

Throttle body, replacement kit installation

24 08 08 2010317/4 February 28, 2008. Supersedes Technical Service Bulletin Group 24 number 08-03 dated February 5, 2008 to revise Warranty information.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A6	1998 – 1999	All	Not Applicable

Condition

Audi has determined that, in rare cases while driving for a considerable period of time at a steady rate of speed during extremely low ambient temperatures (5F or below), the throttle on affected vehicles may not return to idle position due to ice accumulating in the throttle body. In the absence of such action, the vehicle may maintain speed when the driver expects the vehicle to slow.

This condition may exist in vehicles driven in the following states: Alaska, Colorado, Connecticut, Delaware, Idaho, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Montana, Nebraska, New Jersey, Nevada, New Hampshire, New York, North Dakota, Ohio, Oregon, Pennsylvania, Rhode, Island, South Dakota, Vermont, Washington, Wisconsin or Wyoming. For vehicles registered in these states, the JB Safety Recall should be performed.

Customers with vehicles registered in warm weather states other than those listed above received a notification letter (see attachment) regarding this Technical Service Bulletin.

Because the condition being addressed by Safety Recall JB is present only in cold climates, it is not expected to cause a safety concern for these warm-weather state customers. However, please assist any customer requesting a replacement throttle body kit whose vehicle does not show an open JB safety recall in ElsaWeb.

Technical Background

In cold climates, ice may accumulate in the throttle body.

Production Solution

Service

Install a replacement throttle body kit as follows:

1. Drive vehicle into hoist area and open hood.

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Marning:

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The cooling system is pressurized when the engine is warm. When opening the coolant reservoir, wear gloves and other appropriate protection. Cover the cap with a cloth, and carefully open cap to slowly relieve system pressure.

2. Turn screws (Figure 1) and remove engine cover.



Figure 1. The locations of the screws.

- 3. Slowly open cap on coolant reservoir to relieve pressure.
- 4. Use hose clamp 3094 to clamp off lower coolant return hose from the coolant reservoir.
- 5. Use hose clamp 3093 to clamp off upper radiator hose.

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6. Raise vehicle, remove screws (Figure 2) and remove sound dampening pan.



Figure 2. The locations of the screws.

- 7. Place a drain pan under the engine.
- 8. Disconnect coolant hose from oil cooler at the oil filter and drain coolant (approximately 3 liters or 0.8 gal.) until it stops flowing. Then reconnect coolant hose.
- Lower vehicle and remove intake air hose between Mass Air Flow (MAF) sensor and air intake elbow by loosening clamps (Figure 3, 2).

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Figure 3. The clamps (2) and bolts (3).

- 10. Remove three bolts (Figure 3, 3) securing solenoid plate assembly located rearward of the intake manifold.
- 11. Disconnect vacuum hoses and electrical connectors (note location of vacuum hoses) as necessary.

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12. Unclip wiring support (Figure 4, 3).



Figure 4. The connector for the intake air temperature sensor (1), connector for the throttle body (2), wiring support (3), and cruise control vacuum unit (4).

- 13. Disconnect connector (Figure 4,1) for intake air temperature sensor.
- 14. Move disconnected solenoid plate assembly to one side.
- 15. Disconnect connector (Figure 4, 2) from throttle body.
- 16. Remove cruise control vacuum unit from support (Figure 4, 4).



17. Remove cap screw (Figure 5, C) from air intake elbow and slide elbow rearward.



Figure 5. The canister purge regulator hose (A), the crankcase ventilation hose (B), the cap screw (C) and the vacuum hose (D).

- 18. Disconnect crankcase ventilation hose (Figure 5, B) from the intake air elbow and remove the elbow.
- 19. Disconnect vacuum hose (Figure 5, D) and evaporative emission (EVAP) canister purge regulator hose (Figure 5, A) from the throttle body.



A support (90 mm or 3.5 inches) under the accelerator pedal will ease cable tension and aid in disassembly.



Figure 6. A support placed under the accelerator pedal.

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20. Remove throttle body from intake manifold by removing screws labeled 1, 2, and 3 in Figure 7 with a 5 mm hexagon socket. Remove screw labeled 4 in Figure 7 with an 8 mm hexagon socket.



Screws labeled 2 and 3 in Figure 7 also secure the throttle valve heating tube, and screw 2 also secures the ground wire.



Figure 7. The location of the screws.

- 21. Carefully disconnect throttle cable and cruise control linkage (do not remove accelerator pedal cable retainer from throttle body) from the throttle body and set aside.
- 22. Remove screw clamp (Figure 8, 1), pinch clamps (Figure 8, 2 and 3), securing suction pump (Figure 8, S), then remove suction pump.



