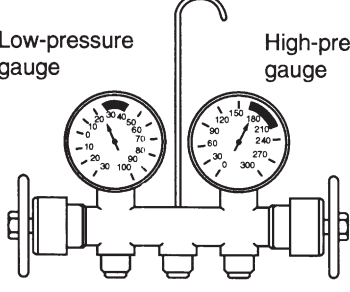
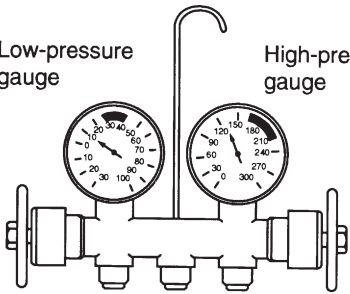
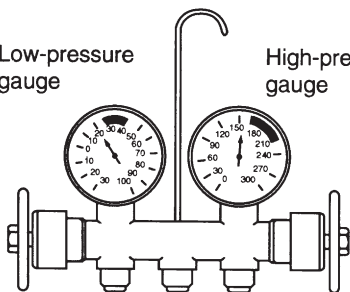


2. Performance Test Diagnosis

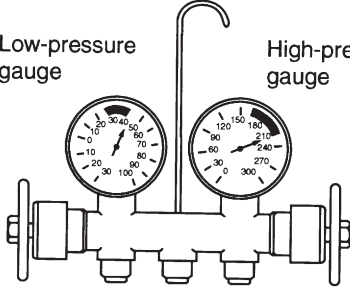
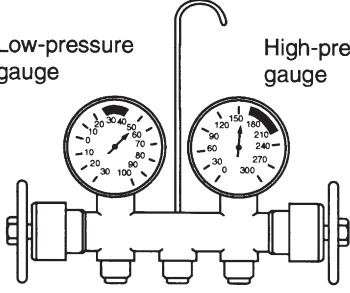
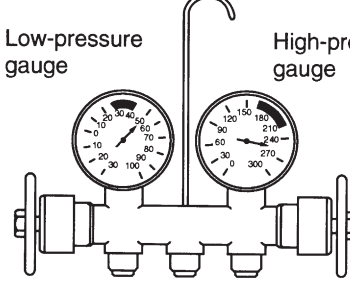
If various conditions caused to other air conditioning system, the characteristics revealed on manifold gauge reading are shown in the following:

As to the method of a performance test, refer to the item of "Performance Test".

Each shaded area on the following tables indicates a reading of the normal system when the temperature of outside air is 32.5°C (91°F).

Condition	Probable cause	Corrective action
<p>INSUFFICIENT REFRIGERANT CHARGE</p>  <p style="text-align: right;">G4M0673</p>	<p>Insufficient cooling</p>	<p>Refrigerant is small, or leaking a little.</p> <p>(1) Perform leak test. (2) Repair leak. (3) Charge system. Evacuate, as necessary, and recharge system.</p>
<p>ALMOST NO REFRIGERANT</p>  <p style="text-align: right;">G4M0674</p>	<p>No cooling action</p>	<p>Serious refrigerant leak.</p> <p>Stop compressor immediately. (1) Perform leak test. (2) Discharge system. (3) Repair leak(s). (4) Replace receiver drier if necessary. (5) Check oil level. (6) Evacuate and recharge system.</p>
<p>FAULTY EXPANSION VALVE</p>  <p style="text-align: right;">G4M0675</p>	<p>Slight cooling; Sweating or frosted expansion valve inlet.</p>	<p>Expansion valve restricts refrigerant flow.</p> <ul style="list-style-type: none"> ● Expansion valve is clogged. ● Expansion valve is inoperative. ● Valve stuck closed. ● Thermal bulb has lost charge. <p>If valve inlet reveals sweat or frost: (1) Discharge system (2) Remove valve and clean it. Replace it if necessary. (3) Evacuate system (4) Charge system.</p> <p>If valve does not operate: (1) Discharge system. (2) Replace valve. (3) Evacuate and charge system.</p>

