

### 3. ABS Sequence Control

#### A: OPERATION

- 1) While the ABS sequence control is being performed, the operation of the hydraulic unit can be checked using the brake tester or pressure gauge after the hydraulic unit solenoid valve operation.
- 2) ABS sequence control can be started by diagnosis connector or Subaru Select Monitor.

#### 1. ABS SEQUENCE CONTROL WITH SUBARU SELECT MONITOR

##### NOTE:

If a problem occurs, sequence control will not operate. In this case, diagnose the failure. <Ref. to ABS(diag)-2, PROCEDURE, Basic Diagnostic Procedure.>

- 1) Connect the Subaru Select Monitor to data link connector under the driver's side instrument panel lower cover.
- 2) Turn the ignition switch to ON.
- 3) Run the Subaru Select Monitor.
- 4) Set the Subaru Select Monitor to "BRAKE CONTROL" mode.
- 5) When the "Function check sequence" is selected, the "ABS sequence control" will start.
- 6) Execute the following operations when the message "Press the brake pedal so that the brake pedal force is between 100 and 150 kgf" is displayed.
  - (1) When using a brake tester, press the brake pedal pad with a force of 981 N (100 kgf, 221 lb).
  - (2) When using a pressure gauge, press the brake pedal so that the pressure gauge indicates 3,432 kPa (35 kg/cm<sup>2</sup>, 498 psi).

##### CAUTION:

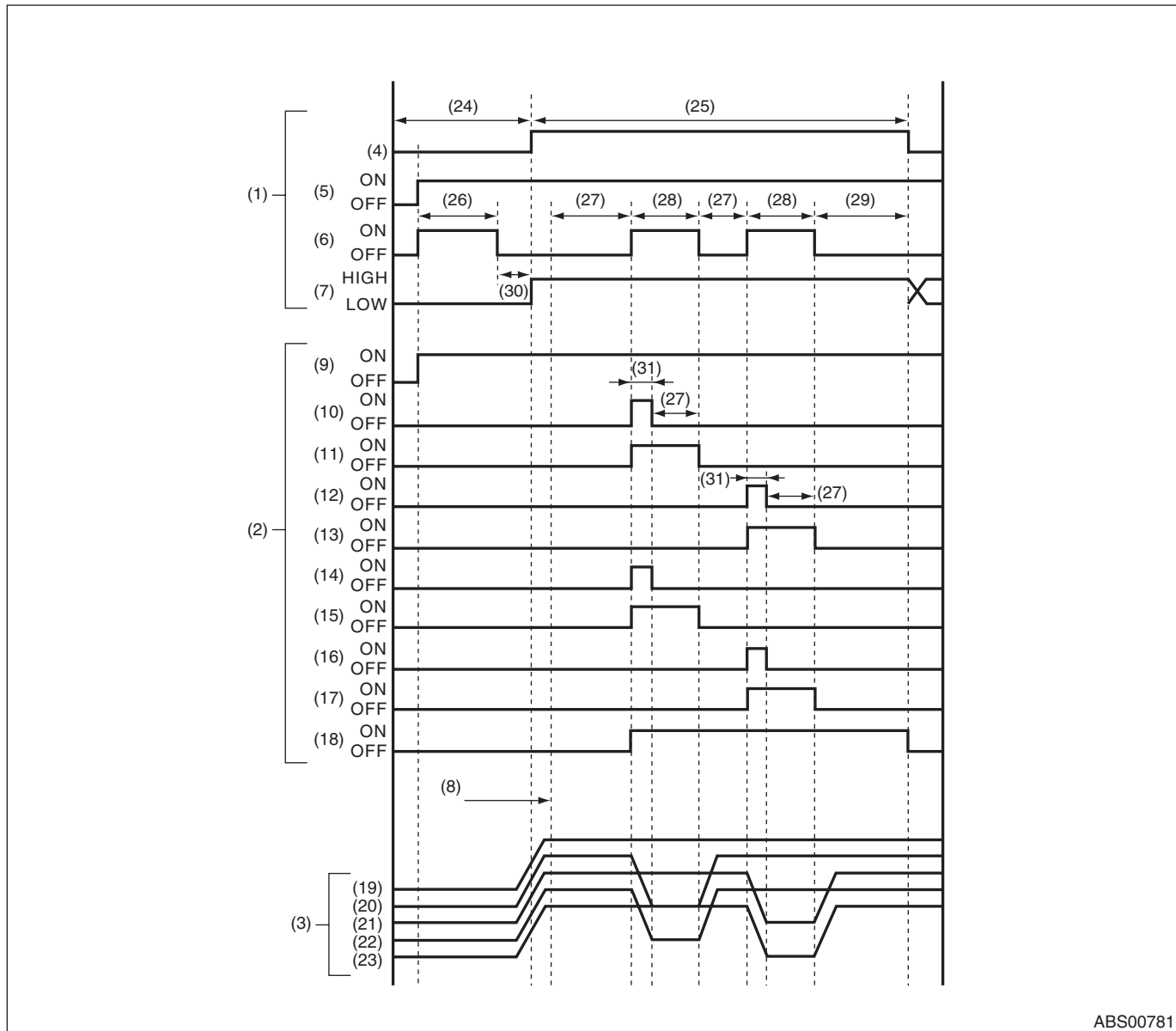
**On models with the hill holder feature, do not step on the clutch pedal.**

- 7) "OK" will be displayed. Select the [OK].
- 8) The brake system being operated is displayed on the Subaru Select Monitor.

# ABS Sequence Control

ABS

## 2. CONDITIONS FOR ABS SEQUENCE CONTROL



ABS00781

- |  |                                 |                                 |
|--|---------------------------------|---------------------------------|
| (1) Operation guide line of the sequence control | (10) FL decompression valve     | (21) FR wheel cylinder pressure |
| (2) Operation pattern of sequence control        | (11) FL compression valve       | (22) RR wheel cylinder pressure |
| (3) Operating pressure of sequence control       | (12) FR decompression valve     | (23) RL wheel cylinder pressure |
| (4) All wheel speed                              | (13) FR compression valve       | (24) 4 km/h (2 MPH) or less     |
| (5) Ignition key                                 | (14) RR decompression valve     | (25) 10 km/h (6 MPH) or less    |
| (6) ABS warning light                            | (15) RR compression valve       | (26) Approx. 2 sec.             |
| (7) Stop light switch                            | (16) RL decompression valve     | (27) 1.0 second                 |
| (8) A point                                      | (17) RL compression valve       | (28) 1.4 seconds                |
| (9) Valve relay                                  | (18) Pump motor                 | (29) 0.6 seconds                |
|  | (19) Master cylinder pressure   | (30) Within 0.5 second          |
|  | (20) FL wheel cylinder pressure | (31) 0.4 seconds                |

**NOTE:**

- The control operation starts from point A.
- HIGH indicates high voltage.

- LOW indicates low voltage.

## **B: SPECIFICATION**

### **1. ABS SEQUENCE CONTROL COMPLETE CONDITION**

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 the brake pedal is released during sequence control and the stop light switch becomes OFF.
- 3) After completion of the sequence control.
- 4) When a malfunction is detected.