TRON_Legacy_21314 LED Lighting Kit

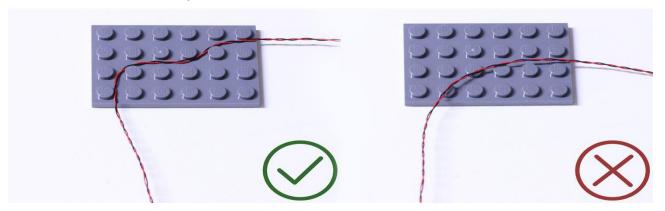
Package contents:

- 7x Blue 30cm Dot Lights
- 7x Orange 30cm Dot Lights
- 1x 6-Port Expansion Board
- 1x 12-Port Expansion Board
- 1x 5cm Connecting Cable
- 1x AA Battery Pack
- LEGO Pieces:
- 2x Black Plate 1x6
- 4x Technic Pin 1/2 Light Bluish Grey

Note:

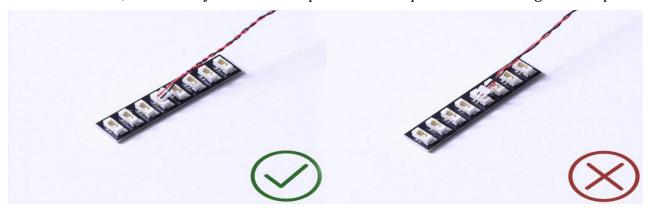
Place wires on the surface or under the LEGO building blocks.

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

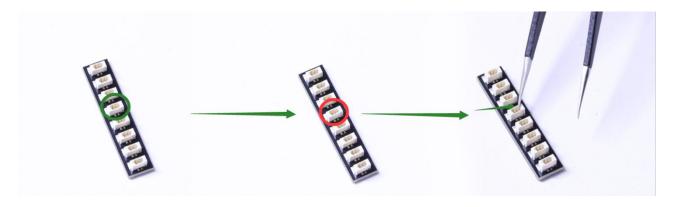


Insert the connectors to the ports.

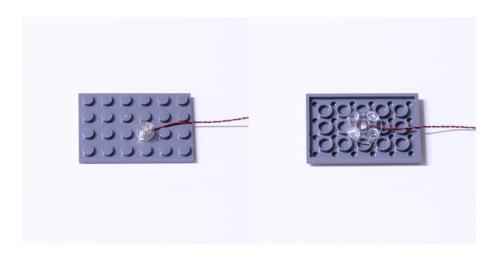
Be careful when you are operating, there's only one correct way to insert, make sure the expansion board is upward, find the soldered "=" sign on the left of the port. When you are inserting, the side which the wires can be seen should be faced to the "=" sign and if you feel hard to insert, please stop, 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 bentpins.

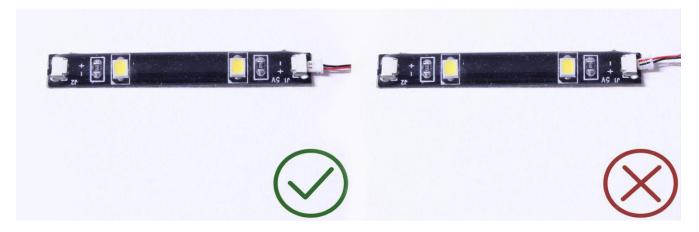


When installing dot lights, make sure they are correctly placed (Yellow LED package is exposed). You can put they either on the top of the studs or between studs.

