

Light My Bricks: UCS Red-Five X-Wing Lighting Kit



Here is the instructions document for the LEGO UCS Red-Five X-Wing LED lighting kit. Please read and follow the steps carefully to ensure this lighting kit is installed properly.

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



To ensure a trouble-free installation of your light kit, please read and follow each step carefully. These instructions can be downloaded in PDF format [here](#)

Package contents:

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

Note – AA Battery Pack will be replaced with USB Power Cables from mid April 2020

LEGO Pieces:

- 1x Trans Blue Round Plate 1x1
- 4x Trans Red Saber Bar 4L
- 4x Plate 1x2 (black or grey)

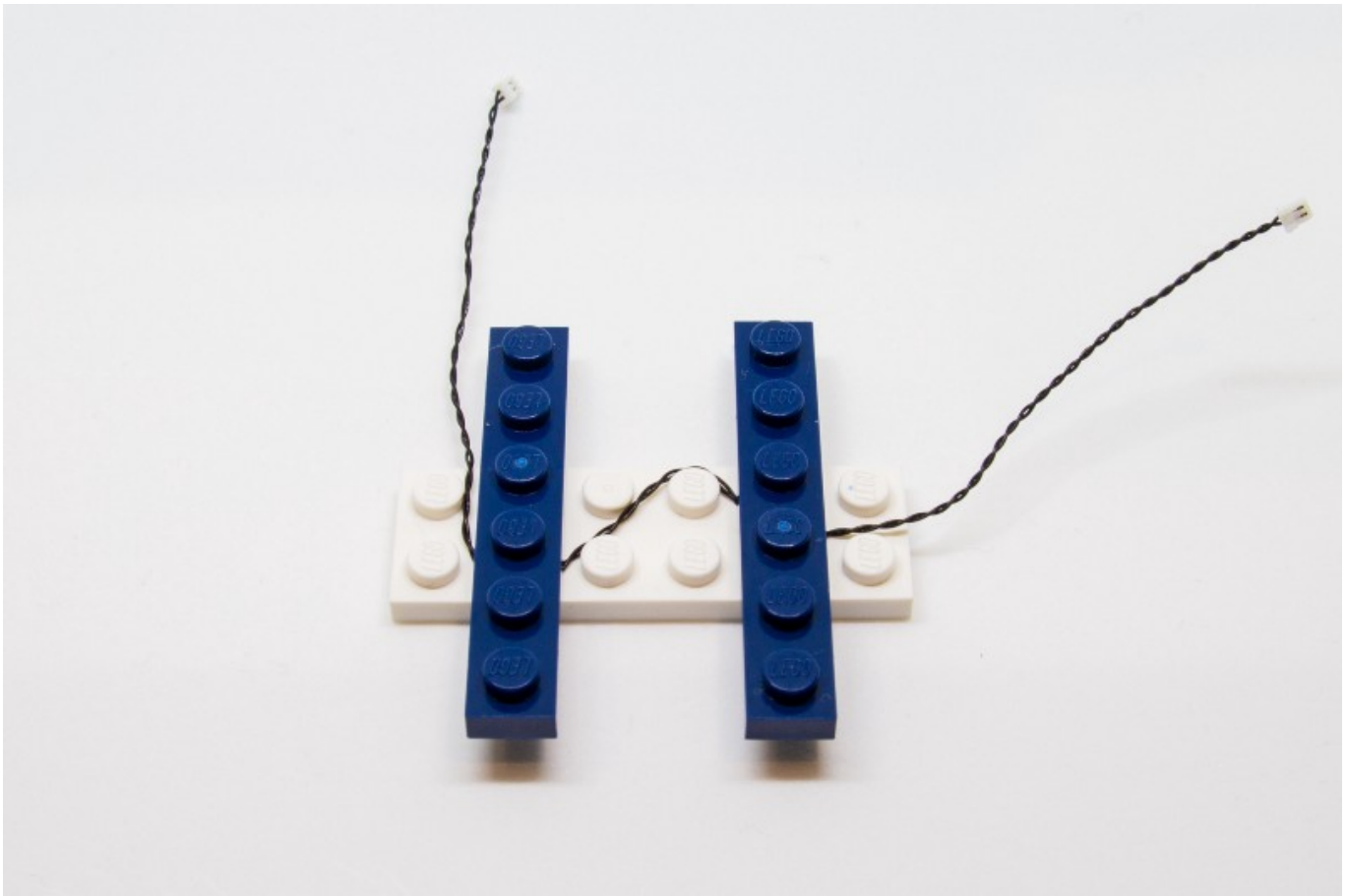
Important things to note:

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.





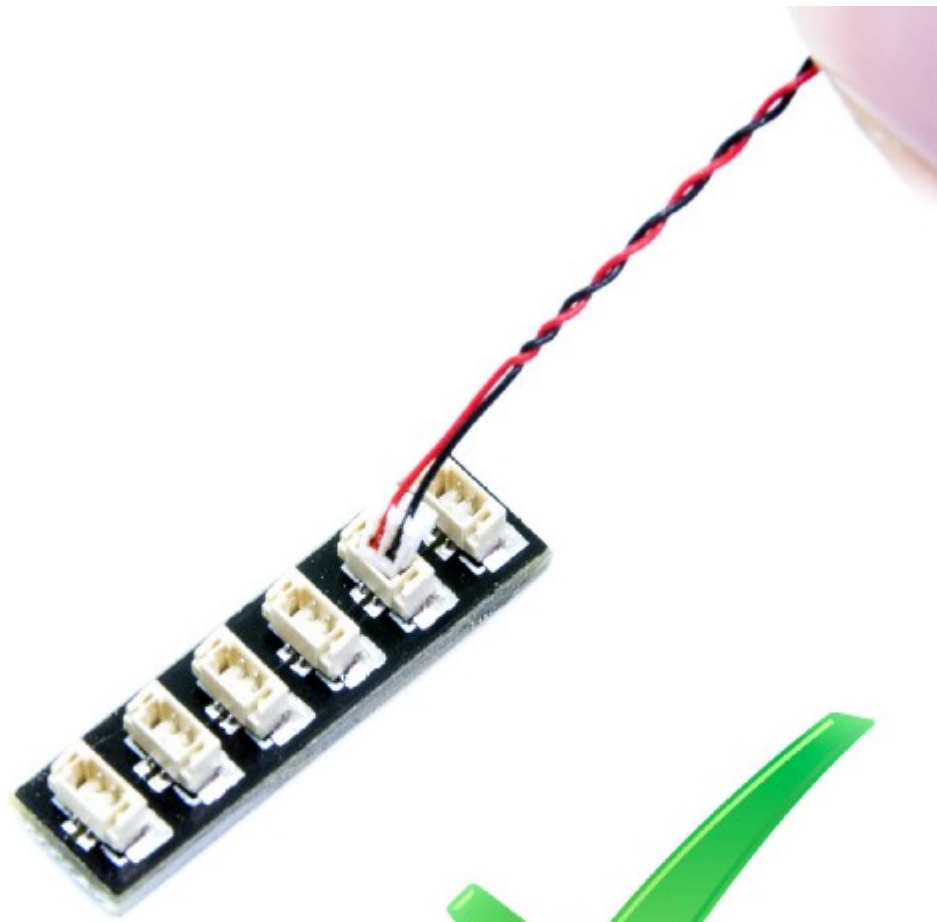
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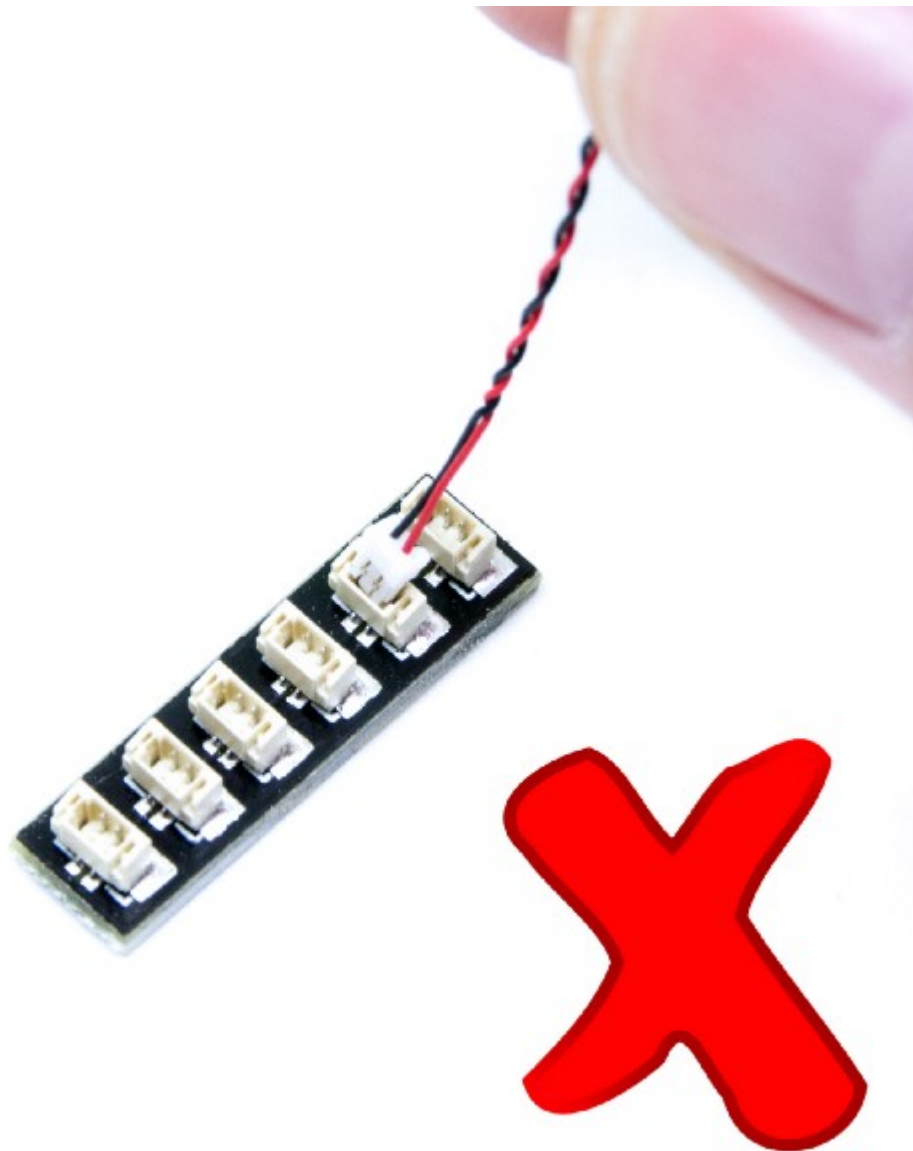
CAUTION: Forcing LEGO® to connect over a cable can result in damaging the cable and light.

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.





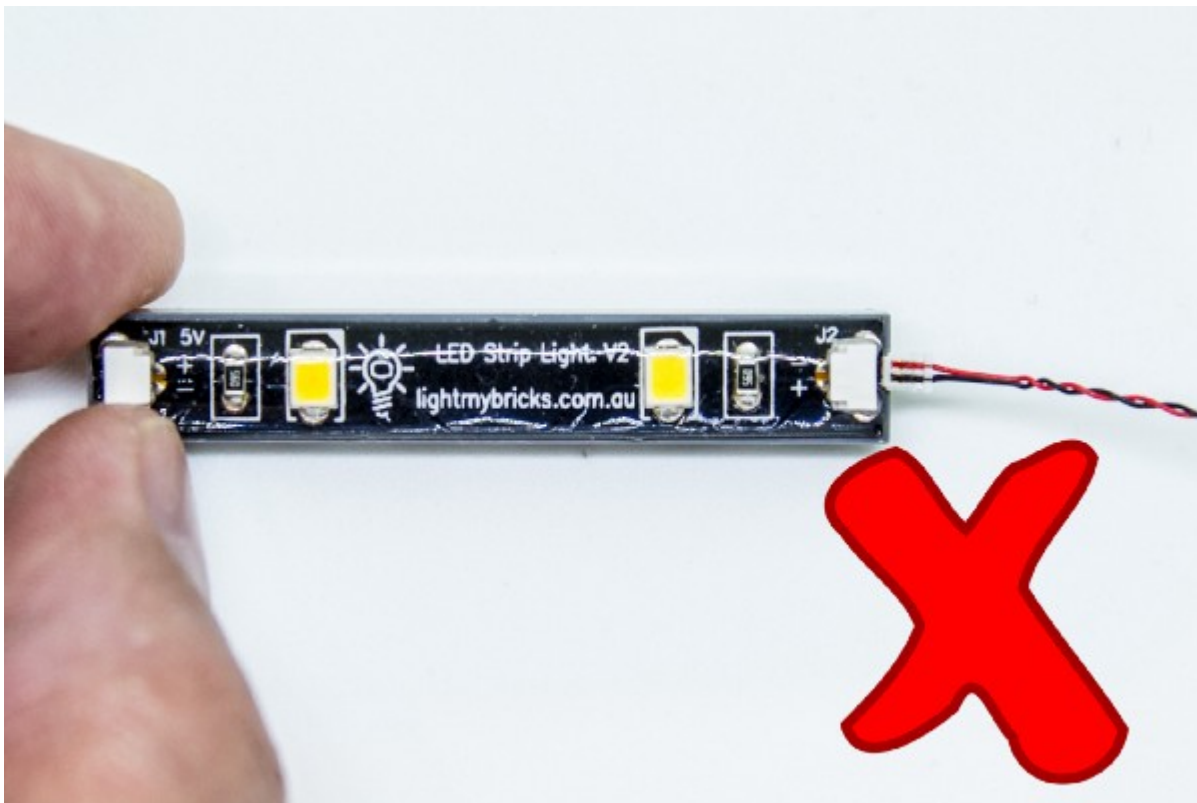


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Incorrectly inserting the connector can result in bent pins inside the port or possible overheating of the expansion board when connected.

Connecting cable connectors to Strip Lights

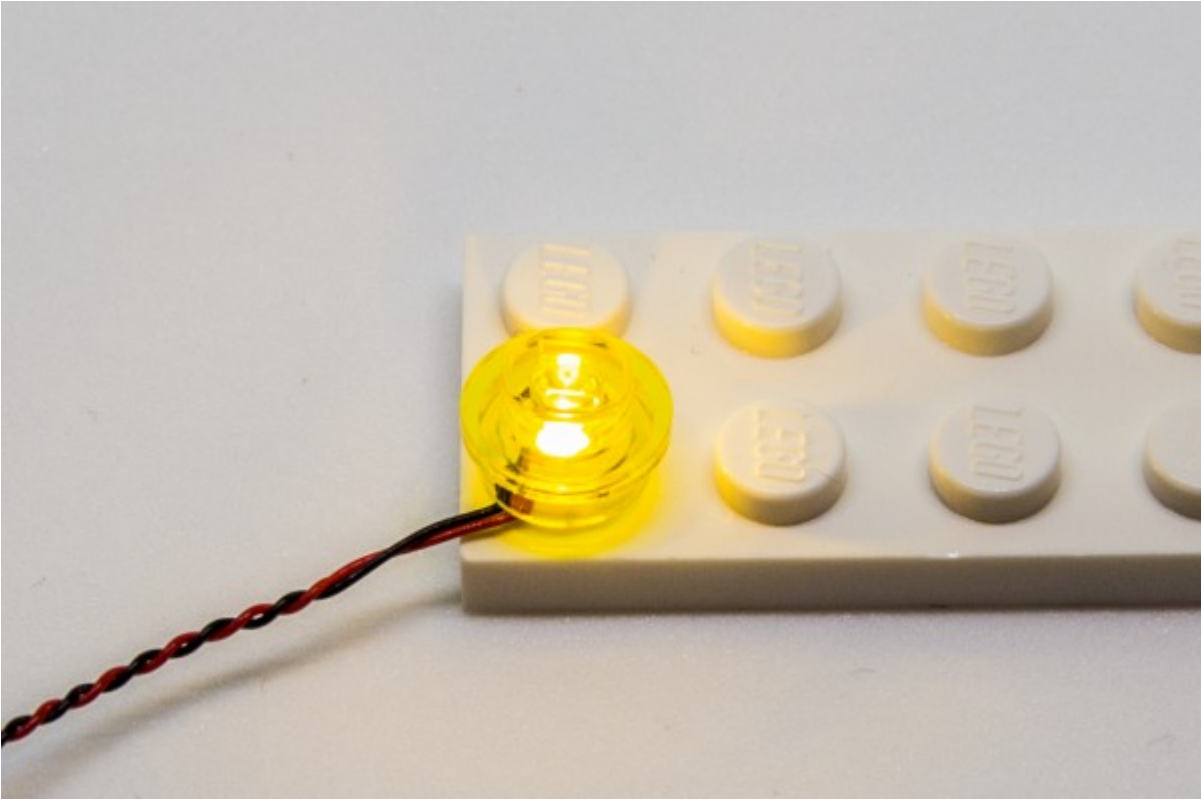
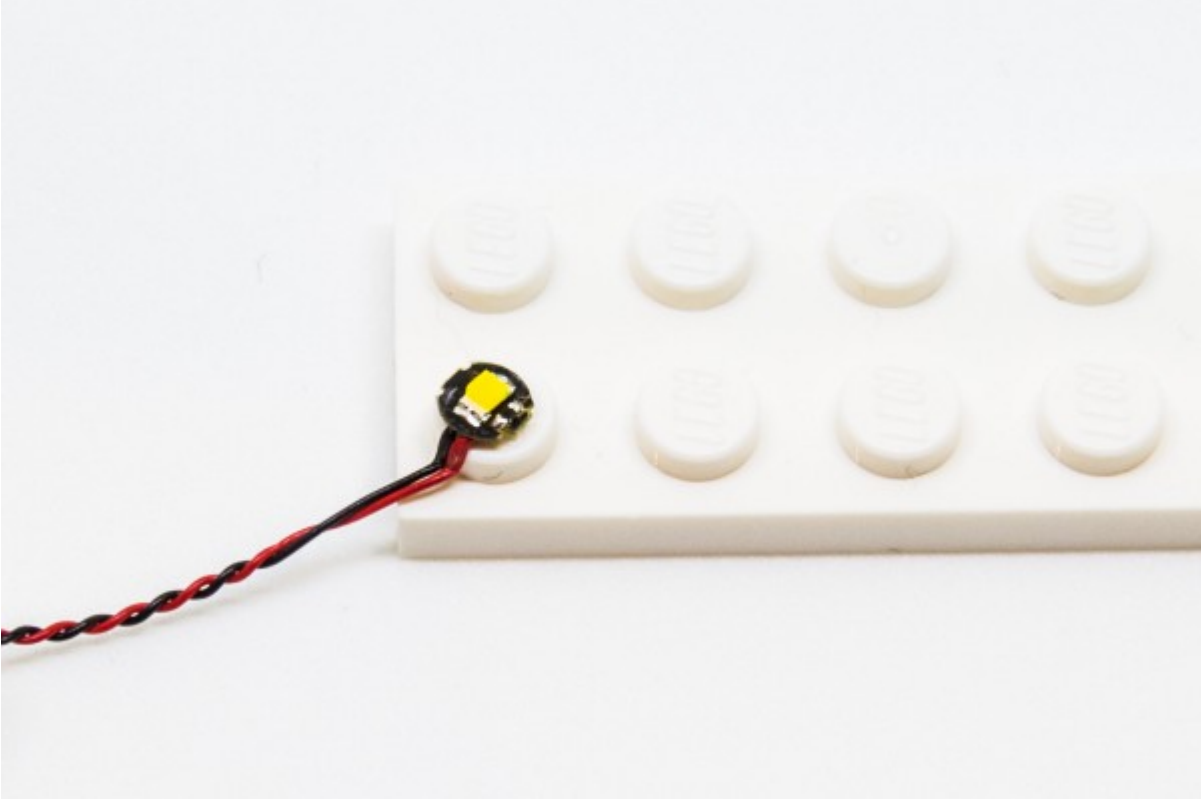
Take extra care when inserting connectors to ports on the Strip Lights. Connectors can be inserted only one way. With the Strip Light facing up, ensure the side of the connector with the wires exposed is facing down. If a plug won't fit easily into a port connector, don't force it. Doing so will damage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

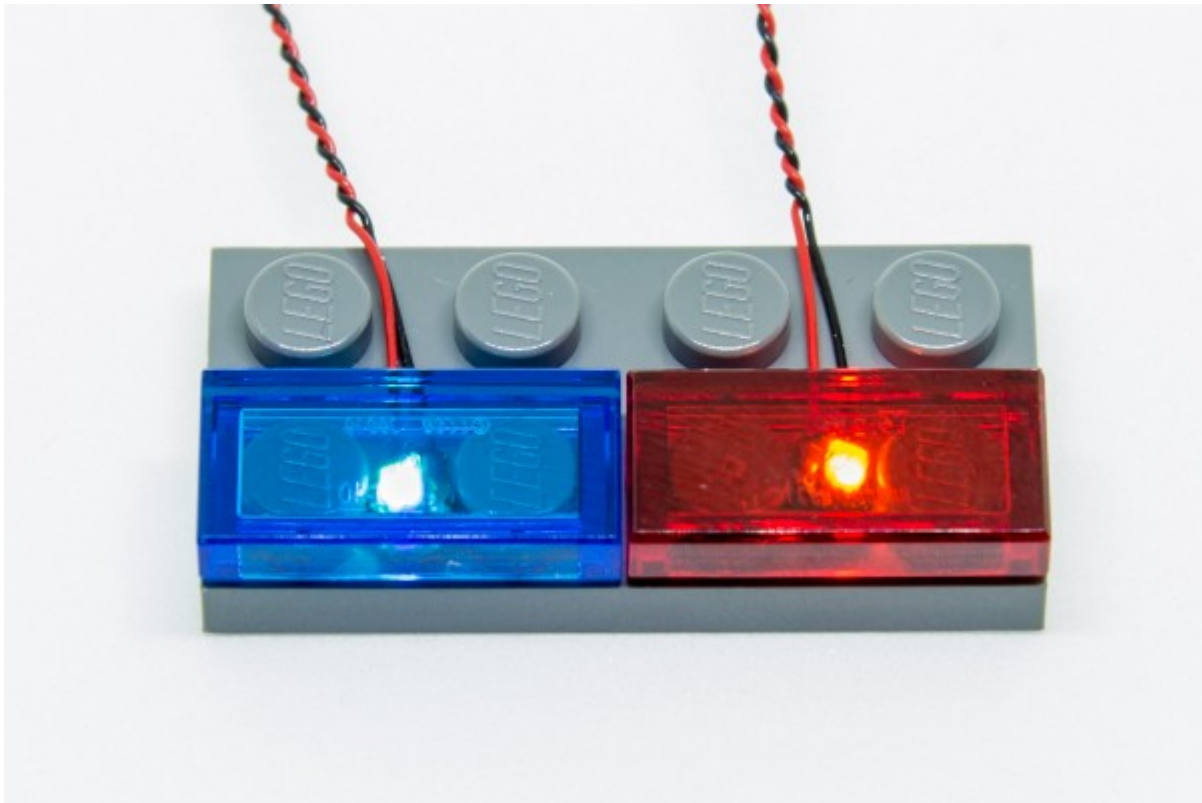
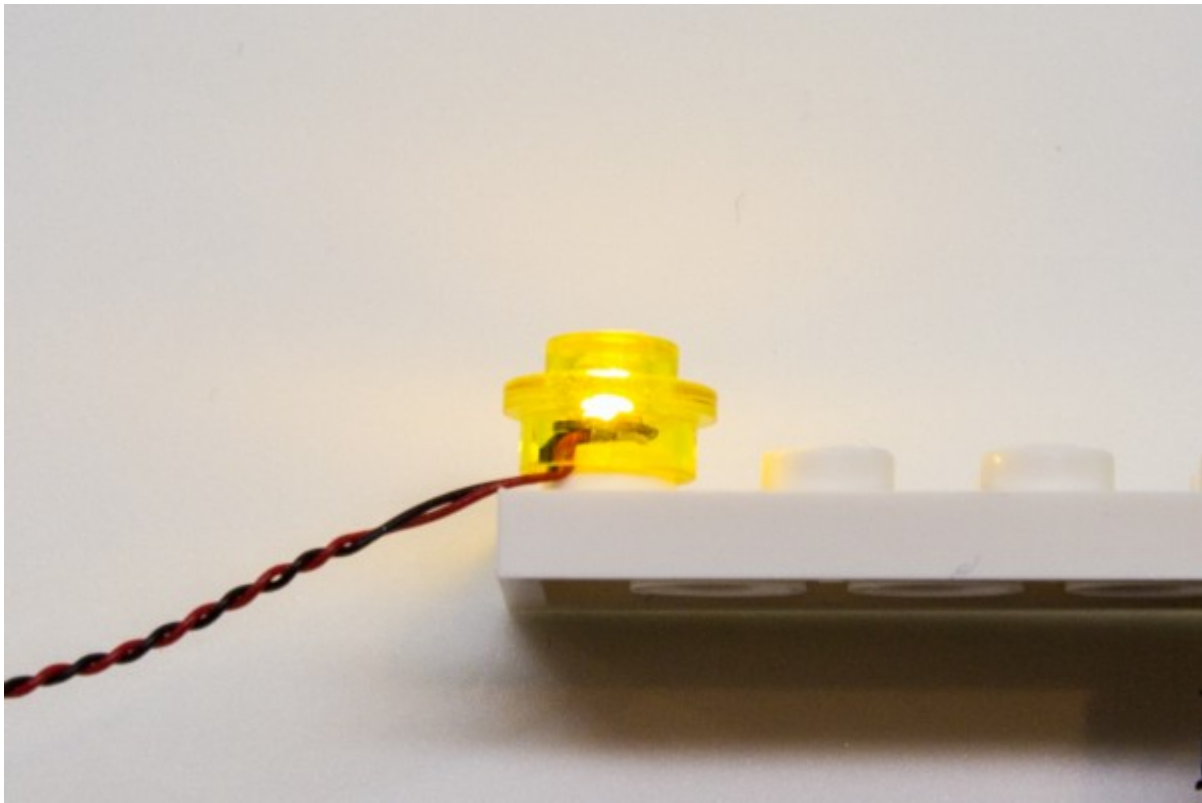


Installing Bit Lights under LEGO® bricks and plates.



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.





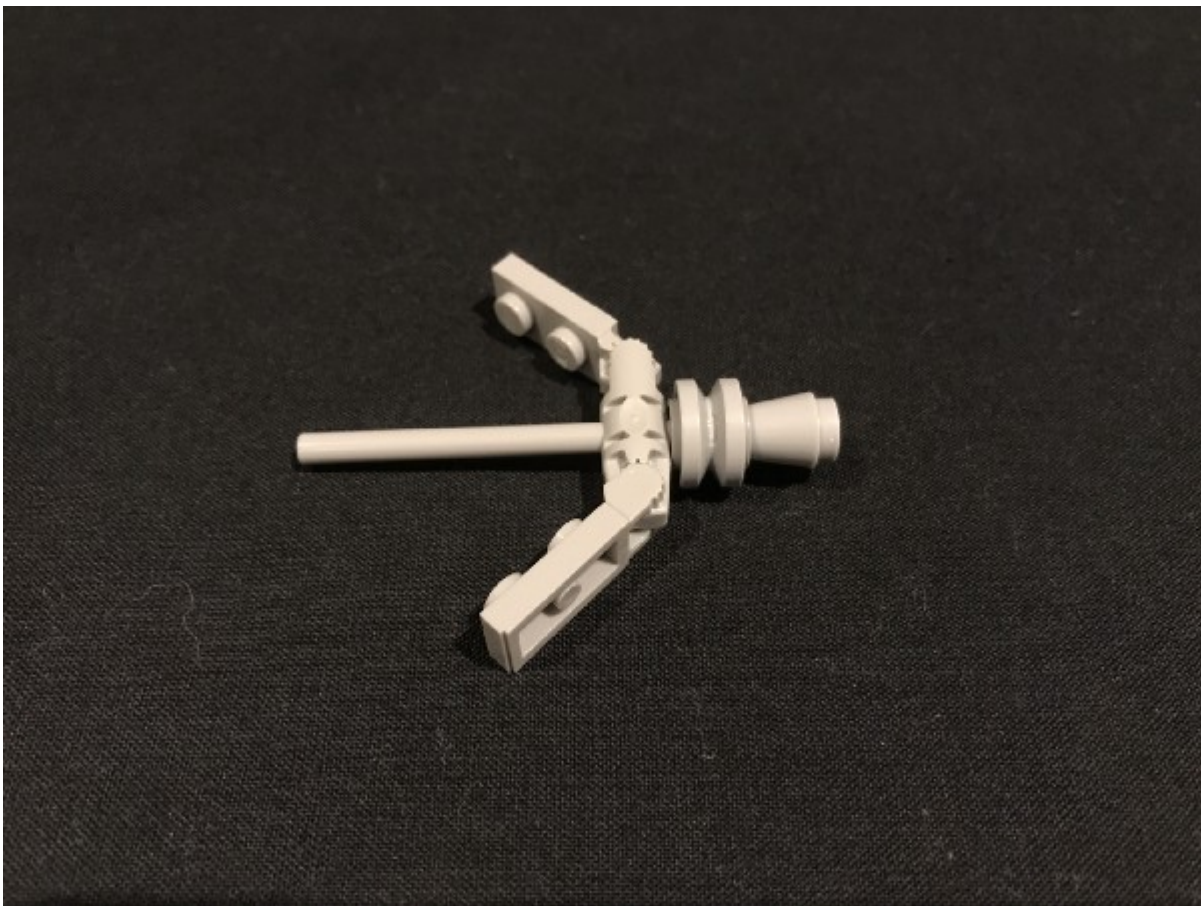
OK, Let's Begin!



Instructions for installing this kit

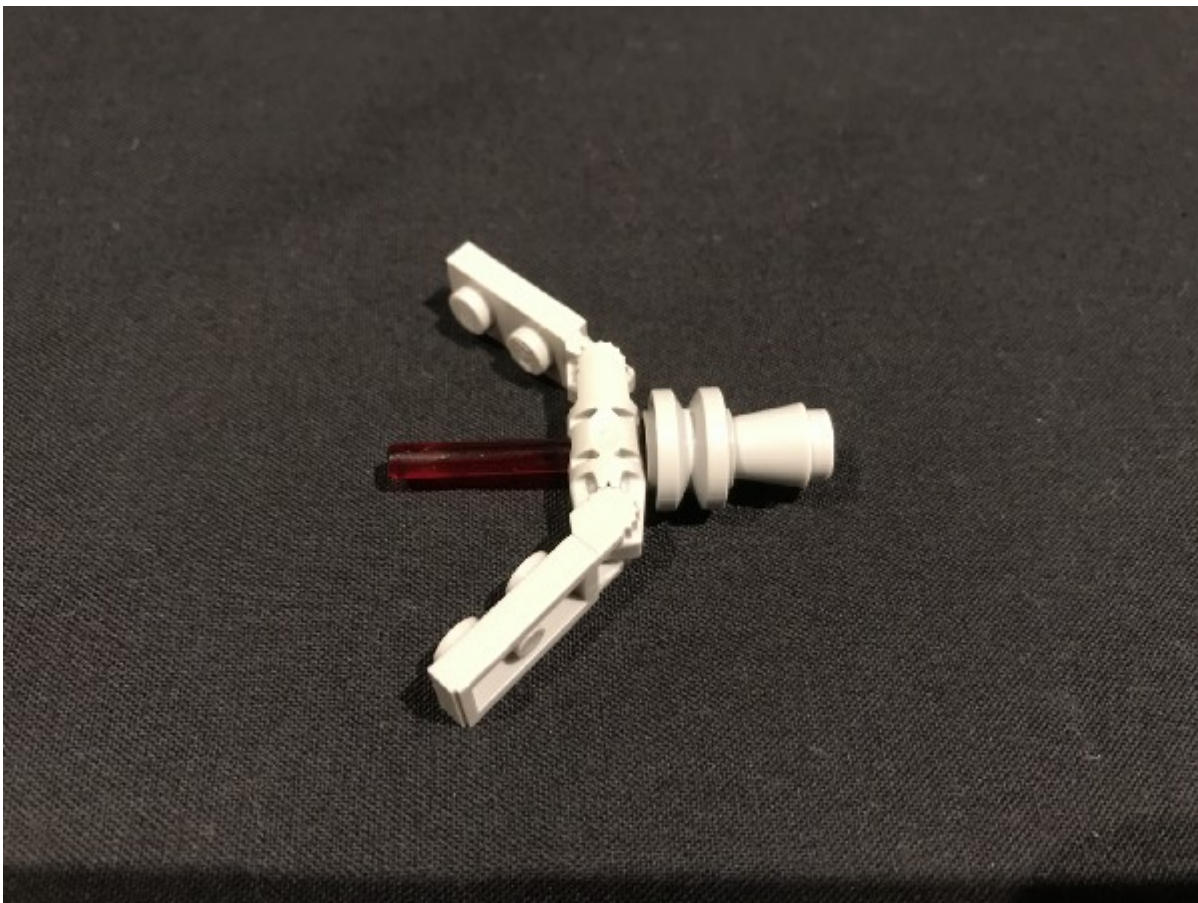
1.) We will first install lights to the upper cannons. Start with one of the upper cannons and disconnect the top section and then disassemble pieces as per below



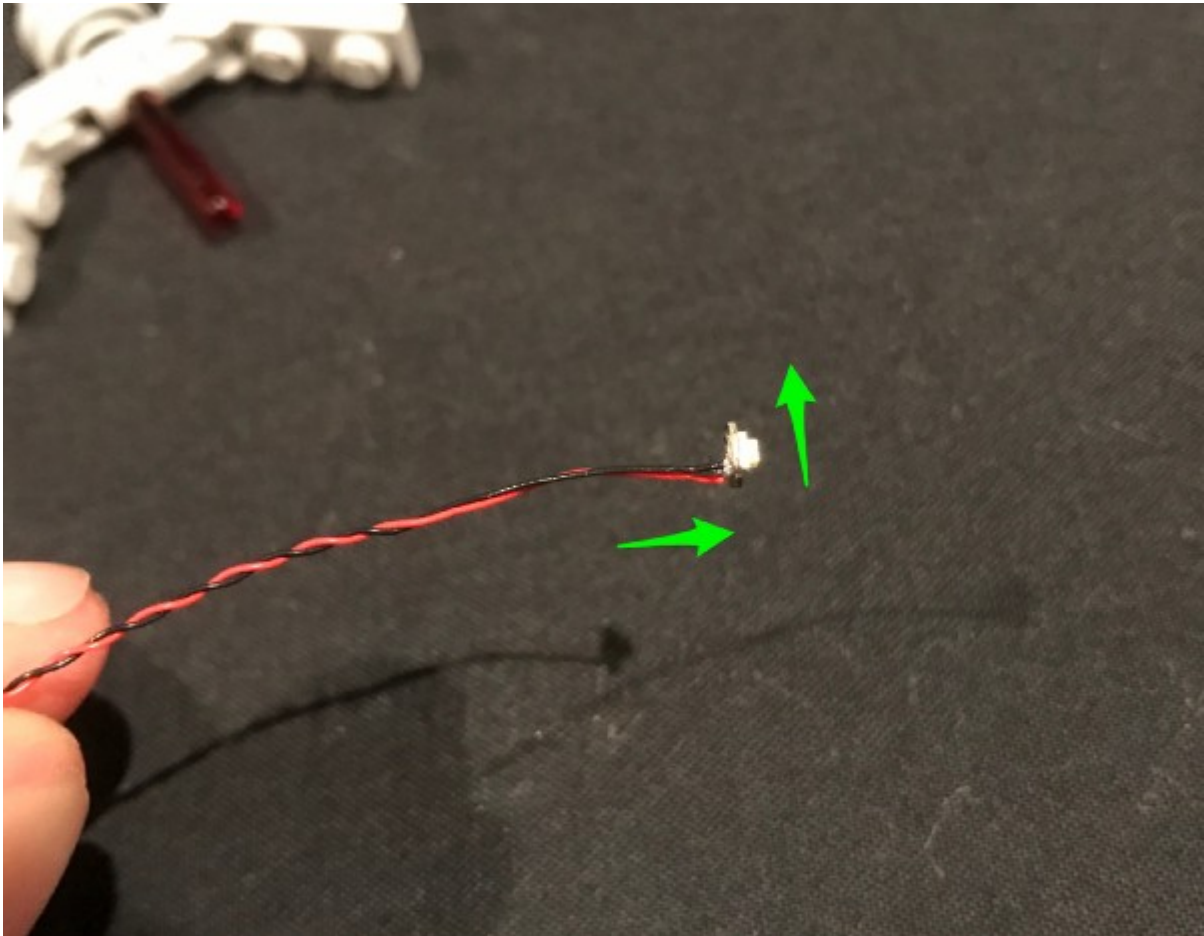
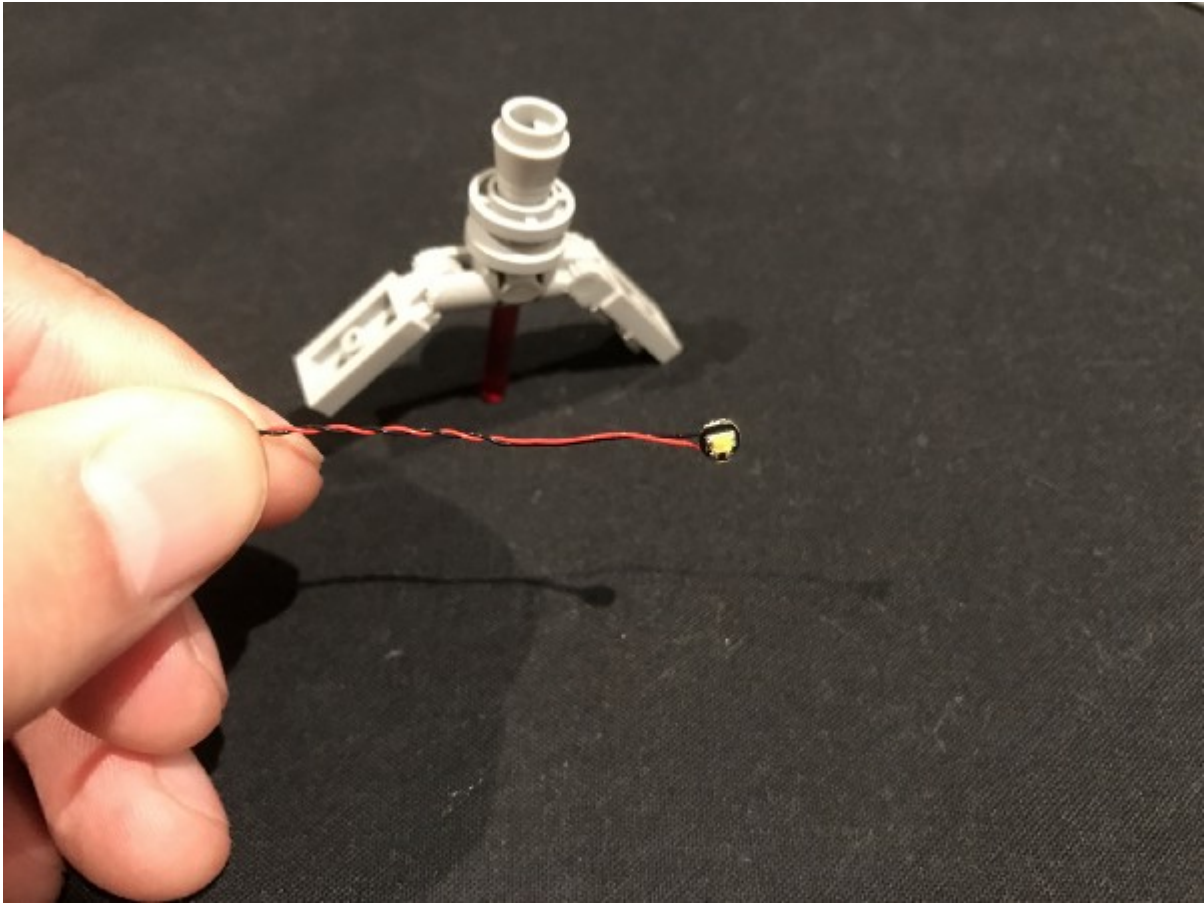


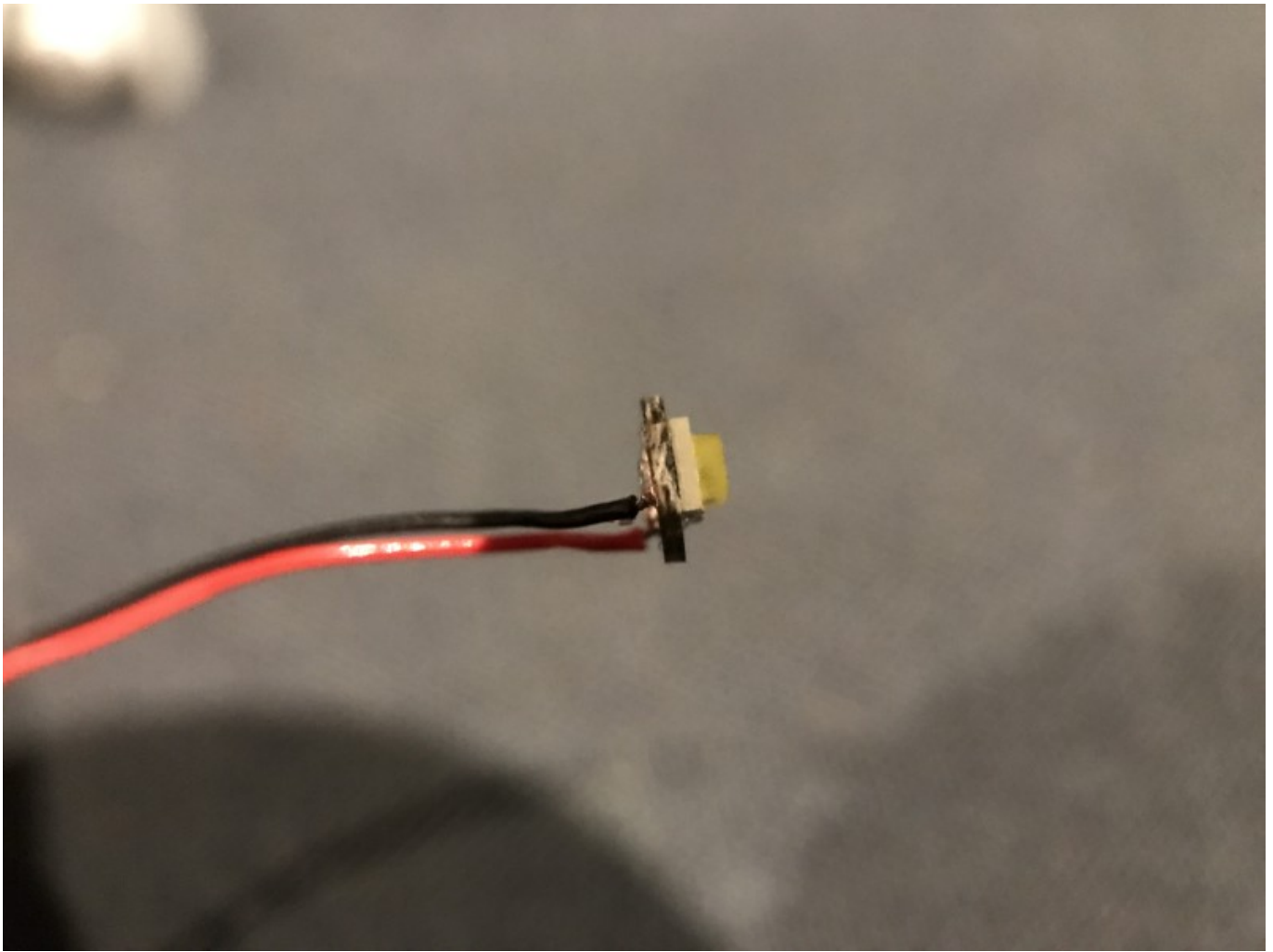


2.) Take one of the provided **LEGO trans red saber bars** and replace the light grey bar from this set.



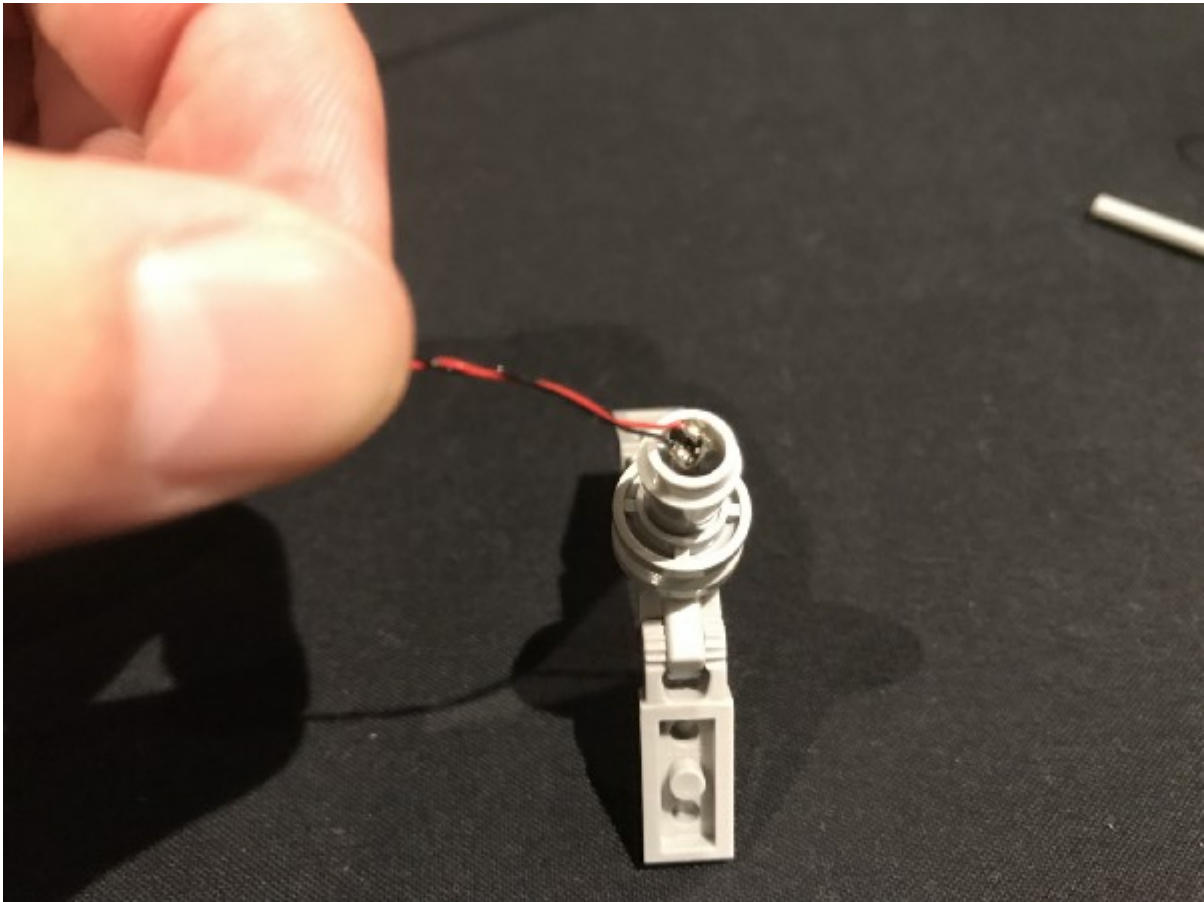
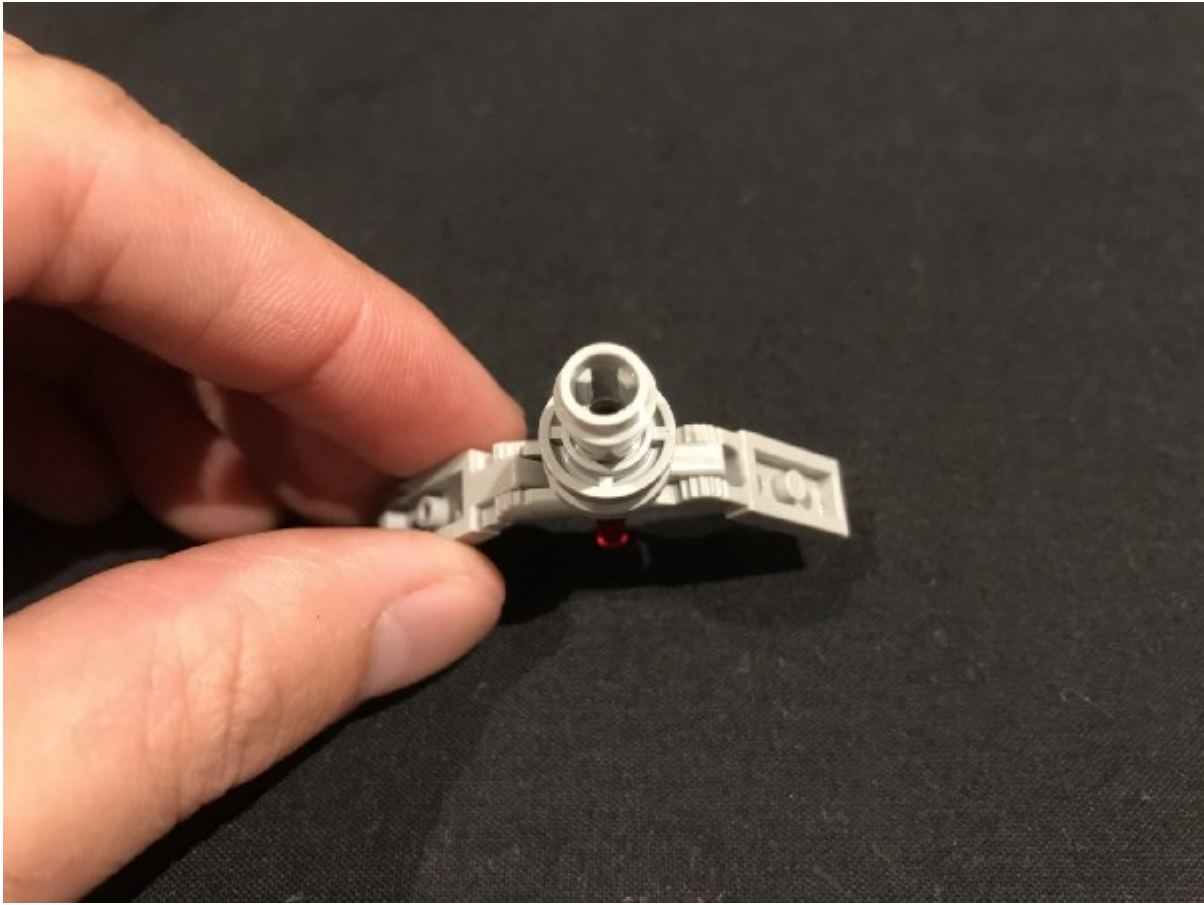
Take a **White 30cm Flashing Bit Light** and then bend the tip of it up in a 90 degree angle as shown below ▲





Place the Bit Light (face down) into the inside of the bottom of the cannon section. Place it as far down inside as you can

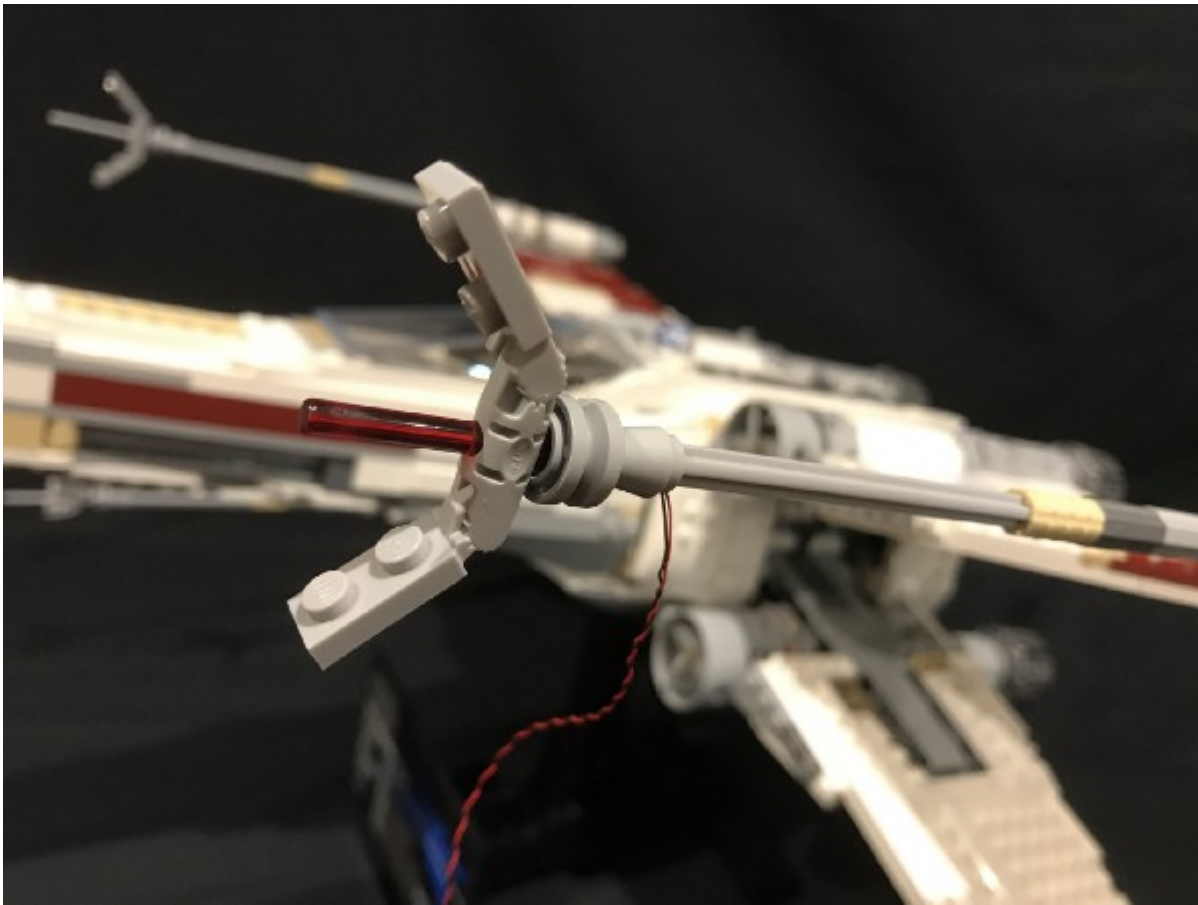






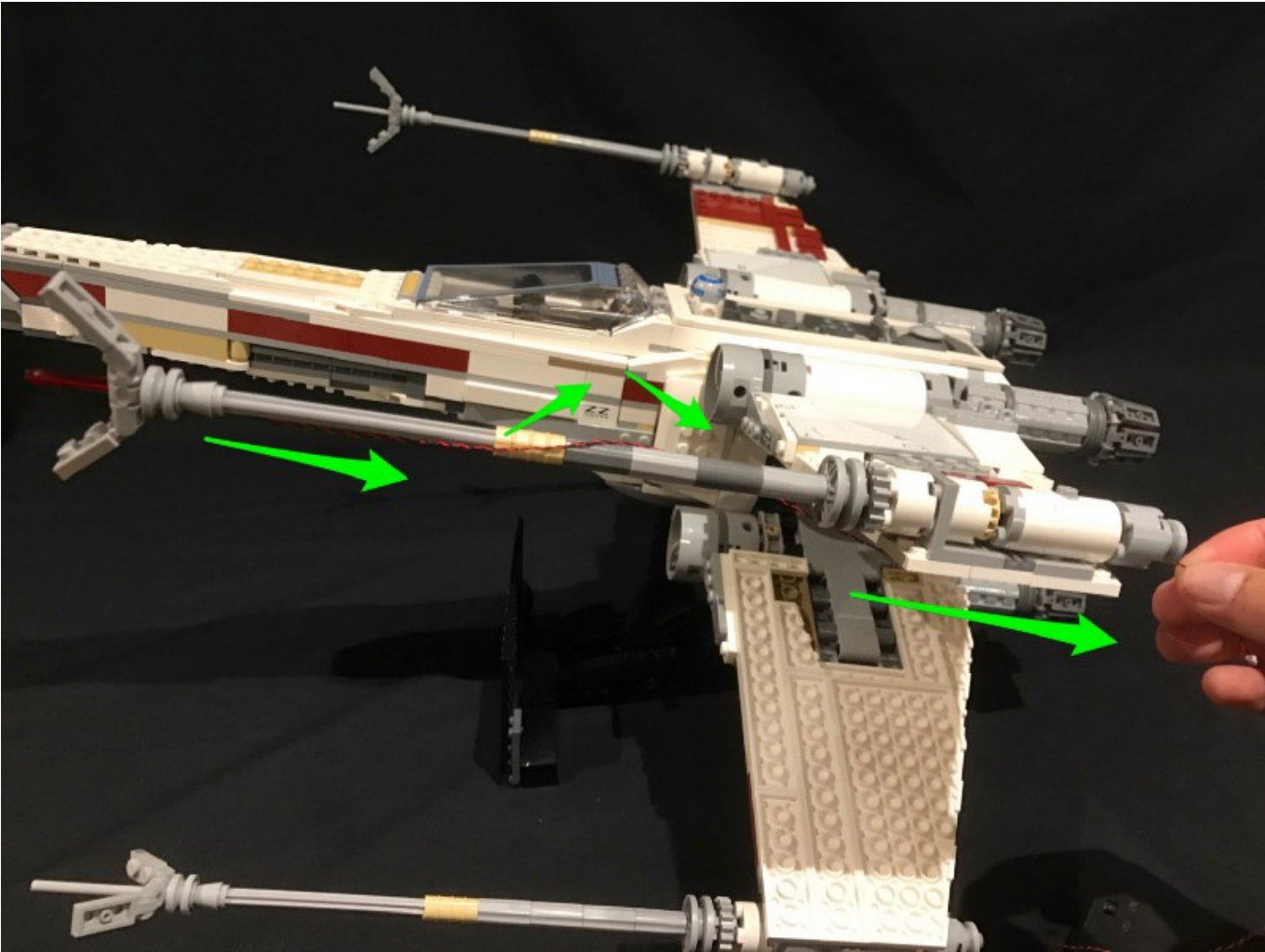
Carefully reconnect this section back to the cannon pole.

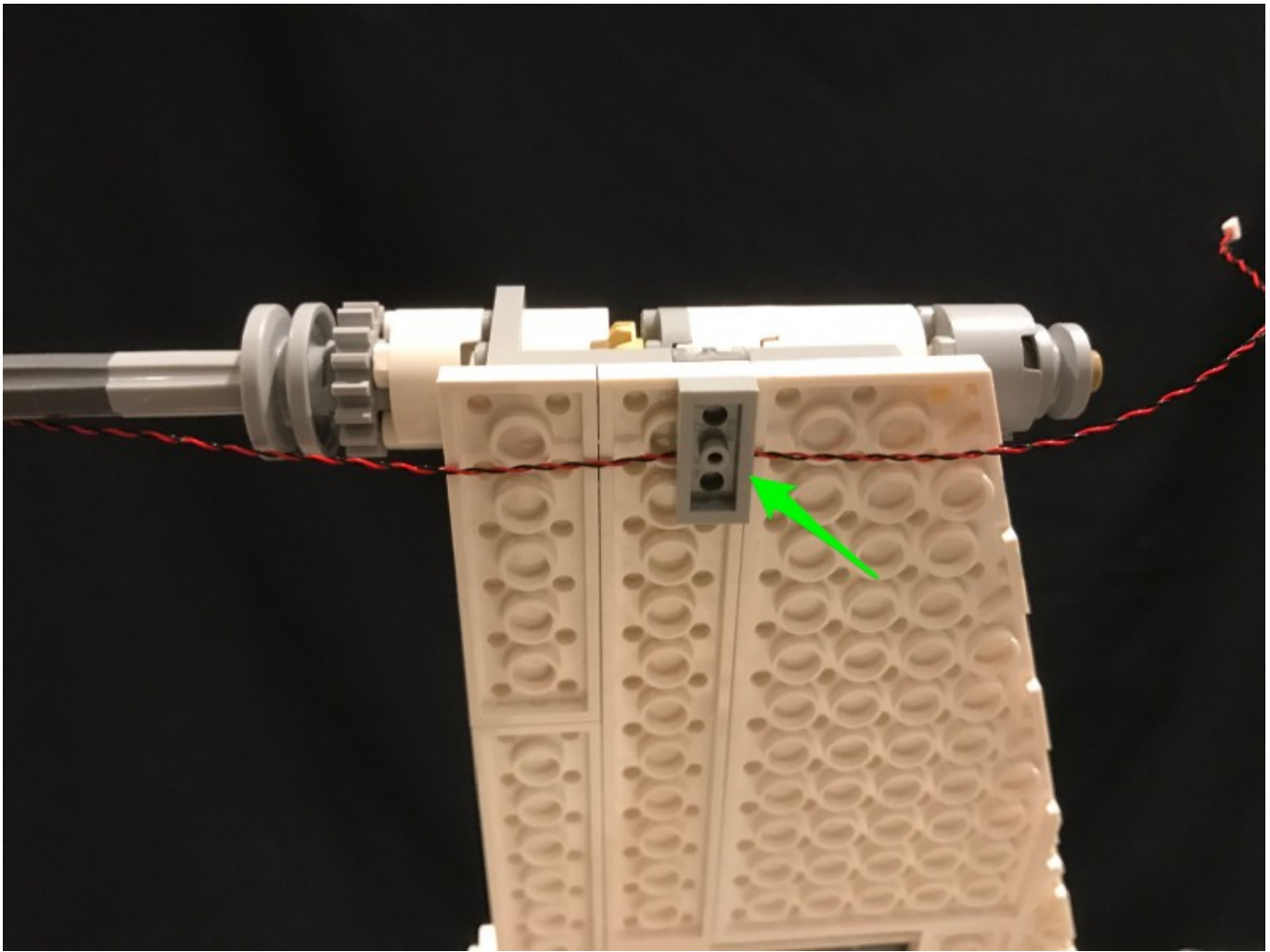




3.) Pull the Bit Light cable toward the back and then loop it around toward the inside of the pole. Secure the cable in place by using one of the provided **LEGO 1x2 Plates**

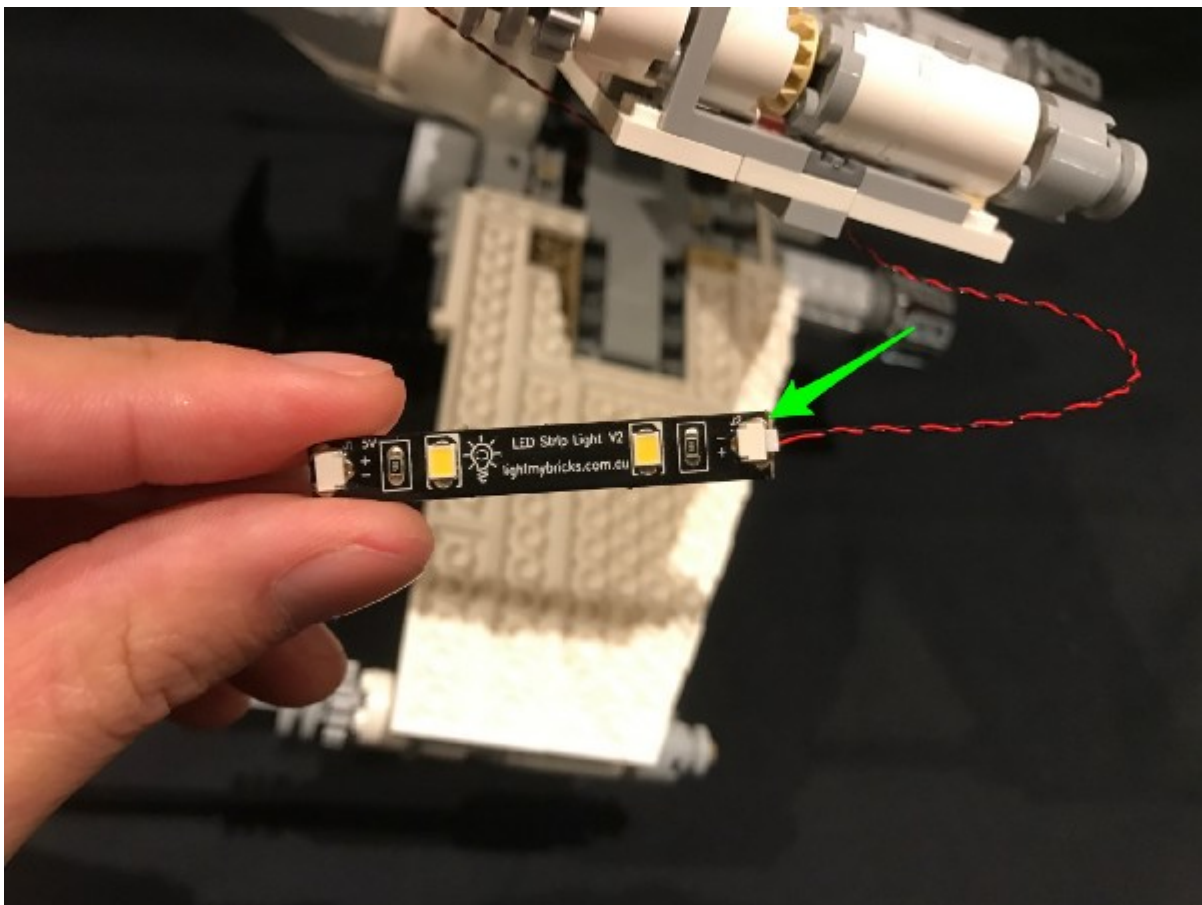
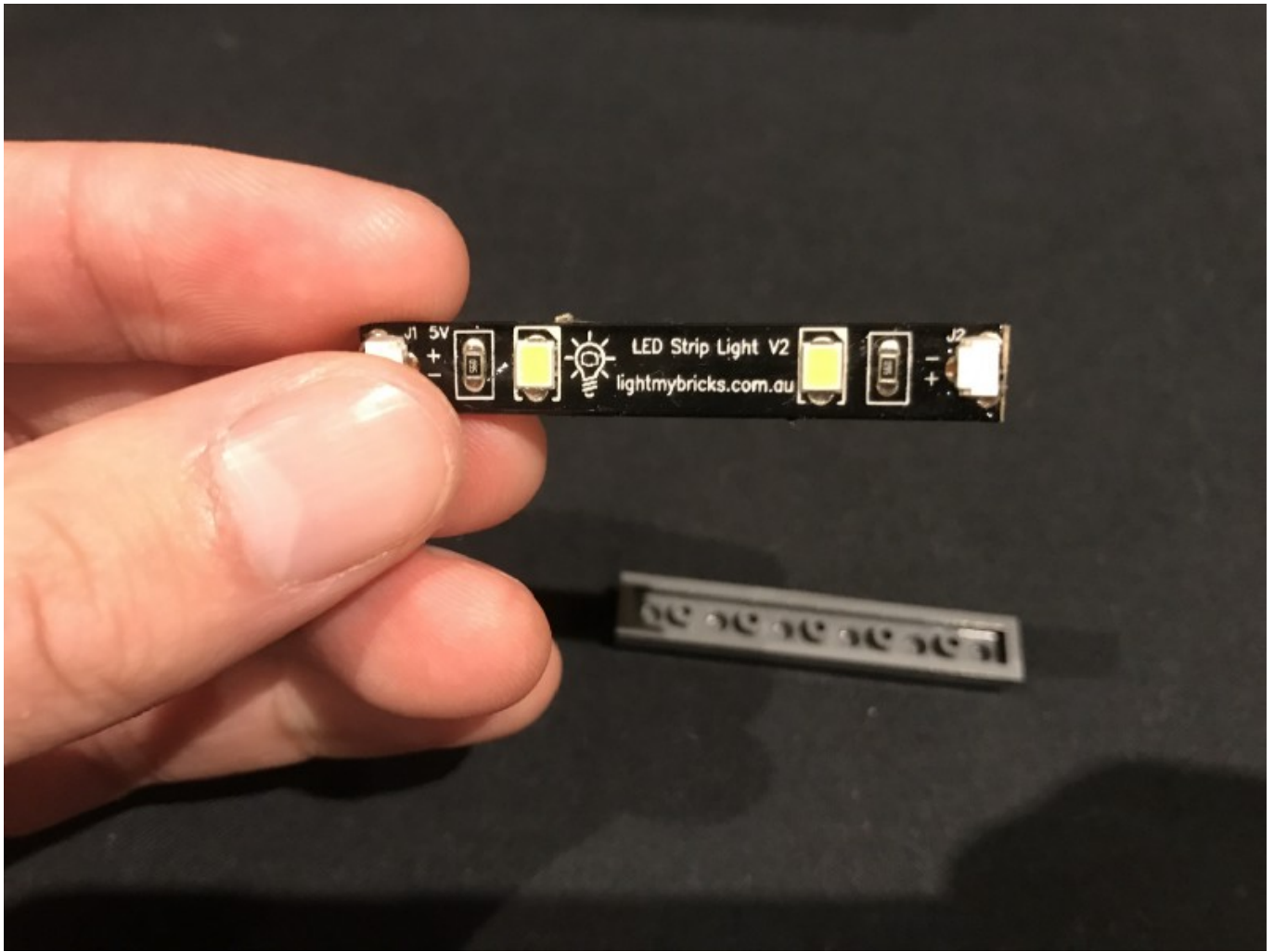
to mount up underneath the wing as per below.

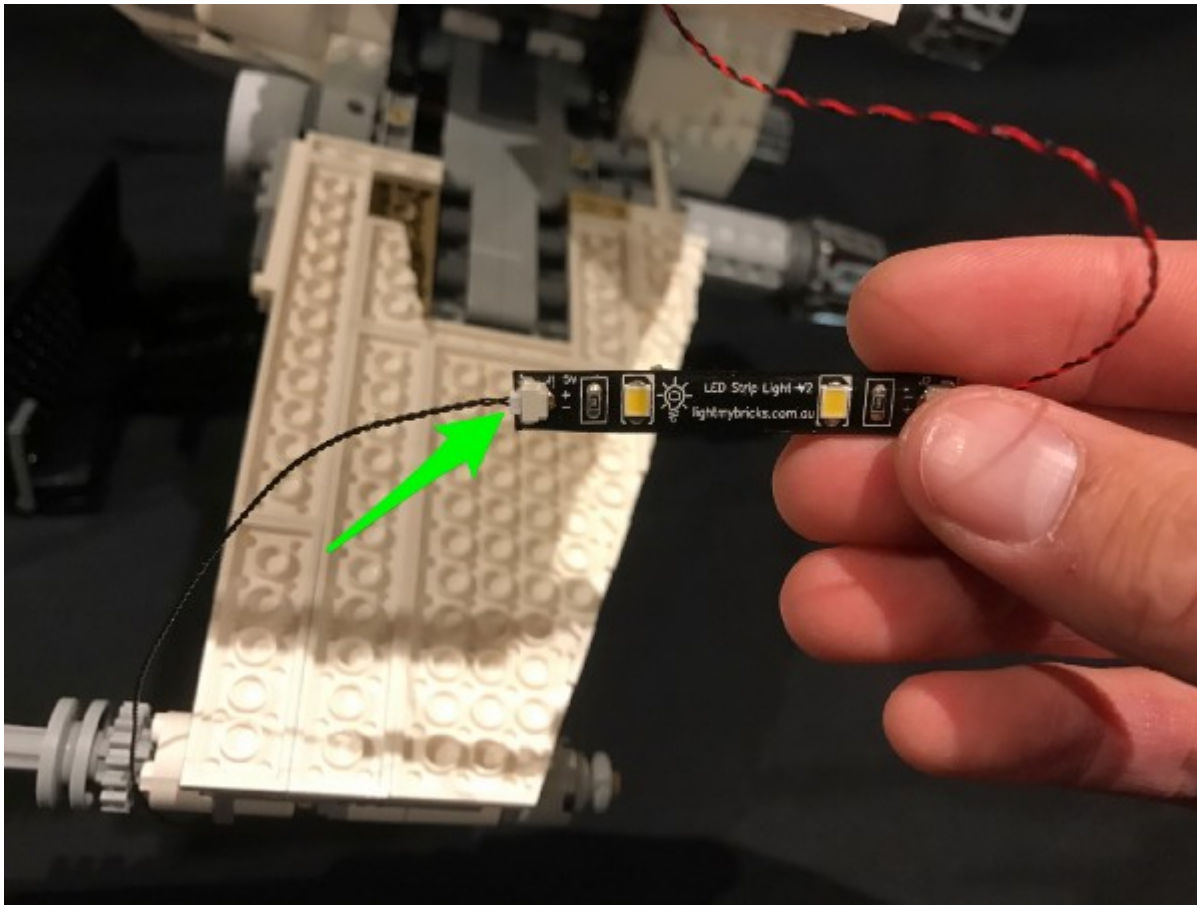




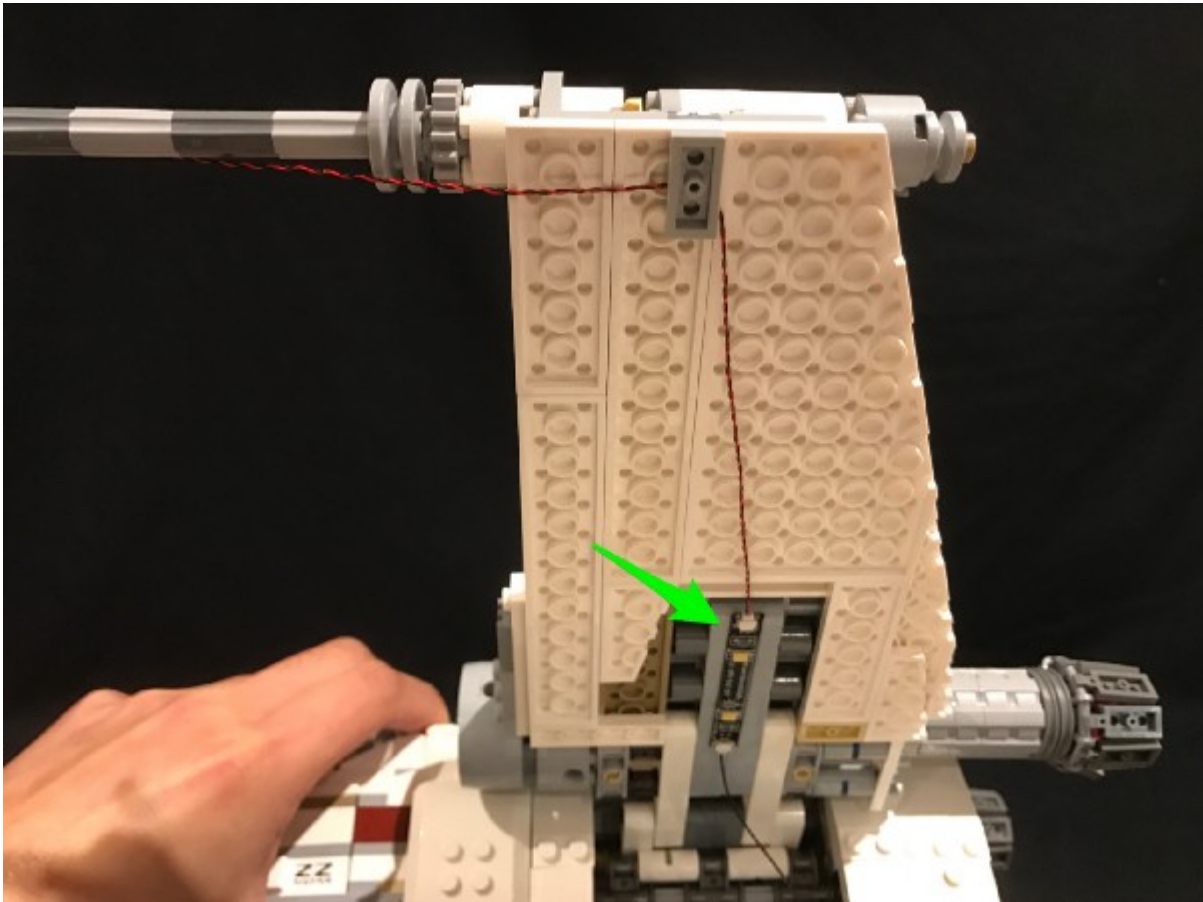
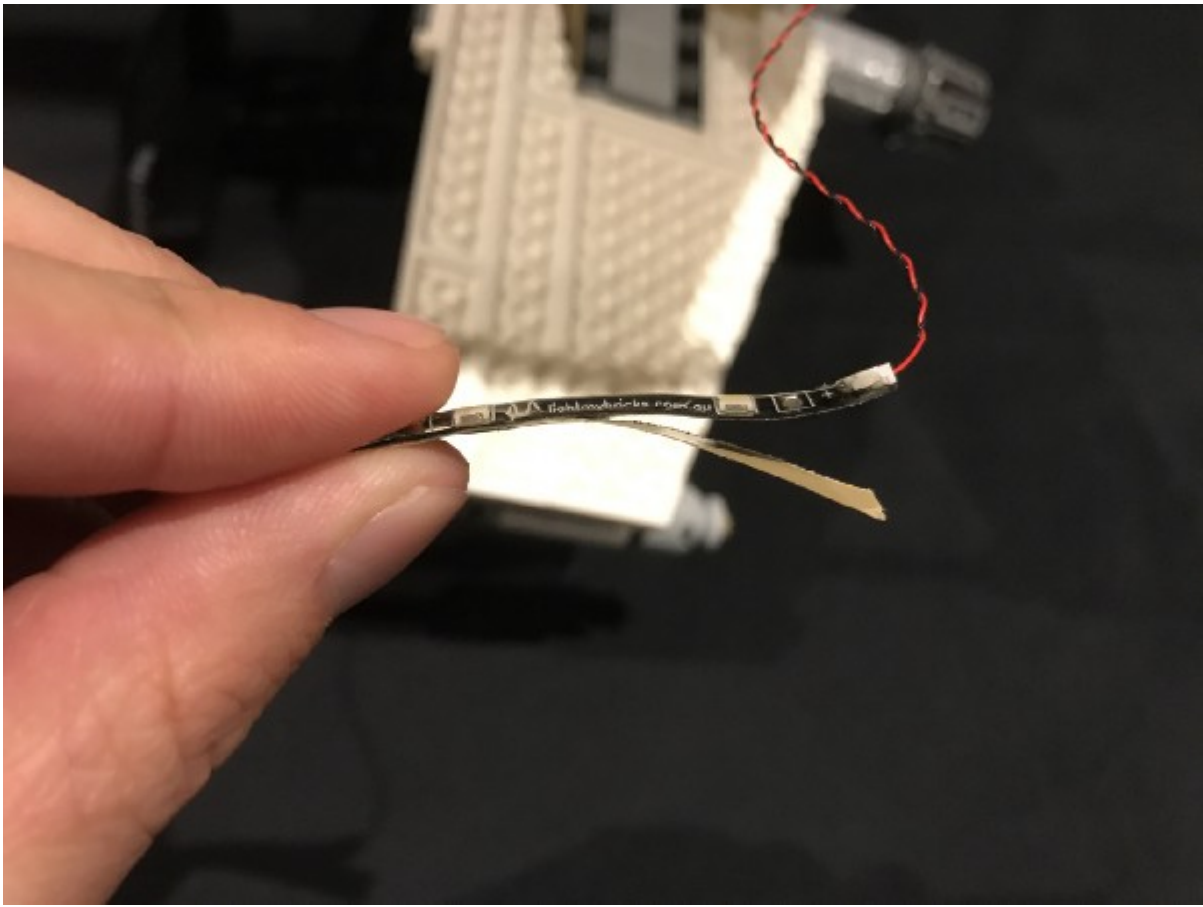
Ensure the cable is laid in between the lego studs.

