# Service Bulletin Trucks

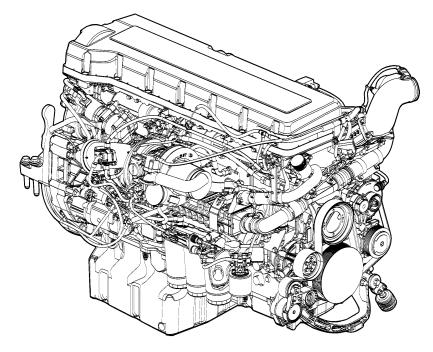
Volvo Trucks North America Greensboro, NC USA

This Service Bulletin replaces SB 262-43, "Thermostat, D16F" dated (2.2007), publication no. PV776–20176582.

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Thermostat Replacement D16F

## Thermostat, Replacement



W2005772

This information covers the replacement of the thermostat on the Volvo D16F engine.

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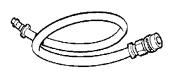
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**Note:** Information is subject to change without notice. Illustrations are used for reference only and may differ slightly from the actual vehicle being serviced. However, key components addressed in this information are represented as accurately as possible.

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## **Special Tools**

For special tools ordering instructions, refer to Tools Information, group 08.



9996049 Coolant Drain Hose



**DBT2V700**Coolant Extraction Tool

## 2627-03-02-02 Thermostat, Replacement

**Excluded: Test** 

You must read and understand the precautions and guidelines in Service Information, group 20, "General Safety Practices, Engine" before performing this procedure. If you are not properly trained and certified in this procedure, ask your supervisor for training before you perform it.

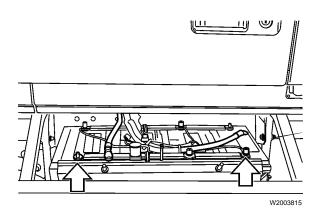
Special tools: 9996049, DBT2V700

## Removal

1

Apply the parking brake and place the shift lever in neutral.

**2**Remove all cables from ground (negative) battery terminals to prevent personal injury from electrical shock.



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3

Connect coolant extraction tool DBT2V700 to the drain fitting at the bottom of the radiator. Drain the coolant.

**Note:** An alternative method is to use drain hose 9996049 to drain coolant into an approved container.



### WARNING

Coolant can be very hot and under pressure. Use care when opening the drain fitting to avoid hot coolant contacting your skin. Failure to do so can result in burns or scalding.

DBT2V700, 9996049

#### 4

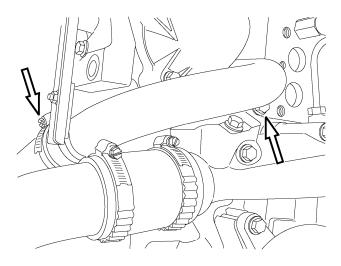
Loosen the clamp and remove the upper radiator hose from the radiator and suction out any remaining coolant.

#### 5

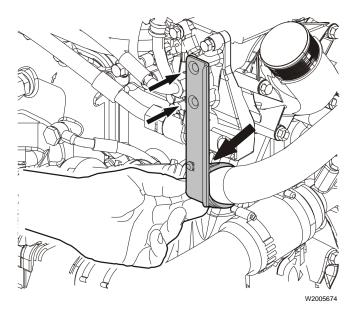
Loosen the clamp and remove the upper radiator hose from the thermostat housing.

### 6

Remove the EGR cooler coolant pipe bolt and clamp located at the front of the engine next to the thermostat housing and loosen hose clamp at the opposite end of pipe.

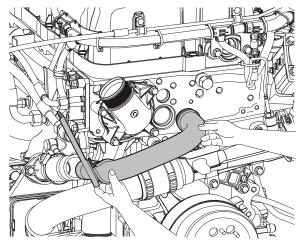


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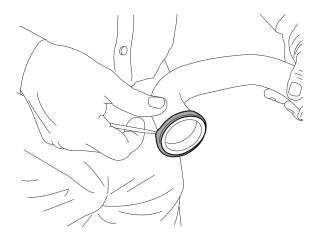


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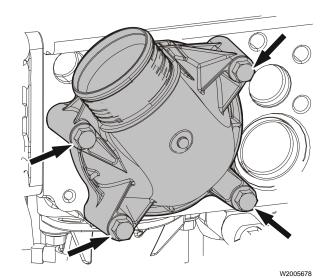
Remove all the fasteners (clamps and bolts) that secure the bracket to the EGR cooler coolant hard pipe at the front of the engine.



