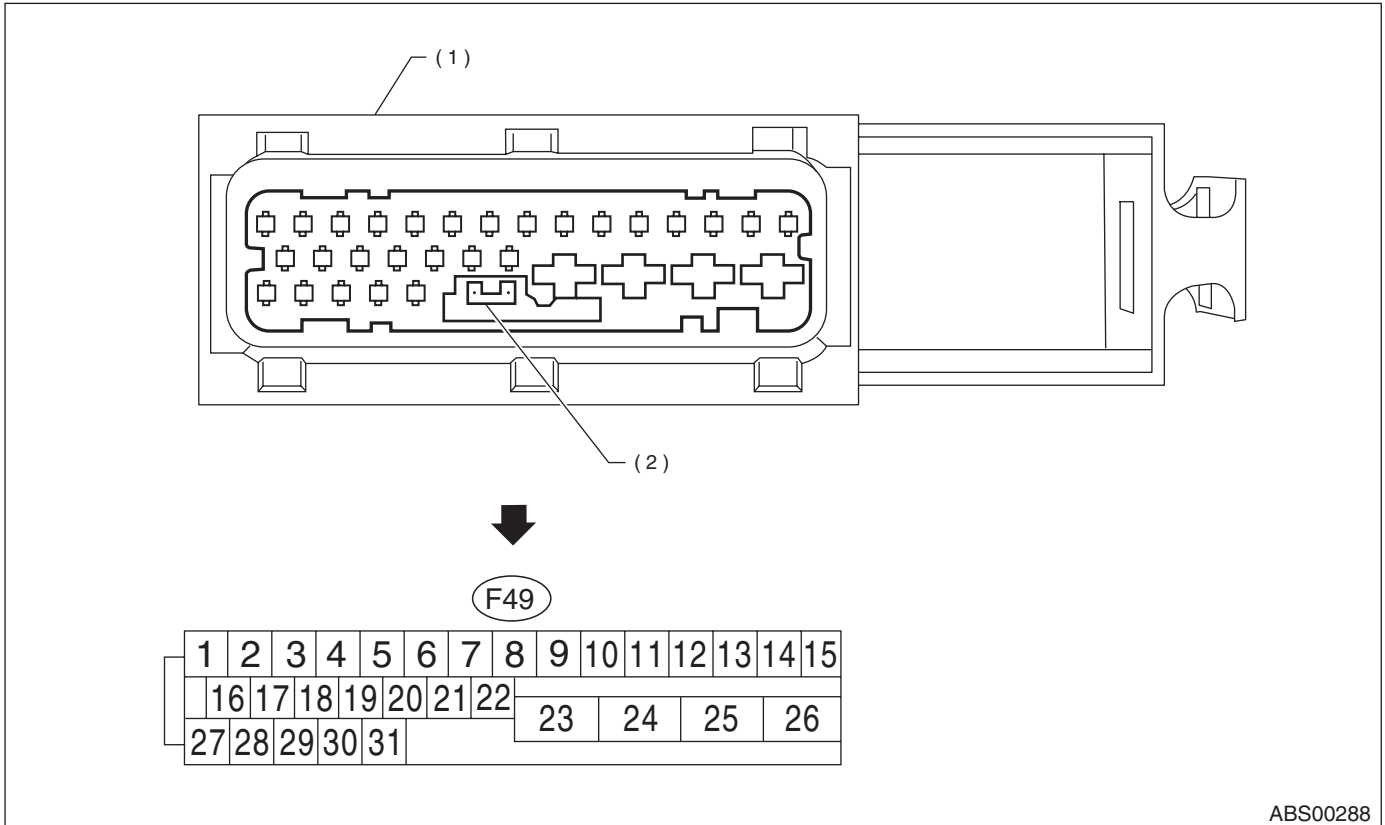


CONTROL MODULE I/O SIGNAL

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. |
| Power supply*1 | | 1—23 | 10 — 15 V when ignition switch is ON. |
| Grounding line | | 23 | — |
| Grounding line | | 26 | — |

