

Owner's Manual

Saab 9-3 Convertible M2003

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Introduction

This manual provides practical guidance on driving and caring for your Saab.

The Saab 9-3 Convertible is available with a 2.0L turbo-engine, 205 hp.

Although the manual describes the most important differences between model variants, it does not include precise specifications of the different variants. Some differences also occur to meet special legal requirements in different countries.

Importation and distribution of Saab automobiles, spare parts and accessories are handled exclusively by General Motors of Canada Limited in Canada and by Saab Cars USA, Inc. in the U.S.A.

We recommend that you read through the manual before taking the car out for the first

time and that you keep it in the car for future reference.

To find a specific item, use the overviews given on pages 3–6. A list of contents is given at the beginning of each section of the manual, and there is also a comprehensive index at the back of the book.

Supplied with the car is a Warranties and Service Record booklet and a tire warranty folder which specifies the regular maintenance to be carried out. The book also contains important warranty conditions:

WARNING

WARNING texts warn against the danger of injury if the specified instructions are not followed.

NOTICE

NOTICE texts warn of potential damage to the car if the recommendations are not followed.

Since the policy at Saab is one of continual improvement, we retain the right to incorporate modifications and to alter specifications during production without prior notice.

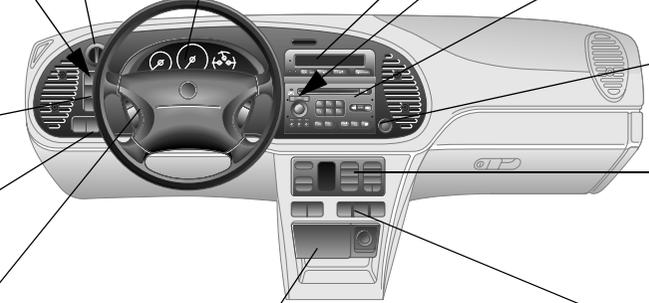
If you have any questions concerning your car, its equipment, the warranty conditions or the like, your Saab dealer will be pleased to help.

Best wishes,
Saab Automobile AB

Saab Automobile AB does not accept liability for any damage caused by the fitting of spare parts, exchange parts or accessories that are not approved by Saab Automobile AB.

The specifications, design particulars and illustrations included in the manual are not binding.

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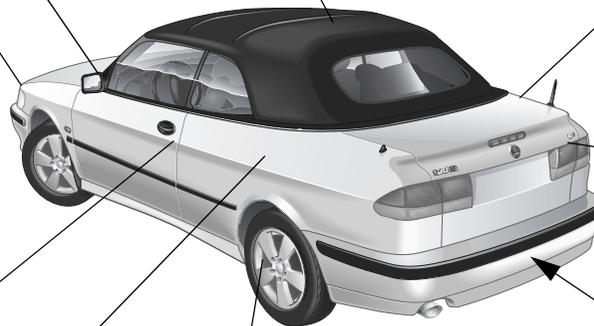
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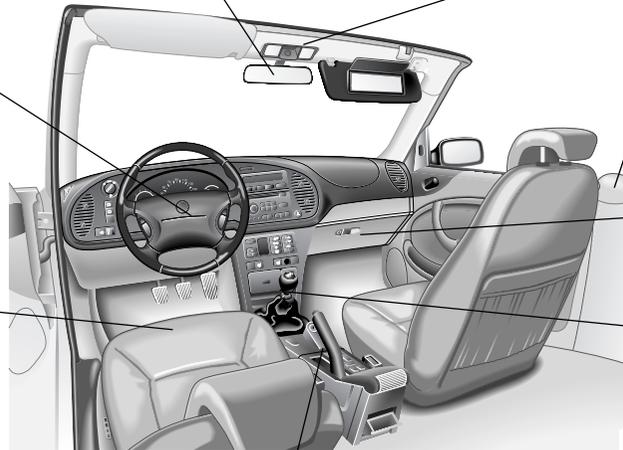
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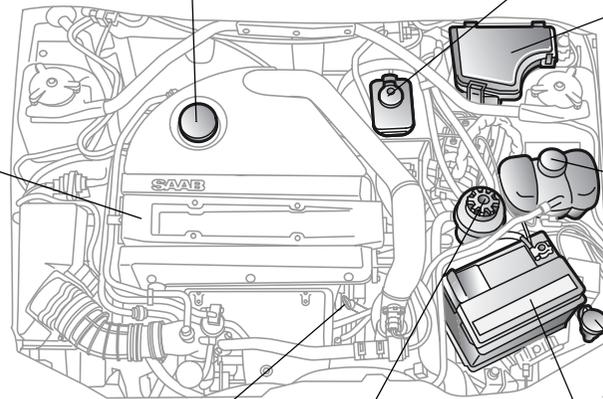
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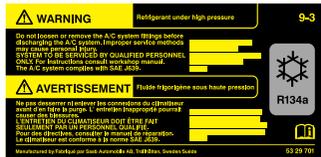
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Warning labels



A/C system:

Refrigerant at high pressure.

Do not undo or remove any connections in the A/C system until the system has been emptied. Working the wrong way may result in injury. **Work on the A/C system must be left to qualified personnel only.** For working instructions, see the Workshop Handbook.

The A/C system complies with SAE J639.

Refrigerant: 770 g of R134a.

Compressor oil: 150 cc PAG Oil SP-10, or SAAB oil 4759106 SP-10.



Radiator fan:

The radiator fan can cut in even after engine has been switched off.



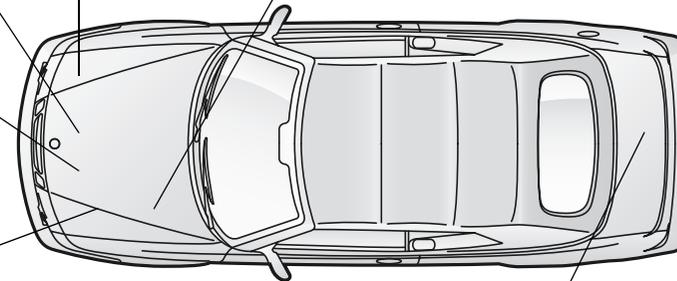
Drive belt:

Moving belt. Do not touch while engine running.



Coolant:

Never open while engine is hot. Escaping coolant under pressure can cause serious injuries.



- AVOID SPARKS, AVOID OPEN FLAMES, NO SMOKING
- PROTECT YOUR EYES
- KEEP OUT OF REACH OF CHILDREN
- ACID
- SEE MANUAL
- FLAMMABLE GAS

Battery:

- No sparks, flames or smoking.
- Shield eyes, explosive gases can cause blindness or injury.
- Sulphuric acid can cause blindness or severe burns.
- Flush eyes immediately with water. Get medical help fast.
- Do not tip battery, do not open battery.

KEEP OUT OF REACH OF CHILDREN



Wheel changing:

Intended for the Saab 9-5 and 9-3. Use the jack only on firm, level ground. Use blocks. Max. jack load: 2200 lbs. (1000 kg). For further information, see the manual.



Soft top
Do not lean over top or sit in the rear seat while activated.



Soft top
Push the handle in before driving away.
There would otherwise be a risk of injury.



CANADA

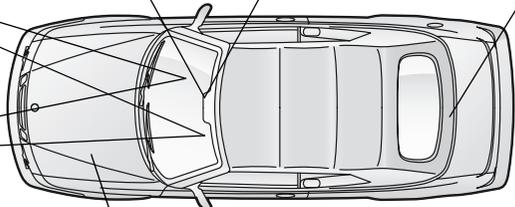


USA

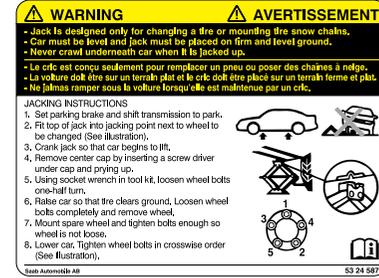
WARNING

DEATH or SERIOUS INJURY can occur.

- Children 12 and under can be killed by the air bag.
- The **BACK SEAT** is the **SAFEST** place for children.
- **NEVER** put a rear-facing child seat in the front.
- Sit as far back as possible from the air bag.
- **ALWAYS** use **SEAT BELTS** and **CHILD RESTRAINTS**.



Brake fluid
Clean filler cap before removing. Use only Dot 4 fluid from sealed container.



Jack

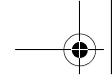
- The jack is designed only for changing a tire or mounting tire snow chains.
- Car must be level and jack must be placed on firm and level ground.
- Never crawl under car while it is jacked up.

JACKING INSTRUCTIONS

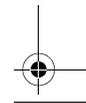
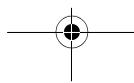
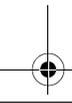
- 1 Set parking brake and shift transmission to park.
- 2 Fit top of jack into jacking point next to wheel that to be changed (See illustration).
- 3 Crank jack until so that car begins to lift.
- 4 Remove center cap by inserting a screw driver under cap prying up.
- 5 Using socket wrench in tool kit, loosen wheels bolts one-half turn.
- 6 Raise car so that tire clears ground. Loosen wheel bolts completely and remove wheel.
- 7 Mount spare wheel and tighten bolts enough so wheel is not loose.
- 8 Lower car. Tighten wheel bolts in crosswise order (See illustration).
Observe max. speed limit for spare tire.

Examples of symbols that can be found in your car

	No sparks, flames or smoking.		Buckle up		Headlights		Windshield wipers		Coolant temperature		Radiator fan
	Shield eyes		Airbag		Direction indicators		Windshield washers		Battery charging		Fuel
	Keep out of reach of children.		Electric windows		Parking lights		Defroster		Foot brake		
	Battery acid contains sulphuric acid.		Central locking		Hazard warning lights		Rear window heating		Coolant level		
	Refer to the Owner's Manual.		Never place a rear-facing child seat in this seat.		Front fog lights		Ventilation fan		Engine oil pressure		
	Risk of explosive gas.				Rear fog lights				ABS brakes		



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Safety

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12 Safety

Seats

The following seat adjustments can be made to achieve a comfortable driving position:

- Height (driver's seat)
- Legroom
- Backrest rake angle
- Lumbar support
- Head-restraint height

We recommend that adjustments to the driver's seat be performed in the following order:

- 1 Height
- 2 Legroom
- 3 Backrest rake angle

Lastly, adjust the steering wheel (see page 123).

WARNING

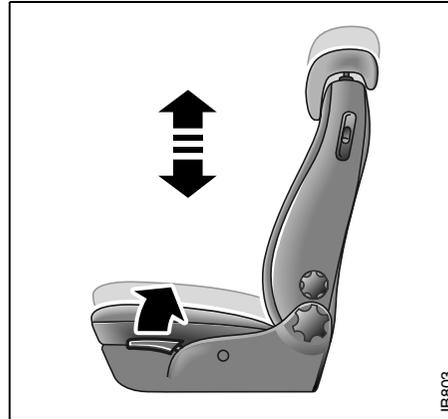
Never adjust the driver's seat except when the car is stationary.

Side airbags

See page 30.

Head restraint

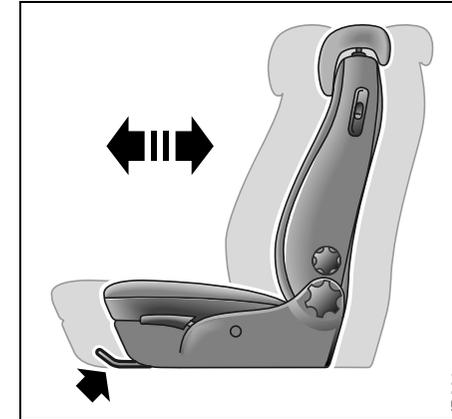
See page 17.



Height adjustment, driver's seat

Lift the lever to raise the seat. The lever is spring-loaded to return to its neutral position. Repeated lifting of the lever will increase the height in steps.

Press down the lever to lower the seat. Repeated downward presses of the lever will lower the seat in steps.

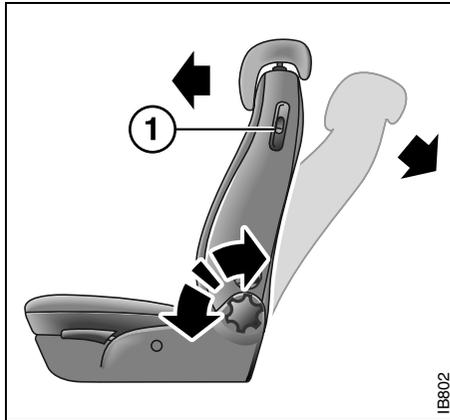


Legroom adjustment

Lift the lever under the front of the seat and slide the seat to the desired position.

WARNING

Check that the seat is locked in the new position. If not, it may move while the car is being driven and it could result in injury to the occupant in the event of a crash.



Adjusting the backrest
1 Catch, backrest

Backrest rake angle

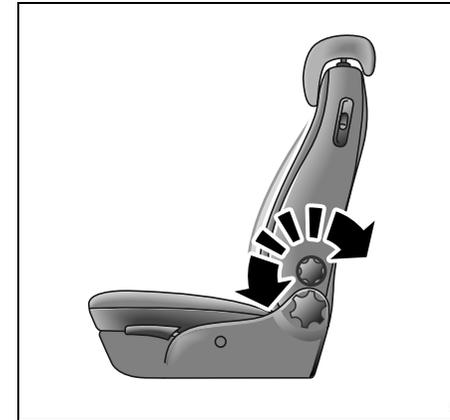
To find the most comfortable position, turn the knob to provide stepless adjustment of the backrest.

WARNING

The backrest should be upright during driving, so that the safety belt, airbag and backrest can provide optimum protection in the event of emergency braking or a crash, in particular a rear-end collision.

Front seats

Both front seats have release levers on the outside of the backrest. The passenger seat also has a release on the inside of the backrest so that the driver can tilt the backrest for the convenience of rear-seat passengers. Raise the release levers to tip the backrest forward.



Lumbar support

Turn the smaller knob for stepless adjustment of the lumbar support.

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Manually adjustable front seats with "Easy Entry" function

Manual seats have a feature called "Easy Entry", which facilitates movement to and from the rear seat.

Activate "Easy Entry" as follows:

- 1 Raise the release lever and hold it in its uppermost position until the backrest is tipped forward.
- 2 Slide the seat forward. The whole seat is now shifted to its forward position.

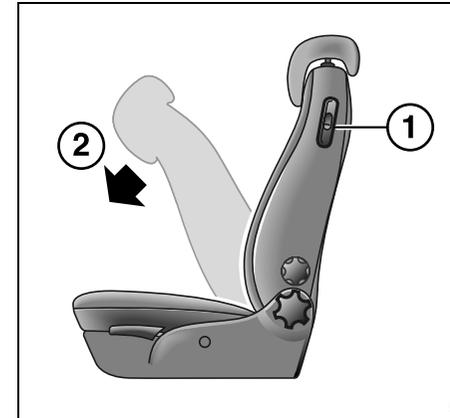
Resetting:

- 1 Slide the seat back to the desired position.
- 2 Fold the backrest to the upright position. Lock the front to rear seat adjustment.

After resetting you should ensure that the backrest and seat are properly secured.

WARNING

- Always check that the catch engages properly after the backrest is raised.
- Check also that the seat's lateral adjuster is properly secured by trying to shift the seat. Both the backrest and the whole seat must be locked in place; otherwise you are at risk of injury during braking or in a crash especially if a rear-facing child seat is fitted behind the backrest.



Manually adjusted front seat

- 1 Release lever, tipping backrest forward
- 2 Activation of the "Easy Entry" feature when the backrest is tipped forward

Electrically adjustable front seats (certain variants)

WARNING

The seats are actuated by powerful motors. Bear this in mind when adjusting the seat, and make sure that nothing gets caught and damaged. Ensure that nothing can be trapped when adjusting the seat.

Bear in mind that children can be injured if they play with the electrically-operated seats.

Always remove the ignition key when you leave the car to prevent personal injury caused by the electrically adjustable seats, for example, due to children playing.

Both seats can be operated from outside when one of the front doors is opened, to improve access to the car.

For safety reasons, if the door is closed, the seat can only be adjusted when the ignition is ON.

Note, that both front seats can be adjusted up to 30 seconds after the door has been closed.



Height

Raise the seat by lifting the front switch bar straight up.

Lower the seat by pushing the front switch bar down.

The same switch bar can be used to adjust the height of the front and rear edges of the seat independently by moving half of the switch in the direction desired.



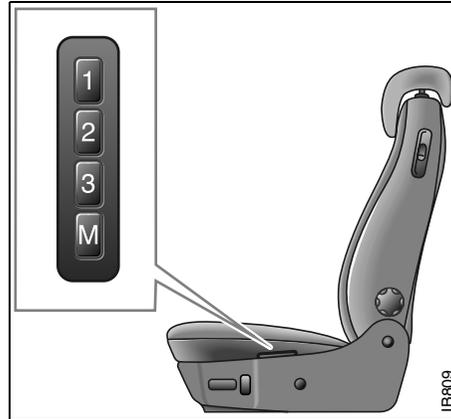
Legroom adjustment

For power seats, slide the switch bar forward or rearward to the desired position.

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Backrest rake angle
Push the rear lever forward or rearward to adjust the rake angle of the backrest.

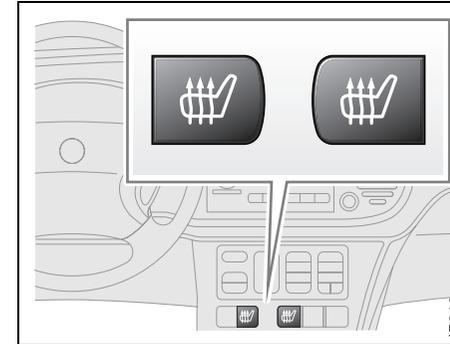


Memory function (certain variants)
In some variants the electrically adjustable driver's seat has a memory function. Three different settings can be programmed.

- 1 Make the desired adjustments to the seat setting.
- 2 Store the setting of the seat by keeping the "M" depressed and at the same time pressing one of the memory buttons, 1, 2 or 3. Hold the buttons depressed until the Saab information Display (SID) provides acknowledgement with a chime.

When you next wish to activate the memory function, keep the desired memory button depressed while the seat adopts the programmed settings.

To change any of the three programmed settings, repeat stages 1 and 2.



Electrically heated front seats (option on some model variants/markets)

Both front seats can be equipped with heating for the seat cushion and backrest. It is switched on and off using the buttons on the instrument panel.

The heating is thermostatically controlled. It comes on when the temperature of the seat cushion goes below 79°F (26°C) and turns off when it reaches 97°F (36°C).

Shut off the heating once the seat is warm.

Head restraint

WARNING

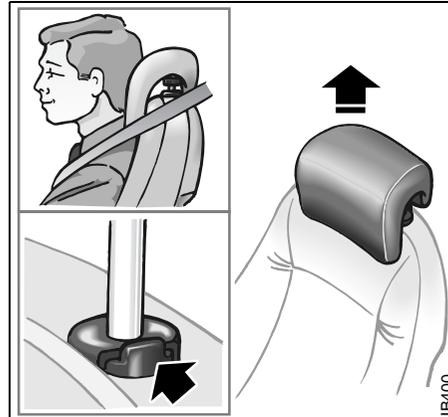
Adjust the head restraint so that the head is optimally supported and the center of the head restraint is at ear height, thus reducing the likelihood of neck injury in a crash.

The front seats in the Saab 9-3 are equipped with Saab Active Head Restraints (SAHRs). These reduce the risk of whiplash injury if the car is hit from behind.

In the event of a rear-end crash, the body is forced back against the backrest. This, in turn, causes the mechanism to press the head restraint forward and upward, thus limiting the backward movement of the head.

The SAHR is a mechanical system, actuated by body weight. The mechanism is built into the top of the backrest, where it is connected to the head restraint.

Because the SAHR is mechanically operated, it does not need to be replaced after a minor rear-end crash.



The head restraint can be raised or lowered and is adjustable in various positions.

- Raising: grasp the head restraint on both sides and pull it straight up.
- Lowering: depress the catch on the left-hand side of the attaching point and press the head restraint down.

18 Safety

Safety belts

! WARNING

Safety belts must be worn **at all times** by all car occupants. Child safety, see page 23.

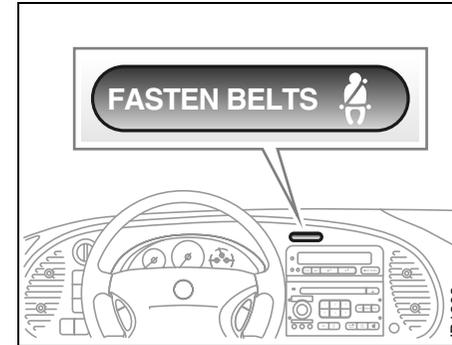
Check that the locking tongue is properly locked in the belt lock.

Three-point inertia-reel safety belts are provided for all seats.

The results of studies show that it is equally important to wear safety belts in the rear seat as in the front seats.

! WARNING

In the event of a crash, the rear-seat passengers not wearing a seatbelt will be thrown forward against the front-seat backrests. The stresses imposed on the front seat passengers and belts are multiplied and can result in needless injury or even death for all car occupants.



Safety-belt reminder

When the ignition is switched on, the "fasten belts" reminder will light up until the driver fastens the safety belt. In addition an audible signal sounds for 6 seconds, or until the driver fastens his belt.

Safety-belt pretensioners

The belts of the front seats are fitted with automatic pretensioners, which are activated in the event of a severe frontal crash or very violent rear-end crash. They serve to reduce the forward movement of the body by tensioning the belt.

The belt pretensioners do not activate in less violent frontal or rear-end crashes.

WARNING

If the car is involved in a crash, the safety belts, belt pretensioners and other components must be inspected by an authorized Saab dealer and replaced as necessary.

Never make any alterations or repairs to the safety belt yourself. Visit an authorized Saab dealer for any necessary repairs.

Correct position for safety belt

- The lap part of the belt should be pulled as tightly as comfortable and as low as possible across the hips, so that it is just touching the top of the thighs. The shoulder belt should be well in on the shoulder but not touching the neck.

WARNING

Proper positioning of the safety belt is extremely important. An out of position safety belt can result in the wearer sliding underneath the belt in a crash (submarining) and injury can result from the lap portion cutting into the abdomen.

- Check to ensure that the belt is not twisted or rubbing against any sharp edges.
- There should not be any slack in the belt. Pull the belt tight – particularly important when thick outer clothing is worn. It is advisable to remove thick items of clothing.



Correctly positioned safety belt.

- Refrain from tilting the backrest more than necessary, as the safety belt provides better protection when the seat is in the more upright position.
- Only one person per safety belt!

WARNING

If two people share a belt, they risk injury by being crushed together in the event of a crash.

- For most of the time a safety belt is worn, the retractor will allow the wearer freedom of movement. The retractor locks up automatically if the belt is jerked or withdrawn sharply, the car tilts, the brakes are applied hard or a crash occurs.

20 Safety

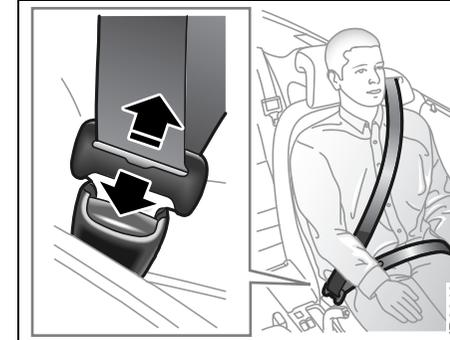
- Children who have grown out of a child seat should be restrained by the car's standard three-point belts. Make sure that the shoulder belt is not in contact with the neck or throat. If it is, a booster seat/cushion may be necessary.

WARNING

Never fasten the safety belt with the shoulder belt behind the body or pull the belt off the shoulder and under the arm.



To fasten the belt



Press the red button to release the belt.

Front seat belts

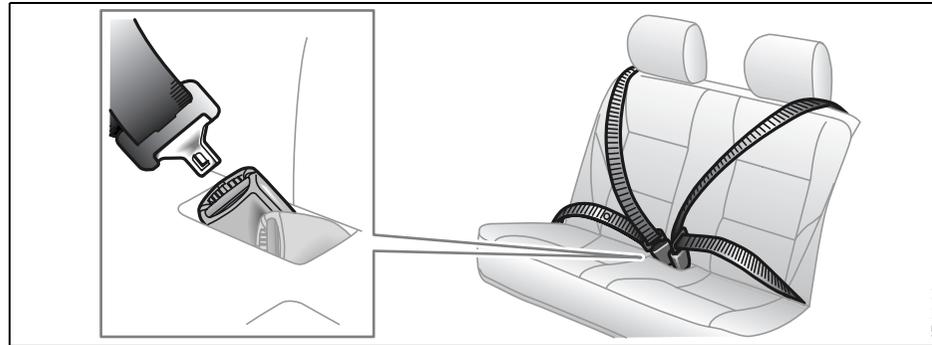
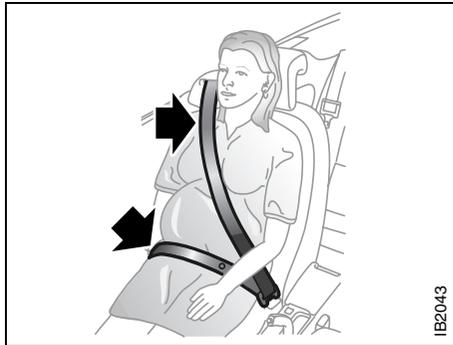
Fasten the belt by pulling the belt and inserting the tongue in the buckle. Check that it is securely fastened.

The lower outer anchorage point is in the rear of the sill, which makes it all the more important that the lap strap is not slack during use.

Grasp the shoulder belt close to the buckle and pull the belt towards the shoulder to tighten the lap belt part.

The belt must be as far in on the shoulder as possible.

To release the belt, press the red button on the belt buckle, as illustrated. See page 208 for the checking of belt function, cleaning etc.



Safety belts, rear seat

Safety belt use during pregnancy

Pregnant women must **always** wear a safety belt to protect both themselves and the unborn child.

The lap belt should be placed low, across the hips and over the upper thighs.

Safety belts, rear seat

Three-point safety belts are provided for the two rear-seat passengers.

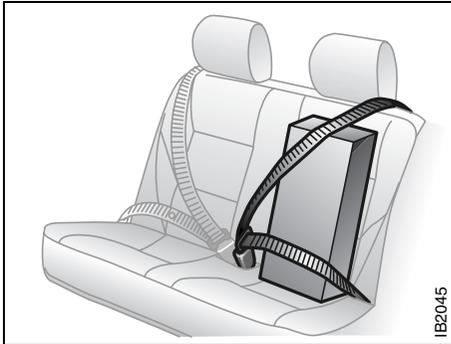
Fasten the belts by pulling the belt across you and inserting the tongue into the buckle. Check that it is securely fastened.

Grasp the shoulder belt close to the buckle and pull the belt towards the shoulder to tighten the lap belt part.

The belt must be as far in on the shoulder as possible.

Press the red button on the belt buckle to release the belt.

22 Safety



Securing a load on the rear seat

IB2045

WARNING

- Make sure that the belt does not become trapped when the backrest is folded down or raised (see page 129).
- If a cargo has to be placed on a seat, it must be properly secured with the safety belt. This reduces the risk of the cargo being thrown about during hard braking or a crash, which could cause personal injury.
- Check that the belt is not twisted or lying against sharp edges.

See page 130 for securing of load.
See page 208 for the checking of belt function, cleaning etc.

WARNING

Safety belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.

Safety belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A loose belt will greatly reduce the protection afforded to the wearer.

Care should be taken to avoid contamination of the webbing with polishes, oils and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.

It is essential to replace the entire assembly after it has been worn in a severe impact even if damage to the assembly is not obvious.

Belts should not be worn with straps twisted.

Each belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.

No modifications or additions should be made by the user which will either prevent the safety belt adjusting device from operating to remove slack, or prevent the safety belt assembly from being adjusted to remove slack.

Child safety

WARNING

- NEVER put a rear-facing child seat in the front.



- Children must **always** be suitably restrained in the car. All child restraints and booster seats are designed to be secured in vehicle

seats by the lap belt of a lap-shoulder belt or LATCH. If the child restraint is not properly secured, a child can be injured or killed in a crash.

- Children 12 and under can be killed by the airbag.
- According to crash statistics, the BACK SEAT is SAFER for properly restrained children than the front seat.
- Sit as far back as possible from the air bag.

Car safety tips

WARNING

- Never leave your children unattended in a car, even for a short time.
 - Children can suffer heat stroke – perhaps die – in a matter of minutes.
 - Children can put the car into gear and hurt themselves or others.
- At gas stations, take the keys from the car while filling the tank.
- Never allow children to climb on top of – or under motor vehicles.
- Always look for children before backing your motor vehicle out of a garage or driveway.
- To avoid carbon monoxide poisoning, never let a car idle in the garage.
- Supervise young children around buckets of water while washing your car. Small children can drown in seconds in less than an inch of water.

Protect your children from getting trapped in the trunk of a car

WARNING

- Teach your children not to play in or around cars.
- Watch your children when loading or unloading the car so they don't get locked in by mistake.
- Always lock the doors and trunk of your car, and keep the keys out of children's sight and reach.
- Keep the rear fold-down seat closed to help prevent kids from getting into the trunk from inside the car.

For Trunk Release Handle information see page 39 and 131.

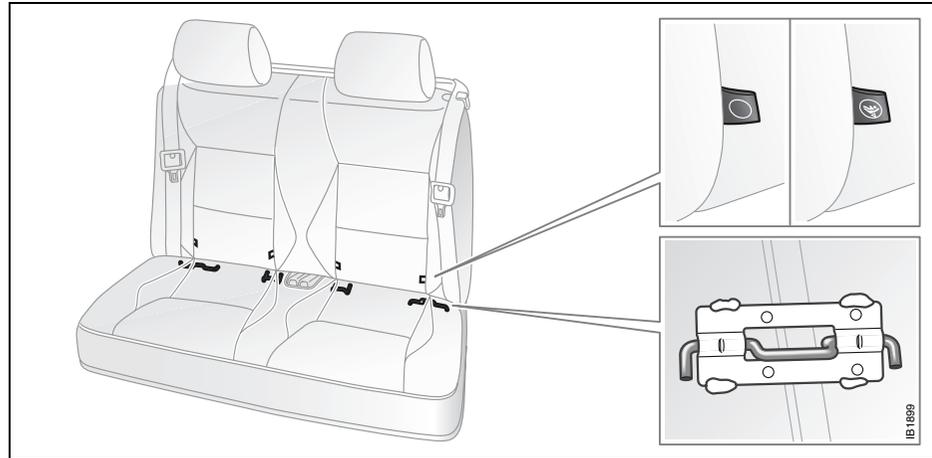
24 Safety

The same attention must be given to child safety in the car as is given to adults. Saab recommends rearward facing child restraints for children up to 3 years old. Children travel most safely when properly restrained, but restraints must be suitable for the size of the child. Always follow the child seat/booster cushion manufacturer's instructions when installing these devices in your vehicle.

Make sure you are acquainted with the legal requirements for seating children in the car.

Make sure that it is possible to fit a child restraint in accordance with the manufacturer's child seat instructions.

When fitting child seats in cars you must always read the instructions supplied by the manufacturer.



ISOFIX attachment points in the rear seat

LATCH

LATCH (Lower Anchorages & Top tethers for CHildren) consists of top tether and lower anchorage bars ("ISOFIX") for child restraints in the rear seats.

ISOFIX are lower attachments located where the seat and back cushions come together. Top tether are upper attachments located between belt beam and parcel shelf, see page 26.

Saab recommends rearward facing child restraints for children 3 and under.

LATCH installation

To facilitate the proper fitting of new specially-designed child restraints rigid lower anchorages (ISOFIX) have been installed to the vehicle that shall be used with the top tether anchorages in the rear seating positions.

LATCH is a U.S./Canadian government standard for an uniform method of fitting child restraints without using the standard safety belts. Only certain child restraints are equipped to utilize these rigid lower anchorages behind where the seat cushion and seat back come together. LATCH child seats also utilize a top tether strap that is found on some newer child seats that still require installation with the standard safety belts.

There are two bars attached to the car body for each specially designed LATCH child restraint. A small label is located on the seat back just above each attachment bar to facilitate installing the child restraint. The label contains a circle or a rearward facing child restraint.

- 1 Place the child restraint on one of the designated rear seat cushions.
- 2 Press the child restraint rearward, lining up the restraint attachment arms with the labels.
- 3 Follow the child restraint instructions to confirm that both restraint arms are properly attached to the bars.
- 4 Attach the top tether strap to the in-car anchorage and tighten according to the restraint instructions, see page 26.
- 5 Pull the child restraint to make a second check that restraint is securely attached at both the lower anchorage bars and the top tether strap.

For the top tether, only use the strap supplied with the child restraint.

Always follow the installation instructions supplied with the child restraint.

The availability of LATCH child restraints is limited.

When fitting child seats in cars you must always read the instructions supplied by the car seat manufacturer.



Rigid 2-point lower attachment with top tether

Semi-rigid 2-point lower attachment with top tether



26 Safety

Child tether anchorages



Child restraints with a tether strap must be anchored according to law.

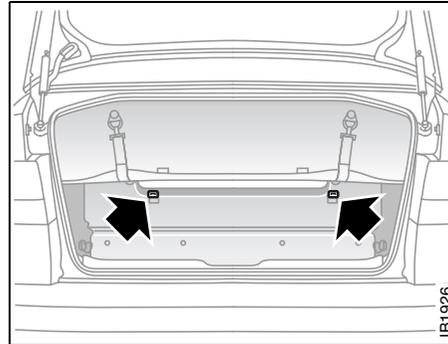
WARNING

Child tether anchorages are designed to withstand only those loads imposed by correctly fitted child restraints.

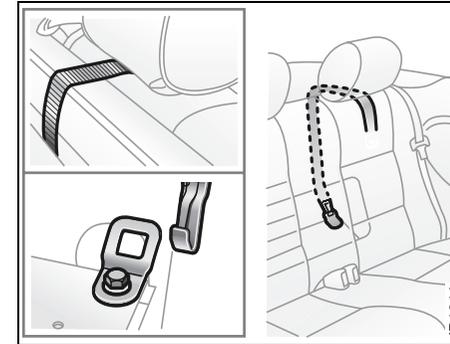
Under no circumstances are they to be used for adult safety belts.

The car is provided with two top tether anchorages. Use the one that is right behind the child restraint and attach the restraint as follows:

- 1 Lower the convertible top fully.
- 2 Switch off the ignition when the top storage covers are in their straight up position.
- 3 Place the child restraint in the rear seat.
- 4 Unlock the backrest and lower it about 8 in. (20 cm).



Child tether anchorages



Attaching tether strap hook to anchorage. The tether strap is not a part of the tether child anchorage.

- 5 Insert the child restraint's upper tether between the bottom of the headrest and the top of the backrest.
- 6 Run the hook and the tether over the cross-member behind the headrest.
- 7 There are slits in the fabric where the top bag is joined to the cross-member. Insert hook and strap through the slit opening.
- 8 Attach the tether to the anchorage. This might be easier if you insert your other hand between the backrest and the crossmember to help attach the tether.
- 9 Raise the backrest and lock in place.
- 10 Tighten the tether so that the back of the child restraint is pressed hard against the backrest. Also check that no buckle is positioned above the cross-member, as this could obstruct locking of the tonneau cover.
- 11 Secure the lower part of the child restraint by means of the safety belt as described in the child restraint mounting instructions.

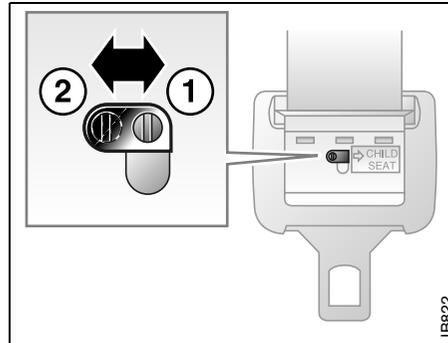
Lockable belt tongue

If fitting a child seat that is intended to be secured in position by the lap portion of the safety belt, make use of the locking function of the buckle.

Locking the lap portion of the belt lessens the risk that the seat will work loose while the car is in motion.

The button for the locking function is located on the back of the buckle.

- 1 Position the child seat in the back of the car.
- 2 To activate the locking function, move the locking button on the tongue of the belt to the position marked "CHILD SEAT" (item 1 in the figure) in order to activate the locking function.
- 3 Secure the base of the child seat with the lap portion of the safety belt in accordance with the installation instructions accompanying the child seat.
- 4 Grasp the shoulder part of the safety belt and pull it upwards to tighten the lap portion against the child seat.
- 5 Check for correct locking function by pulling on the lap portion of the belt. The belt must not unreel.



Locking the lap belt

- 1 Locked
- 2 Unlocked

Installation of child restraint using the standard safety belt

Child restraint that are approved for rearward facing installation in the rear seat can be positioned in any of the two rear places.

Make sure that it is possible to fit it in accordance with the manufacturer's instructions.

When fitting child restraints in cars you must always read the instructions supplied by the child seat manufacturer.

! WARNING

Failure to follow all the manufacturer's instructions on the use of this child restraint system can cause your child to strike the vehicle's interior during a sudden stop or crash.

Saab recommends rearward facing child restraints be used for children up to 3 years of age.

28 Safety

Airbag



⚠ WARNING

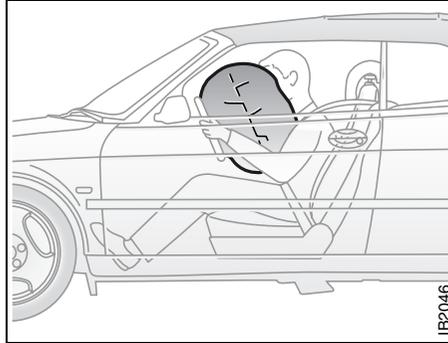
To reduce risk of injury:

- **Always** wear your safety belt.
- **Always** adjust your seat so that you are as far back as possible but still able to reach the steering wheel and controls comfortably.
- Children 12 and under or shorter than 55 inches (140 cm) should **always** travel in the rear as the vehicle is equipped with an airbag on the passenger side.

The AIRBAG system comprises an airbag in the steering wheel, a front passenger airbag and side airbags in the front seats.

The system supplements the protection provided by the safety belts to further enhance the safety of occupants.

If a fault is detected in the AIRBAG, the AIR BAG warning light on the main instrument panel will come on (see pages 60 and 32).



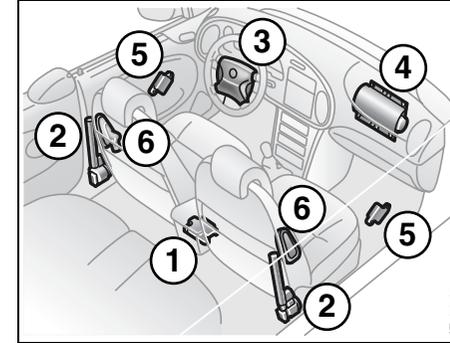
Airbag in course of inflation (driver's side)

When the system is triggered by impact of a frontal crash, the airbags in the steering wheel and passenger side of the dash board are inflated, after which they deflate through vents in the back of the bags.

The entire process takes less than 0.1 second – literally, faster than the blinking of an eye.

These airbags are triggered only by moderate to severe frontal or near-frontal crashes. They will not be activated by minor front-end impacts, rear-end or side impacts, or by the car rolling over.

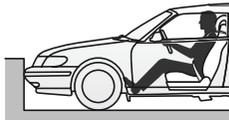
Side airbags, see page 30.



AIRBAG system with belt pretensioners

- 1 Electronic control module and sensor
- 2 Belt pretensioners (for both front safety belts)
- 3 Steering wheel with integral airbag
- 4 Recess for airbag on passenger's side
- 5 Sensor, side airbag
- 6 Side airbag

Operation of the airbag in a front-end crash



Moment of impact.



The sensors detect retardation and send a signal via the central sensor to a gas generator that inflates the airbag.



The inflating airbag cushions the driver.



Airbag now fully inflated.



The airbag starts to deflate.

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WARNING

- Even if the car is equipped with AIR-BAG, safety belts must still **always** be worn by all occupants.
- Note that because an airbag inflates and deflates extremely rapidly, it will not provide protection against a second impact occurring in the same incident. **Always** use your safety belt.
- Always sit with the whole of your back in contact with the backrest of the seat, and with your seat as far back as is practical. Otherwise you will be thrown back against the backrest when the airbag inflates which could cause you injury or death. The airbag needs room in which to inflate.
- Never attach anything to the steering wheel or passenger side of the instrument panel, as this could result in injury if the airbag should inflate. The same applies to anything you might have in your mouth, such as a pipe, for instance.
- Some components of the airbag will be warm for a short time. In some circumstances the airbag can cause minor burns or abrasions to the body when the airbag inflates/deflates.

- Never rest your hands or forearms on the steering-wheel center padding.
- If the AIR BAG warning light remains on after the car has been started or comes on while you are driving, have the car checked immediately by an authorized Saab dealer. The warning light could signify that the airbags may not inflate in a crash, or they could even inflate without a crash. See page 60.

30 Safety

Front passenger seat



WARNING

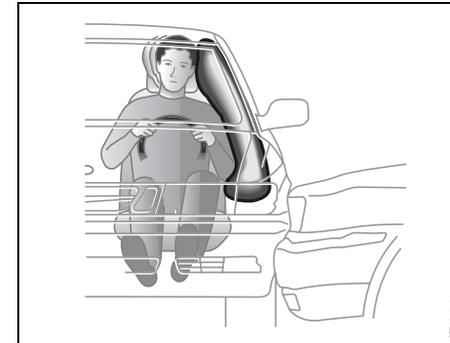
Never secure a rear-facing child seat in the right front seat of a car equipped with a passenger airbag. Inflation of the airbag in the event of a crash could seriously injure or kill a child.

The airbags are interconnected and have a common warning light, AIR BAG. The passenger airbag module is housed in the fascia above the glove compartment and is marked "SRS AIR BAG".

Both airbags will be inflated in the event of a moderate to severe frontal, or near-frontal crash, even if the passenger seat is unoccupied.

