VEHICLE THEFT SECURITY SYSTEM

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GENERAL INFORMATION

INTRODUCTION

Vehicles equipped with the Vehicle Theft Security System (VTSS) system, the doors, liftgate, hood and ignition circuit are monitored by the Body Control Module (BCM) when the system is armed. The VTSS will prevent the engine from starting until the BCM receives a disarm signal. If the VTSS is triggered, the horn will pulse, headlamps/marker lamps will flash, and the VTSS warning lamp will flash. If BCM determines the threat to be false and the VTSS is not triggered again, the system will shut down and rearm itself after three minutes. The VTSS monitoring portion of the system is split into two sections. The engine compartment section and the passenger compartment section. If a malfunction occurs in the engine compartment section, the passenger compartment section would still arm and function normally. If an electrical malfunction occurs in either section of the system a Diagnostic Trouble Code (DTC) would be stored the BCM memory to aid system repair. DTCs can be retrieved using scan tool (DRB) attached to the diagnostic connector above the accelerator pedal.

ENABLING

To initialize the VTSS feature the operator must, with the engine compartment hood open, cycle the key in the liftgate key cylinder to the unlock position giving the BCM a disarm signal. At this time the visual alarm outputs the headlamps and marker lamps will function. However the audio alarm output the horn and engine disable portion of the VTSS will not function until there has been twenty consecutive engine run cycles. When this has occurred the total VTSS will function.

If during alarm being set the BCM receives a request from the RKE module to enter PANIC mode the BCM will cancel the alarm, return VTSS armed state and then perform the RKE PANIC feature.

DESCRIPTION AND OPERATION

ARMING PROCEDURE

METHOD-A

(1) With the key removed from the ignition lock and any door open, actuate one of the following:
- Power door lock button to LOCK,
- Key fob LOCK button
- Door lock key cylinder to locked position.

(2) Close all opened doors.

(3) After the last door is closed, an arming time-out period of sixteen seconds will start, then the VTSS will become armed.

METHOD-B

Actuating the key fob transmitter LOCK button, key locking the front doors or liftgate with the doors closed and the ignition locked will begin the arming time-out period. If method-A, 16 second time-out sequence was in process when method-B was actuated, the 16 second time-out will restart from the time of the second actuation.

If the security lamp does not illuminate at all upon final door closure, it indicates that the system is not arming.

The current VTSS status armed or disarmed shall be maintained in memory to prevent battery disconnects from disarming the system.

DESCRIPTION AND OPERATION (Continued)

TIME-OUT PERIOD

The VTSS requires 16 consecutive seconds to time-out and arm the alarm. If a door is key unlocked, key fob unlocked. or the ignition is switched ON, the VTSS will cancel out. To reset the VTSS, perform methods A or B.

TRIGGERING THE VTSS

After the VTSS is armed, following actions will trigger the alarm:

- Opening any door.
- Opening the hood
- Turning the ignition to the ON or unlock position.
- The ignition switch can be turned to the accessory position without triggering alarm system.

DIAGNOSIS AND TESTING

DIAGNOSTIC PROCEDURES

Refer to Group 8W, Wiring Diagrams for circuit information and component locations. Using a scan tool (DRB). Refer to the proper Body Diagnostic Procedures manual for test procedures.

REMOVAL AND INSTALLATION

BODY CONTROL MODULE

REMOVAL

(1) Disconnect the battery negative cable.

(2) Remove the lower steering column cover and the knee blocker reinforcement.

(3) Disconnect the two wire connectors from the bottom of the Body Control Module (BCM) (Fig. 1).

(4) Remove the bolts holding the Junction Block to the dash panel mounting bracket.

(5) Remove the Junction Block from the mounting bracket.

(6) Remove the screws holding BCM to Junction Block.

(7) Slide the BCM downward to disengage guide studs on Junction Block from the channels on the BCM mounting bracket.

(8) Remove the BCM from Junction Block.

INSTALLATION

For installation, reverse the above procedure.

DOOR LOCK CYLINDER SWITCH

REMOVAL

(1) Remove the door trim and water shield.

(2) Close the door window.

