

Porsche_911_GT3_RS_42056 White light LED Lighting Kit

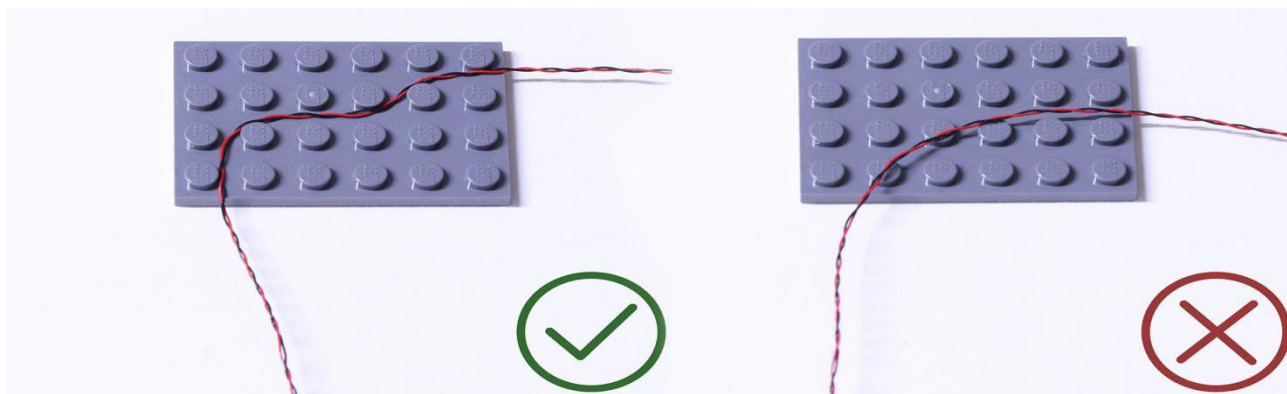
Package contents:

- 10x White 15cm Dot Lights
- 6x Cool White 15cm Dot Lights
- 1x LED Strip Light
- 1x 50cm Connecting Cable
- 2x 30cm Connecting Cables
- 6x Adhesive Squares
- 1x 6-port Expansion Board
- 1x 8-port Expansion Board
- 1x 12-port Expansion Board
- 1x AA Battery Pack (Requires 3x AA Batteries)

Note:

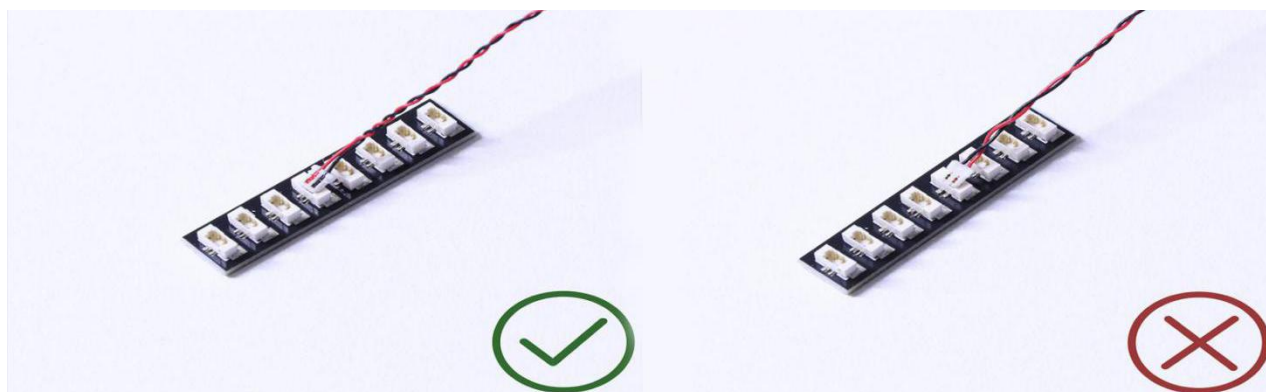
Place wires on the surface or under the LEGO building blocks.

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

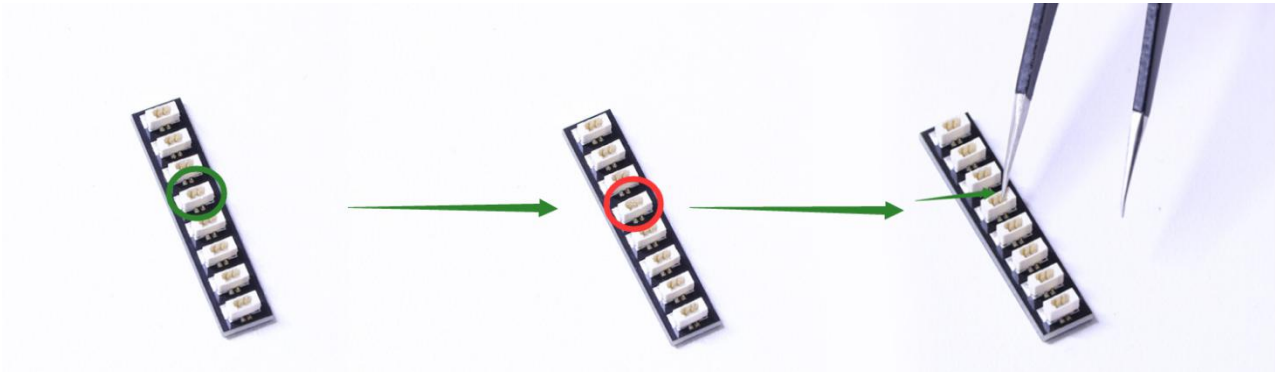


Insert the connectors to the ports.

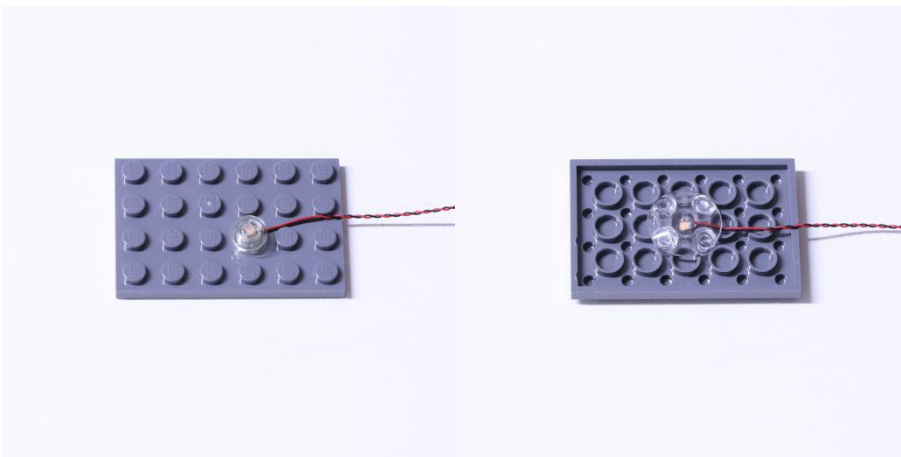
Be careful when you are operating, there's only one correct way to insert, make sure the expansion board is upward, find the soldered "=" sign on the left of the port. When you are inserting, the side which the wires can be seen should be faced to the "=" sign and if you feel hard to insert, please stop,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

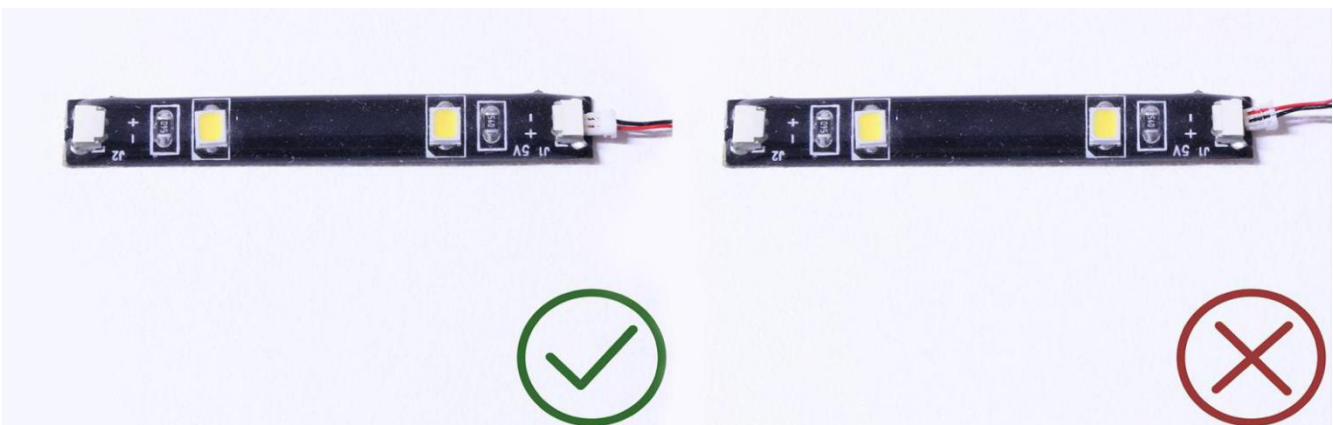


When installing dot lights, make sure they are correctly placed (Yellow LED package is exposed). You can put them either on the top of the studs or between studs.

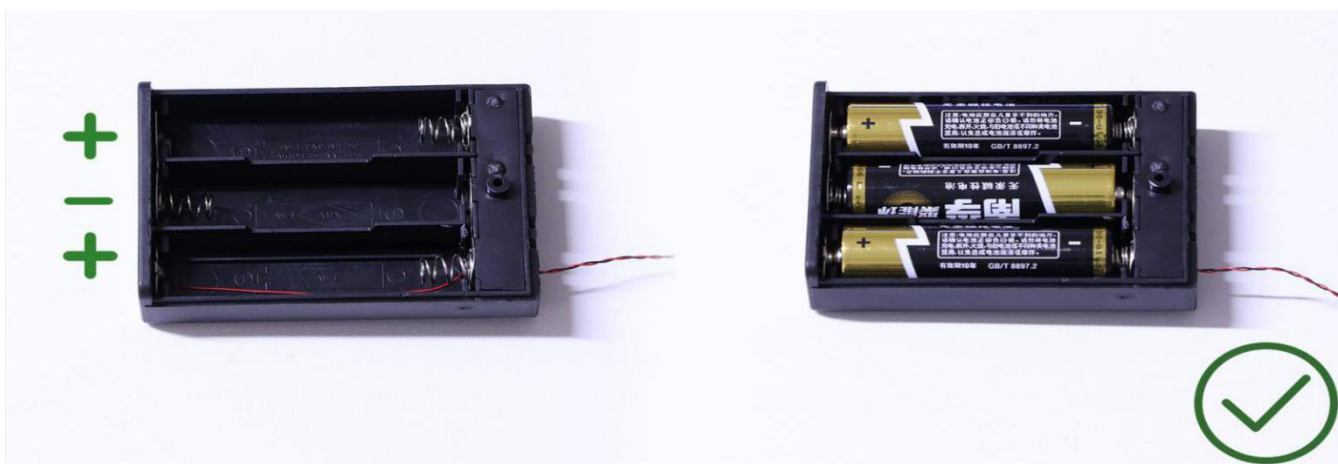


Connecting cable connectors to Strip Lights

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!

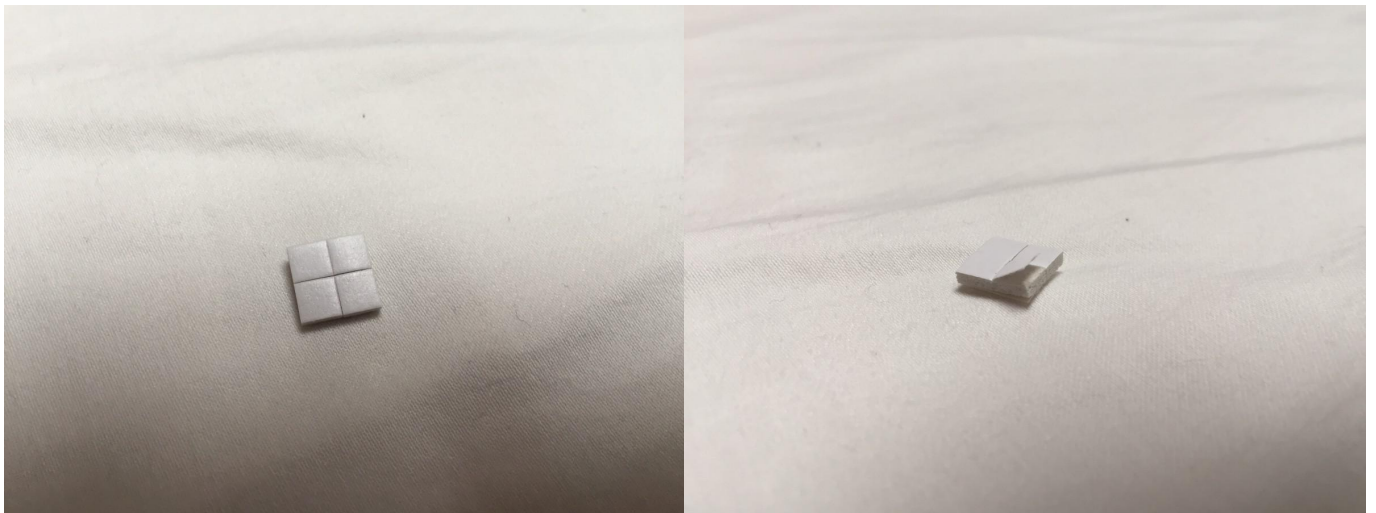
Instructions for installing this kit



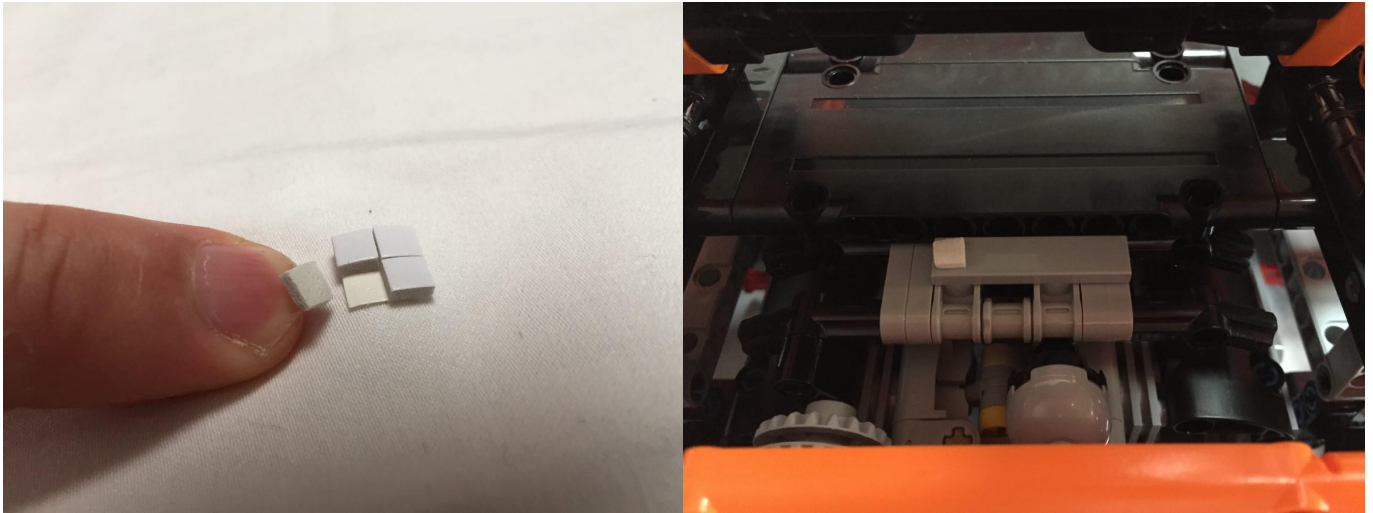
Let's start at the back of the vehicle. Grab the **12 Port Expansion Board** and move the car around so you have easy access to the boot.



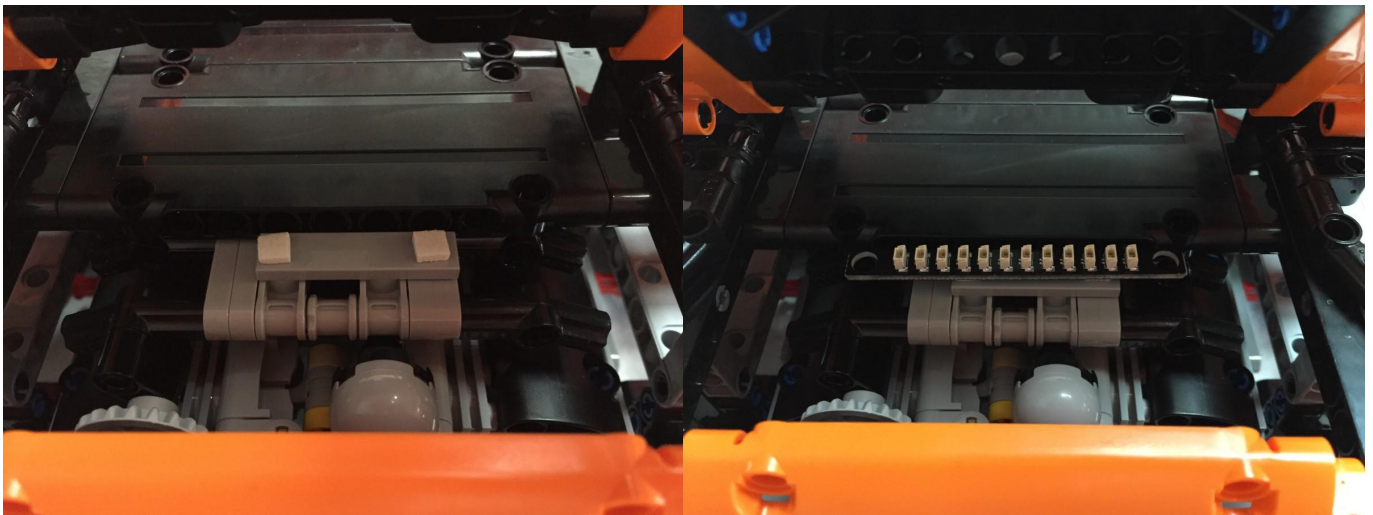
There are a few options for mounting the **12 Port Expansion Board**. I am going to mount mine on top of the 1 x 4 tile. If you have applied a sticker to this piece, you may want to mount the expansion board in one of the other positions shown in the photos above.



Grab some **Adhesive Squares** and peel the top off one of them.

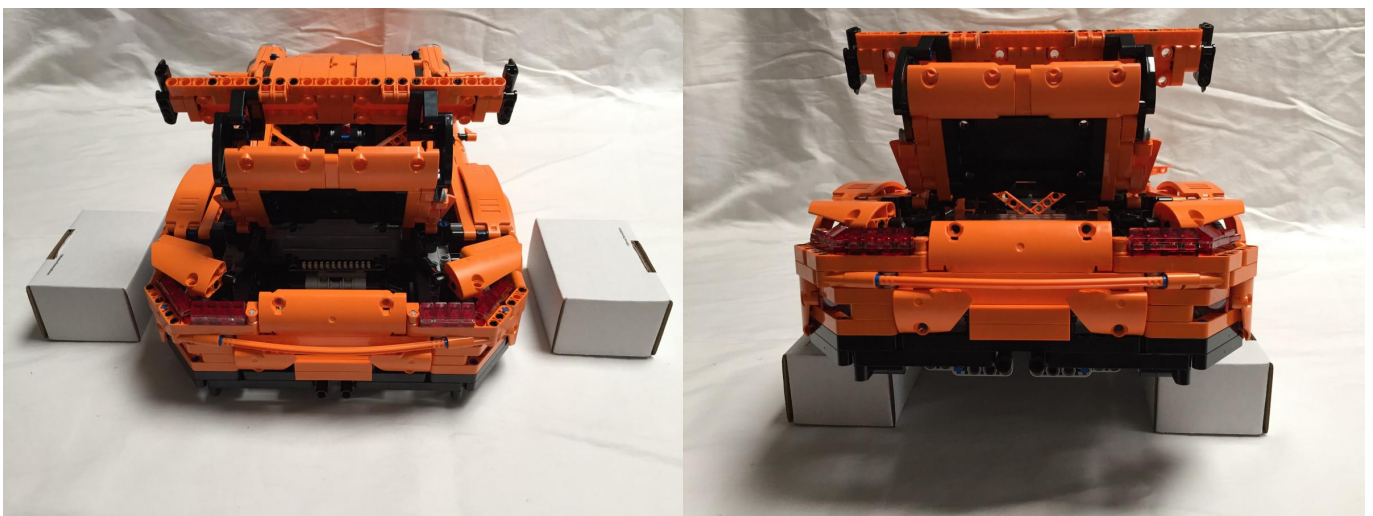


Remove it from the base and stick it on the car where you want to mount your **12 Port Expansion Board**.



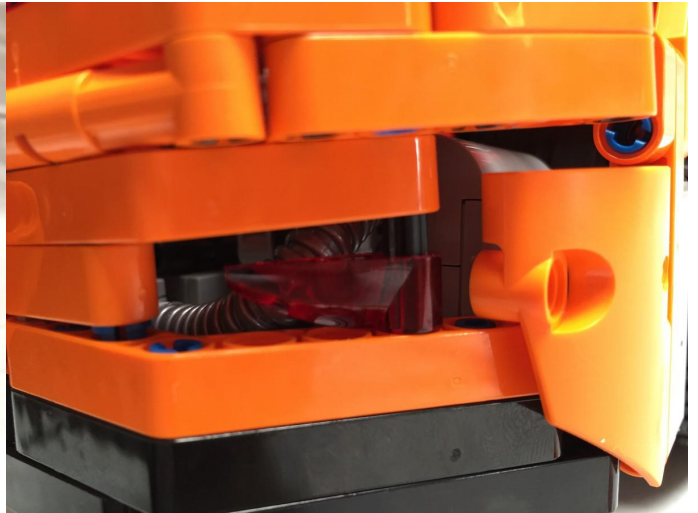
Grab another **Adhesive Square** and peel it like the previous one. Also stick it where you want the **12 Port Expansion Board** to be.

Mount the **12 Port Expansion Board** on top the **Adhesive Squares**.

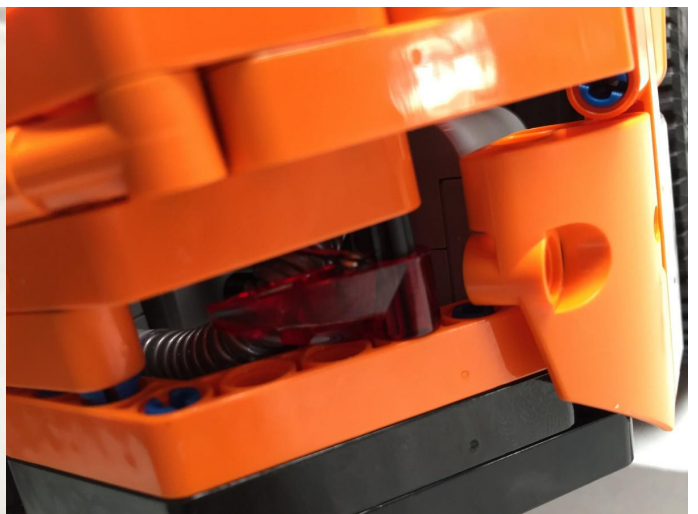
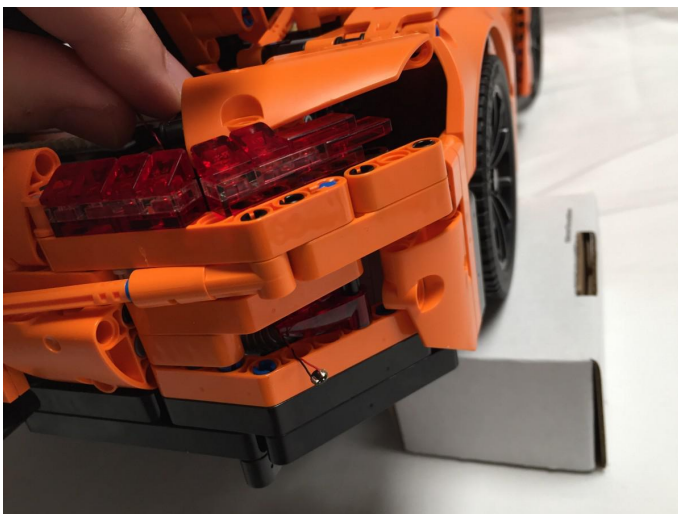
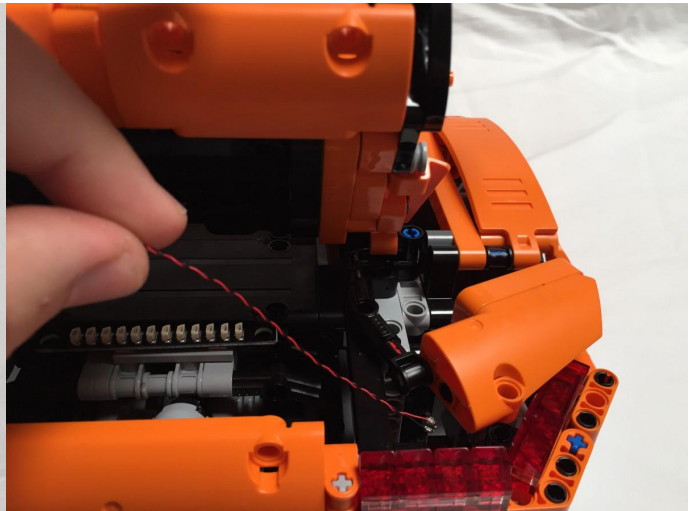


When working on the rear lights, I found it useful to prop the car up on a couple of small boxes which made it easier for me to access the pieces I needed.

