



Innotech Performance  
Exhaust  
Vehicle exhaust system  
technology

# **Product Installation Manual**

**Applicable model: Mercedes  
Mercedes Benz C63 S**

[WWW.IPE-f1.com](http://WWW.IPE-f1.com)

Version 1

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## Preface

This document explains installation procedures that relates setting and operation methods for the exhaust sold by IPE.

## 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.

## Installation Processes:

The product for Benz C63s include three import step. This product install more fast and smoothly job that we suggest two mechanics to do installation job.

	Working Content	Estimated time
1	Remove stock exhaust	6 hour
2	Install IPE exhaust system	2.5 hour
3	Install control box and wire set.	1.5 hour
Total time		7 hour

## 操作過程中所需的工具



**Hex Wrench**  
**6mm**



**Star groove wrench**  
**E10 、 E12 、 E14**

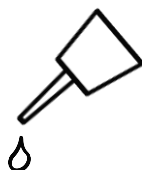


**Open end hexagonal  
wrench**  
**12mm 、 13mm**  
**15mm 、 22mm**



**Torque wrench**

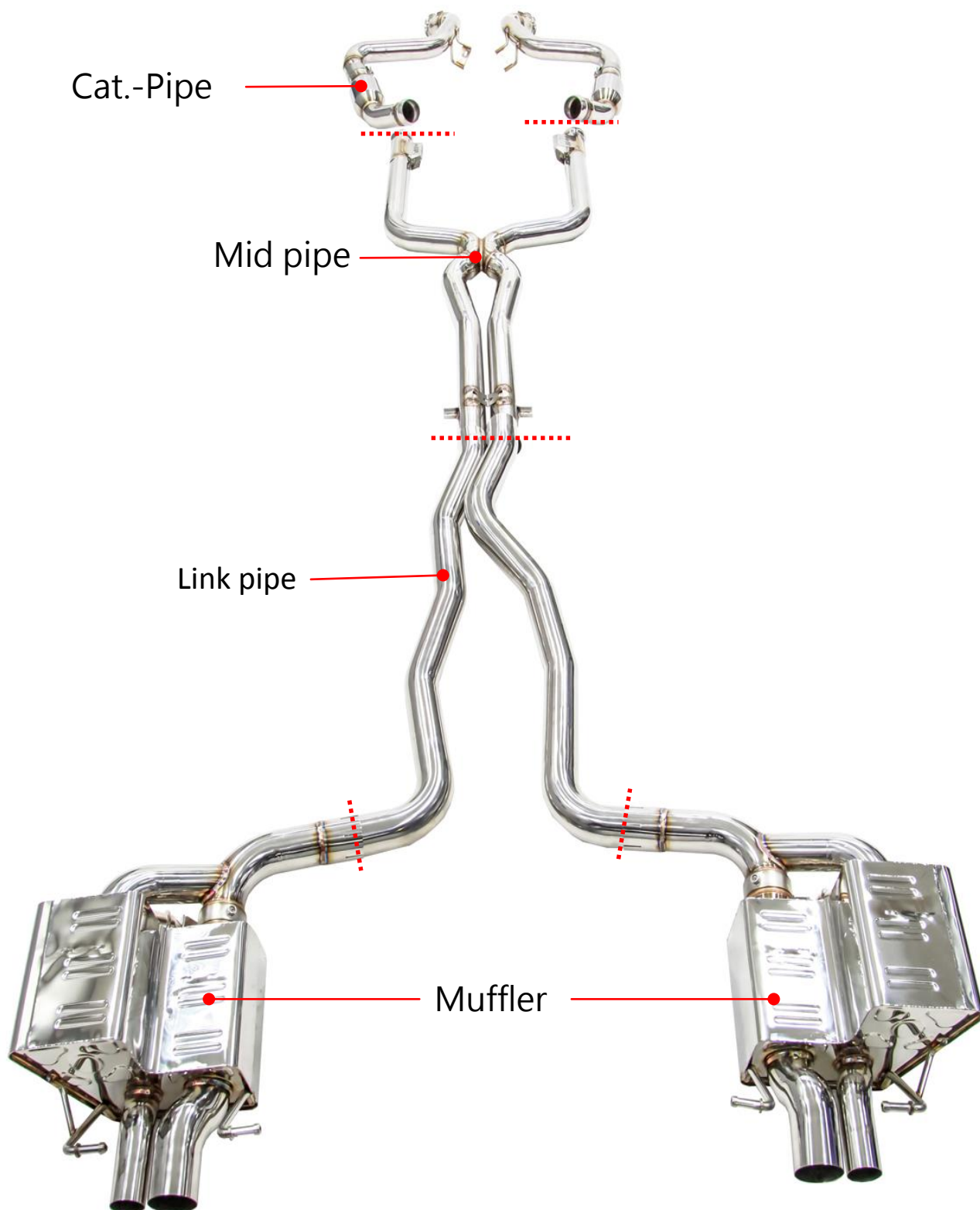
Torque Wrench



**Anti-rusting oil**



## iPE C63 S Assembly of product appearance

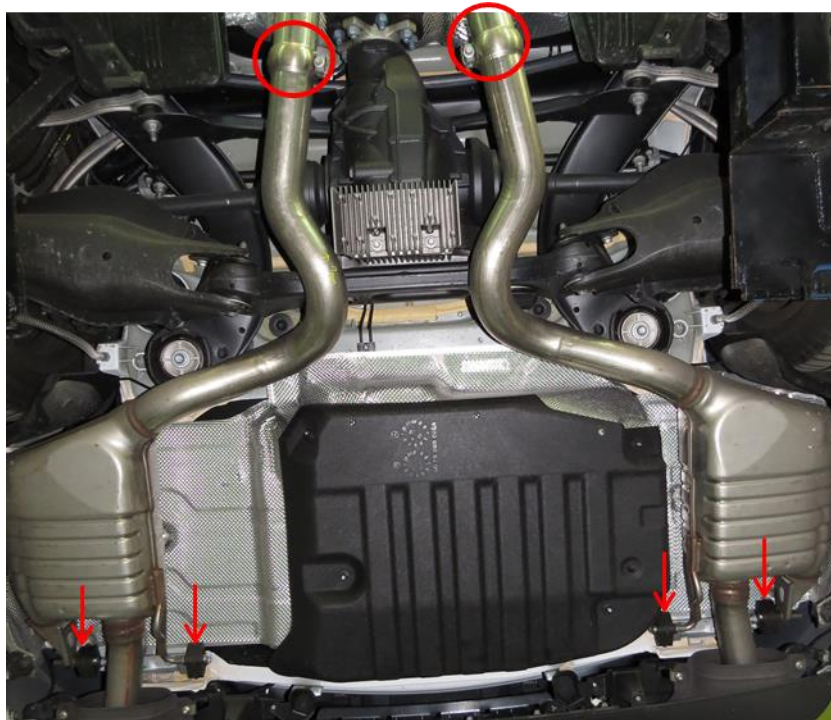


# Step 1: Removal of the original exhaust pipe

The procedure of low protection spoiler dismantling

1. Using E12 star type sleeve to remove the both side bundle rings on the bucket body Pic.1-1 Red Circle.
2. Dismantling both side lifting lugs on the bucket body

Pic.1-1Red Arrow.



Pic.1-1

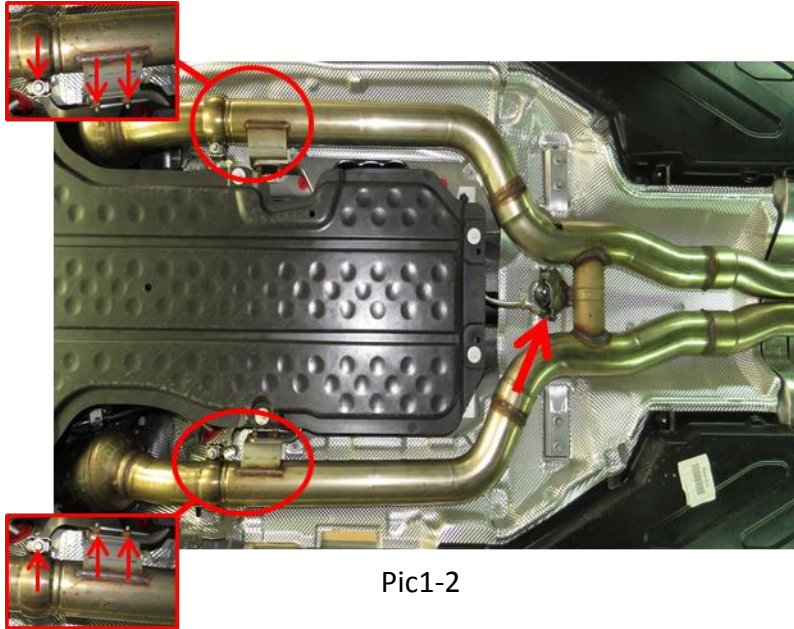




# The procedure of middle X pipe dismantling

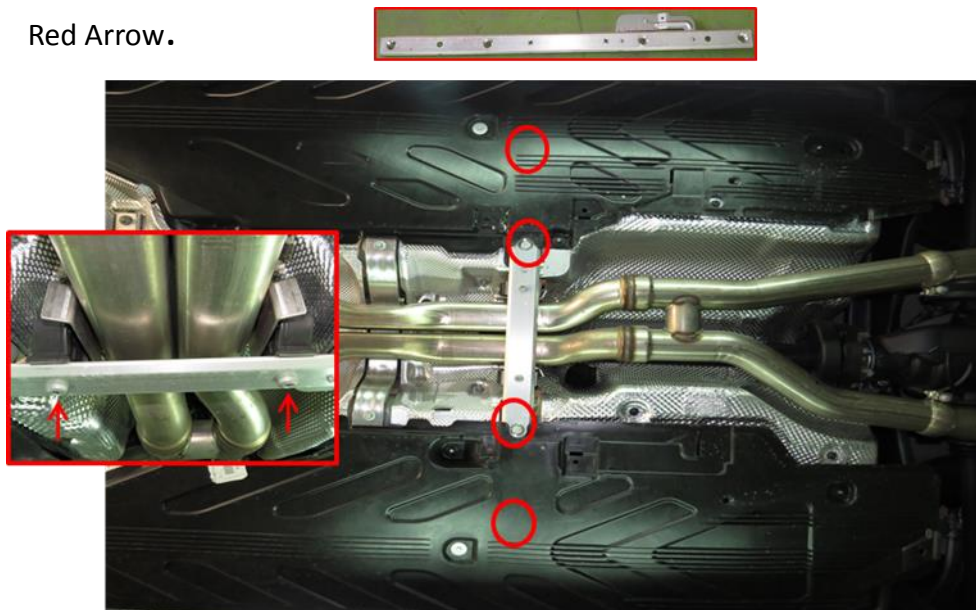
3. Dismantling the bundle rings and the holder by E12 star wrench , and 10mm wrenchPic.1-2Red Circle.

