Instruction Manual

Intelli RC Toy Car

RC car project

Leonardo Fusser, 1946995

IECE

Intelli Electronic Car Enthusiasts

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Department of Computer Engineering Technology
Product Development I
Dr. Manijeh Khataie

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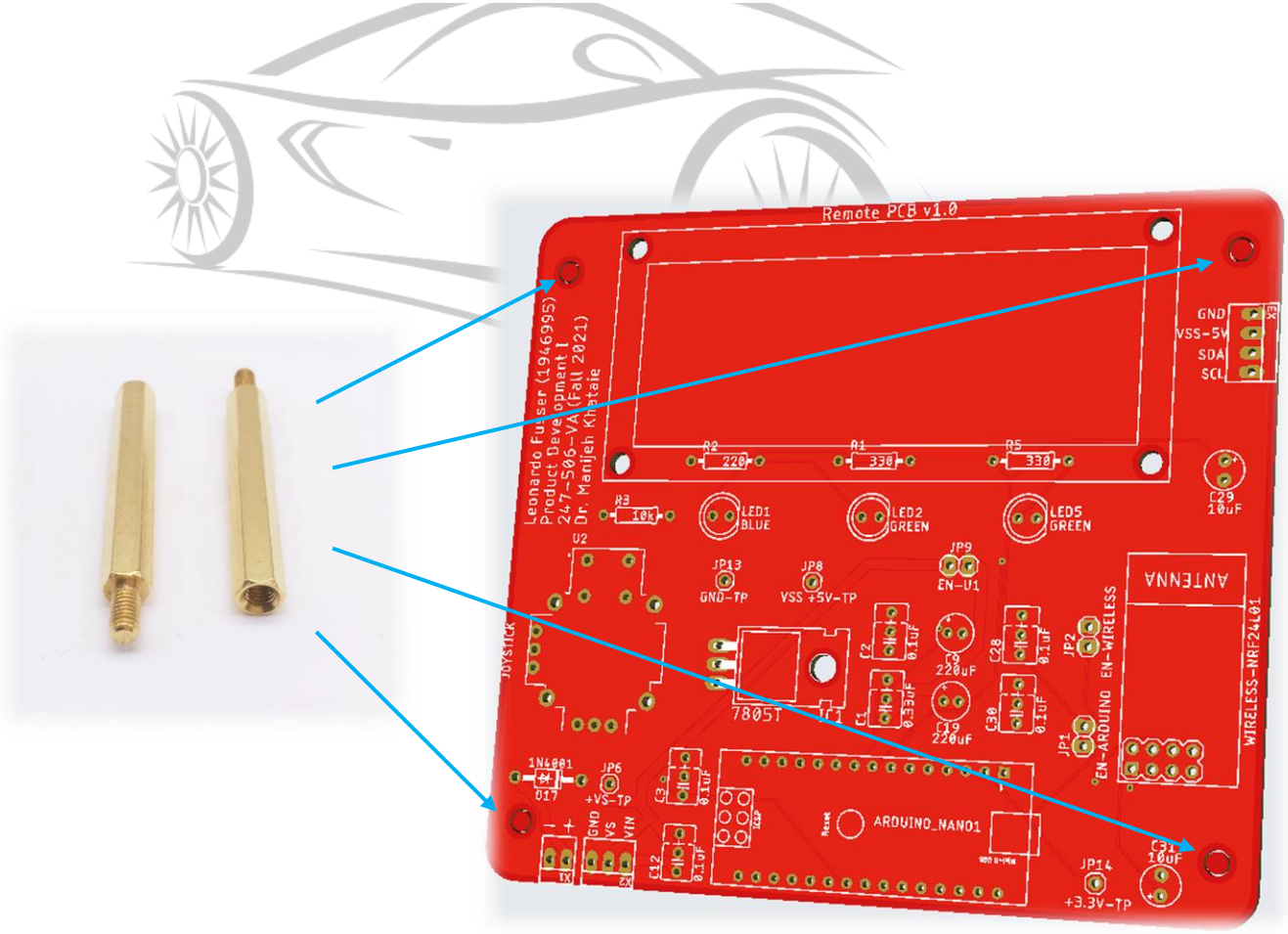
1.0 Remote Assembly Instructions

Assembling the Remote:

- Before proceeding with the assembly for the remote, ensure that all electrical components have been installed and soldered to the remote PCB. Refer to schematics that have been provided in the submission of this instruction manual.

