

Installation instructions

Akrapovič Exhaust System:

Evolution Header Set

With

Slip-On Line

Or

Slip-On Race Line

for the

Porsche 911 GT3 RS (type 991.2)

ENGLISH Version 1.0

03/2020



www.akrapovic.com



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Congratulations on purchasing the Akrapovič exhaust system. The Akrapovič exhaust system is a product of Akrapovič d.d., Malo Hudo 8a, 1295 Ivančna Gorica, Slovenia ("Akrapovič").

Please read this entire installation manual carefully prior to installing and using the Akrapovič exhaust system.

Akrapovič exhaust system should only be installed by persons skilled in car exhaust system installation and performance. The instructions provided in this manual should be followed to ensure proper installation and safe use of the Akrapovič exhaust system. Akrapovič and/or its partners shall not be held liable for any damage or personal injury (including direct, indirect, or consequential damage) sustained as a result of improper installation of the Akrapovič exhaust system or its use and maintenance contrary to the instructions and warnings contained herein.

If you have any questions regarding the installation and/or proper use of the Akrapovič exhaust system or this manual, please contact your local Akrapovič partner.

For more information on the Akrapovič exhaust systems, see the official Akrapovič website at: http://www.akrapovic.com

GENERAL INFORMATION

Your safety is our number one priority. Please drive your car responsibly, safely and always obey local traffic rules.

All statements made with regard to the exhaust system's compliance are made in respect of the exhaust system "as is". Any modifications of the Akrapovič exhaust system or its improper installation, use or maintenance that is not in accordance with this Installation manual, may result in severe damage to the exhaust system and/ or engine, as well as personal injury, and may affect the exhaust system's compliance with the legal requirements, such as exhaust system's air and/ or noise emissions (as an example, the car may not be suitable for use on public roads any longer), as well as warranty coverage.

The exhaust system may only be used in accordance with relevant laws and regulations, including state and federal, where applicable.

Damage caused by improper installation, use and maintenance of the Akrapovič exhaust system is not covered by the Akrapovič warranty. Please refer to the enclosed warranty with regard to the terms of our warranty.

Technical specifications of Akrapovič exhaust systems and related products are subject to change without notice.

COPYRIGHT AND OTHER RIGHTS NOTICE

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Akrapovič takes all copyright and other rights infringement cases under serious consideration. If you have any reason to believe that your exhaust system is not an original Akrapovič product, please contact our local partners or Akrapovič at info@akrapovic.com.



SAFETY AND COMPLIANCE WARNING, PLEASE READ CAREFULLY

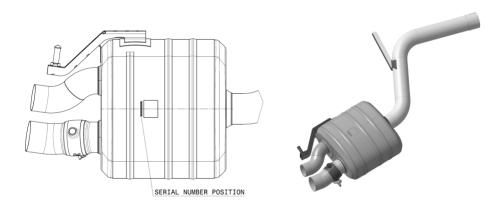
BEFORE REMOVING THE STOCK EXHAUST SYSTEM AND BEGINNING THE INSTALLATION OF YOUR NEW AKRAPOVIČ EXHAUST, PLEASE MAKE SURE THAT ALL ITEMS LISTED BELOW ARE VERIFIED:

- This manual is specific to the car indicated on the cover page, for which it is designed.
 Installation procedures vary depending on the type of car. Please verify that the Akrapovič exhaust system and this installation manual correspond to the type of your car.
- The exhaust system can get extremely hot during and after it is used. Make sure not to touch
 the exhaust system until it is completely cool. Allow the exhaust and engine to cool down
 before beginning installation.
- Make sure the car is securely positioned to prevent damage to yourself ond other, or the car.
- Please check the parts you recieved against the parts list available on our website (please
 use the QR code on the front page or look for "schematic view" in the respective product
 page on www.akrapovic.com). Make sure that you have all the parts necessary for the
 installation of your new Akrapovič exhaust system. If any of the parts is missing, please
 do not proceed with uninstalling your stock exhaust system/installing the Akrapovič exhaust
 system and contact the retailer where you purchased the Akrapovič exhaust system.
- Every exhaust system muffler has its unique serial number, which identifies the authenticity
 of the product. You can find the serial number on the muffler's sleeve. Please refer to the
 picture 1 below. Please verify that your exhaust system is an original Akrapovič product. If
 you have any doubts, please contact the reseller where you purchased the exhaust system
 or Akrapovič partners. This manual, any certificates and Akrapovič warranty apply to original
 products only.

GENERAL NOTE

Photographs and other illustrations in this manual are symbolic and are intended to help represent individual steps for proper installation and use, as well as for a general overview. The actual component parts of the Akrapovič exhaust system may not entirely correspond to the photographs and other illustrations.

Picture 1 - Serial Number Position





NOISE AND EMISSION WARNINGS

General warning

Because of the world-wide distribution of Akrapovič d.d. products, neither Akrapovič d.d. nor any of its subsidiaries make any representation that the exhaust system complies with the air and/or noise emissions laws, or labeling laws, of any jurisdiction. The purchasers are entirely responsible for informing themselves of the applicable laws where the products are to be used and to comply with those law.

Although legal compliance of Akrapovič products in a specific country should be determined by the user, you can find some basic guidance on compliance of your Akrapovič exhaust system with various legal requirements on the product-related part of our website (please use the QR code on the front page or look for the respective product page on www.akrapovic.com). For EC and ECE type approvals, please refer to the certificate enclosed to your product.

USA WARNING

Various U.S. states and the U.S. federal government have individual laws regulating the use of aftermarket exhaust parts and systems, especially as those parts and systems modify, remove, or replace original equipment catalysts. Please consult the appropriate laws in your area before installing any aftermarket part or system on your vehicle to ensure compliance with all applicable laws. Neither Akrapovic d.d. nor any of their subsidiaries or the sellers of the parts or systems make any representation that any of their parts or systems comply with any such laws.

CALIFORNIA WARNING

California laws prohibit the use of any aftermarket exhaust part or system that modifies, removes or replaces original equipment catalysts unless the California Air Resources Board has issued an Executive Order regarding such part or system or unless the part or system is exempted by being used only on racing vehicles on closed courses. Neither Akrapovic d.d. nor any of their subsidiaries make any representation that any of their parts or systems has received such an Executive Order or that any of their parts or systems conform with the racing vehicles exemption. The purchasers are entirely responsible for informing themselves of applicable California laws and to comply with those laws.

SYMBOLS

The following symbols are used throughout these installation instructions:



TOOLS AND PROTECTIVE EQUIPMENT REQUIRED



TIGHTENING TORQUE



LUBRICATION



HAND TIGHTEN



INSTALLATION TIP



CAUTION OR IMPORTANT



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 reach of children.



USE ANTI-SEIZE LEAD-FREE COPPER PASTE (black tube)

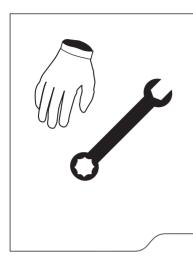
Provides trouble-free and long-lasting protection against seizing, corrosion and rusting of bolts, threaded ends, nuts, joints, etc. Also protects against vibration, wear and impact. WARNING! Avoid eye contact. Keep out of reach of children.



USE ANTI-SEIZING GREASE (white tube)

Prevents seizing, corrosion and excessive wear between the titanium components of your exhaust system. **WARNING!** Avoid eye contact. Keep out of reach of children.





Tools & equipment

- · mechanic gloves
- eve protection
 - Torx 25
- Torx 30
- Tory 45
- Combination 14 mm wrench
- · Combination 16 mm wrench
- Combination 22 mm wrench
- · T-handle 16 mm wrench
- · T-handle swivelling E12 Torx wrench
- Socket 16 mm
- Socket 18 mm
- T-handle swivelling 10 mm wrench
- · T-handle swivelling 12 mm wrench
- T-handle swivelling 13 mm wrench
- Clamp pliers

PARTS LIST

The following parts should be found in the box:

- Installation Manual
- Homologation certificate/ compliance documents if applicable
- Warranty
- Fitting material
- Muffler, pipes, Carbon Fiber components or Sound Kit components

Detailed list of parts can be found on the Akrapovič website (please use the QR code on the front page or look for "Schematic view" in the respective product page on www.akrapovic.com).

IMPORTANT: The car should be in the off position throughout the dismounting and installation process, as well as any other work done on the exhaust system!

REMOVAL OF STOCK EXHAUST SYSTEM:

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.

If you for any reason decide otherwise, please note that any information provided in this respect herein should be considered as general information provided for your convenience only. Akrapovič shall not assume any liability or responsibility with regard to uninstalling your existing exhaust system, warranty coverage of such exhaust system or vehicle or their further fitness for use.

In case your Akrapovič exhaust system may not be used on certain roads or under certain conditions, please keep the stock or other exhaust system that you can use in such circumstances legally.



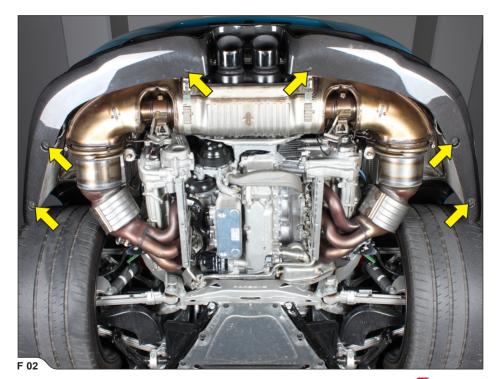
REMOVAL OF STOCK EXHAUST SYSTEM:

Put the vehicle onto a car lift.

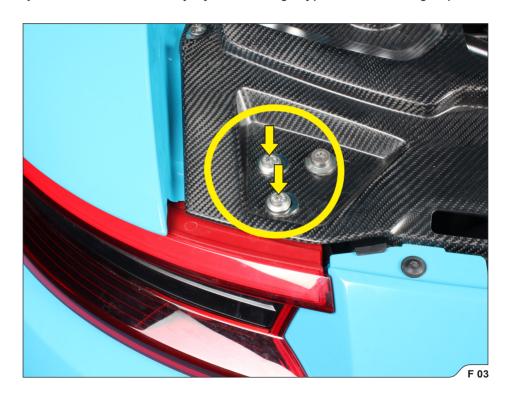
- ! CAUTION: ensure that the car is lifted safely and properly in order to avoid the risk of vehicle damage, injury, or even death!
- 1. Unscrew the marked bolts and carefully remove the diffuser off the vehicle (F 01).
- ! CAUTION: make sure not to injure yourself or damage any part of the vehicle during this process!



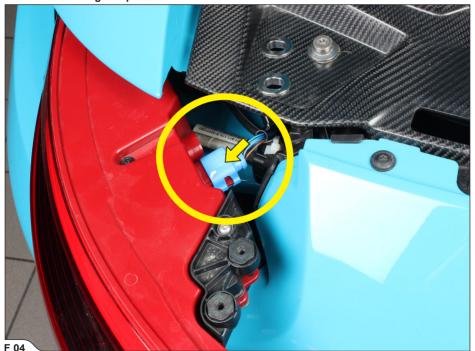
- 2. Unscrew the marked bolts (F 02).
- ! CAUTION: make sure not to injure yourself or damage any part of the vehicle during this process!



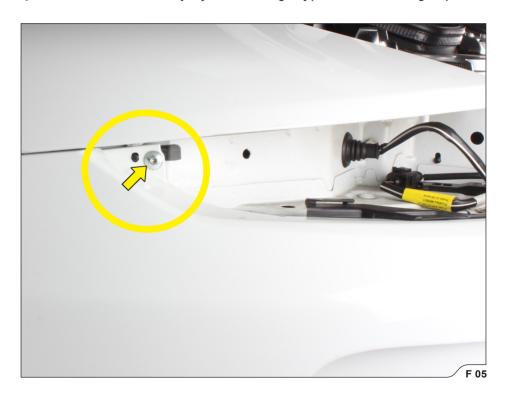
- 3. Unscrew the marked bolts on both sides of the vehicle (F 03).
 - ! CAUTION: make sure not to injure yourself or damage any part of the vehicle during this process!



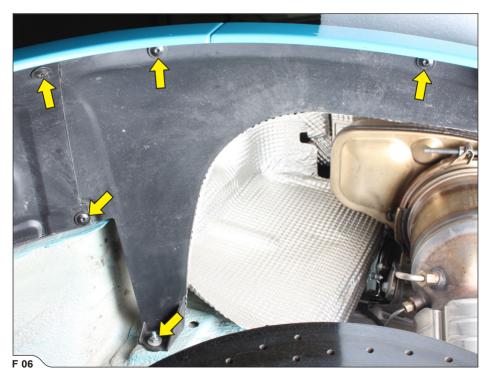
- 4. Carefully pull both tail lights out of the chassis, disconnect the tail lights' electrical connectors and remove the tail lights off the vehicle (F 04).
- ! CAUTION: make sure, not to damage the connectors, tail lights or any other part of the vehicle during this process!



- 5. Unscrew the marked bolt, on both sides of the vehicle (F 05).
 - ! CAUTION: make sure not to injure yourself or damage any part of the vehicle during this process!

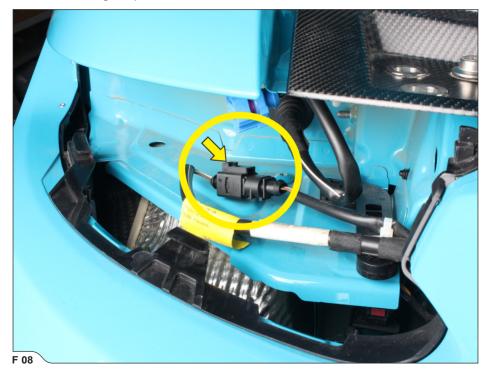


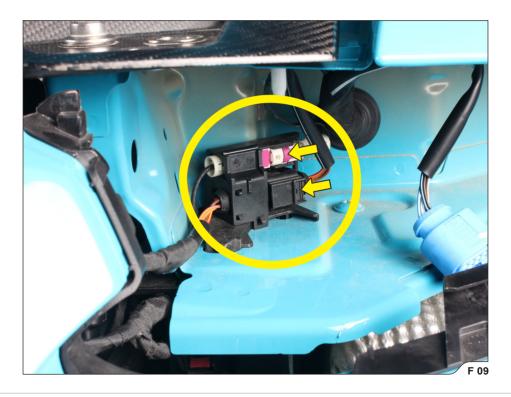
- 6. Unscrew the marked bolts, on both sides of the vehicle (F 06, 07).
- ! CAUTION: make sure not to injure yourself or damage any part of the vehicle during this process!





- 7. Disconnect the bumpers' electrical connectors (F 08, 09).
 - ! CAUTION: make sure, not to damage the connectors, bumper or any other part of the vehicle during this process!

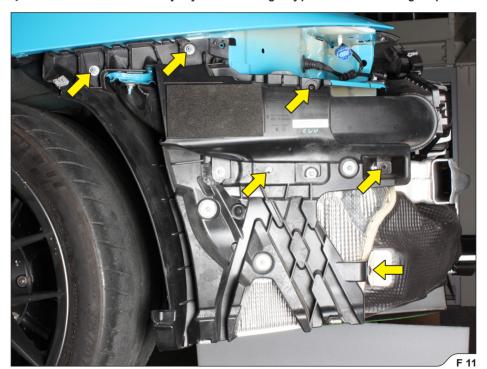




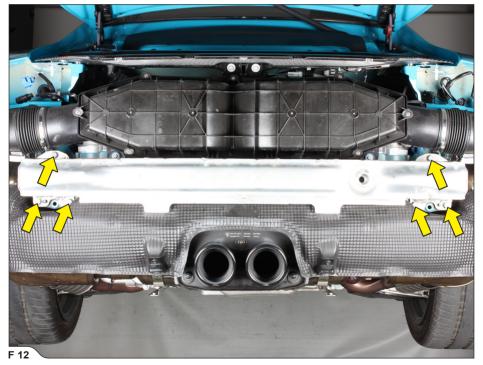
- 8. Unscrew the market bolts and carefully remove the bumper off the vehicle (F 10).
 - ! CAUTION: make sure, not to damage the bumper or any other part of the vehicle during this process!



- 9. Unscrew the marked bolts and nuts on both sides of the vehicle and remove the side heat shields (F 11).
 - ! CAUTION: make sure not to injure yourself or damage any part of the vehicle during this process!

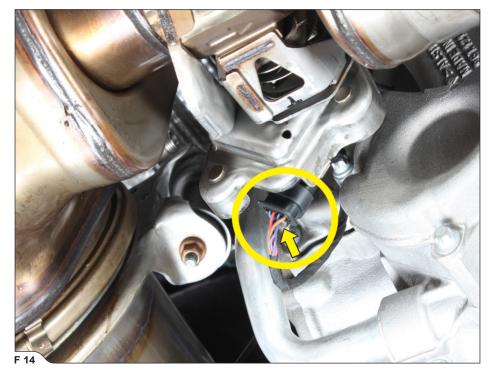


- 10. Unscrew the marked bolts, and remove the rear crash bar with muffler heat shield (F 12).
- ! CAUTION: make sure not to injure yourself or damage any part of the vehicle during this process!

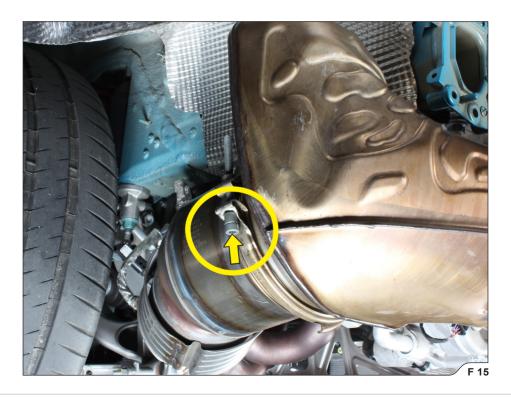


- 11. Disconnect the exhaust valve servos, unscrew and remove the market V-clamps, unscrew both OPF/GPF sensors out of the muffler, unscrew the side bracket bolts, support the muffler, unscrew and move out of the way both muffler's clamps and carefully remove the muffler, off the vehicle (F 13, 14, 15, 16, 17).
- ! CAUTION: support the muffler during this process or you could injure yourself or damage the vehicle!



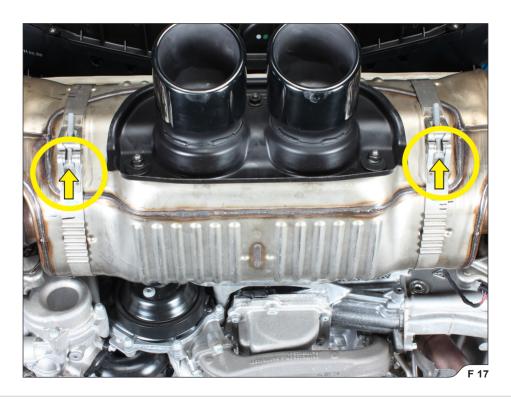




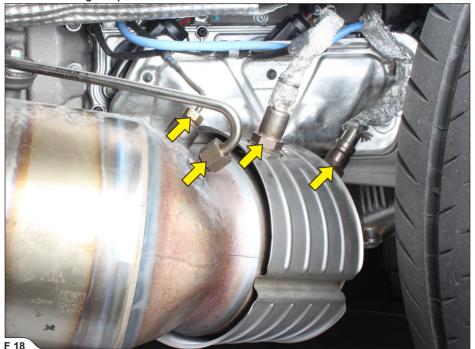




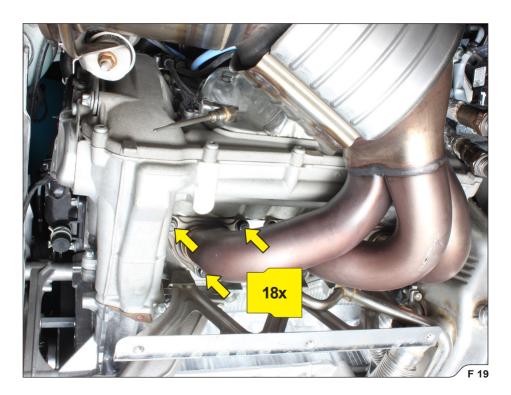




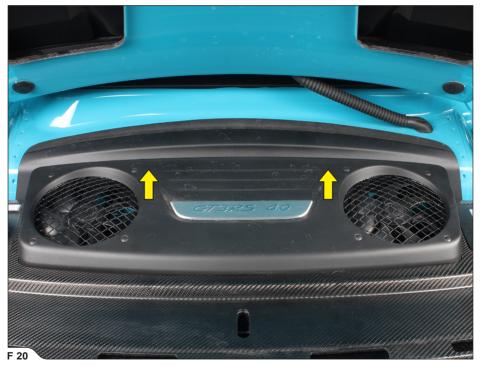
- 12. Unscrew the marked temperature sensor, OPF/GPF sensor and lambda sensors out of headers, on both sides of the vehicle (F 18).
- ! IMPORTANT: make sure not to damage the temperature's or lambda sensors' electrical leads during this process!



