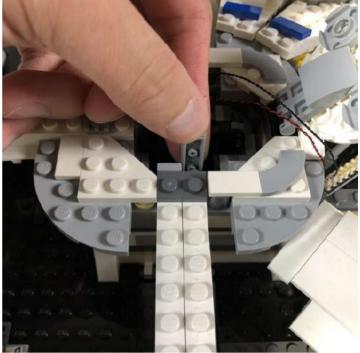
17.) Turn the Kessel Run over to the other side and then disconnect the following sections to allow us to remove the two white arched pieces.

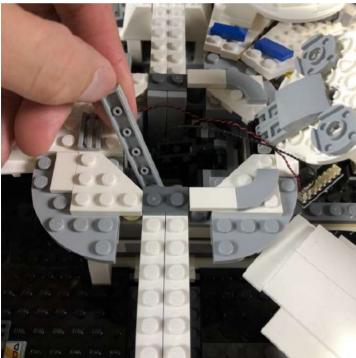










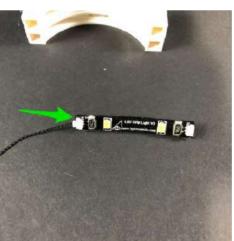


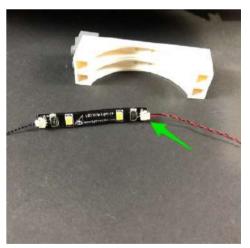




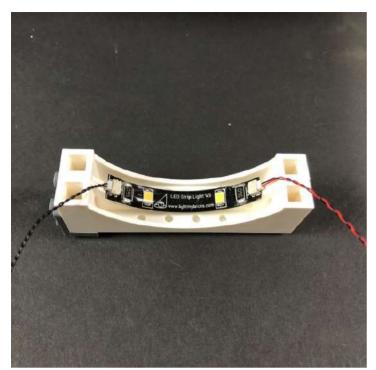
18.) Take another **White Strip Light** and connect a new **15cm Connecting Cable** to the left port. Take a **Blue 30cm Bit Light** and connect it to the Strip Light's right port.

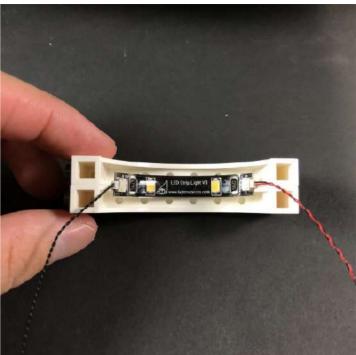




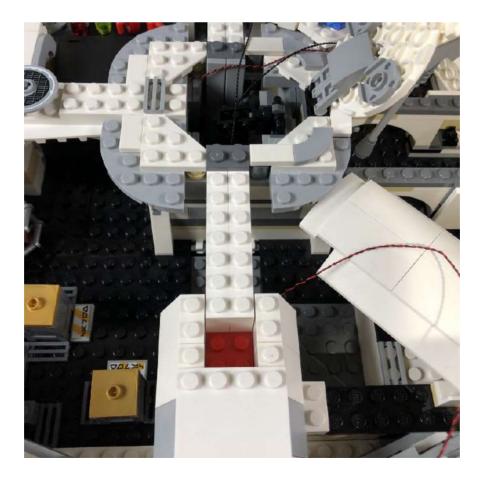


19.) Using it's adhesive backing, mount the strip light underneath the two white arch pieces in the following position

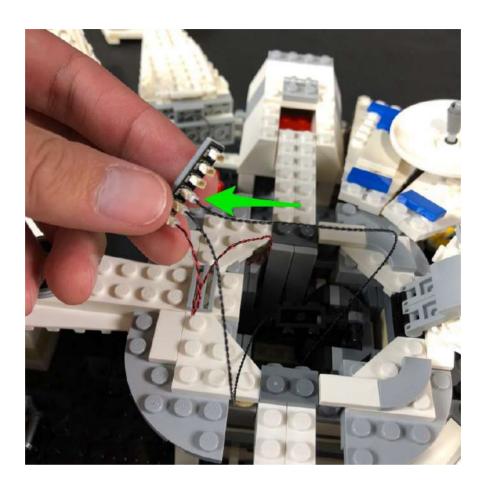




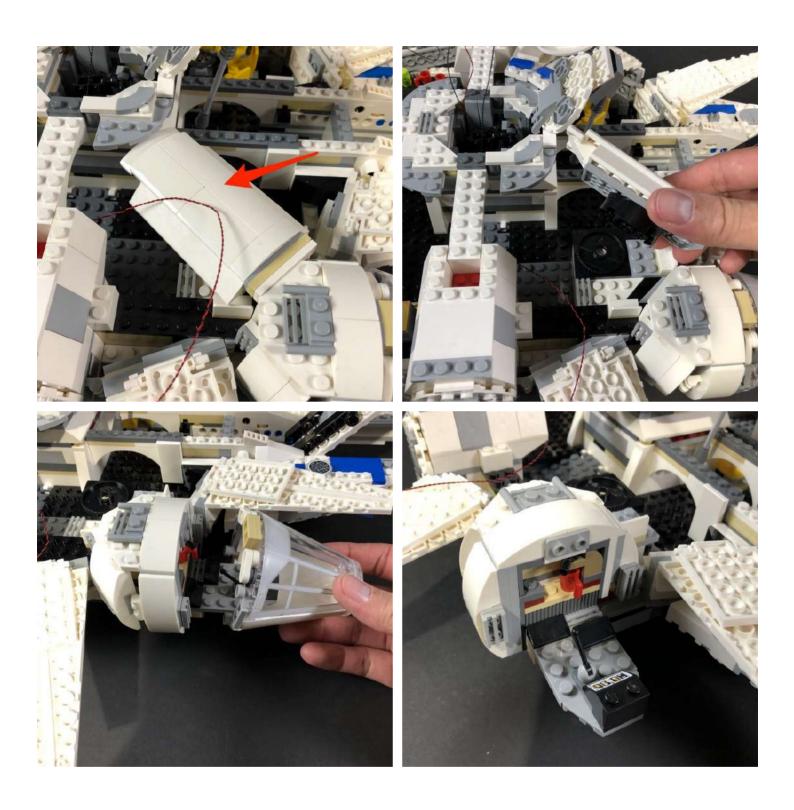
Reconnect this section back ensuring the Blue Bit Light is facing down and 15cm Connecting Cable is facing up and laid in between studs.



