

# Installation instructions

Akrapovič Exhaust Systems

Evolution Line

for the

KAWASAKI Ninja H2R (ZX1000P. / ZXT00P.)

KAWASAKI Ninja H2 (ZX1000N. / ZXT00N.)



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.
- 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**

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#### **Registered Community Design**

RCD 002487314-001

#### 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:





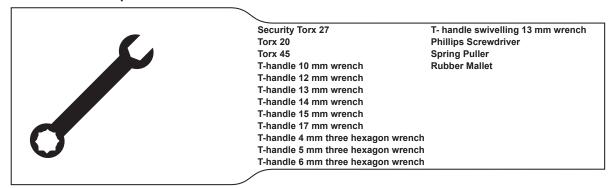
**USE BOLT SEALANT**; Apply 3 to 4 small drops of bolt sealant onto the cleaned and degreased threads before tightening the bolts. **WARNING!** Avoid contact with skin, eyes and mucous membranes. **Do not inhale fumes. Keep out of reach of children.** 



**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.** 





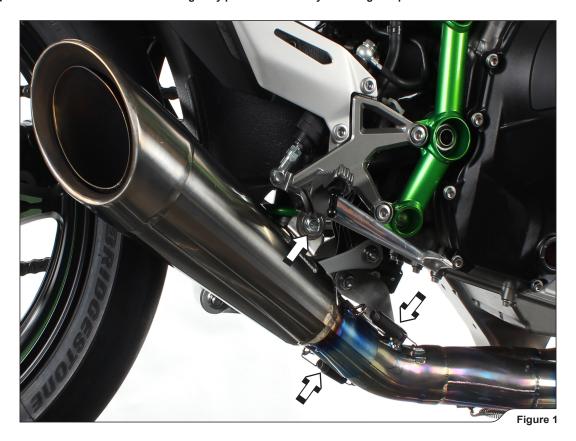
BEFORE INSTALLING, CHECK THE PARTS LIST AND SCHEMATIC DRAWING OF THE EXHAUST SYSTEM! THE LATEST VERSION OF THE PARTS LIST AND SCHEMATIC DRAWINGS OF THE PRODUCTS ARE AVAILABLE ON OUR WEB PAGE.

- 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.
- THIS MANUAL IS SPECIFIC TO THE KAWASAKI NINJAH2R. THERE MAY BE SOME DIFFERENCES IN INSTALLATION PROCEDURES FOR OTHER MODELS.
  - AKRAPOVIČ MAKES EVERY EFFORT TO PROVIDE IMPROVED CORNERING CLEARANCE FOR EXHAUST SYSTEMS. HOWEVER, DUE TO DESIGN AND SPACE LIMITATIONS ON SOME MOTORCYCLE MODELS, GROUND AND CORNERING CLEARANCE MAY NOT IMPROVE OR MAY EVEN BE REDUCED. FOR ADVANCED USERS, WE RECOMMEND INCREASING THE SPRING PRELOAD SETTINGS TO IMPROVE GROUND CLEARANCE.



## REMOVAL OF THE STOCK EXHAUST SYSTEM NINJA H2R:

- 1. Put the motorcycle on a side stand, we recommend a racing stand.
- 2. Unhook two marked springs, unscrew marked bolt and remove the stock muffler off the motorcycle (Figure 1).
- ! CAUTION: be careful not to damage any part of the motorcycle during this procedure!

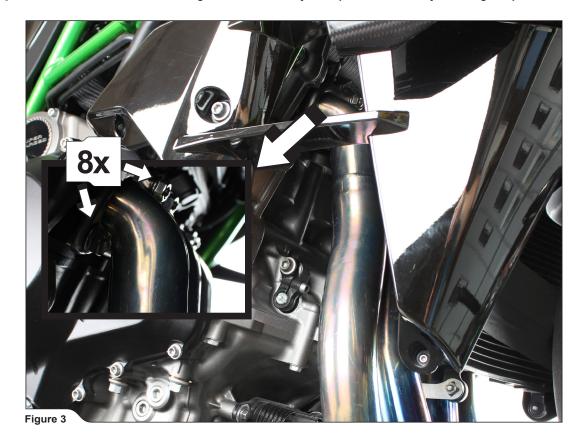


- 3. Unhook two springs (marked with the bottom arrow), unscrew marked bolt and remove stock link pipe off the motorcycle (Figure 2).
- ! CAUTION: be careful not to damage any part of the motorcycle during this procedure!



