



iPE Exhaust

Automotive exhaust system engineering

Mercedes-Benz

GLC250/GLC300(X253)

(2020 OPF version)

Product installation instruction





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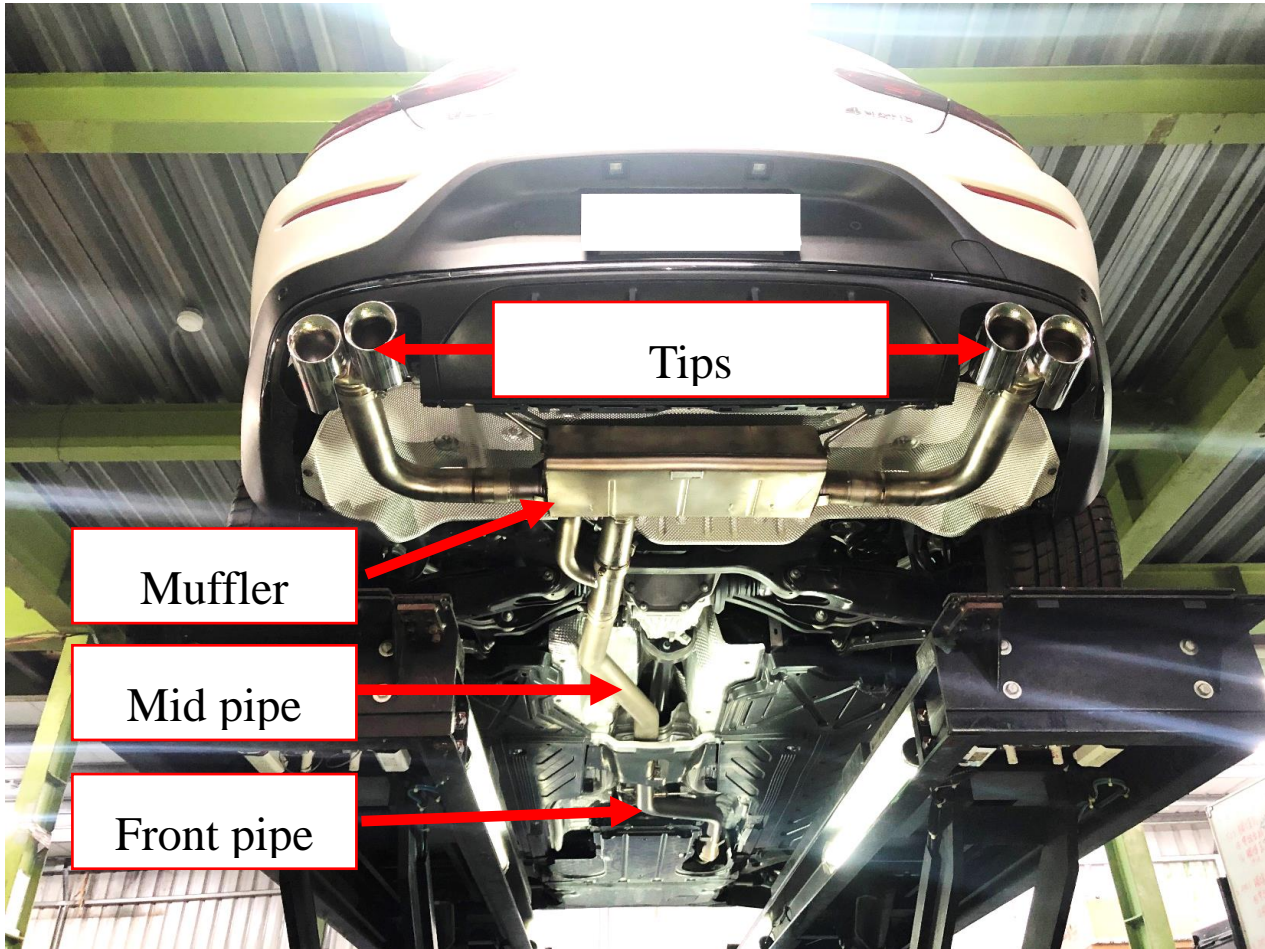
1.Important information

- i. Please read the installation manual before installing the iPE exhaust.
- ii. Please install by the technician of the car exhaust system or familiar with the iPE exhaust system.
- iii. This manual provides detailed installation instructions to ensure proper use and disassembly that the iPE exhaust is properly installed and used. If improper use and disassembly, the company does not assume any responsibility for loss and personal injury.
- iv. When installing the iPE exhaust system, please lock according to the torque value of the manual to avoid abnormal damage to the screws and nuts.
- v. If the exhaust pipe of the car still at a high temperature, please wear insulated gloves for the exhaust pipe installation work, or install it after cooling down.
- vi. Before starting, be sure to wipe off the oil on the exhaust pipe to avoid burning with high temperature.
- vii. The iPE exhaust system is designed according to the original engine data. If the computer is upgraded to change the engine parameters, the exhaust pipe may generate resonance, resonance or other abnormal sound. iPE can provide a modified version of the exhaust pipe for such vehicles.
- viii. If you have any questions about this installation instruction or use of the iPE exhaust system, please contact your local iPE dealer or contact us at info@ipe-f1.com.

2. Tools required for the installation

Tool name	Tool appearance
Rust inhibitor / lubricant	
Hexagon socket	
Hexagon wrench	
Torque wrench	

3. Mercedes-Benz GLC250/300(X253) product assembly



4. Steps to remove the original exhaust and related key point

Lift up the vehicle to the working position.

1. Remove the original electronic valve motor plug.
2. Remove the clamp and bushes at the connection between the rear pipe of the muffler and the mid pipe, and then move it forward to remove the rear section of the muffler. (Fig.1)

