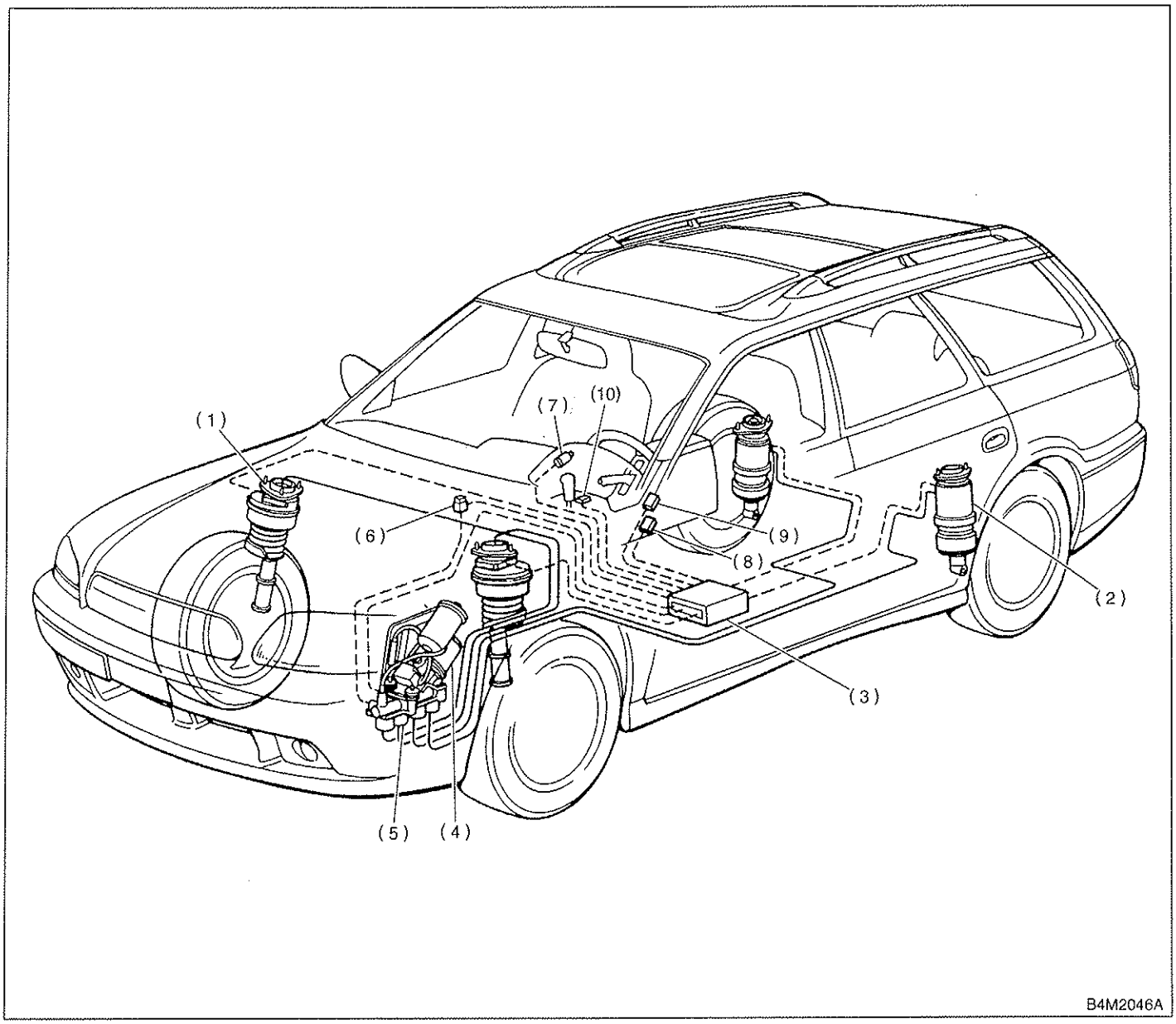
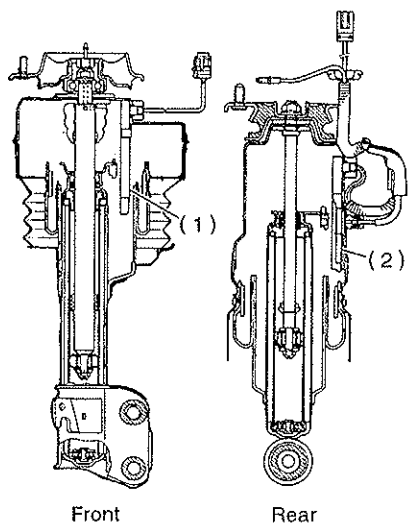
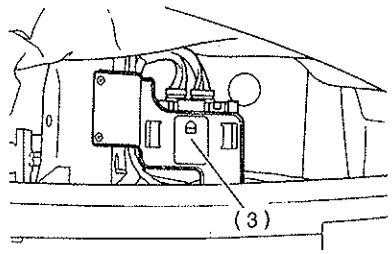
3. Electrical Components Location



