Symptom Simulation

"Intermittent troubles or problems" are the malfunctions about which the customer has a complaint, but which do not occur and can not be confirmed in the workshop. The intermittent problems also include complaints about the airbag warning light going on and off erratically.

The self-diagnostic system stores the circuit of the intermittent problem in memory even if the ignition switch is turned off.

And, for accurate diagnosis of the problems, ask the customer to obtain information as much as possible following the customer problem analysis check sheet (See page AB–29), and try to reproduce the intermittent problem.

The problem simulation methods described below are the effective ways for this nature of problem to produce the problem conditions by applying vibration, heat, and humidity.

1 VIBRATION METHOD:	When vibration seems to be the major cause.
	CONNECTORS Slightly shake the connector vertically and horizontally.
AB0245	 (Inspection of connectors) (a) Does the wire harness connecting with its corre– sponding part have insufficient slack? (b) Are the terminals dirty? (c) Are the terminal making loose contact due to ter– minals spread?
	WIRE HARNESS Slightly shake the wire harness vertically and horizon– tally. The connector joint, fulcrum of the vibration, and body through portion are the major areas to be checked thoroughly.
	 PARTS AND SENSORS Apply vibration slightly by a finger to the part or sensor considered to be the problem cause and check if the malfunction will occur. CAUTION: Do not apply vibration to the center airbag sensor.
AB0255	

2 HEAT METHOD: When the problem seems to occur when the suspect area is heated.		
AB0273	 Heat the component that is likely the cause of the mal–function with a hair dryer or similar object. Check to see if the malfunction will occur. NOTICE: Do not heat to more than 60°C (140°F) (Temperature limit that the component can be touched with a hand.) Do not apply heat directly to part in the ECU. 	
3 WATER SPRINKLING METHOD: When the malfunction seems to occur on a rainy or in a high-humidity condition.		
AB0274	 Sprinkle water onto the vehicle and check to see if the malfunction will occur. NOTICE: Never apply water directly onto the electronic components. HINT: If a vehicle is subject to water leakage, the leaked water may contaminate the ECU. When testing a vehicle with a water leakage problem, special caution must be paid. 	
4 OTHER: When a malfunction seems to occur when electrical load is excessive.		
AB0234	Turn on all electrical loads including the heater blower, headlights, rear window defogger, etc. and check to see if the malfunction will occur.	