WARNING

- Children 12 and under can be killed by the airbag.
- The back seat is the safest place for children.
- Never allow a child to stand in front of the seat or to sit on the lap of a front seat passenger. Serious injury or death could result if the airbag is inflated in a crash.
- The glove compartment must be closed while travelling. An open glove compartment door could cause leg injuries in the event of a crash.
- Never place anything on the dash or in front of the seat as, in addition to being a hazard to passengers, this could interfere with the function of the airbag in the event of a crash. The same applies to the mounting of accessories on the dash.
- Keep feet on the floor – never put feet up on the dash, on the seat or out of the window.
- Do not carry anything in your lap.



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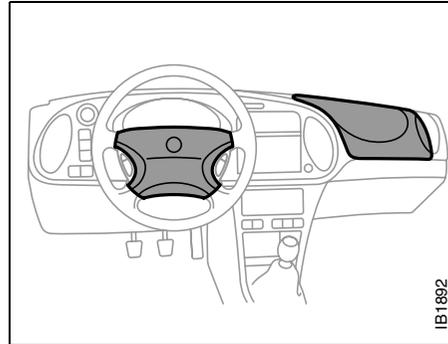
Side airbag



WARNING

- This car is equipped with side airbags and no extra interior trim should be fitted. Failure to observe this warning could result in the side airbags not inflating as intended and thus not providing the intended protection either.
- Never place any object in the area that would be occupied by the inflated airbag.
- For optimum protection, sit upright in the seat, with your safety belt correctly fastened.

- The sensors for the side airbags are fitted in the doors. We advise against doing any work on the doors that could affect the moisture barrier in the door or the airbag sensors. It is essential that the moisture barrier (thick plastic film) in the door is not damaged in any way.
- Improvement of the anticorrosion treatment of the doors should only be carried out by an authorized Saab dealer. Otherwise there is a risk that the side impact sensor and the moisture barrier in the door could be damaged.
- The side airbags will inflate only in the event of a side impact; not in the event of a front or rear-end crash or of the car's rolling over.
- Damage or wear to the seat cover, or the seat seam, in the area of the side airbag must immediately be repaired by an authorized Saab dealer.
- Do not modify the speaker installation in the front doors or install speakers other than those specifically approved by Saab.

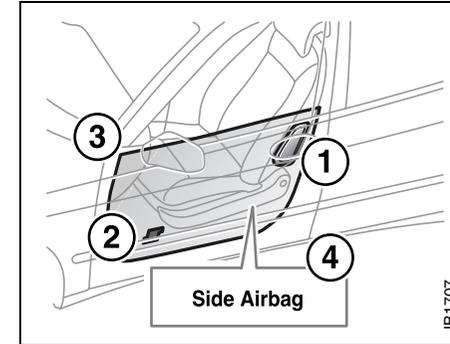


Accessories and other equipment must not be fitted to the surfaces marked as these are where the airbags may inflate in the event of a crash.

Side airbags are housed inside the back-rests of the front seats and are designed to protect the driver and front passenger in the event of a side impact.

In a side impact, only the airbag on that side will be activated, and only then if certain pre-determined conditions are met such as the force and angle of the impact, the speed of the car on impact, and at which point on the car's side the impact occurs.

The sensors, which are fitted in the front doors, sense the rise in pressure caused by the door panel being pressed in during an impact condition. The side airbag trigger will be commanded based on the characteristics of this pressure rise.



Side airbag, components

- 1 Side airbags
- 2 Sensor
- 3 Moisture barrier
- 4 Text on seat

32 Safety

AIR BAG warning light

WARNING

- If the airbag readiness light stays on after you start your vehicle, it means the airbag system may not be working properly. See page 60.
- The airbags in your vehicle may not inflate in a crash, or they could even inflate without a crash.
- To help avoid injury to yourself or others, have your vehicle serviced right away if the airbag readiness light stays on after you start your vehicle.

AIRBAG servicing

The AIRBAG must be inspected as part of the normal service program but otherwise may be regarded as maintenance-free.

Scrapping or working on airbag and belt pretensioners

WARNING

- Under no circumstances should any modifications be made that affect the steering wheel or the airbag's electrical circuitry.
- Before starting any welding work on the car, always disconnect the negative (-) battery lead and cover the conductor.
- Airbags and belt pretensioners must be deployed under controlled conditions before the car is scrapped or any of the system's components are removed. Airbags or belt pretensioners that have been deployed as a result of a crash must be replaced by new ones.
- Airbag-system components must never be transferred for use in another vehicle.
- All work involving the scrapping or replacement of airbags or belt pretensioners must only be carried out by knowledgeable personnel.

Frequently asked questions on function of the airbag

Do you still need to wear a safety belt if airbags are fitted?

Yes, always! The airbag merely supplements the car's normal safety system. Moreover, the airbag will only be actuated in a moderate to severe frontal, or near-frontal crash, which means, of course, that it provides no protection in minor frontal crashes, major rear-end or side-on crashes or if the car rolls over.

The safety belts help to prevent passengers from being thrown against each other and being injured or killed.

But they also ensure that, if a crash occurs in which the airbags are inflated, the airbag will make the optimum contact with the occupant, i.e. square on from the front. If the occupant meets the airbag in an offset position, the protection afforded will be reduced.

In addition, airbags provide no protection against a secondary impact occurring in the same incident. So there is no doubt about the benefit of wearing safety belts at all times.

Do not sit too close to the airbag: it needs room to inflate.

The airbag inflates very quickly and powerfully in order to protect an adult person, before they are thrown forward, in a serious frontal crash.

How do I position the seat to leave room for the airbag to inflate?

Don't have your seat too far forward.

Recline the seat back to increase the distance between you and the airbag. For short drivers, special accessory pedal extensions are available through your Saab dealer.

Airbags inflate extremely rapidly and with great force – to be fast enough to protect an adult in the seat.

When do the airbags in the steering wheel and passenger side of the dash board inflate?

The airbag will only be inflated under certain predetermined conditions in a moderate to severe frontal, or near-frontal crash, depending on such factors as the force and angle of the impact, the speed of the car on impact, and the resistance to deformation of the impacting object.

The airbag can only be activated once in the same incident.

Do not attempt to drive the car after an airbag has been inflated, even if it is possible.

What won't trigger the airbag?

The airbag will not be activated in all front-end crashes. For instance, if the car has hit something relatively soft and yielding (e.g. a snow drift or a hedge) or a solid object at a low impact speed, the airbag will not necessarily be triggered.

How loud is the inflation?

The noise of the inflation is certainly loud, but it is very short-lived and will not damage your hearing. For a short time afterwards you could experience a buzzing noise in your ears.

Most people who have experienced it cannot remember the noise of the inflation at all – all they remember is the noise of the crash.

Can you still use a child seat in the front if a passenger airbag is installed?

Definitely not!

Children 12 and under can be injured or killed by the airbag.

The BACK SEAT is the SAFEST place for children.

NEVER put a child seat in the front.

34 Safety

Are the smoke and fumes given off when the airbag operates at all harmful?

Most people who have remained in a car with little or no ventilation for several minutes complained only of minor irritation of the throat and eyes. Avoid as much as possible getting dust on your skin as there is a risk of skin irritation.

If you suffer from asthma, the incident may bring on an attack, in which case you should follow the normal procedure advised by your doctor. It is advisable to consult a doctor afterwards.

WARNING

When an airbag is inflated there is dust in the air.

Because the dust/smoke can, in certain cases, cause irritation to the skin, the following precautions should be taken:

- As soon as possible, wash any exposed skin using a mild soap and water.
- If there is irritation of the eyes, flush them liberally with clean water for at least 20 minutes.
- If this trouble persists, you should consult a doctor.

What should I do if the AIR-BAG warning light comes on?

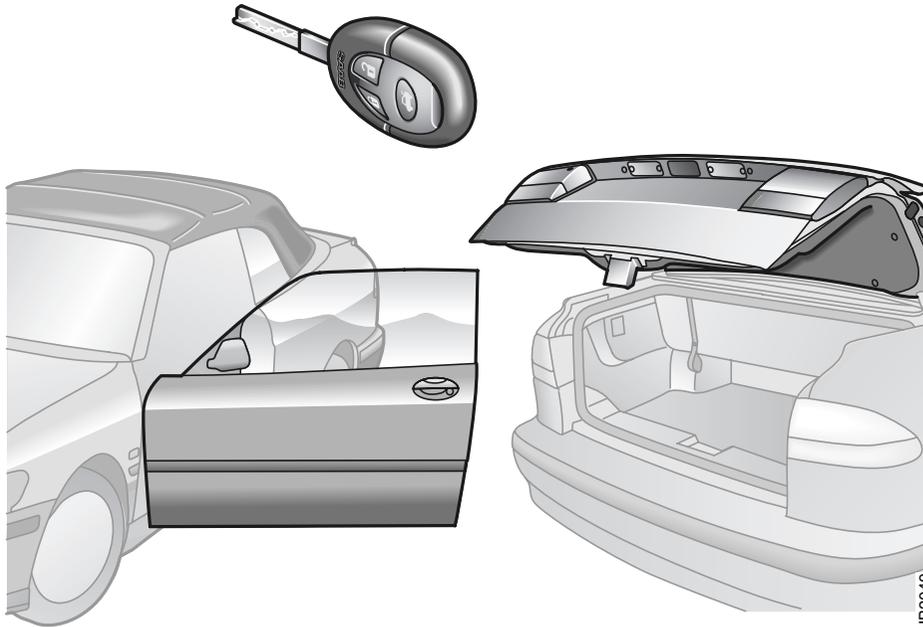
If the warning light is on, it means that a fault has been detected in the system. The airbag cannot be relied on to operate as intended and it might even be activated erroneously. You should therefore take the car to an authorized Saab dealer as soon as possible.

WARNING

To reduce the risk of head injuries in the event of a crash, the pillar trims and header trims incorporate energy absorbing material. These areas must not be modified in any way. Work on these areas must only be carried out at an authorized Saab dealer.

Security

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Car alarm	41



36 Security

Doors

Opening handle

Open the door by **lifting** the opening handle from below.

If the door is stuck (e.g. if frozen), hold the handle from above to secure a better grip.

Central locking

WARNING

Leaving children or pets unattended in a locked car is dangerous. It is also dangerous to leave children in a vehicle with the ignition key. A child or others could be badly injured or even killed.

Key

The key unit consists of a mechanical key with integrated remote control.

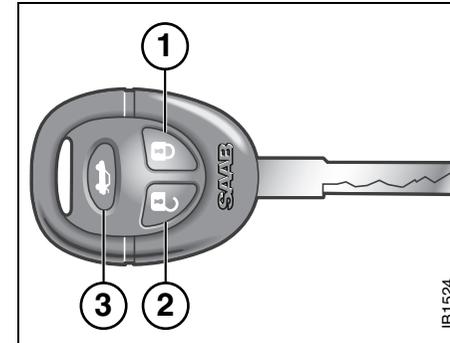
The mechanical key is used for manual locking and unlocking.

The remote control is used for remote locking and unlocking.

The key fits all the car's locks

The key supplied with the car has a code number on a black plastic tag that needs to be quoted for ordering additional keys. You should therefore make a careful note of the number.

The key contains a unique electronic code for your car. When the key is inserted in the ignition, the code is checked. If it matches, the car can be started.



Remote control

- 1 To lock
- 2 To unlock
- 3 To open trunk lid

Two keys are supplied with the car. It is possible to have up to four at one time that are coded for your car. If one is lost, contact your authorized Saab dealer to obtain a replacement. If an additional key is to be added, all of the original keys must be brought to the dealer so that the control module can "learn" to recognize the new components.

NOTE: For this reason, we strongly advise you to take two keys with you on long journeys and to keep them separate. If all keys are lost, it will be necessary to replace costly electronic components as well as the keys and remotes. This loss and replacement cost is not covered by the new car warranty.

NOTICE

The key contains delicate electronics.

- Do not expose it to water.
- Avoid rough handling.
- Do not place the key where it may be subjected to high temperatures, e.g. on the instrument panel.
- The key may malfunction if it becomes very cold. Warm it in your hands for a couple of minutes.
- Never open the key. For changing the battery, see page 38.

To check the number of keys that are programmed for the car; see page 45.

Electronic starting interlock (immobilizer)

Each time the key is removed from the ignition, the electronic starting interlock is activated and the car is thus immobilized, see also page 42.

Reprogramming lock system functions

Certain lock system functions can be reprogrammed by your authorized Saab dealer; see page 237.

Locking/unlocking the car

When the car is locked and unlocked with the key, the theft alarm is also affected.

Remote locking (1)

Press  once on the control: all doors lock.

The hazard warning lights will flash once to confirm.

The trunk lid cannot be opened now from inside using the switch on the driver's door.

Remote unlocking (2)

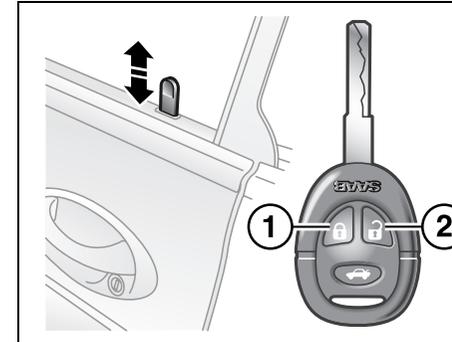
Press  once on the control: driver's door is unlocked. Press a second time to unlock the passenger door.

The hazard warning lights will flash twice to confirm.

If unable to unlock using the remote control

Unlock the door manually. If the car has an alarm, this will be tripped. To silence the alarm, insert the key into the ignition switch and turn it to the ON position.

The car can now be started. Contact your local Saab dealer to have the system checked and rectified.



Locking / unlocking by remote control

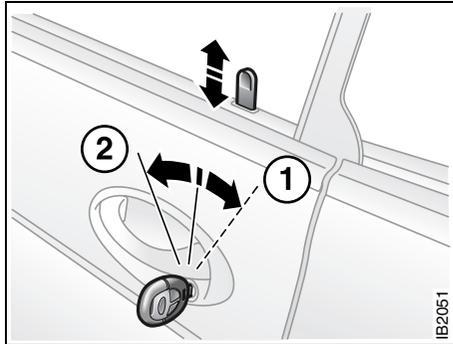
- 1 To lock
- 2 To unlock

WARNING

The remote control also works from inside the car. Therefore, hold the key in such a way that the buttons are not unintentionally pressed when the key is turned, or inserted or removed from the ignition switch.

Otherwise, the doors may be unintentionally locked or the trunk may be opened.

38 Security



Central locking

- 1 To lock
- 2 To unlock

Locking by key (1)

Turn the key clockwise: all doors and trunk lid locked.

The trunk lid cannot be opened now from inside using the switch on the driver's door.

Unlocking by key (2)

Turn the key counterclockwise once: the driver's door unlocked.

Turn the key counterclockwise twice: the passenger door, but not trunk lid, unlocked.

The driver's door lock button will lock/unlock both doors.

If the car is left with the doors open, the interior lighting will be switched off automatically after 20 minutes, to prevent a dead battery.

WARNING

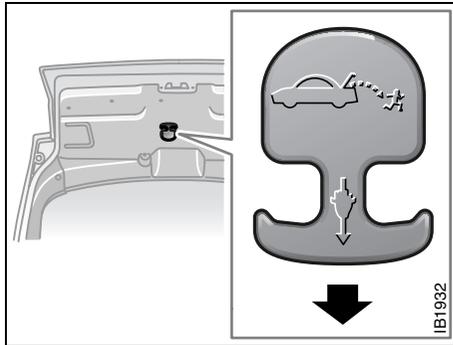
Having the doors locked when you are driving will reduce the likelihood of:

- Passengers, especially children, opening doors and falling out of the car.
- Intruders entering the car when it is moving slowly or at a standstill.
- Injury resulting from a door bursting open in the event of a crash.

However, you must also remember that locked doors can hamper rescuers in the event of a crash.

Changing the key battery

When the battery voltage in the key falls below a predetermined level the Saab Information Display (SID) will issue the following message: REPLACE KEY BATTERY. Press the CLEAR button on the Saab Information Display (SID) to acknowledge this message. You must then replace the battery without delay to avoid malfunctions. The life of the battery is normally 4 years. Contact a Saab dealer to have the battery replaced.



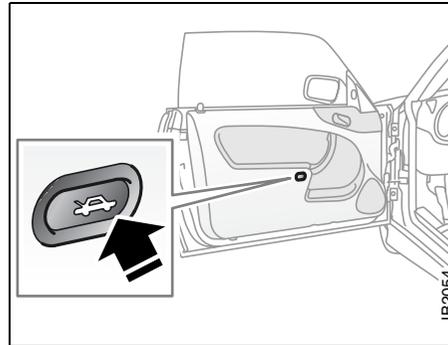
Trunk Release Handle

Trunk Release Handle

There is a glow-in-the-dark trunk release handle located inside the trunk on the latch. This handle will glow following exposure to light. Pull the release handle down to open the trunk from the inside.

NOTICE

The trunk release handle was not designed to be used to tie down the trunk lid or as an anchor point when securing items in the trunk. Improper use of the trunk release could damage it.



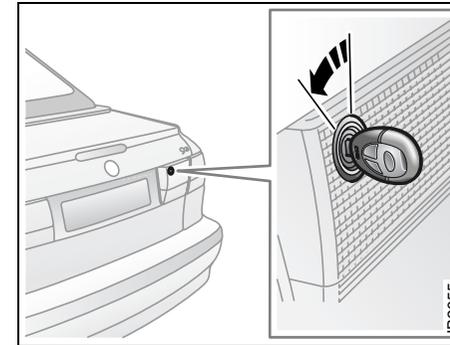
Trunk switch

Trunk lock

Unlocking the trunk lid by using the remote trunk release button on the driver's door is possible only when the top is **fully** lowered or raised (note that the ignition must be in position ON when the top is lowered).

NOTICE

If the trunk lid is opened by unlocking it with the key when the top is not fully raised or lowered, damage to the trunk lid and/or top system could result.



Unlocking the trunk lid with the key

The trunk does not unlock when the other doors are unlocked. The trunk button on the driver's door is inoperative when the car is locked or moving at a speed greater than 2.7 mph (4 km/h).

When unlocked the trunk lid opens slightly.



40 Security

To unlock

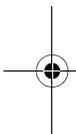
The trunk is unlocked and opened using:

- The  button on the key.
- The trunk switch on the inside of the driver's door (if the car is unlocked and at a standstill).
- The key in the trunk lock.

Remote unlocking is confirmed by the direction indicators blinking three times.

The unlocking button in the driver's door is inoperative when the car is locked.

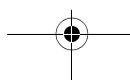
If the car has an alarm, and it is armed (the car is locked), the alarm will sound if the trunk is unlocked with a key. However, if the trunk is opened using remote unlocking, the alarm will not be triggered.



To lock

The trunk is locked in the following ways:

- When locking all the car's doors with the  button on the key.
- With the key in the driver's door.



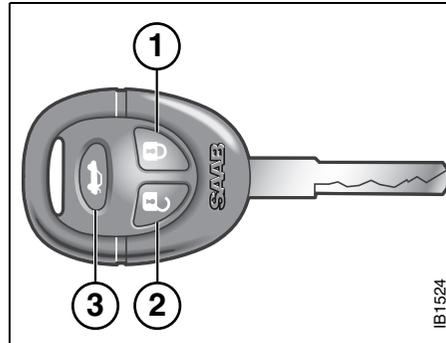
Car alarm

WARNING

Leaving children or pets unattended in a locked car is dangerous. It is also dangerous to leave children in a vehicle with the ignition key. A child or others could be badly injured or even killed.

The car alarm (anti-theft system) is activated/deactivated when the car is locked/unlocked by the key remote or by the key in the driver's door.

All of the doors plus the trunk lid and hood are monitored by microswitches, and window-glass sensors will trigger the alarm if any glass is broken.



Remote control

- 1 Activate/lock
- 2 Deactivate/unlock
- 3 To open trunk lid

Electronic starting interlock (immobilizer), see page 42.

The car alarm is armed 10 seconds after the car has been locked by the remote control. During this ten-second delay period, the doors, trunk lid and hood may still be opened without the alarm being triggered. The LED indicator on the dash will be on continuously during this period, at the end of which it will start to flash (once every third second) when the alarm arms.

If a door or the trunk lid or hood has been left open when the car is locked, the LED on the dash will flash (three times per second) for ten seconds to indicate that something is wrong.

Check to ensure that all the doors, plus trunk lid and hood, are closed properly.

If the fault persists (LED flashing when renewed attempt made to activate the car alarm by remote locking), lock the car using the key in the driver's door instead. The car alarm may not have been activated and you should get in touch with an authorized Saab dealer.

Be sure everyone using the car is familiar with how both the car alarm and the locking system work. This will avoid the alarm being triggered inadvertently.

If the alarm is tripped (the direction indicators are flashing and the siren is on) it can be turned off by unlocking the car using the

 button.

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Activating the car alarm

The car alarm cannot be activated if the driver's door is open or if the ignition switch is in the ON position.

If, on the other hand, the other door or the trunk or hood is open or opened and not closed again during the 10-second delay period, it will be excluded from the alarm function.

If it is then closed, a new delay period of ten seconds will start, and the door (or trunk or hood) will once again be secured by the alarm system.

As usual, the LED will be on continuously during the new delay period and will start to flash every three seconds after the 10-second period has elapsed.

Window glass sensor

The car-alarm (anti-theft system) incorporates a sensor that monitors the window glass for the sound of breakage. The sensor is fitted in the front interior light.

To avoid false alarms, such as the alarm being triggered by children or pets left inside the car, the sensor can be temporarily disabled.

To disable the sensor

To disable the sensor, first turn off the ignition and remove the key from the switch. Next, press and hold the NIGHT PANEL button until "DOOR ALARM ONLY" appears on the Saab Information Display (SID) and a chime sounds. The car alarm must now be activated within three minutes, or the glass sensor will become active again.

The glass sensor will be enabled again automatically the next time the car is unlocked. The sensor can also be enabled again by repeating the procedure for disabling it. When the sensor has been enabled, "FULL THEFT ALARM" will appear on the Saab Information Display (SID).

If a fault is detected in the glass sensor, "SERVICE THEFT ALARM" will appear on the Saab Information Display (SID).

When the car is parked with the soft top down, the glass sensor will be automatically disabled.

Electronic starting interlock (immobilizer)

When the key is inserted in the ignition, a signal is sent to the receiver. If the signal is verified, the engine can be started.

Each time the key is removed from the ignition, the electronic immobilizer is activated.

If a fault is detected (e.g. in the transmitter) "KEY NOT ACCEPTED" will appear on the Saab Information Display (SID).

In this case, you can still start the car if you turn the ignition key to ON and press one of the buttons on the key.

Take the car to an authorized Saab dealer to have the system checked.

The LED on the top of the dash double-flashes when the car is immobilized.

Alarm signals

When the car alarm is armed, it will be triggered if any door, the trunk lid or hood, is opened, or if a window is broken.

The alarm will also be triggered if an attempt is made to bypass or short-circuit the ignition switch, or to disconnect the battery.

If the alarm is triggered, the following alarm signals will be set off:

- Flashing of hazard warning lights for five minutes.
- Siren wailing for 30 seconds.

The alarm signals will stop if the alarm is deactivated (car unlocked) during the alarm period.

NOTICE

- It is possible to inadvertently deactivate the car alarm and at the same time unlock the car, if the button on the key is pressed by mistake when the car is still within its range.
- When locking the car by remote control in extremely cold weather, it is advisable to check that the lock system has operated properly. To do so, check that the interior locking buttons are all down.
If not, unlock and relock the car again.

Panic-function

In the car alarm system is a function called "Panic-function".

To activate panic function:

- Push and hold one of the buttons on the key for 2 seconds.

That action will trigger the alarm (hazard warning lights and siren).

To deactivate panic function:

- Push one of the buttons on the key.
- Turn the key in one of the doors or
- Turn the ignition to ON.

When the panic-function is activated the car will be locked/unlocked depending upon which button was pushed.

When the ignition is ON the panic-function cannot be activated.

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Overview of functions

Locking/ activation	Hazard warning lights flash once (0.5 seconds). Horn chirps once. The LED will come on for 10 seconds.
Unlocking/ deactivation	Hazard warning lights flash twice. Horn chirps twice. The LED will come on for two seconds.
Unlocking/ deactivation of trunk lid alarm	Hazard warning lights flash three times. Horn chirps three times. The LED will flash three times per second for 10 seconds.
Alarm triggered	Hazard warning lights flash for 5 min. Siren wails for 30 seconds. To switch off the alarm, deactivate the system in the normal way (unlocking) by unlocking the door with the key or the remote
Window-glass sensor	The sensor detects if any window is broken and triggers the alarm. To disable the sensor, see page 42.

Key	The range of the key is normally 5–10 yds. (5–10 metres), although it can be substantially more than this in ideal conditions (range can vary greatly depending on the position of the car and its surroundings). If the key is not working, it may be because the code signal has not been synchronized with that in the control module for the car alarm. To rectify this, press the unlock button on the key at least four times in quick succession. When it is recognized, the door locks will cycle. If a key is lost, the new one will have to be programmed (all keys must be present) to match the car's unique security code. Get in touch with an authorized Saab dealer.
Battery for key	The battery for the key will normally have a life of 4 years. When the battery needs changing, "REPLACE KEY BATTERY" will appear on the Saab Information Display (SID). Contact a Saab dealer to have the battery changed.
Car-battery voltage	If the battery is disconnected while the alarm is active (car is locked), for example during an attempt to steal the car, the alarm will be triggered.

Alarm signals may differ between model variants for different countries.

Some of the car alarm functions can be reprogrammed – consult your Saab dealer for further details (see page 237).

Overview of, LED signals and SID messages

Status	LED signal	SID message	Reason/action
Activation (during 10-second delay).	Comes on for 10 seconds.	SERVICE THEFT ALARM	Probably a faulty sensor or siren. Have the car checked by an authorized Saab dealer.
Alarm activated (after delay).	Flashes once every third second.	KEY NOT ACCEPTED	Fault in key transmitter or in ignition-switch receiver. Turn ignition switch to ON and press one of the buttons on the remote control. Start the engine. Have the car checked by an authorized Saab dealer.
Deactivation.	Comes on for 2 seconds.	REPLACE KEY BATTERY	Fit a new battery in the key.
Alarm not activated.	Off.	DOOR ALARM ONLY	Window-glass sensor is disabled.
Door, trunk lid or hood open or opened during delay period.	Flashes three times per second for 10 seconds.	FULL THEFT ALARM	Window-glass sensor is included in circuit.
Unlocking the trunk lid.	Flashes three times per second for 10 seconds.	• REMOTE KEY • TRANSPONDR	Turn the ignition key to the ON position and then press the button for opening the trunk lid. Saab Information Display (SID) displays the number of keys (remote key) and transmitters (transponders) coded to the car.
Closing of door, trunk lid or hood after delay period.	Comes on for 10 seconds.		
Car immobilized but not locked. Car alarm not activated.	Flashes twice at three seconds intervals.		
Fault in a switch for doors, hood or trunk lid.	Flashing (instead of being on continuously) during delay period.		

Some signals may differ between model variants for different countries.



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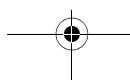


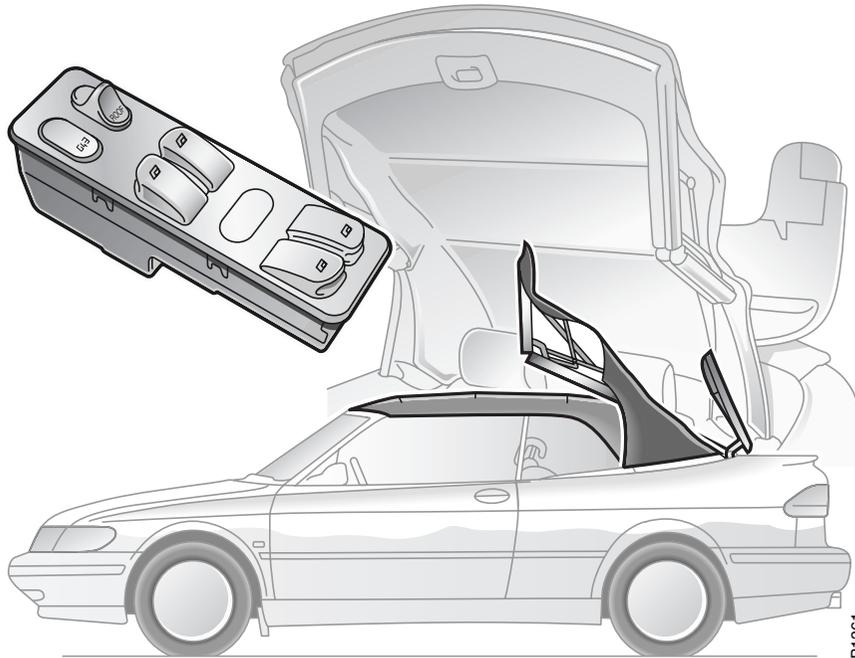
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Canada only:

This device complies with RSS-210 of Industry Canada. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.





Soft top

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48 Soft top

Soft top

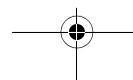
General safety instructions

- Never touch the hinges and struts of the soft top nor the upper beam of the windshield while operating the soft top.
- After raising the soft top, always check that it is properly secured to the top beam of the windshield with the soft top locking device before driving the car away. After folding it down you should check that the tonneau cover latches have engaged properly. Otherwise it may come loose while you are driving and cause injury.
- Do not operate the soft top with passengers in the rear seat or bystanders right next to the car. There is a risk of head injuries while the soft top is in motion.
- Remove child seats and children before operating the soft top.
- Don't operate the soft top in temperatures below 23°F (-5°C).



- Note that certain automatic carwashes can do damage to fabric soft tops. This applies to carwashes that use mechanical feelers bearing against the body. We advise against washing the car in automatic carwashes.
- Note that certain automatic car washes can cause water to leak in places that normally would not leak. Do not direct high pressure streams of water at the seals for the convertible top.
- Roof racks and ski holders must not be mounted on the soft top.
- Under no circumstances should anything be put into the storage space for the soft top (under the tonneau cover) since this could cause obstruction when the soft top is being folded away.
- See that no luggage is resting against the soft top stowage space since this could interfere with the raising and folding of the soft top.

- When the soft top is being operated, lowering or raising should be completed. Do not leave the soft top partially raised or lowered: after 20 seconds it will quickly "settle down" when the hydraulic pressure is automatically released.
- It is important that the telescopic locking handle is completely pushed in when the soft top is closed.
- Fold down any auxiliary mounted antenna before raising the top to avoid possible antenna or top damage (e.g., OnStar cellular antenna on windshield).



Folding the soft top

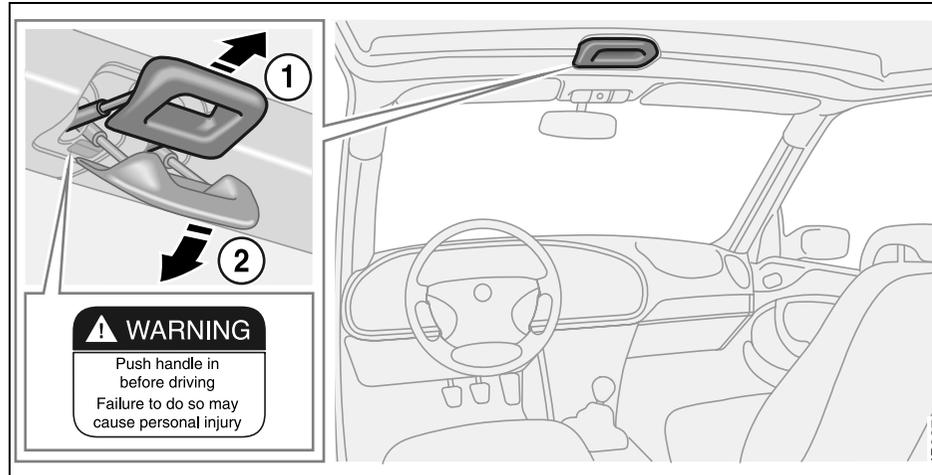
Before operating the soft top, read through the section "General safety instructions" on page 48.

WARNING

- Do not touch the hinges or struts of the soft top during folding, because of the pinch hazard.
- Do not operate the soft top with passengers in the rear seat or bystanders right next to the car, because of the risk of head injuries.
- After lowering the top, make sure the soft top cover has locked properly.

NOTICE

If you drive away while the soft top is being raised or lowered it will stop when the car exceeds 6 mph (10 km/h). The motion of the car and the resulting wind can seriously damage the components of the soft top system and may cause personal injury.

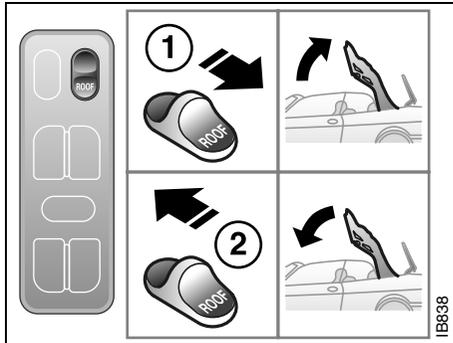


Locking handle

- 1 Pull the handle out
- 2 Unfasten the hooks

- 1 Start the engine and let it idle.
- 2 Release the locking handle to free the two hooks.
 - Pull the handle straight backwards.
 - Pull the handle down, releasing the hooks.
 - Raise the handle up.

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Switch for operating the soft top

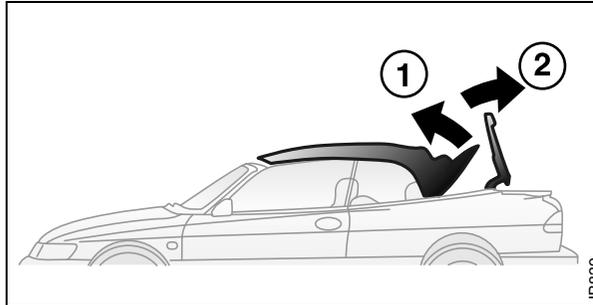
- 1 Lowering
- 2 Raising

3 Slide the ROOF button backwards until the soft top is completely folded away, the tonneau cover is closed **and the SID has given an OK signal** (beep). Slide the ROOF button backwards a second time to lower the windows.

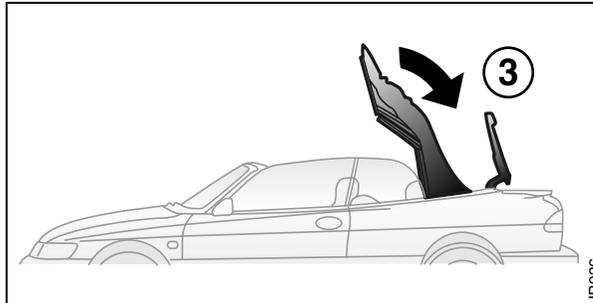
4 Check that there are no fault messages on the SID; see page 54.

NOTICE

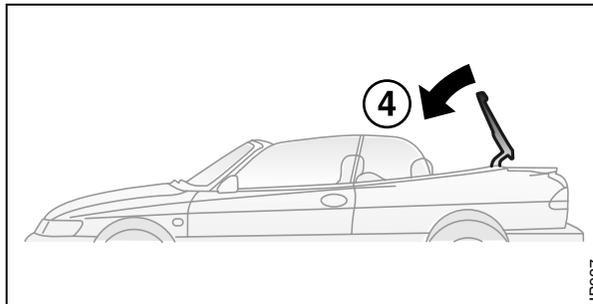
After folding the top down you should check that the front of the tonneau cover is locked at the front on both sides before driving away. If an error message is displayed, see page 54.



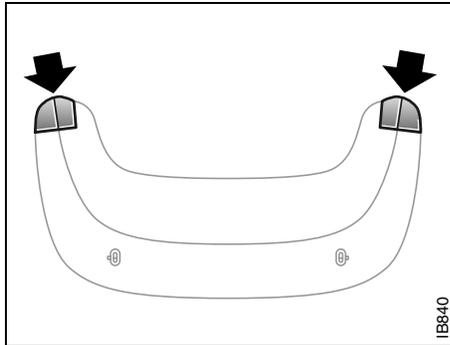
- 1 The rear window is raised.
- 2 The tonneau cover is opened.



- 3 Roof and rear window are folded down.



- 4 Tonneau cover is closed.

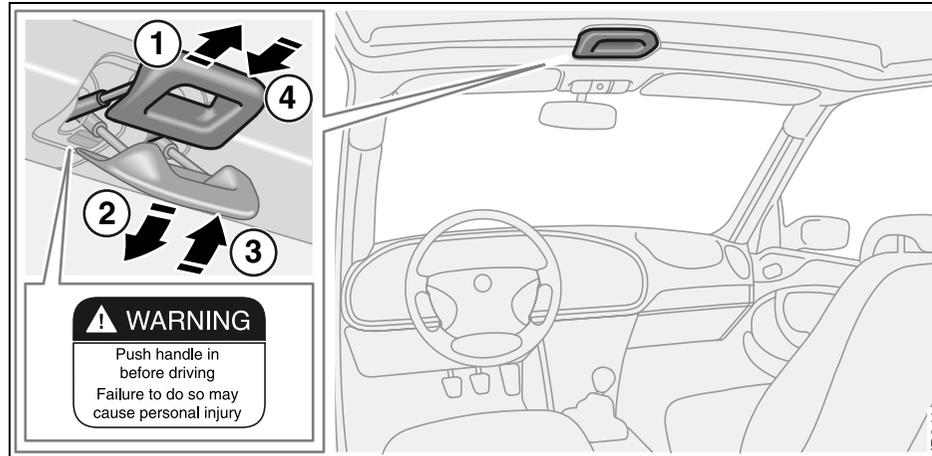


The front-edge locking of the tonneau cover

Raising the soft top

WARNING

- Do not touch the hinges or struts of the soft top during raising the top, because of the danger of being injured.
- Do not operate the soft top with passengers in the rear seat or bystanders right next to the car, because of the risk of head injuries.



WARNING

Push handle in before driving
Failure to do so may cause personal injury

Locking handle

- 1 Pull the handle out.
- 2 Lower the handle so that the hooks engage the locks

- 3 Raise the handle to lock
- 4 Slide in the handle

- 1 Start the engine and let it idle.
- 2 Slide the ROOF button forward until the 5th bow is locked in the tonneau cover **and the SID has given an OK signal** (beep). The top must be locked within 20 seconds. If this is not done the soft top will lift an inch or two (a few centimeters). In this case, slide the ROOF button forward again until the SID gives an OK signal. Lock the soft top with the locking handle.

Note that all side windows will be automatically lowered an inch or two (a few

centimetres) so as to protect the seal strips when the soft top is raised. The window operation is bypassed throughout the raising cycle to prevent the windows being raised.

- 3 Lock the soft top as illustrated. Check that the hooks have locked the soft top.
- 4 Raise the side windows by sliding the ROOF button forward a second time. Alternatively, use the central operating switch for the side windows.
- 5 Check that there are no fault messages on the SID; see page 54.

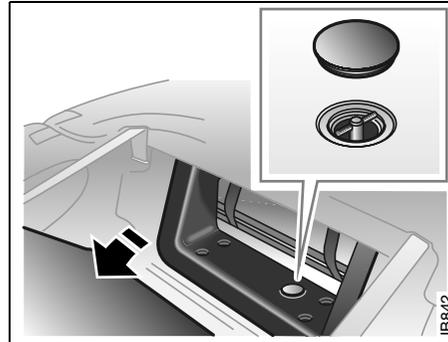
52 Soft top

Manual raising of the soft top**⚠ WARNING**

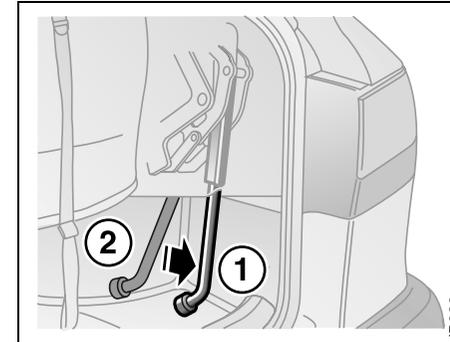
Manual operation of the soft top must be resorted to only **to raise** it in an emergency (e.g. in case of an electrical or hydraulic fault).

After manual raising the soft top must on no account be folded down manually, since this could cause damage to the soft top mechanism.

Points 6 to 8 are only valid if the soft top is operated manually when the soft top tonneau is locked.

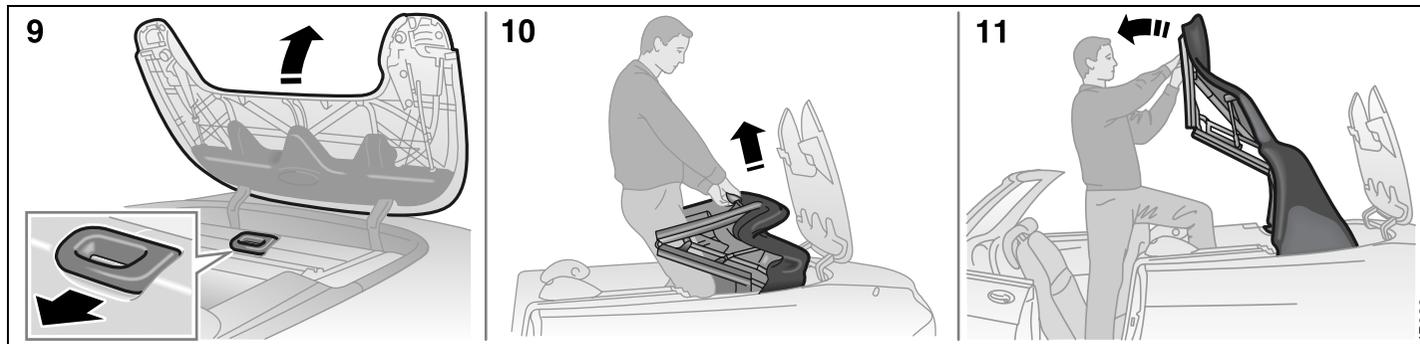


Valve for manual raising of the soft top



Tool fitted for manual unlocking (1) or locking (2) of the tonneau cover

- 1 Tip the backrests of the front seats forward.
- 2 Unlock the rear-seat backrest with the ignition key just outboard of the left rear headrest and tip it forward.
- 3 Remove the round rubber cover over the hydraulic valve.
- 4 Open the valve about half a turn counter clockwise.
- 5 Open the trunk lid.
- 6 Take out the wheel lug wrench.
- 7 In the soft top tonneau mechanism and inside the trunk lining on the right-hand side, is a hole into which the straight part of the tool is to be inserted; see the figure.
- 8 Unlock the tonneau cover by pulling the tool backwards. The cover should lift half an inch or so (a centimeter or so). Remove the tool. **Close the trunk lid.**



Manual raising of the soft top

- 9 (ill. 1) Stand at the side of the car and open the tonneau cover by grasping its black part.
- 10 (ill. 2) Get into the car and stand on the lowered backrest.

