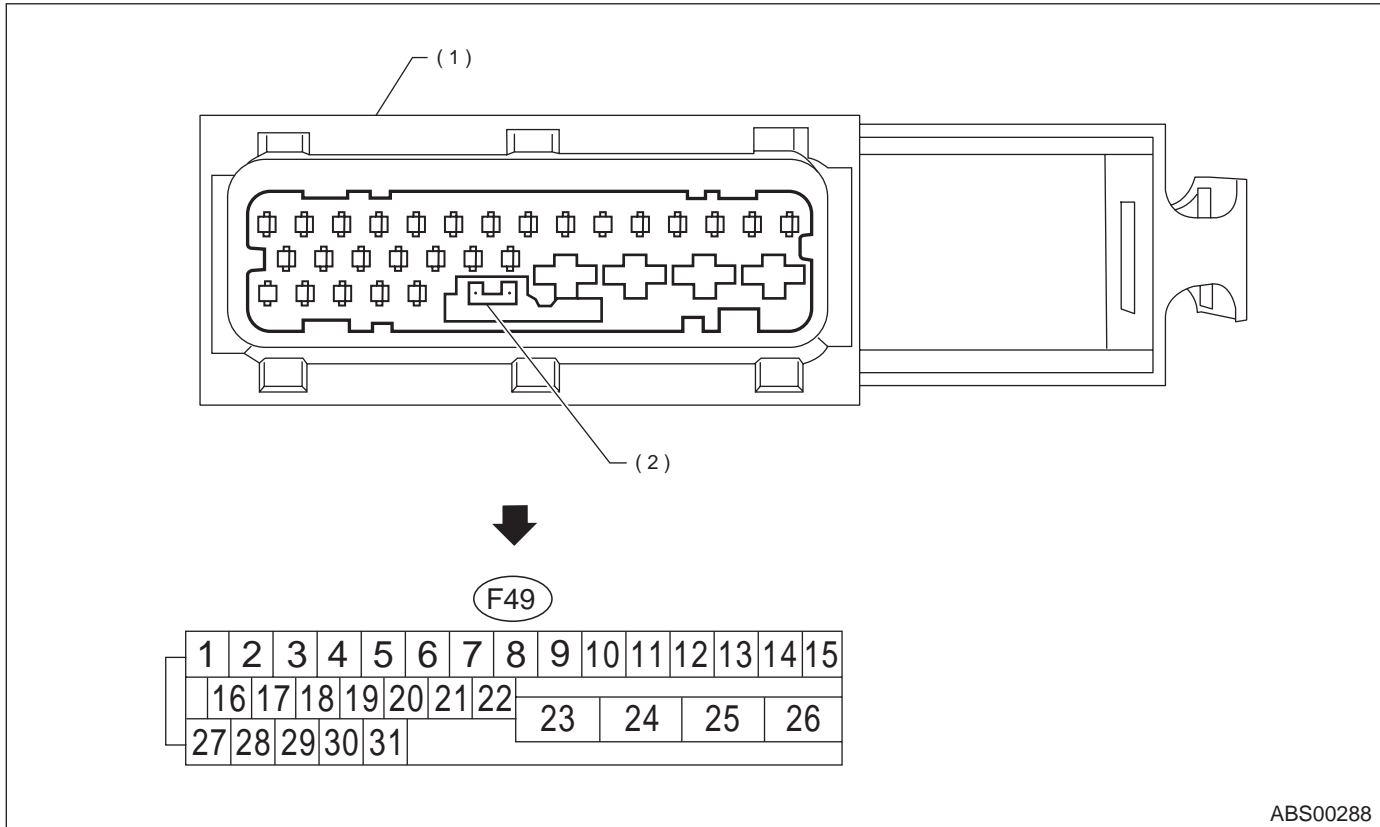


## CONTROL MODULE I/O SIGNAL

ABS (DIAGNOSTICS)

### 5. Control Module I/O Signal

#### A: ELECTRICAL SPECIFICATION



- (1) ABSCM&HU connector
- (2) Connector switch

**NOTE:**

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

**CONTROL MODULE I/O SIGNAL**

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 — 1 V (When it is 20 Hz.)
	Front right wheel	11—12	
	Rear left wheel	7—8	
	Rear right wheel	14—15	
Valve relay power supply		24—23	10 — 15 V
Motor relay power supply		25—23	10 — 15 V
G sensor*2	power supply	30—28	4.75 — 5.25 V
	ground	28	—
	output	6—28	2.3±0.2 V when vehicle is in 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 during 1.5 seconds when ignition switch is ON, and 10 — 15 V after 1.5 seconds.
AT ABS signal*2 (AT model only)		31—23	Less than 1.5 V when the ABS control still operates and more than 5.5 V when ABS does not operate.
ABS operation signal monitor*2		3—23	Less than 1.5 V when the ABS control still operates and more than 5.5 V when ABS does not operate.
Select monitor*2	Data is received.	20—23	Less than 1.5 V when no data is received.
	Data is sent.	5—23	4.75 — 5.25 V when no data is sent.
ABS diagnosis connector*2	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&amp;H/U terminal.