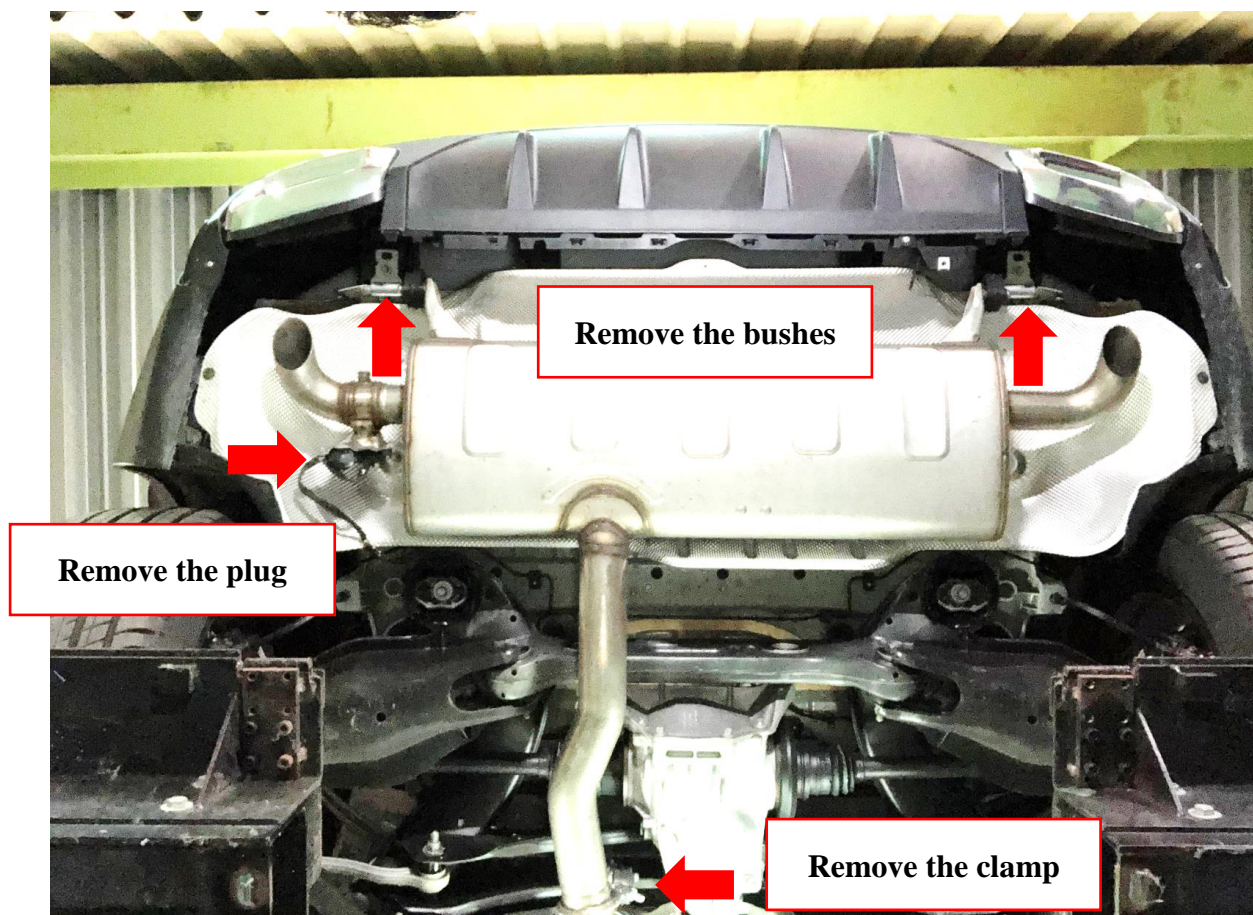


Fig. 1

Warning: Park to position before lifting up, clear the surrounding area and pay attention to the height to ensure the safety of people and vehicles!

After the screws are removed, placed neatly to avoid confusion during reinstall, lubricant for disassemble might be necessary.

3. Remove the lower guard plate of the automatic transmission and the mid pipe chassis support.
4. Remove the exhaust temperature and exhaust pressure sensors on the mid pipe.
5. Remove the mid pipe entrance end clamp and bush seat screws and then the original mid pipe can be removed.

✘ After the screws are removed, placed neatly to avoid confusion during reinstall.

