



Installation instructions

Akrapovič Exhaust Systems:
Racing and **Evolution**
for the
HONDA CRF450R



504291

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.
5. 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.
6. Technical specifications of Akrapovič exhaust systems and related products are subject to change without notice.
7. 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.
8. 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.
9. 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 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 8 mm wrench
T-handle 10 mm wrench
T-handle 12 mm wrench
T-handle Torx 45 wrench
Cross head screwdriver
Spring hook



BEFORE INSTALLING, CHECK THE PARTS LIST AND SCHEMATIC DRAWING 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.

REMOVAL OF STOCK EXHAUST SYSTEM:

1. Put the motorcycle on a central racing stand. Make sure, that surface is solid and flat.
2. Unscrew the marked bolts on both sides of the motorcycle and remove the side panels (**Figure 1**).

! CAUTION: be careful not to damage any part of the motorcycle during this process!



Figure 1

3. Loosen the marked metal clamp at link-pipe - muffler joint and unscrew the muffler bracket bolt. Remove the right muffler off the motorcycle (**Figure 2**).

! CAUTION: make sure not to damage any part of the motorcycle during this process!



Figure 2

4. Unscrew the marked bolt and carefully remove the right under seat panel (**Figure 3**).
! CAUTION: be careful not to damage any part of the motorcycle during this process!



Figure 3

5. Unscrew the marked bolts and remove the mud guard off the motorcycle (**Figure 4**).
! CAUTION: make sure not to damage any part of the motorcycle during this process!



Figure 4

6. Loosen the marked clamp and unscrew the link pipe's bracket bolt (Figure 5).

! **CAUTION:** make sure not to damage any part of the motorcycle during this process!

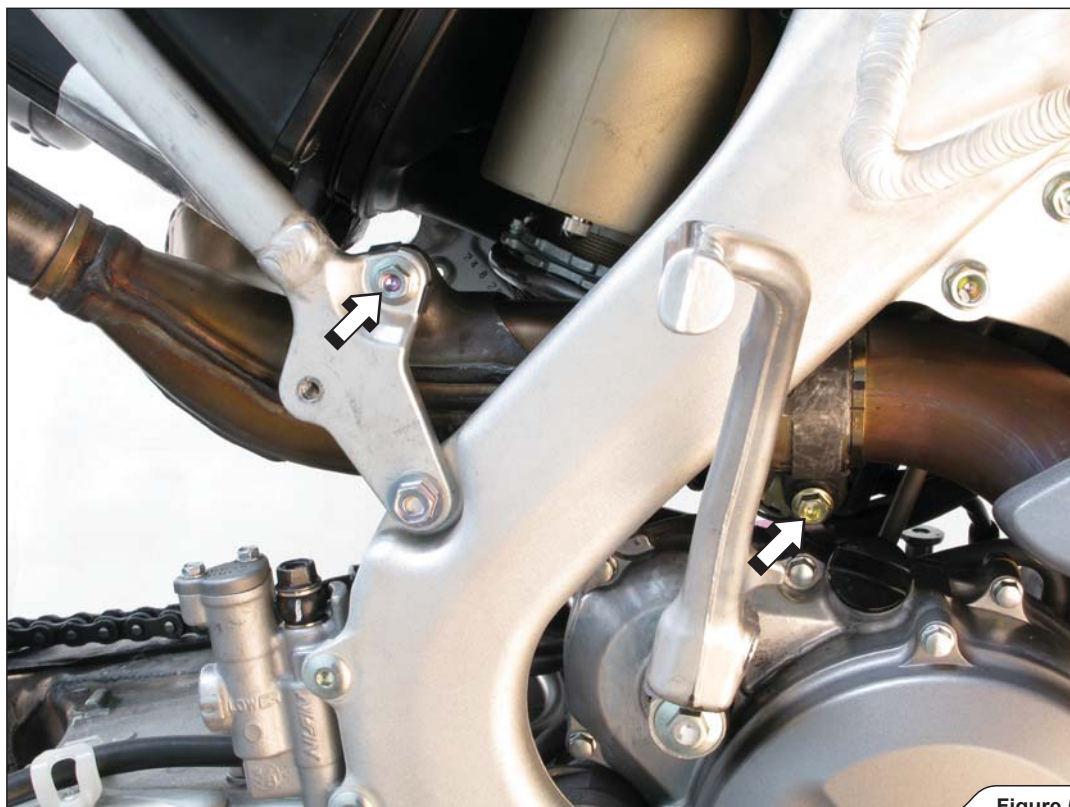


Figure 5

7. Unscrew the marked muffler bracket bolt and carefully remove the left muffler with link pipe off the motorcycle (Figure 6).