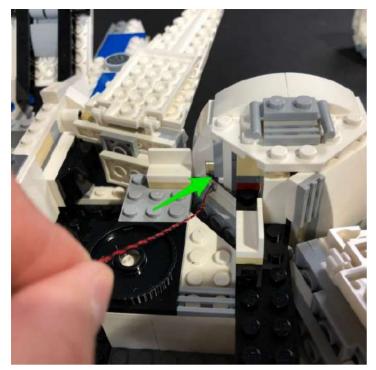
Connect the other end of the 15cm Connecting Cable to a spare port on the 6-port Expansion Board in the middle.

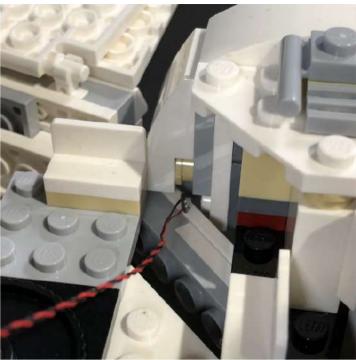


17.) Disconnect the following section that leads to the cockpit as well as the cockpit cover section.



18.) Thread the end of the Blue 30cm Bit Light through the space that leads to the back of the cockpit.





Pull the Bit Light out from the front and then lay it on top of the following stud:

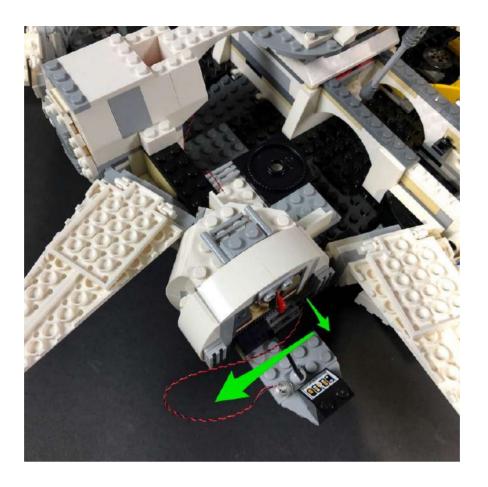




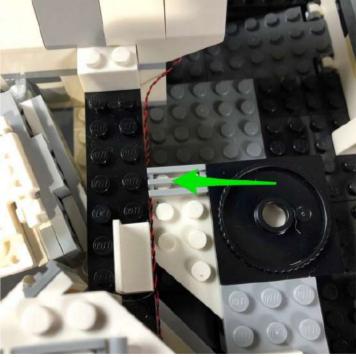
Secure the Bit Light in place by connecting the  $provided\ Trans\ Clear\ Round\ Plate\ 1x1$  over the top.



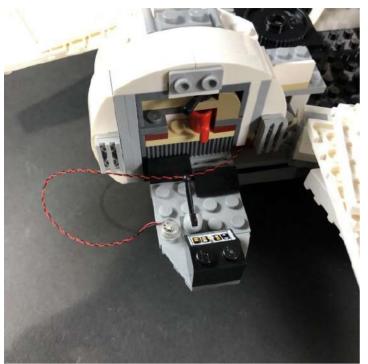
19.) Pull the excess cable out through to the front and then secure the cables underneath the following LEGO piece.

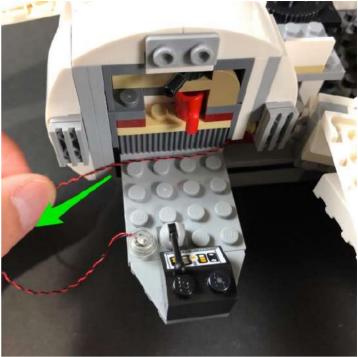


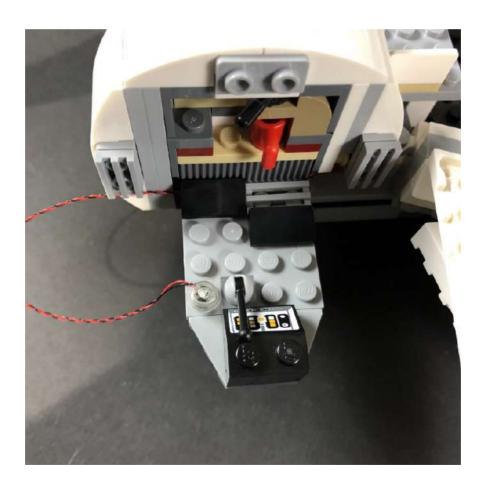




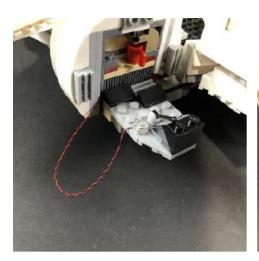
Disconnect the following pieces from the front of the cockpit, pull the cable out to the left in between studs and then reconnect the pieces over the top.







Tuck the excess cable down underneath the cockpit and then place Han Solo inside.







