



# Technical Journal

TITLE:

**Engine 62: High oil consumption**

<b>REF NO:</b> TJ 29871	<b>ISSUING DEPARTMENT:</b> Technical Service	<b>CAR MARKET:</b> United States and Canada		
<b>PARTNER:</b> 3 US 7510 Volvo Cars North America		<b>ISSUE DATE:</b>		
<b>FUNC GROUP:</b> 2100	<b>FUNC DESC:</b> Engine	<b>YEAR</b> 2015	<b>MONTH</b> 02	<b>DAY</b> 05
<b>Page 1 of 14</b>				

**“Right first time in Time”**

## Attachment

File Name	File Size
Attachment TJ 29871.pdf	2.5818 MB
Oil specifications_US_MY12_150122.pdf	0.0597 MB

## Vehicle Type

Type	Eng	Eng Desc	Sales	Body	Gear	Steer	Model Year	Plant	Chassis range	Struc Week Range
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



## **Text**

### **DESCRIPTION:**

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

### **PRODUCT MODIFICATION:**

This engine type was replaced by engine 61 on MY 2013.

### **VEHICLE REPORT:**

Please follow the general TIE Reporting guidelines available in the TIE system under “Instructions”. If the symptom is not remedied by using this TJ, submit a Vehicle Report. When submitting a Vehicle Report for a condition described in this TJ, use concern area “Vehicle Report and sub concern area “Support Needed” with function group 2100.

### **SERVICE:**

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

Change engine oil to fully synthetic engine oil, viscosity SAE 5W-30, quality ACEA A5/B5. This will be the requirement for the rest of the life of this vehicle.

Attached file, “Oil specifications\_US\_MY12\_150122”, must be printed and Owners Manual updated.

Make the customer aware of the change to a full synthetic oil requirement.

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



## Volvo Car Customer Service

TJ Instruction 29871

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

Issue	Date	Reason
1	2015-01	First issue

### Affected vehicles

Model year	Model	Engine	Chassis
2012	S60 (11-)	B5254T5	017819-170117

### Materials

Materials	Qty.	Part No.	Notes
Engine oil	0.1		See VIDA for quantity
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

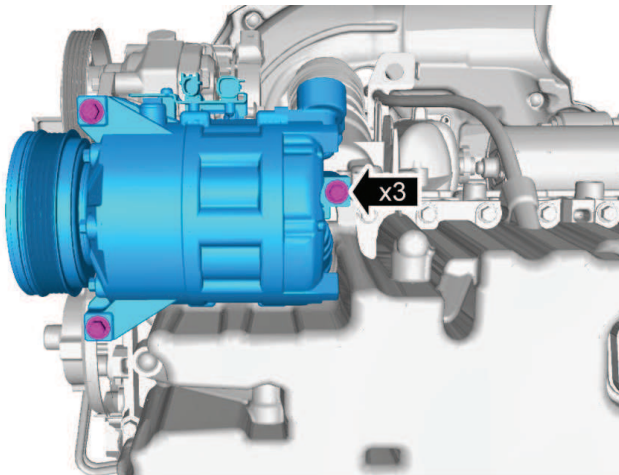
Designation	Part No.
Piston ring pliers	
Piston ring compressor	

## 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

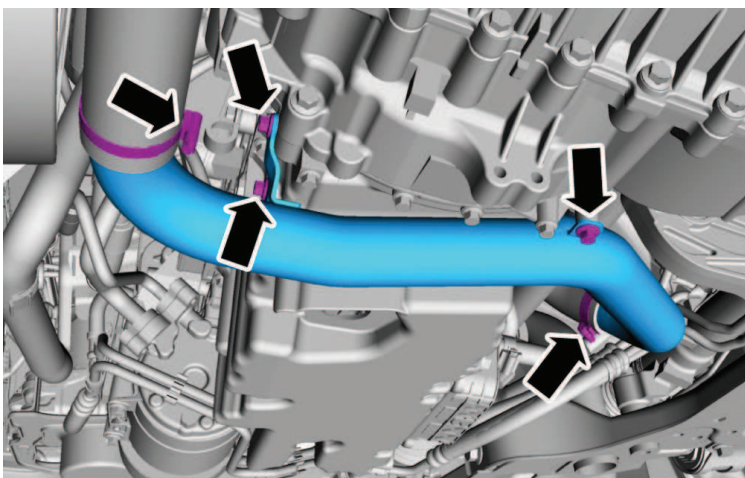
Drain engine oil , refer to:  
Removal, replacement and installation  
2 - Engine with mountings and equipment  
22 - Lubricating and oil system  
220 - general



Remove the screws.