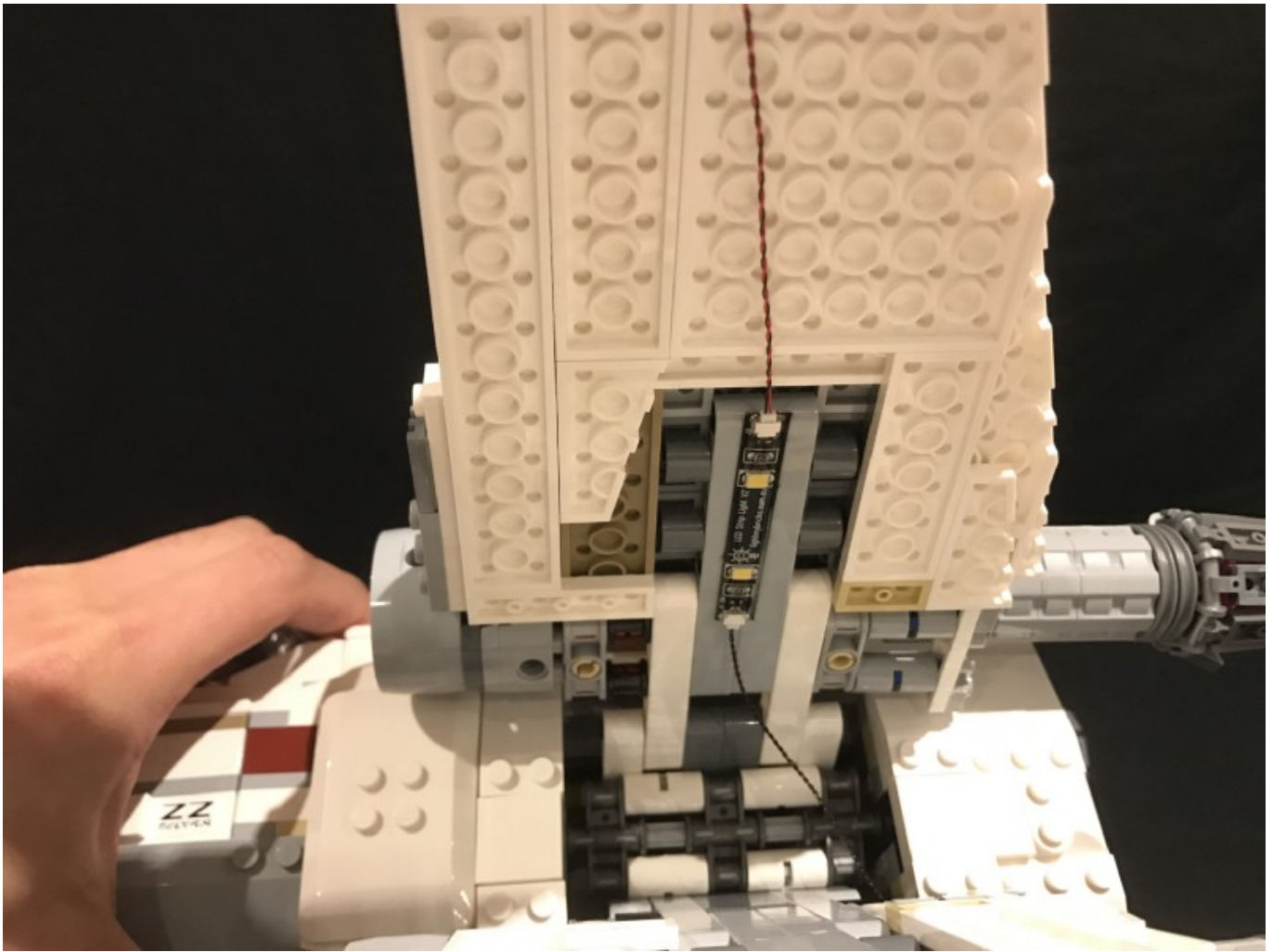
4.) Take a **White Strip Light** and then connect the Bit Light cable into one of the ports, then take a **15cm Connecting Cable** and connect it to the other port.





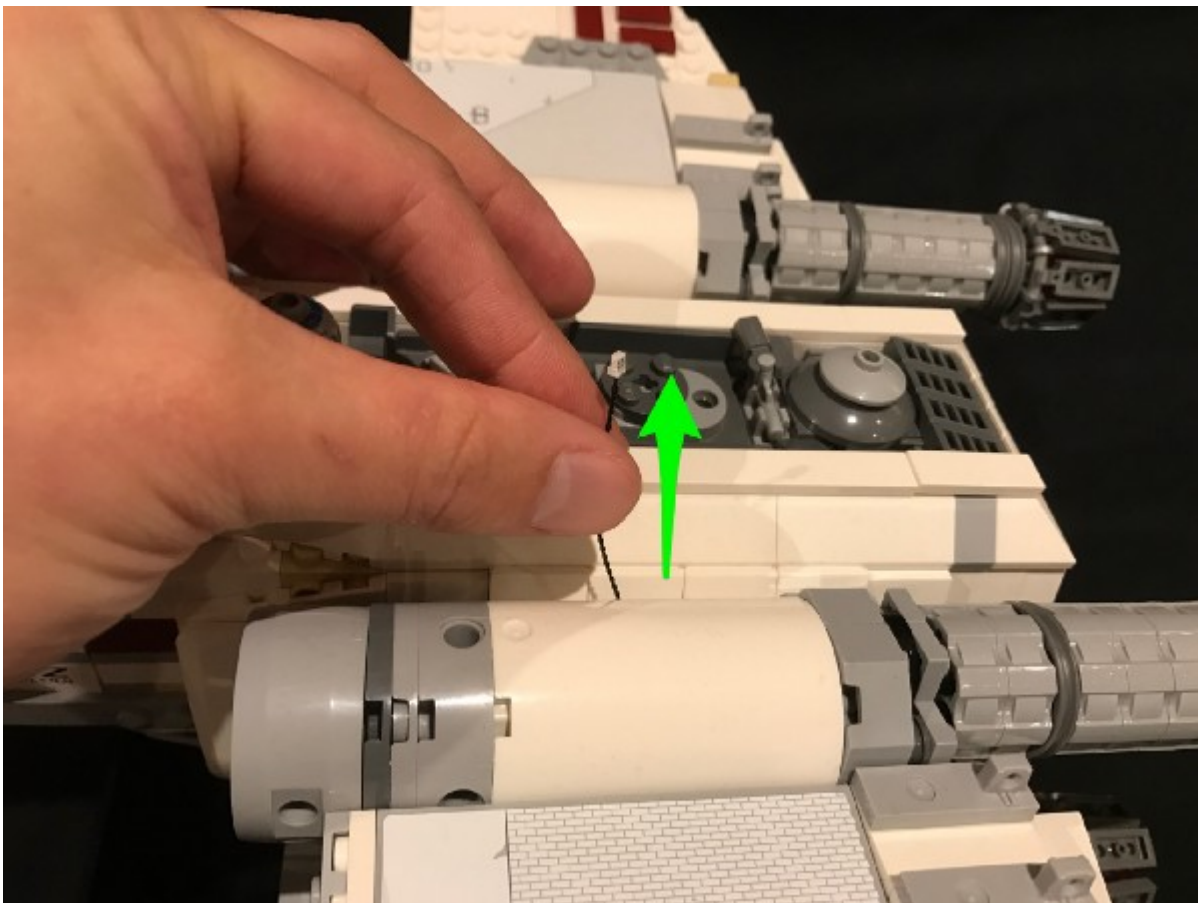
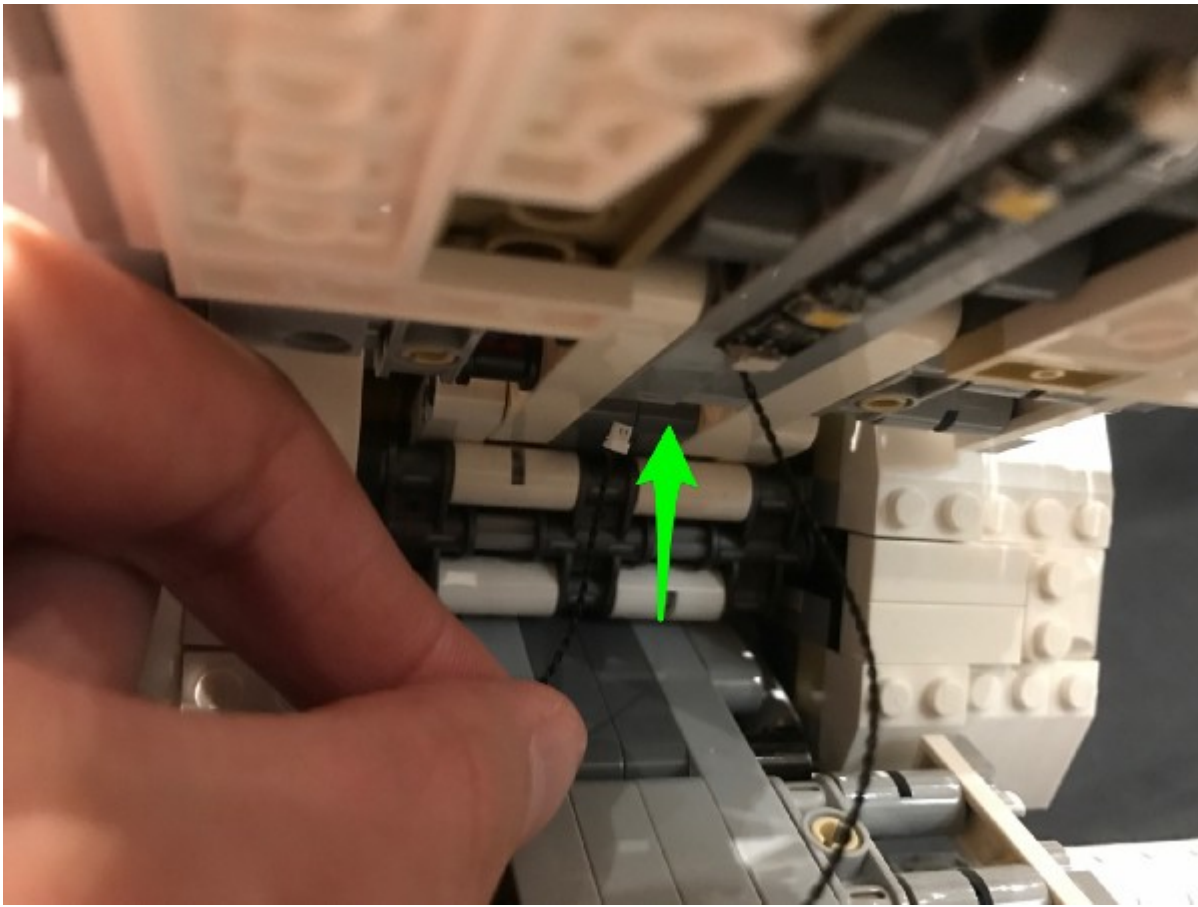
5.) Peel off the adhesive backing from the Strip Light and then stick it underneath the wing in the following position.



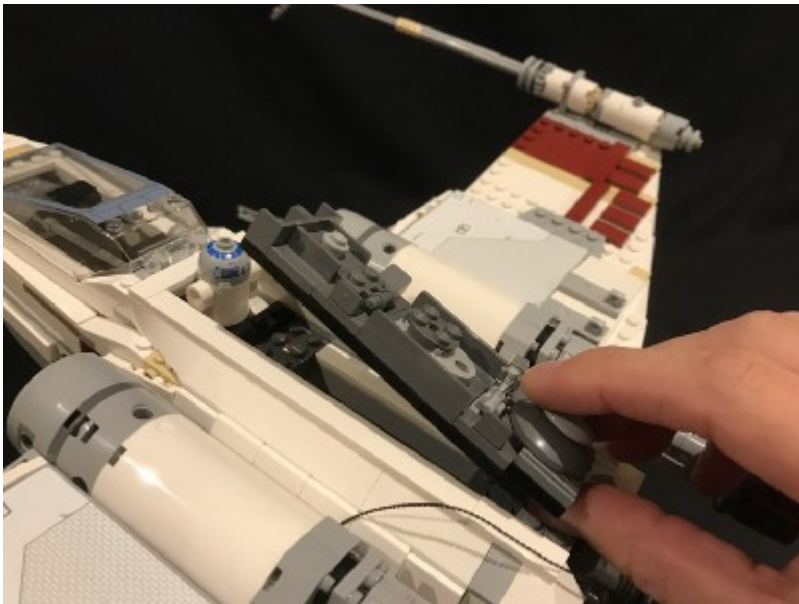
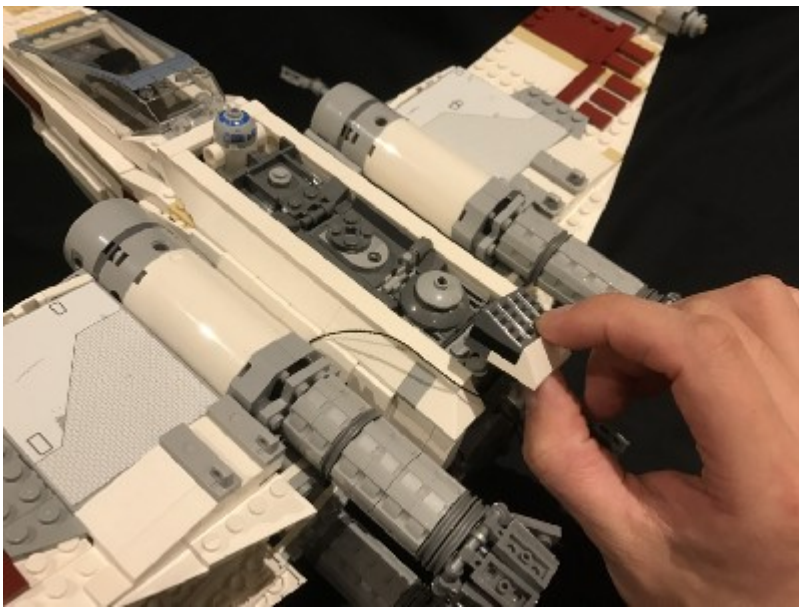
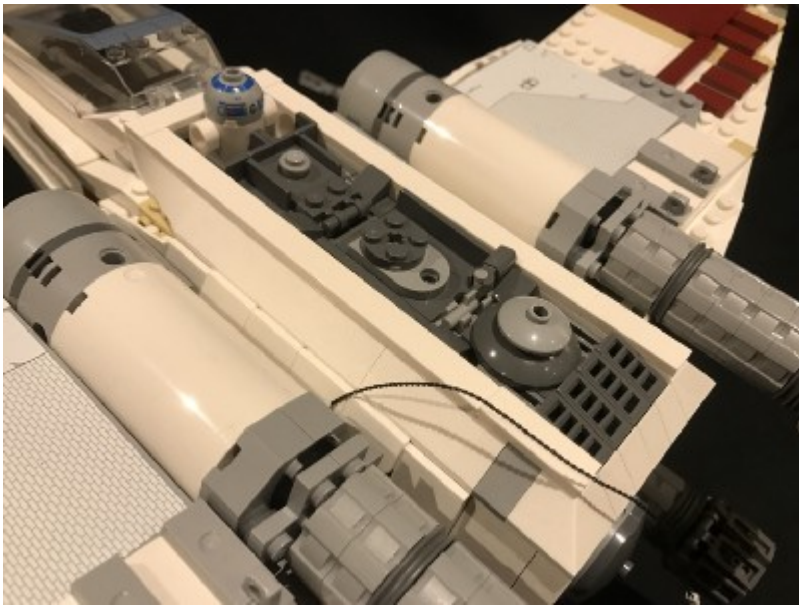


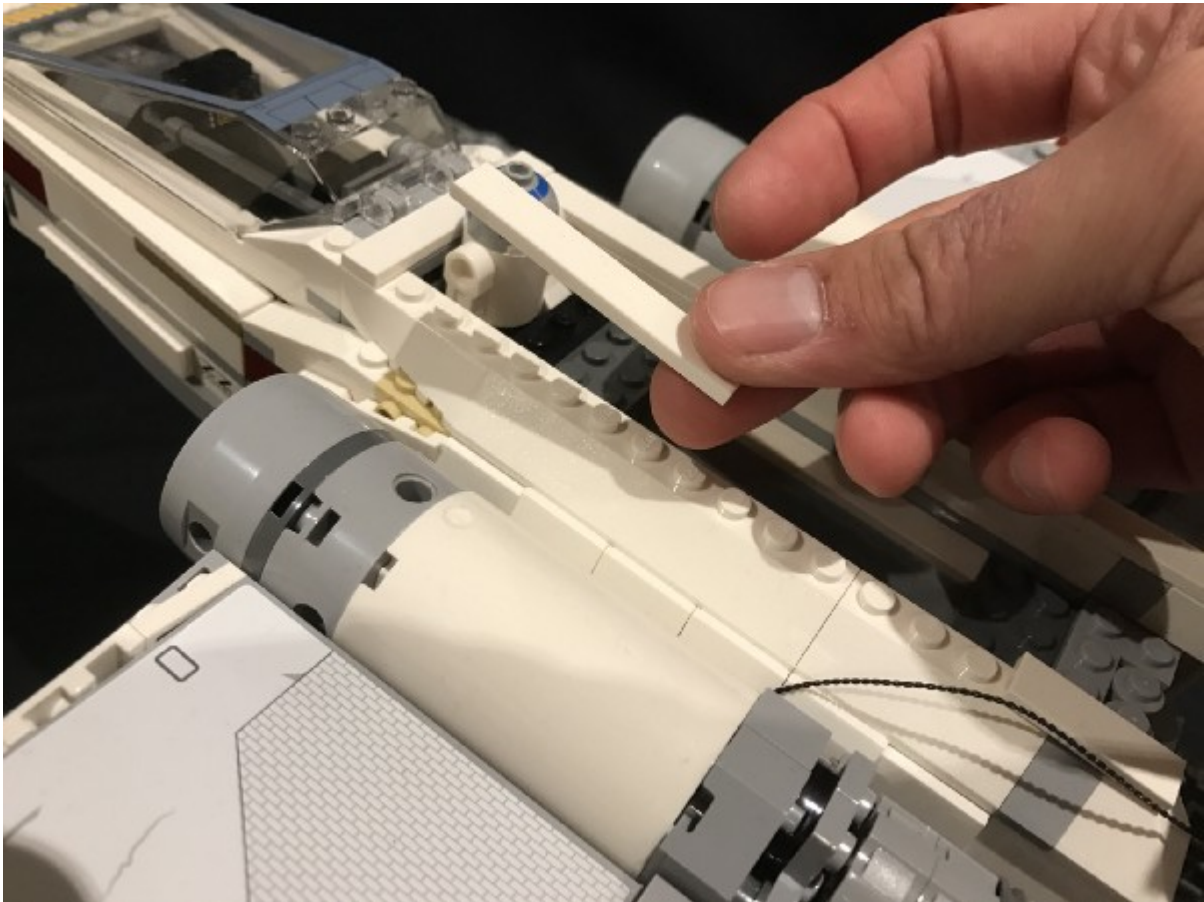
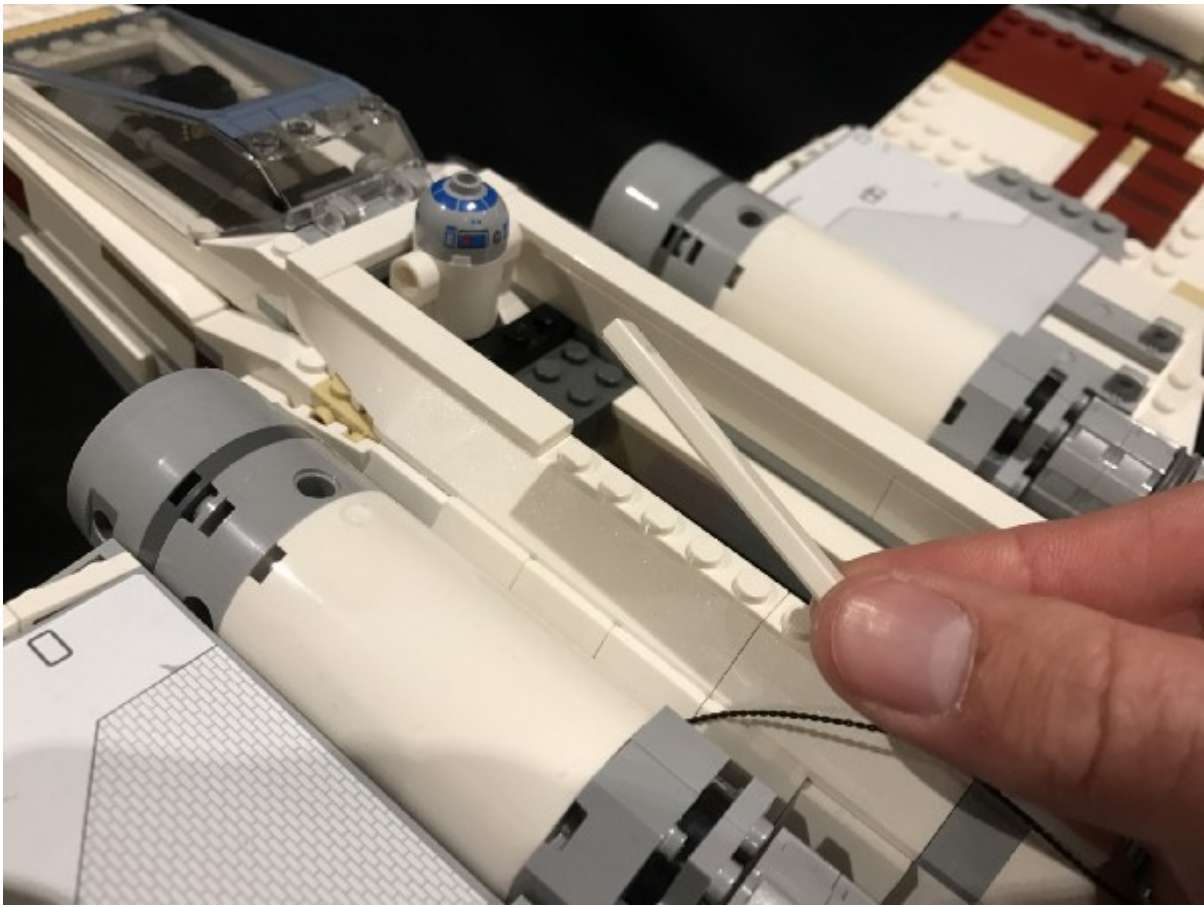
Thread the other end of the 15cm connecting cable up through the space which leads to the top side of the wing. Pull the cable up from the other side.

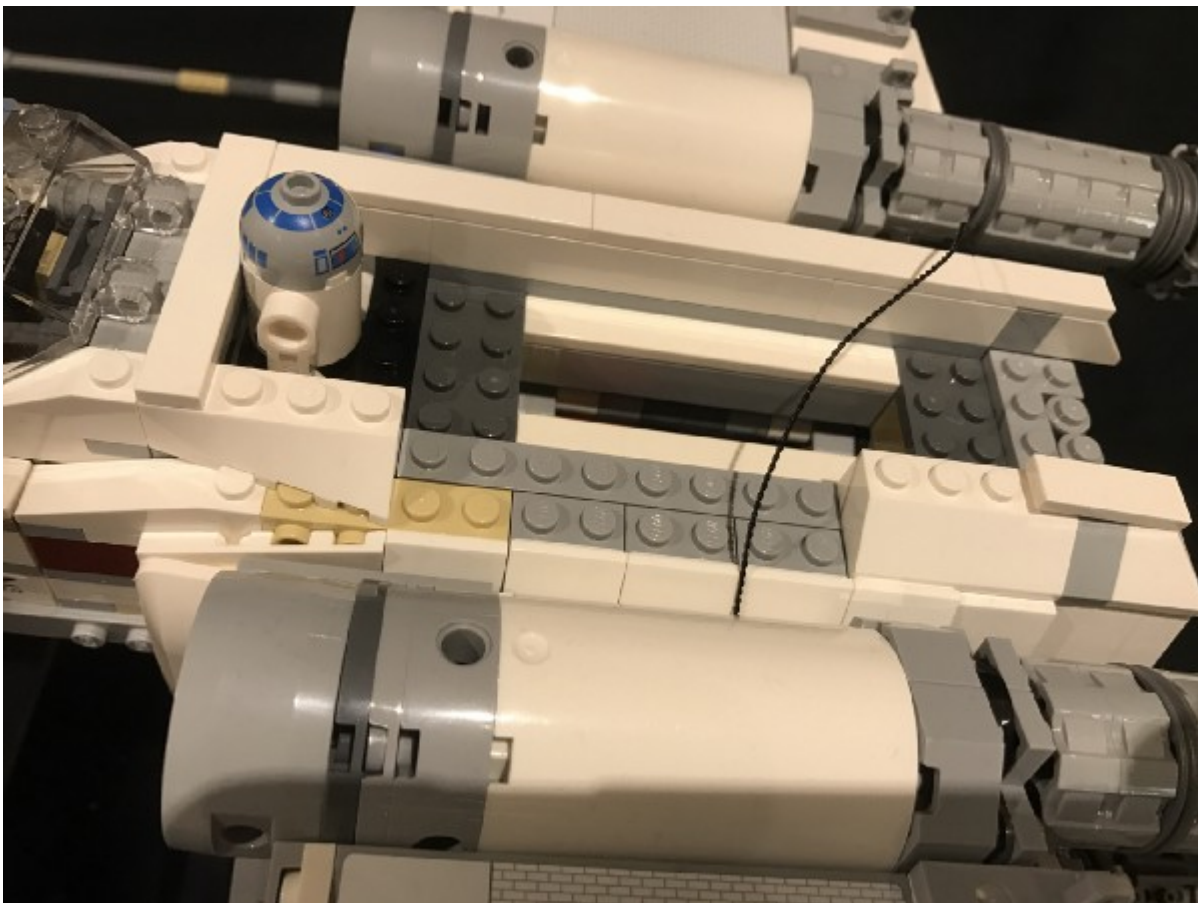
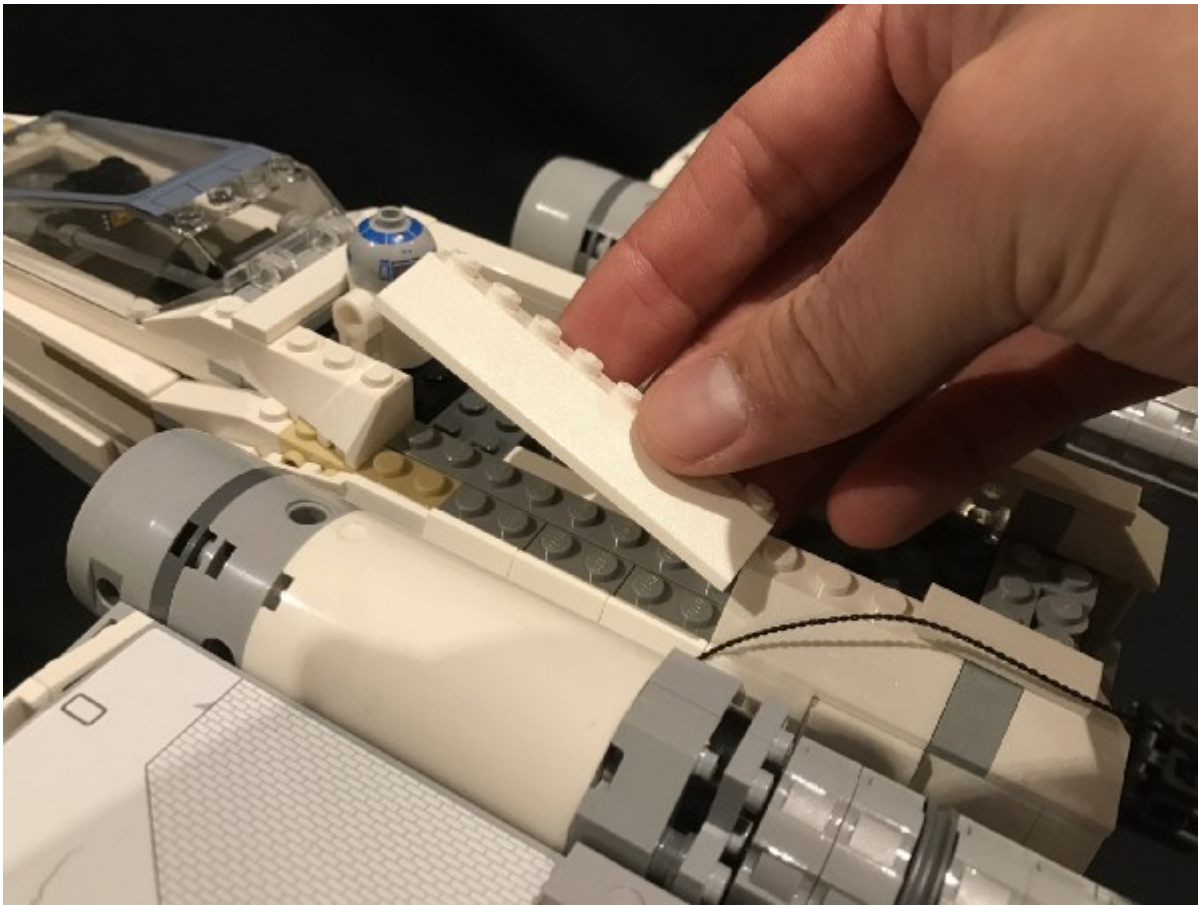




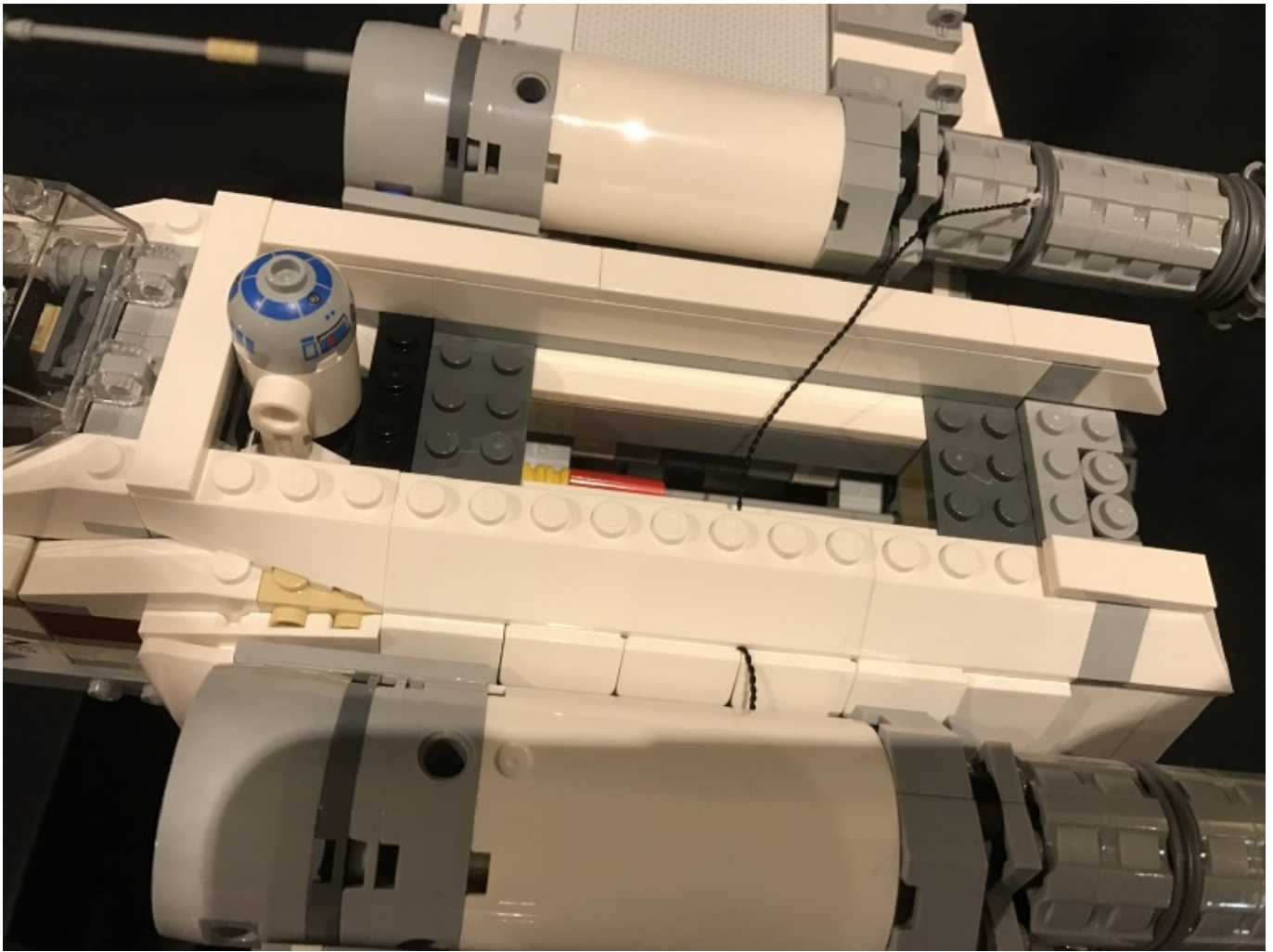
6.) Remove the following sections of the top of the X-Wing to allow us to lay the cable underneath. ▲





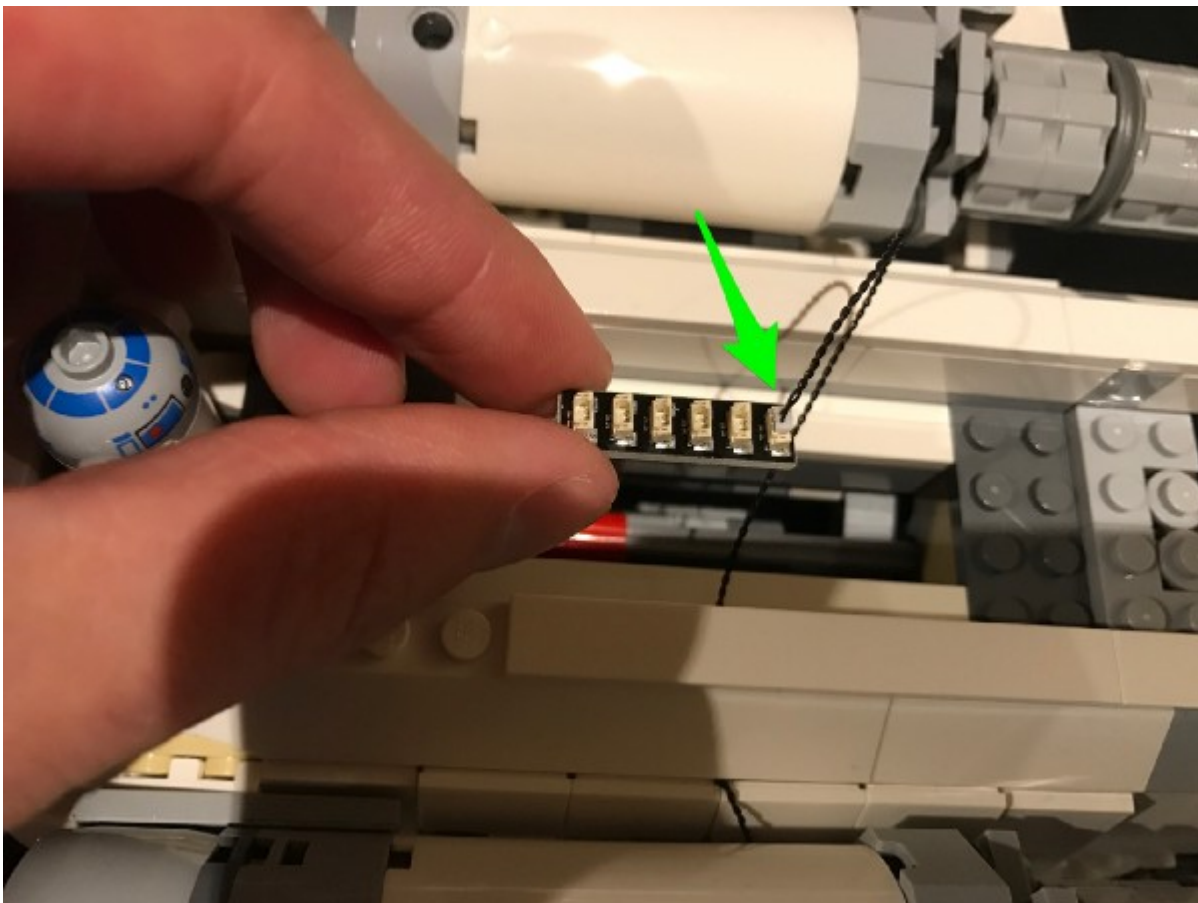
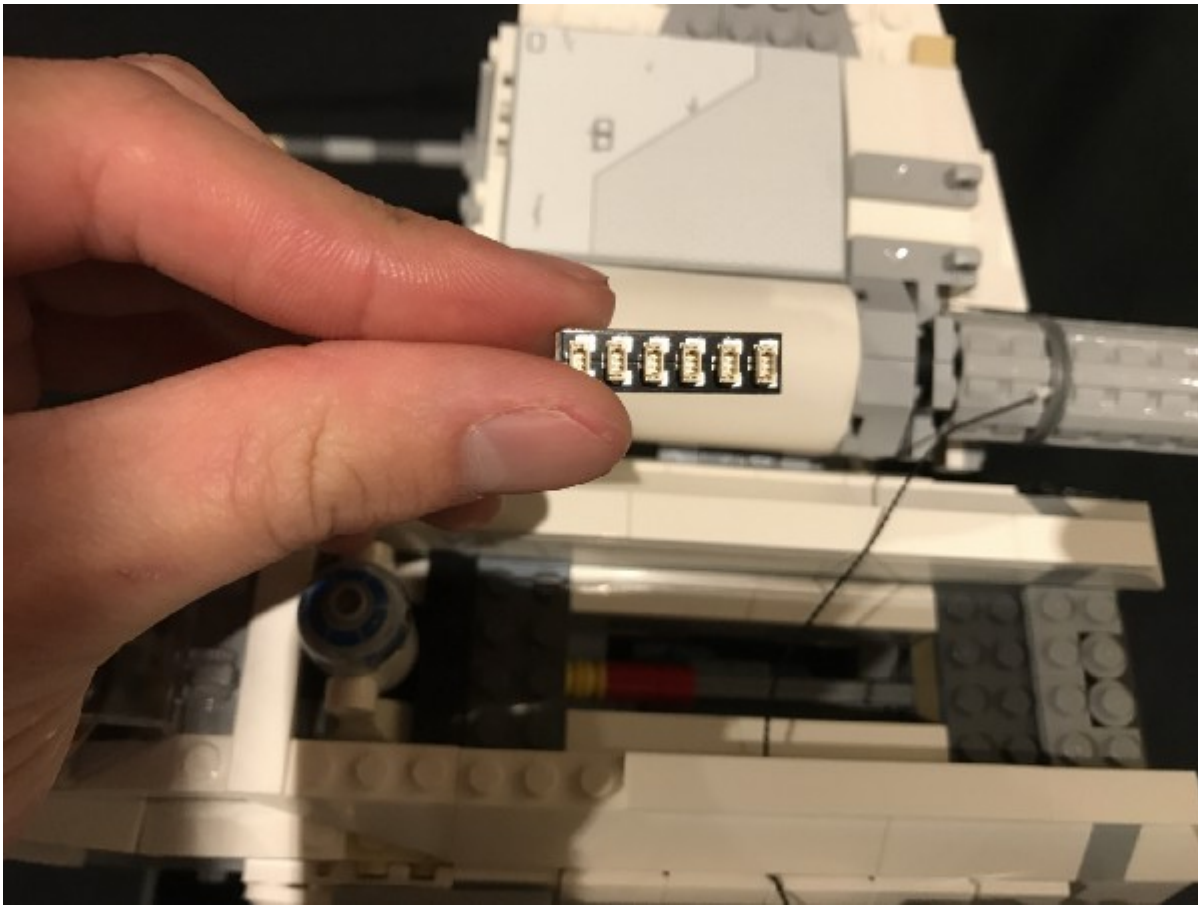


Reconnect pieces over the top of the cable ensuring it is first laid neatly in between studs. ▲



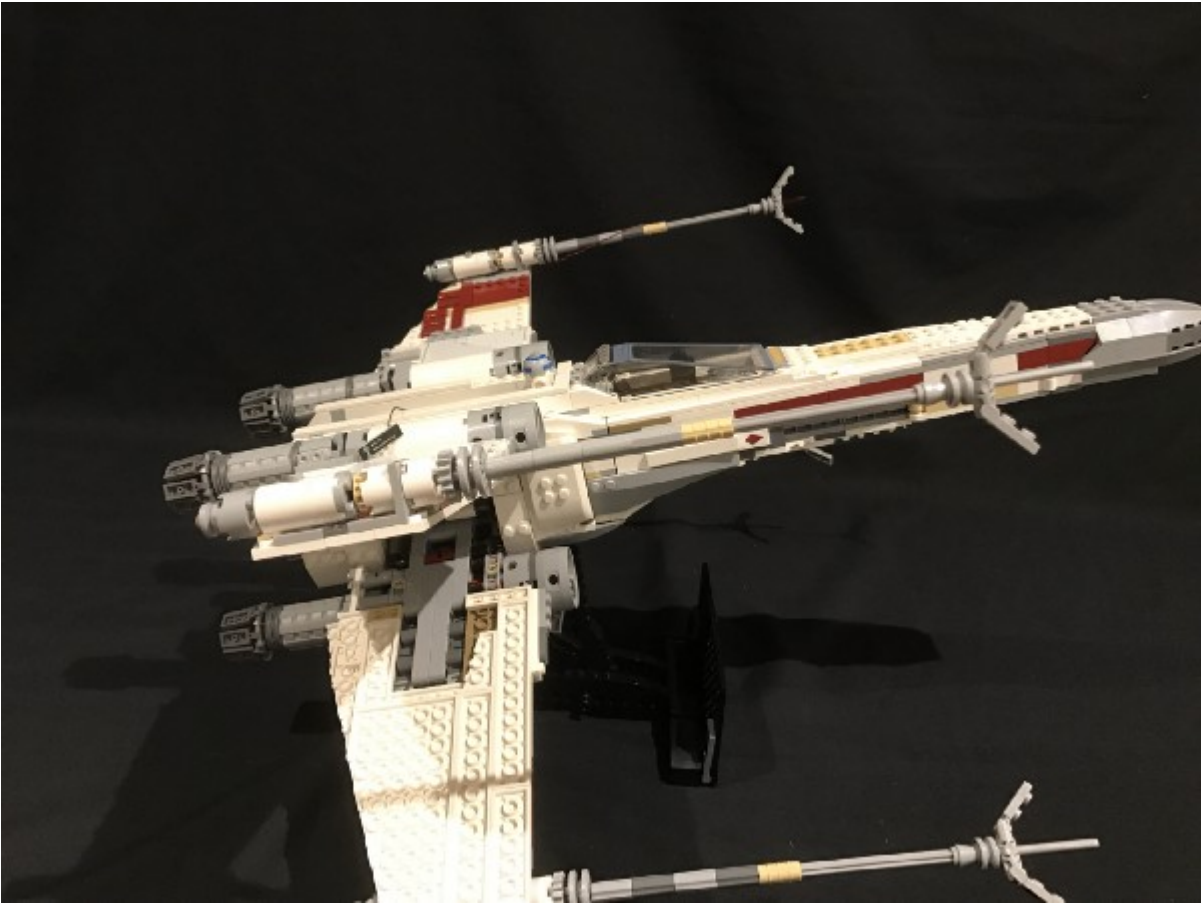
7.) Take a **6-Port Expansion Board** and connect the 15cm cable into one of the ports.

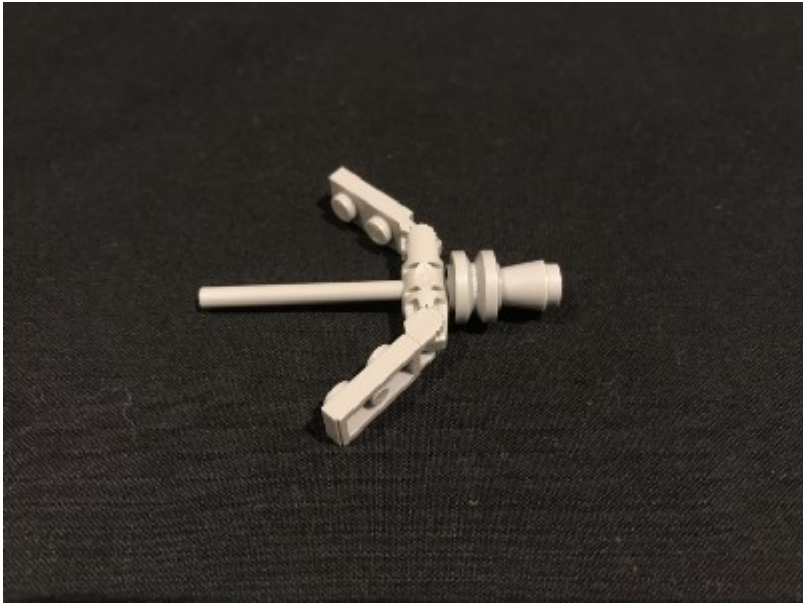


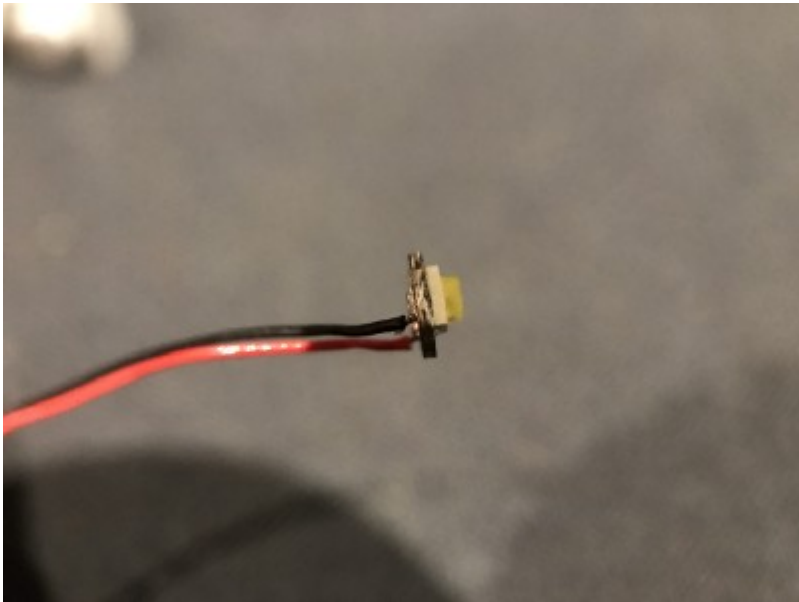
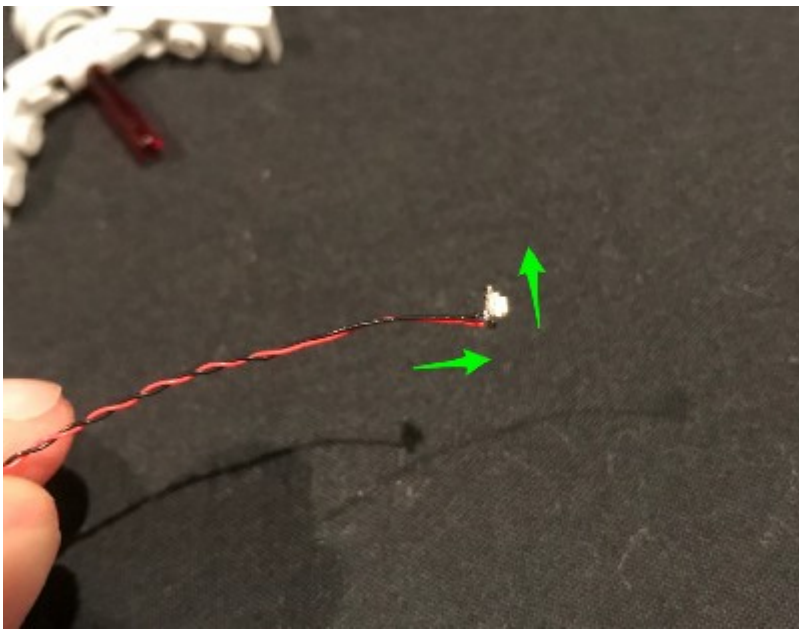
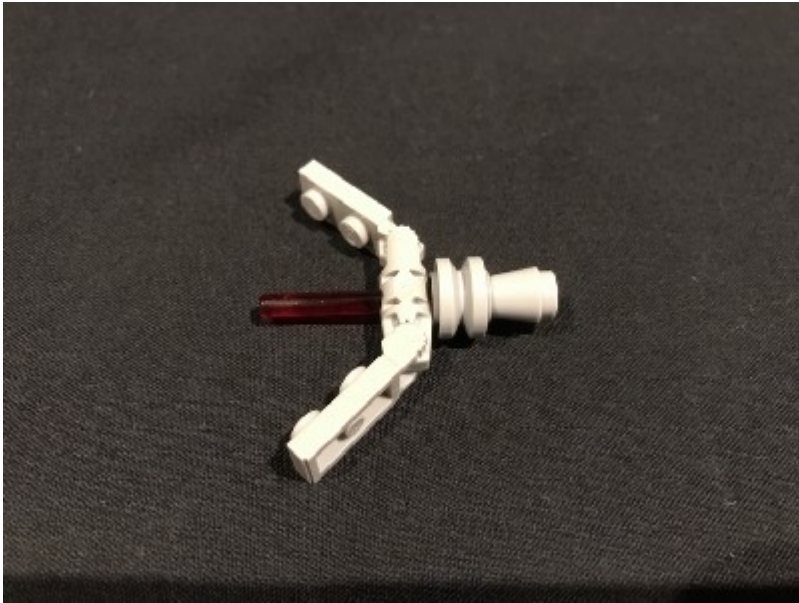


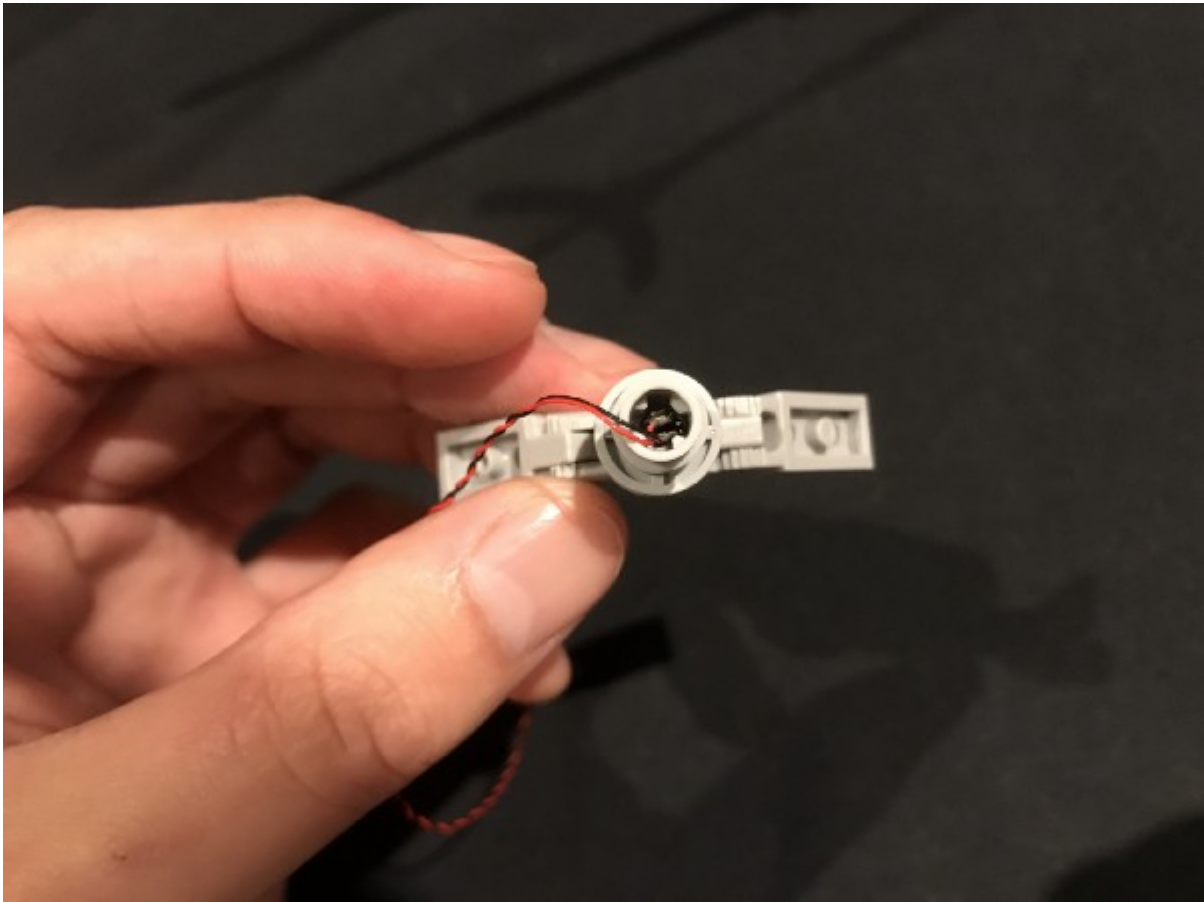
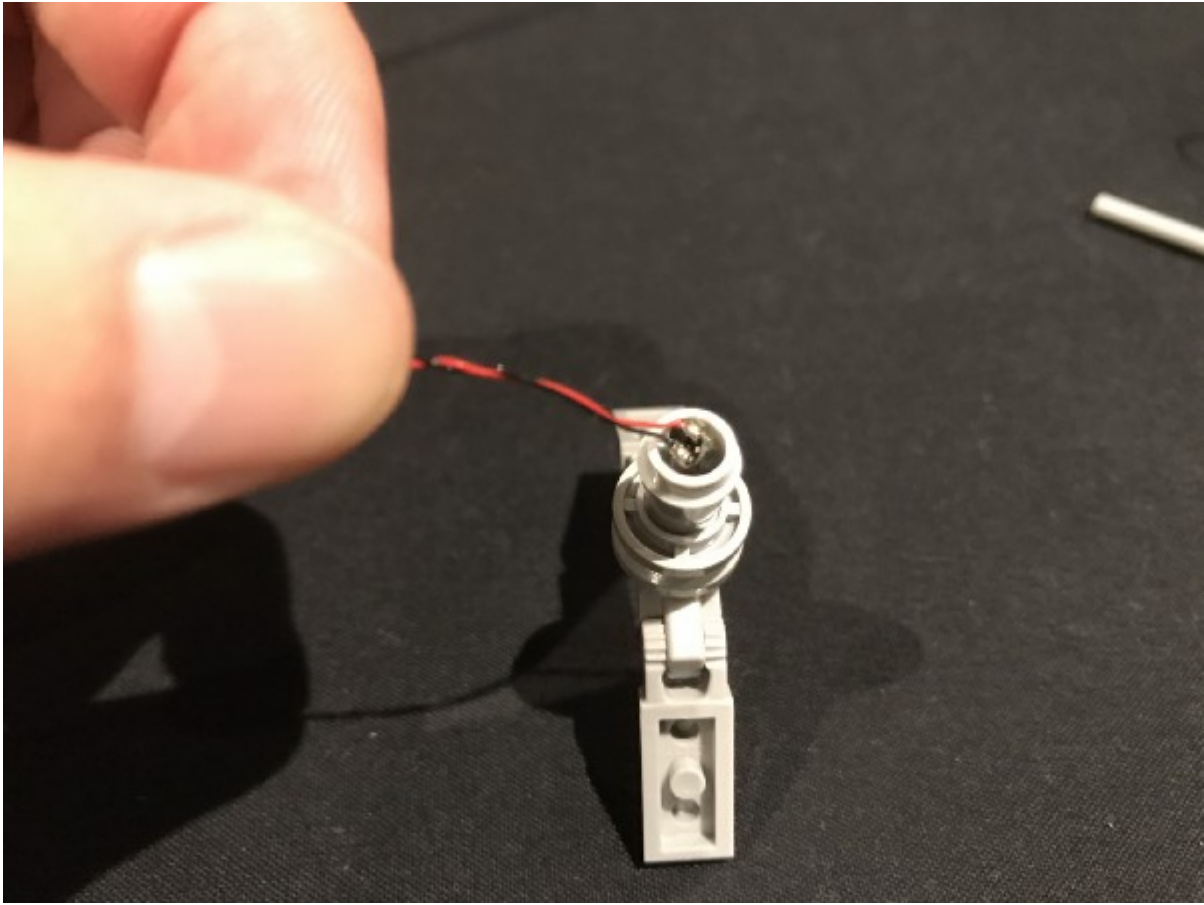
8.) Turn the X-Wing around and repeat steps 1-5 to install another **Flashing White 30cm Bit Light**, **White Strip Light**, and **15cm Connecting Cable** to the upper wing ▲

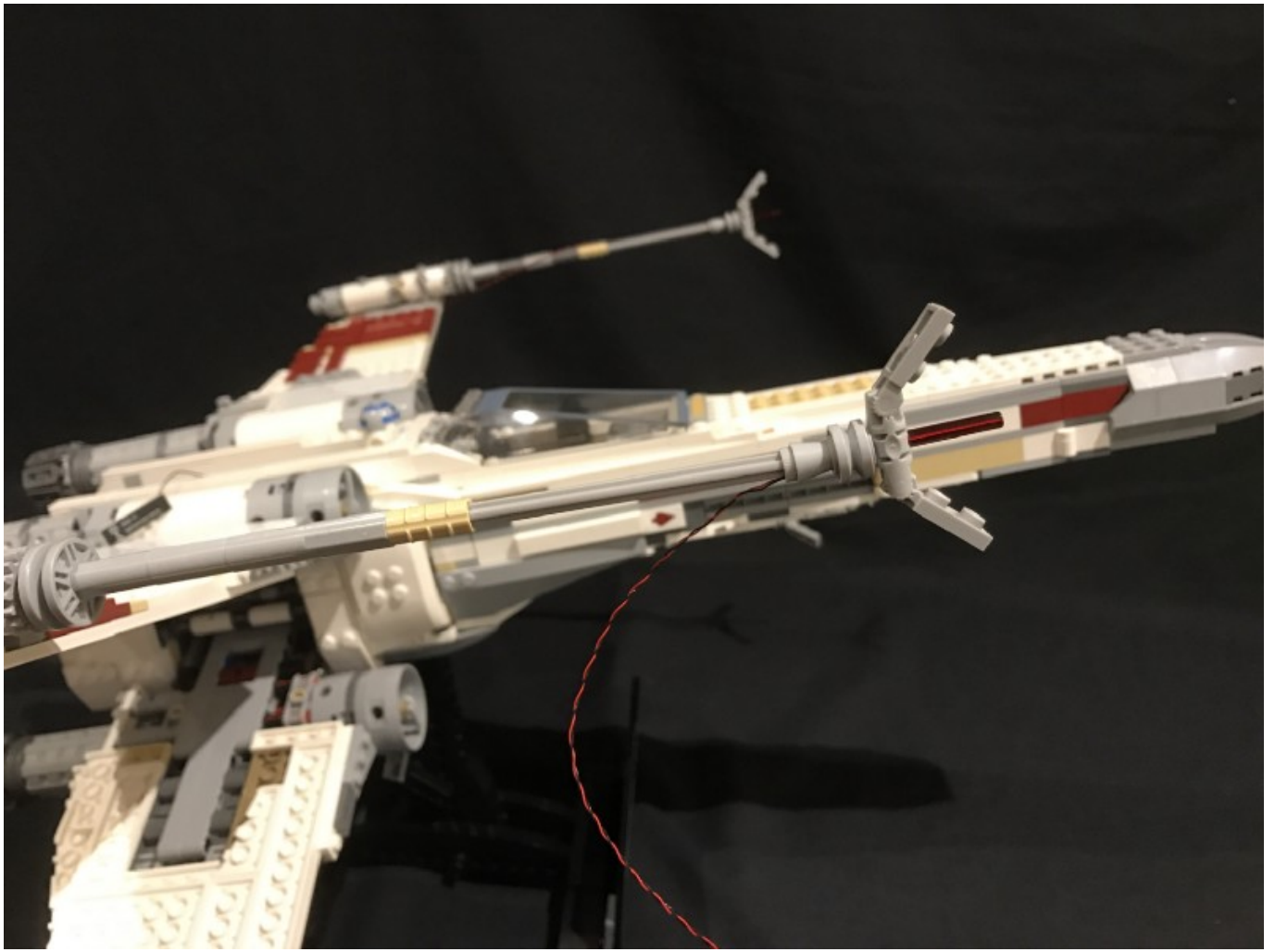
on the other side of the space ship.

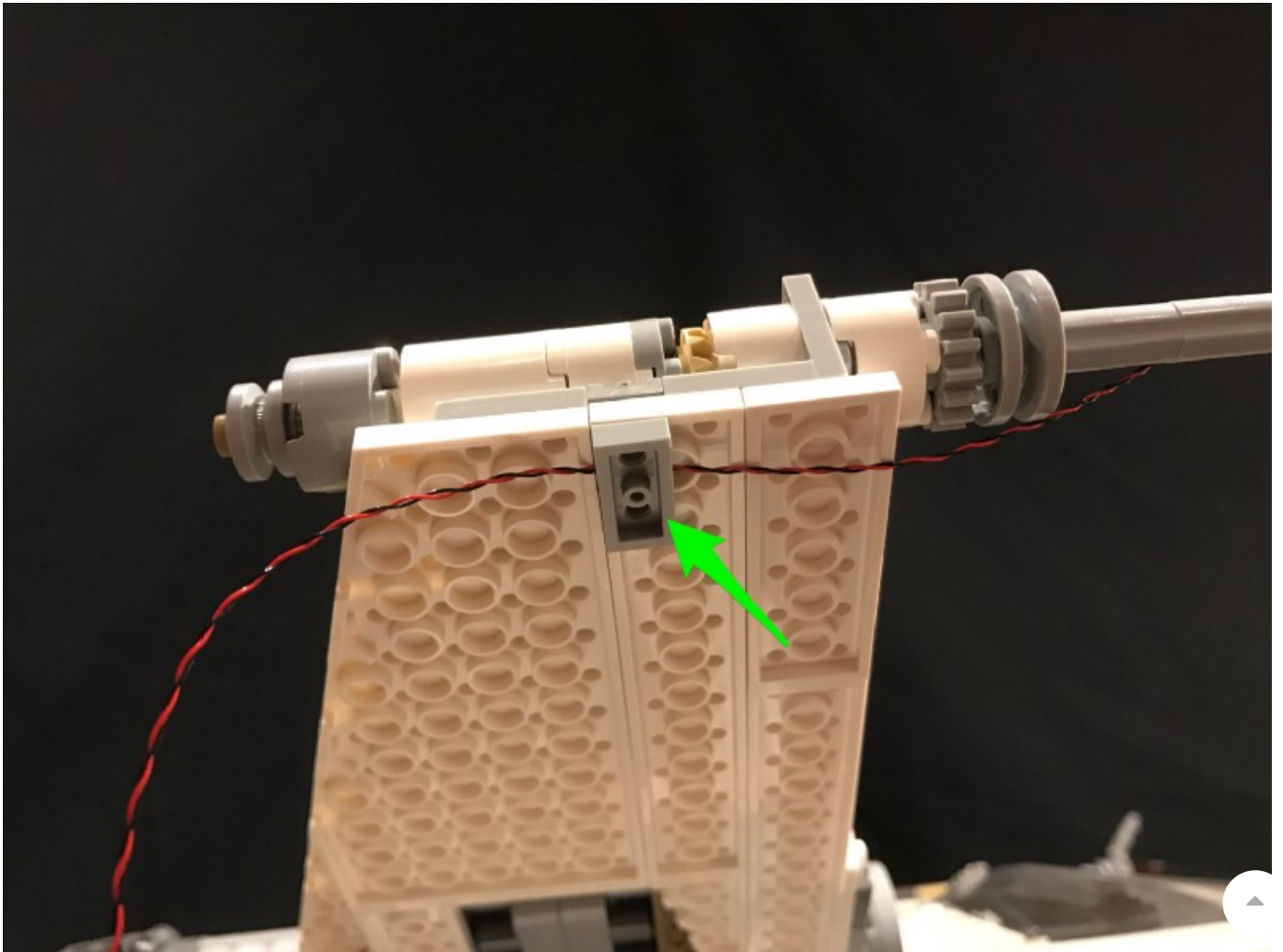
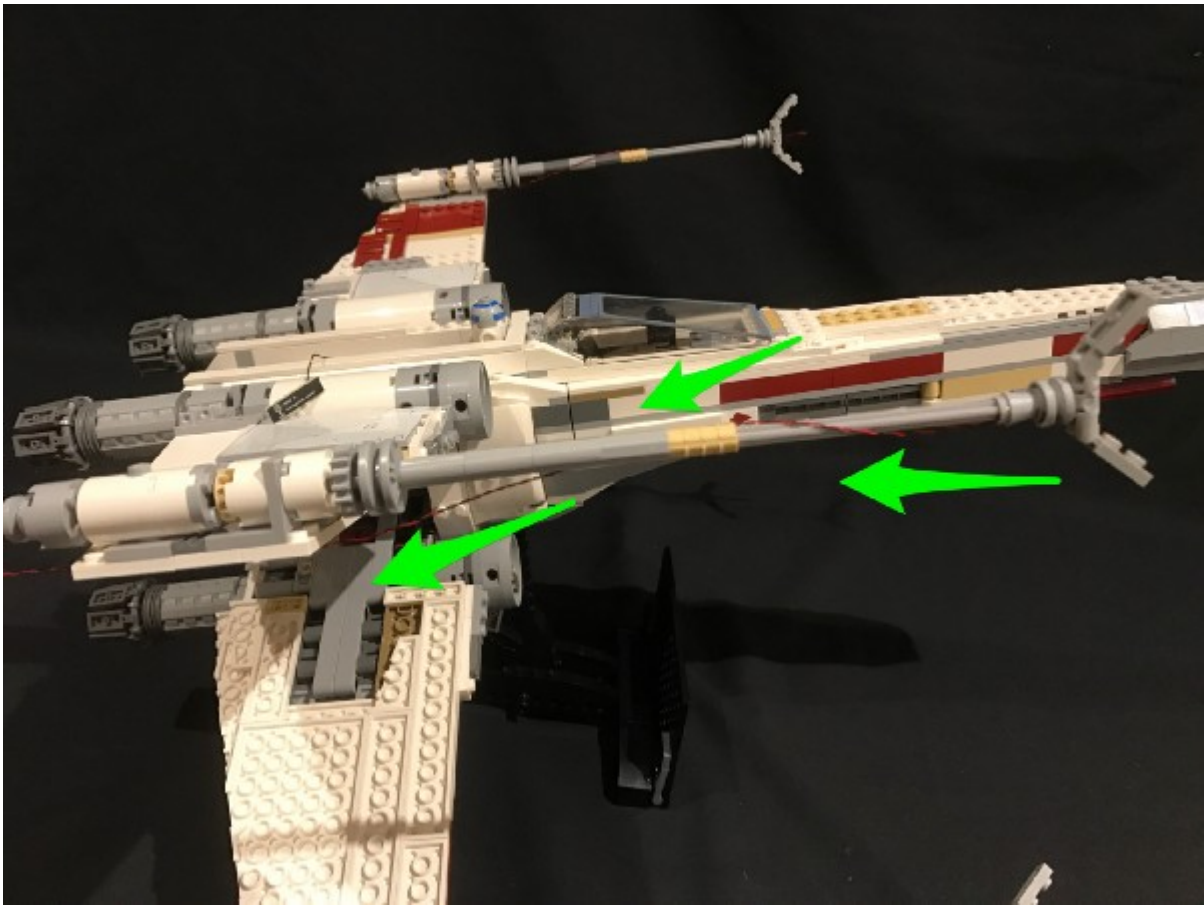


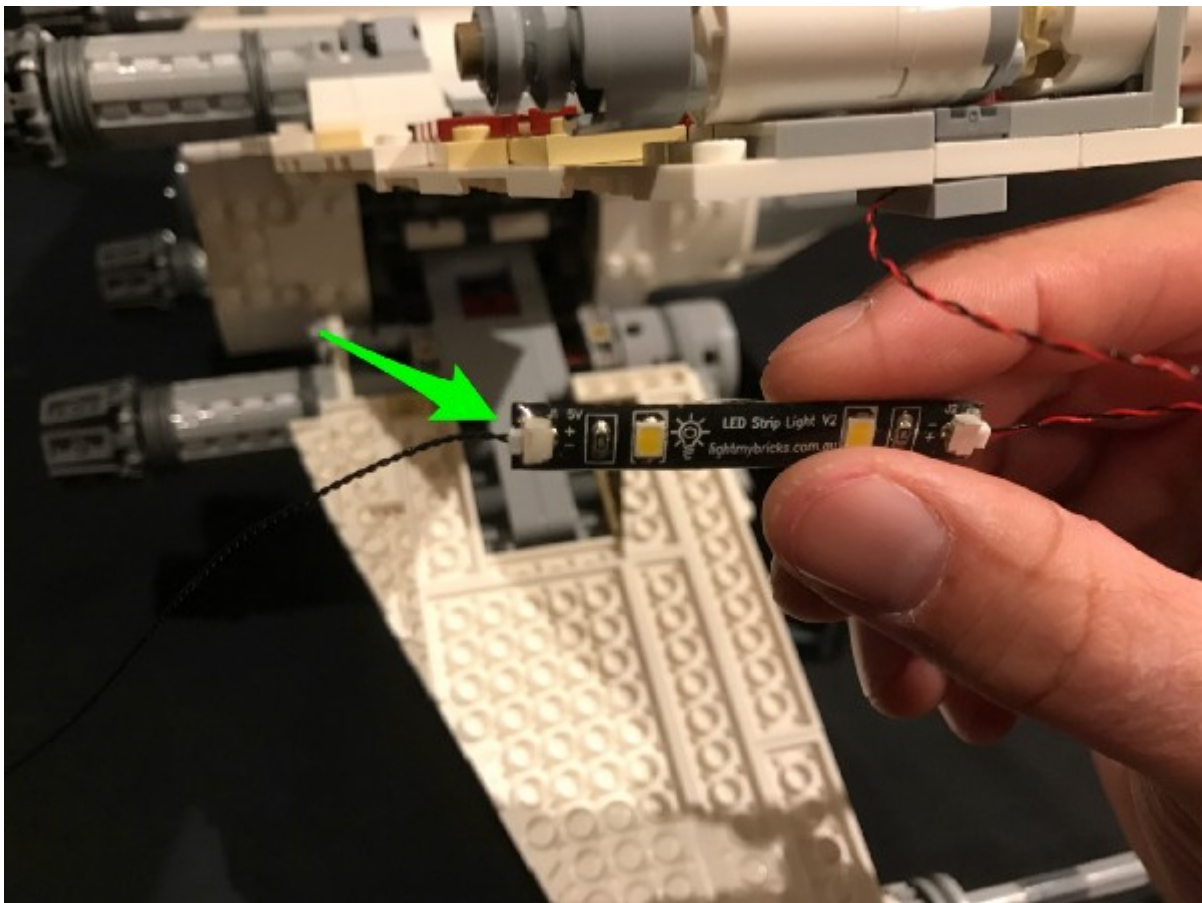
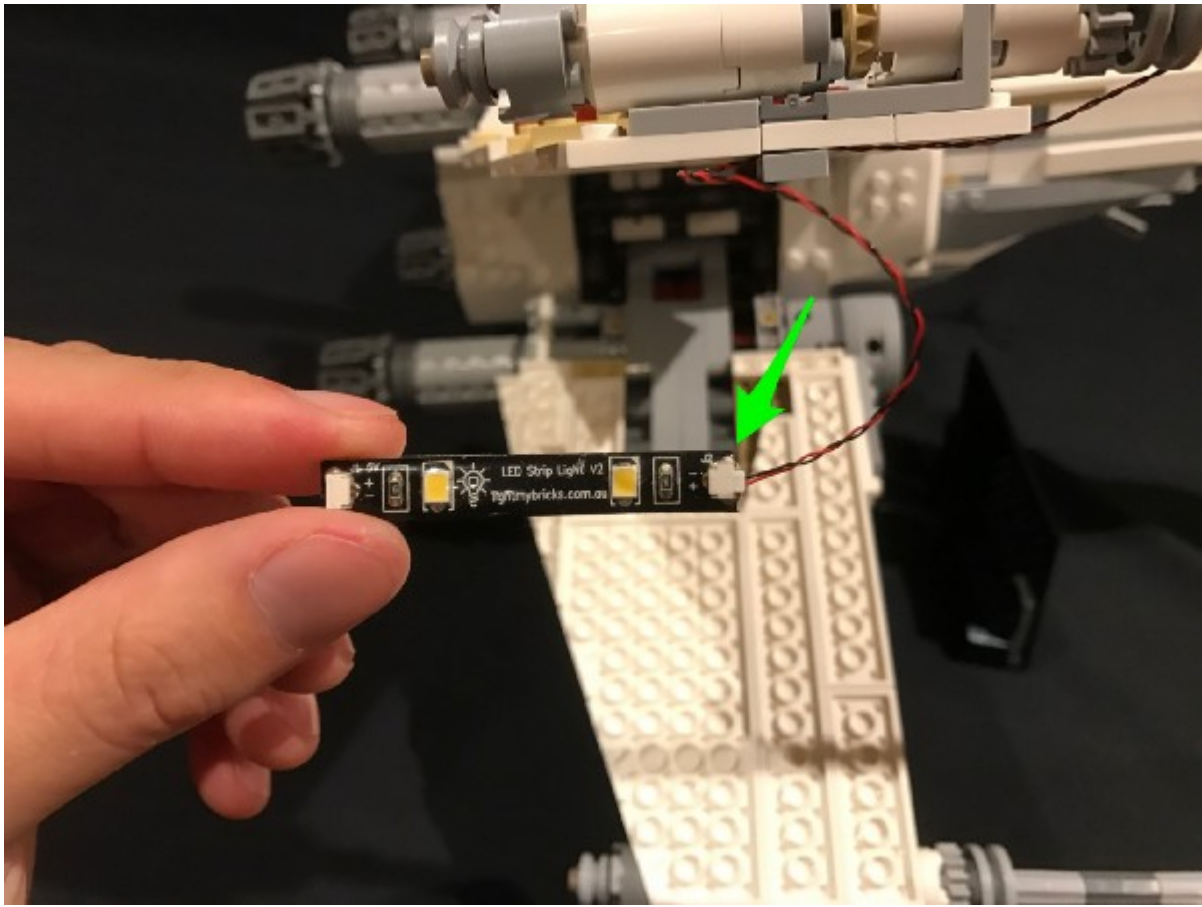