! WARNING

Do not touch the hinges and struts of the soft top during raising. Keep your hands clear of the upper beam of the windshield – this is a pinch hazard area. Do not operate the soft top with passengers in the rear seat or with bystanders right next to the car.

- 11 (ill. 3) Take hold of the handle and pull the soft top up.
- 12 Climb down onto the floor and pull the soft top towards the windshield. Stand-

- ing at the side of the car, raise the 5th bow (rear window).
- 13 Stand at the side of the car and close the tonneau cover.

NOTICE

Close the cover carefully so as not to damage the small flaps in the front.

- 14 Tip down the 5th bow/rear window as far as possible.
Note: In manual raising it is not possible to completely secure the 5th bow in the latches of the tonneau cover.
- 15 Shut the valve of the hydraulic system, without making it too tight. Replace the cover over it. Raise the rear-seat backrest again. See that the safety belts don't

get caught. Be sure the seat back locks in place on both sides.

- 16 Sit down in the front seat, open the handle and lock the soft top to the windshield beam. Make sure that the hooks engage in the beam.
- 17 In the trunk: replace the tool in the soft top mechanism and lock the soft top tonneau by pushing the tool forward until the stop point.
- 18 Take the tool out.

The soft top system must be checked and repaired by an authorized Saab dealer as quickly as possible.

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Fault messages in SID

The following CHECK messages are included in the soft top system and can be displayed on the SID together with a beep.

SID displays	Cause	Action
CHECK SOFT TOP STORAGE	<ul style="list-style-type: none"> The soft top storage bag is hooked up. An item in the trunk under the soft top is obstructing the soft top. 	<ul style="list-style-type: none"> Unhook and lower the soft top storage bag, see page 129. Make sure that no item in the trunk is lying against the soft top storage.
CLOSE TRUNK LID	<ul style="list-style-type: none"> The raising or lowering of the soft top is obstructed because the trunk lid is not closed. 	<ul style="list-style-type: none"> Close the trunk lid so it is latched securely.
CHECK SOFT TOP LATCHES	<ul style="list-style-type: none"> The soft top is not latched to the top beam of the windshield. Somebody is trying to lower the soft top while it is still locked to the windshield beam. 	<ul style="list-style-type: none"> Lock the soft top with the locking handle, see page 51. Release the soft top with the locking handle, see page 49.
FINISH SOFT TOP MOTION	<ul style="list-style-type: none"> Raising or lowering was stopped before the cycle completed. 	<ul style="list-style-type: none"> Finish the soft top motion completely.
CHECK SOFT TOP COVER	<ul style="list-style-type: none"> The soft top cover is not being locked. The soft top cover doesn't open. 	<ul style="list-style-type: none"> Make sure that the valve for manual raising of the soft top is closed, see page 52. Try to slide the ROOF button backwards once more.
SOFT TOP FAILURE	<ul style="list-style-type: none"> Serious fault in soft top mechanism. 	<ul style="list-style-type: none"> Try to slide the ROOF button once more. BE VERY CAREFUL AND MAKE SURE THAT NOTHING IS OBSTRUCTING THE OPERATION OF THE SOFT TOP. Remove anything that can obstruct the operation of the soft top. Operate the soft top manually, see page 52.
CHECK SOFT TOP	<ul style="list-style-type: none"> Something is in the way and is obstructing the operation of the soft top by the electro-hydraulics. The soft top cover has not locked at the front on both sides. The 5th bow (rear window) has not locked to the soft top cover on both sides. 	<ul style="list-style-type: none"> Try to slide the ROOF button once more. BE VERY CAREFUL AND MAKE SURE THAT NOTHING IS OBSTRUCTING THE OPERATION OF THE SOFT TOP. Remove anything that can obstruct the operation of the soft top.

The following fuses should be checked if the soft top cannot be operated and no fault messages are shown by the SID:

- MAXI-fuse 5 in the engine bay, see page 195.
- 7, 14, 21 and 23 in the fuse panel on the end of the instrument panel, see page 196.

Central operation of the windows

WARNING

Bear in mind the pinch hazard when the electric side windows are being wound up.

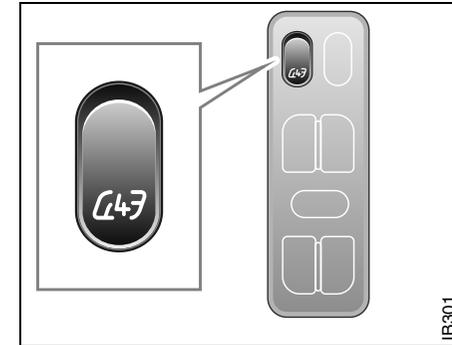
- **Always** remove the ignition key when you leave the car to prevent personal injury caused by the electric windows, for example, due to children playing.
- The person operating the electric windows is responsible for ensuring that no one, especially children, has their head, hands or fingers in the window openings, before raising the windows. Raising the windows could otherwise cause serious or fatal injuries.

On the center console is a switch (see illustration) for the simultaneous closing or opening of the four side windows.

Using the ROOF-button

When folding the soft top down, you can lower all windows by continuing to hold the ROOF button backwards after the soft top has been folded down.

When the soft top is being raised, all side windows are automatically lowered an inch or two (a few centimetres) to protect their seals. After the "beep" is heard, the hooks of the soft top have been secured to the



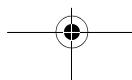
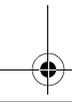
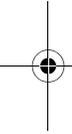
Switch for central operation of the windows

windshield beam, hold the ROOF switch forward again and all 4 windows will close.



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Instruments and controls

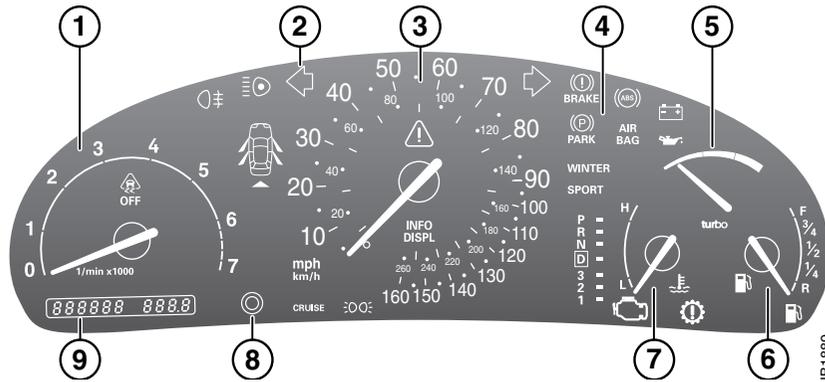
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IB1935

58 Instruments and controls

Main instrument panel



Main instrument panel

- | | |
|--------------------------------|----------------------------|
| 1 Tachometer | 6 Fuel gauge |
| 2 Indicator and warning lights | 7 Engine temperature gauge |
| 3 Speedometer | 8 Trip meter reset button |
| 4 Indicator and warning lights | 9 Odometer and trip meter |
| 5 Pressure gauge | |

Warning and indicator lights

A number of warning and indicator lights will come on when the ignition is switched on prior to starting (see page 63). Under normal conditions, these should go out a few seconds after the engine has started.



Warning, oil pressure (engine oil)

This symbol comes on together with  if the oil pressure in the engine is too low. If the symbol flashes or comes on while you are driving, stop as soon as possible and where it is safe to do so, switch off the engine and check the engine oil level, see page 178.

NOTICE

Under no circumstances must the car be driven when this warning light is on. Low oil pressure can result in serious engine damage.



Warning charging

This light comes on together with  if the battery is not charging. If it comes on while you are driving, stop the car as soon as possible and switch off the engine.

Check the alternator drive belt (see page 185). If the belt has broken, the engine may overheat (cooling system will not function properly), the battery will not be charged, the A/C compressor will not run and power assistance for the steering will be lost.



Brake warning light

This light should come on briefly when you turn the ignition key to ON. If it doesn't come on, have it fixed so it will be ready to warn you if there is a problem.

The brake warning light will come on

together with  if there is insufficient brake fluid in the reservoir, see page 182.

If the ABS warning light is on at the same time, the ABS system may be inoperative because of a fault (see Anti-lock brake warning, see page 60).

WARNING

Never drive the car when these warning lights are on. Danger of brake failure!

Have the brake system checked at once by an authorized Saab dealer.



Parking brake warning light

The light will show when the parking brake is on (see page 156.)

If the car driven with the parking brake on,

 will also come on and a chime will sound.

The parking brake is mechanical and operates on the rear wheels.

WARNING

- **Always** apply the parking brake when parking, see page 156.
- **Always** apply the parking brake before removing the ignition key.
- Do **not** apply the parking brake while the car is moving.

60 Instruments and controls

**Anti-lock brake warning**

This light will come on if a fault has occurred in the ABS system.

On certain variants  and  as well as  can light up to indicate a fault in the electronic brake force distribution system (distribution of the brake pressure between the front and rear wheels).

Conventional braking without the ABS function will still be available.

For safety reasons, stop the car and check the level of the brake fluid (see page 182).

If the level is normal, depress the brake pedal firmly two or three times. Now check the level again. If the level is still normal, you may drive the car, with considerable caution, to the nearest authorized Saab dealer to have the brake system checked.

! WARNING

- If the ABS is inoperative, there is a danger of the rear wheels locking up on hard braking
- If the level of brake fluid in the reservoir is below the MIN mark, the car should be towed to an authorized Saab dealer

**Airbag warning light**

This light together with  will come on if a potentially serious fault has occurred in the airbag system.

! WARNING

- If the airbag readiness light stays on after you start your vehicle, it means the airbag system may not be working properly. One or more of the following conditions may occur:
 - Non-deployment of the airbags in the event of a crash.
 - Deployment of the airbags without a crash.
 - Deployment of the airbags in crashes less severe than intended.
- To help avoid injury to yourself or others, have your vehicle serviced right away if the airbag readiness light stays on after you start your vehicle.

This light will come on for about three seconds when the ignition switch is turned to the Start or Drive position. It should go out after the engine has started.

**Indicator, fuel**

This light comes on when there is less than about 2.5 gallons (10 litre) of fuel left in the tank.

NOTICE

If the car runs out of fuel, air can be drawn in with the fuel, which, in turn, can cause the catalytic converter to be damaged by overheating.

**Central warning light**

This light comes on and a chime will sound if a fault has been detected in any system that is critical to safety. Any of the following can activate the central warning light and alarm:

- Airbag system
- Low oil pressure in engine
- Parking brake is on (when car is moving)
- Brake fluid level low
- Fault detected in ABS system
- Electronic brake force distribution (distribution of brake pressure between front and rear wheels)
- Engine overheating
- Alternator not charging properly

CRUISE Cruise Control indicator light

The symbol is lit when cruise control is active.

**Engine malfunction (CHECK ENGINE)****WARNING**

An illuminated “Engine malfunction (CHECK ENGINE)” indicator light indicates an engine-related problem. While your car may be able to be driven with the “Engine malfunction (CHECK ENGINE)” indicator light illuminated (limp-home mode), you are advised to have your car serviced at an authorized Saab dealer as soon as possible.

Continued driving without this problem being corrected might cause serious further damage to your car and create unsafe driving conditions. The operator should be prepared to take action if such unsafe conditions arise (e.g. brake smoothly, engage neutral, stop in a suitable place, switch off the engine, etc.).

This light indicates a malfunction in the fuel-injection or ignition system. The car may still be driven with care and with somewhat diminished performance.

NOTICE

The car should be checked immediately at an authorized Saab dealer to prevent more serious faults from arising.

SPORT SPORT Mode Indicator (automatic transmission)

On cars with automatic transmission the indicator light comes on when you press the SPORT button on the gear-lever knob.

In SPORT mode, the transmission remains longer in the (D, 3, 2, 1) gears before upshifting.

Cancel Sport mode by again depressing the SPORT button; see also page 151.

62 Instruments and controls

WINTER **WINTER Mode Indicator
(automatic transmission)**

On cars with automatic transmission the indicator light comes on when, in the D position, you press the WINTER button on the center console next to the gear selector. When the car is in the Winter mode it starts in 3rd gear, which gives a better grip in slippery conditions by reducing the tendency to spin the wheels. Cancel Winter mode by again depressing the WINTER button; see also page 151.

**INFO
DISPL** **CHECK message
indicator**

This light indicates that there is a message in the Saab Information Display (SID). A chime will also sound (see page 70).

 **Automatic transmission
fault indicator**

On a car with an automatic transmission, this warning symbol is illuminated if a fault has been detected in the transmission. Switch the ignition off and on again to check if the fault persists. Even if the fault persists, it is still possible in most cases to drive the car. Have the automatic transmission checked by an authorized Saab dealer as soon as possible.

NOTICE

If the control module has actuated the Limp-home function for the automatic transmission, the car will remain in 4th gear when D and 3rd are selected, making it very sluggish. To overcome this, select position 2 to prevent unnecessary wear on the transmission. The transmission then starts in 3rd gear. When the car is moving you can select position D or 3.

When the indicator light is on, the car must not be driven with a trailer attached.

 **Rear fog light Indicator**

This light shows when the rear fog light is on (see page 75). The rear fog light is switched off automatically when the engine is switched off. When the fog light is next needed, it will have to be switched on manually again.

 **High beam Indicator**

The symbol is lit when the high beam is on.

 **Open door Indicator**

If a door has not been closed properly, the pictogram will indicate the door concerned (or trunk).



Traction Control System indicator (option)

The  lamp in the tachometer lights up when the TCS system is activated, i.e. when the friction between the tires and road surface is insufficient for the car to accelerate as desired. You may also experience that the engine does not respond as normal when the accelerator is depressed.

Operation of the TCS indicates reduced cohesion between the tires and the road, and that extra care should be taken by the driver.

During normal driving, the TCS will help to improve both ride comfort and safety, but must not be regarded as a system to enable the driver to maintain a higher speed. The same precautions for safe cornering and driving on slippery roads must still be adopted (see page 155).



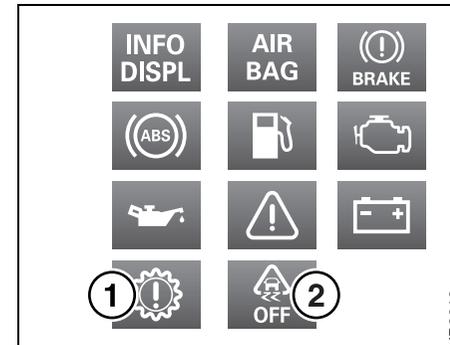
Traction Control System OFF indicator (option)

This light comes on when the traction control system (TCS) is switched off with the TCS button.

IMPORTANT! The traction control system is switched on automatically each time the car is started (see page 155).

This indicator light also comes on if a fault has been detected in the TCS, in which case the lamp will not be extinguished when the TCS is switched off by means of the TCS button. If a fault is indicated, have the system checked at an authorized Saab workshop.

See also the section Traction Control System, on page 155.



- 1 Cars with automatic transmission
- 2 Cars with TCS (option)

Autochecking of lights, main instrument panel

The above warning and indicator lights should come on when the ignition is switched on. They go out after about 3 seconds.

The following lamps light up until the engine starts, as long as no faults exist:

Central warning light .

Oil pressure warning light .

Charge warning light .

64 Instruments and controls



Instruments

Tachometer

The tachometer indicates the engine speed in thousands of revolutions per minute. The needle may be allowed to enter the broken red zone on the dial only for an instant.

A safety cut-out function (in the fuel system) prevents the engine speed exceeding approximately 6,200 rpm.



Odometer and trip meter

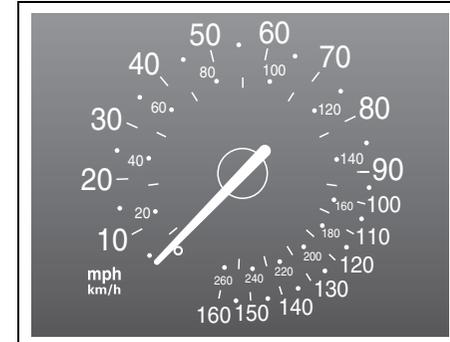
The odometer records the distance travelled in miles on U.S. vehicles and on Canadian vehicles the distance indicated is in kilometres, and the trip meter in miles and tenths (kilometres and tenths of kilometres on Canadian vehicles).

Reset button

The button is located close to the right of the odometer and trip meter in the main instrument panel.

The reset button has two functions, determined by whether the ignition is ON or OFF.

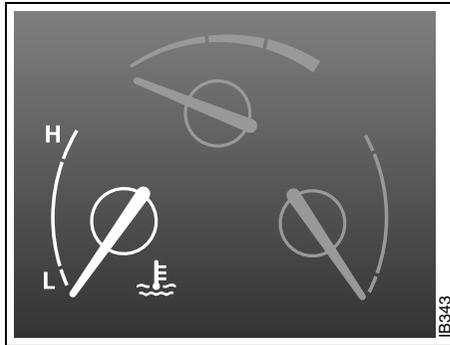
- When the ignition is ON, the button will reset the trip meter.
- When the ignition is OFF, the button will bring up the display for 20 seconds to allow the odometer and trip-meter readings to be viewed. Press once more within 20 seconds to reset the trip meter.



Speedometer (U.S. speedometer shown)

The speedometer receives signals from a wheel sensor in the ABS system.

If the NIGHT PANEL mode has been selected, the scale will be illuminated up to 87 mph (140 km/h). The remainder of the scale will be illuminated if the speed of the car exceeds 84 mph (135 km/h).



Temperature gauge

The temperature gauge shows the temperature of the coolant. The needle should be in the middle of the scale when the engine is at normal operating temperature.

If the needle enters the red zone, the  warning light will come on and an alarm chime will sound.

If the needle approaches the red zone, which can occur in very hot weather or when the engine is under a heavy load, drive in the highest gear possible, keep the engine revs low and avoid shifting down.

Check fuse 3 (radiator fan) in the fuse panel under the hood, see page 198.

If the needle repeatedly enters the red zone, stop the car as soon as it is safe to do so and check the coolant level by looking at the level visible through the plastic tank – do not remove the cap.

NOTICE

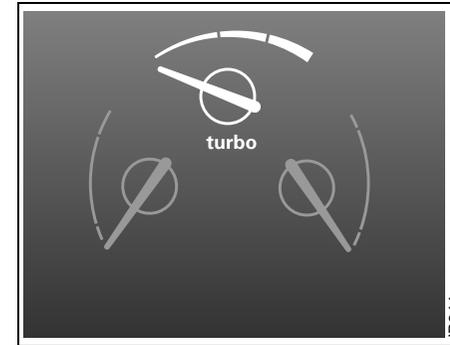
If the needle, despite the above action, enters the red zone, stop the car immediately, let the engine idle.

If the needle stays in the red zone, turn off the engine.

If the coolant level falls below the MIN mark, the Saab Information Display (SID) will display the message "FILL COOLANT FLUID".

WARNING

Never open the cap of the expansion tank completely when the engine is hot, open with care. The pressure in the cooling-system can cause hot coolant and steam to be released. Failure to heed this warning may result in personal injury.



Pressure gauge

The turbo gauge indicates the air volume for combustion, which is equivalent to the engine load.

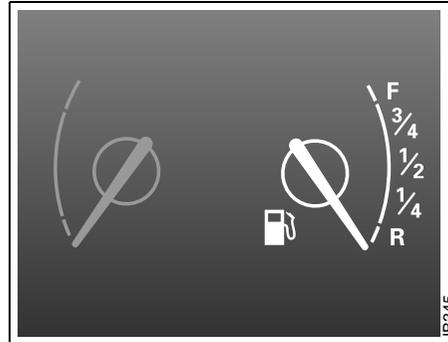
At low loads, the needle will move within the white zone. At higher loads and during heavy acceleration, the needle will enter the yellow area. At very high loads (certain variants only) the needle may enter the first part of the red zone without indicating that there is a fault.

66 Instruments and controls

Under certain barometric conditions the needle may enter the first part of the red zone without necessarily indicating that a fault has arisen.

If the needle repeatedly enters the red zone and the engine at the same time loses power, because the monitoring system is holding the charging pressure down, you should contact an authorized Saab dealer.

If the speed exceeds 143 mph (230 km/h), the increase in speed will be limited by the lowering of the boost pressure. The pressure gauge then moves towards the middle of the orange zone, indicating reduced engine output and thus reduces the speed of the car as well.

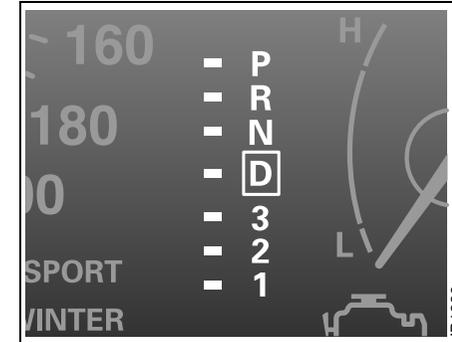


Fuel gauge

The fuel-tank capacity is 17.0 gal. (64 liters). The fuel gauge shows the amount of fuel left in the tank. When this is down to about 2.5 gal. (10 liters), a warning light on the main instrument panel will come on (see page 60).

Use the Saab Information display (SID) to check the approximate distance that can be travelled on the remaining fuel (see page 67).

Refueling; see page 140.



Gear selector indication (cars with automatic transmission)

An indicator showing which gear is selected is situated in the main instrument panel.

Saab Information Display (SID)

WARNING

It is strongly recommended that the SID settings be changed only when the car is stationary. The driver's attention can otherwise easily be distracted from the road.

The car is equipped with SID (Saab Information Display). This instrument contains a varying number of functions depending on the standard of equipment and the model variant.

SID displays CHECK messages and has eight trip-computer functions; see page 67.



SID (SCC, Saab Car Computer)

SID (SCC) Selecting the function

Use the  button to scroll through the following functions:

- DIST Distance to destination / Trip meter.
- ARRIV Estimated time of arrival.
- ALARM Alarm function.
- SPD W Speed warning (chime).

Use the  button to scroll through the following functions:

- TEMP Outdoor temperature and Date.
- D.T.E. Estimated range (distance to empty fuel tank).
- FUEL Ø Average fuel consumption since function last reset.
- SPD Ø Average speed since function last reset.

Outside temperature (Frost warning)

Regardless of what function you have selected, SID automatically switches to the outside-temperature function when the temperature is between 26° and 38°F (−3° and +3°C), and also when temperature is selected and it has been outside the range from 21° to 43°F (−6°C to +6°C) and again enters the range between 26° and 38°F (−3°C and +3°C).

WARNING

Remember that roads can be icy even at temperatures of above 38°F (+3°C), especially on bridges and stretches of road that are sheltered from the sun.

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Entering values for the functions

Values can be entered for the following functions: SPD Ø (SPEED AVERAGE), DIST, ARRIV, ALARM and SPD W.

- 1 Select the desired function using  or .
- 2 Press the SET button for at least one second (figures start to flash and a chime sounds).
- 3 Use  or  to increase or decrease the value (press CLR to reset).
- 4 Press SET to record the value.

Setting the date

- 1 Use  to select TEMP/DATE.
- 2 Press the SET button for at least one second (year starts to flash and a chime sounds).
- 3 Set the year using  or .
- 4 Touch SET.
- 5 Set the month in the same way.
- 6 Touch SET.
- 7 Set the day in the same way.
- 8 Press SET to save the date setting.

Average fuel consumption

The average fuel consumption is calculated using the values for fuel consumed and distance driven since last reset. This value is stored in the car's trip computer even when the engine is switched off.

- Select FUEL Ø with .

To reset the value, press the CLEAR button for 4 seconds. A chime will be heard and CLEARED will be displayed.

Turning the Alarm and Speed warning on or off

- 1 Select the Alarm or Speed-warning function.
- 2 Press SET to turn on the function. Press CLR to turn off the function.

When either function is on, an asterisk * will be visible on the far right of the display. The function will be visible even if another function has been selected.

The Alarm and Speed-warning settings will not be cancelled when the engine is switched off.

When the Alarm has been set to come on at a specified time, it will only be activated once – it will not come on at the same time every day. Press SET to turn it on again. The Alarm will continue to beep for one minute if not switched off.

Calculation of arrival time and average speed

The settings must be made before the journey is started.

Calculation of arrival time:

- 1 Select DIST using the  button.
- 2 Hold SET until display starts flashing.
- 3 Set the destination distance using  or .
- 4 Press SET to store settings.

When ARRIV is selected during the journey, the arrival time based on the average speed over the past 20 minutes will be displayed. The trip computer will include any stops in the calculation of the estimated time of arrival.

Press DIST and the distance remaining to the destination will be displayed in the same way.

After the distance to destination has decreased to zero, the DIST will function as a trip meter (see "Using DIST as a trip meter"). The starting value for the trip meter will be the last distance set in the DIST function.

Example: The DIST setting was 100 miles. Once 100 miles (160 km) has been covered, the DIST will start to function as a trip meter, the initial reading of which will be 100 miles (160 km).

Using DIST as a trip meter

If no value has been set for the DIST function, DIST will now function as a trip meter (indicated by an arrow on the far right of the display).

Press CLR to reset the trip meter.

Under 1000 miles the distance will be shown in increments of 0.1 miles, there-after, the reading will change in increments of 1.0 miles.

Metric units: for just under a kilometer, the distance will be shown in increments of 10 meters, there-after, the reading will change in increments of 100 meters.

When DIST is functioning as a trip meter, the ARRIV function will display the current time.

To calculate the arrival time if a specified average speed is maintained

- 1 Select DIST using the  button.
- 2 Hold the SET button for two seconds.
- 3 Set the distance to be covered using  or .
- 4 Press SET to store settings.
- 5 Press  to select SPD Ø.
- 6 Hold the SET button for two seconds.
- 7 Set the average speed you intend to drive at using  or .
- 8 Press SET to display the estimated arrival time.

At the beginning of a journey, the SPD Ø and ARRIV functions will display current values. If values are set during the journey, the new values will be displayed after a delay of about 10 seconds.

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Calculating the requisite average speed:

- 1 Press  to select DIST.
- 2 Hold the SET button for two seconds.
- 3 Set the distance to be covered using  or .
- 4 Press SET to store settings.
- 5 Press  to select ARRIV.
- 6 Hold the SET button for two seconds.
- 7 Set the desired arrival time using  or .
- 8 Press SET to display the average speed you need to maintain to arrive at the desired time.

At the beginning of a journey, the SPD \emptyset and ARRIV functions will display current values. If values are set during the journey, the new values will be displayed after a delay of about 10 seconds.

Resetting values

To reset the values, press CLR for at least four seconds.

The following functions will be reset simultaneously:

- Estimated range on remaining fuel (function based on a fuel consumption of 28 mpg)
- Average fuel consumption
- Average speed
- Arrival time (function based on current speed)

Programmed values for DIST, ALARM and SPD \emptyset will not be reset (see the respective function).

CHECK messages

When the engine is started, CHECKING will appear on the display for about four seconds, while the SID checks are being performed.

When a CHECK message is generated while the car is being driven, a chime will sound, INFO DISPL will illuminate on the main instrument panel, and the message will appear on the SID. The number of messages that can be displayed by the SID varies with the specification of the car.

If more than one CHECK message has been generated, the + symbol will appear to the left of the text on the display. The messages appear in order of priority.

If a new fault occurs while another message is being displayed, the message relating to the new one will appear for 10 seconds, after which the display will return to the earlier one.

Press CLR once to acknowledge a message, whereupon it will be cleared from the display. It will not be displayed again before the ignition has been switched off and then on again.

The following CHECK messages may be displayed:

Display shows:	See page
BRAKE LIGHT FAILURE	190
FRONT LIGHT FAILURE	188
REAR LIGHT FAILURE	190
FOG LIGHT FAILURE	191
WASHER FLUID LEVEL LOW	187
TIGHTEN FUEL FILLER CAP	140
FILL COOLANT FLUID	180
KEY NOT ACCEPTED	45
REPLACE KEY BATTERY	45
SERVICE THEFT ALARM	45
TRANSMISSION OVERHEATING	148
TIME FOR SERVICE ¹⁾	222

1) This message will be displayed approximately 600 miles (1,000 km) before the next scheduled service is due, or when 365 days have elapsed since the last service. The message should be cleared at the time of that service (see the Saab Warranties & Service Record Booklet).

This message can also be deleted by first briefly pressing the CLR button, then depressing it a second time for at least eight seconds until "SERVICE" appears on the display and a chime sounds. The message can only be deleted when it is shown on the SID.

Night panel

To improve night-driving conditions inside the car, the Night Panel mode can be selected. In this mode, the amount of information displayed is reduced, and only the most important instruments and displays will be illuminated.

When the Night Panel button is pressed, only the speedometer will be illuminated (up to the 87-mph or 140-km/h graduation), all the other instruments illumination will be extinguished and their needles moved to zero. Both the SID and the ACC displays will be extinguished and the backlighting for switches and other controls will be dimmed. Note: All indicator and warning lights, together with the display of CHECK messages, will operate as normal.

The following conditions will wake up the respective displays in the Night-Panel mode:

- Setting of the Audio System, SID or ACC (display comes on for ten seconds).
- CHECK message generated in the SID.
- High engine revs cause the rev counter to be illuminated until the engine speed has fallen again.
- If the quantity of fuel remaining falls below 4 gallons (15 liters), the fuel gauge will be illuminated.
- If the engine temperature rises above normal, the temperature gauge will be illuminated.
- If the speed of the car exceeds 84 mph (135 km/h), the entire speedometer will be illuminated.
- In cars with automatic transmission, if the selector lever is moved from D to position 3, 2 or 1, the selector indication on the main instrument panel will be illuminated.

To restore the displays and lighting to the normal mode, press the Night-Panel button.

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Units and language versions

The SID has four sets of units:

METRIC	IMP. 1	IMP. 2	US
km	miles	miles	miles
km/h	mph	mph	mph
litres	gallons	gallons	US gallons
°C	°F	°C	°F
24 hours	12 hours	12 hours	12 hours

CHECK messages can be displayed in six language options: English, Swedish, German, French, Italian and Spanish.

Selecting units and language

- 1 Press the CLR and SET buttons at the same time for 4 seconds until an audible signal sounds.
- 2 Press  or  to select the required units.
- 3 Touch SET.
- 4 Press  or  to select the required language.
- 5 Touch SET.



Clock

Set the clock by means of the two small buttons under the digital clock on the left of the display.

When the ignition key is in the OFF position or removed, the clock can be illuminated (approx. 10 seconds) by pressing one of the SID buttons (not the NIGHT PANEL button).

Programming features, see page 237.

Switches

Daytime running lights

The parking lights and daytime running lights come on automatically when the ignition switch is in the ON position.

Note to owners in the U.S.: If you do not want Daytime Running Lights, this feature can be disconnected: switch off the engine and remove fuse No. 15 (see page 196).

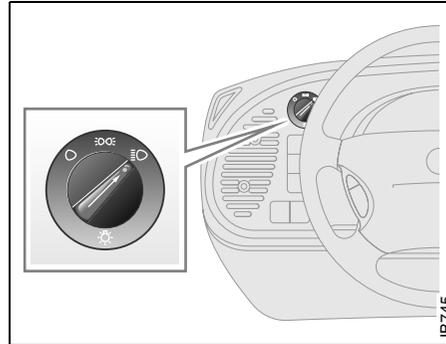
Note to owners in Canada: Daytime Running Lights must not be disconnected as they are a Canadian Federal legal requirement.

Parking lights

The parking lights can be switched on regardless of the position of the ignition switch. Do not use parking lights when driving.

Note:

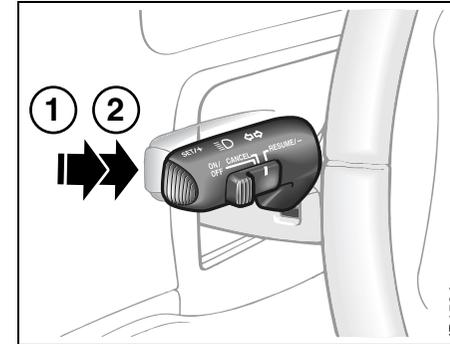
The lighting switch must be in parking or headlight position to operate the rear fog light (see page 75).



Light switches

Headlights

The headlights come on when the ignition switch is in the OFF, ON or START positions. Note that they go off again when the ignition switch is turned to LOCK.



- 1 Headlight flasher
- 2 High/low beam

High/low beam

To switch from high to low beam, pull the control stalk towards the steering wheel to position 2. When the high beam is on, it is shown by an indicator light in the main instrument panel.

Headlight flasher

To flash your headlights, pull the control stalk towards the steering wheel to position 1. The high beam will remain on until you release the switch.

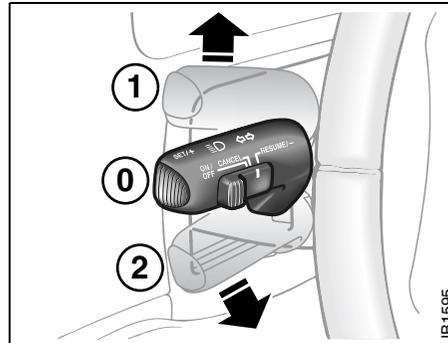
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Courtesy Headlamp Feature

A delay function allows the headlights to remain on low beam for about 30 seconds after the driver's door has been closed.

To activate this function,

- Switch off the ignition and remove the key
- Open the driver's door
- Pull the high/low beam control stalk towards the steering wheel like you are flashing the high beam, see page 73. The low beam headlights will now come on immediately after the driver's door has been closed (within 30 seconds) and will remain on for about 30 seconds.



Turn signal & lane change indicators

- 1 Right turn signal indicators
- 2 Left turn signal indicators

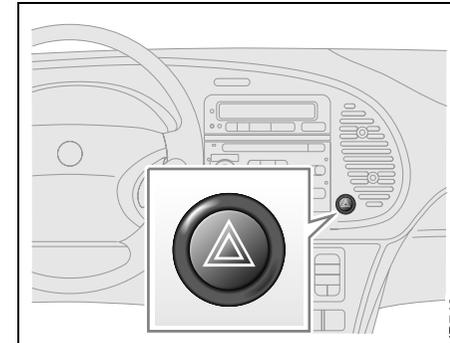
Turn signal & lane change indicators

To switch on the indicators, move the stalk up or down.

The stalk has fixed positions for indicating a right or left turn, and the indicators are cancelled automatically (stalk returns to off position) after most turns.

The stalk also has an intermediate, spring-loaded position that is useful for signalling when changing lanes or passing.

The respective indicator lights on the instrument panel flash at the same frequency as the indicators



Hazard warning lights

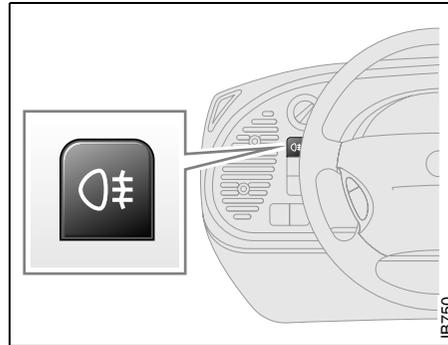
When this button is pressed, all the turn signal & lane change indicators and a symbol in the button flash simultaneously. If the ignition is on, both indicator lights on the instrument panel will also flash.

If the hazard warning lights are left on for some time, the flasher frequency will be reduced to save the battery.

Hazard warning lights should only be used if, because of a crash or breakdown, the car constitutes a hazard to other road users.

⚠ WARNING

Switch on the hazard flashers if the car has to be left at the roadside on account of a crash, engine trouble or a puncture. If you carry a warning triangle or flares, they should be set up along the side of the road 300 ft. (100 m) behind your vehicle. If the car is not clearly visible (e.g. over the brow of a hill or bridge), place the triangle/flare even further back.



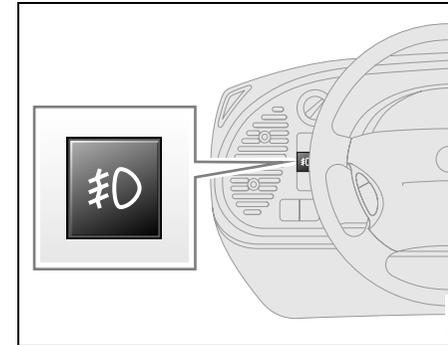
Rear fog light

Your Saab is equipped with one rear fog light and this is located on the driver's side in the rear taillight housing.

Press the button to switch on the rear fog light, which will only come on if the headlights or front fog lights are on.

The rear fog light will go off automatically when the engine is switched off. When the fog light is next needed, it will have to be switched on manually again.

Make sure you are familiar with the applicable provincial/state law regarding the use of rear fog light.



Front fog lights

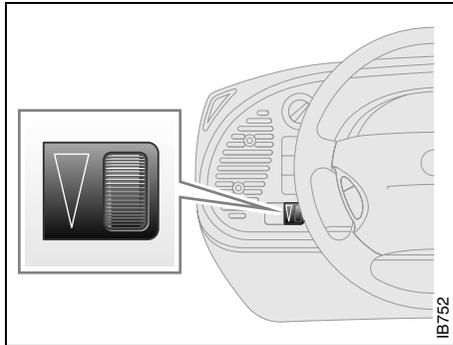
Press the button to switch on the fog lights fitted in the front spoiler. These should be used in poor visibility. They will only operate on low beam and switch off automatically on high beam.

Make sure you are familiar with the applicable provincial/state law regarding the use of fog lights.

⚠ WARNING

In poor visibility, avoid following the tail lights of the vehicle in front. If the vehicle stops suddenly, you may be unable to avoid a crash and therefore risk injury to yourself and others.

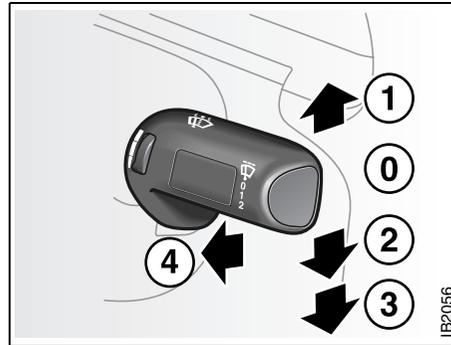
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Instrument lighting

The brightness of the instrument lighting can be varied by means of the dimmer switch adjacent to the headlight switch, the ignition switch shall be in position ON. (See also Night panel on page 71).

In daylight or other equally bright light, the instrument and switch illumination is automatically extinguished.



- 0 OFF
- 1 Windshield wipers: intermittent operation. The delay can be adjusted to between 2 and 15 seconds
- 2 Windshield wipers: low speed
- 3 Windshield wipers: high speed
- 4 Washing the windshield and cleaning the headlights

Wipers and washers

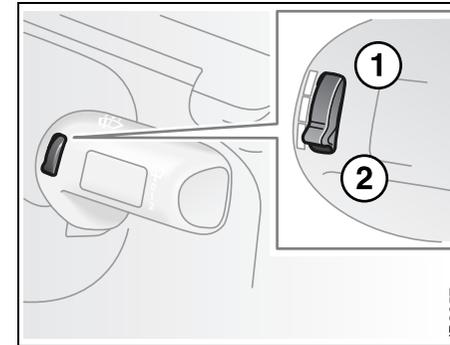
Windshield wipers

The delay of the intermittent operation can be adjusted to between 2 and 15 seconds.

Moving the control stalk to the spring-loaded position between 0 and 2 will produce a single sweep of the wipers.

Washers

When the washers are operated the wipers will make 3, 4 or 5 sweeps depending on how long the washers were in action. If the



Control for setting wiper delay

- 1 Long delay
- 2 Short delay

speed of the car is less than 12 mph (20 km/h) the wipers will make an additional sweep after about 9 seconds.

The headlights are washed and wiped automatically whenever you use the windshield washers. They cannot be operated independently of the windshield washers.

Manual climate-control system

The air is drawn in through an intake at the bottom edge of the windshield. It passes through an efficient filter before being routed through the climate-control system and into the cabin. The cabin discharge vent is located on the right behind the rear bumper. The air discharge vents should be kept free of snow and ice in the winter.

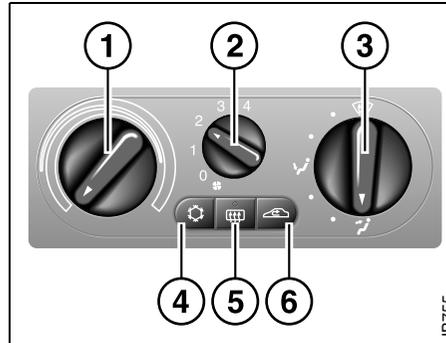


Fan

The rate of air flow inside the car is controlled by means of the fan switch.

Temperature control

The temperature of the incoming air can be steplessly varied using the temperature control.



Control panel: manual system

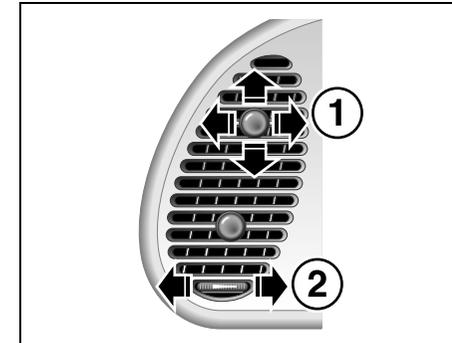
- 1 Temperature
- 2 Fan speed
- 3 Air distribution
- 4 Air conditioning (A/C)
- 5 Rear-window heating
- 6 Recirculation

Air distribution

The air distribution control is used to direct the flow of air to the defroster, dash and floor vents.

The control permits settings intermediately between the three main settings so that the available air can be apportioned between the floor and the windshield (defroster) or between the floor and the panel.

To counter cold drafts from the front side windows when the control has been set to defroster or floor, a small flow of air issues from the dash vents.



