

Star_Wars_R2-D2_10225 Basic Version LED Lighting Kit

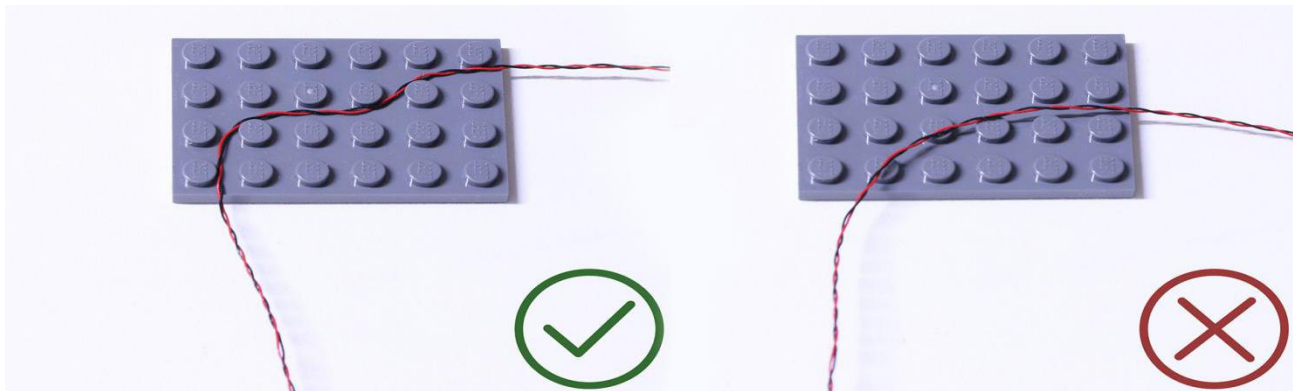
Package contents:

- 2 x White 30cm Dot Lights
- 2 x Blue 30cm Dot Lights
- 1 x 6 Port Expansion Board
- 1 x Battery Pack (3 x AA Batteries not included)

Note:

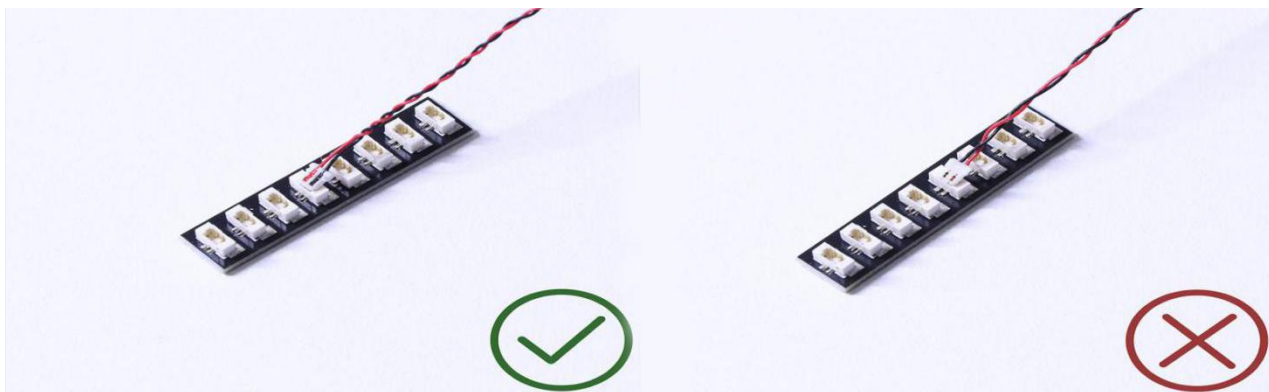
Place wires on the surface or under the LEGO building blocks.

The wire can be placed between the building blocks or under the block, but they should be placed between the studs correctly.

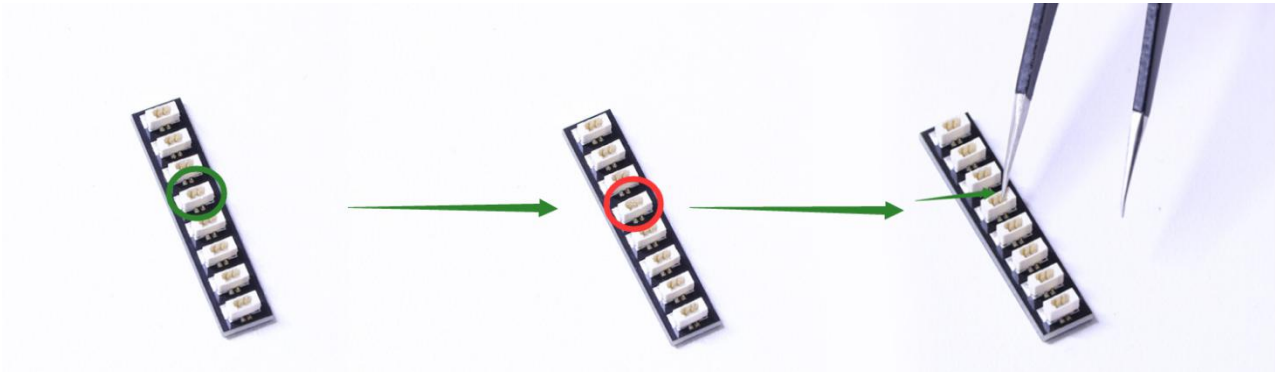


Insert the connectors to the ports.

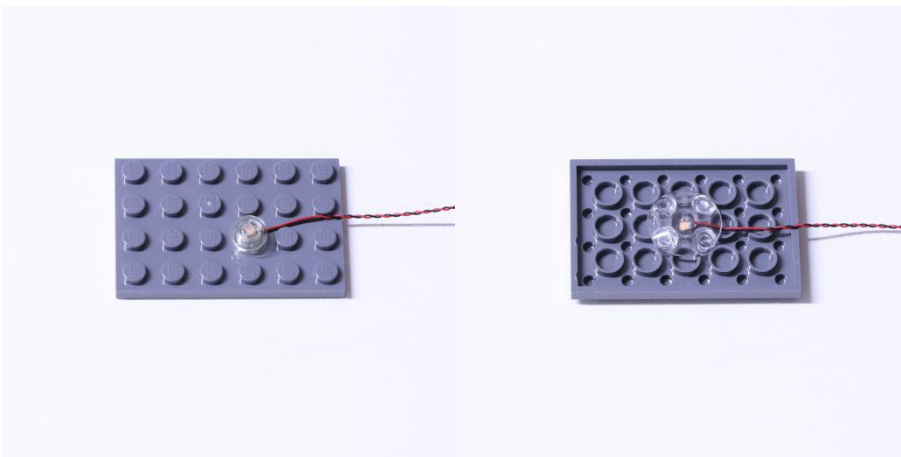
Be careful when you are operating, there's only one correct way to insert, make sure the expansion board is upward, find the soldered "=" sign on the left of the port. When you are inserting, the side which the wires can be seen should be faced to the "=" sign and if you feel hard to insert, please stop, and don't force it, for that may result in bent pins inside the port or overheating of the expansion board.



At this point, use the tweezers to straighten the bent pins.

