



iPE Exhaust

Automotive exhaust system
engineering

Product installation
instructions

Applicable vehicle type:

BMW G30/G31/G38

520i/530i/530Li



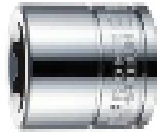

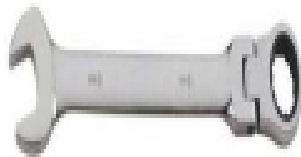
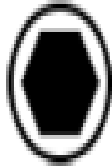


Catalog

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➤ 1. Important Notice

- *iPE developed this exhaust according to the improvement of stock . Therefore, there will be no effect of the car from the original manufacturer after installation. There is an inductive power supply function between the car key and the car for many vehicle models. Therefore, the car key should be kept away from the car with a distance of at least five meters to maintain safe conditions.*
- *The exhaust of a car right after driven is still in a high temperature. Thus, please wear heat insulating gloves to replace the exhaust, or perform the replacement after the temperature lowered to avoid burns.*
- *For avoiding the generation of resonance, please don't let the valve open too early when setting the valve to open automatically. The opening of the valve is recommended to be set to 60% of gas pedaling. Please refer to page 21 for the explanation of detail setting.*
- *iPE exhaust is designed according to the stock engine data. In case the engine computer upgraded for increasing horse power, obvious resonance in conjunction with this exhaust could occur. IPE also provide revised exhausts for such vehicles, please contact us for further details.*

2. Tools required for operating Procedures

Tools name	Tools Appearance
Rust inhibitor / lubricant	 
Hexagonal bucket	 
Hex Wrench	 
Torque wrench	 

3. Assembly of product appearance



4. Demounting Stock Exhaust

Move the vehicle to the top machine and raise it to the proper position.

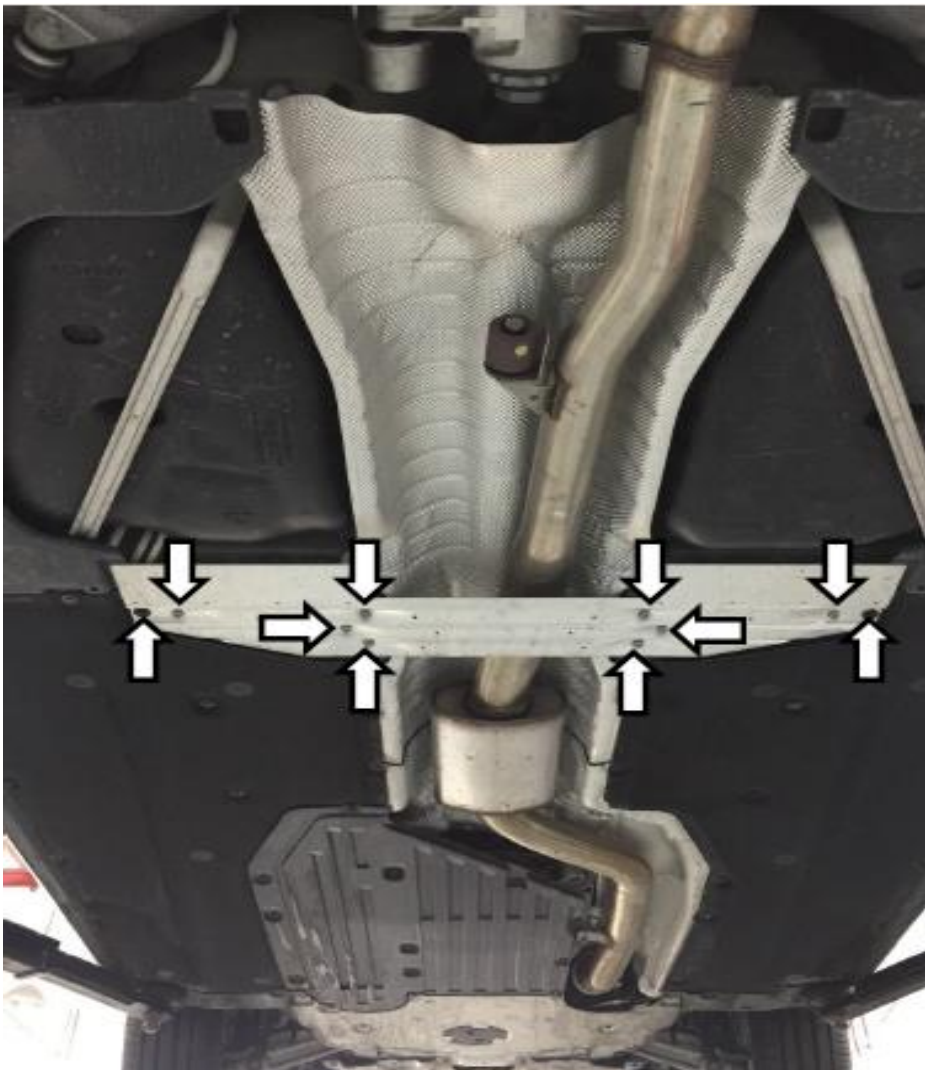
Note: Please stop the vehicle and actually lift the vehicle up. When jacking up,

Keep the clearance around, pay attention to the height to ensure the safety of people and cars!

After the screws are removed, they are placed neatly to avoid confusion during recovery.

