



SERVICE BULLETIN

PUBLICATION GROUP, AFTER SALES SERVICE DEP.
MITSUBISHI MOTOR SALES EUROPE BV

SERVICE BULLETIN

No.: ESB-97E55-003

Date: 1998-XX-XX

Subject: CORRECTION TO AIR CONDITIONER
PERFORMANCE TEST PROCEDURE

Group: HEATER, A/C & VENTILATION

INFORMATION

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After Sales Service Dept.

<Model>

(EC,EXP)
CARISMA

<M/Y>

96-10

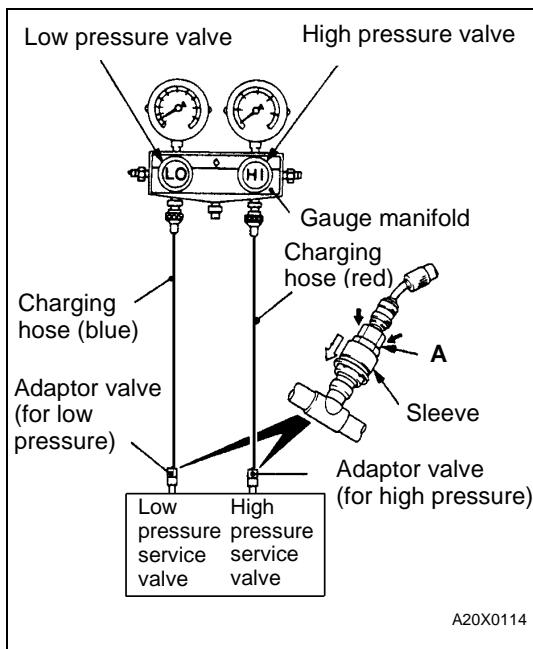
1. Description:

This Service Bulletin informs you of correction to the air conditioner performance test procedure.

2. Applicable Manuals:

| Manual | Pub. No. | Language | Page(s) |
|-------------------------------------|----------|-----------|-----------|
| '96 CARISMA Workshop Manual chassis | PWDE9502 | (English) | 55-16, 17 |
| | PWDS9503 | (Spanish) | |
| | PWDF9504 | (French) | |
| | PWDG9505 | (German) | |
| | PWDD9506 | (Dutch) | |
| | PWDW9507 | (Swedish) | |
| | PWDI96E1 | (Italian) | |

3. Details:



PERFORMANCE TEST

1. The vehicles to be tested should be in a place that is not in direct sunlight.
2. Close the high and low pressure valve of the gauge manifold.
3. Connect the charging hose (blue) to the low pressure valve and connect the charging hose (red) to the high pressure valve of the gauge manifold.
4. Install the quick joint (for low pressure) to the charging hose (blue), and connect the quick joint (for high pressure) to the charging hose (red).
5. Connect the quick joint (for low pressure) to the low-pressure service valve and connect the quick joint (for high pressure) to the high-pressure service valve.

NOTE

The high pressure service valve is on discharge pipe A and the low-pressure service valve is on the suction hose.

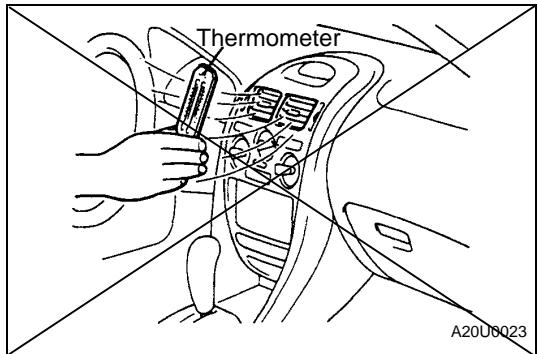
Caution

to connect the quick joint, press section "A" firmly against the service valve until a click is heard. When connecting, run your hand along the hose while pressing to ensure that there are no bends in the hose.