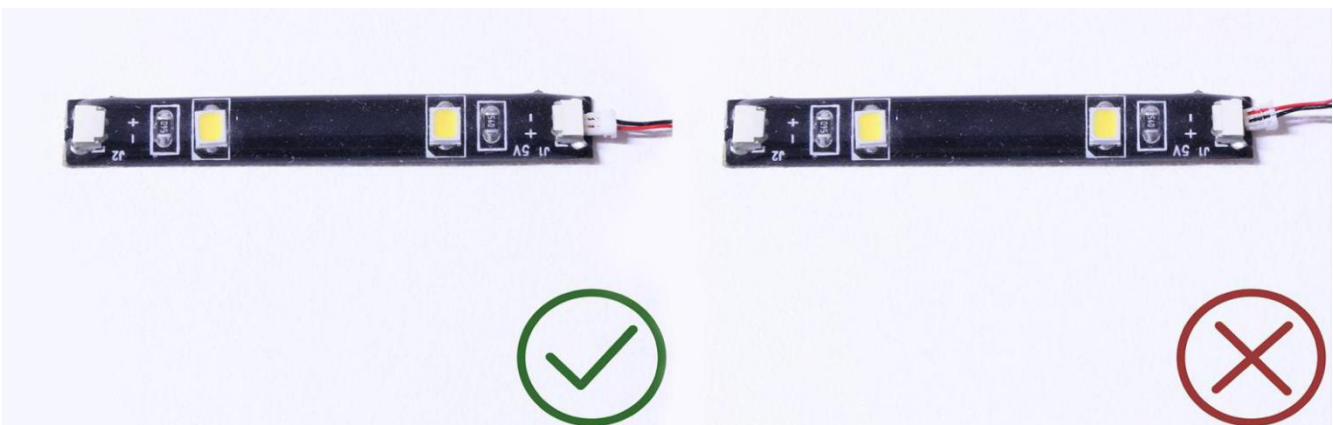


When installing dot lights, make sure they are correctly placed (Yellow LED package is exposed). You can put them either on the top of the studs or between studs.

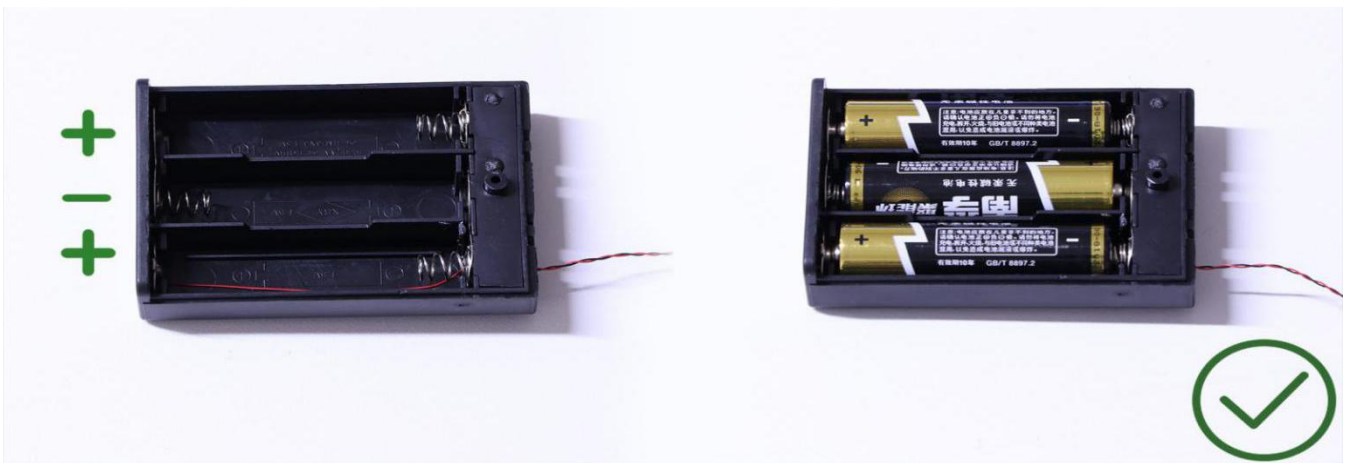


Connecting cable connectors to Strip Lights

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.



Finally, please pay attention to the positive and negative terminals of the battery when installing the battery case.

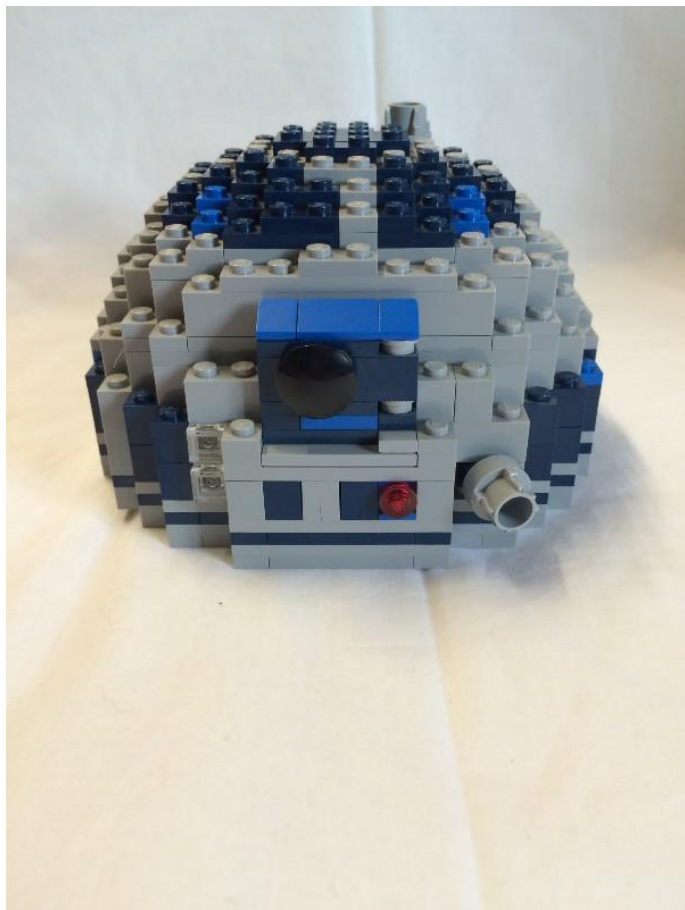


OK, Let's Begin!

Instructions for installing this kit

The first thing we need to do is take R2' s head off. I know, it sounds brutal but he can' t feel it anyway, right??

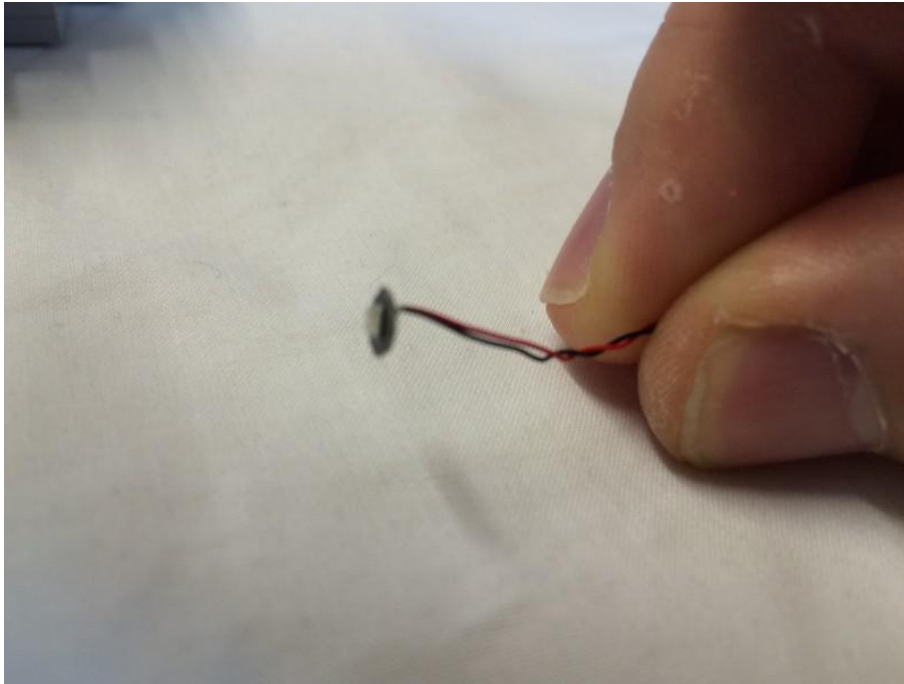
If you gently hold his head and lift upward, it should easily come off.



