

# Installation instructions

Akrapovič Exhaust System

Racing & Evolution

for the

Honda CBR 1000RR

Honda CBR 1000RR ABS

Congratulations on purchasing the Akrapovič exhaust system.

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 motorcycle 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.

## **GENERAL INFORMATION**

Your safety is our number one priority. Please ride your motorcycle 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 motorcycle 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

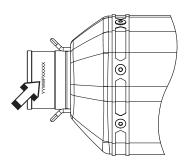
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Any reproduction, technical or other manipulation, translation, or other use of the copyright and/or trademark rights contained herein is prohibited without the explicit prior written consent of Akrapovič. The same especially applies to the entire contents of this manual and/or any of its parts, including but not limited to technical specifications, instructions, graphs, photographs, and so on included in this manual.

# 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 MOTORCYCLE INDICATED ON THE COVER PAGE, FOR WHICH
  IT IS DESIGNED. INSTALLATION PROCEDURES VARY DEPENDING ON THE TYPE OF
  MOTORCYCLE. PLEASE VERIFY THAT THE AKRAPOVIČ EXHAUST SYSTEM AND THIS
  INSTALLATION MANUAL CORRESPOND TO THE TYPE OF YOUR MOTORCYCLE.
- 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 MOTORCYCLE IS **SECURELY POSITIONED TO PREVENT TIPPING OVER** AND DAMAGE TO YOURSELF AND OTHERS, OR THE MOTORCYCLE.
- PLEASE CHECK THE PARTS YOU RECEIVED AGAINST THE PARTS LIST AVAILABLE ON OUR
  WEBSITE. 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.
- ALWAYS SECURE YOUR MOTORCYCLE'S GROUND CLEARANCE. FOR ADVANCED USERS, WE RECOMMEND YOU CHECK THE MOTORCYCLE SPRING PRELOAD SETTINGS TO OPTIMIZE GROUND CLEARANCE WHERE POSSIBLE.
- 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
  INLET PIPE. PLEASE REFER TO THE PICTURE 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.





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. 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.

#### **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.

#### **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**

- · T-handle 8 mm wrench
- · T-handle 10 mm swiveling wrench
- T-handle 12 mm wrench
- T-handle 4 mm three hexagon wrench
- · T-handle 5 mm three hexagon wrench
- · T-handle 8 mm three hexagon wrench
- · Combination 12 mm wrench
- Combination 17 mm wrench
- · Combination 22 mm wrench
- Spring puller
- · Small cross head screwdriver
- Cutting pliers

### **PARTS LIST**

The following parts should be found in the box:

- Installation Manual
- Homologation certificate/ compliance documents if applicable
- Warranty
- Fitting material
- Muffler and pipes

# **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 motorcycle on a side stand, we recommend a racing stand. Make sure, that surface is solid and flat. Unscrew and remove the plastic fasteners from the cover of the servo motor (Figure 1). Disconnect and remove the exhaust valve cable and than reattach the plastic servo motor's cover onto original position (Figure 2).



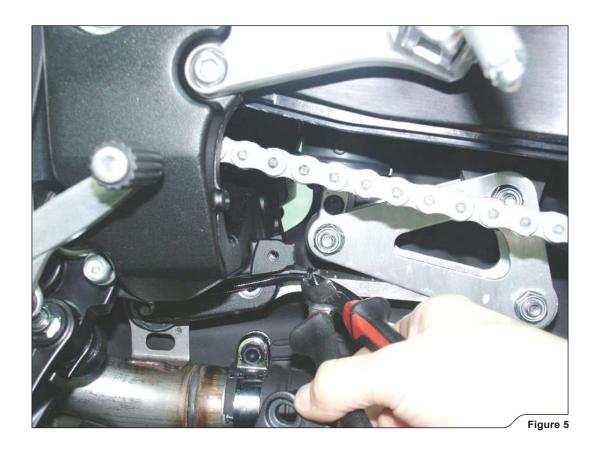


3. Unscrew the bolt from the muffler chassis hanging bracket (Figure 3). Unscrew the bolts from the left lower part of the cowling (Figure 4).





4. Cut the plastic tie which holds the lambda sensor cable and than unscrew the lambda sensor (Figure 5, 6).





5. Unscrew the bolt from the metal clamp at the muffler - link pipe joint and remove the muffler (Figure 7, 8).





6. Unscrew the bolts from the right lower part of the cowling (Figure 9, 10).





7. Remove the lower part of the cowling then unscrew the bolts and remove the plastic fasteners from the left and right side of the cowling (Figure 11, 12, 13, 14, 15, 16, 17, 18, 19, 20).



















