

1992 Volvo 940

Submodel: | Engine Type: L4 | Liters: 2.3

Fuel Delivery: FI | Fuel: GAS

Repair or service of air conditioning components is not covered by this manual, because of the risk of personal injury or death, and because of the legal ramifications of servicing these components without the proper EPA certification and experience. Cost, personal injury or death, environmental damage, and legal considerations (such as the fact that it is a federal crime to vent refrigerant into the atmosphere), dictate that the A/C components on your vehicle should be serviced only by a Motor Vehicle Air Conditioning (MVAC) trained, and EPA certified automotive technician.

NOTE: If your vehicle's A/C system uses R-12 refrigerant and is in need of recharging, the A/C system can be converted over to R-134a refrigerant (less environmentally harmful and expensive). Refer to Section 1 for additional information on R-12 to R-134a conversions, and for additional considerations dealing with your vehicle's A/C system.

1992 Volvo 940

Submodel: | Engine Type: L4 | Liters: 2.3

Fuel Delivery: FI | Fuel: GAS

240 Series and Coupe

1. Disconnect the negative battery cable.
2. Remove the sound insulation and side panels on both sides of the radio, if equipped.
3. Remove the control panel and center console.
4. Remove or disconnect, as required, the center air vents, the cable and electrical connectors from the clock, the glove compartment and air ducts for the center air vents.
5. From the right side, remove the air ducts and disconnect the vacuum hoses from the shutter actuators.
6. Fold back the floor mat, remove the rear floor duct screw and move the duct aside.
7. Remove the outer blower motor casing and the blower motor wheel.

NOTE: It may be necessary to remove the support from under the glove compartment in order to remove the blower motor casing.

8. Disconnect the blower motor switch from the center console and the electrical leads from the switch.
9. From the left side, disconnect the air ducts and the vacuum hoses from the shutter actuators.
10. Remove or disconnect the inner blower motor casing, the vacuum hose from the rear floor shutter actuator, the electrical connector and the blower motor.

NOTE: Should the blower motor need to be replaced, a modified replacement unit is available. Certain modifications must be done and instructions are included with the new assembly.

To install:

11. Clean heater housing of all dirt, leaves, etc. before installation.
12. Install the blower motor, the electrical connector, the vacuum hose to the rear floor shutter actuator and the inner blower motor casing.
13. Install the blower motor wheel and the outer blower motor casing.
14. Install the rear floor air duct and the floor mat.
15. At the left side, connect the air ducts and the vacuum hoses to the shutter actuators.
16. Connect the electrical leads to the blower motor switch and the switch to the center console.
17. At the right side, install the air ducts and connect the vacuum hoses to the shutter actuators.
18. Install or connect, as required, the center air vents, the cable and electrical connectors to the clock, the glove compartment and air ducts for the center air vents.
19. Install the control panel and center console.
20. Install the sound insulation and side panels to both sides of the radio.
21. Reconnect the negative battery cable.
22. Check the system for proper operation.

NOTE: On some vehicles, a drum type fan is used which can be balanced by fitting steel clips to the outer edge. On most vehicles, a hose is connected to the fan housing to supply cooling air to avoid damage to the fan motor assembly.

740 Series

1. Disconnect the negative battery cable.
2. Remove the lower glove box panel and the glove box.
3. Unfasten the electrical connector from the blower motor.
4. Remove the blower motor-to-housing screws and the blower motor assembly.

To install:

5. Clean the heater housing of all dirt, leaves, etc. before installation.
6. Attach the electrical connector to the blower motor.
7. Install the motor, screws and panel beneath the glove compartment.
8. Connect the negative battery cable.
9. Check the blower motor operation.

