

# **AMS**

PERFORMANCE



VW Audi  
CV3  
Spain

**GOLF R MKVII DOWNPIPE**  
TECHNICAL SPECIFICATIONS



The goal of AMS Performance is to provide the highest quality, best performing products available. By utilizing research and development, and rigorous testing programs AMS Performance will never compromise the quality or performance of our products. In addition, AMS Performance will only provide the finest customer service offering only parts and advice that are in the best interests of the customer. AMS Performance was built on a foundation of integrity. This is who we are; this is what you can count on.

A vehicle modified by the use of performance parts may not meet the legal requirements for use on public roads. Federal and state laws prohibit the removal, modification, or rendering inoperative of any part or element of design affecting emissions or safety on motor vehicles used for transporting persons or property on public streets or highways. Use or installation of performance parts may adversely affect the drivability and reliability of your vehicle, and may also affect or eliminate your insurance coverage, factory warranty, and/or new OEM part warranty. Performance parts are sold as-is without any warranty of any type. There is no warranty stated or implied due to the stresses placed on your vehicle by performance parts and our inability to monitor their use, tuning, or modification.

These instructions are provided as a guide only as there are many variables that cannot be accounted for concerning your particular vehicle, including but not limited to model year differences, model differences, the presence of non-OEM parts, and modifications that may already be or were previously installed. A basic knowledge of automotive parts and systems is helpful but a better understanding of the parts and systems on your particular vehicle may be required.

If you have any questions or issues at any time during the installation of your AMS Performance product(s) please call us for technical assistance. The AMS Performance tech line can be reached during business hours at 847-709-0530 for AMS and Alpha Performance products only.

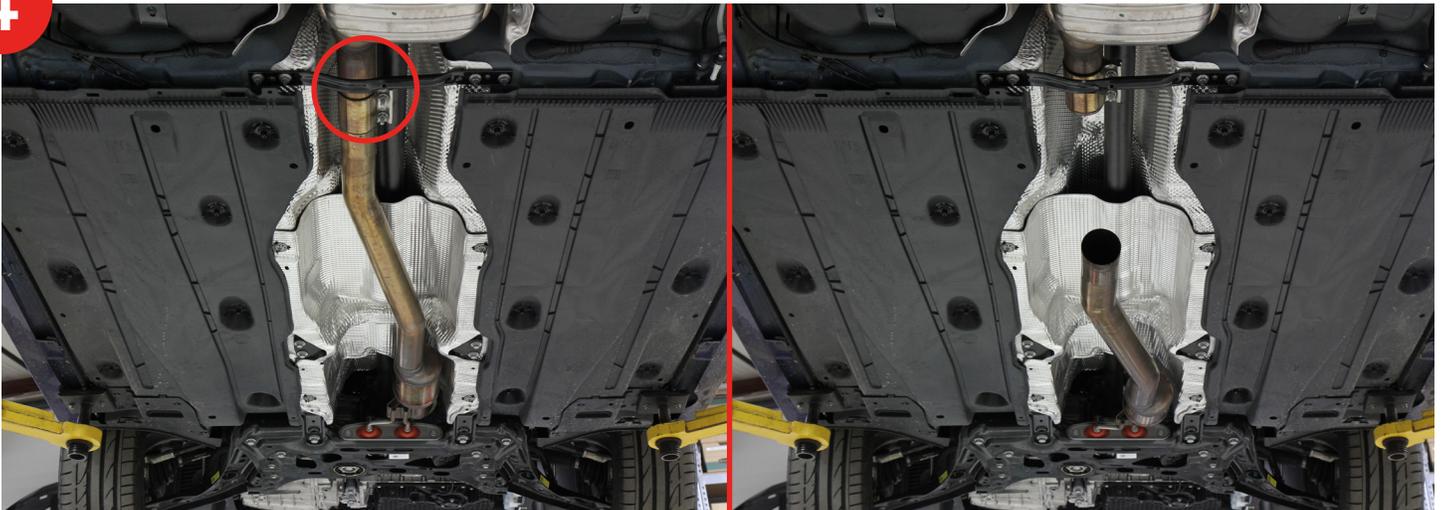
## Installation

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1. Safely secure and raise the front of the vehicle up. An automotive lift is recommended for this install.
2. Making sure the car is secure and will not roll, place the car into neutral. This can be done in one of two way.
  - a. Key the vehicle on without starting it. Press the brake pedal and move the shifter lever into neutral. Disconnect the battery.
  - b. Or, Follow the operation listed in the owner's manual under "Emergency release for the selector lever lock"
3. If the battery has not been disconnected, make sure to do this now.

4. From under the vehicle, loosen the two 13mm nuts on the factory exhaust clamp. Slide the clamp onto the rear axle back section of the exhaust. The clamp will be reused if retaining the factory axle back exhaust system.