Figure 8. The area rearward of the intake manifold, as viewed from the right side of the vehicle. The screw clamp (1), pinch clamps (2 and 3), and securing suction cup (S).

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23. Install new suction pump (Figure 8, S), Part No: 058 133 753 B.
Secure new suction cup in position with screw clamp (Figure 8, 1), new clamp (Figure 8, 2) Part No: N 102 582 01, and new clamp (Figure 8, 3), Part No: N 02 019 01.

24. Carefully disconnect crankcase ventilation hose (Figure 9, 1) from engine block.

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Figure 9. The area rearward of the intake manifold, as viewed from the right side of the vehicle. The ventilation hose (1), clamps (2 and 3), metal water pipe (A), and contoured pipe (C).

- 25. Using clamp pliers (VAG 1921), remove clamps from heater hoses (Figure 9, 2 and 3) connecting to metal water pipe (Figure 9, A).
- 26. Remove heater hoses (Figure 9, 2 and 3) and contoured pipe (Figure 9, C) (see inset) from metal water pipe (Figure 9, A).

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27. Connect new heater hose (Figure 10, 3), Part No: **078 121 188G** to metal water pipe (Figure 10, A) with marking facing vertically upward.

Secure with new clamp (Figure 10, 4), Part No: **N 906 867 01**.



Kit **078 198 135 A** contains all the required new parts.



Figure 10. The crankcase ventilation hose (1), new heater hoses (2 and 3), metal water pipe (A), and new clamp (4).

28. Connect new heater hose (Figure 10, 2), Part No: **078 121 188F** to metal water pipe (Figure 10, A) with marking facing vertically upward.

Secure with new clamp (Figure 10, 4), Part No: N 906 867 01.

- 29. Carefully reconnect crankcase ventilation hose (Figure 10, 1) to engine block.
- 30. Connect other end of heater hose (Figure 11, 3) to new throttle body (Figure 11, 5), Part No: **078 133 068 AP**.

Secure with new clamp, Part No: N 906 867 01.



Figure 11. The ends of the heater hose (2 and 3) and throttle body (5).

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- 31. Connect other end of heater hose (Figure 11, 2) to new throttle body (Figure 11, 5). Secure with new clamp, Part No: **N 906 867 01**.
- 32. Reconnect throttle cable and cruise control linkage to throttle body.



Figure 12. The screws (1, 3 and 4), bolt (2), and ground wire (G).

- 33. Install throttle body onto intake manifold. Secure with screws (Figure 12, Points 1, 3 and 4). Tighten to 10 Nm (7 ft. lbs.).
- 34. Install ground wire (Figure 12, G) with bolt (Figure 12, 2), securing the throttle body. Tighten to 10 Nm (7 ft. lbs.).

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35. Place air intake elbow in front of throttle body, and reconnect crank case vent hose (Figure 13, B).

Slide elbow to correct position on throttle body. Secure with cap screw (Figure 13, C). Tighten to 10Nm (7 ft. lbs.).



Figure 13. The canister purge regulator hose (A), crank case vent hose (B), cap screw (C), and vacuum hose (D).

- 36. Reconnect vacuum hose (Figure 13, D). Secure with new clamp, Part No: N 102 334 01.
- 37. Reconnect evaporative emission (EVAP) canister purge regulator hose (Figure 13, A) to the throttle body and secure with clamp.
- 38. Reconnect connector to throttle body.
- 39. Reinstall solenoid plate with three screws.
- 40. Reconnect previously disconnected vacuum lines.
- 41. Reconnect connector for intake air temperature sensor.
- 42. Reinstall cruise control vacuum unit and tighten bolt to 10 Nm (7 ft. lbs.).
- 43. Reinstall wiring support.
- 44. Reinstall intake air hose between MAF sensor and air intake elbow. Secure with clamps and tighten to 10 Nm (7 ft. lbs.).
- 45. Remove 3094 clamp from coolant reservoir hose and 3093 clamp from radiator hose. Fill coolant reservoir with a 50/50 mixture of G12 coolant.
- 46. Remove support from under accelerator pedal.
- 47. Set throttle adaptation using VAS 5051 or VAS 5052 diagnostic tool.
- 48. Start engine and check for coolant leaks.
- 49. If necessary, top off engine coolant.

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- 50. Reinstall engine sound dampening pan and engine cover.
- 51. Close hood.
- 52. Properly dispose of all removed parts.