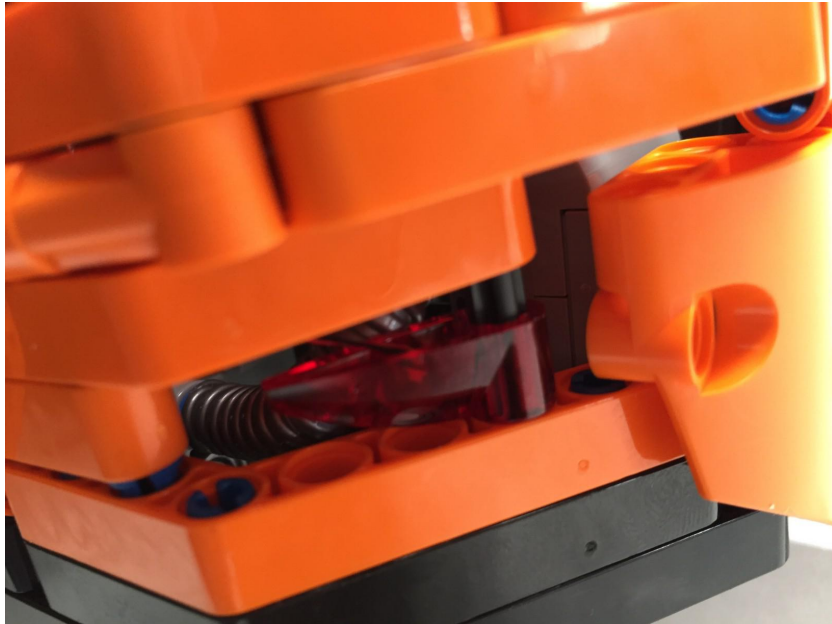
I will go through the steps for installing LEDs on the right hand side of the car. When finished, repeat the same steps for the left hand side of the car.



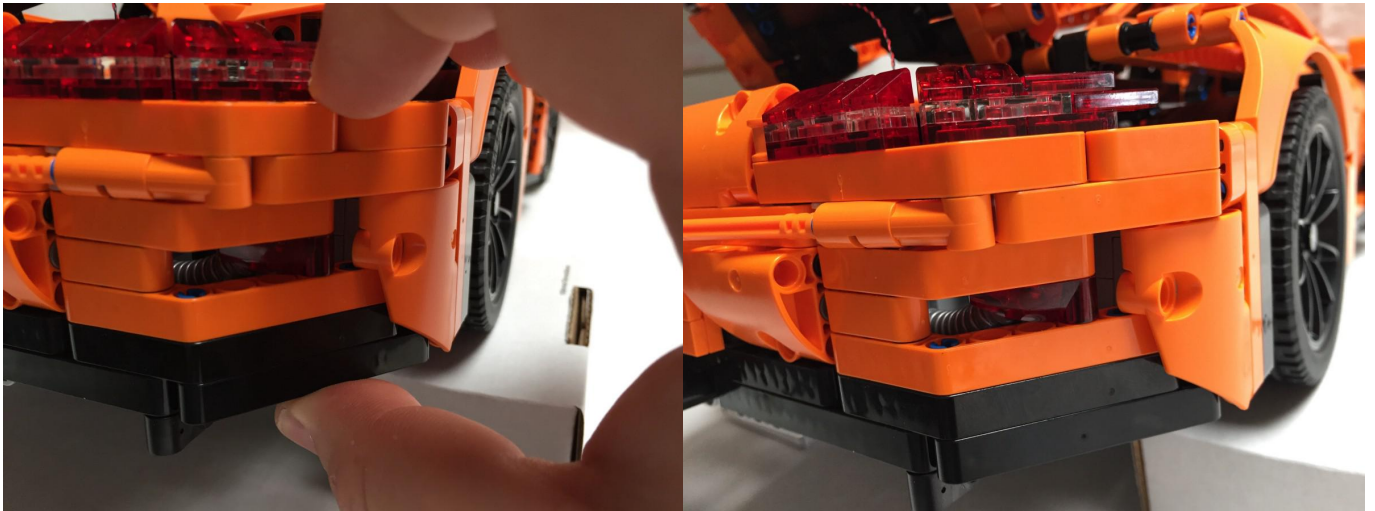
Look for the Trans-Red Bionicle 1 x 3 Tooth with Axle Hole piece. Gently pry apart the orange technic pieces above and below it.



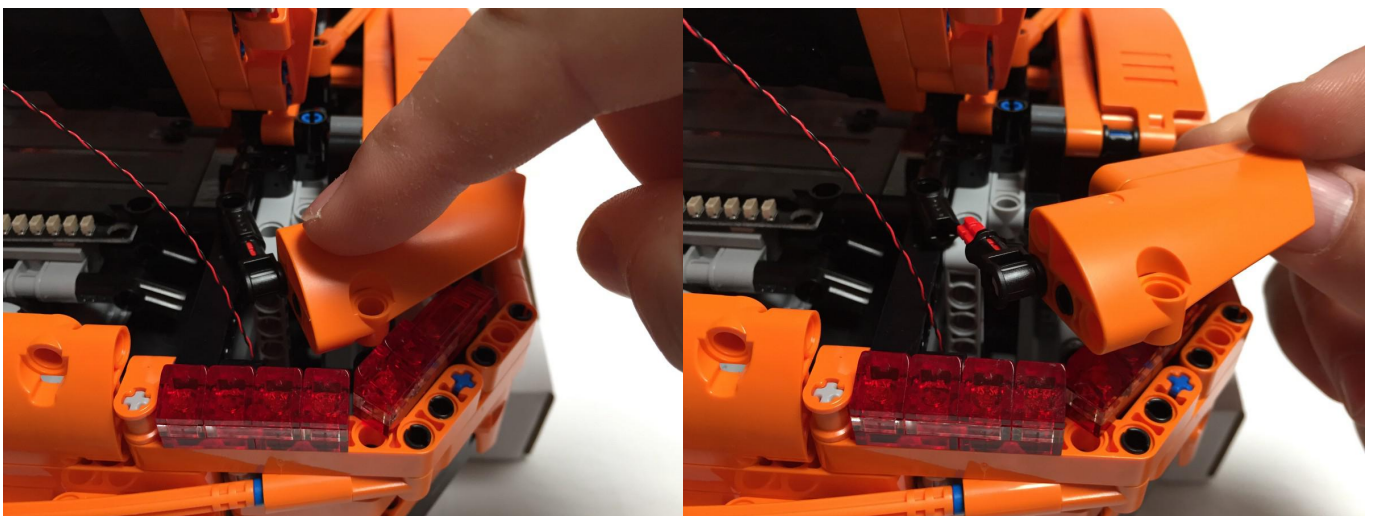
Grab a **White 15cm Dot Light** and feed it down through the boot and out near the Trans-Red Bionicle 1 x 3 Tooth with Axle Hole piece.



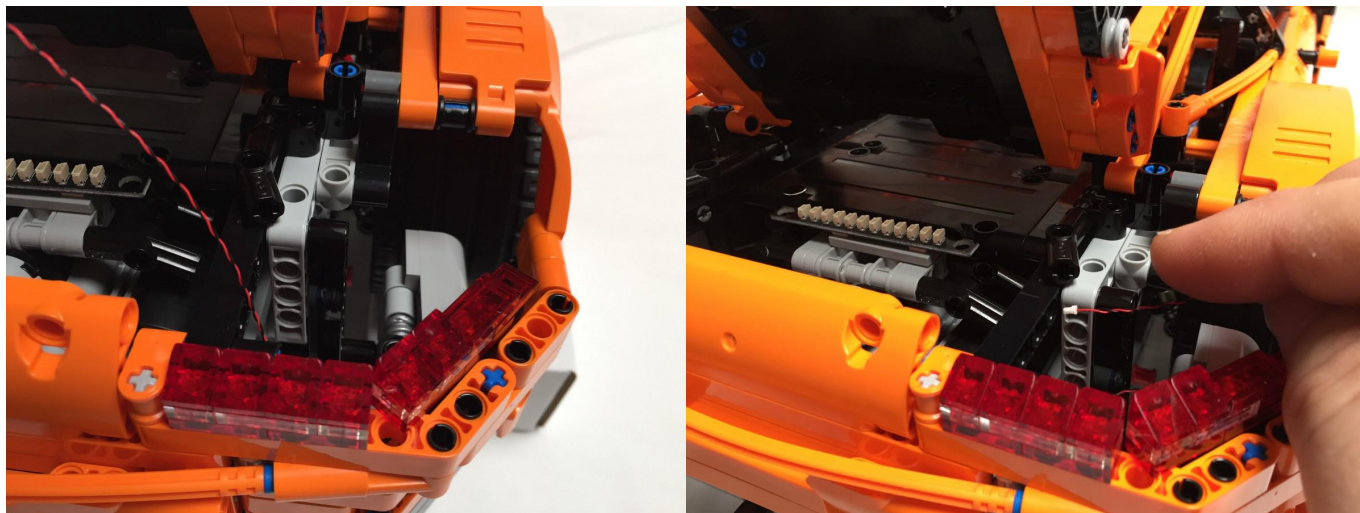
Jiggle and manoeuvre the LED until it is face down and inside the Trans-Red Bionicle 1 x 3 Tooth with Axle Hole piece.



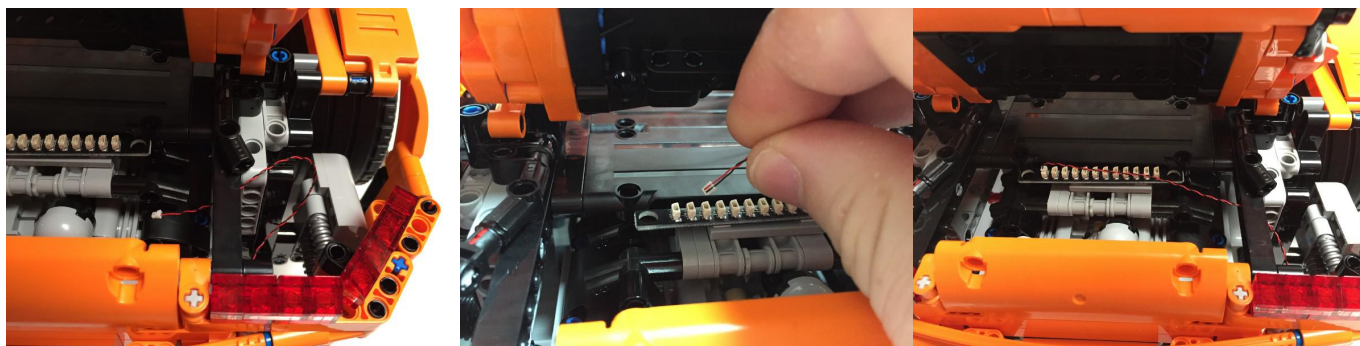
Pinch the technic pieces that you previously separated back together.



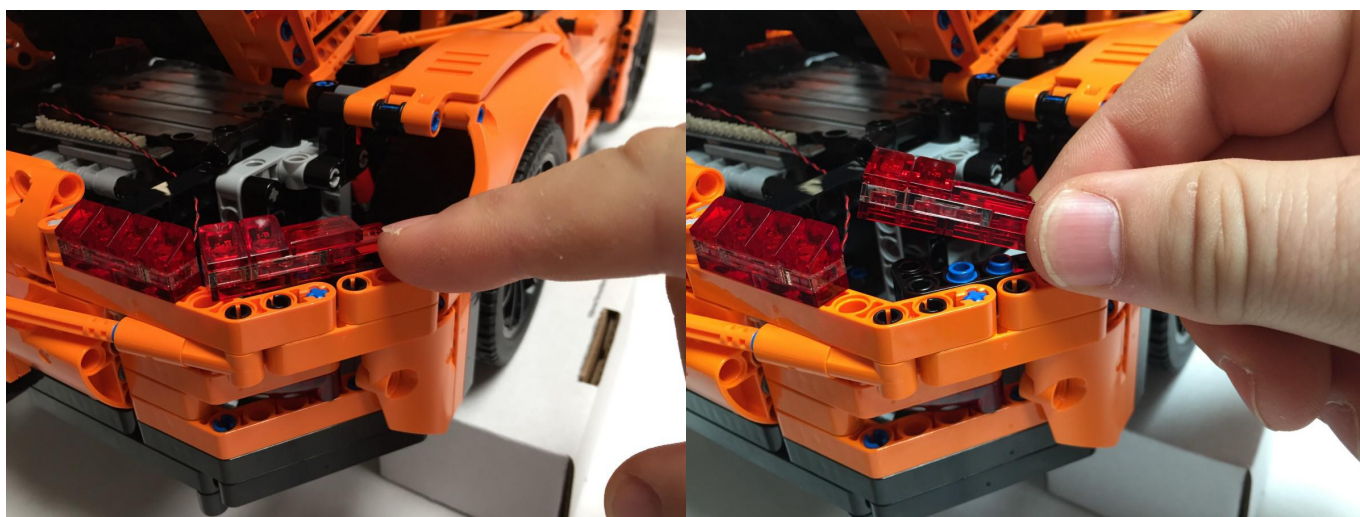
Remove the orange technic fairing piece that sits above the brake light. Do this by pulling it backwards towards you.



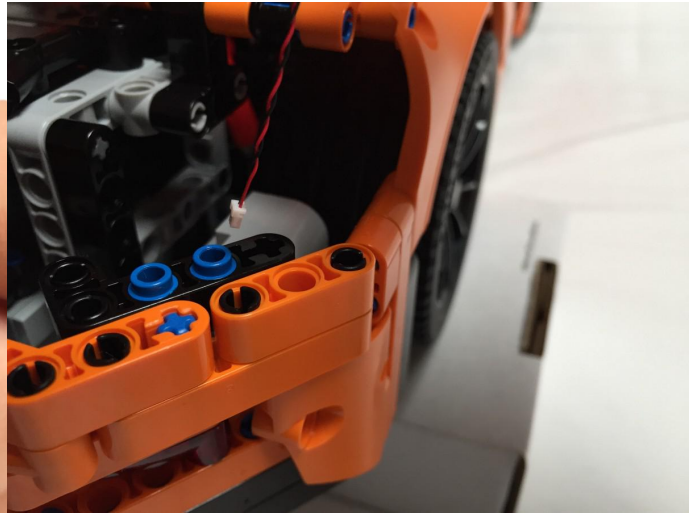
Grab the plug end of the **White 15cm Dot Light** and feed it through a side hole in the black technic liftarm piece.



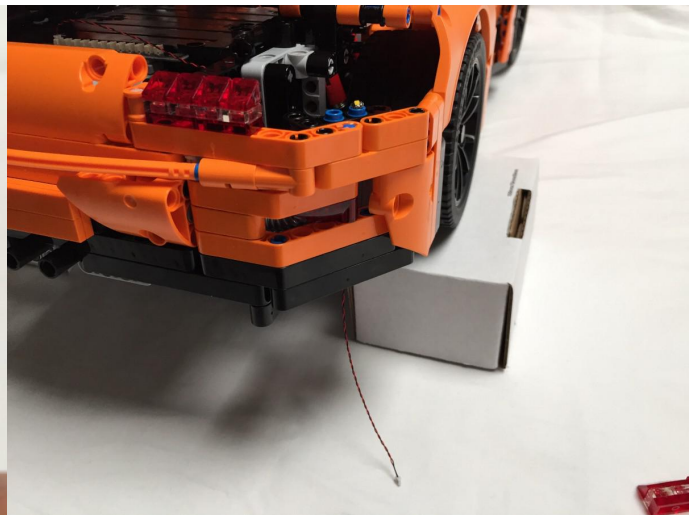
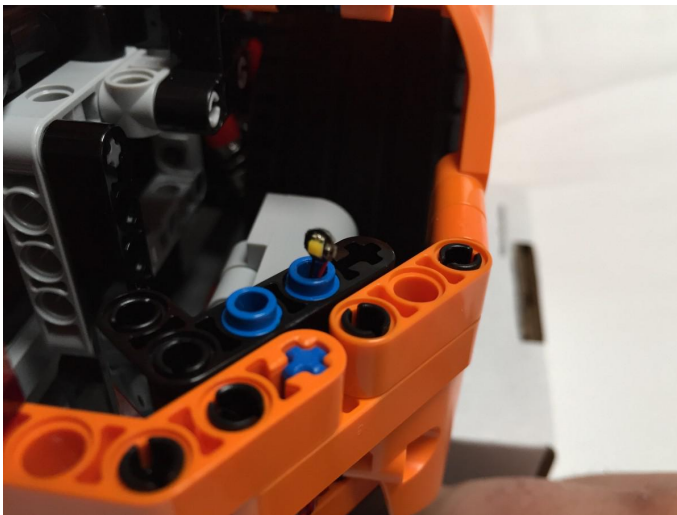
Plug the **White 15cm Dot Light** into an available port on the **12 Port Expansion Board**. I have chosen the furthest port on the left to minimise the amount of slack in the wire.



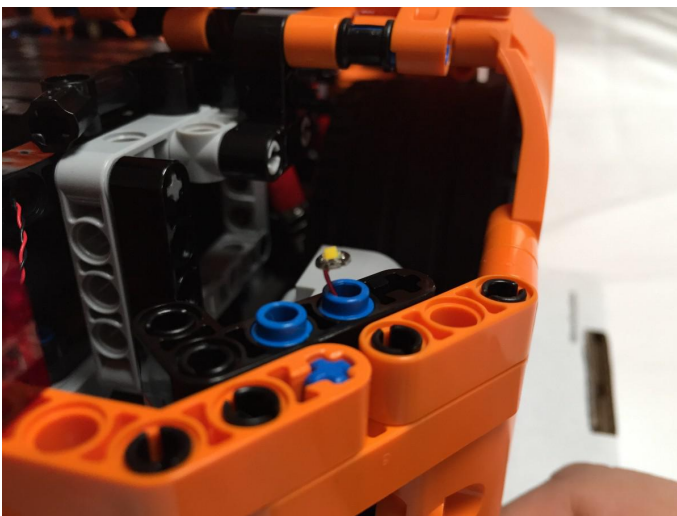
There are two sets of transparent pieces on each side of the car that represent brake lights. Remove the set furthest from the centre of the car (in this instance, the set on the right).



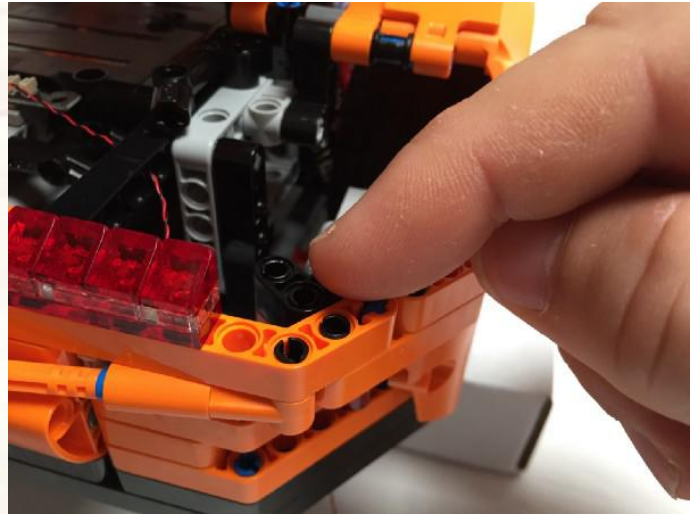
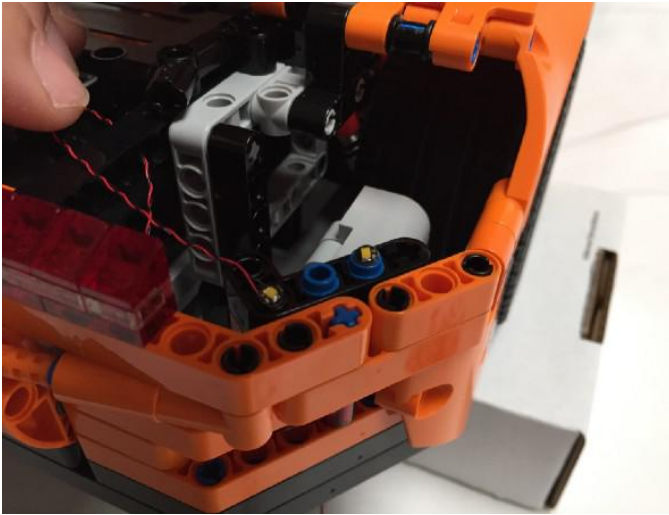
There are now two blue technic 1/2 pins visible. Grab a **White 15cm Dot Light** and feed the white plug end through the blue technic 1/2 pin furthest from the centre of the car.



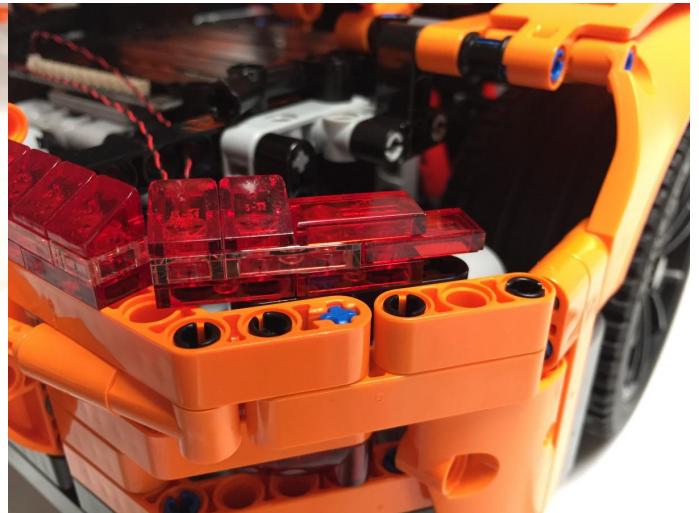
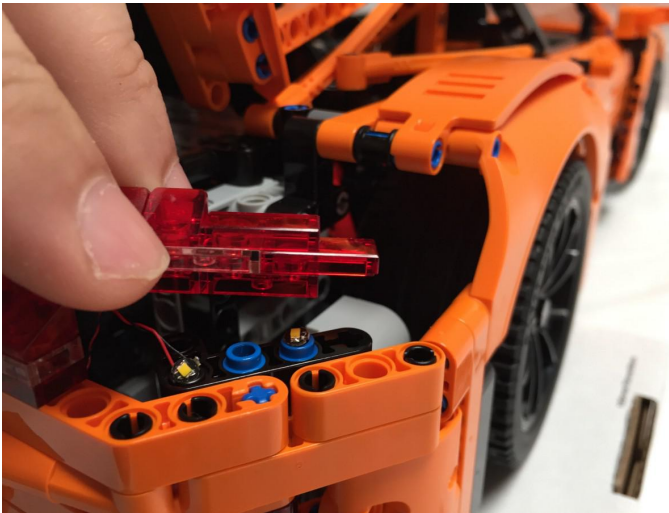
The wire will likely run through and out the bottom of the car which is fine.



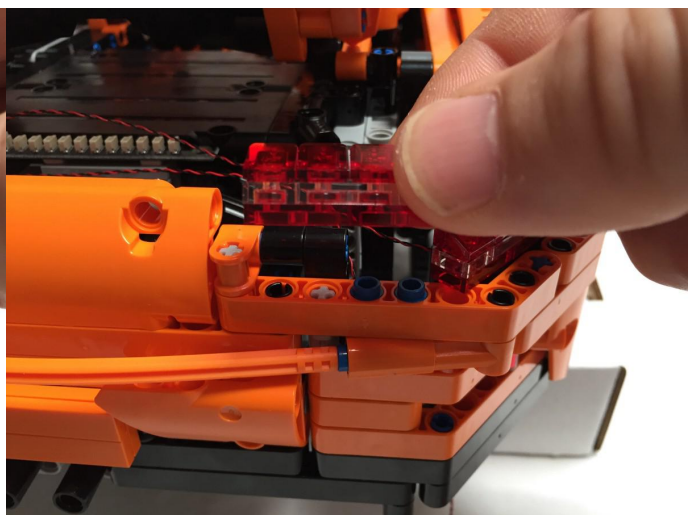
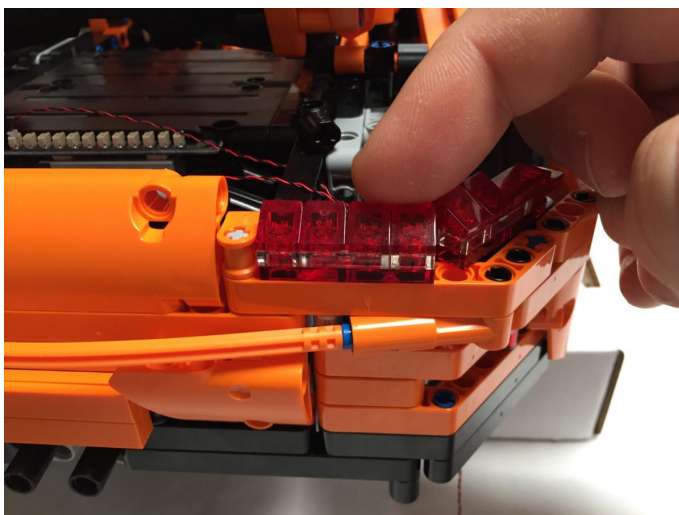
Grab the top of the LED on the **White 15cm Dot Light** and carefully bend it so that it faces upwards. You want it to sit flat on top of the blue technic 1/2 pin.



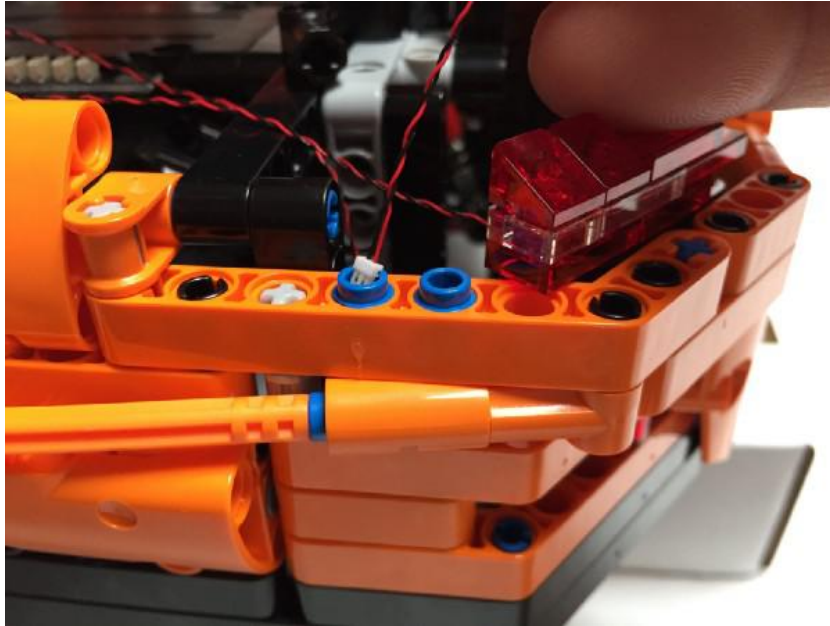
The blue technic 1/2 pins sit inside a black L-Shaped technic lift arm. There is a black technic pin in the corner of the black L-Shaped technic lift arm. Grab a **White 15cm Dot Light** and rest it on top of the black technic pin with the yellow LED element facing upwards. Hold this **White 15cm Dot Light** in place and....