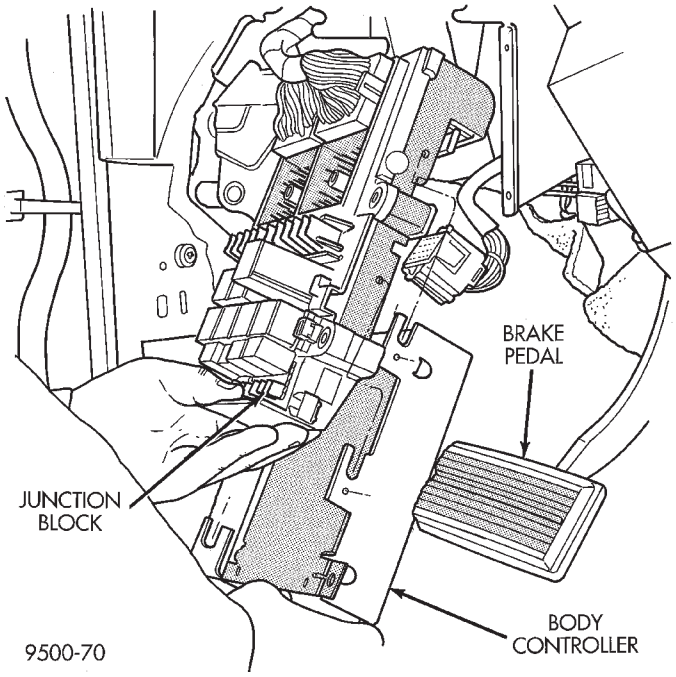

Fig. 1 Body Control Module

(3) Disconnect the door lock cylinder switch wire connector from the door harness and wiring clip from the impact beam.

(4) Remove the outer handle from the door.

(5) Disengage the lock tab holding switch to the back of the lock cylinder (Fig. 2).

(6) Remove the switch from the door handle.

INSTALLATION

For installation, reverse the above procedure.

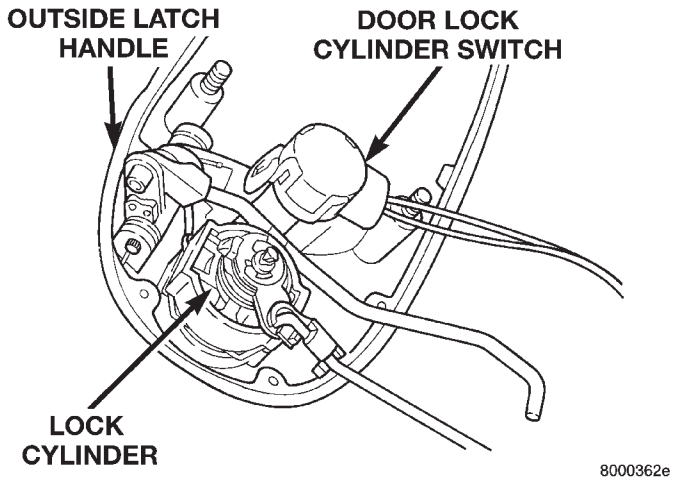

Fig. 2 Door Lock Cylinder Switch

FRONT DOOR AJAR (VTSS TRIGGER) SWITCH

REMOVAL

(1) Open the front door.

(2) Remove the screw holding the door ajar switch to the door B-pillar (Fig. 3).

(3) Remove the door ajar switch from the B-pillar.

REMOVAL AND INSTALLATION (Continued)

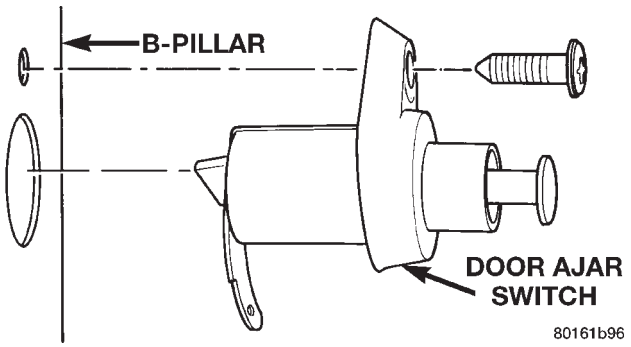

Fig. 3 Front Door Ajar Switch

(4) Disconnect the wire connector from the back of the ajar switch and remove the switch.

INSTALLATION

For installation, reverse the above procedure.

HOOD AJAR (VTSS TRIGGER) SWITCH

REMOVAL

(1) Release the hood latch and open the hood.

(2) Using a small flat blade screws driver, pry trigger switch from top of the radiator closure panel.

(3) Disconnect the trigger switch from the wire connector and remove the switch (Fig. 4).

INSTALLATION

For installation, reverse the above procedure.