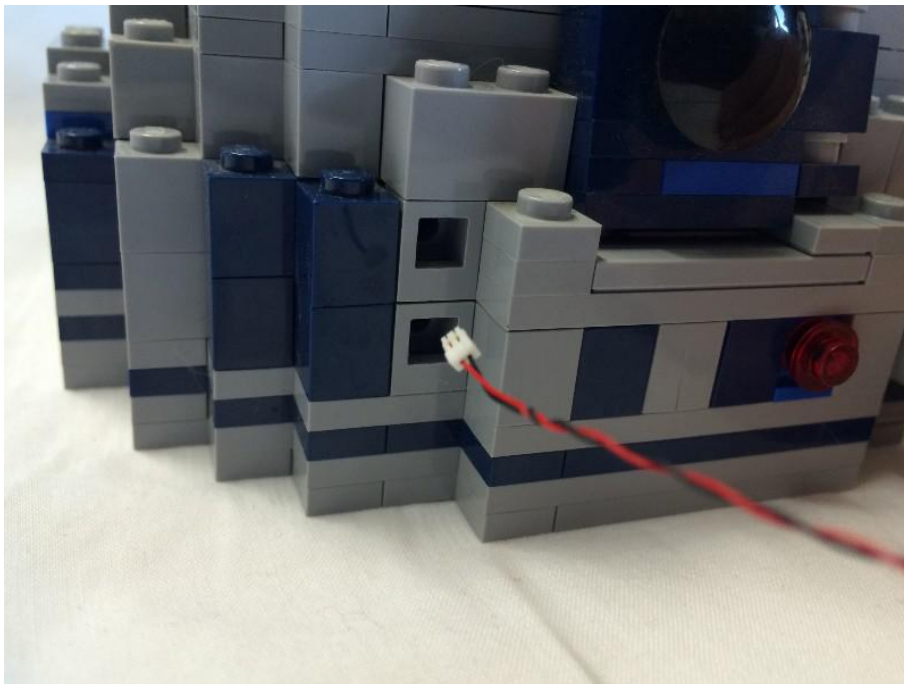
Look at the front of R2' s head, look for two trans-clear 1x1 plates and remove them.



Grab two of the Dot Lights and angle the end so that the light is perpendicular to the wire.



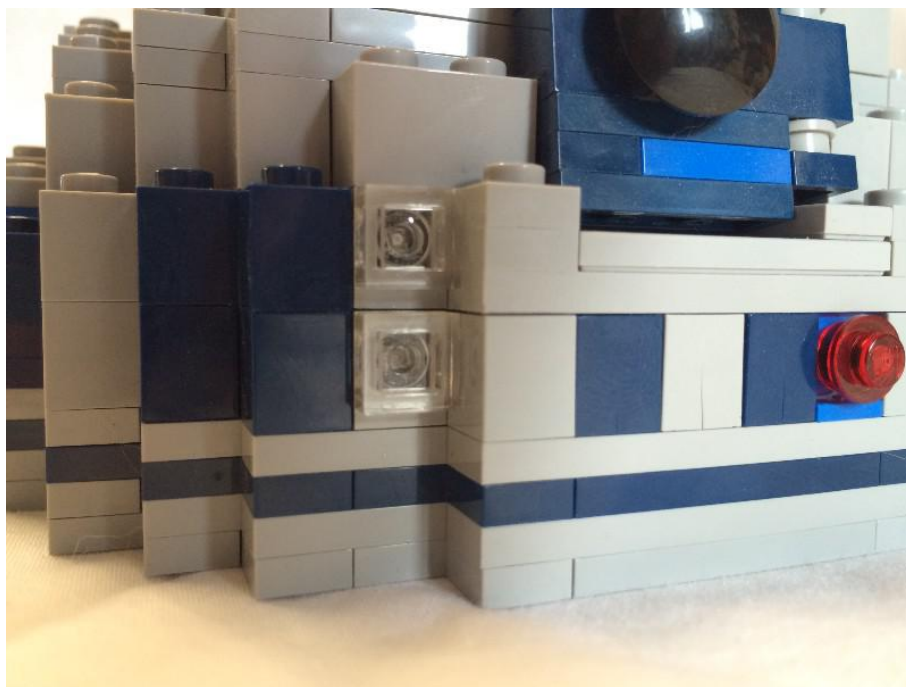
Feed the connector end of each Dot Light into the square hole left by removing the 1x1 trans-clear plates.



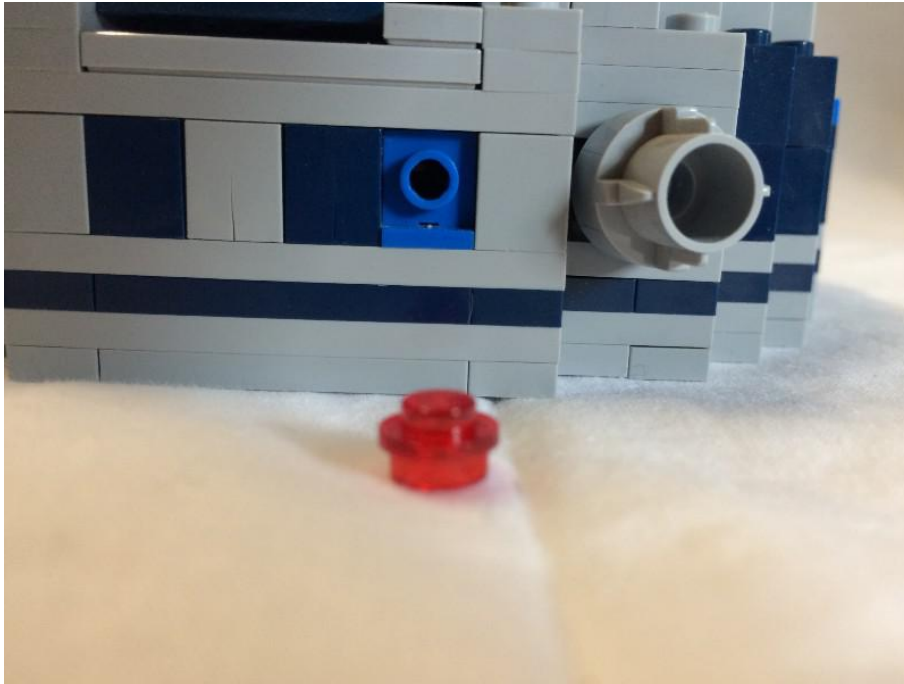
Once they are thread all the way through, the LED will sitting inside the square hole facing towards the front.



