

**Haynes**
shows you how

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

10 Heater/ventilation components - removal and installation

Warning:

The models covered by this manual are equipped with Supplemental Restraint systems (SRS), more commonly known as airbags. Always disarm the airbag system before working in the vicinity of any airbag system component to avoid the possibility of accidental deployment of the airbag, which could cause personal injury (see Chapter 12) . Do not use a memory saving device to preserve the PCM's memory when working on or near airbag system components.

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

Integrated Heating Cooling Assembly (IHKA) control panel

3 series models

2 Working below the IHKA control panel, open the utility compartment door.

3 Push up in the center of the utility compartment door to release the locking tabs.

4 Remove the utility compartment from the dash.

5 Pry the shift lever bezel from the center console (see [Chapter 7](#)).

6 Remove the shift knob or lever (see [Chapter 7](#)). Unclip the boot from around the shift panel and move the rubber boot up and around the shift lever. Do not remove the boot from the console.

7 Remove the mounting screws from the rear of the shift panel and lift the trim to unhook the assembly from the front of the console.

8 Remove the mounting screws from the front and rear of the ashtray assembly and remove it from the console.

9 Reach in from the opening and push the control panel out of the dash (see illustration) .

10.9 Reach in with your hand and push the control panel out of the dash



10 Disconnect the electrical connectors from the back of the IHKA control panel.

11 Use an anti-static pad and disconnect the IHKA control module from the control panel.

12 Installation is the reverse of removal. Be sure to use a BMW scan tool to program the IHKA module after it has been installed back into the dash. Consult with a dealer service department or other qualified automotive repair facility.

Z4 models

13 Remove the radio (see [Chapter 12](#)).

14 Using a panel removal tool, carefully pry the trim panel below the control panel assembly out of the dash.

15 Disconnect the electrical connectors from behind the control panel.

16 Position a protective cover below the control panel covering the center console.

17 Press the controls on the panel into the dash, move the control panel assembly away from the dash and lower the assembly out the bottom through the opening.

18 Installation is the reverse of removal. Be sure to use a BMW scan tool to program the IHKA module after it has been installed back into the dash. Consult with a dealer service department or other qualified automotive repair facility.

Heater core

19 Have the air conditioning system refrigerant discharged by a BMW dealer or suitably-equipped specialist.

20 Drain the engine coolant (see [Chapter 1](#)).

3 series models

21 Remove the in-cabin air filter (see [Chapter 1](#)).

22 Release the wire harness holder locking tabs and remove the harness and hoses from the holder (see illustration) .

10.22 Unclip the cable ducting



23 Remove the screws and separate the ducting from the cowl (see illustration) .

10.23 Remove the two Torx screws and remove the inlet ducting



24 Working in the passenger compartment, remove the center console and the instrument panel (see [Chapter 11](#)).

25 Working in the engine compartment, disconnect the heater hoses at the firewall (see illustration) . Use shop towels or suitable plugs to prevent coolant spillage.

10.25 Loosen the clamps and disconnect the heater hoses from the firewall



26 Working in the passenger compartment, remove the right side air duct from the IHKA housing.

27 Disconnect the electrical connectors from the housing. Label each connector carefully.

28 Remove the heater core temperature sensor (see illustration) .

10.28 Pry the temperature sensor from the heater box



29 Remove the retaining clips from the heater core housing cover (see illustration) .

10.29 Release the clip and remove the core cover



30 Remove the heater core cover and unhook the tabs located in the rear of the housing.

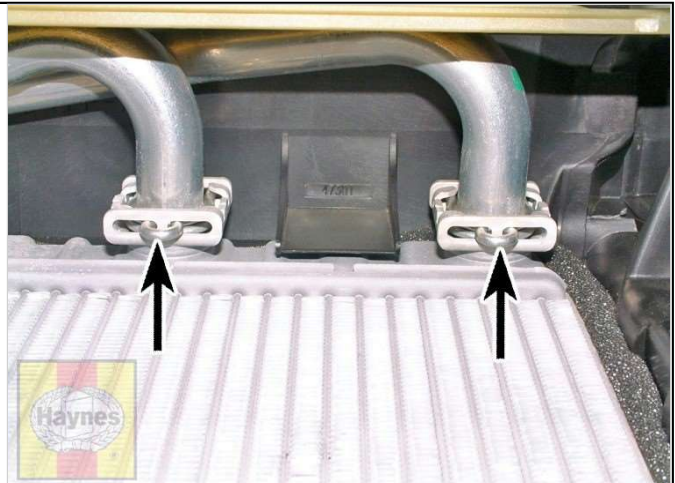
31 Remove the screw securing the coolant pipes (see illustration) .

