

GSXR Injection Set up Instructions

Engine	Fuel Pressure	Injector No	Idle Voltage Check with engine running	Idle speed	kg/ph	Cam Profiles
1000 GSXR	3.0 bar	Standard	1.22 to 1.24v	1350-1450rpm	4.5-4.8kg/ph	Standard
1300 GSXR	3.0 bar	Standard	1.22 to 1.24v	1350-1450rpm	7.0-7.5kg/ph	Standard
1500 GSXR	3.0 bar	INJ480P PECO	1.22 to 1.24v	1450-1500rpm	9.0-9.5kg/ph	PowerTec
1600 GSXR	3.0 bar	INJ480P PECO	1.22 to 1.24v	1450-1500rpm	9.0-9.5kg/ph	PowerTec

When setting Idle on the GSXR1000 only, you must set-up directly to the throttle bodies without air horns fitted, as the air horns have holes in them & would give incorrect readings.



The GSXR1300 to 1600 can be set-up with or without air horns (shown below).



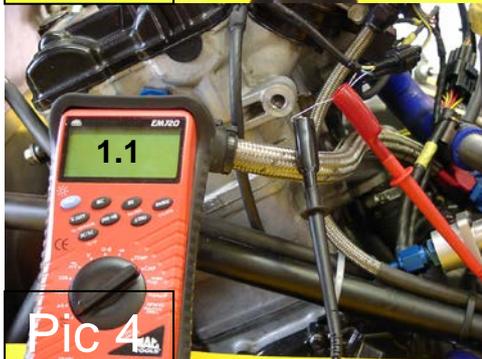
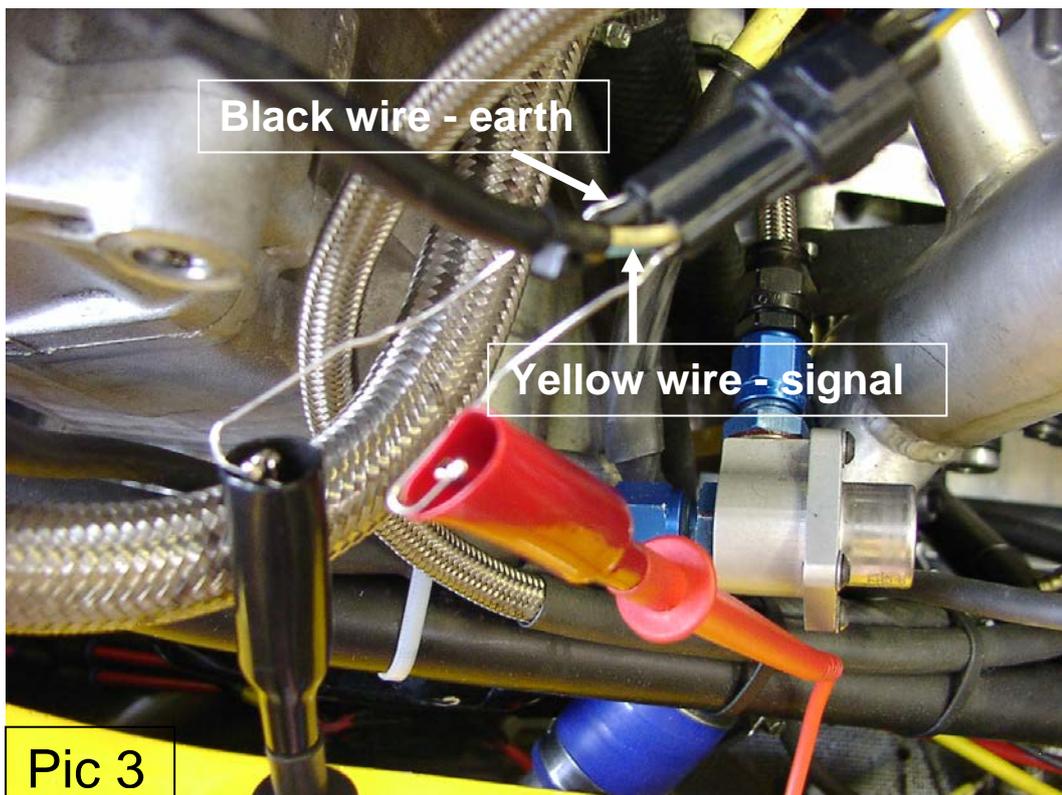
Set-up Procedure

****NOTE****- Before attempting to start setting up you will need a Syncrometer & either a computer with Easimap5 software + a CAN/USB adapter or a voltmeter

Setting up idle RPM & voltage at idle is the most important part of getting your engine running correctly. If you do not set these correctly, your engine will not run properly. The only way the ECU knows how much fuel is required to make the engine run correctly is by the amount of air being drawn into the engine at idle. The Syncrometer, as shown in the pictures, are available from us, or many reputable Motorsport accessories suppliers. The Syncrometer is extremely accurate and can measure kilograms of air per hour. Without the use of this type of meter, you will not be able to set up your engine accurately enough.