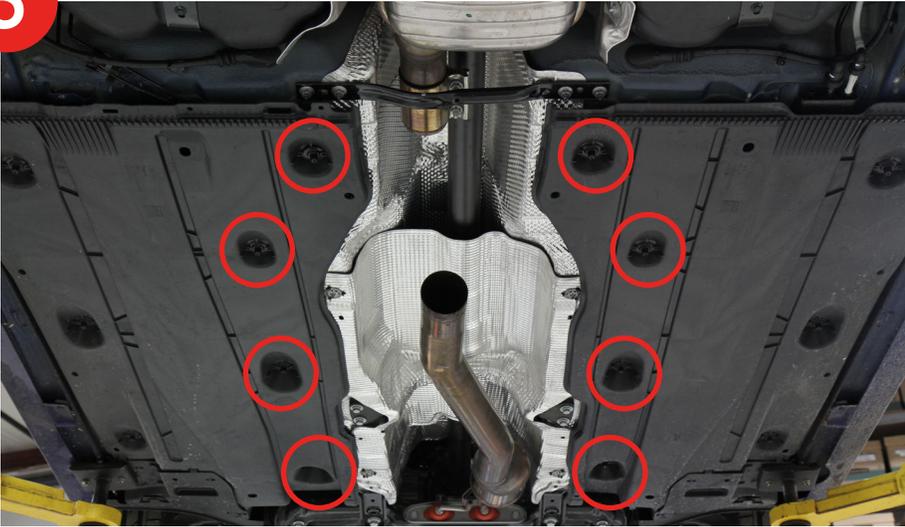
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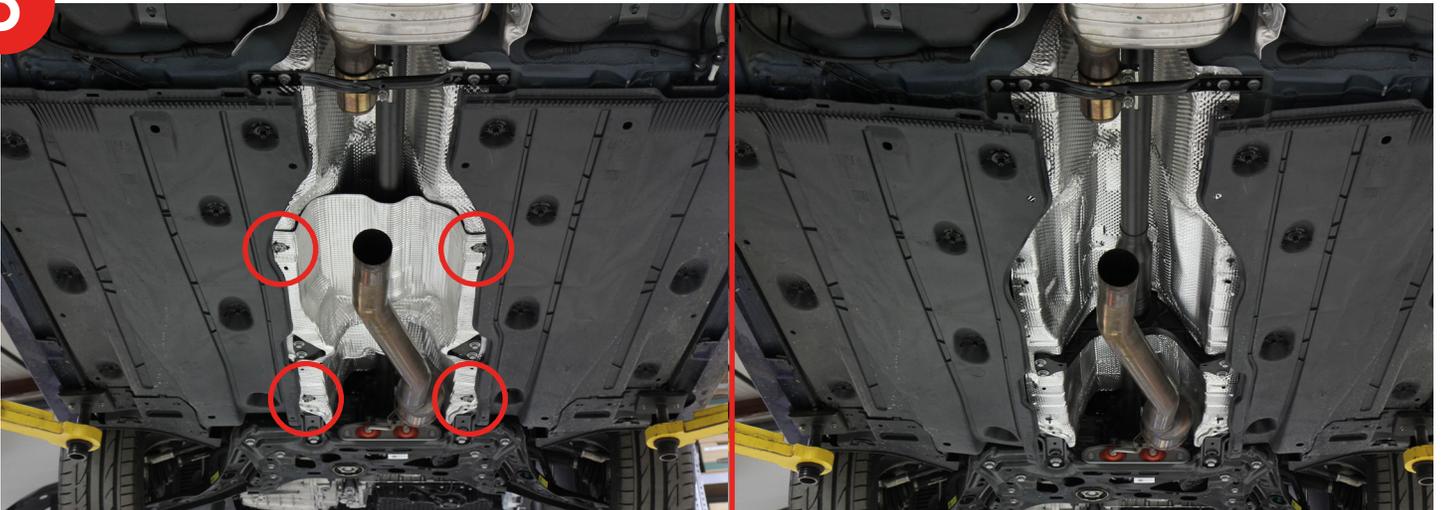
5. Loosen the eight plastic nuts on the side under trays to drop the panels down slightly. The panels do not have to be removed.

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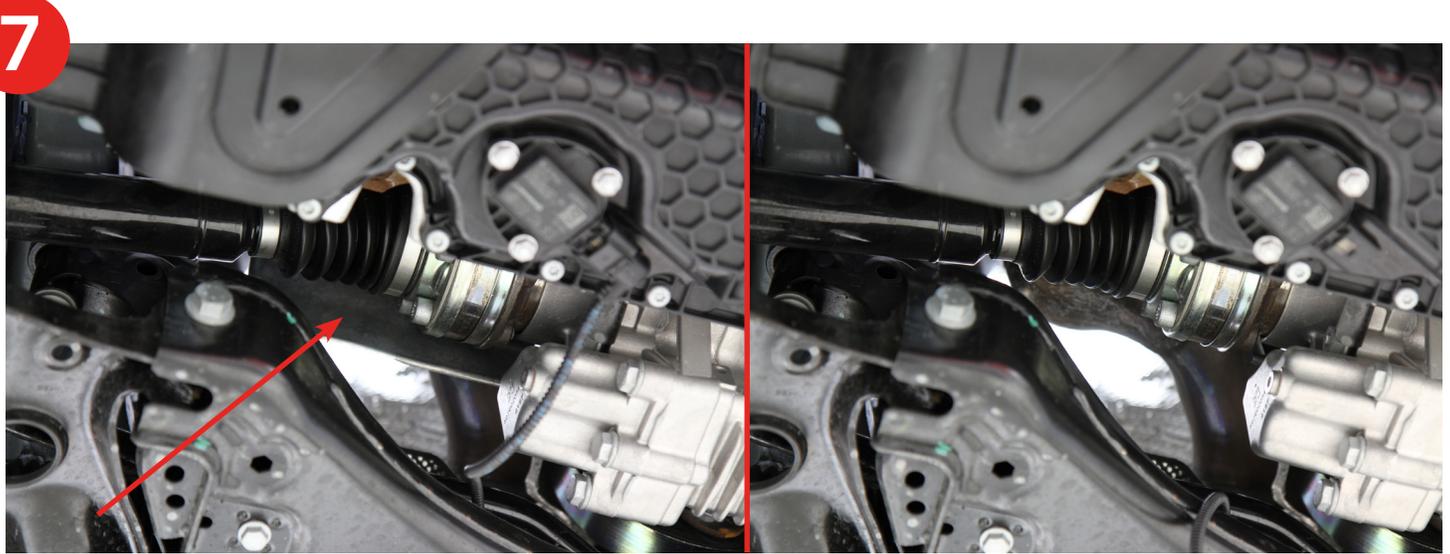
6. Next step will be to remove the center exhaust heat shield to expose the driveshaft. To do this, use needle nose pliers to grab on to the four metal retaining washers and turn counter clockwise while pulling downwards. There will be little triangle cutouts on the washers. The trick is the push in two of them 180 degrees apart with the pliers and grab it from there.