Reconnect the cockpit window and then turn the Battery Pack ON to verify everything you have installed so far is working OK

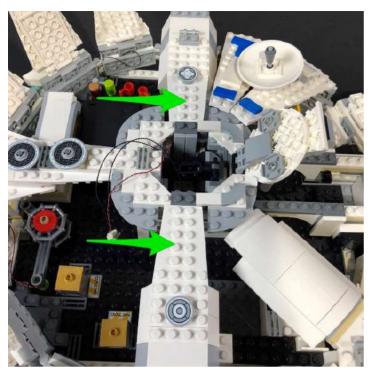


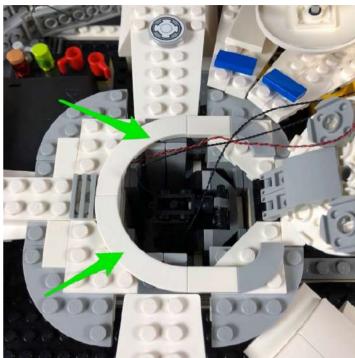




20.) Reconnect the roof that leads to the cockpit as well as pieces around the centre of the ship we removed earlier.



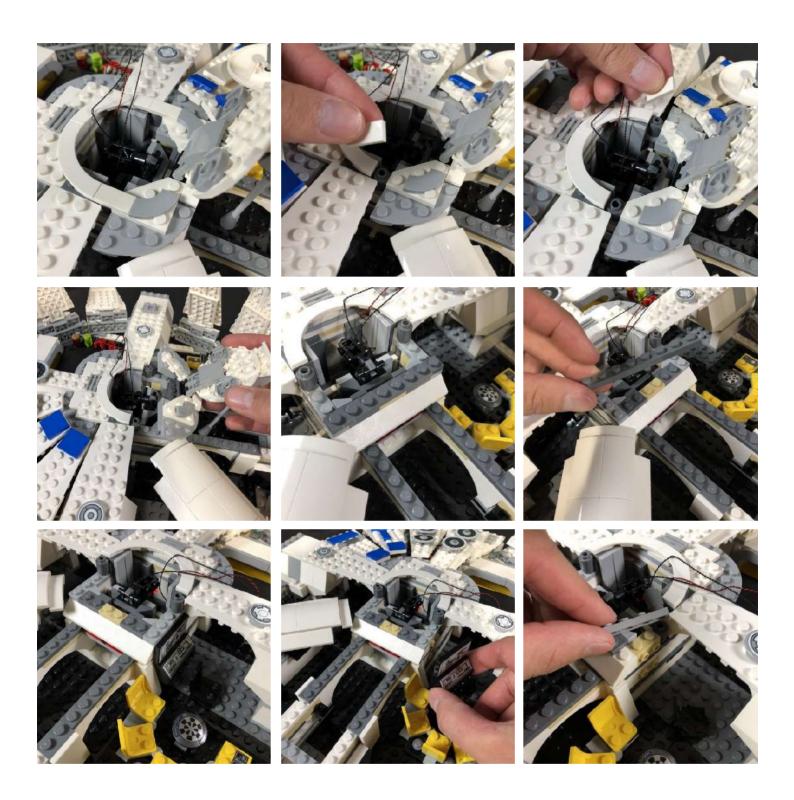


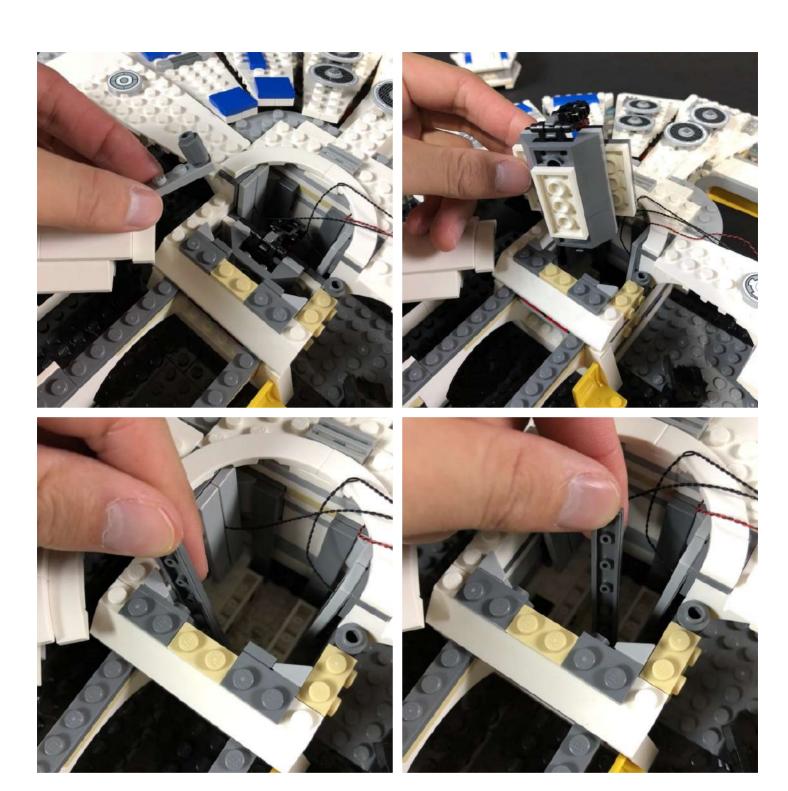


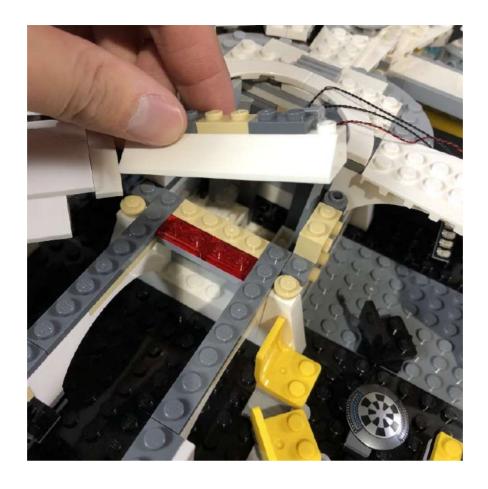
21.) We will now install flashing lights to the control panel at the front of the vehicle. Disconnect the following pieces to give us access inside.



