



Technical Journal

TITLE:
Oil in cooling system. New cleaning method developed

REF NO: TJ 21965.5.0	ISSUING DEPARTMENT: Technical Service	CAR MARKET: United States and Canada	
PARTNER: 3 US 7510 Volvo Car USA		ISSUE DATE: 2019-01-23	STATUS DATE: 2019-02-05
FUNC GROUP: 2600	FUNC DESC: Cooling system	Page 1 of 8	

“Right first time in Time”

Attachment

File Name	File Size
T9318EN01.doc	0.1547 MB

Vehicle Type

Type	Eng	Eng Desc	Sales	Body	Gear	Steer	Model Year	Plant	Chassis range	Struc Week Range
1XX							1999-9999		0000000-9999999	199815-0
2XX							2000-9999		0000000-9999999	199943-0
3XX							2001-9999		0000000-9999999	200032-0
5XX							2004-9999		0000000-9999999	200339-0

CSC Customer Symptom Codes

Code	Description
J9	Lubrication and oil system/Oil leakage

VST Operation Number

VST Operation Number	Description
99703-2	

DTC Diagnostic Trouble Codes

Rows beginning with * are modified

Note! If using a printed copy of this Technical Journal, first check for the latest online version.



Text

*Updated with correct attachment.

DESCRIPTION:

Oil can be found in cooling system for several reasons, e.g:

- defect engine oil cooler
- defect radiator (mixing coolant - ATF oil)
- defect cylinder head gasket

SERVICE:

New cleaning method developed, using a "flush gun".

See attachment for instruction how to use it.

VSTG OPERATION NUMBER:

99703-2

To view TJ attachment continue to next page. This TJ has one attachment.

Volvo Car Customer Service	
	TJ Instruction
	No. T9318
	Date Nov - 09 Issue 01
Title	Cooling system, flushing
Model	All (see exception in the method)
Model Year	All
Competence requirement	Volvo Level 1 Technician

Material	Quantity	Part No.
Radiator hoses		See spare parts catalogue for relevant Model and engine
Expansion tank and cover		See spare parts catalogue for relevant Model and engine
Thermostat/Thermostat kit		See spare parts catalogue for relevant Model and engine
Coolant glycol Volume see relevant engine		

Special tools	Quantity	Part No.
Cleaning gun	1	9814122
Radiator hose	1	31319442
Radiator hose	1	30761633

1.

Note! Some variation in the illustrations may occur, but the essential information is always correct.

VOLVO

2.

General

A new tool 9814122 for flushing the cooling system has been introduced.

The tool uses water and compressed air.

After flushing, the thermostat, all rubber radiator hoses and the expansion tank with cover must be replaced.

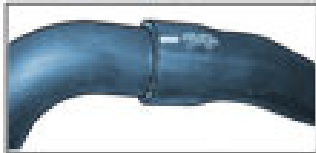


Note! The thermostat must be removed from the thermostat housing and the thermostat housing reinstalled for flushing to be effective.

These instructions do not apply to D4164Tx, D4204Tx and D5244T10/14/16/19 because the thermostat cannot be removed from the thermostat housing.

IMG-333178

3.



The hose that is connected to the thermostat housing during flushing must reach outside the engine compartment.

Tip! Use radiator hoses 30776224 and 30761633 as tools. These are suitable for the different diameters on the outgoing connector on the thermostat housings.

IMG-333508

4.

Thermostat removal

Drain the cooling system.

Remove the thermostat, see:

Removal, replacement and installation
2 Engine with mountings and
equipment
26 Cooling system
Thermostat/temperature sensor
coolant, replacement

5.

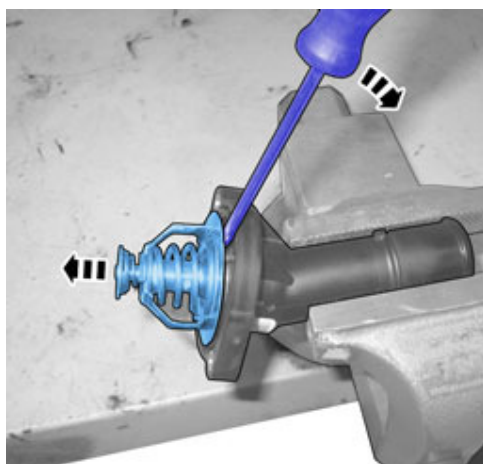
On most engines the thermostat housing with thermostat is only available as a spare part. In these cases, the thermostat must be removed from the thermostat housing

The following steps show how to do this.

