

REFRIGERATION SYSTEM Checking of Refrigerant Volume

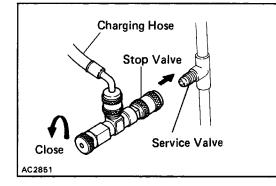
- 1. RUN ENGINE AT APPROX. 1,500 RPM
- 2. OPERATE AIR CONDITIONING AT MAXIMUM COOLING FOR A FEW MINUTES
- 3. CHECK AMOUNT OF REFRIGERANT

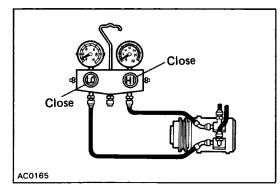
Observe the sight glass on the receiver.

AC1689

Item	Symptom	Amount of refrigerant	Remedy
1	Bubbles present in sight glass	Insufficient *	 (1) Check for gas leakage with gas leak tester and repair if necessary (2) Add refrigerant until bubbles disappear
2	No bubbles present in sight glass	None, sufficient or too much	Refer to items 3 and 4
3	No temperature difference be- tween compressor inlet and out- let	Empty or nearly empty	 (1) Check for gas leakage with gas leak tester and repair if necessary (2) Add refrigerant until bubbles disappear
4	Temperature between compres- sor inlet and outlet is noticeably different	Proper or too much	Refer to items 5 and 6
5	Immediately after air condition– ing is turned off, refrigerant in sight glass stays clear	Too much	 (1) Recover refrigerant (2) Evacuate air and charge proper amount of purified refrigerant
6	When air conditioning is turned off, refrigerant foams and then stay clear	Proper	_

*: Bubbles in the sight glass with ambient temperatures higher can be considered normal if cooling is sufficient





Installation of Manifold Gauge Set

HINT: To prevent releasing refrigerant, use charging hoses with a stop valve when installing the manifold gauge set to service valves on the refrigerant line. Part No. of charging hoses with a stop valve

1. CONNECT CHARGING HOSES WITH A STOP VALVE TO MANIFOLD GAUGE SET

Tighten the nuts by hand. **CAUTION:**

- Do not connect the wrong hoses to the high pressure and the low pressure sides.
- To prevent loosening the nuts, do not apply compressor oil to seat of the connection.
- 2. CLOSE HAND VALVES OF BOTH STOP VALVES
- 3. CLOSE BOTH HAND VALVES OF GAUGE SET
- 4. REMOVE CAPS FROM SERVICE VALVES ON REFRIGER-ANT LINE