



Technical Journal

TITLE:

High oil consumption

REF NO: TJ 29871.3.0	ISSUING DEPARTMENT: Technical Service	CAR MARKET: United States and Canada	
PARTNER: 3 US 7510 Volvo Car USA		ISSUE DATE: 2019-02-05	STATUS DATE: 2019-02-12
FUNC GROUP: 2100	FUNC DESC: Engine	Page 1 of 14	

“Right first time in Time”

Attachment

File Name	File Size
Oil specifications_US_MY12_150122.pdf	0.0597 MB
TJI-481117-1_1_0_en-US.pdf	0.2823 MB

Vehicle Type

Type	Eng	Eng Desc	Sales	Body	Gear	Steer	Model Year	Plant	Chassis range	Struc Week Range
134	61	B5254T12					2013-2016		-	201220-201617
134	62	B5254T5					2012-2012	22	0017819-0170117	201046-201219

CSC Customer Symptom Codes

Code	Description
AZ	Lubrication and oil system/Excessive oil consumption

VST Operation Number

VST Operation Number	Description
98547-2	Piston ring replacement

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

DESCRIPTION:

* Vehicle type updated with engine 61, MY 2013-2016.

Oil specifications, TJ instruction and VST Operation No valid also for engine 61.

Customer may experience “Low oil pressure light” coming on. No external leakage.
High engine oil consumption may occur.

PRODUCT MODIFICATION:

This engine type (62) was replaced by engine 61 on MY 2013 in production.
This repair is valid for both engine types.

MATERIAL RETURN:

No

SERVICE:

Replace piston ring kit and attach engine oil sticker according to attached instruction.

Model year 2012, Change engine oil to fully synthetic engine oil, viscosity SAE 5W-30, quality ACEA A5/B5.

Attached file, “Oil specifications_US_MY12_150122”, must be printed and Owners Manual updated.

VEHICLE REPORT:

Please follow the general TIE Reporting guidelines available in the TIE system under “Instructions” or the SPJ 27125 TIE Quick Guide (Dealers).

If this information cannot be found, please check other SPJ’s or TJ’s released locally by your market responsible office or the Dealer Development Platform <https://ddp.volvocars.biz/>.

When submitting a Vehicle Report for a condition described in this TJ, use concern area “Vehicle Report and sub concern area “Support Not Needed” with function group 2100.

To view TJ attachment continue to next page. This TJ has two attachments.



Volvo Car Customer Service

TJ Instruction VCC-481117-1

Title	Piston rings	Page	1 (10)
Action	Replacement	Operation number:	98547-2

Issue	Date	Reason
1	2019-02	Updated Affected vehicles

Affected vehicles

Model year	Model	Engine	Structure week
2012	S60 (11-)	B5254T5	017819-170117
2013-2016	S60	B5254T12	201220-201617

Materials

Materials	Qty.	Part No.	Notes
Engine oil	0.1		Consumable;
Abrasive cloth	1	9511024	
Isopropanol	0.21	31375638	Consumable;
Chemical gasket	0.5	1161059	
Piston ring kit	5.0	30750667	
Screw	10.0	9497858	
Decal	1.0	31416624	

Special tools

Description	Part No.
Holder (remov.piston/connecting rod) B 200-B 6304	999 5746
Guide pin	999 7273
Roller (Applying liquid gasket) B234,5234,6304	951 2767

Equipment

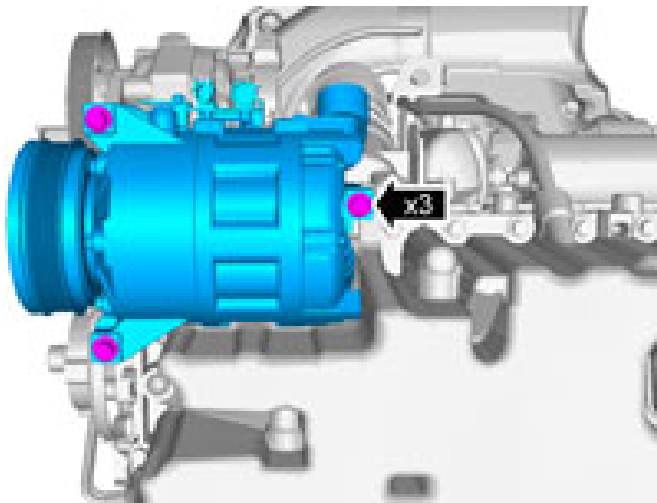
Designation	Part No.
Piston ring pliers	
Piston ring compressor	

Removal

Note! Removal steps in this procedure may contain installation details.

