

Installation instructions

Akrapovič Exhaust Systems **Racing&Evolution** for the **BMW S1000RR 2010**



www.akrapovic.com

Congratulations on purchasing an Akrapovič exhaust system. Please read these installation instructions carefully. If you have any trouble installing the system please contact your authorized dealer!

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.

Trademarks

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Akrapovič website

Information about Akrapovič exhaust systems and related products is available on the Akrapovič website at: http://www.akrapovic.com

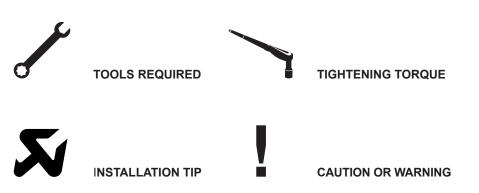
Copyright

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Symbols

The following symbols are used throughout these installation instructions:





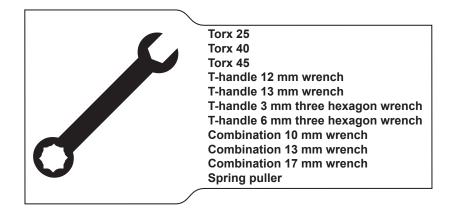
USE BOLT SEALANT; Apply 3 to 4 small drops of bolt sealant onto the cleaned and degreased threads before tightening the bolts. **WARNING! Avoid contact with skin, eyes and mucous membranes. Do not inhale fumes. Keep out of reach of children.**



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.





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:

- Put the motorcycle on a side stand, we recommend a racing stand.
 Unscrew the marked bolts from the muffler hanging bracket and the metal clamp at the muffler-collector connection (Figure 1). Remove the muffler together with heatshield.



Remove the metal collar and rubber damper from the stock muffler hanging bracket (Figure 2). 3.



Figure 2

4. Unscrew both rider's seat screws and remove the seat (Figure 3).



5. Unscrew marked bolts and remove the fuel tank side covers on both sides of the motorcycle (Figure 4).



- 6. Remove the stock exhaust valve cables from servo motor (Figure 5).
- ! WARNING: do not turn the the servo motor wheel with force or the servo motor could be damaged!
- WARNING: do not disconnect the servo's elecrical connector or remove the servo motor off the vehicle!



- 7. Free the cables from the motorcycle (Figure 6).
- WARNING: make sure not to scratch or damage any part of the motorcycle during removal of the cables!



6

8. Unscrew the marked bolts on both sides of the motorcycle and remove the lower and middle parts of the cowling (Figure 7, 8, 9).









WARNING: disconnect the turn signal elecrical connectors during removal of the middle cowling (Figure 9)!

- 9. Pull the radiator's bracket off the radiators (Figure 10).
- WARNING: make sure not to damage the radiator's cooling fins!



10. Unscrew the radiator's bracket off the engine block and both lambda sensors (Figure 11).



- 11. Remove the header tubes valve cable from servo motor (Figure 12).
- WARNING: do not turn the the servo motor wheel with force or the servo motor could be damaged!
- WARNING: do not disconnect the servo's elecrical connector or remove the servo motor off the vehicle!



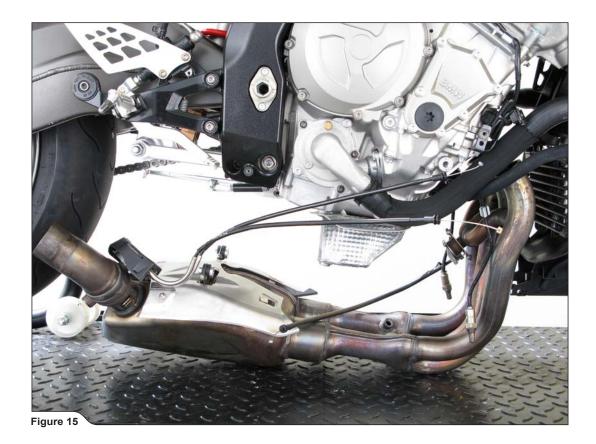


- 12. Unscrew all nuts from the front header tube flanges (Figure 13).
- WARNING: make sure not to damage the radiator's cooling fins!



- 13. Unscrew the market bolt on both sides of the motorcycle and remove the stock exhaust off the motorcycle (Figure 14, 15).
- WARNING: support the stock exhaust during this procedure or it may fall of and damage you or the motorcycle!







