

# **Component Procedures: Refrigerant Oil**

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# Component Procedures: Refrigerant Oil

## Specifications Quick Reference (itype\_439)

Quick Specifications

- item

## Compressor Oil - Repair Procedures (Article 44843)

- Oil Specification

- The HFC-134a system requires synthetic (PAG) compressor oil whereas the R-12 system requires mineral compressor oil. The two oils must never be mixed.

- Compressor (PAG) oil varies according to compressor model. Be sure to use oil specified for the model of compressor.

Handling of Oil

- The oil should be free from moisture, dust, metal powder, etc.

- Do not mix with other oil.

- The water content in the oil increases when exposed to air. After use, seal oil from air immediately.

(HFC-134a Compressor Oil absorbs moisture very easily.)

- The compressor oil must be stored in steel containers, not in plastic containers.

Compressor Oil Check

Oil Return Operation

- Open all the doors and engine hood.

- Start the engine and air conditioning switch to "ON" and set the blower motor control knob at its highest position.

- Run the compressor for more than 20 minutes between 800 and 1,000 rpm in order to operate the system.

- Stop the engine.

## HVAC - Specifications (Article 44819)

- Specification

Air Conditioner

Item Specification

Compressor Type 6VSe14

Oil type & Capacity FD46XG (IDEMITSU) 110 ± 10 g (3.88 ± 0.35 oz.)

Pulley type 6PK - TYPE

Displacement 142 cc / rev

Expansion valve Type Block type

Refrigerant Type R-134a

Capacity 500 ± 25 g (17.6 ± 0.88 oz.)

Blower Unit

Fresh and recirculation Operating method Actuator

Blower Type Sirocco fan

Speed step Auto + 8 speed (Automatic), 1 - 4 speed (Manual)

Speed control Power mosfet (Automatic), Resistor (Manual)

Air filter Type Particle filter

Heater and Evaporator Unit

Heater Type Fin & Tube type

Type Tube - Fin 1Way

Mode operating method Actuator

Temperature operating method Actuator

Evaporator Temperature control type Evaporator temperature sensor

Blower singular A/C Output OFF Temperature A/C Output ON Temperature

Manual control 1 - 2 speed 1.5°C (34.7°F) 3.0°C (37.4°F)

3 - 4 speed 0.6°C (33.1°F) 2.1°C (35.8°F)

Dual control 1 - 4 speed 1.5°C (34.7°F) 3.0°C (37.4°F)

5 - 6 speed 1.0°C (33.8°F) 2.5°C (36.5°F)

7 - 8 speed 0.6°C (33.1°F) 2.1°C (35.8°F)

Manufacturer HVCC (Halla Visteon Climate Control)

- Tightening Torques

Items N.m kgf.m lb-ft

Compressor 20.0 - 32.95 2.04 - 3.36 14.75 - 24.30

Condenser - Discharge hose 8.8 - 13.7 0.9 - 1.4 6.5 - 10.1

Condenser - Liquid tube

Compressor - Discharge hose 21.6 - 32.4 2.2 - 3.3 15.9 - 23.9

Compressor - Suction hose

Expansion valve - Evaporator 7.8 - 11.8 0.8 - 1.2 5.8 - 8.7