4. Removing the original electronic valve controlPic.1-2 Red Arrow.



Pic1-2

5Using 16mm wrench to dismantle the strengthen beam under the car bodyPic.1-3 Red Circle,  
Middle lugs demolition using T45 star wrench Pic.1-3  
Red Arrow.



Pic1-4

Bend angle due to lack of space and the body catalyst segment, replacement of the catalyst segment need to remove the gearbox, so emphasize that please according to the original construction disassembly mode.



6. Remove the engine compartment air filtration first, then catalyst segment covers using E10 star wrench Pic.1-4 Red Arrow.

7. Remove the rear O2 Sensor before using 22mm wrench.



Pic1-4



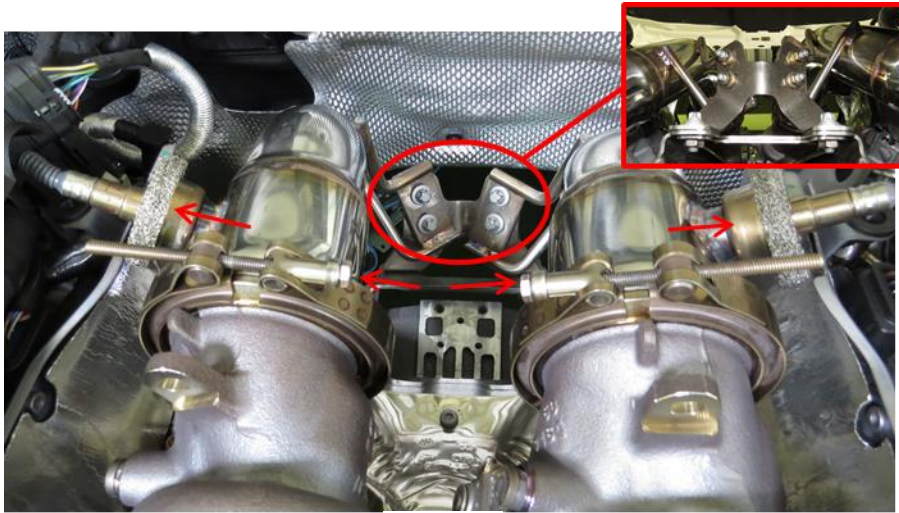
## Procedures and related points of iPE Exhaust installation

### Procedures for header

1. Mount header by 10mm wrench to install cat pipe.(pic 2-1 arrowhead)Mount fixation by E10 star groove wrench(pic 2-1 red circle)

Fully lock up when all install finish.

2. Fasten front O2 sensor by 22mm wrench (pic 2-1 arrowhead) .



Pic2-1

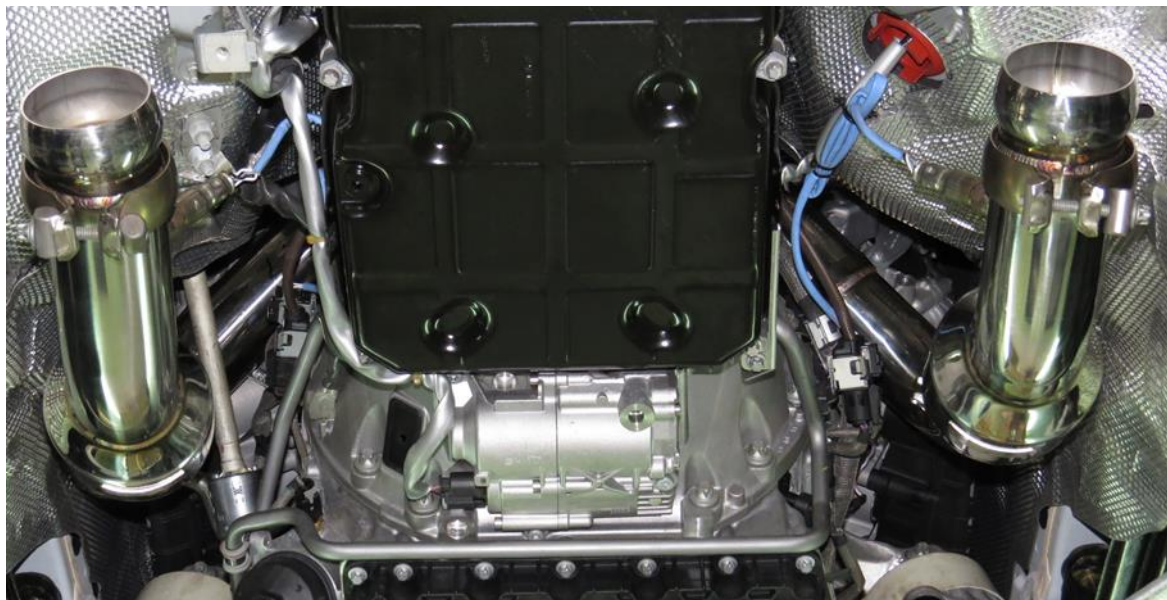
3. Set both sides of header and fasten clamp by 13mm wrench.(pic 2-2 red circle)

