

ROTTWEILER INTAKE SYSTEM INSTALLATION ADVENTURE 1050-1290 / SUPER DUKE 1290





Note: Please read and understand all notes, precautions and warnings within this document before performing these procedures. It is solely you and/or the installer's responsibility to adhere to the guidelines of all factory torque specs and procedures mandated by the manufacturer of your motorcycle. Always wear the appropriate safety If you believe that these instructions are beyond your capabilities, you should seek out a

equipment. If you believe that these instructions are beyond your capabilities, you should seek out a professionally trained motorcycle mechanic to install any aftermarket product/s including these.

- Installation time: 1 to 3 hours depending on experience
- Helpful links to remove the fuel tank:
 - <u>YouTube instructions for fuel tank removal Adventure 1050-1190</u> (Or see our Rottweiler Performance YouTube page)
 - <u>PDF instructions to remove the Adventure 1290 R fuel tank.</u> (Or see our 'downloads/instructions' page.
- Tools needed: (Most can be found in your stock tool kit)
 - T20 Torx
 - T30 Torx
 - T40 Torx
 - o 6mm hex key or socket
 - o 8mm socket
 - o Pliers (for fuel lines and crankcase breather)
 - Flush cutters or razor blade (for zip ties)
 - o Biodegradable Foam Filter Oil (See Oiling Instructions)



ONLINE INSTRUCTIONS OR CODE LINKS

Scan these codes with your iPhone's camera or a QR code reader to get direct links to online versions of these instructions.

THESE ONLINE INSTRUCTIONS



ALL INSTRUCTIONS PAGE



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INSTRUCTIONS

- 1. Remove plastic and fuel tank. (See links above)
- 2. (Fuel tank off now) Unplug the white air temperature sensor on top of the air-box lid.



3. Using the same screws, reinstall the air temp sensor into the base of the Rottweiler Intake plate. (T20 Torx)





- 4. Remove the 8 screws in the air-box lid. (6mm hex)
- 5. Remove the spring clip on the crankcase breather hose at the back of the air-box and slide the hose off. Remove the lid and set it aside.
- 6. Remove both velocity stacks. (T 30 Torx)





- 7. Lift up on the rear of the air-box and pull back just enough to free it from the throttle body grooves that locate its position.
 - a. Reaching through the right hand side, pull the SAS valve off of the air-box by pulling the rubber out of the stakes attached to the bottom of the air-box.



- 8. Remove the air-box drain line. This is located at the front left lower corner of the air-box. Take this out completely.
- 9. Using channel lock pliers squeeze the spring clamp where the SAS hose attaches to the bottom of the stock air-box and remove the hose from the air-box side.

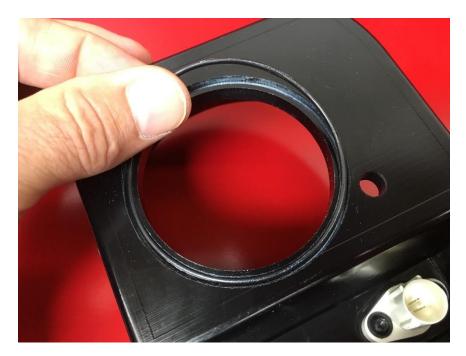


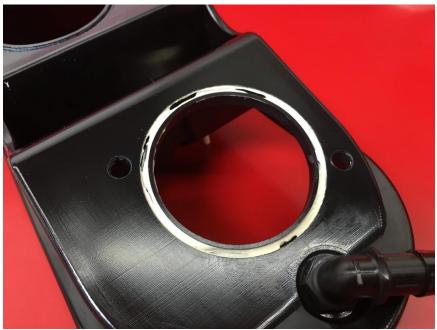
10. You may now remove the stock air-box and the snorkel tubes. The snorkel tubes will not be reinstalled and can be shelved.





 Install the supplied o-rings into the base of the Rottweiler Intake and pad them with grease. This will help keep them within the groove during installation and act as a further barrier against any elements.
NOTE: Do not reuse the factory o-rings. Use the supplied o-rings that come within the hardware kit included.