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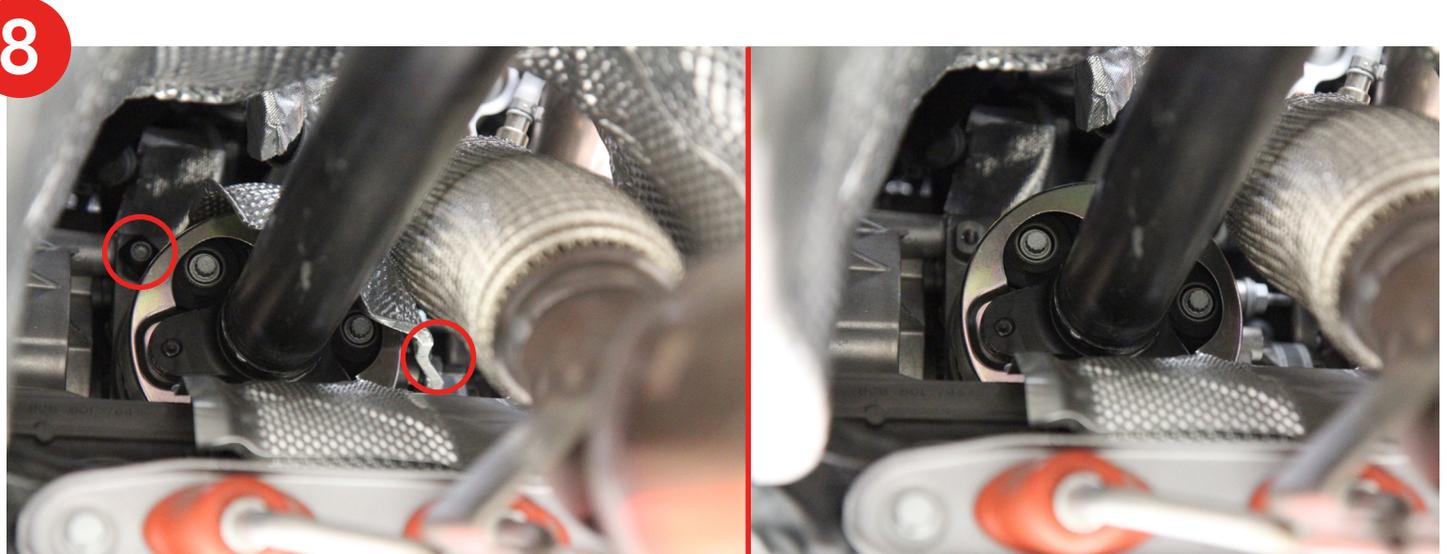


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7. Remove the heat shield around the right front axle boot. It is held in place by two 8mm allen nuts. A long 8mm ball allen is recommended.