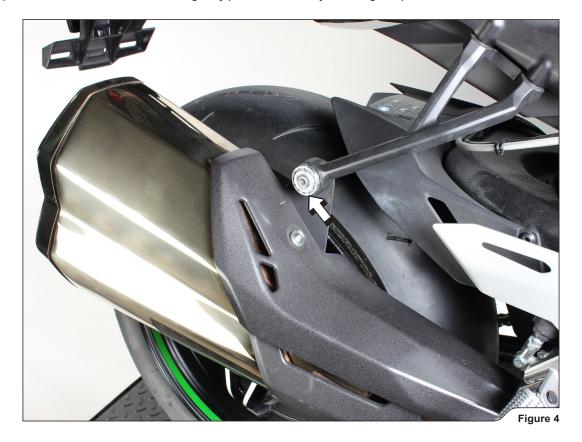
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- 4. Removal of stock collectors and headers can be achieved in one single step. Unscrew 8 nuts attaching headers to the motorcycle. Then carefully remove stock headers from the motorcycle (**Figure 3**).
- WARNING: be careful not to damage the radiator or any other part of the motorcycle during this process!

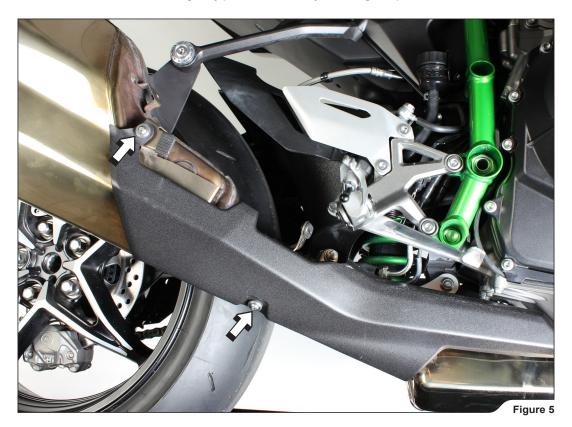


## REMOVAL OF THE STOCK EXHAUST SYSTEM NINJA H2:

- 1. Put the motorcycle on a side stand, we recommend a racing stand.
- 2. Unscrew marked bolt and carefully remove upper heat shield off the motorcycle (Figure 4).
- ! CAUTION: be careful not to damage any part of the motorcycle during this procedure!



- 2. Unscrew marked bolts and remove lower heat shield off the motorcycle (Figure 5).
- ! CAUTION: be careful not to damage any part of the motorcycle during this procedure!



- Loosen the metal clamp at the muffler-collector connection and unscrew the muffler hanging bracket bolt (Figure 6).
   Remove the muffler off the motorcycle.
- ! CAUTION: be careful not to damage any part of the motorcycle during this procedure!



- 4. Remowe the exhaust support bracket. You do this by unscrewing marked bolts on the right hand side of the motorcycle (Figure 7).
- ! CAUTION: be careful not to damage any part of the motorcycle during this procedure!



5. Use motorcycle's key to unlock and remove the back rest of the seat (Figure 8).



- 6. Once back rest is removed, unscrew the market bolts. This will enable you to remove leather sitting area (Figure 9).
- ! CAUTION: be careful not to damage any part of the motorcycle during this procedure!



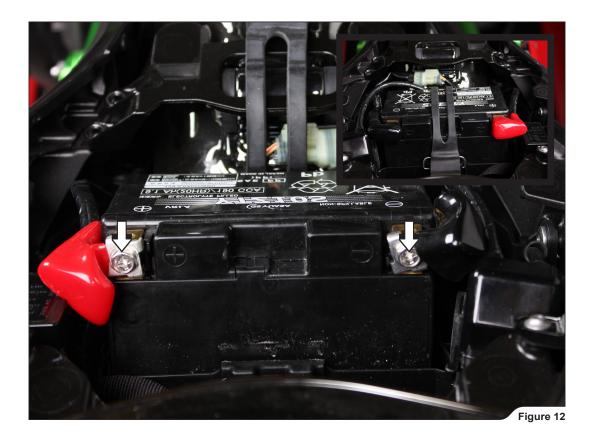
- Unscrew the marked bolts in order to remove the left and right side panels (in total 4 panels). Please note that locations of the bolts are simetrical on each side (Figure 10).
- ! CAUTION: be careful not to damage any part of the motorcycle during this procedure!



