

# RS-51(R470B)

## RETROFIT PROCEDURE TO REPLACE R404A OR R507

Replacing R404A or R507 with RS-51 essentially will follow the procedure specified by the equipment manufacturer for a refrigerant change. Since RS-51 is zeotropic it is very important that liquid, not vapour, refrigerant be added to the system.

1. Ensure the right equipment is available, eg recovery unit and cylinders, container for recovered lubricant, vacuum pump, weighing scales, replacement drier etc.
2. Before removing the R404A or R507A, operate the unit under standard operating conditions and record the pressures, temperatures and any other relevant measurable data to establish unit performance. Typically, the appropriate standard conditions for setting up the unit will have already been specified by the equipment supplier.
3. Recover and weigh the R404A or R507A from the unit. The weight should be within the range specified by equipment manufacturer.
4. Replace the filter/drier and evacuate the system.
5. As in the case of R404A and R507, RS-51 should be used with a polyol ester lubricant.
6. Before operating the unit, charge the unit with **liquid** RS-51. The weight added at this stage should be approximately 10% lower than the R404A or R507 charge specified by the equipment manufacturer.
7. Operate the unit under conditions similar to those used in Step 2, closely watching the liquid line sight glass, the compressor oil level sight glass and the suction superheat.
8. For optimum performance it is recommended to change the expansive valve to one commonly used with R134a. If the system has an electronic expansive device, select the parameters applicable to R134a.
9. If a liquid line sight-glass is fitted, charge to a full glass gradually adding more liquid RS-51 until only liquid is passing through the expansion valve. **Do not overcharge the system.**
10. Check system thoroughly for leaks.
11. Remove all R404A or R507A labels and clearly label system RS-51.

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