

# HOW TO PROCEED WITH TROUBLESHOOTING

**HINT:**

Use this procedure to troubleshoot the engine immobilizer system. The intelligent tester should be used in steps 4, 5 and 7.

**1 VEHICLE BROUGHT TO WORKSHOP**



**2 CUSTOMER PROBLEM ANALYSIS CHECK AND SYMPTOM CHECK (See page 05-3032)**



**3 CRANK ENGINE FOR MORE THAN 10 SECONDS**



**4 CHECK FOR DTCs**

- (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 05-36)

**C** Go to step 5



**5 READ VALUE OF INTELLIGENT TESTER**

- (a) Connect the intelligent tester to the DLC3.
- (b) Turn the ignition switch ON and push the tester main switch ON.
- (c) Read the DATA LIST according to the display on the intelligent tester.

**OK: ON (Key is in ignition key cylinder)**

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 05-3043)



**OK**

**6 PROBLEM SYMPTOMS TABLE (See page 05-2999)**

- (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 OVERALL ANALYSIS AND TROUBLESHOOTING**

- (a) DATA LIST/ACTIVE TEST (see page 05-3040)
- (1) Inspection with the intelligent tester (DATA LIST).
  - (2) Inspection with the intelligent tester (ACTIVE TEST).
- (b) Terminals of ECU (see page 05-3034)

**8 ADJUST, REPAIR OR REPLACE****9 CONFIRMATION TEST****END**