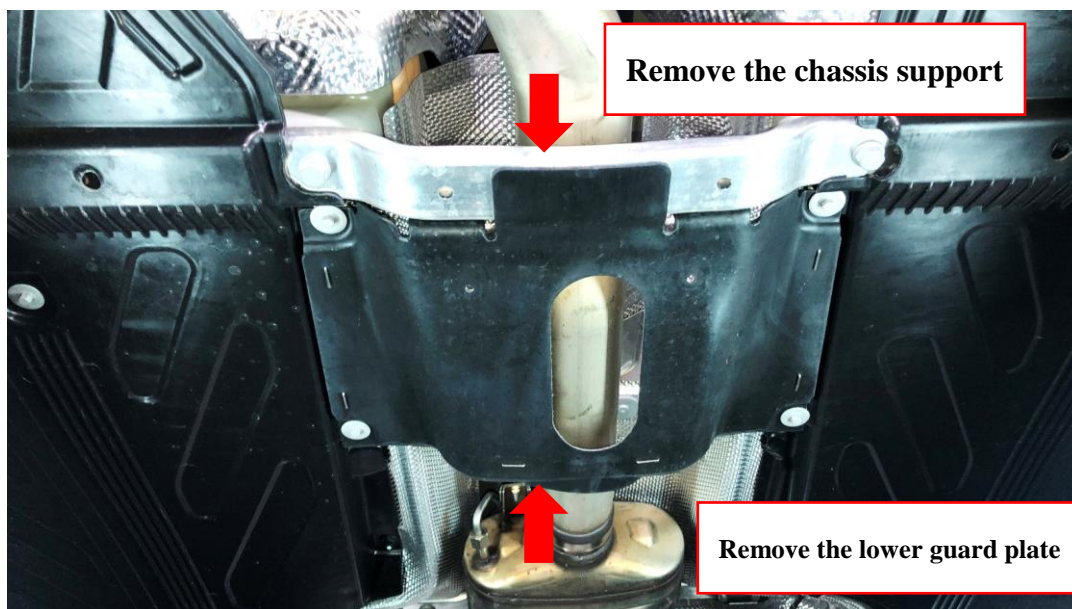


Fig. 2

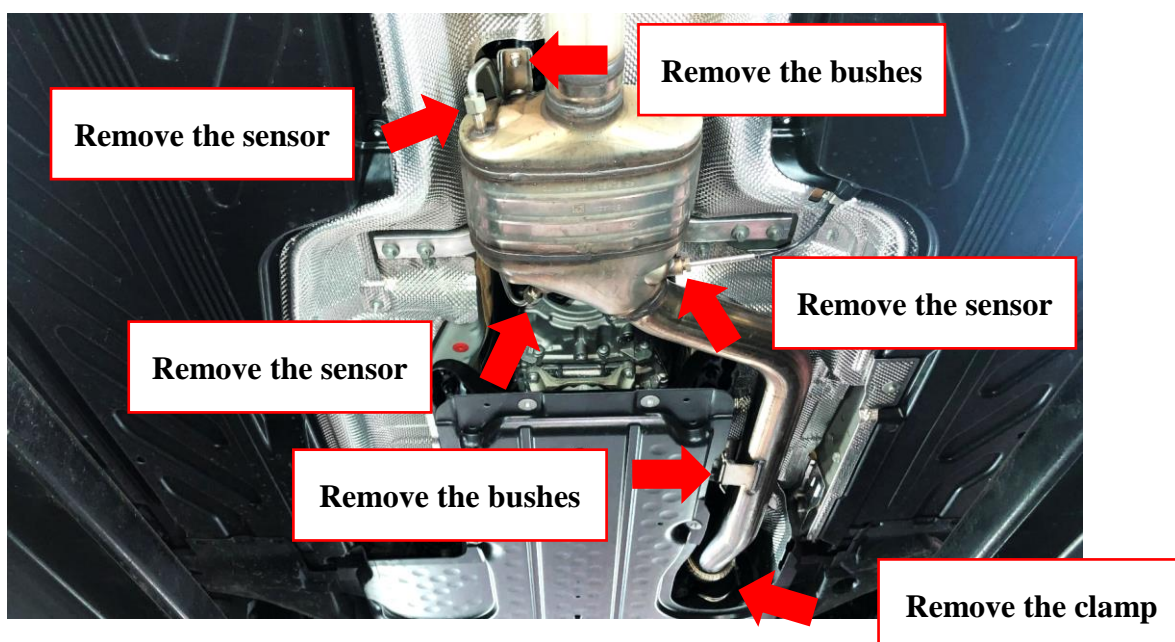


Fig. 3

6. Remove the engine trim and remove the air filter assembly.
7. Unplug the two front and rear oxygen sensor plugs, and remove the oxygen sensor after removing the cat pipe.

