

SENSOR READINGS

I answered to these questions in many threads but i see the questions are keep coming about that so i thought i'll post here the sensor readings as i know they must be for a well working engine... the figures are based on many live tests and official data from various documents, so:

(for all the presented figures +/- 5% is acceptable)

MAF(air flow) = 55-60 at idle growing with revs up to 600 or above at 3000+rpm under heavy load

AAP(ambient pressure) = real ambient pressure on barometer in kPa, around 100 must drop up to 2 units to 3000+rpm, more decreasing of that value related to the acceleration should indicate that the air beyond the filter is less than required.

AAT(ambient temp) -only Eu3/15-16P engines = real ambient temp on thermometer

MAP(manifold absolute pressure) = with AAP at idle growing to 230 at full load

IAT(inlet air temp) = AAT + 10 to 30 depending on outside temp, engine coolant temp and boost(measured with coolant gauge at middle)...also it can be much higher if non-cooled EGR is still fitted

COOLANT TEMP = 70 - 115 gauge stays at the middle, the gauge will go to red zone only at 120 and the electric cooling(aircon) fan kicks in at 110 and stops at 105

FUEL TEMP = around 10 less than coolant temp

THROTTLE

ACCEL. WAY 1 - about 0.3V with the pedal released, about 4.7V with pedal to the maximum position

ACCEL. WAY 2 - about 4.7V with the pedal released, about 0.3V with pedal to the maximum position

ACCEL. WAY 3 – this track must have values very near to the second track.(only 15P-16P engines)

ACCEL. SUPPLY – this value must stay between 4.9 a 5.1

IDLE ESPEED = 750rpm

IDLE SPEED ERROR – This is a calculated value that shows the difference between the idle speed and the real drive demand

i hope i didnt forget anything but if i did just shoot and i'll update the list