TripleClamp Moto / Muller Motorsport Air filtration system instructions for the KTM 950 and 990

Thank you for your purchase and support. Installation of the filter is a straightforward process. It differs slightly for 990 vs 950 and those differences are pointed out in each step respectively.

Your Tripleclamp Moto filter kit contains the following components:

- 1. Two pre-oiled foam filter elements.
- 2. One base plate; either for a 950 or a 990 (990 is identifiable by the small holes for the air temperature sensor).
- 3. One filter cage plate with filter posts.
- 4. One crankcase breather hose filter and clamp.
- 5. Four baseplate sealing o-rings (2 are extra to stash in your toolbox).
- 6. Two air temperature sensor bolts (990 only).
- 7. Two filter system main bolts.
- 8. Stickers to display and make your friends jealous.

Removing your existing filter

Original KTM Air-box

- If you have the original air box on your bike, you will need to remove it entirely and in doing so, you will have to detach the throttle bodies or carburetors from the engine. On the 990 models, remove the air-temperature sensor from the top of your airbox and make sure not to lose its o-ring. You will need to install this sensor on the new baseplate later with the screws provided in the kit. Your crankcase breather hose is attached to the top lid of the airbox so please remove it from the airbox and set it aside for now. Please refer to your KTM service manual for detailed instructions on the airbox removal.
- Install the throttle bodies or carburetors back onto the engine without the airbox. Make sure the rubber boots fit correctly and the clamps are in the grooves of the boots when tightening them. Route the cables to their original positions making sure that none of them interfere with the throttle assembly.

Tip: Position the clamps in such a way that you can access them without

removing the tanks on the Adventure bikes with a long extension. This makes future maintenance easier.

Other air filters

• If you have another brand of open air filter system in place, remove all its components. Save the air-temperature sensor and its oring if you have a 990. Our kits include everything you need to install and operate a complete system.

Installing the kit

1. Foam Seal rings

Install one foam seal o-ring over each throttle body or carburetors

2. Base-Plate

Place the filter base plate over the throttle bodies with the protruding threaded portion of the nut rivets on the underside of the plate.

990 only: Before installing the base-plate, install your air temperature sensor with the two small screws provided and a small amount of medium strength blue thread-lock. The plug of the sensor faces under the plate similar to the nut rivets. Re-use the o-ring that you saved earlier, between the sensor and the plate. Don't over tighten the screws. There should be a very small gap visible between the sensor and the plate that's filled with the o-ring. Plug the air-temperature sensor connector to the sensor and install the filter baseplate over the throttle bodies with the wiring of the sensor under the plate.

3. Trumpets (Velocity stacks)

Install the trumpets over the baseplate. They should click into place (or turn and click), securing the base plate in the same way as when they were in your original airbox or other brand of filter system. Note: the 950 Super Enduro trumpets do not need to be cut as with other filter kits.

4. Filter-Cage plate

Insert the cage-plate with its two posts into your oiled filter. Push the two tall posts into the black grommets on the filter. Press on the gromets to bottom out against the posts. Pull the filter up so the base of the cage

place is sitting right over the rim of the filter all around. The entire filter cage plate should be inside your foam filter.

5. Filter skin (Optional)

If you want to install the filter skin, with the cage plate installed in the foam filter, pull the filter skin over the filter with the elastic right at the edge of the filter but not under it more than a couple of millimeters. Line up the holes on the filter skin with the grommets on the filter.

Note: The skin is designed to fit loosely in order to shake of the dust and dry mud with vibration of the engine. The skin also provides significant protection against water. It should not ever be oiled.

6. Installing the Filter

Put the foam filter and the filter cage assembly over the baseplate; position it so you can't see the baseplate looking at the filter from above. Feed the screws into the grommets on the filter. Try to engage both screws with the threads on the baseplate, then tighten them at the same time with both hands or gradually with a few turns at a time on each. Do not tighten one all the way down with the other one loose. Make the screws finger tight. The screws don't need to be too tight. The base of the foam is designed to compress intentionally and it will make a complete seal everytime. Over tightening the screws can reduce the life of your filter.

7. Inspect the filter

Look around the filter, run your fingers all around it to make sure the filter is sitting over the plate evenly all around with no part of it hanging out more than other areas. If so, the cage plate may not have been installed into the filter correctly. Remove and correct the fitment of the filter cage into the foam filter if necessary and repeat the installation.

8. Crankshaft breather filter

Your kit includes a crank-shaft breather filter with a clamp. Install that at the end of the breather hose with the included clamp and secure it to the frame of the bike <u>away from the filter</u>. Use zip-ties to secure the hose to the frame of the bike as high up as possible without it interfering with anything. This filter does not need to be oiled. Inspect it every time you replace the main air filter for excess dirt and dust. It is completely serviceable by cleaning it of excess engine oil vapour that emanates from the crankcase breather hose.

9. Jetting / re-mapping

Every time any component of the engine related to air intake, exhaust and

fuel type is changed you should update the jetting (950) or re-map the ECU (990), accordingly. This air filter system is no exception however, if you already had an open air filter on your motorcycle such as those made by ITG, you may find the settings not requiring any change. If you are switching from factory stock air box to the system, you should update the jettings/map otherwise you risk damaging the engine by running too lean.

We avoid recommending a specific jetting or map because there are too many variables to result in the best set up. A good, safe place to start is using larger main jets 950 and a richer map for 990. Depending on your local conditions and other modifications to your bike, you may need to further change the jetting/map to get the best results. Ultimately, taking your bike to a shop with a dyno and professional staff will provide you with the best outcome.

Baseline for 950:

- Main jets to 170 front and 175 rear.
- Leave all other jets stock
- Floats height to 3.5mm
- Needle clips on the position 3rd position counting from the sharp tip.

Baseline for 990:

- Option one: Akrapovicmap™ provided by KTM™.
- Option two: Map known as Zuber's map made by Zuber on advrider.com

10. Servicing your filter kit:

Your TripleClamp Moto filter system uses a three-layer foam filter that requires regular maintenance. These are pre-oiled with a chemical based filter oil and can be cleaned using most oil filter cleaners except for biodegradable cleaners such as No-Toil. Once cleaned, oil your filter using your favourite filter oil such as Motorex, Motul, Belray, No-Toil, etc and please follow the instructions provided by the filter oil cleaner and filter oil of your choice. Never run your bike without a filter or with a dry filter as filtration depends on filter oil as part of the filtering process.

As with all Tripleclamp Moto products, these are intended for racing and do not claim to adhere to any local laws or warranties.

Please feel free to contact us by email at <u>info@tripleClampMoto.com</u> if you have any questions.