4. . Fasten rear O2 sensor by 22mm wrench (pic 2-2 arrowhead) °



Pic2-2

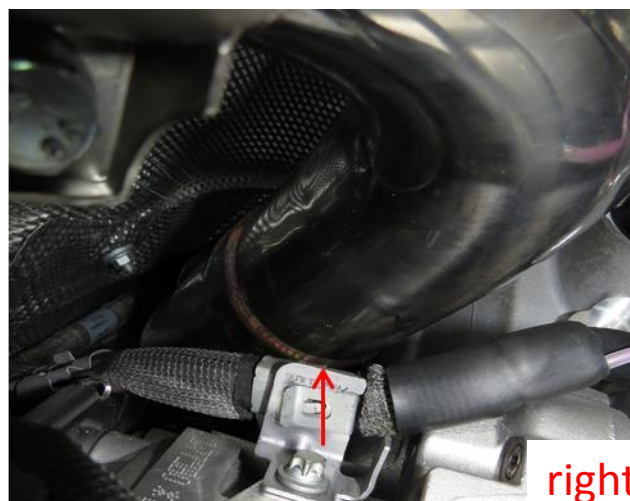
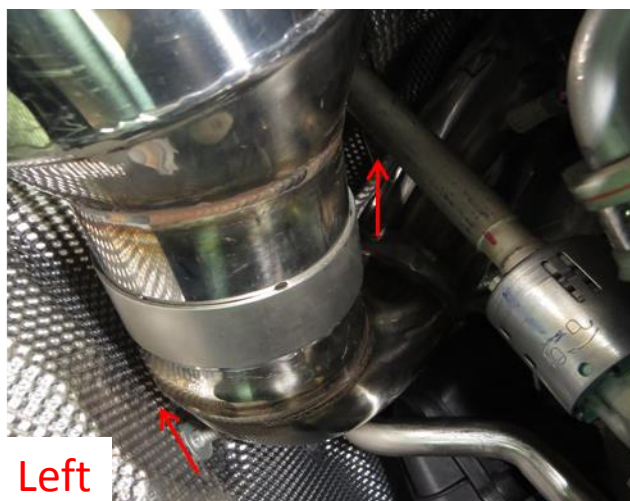
5. Reset transmission in **stock exhaust demounting** way. pic2-3 °