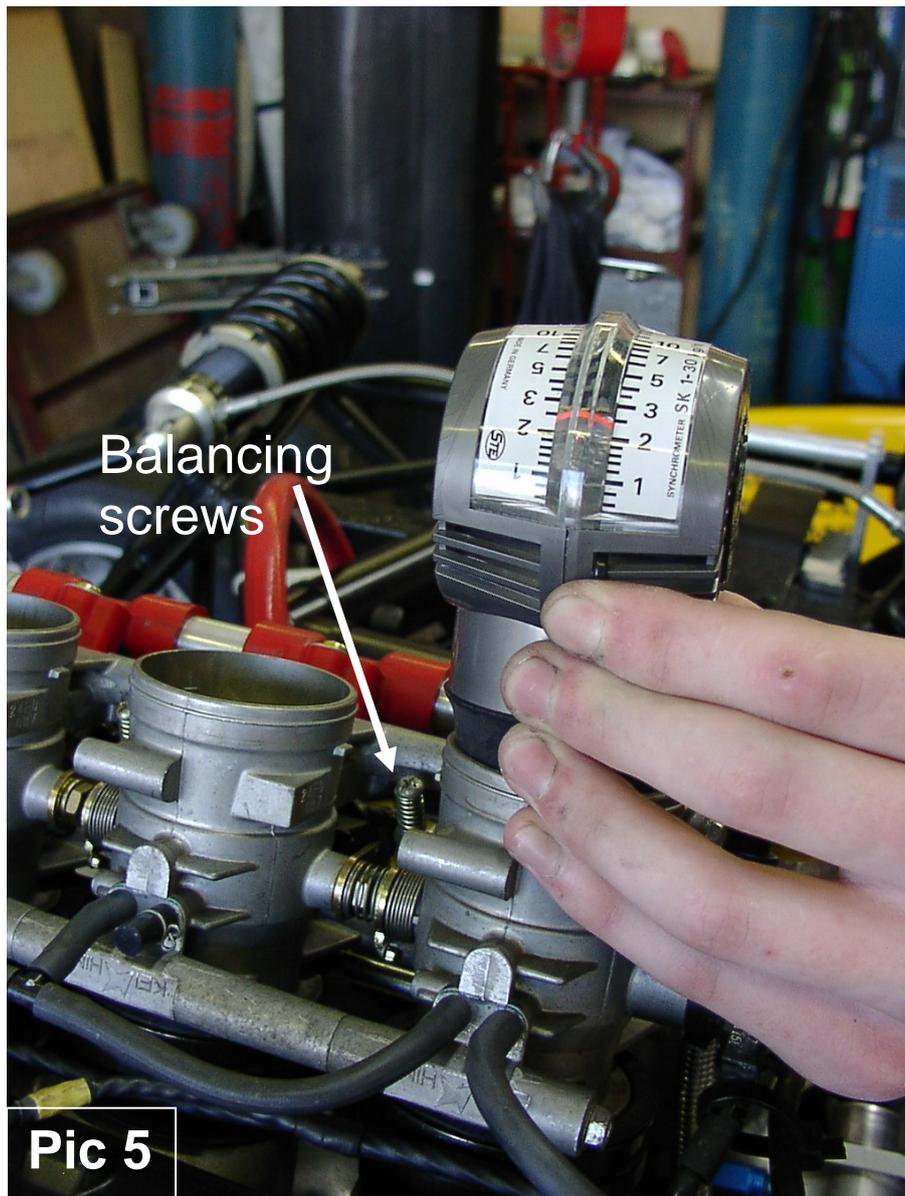
Starting your engine for the first time

1. Before you start your engine for the first time, you must make sure the throttle pot is at least set at a point which will allow you to adjust the idle settings easily. If you have a computer with Easimap 5, connect it using the CAN/USB lead to the 985 harness. When you turn on the ignition which will power up the ECU, the computer screen will display the throttle position voltage, which is the voltage you must set your throttle pot to when the engine is idling. These are detailed in the table. For example, the idle voltage for the GSXR 1300 is 1.22 – 1.24 volts. If you don't have a computer then connect the voltmeter to the Yellow wire & Black wire on the pot connector.



2. With the ignition on & engine NOT running set the voltage to less than the idle voltage, by loosening the 2 screws & twisting the pot. (e.g. 1.1 volts) This is an ideal starting point.

