

FIA CROSS CAR CHAMPIONSHIP	
Engine type	Yamaha R6 2017
Map name	R617AE02
Firmware version	01.18.XX
Fuel type	ETS IRF 102
Fuel pressure	3,4 bar

Follow this document and apply the changes to the throttle body before starting the engine

To obtain the maximum benefits from the ECU, a reconfiguration of the hoses mounted on the throttle bodies is necessary.

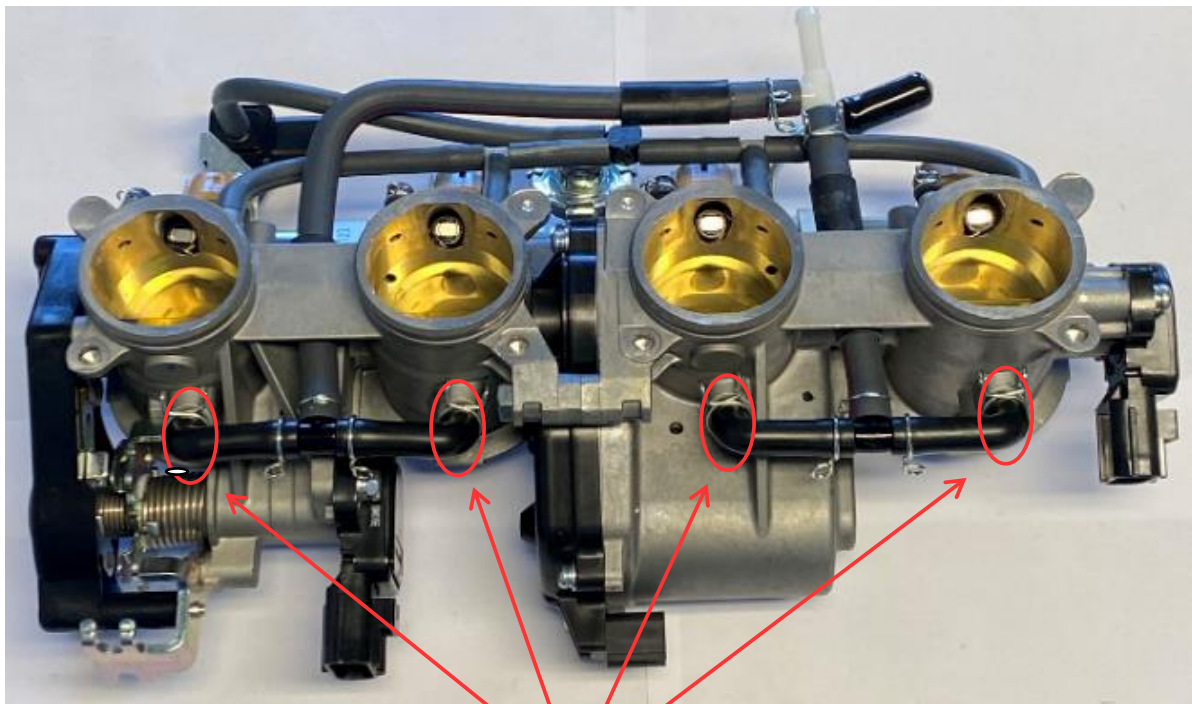
Specifically, the standard configuration has a MAP (manifold air pressure) sensor that measures pressure from pipes connected to all 4 cylinders.

The race ECU, is able to read pressure with angle base sample (every 5 crank shaft degrees). By using this type of sampling, it is possible to more accurately measure and calculate the intake air quantity.

At the same time, the ECU uses this signal to detect the Intake Stroke for cylinder 1 (for synchronization).