**Torque:**

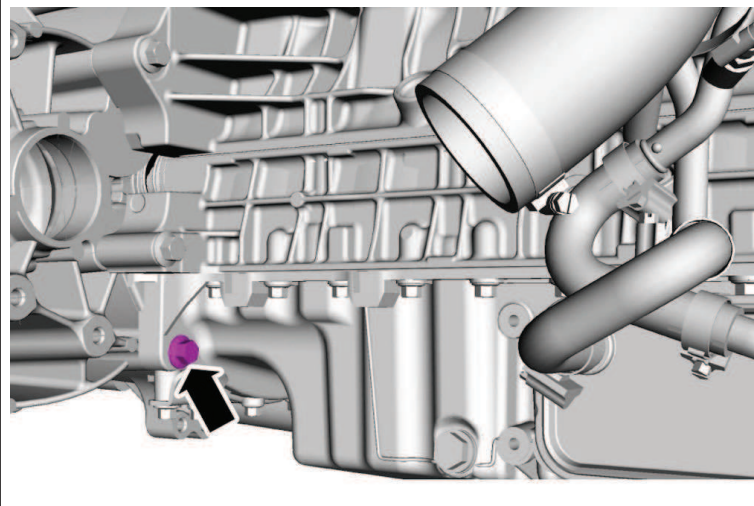
M8 , 24 Nm



Remove the screws.

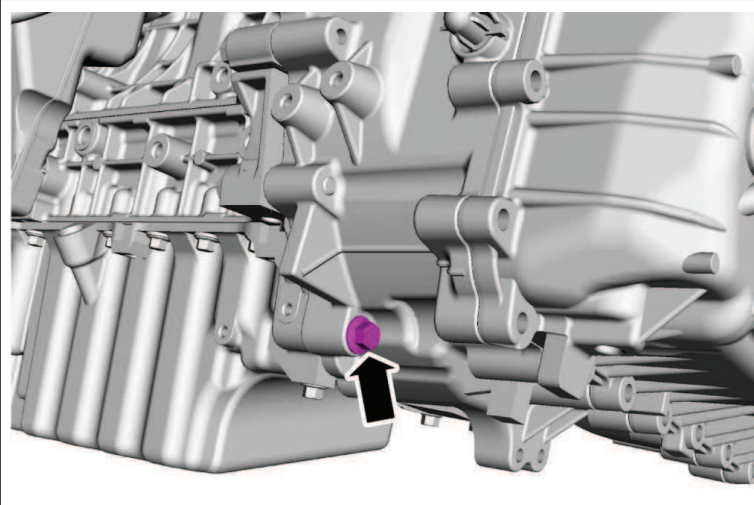
**Torque:**

M7 , 17 Nm



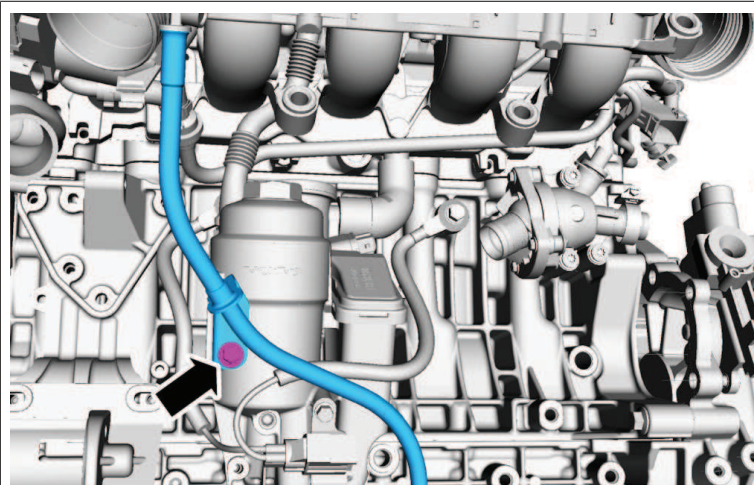
Remove the screw.