- 13. Unscrew all flange nuts and carefully remove both headers off the vehicle (F 19).
- CAUTION: make sure not to injure yourself or damage any part of the vehicle during this process!



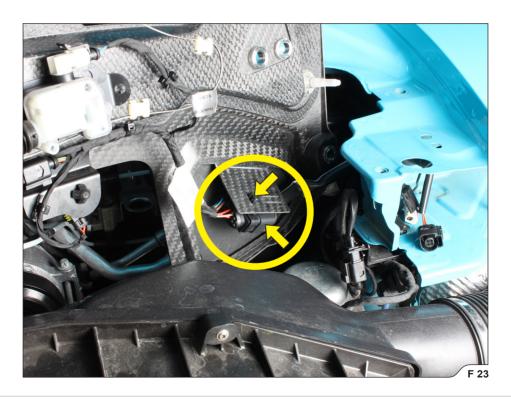
- 14. Remove the engine compartments' cooling fans; check vehicle's manufacturer work shop manual for correct procedure (F 20, 21).
 - CAUTION: make sure not to injure yourself or damage any part of the vehicle during this process!





- 15. Remove the engine oil and cooling liquid caps, unscrew marked bolts on both sides of the engine compartment, disconnect the market connector and remove the engine compartment's cover (F 22, 23, 24).
 - CAUTION: make sure not to injure yourself or damage any part of the vehicle during this process!





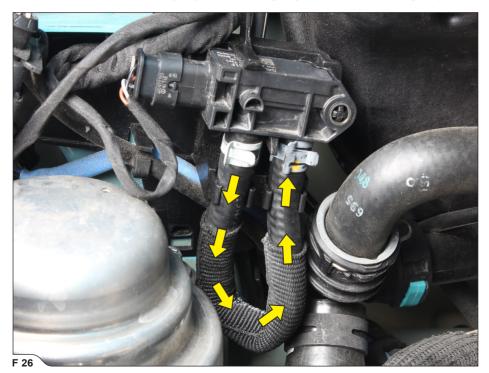




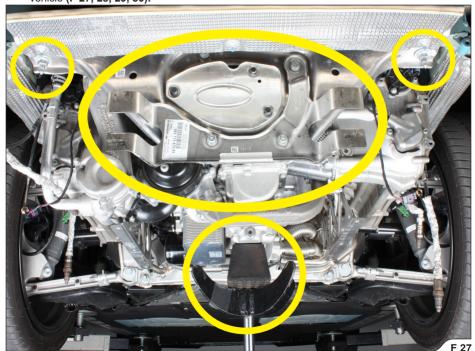
- 16. Undo the market OPF/GPF sensors' clamps, remove the rubber tubes off the metal parts of the tubes, unscrew the market bolts and remove the metal parts of the tubes off the vehicle, on both sides of the engine compartment (F 25).
- CAUTION: make sure not to injure yourself or damage any part of the vehicle during this process!



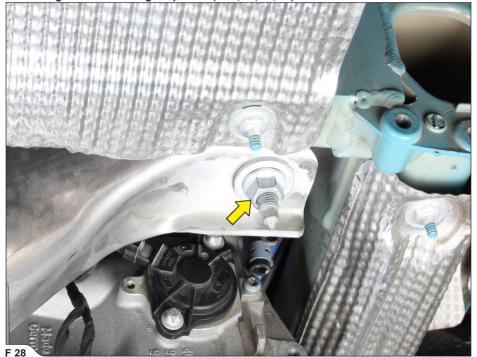
- 17. Remove one of the rubber tubes off the OPF/GPF sensor and connect the other tube to the free tube connection, as shown; repeat the process on both sensors (**F 26**).
 - CAUTION: make sure not to injure yourself or damage any part of the vehicle during this process!



18. In order to install the Akrapovič system, you'll need to change the stock muffler's bracket with original Porsche's muffler bracket with code 991.111.473.91. Support the engine, as shown, unscrew the engine bracket nuts on both sides, unscrew the muffler bracket's bolts, carefully lower the engine (until you can remove the upper bolt), and remove the muffler's bracket off the vehicle (F 27, 28, 29, 30).



CAUTION: make sure to support and lower the engine correctly or you could injure yourself or damage the vehicle during this process (F 27, 28, 29, 30)!

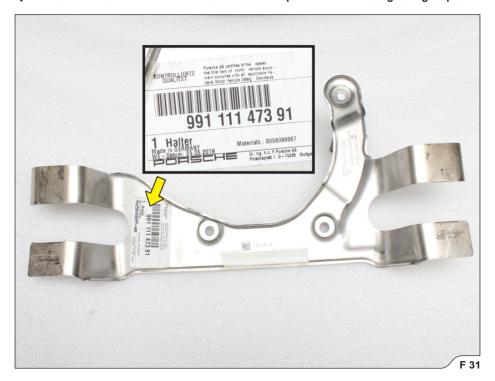


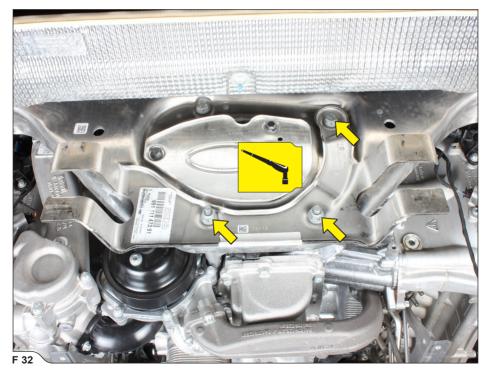




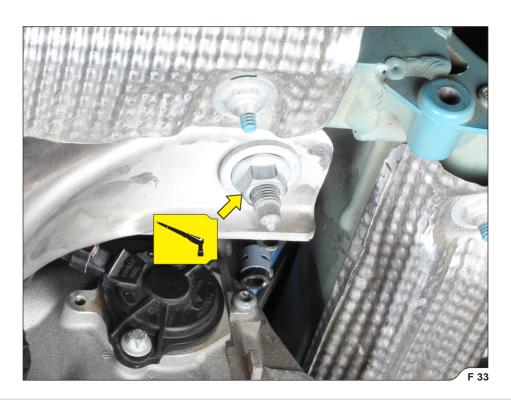


- 19. Install the new bracket (code 991.111.473.91) in the reverse order, from the order the stock bracket was removed and retighten the engine bracket back onto the chassis (F 31, 32, 33).
- CAUTION: check the vehicle manufacturer's work shop manual for correct tightening torques!