12. Take the stock air-box and:

- A. Throw it in the trash.
- B. Mail it back to KTM and ask them to fire the engineer.
- C. Burn it for warmth because it left you stranded.



13. If you are also performing an SAS and Canister removal as part of your upgrade, it will be beneficial to complete this at this stage. (See our SAS Stage Kits)

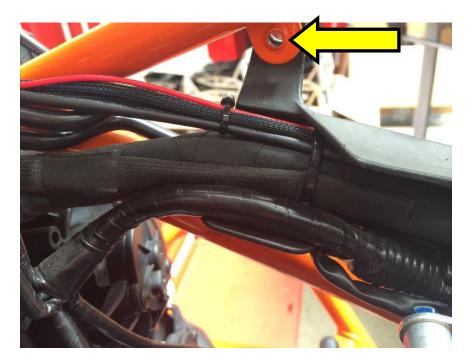
If you have decided to retain the SAS system you will need a small Pleated UNI filter with a 5/8 (16mm) fitting and insert it where the SAS system once pulled air from the bottom of the stock air-box. These can be found on our website under <u>'UNI Mini Filter'</u>.





14. Readjust the wiring harness as shown or out of the way so that the debris plate can fit flush to the frame. (1190 ADV pictured)

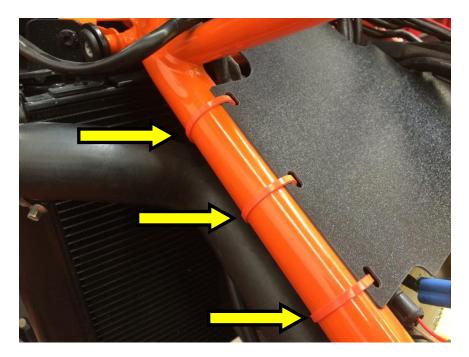
Note: Removing the bolt that holds the plastic wiring harness guide can help with the installation of the debris plate and can be reinserted once the plate is in position.



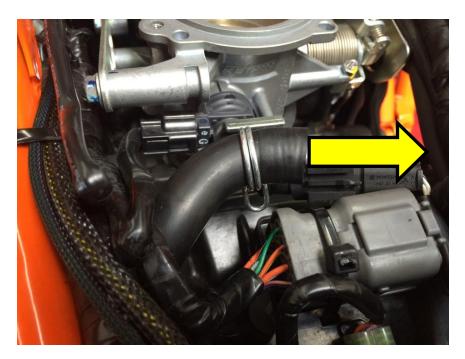
15. Install the optional debris plate from the left hand side through the frame. Sliding it in over the throttle bodies may help get the upper left hand corner into place. You should then be able to drop it to contact the frame. Please ensure that no hoses or wires are touching any sharp edges and that the fuel line is properly positioned to not come in contact with the edge of the plate. You can trim the plate with scissors as needed if you have any special wiring additions that you have added.



16. Zip tie the debris plate to the frame making sure no wires are trapped.



17. Loosen the spring clamp on the crankcase vent hose coming out of the rear cylinder valve cover and rotate to point this direction.

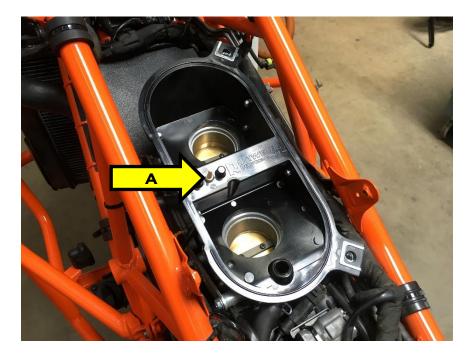




18. Insure that the crankcase breather elbow is completely bottomed into the seat of the base plate (A) and that the rib has been trimmed (B) to ensure clearance of the throttle body parts. Nothing should be touching the throttle body in this area when installed.



