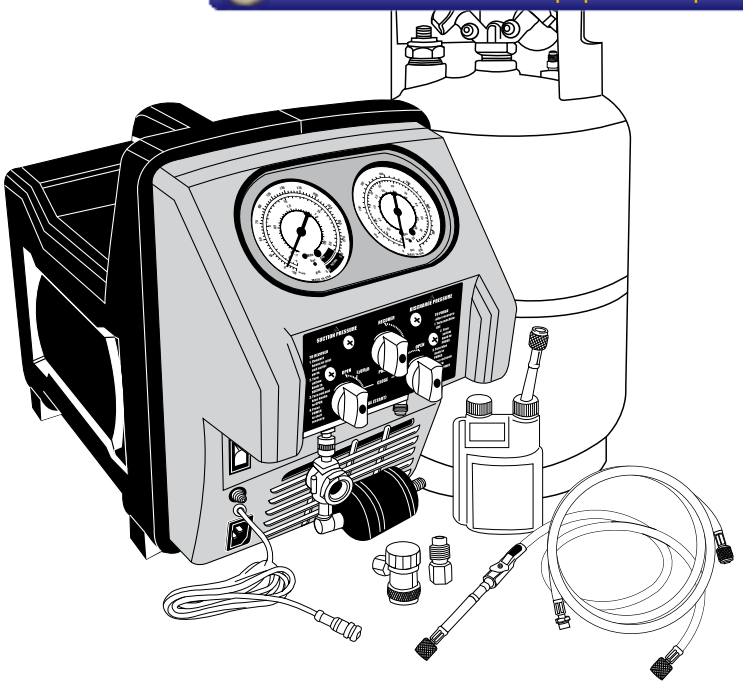
OPERATING INSTRUCTIONS

TWINTURBO
REFRIGERANT RECOVERY MACHINE

MODEL#
69360, 69365



SAFETY INFORMATION!
READ CAREFULLY BEFORE USING MASTERCOOL RECOVERY SYSTEM!

1. This equipment is designed to be used by qualified service personnel. The operator of this equipment must be familiar with air conditioning and refrigeration systems. Do not attempt to operate this equipment until all safety instructions and operating instructions are read and understood.
2. Always use eye protection (safety goggles) and hand protection (gloves) when working with refrigerants. Other types of personal protective equipment should also be used.
3. All hoses used for interconnecting system should have shut off valves (manual or automatic) on both ends. Treat all hoses and connections with caution. Hoses or connections will contain liquid refrigerant or gas under pressure. Connect and disconnect fittings with caution.
4. Do not pressure test system with air. Some mixtures of air and refrigerant can be combustible or explosive.
5. Recovery tank contains liquid refrigerant under high pressure. Never over fill recovery tank. Tanks

should be filled to a maximum of 80% of capacity only. Use scale and connection to recover tank's float switch to make sure tank is not over filled. Recovery system with automatic shut down switch must be connected to recovery tank float switch for proper operation. Use only approved tanks for refrigerant recovery. An over filled tank can explode causing serious injury or death.

6. Do not breath refrigerant vapors and/or lubricant vapor or mist. Breathing high concentrations of these substances will cause severe health problems. Always use Recovery system in a well-ventilated area.
7. Do not use this Recovery System in the vicinity of spilled or open containers of flammable substances (gasoline, solvents, etc.).
8. If electrical extension cord is used, it must be 14 AWG or larger and 50 feet maximum length. If lower amperage capacity extensions are used an overheat condition and fire hazard could occur.
9. Make sure system is electrically connected to a properly grounded power source. Always disconnect system from power source when servicing system.
10. Some governmental agencies require licenses or certification to work with refrigerants and this recovery equipment. Use this system only if operator has proper license or certification.
11. This recovery system is not to be used with any type of flammable refrigerant or flammable gas.
12. The Recovery System includes a fine screen filter at the inlet port. Since many recovery operations involve transferring contaminated refrigerants, the recovery system has an inlet in-line filter-dryer installed at the inlet port. Filter should be changed often or whenever contamination prevents proper operation of recovery system.

DANGER! – EXPLOSION RISK!!!
DO NOT RECOVER FLAMMABLE REFRIGERANTS

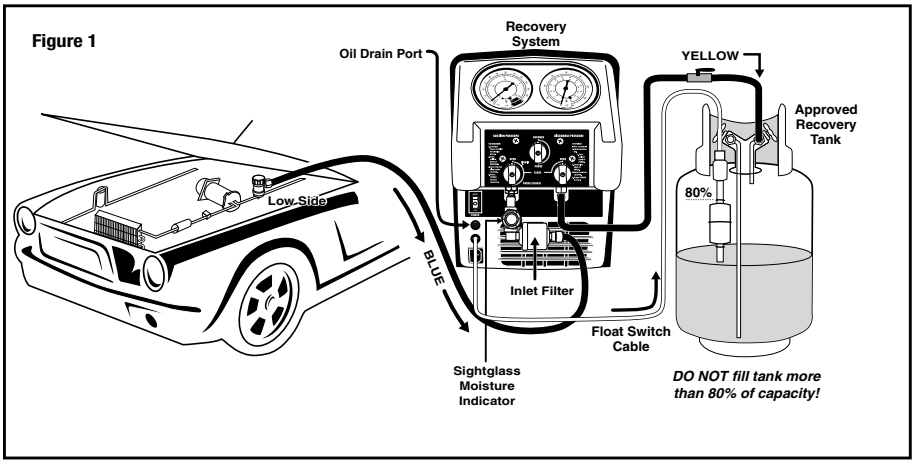
OPERATING GUIDE FOR DIRECT VAPOR OR LIQUID RECOVERY (Refer to fig.1)

Note: A. Connect blue hose (with coupler) to inlet filter. When Recovery Machine is in use, always keep hose and coupler assembled to inlet filter. When hose is removed from filter, use protective cap to seal inlet filter.

