Purging the YJ-LTE

- 1. Close all system valves.
- 2. Close valves on system hoses.
- 3. Connect the system vapor recovery hose or blue manifold hose to the PURGE port on the YJ-LTE. This hose must have a valve depressor for opening the purge port Schrader valve.
- 4. Turn the YJ-LTE valve to the PURGE position, open the recovery/blue hose valve, and turn the unit on.
- 5. When the pressure gauge indicates the appropriate vacuum level, the purge process is complete.
- 6. Close the valve on recovery discharge hose and the recovery tank. Shut off the YJ-LTE.
- 7. Disconnect the hoses from the YJ-LTE.

Liquid Service Port

Warranty Information

Ritchie Engineering guarantees YELLOW JACKET products to be free of defective material and workmanship which could affect the life of the product when used for the purpose for which it was designed. Warranty does not cover items that have been altered, abused, or returned solely in need of field service maintenance.

The YELLOW JACKET YJ-LTE recovery system (UPC 95730) is covered by a one year warranty for parts and labor. The warranty also allows for over-the-counter exchange, when applicable. To receive the over-the-counter exchange, call Ritchie Engineering Customer Service at (800)769-8370 and get the required authorization number. Failure to get the required authorization number could result in a denial of the over-the-counter exchange.

The following exceptions will not be covered under this warranty: recovery products that have been altered, misused, or improperly maintained.

The following must be done before returning the unit:

- 1. Call our technical service personnel at (800)769-8370 to assess if the problem can be resolved over the phone.
- 2. Obtain an RGA number from Ritchie Engineering for the return of the product.
- 3. Fax a copy of the original invoice to (800)322-8684.

XJ YELLOW JACKET⁽¹⁰⁹⁵⁰⁾ Bloon Phone Fax: (e-mail

Ritchie Engineering Co., Inc. - YELLOW JACKET Products Division 10950 Hampshire Avenue South Bloomington, MN 55438-2623 Phone: (800)769-8370 or (952)943-1333 Fax: (800)322-8684 or (952)943-1605 e-mail: custserv@yellowjacket.com www.yellowjacket.com

YELLOW JACKET®

YJ-LTE™ Refrigerant Recovery System

Quick Start Guide



For a complete manual, visit www.yellowjacket.com/product/1087

Important Safety Information:

- 1. This equipment may only be operated by trained and certified technicians that understand the equipment and process. If you do not understand this equipment STOP! Do not operate until you understand process equipment and risks.
- 2. Servicing refrigeration equipment can be hazardous. Potential hazards include injury to eyesight, frostbite to hands and impairment, loss of consciousness or cardiac sensitization due to refrigerant vapors. Wear proper protective equipment such as gloves and eye protection and always work in a well ventilated area. Hearing protection may be required in certain environments.
- 3. Over-filled recovery cylinders can explode causing severe injury and property damage. Always know how much refrigerant is in your cylinder and how much is in the system to be serviced. Observe max fill requirements for cylinders.
- 4. Extension cords Use only if required. To reduce the risk of fire due to overheating, use the shortest possible extension cord with a minimum conductor size of #16 AWG, 3 conductor with ground, maximum length 50' from outlet.
- 5. Grounding and power cord damage Only use equipment with a properly wired outlet of required ampacity. Any power cord damage requires replacement by factory authorized technician.
- 6. Explosion hazards. Never pressure test with mixture of air and any refrigerant. Even nonflammable refrigerants such as R-22 can become explosive under pressure when mixed with air.
- 7. Do not recover flammable refrigerants such as R-290, R-600 or R1234yf.
- 8. Do not operate equipment in any area that may contain flammable gasses, liquids or vapors. Always ensure proper ventilation.

IMPORTANT!!! Take time to read the safety instructions that came with the device you are servicing as well as any material that came with your refrigerant.

WARNING!!! USE ONLY D.O.T. RECOVERY CYLINDERS APPROVED FOR R-410A. Overfilling the tank may cause it to vent!

The YJ-LTE is used to pull liquid or vapor refrigerant out of the system and transfer it into a recovery cylinder. Recovery is accomplished by connecting to the high and low side service ports of the system being serviced with a manifold. Ensure you have the capacity to recover all refrigerant in the system. In the USA the recovery cylinders can only be filled to 80% capacity and in the EU it is only 60% capacity.