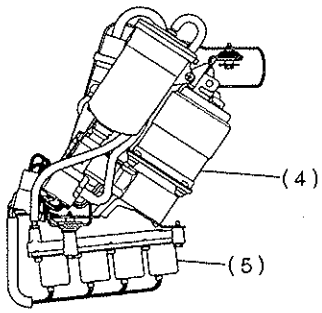
(1) Front height sensor
(2) Rear height sensor
(3) Air suspension control module
(4) Compressor
(5) Solenoid valve
(6) Compressor relay
(7) Height "HI" indicator light
(8) Data link connector (for SUBARU select monitor)
(9) Diagnosis connector
(10) Height control switch



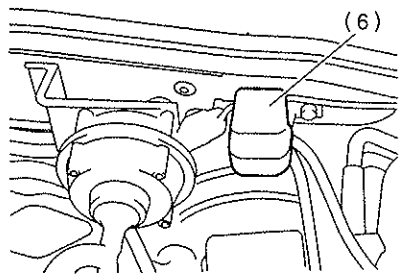
B4M2047A



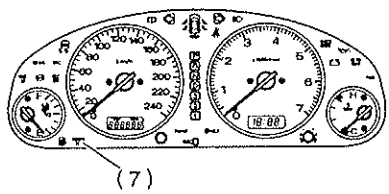
B4M2048A



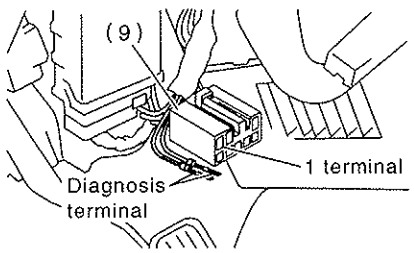
B4M2049A



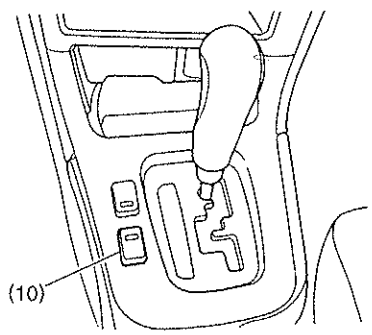
B4M2064A



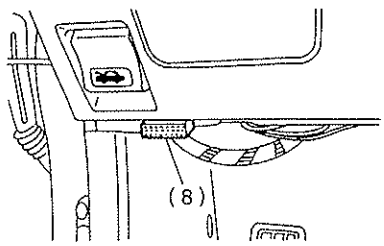
B4M2181A



B4M2180A

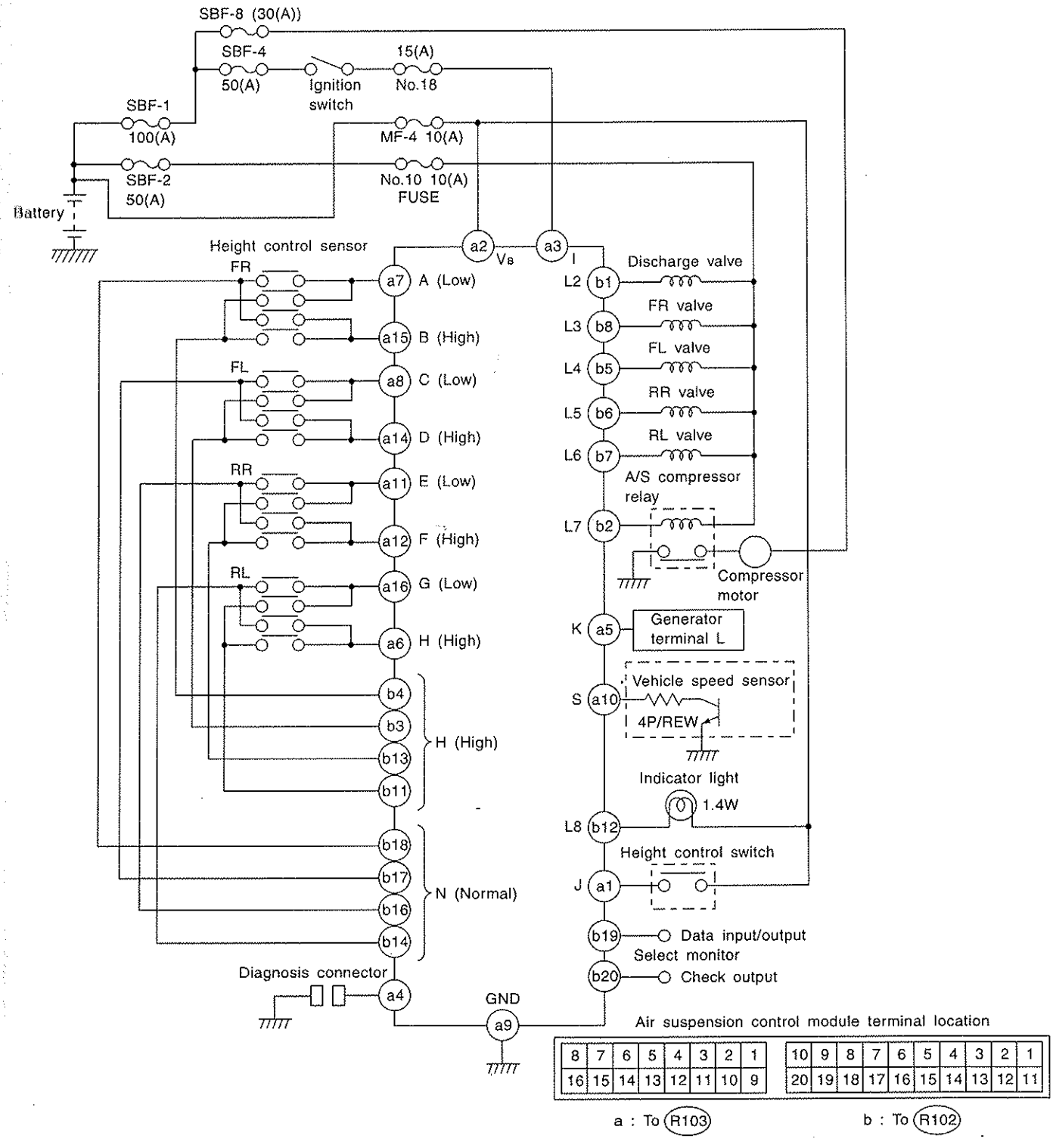


B4M2065A



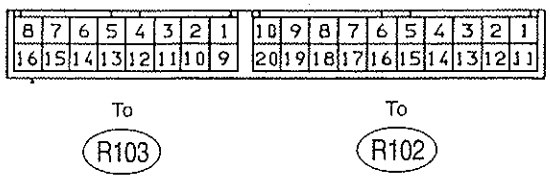
B4M2182A

4. Schematic



B4M2050A

5. Control Module I/O Signal

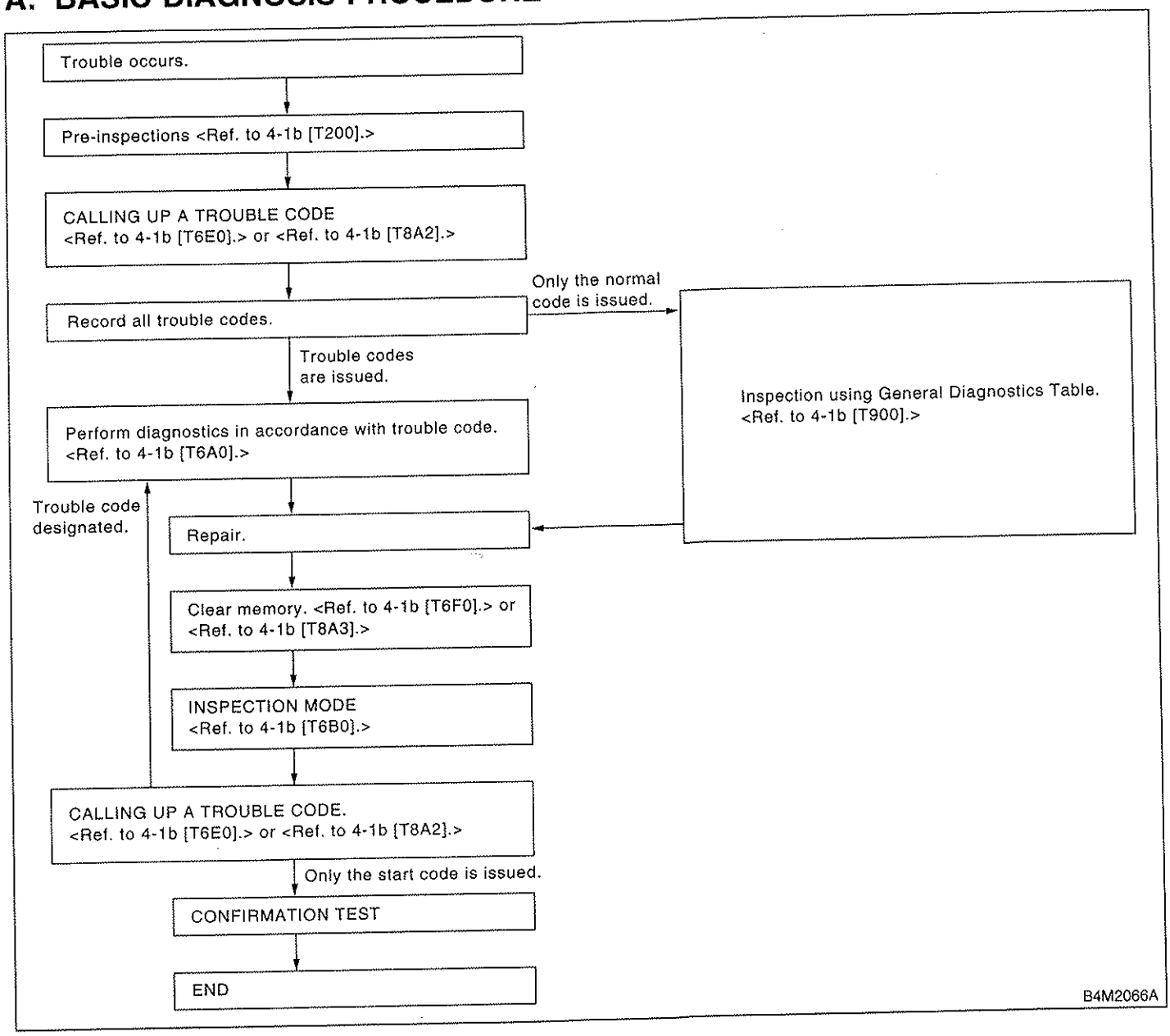


B4M0335B

Item			Connector	Terminal	Measuring conditions and voltage (V)			Remarks
					Ignition switch			
					OFF	ON		
						Height control ON	Height control OFF	
