



Innotech Performance Exhaust
Automotive Exhaust Systems Engineering

Installation Manual

Product Installation
Manual:

Ferrari 458 Speciale

Version 1

Date : 2015/07/06

WWW.IPE-f1.com

Important Message

IPE developed this exhaust system as an improvement to the original system, Therefore, there will be no difference from the original vendor after installation. In many vehicle model, there is an inductive power supply function between the car key and the car. For safety, the car key should be kept away from the vehicle with a distance of at least five meter.

The exhaust on a car immediately after being driven still has a high temperature. For safety, please wear heat insulating gloves when replacing the exhaust, or wait until the temperature has decreased to avoid burns.

When the valve is set to open automatically, do not let the valve open too early to prevent resonance generation. The opening of the valve is recommended to be set to 60% of throttle position

IPE exhaust has been designed according to the engine data of the original vendor. If the horse power of the engine is increased through a computer upgrade, obvious resonance in conjunction with this exhaust could occur. IPE can also provide modified exhausts for such vehicles. Please contact us for further details.

Installation Process

This document is used to explain the installation procedures, and related setting and operation methods for the exhaust sold by IPE. There are a total of 5 five procedures. The necessary operation time corresponding to each of the procedures is as shown in Table 1.1 below. The following times are calculated based on one experienced technician working with one assistant.

Step	Content	Estimated time
1	Remove the Exhaust of the Original Vendor	4 Hrs.
2	Install the IPE Exhaust	3 Hrs.
3	Install Control Box & wiring	1 Hrs.
Total		8 Hrs.