Dash vent

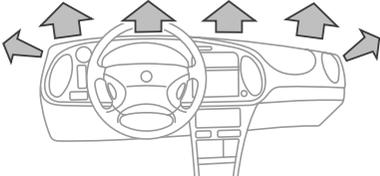
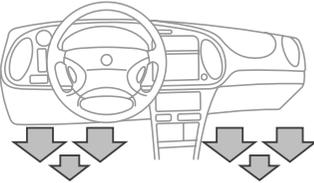
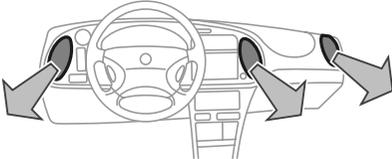
- 1 Adjusting the direction of the air flow.
- 2 Adjusting the air flow

The dash vents swivel universally, so that the air can be directed as desired.

The flow of air through the dash vents can be adjusted for each vent by means of the adjacent control.

If the windows are thoroughly cleaned it is much easier to keep them free of mist.

78 Instruments and controls

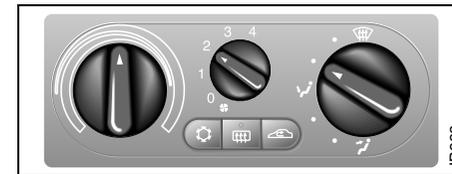
	
Defroster	
	
Floor	
	
Panel	incl. rear center vent

As the winter comfort setting we recommend that the distribution knob be turned two steps to the left from the Defroster position.

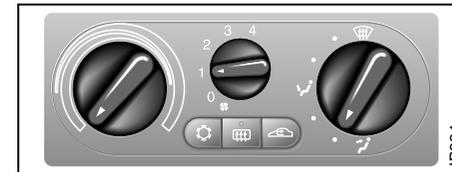
Settings for various weather conditions



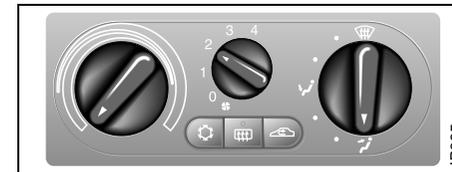
Winter – defroster



Winter – comfort



Summer – cloudy



Summer – sunny



Air conditioning (A/C)

The air conditioning is combined with the conventional climate-control system and is switched on by pressing the  button, provided that the fan control is in position 1–4.

The incoming air is treated in three stages: first it passes through a filter; it is then dehumidified and cooled and, finally, if required, heated.

The air conditioning can be used at outdoor temperatures down to 32°F (0°C).

Condensation water

When the A/C compressor is on, the incoming air is dehumidified. The resulting condensation water is drained away through an outlet under the car.

It is therefore perfectly normal for water to be seen dripping from this outlet when the car is parked. The warmer the ambient air and the higher the humidity, the more condensation will form.



Recirculation

When the  button is depressed the regular air intake will be closed. In this position, the air inside the cabin is recirculated. Use recirculation when you want rapid cooling, at extremely high air temperatures. Switch the air conditioning (A/C) on first.

Recirculation can be useful to activate manually to prevent unpleasant smells being drawn into the car from outside.

Note that recirculation should not be used when the outside temperature is lower than 50°F (+10°C) except briefly, e.g. to avoid unpleasant air from entering the car. Prolonged use of recirculation could cause the windows to mist or ice up.



Electrically heated rear window/external mirrors

The button is located on the climate-control panel. An LED in the button is lit as long as heating is on.

Switch off the heating as soon as the rear window is clear. It will go off automatically after about 10 minutes.

If the battery voltage is lower than 12 V the heating will be switched off earlier so that the battery can get the benefit of the alternator charge.

Do not switch the heating on until you have started the engine.



80 Instruments and controls

Recommended settings in severe cold

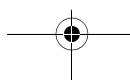
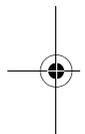
On starting with a cold engine, set the fan switch to position 2 and select defrost to heat the cabin and defrost the windshield as quickly as possible.

When the engine is warm enough for the reading of the temperature gauge to start rising, fan setting 3 may be chosen. Once the windshield is clear, the air-distribution control should be shifted two steps to the left.

The warm-up time of the engine depends on the kind of driving. Town driving in high gear with a low RPM requires a longer warm-up time than highway driving with a higher RPM.

Do not use position 4 on the fan switch, as this is mainly intended to provide rapid cooling in hot weather.

Fault diagnosis and care of A/C system, see page 217.



Automatic climate control (ACC)

The air is drawn in through an intake at the bottom edge of the windshield. It passes through an efficient filter before being routed through the climate-control system and into the cabin. The cabin discharge vent is located on the right behind the rear bumper. The air discharge vents should be kept free of snow and ice in the winter.

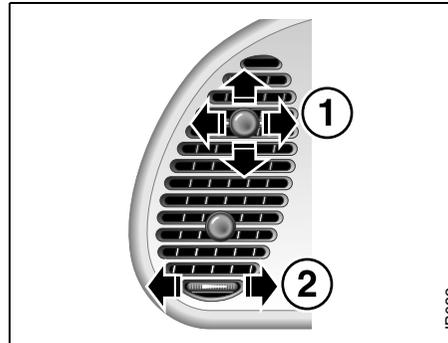
ACC (Automatic Climate Control) automatically maintains the desired cabin temperature, regardless of the weather outside.

The system will achieve the desired temperature in the quickest possible way.

Note that heating or cooling is not speeded up by setting the temperature higher or lower than you really want.

For the ACC system to be most effective, all windows must be closed, and the panel vents must be open.

The incoming air is treated in three stages: first it passes through a filter; it is then dehumidified and cooled and, finally, if required, heated.



Dash vent

- 1 Adjusting the direction of the air flow.
- 2 Adjusting the air flow

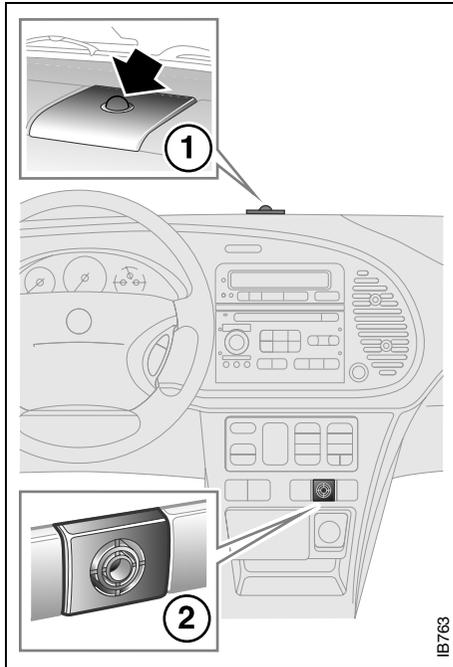
The temperature interval within which you can make adjustments is 58–82°F (15–27°C). Outside it, there is the HI position (max. heat and high fan speed) and the LO position (max. cooling and max. fan speed).

The displayed temperature is not the actual temperature but corresponds to the comfort level normally experienced at that temperature after allowance has been made for the air flow, relative humidity, solar radiation, etc., currently prevailing inside the car.

- The most usual temperature setting is 66–74°F (19–23°C), depending on personal preference and what clothing is worn.

- It is recommended that changes in the temperature setting be made in steps of 2°F (1°C).
- Conversion between °C and °F is done in the SID unit; see "Units and language versions", page 72.
- During the cooling phase in warm weather the panel vents must be open.
- Do not manually select recirculation in cold/wintery weather. The reduced air flow can cause misting and ice on the inside of the windows.

82 Instruments and controls



- 1 Sun sensor
- 2 Interior-temperature sensor

The system uses five sensors:

- Outside-air temperature
- Cabin-air temperature
- Sun sensor
- Blended-air temperature (located in the heater unit)
- Coolant temperature

The sun sensor is centrally located on the dashboard panel between the defroster nozzles. Note that if anything is placed over the sun sensor the ACC system will not function properly.

Condensation water

When the A/C compressor is on, the incoming air is dehumidified. The resulting condensation water is drained away through an outlet under the car.

It is therefore perfectly normal for water to be seen dripping from this outlet when the car is parked. The warmer the ambient air and the higher the humidity, the more condensation will form.



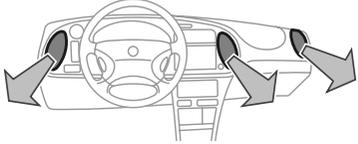
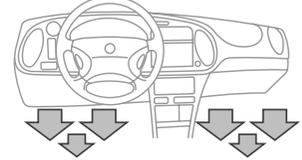
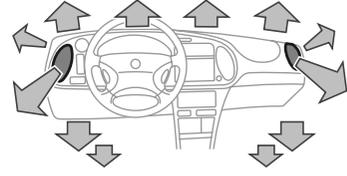
Functions

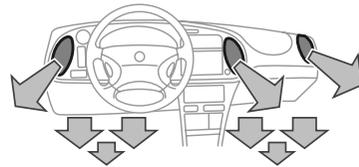
The function you have manually selected will be locked in, while other functions remain automatic. Temperature maintenance, except in positions HI and LO, is, therefore always automatic. The active function is shown in the display. A manual selection is cancelled by pressing AUTO or by repeated pressing of the button used to make the manual choice. For further functions, see "Programming II", page 88.

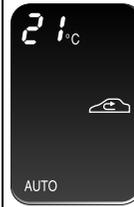
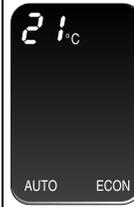
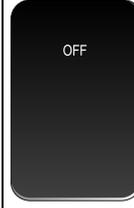
Button	Display	
		<p>Setting the cabin temperature</p> <ol style="list-style-type: none"> 1 Switch on the ignition. 2 Set the desired cabin temperature using the two buttons. 3 The temperature you have now chosen will be stored, remaining in the memory even when the ignition is switched off, unless ACC has been programmed with a different "ON" setting. See programming, page 87.

Button	Display	
		<p>When the system is set to AUTO, the temperature, air distribution, fan speed and recirculation will be controlled automatically. The air conditioning is activated automatically if the outside temperature is above 32°F (0°C). When AUTO is depressed again, all automatically selected settings are shown on the display.</p>

84 Instruments and controls

Button	Display	
		<p>One touch: When Defroster is manually selected you will get demisting of all windows by high fan speed. Air will be routed to the defroster nozzles. Normal temperature control, recirculation and ECON will be switched off but the electric heating of the rear window and outside mirrors will be switched on. Current settings will be shown on the display and AUTO will go out. The demister function remains operative until another selection is made, but the heating of the rear window and the outside mirrors will be switched off after a certain time, depending on the outside temperature.</p> <p>Two touches: Two touches on the defroster button routes the air to the windshield without any increase in fan speed and without switching on the rear-window heating. To revert to the previous setting, press the AUTO button.</p>
		 Panel (and center rear vent)
		 Floor, front and rear
Press simultaneously 		 Defroster – floor (front and rear)

Button	Display	
Press simultaneously 		 Panel – floor (front and rear) and center rear vent
		Electrically heated rear window/electrically heated door mirrors are controlled automatically, though they can also be programmed for manual control; see "Programming II", page 88. The temperature, air distribution and fan speed will still be controlled automatically.
		Press \triangle or ∇ to increase/decrease the fan speed (the fan setting is shown on the display). To revert to automatic fan control, press AUTO. Other manual selections will revert to automatic control at the same time.

Button	Display	
		Recirculation is controlled automatically, but there is also manual ON/OFF control.
		When this function is activated the A/C compressor will be shut off. Reconnection can be made with one press on AUTO or pressing ECON. The function can be programmed for automatic A/C disconnection when the outside temperature falls below 57°F (+14°C), see "Programming II", page 88. The temperature, air distribution and fan speed will still be controlled automatically.
		After you have depressed OFF there will be no control. You can re-activate by pressing AUTO or by again pressing OFF, which gives the latest setting.

86 Instruments and controls

Starting in cold weather: The automatic climate control system selects the defroster position, max. heating and low fan speed to begin with.

As the engine temperature rises, the fan speed is increased and air is routed towards the floor.

As the temperature inside the car nears the selected value, both the fan speed and the heat will be decreased to a level determined by the system.

Starting in hot weather: The automatic climate control system selects air to the panel vents and high fan speed. Recirculation is switched on about 30 seconds after starting if the selected cabin temperature is markedly lower than the actual temperature.

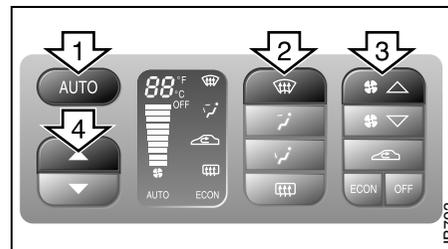
Unless the ECON button has been depressed, the A/C compressor is always switched on at outside temperatures above 32°F (0°C) in order to cool and dehumidify the incoming air, unless the ECON button has been depressed.

As the temperature inside the car nears the selected value, the fan speed will be decreased to a value determined by the system.

Action to be taken in special types of weather

Normally, misting and icing problems on the windows do not occur other than in extreme situations, e.g. when you are driving in heavy rain or severe cold in combination with high air humidity or when those traveling in the car are sweaty and wet. If you have trouble with misting or icing in such cases we suggest the following counter-measures:

- 1 Select **AUTO** and temperature 70°F (21°C).
- 2 Select . If this is not enough...
- 3 Increase the fan speed. If this is not enough...
- 4 Select a higher temperature.



IB793

Calibration

If the battery has been disconnected or has run flat, the system will recalibrate automatically.

Manual calibration:

- 1 Start the engine.
- 2 Press **AUTO** + **OFF** at the same time. The ACC display flashes once to indicate that calibration and self-testing have started.

During calibration the display indicates the figure 0 or the fault codes (01–23) that have been found.

Calibration and self-testing takes about 30 seconds.

Programming I

The manual selections you have made can be saved so that the ACC system always starts up on these selections every time the ignition is switched on. But notice that the ignition must have been off for at least 10 minutes before you try out the saved setting.

- 1 Select the desired settings.
- 2 Press **ECON** + **#** + **▲** at the same time.

(The ACC background lighting flashes to confirm that the information has been stored.)

Example:

If you want the ACC system to distribute the air to the dash vents from the start, proceed as follows:

- 1 Start the engine.
- 2 Press the button .
- 3 Press **ECON** and **#** + **▲** at the same time.
- 4 Shut off the key.
- 5 The system will memorize this new program 10 minutes after the key is shut off.

Cancelling program I

A saved setting is deleted only by pressing  + **■** at the same time.

(The ACC display flashes to confirm that deletion has been effected.)

88 Instruments and controls

Programming II

It is also possible to customize the ACC system to adapt to driving and weather conditions.

Function	Operation in AUTO mode after Programming II	Standard operation in AUTO mode
	The A/C compressor is not switched on until the outside temperature goes above +55°F (+13°C). – <i>This function can be used to save fuel, since the A/C compressor will not be in action for so long a time. In wet weather, however, the A/C compressor should be on at below 57°F (14°C) as well, since this reduces the risk of misting on the windows.</i>	A/C compressor cuts in when outside temperature is above 32°F (0°C).
	Rear-window heating can only be switched on manually.	The heating will come on about five seconds after the engine has started if the outside temperature is below +41°F (+5°C). – <i>The activation time depends on the outside temperature.</i>

Programming and cancellation of programming is carried out by holding the appropriate button down until the corresponding symbol has flashed 4 times, an audible signal has sounded and the following text for the desired function has appeared in the SID.

Make sure the ignition is ON.

Function	Text displayed on SID during programming	Text displayed on SID when cancelling program
	ACC: LO TEMP A/C CTRL	ACC: NORMAL A/C CTRL
	ACC: MANUAL RDEFR CTRL	ACC: AUTO RDEFR CTRL

Example:

If you want to control the switching on and off of the heating for the rear window and the door mirrors manually, hold the  button depressed until the symbol has flashed 4 times, an audible signal has sounded and the following text has appeared in the SID.

SID shows:
ACC: MANUAL
RDEFR CTRL

Once a function has been recorded under "Programming II", it will remain in the system until you cancel the program.

AUTO will still show on the display after a function has been saved in "Programming II".

Additional programming features, see page 237.

Useful tips:

If the ACC system is not functioning satisfactorily the following should be tried before you take the car to an authorized Saab dealer.

- If the indication AUTO does not light up after starting (the ignition must have been switched off for at least 10 minutes): See "Cancelling program I", page 87.
- If you think that the ACC system is not functioning satisfactorily you should:
 - 1 Check that the cigarette lighter plug is in its socket (since if the socket is empty heated air can flow out and affect the cabin sensor).
 - 2 Recalibrate: See the section headed Calibration, page 87.
- If the battery has been disconnected or has died, the ACC system should be recalibrated: See Calibration, page 87.

Programmed settings are not deleted if the battery has been disconnected.

Extinguishing the lighting in ACC

See section Night panel, page 71.

ACC with soft top folded down

When the soft top is folded down the ACC system goes over to manual temperature setting.

Between HI and LO there are eleven (0–10) fixed temperature steps.

The system adjusts itself as follows:

- AUTO is turned off.
- Heating, air distribution and fan speed are not affected.
- Recirculation and electric rear window are turned off.
- A/C assumes the same setting (ON/OFF) as it had when the soft top was last folded down.

All manual selections are possible with the exception of electric rear window.

Saab recommends leaving the ACC setting on ECON when the soft top is folded down to improve fuel economy and unnecessary running of the A/C compressor.

When the soft top is raised the system reverts to the AUTO mode and the previous set temperature.



ACC display with soft top folded down

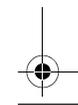
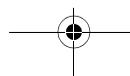
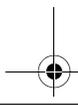
IB795

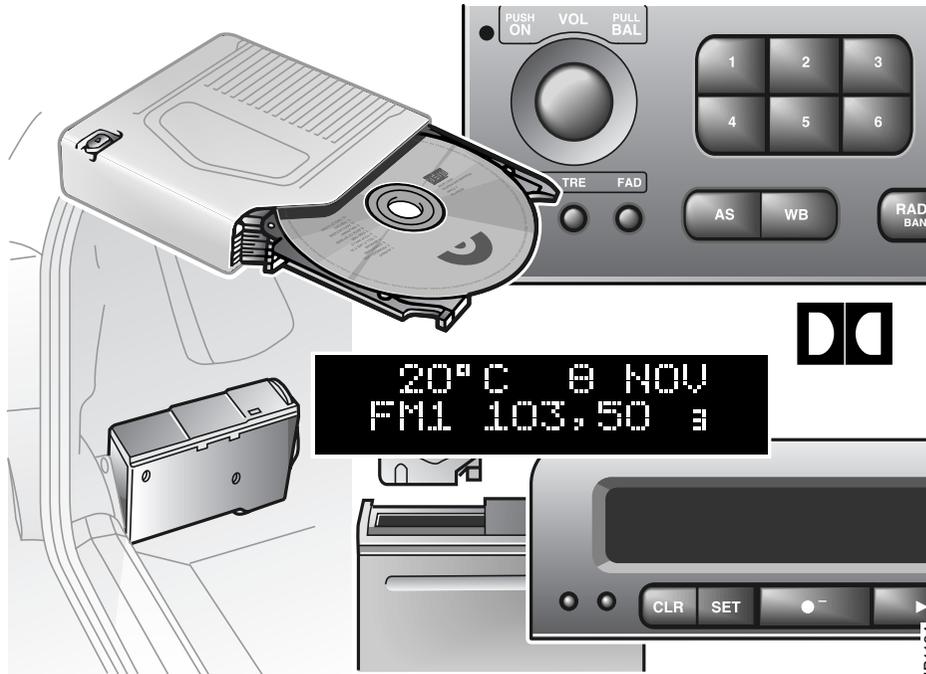
Fault diagnosis and care of A/C system, see page 217.



90 Instruments and controls

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Saab 9-3 Audio System

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CD player	98
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General functions	103
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92 Saab 9-3 Audio System

Saab 9-3 Audio System

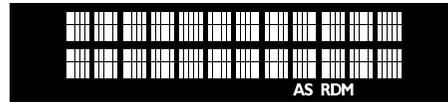
The Saab 9-3 Audio System comes in two levels, Premium and Prestige. They are specially adapted to the cabin space in the Saab 9-3.

The Saab 9-3 Audio System consists of a main unit with a radio and an in-dash CD player. There is also a CD player and a CD changer for 6 CD discs available as an accessory.

The Premium Audio System has two loudspeakers at the front and two at the rear. Output is 4x20 watts.

The Prestige Audio System 3 has two additional loudspeakers. They are mounted in the front doors and reproduce bass tones below 200 Hz. These subwoofers have their own amplifier of 2x40 watts.

The Audio Systems are interconnected with SID (Saab Information Display) which is located above the radio in the instrument panel. The Audio Systems uses the display of the SID instrument to show text/characters and indications.



Indicator	
AS	Radio is in Autostore mode
RDM	Random playback of CD tracks when CD player selected

Quick guide to the Saab 9-3 Audio System

Radio, see page 96



On

To switch the system ON, press the volume button. The last settings used will be activated. If the Audio System is switched on when the ignition key is not in the switch, the system will automatically be switched off after one hour has elapsed since a control button on the radio was last pressed.

Off

To switch the system OFF, press the volume button or remove the ignition key.

VOL

To adjust the volume, rotate the VOL control.

BAL

To adjust the balance between the left and right channels, pull out and turn the VOL control.



BAS

Press to release the button, and adjust the bass level. Lock the setting by pushing the button in.

TRE

Press to release the button, and adjust the treble. Lock the setting by pushing the button in.

FAD

Press to release the button, and adjust the balance between the front and rear sets of speakers. Lock the setting by pushing the button in.



Preset station buttons

Press once: play the preset station.

Press and hold briefly: store a new station.



Auto tuning

Touch: SEEK.

Press and hold briefly (a chime will sound): manual tuning.

Press SEEK once: frequency display



Touch: AS (AutoStore) ON/OFF.

Press and hold briefly: automatic tuning and storing of the 6 strongest stations in the area in which you are currently driving.



Touch: change frequency band.



Press once: Mute ON/OFF.



Press once: activate Weather Band.



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CD player. See page 98



Touch: change to CD playback when other sound source is active.
Press and hold briefly (a chime will sound): random playback.



Touch: SEEK at either end to change track.
Press and hold briefly: fast playback or fast track changes.
Touch center on SEEK (a chime will sound): change between functions fast playback (PLAY) and fast track changes (TRACK).



Remove CD.

CD changer (option). See page 100



Touch: change to CD changer when CD player is active.
Two touches: change to CD changer when radio is active.
Press and hold briefly (a chime will sound): random playback of entire magazine.



Touch: SEEK at either end to change track.
Touch and hold briefly: fast playback.
Press SEEK (center) once: Switch between Rapid play (PLAY) and Fast track search (TRACK).



Selects disc in magazine.



Sound controls

ON/OFF

The Audio System will come on:

- When the volume control is pressed.
- When the ignition is switched ON, if the Audio System was on when the ignition key was last removed.

The Audio System will be switched off:

- When the volume control is pressed.
- When the ignition key is removed.
- One hour after the ignition was switched OFF, if the ignition key has not been removed.
- When one hour has elapsed since a control button was pressed if the Audio system was switched on when the ignition key was not in the switch.

VOL – Volume

BAL – Balance

Pull out and rotate the VOL control to adjust the balance between the left and right speakers. When the control is released, it reverts to the volume function.



BAS – Bass

TRE – Treble

Rotate clockwise to increase the level and counter-clockwise to reduce it.

The Bass and Treble controls must be pressed first to release them.

FAD – Fader

The fader control adjusts the balance between the front and rear sets of speakers.

The Fader control must be pressed first to release it.

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Radio

Press the RADIO/BAND button to switch to the radio when another source is active.

Preset station buttons (1)

Press once (release within a second) to select a preset station, e.g.



The small figure on the far right of the display is the number of the preset button selected.

Presetting a station

Press the desired button and hold it down for more than a second to store the currently tuned station. During this time, the radio will be mute. The sound will return as soon as the station has been stored.



IB1166

Seeking (2)

Automatic seek tuning:

Press **SEEK** briefly to search for higher frequencies or **SEEK** for lower frequencies.

Manual tuning:

To switch to the manual-tuning function, press **SEEK** or **SEEK** and hold until a chime sounds and the M indicator appears on the display.

The function will revert to automatic seek tuning two seconds after the last manual frequency change has been made.

Band selector (3)

Touch the RADIO/BAND button repeatedly to move through the waveband selections: FM1, FM2 and AM.

AS, Autostore (4)

The autostore mode provides an additional preset function that can be used to search for and to store stations when you are in an area where you are unfamiliar with the stations and their frequencies. This can be done without changing your normal presets.

Touch the AS button to switch the Autostore mode ON/OFF. When the Autostore mode is ON, the AS indicator will show at the bottom of the display.

Press and hold the AS button for more than a second to initiate an automatic search for the six strongest stations.

Each time the system finds and stores a station, the number on the far right of the SID display will change. If the system cannot

find six stations with good reception, the remaining preset buttons will be empty. If one of these empty buttons is pressed, FM or AM**** will appear on the display.

When the system leaves the AS mode, it returns to the station that was selected before the AS mode was activated.

The AS mode can also be used in the AM band.



WB (Weather Band) (5)

Press the WB button to select the Weather Band mode. The radio will automatically search for the strongest national weather service station in the area. When a weather band station is received, the display indicates "WB". The strongest station generally provides the most accurate information for the area in which you are travelling.

To exit the Weather Band mode, depress the WB button again. Weather Band reception is available in CD and RADIO mode. If the radio is unable to find a sufficiently strong station to lock onto, the unit will continue to search and the display will indicate "NO WB".

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CD player

NOTICE

Do not use writeable CDs in your Audio System. In certain cases, this type of CD is only suitable for home use and can therefore cause operational problems (overheating).

To select the CD mode, load a CD into the deck or, if one is already loaded, press the CD/RDM button.

Insert the CD, label-side up, and allow the mechanism to load it automatically. Playback of the first track will start and the following message will appear on the display:

20°C 8 NOV
CD PLAY 1

A tiny, amber-colored LED indicator to the left of the disc tray is illuminated when a disc is loaded.

When all the tracks have been played, the CD player will restart playback from track 1. To cancel playback, press the eject or RADIO/BAND button.

**Track search (1)**

Touch **◀SEEK** or **SEEK▶** repeatedly to move to preceding or following tracks. Touching **◀SEEK** once will restart playback from the beginning of the current track. To change to the preceding track, touch **◀SEEK** twice.

Rapid play (passage search)

When **◀SEEK** or **SEEK▶** is pressed and held, rapid play will be initiated, with the time and track showing on the display, e.g.:

20°C 8 NOV
CD 2:34 9

If the button is depressed for more than 5 seconds, the rapid play will be even faster. Rapid play stops when the button is released.

Fast track changes

Touch **SEEK** (mid-segment) to switch between the CD PLAY and CD TRACK modes.



The CD PLAY and CD TRACK modes change the function of **SEEK** and **SEEK**. The selected mode will also be active the next time the system is switched on. Choose the mode that you find most convenient:

CD PLAY	Pressing and holding SEEK or SEEK starts Rapid play.
CD TRACK	Pressing and holding SEEK or SEEK activates track changes.



IB1165

Random playback (RDM) (2)

Press and hold the CD/RDM button to select/deselect random playback of the current disc. When this function is selected, RDM will appear at the bottom of the display.

Touch **SEEK** to move from the current track to the next during random playback.

Touch **SEEK** to repeat the current track during random playback.

Pressing and holding **SEEK** or **SEEK** will start Rapid play.

Eject (3)

Touch **EJECT** to remove the disc.

If you press the eject button to open the tray but fail to remove the disc, the CD player will automatically close the tray again after 10 seconds to protect the disc, without restarting playback.

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CD changer (accessory)

NOTICE

Do not use writeable CDs in your Audio System. In certain cases, this type of CD is only suitable for home use and can therefore cause operational problems (overheating).

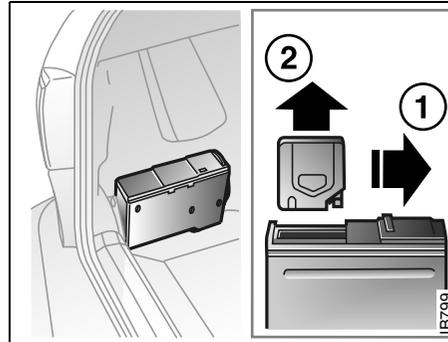
Important! Always keep the sliding cover closed to keep dust out of the CD changer, so that it will continue to provide satisfactory service for a long time.

To load the CD changer, which is installed in the trunk and can accommodate six CDs, proceed as follows:

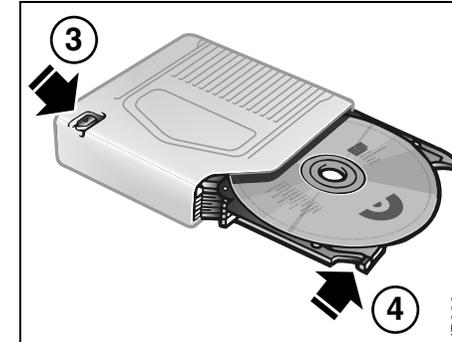
- 1 Slide the cover back.
- 2 The CD magazine will automatically eject after it has retrieved all discs.
- 3 Press the catch on the magazine to one side.
- 4 Withdraw one CD tray at a time and swap or load the CD (label side up).
- 5 Slide the tray back into the magazine.

Note the position of the magazine for loading (see picture).

Insert the entire magazine carefully inside the CD changer and slide the cover closed again.



CD changer in trunk



To select the CD changer

- If the Audio System is in the RADIO mode, touch the CD/RDM button twice.
- If the CD player is active, touch the CD/RDM button once.

If the CDs in the magazine have not been changed, the system will restart playback from where it left off.

If there is no magazine in the CD changer, the following will appear on the display:

20°C 8 NOV
NO MAGAZINE

If the magazine in the CD changer is empty, the following will appear on the display:

20°C 8 NOV
CD MAG EMPTY

If the CD changer is activated immediately after a magazine has been loaded, the following will appear on the display:



The CD number will change as each CD is played.

After a magazine has been loaded, playback will start with the first track on the first CD when the CD changer is selected, and the following will appear on the display:



IB1164

Selecting CDs (1)

When the CD changer is operating, the radio preset buttons work for the six CDs in the magazine. Press the button for the corresponding CD.

If the selected CD is already being played, playback will restart from the first track.

If the selected CD-tray, e.g. 3, is empty, the following will appear on the display:



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After two seconds, the status of the trays in the magazine (i.e. loaded or empty) will be shown on the display, e.g.:

20°C 8 NOV
CD MAG12*456

If for some reason the CD selected by the preset button cannot be played, playback of the current CD will continue.

Track change (2)

Touch **◀SEEK** or **SEEK▶** repeatedly to move to preceding or following tracks. Pressing **◀◀SEEK** once will restart playback from the beginning of the current track. Thus, to play the preceding track, touch **◀◀SEEK** twice.

Rapid play

When **◀◀SEEK** or **SEEK▶▶** is pressed and held, rapid play will be initiated, with the time and track showing on the display, e.g.:

20°C 8 NOV
CD6 2:34 9

If the button is depressed for more than 5 seconds, the rapid play will be even faster. Rapid play stops when the button is released.

Fast track changes

Touch **◀◀SEEK▶▶** (mid-segment) to switch between the CD PLAY and CD TRACK modes.

20°C 8 NOV
CD6 TRACK 9

The CD-PLAY and CD-TRACK modes change the function of **◀◀SEEK** and **SEEK▶▶**. The selected mode will also be active the next time the system is switched on. Choose the mode that you find most convenient.

CD PLAY	Pressing and holding ◀◀SEEK or SEEK▶▶ starts Rapid play.
CD TRACK	Pressing and holding ◀◀SEEK or SEEK▶▶ activates track changes.

Random playback (RDM) (3)

Press and hold the CD/RDM button to select/deselect random playback of the CDs in the magazine. When this function is selected, RDM will appear at the bottom of the display.

Touch **SEEK▶▶** to move from the current track to the next during random playback.

Touch **◀◀SEEK** to repeat the current track during random playback.

Pressing and holding **◀◀SEEK** or **SEEK▶▶** will start Rapid play.

To stop playback from the CD changer, simply select another source (RADIO/CD). The CD changer will now enter stand-by mode.

General functions

WARNING

These functions should only be carried out when the car is stationary.

Volume-preset mode

To select the volume-preset mode, press and hold the WB button at the same time as you switch the Audio System on.

Use the  button to select the required function.

The following volume settings can be preselected:

- START VOL – **maximum** volume level when the Audio System is switched on.
- TEL VOL – preset volume level when an in-car phone is activated.
- SP D VOL – speed-dependent volume. The Audio System will automatically adjust the volume level to suit the background noise, such as road noise, which increases with vehicle speed.
- LOUDNESS ON/OFF – boosting of the highest and lowest frequency ranges to enhance the sound image when the volume is set to a low level.

Adjusting the volume

The default setting for START VOL is volume setting 9, and that for TEL VOL is volume setting 14 (the highest volume setting is 30).

- Maximum START VOL



- TEL VOL



To change the volume setting:

- Press and hold the WB button at the same time as you switch on the Audio System.
- Adjust the volume.
- Wait 10 seconds or touch one of the buttons on the bottom row of the Audio System, e.g. RADIO/BAND, to save the new volume setting.

Speed-dependent volume (SP D VOL) ON/OFF



To change the volume setting:

- Press and hold the WB button at the

same time as you switch on the Audio System.

- Select SP D VOL using .
- Select ON/OFF by turning the VOL control.
- Wait 10 seconds or touch one of the buttons on the bottom row of the Audio System, e.g. RADIO/BAND, to save the new volume setting.

Loudness ON/OFF



To change the loudness setting:

The default setting for this function is ON.

- Press and hold the WB button at the same time as you switch on the Audio System.
- Select LOUDNESS using .
- Select ON/OFF by turning the VOL control.
- Wait 10 seconds or touch one of the buttons on the bottom row of the Audio System, e.g. RADIO/BAND, to save the new volume setting.

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Steering-wheel controls

To facilitate use of the Audio System and to promote safer driving, most of the functions can be operated using the integral remote controls on the steering wheel.

Control functions:

NEXT:

RADIO mode: preselect buttons

1⇒2⇒ ... ⇒6⇒1⇒ ...

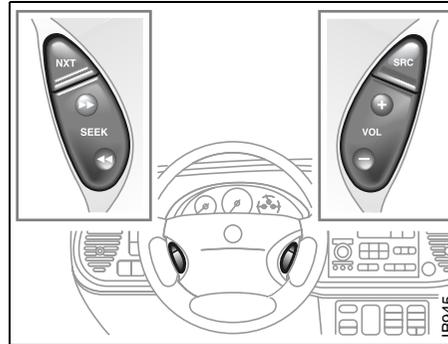
CD mode: Inoperative.

CD-changer mode: Change CD in the magazine 1⇒2⇒ ... ⇒6⇒1⇒ ...

<< SEEK >>:

RADIO mode: Auto/manual seeking.

CD/CD-changer mode: Track change/Rapid play.



Audio System controls on steering wheel

SRC (SOURCE)

Press repeatedly to switch between RADIO ⇒(CD changer) ⇒ RADIO ⇒ ...

VOL +/-:

Volume adjust.

Security lock

The Audio System is equipped with an electronic security lock. The special code is unique to the car in which the Audio System is fitted.

Each time the Audio System is switched on, a check is made to ensure that the codes match.

If not, the following will appear on the display:

20°C 8 NOV
RADIO LOCKED

If a CD changer has been installed, it will also have been security coded.

If the security code for the CD changer does not match when the changer is selected, the following will appear on the display:

20°C 8 NOV
CDC LOCKED

If a CD changer is to be installed or if you wish to move the main audio-system module and/or CD changer to another car (Saab 9-3), you *must* consult an authorized Saab dealer so that the modules can be given the correct security codes.

Technical data

Tone controls

Bass _____ ± 12 dB at 40 Hz
 Treble _____ ± 10 dB at 15,000 Hz

Power output _____ 4 x 20 W (4 x 12 W at 1 % THD (total harmonic distortion) and 13.5 V)

Radio module

Radio system _____ PLL dual-synthesizer tuner

Number of presets

FM _____ 3 x 6
 AM _____ 2 x 6

Frequency range

FM _____ 87.9 MHz – 107.9 MHz
 AM _____ 530 kHz – 1710 kHz
 WB _____ 162.40 – 162.55 MHz

Scanning steps

Automatic seek tuning: _____ VHF (FM) 200 kHz
 AM 10 kHz
 WB 50 kHz

Manual seek tuning: _____ VHF (FM) 200 kHz
 AM 10 kHz

CD player and CD changer

1-bit system and 8 x oversampling

Frequency range _____ 5–20000 Hz
 ± 0.5 dB

Stereo separation _____ 45 dB

Distortion _____ < 0.008 %

Dynamics _____ > 95 dB (1 kHz)

CD-changer capacity: 6 discs

Amplifier (cars with extra speakers in front doors)

Power output _____ 2 x 40 W (2 x 30 W at 1 % THD 50 Hz)

Crossover frequency _____ 110 Hz (-3 dB)

- These specifications comply with the new IHF Standard
- Since the policy at Saab is one of continual improvement, we retain the right to alter specifications and design without prior notice.

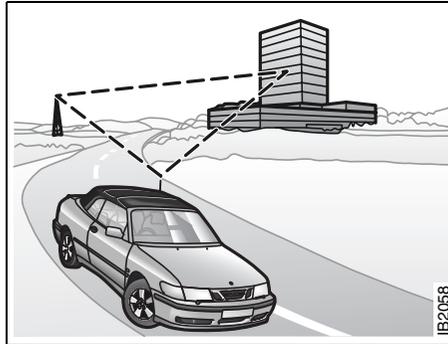
Changes or modifications not expressly approved by the manufacturer for compliance could void the user's authority to operate the equipment.

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Antenna

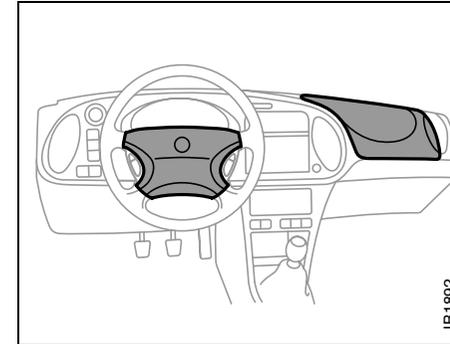
The antenna of the Audio System is motorized.

For the cleaning of the motorized antenna, see the section headed "Washing", page 210.



Multipath interference

When the radio waves from an FM transmitter collide with a large building, for example, they will be reflected so that they reach the car antenna slightly later than the direct waves. This is referred to as multipath distortion. The effect is liable to be blamed upon malfunctions in the radio.



Accessories and other equipment must not be fitted to the surfaces marked as these are where the airbags may inflate in the event of a crash.

WARNING

To reduce the risk of head injuries in the event of a crash, the pillar trims and header trims incorporate energy absorbing material. These areas must not be modified in any way. Work on these areas must only be carried out at an authorized Saab dealer.

Fault codes

NOTICE

Great care should be exercised in trying to rectify a fault. If you are at all unsure, contact an authorized Saab dealer.

The Audio System has a built-in diagnostics function. If a fault is detected, a fault code is generated to help dealer technicians to diagnose the fault. Below is an example of a fault code that you might be able to rectify yourself.

Fault code	Possible cause
CD/CDC ERROR 12/17/19	CD is dirty, loaded the wrong side up or defective.

WARNING

The CD player/CD changer is classified as Class 1 laser equipment.

- Service and repair work must only be carried out by authorized technicians.
- If the casing is damaged, hazardous laser radiation can occur.

NOTICE

All work on the Audio System must be carried out by an authorized Saab dealer.

OnStar System

Your vehicle may be equipped with OnStar, a vehicle telematics communications and navigation system. Please consult the separate chapter in this owner's manual, page 109.

Adjusting the frequency steps North America/Europe

If the car is taken from Europe to North America, the radio's frequency steps will need to be adjusted.

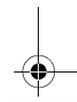
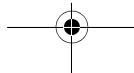
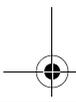
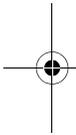
- With the radio off, press and hold  (mid-segment) and switch the radio on at the same time.

The station presets will be cancelled and replaced by preset frequencies.



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OnStar - Telematics

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110 OnStar - Telematics

Your new vehicle comes equipped with advanced telematics hardware and one full year of OnStar Directions and Connections. Saab Telematics is a sophisticated in-vehicle system allowing convergence of wireless communications, GPS (Global Positioning System) satellites and advanced vehicle electronics.

You must activate immediately to ensure you receive your full year of service, as your prepaid subscription begins at the time of delivery.

Here's how to activate your OnStar service:

- 1 Push the blue OnStar button located in your Saab. After a prerecorded message explaining the benefits of OnStar, you will be greeted by a live OnStar advisor. The advisor will activate your OnStar service.
- 2 Provide the information requested by the advisor to activate your account and set up your personal profile. This will take approximately 10–15 minutes.

Using OnStar

Welcome to OnStar. This section gives you all the information you need to get started using OnStar, including descriptions of all OnStar services. It also introduces the added services of Personal Calling, Virtual advisor, and the OnStar Subscriber website. For a complete explanation of these additional services, please see pages 114, 118 and 119.

NOTE: In order for OnStar to operate, the car audio system must be switched on.

OnStar is Easy

It's easy to start using your OnStar system. In fact, pressing the OnStar button is usually all you need to do. Once you are connected, an OnStar advisor will help you with the services in your plan.

Inoperative if battery is discharged or disconnected.

OnStar is powered by your vehicle's battery and will not operate if the battery is discharged or disconnected.

Potentially inoperative if vehicle is in a crash

If your vehicle is in a crash, some components could be damaged or disconnected, potentially rendering OnStar inoperative.

Your onboard OnStar System consists of three buttons:

OnStar Services Button



Press this button, and you are connected to an OnStar advisor. You will hear a chime, followed by the words "Connecting to OnStar." Allow 20–30 seconds for initial connection to the OnStar Call Center. An advisor will then help you with any of the services included in your OnStar plan. If cellular service is unavailable, OnStar will generate a fast busy tone. The OnStar system will retry calls a number of times before returning to the ready mode. To cancel the automatic dialing, press the White dot button.

