Passive immobilisation

Passive immobilisation prevents the vehicle from being started unless the authorised key is used to start the vehicle.

There are only two configurations for passive immobilisation:

- passive immobilisation not active
- passive immobilisation active

When the ignition is switched off, the vehicle remains mobilised for up to a maximum of 5 minutes. If however the driver's door is opened, after 2 minutes 30 seconds, the vehicle remains in a mobilised state for a further 30 seconds. When the timer in the BCU has expired, the vehicle is immobilised.

Once the ignition is switched on, the BCU transmits a coded signal to the ECM. If the coded signal does not correspond to the programmed code in the ECM, the ECM is inhibited and the BCU inhibits the starting circuit.

In order for passive immobilisation to occur, the following conditions must be met:

- Driver's door closed.
- Fuel cut-off switch not tripped.
- Key not inserted in ignition.

Passive remobilisation

Whenever the vehicle is immobilised, passive remobilisation of the engine occurs when the ignition is switched on, allowing the vehicle to be started.

There are three configurations for passive remobilisation:

- Passive immobilisation not active.
- Passive immobilisation active.
- EKA with super locking on receiving good passive remobilisation exciter coil signal.

The BCU controls the passive remobilisation exciter coil (located around the ignition barrel) to generate a magnetic field which causes the handset to transmit a remobilisation signal. The BCU receives the signal and allows the vehicle to be started. If a valid signal from the handset is not received within one minute of the ignition being switched to position II, the BCU stops the passive coil from generating the magnetic field.

Emergency key access

If the handset fails to operate, the engine can be remobilised by using the key to enter a unique four digit Emergency Key Access (EKA) code.

There are three configurations for emergency key access:

- EKA not active (no immobiliser fitted).
- EKA active.
- EKA with super locking on receiving good passive remobilisation exciter coil signal.

ALARM SYSTEM AND HORN

The code is recorded on the security information card and is entered as follows:

- 1 Using the key, turn the driver's door lock to the UNLOCK position and hold in this position for at least 5 seconds. An audible warning is then emitted to indicate that the body control unit is ready to accept the code. Return the key to the centre position. It is now possible to use the key to enter the separate numerical values of the four digits that make up the EKA code.
- 2 Enter the first digit of the code. If the first digit is 4, turn the key to the UNLOCK position 4 times. Ensure the key is fully returned to the centre position after each turn of the key.
- **3** Enter the second digit of the code. If the second digit is 3, turn the key to the LOCK position 3 times. Ensure the key is fully returned to the centre position after each turn of the key.
- 4 Enter the third digit of the code. If the third digit is 2, turn the key to the UNLOCK position twice. Ensure the key is fully returned to the centre position after each turn of the key.
- **5** Enter the fourth digit of the code. If the fourth digit is 1, turn the key to the LOCK position once. Ensure the key is fully returned to the centre position after each turn of the key.
- **6** Finally, turn the key to the UNLOCK position and back to the centre position, a double bleep will indicate that the code has been entered correctly. A single bleep indicates that the code has been entered incorrectly.

Then, before opening the door, wait 5 minutes for the alarm and immobiliser to be de-activated. During the 5 minute wait for the alarm and immobiliser to be de-activated, the alarm indicator LED in the instrument pack continues to flash (one flash every 2 seconds). **DO NOT OPEN THE DOOR OR ATTEMPT TO ENTER THE CAR** until the full delay period has elapsed.

When the 5 minute wait has elapsed, the alarm indicator LED stops flashing. Immediately open the door, insert the key in the ignition switch and turn the switch to position II. If the ignition switch is not turned to position II within 30 seconds of the end of the 5 minute wait, the engine is automatically immobilised again.

The EKA code will not be recognised if there is an interval of 10 seconds or more between key turns or if the key is held turned for 5 seconds or more during the procedure.

In some system configurations a successful EKA code entry is indicated by the audible warning device pulsing twice for a period of 50 ms on, 200 ms off. The theft deterrent LED is switched on for 1 second, all doors unlock, the alarm disarms and the vehicle is remobilised allowing the engine to start.

If an incorrect code is entered, an audible warning is emitted and the procedure must be repeated. Up to a maximum of 10 attempts to enter the code is possible. After 10 attempts, the BCU will not allow any further codes to be entered for a period of 10 minutes.

Single point entry

Single point entry (SPE) allows the driver to unlock the driver's door while leaving all other doors locked.

There are two configurations for single point entry:

- SPE not active.
- SPE active.

To use SPE, press the unlock button on the handset once. Depressing the unlock button a second time in the space of one minute unlocks the remaining doors. SPE is also possible by turning the key in the driver's door lock to the unlock position once. Turning the key to the unlock position again within one minute unlocks the remaining doors.

In order for SPE to operate, the following conditions must be met:

- The ignition is off.
- All doors are locked.

Speed related locking

For added protection the vehicle doors can automatically lock when the vehicle exceeds a specific road speed.

There are two configurations for speed related locking:

- Speed related locking not active.
- Speed related locking active.

Speed related locking causes the doors to automatically lock when the vehicle exceeds a speed of 4 mph (7 km/h). When the ignition is switched off, the doors are automatically unlocked. Depressing the instrument panel mounted central door unlocking switch disables the speed related locking for the duration of the journey.

Speed related locking only activates once per ignition cycle. If speed related locking activates and a door is then unlocked, the door does not automatically re-lock.