



# iPE Exhaust

Automotive exhaust system engineering

***BMW***

***G20/G21 M340i***

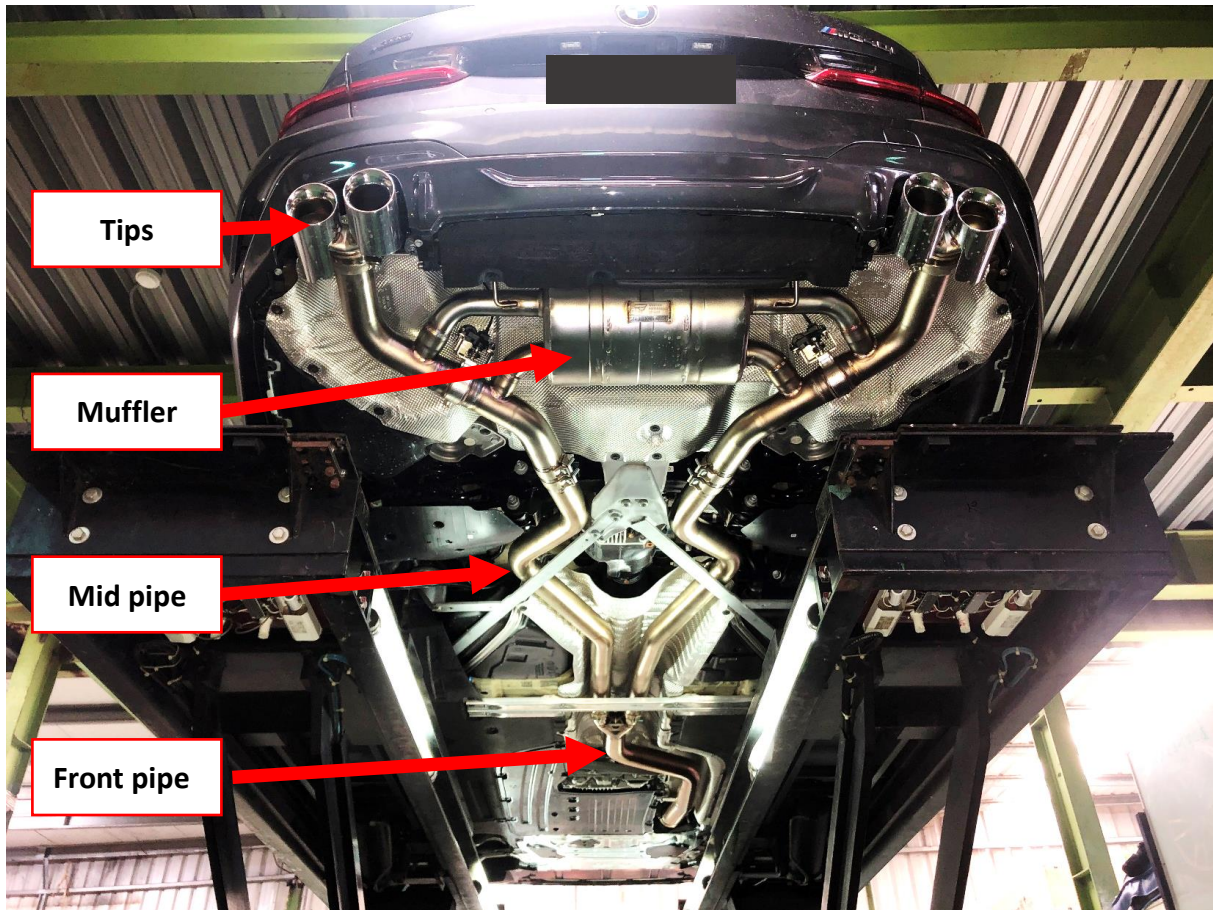
Product installation instruction

## I. Important information

iPE developed exhaust systems based on the OEM exhaust to avoid issue with installation. Modern car keys and the vehicle itself have an inductive power transmission function, we suggest to keep the car key at least 5 meters away from the vehicle for safety purpose. Please wear insulated gloves to replace the exhaust pipe when hot, or replace it after cool down to avoid burns.

