

# insider info.

## Evaporator Icing Countermeasure

There is a possibility that icing could occur in the evaporator core of A/C-equipped 2002-2003 Impreza vehicles, up to October 2002, VIN 3\*511336 (sedan) and 3\*801514 (wagon). During operation under warm, high humidity conditions the customer would notice a diminished output of air from the dash vents causing the cabin temperature to rise. The icing condition can be eliminated by replacing the original thermosensor with a new fin sensitive type sensor and placing it in the proper location.

The location of the original thermosensor will depend on the production date of the vehicle. In December 2001, it was moved to the right side of the evaporator. You will replace the surface mounted probe with the internal fin-mounted probe if the condition still exists on vehicles up to the production change listed here.

The part number for the new thermosensor is 72166FE010 and the O-rings needed are 73039FA100 and 73039FA110.

## Repair Procedure

1. This procedure is different than what is shown in the service manual.

2. Start by evacuating the A/C system.  
3. While the system is evacuating, start removing the (9) screws and 1 clip that hold the glove box assembly in place. Remove the connector for the glove box light. This is a different type of clip. You must lift the end of the connector to get the locking tab out. There is no depression tab to push.

4. Remove the A pillar lower kick panel.

5. Remove the daytime running lights relay and bracket as an assembly.

6. Remove the daytime running light control module and bracket.

7. Remove the heater control cable, intake side.

8. Disconnect the heater recirculation

door cable.

9. Remove the two (2) nuts and one (1) bolt that hold the blower assembly in place. The upper nut is hidden behind the white wire tie clip that is mounted to the same stud. At this time, disconnect the electrical connectors from the blower unit. Be careful of the sealing packing material on the unit.

10. Remove the five (5) screws and one (1) hidden black clip that hold the white evaporator cover to the main case. a) Lift the cover guide pin off then, and remove the cover. It is easier if you set the heater control to DEF before removing the cover.

11. Check to insure the system is completely discharged.

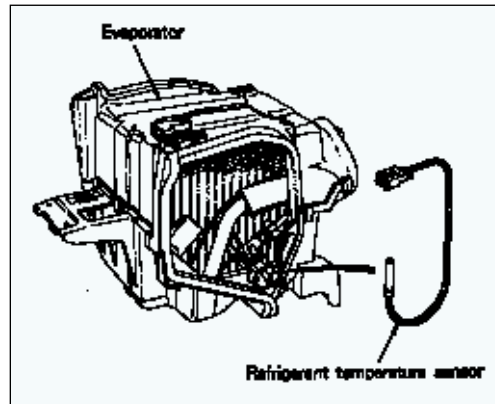
12. Remove the high and low pressure lines from the expansion valve block from under the hood on the firewall. There is one (1) 10mm bolt holding these two lines in place. If you are working on a WRX, it may be easier to also remove some of the firewall line clips to gain more clearance. If there is not enough clearance, you may need to remove the air box or intercooler on turbo models.

13. Remove two (2) 4mm Alan screws from the same location, These are found after the lines are removed. Do not remove the aluminum block at this time. It must come out from the inside.

14. From under the dash you can now remove the expansion valve block (gold in color), followed by the aluminum block previously mentioned. Cover openings to prevent contamination and catch any oil that may leak out to prevent customer complaints.

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15. You can now slide the evaporator out to the right with the thermosensor probe attached. Work it out slowly because the wiring harness attached above the evaporator on the top of the dash will be in the way.



*Refrigerant Thermosensor*

16. Remove the old surface mounted thermosensor and discard it. Replace it with the new style internal thermosensor P/N 72166FE010 at the new location as shown in the picture in this bulletin. The metal thermosensor goes in the eighth row from the right and 30 mm up from the bottom fin. Assemble the thermosensor and the plastic holder first, then push them both into position. The plastic tab goes to the right of the metal thermosensor in the seventh row.

17. Replace the O-rings (P/N 73039FA100 and 73039FA110) on the high and low pressure lines and expansion valve.

18. After the evaporator is reinstalled and the lines are secured, test the integrity of the seals by pulling and holding a vacuum on the system. This is done before the final assembly.

19. The white cover must be sealed from the lower corner where the thermosensor wire goes through to the top side as far as you can reach. Failure to do this will cause water to leak out on the carpets.

20. Assembly is in the reverse order of disassembly.