

6.0 Litre V12 / LM Engine Management System

Serial communications

Serial communications between the engine management system and JDS or PDU are available via the serial communications data link connector located in the trunk. Serial communication is used for engine setup, fault diagnosis and erasing diagnostic trouble codes.

Limp home mode

In order to allow vehicle operation if a malfunction occurs, "limp home" default strategies are incorporated as an ECM facility. The ECM will substitute a nominal value for missing inputs from various sensors and components.

Diagnostic trouble code summary

The available DTCs are listed in order of priority on the following table. Limp home mode is available as indicated. When multiple faults occur, only the highest priority code will be displayed.

DTC	Limp Home Mode	Input or Component checked
29		ECM Self-test
44	X	Oxygen sensor circuit — A bank
45	X	Oxygen sensor circuit — B bank
13	X	Manifold pressure transducer and sensing hose
34		Injector electrical circuits — A bank
36		Injector electrical circuits — B bank
14	X	Coolant temperature sensor circuit
17	X	Throttle position sensor circuit
18	X	Manifold pressure transducer / throttle position sensor circuit (high throttle voltage / low MAP)
19	X	Manifold pressure transducer / throttle position sensor circuit (low throttle voltage / high MAP)
23		Fuel metering at idle — banks A and B combined
49	X	Power resistors electrical circuits
11	X	Pressure transducer / throttle position sensor circuit
16	X	Intake air temperature sensor circuit
67		Air injection operation (oxygen sensor response)
77		Engine speed (loss of input from ignition ECM)

Clearing diagnostic trouble codes

All DTCs are held in the ECM memory until cleared using serial communication. If the vehicle battery is disconnected, the DTC(s) will be cleared.