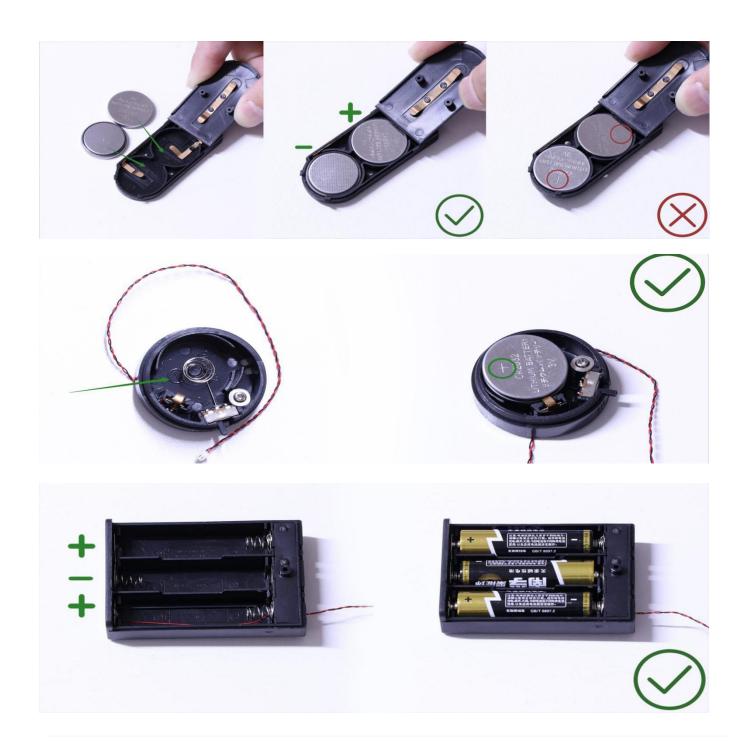


Connecting cable connectors to Strip Lights

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!

1.) We will light the blue vehicle first. Start by disconnecting it from the base plate and then remove the centre 1x8 plate from underneath as well as the light sections from each side.







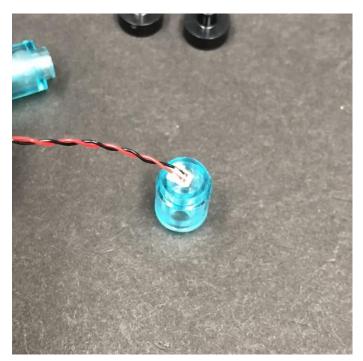


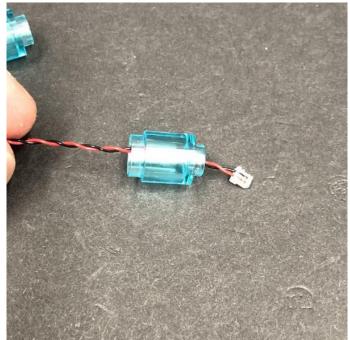


2.) Disassemble the two light sections and the take a Blue 30cm Dot Light and thread the connector side of the cable through the base (larger hole) of one of the trans light blue round bricks.

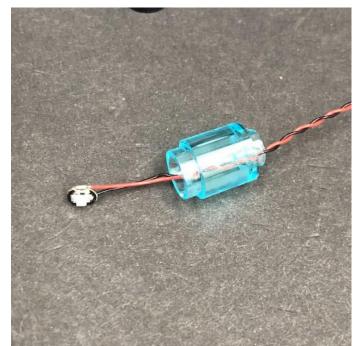




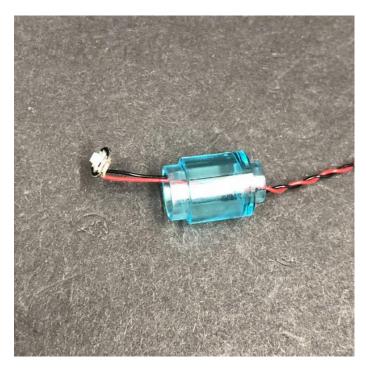




Thread the cable all the way through and slightly bend the Dot Light on a 90 degree angle so that it is facing upward, before pulling the cable all the way out from the other side of the brick.









With the Dot Light sitting all the way inside the trans light blue brick, reconnect the black piece to secure the Dot Light in place. Follow the same method to install another Blue 30cm Dot Light to the other light section.

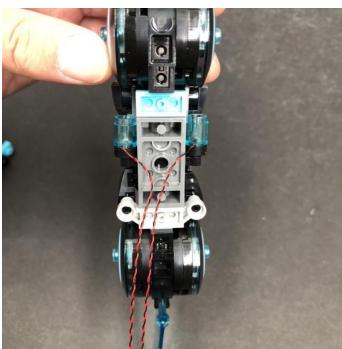


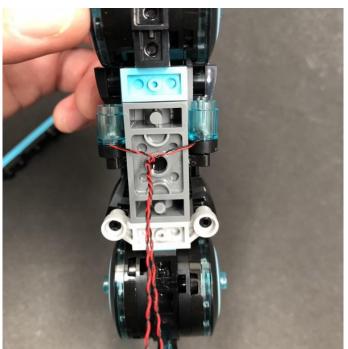


3.) Reconnect the light sections to each side of the vehicle and then from underneath, grab both cables and twist them around each other a few times as shown below:



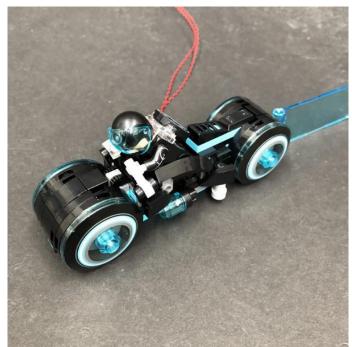






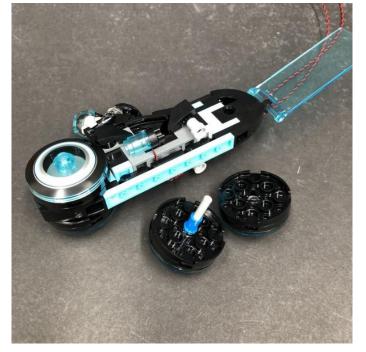
Reconnect the bottom plate we removed earlier ensuring the cables are facing toward the right side of the vehicle and cables underneath are in laid in between studs.





4.) Remove the two back wheels and then disassemble pieces as shown below:



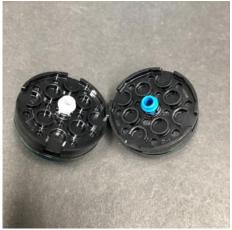






Discard the longer light grey bar and take a provided Technic Pin 1/2 Light Bluish Grey and connect this along with the blue technic pin to inside of the wheels (longer side through first).







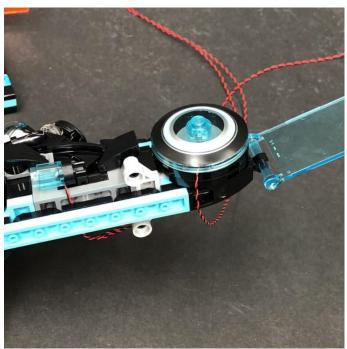
5.) Disconnect the front piece from each back wheel and then take a Blue 30cm Dot Light and place it over the centre stud of one of the wheels. Secure the Dot Light in place by reconnecting the front piece over the top ensuring cables are laid in between studs.



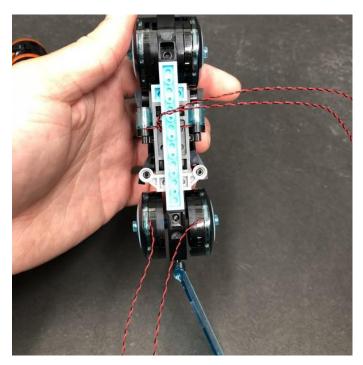
Repeat this process to install another Blue 30cm Dot Light to the other back wheel.

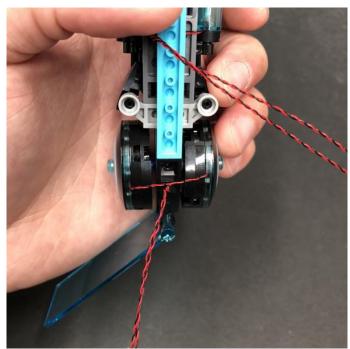


6.) Reconnect the back wheels to the vehicle (ensuring the cables are at the lowest point of each wheel) and then from underneath, grab both cables and twist them around each other a few times.









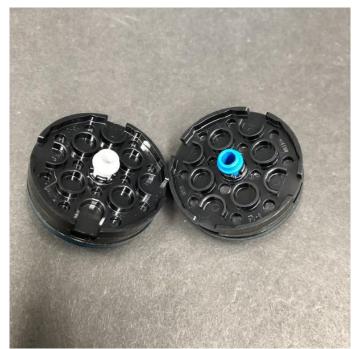
7.) Disconnect the front two wheels and then using the same method we used for the back two wheels, install another 2x Blue 30cm Dot Lights to the front two wheels using another provided Technic Pin 1/2 Light Bluish Grey.











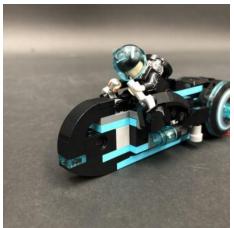


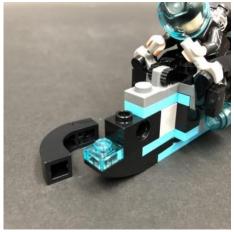






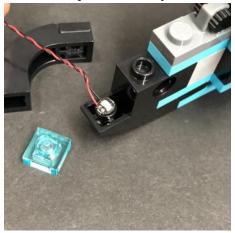
8.) Before reconnecting the front two wheels we need to install a light to the headlight. First disconnect and disassemble the following pieces from the front of the vehicle.



