

# Installation instructions

Akrapovič Exhaust Systems:

Slip-On

Slip-On with optional header set

Racing

for the

Yamaha WR450F



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 <u>installed by someone with sufficient knowledge</u> 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 <u>follow all installation instruction guidelines</u> 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. <u>Before removing the original exhaust system</u> 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 <u>photographs and pictures</u> 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:





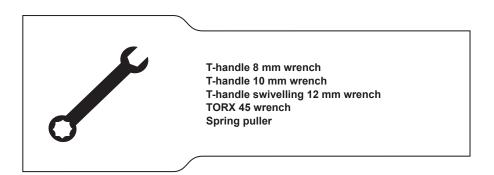
USE BOLT SEALANT; Apply 3 to 4 small drops of bolt sealant onto the cleaned and degreased threads before tightening the bolts. WARNING! Avoid contact with skin, eyes and mucous membranes. Do not inhale fumes. Keep out of reach of children.



**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.** 





BEFORE INSTALLING, CHECK SCHEMATIC OF THE EXHAUST SYSTEM!

- 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.

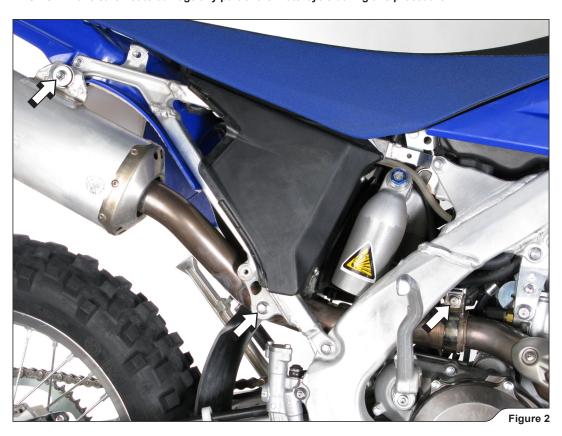


# **REMOVAL OF ORIGINAL EXHAUST SYSTEM:**

- 1. Put the motorcycle on a central racing stand. Make sure, that surface is solid and flat.
- 2. Unscrew the marked bolts and remove the right side panel (Figure 1).



- 3. Unscrew the marked clamp at header tube muffler pipe joint, muffler's bracket bolt and muffler pipe's bracket bolt. Carefully remove the original muffler off the motorcycle (Figure 2).
- ! CAUTION: make sure not to damage any part of the motorcycle during this procedure!



- For Racing and optional header set only: unscrew the marked nut and bolt and carefully remove the original header pipe off the motorcycle (Figure 3).
- CAUTION: make sure not to damage any part of the motorcycle during this procedure!



# INSTALLATION OF THE AKRAPOVIČ EXHAUST SYSTEM:

1. For Racing and optional header set only: set up the sleeve with the flange and springs, as shown (Figure 4).



Figure 4

- 2. **For Racing and optional header set only:** correctly install the assembled sleeve, flange and springs onto the cylinder head, using original nut and bolt; hand tighten the nut and bolt (**Figure 5**).
- WARNING: do not fully tighten the nut and bolt yet!
- > INSTALLATION TIP: use new original exhaust port gasket.



- 3. **For Racing and optional header set only:** assemble the heat shield bolts and heat resistant washers onto the carbon fiber heat shield, as shown **(Figure 6, 7).**
- WARNING: screw the heat resistant washers onto the bolts; do not try to push them on!



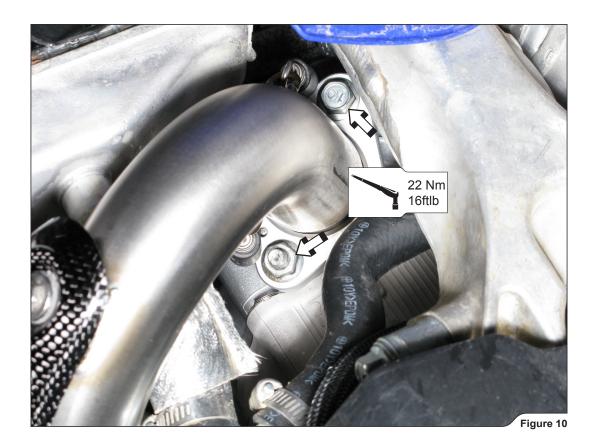


- For Racing and optional header set only: install the heat shield onto the header tube; tighten the bolts to a specified torque (Figure 8).
- WARNING: make sure, not to damage the heat shield, bolt threads or any other part, during this procedure!



- 5. **For Racing and optional header set only:** insert the header tube into the sleeve, attach the springs and tighten the nut and bolt to a specified torque **(Figure 9, 10).**
- WARNING: before tightening the nut and bolt, 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!





- For Racing and optional header set only: slide the clamp from Akrapovič installation kit onto the muffler's inlet, as shown; hand tighten the clamp (Figure 11).
- WARNING: do not tighten the clamp yet!
- CAUTION: do not insert the graphite gasket into the muffler's inlet (gasket is for Slip-On system only)!



- **For Slip-On only:** assemble the graphite gasket and clamp from Akrapovič installation kit onto the muffler's inlet, as shown; hand tighten the clamp **(Figure 12).**
- ļ WARNING: do not tighten the clamp yet!
- CAUTION: be careful not to damage the graphite gasket during this procedure!



