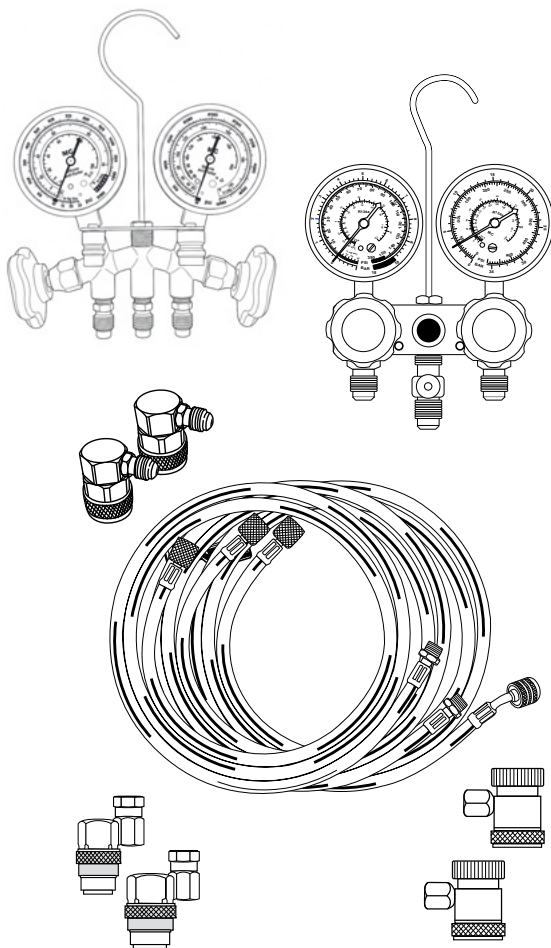


# **AUTO A/C CHARGING AND TESTING MANIFOLD FOR R134a INSTRUCTIONS**



These manifold gauge sets are designed for use with R134a air conditioning systems



## **WARNING**

- **WEAR GOGGLES AND SAFETY GLOVES!!**
- **DO NOT VENT REFRIGERANT INTO ATMOSPHERE**

The 1990 amendments to the United States Clean Air Act mandate that all personnel who service refrigerant systems must be trained and certified. Fines are in place for violations and compliance is not being monitored by the U.S. EPA.

## PRE-SERVICE INSTRUCTIONS

1. Close both valves on the manifold gauge set by turning the high and low knobs clockwise.
2. The gauges are correctly calibrated at the factory before shipment. If calibration is required, insert a straight blade screwdriver into the adjusting screw on the gauge face.
3. Attach the high and low couplers to the male end of the red and blue hoses. If using manual couplers, open the plunger by turning the knob counter-clockwise prior to connection to the system. If E-Z Snap™ couplers are used, pull the sleeves up to unlock position before attaching to an A/C system (figs. A & B).
4. Connect the red hose to the high port and the blue hose to the low port on the manifold gauge.

## TESTING AND CHARGING

To properly diagnose the problem in the A/C system, first check the system's overall performance. This includes testing the system's pressure and refrigerant flow. These conditions can be checked with the manifold gauge set.

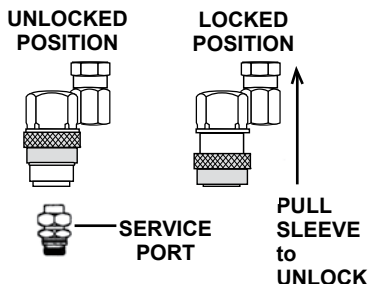
**NOTE: Be sure that the hand valves on the manifold gauge set are in the closed position. Always wear gloves and safety goggles when working with refrigerant.**

1. Remove the protective caps from the system ports. Check for leaks at the ports.
2. Connect the low side service hose (blue) to the suction side of the compressor. Connect the high side service hose (red) to the discharge side of the compressor. Make sure the couplers are securely snapped (fig. D).
3. If using manual couplers, move the plunger down within the coupler by turning the knob clockwise in order to open the port valves and start refrigerant flow.

## IMPORTANT NOTES

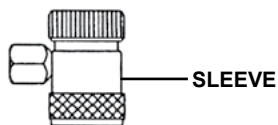
- A system that has been opened or one that is found to be excessively low on refrigerant pressure as a result of a leak, must be fully evacuated by means of recycling and deep vacuum. (fig. C)
- A system that has been evacuated must be repaired, leak tested and evacuated again to 29" Hg. before charging.
- If charging on the liquid or high side, use only the high side valve on the manifold gauge set. Make sure the low side valve is closed.
- After charging, test the system by turning on the engine and running the A/C with both valves closed on the manifold.
- After testing, disconnect the couplers from the system and make sure to use a recovery/recycling machine to evacuate any refrigerant remaining in the hoses.

### E-Z SNAP™ COUPLER (Fig. A)



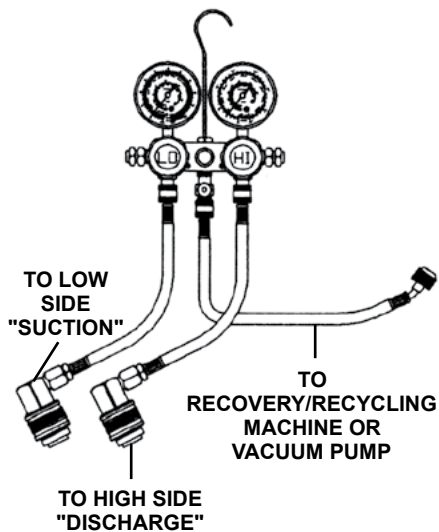
To attach to the system, make sure that the coupler is in its unlocked position. Press the coupler against the service port until it snaps (locked position).