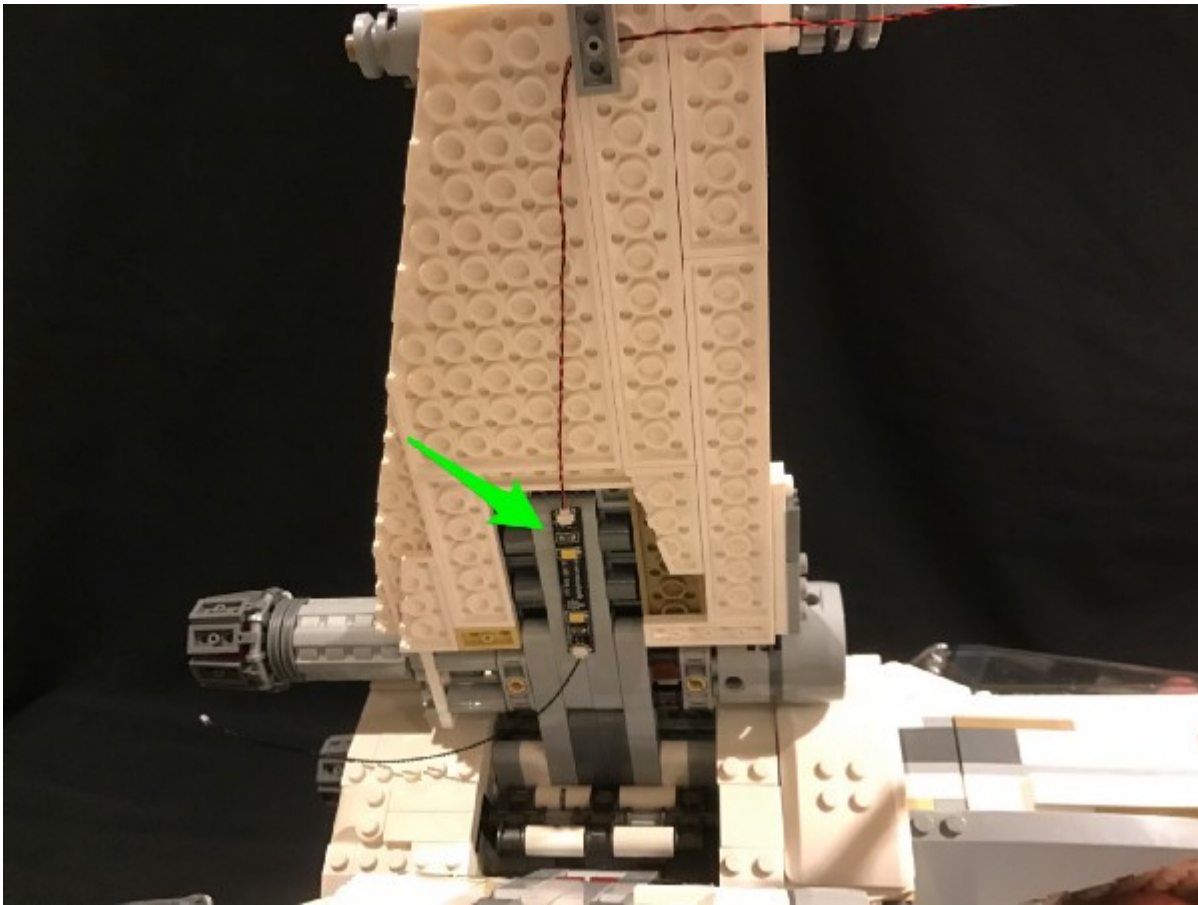




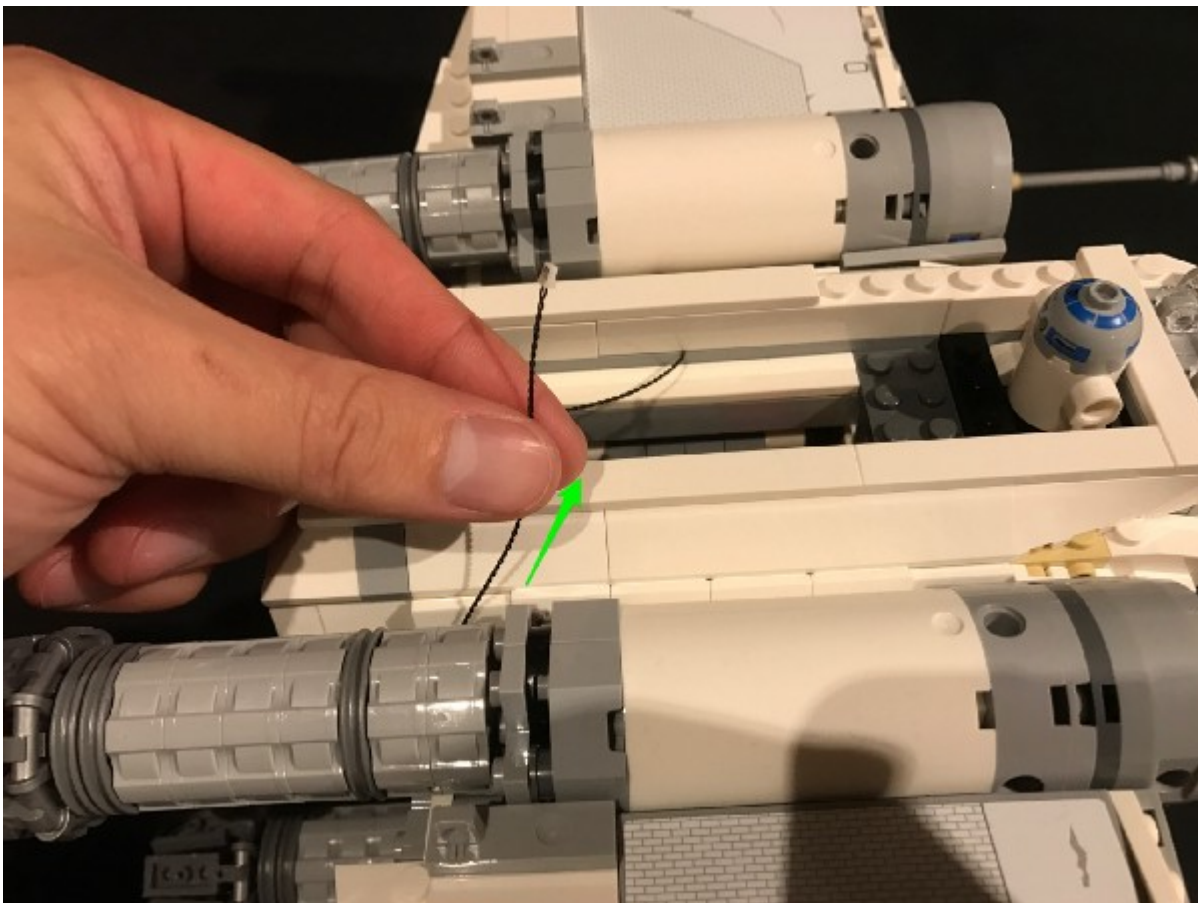
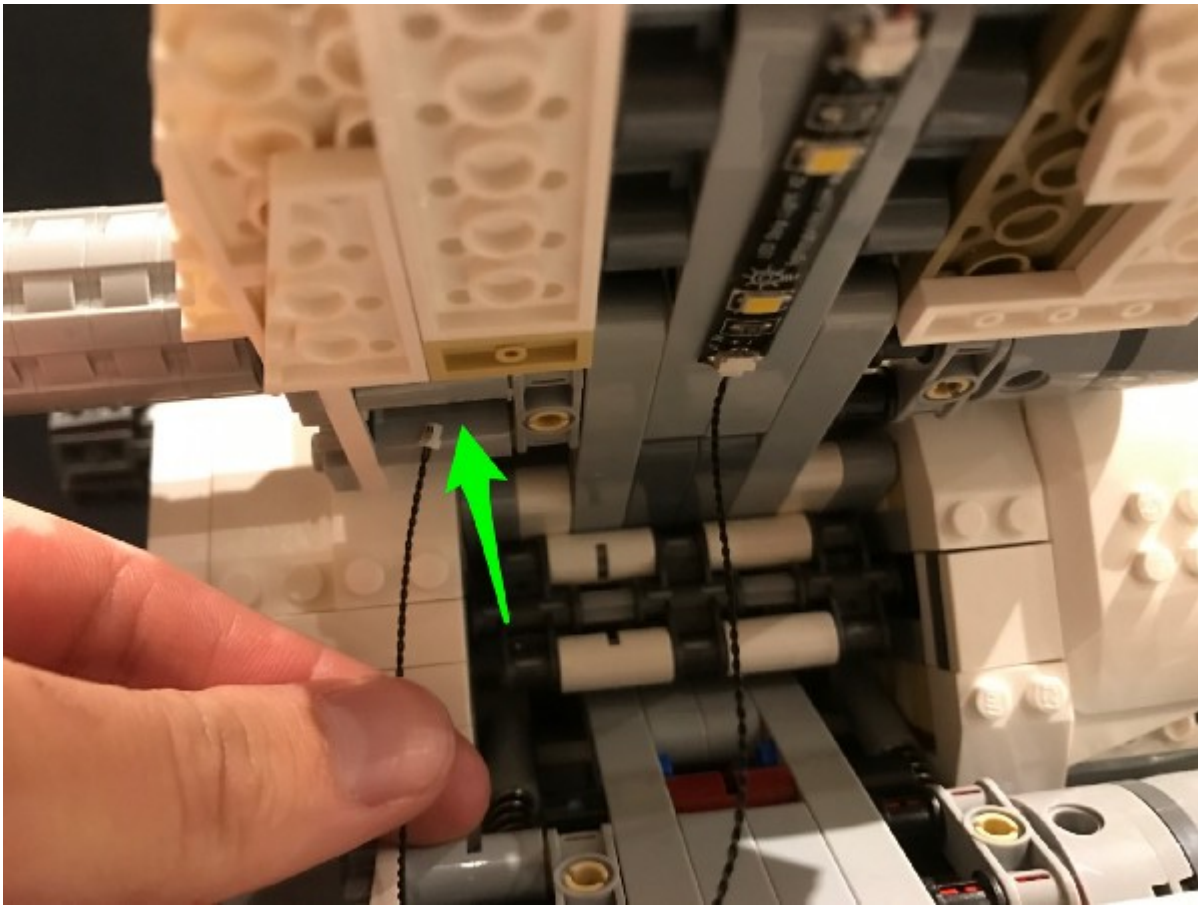




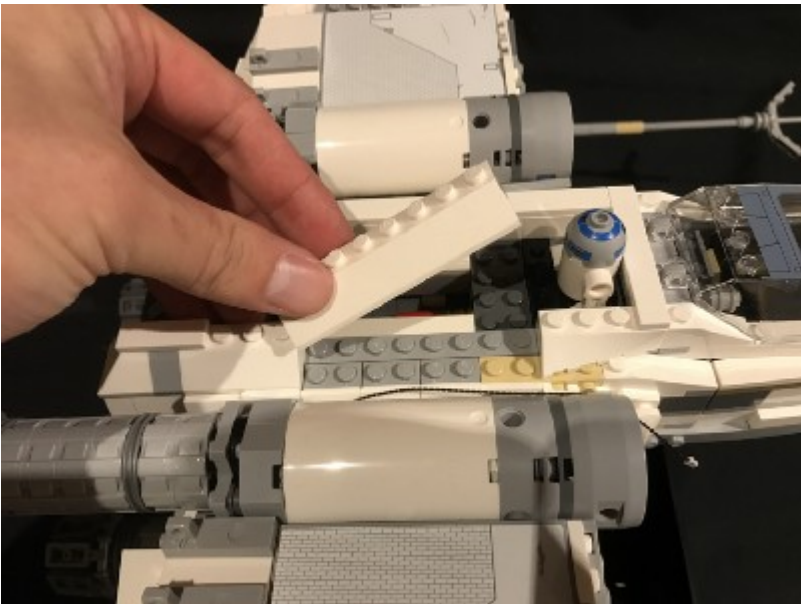
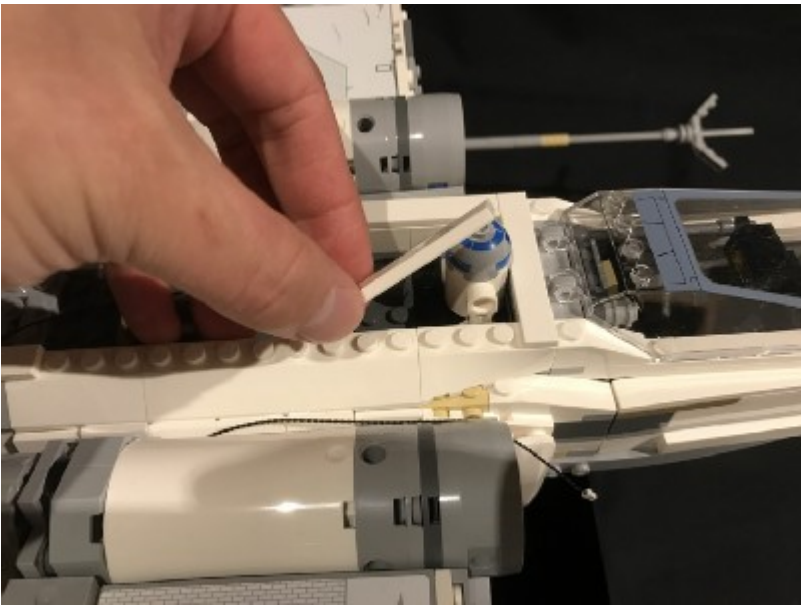
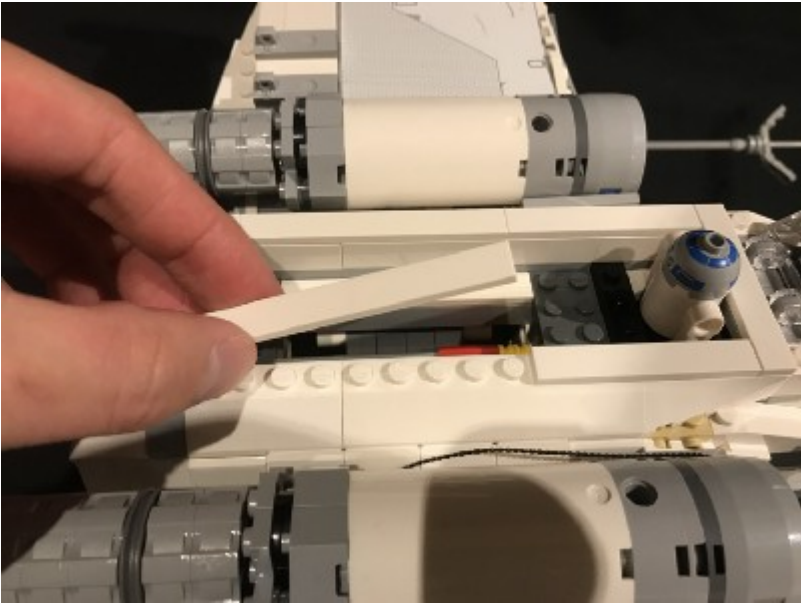


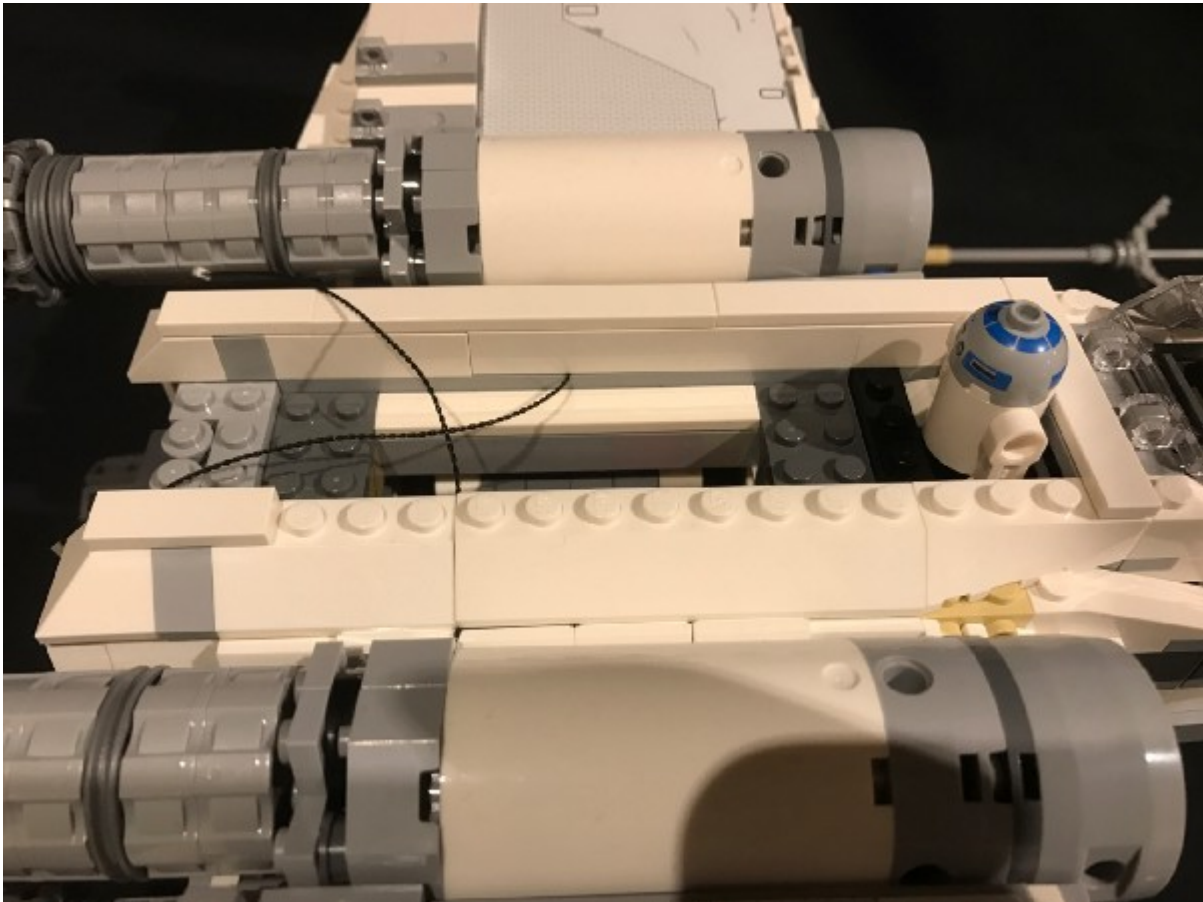
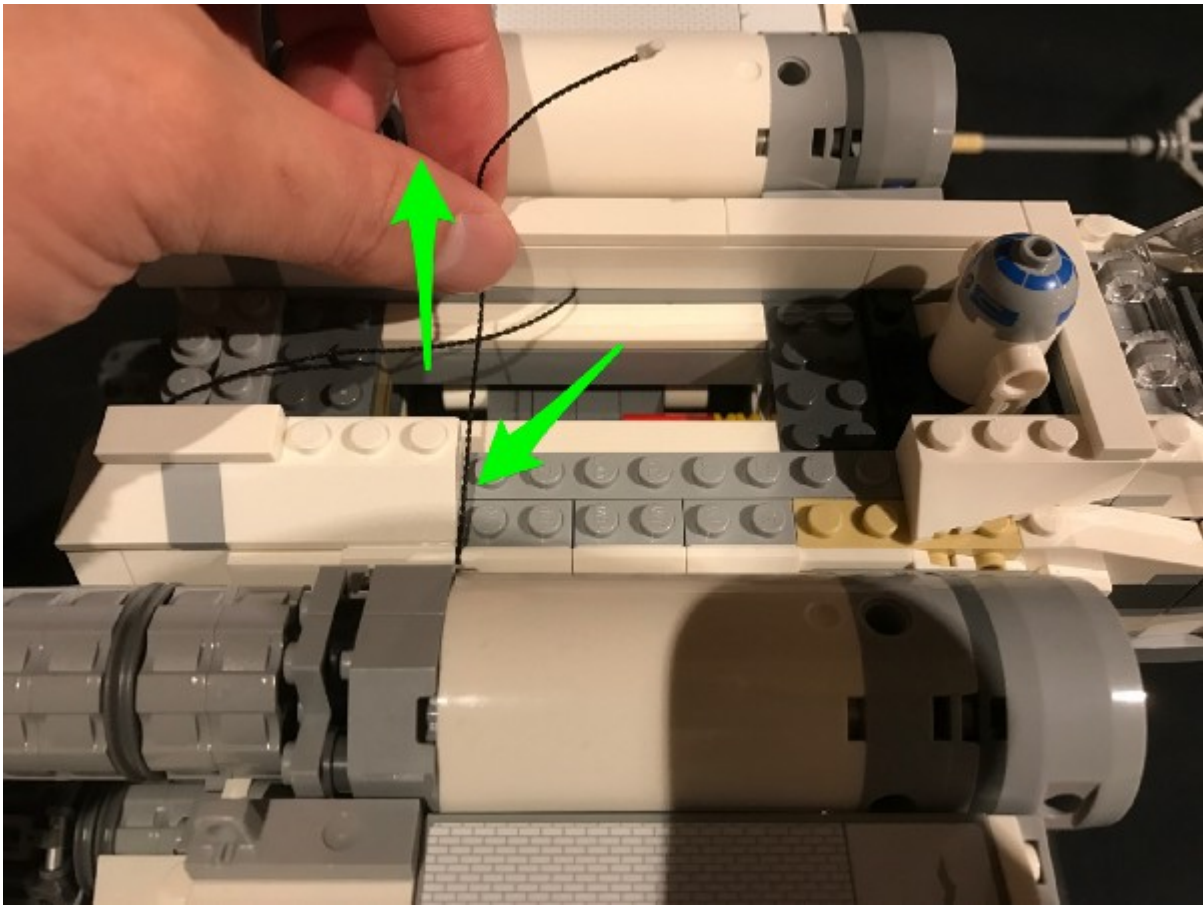


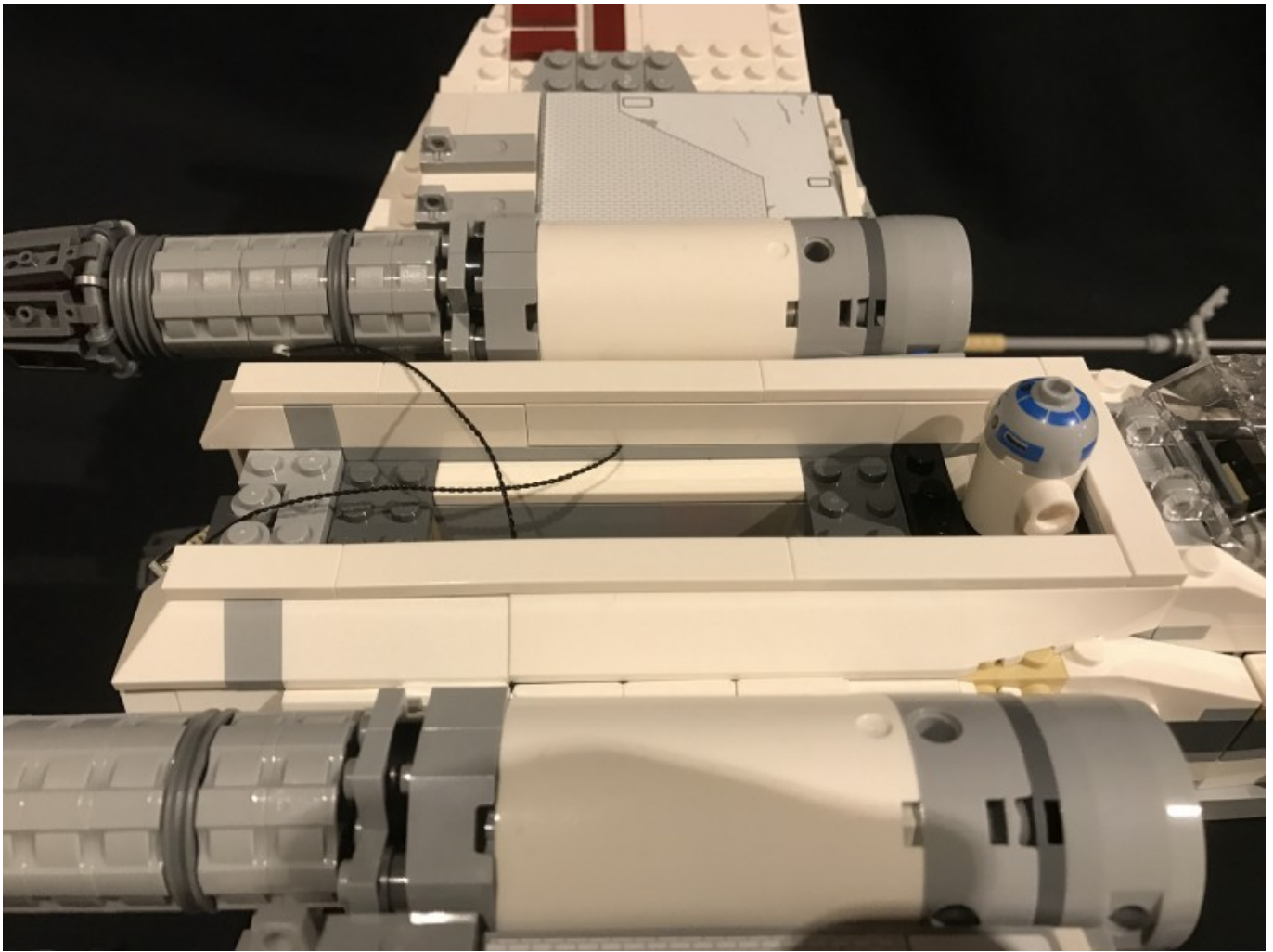
9.) Thread the other end of the 15cm Connecting cable up through the following spacing which leads to the other side. Pull the cable up from the other side. ▲



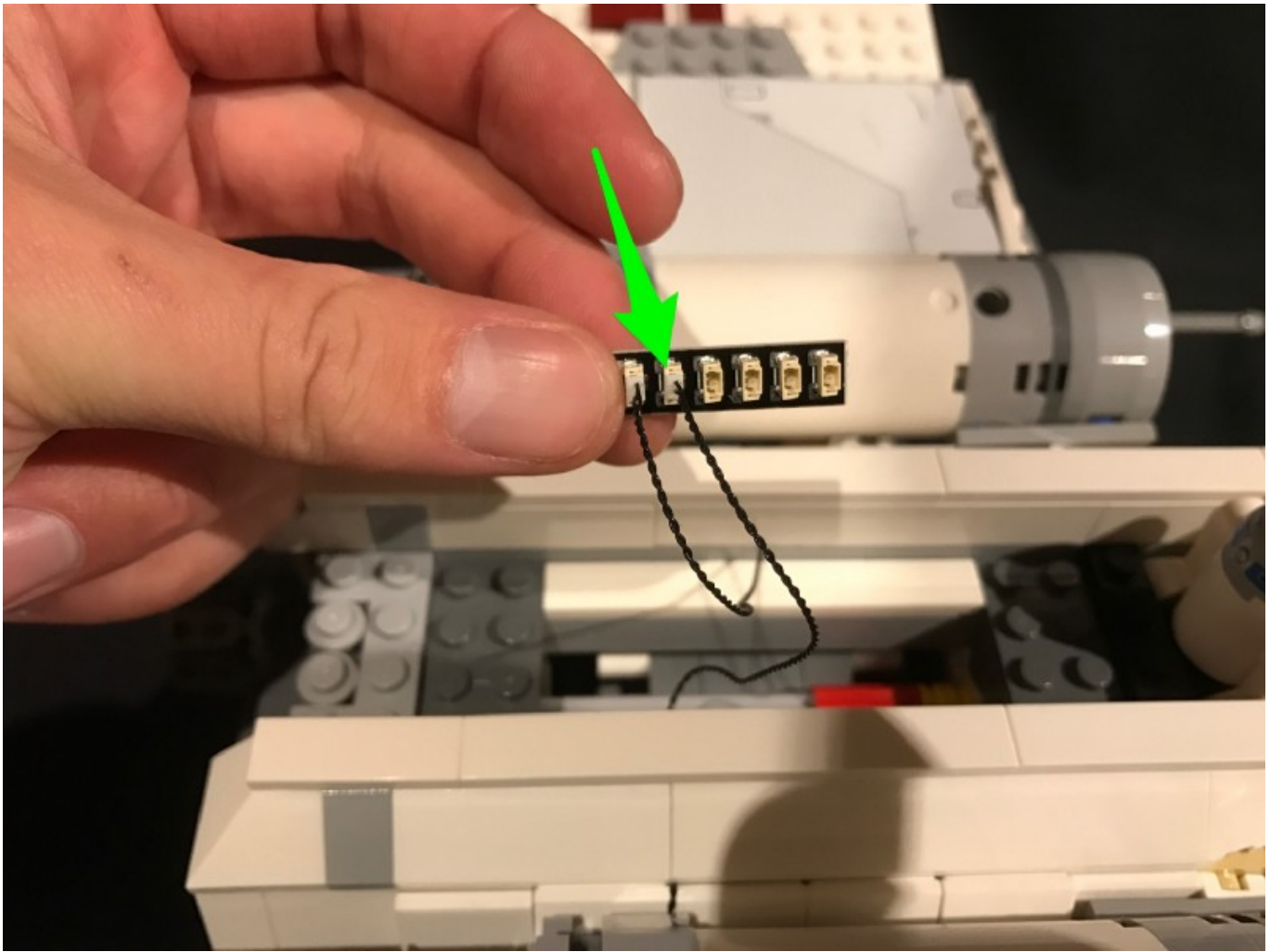
Remove the following pieces around the top of the X-Wing and then pull the cable over and lay in between studs. Reconnect pieces over the top. ▲





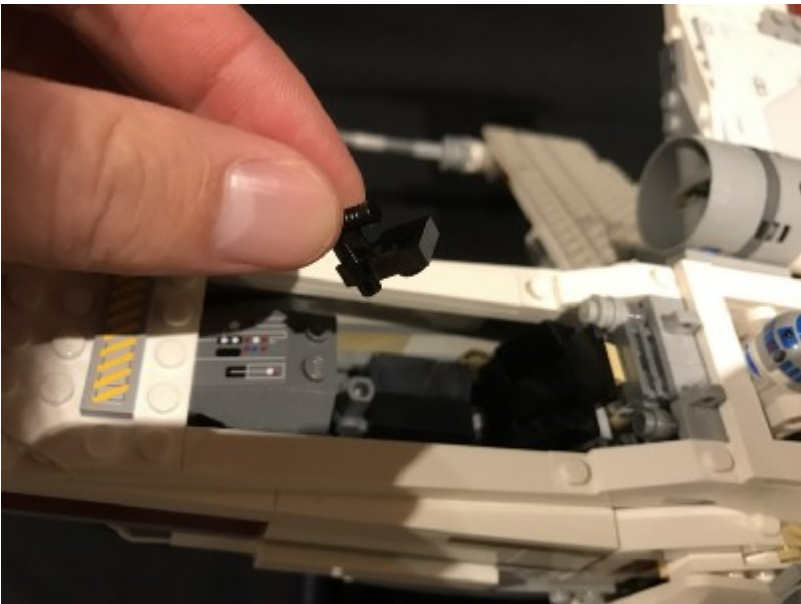
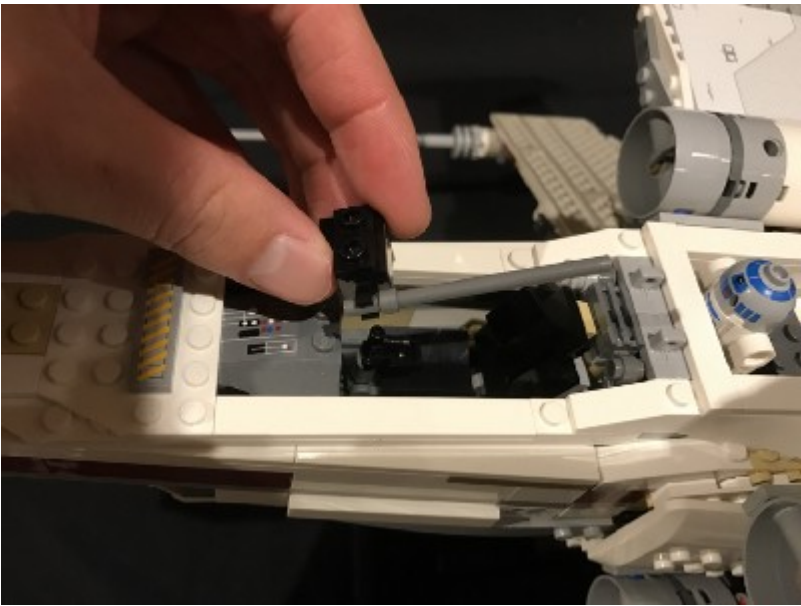
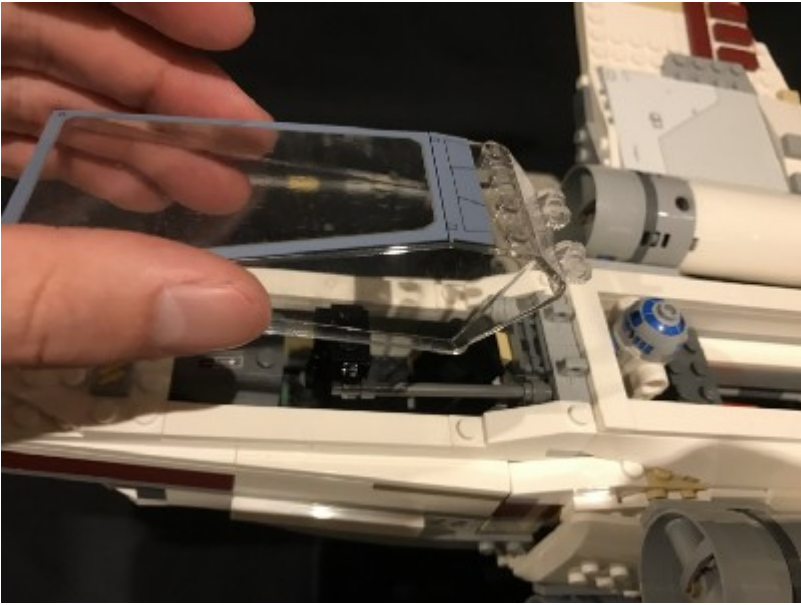


10.) Connect the cable from this side into a spare port on the expansion board.



11.) Remove the following sections of the cockpit to allow us to then remove the joystick section. Disassemble pieces as per below.

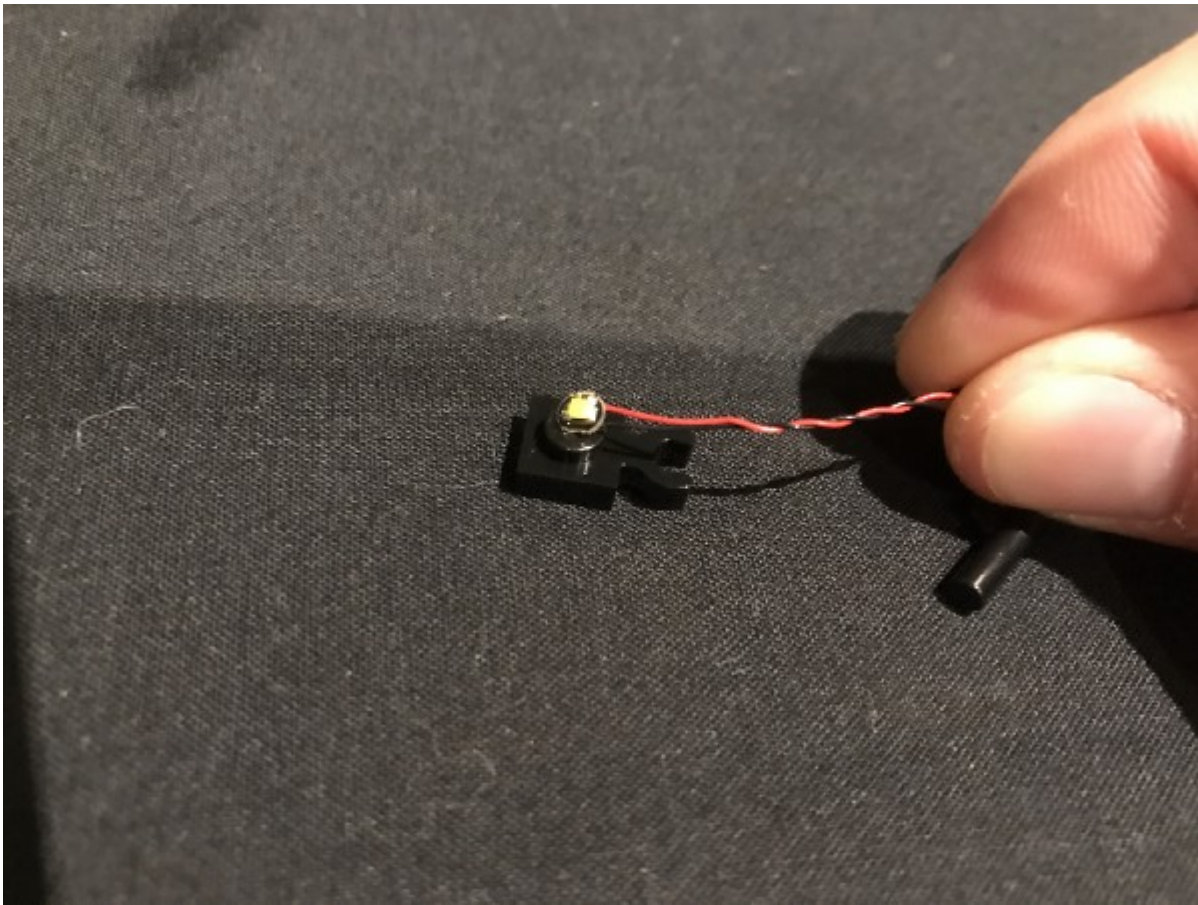




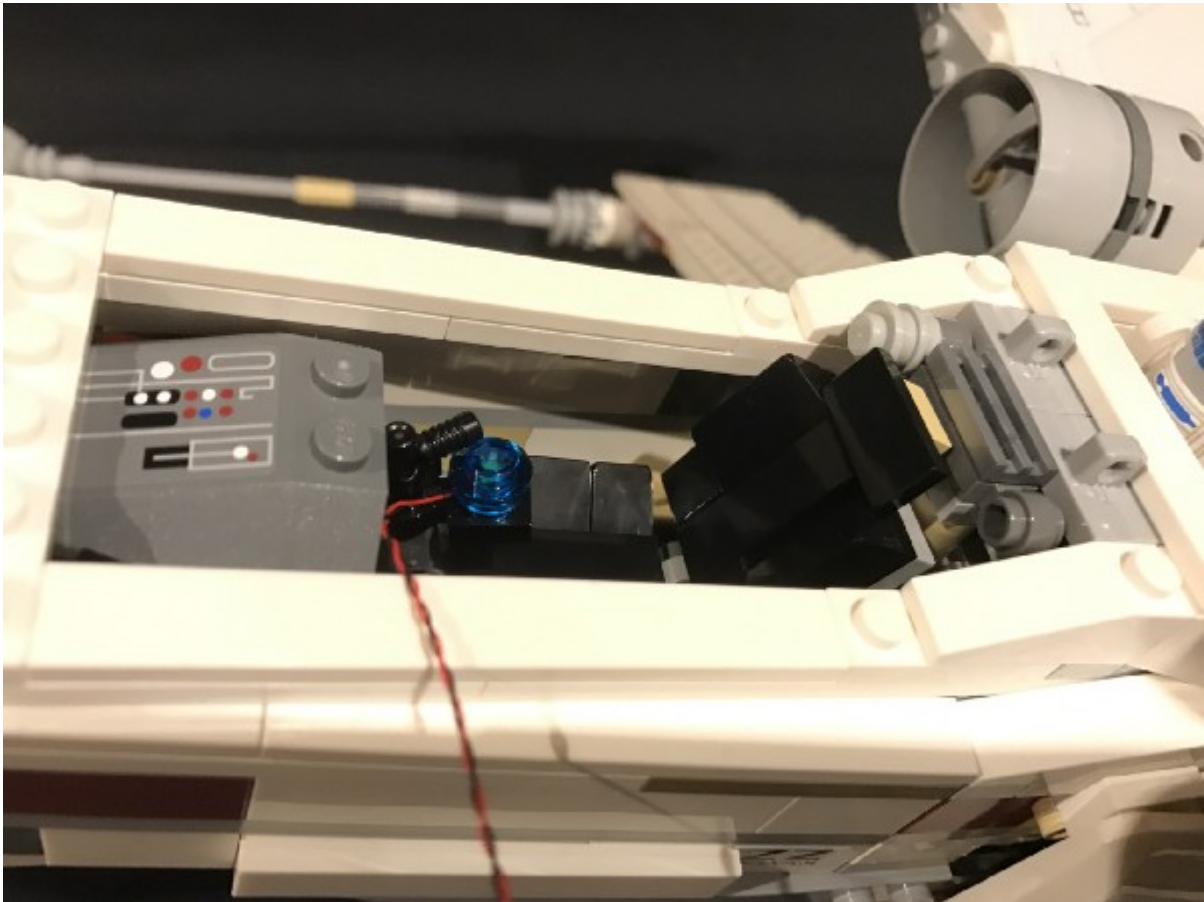
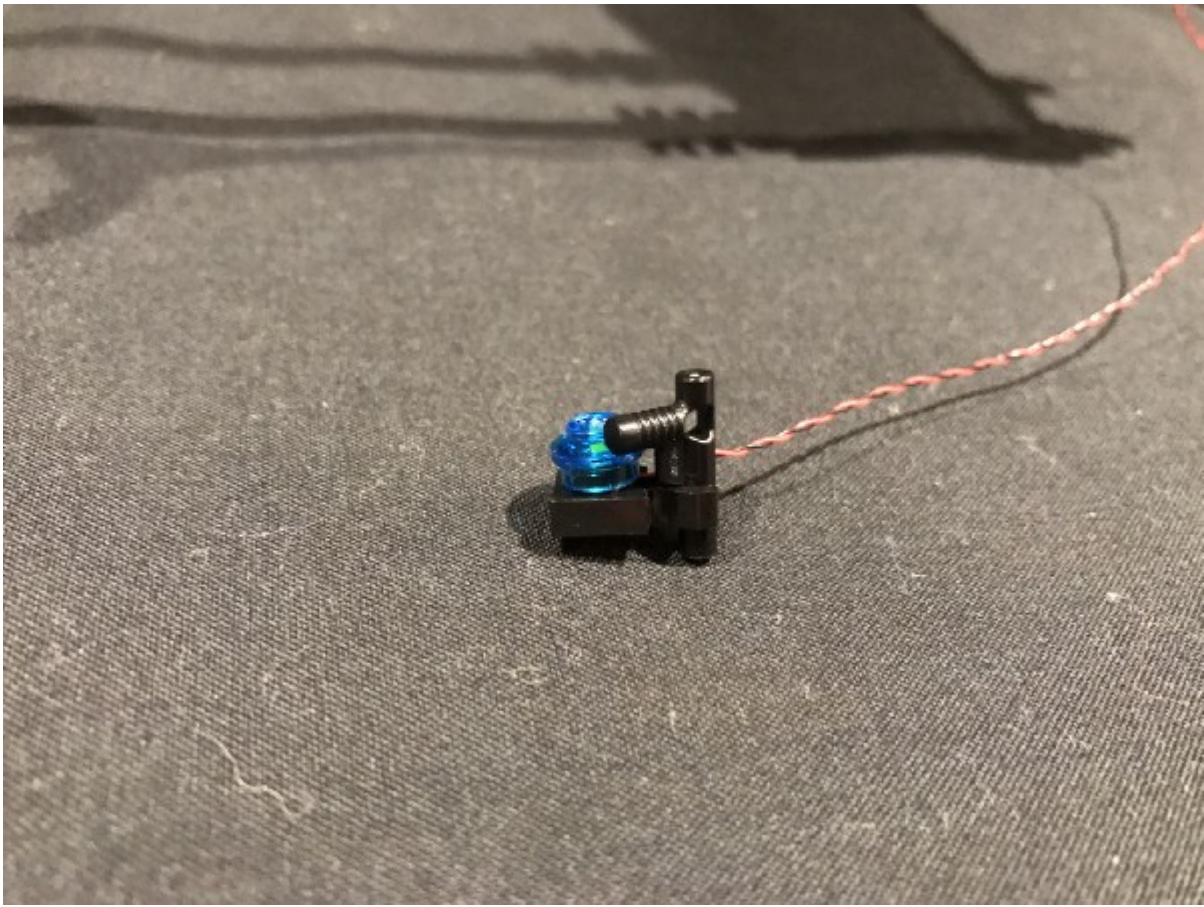


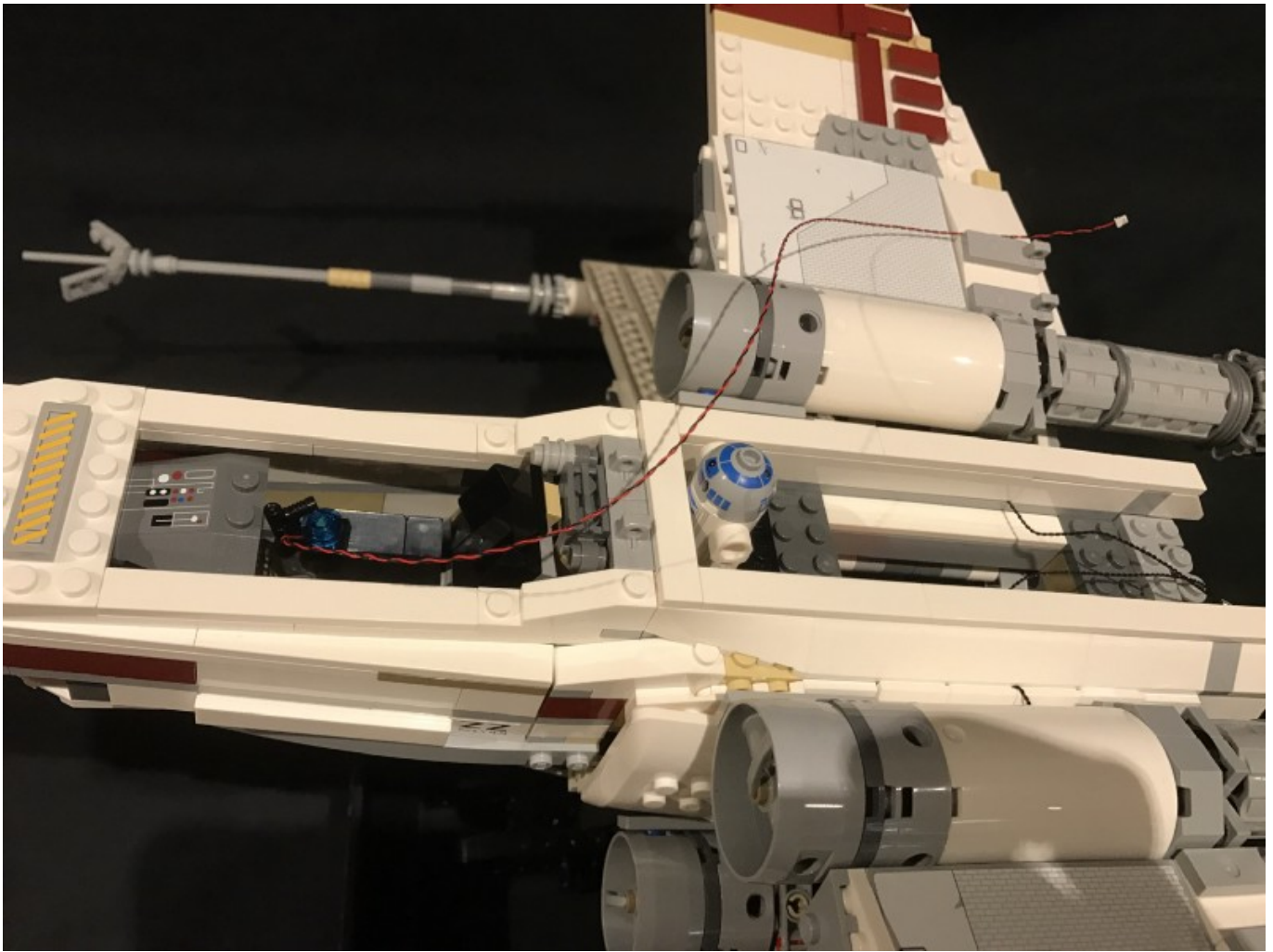
12.) Take a **White 30cm Bit Light** and place it directly over the stud of black plate. Secure the Bit Light in place by connecting the provided **LEGO Trans Blue 1×1 Plate** over the top.



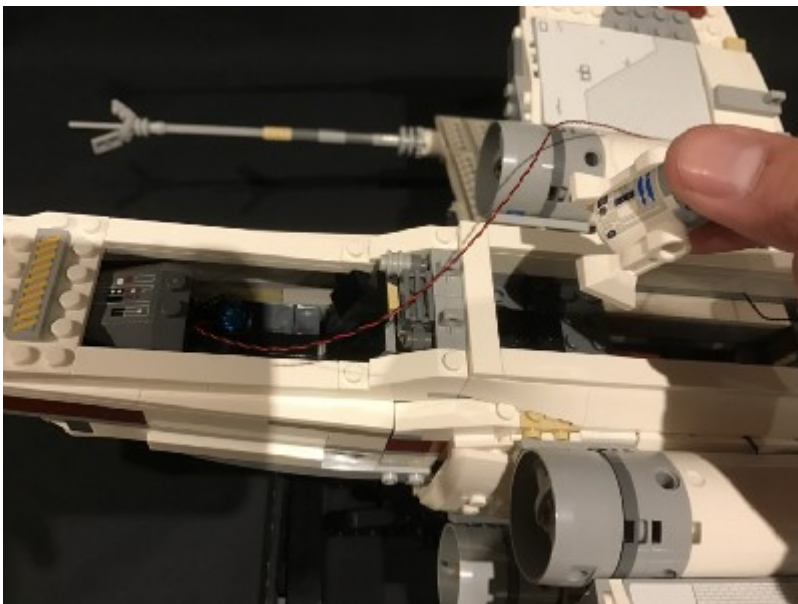


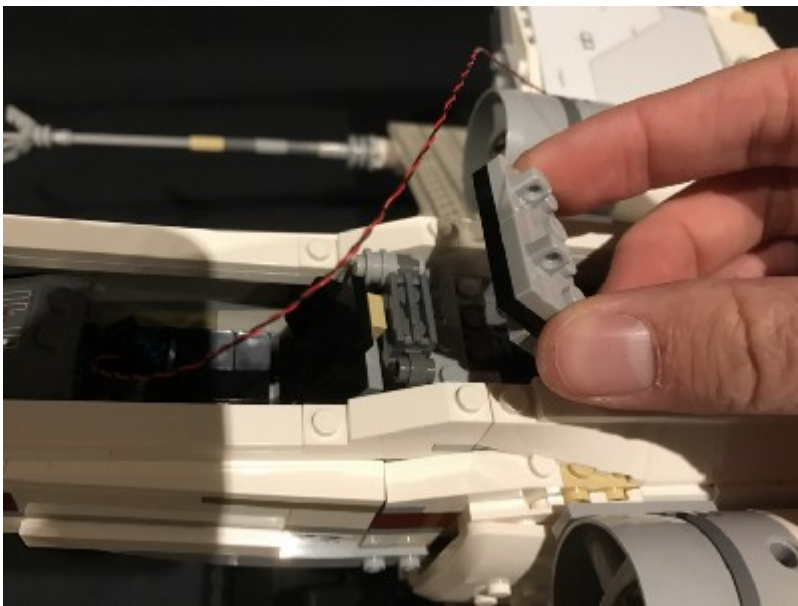
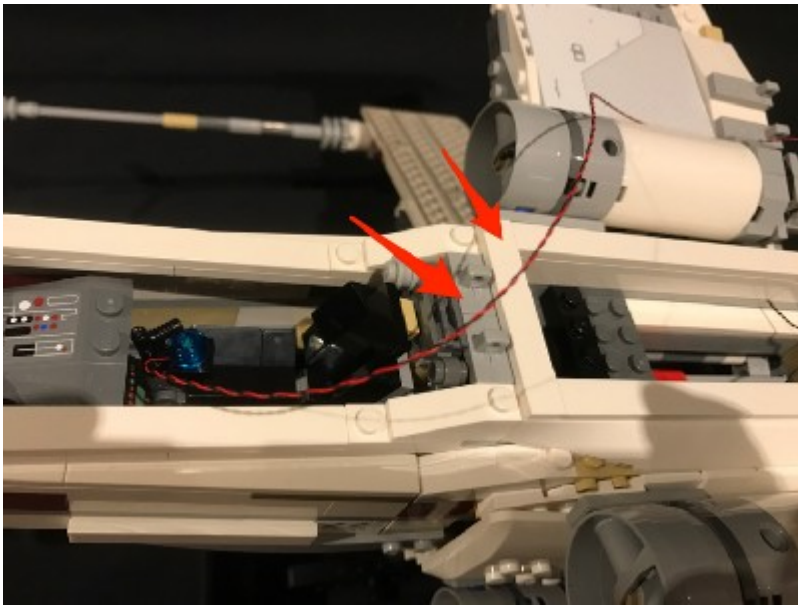
Reconnect this plate (this time with the trans blue plate facing up) back to the joystick and then reconnect back to the cockpit. ▲





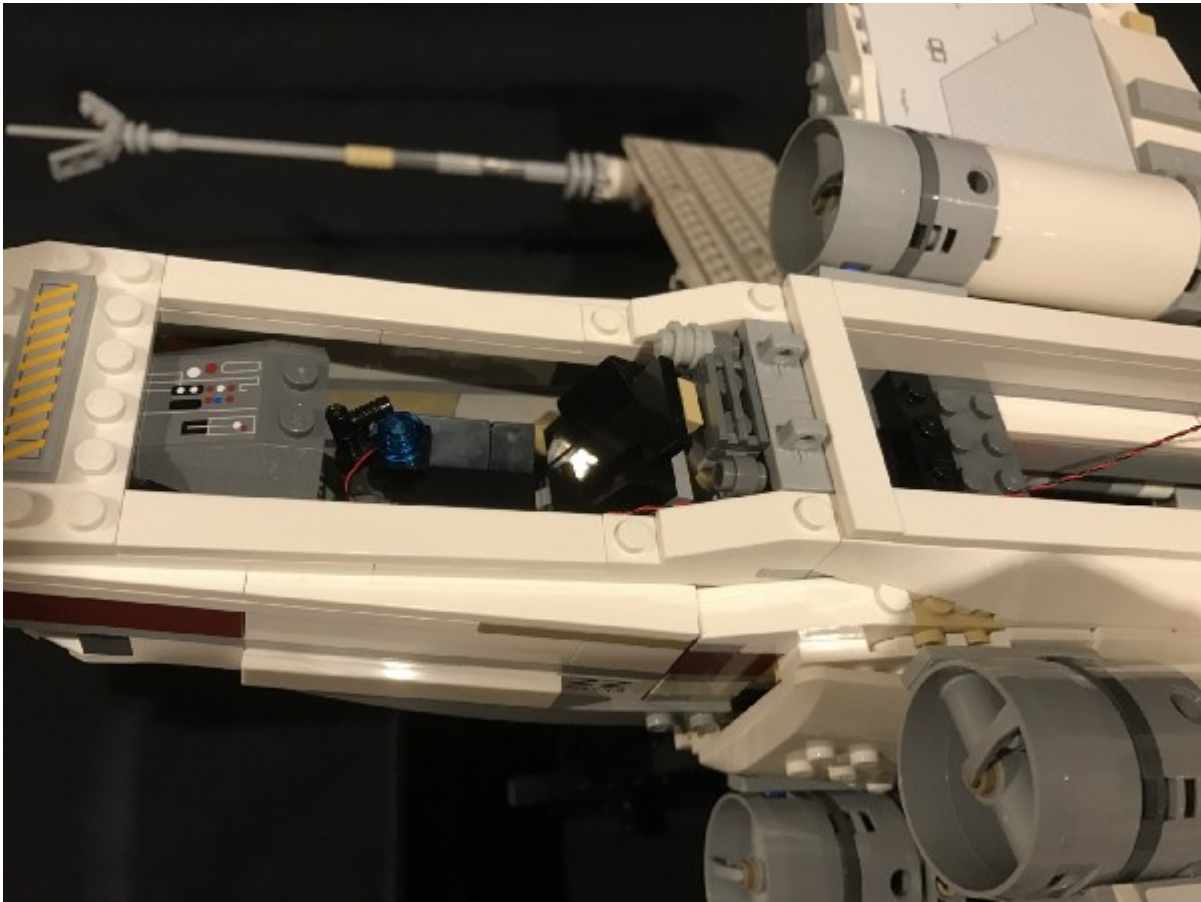
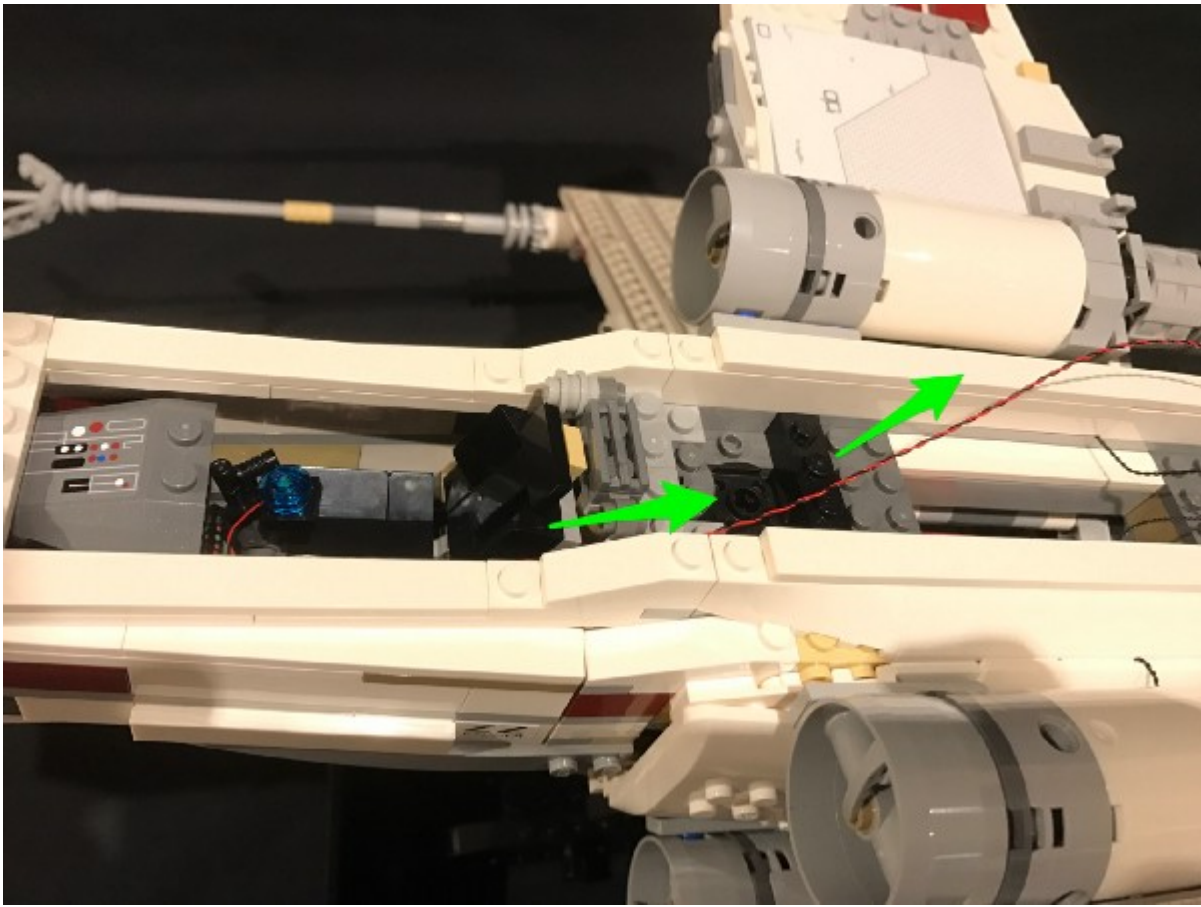
13.) Remove the following sections (including R2D2) to allow us to pull the Bit Light cable toward the back.





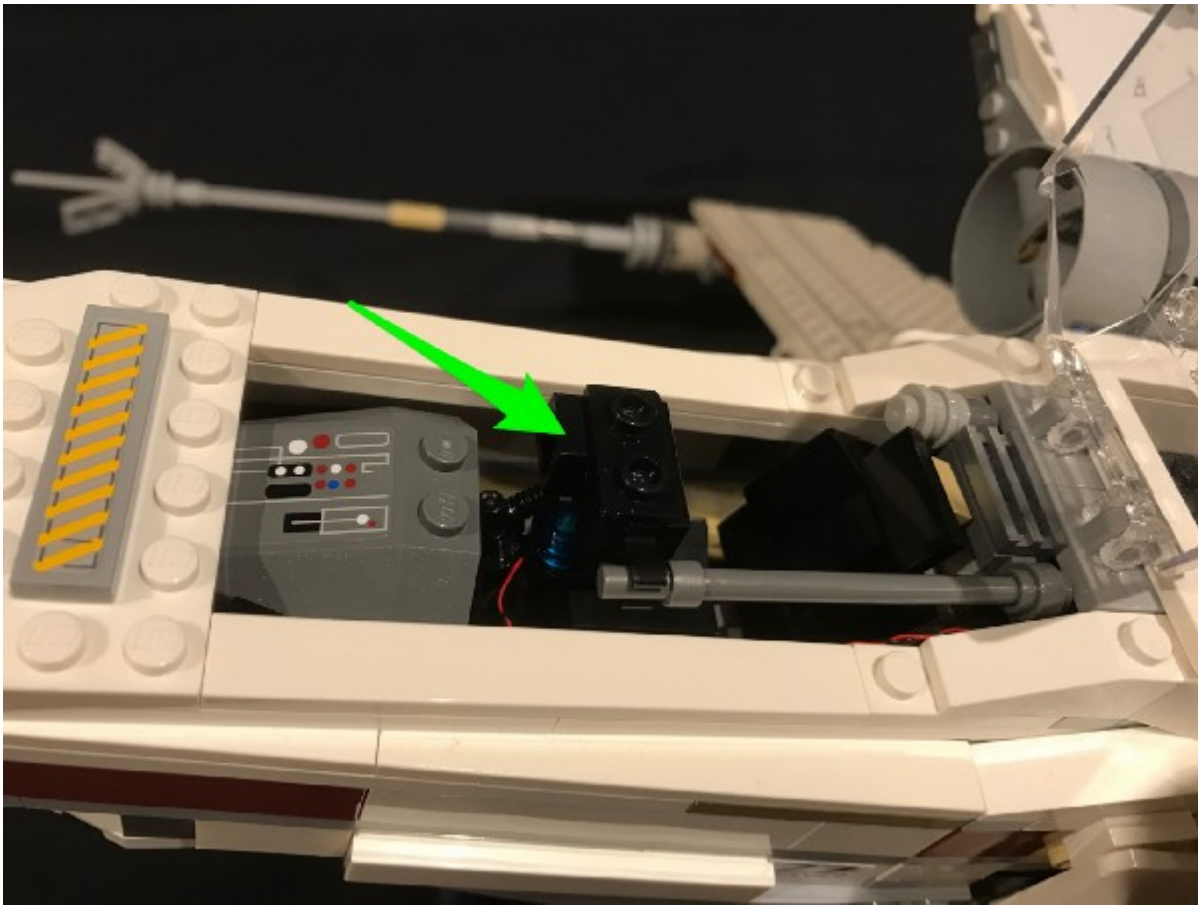
Carefully lay the cable in between studs and then reconnect pieces we removed over the top.





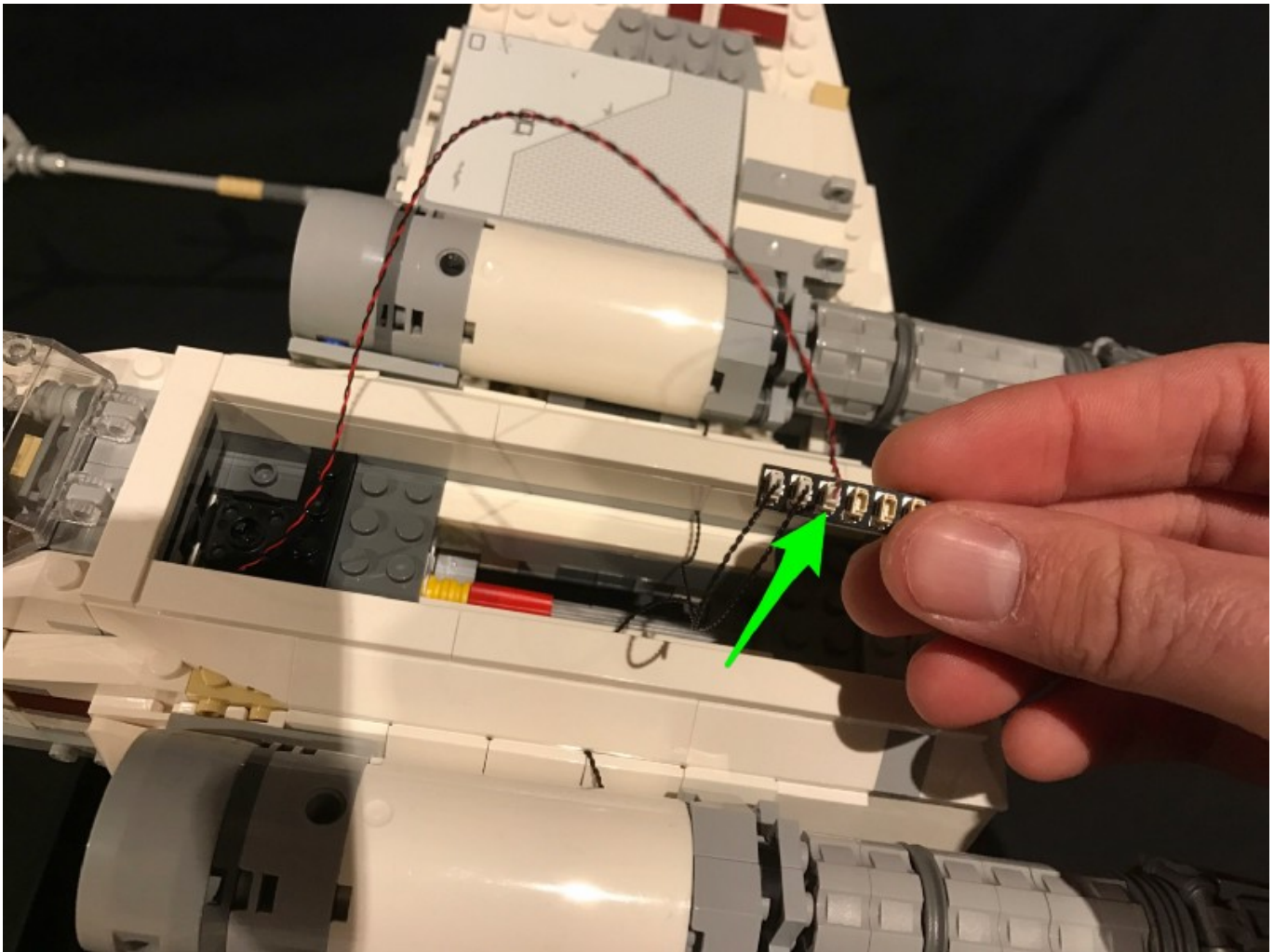
Reconnect remaining sections of the cockpit





14.) Take the Bit Light cable from the cockpit and then connect it to the next available port on the 6-port expansion board.

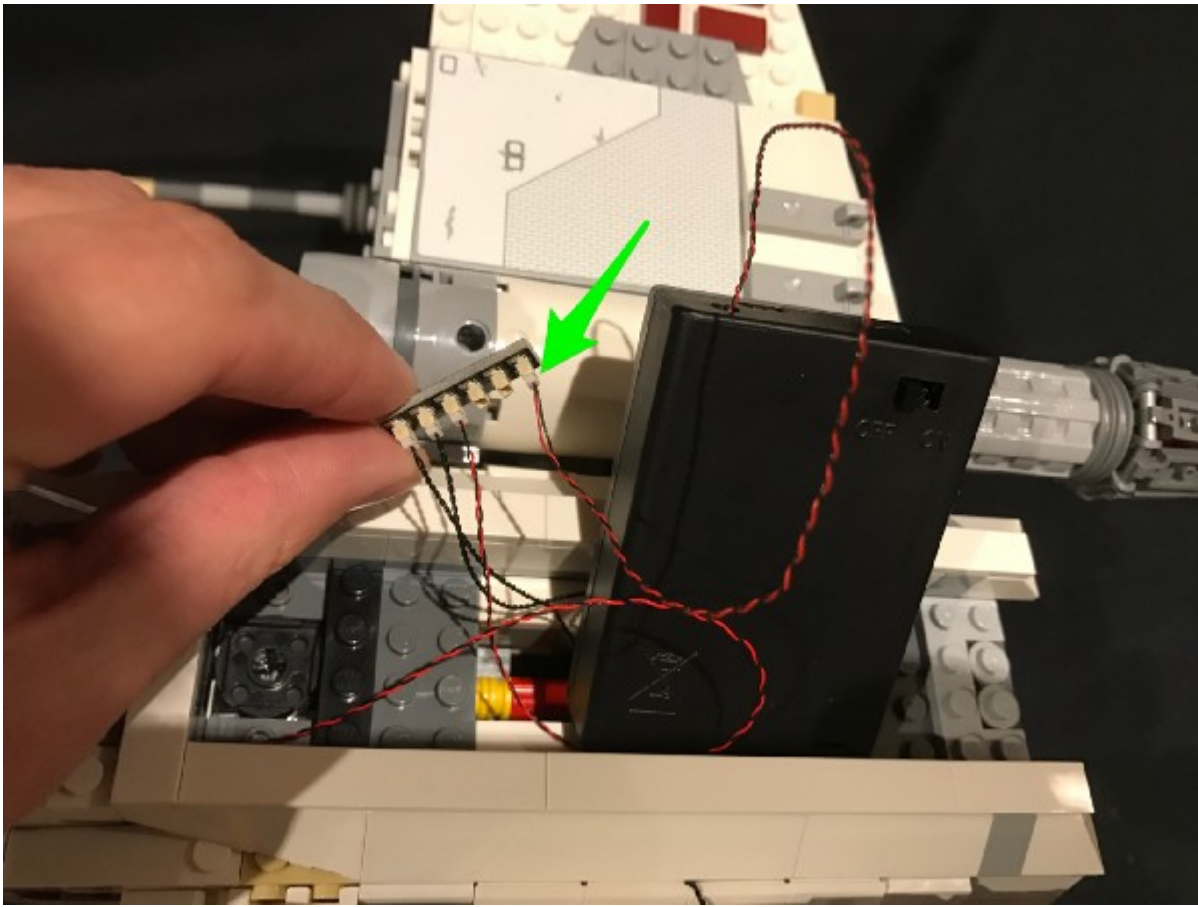




Take this time to test the lights we have installed so far. To do so, take the **AA Battery Pack** and insert 3x AA batteries into it. Take the battery pack cable and connect it to the expansion board. Turn the battery pack 'on' and verify all is working OK.

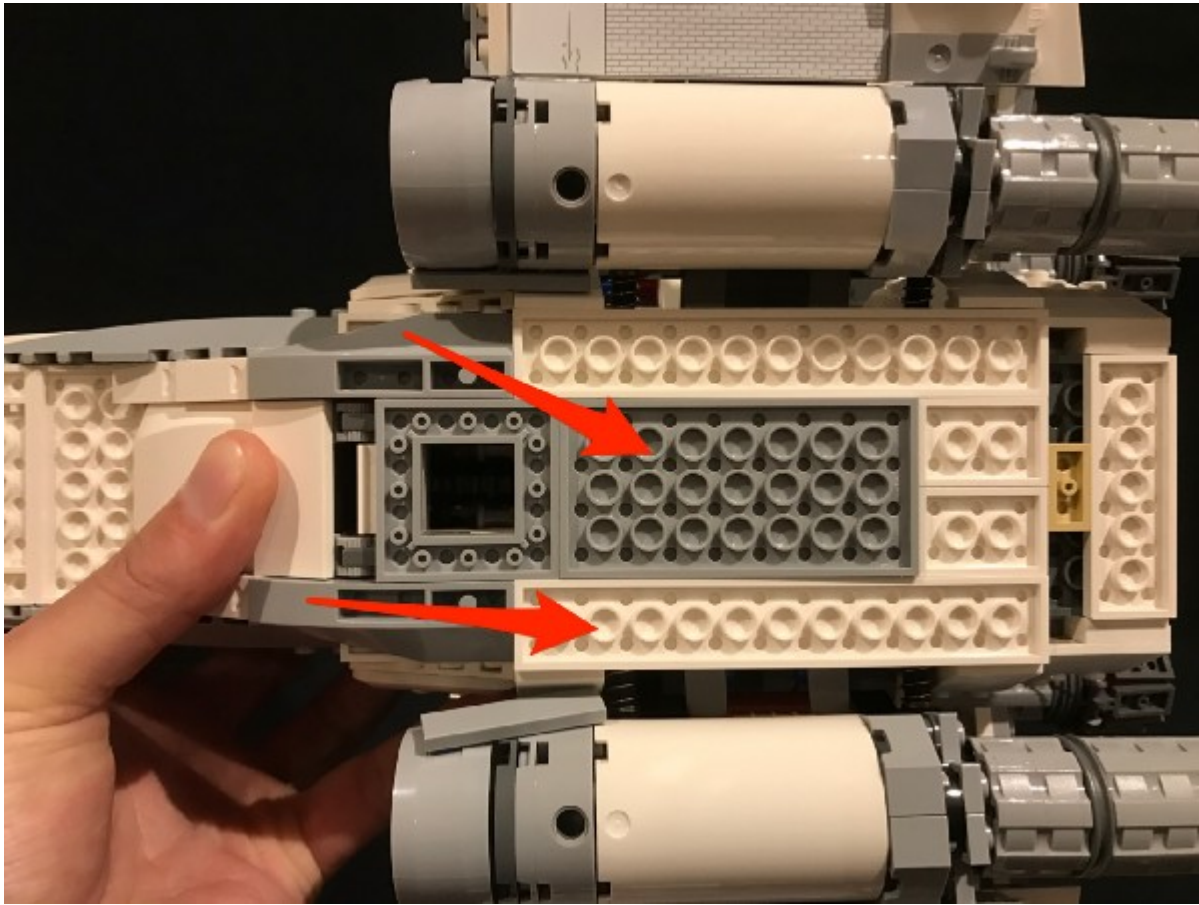
If you're using the **USB Power Cable**, connect this to the board this instead of the battery pack, and connect the other end to a **USB Power Bank** or **wall adaptor** (sold separately) and turn it ON to test the lights are working OK.