When setting the valve to open automatically, please do not let the valve open prematurely to avoid resonance; it is recommended to set the timing of valve opening to 60% of the throttle. For detailed setting options, please refer to the **control box setting** page.

## II. BMW G20/G21 M340i product assembly



### III. Remove the original exhaust

1. Remove the front pipe clamp and front pipe bushes screws.(Figure 1)

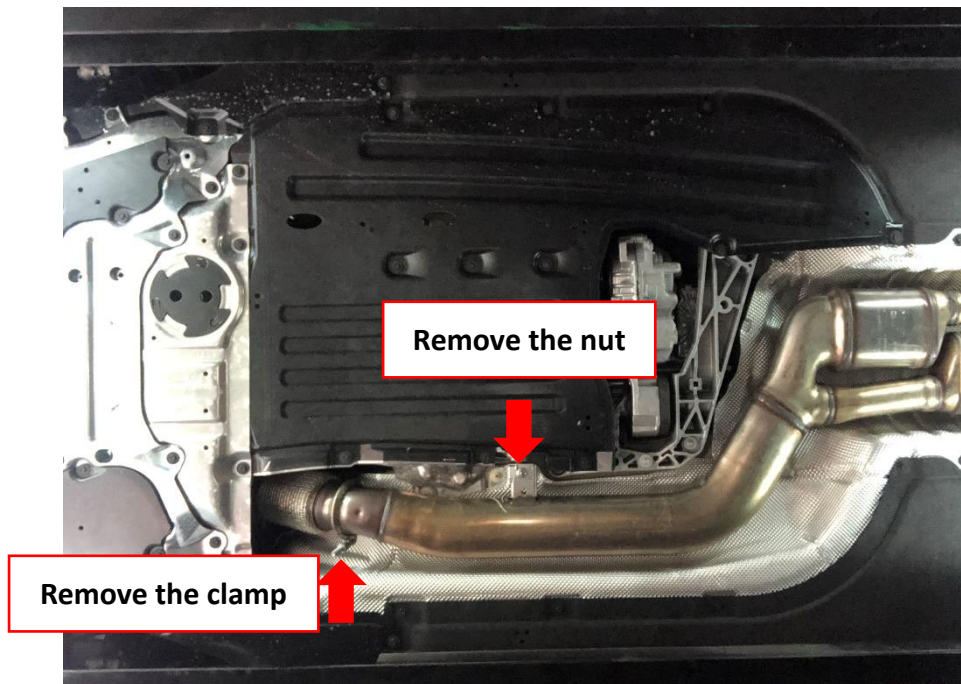


Figure 1

2. Remove the original support braces, mid pipe bushes and muffler bushes to remove the original mid pipe. After removal, the motor on the original muffler must be removed. (Figure 2)