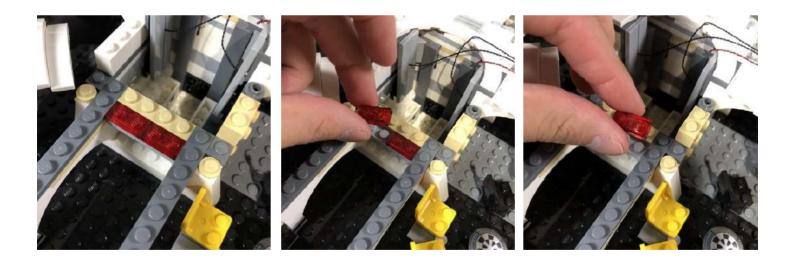


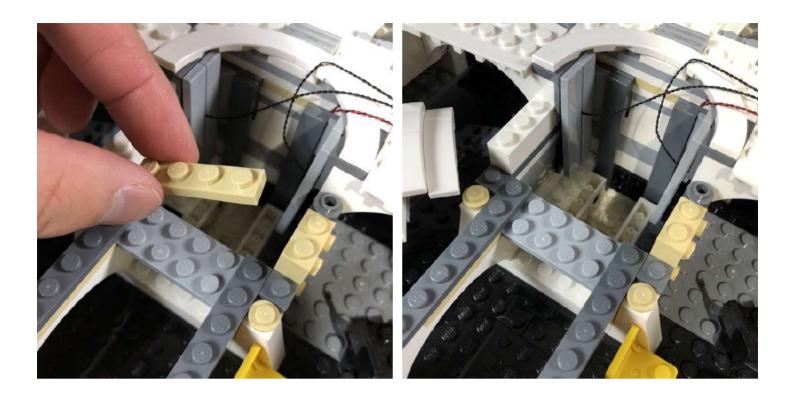




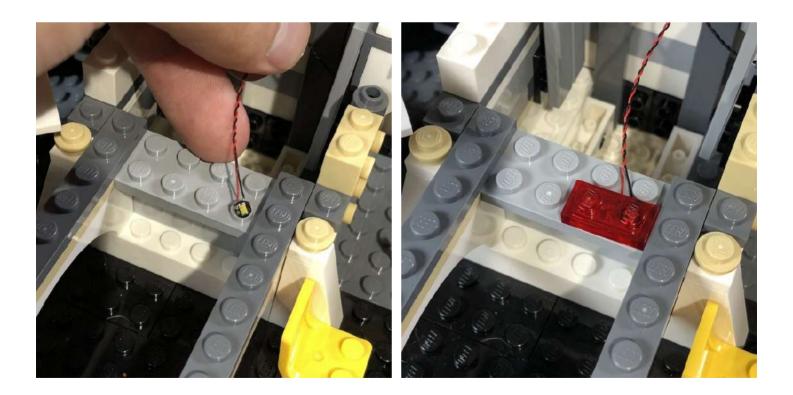


Disconnect the two trans red 1x2 plates as well as the 1x4 plate behind.

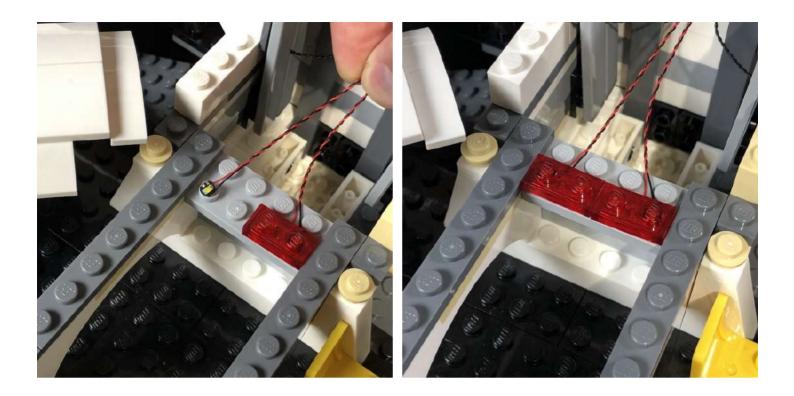




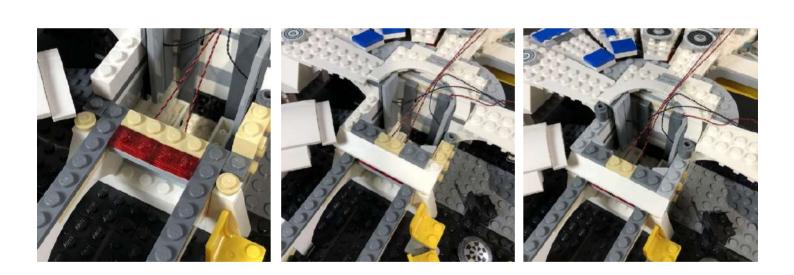
22.) Take a **Flashing White 15cm Bit Light** and with the cable facing toward the back, place it on top of the following stud. Secure the light in place by reconnecting one of the trans red 1x2 plates over the top.

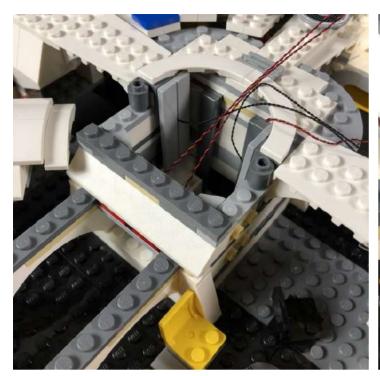


Repeat this step to install another **Flashing White 15cm Bit Light** to the other side.

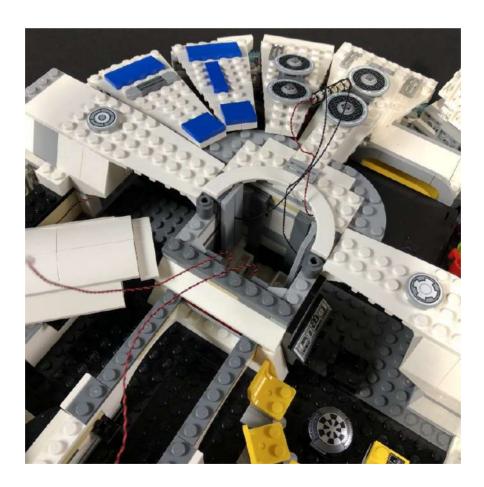


23.) Reconnect some of the surrounding pieces we removed earlier.