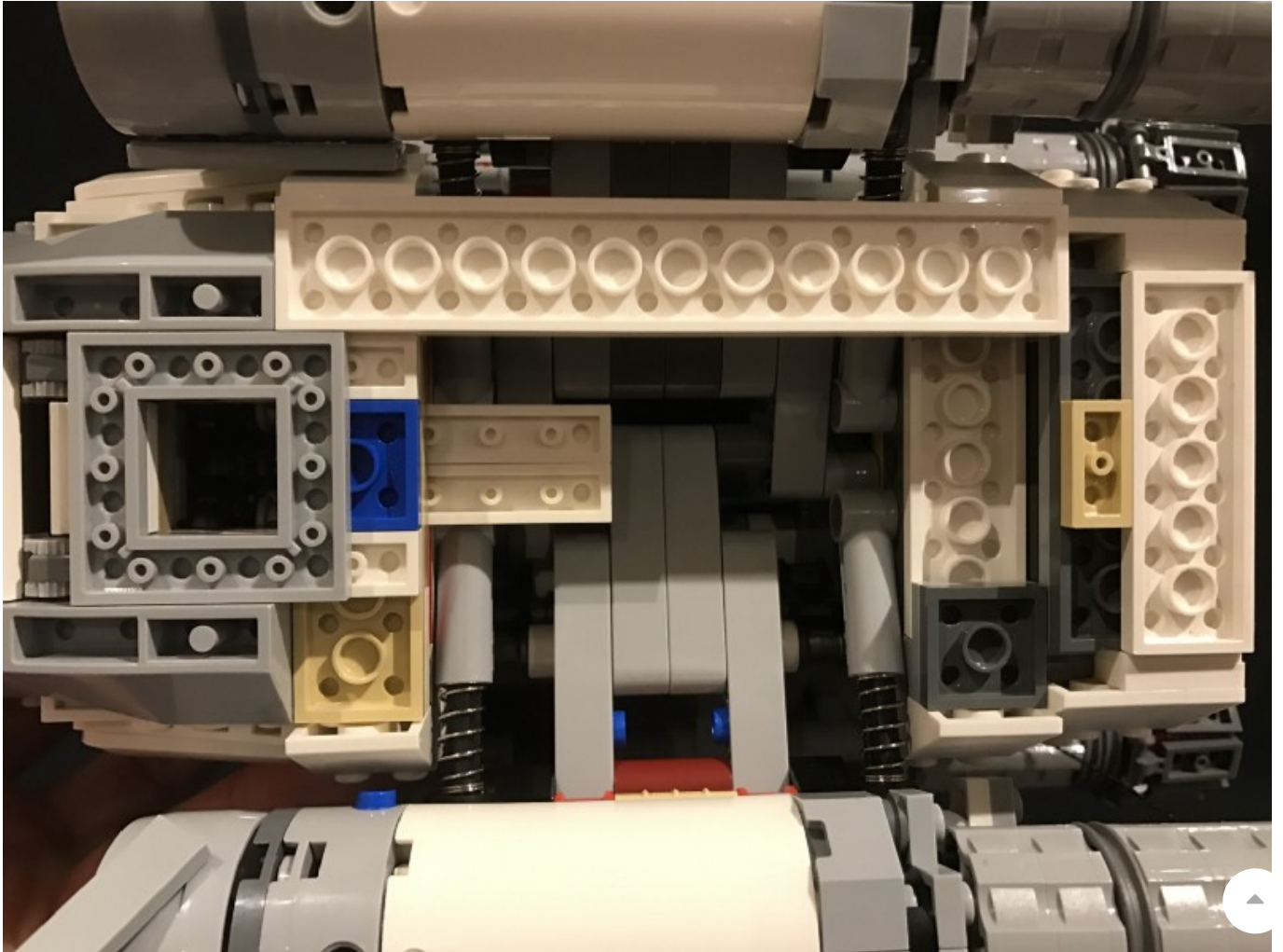
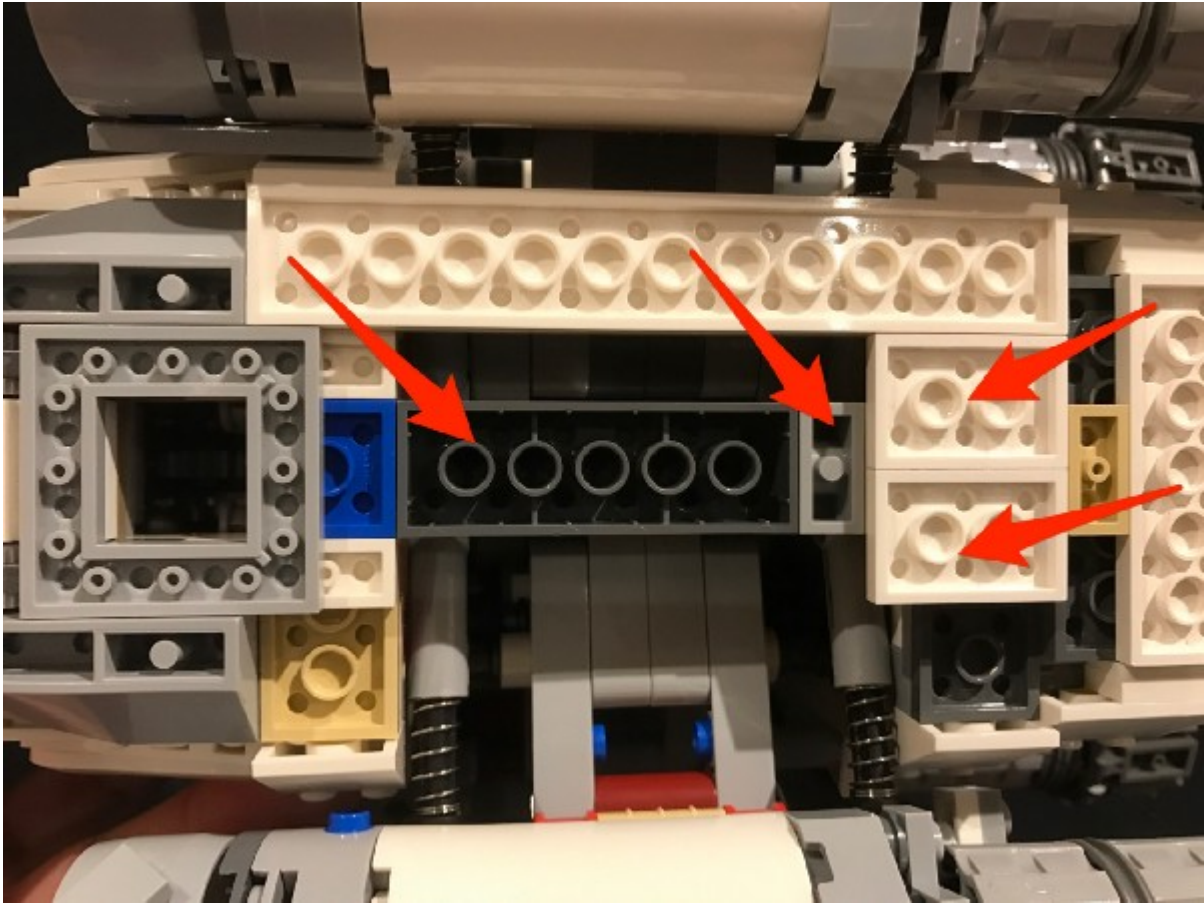




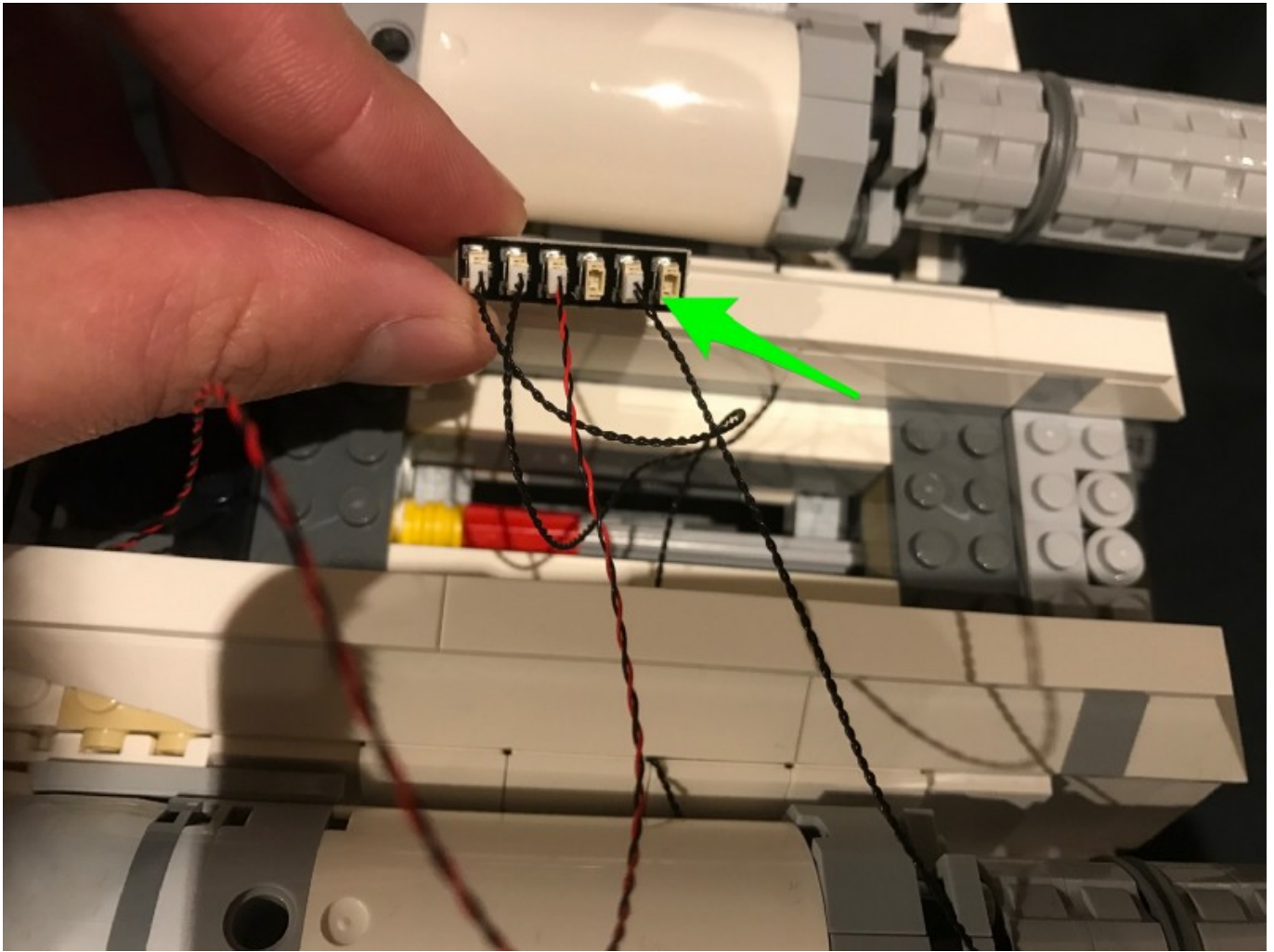
Once you have confirmed all is working OK, disconnect the battery pack /usb cable from the expansion board and move on to the next step. ▲

15.) Turn the X-Wing over so that you can access underneath and then remove the following sections.



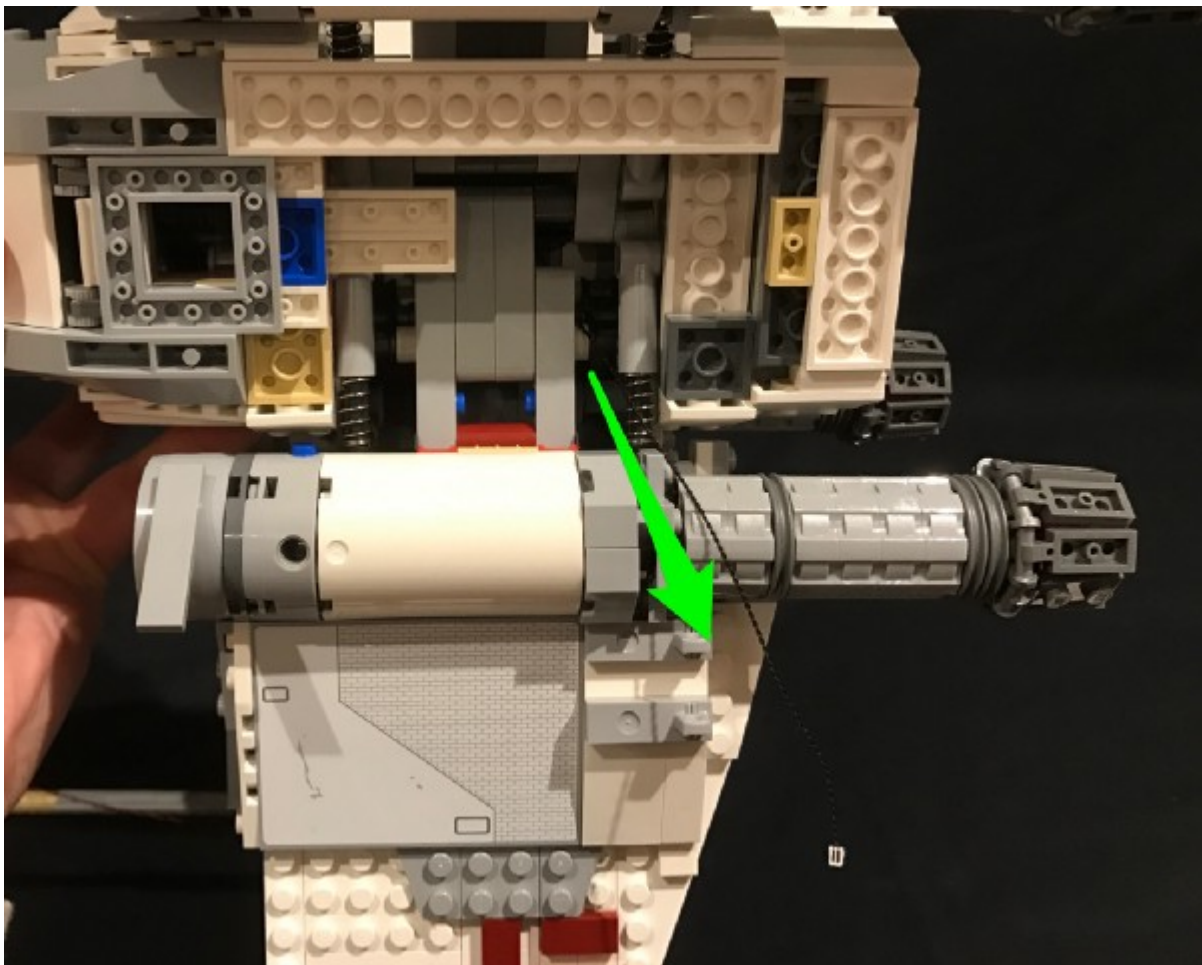
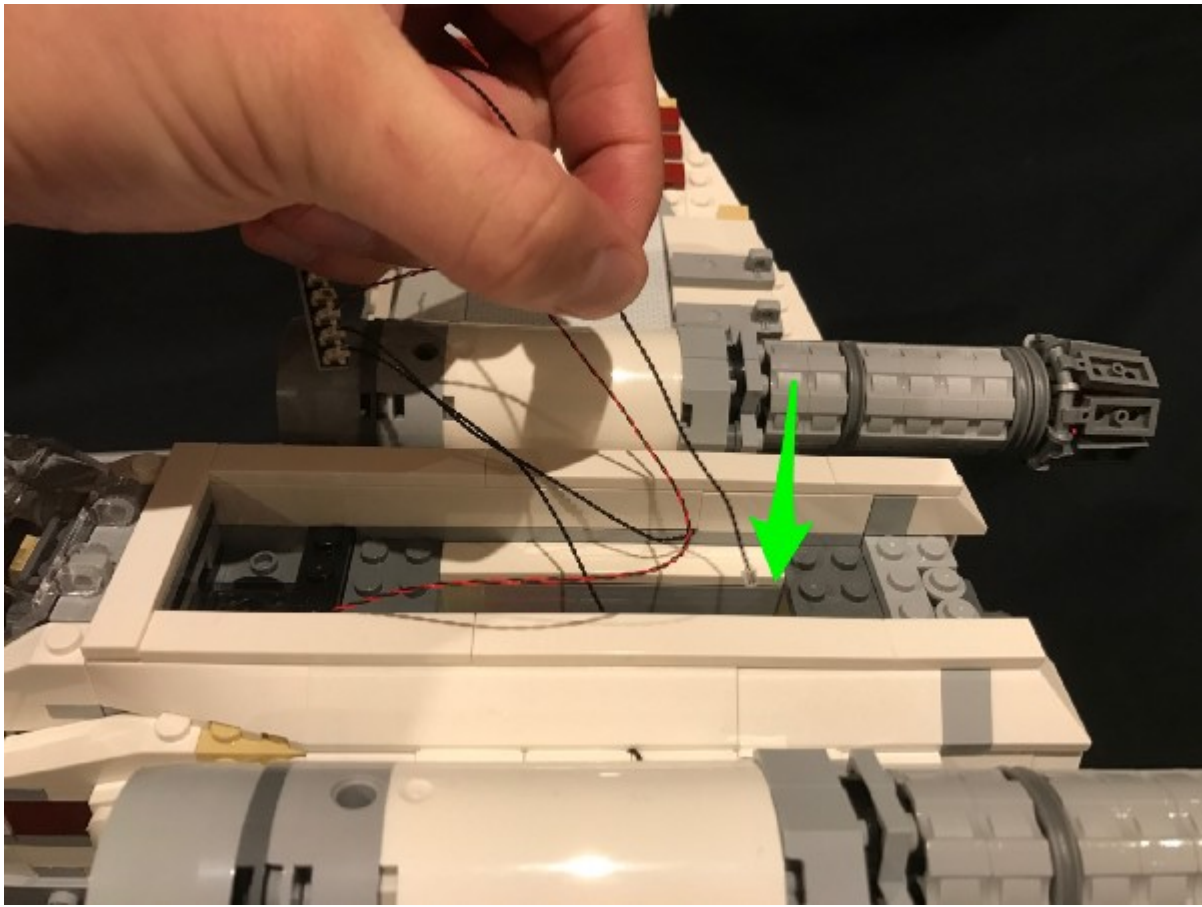


16.) Turn the X-Wing back over and then take a new **15cm Connecting Cable** and connect it to a spare port on the 6-port expansion board.

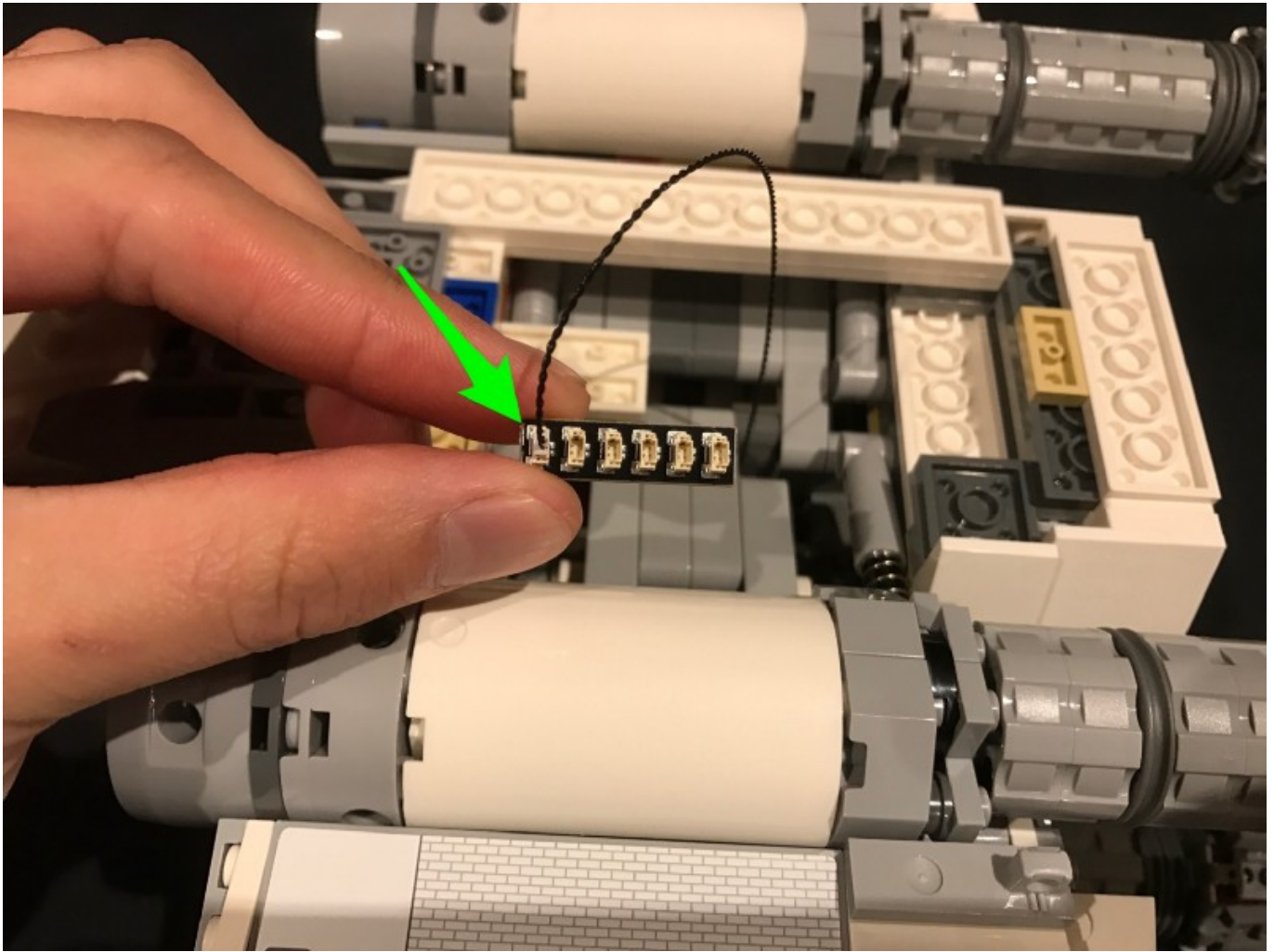


Thread the other end of this cable down through the spacing and then turn the X-Wing over to then pull the cable out from above.



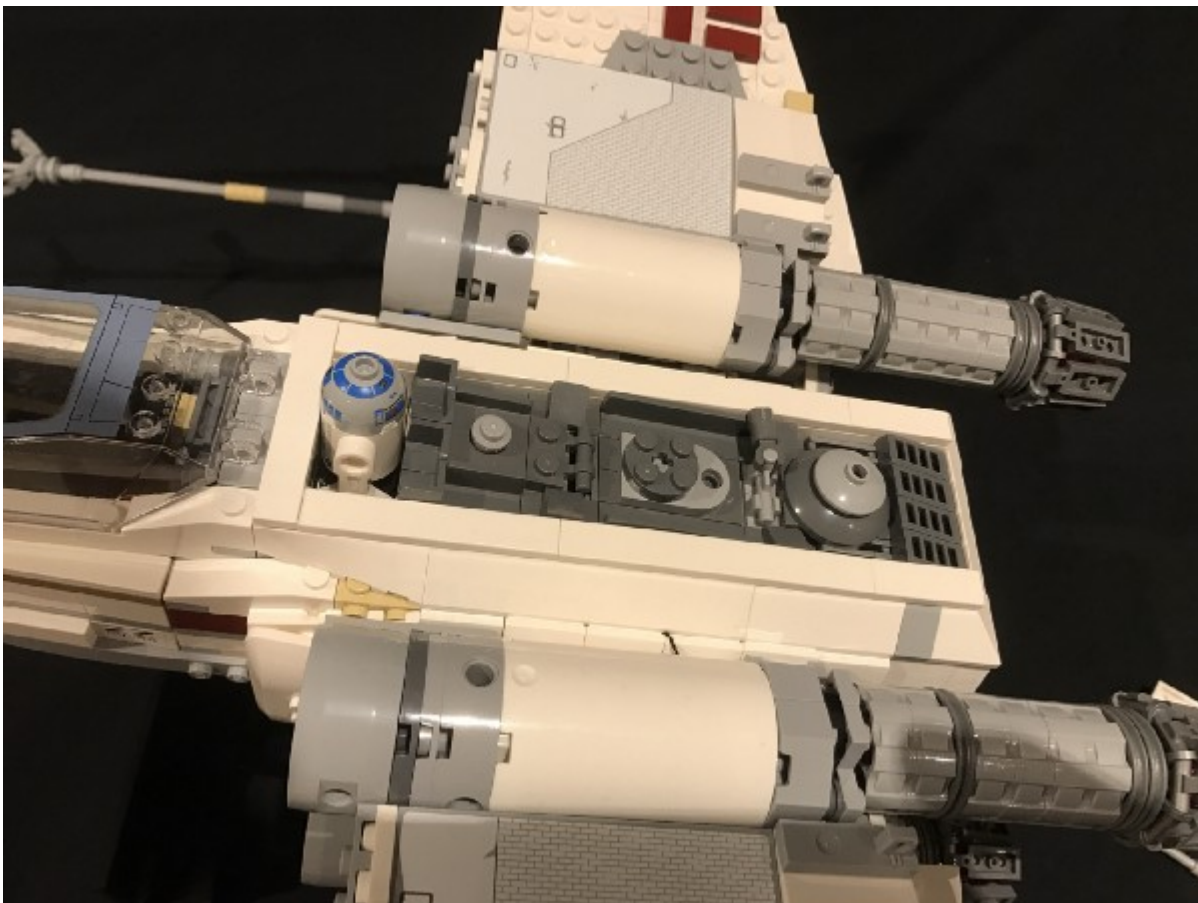
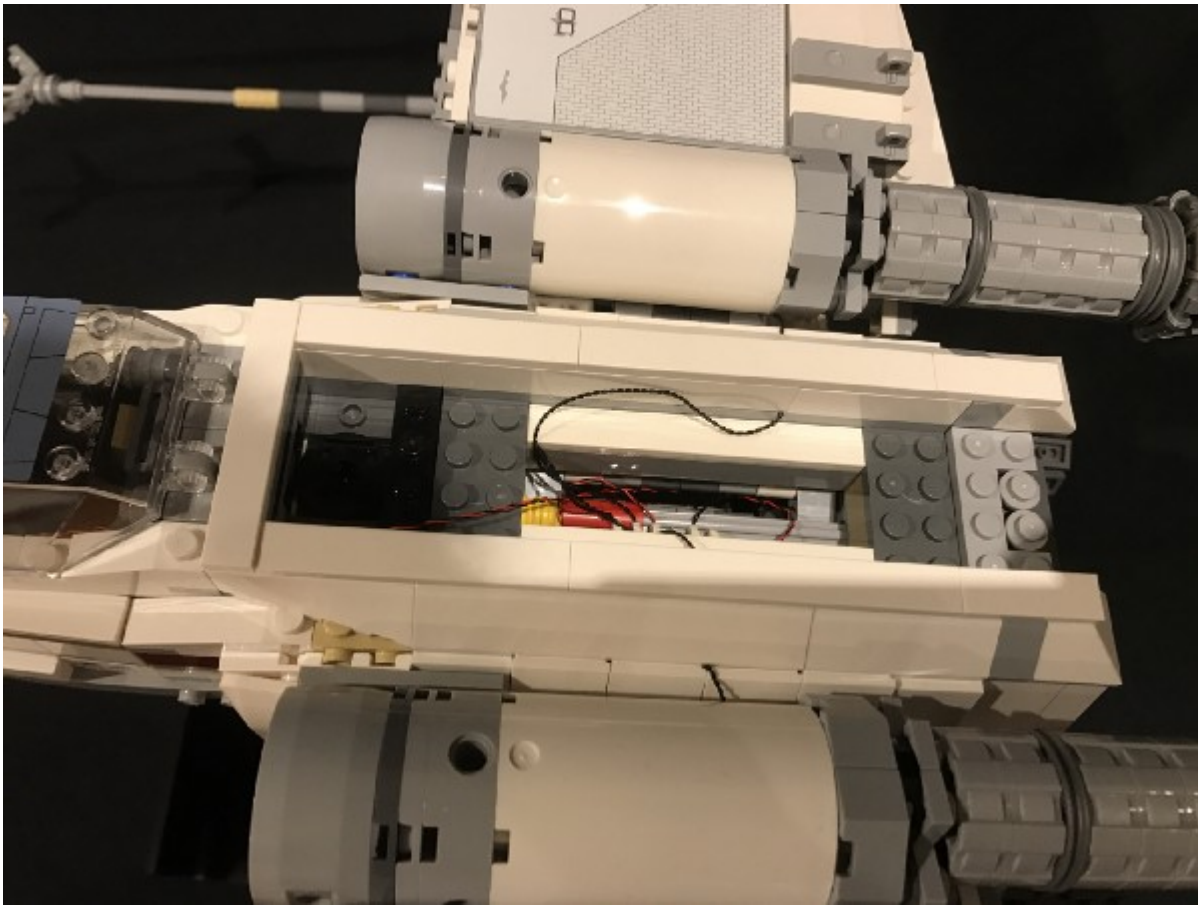


17.) Take another **6-Port Expansion Board** and then connect the other end of the 15cm connecting cable we pulled down into one of the available ports.



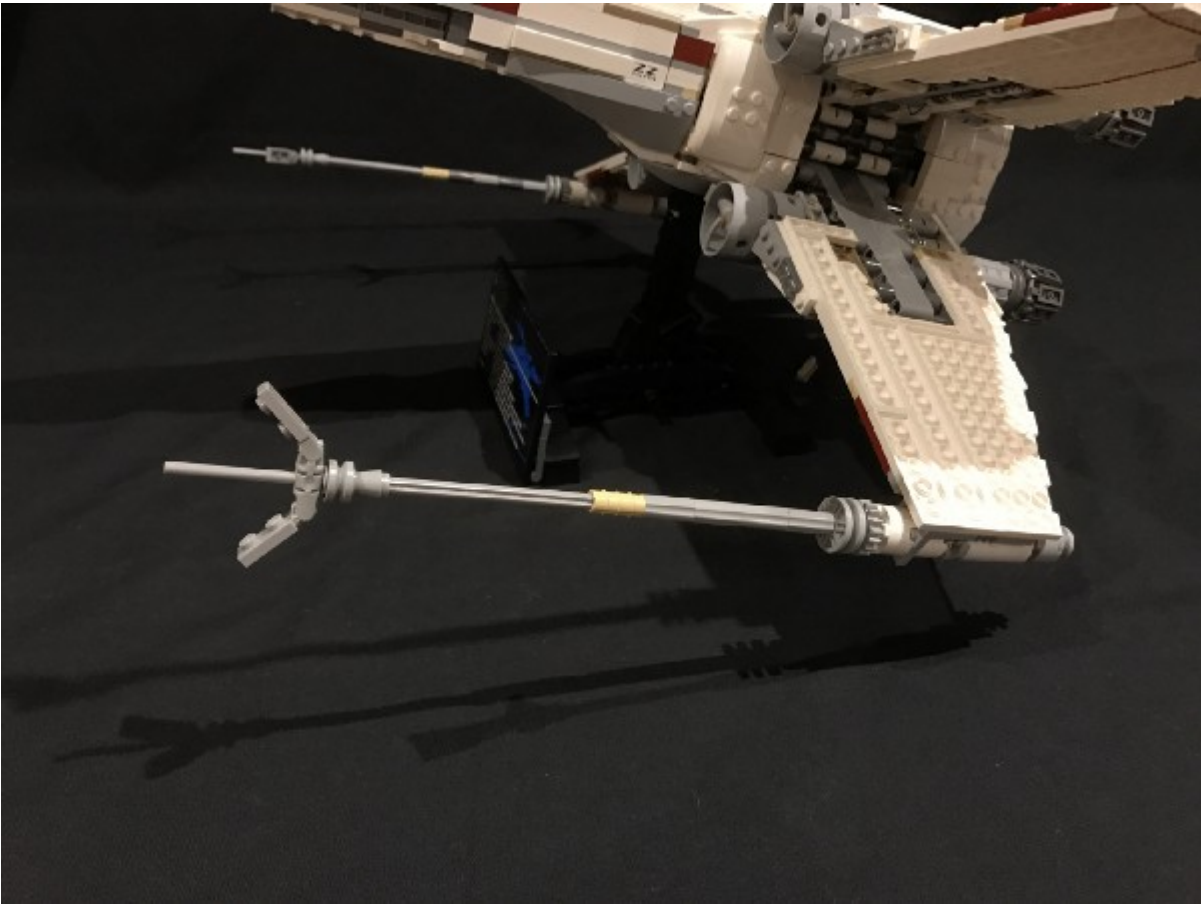
Turn the X-Wing back over again and then neaten up all the cables by tucking them as well as the expansion board in through the space. Reconnect R2D2 and the remaining sections we removed previously.

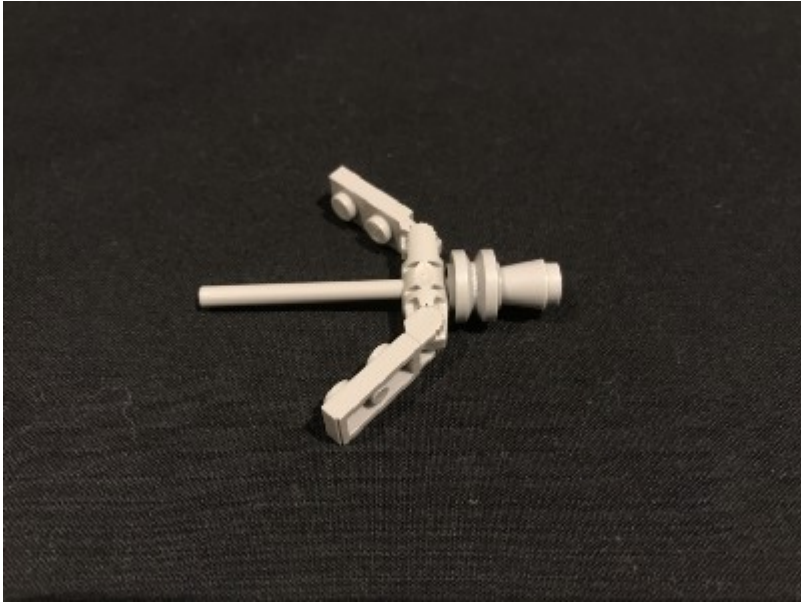
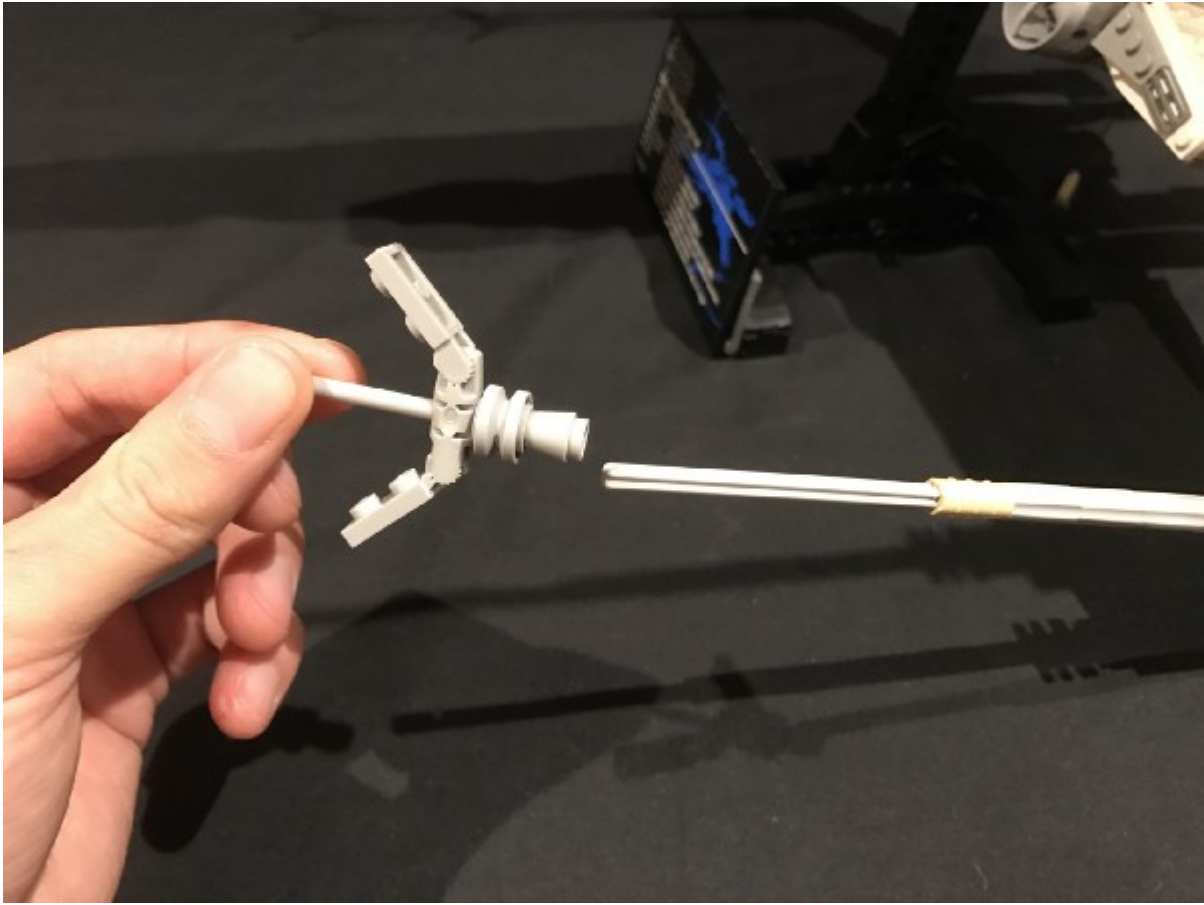


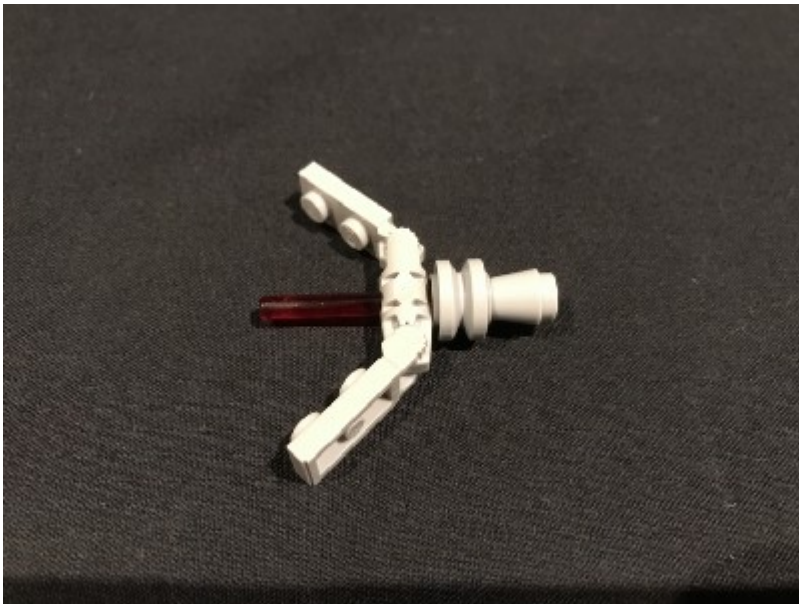
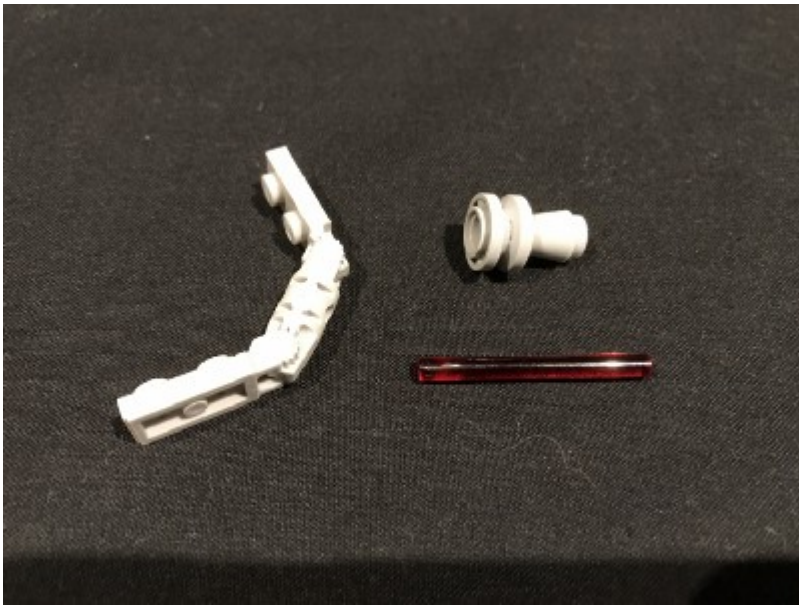


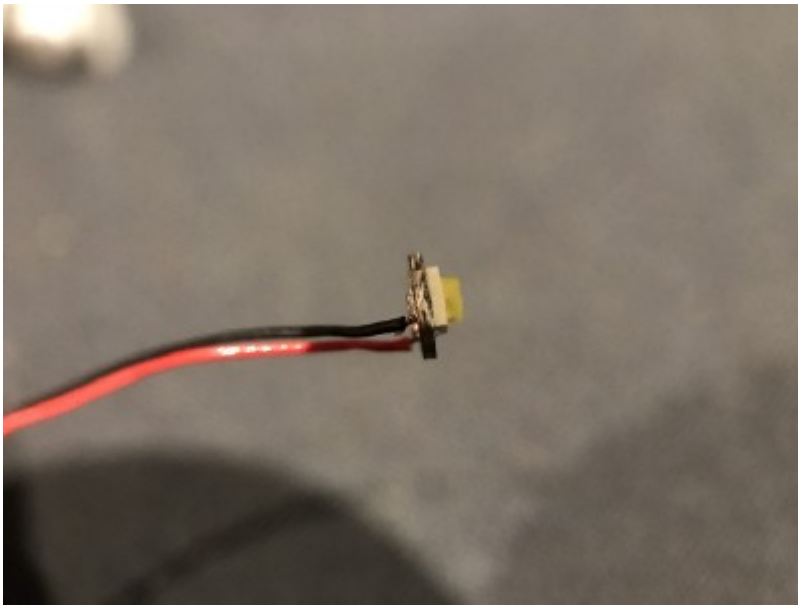
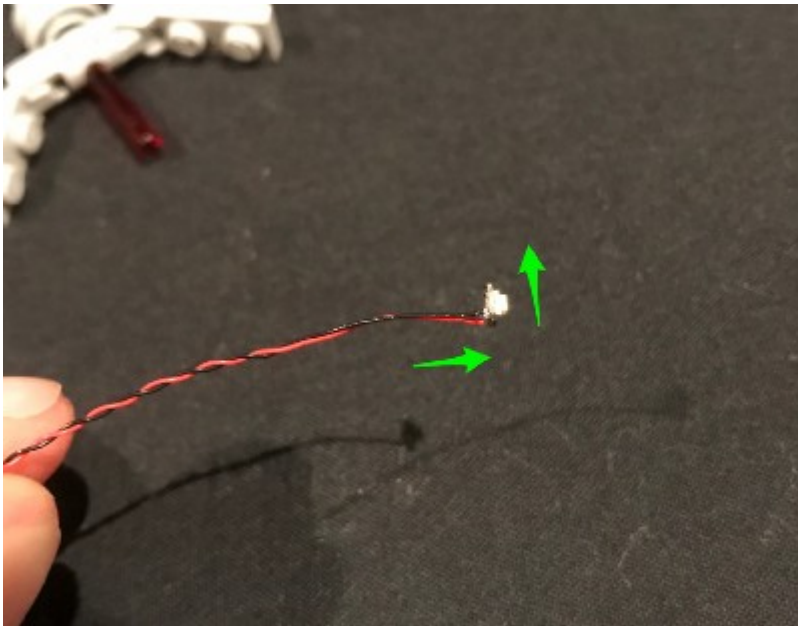
18.) We will now proceed to lighting the bottom cannons and wings on each side starting with the left section. Follow the same methods we used for the upper

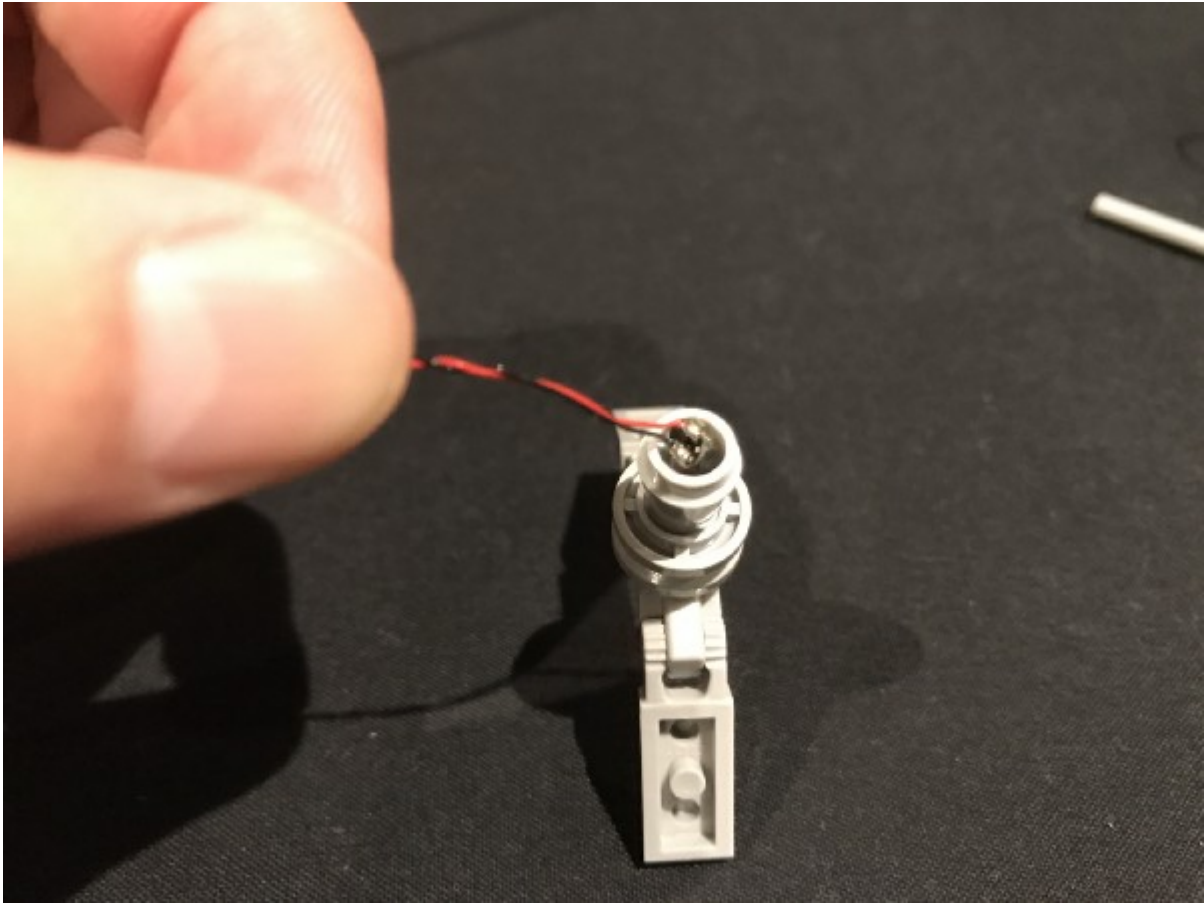
cannons to install another **White Flashing 30cm Bit Light** as well as provided **Trans Red Saber Bar**.

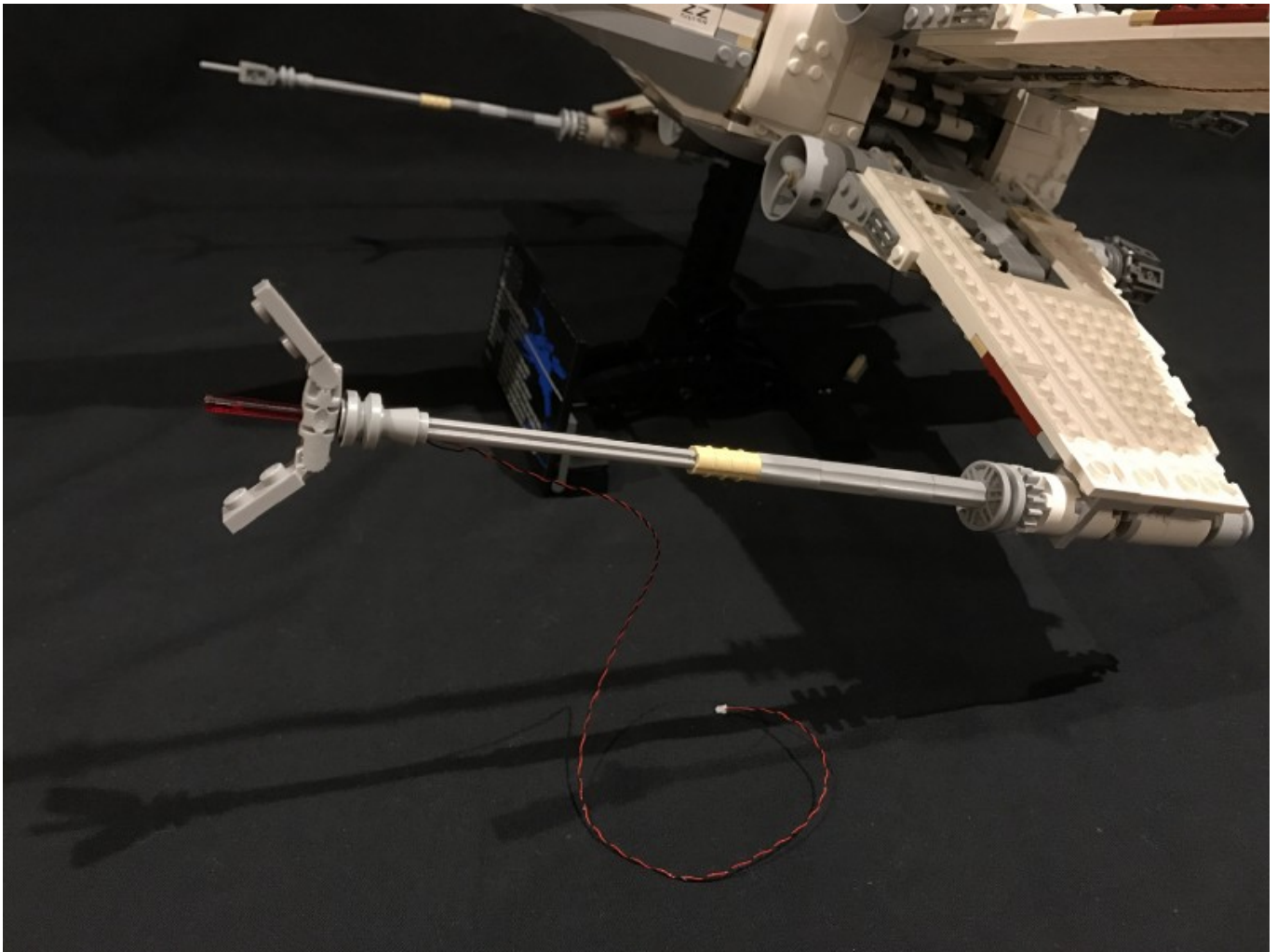




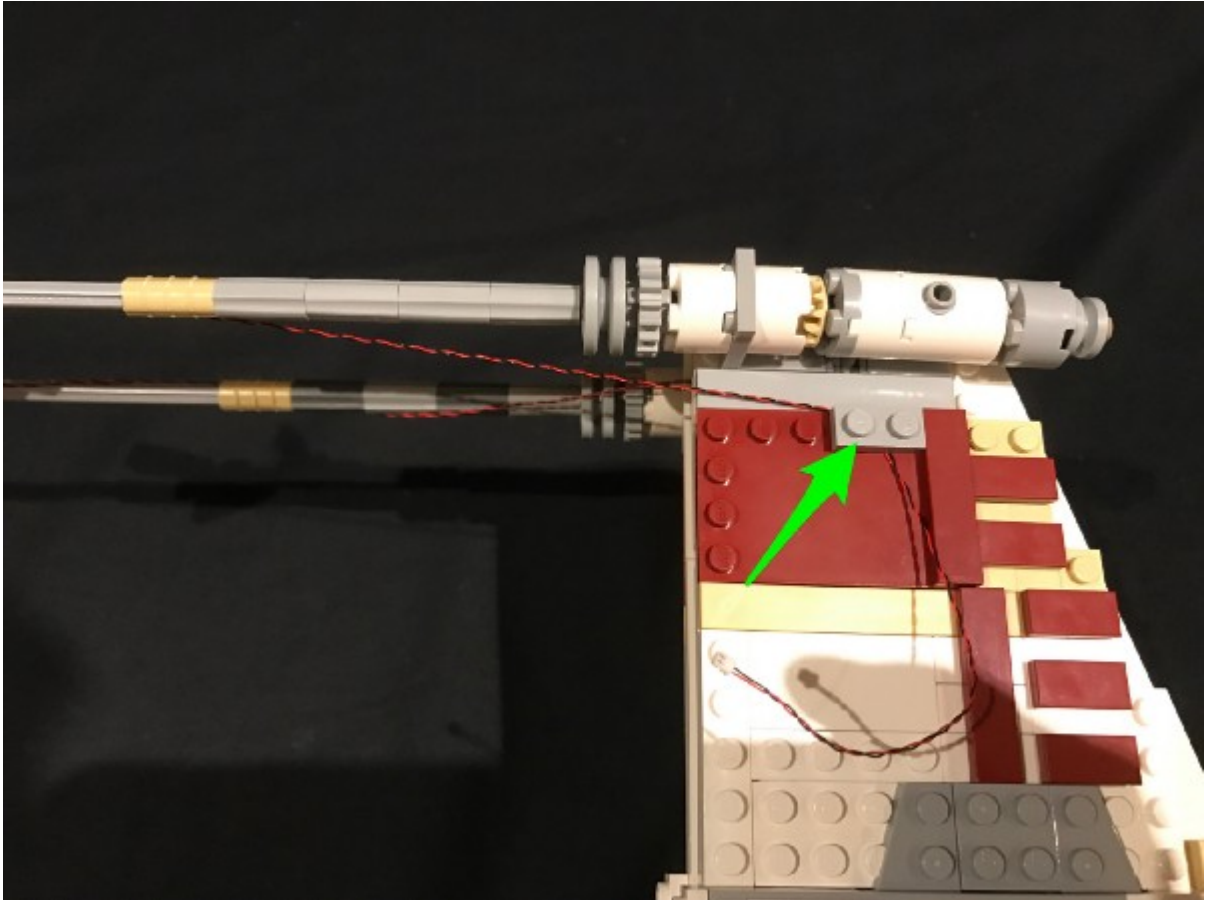
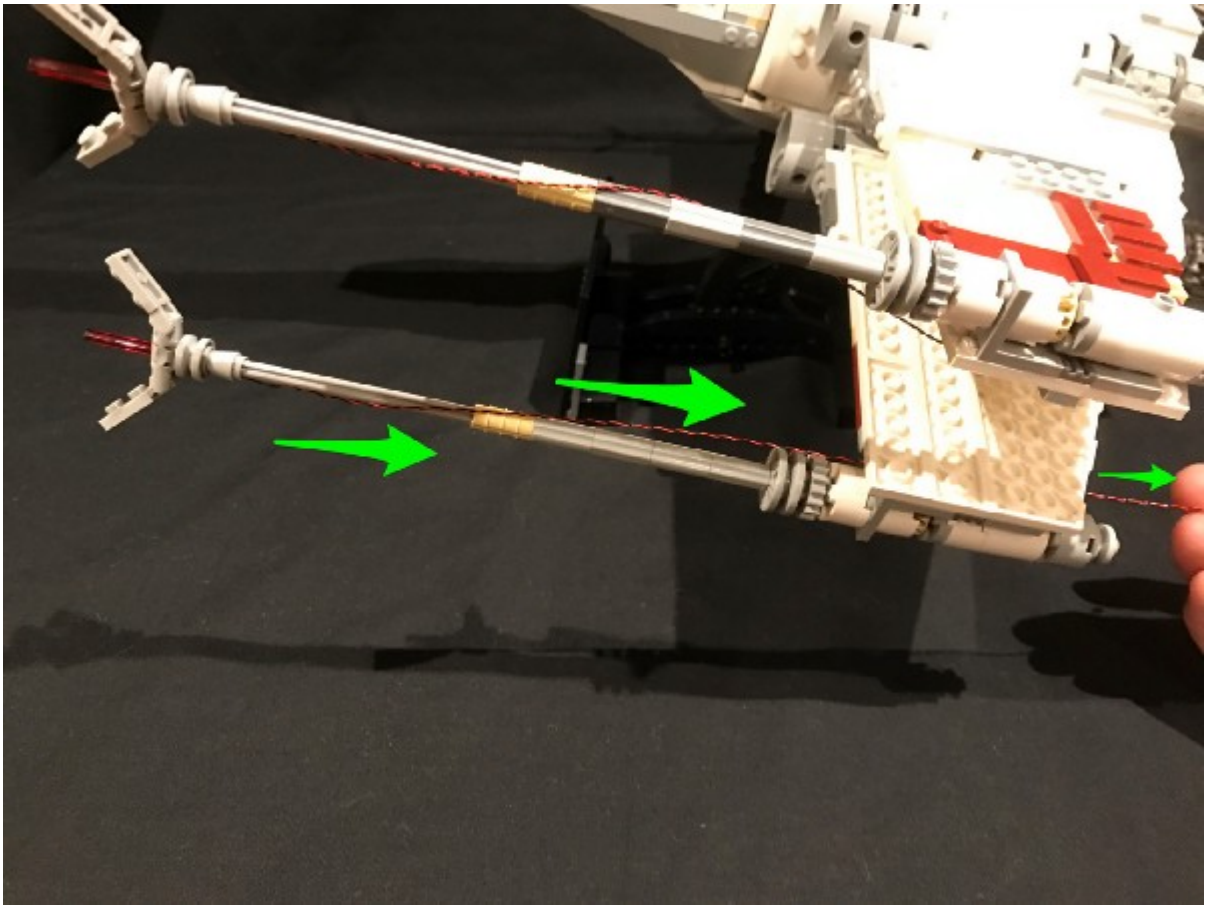


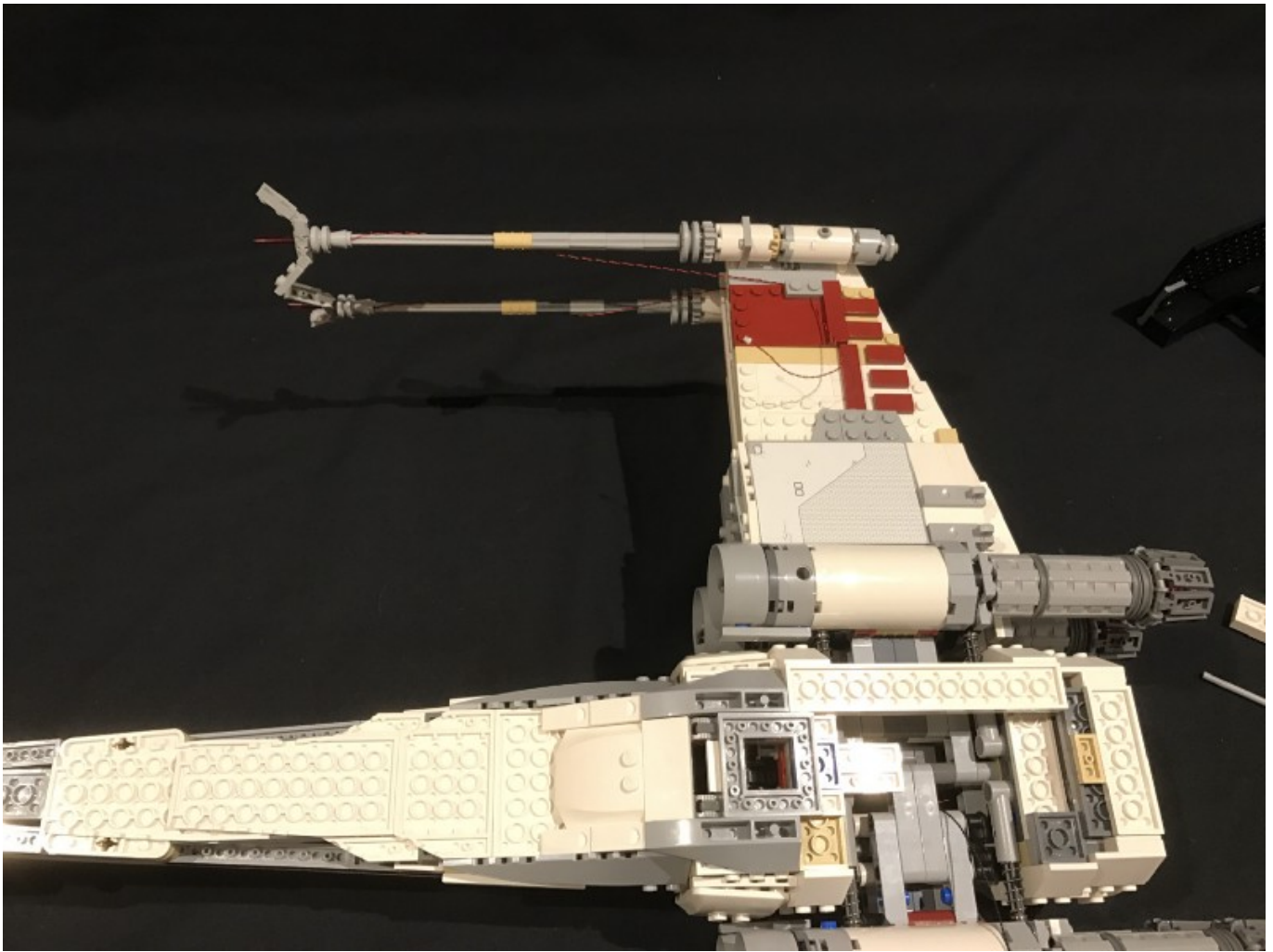






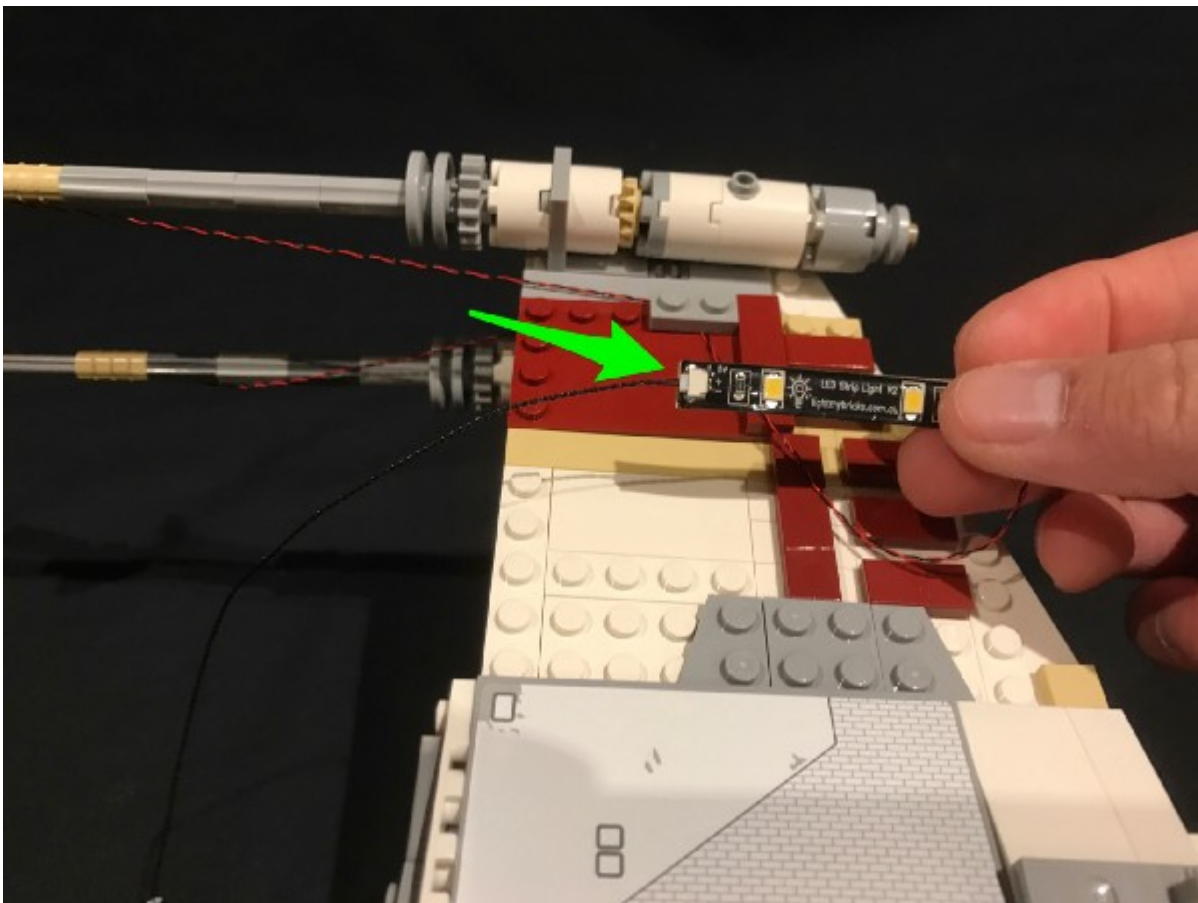
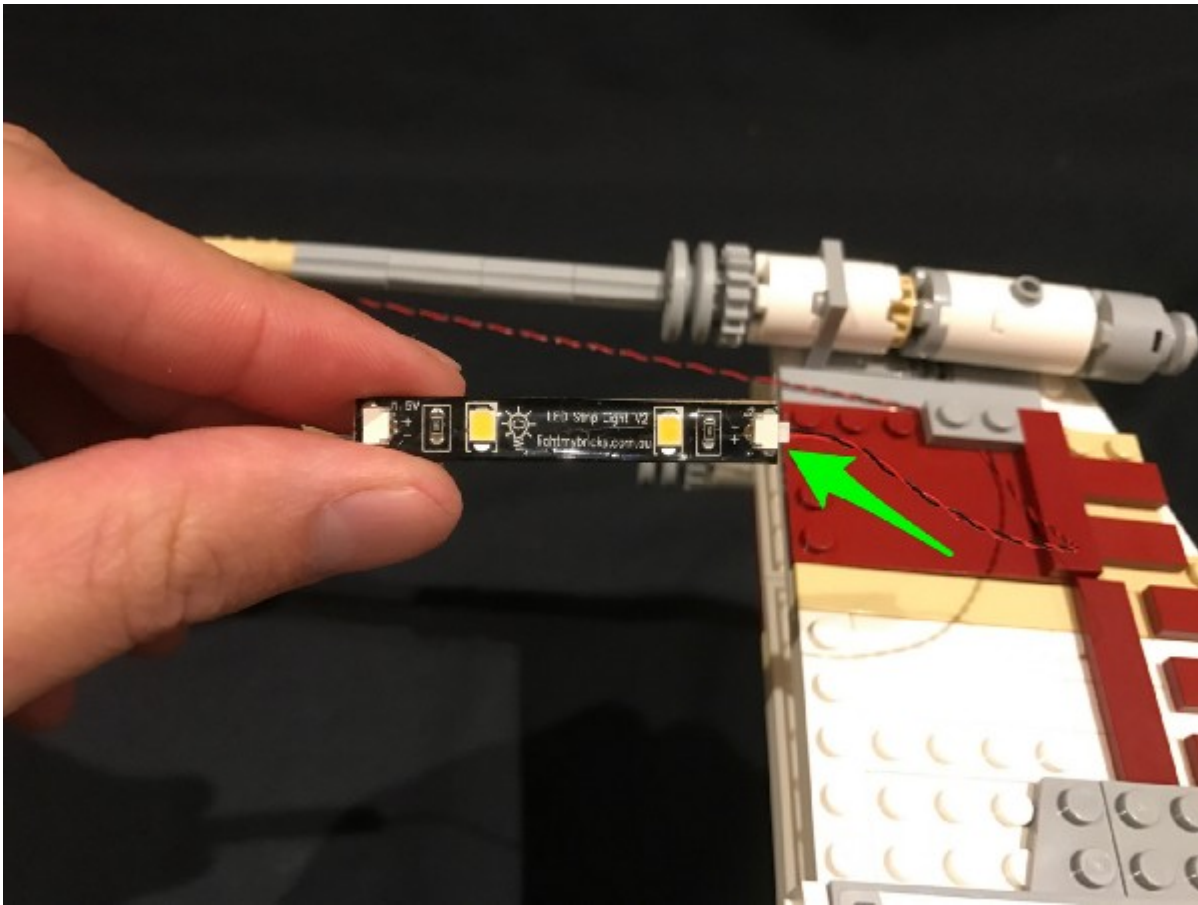
19.) Pull the cable back and then loop once around the cannon pole. Turn the X-Wing over and then secure the Bit Light cable in place by using a **provided LEGO 1x2 plate** to connect over it.



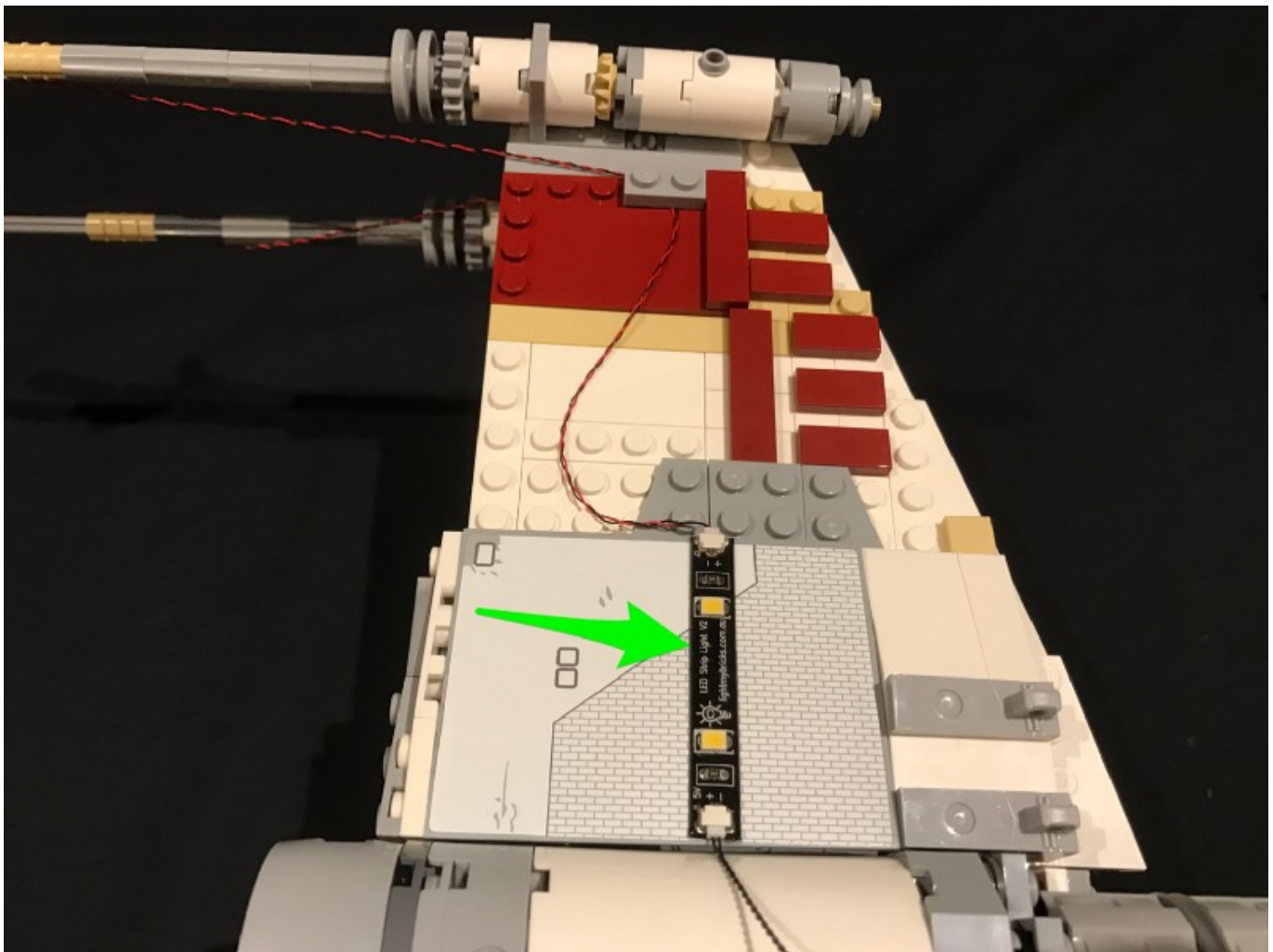


20.) Take a **White Strip Light** and then connect the bit light cable into one of the ports. Take a **15cm Connecting Cable** and connect it to the other port on the Strip Light.



