

INSTRUCTIONS FOR R429A, R430A, R431A, R432A and R433A

- Recover the existing refrigerant in the system.
- Check the system for leaks or defective components.
- If a leak is detected, the system must be repaired before charging.
- Leak test should be done by an electronic hydrocarbon tester or soap bubbles.
- If welding is needed, release all refrigerant from the system before welding. (Our refrigerants are flammable.)
- Draw thorough vacuum in the system. (Less than 5kPa).
- Purge the air from charging hose each time refrigerant is added.
- Do not run compressor without refrigerant in the system.
- Do not charge system through the high pressure side.
- When charging the refrigerant to the system, turn the cylinder upside down so that liquid can be charged.
- When the refrigerant does not go into the system anymore, stop charging and run compressor.
- Check charge amount. *See table:*

Charging Amount of New Refrigerants			
Traditional Refrigerant	%	New Refrigerant	%
R12	100	R429A	45-50
R134a	100	R430A	55-60
R22	100	R431A	45-50
R407C	100	R432A	45-50
R502	100	R433A	45-50

- It is recommended to use the digital scales. (Digital scales save a great deal of time and help to prevent refrigerant overcharge).
- Check the pressures of high and low sides. *See Table:*

Low & High Side Pressure Standards of New Refrigerants					
Traditional Refrigerant	Low (%)	High (%)	New Refrigerant	Low (%)	High (%)
R12	100	100	R429A	85-90	95-100
R134a	100	100	R430A	100-105	95-100
R22	100	100	R431A	95-100	95-100
R407C	100	100	R432A	95-100	90-95
R502	100	100	R433A	90-95	90-95

- Check the super-heat and sub-cooling temperature.
- To use the cylinder more effectively, turn it upside down (as liquid phase).
- Our Refrigerants (R429A, R430A, R431A, R432A and R433A) are compatible with any refrigerant lubricant.
- However, we recommend the system flush and a use of mineral oil in all systems.
- DO NOT OVER CHARGE!! It may cause a severe damage to the compressor.
- Let the system run for several minutes before adding more refrigerant.
- Check MSDS (Material Safety Data Sheet) for other information.