

Emissions - Crankcase Ventilation System Cleaning Method

NO: 25-149-C

DATE: 02-20-2006

MODEL/YEAR: C70 1999-2002

S70 1999-2000

S60 2001

V70 1999-2001

V70XC 1999-2001

S80 1999-2001

SUBJECT: Cleaning the Crankcase Ventilation

REFERENCE: VIDA TNN 25-149-B

This TNN supersedes the previous TNN 25-149-C dated 12-06-2005. Please update your files.

Material C70 1999-2002 S70/V70 1999-2000 V70XC 1999-2000 5-cyl Turbo		
Description	Quantity	Part Number
Gasket	2	947282
Cable tie	1	983750

Material S60 2001 V70 2001 V70XC 2001 5-cyl Turbo		
Description	Quantity	Part Number
Gasket	2	947282
O-ring	1	969092
Cable tie	1	983750

Material 6-cyl Turbo		
Description	Quantity	Part Number
Gasket	2	947282

Material 6-cyl Non-turbo		
Description	Quantity	Part Number
Gasket	1	9440982

DESCRIPTION:

This TNN is an update of the existing method for cleaning the crankcase ventilation system shown in SB 25-0035 February 2004.

Description

Wrench (B5T) See Special Tool Bulletin 143
Protection (B6S) See Special Tool Bulletin 114

Part Number

999 7109
999 5723

SERVICE:

Crankcase Ventilation, Cleaning

Cleaning, 5-cyl Turbo

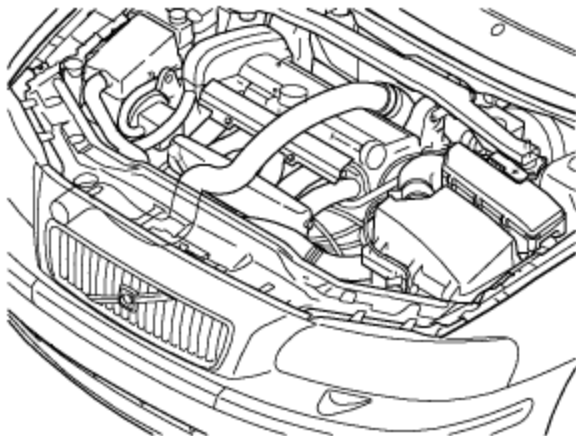
Note! The method applies to both the C70 1999- 2002 S701V70 1999-2000 V70XC 1999-2000 and S60 2001 V70 2001 V70XC 2001. Certain parts of the method differ but this is stated in the heading for that stage.

Remove:

- the battery negative lead from the battery, see:
- Electrical system Battery replacement
- the auxiliaries belt. Use wrench 999 7109
- cold air inlet hose to the [control module](#) if applicable.

Only S60 2001 V70 2001 V70XC 2001

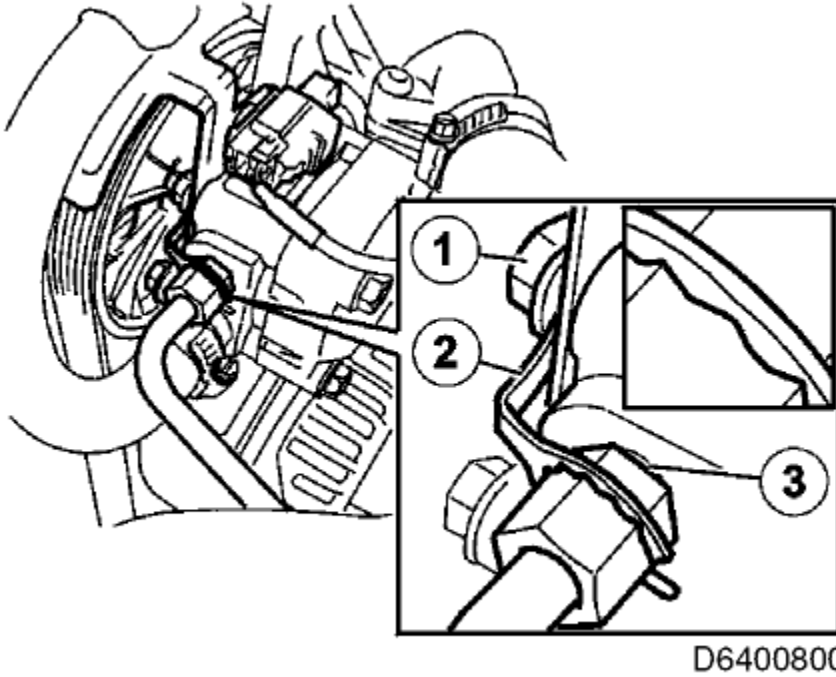
Remove:



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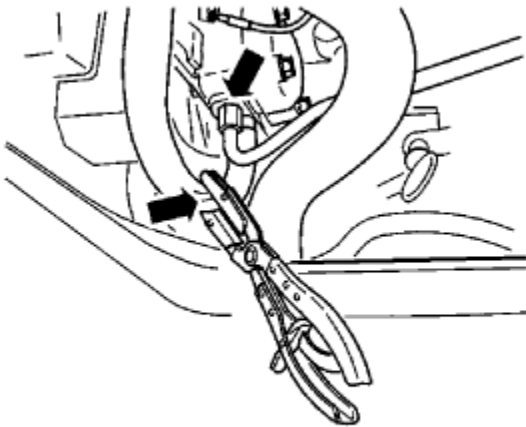
- the screw for the charge air pipe over the engine
- the clamp for the power steering pump pressure pipe from the intake manifold
- the charge air hose from the charge air cooler (CAC).

Move the charge air pipe with hose to one side.
If the vehicle has locking brackets
Remove:



- the locking bracket (2) by removing the screw (1)
- the pipe nipple by the pump.

Only S60 2001 V70 2001 V70XC 2001



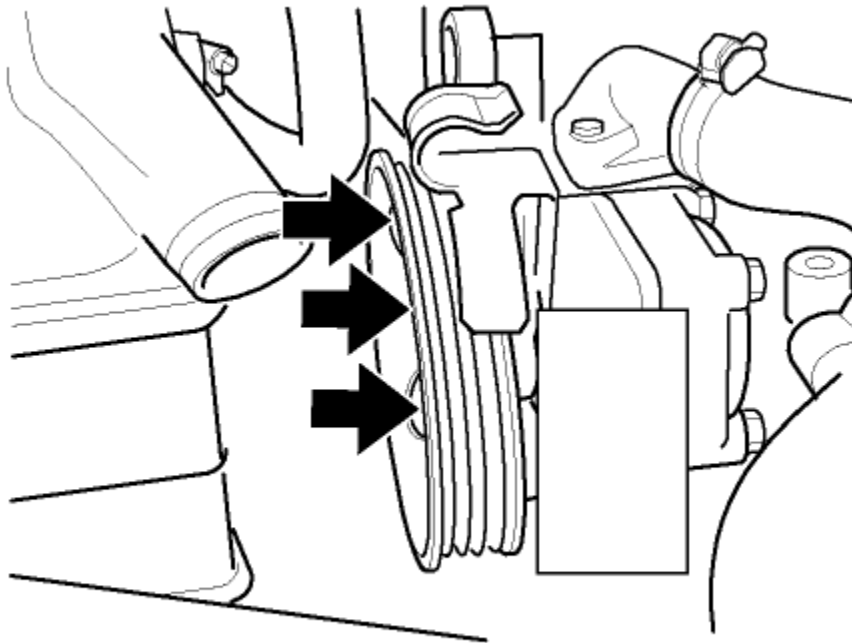
I-229918

Place paper towels under the power steering pump to absorb any oil from the power steering pump.

Install hose clips on the hose to the power steering pump.

Remove the delivery line from the power steering pump. Plug the power steering pump and the power steering pipe using rubber plugs.