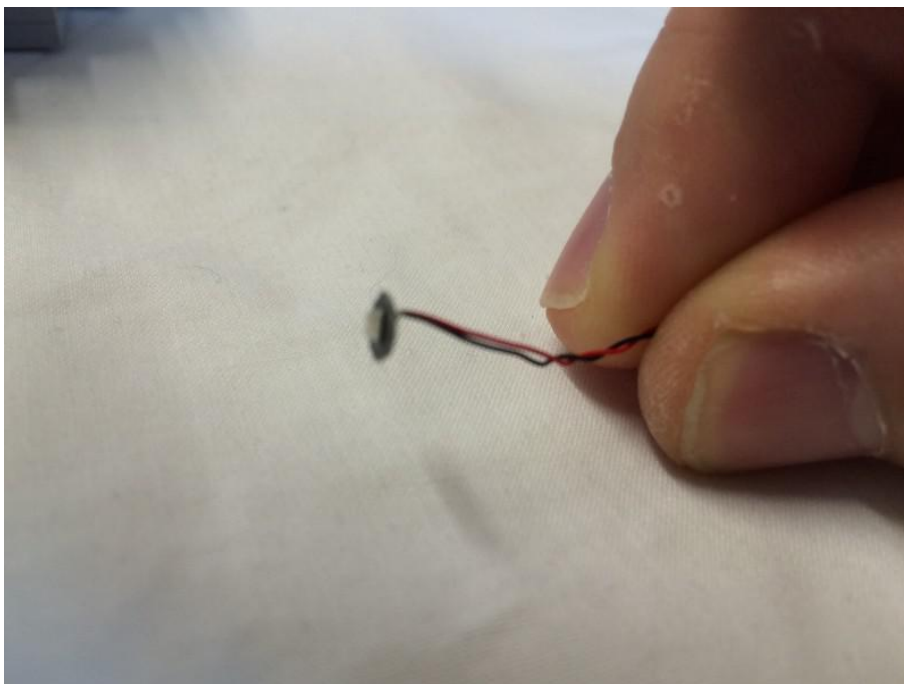
Let the plug ends of wires rest where they will.....we will get to those later.
Replace the two 1x1 trans-clear plates.



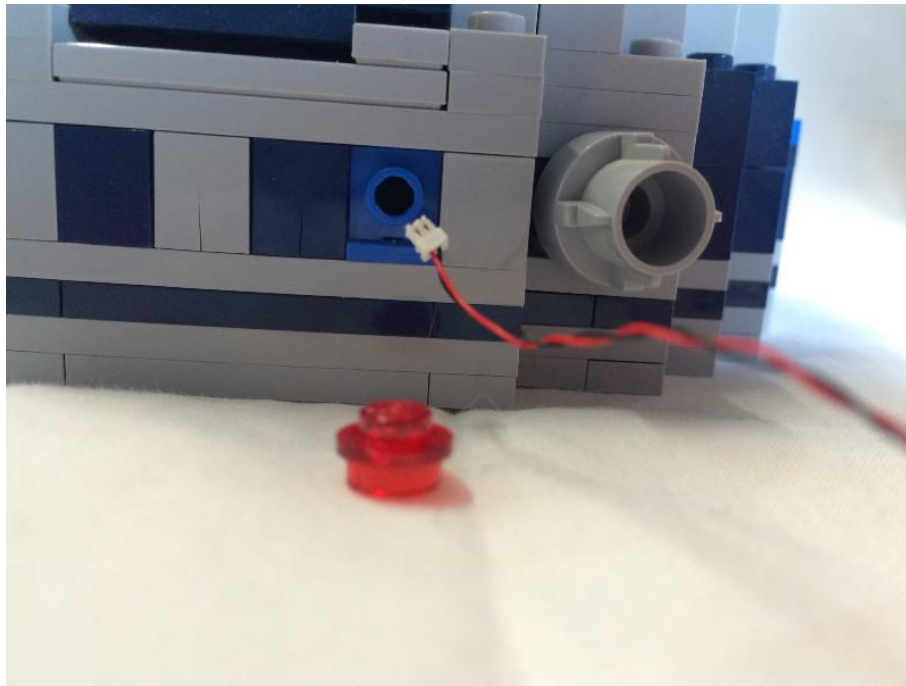
Remove the 1x1 round trans-red plate from the front of R2' s head.



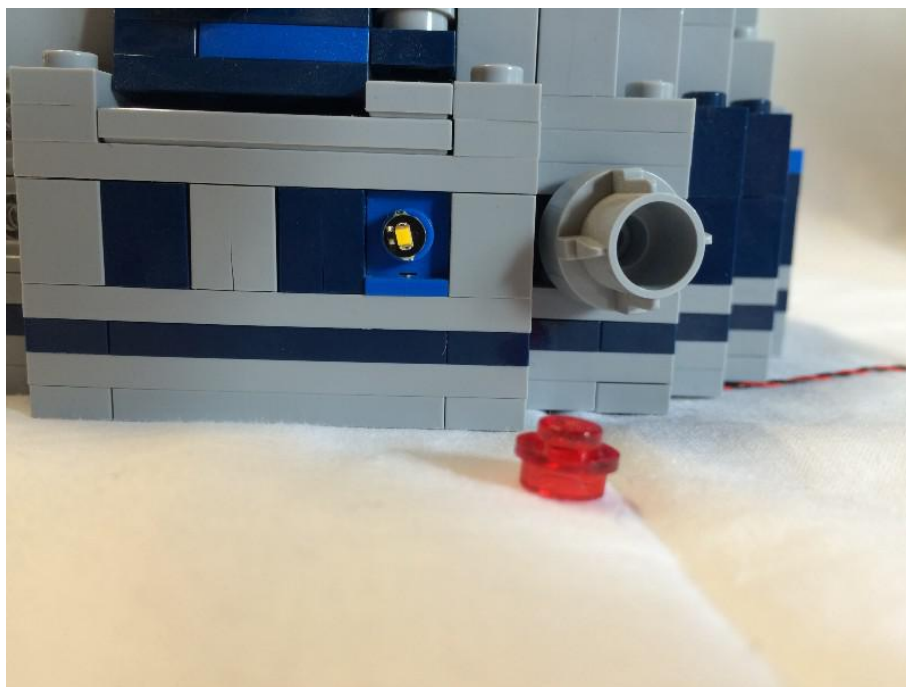
Grab one of the Dot Lights and angle the end so that the light is perpendicular to the wire.



Feed the connector end of the Dot Light into the round hole in the blue brick left by removing the 1x1 round trans-red plate.



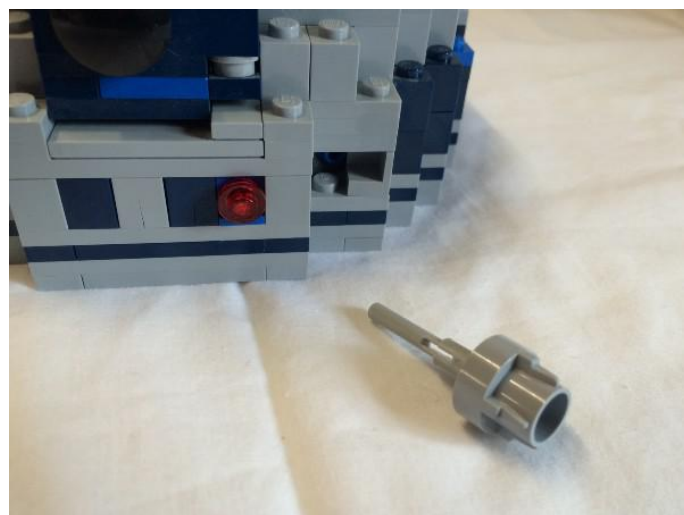
Once the wire has been fed all the way through, the Dot Light will sit on the outside of the round hole in the blue brick.



