

Light My Bricks: LEGO NASA Apollo Saturn V 21309 Lighting Kit



The following page is the instructions for the **Light My Bricks LEGO NASA Apollo Saturn V (21309) LED light kit**.

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**

Please note: This page lists instructions for the LED light kit only. If you are wishing to purchase the Light My Bricks LEGO NASA Apollo Saturn V (21309) LED light kit, please click [here](#) to view the product page

Package Contents:

- 11x White 30cm Bit Lights
- 3x Flicker Effects Board
- 2x 6-Port Expansion Boards
- 2x 5cm Connecting Cables
- 3x Flat Battery Packs (Each battery pack requires 2x CR2032 Batteries)

LEGO PIECES:

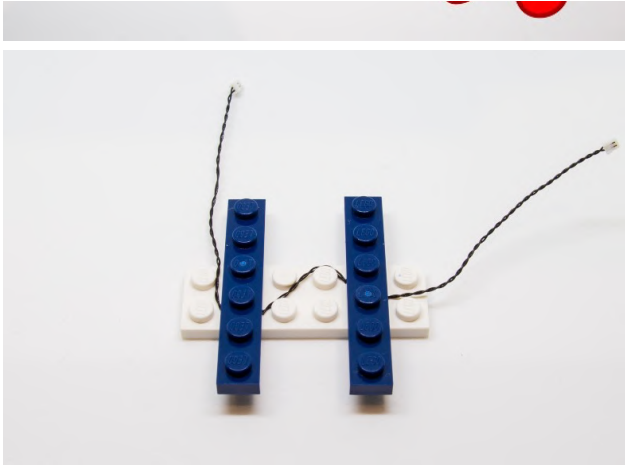
- 6x Trans Orange Round Plate 1x1

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.

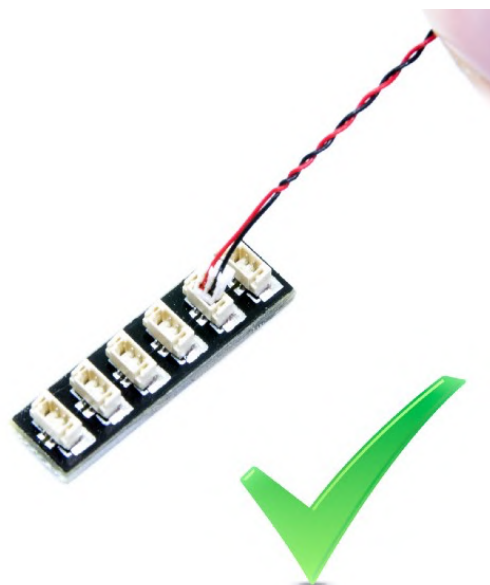




CAUTION: Forcing LEGO® to connect over a cable can result in damaging the cable and light.

Connecting cable connectors to Expansion Boards

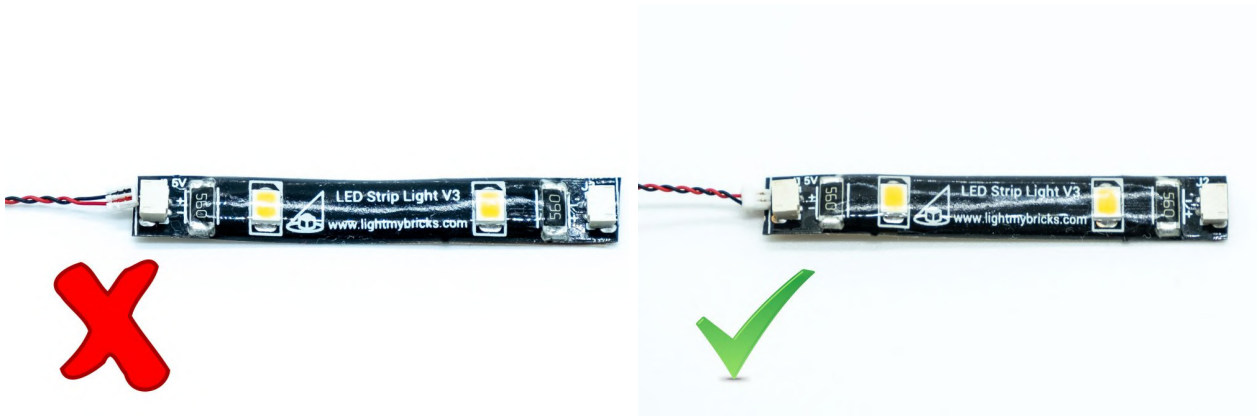
Take extra care when inserting connectors to ports of Expansion Boards. Connectors can be inserted only one way. With the expansion board facing up, look for the soldered “=” symbol on the left side of the port. The connector side with the wires exposed should be facing toward the soldered “=” symbol 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 result in bent pins inside the port or possible overheating of the expansion board when connected.

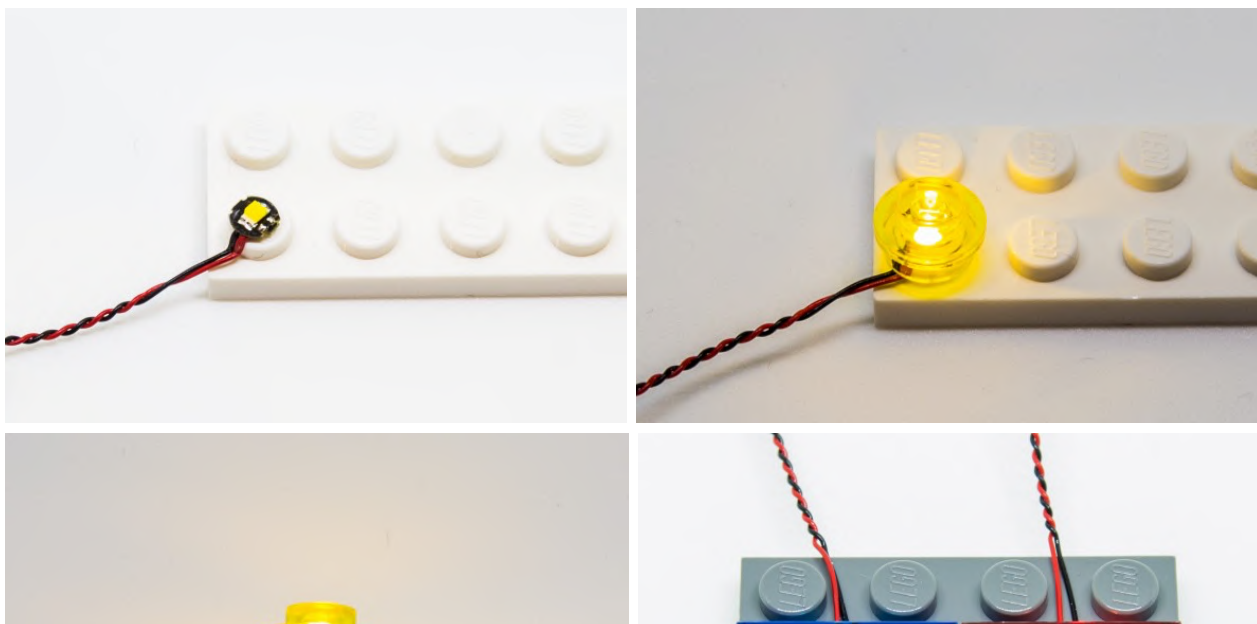
Connecting cable connectors to Strip Lights

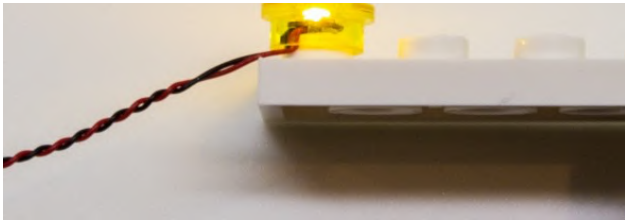
Take extra care when inserting connectors to ports on the Strip Lights. Connectors can be inserted only one way. With the Strip Light facing up, ensure the side of the connector with the wires exposed is facing down. If a plug won't fit easily into a port connector, don't force it. Doing so will damage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





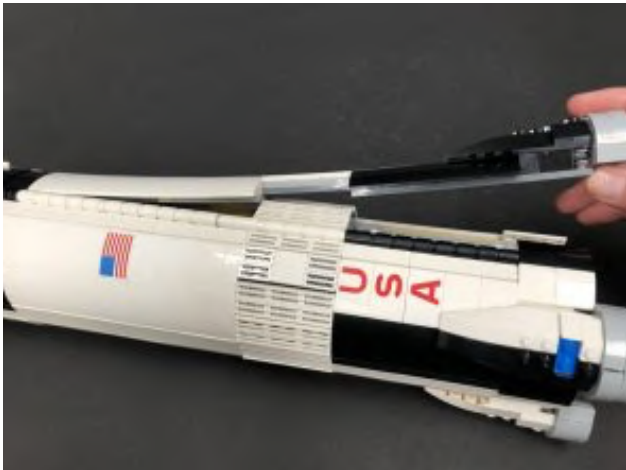
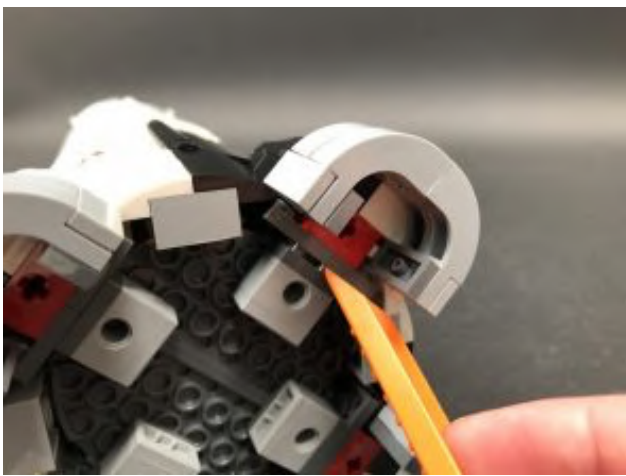
OK, Let's Begin!

1.) We will install lights to the bottom rocket first. Start by disconnecting the bottom jet sections followed by the tail pieces as per below:

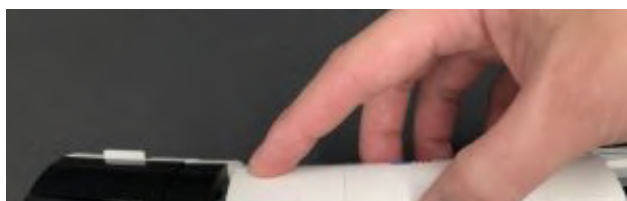
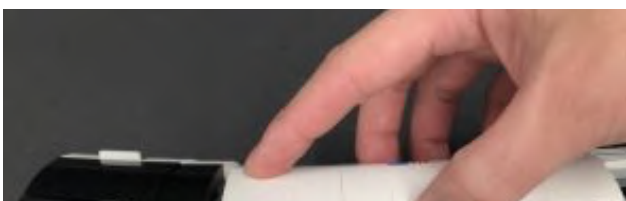


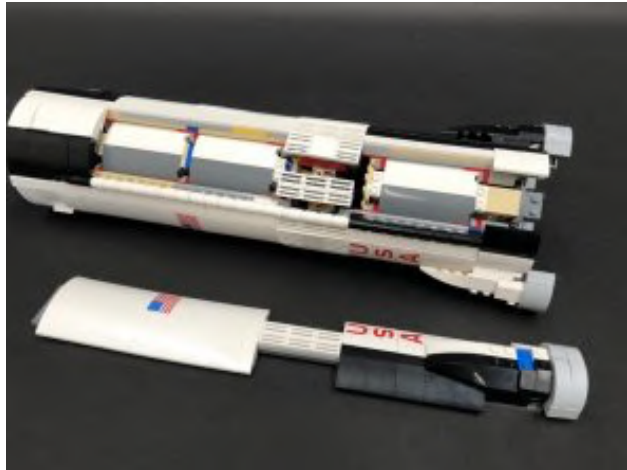
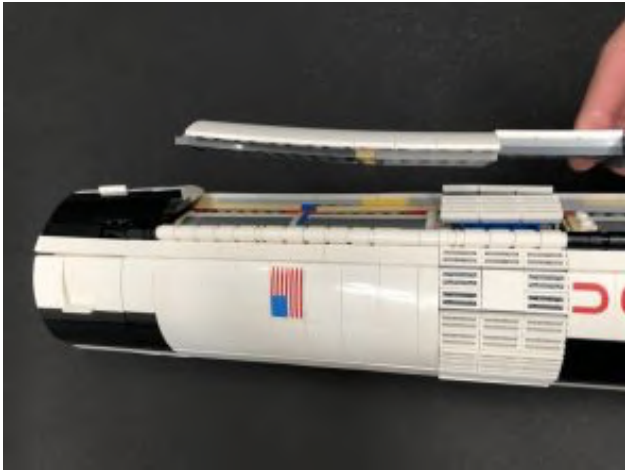


2.) Using the LEGO Removal tool, disconnect the following wall section from the bottom as shown below

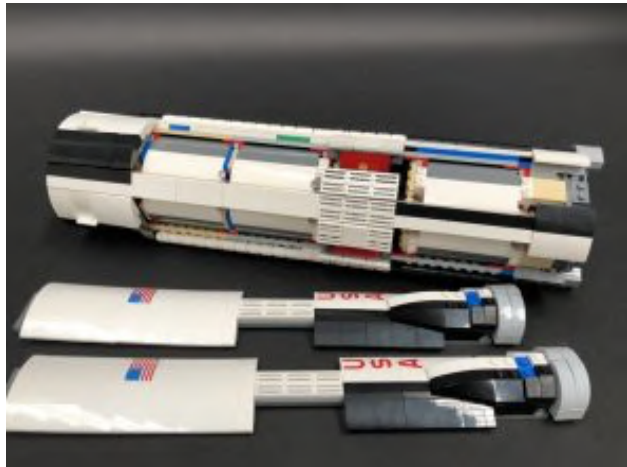
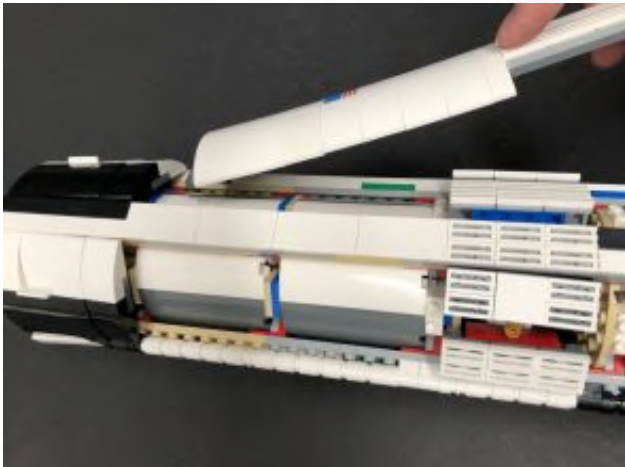


Carefully press down at the following position to allow you to completely pull this section out.

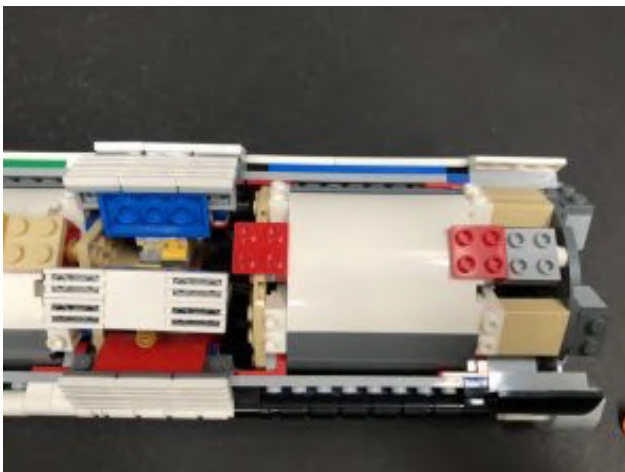
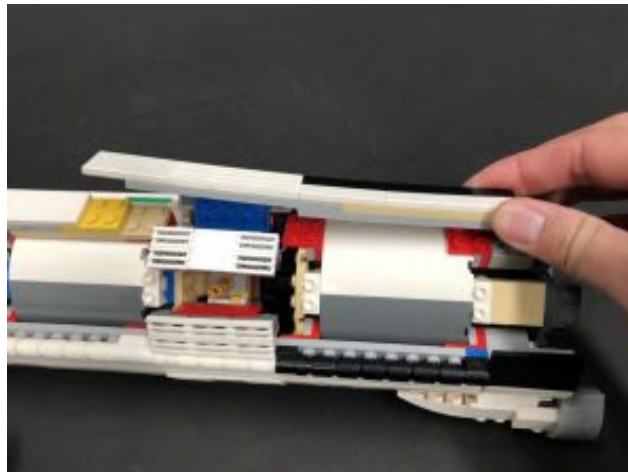
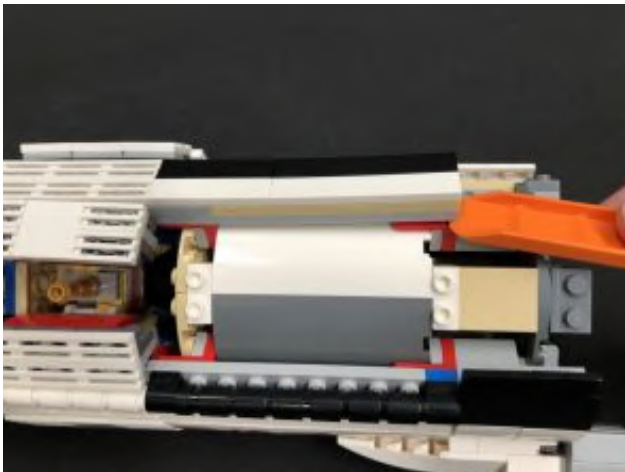
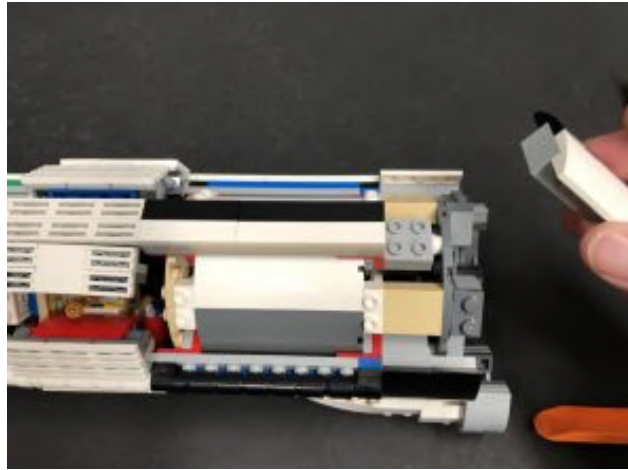
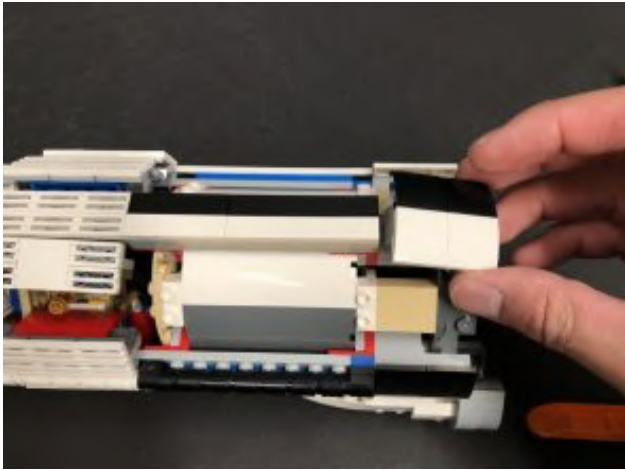




