



## Reading Diagnostic Trouble Codes

Diagnostic Trouble Codes (DTC) are five-character fault codes that indicate elements in a vehicle's engine or other systems experiencing abnormalities. Each character position has a meaning. For example, a code of **P0171** references a generic power train code in the Emission Management System. Code 1 71 indicates System Too Lean. For a full explanation of each code, refer to [http://www.obd-codes.com/trouble\\_codes/](http://www.obd-codes.com/trouble_codes/).

Character	Description	Values
1 Vehicle System	Identifies the vehicle system related to the trouble code.	P = Power Train B = Body C = Chassis U = Network
2 Code Type	Identifies the code as generic (OBD-II standard), or manufacturer specific.	0 -3
3-5 Code Value	Indicates the specific abnormality reported.	000-FFF (3 hex digits)

The following list provides 10 diagnostic trouble codes that have a more familiar and obvious detrimental impact. CalAmp recommends the following codes as possible alert candidates as you start using the FleetOutlook DTC Alert. Note that if you want to be alerted for each code listed below, you will need to create one alert for each code.

Code	Description
P2560	Engine Coolant Level Low
P0217	Engine Coolant Over Temperature Condition
P250F	Engine Oil Level Too Low
P0298	Engine Oil Over Temperature
P0524	Engine Oil Pressure Too Low
P0219	Engine Overspeed Condition (High RPM)
P0563	System Voltage High
P0562	System Voltage Low
P070F	Transmission Fluid Level Too Low
P0218	Transmission Fluid Over Temperature Condition

## Configuring the FleetOutlook DTC Alert

Alerts are real-time, notifying you when a vehicle performance issue is occurring in the field that requires immediate attention. You can receive alert notifications by email, text message, the FleetOutlook application or FleetOutlook reports.

### To Create a DTC Alert for Code P2560:

1. Select the **Alerts** tab, and then select the **Inactive** tab. Click the **Add** button at the bottom of the Inactive Alerts screen.
  - The Add Alert screen displays. All fields marked with a red asterisk (\*) are required.
2. Select the **Group** to which you want to apply the alert from the drop-down list, and then enter an **Alert Name**.
  - The alert will only trigger when a vehicle in the selected group reports the diagnostic trouble code.
3. Select **DTC Code** from the **Alert Type** drop-down list. The DTC fields display on the right of the screen.
4. From the **Vehicle System** drop-down list, select the corresponding code from the trouble code (e.g., DTC P2560, select P – (Power Train) from the drop-down list).
5. From the **Code Type** drop-down list, select the value that matches the 2<sup>nd</sup> character position in the code (e.g., DTC P2560, select 2 from the drop-down list).
6. Enter the last three numbers of the trouble code in the **Code Value** field (e.g., DTC P2560, enter 560 in the field).
7. Select the condition to trigger the alert from the **Alert if** drop-down list (e.g., Code Becomes Active).
8. Select the tab for the preferred **Alert Notification Method** (e.g., Text), and then select the **Enable Alert** check box.
  - Based on the notification method selected, you may need to configure additional fields. For a text notification, you must enter the SMS Text, and then select the SMS Address tab to enter the Recipient's Mobile Number and Cellular Carrier Domain (e.g., 7032620500@vzwpx.com for Verizon).
9. Click the **Add and Activate** button to add the alert and immediately activate it.

The screenshot shows the 'Add Alert' dialog box with the following configuration:

- 1** Group: \* WRXMA Enterprise Group (with a 'Choose' button)
- Alert Name: \* DTC Code
- 3** Alert Type: \* DTC Code
- Vehicle Category: (None)
- Vehicle System: \* P - (Power Train) **4**
- Code Type: \* 2 **5**
- 6** Code Value: \* 560 (with a hint: 3 hex digits, 000-FFF, \*\*\* matches any)
- 7** Alert if: \* Code Becomes Active
- 8** Configure one or more alert notification methods ...
  - Selected tab: Text
  - ☒ Enable Text Msg Alerts
  - SMS Text: \* DTC Alert
  - SMS Filter: (None)
- 9** Add & Activate button