

**Haynes**
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BMW 3-Series and Z4 (99-05) Includes 2006 325ci/330ci Coupe and Convertible models Haynes Online Manual.

7 Cooling system electrical switches - testing, removal and installation

Radiator outlet switch

Testing

1 Testing of the switch should be entrusted to a BMW dealer or other qualified repair shop.

Removal

2 The switch is located in the radiator lower hose. The engine and radiator must be cold before removing the switch.

3 Disconnect the cable from the negative terminal of the battery (see [Chapter 5, Section 1](#)).

4 Either drain the cooling system to below the level of the switch (as described in [Chapter 1](#)), or have ready a suitable plug which can be used to plug the switch aperture in the radiator while the switch is removed. If a plug is used, take great care not to damage the radiator, and do not use anything which will allow foreign matter to enter the radiator.

5 Disconnect the wiring connector from the switch (see illustration) .

7.5 The radiator outlet switch is located in the lower hose



6 Release the retaining clip, and remove the switch. Recover the sealing ring.

Installation

7 Installation is a reverse of removal using a new sealing washer. On completion, refill the cooling system as described in [Chapter 1](#) .

8 Start the engine and run it until it reaches normal operating temperature, then continue to run the engine and check that the cooling fan cuts in and functions correctly.

Coolant temperature sensor

Testing

9 Testing of the sensor should be entrusted to a BMW dealer or other qualified repair shop.

Removal

10 Either partially drain the cooling system to just below the level of the sensor (as described in [Chapter 1](#)), or have ready a suitable plug which can be used to plug the sensor aperture while it is removed. If a plug is used, take great care not to damage the sensor unit aperture, and do not use anything which will allow foreign matter to enter the cooling system.

11 The sensor is screwed into the left-hand side of the cylinder head, under the intake manifold.

12 Disconnect the wiring from the sensor. Unscrew the sensor unit from the cylinder head and recover its sealing washer (see illustration) .

7.12 Coolant temperature sensor (shown with the intake manifold removed)



Installation

13 Install a new sealing washer to the sensor unit and reinstall the sensor, tightening it securely.

14 Reconnect the wiring connector then refill the cooling system (see [Chapter 1](#)).

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