19. Snap the connecting plug back into the air temperature sensor (A) and install the Rottweiler base plate.





20. If installing Rottweiler TVS velocity stacks at this time, (Stage 2 or greater) push the small metal spacers past the plastic tab on the stock velocity stack and insert them in the same fashion into the Rottweiler TVS velocity stack before installation into the Rottweiler base plate.







21. Using a thread locking agent, attach the velocity stacks through the base plate. (T30)

NOTE: Torque the 5mm bolts to 55 INCH lbs. only! Over-torqueing can lead to stripped threads or a damaged base plate.



ABOUT ROTTWEILER PERFORMANCE VELOCITY STACKS

Rottweiler Performance velocity stacks are designed to offer improved flow and performance over the stock plastic velocity stacks. This is accomplished by altering the taper, height and shape of the lip, increasing the efficiency of the air as it is drawn into the throttle bodies.

Each 'Stage' kit starting at Stage 2 come with one velocity stack for the rear cylinder. A second TVS-80-54 Rottweiler Performance velocity stack mounted in on the front cylinder will yield better results for power gains, but is not a mandatory addition to the kit for the system to work well. For this reason, we have left the additional stack as an option rather than a requirement to suit differing budgets.

ALL MODELS NOTE: Stage 1 intake kits will require trimming 20mm (3/4") off of the top of the rear stock velocity stack using a hacksaw blade or a band saw. This is due to the clearances inside the filter once assembled. While this still works well, a 'tuned velocity stack' such as our TVS-80 series billet aluminum velocity stacks produce a much smoother intake flow and can be found separately or starting in our Stage 2 intake kits.

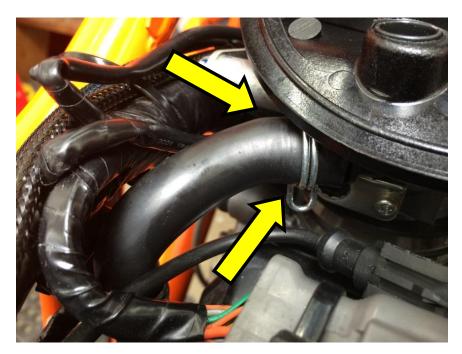
1090 ADVENTURE NOTES: The KTM 1090 Adventure Models use much longer velocity stacks than the 1190 and 1290 Adventure models. For this reason, the stock FRONT velocity stack will not fit within the inside of the Rottweiler Intake System Filter. If a second TVS-80-54 velocity stack has not been opted for upon purchase, you will be required to move the 1090 REAR stock velocity to the front and install the included (Stage 2 and up) Rottweiler TVS-80-54 billet stack in the rear. On this model, you can achieve better results by purchasing a TVS-80-54 billet 80mm velocity stack or a stock 1190 100mm velocity stack – part number 60341040100. This will allow a larger gap between the top of the velocity stack and the inside of the filter, allowing better air draw.



22. NOTE: You may notice a small gap at the base of the velocity stack as shown below. This is NOT where the base plate seals to the throttle bodies and completely fine. The grooves at the underside of the base plate with the o-rings are what seal the base plate.

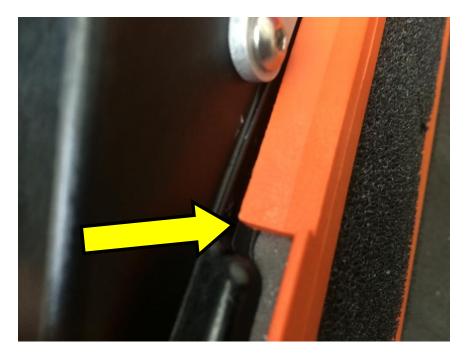


23. Attach the crankcase breather and spring clamp to the 90-degree breather port at the rear of the base plate.





- 24. Oil your Rottweiler Intake Filter according to the instructions at the bottom of this page, included with your filter kit or found on our 'Downloads' page.
- 25. Install the filter by 'hooking' the left side tab underneath the base plate on the left hand side. Gently push on the base of the filter from left to right ensuring that the filter is hooked properly by trying lightly to pry it upward. It should not tilt up when rolled from left to right if done properly. (Left underside shown below)



26. Making sure that the base plate 'ears' are located up inside the orange filter base on both ends, turn the ¹/₄ turnkey tabs clockwise until they latch and click into place. This may take some downward pressure to get the locks to catch the base plate tabs and a long screwdriver can make this a bit easier.



