



# iPE Exhaust

Automotive exhaust system engineering

#### AUDI A7-C8

Product installation instructions



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# (1) Important message



- 1. Please read the installation manual before installing the iPE exhaust pipe.
- 2. Please install by the technician of the car exhaust system or familiar with the iPE exhaust system.
- 3. This manual provides detailed installation instructions to ensure proper installation and use of iPE exhaust pipe; in case of improper use and disassembly, the company does not assume any responsibility for loss and personal injury.
- 4. When installing the iPE exhaust pipe, please lock according to the torque value of the manual to avoid abnormal damage to the screws and nuts.
- 5. If the exhaust pipe of the car is still at a high temperature, please wear insulated gloves for the exhaust pipe installation work, or install it after cooling down.
- 6. Before starting, be sure to wipe off the oil on the exhaust pipe to avoid burning and high temperature.
- 7. The iPE exhaust pipe 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.
- 8. If you have any questions about this installation instruction or the use of the iPE exhaust pipe, please contact your local iPE partner or contact us at info@ipe-f1.com

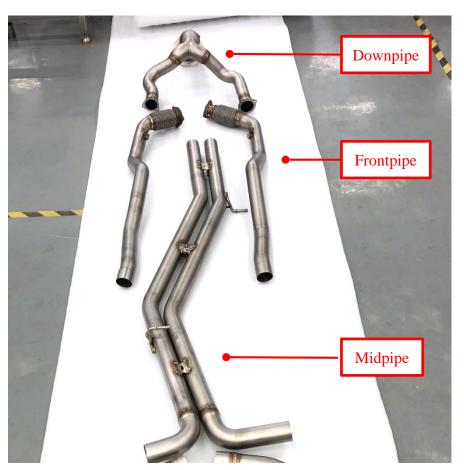


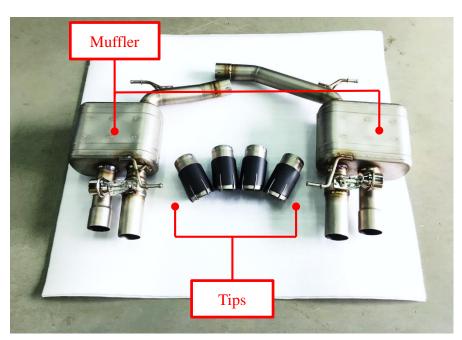
# (2) Tools required for the operation process

Tool name	Tool appearance
Rust inhibitor / lubricant	
Hexagon socket 10 · 12 · 13 · 14mm	
Hexagon wrench 12 \cdot 13 \cdot 14mm	<b>→</b> ••• ••
Torque wrench	Toque Wench
Twelve-Polints Socket	12



# (3) Product assembly appearance





# (4) Steps for disassembling the original exhaust and related key points



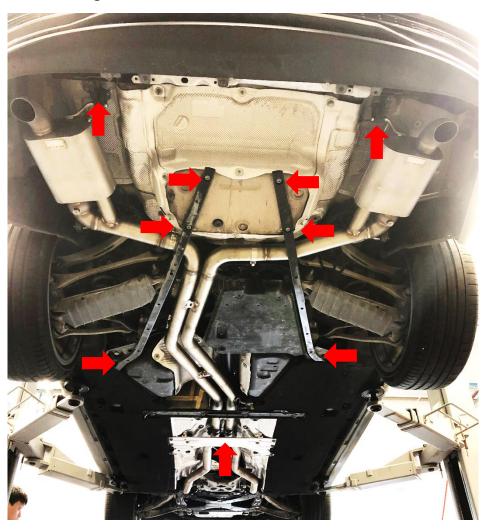
Move the vehicle to the top machine and raise it to the proper position.

Note: Please stop the vehicle and really lift the vehicle. When jacking up, clear the surrounding area and pay attention to the height to ensure the safety of people and vehicles!

After the screws are removed, place them neatly to avoid confusion during recovery.

Use a lubricant and disassemble if necessary.