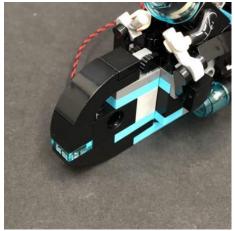




Take the remaining Blue 30cm Dot Light and then with the cable facing the right side (facing up), place it over the black stud. Secure the Dot Light in place by reconnecting the trans light blue plate over the top followed by the black arched piece.

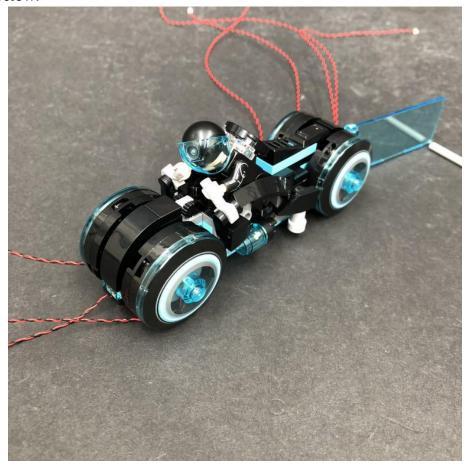


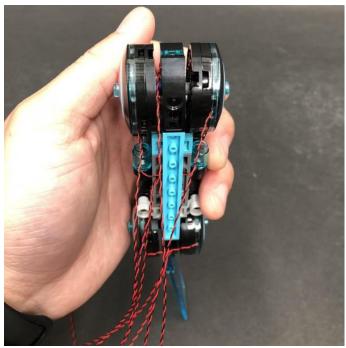


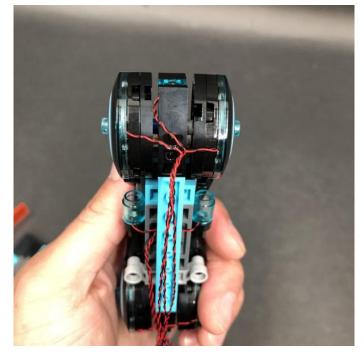


9.) Reconnect the front two wheels (ensuring each cable is at the lowest point of the wheel) and then from underneath, grab the three cables (front wheels and head light) and then twist them around each

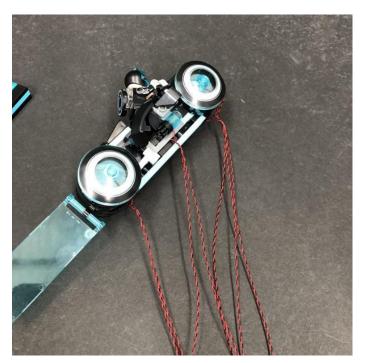
other as shown below:





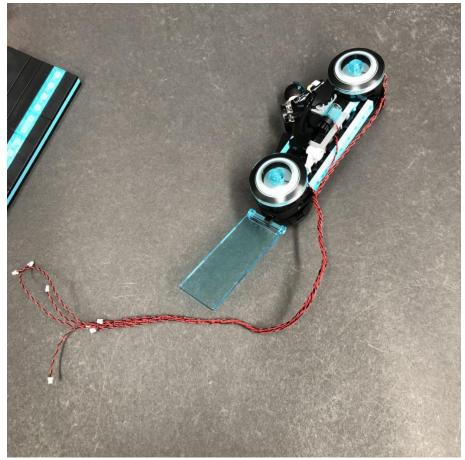


10.) Turn the vehicle on it's left side (front facing up) and then take the three groups of cables and then twist them all around each other from the point directly underneath the back wheels.

