VOLKSWAGEN - TRANSPORTER

#T0065

Make: Volkswagen

Model: Transporter

Subject: Installation of ECM, basic settings

From the early / mid 1990's many VW / Audi ECM's had the ability of adaptive learning from inputs such as RPM, O2 sensor value, engine load signal (AFM, MAF or MAP), Throttle position etc.

These inputs and learnt values are used to determine the initial start point (base setting) of outputs such as idle speed, fuel mixture etc.

When installing one of these ECM's it is desirable to connect a V.A.G. (Volkswagen) scan tool (or equivalent) and go through the procedure of 'Basic Settings', which then programs the ECM to learn the vehicles engine characteristics. The engine will usually idle and accelerate smoother after doing this. The only other way is to drive the vehicle for some time so that the ECM learns the appropriate values. How long this time is, at this stage Injectronics have not been able to determine and the manufacturers do not specify.

When remanufacturing VW Transporters 4 and 5 Cylinder ECM's with an internal map sensor, Injectronics sets the base setting so that the ECM will see a throttle position voltage of .9 volts as a closed throttle. The fuel mixture will also be set slightly on the rich side of normal. This will usually enable the engine to run reasonably on first start up.

However, if your vehicle's TPS voltage is different or your fuel requirements of your engine are different (eg blocked injectors) you may experience poor idle or even poor initial acceleration. If you experience this and you do not have a tool to do basic settings, you may wish to set your TPS voltage to .90 volts, but only do this if your vehicle is a manual. The automatic transmission ECM also uses the TPS voltage and if this value is changed then the transmission ECM will also need 'Basic Setting' performed on it. You will also need time for the vehicle to respond and learn from the O2 sensor, so it is imperative that this sensor is operating correctly. The best method of 'Teaching' the ECM to learn values is to drive the vehicle once the operating temperature is reached and the O2 sensor is cycling. For more information on performing basic setting, please don't hesitate to call Injectronics.