B. Connect yellow hose to recovery machine outlet. Valve end of hose is connected to recovery tank. If recovery machine shuts off due to full tank, close valve in yellow hose, shut off machine, replace and connect empty recovery tank to yellow hose and restart Recovery Machine. If Recovery Machine does not start refer to Steps 8 and 9.

1. Make sure on-off switch is off, "O" pushed in. Connect system to grounded power connection.
2. Turn INLET (blue color) valve to CLOSE position. Turn center valve (yellow color) to RECOVER position.
3. Turn OUTLET (red color) valve to OPEN position.
4. Connect blue hose from low side connection system to inlet port filter connection. Connect hose from outlet port of recovery machine to vapor (gas) connection on recovery tank.
5. Connect float switch cable from recovery machine to recovery tank.
   NOTE: Recovery tank must have a maximum capacity switch to prevent over filling of tank. Recovery system will not operate if float switch cable is not connected. Purge air and moisture from system by bleeding lines, using vacuum pump or purge function of recovery system.
6. Open the vapor valve on the recovery tank.
7. Turn INLET valve on Recovery System to OPEN.
8. Turn on Recovery System (push power switch "I").
9. Start recovery system.
10. Observe operation of system. In rare instances "slugging" may be apparent (loud compressor noise or high vibration). If this condition is apparent turn inlet valve to LIQUID position. System can be run with this setting continuously. It is suggested that operator periodically turn inlet valve to OPEN position and

check for proper operation of system. Best operation of the system is with inlet valve OPEN and automatic pressure regulating valve controlling flow conditions.



RECOVERY SYSTEM PURGE

1. Turn off power switch. Turn inlet valve to PURGE position. Turn center valve to PURGE position. Make sure outlet valve is in OPEN position. Start System.
2. Purge may take a few minutes as some liquid refrigerant may be in the Recovery System. The liquid must become vapor, which may require some time. Allow the system to run until the low side gauge reads approximately 10-14 inHg.
   NOTE: Unit contains compressor for recovery. For ultimate vacuum use a vacuum pump.
3. Shut OFF Recovery System. If System is to be used with the same refrigerant next operation, shut outlet valve and disconnect outlet hose. If venting of system is required, disconnect outlet hose to relieve residual pressure.
4. The inlet port has a fine screen filter. Remove inlet nut and clean screen filter after every use. A clean filter is very important for the proper operation of the System. Replace filter dryer whenever plugged or contaminated.

TO DRAIN RECOVERED OIL

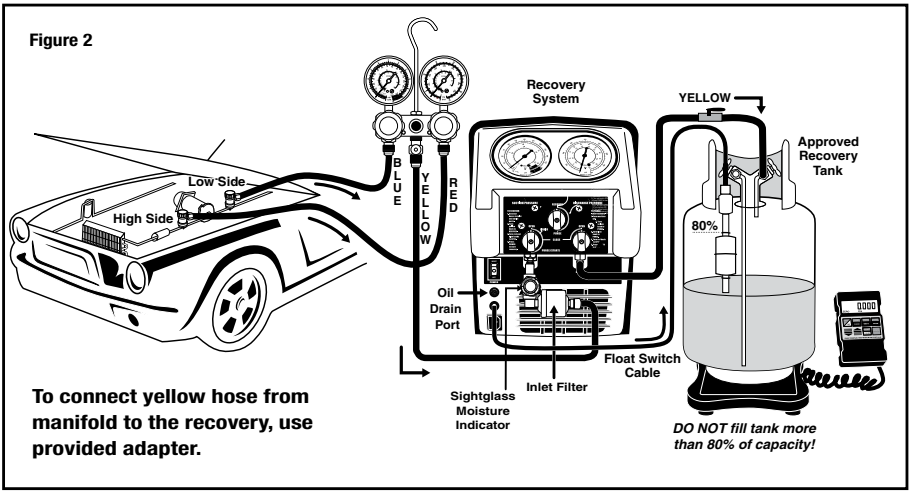
CAUTION! Do not cap the open bottle neck! The neck must remain open to vent pressure.

NOTE: The oil separator capacity is approximately 1.5 oz which can cover 8-10 normal recoveries. However, some systems deposit more oil in the separator due to high pressure or excessive oil in the system. It is recommended to drain oil after each use of the recovery machine.

1. Check pressure on recovery machine inlet pressure gauge. Pressure must be below 10 PSI (.7 Bar), but above 2 PSI (.1 Bar).
2. Insert short yellow hose into the “plastic bottle with two openings” which is supplied. Carefully attach the short yellow hose to the oil drain fitting on the recovery machine. As hose is tightened on fitting, oil will flow into container. (Hose is equipped with a depressor which will open core valve in oil drain fitting).
3. When oil has drained completely, disconnect the hose from the system. Unscrew the cap/hose from the bottle and dispose of the oil into an environmentally approved container.

MAINTENANCE REQUIREMENTS

1. Replace filter if sight glass indicator is red/orange in color. The color change may be green/blue for dry condition when refrigerant is passing through and red/orange in color for wet condition.
2. Replace filter after recovering refrigerant from a known contaminated system.
3. Replace filter if excessive pressure drop is indicated. Difference of pressure gauge reading before and after filter.



Connections for liquid/vapor recovery using manifold gauge set.

⚠ **WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.