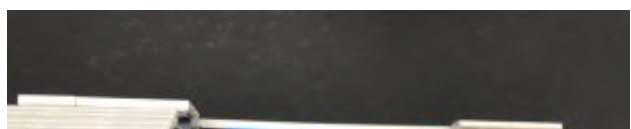
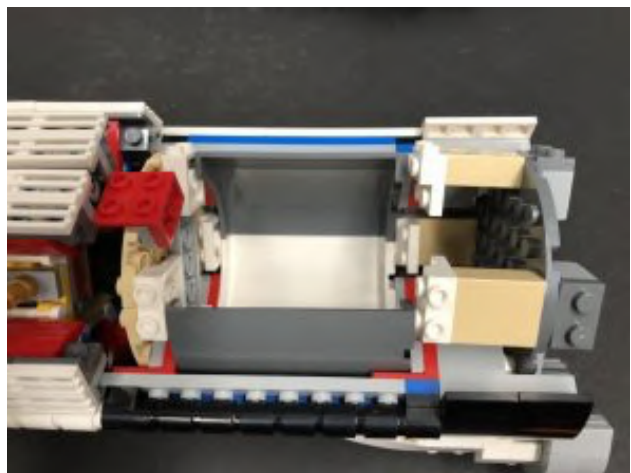
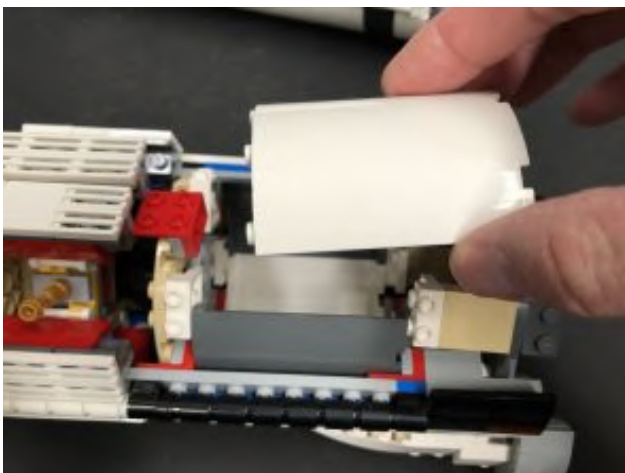
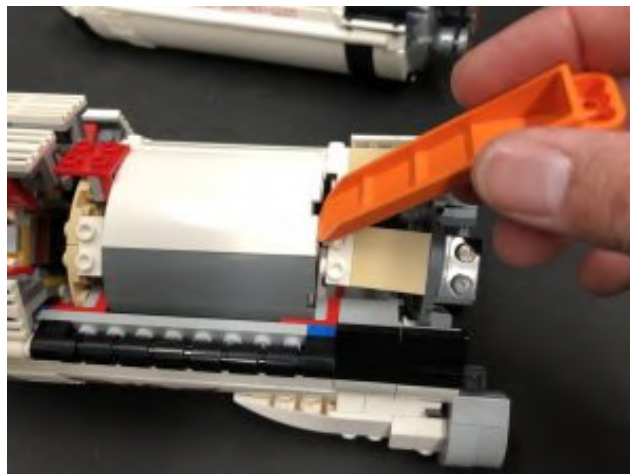
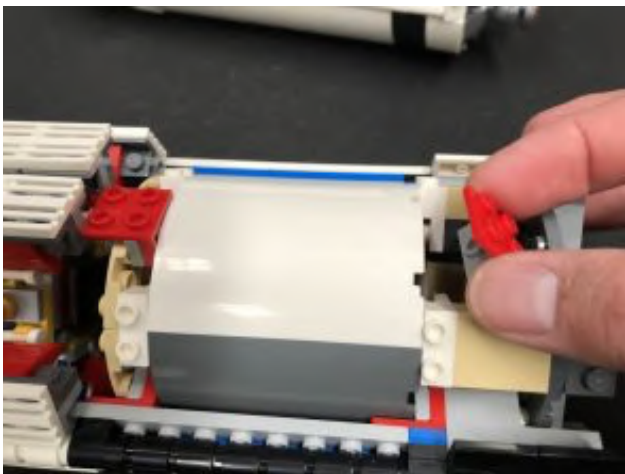
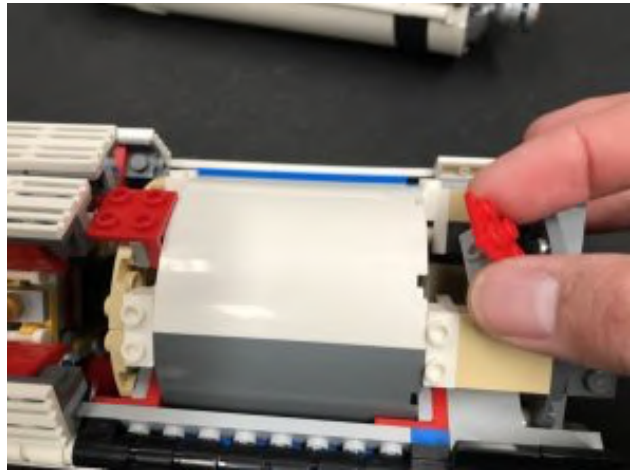
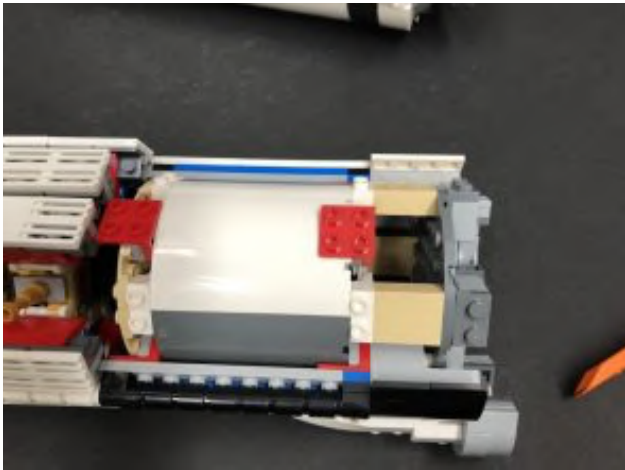
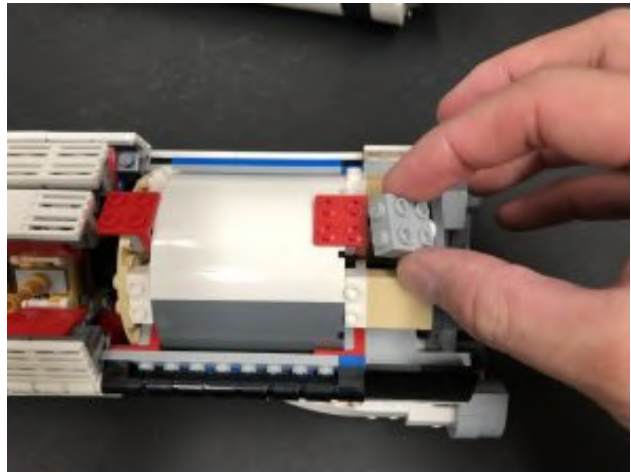
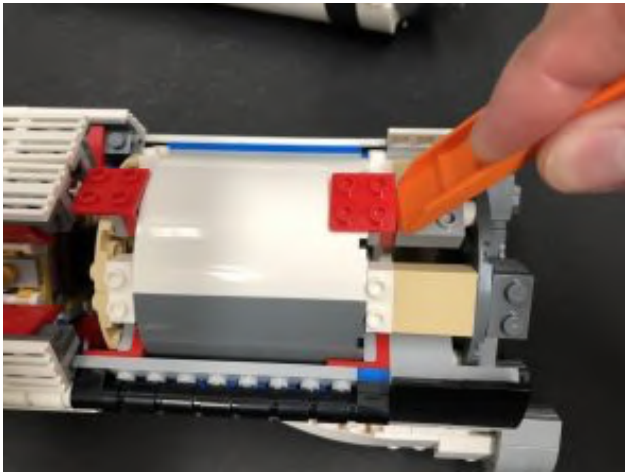
3.) Repeat previous step to remove the wall section to the right

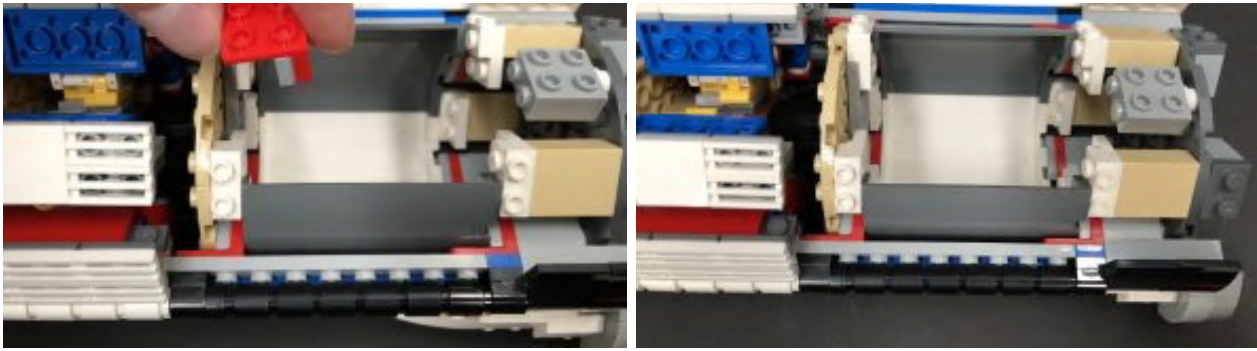


4.) Remove the section in the middle by lifting out sections using your finger as well as using the LEGO removal tool

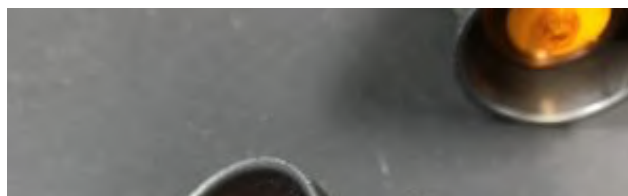
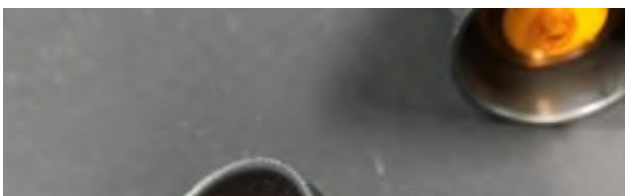


5.) Use the LEGO Removal tool to disconnect the following sections to then allow us to remove the internal white wall section as well as the red pieces above and underneath





6.) Take the 5 jet sections and starting with one, disconnect the bottom half then take a **White 30cm Bit Light** and thread the connector side of the cable down through the centre of the top of the jet (trans orange piece). Thread it all the way through until the Bit Light is right up against the edge of the trans orange piece.



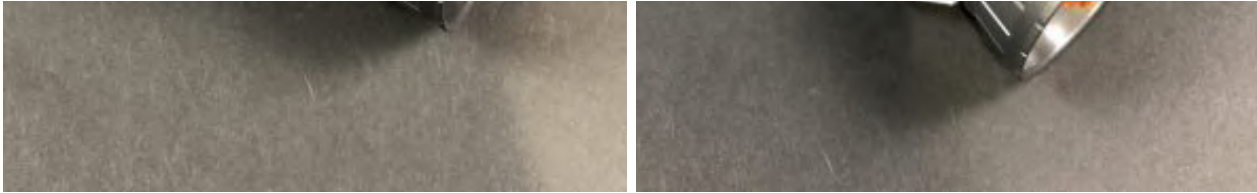


Slightly bend the Bit Light on a 90 degree angle so that it sits flat, then secure it in place by connecting one of the provided **Trans Orange Round Plate 1x1** over the top



Reconnect the top half of the jet section back to the bottom half ensuring the cable from the Bit Light is tucked neatly underneath the dark grey bars.



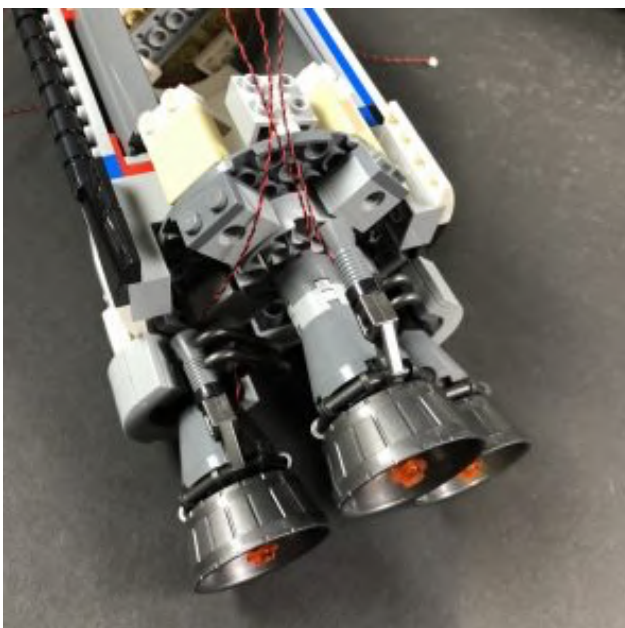
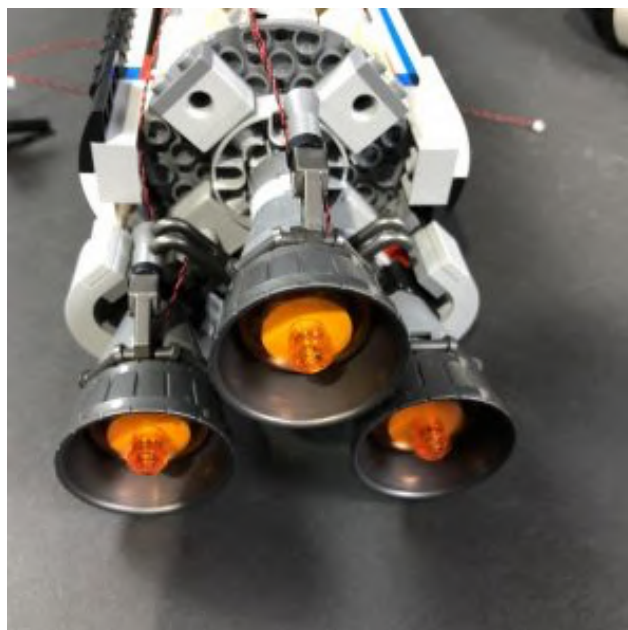
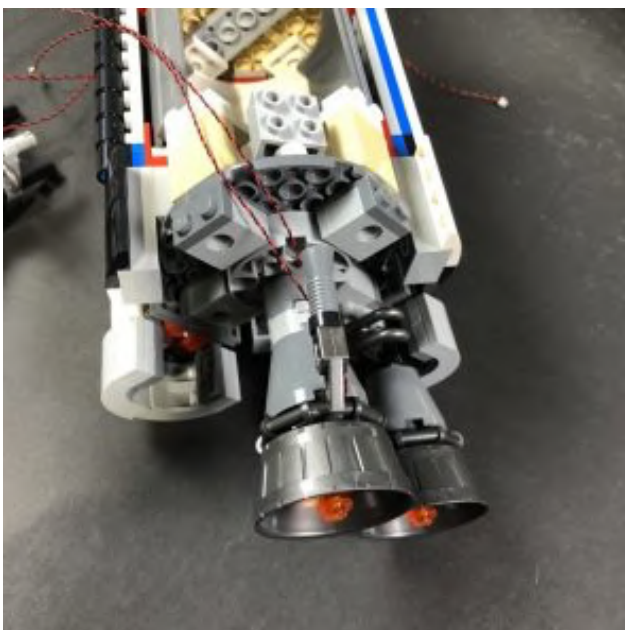
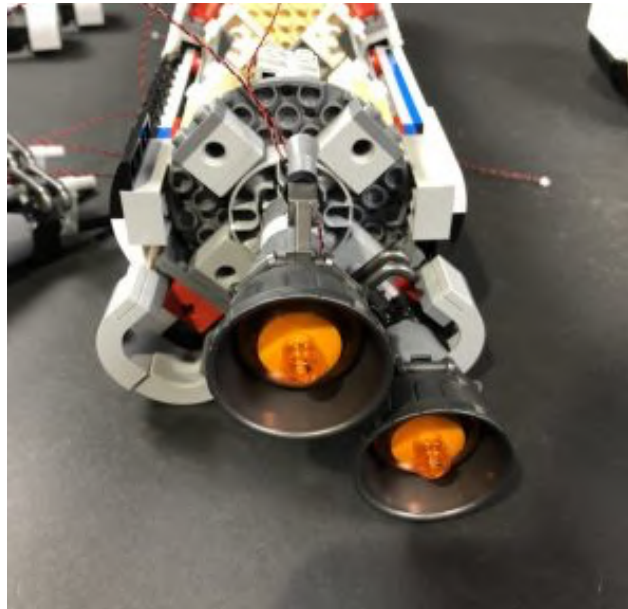
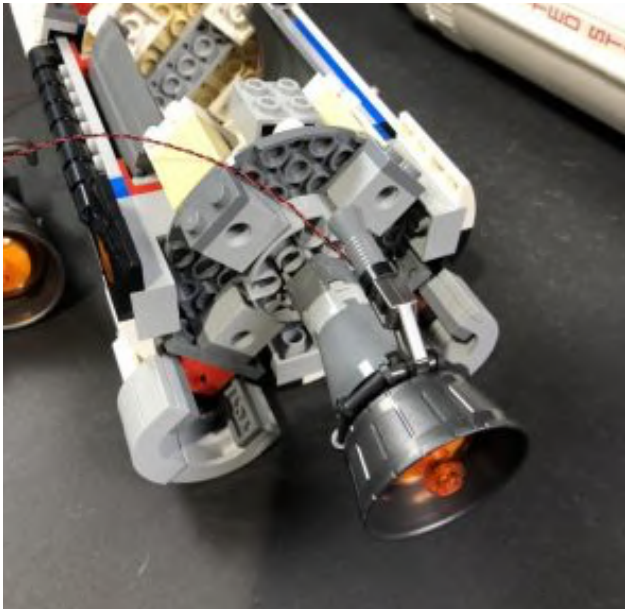