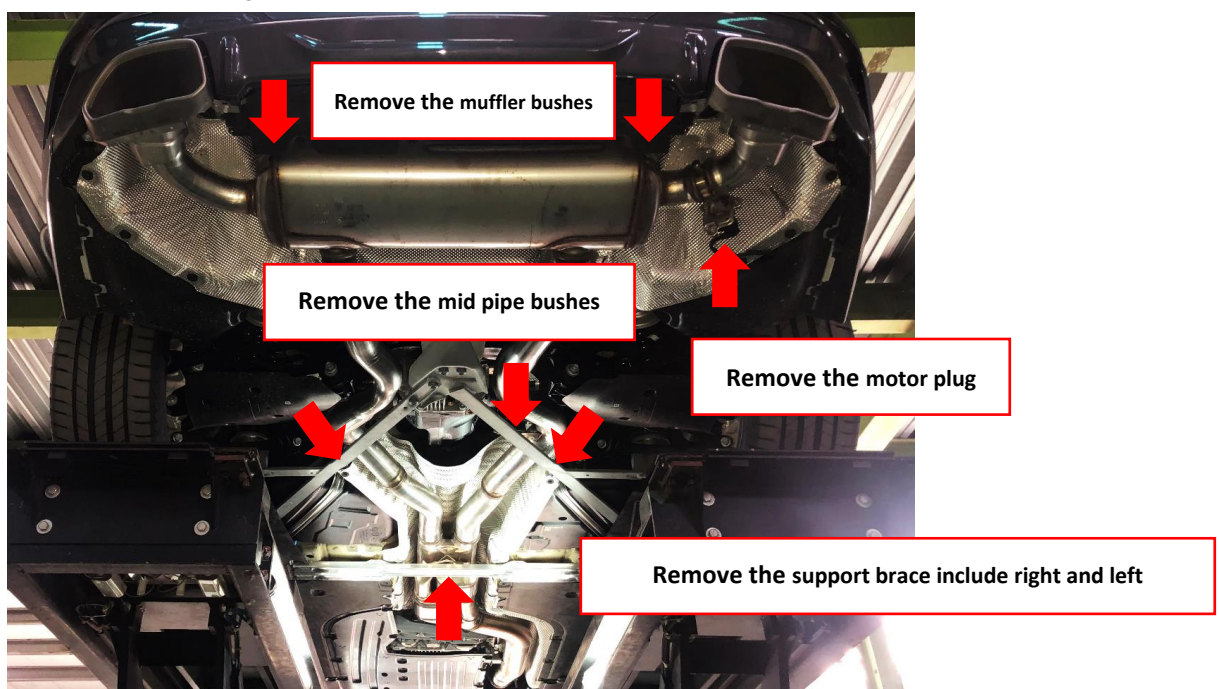


Figure 2

3. Remove the front retainer clamp, the bush seat screw, the front and rear oxygen sensor plugs, and the OPF discharge pressure sensor plug, and then to remove the original cat pipe. (Figure 3)



Remove the oxygen sensor and exhaust temperature sensor

Remove the original clamp

Figure 3



Figure 4

4. Remove the washer of the original cat pipe and install it on the iPE cat pipe. (Figure 5)



Figure 5

## IV. Install the iPE exhaust

1. Install the front and rear oxygen sensors and OPF discharge pressure sensors with iPE cat pipe.
2. Lock the front retainer clamp and bush seat screws back.

