Performance Test



The performance test will help determine if the air conditioning system is operating within specifications.

- Attach the gauge and pump as shown, connecting the center charging hose to the pump inlet. To purge air from the hose loosen both charging hoses fitting at the stop valves, until they hiss for a few seconds, then tighten them again.
- Start the pump, then open both gauge valves and the evacuate valve (2 valve gauge: evacuate stop valve).
 The low gauge should indicate above 700 mmHg (27in-Hg), then run the pump about 1 minute.
- Close both valves and the evacuate valve (2 valve gauge: evacuate stop valve) and stop the pump. Open both stop valves.
- Insert a thermometer in the vent outlet. Determine the relative humidity and ambient air temperature by a portable weather station or calling the local weather station.
- 5. Test conditions:
 - Avoid direct sunlight.
 - Open engine hood.
 - Open front doors.
 - Temperature control switch: COLD Mode switch:
 Recirculation control switch:
 - Turn the fan switch to MAX.
 - Turn the A/C switch ON.
 - Run the engine at 1,500 RPM.
 - No driver or passengers in vehicle.
- After running the air conditioning for 10 minutes under the above test conditions, read the delivery temperature from the thermometer in the dash vent and the high and low system pressure from the A/C gauges.
- To complete the charts:
 - Mark the delivery temperature along the vertical line.
 - Mark the intake temperature (ambient air temperature) along the bottom line.
 - Draw a line straight up from the air temperature to the humidity.
 - Mark a point one line above and one line below the humidity level. (10 % above and 10 % below the humidity level)
 - From each point, draw a horizontal line across to the delivery temperature.
 - The delivery temperature should fall between the two lines.
 - Complete the low side pressure test and high side pressure test in the same way.
 - Any measurements outside the line may indicate the need for further inspection.