7.) Repeat previous step to install **White 30cm Bit Lights** to the other four Jet sections using more of the provided **Trans Orange Round Plate 1x1**



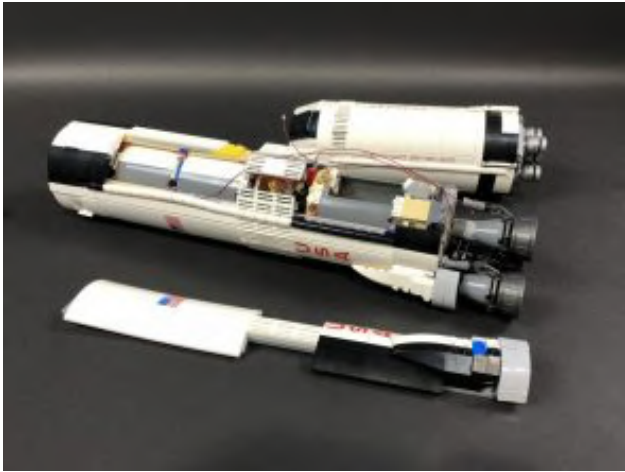
8.) Reconnect the bottom three jet sections back to the base of the rocket starting with the one in the centre. Ensure the cable from each jet light is laid toward the top centre as shown below:



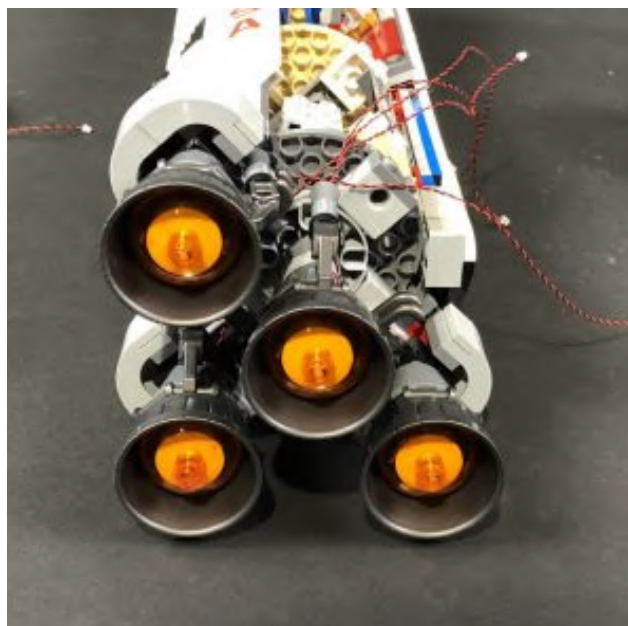
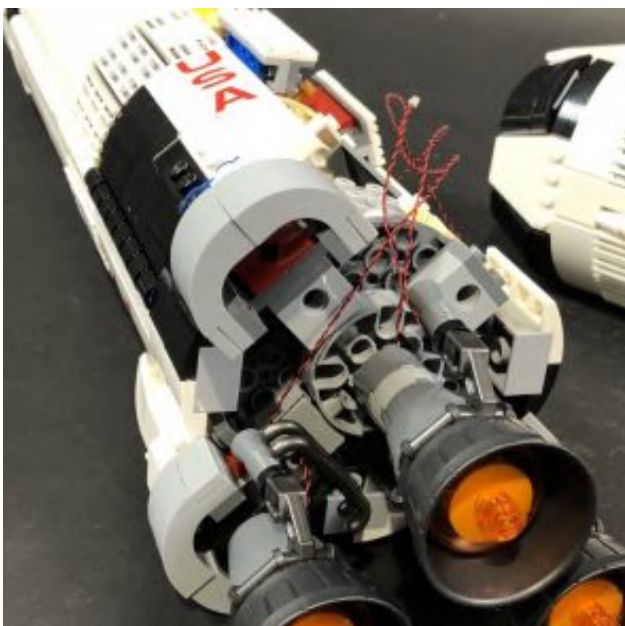


9.) Take the wall section closest to the bottom and then reconnect this to the

ship starting with the top part.

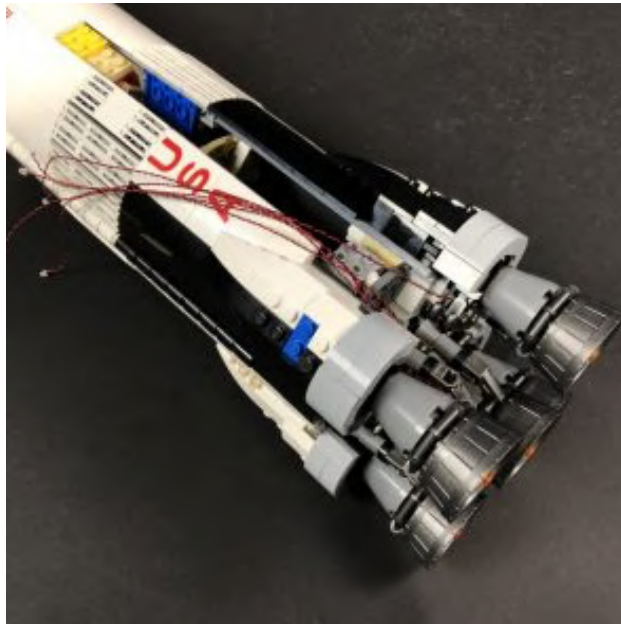
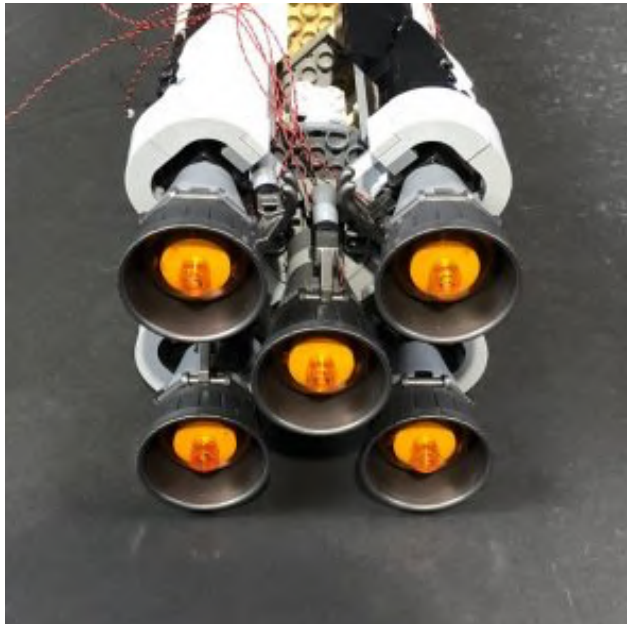
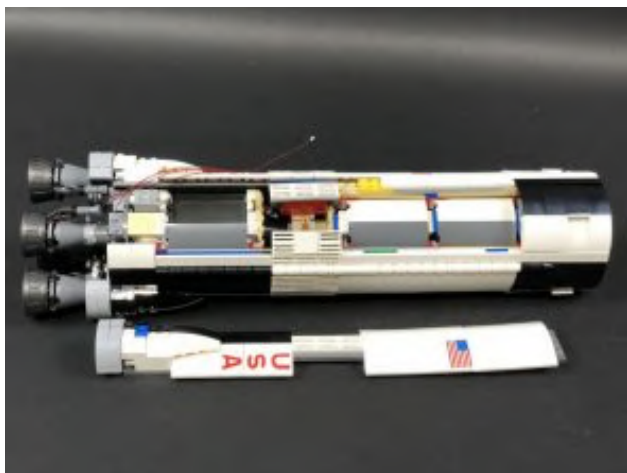


10.) Reconnect the Jet section that connects to the bottom of the wall section we just reconnected ensuring all cables are neatly laid towards the centre.



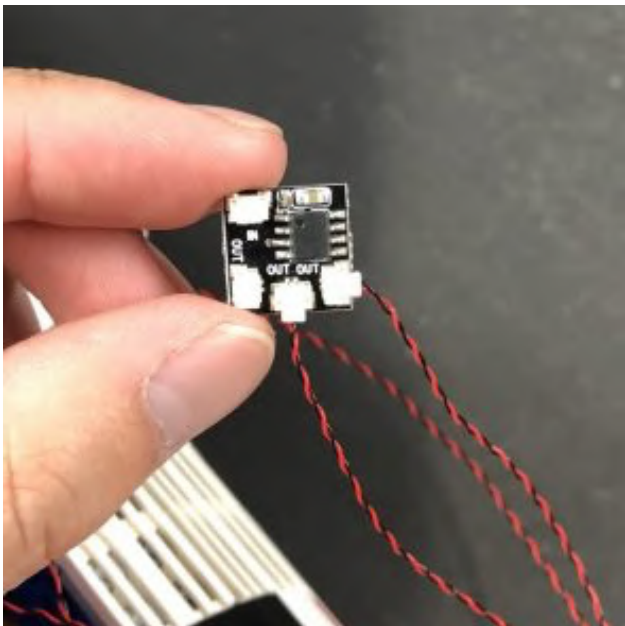
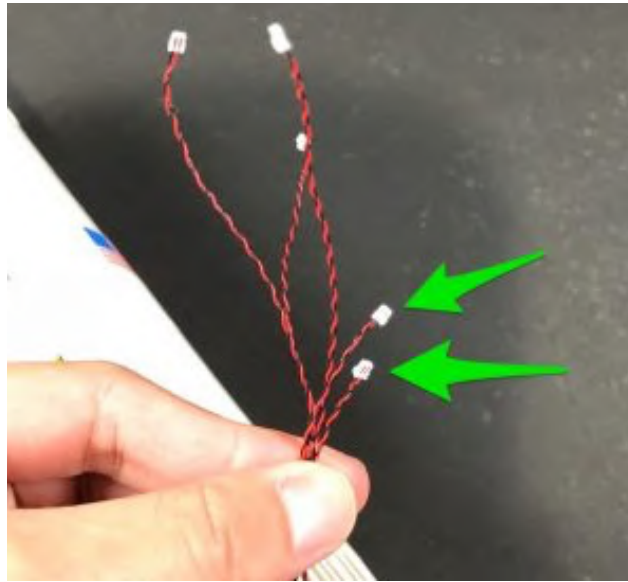
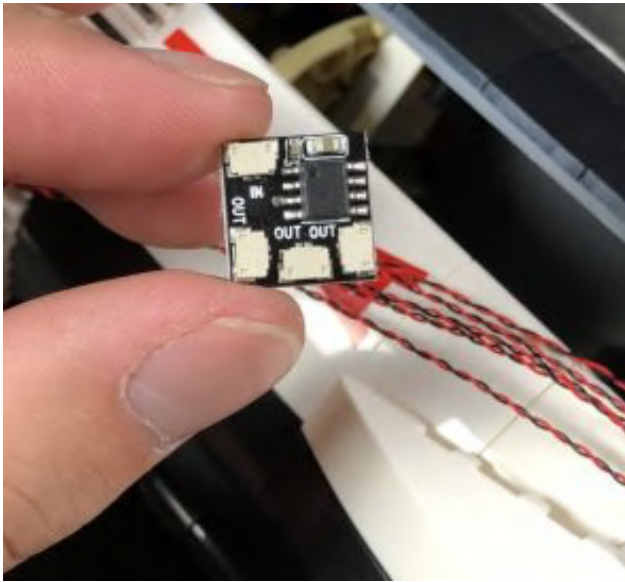
Flip the rocket over and then reconnect the remaining wall section by first

reconnecting the top part then reconnect the remaining Jet section.

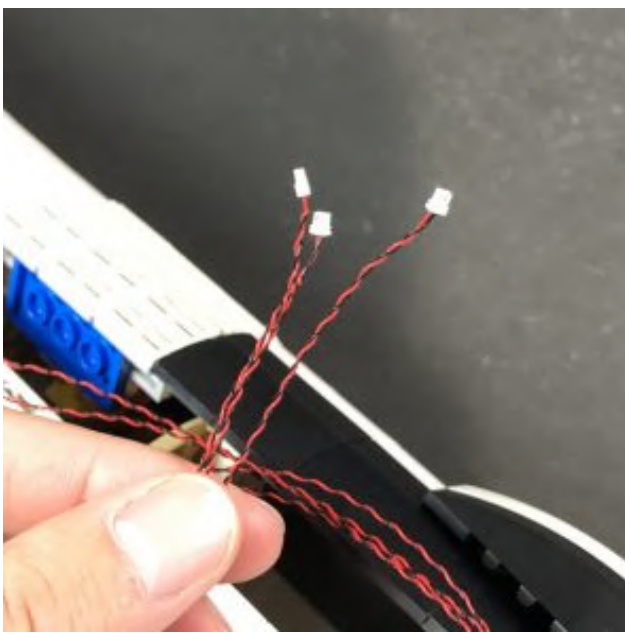


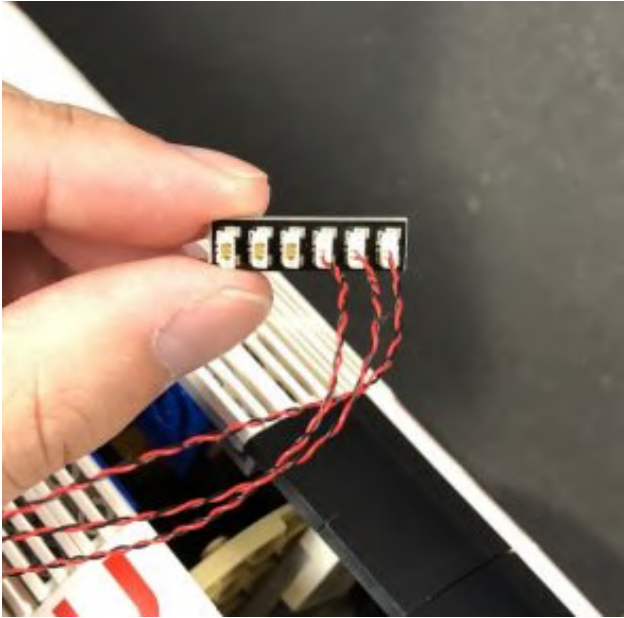
11.) Take 1x **Flicker Effects Board** and connect the two shortest Bit Light Cables to the OUT ports (There are 3 OUT ports in total).



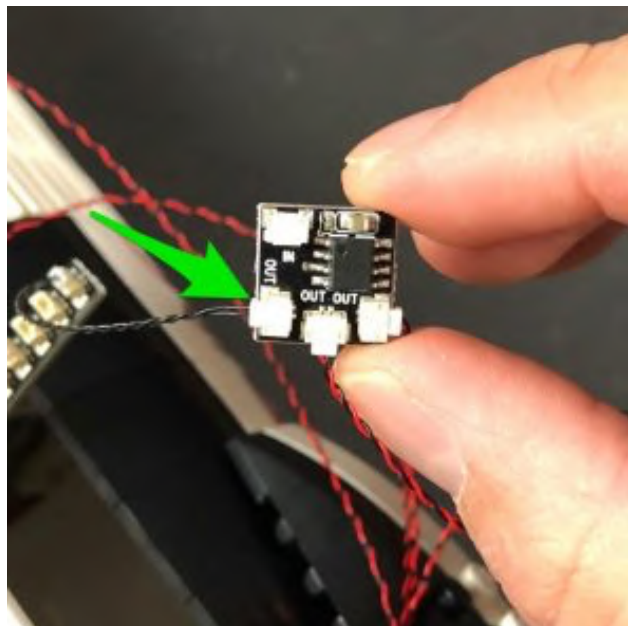
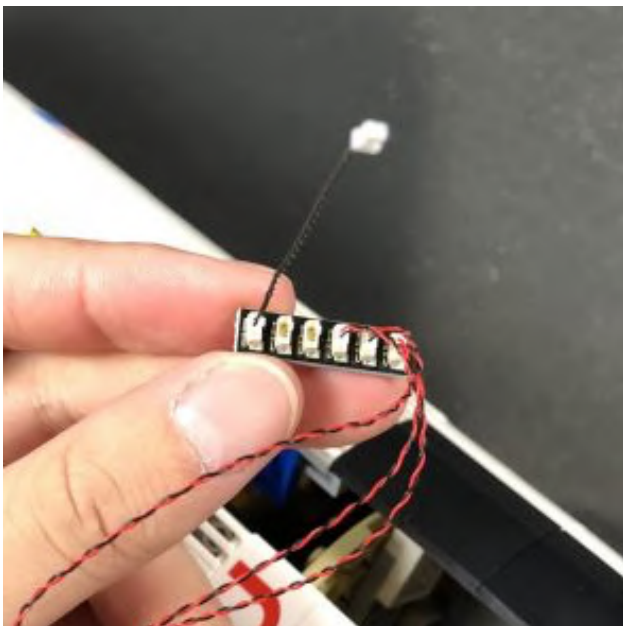


12.) Take remaining three Bit Light cables and connect them to a **6-Port Expansion Board**



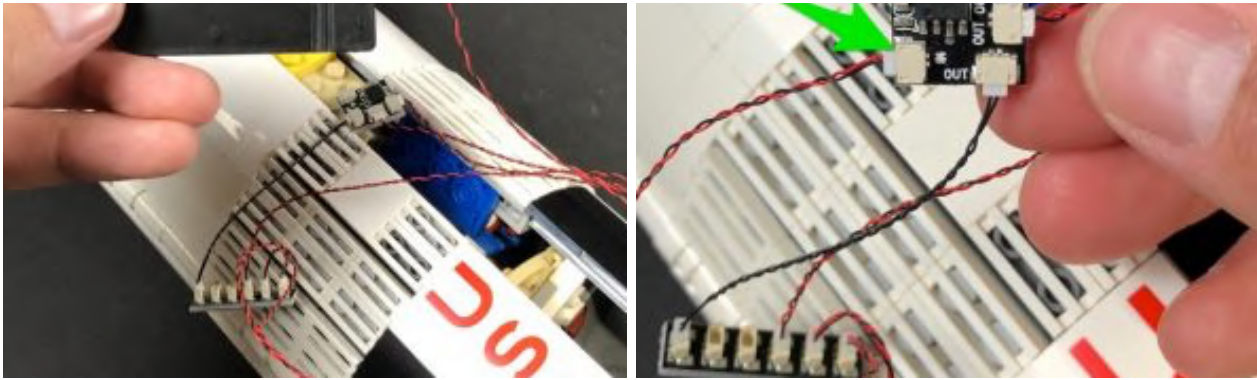


13.) Take a **5cm Connecting Cable** and connect one end to the 6-port Expansion Board and connect the other end to the remaining OUT ports of the Flicker Effects Board.