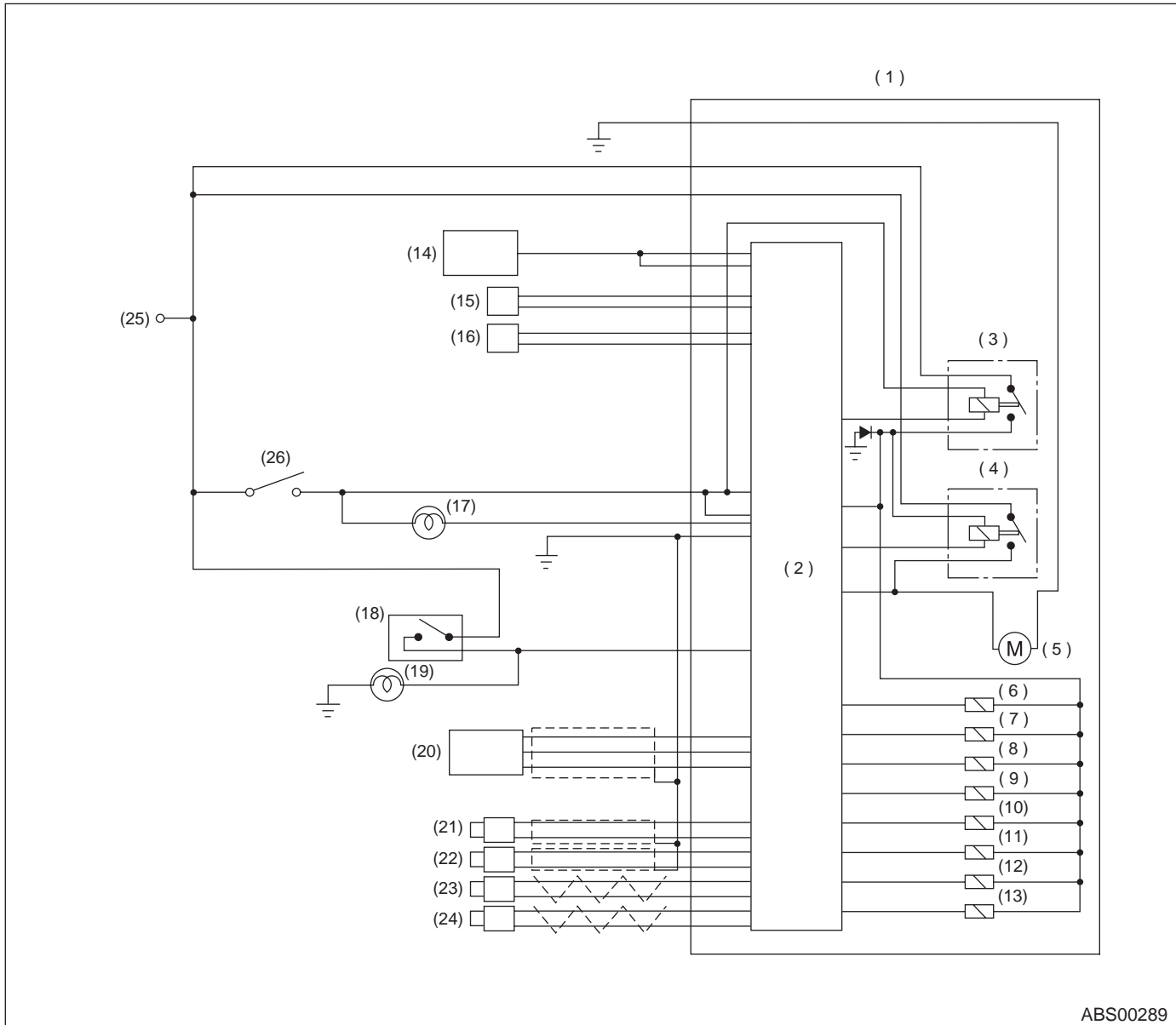
\*2: Measure the I/O signal voltage at connector (B62) or (F55).

**ABS-13**

## CONTROL MODULE I/O SIGNAL

### ABS (DIAGNOSTICS)

### B: SCHEMATIC



ABS00289

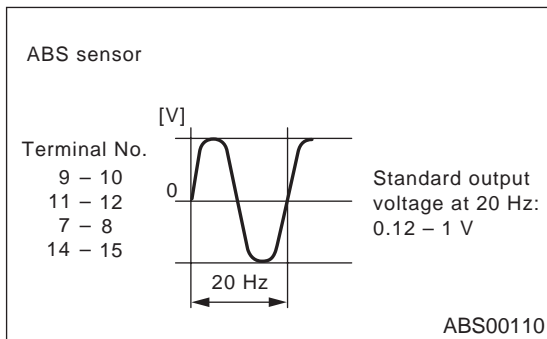
- |   |  |                             |
|---|--|-----------------------------|
| (1) ABS control module and hydraulic control unit (ABSCM&H/U) | (10) Rear left inlet solenoid valve              | (18) Stop light switch      |
| (2) ABS control module area                                   | (11) Rear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

## ABS-14

## CONTROL MODULE I/O SIGNAL

ABS (DIAGNOSTICS)

### C: WAVEFORM



ABS-15

Vehicle-id:  
SIE-id::C:Waveform  
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