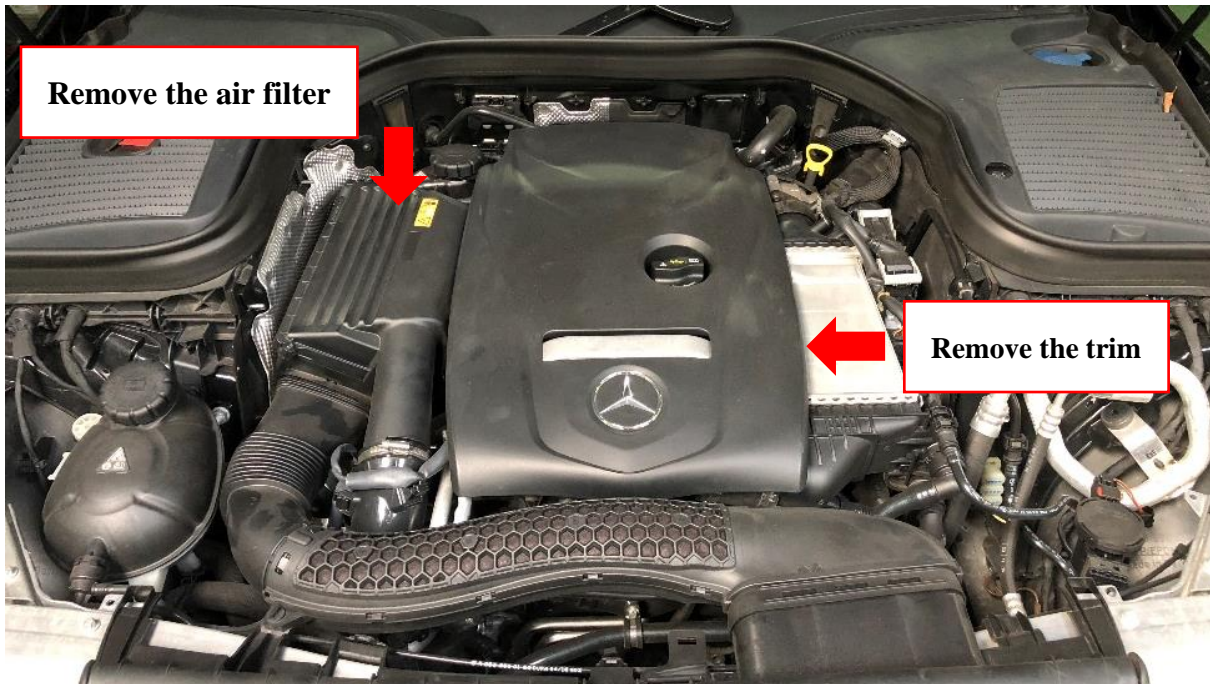


Fig.4

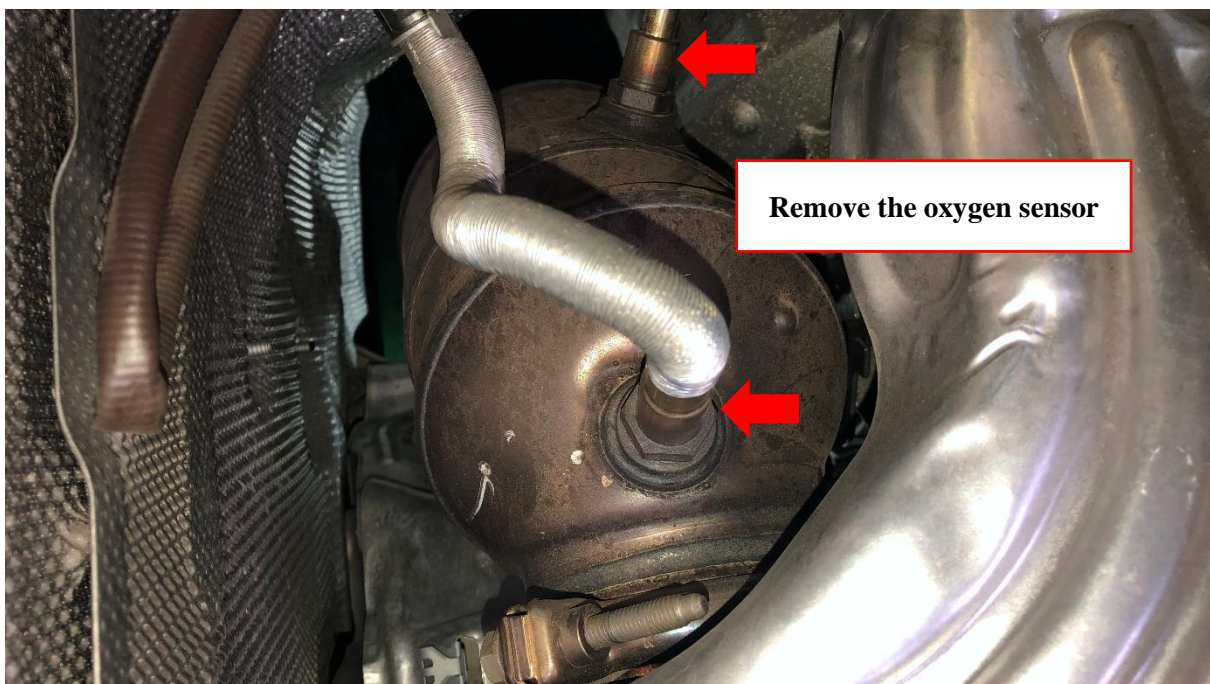


Fig.5

8. Remove the cat pipe clamps. (Fig.5)

9. Remove the lower support fixed screw. (Fig.6)

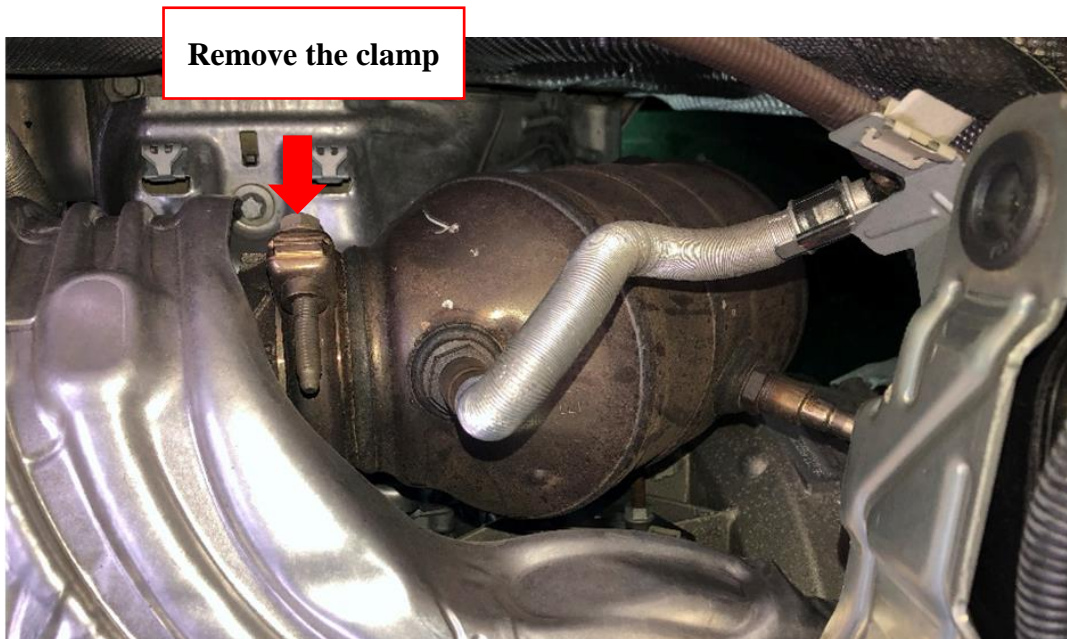


Fig.6

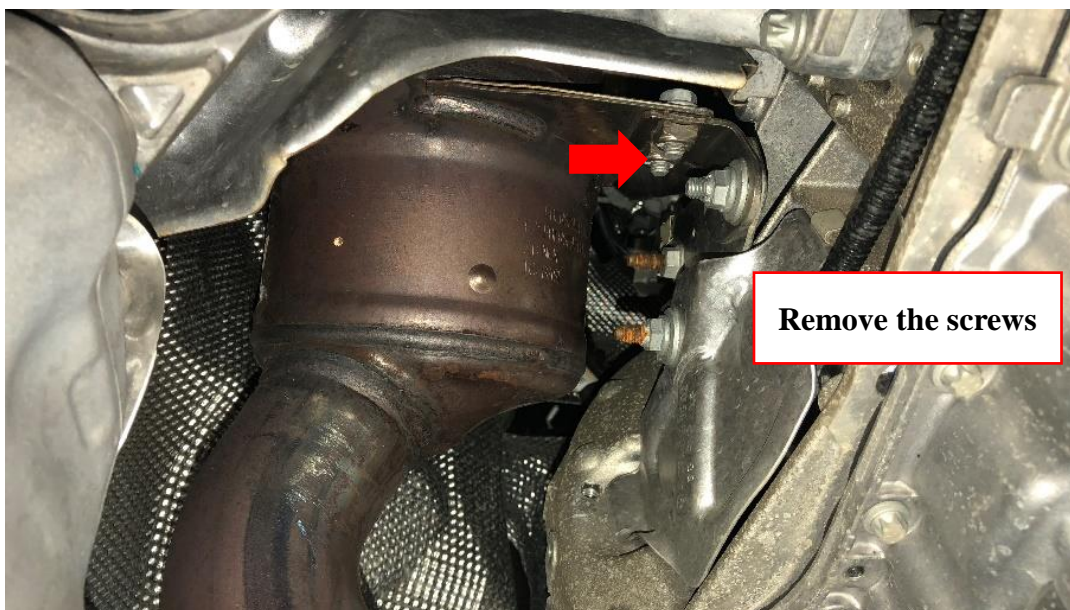


Fig.7

※Use an appropriate tool to remove the oxygen sensor to avoid wire damage!

Warning: do not use lubricant or rust remover organic solvent when the exhaust has high temperature!

10. Remove the original rear bumper. (It is necessary to remove rear bumper after installing the Dual Side Dual Out Tips)

11. Drill the original tips pull studs and remove the original tips.

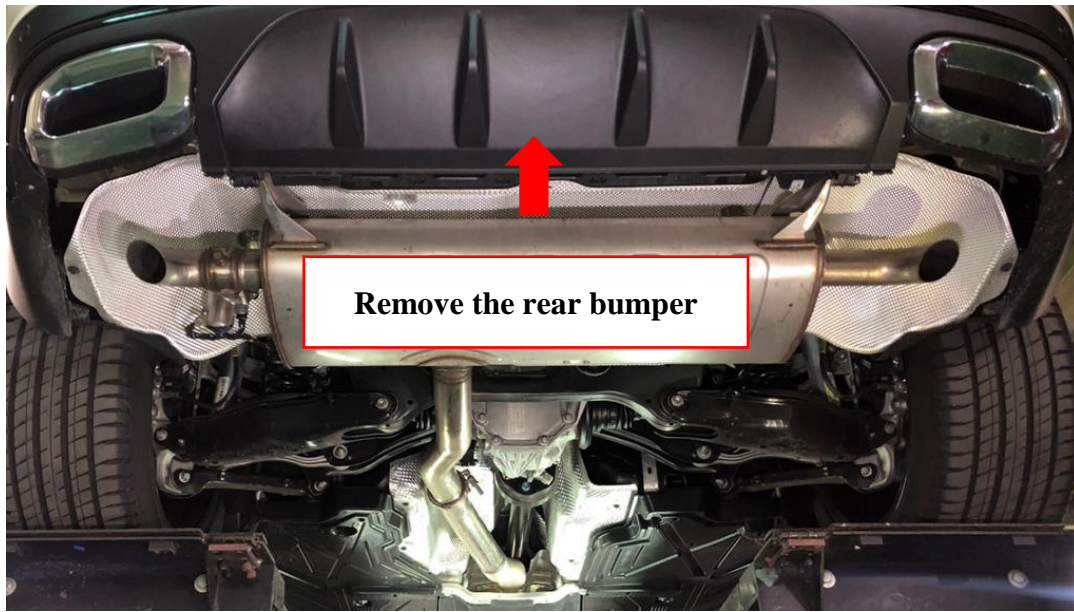


Fig.8



Fig.9

5. Steps and focused points for installing the iPE exhaust

1. First, install the front and rear oxygen sensor in cat pipe.
2. Lock the support fixed screw on cat pipe (Fig.7) and then tighten the clamps. (Fig.8)

Warning: lock these screws with proper torque setting.