Emergency button



In an emergency, press this button to connect with an OnStar advisor. Your call will be given the highest priority, and you will hear a tone followed by the words "Connecting to OnStar Emergency." An advisor will locate your Saab, find out what kind of assistance you require, and contact the nearest emergency services provider who can dispatch ambulance, fire, police or other emergency services. Please use this button only for true emergencies.

White dot button



Press this button at the end of a call. You'll hear the words "OnStar Request Ended." Also, press this button to answer a call from the OnStar Center, or cancel a call if one of the other buttons is accidentally pressed. This button is also used to access OnStar Personal Calling services which are described on page 114.

System status light

Solid Green — Indicates the OnStar system in the vehicle is powered ON and ready to make calls or receive calls from the OnStar Center.

Blinking Green — The light blinks green to indicate a call is being connected or in progress. If you notice this light blinking while you are not on a call, press the White dot button.

Red — This signals that your OnStar system may not be functioning properly. Press the OnStar button to attempt to contact an OnStar advisor. If the connection is made, the advisor will assist you in making sure your OnStar system is operating properly. If you cannot contact the OnStar Center, please take your car to the nearest Saab dealer for diagnosis and service.

The OnStar Center is the heart of your service — staffed 24 hours a day, 7 days a week with knowledgeable OnStar advisors. Even on weekends and holidays, there is always someone ready to help.

OnStar uses sophisticated Global Positioning System (GPS) satellites to locate your Saab, and wireless technology to provide the communications link and seamless integration into your Saab. This system allows the OnStar advisors to pinpoint your Saab's location precisely. This way, advisors can provide you with a range of helpful services to protect you and your Saab. Plus, with the Premium Services Plan* included for 12 months with your Saab, advisors can also access an extensive database to assist you with directions, making reservations and other convenience services.

*) New retail deliveries only.

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The OnStar Center

Connecting to the OnStar center

In addition to using the 3-button system found in your Saab, there are two other ways to connect to the OnStar Center.

Toll-Free Call

To take advantage of your OnStar services from outside your Saab, you can call OnStar toll-free at 1-888-4-OnStar (1-888-466-7827). Remember to have your Personal Identification Number (PIN) handy.

Automatic Notification

A priority signal will be sent to the OnStar Center with your exact location if an airbag deploys.

(Vehicle electrical system and cellular service must be operable.)

Your personal identification number (PIN)

When you signed up with OnStar, you were asked to provide a Personal Identification Number (PIN). You'll need your PIN to access many of OnStar's services. If, for example, your vehicle has been stolen, an OnStar advisor will ask for your PIN in order to provide assistance.

Changing your PIN is easy. Call the OnStar Center and provide the advisor with your current number, and he or she will assist you in setting up a new number. If you have forgotten your PIN, just call the OnStar Center. For security reasons, we will send your PIN to you in the mail.

The OnStar Directions and Connections Plan

The OnStar Safe and SoundPlan is part of the Directions and Connections Plan that comes with your vehicle.* With it, you have access to a complete range of services providing you with an unsurpassed level of safety and security — 24 hours a day, 7 days a week. And you have it all at the touch of a button.

So whether you're on a lonesome country road or stuck in highway traffic, you have at your disposal a complete range of services providing you with unsurpassed security. And you have it all at the touch of a button.

Automatic notification of air bag deployment

Should your front air bags deploy, a priority signal will be sent to the OnStar Center with your Saab's location (as long as cellular service and the vehicle's electrical system are operable). An advisor will attempt to contact you to assess the nature of your emergency, and then notify the appropriate emergency services provider.

Emergency services

Should you require emergency assistance, press the red emergency button and OnStar or an advisor will contact the nearest emergency services provider with your exact location and your request for help.

* New retail deliveries only.

Roadside assistance**

There's nothing worse than being stranded on the road with car trouble. No matter what the problem is (flat tire, out of gas, or engine trouble), just call OnStar. They will contact the help you need to get you quickly back on the road.

Stolen vehicle tracking

OnStar doesn't just protect you, it protects your Saab, too. If your vehicle is ever stolen, just contact OnStar by calling 1-888-4-ONSTAR. They will put you in touch with the authorities and aid them in locating your Saab. Ask your insurance carrier about possible premium discounts.

Accident Assist™

Accident Assist™ provides step-by-step guidance about what to do in case of a crash. Working with leading insurance companies OnStar has developed a "best practices" list to assist you through most accident situations. OnStar Accident Assist™ can make the process of completing a police report and/or insurance claim less stressful.

OnStar Med-Net***

OnStar MED-NET securely stores your personal medical information (e.g., physician's name, emergency contacts, medications, chronic conditions) and, in an emergency, can quickly send it to a medical facility. This important information can help assist with diagnosis and treatment. ****

**There will be no charge for Roadside Assistance as long as your vehicle is under warranty.

***Requires activation and additional fee.

****Not available in Canada.

Hands-free communication

Talking to an OnStar advisor is easy and hands-free. Simply press the OnStar button, and a small microphone picks up your voice while the OnStar advisor talks to you through your stereo speakers. Note: Audio system must be switched on. You can even adjust the volume to your liking with the steering wheel controls or the radio volume knob. Your hands remain on the steering wheel, while your eyes remain on the road.

*Being safe on the road is important, but there's more to life than security. There's living. That's why we have created the OnStar Directions and Connections Plan. It gives you not only the important protections of the Safe and Sound Plan, but also a whole range of services which truly change driving from a chore to a luxury. All new Saab models come with one full year of the OnStar Directions and Connections Plan. **

* New retail deliveries only.

The OnStar Premium Services Plan *

Route support

With OnStar Route Support, an advisor can help you find your way, no matter how far off course you are. You can get exact street directions, or guidance to nearby gas stations, restaurants, hotels or ATMs.

Ride Assist

If you need a lift, anytime of the day or night, just call OnStar. They'll contact transportation and send it right to you.

Information and Convenience services

OnStar advisors have access to over five million service listings including hotels, restaurants, gas stations, dealerships, hospitals, ATMs and airports — more than 250 service categories in all. OnStar advisors can even assist you with hotel and restaurant reservations.

*All Saab models come with one full year of Premium Service. New retail deliveries only.

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Online Concierge services

From shopping to travel to entertainment and more, OnStar's online concierge can help you make the most of your time. Login to www.myonstar.com and simply select a city, choose a category and ask away. Get instant answers in a live online chat with an OnStar Advisor or send an email if you prefer. You can also view OnStar's recommendations for top picks in eight categories like dining, travel and sports and recreation.

Additional Services

Personal Calling

As an OnStar Safe and Sound Plan or Directions and Connections Plan subscriber, you have access to OnStar Personal Calling. OnStar Personal Calling provides you with a nationwide wireless phone service in your Saab that you can activate simply by pressing a button and using your voice. You can use Personal Calling in your Saab to place or to receive calls. The voice-activated system will dial the number. Your party will answer through your stereo speakers.

With OnStar Personal Calling, you can enjoy the simplicity of a one-touch wireless connection. Whether you are placing or receiving a call, once you press the button, you never have to take your hands off the wheel or your eyes off the road. The ease of the hands-free communication service allows you to enjoy an even greater level of safety, security and convenience while driving.

This new service is not yet available in all areas. Complete availability in the U.S. is anticipated in 2001*. For system limitations and details, call OnStar at 1-800-ONSTAR-7.

* Availability in Canada was undetermined at time of publication. Please contact your local dealer in Canada.

Signing Up for Personal Calling

As an OnStar subscriber, the Personal Calling capability is already built into your Saab's OnStar hardware. In order to use this service, an OnStar advisor must set up your cellular account. You must also provide a credit card in order to establish your prepaid cellular account. Usage charges will be deducted from this prepaid account of "units." Units are easily replenished using the credit card on file at OnStar. Once you sign up for OnStar Personal Calling, you will be given your own personal phone number that others can use to call into your Saab.

To sign up for Personal Calling, simply

- Press the OnStar button in your Saab.
- Inform the advisor that you would like to sign up for Personal Calling.
- The advisor will set up your account. You will need to provide account and credit card information.

Voice Commands

Personal Calling is made available through your voice commands to the system. This allows you to verbally control all of the phone functions.

Your OnStar wireless phone system has been programmed to respond to a wide variety of voices and accents. You should speak distinctly in a normal speaking volume. It is not necessary to exaggerate your voice or to speak loudly. Speak numerical digits one at a time, and then wait for confirmation before going to the next digit.

Voice Command Error Messages

Pardon – The system has not been able to match your command with a word that it knows. Repeating the command distinctly should fix the problem.

Slower Please – Repeat the command after a short pause. This response normally happens if you say a command before the system is ready for it or if there is substantial background noise.

Universal Commands

Help – The system will provide a list of available commands.

Clear – When you are entering digits, this command will erase the last digit entered.

Cancel – This command takes you from the current function to the "Ready" prompt. If the last response from the system was "Ready," this command will exit voice recognition.

Placing a Call

There are three ways to place a call:

- 1 By using a particular number, say "DIAL"
- 2 By using a stored nametag, say "CALL"
- 3 By dialing the last number, say "REDIAL"

To dial a number:

- | | |
|--|--|
| 1 Press the OnStar White dot button | OnStar will respond "Ready" |
| 2 Say "DIAL" | OnStar will respond "Number Please" |
| 3 Say the 1st Digit | OnStar will repeat the number |
| 4 Say the 2nd Digit | OnStar will repeat the number |
| <i>Continue saying numbers in this manner until finished</i> | |
| 5 Say "DIAL" | OnStar will respond "Dialing <number>," then make the call |

To dial using a "Nametag":

- | | |
|-------------------------------------|---|
| 1 Press the OnStar White dot button | OnStar will respond "Ready" |
| 2 Say "CALL" | OnStar will respond "Nametag Please" |
| 3 Say "<stored nametag>" | OnStar will respond "Calling <nametag>," then make the call |

To redial the last number dialed:

- | | |
|-------------------------------------|---|
| 1 Press the OnStar White dot button | OnStar will respond "Ready" |
| 2 Say "REDIAL" | OnStar will respond "Redialing", then make the call |

Receiving a Call

If someone calls your wireless phone number, the entertainment system in your Saab will mute (if it is on), and you will hear a phone ringing sound. To answer the call, simply press the White dot button.

Ending a Call

When your call is finished, press the White dot button to end the call. It is not possible to end a call using voice commands.

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Storing/Deleting Numbers in Memory (Nametags)

Storing a number

Your OnStar system can store up to 20 numbers (up to 32 digits each) in memory that can be dialed by simply repeating the "nametag."

To store a number:

1 Press the OnStar White dot button	OnStar will respond "Ready"
2 Say "STORE"	OnStar will respond "Number Please"
3 Say the 1st Digit	OnStar will repeat the number
4 Say the 2nd Digit	OnStar will repeat the digit
<i>Continue saying numbers in this manner until finished</i>	
5 Say "STORE" again	OnStar will respond "Nametag Please"
6 Say "<new nametag>"	OnStar will respond "Again"
7 Say "<new nametag>"	OnStar will respond "Once More"
8 Say "<new nametag>"	OnStar will respond "Storing <nametag>"

Deleting a Number from Memory To delete a nametag:

1 Press the OnStar White dot button	OnStar will respond "Ready"
2 Say "DELETE"	OnStar will respond "Nametag Please"
3 Say "<nametag>"	OnStar will respond "Delete <nametag>, YES or NO"
4 Say "YES"	OnStar will respond "Deleting <nametag>"

Setting Tone or Voice Response

Your system comes from the factory with voice responses to your commands to confirm that the system received the command or number you intended. For example, when you are entering a number, OnStar repeats the number back to you. You may change the system to respond with a tone response if you prefer. A ready tone, a digit tone, or a goodbye tone will respond instead of the voice. All other responses will still be by voice.

1 Press the OnStar White dot button	OnStar will respond "Ready"
2 Say "Voice Feedback"	OnStar will respond "Voice Feedback is now ON/OFF"

Units Remaining

OnStar keeps track of the amount of calling time you have purchased and used in units. The number of total remaining units is stored within the OnStar system, and can be accessed easily.

1 Press the OnStar White dot button	OnStar will respond "Ready"
2 Say "Units"	OnStar will respond "Verify or Add"
3 Say "Verify"	OnStar will respond "You have # units remaining"

Adding More Calling Minutes / Units

You can charge additional calling units with automatic refill by contacting OnStar, or by authorizing automatic unit refill on the OnStar subscriber website. For more information about the OnStar subscriber website, please see page 119.

Automatic Replenishment

If you run out of units during a call, your call will be terminated and you will be connected to OnStar for approval to replenish. You will be warned at the beginning of a call when you have ten or fewer calling units remaining.

Contact OnStar

- | | |
|-------------------------------------|---|
| 1 Press the OnStar White dot button | OnStar will respond "Ready" |
| 2 Say "Units" | OnStar will respond "Verify or Add" |
| 3 Say "Add" | You will be connected to OnStar for replenishment |

You will need your OnStar Personal Identification Number (PIN) to authorize the charge to your credit card on file.

If you are not in your Saab, you may call an OnStar Advisor at 1-888-4-ONSTAR (1-888-466-7827) to request unit replenishment.

Security/Locking your System

You can set up a four-digit Personal Security Code to ensure that unauthorized people do not use the calling capability of your system. With security set to ON, the system will not allow any personal calls. You must turn security OFF before calls can be made.

- | | |
|-------------------------------------|--|
| 1 Press the OnStar White dot button | OnStar will respond "Ready" |
| 2 Say "Security" | OnStar will respond "Enter Four-Digit Security Code" |
| 3 Say the 1st Digit | OnStar will repeat the digit |
| 4 Say the 2nd Digit | OnStar will repeat the digit |
| 5 Say the 3rd Digit | OnStar will repeat the digit |
| 6 Say the 4th Digit | OnStar reply "Security (code # # # #) is now ON/OFF" |

Volume Control

The volume of the audio portion of Personal Calling is controlled with your steering wheel volume control or with the radio volume knob.

118 OnStar - Telematics

Virtual Advisor

Once you have activated Personal Calling, you can enjoy your time in your Saab even more with the OnStar Virtual Advisor. This service allows you to listen to your favorite news and information topics, such as weather reports, stock quotes and sports scores. You can even listen to your e-mail, whenever you want, without ever taking your eyes off the road. Using simple voice commands, you can browse your personal topics and skip or listen to those you choose. You can also search for additional information on special topics that interest you.

To find out how to set up a customized profile, visit the OnStar subscriber website at www.onstar.com, or turn to the OnStar subscriber website section on page 31 of this guide. If you do not have Internet access, you can still take advantage of the OnStar Virtual Advisor services as a default profile will be set up for you.*

*Availability in Canada was undetermined at the time of publication. Please contact your local dealer in Canada.

Calling the Virtual Advisor

- | | |
|-------------------------------------|--|
| 1 Press the OnStar White dot button | OnStar will respond "Ready" |
| 2 Say "Virtual Advisor" | You will be connected to Virtual Advisor |

Getting Information from the Virtual Advisor

The OnStar Virtual Advisor will prompt you for information you desire. These offerings will change to provide you with services and information that you and other subscribers want and need. The prompts are very clear and easy to understand and use.

Information Available

OnStar will continue to add new features and categories to the Virtual Advisor. The following general categories will give you an overview of the types of information available to you. For complete up-to-date categories, you can go to the Saab Cars USA, Inc. website at www.saabusa.com or the OnStar website at www.onstar.com, and then click on the link to the subscriber website.

Weather

The OnStar Virtual advisor will deliver an up-to-date weather forecast for the current location of the vehicle. The forecast includes current temperature, daily high/low, tomorrow's high/low, precipitation forecast, and unusual conditions.

Stock Quotes

The OnStar Virtual advisor can provide you with current quotes for the stocks you have specified in your customized profile as well as other requested stocks. All market data is delayed by twenty minutes. If you have not set your profile, you can still access the stock quote feature through your default profile and then request the stock of your choice.

Sports Scores

The OnStar Virtual advisor can provide you with scores for your favorite college and professional teams with up-to-the-minute highlights, even if they are being broadcast on a local station. See the team selection option in your Mobile Profiler section of the subscriber section of OnStar.com.

If you have not set your profile or are still using the default profile, you can access the sports option of the Virtual advisor and ask for an update on your favorite sport. You always have access to the options in the Virtual Advisor.

News Headlines

The OnStar Virtual Advisor will provide current headlines for many different categories, including:

- International News Headlines
- National News Headlines
- Technology Headlines
- Business Headlines
- Sports Headlines
- Entertainment Headlines

E-mail Reader

The OnStar Virtual Advisor allows you to listen, and soon respond, to your e-mails any time you want. E-mail availability is based on the address(es) you provide to OnStar. Every Virtual Advisor enrollee will receive an E-mail account.

OnStar Subscriber Website

As an OnStar subscriber, you have access to the OnStar subscriber website. The subscriber website will provide you with important facts about your OnStar subscription and allow you to customize your Virtual Advisor Mobile Profile. All this allows you to access up-to-the-minute information that can make your driving experience safer and more enjoyable.

The subscriber website was designed to provide you with easy access to personalized information, learn more about OnStar, update your account information, plan your travel, receive weather information and interact with OnStar.

You can also act like an OnStar advisor and pinpoint your Saab. To access the subscriber website, simply go to www.onstar.com, and then click on the OnStar subscriber link. The OnStar Subscriber website is a secured site that is password protected. You will be required to provide your OnStar account number and personal identification number (PIN). If you do not know your account number or PIN, contact OnStar at 1-888-4-ONSTAR. For security reasons, your PIN will be mailed to your address on record.

Limitations

Notwithstanding anything contained herein, OnStar's nonperformance hereunder shall be excused if caused by act or omission of a cellular carrier or a third-party service provider, equipment failure, acts of God, strikes, equipment or facility shortage, or other causes beyond OnStar's reasonable control. In addition, the liability of OnStar, if any, for any mistake, omission, interruption, delay, error, defect or other failure in the service furnished, or in the equipment used in furnishing service, shall in no event exceed the amount of OnStar's charges to subscriber for said service during the period so affected, provided that no liability shall result for outages of 24 hours or less.

This manual includes the latest information at the time it was printed. We reserve the right to make changes to the products and services without prior notification.

In order to provide you with excellent service, any call to the OnStar Center may be monitored or recorded.

All features may not be available on all models. Please consult your dealer for details.



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OnStar Operation:

OnStar uses existing emergency service providers and cellular and satellite technologies. OnStar requires cellular service to be available and operating for features to function properly.

Personal Calling:

Existing OnStar service agreement required. Additional usage charges apply for Personal Calling. Interim 2001 model year availability in select markets. For system limitations and details, call 1-800-ONSTAR-7 or visit www.onstar.com.

Virtual Advisor:

Existing OnStar and Personal Calling service agreement required. Additional usage charges apply for Personal Calling. Interim 2001 model year availability in select markets. For system limitations and details, call 1-800-ONSTAR-7 or visit www.onstar.com.

Additional Information

Warranty

OnStar is warranted as part of the Saab new vehicle limited warranty.

A Note About Privacy

At OnStar, we know you want to protect your privacy, and we take subscriber privacy very seriously. We never provide your personal information to another company or person unless you authorize it, or we are required to by the legal process, or in such cases where you have provided it for billing purposes or you have requested a hotel reservation, are sending flowers, etc. Having this information on file with OnStar is a real advantage and helps you avoid repeating your credit card information over a cellular connection. Your trust is what we most value.

Transferring OnStar

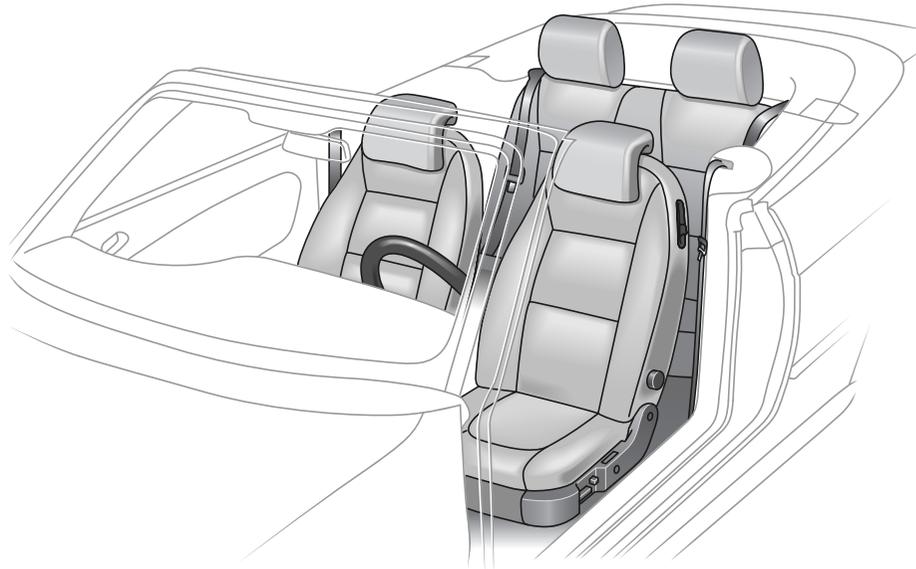
Because your OnStar 3-button system is an integral part of your Saab, it cannot be transferred to another vehicle. Each OnStar system stays with the original car or truck in which it was installed.

The one-year OnStar prepaid subscription applicable to new retail deliveries cannot be transferred to another vehicle. However, if you've purchased additional years of service and decide to dispose of your Saab, any remaining service will be refunded to you. Or, if you choose, you can have it transferred to another vehicle on your account. Any service that is refunded or transferred will be prorated at the monthly rate in effect at the time of transfer.

OnStar Subscription Information

To renew your subscription or upgrade your plan, just push the OnStar button, or call the OnStar customer service department at 1-888-864-2801 between 7 am and 12 pm EST Monday-Friday; 8 am and 5 pm on Saturday.





IB2063

Interior equipment, trunk 121

Interior equipment, trunk

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122 Interior equipment, trunk

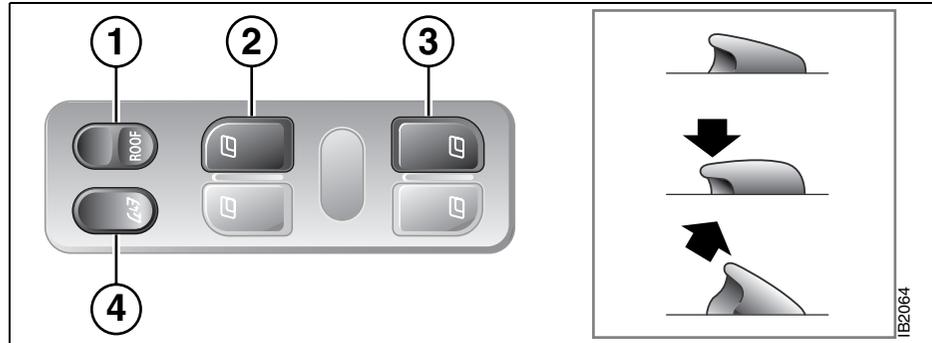
Electrical windows

WARNING

Bear in mind the pinch hazard when the electric side windows are being wound up. Raising the windows could otherwise cause serious or fatal injuries.

- **Always** remove the ignition key when you leave the car to prevent personal injury caused by the electric windows, for example, due to children playing.
- The person operating the electric windows is responsible for ensuring that no one, especially children, has their head, hands or fingers in the window openings, before raising the windows.

The electric window motors are equipped with overload protection. If this protection should trip, wait several seconds before operating the electric windows again.



- 1 Control, soft top operation
- 2 Window switches, front
- 3 Window switches, rear
- 4 Switch for central operation of the windows

To open

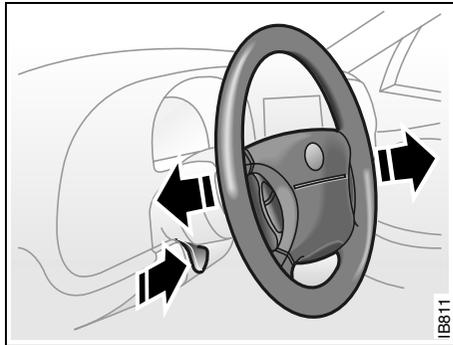
Press the window symbol on the button. Press the button briefly to lower the window automatically. Automatic lowering can be stopped by briefly lifting the symbol end of the button.

Press and hold the button to lower the window manually. The window will stop when you release the button.

To close

Lift the symbol side of the button.

The actuating motor will be switched off automatically when the window is fully closed or when the switch is released.



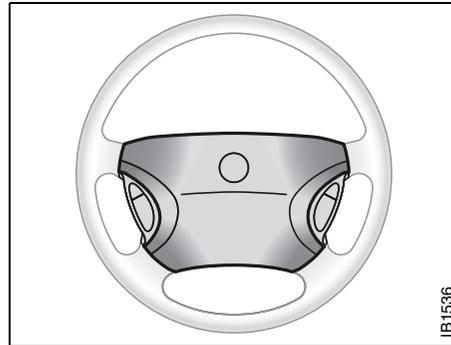
Lever for steering-wheel adjustment

Steering-wheel adjustment

The steering wheel can be positioned fore-and-aft by pulling the lever to the left. Set the steering wheel to the desired position and return the lever to the locked status.

 **WARNING**

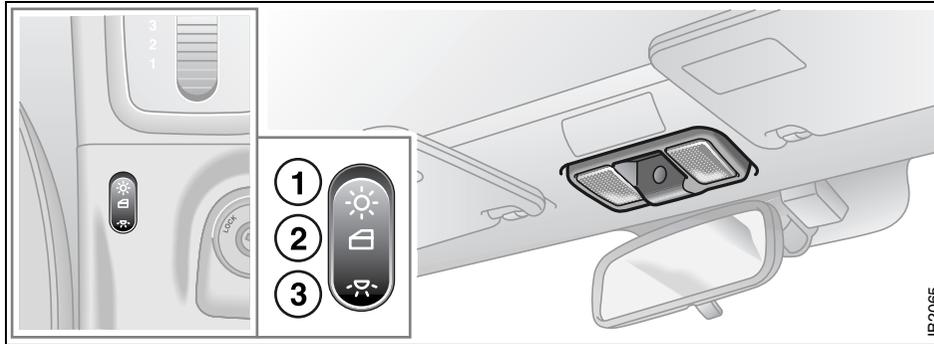
For safety reasons, you should adjust the steering wheel only while the car is stationary.



Horn signal

The horn is operated by pressing at the outer edges of the airbag module in the center of the steering wheel.

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- 1 Interior lighting on continuously
- 2 Lighting comes on when a door is opened
- 3 Rear-seat lighting on continuously

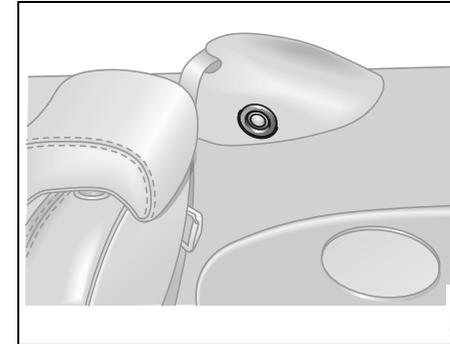
Interior lighting

The front light is located on the front roof rail. The rear lighting consists of two lights built in to the side panels adjacent to the rear seat. The switch is on the center console between the front seats.

Certain variants have a mirror and lighting built into the sun visors.

When the switch is in the mid-position (door-activated), the interior lighting will come on:

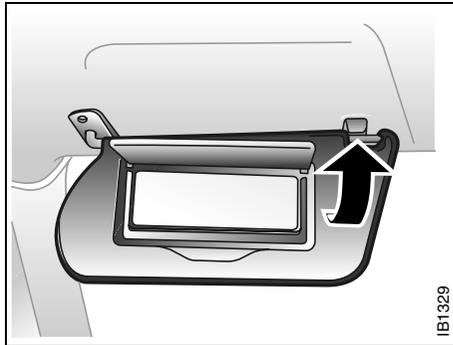
- When the car is unlocked from outside.
- When any door is opened with the ignition off.
- When the ignition key is withdrawn from the switch.



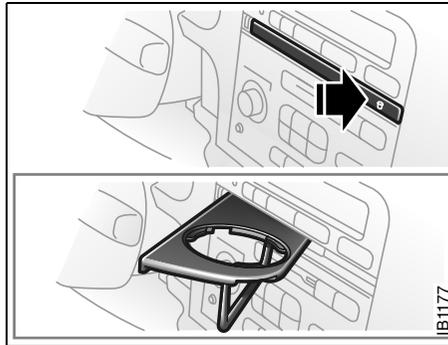
Rear-seat lighting

Trunk lighting

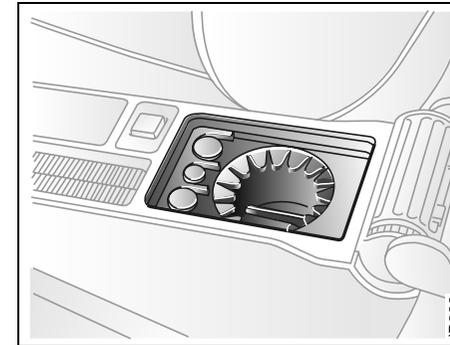
The trunk lighting is switched on and off when you open and close the trunk, if the switching button is set to ON. The lighting can also be switched on and off using the button on the light.



Sun visor with vanity mirror



Cup holder in fascia



Cup holder in the center console

Cup holder

There are two cupholders, one in the fascia under the SID unit and one in the center-console compartment between the front seats on certain models.

Next to the cup holder between the front seats is a coin tray.

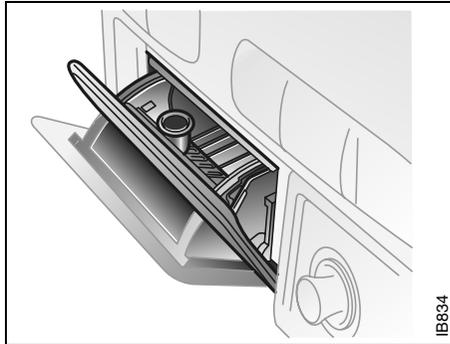
NOTICE

Be careful not to spill any drinks or liquid onto the audio system when using the cup holders. Soft drinks in particular can cause malfunction.

WARNING

- The cup holder should not be used to hold cups made of china or glass as these can cause injury in the event of a crash.
- Use only for paper cups, plastic bottles or aluminium cans.
- Avoid spillage, particularly of hot drinks.
- Avoid putting oversized cups in the cup holder.

126 Interior equipment, trunk



Ashtray

Ashtray (accessory)

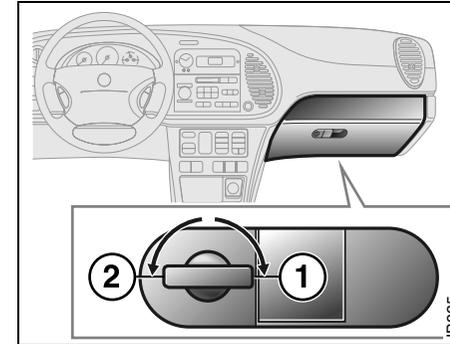
The ashtray is positioned low down on the dash.

Open the ashtray by lightly pressing on the front. Remove it by depressing the catch on the underside. You do not need to open it in order to take it out. To replace it, just push it straight in.

The cigarette lighter socket can also be used as a power supply for a mobile phone or other electrical accessory.

WARNING

The maximum output that can be taken from the cigarette lighter socket is 240 W (20 A).



Glove compartment

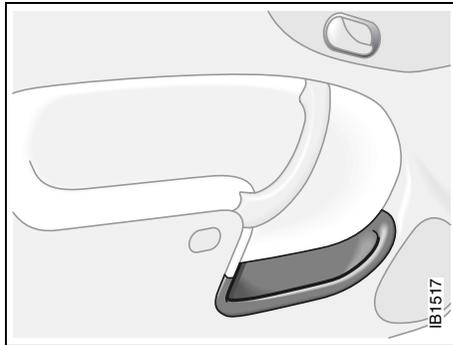
- 1 To unlock
- 2 To lock

Glove compartment

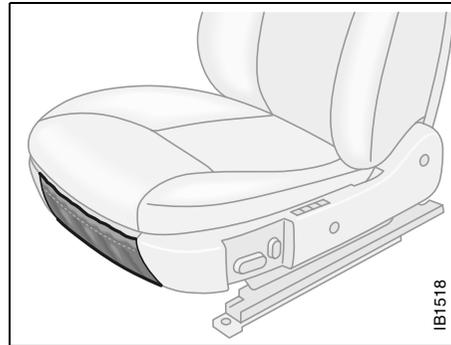
WARNING

The glove compartment must be closed while travelling. An open glove compartment door could cause leg injuries in the event of a crash.

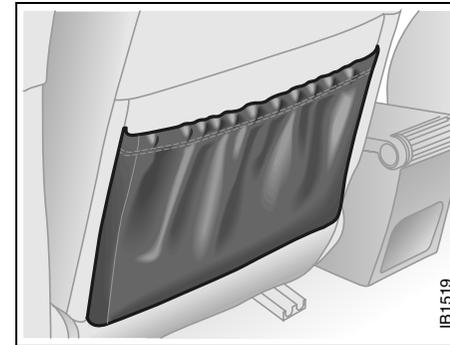
For additional storage compartments see next page.



In the doors

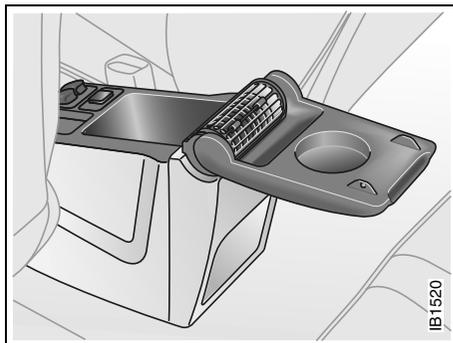


Front edge of front seats

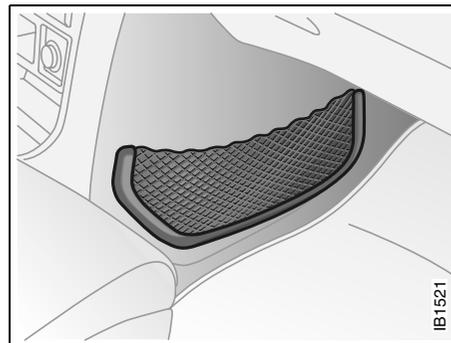


Front seat backrests

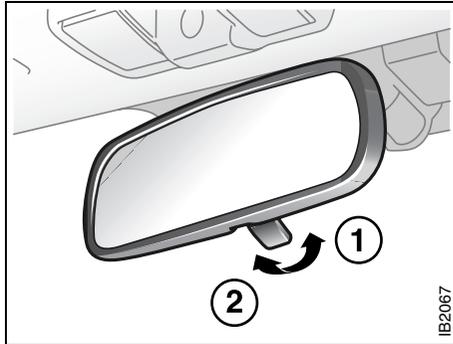
Center console between the seats



Center console on passenger side



128 Interior equipment, trunk

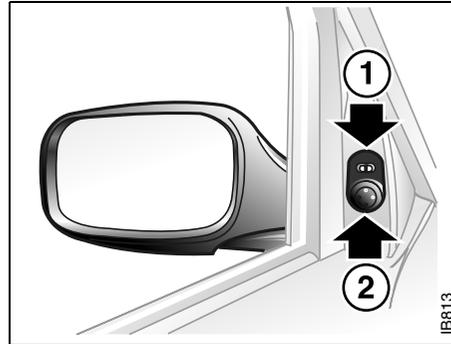


Rearview mirror

- 1 Day position
- 2 Night position

Rearview mirrors

The rear-view mirror has day/night positions that can be selected by means of a knob beneath the mirror. Adjust the mirror for best vision in the day position and pull the tab on the bottom of the mirror toward you for the night position.



Adjusting the door mirrors

- 1 Select mirror
- 2 Use touch pad to adjust mirror

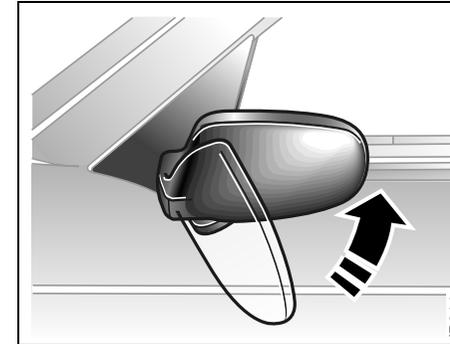
Door mirrors

The door mirrors are electrically adjustable. The controls are on the driver's door.

- 1 Use the upper button to select a door mirror.
- 2 Use the touch pad to set the mirror vertically and horizontally. There are raised points at the 12, 3, 6 and 9 o'clock positions to indicate adjustment points.

The mirror glass can also be adjusted manually by gently pressing the glass in the desired direction.

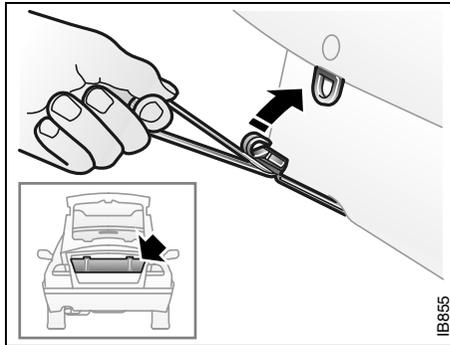
If subjected to a certain force, the whole mirror will fold back to prevent injury.



Retracting a mirror

The mirror can also be retracted by hand, which can be useful when parking in confined spaces, e.g. on car ferries. Don't forget to fold the mirrors out again before driving away.

The electric heating of the door mirrors is switched on and off with the same button as the heating of the rear window.



Suspending top bag

Trunk

Hooking up top storage bag

More space in the trunk can be obtained by lifting the top storage bag up by the straps under it and hooking them in the eyelets at the top of the bag.

The top storage bag can only be hooked up in this way when the top is raised. If you attempt to lower the top while the bag is hooked up, the SID will display the message "CHECK SOFT TOP STORAGE"; see page 54.

Rear seat

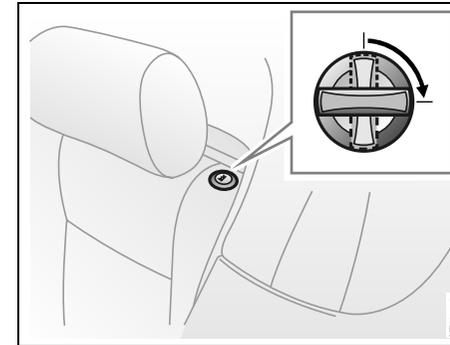
The rear seat is intended for two passengers.

The two rear seat positions have three-point safety belts with inertia reels.

Lowering the rear seatback

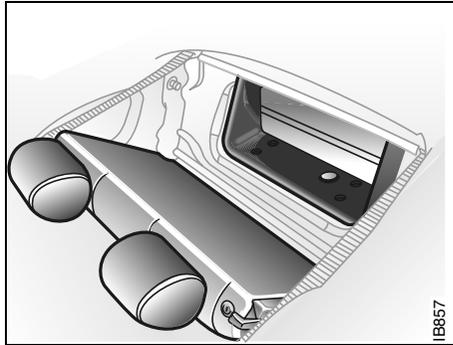
To increase the load-carrying capacity of the car, the rear seatback can be folded forward. This will be easier if the front seats are not too far back.

- 1 Pass the rear safety belts under the black handles at both ends of the backrest. This prevents the safety belts from becoming caught when the seatback is raised again.
- 2 The seatback is fitted with a lock at the top near the left rear head restraint. Use the ignition key to unlock the entire backrest. Remove the key.
- 3 Lower the seatback. (If using child seat top tether strap, detach from anchorage in trunk prior to lowering the seatback).



Lock for rear backrest cushion

130 Interior equipment, trunk



Pass through for long loads

Trunk Pass-Through in the rear seatback for long, narrow loads

A trunk pass-through is provided in the rear seatback support so that long narrow objects can be carried. Before using this trunk pass-through, the rear seatback must be lowered.

Suspend the top storage bag by means of the hooks as previously described on page 129.

WARNING

Never leave a child or animal unattended in the car. During sunny weather the temperature in the cabin/luggage compartment can climb to 160-180°F (70-80°C). Small children are very susceptible to heat stroke.

NOTICE

The trunk pass-through can only be used when the top is raised.

If you attempt to lower the top with the top storage bag suspended from the hooks or with a load pressing against the top storage bag, the SID will display the message "CHECK SOFT TOP STORAGE" (see page 54).

Tie downs

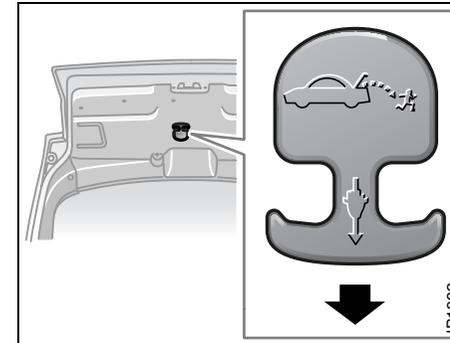
Four tie downs for securing the load are fitted inside the trunk. Place the load as far in as possible.

⚠ WARNING

- Lay heavy suitcases flat on the floor. Then place smaller and lighter items of luggage on top.
- Always secure heavy, bulky loads to the four tie downs in the trunk. This will reduce risk of having them thrown about during heavy braking or during a crash and causing personal injury.
- Secure small items if the backrest is folded down. Small items can also be thrown around inside the car and cause personal injury.
- **The rear seat must be in the upright position to protect against load displacement in the event of a collision.**
- Do not exceed the load capacity of the car, as this will alter its handling characteristics, (see page 226).
- Keep hands well clear of all moving parts.
- The tail pipe of the exhaust system can become very hot during driving. Bear this in mind when loading and unloading the car so that children, for example, do not burn themselves.

⚠ WARNING

- Do not obstruct outward vision or the ability to exit the vehicle when loading the vehicle.
- When the rear seat backrest is placed upright after having been folded forward, ensure that all rear safety belts are accessible and properly routed.
- Make sure that tire pressures are properly adjusted in accordance with altered vehicle weight (refer to tire pressures in the Specifications section of this manual).

