

# INSTALLATION GUIDE

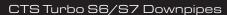
# CTS Turbo C7 AUDI S6/S7 Downpipes



20630 Mufford Crescent, Unit #309 Langley, British Columbia V2Y 2V9

www.CTSTURBO.com

## **INSTALLATION GUIDE**





## WHAT IS INCLUDED

- 1. CTS Downpipes
- 2. Gaskets
- 3.02 sensor extensions
- 4. Hardware

#### **NOTES**

Vehicle used in this guide is a 2016 Audi S6. Product in pictures may look different, but installation procedure is the same. Always make sure the car is safe to work on. Do not work on a hot motor. We do not accept any liability for incorrect installation or damage during the install.



Disconnect the battery in the trunk using a 10mm socket.



## STEP 2

Remove the weather stripping and rain tray.

The weather
stripping and tray will
come towards you for
removal.





Remove the two T25 screws holding the bulkhead

to the strut brace.



## STEP 4

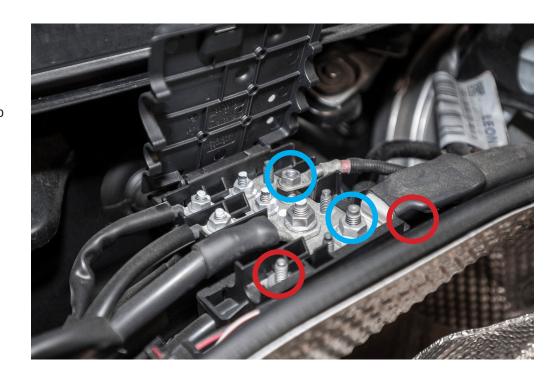
Remove the 5 triple square screws holding the strut tower.





At the electrical junction box you will need to remove two ground connectors marked in blue.

Remove the two
10mm nuts holding
the junction box
to the bulkhead
indicated in red



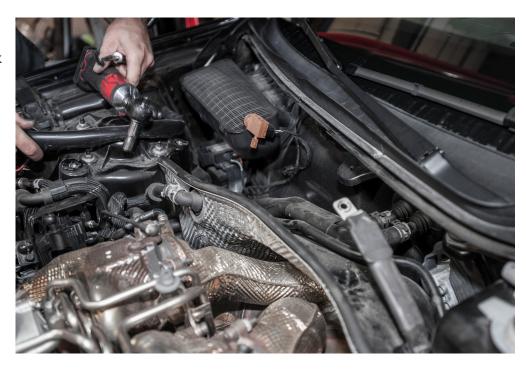
#### STEP 6

Disconnect the electrical connector.



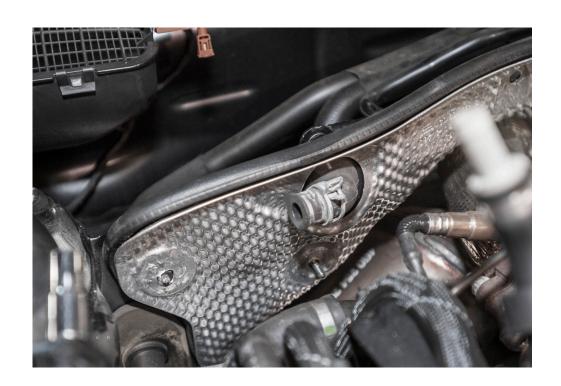


Move the junction box out of the way toward the right side of the vehicle



## STEP 8

Remove the brake booster vacuum line from the back and the front of the bulkhead.

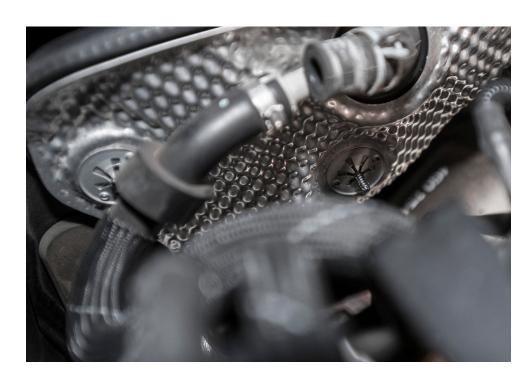




There are 2 metal clips that need to be removed from the threaded studs on the bulkhead.

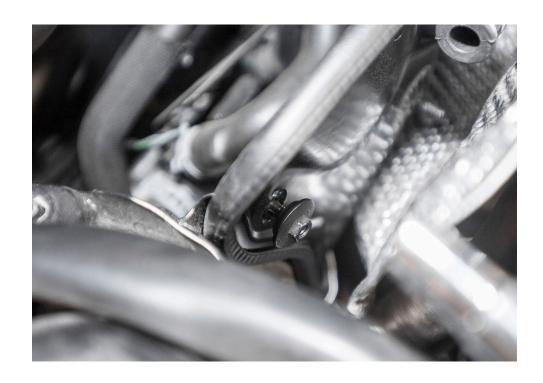
The bottom left and top right studs are the ones to be removed.

\*Left meaning the left side of the car.



# **STEP 10**

On the right side pull the heat-shield forward to reveal the 10mm nut and remove





On the left side of the vehicle remove the O2 sensors using a O2 socket.

We suggest marking the O2 sensors with a sharpie.

We have number 1 as the upper and 2 as the lower O2 sensor



## **STEP 12**

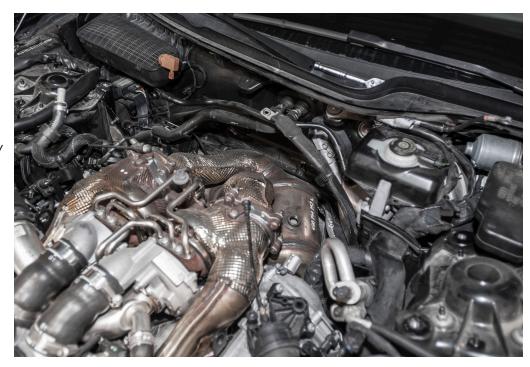
Now pull the heatshield forward on the left side and you will see a T25 torx screw than needs to be removed.





Now you can remove the heat-shield and bulkhead.

Pull it forward slightly and then lift it out.



#### **STEP 14**

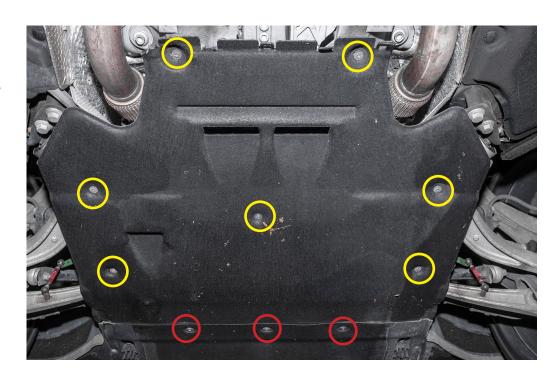
Remove the O2 sensors from the right hand side using an O2 socket. Mark the sensor location. In our case top is 1 and bottom is 2





Using a flat head or philips screw driver remove the under belly tray screws marked in yellow.

Remove the three T25 torx bolts marked in red



## **STEP 16**

Using the 13mm socket loosen the sleeve clamps on both sides and slide them backward.





Each side has three 12mm bolts holding the OEM downpipes and midpipes.

Remove bolts and midpipes from the vehicle





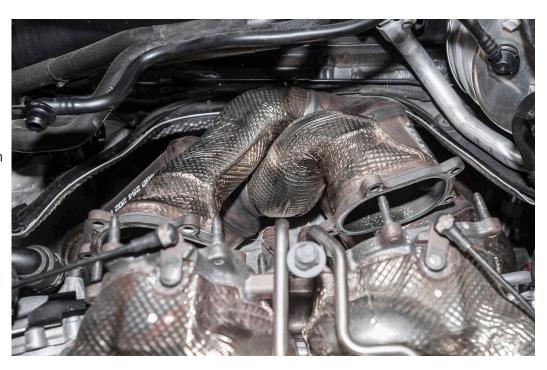
## **STEP 18**

Remove the downpipe brackets attached to the gearbox on both sides with a 13mm socket.





Remove the ten
12mm nuts
holding both
downpipes to the
turbos and let them
rest on each other.

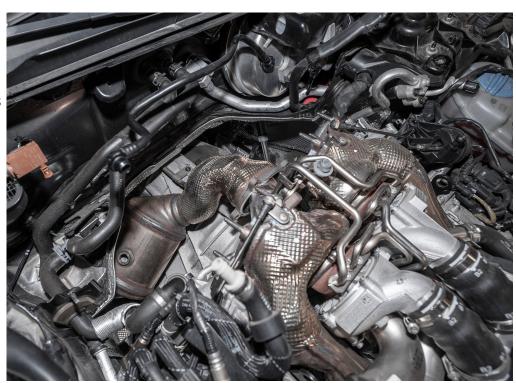


## **STEP 20**

You will need to maneuver the downpipes a bit to get them out.

It is going to be easier to remove the left side OEM downpipe first.

Then remove the right side downpipe.





For the left hand side downpipe remove the lower O2 sensor and connect the provided O2 extension.



#### **STEP 22**

Take the O2 sensor we removed and install it on to the lower O2 port on the left downpipe.

\*Use some anti seize on the thread of the O2 sensors.





Carefully install the left downpipe with the provided gaskets and make sure the O2 connector is not getting damaged.

Attach and tighten the 12mm turbo flange outlet nuts to 23nm





#### **STEP 24**

Once the downpipes are fitted we need to route the O2 sensor extentions.





On the right hand side of the vehicle trace O2 sensor number 2.

Remove and install the O2 extender and follow the path and install with cable ties provided.



#### **STEP 26**

Install the 12mm turbo flange out let nuts and torque to 23nm

Install O2 sensor to downpipe and install downpipe to vehicle. Attach routed O2 extension to O2 sensor.

Connect to extension harness and O2 sensor and install on to the downpipe.





On the left side of the vehicle you can install the upper 02 sensor (number 1)

Take note of how the extender for the lower O2 sensor is mounted with cable ties.









Install the upper (number 1) 02 sensor on the right hand downpipe.



#### **STEP 29**

On both downpipes install the provided block offs and washers.





Transfer the spring clamps from the OEM downpipes and install on to CTS downpipes.

Reinstall 13mm bolt to the gearbox mount.



# **STEP 31**

Install the CTS midpipes and clamps.



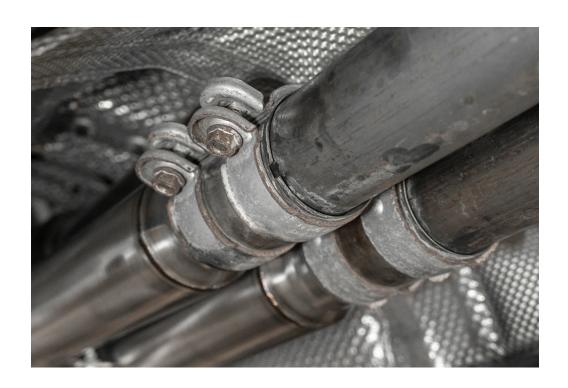


Fasten the midpipes together with the provided 13mm bolt and nut



# **STEP 33**

Slide the sleeve clamps on to the midpipes and tighten.



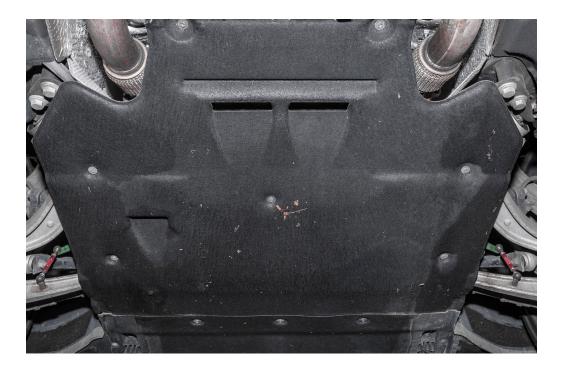


Tighten the clamps on the downpipes.



# **STEP 35**

Reinstall the under belly tray.





Reassemble from STEP 13 backwards.

Make sure to check all connections and clamps along the way.