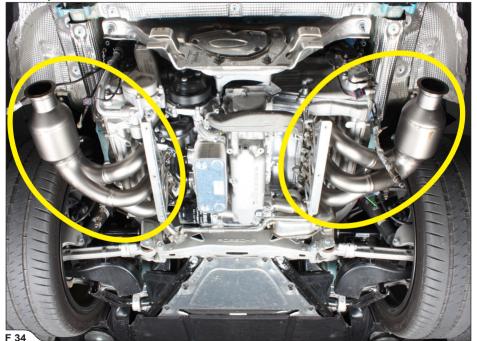


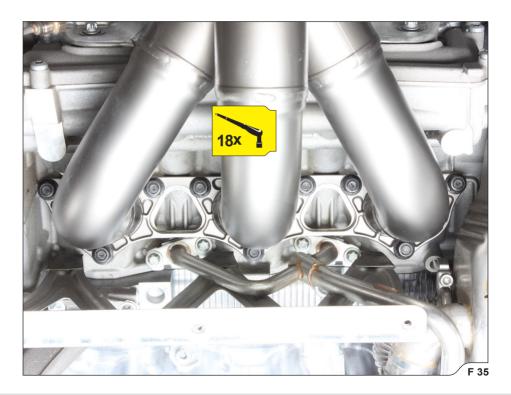




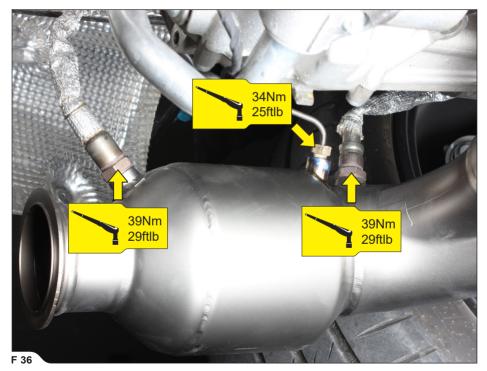
INSTALLATION OF THE AKRAPOVIČ EXHAUST SYSTEM:

- Install the Akrapovič headers with new stock gaskets, using stock nuts; tighten nuts to a vehicle manufacturer specified torque using criss-cross pattern in three steps (F 34, 35).
 - IMPORTANT: use new exhaust port gaskets!
- ! IMPORTANT: check vehicle manufacturer workshop manual for correct tightening torque!

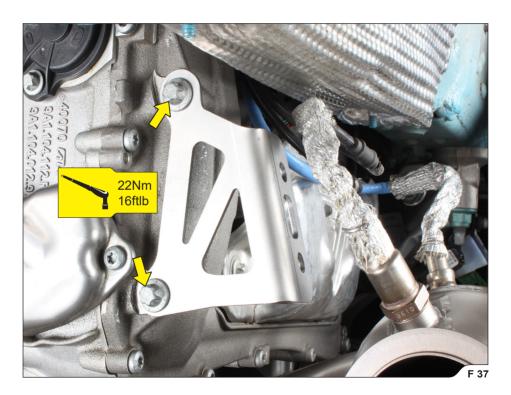


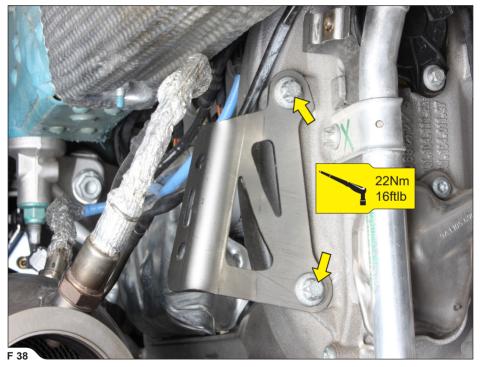


- 2. Reinstall the lambda and temperature sensors on both sides of the vehicle (F 36).
- ! IMPORTANT: make sure not to damage the sensors' electrical leads during this process!



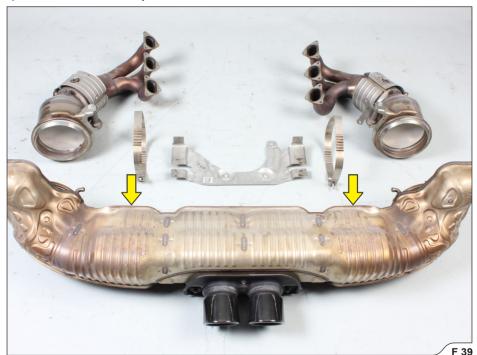
- 3. Install the Akrapovič side mufflers' brackets as shown, using stock bolts (F 37, 38).
 - ! CAUTION: make sure not to injure yourself or damage any part of the vehicle during this process!

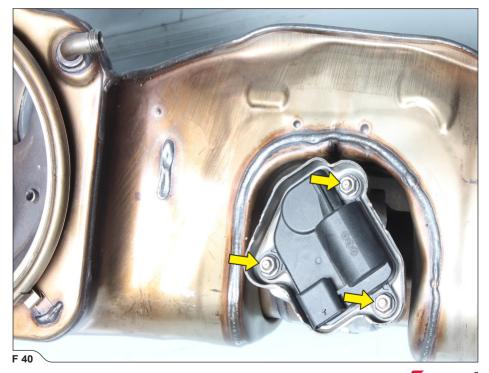






- Remove the exhaust valve actuators from stock muffler and install them onto Akrapovič muffler, using bolts, actuators' heat shields and spring connections from Akrapovič installation kit (F 39, 40, 41, 42, 43, 44, 45, 46, 47).
 - IMPORTANT: use Akrapovič bolt sealant on the actuator's bolts threads!

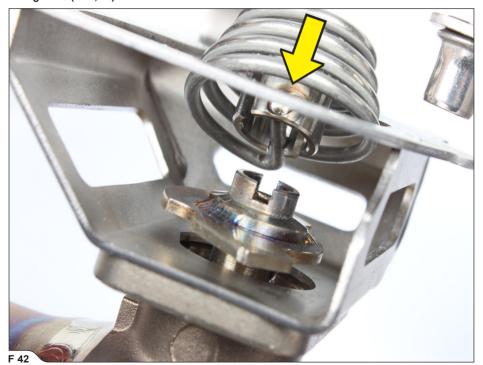


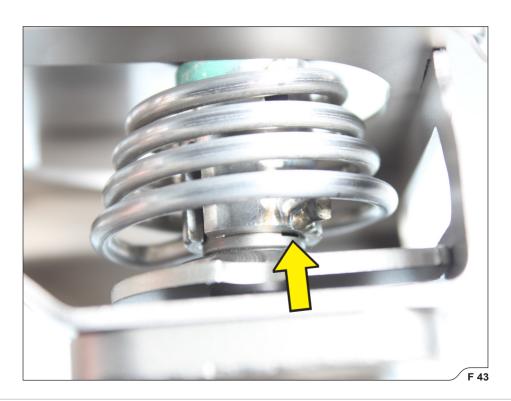






IMPORTANT: make sure, that spring connections seat correctly into the valves' axle groves (F 42, 43)!