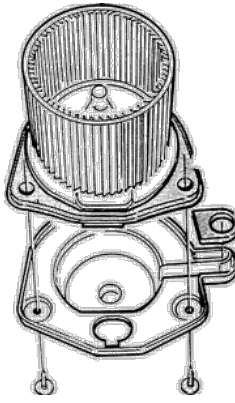
760, 780, 900 Series and S90/V90 Models

WITH AUTOMATIC CLIMATE CONTROL (ACC)

1. Disconnect the negative battery cable.
2. Remove the lower glove box panel.
3. From the right side, remove the instep molding.
4. Remove the panel from above the control unit, being careful not damage it.
5. Unfasten the electrical connector from the control unit.
6. Remove the control unit-to-bracket bolts and the control unit.
7. Remove the bracket-to-chassis bolts and the bracket.
8. Remove the electrical connector from the blower motor.
9. Remove the ventilation pipe, blower motor-to-housing screws and blower motor.

To install:

10. Clean the heater housing of all dirt, leaves, etc. before installation. Install the blower motor and ventilation pipe.
11. Fasten the electrical connector to the blower motor.
12. Install the control unit bracket and control unit.
13. Attach the electrical connector to the control unit.
14. Install the panel above the control unit, the instep panel and the lower glove box panel.
15. Connect the negative battery cable.
16. Check the blower motor operation.



WITH ELECTRONIC CLIMATE CONTROL (ECC)

1. Disconnect the negative battery cable.
2. From the right side, remove the lower glove box panel and the glove box.
3. Remove the electrical connector and the mounting bracket from the blower motor housing.
4. Remove the electrical connector from the blower motor.
5. Remove the blower motor-to-housing screws and the motor.

To install:

6. Clean the heater housing of all dirt, leaves, etc. before installation.
7. Position the rubber seal to the blower motor and install the assembly.
8. Attach the electrical connector to the blower motor and the positive terminal to the housing.
9. Connect the negative battery cable.
10. Check all blower motor speeds for proper operation.
11. Install the glove box and the lower panel.

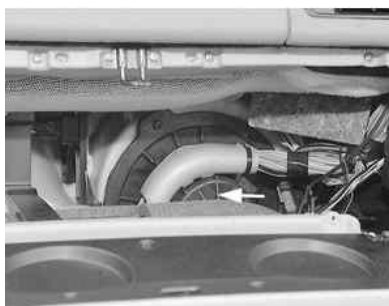
850 and C70/S70/V70 Series

1. Disconnect the negative battery cable.
2. Remove the following:
 - Three passenger's side soundproofing panel screws and panel
 - Four glove compartment screws and glove compartment
 - Four glove compartment door screws and door
 - On vehicles equipped with a passenger side airbag, remove the support brace for the air bag module
 - Fan motor connector
 - Cable duct from the fan motor
 - Two connectors from the brackets
 - Four fan motor screws and fan motor

To install:

3. Install the following in order:
 - New fan motor and attaching screws
 - Two connectors in the brackets
 - Cable duct to the fan motor
 - The support brace for the air bag module
4. Install the glove compartment and door using the screws.
5. Refit the soundproofing panel and screws.
6. Connect the negative battery cable.
7. Test the fan motor function.

Fig. 2: The blower motor is accessible after the glove box is removed



1992 Volvo 940

Submodel: | **Engine Type:** L4 | **Liters:** 2.3

Fuel Delivery: FI | **Fuel:** GAS

On all vehicles, make sure the air mix shutter assembly touches both end stops when the control cable is moved between the COOL and WARM positions on the manual control head assembly.

1992 Volvo 940

Submodel: | Engine Type: L4 | Liters: 2.3

Fuel Delivery: FI | Fuel: GAS

240 Series and Coupe

1. Disconnect the negative battery cable.
2. Remove the soundproofing and side panels from both sides of the center dash console.
3. Remove the radio assembly.
4. Remove the center control panel. Position the control assembly as far forward as possible.
5. Remove the cable (upper end) from the lever on the control assembly.
6. Disconnect the cable (lower end) from the proper distribution door. Note its location and position for correct installation.
7. Remove the control cable.

To install:

8. Install the cable onto the proper distribution door.
9. Route the control cable in the proper position.
10. Attach the cable to the control panel assembly.
11. Install the center control panel.
12. Verify the cable operation.
13. Adjust the cable, as necessary.
14. Install the radio.
15. Install the soundproofing and side panels.
16. Connect the negative battery cable.

