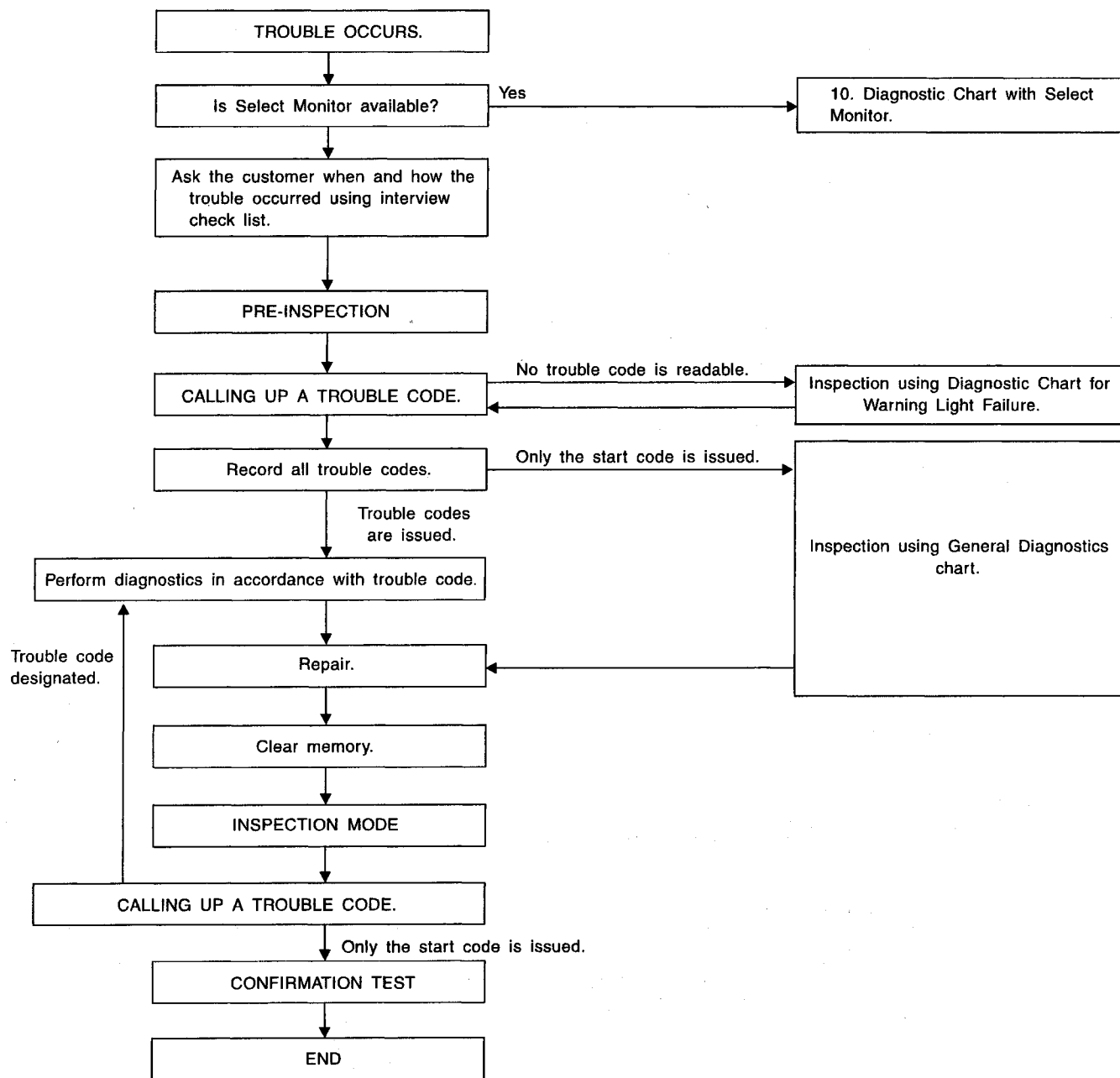


6. Diagnostics Chart for On-board Diagnosis System

A: BASIC DIAGNOSTICS PROCEDURE



B4M1051A

CAUTION:

Remove foreign matter (dust, water, etc.) from the ABSCM&H/U connector during removal and installation.

NOTE:

- To check harness for broken wires or short circuits, shake it while holding it or the connector.
- When ABS warning light illuminates, read and record trouble code indicated by ABS warning light.

B: CHECK LIST FOR INTERVIEW

Check the following items about the vehicle's state.

