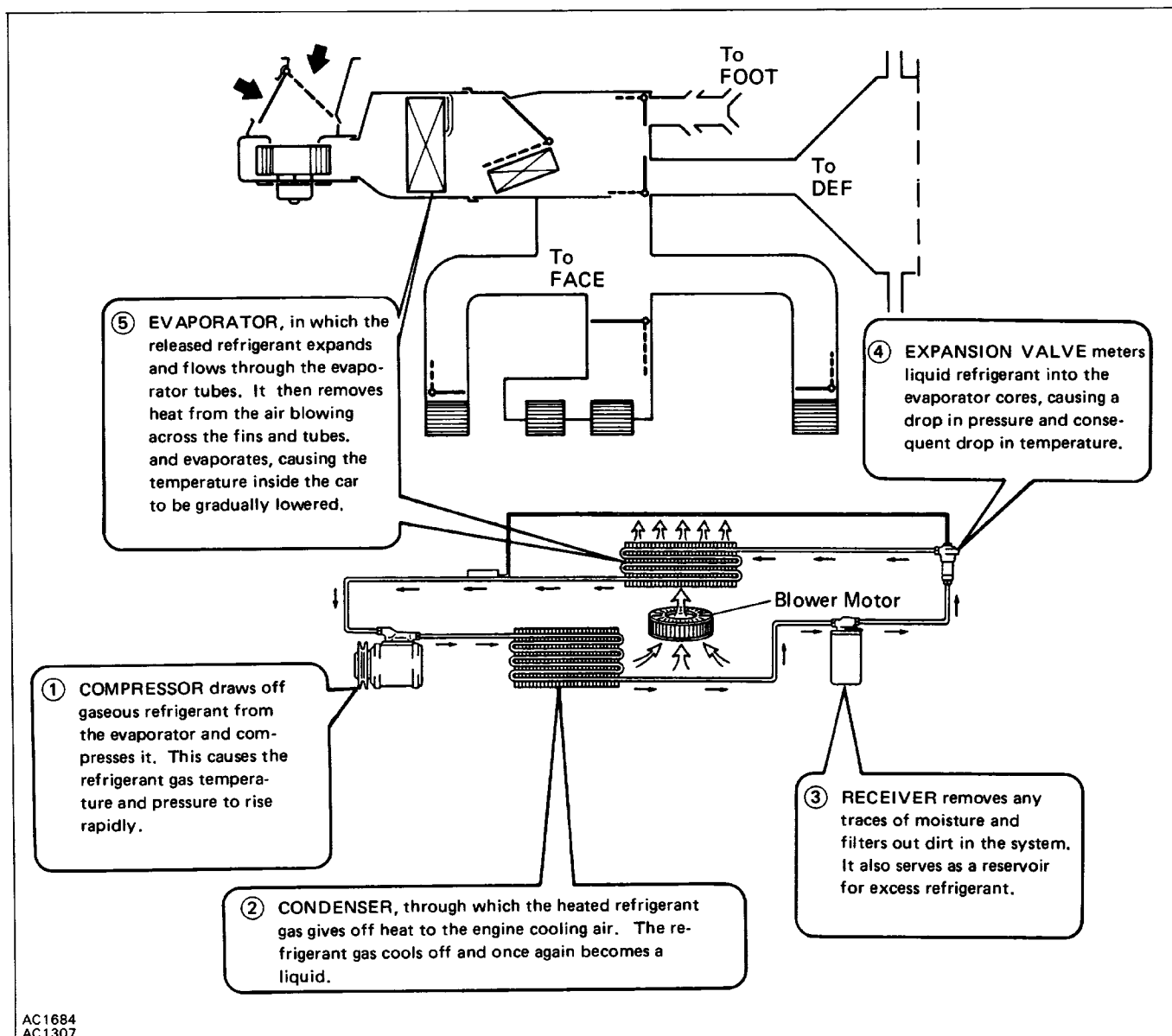


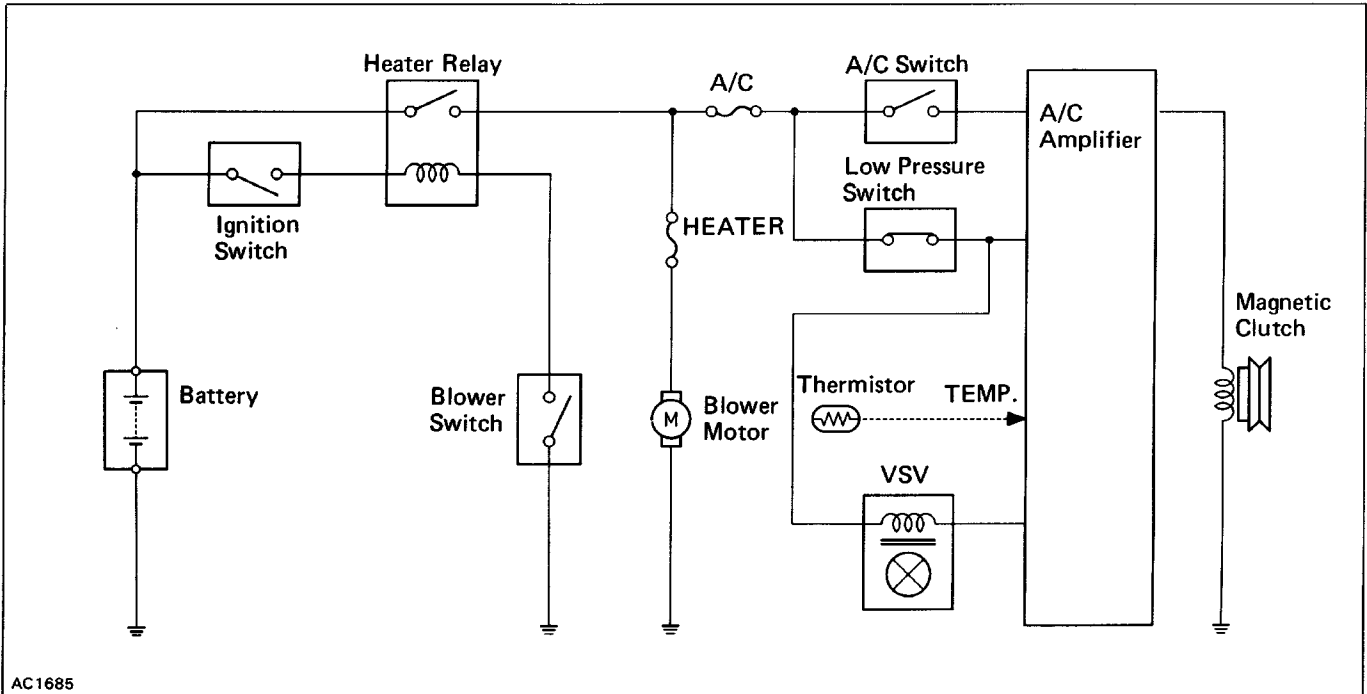
## GENERAL DESCRIPTION

### REFRIGERATION CYCLE

1. The compressor discharges high temperature and high pressure refrigerant containing the heat absorbed from the evaporator plus the heat created by the compressor in a discharge stroke.
2. This gaseous refrigerant flows into the condenser. In the condenser, the gaseous refrigerant condenses into liquid refrigerant.
3. This liquid refrigerant flows into the receiver which stores and filters the liquid refrigerant till the evaporator requires the refrigerant.
4. The liquid refrigerant is changed by the expansion valve into a low temperature, low pressure liquid and gaseous mixture.
5. This cold and foggy refrigerant flows to the evaporator. Vaporizing the liquid in the evaporator, the heat from the warm air stream passing through the evaporator core is transferred to the refrigerant. All the liquid is changed into the gaseous refrigerant in the evaporator and only heat-laden gaseous refrigerant is drawn into the compressor. Then the process is repeated again.



**1. PRINCIPLE OF A/C ELECTRICAL CIRCUIT**



**2. HOW IS MAGNETIC CLUTCH ENERGIZED?**

The general process until the magnetic clutch is energized as shown below.

- ① Ignition Switch "ON"
- ② Blower Switch "ON" → Heater Relay "ON" (Blower Motor "RUN")
- ③ A/C Switch "ON" → A/C Amplifier "ON" (A/C Amp. Main Power Supply)
- ④ Low Pressure Switch "ON":  
Refrigerant Condition is more than 206 kPa (2.1 kgf/cm<sup>2</sup>, 30 psi)
- ⑤ Thermistor supplies temperature signal of evaporator to A/C amplifier.
- ⑥ VSV "ON" → E/G Idle-up
- ⑦ Magnetic Clutch "ON"