



SERVICE MANUAL

VOLVO 164 1971

DOORS AND LUGGAGE COMPARTMENT LID

DESCRIPTION

The doors are built up of an inner and an outer plate which are flanged and spot-welded together. The hinges are fitted to the inner plate. The doors are adjustable both longitudinally, vertically and laterally. The doors have bonded cord strips at the windows. The door locks are screwed to the doors.

The press button of the outer door handle operates a lever which in turn lifts a locking pin. The door opener inside the car is fitted in the inner door plate with screws. The handle transmits the movement to a lever which lifts the locking pin by means of link rods in the lock. On the front doors the lock mechanism is fitted in a cylinder under the door handle.

The window winders consist of lifting arms with toothed segments. The window runs in sliding grooves in the inner door plate and is set to the desired position by means of a lifting arm from the toothed segment with the assistance of a helper arm.

The luggage compartment lid is built up of an outer and inner plate bonded together with adhesive. The catch for the locking device is fitted on the rear edge of the luggage compartment lid and the hinges are fitted on the front edge of the lid. The hinges are bolted to the body. The luggage compartment lid is counter-balanced by means of a gas spring and can be set in any desired position when opening. The locking device is fitted on the body below the lid and is of the turning type.

The vehicle is also available with a sun-roof. The roof is operated by means of a crank handle, which is folded in the recess in the roof upholstery between the sun visors when not in use.

Any water that penetrates the joint between the body roof and sun-roof is collected in the inner roof plate and conducted away through four hoses taken through the corner posts of the roof.

REPAIR INSTRUCTIONS

DOORS

Removing and fitting door stops

Remove the door panel in accordance with the instructions under "Removing inner handles and upholstery". Then unscrew the screw between the door stop and post, and remove the rubber sealing (see Fig. 8-7). After this remove the three screws securing the door stop to the door. The door stop can now be taken out through the upper opening in the inner plate of the door.

Fitting is in the reverse order.