1. THE STATE OF THE ABS WARNING LIGHT			
ABS warning light comes on.	<input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Only once <input type="checkbox"/> Does not come on ● When /how long does it come on?:		
Ignition key position	<input type="checkbox"/> LOCK <input type="checkbox"/> ACC <input type="checkbox"/> ON (before starting engine) <input type="checkbox"/> START <input type="checkbox"/> On after starting (Engine is running) <input type="checkbox"/> On after starting (Engine is stop)		
Timing	<input type="checkbox"/> Immediately after ignition is ON. <input type="checkbox"/> Immediately after ignition starts.		
	<input type="checkbox"/> When advancing	km/h to	km/h
		MPH to	MPH
	<input type="checkbox"/> While traveling at a constant speed	km/h	MPH
	<input type="checkbox"/> When decelerating	km/h to	km/h
		MPH to	MPH
	<input type="checkbox"/> When turning to right	Steering angle :	deg
		Steering time :	sec
	<input type="checkbox"/> When turning to left	Steering angle :	deg
		Steering time :	sec
<input type="checkbox"/> When moving other electrical parts	● Parts name : ● Operating condition :		
2. SYMPTOMS			
ABS operating condition	<input type="checkbox"/> Performs no work.		
	<input type="checkbox"/> Operates only when abruptly applying brakes.	Vehicle speed :	km/h
			MPH
	● How to step on brake pedal :		
	a) Operating time :		sec
	b) Operating noise : <input type="checkbox"/> Produce / <input type="checkbox"/> Does not produce		
	● What kind of noise?	<input type="checkbox"/> Knock <input type="checkbox"/> Gong gong <input type="checkbox"/> Bong <input type="checkbox"/> Buzz <input type="checkbox"/> Gong gong buzz <input type="checkbox"/> Others :	
	c) Reaction force of brake pedal	<input type="checkbox"/> Stick <input type="checkbox"/> Press down once with a clunk <input type="checkbox"/> Press and released <input type="checkbox"/> Others :	

Behavior of vehicle	a) Directional stability cannot be obtained or steering arm refuses to work when applying brakes : <input type="checkbox"/> Yes / <input type="checkbox"/> No	
	● When :	<input type="checkbox"/> Vehicle turns to right <input type="checkbox"/> Vehicle turns to left <input type="checkbox"/> Spins <input type="checkbox"/> Others :
	b) Directional stability cannot be obtained or steering arm refuses to work when accelerating : <input type="checkbox"/> Yes / <input type="checkbox"/> No	
	● When :	<input type="checkbox"/> Vehicle turns to right <input type="checkbox"/> Vehicle turns to left <input type="checkbox"/> Spins <input type="checkbox"/> Others :
	c) Brakes are out of order : <input type="checkbox"/> Yes / <input type="checkbox"/> No	
	● What :	<input type="checkbox"/> Braking distance is long <input type="checkbox"/> Brakes lock or drag <input type="checkbox"/> Pedal stroke is long <input type="checkbox"/> Pedal sticks <input type="checkbox"/> Others :
	d) Poor acceleration : <input type="checkbox"/> Yes / <input type="checkbox"/> No	
	● What :	<input type="checkbox"/> Fails to accelerate <input type="checkbox"/> Engine stalls <input type="checkbox"/> Others :
	e) Occurrence of vibration : <input type="checkbox"/> Yes / <input type="checkbox"/> No	
	● Where ● What kind :	
	f) Occurrence of abnormal noise : <input type="checkbox"/> Yes / <input type="checkbox"/> No	
	● Where ● What kind :	
g) Occurrence of other phenomena : <input type="checkbox"/> Yes / <input type="checkbox"/> No		
● What kind :		

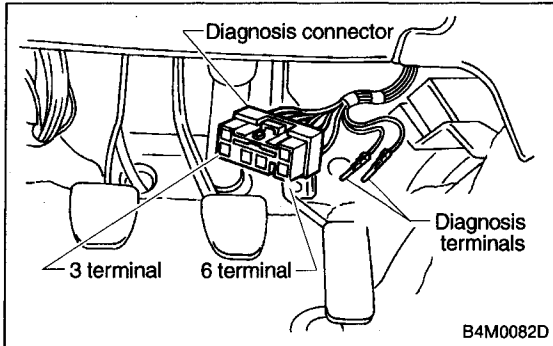
3. CONDITIONS UNDER WHICH TROUBLE OCCURS

Environment	a) Weather	<input type="checkbox"/> Fine <input type="checkbox"/> Cloudy <input type="checkbox"/> Rainy <input type="checkbox"/> Snowy <input type="checkbox"/> Various/Others :
	b) Ambient temperature	F(°C)
	c) Road	<input type="checkbox"/> Urban area <input type="checkbox"/> Suburbs <input type="checkbox"/> Highway <input type="checkbox"/> General road <input type="checkbox"/> Ascending slope <input type="checkbox"/> Descending slope <input type="checkbox"/> Paved road <input type="checkbox"/> Gravel road <input type="checkbox"/> Muddy road <input type="checkbox"/> Sandy place <input type="checkbox"/> Others :
	d) Road surface	<input type="checkbox"/> Dry <input type="checkbox"/> Wet <input type="checkbox"/> New-fallen snow <input type="checkbox"/> Compressed snow <input type="checkbox"/> Frozen slope <input type="checkbox"/> Others :