Fig. 7

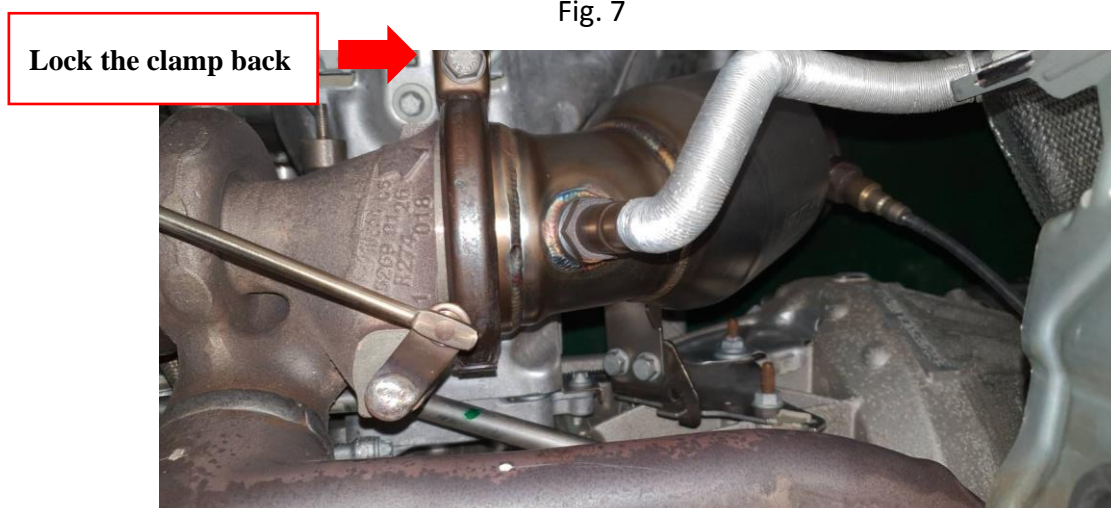


Fig. 8

3. Insert the front pipe into the cat pipe, lock the bush screws without tighten clamp.

Warning: lock these screws with proper torque setting.

