

## Installation Manual

Mercedes Benz CLA250



#### **Announcement**

- 1. The exhaust system developed by iPE is based on the original factory exhaust, so it will remain unchanged after installation.
- 2. The car keys of many cars have an inductive power transmission function with the car itself, so make sure the car keys must be kept at least 5 meters away from the car itself to ensure safety.
- 3. Make sure the exhaust is already cool down.
- 4. When the auto mode is on, please avoid valve open too early that may cause some vibration; it is recommended to set the valve opening to 60% of the accelerator pedal. For more details, please refer to the control box setting.
- 5. The iPE exhaust is designed based on the factory engine data. If the ECU has been upgrade, may cause some vibration from the exhaust. iPE can provide custom design for these type of car, please contact us for more detail.

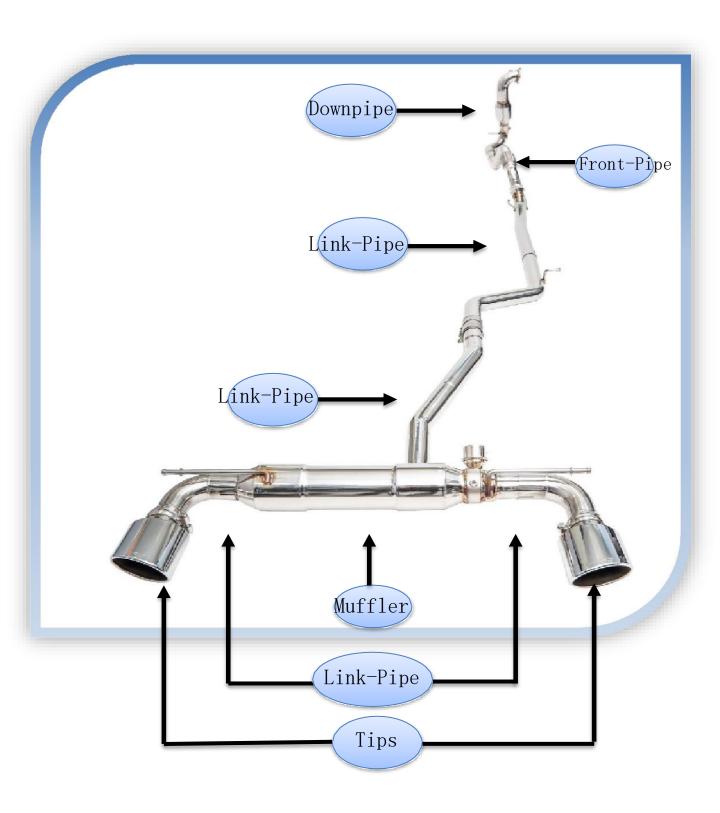


## **Tools**

Name		Sizes
Sockets		E12 · E14
Allen Keys		10mm · 13mm · 16mm
Wrenches		13mm · 22mm
Torque Wrench	Torque Wrench	
WD-40 / Lubricant		