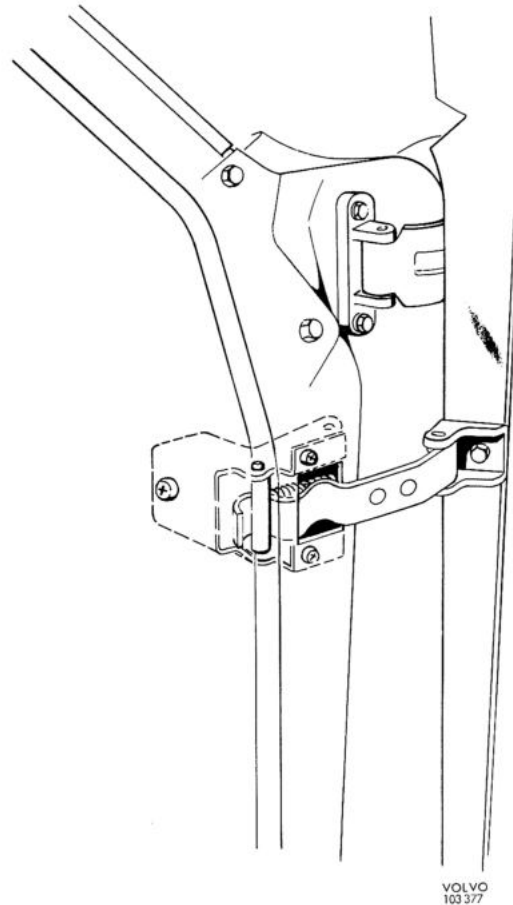


Fig. 8-7. Door stop

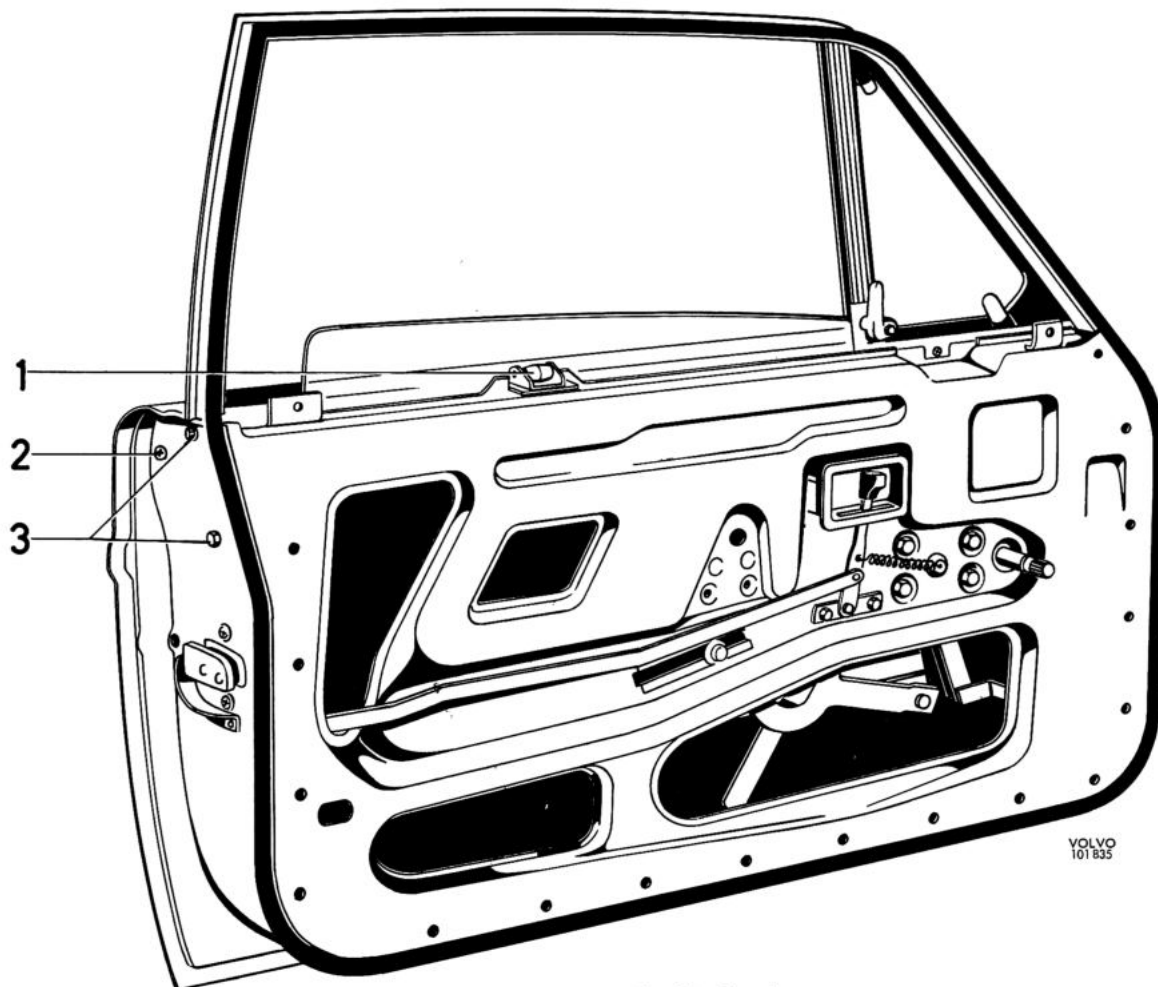


Fig. 8-8. Front door

1. Support roller for door window
2. Screw for outer handle
3. Bolts for door frame

Removing and fitting front doors

Remove the door stop in accordance with the instructions under "Removing and fittings door stops". Unscrew the bolts between the hinges and door. The bolts are accessible when the door is opened. The door can then be taken off (Fig. 8-8).

In order to remove the hinges the panel in front of the door has to be taken off. When this has been done, the three bolts are unscrewed, after which the hinges can be removed.

The door and hinges are fitted in the reverse order. Concerning fitting the door stop, see under "Removing and fitting door stops".

Since the holes in the hinges and in the attachment between the door hand hinges are oval, the door can be adjusted laterally. The door can be adjust vertically and sideways in the attachment between the hinges and door post. This is possible since the holes in the door post are larger than the diameter of the bolts.

Removing and fitting rear doors

See the corresponding section above and Fig. 8-9.

