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|---|---|---|
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| **Model Year:** 2013 | **Model:** RAV4 | **Prod Date Range:** [12/2012 - ] |
| **Title:** HEATING / AIR CONDITIONING: AIR CONDITIONING SYSTEM: GENERAL; 2013 MY RAV4 [12/2012 - ] | | |

# GENERAL

## 1. OUTLINE

(a) Air Conditioning System

(1) An automatic air conditioning system or a manual air conditioning system is provided.

(2) The automatic air conditioning system uses left and right independent temperature control to enhance comfort.

## 2. SPECIFICATIONS

(a) Ventilation and Heater Core

| MODEL | | SPECIFICATIONS |
|---|---|---|
| Heater Radiator Unit Sub-assembly | Type | Straight Flow Aluminum-II (SFA-II) |
| | Size (W x H x L) | 201.5 mm x 150 mm x 27 mm<br>(7.93 in. x 5.90 in. x 1.06 in.) |
| | Fin Pitch | 1.8 mm (0.07 in.) |
| Blower with Fan Motor Assembly | Motor Type | K70-10.5T*1<br>K70-10T*2 |
| | Fan Type | Semi Sirocco |
| | Fan Size (Dia. x H) | 155 mm x 70 mm (6.10 in. x 2.76 in.) |

*1: Models with manual air conditioning system
*2: Models with automatic air conditioning system

(b) Air Conditioning

| MODEL | | SPECIFICATIONS |
|---|---|---|
| Cooler Condenser Assembly | Type | Multi-Flow-IV (MF-IV) Sub-cool |
| | Size (W x H x L) | 680 mm x 415 mm x 16 mm<br>(26.8 in. x 16.3 in. x 0.63 in.) |
| | Fin Pitch | 2.75 mm (0.11 in.) |
| Cooler Compressor Assembly | | 7SES17*1<br>7SAS17*2 |
| No. 1 Cooler Evaporator Sub-assembly | Motor Type | Revolutionary Super-slim Structure (RS) |
| | Size (W x H x L) | 226 mm x 241 mm x 38 mm<br>(8.90 in. x 9.49 in. x 1.50 in.) |
| | Fin Pitch | 3.0 mm (0.11 in.) |

| | | |
|---|---|---|
| Refrigerant | Type | HFC-134a |
| | Charge Volume | 470 g to 530 g (16.6 oz. to 18.7 oz.) |

*1: AWD models
*2: 2WD models

## 3. MAIN FEATURES

(a) The air conditioning system has the following features:

| | |
|---|---|
| High Performance | • The neural network control is used so passengers can finely control the air conditioning for maximum comfort.*1<br>• A pollen-removal type clean air filter, which has a pollen-removal effect, is used.*1<br>• The manual blower control has 7 steps and automatic blower control has 31 steps to allow precise control.*1<br>• The blower control has 4 steps.*2<br>• The system contains a PTC heater (quick heater assembly) that heats the air that has passed through the heater radiator unit sub-assembly to ensure proper heater performance. |
| Lightweight*1 | • A bus connector with a built-in IC is used in a lightweight wire harness design to allow a reduced number of wires.<br>• The use of this connector means that pulse pattern type servo motors can be used. |
| Compact | A blower motor with a built-in blower motor controller is used to achieve a compact construction.*1 |
| Others | The following parts are used to ensure high cooling performance while achieving a compact and lightweight construction:<br>• Semi-center Location Air Conditioning Unit<br>• Revolutionary Super-slim Structure (RS) Evaporator<br>• Straight Flow Aluminum-II (SFA-II) Heater Radiator<br>• Multi-Flow-IV (MF-IV) Sub-cool Condenser |

*1: Models with automatic air conditioning system
*2: Models with manual air conditioning system

## 4. PRECAUTION

(a) Ignition Switch Expressions

(1) The type of ignition switch used on this model differs depending on the specifications of the vehicle. The expressions listed in the table below are used in this section.

| EXPRESSION | IGNITION SWITCH (POSITION) | ENGINE SWITCH (CONDITION) |
|---|---|---|
| Ignition Switch off | LOCK | Off (Lock) |
| Ignition Switch ACC | ACC | On (ACC) |

| | | |
|---|---|---|
| Ignition Switch ON | ON | On (IG) |
| Engine Start | START | On (Start) |