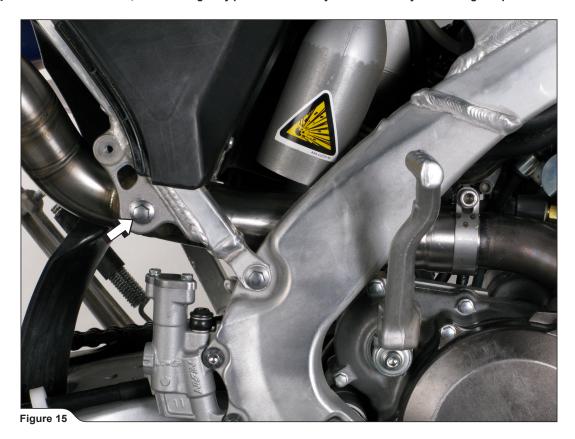
Figure 12

- 8. **For all systems:** correctly assemble the carbon-fiber clamp and slide it onto the muffler bear in mind the **left offset** of the carbon fiber clamp viewed from the rear **(Figure 13, 14).**
- WARNING: open the clamp slightly wider than the diameter of the outer sleeve of the muffler do not scrape it along the muffler outer sleeve!





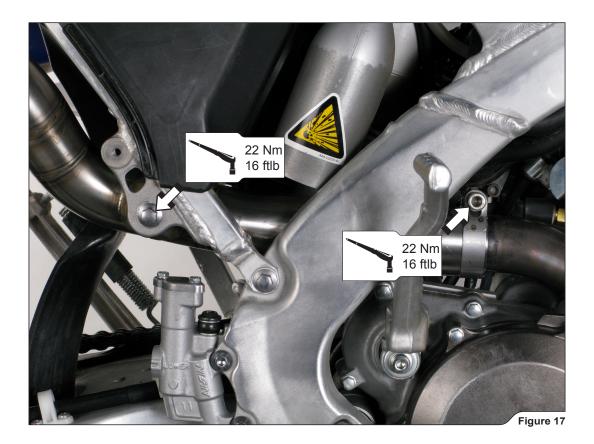
- 9. **For all systems:** position the muffler correctly and slide it onto the outlet side of the header pipe and hand tighten the market bolt; use original bolt (**Figure 15**).
- ! WARNING: make sure, not to damage any part of the motorcycle or exhaust system during this procedure!



10. **For all systems:** align the muffler in respect to the motorcycle and tighten the muffler clamp to the specified torque, using original bolt and washer **(Figure 16).** 



11. For all systems: tighten the link pipe bracket and the metal clamp to a specified torque (Figure 17).



12. For all systems: reattach the right side panel and tighten the marked bolts to a specified torque (Figure 18).



#### 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. Stainless steel muffler link pipe and header tube: use a soft cloth sprayed with a contact cleaner, then wipe with a soft dry cloth

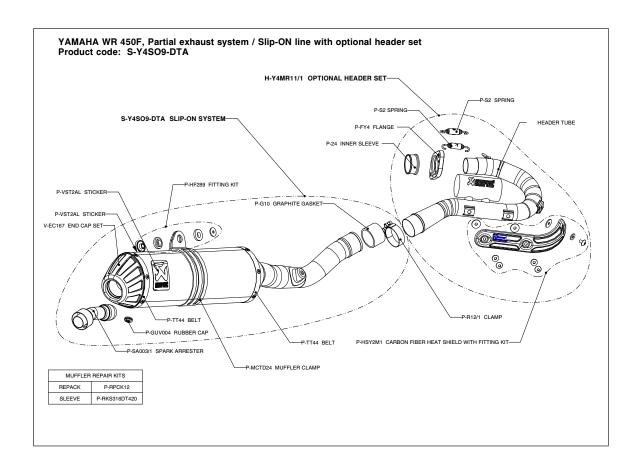
Cleaning will prevent spots from burning onto the surface. Do not use aggressive chemical cleaners, because they can damage the sticker.

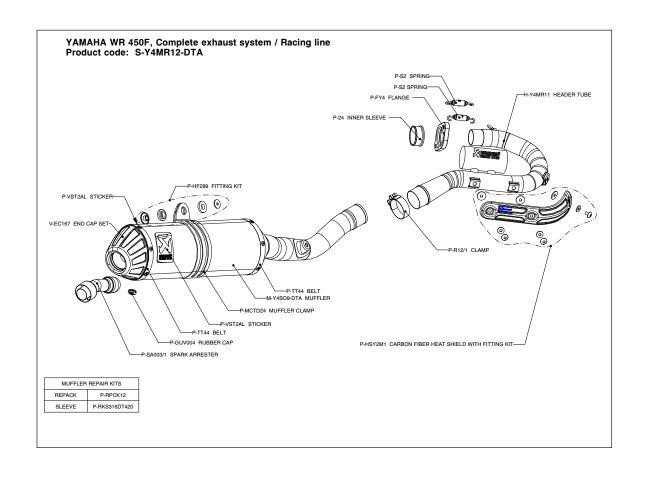
- ! WARNING: after running the engine for 30 minutes, retighten the bolts of the Akrapovic carbon-fiber heat shield!
- ! WARNING: make sure all the bolts are sufficiently tightened. In case the exhaust system touches the cowling or other parts repeat the adjustment of the exhaust system or contact your authorized dealer.
- ! WARNING: check vehicle manufacturer manual for tightening torques (for dismounted stock parts)!
- 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."