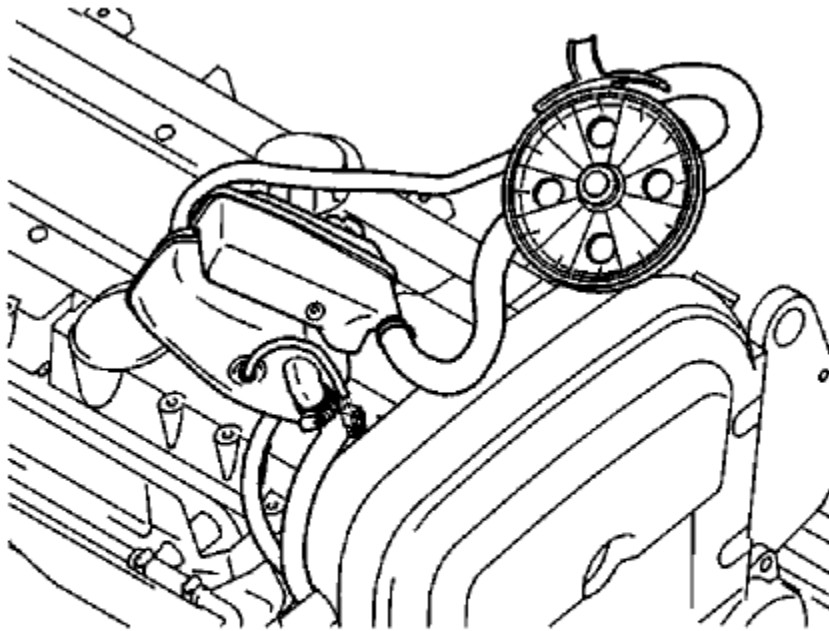
Remove the connector from the belt protector above the power steering pump.



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Remove the power steering pump's 3 x mounting screws through the pulley hole.

Only S60 2001 V70 2001 V70XC 2001



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Remove the power steering hoses and coolant hoses from their holders/clips). Remove the tie strap for the power steering hose by the suspension turret.

Remove:

- the coolant expansion tank and the power steering reservoir from the mounting on the spring strut turret
- the connector and place the reservoirs on the engine.

Place the power steering pump up on the engine.

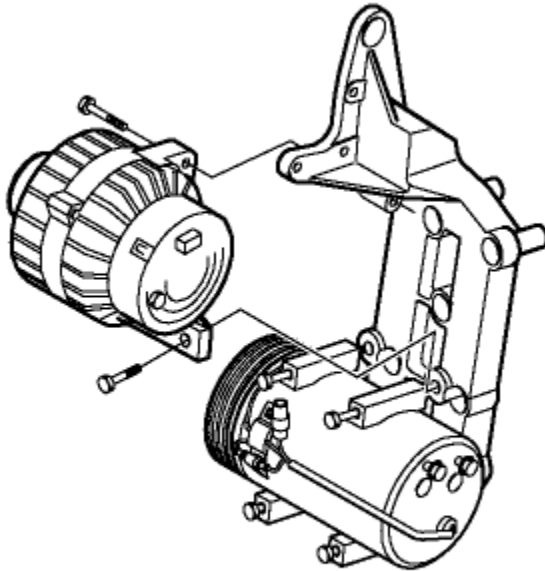
Only S60 2001 V70 2001 V70XC 2001

Remove:

- power steering hoses and coolant hoses from their holders/clips. Remove the tie strap for the power steering hose by the suspension turret
- the power steering reservoir from its mounting on the coolant expansion tank
- the connector and place the power steering reservoir on the engine.

Place the power steering pump up on the engine.