Remove the cylinder head , refer to:
Removal, replacement and installation
2 - Engine with mountings and equipment
21 - Engine
211 - cylinder head

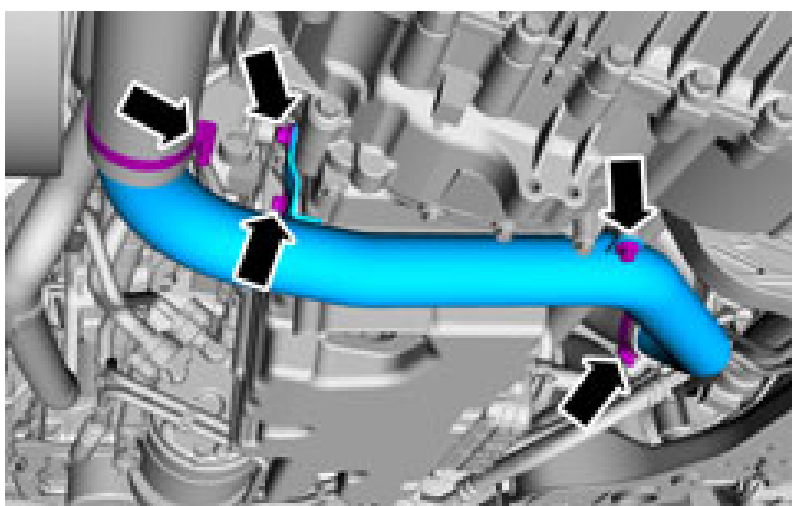
Drain engine oil , refer to:
Removal, replacement and installation
2 - Engine with mountings and equipment
22 - Lubricating and oil system
220 - general



Remove the screws.

Torque:

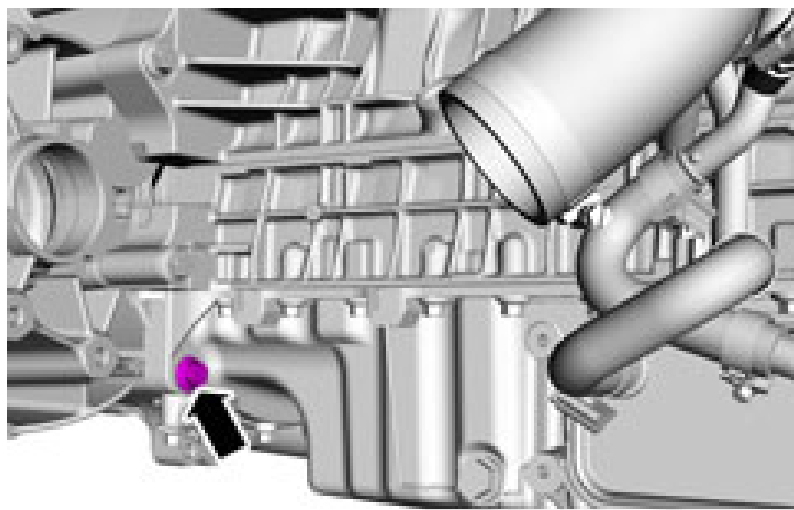
M8 , 24 Nm



Remove the screws.

Torque:

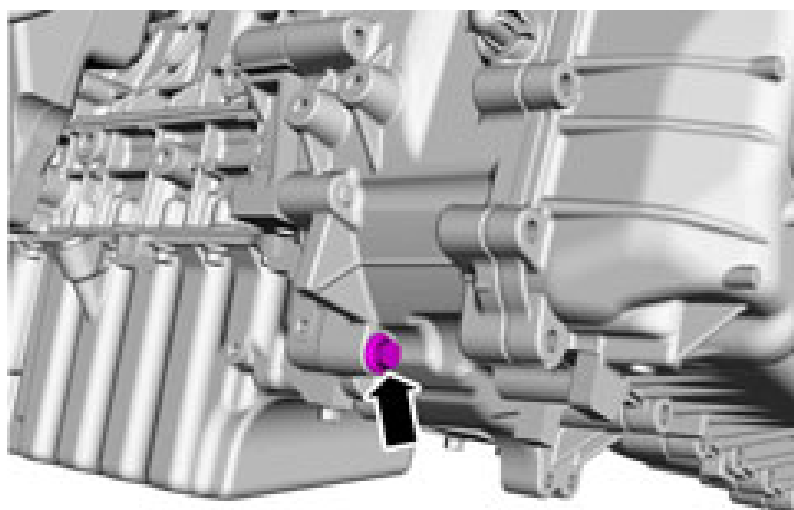
M7 , 17 Nm



Remove the screw.

Torque:

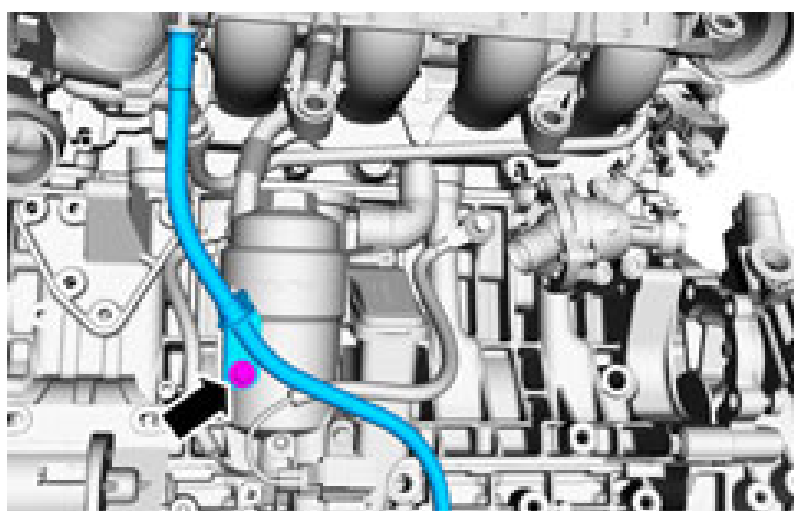
M10 , 50 Nm



Remove the screw.

