



Installation instructions

Akrapovič Exhaust Systems:

Evolution

for the

BMW X6 M (type E71)

BMW X5 M (type E70)



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Congratulations on purchasing an Akrapovič exhaust system. Please read the entire installation manual prior to undertaking any activities related to installation of your new Akrapovič exhaust system. In case you do not fully understand the manual or any of its parts, please contact your authorized dealer!

This product should be installed by someone with sufficient knowledge of exhaust systems and their installation, and appropriate hand or power tools. If you are not qualified for this work, please utilize a certified mechanic for installation. By installing Your Akrapovič exhaust system, you indicate that you have read the installation manual in its entirety and you agree with the terms stated herein.

It is your responsibility to follow all installation instruction guidelines supplied with the Akrapovič exhaust system and undertake all necessary safety precautions. Akrapovič d.d. assumes no responsibility for damages occurring from misuse, abuse, improper installation, improper operation, lack of responsible care, or all previously stated reasons resulting from incompatibility with other manufacturer's products and/or systems.

IMPORTANT INFORMATION

Exclusion of Certain Liability

1. The manufacturer, importer or dealer shall not be liable for any incidental damage including personal injury or any other damages caused by improper installation or operation of the Akrapovič exhaust system. When installing the Akrapovič exhaust system be careful that the exhaust system does not touch other parts sensitive to high temperature.
2. Akrapovič makes no representation or warranties with regard to damage caused by the improper installation, use and maintenance of the Akrapovič exhaust system. The warranty is limited to defects recognized by our technical department and due to normal use, and excludes items subject to normal wear (gaskets and damping wool). The guarantee is void in case of accident, modification, improper or competition use.
3. Do not attempt to install the Akrapovič exhaust system on a vehicle model for which it was not made or tested by Akrapovič.
4. When the exhaust system gets very hot during operation, be careful not to burn yourself on the exhaust system or parts which are in direct contact with it, even when the engine is not running. Also protect other people, especially children, from the injuries mentioned above.

1. In some cases Akrapovič exhaust system kits contain chemical products (ceramic anti-seizing grease; bolt sealant). Handle with care, do not inhale or swallow. Avoid excessive contact with skin, eyes or mucous membranes. Keep out of reach of children.
2. Technical specifications of Akrapovič exhaust systems and related products are subject to change without notice.
3. Before removing the original exhaust system from your vehicle, please compare the parts you received with the list of materials provided in the installation manual in order to assure that you have all the parts necessary for the installation of your new Akrapovič exhaust system.
4. Although this manual consists of instructions for installation in written form, as well as photographs and pictures representing individual steps of the installation, please note that the photographs and pictures are symbolic and are intended for representation of general overview only. The photographs and pictures contained herein should serve as a guideline only and actual installation of the exhaust system may not correspond with the photographs and pictures entirely.
5. The process of uninstalling the original exhaust system may vary depending on the existing exhaust system. Please follow the original exhaust system manufacturer's instructions for uninstalling the original exhaust system.

Trademarks

The Akrapovič Exhaust System Technology logo is a registered trademark of Akrapovič d.d.

Akrapovič website

Information about Akrapovič exhaust systems and related products is available on the Akrapovič website at:

<http://www.akrapovic.com/>

Copyright

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Symbols

The following symbols are used throughout these installation instructions:



TOOLS REQUIRED



TIGHTENING TORQUE



INSTALLATION TIP



CAUTION OR WARNING



USE BOLT SEALANT; Apply 3 to 4 small drops of bolt sealant onto the cleaned and degreased threads before tightening the bolts. **WARNING! Avoid contact with skin, eyes and mucous membranes. Do not inhale fumes. Keep out of the reach of children.**



USE ANTI-SEIZE LEAD-FREE COPPER PASTE (black tube); Provides trouble-free and long-lasting protection against seizing, corrosion and rusting of bolts, threaded ends, nuts, joints, etc. Also protects against vibration, wear and impact. **WARNING! Avoid eye contact. Avoid excessive skin contact. Keep out of reach of children.**



USE ANTI-SEIZING GREASE (white tube); Prevents seizing, corrosion and excessive wear between the titanium components of your exhaust system. **WARNING! Avoid eye contact. Avoid excessive skin contact. Keep out of reach of children.**



T-handle swiveling 8mm wrench
T-handle swiveling 10mm wrench
T-handle swiveling 11mm wrench
T-handle swiveling 13mm wrench
T-handle swiveling 15mm wrench
Combination 13mm wrench
Lambda 22mm wrench
Torx 30
T- Handle Torx E8
T- Handle Torx 30
Medium screwdriver



BEFORE INSTALLING, CHECK SCHEMATIC OF THE EXHAUST SYSTEM! THE LATEST VERSION OF THE PARTS LIST AND SCHEMATIC DRAWINGS OF THE PRODUCTS ARE AVAILABLE ON OUR WEB PAGE.



IF ANY ITEMS IN THE AKRAPOVIČ EXHAUST SYSTEM PACKAGE ARE MISSING, PLEASE CONTACT YOUR AUTHORIZED DEALER. KEEP THE SCHEMATIC FOR FUTURE REFERENCE.



THESE INSTALLATION INSTRUCTIONS MUST BE READ CAREFULLY IN ORDER TO ENSURE PROPER INSTALLATION AND OPERATION OF THE AKRAPOVIČ EXHAUST SYSTEM.



THE EXHAUST SYSTEM CAN BE EXTREMELY HOT. ALLOW THE EXHAUST AND ENGINE TO COOL DOWN BEFORE BEGINNING INSTALLATION.



WE ADVISE YOU TO LEAVE INSTALLATION TO A QUALIFIED SERVICEMAN. IMPROPER INSTALLATION MAY RESULT IN A SHORTER LIFETIME OF THE EXHAUST SYSTEM AND/OR DAMAGE TO THE VEHICLE.



THIS MANUAL IS SPECIFIC TO THE BMW X6. THERE MAY BE SOME DIFFERENCES IN INSTALLATION PROCEDURES FOR OTHER MODELS.



WHEN INSTALLING AKRAPOVIČ'S AFTERMARKET OPTIONAL DOWN PIPES WITHOUT CATALYTIC CONVERTERS, WHICH ARE DEVELOPED FOR USE ON CLOSED TRACKS ONLY, REMAPPING OF THE ECU IS MANDATORY. THE AKRAPOVIČ COMPANY TAKES NO RESPONSIBILITY FOR ECU REMAPPING OR ANY POTENTIAL ISSUES RELATED TO THE USE OF AKRAPOVIČ DOWN PIPES.



AT EACH ENGINE START, THE EXUP VALVE MAY VIBRATE FOR A FEW SECONDS UNTIL THE VACUUM SYSTEM REACHES OPERATING PRESSURE.

REMOVAL OF ORIGINAL EXHAUST SYSTEM:

Put the vehicle onto a car lift.

! **WARNING:** make sure, that car lifting is safely and correctly done or you risk vehicle damage, injury or even death!

1. Unscrew the three marked bolts and remove the aluminium protection off the vehicle (**Figure 1**).

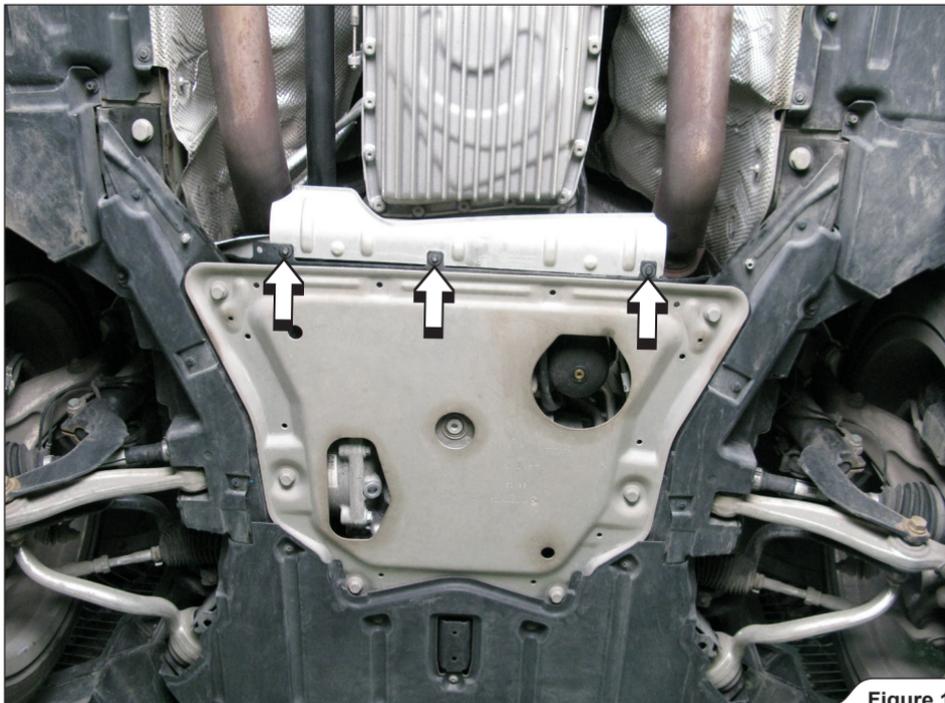


Figure 1

2. Unscrew marked exhaust flange nuts on both sides of the engine (**Figure 2**).

! **WARNING:** make sure, that you don't injure yourself or damage any part of the vehicle during this process!



Figure 2

3. Unscrew the front pipes' rubber brackets (**Figure 3**).

! **WARNING:** make sure, that you support the original exhaust during this process or you could injure yourself or damage the vehicle!

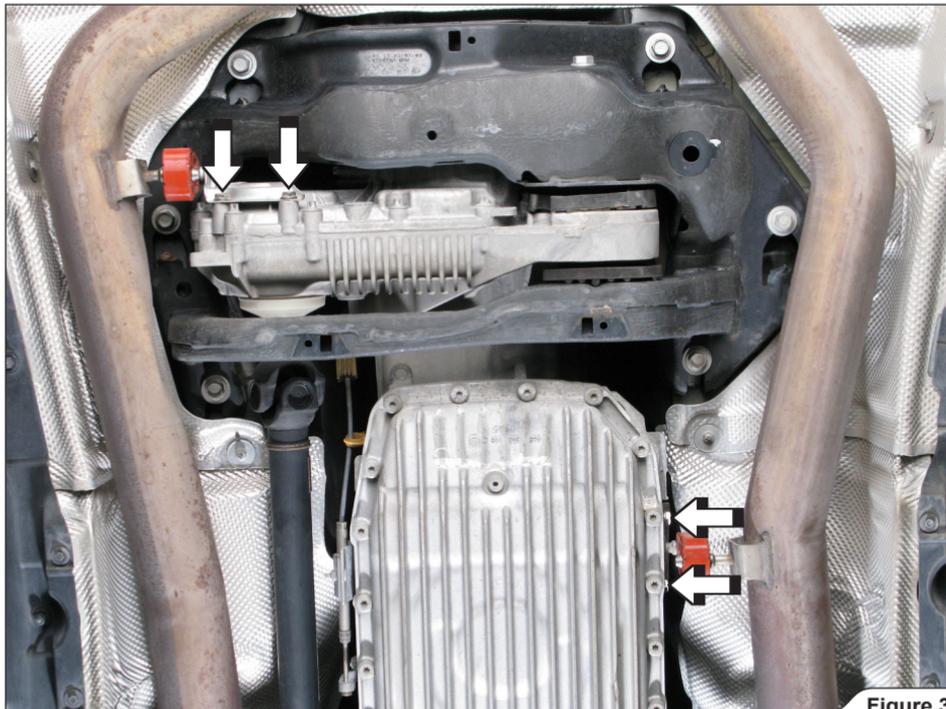


Figure 3

4. Carefully pull the rubber brackets off the middle pipes brackets, using flat pry bar (Figure 4).

! **WARNING:** make sure, that you support the original exhaust during this process or you could injure yourself or damage the vehicle!