INSTALLATION OF THE AKRAPOVIČ RACING OR EVOLUTION EXHAUST SYSTEMS:

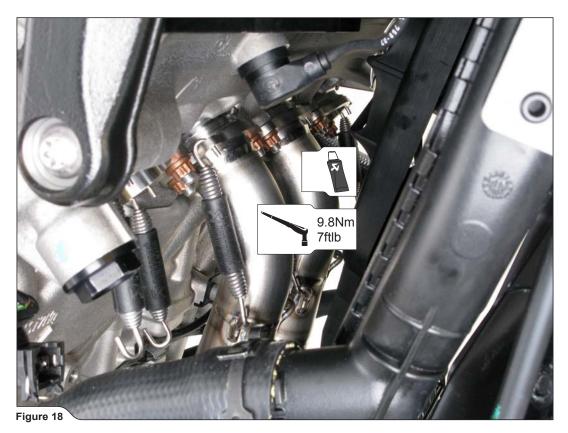
- 1. Set up and hand tighten the sleeves together with the flanges and springs onto the cylinder head; make sure they are correctly oriented (Figure 16, 17).
- WARNING: do not fully tighten the flanges yet! !



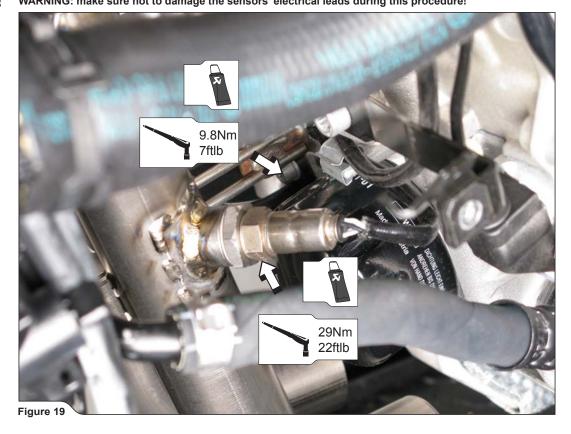


Figure 17

- 2. Insert the middle header tubes all the way into the sleeves together, attach the springs and tighten the middle flanges to a specified torque (Figure 18).
- WARNING: use anti-seize copper paste on all nut threads!



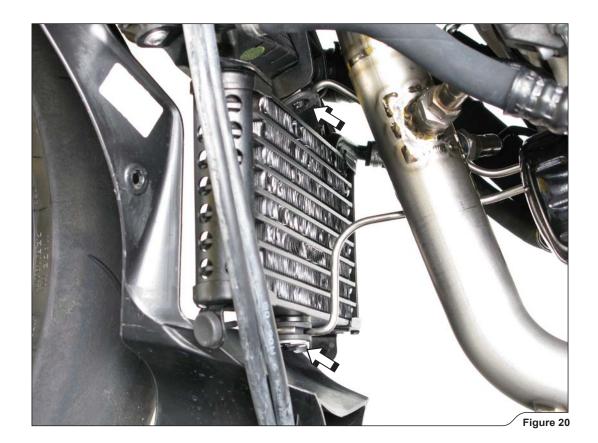
- 3. Tighten the lambda sensors into the middle header tubes and radiator bracket onto the cylinder block. Attach the sensor's electrical leads into the stock electrical lead brackets, as shown (Figure 19).
- WARNING: grease only the threads of the lambda sensor with Akrapovič anti-seize lead-free copper paste!
 WARNING: make sure not to damage the sensors' electrical leads during this procedure!



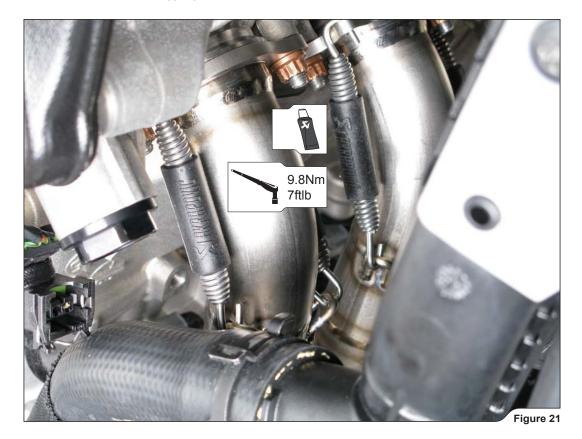
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13

4. Attach the radiator bracket onto the radiators (Figure 20).



- 5. Insert the outer header tubes all the way into the sleeves, attach the springs and tighten the outer flanges to a specified torque (Figure 21).
- WARNING: use anti-seize copper paste on all nut threads!