- 1. Remove the undercarriage bracket and the left and right lower guard plates. (Figure 1)
- 2. Remove the silver lower guard and loosen the midpipe sleeve screws.
- 3. Remove the barrel lug screws and remove the stock catback

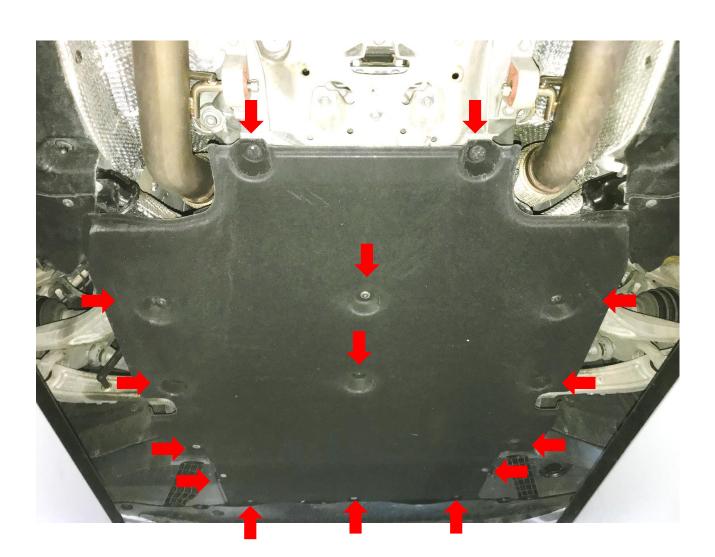


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#### 4. Remove the front lower guard (Figure 2)

After the screws are removed, place them neatly to avoid confusion during recovery.

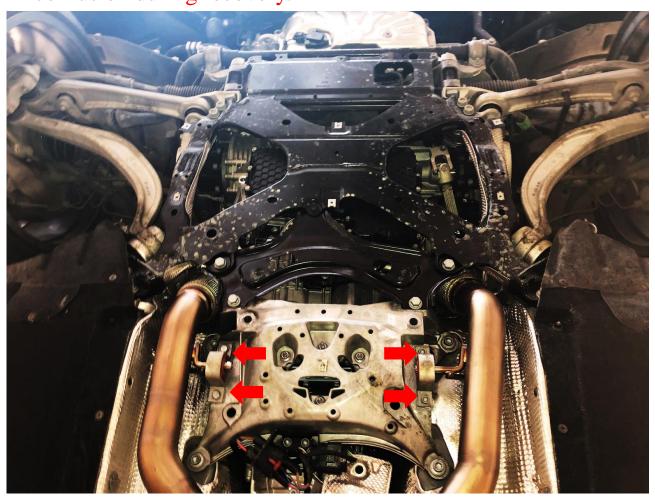


(figure 2)



- 5. Unscrew the front pepe lug. (Figure 3)
- 6. Remove the front pipe iron head screws and remove the stock front pipe.

After the screws are removed, place them neatly to avoid confusion during recovery.



(figure 3)



7. Remove the engine cover and remove the heat shield screws to remove the heat shield (Figure 4)
After the screws are removed, place them neatly to avoid confusion during recovery.



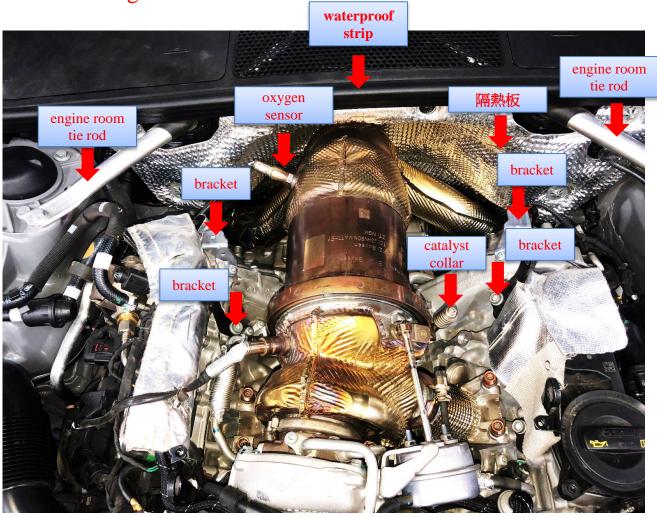
(figure 4)



- 8. Remove the oxygen sensor and the catalyst collar. (Figure 5)
- 9. Remove the waterproof strip, trim, engine room tie rod, bracket, and heat shield. (Figure 5)

Note: After the screws are removed, please place them neatly to avoid confusion during recovery.