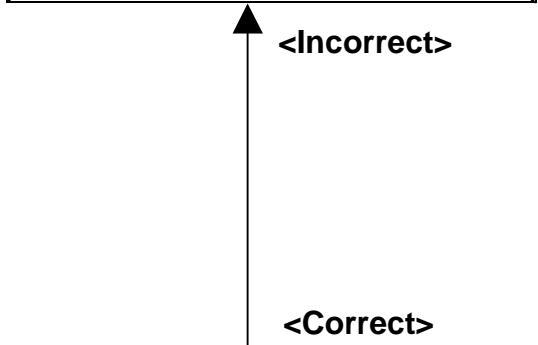
6. Start the engine.
7. Set the controls to the A/C as follows:
AC switch: A/C -ON position
Mode selection: Face position
Temperature control: Max. cooling position
Air selection: Recirculation position
Blower switch: HI (Fast) position
8. Adjust engine speed to 1,000 r/min with A/C clutch engaged.
9. Engine should be warmed up with doors and windows closed.
10. Insert a thermometer in the left center A/C outlet and operate the engine for 20 minutes.
11. Note the discharge air temperature.

NOTE

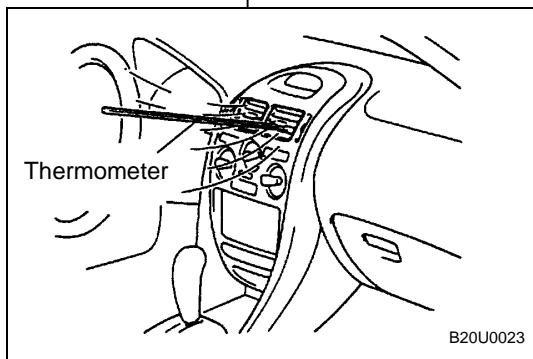
If the clutch cycles, take the reading before the clutch disengages.



<Incorrect>



<Correct>



Performance Temperature Chart

<Incorrect>

| | | | | |
|-------------------------------|-----------|-----------|---------------|---------------|
| Garage ambient temperature °C | 20 | 25 | 35 | 40 |
| Discharge air temperature °C | 2.5 - 4.5 | 2.5 - 4.5 | 4.0 - 6.5 | 6.5 - 9.0 |
| Compressor high pressure kPa | 765 - 960 | 765 - 960 | 1,325 - 1,420 | 1,570 - 1,765 |
| Compressor low pressure kPa | 40 - 135 | 40 - 135 | 80 - 175 | 155 - 255 |

REFRIGERANT LEAK REPAIR

55200150045

LOST CHARGE

If the system has lost all charge due to a leak:

1. Evacuate the system. (See procedure.)
2. Charge the system with approximately one pound of refrigerant.
3. Check for leaks.
4. Discharge the system.
5. Repair leaks.
6. Replace receiver drier.

Caution

Replacement filter-drier units must be sealed while in storage. The drier used in these units will saturate water quickly upon exposure to the atmosphere. When installing a drier, have all tools and supplies ready for quick reassembly to avoid keeping the system open any longer than necessary.

7. Evacuate and charge system.

LOW CHARGE

If the system has not lost all of its refrigerant charge; locate and repair all leaks. If it is necessary to increase the system pressure to find the leak (because of an especially low charge) add refrigerant. If it is possible to repair the leak without discharging the refrigerant system, use the procedure for correcting low refrigerant level.

HANDLING TUBING AND FITTINGS

Kinks in the refrigerant tubing or sharp bends in the refrigerant hose lines will greatly reduce the capacity of the entire system. High pressures are produced in the system when it is operating. Extreme care must be exercised to make sure that all connections are pressure tight. Dirt and moisture can enter the system when it is opened for repair replacement of lines or components. The following precautions must be observed. The system must be completely discharged before opening any fitting or connection in the refrigeration system. Open fittings with caution even after the system has been discharged. If any pressure is noticed as a fitting is loosened, allow trapped pressure to bleed off very slowly. Never attempt to rebend formed lines to fit. Use the correct line for the installation you are servicing. A good rule for the flexible hose lines is keep the radius of all bends at least 10 times the diameter of the hose.

Sharper bends will reduce the flow of refrigerant. The flexible hose lines should be routed so that they are at least 80 mm from the exhaust manifold. It is good practice to inspect all flexible hose lines at least once a year to make sure they are in good condition and properly routed. Unified plumbing connections with O-rings, these O-rings are not reusable.

| | | | |
|-------------|-------------|---------------|---------------|
| 6.0 - 9.0 | 6.0 - 9.0 | 7.0 - 11.5 | 9.0 - 12.5 |
| 870 - 1,100 | 970 - 1,100 | 1,580 - 1,780 | 1,630 - 1,780 |
| 110 - 190 | 110 - 190 | 160 - 240 | 170 - 250 |

<Correct>