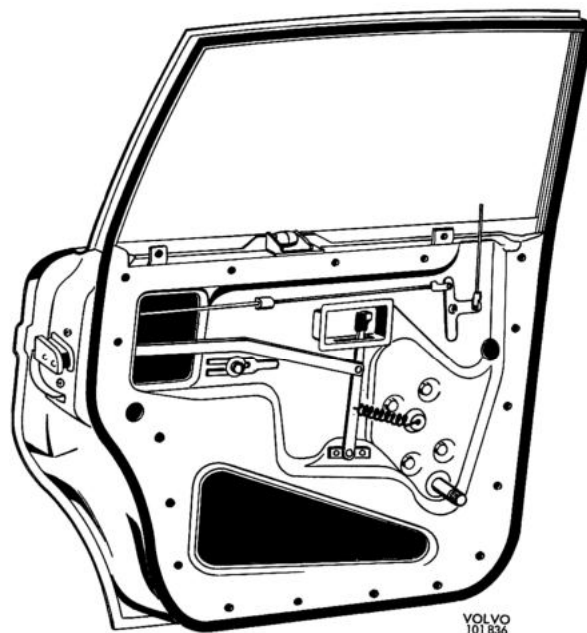


Fig. 8-9. Rear door



Fig. 8-10. Removing winding handle

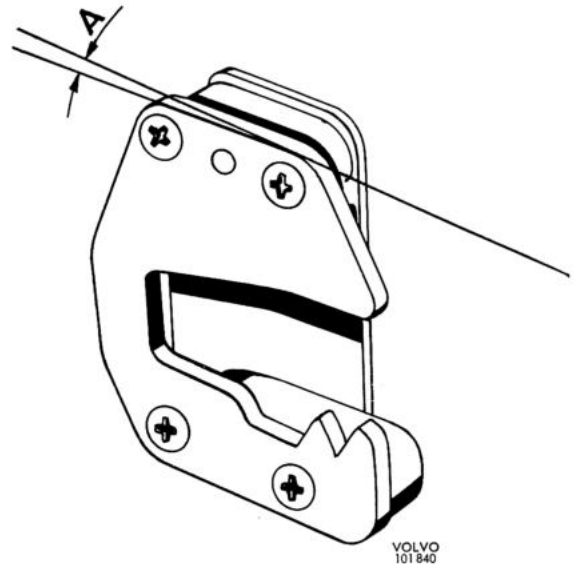


Fig. 8-11. Latch plate

A. Front door 1.5°
Rear door 2.5°

Removing inner handles and upholstery

1. Remove the armrest in the front door by taking out the two plastic plugs with a narrow screwdriver and removing the attaching screws located on the inside. Then turn the plastic ring at the front edge of the armrest several turns to the left, push the armrest forwards and the hook at the front edge disengages leaving the armrest to be removed. The armrest in the rear door is removed by taking out the plastic plugs and undoing the attaching screws.
2. Remove the window winding handle by pressing in the washer towards the door upholstery and then towards the handle in the same direction as the handle as shown in Fig. 8-10. This releases the spring clip and the winding handle can be taken off.
When fitting, make sure that the spring clip is fitted so that its open end faces towards the winding handle as shown in Fig. 8-10.
3. Remove the door upholstery by inserting a screwdriver or similar under the upholstery edge and carefully levering outwards so that the upholstery comes away.

Latch plates

The latch plate is made of steel and is fitted with a floating nut plate. The latch plate is adjustable since the holes in the body are larger than the diameter of the attaching screw.

The vertical position of the latch plate is controlled by closing the door with the press button of the

outer handle pressed in, when the door latch should slide correctly into the latch plate. The latch plate should have an inward inclination of 1.5° for the front doors and 2.5° for the rear doors, see Fig. 8-11.

Removing front door lock

1. Carry out operations 1—3 under "Removing inner handles and upholstery".
2. Remove the lock cylinder by unscrewing the attaching screw which is fitted in the rear edge of the door.
3. Remove the locking for the pull rod locking knob and take out the pull rod.
4. Remove the locking for the inner door opener push rod.
5. Remove the locking for the outer handle pull rod.
6. Unscrew the two screws for the rear winder rail on the edge of the door.
7. Unscrew the three screws for the door lock. These screws are placed on the rear edge of the door.
8. The lock can then be removed by carefully levering the rear winder rail forwards.

Removing rear door lock

1. Carry out operations 1—3 under "Removing inner handles and upholstery".
2. Remove the locking for the pull rod locking knob.
3. Remove the locking for the inner door opener push rod.
4. Remove the locking for the outer handle pull rod.
5. Wind down the window so that its lower edge

comes level with the upper edge of the door lock.

6. Remove the weather strip for the door frame.
7. Unscrew the attaching screws for the door frame and lift it off.
8. Unscrew the attaching screws for the door lock and remove the lock from the door. The attaching screws for the lock are placed on the rear edge of the door.

