Burglar alarm and Immobilizer
Volvo anti-theft system is a complete security package that is designed to provide the best possible protection against break-ins, theft and physical attacks.

Starter inhibitor - Immobilizer
Volvo Immobilizer is a security system whereby only the correct key will start the engine.

CUSTOMER BENEFITS
• Have a deterrent affect on attempted burglary.
• Protects the driver during overnights/rest in the cab.
• Obstructs or prevents theft of the truck.
• On several markets, an installed system provides lower insurance premiums.
Burglar alarm and Immobilizer

The siren is installed in a box of steel, located in a protected area, not reachable from the outside. When the alarm is activated, the siren sounds with a high intensive signal of about 105 dB (A) for up to 5 minutes at the same time as all the truck's signal indicators are flashing. The siren features an internal battery back-up that triggers the alarm if any attempt is made to tamper with the wires and connectors.

When the alarm is activated, it is not possible to start the engine. A contact function breaks the connection to the starter motor, making theft of the truck far more difficult.

The cab is protected from break-ins via contacts in the doors. Motion detectors set off the alarm if there is any movement inside the cab. The alarm can also be set in a special reduced setting which is activated during ferry transport or when the driver spends the night inside the cab. The in-cab motion detectors and the tilt sensor are then disabled.

The alarm control unit is connected to the truck's electronic system and it communicates with the various on-board control units such as Immobilizer, engine control unit, vehicle control unit and driver information unit. The alarm and the central locking are integrated with each other and are conveniently operated via the same remote control unit. When the doors are locked the alarm is activated. The remote control has a built-in radio transmitter that functions up to 15 metres from the truck. The alarm is also integrated with the truck's starter inhibitor, Immobilizer.

The alarm has a "panic" function that serves as a personal security warning system. If the driver presses the panic button for more than 2 seconds, the alarm is triggered. This function provides increased security when the driver spends the night in the cab.

When the alarm is activated, a diode flashes in the alarm display at the top of the instrument panel to serve as a visible theft deterrent. The alarm display also provides information about the alarm's status. For instance, the flashing signal indicates if the alarm has been triggered.

Starter inhibitor - Immobilizer

The starter key communicates with the engine's starting circuit via security-coded electronic signals and randomly selected codes. There is a transponder embedded in the truck key, which communicates with an inductive antenna in the starter lock. When the key is inserted into the starter lock, the Immobilizer control unit (ICU) recognises the key's signal and permits communication with the engine's electronic management system (EMS). When the key is turned in the starter lock, a coded signal is sent from the engine's electronic management system to the Immobilizer control unit. If the signal is approved, a coded, randomly selected signal is sent on to the EMS to permit the engine to start. If the signal is not recognised the engine will not be able to start.

1. The key sends its individual code to the ICU.
2. The ICU sends a coded counter question to the transponder.
3. The transponder translates the question and sends a coded answer to the ICU. If the code is correct, the key is approved.