**Torque:**  
M10 , 50 Nm



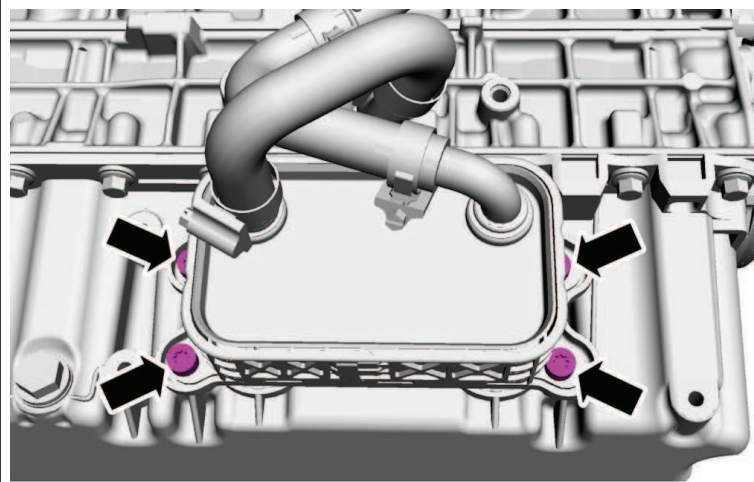
Remove the screw.

**Torque:**  
M10 , 50 Nm



Remove the screw.

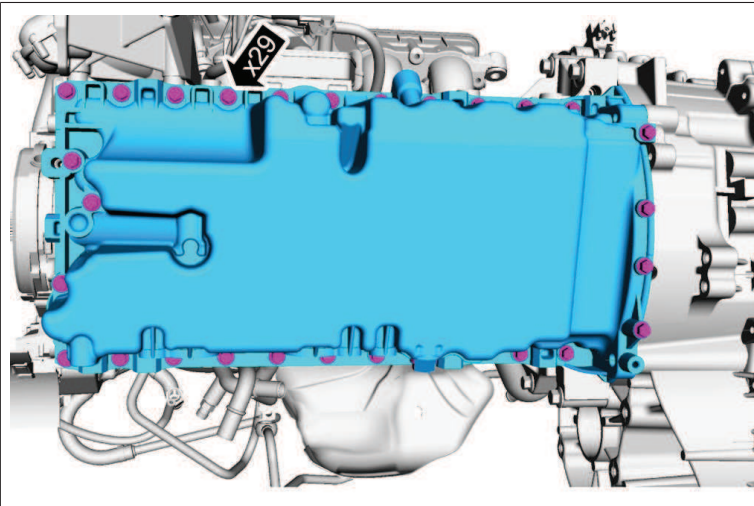
**Torque:**  
M6 , 10 Nm



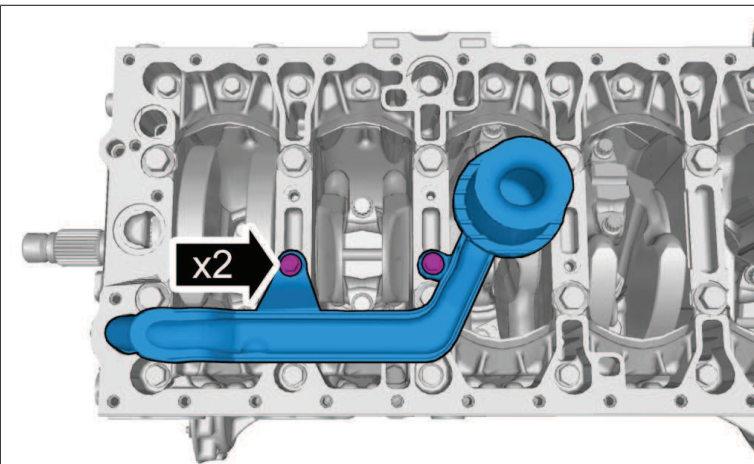
Remove the screws.