Condition	a) Brakes	Deceleration : g		
		<input type="checkbox"/> Continuous / <input type="checkbox"/> Intermittent		
	b) Accelerator	Acceleration : g		
		<input type="checkbox"/> Continuous / <input type="checkbox"/> Intermittent		
	c) Vehicle speed	km/h	MPH	
		<input type="checkbox"/> Advancing <input type="checkbox"/> Accelerating <input type="checkbox"/> Reducing speed <input type="checkbox"/> Low speed <input type="checkbox"/> Turning <input type="checkbox"/> Others :		
	d) Tire inflation pressure	Front RH tire :	kPa	
		Front LH tire :	kPa	
		Rear RH tire :	kPa	
		Rear LH tire :	kPa	
	e) Degree of wear	Front RH tire :		
		Front LH tire :		
		Rear RH tire :		
		Rear LH tire :		
	f) Genuine parts are used. :	<input type="checkbox"/> Yes / <input type="checkbox"/> No		
	g) Chain is passed around tires. :	<input type="checkbox"/> Yes / <input type="checkbox"/> No		
	h) T tire is used. :	<input type="checkbox"/> Yes / <input type="checkbox"/> No		
i) Condition of suspension alignment :				
j) Loading state :				
k) Repair parts are used. :	<input type="checkbox"/> Yes / <input type="checkbox"/> No			
● What :				
l) Others :				

C: INSPECTION MODE

Reproduce the condition under which the problem has occurred as much as possible.
 Drive the vehicle at a speed more than 40 km/h (25 MPH) for at least one minute.



D: TROUBLE CODES

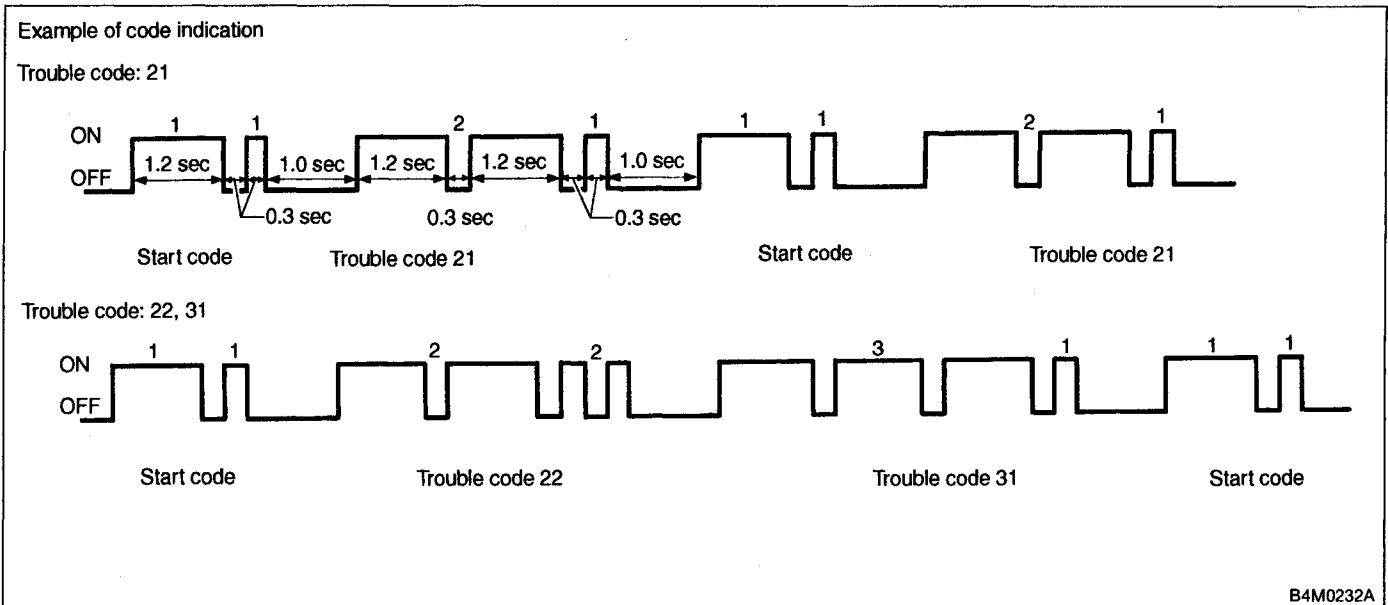
When on-board diagnosis of the ABS control module detects a problem, the information (up to a maximum of three) will be stored in the EEP ROM as a trouble code. When there are more than three, the most recent three will be stored. (Stored codes will stay in memory until they are cleared.)