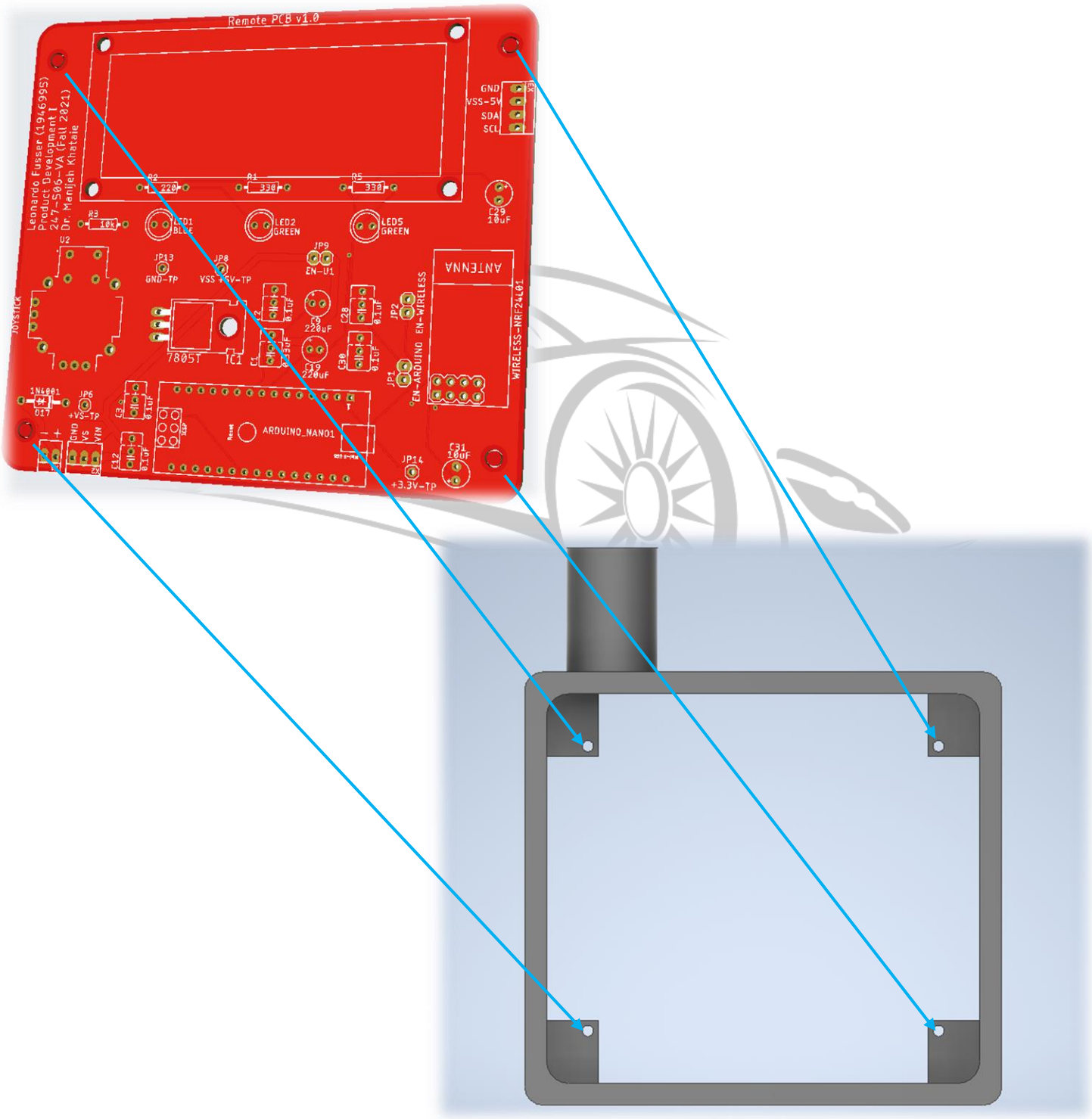
[Step 1]

- Start by assembling the brass M3 hex standoffs to the remote PCB on both sides as follows:



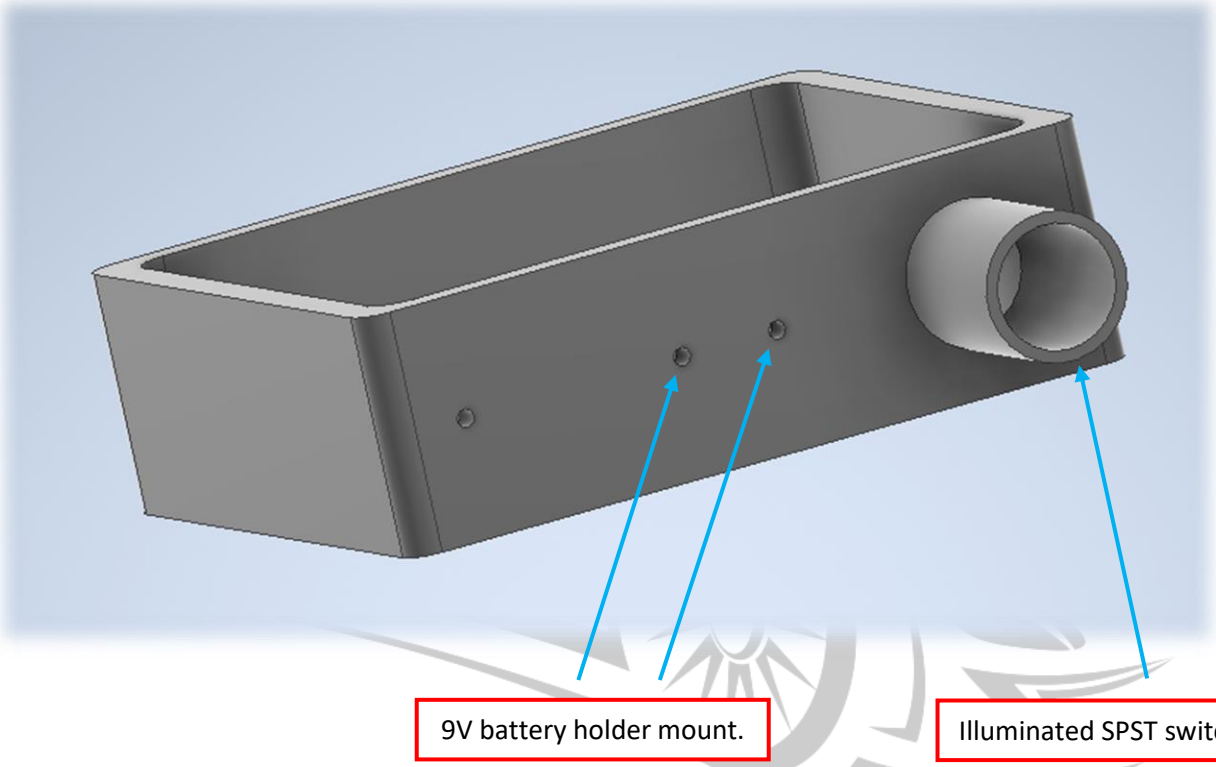
[Step 2]

- Take the remote PCB with the standoffs connected and place the PCB in the remote's case:



[Step 3]

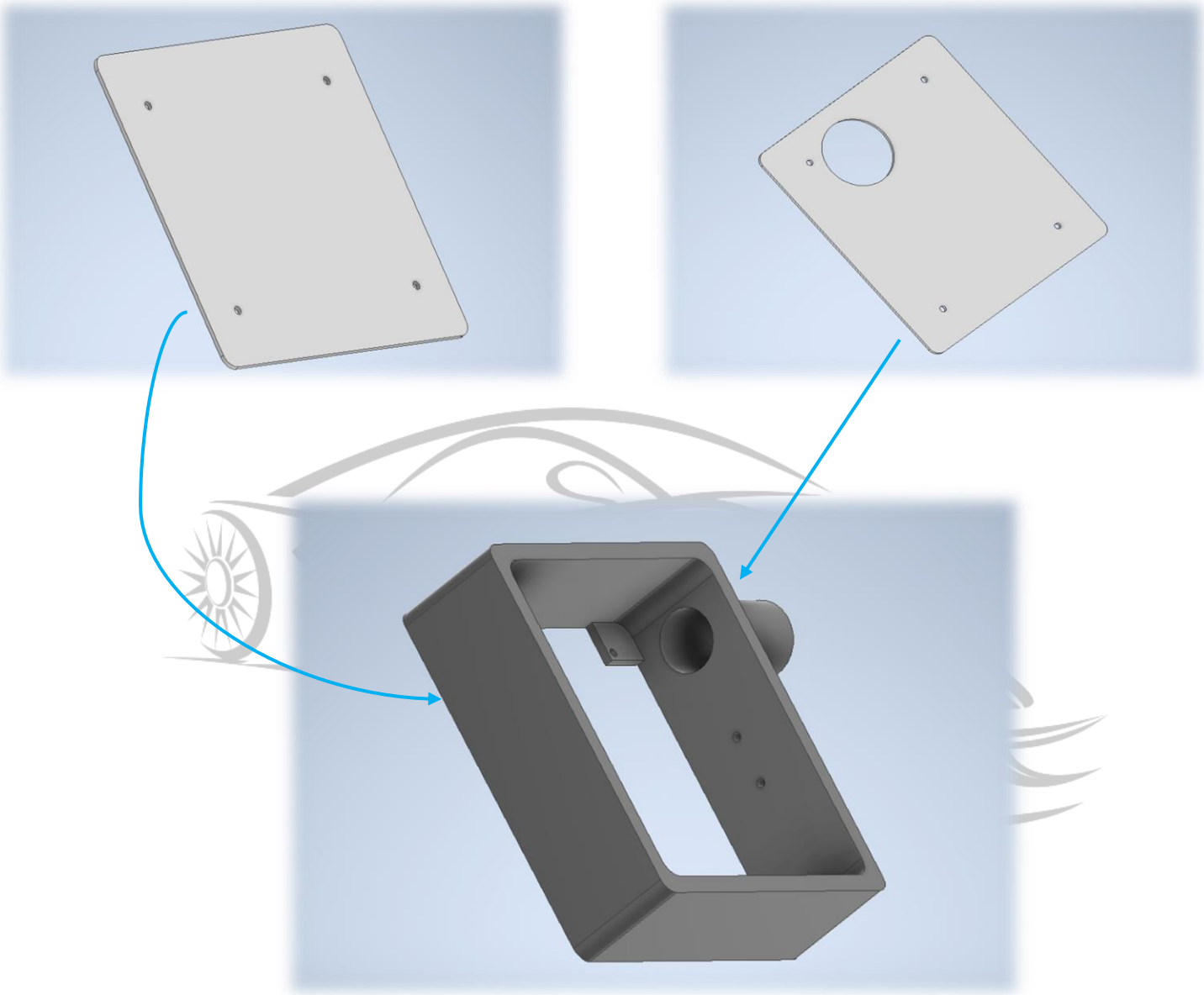
- With the remote PCB inside the remote case, add the illuminated SPST switch and the 9V battery holder to the remote case. Wire these two peripherals to the remote PCB:



[Step 4]

- Once all additional peripherals were installed to the remote case, install the top and bottom acrylic to the remote case:

  (See next page)



[Step 5]

- If the remote has been assembled correctly, it should look like the following:

Figure 1. Fully assembled remote.

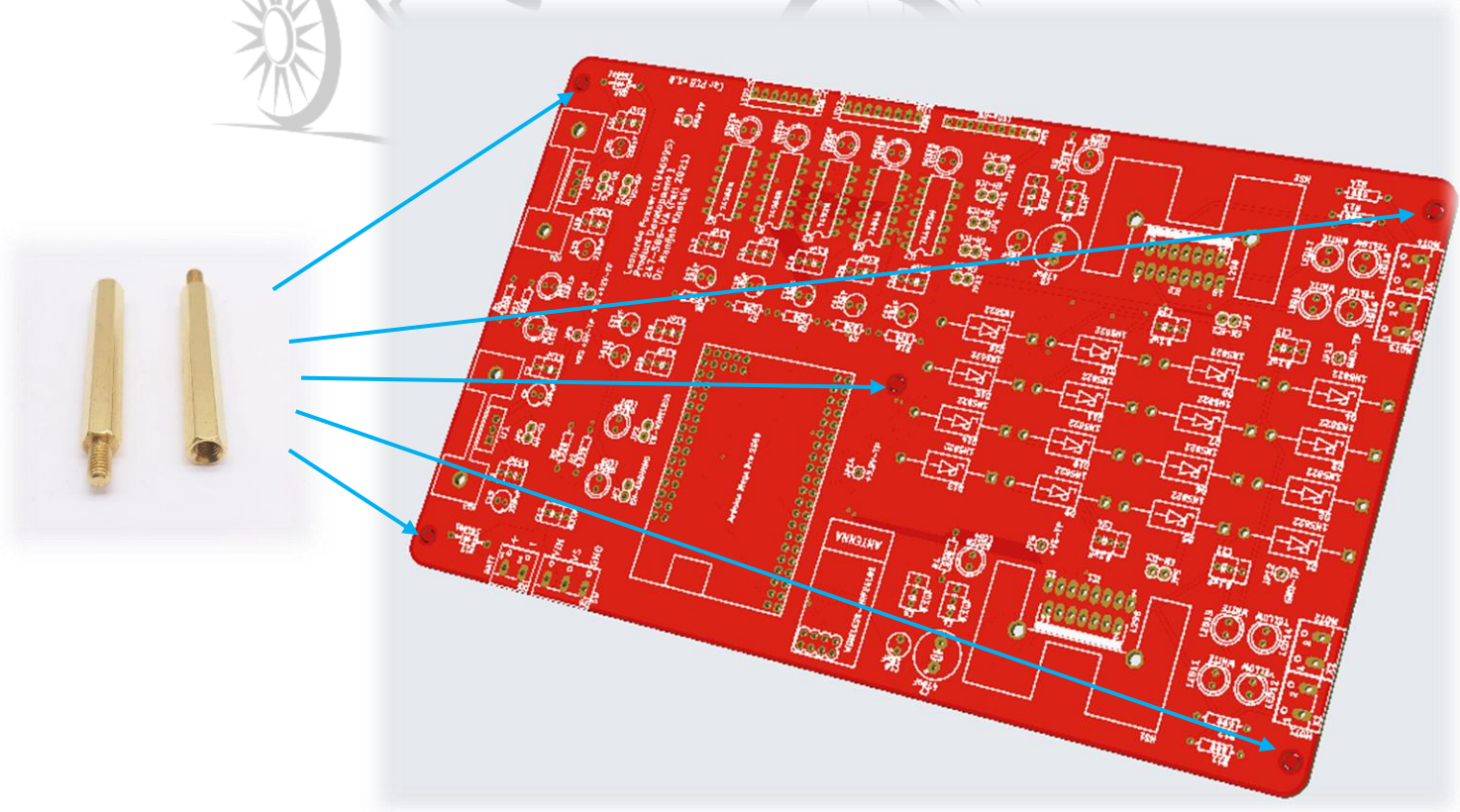
2.0 Car Assembly Instructions

Assembling the Car:

- Similar as before, before proceeding with the assembly for the car, ensure that all electrical components have been installed and soldered to the car PCB. Refer to schematics that have been provided in the submission of this instruction manual.

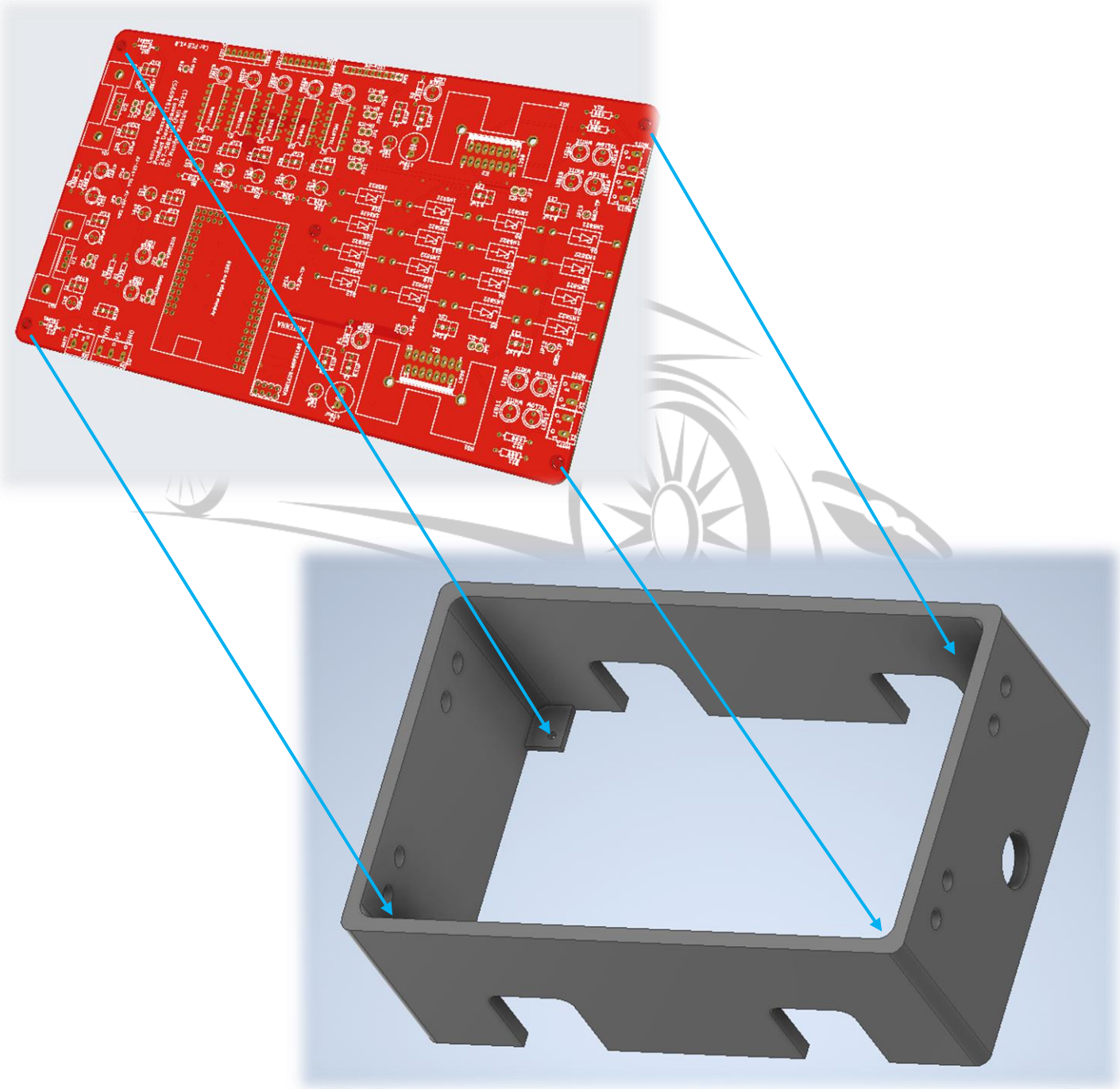
[Step 1]

- Start by assembling the brass M3 hex standoffs to the car PCB on both sides as follows:



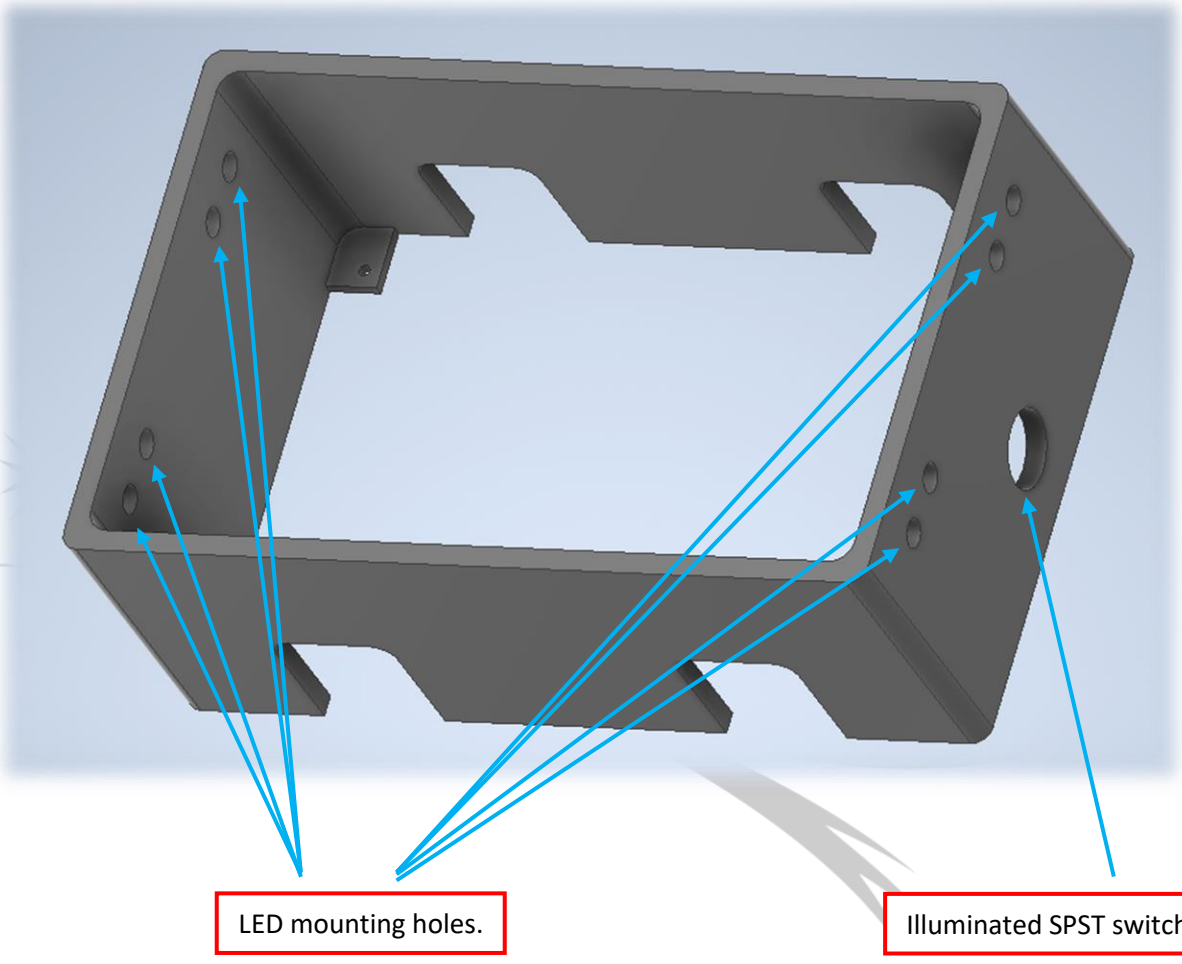
[Step 2]

- Take the car PCB with the standoffs connected and place the PCB in the car's case:



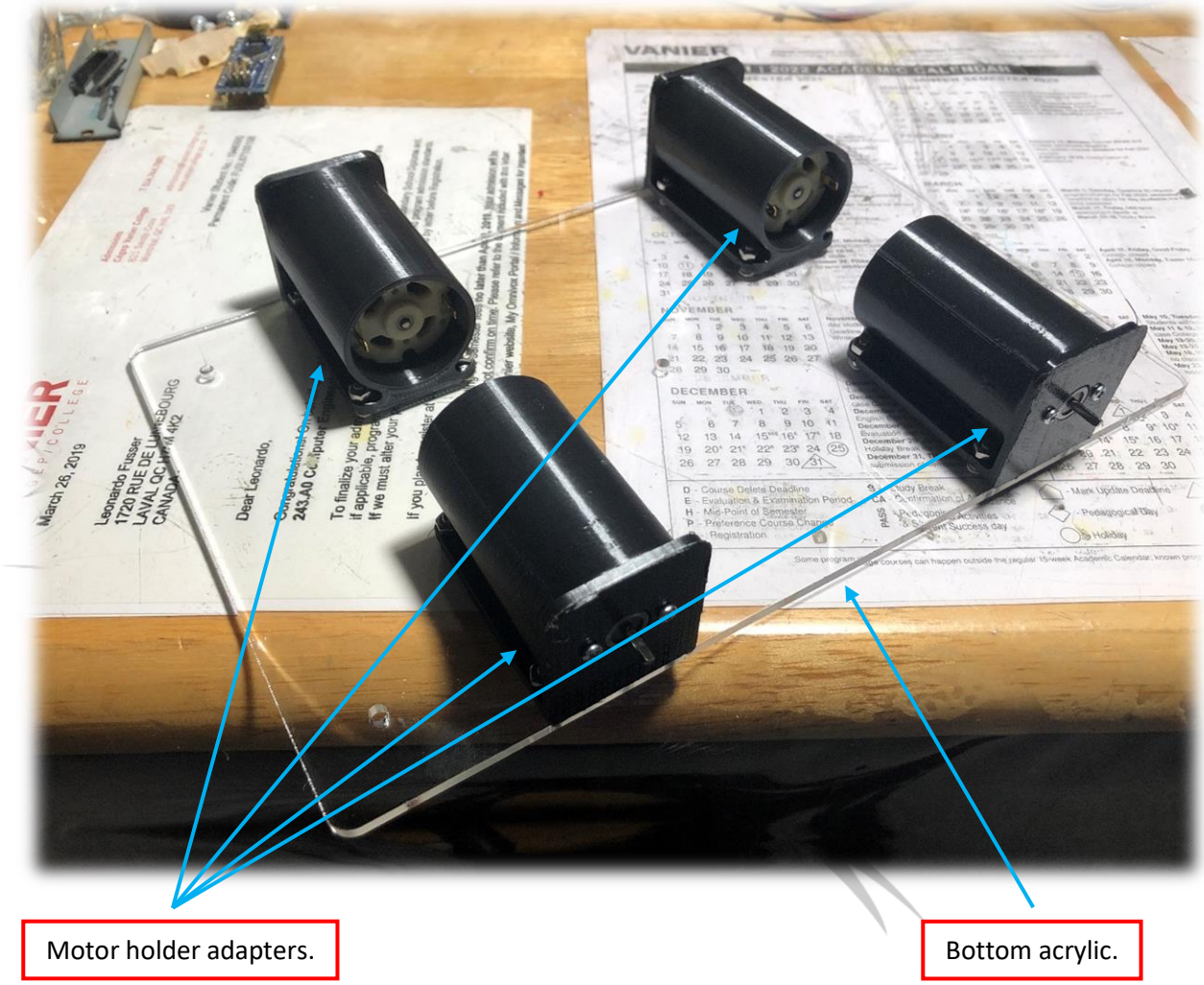
[Step 3]