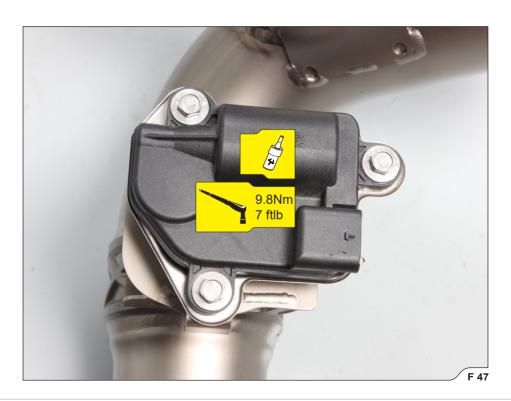


! IMPORTANT: make sure, that actuators' axle groves seat correctly into the valves' spring connections (F 45, 46)!





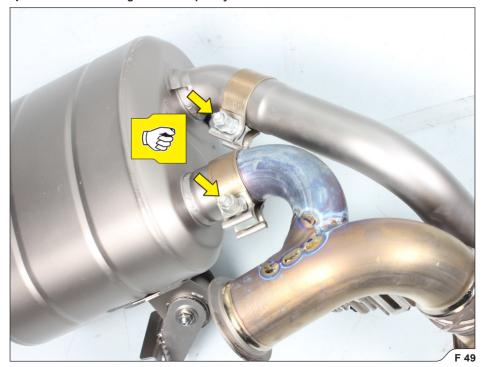




- 5. Assemble the side mufflers and link pipes as shown, using clamps from Akrapovič installation kit **(F 48, 49).**
 - CAUTION: make sure not to injure yourself or damage any part of the exhaust during this process!



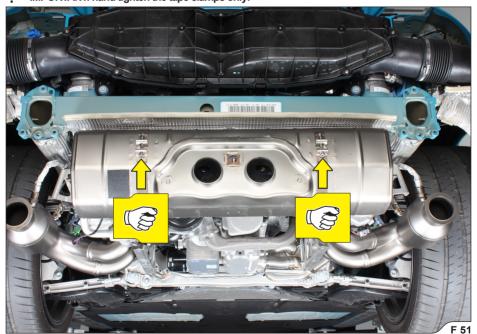
IMPORTANT: hand tighten the clamps only!



- For Slip-On exhaust system only: assemble the mufflers' flanges and graphite gaskets from Akrapovič installation kit, onto the link pipes as shown (F 50).
 - ! CAUTION: make sure not to injure yourself or damage any part of the exhaust during this process!



- 7. **For Slip-On exhaust system only:** install the muffler onto the muffler's bracket, using tape clamps from Akrapovič installation kit **(F 51, 52).**
- ! CAUTION: make sure not to injure yourself, damage any part of the exhaust or vehicle during this process!
- ! IMPORTANT: hand tighten the tape clamps only!



IMPORTANT: make sure, that tape clamps seat correctly on the muffler's bracket (F 52)!



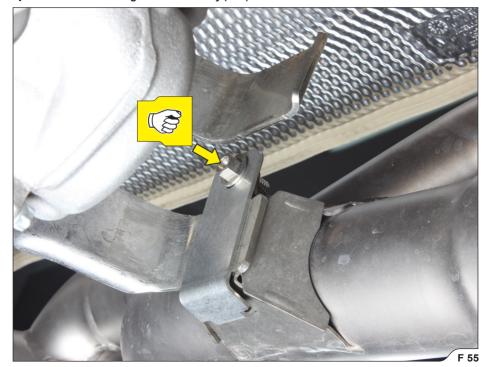
- 8. **For Slip-On Race exhaust system only:** assemble the clamps from Akrapovič installation kit, onto the muffler's inlet pipes, as shown **(F 53).**
- ! CAUTION: make sure not to injure yourself or damage any part of the exhaust during this process!



- For Slip-On Race exhaust system only: install the muffler onto the muffler's bracket, using additional brackets and bolts from Akrapovič installation kit (F 54, 55).
 - ! CAUTION: make sure not to injure yourself or damage any part of the exhaust during this process!

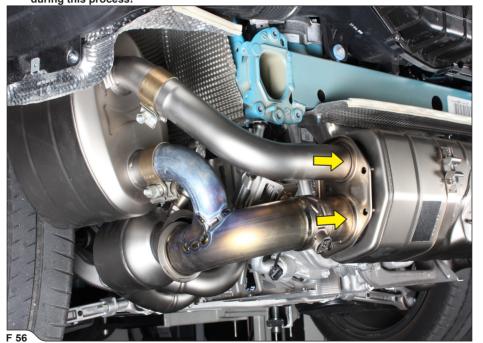


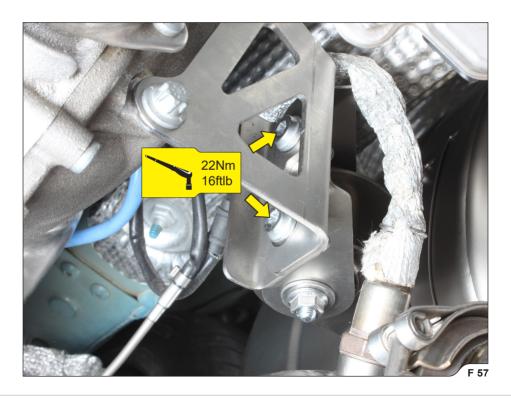
IMPORTANT: hand tighten the bolts only (F 55)!



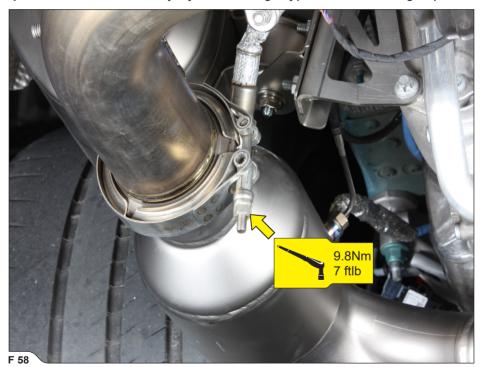
10. **For Slip-On exhaust system only:** insert the side mufflers' outlet pipes into the muffler, align the side mufflers with headers' outlets and muffler and tighten the side mufflers onto the brackets, using bolts and nuts from Akrapovič installation kit (**F 56, 57**).

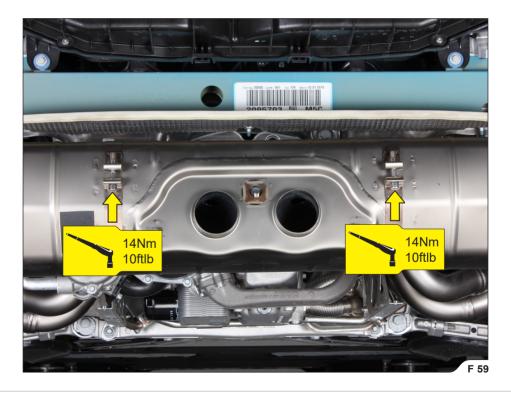
CAUTION: make sure not to injure yourself, damage any part of the exhaust or vehicle during this process!