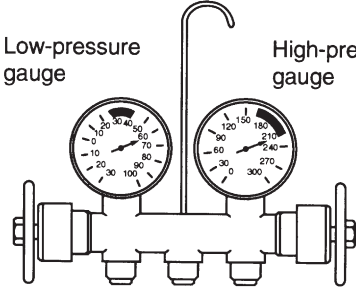
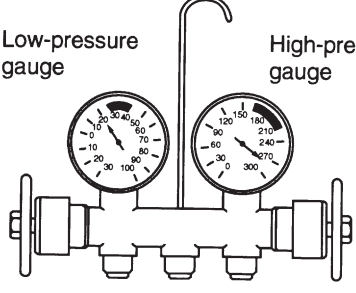
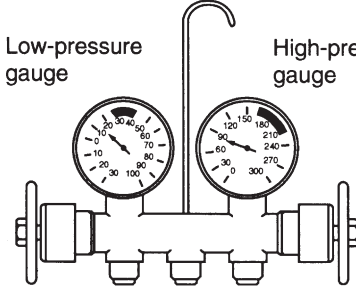
DIAGNOSTICS

Condition	Probable cause	Corrective action
 <p>Low-pressure gauge</p> <p>High-pressure gauge</p> <p>G4M0676</p>	<p>Insufficient cooling; Sweated suction line. No cooling; Sweating or frosted suction line.</p>	<p>Expansion valve allows too much refrigerant through evaporator. Faulty seal of O-ring in expansion valve.</p> <p>Check valve for operation. If suction side does not show a pressure decrease, replace valve. (1) Discharge system. (2) Remove expansion valve and replace O-ring. (3) Evacuate and replace system.</p>
 <p>Low-pressure gauge</p> <p>High-pressure gauge</p> <p>G4M0677</p>	<p>AIR IN SYSTEM</p>	<p>Insufficient cooling</p> <p>Air mixed with refrigerant in system.</p> <p>(1) Discharge system. (2) Replace receiver drier. (3) Evacuate and charge system.</p>
 <p>Low-pressure gauge</p> <p>High-pressure gauge</p> <p>G4M0678</p>	<p>MOISTURE IN SYSTEM</p>	<p>After operation for a while, pressure on suction side may show vacuum pressure reading. During this condition, discharge air will be warm. As warning of this, reading shows 39 kPa (0.4 kg/cm², 6 psi) vibration.</p> <p>Drier is saturated with moisture. Moisture has frozen at expansion valve. Refrigerant flow is restricted.</p> <p>(1) Discharge system. (2) Replace receiver drier (twice if necessary). (3) Evacuate system completely (repeat 30-minute evacuating three times). (4) Recharge system.</p>

DIAGNOSTICS

[K200] 4-7

2. Performance Test Diagnosis

Condition	Probable cause	Corrective action
<p>FAULTY CONDENSER</p>  <p>Low-pressure gauge</p> <p>High-pressure gauge</p> <p>G4M0680</p>	<p>No cooling action; Engine may overheat. Suction line is very hot.</p>	<p>Condenser is often found not functioning well.</p> <ul style="list-style-type: none"> ● Check condenser cooling fan. ● Check condenser for dirt accumulation. ● Check engine cooling system for overheat. ● Check for refrigerant overcharge. <p>If pressure remains high in spite of all above actions taken, remove and inspect the condenser for possible oil clogging.</p>
<p>HIGH-PRESSURE LINE BLOCKED</p>  <p>Low-pressure gauge</p> <p>High-pressure gauge</p> <p>G4M0681</p>	<p>Insufficient cooling; Frosted high-pressure liquid line.</p>	<p>Drier is clogged, or restriction in high-pressure line.</p> <ol style="list-style-type: none"> (1) Discharge system. (2) Remove receiver drier or strainer and replace it. (3) Evacuate and charge system.
<p>FAULTY COMPRESSOR</p>  <p>Low-pressure gauge</p> <p>High-pressure gauge</p> <p>G4M0682</p>	<p>Insufficient cooling</p>	<p>Internal problem is in compressor, or damaged gasket and valve.</p> <ol style="list-style-type: none"> (1) Discharge system. (2) Remove and check compressor. (3) Repair or replace compressor. (4) Check oil level. (5) Replace receiver drier. (6) Evacuate and charge system.