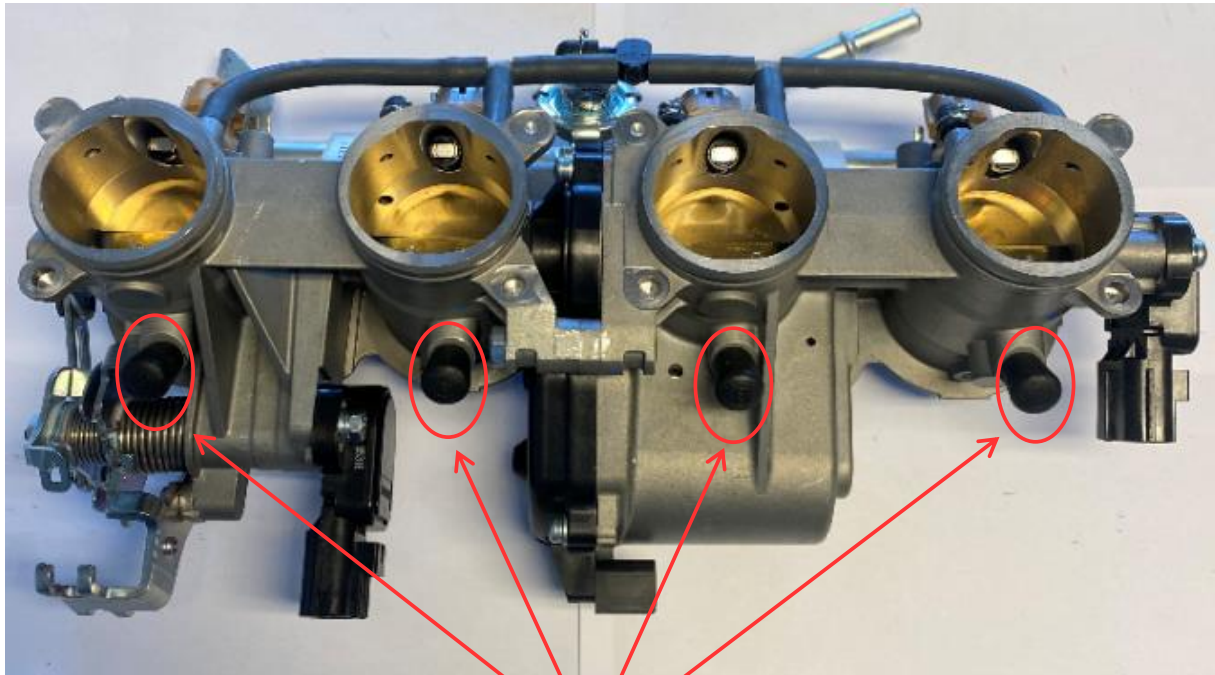
Below is an image of original configuration of the throttle bodies.

Step number one :



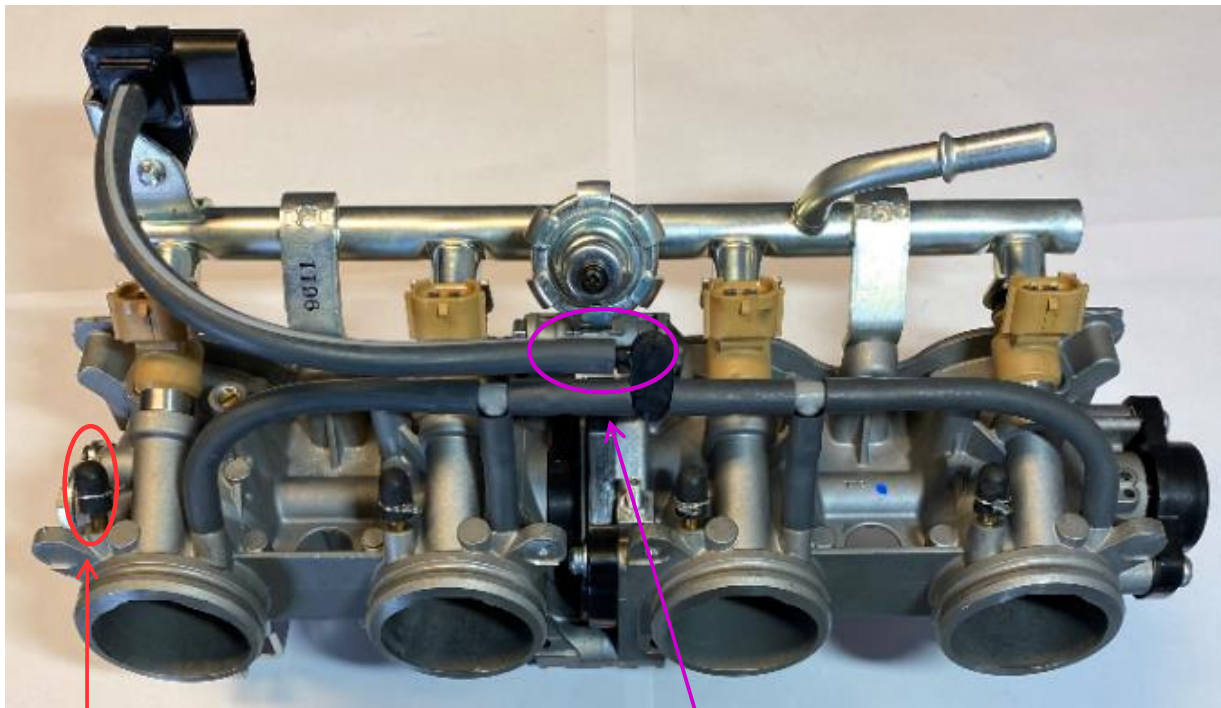
Remove the marked pipes

Step number two :



