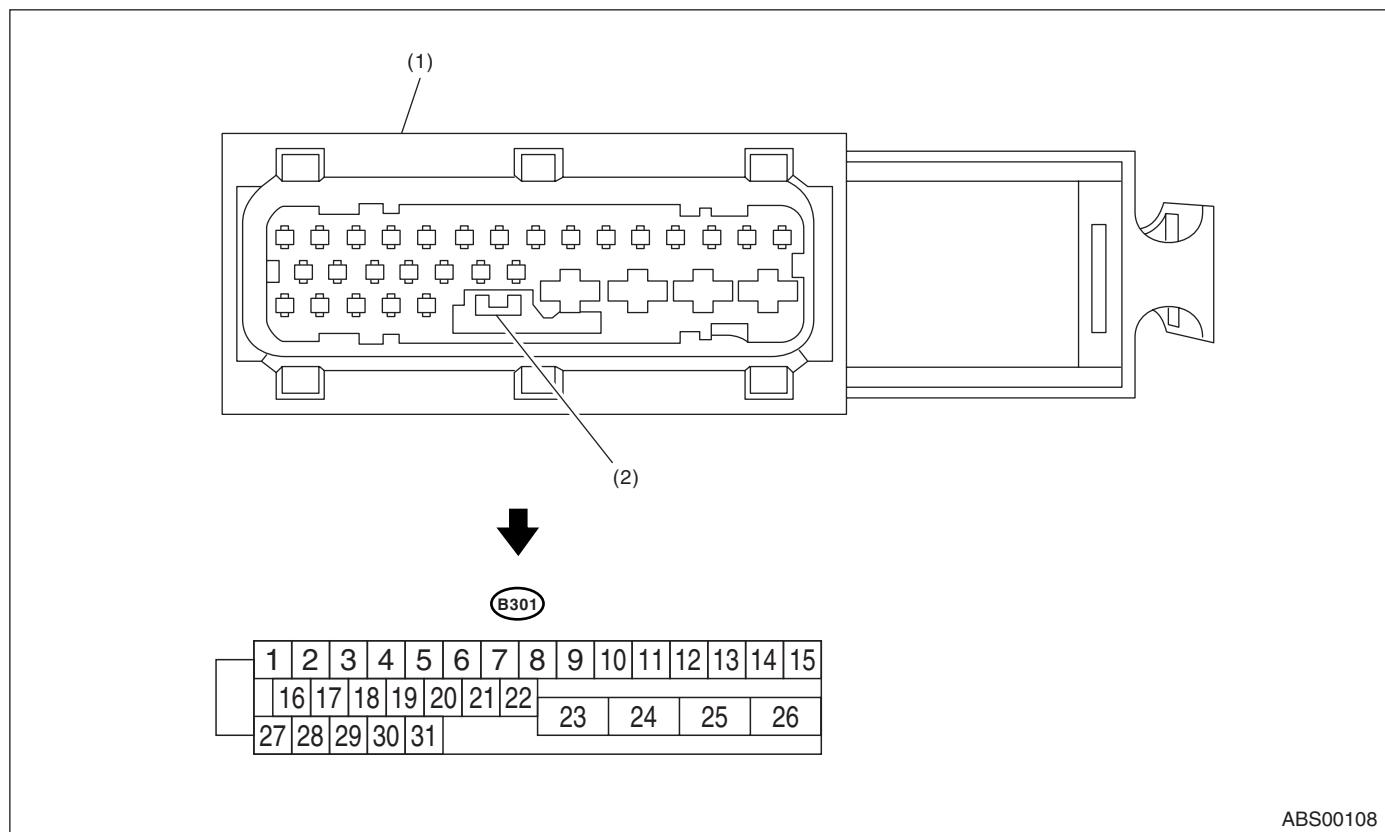


CONTROL MODULE I/O SIGNALS

ABS (DIAGNOSTICS)

5. Control Module I/O Signals

A: ELECTRICAL SPECIFICATIONS



- 1) ABS control module and hydraulic control unit connector
- 2) Connector switch

NOTE:

- The terminal numbers in ABS control module and hydraulic control unit connector are as shown in the figure.
- When the connector is removed from ABSCM & H/U, the connector switch closes the circuit between terminal No. 22 and No. 23. When this occurs, the ABS warning light comes on.

CONTROL MODULE I/O SIGNALS

ABS (DIAGNOSTICS)

Contents		Terminal No. (+) — (-)	Input/Output signal
			Measured value and measuring conditions
ABS sensor*2 (wheel speed sensor)	Front left wheel	9 — 10	0.12 — 1V (at 20 Hz)
	Front right wheel	11 — 12	
	Rear left wheel	7 — 8	
	Rear right wheel	14 — 15	
Valve relay power supply*1		24 — 23	10 — 15V
Motor relay power supply*1		25 — 23	10 — 15V
G sensor*2	Power supply	30 — 28	4.75 — 5.25V
	Ground	28	—
	Output	6 — 28	2.1 — 2.5 V when vehicle is in a horizontal position.
Stop light switch*1		2 — 23	Less than 1.5 V when the stop light is OFF and, 10 — 15 V when the stop light is ON.
ABS warning light*2		22 — 23	Less than 1.5 V for 1.5 seconds ignition switch is turned to ON, and 10 — 15 V after 1.5 seconds has elapsed.
AT ABS signal (AT vehicles only)		31 — 23	Less than 1.5 V when ABS control is operating, and more than 5.5 V when ABS control is not operating.
ABS operation signal monitor		3 — 23	Less than 1.5 V when ABS control is operating, and more than 5.5 V when ABS control is not operating.
Subaru Select Monitor*2	Receiving data	20 — 23	Less than 1.5 V when no data is received.
	Sending data	5 — 23	4.75 — 5.25 V when no data is sent.
ABS diagnosis connector	Terminal No. 3	29 — 23	10 — 15 V when ignition switch is ON.
	Terminal No. 6	4 — 23	10 — 15 V when ignition switch is ON.
Power supply*1		1 — 23	10 — 15 V when ignition switch is ON.
Grounding line		23	—
Grounding line		26	—