- 6.
- Assemble the collectors with link pipe as shown and attach the springs (Figure 22). WARNING: make sure, that springs pull the link pipe all the way onto the collectors use rubber mallet if neces-1 sary to tap the connections into place!
- INSTALLATION TIP: for Evolution exhaust sistem, coat the interior side of the input bushes of the titanium collector with Akrapovič ceramic anti-seizing grease(white tube). Я



- Slide the assembled link pipe and collectors onto the header tubes and attach the springs (Figure 23).
- 7. WARNING: make sure, that springs pull the collectors all the way onto the headers - use rubber mallet if necessary to tap the connections into place!
- INSTALLATION TIP: for Evolution exhaust sistem, coat the interior side of the input bushes of the titanium collector with Akrapovič ceramic anti-seizing grease(white tube). ۶





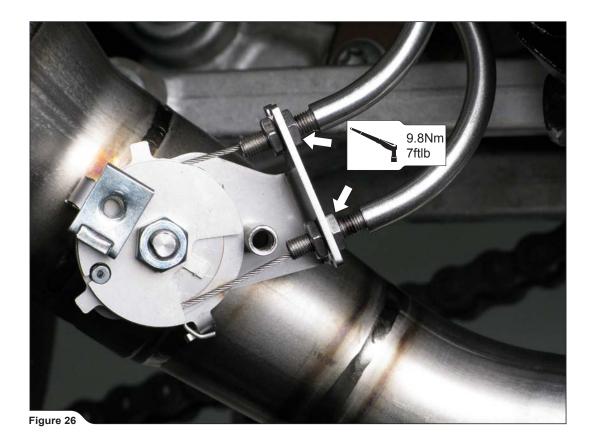
- 8. For street legal Racing and Evolution only: remove the stock exhaust cables off the stock exhaust valve and install them back onto the exhaust valve servo motor (Figure 24).
- WARNING: make sure, that you don't swap the two cables!
- WARNING: do not turn the the servo motor wheel with force or the servo motor could be damaged!



- 9. For street legal Racing and Evolution only: direct the exhaust valve cables to the Akrapovič exhaust valve (Figure 25).
- WARNING: make sure, that you don't swap the two cables!



10. For street legal Racing and Evolution only: set the cable adjusters on the middle of the cable bracket, as shown. Tighten the cable adjusters nuts to a specified torque (Figure 26).



11. For street legal Racing and Evolution only: tighten the carbon-fiber heatshield onto the exhaust valve bracket, useing Akrapovič bolts and heat resistant washers (Figure 27).

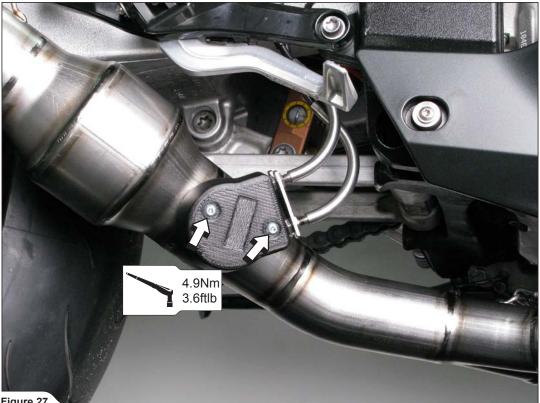
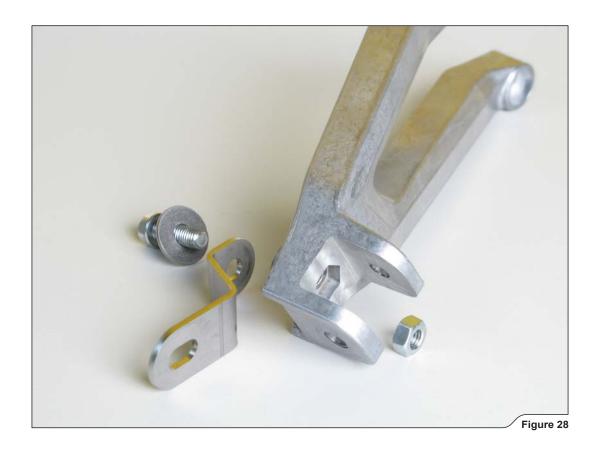
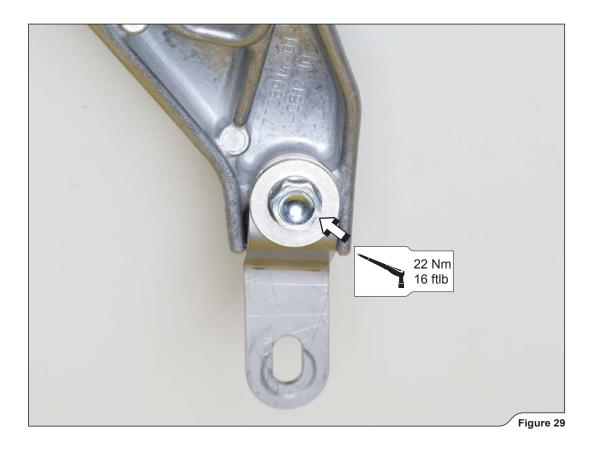


