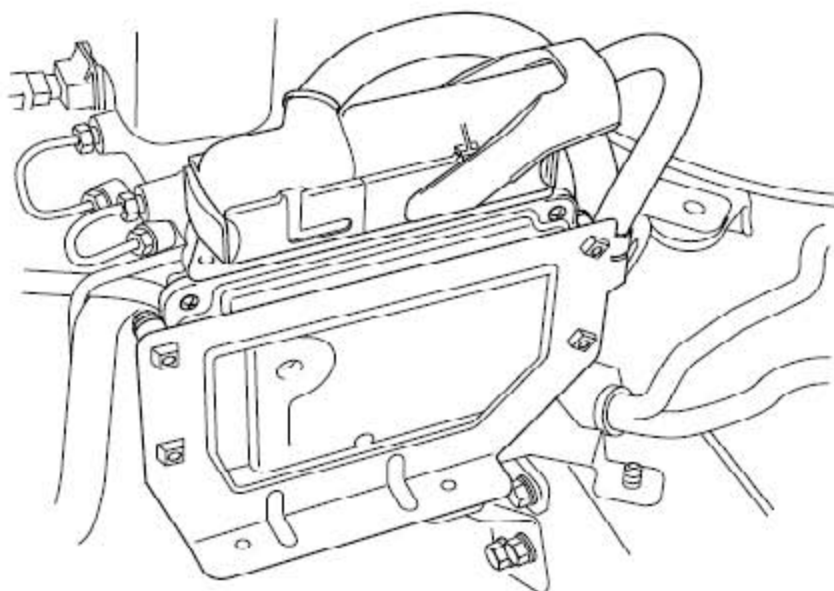# P1697 HI-SCAN MESSAGE ERROR

COMPONENT LOCATION

GENERAL DESCRIPTION

In immobilizer system, scantool is mainly used for diagnosis. besides this, registration of key and neutralization of ECMis executed by scantool. For ECM communicate with other components such as SMARTRA and scantool by changing type of communication through just one line, K-line communication between scantool and ECM is unavalible while communication between ECM and SMARTRA is in progress.
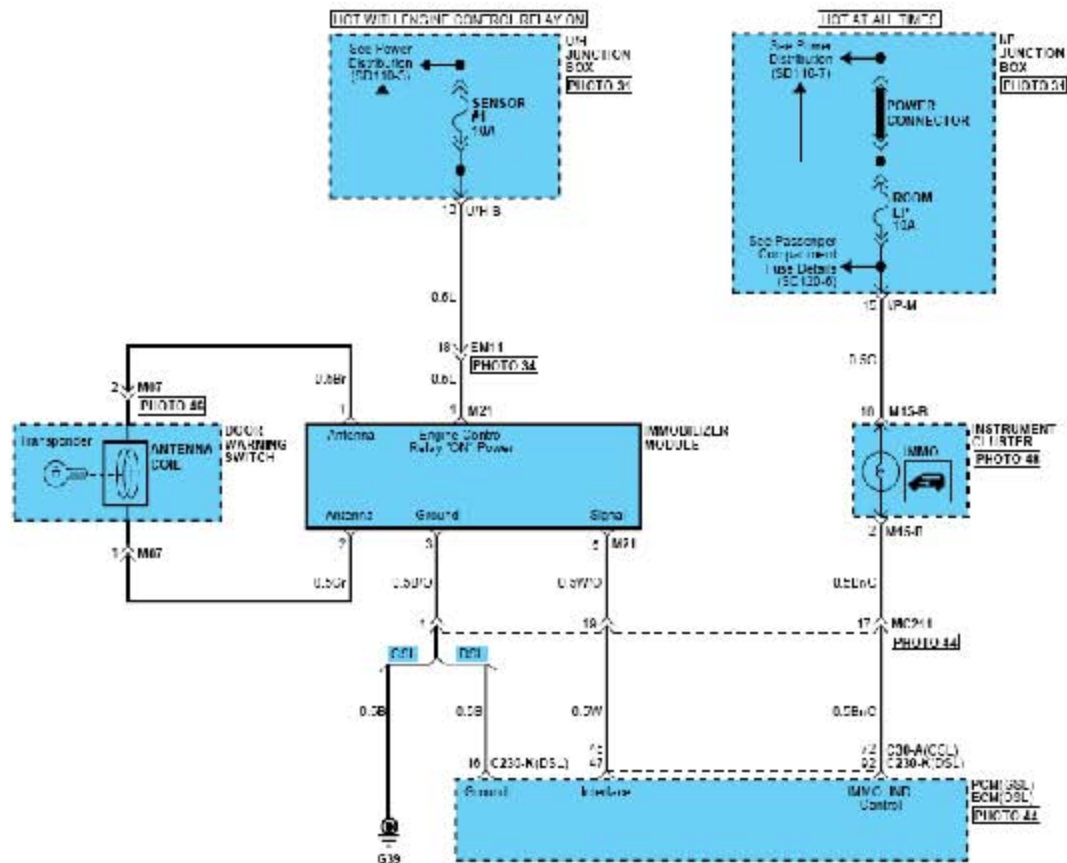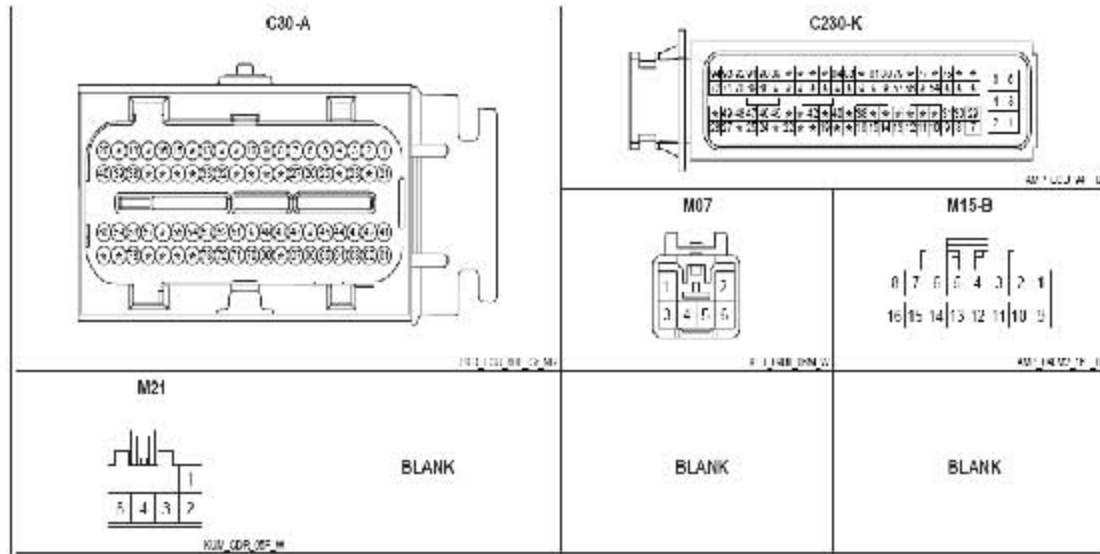
DTC DESCRIPTION