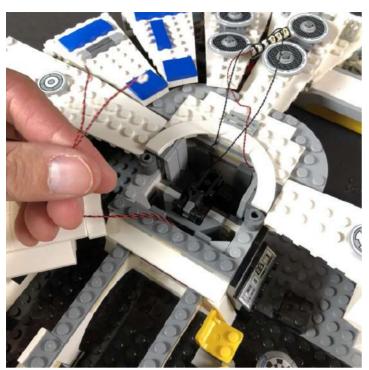


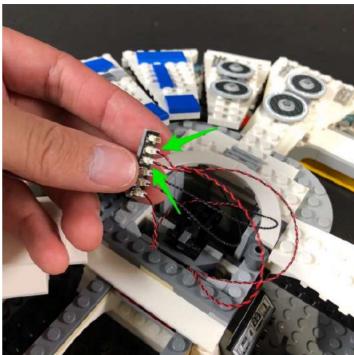




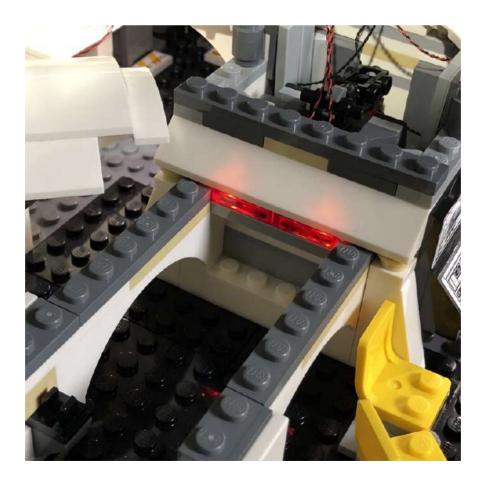


Take the two Flashing Bit Lights and connect them to the 6-port Expansion Board  $\,$ 



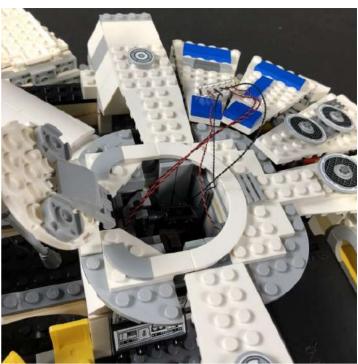


Turn the Battery Pack ON to verify everything you have installed so far is working OK



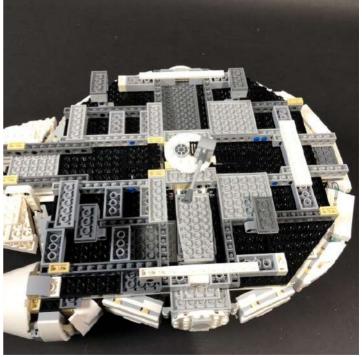
Reconnect the top cannon section.



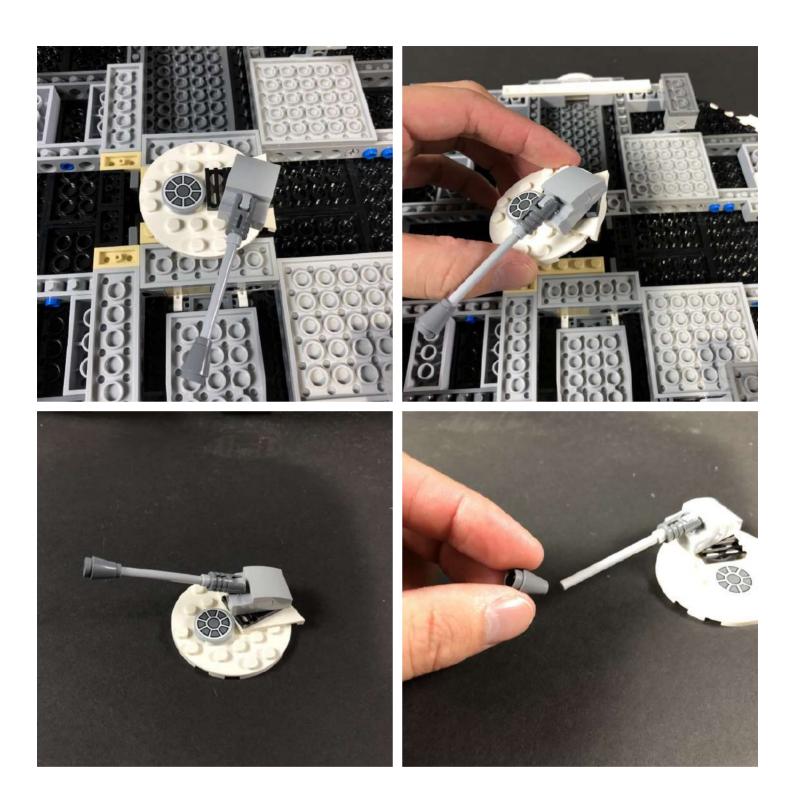


24.) Carefully turn the entire Kessel Run over to access underneath. Place your hands over the top of the back section to ensure the AA Battery Pack doesn't fall out.