**Torque:**

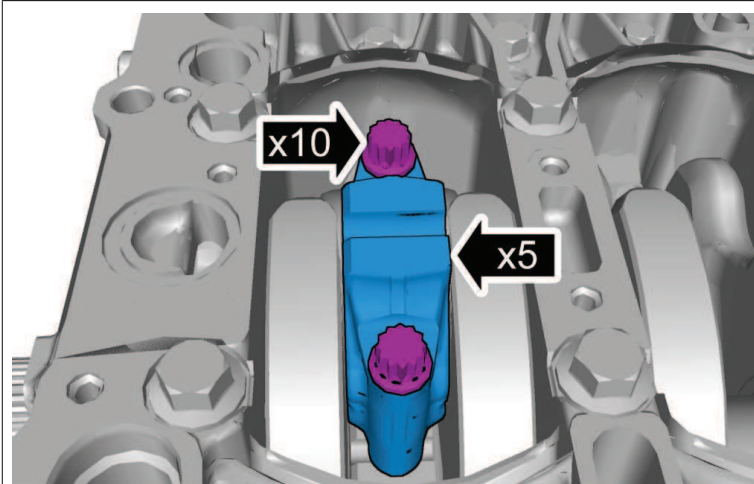
M7 , 17 Nm



Remove the screws.



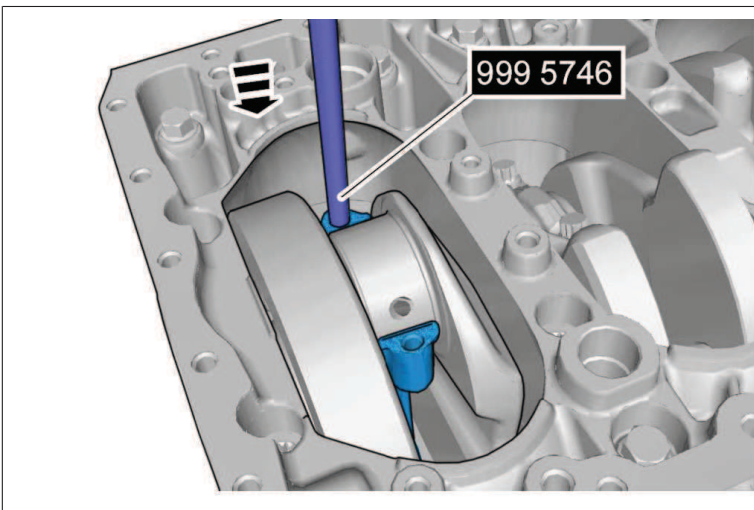
Remove the screws.