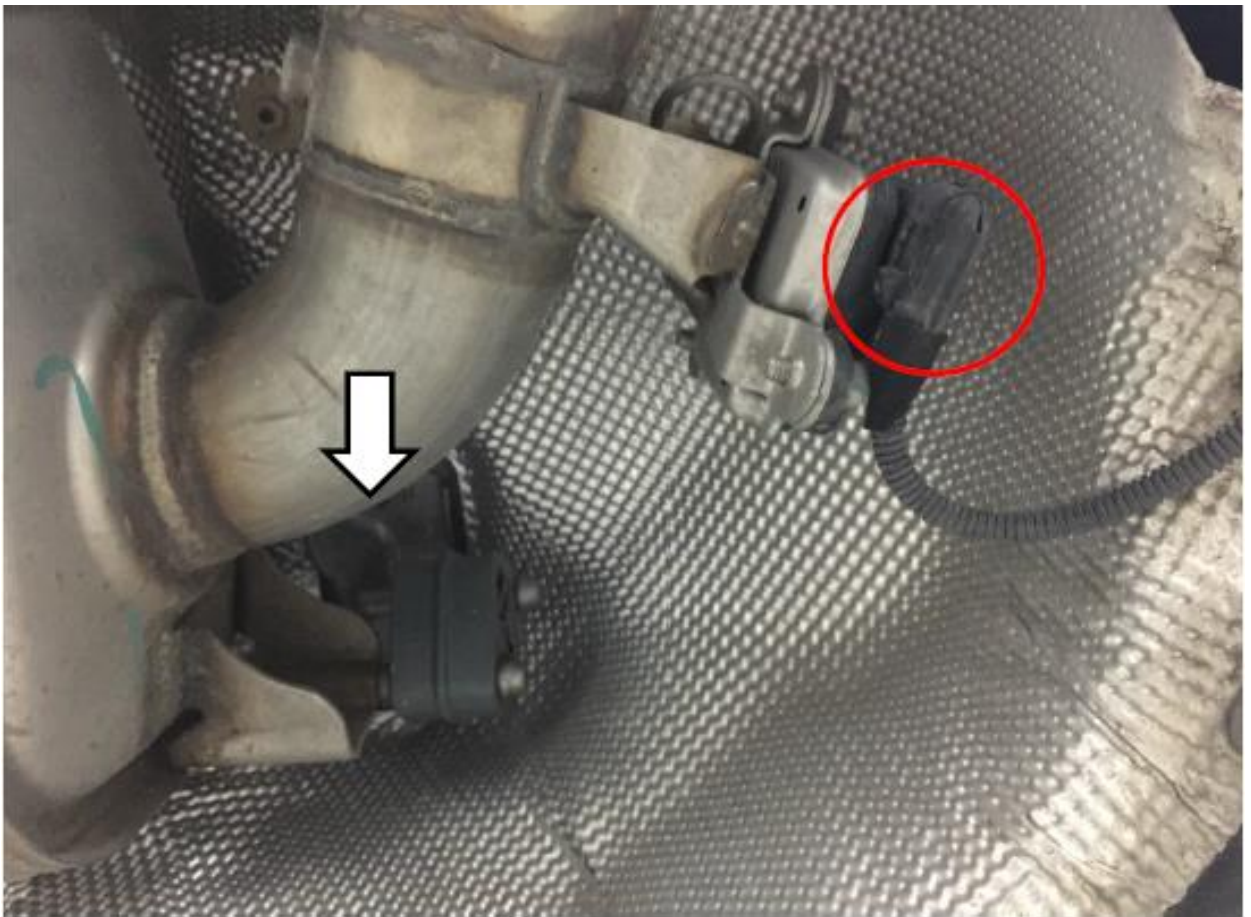
Use a lubricant and disassemble if necessary.