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27. Pull up on all sides of the filter to ensure that it is attached properly. The most common mistake is that the left hand locking tab is not properly secured underneath the base plate and the filter can rock upwards. If done properly, the filter will be securely in place and will not move.



28. You may now install any oiled pre filters you may have and reinstall the fuel tank. The 1190 and 1290 Adventure models air filter can be difficult to service due to the necessary removal of the fuel tank and if you think that you may be in heavy dust for long periods of time between servicing, it is highly suggested that the use of a 60 cell pre filter be implemented. This will not create any noticeable performance loss, no matter what 'joeadv24' says on the forums.





CALIFORNIA EMISSIONS WARNING

The California Air Resources Board (CARB) does not permit the removal or alteration of OEM emission control devices unless certified by CARB, other than for racing vehicles on closed courses. These products are legal for use ONLY in competition racing vehicles and may not be legal in California for use on public roads, streets or highways. Check your local laws and regulations to determine that compliance needed in your city or state.

GENERAL NOTES ON MAPPING

At Rottweiler Performance we have tested average air fuel ratios on a number of motorcycles with this system and the results have been that no extra mapping is necessary to maintain safe air fuel ratios. (no leaner than 14.7 and no richer than 12.5) In addition, we have also found that installing <u>Rottweiler Fueling</u> <u>Dongles</u> can help low end fueling tremendously and makes for a smoother running motorcycle. This should be considered a stepping stone to a proper mapping system such as a <u>Powercommander</u> piggyback ECU for full fueling control. If what you are looking for from this system is an air box that won't fail and cause dirt to enter the engine, then we would suggest simply installing the Rottweiler Fueling Dongles. If you are looking to maximize power output to its fullest, we would suggest that you look to Rottweiler Performance for Powercommander options and either have your bike tuned by a qualified tuner or download one of our free tunes providing we have something close to what you are looking for. Rottweiler Performance keeps a full stock of Powercommander units and has mapping support to go along with that and a number of tutorial videos on our site to help you understand how these units work and how to set them up.

PRECAUTIONS AND WARNINGS

Please keep in mind that while our findings have been very conclusive during our testing processes, it is impossible to predict exactly how every motorcycle will react with various modifications and that you the consumer must assume <u>full responsibility for both the final condition of your vehicle and personal safety</u> when opting to modify or alter your motorcycle. We suggest that like any other engine modifying product such as an exhaust, that you perform the proper investigation/s as to what that particular modification/s has done to your fueling and the general intended use of your motorcycle and if it is deemed safe for your engine. CPR Fabrications / Rottweiler Performance will not be liable for any issues arising from the use or installation of any OEM or aftermarket product/s sold by either CPR Fabrications / Rottweiler Performance, or any authorized dealer / reseller of their products. The purchaser accepts any and all responsibility that they have chosen to 'undo' what the original vehicle manufacturer has 'done'.

YOUR ROTTWEILER PERFORMANCE INTAKE FILTER

<u>All foam air filters should be thoroughly oiled to provide the best filtration performance</u>. The recommended oils are specifically formulated for foam air filters. When the oil is correctly applied, it provides a tacky coating over all the surfaces of the structure of the foam filter. As dust particles pass into the filter, they collide with the foam structure and are then retained in the sticky oil coating. The oil coating also flows around the dust particles to continue to present a tacky surface for further dust particles.

CPR Fabrications / Rottweiler Performance does not provide any warranty of any kind other than backing the general craftsmanship and quality of its products. The use of any aftermarket products is at the sole discretion of the user and may void the warranty.



