

	valve blocked/contaminated <ul style="list-style-type: none"> <li>• High pressure fuel leak</li> <li>• Fuel injection pump fault</li> </ul>	
Excessive fuel consumption	<ul style="list-style-type: none"> <li>• Fuel system low pressure circuit fault</li> <li>• Fuel volume control valve blocked/contaminated</li> <li>• Fuel pressure control valve blocked/contaminated</li> <li>• Fuel temperature sensor leak</li> <li>• High pressure fuel leak</li> <li>• Injector(s) failure</li> <li>• Exhaust gas recirculation valve(s) fault</li> </ul>	Check the fuel system low pressure circuit for leaks/damage. Check the fuel volume control valve and fuel pressure control valve. Check the fuel temperature sensor, fuel injection pump, etc for leaks. Check for injector DTCs. Check the exhaust gas recirculation system

## DTC failure type definitions

NOTE: Generic scan tools may not read the codes listed, or may read only five digit codes. Match the five digits from the scan tool to the first five digits of the seven digit code listed to identify the fault (the last two digits, DTC failure type give additional information read by the manufacturer-approved diagnostic system). The DTC failure type information is described in the table below

DTC failure type	DTC failure type description
00-0F	<ul style="list-style-type: none"> <li>• General failure information</li> <li>• This category includes all other categories and is used when the fault within that failure category is unique, not amenable to standardization through assignment of a new sub type, or when the detected fault is best described by two or more sub types within that failure category</li> </ul>
10-1F	<ul style="list-style-type: none"> <li>• General electrical failures</li> <li>• This category includes standard wiring failure modes, short to ground, short to battery, open circuit and direct current quantities related by Ohm's Law</li> </ul>
20-2F	<ul style="list-style-type: none"> <li>• General signal failures</li> <li>• This category includes quantities related to amplitude, frequency or rate of change, and wave shape</li> </ul>
30-3F	<ul style="list-style-type: none"> <li>• Frequency modulated, pulse width modulated failures</li> <li>• This category includes faults related to frequency modulated and pulse width modulated inputs and outputs of the control module. This category also includes faults where position is determined by counts</li> </ul>
40-4F	<ul style="list-style-type: none"> <li>• System internal failures</li> <li>• This category includes faults related to memory, software, and internal electrical circuitry; requiring component, control module, sensor, replacement</li> </ul>
50-5F	<ul style="list-style-type: none"> <li>• System programming failures</li> <li>• This category includes faults related to operational software, calibrations, and options; remedied by configuring, programming a part of the system, control module, sensor</li> </ul>
60-6F	<ul style="list-style-type: none"> <li>• Algorithm based failures</li> <li>• This category includes faults based on comparing two or more input parameters for plausibility or comparing a single parameter to itself with respect to time</li> </ul>
70-7F	<ul style="list-style-type: none"> <li>• Mechanical failures</li> <li>• This category includes faults detected by inappropriate motion in response to control related input, controlled output</li> </ul>
80-8F	<ul style="list-style-type: none"> <li>• Bus signal / message failures</li> <li>• This category includes faults related to bus hardware and signal integrity. This category is also used when the physical input for a signal is located in one control module and another control module diagnoses the circuit or inhibits operation due to a reported failure of that circuit</li> </ul>
90-9F	<ul style="list-style-type: none"> <li>• Component failures</li> <li>• This category includes faults related to component failures including parametric, performance assembly and operating environment failures</li> </ul>