

## **A/C Recover - Recycle - Charge Machines (All Models)**

Recover, recycle, and charge only the refrigerant for which the machine is configured.

Wear safety glasses and protective gloves. Refrigerant has a very low boiling point and can cause frostbite.

Follow the operating procedures sequentially to avoid prematurely disconnecting hoses or opening valves which may release refrigerant to the atmosphere.

Do not expose the machine to moisture or operate in wet areas.

Use the machine in locations with mechanical ventilation that provides at least four air changes per hour.

Hoses used must have shutoff devices within 12 inches (30 centimeters) of the connection point to the A/C System to minimize the introduction of Non-Condensable Gas (Air) into the machine and the release of refrigerant when being disconnected.

Disconnect power before performing any maintenance or service on the machine.

Connect the machine to a properly grounded receptacle. Do not over load the circuit.

Avoid using an extension cord with the machine. If necessary use a good condition three wire, grounded, #14 AWG (2.0 mm<sup>2</sup>) or larger extension cord of the shortest possible length.

Do not connect the machine to the liquid side of any A/C System with a capacity greater than 4 lbs (1.8 Kg.). Refrigerant in A/C Systems having larger capacities must be recovered from the vapor side only.

Never connect the red or blue hose on the machine to the liquid port of a cylinder of refrigerant to fill the charge cylinder. Doing so may cause the compressor to fail and void the warranty.

Avoid breathing refrigerant or lubricant vapor or mist. Exposure may irritate eyes, nose and throat. If accidental system discharge occurs, ventilate work area before continuing.

Additional health and safety information may be obtained from refrigerant and lubricant manufacturers.

## **Special Considerations with R134a**

R134a has been shown to be nonflammable at ambient temperature and atmospheric pressure. However, tests under controlled conditions have indicated that at pressures above atmospheric and with air concentrations greater than 60 percent by volume, R134a can form combustible mixtures.

While it is recognized that an ignition source is also required for combustion to occur, the presence of combustible mixtures is a potentially dangerous situation and should be avoided.

Under no circumstances should any equipment be pressure tested or leak tested with Air and R134a mixtures. Do not use compressed air (shop air) for leak detection in R134a systems.

**Always follow the Operation Manual Instructions.**