



SERVICE MANUAL

VOLVO 164 1971

UPHOLSTERY, INTERIOR EQUIPMENT AND HEATING SYSTEM DESCRIPTION

INTERIOR FITTINGS AND UPHOLSTERY

Front seats

The front seats (Fig. 8-28) are built up on a tubular frame. The stuffing consists of foam plastic covered with cloth. The seat can be adjusted longitudinally by releasing the catch on the front side of the seat (driver's side) or the outside of the seat (passenger's side) and sliding the seat to the desired position. The driver's seat is adjusted vertically with the lever placed in front of and under the seat. The passenger's seat is adjusted vertically by means of the rear attachments which have been provided with three holes. Both seats are inclined to the desired angle by means of a screw at the front end. The backrest inclination is variably adjustable by pulling up the lever on the reclining mechanism, whereby the backrest is tilted forwards by means of springs or tilted rearwards by leaning backwards in the seat. The front seats are provided with an adjustable lumbar support, the tension of which can be adjusted by means of a knurled knob located on the inner backrest side. The seat cushions are fastened to the seat frame by means of press studs.



Fig. 8-28. Front seat

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Both front seats are fitted with restraints which can be adjusted vertically.

Rear seat

The rear seat and backrest are built up on the same principle as the front seats, although in this case the seat has a wooden frame.

Door upholstery

The door upholstery consists of wood-fibre sheeting lined with non-woven padding and covered with upholstery material. It is secured to the door by means of clips. The armrests are made of moulded plastic and are screwed to the inner plate of the door.

Headlining

The headlining consists of plastic fabric stretched on roof ribs and secured in retainers fitted on the upper limit of the body sides.

Covering for firewall and floor

The sides of the firewall are lined with millboard while the bulkhead itself is covered with self-adhesive insulating material. The floor is covered with carpets.

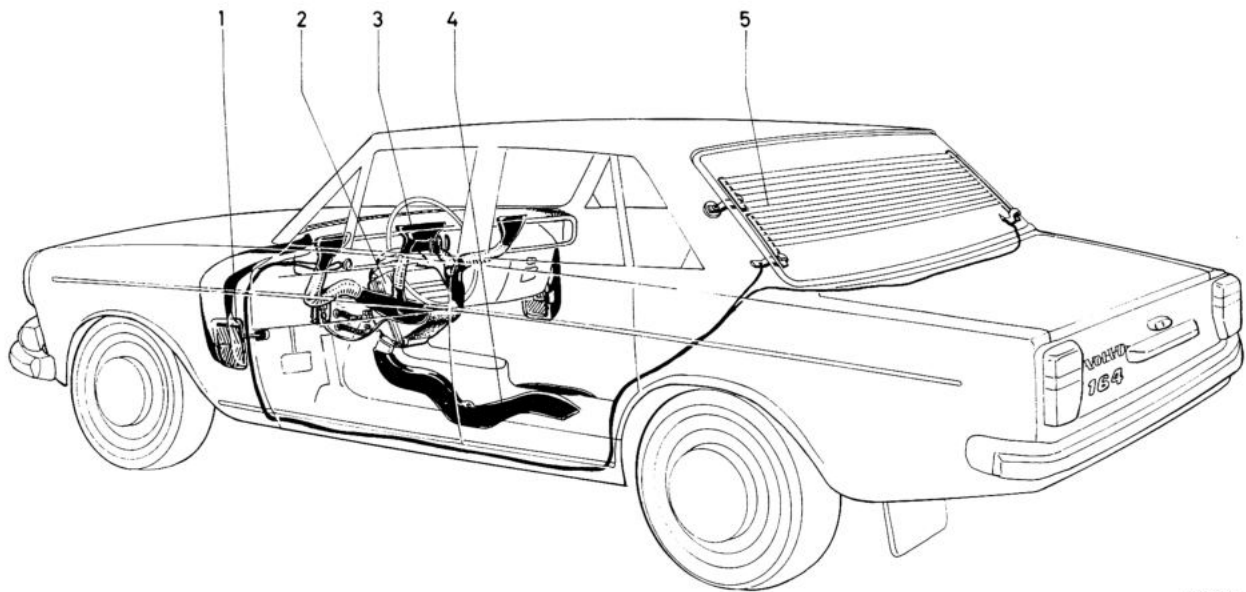
HEATING SYSTEM

The heating system is a combined warm air and fresh air system. The incoming air is forced, by a fan, through the cellular system of the heater unit and out into the car. The fresh air can be heated and directed to the required area of the car by means of the various controls.