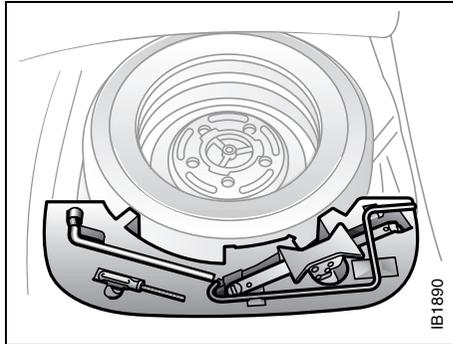
*Trunk Release Handle***Trunk Release Handle**

There is a glow-in-the-dark trunk release handle located inside the trunk on the latch. This handle will glow following exposure to light. Pull the release handle down to open the trunk from the inside.

NOTICE

The trunk release handle was not designed to be used to tie down the trunk lid or as an anchor point when securing items in the trunk. Improper use of the trunk release could damage it.

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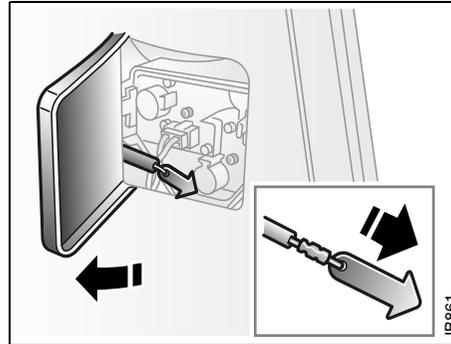
Tools and spare wheel

The tool kit and compact spare wheel are kept beneath the carpeting in the trunk.

The screwdriver handle has a "button" for removing a certain type of plastic rivet.

WARNING

After use, return tools and the spare wheel to their designated locations to reduce the risk of personal injury in the event of a crash.



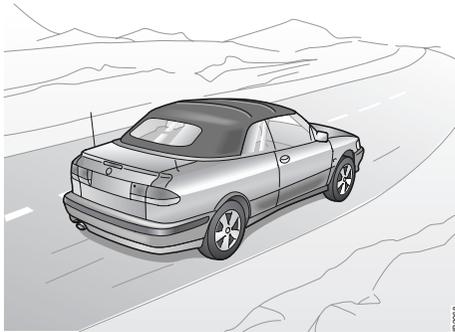
Wire for manual opening of fuel filler door.

Manually opening the fuel filler door

If the fuel filler door, controlled by the central lock, does not unlock take the following action:

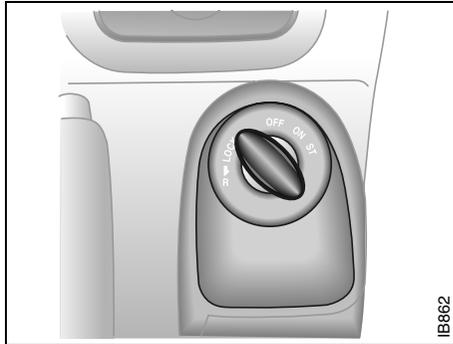
Check fuse 25. If it is defective or blows again after changing, the locking motor can be detached from the flap by pulling a wire. The wire, marked with a yellow arrow at the end, is located in the trunk inside the opening in the upholstery in front of the right-hand rear light.

Starting and driving



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134 Starting and driving



Ignition switch

The single lock used for both the ignition and gear/selector lever is in the center console located between the front seats. Before you can remove the key, the car must be in reverse gear (manual gearbox cars) or the Parking (P) position (cars with automatic transmission).

The key for this lock also fits all other locks in the car. The key number is on a small plastic tag delivered together with the keys. Be sure to save this plastic tab since it has the key number on it.

	<p>LOCK position Put the gear lever in reverse and turn the ignition key to the LOCK position. For cars with automatic transmission, select the Parking (P) position and turn the ignition key to the LOCK position. The gear lever is now locked. The key can only be removed when the gear lever is in this position. The parking lights, the hazard warning lights and the interior lighting can still be illuminated.</p>
	<p>OFF position Gear lever is not locked (manual transmission). Automatic transmission: gear lever is locked until brake pedal is depressed.</p>
	<p>ON position The entire electrical system is operative. Do not leave the key in the ON position while the engine is not running. Turn the key to the LOCK position to disconnect the electrical system. When you turn the key to the ON position, the warnings and indicators in the main instrument light so that you can check to see that they are functioning properly. They are extinguished after approx. 3 seconds.</p>
	<p>Start position (ST) The starter motor operates in this position. When you release the key, it springs back to the ON position. Restarting the starter motor is prevented. If starting is unsuccessful, you must turn the key back to a position between OFF and LOCK before you can turn it to the start (ST) position again.</p>

 **WARNING**

- Always remove the key before leaving the car.
- Always apply the parking brake before removing the ignition key.

NOTICE

Take care not to spill drinks or to drop crumbs over the ignition switch. If dirt or liquid gets into it, the switch may not operate properly.

If the car does not start

If the text "KEY NOT ACCEPTED" appears on the SID when the engine refuses to start, the trouble may be a fault in the transponder of the key or in the receiver of the ignition switch. Proceed as follows:

- Turn the key back to the LOCK position.
- Turn the key to the ON position.
- Press one of the buttons on the remote control (the LED on top of the dash stops flashing).
- Start the engine.

Try the other key. If it works, the trouble is in the first key.

Call on an authorized Saab dealer for inspection and correction.

Note:

Certain electronic items, such as cellular phones, may affect the starting procedure. Be sure that all devices are clear of the key/ignition switch area.

Starting the engine

 **WARNING**

- When starting the engine:
 - Sit down in the driver's seat.
 - Depress the clutch pedal fully. If the gear lever is not in the neutral position, the clutch pedal must be fully depressed or the car will jump forwards or backwards, which may cause a crash.
 - Never start the car from outside the vehicle, e.g. through a wound down window. This could lead to serious personal injury.
- Engage reverse (R) (position P for automatic transmission) to remove the ignition key. The key can only be removed in this gear position.
- Carbon monoxide (CO) is a colorless, odorless, poisonous gas. Be alert to the danger of CO – always open the garage doors before starting the engine in the garage.
- The tail pipe of the exhaust system can become very hot during driving. Bear this in mind when loading and unloading the car.

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- There is also a danger of CO poisoning if the exhaust system is leaking.
- Do not rest or sleep in the car when parked with the engine running. There is a risk of depressing the accelerator which could lead to engine damage.

Do not run the starter motor for more than 25 seconds at a time. Wait 20–30 seconds before running the starter again, to give the battery time to recover.

Avoid racing the engine or putting a heavy load on it before it has warmed up. Let the engine idle for at least 10 seconds and then drive away as long as the engine oil warning light has gone out to enable the engine to attain its normal temperature as quickly as possible.

It is possible for air to enter the lubricating system in conjunction with an oil or oil-filter change, or if the car has been stored for some time. This air can cause the hydraulic cam followers to emit a ticking noise, which can persist for up to 15 minutes after starting. Although this is quite normal and does not indicate any malfunction, it is advisable not to exceed 3,000 rpm before the noise has disappeared.

The hydraulic cam lifters are completely service free; the valve clearance is set up at the factory and will not need any subsequent adjustment.

Starting the engine

The engine has an automatic choke and should be started as follows:

Cars with manual gearbox

To start the engine the clutch pedal must be fully depressed.

- 1 Depress the clutch pedal but do not touch the accelerator.
- 2 Start the engine. Let the ignition key spring back as soon as the engine has started and is running smoothly – at very low temperatures, you may need to run the starter for up to 50 seconds.

Note:

On cars with manual transmission, if the starter fails to engage when the ignition key is turned to the start position, make sure the clutch pedal is full depressed. Mispositioned floor mats or other obstructions under the clutch pedal may affect starting.

Let the engine idle for about 10 seconds. Do not open the throttle wide for at least 2–3 minutes after starting.

Cars with automatic transmission

The selector lever must be in the P or N position.

- 1 Keep your foot on the brake pedal.
- 2 Start the engine. Let the ignition key spring back as soon as the engine has started and is running smoothly – at very low temperatures, you may need to run the starter for up to 50 seconds.

Let the engine idle for about 10 seconds. Do not open the throttle wide for at least 2–3 minutes after starting.

Useful tips on cold climate starting

If the engine has failed to start after several attempts in very cold weather, press and hold the accelerator down to the floor and run the starter for 5–10 seconds. This will prevent the engine being flooded (excessively rich fuel-air mixture).

Now start the engine in the normal way – do not touch the accelerator.

If the engine stalls immediately after starting (e.g. if the clutch was released too quickly), do not touch the accelerator when restarting the engine.

Every time the engine is switched off the spark plugs are automatically cleaned. If your attempt to start nevertheless fails, let go of the ignition key and allow it to spring back. This initiates more vigorous cleaning of the sparking plugs which goes on for about 5 seconds. Then start in the ordinary way. Do not touch the accelerator; if the accelerator is pressed to the floor the fuel supply is shut off.

Important considerations for driving

The engine-management system in the Saab 9-3 is called Saab Trionic T7. The system manages the ignition, fuel injection and turbo boost pressure.

The Trionic T7 system developed by Saab is an intelligent engine-management system designed to achieve optimum driveability under differing driving conditions. The system makes adjustments automatically, for instance, if the car is being driven at altitude (oxygen-deficient air), for different grades of fuel (AON 87–93) and for different load conditions.

1 Starting and driving:

- Refrain from using full throttle before the engine has warmed up (before needle is in the mid-range on temperature gauge) to avoid unnecessary wear. If the needle of the pressure gauge repeatedly enters the red zone the engine may suddenly lose power, owing to the intervention of a monitoring system which curtails the charging pressure. Get in touch with an authorized Saab dealer at once.
- A safety function prevents the engine from revving faster than 6,200 rpm by temporarily shutting of the fuel injectors.

2 Stopping the engine:

- Do not rev the engine immediately before switching it off - stop the engine when it is idling.

3 Regulating the charging pressure:

- The system is optimized for fuel with an octane rating of AON 93. One of the advantages of the system is that it enables the engine to be run safely on lower-grade fuel, although not lower than AON 87. However, engine performance will fall off slightly, and heavy loading should be avoided. For best performance you should use the recommended grade of fuel AON 93.
- The maximum boost pressure is adjusted automatically to the knocking or pinging tendency of the engine. Occasional, short-lived knocking when the engine is under a heavy load is perfectly normal; the extent will depend on the grade of fuel in the tank.
- Isolated instances of knocking are more likely to occur with low-octane fuel. This controlled form of knocking, followed by a reduction in the boost pressure, is a sign that the wastegate is functioning and is perfectly safe for the engine.

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NOTICE

- If the engine sounds strange there is a fault. Contact an authorized Saab workshop immediately.
- The use of fuel with too low an octane rating can cause serious engine damage.

WARNING

If the engine is being run with the car on a rolling road or dynamometer, longer than for a standard state emission inspection, to ensure adequate cooling, air must be blown into the engine compartment and under the car at a rate equivalent to the ram-air effect that would be obtained at the corresponding road speed.

Limp-home

The car's engine management system has a diagnostics function that, once the engine has been switched off, checks a number of internal functions. If a throttle valve fault is detected, the engine management system will initiate limp-home mode for the valve. This means that:

- idling speed regulation will be impaired
- the cruise control system will be inoperative
- the capacity of the A/C compressor will be limited.

When starting the car in limp-home mode at temperatures below 32°F (0°C), depress the accelerator slightly.

If the diagnosis function detects any faults in the engine management system, the "Engine malfunction (CHECK ENGINE)

 indicator in the main instrument panel will light up (see page 61). The car should be checked as soon as possible at an authorized Saab dealer.

NOTICE

If the CHECK ENGINE warning light  starts to flash, ease off the accelerator slightly. If the light does not cease to flash within 5 seconds, stop the car in a suitable place as soon as possible and turn off the engine. The car must be towed to an authorized Saab dealer.

If the CHECK ENGINE warning light flashes, it indicates that the engine is misfiring which can result in damage to the catalytic converter.

Important considerations with catalytic converters

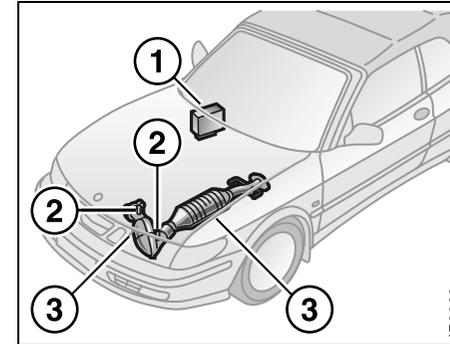
The catalytic converter is an emission-control device incorporated in the car's exhaust system. It consists of a metal canister with a honeycomb insert, the cells of which have walls coated in a catalytic layer (mixture of precious metals).

NOTICE

Use only unleaded gasoline. Leaded gasoline is detrimental to the catalyst and oxygen sensor and will seriously impair the function of the catalytic converter.

To ensure that the catalytic converter continues to function properly, and also to avoid damage to the converter and its associated components, the following points must be observed:

- Have the car serviced regularly in accordance with the service program. The fuel and ignition systems are particularly important in this context.
- Always be alert to any misfiring of the engine (not running on all cylinders) and any loss of power or performance. At the first sign of a malfunction, reduce speed and take the car to an authorized Saab dealer as soon as possible.



Engine-management system with catalytic converter

- 1 Engine control module
- 2 Oxygen sensor (lambda probe)
- 3 Catalytic converter

- If the engine fails to start (in very cold weather or if the battery is dead), the car can be push started (manual gearbox only) or started using jumper cables to a donor battery. However, as soon as you have started the engine, it is important that it runs on all cylinders. If it is misfiring, allow it to idle for up to five minutes to give it time to settle and run smoothly. If, after this time, the engine still fails to run properly, turn off the engine and get in touch with an authorized Saab dealer for advice.

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- Never park the car on dry grass or other combustible material. The catalytic converter gets very hot and could therefore start a fire.
- Never drive off if the engine is misfiring.
- If you jump start the car when the engine is already up to normal temperature, the engine must start to run on all cylinders. Stop jump-starting if the engine fails to start immediately.

NOTICE

If the car runs out of fuel, it is possible for air to get into the fuel system. If this happens, the catalytic converter may overheat and be damaged.

- Failure to follow these directions could result in the catalytic converter and associated components being damaged, and could represent a breach of the warranty conditions.

Refueling

! WARNING

- Never use fuel for any purpose other than as engine fuel.
- Fuel is highly flammable and can cause severe burns. Never use an exposed flame in the vicinity of gasoline. Never smoke when filling the vehicle up with fuel.
- Do not use the phone when refueling. Gasoline fuels are highly explosive.

Only fuel from well-known oil companies should be used.

All Saab gasoline engines can be driven on fuel of grade AON 87–93.

For optimum performance we recommend AON 93.

If fuel containing a mixture of alcohol is used, the following restrictions apply:

Methanol: max. 5 % by volume.

Ethanol: max. 10 % by volume.

MTBE: max. 15 % by volume.

The fuel filler cap is located in the right rear quarter panel.

Refueling:

- 1 Switch off engine.
- 2 Insert the fuel-pump nozzle beyond the flange on the filler pipe. Do not withdraw the nozzle while filling is in progress.
- 3 **Cease refueling the first time the pump stops.**

NOTICE

- Do not overfill. Fuel should not come right up the filler pipe as expansion room is needed.
- The use of fuel with too low an octane rating can cause serious engine damage.

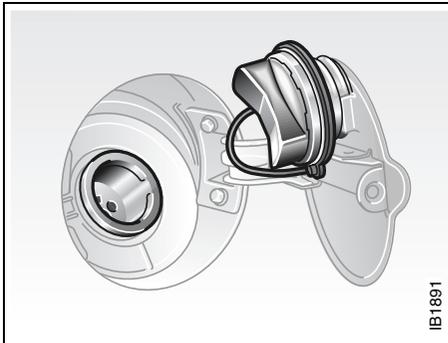
Fuel-tank capacity: 17.0 US gal. (64 liters)

Screw on the filler cap and keep turning until it has clicked at least **three** times to prevent illumination of the CHECK ENGINE light and a TIGHTEN FUEL FILLER CAP message to appear on SID.

Manually opening the fuel filler door, see page 132.

The most effective way to prevent condensation forming in the tank (and thus avoid possible running problems) is to keep the tank full.

Before the onset of freezing temperatures in winter, it may be advisable to add gasoline anti-freeze to the fuel a few times to dispel any condensation in the system.

**NOTICE**

- Fill to maximum filling capacity
- Stop filling after the first time that the nozzle trips to shut off the flow of fuel.
- Filling capacity can differ between different fuel stations and outside temperature. Fuel tank volume when nozzle trips to shut off, may vary by 0.5 gal. (2 liters).
- Do not fill fuel all the way up the filler pipe. The gasoline must be allowed room for expansion especially during hot weather.

Recommended fuel:

For optimum performance we recommend AON 93.

Octane rating is determined according to the formula:

$$\frac{\text{MON} + \text{RON}}{2}$$

where MON is the Motor Octane Number, and RON is the Research Octane Number. The average of these two values is the octane rating of the gasoline as it appears on the pump at a retail gas station. This value is sometimes referred to as the "Anti-Knock Index" (AKI) or the "Average Octane Number" (AON).

To avoid deposit formation on the fuel injectors which can cause poor driveability, use only quality gasolines that contain detergents and corrosion inhibitors. Because gasolines sold at retail gas stations vary in their composition and quality, you should switch to a different brand if you begin experiencing driveability and/or hard starting problems shortly after refueling your car. In recent years, a variety of fuel additives and alcohols or oxygenates have been blended with gasoline. These types of gasolines may be found in all parts of the United States and Canada, but particularly in geographic areas and cities that have high carbon monoxide levels. Saab approves the use of such "reformulated" gasolines in its products, which help in reducing pollution from all motor vehicles, provided that the following blending percentages are met by such fuels:

- Up to 10 % ethanol by volume, with corrosion inhibitors.
- Up to 15 % MTBE by volume (methyl tertiary butyl ether).
- Up to 5 % methanol by volume, with an equal amount of a suitable co-solvent and added corrosion inhibitors.

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Other, less common, fuel additives used by some gasoline dealers are also acceptable, provided that the resultant gasoline is not more than 2.7 % oxygen by weight. In many cases, you may not be able to determine the exact type or percentage by volume of fuel additive in the gasoline you purchase for your car.

Some Canadian and U.S. gasolines contain an octane enhancing additive called methylcyclopentadienyl manganese tricarbonyl (MMT). If such fuel is used, your emission control system performance may deteriorate and the malfunction indicator lamp on your instrument panel may turn on. If this occurs, return to your authorized Saab dealer for service.

However, these blended gasolines are regulated and should never exceed these recommended blend percentages and service station operators should know if their gasolines contain detergents and oxygenates, and have been reformulated to reduce vehicle emissions. Nevertheless, if you begin to notice a problem with the way your car starts or runs shortly after it has been refueled, try a different brand of gasoline.

NOTICE

Higher concentrations of methanol than listed above, or the use of methanol-blended gasoline without suitable co-solvents and corrosion inhibitors, can damage your car's fuel system, leading to the need for repairs which are not covered by Saab's product warranty.

NOTICE

The engine control module (ECM) monitoring the engine parameters also stores fault codes.

Under certain circumstances, this may cause constant illumination of the Engine malfunction (CHECK ENGINE) lamp , thus indicating a fault that must be checked by your Saab dealer, see page 61.

NOTE: always observe the following two measures:

- Make sure that the fuel filler cap is screwed on correctly before the engine is started. Screw on the fuel filler cap until you hear three distinct clicks.
- Avoid driving with the fuel low level indicator illuminated. The symbol illuminates when less than approximately 2.5 gallons (10 litres) of fuel remains in the tank.

Fuel (Gasoline Engine)

Use regular unleaded gasoline rated at 87 octane or higher. Use of gasoline with an octane rating lower than 87 can result in severe engine damage. Damage caused by incorrect fuel being used is not covered under the terms of the New Car Warranty and will be the responsibility of the owner. It is recommended that the gasoline meet specifications which were developed by the American Automobile Manufacturers Association (AAMA) and endorsed by the Canadian Motor Vehicle Manufacturers Association for better vehicle performance and engine protection. Gasolines meeting the AAMA specification could provide improved driveability and emission control system performance compared to other gasolines.



In Canada, look for the "Auto Makers' Choice" label on the fuel pump.

Be sure the posted octane is at least 87. If the octane is less than 87, you may get a heavy knocking noise when you drive. If it's bad enough, it can damage your engine. If you're using fuel rated at 87 octane or higher and you hear heavy knocking, your engine needs service. But don't worry if you hear a little pinging noise when you're accelerating or driving up a hill. That's normal, and you don't have to buy a higher octane fuel to get rid of pinging. It's the heavy, constant knock that means you have a problem. If your vehicle is certified to meet California Emission Standards (indicated on the underhood emission control label), it is designed to operate on fuels that meet California specifications. If such fuels are not available in states adopting California emissions standards, your vehicle will operate satisfactorily on fuels meeting federal specifications, but emission control system performance may be affected. The malfunction indicator lamp on your instrument panel may turn on and/or your vehicle may fail a smog-check test. See "Malfunction Indicator Lamp" in the Index. If this occurs, return to your authorized Saab dealer for diagnosis to determine the cause of failure. In the event it is determined that the cause of the condition is the type of fuels used, repairs may not be covered by your warranty.

Some gasolines that are not reformulated for low emissions may contain an octane-enhancing additive called methylcyclopentadienyl manganese tricarbonyl (MMT); ask your service station operator whether or not the fuel contains MMT. Saab does not recommend the use of such gasolines. If fuels containing MMT are used, spark plug life may be reduced and your emission control system performance may be affected. The Engine malfunction (CHECK ENGINE) light on your instrument panel may turn on. If this occurs, return to your authorized Saab dealer for service.

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Engine Break-in Period

Pistons, cylinder bores and bearings need time to obtain uniform, wear-resistant surfaces.

If a new engine is driven too hard, this gradual process of bedding-in will not be possible and the life of the engine will be shortened.

During the first 1,200 miles (2,000 km), do not exceed 5,000 rpm.

In addition, refrain from driving the car at full throttle, other than for brief instances, during the first 1,800 miles (3,000 km).

Wearing in new brake pads

New brake pads take time to bed in, about 90 miles (150 km) if the car is driven largely under stop-and-go conditions or about 300 miles (500 km) of highway driving.

To extend the useful life of the pads, avoid hard braking as much as possible.

Manual transmission

To start the engine the clutch pedal must be fully depressed.

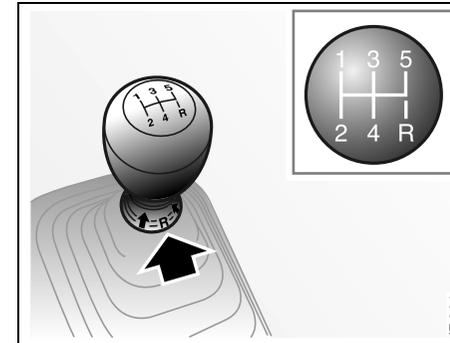
The gear positions are marked on the gear lever. Before reverse (R) can be engaged, you must lift the ring underneath the gear-lever knob.

To change gear, fully depress the clutch pedal and then release it smoothly. It is inadvisable to drive with your hand resting on the gear lever, as this can increase the wear on the gearbox.

When shifting down from 5th to 4th gear, ease the gear lever straight back, without applying any lateral pressure. This will prevent 2nd gear being engaged by mistake, which can result in overrevving and possible damage to the engine.

NOTICE

When the reverse gear is to be engaged the car must be at a standstill with the accelerator fully released. Lift the reverse lock-out collar and push the gear lever firmly to the right in neutral before easing it into reverse.



Shift-up indicator for improved fuel economy (U.S. models only)

Cars equipped with a manual transmission have a "Shift-up" light on the instrument panel. The light begins to work after the vehicle is warmed up and provides you with a good indication when to shift to a higher gear.

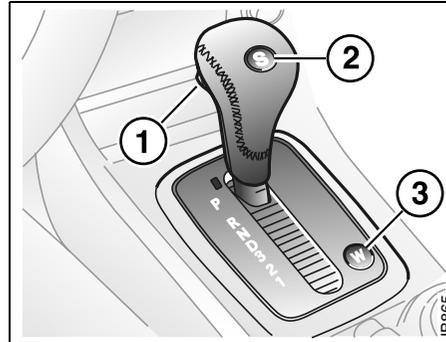
It is not necessary or recommended to follow the shift-up recommendations in all driving conditions, for example, when driving in heavy urban traffic or steep downhill grades.

However, shifting with the light should result in improved fuel economy. Therefore, for reduced fuel consumption and better energy conservation, you should make a habit of shifting before or when the shift-up light comes on.

Automatic transmission

⚠ WARNING

- Make it a habit to keep your foot on the brake when selecting a drive position, to prevent the car from creeping forward (or backwards if reverse is selected).
- The car must be at a standstill before P, R or N is selected. You have to have your foot on the brake pedal to move the lever out of P. If the car is still moving when a drive position is subsequently selected, this could cause a crash or damage the automatic transmission.
- Never park the car with the selector lever in a drive position, even if the parking brake is on.
- If you want to leave the car with the engine running, move the selector lever to P or N and apply the parking brake.



Selector lever

- 1 Catch
- 2 Button for SPORT position
- 3 Button for WINTER position

The electronic control module for the automatic transmission receives information on engine torque and road speed. It also controls the hydraulic pressure in the transmission to ensure that gear changing is as smooth as possible.

The position of the selector lever is shown by the symbols adjacent to the lever and also by an indicator on the main instrument panel.

The ignition key can only be removed when the selector lever is in the P position.

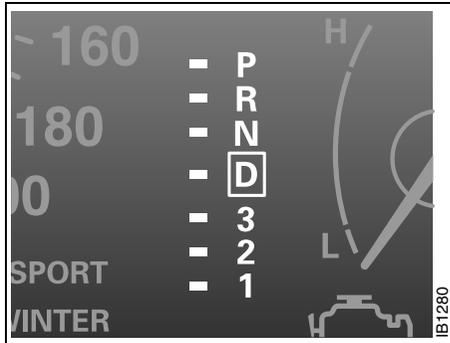
When the car is stationary, the engine must be idling when the selector lever is moved. **You must have your foot on the brake pedal to move the lever out of park.**

If the accelerator is depressed while the lever is moved, this will result in abnormal wear in the transmission.

NOTICE

After selecting a drive position, pause briefly to allow the gear to engage (the car starts to pull a little) before you accelerate.

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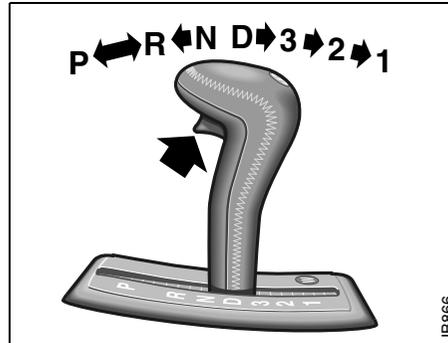
Indication of gear position on the main instrument panel

The detent button on the selector lever has to be pressed before the selector can be moved between certain positions.

Three modes for the automatic transmission can be selected: Normal, Sport and Winter.

The Normal mode, which provides the best fuel economy, is the default setting when the engine is started.

Sport mode alters the angle of the throttle valve for increased power compared to the same accelerator position in Normal mode. This means gear changes are made to optimize the car's performance. The SPORT indicator light is shown on the main instrument panel; see page 151).



Detent positions for selector movement

The Winter mode is intended for use when pulling away and driving on icy roads. In this mode, the transmission starts in 3rd gear, to provide better grip, and the WINTER indicator appears on the main instrument panel. When the ignition is turned to OFF, the automatic transmission will automatically revert to Normal mode (see page 151).

Adaptive gear change pattern is a function of the Normal and Sport modes. It allows gear changing to be suited to the prevailing driving conditions. The transmission control module senses the engine load and temperature of the transmission and selects one of the four available gear change patterns. Unnecessary gear changes and undesired temperature increases in the transmission are avoided.

Lock-up function

The automatic transmission has a lock-up function. This can render the torque converter inoperative in 3rd and 4th gears, thus reducing the engine speed and fuel consumption.

When the lock-up function comes into operation, it may give the impression of an overdrive being engaged.

Kick-down

When the accelerator is pressed down hard, a downshift to the next lower gear will occur to provide maximum acceleration, e.g. for overtaking.

The change-up to the next gear again will take place either when the accelerator is released or when maximum engine speed for that gear is reached.

Park Brake Shift Lock

The transmission has a safety function called Park Brake Shift Lock. For the selector lever to be moved out of the P position, the brake pedal must be depressed at the same time as the detent button is lifted.

Park Brake Shift Lock override

NOTICE

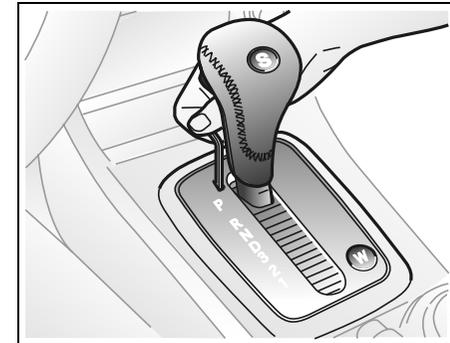
Due to electrical problems it may not be possible to move the selector out of the park position, even if the ignition is ON. If for some reason the selector has to be moved out of the park position (i.e. to tow the car a short distance) do as described below.

Check fuse No. 12 (see page 196). If the fuse is OK, check the battery voltage. If the problem was cured by changing the fuse or battery, you do not have to contact a Saab dealer.

If the fuse blows again as soon as the Shift Lock feature is activated you should contact your Saab dealer.

If the fuse is good the battery may be too low.

- 1 Apply the parking brake.
- 2 Make sure the key is in the ON position.
- 3 Use a small tool such as a screwdriver and push the lever downwards so that the detent button can be pressed approx. 10 mm.



- 4 Move the selector out of position P to N.
- 5 Remove the tool.
- 6 Release the parking brake if the car is to be moved immediately; otherwise keep it applied.

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Automatic transmission fault indicator

If the symbol appears on the main instrument panel, the system has detected a fault in the automatic transmission or its control module (see page 62).

This also means that the Limp-home mode has been selected, to guard against further damage being done to the transmission. In this mode, the automatic transmission starts in 4th gear, and gear changes (if necessary) will have to be made manually.

Stop the car in a safe place. Switch off then restart the engine. If the fault is intermittent, the transmission will operate as normal despite the fault indicator being on. Have the car checked at a Saab dealer.

It is not possible to select the SPORT or WINTER mode when the Limp-home mode is active.

You should have the automatic transmission checked as soon as possible by an authorized Saab dealer.

The following gears will be engaged in the respective selector positions when the automatic transmission is in the Limp-home mode:

Position	R	D	3	2	1
Gear	Reverse	4th	4th	3rd	3rd

NOTICE

If the control module has actuated the Limp-home function for the automatic transmission, the car will remain in 4th gear when D and 3 are selected, making it very sluggish. To overcome this, move the selector lever to position 1. The transmission then starts in 3rd gear. When the car is moving you can select position D or 3.

Overheated transmission oil

If the transmission oil becomes overheated while driving, the following message appears on the SID: TRANSMISSION OVERHEATING. In this event, stop the car in a suitable place, switch off the engine, open the hood. Wait for several minutes then turn on the ignition to check that the message has gone out. When driving subsequent to the transmission oil overheating, select either 3rd gear or Drive, whichever will allow the engine to run at 3,000 rpm and maintain the speed of traffic or a safe speed.

The transmission oil can become very hot when the car is driven with a heavy load; for example, driving with a trailer on hilly roads when the wrong gear has been selected, resulting in many extra gear changes. Select one of the positions 1, 2 or 3. A high outside temperature or a defective oil cooler can also cause the oil temperature to increase. Contact an authorized Saab dealer, see also page 162.

Driving in hilly country with a heavy load

Overheating of the automatic-transmission fluid can occur when the car is towing a heavy load, such as a trailer in hilly country, with the wrong gear selected, resulting in abnormally frequent gear changing. To avoid the transmission oil from overheating always drive in Normal mode, then the adaptive gear change pattern is active.

High ambient temperatures can also increase the temperature of the transmission fluid or the oil cooler may be faulty. As the transmission fluid temperature increases, its useful service life is reduced. Contact an authorized Saab dealer (see also page 162).

WARNING

Remember to use engine-braking (selector position 1, 2, or 3) to spare the brakes when you are driving on a long or steep downhill slope.

Brake failure can result from overheated brakes!

Towing

Drive carefully and do not exceed the speed limit for vehicles in tow., see page 168.

Selector positions

	<p>P To shift out of the P position you must depress the brake pedal and the ignition must be ON. The parking position (P) must only be selected when the car is at a complete standstill. The selector lever is locked and the transmission is mechanically immobilized. Always apply the parking brake after parking the car. The engine can be started.</p>
	<p>R The reverse (R) position must only be selected when the car is at a complete standstill. The detent-release button must be pressed before the selector lever can be moved to R. Wait until reverse gear has engaged (car starts to creep) before touching the accelerator.</p>
	<p>N In the Neutral position (N), the transmission is disengaged from the engine. The engine can be started, but first ensure that the parking brake is on, to prevent the car from moving off unexpectedly. To prevent the engine and transmission from becoming hotter than necessary, select N for stops other than brief ones, e.g. if stuck in a traffic jam. The normal drive position (D) is recommended for waiting at traffic lights.</p>

	<p>D The Drive position (D) is the position for normal motoring. Gear changes between 1st and 4th will take place automatically, the timing of which is determined by the throttle (accelerator) position and the speed of the car. After moving the selector lever to D, pause to give the gear time to engage (car starts to pull).</p>
	<p>3 In position 3, 4th gear is locked out. The car will start in 1st gear and normal gear changing (up and down) will take place automatically between gears 1, 2 and 3. Moving the selector lever from D to 3 will cause a downshift to 3rd gear, which will give better engine-braking. Do not move the selector to position 3 at speeds in excess of 90 mph (150 km/h).</p>
	<p>2 Position 2 is recommended in hilly country as it provides effective engine-braking. Normal gear changing (up and down) between 1st and 2nd gear will take place automatically. Third and 4th gears are locked out. Do not move the selector to position 2 at speeds in excess of 70 mph (110 km/h).</p>
	<p>1 Position 1 should be used when maximum engine-braking is required on steep downhill slopes. Do not move the selector to position 1 at speeds in excess of 30 mph (50 km/h).</p>



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If the gear selector lever is moved from position D to 1, a change-down to 3rd gear will occur at about 110 mph (180 km/h). A change-down to 2nd gear will occur at about 75 mph (120 km/h) and to 1st gear at about 40 mph (65 km/h).

When position 1 is selected, all the other gears will be locked out. Manual gear-changing is not recommended on slippery roads.

If one of the drive wheels spins excessively, the engine torque will be reduced to avoid damaging the transmission.

NOTICE

- Do not move the selector to position 3 at speeds in excess of 90 mph (150 km/h).
- Do not move the selector to position 2 at speeds in excess of 70 mph (110 km/h).



Adaptive gear-change patterns

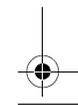
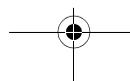
Adaptive gear-change patterns are selected automatically depending on the engine load. This function applies in the Normal and Sport modes.

The change occurs at a higher rotation speed and the gear remains engaged for a longer period, if the control module senses that the load does not drop. These change patterns avoid unnecessary gear changes when, for example, driving on long inclines with a trailer, and to prevent overheating of the transmission oil. This function cuts in automatically if the oil becomes too hot, to protect the transmission from damage, and lowers the oil temperature.

The adaptive change pattern function is not activated at speeds over 93 mph (150 km/h). If a pattern is in operation when this speed is exceeded, it will be maintained until the control module senses that a more suitable one can be activated.

The adaptive gear-change pattern function is deselected when:

- Winter mode is selected.
- The engine is switched off.
- The load is reduced by so much that this function is no longer required.
-  "Automatic transmission fault indicator" appears on the main instrument panel, see page 148.



The SPORT and WINTER modes



To select **Sport mode**, press the "S" button on the selector lever when the selector lever is in position N, D, 3, 2 or 1.

In this mode, gear changes will take place at higher engine speeds than in Normal mode, in other words, the transmission will shift up later and shift down earlier for the same throttle (accelerator) position.

The Sport mode will be deselected if:

- The S button is pressed.
- The selector lever is moved to position P or R.
- The engine is switched off.
- The Winter mode is selected.
-  "Automatic transmission fault indicator" appears on main instrument panel, see page 148.



To select **Winter mode**, press the "W" button. The Winter mode facilitates starting off and driving on icy roads. Third gear is selected automatically for starting off to reduce wheelspin.

Winter mode can be selected when the engine is running by pressing the "W" button on the selector-lever surround. It cannot be selected when the selector lever is in position 2 or 1.

Note: It is still possible to use kick-down in the Winter mode, in which case a change-down to 2nd or 1st will take place.

The Winter mode will be deselected if:

- The W button is pressed.
- The engine is switched off.
- The selector lever is moved to position 2 or 1.
- The automatic-transmission fluid overheats.
-  "Automatic transmission fault indicator" appears on main instrument panel, see page 148.

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Cruise Control**⚠ WARNING**

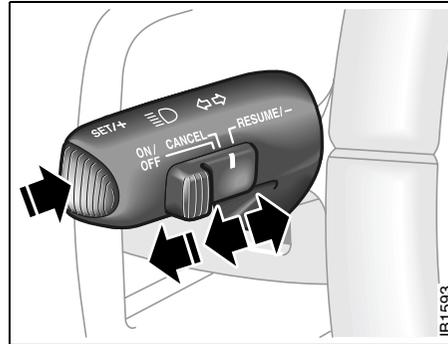
- Do not use the Cruise-control system on wet or icy roads, in dense traffic or on winding roads
- Set the control to OFF when you do not want to use the system, to prevent the system being activated inadvertently.

For safety reasons (brake system function) the brakes must be applied once, when the engine has started, before the cruise control system can be activated.

The system is operated by means of the controls on the stalk switch:

- OFF (system is disconnected; the system is always in the OFF position when the engine is started).
- ON (system switched on).
- SET/+ (to set the desired speed).
- CANCEL (cancel operation of system, e.g. to reduce speed temporarily).
- RESUME/- (resume preset speed).

When the system is ON, the CRUISE indicator light will appear on the main instrument panel and will be extinguished when the system is switched OFF. If CANCEL is selected, CRUISE will flash off once.

**To set the desired speed**

Move the switch to ON. Accelerate to the desired speed (minimum speed: 25 mph (40 km/h) and press SET/+.

To increase the preset speed

Accelerate to the desired speed and press SET/+.

You can also increase the speed of the car using the SET/+ button. Press it once to increase the speed by 1 mph (1.6 km/h) or hold it in and release when the desired speed is reached.

Temporary increase in speed

Press the accelerator to override the preset speed, e.g. for overtaking.

When you release the accelerator, the system will revert to the preset speed.

To cancel temporarily

Move the control stalk to CANCEL (spring-loaded position before OFF position). This will disengage the system but the preset speed will be retained in the system memory. (The memory is deleted when the engine is switched off.)

To re-engage the system

To revert to the preset speed, slide the switch to RESUME/-. This will only operate when the car's speed is above 25 mph (40 km/h).

To reduce the preset speed

The cruise-control system will always disengage automatically the moment that either the brake pedal or the clutch pedal is depressed.

It is also possible to reduce the speed by:

- Sliding the button to RESUME/- once will reduce the speed by 1 mph (1.6 km/h).
- Holding the button in the RESUME/- position will effect a gradual reduction in speed until the button is released.

Disengaging the system

The system will be disengaged:

- When the brake or clutch pedal is depressed.
- When the switch is moved to CANCEL.
- When the switch is moved to OFF.
- When the engine is switched off.
- When the selector lever is moved to position N (cars with automatic transmission).

Braking

To avoid overheating the brakes, (e.g. when negotiating long descents with a drop of several hundred feet), select a low gear to use the braking effect of the engine. If the car has automatic transmission, move the selector lever to position 1 or 2.

When driving fast, you can help to prolong the life of the brakes by thinking ahead and braking harder for short periods, rather than braking more moderately over long stretches.

Brake pad wear indicators

The outboard brake pads on the front wheels incorporate pad-wear indicators. When the lining is down to 3 mm, the pad will produce a screeching, squealing or scraping noise when the brakes are applied. New pads should be installed without delay.

Brake pads should only be replaced by an authorized Saab dealer.

To ensure optimum brake performance, it is recommended that you use only Saab original brake pads.

WARNING

- It is prudent to try your brakes from time to time, especially when driving in heavy rain, through water collected on the road, in snow, on a wet road surface or in salty slush. In such conditions, the brakes may take longer than normal to take effect. To rectify this, touch the brake pedal periodically to dry the brakes out.
- The same applies after the car has been washed or when the weather is very humid.
- Avoid parking the car with wet brakes. Before parking, and if the traffic conditions allow, brake quite heavily so that the brake discs and pads warm up and dry.
- The brakes are power assisted and it should be kept in mind that the servo unit only provides the power assistance when the engine is running.
- The brake pressure required when the engine is off, (e.g. when the car is being towed) is roughly four times the normal pedal force required. The pedal also feels hard and unresponsive.

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ABS brakes

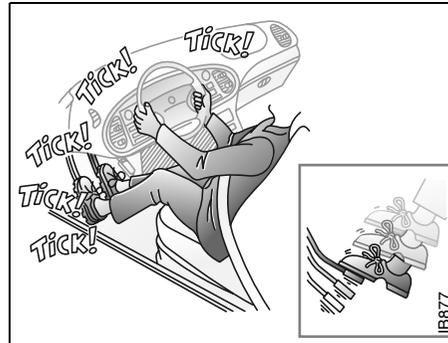
WARNING

- The additional safety afforded by the ABS system is not designed to allow drivers to drive faster but to make normal driving safer.
- To stop as quickly as possible, without loss of directional stability, whether the road surface is dry, wet or slippery, **press the brake pedal down hard without letting up (do not pump the pedal), declutching simultaneously, and steer the car to safety.**

ABS (Antilock Braking System) modulates the brake pressure to the respective wheels. Wheel sensors detect if a wheel is about to lock, and the control module reduces the pressure to that wheel and then increases it once more until the tendency is detected again.