- With the car PCB inside the car case, add the illuminated SPST switch and the eight LEDs around the car case. Wire these two peripherals to the car PCB:



[Step 4]

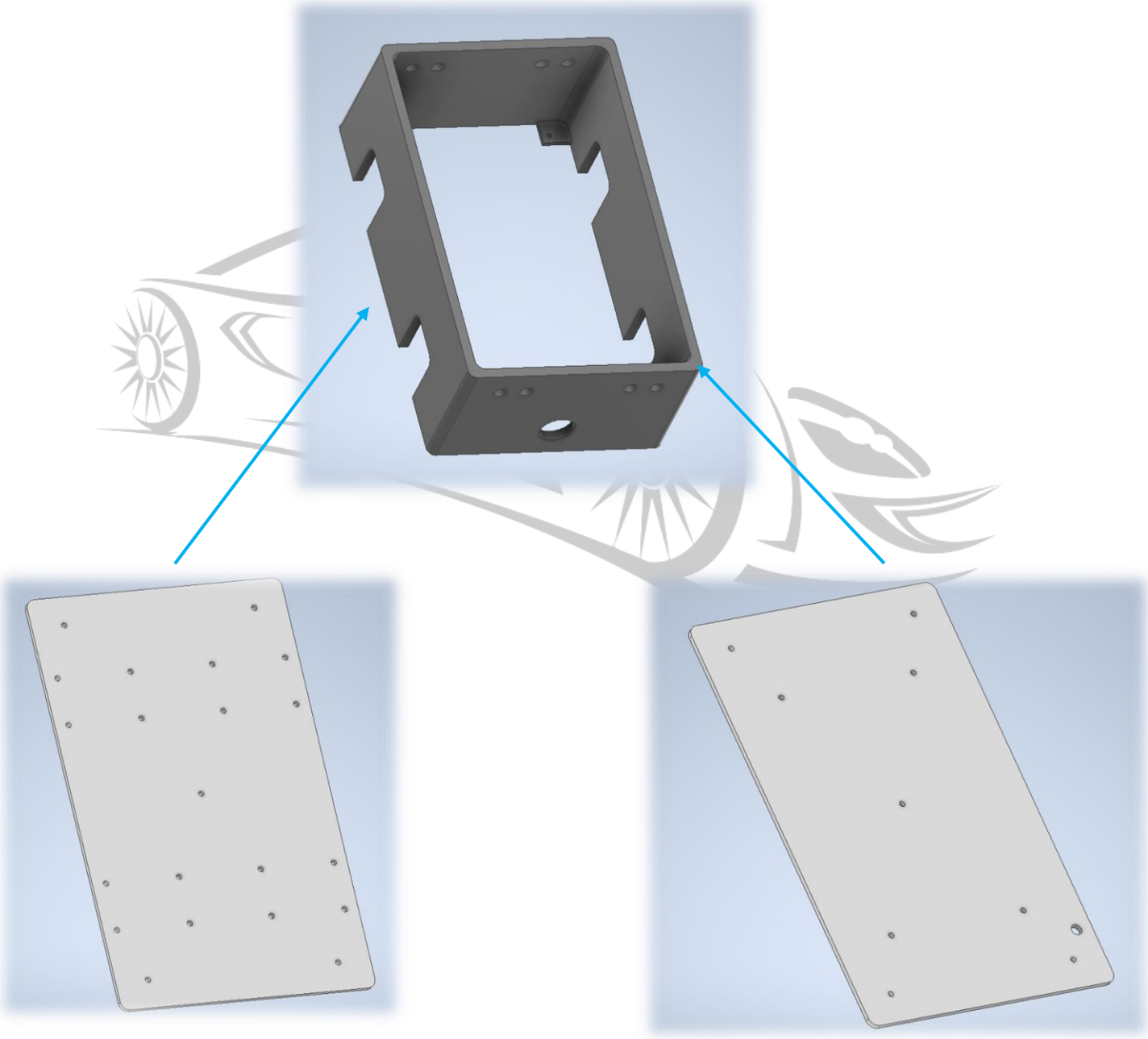
- Once all additional peripherals were installed to the car case, install the four motors inside their motor holder adapters. Afterwards, install them onto the bottom acrylic like this:



*Note: wiring needs to be done at the same time since the next step will require this acrylic plate to be closed off with the car case.

