

C0563 Recovery from any controller fault condition is attempted only after the ignition is cycled ON and OFF

Circuit Description

The electronic suspension control (ESC) module performs checks of internal calibration data, electronic bump stop trim set data and steering auto center data. If a fault condition is detected, the ESC module will set the fault DTC, and may, depending upon the fault type, turn on the SERVICE SUSPENSION SYS message. Additionally, depending upon the type of the internal fault, the system will either enter a Speed Dependent Damping mode or disable all dampers. In the latter case, a class 2 message will be sent to the power train control module (PCM) to cause the vehicle speed to be limited. Recovery from any controller fault condition is attempted only after the ignition is cycled ON and OFF.

Conditions for Running the DTC

The ignition is ON.

Conditions for Setting the DTC

- The DTC is set when any calibration faults internal to the ESC module are detected.
- The fault is detected during three consecutive ignition cycles, or during the same ignition cycle after clearing the DTC with the scan tool.

Action Taken When the DTC Sets

Depending upon which of the internal functions are affected by the fault condition, the ESC module will take one of two sets of actions:

- If the fault condition allows continued output operation, the system will enter a Speed Dependent Damping mode, in which all four corners of the vehicle are concurrently driven by a fixed PWM duty cycle, which increases as a function of the vehicle speed. The SERVICE SUSPENSION SYS message will be displayed.

- If the fault is more severe, the control module will disable ALL dampers by commanding 0 percent PWM duty cycle, disabling the damper switched battery circuit, and sending a message to the PCM to limit vehicle speed. The SPEED LIMITED TO XXX and SERVICE SUSPENSION SYS messages will be displayed. Conditions for Clearing the MIL/DTC
- The scan tool can be used to clear the DTC.
- The DTC is saved as HISTORY when the ESC module no longer senses the hardware fault and the ignition is cycled OFF and ON.

Test Description

The number below refers to the step number on the diagnostic table.

2. This step checks to see if the condition has cleared after the ESC module has been calibrated.

LAUNCH