Figure 27



12. Attach the additional Akrapovič stainless steel bracket to the stock right passenger footrest bracket, useing Akrapovič nut, bolt and washer (Figure 28, 29).





- 13. For optional carbon-fiber muffler bracket only: attach the optional Akrapovič carbon-fiber bracket as shown, useing stock bolts (Figure 30).
- WARNING: use anti-seize copper paste on bolt threads!



- 14. 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 31**).
- **!** 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!

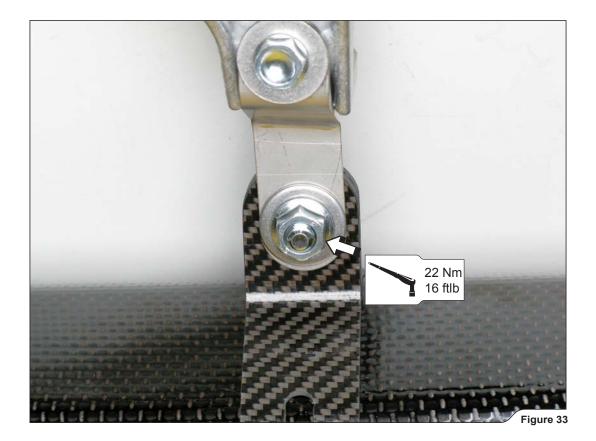




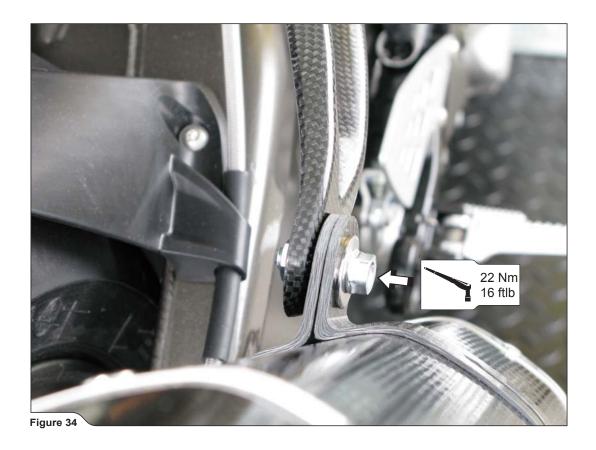
- 15. Position the muffler correctly and slide it onto the outlet side of the link pipe. Attach the springs (Figure 32).
 WARNING: make sure, that springs pull the muffler all the way onto the link pipe use rubber mallet if necessary to tap the connection into place!
- ۶ INSTALLATION TIP: for Evolution exhaust sistem, coat the interior side of the input bushe of the muffler with Akrapovič ceramic anti-seizing grease (white tube).



16. Align the muffler in respect to the motorcycle and tighten the muffler clamp to the bracket, using Akrapovič bolt, washers, and nut as shown (Figure 33).



17. For optional carbon-fiber muffler bracket only: align the muffler in respect to the motorcycle and tighten the muffler clamp using Akrapovič bolt, washers and nut as shown (Figure 34).



- 18. Assemble the cowlings in the reverse order from the order in which they were removed (Figure 35).
- WARNING: tighten all cowling bolts to a recommended torque or check vehicle manufacturer manual!







