# Thanks for purchasing the Dilone / Gabro Racing Oil radiator kit for Aprilia RS660



- **Note 0:** This manual is presently only a draft. Be sure to scan the QR code in last page and download the latest revision prior to start the installation.
- **Note 1:** This kit is not compatible with street bodywork. This part may not be compatible with track bodywork either. Expect to have to enlarge the chin opening when fitting this kit with aftermarket track bodywork. Please check hoses for rubbing inside the bellypan as well, they may need accurate positioning to avoid this, or a protection rubber boot.
- **Note 2:** This kit eliminate the stock cooling thermostat valve, this require you to monitor the engine temperature to always be in the 75-100C operating window (3<sup>rd</sup> dash shown in the bike temperature indicator) taping the coolant radiator to avoid running the motor in colder conditions.
- **Note 3:** This kit uses the Tuareg 660 oil filter (Aprilia OEM p/n 82960R). Stock RS 660 oil filter is not compatible. One filter is supplied with the kit, be sure to have spare filters available.
- **Note 3:** this kit places HOT/COLD connection both on radiator left side, allowing fitment with the widest range of aftermarket exhausts: SC Project, Akrapovic and stock exhaust have been proven to be a perfect fit while Spark is not (it's cyl1 header collides with the larger Tuareg oil filter).
- **Note 4:** Professional installation is mandatory. This is a professional racing part for track use only.

#### The Kit Content:



- A- Oil radiator (preassembled with M6 screws)
- B- Bypass plate (preassembled with hose retainer plate and M5 screw)
- C- Oil filter nipple
- D- Oil filter
- E- Colling system plugs
- F- Radiator brackets
- G- M5 screw for LH bracket and radiator plastic shroud
- H- Oil hoses
- I- Thermostatic valve delete ring (not pictured)
- J- Spare hoses oring kit (not pictured)

#### **Attention:**

- when not specified use bike shop manual procedures and torque setting.
- LH/RH side of the bike are intended as from rider view.

#### **Installation:**

Follow shop manual instruction to drop coolant first and then engine oil.

Remove and discard stock oil filter, remove the stock coolant/oil heat exchanger complete with coolant hoses. Fit silicone plugs (ITEM E) at head and radiator connections.

Remove the thermostat housing, replace the thermostat with the supplied thermostat delete **(ITEM I)** using the stock thermostat gasket.

Clean and degrease the engine block oil nipple port, fit the supplied oil filter nipple (ITEM C) in the oil filter plate (ITEM B), apply hard Loctite on the nipple engine side, screw it in the block and tight it to 30Nm (be sure to correctly engaging the anti-rotational lip of the oil filter plate in the block strut). Screw in the oil filter.

Apply vaseline grease on hoses (ITEM H) o-rings, carefully fit hoses big end (the one with no nuts) in the oil filter plate. It's a tight fit, be sure to do not cut the o-rings at installation. Long hose must be fitted to RH port, short hose to LH port.

Place the hoses lock plate in place, secure it with its screw, lockwire the screw.

Remove the OEM cooler bracket from engine block LH side and replace with the supplied one **(ITEM F)**. Place the oil radiator on the LH bracket leaving it lose on the supplied M6 screws, install hoses small end in the radiator ports using vaseline grease, place hoses fitting nuts in place, lose. Long hose must be fitted to the upper radiator port, short hose to the lower port.

Install the second bracket (**ITEM F**) on radiator RH side, attaching it's upper support to the OEM radiator lug. Use the supplied screw (**ITEM G**) if your bike has the OEM radiator black plastic shroud fitted, use a commercially available M5 crews if you are not using the OEM shroud. Be sure this screw isn't too long, otherwise it will damage the radiator.

Tight both LH and RH fixing screws using the built in slotted holes to find the best alignment possible. Be sure the oil radiator front part is flush with coolant radiator, or a bit recessed: that will ensure the front tyre will not touch the radiator assembly under hard braking.

Find the hoses best position possible to avoid them touching exhaust header or scrubbing in fairing bellypan. Be sure the hoses will not rub each other either. Once found the right position, tight the hoses nuts at radiator connection.

Load coolant into radiator, and load 2.5liters oil in the sump.

Disconnect the fuel pump, prime the whole oil system cranking the motor on the starter. Usually 5x 5 second bursts are enough. When done re-connect the fuel pump and start the motor.

Purge coolant as well and fir back radiator cap. Let it reach operating temperature then stop the motor, check oil level and top-up it. This radiator kit adds 400cc oil capacity, from 2.3lt to approx. 2.7lt.



ATTENTION: this is a race product intended to be used on closed courses only.