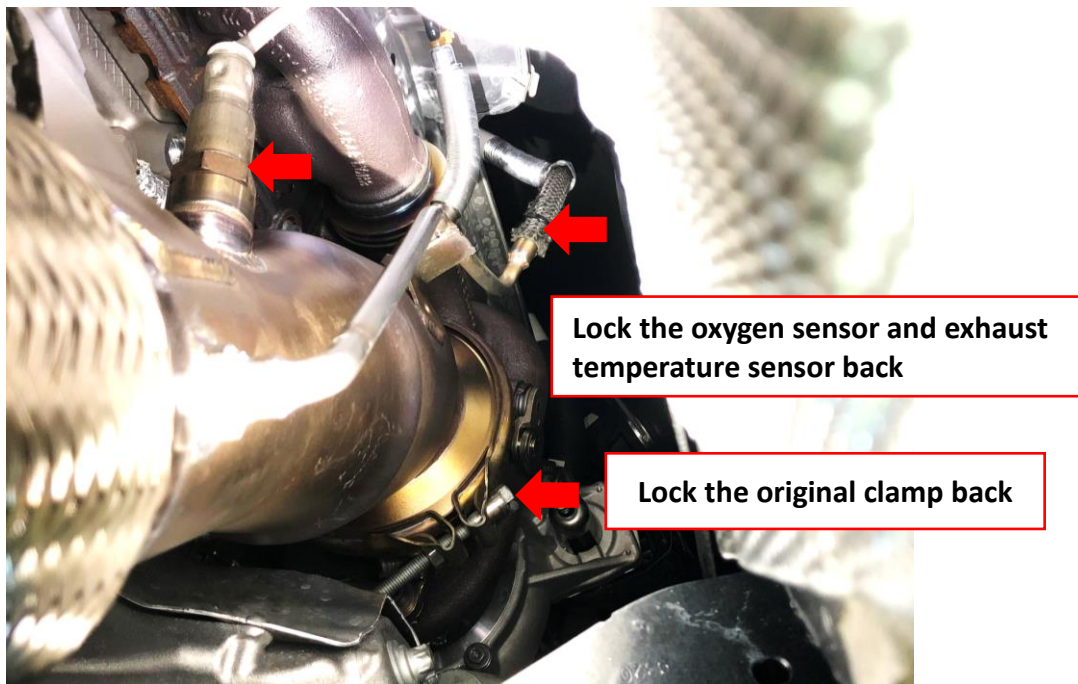


Figure 6

3. Install the iPE front pipe, and lock the bush nut and clamp. (Picture 6)

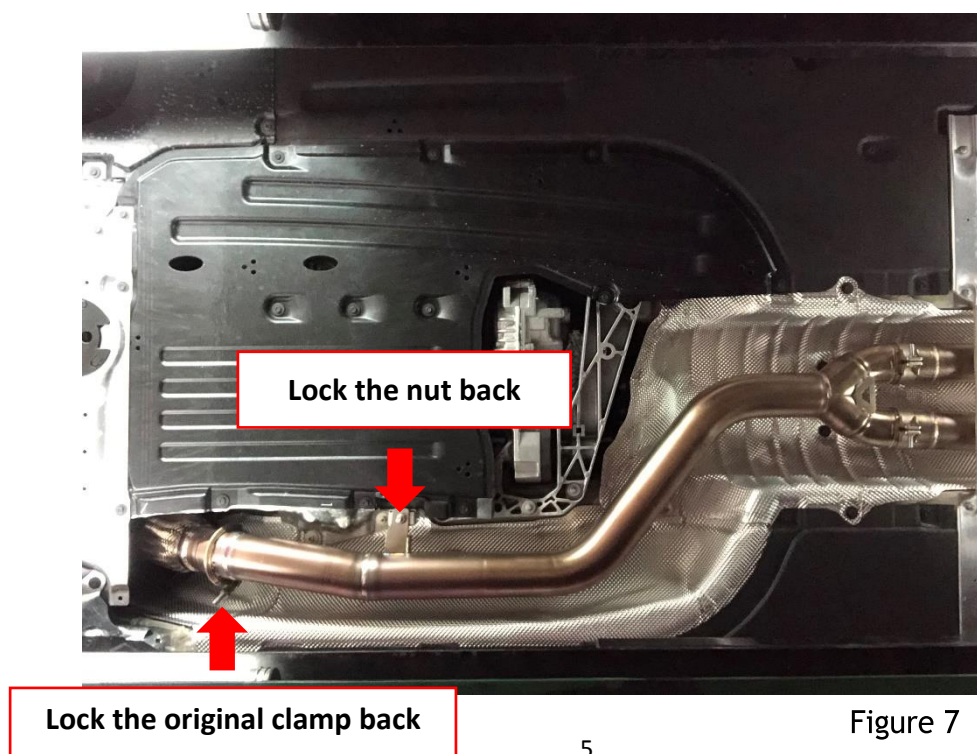


Figure 7

4. Install the original control one-to-two extension cable, install it to the position, and hide it in the heat-insulating aluminum plate, and then connect the plug to the original plug.
5. Lock the muffler of the iPE valve with the original motor and the attached motor and spring.
6. Keep the mid pipe and the chassis lever to a distance of 15mm.
7. Install the iPE mid pipe, sliding bush, muffler, and tips to the position, check the distance is correct, and lock the clamps and bushes.
8. Plug the original control one-to-two extension cable into the motor on the muffler to complete all installations.