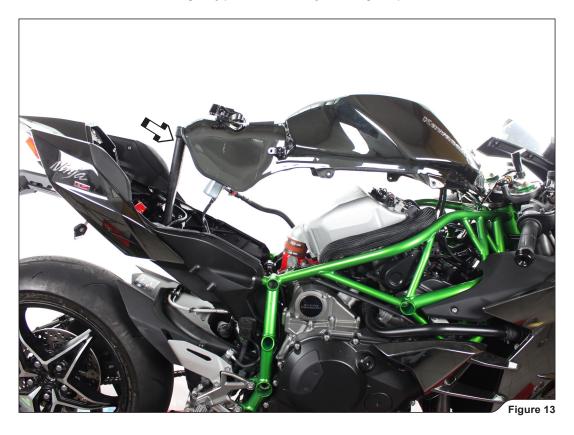
- 8. Further deinstalation requires lifting of the fuel tank cover. Unscrew marked bolts, as shown (Figure 11).
- ! CAUTION: be careful not to damage any part of the motorcycle during this procedure!



9. Remove the battery by releasing the spring and unscrewing the positive and negative contact points, as shown **(Figure 12)**.



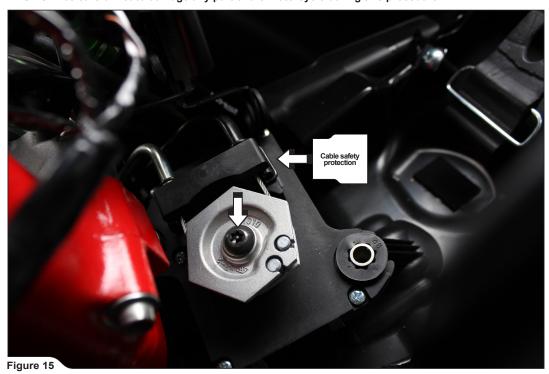
- 10. Lift the fuel tank cower and support it with some gentle spacer (we used rubber mallet), as shown (Figure 13).
- ! CAUTION: be careful not to damage any part of the motorcycle during this procedure!



- 11. Now you have access to the servo motor, which operates the exhaust valves. Unscrew the marked bolt and carefully lift up the servo motor's cover (Figure 14).
- CAUTION: be careful not to damage any part of the motorcycle during this procedure!

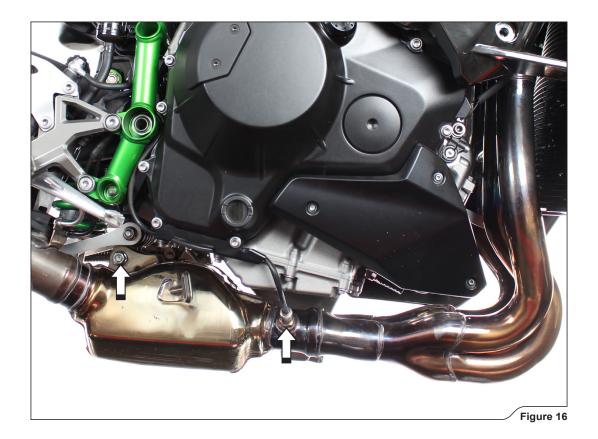


- 12. Remove the cable safety protection, unscrew marked bolt and remove the cables (Figure 15). Note that cables are still fixed on another side to the stock link pipe, which is alright. Link pipe will be removed together with the cables. Reinstall valve's servo motor cover, battery, fuel tank cover, pannels and seat back onto the motorcycle in reverse order from the order in which it was removed.
- CAUTION: be careful not to damage any part of the motorcycle during this procedure!



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13. Before completely removing the stock link pipe, unscrew lambda sensors and unscrew marked bolt (Figure 16).



- 14. Removal of stock collectors and headers can be achieved in one single step. Unscrew 8 nuts attaching headers to the motorcycle. Then carefully remove stock headers from the motorcycle (**Figure 17**).
- ! WARNING: be careful not to damage the radiator or any other part of the motorcycle during this process!



