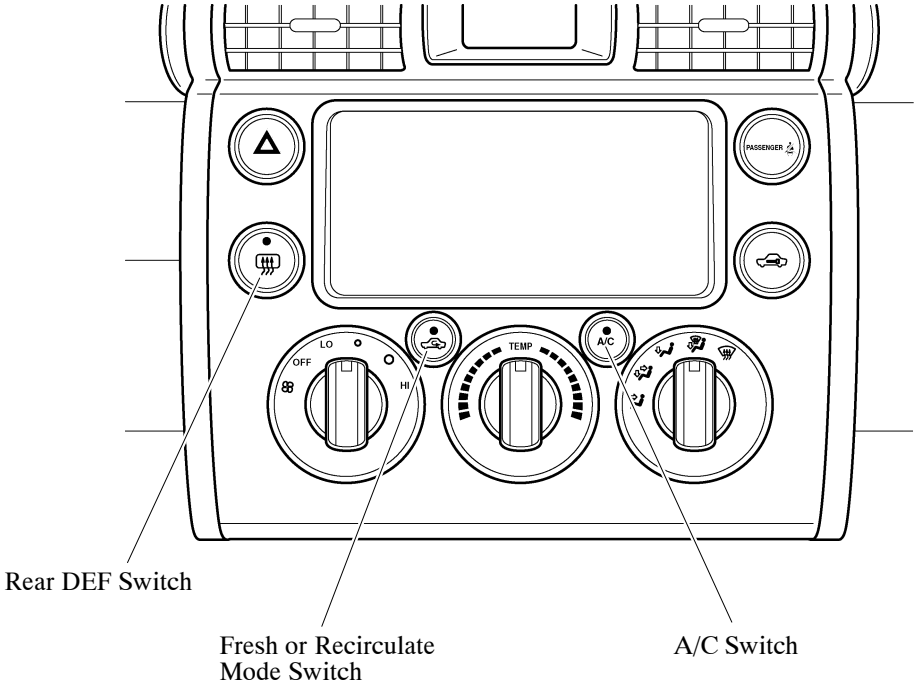
■ CONSTRUCTION AND OPERATION

1. Integration Control & Panel Assembly

- An electric manual integration control & panel assembly is used.
- The control panel has large switches and knobs, improving ease of use and visibility.

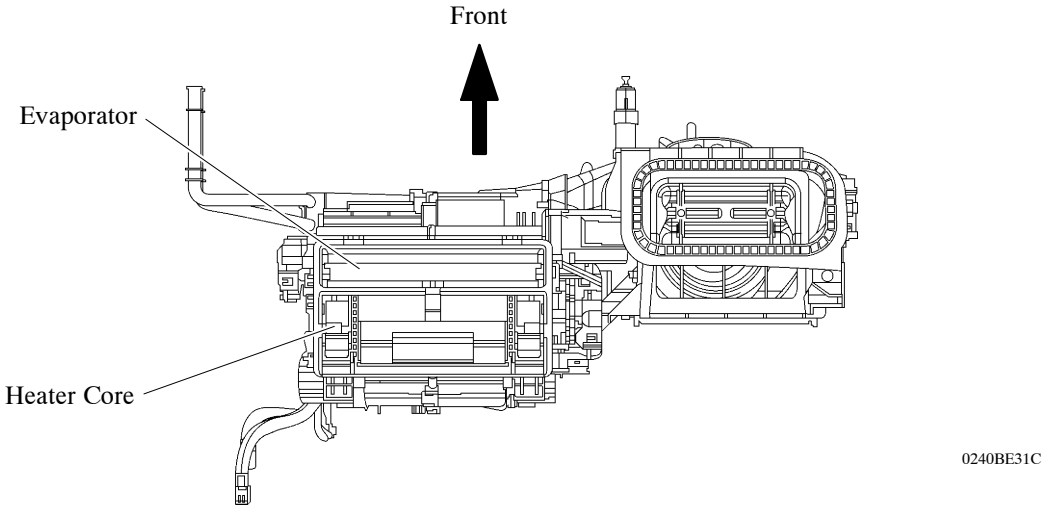


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2. Air Conditioning Unit

General

A semi-center location air conditioning unit, in which the evaporator and heater core are placed parallel to the firewall. As a result, the air conditioning unit has been made compact and lightweight.

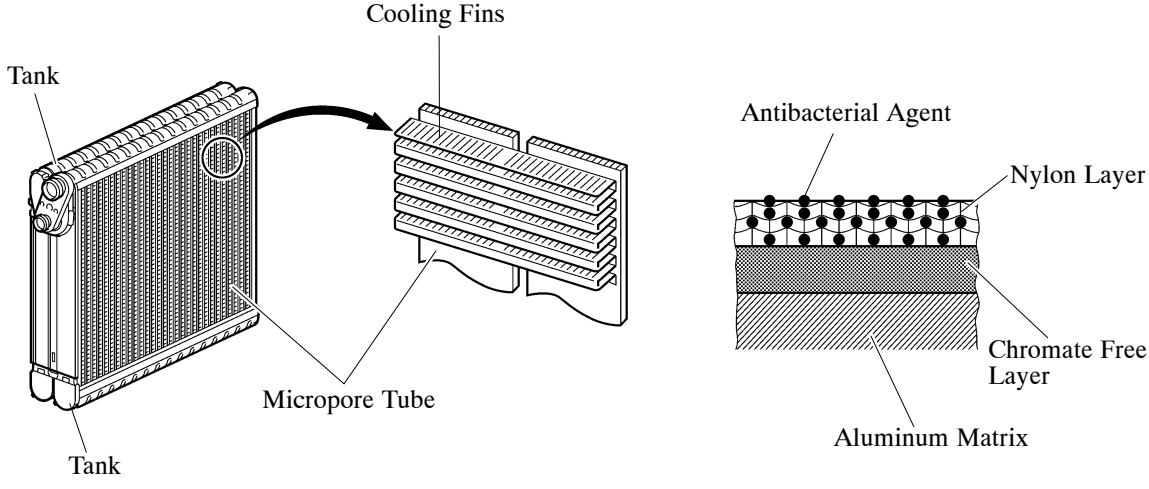


Evaporator

- A RS (Revolutionary super-slim Structure) evaporator is used.
- By placing the tanks at the top and the bottom of the evaporator unit and adopting a micropore tube construction, the following effects are realized:

  a) The heat exchanging efficiency is improved.
  b) The temperature distribution is made more uniform.
  c) The evaporator is made thinner.

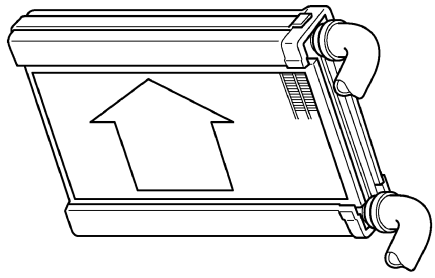
- The evaporator body is coated with a type of resin that contains an antibacterial agent in order to minimize the source of foul odor and the propagation of bacteria. The substrate below this coating consists of a chromate-free layer to help protect the environment.



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Heater Core

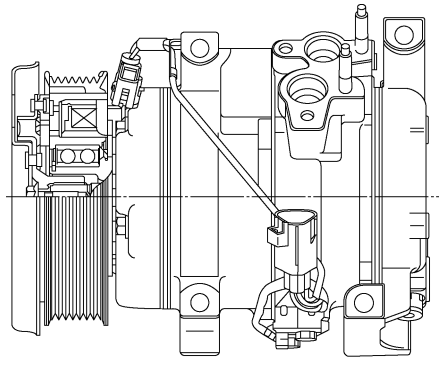
A compact, lightweight, and highly efficient straight flow (full-path flow) aluminum heater core is used.



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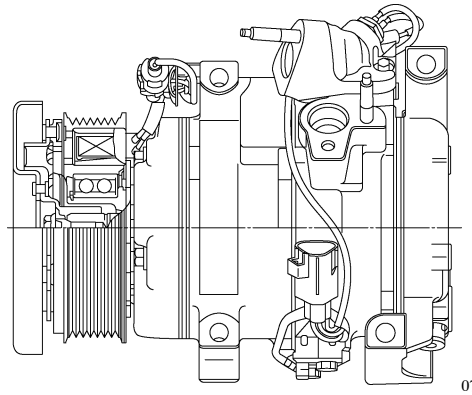
3. Compressor Assembly

A compact, lightweight, and low-noise swash plate type compressor is used.