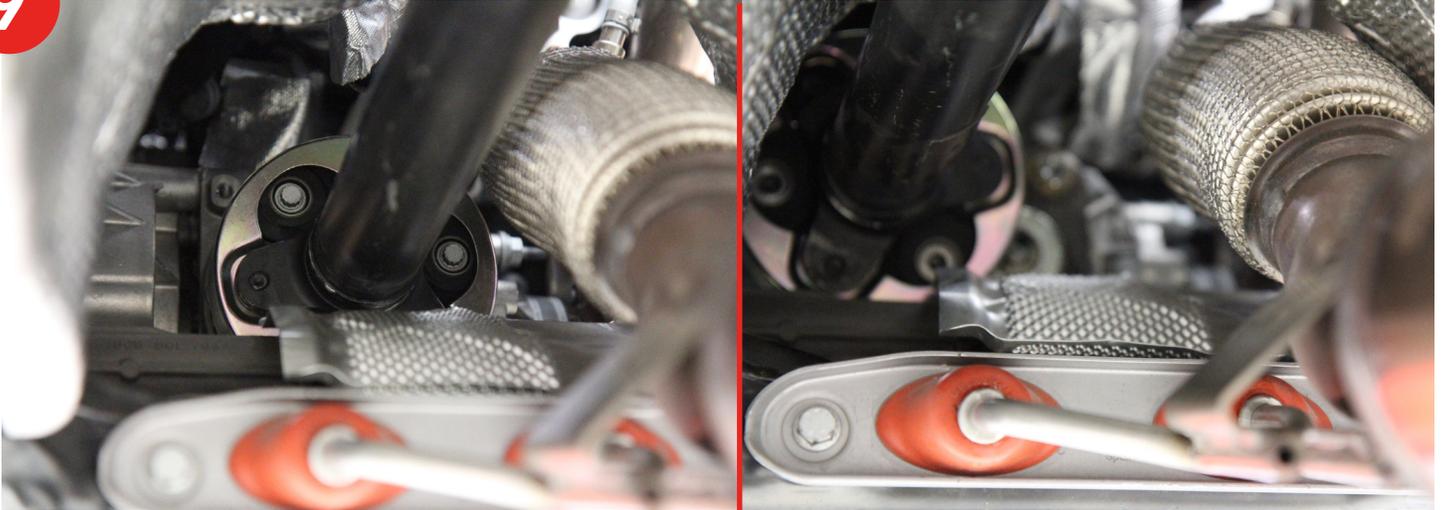


8. Remove the heat shield around the transfer case output shaft. It is held in place by a 10mm triple square shown in the picture and a 16mm stud bolt on the side where the shield in step # 7 was removed.



9. Unbolt the rear prop shaft from the transfer case by removing the three 10mm 12pt bolts. Next unbolt the prop shaft center support by removing the four 13mm bolts holding the cross member in place. Take the assembly and push it towards the rear of the car to remove it off the transfer case. Then push the prop shaft over to the left side of the car.

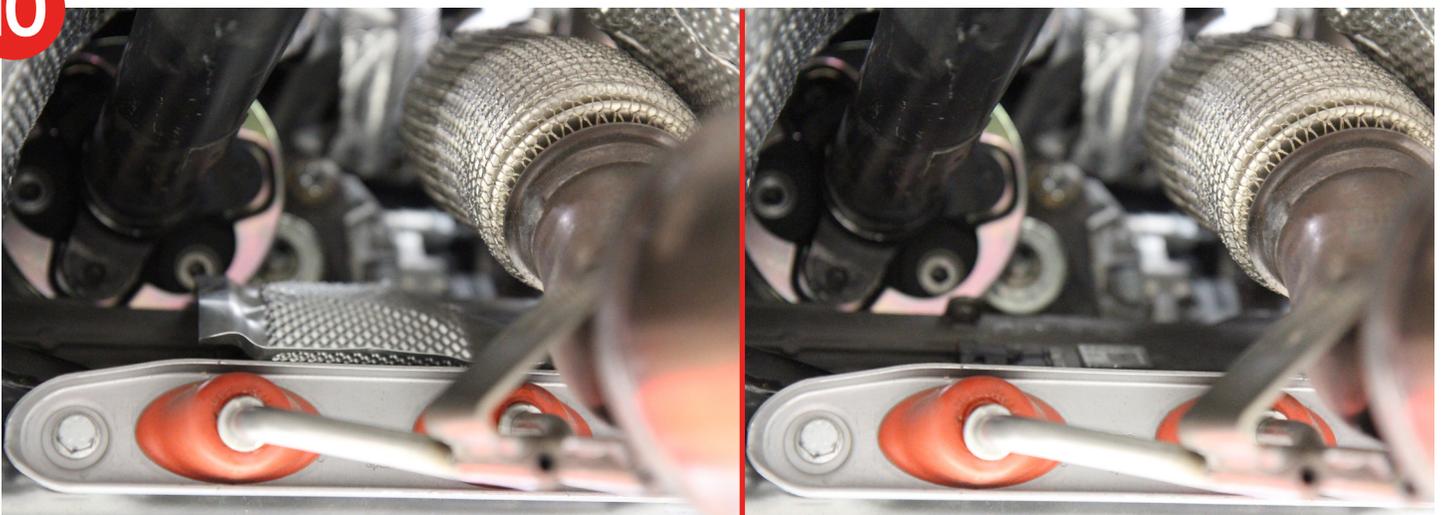
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10. Remove the heat shield on the subframe. It is held in place by four T30 Torx bolts. Removing this heat shield will help when removing the factory downpipe and installing the new AMS downpipe without bending the shield.

