

The refrigerant compressor (1) driven by the engine will draw up the heated, gaseous and slightly pressurized refrigerant R 12 for delivery to the condenser (2). The head wind will flow through condenser located in front of radiator and will cool the refrigerant vapor which has been additionally heated and put under high pressure until it is fluid. The now fluid refrigerant will then flow to the receiver dehydrator (3). The filter drier installed in receiver dehydrator will extract any remaining water from fluid refrigerant to prevent any icing-up of expansion valve (4). A sight-glass at top of receiver dehydrator permits checking quantity of refrigerant in system at any time. With the system switched on, the refrigerant should circulate free of bubbles. From receiver dehydrator the refrigerant flows to the expansion valve (4). The expansion valve on evaporator will change the high pressure of the fluid refrigerant into a low pressure fluid evaporator (5), upon which the fluid will become a vapor. The required vaporizing heat is taken from the air flowing through evaporator; the air will be cooled.

The vaporized refrigerant is drawn up by the refrigerant compressor and is again compressed to complete the cycle.