## **Products**





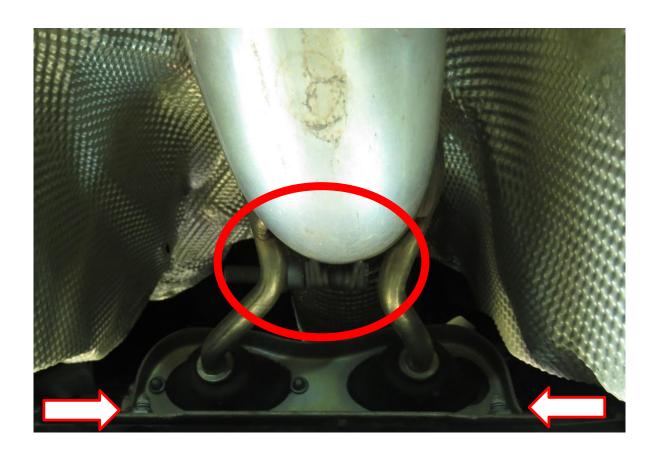
### **Disassembled OEM Exhaust**

1. Remove the undercover and the support bracket.





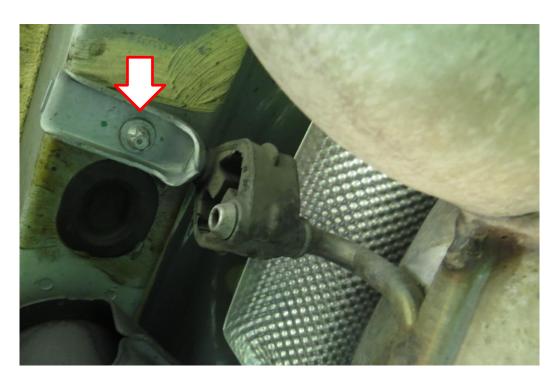
# 2. Remove downpipe and front-pipe





# 3. Remove mid-pipe and muffler

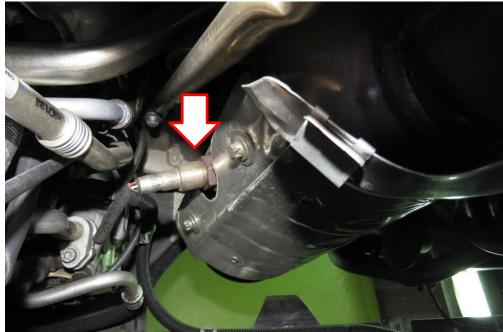






#### 4. Remove airbox and two O2 sensors







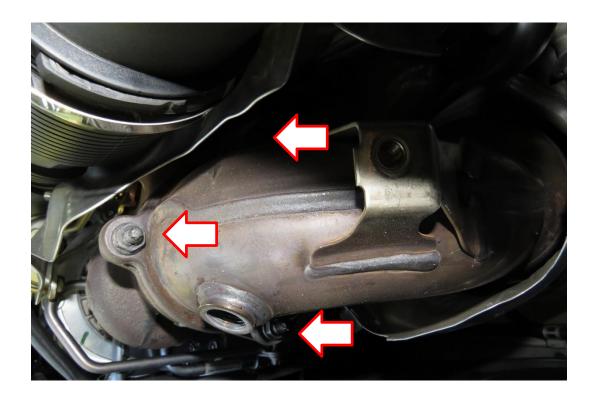
#### 5. remove engine cover support and heat protector.

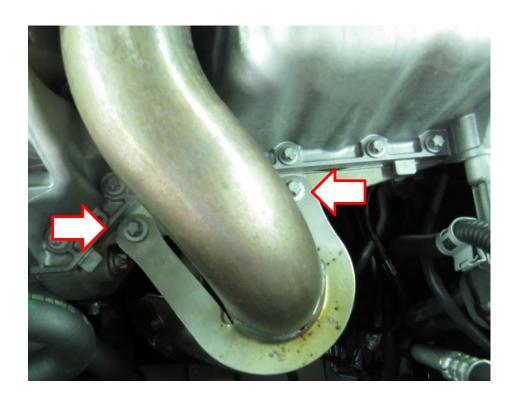






## 6. Unscrew the factory catalytic converter



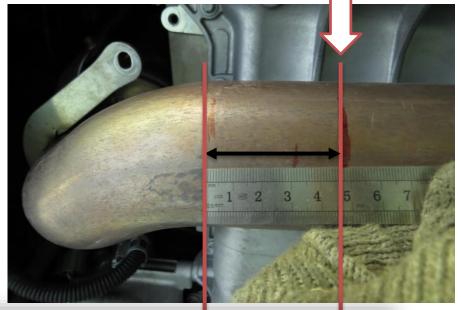




### 7. Factory downpipe cutting

#### **WARNING:**

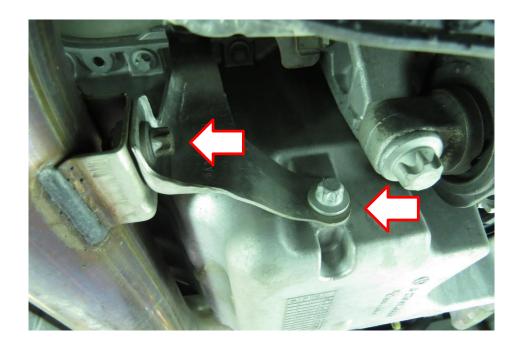
- 1. Please measure 5cm from the elbow to cut the downpipe.
- 2. Because of the angle, length and the space, cutting the factory downpipe is necessary. Please follow the factory steps if you do care about making modification on the factory downpipe.