Battery			R103	2	Battery voltage	Battery voltage		
Ignition power supply			R103	3	0	0	Battery voltage	
Generator power supply			R103	5	0	0	Battery voltage	
Diagnosis connector			R103	4	0	0	Approx. 5	
Height sensor	FR	LOW	R103	7	0	1, max.	Approx. 5	When select monitor is used to check height sensor, set in force drive mode. When select monitor is not used to check height sensor, move air suspension up and down using a suitable means.
		HIGH	R103	15	0	1, max.	Approx. 5	
	FL	LOW	R103	8	0	1, max.	Approx. 5	
		HIGH	R103	14	0	1, max.	Approx. 5	
	RR	LOW	R103	11	0	1, max.	Approx. 5	
		HIGH	R103	12	0	1, max.	Approx. 5	
	RL	LOW	R103	16	0	1, max.	Approx. 5	
		HIGH	R103	6	0	1, max.	Approx. 5	
Vehicle speed sensor			R103	10	0	0	Approx. 5	Drive vehicle to check.
Indicator light	("HI" mark)		R102	12	0	0.5, max. (light ON)	Battery voltage (light OFF)	
Solenoid valve	FR		R102	8	1, max. (switch ON)	Battery voltage (switch OFF)	When select monitor is used to check solenoid valve, set it in forced height drive mode.	