**OPTIONAL**

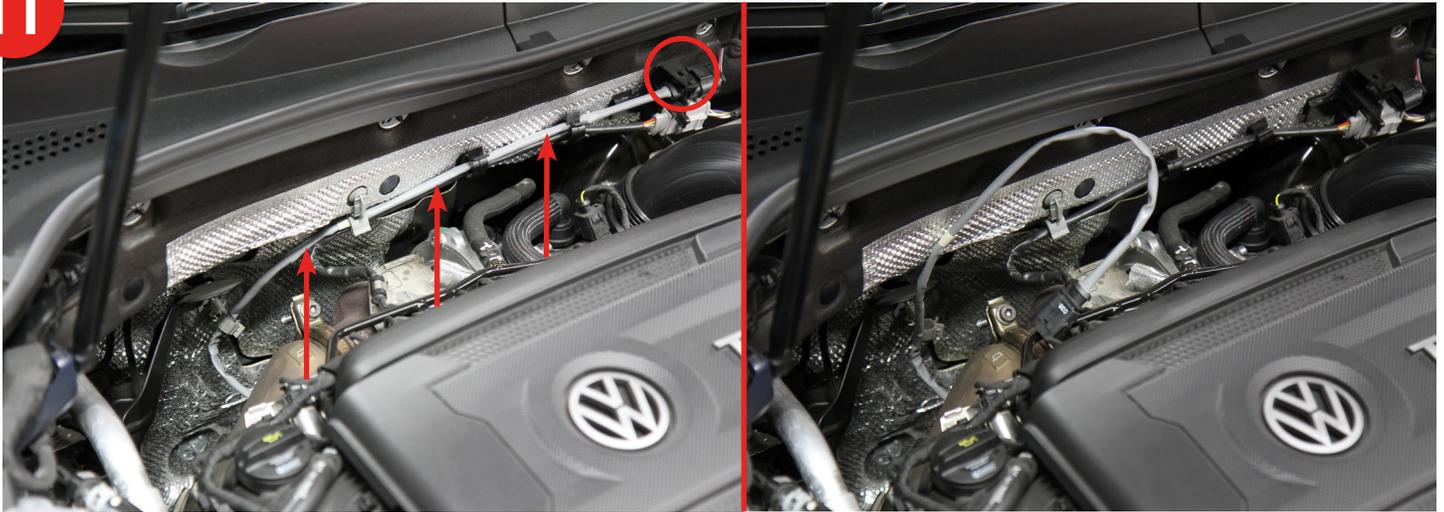
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11. From the top of the car, remove the secondary O2 sensor harness for its retaining clips on the firewall. It is the long Grey harness with the black connector.

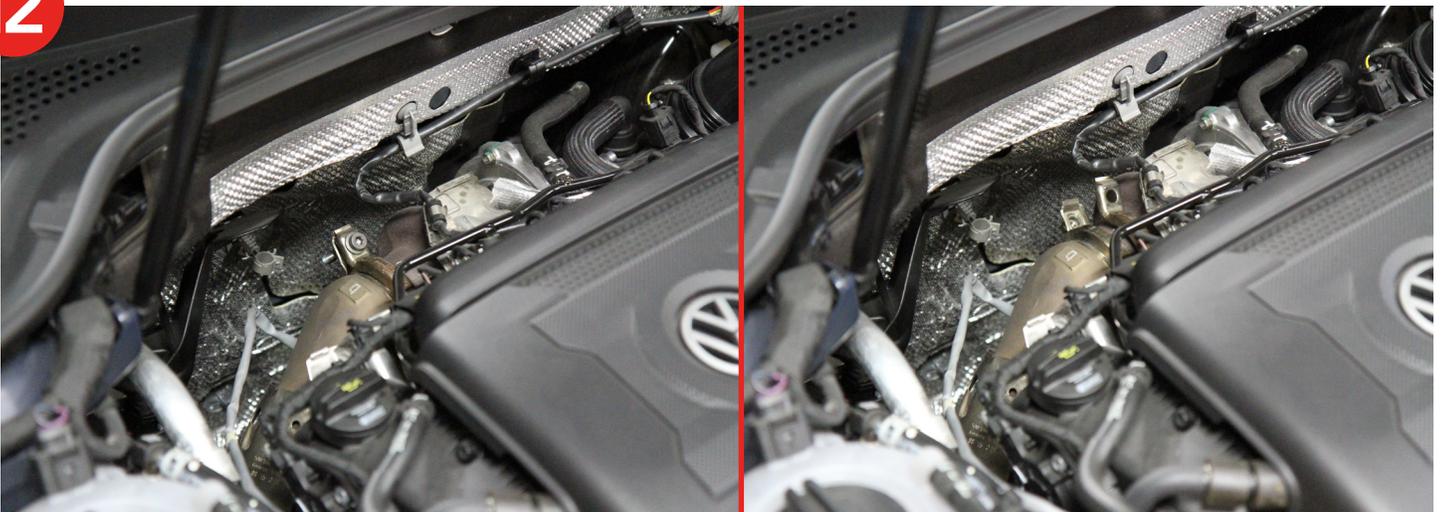
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12. Unbolt the factory downpipe bracket on the rear of the engine. The bracket is located on the catalytic converter and is held in place by two 13mm nuts. These nut are easier to remove from the top of the car but can still be difficult.