Warranty

Use the following claim instructions:

SAGA

Claim Type:	1SP				
Service Number:	AU22				
Damage Code:	0010				
Outside Labor Operations:	AU221600	Throttle valve housing remove + install	180 TU		
Diagnostic Time:	agnostic Time: Diagnostic time reimbursement follows guidelines printed in Section 2.2 of the Audi Warranty Policies and Procedures Manual				
Claim Comment:	Claim Comment: As per TSB #2010317/4				
All warranty claims submitted for payment must be in accordance with the Audi Warranty Policies and Procedures Manual. Claims are subject to review or audit by Audi Warranty.					

Required Parts and Tools

Part Number	Part Description	Quantity
078 198 135 A*	Kit	1
058 133 753 B	Suction Pump	1
N 102 582 01	Clamp	1
N 102 019 01	Clamp	1
N 102 334 01	Clamp	1
G 012 A8F A4	Coolant G12	0.5 gal. (2 liters)

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* Kit 078 198 135 A contains the following parts:

Part Number	Part Description	Quantity
078 133 068 AP	Throttle Body	1
078 121 188 F	Heater Hose	1
078 121 188 G	Heater Hose	1
N 906 867 01	Clamp	4

Tool Number	Part Description
VAS 5051 or VAS 5052	diagnostic tester
VAG 1921	hose clamp pliers or equivalent
VAG 1331	torque wrench or equivalent
3094	hose clamp or equivalent
3093	hose clamp or equivalent

Additional Information

All parts and service references provided in this TSB are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.

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Customer Letter Example – EXCEPT COLD WEATHER STATES

Audi of America, Inc.



October 2004

Subject: Technical Bulletin – Install Replacement Throttle Body Kit 1998-1999 Model Year Audi A6 Vehicles with 2.8L V6 5-valve Engine and Automatic Transmission

Dear Audi Owner:

We are writing to you to inform you of a condition that exists in some 1998-1999 model year Audi A6 vehicles with a 2.8L V6 5-valve engine and automatic transmission when operated in extremely low ambient temperatures. Our records show that you are the owner of one of these vehicles, however your vehicle is not registered in a state that is likely to experience temperatures 5°F or below.

What Is The Problem?

Audi has determined that, in some cases while driving for a period of time at a steady rate of speed during extremely low ambient temperatures (5°F or below), the throttle on affected vehicles may remain in an open position due to ice accumulating in the throttle body. If this occurs, the vehicle may maintain speed when the driver expects the vehicle to slow. Audi is conducting a safety recall for this matter in cold weather states.

What We Would Like You To Do

Because this condition is present only in cold climates, it is not expected to cause a safety problem for you. However, if you plan on traveling to areas where it is possible for temperatures to drop to 5°F or below, or if you should decide to move to or sell your vehicle to a resident in the states of: Alaska, Colorado, Connecticut, Delaware, Idaho, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Montana, Nebraska, New Jersey, Nevada, New Hampshire, New York, North Dakota, Ohio, Oregon, Pennsylvania, Rhode, Island, South Dakota, Vermont, Washington, Wisconsin or Wyoming, please contact your authorized Audi dealer and arrange for an appointment so that this repair can be performed on your vehicle. In any case, you may obtain the free remedy upon request. This service will take approximately 2 hours, however your dealer may need additional time for the preparation of the repair as well as to accommodate the daily workshop schedule.

We also remind you to follow all the information in your owner's manual regarding the floor mats in your vehicle, including securing your factory floor mats properly to prevent any unwanted interference with the throttle pedal, and using only genuine Audi mats.

What Will Audi Do?

At your request, we will install a replacement throttle body kit on your vehicle free of charge.

Lease Vehicles

If you are the lessor and registered owner of the vehicle identified in this action, the law requires you to forward this information immediately via first-class mail to the lessee within ten (10) days of receipt of this notification.

Have You Changed Your Address Or Sold The Vehicle?

If you have, please fill out the enclosed prepaid Owner Reply card and mail it to us so we can update our records.

Reimbursement of Expenses

If you have previously incurred expenses relating to throttle body not returning to idle in extremely low ambient temperatures, the enclosed form explains how to request reimbursement. We would be pleased to review your reimbursement request.

Service Help from Us

If your authorized Audi dealer fails or is unable to complete this work free of charge within a reasonable time, or if you are not satisfied for *any reason* with the repair please call or write to:

Audi of America, Inc. **Attn: Customer Relations (Throttle Body Kit Technical Bulletin)** 3499 West Hamlin Road Rochester Hills, MI 48309 1-800-822-2834

We regret any inconvenience this matter may cause. Thank you for your continued loyalty.

Sincerely,

Maria Cotter Product Compliance