Final installation:

Clean grease spots:

- a. Muffler carbon-fiber outer sleeve: use a soft dry cloth.
- b. Muffler titanium outer sleeve: use a soft cloth sprayed with a multi-purpose spray lubricant (WD-40 or equivalent).
- c. Muffler carbon-fiber outlet cap: use a soft dry cloth.
- d. RACING stainless steel link pipe, collectors and header tubes: use a soft cloth sprayed with a contact cleaner, then wipe with a soft dry cloth
- e. EVOLUTION titanium link pipe, collectors and header tubes : use a soft cloth sprayed with a multipurpose spray lubricant (WD-40 or equivalent).

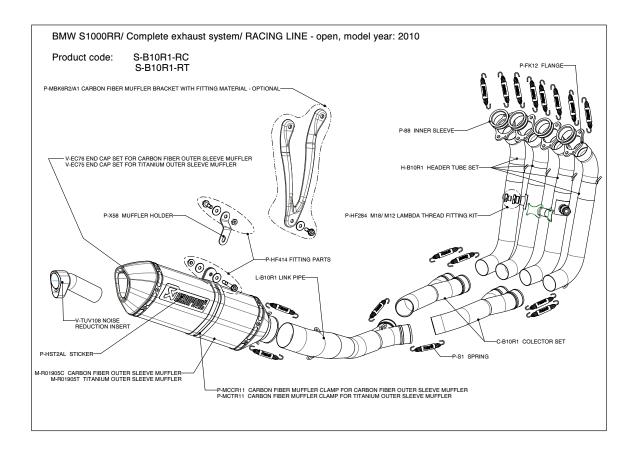
Cleaning will prevent spots from burning onto the surface. Do not use aggressive chemical cleaners, because they can damage the sticker.

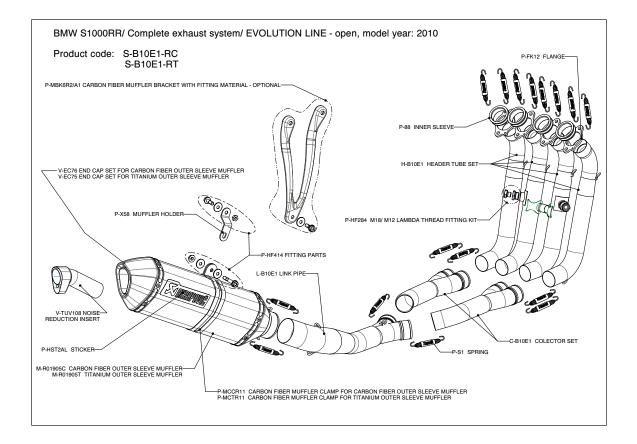
- ! WARNING: make sure all the bolts are sufficiently tightened. In case the exhaust system touches the cowling or other parts repeat the adjustment of the exhaust system or contact your authorized dealer.
- ! WARNING: check vehicle manufacturer manual for tightening torques (for dismounted stock parts)!
- 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.

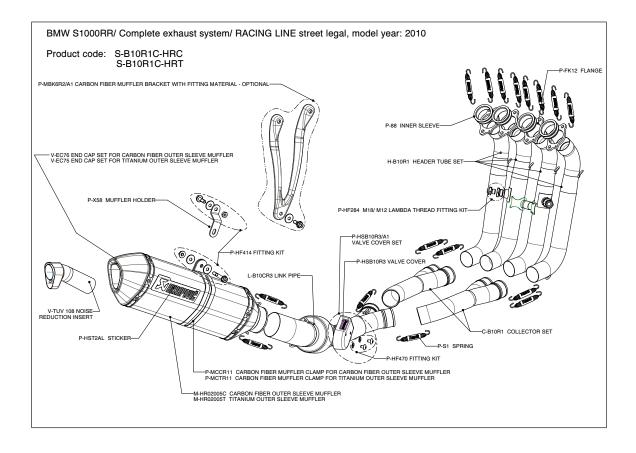
MAINTENANCE OF THE AKRAPOVIČ EXHAUST SYSTEM