Removing lock handles

When removing the lock handles, the door panel must be removed (see under "Removing inner handles and upholstery"). In order to remove the inner door opener, it is first necessary to remove the clip for the push rod of the lock. The return spring is then taken off. After the screws holding the inner door opener have been removed, the door opener is pulled downwards at the same time as the handle is jerked loose from the lever.

The outer handle is removed by first taking off the clip for the pull rod of the lock. The two screws for the handle are then unscrewed, the front one of which is placed inside the door and the rear one on the edge of the door.

Fitting and adjusting front door lock handle

When fitting the inner door opener this is adjusted as follows:

Fit the inner door opener without tightening the screws. Attach the link arm to the lock and fit the spring. By the fact that this spring is fitted, the inner door opener is in its correct position so that the screws can now be tightened, see Fig. 8-12.

When fitting the outer door handle, this is adjusted as follows:

Fit the handle with the link arm on it. Then adjust the link arm so that the loop falls easily on the pin on the lock lever, see Fig. 8-12.

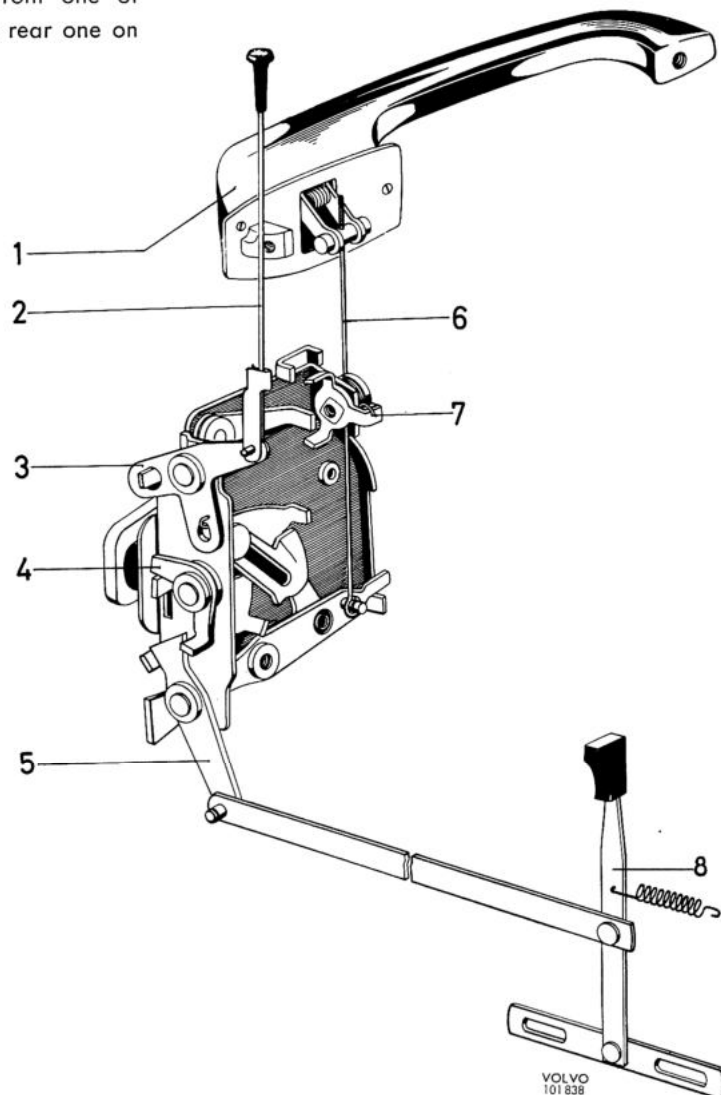
Fitting and adjusting rear door lock handle

When fitting the inner door opener, this is adjusted as follows:

Fit the inner door opener without tightening the screws. Attach the link arm to the lock and fit the spring. By moving the inner door opener forwards

Fig. 8-12. Front door lock

1. Outer handle
2. Pull rod for inner lock knob
3. Lever
4. Lever
5. Lever
6. Pull rod for outer handle
7. Locking device
8. Inner door opener



to its front stop and the tightening the screws it will come into the correct position, see Fig. 8-13.

When fitting the outer door handle, adjust as follows: Fit the handle with the link arm on it. Then adjust the link arm so that the lower part of the loop has a clearance of 1 ± 1 mm (0.04 ± 0.04 ") on the pin see Fig. 8-13, after which the link arm can be fitted. N.B. The clearance between the link arm loop and pin must never be less than this amount.