**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.

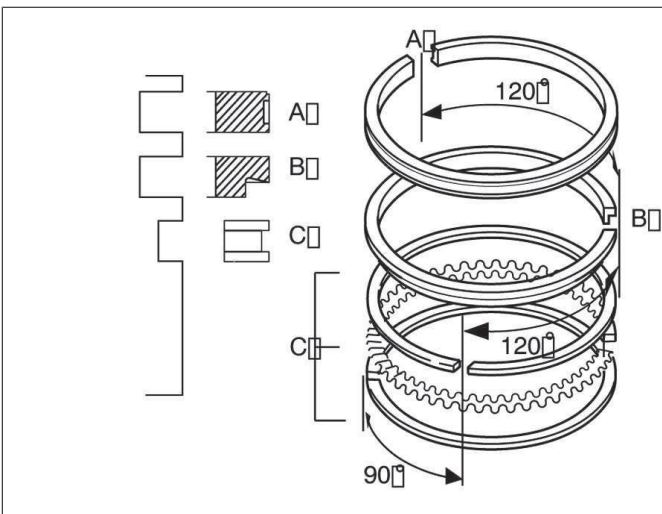


**Caution!** Take extra care when handling the components.

**Caution!** Take extra care not to damage the bearings.

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

**Installation**

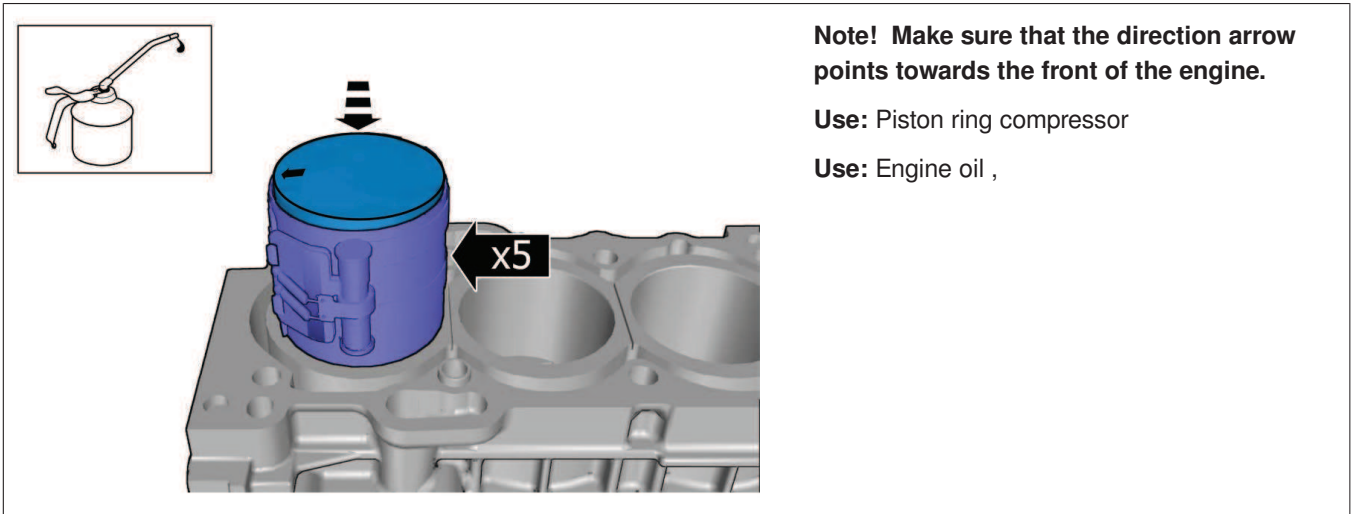
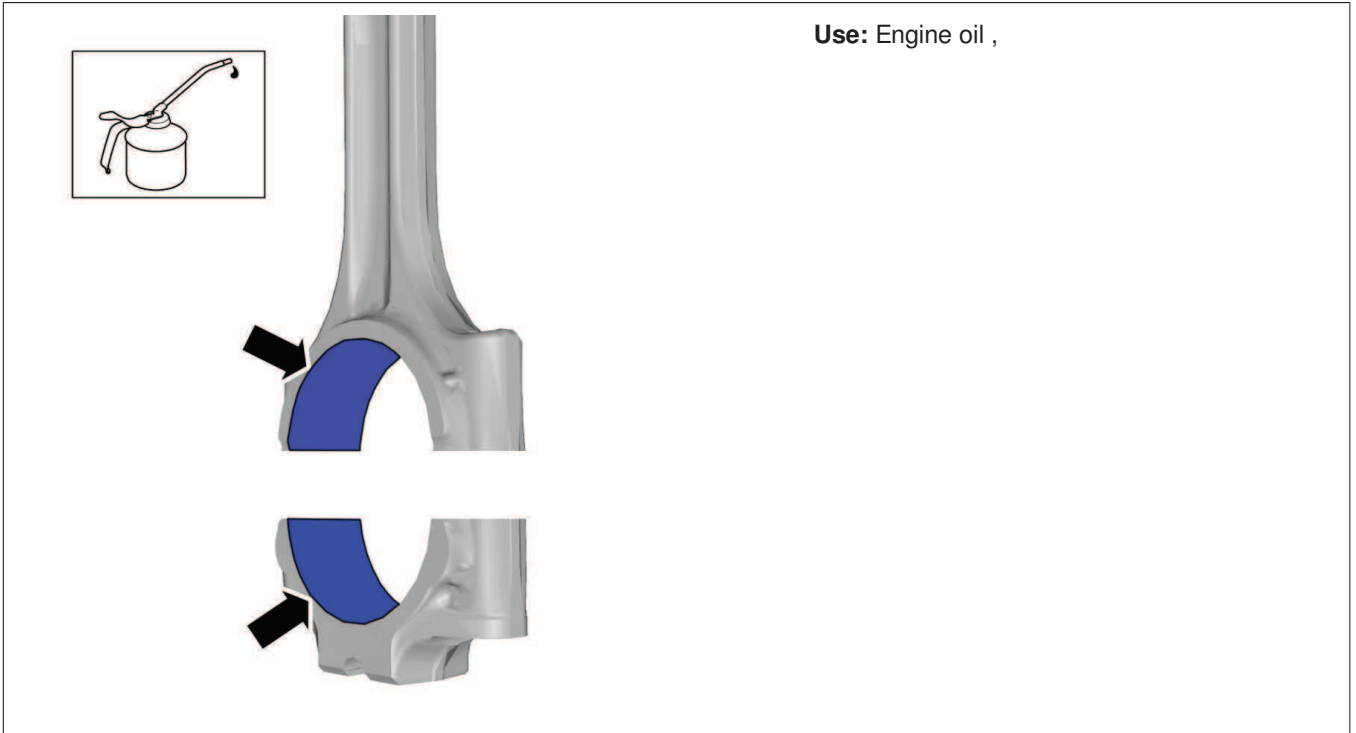