The brake system is equipped with an Electronic Brake-force Distribution device (EBD), which distributes the brake pressure between the front and rear wheels in such a way as to achieve optimum braking performance irrespective of the car's speed and load.

The ABS system has a built-in diagnostic function which will switch on the ABS warning light if a fault is detected in the system (see page 60).



ABS braking – confirmation that the system is operating

The ABS system will not reduce the braking distance on loose gravel or on snow or ice but, because the wheels cannot lock up, some steering control is retained.

When the ABS system is working, i.e. modulation of the brake pressure is in progress, the brake pedal will pulsate and a ticking noise will be heard. All this is perfectly normal.

Press the pedal **down hard** (you cannot press too hard) and steer the car to safety.



Braking with ABS – evasive steering

Do not release the brake pedal before the car has come to a halt or the danger is past!

This is critical.

If the road is slippery, the ABS system will operate even when only light pressure is applied to the pedal. This means that you can brake gently to test the condition of the road and adapt your driving accordingly.

It is well worth practising the use of ABS brakes on a skid pad or other suitable facility.

Traction Control System

How the system works

The traction control system (TCS) is designed to minimize wheelspin. This enables the car to achieve the best possible grip and, hence, maximum tractive effort, together with greater stability.

The TCS system uses information from the ABS system's wheel sensors to detect when the front (driving) wheels are rotating faster than the rear wheels. It then monitors whether one driving wheel is rotating faster than the other. If so, the faster wheel is retarded until both wheels are rotating at the same speed.

If the two front wheels are rotating at the same speed but are turning faster than the rear wheels, the torque from the engine is reduced to eliminate the difference.

The process continues until all the wheels are rotating at the same speed.

To ensure that the system works as designed, the dimensions of all four tires must be the same.

The advantages of the TCS system become most apparent when the cohesion between the front wheels and the road surface is so low that one or both of the wheels would lose their grip were the car not equipped with the TCS, e.g.:

- When the car is pulling away or accelerating with the front wheels on different surfaces (e.g. one slippery and one dry). The TCS then functions like an electronic differential lock.
- When the car is pulling away or accelerating on a slippery road, in which case the TCS eliminates wheelspin. The same applies when the car is reversing.
- On cornering, if there is a tendency for the inner front wheel to rotate faster than the other wheels.
- On overtaking.

WARNING

When driving normally, the TCS helps to improve the stability of the car. This does not mean that car can be driven faster. The same care and prudence normally applied should be displayed on cornering and when driving on slippery roads.

TCS OFF

The  indicator on the main instrument panel will come on:

- If a fault has been detected and the system has therefore been switched off.
- If there is a fault in the ABS system.
- If the system has been switched off manually.

The indicator light will also come on for 4 seconds when the ignition key is turned to ON, while an internal system check is performed.

TCS indicator

The  in the tachometer comes on when the system is operative, i.e. when the wheels are not rotating at the same speed.

The fact that the TCS system is operative indicates that the limit for grip has been exceeded and that the driver must exert greater care.

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Turning the TCS off

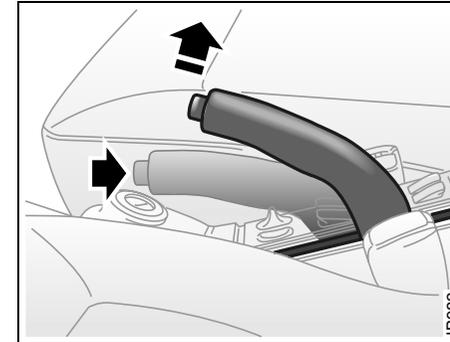
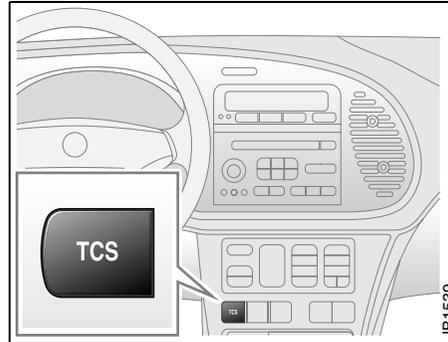
The  is switched on automatically when the engine is started.

The system can be switched off manually by the TCS button, whereupon  on the main instrument panel will come on. The TCS system cannot be switched off if the car is travelling faster than 35 mph (60 km/h).

It may be necessary to switch off the system if the car has become bogged down, for instance. Press TCS to switch it on again.

If a fault is detected in the ABS system, the TCS will be switched off automatically.

The cruise-control system will automatically be disengaged after one second if it is active when the TCS starts to operate.



Parking brake

The parking brake lever is located between the front seats. The brake acts on the rear wheels. When the parking brake is on, the indicator lamp on the main instrument panel will be lit.

To release the brake, lift the lever slightly, press the pawl button, and let the lever down.

Parking

WARNING

- **Always** apply the parking brake when the car is parked.
- **Always** apply the parking brake before removing the ignition key.
- Never use the parking brake while the car is moving.

WARNING

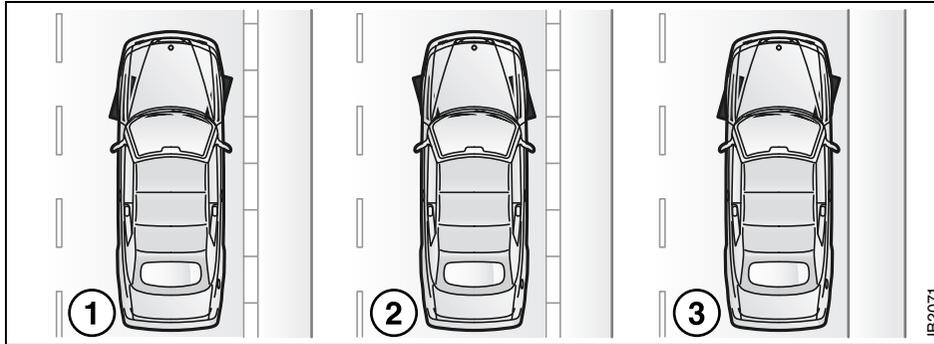
- Do not leave children or pets unattended in the car. In warm, sunny weather, the temperature inside the car can reach 160–180°F (70–80°C).
- Park where the vehicle will not create an obstruction or a hazard to other road users.
- Do not park on dry grass or other combustible material. The catalytic converter gets very hot and could start a fire.
- Apply the parking brake.
- Shift into Reverse for manual transmission; for automatic transmission: move selector lever to P (Park), and remove the ignition key. Lock the car.

NOTICE

Empty the car yourself and bear in mind:

- never leave a mobile phone, computer or similar object visible in your car.
- clothing, packages and bags attract thieves.
- do not leave small objects such as CDs, sunglasses and coins visible.
- if possible, park in a well-lit, conspicuous parking space.
- thieves strike whenever and wherever they are given the opportunity.

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1 Pointing downhill and against the curb

– Turn the wheels into the curb and edge the car forward until the wheels touch the curb.

2 Pointing uphill and against the curb

– Turn the wheels away from the curb and edge the car back until the wheels touch the curb.

3 Pointing uphill or downhill – no curb

– Turn the wheels towards the edge of the road. If the car should start rolling, it will not run into the road.

Parking on a hill

When parking on a steep hill, turn the front wheels so that they will be blocked by the curb if the car should move.

Long-term parking

If the car is not going to be used for some time, e.g. 3–4 months, the following steps are recommended:

- Run the engine to normal temperature before long-term parking.
- Drain the washer-fluid reservoir and hoses.

- Wash and wax the car. Clean the rubber seals on the hood, trunk lid and doors, and lubricate them with glycerol (glycerin).
- After washing the car, dry the brake discs by taking the car out on the road and applying the brakes a few times. If the traffic conditions allow, brake quite heavily just before parking.
- Fill the fuel tank with fuel to prevent condensation forming in it.
- Top up the coolant and check the anti-freeze before the onset of winter.
- Park the car in a dry, covered and well-ventilated building. Leave the parking brake OFF!
- Disconnect the negative (–) battery lead. If freezing temperatures are likely to occur during the long-term parking, remove the battery and store it away from freezing temperatures.
- Ideally, the car should be put up on blocks, with the wheels off the ground. If this is not possible, inflate the tires to about 43 psi (300 kPa).
- Leave all the windows open a crack and cover the car with a fabric tarpaulin – not one made of plastic which will not breath.

Economical motoring

Factors affecting fuel consumption

Fuel consumption is greatly affected by the general driving conditions, the way in which the car is driven and at what speeds, the weather, the state of the road, the condition of the car, etc.

Breaking-in

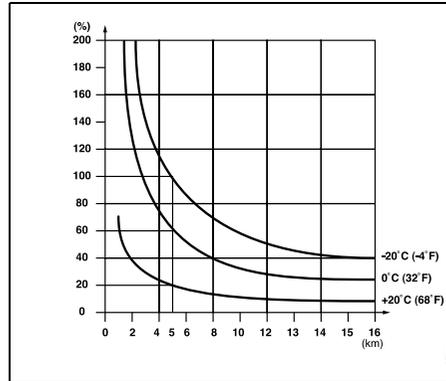
Fuel consumption may be somewhat higher during the break-in period (the first 3,000–4,000 miles (5,000–7,000 km)).

Weather conditions

Fuel consumption can be as much as 10 % lower in summer than in winter. The higher consumption in cold weather is explained by the longer time it takes for the engine to reach normal operating temperature, and for the transmission and wheel bearings to warm up. Fuel economy is also affected by the distance driven: short journeys of 3–5 miles (5–8 km) do not give the engine enough time to reach normal temperature. Strong winds can also affect fuel consumption.

WARNING

Never switch the engine off while driving as the effect of the brakes and power steering will be greatly reduced.



Percentage increase in fuel consumption of engine starting from cold compared to engine at normal temperature

How to read the graph:

If fuel consumption with the engine at normal temperature is 28 mpg (10l/100 km), the actual fuel consumption 3 miles (5 km) after the engine has started from cold will be:

- 23.5 mpg (12l/100 km) at outside temp. of 68°F (20°C) (increase of 20 %)
- 17.7 mpg (16l/100 km) at outside temp. of 32°F (0°C) (increase of 60 %)
- 14 mpg (20l/100 km) at outside temp. of -4°F (-20°C) (increase of 100 %)

As can be seen, both the distance travelled by the car and the outside temperature have a major impact on fuel consumption after

the engine has started from cold. Thus, if the car is mainly used for short journeys of 3–5 miles (5–8 km), the fuel consumption will be 60–80 % higher than normal.

Driving technique

- To obtain the best running economy, not only regarding fuel consumption but general wear also, regular service is required.
- High speed, unnecessary acceleration, heavy braking and much low gear work all gives rise to higher fuel consumption.
- Frequent gear changing in traffic, starting in cold weather, the use of studded tires, and towing a trailer all increase fuel consumption.
- Do not run the engine when the car is stationary. If idling, it will take much longer before the engine becomes hot. Engine wear is greatest during this warming-up phase. Therefore drive away as soon as possible after the engine is started and avoid high revving.

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- Driving in a low gear results in higher fuel consumption than in a high gear because of the lower engine speed for a given road speed. Always change up to a higher gear as soon as traffic conditions allow and use the highest gear as much as possible.
- Check the air pressure in the tires once a month. Incorrect pressures increase tire wear. It is better to have slightly higher pressure than lower.
- Check fuel consumption regularly. Increased consumption can indicate that something is wrong and that the car needs to be checked by an authorized Saab dealer.

Practical tests on the roads have demonstrated that substantial savings in fuel consumption can be made if the above advice is heeded.

Road conditions

Wet roads increase fuel consumption, as do unpaved roads and driving in hilly country (the amount of fuel saved driving downhill is less than the additional amount required to climb the hill).

Engine block heater (standard equipment in Canada, accessory in U.S.)

The following are just some of the benefits to the car and the environment of using an engine block heater:

- Lower fuel consumption.
- Exhaust emissions substantially reduced over short runs.
- Reduced wear on the engine.
- Inside of car warms up faster.

The engine block heater is effective with outside temperatures up to +60 – +70°F (+15 – +20°C). The warmer it is outside, the shorter the time the heater need be connected. Longer than 1.5 hours is unnecessary.

If the car is equipped with a removable electrical cabin heater that is not in use, this should be stored in the luggage compartment.

Driving in cold weather

Before starting a journey in cold weather you should check the following:

- That the wiper blades have not become frozen to the windshield/glass.
- Brush any snow away from the air intake for the heater system (opening between hood and windshield).
- It may be advisable to lubricate the door-lock cylinder (use molybdenum disulphide, MoS₂) to prevent its freezing. If the lock has frozen, take care not to break the key (or use the remote control) – heat it first or spray it with de-icer.
- Periodically during the winter, add gasoline anti-freeze to the fuel to dispel any condensation in the fuel tank which could freeze and cause problems in the system. Keep the tank well filled to reduce the risk of condensation forming. If the car is parked outside in freezing weather, fuel additives (gasoline anti-freeze) will not do any good as it cannot remove water that has already frozen. Park the car in a warm place so that any ice that may have built up melts, then add gasoline anti-freeze when filling up the tank. Condensation is caused by changes in the outdoor temperature or by the car being parked alternately in a garage and outside.
- It is particularly important when the roads are slippery that the brakes and tires be in good condition.

- Check the anti-freeze in the engine coolant, see page 180.

The car's trip computer will warn you when there is a risk of slippery conditions. For further information on this function, see page 67.

The car is equipped with tires designed to provide optimum grip on both wet and dry roads, although this has been achieved at the expense of somewhat reduced grip on snow and ice. For regular driving on snow and ice, we therefore recommend that winter (snow) tires be fitted.

Winter (snow) tires, particularly studded tires (where use is legally permitted), generally make driving safer on snow and ice.

Acquaint yourself with the legal provisions governing the use of different types of winter tires and snow chains. Studded tires are not allowed in some countries.

If winter tires are installed, the same type must be installed on all wheels. Your Saab dealer will be pleased to advise you on the best tires for your car.

Remember that tires age. It may therefore be necessary to change them before they reach the legal wear limit, as they gradually lose their friction properties. Date code, see page 203.

The best response if the car gets into a front-wheel skid is to freewheel (manual gearbox only), i.e. disengage the clutch (so that the wheels are neither driven nor braked by the engine) and carefully steer the wheels in the direction you want to go.

If the car has an automatic transmission you should lift off the accelerator somewhat and carefully steer the wheels in the direction you want to go.

In a rear-wheel skid, steer into the skid, i.e. in the same direction as that in which the back is sliding.

Tire chains

If you want to fit tire chains (where legally permitted) they should only be installed to the tires recommended under "Technical data" (see page 233).

Consult your Saab dealer for details about approved tire chains.

! WARNING

- Do not exceed 30 mph (50 km/h) when tire chains are fitted.
- Tire chains can reduce the directional stability of the car.
- Tire chains must not be used on the rear wheels.

NOTICE

- Check the links frequently for wear.
- Check that the chains do not contact the wheel-arch liner at full lock.
- See section "Technical data", page 233, for information on allowable wheel dimensions for the fitting of tire chains.

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Driving in hot weather

- Always check the coolant level before starting a journey. When the engine is cold, the coolant must not be above the KALT/COLD mark on the expansion tank.
- At the end of a journey, if the engine has worked hard, allow it to idle for two or three minutes before switching it off.

If the needle on the temperature gauge enters the red zone:

- 1 Bring the car to a standstill but leave the engine running. Do **not** remove the cap on the expansion tank even if the tank is empty. The engine temperature should decrease. If not, the engine must be switched off.

- 2 If the engine is idling and the needle on the temperature gauge falls, wait until a normal temperature is shown (about in the middle of the scale) before switching off the engine. If the coolant needs topping up, unscrew the cap on expansion tank **carefully**.

Top up, as necessary, ideally with a 50/50 mixture of coolant and water. Use a Saab-approved coolant. If only water is available, use that, but remember to have the coolant mixture checked as soon as possible.

WARNING

- Exercise care when opening the hood if the engine is overheated. Never remove the expansion tank cap completely when the engine is hot.
- The cooling system is pressurized – hot coolant and vapor can escape. These can cause injury to your eyes and burns. Open the cap slowly to release the pressure before removing it.

- 3 As soon as possible, have the cooling system checked by an authorized Saab dealer.

Towing a trailer

Trailer hitch attachment

Trailer hitch attachments are available as accessories. These are designed for a maximum trailer weight of 3500 lbs (1588 kg), with trailer brakes, see also page 228.

Use only the electrical trailer hitch connector provided in the trailer hitch kit.

Saab recommends:

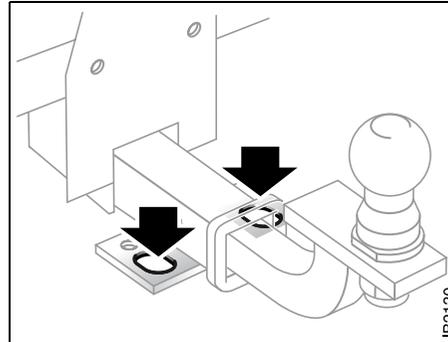
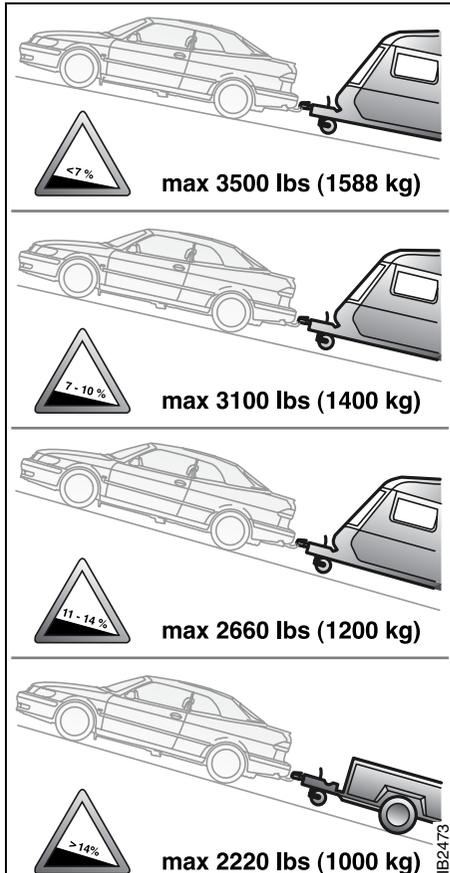
- Use a Saab original hitch kit attachment which is designed and tested by Saab.
- Consult your Saab dealer for the right hitch kit for your car.

NOTICE

Use only a genuine Saab trailer hitch and wiring, since other wiring methods can cause expensive damage to the car's body and electrical system.

Consult an authorized Saab dealer for guidance on how to connect the trailer hitch electrical system.

Maximum recommended trailer weights for different gradients



Attach the safety chains to the holes as illustrated.

! WARNING
When you connect the trailer be sure to attach its safety chains to the holes as illustrated.

Trailer weight

Maximum recommended trailer weights for different gradients, for best comfort and driveability for manual and automatic cars, are shown in the drawing.

Make sure you are familiar with the law regarding speed limits for towing, maximum trailer weights, trailer-braking requirements, and also any special driving-license provisions (see also page 228).

! WARNING

- When towing a trailer, do not attempt to negotiate a hill having a gradient in excess of 15 %. The weight distribution over the front wheels of the car will be insufficient to prevent wheelspin, making further progress impossible.
- In addition, the parking brake may not always be able to hold the car and trailer securely, with the result that the wheels can start to slide downhill.
- Always apply the trailer's handbrake when unhitching it. There is otherwise a risk of personal injury or damage to the bumper should the trailer start to roll.

The specified trailer weights and gradients assume you are operating in hilly terrain and therefore apply only to short trips.

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Recommendations for driving in hilly terrain

The following time limits are based on the capacity of the cooling system in warm weather, i.e. approximately 86°F (30°C).

Gradient of hill, %	Maximum trailer weight, lbs. (kg)	Maximum duration, minutes
6–7	3310 (1500)	Unlimited
8–9	3310 (1500)	15 max.
10–15	1870 (850)	15 max.

The following time limits are based on the capacity of the cooling system in hot weather, i.e. approximately 104°F (40°C).

Gradient of hill, %	Maximum trailer weight, lbs. (kg)	Maximum duration, minutes
6–7	1980 (900)	Unlimited
8–9	1980 (900)	15 max.
10–15	990 (450)	15 max.

It is important to consider the following when driving a car with automatic transmission up long inclines.

Use Normal mode when driving with a caravan or trailer on hilly roads. The adaptive gear change pattern function will prevent the transmission overheating.

Rises in coolant temperature are indicated by the temperature gauge in the main instrument panel.

The following may also occur:

- A/C compressor is switched off
- Gear change pattern is altered
- The CHECK message TRANSMISSION OVERHEATING appears on the SID

If the transmission oil becomes overheated while driving, the following message appears on the SID: TRANSMISSION OVERHEATING. In this event, stop the car in a suitable place, switch off the engine, open the hood. Wait several minutes and then turn on the ignition to check that the message has been extinguished. When driving subsequent to the transmission oil overheating, select either 3rd gear or Drive, whichever will allow the engine to run at 3,000 rpm and maintain the speed of traffic or a safe speed; see page 148.

WARNING

Remember to use engine-braking (selector position 1, 2, or 3) to spare the brakes when you are driving on a long or steep downhill slope.

Brake failure can result from overheated brakes!

Do not drive continuously with the WINTER mode selected in hilly country when you are towing a trailer, as this will increase fuel consumption and risk overheating the transmission.

Driving considerations

Always take extra care when towing a trailer, as the car's handling will be different and its braking effect reduced. The trailer's braking system and suspension also have a considerable effect on these characteristics, see also "Driving with a load" page 166.

Select position 1 when descending steep hills.

NOTICE

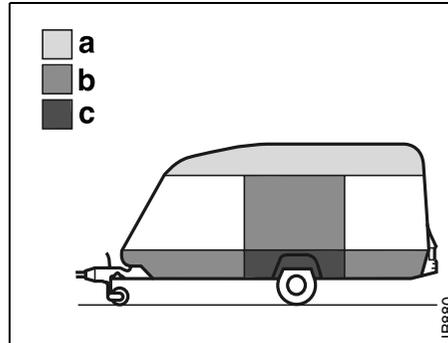
If the  "Automatic transmission fault indicator" warning comes on, cease towing until the problem has been rectified.

Trailer hitch load

The weight distribution on the trailer makes a lot of difference to the handling properties of the car and trailer combination. With single-axle trailers, whenever possible, concentrate the load over the axle and keep it as low as possible.

The trailer should be loaded so that the maximum load on the towbar ball is 5 % to 7 % of the trailer weight with a maximum permissible tongue weight of 165 lbs (75 kg).

Note that this load must be added to the total load for the car. If this now exceeds the specified load capacity, the load in the trunk will have to be reduced by a corresponding amount.



Distribution of load in trailer

- a Light
- b Moderate
- c Heavy

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Driving with a load

The driving characteristics of the car are affected by the way it is loaded.

- Place heavy loads as far forward and as low as possible in the trunk.
- Secure the load to the tie downs.
- The load should be such that the car's total weight or axle weight are not exceeded, see page 226.
- Heavy loads mean that the car's center of gravity is further back. As a result, the car will sway more during evasive steering.
- Ensure that the tire pressure is correct – slight overinflation is preferable to underinflation.
- The braking distance of a loaded car is always greater. Keep your distance from the vehicle in front.

Tire pressure, see page 200 and back cover.

Tires

WARNING

Check the tire pressure **at least once a month** and before long journeys. Underinflation can result in:

- Punctures
- Separation of the tire and tread
- Damage to the sidewalls
- Damage to the rims on poor roads
- Poor handling characteristics
- Premature tire wear
- Increased fuel consumption.

The tire pressure should match the current load and speed of the car; see page 234 or the tire pressure label on page 235.

The tire pressures given apply to **cold** tires, that is tires that are the same temperature as the outside air temperature.

The tire pressure increases as the tires become warm (e.g. during highway driving) with approximately 0.3 bar (4 psi). When the temperature of the tires changes by 50° (10°C), the tire pressure will change 0.1 bar (2 psi).

Never reduce the pressure of a hot tire. If the tires are hot when you check them, only increase the pressure, if necessary.

Underinflated tires wear more quickly than slightly overinflated tires.

If a valve is leaking, simply unscrew it and fit a new one.

Important! Remember to adjust the tire pressures if you change the load in the car or intend to drive at substantially lower or higher speeds than normal.

Driving with the trunk lid open

Avoid driving with the trunk lid partly or fully open, since exhaust fumes can be drawn into the cabin.

If you must drive with the trunk lid open, all windows must be closed and the cabin fan on at its highest speed setting.

Driving in deep water

NOTICE

Do not drive in water deeper than 11" (30 cm) and do not drive faster than at idling speed. Water can otherwise be sucked into the engine. The engine will be damaged if water enters the intake system. The car's electrical systems may also be affected.

Driving at night

Bear in mind the following points, especially when driving at night:

- Driving requires your full concentration
- Do not rush. Count on your journey taking slightly longer.
- The number of drivers under the influence of drugs is likely to be greater at night than during the day.
- Do not stare at the headlights of oncoming vehicles.
- Avoid driving at night if you have poor eyesight. Night vision deteriorates with age.
- Keep your car's headlights, windows and mirrors clean.
- Make sure you are well rested before starting a long journey. Take a break every other hour.
- Only eat light meals. Heavy meals have a tendency to induce tiredness.

Towing the car

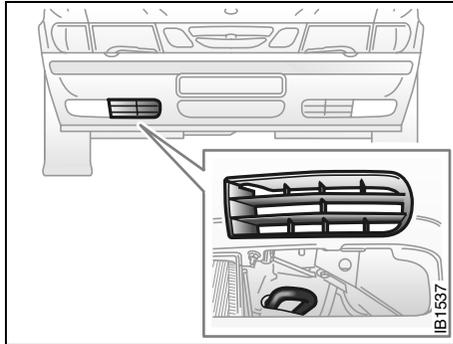
⚠ WARNING

- Remember that the brake servo does not operate when the engine is off. Much greater pressure than normal will therefore be required to operate the brake pedal.
- Nor does the steering pump operate when the engine is off. The steering will therefore be much heavier than usual.
- The towing vehicle should always be heavier than the vehicle on tow.
- Never allow passengers to ride in the car being towed.
- Always seek professional help if the car needs to be towed.

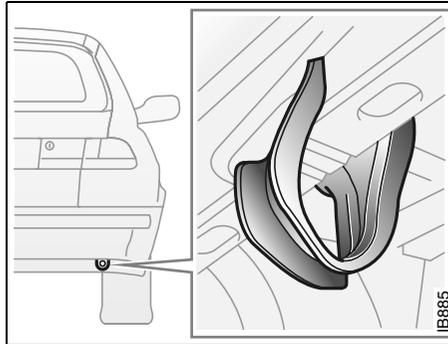
The car is fitted with towing eyes at both front and rear. For access to the front towing eye, located on the right-hand side of the car, compress the grille (see illustration) and pull it straight out.

If the car is equipped with a trailer hitch, this can be used to tow another car.

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Front towing eye



Rear towing eye



Never use the towing eyes to pull the car unstuck.

NOTICE

Do not confuse the front towing eye with the oil pipe for the power steering.

Transporting the car

NOTICE

If a car with sports (lowered) chassis is transported, for example on a flat bed truck, take extra care not to damage the spoiler and/or underbody.

Towing a car

The gear lever must be in neutral (in car with automatic transmission the gear selector must be in the N position). Switch hazard lights on.

Drive carefully and do not exceed the speed limit for vehicles in tow.

Always try to keep the towrope taut by gently applying the brake as necessary. This will avoid the towrope being jerked violently.

NOTICE

- **Cars with automatic transmission:** The car must be towed front first.
- If the car is to be towed with the front wheels off the ground, make sure the parking brake is off, as this acts on the rear wheels.
- **Never** use the towing eyes to pull the car unstuck.

The local regulations on towing speeds must be followed. The highest permissible towing speed is 30 mph (50 km/h), unless the legal limit is lower. The longest permissible towing distance is 30 miles (50 km). If the car has to be transported farther than that, summon a tow truck. A flat bed tow truck is the preferred method to tow.

Cars with automatic transmission: The engine cannot be started by towing or pushing the car. In emergency, the engine can be started as described in the section "Jump starting".

Jump starting

If your battery has run down, you may want to use another vehicle and some jumper cables to start your Saab. Follow the steps below to do it safely.

 **WARNING**

Batteries can cause injury. They can be dangerous because:

- They contain acid that can burn you.
- They contain gas that can explode or ignite.
- They contain enough electricity to injure you.

If you do not follow these steps exactly, some or all of these things can hurt you.

NOTICE

Ignoring these steps could result in costly damage to your vehicle that would not be covered by your warranty.

Trying to start your car by pushing or pulling it could damage your vehicle, even if you have a manual transmission. If you have an automatic transmission, your vehicle cannot be started by pushing or pulling it.

To jump start your vehicle:

- 1 Check the other vehicle. It must have a 12-volt battery with a negative ground system.

NOTICE

If the other system is not a 12-volt system with a negative ground, both vehicles can be damaged.

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- 2 Get the vehicles close enough so the jumper cables can reach, but be sure the vehicles are not touching each other. If a poor connection on the negative jumper cable should exist, it is possible for damage to be caused to electrical systems/components of either vehicle should inadvertent contact be made. You would not be able to start your car and bad grounding could damage the electrical systems.

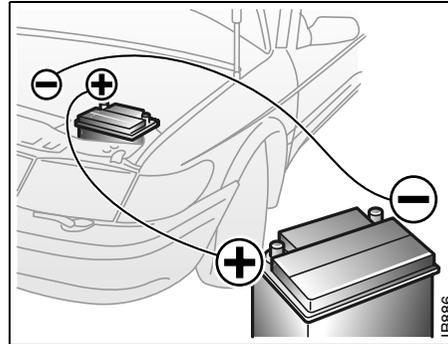
WARNING

You could be injured if the vehicles roll. Set the parking brake firmly on each vehicle. Put an automatic transmission in P (Park) or a manual transmission in Neutral.

- 3 Turn off the ignition on both vehicles. Turn off all lights that are not needed, and radios. This will avoid sparks and help save both batteries and it could save your radio.

NOTICE

If you leave your radio on, it could be badly damaged. The repairs would not be covered by your warranty.



- 4 Open the hood and locate the battery. Find the positive (+) and negative (-) terminals on the battery.

WARNING

An electric fan can start up even when the engine is not running and can injure you. Keep hands, clothing and tools away from any underhood electric fan.

WARNING

Using a match or flame of any kind near a battery can cause battery gas to explode. You can suffer burns or be blinded. Use a flashlight if you need more light.

Be sure the battery has enough water. The battery installed in your new Saab has filler caps. Be sure the right amount of water is there. Add distilled or boiled water if the level is too low. If you don't, explosive gas could be present.

Be sure the electrolyte in the battery is not frozen. Discharged batteries will freeze. When connecting jumper cables to a frozen battery, gas from the chemical reaction inside the battery can build up under the ice and cause an explosion.

Battery fluid contains acid that can burn you. Do not get it on you. If you accidentally get it in your eyes or on your skin, flush the area with water and get medical help immediately.

- 5 Check that the jumper cables do not have loose or missing insulation. If they do, you could get a shock and also the vehicles could be damaged. Before you connect the cables, here are some basic things you should know. Positive (+) will go to positive (+) and negative (-) will go to a major metal engine part with a good ground. Do not connect (+) to (-) or you will get a short that could injure you or would damage the battery and maybe other parts as well.
- 6 Connect the red positive (+) cable to the positive (+) terminal of the vehicle with the discharged battery.
- 7 Do not let the other end touch metal. Connect it to the positive (+) terminal of the good battery. Use a remote positive (+) terminal if the vehicle has one.
- 8 Now connect the black negative (-) cable to the good battery's negative terminal.

 **WARNING**

Do not let the other end touch anything until the next step. The other end of the negative cable **does not** go to the dead battery. It goes to a major metal part with a good ground on the engine of the vehicle with the discharged battery.

- 9 Attach the cable at least 18 inches (45 cm) away from the discharged battery, but not near engine parts that move. To avoid an arc which could detonate the hydrogen gas around the battery, the final connection must be at least 18" from the battery.
- 10 Start the vehicle with the good battery and run the engine for a while.
- 11 Try to start the vehicle with the discharged battery. If it does not start after a few tries, it probably needs service.
- 12 Remove the cables in reverse order to prevent electrical shorting. Take care that they do not touch each other or any other metal.

Driving considerations with compact spare wheel/tire fitted

 **WARNING**

Do not exceed 50 mph (80 km/h) as the tire can overheat and adversely affect the handling of the car.

The tire should be inflated to 60 psi (420 kPa).

The following should be observed when the compact spare wheel (T115/70 R16) is installed:

The compact spare is light and easy to handle when changing the wheel. Do not drive farther than necessary with the compact spare fitted – the maximum life of the wheel is only just over 2000 miles (3,500 km). Have the standard wheel repaired and reinstalled as soon as possible.



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Points to bear in mind when driving with a compact spare wheel:

- The car's ground clearance is reduced with the compact spare fitted.
- Only one compact spare wheel may be used at any time.
- Take care not to hit the curb.
- Do not fit snow chains.
- Leave the wheel cover off, so that the warning text is readily visible.

NOTICE

To avoid damaging a punctured alloy wheel this can be placed outside up in the spare-wheel well but **only** while driving to the closest dealer.

A general rule is that all heavy loads must be well secured in the luggage compartment, see page 130.

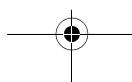


For long trips

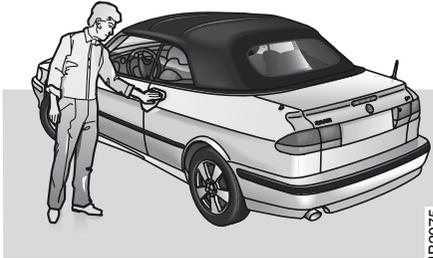
Before starting off on a long journey, it is advisable to have your car inspected by your Saab dealer.

Obtain a few important items to take along on your journey such as spare bulbs, wiper blades, fuses, a Poly-V belt and the like. You can check some points yourself beforehand:

- Make sure that the engine is in good condition.
- Check that no oil or fuel leaks out of the engine or gearbox/transmission.
- Check the coolant and power steering fluid levels. Check also for leaks.
- Inspect the Poly-V belt and replace it if it shows any signs of wear.
- Check the battery charge.
- Check the tires for tread pattern and air pressure, including the compact spare wheel.
- Take an extra car key/remote control and keep it separate, see also page 36.
- Check the brakes.
- Check all bulbs.
- Check for the presence of the tool kit and the jack in the car.



Car care



IB2075

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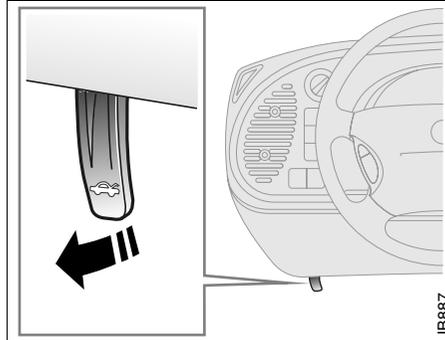
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Hood release handle

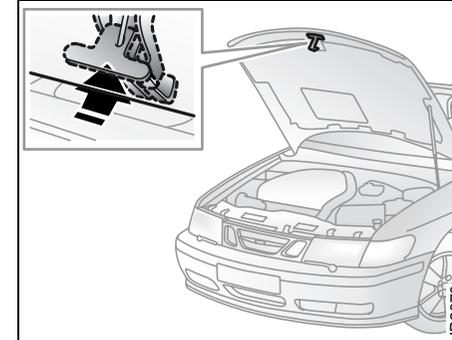
The handle of the hood lock is located on the left under the instrument panel. Open the hood in the following way:

- 1 Pull the release handle.
- 2 The hood moves to the half-locked position and is stopped by a safety catch at the front edge.
- 3 Press the lever of the catch upwards and raise the hood.

When you close the hood you should drop it from a height of about 8 inches (20 cm), **without** slamming it.



Hood release handle

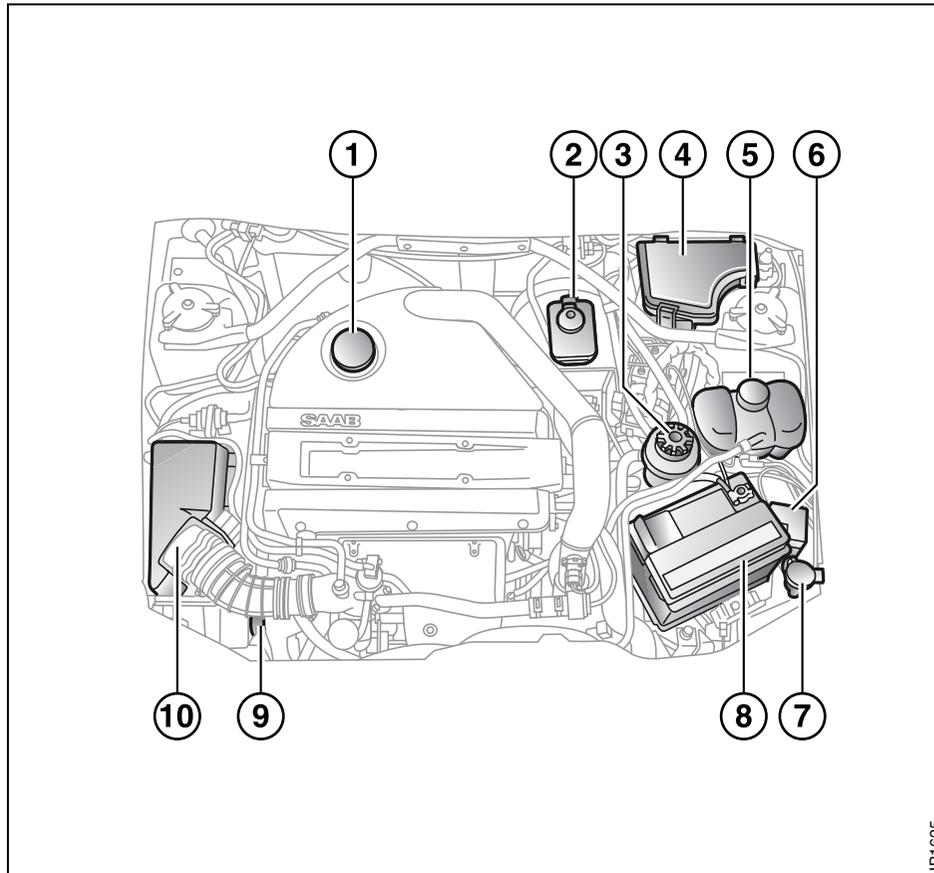


Hood release pressure plate

! WARNING

Never hold your fingers between the hood and safety catch if lowering but not closing the hood.

Engine bay



- 1 Engine-oil dipstick
- 2 Brake-fluid reservoir
- 3 Power-steering fluid reservoir
- 4 Fuse box
- 5 Coolant reservoir
- 6 MAXI fuses
- 7 Washer-fluid reservoir
- 8 Battery
- 9 Drive belt
- 10 Air filter

IB1625



Engine

The engine is a transverse four-cylinder in-line engine with twin overhead camshafts and 16 valves.

The engine is equipped with two balance shafts that reduce engine vibration to a minimum.

The balance shafts are chain-driven and rotate at twice the speed of the crankshaft. They produce forces and torques that are opposed to those generated by the pistons and connecting rods. The effect occurs twice in each revolution of the engine, counteracting the vibration from its moving parts, and at the same time reducing unwanted engine noise.

The gearbox, located on the right (viewed from the front), is integrated with the engine.



Engine families

Saab cars imported into the United States and Canada meet all applicable emission control standards. The engine family and appropriate tune-up specifications are identified on a label affixed to the left front inner fender.

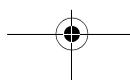
These engine families meet applicable EPA Federal Standards, California State Standards and Canadian Federal Standards and are equipped with the following systems:

- Sequential multiport fuel injection system.
- Three way catalytic converter.
- Crankcase emissions control system.
- Evaporative emission system.

Emission control systems

The systems for controlling emissions to the atmosphere require regular checking and adjustment at the intervals specified in the service program.

In addition to meeting the exhaust emission regulations and thereby helping to keep the environment clean, a correctly tuned engine will also give maximum fuel economy.



Saab Trionic engine management system

The Saab Trionic engine management system is a unique Saab development that combines sequential multiport fuel injection, electronic distributorless ignition and turbo-charger boost pressure control into one system.

The Trionic engine control module (ECM) monitors many different engine parameters such as:

- Intake manifold pressure.
- Intake air temperature.
- Crankshaft position.
- Engine coolant temperature.
- Throttle position.
- The oxygen content of the exhaust gases.

The ECM receives information regarding engine knocking from a sophisticated feedback function in the ignition discharge unit.

By processing all of this information, the Trionic system can control fuel injector opening duration, ignition timing and turbo-charger boost pressure to provide excellent engine performance while maintaining low emissions and fuel consumption.

NOTICE

The Trionic engine management system continuously monitors the operation of these systems and has on-board diagnostic capabilities (OBD II). If the Engine malfunction (CHECK ENGINE) light in the main instrument illuminates, the Trionic ECM has detected a problem. The car will continue to operate, but performance may be diminished. You should have your car checked by a Saab dealer as soon as possible.

ORVR (Onboard Refueling Vapor Recovery)

All hydrocarbons formed when refueling will be recovered by the car and not released into the atmosphere. The hydrocarbons are absorbed in an evaporative emission canister. When the engine is subsequently started, the evaporative emission canister is gradually purged as air is sucked into it through a shut-off valve. The hydrocarbon/air mixture passes through the evap canister purge valve and into the engine where it is burned. "Refueling", see page 140.

When refueling, make sure you screw the filler cap on and keep turning until it has clicked at least 3 times. Otherwise, it is possible for the CHECK ENGINE light to illuminate and a TIGHTEN FUEL FILLER CAP message to appear on SID.