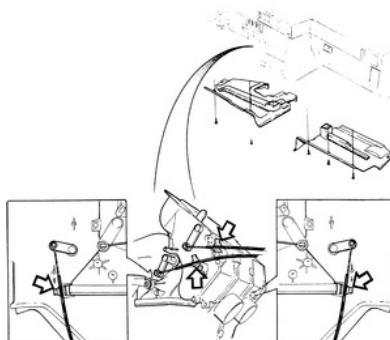
Except 240 Series and Coupe

1. Disconnect the negative battery cable.
2. Remove the glove box and panel below the glove box assembly.
3. Position the heater control to the WARM position.
4. Remove the trim panel.
5. Remove the control assembly from the dashboard. Position the control assembly as far forward as possible.
6. Remove the cable (upper end) from the lever on the control assembly.
7. Disconnect the cable (lower end) from the distribution door. Note its location and position for correct installation.
8. Remove the control cable.

To install:

9. Install the cable onto the proper distribution door.
10. Route the control cable in the proper position.
11. Attach the cable to the control panel assembly.
12. Install the center control panel.
13. Verify the cable operation.
14. Adjust the cable, as necessary.
15. Install the trim panel.
16. Install the glove box and panel.
17. Connect the negative battery cable.

Fig. 1: Control cable replacement points — 960 shown



1992 Volvo 940

Submodel: | Engine Type: L4 | Liters: 2.3

Fuel Delivery: FI | Fuel: GAS

Manual Control Head

240 SERIES AND COUPE

1. Disconnect the negative battery cable.
2. Remove the soundproofing and side panels from both sides of the center dash console.
3. Remove the radio assembly.
4. Remove the center control panel. Position the control assembly as far forward as possible.
5. Remove the lever knob, then detach the cable from the lever and control assembly.

To install:

6. Attach the cable to the control panel assembly.
7. Install the center control panel.
8. Install the knob.
9. Verify the cable operation.
10. Adjust the cable, as necessary.
11. Install the radio.
12. Install the soundproofing and side panels.
13. Connect the negative battery cable.
14. Check the system for proper operation.

EXCEPT 240 SERIES AND COUPE

1. Disconnect the negative battery cable.
2. Remove the trim panel.
3. Remove the control assembly from the dashboard.
4. Disconnect the control cable clip, vacuum connections and electrical connections.

To install:

5. Attach the cable to the control panel assembly.
6. Secure the vacuum and electrical connections.
7. Install the center control panel.
8. Verify the cable operation.
9. Adjust the cable, as necessary.
10. Install the trim panel.
11. Connect the negative battery cable.
12. Check the system for proper operation.

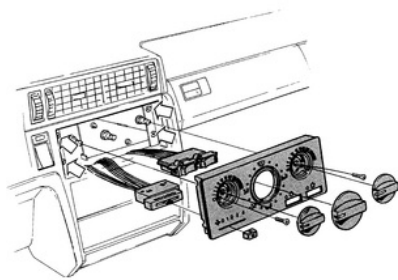
Electronic Control Head

1. Disconnect the negative battery cable.
2. Remove the control knobs.
3. Remove the panel retaining screws.
4. Pull the panel out and unplug the electrical connectors.
5. Remove the panel from the dashboard.

To install:

6. Plug in the electrical connectors.
7. Position the panel in place and install the retaining screws.
8. Push the knobs onto the shafts.
9. Reconnect the negative battery cable.
10. Check the system for proper operation.

Fig. 1: Exploded view of an electronic control panel assembly



1992 Volvo 940

Submodel: | Engine Type: L4 | Liters: 2.3

Fuel Delivery: FI | Fuel: GAS

NOTE: On vehicles equipped with Automatic Climate Control (ACC), a thermal switch is located on the outlet hose from the heater core. It switches on and starts the fan motor only when the water temperature exceeds approximately 95°F (35°C). This prevents cold air from being blown into the passenger compartment during winter. The thermal switch is bypassed in the defrost position.

