

CHECK FOR INTERMITTENT PROBLEMS

HINT:

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.

1. Clear the DTCs (See page [ES-28](#)).
2. Switch the ECM from normal mode to check mode using an intelligent tester (See page [ES-29](#)).
3. Perform a simulation test (See page [IN-31](#)).
4. Check and wiggle the harness(es), connector(s) and terminal(s).

BASIC INSPECTION

When the 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 WILL CRANK

HINT:

See page [ES-22](#).

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

HINT:
See page [ES-22](#).

NG

PROCEED TO PROBLEM SYMPTOMS
TABLE

OK

6

CHECK FUEL PRESSURE

HINT:
See page [FU-3](#) (for Fuel system).

NG

PROCEED TO FUEL SYSTEM AND
CONTINUE TO TROUBLESHOOT

OK

7

CHECK FOR SPARK

HINT:
See page [IG-1](#).

NG

PROCEED TO IGNITION SYSTEM AND
CONTINUE TO TROUBLESHOOT

OK

PROCEED TO PROBLEM SYMPTOMS TABLE