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Models for Except Middle East

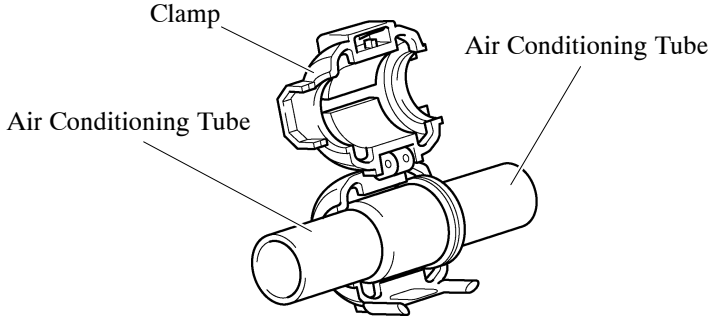


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Models for Middle East

4. Quick Joint

A clamp type quick joint is used. As a result, the ease of service operations is improved.



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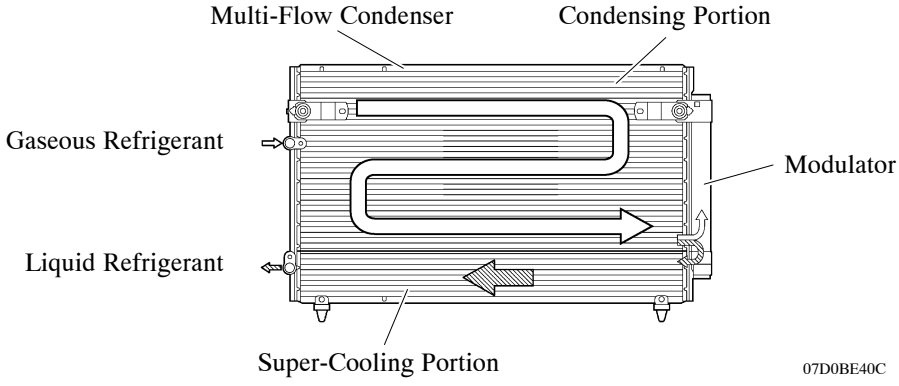
5. Condenser

General

The condenser a multi-flow condenser consisting of two cooling portions (a condensing portion and a super-cooling portion), and a gas-liquid separator (modulator) all integrated together. This condenser uses a sub-cool type cooling cycle to improve heat-exchange efficiency.

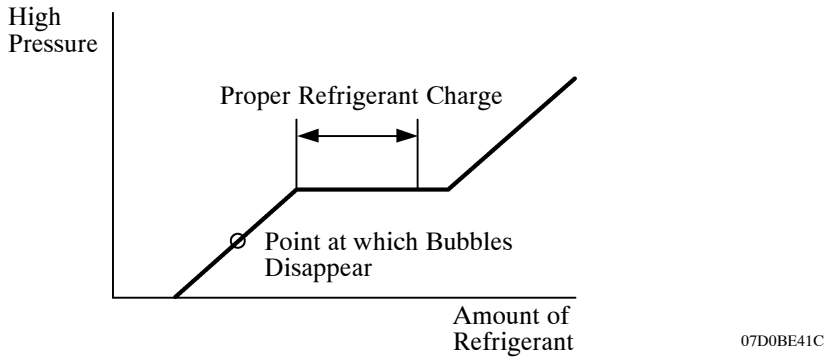
Sub-Cool Cycle

In the sub-cool cycle, after the refrigerant passes through the condensing portion of the condenser, both the liquid refrigerant and the gaseous refrigerant that could not be liquefied, are cooled again in the super-cooling portion. Thus, the refrigerant is sent to the evaporator in an almost completely liquefied state.