1. Remove the plaque fixing screws and remove the plaque (Figure 1).



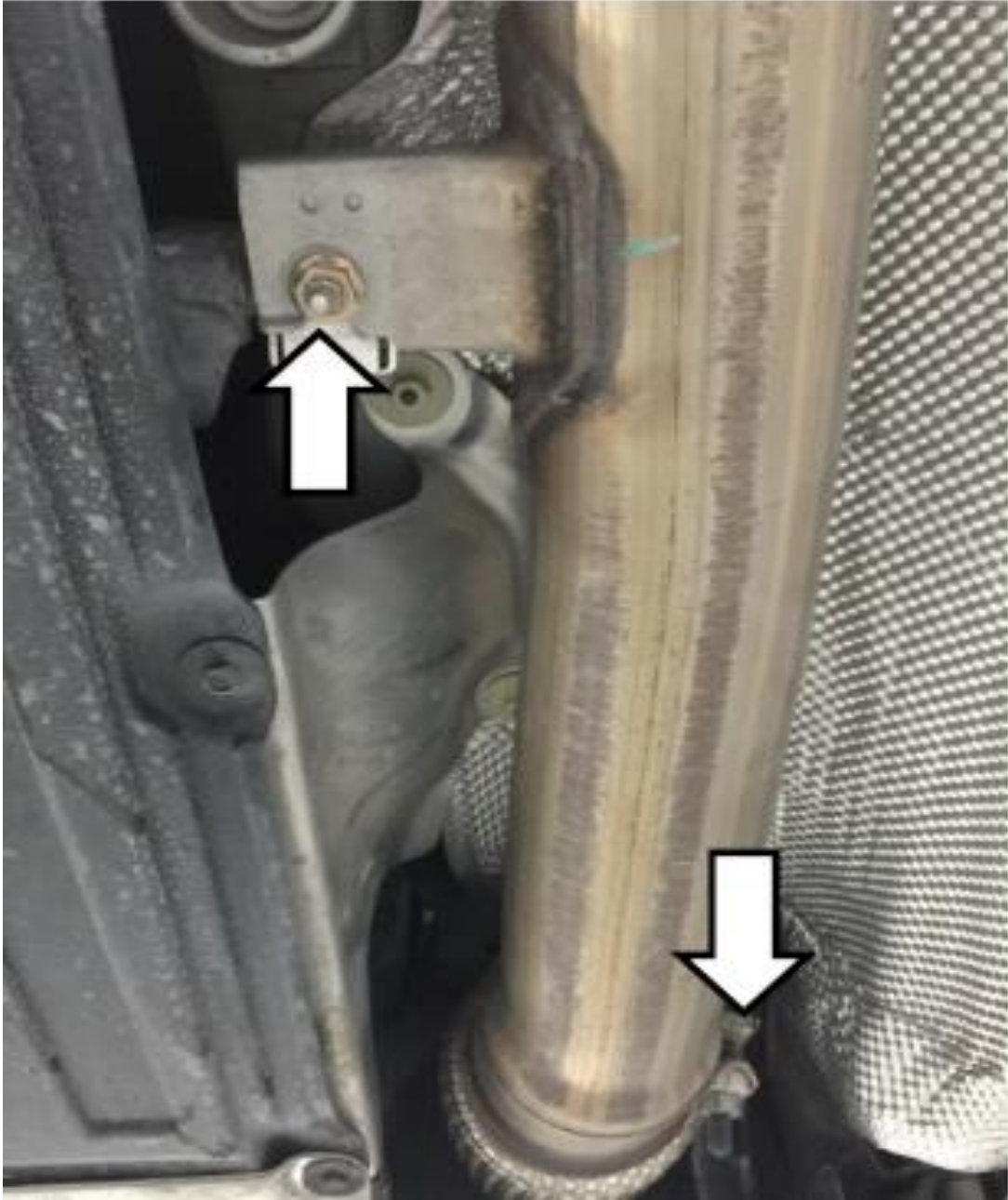
(Figure 1)

- 2. Loosen the left and right lifting lugs of the rear barrel and the front tube lug and loosen the front tube loop to remove the middle and rear sections (Figures 2 and 3).
- 3. The motor plug should be removed according to regulations.
- **Note: After the screws are removed, they are placed neatly to avoid confusion during recovery.**



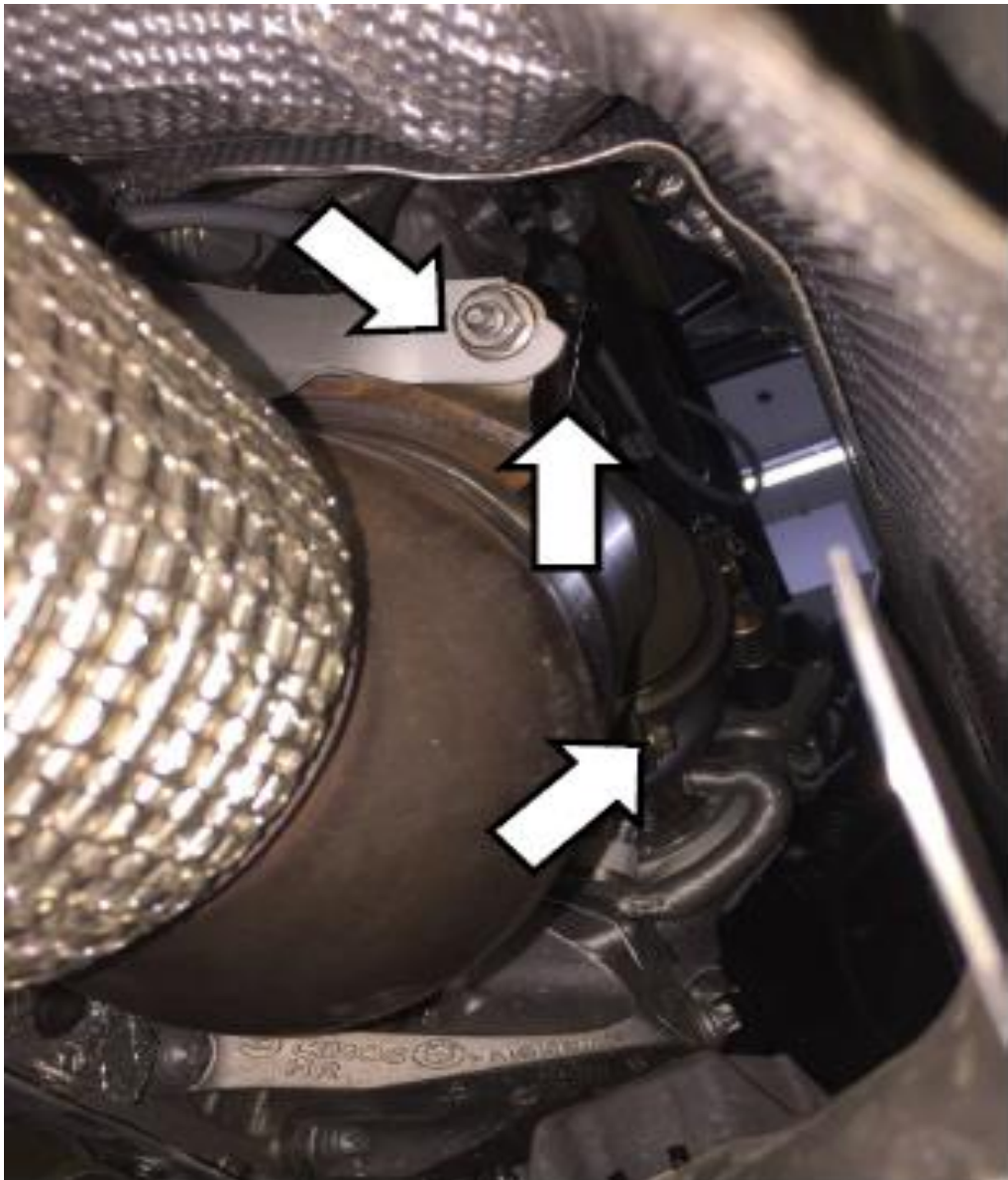
(Figure 2)