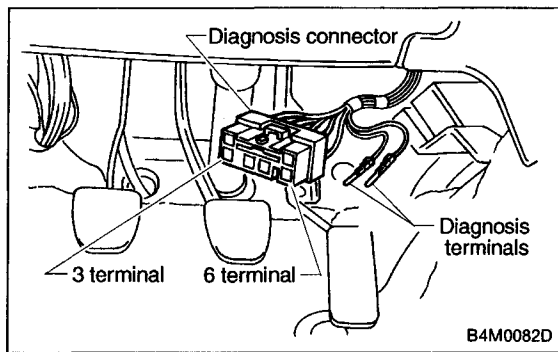
1. CALLING UP A TROUBLE CODE

- 1) Take out diagnosis connector from side of driver's seat heater unit.
- 2) Turn ignition switch OFF.
- 3) Connect diagnosis connector terminal 6 to diagnosis terminal.
- 4) Turn ignition switch ON.
- 5) ABS warning light is set in the diagnostic mode and blinks to identify trouble code.
- 6) After the start code (11) is shown, the trouble codes will be shown in order of the last information first. These repeat for a maximum of 5 minutes.

NOTE:

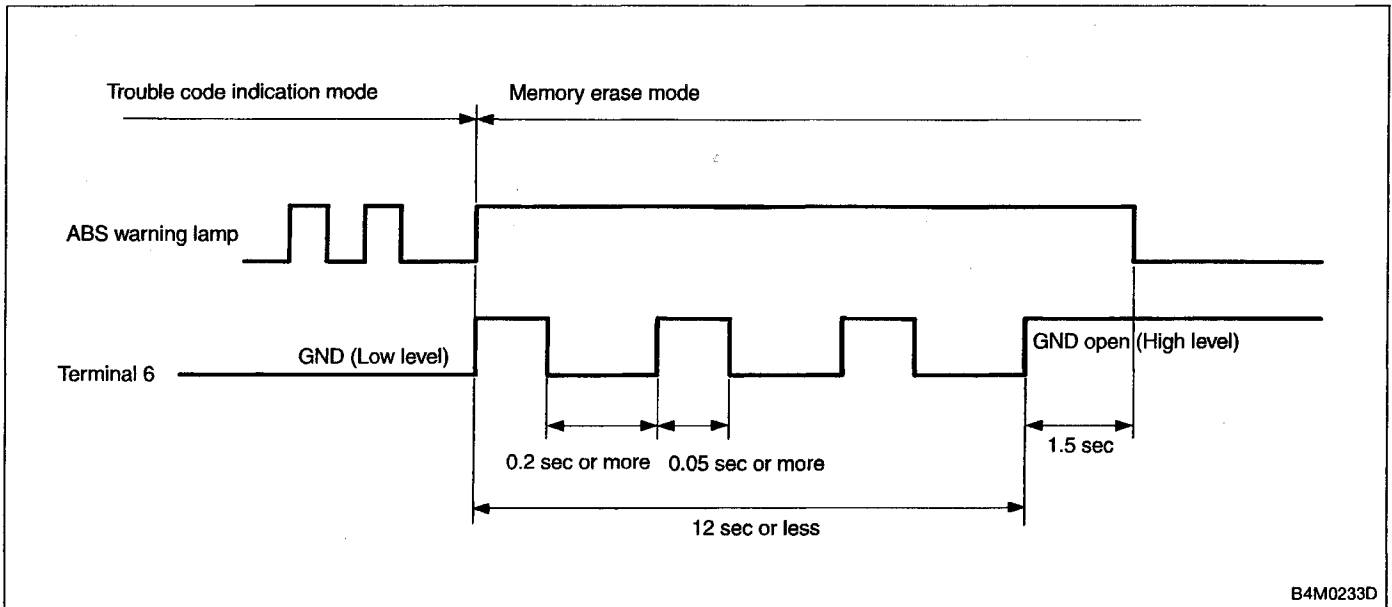
When there are no trouble codes in memory, only the start code (11) is shown.





2. CLEARING MEMORY

- 1) After calling up a trouble code, disconnect diagnosis connector terminal 6 from diagnosis terminal.
- 2) Repeat 3 times within approx. 12 seconds; connecting and disconnecting terminal 6 and diagnosis terminal for at least 0.05 seconds each time.



NOTE:
 After diagnostics is completed, make sure to clear memory. Make sure only start code (11) is shown after memory is cleared.