

CPS[®]

MT69

Molecular Transformator Operational Manual

MT69



The effects of ambient temperature and elevated tank pressures on the speed of the refrigerant recovery process are in many cases more important than the speed of the recovery machine itself. As the ambient temperature increases, the pressure in the recovery cylinder increases, significantly reducing the recovery speed and in many cases can lead to a high pressure shutdown as the recovery equipment and tank pressure limits are reached.

The Pro-Set MT69 Molecular Transformator significantly reduces the temperature and pressure of recovered refrigerant during the recovery process, dramatically improving the recovery speed and high ambient temperature performance of all commercially available recovery machines in addition to extending the life of the equipment. The Pro-Set MT69 is a patent pending "Innovation in Design" from CPS, intended for use with all major brands of refrigerant recovery equipment. It is engineered for harsh field conditions and is extremely easy to use. Please refer to the diagrams shown for details on the proper operation of the MT69.

General Safety Instructions

ONLY QUALIFIED SERVICE PERSONNEL SHOULD OPERATE THIS DEVICE. MOST STATES, COUNTRIES, ETC., MAY REQUIRE THE USER TO BE LICENSED. PLEASE CHECK WITH YOUR LOCAL GOVERNMENT AGENCY.

Danger- The recovery tank used in conjunction with this product contains liquid refrigerant. Overfilling of the recovery tank may cause a violent explosion resulting in severe injury or even death. Recovery tank weight should be continuously monitored using a scale specifically designed for this purpose.

Danger- Avoid breathing refrigerant vapors and/or lubricant mist. Exposure may irritate eyes, nose, throat, and skin. Breathing high concentration levels may cause heart arrhythmia, loss of consciousness, or even cause suffocation. Please read the manufacturers Material Safety Data Sheet for further safety information on refrigerants and lubricants.

Caution- Contact with refrigerant may cause frostbite or other related injuries. Wear proper personal protective equipment such as safety goggles and gloves. Hoses may contain liquid refrigerant under pressure use extreme caution when disconnecting any hose.

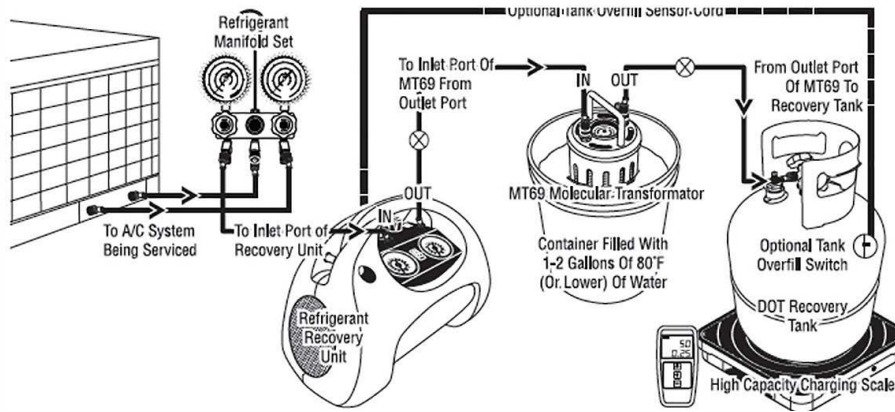
Caution- This device is not a storage vessel for refrigerant. It must have its contents removed after each use. Mixing of different refrigerants will cause your recovered supply of refrigerant to become contaminated. This unit should be evacuated after each use.

Caution- Read and understand the refrigerant recovery unit manufacturer's instructions. Always follow the manufacturers recommended safety procedures.

CONDENSER / SUB-COOLER OPERATION

Using refrigerant hoses equipped with ball valves on one end (CPS P/N HP5YE), proceed to connect the non-ball valve end of the hoses to the inlet and outlet ports of the MT69. Evacuate the MT69 with hoses attached to remove contaminants and expedite the recovery process. Install the MT69 between the outlet port of the recovery unit and the vapor valve of the recovery cylinder. Submerge the MT69 into a container with cool water (the cooler the water, the more heat it can absorb during the recovery process). Connect the system to be serviced to the inlet of the recovery unit as shown. Ensure that the recovery cylinder is placed on a scale for continuous weight monitoring. Open all hose, tank and recovery unit valves in the flow path. Start and run the refrigerant recovery unit per the manufacturer's directions. As the temperature & pressure of the recovery tank increases, the water surrounding the MT69 will become warmer as it absorbs heat from the compressed refrigerant. It may become necessary to replace the warmed water with cooler water in extreme ambient conditions to keep the tank temperature & pressure safely below high pressure limits. Once the refrigerant has been completely recovered from the system, turn the recovery unit off and close all hose, tank and recovery unit valves. Recovery is now complete. **WARNING:** The MT69 will contain high pressure refrigerant upon completion of the recovery process. Proceed to recover the residual refrigerant from the MT69 per the instructions below.

FIGURE 1.



CLEARING OUT THE MT69 AFTER A RECOVERY OPERATION

The MT69 will contain high pressure refrigerant upon completion of a recovery job. **DO NOT USE** the MT69 as a storage vessel. The residual refrigerant must be properly recovered per the following instructions. Ensure that all valves on the tank, hoses and recovery unit are closed. Connect the MT69 to a manifold and recovery unit as shown in Figure 2. Keeping the low side manifold valve **CLOSED**, proceed to open all other hose, tank and recovery unit valves in the flow path. Start the Refrigerant Recovery unit per the manufacturer's instructions. Manually regulate the low side manifold valve so that the low side gauge reads 50 PSIG. This will slowly fall into a vacuum, indicating that the MT69 has been fully evacuated of refrigerant. Visually check the pressure gauge on the MT69 to verify that it reads zero **BEFORE** proceeding to disconnect the hoses. Recovery is now complete. Dry off the external surface of the MT69 and replace caps to prevent contamination during storage.

FIGURE 2.