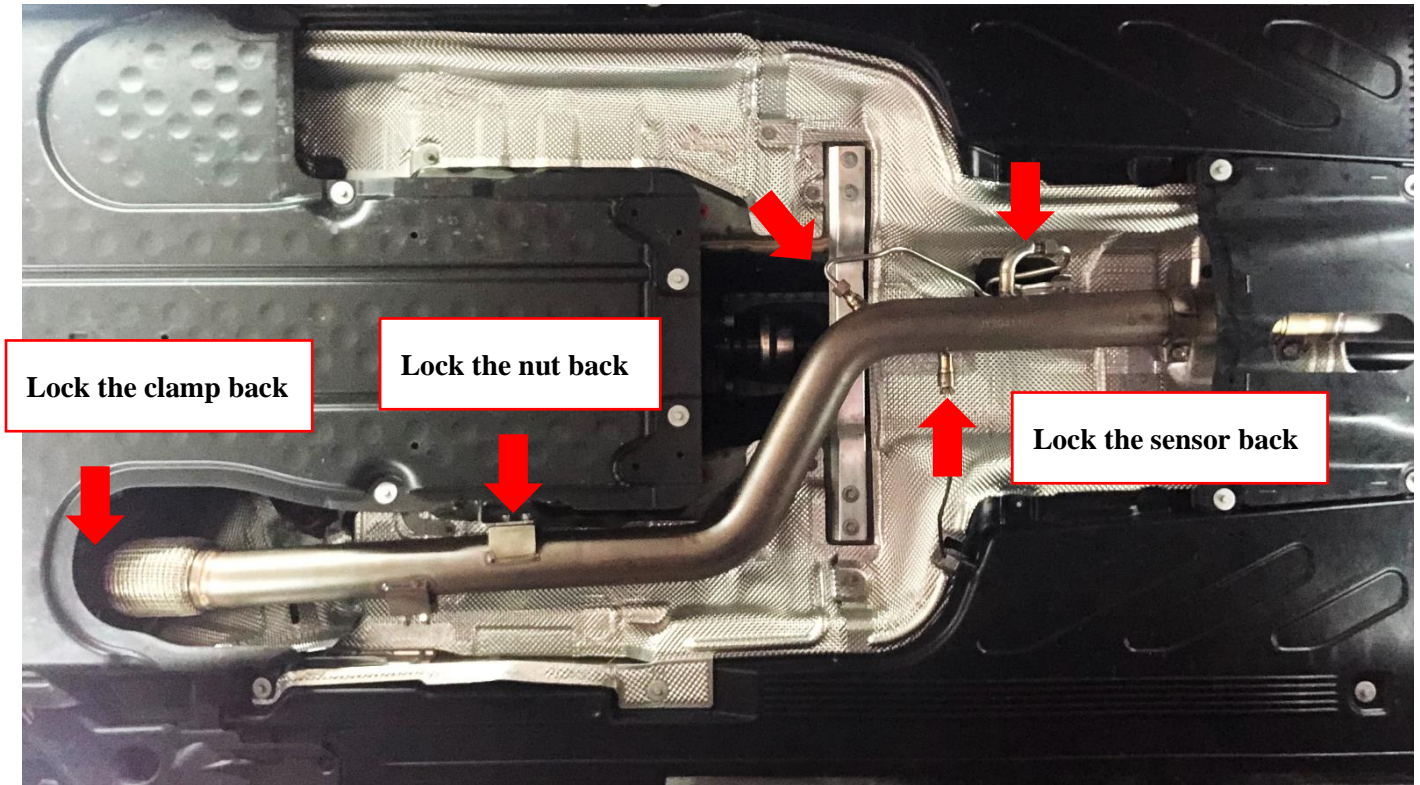


Fig. 12

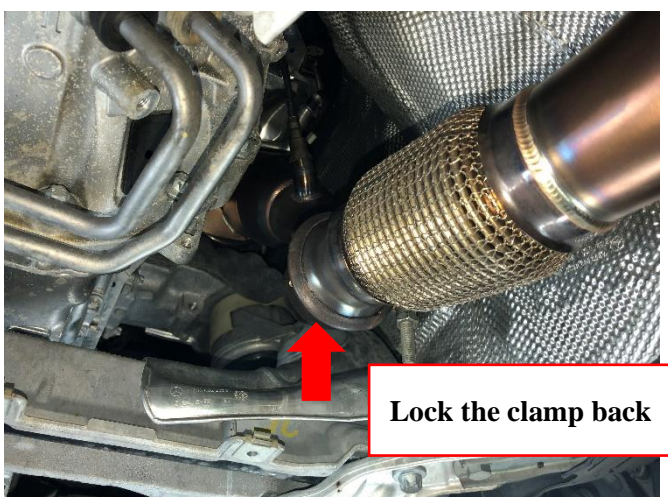


Fig. 13

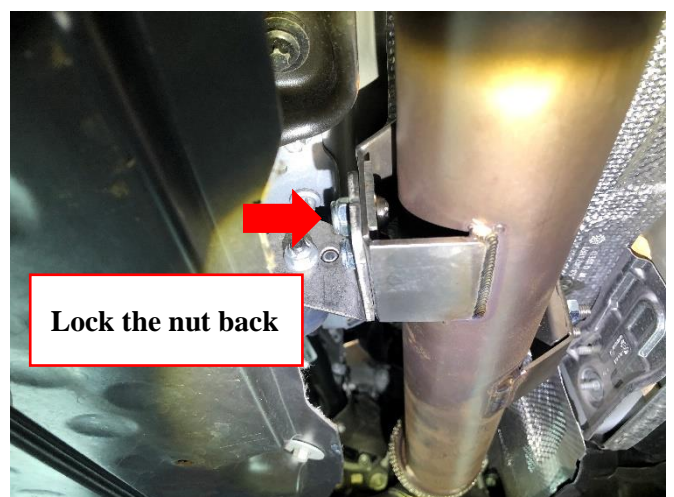


Fig. 14

4. Insert the mid pipe into the front pipe then install the bush on the car and the clamp without locking.
5. Insert the muffler into the mid pipe then install the left and right bushes of muffler.
6. Install the muffler outlet pipe and tips to the muffler.
7. Make sure that the gap between the exhaust and chassis is at least 15mm, and tighten the clamp.
8. Install the exhaust temperature and exhaust pressure sensor back to the iPE front pipe.

Warning: lock these screws with proper torque setting.

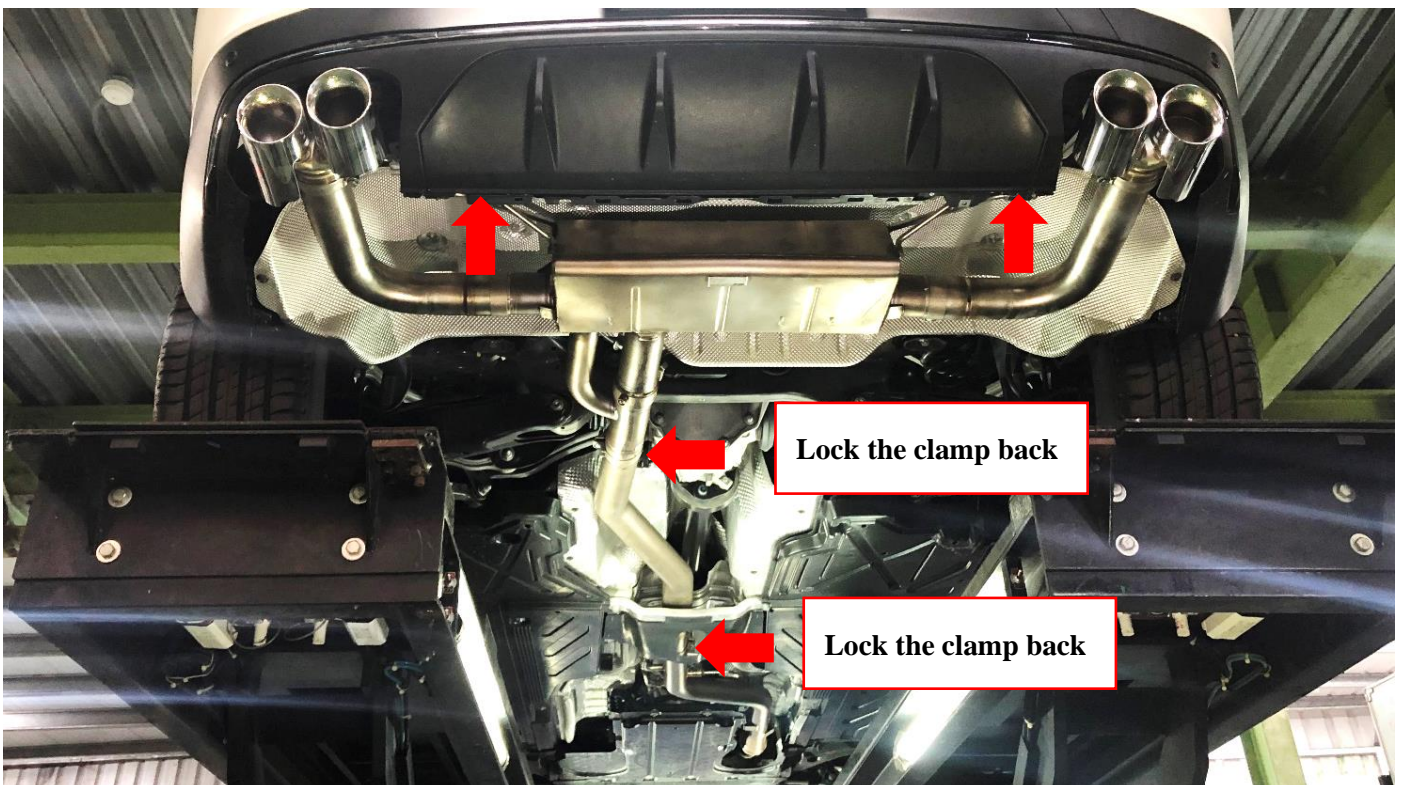


Fig. 15

9. Remove the motor from the original muffler, install it on the anti-lighting module attached to the shipping accessories, and install it in the left side heat shield.