10.31 Heater pipe bracket retaining screw



32 Disconnect the coolant pipes at the heater core (see illustration) . Tilt the heater core to remove it from the IHKA housing.

10.32 Remove the heater core pipe retainers



33 Unbolt any brackets securing the heater box, and disconnect any wiring connectors, having noted their locations and harness routing. Remove the heater core from the vehicle.

34 Be prepared for coolant spillage and position a suitable container beneath the union on the end of the core.

35 Installation is the reverse of removal. Use new sealing rings. On completion, refill the cooling system as described in [Chapter 1](#) .

Z4 models

36 Remove the control panel (see Steps 13 through 18).

- 37 Remove the lower section of the steering column (see [Chapter 10](#)).
- 38 Remove the instrument panel (see [Chapter 11](#)).
- 39 Working in the engine compartment, disconnect the heater hoses at the firewall. Use shop towels or suitable plugs installed into the hose ends to prevent coolant overflow.
- 40 Working directly next to the heater hoses, remove the bolts for the air conditioning lines.
- 41 Working under the dash, remove the heater assembly mounting bolts from below the steering column.
- 42 Remove the nuts from the brace at the left and right corners of the passenger compartment.
- 43 Remove the screws from the center console area of the heater assembly.
- 44 Remove the brace from the passenger compartment.
- 45 Lower the heater assembly from the dash area.
- 46 Unbolt the adapter plate securing the heater box, and disconnect any wiring connectors, having noted their locations and harness routing. Remove the heater core from the heater assembly.
- 47 Be prepared for coolant spillage and position a suitable container beneath the union on the end of the core.
- 48 Installation is the reverse of removal. Use new sealing rings. On completion, refill the cooling system as described in [Chapter 1](#) .

Heater blower motor

- 49 Have the air conditioning system refrigerant discharged by a BMW dealer or suitably-equipped specialist.

3 series models

- 50 Remove the in-cabin air filter (see [Chapter 1](#)).
- 51 Release the wire harness holder locking tabs and remove the harness and hoses from the holder .
- 52 Remove the lower housing screws and separate the housing from the cowl (see [illustration 10.23](#)) .
- 53 Remove the engine compartment side trim panel.
- 54 Remove the heater firewall cover mounting screws and lift the cover from the engine compartment.
- 55 Remove the engine cover (see [Chapter 2A](#)).

56 Peel away the rubber sealing strip from the housing opening.

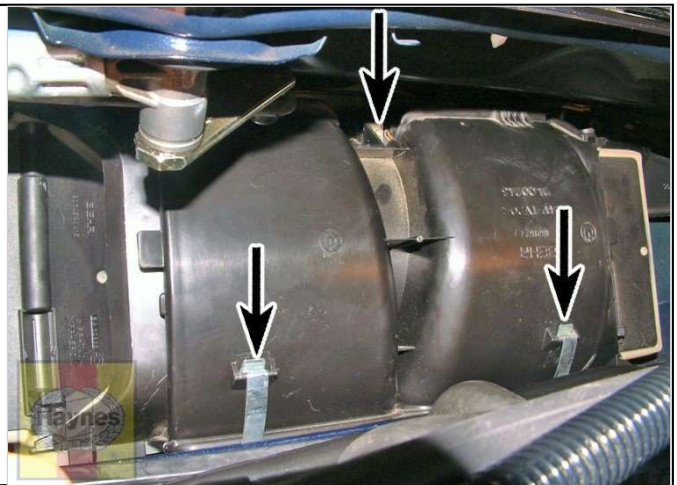
57 Pull up the right-hand flap spindle lever, and remove the flap (see illustration) .

10.57 Lift the spindle lever to remove the flap



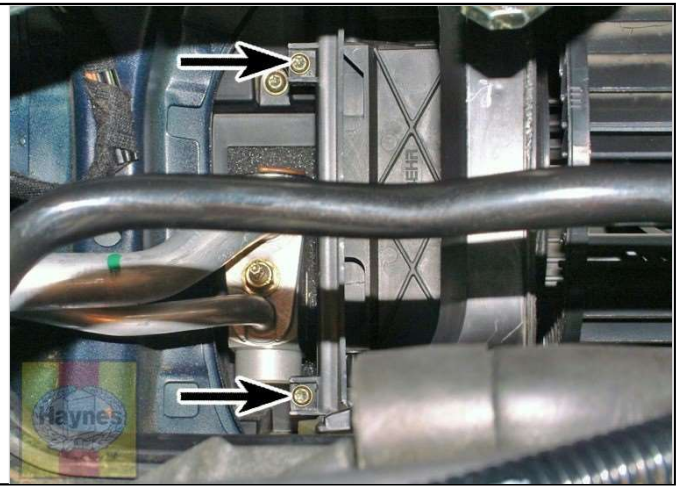
58 Remove the single screw, release the two retaining clips and remove the heater motor front cover (see illustration) .