Removing the alternator



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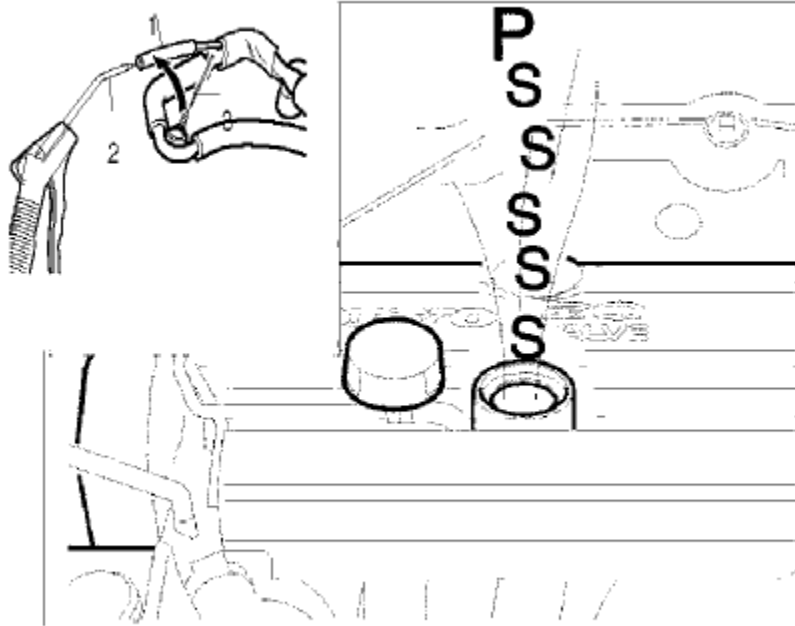
Remove:

- the upper screw for the alternator
- screws common to the alternator and corn pressor.

Loosen the lower screws for the compressor (so that there is some clearance).

Position the alternator so that it rests against the radiator and on the air conditioning (A/C) compressor.

Cleaning the crankcase ventilation



Remove the banjo bolt from the intake manifold.

Remove the hose (1) from the banjo nipple. Remove the oil filler cap.

Blow the hose clean (1) using compressed air (2) to verify that the system is open. If the hose is blocked clean the hose using 2.0 mm diameter wire.

If air travels through to the oil filler the breather is good, no further verification or repairs are necessary.

Note! If the hose is blocked, use a welding rod (maximum diameter 2.0 mm, approximately 250 mm long) to unblock the hose.

Clean the banjo nipple using a diameter 2.0 mm drill bit (3).

Install:

- the hose on the banjo nipple
- the banjo bolt with new gaskets
- the oil filler cap.

Raise the car.

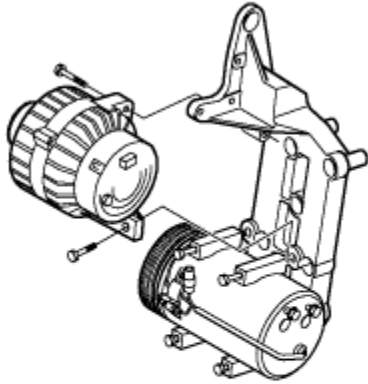
Remove the splashguard under the engine

Tighten the banjo bolt. Tighten to 24 Nm.

Install the cover under the engine.

Lower the car.

Installing the alternator



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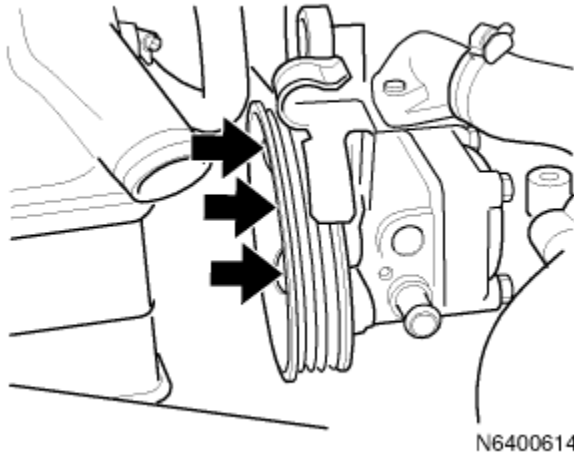
Install:

- the alternator in the correct position
- the upper screw but do not tighten
- the screws common to the alternator and the air conditioning (A/C) compressor. Do not tighten.

Tighten.

- the upper screw. Tighten to 24 Nm
- the lower screws for the air conditioning (A/C) compressor. Tighten to 24Nm
- the screws common to the alternator and the air conditioning (A/C) compressor. Tighten to 24 Nm.