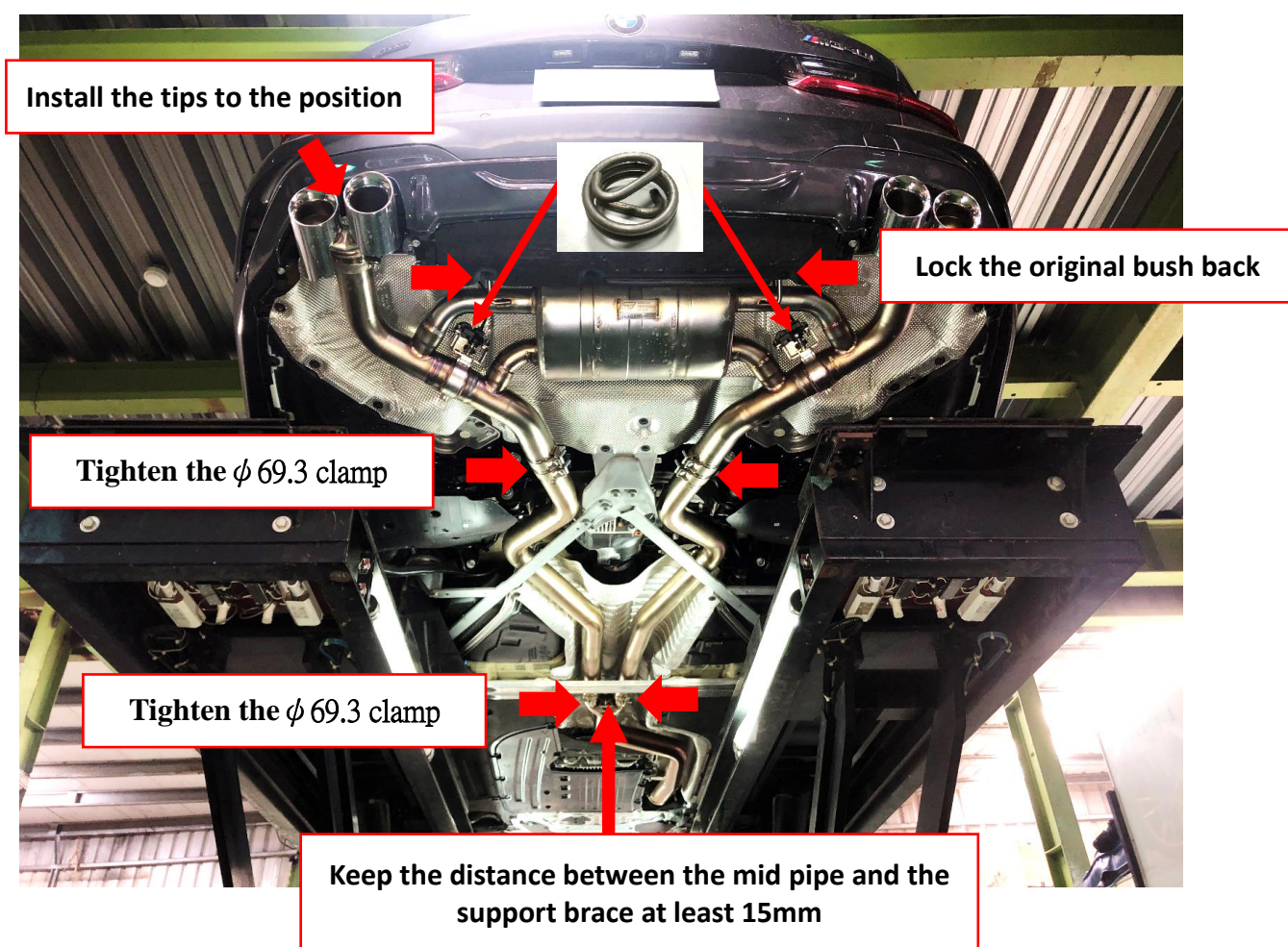
