**Throttle Position**

Every TPS (Throttle Position Sensor) needs calibrating as a priority after connecting to the ECU and before starting the engine. This is regardless of the load input used. It is assumed from here on in the manual that the user has read and is familiar with the GWv4 software or its GWv4 manuals.

To calibrate the TPS sensor:

Connect to the ECU.

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Open the parameters window.

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From the highlighted drop down box select the parameter TPS raw.

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The Parameters window shows a value for TPS raw. At the idle position, the throttle pot needs to be physically turned (if possible) until this number is around 20. Tighten the throttle pot then open to WOT (wide open throttle) and check the TPS raw number. This number should be less than 255. If the number is 255, then the throttle pot is at its stop so needs to be turned back until it reads less than 255.

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The number for parameter ***TPS raw*** at WOT, needs to have a safety margin added to it and then input in to the options box as *TPS max*. The number for ***TPS raw*** at minimum throttle needs a safety margin subtracted from it and input into the options box as *TPS min*. Your ***Throttle*** parameter should now read around 1% when at rest and around 98-99% when fully depressed. Your values must never reach 0% and 100%, as if the ECU sees a full scale value, it will identify this as a TPS failure.