**Note!** Make sure that the component is clean and free of foreign material.

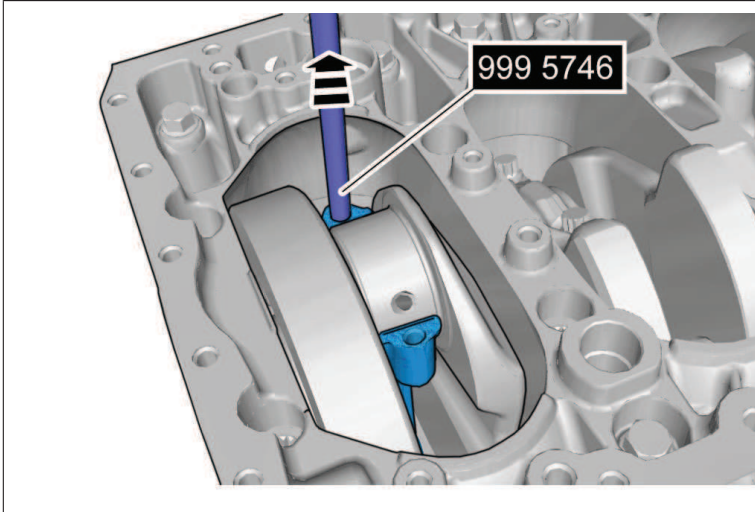
**Note!** The text on piston ring A must be face up.

**Note!** Make sure that new components are installed.

**Use:** Piston ring pliers

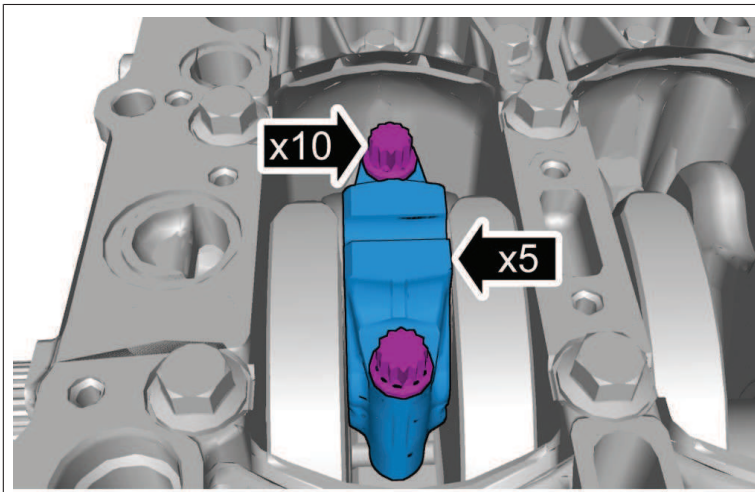






**Caution! Take extra care not to damage the bearings.**

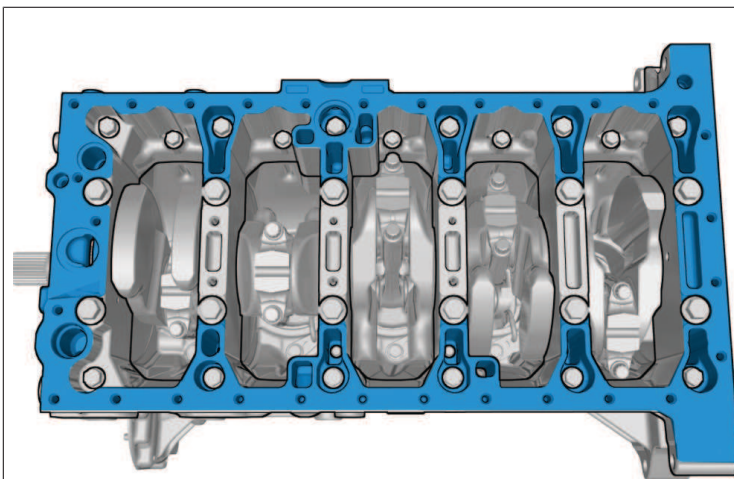
Special Tool: T9995746, Holder (remov.piston/ connecting rod) B 200-B 6304