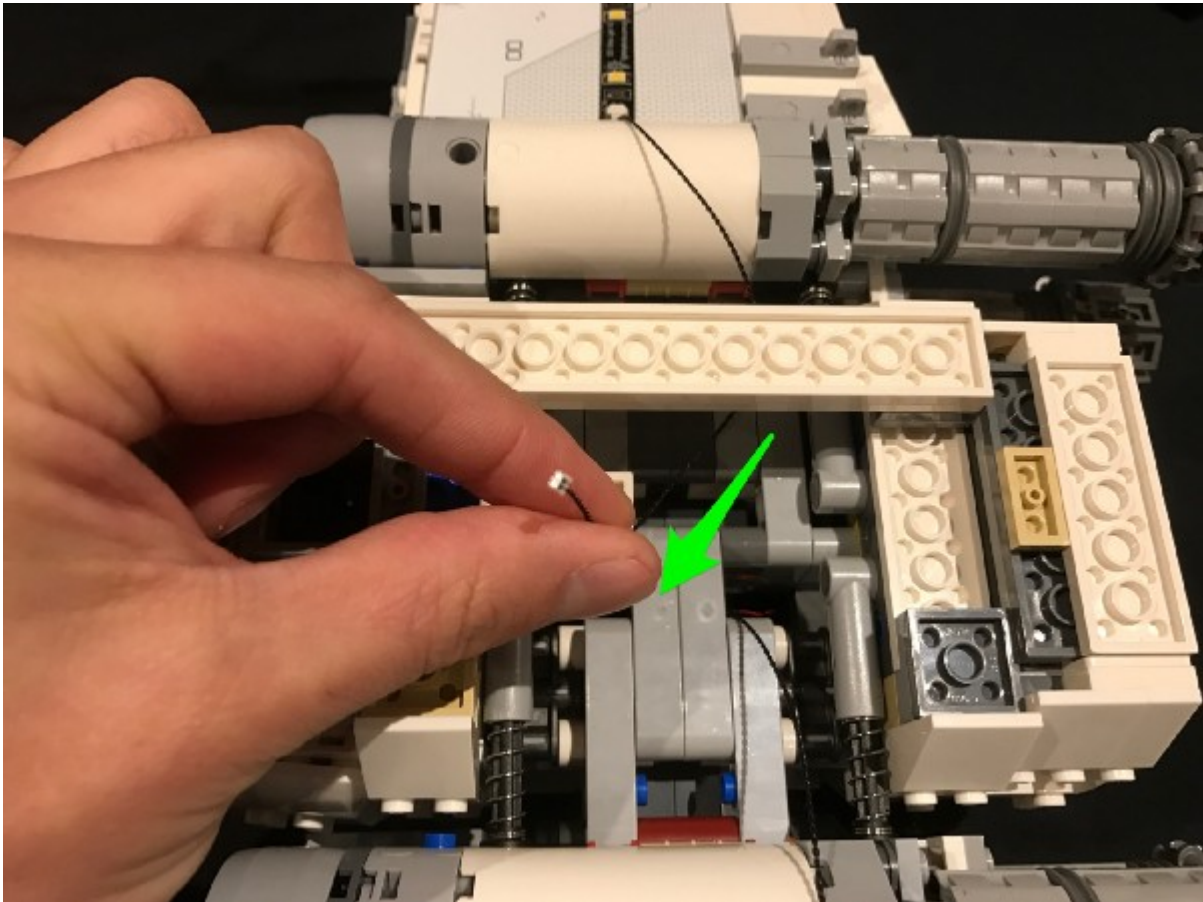
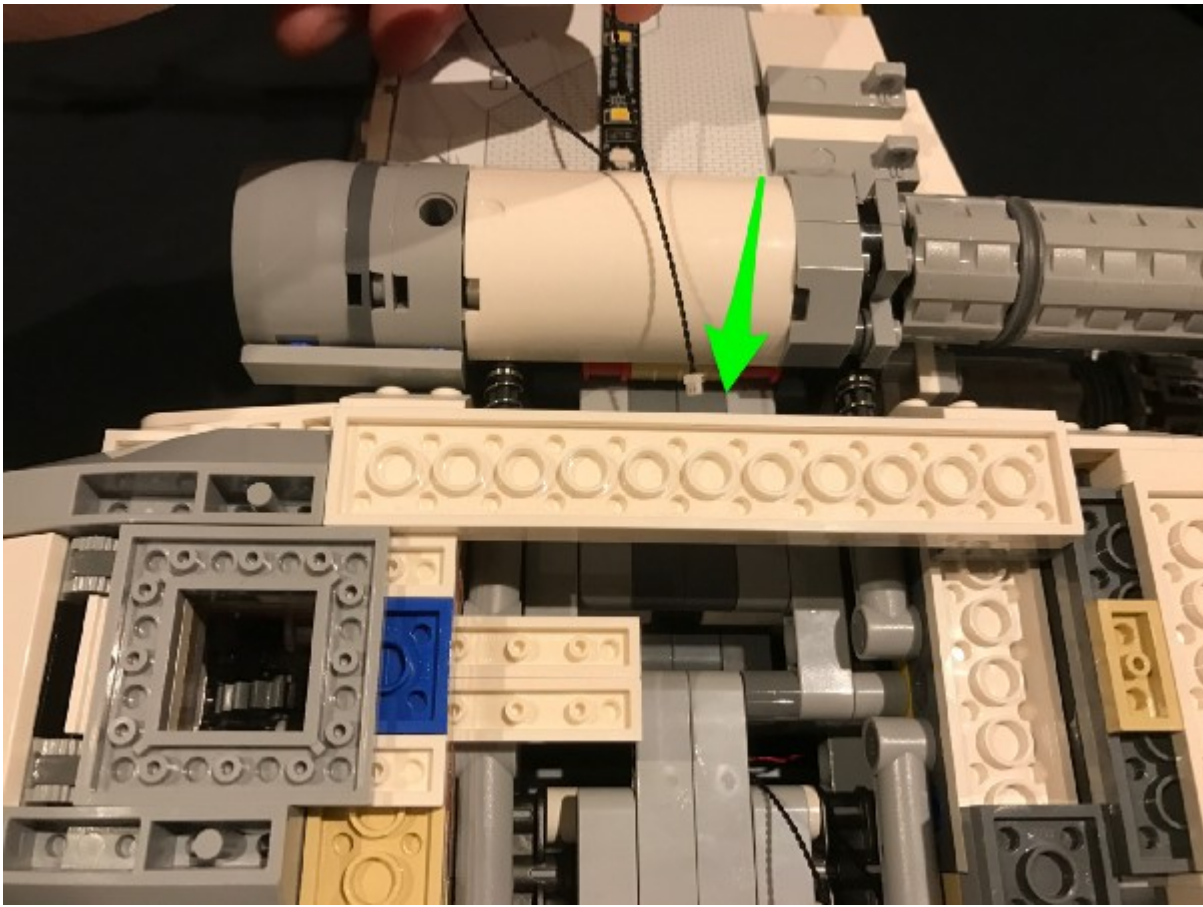


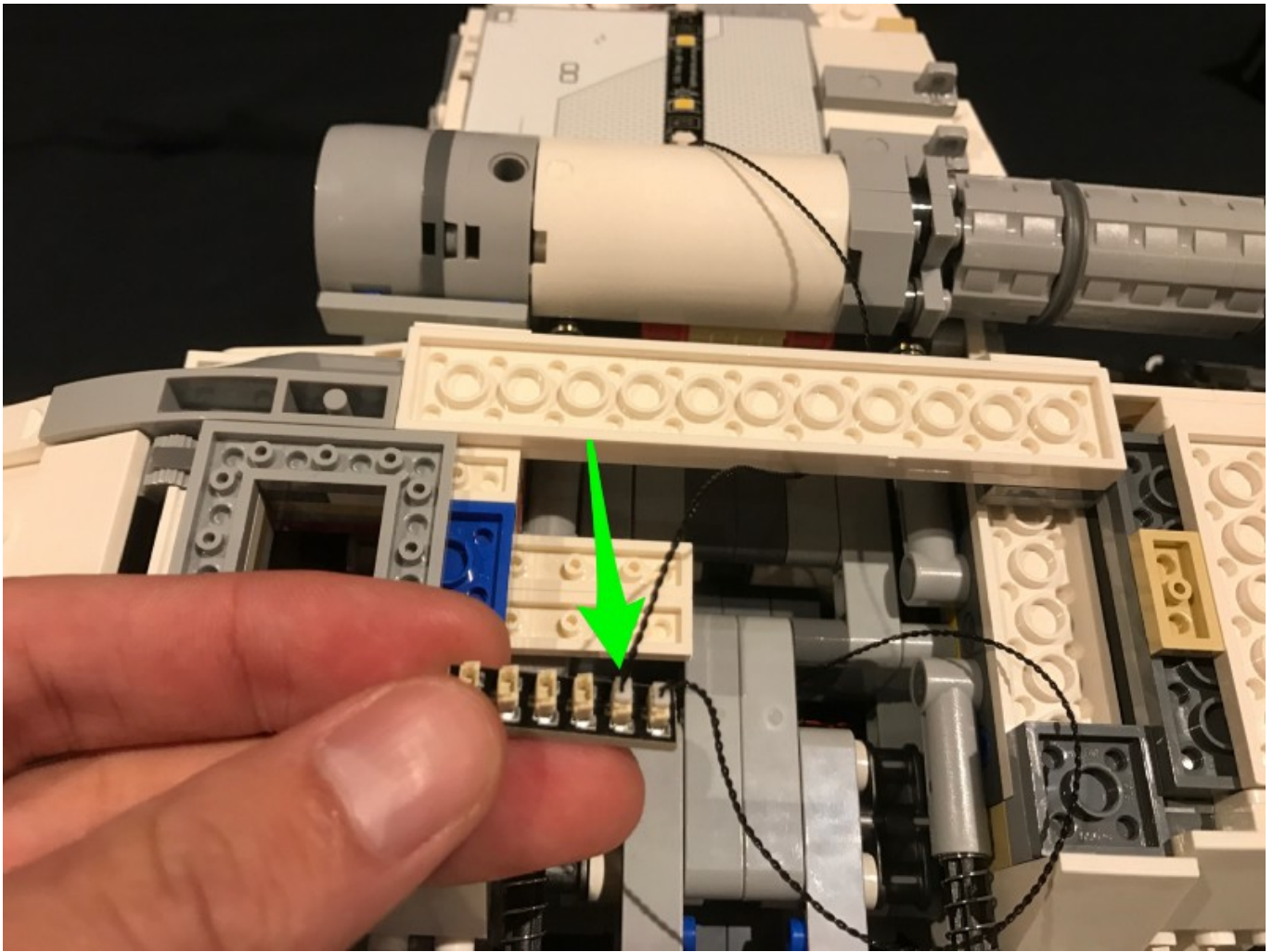
Stick the White Strip Light down in the following position underneath the bottom left wing using the adhesive backing. ▲



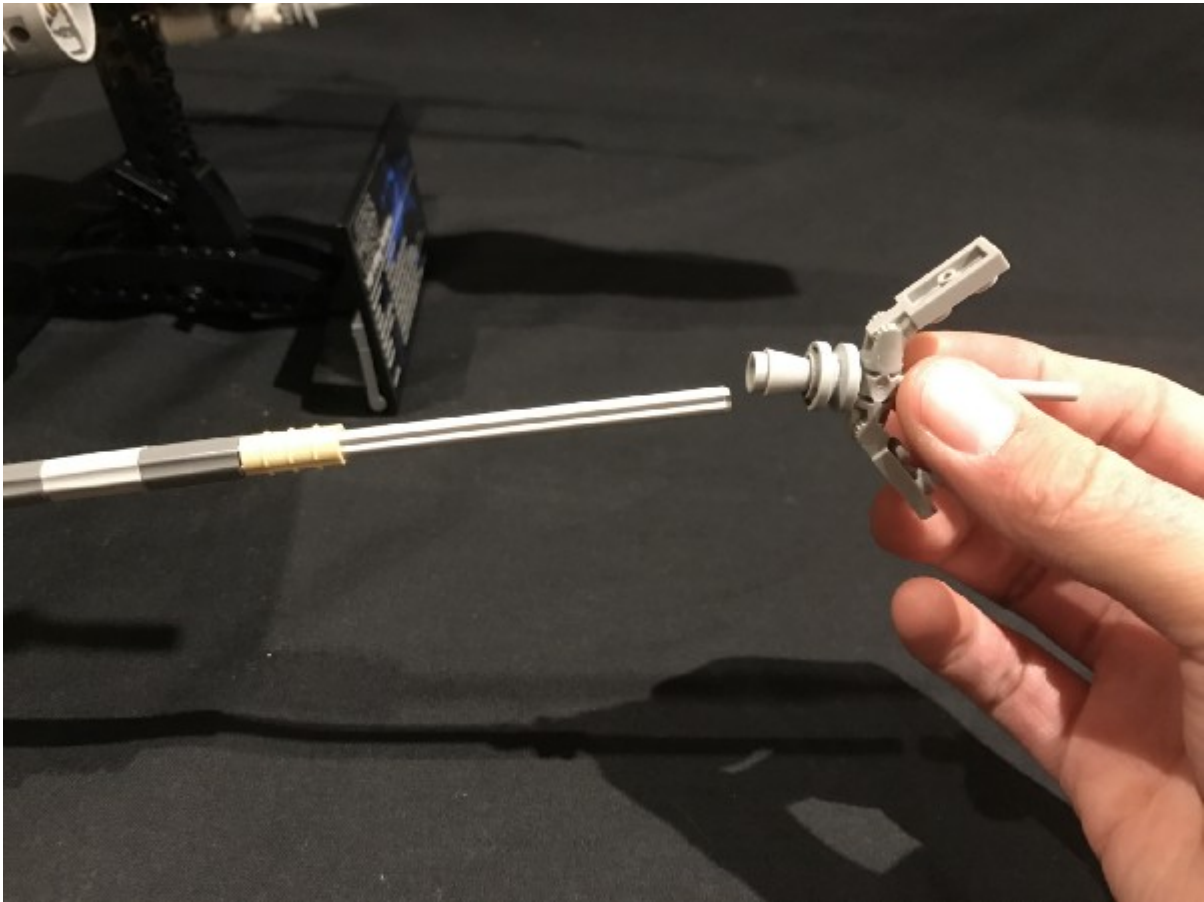
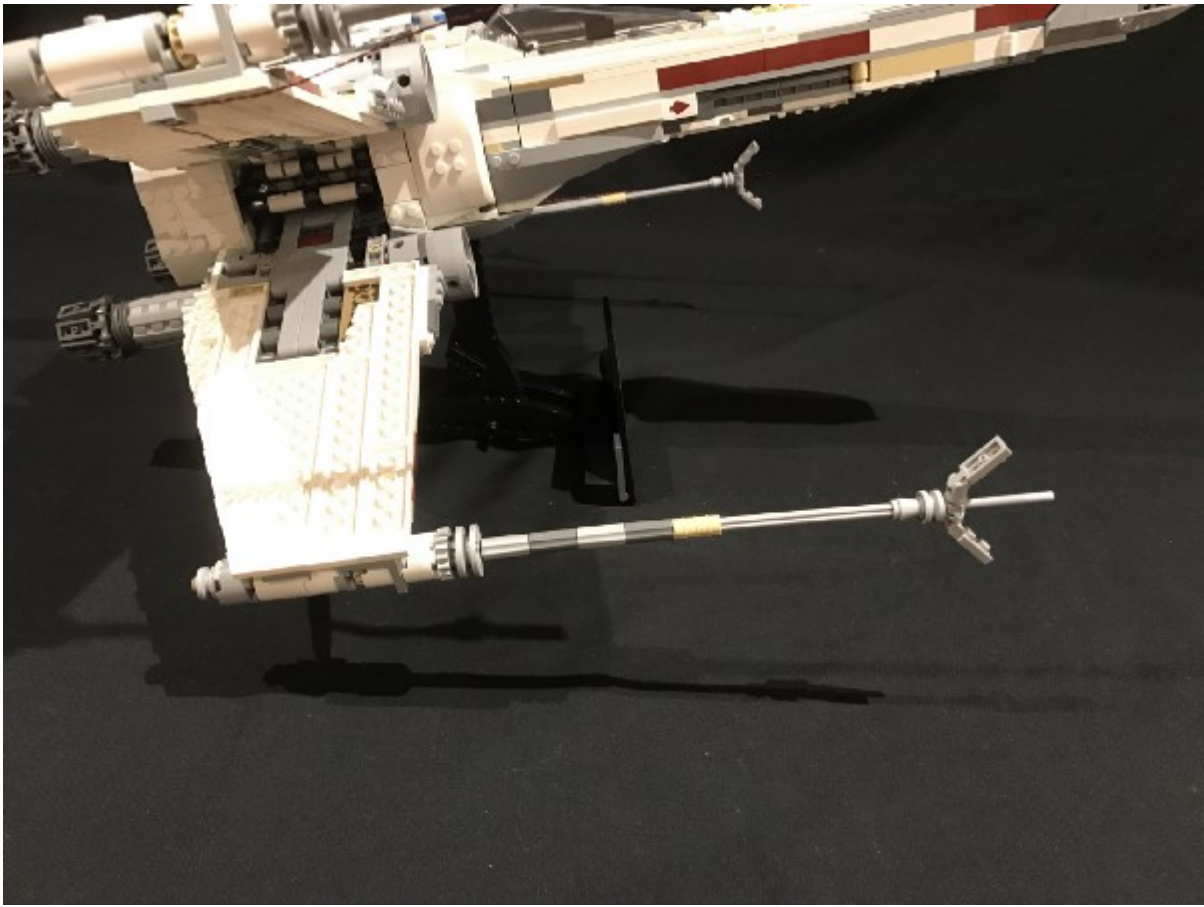
21.) Take the other end of the 15cm cable from the strip light and then loop it under the White 2×12 LEGO plates. Pull it out from underneath and then connect it to the next available port on the 6-port expansion board.

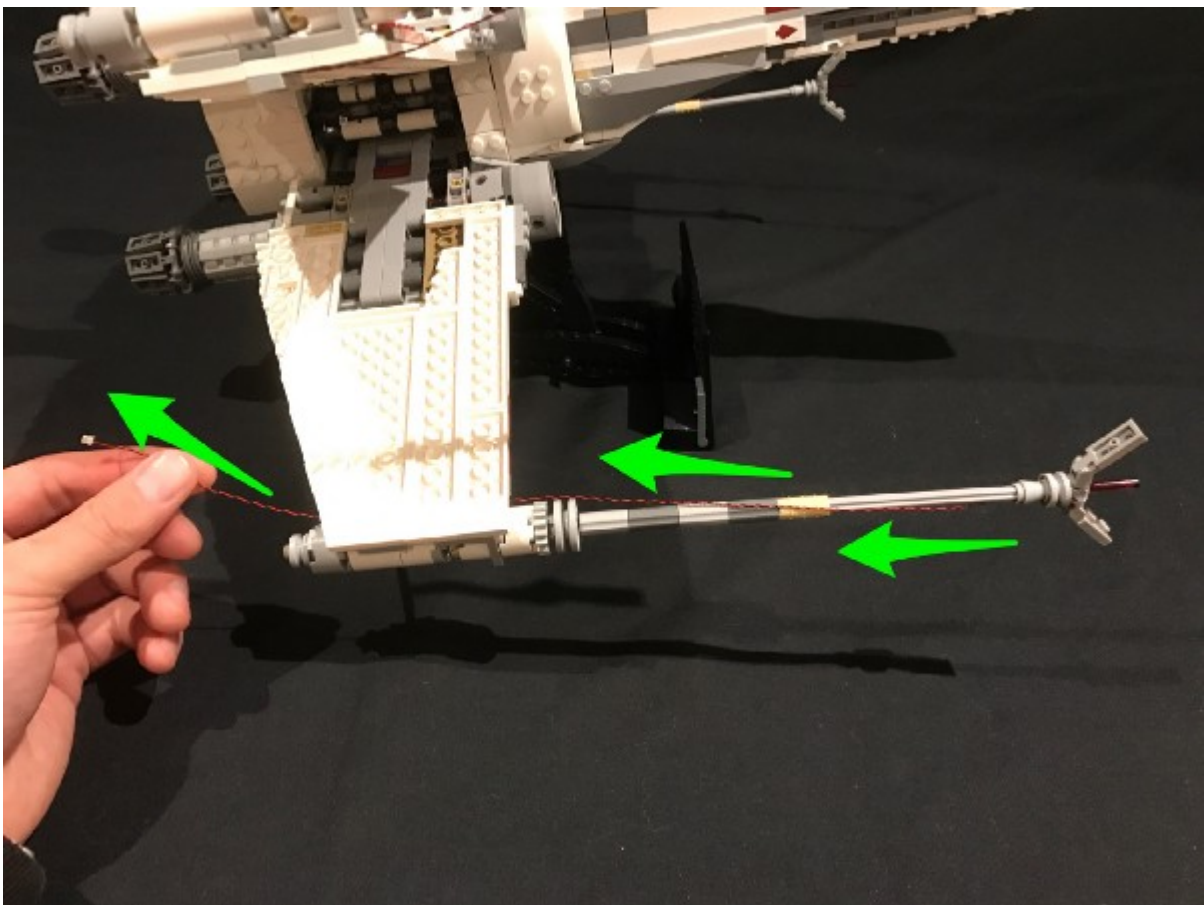
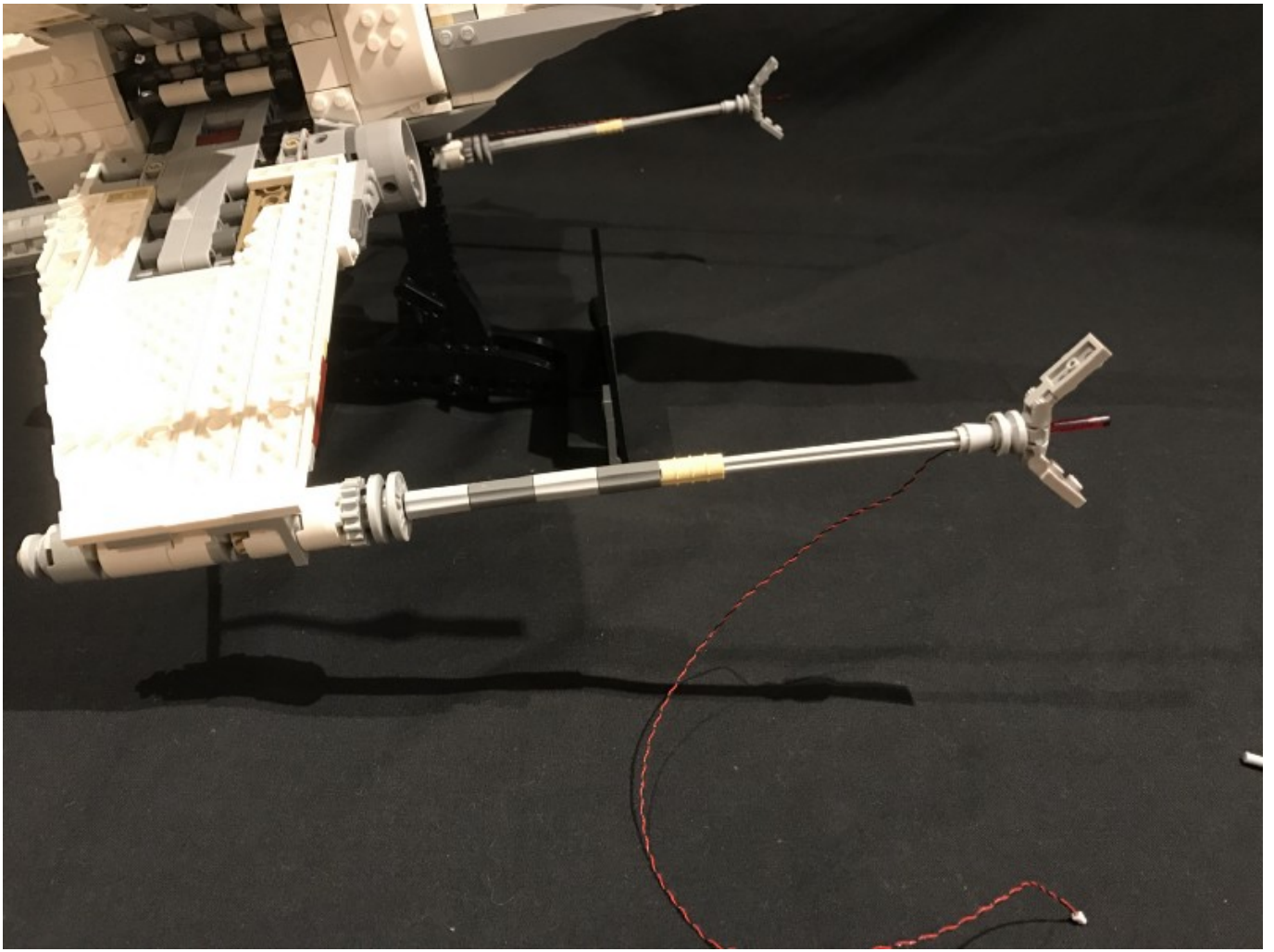


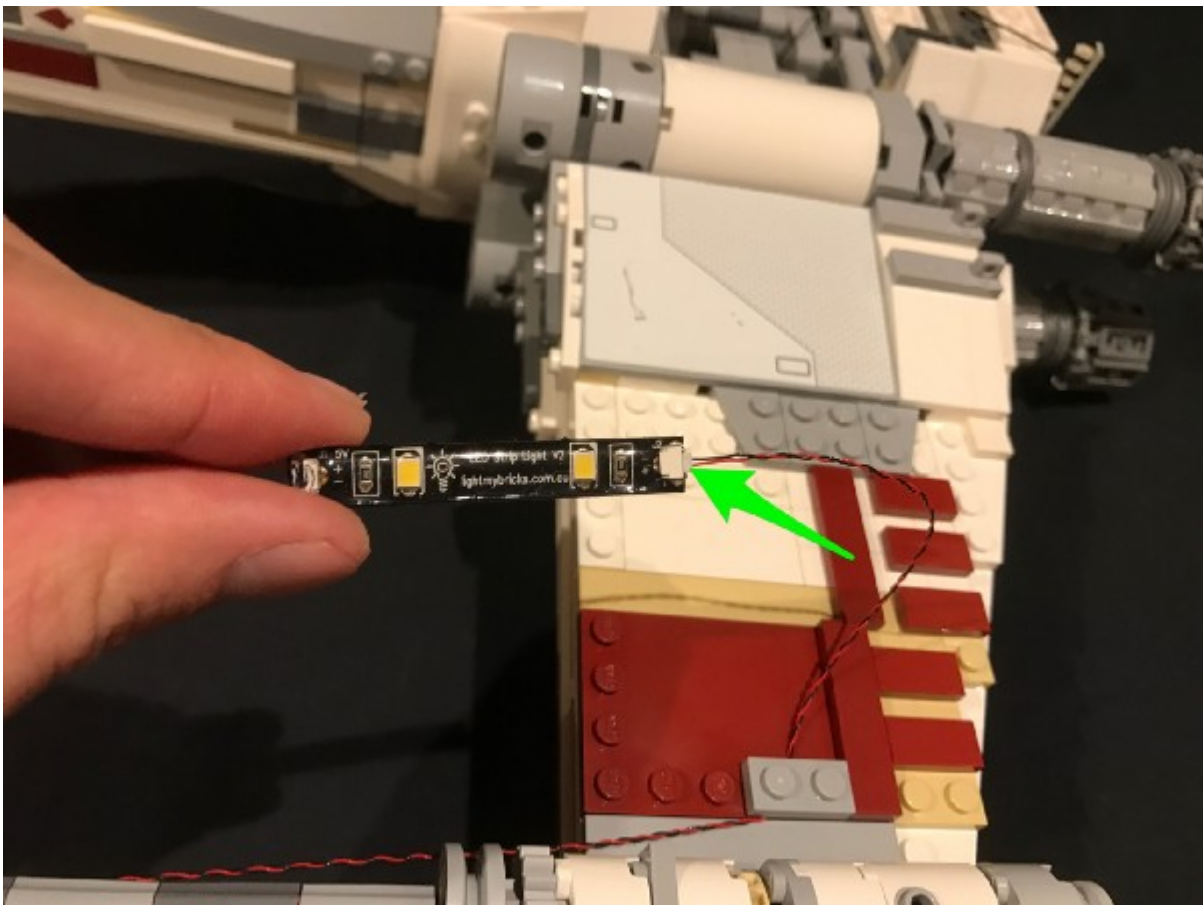
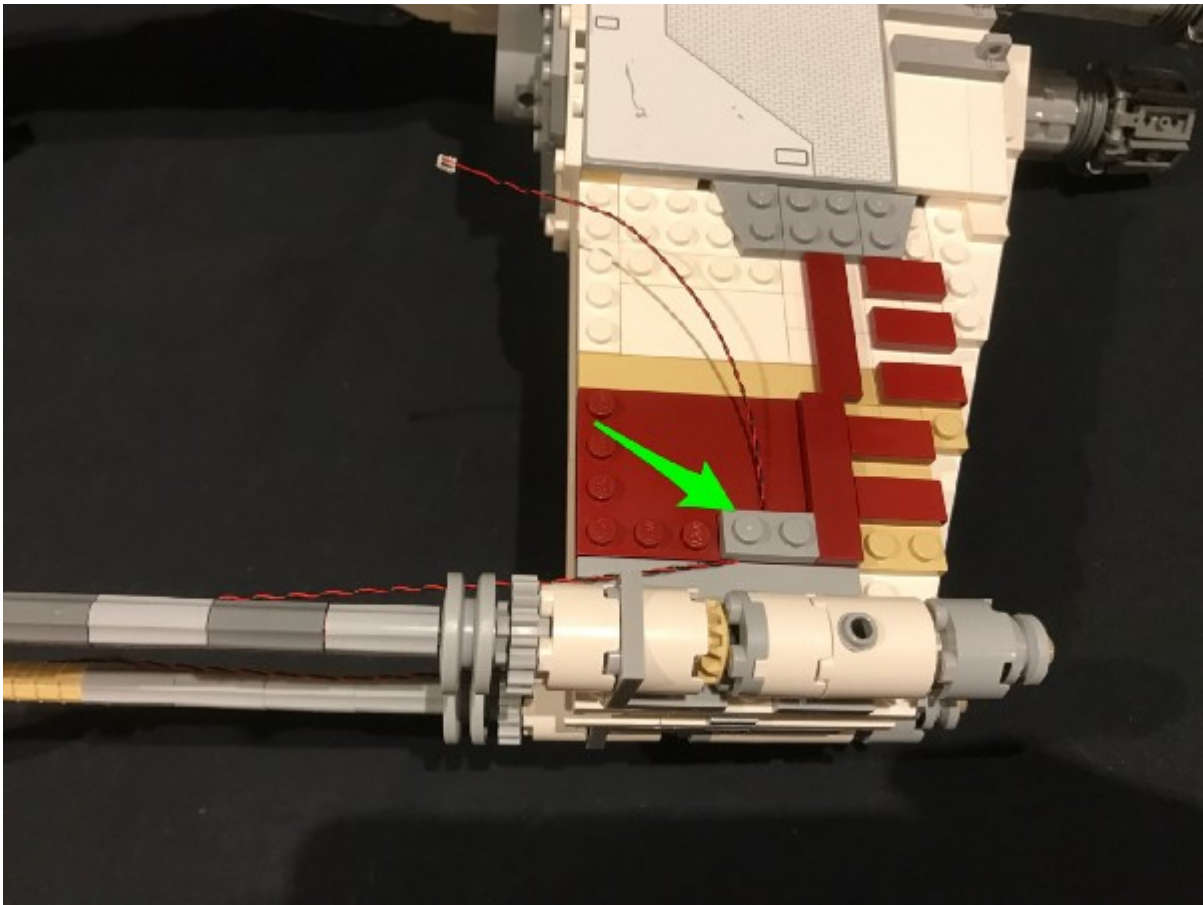


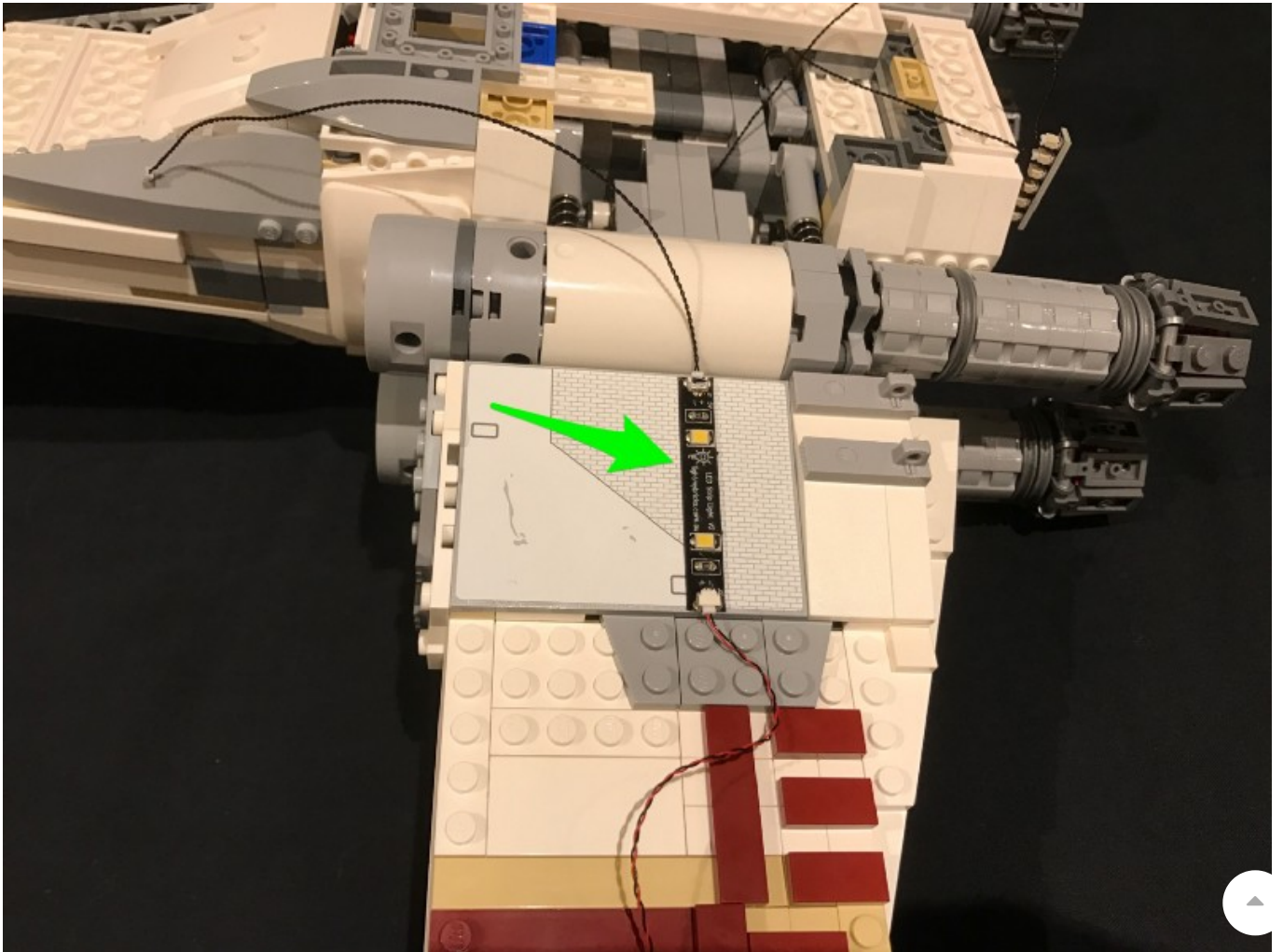
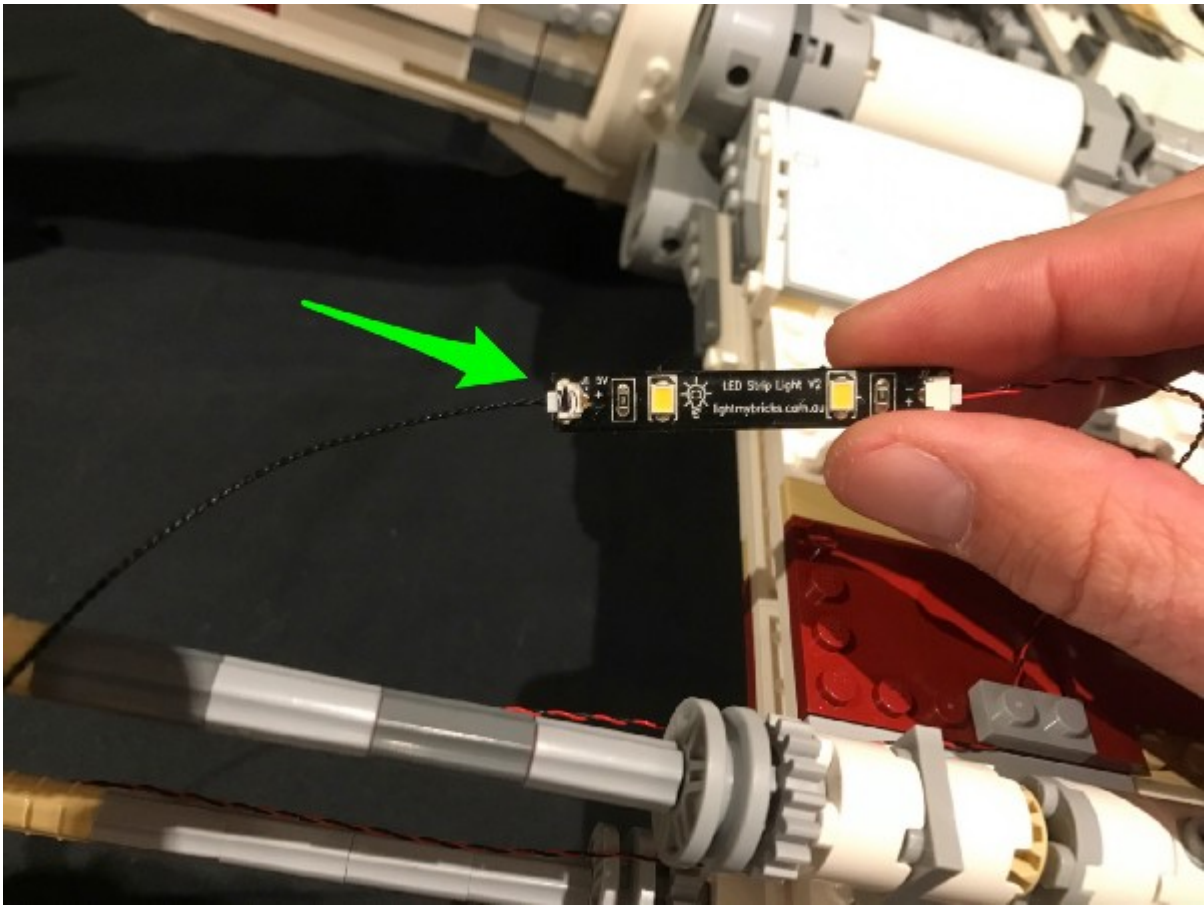


22.) Repeat previous steps to install another **Flashing White 30cm Bit Light**, **Trans Red Saber Bar**, **White Strip Light** and **15cm Connecting Cable** to the right cannon and wing.

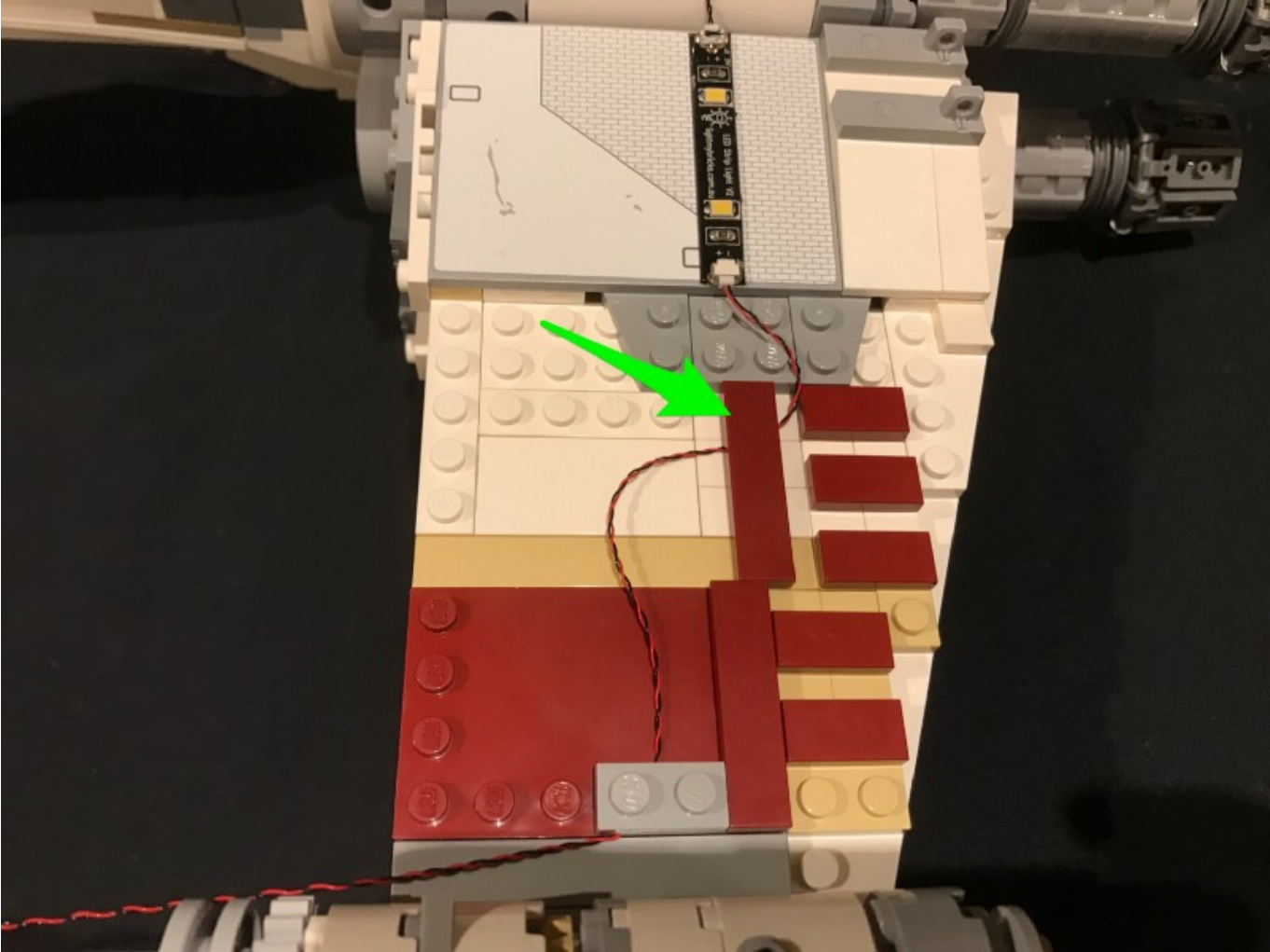






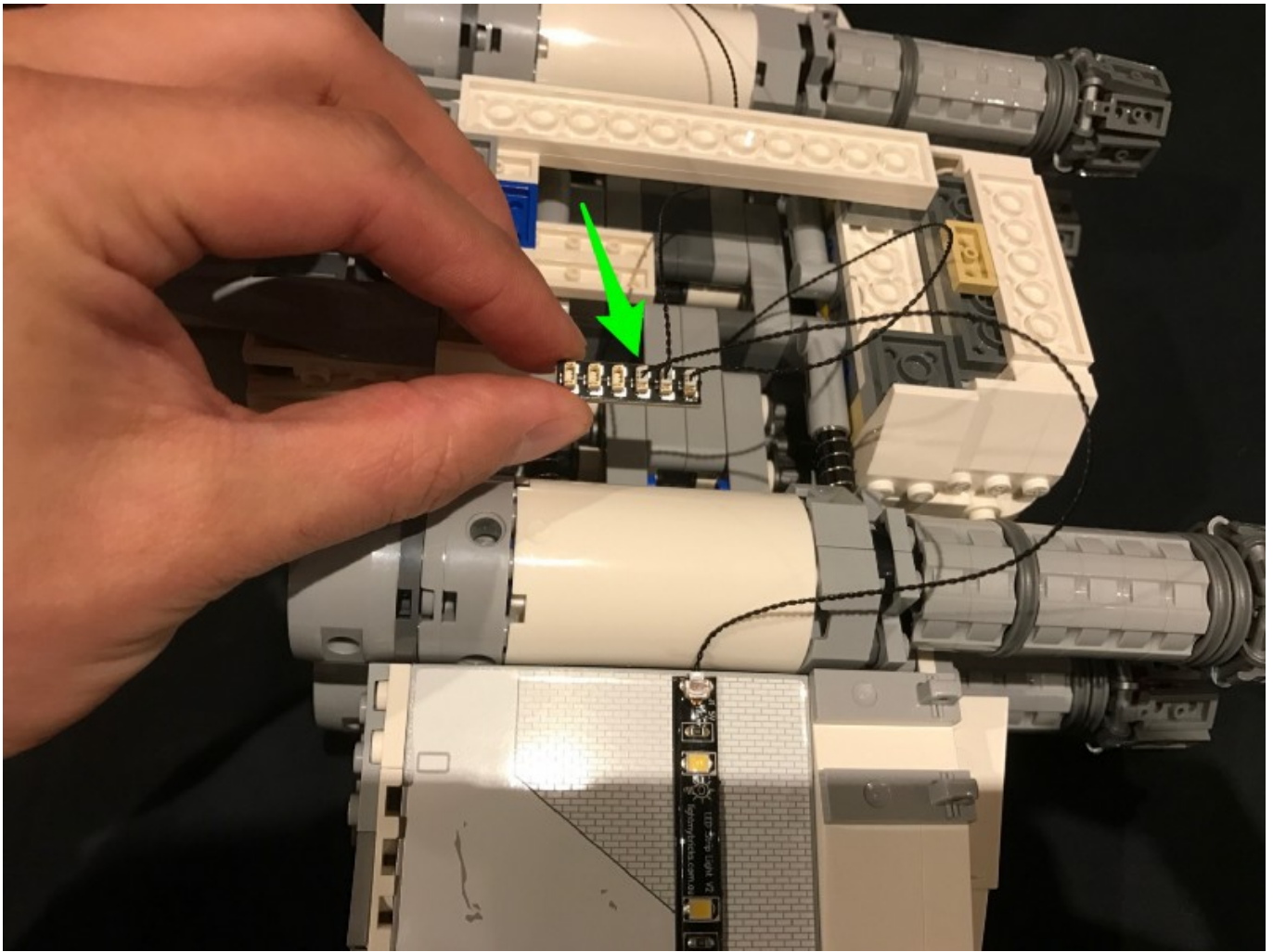


If you find that you have excess cable from the bit lights, you can secure them down to prevent them from dangling by reconnecting LEGO tiles over them. Just ensure the cable is laid in between studs.



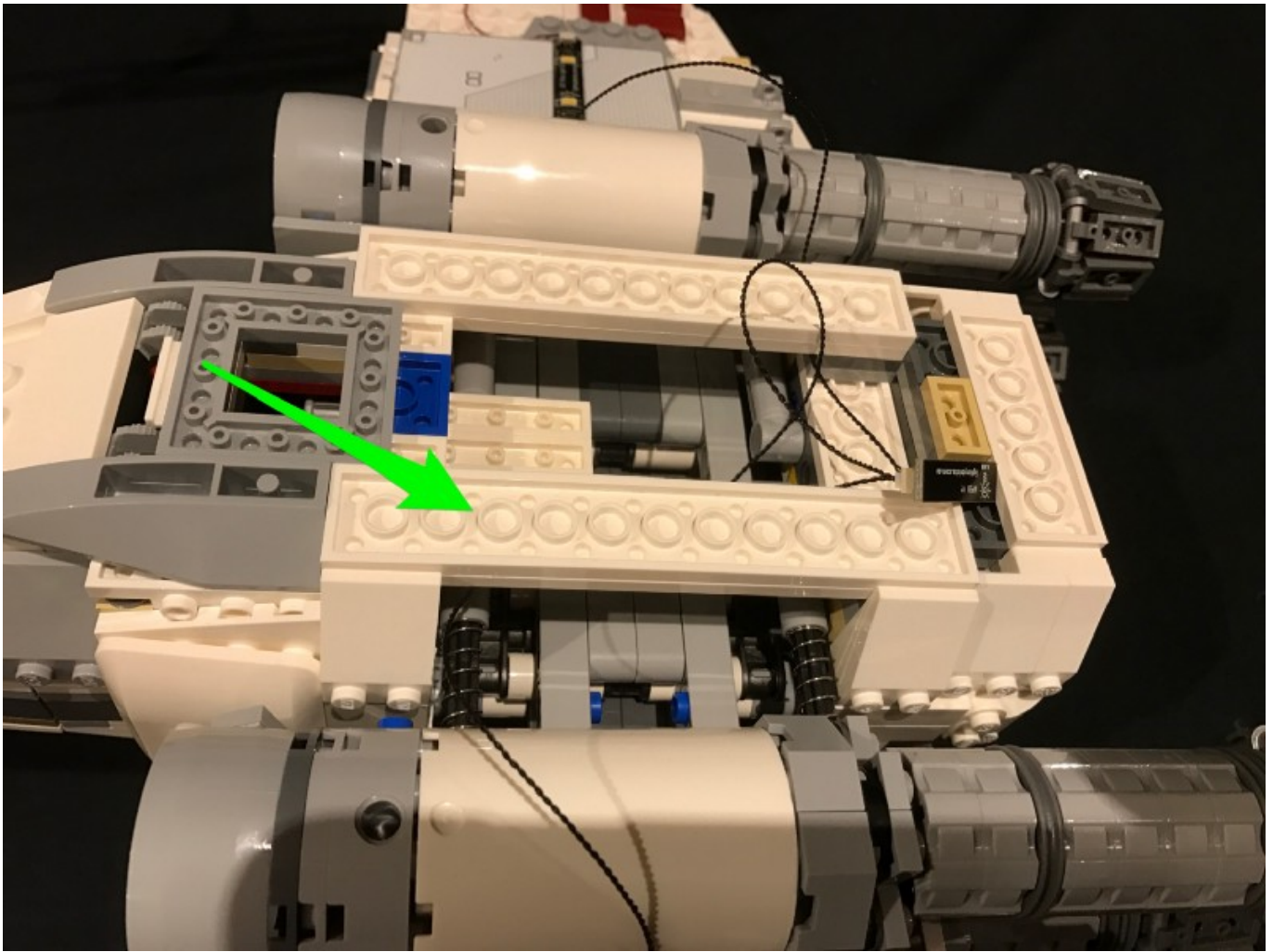
23.) Take the other end of the 15cm connecting cable from the strip light and then connect it to the next available port on the 6-port expansion board.



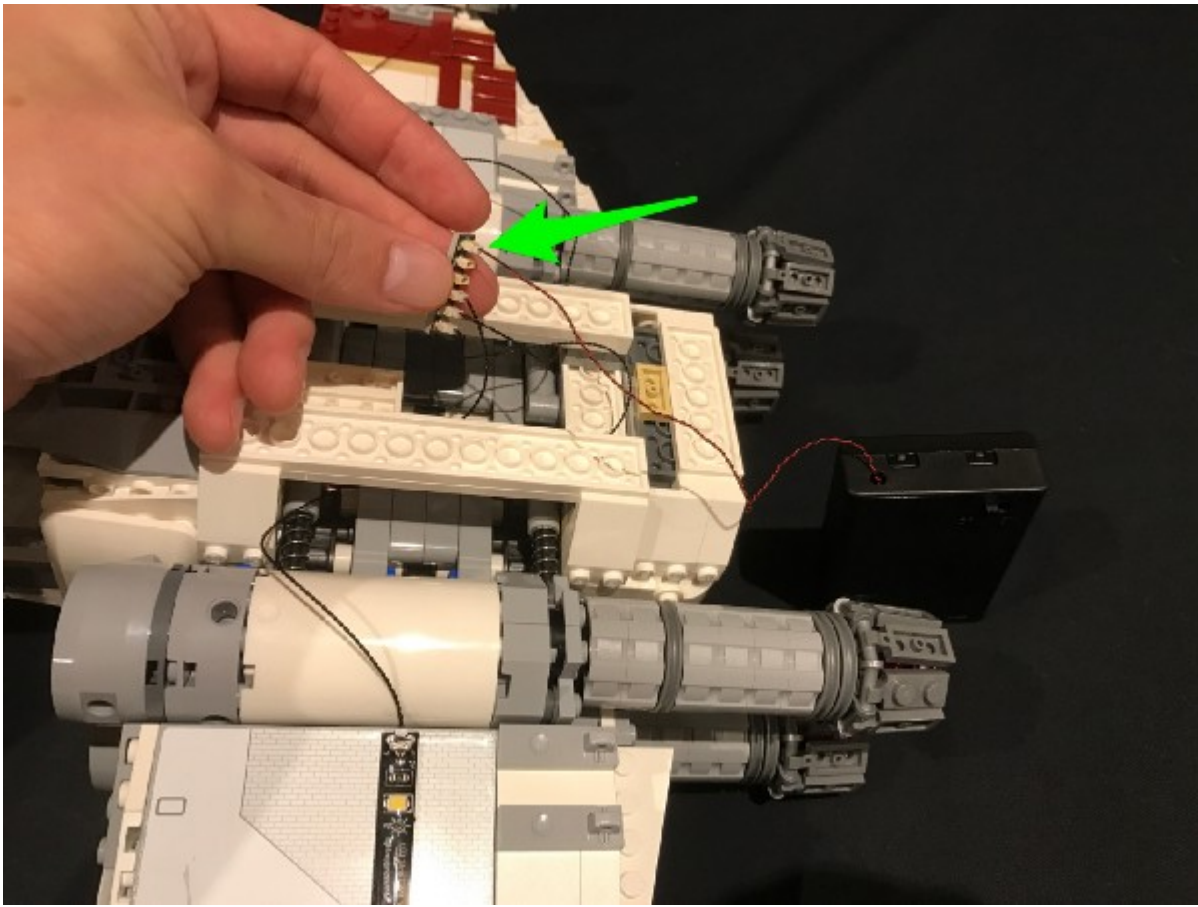


Reconnect the 2x12 LEGO plates we removed in step 15.

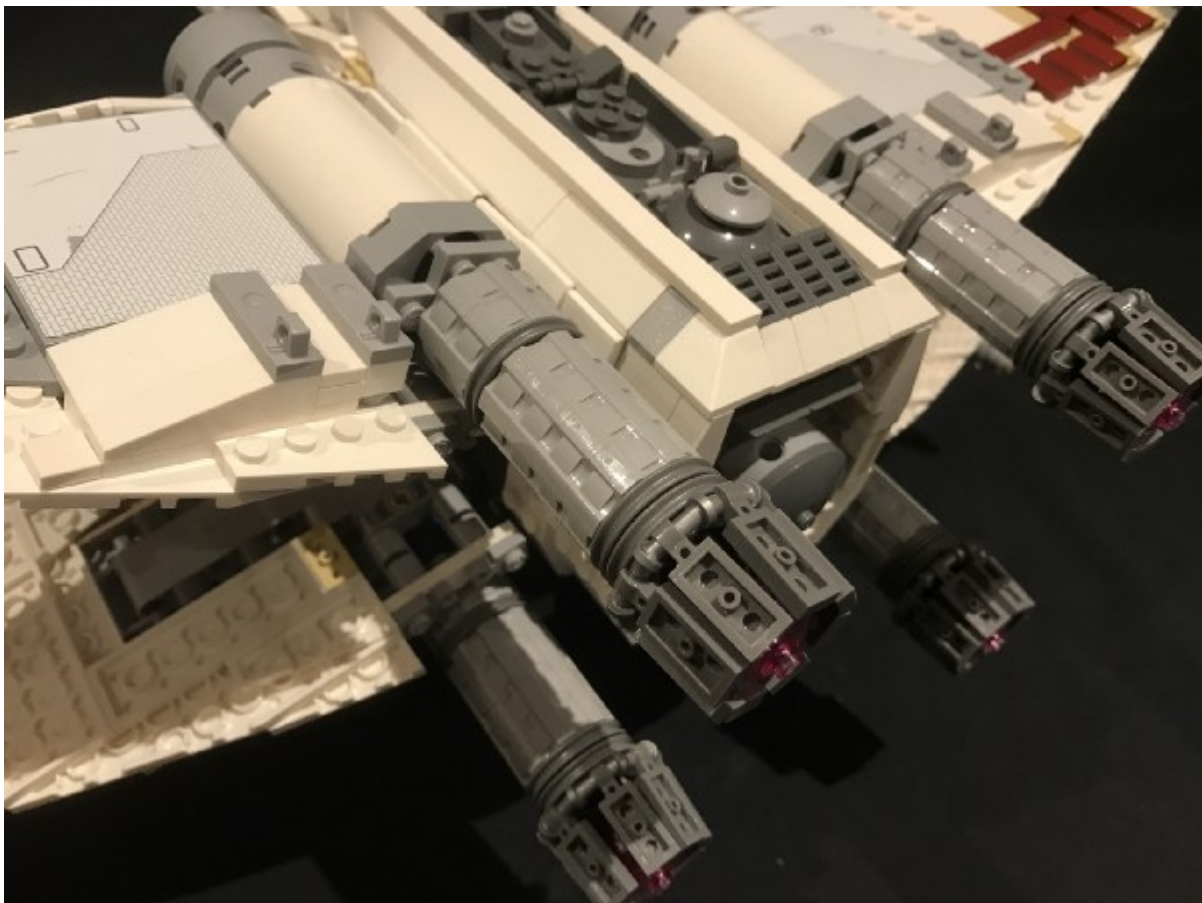


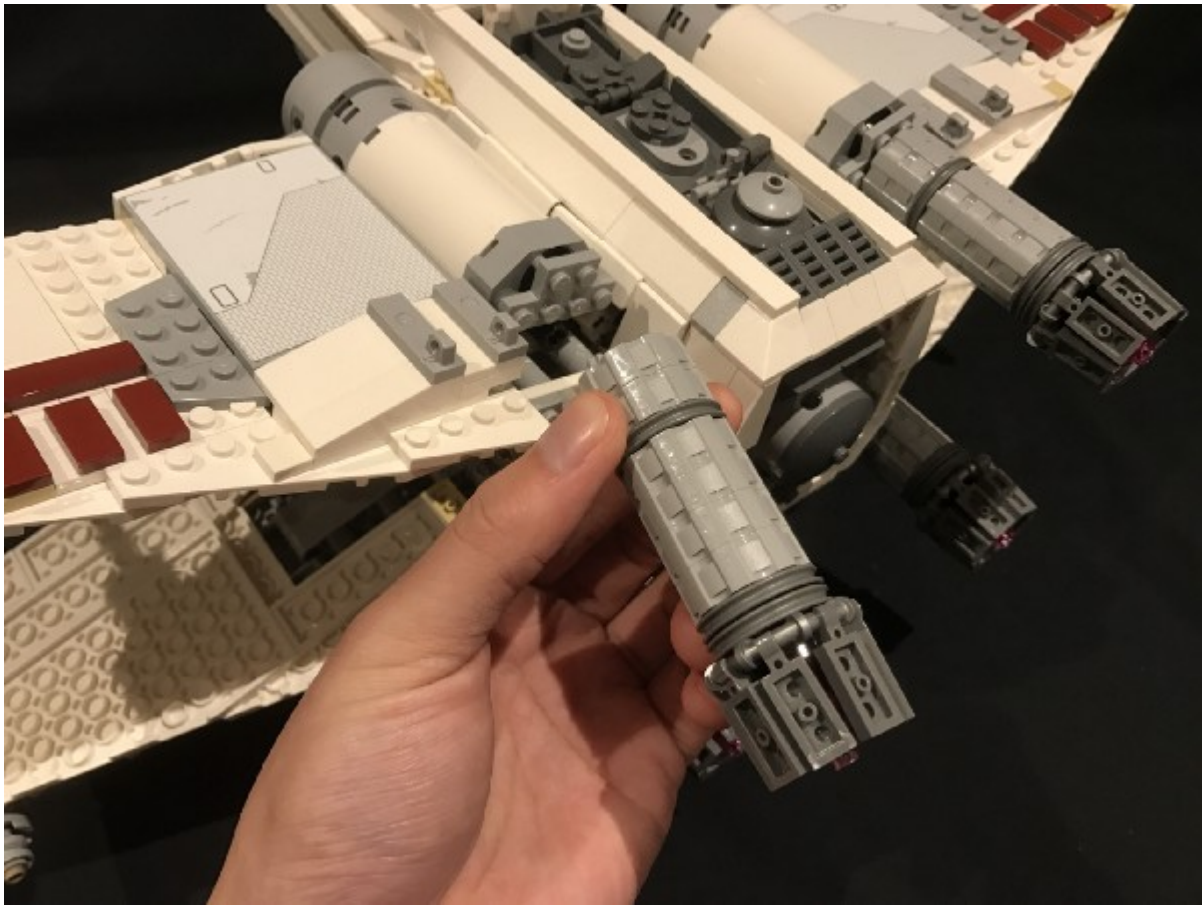


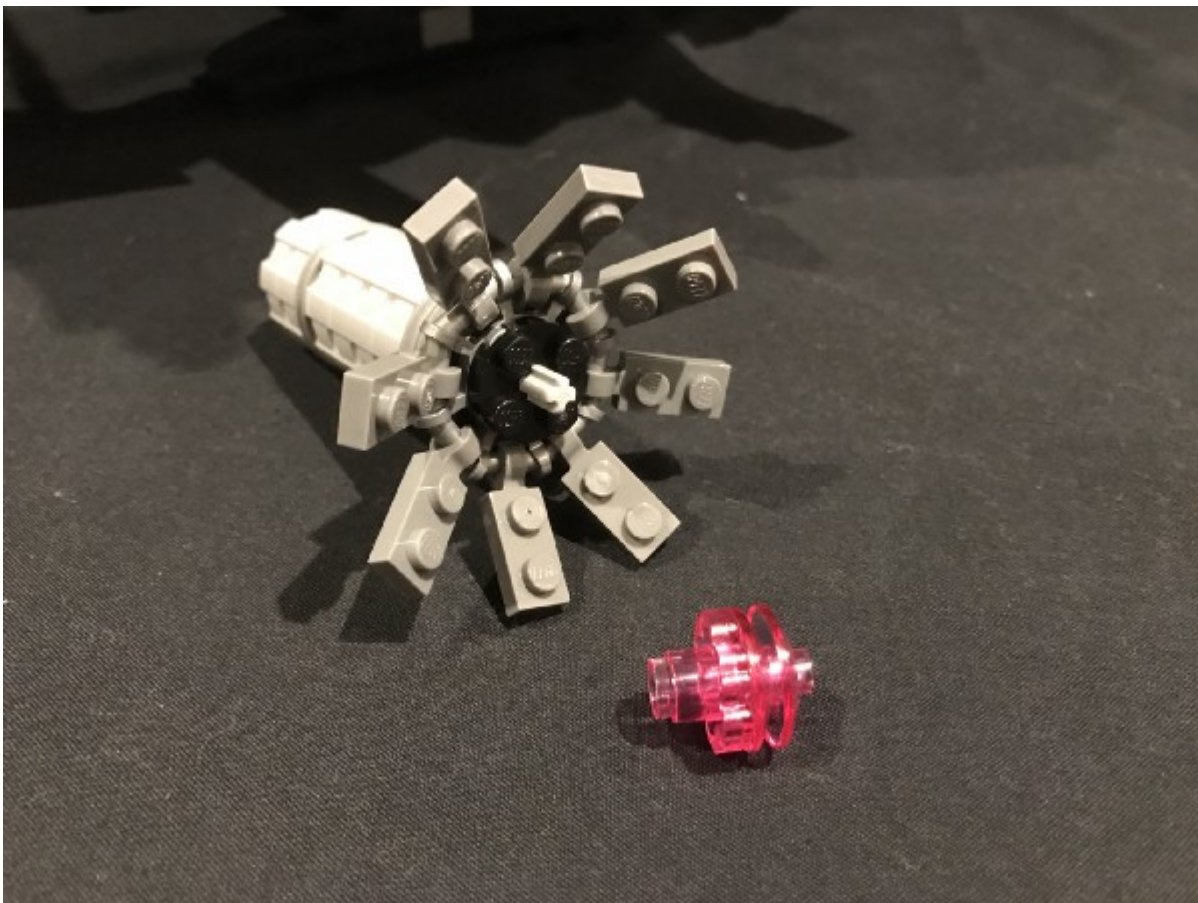
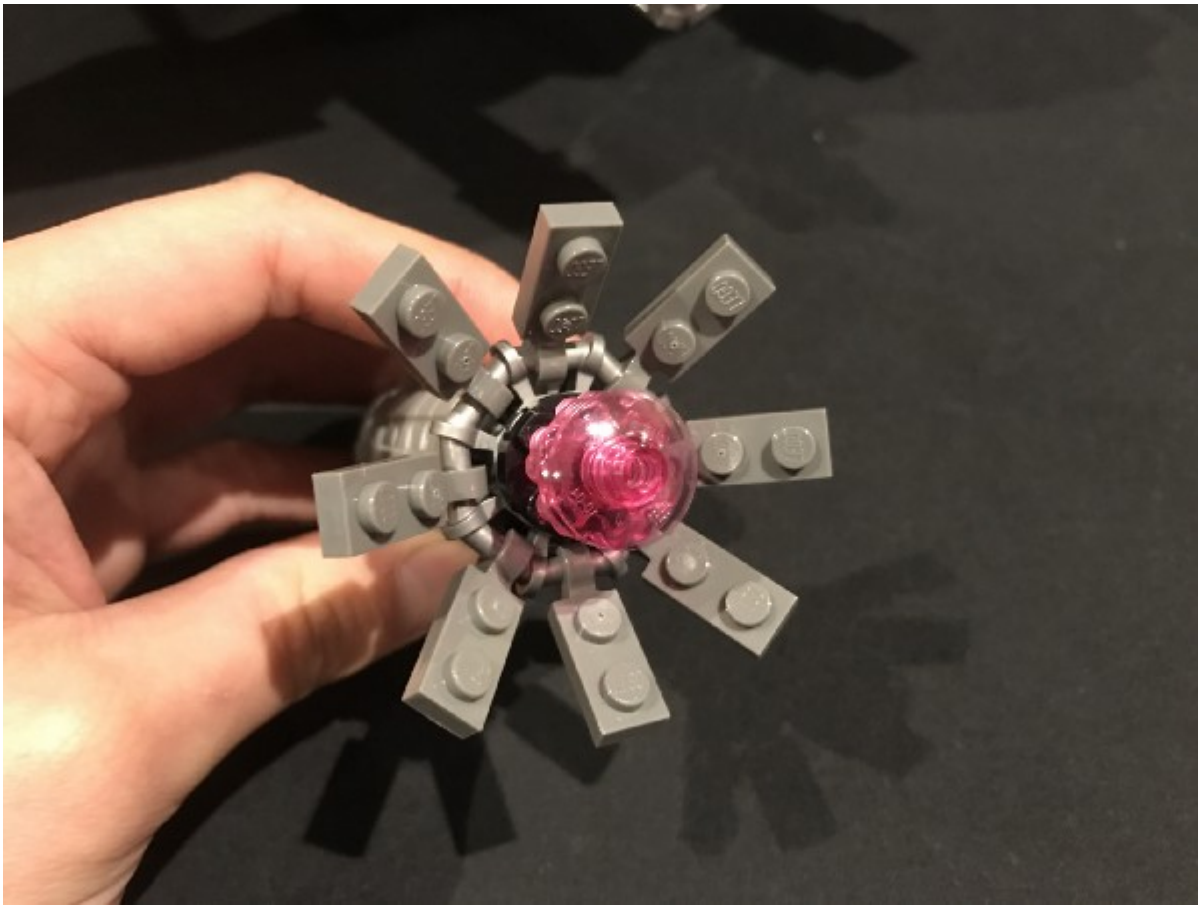
Take this time to test the lights we installed to the bottom wings and cannons by connecting the battery pack cable /usb cable into one of the spare ports on the expansion board. Turn the battery pack 'on' and verify all is working OK



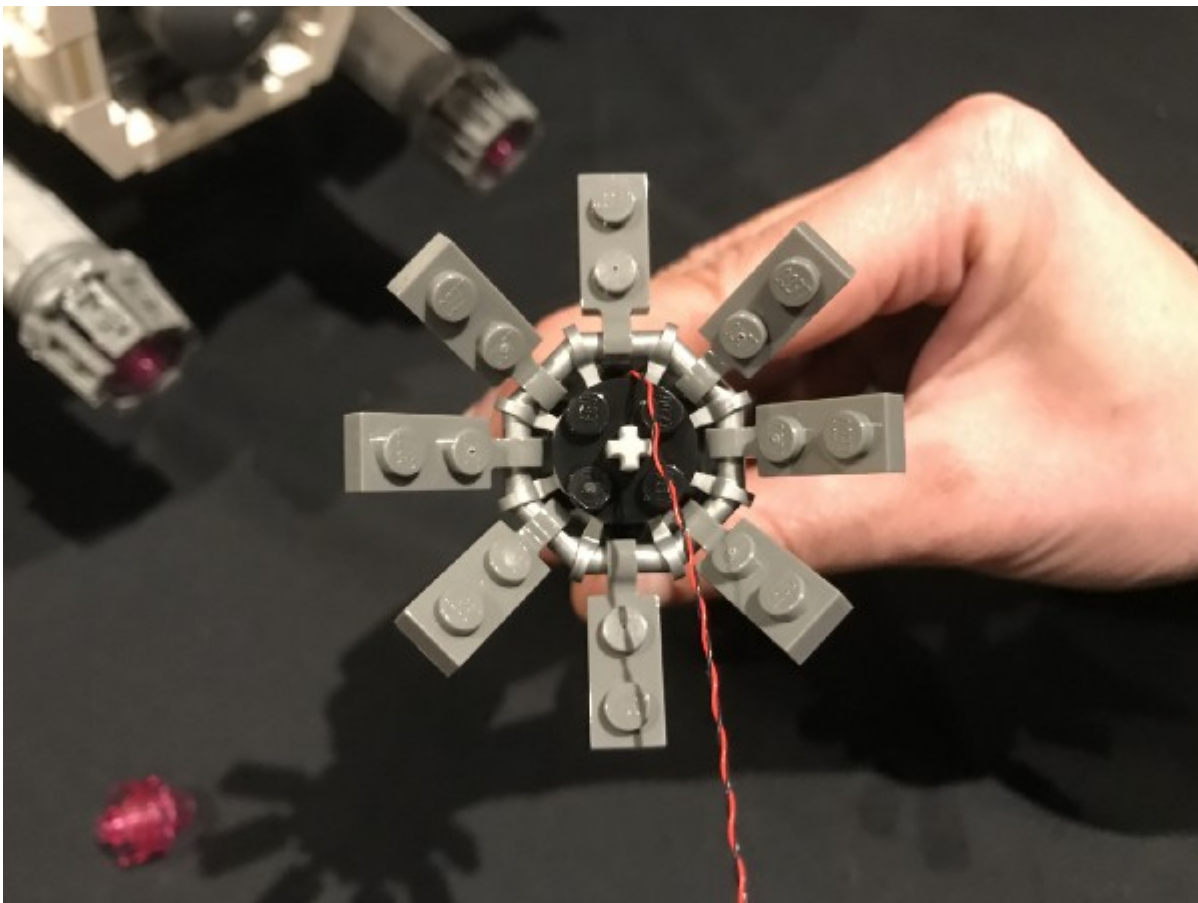
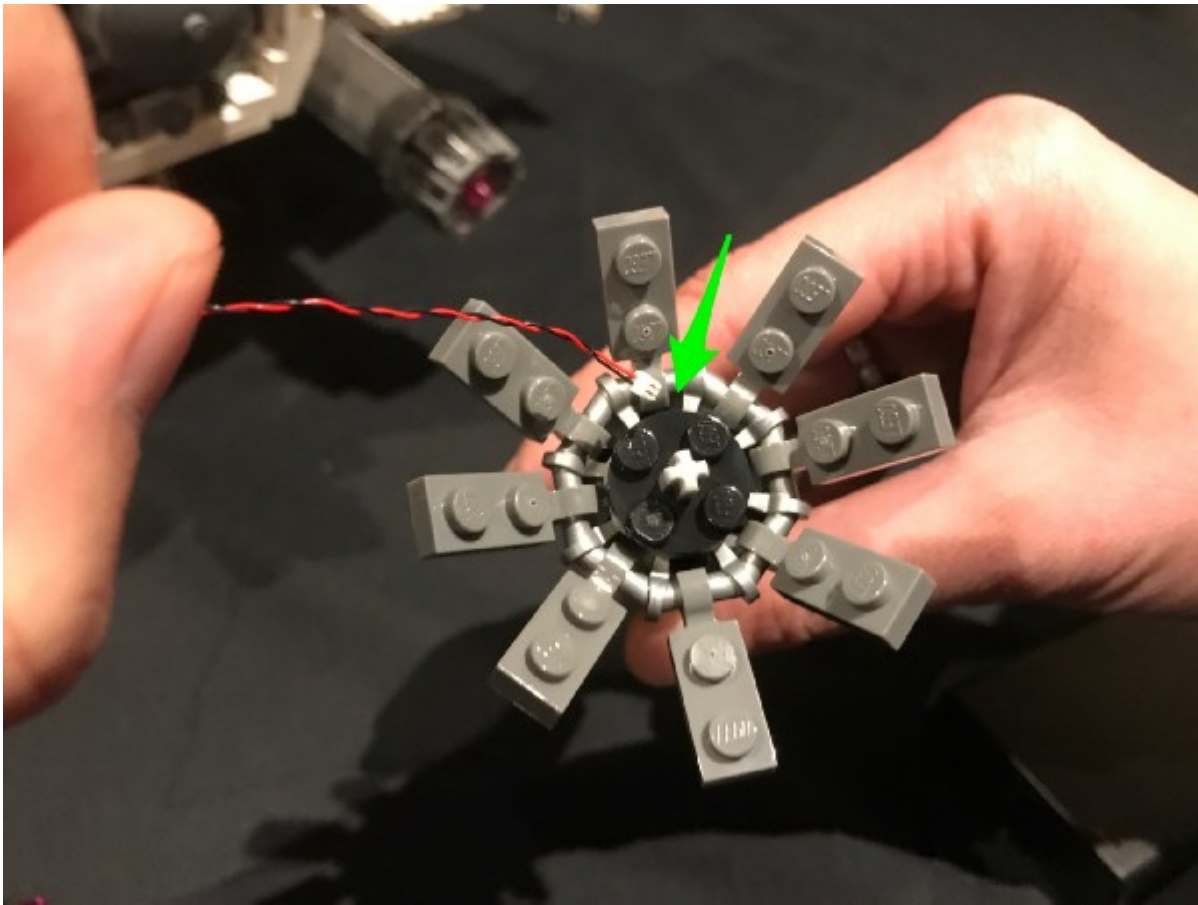
24.) We will now move onto lighting the back jets. First disconnect the top left jet section and then open sections up to remove the trans pink pieces.



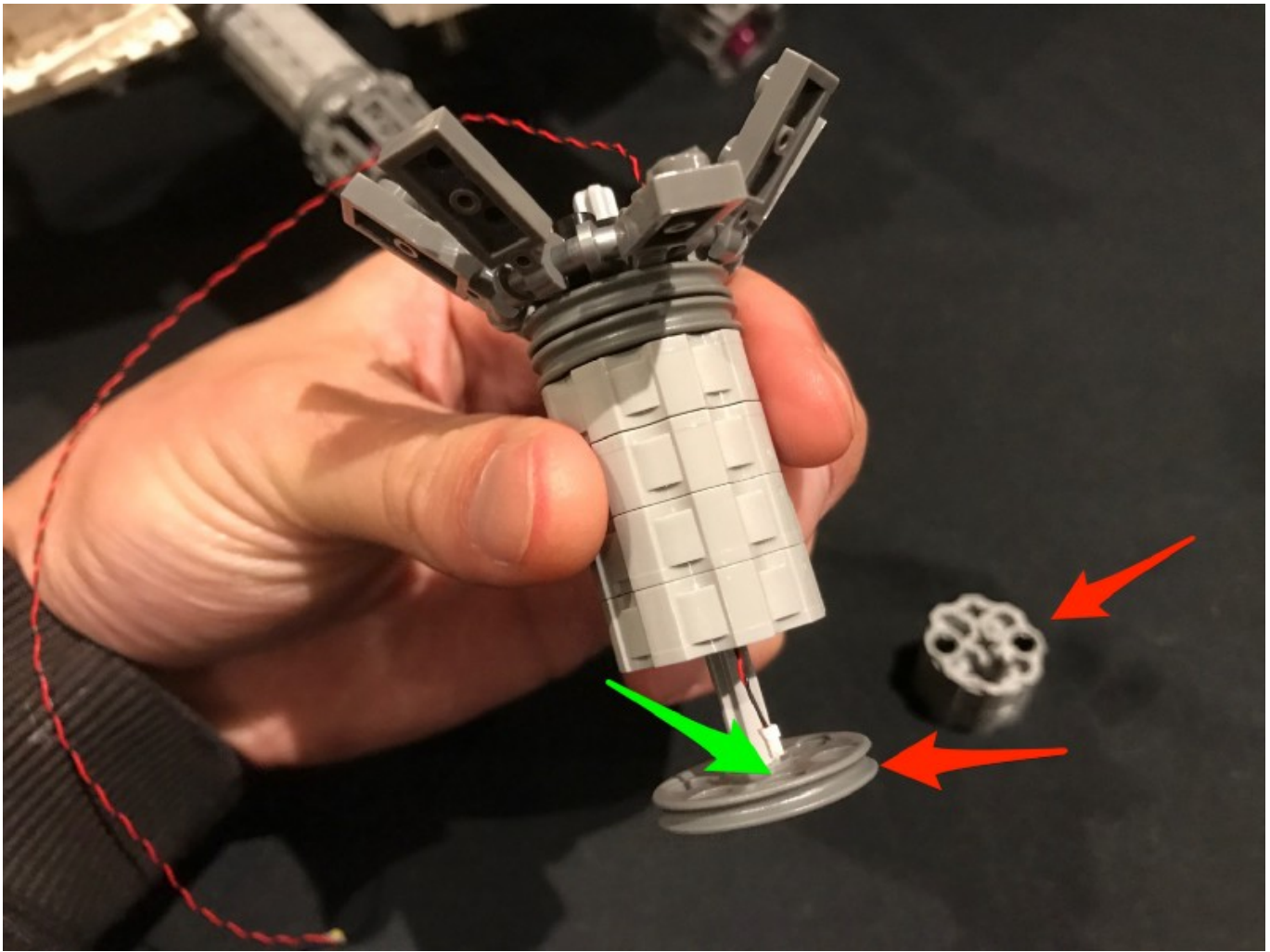




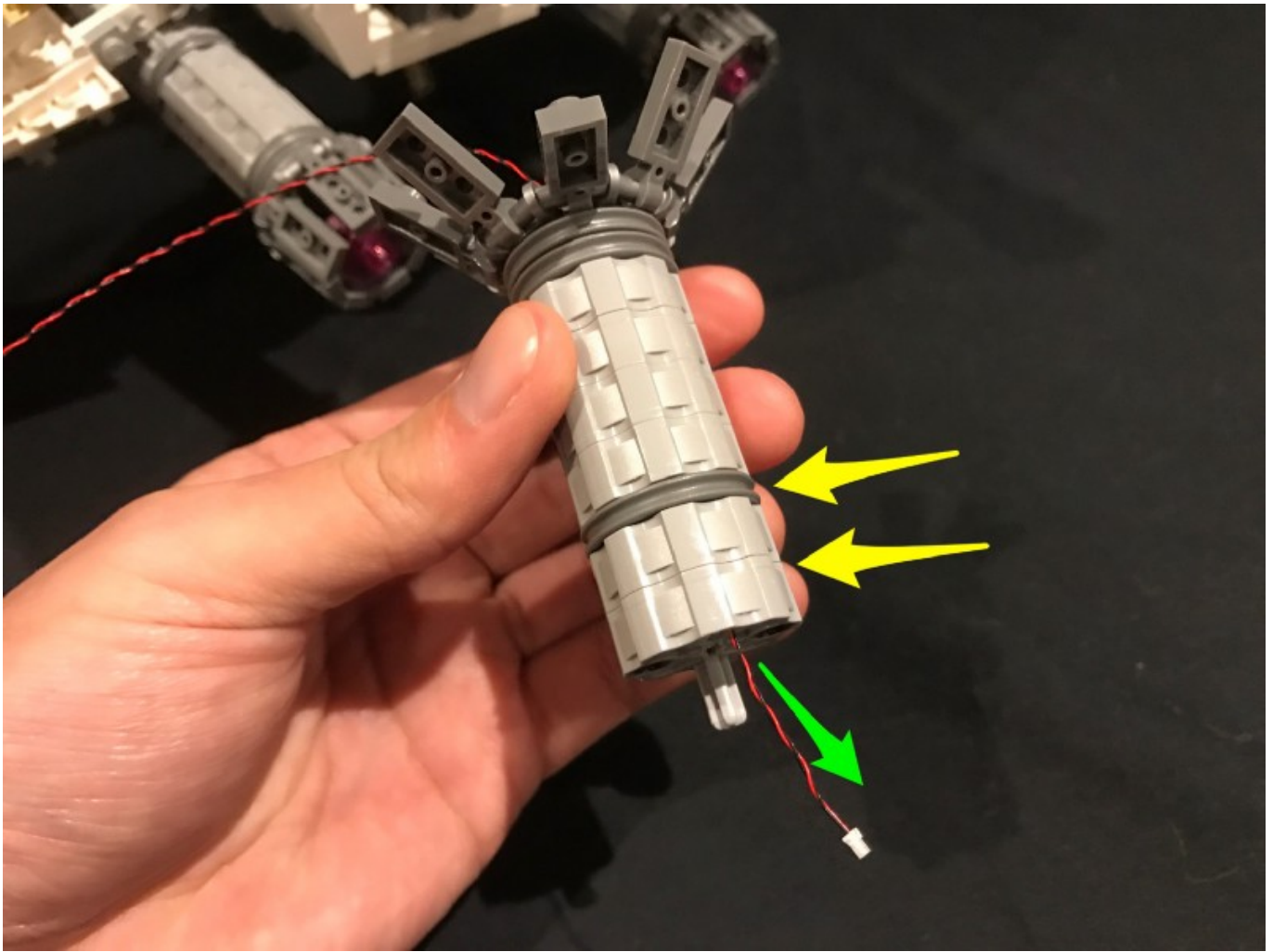
Take a **White 30cm Bit Light** and then thread the connector side through one of the spaces that allow for the cable to be threaded half way down the jet. ▲



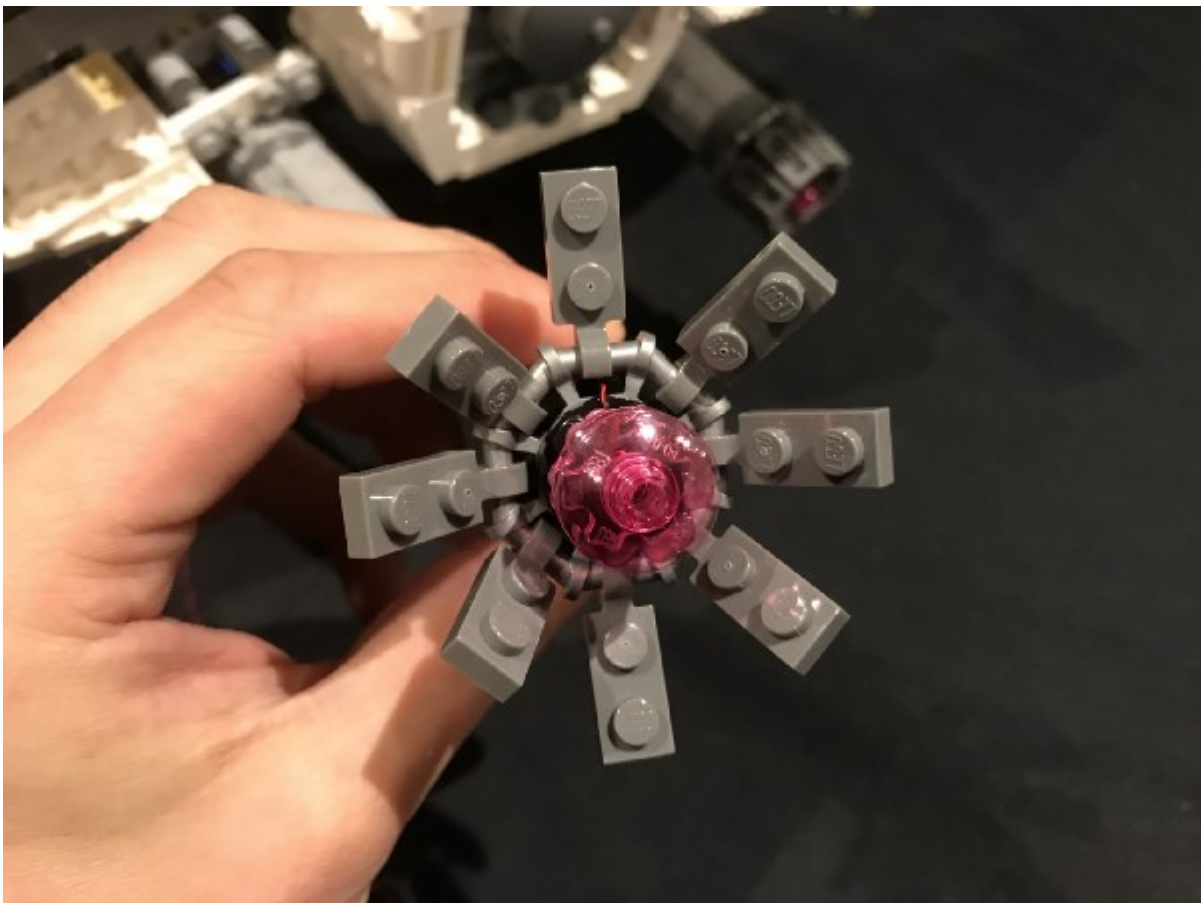
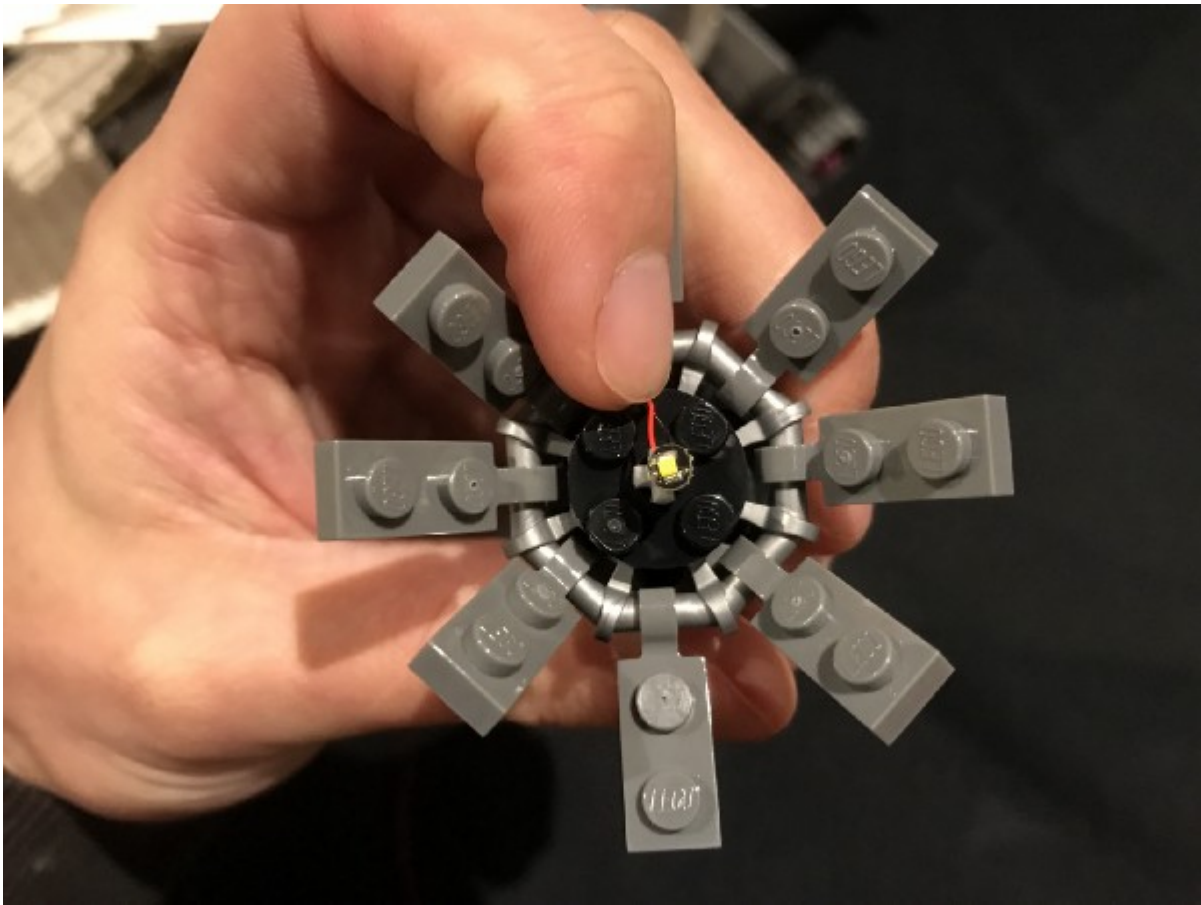
Remove the bottom barrel piece and pull the wheel piece down to allow you to thread the rest of the cable through one of the holes in the wheel piece. ▲



Once the cable is thread through, push the wheel piece up and then thread the cable through one of the holes in the barrel piece.