240 Series and Coupe

1. Disconnect the negative battery cable.
2. Drain the cooling system.
3. Move the heater controls to the CLOSED position.
4. Remove the soundproofing and side panels from both sides of the center dash console.
5. Remove the radio and the center control panel.
6. Disconnect any necessary cables and move the panel aside.
7. Remove the glove box assembly and the strip below the right air vent by carefully prying it off with a small prybar.
8. Remove the steering wheel casing (column cover) and disconnect the choke control with the cover plate.
9. Remove the strip from under the left air vent, the instrument panel lighting intensity and light switch knobs; do not remove the switch.
10. Detach the speedometer drive cable and any electrical connectors from the instrument panel cover plate, then remove the cover plate.
11. Remove the storage compartment, the center air vents and the instrument panel frame.
12. From the left side, detach the windshield wiper connectors.
13. Disconnect the air duct between the heater and the center air vents.
14. Disconnect the electrical connector from the glove box courtesy light and the rubber straps from the defroster vents.
15. Remove the dashboard unit from the dash assembly, as necessary.
16. Remove or disconnect the rear floor air duct screws and lower the duct slightly.
17. Remove or disconnect the following:
 - A. The lower heater mount screws
 - B. The vacuum hose from the vacuum tank
 - C. The cable from the control valve
 - D. The upper and lower center console screws
 - E. The center support screws located on the console
 - F. The fan motor ground electrical connector
 - G. The inlet hose from the control valve
18. Disconnect the upper hose from the heater core tube and the vacuum hoses from the shutter actuators.
19. Loosen the upper housing screws.
20. From the right side, disconnect the vacuum hoses from the shutter actuators.
21. Disconnect and remove the air ducts.
22. Disconnect the hoses from the vacuum tank.
23. Remove the rear floor duct screws and lower the duct slightly.
24. Remove the upper and lower console screws and position it aside.
25. Remove the right support screws and the support.
26. Disconnect the electrical connector from the heater fan switch and the positive lead.
27. Disconnect the REC shutter vacuum hose from the control panel.
28. Disconnect the input vacuum hose from the T connection-to-floor shutter actuators.
29. Remove the upper heater housing retaining assembly screws and remove the assembly from the vehicle.
30. Place the assembly on a cleared area and remove or disconnect the following:
 - A. The upper hose from the heater core.
 - B. The air inlet rubber seal from the top of the housing.
 - C. The REC shutter clips, from the left side.
 - D. The rubber seals from both defroster vents.
 - E. All outer blower motor casing clips and the casing from the assembly.
31. Remove the blower motor wheel locking clips (from both sides) and the blower motor wheels.
32. Remove the heater core drain hose and the vacuum tank assembly. The vacuum tank bracket screws from the left side. The REC shutter spring and heater housing clips.
33. Install the heater housing clips and REC shutter spring. At the left side, install the vacuum tank assembly, the vacuum tank bracket screws and the heater core drain hose.
34. Pull the heater housing apart from the middle.
35. Remove the blower motor and the heater core assembly.

To install:
36. Install the blower and heater core in the housing assembly. Make sure that the fan motor is correctly positioned in the housing. Install the fan motor hose.
37. Using a suitable sealant, coat the mating surface of the heater housing and assemble the case.
38. Install the heater control valve capillary tube to the T-joint and the blower motor screws.
39. Install the heater housing clips and REC shutter spring. At the left side, install the vacuum tank assembly, the vacuum tank bracket screws and the heater core drain hose.
40. Install the blower motor wheel and the blower motor wheel locking clips to both sides.
41. Install or connect the following items:
 - A. Outer blower motor casing clips to the assembly.
 - B. Rubber seals to both defroster vents.
 - C. REC shutter clips to the left side.
 - D. Air inlet rubber seal to the top of the housing.
 - E. Upper hose to the heater core.
42. Install the heater assembly into the vehicle.