Tools Necessary for Operation Procedures



Star Type Sleeve
T30 、 T25



**Outer Hexagon
Wrench**
E4 、 E17

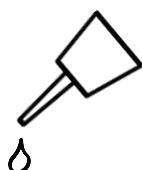


Hexagon wrench
10mm 、 13mm
15mm 、 22mm



torque wrench

Torque Wrench

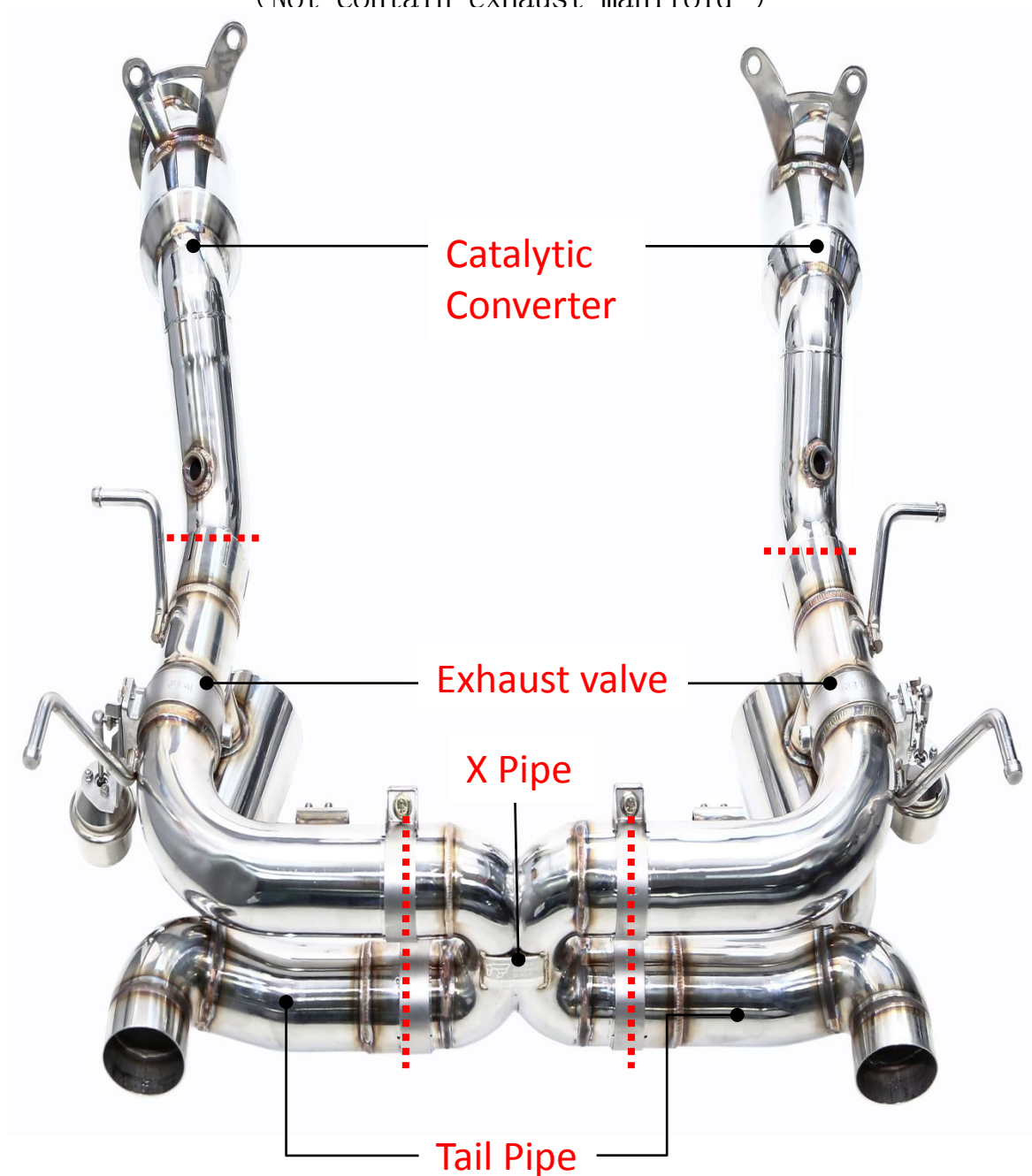


**Antirust
Agent/Lubricant
Rust Preventive spray**



iPE 458 Speciale complete product outside look

(Not contain exhaust manifold)



Step 1: Removal of the original exhaust pipe

The procedure of low protection spoiler dismantling

1. Use 17mm hex wrench remove left rear wheels , then use 10mm wrench to remove low protection spoiler see 1-1 red arrow
arrow **Must remove the left and right ducting hose** Photo 1-1 red arrow



Photo 1-1

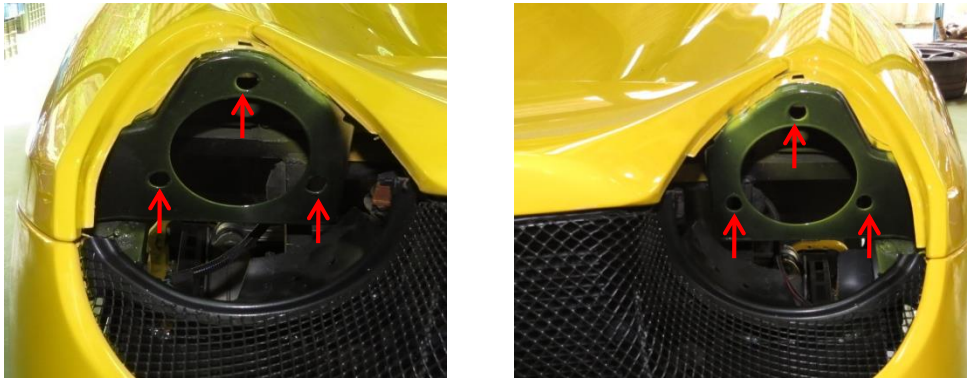
2. Use 4mm Hexagon wrench and 10mm wrench to remove low protection spoiler Photo 1-2 red arrow