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



(figure 5)

10. Remove the catalyst segment retaining plate screws. (Figures 6, 7)



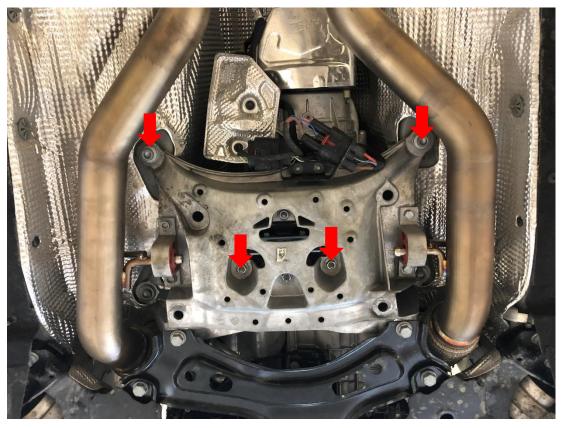
- 11. Relax the gearbox screw and lower the body, about 2CM. (Figure 8)
- 12. Remove the original catalyst section.



(figure 6)



(figure 7)



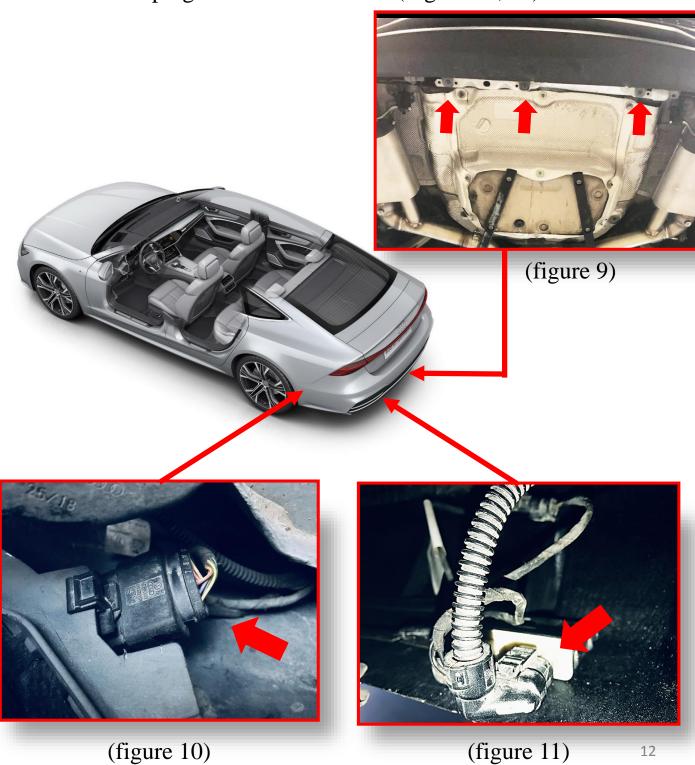
(figure 8)