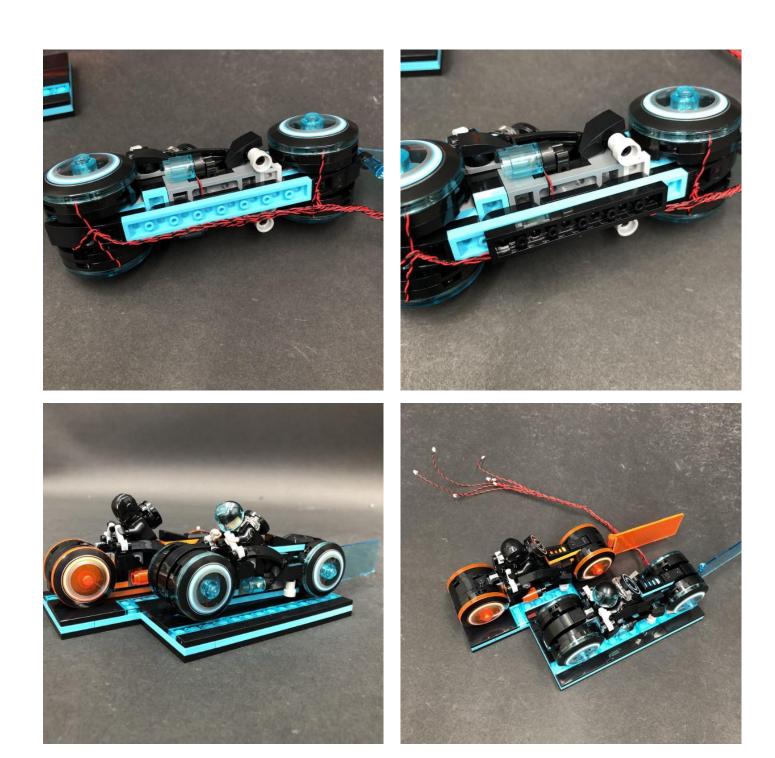




Continue to twist all the cables around each other all the way to the end to form one larger cable

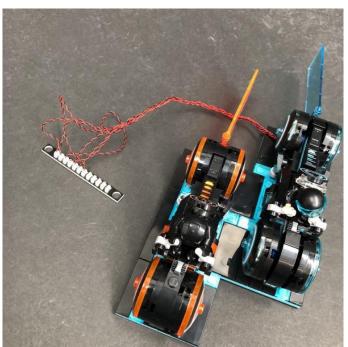


Take a provided Black 1x6 Plate and connect it underneath as per below then reconnect the vehicle back to the base plate ensuring cables are facing the right side of the vehicle (behind)

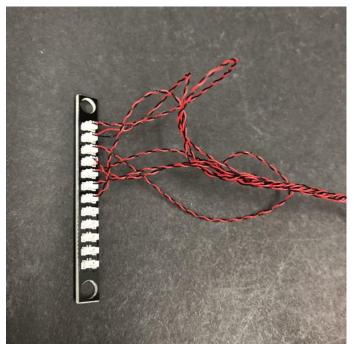


11.) Take the 12-Port Expansion Board and connect all seven cables to it.



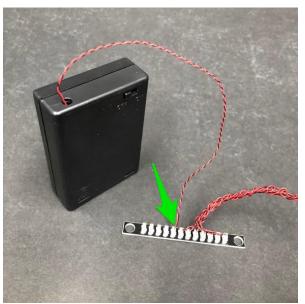


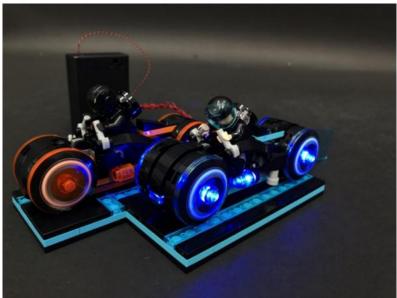
Group all the excess cable together and twist them around the larger cable so they are all neat and grouped together.



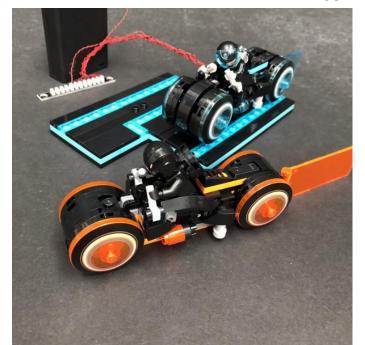


Take the AA Battery Pack and insert 3x AA Batteries to it. Connect the battery pack cable to the next available port on the expansion board. Turn the battery pack ON to verify all lights are working OK.





12.) Disconnect the orange vehicle from the base plate and using the same method used for the blue vehicle, install 7x Orange 30cm Dot Lights to the orange vehicle. First disconnect and disassemble the following pieces.









13.) Install Orange Dot Lights to the side lights remembering to slightly bend the Dot Light on a 90 degree angle so that it is facing upward.