! **CAUTION:** make sure not to damage any part of the motorcycle during this process!



Figure 6

8. Unscrew the marked nuts and remove the stock header pipe off the motorcycle (**Figure 7**).
! CAUTION: be careful not to damage any part of the motorcycle during this process!

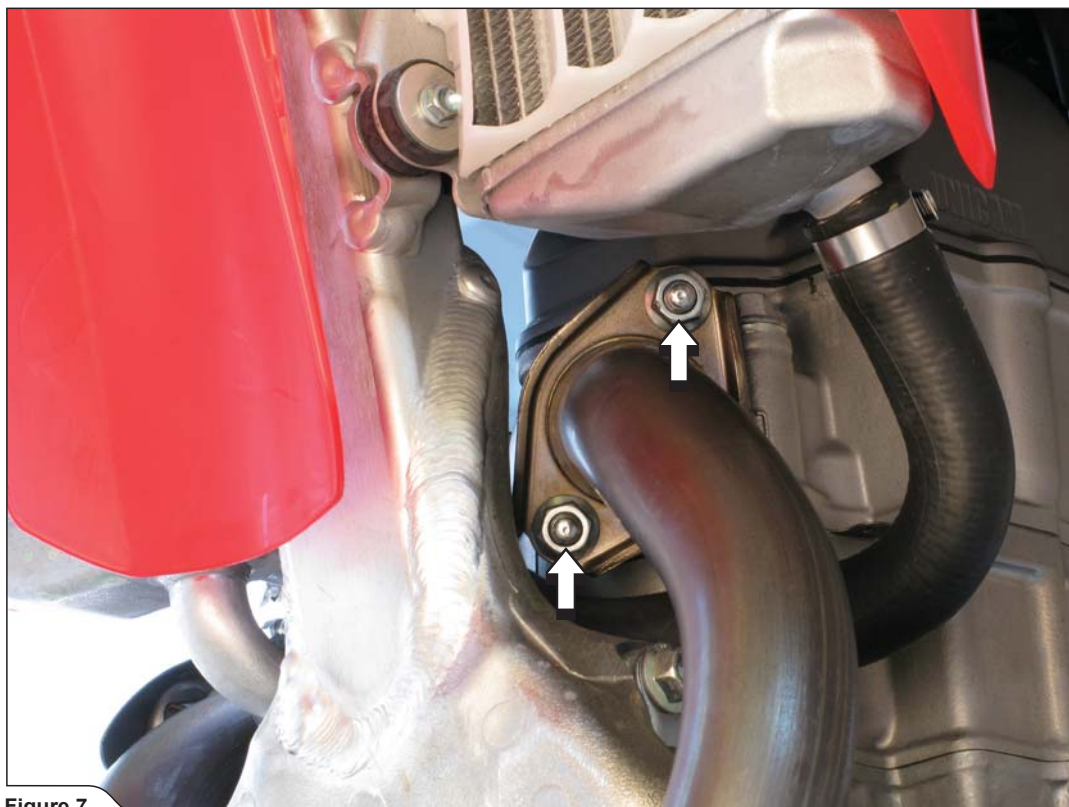


Figure 7

INSTALLATION OF THE AKRAPOVIČ EXHAUST SYSTEM:

1. Set up the flange together with the springs and sleeve, as shown (**Figure 8**).



Figure 8

2. Set up and hand tighten the flange together with the springs and sleeve onto the cylinder head, using stock nuts; make sure you orient the flanges and springs as shown (Figure 9).

! WARNING: do not fully tighten the flange yet!

✂ INSTALLATION TIP: use new stock exhaust port gasket.