✂ **INSTALLATION TIP:** for easier dismounting, lubricate the original rubber brackets (WD40).

! **WARNING:** make sure, not to damage the rubber brackets during this process!

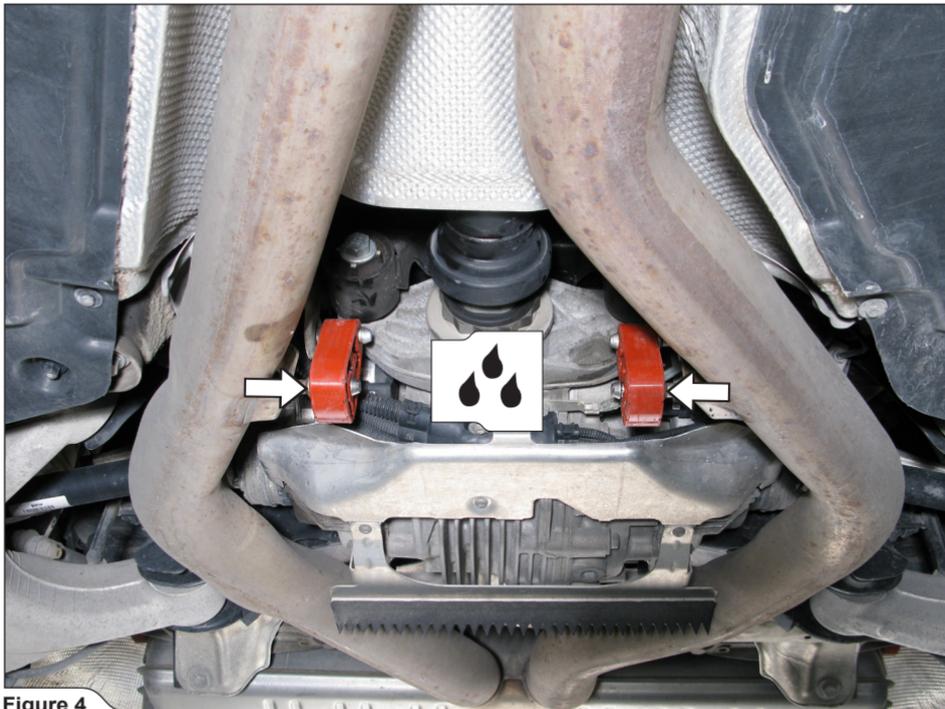


Figure 4

5. Pull the vacuum hoses off both vacuum actuators (**Figure 5**).

! **WARNING:** make sure, that you don't injure yourself or damage any part of the vehicle during this process!

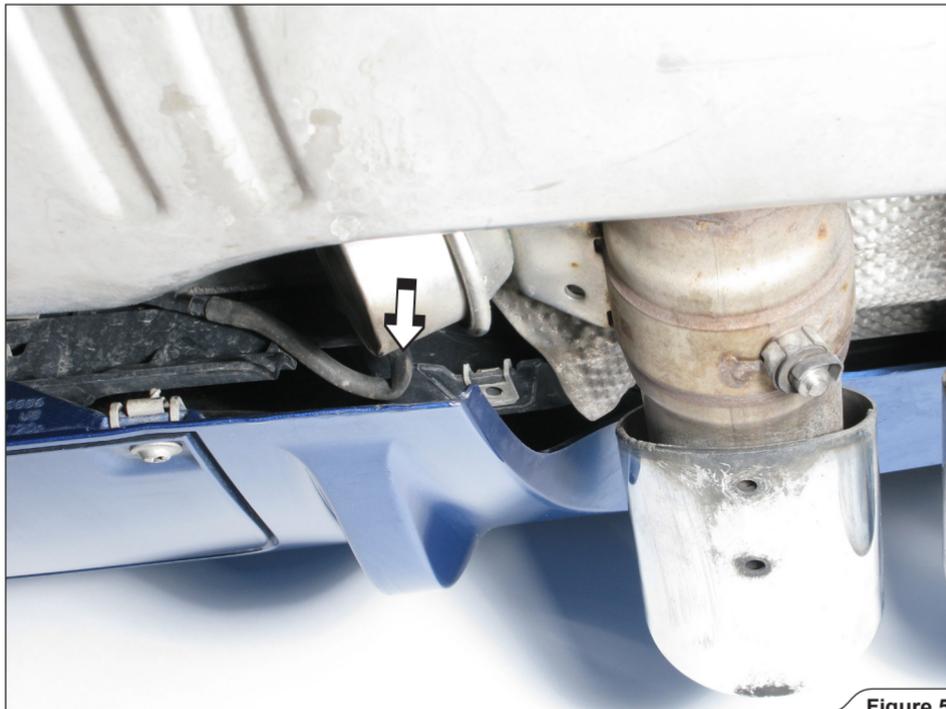


Figure 5

6. Unscrew muffler's rubber brackets on both sides of the vehicle and carefully remove the complete original exhaust off the vehicle (**Figure 6**).

! **WARNING:** make sure, that you support the original exhaust during this process or you could injure yourself or damage the vehicle!



Figure 6

7. For optional Down Pipes only: remove marked plastic engine cover. (Figure 7).

! **WARNING:** make sure, that you don't injure yourself or damage any part of the vehicle during this process!



Figure 7

8. **For optional Down Pipes only:** unscrew the marked coolant container bracket bolts and remove the engine coolant container. **(Figure 8).**
- !** **WARNING:** make sure, that you don't injure yourself or damage any part of the vehicle during this process!



Figure 8

9. **For optional Down Pipes only:** unscrew the bolt holding vacuum container on both side of the engine (Figure 9).

! **WARNING:** make sure, that you don't injure yourself or damage any part of the vehicle during this process!



Figure 9

10. **For optional Down Pipes only:** disconnect marked lambda sensors connectors on both side of the engine (**Figure 10**).

! **CAUTION:** be careful not to damage the electrical leads or the lambda sensors during this procedure.



Figure 10

11. For optional Down Pipes only: unscrew and remove marked front lambda sensors (Figure 11).

! CAUTION: be careful not to damage the electrical leads or the lambda sensors during this procedure.

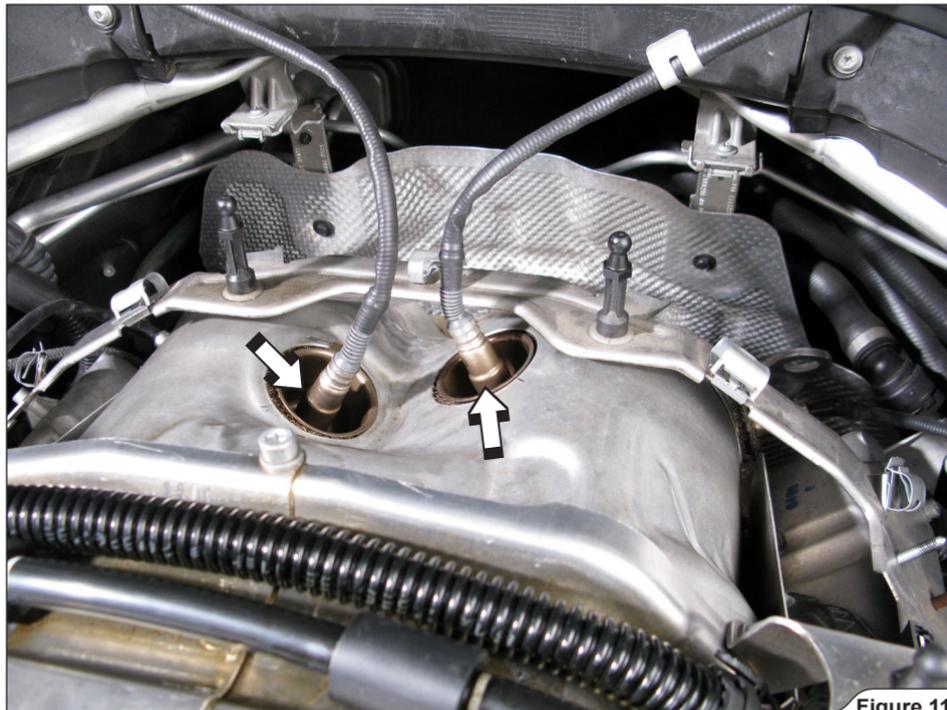


Figure 11

12. **For optional Down Pipes only:** loosen marked bolts on both sides of the engine and remove lambda cables and vacuum hoses bracket (**Figure 12**).

! **CAUTION:** be careful not to damage the electrical leads or the lambda sensors during this procedure.

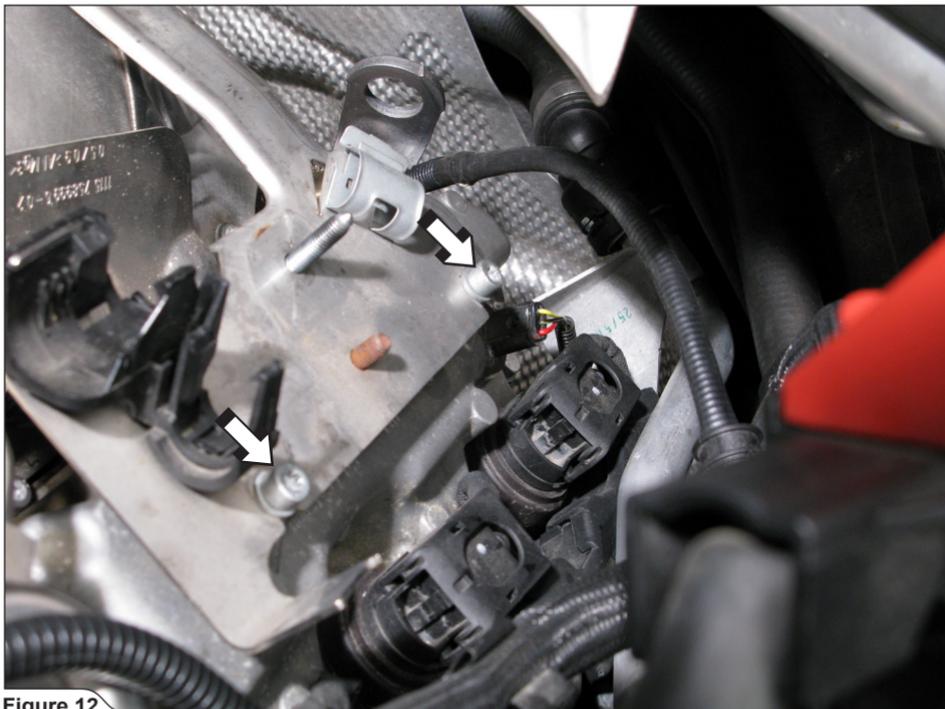


Figure 12

13. **For optional Down Pipes only:** unscrew marked bolts and remove aluminium plate on both sides of the engine (Figure 13).