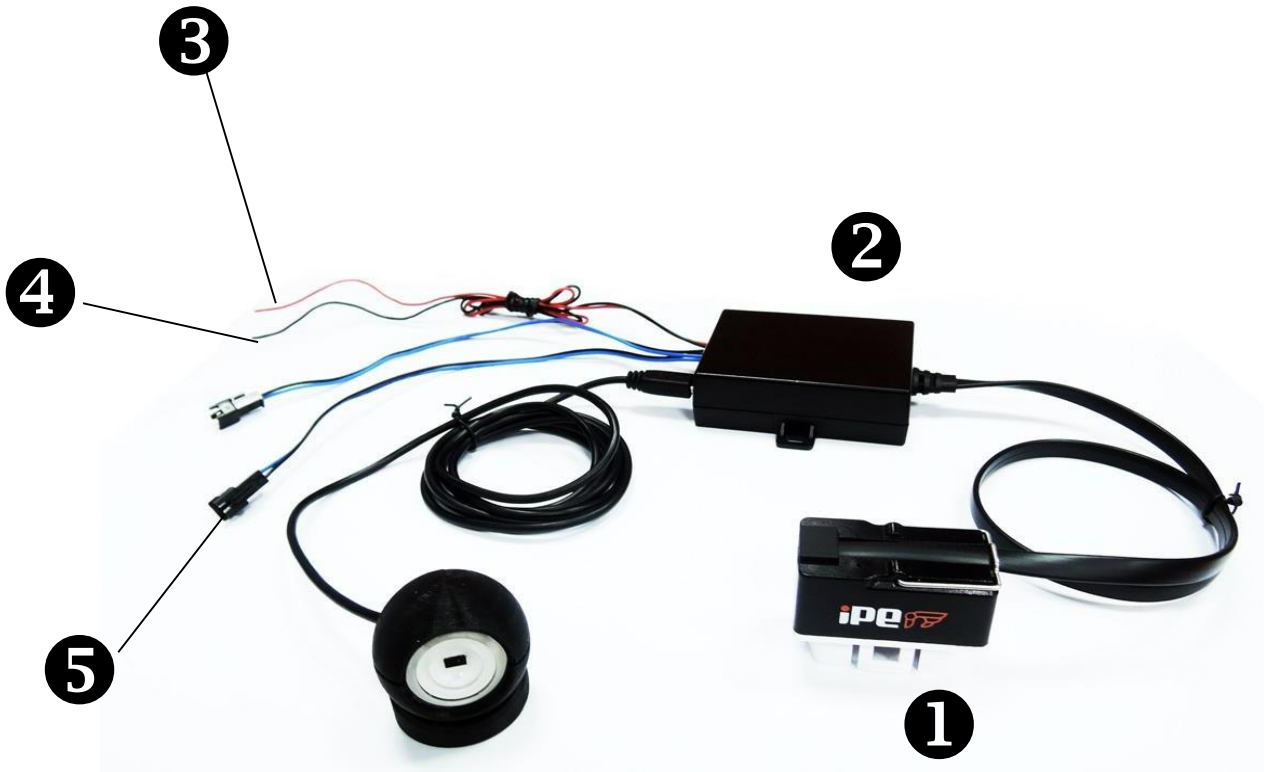