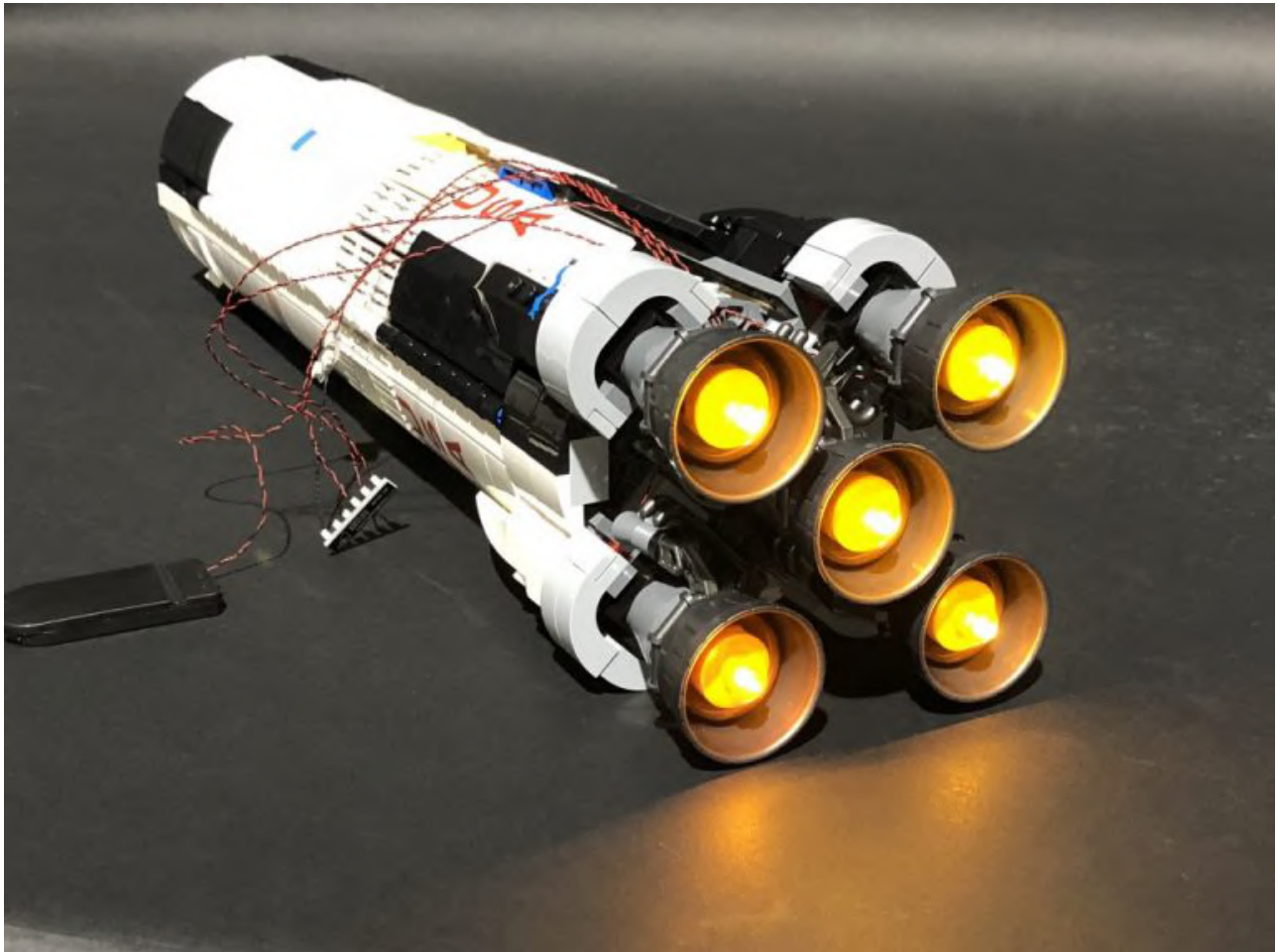


14.) Take a **Flat Battery Pack** and insert 2x CR2032 Batteries to it and then connect the battery pack cable to the IN Port on the Flicker Effects Board



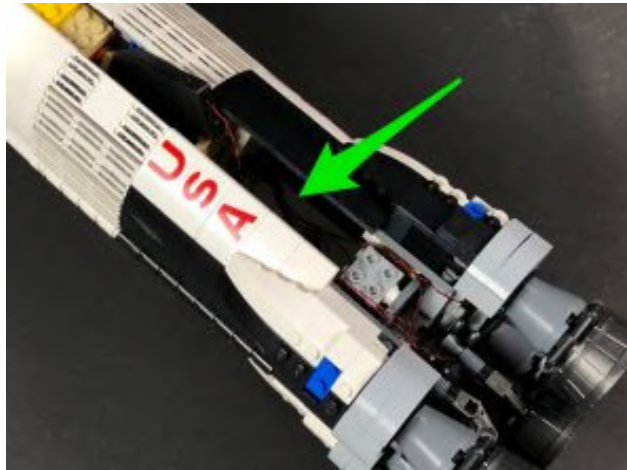
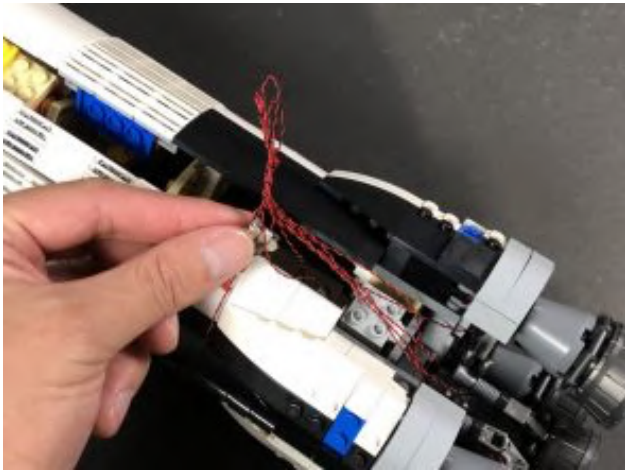
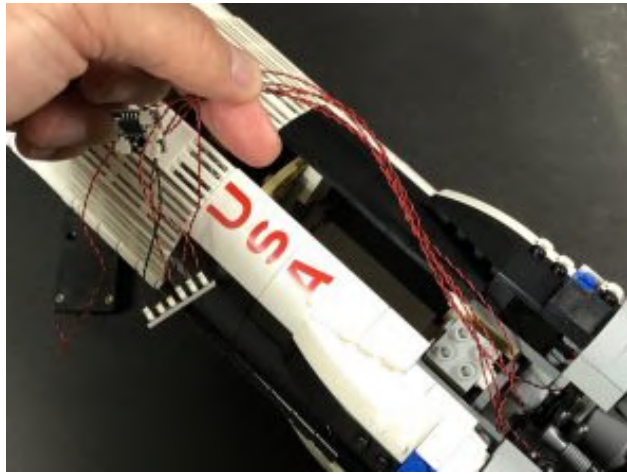
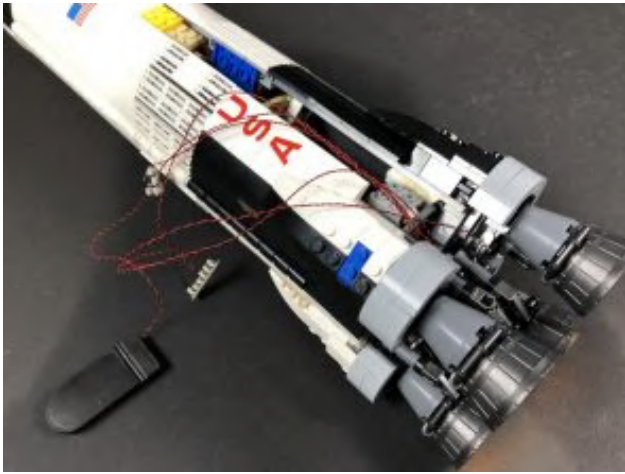


Turn the Battery Pack on and confirm all lights and effects are working OK

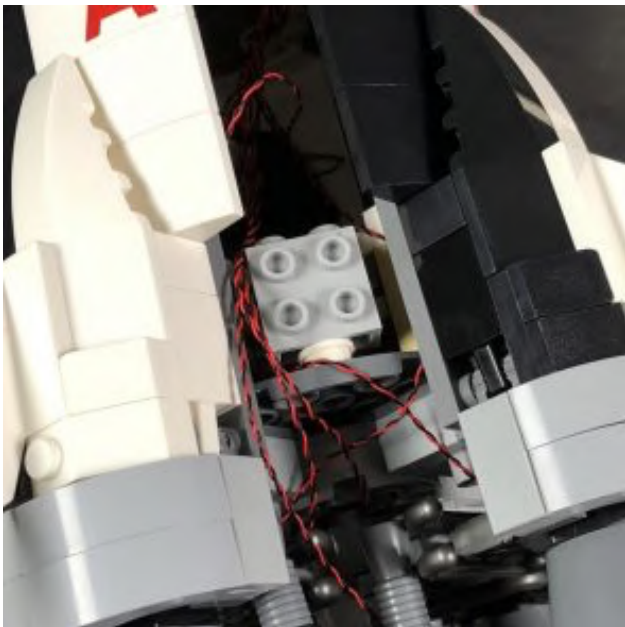


*Note: If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing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

15.) Eliminate excess cabling by grouping all the cables and twisting them around each other. Tuck everything in to the open middle section.

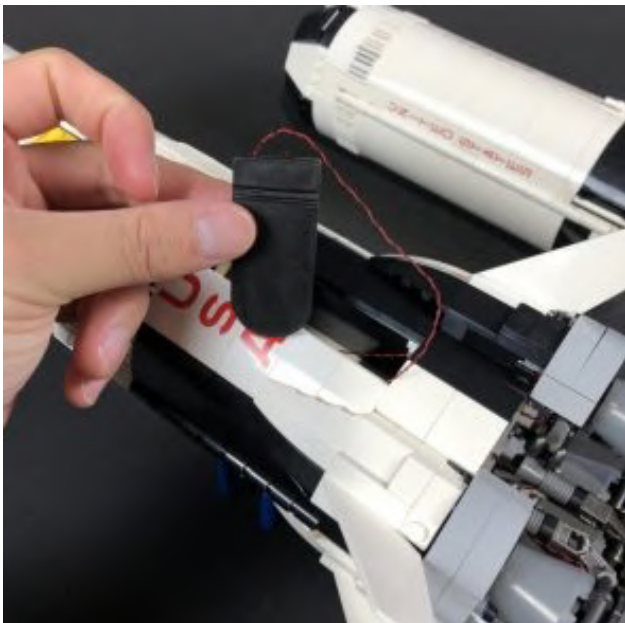
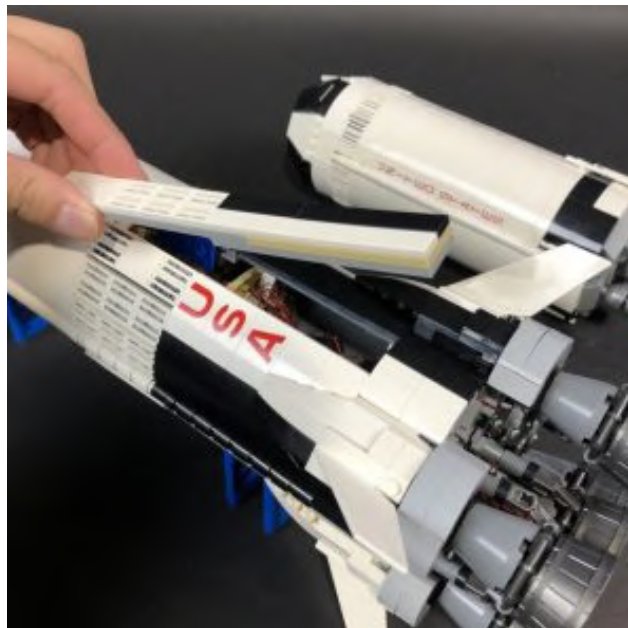
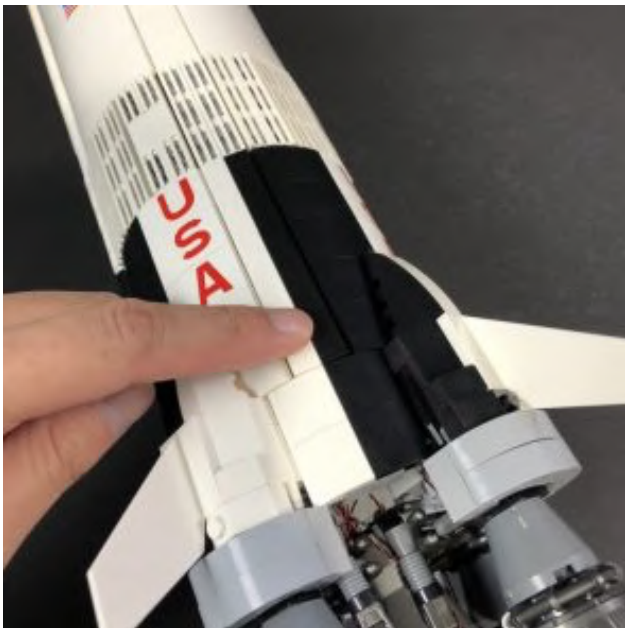


Reconnect remaining sections of the Rocket.



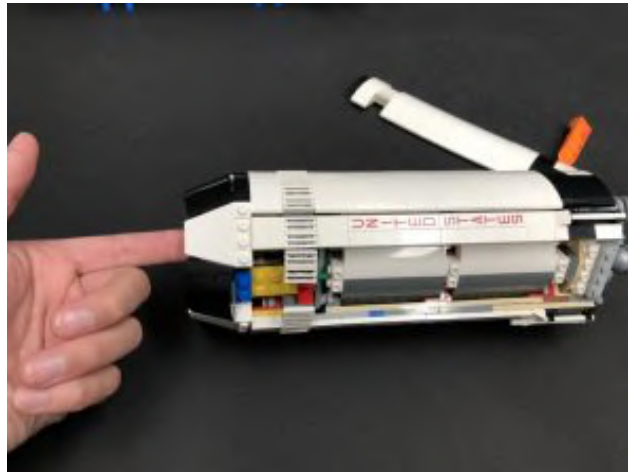


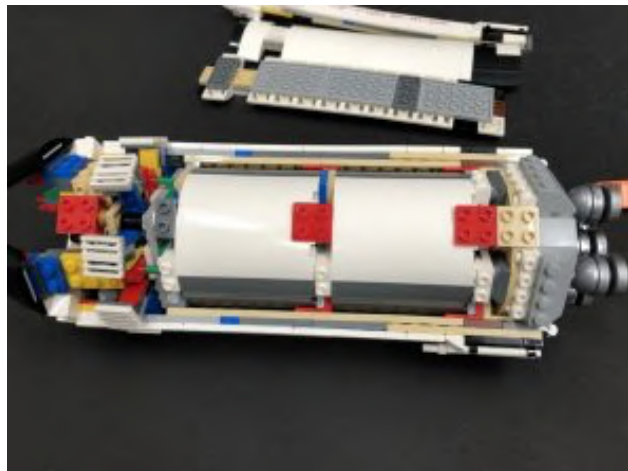
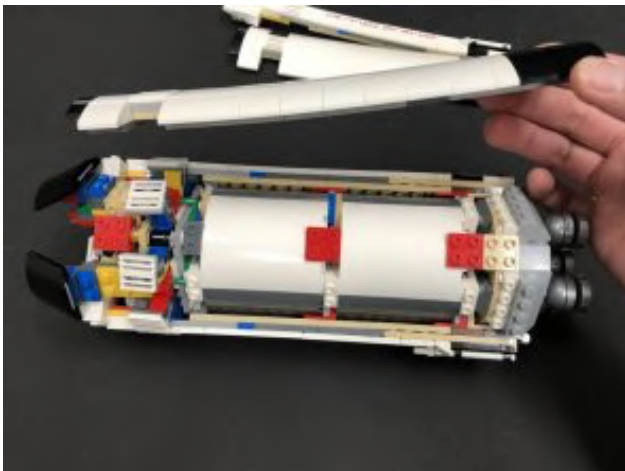
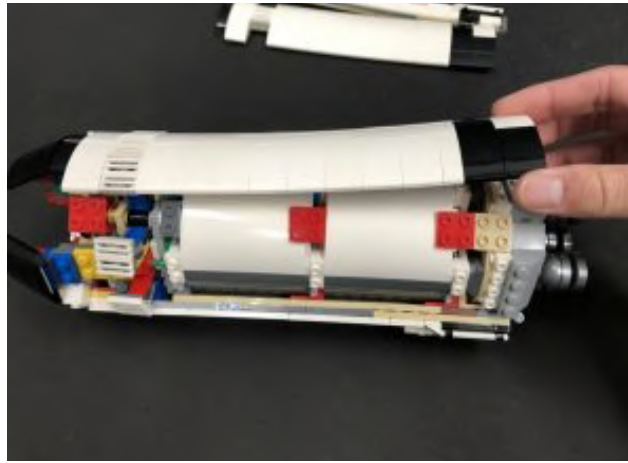
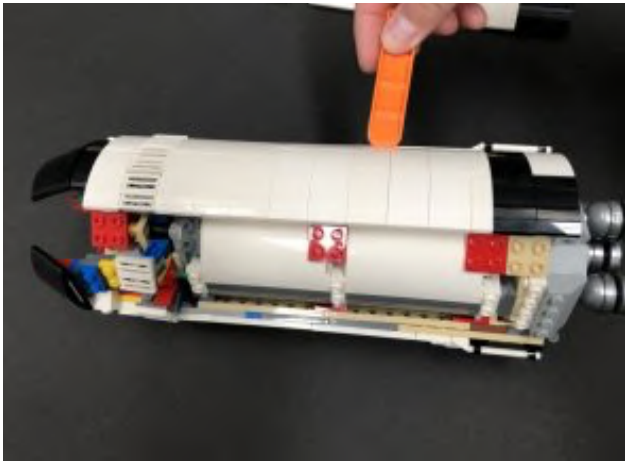
To turn On and OFF the lights, simply detach the middle section to access the Battery Pack.



