# DFG Tuning MK7/7.5 Downpipe Installation Guide

## Tools Required:

- 10mm Socket, 13mm Socket, 15mm Socket, 16mm Socket, Socket Extension, 22mm Wrench
- 6mm Allen Key, Pry Bar, (2) Jack Stands, (1) Floor Jack

Downpipe Components: \*Please make sure you have the below parts before starting!\*

- (1) Front downpipe section with flex section
- (1) Test pipe section or Catted section
- (1) Compression Clamp
- (1) O2 sensor extension harness



#### Notes:

- Due to the space constraints, DFG Tuning recommends professional installation. If you do not have
  access to a lift make sure you properly secure the car on jack stands before working underneath
  the vehicle.
- This guide is based on a 2018 DSG GTI with the electronic differential. Manual cars will have more room to work with due to the size of the transmission.
- Please make sure the car is properly cooled down as heat can be stored in the exhaust components well after the vehicle is shut off

### **Starting Under the hood**

1. Disconnect the battery by loosening the 10mm bolt on the negative battery terminal and removing the line from the battery



2. Unplug The O2 sensor on the firewall and remove the (4) clips holding the harness against the firewall





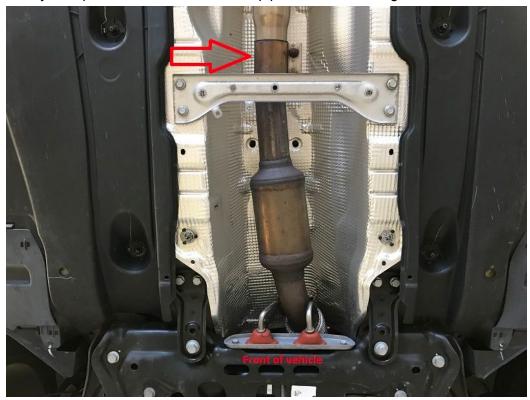
3. Locate and remove the 6mm HEX bolt that holds the V-Band clamp around the downpipe. Once the hex bolt is removed carefully separate the stock downpipe from the turbo and remove the flange. Save the factory clamp as it is re-used for DFG Tuning downpipe





#### **Removing The Stock Downpipe**

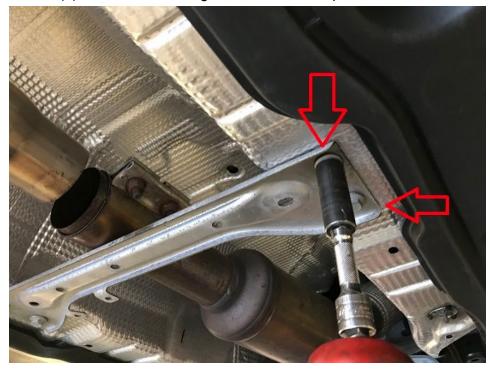
- 1. Now it's time to go underneath the vehicle.
- 2. Properly secure the vehicle on jack-stands if you do not have access to a lift.
- 3. Locate the factory clamp which connects the downpipe and cat-back together



4. Unbolt this clamp using your 13mm socket, once the clamp is loose, slide the clamp forward onto the downpipe. The downpipe is now disconnected from the cat-back.



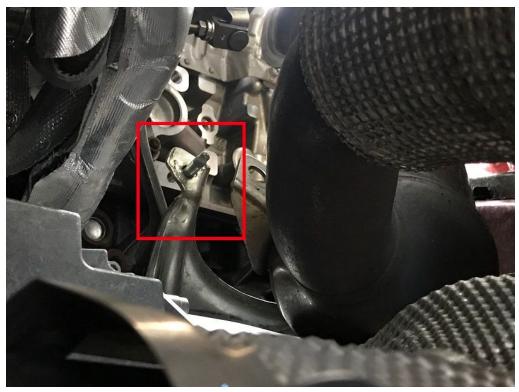
5. Located & remove the (4) 13mm bolts holding the cross brace in place.



- 6. Locate the (2) 13mm bolts holding the downpipe to the engine bracket. **Depending on your transmissions this is a very tight area to work in.** 
  - a. Downpipe is lifted off driver side bracket to show the location



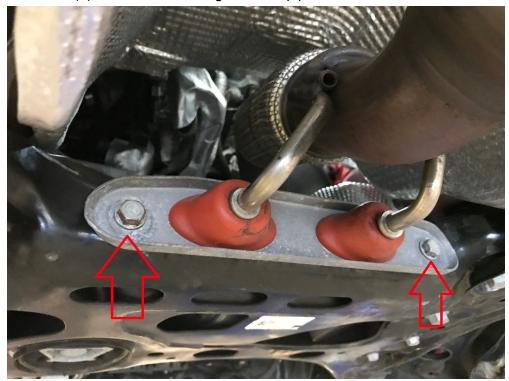
b. Closer look at driver side bracket location



c. How the bracket looks when the downpipe is removed from the tunnel



- 7. Once located remove the bolts
- 8. Locate and remove the (2) 13mm bolts holding the downpipe to the subframe of the vehicle.