Fig. 16

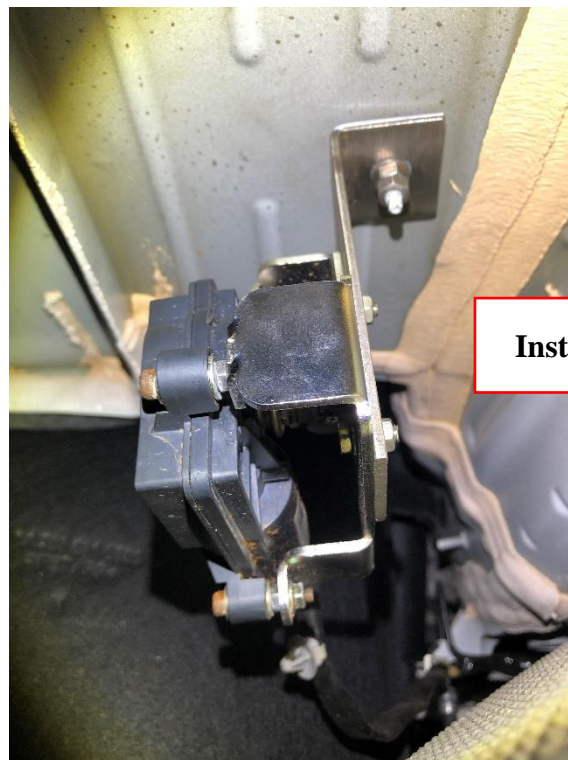
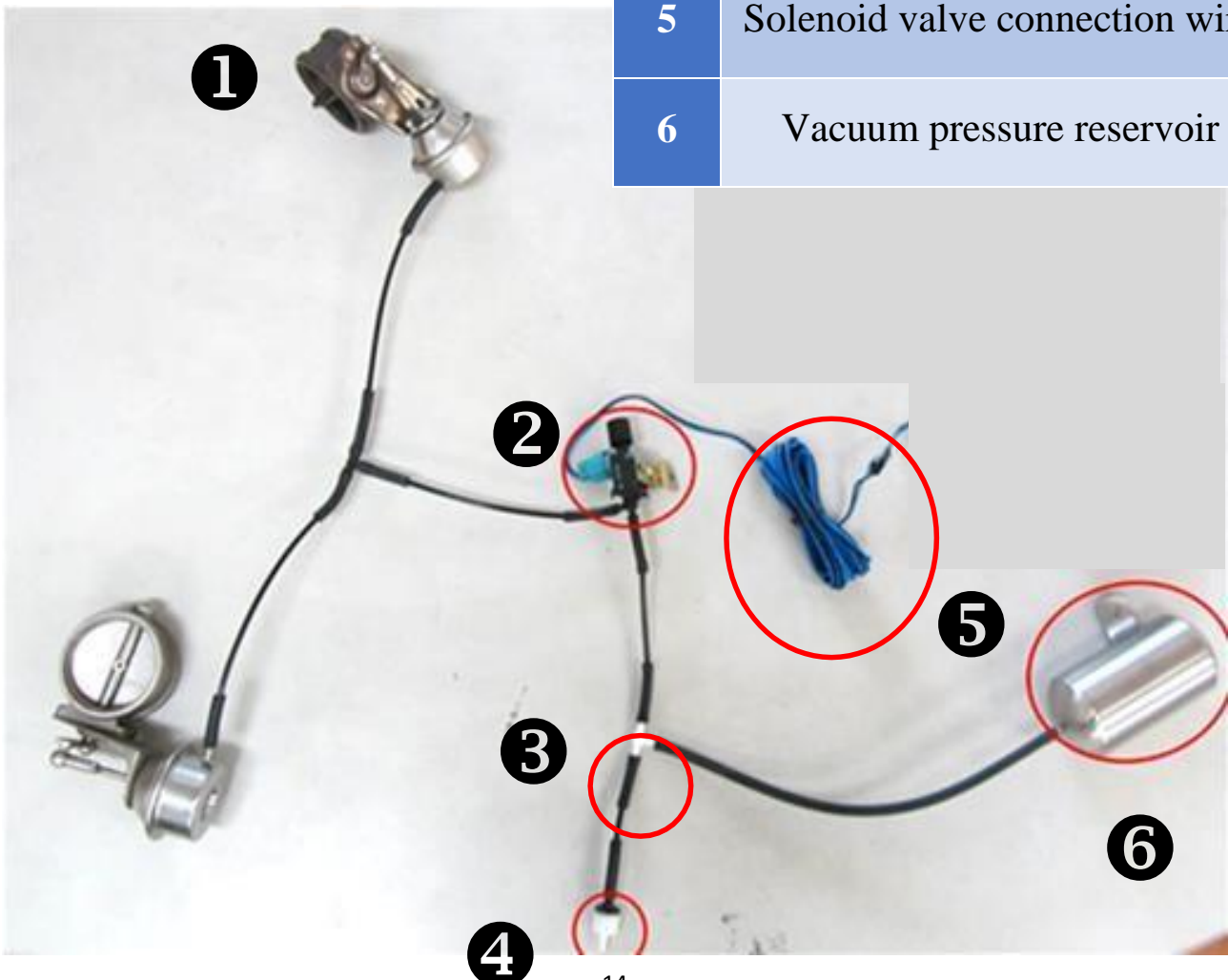


Fig. 17

6. Steps and focused points for installing the OBDII

※ The number of exhaust valves must be based on the actual exhaust pipe design.

No.	Product
1	Exhaust valve
2	Vacuum solenoid valve
3	Three-way connector
4	One way valve
5	Solenoid valve connection wire
6	Vacuum pressure reservoir



1. Install the power cord of the host to the fuse box beside the instrument panel. (Fig.19)

Warning: Make sure the positive and negative are correct to prevent the circuit from burning out.