Torque:

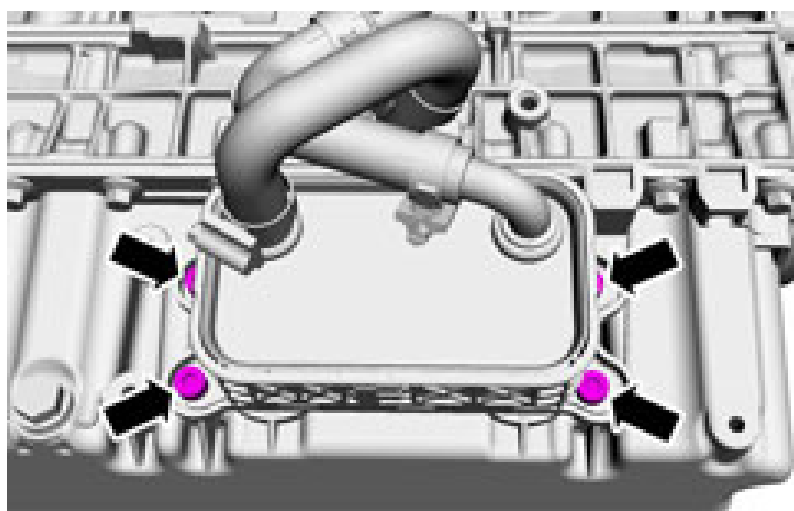
M10 , 50 Nm



Remove the screw.

Torque:

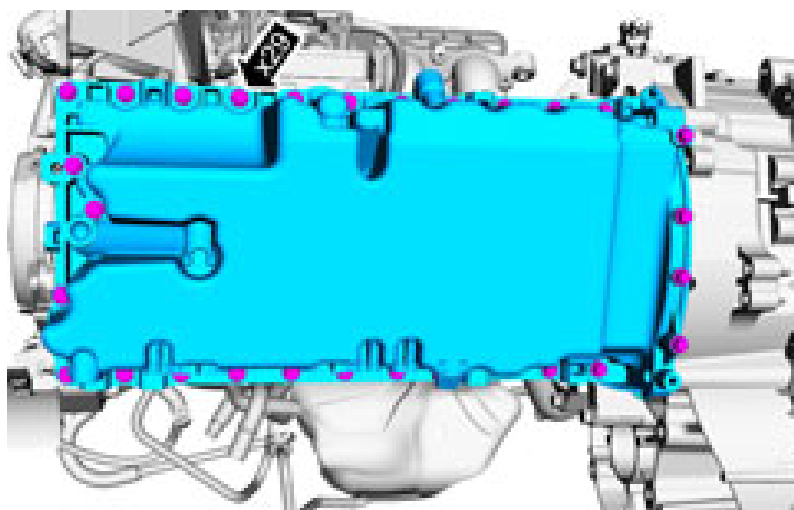
M6 , 10 Nm



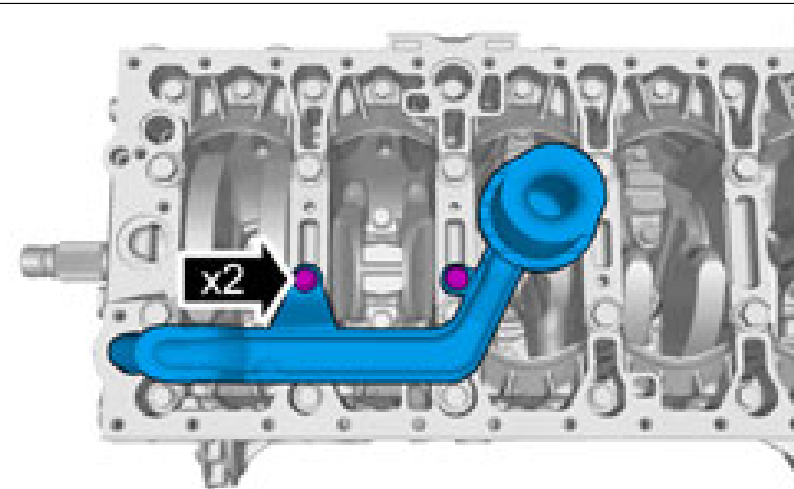
Remove the screws.

Torque:

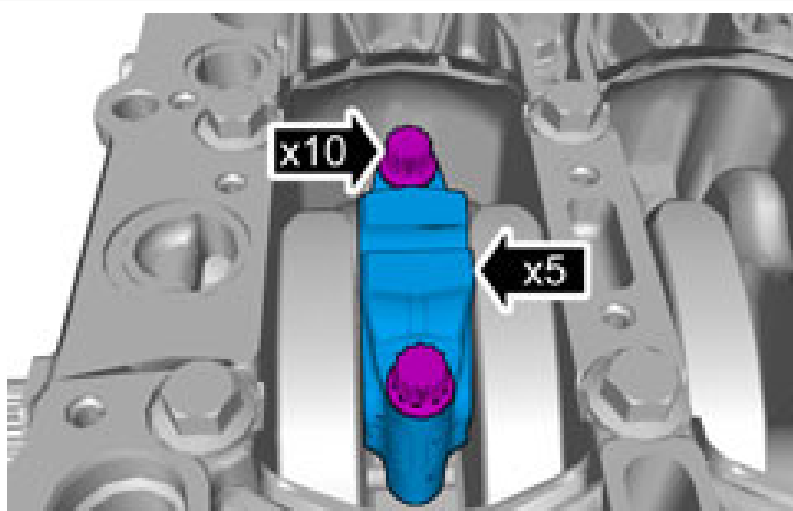
M7 , 17 Nm



Remove the screws.