- Note: After the screws are removed, they are placed neatly to avoid confusion during recovery.



(Figure 3)

- 4. The front and rear oxygen sensor plugs can be removed first, and the oxygen sensor is removed after the catalyst is removed.
- 5. Unscrew the catalyst bundle ring screw and the lifting eye screw to remove the catalyst (Figure 4, 5)
- **Note: Do not use lubricant or rust remover organic solvent when the exhaust pipe has residual temperature!**
- **Use an appropriate tool to remove the oxygen sensor to avoid line damage!**



(Figure 4)

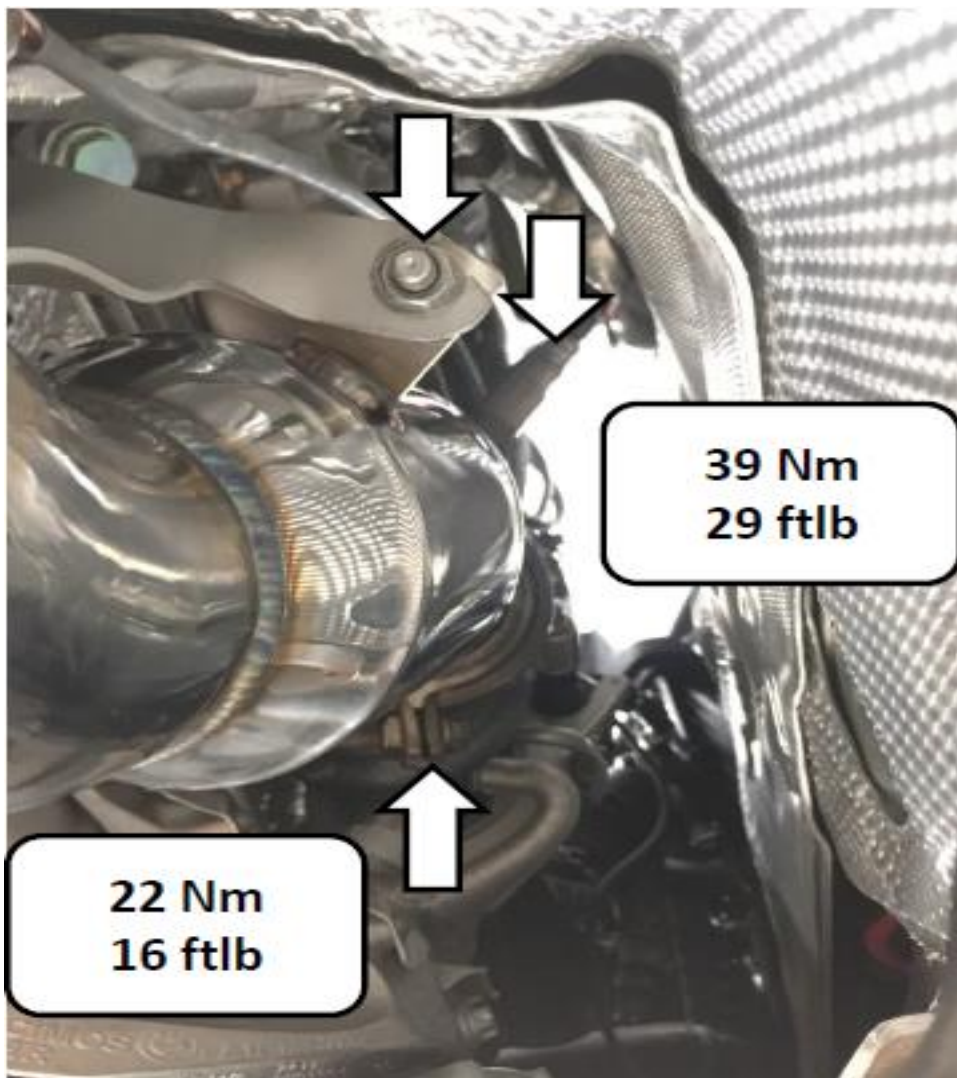
- Note: Do not use lubricant or rust remover organic solvent when the exhaust pipe has residual temperature!