NOTE: Before installation, be sure all sealing flanges are correctly sealed to prevent air leakage during the system operation.
43. Install the upper housing retaining screws.
44. Connect the REC shutter vacuum hose to the control panel.
45. Attach the electrical connector to the heater fan switch and the positive lead. Install the protective cover.

46. Install the right support and console.
47. Install the heater assembly lower mount and the rear floor duct.
48. Connect the hoses to the vacuum tank.
49. Install the air ducts.
50. At the right side, connect the vacuum hoses to the shutter actuators.
51. Connect the upper hose to the heater core tube and the vacuum hoses to the shutter actuators.
52. Install or connect the following items:
 - A. Inlet hose to the control valve.
 - B. Fan motor ground electrical connector.
 - C. Console center support and the center console screws.
 - D. Cable to the control valve.
 - E. Vacuum hose to the vacuum tank.
 - F. Lower heater mount screws.
53. Install the rear floor air and the dashboard unit to the dash assembly.
54. Attach the electrical connector to the glove box courtesy light and the rubber straps to the defroster vents.
55. Secure the windshield wiper connectors, the air duct between the heater housing and the center air vents.
56. Install the instrument panel, the storage compartment, the center air vents and the instrument panel frame.
57. Attach the speedometer cable and any electrical connectors to the instrument panel.
58. Install the strip from under the left air vent, the instrument panel lighting intensity and light switch knobs.
59. Install the steering wheel casing and connect the choke control with the cover plate.
60. Install the glove box assembly and the strip below the right air vent.
61. Install the center control panel and the radio.
62. Install the soundproofing and side panels to both sides of the center dash console.
63. Move the heater controls to the OPEN position.
64. Refill the cooling system.
65. Connect the negative battery cable.
66. Start the engine, allow it to reach normal operating temperature, and check for leaks.
67. Check the heating system for proper operation.

700 Series

1. Disconnect the negative battery cable.
2. Drain the cooling system.
3. Remove the throttle cable from the pulley assembly.
4. Disconnect all heater hoses.
5. From the left side of the dashboard, remove the lower panel.
6. Remove the hose from the panel air vent.
7. At the control panel, move the selector to the FLOOR position.
8. Remove the following items:
 - A. Accelerator pedal.
 - B. Ignition system control unit and bracket.
 - C. Cruise control connector, if equipped.
 - D. Water valve hose and grommet.
9. Remove both hoses from the water valve and the clip from the water valve control cable.
10. To remove the water valve, turn it right, pull it out and disconnect the cable.
11. Remove the heater core cover and the heater core assembly.
- To install:**
12. Clean the heater core housing of all dirt, leaves, etc. before installation.
13. Install the heater core assembly and the cover.
14. Connect the water valve.
15. Install the water valve control cable clip, turn the valve left, adjust the cable and install the clip.
16. Connect the hoses to the water valve and the heater core.
17. Install the following items:
 - A. Grommet and water valve.
 - B. Cruise control connector, if equipped.
 - C. Ignition system bracket and control unit.
 - D. Accelerator pedal.
18. Connect the hose to the panel air vent below the dashboard, and attach the lower panel.
19. Reconnect the throttle cable to the pulley assembly.
20. Connect the negative battery cable.
21. Refill the cooling system.
22. Start the vehicle, allow it to reach normal operating temperature, and check for leaks.
23. Check the heating system for proper operation.

Except Coupe, 240 and 700 Series

WITH AUTOMATIC CLIMATE CONTROL (ACC) SYSTEM

NOTE: Before beginning this procedure, have the A/C system discharged by a certified MVAC technician.

1. Disconnect the negative battery cable.
2. Drain the cooling system.
3. Disconnect the heater hoses from the heater core assembly.
4. Remove the ashtray, ashtray holder, cigarette lighter and console storage compartment.
5. Remove the console assembly from the gearshift lever and parking brake lever.