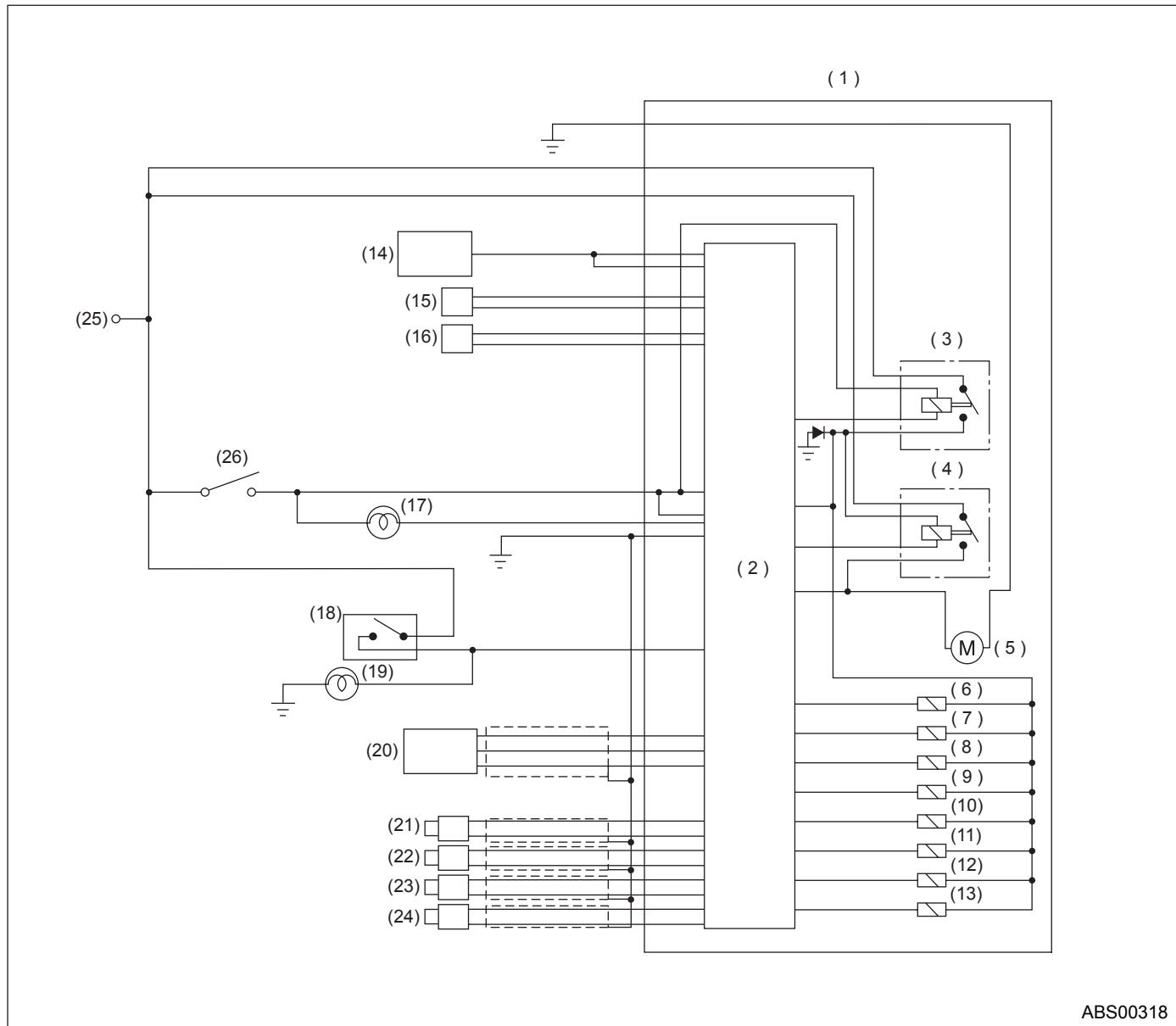
*1: Measure the I/O signal voltage after removing the connector from the ABSCM & H/U terminal.

*2: Measure the I/O signal voltage at connector (B99) or (F45).

CONTROL MODULE I/O SIGNALS

ABS (DIAGNOSTICS)

B: SCHEMATIC



ABS00318

(1) ABS control module and hydraulic control unit (ABSCM & H/U)	(10) Rear inlet solenoid valve LH	(19) Stop light
(2) ABS control module area	(11) Rear outlet solenoid valve LH	(20) G sensor
(3) Valve relay	(12) Rear inlet solenoid valve RH	(21) Front ABS sensor LH
(4) Motor relay	(13) Rear outlet solenoid valve RH	(22) Front ABS sensor RH
(5) Motor	(14) Transmission control module (AT vehicles only)	(23) Rear ABS sensor LH
(6) Front inlet solenoid valve LH	(15) Diagnosis connector	(24) Rear ABS sensor RH
(7) Front outlet solenoid valve LH	(16) Data link connector	(25) Battery
(8) Front inlet solenoid valve RH	(17) ABS warning light	(26) IGN
(9) Front outlet solenoid valve RH	(18) Stop light switch	

C: WAVEFORM