! WARNING: make sure, that you don't injure yourself or damage any part of the vehicle during this process!

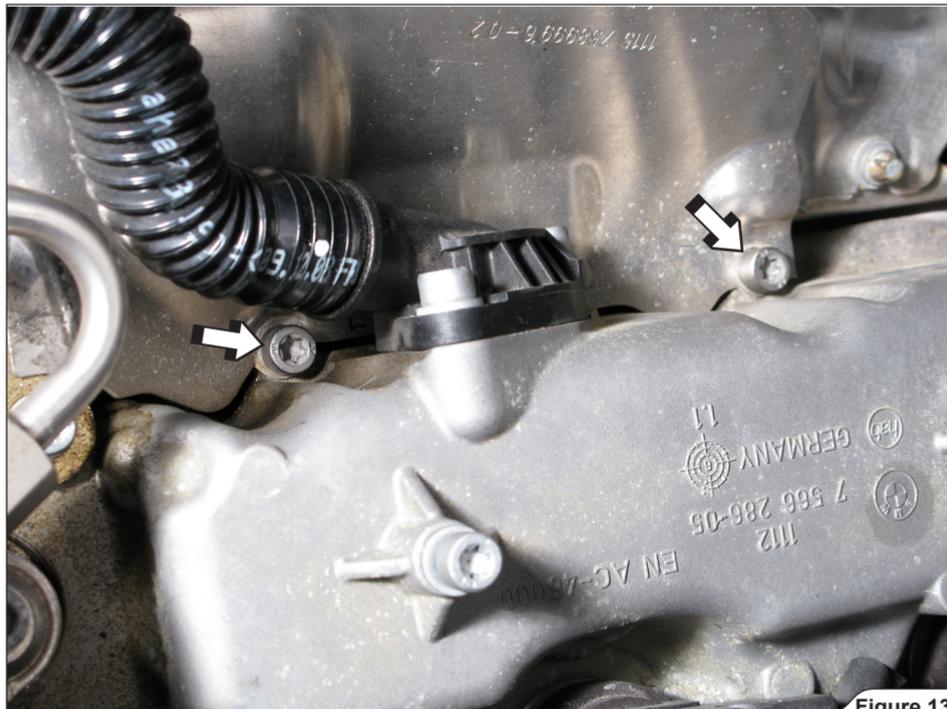


Figure 13

14. For optional Down Pipes only: loosen marked heat shield bolts on both sides of the engine (Figure 14).

! **WARNING:** make sure, that you don't injure yourself or damage any part of the vehicle during this process!



Figure 14

15. **For optional Down Pipes only:** unscrew marked bolts on the rear side of the heat shield and remove the upper heat shield. **(Figure 15).**

! WARNING: make sure, that you don't injure yourself or damage any part of the vehicle during this process!

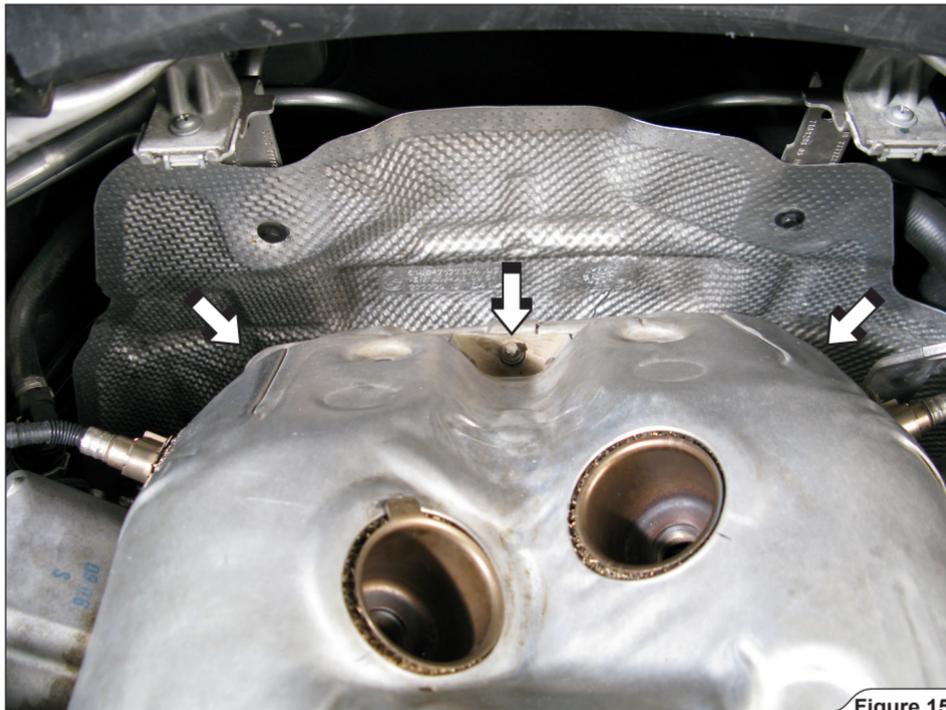


Figure 15

16. For optional Down Pipes only: unscrew and remove rear lambda sensors out of the down pipes. (Figure 16).

! **CAUTION:** be careful not to damage the electrical leads or the lambda sensors during this procedure.

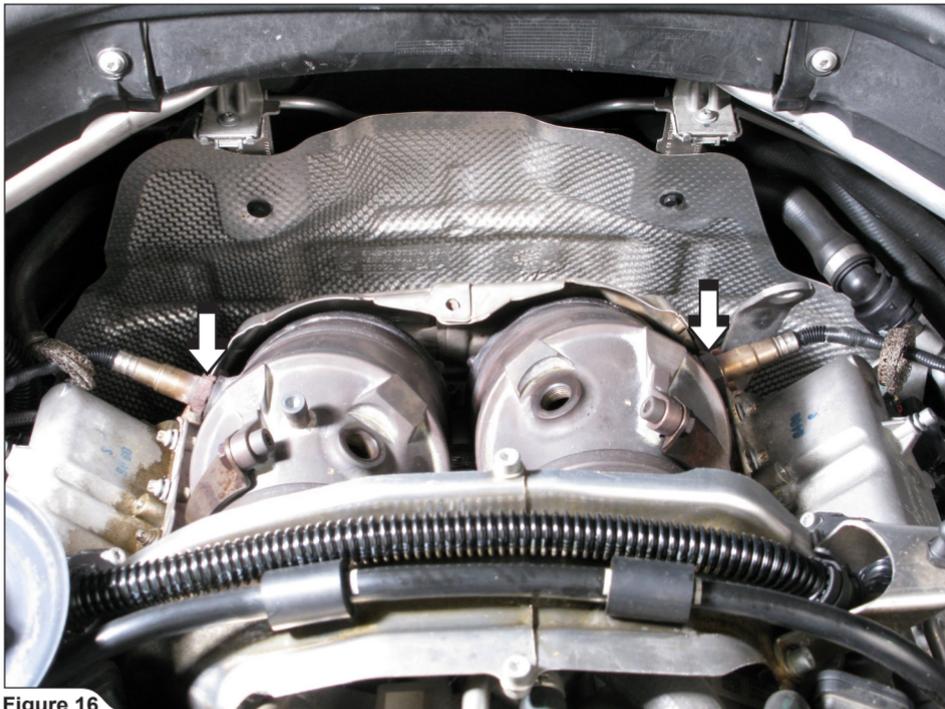


Figure 16

17. For optional Down Pipes only: unscrew marked bolts on the lower heat shield. (Figure 17).

! **WARNING:** make sure, that you don't injure yourself or damage any part of the vehicle during this process!

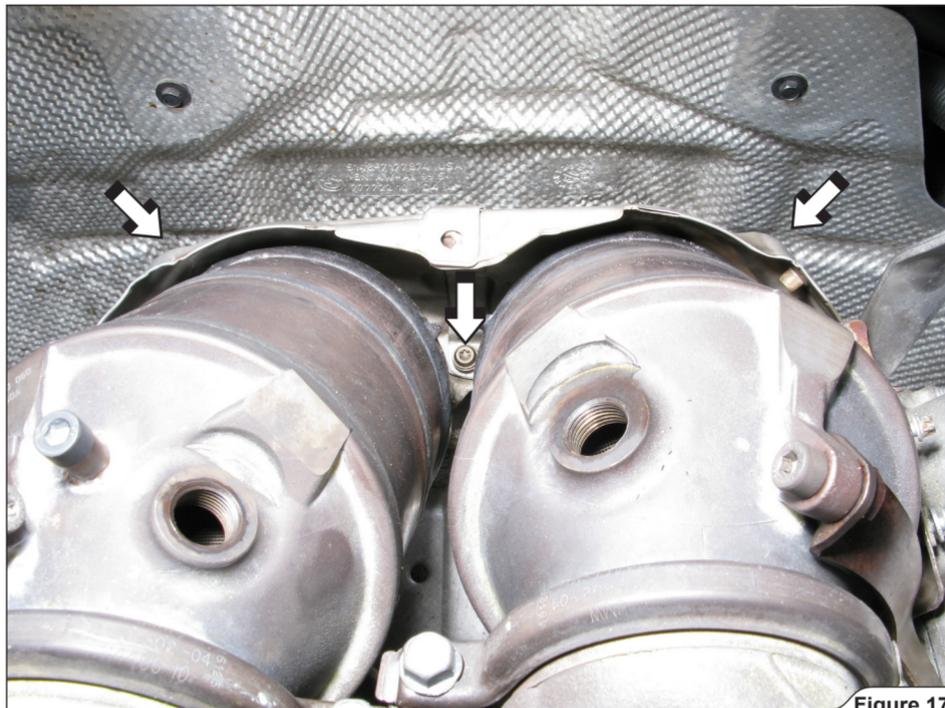


Figure 17

18. **For optional Down Pipes only:** unscrew marked bolts on both side of the engine and remove the lower heat shield (**Figure 18**).
19. Remove marked graphite conical gasket from down pipe on both sides of the engine (**Figure 18**).
- ! WARNING:** make sure, that you don't injure yourself or damage any part of the vehicle during this process!

