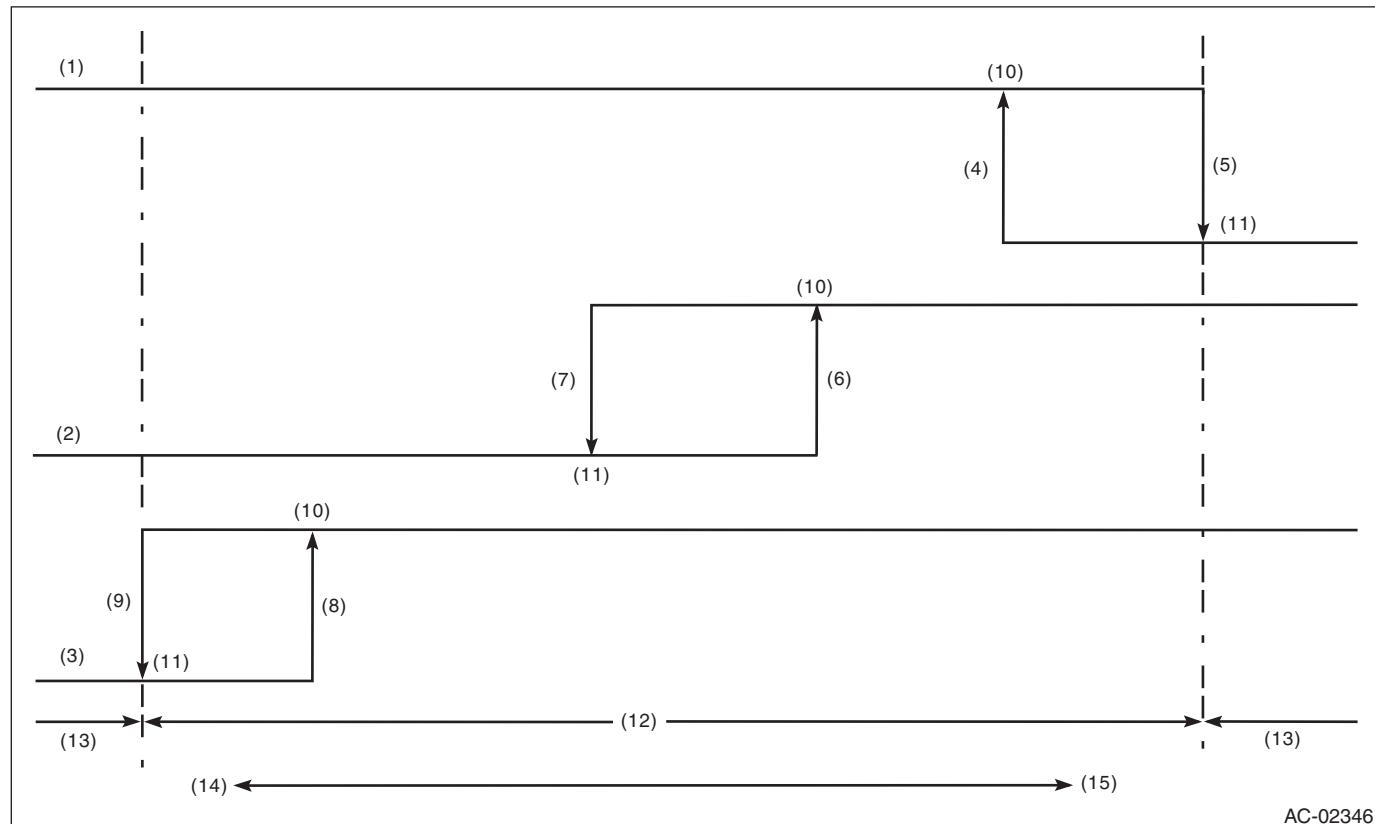


21. Pressure Switch (Triple Pressure Switch)

A: INSPECTION

- 1) Connect the manifold gauge to the service valve on the high-pressure side.
- 2) Disconnect the pressure switch connector.
- 3) Start the air conditioner, and check the operating pressure of switch by turning the compressor (magnet clutch) to ON/OFF. Operation of each switch is as follows.



(1) High pressure switch	(6) $1,770 \pm 100 \text{ kPa}$ ($18.05 \pm 1.02 \text{ kg/cm}^2$, $256.65 \pm 14.5 \text{ psi}$)	(11) OFF
(2) Middle pressure switch	(7) $1,470 \pm 120 \text{ kPa}$ ($14.99 \pm 1.22 \text{ kg/cm}^2$, $213.15 \pm 17.4 \text{ psi}$)	(12) Operative range of compressor
(3) Low pressure switch	(8) $225 \pm 30 \text{ kPa}$ ($2.30 \pm 0.31 \text{ kg/cm}^2$, $32.6 \pm 4.3 \text{ psi}$)	(13) Inoperative range of compressor
(4) $2,350 \pm 200 \text{ kPa}$ ($24.00 \pm 2.04 \text{ kg/cm}^2$, $340.7 \pm 29.0 \text{ psi}$)	(9) $196 \pm 25 \text{ kPa}$ ($2.0 \pm 0.25 \text{ kg/cm}^2$, $28.4 \pm 3.6 \text{ psi}$)	(14) Low pressure
(5) $2,940 \pm 200 \text{ kPa}$ ($29.98 \pm 2.04 \text{ kg/cm}^2$, $426.3 \pm 29.0 \text{ psi}$)	(10) ON	(15) High pressure

NOTE:

- High pressure switch turns the compressor (magnet clutch) to OFF when the refrigerant pressure becomes extremely high to prevent the evaporator, air conditioner piping and expansion valve from getting damaged or frozen, etc.
- Middle pressure switch effectively controls the radiator fan output by judging high load/low load in normal range.
- The low pressure switch detects a refrigerant shortage and deactivates the compressor (magnet clutch) if the refrigerant pressure is abnormally low. (Because any further compressor operation in such a state may lead to compressor seizure)