ENGINE IMMOBILIZER SYSTEM

HOW TO PROCEED WITH TROUBLESHOOTING

054CF–11

HINT:

- Use this procedure to troubleshoot the engine immobilizer system.
- The hand–held tester should be used in step 4, 5 and 7.

1	VEHICLE BROUGHT TO WORKSHOP

2	CUSTOMER PROBLEM ANALYSIS CHECK AND SYMPTOM CHECK (See page 05–1064)

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. Based on the DTC output in (a), try to force output of the same SFI system DTC or engine immobilizer system DTC by simulating the operation indicated by the DTC.
  (1) If the DTC does not reoccur, proceed to A.
  (2) If the SFI system DTC reoccurs, proceed to B.
  (3) If the engine immobilizer system DTC reoccurs, proceed to C.

B → Go to SFI SYSTEM (See page 05–1)

C → Go to step 8

A

5	READ VALUE OF HAND–HELD TESTER (IMMOBILIZER 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	Unlock warning switch signal /ON or OFF	ON: Key is in ignition key cylinder OFF: No key is in ignition key cylinder	–

NG → Go to DTC B2780 (See page 05–1075)

OK

6	PROBLEM SYMPTOMS TABLE (See page 05–1074)

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

B	Go to step 8

A

7	PERFORM TROUBLESHOOTING ACCORDING TO MALFUNCTION SYMPTOM

(a) Pre–check (see page 05–1065)
  (1) Inspect with the hand–held tester (DATA LIST).
  (2) Inspect with the hand–held tester (ACTIVE TEST).
(b) Terminals of ECU (see page 05–1070)

8	ADJUST, REPAIR OR REPLACE

9	CONFIRMATION TEST

END