

## General Information - Diagnostic Trouble Code (DTC) Index DTC: Steering Column Lock Module (VIM)

Description and Operation

### Steering Column Lock Module (VIM)



**CAUTION:** Diagnosis by substitution from a donor vehicle is **NOT** acceptable. Substitution of control modules does not guarantee confirmation of a fault and may also cause additional faults in the vehicle being checked and/or the donor vehicle.

#### NOTES:



If the control module or a component is suspect and the vehicle remains under manufacturer warranty, refer to the Warranty Policy and Procedures manual, or determine if any prior approval programme is in operation, prior to the installation of a new module/component.



Generic scan tools may not read the codes listed, or may read only 5-digit codes. Match the 5 digits from the scan tool to the first 5 digits of the 7-digit code listed to identify the fault (the last 2 digits give extra information read by the manufacturer approved diagnostic system).



When performing voltage or resistance tests, always use a digital multimeter (DMM) accurate to three decimal places, and with an up-to-date calibration certificate. When testing resistance, always take the resistance of the DMM leads into account.



Check and rectify basic faults before beginning diagnostic routines involving pinpoint tests.



If DTCs are recorded and, after performing the pinpoint tests a fault is not present, an intermittent concern may be the cause. Always check for loose connections and corroded terminals.




Where an 'on demand self-test' is referred to, this can be accessed via the 'DTC Monitor' tab on the manufacturers approved diagnostic system.



Check DDW for open campaigns. Refer to the corresponding bulletins and SSMS which may be valid for the specific customer complaint and carry out the recommendations as required.

The table below lists all Diagnostic Trouble Codes (DTCs) that could be logged in the Steering Column Lock Module, for additional Diagnosis and Testing information refer to the relevant Diagnosis and Testing Section. For additional information, refer to: Steering Column Switches (211-05 Steering Column Switches, Diagnosis and Testing).

DTC	Description	Possible Causes	Action
B100D-51	Column Lock Authorisation - Not programmed	<ul style="list-style-type: none"> <li>Module not programmed</li> </ul>	<ul style="list-style-type: none"> <li>Configure the Steering Column Lock Module using the manufacturers approved diagnostic system</li> </ul>
B100D-62	Column Lock Authorisation - Signal compare failure	<ul style="list-style-type: none"> <li>Signal compare failure - This DTC will be logged if the encrypted data exchange does not match between Steering Column Lock and the Central Junction Box</li> </ul>	<ul style="list-style-type: none"> <li>Configure the modules using the manufacturers approved diagnostic system. If the problem persists, complete a CAN network integrity test using the manufacturers approved diagnostic system. Perform an on demand self-test and retest</li> </ul>
B100D-64	Column Lock Authorisation - Signal plausibility failure	<ul style="list-style-type: none"> <li>Signal plausibility failure</li> <li>Steering Column Lock unable to perform lock action</li> <li>CAN Network fault</li> <li>Anti-lock Braking System, Engine Control Module, Central Junction Box fault</li> </ul>	<p> <b>NOTE:</b> Prior to clearing this DTC, carry out the Vehicle Functional Reset application using the manufacturer approved diagnostic system</p> <ul style="list-style-type: none"> <li>Check the serviceability of the steering column and lock. Clear the DTC and retest. If the problem persists, carry out CAN Network Integrity Test and Module Self Test using the manufacturer approved diagnostic system. Alternatively, refer to the electrical circuit diagrams and</li> </ul>

DTC	Description	Possible Causes	Action
B100D-87	Column Lock Authorisation - Missing message	<ul style="list-style-type: none"> <li>• Missing message</li> <li>• CAN fault</li> <li>• No response from electric steering column lock control module, instrument cluster, central junction box</li> <li>• Battery voltage at electric steering column lock control module too low</li> <li>• Electric steering column lock control module, instrument cluster, central junction box fault</li> </ul>	<p>check CAN Network</p> <p> <b>NOTE:</b> Prior to clearing this DTC, carry out the Vehicle Functional Reset application using the manufacturer approved diagnostic system</p> <ul style="list-style-type: none"> <li>• Clear DTC, repeatedly lock and unlock car using the key fob and retest. Check for related DTCs and refer to the relevant DTC index</li> <li>• If the fault is cleared, notify the customer that the steering column lock may fail to unlock if the vehicle is parked with a high steering angle or with the road wheel against a curb. If the column lock is failing to disengage, the customer may be able to rectify this by rotating the steering wheel while pressing the engine start button</li> <li>• If fault persists, complete a CAN network integrity test using the manufacturers approved diagnostic system. Alternatively, refer to the electrical circuit diagrams and check CAN circuits between the central junction box, the instrument cluster and the electronic steering column lock. Refer to the electrical circuit diagrams and check the central junction box, the instrument cluster and the electronic steering column lock power and ground supply circuits for short circuit to ground, short circuit to power, open circuit, high resistance. Repair circuit(s) as required. Clear DTC, perform an on demand self-test and retest</li> <li>• If fault persists, check that the vehicle battery supply voltage is between 9-16 volts. Rectify as required</li> </ul>
U0001-88	High Speed CAN Communication Bus - Bus off	<ul style="list-style-type: none"> <li>• Bus off</li> </ul>	<ul style="list-style-type: none"> <li>• Refer to the electrical circuit diagrams and check the power and ground connections to the module. Using the manufacturer approved diagnostic system, complete a CAN network integrity test. Refer to the electrical circuit diagrams and check the CAN network</li> </ul>
U0300-00	Internal Control Module Software Incompatibility - No sub type information	<ul style="list-style-type: none"> <li>• No sub type information</li> </ul>	<ul style="list-style-type: none"> <li>• Refer to network communication section of the workshop manual. Clear the DTC and ensure the vehicle battery supply voltage is between 9-16Volts. Using the manufacturers approved diagnostic system, complete a CAN integrity test. Perform an on demand self-test and retest</li> </ul>
U3000-49	Control Module - Internal electronic failure	<ul style="list-style-type: none"> <li>• Internal electronic failure detected during self test or lock/unlock operation</li> </ul>	<ul style="list-style-type: none"> <li>• Refer to network communication section of the workshop manual. Clear the DTC and ensure the vehicle battery supply voltage is between 9-16Volts. Perform an on demand self-test and if the DTC returns suspect the electric steering column lock, refer to the warranty policy and procedures manual if a module/component is suspect</li> </ul>
U3000-87	Control Module - Missing message	<ul style="list-style-type: none"> <li>• Configuration message not received</li> </ul>	<ul style="list-style-type: none"> <li>• Refer to the electrical circuit diagrams and check the power and ground connections to the module. Using the manufacturer approved diagnostic system, complete a CAN network integrity test. Refer to the electrical circuit diagrams and check the CAN network. Check modules are configured correctly using the manufacturer approved diagnostic system</li> </ul>
U3002-81	Vehicle Identification Number - Invalid serial data received	<ul style="list-style-type: none"> <li>• Invalid vehicle identification number</li> </ul>	<ul style="list-style-type: none"> <li>• Confirm the correct VIN details are stored in Steering Column Lock Module using the approved diagnostic system</li> </ul>