# **INSTALLATION OF THE AKRAPOVIČ EXHAUST SYSTEM:**

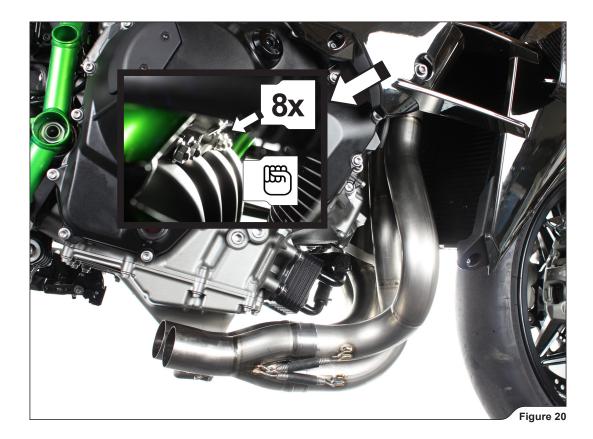
Prepaire and position Akrapovič headers correctly onto the cylinder head outlets and slide them in. Hand tighten the headers only (Figure 18, 19, 20).







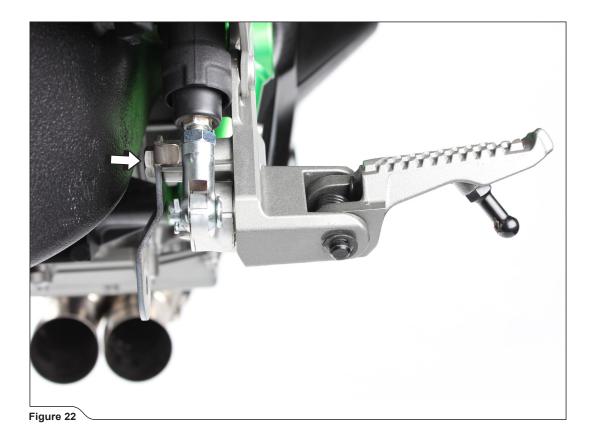
WARNING: be careful not to damage the radiator or any other part of the motorcycle during this process!



- 3. **For Ninja H2R model only:** To remove the original stock exhaust bracket, firstly remove two marked bolts. This will make foot rest bracket partially movable, enough to gain place for removal of the stock exhaust bracket (**Figure 21**).
- ! CAUTION: be careful not to damage any part of the motorcycle during this procedure!



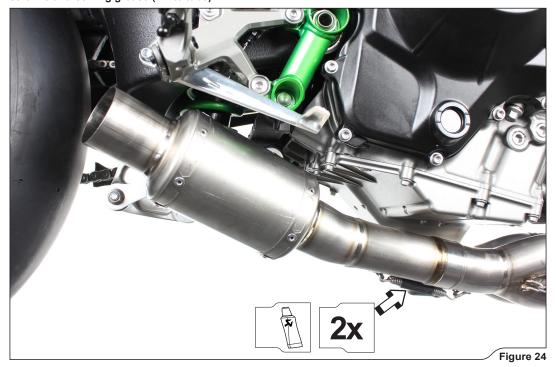
4. **For Ninja H2R model only:** Unscrew marked bolt, which is behind the foot rest bracket. Then remove the bracket and tighten back the bolt (**Figure 22**).



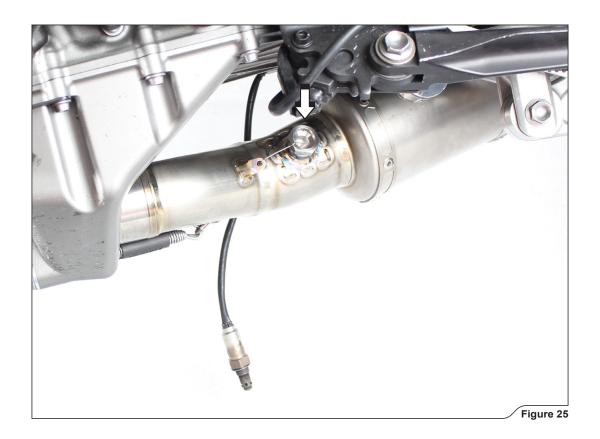
5. **For Ninja H2R model only:** Apply some non-permanent thread locking agent and tighten back all the unscrewed bolts from step 3 **(Figure 23).** 