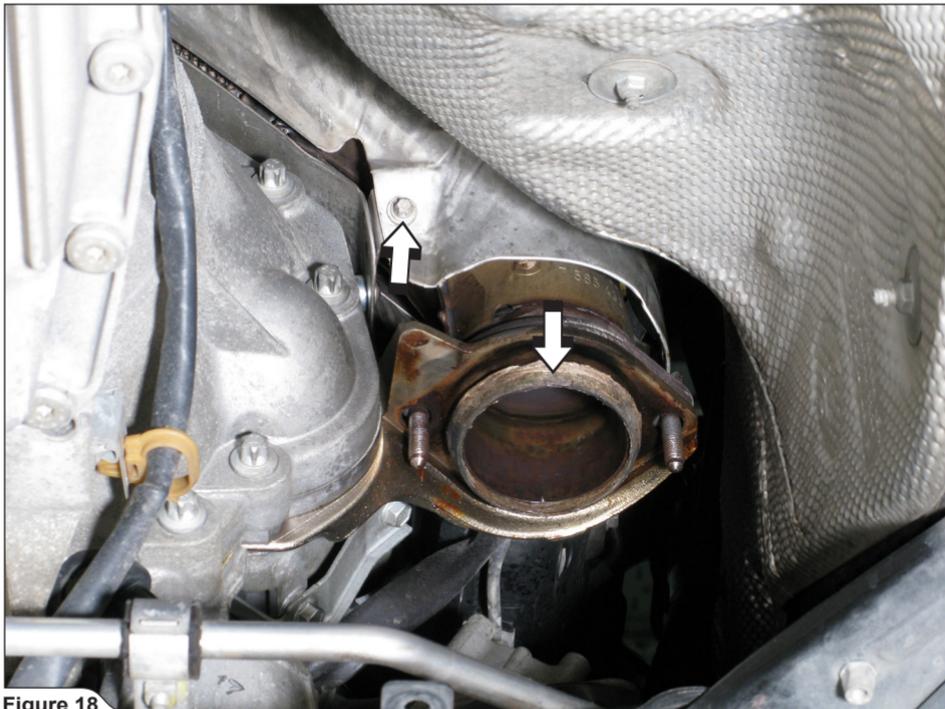


Figure 18

20. **For optional Down Pipes only:** unscrew marked down pipe brackets' bolts (Figure 19).
21. Unscrew and remove the two marked spherical clamps (Figure 19).

! WARNING: make sure, that you don't injure yourself or damage any part of the vehicle during this process!

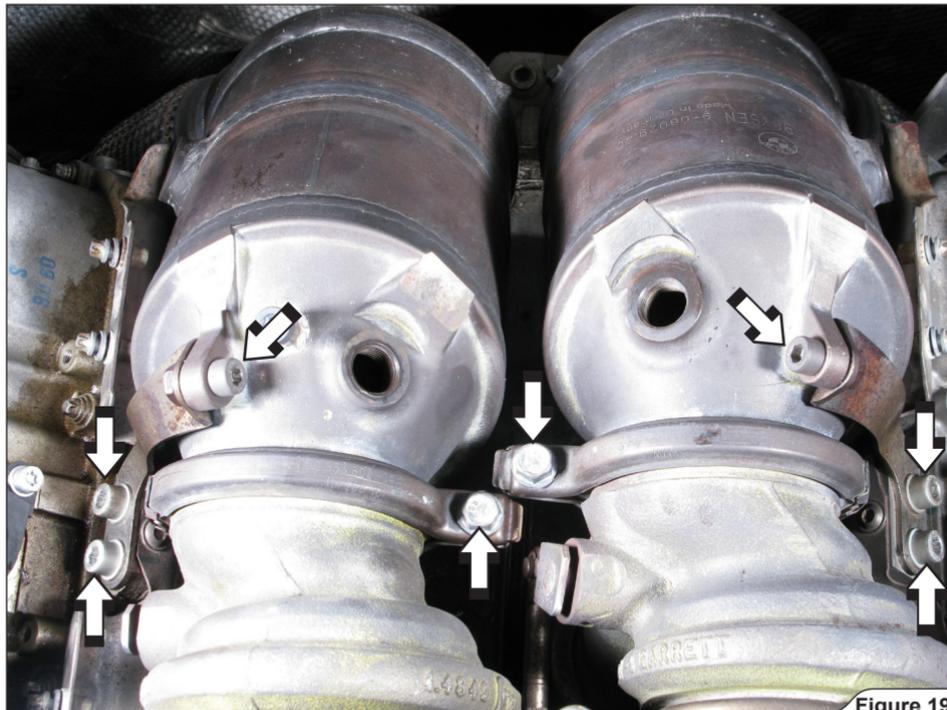


Figure 19

22. **For optional Down Pipes:** unscrew two marked rear bolts on both side of the engine and remove the down pipes (**Figure 20**).

! **WARNING:** make sure, that you don't injure yourself or damage any part of the vehicle during this process!

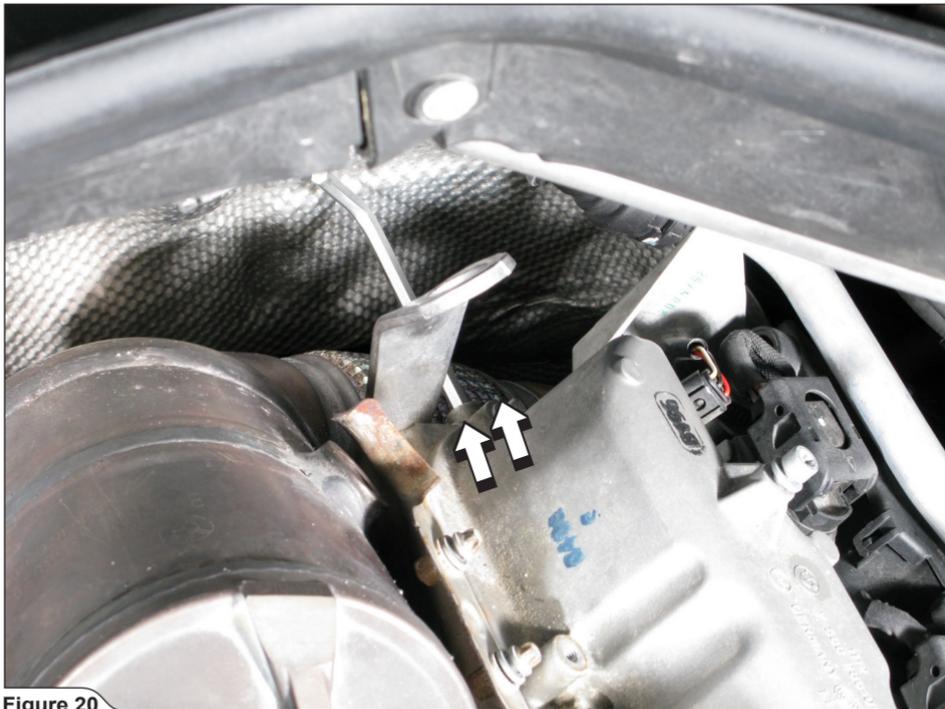


Figure 20

INSTALLATION OF THE AKRAPOVIČ EXHAUST SYSTEM:

1. **For optional Down Pipes only:** install the down pipes, **hand tighten** the clamps and marked bracket bolts, and tighten the rear lambda sensors (**Figure 21**).

! **CAUTION:** use anti-seize cooper paste only on lambda sensors' threads!

! **WARNING:** do not fully tighten the clamps and bracket bolts yet!

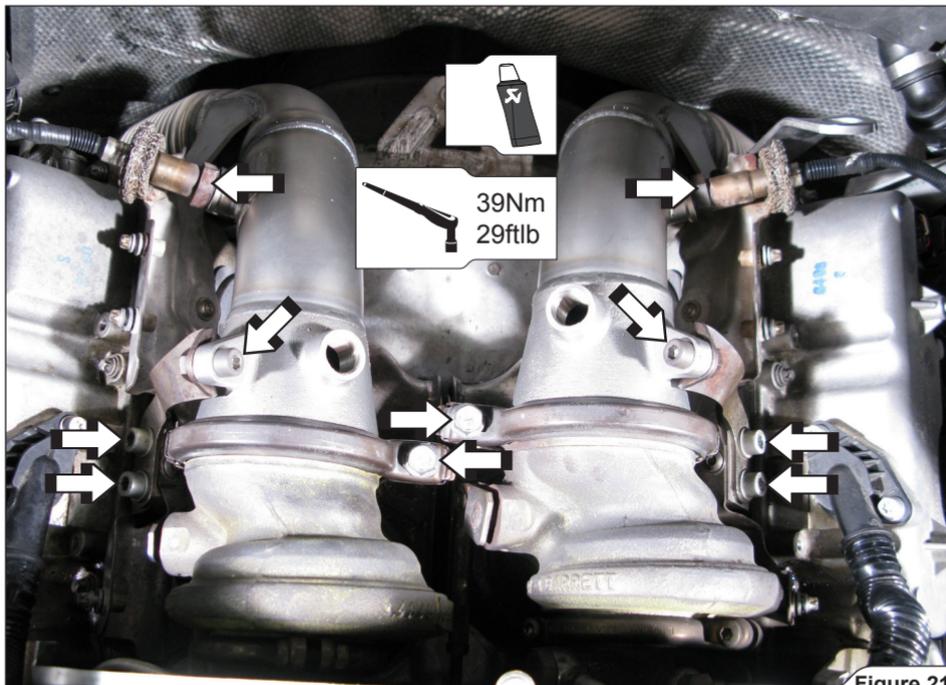


Figure 21

2. **For optional Down Pipes only:** attach the down pipe onto link pipes joint on both side of the engine (Figure 22).
- ! **CAUTION:** use stock graphite gaskets in the joints!
 - ! **WARNING:** make sure, that you don't injure yourself or damage any part of the vehicle during this process!

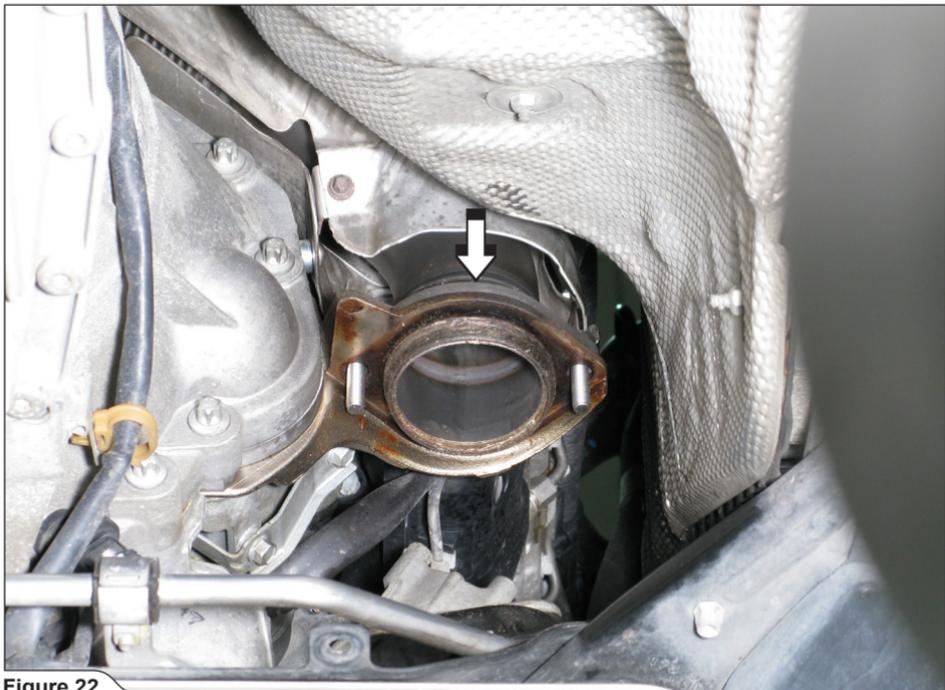


Figure 22

3. For optional Down Pipes only: tighten the down pipe clamps to the specified torque (**Figure 23**).

! **WARNING:** make sure, that you don't injure yourself or damage any part of the vehicle during this process!