Removing front door frame

1. Wind down the window so that it comes near the bottom position.
2. Remove the door panel in accordance with the instructions under "Removing inner handles and upholstery".
3. Unscrew the attaching screws for the bracket for the lower attachment of the front guide rail and remove the bracket.
4. Remove the sealing strip which runs round the door frame.
5. Remove the two attaching screws on the rear edge front edge respectively. The door frame can be removed by lifting it straight up.

Removing rear door frame

See the corresponding section above. However, it is not necessary to carry out point 3 when removing the rear door frame.

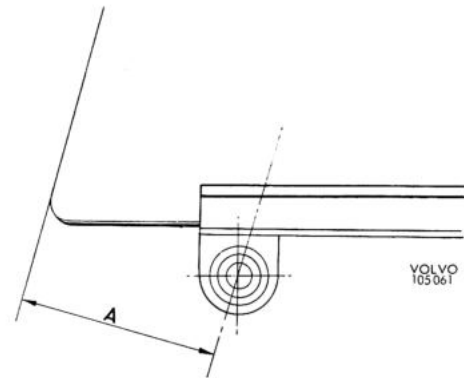


Fig. 8-14. Measurement for front side door $A=78.5 \pm 2$ mm (3.1 ± 0.08 ")

Removing front door winding window

1. Carry out operations 1—5 under "Removing front door frame".
2. Remove the guide roller for the window. The guide roller is placed at the upper edge of the door as shown in Fig. 8-8.
3. Remove the locking springs and washers between the slide rail and lifting arms. These springs can be removed by pressing them right in and then releasing them, after which they can be taken off.

N.B. Take care that the window does not fall down in the door. Even if the window is placed carelessly at the bottom of the door the slide rail can damage the outer plate.

4. Withdraw the window from the pins in the window winder, after which the window can be lifted straight up.

Removing rear door winding window

See the corresponding section above.

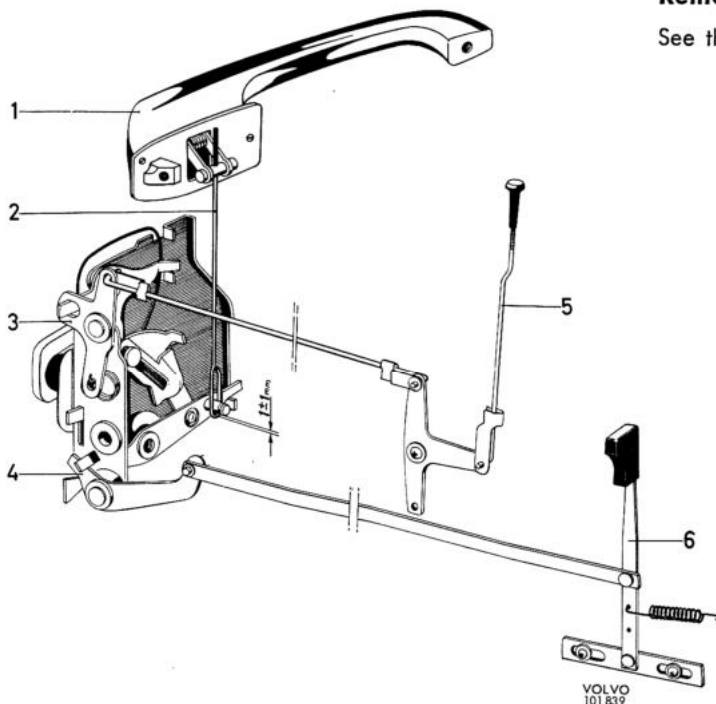


Fig. 8-13. Rear door lock

1. Outer handle
2. Pull rod for outer handle
3. Lever
4. Lever
5. Pull rod for lock knob
6. Inner door opener

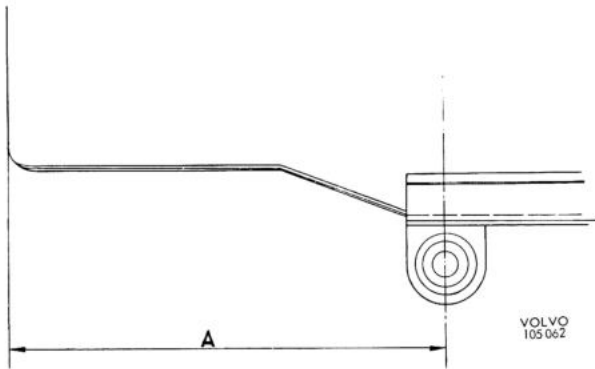


Fig. 8-15. Measurement for rear side door $A=169 \pm 2$ mm
(6.7 ± 0.08 ")

Fitting a window in the window winder

If the window winder is to function satisfactorily, the dimensions given in Figs. 8-14 and 8-15 should be followed when fitting a window in the window winder.