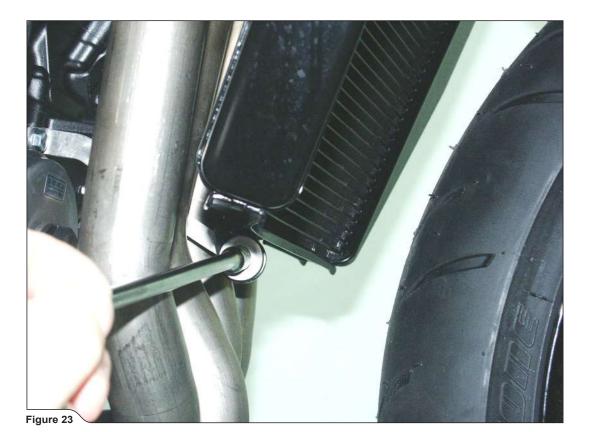


8. Disconnect the vacuum pipes and turn signals electrical connectors (Figure 21, 22).





- Unscrew the bolt from the lower water cooler hanging bracket and slightly remove the cooler (Figure 23). IMPORTANT: do not disconnect the cooling system tubes!
  Unscrew the bolts from the header tube flanges (Figure 24).





10. Unscrew the bolt from chassis hanging bracket of stock headers (Figure 25) and remove the stock header tubes (Figure 26).



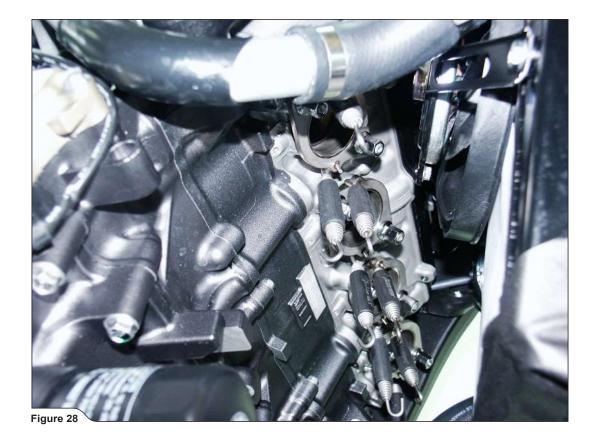


# INSTALLATION OF THE AKRAPOVIČ RACING OR EVOLUTION EXHAUST SYSTEM:

- Set up the sleeves together with the flanges and springs. Make sure they are correctly oriented and that the holes for attaching the springs line up with the loops on the header tubes. Do not tighten up the flanges (Figure 27, 28).
- IMPORTANT: make sure not to damage the cooling fins!







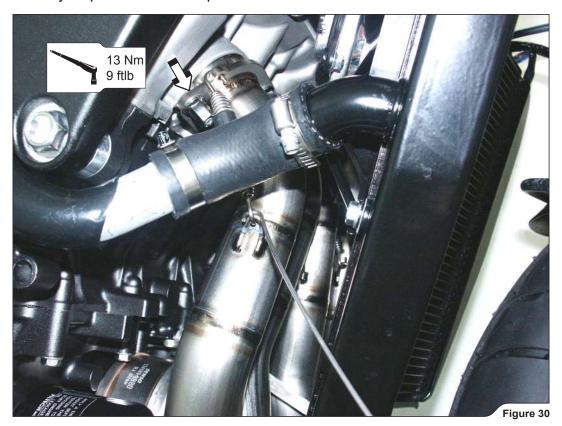
**X** AKRAPOVIĆ

- 2. Put headers and collectors together and attach the springs; make sure they are correctly oriented (Figure 29).
- IMPORTANT: make sure, that springs pull the collectors all the way onto the headers use rubber mallet if necessary to tap the connections into place!

For Evolution exhaust only: coat the interior side of the input bushes of the titanium collectors with Akrapovic



- Figure 29
- 3. Insert the header tubes properly, attach the springs and tighten the flanges;make sure not to damage the cooling fins (Figure 30).Reattach the cooler to the bracket; (Tightening torque for cooler bolt: 9.8Nm / 7ftlb).
- IMPORTANT: make sure, that springs pull the headers all the way into the sleeves use rubber mallet if necessary to tap the connections into place!

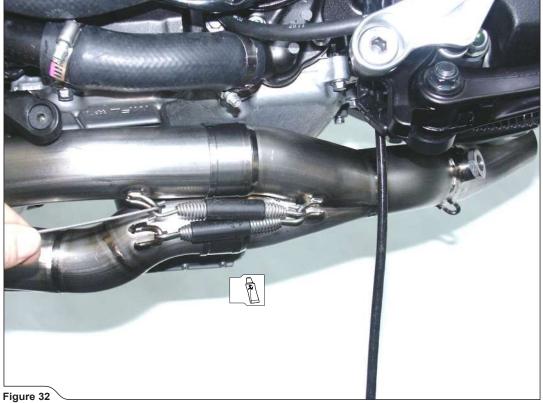


Tighten the reduction nut to the link pipe (Figure 31).

