

ENGINE IMMOBILIZER SYSTEM

HOW TO PROCEED WITH TROUBLESHOOTING

0521A-26

HINT:

Troubleshoot in accordance with the procedures on the following pages.

1 VEHICLE BROUGHT TO WORKSHOP



2 CUSTOMER PROBLEM ANALYSIS CHECK AND SYMPTOM CHECK (See page 05-2108)



3 CRANK ENGINE FOR MORE THAN 10 SECONDS



4 CHECK DTC

- (a) Check for DTCs and note any codes that are output.
- (b) Delete the DTC.
- (c) Recheck for DTCs. Try to prompt the DTC (SFI system and engine immobiliser system) by simulating the original activity that the DTC suggested.
 - (1) If the DTC does not reoccur, proceed to A.
 - (2) If the DTC (SFI system) reoccurs, proceed to B.
 - (3) If the DTC (engine immobiliser system) reoccur, proceed to C.

B

Go to SFI SYSTEM
(2AZ-FE engine: See page 05-1)
(1MZ-FE/3MZ-FE engine: See page 05-491)

C

Go to step 8

A

5 READ VALUE OF HAND-HELD TESTER (IMMOBILISER ECU (TRANSPONDER KEY ECU ASSY) (SWITCH CONDITION))

- (a) Connect the hand-held tester to the DLC3.
- (b) Turn the ignition switch ON and push the hand-held tester main switch ON.
- (c) Select the item "KEY SW" in the "DATA LIST" and read its value displayed on the hand-held tester.

Transponder key ECU assy:

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

NG

Go to DTC B2780 (See page 05-2119)

OK

6 **PROBLEM SYMPTOMS TABLE (See page 05-2118)**

- (a) When problem is not listed on problem symptoms table, proceed to A.
(b) When problem is listed on problem symptoms table, proceed to B.

B**Go to step 8****A****7** **PERFORM TROUBLESHOOTING ACCORDING TO MALFUNCTION SYMPTOM**

- (a) Pre-check (See page 05-2109)
(1) Inspect with the hand-held tester (ECU data monitor).
(2) Inspect with the hand-held tester (Active test).
(b) Terminals of ECU (See page 05-2114)

8 **ADJUST, REPAIR OR REPLACE****END**