### MANUAL COUPLER (Fig. B)

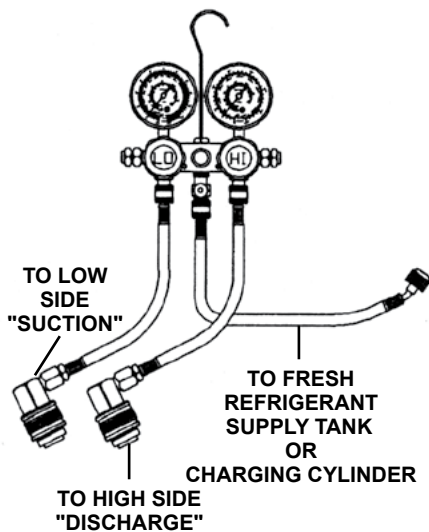


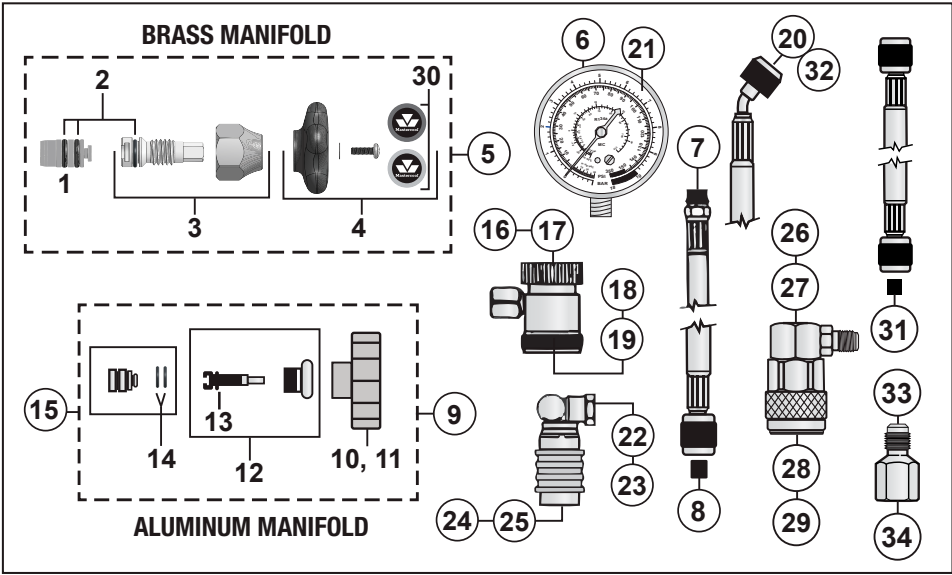
To attach to the system, back-down the plunger by turning the knob fully counter-clockwise. Connect to the system by lifting up the sleeve, placing the service port inside the coupler and releasing to lock. To start the flow, turn the knob fully clockwise (opening the service port).

### EVACUATION OF REFRIGERANT AND DEEP VACUUM (Fig. C)



### CHARGING (Fig. D)





| Fig. | Description                              |
|------|------------------------------------------|
| 1.   | Piston Seal Assembly w/ O-rings (2 pcs.) |
| 2.   | Piston Seal O-rings (3 pcs.)             |
| 3.   | Stem, Nut & O-ring                       |
| 4.   | Knob Kit (Low and High Side)             |
| 5.   | Stem Assembly with Knob (2 pcs.)         |
| 6.   | High Side Gauge<br>Low Side Gauge        |
| 7.   | O-ring for Male Hose Fitting             |
| 8.   | Gasket for Hose Assembly                 |
| 9.   | Stem Assembly with Knob (2 pcs.)         |
| 10.  | Knob Only, Low Side, Blue                |
| 11.  | Knob Only, High Side, Red                |
| 12.  | Stem, Nut, and Stem O-ring               |
| 13.  | Stem O-ring (2 pcs.)                     |
| 14.  | Piston Seal O-ring (4 pcs.)              |
| 15.  | Piston Seal Assembly w/ O-rings (2 pcs.) |
| 16.  | Manual High Side Compact Coupler         |
| 17.  | Manual Low Side Compact Coupler          |
| 18.  | High Side O-ring                         |
| 19.  | Low Side O-ring                          |

| Fig. | Description                                              |
|------|----------------------------------------------------------|
| 20.  | Shut-off Valve O-ring                                    |
| 21.  | 2 1/2" Lens (push in type)<br>3 1/8" Lens (push in type) |
| 22.  | E-Z Snap High Side Coupler                               |
| 23.  | E-Z Snap Low Side Coupler                                |
| 24.  | High Side O-ring                                         |
| 25.  | Low Side O-ring                                          |
| 26.  | Economy High Side Coupler                                |
| 27.  | Economy Low Side Coupler                                 |
| 28.  | O-ring for 66434-R (High Side)                           |
| 29.  | O-ring for 66534-R (Low Side)                            |
| 30.  | Manifold Knob Sticker Kit                                |
| 31.  | Gasket 1/4" Flare                                        |
| 32.  | Shut-Off Valve O-ring 1/4" Flare                         |
| 33.  | 1/2" ACME-F x 1/4" FL-M Adapter                          |
| 34.  | O-Ring for 1/2" ACME-F x 1/4" FL-M Adapter               |

**For parts or service, contact the Service Department: 1-888-825-6989**