Figure 8

## V. Install the control box and wiring



No	Product	No	Product
1	OBDII connector	4	Black (negative)
2	Solenoid valve controller	5	Blue black (solenoid valve)
3	Red (ACC positive)		



1. From the fuse holder on the right rear of the luggage compartment, measure the ACC positive electricity and pull it under the front driver's seat. (Figure 9, 10)



Figure 9

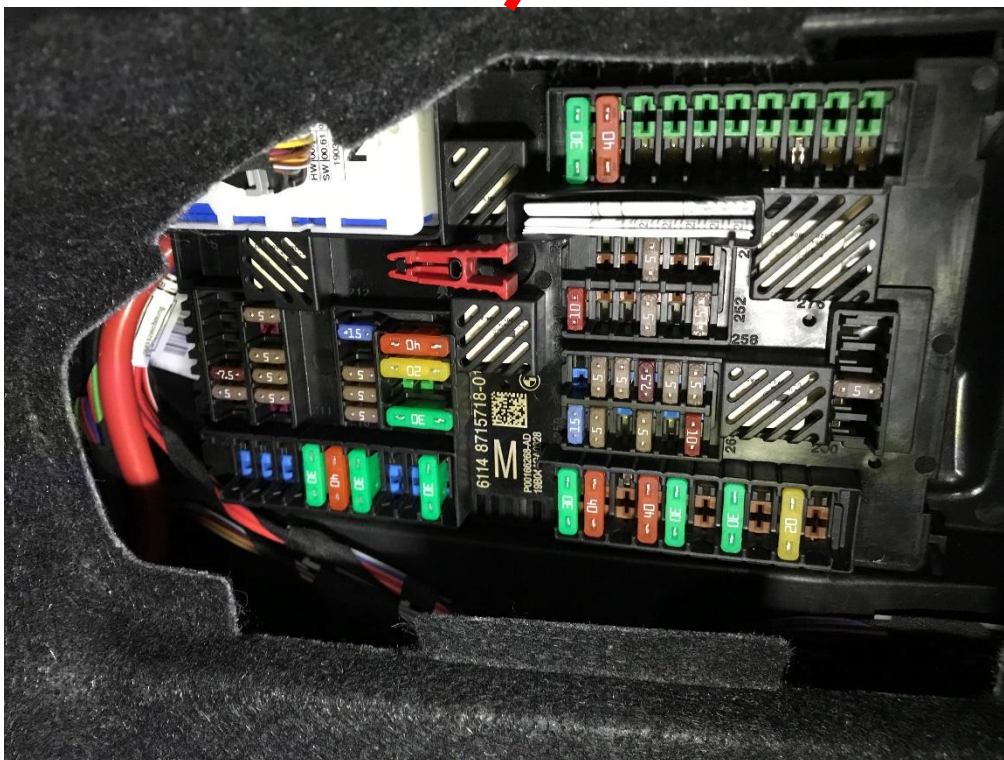


Figure 10

2. Plug in the electronic motor plug, and pull the OBD II -one-to-two extension cable to the front left. (Figure 11, 12)

※The original plug should be wrapped with insulating tape and hidden in a heat shield.



Figure 11

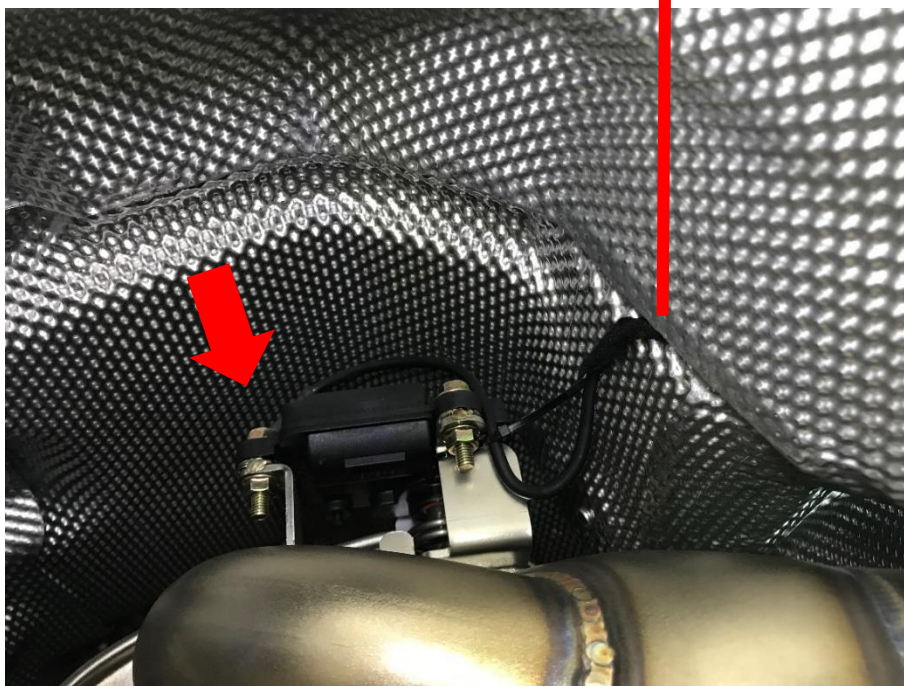


Figure 12

3. Pull from the front left chassis to the driver's seat. (Picture 13, 14)



Figure 13



Figure 14

4. The driver's seat removes the interior trim panel, lifts the carpet, pulls out the electronic motor cable, and connects the negative ground.