(Figure 5)

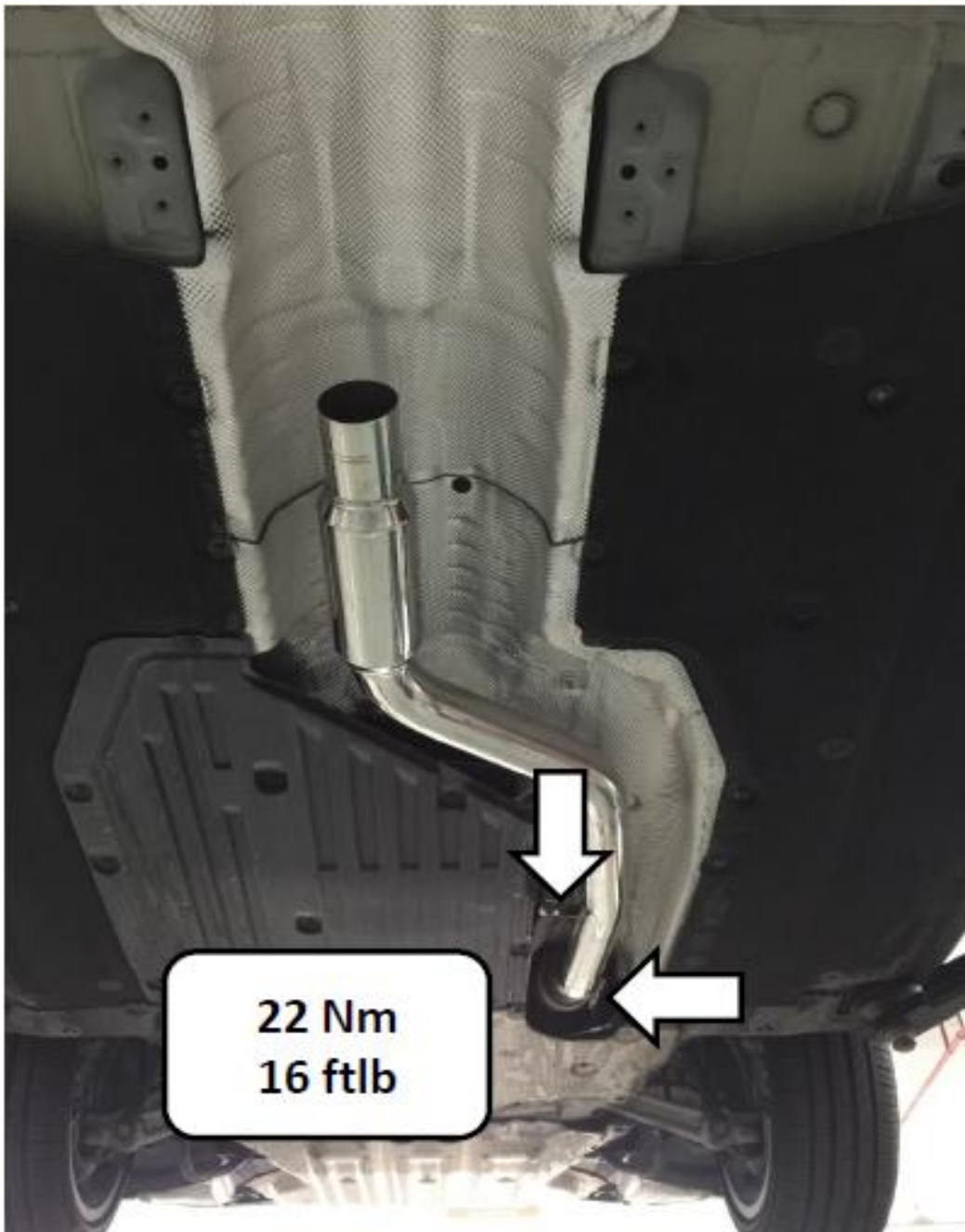
5. Install iPE exhaust

- 1. First install the front and rear oxygen sensor on the catalyst section
- 2. Position the iPE catalyst and lifting lug (Figure 6)
- **Note: Lock the screws to the proper torque**