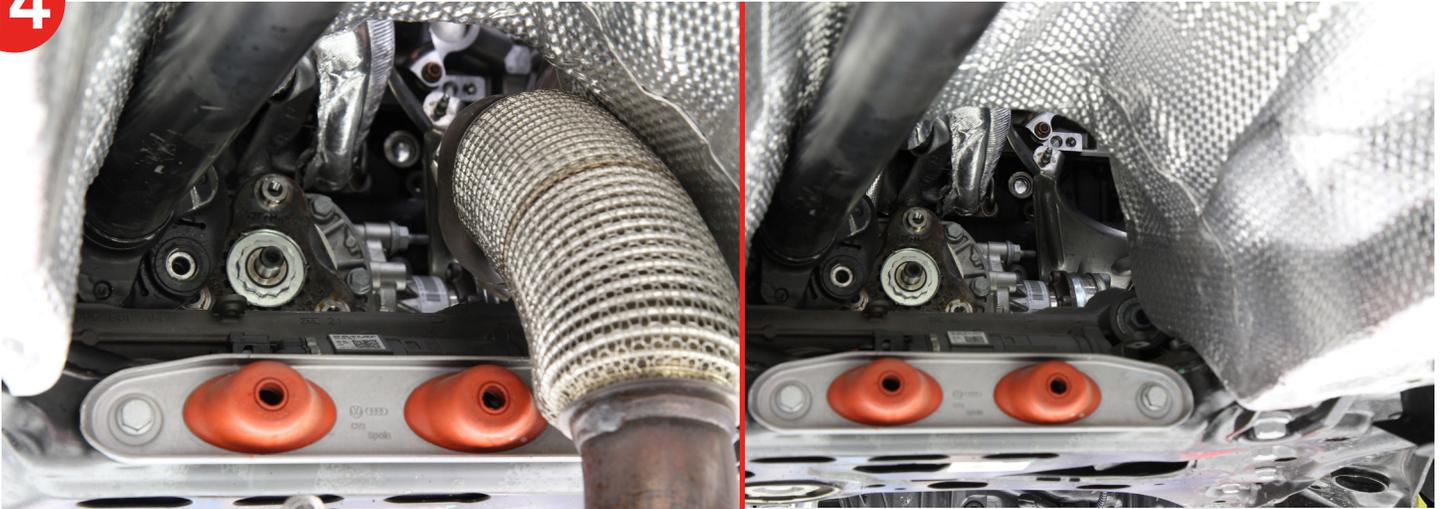
13. Remove the V-band clamp 6mm allen bolt.

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14. From under the car, pry the downpipe mounts out of the orange exhaust hanger. Carefully support the top of the downpipe with one hand to support the flex and remove the downpipe. The downpipe will be turned in a clockwise rotation as it is removed from the vehicle. Be careful of the heat shields and the secondary O2 sensor when removing the downpipe. The heat shields will catch and bend easily so make sure to straighten anything out after removal.

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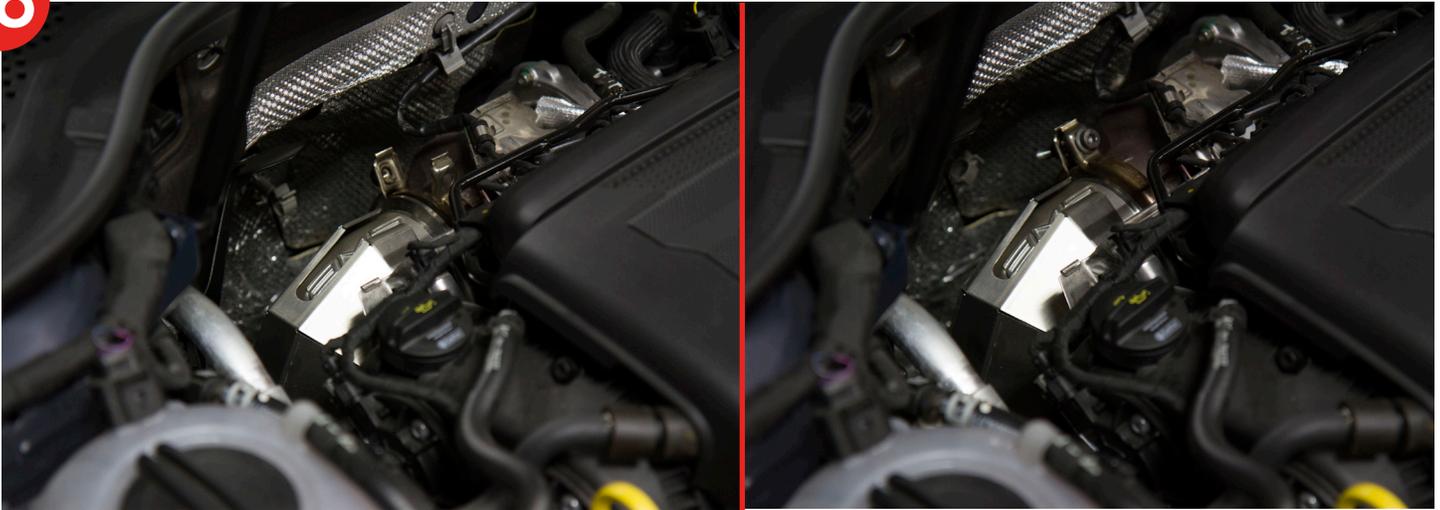
15. If the heat shield on the subframe was removed in step #10, reinstall the metal heat shield by sliding it under the downpipe. Do this before completely installing the downpipe into the lower orange mounts. Place the supplied aluminum spacers onto the bracket studs of the downpipe mount bolted to the rear of the engine before installing the AMS downpipe. Install the new AMS downpipe in the reverse manner. The heat shield on the turbo outlet casting should already be installed for you.

