

### **VID Block**

VID Block is an acronym for Vehicle Identification Block and is supported in X103, X105, X200, X202, X350, X400 and X404 vehicles. The VID Block is only stored in the vehicle's ECM and is programmed into the module on the assembly line during build using a computer called a VCATS station.

The VID block contains 256 bytes of data vital to the ECMs own functionality as well as being needed when programming new modules other than the ECM. In this way, the ECM VID block is essentially the configuration keeper for the whole vehicle.

Each vehicle VID Block is partitioned into two separate areas, the first 64 bytes contain data used for the ECMs own configuration purposes and the last 192 bytes are used to store data for the other configurable modules that are fitted to the vehicle.

### **Replacing an ECM**

The VID Block is only stored in the ECM, and so when an ECM is replaced the configuration process is different than that for the other control modules. Data cannot simply be extracted from the VID Block and downloaded to the new module, as the VID in the new module isn't programmed.

Once the ECM has been selected from the "New Modules" menu and the VIN verification has been carried out the WDS application will first Flash Program the module with the latest appropriate software that is identified on the WDS database. When the flash programming has completed successfully the next stage is to transfer the ECMs unique Passive Anti Theft System Identification (PATS ID) to the other modules on the vehicle that require the ID. The modules that store the PATS ID vary from vehicle type to vehicle type.

After Flash Programming and PATS ID transfer have been completed the next stage is to configure the ECM with it's own configuration data as well as mirror data for all the configurable modules that are also stored in the VID Block. The ECM's own configuration will be constructed from data extracted from the VCATS code stored in the WDS database for the VIN entered at the start of the session, and from operator questions when certain data isn't available from the VCATS Code.

The seventeen character VIN that forms part of the VID Block will be copied from the Instrument Pack. Once this part of the VID Block has been rebuilt the WDS will interrogate all modules that store a mirrored copy of their configuration data in the VID Block and construct the remaining part of the VID Block before downloading it to the new ECM. DTCs will then be cleared and the whole programming and configuration process for the ECM will be complete.