#### (5) The steps of disassembling the rear diffuser



#### and related key points

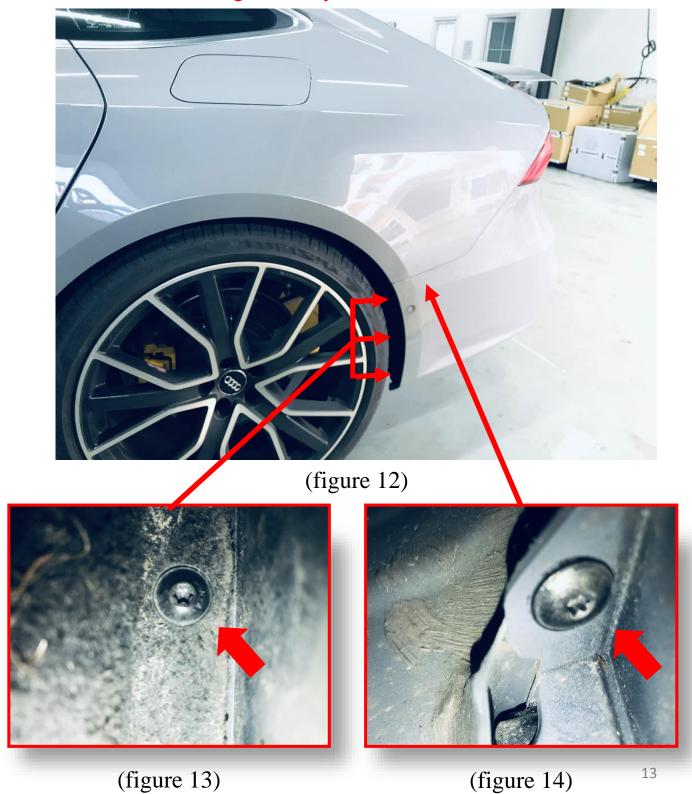
- 1. Remove the fixing screws under the rear guard (Fig. 9)
- 2. Pull out the plug inside the rear lever (Figure 10, 11)



#### 3. Remove the rear side guard screws (Figures 12, 13, 14)



Note: After the screws are removed, please place them neatly to avoid confusion during recovery.





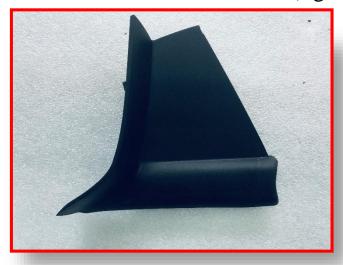
4. Remove the taillight cover (Fig. 16), remove the taillight www.ipe-fl.com fixing screws (Fig. 17), and remove the taillight assembly.

Note: After the screws are removed, please place them neatly

to avoid confusion during recovery.



(figure 15)





(figure 16)

(figure 17)

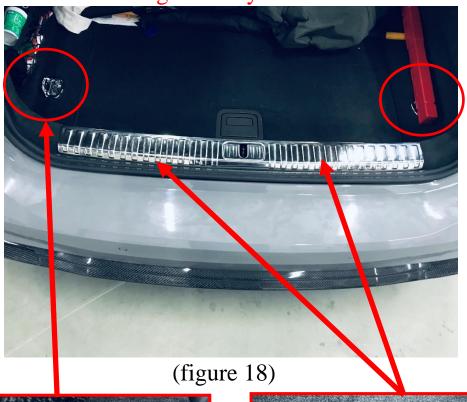


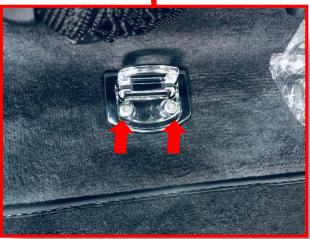
4. Remove the rear trunk screw (Figure 19) and the cover

(Figure 20)

Note: After the screws are removed, please place them neatly

to avoid confusion during recovery.





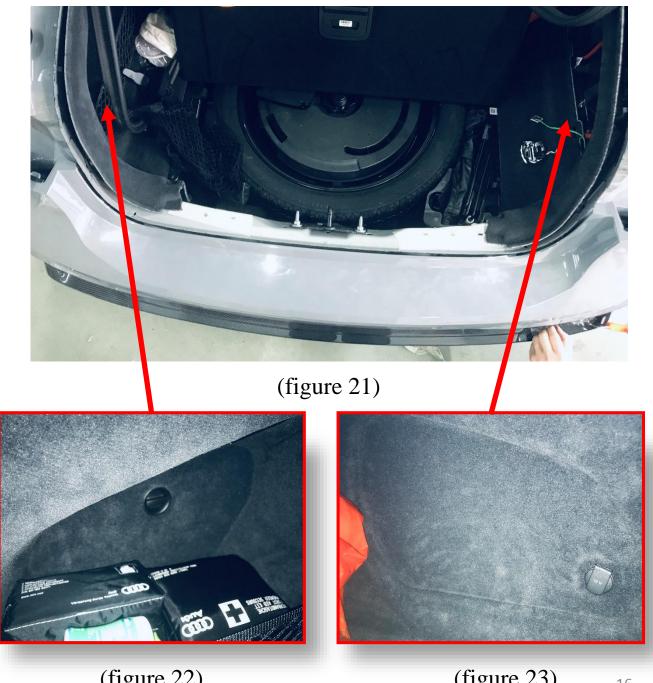


(figure 19)