9. In order to make removal of the factory downpipe easier, we recommend unbolting the pendulum mount from the transmission. This will allow for you to push the motor forward creating more room for removal of the downpipe.



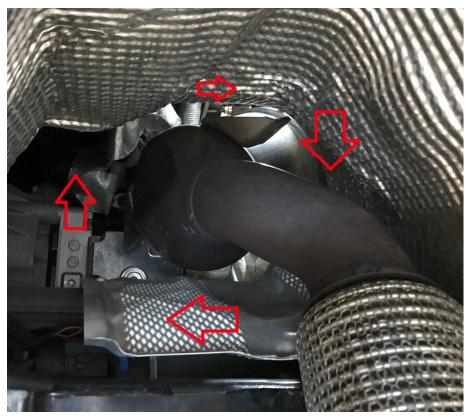
a. The pendulum mount is secured to the transmission with (2) 16mm bolts.



- b. Remove the bolts and you will be able to move the motor forward creating more clearance
- c. A second person is recommended during this step to help keep the engine forward while someone is rotating the downpipe out of the factory location
- 10. Once the pendulum mount is removed. You can push the motor forward while starting to remove the downpipe. It is a very tight fit on vehicles equipped with the electronic limited slip differential.
- 11. Pull the downpipe off the two bracket studs and rest it on the tunnel as shown below.



a. Now rotate the downpipe clockwise and feed it through the tunnel. This is a tight fit so take your time.



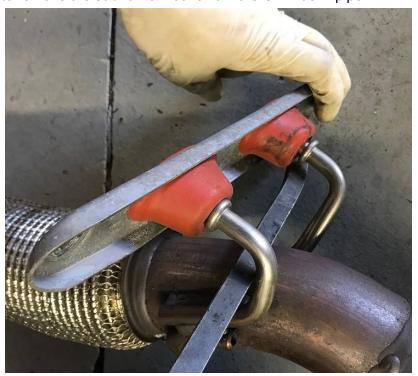
b. The downpipe should be in the position below so you can remove it from the tunnel



c. Below is the angle of the downpipe for removal.



- 12. Now that the OEM downpipe is removed it is time to transfer the subframe mount and O2 sensor onto the DFG Tuning downpipe.
  - a. Use the pry bar to remove the subframe mount from the OEM downpipe



b. Use a 22mm wrench to remove the O2 Sensor from the OEM downpipe



c. Now install the subframe mount onto the DFG Tuning downpipe as shown



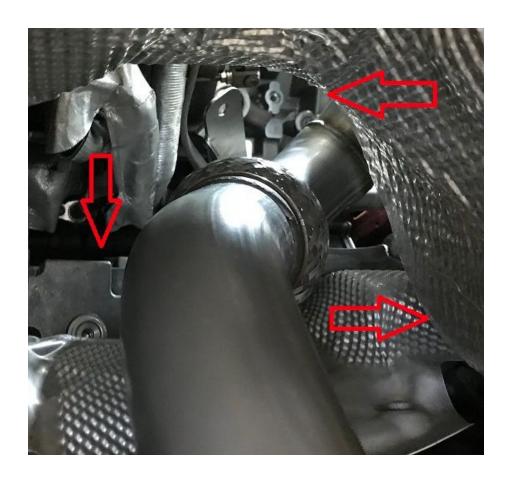
d. Install the O2 sensor onto the DFG Downpipe using the 22mm wrench. Once it is hand tight, tighten by turning  $\frac{1}{4}$  of a turn further.



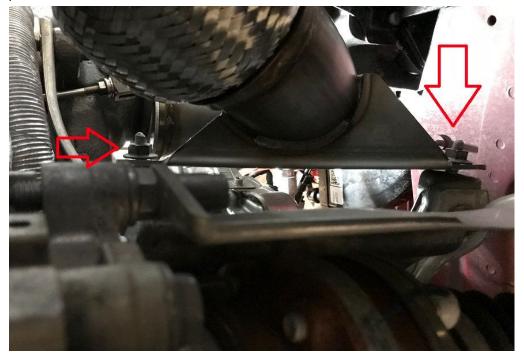
# **DFG Tuning Downpipe Install**

1. Feed the front section of the DFG Tuning downpipe through the tunnel as shown in the picture.





a. Install the DFG downpipe onto the two mounting bracket studs and secure them (don't tighten down yet)+



b. Now secure the lower subframe bracket to the mounting points ( Do not tighten down yet)



2. Use the pry bar or a friend to help you re-align the pendulum mount so you can re-install the (2) 16mm bolts. Once this is completed torque both bolts to 40 FT-LB + 90 degrees.