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Slide the EGR cooler coolant pipe forward to free the pipe from the cylinder head bore and at the same time, from the EGR cooler coolant rubber hose.

**Note:** Inspect EGR cooler coolant rubber hose. Replace hose only if damaged or deteriorated.

#### 9

Replace the O-ring on the EGR cooler coolant pipe at the cylinder head end. Use a suitable pick for removal.

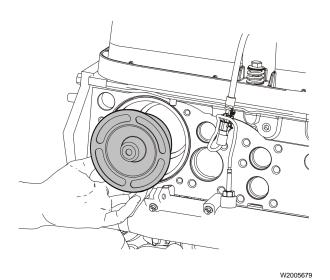
#### 10

Remove the thermostat housing mounting bolts. Then, remove the thermostat housing.

**Note:** Thermostat housing removal may require a slight tap with a rubber mallet to free it from the front of the cylinder head.

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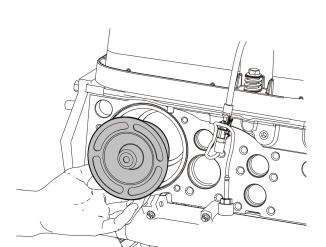
Using hand pressure, remove the thermostat from the front of the cylinder head.

12

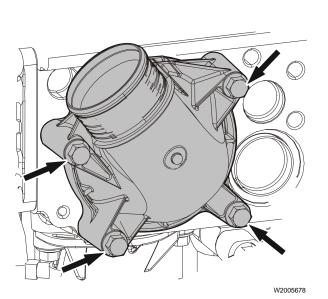
Clean all the sealing surfaces and pipe connections.

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### Installation



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Lubricate the seal on the thermostat with soapy water or fresh antifreeze. Install the thermostat into the cylinder

Put a thin layer of silicone on a new thermostat housing gasket. Position the gasket on the cylinder head.

Note: Make sure that the gasket to the cylinder head is correctly positioned. Use a new gasket.

3

Install the thermostat housing, making sure that the housing gasket stays in position. Thread the thermostat housing bolts so they hold the thermostat housing in place. Torque-tighten the thermostat housing bolts to 24  $\pm$  4 Nm (18  $\pm$  3 ft-lb).

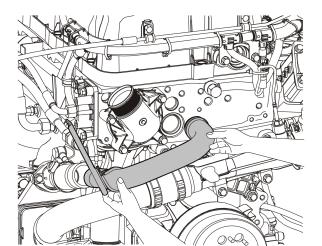
 $24 \pm 4 \text{ Nm}$  $(18 \pm 3 \text{ ft-lb})$ 

Install the EGR cooler coolant hose and slide it rearward to the original hose position. Secure the hose to the cooler with the original clamp tightened securely.

Note: Inspect EGR cooler coolant rubber hose. Replace hose only if damaged or deteriorated.

Date

10.2007



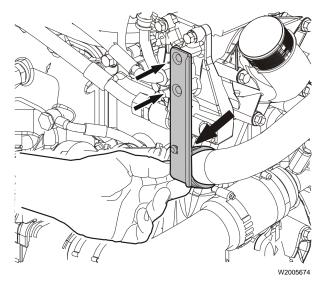
5

With a new O-ring seal positioned on the EGR cooler coolant hard pipe, install the pipe into the front of the cylinder head bore next to the thermostat housing. At the same time, install the EGR cooler end of the pipe into the rubber hose of the EGR cooler. Reposition the hose clamp back in the original position on the EGR coolant pipe and tighten clamp securely. Install the EGR coolant pipe clamp at the front of the engine and tighten the coolant pipe bolt to the specified torque.





Reposition the EGR cooler coolant hard pipe bracket back to its original position and install the bracket bolts. Reposition the coolant pipe bracket clamp back to its original position and tighten the clamp bolt. Torque-tighten the bracket bolts to specification.



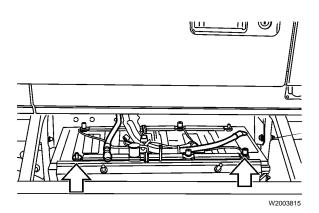
7

Install the upper radiator hose to the thermostat housing and to the radiator. Position the clamps and tighten to secure.

#### 8

Fill the engine cooling system with the recommended coolant using the coolant extractor.

**DBT2V700** 



Install all previously removed cables to the ground (negative) battery terminals.

**10** Start the engine, check for leaks and proper operation. After shutdown, replenish fluids as necessary.