

Part # 22-1500

GENERAL OPERATING INSTRUCTIONS:
R-134a CHARGING STATION CART

**I KNOW,
I KNOW ...** *But Read Carefully Before
Using Equipment 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.



SPECIFICATIONS

This portable Charging Cart is specifically designed for shop servicing R-134a refrigeration and air conditioning equipment. The unit is complete including refrigerant charging cylinder, manifold with pressure and compound gauges, charging and vacuum lines, vacuum isolation valve, vacuum pump and hand truck.

CHARGING CYLINDER

- 5 lb. capacity, 0-500 PSI gauge calibrated for R-134a.
- Heated with 100 watt replaceable cartridge.

MANIFOLD

- High and low pressure compound gauges with temperature pressure conversion for R-134a High and Low side charging valves plus vacuum isolation valve.

ELECTRICAL

- Power cord with 3 prong plug for 110 V, 60 Hz outlet. Vacuum pump plugs directly into receptacle on cord connected to electrical handbox on rear side of back panel. Power to vacuum pump controlled by toggle switch on control panel in front side of unit. Charging cylinder heater activated by switch on control panel.

HOSES

- 1 Blue 6' hose from charging manifold system.
- 1 Red 6' hose from charging manifold system.
- 1 Yellow 6' hose from isolation valve to vacuum pump.
- 1 Red 20 in. hose from charging manifold to charging cylinder.
- 1 Red 20 in. hose from charging cylinder to refrigerant storage tank.



OPERATING INSTRUCTIONS

NOTE: Put on your Safety Goggles. Never work with air conditioning systems without these goggles since refrigerant can damage your eyes. Make it a safety habit of always putting on the goggles when you are ready to begin.

Close all valves before you begin any new procedures. Be careful not to over-tighten valves.

1. POSITIONING REFRIGERANT TANK

Refrigerant drums in 30 lb., 50 lb. or any other compatible size are loaded UPSIDE DOWN onto the shelf near the axle on the rear side of the unit. Tank is held in position with a rubber strap. Connect the Red charging hose from refrigerant tank to port of charging cylinder valve. Valves on cylinder should be closed. Refrigerant tank valve may now be opened. The charging hose should be ????? at the manifold connection (carefully crack open the connection to allow air to escape).

2. FILLING THE REFRIGERANT CYLINDER

Open valve on the cylinder. Refrigerant will begin to fill as seen in the cylinder sight glass. Do not fill above warning line at the top. When desired amount is captured, close cylinder valve and turn on heater switch to increase pressure for quick charging.

3. DISCHARGING A SYSTEM

If there is a positive pressure reading on the manifold gauges, remove the refrigerant by following the instructions of your Recovery/Recycling Machine.

4. PULLING A VACUUM ON SYSTEM

Check to see that compound (low pressure) gauge is set to zero. Zero set screw is located on the gauge dial face. Attach red and blue hoses from charging manifold, open vacuum pump isolation valve. Make sure the valves on cylinder are shut tightly. Turn on the vacuum pump power switch. Pull a vacuum for as long as economically possible. Compound gauge should read 29 inches for at least 5 minutes. If this cannot be obtained, check the system for leaks. Before stopping vacuum pump, close isolation valve then turn pump off.



5. CHARGING A SYSTEM WITH REFRIGERANT

a. FAST CHARGE WITH LIQUID

Refrigerant liquid may be charged into the A/C system only if a vacuum has been pulled. Liquid refrigerant may only be injected into the high side of an A/C system. To perform this operation, continue on from Step 4 by closing the blue valve on the charging manifold and opening valve on the cylinder. Be sure the red valve on the charging manifold is open to accept liquid charge. Charging of refrigerant will begin, with the A/C system not running.

Measure the drop in the refrigerant level in the charging cylinder, and stop the flow when the proper amount has been charged. If the refrigerant level in the cylinder stops dropping before the amount has been charged, the remainder must be vapor charged (Step 5b). Shut off valve on the cylinder and red valve on the charging manifold.

b. CHARGING WITH VAPOR

Remove the charging hose from cylinder valve port and attach it to Schrader fitting on top of the charging cylinder. Be sure that the hose fitting that connects to the Schrader is equipped with a valve core depressor. Turn A/C system on. Make sure compressor is engaged. Open low side (blue) valve on charging manifold. Charge until proper amount has been injected. To get an accurate reading on charging cylinder sight glass, low side charging manifold valve may have to be closed periodically to stabilize the liquid level.

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