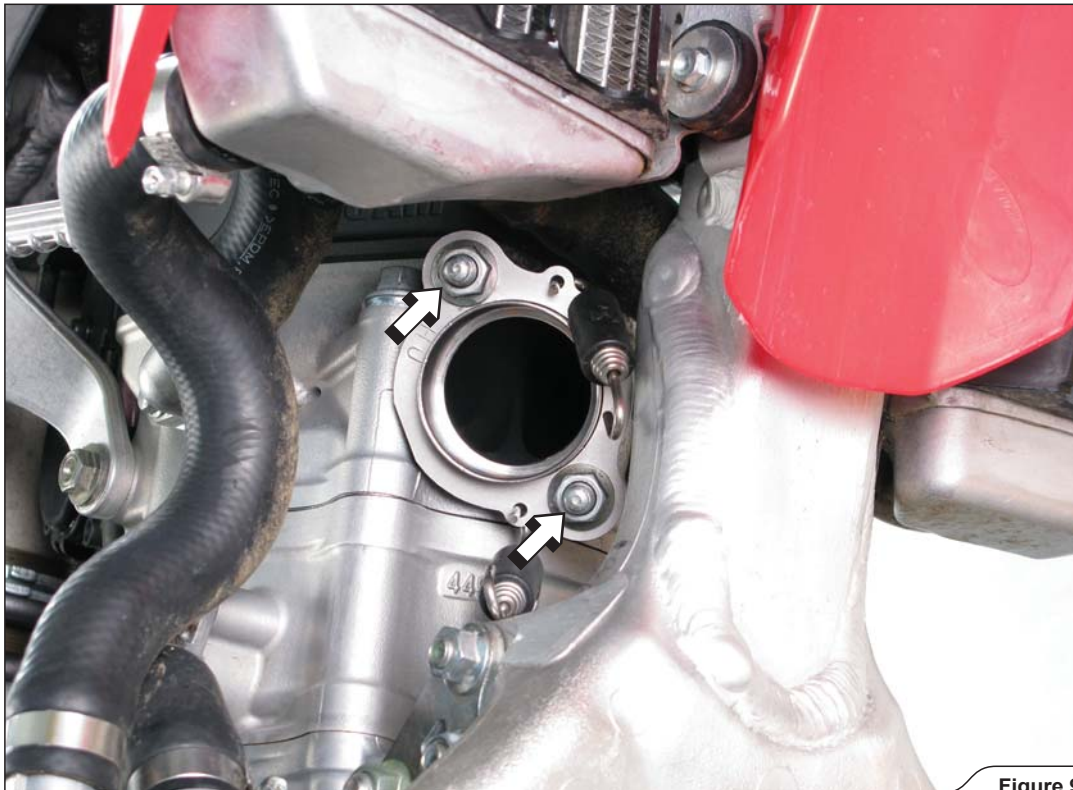


Figure 9

3. Insert the header tube into the sleeve, attach the springs and tighten the nuts to a specified torque (Figure 10).

! WARNING: before tightening the nuts make sure, that springs pull the header tube all the way into the sleeve – use rubber mallet if necessary to tap the connection into place!