Removing ventilation windows

1. Carry out operations 1—5 under "Removing front door frame.
2. Remove the grooved strip from the front slide rail of the winding window and unscrew the screws which hold the plate under the ventilation window. Then unscrew the screws on the opposite side and remove the plate.
3. After the rubber strip round the ventilation window has been removed from the groove all round, the window with strip can be taken off, see Fig. 8-16.

Removing front door window winder

1. Wind down the window so that it comes near the bottom position.

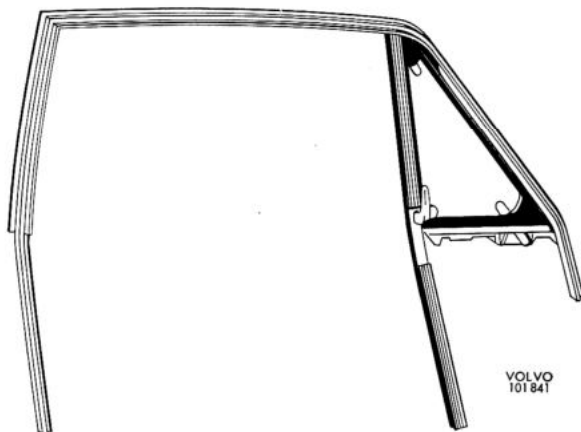


Fig. 8-16. Door frame

2. Remove the door panel in accordance with the instructions under "Removing inner handles and upholstery".
3. Remove the attaching screws between the front guide rail and bracket between the door and bracket. Remove the bracket.
4. Remove the locking springs and washers for the lifting arm. Begin by removing the spring in the door slide. The springs are removed by pressing them right in and then releasing them, after which they can be taken off.

N.B. Take care that the window does not fall down into the door. Even if the window is placed carelessly at the bottom of the door, the slide rail can damage the outer plate.

5. Move up the winding window to the top position. Lock the window by placing a screwdriver under the slide rail in the upper rear clip hole for the door upholstery.
6. Remove the attaching screws for the window winder, see Fig. 8-8, and remove it from the door, see Fig. 8-17.

Removing rear door winder

Proceed in the same way as described above. However, point 3 does not need to be carried out when removing the rear door window winder.

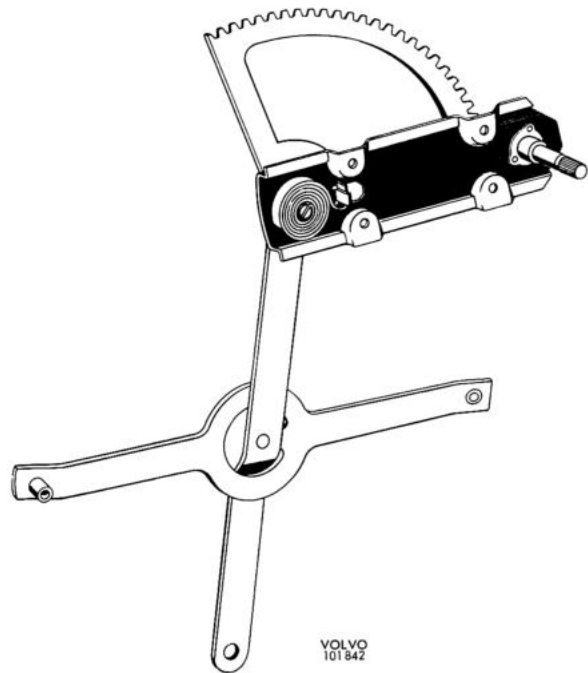


Fig. 8-17. Winding mechanism

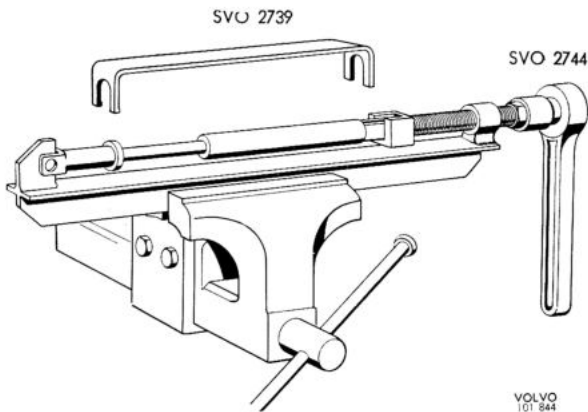


Fig. 8-18. Tools for gas spring

LUGGAGE COMPARTMENT LID

The luggage compartment lid is mounted on two hinges, both of which are attached by means of two bolts to the inner plate of the lid and with three bolts to the pillar under the rear window.

