

CHARGING

1. INSTALL CHARGING CYLINDER

HINT:

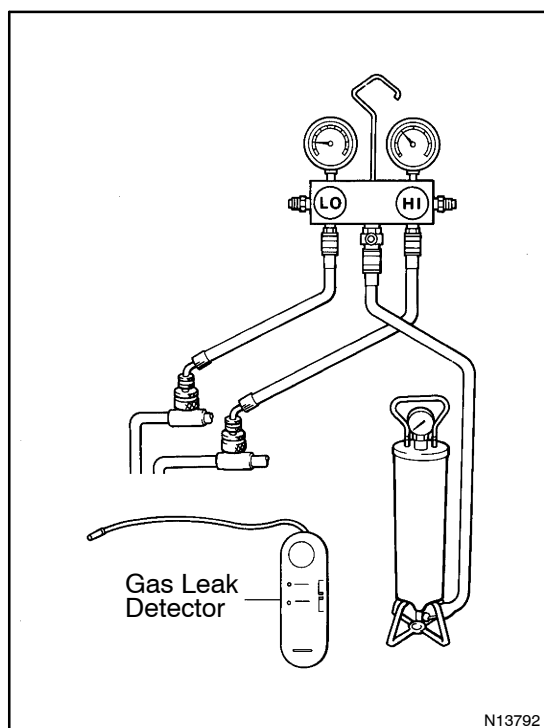
When handling the charging cylinder, always follow the directions given in the instruction manual.

- Charge the proper amount of refrigerant into the charging cylinder.
- Connect the center hose to the charging cylinder.

CAUTION:

Do not open both high and low hand valves of manifold gauge set.

- Open the valve of charging cylinder.
- Press the valve core on the side of manifold gauge and expel the air inside of the center hose.

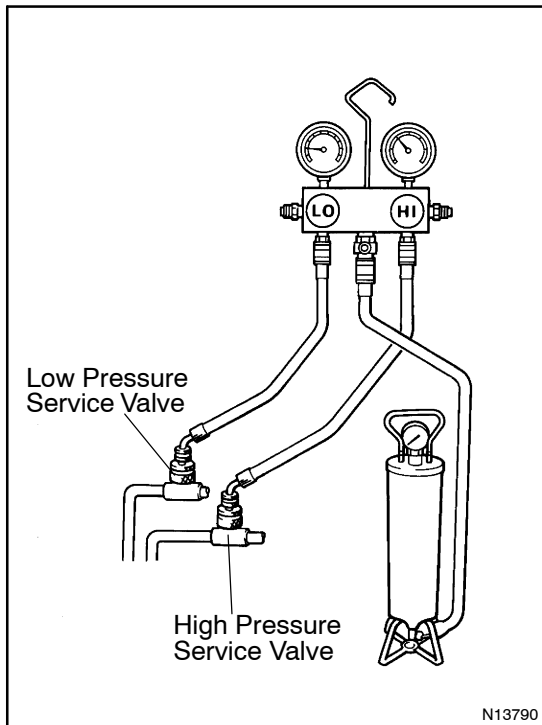


2. INSPECT REFRIGERATION SYSTEM FOR LEAKS

- Open the high pressure hand valve and charge refrigerant.
- When the low pressure gauge indicates 98 kPa (1 kgf/cm², 14 psi) close the high pressure hand valve.
- Using a gas leak detector, check the system for leakage. If leak is found, repair the faulty component or connection.

CAUTION:

Use the refrigerant recovery/ recycling machine to recover the refrigerant whenever replacing parts.



3. CHARGE REFRIGERANT INTO REFRIGERATION SYSTEM

If there is no leak after refrigerant leak check charge, the proper amount of refrigerant in to refrigeration system.

CAUTION:

- **Never run the engine when charging the system through the high pressure side.**
 - **Do not open the low pressure hand valve when the system is being charged with liquid refrigerant.**
- (a) Open the high pressure hand valve fully.
 - (b) Charge specified amount of refrigerant, then close the high pressure hand valve.