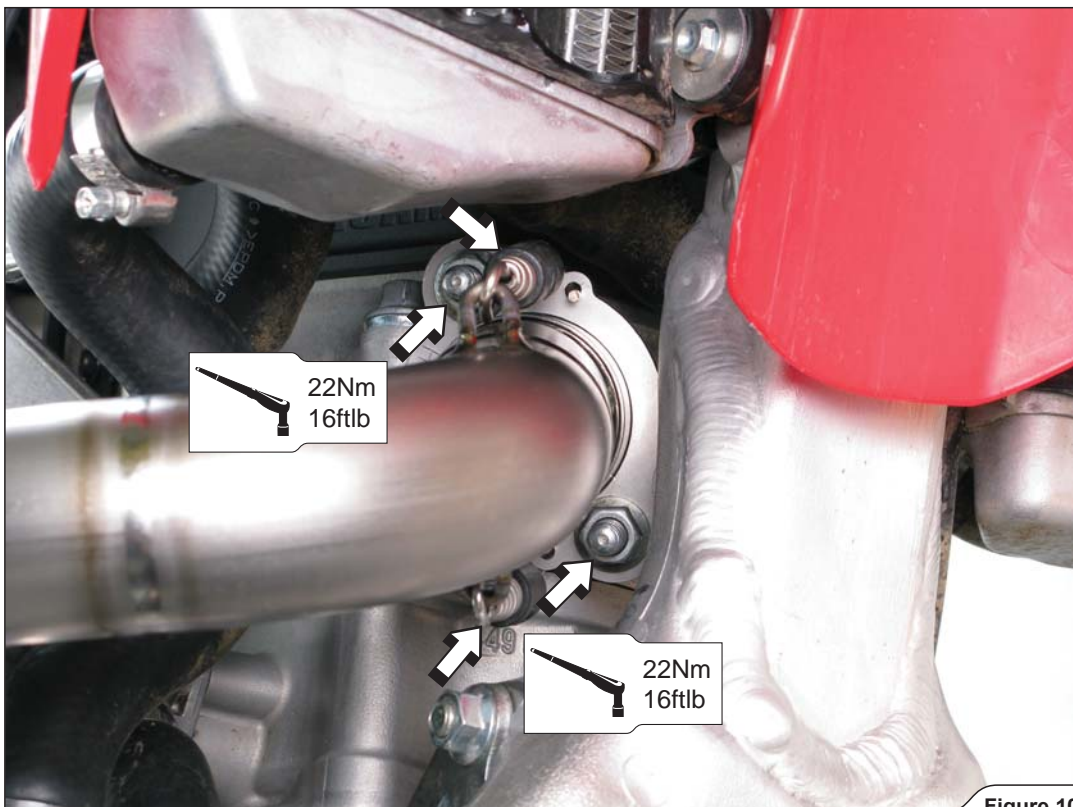


Figure 10

4. Assemble the carbon fiber heat shield onto the header tube (using Akrapovič bolts and heat resistant washers), adjust the heat shield in respect to the header pipe and tighten the bolts to the specified torques (**Figure 11, 12**).

✂ INSTALLATION TIP: screw the heat resistant washers onto the bolts; do not try to push them on!

! CAUTION: make sure to place the bigger heat resistant washers between the header tube and carbon fiber heat shield and smaller washers between bolts' heads and heat shield!