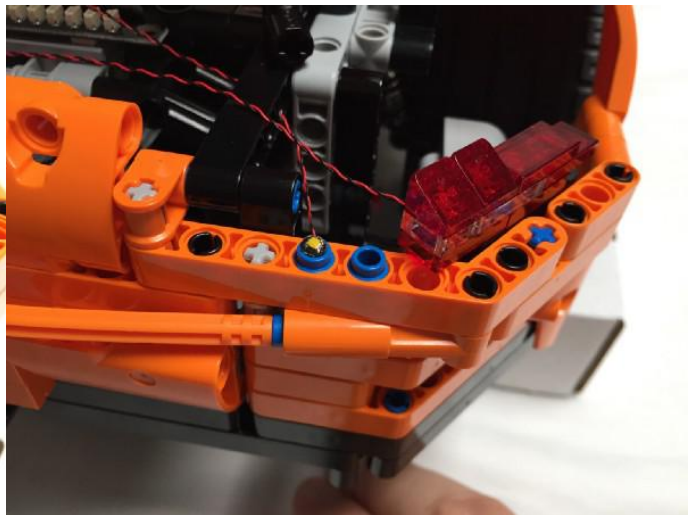
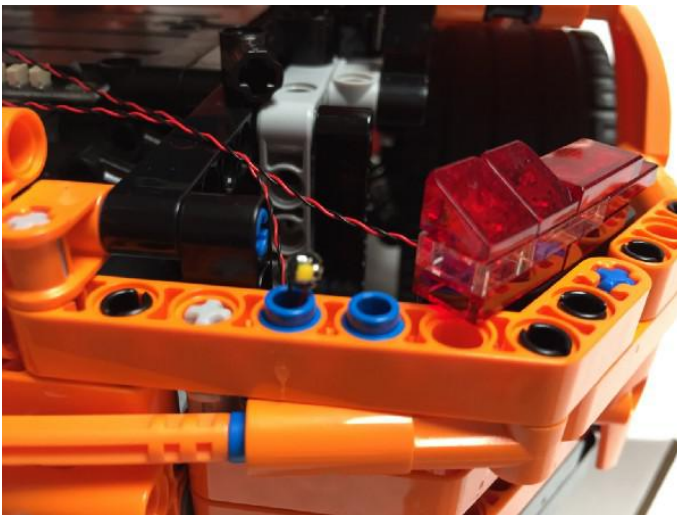
Replace the transparent pieces that represent brake lights. Each **White 15cm Dot Light** LED will sit comfortably inside the cavity of the Lego plate being fixed on top of it. No extra resistance should be encountered when refitting the brake light pieces.



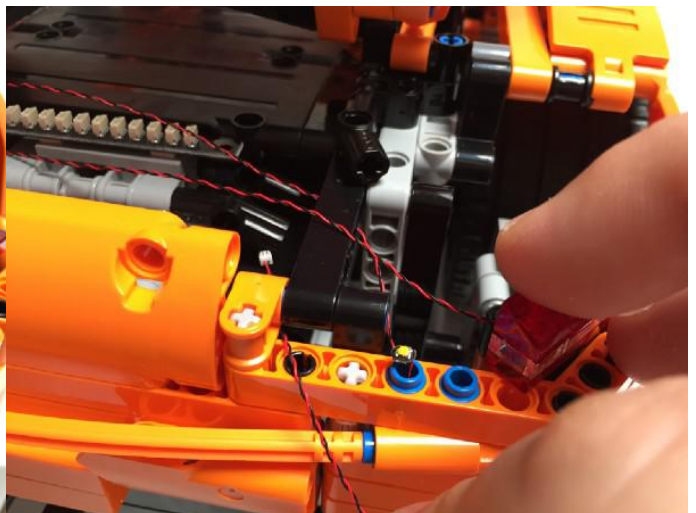
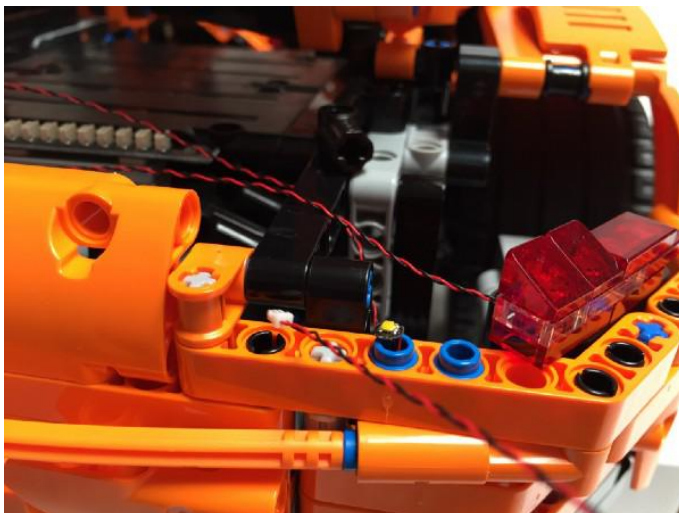
Remove the other set of transparent pieces the represent brake lights.



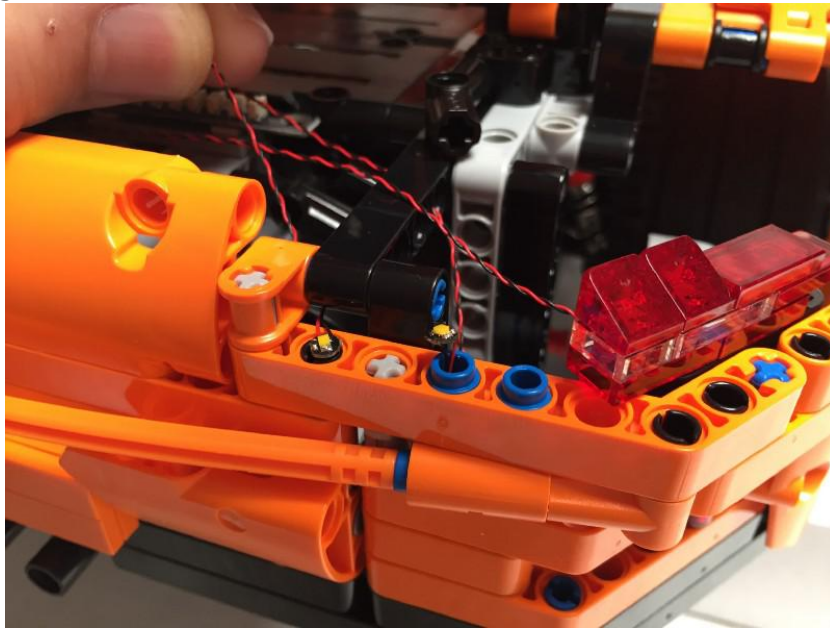
Again, two blue technic 1/2 pins will now be exposed. Grab a **White 15cm Dot Light** and feed the white plug end through the blue technic 1/2 pin closest to the centre of the car. Let the cable run down underneath the car.



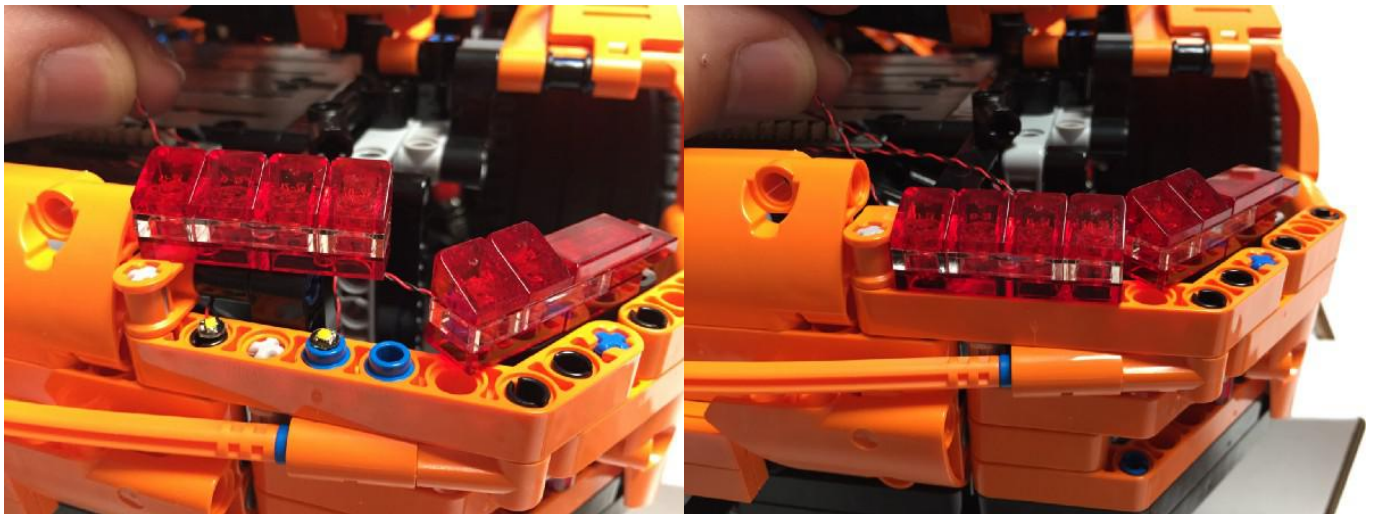
Grab the top of the LED on the **White 15cm Dot Light** and carefully bend it so that it faces upwards. You want it to sit flat on top of the blue technic 1/2 pin.



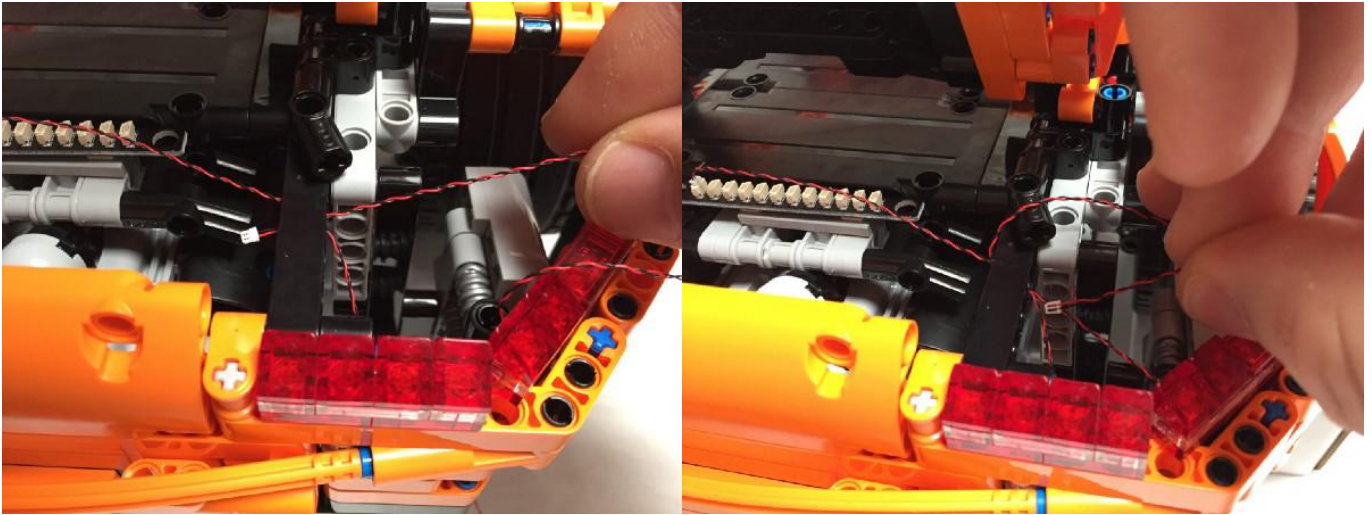
Grab a **White 15cm Dot Light** and feed the white plug end through the available gap between the orange technic liftarm (that holds the blue 1/2 technic pins) and the black technic liftarm that runs back towards the engine.



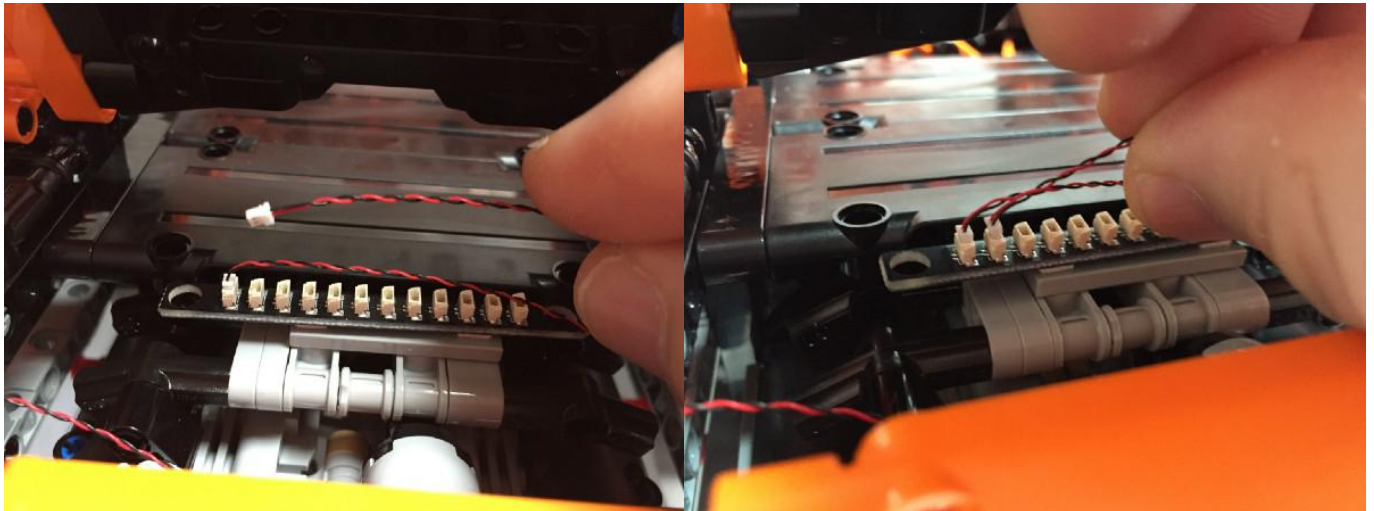
Rest the LED end of the **White 15cm Dot Light** on top of the black technic pin in the orange technic liftarm piece. Make sure the yellow LED element facing upwards. Hold this **White 15cm Dot Light** in place and....



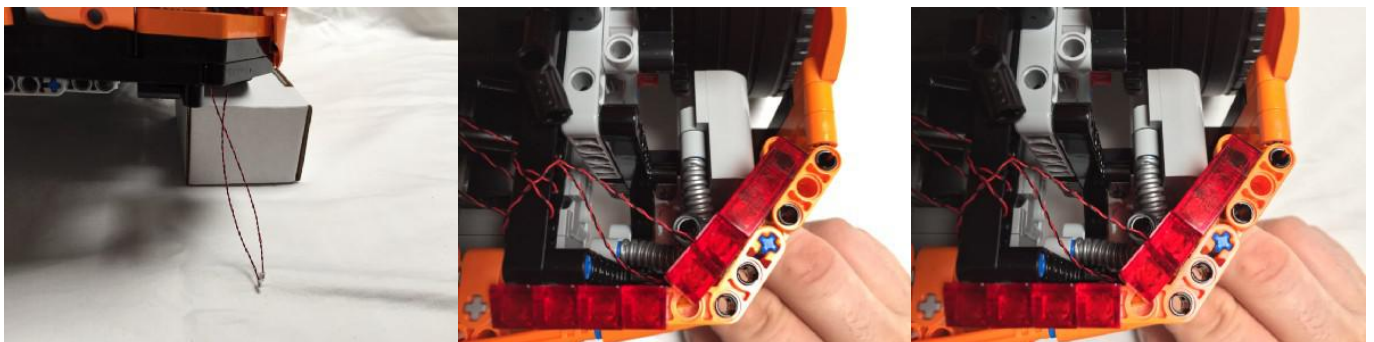
Replace the transparent brake light pieces. Each **White 15cm Dot Light** LED will sit comfortably inside the cavity of the Lego plate being fixed on top of it. No extra resistance should be encountered when refitting the brake light pieces.

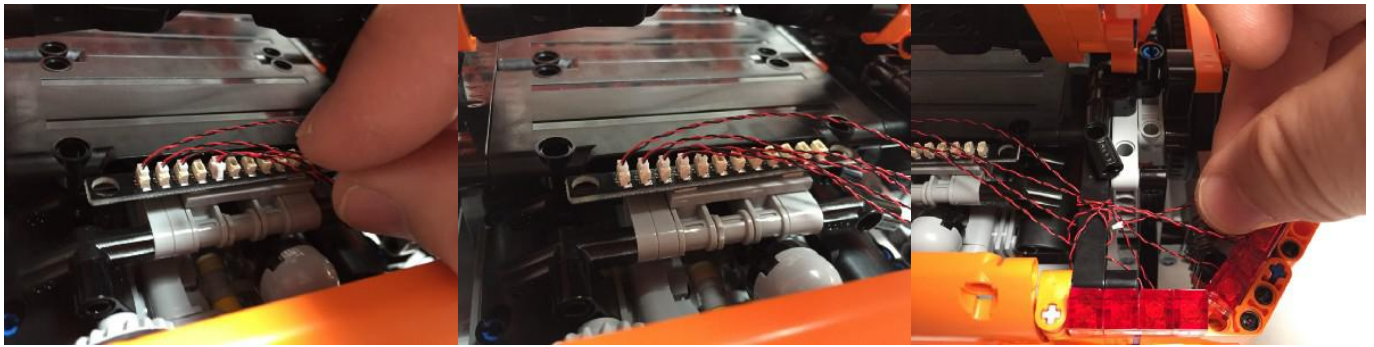


You will have four **White 15cm Dot Lights** that need to be plugged into the **12 Port Expansion Board**. Two are likely to be easily accessible and the other two have run down under the car. Gather the wires one at a time and feed them through the black technic liftarm piece. Wrap them around the black technic liftarm piece as appropriate to consume any slack in the wires.



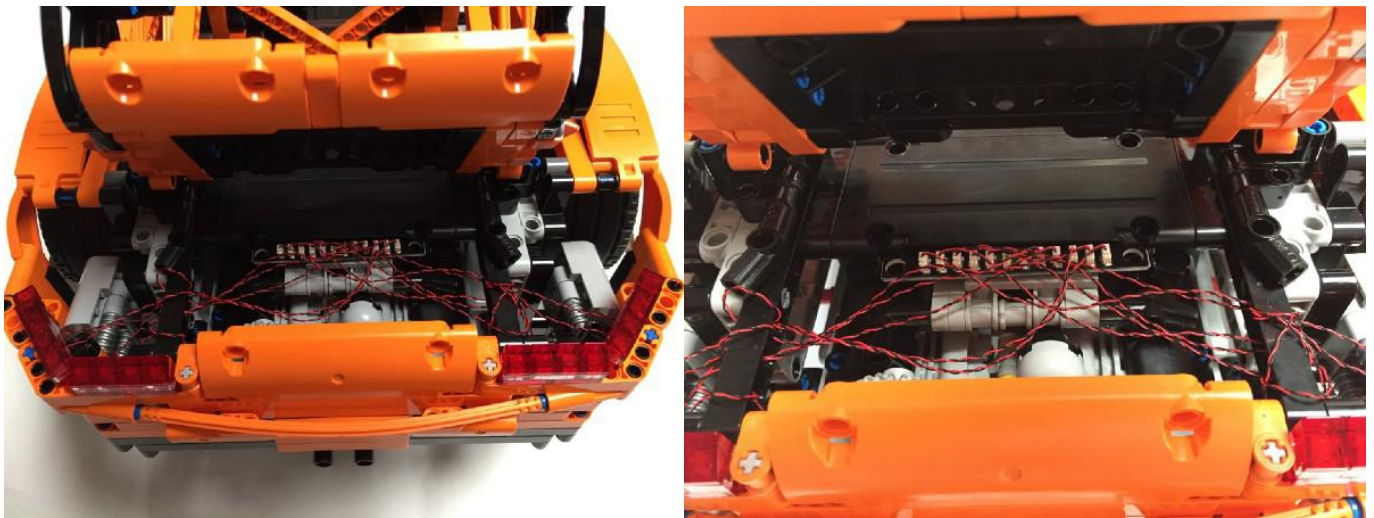
Plug the wires into available ports on the **12 Port Expansion Board**.



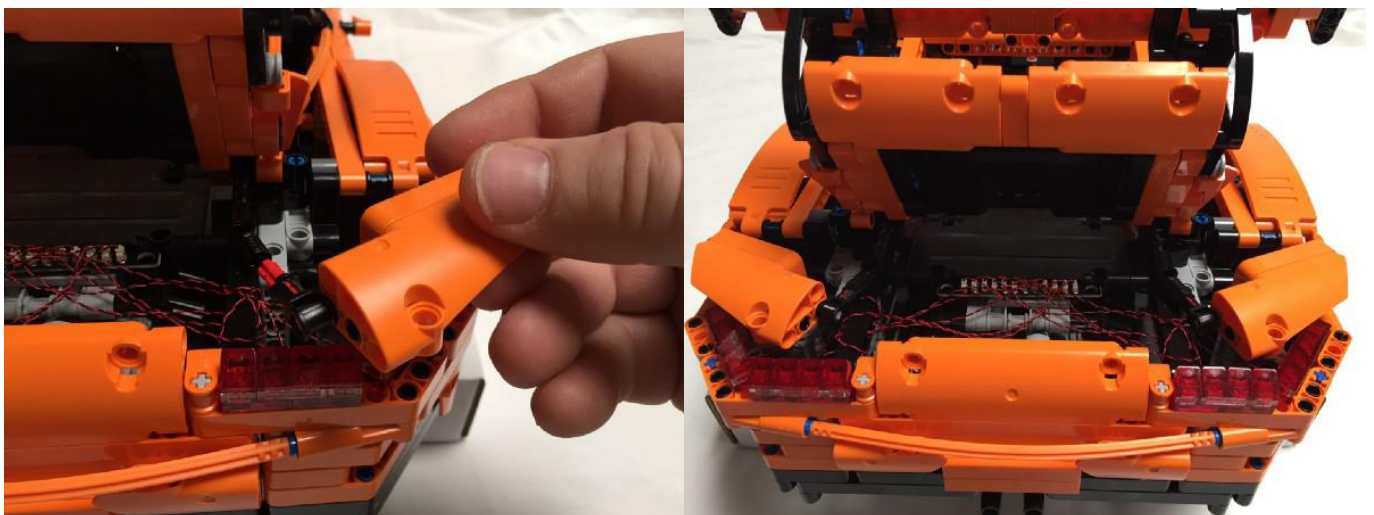


Repeat the process for all remaining wires. When you have finished this side, there should be five wires plugged into the **12 Port Expansion Board**.

Repeat the above process for the lights on the left hand side of the car.



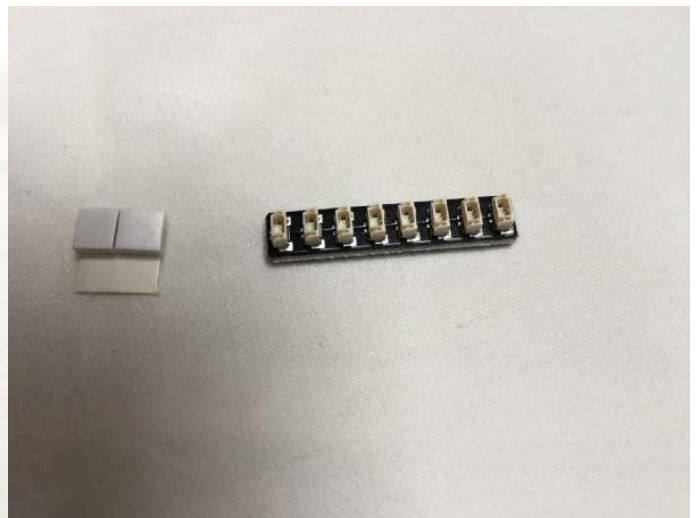
When both sides are wired up, your boot will look something like the pictures above.



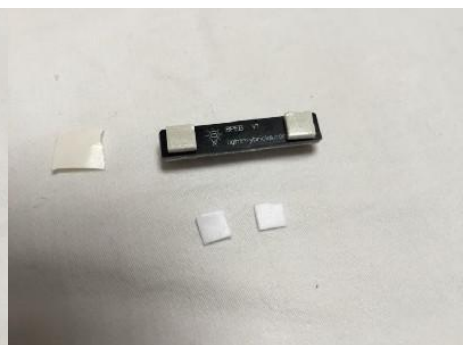
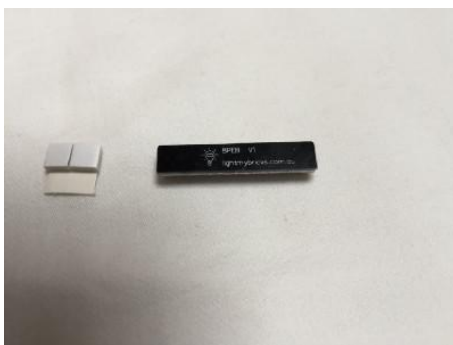
Replace the orange technic fairing pieces on both sides .



Close up the boot, take the car off blocks and turn it around so we can start on the front.