	FL		R102	5	1, max. (switch ON)	Battery voltage (switch OFF)		
	RR		R102	6	1, max. (switch ON)	Battery voltage (switch OFF)		
	RL		R102	7	1, max. (switch ON)	Battery voltage (switch OFF)	When select monitor is used to check condition of air charge and discharge, set in forced mode.	
	Dis-charge		R102	1	1, max. (switch ON)	Battery voltage (switch OFF)		
Select monitor	Clock output		R102	20	0	5		
	Data input/ output		R102	19	0	5		

6. Diagnostics Chart for On-board Diagnosis System

A: BASIC DIAGNOSIS PROCEDURE



B: INSPECTION MODE

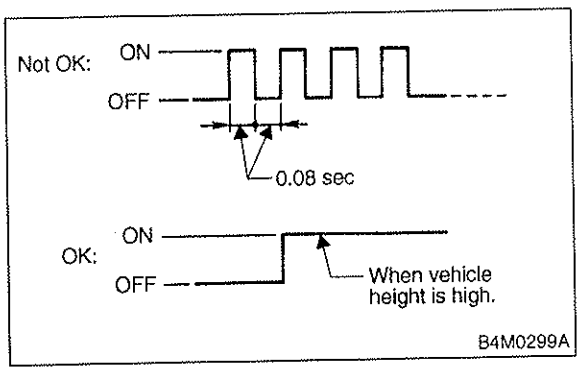
Reproduce the condition under which the problem has occurred as much as possible.
Drive the vehicle at least ten minutes.

C: TROUBLE CODES

When on-board diagnosis of the control module detects a problem, the information (up to a maximum of three) will be stored in the RAM as a trouble code. When there are more than three, the most recent three will be stored.