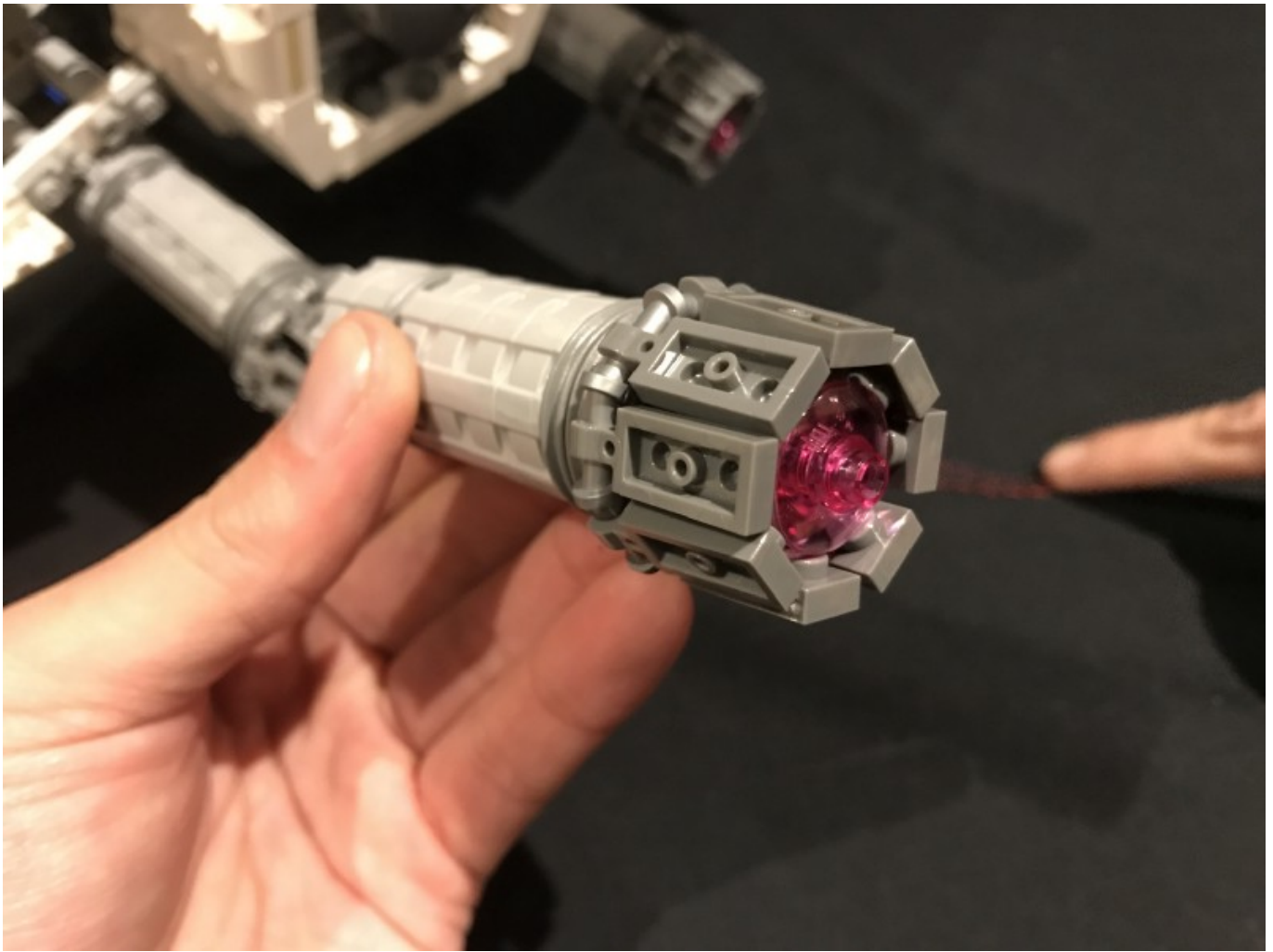


Hold the Bit Light over the centre of the jet and then secure in place by reconnecting the trans pink pieces over the top.



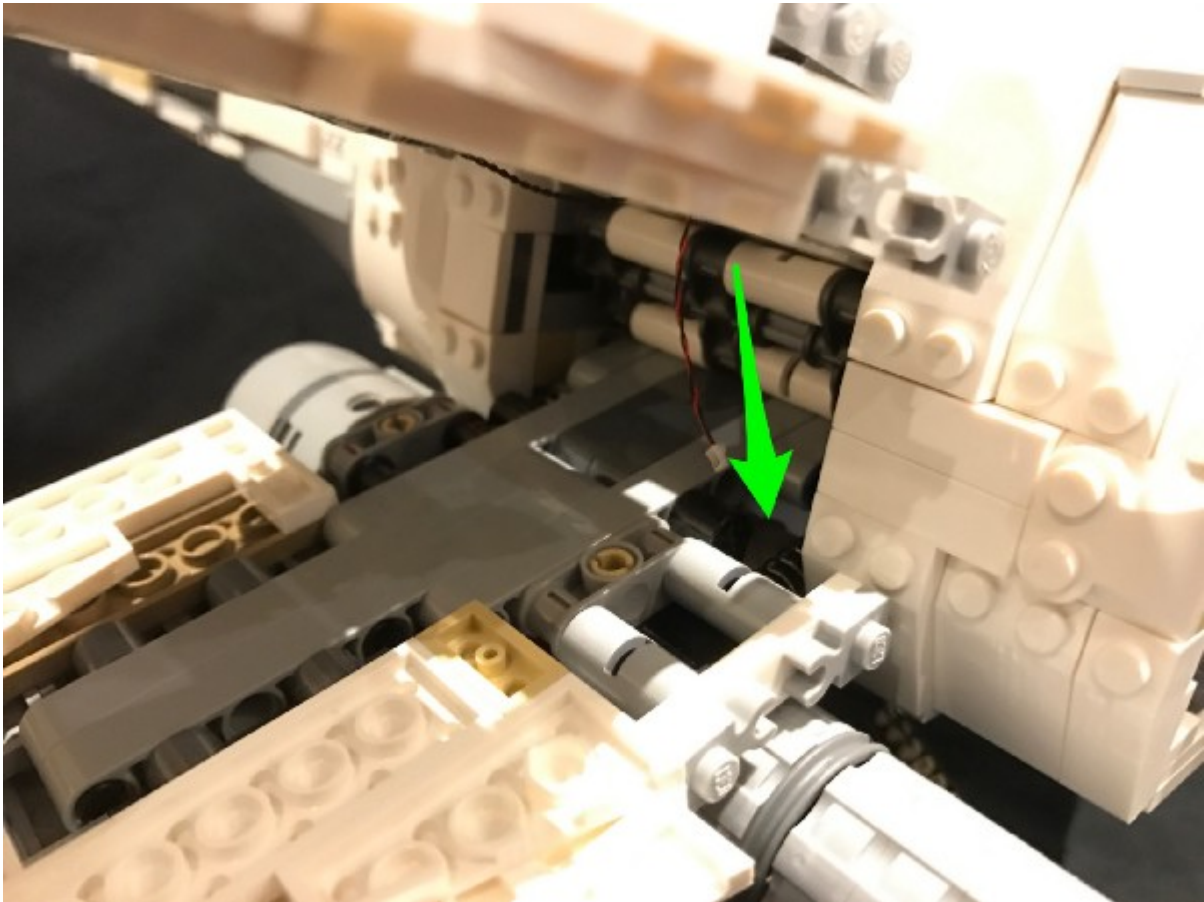
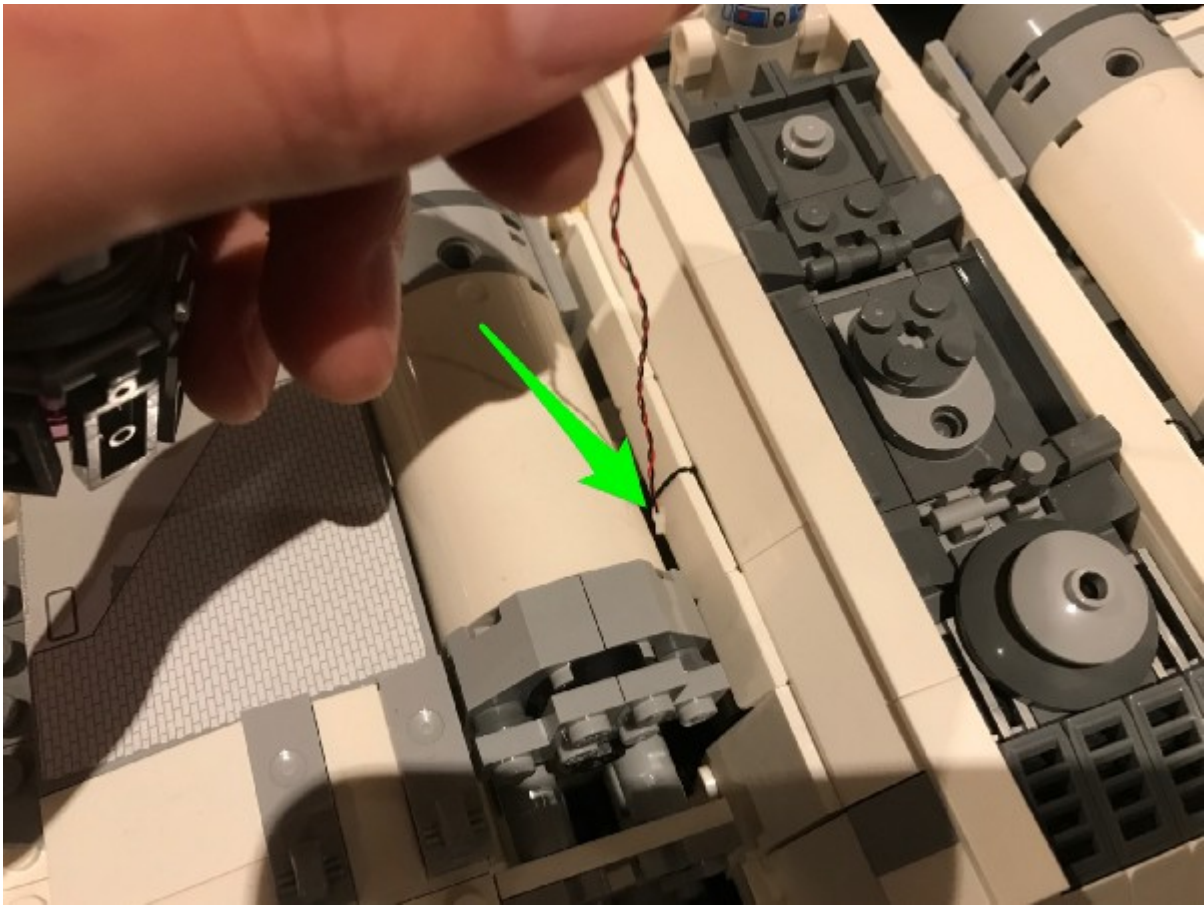
Close the surrounding sections of the jet.

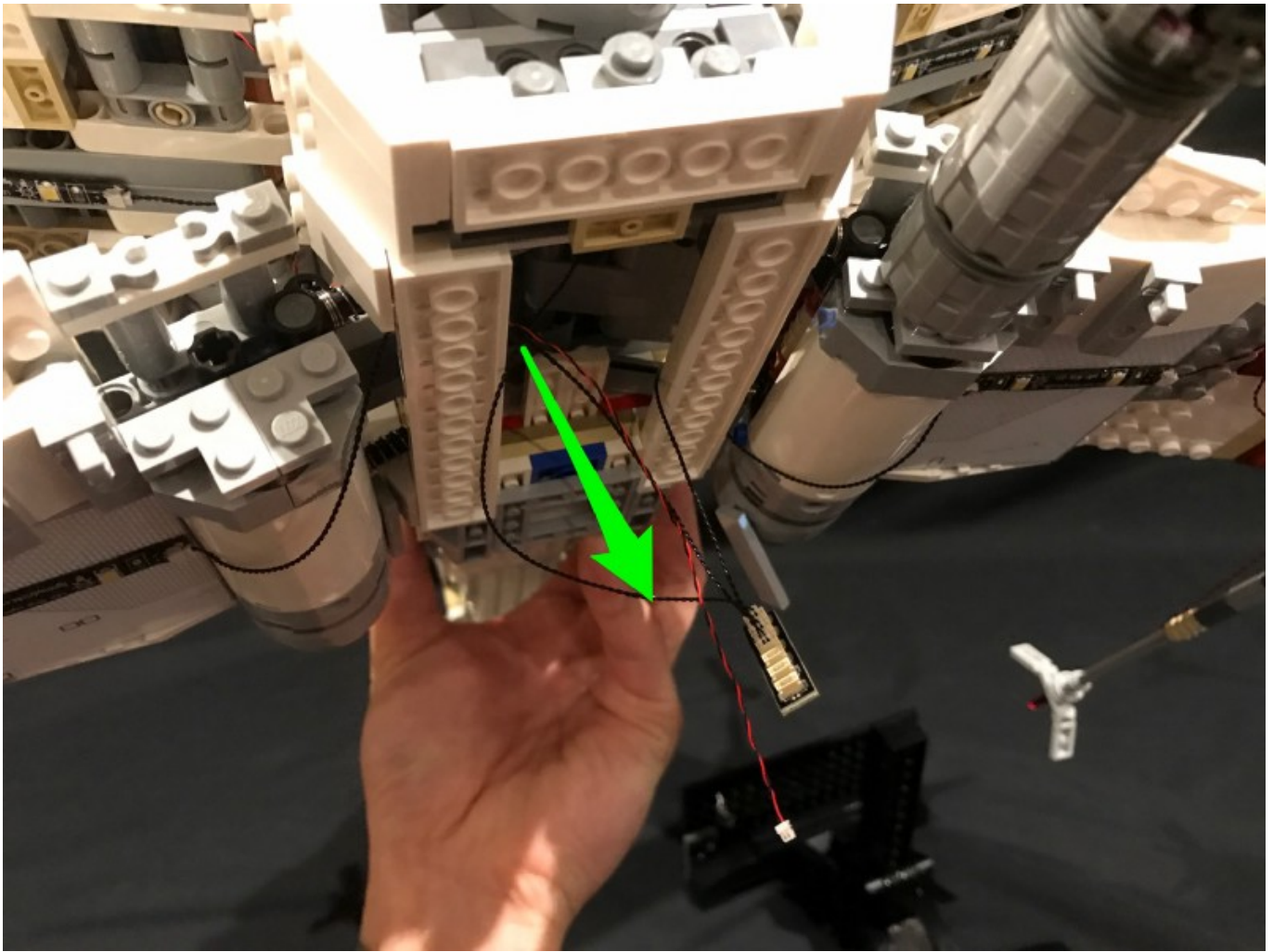




25.) Take the jet section and then thread the cable from the bottom of it through the space at the top of the wing. Pull the cable down from underneath the wing and then thread through the space which leads underneath at the open section.





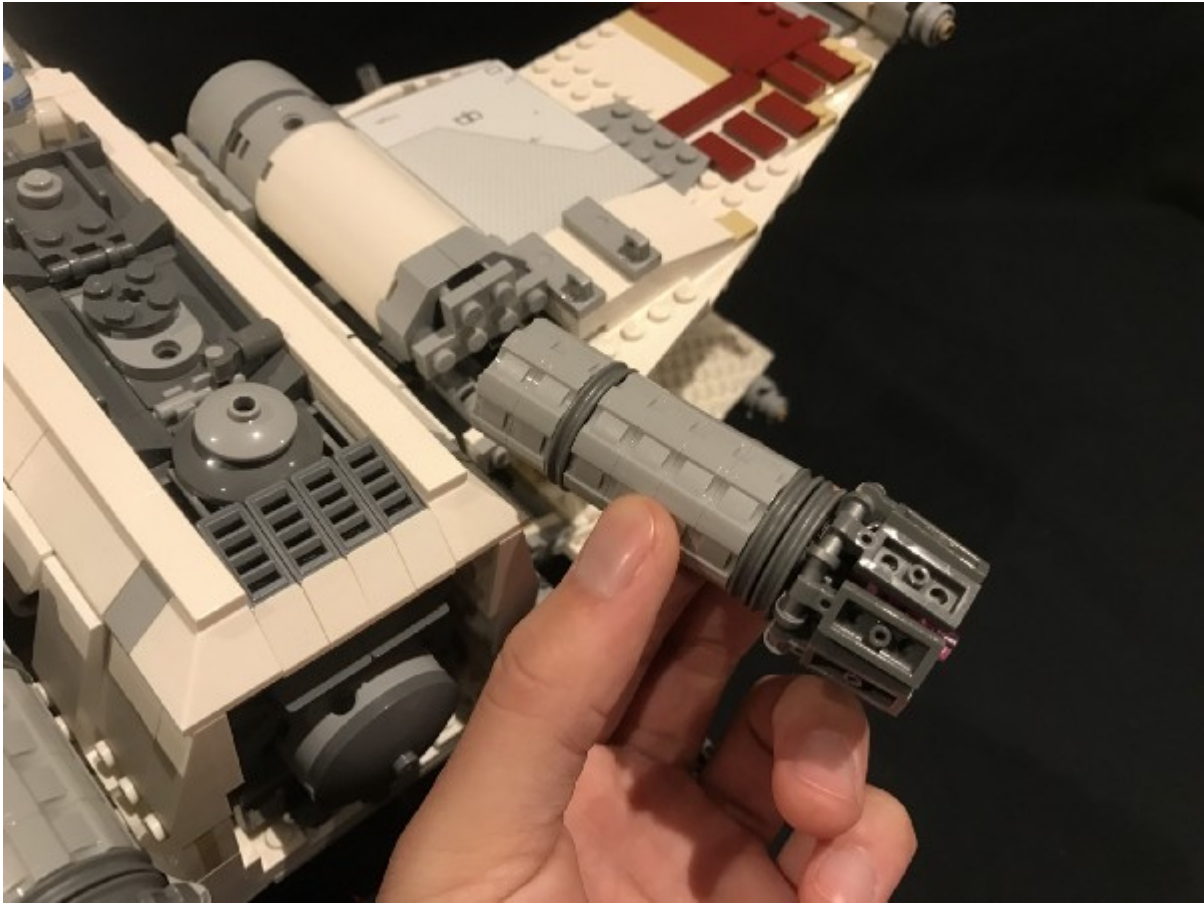


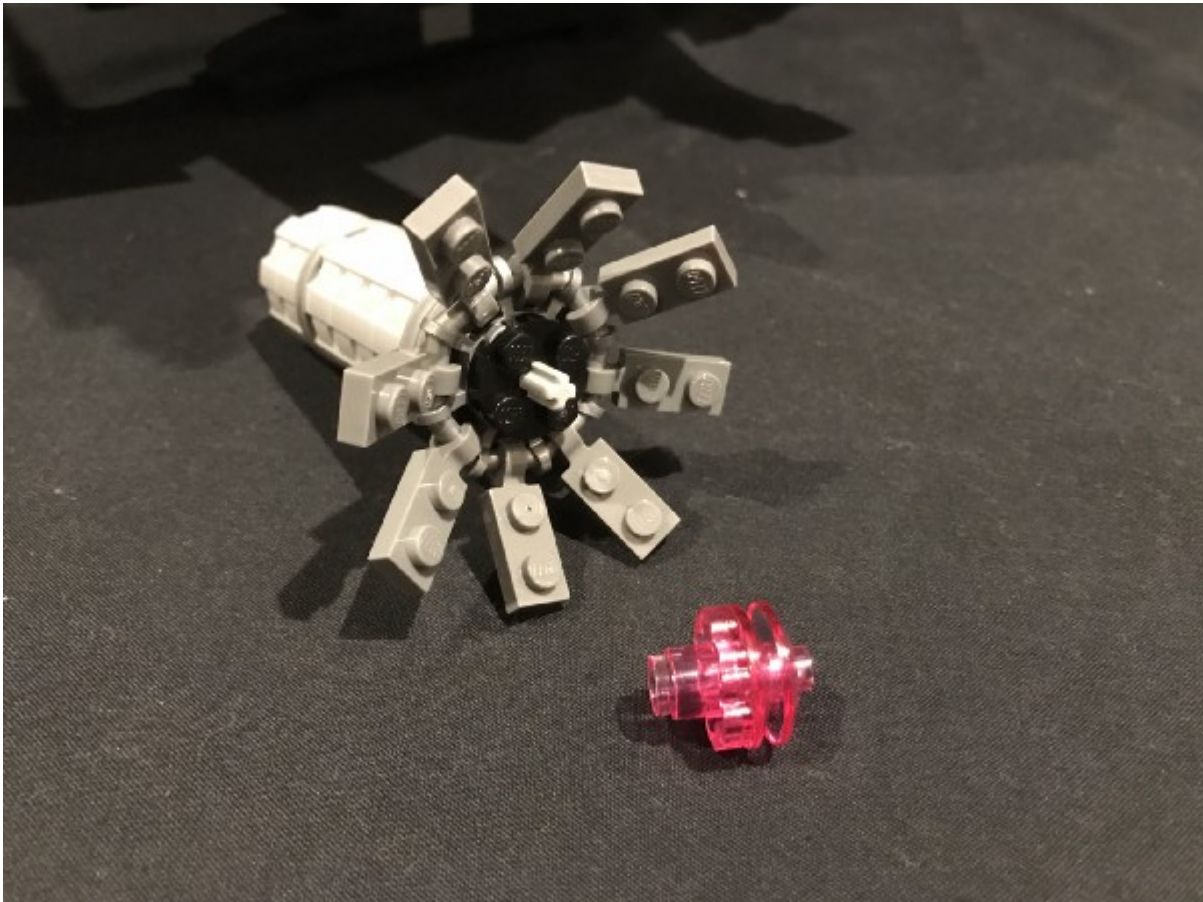
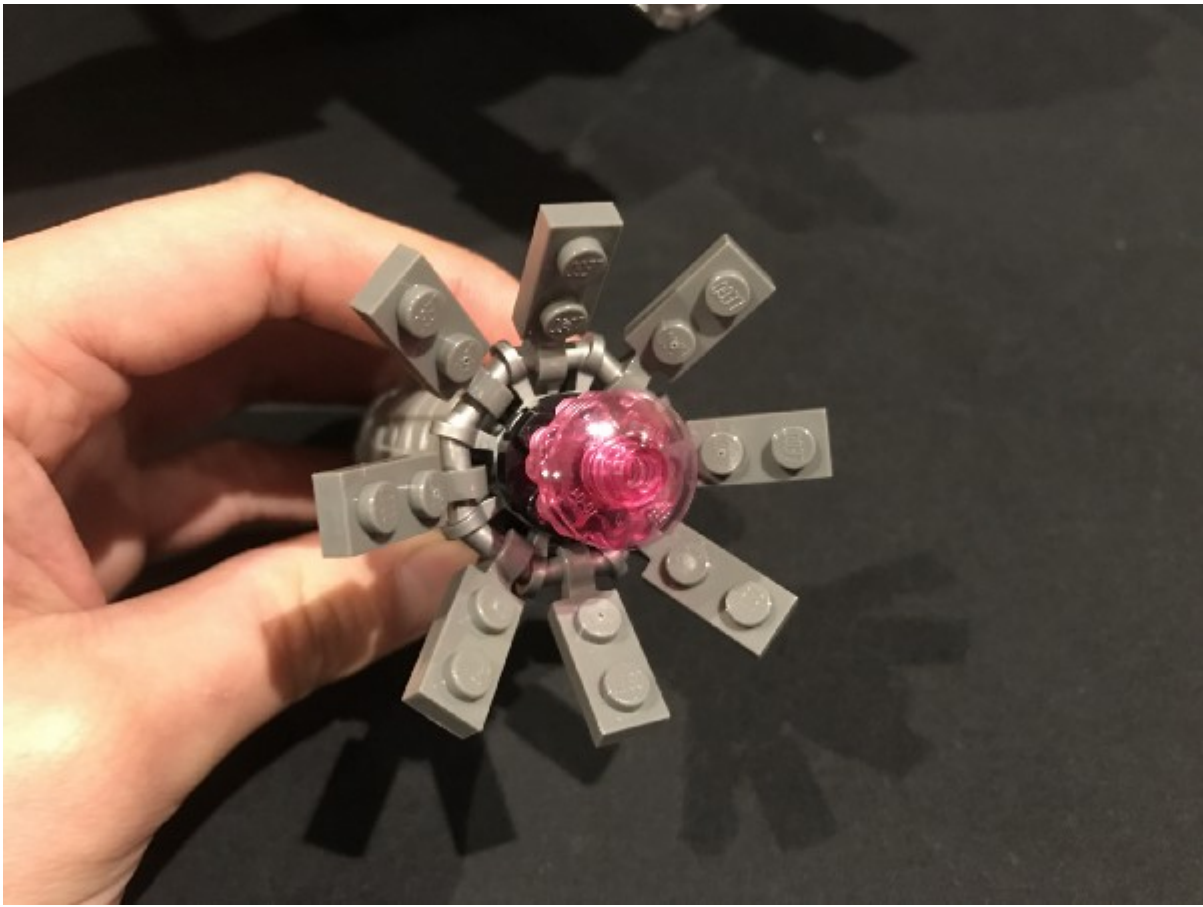
Pull the cable all the way through and then reconnect the jet section back to the X-Wing.

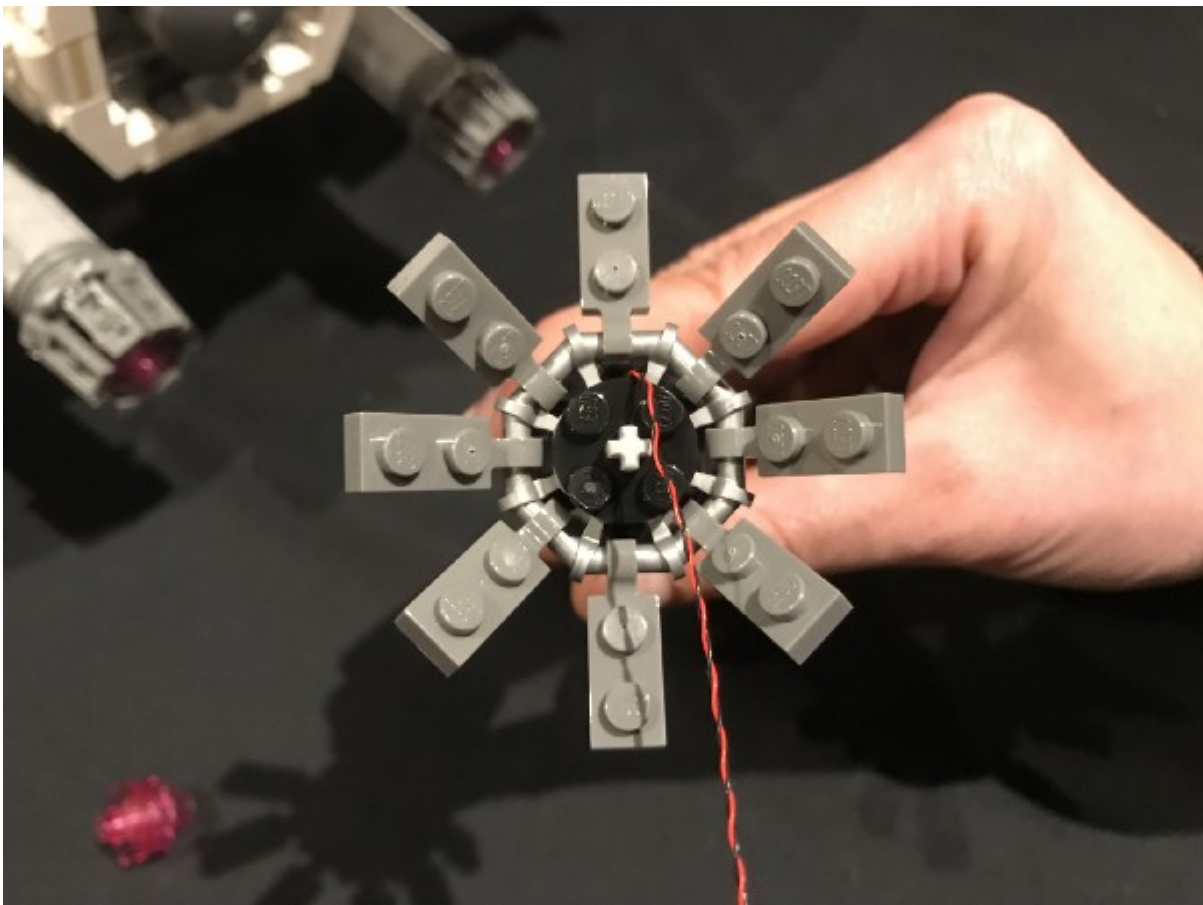
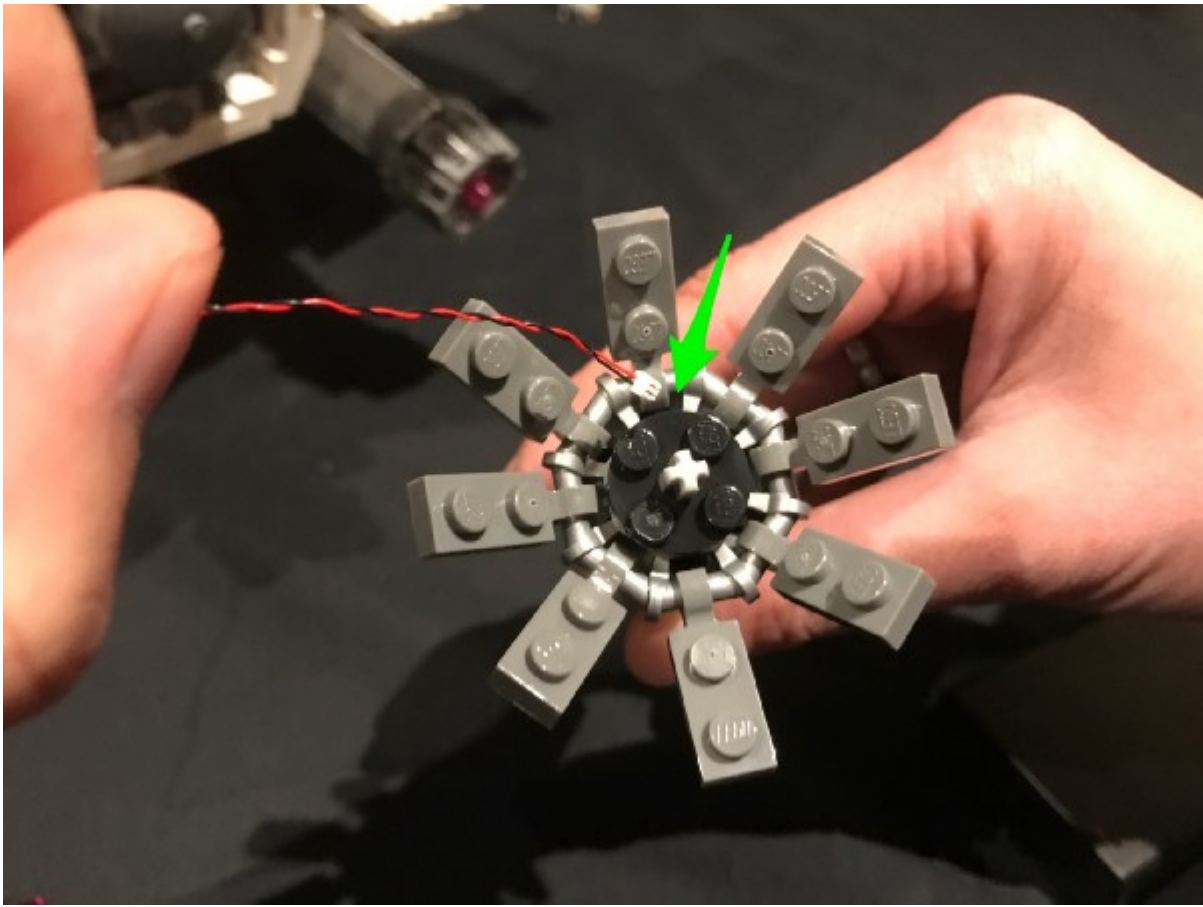


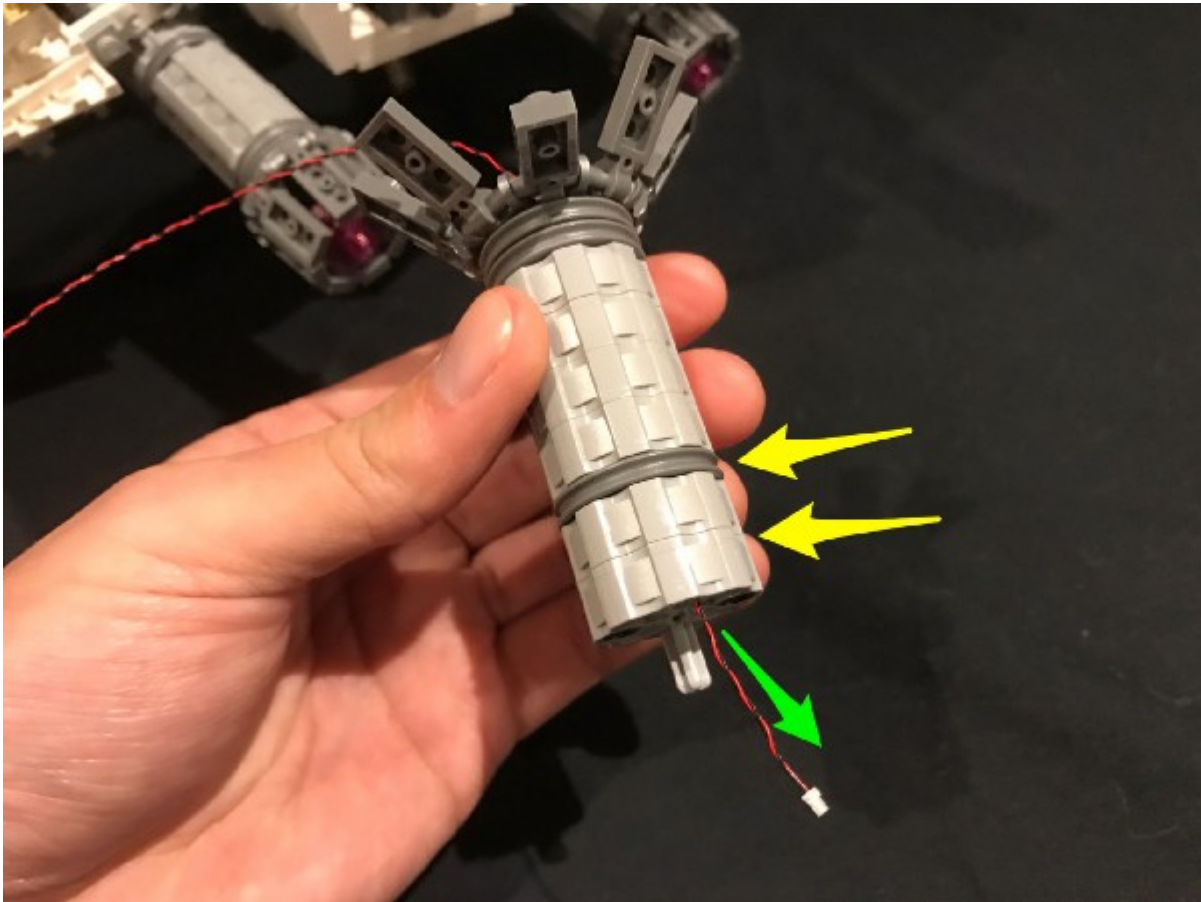
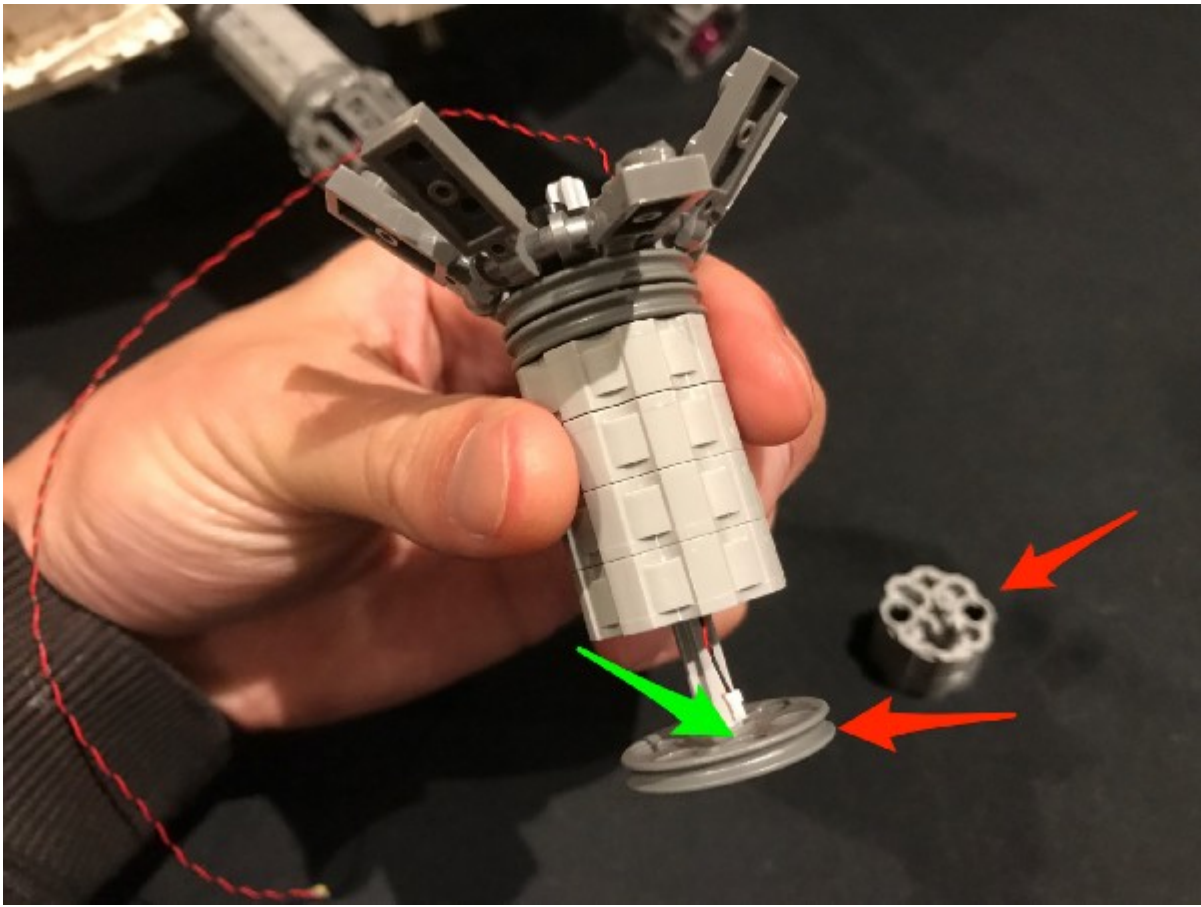


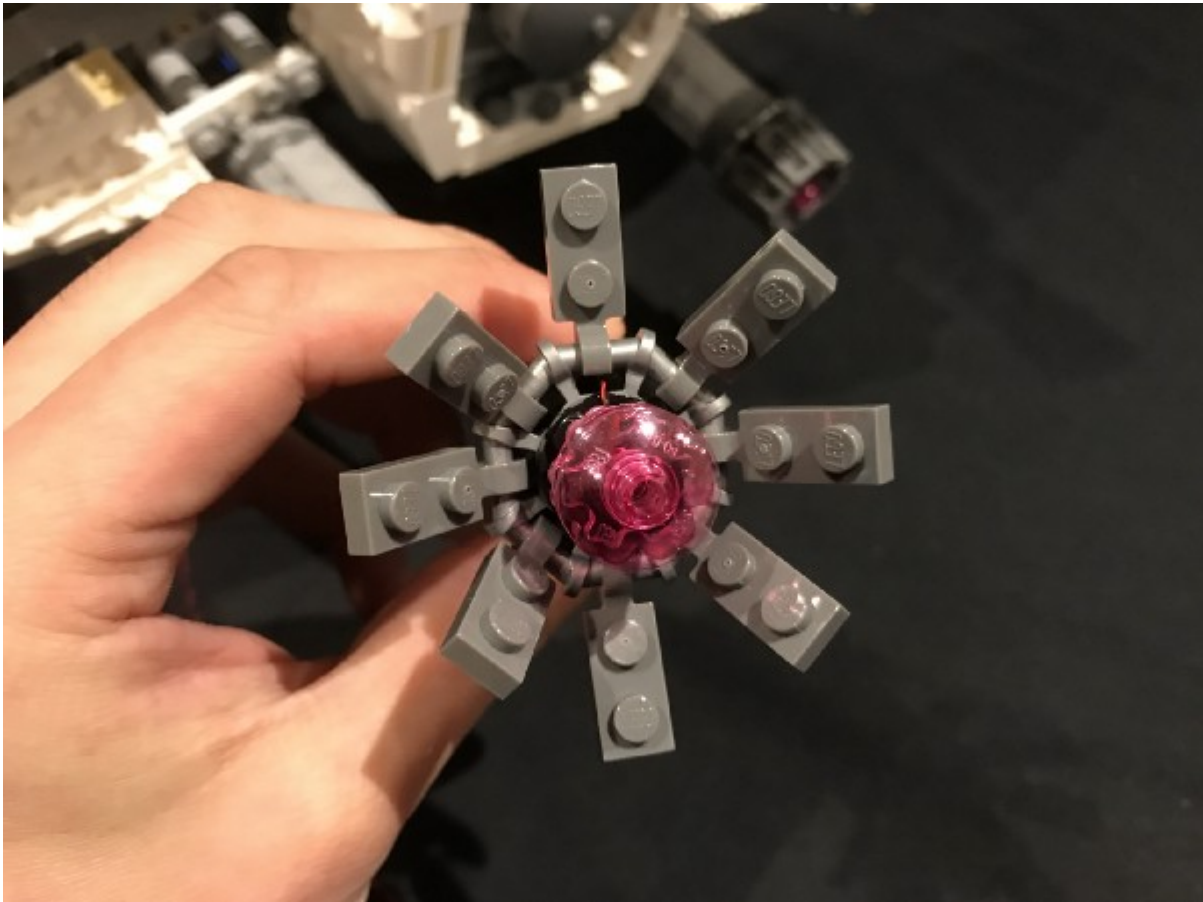
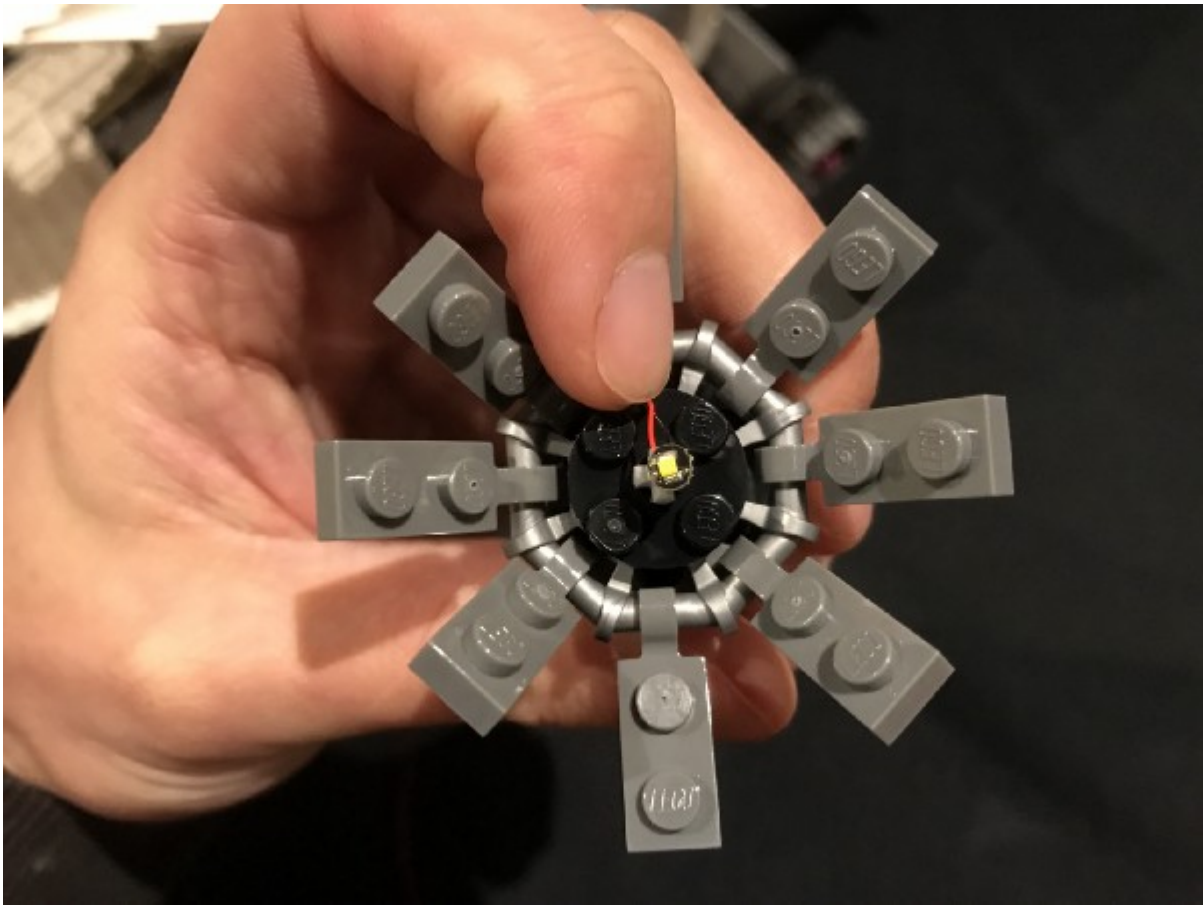
26.) Repeat the previous two steps to install another **White 30cm Bit Light** to the upper right jet.

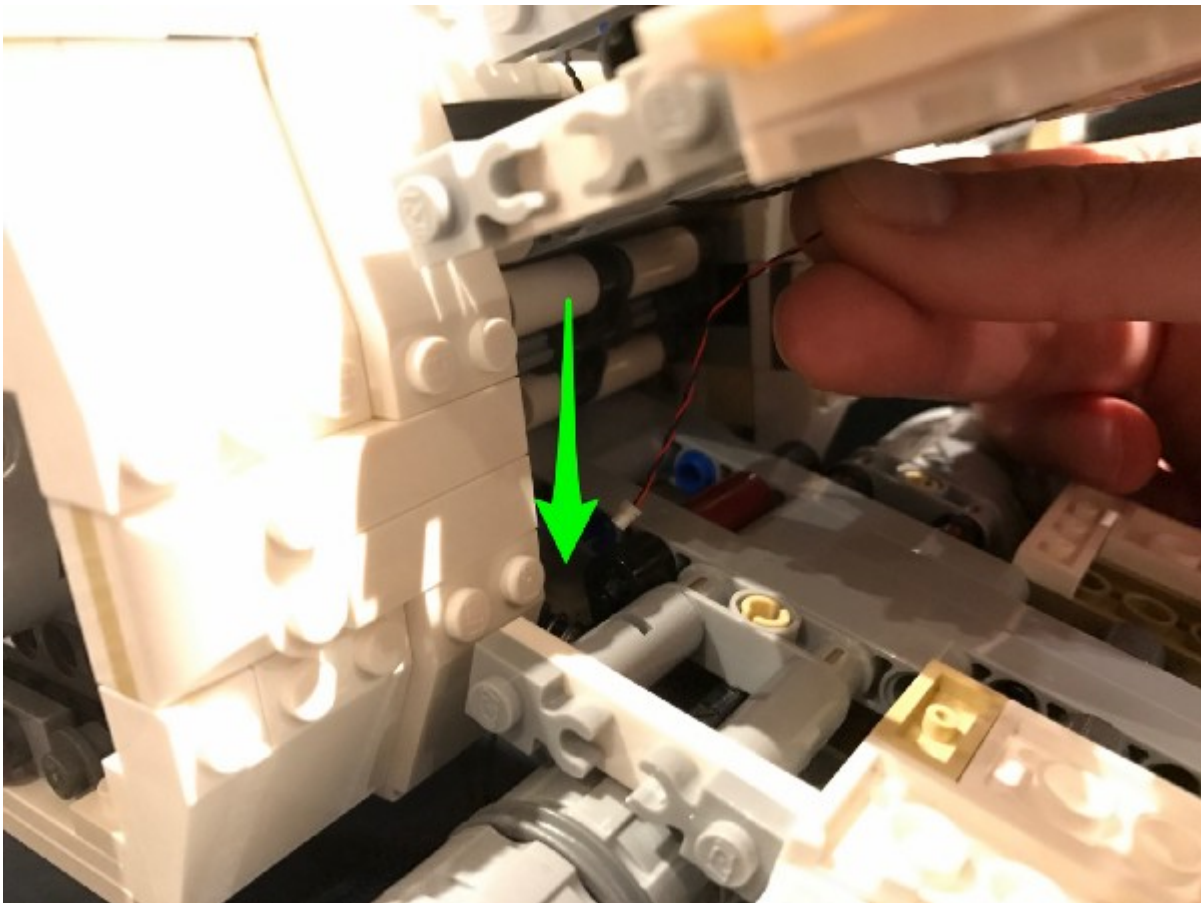
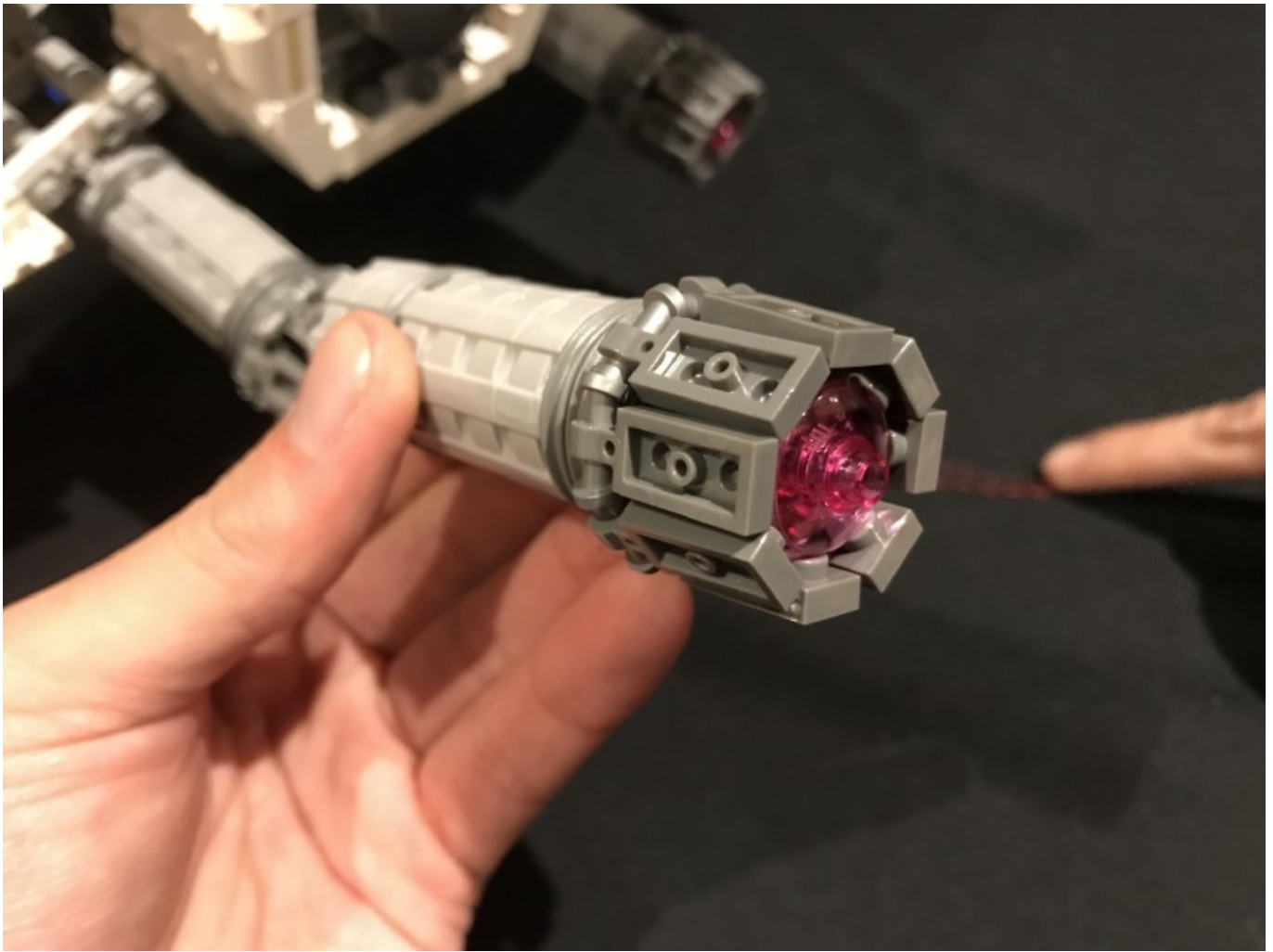


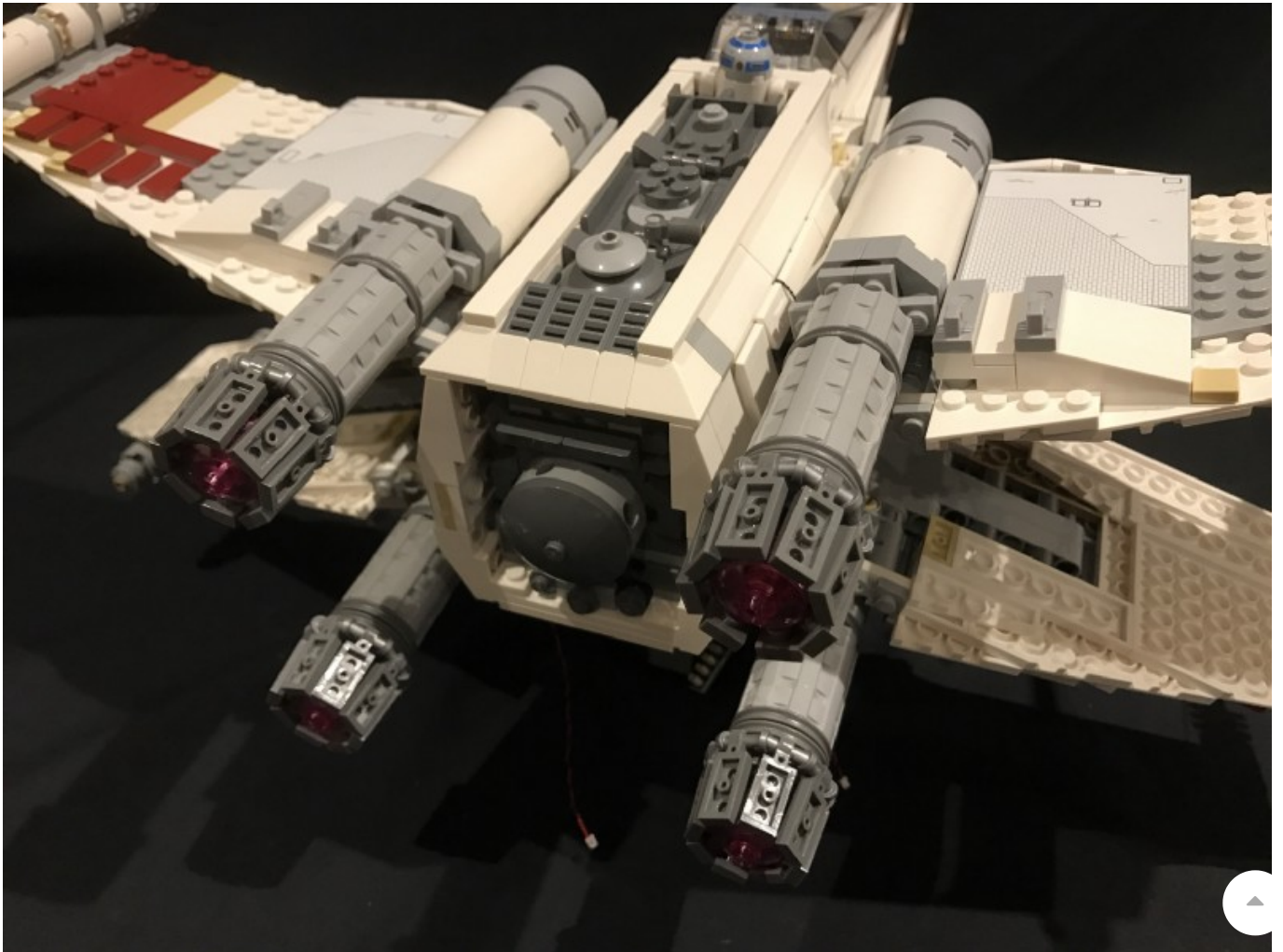
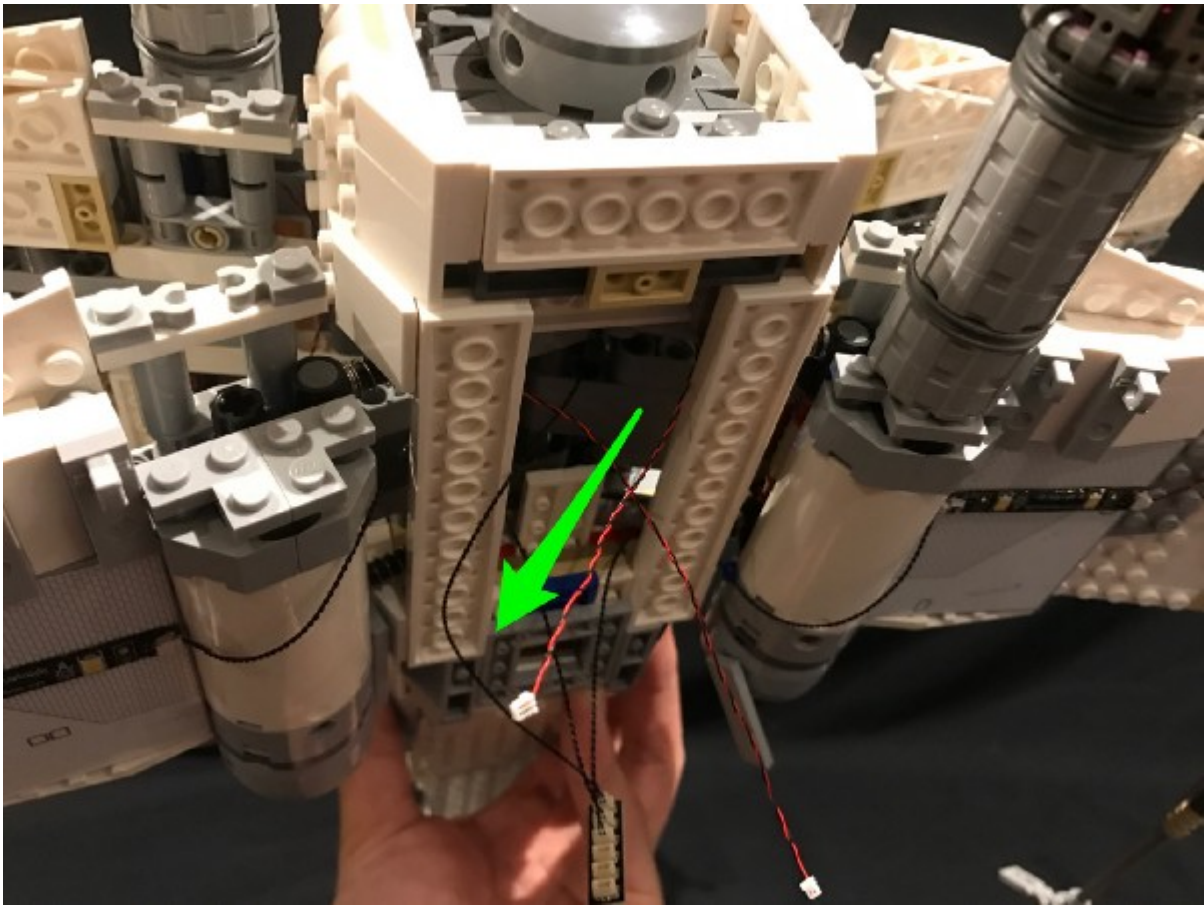




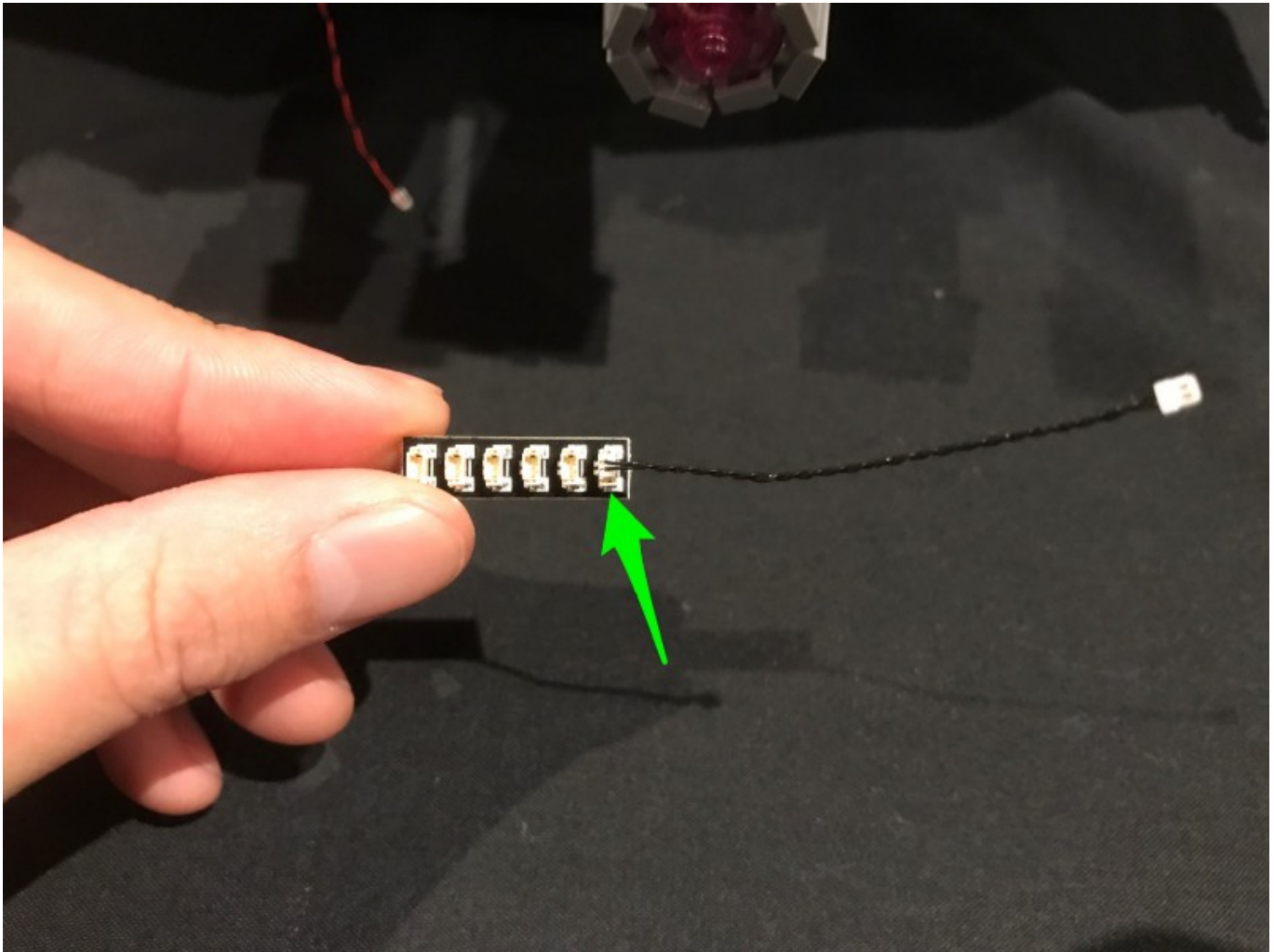




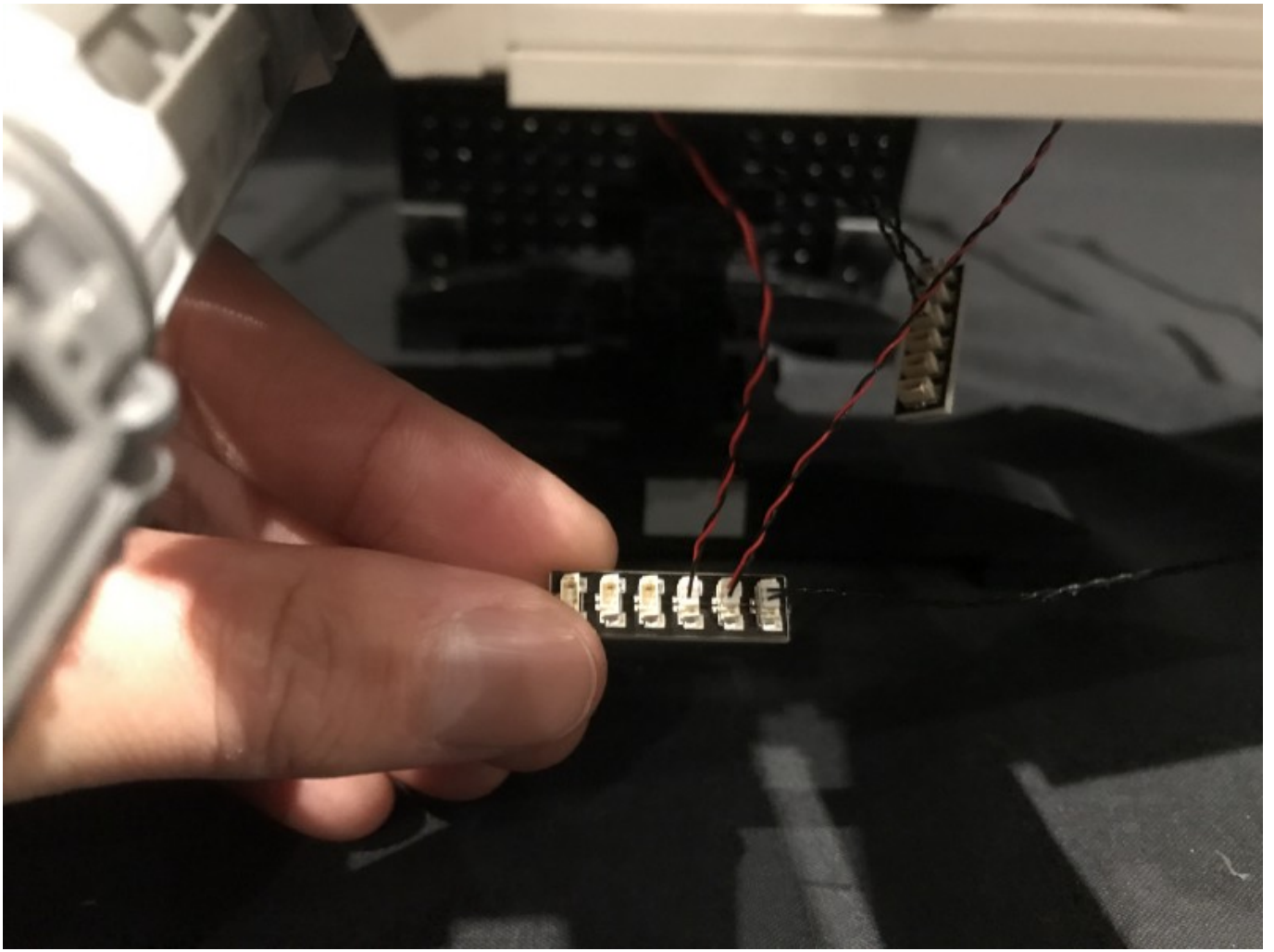


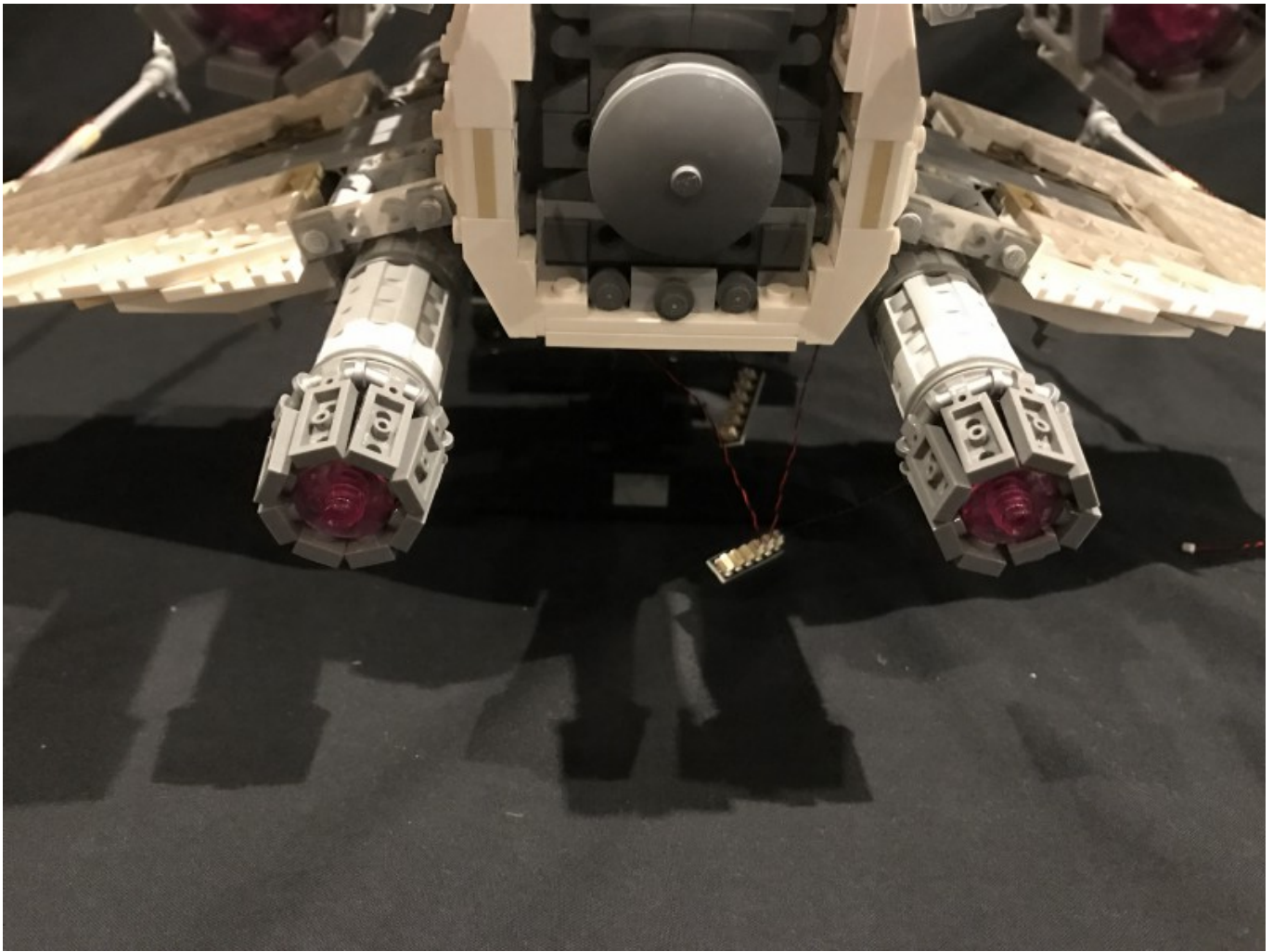


27.) Take another **6-Port Expansion Board** and then connect a **5cm Connecting Cable** to one of the outside ports.