## 8. Remove rear section of downpipe







#### 9. Remove rear O2 sensor





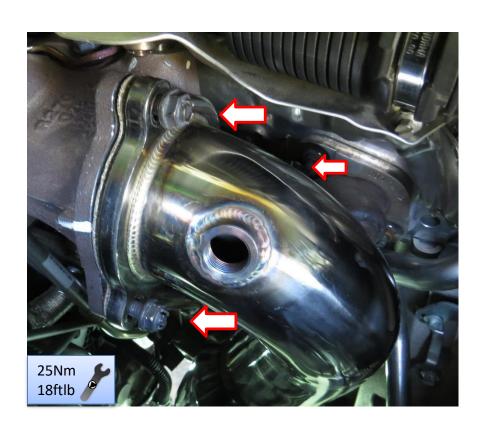
# Installing iPE exhaust system

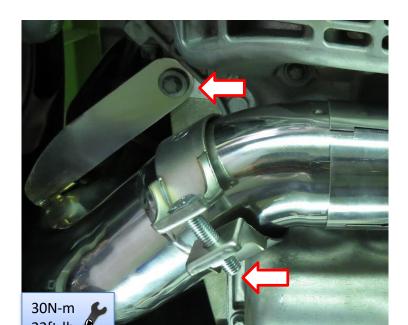
#### 1. Rear O2 sensor install





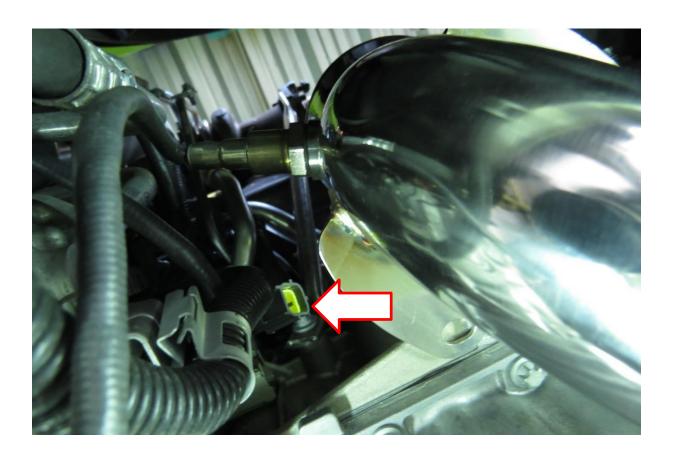
## 2. Installed the downpipe





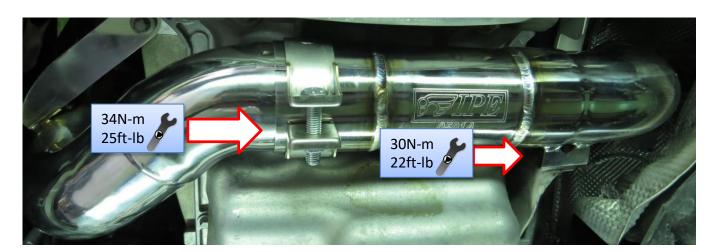
## 3. Connected rear O2 sensor cable





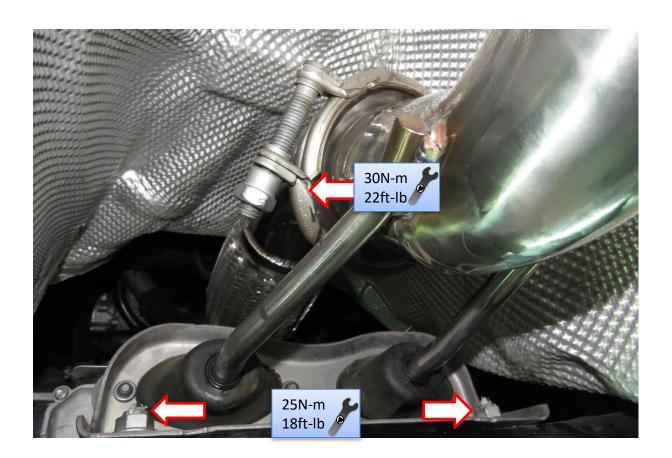
# 4. Front-pipe install





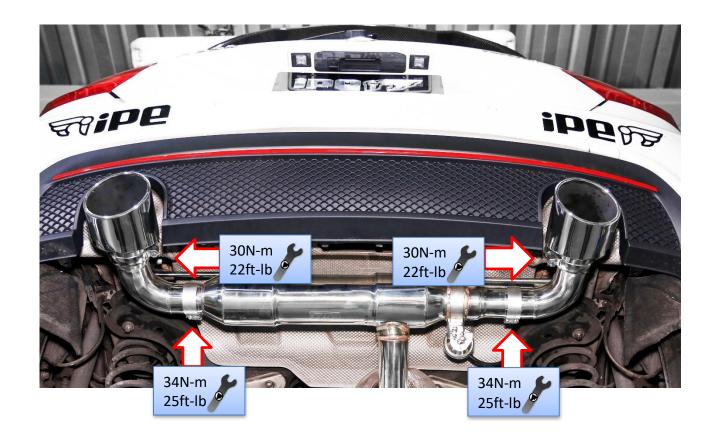


# 5. Front and mid pipe install



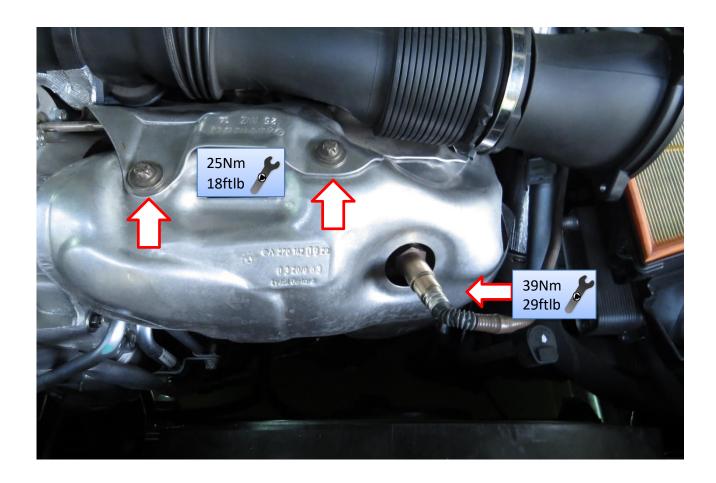


## 6. Muffler and tips install



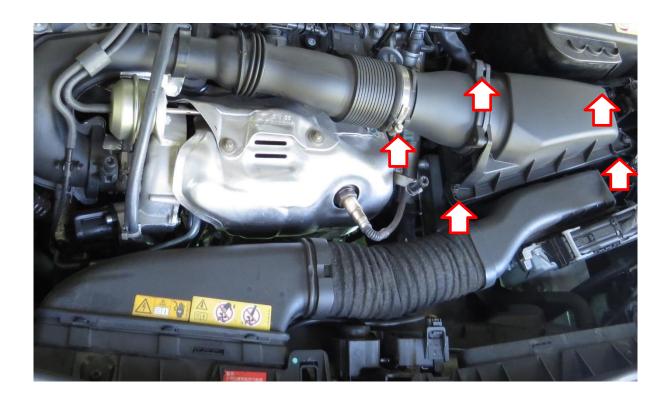


## 7. Heat protector and O2 sensor



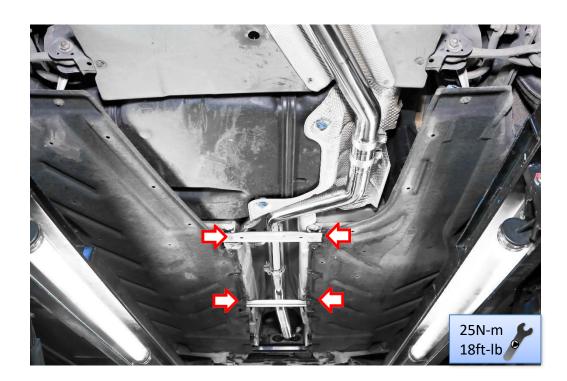


## 8. Air box install





# 9. Engine under cover install





# iPE Valvetronic system

## 1. Plug in the vacuum line





## 2. Install the solenoid and vacuum pump

1. Use the T joint connect vacuum pump, solenoid and the valves.