(Fresh air can also enter into the vehicle through the fresh air intakes in the cowl sides.)

Good compartment ventilation is further improved by air extractor vents located at the base of the rear window. These vents have a total area of 50 cm² (7.8 sq.in.), see Fig. 8-30.

The temperature of the heated air is regulated by means of a heat control valve. The heat control valve is intended to keep the temperature of the heated air at a pre-determined and constant temperature. This is achieved by means of the thermostat which is incorporated in the control valve. The temperature



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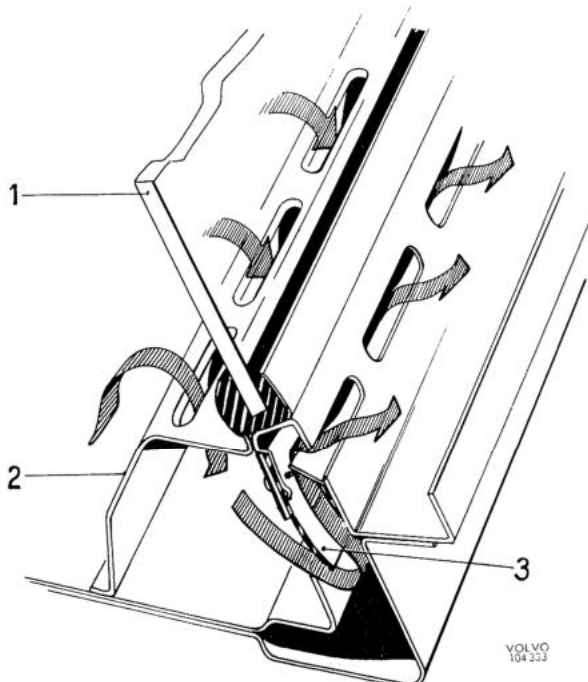
Fig. 8-29. Heater system

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|-------------------------|------------------------------------|
| 1. Fresh air intake | 4. Air ducting to rear seat area |
| 2. Car heater | 5. Electrically heated rear window |
| 3. Windshield defroster | |

control regulates the supply of heated coolant to the cell system. The heater control valve is connected in series with the cell system so that all coolant which passes through the cell system also passes through the control valve. The heated coolant warms up the air which is fed through the heater unit by the heater fan or the slipstream. If the coolant temperature increases, the sensitive body of the thermostat expands

thus acting on the valve in the control system and resulting in a lesser flow of coolant. This means that the temperature of air flowing through the unit will be lower and the sensitive body will again be effected. The result will be an increased flow of coolant. This cycle is repeated continuously so that a stable air temperature is achieved.

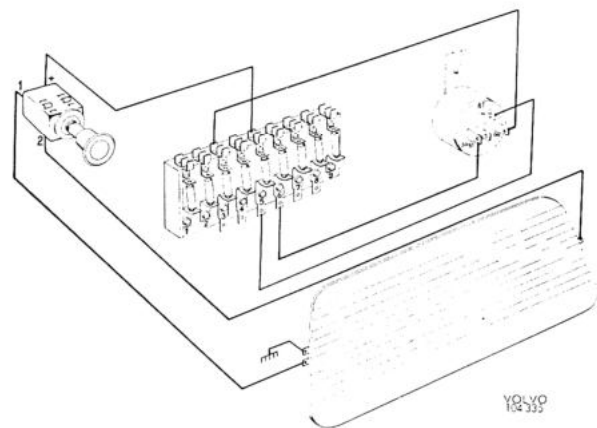
The electrically heated rear window is included in the heating system of the car. The degree of heat is controlled by a switch on the dashboard with which one of two output ranges can be chosen. The one range has a max. output of 150 watts and the other that of 40 watts. The control switch is connected via a control relay (see wiring diagram) which cuts off the supply of current when the ignition is switched off. This safeguards the battery from discharging when the engine is not turned over. See Group 84 concerning replacing rear window.