Photo 1-2

The procedure of rear bumper dismantling

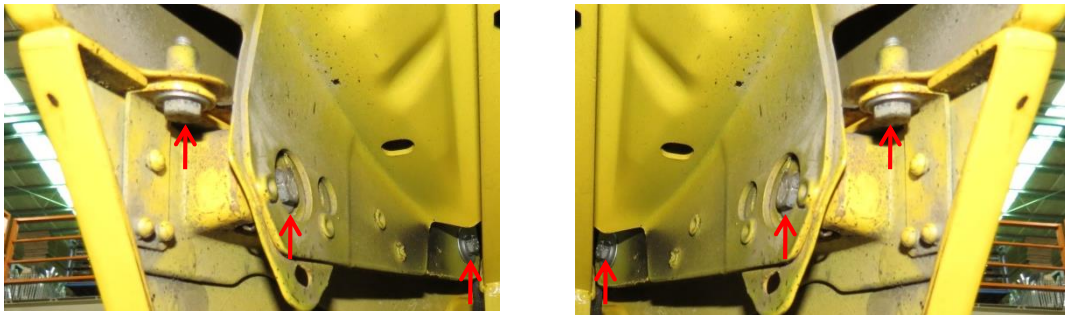
3. Use 4mm hexagon wrench to remove both side rear fender trim and then use 10mm wrench to remove both side rear car lighting pic. 1-3 red arrow



Pic. 1-3

4. Use 10mm wrench to dismantle **both side rear bumper**

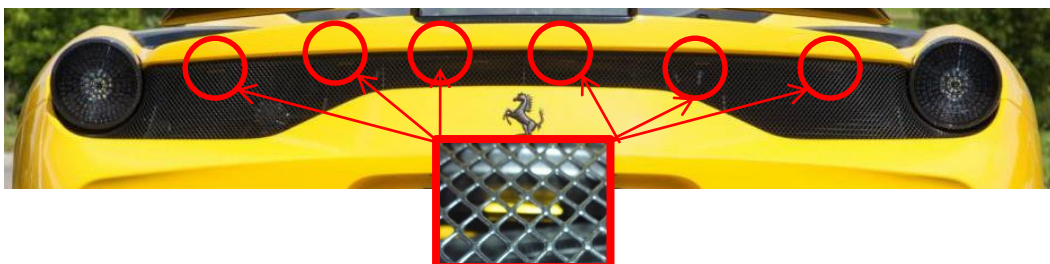
pic. 1-4 red arrow



Pic. 1-4

5. Pull out the rear bumper nets inside the hooks seat and then you can remove the bumper

pic. 1-5 red arrow



Pic. 1-5

Removing Bucket Body Section

1. Dismantling **lifting lugs** with 10mm wrench pic.1-6 red arrow
2. Dismantling **bundle ring on catalytic converter** with 15mm wrench pic. 1-6 red arrow
3. **Bucket body** can be dismantled after finished

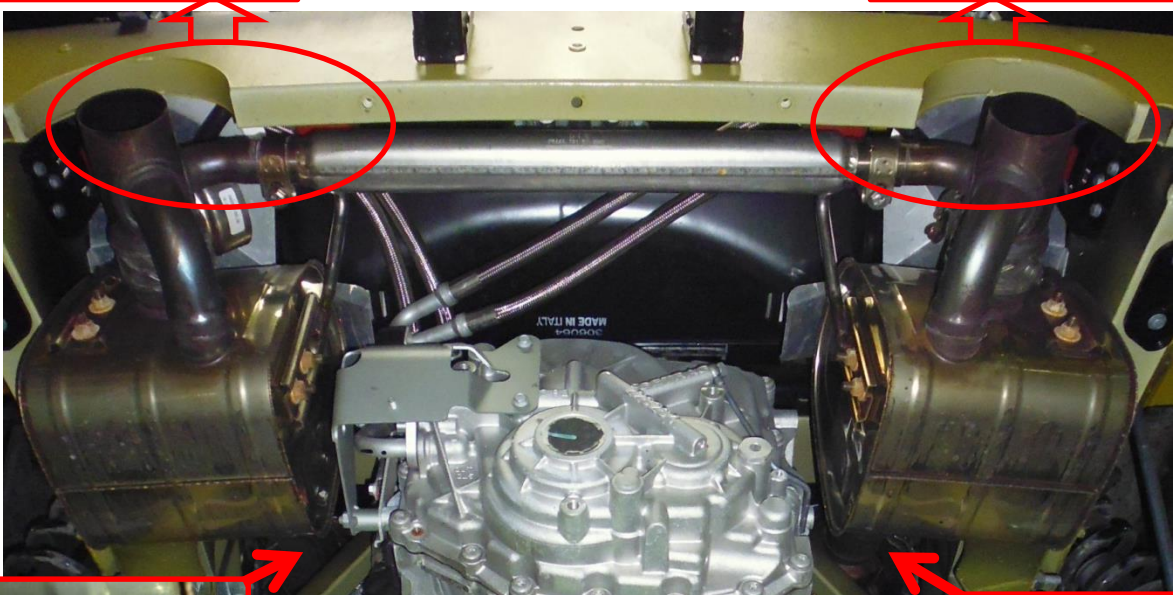
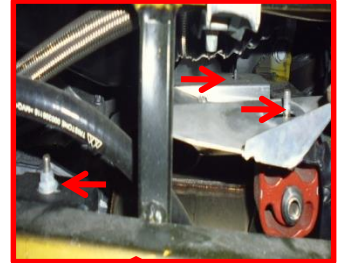
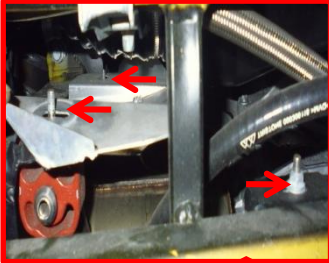