6. Detach the electrical connector.
7. Remove the rear ashtray, the console and light.
8. Remove the screws beneath the plastic cover in the bottom of the storage compartment and the parking brake console.
9. From the left side of the passenger compartment, remove the panel from under the dashboard. Pull down the floor mat on and remove the side panel screws, at the front and rear edge.
10. From the right side of the passenger compartment, detach the panel from under the glove compartment, then remove the glove compartment box with its lighting. Pull down the floor mat and remove the side panel screws, at the front and rear edge.
11. Remove the radio compartment assembly screws.
12. Remove the screws from the heater control, the radio compartment assembly console and the control panel.
13. Loosen the heater control head assembly retaining screws and remove the assembly and mount from the dashboard.
14. Remove the center dash panel, the distribution duct screw and the air duct-to-panel vents/distribution duct screws.
15. Remove the screws holding the rear seat air ducts and the air distribution duct section to rear seat ducts.
16. Remove the vacuum hoses from the vacuum motors and the hose from the aspirator, if equipped with an ACC unit.
17. Remove the distribution unit housing from the vehicle.
18. Remove the retaining clips and the heater core assembly.
19. If the vacuum motors must be replaced, remove the panel from the distribution unit and replace the vacuum motor.

To install:

20. Clean the heater core housing of all dirt, leaves, etc. before installation.
21. Install the heater core assembly and the retaining clips.
22. Install the distribution unit into the vehicle.
23. Connect the vacuum hoses to the vacuum motors and the hose to the aspirator, if equipped with an ACC unit.
24. Install the air ducts top-to-rear seats and the air distribution duct section-to-rear seat ducts.
25. Install the center dash panel, the distribution duct screw and the air duct-to-panel vents/distribution duct screws.
26. Install the heater control head assembly unit and the mount to the dash.
27. Install the heater control, the radio compartment console and the control panel.
28. Install the radio compartment screws.
29. At the right side of the passenger compartment, install the panel under the glove compartment and the glove compartment box with its lighting.
30. Install the side panel screws, at the front and rear edge.
31. At the left side of the passenger compartment, install the panel under the dashboard.
32. Install the plastic cover in the bottom of the storage compartment and the parking brake console.
33. Fasten the electrical connector.
34. Install the rear ashtray, the console and light.
35. Install the console assembly to the gearshift lever and the parking brake.
36. Install the ashtray holder, ashtray, cigarette lighter and console storage compartment.
37. Reconnect the heater core hoses.
38. Refill and bleed the cooling system.
39. Connect the negative battery cable.
40. Start the engine, allow it to reach normal operating temperature, and check for leaks.
41. Check the heating system for proper operation.
42. Have the A/C system charged by a certified MVAC technician.

WITH ELECTRONIC CLIMATE CONTROL (ECC) SYSTEM

1. Disconnect the negative battery cable.
 2. Drain the cooling system.
 3. Disconnect the heater hoses from the heater core assembly.
 4. Remove the heater core cover plate.
 5. Remove the dashboard by performing the following steps:
 - A. From the right side, remove the lower glove box panel, glove box, footwell panel and A-post panel.
 6. Disconnect the solar sensor electrical connector and cut the cable ties.
 - A. From the left side, remove the lower steering wheel soundproofing, knee bolster (leave bracket attached to bolster), footwell panel and A-post panel.
 - B. From the left side, remove the defroster grille, plastic fuse box screws, ashtray, dashboard-to-center console screws, parking brake-to-console screws (move console rearward) and lower center console screws (located below the ashtray).

NOTE: Before performing the next step, be sure the front wheels are in the straight ahead position.