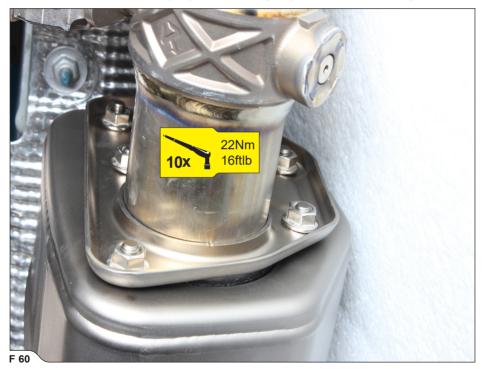


- 11. For Slip-On exhaust system only: tighten both V-clamps to the specified torque, align the muffler in respect to the chassis and tighten the muffler's tape clamps to the specified torque (F 58, 59).
 - CAUTION: make sure not to injure yourself or damage any part of the exhaust during this process!

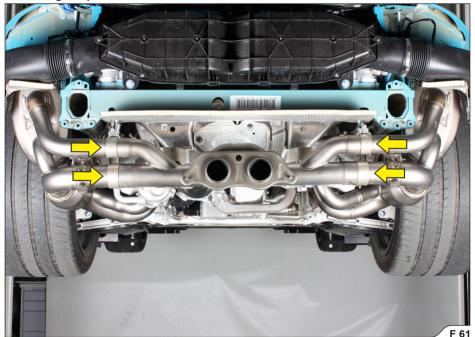


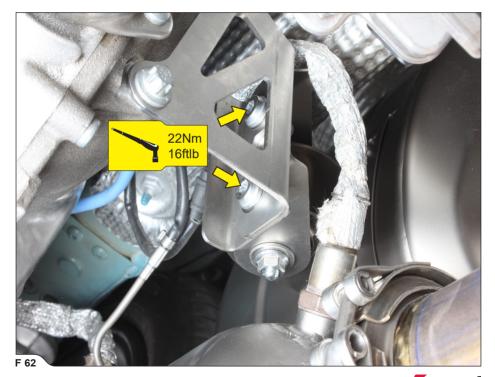


- 12. For Slip-On exhaust system only: tighten the muffler's flanges, using nuts from Akrapovič installation kit (F 60).
- ! CAUTION: make sure not to injure yourself or damage any part of the exhaust during this process!



- 13. **For Slip-On Race exhaust system only:** insert the side mufflers' outlet pipes into the muffler, align the side mufflers with headers' outlets and muffler and tighten the side mufflers onto the brackets, using bolts and nuts from Akrapovič installation kit **(F 61, 62).**
 - CAUTION: make sure not to injure yourself, damage any part of the exhaust or vehicle during this process!

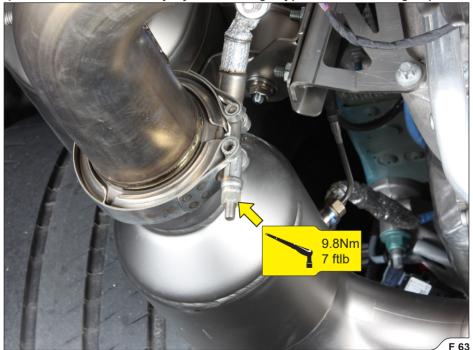


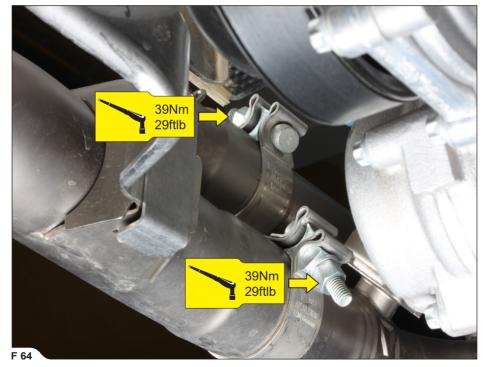




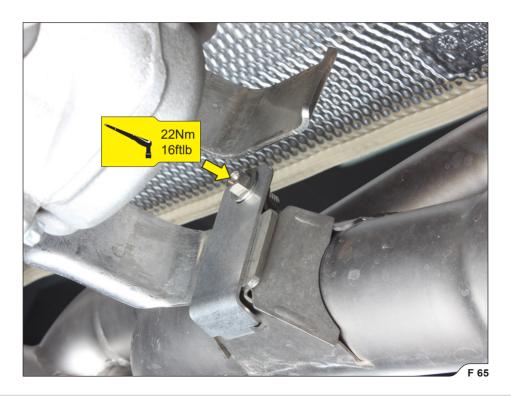
14. **For Slip-On exhaust system only:** tighten both V-clamps to the specified torque, align the muffler in respect to the chassis, tighten the marked clamps and tighten the muffler's bracket bolts to the specified torque **(F 63, 64, 65).**

CAUTION: make sure not to injure yourself or damage any part of the exhaust during this process!

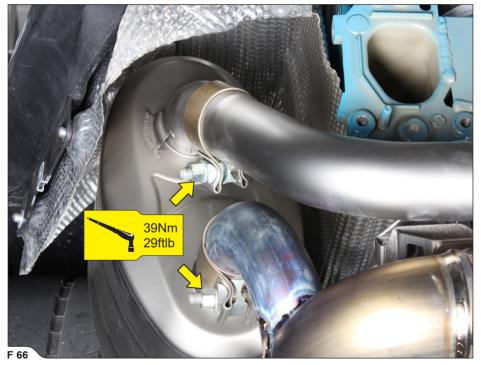




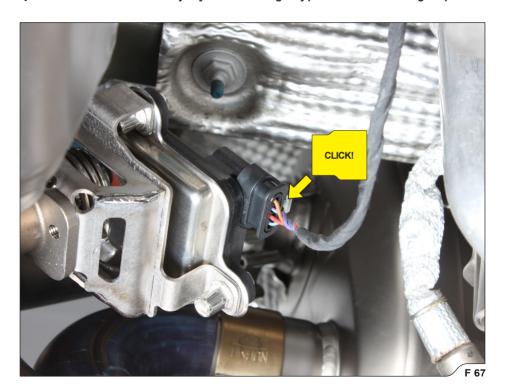




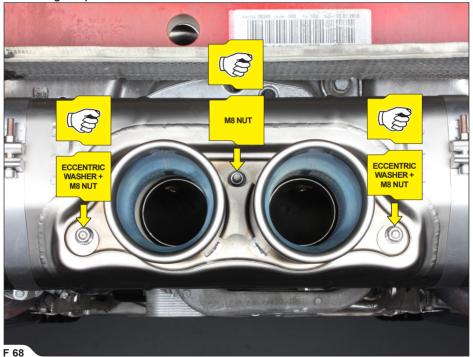
- 15. Tighten the side mufflers clamps to the specified torque, on both sides of the vehicle (F 66).
- ! CAUTION: make sure not to injure yourself or damage any part of the exhaust during this process!