Figure 11

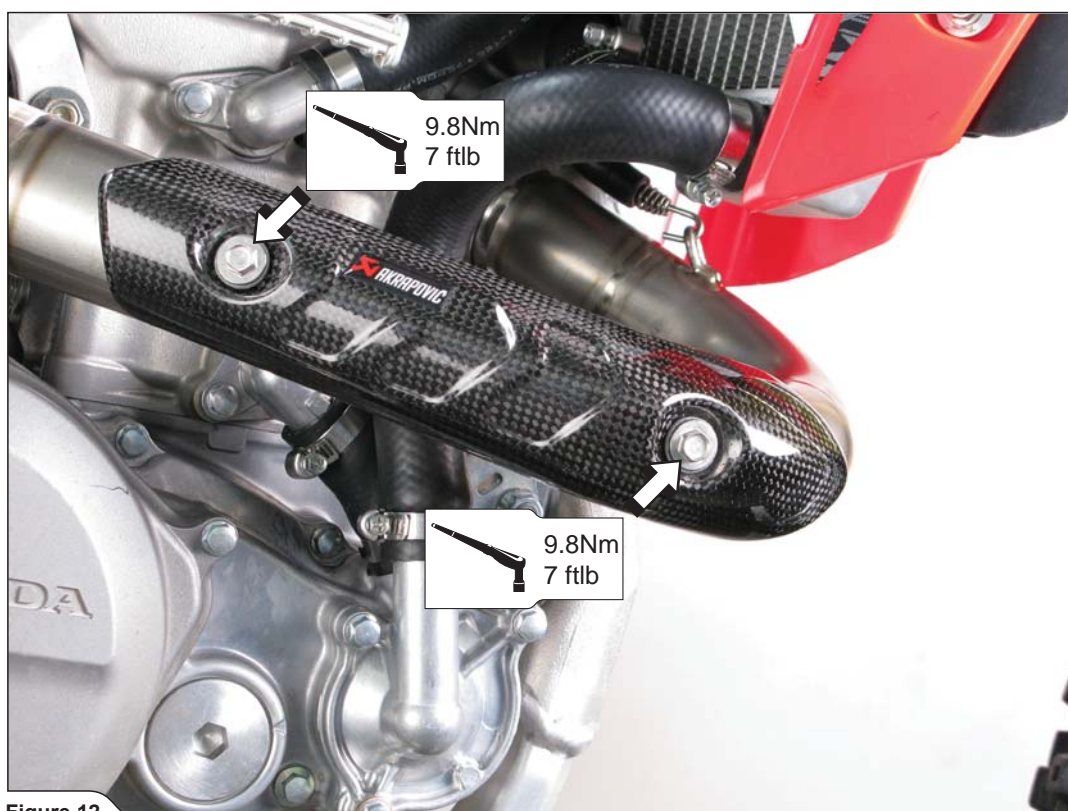


Figure 12

5. Assemble the clamp and u-clip cage nut from Akrapović installation kit onto the link pipe, as shown (Figure 13).

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



Figure 13

6. Position the link pipe correctly, slide it onto the outlet side of the header pipe; attach the spring and hand tighten the link pipe's bracket to the frame (using stock bolt) and clamp (Figure 14).

! **WARNING:** make sure, that spring pull the link pipe all the way onto the header pipe – use rubber mallet if necessary to tap the connection into place!

! **WARNING:** do not fully tighten the bracket bolt or clamp yet!



Figure 14

7. Assemble the aluminium bushes from Akrapovič installation kit into the rubber muffler's brackets, as shown (Figure 15, 16).



Figure 15

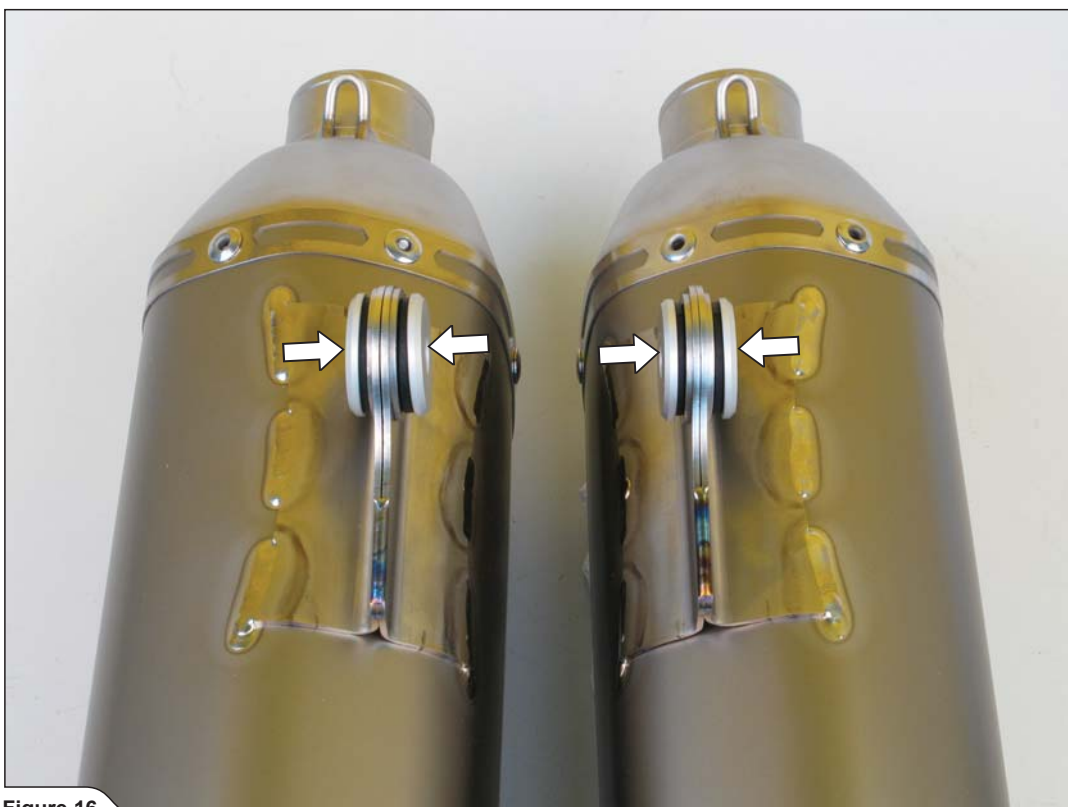


Figure 16

8. Position the mufflers correctly, slide them onto the outlets of the link-pipe and attach the springs. Align the mufflers in respect to the motorcycle and tighten the mufflers onto the sub frame, using bolts and washers from Akrapović installation kit (**Figure 17**).