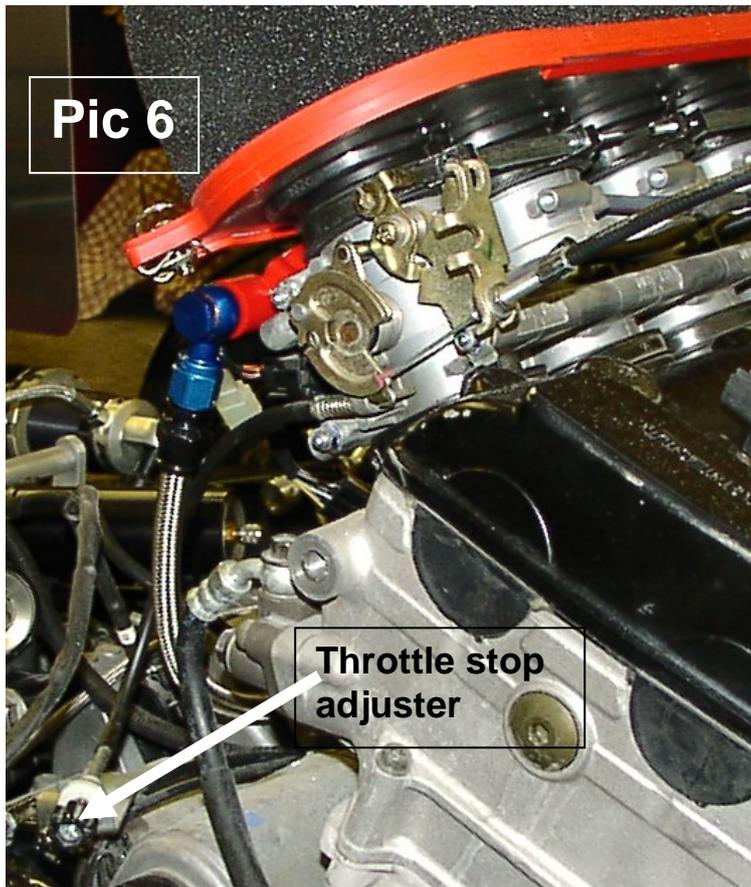
3. Take your vacuum gauge and place it in the position as shown below. You should now attempt to start your engine, if your engine starts first time and keeps running, this is great because it means you are not a long way out from the vacuum you require. If the butterflies are a long way out, e.g. too far open or too far closed, you may find it difficult to start. If you managed to get the engine to run for a few seconds take a note of the vacuum from the Syncrometer, if the vacuum is too small, then you need to adjust the throttle stop screw to increase the amount of air going in and then try again (only make small adjustments to the throttle stop and make sure the voltage you see is never greater than the idle voltage. Re adjust the throttle pot if reqd to read lower than the idle voltage). If the air shown on the Syncrometer is too great, then reduce the throttle stop screw, to reduce the amount of air going in.



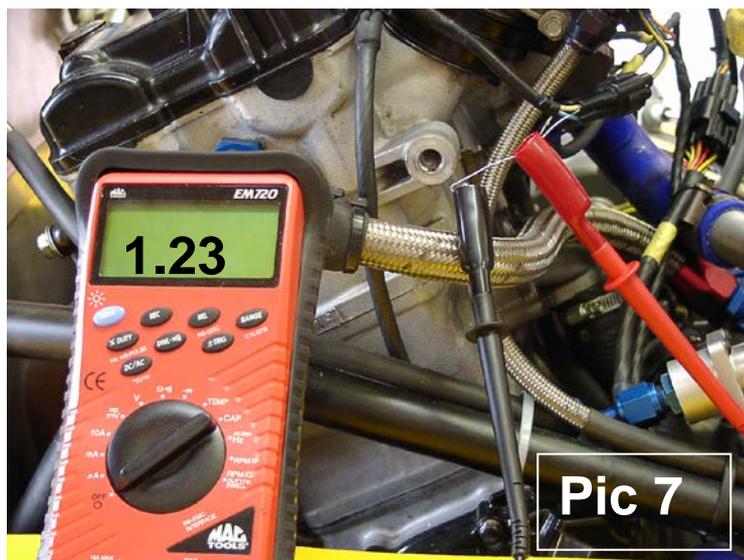
Pic 5

4. Once you have got the engine running, you can then balance the butterflies by using the screws in between the bodies as shown above

- Using the throttle stop screw, adjust the butterflies until the kilograms of air per hour are correct for your engine specification (pic 6) (as listed in table).



- You now need to adjust the throttle position sensor to read the correct idle voltage. If you fail to set the throttle pot to the correct voltage, the engine is likely to not respond well when the throttle is opened (pic 7)



- After setting the correct voltage check the butterflies for the correct amount of air.
- Again check the idle voltage to ensure this is still correct. Re set if required.
- Once throttle idle voltage & vacuum are as listed then you are set up correctly.