

3. ABS Sequence Control

A: OPERATION

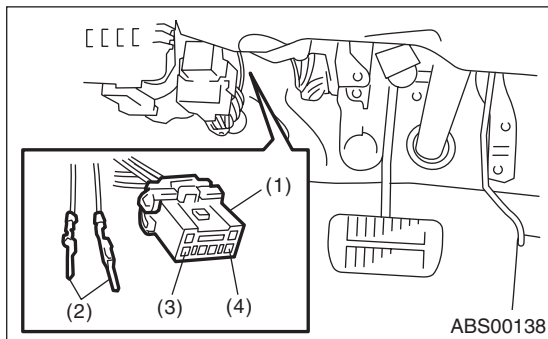
1) Under the ABS sequence control, after the hydraulic unit solenoid valve is driven, the operation of the hydraulic unit can be checked by means of the brake tester or pressure gauge.

2) ABS sequence control can be started by diagnosis connector or SUBARU Select Monitor.

1. ABS SEQUENCE CONTROL WITH DIAGNOSIS CONNECTOR

1) Turn the ignition switch to OFF.

2) Connect the diagnosis terminal to terminal No. 6 of the diagnosis connector under driver's seat instrument panel lower cover.



- (1) Diagnosis connector
- (2) Diagnosis terminals
- (3) Terminal No. 3
- (4) Terminal No. 6

3) Turn the ignition switch to ON.

4) Confirm that start code (code 11) is only displayed.

5) Turn the ignition switch to OFF.

6) Connect the diagnosis terminals to terminals No. 6 and No. 3 of the diagnosis connector.

7) Set the speed of all wheels at 4 km/h (2 MPH) or less.

8) Turn the ignition switch to ON.

9) Within 0.5 seconds after the ABS warning light goes out, depress the brake pedal and hold it depressed.

NOTE:

Engine must not operate.

CAUTION:

Do not depress the clutch pedal in case of model with hill holder.

10) After completion of ABS sequence control, turn the ignition switch to OFF.

2. ABS SEQUENCE CONTROL WITH SUBARU SELECT MONITOR

NOTE:

• In the event of any trouble, the sequence control may not be operative. In such a case, activate the sequence control, referring to "ABS SEQUENCE CONTROL WITH DIAGNOSIS CONNECTOR".

<Ref. to ABS-10, ABS SEQUENCE CONTROL WITH DIAGNOSIS CONNECTOR, OPERATION, ABS Sequence Control.>

• When the diagnosis terminal is connected to the diagnosis connector, the sequence control will not operate.

1) Connect the SUBARU Select Monitor to data link connector under driver's seat instrument panel lower cover.

2) Turn the ignition switch to ON.

3) Turn the SUBARU Select Monitor switch to ON.

4) Put the SUBARU Select Monitor to "BRAKE CONTROL" mode.

5) When "Function check sequence" is selected, 'ABS sequence control' will start.

6) When the message "Press Brake Pedal with braking force of 100 to 150 kgf" is displayed, perform the followings.

(1) When using the brake tester, depress the brake pedal with braking force of 981 N (100 kgf, 221 lb).

(2) When using the pressure gauge, depress the brake pedal so as to make the pressure gauge indicate 3,432 kPa (35 kg/cm², 498 psi).