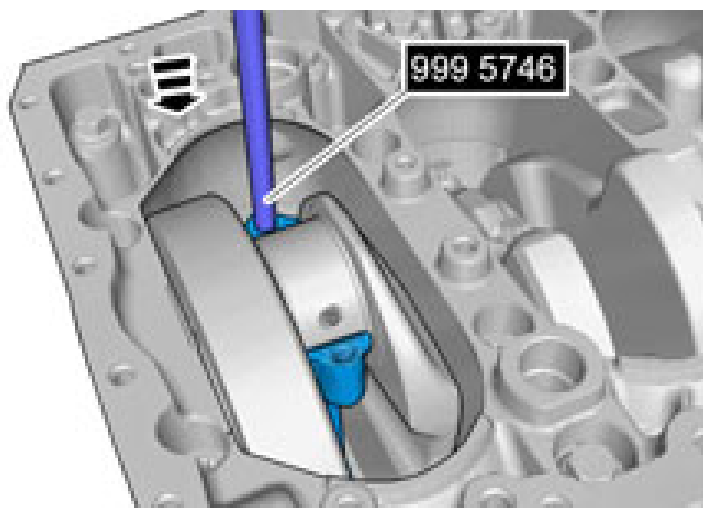
Remove the screws.



Caution! Note the position of the bearing caps in relation to the rotation of the crankshaft. The bearing caps are not interchangeable.

Caution! Note the position of the components before removal.

Remove the screws.

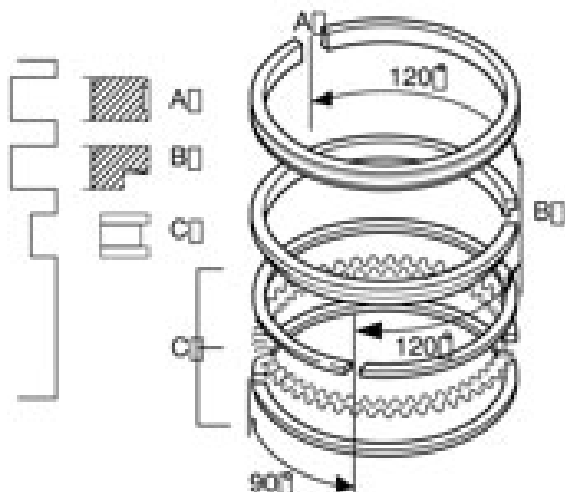


Caution! Take extra care when handling the components.

Caution! Take extra care not to damage the bearings.

