

NUMBER: JTB00103

MODEL:
S-TYPE

DATE: 13 JUNE 2008

SECTION: 412

Unable to Reduce Climate Control Outlet Temperature - Diagnostic Procedure

AFFECTED VEHICLE RANGE:

S-TYPE (X200) VIN: L00600 - N91220
Model Year: 2000 - 2008

CONDITION SUMMARY:

Situation:

The outlet temperature of the climate control system may not be able to be lowered from either the driver or passenger face and side vents; there may also be an extreme difference between the driver and passenger sides. This issue may be caused by a fault within the Dual Coolant Control Valve (DCCV) or the Dual Automatic Temperature Control (DATC) or an electrical circuit fault.

Action:

In the event of a customer concern of the above, refer to the Diagnostic Procedure outlined below to assist in determining if the fault is electrical or mechanical.

PARTS:

No parts necessary; diagnostic information only

TOOLS:

IDS with latest IDS DVD Patch File; software first available on IDS DVD112 Patch File 1 Midtronics PSC-550 Vehicle Power Supply

WARRANTY:

Normal warranty policy and procedures apply.

DIAGNOSTIC PROCEDURE

VERIFYING CUSTOMER CONCERN

1. Verify A/C compressor operation, [refrigerant](#) charge level, and system powers and grounds.
2. Start engine.
3. Using the Dual Automatic Temperature Control (DATC), select:
 - ^ 'HIGH' temperature
 - ^ 'HIGH' fan speed
 - ^ 'RECIRC' and 'PANEL' modes
4. Allow vehicle to sit for five minutes.
5. Using the DATC, select:
 - ^ 'LOW' temperature
6. Allow vehicle to sit for five minutes
7. Using a suitable temperature gauge, record the outlet temperature from both the driver and passenger air distribution vents. Recorded temperatures should be 7°C (45°F).
8. If the recorded temperatures are within 6°C (10°F) of each other, the climate control system is operating normally and no additional diagnosis is necessary.
9. If either of the recorded temperatures are greater than 45°F or the difference between the recorded temperatures is greater than 6°C (10°F), continue the Diagnostic Procedure.
10. Shut engine off.

ELECTRICAL TEST

CAUTION: A Midtronics PSC-550 Vehicle Power Supply must be connected to the vehicle battery during diagnosis.

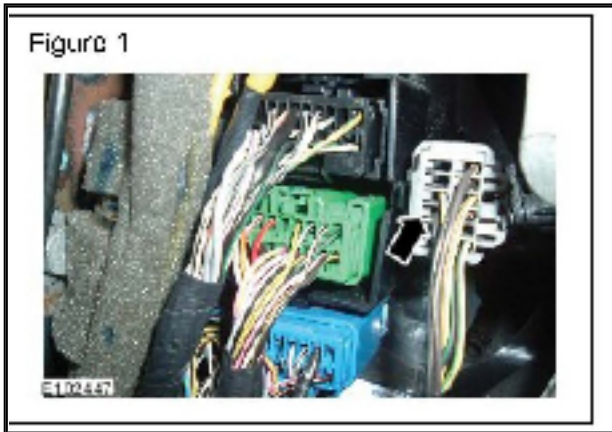
1. Connect the Midtronics PSC-550 Vehicle Power Supply to the vehicle battery.

NOTE: IDS must be loaded with software release DVD112 Patch File 1 or later.

2. Connect the IDS to the vehicle and begin a new diagnostic session by entering the correct VIN for the current vehicle.
3. Select 'No' when prompted 'Do you wish to read configuration information from the vehicle?'.
4. Select 'No' when prompted 'Do you wish to read diagnostic trouble codes?'.
5. Select 'Tick' to continue.
6. Select 'Toolbox' when the 'Content Model' is displayed.
7. Select 'Digital Multimeter' from the menu.
8. Select 'Tick' to continue.
9. Select 'A' (amps) button.
10. Set scale to mA.

11. Remove the left-hand fascia end-panel.

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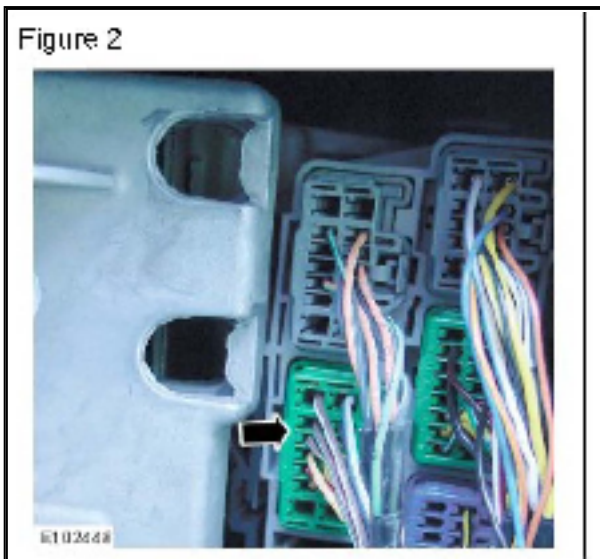


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12. Place the IDS current clamp around the brown/green (NG; FC5-11) wire at connector FC5. (Figure 1)

VIN M45255 - N91220 ONLY



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13. Place the IDS current clamp around the brown/green (NG; FC4-9) wire at connector FC4. (Figure 2)

14. Start the engine.

15. Using the Dual Automatic Temperature Control (DATC), select:

- ^ 'HIGH' temperature
- ^ 'HIGH' fan speed
- ^ 'RECIRC' and 'PANEL' modes

16. Move the temperature from 'HIGH' to 'LOW'.
17. Record the current reading.
18. Move the temperature from 'LOW' to 'HIGH'.
19. Record the current reading.

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20. Switch the current clamp to the brown/blue (NU; FC5-12) wire at connector FC5.

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21. Switch the current clamp to the brown/white (NW; FC4-10) wire at connector FC4.
22. Move the temperature from 'HIGH' to 'LOW'.
23. Record the current reading.
24. Move the temperature from 'LOW' to 'HIGH'
25. Record the current reading.
26. If there is current on both wires, the fault is mechanical. Inspect the Dual Coolant Control Valve (DCCV).
27. If there is current on only one wire, the fault is electrical. Verify and repair the integrity of the wiring between the DATC and DCCV.

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28. If there is no current on both the NG and NU wires, verify current on red (R; CF4-2) wire at the DCCV.
29. If there is no current on the R wire, verify and repair electrical fault at DCCV.

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30. If there is no current on both the NG and NW wires, verify current on yellow (Y; CP5-2) wire at the DCCV.
31. If there is no current on the Y wire, verify and repair electrical fault at DCCV.
32. Exit the current IDS session.
33. Disconnect the Midtronics PSC-550 Vehicle Power Supply.