[Step 5]

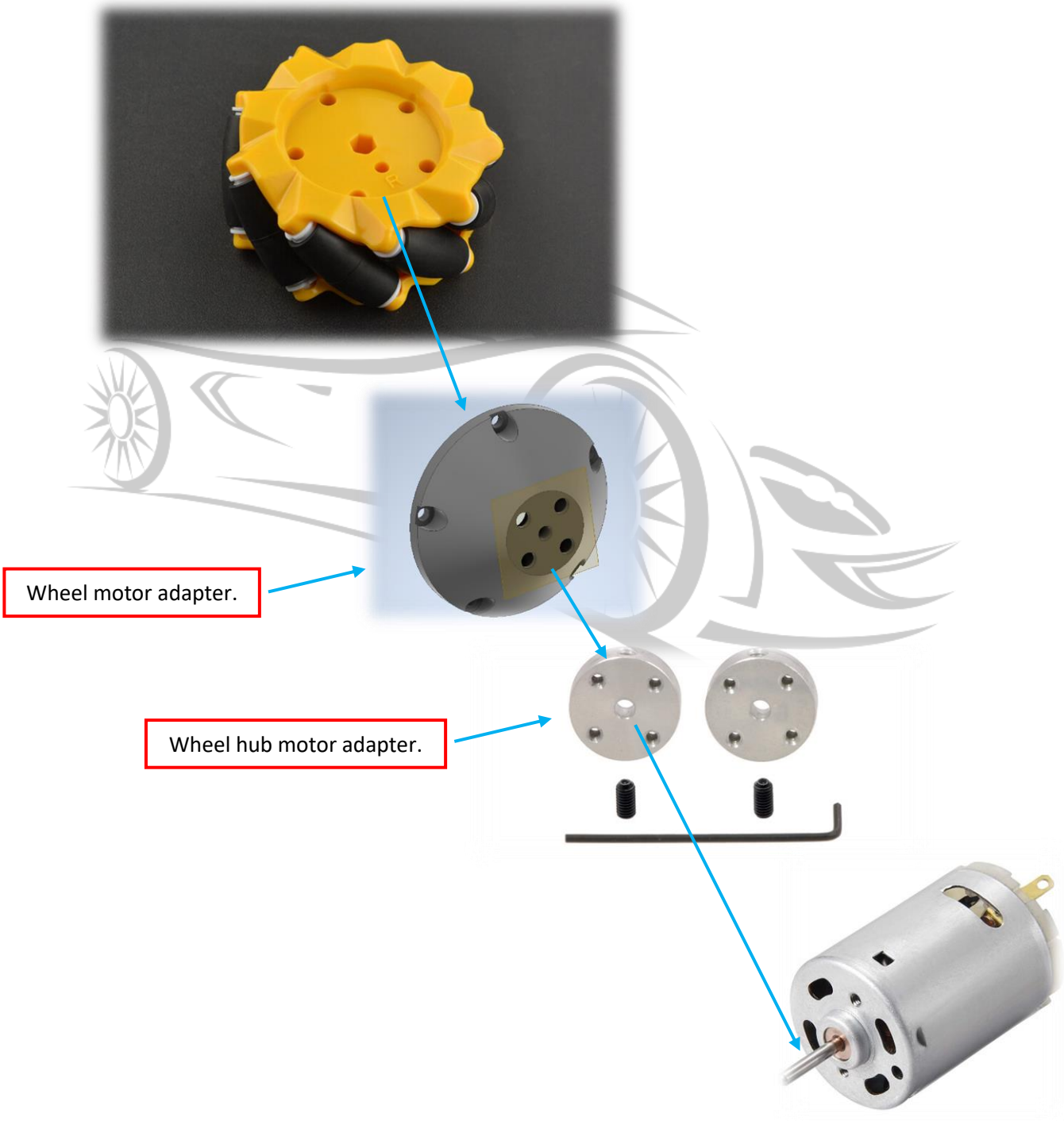
- Once all additional peripherals were installed to the car case and the motors are installed onto the bottom acrylic plate, install the top and bottom acrylic to the car case:



*Note: a small battery holder acrylic plate can be installed on top of the top acrylic to hold the battery for the car.

[Step 6]

- Once the top and bottom acrylic plates have been installed onto the car case, the car's wheels can be installed onto the motor shafts:



[Step 7]

- If the car has been assembled correctly, it should look like the following:

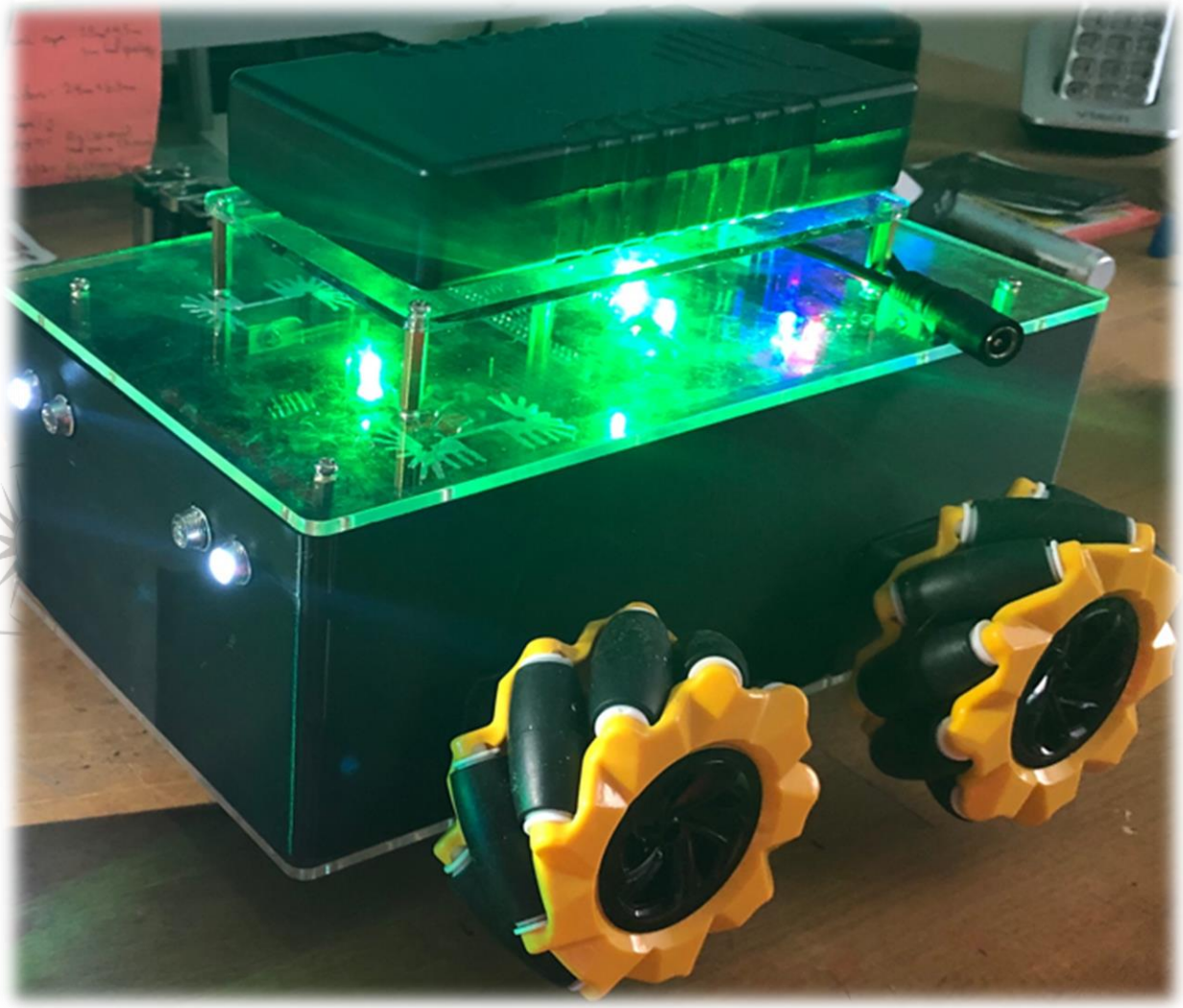


Figure 2. Fully assembled car (top view).

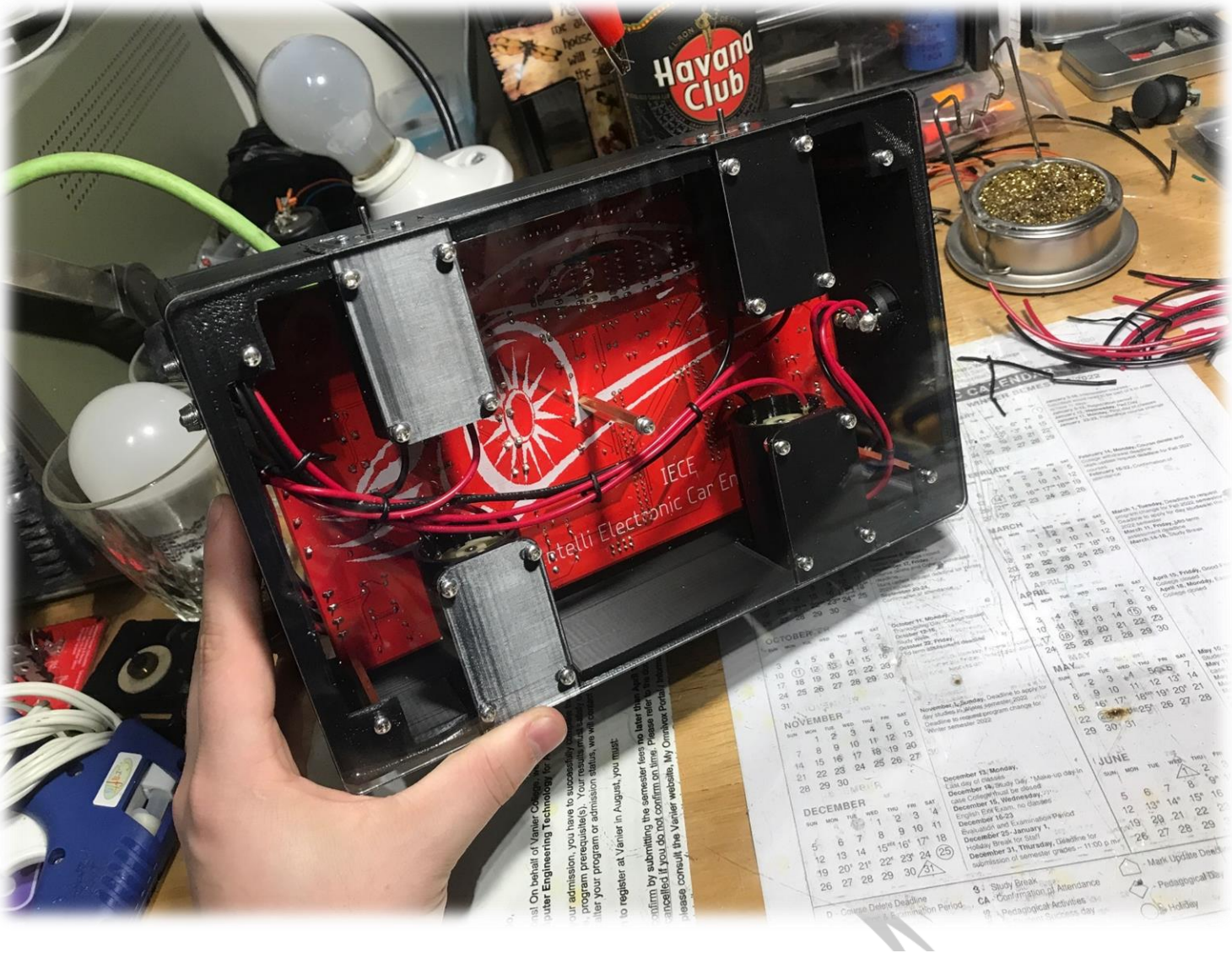


Figure 3. Fully assembled car (bottom view – no wheels attached).

3.0 OTHER RESOURCES

Helpful Resources:

[For Car]

- Refer to schematic for car in “Car-schematic v5.pdf” under the “Schematics” folder included with this instruction manual submission.
- Refer to other car pictures in the “Pictures” folder included with this instruction manual submission.

[For Remote]

- Refer to schematic for remote in “Remote-schematic v2.pdf” under the “Schematics” folder included with this instruction manual submission.
- Refer to other remote pictures in the “Pictures” folder included with this instruction manual submission.