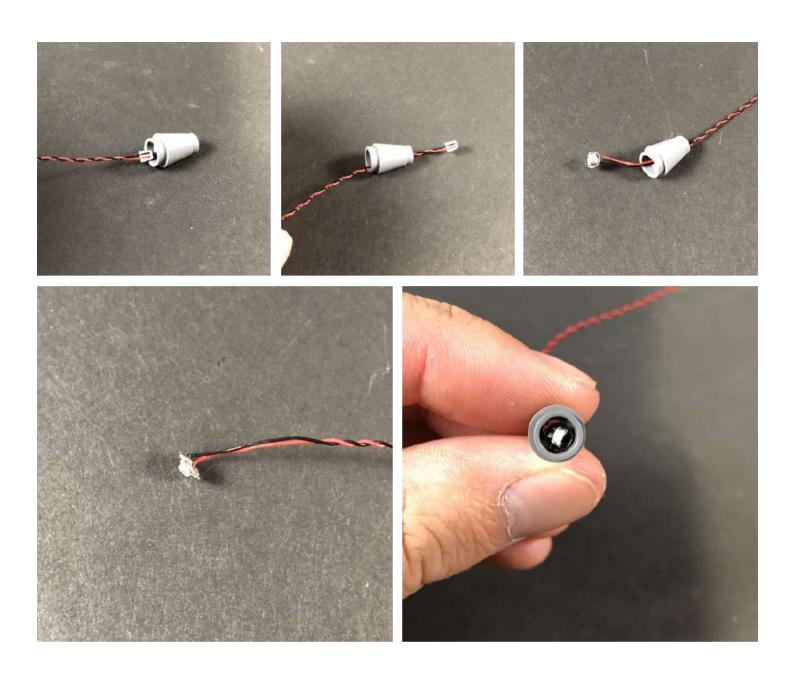




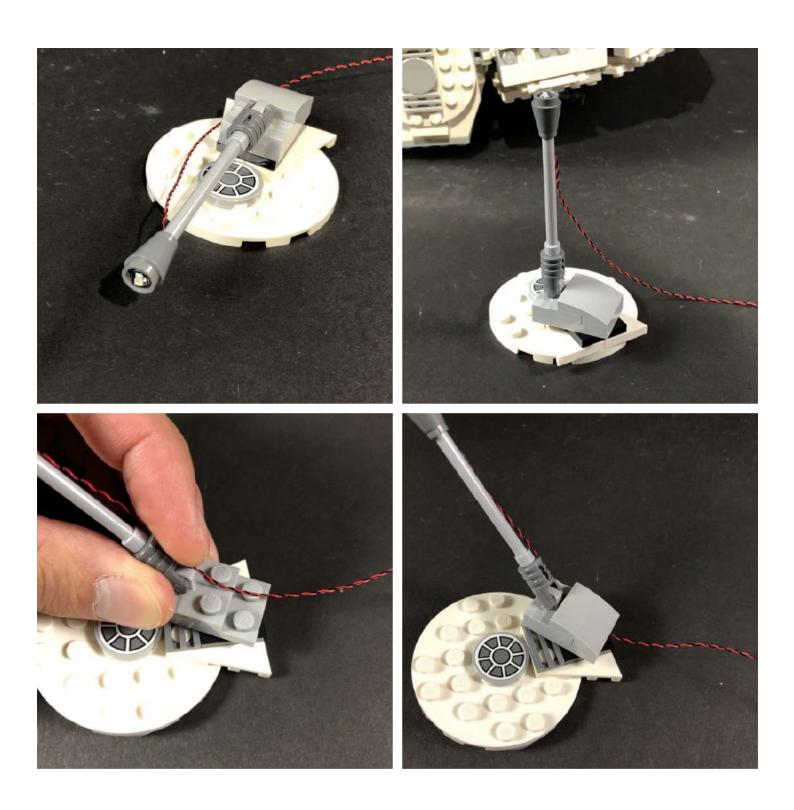
Disconnect the lower cannon section as and then disconnect the dark grey cone piece from the front of the canon as per below:



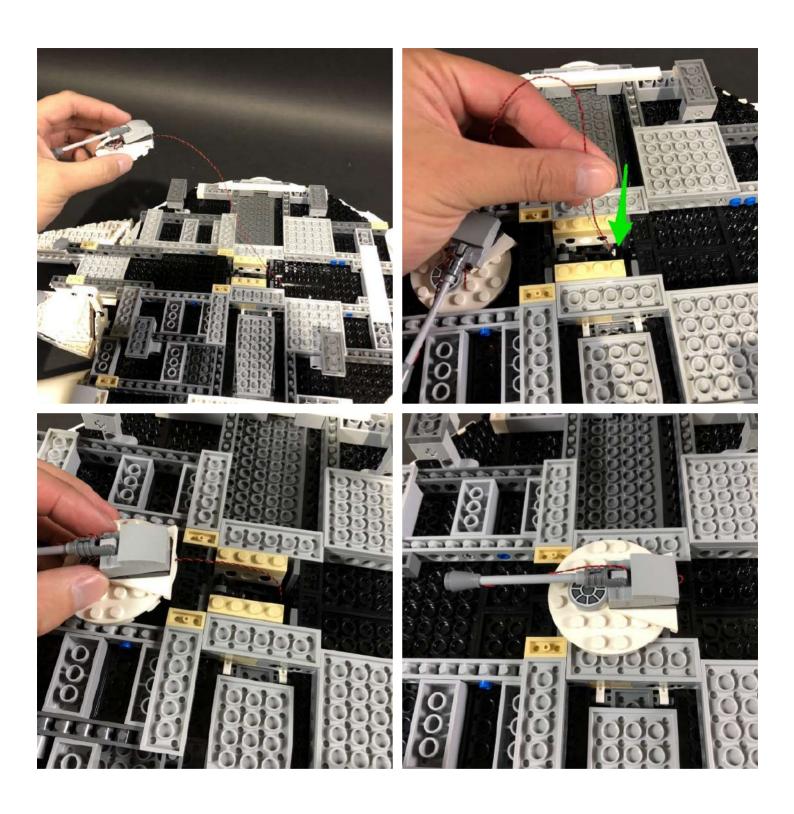
25.) Take a **Red 30cm Bit Light** and thread the connector end of the cable through the base of the cone. Thread the cable all the way through and then slightly bend the LED component on a 90 degree angle so that it sits flat against the edge of the cone piece.