The luggage compartment lid is counter-balanced by means of gas springs.

The luggage compartment lid is removed by unscrewing the two bolts on each hinge and lifting it off.

When replacing the gas spring, the lid is first opened fully. It is then lowered slightly and clamp SVO 2739 applied and the lid opened fully again, after which the gas spring can be removed. When fitting a new gas spring, press tool SVO 2744 is used as shown in Fig. 8-18 in order to enable clamp SVO 2739 to be fitted. Fitting is done in the reverse order.

When removing the hinges, first remove the gas springs as described above. The lid is then removed from the hinges and after this the hinges from the body.

The holes in the part of the hinges which fits on the luggage compartment lid are oval in order to permit longitudinal adjustment. For vertical adjustment the holes in the part of the hinges which fits in the body are oval.

The locking device (Fig. 8-19) is fitted in the rear section and is released by turning the lockable knob. The lock catch on the lower edge of the lid is adjustable in order to permit variation of the closing tension of the lid.

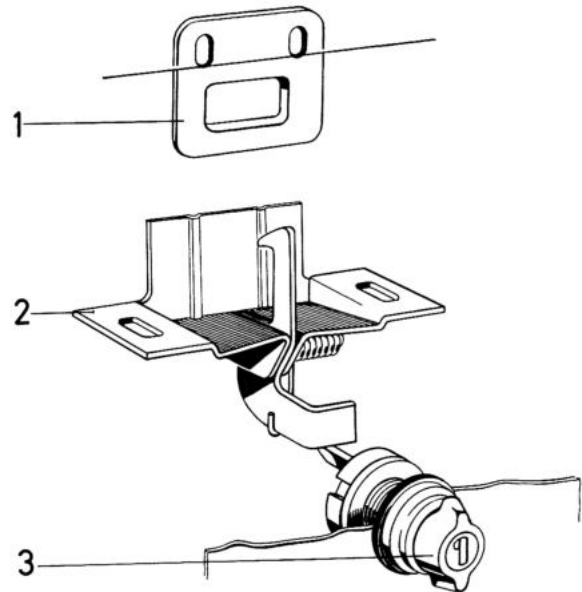


Fig. 8-19. Lock for luggage compartment lid

1. Lock catch, fitted in lid
2. Lock mechanism, fitted in rear section
3. Lock knob, fitted in rear section

To remove the lock, unscrew the two bolts under the upper edge of the rear section, after which the lock can be taken off. The lock is adjustable longitudinally since the bolt holes are oval.

The lock knob is removed by unscrewing the large slotted nut inside the luggage compartment. The lock knob can then be pulled out backwards.

SUN-ROOF

Removing the cable

1. Open the sun-roof and release the clips securing the roof upholstery at the front end. Then move the upholstery back to leave an opening.
2. Crank the sun-roof forwards and slacken the screws at its four attachments (9 and 11, Fig. 8-20). Bend the blade springs (10) to the one side and remove the reinforcing plates (13) at the rear attachments. Lift off the sun-roof.
3. Remove the wind deflector (2).
4. Remove the intermediate pieces (8), covering strip (3) and holders above the drive. Release the front guide rails (6) and pull out the cables (5).

Fitting of cables

1. Fit the cables so that the attachments for the sun-roof come opposite each other, and at the rear end of the roof opening. Screw on securely the front guide rails.
2. Fit the intermediate pieces, holders and covering plate.

3. Fit the wind deflector.
4. Screw on the roof securely and put back the leaf springs.
5. Crank the sun-roof forwards until it is completely closed and check that it is level with the roof. To adjust vertically, use the front attachments (9) and the lifts at the rear attachments (11). Also check that both the lifts stand straight up when the roof is closed.
6. Unscrew the crank and gear housing (4). Turn the crank to the stop position on the removed gear housing.
7. Fit the gear housing and crank. The crank should

now point straight forwards in the vehicle when the sun-roof is completely closed.