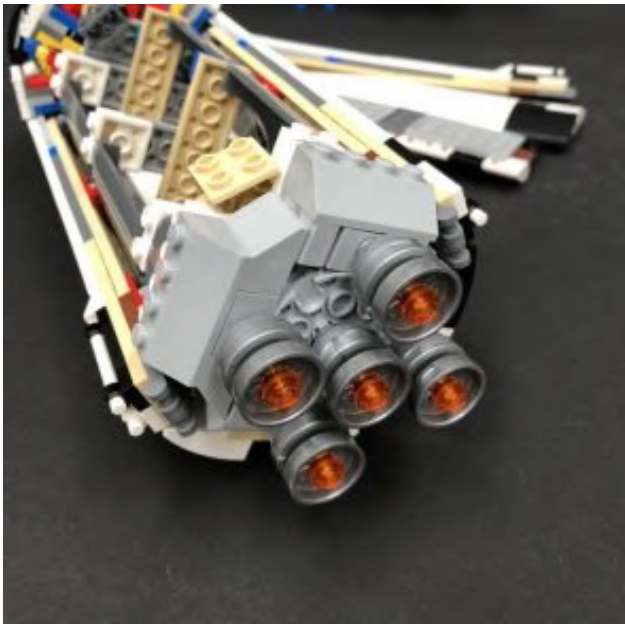
16.) We will now proceed to lighting the middle section of the Saturn V. Using the LEGO Removal Tool, disconnect the following sections (two main and one

centre section).



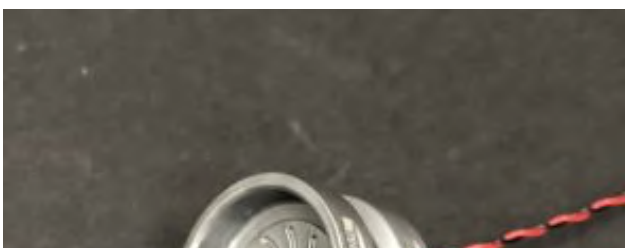
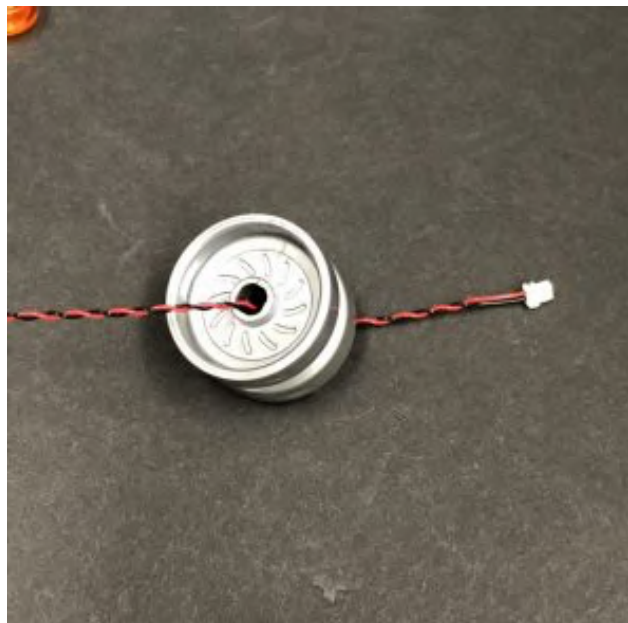
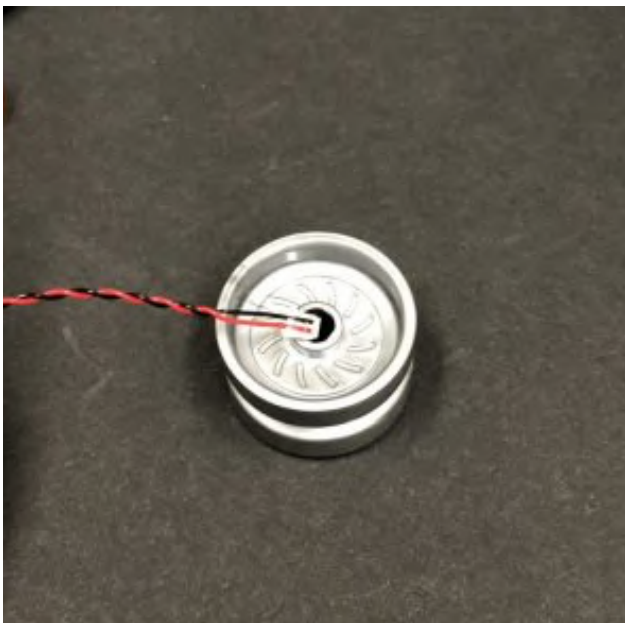


18.) Disconnect the five Jet sections





19.) Disassemble one of the Jets and then take a **White 30cm Bit Light** and then thread the connector side through the top of outer section. Thread it all the way through until the component is right up against the edge.

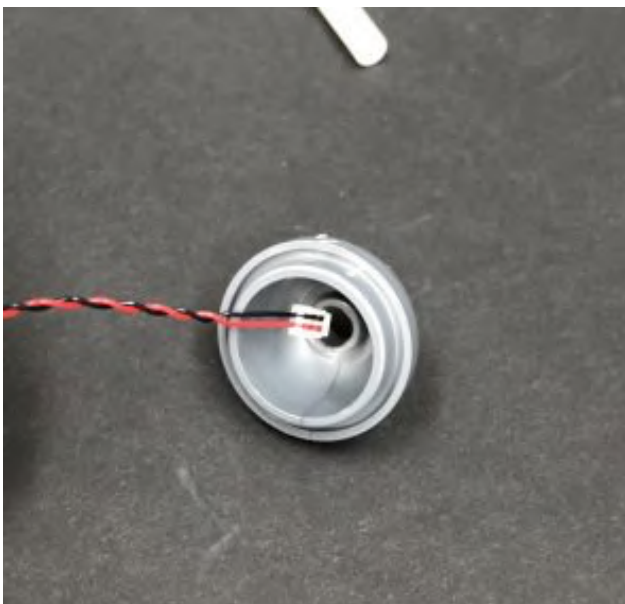


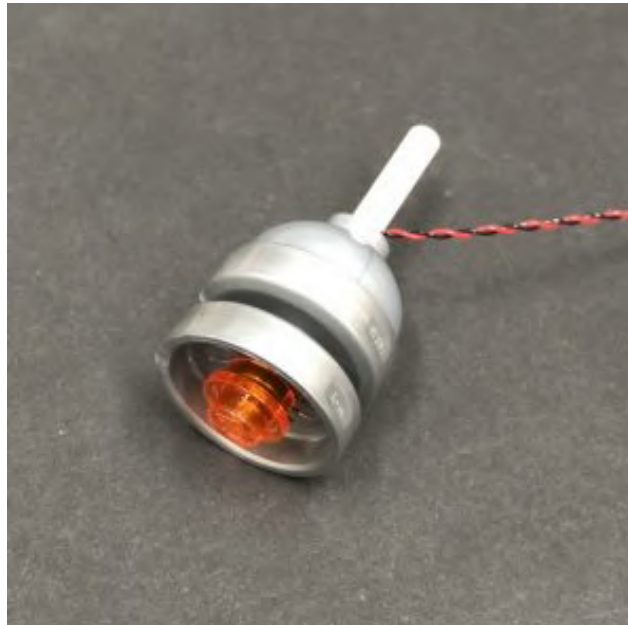
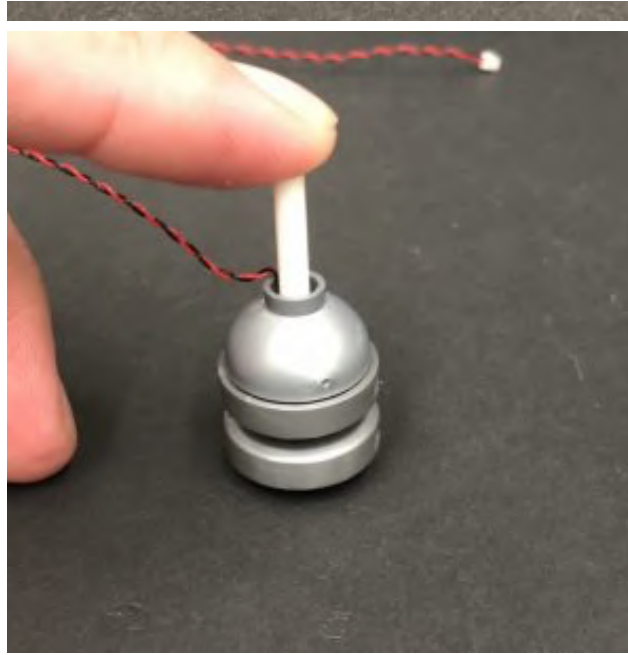
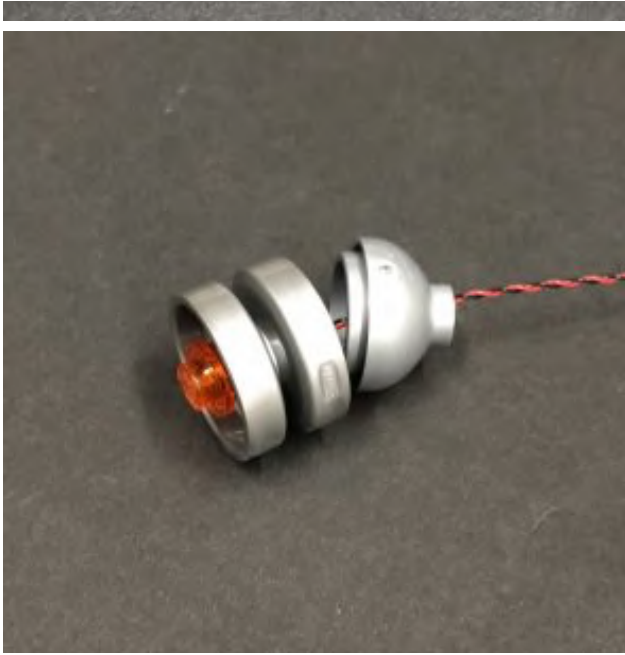


Carefully bend the Bit Light 90 degrees so that it now sits flat against the hole then secure it in place by reconnecting the Trans Orange Round Plate



Thread the cable through the piece that connects behind and then carefully reconnect the white bar securing all pieces together.

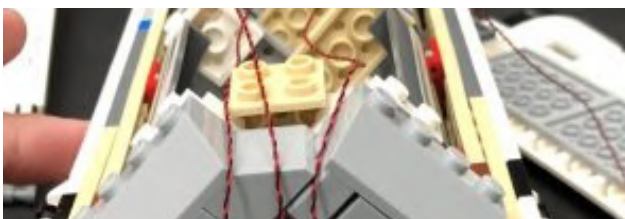
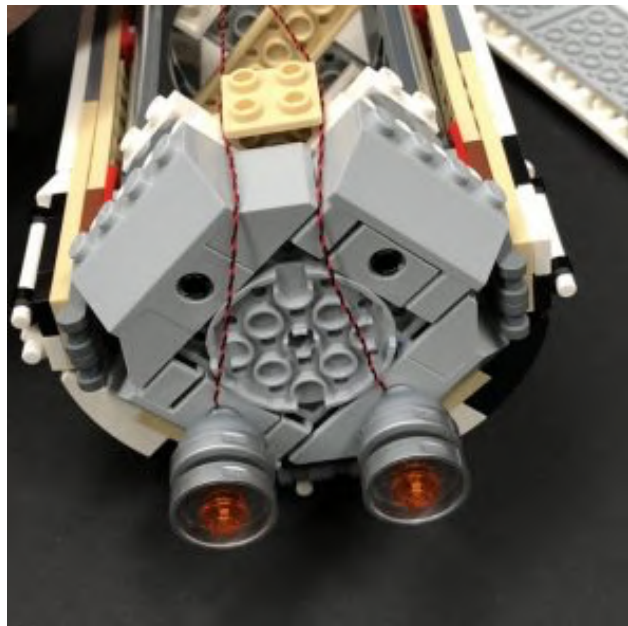
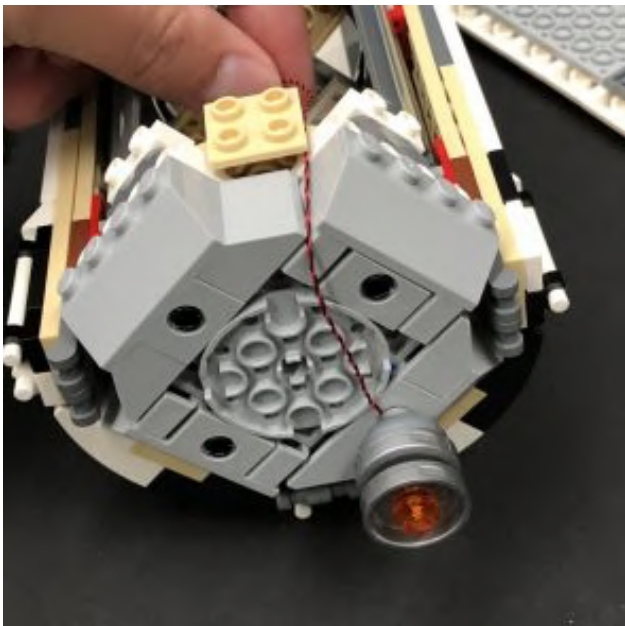


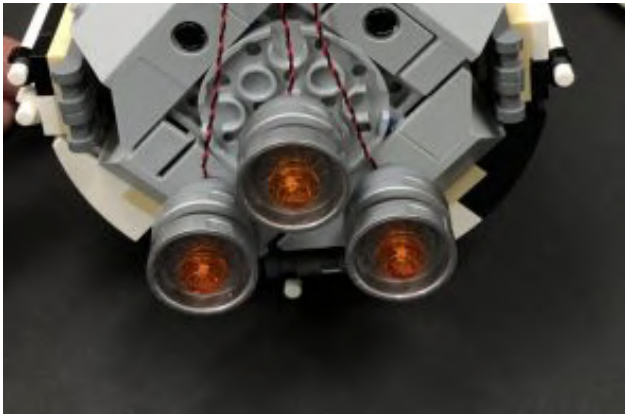


20.) Repeat previous step to install **White 30cm Bit Lights** to the other four Jet sections.

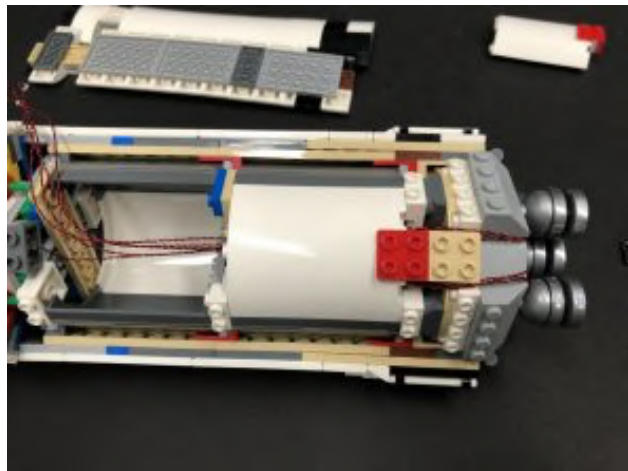
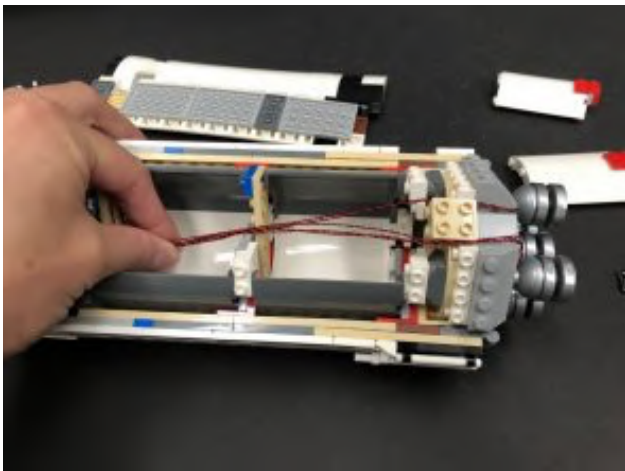


21.) Reconnect the five Jet sections to the base starting with the bottom ones, ensuring the cables for each light is laid neatly up the centre as shown below