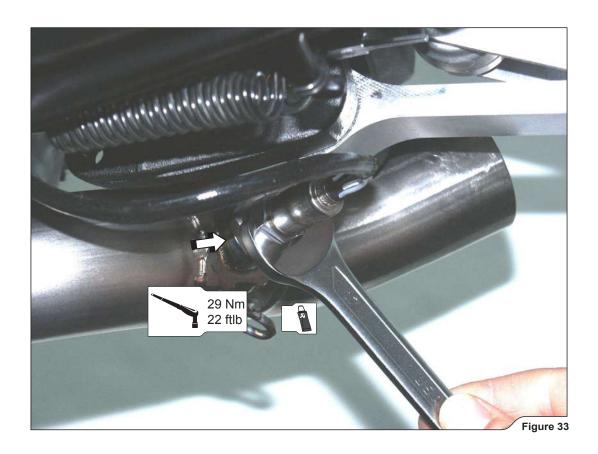


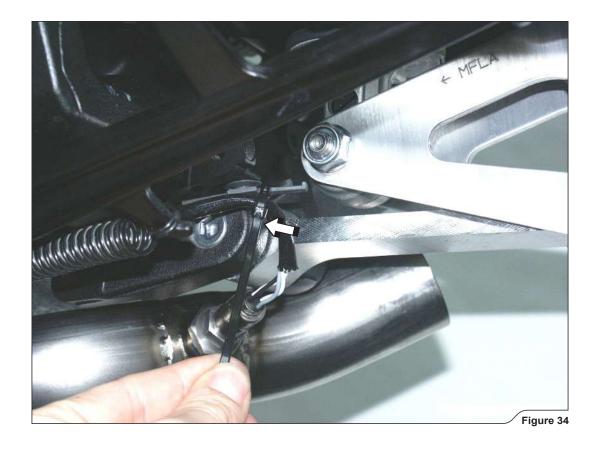
- Slide the link pipe onto the collectors and attach the springs (Figure 32). For Evolution exhaust only: coat the interior side of the input bushes of the titanium link pipe with Akrapovic ceramic anti-seizing grease (white tube).

  IMPORTANT: make sure, that springs pull the link pipe all the way onto the collectors – use rubber mallet
- if necessary to tap the connections into place!



6. Tighten the lambda sensor. Make sure not to damage the sensor's electrical lead (Figure 33). Fix the lambda sensor electrical lead with plastic tie onto the plastic bracket and cut away excess of the tie (Figure 34).





7. Remove the rubber dampers and the metal collar from the muffler bracket (Figure 35). Remove the footrest and put the 5 mm aluminium distance bushes under the footrest than reattach the footrest with the stock bolts (Figure 36).





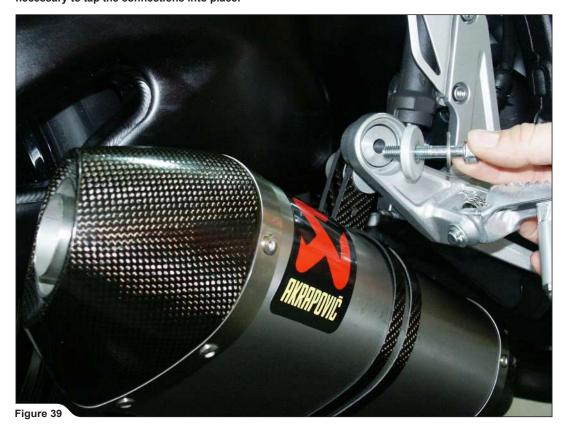
8. Insert the aluminium bush to the muffler bracket (Figure 37).



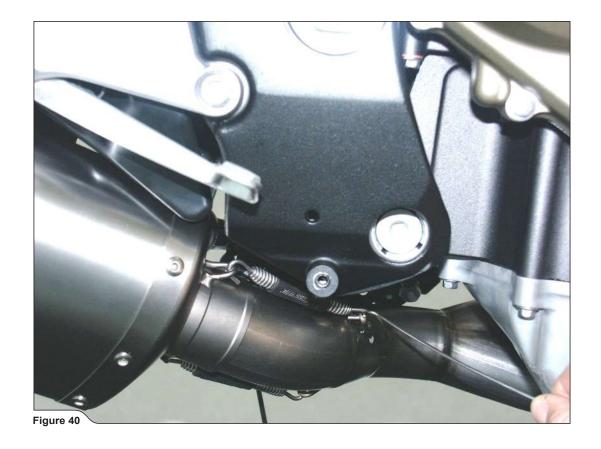
- 9. Correctly position the carbon-fiber clamp and slide it onto the muffler bear in mind the **left offset** of the carbon-fiber clamp viewed from the rear **(Figure 38).**
- IMPORTANT: open the clamp slightly wider than the diameter of the outer sleeve of the muffler do not scrape it along the muffler outer sleeve!