(figure 20)



- 5. Remove the rear luggage waterproof strip (Figure 21)
- 6. Remove the left and right trunk side covers (Figures 22, 23)



(figure 22) (figure 23) 16



- 7. Remove the rear guard rod fixing screws (Fig. 24)
- 8. Pull the side of the rear guard rod down and out to remove the original rear guard (Figure 25).

Note: After the screws are removed, please place them neatly to avoid confusion during recovery.



(figure 24)



(figure 25)



9. Remove the original rear diffuser (Figure 26) and replace it with our four-outlet rear diffuser (Figure 27)



(figure 26)



(figure 27)



10. Remove the sensor from the original rear diffuser (Fig. 28, 29) and stick it to the opposite position of the modified diffuser.



(figure 28)



(figure 29)



# 11. Replace the rear bumper in order (please refer to pages 13~18)

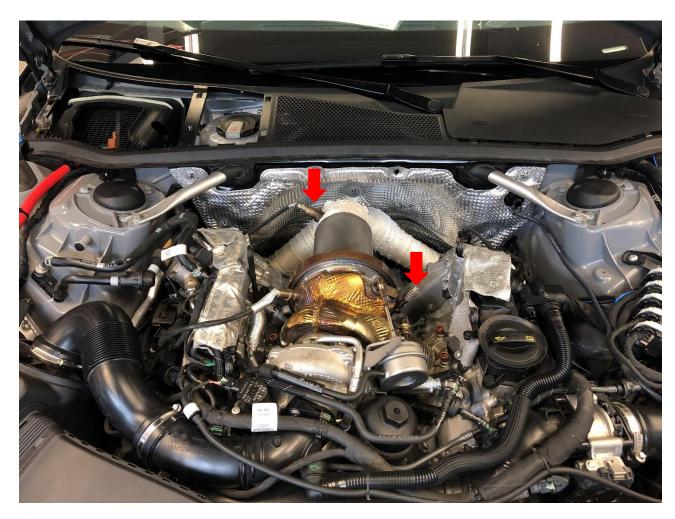


### (6) Steps and related points for installing



#### the IPE exhaust

1. Install the catalyst section to the position and lock the oxygen sensor. The catalyst is pre-locked, not locked, and then locked after the front tube is installed and positioned (Figure 30)





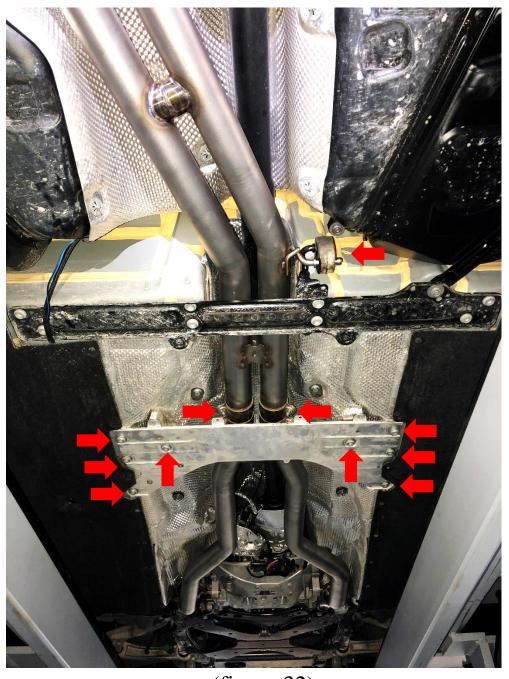
- 3. Install the front pipe to the positioning, and install the lifting lugs first. The screws are pre-locked. After the front pipe iron head is locked, the lifting lugs and the catalyst beam ring are locked. (Figure 31)
- 4. Lock the waterproof strip, trim, engine room lever, bracket, heat shield, and gearbox back into place.



