

## 11. General Diagnostics Table

### A: SYMPTOMS AND PROBABLE CAUSES

Symptom		Probable faulty units/parts
Vehicle instability during braking	Vehicle pulls to either side.	<ul style="list-style-type: none"> <li>● ABSCM&amp;H/U (solenoid valve)</li> <li>● ABS sensor</li> <li>● Brake (caliper &amp; piston, pads)</li> <li>● Wheel alignment</li> <li>● Tire specifications, tire wear and air pressures</li> <li>● Incorrect wiring or piping connections</li> <li>● Road surface (uneven, camber)</li> </ul>
	Vehicle spins.	<ul style="list-style-type: none"> <li>● ABSCM&amp;H/U (solenoid valve)</li> <li>● ABS sensor</li> <li>● Brake (pads)</li> <li>● Tire specifications, tire wear and air pressures</li> <li>● Incorrect wiring or piping connections</li> </ul>
Poor braking	Long braking/stopping distance	<ul style="list-style-type: none"> <li>● ABSCM&amp;H/U (solenoid valve)</li> <li>● Brake (pads)</li> <li>● Air in brake line</li> <li>● Tire specifications, tire wear and air pressures</li> <li>● Incorrect wiring or piping connections</li> </ul>
	Wheel locks.	<ul style="list-style-type: none"> <li>● ABSCM&amp;H/U (solenoid valve, motor)</li> <li>● ABS sensor</li> <li>● Incorrect wiring or piping connections</li> </ul>
	Brake dragging	<ul style="list-style-type: none"> <li>● ABSCM&amp;H/U (solenoid valve)</li> <li>● ABS sensor</li> <li>● Master cylinder</li> <li>● Brake (caliper &amp; piston)</li> <li>● Parking brake</li> <li>● Axle &amp; wheels</li> <li>● Brake pedal play</li> </ul>
	Long brake pedal stroke	<ul style="list-style-type: none"> <li>● Air in brake line</li> <li>● Brake pedal play</li> </ul>
	Vehicle pitching	<ul style="list-style-type: none"> <li>● Suspension play or fatigue (reduced damping)</li> <li>● Incorrect wiring or piping connections</li> <li>● Road surface (uneven)</li> </ul>
	Unstable or uneven braking	<ul style="list-style-type: none"> <li>● ABSCM&amp;H/U (solenoid valve)</li> <li>● ABS sensor</li> <li>● Brake (caliper &amp; piston, pads)</li> <li>● Tire specifications, tire wear and air pressures</li> <li>● Incorrect wiring or piping connections</li> <li>● Road surface (uneven)</li> </ul>
Vibration and/or noise (while driving on slippery roads)	Excessive pedal vibration	<ul style="list-style-type: none"> <li>● Incorrect wiring or piping connections</li> <li>● Road surface (uneven)</li> </ul>
	Noise from ABSCM&H/U	<ul style="list-style-type: none"> <li>● ABSCM&amp;H/U (mount bushing)</li> <li>● ABS sensor</li> <li>● Brake piping</li> </ul>
	Noise from front of vehicle	<ul style="list-style-type: none"> <li>● ABSCM&amp;H/U (mount bushing)</li> <li>● ABS sensor</li> <li>● Master cylinder</li> <li>● Brake (caliper &amp; piston, pads, rotor)</li> <li>● Brake piping</li> <li>● Brake booster &amp; check valve</li> <li>● Suspension play or fatigue</li> </ul>
	Noise from rear of vehicle	<ul style="list-style-type: none"> <li>● ABS sensor</li> <li>● Brake (caliper &amp; piston, pads, rotor)</li> <li>● Parking brake</li> <li>● Brake piping</li> <li>● Suspension play or fatigue</li> </ul>

**B: CHECKING THE HYDRAULIC  
UNIT OPERATION****11B1 : PREPARING THE BRAKE TESTER.**

- CHECK** : *Is the brake tester available?*
- YES** : CHECKING THE HYDRAULIC UNIT  
ABS OPERATION WITH BRAKE  
TESTER. <Ref. to 4-4 [W15D2].>
- NO** : CHECKING THE HYDRAULIC UNIT  
ABS OPERATION BY PRESSURE  
GAUGE. <Ref. to 4-4 [W15D1].>

MEMO: