

CHECK FOR INTERMITTENT PROBLEMS

HINT:

Intelligent tester only:

Inspect the vehicle's ECM using check mode. Intermittent problems are easier to detect with a 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 DTCs (see page [ES-40](#)).
2. Switch the ECM from normal mode to check mode using a intelligent tester (see page [ES-43](#)).
3. Perform a simulation test (see page [IN-34](#)).
4. Check and wiggle the harness(es), connector(s) and terminal(s) (see page [IN-34](#)).

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	Proceed To
11 V or more	OK
Below 11 V	NG

NG

CHARGE OR REPLACE BATTERY

OK

2 CHECK WHETHER ENGINE WILL CRANK

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:

Refer to Engine Mechanical (See page [EM-2](#)).

NG

PROCEED TO PROBLEM SYMPTOMS TABLE

OK

6 CHECK FUEL PRESSURE

HINT:
Refer to Fuel System (See page [FU-6](#)).

NG

PROCEED TO FUEL SYSTEM AND CONTINUE TROUBLESHOOTING

OK

ES

7 CHECK FOR SPARK

HINT:
Refer to Ignition System (See page [IG-3](#)).

NG

PROCEED TO IGNITION SYSTEM AND CONTINUE TROUBLESHOOTING

OK

PROCEED TO PROBLEM SYMPTOMS TABLE