

HOW TO PROCEED WITH TROUBLESHOOTING

HINT:

Use the following procedure to troubleshoot the engine immobiliser system.

The intelligent tester should be used in steps 4, 5 and 7.

1 VEHICLE BROUGHT TO WORKSHOP

NEXT

2 CUSTOMER PROBLEM ANALYSIS CHECK AND SYMPTOM CHECK

NEXT

3 CRANK ENGINE FOR MORE THAN 10 SECONDS

NEXT

4 CHECK FOR DTCS

- (a) Check for DTCs and note any codes that are output.
- (b) Delete the DTC.
- (c) Simulate the malfunction symptoms based on the DTCs recorded in step (a) to check if the same DTCs are output again.
 - (1) If the DTC does not reoccur, proceed to A.
 - (2) If any DTC of the SFI system reoccurs, proceed to B.
 - (3) If any DTC of the engine immobiliser system reoccurs, proceed to C.

B

Go to SFI SYSTEM

C

Go to step 8

A

5 READ VALUE OF INTELLIGENT TESTER

- (a) Connect the intelligent tester to the Controller Area Network Vehicle Interface Module (CAN VIM). Then connect the CAN VIM to the DLC3.
- (b) Turn the ignition switch ON and push the intelligent tester main switch ON.

- (c) Read the DATA LIST according to the display on the tester.

Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note
KEY SW	Unlock warning switch signal /ON or OFF	ON: Key is in ignition key cylinder OFF: No key is in ignition key cylinder	-

OK:

ON (Key is in ignition key cylinder)

NG

Go to DTC B2780

EI

OK

6

PROBLEM SYMPTOMS TABLE

- (a) If the fault is not listed in the problem symptoms table, proceed to A.
- (b) If the fault is listed in the problem symptoms table, proceed to B.

B

Go to step 8

A

7

OVERALL ANALYSIS AND TROUBLESHOOTING

- (a) DATA LIST/ACTIVE TEST (See page [EI-17](#))
- (1) Inspection with the intelligent tester (DATA LIST).
 - (2) Inspection with the intelligent tester (ACTIVE TEST).
- (b) Terminals of ECU (See page [EI-12](#))

NEXT

8

ADJUST, REPAIR OR REPLACE

NEXT

9

CONFIRMATION TEST

NEXT

END