CHECK FOR INTERMITTENT PROBLEMS

1. CHECK FOR INTERMITTENT PROBLEMS

HINT:

For use of the intelligent tester only:

Inspect the vehicle's ECM using check mode.

Intermittent problems are easier to detect with an intelligent tester when the ECM is in check mode. In check mode, the ECM uses 1 trip detection logic, which is more sensitive to malfunctions than normal mode (default), which uses 2 trip detection logic.

(a) Clear the DTCs (See page ES-39).

(b) Switch the ECM from normal mode to check mode using an intelligent tester (See page ES-43).

(c) Perform a simulation test (See page IN-35).

(d) Check and wiggle the harness(es), connector(s) and terminal(s) (See page IN-30).

BASIC INSPECTION

When a malfunction is not confirmed by the DTC check, troubleshooting should be carried out in all circuits considered to be possible causes of the problem. In many cases, by carrying out the basic engine check shown in the following flowchart, the location of the problem can be found quickly and efficiently. Therefore, using this check is essential when engine troubleshooting.

1 CHECK BATTERY VOLTAGE

NOTICE:
Carry out this check with the engine stopped and ignition switch off.
Result

Result	Proceed to
11 V or more	OK
Below 11 V	NG

NG → **CHARGE OR REPLACE BATTERY**

OK

2 CHECK WHETHER ENGINE CRANKS

NG → **PROCEED TO PROBLEM SYMPTOMS TABLE**

OK

3 CHECK WHETHER ENGINE STARTS

NG → **GO TO STEP 6**

OK

4 CHECK AIR FILTER

(a) Visually check that the air filter is not excessively contaminated with dirt or oil.

NG → **REPLACE AIR FILTER**

OK

5 CHECK IDLING SPEED

(a) Check the idling speed (See page EM-2).

NG → TROUBLESHOOT IDLING SPEED AND PROCEED TO NEXT STEP

OK

6	CHECK FUEL PRESSURE

(a) Check the fuel pressure (See page FU-7).

NG → TROUBLESHOOT FUEL PRESSURE AND PROCEED TO NEXT STEP

OK

7	CHECK FOR SPARKS

(a) Check for sparks (See page ES-217).

NG → TROUBLESHOOT SPARK AND PROCEED TO NEXT STEP

OK

PROCEED TO PROBLEM SYMPTOMS TABLE