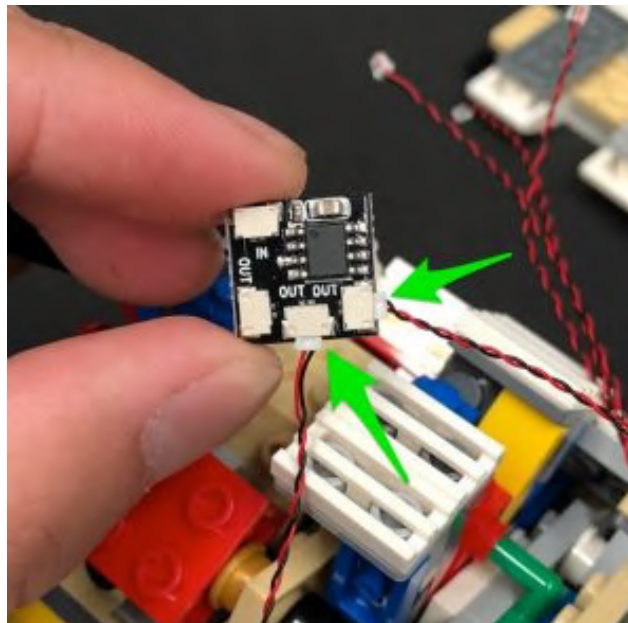
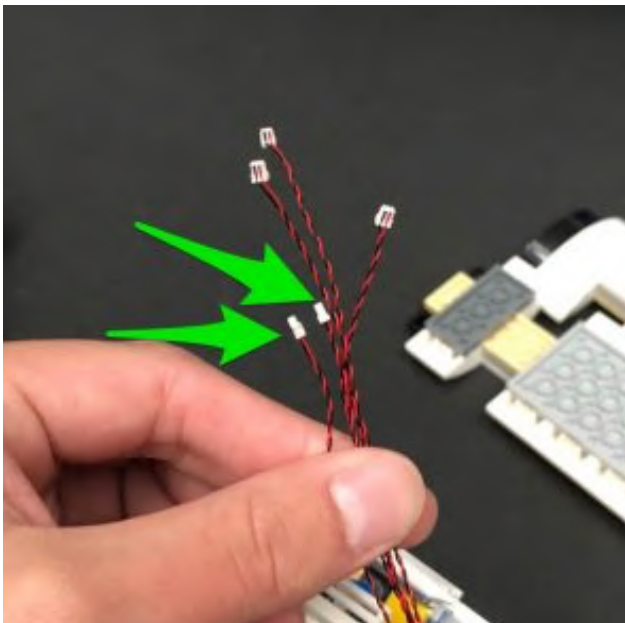




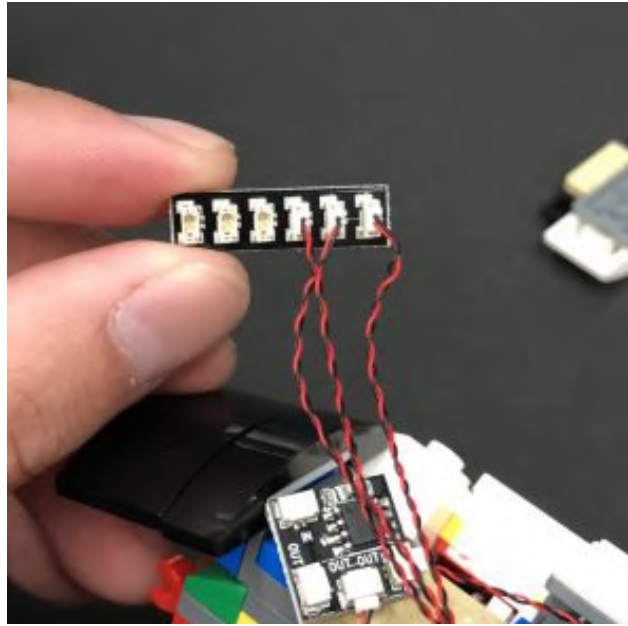
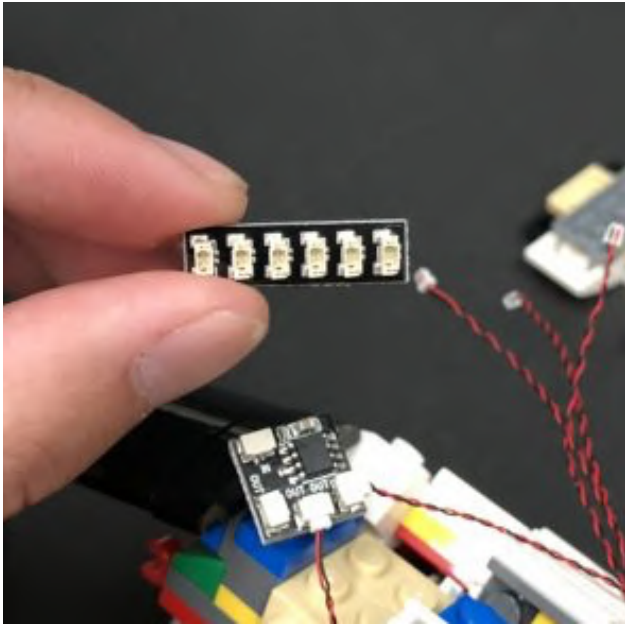
22.) Turn the section over on it's side and then pull all the cables up to the top section. Reconnect the bottom inside wall section to secure the cables in place.



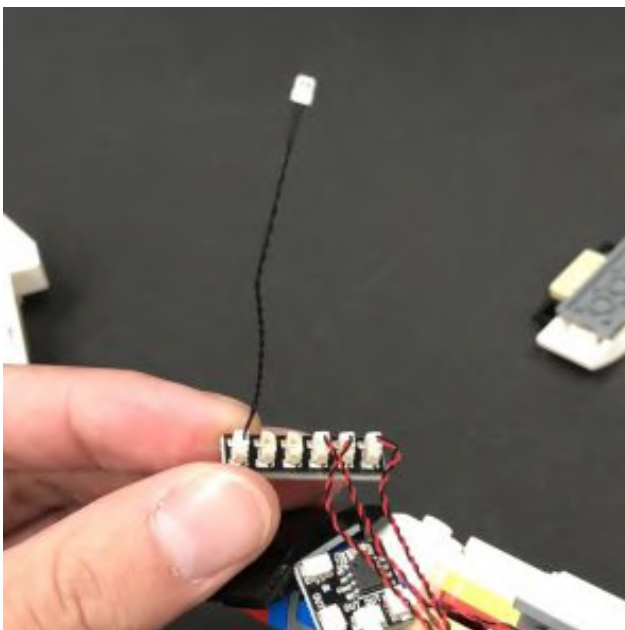
23.) Take the the shortest two cables and connect them to the OUT ports on **Flicker Effects Board**



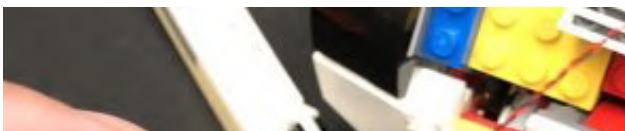
24.) Connect the remaining three cables to a **6-Port Expansion Board**

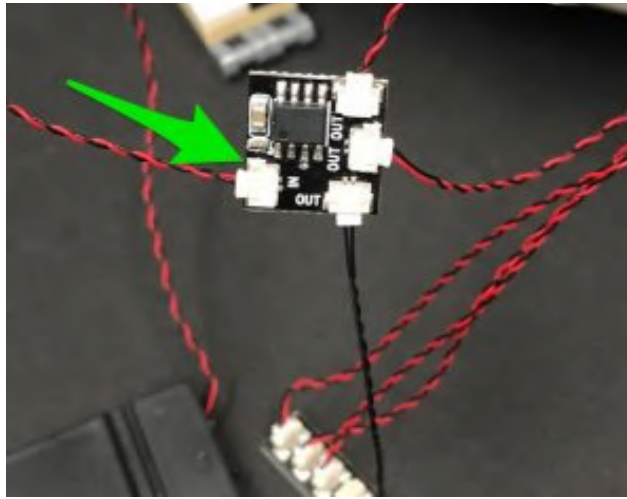
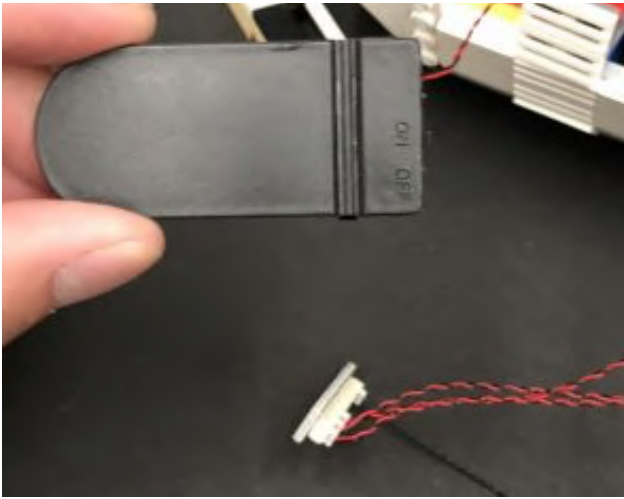


Connect one end of a **5cm Connecting Cable** to the 6-port Expansion Board and connect the other end to the remaining OUT port on the Flicker Effects Board



25.) Take a **Flat Battery Pack** and insert 2x CR2032 Batteries to it then connect the battery pack cable to the IN Port on the Flicker Effects Board. Turn the Battery Pack on and confirm all lights and effects are working OK

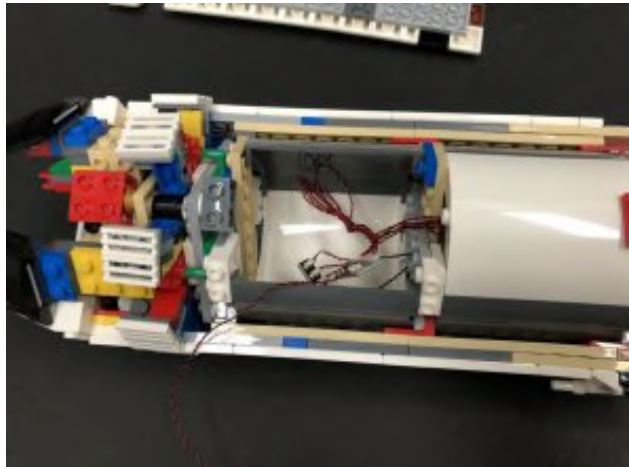
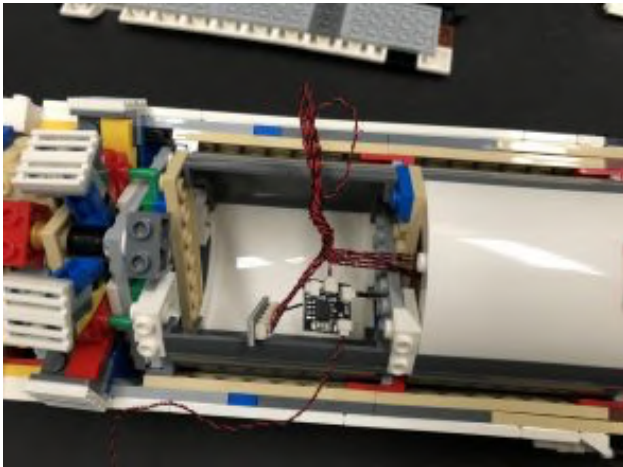
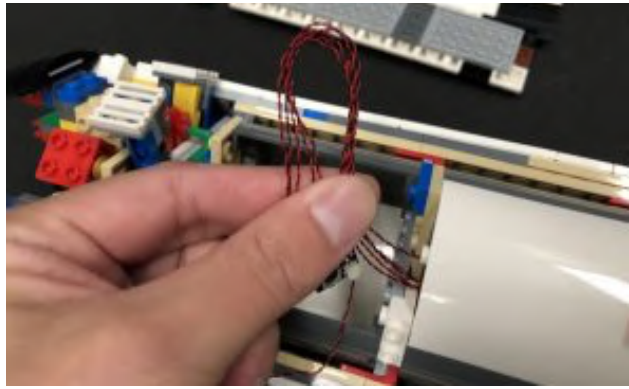
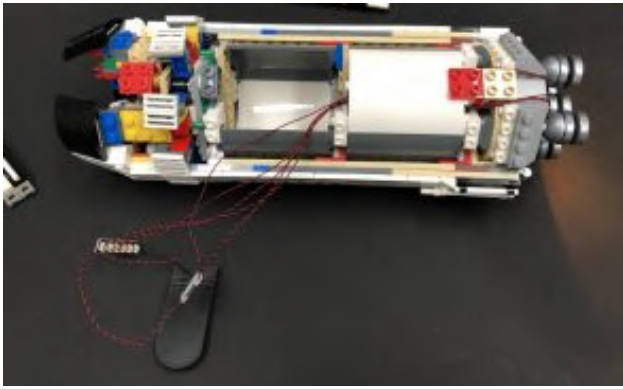




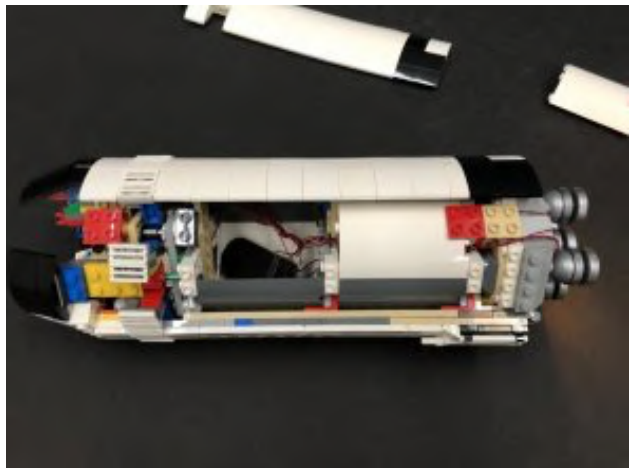
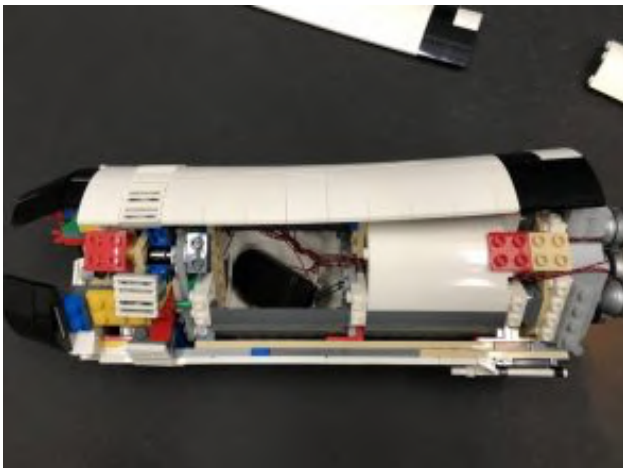
*Note: If you experience any issues with the lights not working and suspect an issue with a component, please try a different port on the expansion board to verify where the fault lies (with the light or expansion board). To correct any issues with expansion board ports, please view the section addressing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

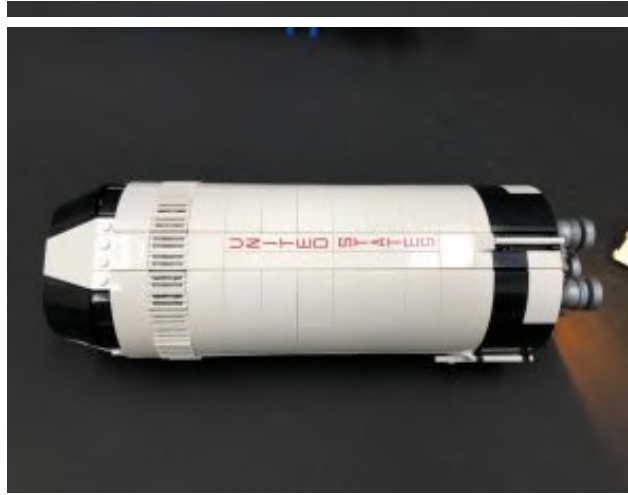
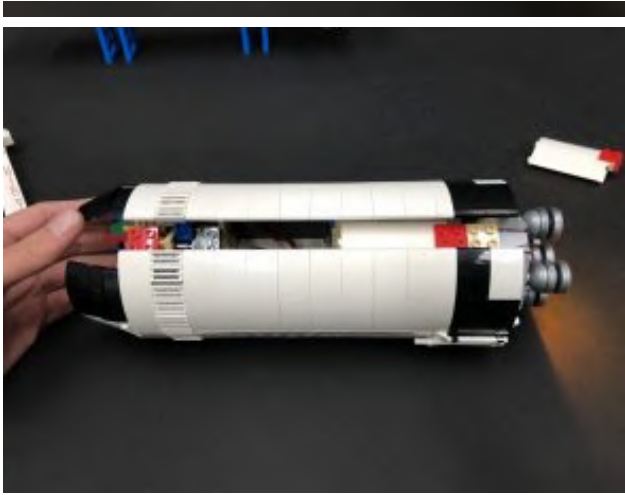
26.) Eliminate excess cabling by grouping all the cables and twisting them around each other. Tuck everything inside the open top section.