(figure 31)



5. Install the midpipe to the positioning and install the sliding sleeve, lifting lugs and brackets. (Figure 32)



(figure 32)

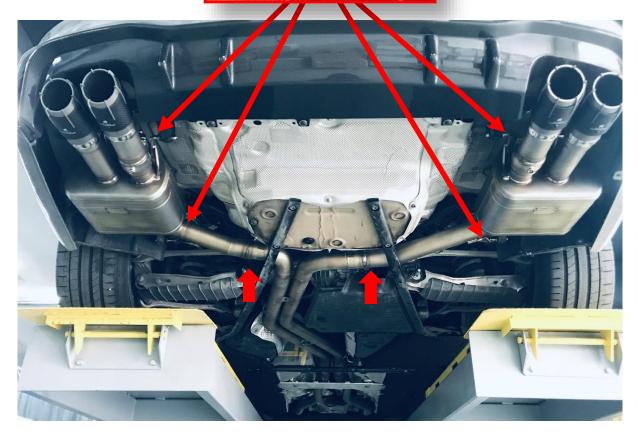
6. Attach the lifting eye of the barrel (Fig. 33), and lock the binding ring first without locking. (Fig. 34)



7. Confirm that the clearance between the exhaust pipe and the chassis is at least 15mm, adjust the exhaust pipe backwards from the front catalyst section to position and lock the collar, and finally install the tips.



(figure 33)





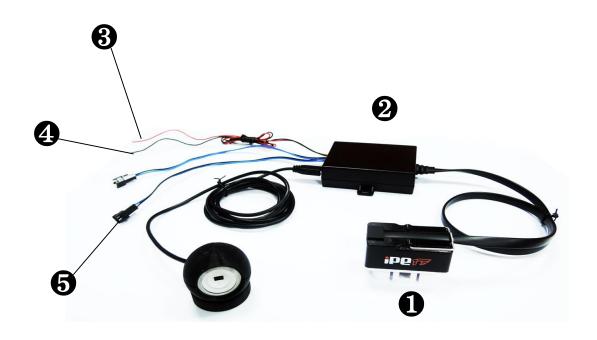
# (7) Installation of control box and wiring

\* The number of exhaust valves must be based on the actual

exhaust pipe design.

exhaust pipe design.	Number	Product name
	1	Exhaust valve
	2	Vacuum solenoid valve
	3	Three-way connector
0	4	Check valve
	5	Solenoid valve connection line
	6	Vacuum pressure bucket
		3

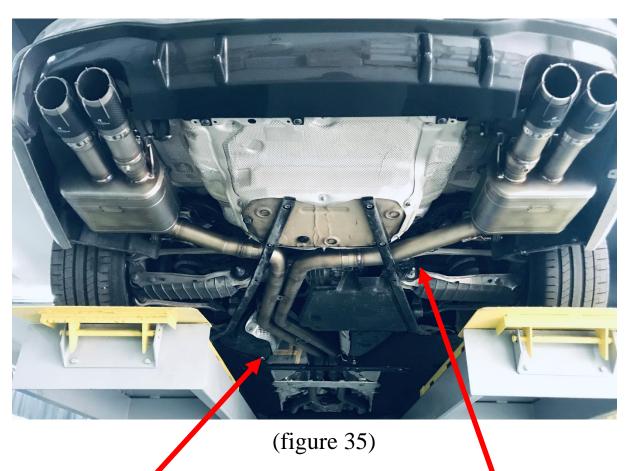




Number	Product name	Number	Product name
1	OBD2 connector	4	Black (negative)
2	Solenoid valve controller	5	Blue black (solenoid valve)
3	Red (ACC positive)	6	



- 1. The vacuum pressure tank is placed in the left chassis (Figure 36)
- 2. Install the solenoid valve on the right rear wheel frame (Figure 37)









