# OPERATING INSTRUCTIONS R1234yf MANIFOLD GAUGE SET







## TROUBLESHOOTING TIPS

- Low side and high side pressure are low. Usually indicates a low charge.
- Low side pressure is low and high side pressure is high.
   Usually indicates a blockage in the system.
   (i.e. expansion of valve or orifice tube.)
- Low side pressure is high and high side pressure is low.
   When accompanied by a vibrating gauge needle, usually indicates faulty reed valves in compressor.
- Low side and high side pressures are high.
   Usually indicates an over charged system.

## **HOOK-UP FOR SYSTEM DIAGNOSIS**

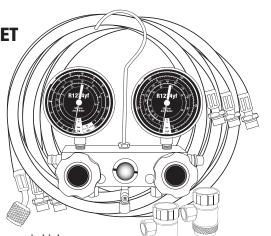
- Verify that service ports are clean and free of metal shavings.
- Verify that both valves on the manifold are shut completely.
- Connect blue adapter to low side service port (5).
- Connect red adapter to high side service port (4).
- Start engine. Turn A/C mode selector to HIGH and fan to HIGH.
- Observe pressure on the manifold gauges and refer to your automotive manual for proper diagnosis.

## **CHARGING REFRIGERANT**

- a. Verify that both valves on the manifold are shut completely.
- b. Turn on car and A/C system, (this will aid in charging of the refrigerant.)
- c. Connect the other end of the yellow hose (3) to Refrigerant Gas supply. (*Follow refrigerant manufacturer's instructions for proper dispensing.*)
- d. Connect vacuum pump to center tee and remove air from yellow hose and manifold (*vacuum pump hose not included.*)
- e. Open manifold low side (blue) valve slowly until pressure reaches 42 psi. Do not exceed 42 psi during the recharging process. Exceeding 42 psi could damage the compressor.
- f. When charging is finished, close low side (blue) valve.

## SYSTEM SCHEMATIC

Low side (blue) hose/adapter.
 (12mm-M fittings on both sides meets SAE J2888, EPA, SAE & UL standards)



- High side (red) hose/adapter.
   (12mm-M fittings on both sides meets SAE J2888, EPA, SAE & UL standards)
- 3. Service (yellow) hose. (Yellow hose 12mm fitting on one side and  $1/2 \times 16$  LH acme on the other meets SAE J2888)
- Compressor discharge service valve.
   (R1234yf couplers with extended disconnect protection sleeve meets SAE J639 & J2888)
- Compressor suction service valve.
   (R1234yf couplers with extended disconnect protection sleeve meets SAE J639 & J2888)