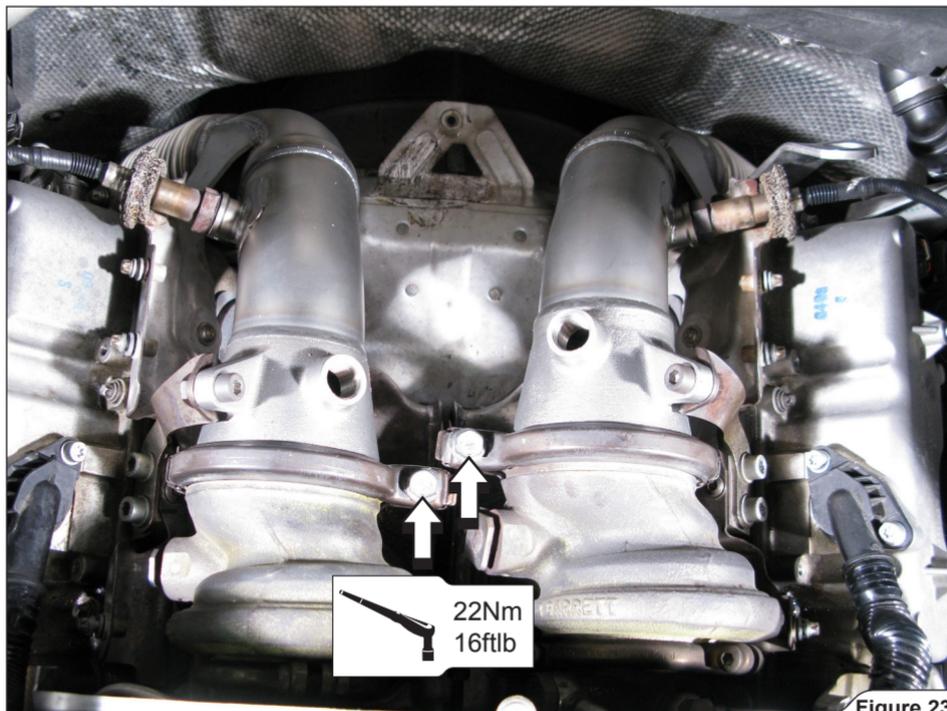


Figure 23

4. For optional Down Pipes only: tighten all marked bracket bolts to the specified torque (Figure 24).

! **WARNING:** make sure, that you don't injure yourself or damage any part of the vehicle during this process!

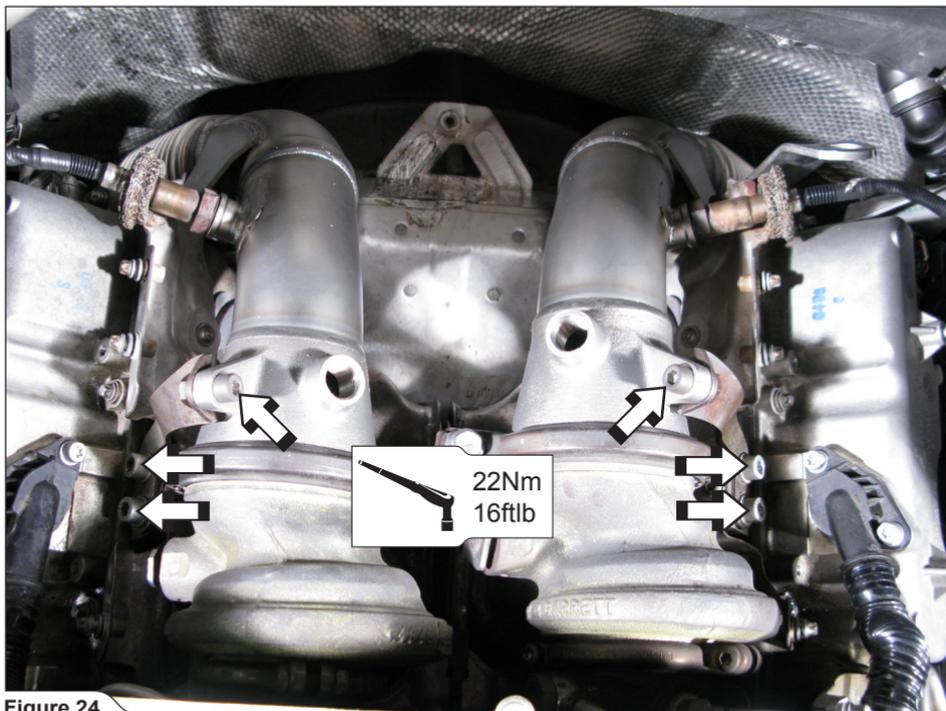


Figure 24

5. **For optional Down Pipes only:** replace all dismantled original parts in the reverse order from the order in which they were removed. Check vehicle manufacturer manual for tightening torques. Make sure everything is in place and all bolts tightened (**Figure 25**).

! **CAUTION:** use anti-seize cooper paste only on lambda sensors' threads!

! **WARNING:** be careful not to damage the electrical leads or the lambda sensors during this procedure!

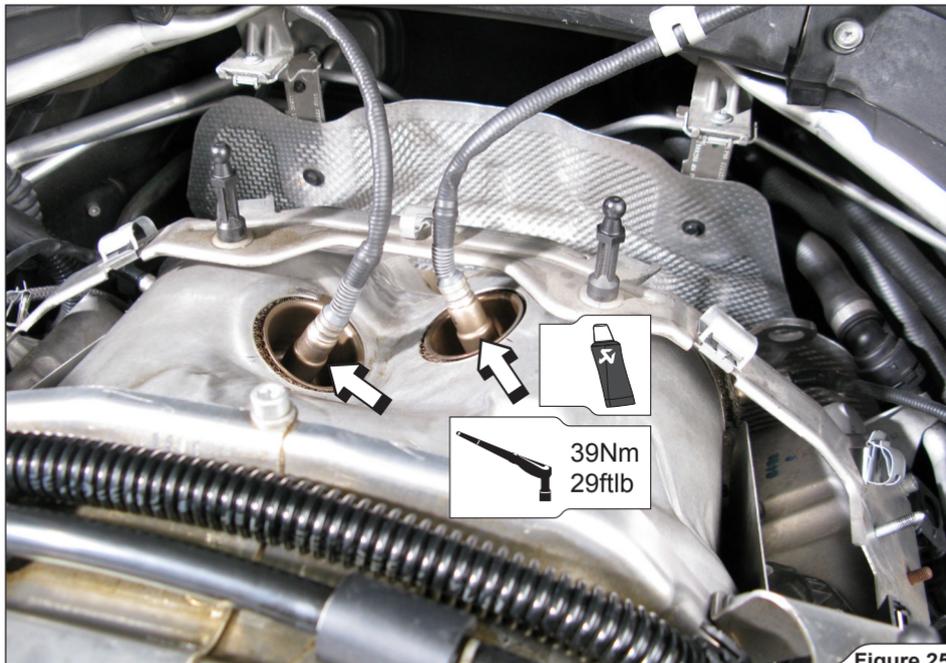


Figure 25

6. For optional Down Pipes only: install vacuum container and lambda connectors (Figure 26).

! **WARNING:** make sure, that you don't injure yourself or damage any part of the vehicle during this process!

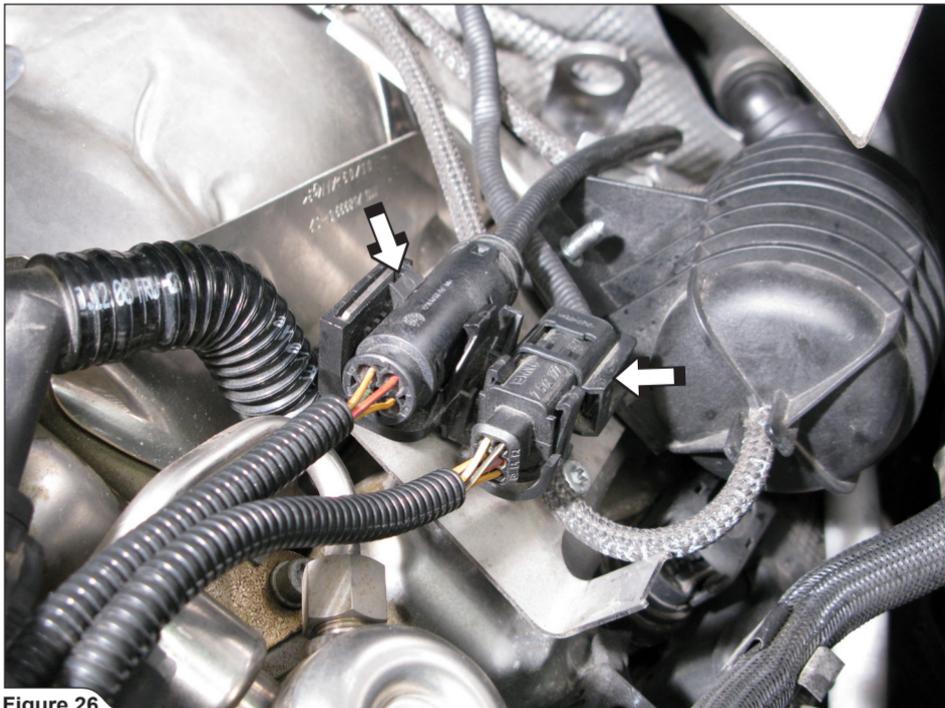


Figure 26

7. Reposition the original rubber brackets onto the Akrapovič link pipes, as shown (Figure 27).
✘ **INSTALLATION TIP:** for easier mounting, lubricate the original rubber brackets (WD40).