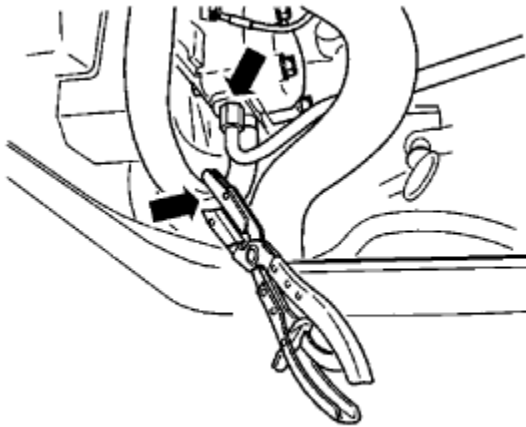
Installing the power steering pump



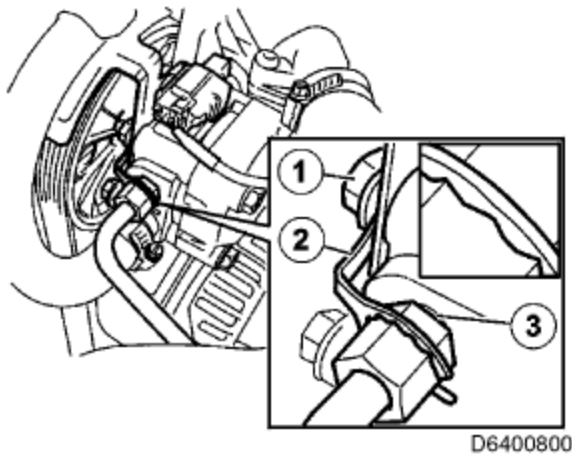
Install:

- the power steering pump in the correct position
- the 3 x screws through the pulley. Tighten to 24 Nm.

Only S60 2001 V70 2001 V70XC 2001



Install the delivery line on the power steering pump. Use new O-rings on the delivery line.
Tighten to 25 Nm.
Remove the hose clip.



Only S60 2001 V70 2001 V70XC 2001

Note! If the vehicle has locking brackets.

Install the locking bracket (2). Tighten the screw (1). Tighten to 24 Nm.

Note! There may be a gap (3) of a few millimeters between the pipe coupling and the power steering pump. Bend the bracket so that the twelve edged mounting on the bracket is on the nut.

Only S60 2001 V70 2001 V70XC 2001

Install:

- the auxiliaries belt. Use Wrench 999 7109
- the connector with holder on the power steering pump
- the power steering reservoir in its mounting on the expansion tank
- the hoses in their holders and clips
- the tie strap for the servo hose by the suspension turret.

Only C70 1999-2002 S70/V70 1999-2000 V70XC
1999-2000

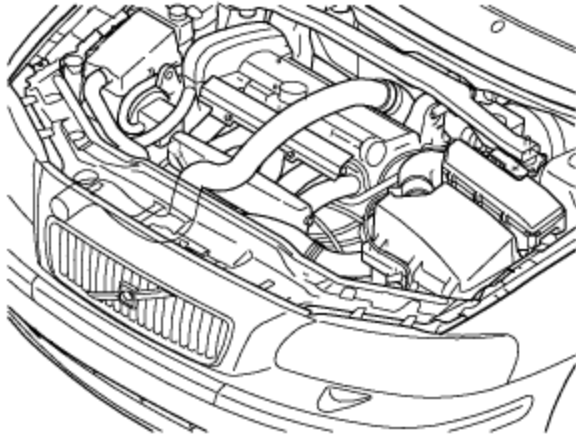
Install:

- the auxiliaries belt. Use Wrench 9997109
- the connector for the coolant level sensor
- the coolant reservoir and the power steering reservoir in their mountings
- the hoses in their holders and clips
- the cold air inlet hose to the [control module](#)

Turn the ignition key to position 2 Connect the battery negative lead.

Only S60 2001 V70 2001 V70XC 2001

Install:



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- the charge air hose on the charge air cooler (CAC).
 - the screw for the charge air pipe above the engine and clamp for the power steering pump delivery line from the intake manifold.
 - the cold air inlet hose to the [control module](#).

Check the level in the power steering reservoir and top up if necessary.

Turn the ignition key to position 2

Connect the battery negative lead.

Start the engine and check for leaks.