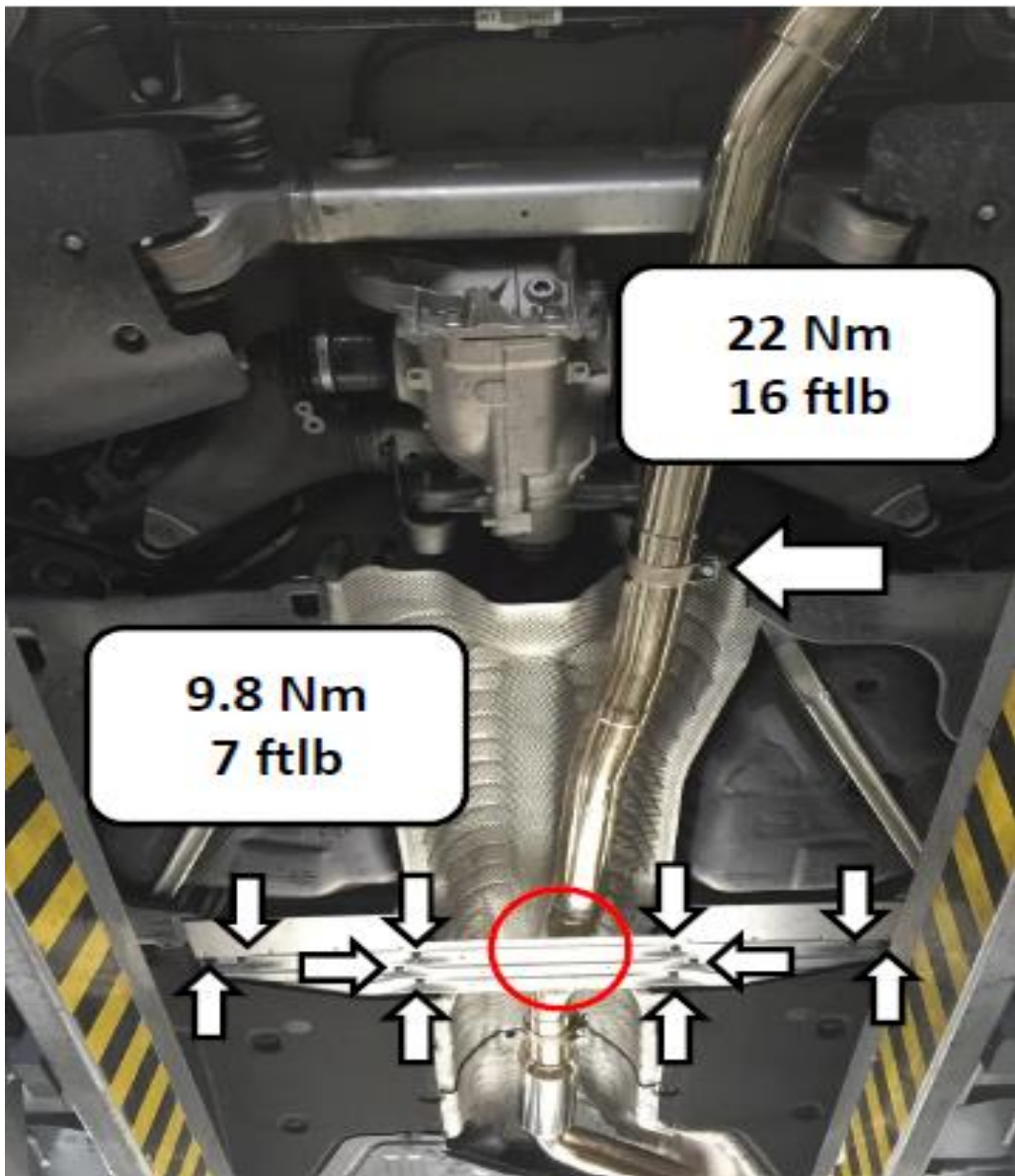
(Figure 6)

- 3. Insert the front tube into the catalyst section and install the lifting lug to the positioning (Figure 7)
- **Note: Lock the screws to the proper torque**



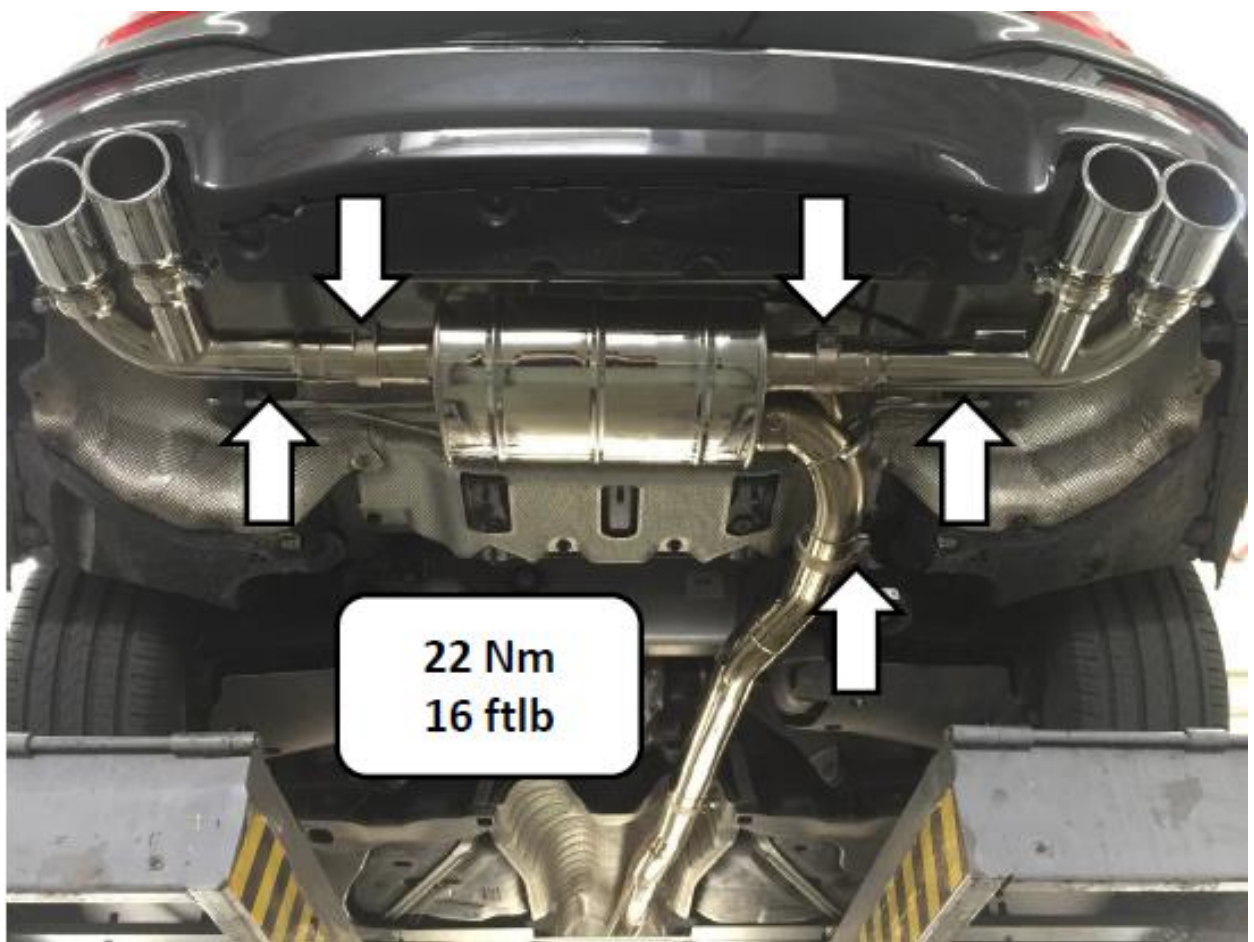
(Figure 7)

