

## CAR CONFIGURATION FILE (CCF)

Car Configuration Files (CCF) were first introduced on the 2007 MY XK (X150 onwards) and continued with the 2009 MY XF. CCF is the current method of configuration and programming going forward with X150 and X250 models.

CCF replaces what was known as the VID Block on earlier vehicles. The principles of the two are similar, but CCF function and operation is more intuitive and user friendly.

A CCF consists of two parts: Vehicle Module Codes and Vehicle Parameters. Vehicle Module Codes are data used in manufacturing to specify the vehicle and are stored to be used in service. Vehicle Parameters are derived from the vehicle specification and relate to which features are fitted to the vehicle and their market settings.

Examples of CCF Vehicle Parameters are:

- Vehicle type
- Brand
- Model year
- VIN
- Tire dynamic rolling radius
- Brake system type
- Brake rotor size
- Final drive ratio
- Transmission type
- LHD or RHD specification
- MOST® configuration
- Reverse mirror dip
- Auto relocking
- Drive away locking
- Single / dual stage unlocking
- Passive arming

Some of these items fall into the category of Vehicle Personalization. Personalization parameters can be changed by the operator using the Touch Screen Display (TSD) accessed in the vehicle menu.

Within the make up of the Vehicle Parameters Code is an area used for the vehicle VIN. This VIN data is implanted in every module on the vehicle that is capable of accepting it, and locked into each new module when programmed. This has service implications, as it is also a vehicle security feature and will prevent the substitution of existing programmed modules from vehicle to vehicle. When replacing a module on vehicles with CCF, IDS must be used.

The Car Configuration File is held in three locations on the vehicle:

- Auxiliary Junction Box (AJB) or Rear Junction Box (RJB), depending on model
- Central Junction Box (CJB)
- Engine Control Module (ECM)

The AJB and RJB are also referred to as ‘master modules’ because they hold master copies of the CCF. A master CCF is an active copy of the current car configuration with all of the personalization settings and changes that have been made since factory programming of the CCF (‘As-Built’ data).

The AJB/RJB transmits the Vehicle Parameters part of the CCF on the CAN bus. Whenever CAN is active, this data is broadcast onto the networks at regular intervals. The AJB/RJB will monitor the integrity of the memory where CCF information is stored. If a fault is detected, a diagnostic trouble code (DTC) will be logged.

The vehicle’s CCF master module holds the only copy of the CCF file used actively within the vehicle. This information is cyclically broadcast from the master on the vehicle’s communication networks as a reference for any modules that require this data. This is very similar to the way vehicle speed, or transmission gear position data, etc., gets broadcast as a live message on the CAN network.

The ECM and the CJB contain back-up copies of the CCF file. Back-up copies of the CCF are NOT used by any module at any time during vehicle operation. These copies of the CCF are completely static and are only accessed or modified by IDS for service/maintenance procedures. This allows IDS to work with the most current CCF data in the event that the master module needs to be replaced.

## As-Built Data

IDS also provides copies of the ‘As-Built’ data from the factory. This data can be used by the operator to restore the vehicle back to its original condition. Any personalization settings set by the customer will have to be restored to the vehicle.

Vehicle coverage of ‘As-Built’ data is typically incremented on most DVD releases. It is very important to use the most current version of IDS when working on vehicles during PDI to ensure most current ‘As-Built’ data coverage.

## CCF Editing

CCF tools and editing procedures are continually being improved to enhance the user interface and minimize the opportunity for vehicle information to become corrupted. For the latest information on CCF editing, please refer to the CCF Documents on GTR under > Diagnostics > Enhanced Diagnosis and Testing.