

2003 and 2004 MY Fuel Trim Monitor (P0171, P0172, P0174, P0175)

To return to monitor description, see page [Fu-4](#).

MONITOR STRATEGY

Required sensors/Components	Main	Heated oxygen sensor or A/F sensor
	Sub	MAF sensor (or MAP sensor), ECT sensor, Crankshaft position sensor, VSV for EVAP
Frequency of operation	Continuous	
Duration	3 sec.	
MIL operation	2 driving cycles	
Sequence of operation	None	

TYPICAL ENABLING CONDITIONS

Item	Specification	
	Minimum	Maximum
The monitor will run whenever the following DTCs are not present	See page In-39	
Fuel system status	Closed Loop	
Engine	Warmed up	
EVAP system	OFF (Purge cut)	
Battery voltage	11 V	–
Either of following condition is met:		
Engine RPM	–	1,100 rpm
Intake air amount	0.14 – 0.26 g/rev.	–

TYPICAL MALFUNCTION THRESHOLDS

Engine family	Detection Criteria	Threshold
Case 1: Fuel trim is too LEAN		
1AZ–FE	Smoothed fuel–trim learned–value	35 % or more
2AZ–FE Camry and Solara		38 % or more
2AZ–FE Highlander		34 % or more
2JZ–GE		45 % or more
1MZ–FE and 3MZ–FE		35 % or more
1NZ–FE		35 % or more
2RZ–FE and 3RZ–FE		30 % or more
2UZ–FE and 3UZ–FE		40 % or more
5VZ–FE		35 % or more
1ZZ–FE except MR2 and 2ZZ–GE		35 % or more
1ZZ–FE MR2		31.5 % or more
Case 2: Fuel trim is too RICH		
1AZ–FE	Smoothed fuel–trim learned–value	–35 % or less
2AZ–FE Camry and Solara		–32 % or less
2AZ–FE Highlander		–34 % or less
2JZ–GE		–35 % or less
1MZ–FE and 3MZ–FE		–35 % or less
1NZ–FE		–35 % or less
2RZ–FE and 3RZ–FE		–35 % or less
2UZ–FE and 3UZ–FE		–35 % or less
5VZ–FE		–35 % or less
1ZZ–FE except MR2 and 2ZZ–GE		–35 % or less
1ZZ–FE MR2		–35 % or less