- 4. Install the middle section to the positioning, do not lock the bundle ring first. Then install the lower guard plate, the distance between the pipe and the guard plate is 15mm (Figure 8)
- Use an appropriate tool to remove the oxygen sensor to avoid line damage!
- Note: Lock the screws to the proper torque



(Figure 8)

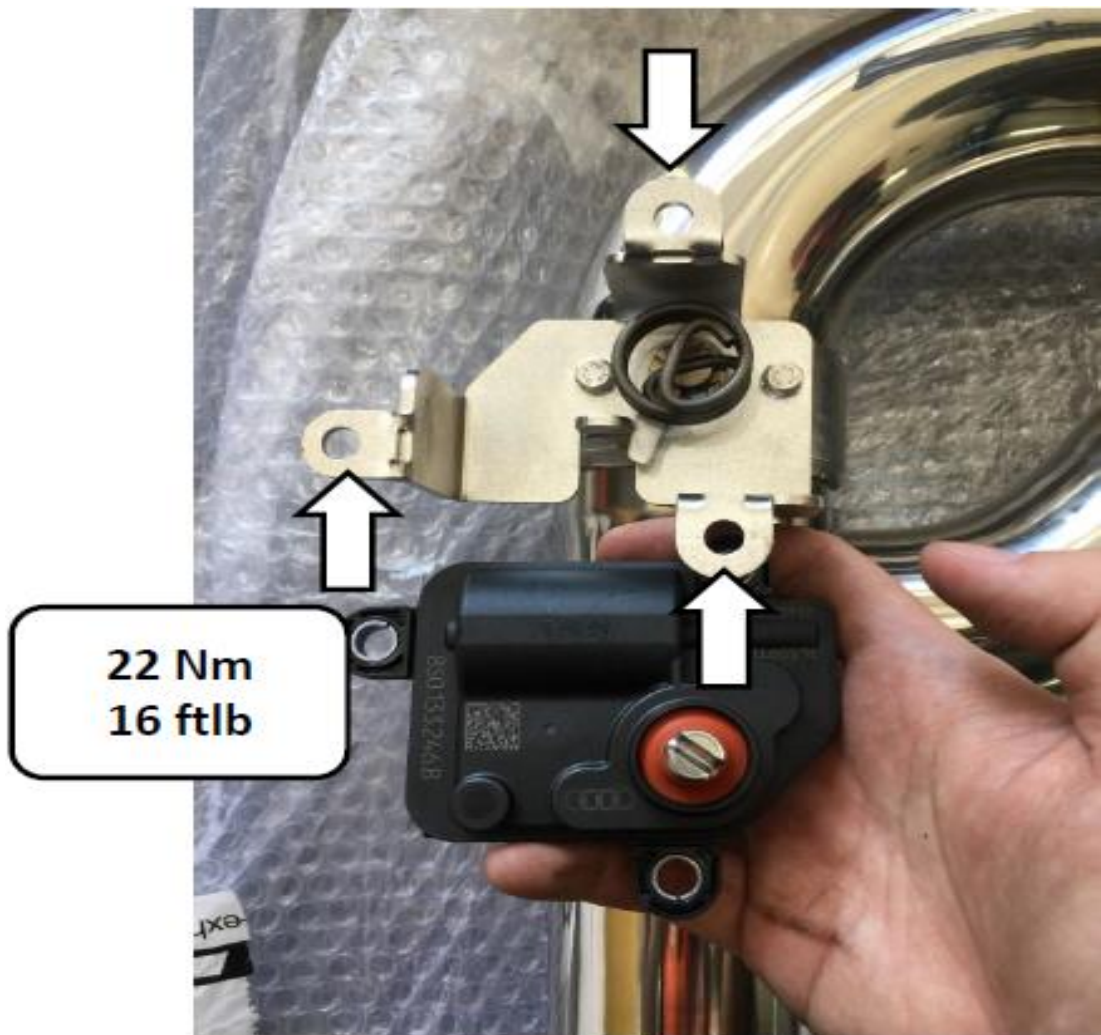
- 5. Install the muffler and outlet nozzles to the positioning (Figure 9)
- 6. Adjust the middle section to the height of the guard plate and lock it
- 7. Finally, lock the tips and adjust the gap between the bumper.
- **Note: Lock the screws to the proper torque**



(Figure 9)

6. Installation of OBD car joint controller steps and related key points

- 1. First install the original motor to the iPE exhaust pipe, then attach the supplied spring to the shaft (Figure 10).
- 2. The motor needs to be rotated clockwise before the screw is locked (Figure 11).
- **Note:** Lock the screw to the proper torque, and the motor lock hole should be concentric with the bracket before locking.