Special Tool: T9995746, Holder (remov.piston/ connecting rod) B 200-B 6304

Installation

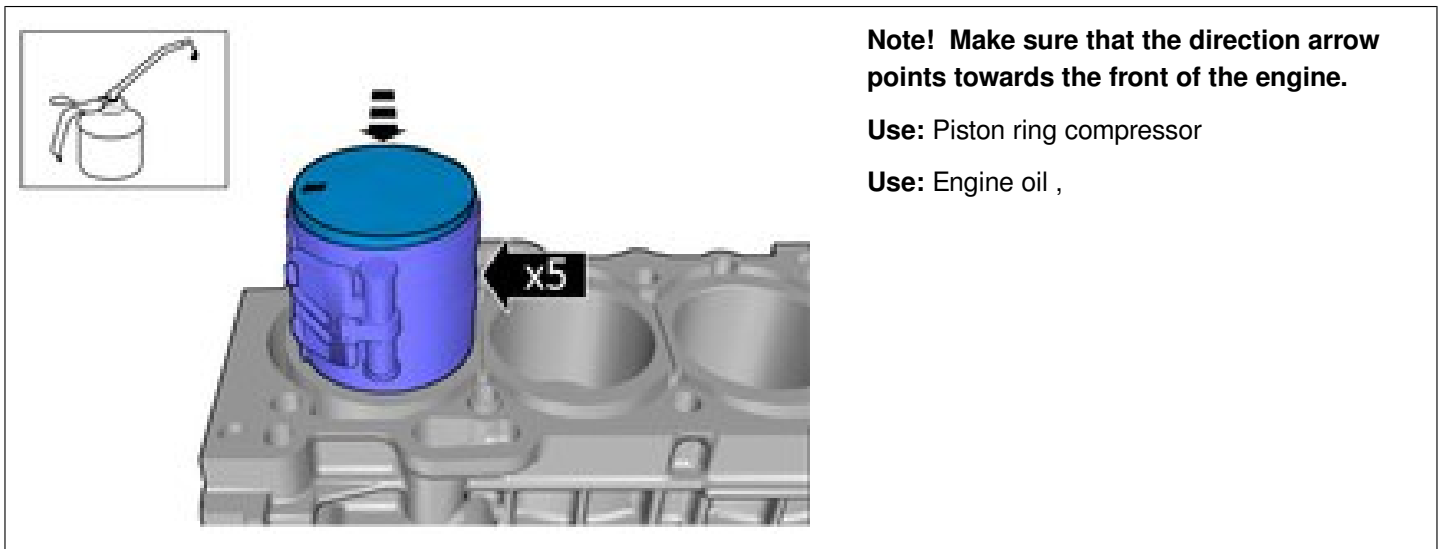
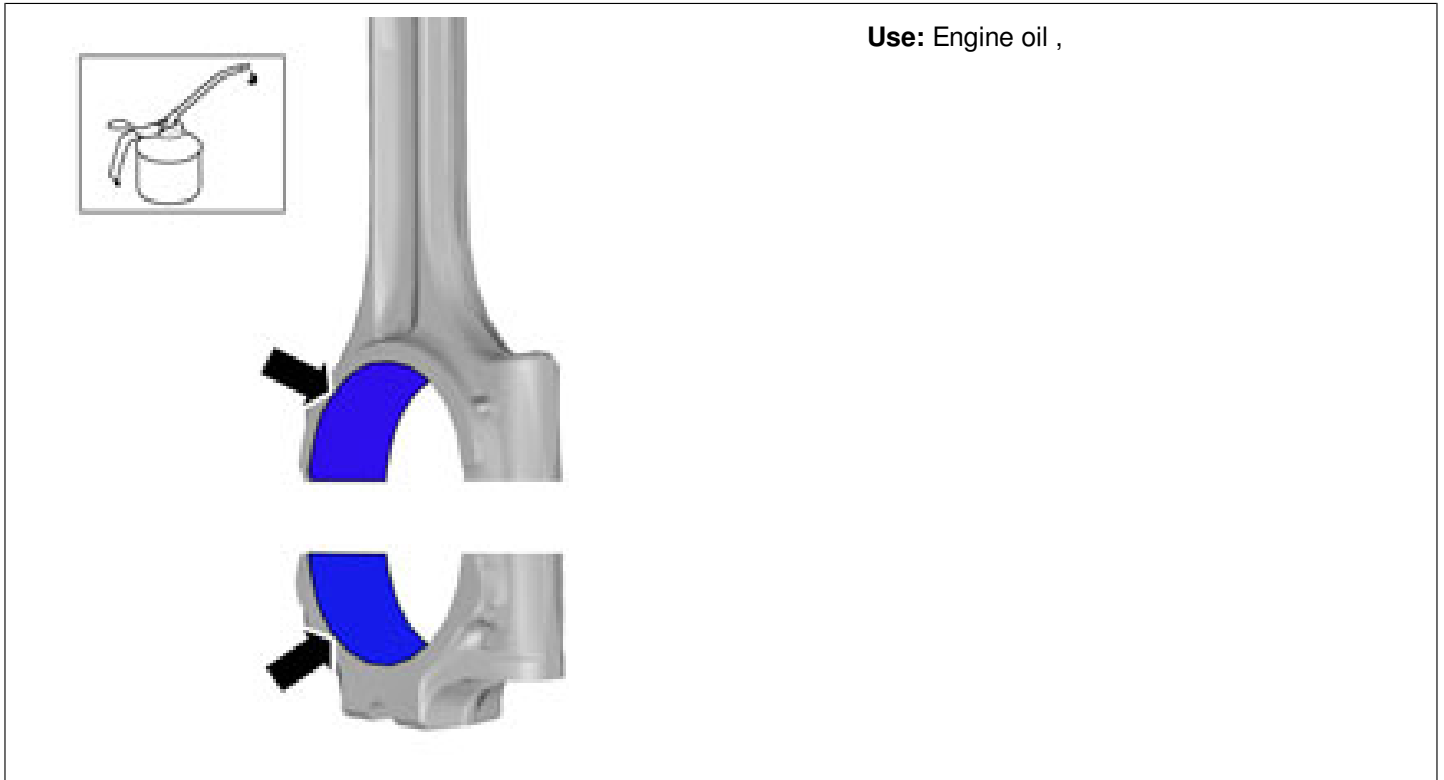


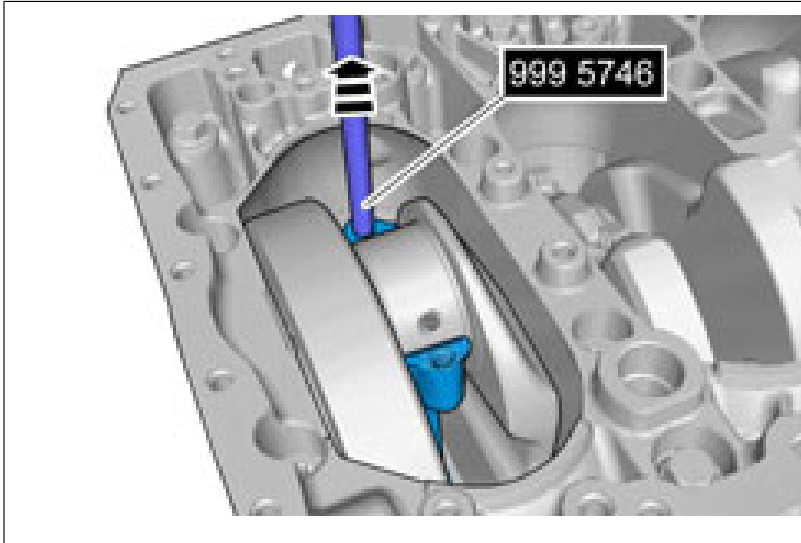
Note! Make sure that the component is clean and free of foreign material.