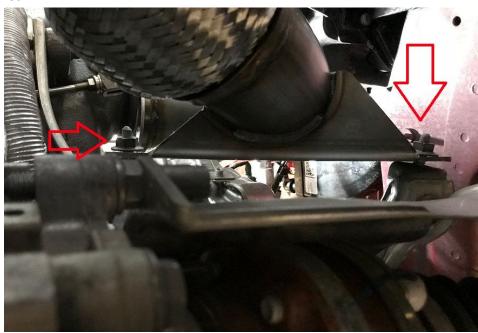
- 3. Make sure the face of the downpipe flange is mounted flush to the turbo. Now take your factory V-band clamp and loosely secure it to the downpipe and turbo.
  - a. How the flange should look before installing the clamp



b. Secure the clamp so the downpipe can still rotate if need be (we will tighten this in another step)



4. Once the downpipe flange is aligned properly you can tighten down the 13mm mounting nuts on the downpipe bracket.



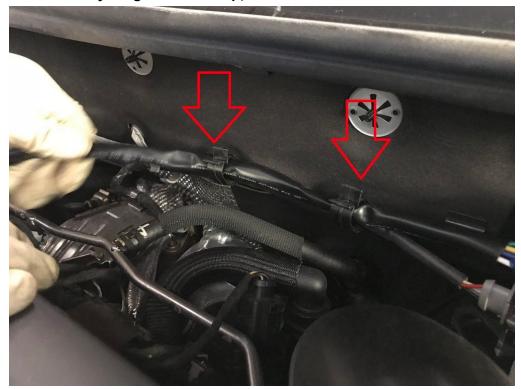
5. Now you can tighten the V-band clamp using a 6mm Allen key. The flange will not touch like on the OEM downpipe. It should look like the photo below.

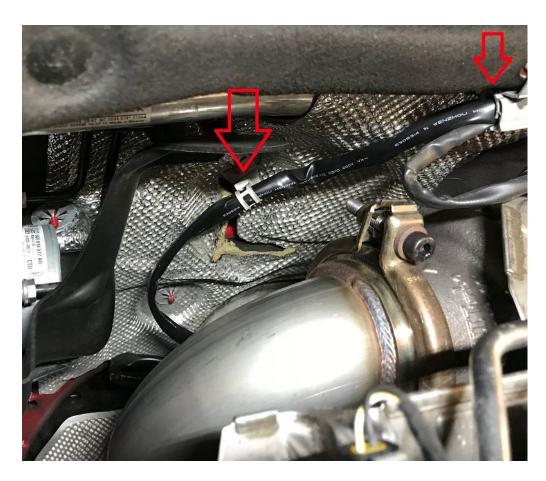


6. You can now install the O2 sensor extension by plugging it into the connector located on the firewall in the engine bay

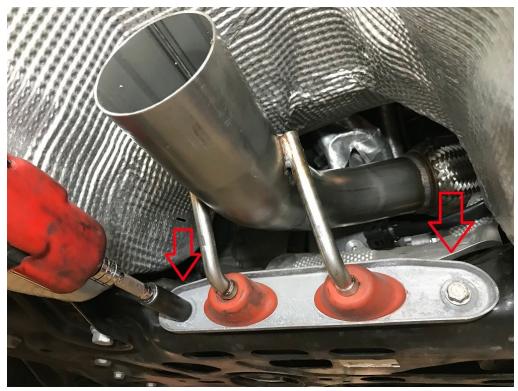


7. Route the harness through the (4) clips on the firewall and guide it down past the downpipe. (we will connect and secure everything in a later step)

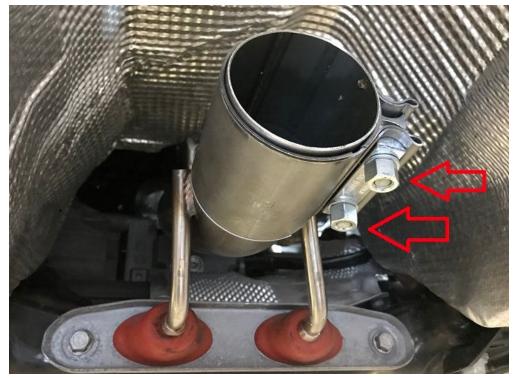




8. Now tighten down the (2) 13mm downpipe subframe mounts. Make sure the bracket is installed correctly as it is an offset bracket.