! **WARNING:** make sure, that spring pull the mufflers all the way onto the link-pipe – use rubber mallet if necessary to tap the connections into place!

✂ **INSTALLATION TIP** (for Evolution exhaust system only): coat the interior side of the inlet bushes of the mufflers with Akrapović ceramic anti-seizing grease (white tube).



Figure 17

9. Tighten the link pipe's bracket bolt and clamp to the specified torque (**Figure 18**).

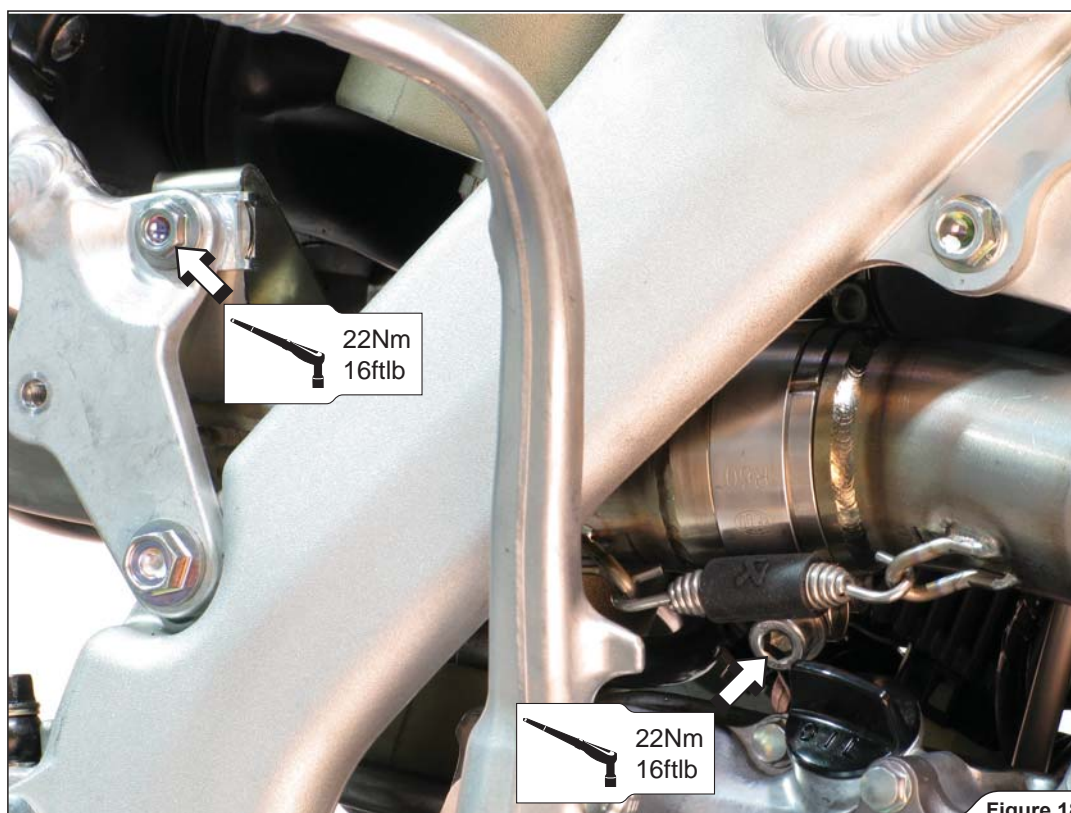


Figure 18

10. Reattach the mud guard (Figure 19).

! **CAUTION:** make sure not to damage any part of the motorcycle during this process!