Note! Text or marking on piston ring A must be face up.

Note! Make sure that new components are installed.

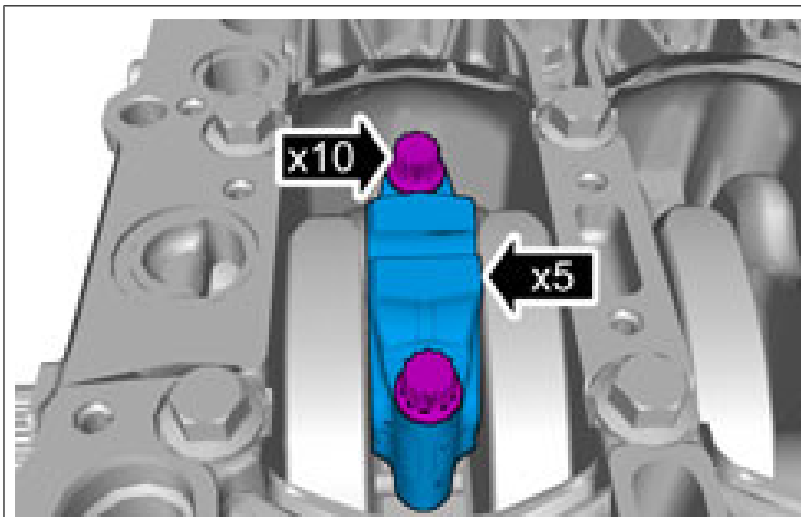
Use: Piston ring pliers





Caution! Take extra care not to damage the bearings.

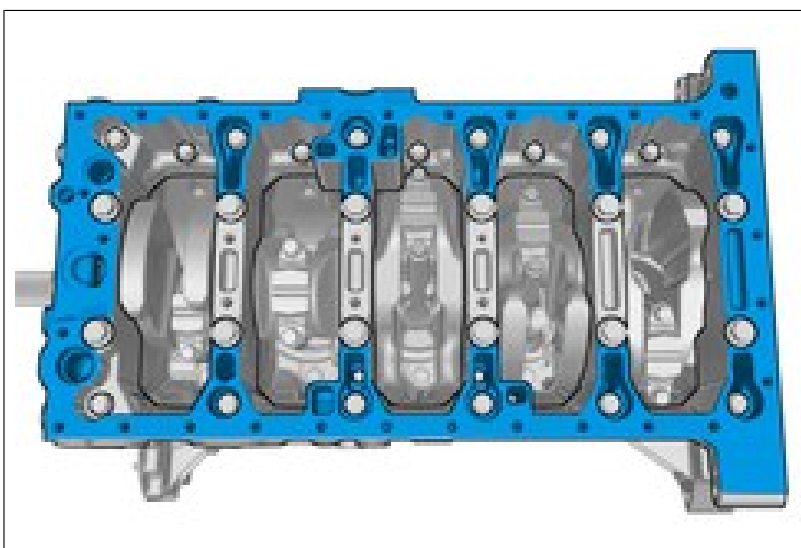
Special Tool: T9995746, Holder (remov.piston/ connecting rod) B 200-B 6304



Caution! Make sure that the components are positioned correctly.

Torque:

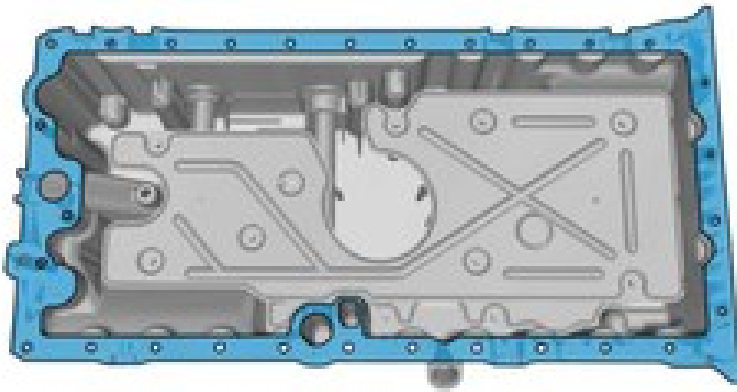
- Stage 1 : Cap connecting rod , 30 Nm
- Stage 2 : Cap connecting rod , 90°



Caution! Make sure that the mating faces are clean and free of foreign material.

