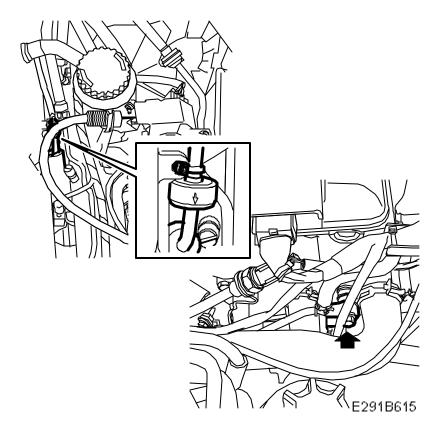
## MODIFICATION INSTRUCTION

Bulletin Nbr: 291-2217 utg. 2

Date:.....Maj 2000 Market: US, CA, JP

Replacement of check valve and banjo screw to remedy blue smoke



Emissions-related campaign 10719

Cars in stock must be remedied before delivery.

A personal communication must be sent to the owners of cars already delivered requesting them to get in touch with the nearest Saab garage as soon as possible to have the fault rectified.

Cars affected

Saab 9-3 with B205 or B235 engines M99-M00 up to and including VIN:

Y2017062 (3D/5D excluding Viggen)

Y7005097 (Viggen 3D/5D and all CV)

Background

Some cars produce unwanted blue smoke. There are two possible reasons:

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- The check valve for the crankcase ventilation can stick, which means that engine oil can be forced out into the exhaust pipe, resulting in blue smoke.
- The flow of coolant through the turbo unit may be reduced, which results in the temperature becoming so high that the engine oil crystallizes (builds carbon deposits) around the turbine-side bearing. Over time these deposits reduce the oil flow through the bearing, which means that engine oil is forced past the turbine shaft seal and out into the exhaust pipe, resulting in blue smoke.

This MI describes the procedure for preventing blue smoke and damage to the turbocharger.

## Parts required

51 25 406 Banjo screw

81 24 141 Gasket (x2)

93 99 973 Hose with check valve

79 71 864 Cable tie

16 - 30 04 223 Electronic cleaner (sufficient for about 10 cars)

#### **Procedure**

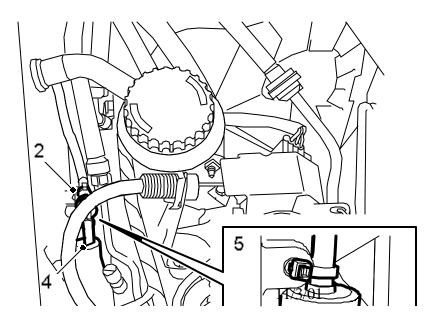
Before proceeding, check box B5 of the modification identity plate. If the box is not marked, continue as follows.

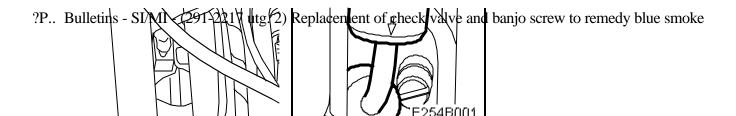
B205L M99-M00 up to and including VIN Y2013566 (3D/5D excluding Viggen) and Y7003737 (Viggen 3D/5D and all CV): All steps must be carried out.

B205L M00 in interval Y2013567-Y2017062 (3D/5D excluding Viggen) and Y7003738-Y7005097 (Viggen 3D/5D and all CV): Perform steps 1-12 only.

**B205R/235R:** Perform steps 1-12 only.

1. Remove the engine cover.





- 2. Cut off the cable tie securing the check valve to the camshaft cover.
- 3. Detach the vacuum hose from the camshaft cover and the throttle body.
- 4. Transfer the insulation hose from the old hose to the new.
- 5. Attach the new hose to the camshaft cover nipple and to the throttle body.

# **Important**

The check valve must be turned so that the flow is directed away from the camshaft cover towards the throttle body, see the arrow on the check valve.

Fasten the check valve to the camshaft cover using a cable tie.

- 6. Make sure the ignition key is in OFF position.
- 7. Remove the bolt attaching the turbocharger delivery pipe to the engine and the hose clip on the pipe attachment to the throttle body.
- 8. Remove the turbocharger delivery pipe and move it to one side. Keep the O-ring.
- 9. Turn the throttle disc to open position and clean inside the throttle body, especially around the throttle disc sealing surface. Use a lint-free cloth moistened with electronic cleaner (part no. 16 30 04 223).
- 10. Lubricate the O-ring with acid-free petroleum jelly and fit the turbocharger delivery pipe to the throttle body.
- 11. Fit the bolt attaching the turbocharger delivery pipe to the engine and the hose clip on the pipe attachment to the throttle body.
- 12. Fit the engine cover.

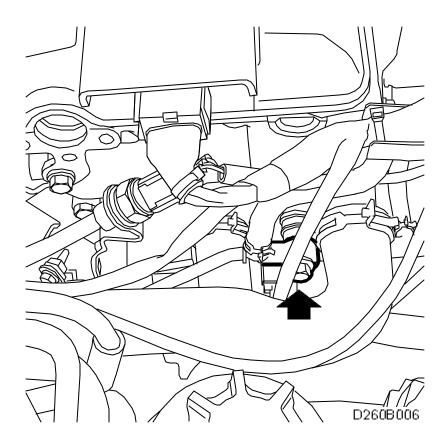
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  - 13. Open the coolant expansion tank cap to release the overpressure in the cooling system. Shut the cap.



Take care if the car is warm. The coolant is hot and there is also a risk of burning yourself on the manifold.

- 14. Place a receptacle under the car.
- 15. Using a fixed spanner to hold the coolant pipe nipple in place on the cylinder head, detach the coolant pipe from the cylinder head, see illustration, and the pressure sensor mounting.



16. Check that the coolant pipe nipple on the cylinder head is tightened, and fit the coolant pipe with a new banjo screw and new gaskets in the cylinder head, see illustration. Fasten the pipe to the pressure sensor mounting.

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# **Important**

Banjo screw 51 25 406 must not be fitted anywhere else on the cooling system other than on the cylinder head connection.

Tightening torques:

Nipple in cylinder head 35 Nm (25.8 lbf ft)

Banjo screw, cylinder head 25 Nm (18.4 lbf ft)

17. Top up the coolant if necessary.

Marking the modification identity plate

On completion of the necessary procedure, box B5 of the modification identity plate must be marked. If the work was carried out by the importer, mark the box with a "7". If done by a dealer, mark with an "8".

Warranty/Time information

See separate information.

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