Replace the 1x1 round trans-red plate.



Now remove R2' s projector piece by holding it and pulling it forward and out.



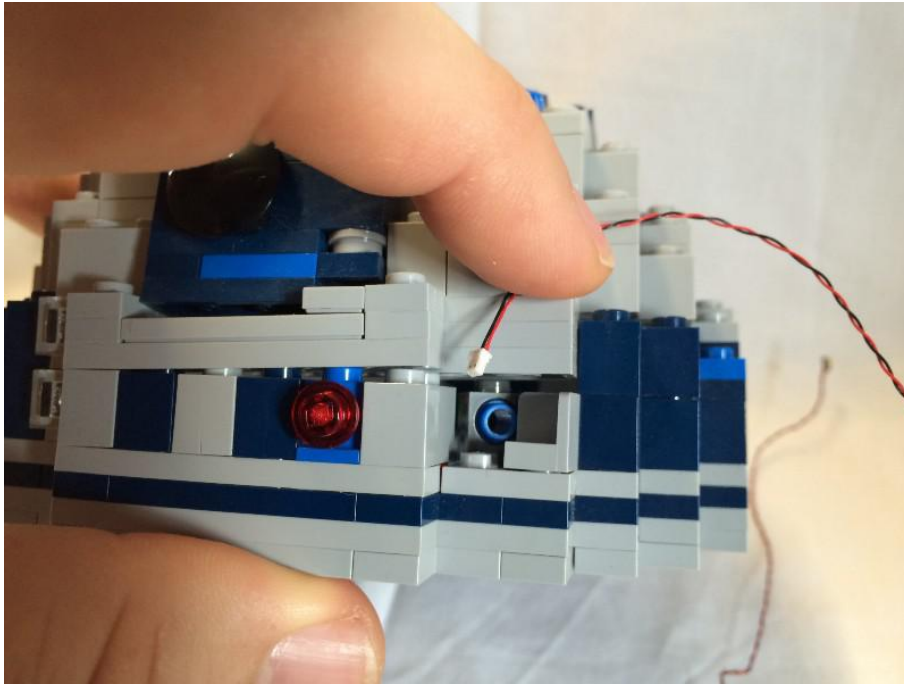
The projector piece came out of a 1x1 brick with a blue technic pin in it. The 1x1 brick can move from side to side a bit leaving a gap on the left hand side of the brick between it and the rest of R2' s head.



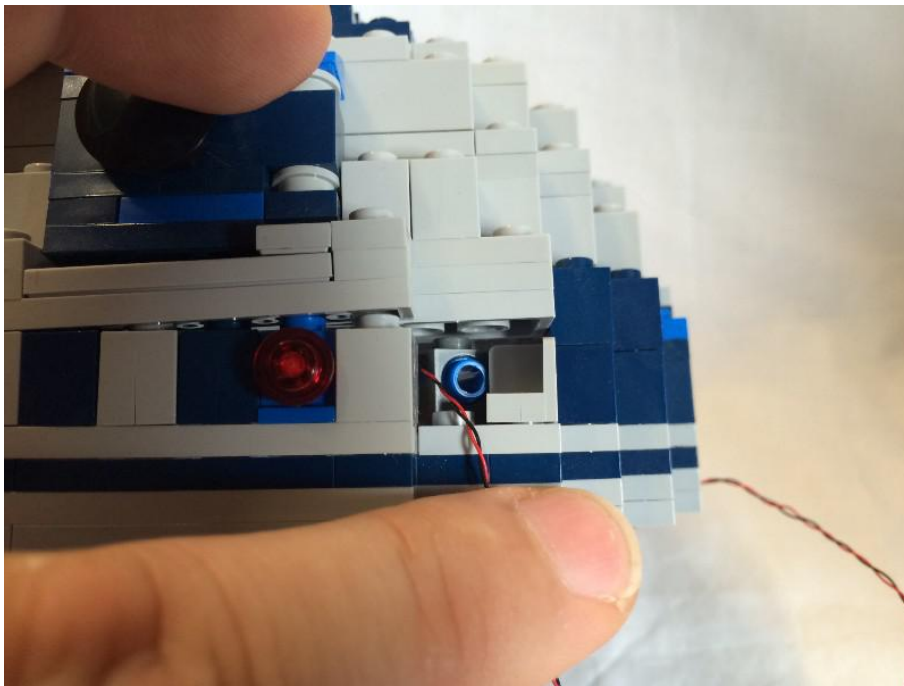
It is in this gap that we want to run the wires for the last Dot Light. The plug won't fit through this gap, so we need to pry some pieces apart to feed the plug through. If you lift from where the 1x1 panel is, you should get some natural separation of layers as seen below:



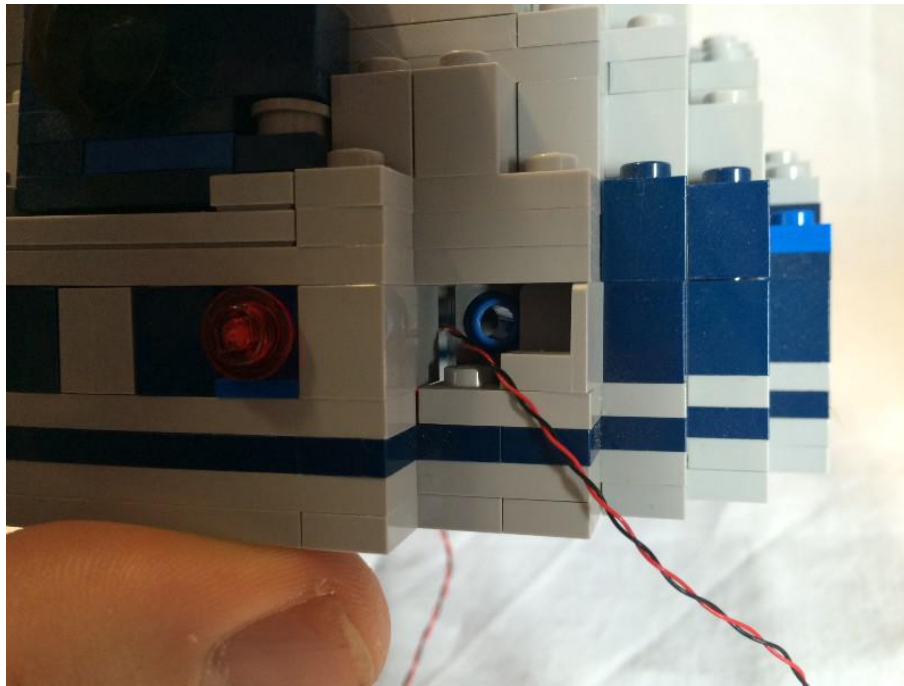
Pry the pieces apart until there is enough room to thread the plug end of the remaining Dot Light through.