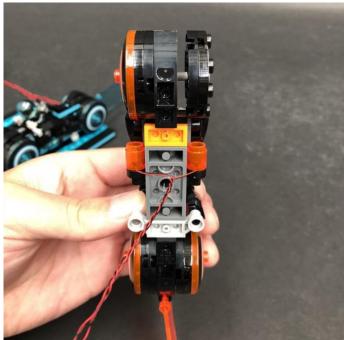






14.) Group cables together and twist them around each other a few times





Reconnect bottom 1x8 plate.



15.) Disconnect and disassemble pieces from the four wheel sections.





Connect technic pins to the inside of each wheel using 2x provided Technic Pins 1/2 Light Bluish Grey along with the existing blue technic pins 1/2



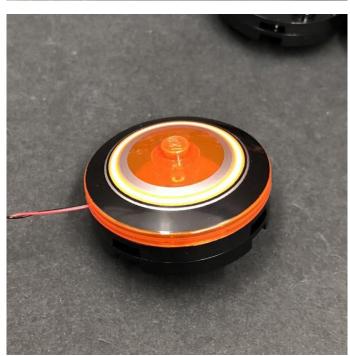


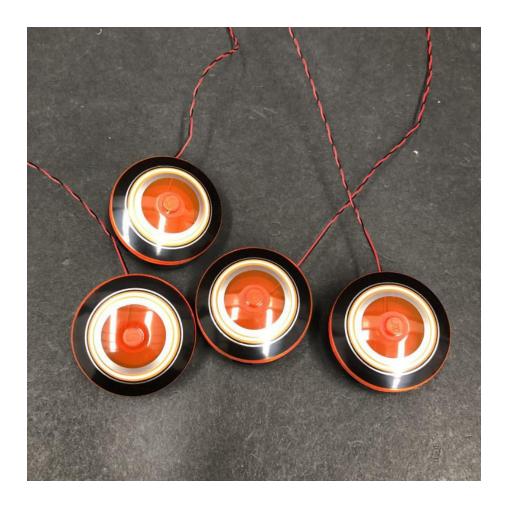
16.) Disconnect the front of each wheel and install Orange 30cm Dot Lights to each wheel







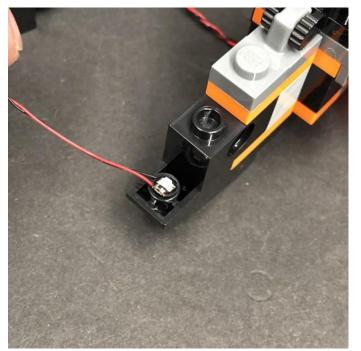




17.) Before reconnecting the wheels, disconnect pieces from the front and install the remaining Orange 30cm Dot Light to the front for the headlight.



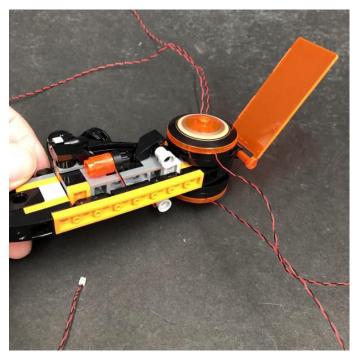


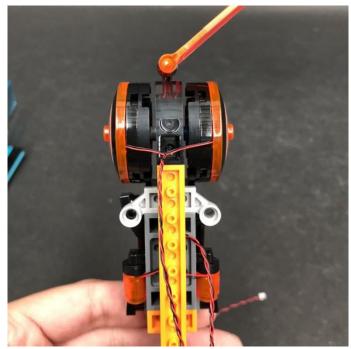






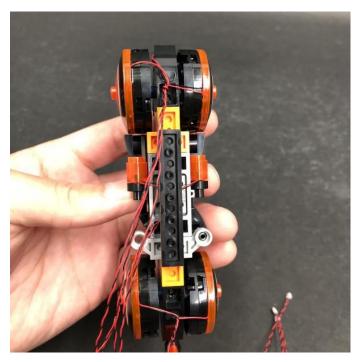
18.) Reconnect the back wheels first then from underneath the vehicle, twist the cables around each other.

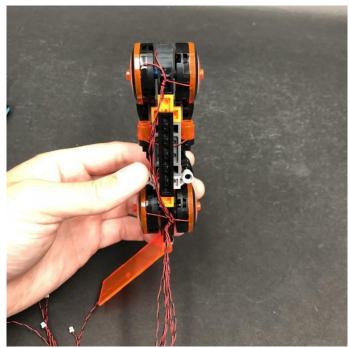






20.) Take the remaining Black Plate 1x6 and connect it underneath the vehicle then group all seven cables and twist them around each other at the point directly underneath the back wheels.



