

## 2001 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 <a href="#">In-39</a> |           |
| 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                        |                                  | 34 % or more   |
| 2JZ-GE                        |                                  | 45 % or more   |
| 1MZ-FE                        |                                  | 35 % or more   |
| 1NZ-FE                        |                                  | 35 % or more   |
| 2RZ-FE and 3RZ-FE             |                                  | 35 % or more   |
| 5S-FE and 5S-FNE              |                                  | 38 % 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                        |                                  | -34 % or less  |
| 2JZ-GE                        |                                  | -35 % or less  |
| 1MZ-FE                        |                                  | -35 % or less  |
| 1NZ-FE                        |                                  | -35 % or less  |
| 2RZ-FE and 3RZ-FE             |                                  | -35 % or less  |
| 5S-FE and 5S-FNE              |                                  | -38 % 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  |