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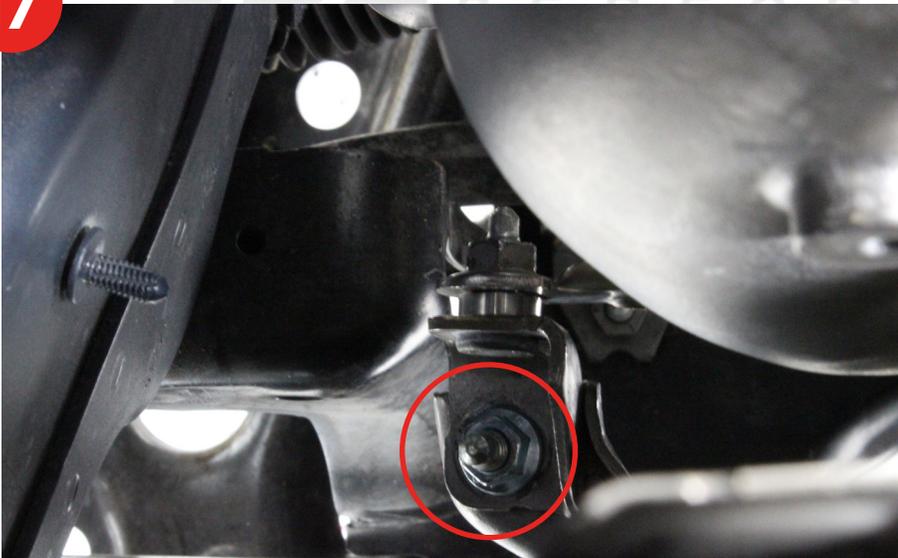
16. From the top of the car, align the factory V-band on the turbo outlet and loosely install the clamp. Make sure the downpipe can still move slightly and rotate.

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17. With the downpipe still loose, start to tighten the two 13mm nuts for the bracket on the downpipe behind the engine. Before completely tightening the two nuts, loosen the 13mm nut shown in the picture. Loosening this nut will allow some adjustment in the bracket to compensate for the new downpipe. Tighten the bracket all the way down, then retighten the 13mm nut for the bracket adjustment.

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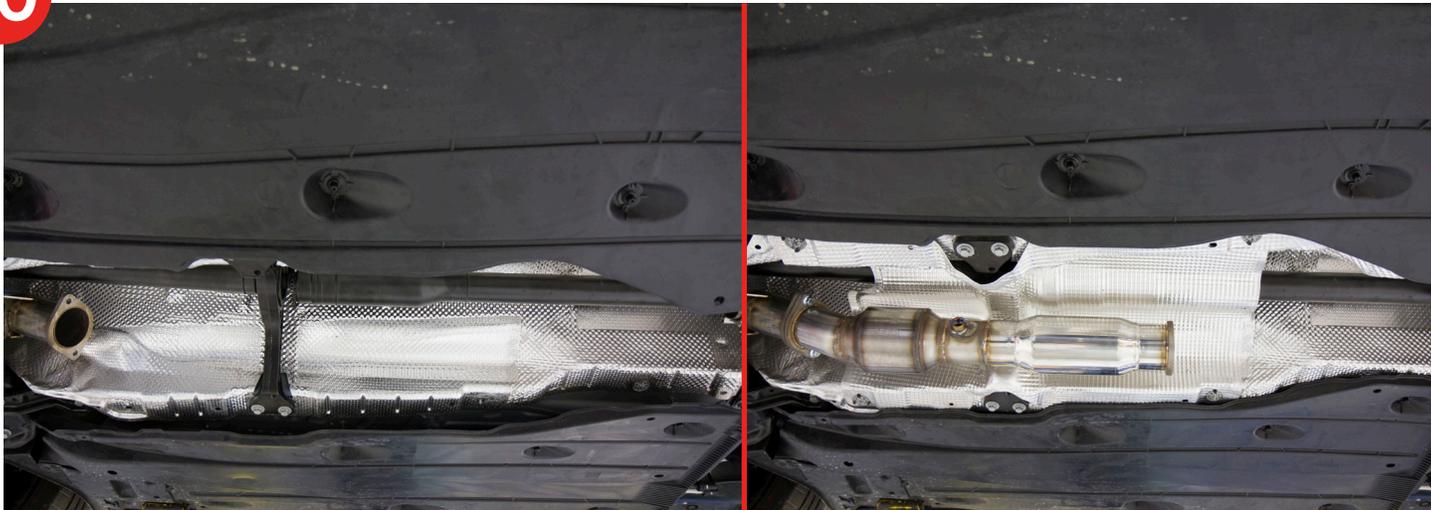