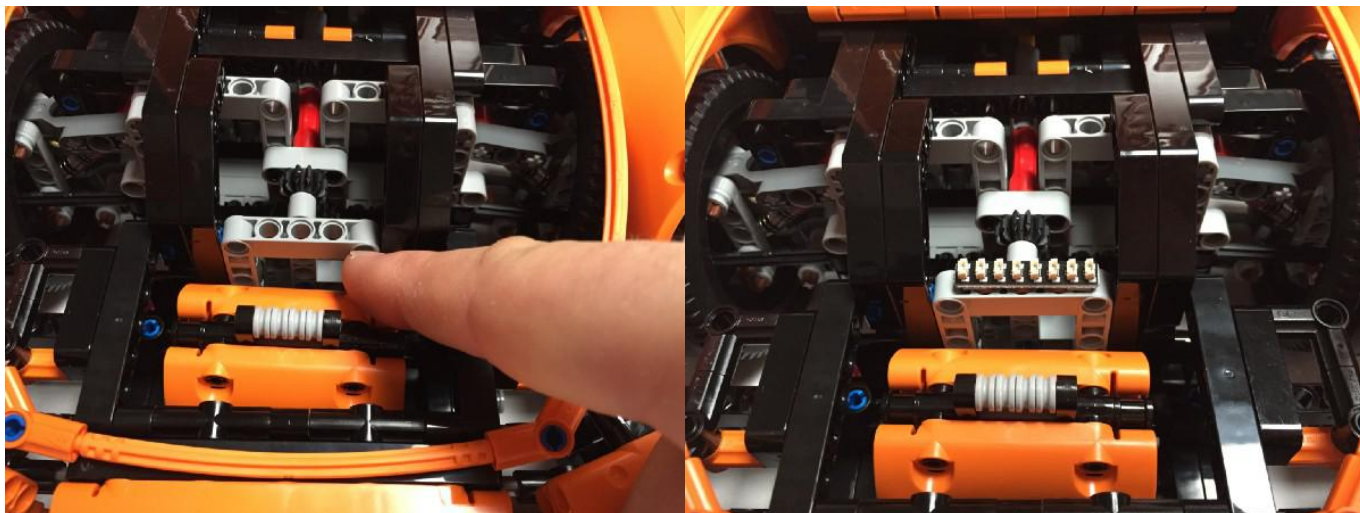


Open up the bonnet and grab the **8 Port Expansion Board** and a couple of **Adhesive Squares**.



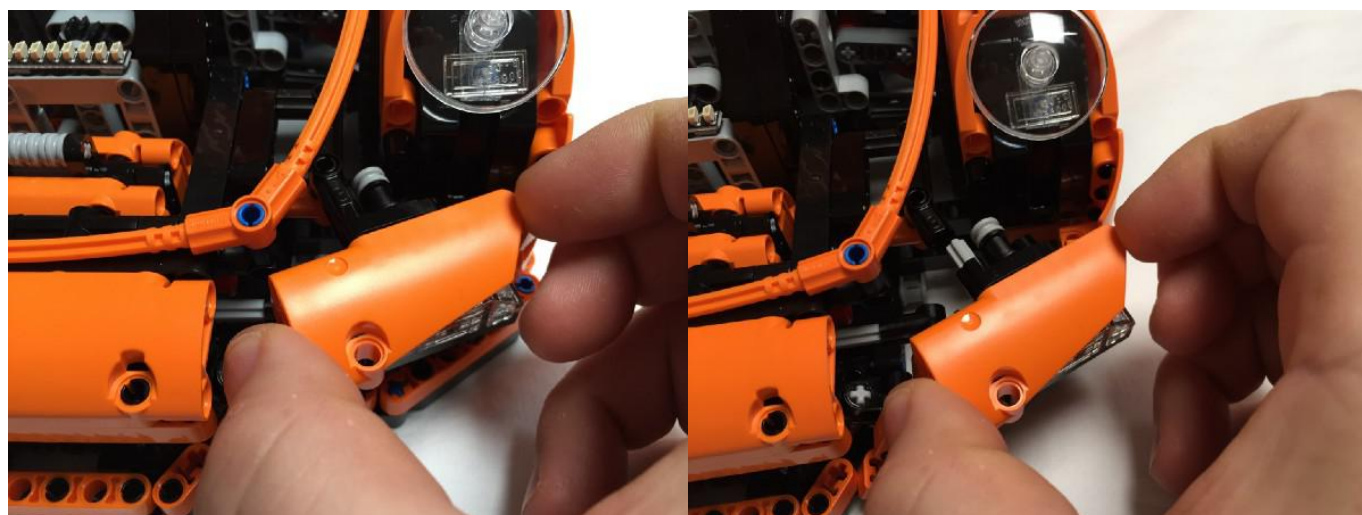
Turn the **8 Port Expansion Board** face down, peel the two **Adhesive Squares** and stick them on to the **8 Port Expansion Board**.

Remove the top bits of paper to expose the other sticky side of the **Adhesive Squares**.

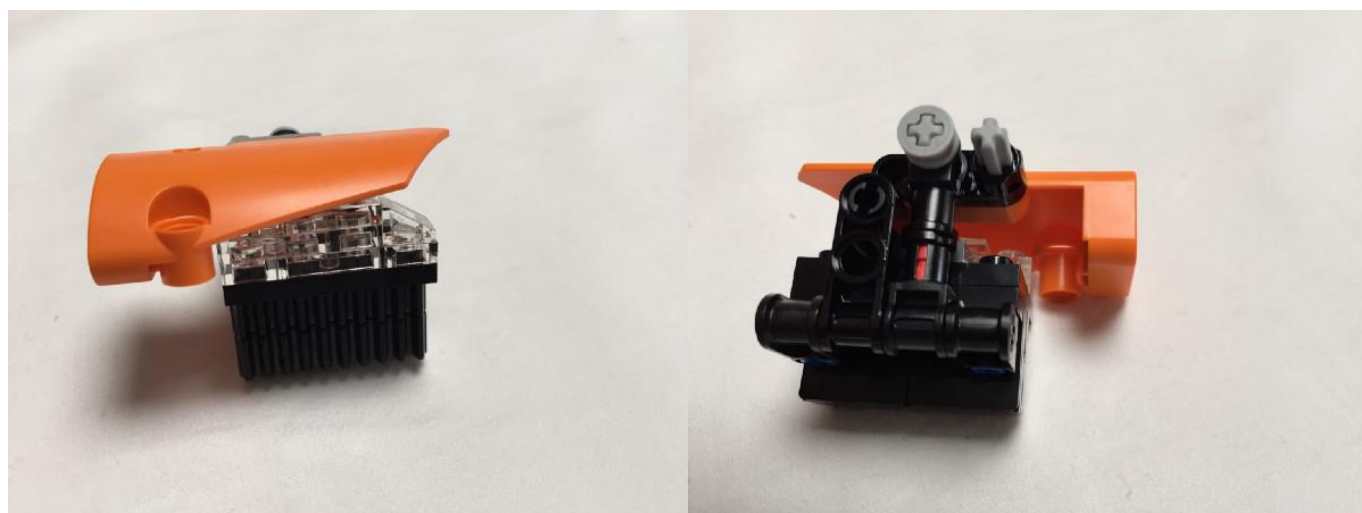


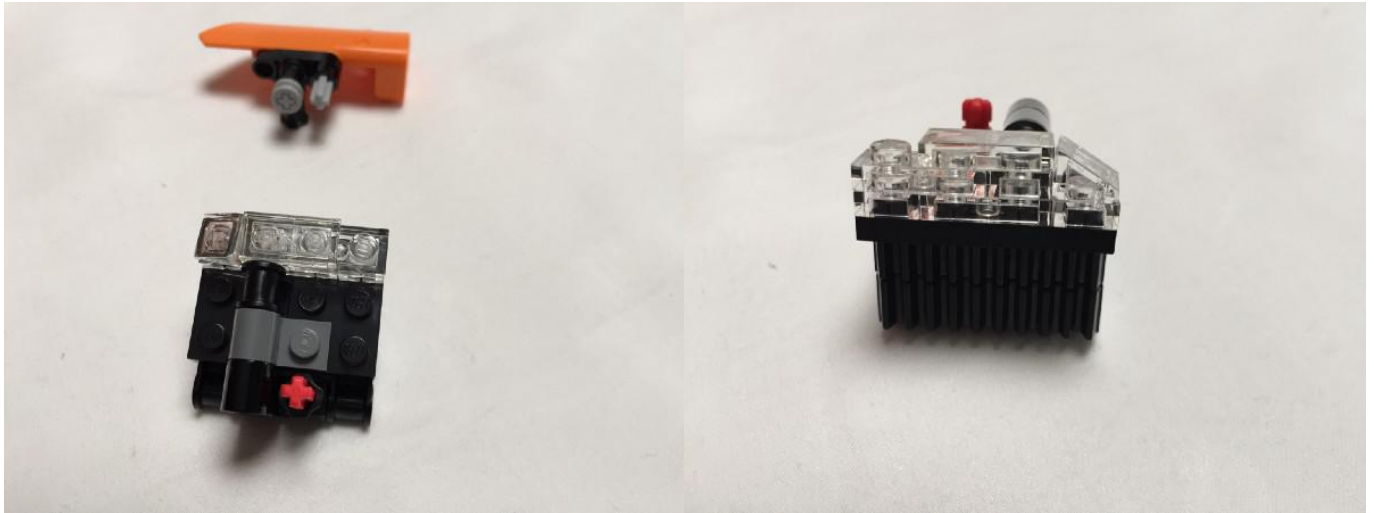
Mount the **8 Port Expansion Board** on top of the rectangle technic piece as shown in the picture above.

I will go through the steps for installing LEDs on the right hand side of the car. When finished, repeat the same steps for the left hand side of the car.

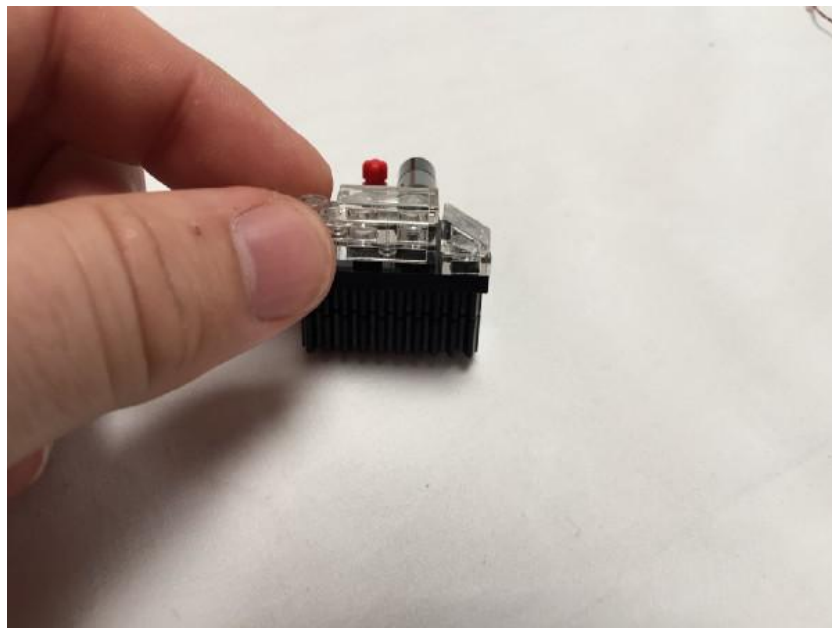
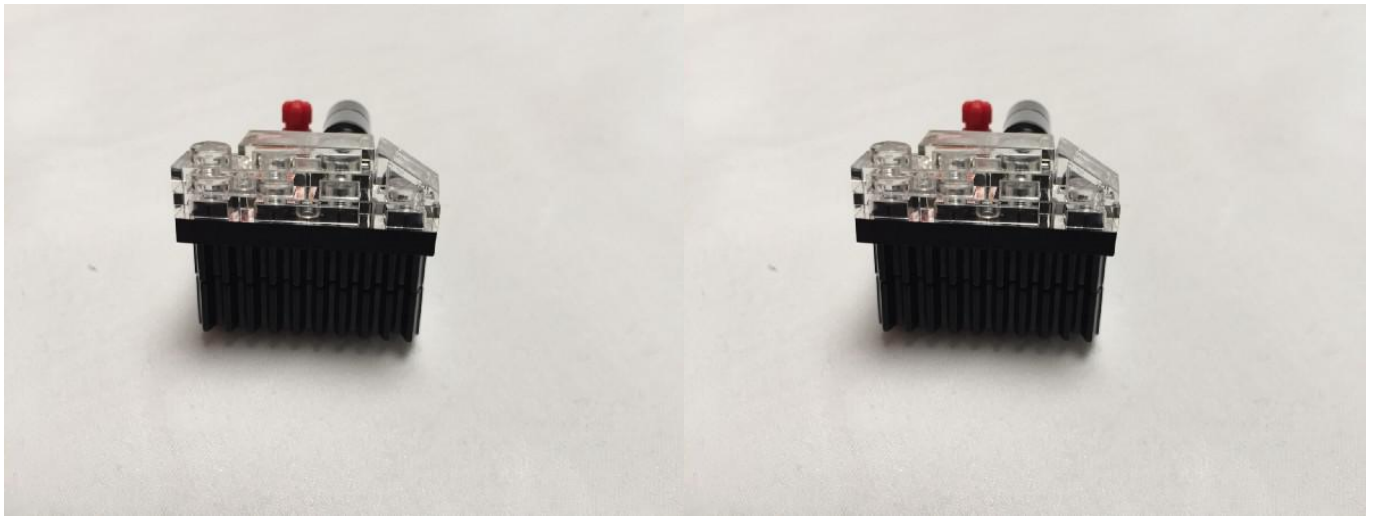


Pinch the orange technic fairing piece as seen on the picture above and remove it by pulling it towards you. Other pieces attached to this piece, including transparent plates and tiles, will come out with the technic fairing piece.

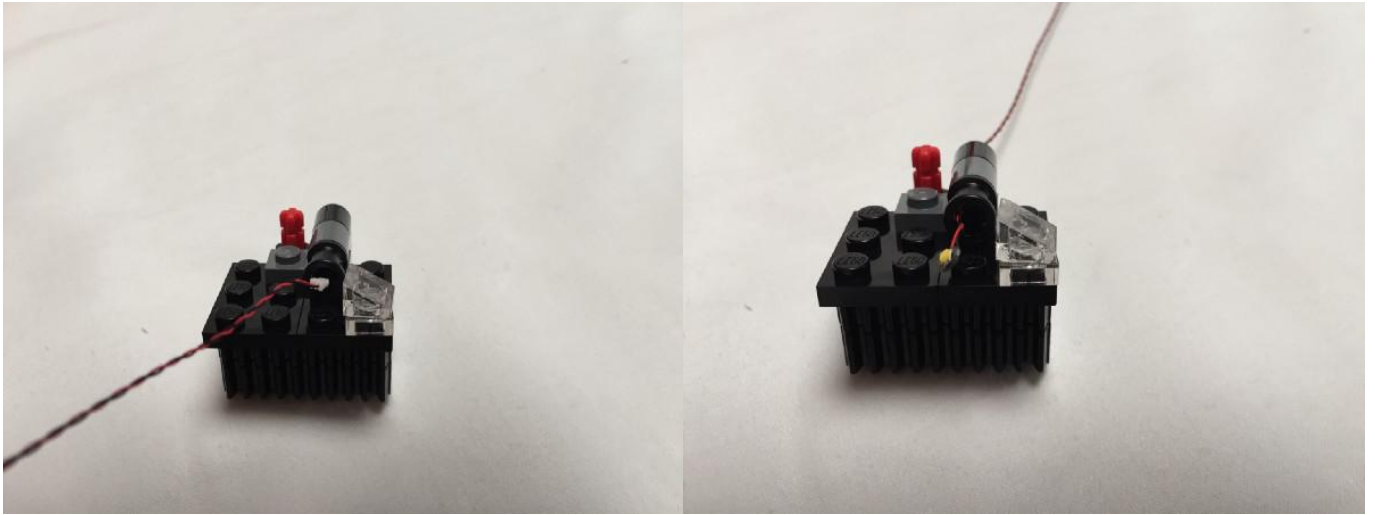




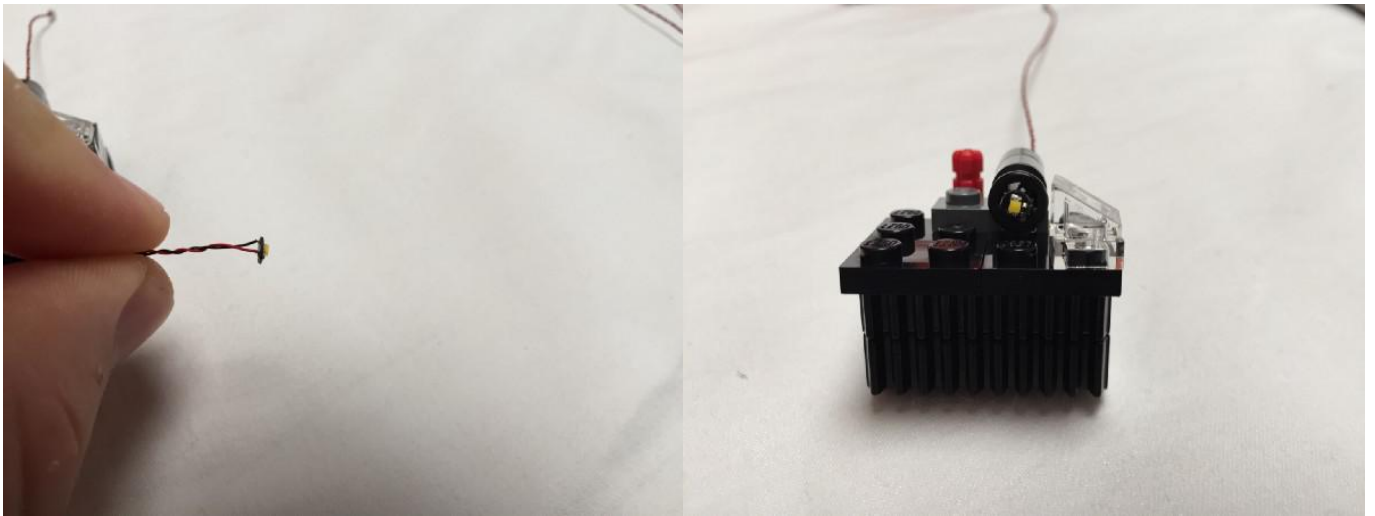
Detach the orange technic fairing piece from the other pieces.



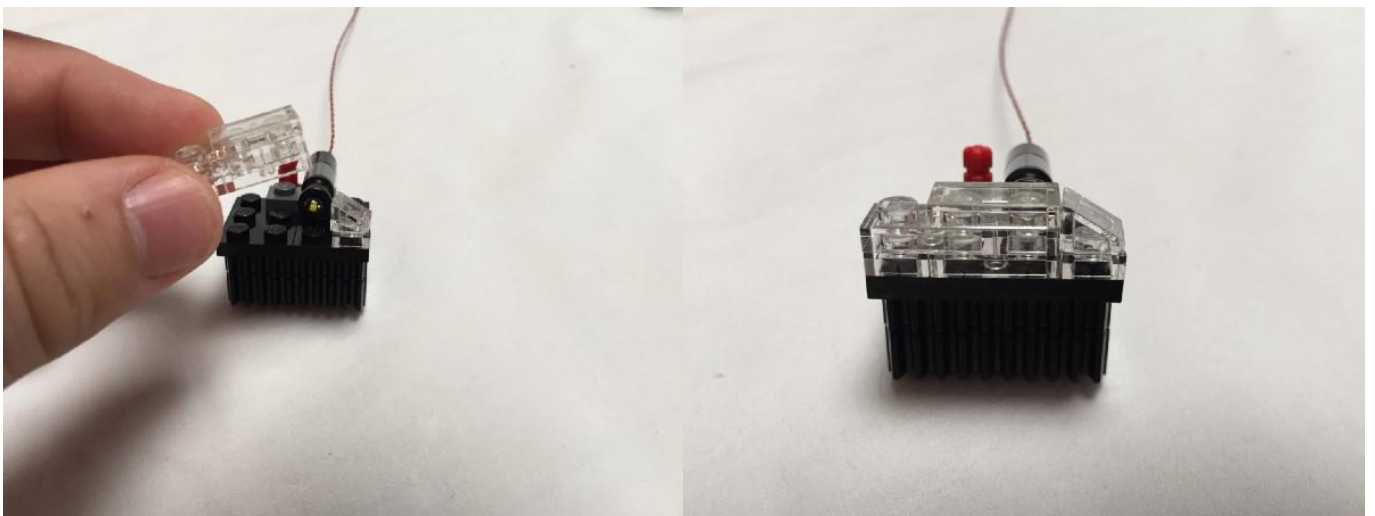
Hold on to the transparent plates and tiles and remove them from the black plate they are attached to. The transparent slope piece and plate it is attached to will probably stay in place, which is ok.



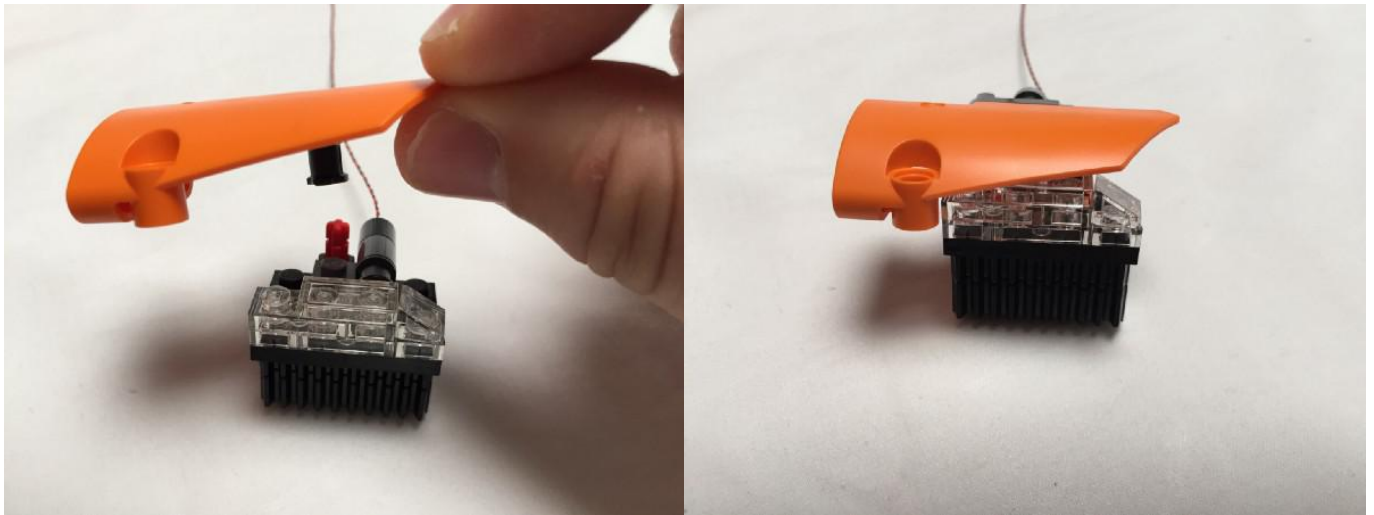
Grab a **White 15cm Dot Light** and feed it through the black technic pin with stop bush.



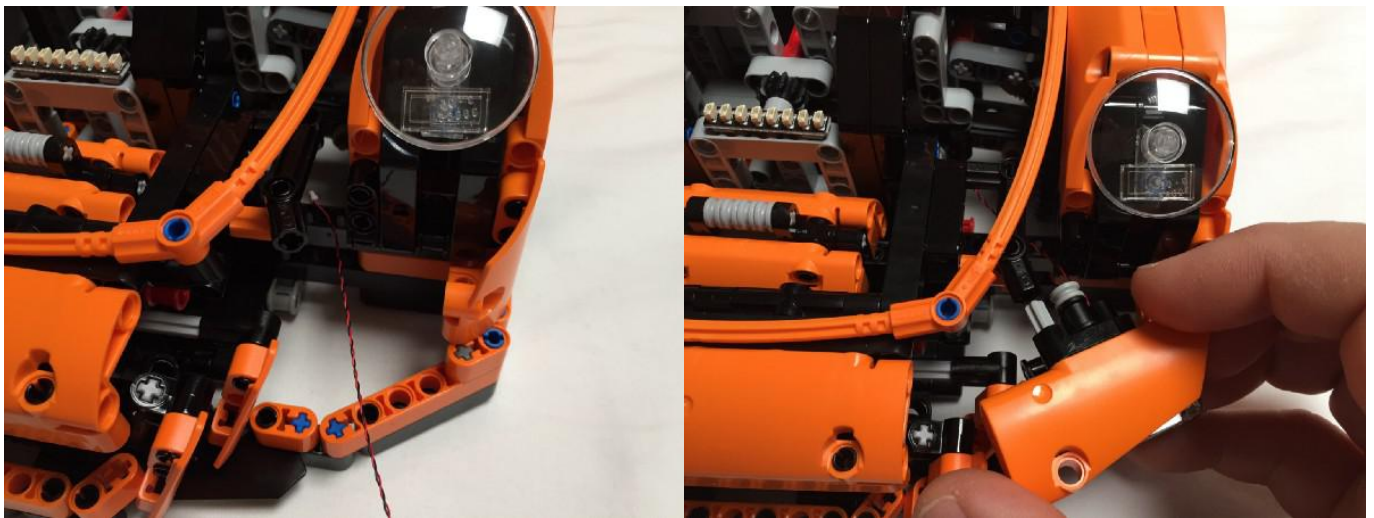
Gently bend the end of the **Cool White 15cm Dot Light** so that it will sit flat inside the black technic pin with stop bush.