6.

Removal of the thermostat from the thermostat housing

B4184Sx, B4204Sx



IMG-333181

7.

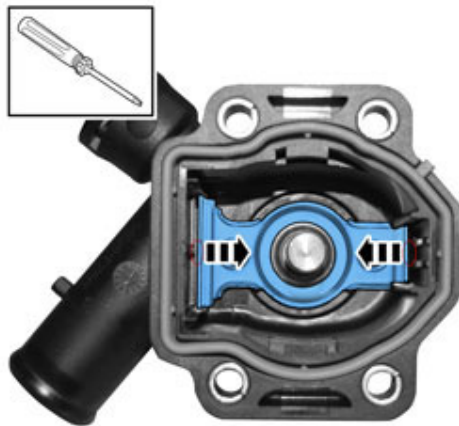
B6324S, B6304T2, Step 1



IMG-333180

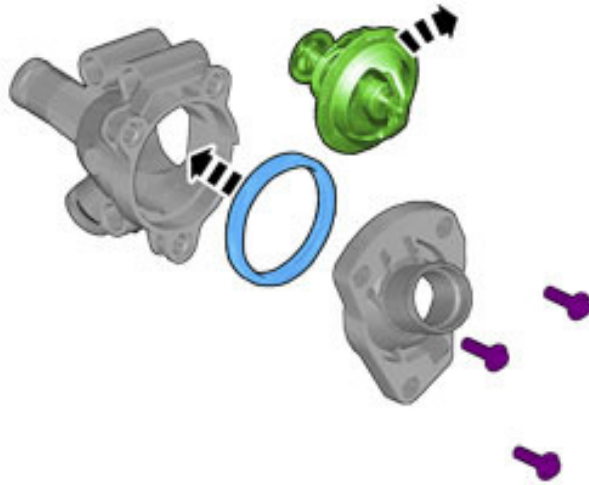
8.

B6324S, B6304T2, Step 2



IMG-333533

9.



S80 07-/V70 08-/ C30/S40/V50

B5254Sx/Tx

Remove the thermostat.

Remove the rubber gasket from the thermostat.

Install the rubber gasket in the thermostat housing.

Assemble the thermostat housing.

IMG-333314

10.

Other engines not shown in any steps:
See relevant model and engine in
VIDA.

Reinstall the thermostat housing on
the engine.

11.

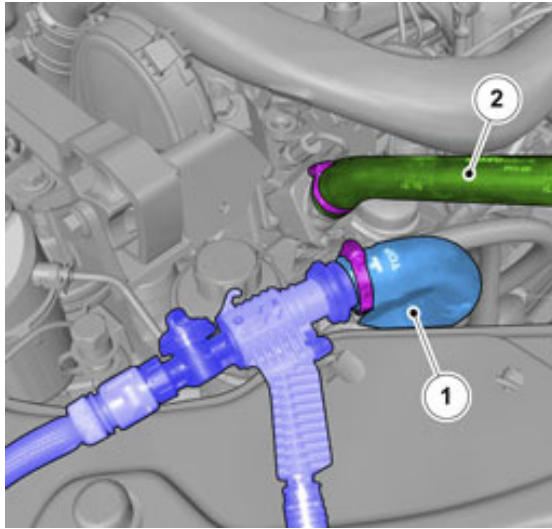
Flushing cooling system

Connect the cleaning gun to hose (1).
Connect the water hose and compressed air to the cleaning gun.

Connect a long hose (2) to the thermostat housing, which extends outside the engine compartment.

Suggestion: radiator hose 30776224 and 30761633.

Use hot water.



Note! When flushing, the first 20 litres must be flushed out into a container because the fluid contains coolant that must not be flushed out into the drainage network. Flushing can then occur over a flush plate with oil separation.

Flush the cooling system for at least 10 minutes if hot water is used.

If hot water is not available, extend the time to 20 minutes.

IMG-333208

12.

After flushing, the thermostat, all rubber radiator hoses and the expansion tank with cover must be replaced.

For thermostat replacement, see:

Removal, replacement and installation
2 Engine with mountings and equipment
26 Cooling system
Thermostat/temperature sensor
coolant, replacement

To replace radiator hoses and expansion tank, see the spare parts catalogue for the relevant model and engine.

There is no method to be followed for the replacement of radiator hoses and expansion tank.