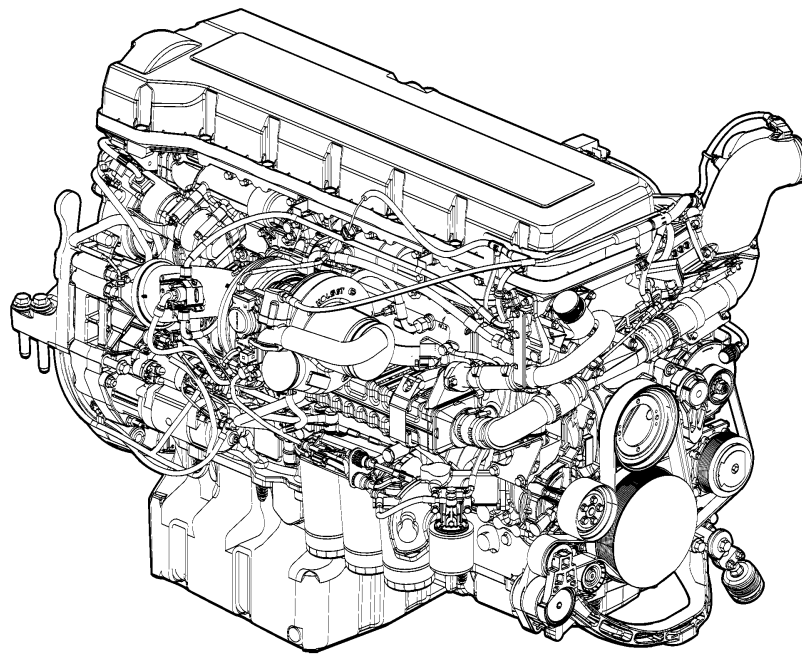


This Service Bulletin replaces SB 221-49, "Piston Cooling," dated (3.2007), publication no. PV776-20179586

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## Piston Cooling Valve Replacement D16F

### Piston Cooling Valve, Replacement



W2005772

This information covers servicing the piston cooling control valves on a Volvo D16F engine.

**Note:** When the engine is running, there usually is a buildup of heat in the piston that, in some cases, requires extra cooling. Piston cooling is set in motion when the oil pressure is sufficient to open the piston cooling opening valve in the cylinder block. The oil is then forced through the engine block drilled galleries into the piston cooling nozzles for piston cooling. There is one nozzle for each piston.

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

# Service Procedures

## 2229-03-02-05

### Piston Cooling Valve, Replacement

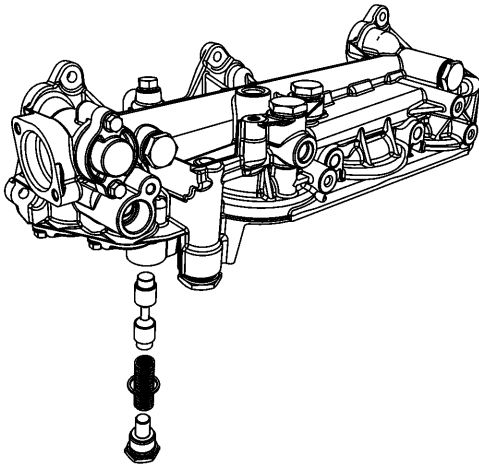
You must read and understand the precautions and guidelines in Service Information, group 20, "General Safety Practices, Engine" before performing this procedure. If you are not properly trained and certified in this procedure, ask your supervisor for training before you perform it.

#### Removal

1  
Clean the oil filter housing area around the piston cooling valve.

2  
Remove the spring and valve from the housing.

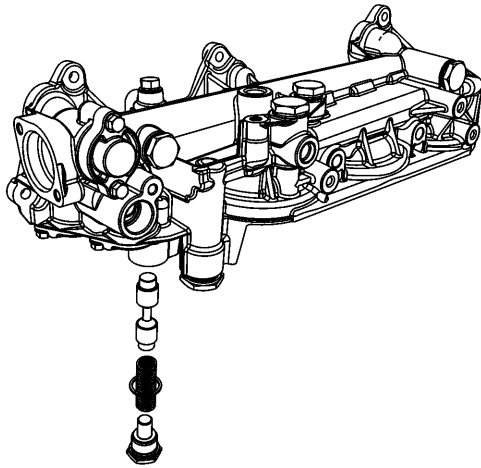
**Note:** Catch excess oil in an approved container.



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#### Installation

1  
Clean the valve bore and retainer plug area of the oil filter housing.



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**2**  
Place a new seal on the retainer plug and lubricate with engine oil.

**3**  
Insert a replacement valve and spring into the valve bore.

**Note:** The valve can be installed with either end up.

**4**  
Compress the spring and install the retainer plug into the housing.

**Note:** Make sure that the O-ring is not damaged during installation.

**5**  
Start the engine, check for leaks and proper operation. After shutdown, replenish fluids as necessary.