8. Put back the upholstery and test the function of the sun-roof.

Replacing the sealing strips

The sun-roof must be removed in order to replace the insulating strip and sealing strip there. See points 1 and 2 under "Removing the cable".

When replacing the insulating strip round the roof opening of the sun-roof, all that is required is to crank the roof back to its rearmost position.

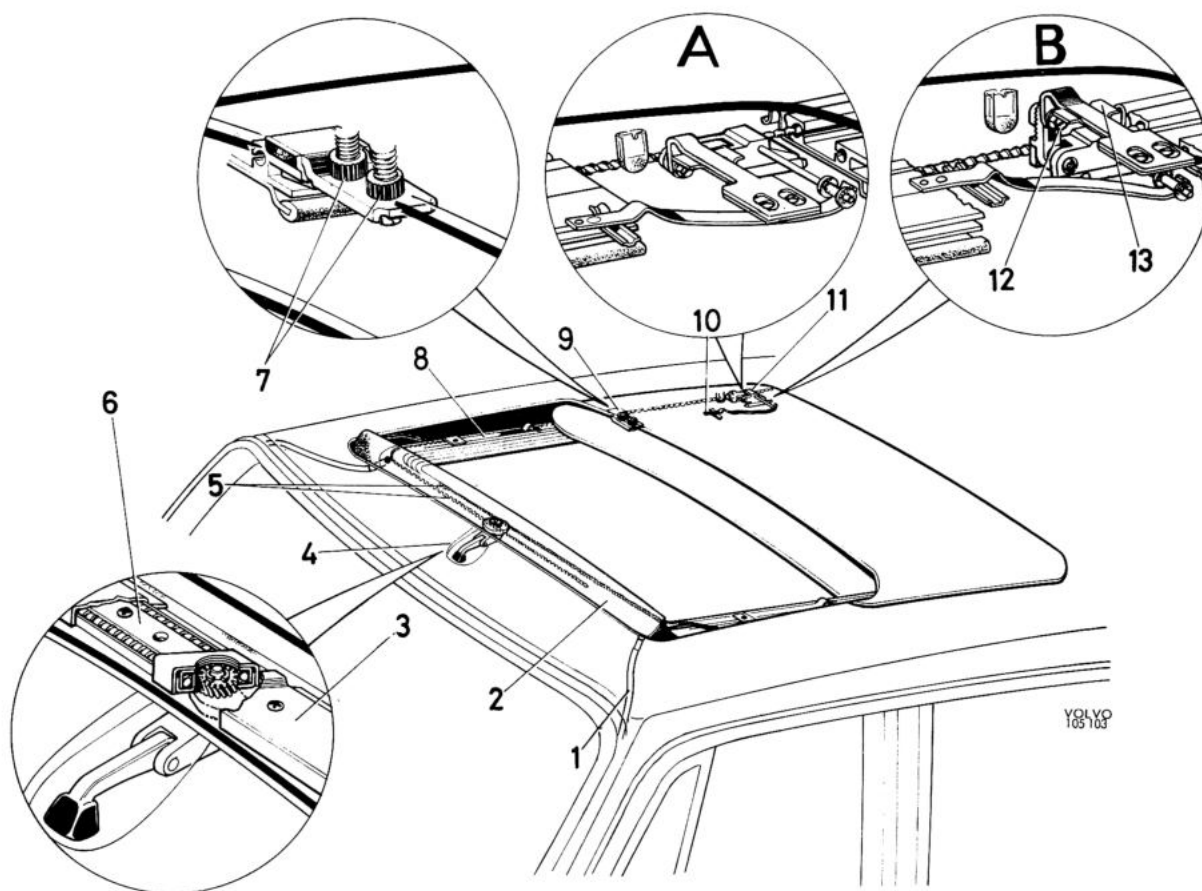


Fig. 8-20. Sun roof

A. Rear attachment when roof is open
B. Rear attachment when roof is closed

- | | |
|-----------------------------|-----------------------|
| 1. Drain hose | 8. Intermediate piece |
| 2. Wind deflector | 9. Front attachment |
| 3. Covering strip | 10. Blade spring |
| 4. Crank housing with crank | 11. Rear attachment |
| 5. Cables | 12. Rear adjustment |
| 6. Front guide rail | 13. Reinforcing plate |
| 7. Front adjustment | |