The ECM sets DTC P1696 if Request from Tester is Invalid.

DTC DETECTING CONDITION

Item	Detecting Condition	Possible cause
DTC Strategy		• Invalid request
Enable Conditions	• IG ON	- Protocol layer violation
Threshold value		- Check sum error
Diagnostic Time		
Fail Safe		

SCHEMATIC DIAGRAM

MONITOR DTC STATUS

1). Connect scantool to Data Link Connector(DLC).
2). Ignition "ON" & engine "OFF".
3). Selet "Diagnostic Trouble Codes(DTCs)"mode and monitor "DTC Status" parameter
4). Is the DTC B1697 present?

YES

Go to "Inspection & Repair" procedure.

NO

Fault is intermittent caused by poor contact in SMARTRA's and/or ECM's connector or was repaired and ECMmemory was not cleared. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage. Repair or replace as necessary and then go to "Verification of Vehicle Repair" procedure.

COMPONENT INSPECTION

1). Check communication between ECM and scantool.
   A) IGN "ON" & Engine "OFF".
   B) Connect scantool to Data Link Connector(DLC).
   C) Erase the DTC and Monitor Parameter of immobilizer on the Scantool. Try one more time from "select car model " even if "Communication error" is present on the scantool.

```
1.1 CURRENT DATA

01. NO. OF LEARNT KEY      1
02. ECU STATUS            LEARNT
03. KEY STATUS            LEARNT




       FIX   SCRN  FULL  PART  GRPH  HELP
```

Fig 1

Fig 1) The current data in abnormal state

D) Is the communication between ECM and scantool normal?

YES

If ECM is in "Locked by Timer" status. Keep "KEY ON" status for 1 hours to withdraw "Locked by Timer" status. Then repair or replace as necessary and go to "Verification of Vehicle Repair" procedure.

NO

Substitute with a known-good scantool and check for proper operation.
If the problem is corrected, Go to "Verification of Vehicle Repair" procedure.

VERIFICATION OF VEHICLE REPAIR

After a repair, it is essential to verify that the fault has been corrected.
1). Connect scantool and selet "Diagnostic Trouble Codes(DTCs)" mode and then clear DTC.
2). Operate the vehicle and monitor the DTC on the scantool.
3). Are any DTCs present?

YES

Go to the applicable troubleshooting procedure.

NO

System is performing to specification at this time.