 - C. If not an SRS equipped vehicle, remove the steering wheel, steering wheel adjustment assembly (with an Allen wrench), upper steering column cover panels and steering column combination switch assembly.
 - D. If an SRS equipped vehicle, remove the steering column adjuster (using an Allen wrench), steering column covers, air bag assembly (with a Torx® bit), steering wheel center bolt, plastic tape label screw from the steering wheel hub (use the lock screw, label attached, to lock the contact reel through the steering wheel hub hole), then lift off the steering wheel. Remove the contact reel and the steering column combination switch assembly.
- NOTE: After securing the contact reel, do not turn the steering wheel, for it will shear off the contact reel pin.**
- E. From the left side of the steering column, push out the light switch panel. Remove the small trim moldings and the light switch.
 - F. From the right side of the steering column, push out the switch panel.
 - G. Remove the ECC control panel, radio console and small trim molding.
 - H. Remove the outer air vent grille by lifting it upwards, grasp it at the bottom and pull it upwards to release it.
 - I. Remove the instrument panel cover-to-dashboard screws and the cover.
 - J. Remove the combined instrument assembly-to-dashboard screws and the assembly; detach any electrical connectors and/or vacuum hoses.
 - K. From the rear of the dashboard, cut the cable ties.
 - L. At the dashboard-to-firewall area, turn the retaining clips, pull the dashboard out slightly and pass the fuse box through the opening.
7. Disconnect the cable harnesses from the dashboard and carefully lift it from the vehicle.
8. From the left side of the heater housing, remove the lower duct.
9. Disconnect the vacuum hoses from the diaphragms and the electrical connector. Remove the heater core cover-to-housing screws and the cover.
10. Remove the heater core-to-housing bracket and carefully remove the heater core.

To install:

11. Clean the heater housing of all dirt, leaves, etc. before installation.
12. Install the heater core and the bracket.
13. Install the heater core cover to the housing.
14. Attach the electrical connector and the vacuum hoses.

15. Install the lower duct to the housing assembly.
16. Install the dashboard by performing the following steps:
 - A. Install the dashboard, connect the cable harnesses, and pass the fuse box through the opening. Secure the dash clips by turning them $\frac{1}{3}$ turn.
 - B. Install the combined instrument assembly to the dashboard.
17. Install the instrument panel cover and the outer air vent grille.
 - A. Install the small trim molding, radio console, ECC control panel and right side switch panel.
 - B. At the left side of the steering column, install the light switch, the small trim moldings and the light switch panel.
 - C. If an SRS equipped vehicle, install the steering column combination switch assembly and the contact reel.
 - D. Install the steering wheel and remove the lock screw.
 - E. Install the steering wheel center bolt, air bag assembly and steering column adjuster.
 - F. If not an SRS equipped vehicle, install the steering column combination switch assembly, steering column covers, steering wheel adjustment assembly and steering wheel.
 - G. At the left side, install the lower center console screw, parking brake-to-console screws, dashboard-to-center console screws, ashtray, plastic fuse box screws and defroster grille.
 - H. At the left side, install the A-post panel, footwell panel, knee bolster (with bracket) and lower steering wheel soundproofing.
 - I. At the right side, fasten the solar sensor electrical connector, then install the A-post panel, footwell panel, glove box and lower glove box panel.
18. Install the heater core cover plate and connect the heater hoses to the heater core.
19. Refill the cooling system.
20. Connect the negative battery cable.
21. Start the engine, allow it to reach normal operating temperature, and check for leaks.
22. Check the heating system for proper operation.

1992 Volvo 940

Submodel: | Engine Type: L4 | Liters: 2.3

Fuel Delivery: FI | Fuel: GAS

1. Disconnect the negative battery cable.
2. Drain the cooling system so that the level (of the system) is below the control valve.

CAUTION

Never open, service or drain the radiator or cooling system when hot; serious burns can occur from the steam and hot coolant. Also, when draining engine coolant, keep in mind that cats and dogs are attracted to ethylene glycol antifreeze and could drink any that is left in an uncovered container or in puddles on the ground. This will prove fatal in sufficient quantities. Always drain coolant into a sealable container. Coolant should be reused unless it is contaminated or is several years old.

3. Loosen the heater hose clamps and remove the hoses.
4. Disconnect the cable and/or vacuum line to the valve.
5. Unfasten the mounting screws and remove the valve.

To install:

6. Place the control in position and secure it.
7. Connect the heater hoses (replace any hoses that show wear) and secure the hose clamps.
8. Connect the cable and/or vacuum line(s).
9. Connect the negative battery cable.
10. Fill the cooling system and check the control valve operation.

Fig. 1: The water control valve is mounted in the heater core inlet hose