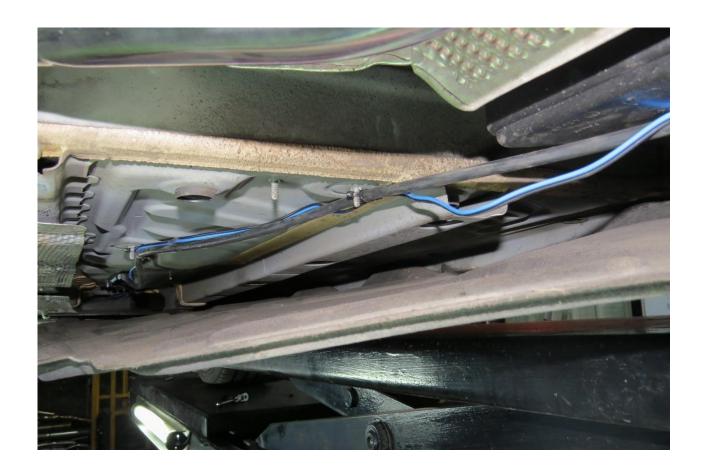
注意:Use zip tie on the connect section to prevent vacuum leak and fall off.





#### 3. Vacuum line and solenoid route

Follow the under chassis to the engine bay

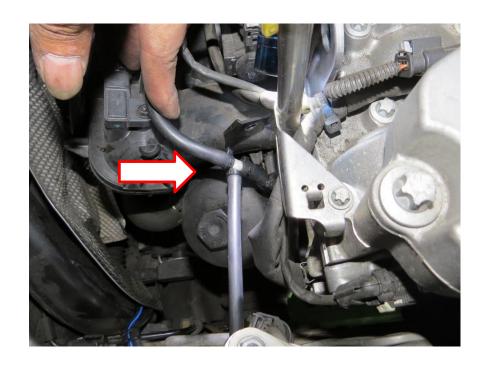




#### 4. Vacuum source install

- 1. Use T joint connect vacuum line and vacuum source.
- 2. Install the one way valve.

注意:Use zip tie on the connect section to prevent vacuum leak and fall off.

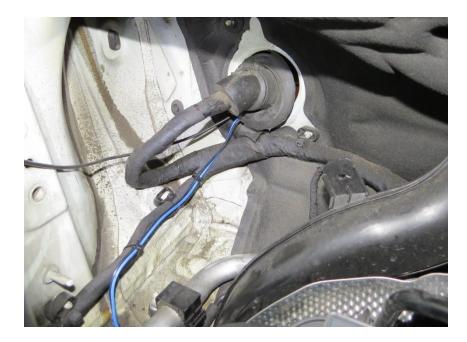




## 5. Solenoid line install



1. Pull the line to the driver side through firwall





#### 6. ACC line install



1. Use the multimeter to find the ACC position and connect the OBD2 ACC red line.

#### WARNING:

According to the original controller will lose power, so we connect one more ACC red line to prevent the situation

