

With the engine running, the charging system supplies voltage to the battery and the vehicle electrical system through the high current BJB and battery B+ cable. The voltage that is supplied to the vehicle electrical system is used for the operation of the various vehicle systems and modules. Many modules monitor this voltage and if it rises above or below their calibrated setpoints, a DTC sets.

Diagnostic Trouble Code (DTC) Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
P0563	System Voltage High	This DTC sets in the PCM when the PCM detects voltage from the charging system greater than 15.9 volts with vehicle speed above 8 km/h (5 mph).
P1397	System Voltage Out of Self-Test Range	If the voltage rises above or drops below the calibrated set point, the PCM sets this DTC. This DTC may also be set if the vehicle has been recently jump started or has had a discharged battery.

Possible Sources

- Battery
- Generator
- Engine, generator or battery ground
- PCM
- Wiring, terminals or connectors

Visual Inspection and Diagnostic Pre-checks

- Inspect the high current BJB for loose or corroded connections.

DIAGNOSIS AND TESTING > CHARGING SYSTEM - 5.2L 32V TI-VCT > PINPOINT TESTS (5.2L) > PINPOINT TEST A : SYSTEM VOLTAGE HIGH > PINPOINT TEST A : SYSTEM VOLTAGE HIGH



NOTE: Make sure battery voltage is greater than 12.2 volts prior to and during this pinpoint test.



NOTE: Do not have a battery charger attached during vehicle testing.

A1 PERFORM INSPECTION AND VERIFICATION

Perform Inspection and Verification procedure in this article.