

Part # 22-1455

GENERAL OPERATING INSTRUCTIONS: R-134a MANIFOLD SYSTEM

**I KNOW,
I KNOW ...** *But Read Carefully
Before Using Anyway!*



DISCLAIMER

We believe the information contained herein to be reliable. However, general technical information is given by us without charge and the user shall employ such information at his own discretion and risk. We assume no responsibility for results or damages incurred from the use of such information in whole or in part. **Always refer to specific instructions and technical information supplied by vehicle manufacturer.**

All warranties expressed or implied, including warranties on merchantability and fitness of purpose, are null and void if the equipment is altered, damaged or misused in any way, or if equipment is not repaired by authorized repair station using authorized parts.

GENERAL INFORMATION

The right side of the manifold with the red handwheel is the high side; the red gauge is the pressure gauge. The left side of the manifold with the blue handwheel is the low side; the blue gauge is the compound gauge. Separate passages from the low and high side fittings to their respective gauges give you pressure and vacuum readings whether the handwheels are open or closed.



The aluminum manifold body connects all three lower Acme fittings to each other by internal passages. The red (HIGH SIDE) handwheel opens or closes the flow through the Acme fitting on the right side to the other two fittings, provided the blue (LO SIDE) handwheel is in the open position.



HI/LO DELUXE MINI QUICK DISCONNECT VALVE

22-1441 - (HI) - R-134a QUICK DISCONNECT

22-1443 - (LO) - R-134a QUICK DISCONNECT

The valves are designed with a knob, which has to be turned in (clockwise), in order to connect the valve to the access fitting.

The valve cannot be released until the knob is turned out (counterclockwise), thus retaining the R-134a in the hose and vehicle - preventing release into the atmosphere and personal injury.

SYSTEM OPERATION

1. Close all valves, connect the RED hose with Quick Disconnect to the system's HIGH side, and connect the BLUE hose with Quick Disconnect to the system's LOW side.
2. Start the A/C system and let it run until the gauge readings stabilize.
3. If the gauge readings are within the manufacturer's specifications, stop the A/C system and disconnect the hoses from the system.
4. If the pressures shown on the gauges differ from the manufacturer's specifications, determine the problem and make necessary repairs or adjustments.

EVACUATING & CHARGING A REFRIGERANT SYSTEM

1. Exhaust all refrigerant from the system.

IMPORTANT: USE A RECOVERY UNIT. DO NOT VENT REFRIGERANT INTO ATMOSPHERE!

Connect the Blue, Low side, to the charging hose to the A/C system's LOW side service valve. Connect the Red, High side, hose to the A/C system's HIGH side service valve. Connect the CENTER YELLOW charging hose to a vacuum pump.



1. Open the HIGH and LOW side hand wheels and start the vacuum pump.
2. After evacuating the system according to the manufacturer's specifications, close both the HIGH and LOW side hand wheels and turn off the vacuum pump.
3. Disconnect the YELLOW charging hose from the vacuum pump and connect it to the refrigerant supply.
4. Slightly open the refrigerant supply valve. Purge air from the yellow charging hose at the manifold, then close the supply valve.
5. You can now charge the A/C system according to the manufacturer's specifications. If the system specifications call for charging on the HIGH side, close the manifolds Blue, Low side hand wheel, open the refrigerant supply valve and open the manifold's Red, High side hand wheel. After dispensing the proper amount of refrigerant, close the manifold's Red, High side hand wheel and close the refrigerant supply valve.
6. When you have charged the system, open the manifold's Blue, Low side hand wheel. Let the compressor run and watch the gauge readings to be sure the system is operating properly. If it is not, repair or adjust the system as necessary.
7. To disconnect the manifold when the system is operating properly, close both the Red, Low side and Blue, Low side hand wheels on the manifold. **Carefully** remove the charging hose from the system.

Note: To disconnect the Quick Disconnect valve, turn the actuation knob counterclockwise until finger tight. Slide the ball release sleeve towards the actuation knob and remove the field service coupling from the male coupling half.

For Technical Questions & Replacement Parts call 845-562-1442. In the unlikely event that you need factory repair, part or item must be securely packed and shipped prepaid to:

Classic Tool Design, Inc.
Repair Department
31 Walnut Street, New Windsor, NY 12553