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Fig. 8-30. Air extractor vents

1. Rear window
2. Inner panel
3. Non-return valve



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Fig. 8-31. Wiring diagram for electrically heated rear window

REPAIR INSTRUCTIONS

SEATS

Removing the front seats

Unfasten the press-studs which hold the seat cushion to the frame and remove the seat cushion. Unscrew the four attaching screws for the slide rails. Lift off the seat.

Adjusting the front seat

1. The inclination of the seat is adjusted with the eyebolt at the front edge of the seat. Slacken the adjusting screw and adjust the eyebolt to the desired position.
2. The height of the seat is adjusted by attaching the rail in a suitable hole in the bracket.

REPLACING THE HEADLINING

1. Remove the interior light, sun visors, and rear view mirror.
2. Pull down the edge of the headlining with finger and thumb on one side as shown in Fig. 8-32 so that the plastic edge can be released from its fastening in the rail.
3. Then pull down the headlining all round.
4. Take down the stretchers beginning from the back by bending them down in the middle and releasing them from the edge of the roof as shown in Fig. 8-33. N.B. Be careful when removing and fitting the stretchers. Careless handling can cause the ends to damage the roof plate.
5. Fit the stretchers in the new headlining. Make sure that they are provided with rubber caps at the ends as shown in Fig. 8-34.
6. Fit the headlining by first inserting the stretchers beginning with the front one.



Fig. 8-32. Removing the headlining

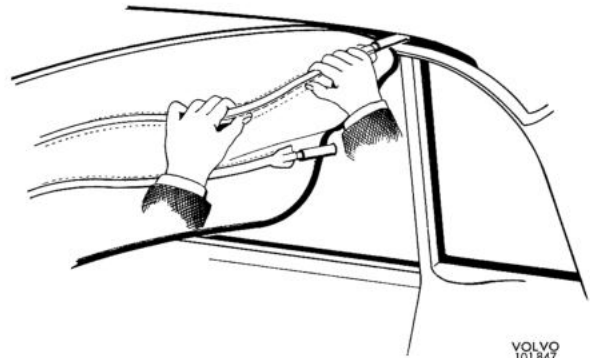


Fig. 8-33. Removing the roof stretchers

7. Stretch the headlining forwards and tuck in the plastic strip at the front edge.
8. Then stretch the headlining backwards by pulling both ends of a stretcher at the same time. Begin at the front and pull on each stretcher working backwards, after which the rear plastic strip can be tucked into its groove.
9. Now pull over the headlining towards one side and tuck in the plastic strip. Then stretch the headlining over towards the other side and tuck in the plastic strip.
10. Fit the interior light, sun visors and rearview mirror.
11. Any folds in the fabric can be removed by pulling the headlining in the necessary direction. The headlining then moves in the attaching rails.

INSTRUMENT PANEL

Removing the instrument panel

The instrument panel is attached to the body with screws. These are accessible partly from above at the edge of the windscreen and partly from underneath at both sides of the panel.

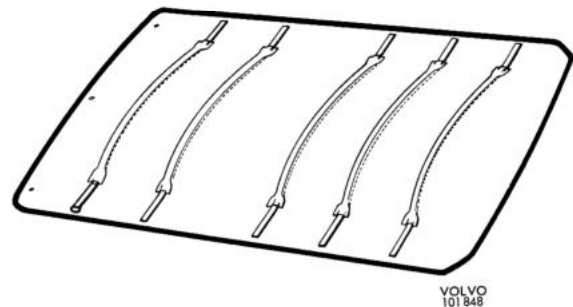


Fig. 8-34. Headlining

HEATING SYSTEM

Removing the heater unit

Drain off the coolant and disconnect the negative battery lead. Remove the hoses to the control valve. Remove the panel, below the dashboard, by loosening the two fixing screws, one on the left cowl side and one beside the glove compartment. Pull the upper section of the panel rearwards so that it loosens from the clips in the dashboard and free the panel from the bonnet release control. Remove the mat on the transmission tunnel. Loosen and remove the defroster hoses and control wires and remove the switch for the fan and disconnect the cables to the fan motor.