Pic2-3

6. Make sure that the gap between left elbow and the car.  
Fasten when adjust finished. (pic2-4 left arrow)

7. Make sure that the gap between right elbow and the car.  
Fasten when adjust finished.(pic2-4 right arrow).

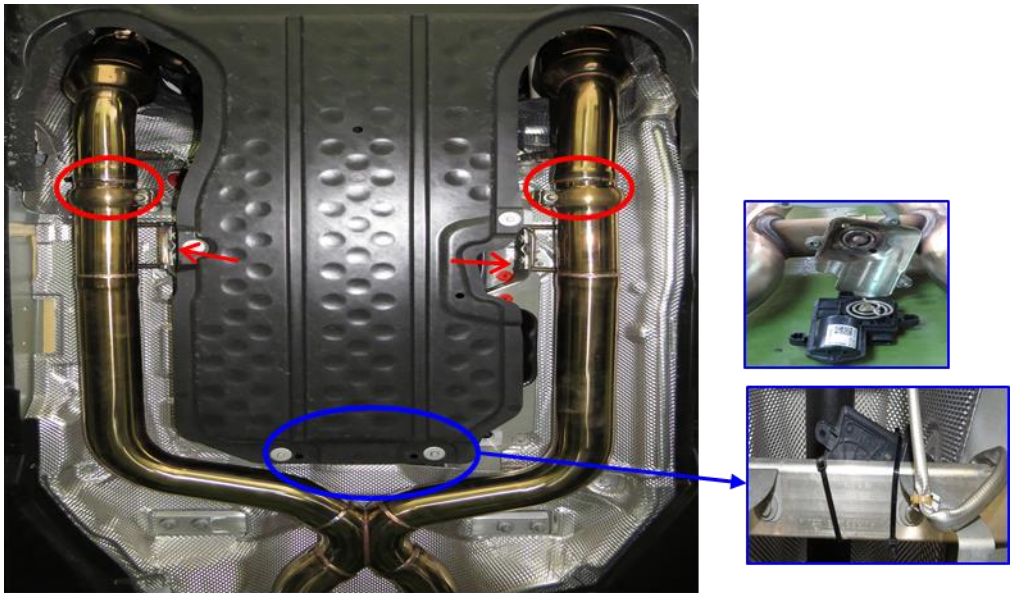


Pic2-4



8. Fasten fixation clamp by E12 star groove wrench(pic 2-5 red circle) fasten fixation rod (pic 2-5 arrow)

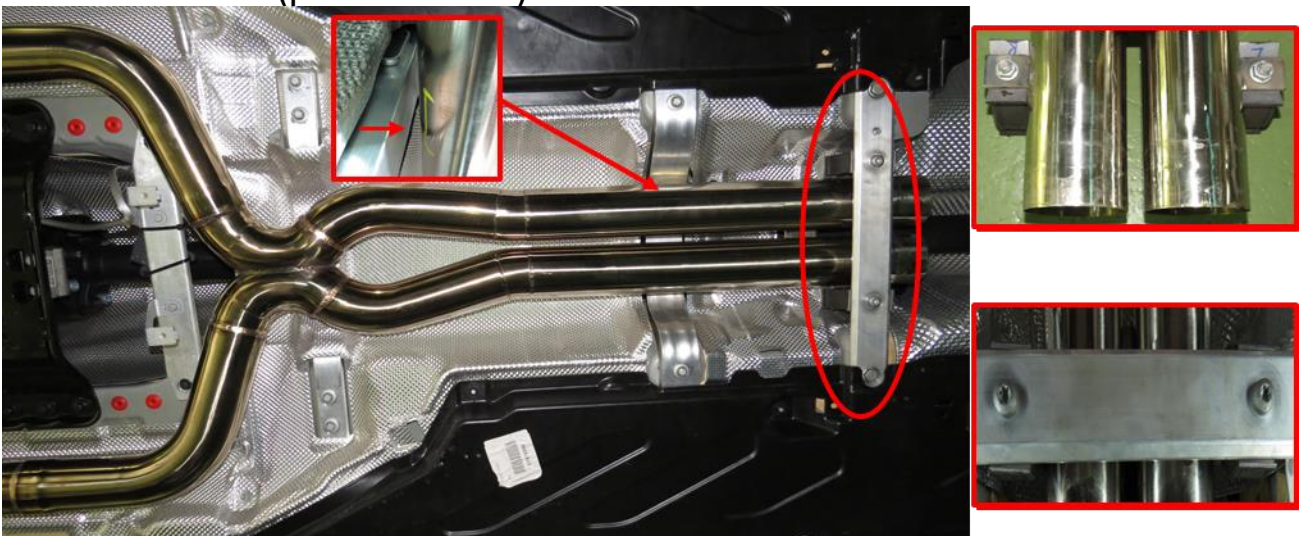
Wait the till the mufflers are completely installed until fix the sleeves completely  
Pic2-3 Blue Circle



Pic2-5

9. Mount hanger by 13mm wrench and fasten up&down strengthening beam(pic 2-6 red circle)

10. Notice that the gap between exhaust and car should be more than 5mm. Fasten when adjust finished. (pic 2-6 arrow)



Pic2-6

11. Install left and right mufflers and fix it with sleeves Pic 2-7 Red arrow  
 Wait the till the mufflers are completely installed until fix the sleeves completely