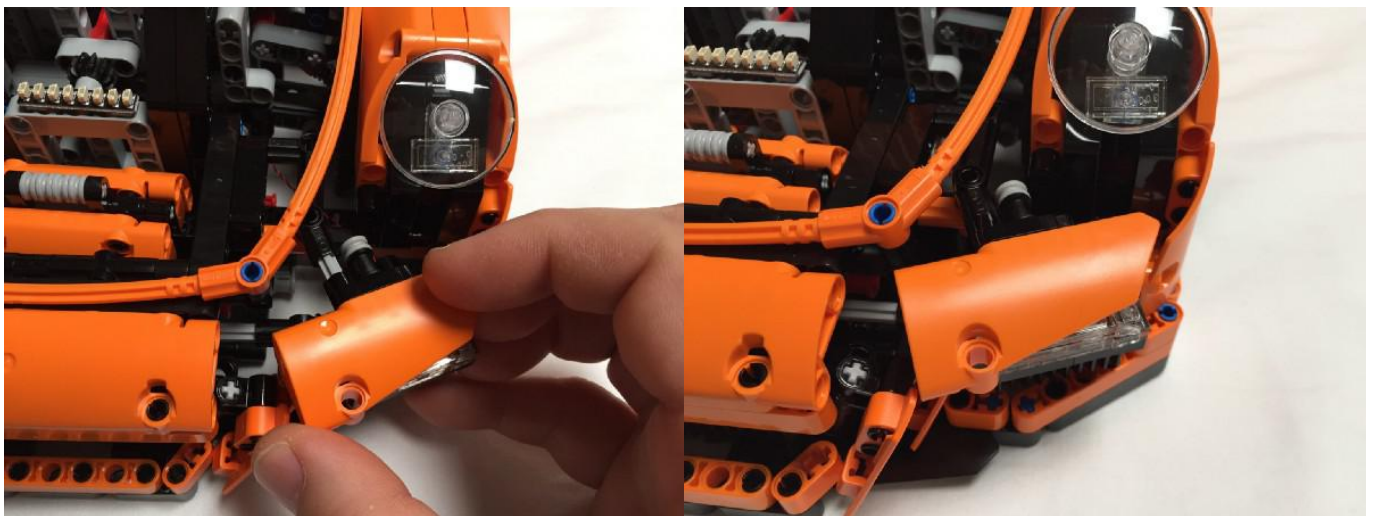
Reattach the transparent plates and tile.



Reattach the orange technic fairing piece.



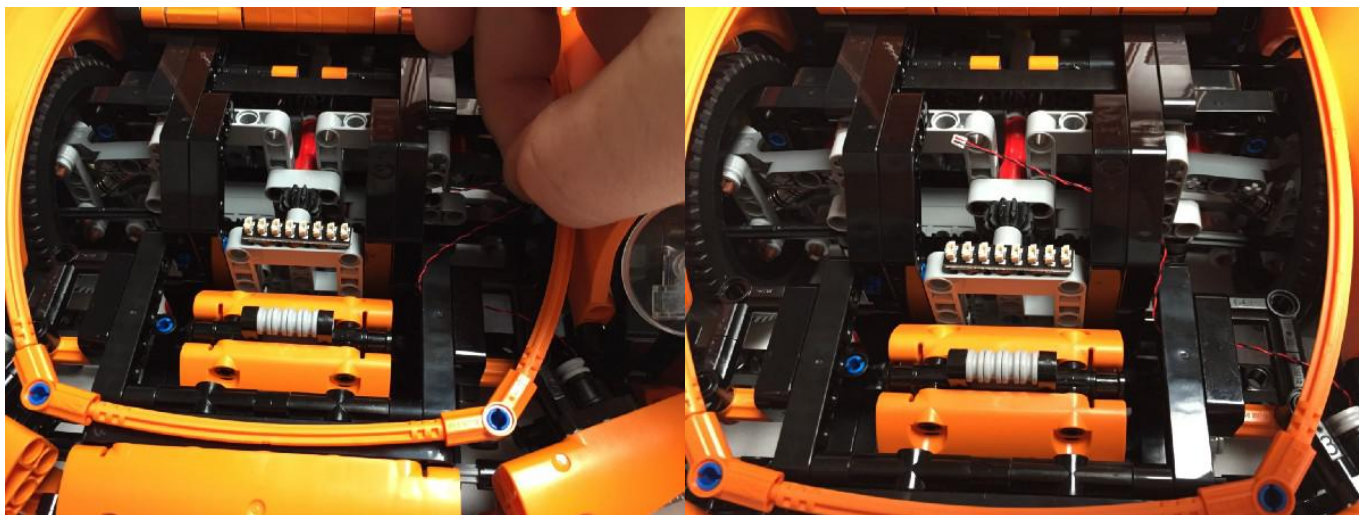
Run the plug end of the cable into the car first as you prepare to replace the orange technic fairing piece and attached pieces.



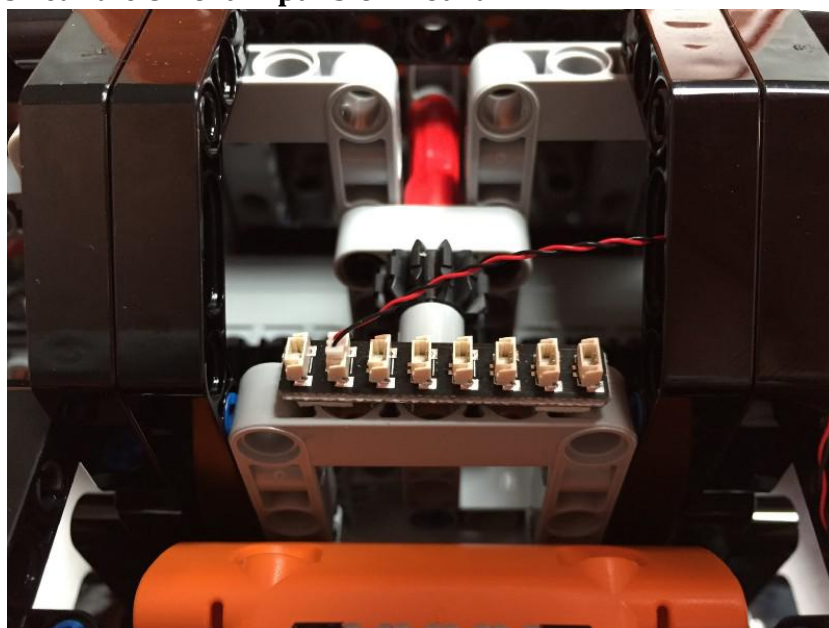
Reattach the orange technic fairing piece and attached pieces.



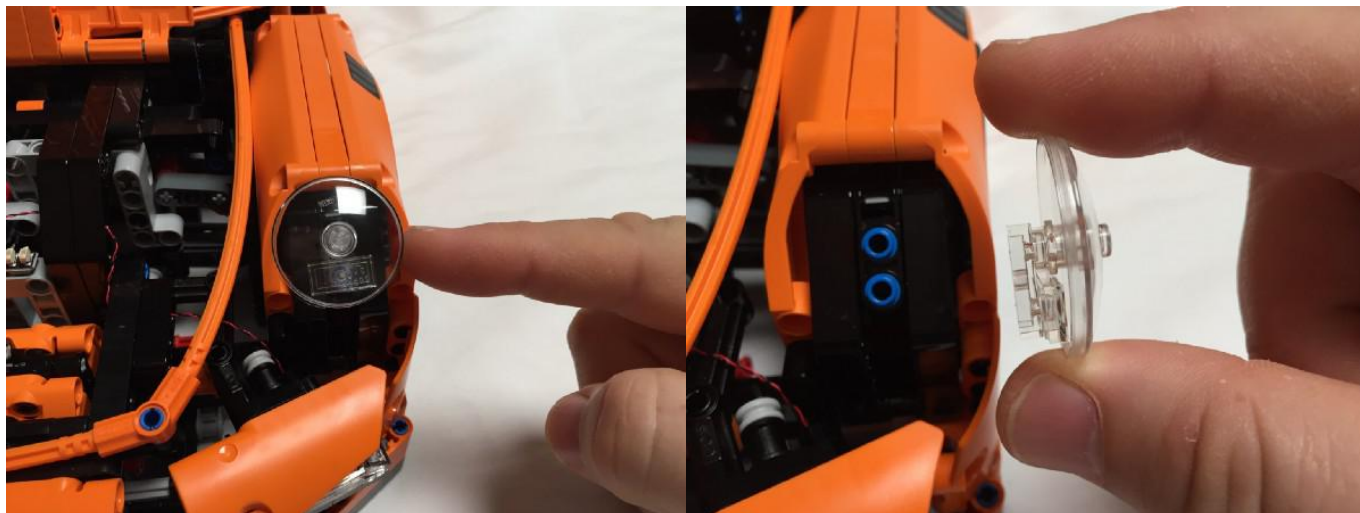
Grab the plug end of the **Cool White 15cm Dot Light** and feed it through available holes in the side of the black technic lift arms as seen in the picture above.



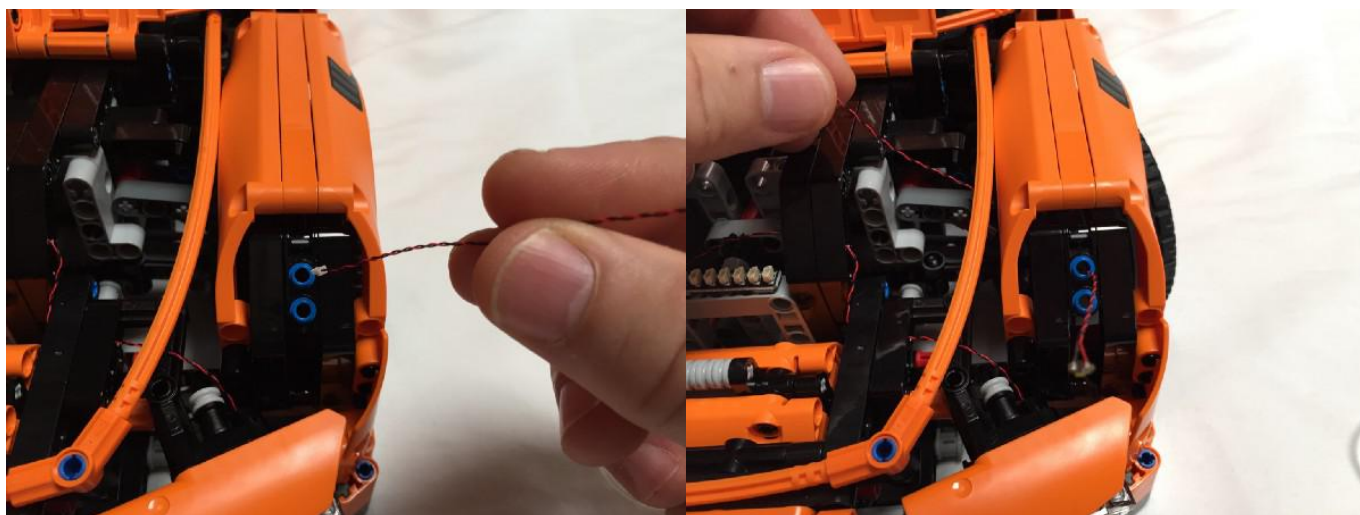
Now run the plug end of the **Cool White 15cm Dot Light** up and through the double size holes on the black technic liftarms near the **8 Port Expansion Board**.



Plug the **Cool White 15cm Dot Light** into an available port on the **8 Port Expansion Board**.



Remove the transparent headlight piece. The other transparent pieces under it should come off as well, but if they don't, remove them also.

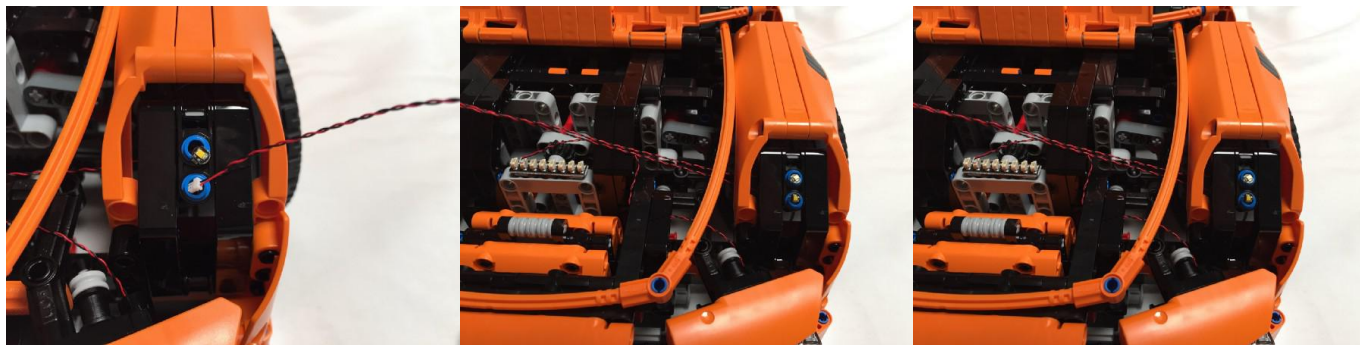


There are two blue technic 1/2 pins now visible.

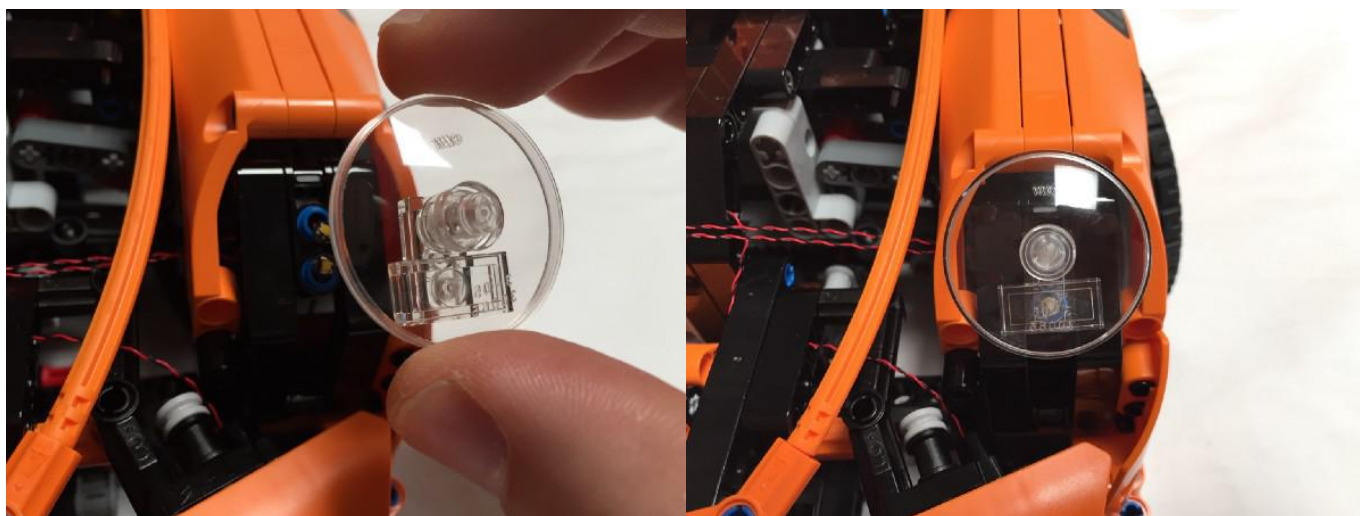
Grab a **White 15cm Dot Light** and feed the plug end through the top blue technic 1/2 pin piece.



Carefully bend the end of the LED element so that it will sit flat on top of the blue technic 1/2 pin when it is pulled through.



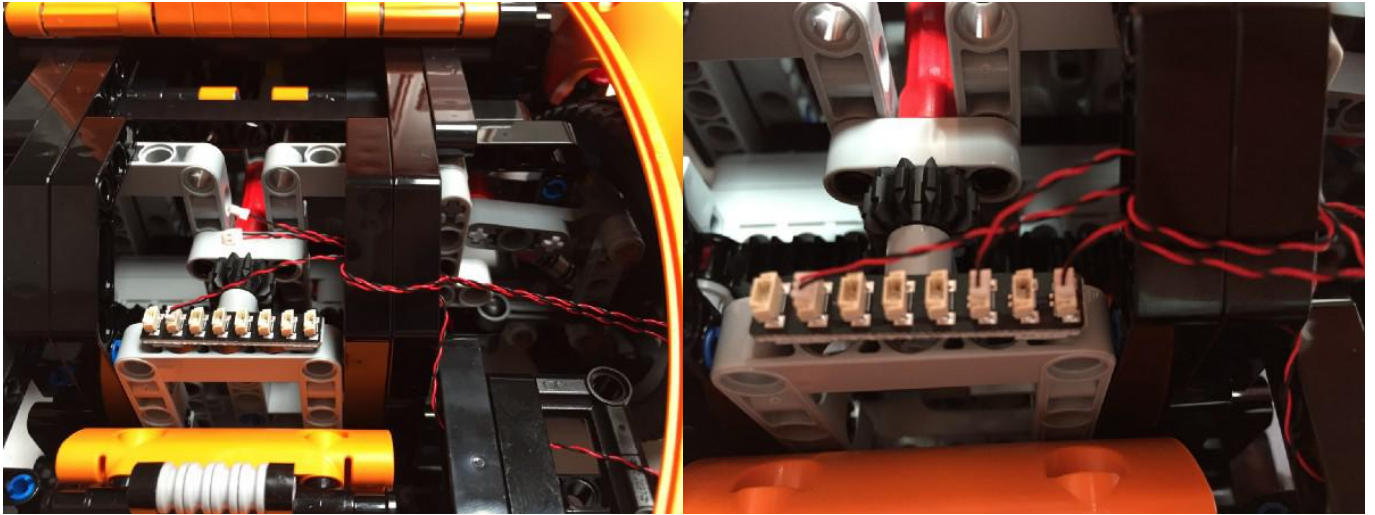
Grab another **Cool White 15cm Dot Light** and feed it through the bottom blue technic 1/2 pin. Carefully bend the end of the LED element so that it will sit flat on top of the blue technic 1/2 pin when it is pulled through.



Reattach the transparent headlight piece, including the pieces under it. Each **Cool White 15cm Dot Light** LED will sit comfortably inside the cavity of the Lego plate being fixed on top of it. No extra resistance should be encountered when refitting these pieces.



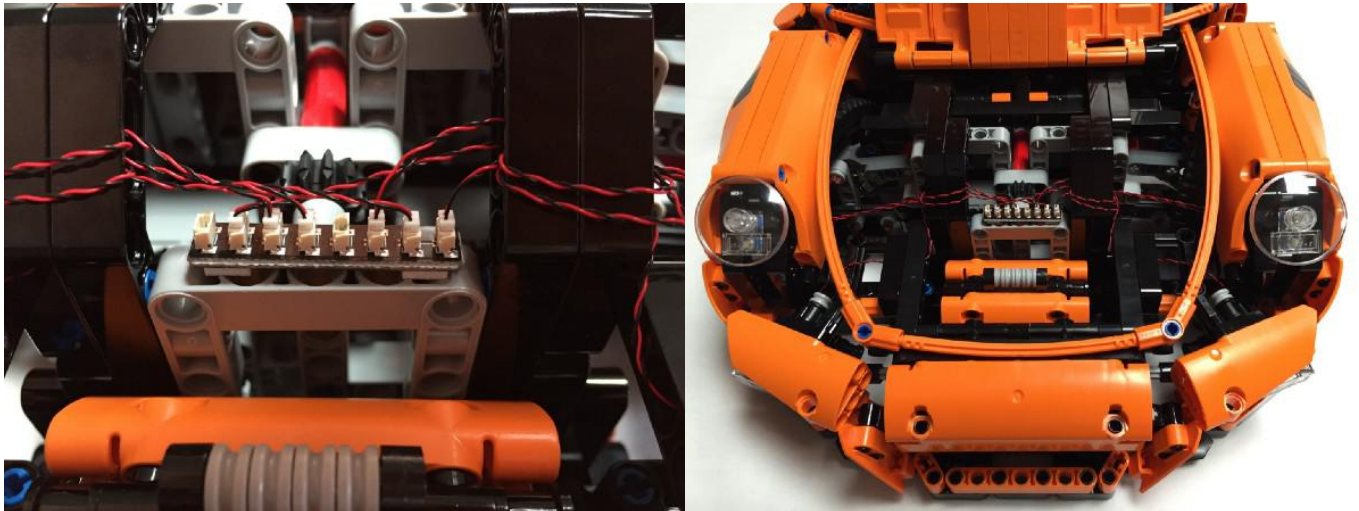
Run the plug ends of the **Cool White 15cm Dot Lights** we just installed up and through the double size holes on the black technic liftarms near the **8 Port Expansion Board**.



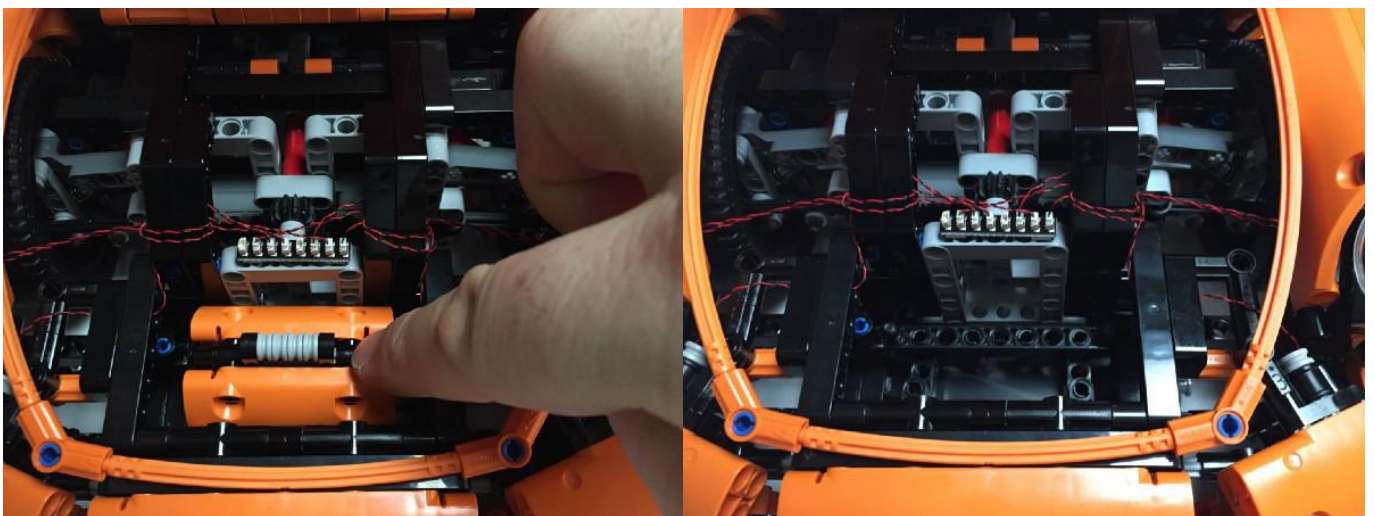
Wrap them around the black technic liftarms and feed them through the double size holes again (to consume the slack in the wires).

Plug them into available ports on the **8 Port Expansion Board**.

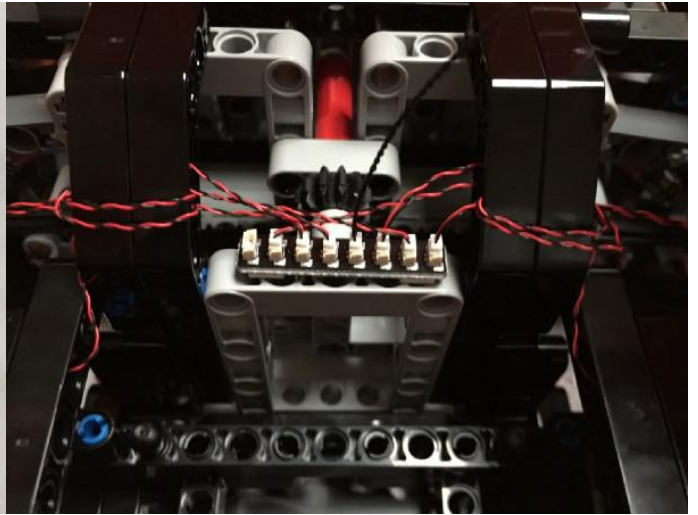
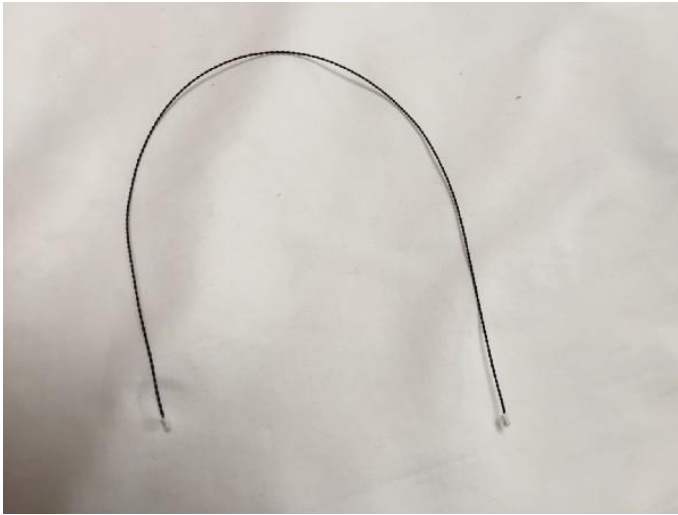
Repeat the above process for the lights on the left hand side of the car.



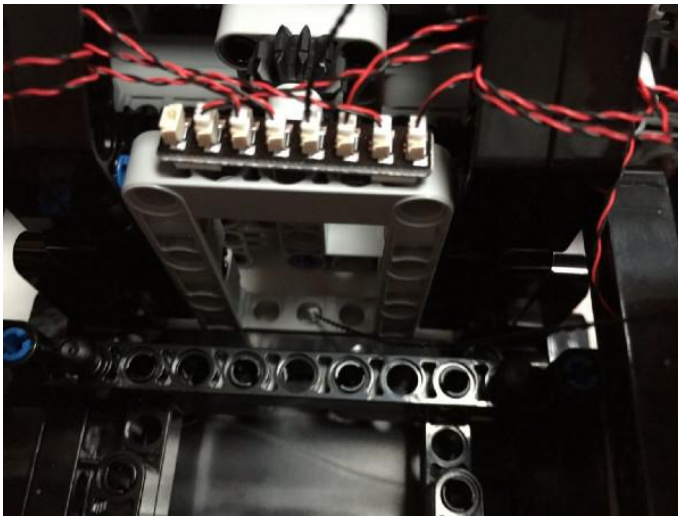
When both sides are wired up, your boot will look something like the pictures above.