OILING YOUR FILTER AND PRE-FILTERS

For the best overall results and longevity of your filter it is recommended that you use biodegradable filter oil systems and follow the instructions below. Always use the products in accordance with instructions. Improper use of cleaning chemicals or use of non-approved chemicals can damage filter materials. <u>Under no</u> <u>circumstances use cotton gauze filter oil, engine oil or any other oil not specifically manufactured for foam air</u> <u>filters.</u>

Do not allow any other chemical other than the recommended filter oil to come into contact with the filter element whatsoever. If any warranty situation arises, and it is determined that any other such chemical has come into contact with the filter element, any and all warranties shall be immediately void.

- 1) These instructions apply to both the base main filter and pre-filters. They both should be thoroughly oiled before use.
- 2) <u>Read the label on the can</u> prior to spraying and use in an open, well ventilated area. Holding the aerosol about 25mm/1" from the filter, spray in a deliberate circular motion all over the foam surface until the course foam pores just start to fill up with oil and/or penetrating the inside of the filter. Then, wearing protective gloves use your finger tips to 'massage' the oil deep into the foam.
- 3) The aerosol contains a mix of oil concentrate and a thinning agent which helps the oil to penetrate deep into the foam. The thinning agent will evaporate off after around 5-10 minutes, so it is important to massage the oil into the foam as soon as it is applied to ensure the oil works its way through to the fine, inner layer of foam. If you think you have over oiled your filter, you can dab the surface of the foam with a strong absorbent paper tissue/paper kitchen towel, which will remove most of the excess oil.

<u>It is important</u> to resist the tendency to simply oil the outside and then the inside of the filter. This may leave the middle layer dry reducing the ability of your Rottweiler Intake Filter element to do its job. Make sure to thoroughly oil the entire filter from the outside until the inside starts to become visually moist with oil primarily from the outside first. Once this has been confirmed, you may then oil the inside well but not oversaturated.

4) Once you are confident that your Rottweiler Intake Filter is properly oiled <u>through all three layers</u> of the foam, spray the sealing foam on the base of your Rottweiler Intake filter with the same filter oil used on the main filter foam and your filter is now ready to install.

DO NOT USE ANYTHING OTHER THAN FILTER OIL <u>ON THE FILTER BASE</u> SEALING GASKET. GREASE PRODUCTS LIKE NO TOIL RIM GREASE ARE KNOWN TO HARDEN AND CAUSE DAMAGE TO THE SEALING GASKET BASE. ANY AND ALL WARRANTIES EXPRESSED OR IMPLIED WILL BE VOID IF UNAPPROVED CHEMICALS ARE USED.

DERFORMANCE

CLEANING

For the best overall results and longevity of your filter it is recommended that you use biodegradable filter oil systems and follow the instructions below. Always use the products in accordance with instructions. Improper use of cleaning chemicals or use of non-approved chemicals can damage filter materials.

Most biodegradable oiling kits are intended to be used in a two-part cleaning process where the cleaner breaks down the sticky dust retention oil on the filter, which is then washed off using warm water and washing up liquid/dish washing soap.

- 1. Follow the instructions for the particular brand of oil in which you have used to originally oil the filter. Mixing cleaning solutions between brands can lead to poor performance during the cleaning process.
- 2. The next step is to wash the filter out in warm soapy water for a final rinse. Fill a sink, washing bowl or bucket with a strong solution of water and liquid/dish washing soap, then submerge the filter in the solution. You should see any remaining oil and dirt residue rising out of the filter as it enters the water which may turn white as it mixes with the water/detergent mix. Repeat this process until you are satisfied that the filter is completely clean and then rinse with clean water only to ensure no dish washing detergent is left on the filter.

This stage of the process should take no more than 4 – 5 minutes, leaving the filter submerged in water for a prolonged period of time may cause the glues in the filter to soften and eventually break down.

Now the filter is clean you will need to leave it in a warm, dry place until is fully dried out. <u>Do not use a high-pressure air line or heat gun to speed the process up.</u>

Once the filter is dry, you may re-oil the filter element with your chosen brand of foam filter oil.

Under no circumstances use cotton gauze filter oil, engine oil or any other oil not specifically manufactured for foam air filters.