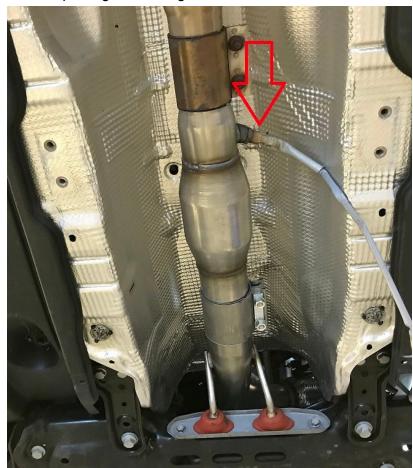
9. Now install the rear section of the DFG Tuning downpipe with the included compression clamp. Make sure the clamp is positioned as shown below



a. Lift the test pipe or catted pipe into position and center the compression clamp over both sections



b. \*Note\* Make sure the O2 sensor is as upright as possible in order to prevent water/condensation from pooling and fouling the O2 sensor.

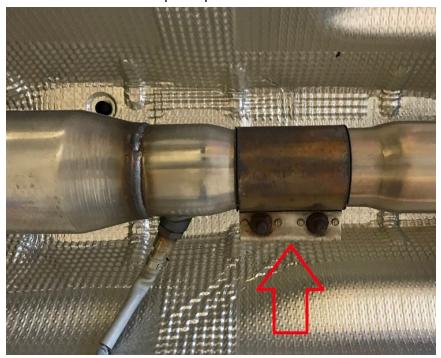




c. Once the O2 sensor is adjusted tighten both 15mm bolts as shown below



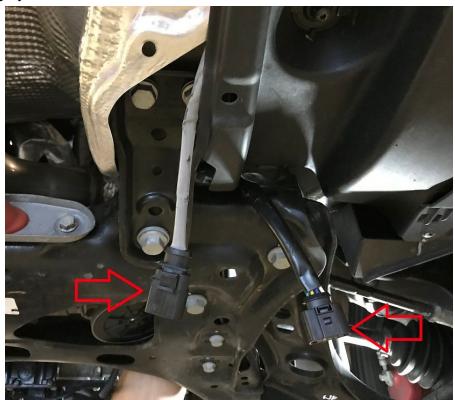
10. Now slide the OEM clamp into position so it attaches the DFG Tuning downpipe and the stock exhaust.



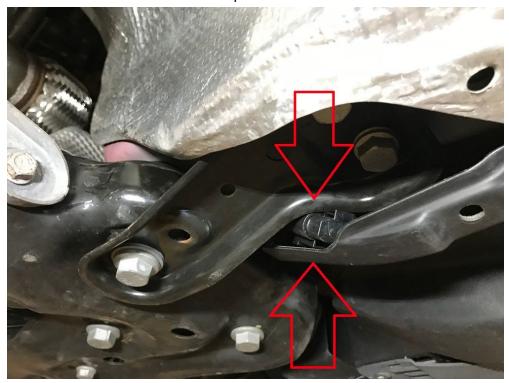
- 11. Route the O2 sensor wire in between the floor and lower right side plastic shield and plug into O2 extension harness.
  - a. Pull the plastic shield down and tuck the O2 harness along the edge towards the front of the vehicle



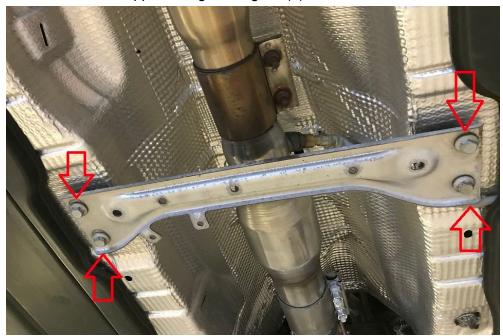
b. Connect the grey O2 harness to the black O2 extension harness.



c. Once connected tuck both harnesses into the plastic shield. It should look like the below photo



12. Now Re-install the lower cross support using the original (4) 13mm bolts.



13. Check all the bolts and clearances again before lowering the vehicle.



14. Re-connect the battery and go for a test drive. It may smell like something is burning or produce smoke for a short period of time after the initial start-up.

#### NOTES

- We recommend you check all the clamps after the first 100 miles especially the V-band.
- If the v-band comes loose after your first re-check, you may need to loosen the downpipe bracket nuts to properly re-align the v-band flange
  - Also, make sure the V-band clamp is properly seated all the way around the connection between the turbo and downpipe.