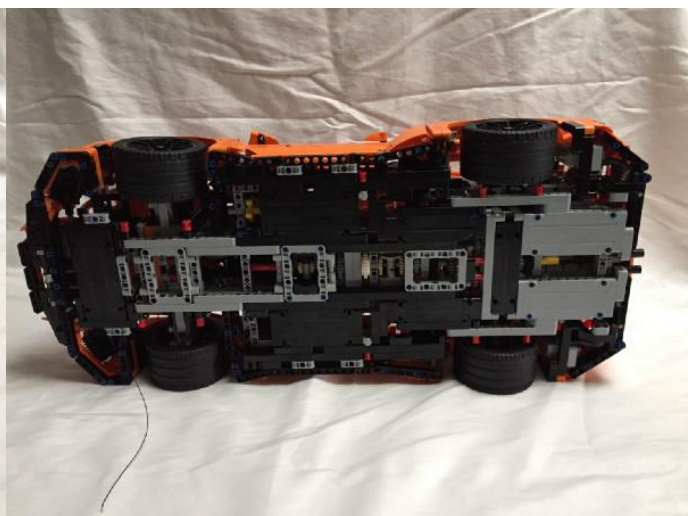
Remove the stylish Porsche suitcase.



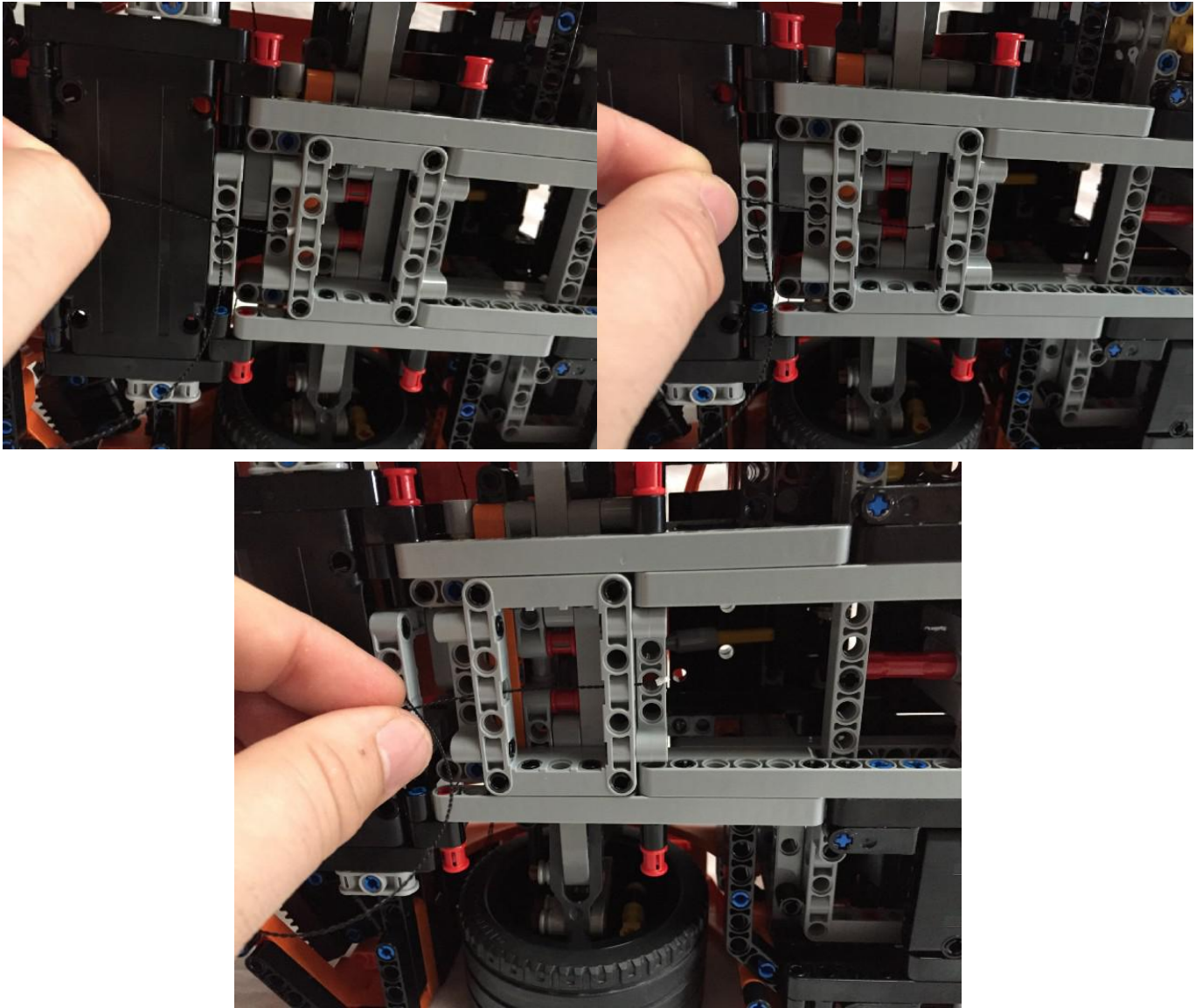
Grab the **30cm Extension Cable** and plug it in to an available port on the **8 Port Expansion Board**.



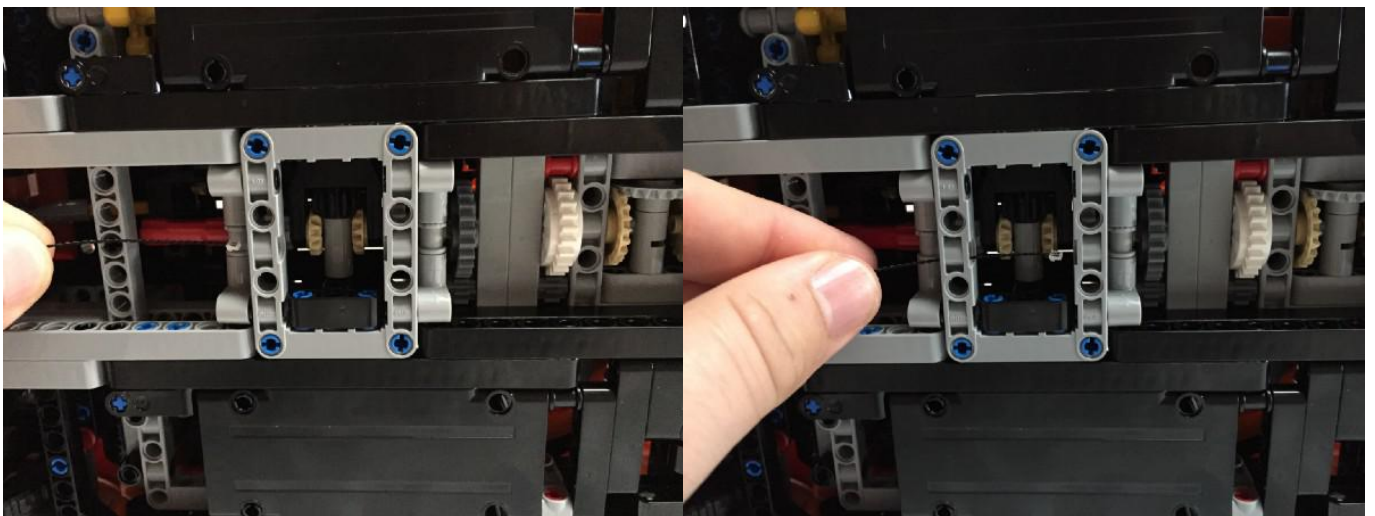
Feed the other end of the **30cm Extension Cable** through the centre hole in the bottom of the same rectangle technic piece that the **8 Port Expansion Board** is attached to. Look for the cable coming through to the bottom of the car. Gently pull it through.



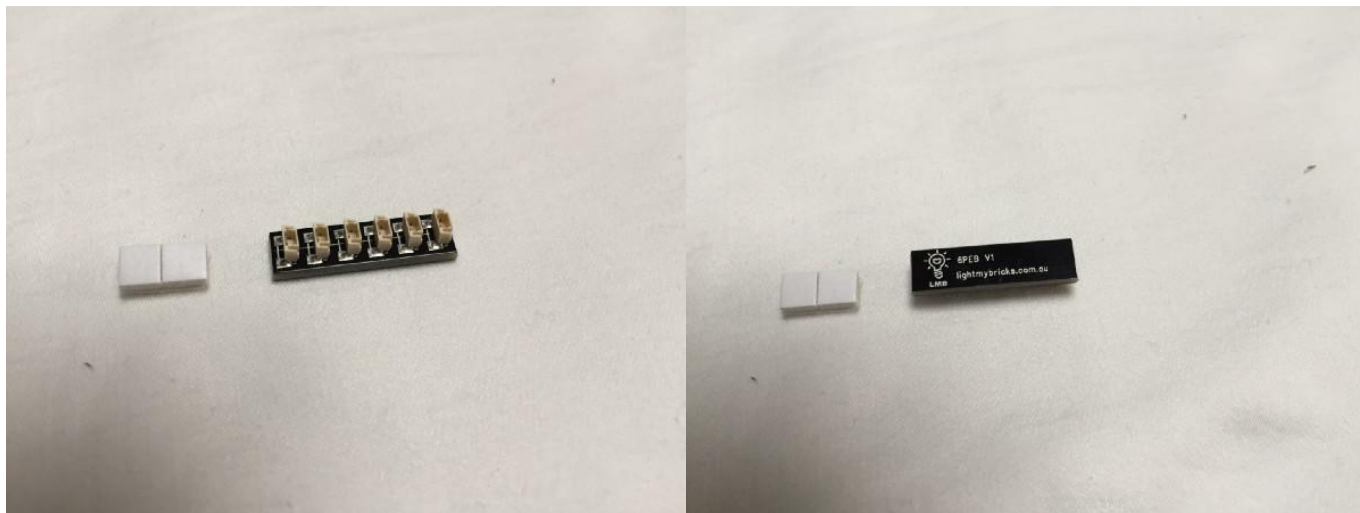
Lie the car on its side so you can access the bottom of it.



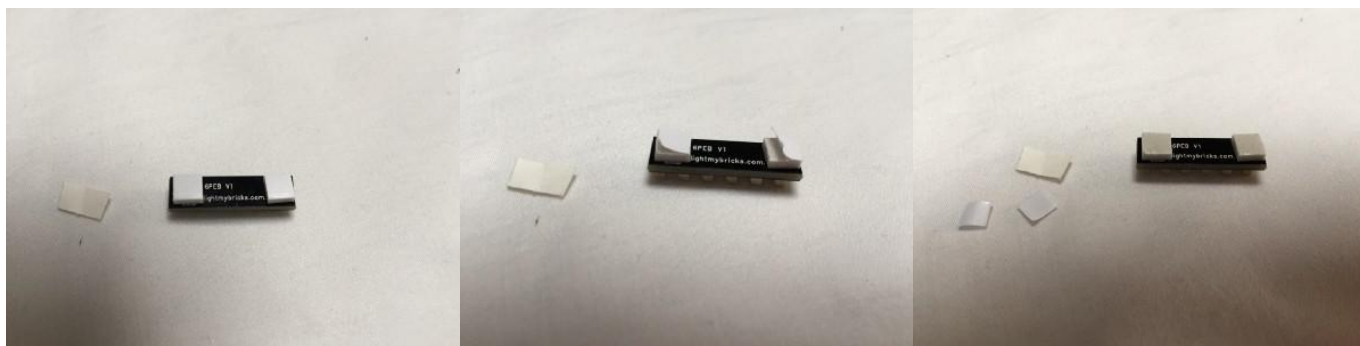
Feed the **30cm Extension Cable** through available centre holes in the rectangle technic piece near where the cable has come down.



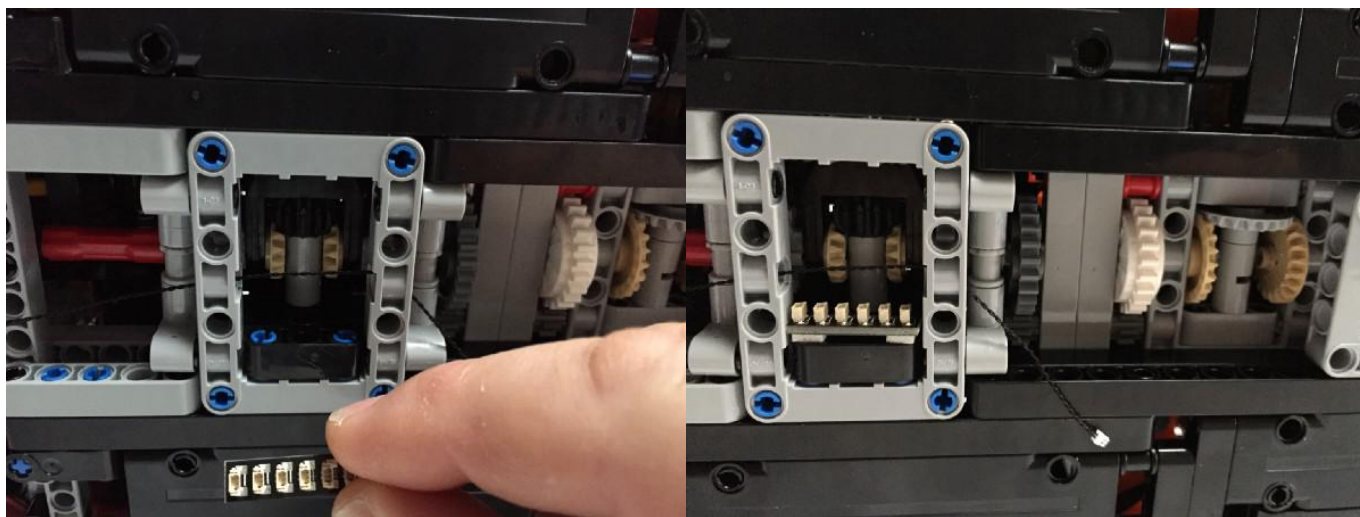
Pull the **30cm Extension Cable** through and feed it through the available centre holes in the rectangle technic piece that is roughly in the centre of the car.



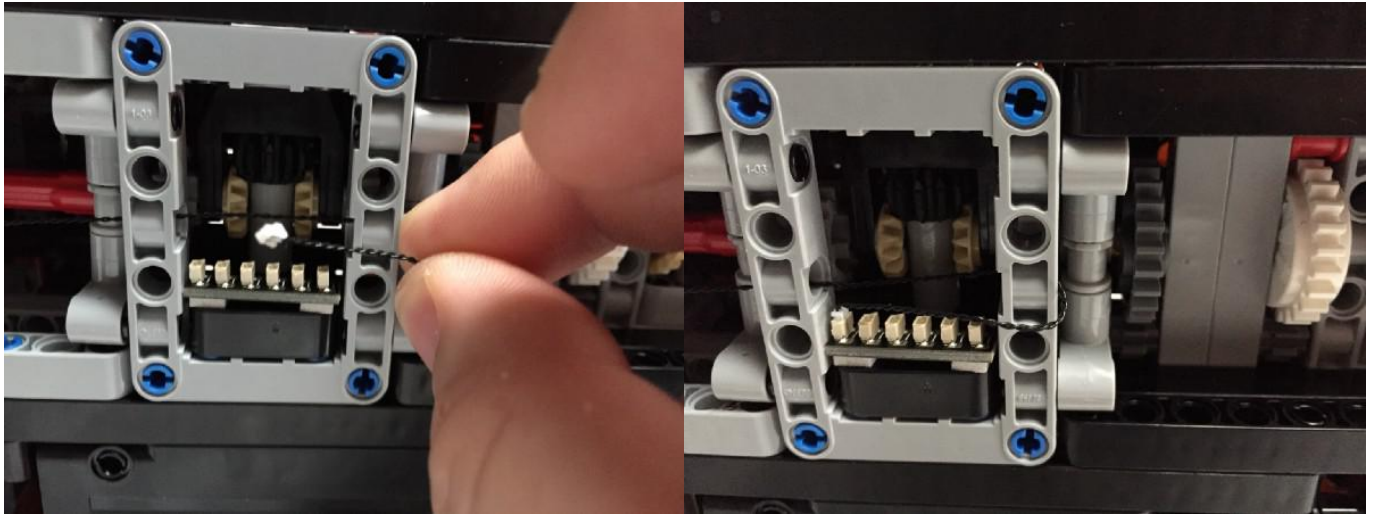
Grab the **6 Port Expansion Board** and a couple of **Adhesive Squares**.
Turn the **6 Port Expansion Board** face down.



Peel the **Adhesive Squares** off the base and stick them to the back of the **6 Port Expansion Board**.
Remove the top bits of paper to expose the other sticky side of the **Adhesive Squares**.



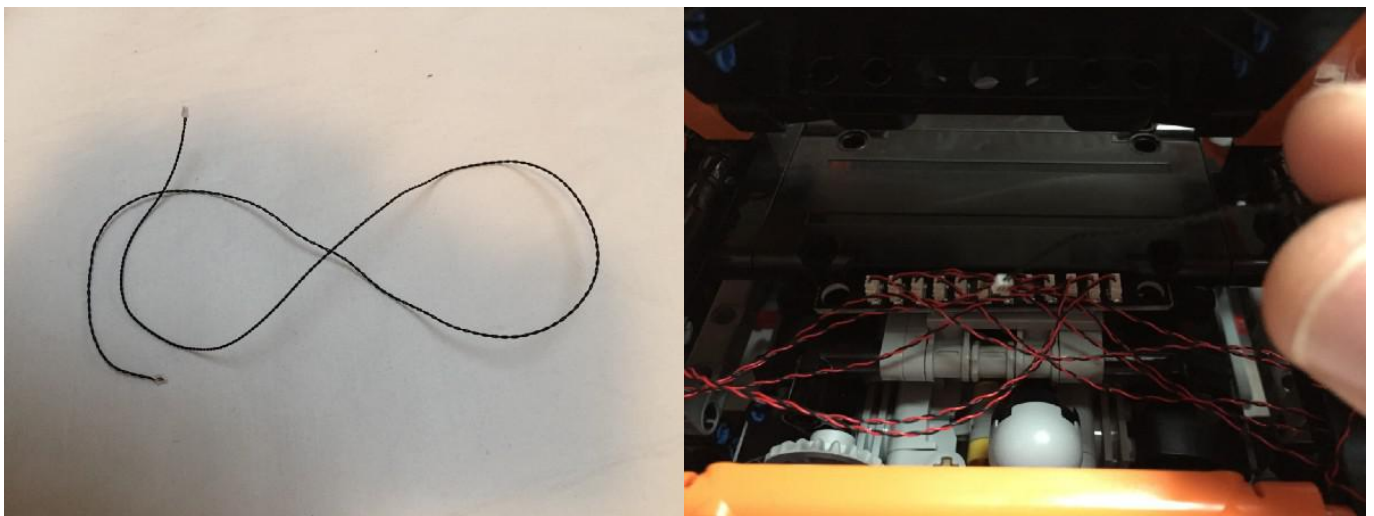
Stick the **6 Port Expansion Board** on to the side of the 1 x 3 black technic liftarm, which is inside the rectangle technic piece that is roughly in the centre of the car.



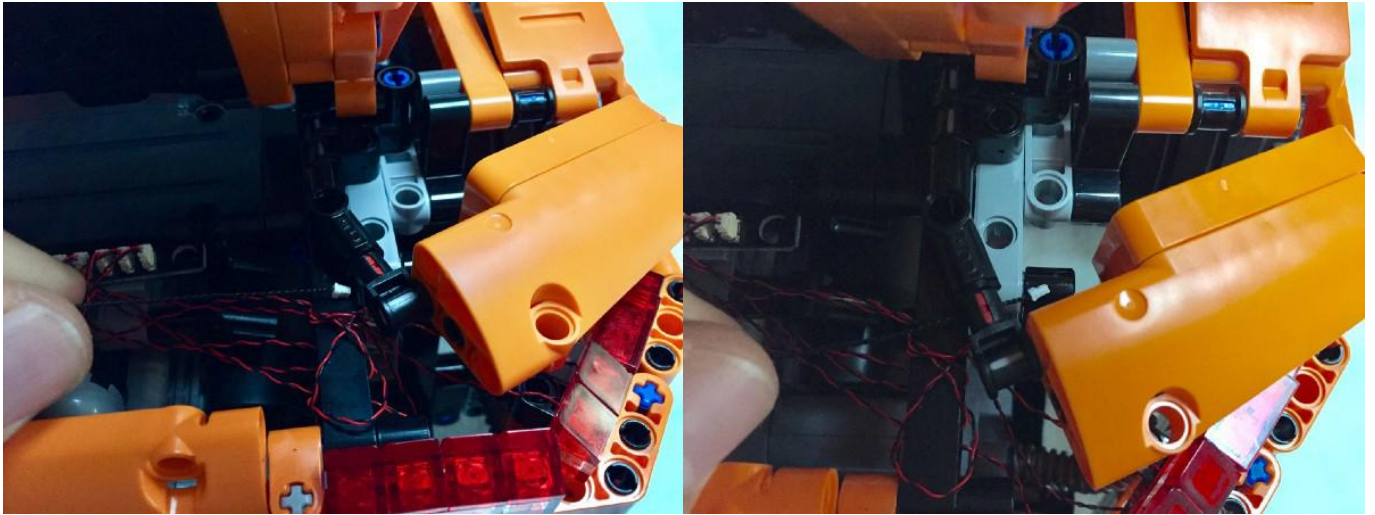
Grab the **30cm Extension Cable** and plug it into the best port on the **6 Port Expansion Board** that leaves the least amount of slack in the cable.



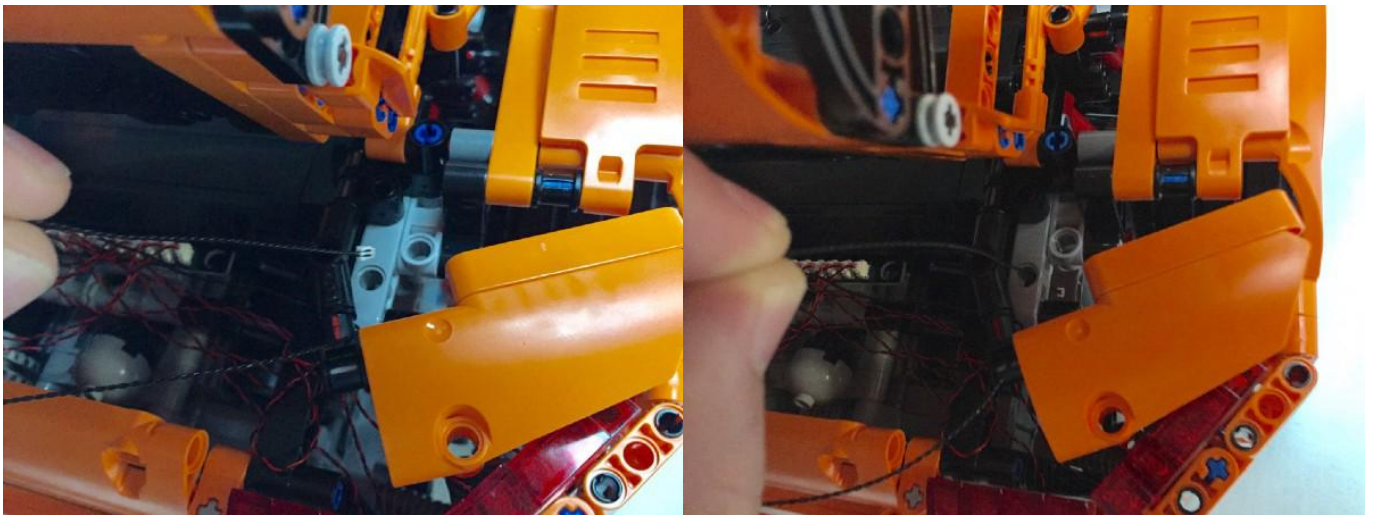
Sit the car upright again and move it around so you can access the boot.



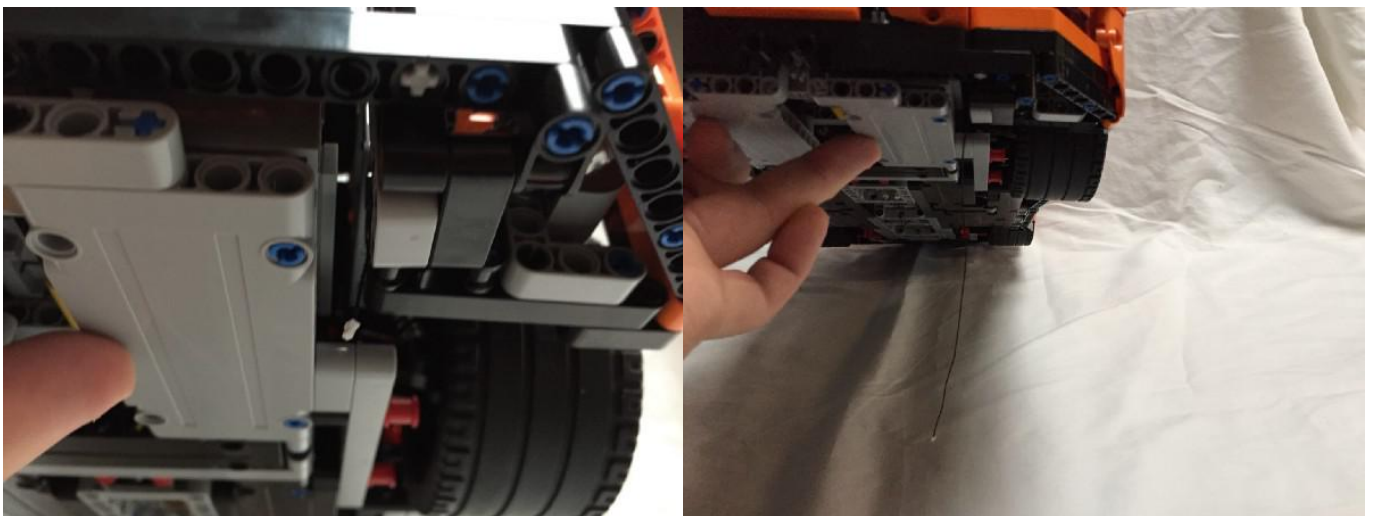
Open the boot, grab the **50cm Extension Cable** and plug it into an available port on the **12 Port Expansion Board**.



