



**Haynes**  
shows you how

BMW 3-Series (92-98) & Z3 (96-98) Haynes Online Manual

## 3 Thermostat - removal, testing and installation

### Warning:

Wait until the engine is completely cool before beginning this procedure.

### Removal

#### Note:

A new thermostat sealing ring and (where fitted) housing gasket/seal will be required on installation.

1 Disconnect the battery negative lead. **Caution:** *If the radio in your vehicle is equipped with an anti-theft system, make sure you have the correct activation code before disconnecting the battery.*

2 Drain the cooling system (see [Chapter 1](#)). To improve access to the thermostat housing, remove the cooling fan and coupling (see [Section 4](#)).

3 Loosen the retaining clamp(s) and disconnect the coolant hose(s) from the thermostat housing on the front of the cylinder head/ timing chain cover (as applicable).

4 Loosen and remove the retaining screws and remove the thermostat housing (see illustration). Recover the housing gasket/seal (where fitted). On six-cylinder engines, it will be necessary to unbolt the engine lifting bracket to allow the housing to be removed.

### 3.4 Remove the thermostat housing . . .



5 Lift the thermostat out from the cylinder head and recover its sealing ring (see illustration) .

### 3.5 . . . and lift out the thermostat and sealing ring



## Testing

6 A rough test of the thermostat may be made by suspending it with a piece of string in a container full of water. Heat the water to bring it to a boil - the thermostat must open by the time the water boils. If not, replace it.

7 If a thermometer is available, the precise opening temperature of the thermostat may be determined, and compared with the figures given in the Specifications. The opening temperature is also marked on the thermostat.

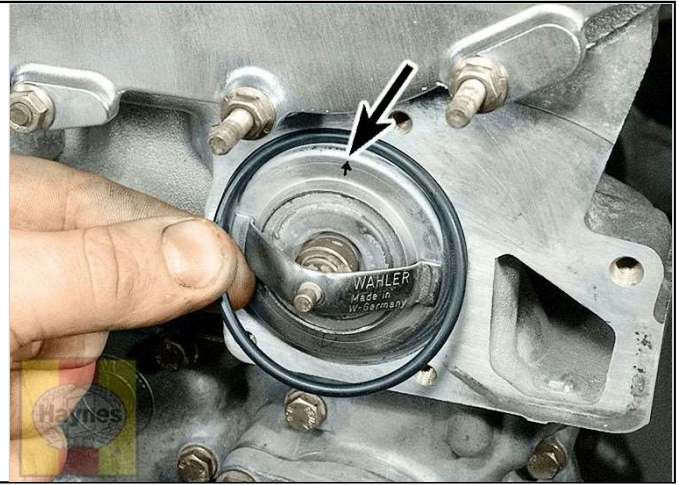
8 A thermostat which fails to close as the water cools must also be renewed.

## Installation

9 Installation is a reversal of removal, bearing in mind the following points.

- A. Fit the thermostat and new sealing ring to the head/timing cover. Note that the thermostat should be fitted with its bleed hole/arrow marking uppermost (see illustration).
- B. Fit the new gasket/seal (where necessary) and tighten the thermostat cover bolts to the specified torque setting (see illustration).
- C. Where necessary, install the cooling fan (see [Section 5](#) ).
- D. On completion refill the cooling system (see [Chapter 1](#) ).

**3.9a Ensure the thermostat is fitted with its bleed hole/arrow marking (arrow) uppermost and fit the new sealing ring**



**3.9b Where necessary, fit a new gasket/seal to the thermostat housing**



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