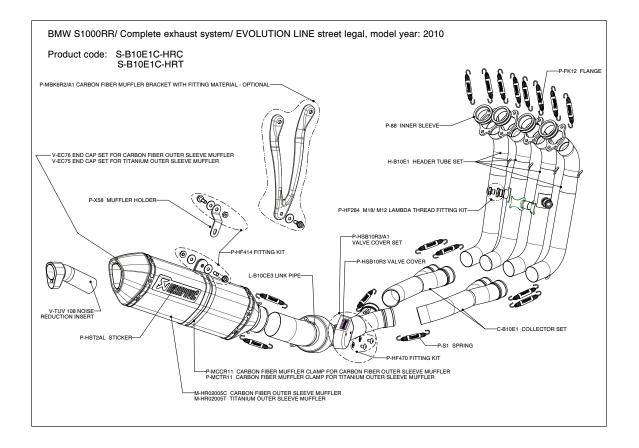
- 1. Clean the titanium exhaust components with a multi-purpose spray lubricant (WD-40 or equivalent), carbon fiber exhaust components with soft and dry cloth and stainless steel components with soft cloth sprayed with contact cleaner, then wipe with soft and dry cloth. A change in the color of the exhaust system is normal due to the high temperatures.
- 2. Periodically make sure all the bolts and springs are sufficiently tight.



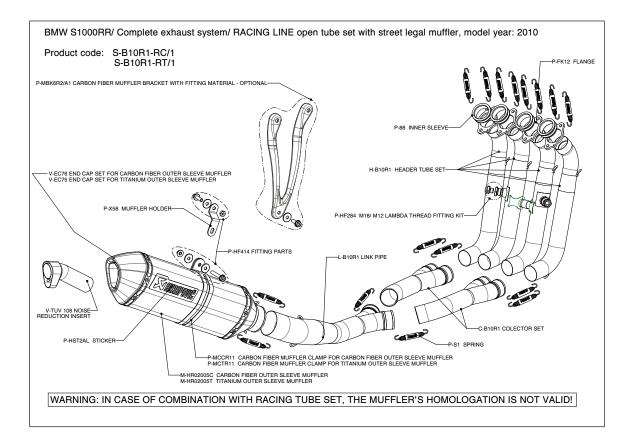


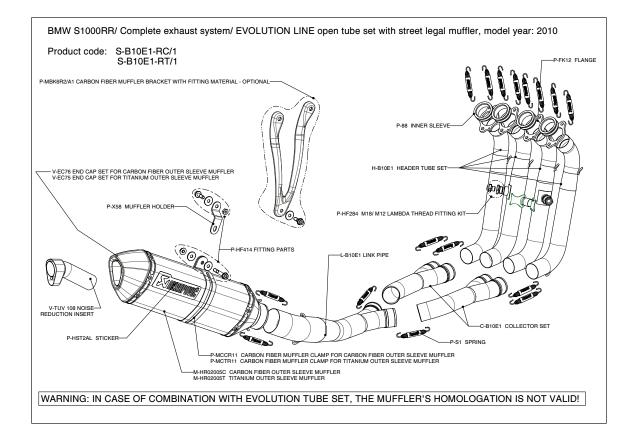


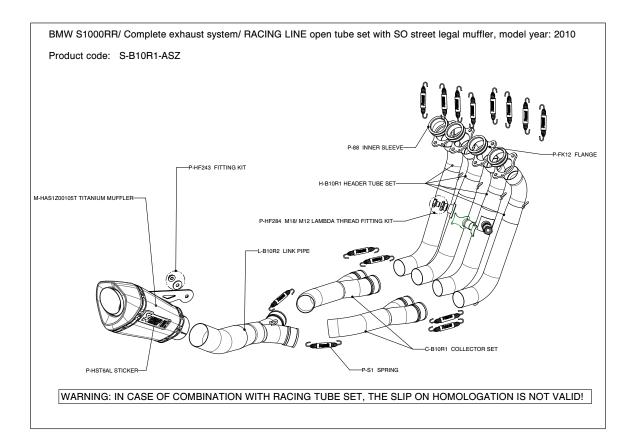


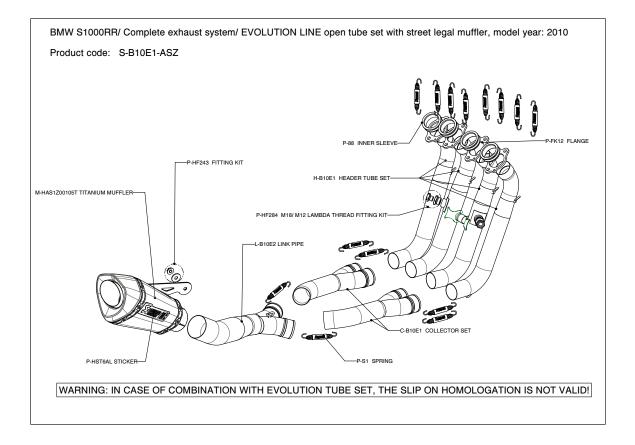














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