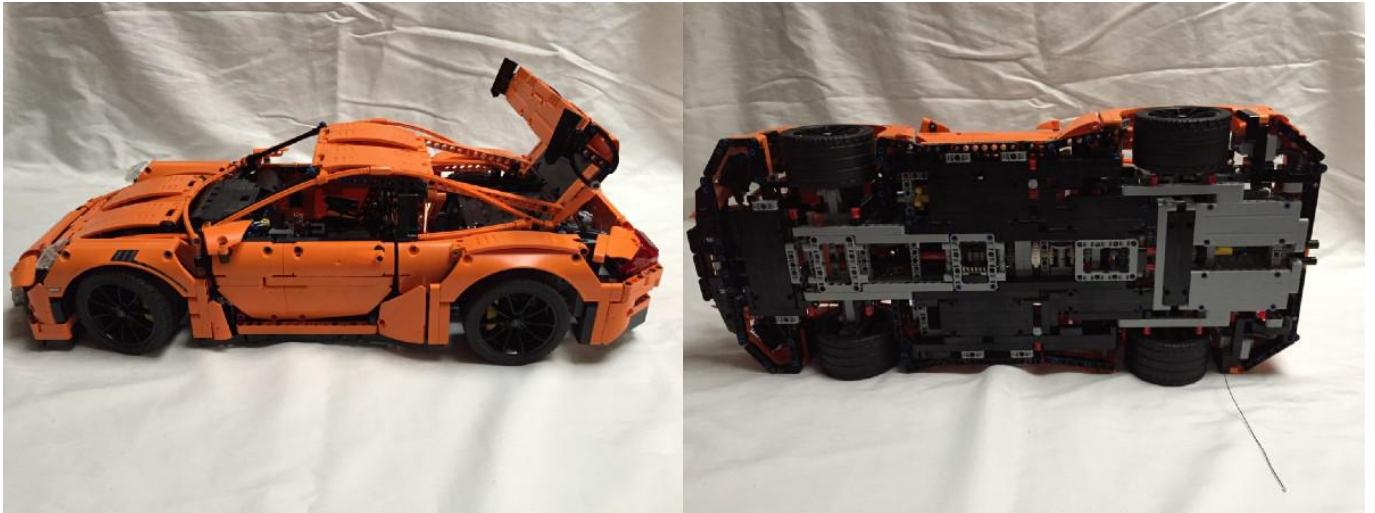
Feed the other end of the **50cm Extension Cable** underneath the black technic pieces that are joined with the red technic axle.



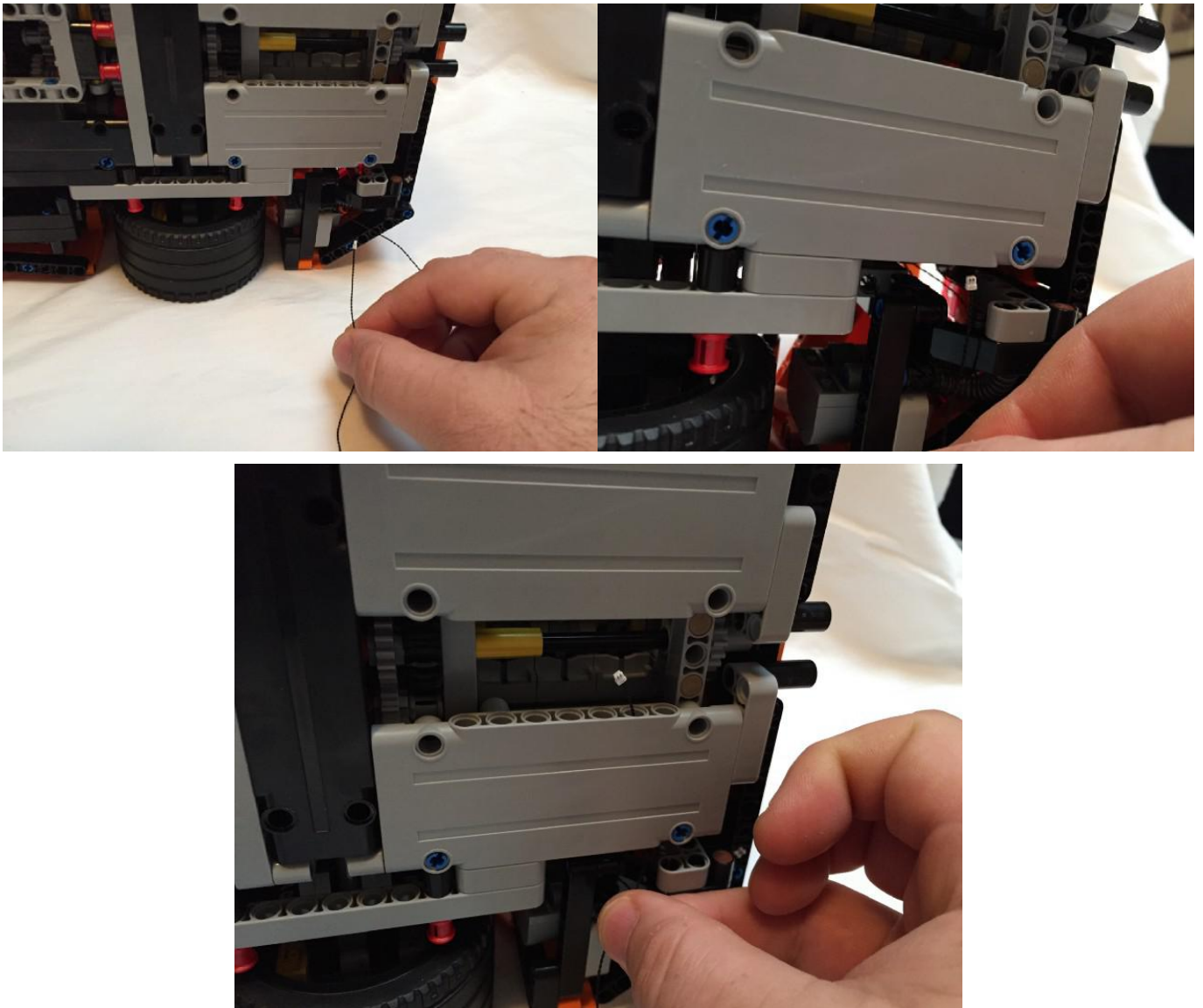
Pull the cable through and then feed it down through the hole in the side of the technic rectangle piece.



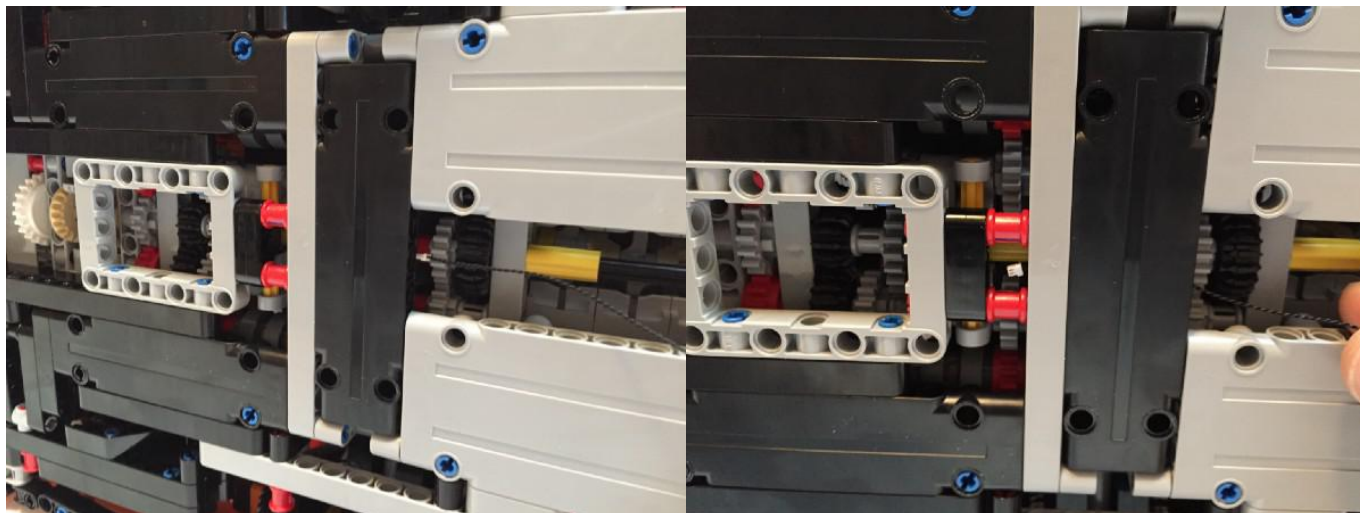
Keep feeding the cable through and as it comes out the bottom of the car, pull it through until you can feel a tiny bit of resistance from pulling.



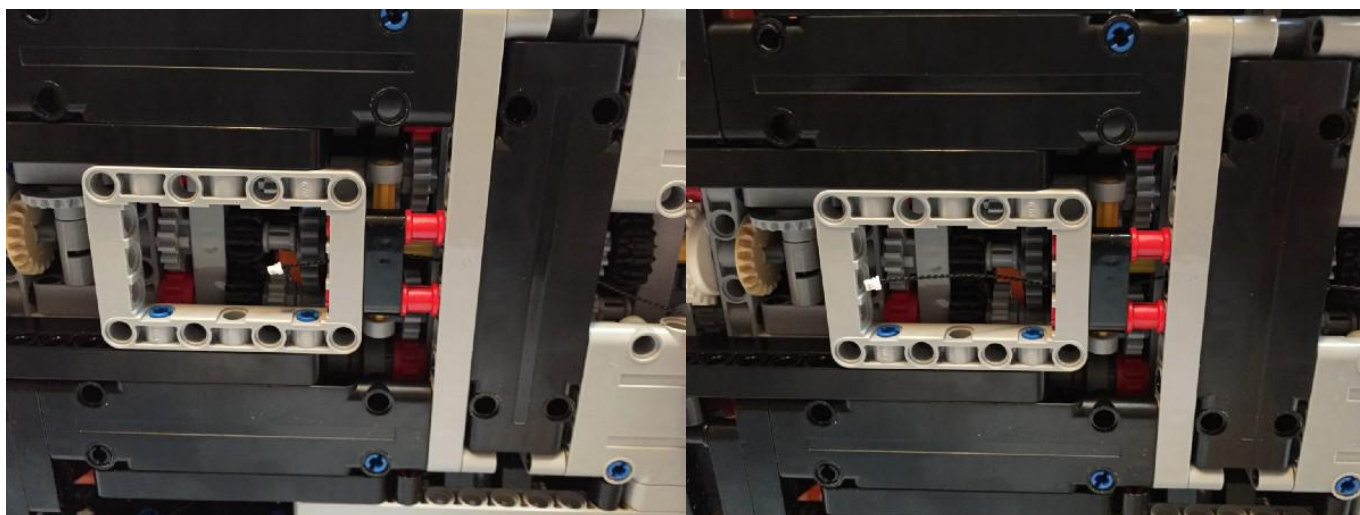
Close the boot and lie the car down so you can access underneath the car.



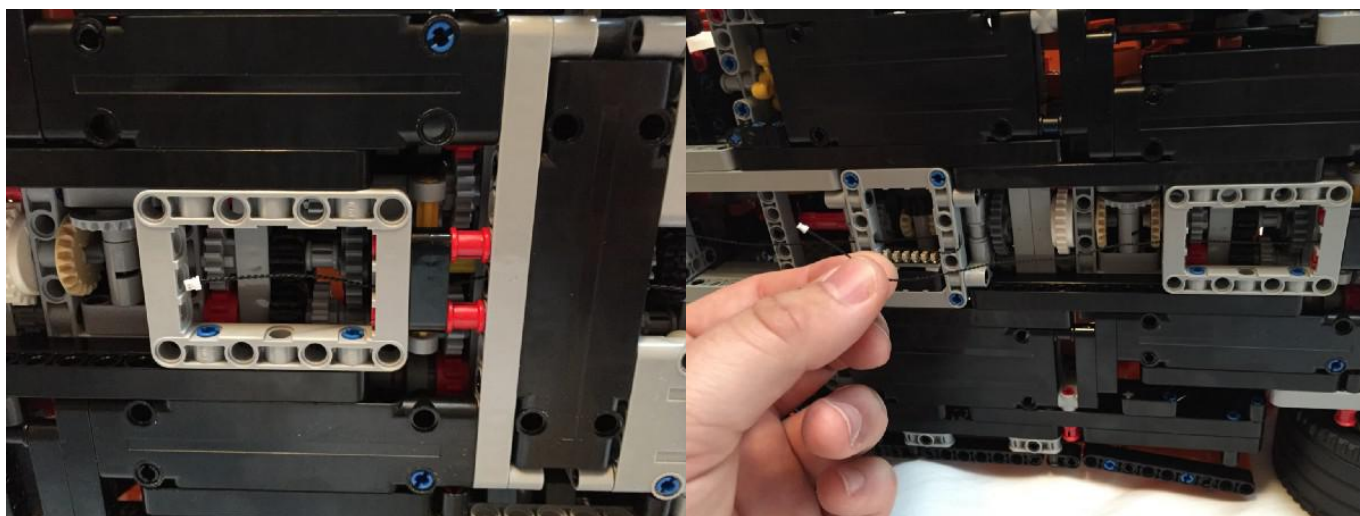
Grab the end of the **50cm Connecting Cable** and feed it through the holes in the side of the technic panel plate. Run the cable from the outside of the technic panel plate towards the centre of the car.



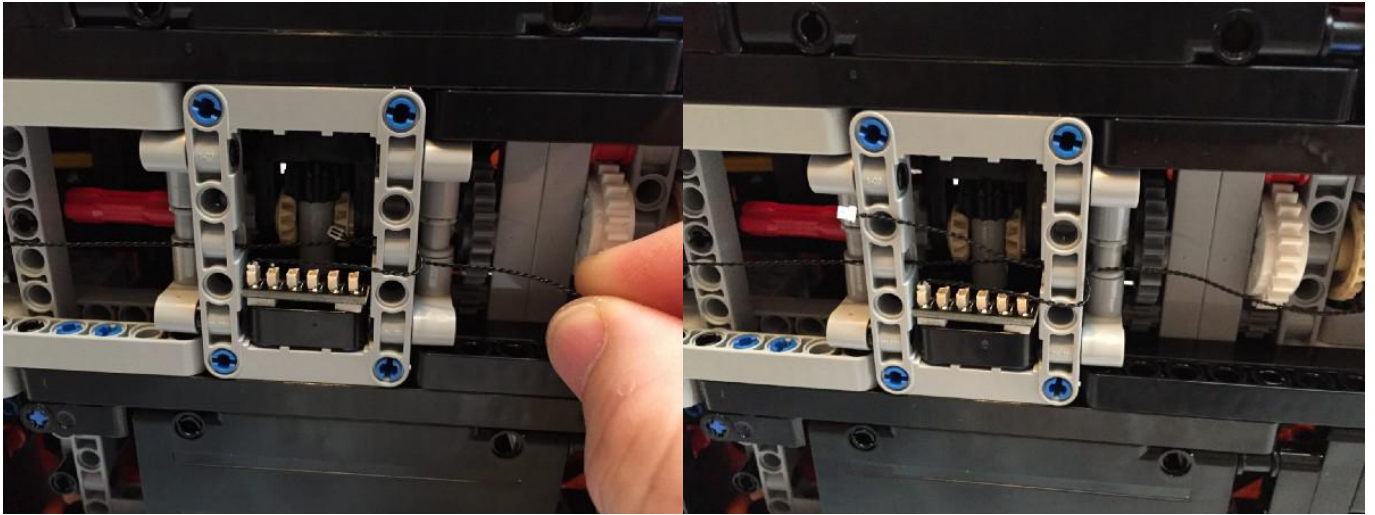
Now run the **50cm Connecting Cable** towards the front of the car.
Feed the cable through the side holes of the black technic panel plate.



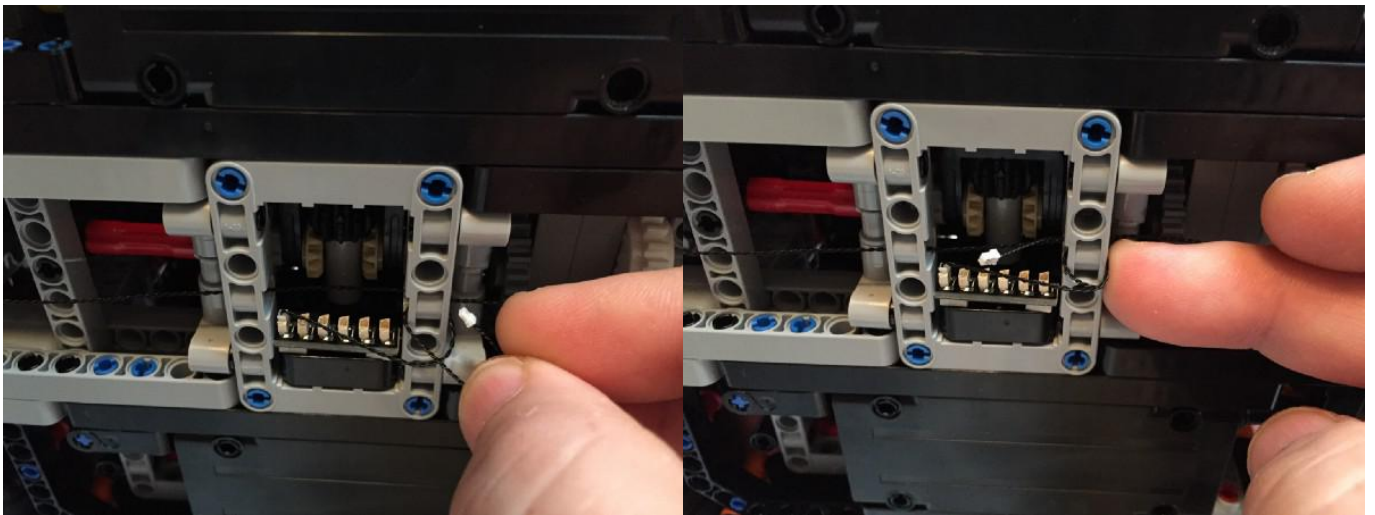
Continue to feed the **50cm Connecting Cable** through the 1 x 3 black technic liftarm and into the technic rectangle piece.



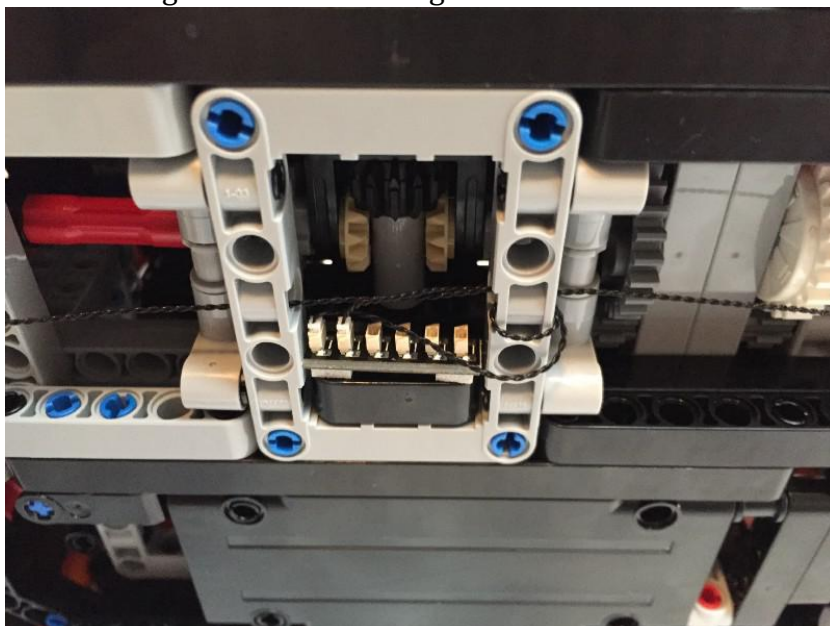
Pull the wire through and it should reach somewhere near the **6 Port Expansion Board**.



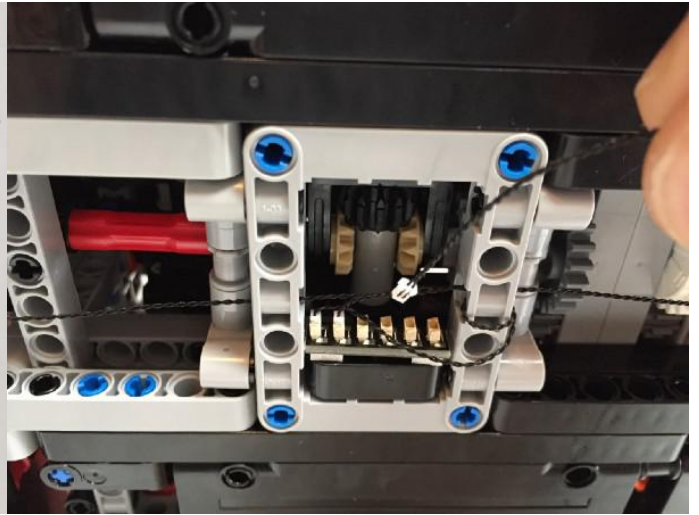
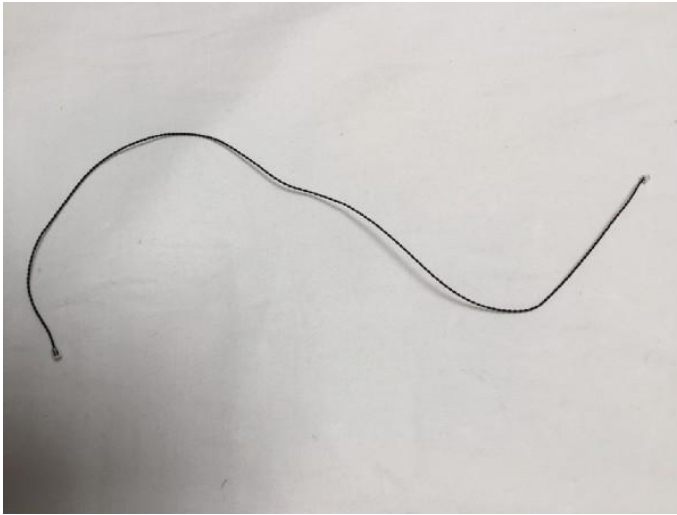
Feed the **50cm Connecting Cable** through the centre hole in the side of the technic rectangle piece that has the **6 Port Expansion Board** in it.



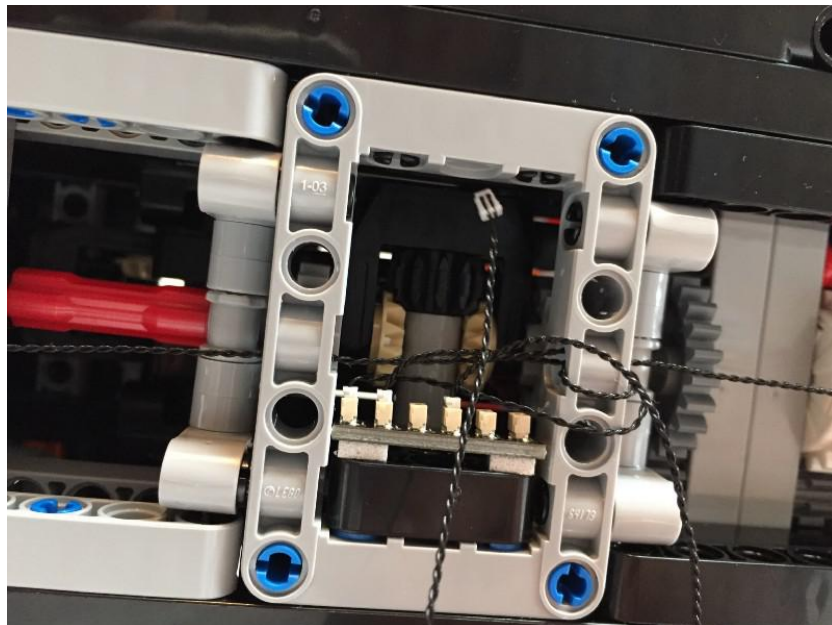
Depending how much excess cable you have, wrap the **50cm Connecting Cable** around the technic rectangle piece and feed it through the centre hole again.



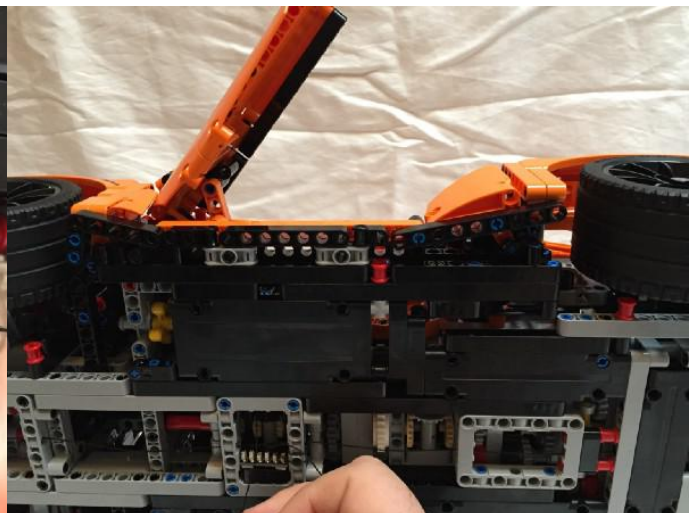
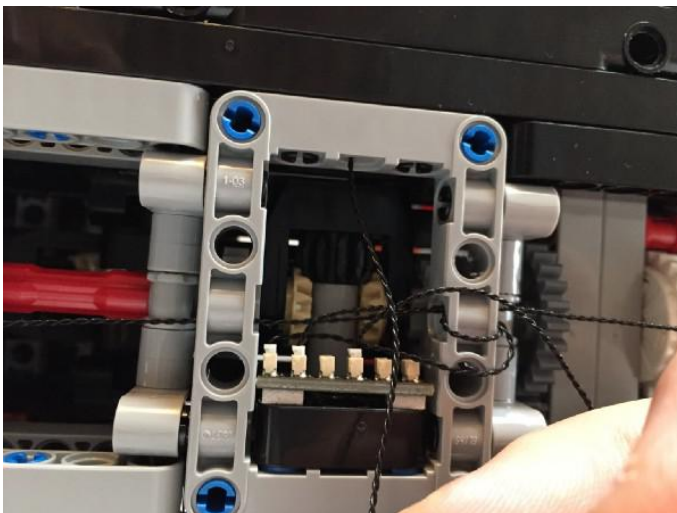
Plug the **50cm Connecting Cable** into the **6 Port Expansion Board**.