Remove the two screws which hold the fusebox to the heater. Remove the control valve and loosen the upper hose to the heater unit. Care must be taken with the control valve and the copper tube between the valve and the heater. Plug the outlets on the heater so that the remaining coolant does not run into the car on removal. Loosen the ground cables from the right-hand bracket. Loosen and remove the four screws which hold the heater unit to the brackets and loosen the draining hose. Lift out the heater unit and control valve carefully.

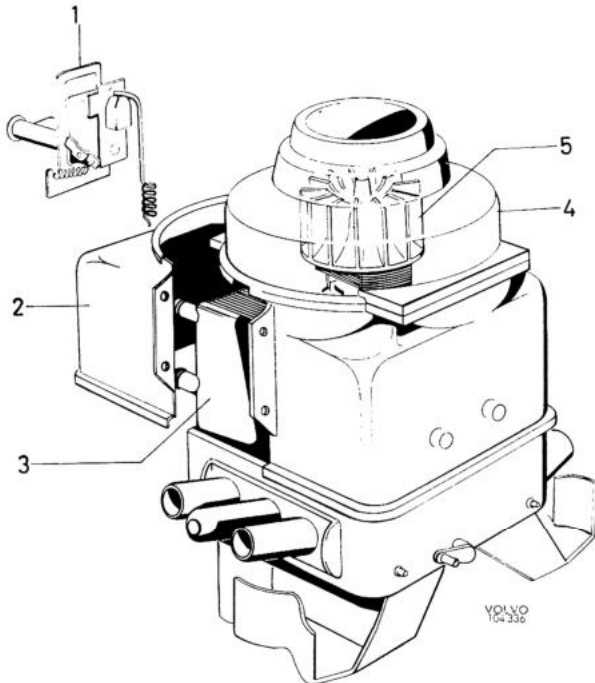
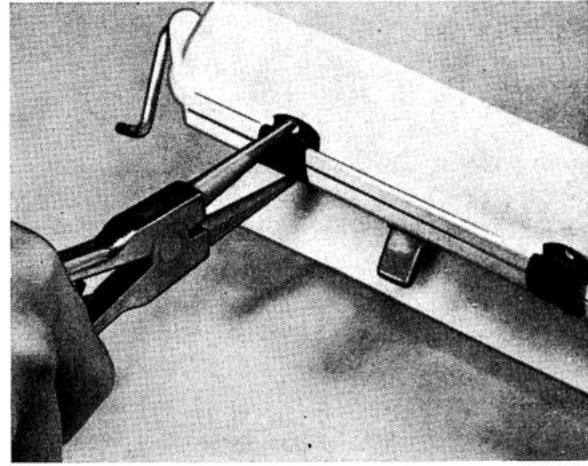


Fig. 8-35. Heater unit, dismantled

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|-----------------------|--|
| 1. Heat control valve | 6. Spring clips |
| 2. Heater casing | 7. Heater casing |
| 3. Cell system | 8. Rubber bushing |
| 4. Fan casing | 9. Sensitive body for heat control valve |
| 5. Fan | |



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Fig. 8-36. Removing spring clips

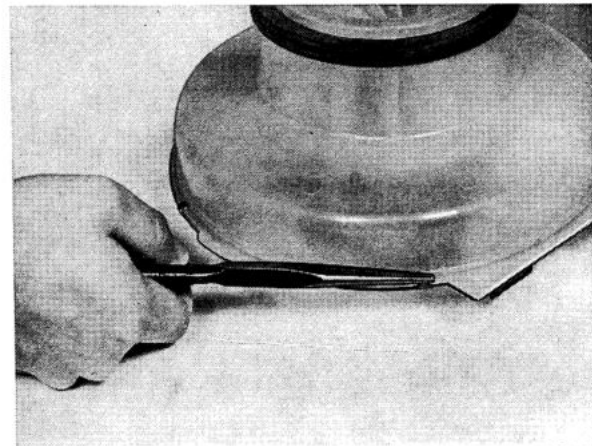
Dismantling the heater unit

Remove the four rubber bushes on the sides of the heater, Fig. 8-36 and separate the two halves. This assembly. Remove the spring clips which hold the heater, Fig. 8-33 and separate the two halves. This exposes both the cell system with sensitive body for control valve and the fan motor.