Use: Abrasive cloth , 9511024

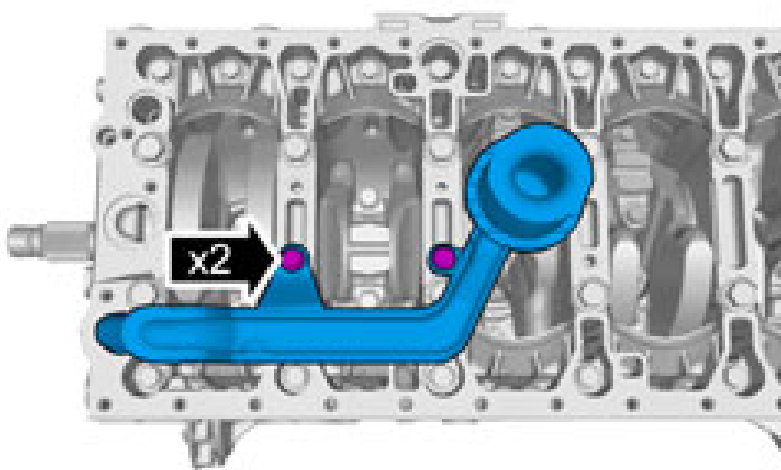
Use: Isopropanol , 31375638



Caution! Make sure that the mating faces are clean and free of foreign material.

Use: Abrasive cloth , 9511024

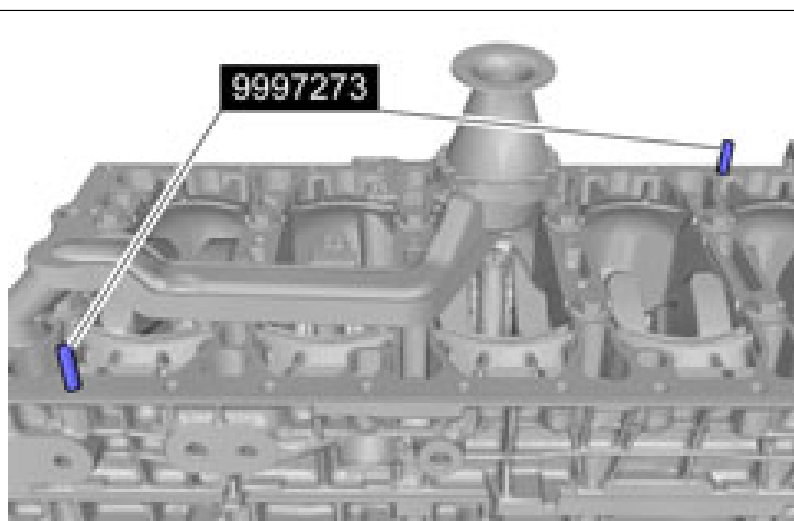
Use: Isopropanol , 31375638



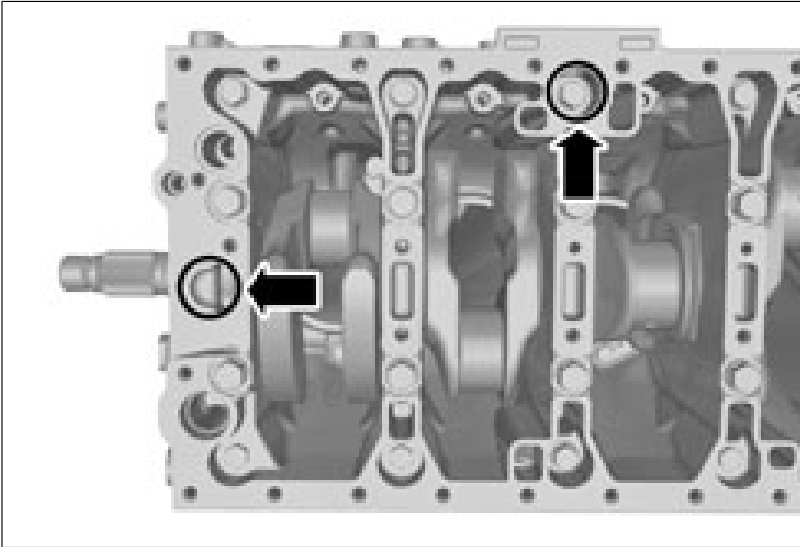
Install the screws.

Torque:

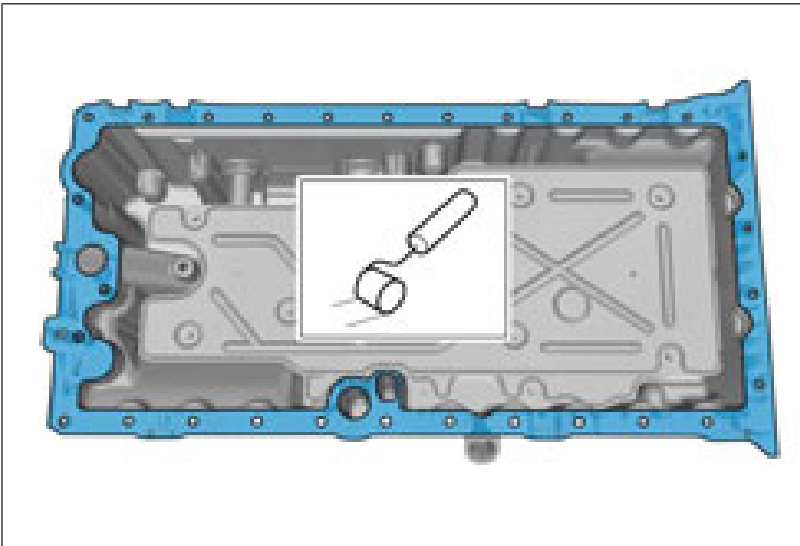
M7 , 17 Nm



Special Tool: T9997273, Guide pin



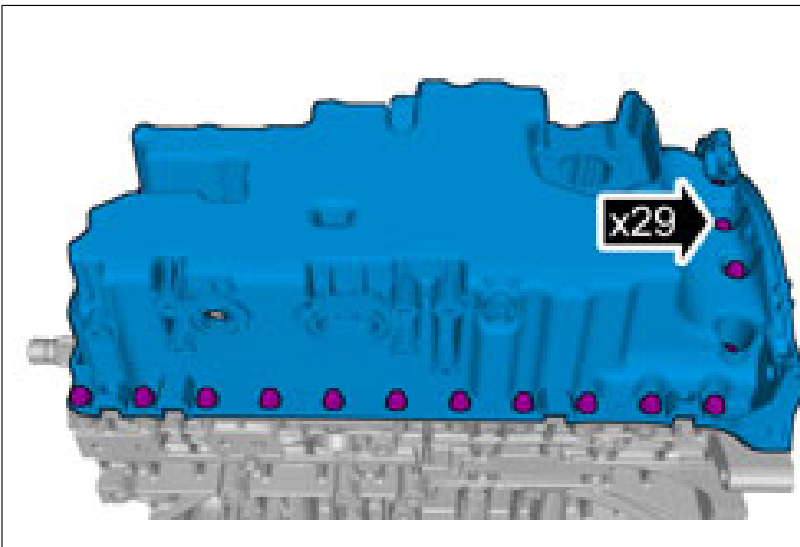
Caution! Make sure that the gaskets are correctly located.



Note! The component must be installed within 5 minutes of applying the sealant.

Special Tool: T9512767, Roller (Applying liquid gasket) B234,5234,6304

Use: Chemical gasket , 1161059

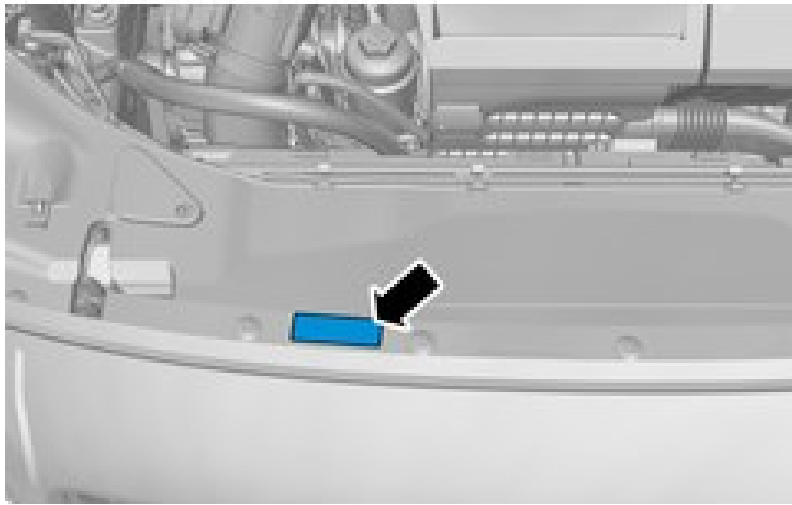


Torque:
M7 , 17 Nm

To install, reverse the removal procedure.

Top up the engine oil , refer to:
Removal, replacement and installation
2 - Engine with mountings and equipment
22 - Lubricating and oil system
220 - general

Install cylinder head , refer to:
Removal, replacement and installation
2 - Engine with mountings and equipment
21 - Engine
211 - cylinder head



Caution! Make sure that the area around the component is clean and free of foreign material.

Use: Isopropanol , 31375638

Fit the decal.

Specifications

Specification/Model	T5
Torque (Nm/rps)	360/30-67
Torque (ft. lbs./rpm)	266/1800-4000
No. of cylinders	5
Bore (in/mm)	3.27/83
Stroke (in/mm)	3.67/93.2
Displacement	2.52 liters / (153.8 cu. in.)
Compression ratio	9.0:1

Oil specifications

Full synthetic engine oil meeting the minimum ACEA A5/B5 must be used. Lower quality oils may not offer the same fuel economy, engine performance, or engine protection.

Volvo recommends:



Refer to the warranty and Service Records information booklet for information on oilchange intervals and oil type requirements.

NOTE

This vehicle comes from the factory with synthetic oil.

Oil additives must not be used.

Oil viscosity

Incorrect viscosity oil can shorten engine life under normal use. SAE 5W-30 will provide

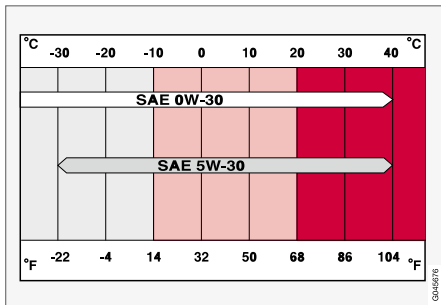
Specifications



good fuel economy and engine protection.
See the viscosity chart.

Extreme engine operation

SAE 0W-30 oil meeting ACEA A5/B5 requirements is recommended for extreme driving conditions.



Viscosity chart

Oil volume

Engine model		Volume (incl. filter)
T5 (5 cyl.)	B5254T5	6.02 US qts (5.7 liters)