



# System Charging

## Supplement

The following are the procedures to be adhered to when servicing air conditioners to reduce the amount of R-12 into the atmosphere.

### **▲ WARNING** When handling refrigerant (R-12):

- Always wear eye protection.
- Do not let refrigerant get on your skin or in your eyes. If it does:
  - Do not rub your eyes or skin.
  - Splash large quantities of cool water in your eyes or on your skin.
  - Rush to a physician or hospital for immediate treatment. Do not attempt to treat it yourself.
- Keep refrigerant containers (cans of R-12) stored below 40°C (100°F).
- Keep away from open flame. Refrigerant, although non-flammable, will produce poisonous gas if burned.
- Work in well-ventilated area. Refrigerant evaporates quickly, and can force all the air out of a small, enclosed area.

**CAUTION:** Do not overcharge the system; the compressor will be damaged.

1. Connect the gauge as shown, close both pressure stop valves. Purge air from the charge hose A, then loosen the stop valve connector.
2. Attach apump and refrigerant containers (can: 250 g x 2) as shown.  
NOTE: Do not open cans.
3. Open both pressure valves and evacuation valve (2 valve gauge: evacuation stop valve), start the pump. The low gauge should indicate above 700 mmHg (27 in-Hg), then run the pump about 1 minute.

4. Close both pressure valves and evacuation valve (2 valve gauge: evacuation stop valve). Open both pressure stop valve.
5. Start the engine and turn on A/C switch.
6. Stop the engine and check for leaks using a leak detector.

NOTE: Particularly check for leaks around the compressor, condenser, and receiver-dryer.

7. Test the system using the pressure test and inspection data.

Test condition:

- Start the engine.
- Turn the air mix dial (lever) to COOL.
- Turn the function control switch (lever) on
- Turn the recirculation control switch on
- Turn the heater fan switch on "E" (MAX).

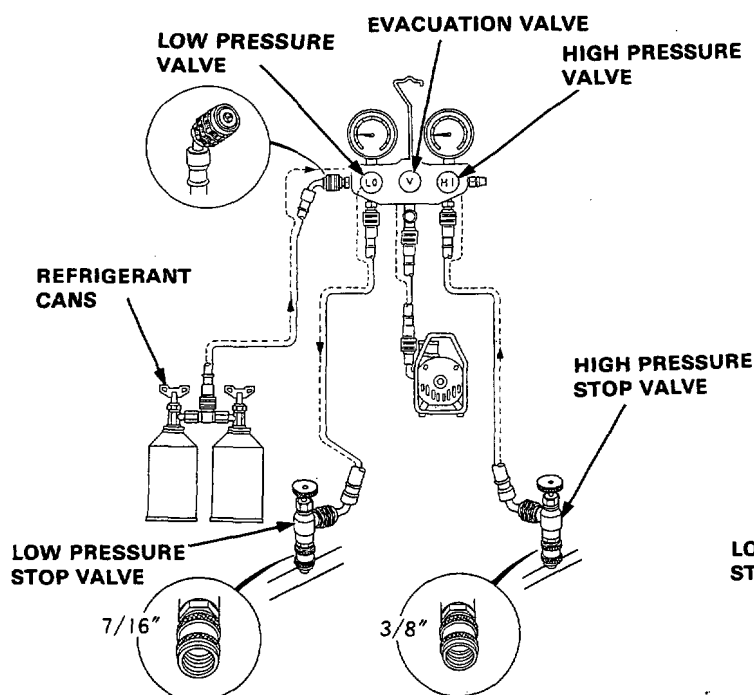
If there is insufficient refrigerant in system, continue to charge system.

8. Open one or two cans, open the low pressure gauge. Charge the system until there are no bubbles in the sight glass.

### **▲ WARNING**

- Do not open the high gauge valve.
  - Do not turn the cans upside down.
9. After adding supplemental refrigerant, close the pressure stop valve. Open the low pressure valve and gradually open the high pressure valve. When pressure gauge read same, close the low pressure stop valve and stop the engine.
  10. Disconnect the charge hose quickly.
  11. Check the system for leaks using a leak detector.

3 VALVE GAUGE



2 VALVE GAUGE