**Caution! Make sure that the components are positioned correctly.**

**Torque:**

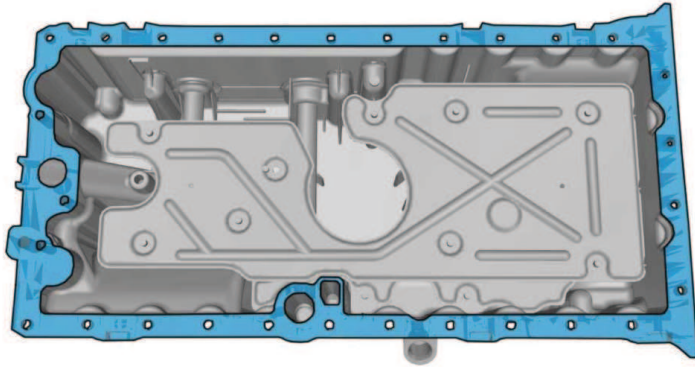
- Stage 1 : Cap connecting rod , 30 Nm
- Stage 2 : Cap connecting rod , 90°



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

**Use:** Abrasive cloth , 9511024

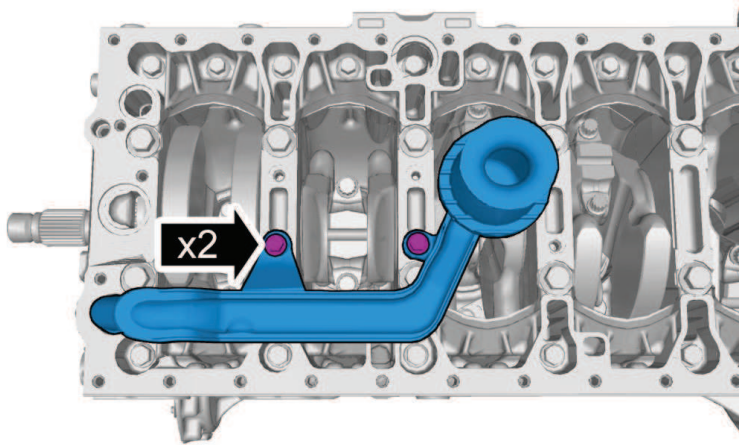
**Use:** Isopropanol , 31375638



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

**Use:** Abrasive cloth , 9511024

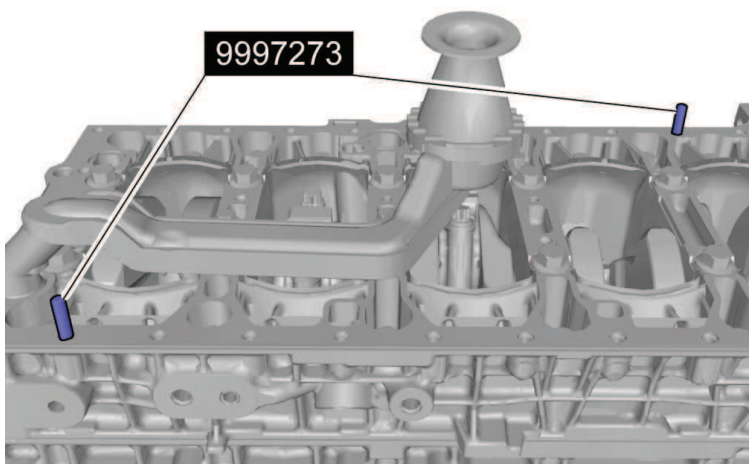
**Use:** Isopropanol , 31375638



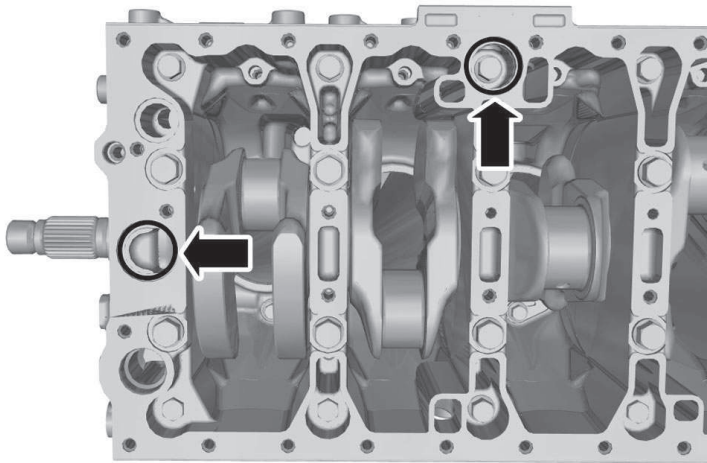
Install the screws.