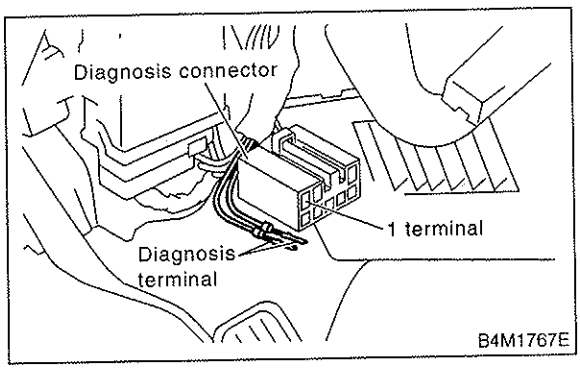
D: TROUBLE INDICATED BY INDICATOR LIGHT

If any fault or trouble occurs, the air suspension indicator light ("HI" mark) located above the height control switch blinks.
There are two types of diagnostic items. One type is checked immediately after the ignition switch is turned ON; the other type are checked at least 10 minutes after the switch has been turned ON.
When a problem is shown on the indicator, it can be determined by reading a trouble code (which is indicated in terms of "the number of indicator light blinks") during ON-BOARD DIAGNOSIS.
Problems which occurred in the past are stored in memory for ready reference. When the indicator light does not show a trouble code, the *select monitor is used to measure the characteristics of sensors, etc. to determine the item in problem.
Indicator signal is as shown in the figure:



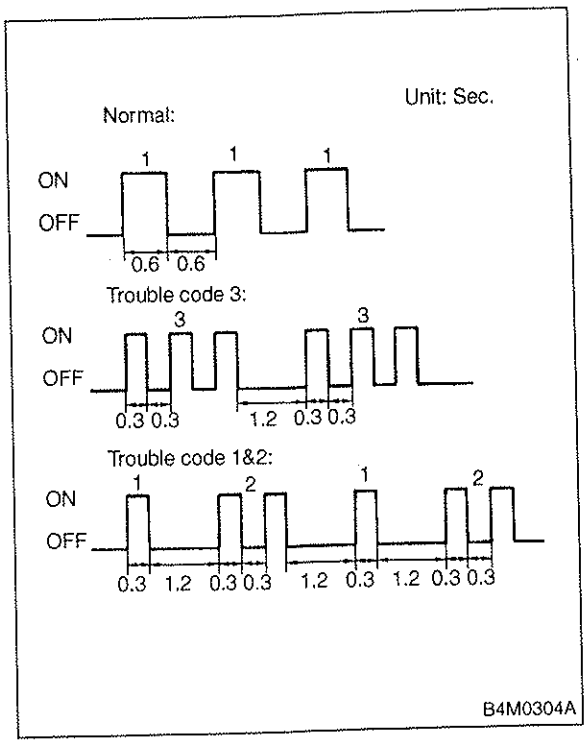
E: CALLING UP A TROUBLE CODE

When the indicator light (located above the height control switch) blinks, conduct on-board diagnosis as described below:
1) Turn ignition switch OFF.
2) Connect No. 1 terminal of diagnosis connector (located below instrument lower cover) to diagnosis terminal.



3) Turn ignition switch ON. A trouble code will then be shown by blinking of the indicator light.

NOTE:
When multiple trouble codes are stored in memory, they will be shown, starting with the smallest trouble code number.



4) When there are no trouble codes shown by indicator light, turn ignition switch OFF and disconnect diagnosis terminal from diagnosis connector.

F: CLEAR MEMORY

The on-board diagnosis system has a memory function which stores a multiple of trouble codes. After all problem items have been repaired, clear trouble codes in memory.

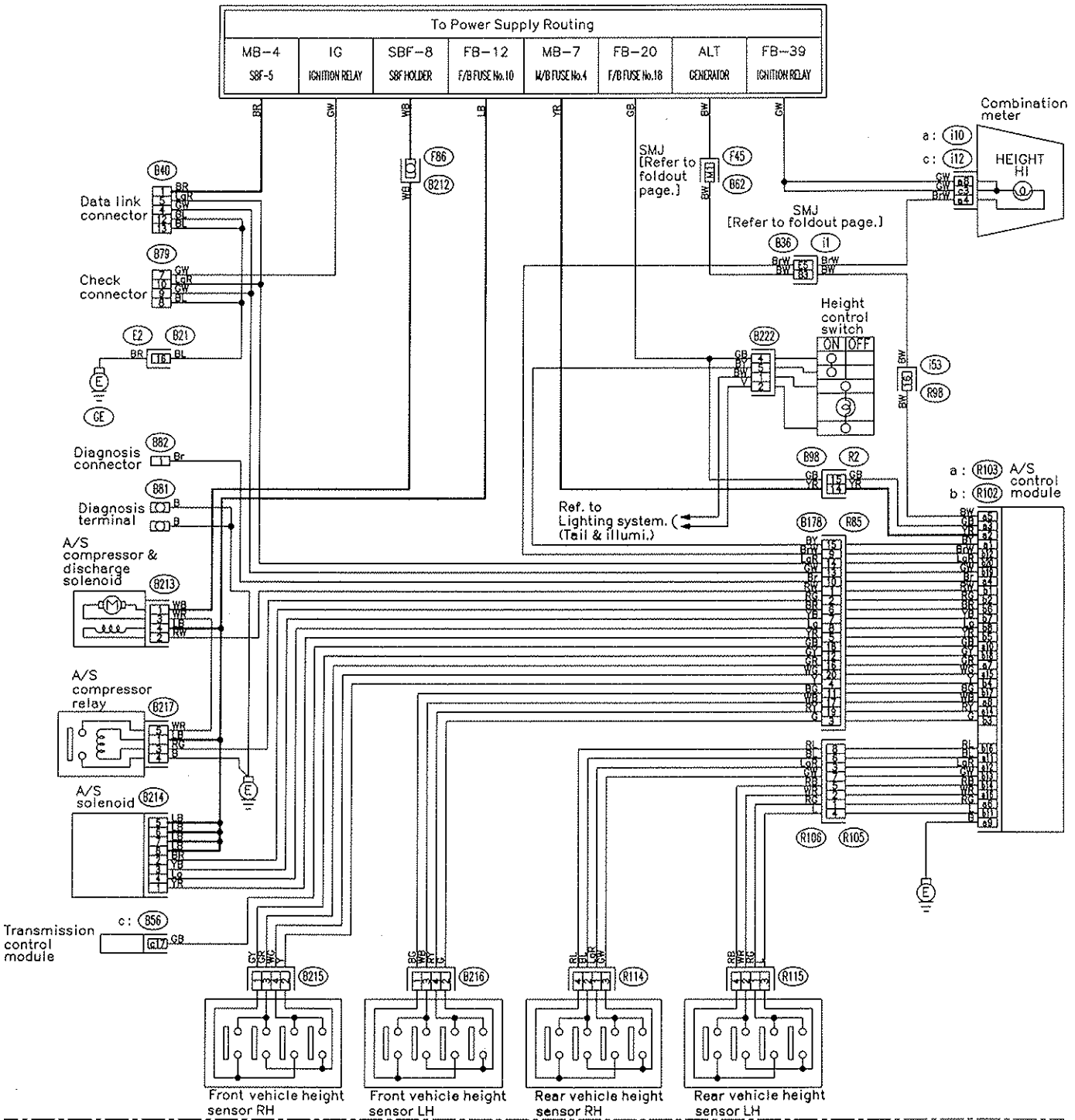
CLEAR MEMORY:
Removal of No. 4 fuse (Ignition switch OFF)