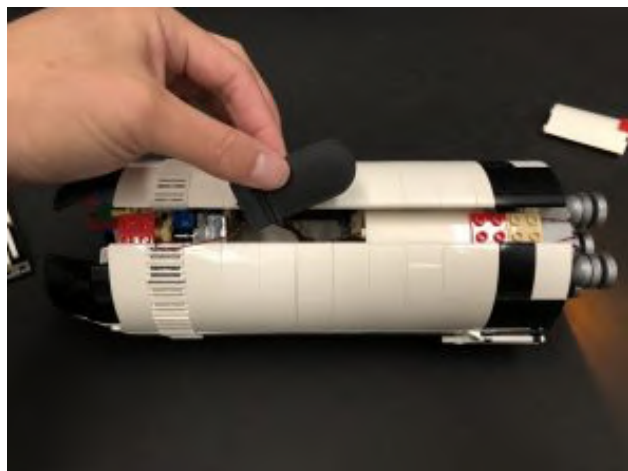


27.) Reconnect the outside sections starting with the two main sections followed by the middle section





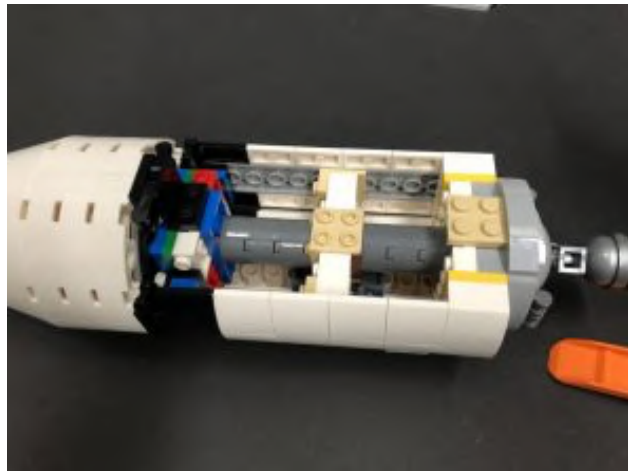
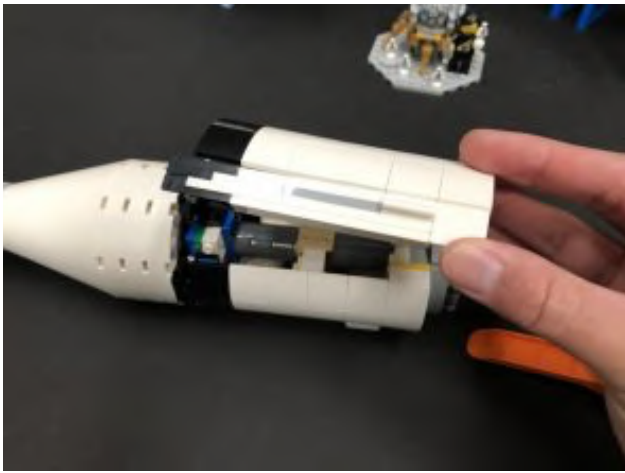
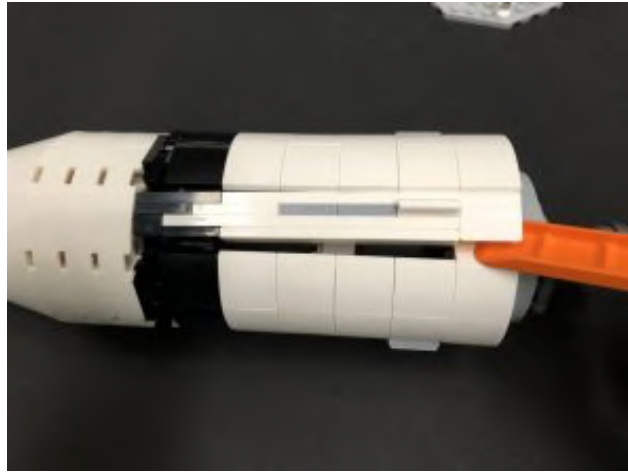
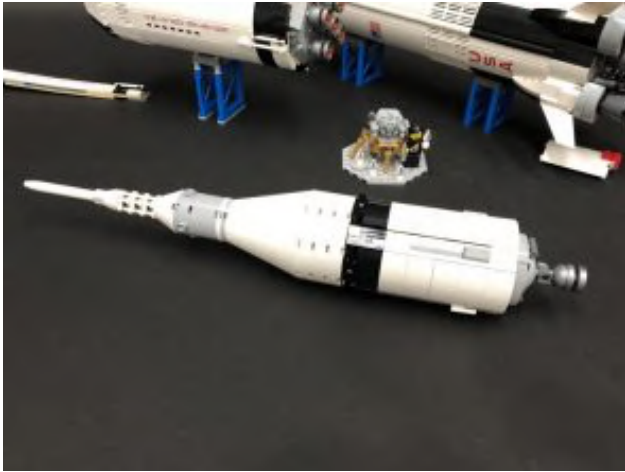
To turn On and OFF the lights, simply detach the middle section (from the bottom where you the cables are visible) to access the Battery Pack.



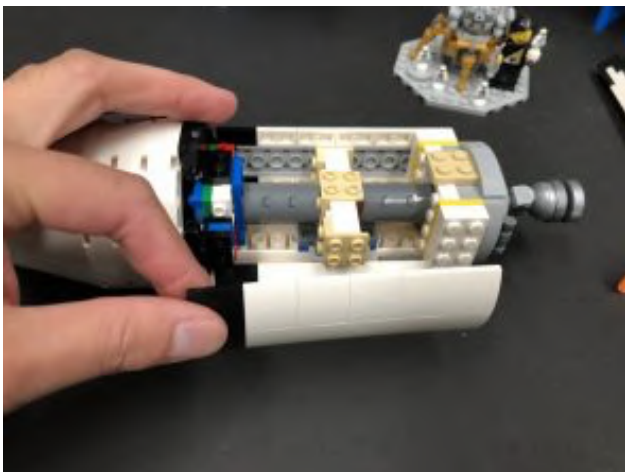
This completes installation of the lights to the middle section of the Saturn V. Let's move on to the top and final section.

28.) Take the top section and disconnect one of the outside wall sections using

the LEGO Removal Tool

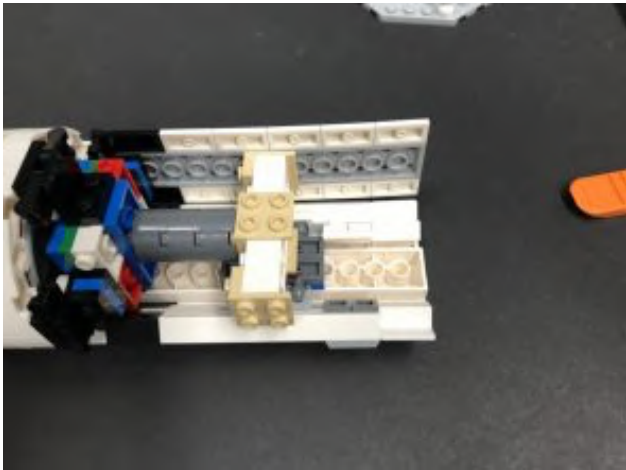
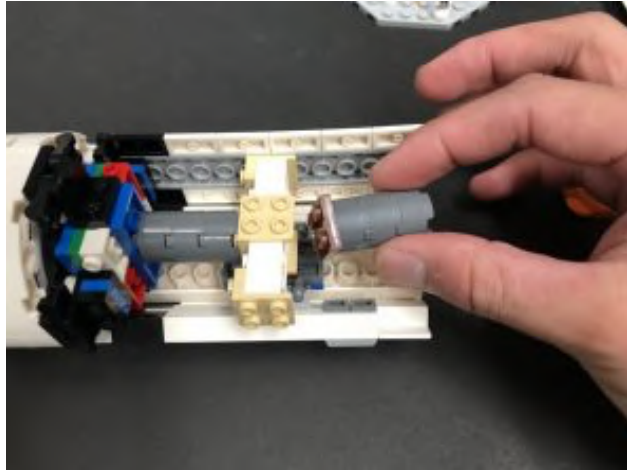
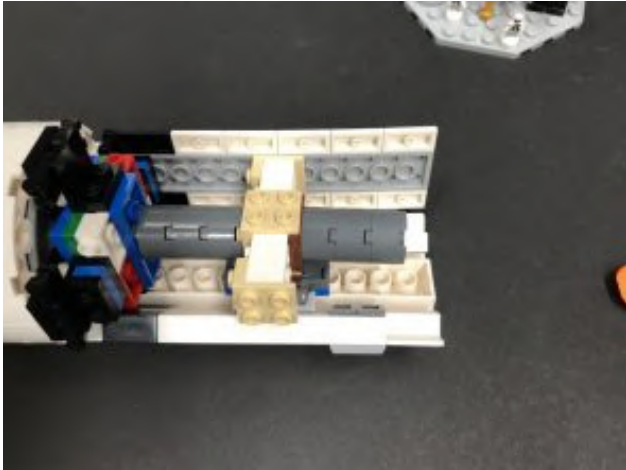
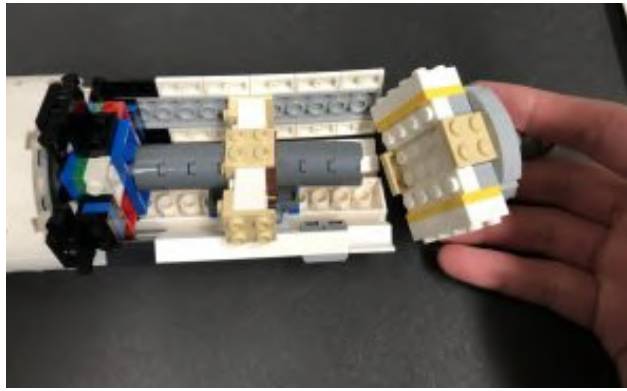
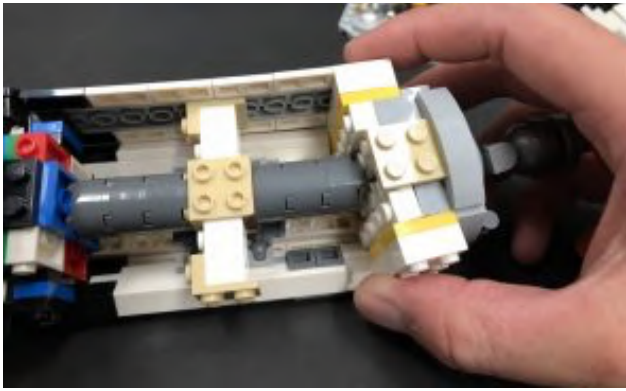


Remove the outside wall section underneath

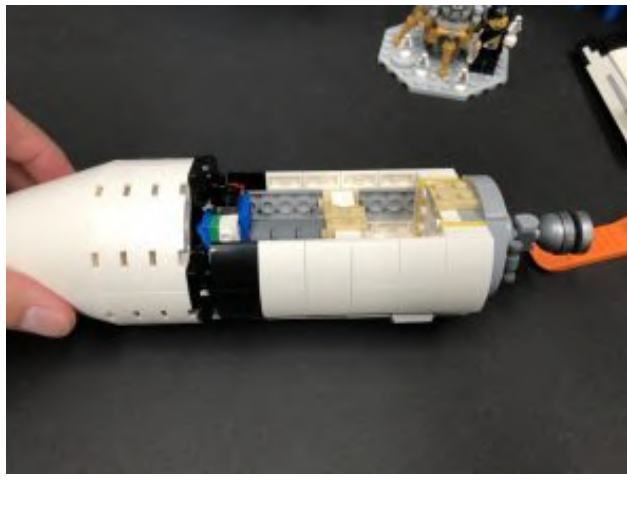
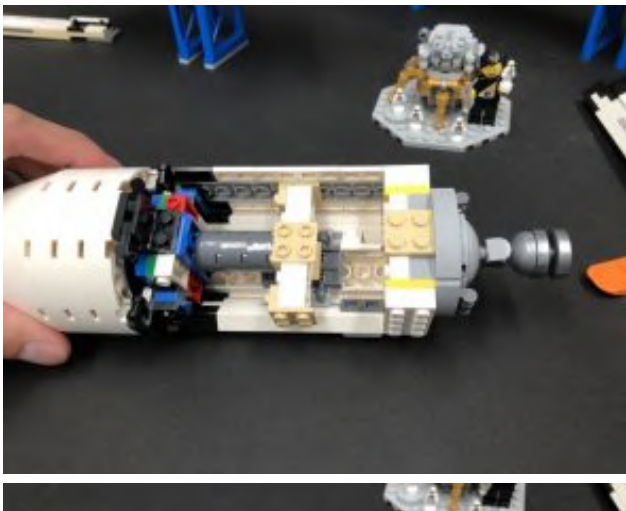


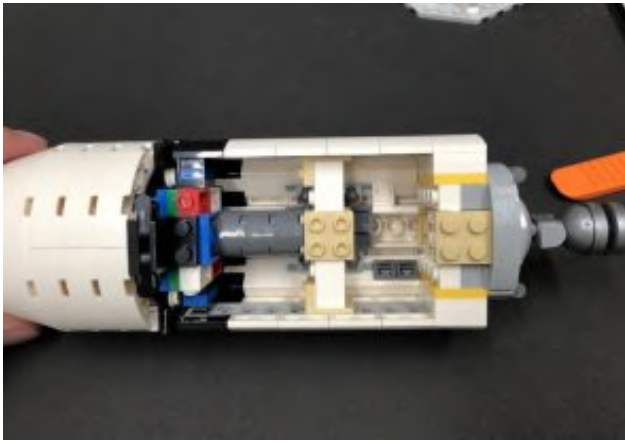
29.) Disconnect the bottom section to allow us to then remove the following dark grey round bricks in the centre.



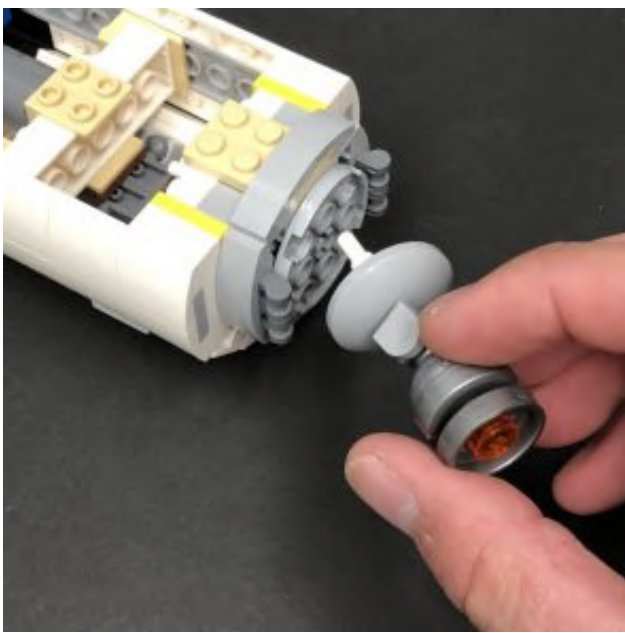


30.) Reconnect the bottom section as well as one of the outside wall sections



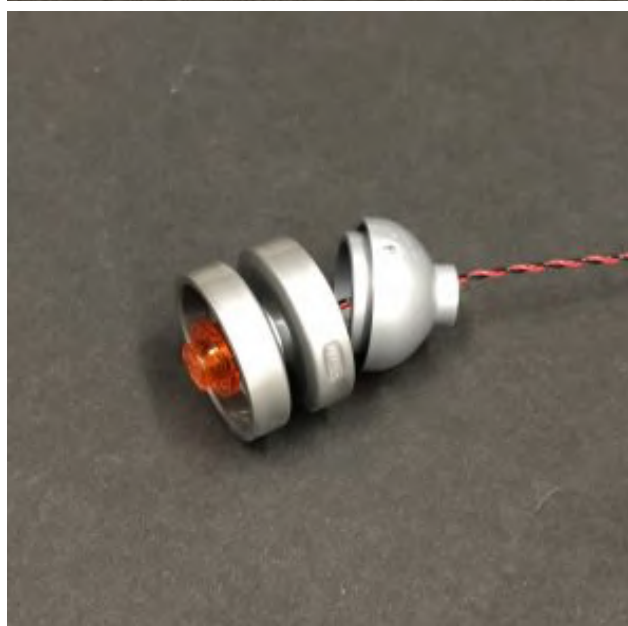
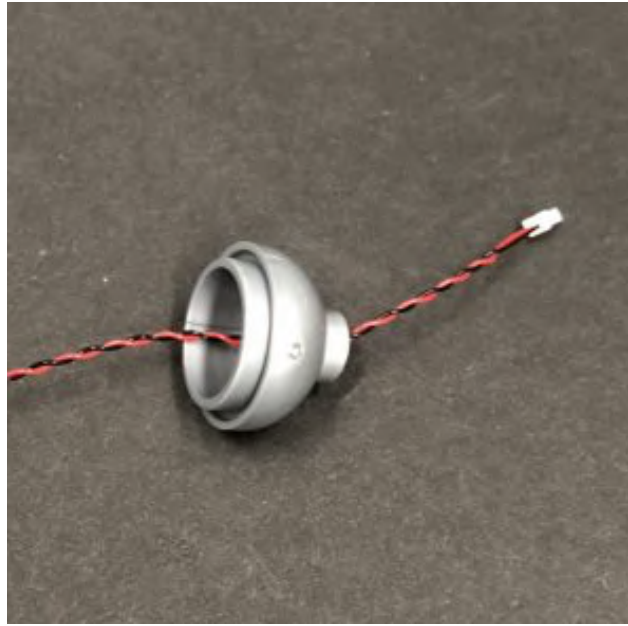
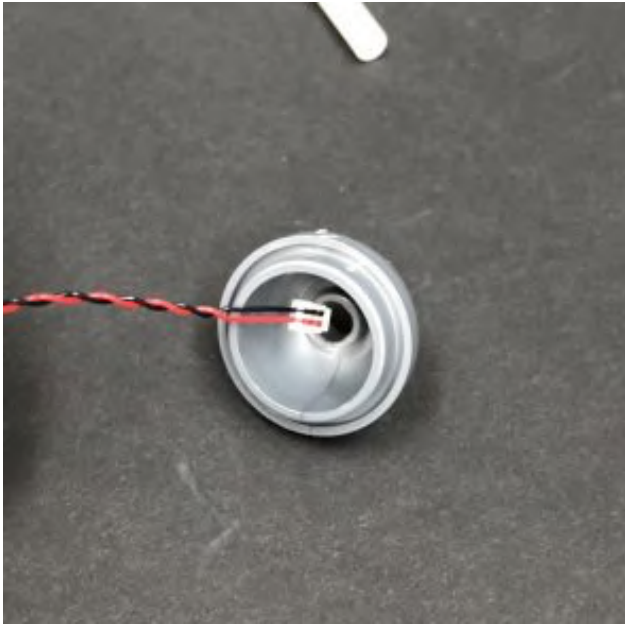


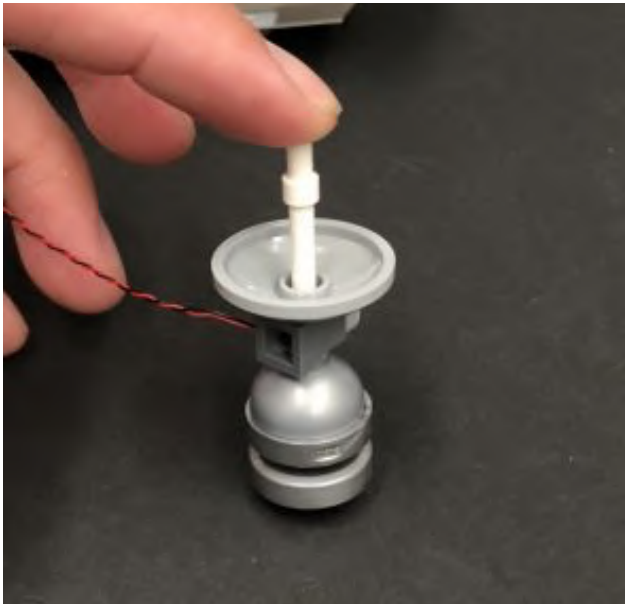
31.) Disconnect the Jet section and then disassemble pieces as shown below:



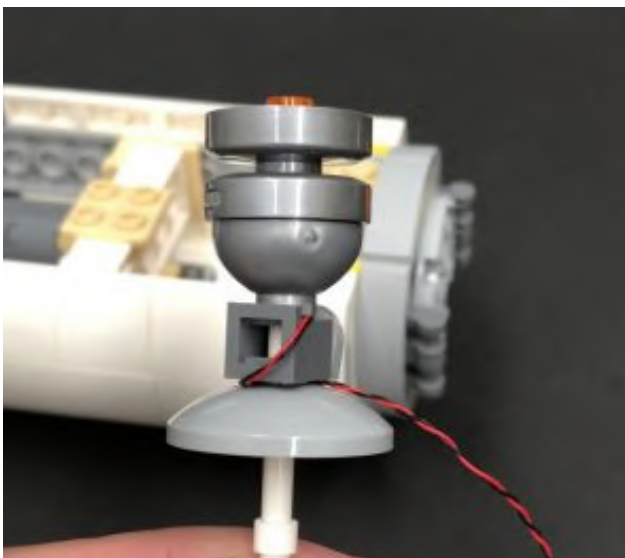
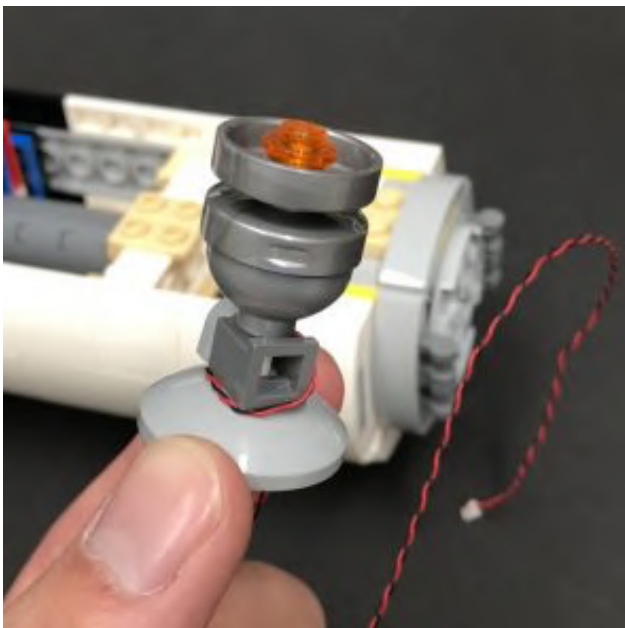
32.) Follow Step 19 to install the remaining **White 30cm Bit Light** to this Jet

section using the provided **Trans Orange Round Plate 1x1**.