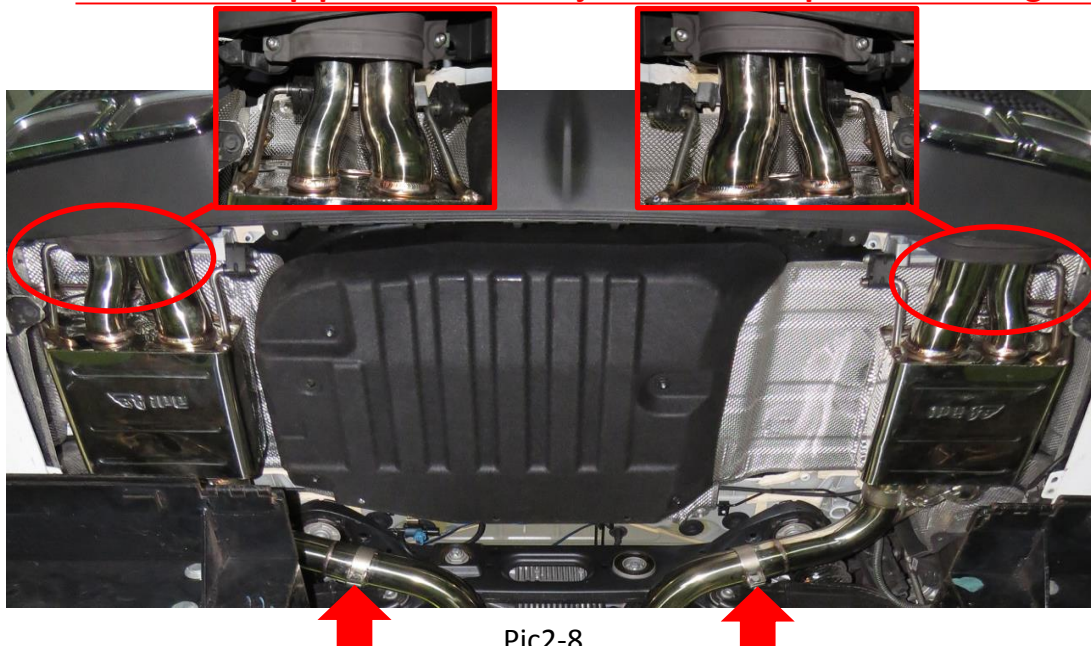


Pic2-7

12. Fix both left and right muffler hangers Pic2-8 Red circle

13. Use 13mm outer hexagonal wrench to install the muffler to fixation Pic 2-8 Arrow

Muffel outlet pipe need to be adjusted to the tips before being fixed



Pic2-8

※ Above iPE exhaust installation completed ※

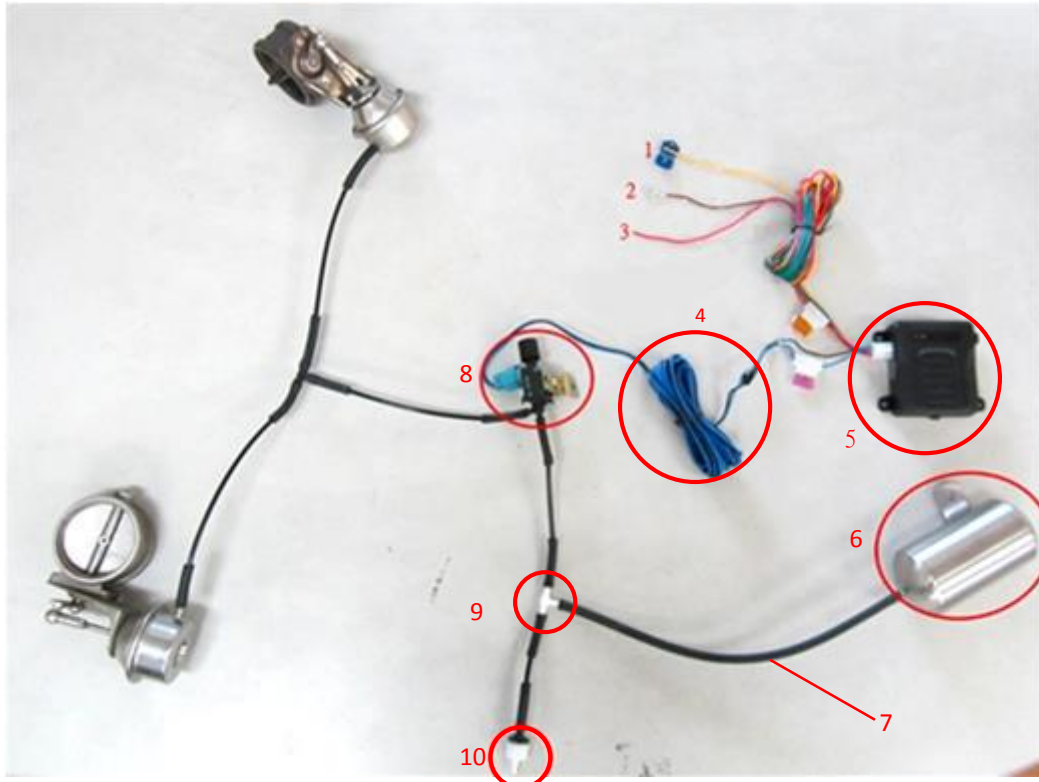


### Step3. iPE Valve control unit installation



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Pic 3-1 shows the diagram of all control components and the corresponding connections. The description for related part names is listed in Table 3-1.



Pic 3-1

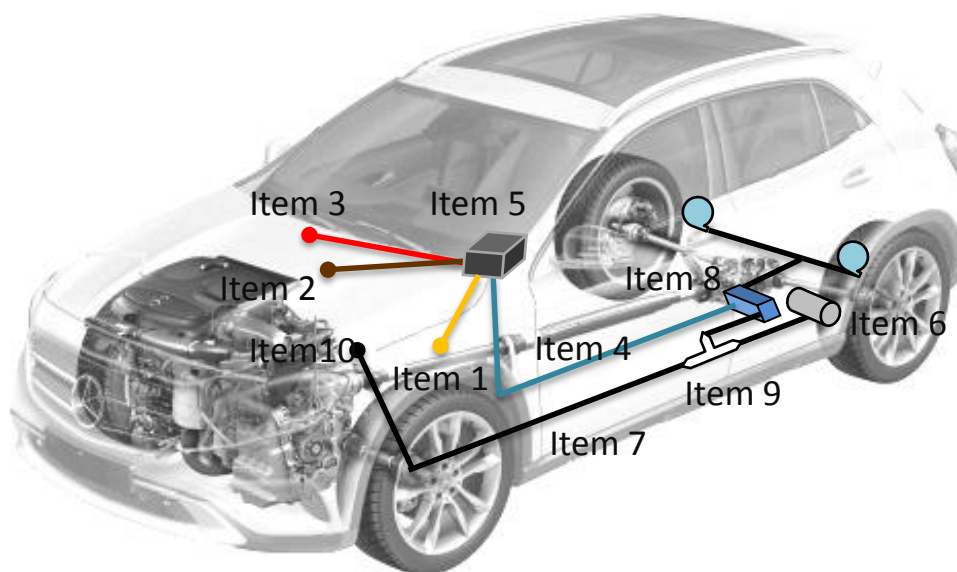
No.	Item Name	No.	Item Name
1	Yellow Wire / Accelerator signal line	6	Vacuum Canister
2	Brown Wire / Ground Wire	7	Vacuum hose
3	Red Wire / Power Wire	8	Electric Vacuum Valve
4	Blue Wire/ electromagnetic valve wire	9	3 way connector
5	Valvetronic control box	10	One Way Valve