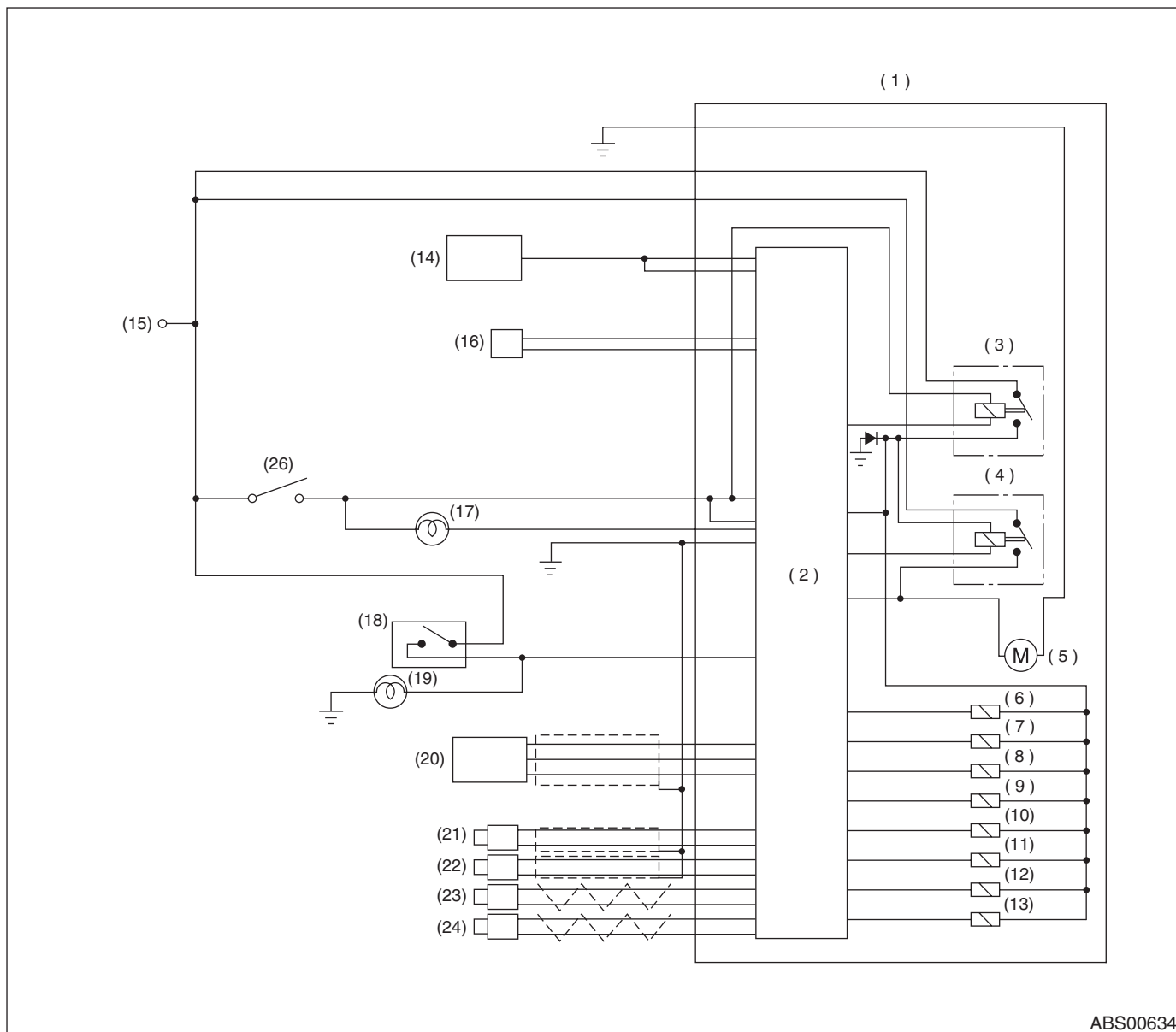
*1: Measure the I/O signal voltage after removing the connector from the ABSCM&H/U terminal.

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

CONTROL MODULE I/O SIGNAL

ABS (DIAGNOSTICS)

B: SCHEMATIC



- | | | |
|---|--|-----------------------------|
| (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) IGN | (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 | (16) Data link connector | (25) Battery |
| (9) Front right outlet solenoid valve | (17) ABS warning light | |

C: WAVEFORM