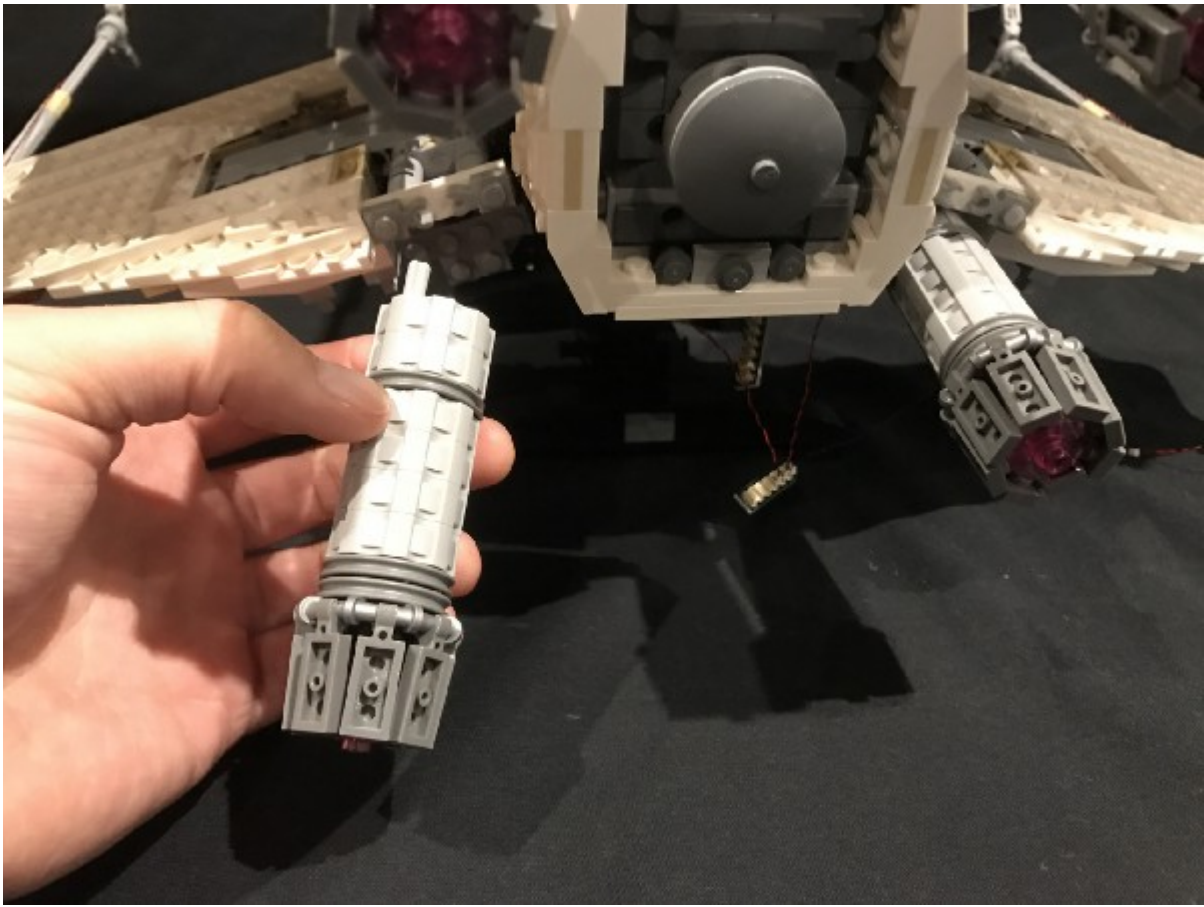


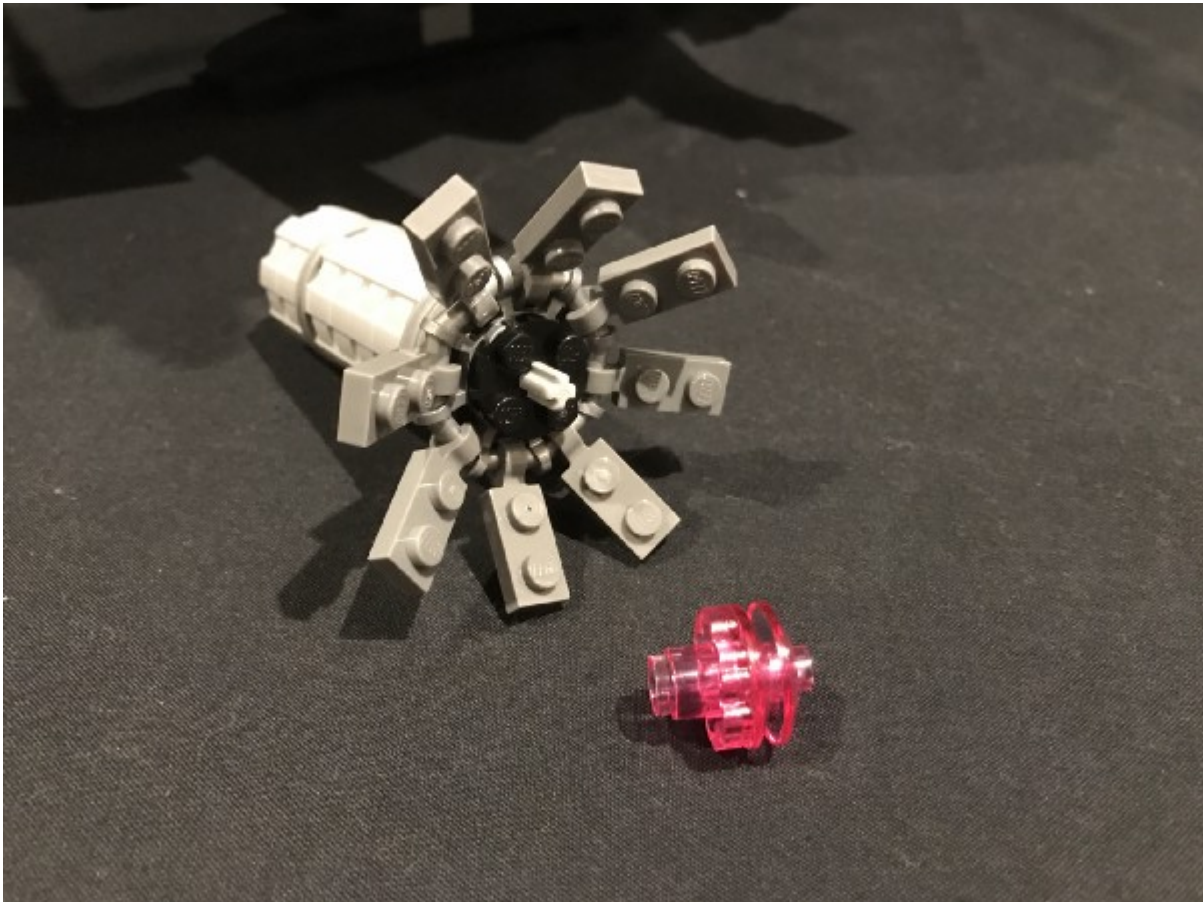
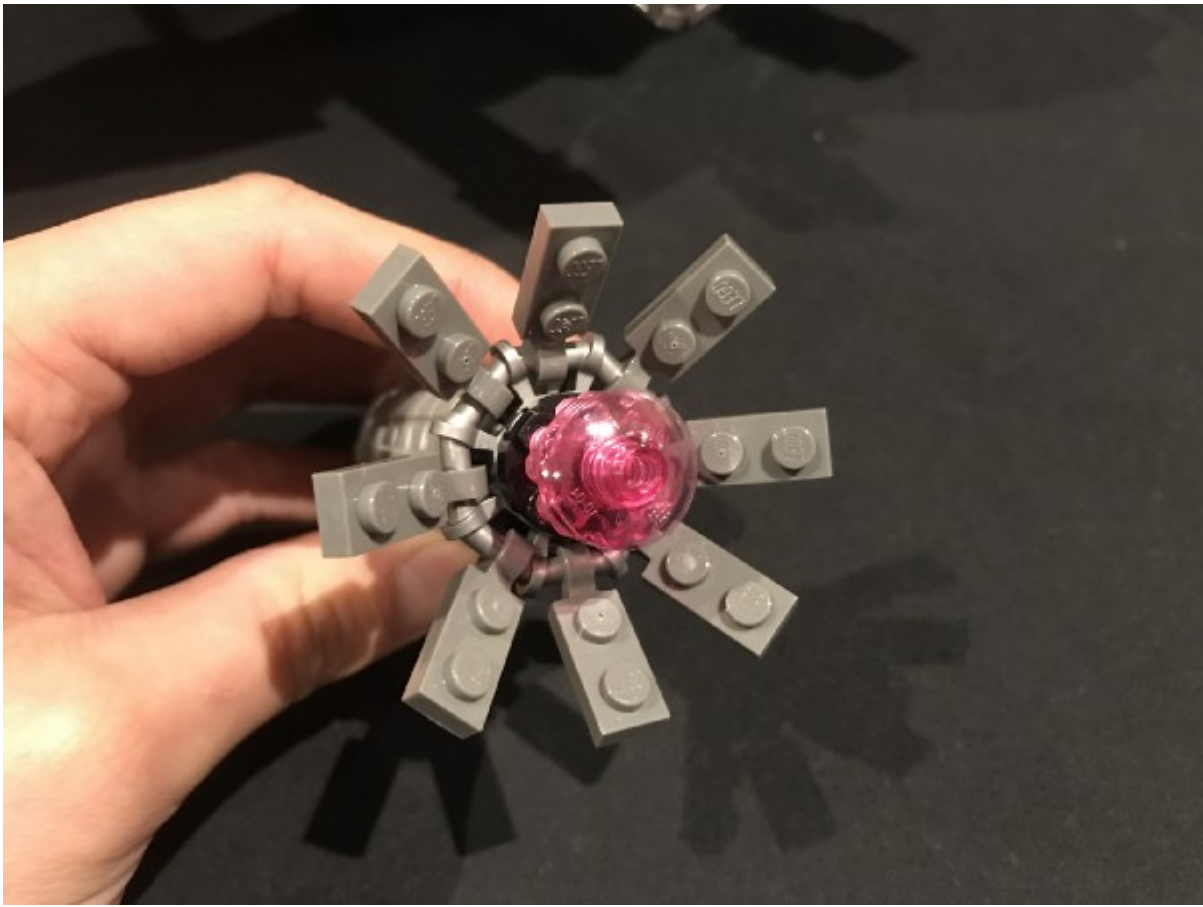
Take the two Bit Lights from the upper jets and then connect them to available ports on the expansion board we have just used.

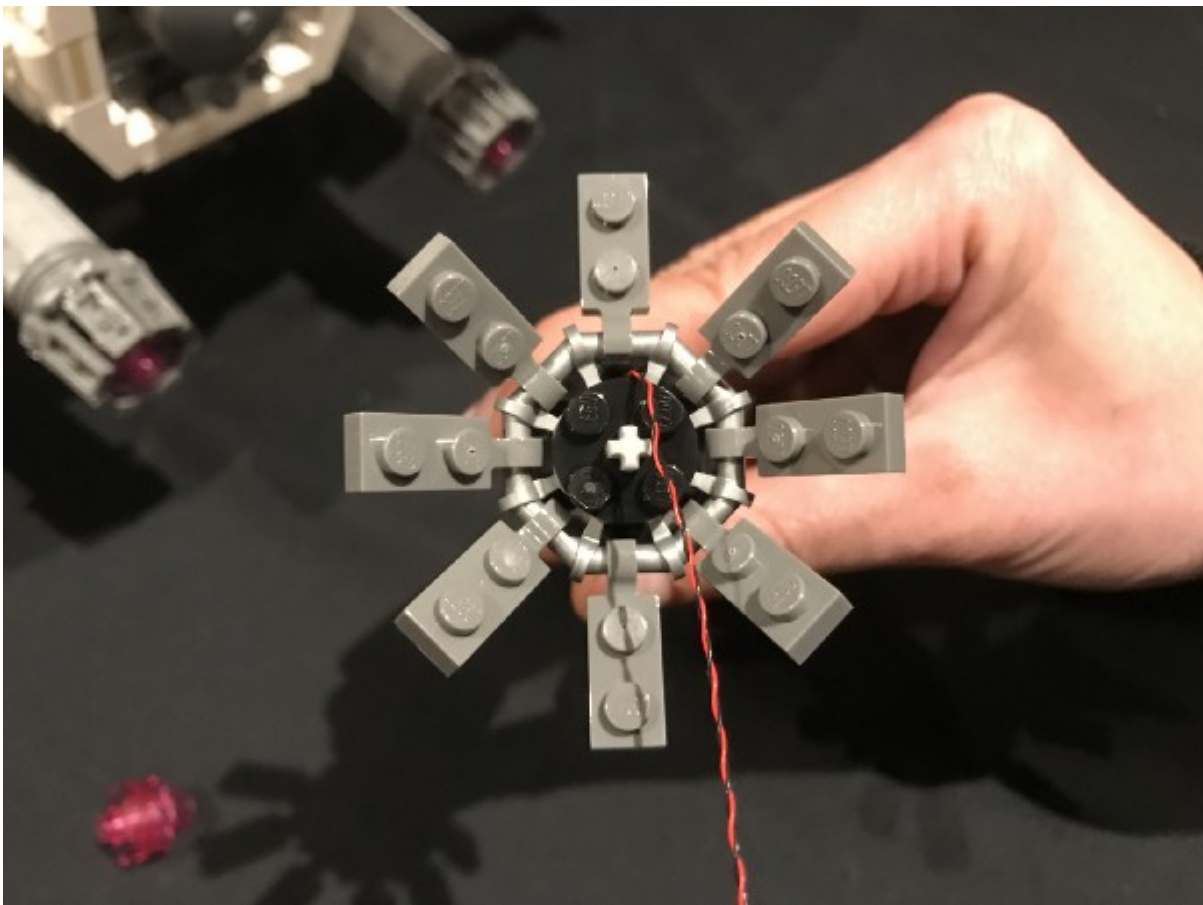
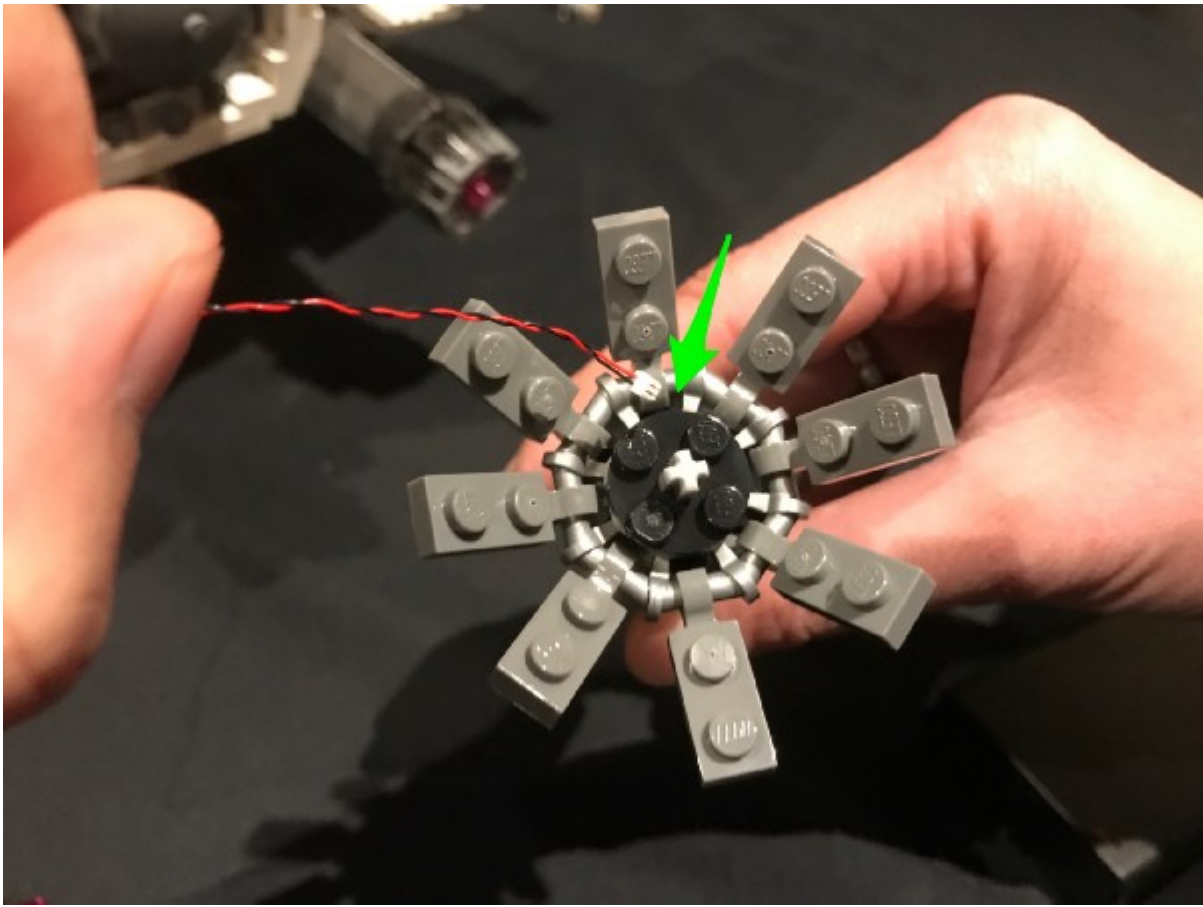


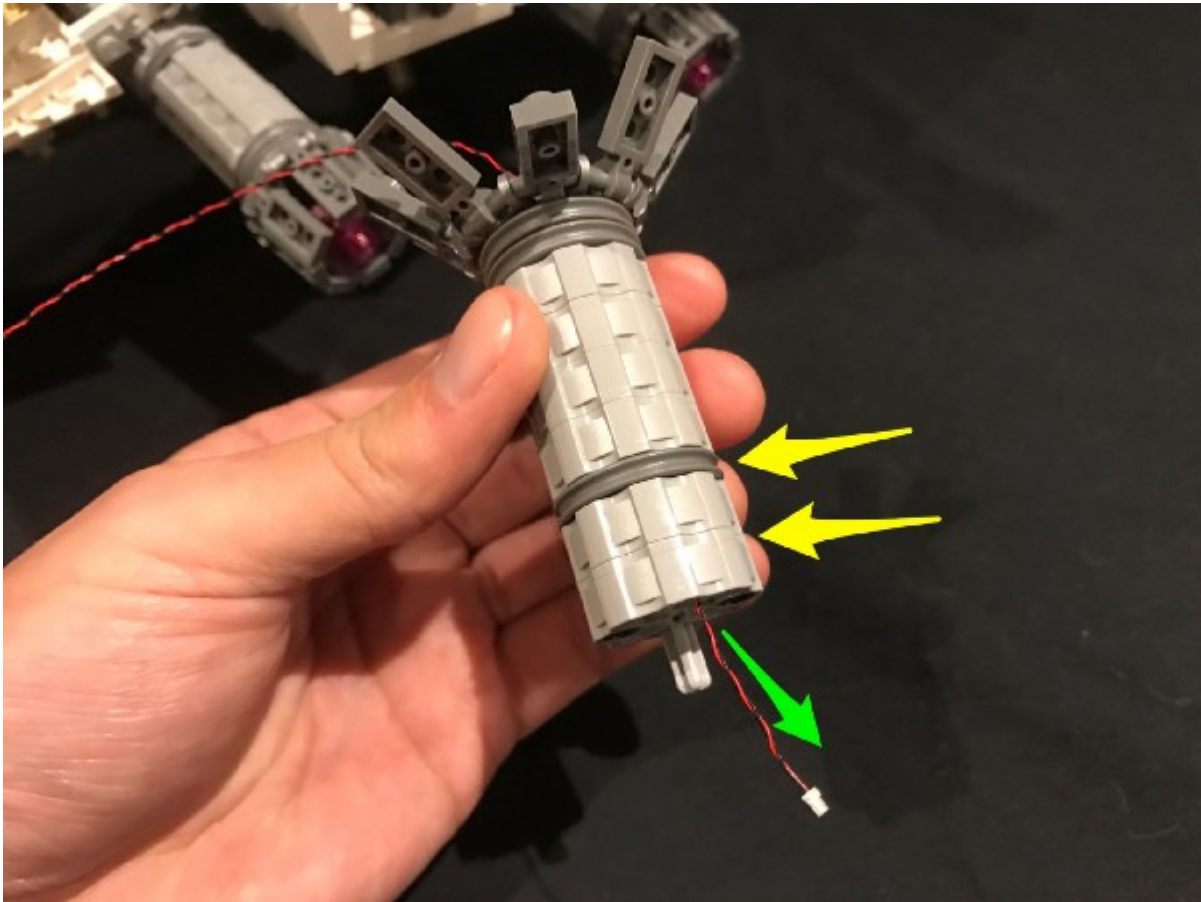
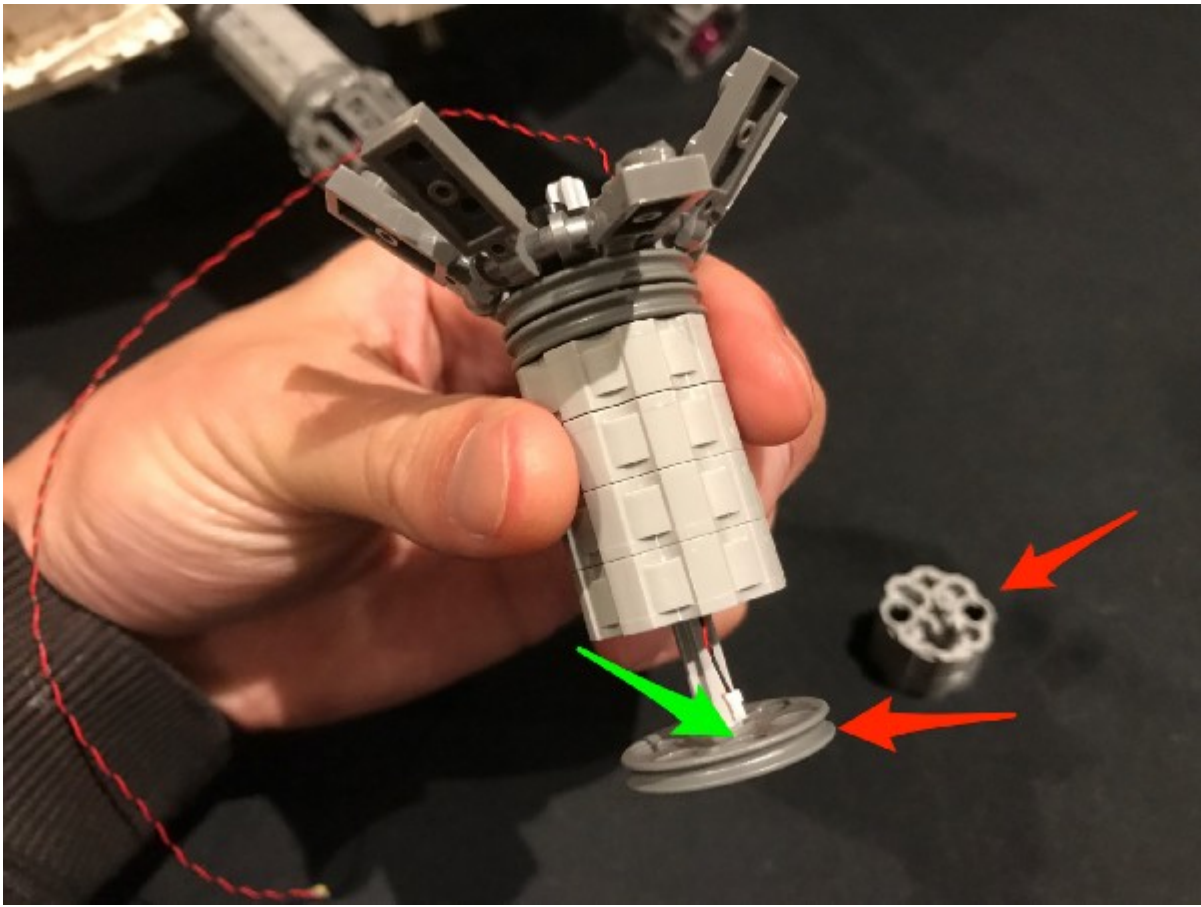


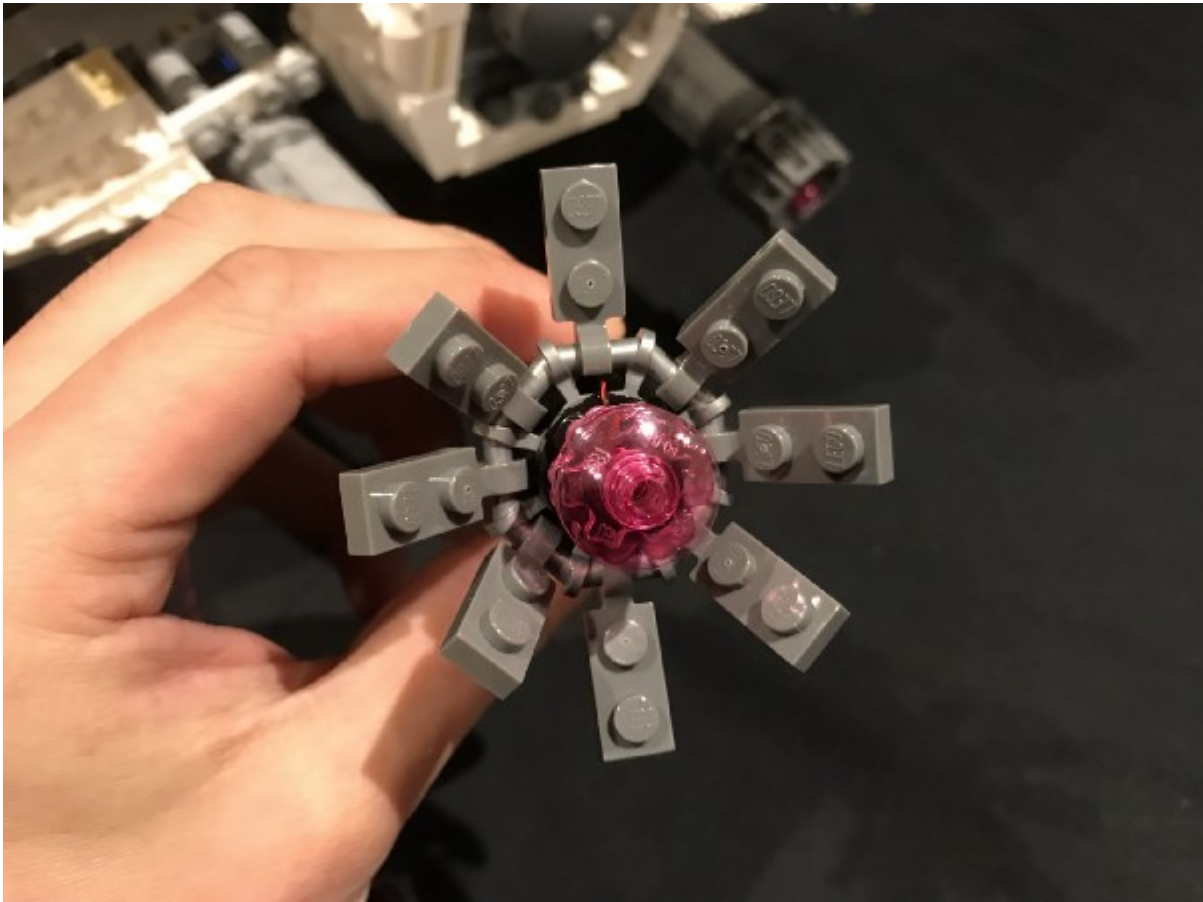
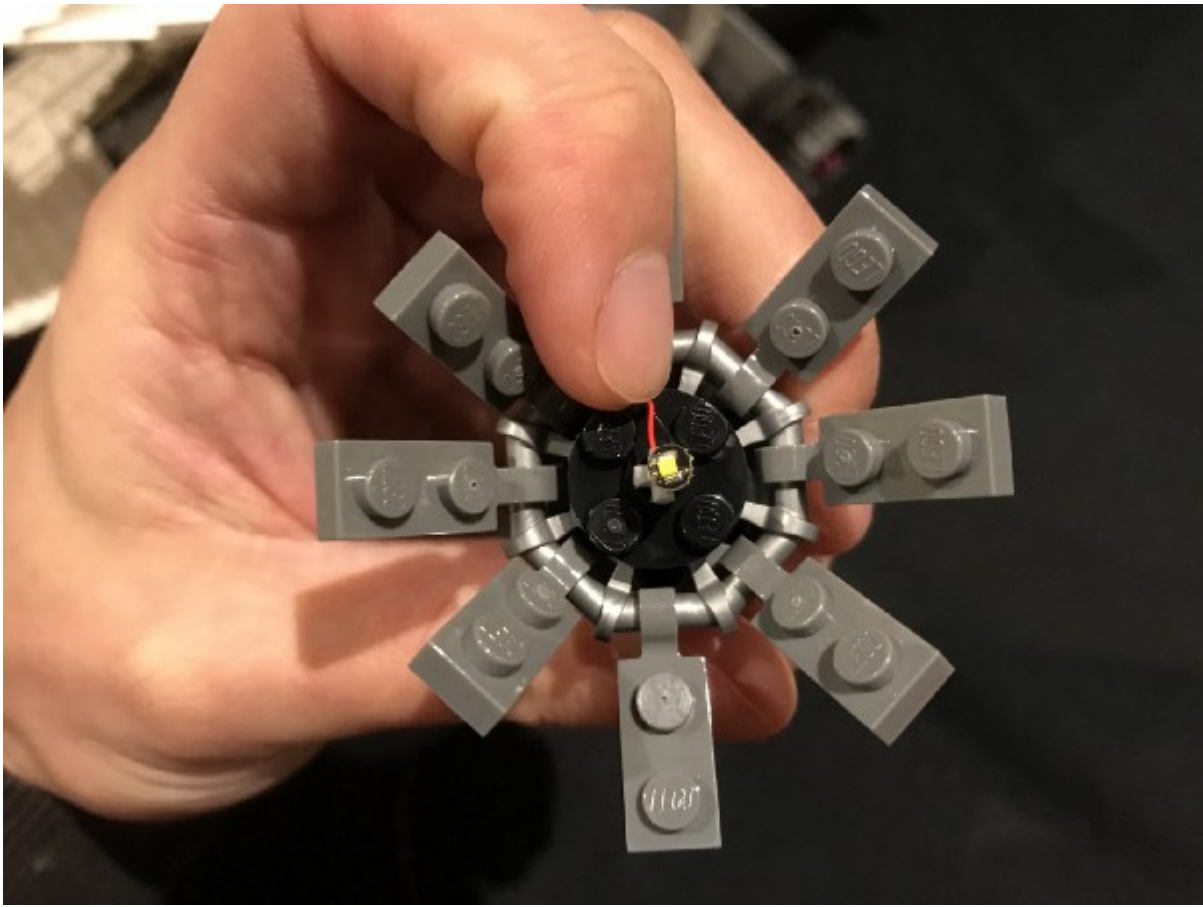
28.) Repeat the same process as we did for the upper jets to install another **White 30cm Bit Light** to the bottom left jet.

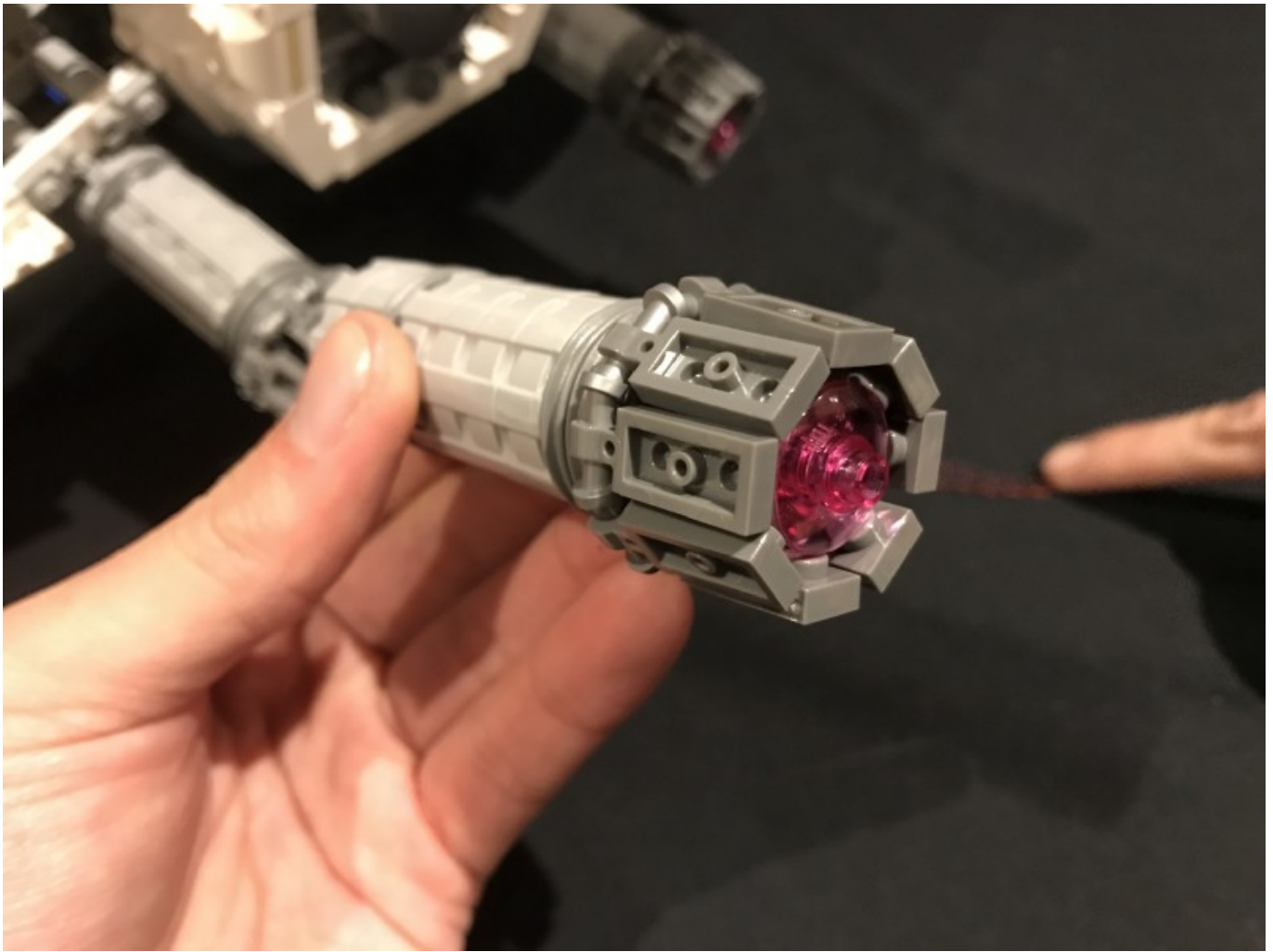






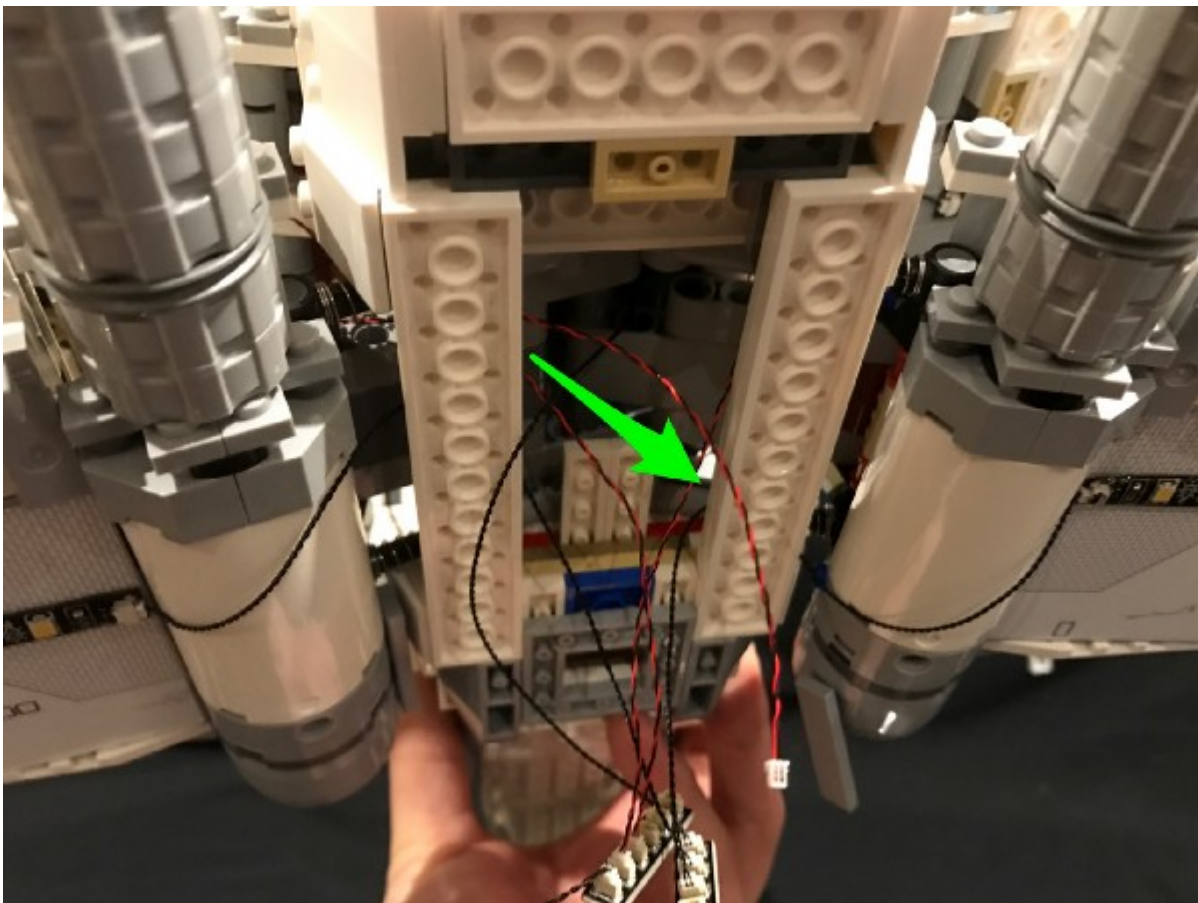
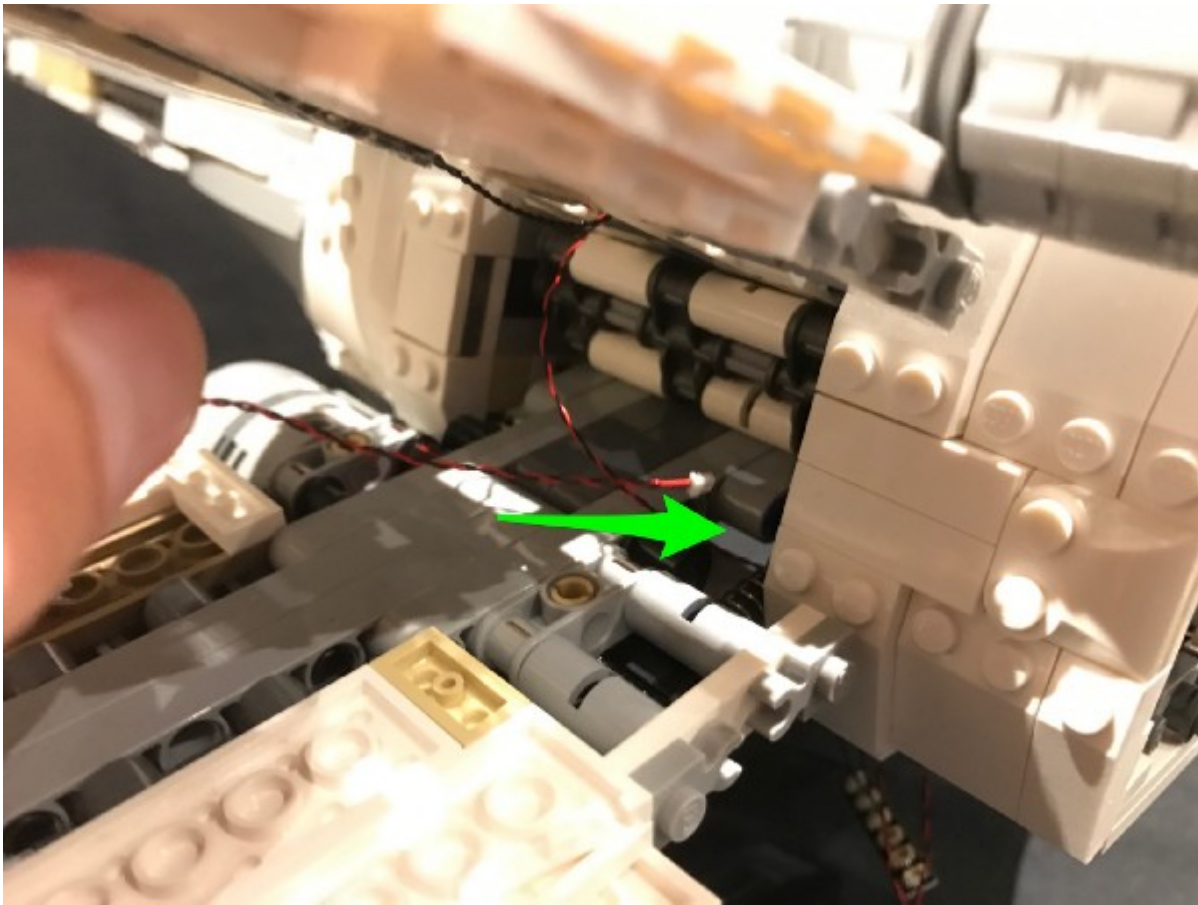






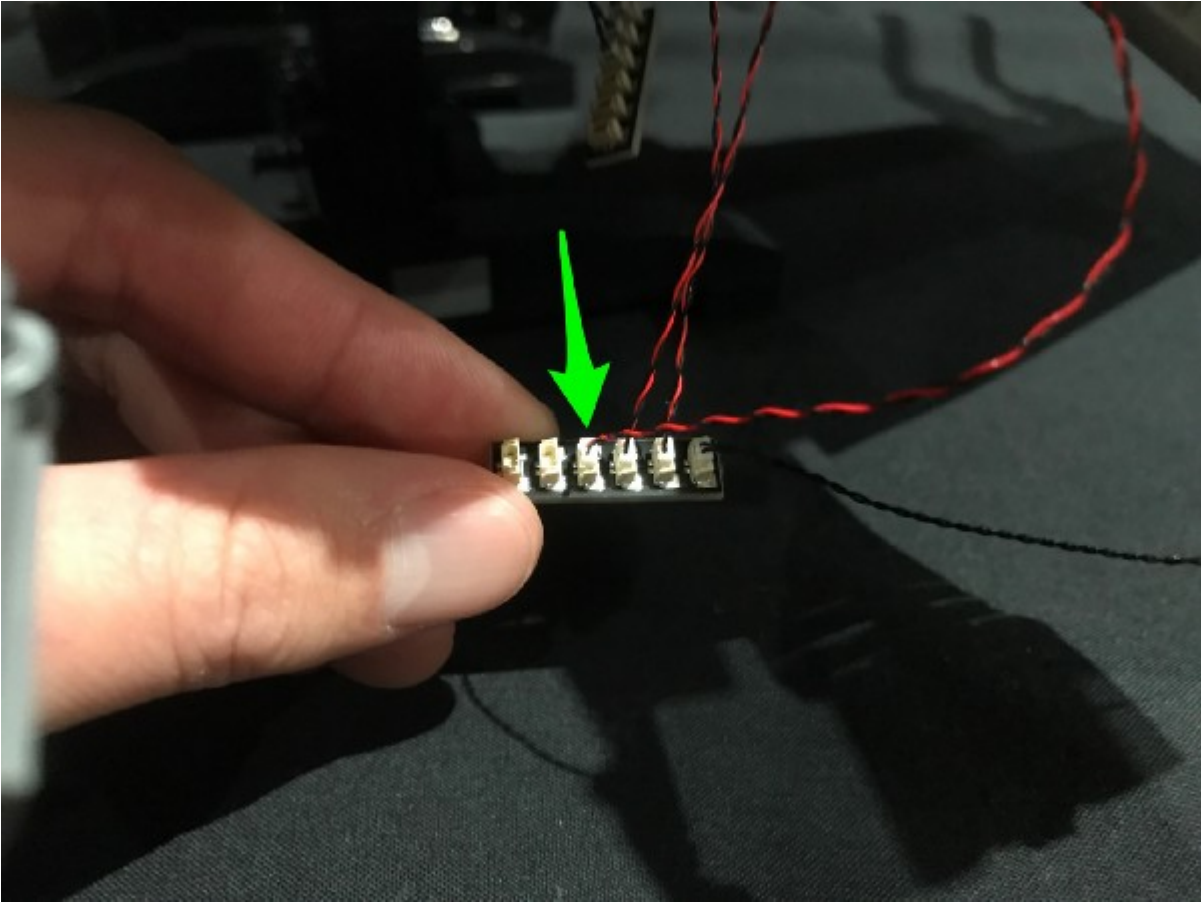
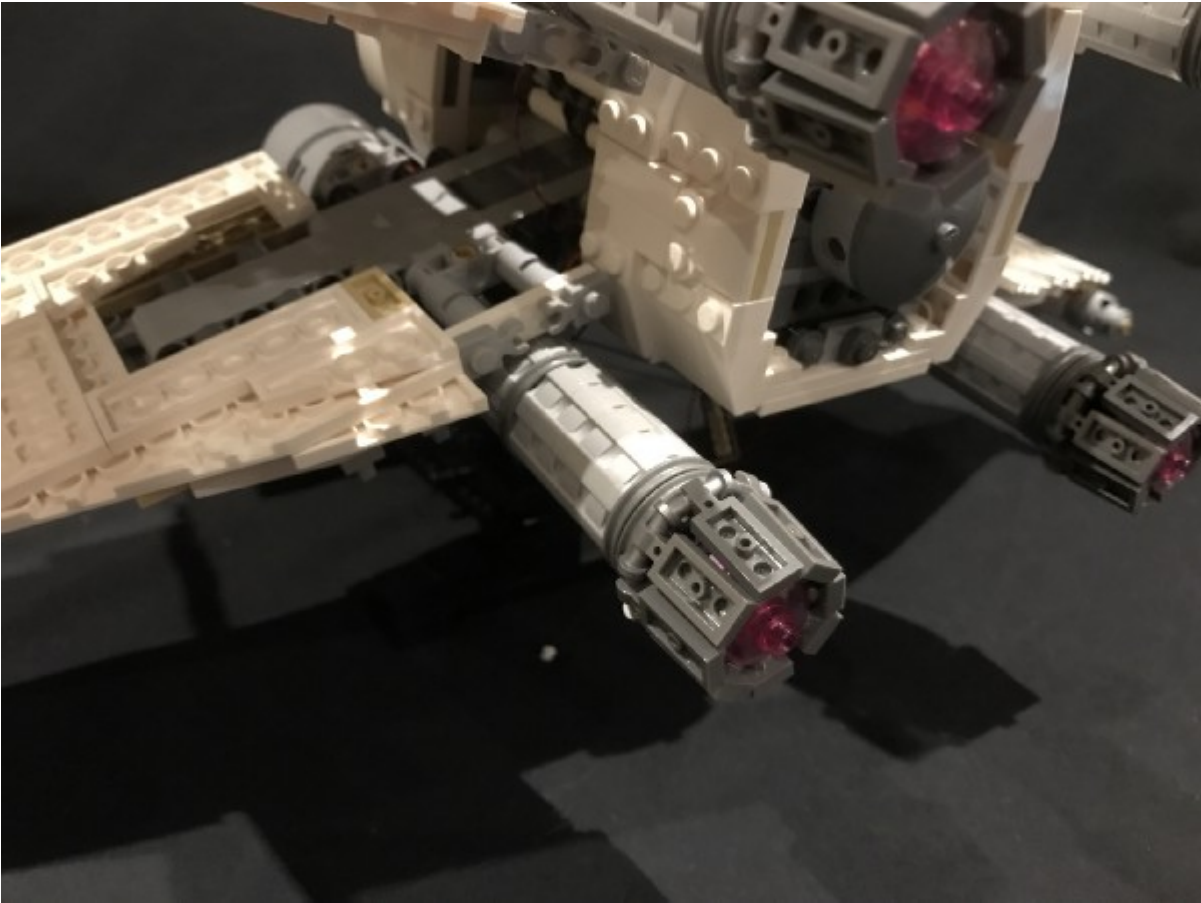
Take the cable from the jet and thread through the space which leads inside and then pull down from underneath at the open section.



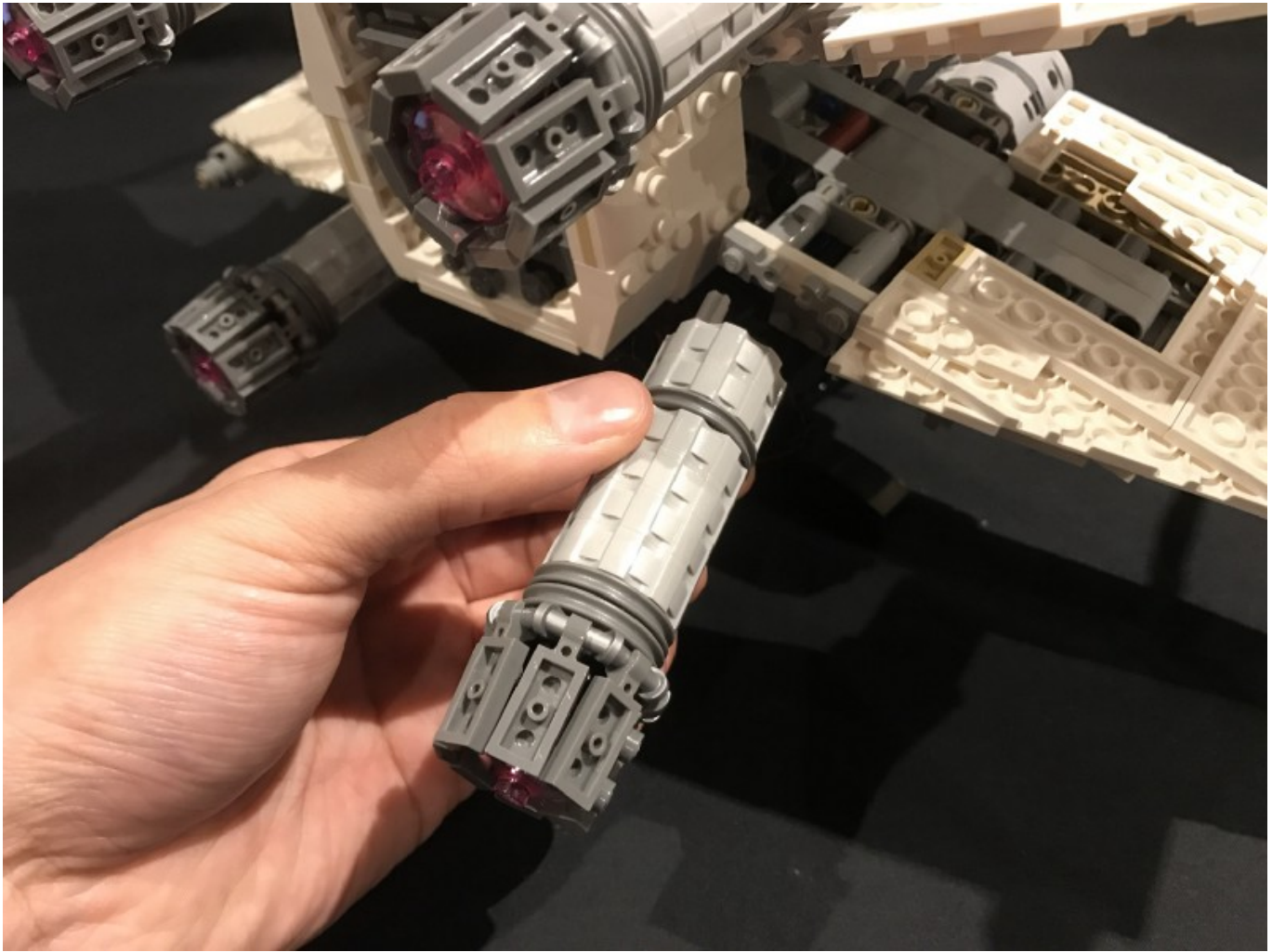


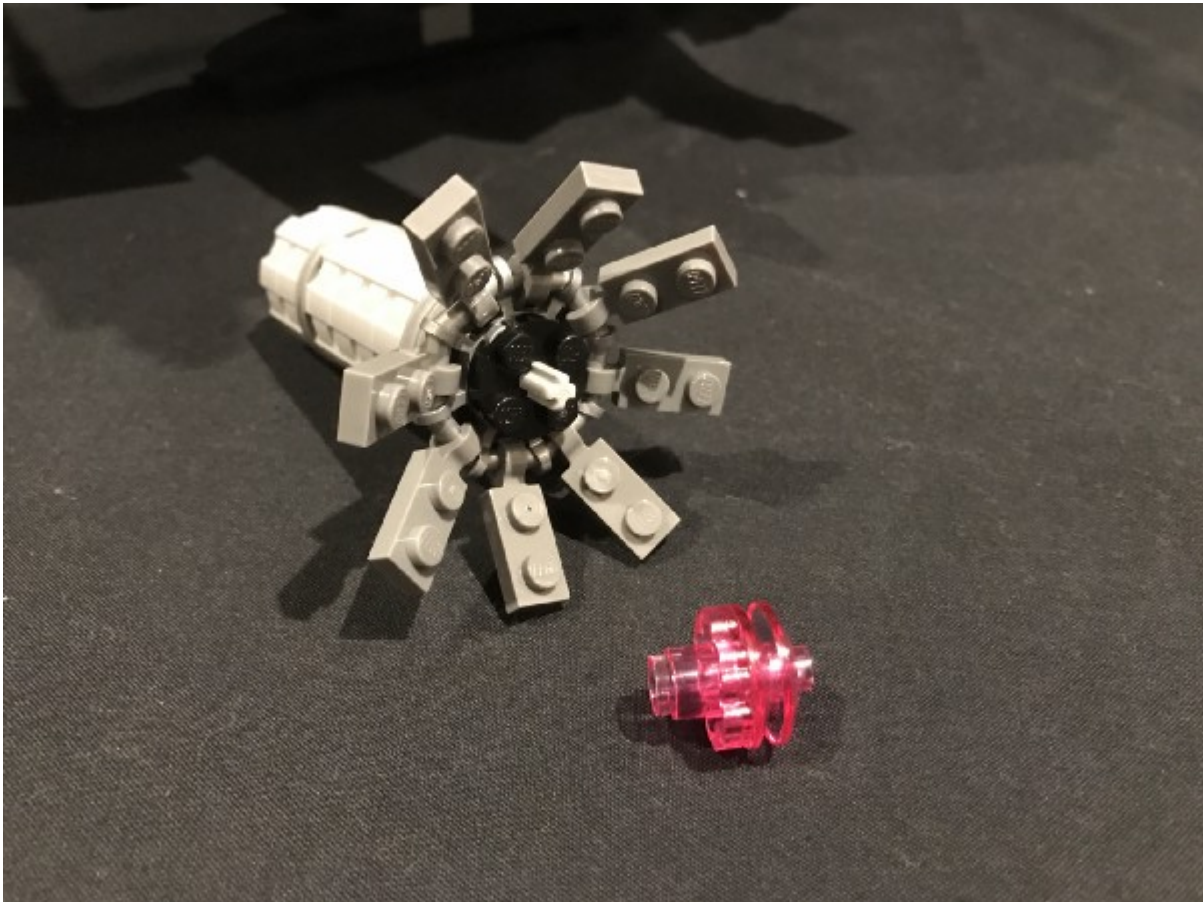
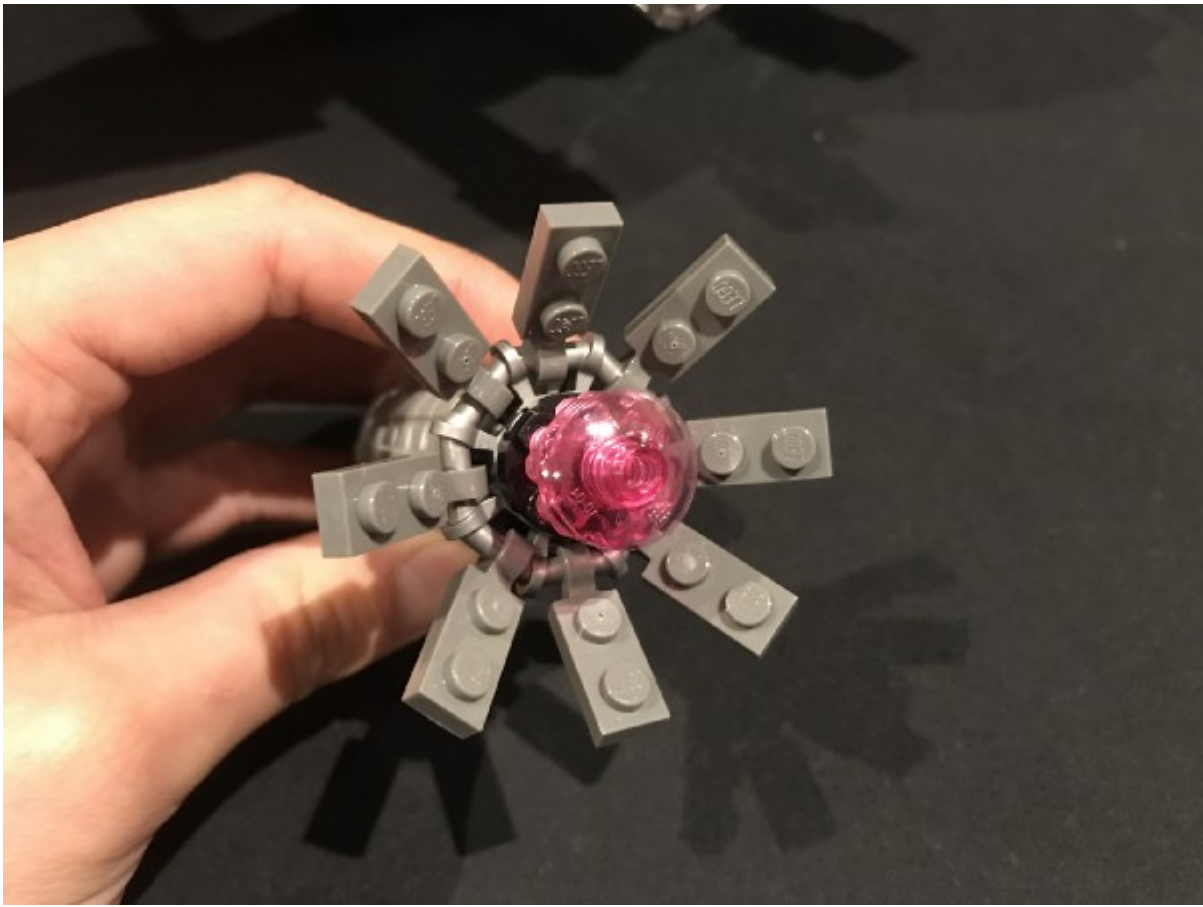
Reconnect the Jet and then connect the Bit Light from this jet to the next port on the expansion board below (same expansion board as the one used to connect the

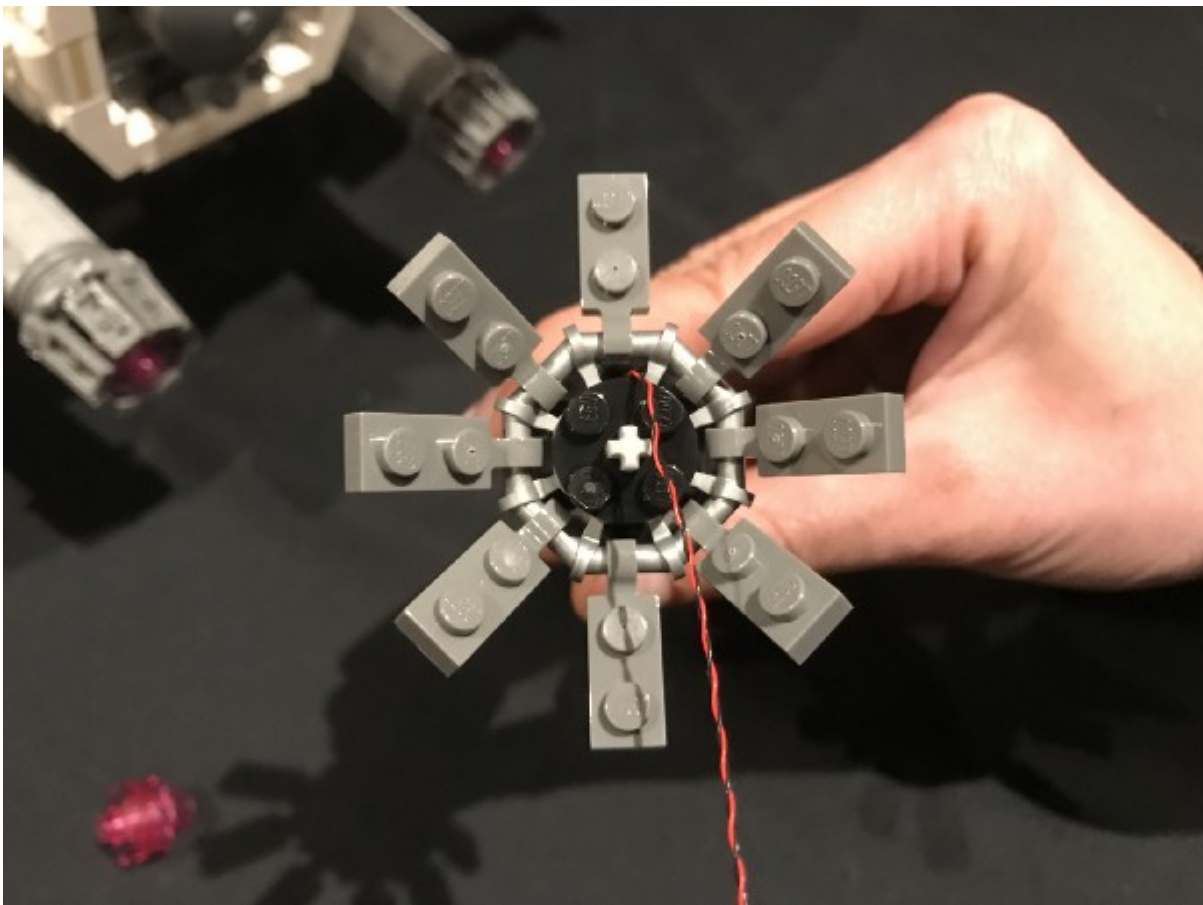
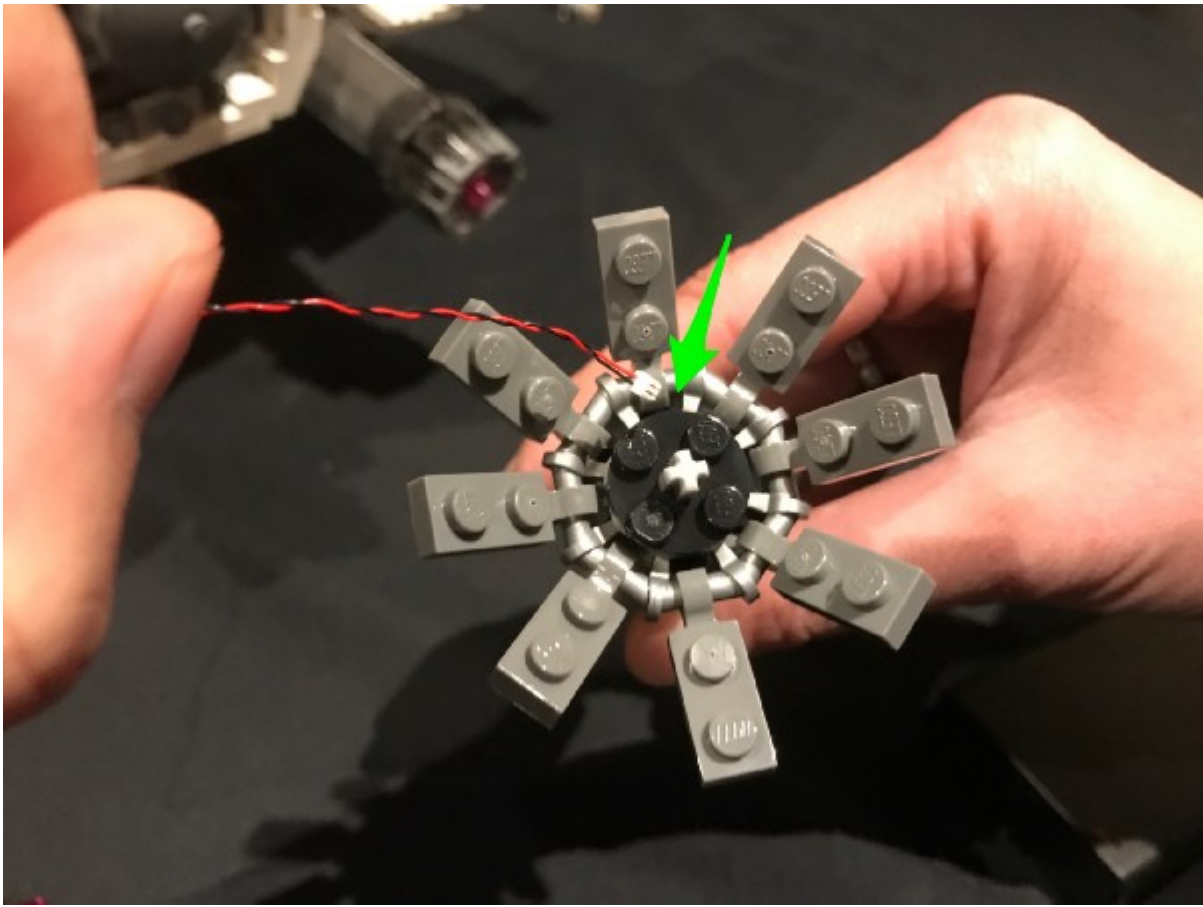
upper two jets).

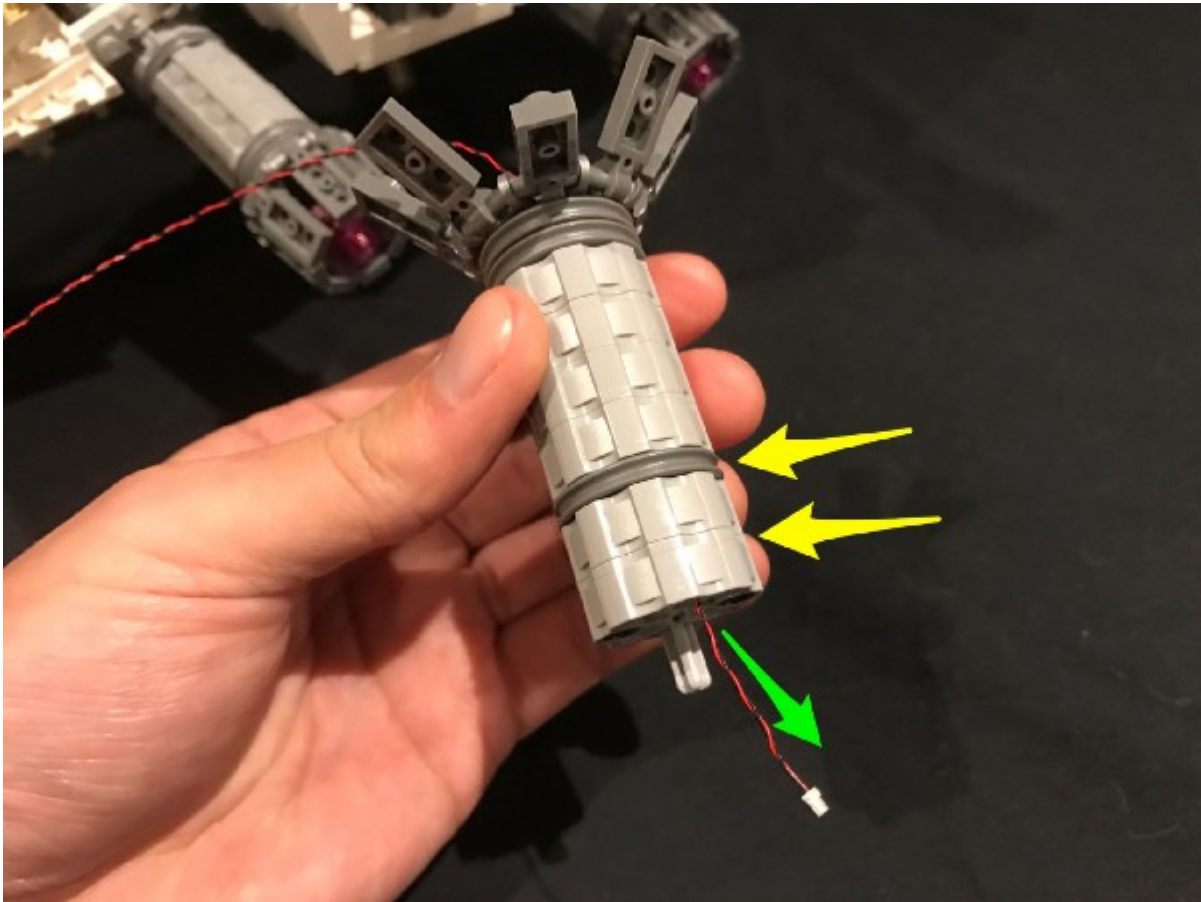
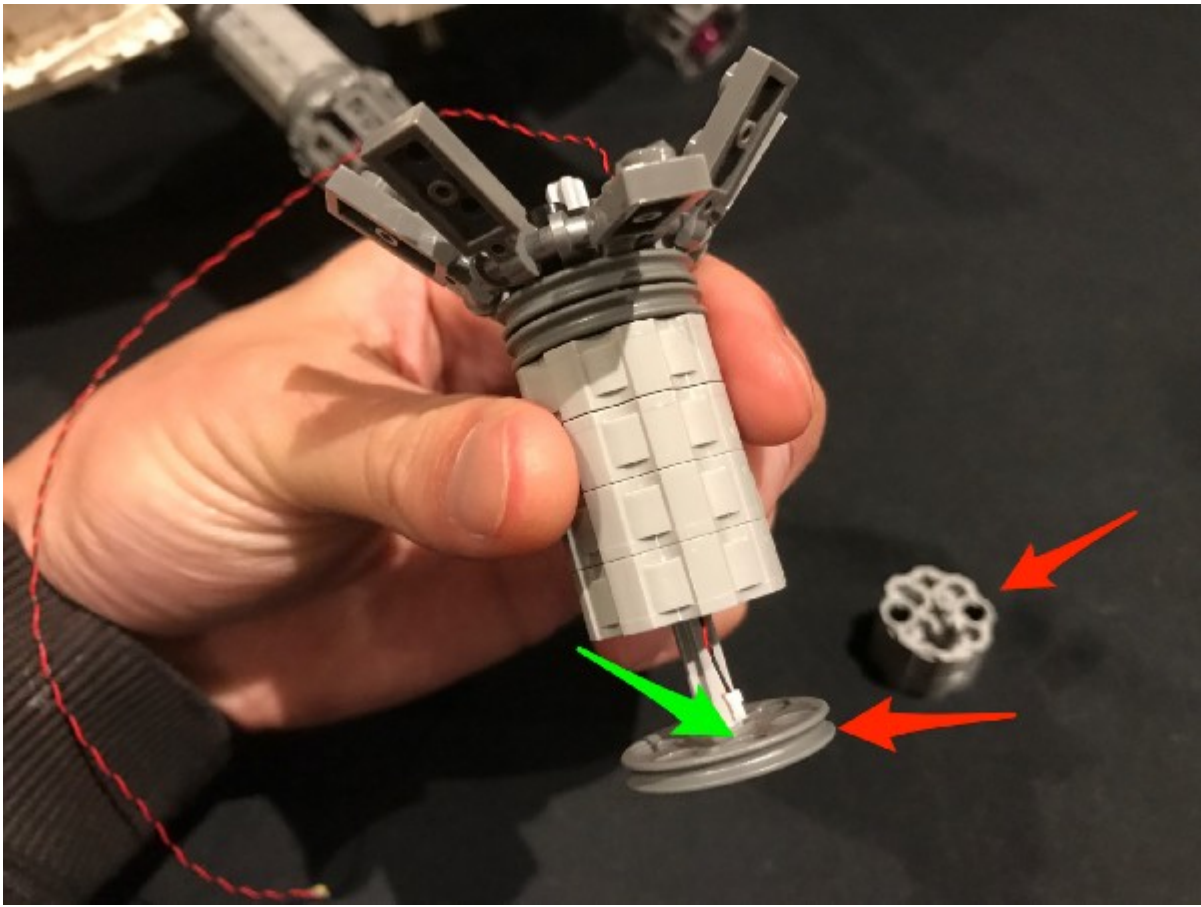


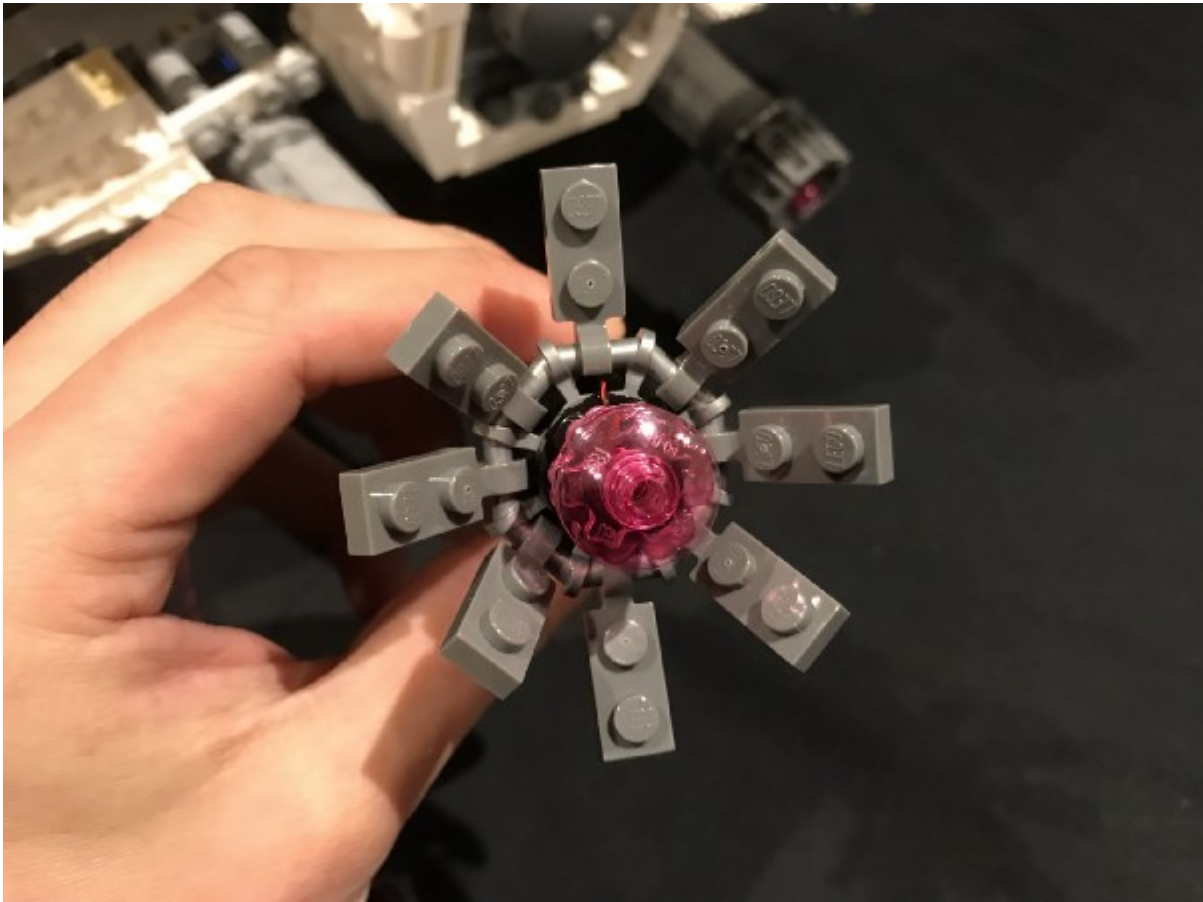
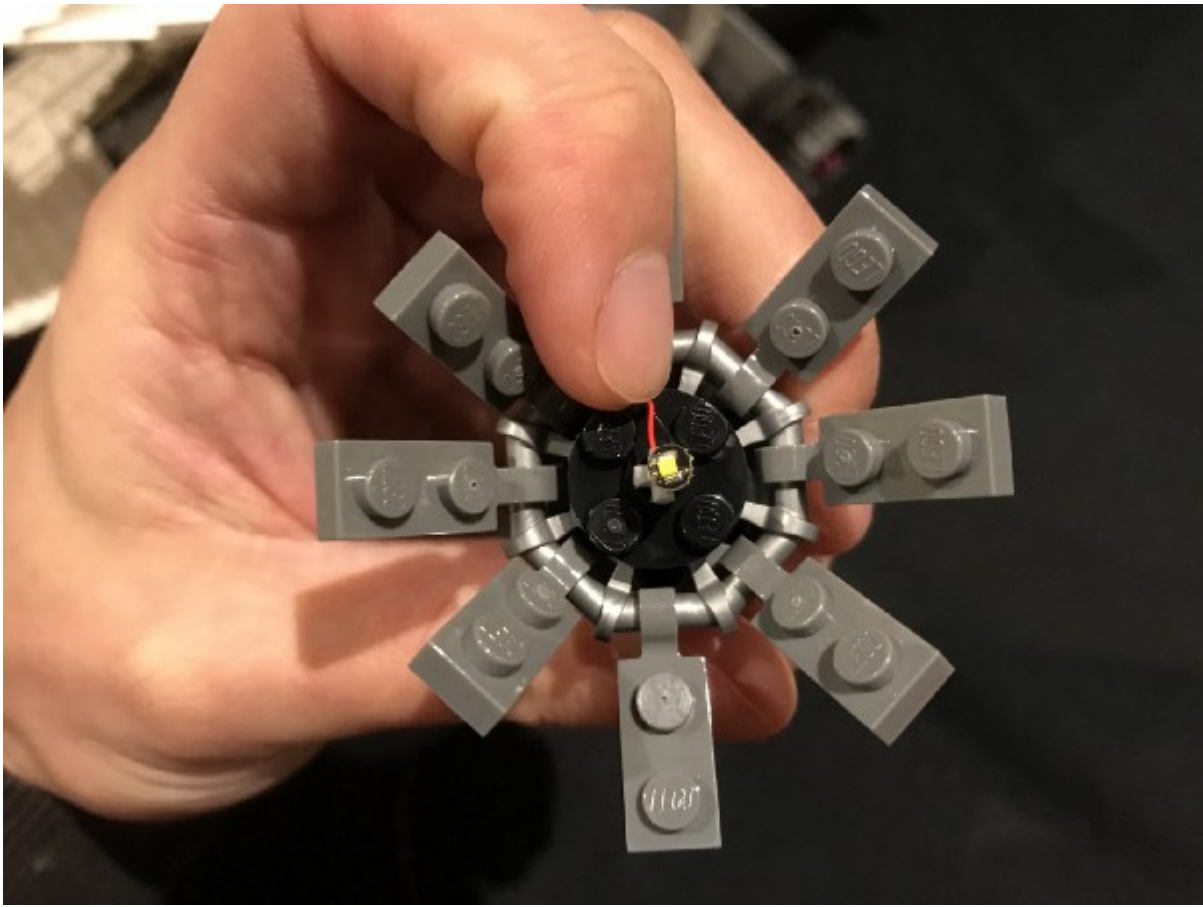
29.) Repeat this process again to install the last **White 30cm Bit Light** to the remaining lower jet and then connect the bit light into the expansion board.