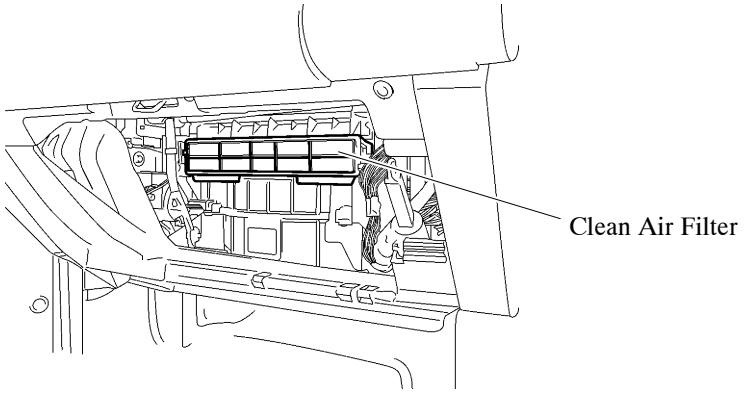
Service Tip

When charging the A/C system, the point at which the air bubbles disappear from view in the refrigerant of the sub-cool cycle is lower than the point at which the proper amount of refrigerant would be present. Therefore, if the system is recharged with refrigerant based on the point at which the air bubbles disappear, the amount of refrigerant would be insufficient. As a result, the cooling performance of the system would be affected. If the system is overcharged with refrigerant, this will also lead to reduced performance. For the proper method of verifying the amount of the refrigerant and to recharge the system with refrigerant, see the FJ CRUISER Repair Manual (Pub. No. RM07D1E).



6. Clean Air Filter

A clean air filter that excels at removing dust is standard equipment.
This filter, which cleans the air in the cabin, is made of polyester. Thus, it can be disposed of easily as a combustible material, a feature that is friendly to the environment.
When it is necessary to change this filter, this can be done easily by releasing the clip that attaches the damper to the door, then releasing the stoppers that retain the top of the glove compartment door to the instrument panel. This makes it possible to open the filter door and take out the filter from inside, thus excellent serviceability is realized.



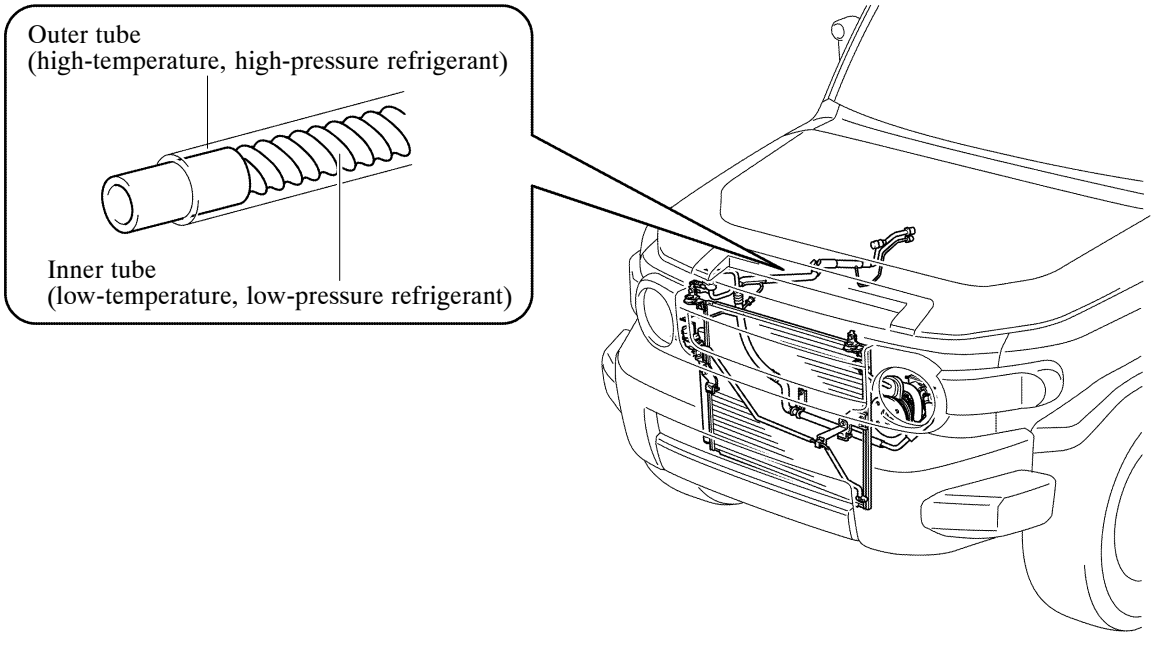
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Service Tip

The clean air filter should be changed every 20,000 km. The need for filter replacement may vary depending on vehicle usage or conditions (environment).

7. Sub-cool Accelerator Type Tube (Models for Middle East)

The sub-cool accelerator type tube is a double-layer tube consisting of an inner tube with low-temperature, low-pressure refrigerant and an outer tube with high-temperature, high-pressure refrigerant. The helical design of the inner tube allows heat to be transmitted easily, cooling the high-temperature, high-pressure refrigerant to ensure cooling performance.



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