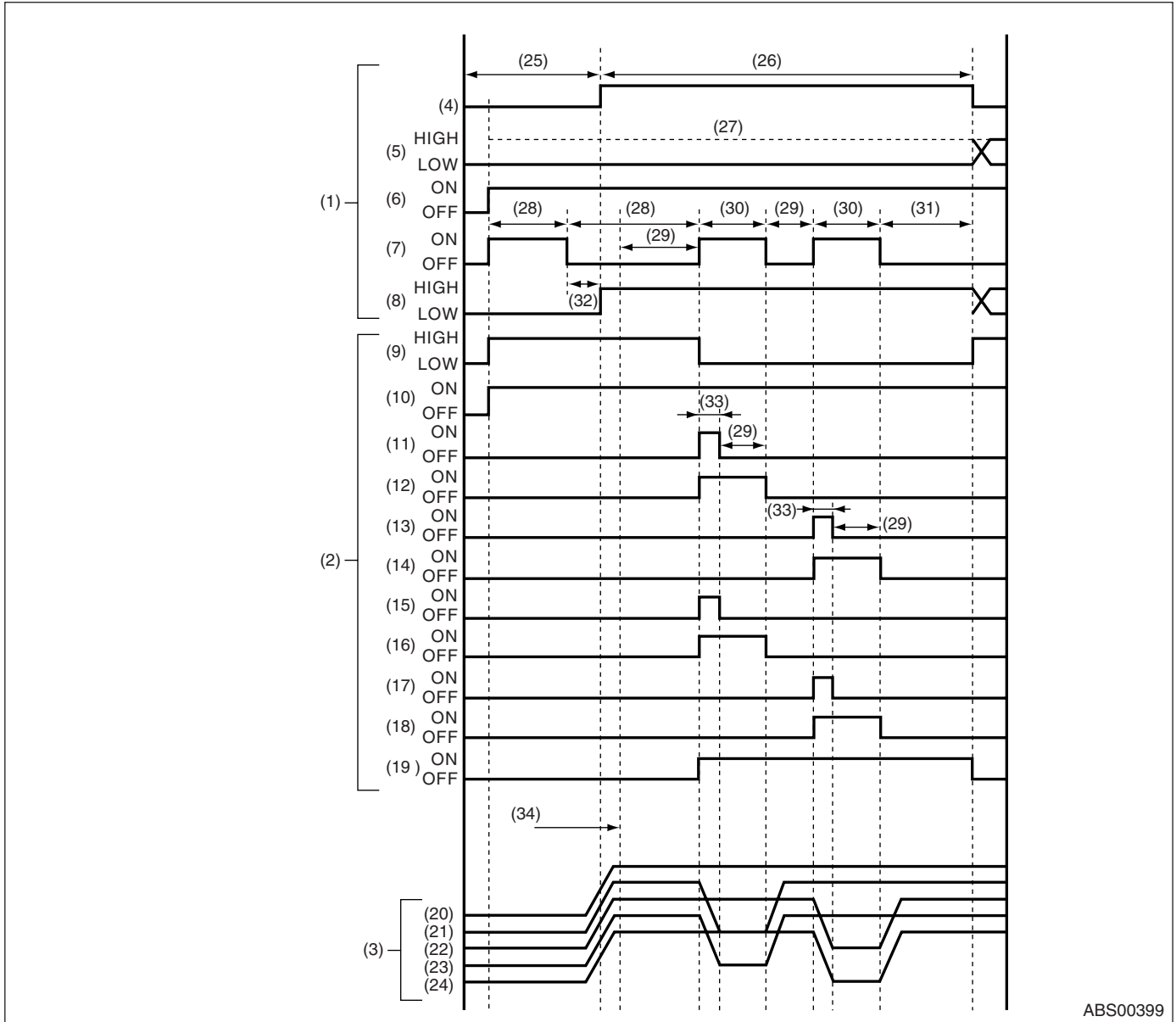
CAUTION:

Do not depress the clutch pedal in case of model with hill holder.

7) When the message "Press YES" is displayed, press the YES key.

8) The braking system in operation is displayed on SUBARU Select Monitor.

3. CONDITIONS FOR ABS SEQUENCE CONTROL



ABS00399

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|--|------------------------------------|---|
| (1) Operational guide line of sequence control | (11) FL outlet valve | (24) Pressure of RL wheel cylinder |
| (2) Operational pattern of sequence control | (12) FL inlet valve | (25) 4 km/h (2 MPH) or less |
| (3) Operational pressure of sequence control | (13) FR outlet valve | (26) 10 km/h (6 MPH) or less |
| (4) Speed of all wheels | (14) FR inlet valve | (27) Either HI or LO possible, if using SUBARU Select Monitor |
| (5) Terminal No. 3 and No. 6 | (15) RR outlet valve | (28) 1.5 seconds |
| (6) Ignition key switch | (16) RR inlet valve | (29) 1.0 second |
| (7) ABS warning light | (17) RL outlet valve | (30) 1.4 seconds |
| (8) Stop light switch | (18) RL inlet valve | (31) 0.6 seconds |
| (9) AT ABS signal | (19) Pump motor | (32) within 0.5 seconds |
| (10) Valve relay | (20) Pressure of master cylinder | (33) 0.4 seconds |
| | (21) Pressure of FL wheel cylinder | (34) Point A |
| | (22) Pressure of FR wheel cylinder | |
| | (23) Pressure of RR wheel cylinder | |

ABS SEQUENCE CONTROL

ABS

NOTE:

- When the SUBARU Select Monitor is used, control operation starts at point A. The patterns from ignition key ON to the point A show that operation is started by diagnosis connector. (However, the stop light switch must be ON before point A.)
- HIGH means high voltage.
- LOW means low voltage.

B: SPECIFICATION

1. CONDITIONS FOR COMPLETION OF ABS SEQUENCE CONTROL

When the following conditions develop, the ABS sequence control stops and ABS operation is returned to the normal control mode.

- 1) When the speed of at least one wheel reaches 10 km/h (6 MPH).
- 2) When terminal No. 3 or No. 6 are separated from diagnosis terminals. (When the SUBARU Select Monitor is not used.)
- 3) When the brake pedal is released during sequence control and the stop light switch is set to off.
- 4) When the brake pedal is depressed after ignition key is turned to ON, and before ABS warning light goes out. (When the SUBARU Select Monitor is not used.)
- 5) When the brake pedal is not depressed after ignition key is turned to ON, and within 0.5 seconds after ABS warning light goes out. (When the SUBARU Select Monitor is not used.)
- 6) After completion of the sequence control.
- 7) When malfunction is detected. (When the SUBARU Select Monitor is used.)