# 13. On-board Diagnostics System A: FUNCTION

The on-board diagnostics system is capable of detecting any trouble which has occurred in any of the following input and output signal systems.

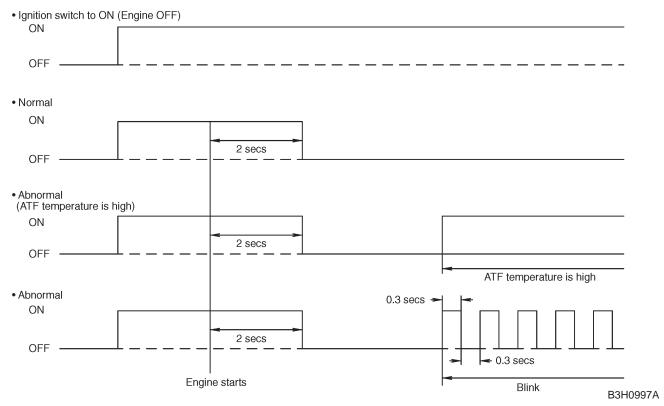
ITEM	Vehicle speed sensor 1 (rear)	Transfer duty solenoid	Low clutch timing solenoid
	Vehicle speed sensor 2 (front)	ATF temperature sensor	Torque converter turbine speed sensor
	Throttle position sensor	Engine speed signal	-
	Shift solenoid 1	Line pressure duty solenoid	-
	Shift solenoid 2	Intake manifold pressure signal	_
	2-4 brake timing solenoid	Torque control signal	-
	Lock-up duty solenoid	2-4 brake duty solenoid	-

The results of on-board diagnostics are displayed by flashing ATF Temperature indicator lamp.

- Repeated flashing at 4 Hz ... Error such as battery trouble
- Repeated flashing at 2 Hz ... Normal
- Output of trouble code ... Check faulty portion
- Continued lighting of lamp ... Error in inhibitor switch, idle switch, or wiring

### **B: OPERATION OF INDICATOR LAMP**

On starting the engine, AT OIL TEMP indicator lamp illuminates as shown below. If any trouble occurs, the lamp continues flashing until ignition switch is turned to ON position (engine turned off).



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#### **MECHANISM AND FUNCTION**

## **C: TROUBLE CODE**

TROUBLE CODE	ITEM
11	Engine speed signal
27	ATF temperature sensor
31	Throttle position sensor
33	Vehicle speed sensor 2 (front)
36	Torque converter turbine speed sensor
38	Torque control signal
45	Intake manifold pressure signal
71	Shift solenoid 1
72	Shift solenoid 2
73	Low clutch timing solenoid
74	2-4 brake timing solenoid
75	Line pressure duty solenoid
76	2-4 brake duty solenoid
77	Lock-up duty solenoid
79	Transfer duty solenoid
93	Vehicle speed sensor 1 (rear)

## **D: SELECT MONITOR**

Various data and ON/OFF signals being processed in the TCM can be monitored by connecting the select monitor to the select monitor terminal located under the instrument panel.