RSI 290

Operational Description

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The KeyZone Vault is a secure plastic housing that stores the vehicle's keys in a drop down drawer that is held in-place by a heavy gauge steel mechanical locking mechanism. It includes a rubberized metal mounting bracket that slips over the top edge of a vehicle's door window. The Vault is covered with a rubberized boot and standoff feet that protect the vehicle from any potential damage caused by the Vault. The vehicle keys are placed inside the Vault drawer, which is then pushed upward into the Vault to lock the draw in place. There are two indicator lights on the front of the Vault whose operation is described below.

To remove the keys from the Vault, the dealer personnel, using their authorized KeyZone Remote, presses the single button on the Remote while holding it approximately one inch from the front face of the Vault. When the Vault receives the signal and verifies that the proper authentication code is received, the Green LED on the front of the Vault will flash. This indicates that authorization has taken place and the user can open the Vault drawer. The sales person or other user then presses up on the bottom of the Vault. This action releases the locking mechanism and the drawer drops down exposing the vehicle's keys. If the user's Remote or the Vault contain the incorrect authentication keys, the Vault will not be set to open and the Red LED will flash.

Whenever a Vault drawer is opened or closed, the Vault sends a message into the system and the KeyZone Server logs the event. The system maintains these records that consist of who accessed the Vault, which Vault was accessed and the associated vehicle, and what time the event occurred.

The Vault also contains vibration sensor that is used as part of the security system. There are three levels of movement that are detected and sent to the server for interpretation. The first level of motion looks for minor infractions and triggers responses from the Controller and Sentinel. The second level of motion is more significant and will escalate the response from the Controller and Sentinel. The third is the most severe measurement that looks for significant shock such as an attempt to break a window and will cause the strongest programmed response from the Controller and Sentinel. The Vault also contains an internal calendar and clock that stores the alarm activation and deactivation times. Whenever any of the alarm events occurs during the activation period, the Vault sends a message to the network for processing and the triggering of the appropriate alarm message.

The Dallas Semiconductor Ibutton™ ID only (unique factory-lasered 64 bit registration number) is attached to the vault RF Cover key fob to allow the vault to associate a key with an ID number. The registration number is stored in the vault and the server database. The vault will read the ID when the draw is closed to insure the correct RF cover key fob is put in place. If the wrong RF cover key fob is put in the drawer, the locking mechanism will be blocked three times but on the fourth the vault will accept the key and notify the server of the problem.