Direct Liquid or Vapor Recovery

Refer to the following instructions and the diagram below:

- 1. Know the type and quantity of refrigerant present before servicing any system.
- 2. Turn off power to the system being serviced.
- 3. Connect your manifold to the system being serviced. High side to liquid port and low side to vapor port as shown in diagram.
- NOTE For best performance, use minimum length and maximum diameter hose(s) between the YJ-LTE recovery machine and the system. The recovery has at the curton

The recovery hose at the system vapor port connection must also have a depressor

for final system purge. In addition, using a low loss hose for this connection will minimize the amount of air drawn in during the purge process.

- 5. Connect the recovery hose from system or utility port of your manifold to the 1/4" SUCTION port of the YJ-LTE.
- 6. Connect the hose from the recovery cylinder (liquid side) to the 1/4" DISCHARGE port of the YJ-LTE.
- 7. Purge all hoses of non-condensable gasses before recovering refrigerant into recovery cylinder.
- 8. Open the liquid valve on the recovery tank.
- 9. Ensure valve is in recover position. Turn the YJ-LTE on.
- 10. Open the utility valve and then slowly open the high side first to recover as much liquid as possible, then open low side and on your manifold. If severe vibration, knocking or lugging of the motor is noticed, it is recommended to partially close the service manifold valves briefly.
- 11. When the manifold pressure gauge indicates the appropriate vacuum level recovery is complete.
- 12. Perform PURGE procedure (see page 4).

Push-Pull Recovery

The Push-Pull Liquid Recovery mode is used for transferring large volumes of liquid refrigerant. The YJ-LTE "pulls" vapor from the recovery cylinder and produces high pressure discharge gas that "pushes" liquid out of the HVAC system and into the recovery cylinder. Some HVAC systems will not allow for the push-pull recovery method. If any of the following conditions apply, do not use push-pull method, but follow the Liquid-Vapor Recovery instructions:

- System contains less than 10 pounds of refrigerant.
- System is a heat pump or other unit with a reversing valve.
- System has an accumulator between the service ports used in liquid recovery.
- The refrigerant system does not allow for the formation of a solid column of liquid.

For push-pull recovery, a sight glass is monitored during recovery. When liquid is no longer visible, stop recovery and finish recovering using the Liquid-Vapor Recovery process. For complete recovery, the system must be pulled into a vacuum as required by EPA standards.

The push-pull process requires the following:

1. Proper hoses for all connections. Hoses with low loss fittings or valves are recommended.

Vapor Service Port

INCOMING

POWER

HVAC UNIT

Liquid (open)

Vapor (open)

RECOVERY

TANK

Liquid Service Port

SIGHT GLASS

OR APPLIANCE

- 2. A recovery cylinder with adequate capacity.
- 3. A sight glass (Note: Make sure sight glass is rated for the pressure of the refrigerant being recovered).

Follow these steps:

- 1. Turn off power to the system to be serviced.
- 2. Hook up YJ-LTE, the system to be recovered, and the recovery tank as shown in the diagram to the right.
- 3. Purge all hoses of non-condensables before recovering refrigerant into recovery cylinder.
- 4. Open valves on the recovery tank.
- Turn the selector valve to PURGE position. Note – This position allows the compressor discharge to bypass the unit condenser. This higher temperature feed gas will allow
 - This higher temperature feed gas will allow a faster liquid recovery. Turn YI-LTE on If starting with an evacuated recovery cylinder allow as a
- Turn YJ-LTE on. If starting with an evacuated recovery cylinder allow as much liquid as possible to flow before starting recovery unit. Note - Gauge will not reflect system pressure.
- 7. Monitor the sight glass. When the passing liquid is no longer visible through the sight glass, the push-pull method of recovery is complete.
- 8. Close the VAPOR valve on the recovery tank and let the recovery continue briefly.
- 9. Close SYSTEM VALVES and LIQUID valve on recovery tank.
- 10. Reconnect the hoses per the diagram under "Direct Liquid or Vapor Recovery."
- 11. Rotate the selector valve to the RECOVER position, open required system and tank valves and restart unit to recover vapor.
- 12. Continue recovery until the unit reaches the appropriate level of vacuum.
- 13. Perform PURGE procedure.

Liquid society Liquid society Service Port A vapor a depressor