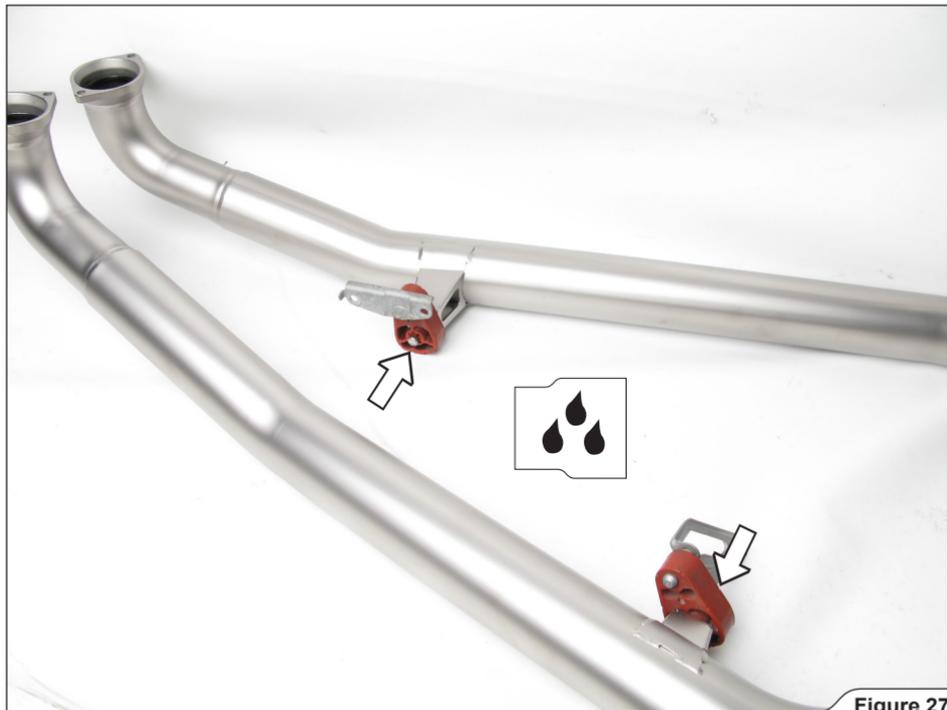


Figure 27

8. Attach the link pipes onto the stock down pipes and **hand** tighten the original flange nuts (Figure 28).

! **WARNING:** use anti-seize copper paste on original nuts' threads!

! **WARNING:** do not fully tighten the nuts yet!

! **CAUTION:** use new exhaust gaskets in Akrapovič link pipes - stock down-pipes joints!



Figure 28

9. Attach the link pipes' rubber brackets onto the transmission (Figure 29, 30).

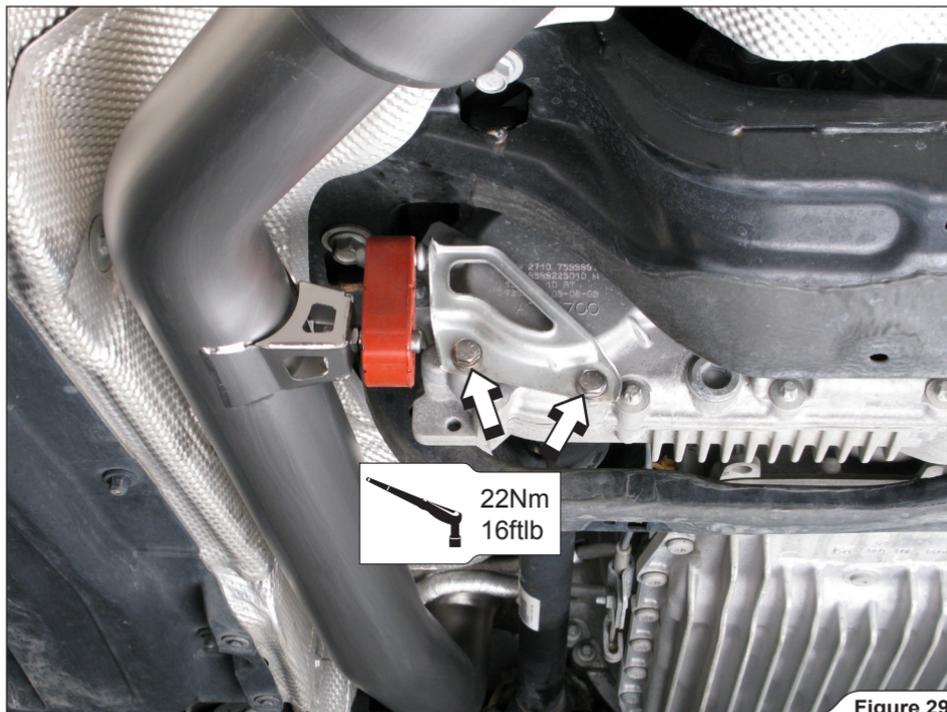


Figure 29

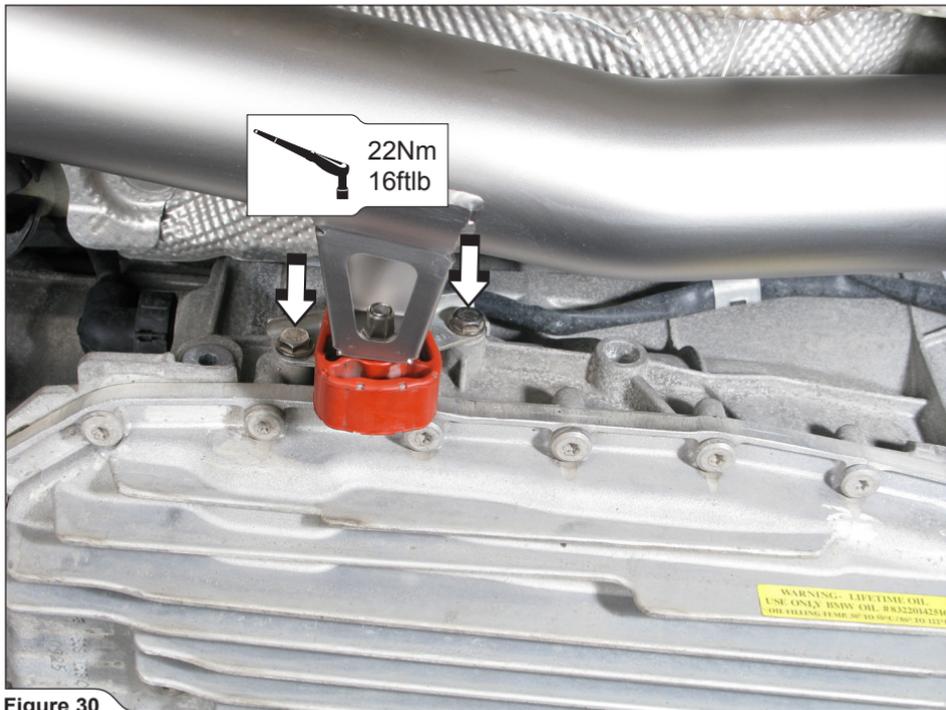


Figure 30

10. Assemble the clamps onto the inlets of the collector, as shown (Figure 31).

! **WARNING:** use anti-seize copper paste on clamps' bolt threads!



Figure 31

11. Slide the collector all the way onto the link pipes, align the pipes and hand tighten the clamps (Figure 32).

! **WARNING:** do not fully tighten the clamps yet!

! **WARNING:** do not attach the rubber brackets yet!

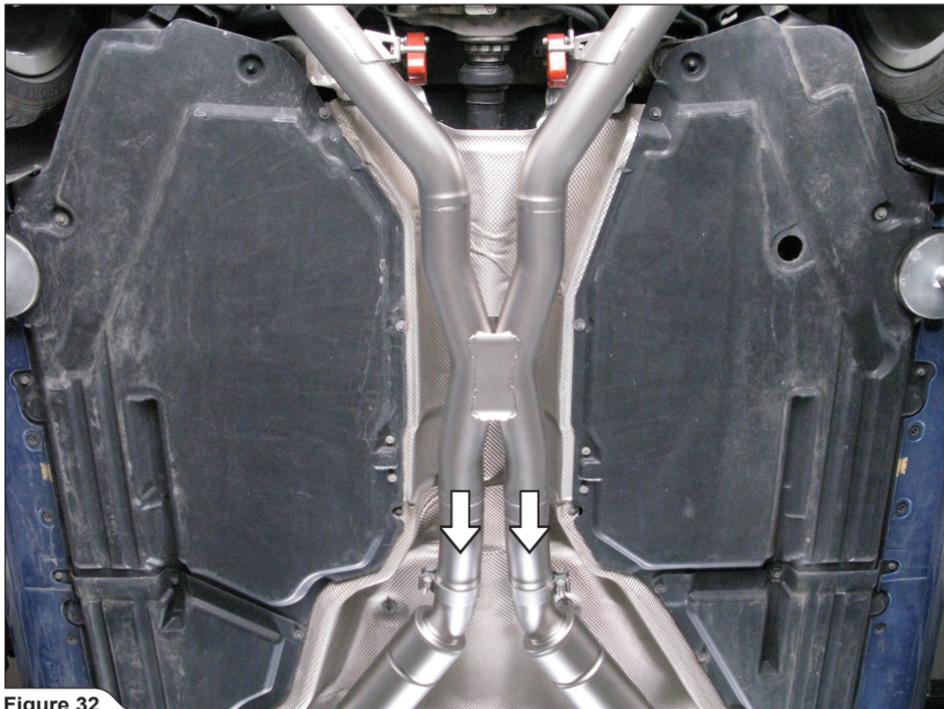


Figure 32

12. Dismount the original aluminium muffler heat shield (**Figure 33**).

! **WARNING:** make sure, not to damage aluminium muffler heat shield during this process!

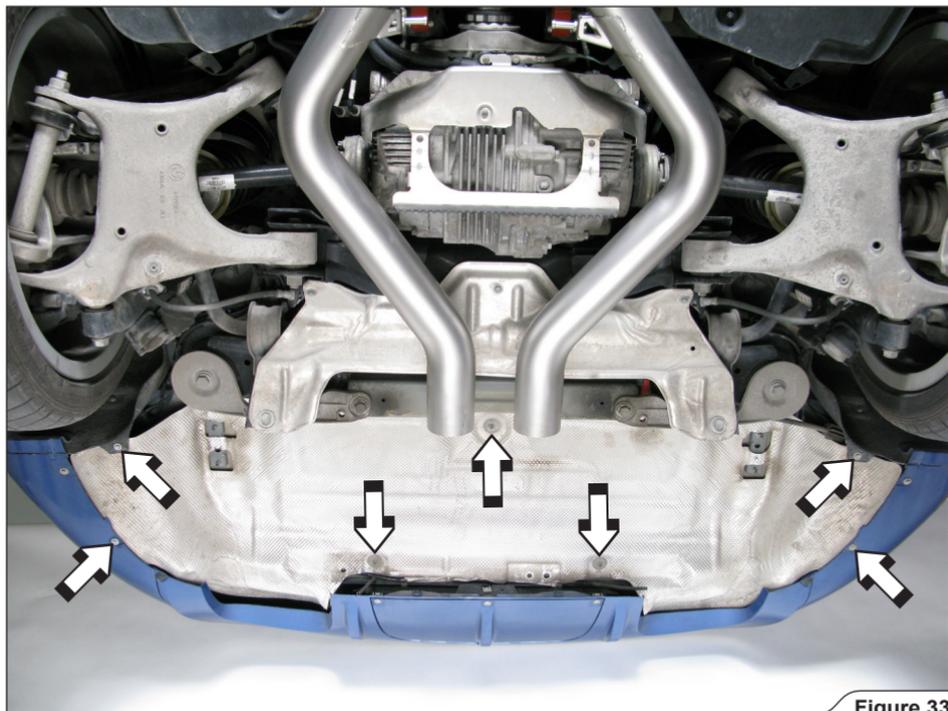


Figure 33

13. Connect the vacuum hoses from installation kit into the original vacuum actuator rubber hoses and direct them exactly as shown (**Figure 34**).