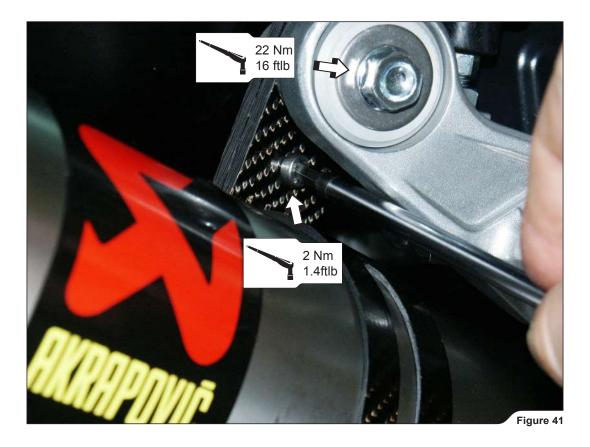
- 10. Position the muffler correctly and slide onto the outlet side of the link pipe, hand tighten the muffler clamp to the bracket and attach the springs (Figure 39, 40).
- IMPORTANT: make sure, that springs pull the muffler all the way onto the link pipe use rubber mallet if necessary to tap the connections into place!

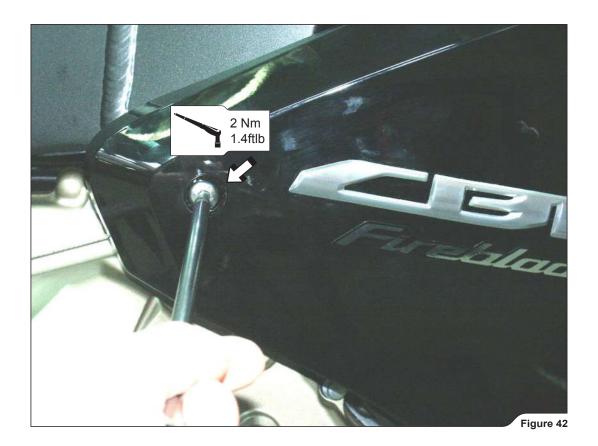


11. **For Evolution exhaust only:** coat the interior side of the input bush of the muffler with Akrapovic ceramic antiseizing grease (white tube).



12. Tighten the bolts on the carbon-fiber clamp and clamp to stock muffler bracket joint (Figure 41). Make sure the link pipe or muffler are not touching the frame, swing arm or any other part of the motorcycle. Attach the cowlings in the reverse order from the order in which they were removed (Figure 42).





### FINAL INSTALLATION AND MAINTENANCE:

Clean grease spots off all exhaust system surfaces, when installation is finished. Cleaning will prevent spots from burning onto the surface. Do not use aggressive chemical cleaners, because they can damage the surface or sticker.

- 1. Muffler titanium outer sleeve: use a soft cloth sprayed with a multi-purpose spray lubricant (WD-40<sup>®</sup> or equivalent)\*.
- 2. Muffler carbon-fiber outer sleeve: use a soft dry cloth sprayed with all purpose foam cleaner, then wipe with a soft dry cloth.
- 3. Muffler carbon-fiber outlet cap: use a soft dry cloth sprayed with all purpose foam cleaner, then wipe with a soft dry cloth.
- 4. Painted mufflers and parts use a soft cloth sprayed with all purpose foam cleaner, then wipe with a soft dry cloth.
- 5. Chrome plated mufflers and parts: use a soft cloth sprayed with all purpose foam cleaner, then wipe with a soft dry cloth.
- 6. Stainless steel pipes: use a soft cloth sprayed with a contact cleaner, then wipe with a soft dry cloth.
- 7. Titanium pipes: use a soft cloth sprayed with a multi-purpose spray lubricant (WD-40<sup>®</sup> or equivalent)\*.

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

- IMPORTANT: 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!
- CAUTION: after running engine for 30 minutes, retighten the bolts of the Akrapovič carbon-fiber heat shield!
- INSTALLATION TIP: IT IS NORMAL IF WHITE SMOKE COMES OUT OF THE MUFFLER DURING THE FIRST 100 KM AFTER REPLACEMENT.
- INSTALLATION TIP: A CHANGE IN THE COLOR OF THE EXHAUST SYSTEM IS NORMAL DUE TO THE HIGH TEMPERATURES.
- CAUTION: DO NOT STAND BEHIND THE MUFFLER AT ANY TIME.
- IMPORTANT: DO NOT USE AUTOMOTIVE WHEEL CLEANERS OR ANY CLEANING PRODUCTS
  WHICH CONTAIN ACIDIC ADDITIVES TO CLEAN AKRAPOVIČ EXHAUST SYSTEMS.

<sup>\*</sup>WD-40<sup>®</sup> is a trademark of the WD-40 Company.

# **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