18. Tighten the factory V-band clamp when the rear bracket is completely tighten.

19. Reinstall the components removed in steps 5-9 in the reverse order of removal.

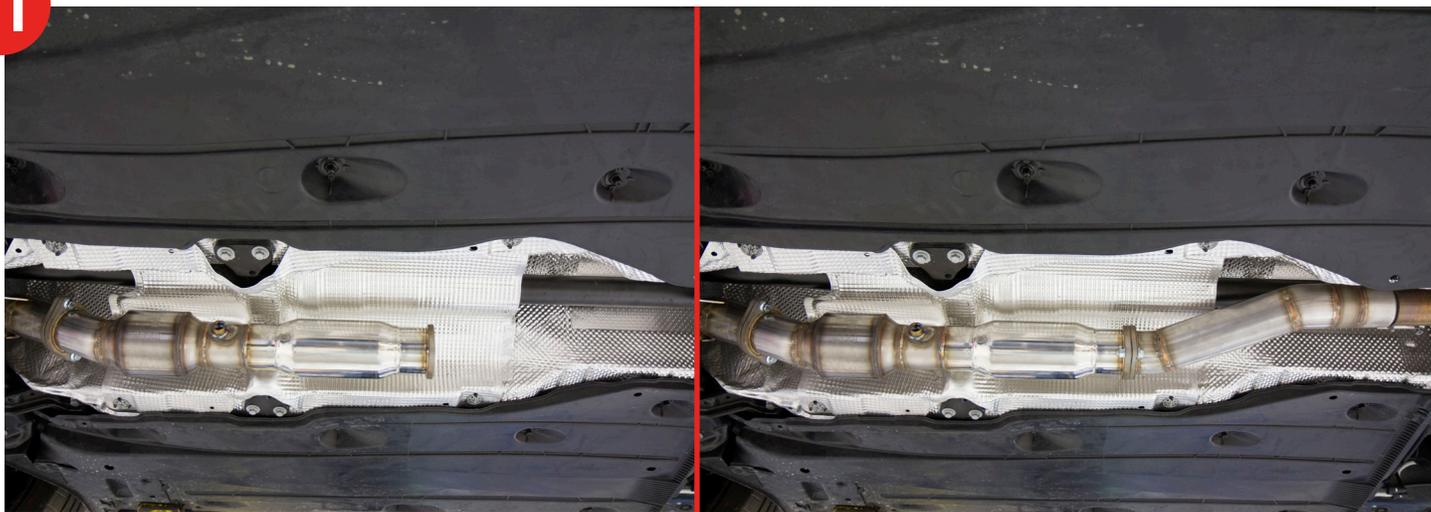
20. Loosely install the mid-pipe.

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21. Loosely install the rear adaptor. If installing an exhaust, do so now working from the front to the rear.

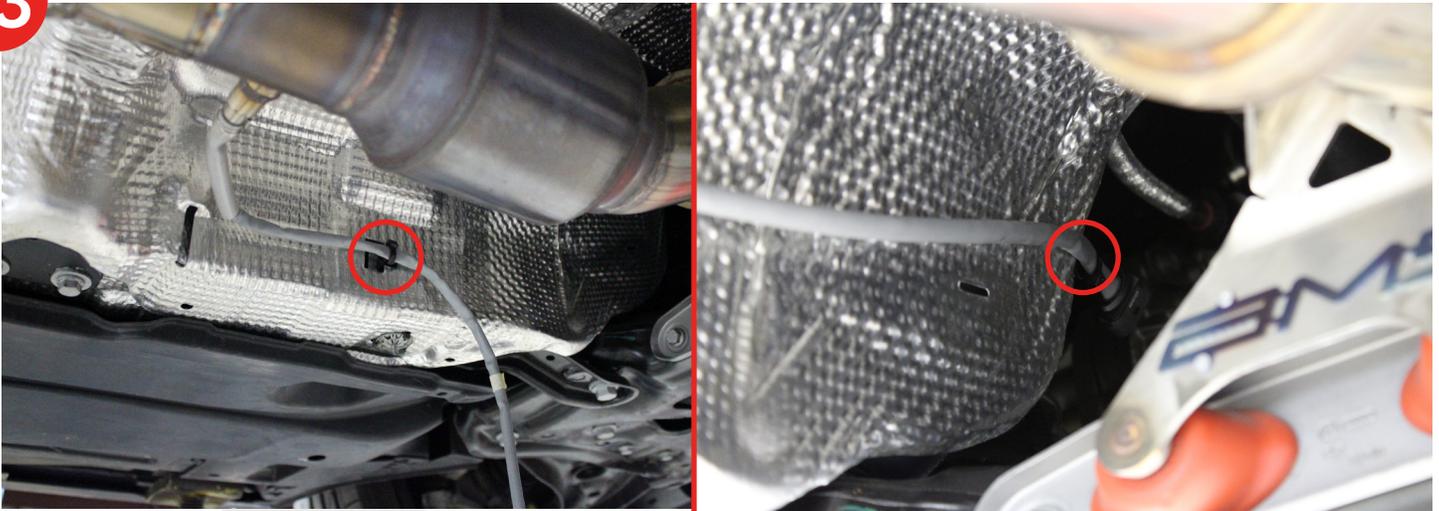
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22. Starting from the front and working to the rear, adjust and tighten the exhaust system. Continue out to the rear of the exhaust if one was also installed at the same time.

23. Install the rear secondary O2 sensor. Use the two supplied panel edge zip ties to secure the sensor harness along the factory heat shields. Clip the panel edge zip ties in the locations shown to secure the O2 sensor harness.

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24. Locate and install the O2 sensor extension harness. Start by connecting to the vehicle side in the engine bay. Route the harness through the harness clip then route down the firewall. From under the car, make the final connection to the O2 sensor connector making sure the harness is on the left side of the shifter cable to keep it from getting too close to the rear shaft.

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25. Double check all your connections and make sure everything is tight.
26. Make sure the vehicle is in park.
27. Reconnect the battery
28. Enjoy!