✂ **INSTALLATION TIP:** use masking tape or equivalent to keep the hoses in place.

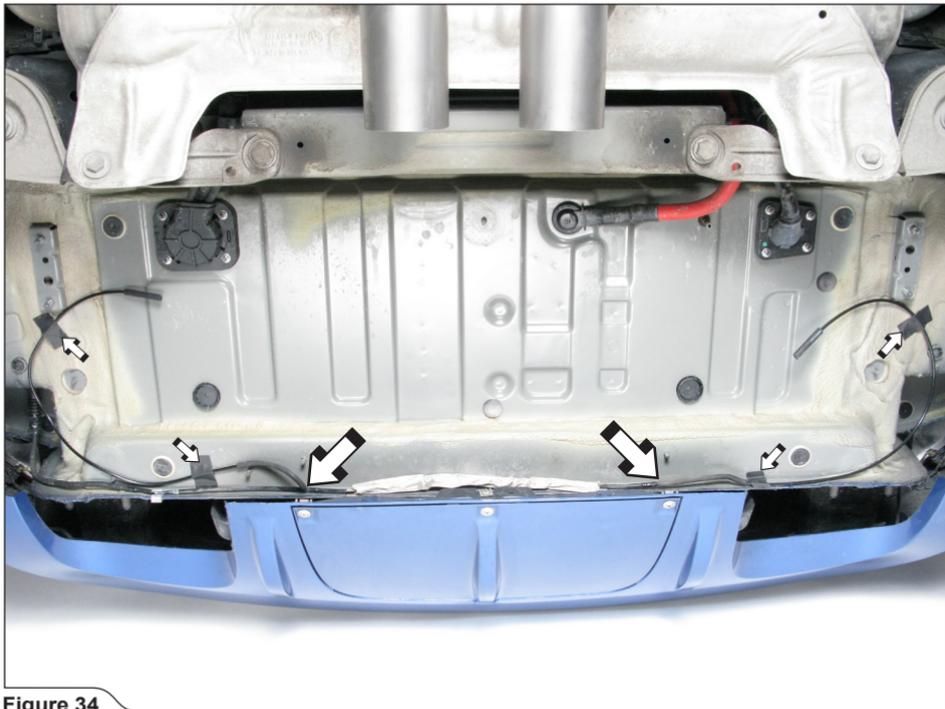


Figure 34

14. Mount the original aluminium muffler heat shield back onto the vehicle; direct the vacuum hoses as shown (Figure 35, 36).

! **WARNING:** make sure, not to damage aluminium muffler heat shield or vacuum hoses!

! **WARNING:** check vehicle manufacturer manual for aluminium heat shield tightening torques!



Figure 35



Figure 36

15. Reposition the original muffler rubber brackets onto the Akrapovič muffler and assemble the clamps onto the muffler inlet pipes, as shown (Figure 37).

! **WARNING:** use anti-seize copper paste on clamps' bolt threads!

✂ **INSTALLATION TIP:** for easier mounting, lubricate the original rubber brackets (WD40).

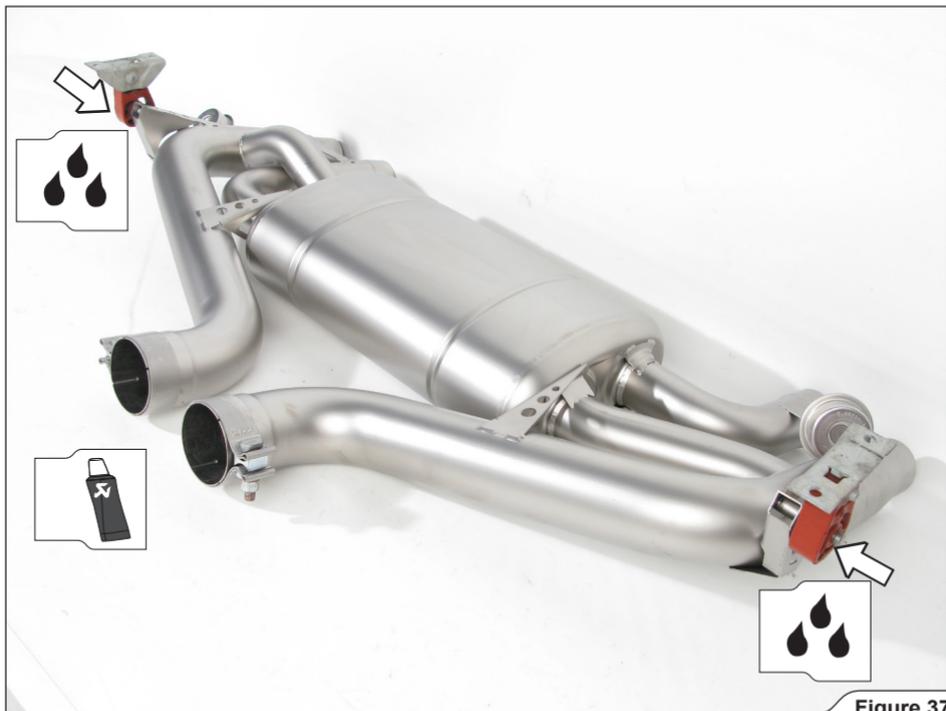


Figure 37

16. Slide the muffler all the way onto the collector, align the pipes, **hand** tighten the clamps and tighten both rubber brackets onto the chassis. Connect the vacuum hoses onto the vacuum actuators (**Figure 38**).

! **WARNING: do not fully tighten the clamps yet!**

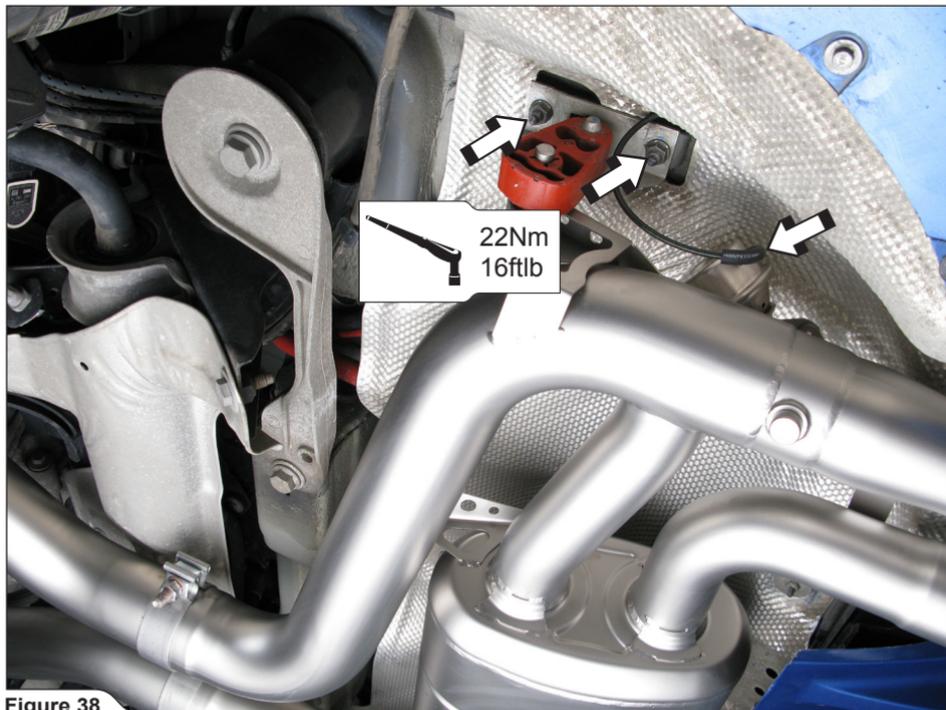


Figure 38

17. Attach the original rubber brackets onto the Akrapovič collector (**Figure 39**).

! **WARNING:** make sure, not to damage the rubber brackets during this process!

✂ **INSTALLATION TIP:** for easier mounting, lubricate the original rubber brackets (WD40).

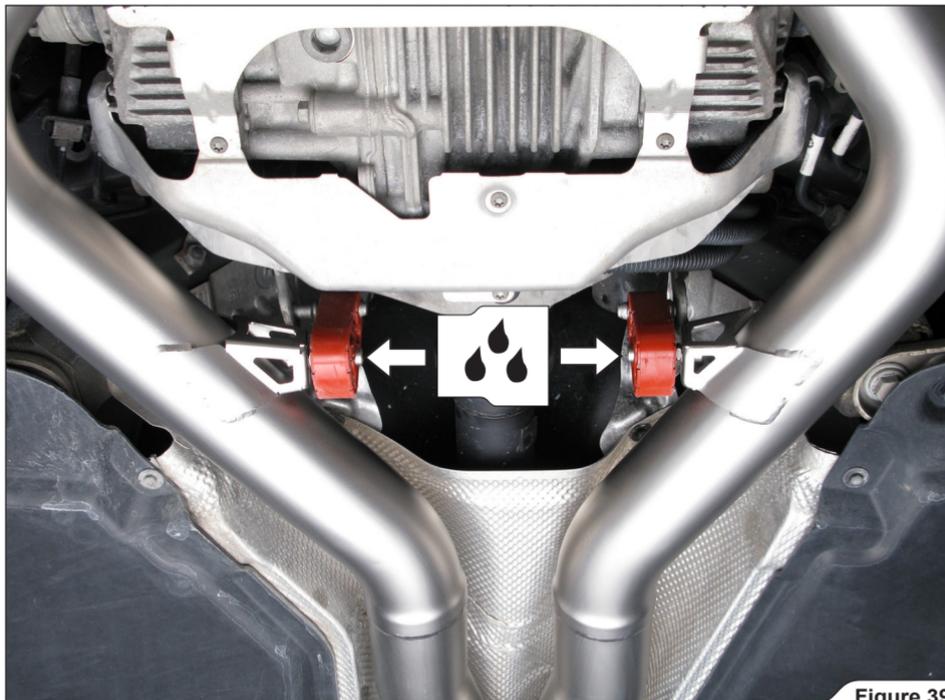


Figure 39

18. Tighten all flange nuts to the specified torque (**Figure 40**).

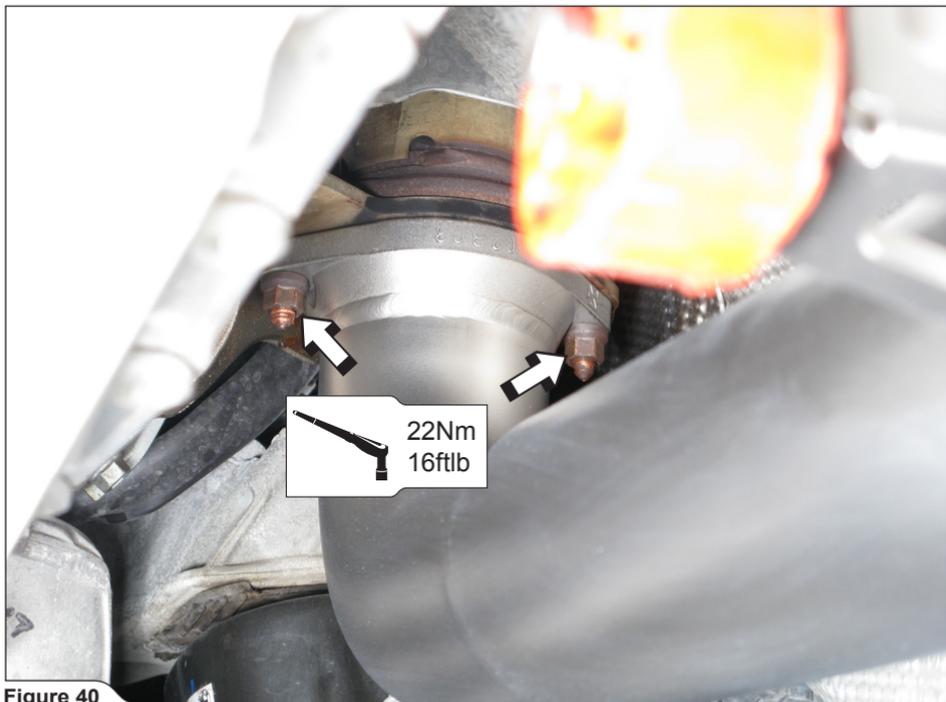


Figure 40

19. Push the link pipes and collector together, adjust the clamps and tighten them to a specified torque (**Figure 41**).