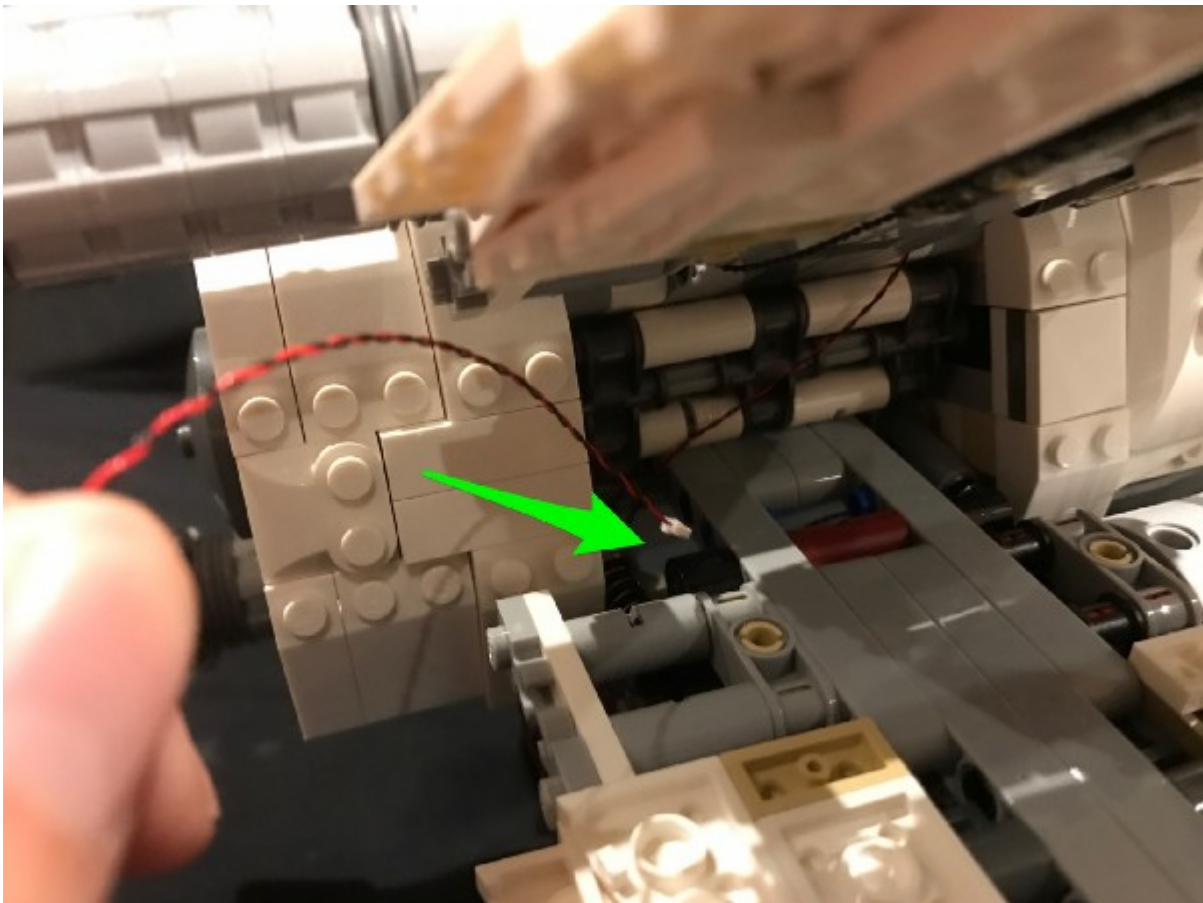
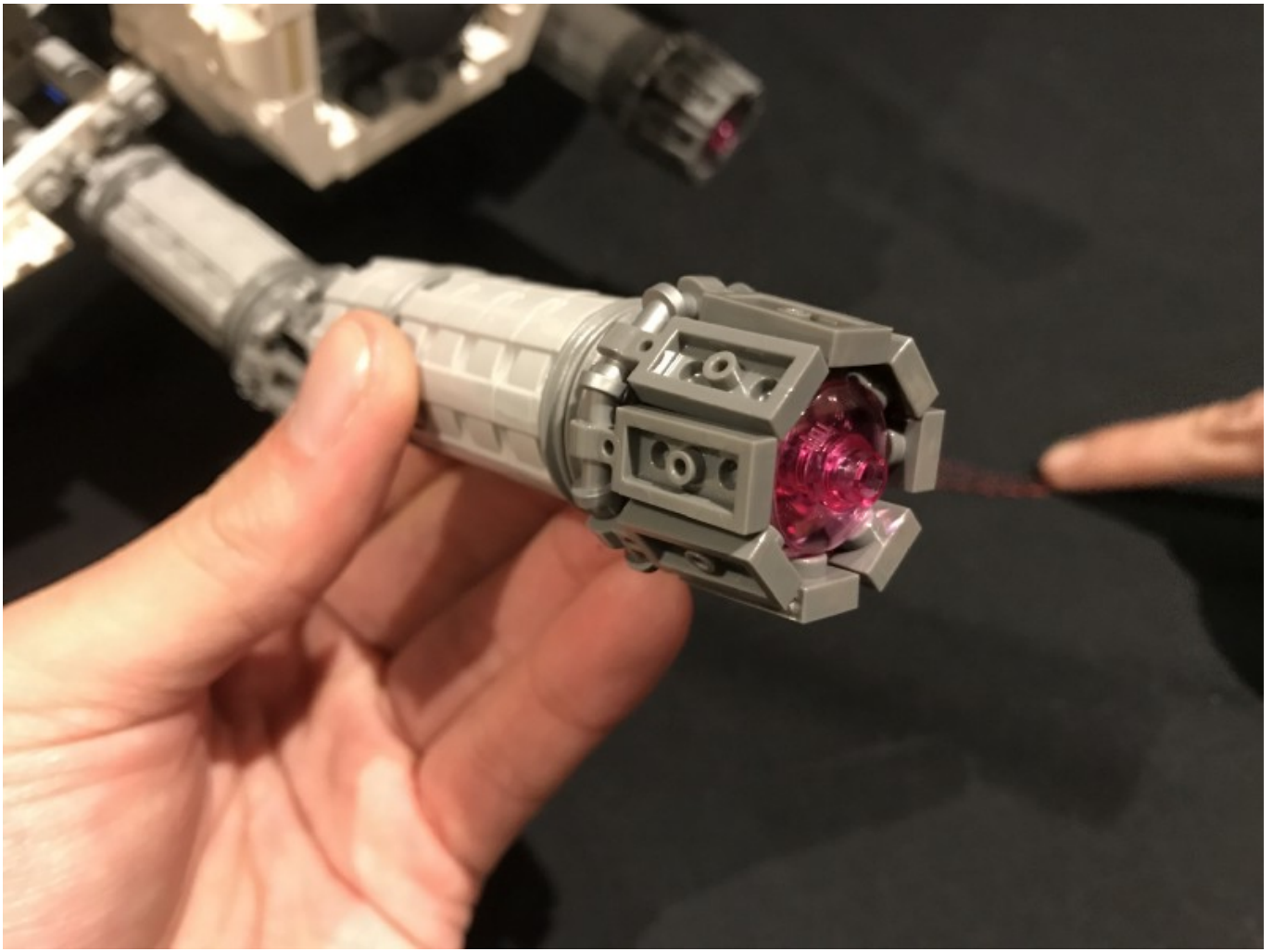


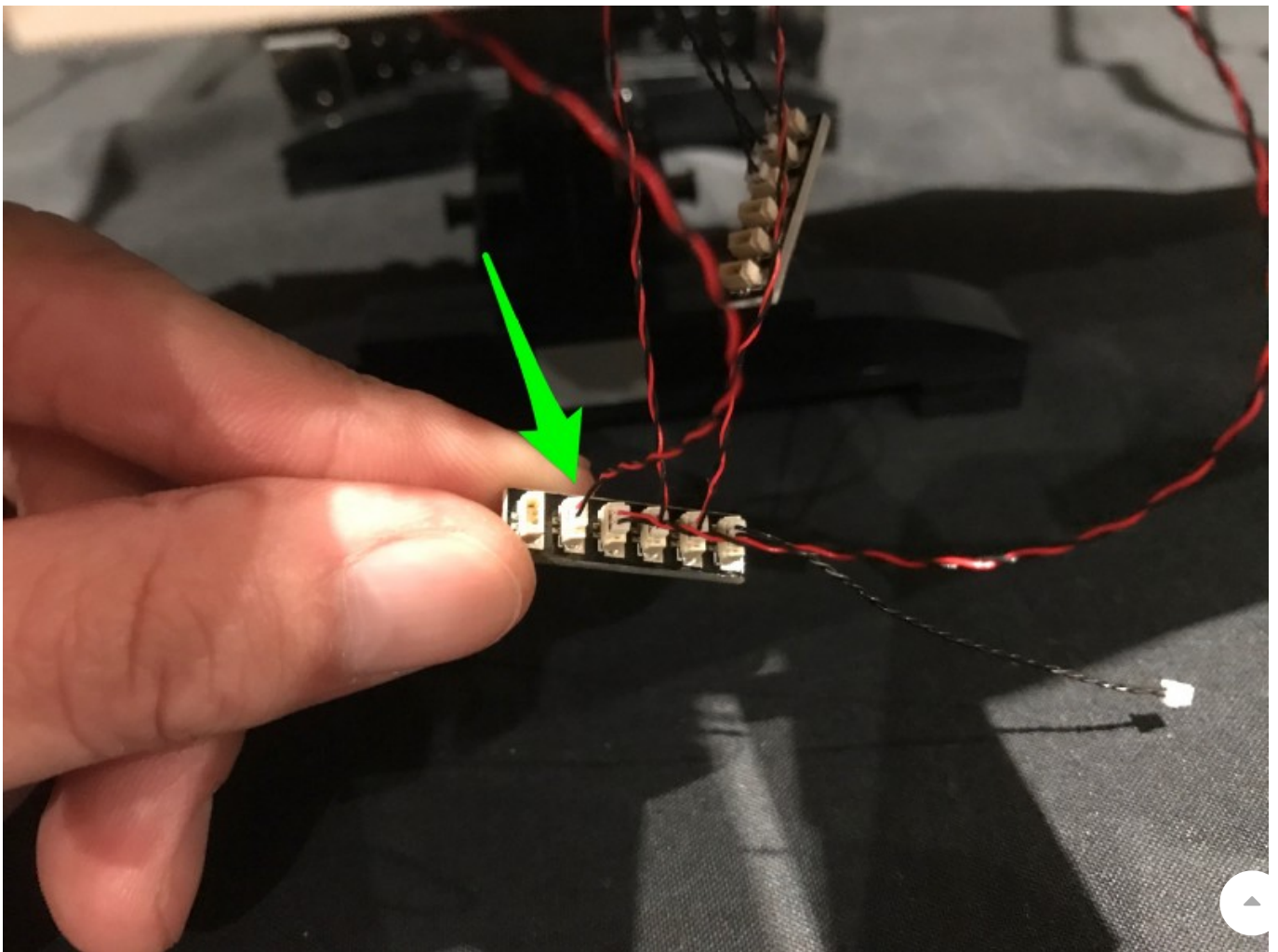
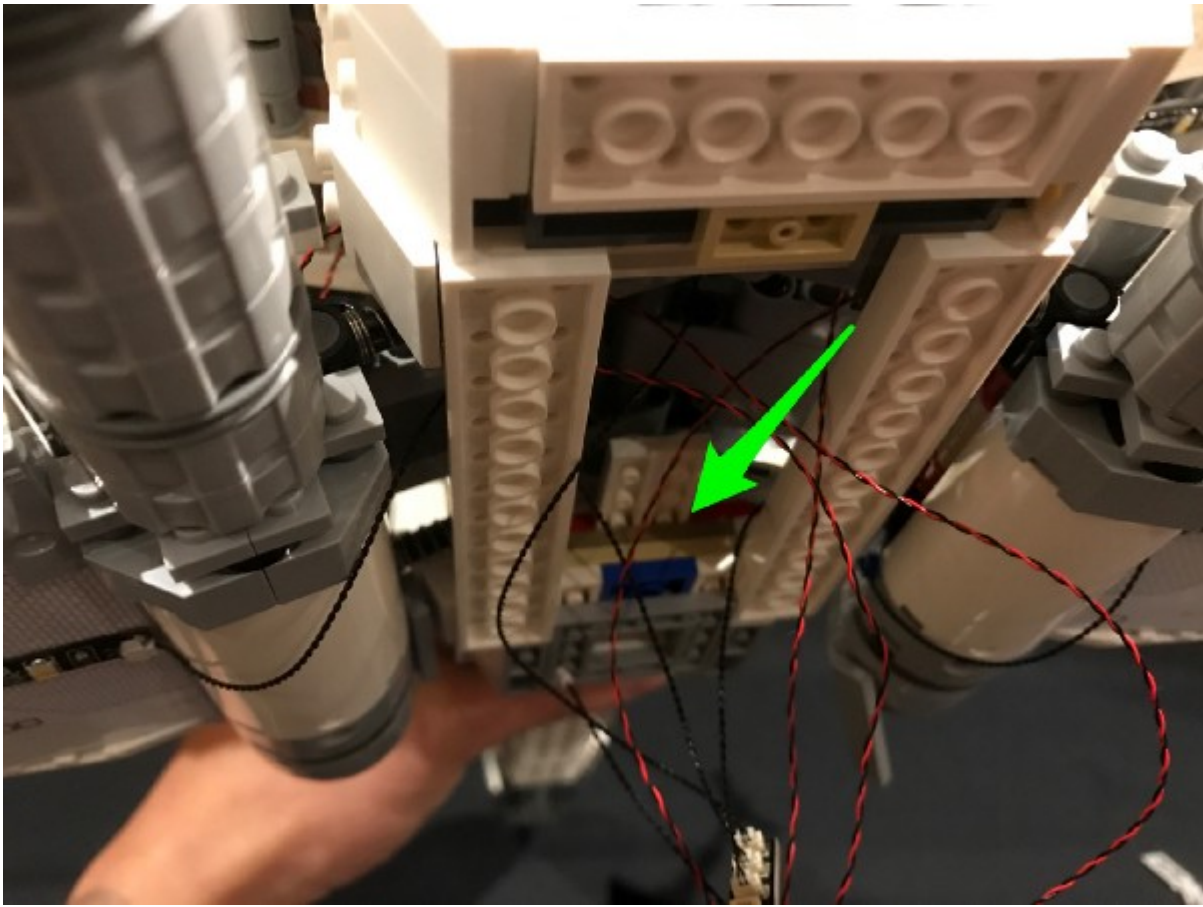




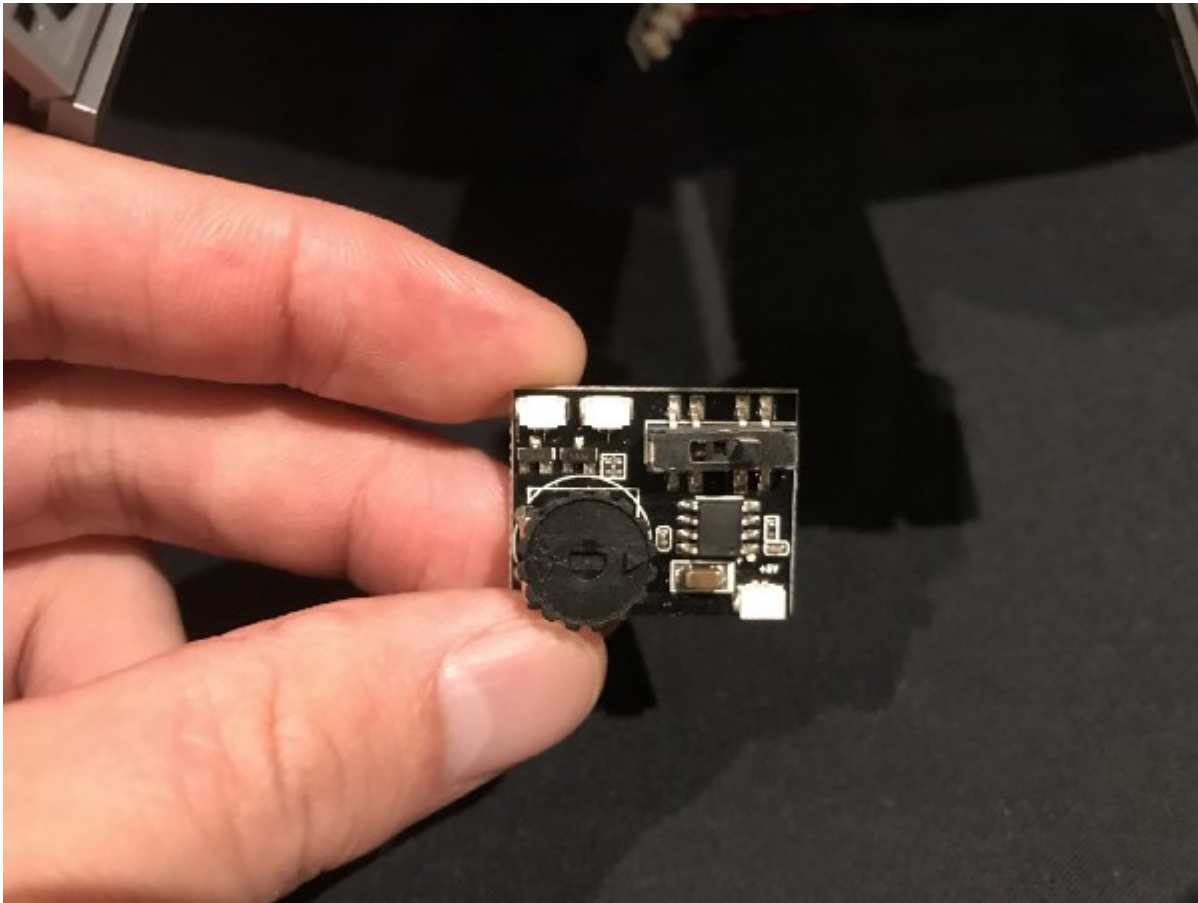


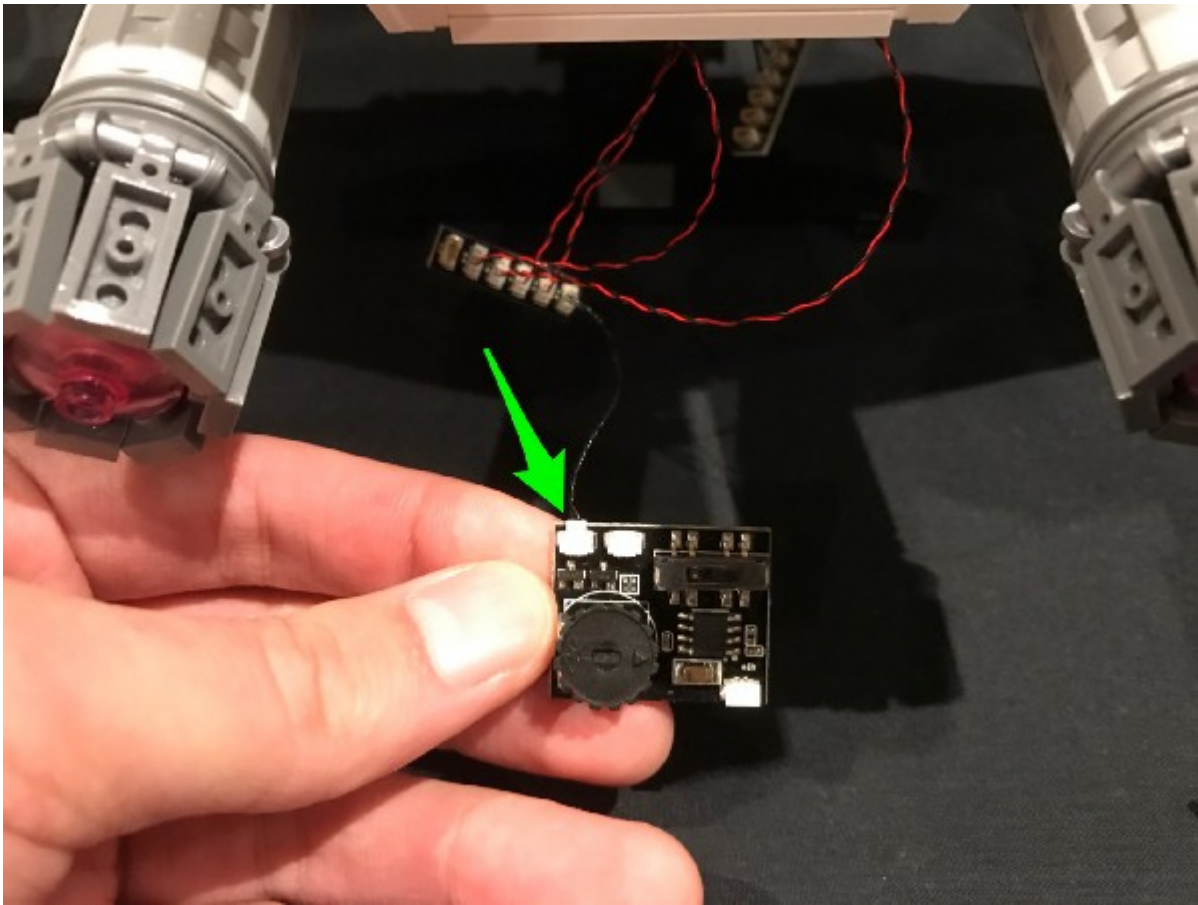






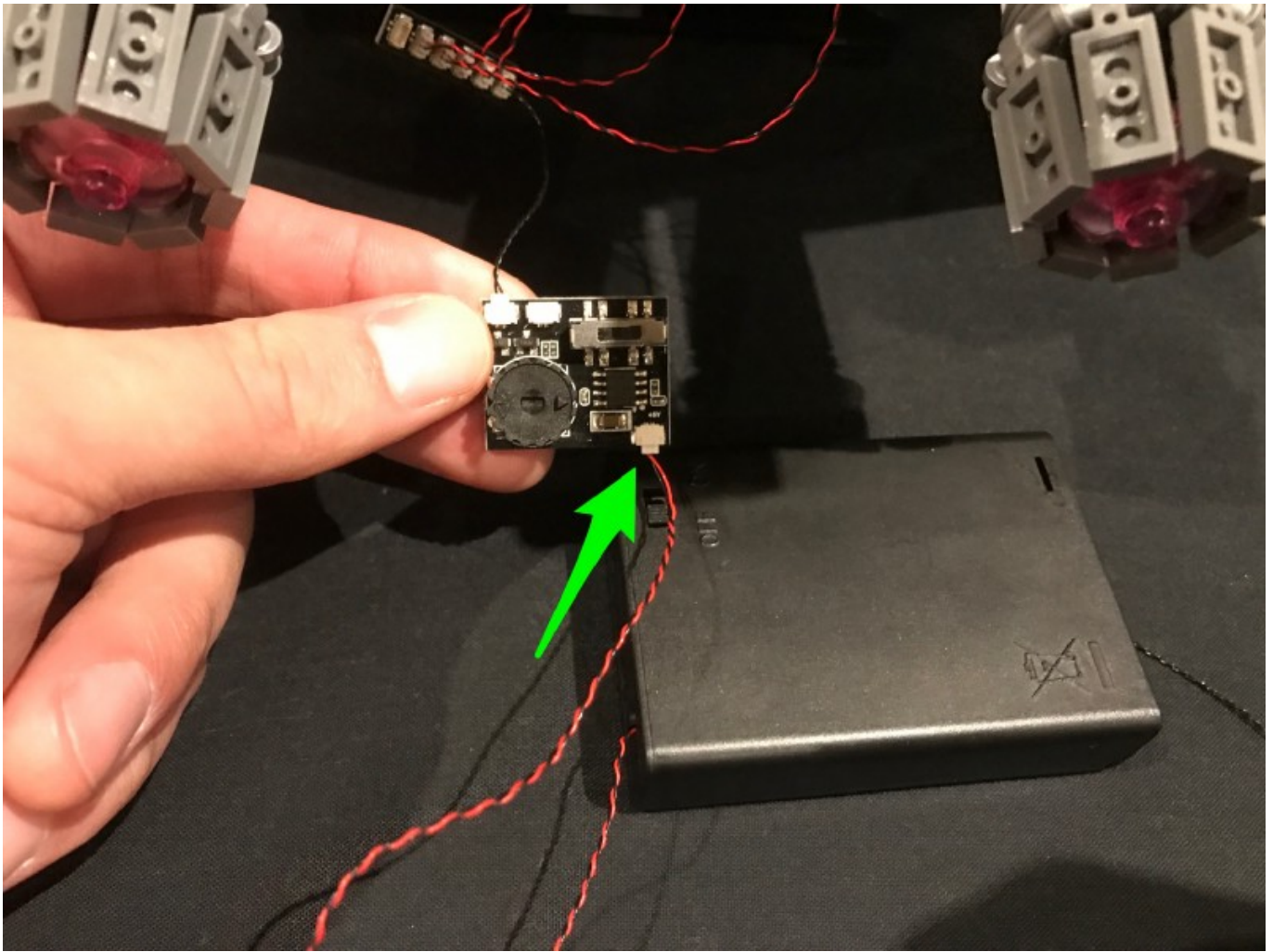
30.) Take the **Multi Effects Board** and then connect the other end of the 5cm connecting cable (from the expansion board in previous steps) into one of the output ports (side with 2 ports).



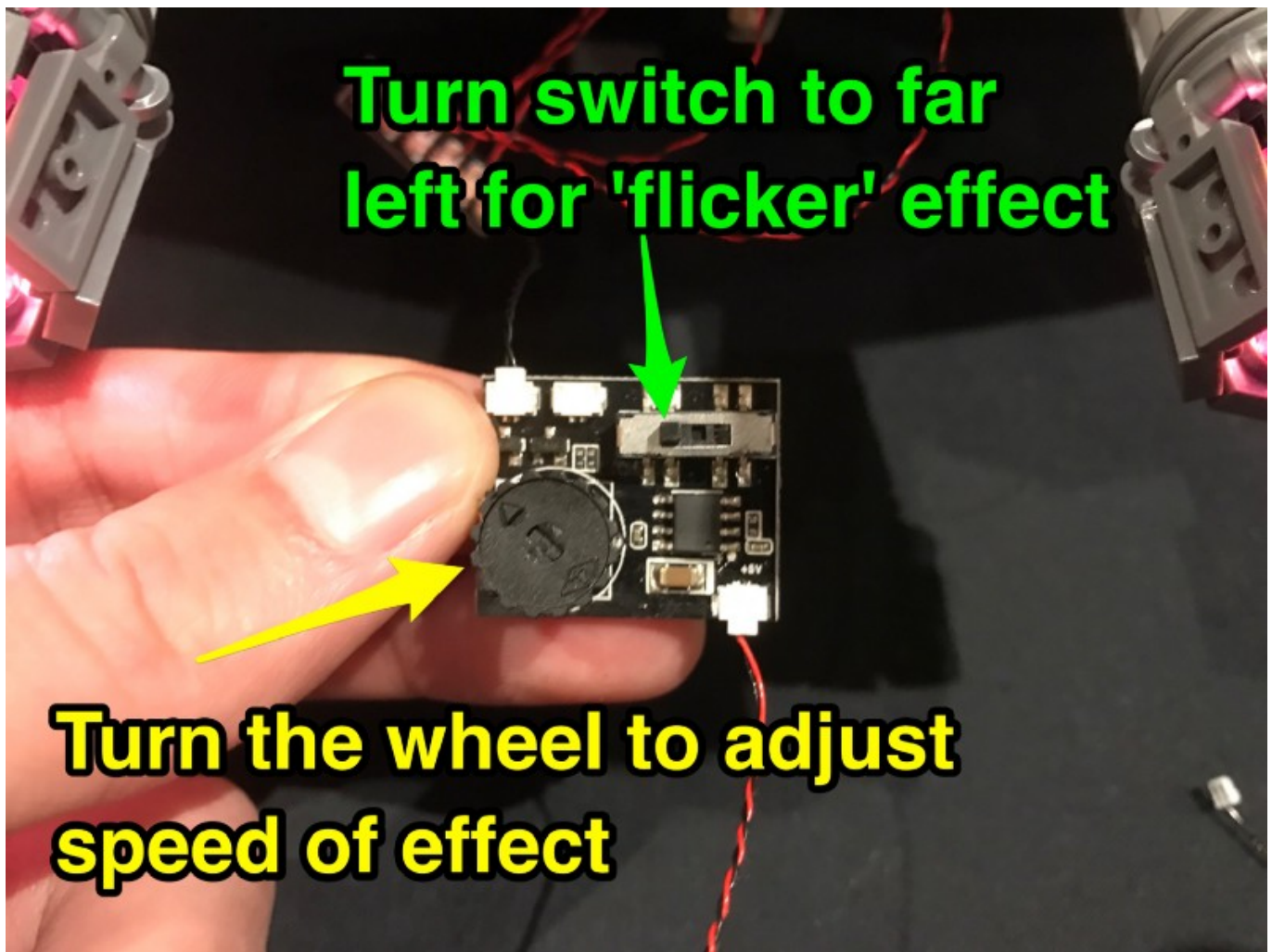


In order to configure the effect you want, take the AA battery pack /usb cable and connect the cable into the input port of the effects board (side with one port)



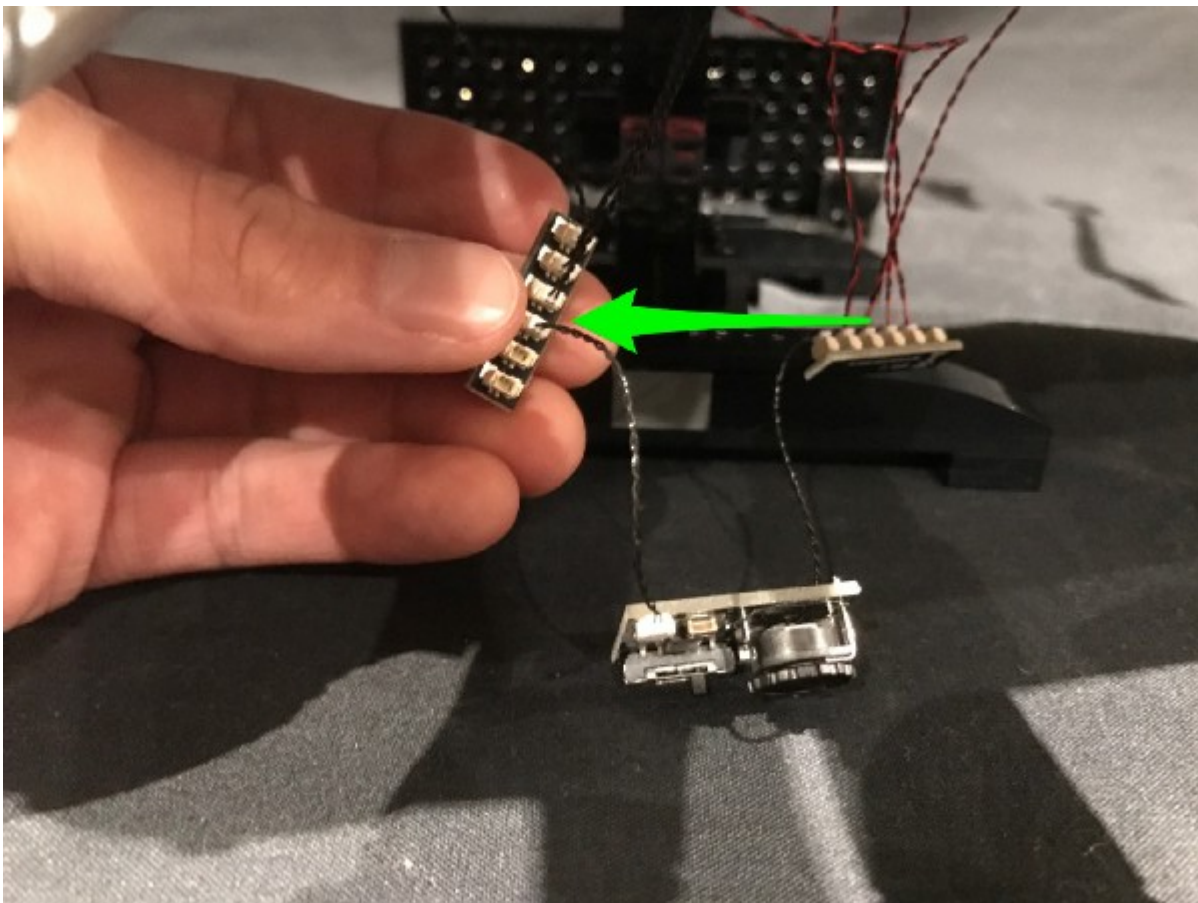
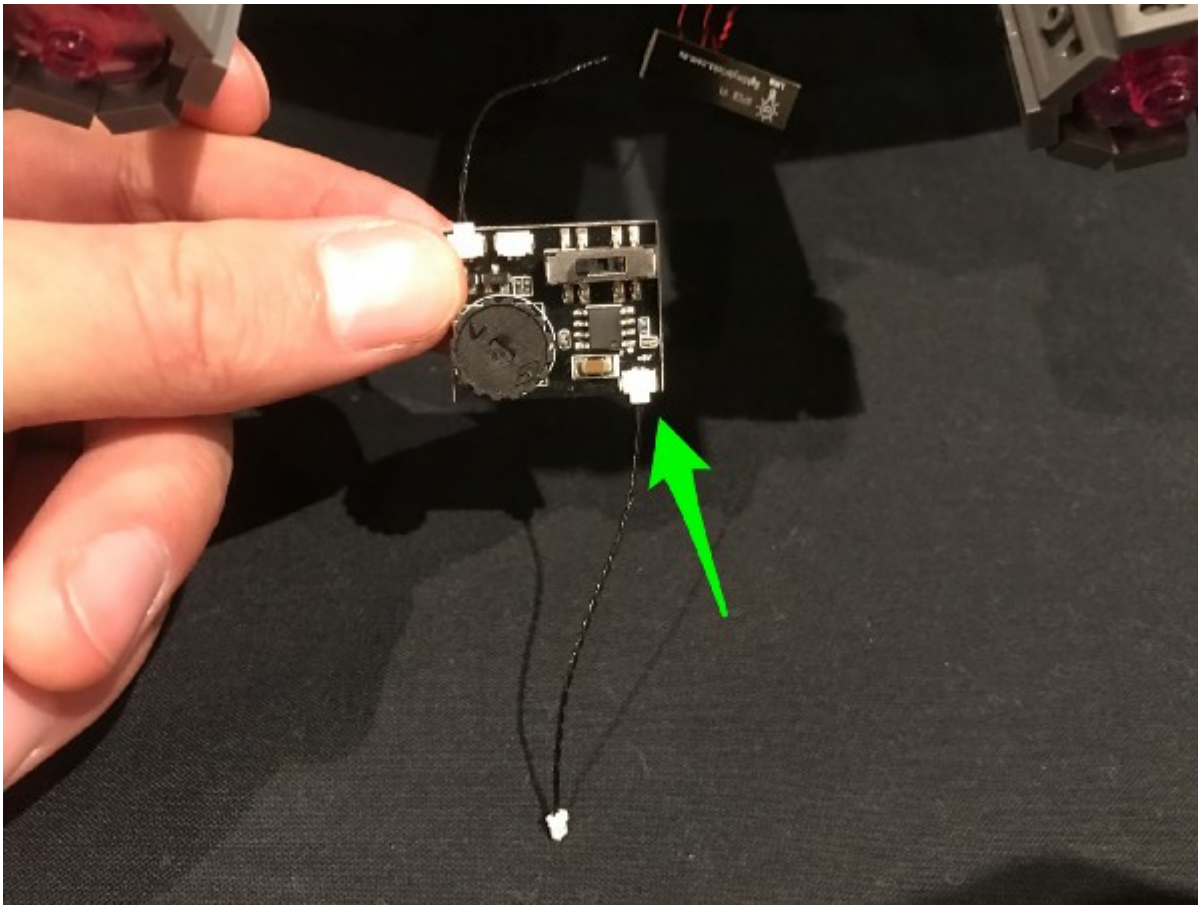


Turn the battery pack on and then turn the switch on the effects board to the far left for the 'flicker' effect. Turn the wheel on the effects board to adjust the speed of the effect.



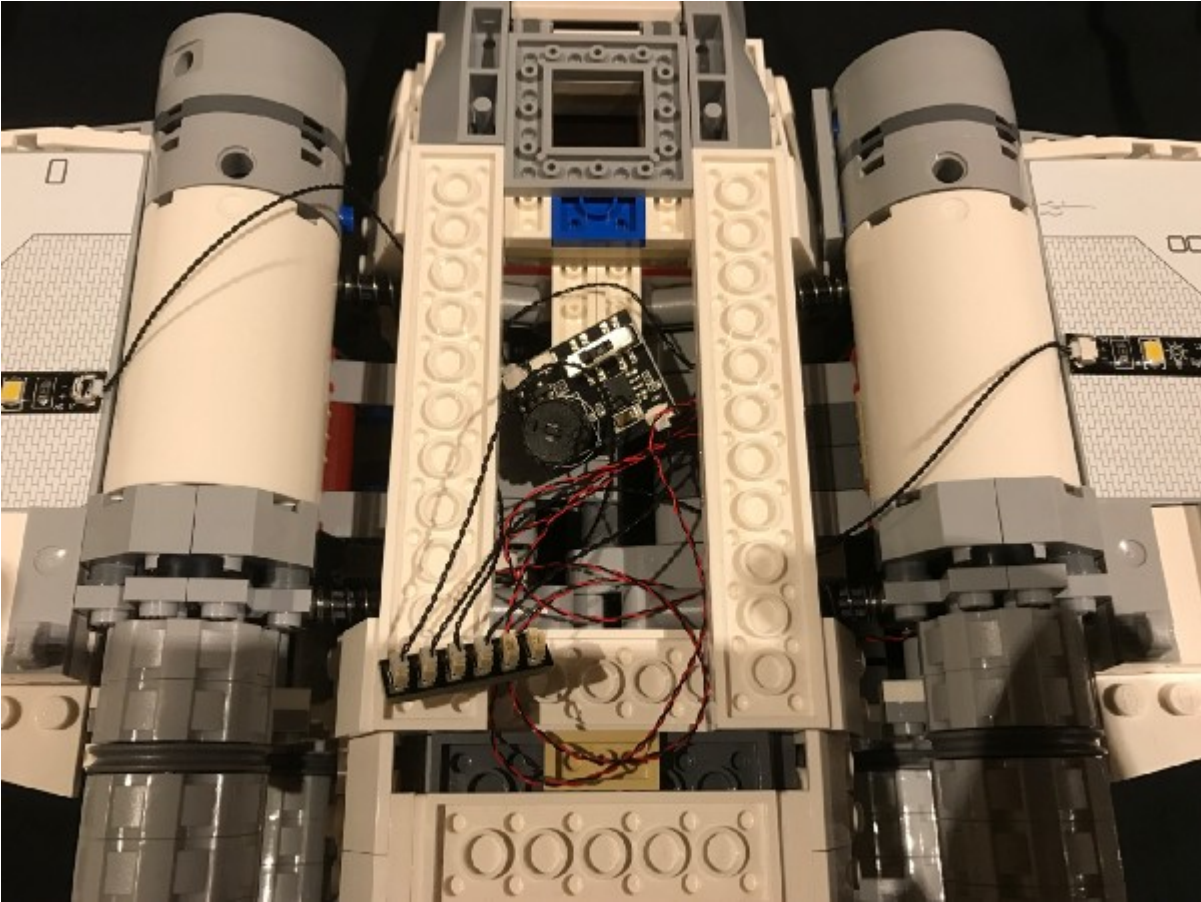
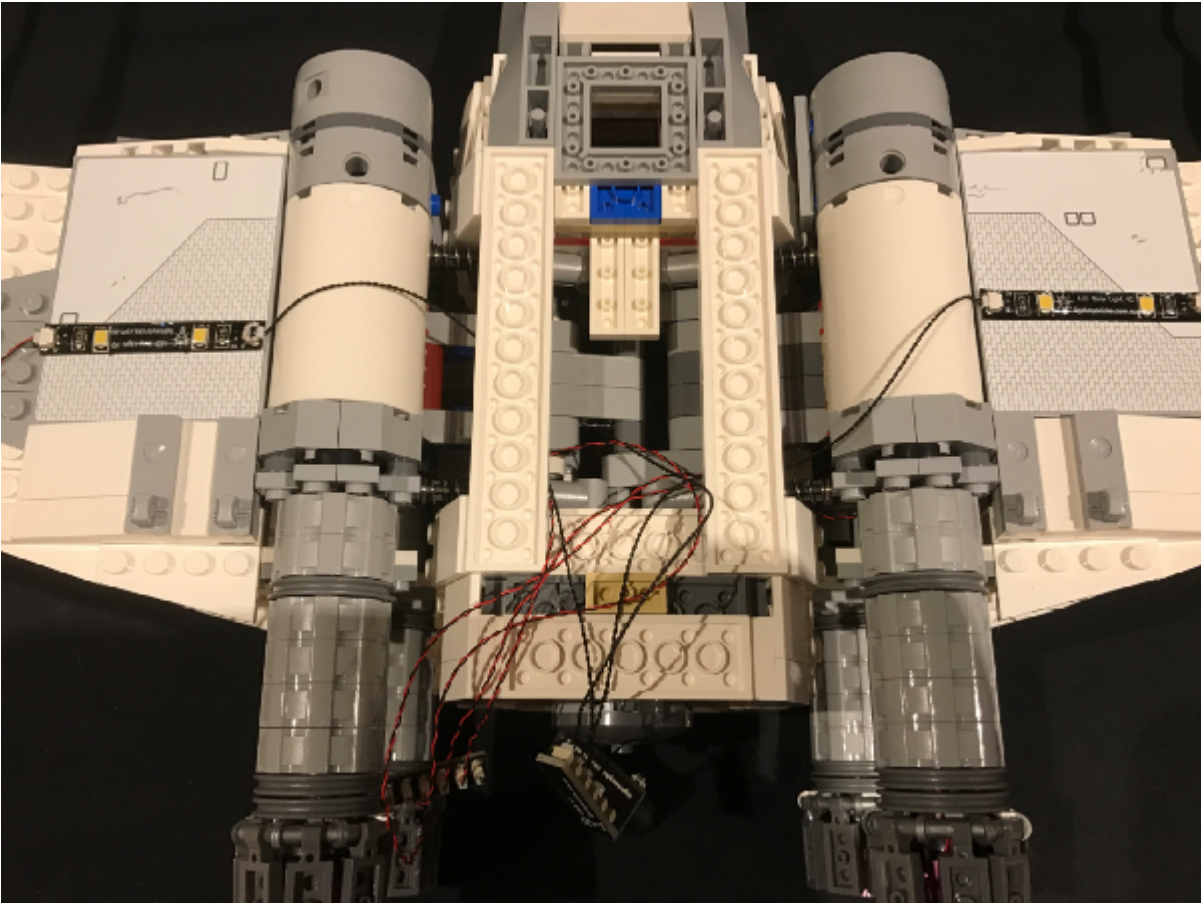
Once you are happy with the effect for the jet lights, carefully disconnect the battery pack cable /usb cable and then move onto the next step.

31.) Take another **5cm Connecting Cable** and connect it to the input port on the multi effects board. Connect the other end of the cable into the other 6-port expansion board (where we connected strip lights to)

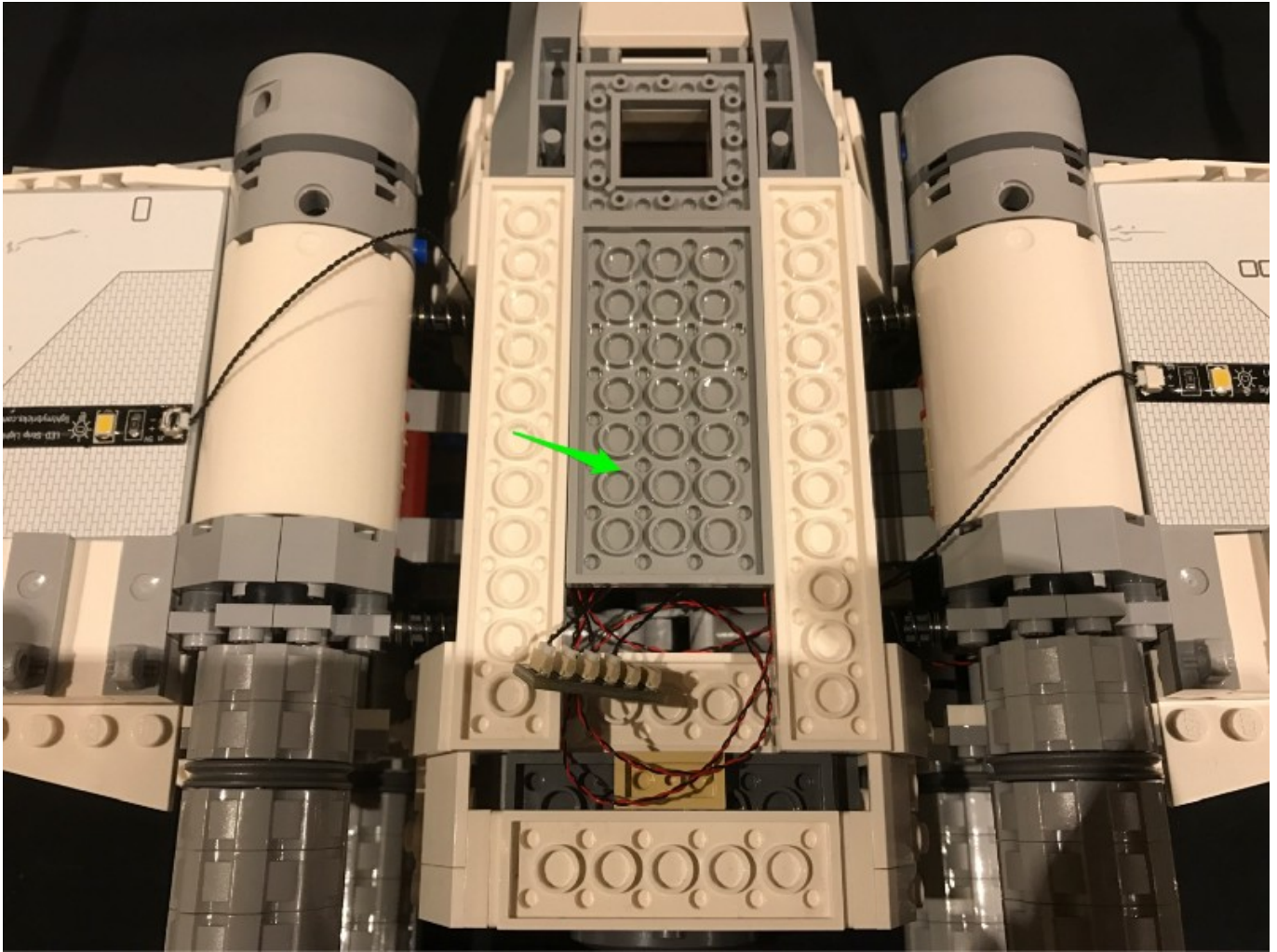


32.) Tuck the 6-port expansion board (with the bit lights from jets), effects board, and cables into the centre space. Leave the 6-port expansion board (with effects board

connected to) out.

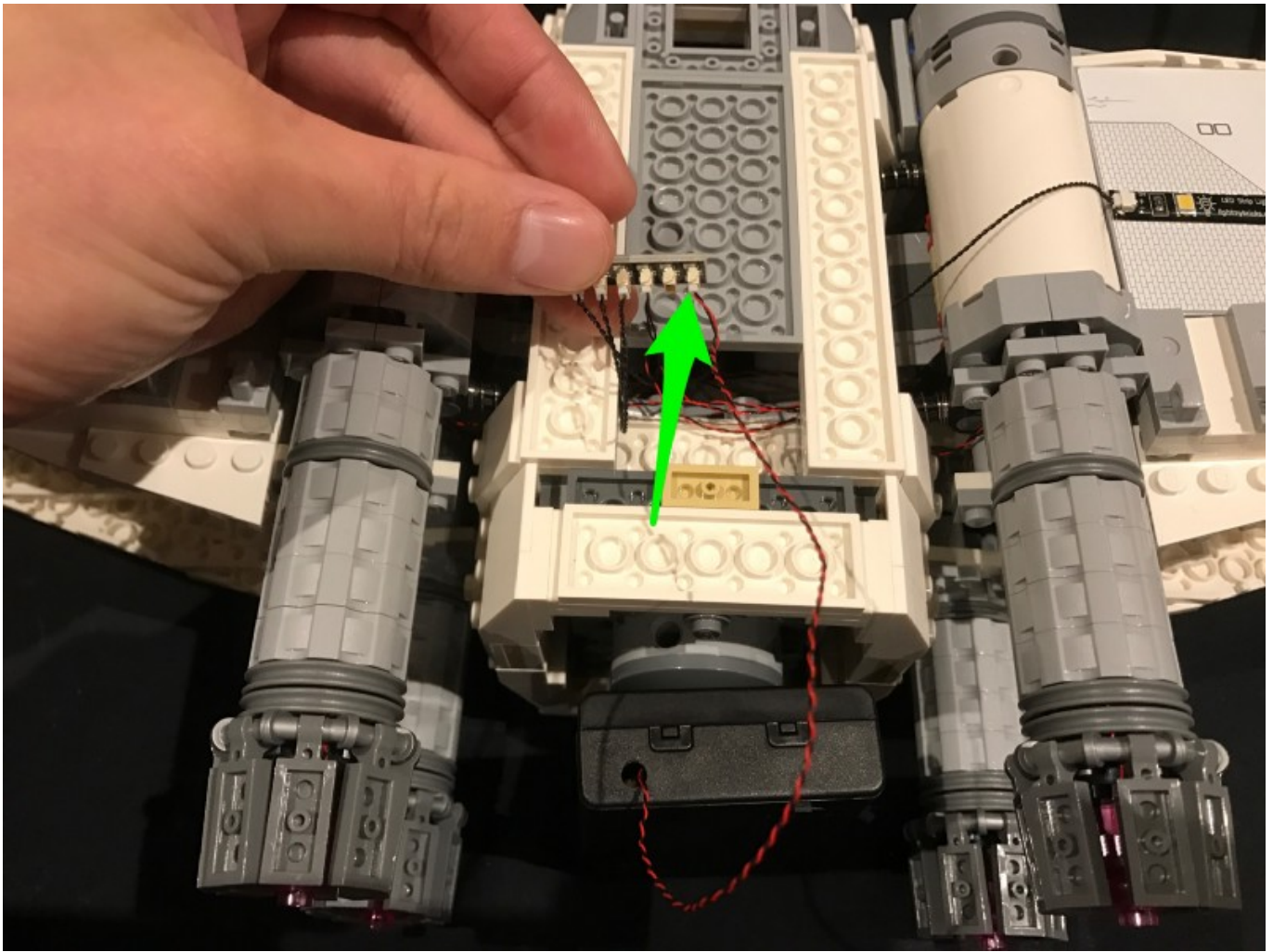


Reconnect the 4x8 plate we removed earlier in step 15.



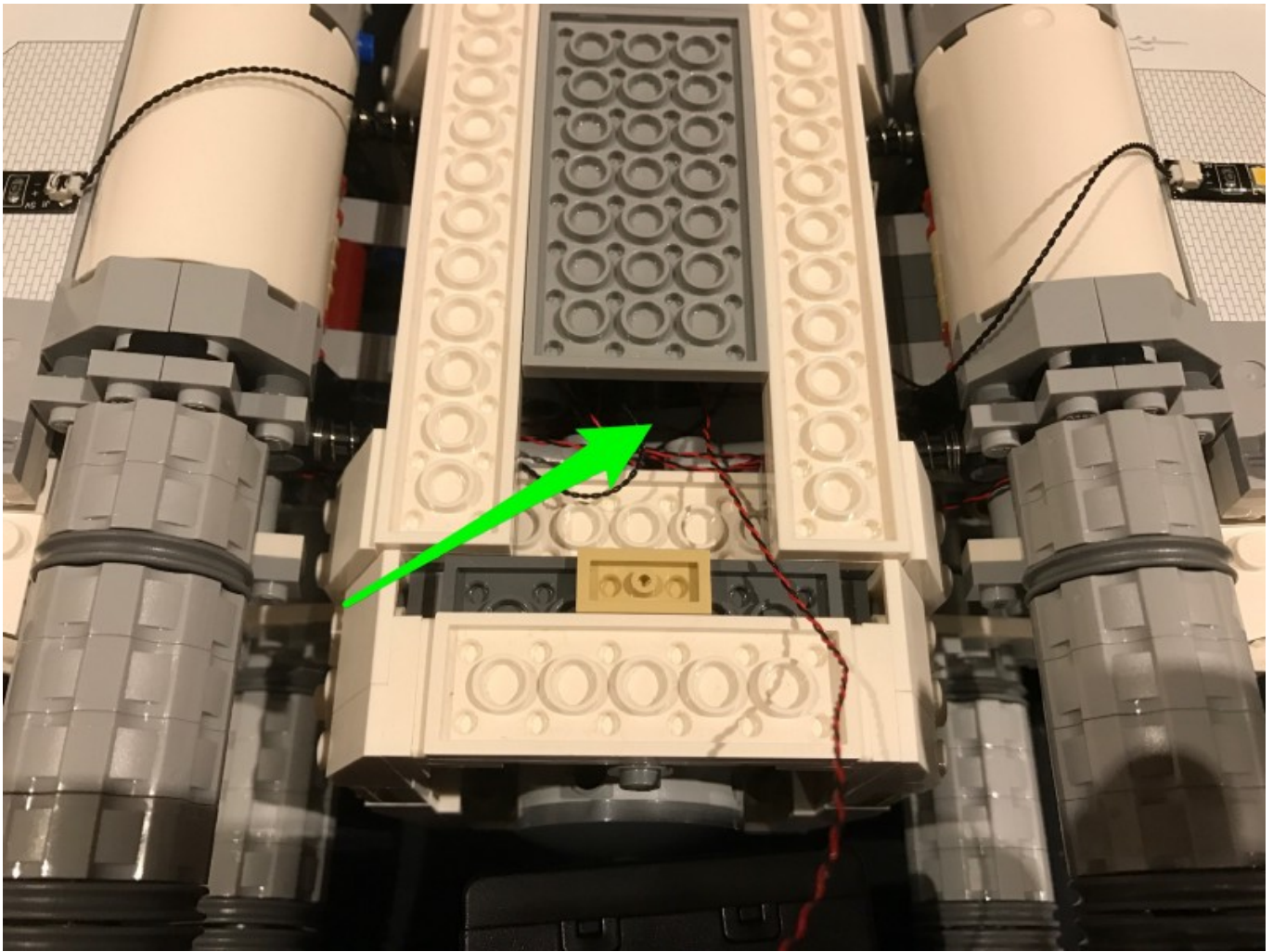
33.) Take the AA Battery Pack /usb cable and connect the cable into the 6-port expansion board we have left out.





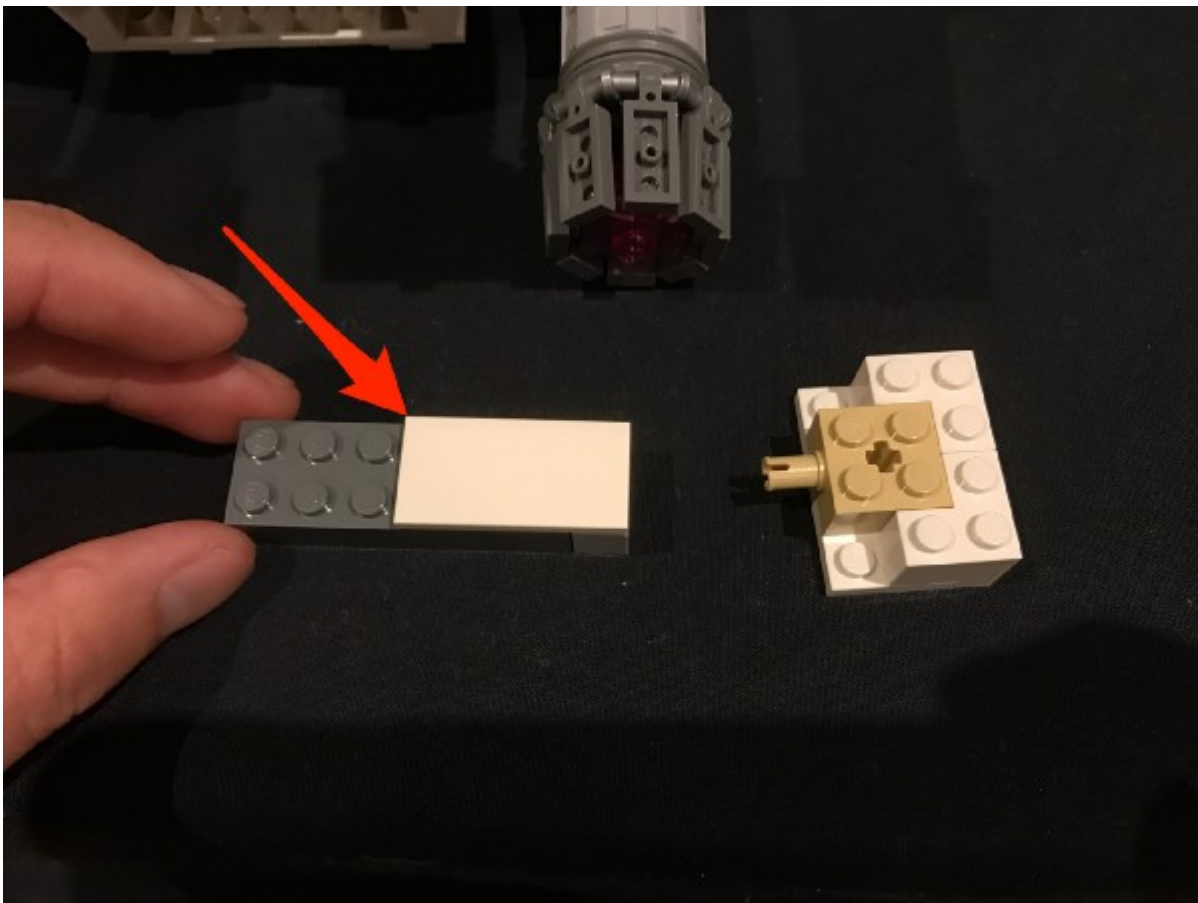
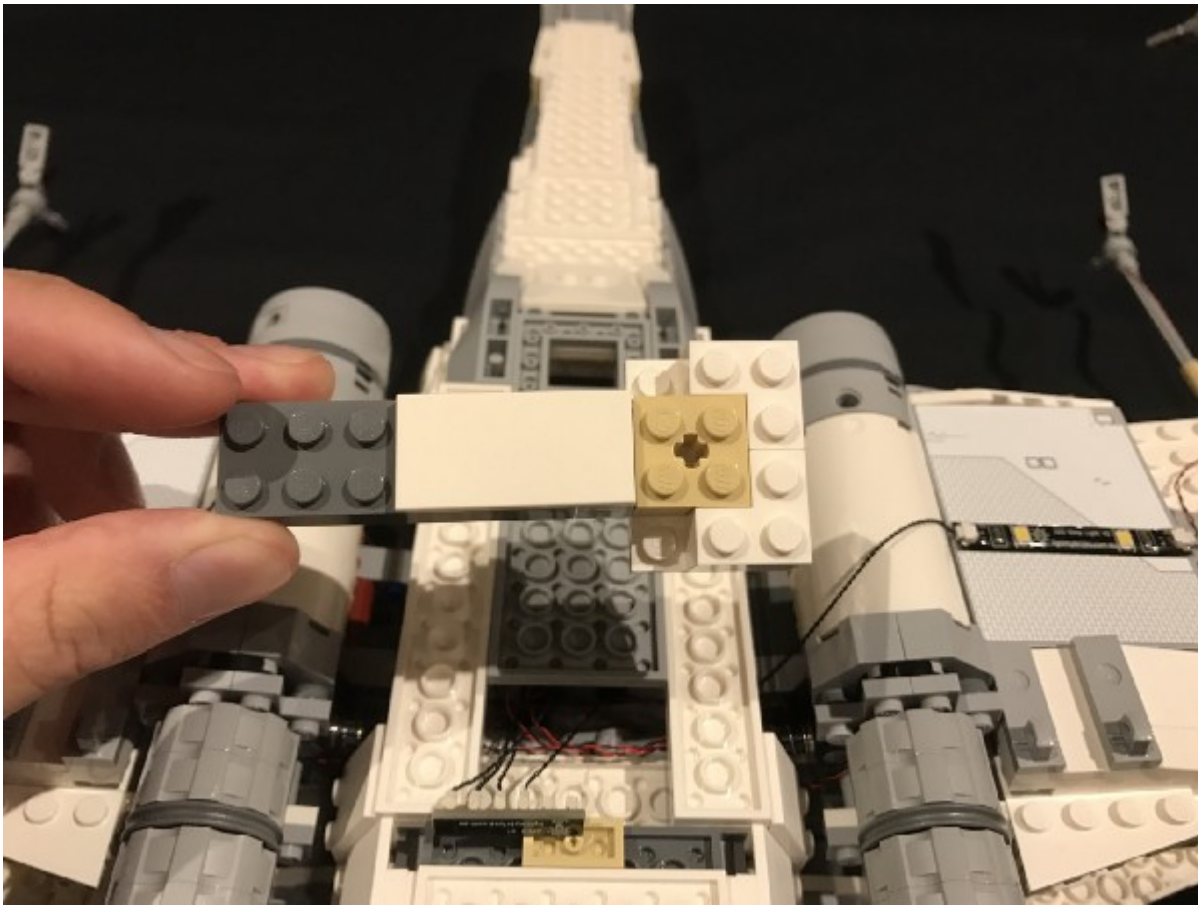
Tuck in the expansion board in with the rest of the components, leaving out the battery pack cable /usb cable.



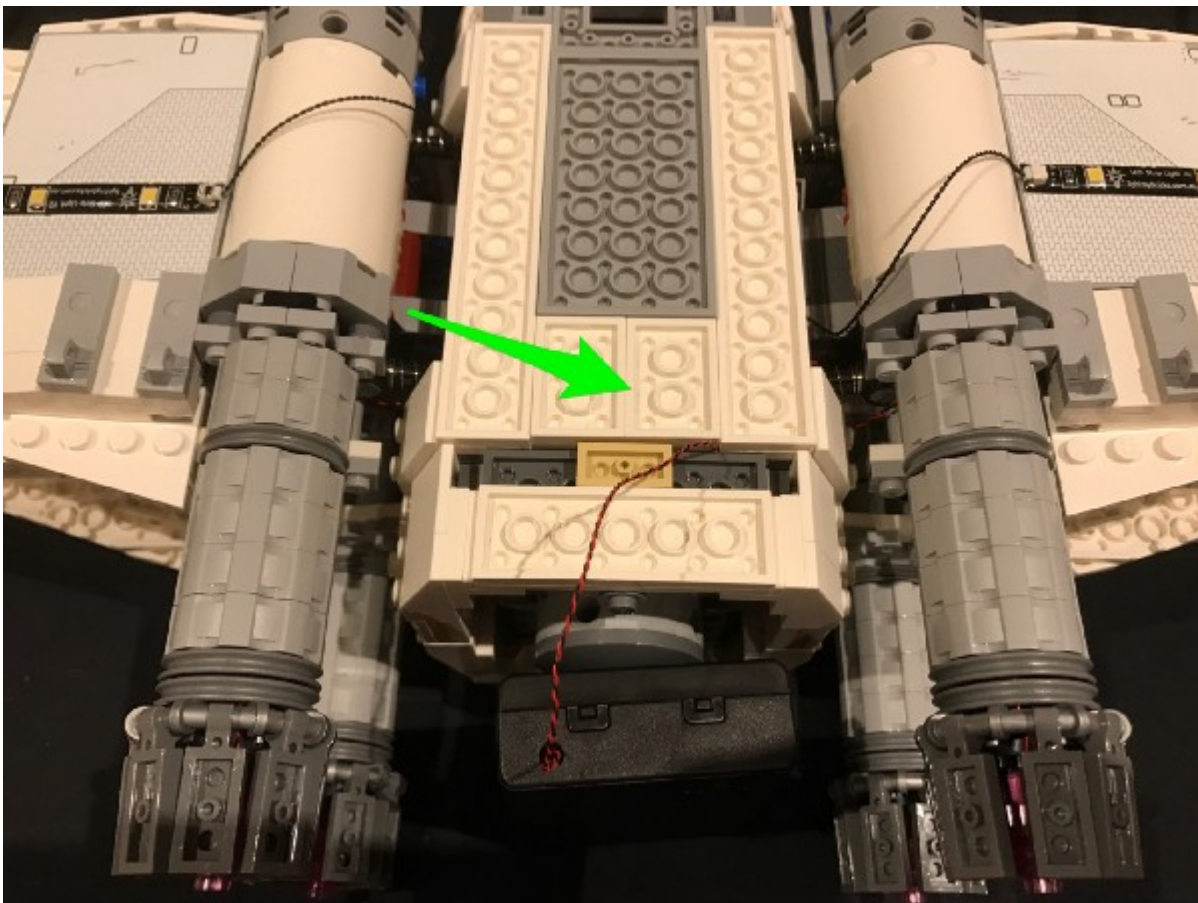
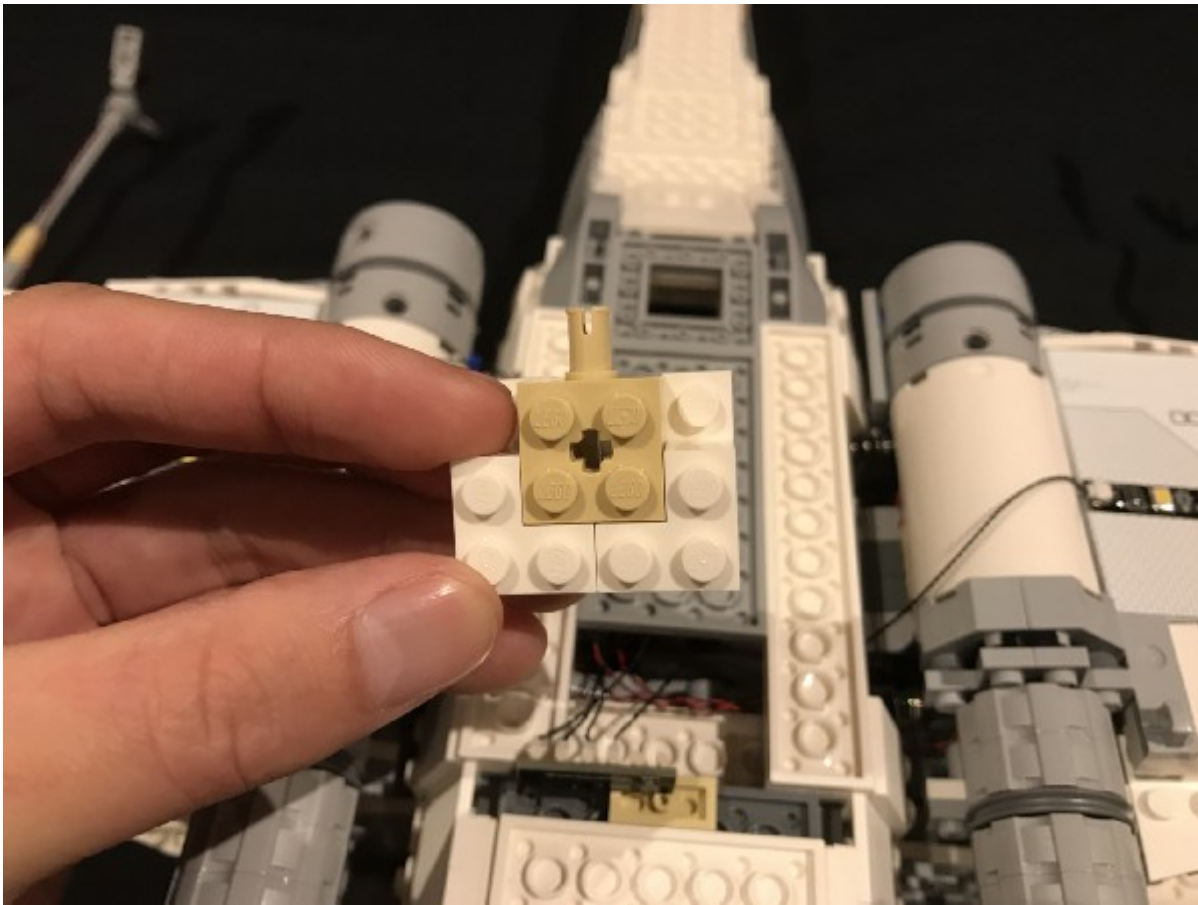


34.) Take the remaining section we removed earlier in step 15 and then disconnect and discard the section with the dark grey 2×6 plate.

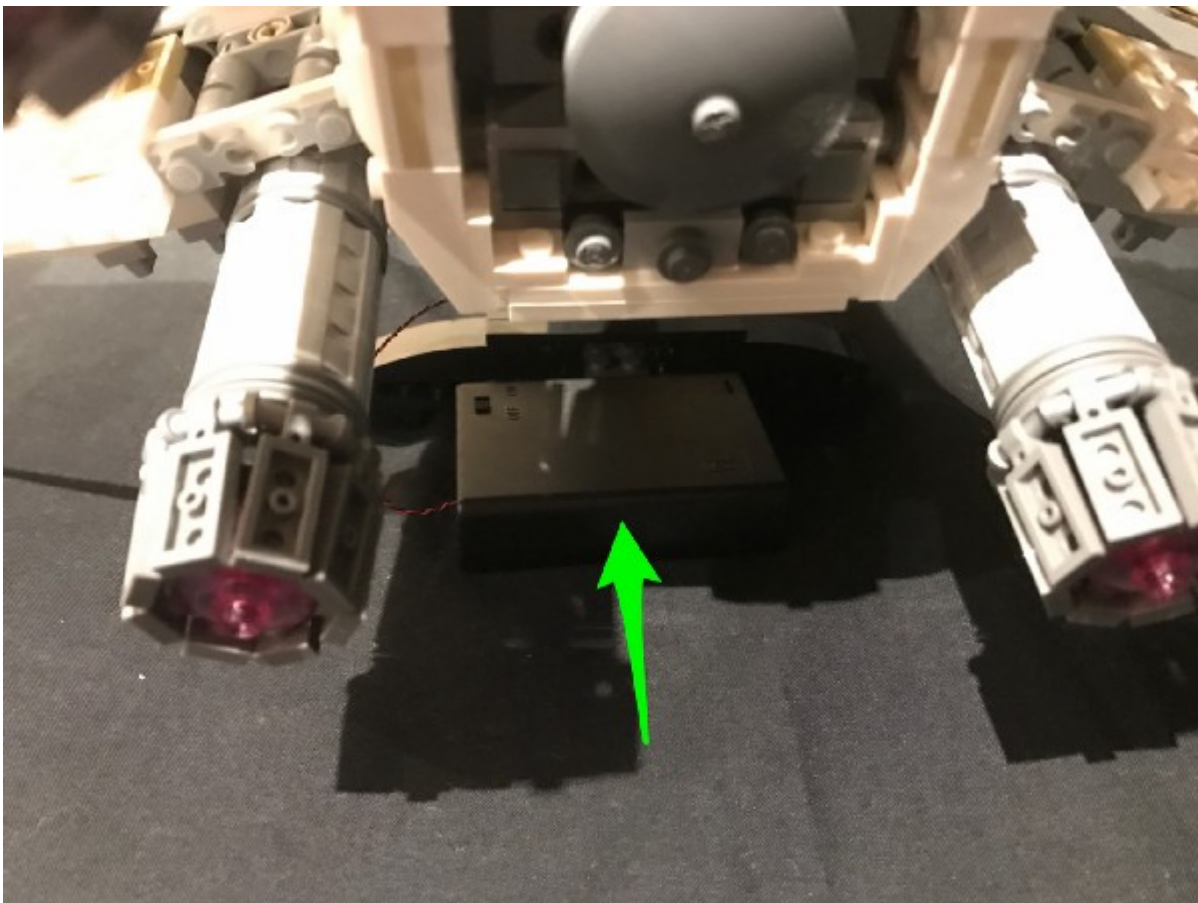
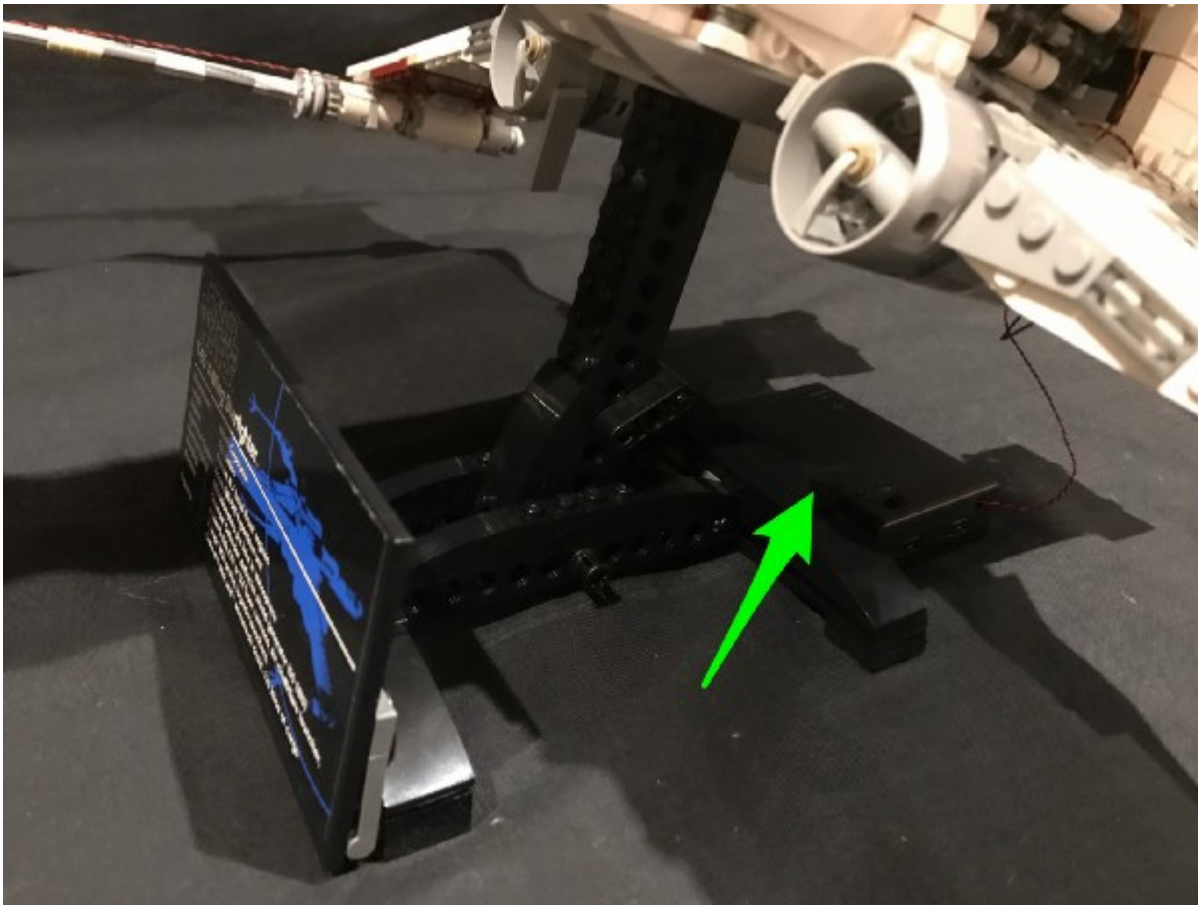




Reconnect this remaining section back to cover up the space underneath the X-Wing. ▲



35.) Carefully turn the X-Wing over and then place it back onto the stand with the battery pack placed behind.



This now completes installation of the Light My Bricks Lighting kit for the LEGO UC Red Five X-Wing. ▲

Turn the battery pack on and ENJOY!