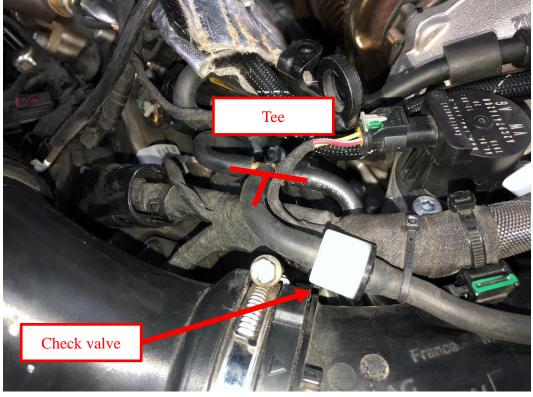
(figure 37)



3. Cut the vacuum tube (Fig. 38) and connect the vacuum source check valve with a tee (Fig. 39).

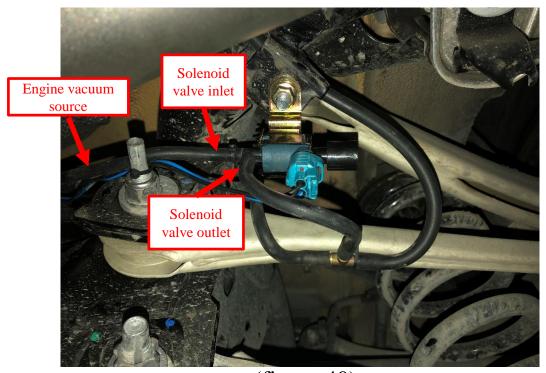


(figure 38)



(figure 39)

4. Connect the engine vacuum source to the pressure tank, and then use the tee to connect to the solenoid valve inlet (Fig. 40). The solenoid valve outlet is connected to the left and right muffler valves using a tee.



(figure  $\overline{40}$ )

5. Connect the solenoid valve control line (blue, black) from the underside of the vehicle through the steering wheel (Fig. 41) to the driver's seat and the control box (Fig. 42).



(figure 41) (figure 42)

Note: When the solenoid valve control line is closed by the steering wheel, it must be noted whether the steering wheel is rotated to prevent wire damage. 6. Remove the driver's interior screws and remove the interior



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(figure 43)



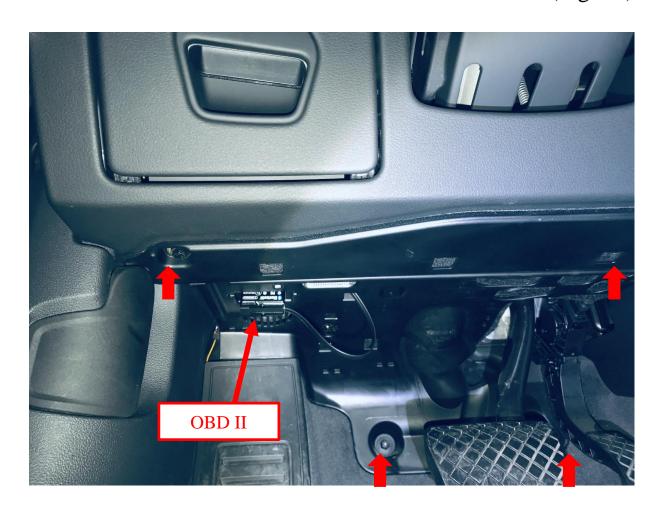
(figure 44)



(figure 45)



7. Remove the driver's internal screws and remove the internal parts. Insert the solenoid control line (blue, black) from the steering column seal and fix the OBD II connector and cable set (Fig. 46).



(figure 46)

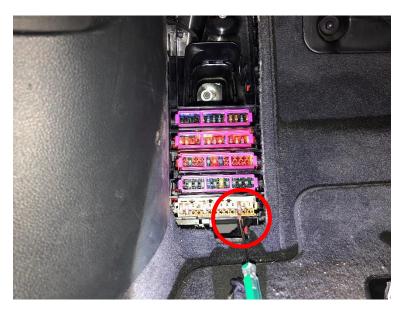


8. Open the left side partition of the brake pedal to see the fuse box (Fig. 47), and install the fuse holder measurement ACC positive (Figure 48) as shown below, and connect the OBD II connector positive (red line)

Note: When wiring, be careful not to short circuit, so as to avoid circuit damage; do not pull the wire strongly when wiring



(figure 47)



(figure 48)