Photo 1-6



Removing catalytic converter section

7. Dismantling both side engine compartment shield with **T25 star type sleeve** Pic 1-7 red arrow



Photo 1-7

8. Dismantling both side rear lambda sensor with **22mm wrench** Pic. 1-8 red circle

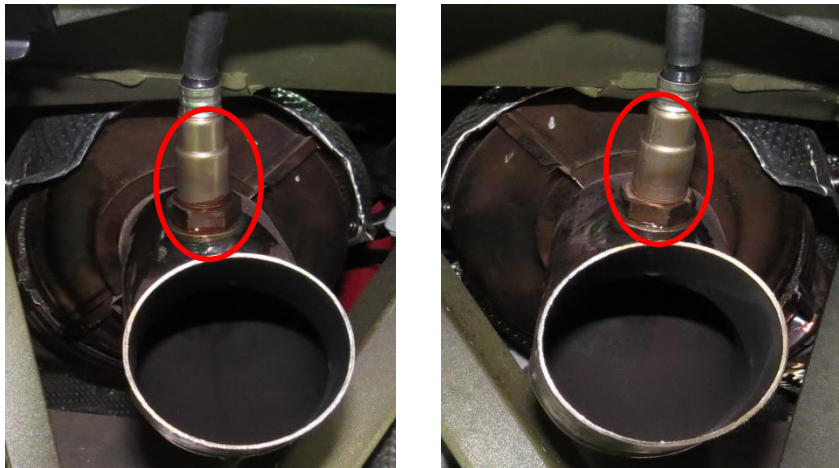


Photo 1-8

9.1 Dismantling both side catalytic converter protection with **13mm wrench** photo 1-9 red arrow

9.2 Dismantling bundle ring on catalytic converter with **13mm wrench** photo 1-9 red photo

9.3 After take down the catalyst cover Photo 1-10 catalyst segment can win out.

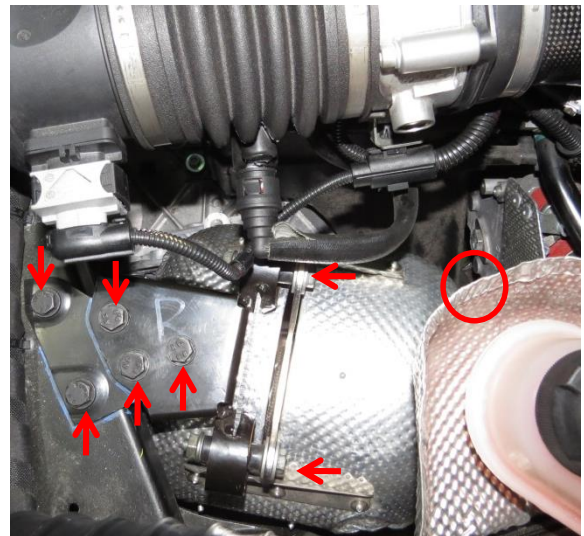
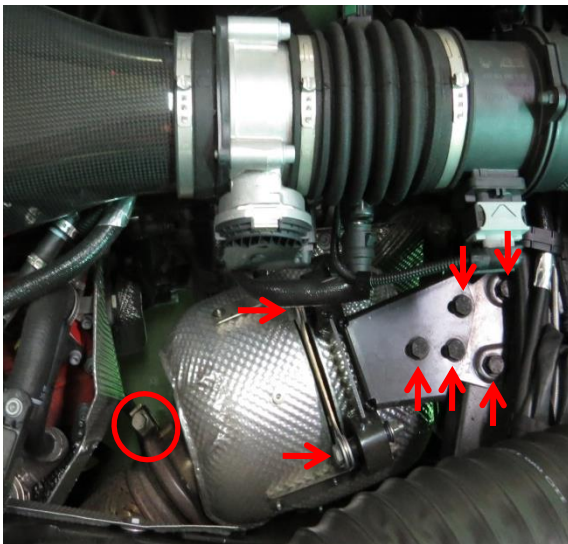