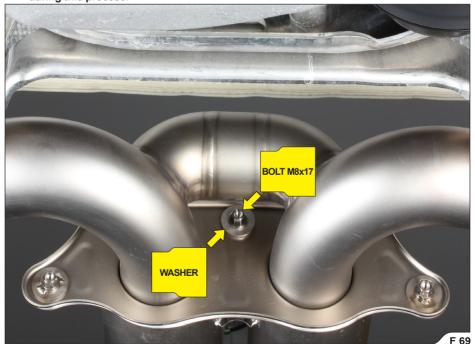
- 16. Connect both exhaust valve actuators (F 67).
- ! CAUTION: make sure not to injure yourself or damage any part of the exhaust during this process!

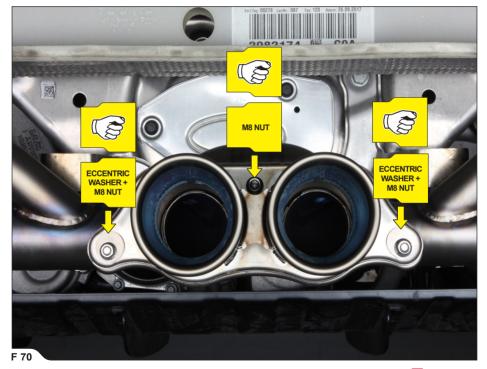


- 17. For Slip-On exhaust system only: install the tail-pipe onto the muffler's outlet, using two eccentric washers and three M8 nuts from Akrapovič installation kit; hand tighten the nuts only (F 68).
 - CAUTION: make sure, not to injure yourself or damage any part of the exhaust system during this process!



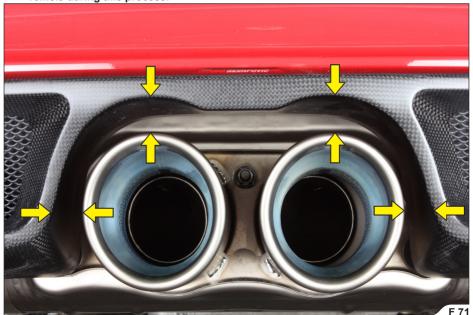
- 18. **For Slip-On Race exhaust system only:** install the tail-pipe onto the muffler's outlet, using M8x17 bolt with washer, two eccentric washers and three M8 nuts from Akrapovič installation kit; hand tighten the nuts only **(F 69, 70)**.
- ! CAUTION: make sure, not to injure yourself or damage any part of the exhaust system during this process!

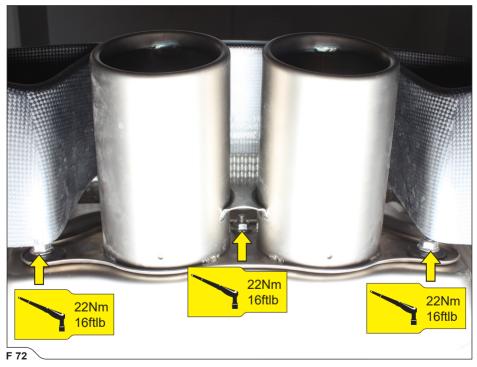




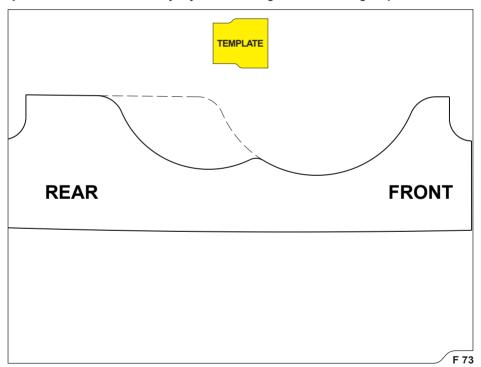


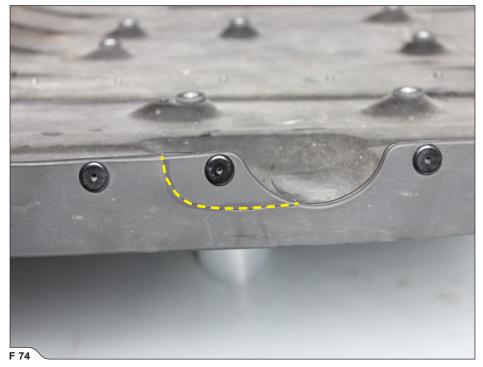
- Reinstall all dismounted stock parts, except diffuser (heat shields, bumper, tail lights etc); check vehicle manufacturer manual for correct procedures and tightening torques.
- ! CAUTION: make sure not to injure yourself or damage any part of the vehicle during this process!
- 20. Adjust and center the Tail Pipe in respect to the bumper's cut out and tighten the tail pipes' nuts to the specified torque (F 71, 72).
 - ! CAUTION: make sure not to injure yourself, damage the Tail Pipe or any other part of the vehicle during this process!





- 21. Using template, mark the **right** side of the diffuser, as shown and cut/grind off the marked area (F 73, 74, 75).
 - ! CAUTION: make sure not to injure yourself or damage the diffuser during this process!









22. Reinstall the diffuser onto the vehicle (F 76).

CAUTION: make sure not to injure yourself or damage any part of the vehicle during this process!



FINAL INSTALLATION:

- ! IMPORTANT: reinstall the dismounted or partially removed stock parts (wheel arches, bumper etc.); check vehicle manufacturer manual for tightening torques.
- ! IMPORTANT: 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.
- ! IMPORTANT: clean all exhaust components before the first start of the engine or the stains will burn onto the surfaces!

MAINTENANCE OF THE AKRAPOVIČ EXHAUST SYSTEM:

- 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.
- Periodically make sure all the bolts and springs are sufficiently tight.
 *WD-40[®] is a trademark of the WD-40 Company.
- INSTALLATION TIP: IT IS NORMAL FOR WHITE SMOKE TO COME OUT OF THE MUFFLER AT FIRST OPERATION.
- ! CAUTION: DO NOT STAND BEHIND THE MUFFLER AT ANY TIME.
- ! CAUTION: DO NOT USE AUTOMOTIVE WHEEL CLEANERS OR ANY CLEANING PRODUCTS WHICH CONTAIN ACIDIC ADDITIVES TO CLEAN THE AKRAPOVIČ EXHAUST SYSTEMS.

WARNING: THE EXHAUST SYSTEM CAN BE EXTREMELY HOT. ALLOW THE EXHAUST AND ENGINE TO COOL DOWN BEFORE BEGINNING INSTALLATION OR ANY OTHER WORK ON THE EXHAUST SYSTEM. THIS MANUAL IS SPECIFIC TO THE PORSCHE 911 GT3 RS TYPE 991.2. THERE MAY BE SOME DIFFERENCES IN INSTALLATION PROCEDURES FOR OTHER MODELS.

TROUBLESHOOTING:

Problem	Possible cause	Solution
Exhaust gas leaks out of the muffler/pipe clamp connections	loosened clamp	tighten the clamp to specified torque
	connection is not completely joined	tap the connection into place and tighten the clamp to specified torque
Valves are not moving	No supply	Check electrical connection and connectors Check fuse for exhaust valves



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