7. Diagnostics Chart with Trouble Code

A: LIST OF TROUBLE CODE

Trouble code	Item	Content of diagnosis
1	Height sensor (right front)	"HIGH" and "LOW" signals are entered simultaneously.
2	Height sensor (left front)	"HIGH" and "LOW" signals are entered simultaneously.
3	Height sensor (right rear)	"HIGH" and "LOW" signals are entered simultaneously.
4	Height sensor (left rear)	"HIGH" and "LOW" signals are entered simultaneously.
5	Solenoid valve (right front)	Output from solenoid valve continues for 10 minutes.
6	Solenoid valve (left front)	Output from solenoid valve continues for 10 minutes.
7	Solenoid valve (right rear)	Output from solenoid valve continues for 10 minutes.
8	Solenoid valve (left rear)	Output from solenoid valve continues for 10 minutes.
9	Compressor relay	Output from solenoid valve continues for 5 minutes.
10	Discharge solenoid valve	Output has already been emitted when trouble code (5 — 8) is shown by indicator light.

2. RHD MODEL


To Power Supply Routing
MB-4 SBF-5
IG IGNITION RELAY
SBF-8 SBF HOLDER
FB-12 F/B FUSE No.10
MB-7 M/B FUSE No.4
FB-20 F/B FUSE No.18
ALT GENERATOR
FB-39 IGNITION RELAY
Combination meter
HEIGHT HI
SMJ [Refer to foldout page.]
Data link connector
Check connector
Diagnosis connector
Diagnosis terminal
A/S compressor & discharge solenoid
A/S compressor relay
A/S solenoid
Transmission control module
Height control switch
ON OFF
Ref. to Lighting system. (Tail & illumi.)
A/S control module
Front vehicle height sensor RH
Front vehicle height sensor LH
Rear vehicle height sensor RH
Rear vehicle height sensor LH
(B213) (Gray)
(B215) (B216)
(R114) (Black)
(R115) (Black)
(B217) (Black)
(B222) (Black)
(B214) (Gray)
(B82) (R105)
c: (i12)
(B79) (Gray)
a: (i10)
c: (B56) (Green)
(B40) (Gray)
a: (R103)
b: (R102)
(B21) (Brown)
(R2) (Blue)
(R98) (Blue)
(B178)
8R80-20