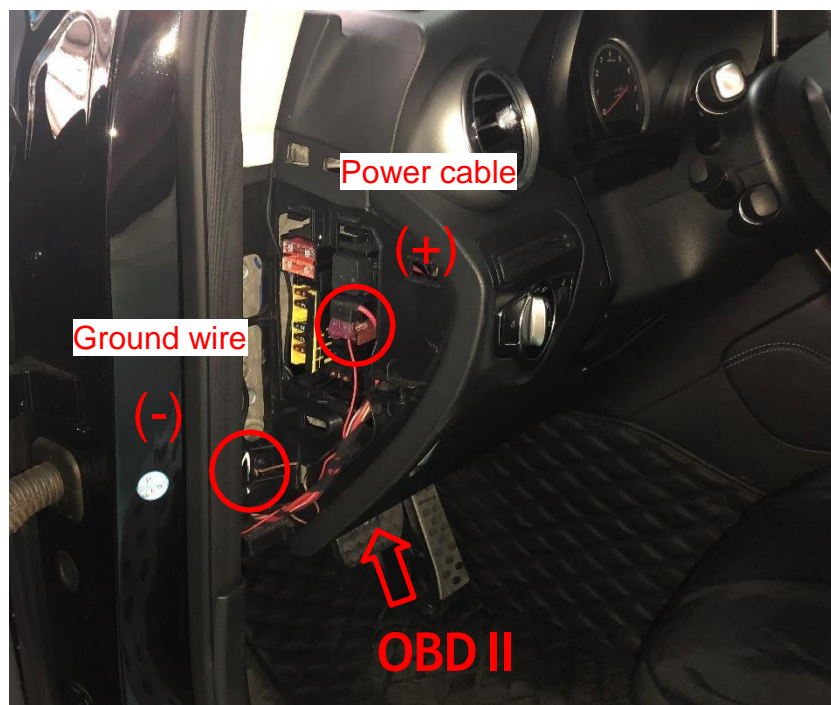


Fig. 18

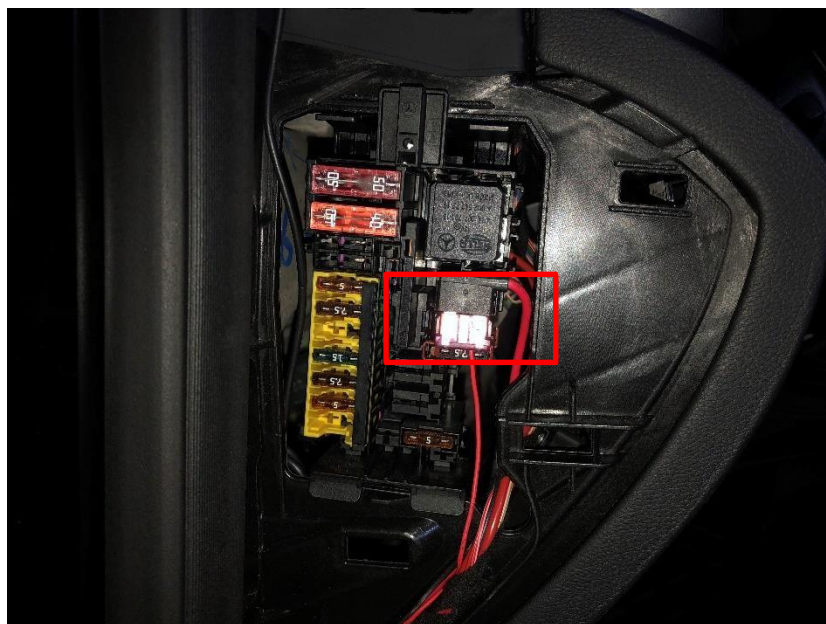


Fig. 19

2. Install the vacuum pressure reservoir (Fig.21), one way valve, solenoid valve (Fig.22) fixed to the upper car beam of differential. (Fig.20)

Warning: The wires and vacuum tubes must be fixed to avoid damage caused by rotating of the transmission shaft.



Fig. 20

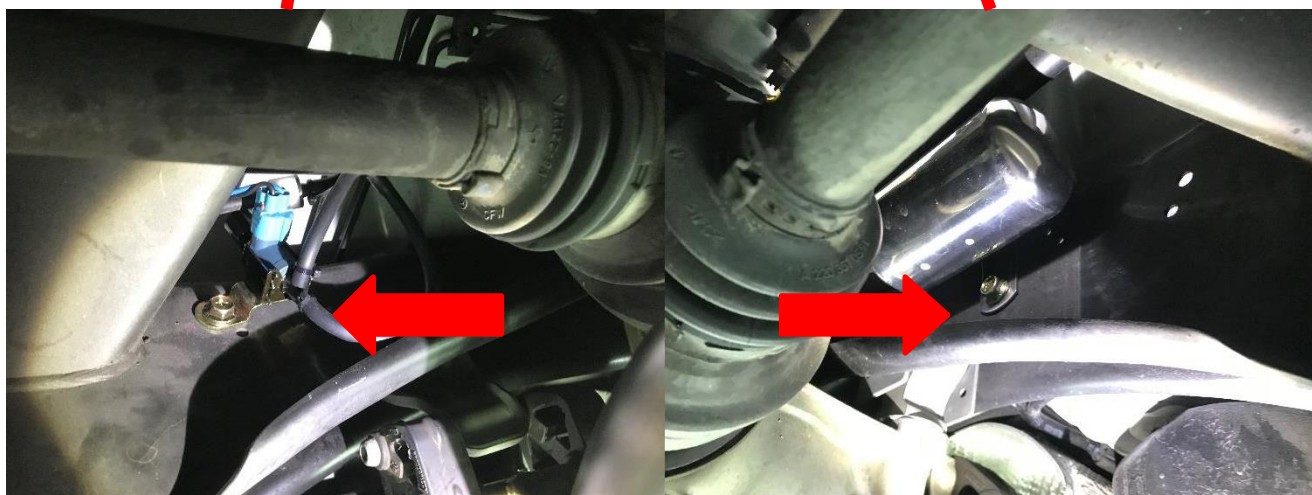


Fig. 21

Fig. 22

3. Remove the original vacuum tube and use a three-way to connect the vacuum source (Fig.24), The solenoid valve control wires (blue and black) are led out by the seal ring of the wire group (Fig. 25) and connected to the check valve.
4. Install engine cover, air filter assembly and lower guard.(Please refer to pages 7 and 9)

Warning: The wires and vacuum tubes must be fixed to avoid damage.

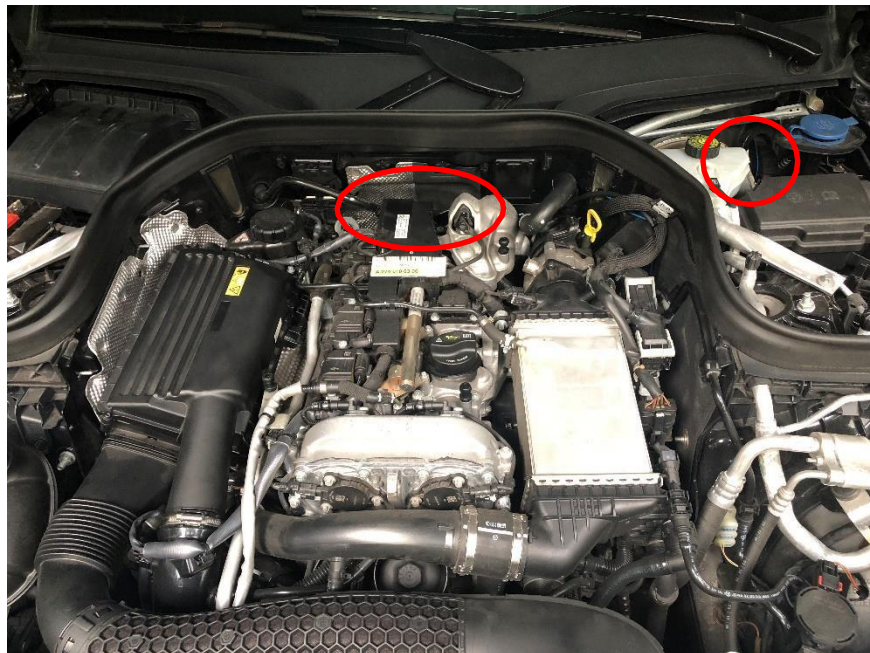


Fig. 23



Fig. 24



Fig. 25