Close the marked pipes

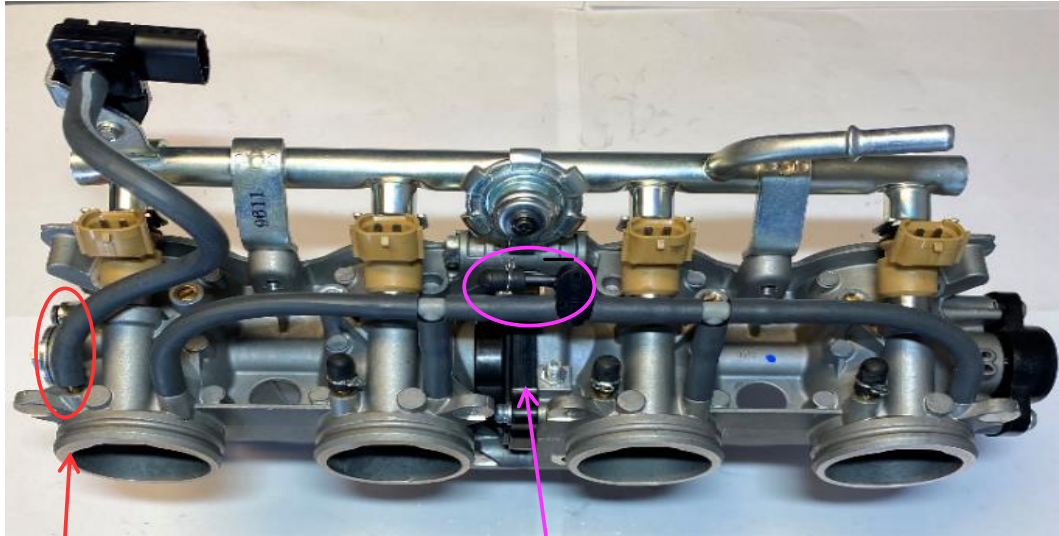
Step number two



Remove the cap from the cylinder one and keep it

Remove the pipe from the T connection

Step number four:



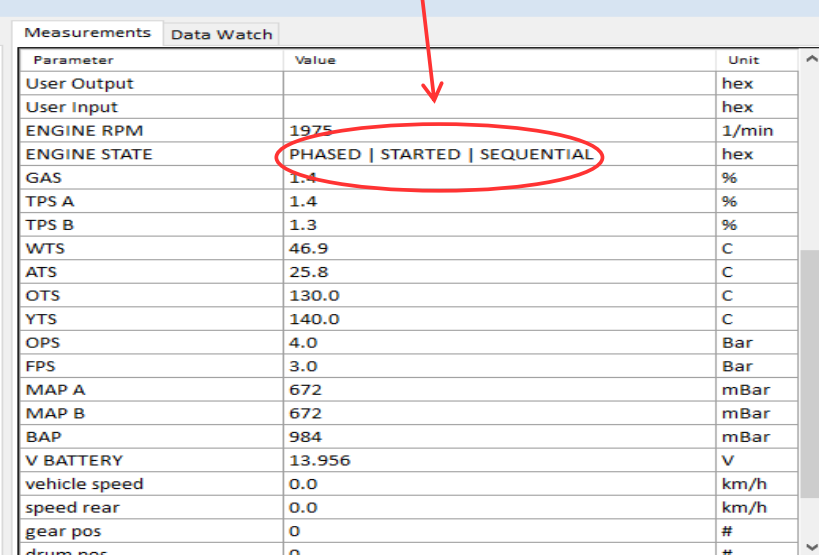
Use the cap to close the T connection

Connect the pipe of the MAP sensor to cylinder one

Step number five :

Open the Mecal software and check in the ENGINE STATE parameter that the value is

PHASED/STARTED/SEQUENTIAL



Measurements	Data Watch		
Parameter	Value	Unit	
User Output		hex	
User Input		hex	
ENGINE RPM	1975	1/min	
ENGINE STATE	PHASED STARTED SEQUENTIAL	hex	
GAS	1.4	%	
TPS A	1.4	%	
TPS B	1.3	%	
WTS	46.9	C	
ATS	25.8	C	
OTS	130.0	C	
YTS	140.0	C	
OPS	4.0	Bar	
FPS	3.0	Bar	
MAP A	672	mBar	
MAP B	672	mBar	
BAP	984	mBar	
V BATTERY	13.956	V	
vehicle speed	0.0	km/h	
speed rear	0.0	km/h	
gear pos	0	#	
drum pos	0	#	

If the value in the ENGINE STATE is STARTED , there is something wrong with the system. check the sensor value and the correct connection.

