Diagnosis - Complaint Related Diagnostic Chart

Complaint/Problem	Possible cause	Test step/Remedy 1)
With light brake pedal applications, the brake pedal pulsates shortly before the vehicle comes to a stop.	Voltage at vehicle speed sensor too low, vehicle speed sensor cable has intermittently open circuit	23 ⇒ 8.0-13.0, 17.0, 20.0, 23,0¹)
ABS malfunction indicator lamp comes on and stays on while driving	Speed sensor wire interrupted	23 ⇒ 8.0-13.0, 17.0, 20.0, 23.0 ¹⁾
ABS malfunction indicator lamp comes on and goes out again while driving	Battery voltage < 11 V, too many electrical consumers in operation, poor ground	23 ⇒ 3.0
ABS malfunction indicator lamp is on, charge indicator lamp is off	Generator defective (1 diode)	Test generator
ABS malfunction indicator lamp and charge indicator lamp are on	Generator defective (2 diodes)	Test generator
ABS malfunction indicator lamp does not go out when engine is started	ABS control module (N30) connector not connected Poor contacts in control module connector Overvoltage protection relay module defective, fuse blown	23 ⇒ 1.0, 3.0
ABS malfunction indicator lamp does not light up with ignition on	Diode in solenoid valve relay defective, bulb defective	23 ⇒ 7.0
Return/pressure pump motor with ignition key removed	Return/pressure pump rely (A7k2) stuck closed	Check return/pressure pump relay (A7k2)
ABS malfunction indicator lamp comes on at higher speeds (approx. 35 mph) and stays on	Rear axle vehicle speed sensor or toothed wheel defective or damaged	23 ⇒ 12.0, 13.0, 23.0

¹⁾ Observe Preparation for Test, see 22.