Table 3-1

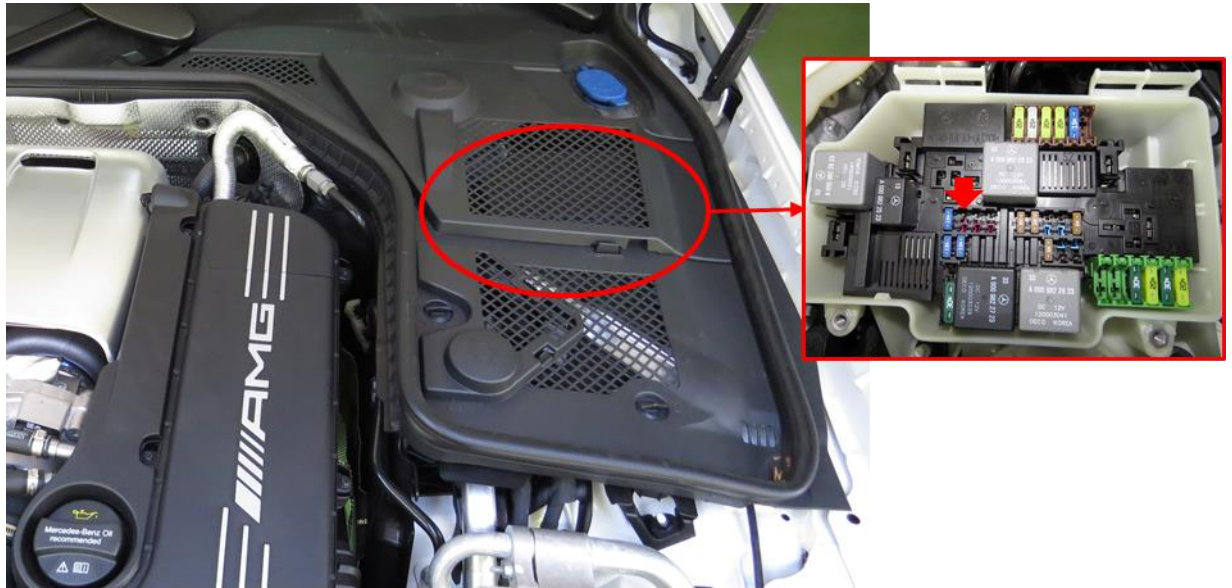


## Valvetronic control unit element distribution diagram

Power connection should follow instruction in this manual. Other hardware component could be connected according to individual vehicle specification.



1. Opening the top of the engine compartment fuse box and connecting the red line(+) table3-1 no.3 across 15A fuse Pic 3-2 red narrow



Pic3-2

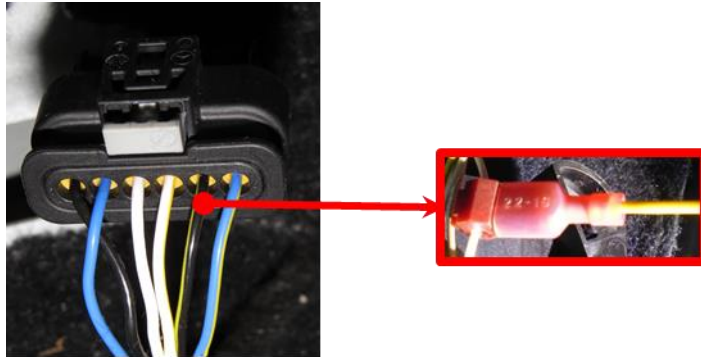
Suggesting to use multimeter to recognized in the key ON energized the fuse

2. Using 13mm outer hexagonal wrench to lock brown line(-) table3-1 no.2 on negative electrode Pic 3-3 red narrow



Pic 3-3

3.After dismantling accelerator pedal plug, connecting yellow line table3-1 no.1 to accelerator pedal signal 5(black & yellow line) pic 3-4

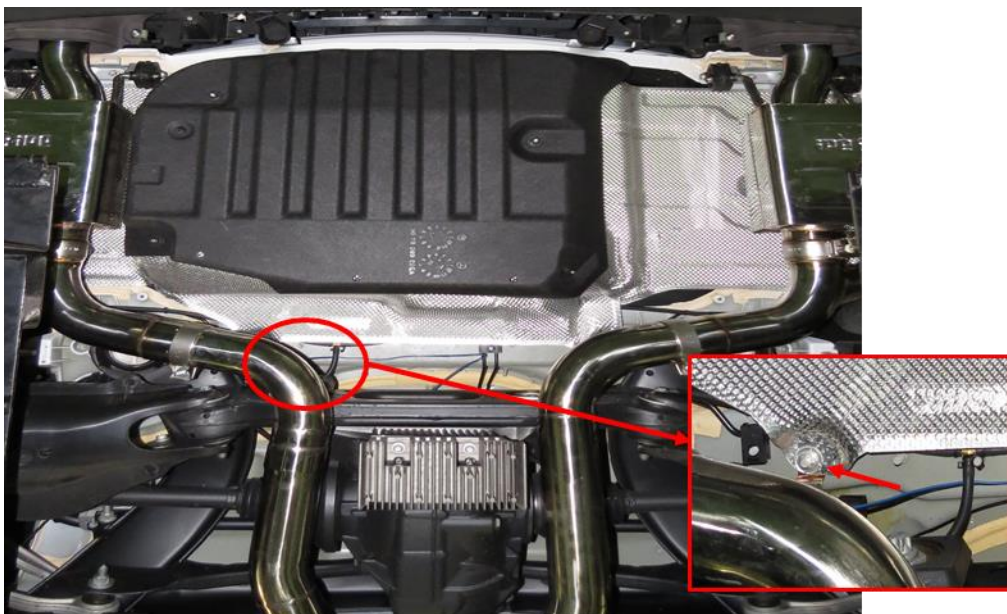


Pic3-4

Suggesting to use the correct measure of the amount of wire multimeter in accordance with instructions.

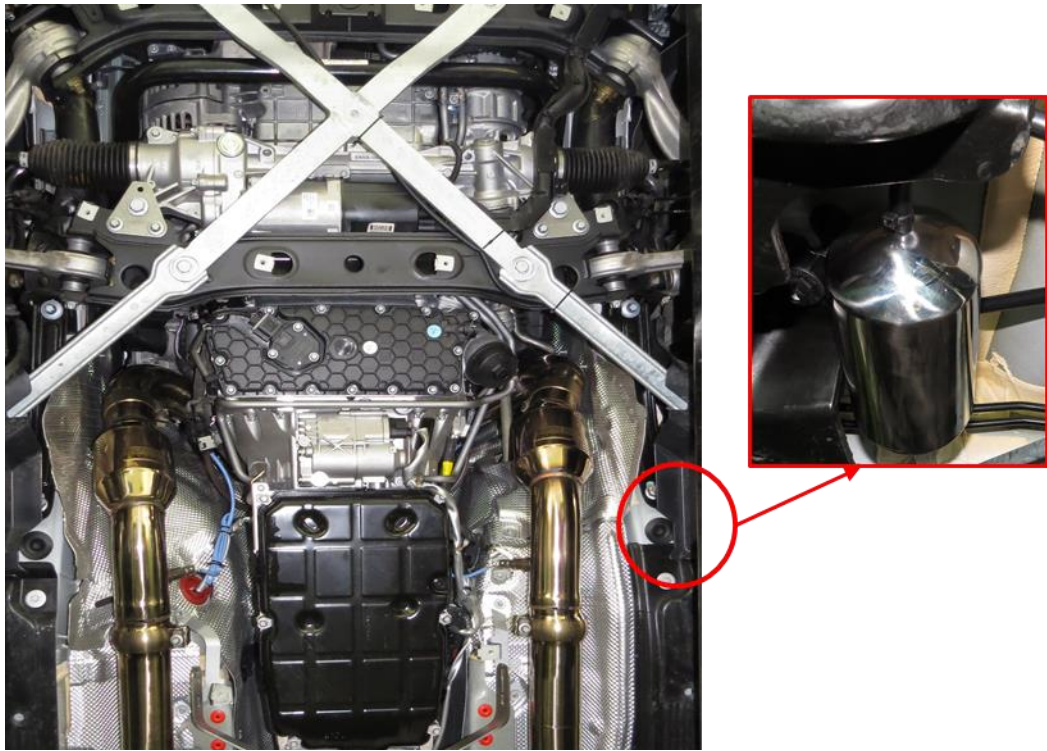
## Solenoid valve & Accumulator barrel Installation Process

4.Locking solenoid valve table3-1 no.8 on left differential with 10mm outer hexagonal wrench Pic 3-5 red circle



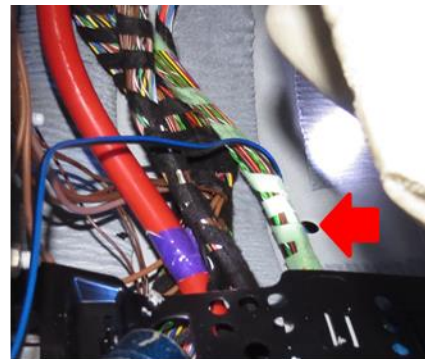
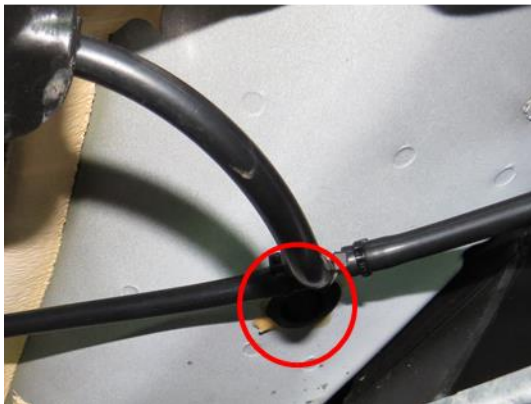
Pic3-5

5.Locking Accumulator barrel table3-1 no.6 on the left rear wheel with 10mm outer hexagonal wrench Pic 3-6 red circle



Pic 3-6

8.Pulling Solenoid valve control line table3-1 no.4 from the engine compartment behind the left front wheel drainage holes inside the car Pic 3-7 red circle °



Pic 3-7

※ Control box setting method refer [Valvetronic control box Setting Description](#) ※