Photo 1-9



Photo 1-10

✂ It has been completed on the original exhaust pipe removal ✂

Step 2 、 IPE exhaust pipe installation procedures and related focus

Catalyst segment installation process

1. Latching bundle ring on catalytic converter with 13mm wrench and lambda sensor with 22mm wrench Photo 2-1 red arrow
2. Latching original catalyst Cover with 13mm wrench photo 2-1 red circle

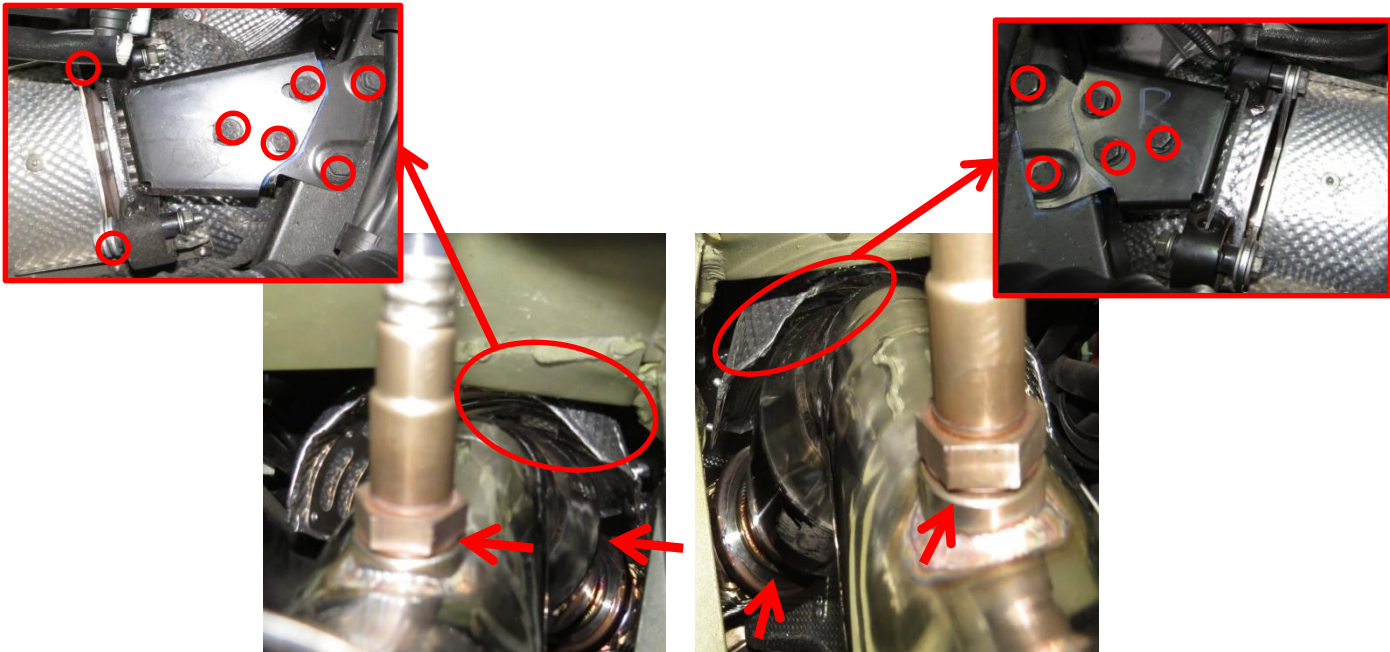


Photo 2-1

3. After finished, set back engine compartment shield with T25 Star Type Sleeve 圖 Photo2-2 red arrow



Photo 2-2

Bucket body X pipe installation process

4. Assembling both side bucket body and x pipe on the ground, and fixed bundle ring then lock up Photo2-3 red arrow

It should be noted lifting lug can not be locked Photo 2-3 red circle Avoid the installation is incomplete