10.58 Remove the screw, release the clips and remove the blower motor cover

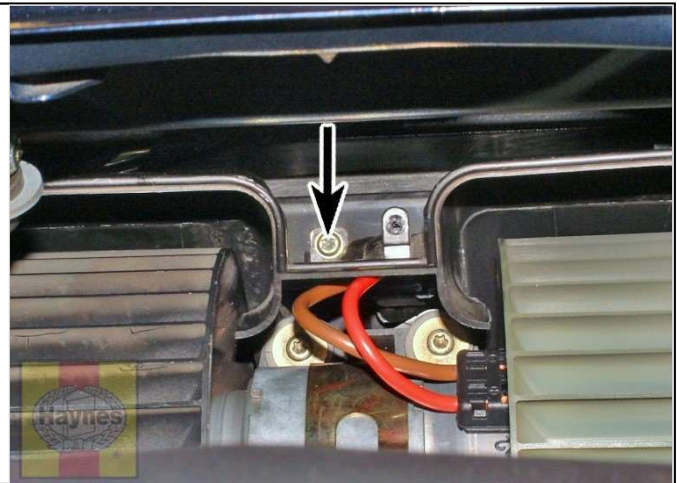


59 Remove the three screws and remove the right-hand cover from the motor (see illustrations) .

10.59a Remove the two screws at the right-hand side . . .



10.59b . . . and one screw in the center



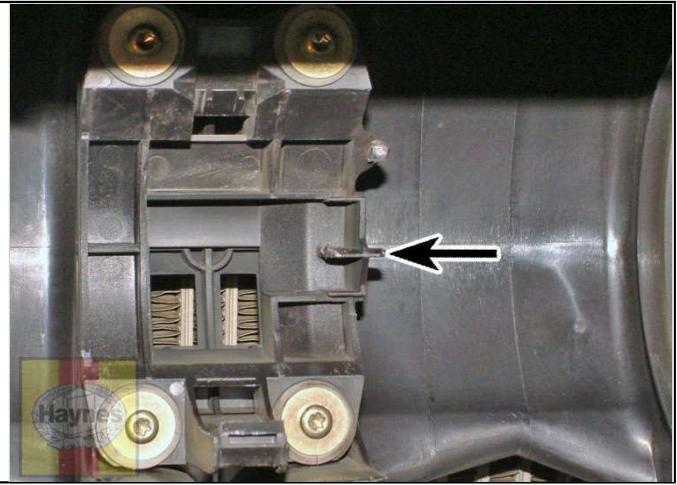
60 Disconnect the motor wiring connector and, using a spiked-tool, push the retaining clip down and release the motor (see illustration) . Maneuver the motor out through the passenger side of the opening.

10.60 Push down the retaining clip to release the motor



61 Installation is a reversal of removal. Ensure that the locating lug in the motor housing engages correctly with the rectangular hole in the motor casing (see illustration) .

10.61 Ensure the lug engages with the corresponding hole in the motor casing



Z4 models

62 Remove the right side glovebox housing.

63 Remove the footwell and trim panel from the passenger's side foot area.

64 Remove the screws from the current distributor located directly in front of the blower motor and push the assembly forward to remove it.

65 Working below the glovebox area, unlock the plug connectors and disconnect them.

66 Remove the wiring harness and position it off to the side.

67 Remove the heater blower motor fan mounting screws and remove the fan with the motor.

68 Installation is a reversal of removal.

Heater blower motor resistor

69 Refer to the information given in [Section 12](#) regarding *Blower limit switch* .

Heater core valve

70 The heater core valve is mounted in the left-hand side of the engine compartment. Unscrew the expansion tank cap (referring to the **Warning** note in [Section 1](#)) to release any pressure present in the cooling system then securely reinstall the cap.

71 Clamp both heater hoses as close to the coolant valve as possible to minimize coolant loss.

72 Disconnect the valve wiring connector(s).

73 Loosen the retaining clips and disconnect the hoses from the valve then unclip the valve and remove it from the engine compartment.

74 Installation is the reverse of removal.

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