

General Safety Instructions of Refrigerant Recovery Unit

FOR USE BY PROFESSIONALLY TRAINED AND CERTIFIED OPERATORS ONLY. MOST STATES, COUNTRIES, ETC... MAY REQUIRE THE USER TO BE LICENSED. PLEASE CHECK WITH YOUR LOCAL GOVERNMENTAL AGENCY.

- DANGER:** The refrigerant recovery tank used in this operation contains liquid refrigerant. Overfilling recovery tank may cause a violent rupture resulting in severe injury or even death. As a minimum, use a scale to continuously monitor the recovery tank weight.
- DANGER:** EXPLOSION RISK! The Refrigerant Recovery units are not certified as “explosion proof” for potentially explosive rated environments.
- DANGER:** ELECTRICAL SHOCK HAZARD! Always disconnect power source when servicing.
- WARNING:** Do not use equipment in vicinity of spilled or open containers of flammable substances
- WARNING:** All hoses, piping, fittings, etc.... contain high pressure refrigerant gas and liquids. Contact with liquids may cause frostbite or other related injuries. Wear protective equipment such as goggles and gloves when disconnecting any pressurized fitting.
- WARNING:** TO REDUCE THE RISK OF FIRE avoid use of an extension cord. Improperly sized extension cord can overheat. Check each unit for proper extension cord size.
- WARNING:** Avoid breathing refrigerant vapors and lubrication mist. Breathing high concentration levels may cause heart arrhythmia, loss of consciousness, or even cause suffocation. Exposure may irritate eyes, nose, throat, and skin. Read refrigerant and lubrication manufacturer’s MSDS Sheet for further safety information.
- WARNING:** Make certain all safety devices are functioning properly before operating equipment.
- CAUTION:** To avoid cross contamination of refrigerant and potential leaks to the atmosphere, proper hoses, piping, and fittings should be used and checked daily for damage.
- CAUTION:** To avoid overfilling refrigerant tank, read and follow the recovery units recommended filling instructions.
- CAUTION:** This equipment is intended for use of one refrigerant at a time. Mixing of different refrigerants will cause your recovered supply of refrigerant to be contaminated.

Additional Safety Instructions for Ignition Proof Refrigerant Recovery Units used on systems containing Class A2, A2L and A3 Refrigerants

The following are additional safety recommendations when servicing refrigerant equipment that contain Class A2L, A2 or A3 refrigerants. These recommendations do not replace existing occupational hazard procedures or other regulations that may be required by local, state, or federal agencies.

Technicians working on Class A2L, A2, and A3 systems should have a detailed knowledge of and skills in handling flammable refrigerants. This includes the use of protective equipment, refrigerant leakage prevention, handling of recovery cylinders, charging, leak detection, and proper disposal. Additional knowledge of legislation, regulations, and standards relating to flammable refrigerants may also be required. Special Certification or licensing may be required on Class A2L, A2, and A3 refrigerant handling.

The area of service should be marked as a Temporary Hazardous Zone. This will be a 3 meter perimeter around the refrigerant equipment being serviced and should have NO SMOKING and other hazardous signs posted. Local supervisors should be notified of the zone's existence. If this is a permanent installation, please check with local codes on Hazardous Locations and the proper classification.

- A flammable gas detector should be used to monitor the air quality in the temporary hazardous zone.
- A dry powder or CO2 fire extinguisher must be available in the service location area.
- A suitable ventilation fan should be used to maintain in the work space at a minimum of 5 air changeovers per hour.
- Ensure the refrigerant equipment's power has been discontinued.
- All potential ignition sources within the Temporary Hazardous Zone must be disabled.
- When connecting service equipment to a power source, the connection must be made outside the Temporary Hazardous Zone.
- A grounding strap must be used between the unit's motor casing and a brass connection on the recovery tank to dissipate any static charge build up.
- Do not pull system into a deep vacuum. Stop the process at 0 psig to prevent accidentally ingestion of air into the recovery tank. Alternate method is to add an Oxygen sensor to the tank to monitor any O2 levels in the tank.
- Once recovery process of Class A2, A2L, or A3 is complete, system should be purged with 100% nitrogen. DO NOT USE AIR.

DANGER-EXPLOSION RISK: Do not mix Class A2, A2L or A3 refrigerants with air. All precautions must be taken to eliminate mixing of air with the flammable refrigerants.