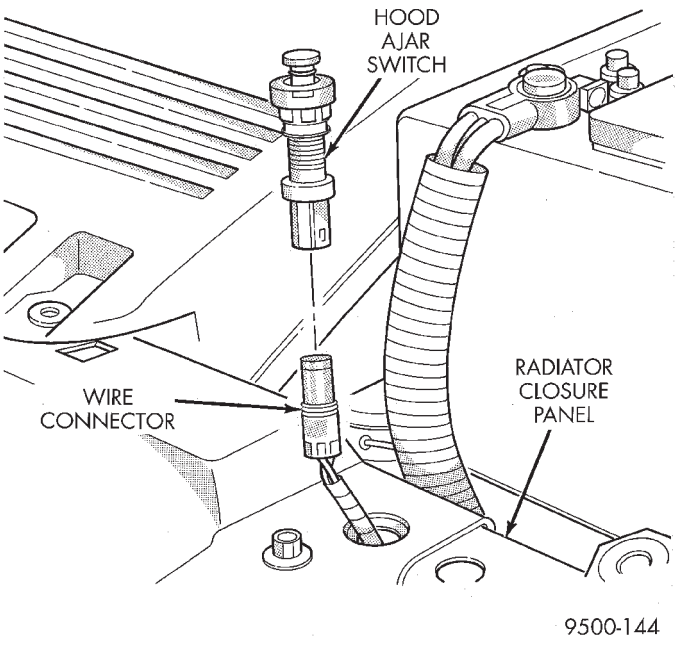

Fig. 4 Hood Ajar Switch

LIFTGATE AJAR (VTSS TRIGGER) SWITCH

REMOVAL

(1) Remove the liftgate latch from the vehicle. Refer to group 23, Body for proper procedures.

(2) Disconnect the wire connector from the liftgate ajar switch.

(3) Remove the screw holding the ajar switch to the liftgate latch and remove the switch (Fig. 5).

INSTALLATION

For installation, Reverse the above procedure.

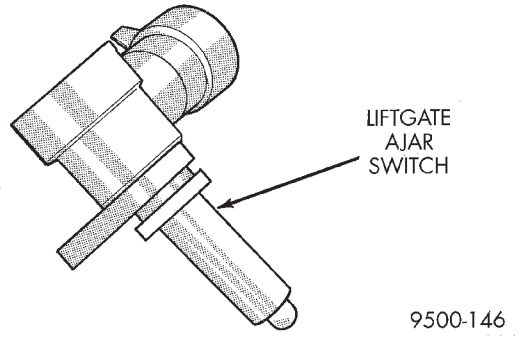

Fig. 5 Liftgate Ajar switch

LIFTGATE LOCK CYLINDER SWITCH

REMOVAL

(1) Remove the inner trim panel from the liftgate. Refer to Group 23, Body for proper procedure.

(2) Disconnect the door lock cylinder switch wire connector from the liftgate harness and clip from the liftgate inner panel.

(3) Remove the outside latch release handle.

(4) Disconnect the lock tab holding the switch to the back of lock cylinder and remove the switch (Fig. 6).

INSTALLATION

For installation, reverse the above procedure.

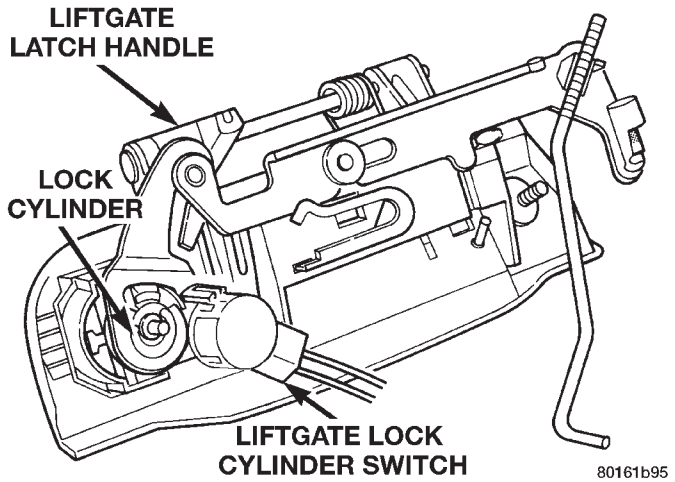

Fig. 6 Liftgate Lock Cylinder Switch

REMOVAL AND INSTALLATION (Continued)

SLIDING DOOR AJAR (VTSS TRIGGER) SWITCH

REMOVAL

(1) Release the sliding door latch and allow back of the door to pop open.

(2) Through opening at the rear edge of the sliding door on outside of the vehicle, pry door ajar switch from quarter panel opening (Fig. 7).

(3) Disconnect the wire connector from the back of the ajar switch.

(4) Remove the sliding door ajar switch.

INSTALLATION

For installation, reverse the above procedure.

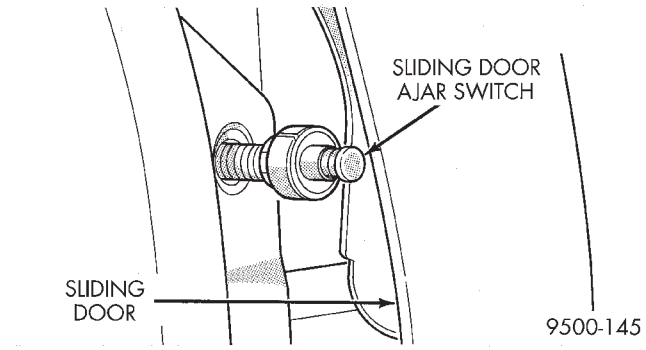

Fig. 7 Sliding Door Ajar Switch