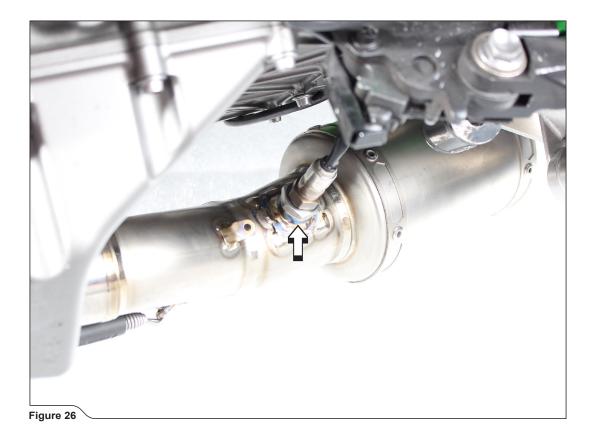
- 6. Slide Akrapovič link pipe correctly into the collector's outlet and attach it with 2 springs from Akrapovič installation kit (Figure 24).
- ! CAUTION: be careful not to damage any part of the motorcycle during this procedure!
- MARNING: make sure, that springs pull the collectors all the way onto the link pipe use rubber mallet if necessary to tap the connections into place!
- INSTALLATION TIP: coat the interior side of the inlet bushes of the titanium collectors with Akrapovič ceramic anti-seizing grease (white tube).



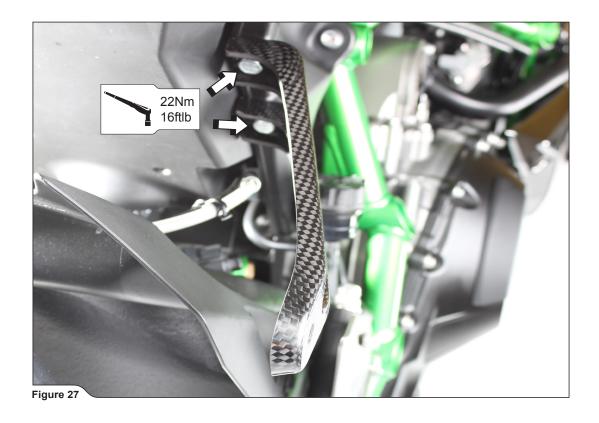
7. For Ninja H2 model only: Remove the plug which will be replaced by lambda sensor (Figure 25).



- 8. For Ninja H2 model only: Install the lambda sensor into the link pipe, as shown (Figure 26).
- WARNING: make sure not to damage the lambda sensor's electrical lead during this procedure!



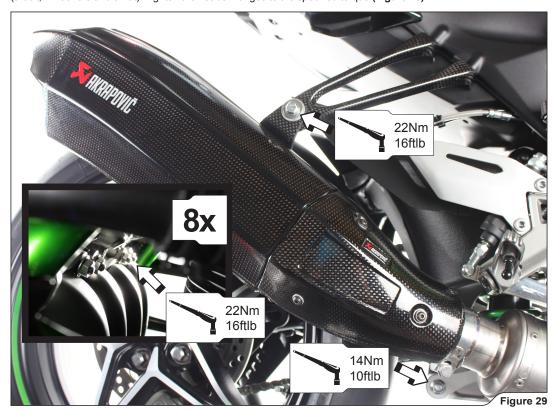
9. Install the Carbon Fiber Bracket onto the right hand side of the sub frame, using 2 bolts and 2 washers from Akrapovič installation kit, as shown (Figure 27).



10. Install the clamp from Akrapovič installation kit onto the muffler's inlet, as shown (Figure 28).



11. Position the muffler correctly and slide it onto the outlet of the stock collector. Align the muffler in respect to the motorcycle and tighten the muffler bracket to the right side of the Carbon Fiber Bracket using material from Akrapovič installation kit (a bolt, 2 washers and a nut). Tighten the header flanges to the specified torque (Figure 29).



- 12. Remove marked warning sticker "DO NOT UNFASTEN" from the muffler, before first use (Figure 30).
- ! WARNING: do not untighten glued muffler bracket bolts in any case!



## 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. Chrome plated parts: use a soft dry cloth.
- f. 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 cowling or other parts repeat the adjustment of the exhaust system or contact your authorized dealer.
- ! WARNING: after running engine for 30 minutes, retighten 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."