Replacing the fan motor

Remove the heater unit and dismantle it as described above. Mark the mounting plate in relation to the fan casing. Loosen the mounting plate with fan motor from the fan casing by straightening the tabs as shown in Fig. 8-37.

Remove the screws which hold the fan motor to the mounting plate. Exchange the fan motor and replace the screws which hold it to the mounting plate. Replace the mounting plate on the fan casing. Reassemble the heater unit and mount it in the vehicle in accordance with the following description.



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Fig. 8-37. Dismantling the mounting plate

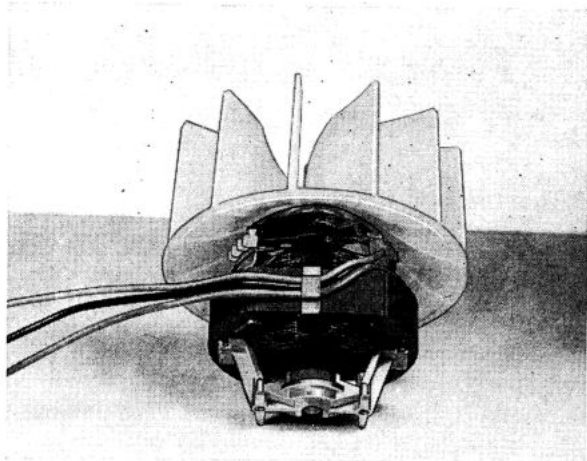


Fig. 8-38. Fan motor

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Assembling the heater unit

Scrape off the previous sealing agent and replace it with a suitably soft sealing agent. Fit the cell system with sensitive body and reassemble the casing halves. Replace the spring clips and the rubber bushings.

Fitting the heater unit

Place the heater unit in position and connect the drain hose. Fit the four screws which hold the heater to the brackets. Connect the ground cables to the right-hand bracket. Fit the control valve and the upper hose to the heater. Fit the fusebox to the heater. Connect the cables from the fan motor to the switch and mount the switch in the dashboard. Fit the control wires to the shutters and control valve. Fit the defroster hoses and replace the mat on the transmission tunnel. Fasten the panel in position below the

dashboard. Fit the hoses to the control valve. Connect the ground battery cable and refill the coolant system.

Removing the heater unit controls

The controls are of unitary design as shown in Fig. 8-39. The unit is fixed to the dashboard with three nuts. For removal, first loosen the panel below the dashboard. Next loosen the wires on the heater unit and control valve. The control lighting lamps are removed by pulling them straight out from the holders. Remove the three nuts and take out the control unit.

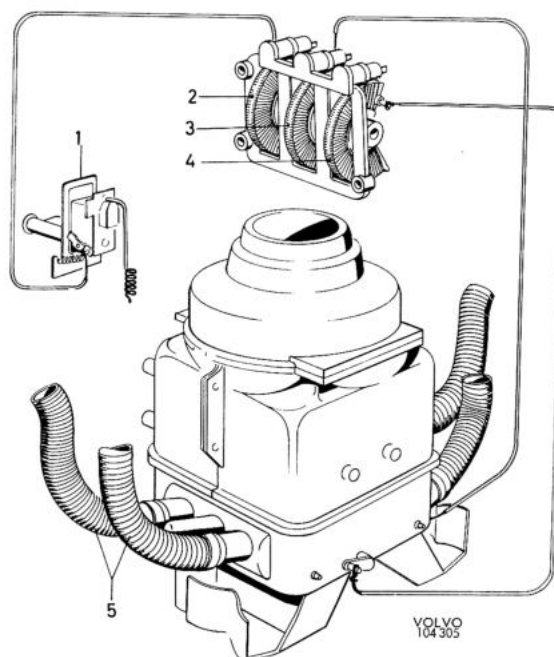


Fig. 8-39. Heater unit controls

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|-----------------------|-------------------------------|
| 1. Heat control valve | 4. Heat control, floor |
| 2. Heater control | 5. Hoses to defroster nozzles |
| 3. Defroster control | |