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Parts: Throttle Body

Version : 1.2 (01/01/19)

Machine: Yamaha YZF-R6

Application: World Supersport

ECU: WSS600_A

: YMER6xxx (V1.11 & up)

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This quick reference document is drawn up with the aim to be simple and fast for user consultation, assisting the user or technician in their calibration work.

Will not be in-depth concepts considered fundamental, technical control, PID logic and procedures for writing data or parameters.

This document is the reference for the STRATEGIES section of the control firmware only.

Mectronik will not be responsible for all the effects resulting from the calibrations performed by the user using the tools provided, of not achieved competitive results or not achieved goals. The user is always suggested to verify through simulation, the effect of the calibrations on control algorithms.



IN THE DRIVE BY WIRE SYSTEM, THE INCONSISTENCY OF CERTAIN PARAMETERS REGARDING THE MANAGEMENT OF THE THROTTLE BODY, MAY DETERMINE NOT ITENDED AND UNCONTROLLED EVENTS. THE USER ASSUMES THE FULL RESPONSIBILITY WHEN USING ANY TOOL ABLE TO MODIFY CALIBRATION PARAMETERS.

In cases where it is deemed useful to verify through simulation actions resulting from the changes made to the data, and not being in possession of the appropriate tools, contact technical service.

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INTRODUCTION

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

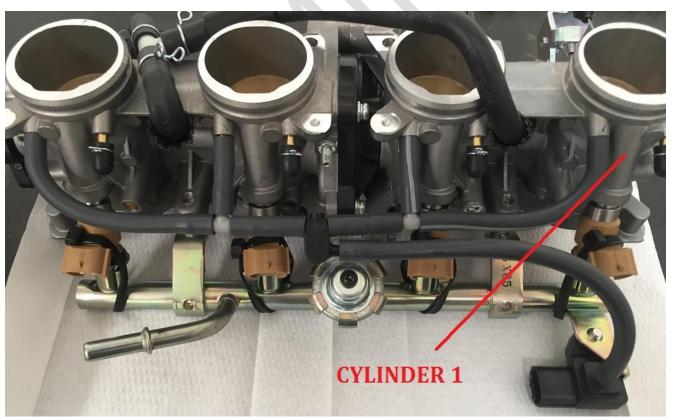
Specifically, the standard configuration has a MAP (manifold air pressure) sensor that measures pressure from pipes connected to all 4 cylinders.

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.

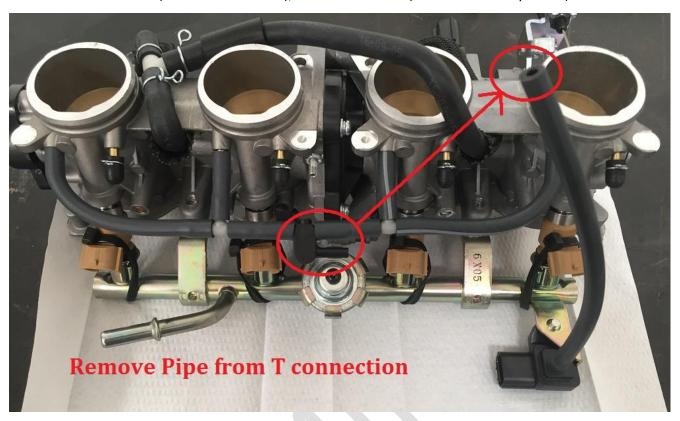
At the same time, the ECU uses this signal to detect the Intake Stroke for cylinder 1 (for synchonisation).

Please check the technical rules of your specific championship to ensure that these changes are allowed (notably British Supersport). In case this is not allowed, be sure to use an ENGINE CALIBRATION (.DIS distribution file) that uses the CAM sensor instead of MAP sensor for engine synchronisation .

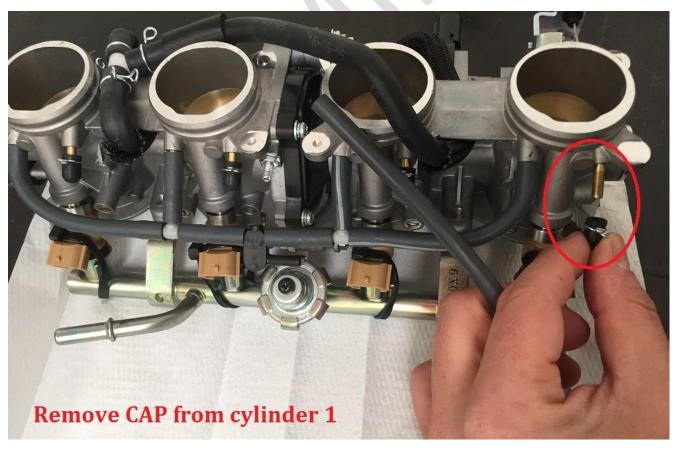
Below is an image of original configuration of the (EU) throttle bodies (note there are regional differences):



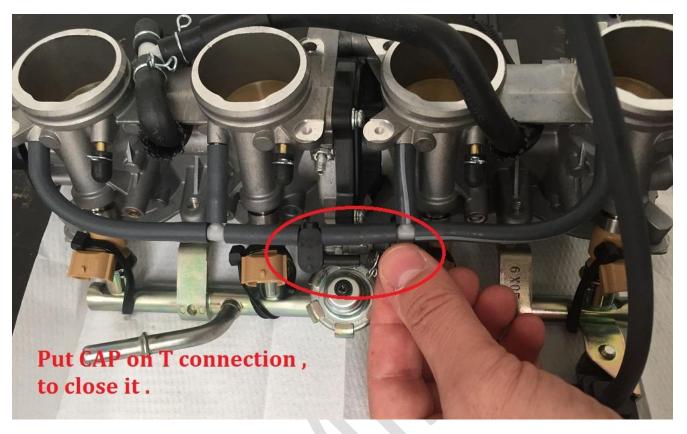
STEP 1: remove the hose (connected to sensor), from T connection (connected to all cylinders):



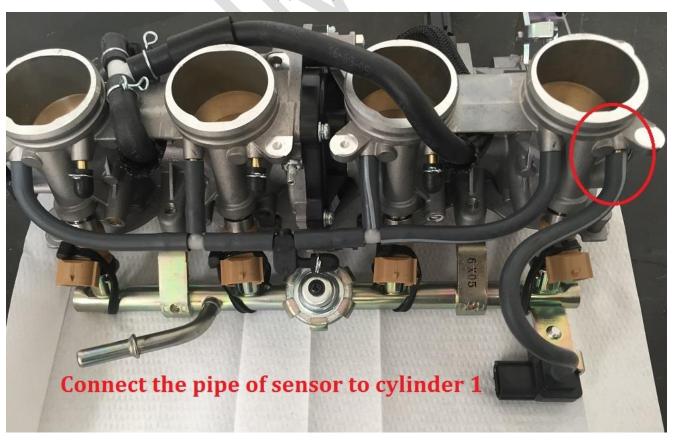
STEP 2: remove the CAP from the metal pipe on cylinder 1 :



STEP 3: put the CAP (removed in STEP 2) and fit it to the T connection to seal the pipes connected to all cylinders:



STEP 4: connect the sensor hose to the metal pipe on cylinder 1.



Before installing your throttle body, ensure that you close the pipe originally used for the canister valve (the fuel vapor recirculation device) that usually is removed for racing.

