

REFRIGERANT PRESSURE WITH MANIFOLD GAUGE SET

HVAC System (Heater, Ventilator and A/C)

2. Refrigerant Pressure with Manifold Gauge Set S701631

A: OPERATION S701631A16

- 1) Place the vehicle in the shade and draftless condition.
- 2) Connect the manifold gauge set.
- 3) Open the front windows and close all doors.
- 4) Open the hood.
- 5) Increase engine rpm to 1,500.
- 6) Turn ON the A/C switch.
- 7) Turn the temperature control switch to MAX COOL.
- 8) Put in RECIRC position.
- 9) Turn the blower control switch to HI.
- 10) Read the gauge.

Standard:

Low pressure: 127 - 196 kPa (1.3 - 2.0 kg/cm², 18 - 28 psi)

High pressure: 1,471 - 1,667 kPa (15 - 17 kg/cm², 213 - 242 psi)

Ambient temperature: 30 - 35°C (86 - 95°F)

B: INSPECTION S701631A10

Symptom	Probable cause	Repair order
High-pressure side is unusually high.	<ul style="list-style-type: none">● Defective condenser fan motor● Clogged condenser fan● Too much refrigerant● Air inside the system● Defective receiver drier	<ul style="list-style-type: none">● Replace the fan motor.● Clean the condenser fin.● Discharge refrigerant.● Replace the receiver drier.
High-pressure side is unusually low.	<ul style="list-style-type: none">● Defective compressor● Not enough refrigerant● Clogged expansion valve● Expansion valve frozen temporarily by moisture	<ul style="list-style-type: none">● Replace the compressor.● Check for leaks.● Replace the expansion valve.
Low-pressure side is unusually high.	<ul style="list-style-type: none">● Defective compressor● Defective expansion valve● Too much refrigerant	<ul style="list-style-type: none">● Replace the compressor.● Replace the expansion valve.● Discharge refrigerant.
Low-pressure side is unusually low.	<ul style="list-style-type: none">● Not enough refrigerant● Clogged expansion valve● Expansion valve frozen temporarily by moisture● Saturated receiver drier	<ul style="list-style-type: none">● Check for leaks.● Replace the expansion valve● Replace the receiver drier.