**Torque:**

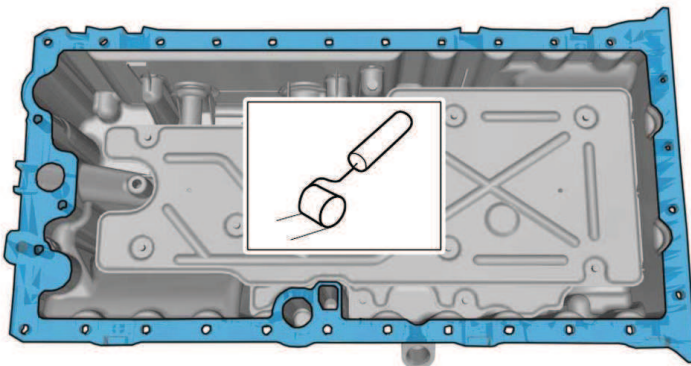
M7 , 17 Nm



Special Tool: T9997273, Guide pin



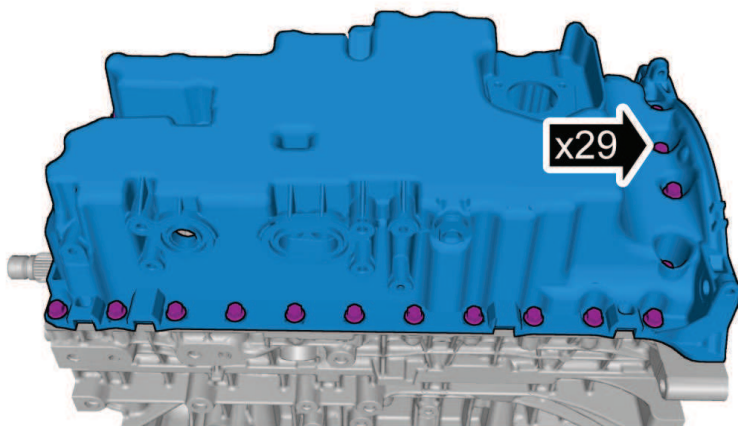
**Caution!** Make sure that the gaskets are correctly located.



**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



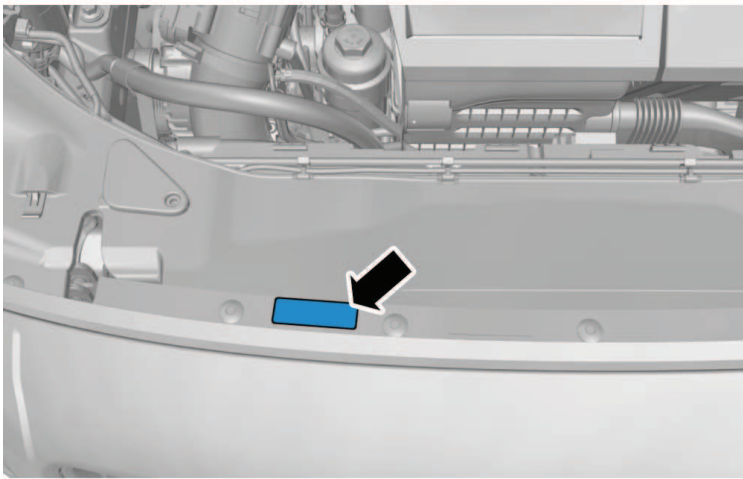
**Torque:**

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

09

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.

**i NOTE**

This vehicle comes from the factory with synthetic oil.

**Oil additives must not be used.**

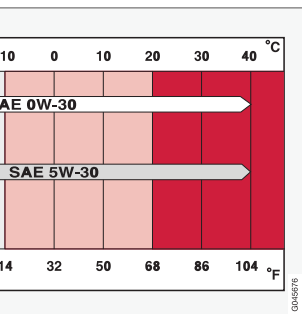
**Oil viscosity**

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

## ifications

### ions

omy and engine protection.  
y chart.



### Extreme engine operation

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

el

B5254T5

Volume (incl. filter)

6.02 US qts (5.7 liters)