Photo 2-3

5. Fixed lifting lug portion in advance, then assembling the bucket body Photo 2-4 red circle

6. Using 13mm wrench to lock up **bundle ring** on the bucket body catalyst segment interface Photo 2-4 red arrow



Photo 2-4

7. Using 13mm wrench to lock up both side moveable lifting lugs of the bucket body Photo 2-5 red arrow

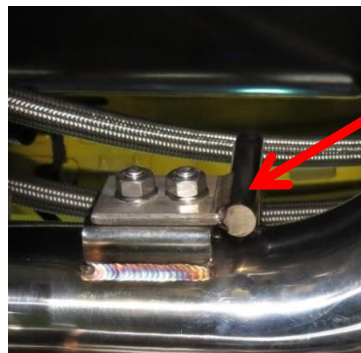


Photo 2-5

8. Using 13mm wrench to lock up both side lifting lugs of the bucket body Photo 2-6 red circle

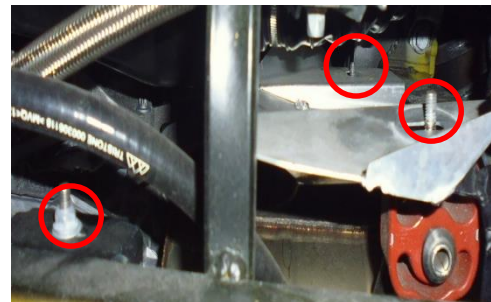
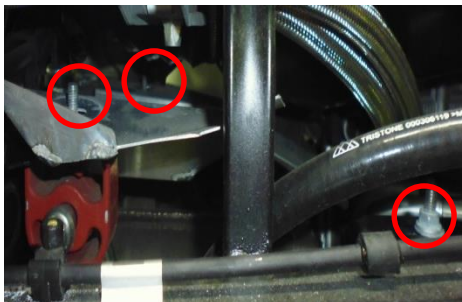


Photo 2-6

9. After confirming X pipe and bucket body outlet nozzle position, using 13mm wrench to lock up x pipe bundle ring Photo 2-7 red circle
 Refocus: outlet nozzle spacing and the barrel body needs 10-15mm Photo 2-8 red arrow, X pipe requiring in the middle position Photo 2-8 orange circle (pushing around the x pipe , and rotating backward to the photo 2-7 arrow)