(Figure 10)



(Figure 11)

- 3. Install the original motor on the support frame, and put a 4mm washer on the valve to make the valve operate normally (Figure 12).



(Figure 12)

- 4. Find the fuse box on the right side cover of the rear compartment
- 5. OBD controller positive electrode as shown below in the red circle at the second row of the third fuse (Figure 13)



(Figure 13)

- 6. The OBD power cord is inserted into the vehicle from the rubber at the bottom of the vehicle and the positive pole is worn out of the vehicle bottom (Figure 14).



(Figure 14)

- 7. Move the rubber sleeve of the steering wheel post outward, and then insert the OBD wire harness into the car from the bottom of the vehicle (Figure 15).



(Figure 15)

- 8. Drill the rubber sleeve of the steering gear inside the car, and then insert the OBD wire harness into the car from the bottom of the car (Figure 16).



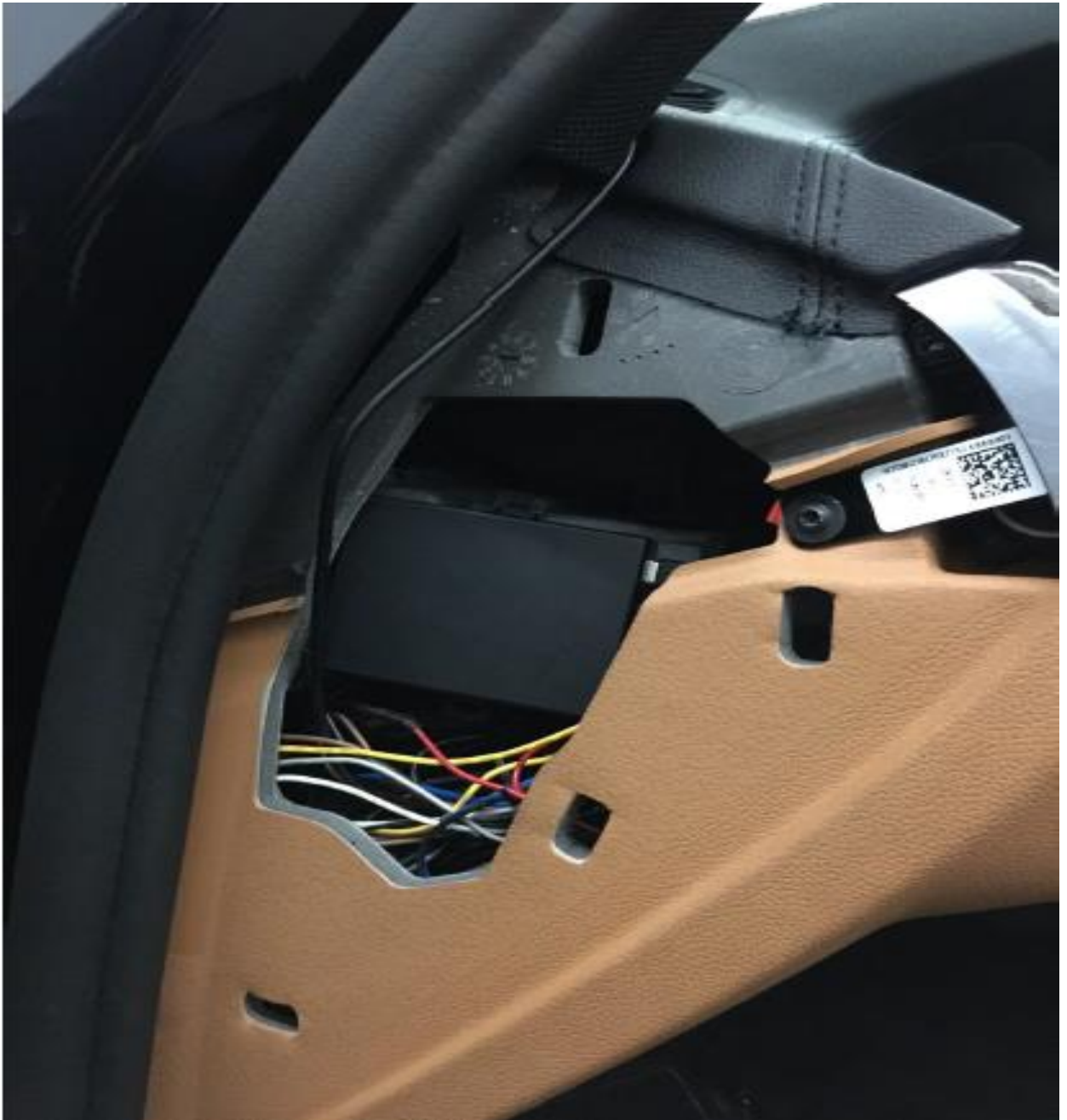
(Figure 16)

- 9. Place the OBD host (black box) under the A-pillar of the car (Figure 17)



(Figure 17)

- 10. Remove the left side cover of the driver's seat and place the controller circuit in this space. Loosen the screw and lock the negative pole at the position indicated by the arrow (Fig. 18).
- **Note: Do not pull the line too hard to avoid line damage.**



(Figure 18)

- 11. Plug the OBD plug and reset it to test if the switch valve is working properly.
- 12. Install all removed parts and restore and lock the appropriate torque according to the correct installation procedure.
- **Note: Do not pull the line too hard to avoid line damage.**



(Figure 19)