33.) Pull the cable around the bottom of the Jet and then secure it in between the light grey dish and dark grey modified brick.

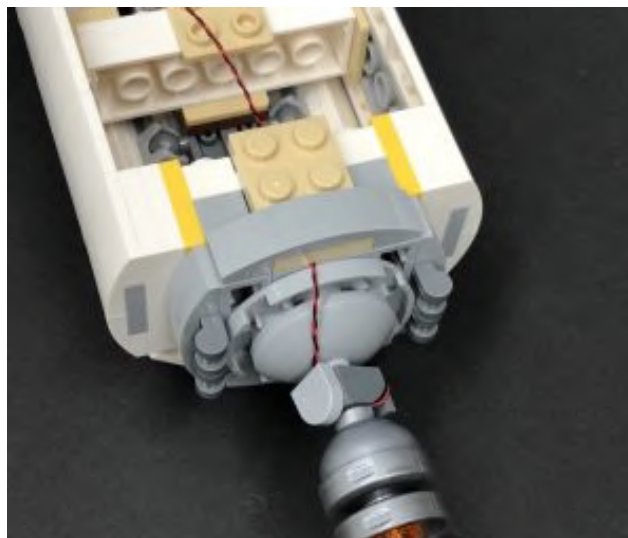
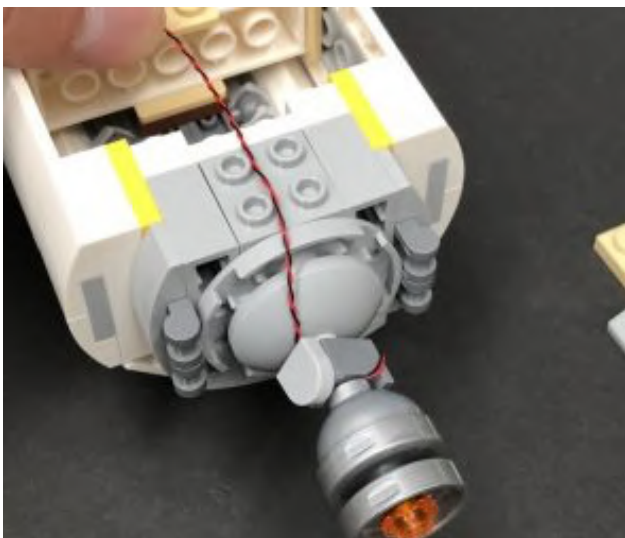




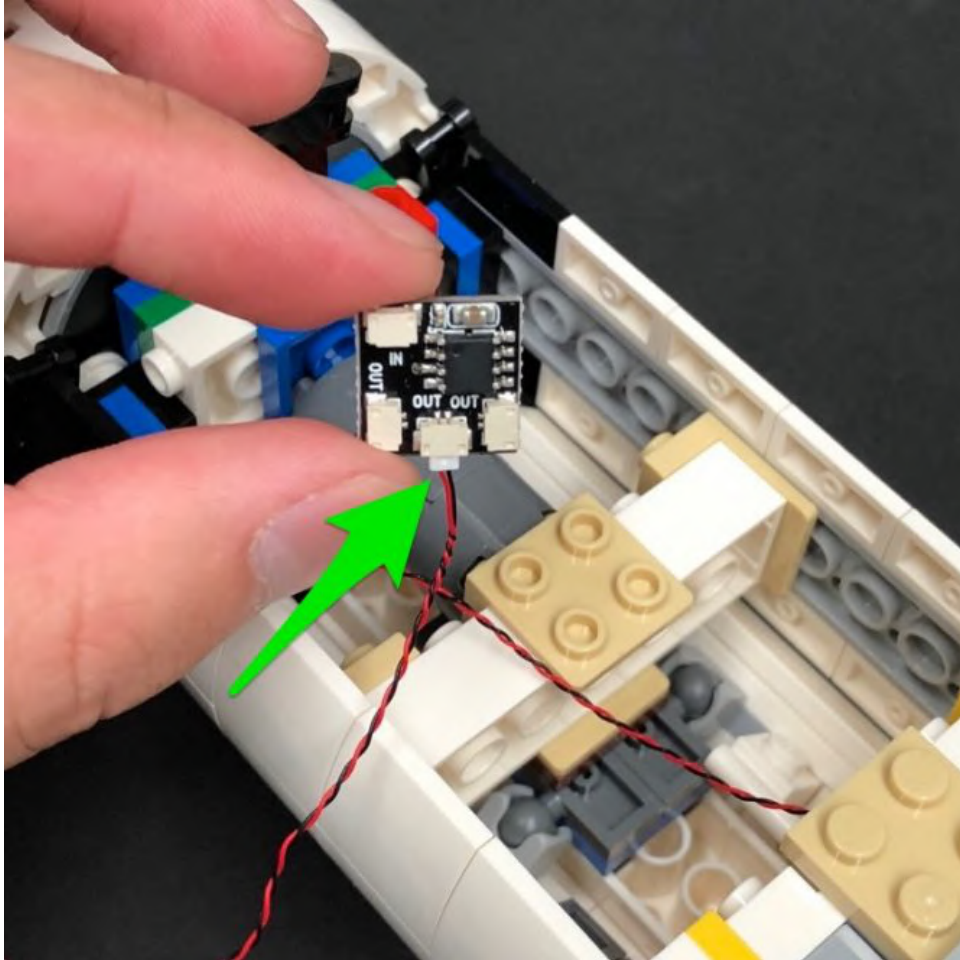
34.) Reconnect the Jet section back to the bottom of this rocket section ensuring the cable is facing toward the centre of the open section above.



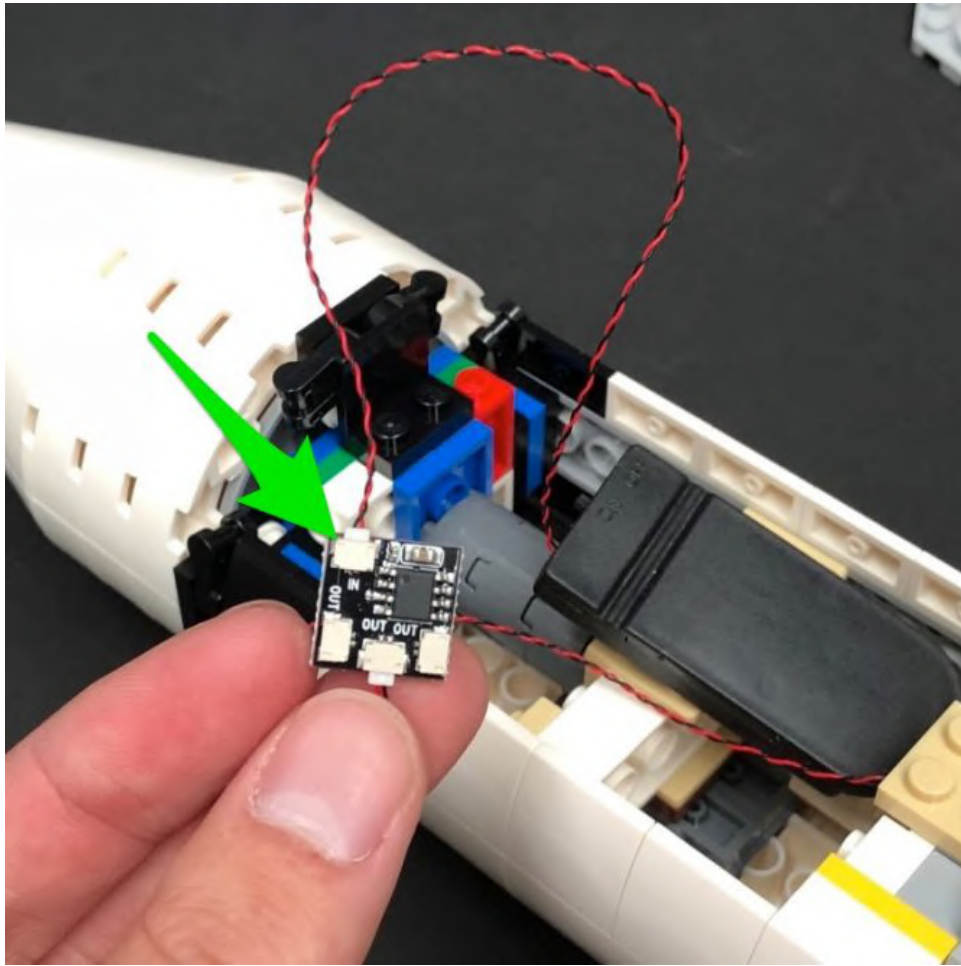
Lay the cable underneath the following LEGO pieces in between studs.



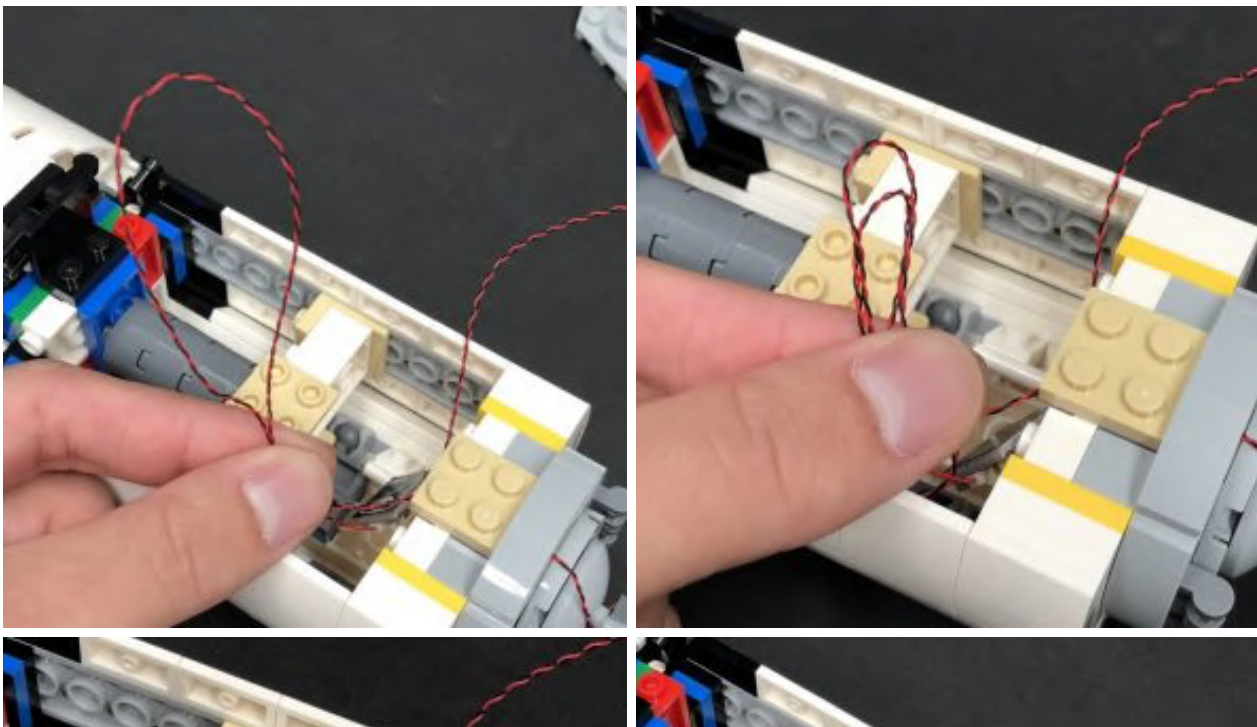
35.) Connect the other end of the Bit Light cable to any OUT port on the remaining Flicker Effects Board

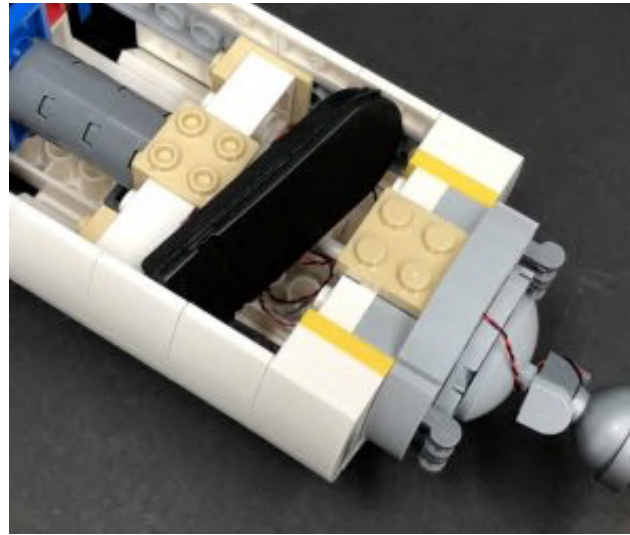
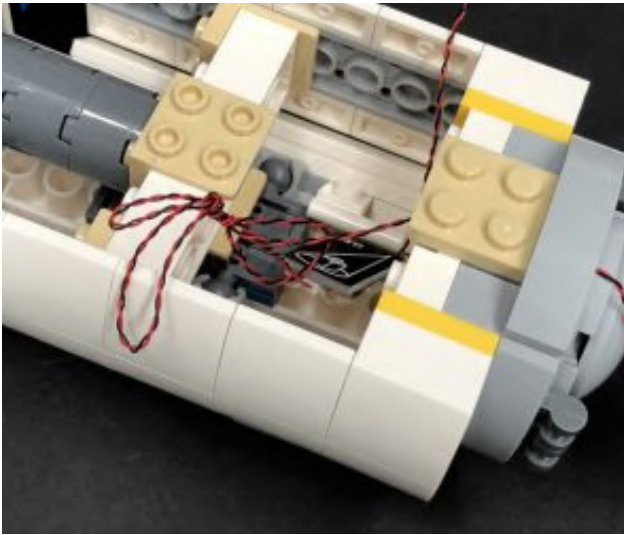


Take the remaining **Flat Battery Pack** and insert 2x CR2032 Batteries to it. Connect the battery pack cable to the IN port on the Flicker Effects Board

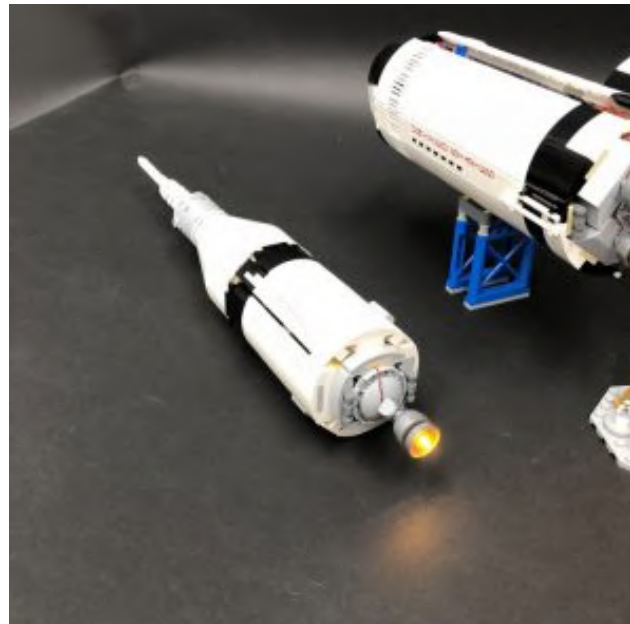


36.) Eliminate excess cable by looping and twisting the cable around a few times. Tuck everything into the lower compartment. The Battery Pack should sit neatly sideways.





37.) Turn on the battery pack and then reconnect the outside wall section.



This finally completes installation of the Light My Bricks Apollo Saturn V Lighting Kit. Your light kit can be enjoyed either with all 3 sections connected or all apart.

We Thank YOU for purchasing this Light Kit!