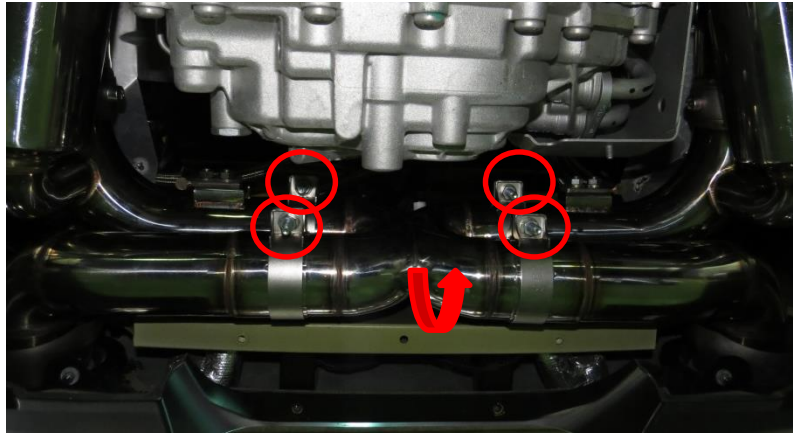


Photo 2-7

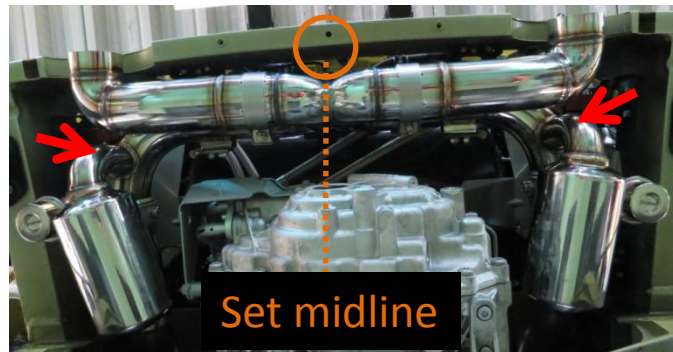


Photo 2-8

10. Installing rear bumper and confirming outlet location and tail pipe trim set in middle Photo 2-9 red arrow

Repeat step 9 and adjust if the tips spacing do not match
 (Rear bumper only closer to match the site on the top)



Photo 2-9

≡ 、 Vacuum connection with recovery installation

Vacuum tube connection Process

1. Connecting the original vacuum tube to vacuum tube
using two-way tube Photo 3-1 red circle

Then connecting vacuum tube from the outside to the
valve position Photo3-1 red arrow

Need to pay attention to high temperature Vacuum tube configuration, not too close to
the exhaust pipe.

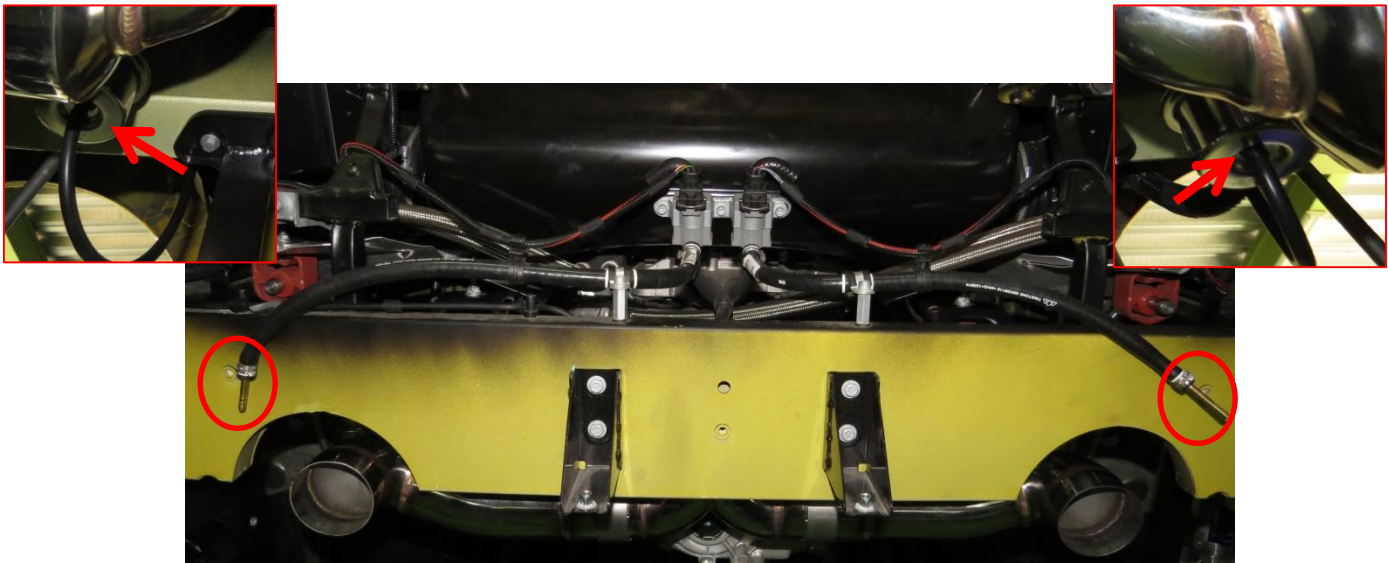


Photo 3-1

low protection spoiler recovery process

2. Fasten the rear bumper Photo 3-2 red arrow Left and right side
sequentially locking The fourth page step 3,4



Photo 3-2

3. Sequentially fitting skid plate Photo3-3 and rear skid plate Photo 3-4

The sixth page step 1,2



Photo 3-3



Photo 3-4