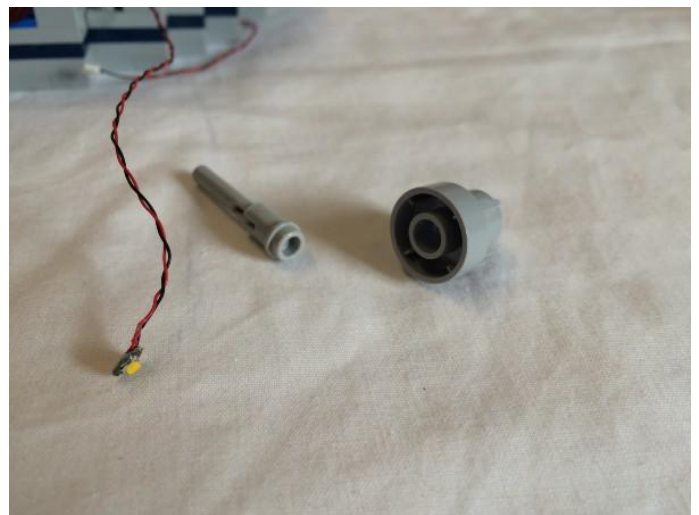
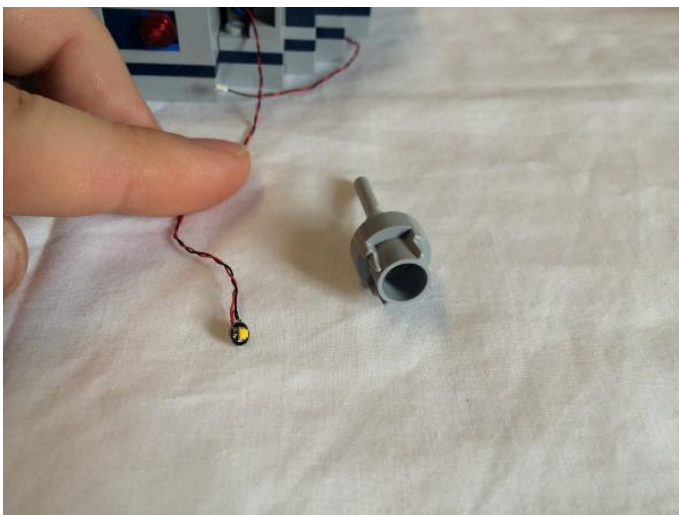
Push a few inches of the wire through and let the wire rest next to the grey brick with the blue technic pin in it.



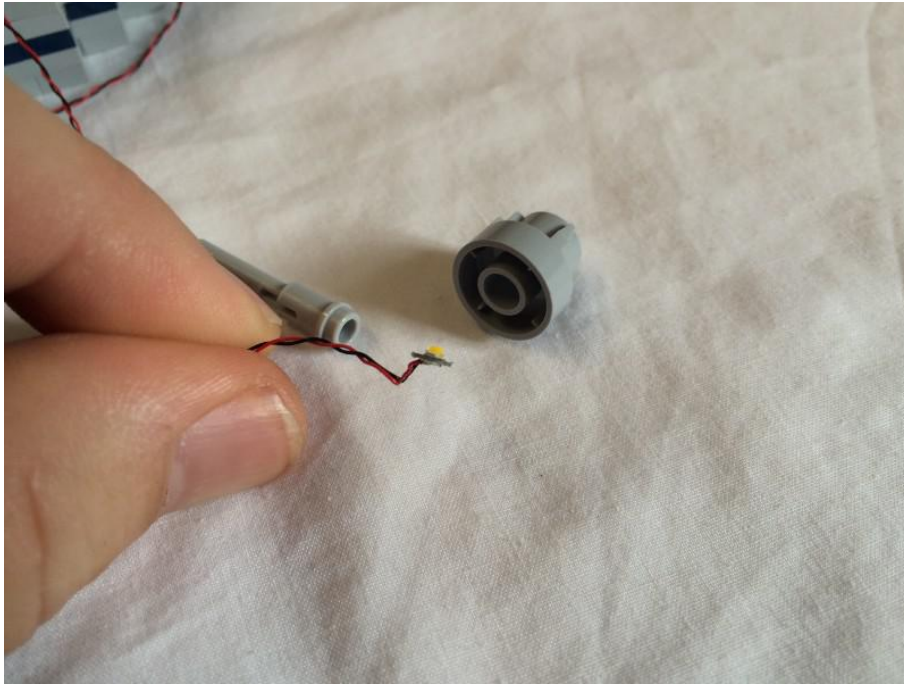
Press the pieces back together. The wire will be able to freely move in the gap.



The projector piece we removed is actually two pieces. Pull those pieces apart.



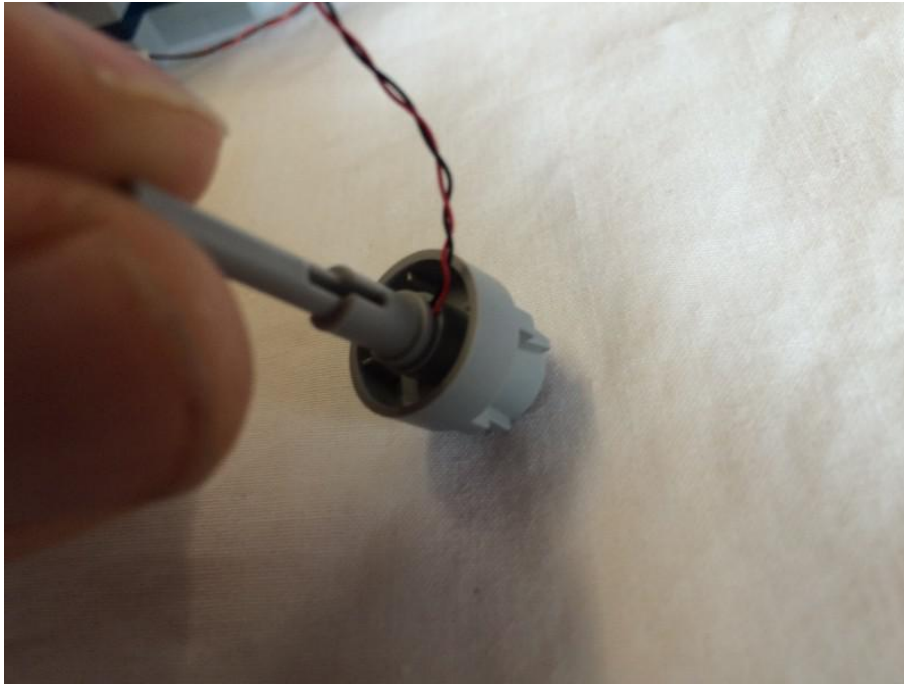
We are going to place the Dot Light inside the larger round piece making sure that the LED faces away from the hole we will put it in to. Gently bend the wires until it resembles the image below:



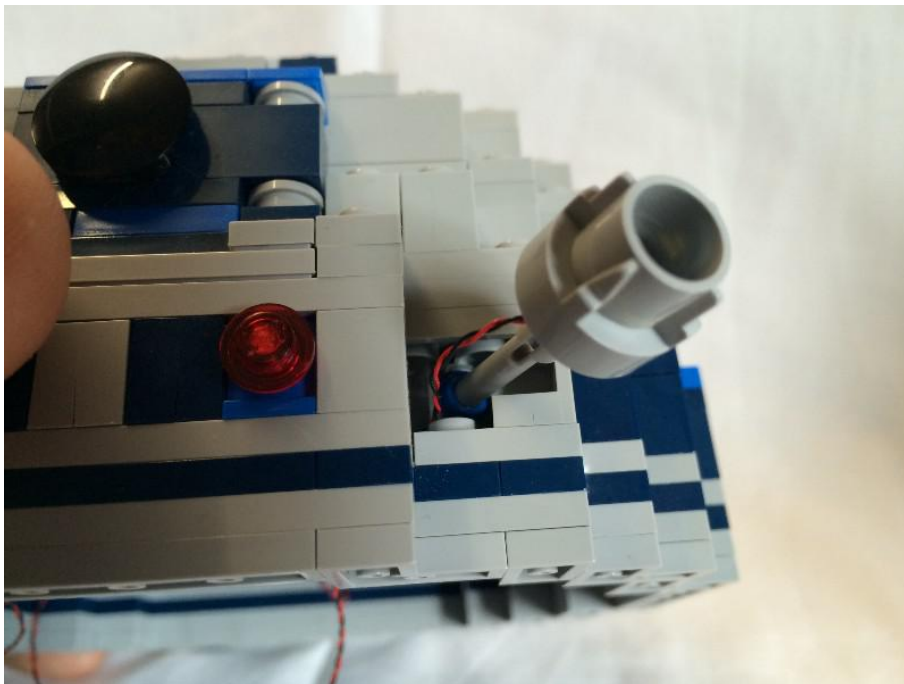
Place the Dot Light into the round space on the larger round piece just far enough so that the LED itself is inside the piece.



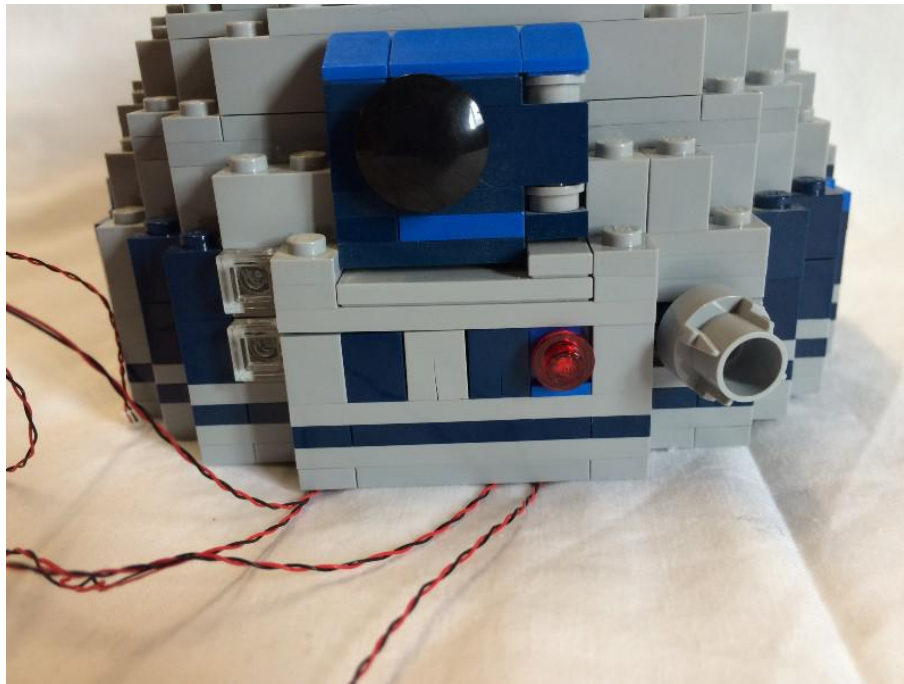
Gently replace the technic rod into the hole where the LED is. It will be a tight fit so you need to do it slowly to prevent damage.



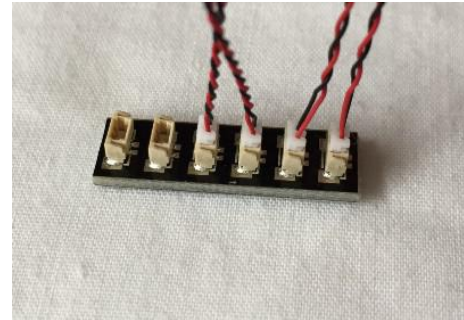
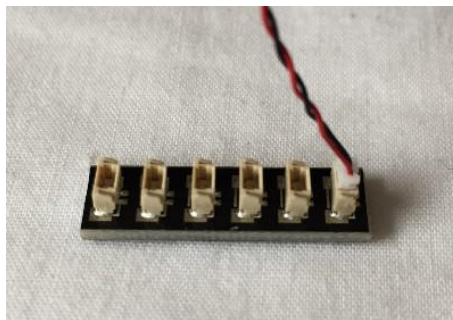
Now you can return the projector piece to its place. Feed the wire back in through gap as you return the projector to its place.



With the projector piece back in place, we have all four LEDs where we want them and four wires hanging out from the inside of R2' s head.



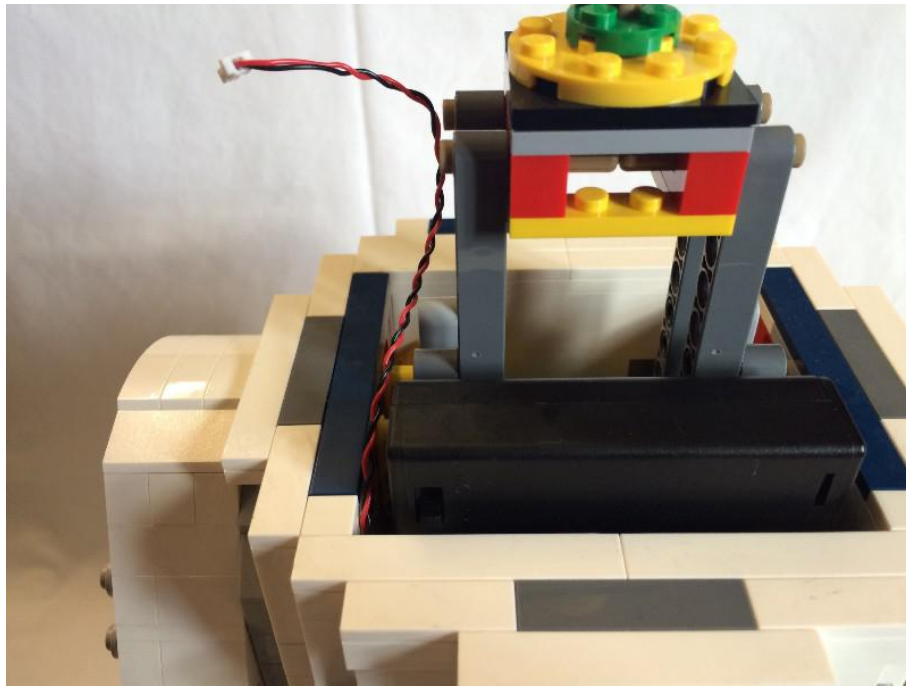
Grab the 6 Port Expansion Board fit each of the plug ends of the Dot Lights into the board.