Grab the other **30cm Connecting Cable** and connect it to an available port on the **6 Port Expansion Board**.



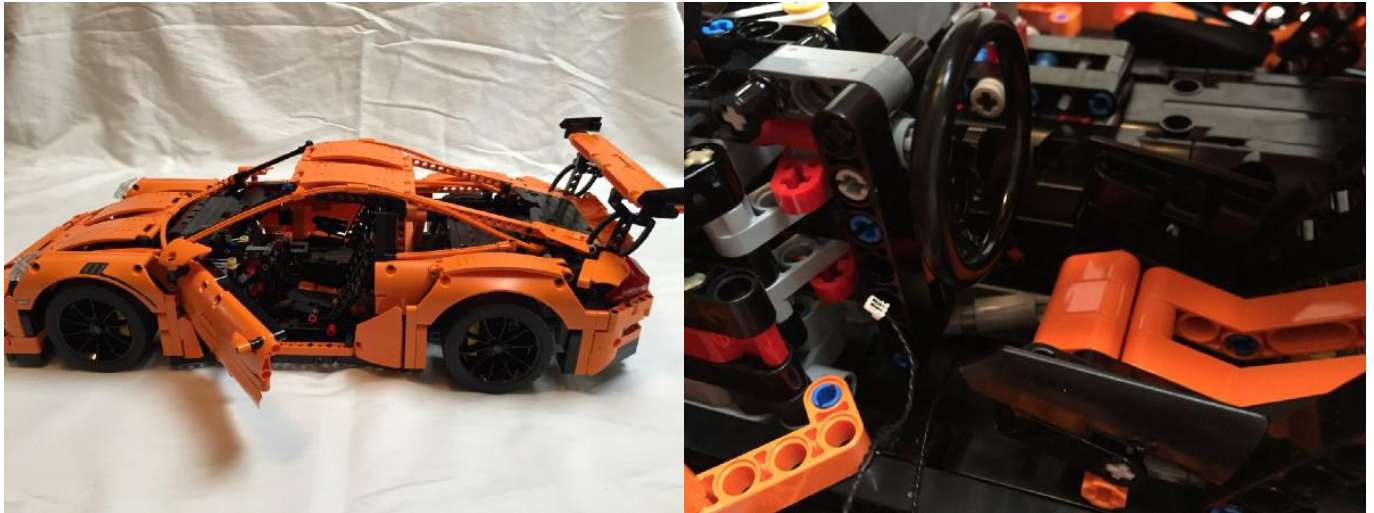
Feed the **30cm Connecting Cable** up through the available hole in the side of the technic rectangle piece. The cable runs vertically up and away from the **6 Port Expansion Board**.



The **30cm Connecting Cable** will feed through the black technic liftarm and the black technic panel

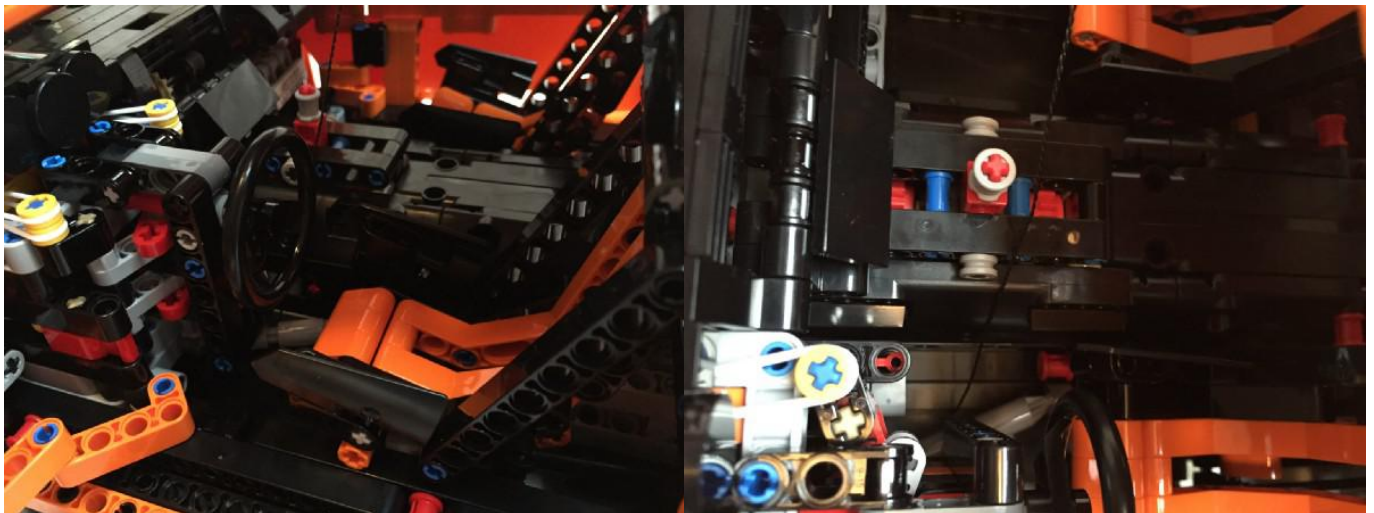
plate above the technic rectangle piece.

The black technic panel plate is the footwell when looking inside the vehicle.

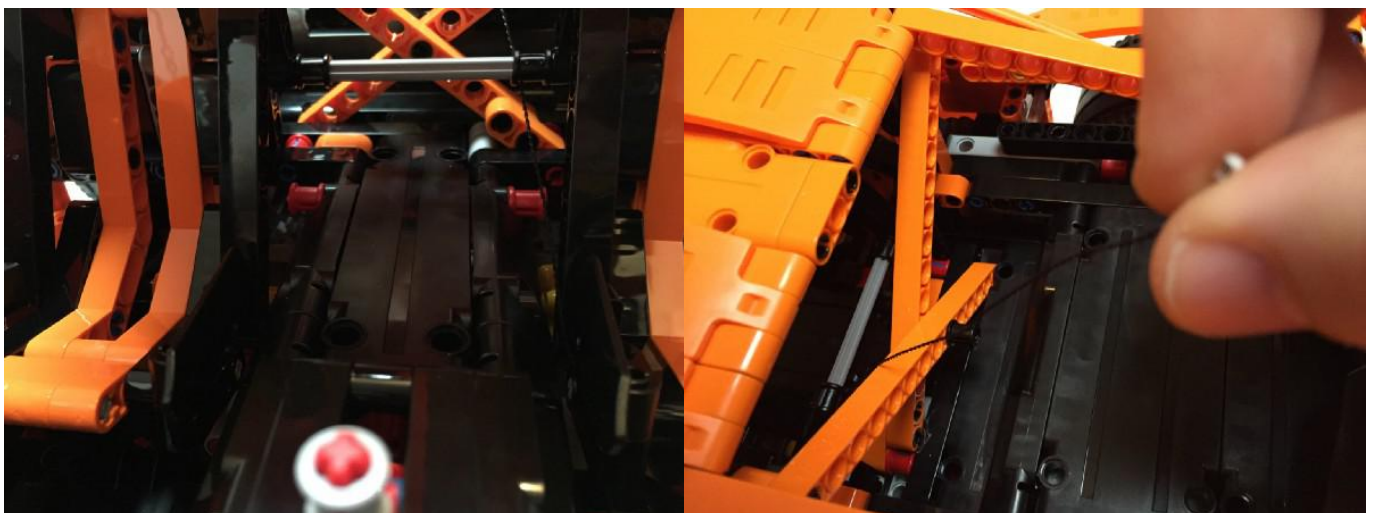


Set the car on its wheels again and open the door.

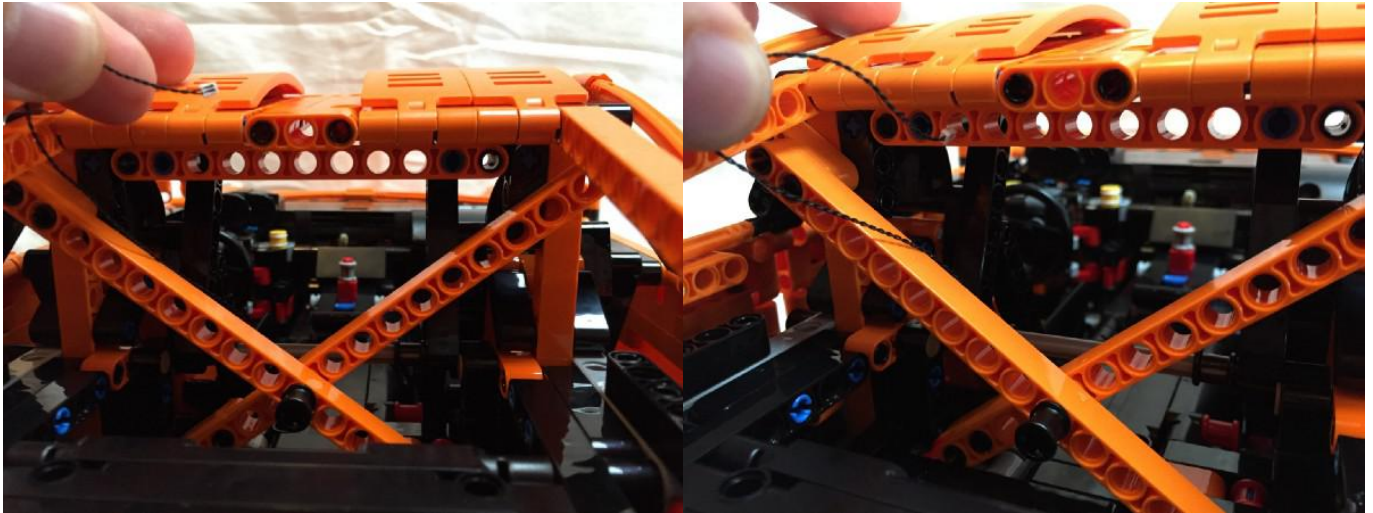
Look for the other end of the **30cm Connecting Cable** and pull it through.



Run the **30cm Connecting Cable** back towards the centre of the car making sure it goes underneath the steering CV joint pieces (these are the light grey pieces near the floor that turn when you turn the steering wheel).



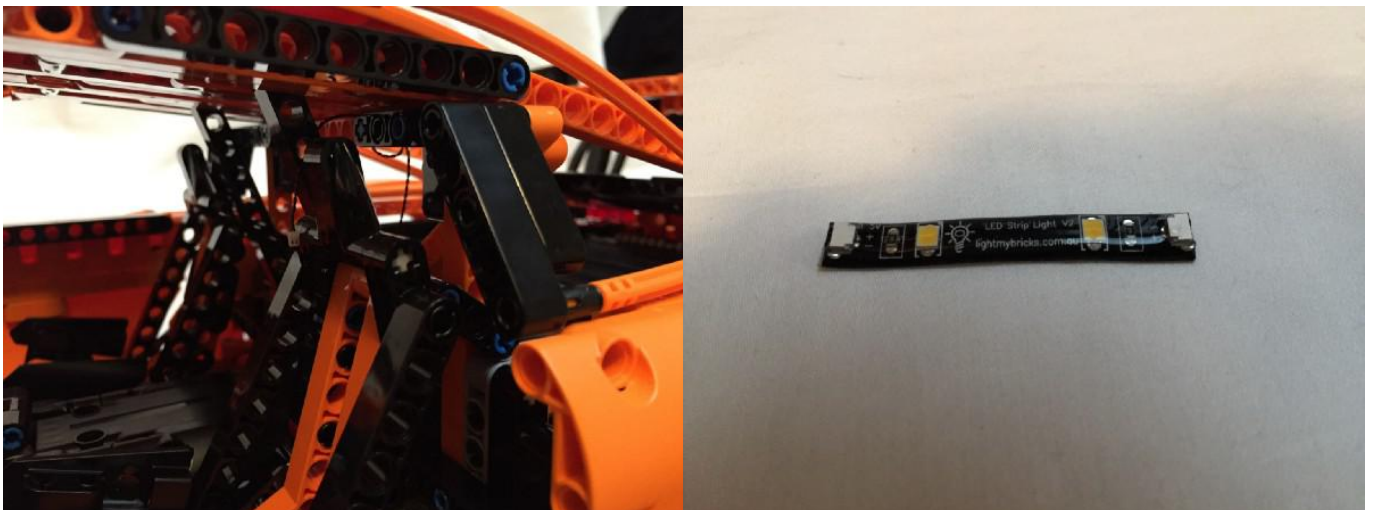
Run the **30cm Connecting Cable** in between the drivers seat and centre console. Pull it out the back “window” above where the two orange technic liftarms cross over.



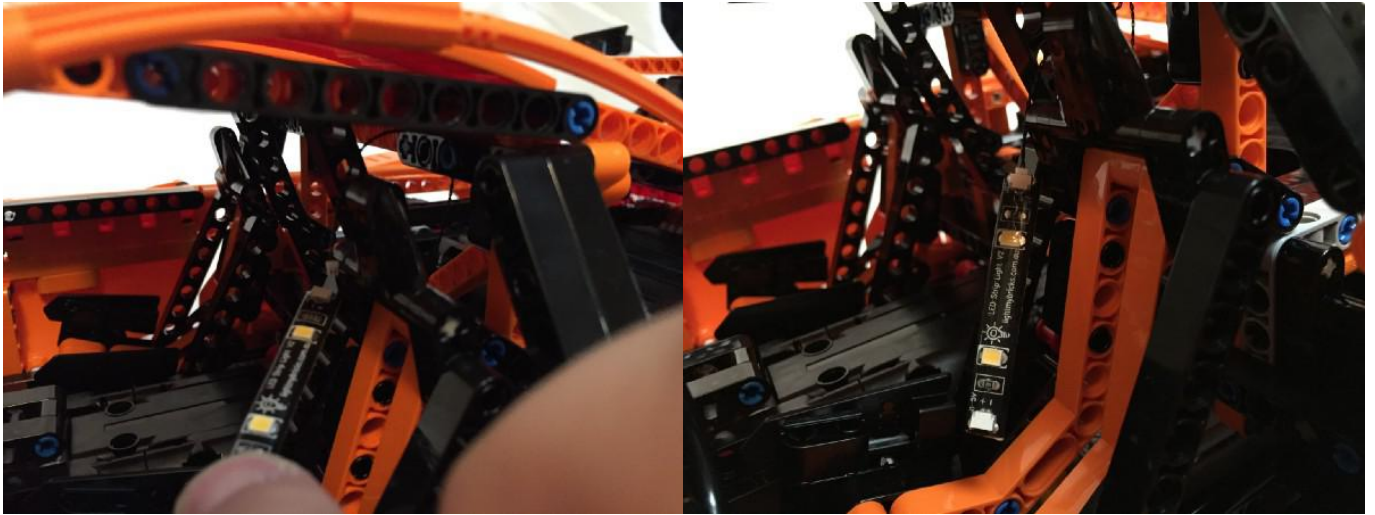
Feed the **30cm Connecting Cable** through an available hole in the orange technic liftarm that runs underneath the roof line.



Pull the **30cm Connecting Cable** out through the back “window” again and loop it back through the same orange technic liftarm.

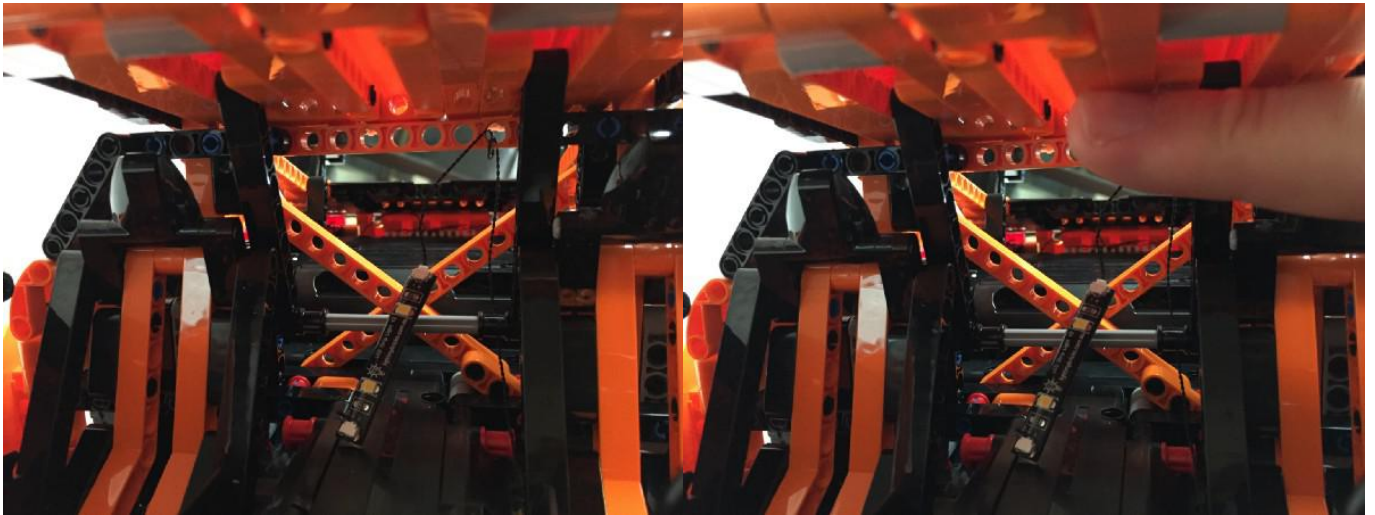


Grab the **Strip Light**.



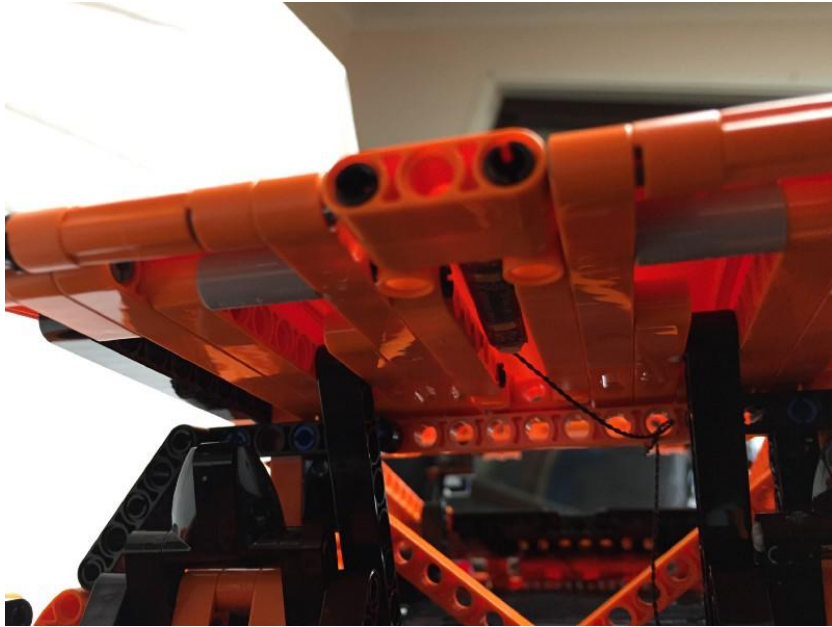
Connect the **Strip Light** to the **30cm Connecting Cable**.

(In hind sight, it would be easier to pull the cable out the back “window” again and connect the strip light to it while it is outside the car.)



We are going to stick the strip light to the very centre of the roof which is seen by the gap in the orange technic panel plate.

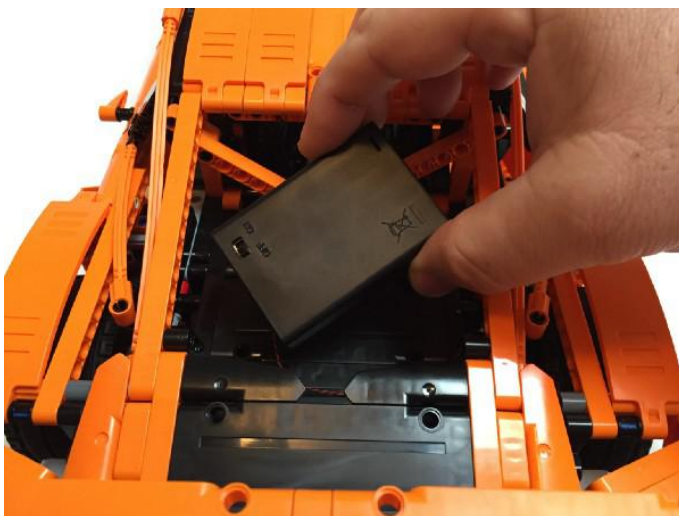




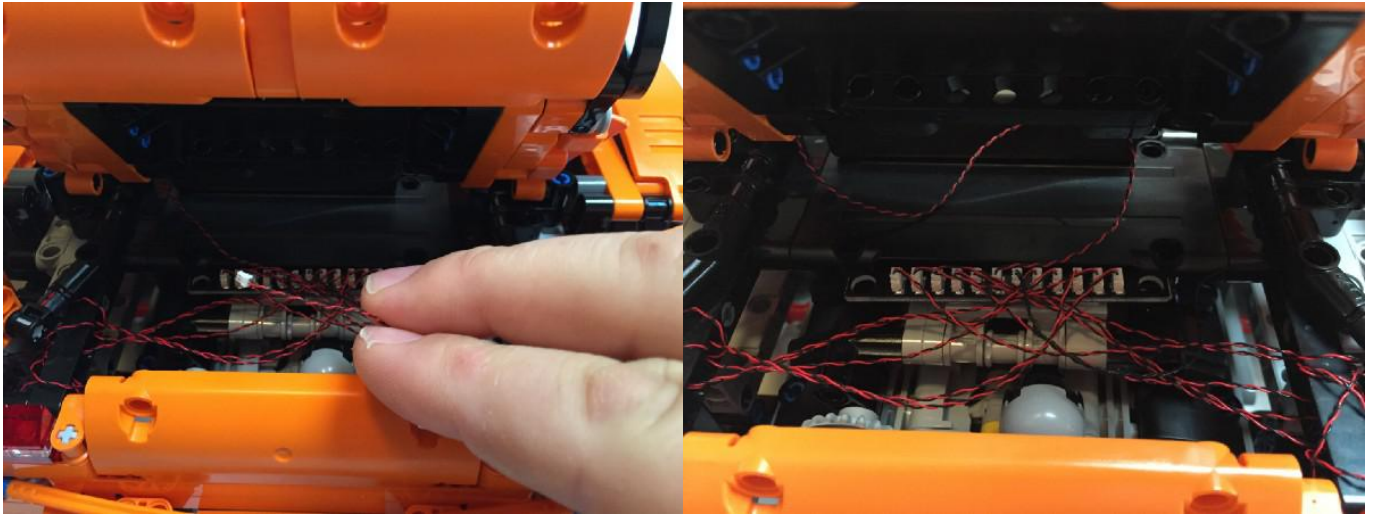
Peel the adhesive backing off the **Strip Light**.
Pass the strip light through to the cabin and stick it to the roof.



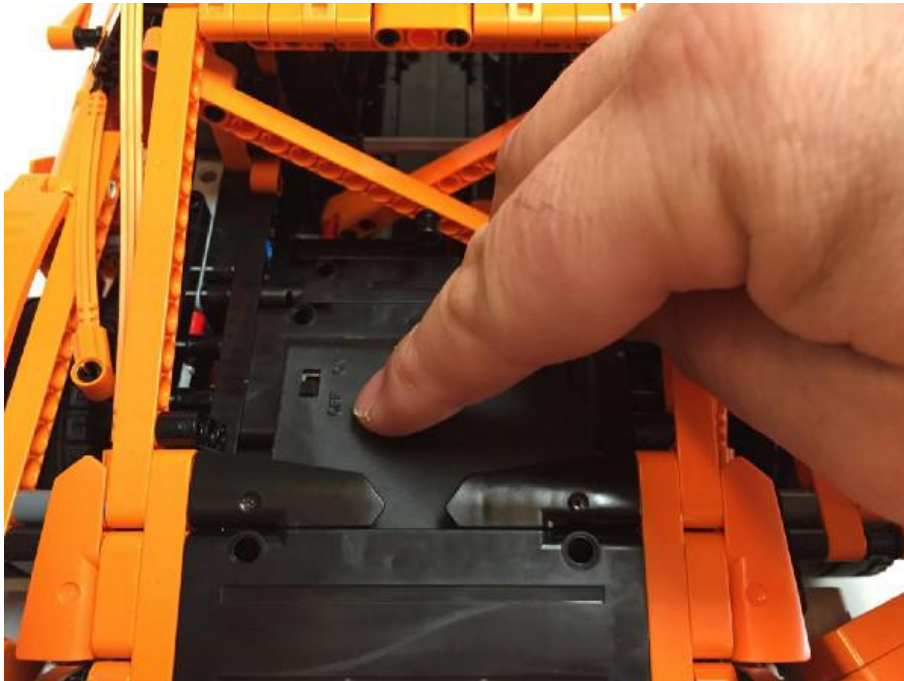
Grab the **AA Battery Pack** and give yourself access to the back of the vehicle.



Rest the **AA Battery Pack** on the back of the car between the rear “window” and the boot.
Open the boot.



Feed the **AA Battery Pack** wire underneath the boot and plug it in to the last available port on the **12 Port Expansion Board**.



Now all you need to do is put the batteries in, turn the **AA Battery Pack** on and enjoy the lights!!