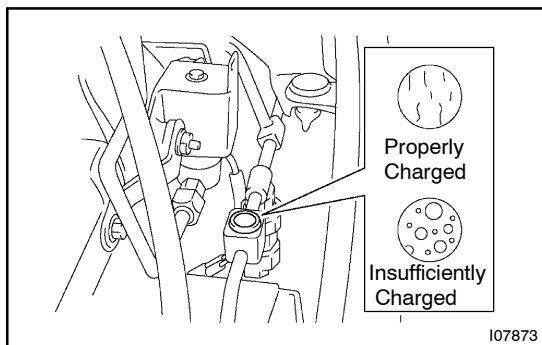
HINT:

A fully charged system is indicated by the sight glass being free of any bubbles.

- (c) Charge partially refrigeration system with refrigerant.
 - (1) Set vehicle in these conditions:
 - Running engine at 1,500 rpm
 - Blower speed control set at "HI"
 - Temperature control set at "MAX. COOL"
 - Air inlet control set at "RECIRC"
 - Fully open doors (Sliding roof : closed)
 - (2) Open the low pressure hand valve.

CAUTION:

Do not open the high pressure hand valve.

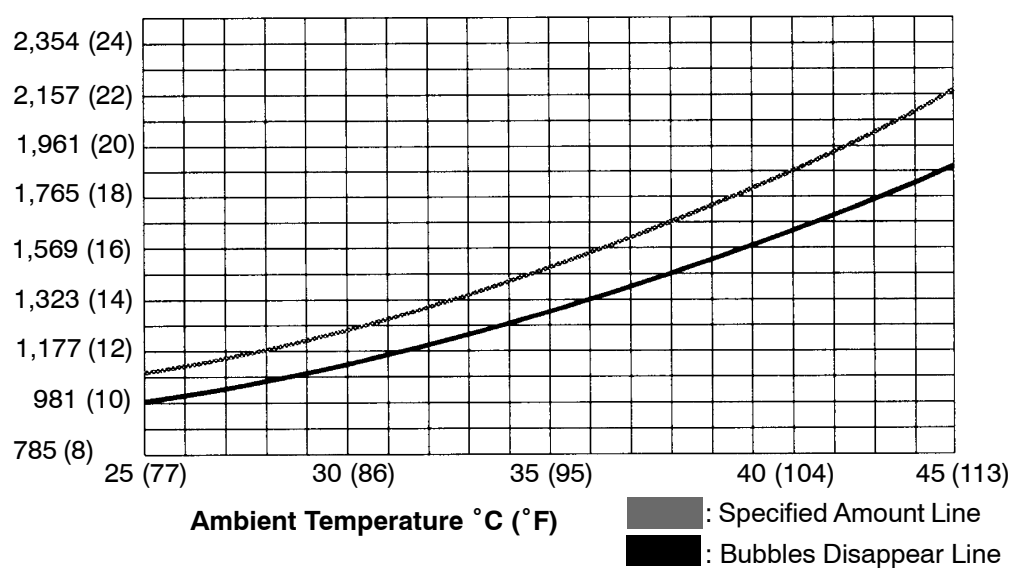


- (3) Charge refrigerant until bubbles disappear and check the pressure on the gauge through the sight glass.
- (4) Stop adding the refrigerant when the pressure of the specified amount has been reached.
- (5) Add the refrigerant gradually until the pressure reaches to of point of intersection with ambient temperature and the specified amount in the chart and check the pressure rise up.

HINT:

- In the case that the refrigerant has been charged excessively, draw out the refrigerant until the pressure returns to the specified amount.
- When the ambient temperature is 25°C (77°F) below, a compressor might be OFF due the mechanism of the system. When checking the pressure based on this chart, check it at the ambient temperature of 25°C (77°F) above.

High Pressure Side Pressure KPa (kgf/cm²)



I05402