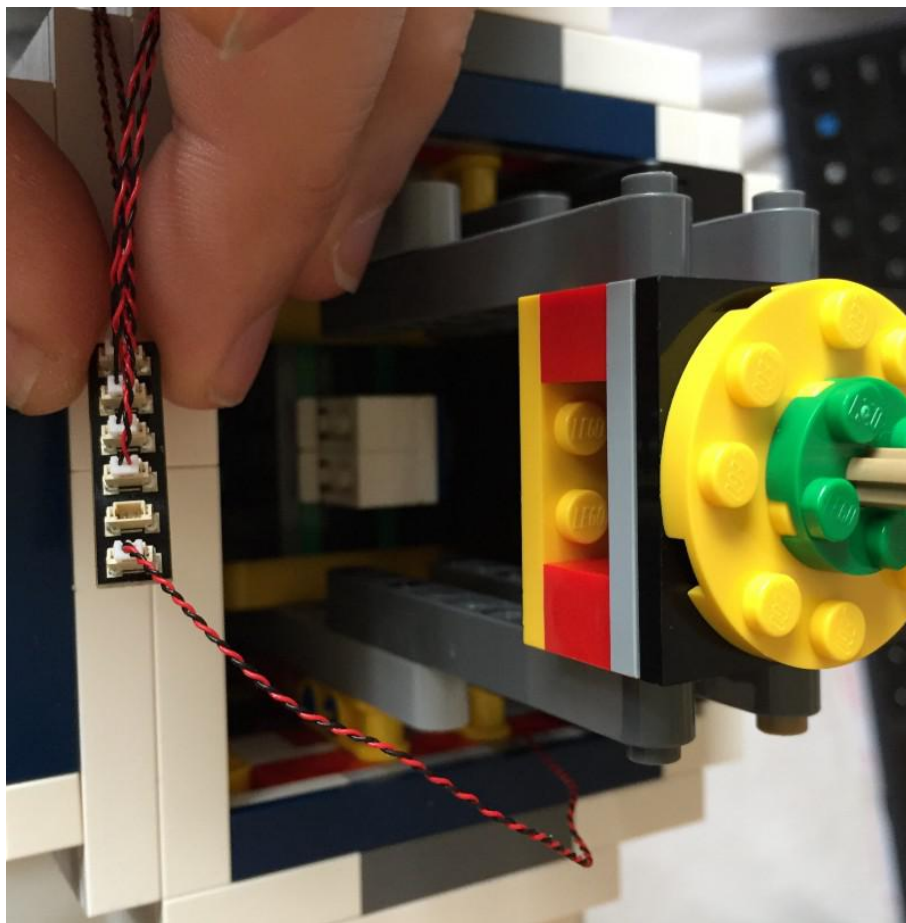
Now get the battery pack



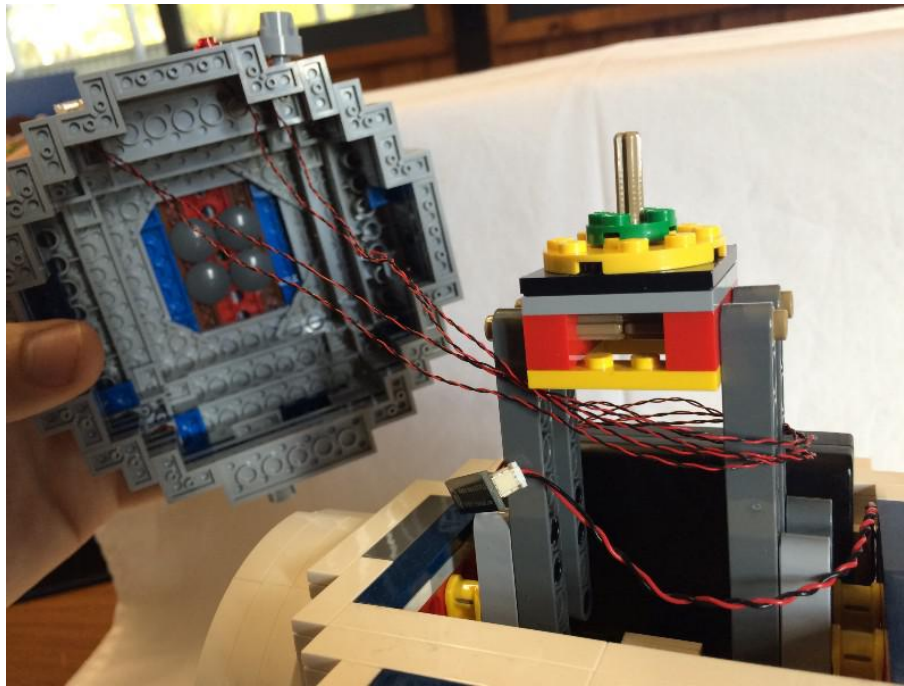
Turn R2 around and sit the battery pack horizontally inside his body with the switch on the high side and facing back towards you.



Turn R2 back around and connect the plug from the battery pack to the 6 port expansion board.

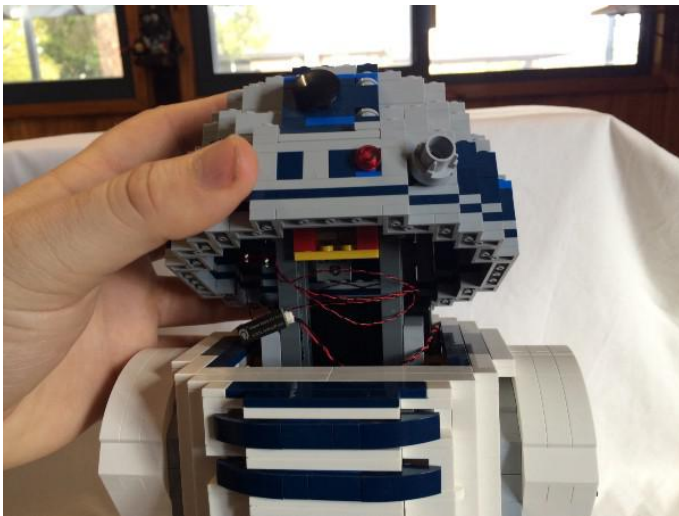


You' ll see that there is an excess of wire from the Dot Lights to the 1:4 expansion adaptor. You can gather these up in whatever way you choose. One way is to wrap the wires around the centre pieces in R2 as seen below:



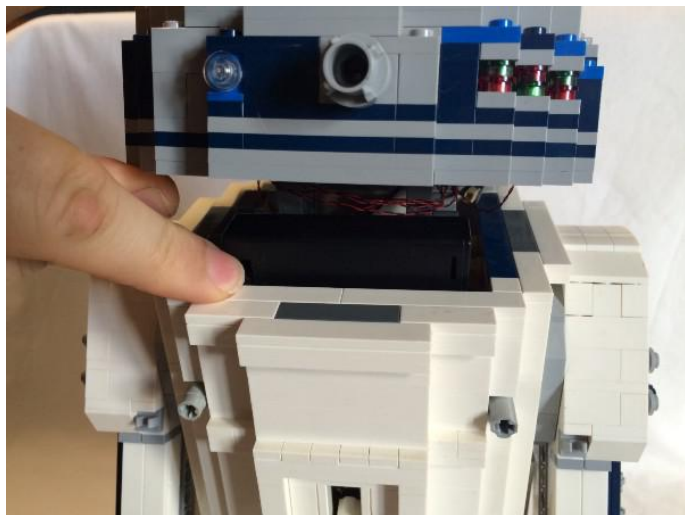
Caution: Do not rotate R2' s head after you put it back on. This may pull on the wires and damage them.

Carefully put R2' s head back on his body making sure that wires and connectors are clear of the outsider sides of the head.



Congratulations! You' re done!

To turn on, gently lift R2' s head until you can access the on / off switch.



Flick the switch, pop his head back on, turn him around and enjoy!