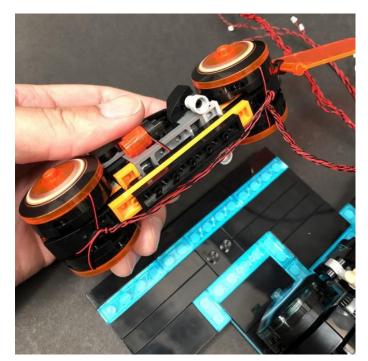


21.) Twist all the cables around each other all the way to the end to form one larger cable





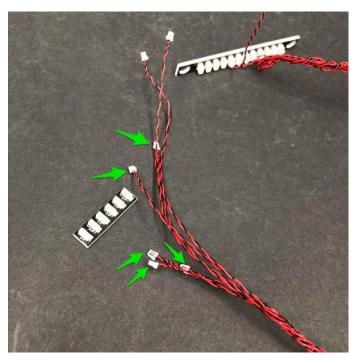
Ensure cables are laid and facing the right side of the vehicle (cables facing back) before reconnecting it to the base plate.

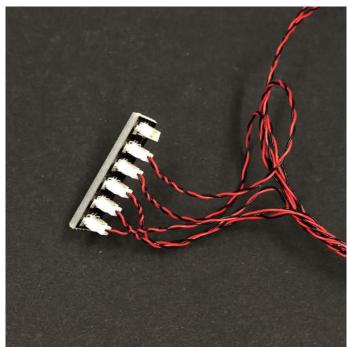




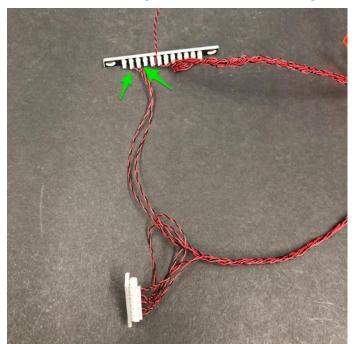


22.) Take the 6-Port Expansion Board and then connect the shortest five cables from the orange vehicle to it.



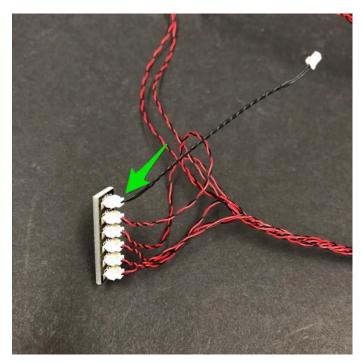


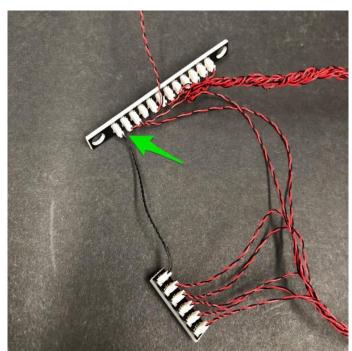
Connect the two longer cables from the orange vehicle to the 12-port expansion board.





23.) Take the 5cm Connecting Cable and connect one end to the remaining port on the 6-port expansion board and then connect the other end to a spare port on the 12-port expansion board.

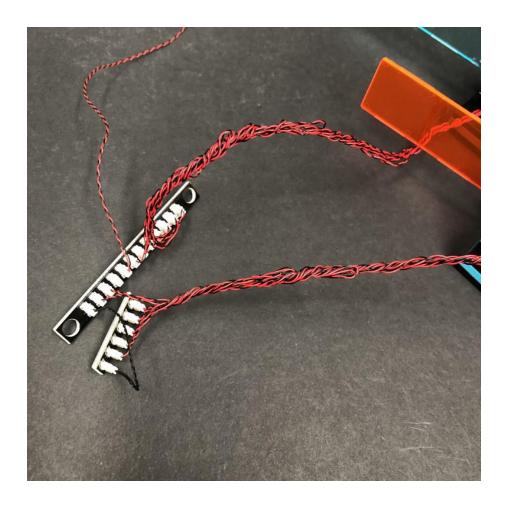




24.) Clean up messy cables by grouping excess cabling from the orange vehicle and twisting them around each other to form a larger cable.







Finally, neaten up all your components behind the LEGO set, then turn the battery pack ON to verify all is working OK.

