

Applies To: 1994 and Newer except Passport – ALL with R-134a A/C

July 5, 2000

Air Conditioning System Performance Test

(Supersedes 96-012, dated March 6, 1996)

If your customer complains of poor A/C performance, use these measurements and charts to determine whether the A/C system is working within specs.

NOTE: For the Passport, refer to Diagnosis (under A/C System) in the HVAC section of the appropriate service manual.

WARRANTY CLAIM INFORMATION

In warranty: The normal warranty applies.

Submit this information along with the operation number and flat rate time for any procedure in the flat rate manual that requires discharging, repairing, evacuating, and recharging the A/C system. Attach a completed copy of the A/C System Performance Test form to the warranty copy of the repair order.

- Do not use this performance test as the primary operation number on the warranty claim.
- Do not claim time for a performance test in a warranty claim based on a service bulletin. Bulletins specify the problems and the repair, so a general performance test is not needed.

Operation Number: 622001
Flat Rate Time: 0.5 hour
Defect Code: 060
Contention Code: B01

Out of warranty: Any repair performed after warranty expiration may be eligible for goodwill consideration by the District Service Manager or your Zone Office. You must request consideration, and get a decision, before starting work.

SETUP

Do these steps *before* you begin the test. If you do *not*, you will get inaccurate readings.

- Move the vehicle out of direct sunlight, and let it cool down. The exterior should cool down to the temperature of the air around it before you begin.
- 2. Clean the condenser. If the airflow through the condenser is restricted, the A/C system may seem fully charged when it is actually low on refrigerant.
- Close the doors and windows. With the engine running at 1500 rpm, turn on the A/C and select Recirc. Run the blower on high for 15 minutes.

TEST PROCEDURE

Do these pressure and temperature checks. Take the measurements with the compressor running, just before it cycles off.

- Connect the R-134a recovery/recycling station to the A/C system.
- Measure the air temperature 12 inches in front of the vehicle with the fans running. Write down this ambient temperature on the Air Conditioning System Performance Test form (Y0430).
- Check the A/C system pressures on the low and high sides with the engine running at 900 rpm (1100 rpm or slightly higher on 1998 and later Civic and CR-V). Write down the pressure readings on the form.
 - Do not check A/C system pressures if the compressor is off. If the compressor does not stay on, increase or decrease the engine rpm until it does, but do not exceed 1100 rpm (except for 1998 and later Civic and CR-V).
 - For the Odyssey, make sure the fan for the rear A/C is off.

NOTE: On the 1998 and later Civic and CR-V, the compressor will *not* cycle with the engine running at a steady 1000 rpm. You *must* run the engine at 1100 rpm, or slightly higher.

- 4. Odyssey only: Turn the rear A/C fan unit on high. Check the A/C system pressures on the low and high sides with the engine running at 1000 rpm. Write down the pressure readings on the form.
- 5. Measure the outlet air temperature at the center vents, and write it down on the form.
- Odyssey only: Measure the outlet air temperature at the vents in the rear A/C unit, and write it down on the form.

NOTE: Do *not* insert the temperature probe more than 2.5 inches into the vent.

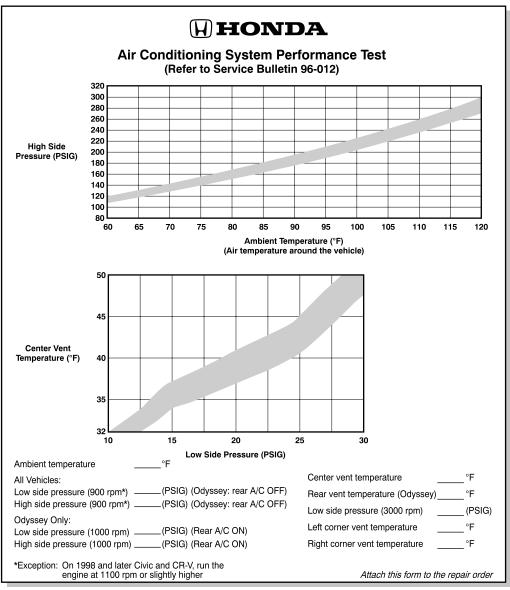
- Check the A/C system pressure on the low side with the engine running at 3000 rpm, and write it down on the form.
- 8. Measure the outlet air temperature at the corner vents with the engine running at 3000 rpm, and write down both readings on the form.
- Compare your readings to the pressuretemperature charts on the form to determine if the A/C system is working within specs.

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Reorder No. Y0430

TEST RESULTS

Here are some problems that cause test results to be out of specification. For more information, refer to the Pressure Test chart in the HVAC section of the appropriate service manual.

TEST RESULTS	PROBABLE CAUSE
Pressure on the high side is too high.	Restricted airflow through the condenser. Condenser or radiator fan is <i>not</i> working. Restricted refrigerant flow through the A/C system.
Pressure on the high side is too low.	A/C system is <i>not</i> fully charged.
Pressure on the low side is too low, and the outlet air temperature from the right corner vent is about 10 degrees colder than the left.	Restricted refrigerant flow through the evaporator. Low refrigerant charge.
Outlet air temperature from the center vents is too high.	Air mix and heater control valve cables are out of adjustment.
Outlet air temperature from the corner vents differs by more than 10 degrees.	Air mix and heater control valve cables are out of adjustment.

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