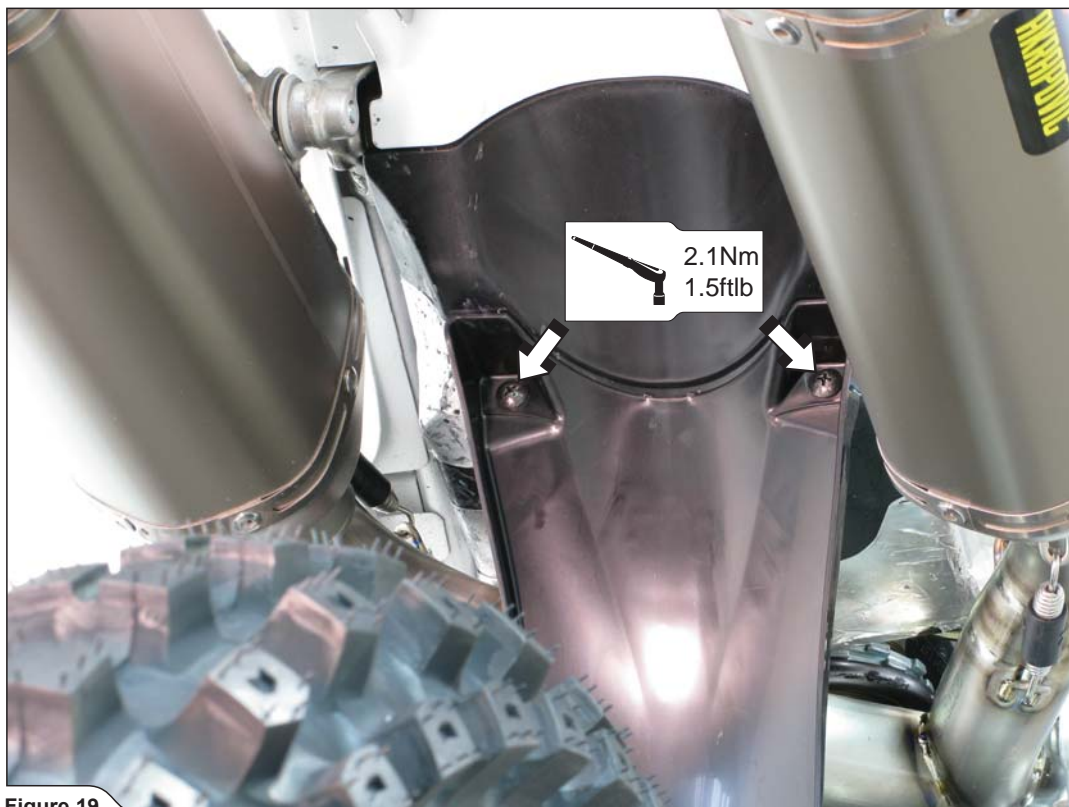


Figure 19

11. Reattach the right under seat panel and both side panels. Tighten the marked bolts on both sides of the motorcycle to the specified torques (Figure 20, 21).

! **CAUTION:** make sure not to damage any part of the motorcycle during this process!



Figure 20



Final installation:

Clean grease spots:

- a. Muffler – titanium outer sleeve: use a soft cloth sprayed with a multi-purpose spray lubricant (WD-40 or equivalent).
- b. Muffler – carbon-fiber outer sleeve: use a soft dry cloth.
- c. Muffler – carbon-fiber outlet cap: use a soft dry cloth.
- d. Stainless steel pipes: use a soft cloth sprayed with a contact cleaner, then wipe with a soft dry cloth.
- e. Titanium pipes: use a soft cloth sprayed with a multi-purpose spray lubricant (WD-40 or equivalent).

Cleaning will prevent spots from burning onto the surface. Do not use aggressive chemical cleaners, because they can damage the sticker.

! WARNING: make sure all the bolts are sufficiently tightened. In case the exhaust system touches the cowl or other parts repeat the adjustment of the exhaust system or contact your authorized dealer.

! WARNING: after running engine for 30 minutes, tighten the bolts of the Akrapovic carbon-fiber heat shield!

! IT IS NORMAL IF WHITE SMOKE COMES OUT OF THE MUFFLER ON FIRST OPERATION.

! DO NOT STAND BEHIND THE MUFFLER ON FIRST OPERATION.

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

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 the high temperatures.
2. Periodically make sure all the bolts and springs are sufficiently tight.

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.”