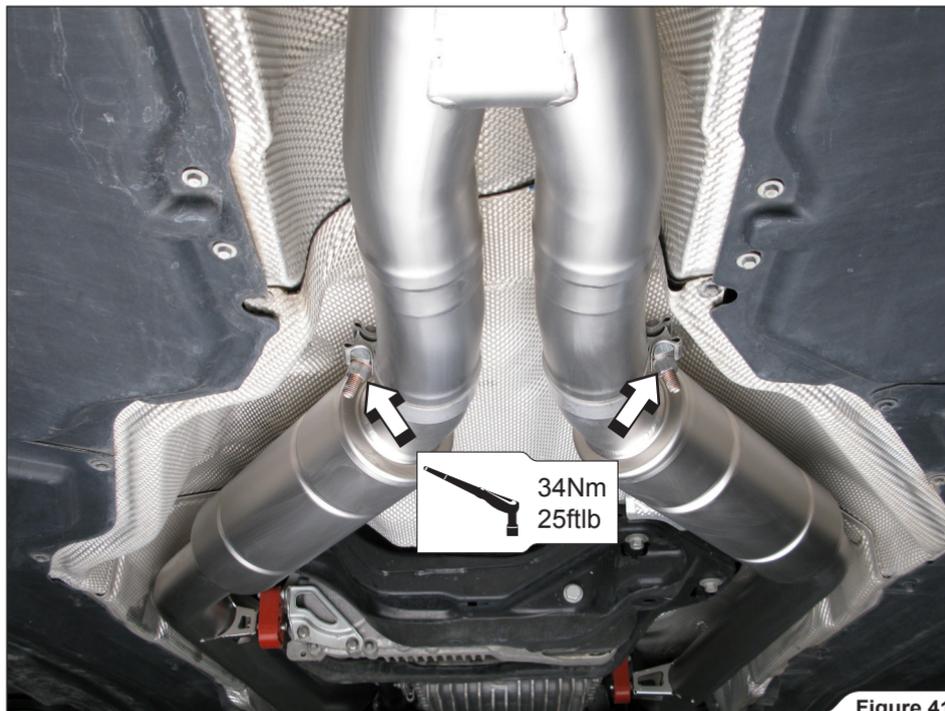


Figure 41

20. Push the collector and muffler pipes together, adjust the clamps and tighten them to a specified torque (**Figure 42**).

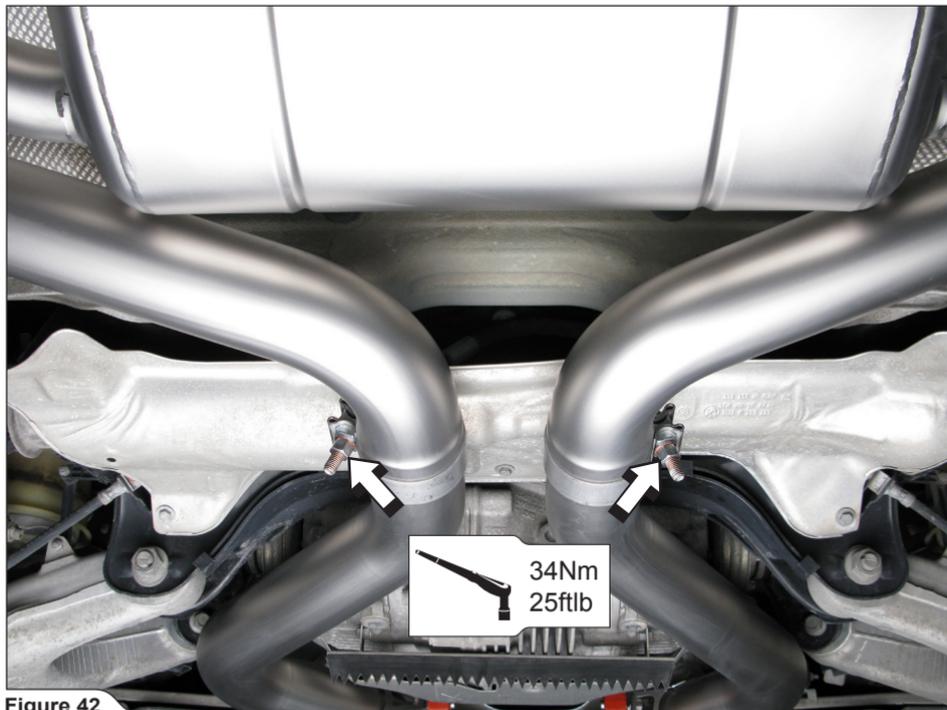


Figure 42

21. Reinstall the aluminium protection (Figure 43).

! **WARNING:** check vehicle manufacturer manual for aluminium protector tightening torques!



Figure 43

22. Assemble the Tail Pipes with spherical rings and clamps, as shown (Figure 44).

! **WARNING:** use anti-seize copper paste on clamp bolt threads!



Figure 44

23. Slide the tail-pipes onto the muffler outlets. Rotate and center them in respect to rear bumper and according to your personal taste (**Figure 45**).

! **CAUTION:** there should be at least 10mm gap between rear bumper and tail-pipes at any point!



Figure 45

24. Tighten Tail Pipes' clamps to a specified torque, on both sides of the vehicle (**Figure 46**).

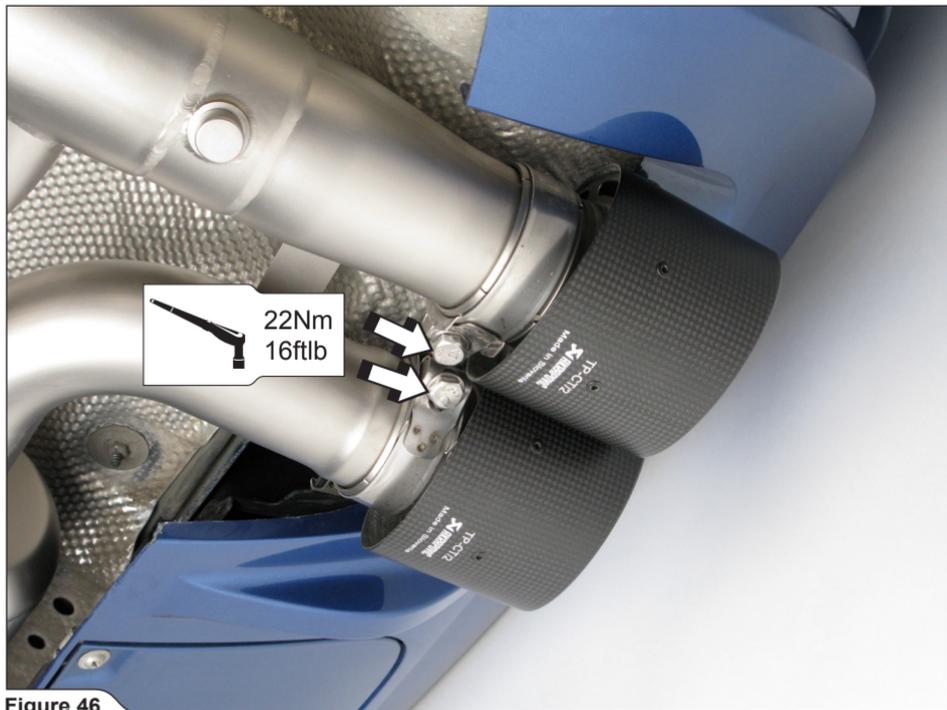


Figure 46

Final installation:

- ! **WARNING: check vehicle manufacturer manual for tightening torques (for dismantled stock parts)!**
- ! **WARNING: make sure all the nuts and bolts are sufficiently tightened. In case the exhaust system touches the cowling or other parts, repeat the adjustment of the exhaust system or contact your authorized dealer.**

MAINTENANCE OF THE AKRAPOVIČ EXHAUST SYSTEM:

1. Clean the titanium exhaust components with a multi-purpose spray lubricant (WD-40 or equivalent), carbon fiber exhaust components with soft and dry cloth and stainless steel components with soft cloth sprayed with contact cleaner, then wipe with soft and dry cloth. A change in the color of the exhaust system is normal due to high temperatures.
2. Periodically make sure all the bolts and springs are sufficiently tight.

! **WARNING: clean all exhaust components before the first start of the engine or the stains will burn onto the surfaces!**

! **IT IS NORMAL FOR WHITE SMOKE TO COME OUT OF THE MUFFLER AT FIRST OPERATION.**

! **DO NOT STAND BEHIND THE MUFFLER AT FIRST OPERATION.**

! **DO NOT USE AUTOMOTIVE WHEEL CLEANERS OR ANY CLEANING PRODUCTS WHICH CONTAIN ACIDIC ADDITIVES TO CLEAN THE AKRAPOVIČ EXHAUST SYSTEMS.**

WARNING

Please note that certain aftermarket exhaust systems may not comply with applicable California laws and regulations, and may therefore be prohibited for use on California highways or roads, or on roads or vehicles otherwise subject to emissions control requirements.

Akrapovič exhaust systems for automobiles and motorcycles mounted downstream of the catalytic converter (also known as “cat-back systems”) are considered “replacement parts” in California by the California Air Resources Board (CARB), and do not require an exemption or executive order from CARB to be sold in California. However, California prohibits the use of any aftermarket exhaust system that modifies, removes or replaces original equipment catalysts, unless CARB has issued an Executive Order as to such part or system.

Further, Akrapovič parts or exhaust systems used or intended for use on “racing vehicles” (i.e. a competition vehicle used exclusively for competition on closed-course circuits) do not require an exemption or Executive Order from CARB to be sold in California. However, such parts are prohibited from use on California public highways or roads, even if occasionally used “off-road.”

! CAUTION: secure all vacuum tubing connections, using clamps from Akrapovič installation kit! Install the clamps with corresponding tube clamp pliers.





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