After the wiring is completed, restore the parts and connect the OBD II to complete the installation. (Figure 15)

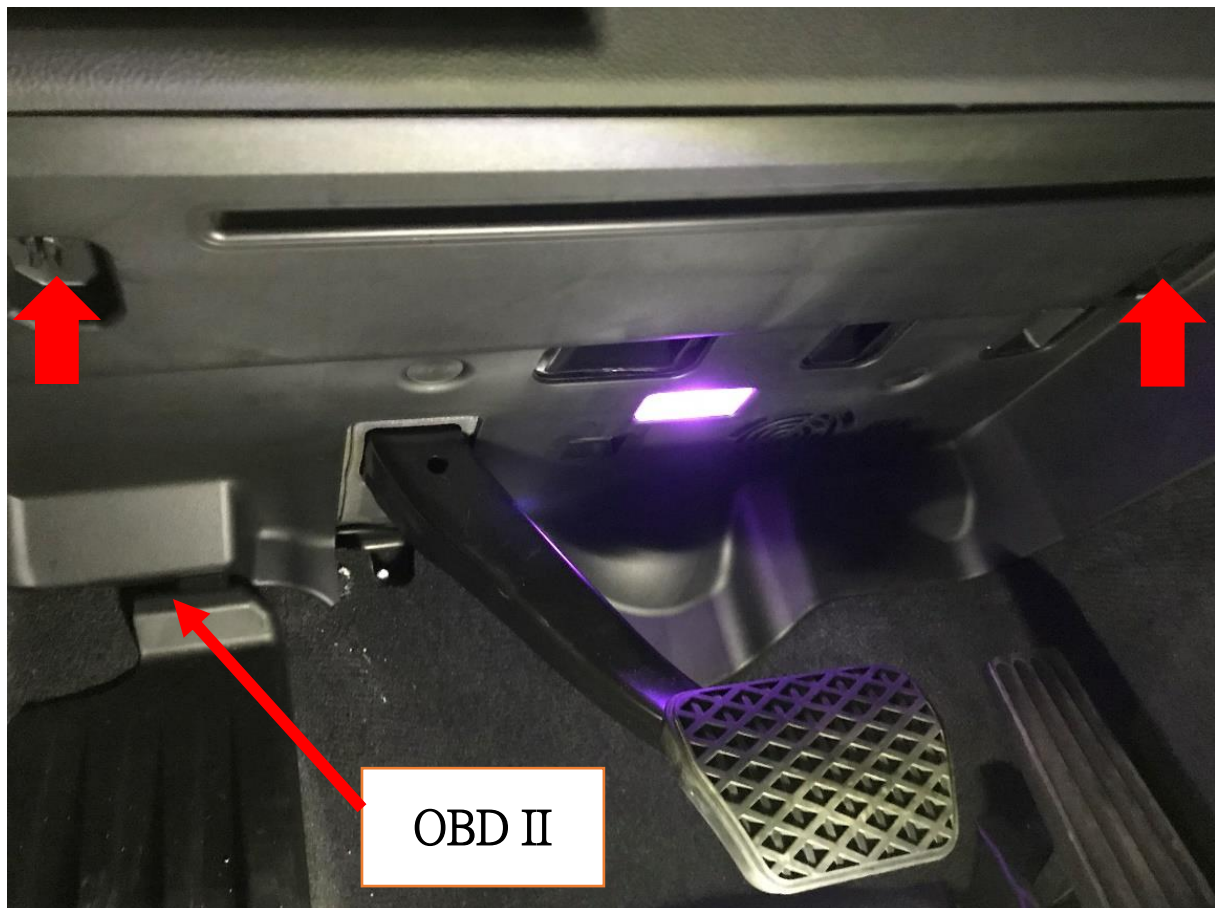


Figure 15