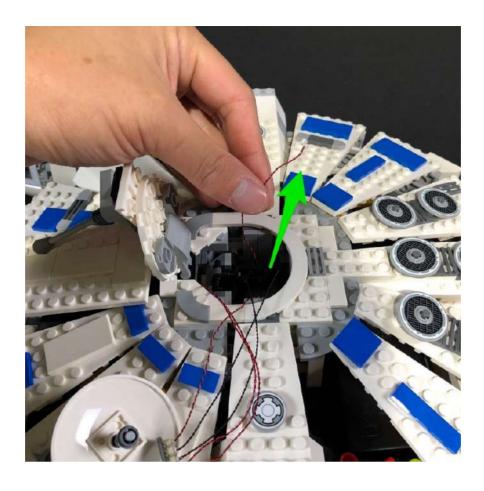
Reconnect the cone piece to the cannon bar and then pull the cable down and secure underneath the following dark grey 2x2 tile. Ensure the cable is laid in between studs



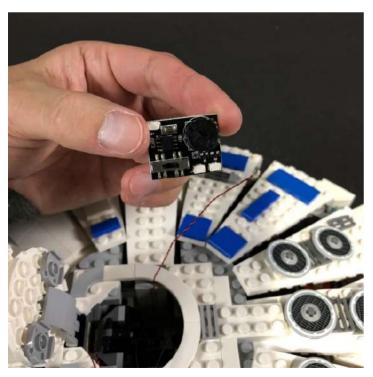
26.) Thread the cable down (up through to the top side) through the centre of the Kessel Run before securely reconnecting the lower cannon section.

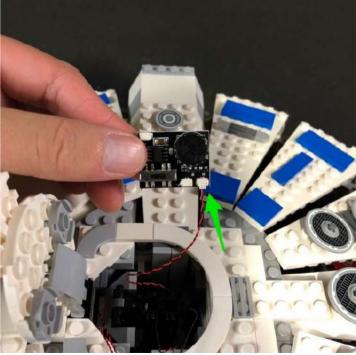


Carefully turn the entire Kessel Run over and pull the Bit Light cable from the lower canon up from the centre.

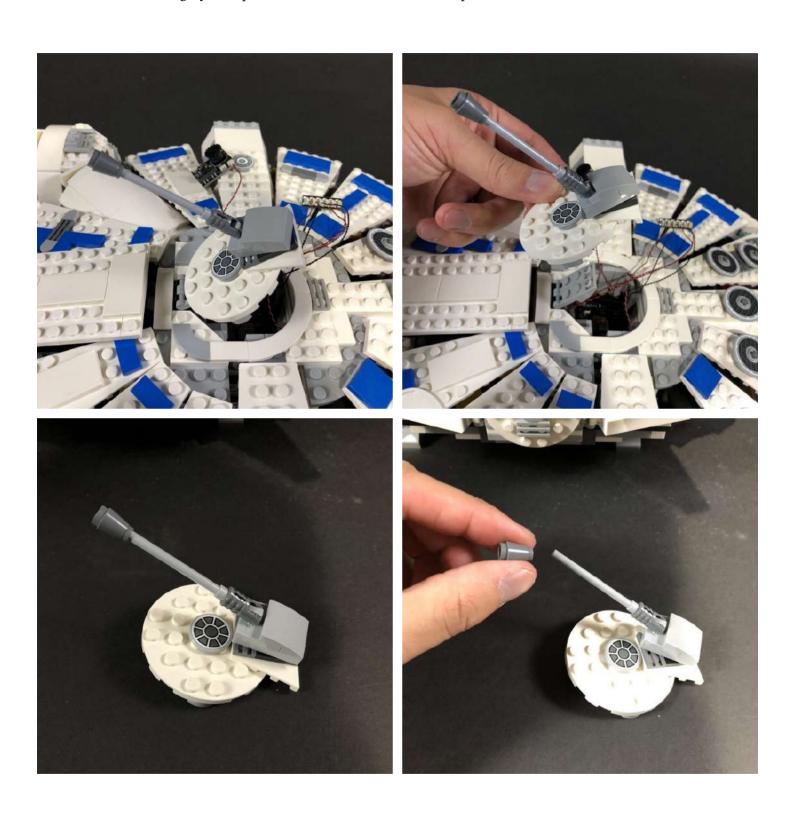


27.) Take the **Multi Effects Board** and connect the other end of the Red 30cm Bit Light to one of the output ports (side with two ports). Set this effects board aside for now and proceed to next step.

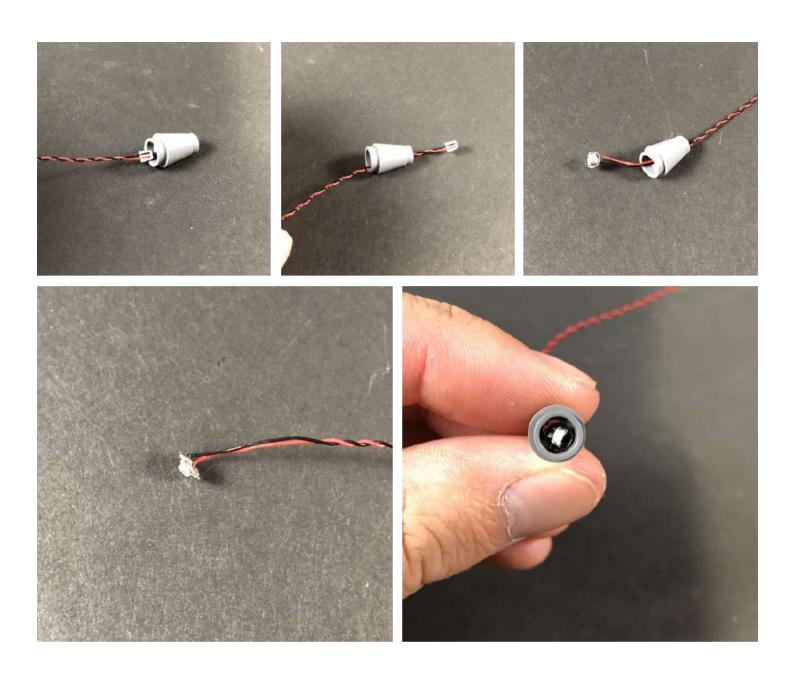




28.) Disconnect the upper canon section and then disconnect the dark grey cone piece from the front of the canon as per below:

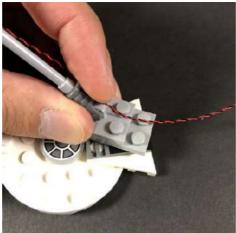


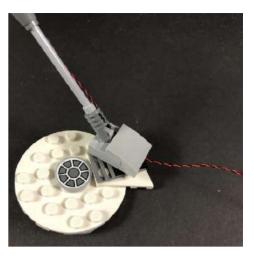
29.) Take the remaining **Red 30cm Bit Light** and thread the connector end of the cable through the base of the cone. Thread the cable all the way through and then slightly bend the LED component on a 90 degree angle so that it sits flat against the edge of the cone piece.



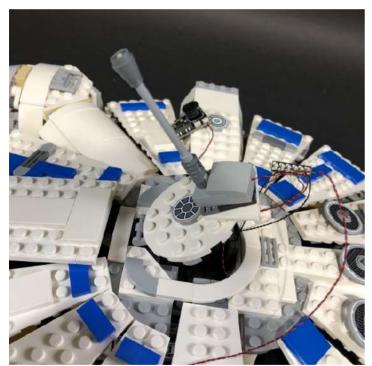
Reconnect the cone piece to the cannon bar and then pull the cable down and secure underneath the following dark grey 2x2 tile. Ensure the cable is laid in between studs

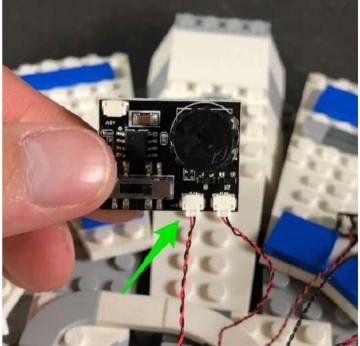




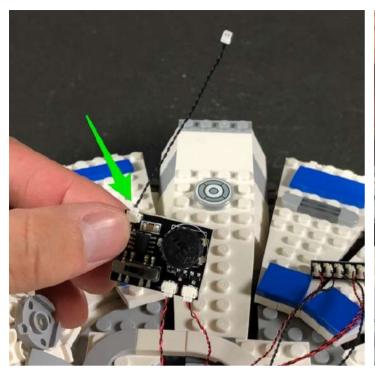


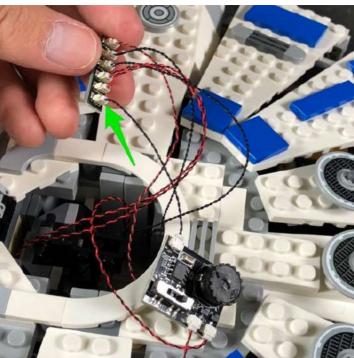
30.) Reconnect the upper canon section to the top of the kessell run and then connect the other end of the Red 30cm Bit Light to the other output port on the multi effects board.



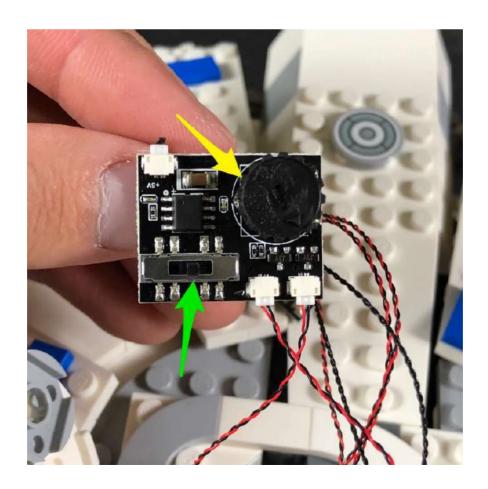


31.) Take a **5cm Connecting Cable** and connect one end to the input port of the Multi Effects Board and then connect the other end to the remaining port on the 6-port expansion board.





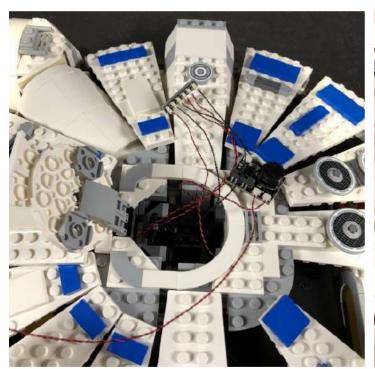
32.) Configure the effects board but turning the switch to the middle channel for "emergency" effect and then turn the speed wheel all the way to the left for the slowest effect. This setting will set the "firing canon" effect.

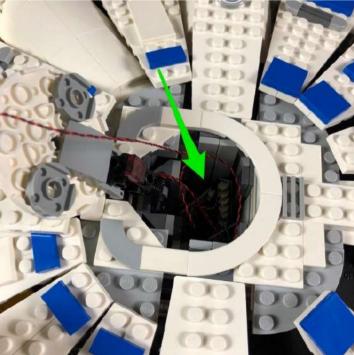


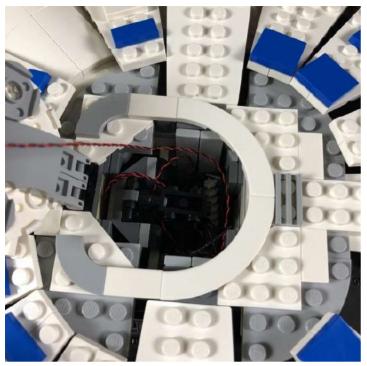
Turn the battery pack ON to verify.



33.) Neatly tuck all the components and cables down through centre hole and then close up the upper cannon door.









Reconnect the escape pod to the front of the ship.





This finally completes installation of the Kessel Run Millennium Falcon Light Kit. Now turn on the light kit using both battery packs and ENJOY!

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