Engine oil

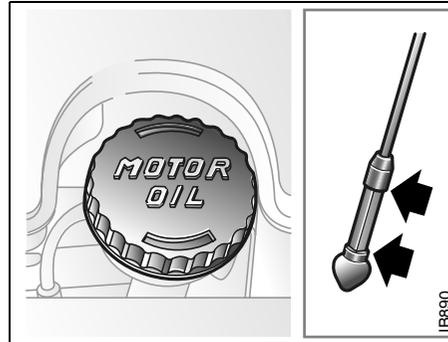
Checking the fluid level

Regularly check the oil level in the engine. Do this with the car standing on level ground with the engine warm, 2–5 minutes after it has been turned off. Take the dipstick out and wipe it off with a clean rag before carrying out the check.

The level must not be below the MIN mark on the dipstick, but nor should it be above the MAX mark. Excess engine oil could result in abnormal oil consumption.

The distance between MIN and MAX corresponds to a volume of about one quart.

When necessary, add oil of the recommended grade via the dipstick pipe. Make sure that the cap of the dipstick is screwed on properly after the check.



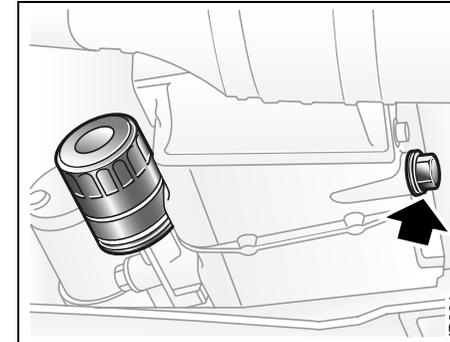
Oil filler cap and dipstick

Oil changing

The engine oil must be changed in accordance with the service program.

Oil volume and grade, see page 229.

Oil changing should be carried out on a warm engine.



Drain plug

- 1 Unscrew the drain plug in the bottom of the sump and leave the oil to drain into an oil tray or other suitable receptacle for at least ten minutes. Take care, as the oil may be hot.
- 2 After the oil has been drained, unscrew and remove the oil filter.
- 3 Fit a new filter and tighten it by hand.
- 4 Refit the drain plug with a new washer.
- 5 Add new oil.

Run the engine to normal temperature and check the oil level.

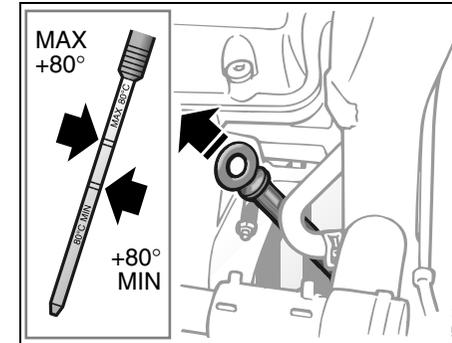
NOTICE

Change of engine oil and oil filter may be required more frequently (5000-mile intervals (8,000 km)) if any one of the following conditions apply to the car:

- Most trips are less than 5 to 10 miles (8 to 16 km). This is particularly important when outside temperatures are below freezing.
- Most trips include extensive idling (such as frequent stop-and-go driving).
- Most trips are through dusty areas.
- You frequently tow a trailer or use a carrier on top of your vehicle.
- If the vehicle is used for delivery service, police, taxi or other commercial applications.

WARNING

- Prolonged and repeated exposure of the skin to engine oil can cause serious skin disorders.
- Avoid prolonged skin contact whenever possible. Wash the affected area thoroughly with soap and water after any contact.
- Keep oil out of reach of children.
- Do not touch the turbocharger or manifold. These get very hot when the engine has been running.
- Do not spill oil on hot parts of the engine as this could cause a fire. Used engine oil is particularly flammable.
- Protect the environment. Do not dispose of oil in the ground or down a drain. Dispose of all used oil and oil filters at an appropriate disposal facility.



Oil dipstick, automatic transmission

Transmission fluid**Manual transmission**

Check and top up the fluid in accordance with the service program.

If original fluid cannot be obtained for topping up, Dexron III (synthetic fluid) automatic transmission fluid can be used. If so, the car should be taken to an authorized Saab dealer immediately to have the reason for low fluid level corrected and original fluid installed.

Automatic transmission

Check the fluid level as follows:

- 1 Park the car on level ground and apply the parking brake. The automatic transmission fluid must be at normal running temperature, approximately 175°F

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(80°C). This can be achieved by driving the car for about 30 min on the open road.

- 2 With the engine idling, move the selector lever to D and wait for at least 15 seconds. Next, move the selector lever to R and wait for 15 seconds again. Finally, move the selector lever to P. Let the engine idle.
- 3 Wipe the dipstick clean with a lint-free cloth and put it back.
- 4 With the fluid at normal temperature, the level should be between the MAX and MIN marks on the dipstick. Top up, as necessary, with Texaco Texamatic Dexron III automatic-transmission fluid, adding it through the dipstick pipe. The distance between the MIN and MAX marks on the dipstick corresponds to a volume of approximately 0.4 qts (0.4 litre).

NOTICE

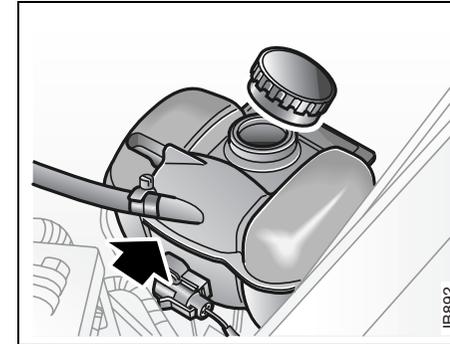
If there is a burnt smell or the fluid is black, change the fluid as soon as possible.

If the outside temperature is below 50°F (10°C), the fluid will not reach the specified temperature of 175°F (80°C). In this case, the correct fluid level may be 0.8 in (20 mm) below the MAX mark.

Coolant

! WARNING

- Proceed with caution if the radiator is boiling when you open the hood. Never remove the expansion-tank filler cap when the radiator is boiling.
- The cooling system is pressurized – hot coolant and vapor can escape when the filler cap is released. These can cause injury to your eyes and burns. Loosen the cap carefully, and let the engine cool before removing the cap.
- Exercise care when adding coolant. Coolant on hot surfaces constitutes a fire risk.



Coolant expansion tank

The expansion tank is transparent, to facilitate checking. The level must be a little under the mark "KALT – COLD" on the tank when the engine is cold. If the SID message "FILL COOLANT FLUID" is displayed, the level in the expansion tank should be checked. Top up as necessary with equal parts of clean water and coolant. Use only coolant approved by Saab.

If the expansion tank is empty when coolant is added, run the engine to normal temperature and top up again, as necessary.

Coolant

The cooling system is filled at the factory with coolant containing a 50 % concentration of a combined antifreeze and corrosion inhibitor. A weaker mixture will result in reduced anticorrosion protection. For protection against freezing in very cold weather, a stronger concentration will be needed.

A 60 % concentration of antifreeze will provide protection at temperatures down to -58 F (-50°C).

The coolant does not normally have to be changed during the service life of the car. This type of coolant has a reddish colour and should not be mixed with other types of coolant. Saab Original coolant should be used all year round. Only use coolant approved by Saab.

NOTICE

Always mix the antifreeze with the appropriate volume of water before adding it to the cooling system.

If pure antifreeze is added, the engine could still freeze and be damaged. This is because the antifreeze will not mix properly with the coolant before the thermostat has opened to allow full circulation.

Note:

If incorrect coolant is used or added, the life-time properties will be affected. Even if the coolant is flushed from the system and replaced with life-time coolant, life-time properties are no longer retained and the coolant must then be drained and replaced at regular intervals.

Air filter

WARNING

To ensure reliable operation, only use an air filter recommended by Saab Automobile AB.

Brake- clutch fluid and brake pads

WARNING

Brake fluid deteriorates as it becomes old. Because it is hygroscopic, it absorbs water from the air and, in time, could allow vapor to form in the brake system, thus reducing its performance. It is therefore important that brake fluid be changed regularly, as specified in the service program.

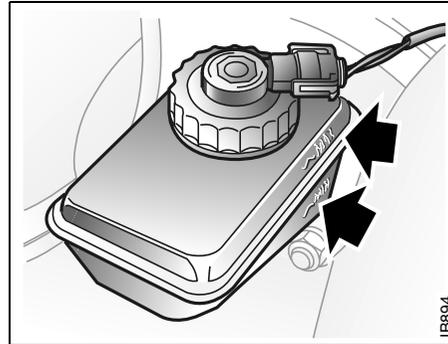
Checking the fluid level

The combined brake and clutch-fluid reservoir is transparent to facilitate checking of the fluid level.

The level should be between the MAX and MIN marks. Top up, as necessary, with **DOT 4** fluid. Do *not* use DOT 5 brake fluid. Use only new brake fluid from a sealed container.

Check that there are no leaks in the brake system.

Changing of the brake fluid should be carried out by an authorized Saab dealer.



The vehicle's regular braking system is adjusted automatically, but the parking brake has to be adjusted manually. This work, involving adjustment of the parking brake cables and brake pads, must only be carried out by an authorized Saab dealer.

It is not possible to detect, through abnormal pedal or parking brake-lever travel, whether brake pads are worn and need replacing. It is therefore essential that brake pads be checked regularly, as specified in the service program.

NOTICE

Avoid spilling brake fluid onto paintwork, since it can cause the paint to bubble and lift. If any brake fluid is spilled, the area should be flushed with large quantities of water as quickly as possible.

Brake pad wear indicators

The outboard brake pads on the front wheels incorporate pad-wear indicators. When the lining is down to 0.11 in (3 mm), the pad will produce a screeching, squealing or scraping noise when the brakes are applied. New pads should be installed without delay.

Brake pads should only be changed by an authorized Saab dealer. To ensure optimum brake performance, use only Saab original brake pads.

Power steering

WARNING

Do not fill the power steering fluid to above the MAX mark. Too much fluid can result in leakage.

Power steering fluid on hot engine components constitutes a fire risk.

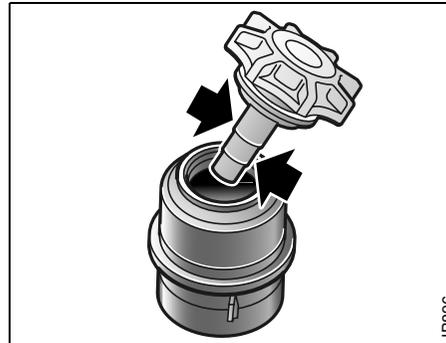
Check the level of the power-steering fluid in the reservoir regularly, in accordance with the service program.

The wheels should point forward during the check.

Clean around the cap before it is unscrewed.

Unscrew the cap and wipe the dipstick. To check the fluid level, first screw the cap on fully again and then remove. The level should be between the MAX and MIN marks on the dipstick when the oil temperature is about 68°F (+20°C). If the oil is colder the oil level can be lower, and in higher temperatures the level can be higher, both of which are acceptable.

Top up with power-steering fluid CHF 11S .



Power steering fluid reservoir

1B896

Battery

WARNING

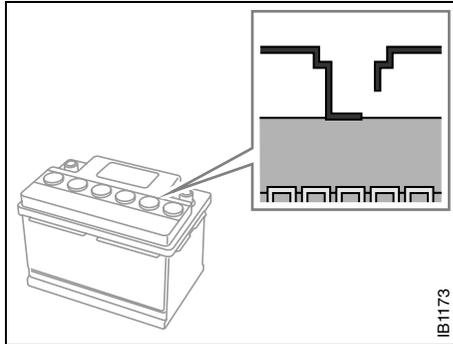
- Work on the battery may entail an explosion hazard, since the battery gives off hydrogen which forms an explosive mixture with the oxygen in the air.

For this reason, always avoid sparks or open flames when working near the battery.

- The battery contains corrosive sulphuric acid. Always wear a face mask or goggles when working on the battery.

- If battery acid gets into the eyes or splashes the skin or clothing, wash the affected area liberally with water. If acid gets into the eyes or a large quantity makes contact with the skin, seek medical help.

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Correct fluid level in the battery

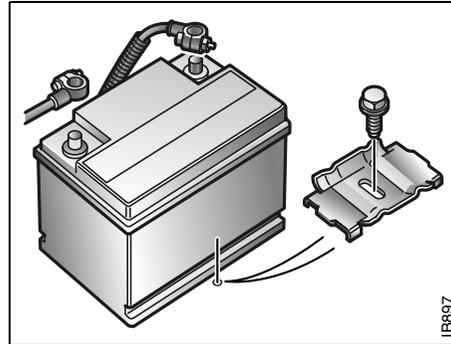
The liquid level in the car battery must be checked at regular intervals.

NOTICE

Never use tap water to top up the battery. Use distilled or boiled water.

Tap water contains salts and minerals that accelerate the corrosion of the battery electrodes, which can shorten the life of the battery.

The charge level should be checked with a battery-acid tester. The specific gravity of the acid in a fully charged battery should be 1.28. A specific gravity of 1.18 roughly indicates a 50 % charge.



Taking out the battery

NOTICE

A discharged battery can freeze and fracture. Batteries should therefore always be stored away from frost.

If frequent short journeys are made in cold weather, the battery may need to be given a booster charge. This can be done either using a battery charger or by taking the car for a long drive.

A car with standard equipment and a fully charged battery can be left for up to 40 days and still have a sufficient charge for starting. If extra equipment is fitted, such as a mobile telephone, the time may be reduced to about 15 days.

Always connect the positive (red) cable to the positive (+) terminal of the battery and the negative (blue) cable to its negative (-) terminal. Always disconnect both battery leads when boost charging the battery.

NOTICE

- **Don't connect the battery terminals + and - the wrong way around.**
- Serious damage can occur to the car's electrical system if a battery or alternator lead is disconnected while the engine is running.

Drive belt

WARNING

- Keep hands and clothing clear of drive belts when engine is running.
- Always stop the engine before inspecting drive belts.
- The fan can start **even** when the engine is switched off.

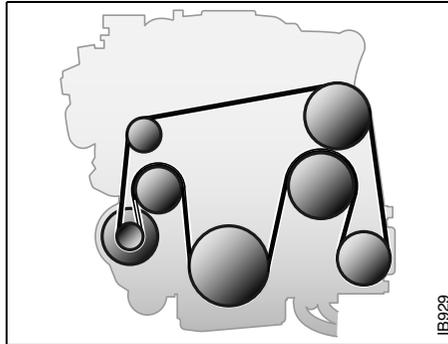
NOTICE

Serious damage can occur to the car's electrical system if an alternator lead is disconnected while the engine is running.

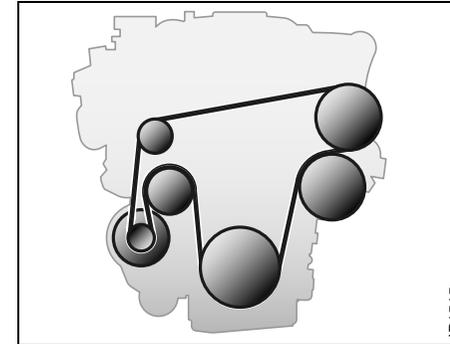
The alternator is situated on the right-hand side of the engine. It is driven via a poly-V belt from the crankshaft pulley.

The poly-V-belt also drives the water pump, the A/C compressor and the steering servo pump.

The belt tension is critical, and is adjusted by an automatic belt tensioner.
See also page 59, "Warning charging".



Drive belt, cars with A/C compressor



Drive belt, cars without A/C compressor

Wipers and washers

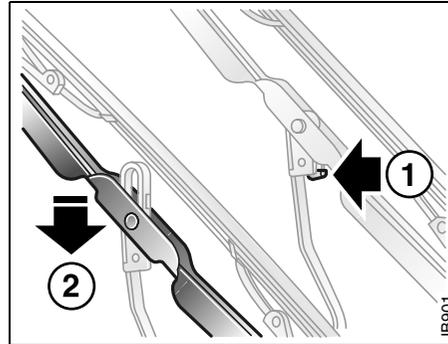
Wiper blades

Check and clean all wiper blades regularly. We recommend Saab washer fluid for cleaning.

If poor wiper performance is experienced, clean the windshield with Saab washer fluid. If wiper performance is still unsatisfactory, fit new blades.

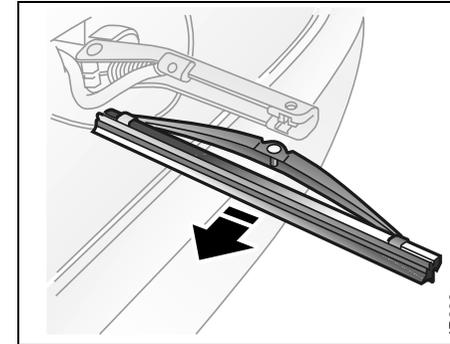
⚠ WARNING

Take care not to spill washer fluid concentrate onto hot surfaces. Washer fluid concentrate can contain flammable ingredients such as alcohol.



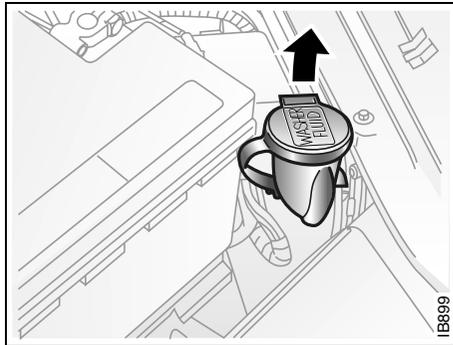
Windshield

- 1 Push the catch in (1).
- 2 Pull the complete wiper blade downwards so that it comes away from the wiper arm. Slide the entire blade out from the arm.



Headlight wipers

- 1 Lift the wiper arm off the headlight.
- 2 Detach the wiper blade by pulling it laterally from the wiper arm.
- 3 Fit the new blade by sliding it into the retainer on the wiper arm and pressing it firmly home.

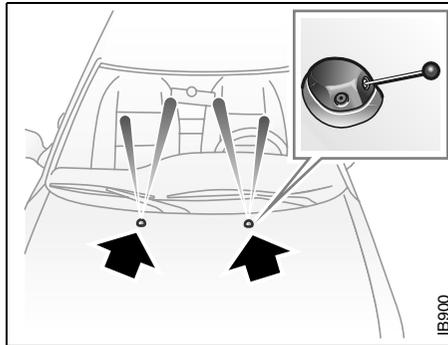


Washer-fluid reservoir

Washer

The reservoir holds 5 quarts (4.7 litres).
When the SID message "WASHER FLUID LEVEL LOW" appears there is about 1.5 quarts (1.4 litres) left.

Fill with quality washer fluid, available from your Saab dealer and follow the instructions on the package to reduce the risk of freezing.



Washer jets

The washer jets, which are adjustable, can be cleaned with a pin if necessary.

Changing bulbs

WARNING

Before changing a bulb in the engine bay, switch off the engine to avoid the danger of fingers and hands being injured by moving parts.

The radiator fan can cut in even when the engine is switched off.

NOTICE

Switch off the ignition before changing a bulb, to avoid possible short-circuiting.

Headlight

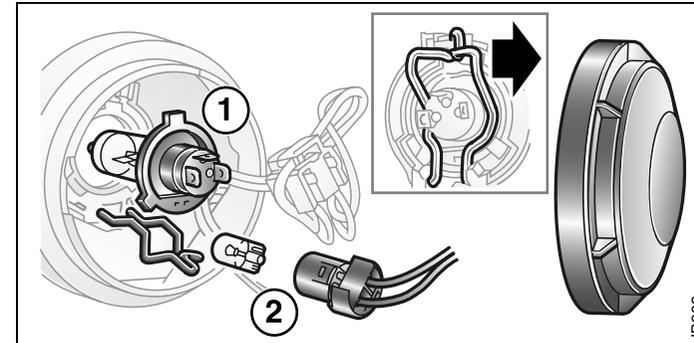
- 1 Unscrew the cover from the back of the light units.
- 2 Unplug the connector.
- 3 Unhook the spring clip by pushing it forward and then to the side.
- 4 Remove the bulb.
- 5 Insert the new bulb, without touching the glass with your fingers. Line it up so that the three lugs fit into the corresponding slots in the reflector and secure it with the spring clip.

NOTICE

Do not fit bulbs with a rating above 60/55W, since the headlight reflector and the wiring of the car are not designed for a higher wattage.

Do not touch the glass of the bulbs with your fingers. The oil on your skin can shorten the life of the bulb.

IMPORTANT! Use only "Long Life" bulbs.



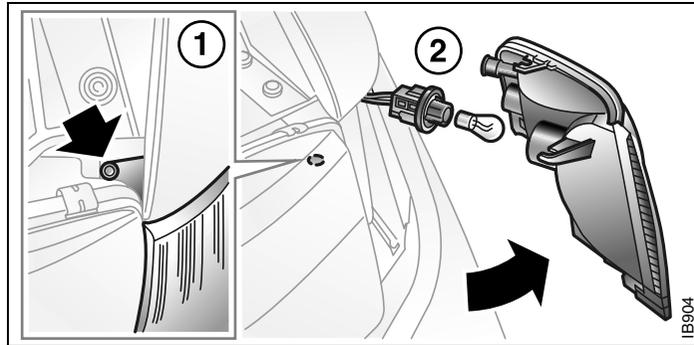
- 1 Headlight bulb
- 2 Parking-light bulb

Headlight aiming, see page 218.

Parking lights

The parking-light bulb is fitted in the same light unit as the headlight bulb.

- 1 Remove the bulb holder from the lamp unit.
- 2 Then take the bulb out of the holder.

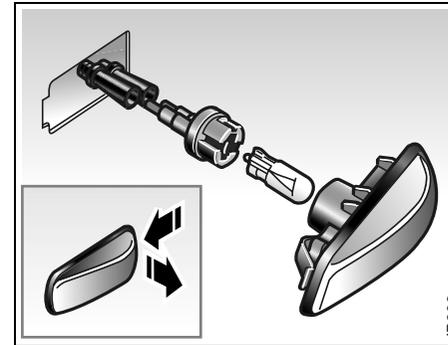


- 1 Retaining screw
- 2 Turn signal bulb

Front turn signal bulb

To change the bulb, the complete lamp unit has to be removed.

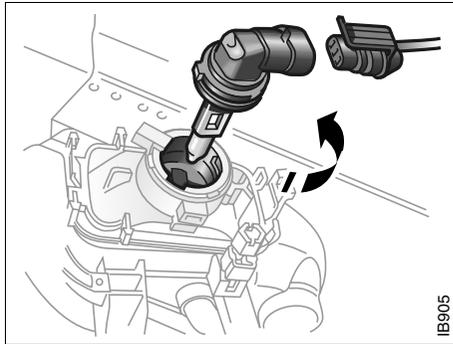
- 1 Loosen the screw (1). There is no need to remove it completely.
- 2 Carefully remove the complete lamp unit.
- 3 Grasp the two plastic tabs and turn the bulb holder counterclockwise.
- 4 Pull the bulb holder out of the lamp unit and change the bulb.
- 5 Check that the new bulb is firmly in place and has good contact.
- 6 When mounting the lamp unit, see that the two guide lugs on the rear edge of the unit come inside the edge of the body panel.
- 7 Insert the lamp unit in towards the headlight and see that the front bracket comes under the screw. Tighten the screw (1).



Side-mounted turn signal

- 1 Slide the lens forward so that its rear part can be pulled out.
- 2 Change the bulb.
- 3 When refitting, make sure that the groove in the spring engages the edge of the body panel and that the rubber gasket is correctly positioned.

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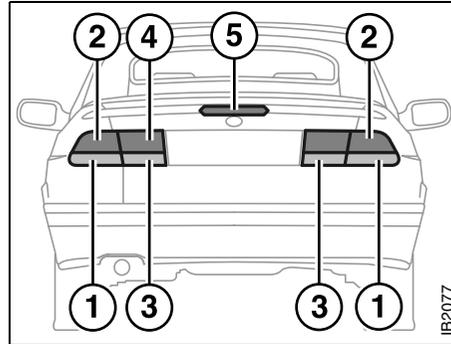


Front fog lights

- 1 Slightly turn the bulb holder counter-clockwise.
- 2 Unplug the connector.
- 3 Remove the bulb.

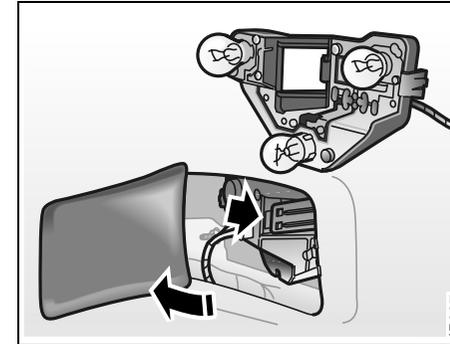
WARNING

- Never crawl under a car that is supported only by a jack.
- Always use axle stands. Refer to the information on jacks on page 206.



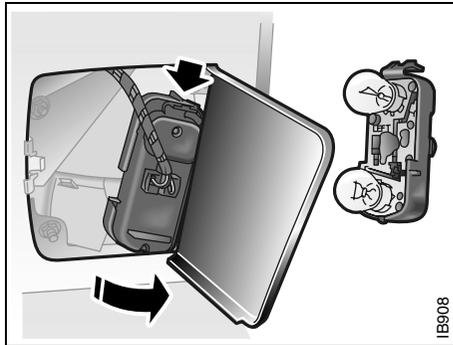
Rear light clusters

- 1 Direction indicators
- 2 Tail lights/stop lights
- 3 Reversing lights
- 4 Rear fog light
- 5 High-mounted stop light



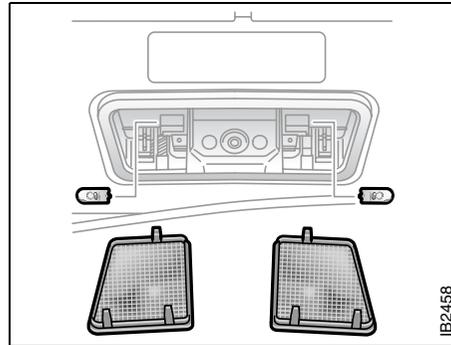
Stop lights, taillights and direction indicators

- 1 Open the door in the trunk upholstery.
- 2 Press aside the plastic tab that secures the bulb holder.
- 3 Carefully pull the entire bulb holder out of the lamp unit. Replace the dead bulb.
- 4 When the bulb holder is being refitted, check that its plastic catches snap into place.



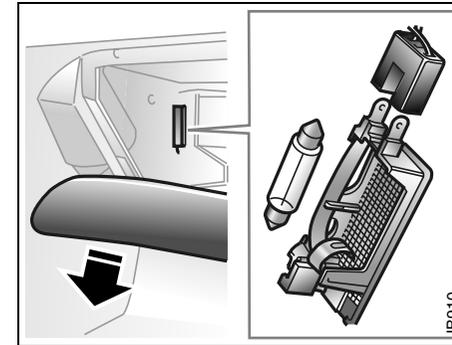
Reversing lights and rear fog light

- 1 Open the hatch on the inside of the trunk.
- 2 Press down the plastic tab that secures the bulb holder.
- 3 Carefully pull the entire bulb holder out of the lamp unit. Replace the dead bulb.
- 4 When refitting the bulb holder, fit it in first at the lower edge. Then push the bulb holder in so that the plastic tab snaps into place.



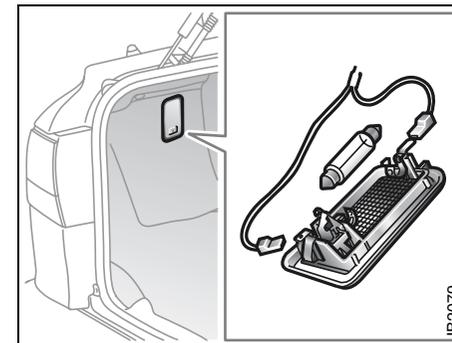
Dome light, front

- 1 Insert a screwdriver behind the top edge of the lens and carefully pry it out. Remove the lens.
- 2 Change the bulb.

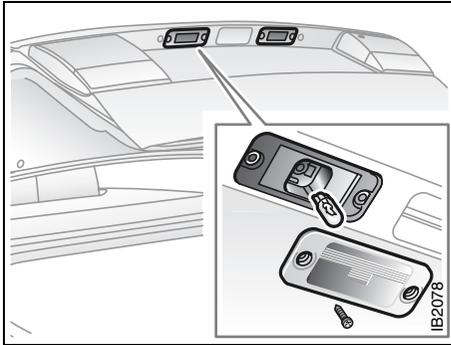


Glove-compartment lighting (detach the whole lamp unit with a short screwdriver applied at the lower edge)

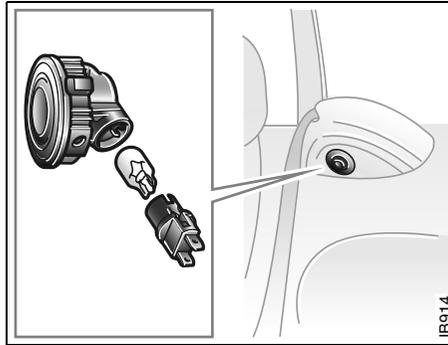
Trunk light (detach the whole lamp unit with a screwdriver applied at one edge)



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License plate lighting (the glass is held in place by two screws)



Reading lamps, rear seat

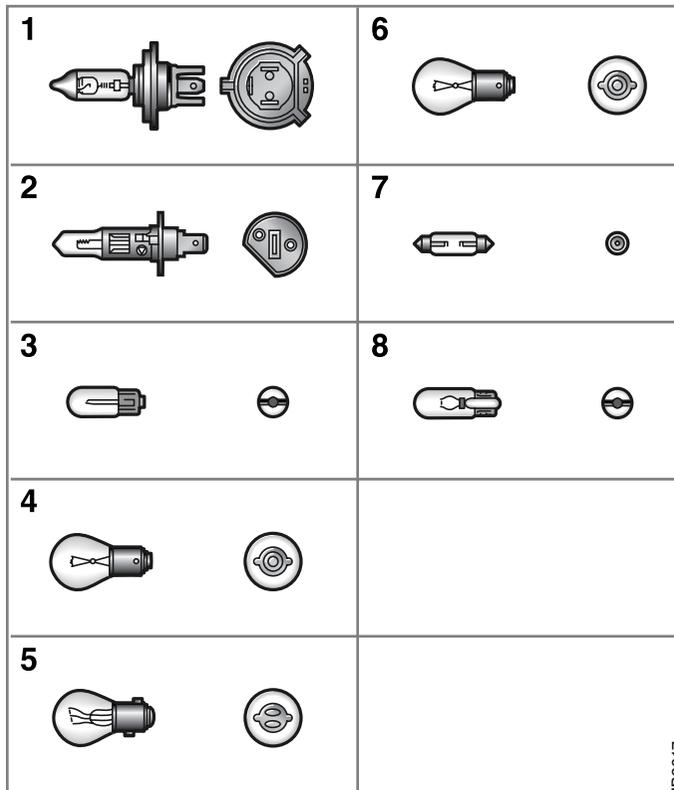
Reading lamps, rear seat

Detach the whole lamp unit by inserting a screwdriver into the notch and carefully prying the lamp unit out. Pull the bulb holder out of its bracket and change the bulb.

Replace the bulb holder in its bracket and refit the entire lamp unit.

Other lighting

If any other bulbs need changing, you are advised to take the car to an authorized Saab dealer.



Bulb table

No.	Cap	Wattage	
1	H4	60/55	Headlight
2	H1	55	Front fog light
3	W1,2W	1,2	Ashtray; cigarette lighter; warning light for safety belts
4	P21W	21	Rear fog light; reversing light
5	P21/5W	21/5	Stop/taillight
6	PY21W	21	Direction indicator, front/rear
7	R10W	10	Trunk; glove compartment
8	WY5W W5W	5	Side indicators (yellow bulb); license plate lighting; parking lights; dome light; reading lamps, rear

NOTICE

Only fit lamps of the specified rating. Lamps of the wrong wattage could damage the car's wiring harness and electronics.

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Fuses

The fuses are housed in two fuse panels: one at the end of the instrument panel on the driver's side, and one under the hood.

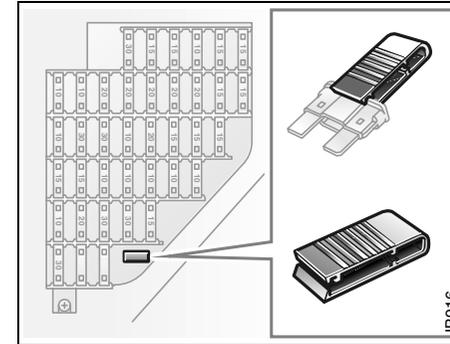
To check if a fuse has blown, first remove it from the panel (see below). If the filament is broken, the fuse has blown.

A special tool for removing fuses is provided at the bottom of the fuse panel on the fascia. Simply push the tool onto the fuse, squeeze and remove the fuse.

WARNING

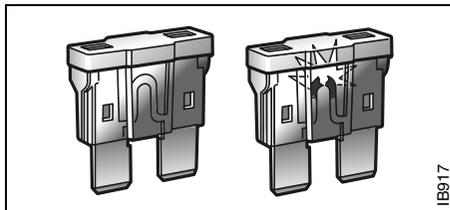
To avoid the risk of short-circuiting and/or fire breaking out in the electrical system, the following should be heeded:

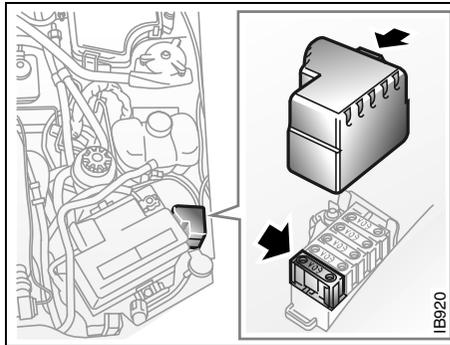
- Always consult an authorized Saab dealer before modifying or adding any electrical equipment. Failure to do so can result in the electrical system being damaged.
- Never replace a fuse with one having a higher/lower rating than specified (see page 196). The color of the fuse indicates its amperage.
- If the same fuse blows repeatedly, have the electrical system checked by an authorized Saab dealer.
- If a MAXI fuse blows, it means that there is a major fault in the electrical system. Have the car checked without delay by an authorized Saab dealer.



Tool for changing fuses

Sound fuse/Blown fuse





MAXI fuse for soft-top system

MAXI fuses

The MAXI fuses are housed in the fuse box under the hood. These fuses can be checked in the same way as the other fuses. The MAXI fuses are designed to protect the car's electrical system from being damaged. Each MAXI fuse protects a number of electrical circuits and functions and therefore has a higher rating (amperage) than the standard fuses. No spare MAXI fuses are supplied with the car.

NOTICE

If a MAXI fuse blows, it means that there is a major fault in the electrical system. Have the car checked without delay by an authorized Saab dealer.

DICE / TWICE

DICE = Dashboard Integrated Central Electronics

TWICE = Theft-Warning Central Electronics
DICE and TWICE are electronic control modules.

DICE controls, among other things:

- Front lights and interior lighting
- Instrument illumination
- Intermittent wiper operation
- Electric heating of rear window and door mirrors

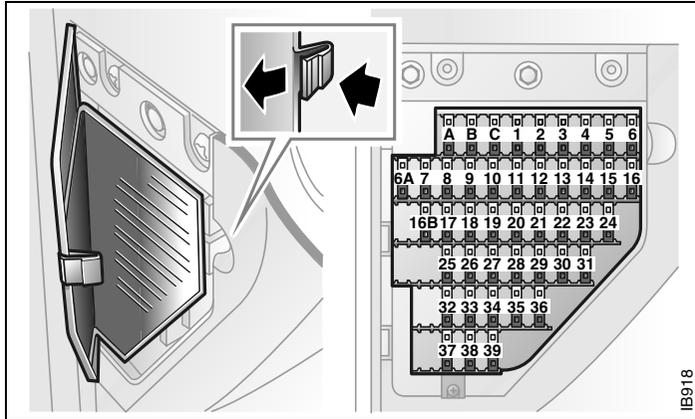
TWICE controls, among other things:

- Central locking
- Car alarm (Anti-theft system)
- Engine immobilizer
- Auto checking of lights
- Safety belt reminder
- Electrically adjustable passenger seat

The DICE and TWICE control modules are linked to a data bus, which is basically an information carrier that allows information to be exchanged between all the control modules and components connected to the bus. If a fault occurs in any of these components, diagnostic faults codes are set in the relevant control module, which enhances fault diagnosis at the Saab dealer.

The scan tool connector for fault diagnosis is located under the instrument panel on the driver's side.

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Fuse holder on the end of the instrument panel

Fuses

No.	Amp	Function
A	–	–
B	10	Stop lights, trailer
C	30	Cabin fan, ACC
1	30	Electrically heated rear window and rear-view mirrors
2	20	Direction indicators
3	30	Cabin fan, A/C
4	15	Trunk light; switch illumination; electrically powered radio antenna
5	30	Electrically operated front seat, right

6	30	Cigarette lighter
6A	7.5	Automatic transmission
7	30	Rear window operators, rear-view mirrors
8	–	–
9	7.5	ACC panel
10	10	Horn
11	7.5	DICE / TWICE
12	20	Stop lights; front fog lights; Park brake Shift Lock
13	15	Diagnostics; radio
14	30	Front window motors; soft top
15	20	Daytime running lights
16	30	Electrically operated front seat, left
16B	30	Control module, engine management system
17	15	Control module, engine management system; DICE/TWICE; main instrument panel/SID; memory for electrically operated driver's seat; telephone; cruise control
18	10	Airbag
19	10	ABS; A/C; rear fog light; switch, rear fog light
20	20	Electric heating, front seats; switch, electrically heated rear window

No.	Amp	Function
21	10	Switch, manual A/C; soft top
22	15	Direction indicators; Cruise Control
23	20	Soft top; telephone
24	7.5	Radio
25	30	Central locking; amplifier
26	30	Control module, engine management system
27	15	High beam flash; ACC
28	10	Control module, engine management system
29	10	Right parking light; license plate lighting
30	10	Left parking light
31	20	Reversing light; windshield wipers; headlight beam-length adjustment
32	15	Fuel pump
33	-	-
34	10	SID; control module; automatic transmission
35	15	DICE/TWICE; main instrument panel; interior lighting
36	10	Relay, starter
37	15	Limp-home
38	25	Oxygen sensor (lambda probe)
39	-	-
S	-	Spare

Relay holder

Under the instrument panel next to the steering wheel

Item	Function
A	-
B	Reversing light, cars with automatic transmission
C1	-
C2	Lock motor, trunk lid
D1	-
D2	-
E	Ignition switch
F	-
G1	Horn
G2	Windshield wipers (intermittent)
H	Rear-window heating
I	Fuel pump
J	-
K	Start relay
L	Main relay (injection system)

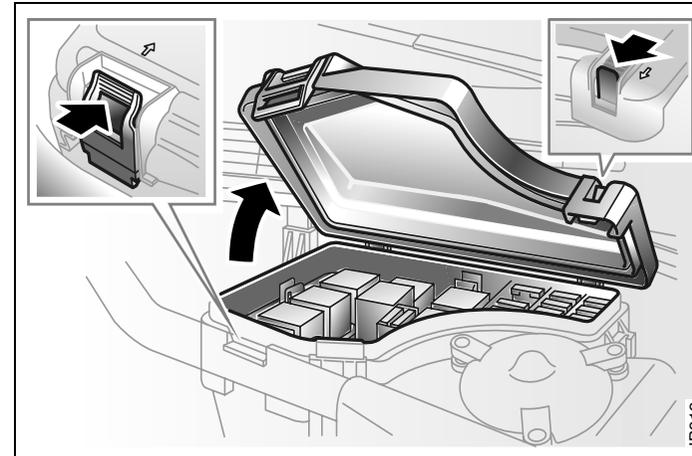
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Fuses and relays

Fuse panel in engine bay

No.	Amp	Function
1	–	–
2	15	Front fog lights
3	40	Radiator fan, low speed
4	10	Vacuum pump
5	15	A/C-compressor
6	10	Left low beam
7	10	Right low beam
8	10	Left high beam
9	10	Right high beam
10	7.5	Headlight wipers
11	–	–
12	–	Extra lights
13	–	–
14	10	Extra heater; water pump (Europe)
15	15	Extra heater (Europe)
MAXI 1	30	Radiator fan, high speed
MAXI 2	50	ABS

Item	Amp	Function
A		Low beam
B		High beam
C1		Extra heater (Europe)
C2	–	–



Fuses and relays in engine bay (left side)

D		Radiator fan, low speed
E		Lamp check (filament monitor, front)
F1	–	–
F2	–	–
G1		Headlamp wipers
G2		Front fog lights
H	–	–
I		Radiator fan, high speed
J		A/C-compressor

Wheels

Alternative wheels and tires

If you wish to fit other tires or wheels than those supplied with the car, consult your Saab dealer first as to the possibilities available.

Wheels/tires combinations that are not approved by Saab can negatively affect the car's directional stability, steering and braking in both wet and dry conditions.

Do not assume that a wheel/tire combination will function properly just because it will bolt on.

To ensure that the speedometer is as accurate as possible it should be reprogrammed if wheels of a different dimension are fitted. Contact an authorized Saab dealer.

NOTICE

Always consult your Saab dealer before changing the wheels and tires on your Saab.

Wide wheels and tires with side walls that are too low can:

- be damaged in potholes etc.
- cause springs, shock absorbers and wheel bearings and body mountings can be overloaded.
- cause that the wheels can come into contact with chassis and body components.

The speed and load limits for the tires must not be exceeded; see page 201.

Wheels larger than 17" must not be fitted on the Saab 9-3. The maximum permissible offset for the 9-3 is 49 mm.

The wheels and tires have been carefully matched to the characteristics of the car and play a key role in its outstanding roadholding and handling.



Tire pressure

 **WARNING**

Check the tire pressure **at least once a month** and before long journeys. Under-inflation can result in:

- Punctures
- Separation of the tire and tread
- Damage to the sidewalls
- Damage to the rims on poor roads
- Poor handling characteristics
- Premature tire wear
- Increased fuel consumption.

Tires need to be inflated to suit the load carried and the maximum speed the car will be driven, see the recommended tire pressures on page 234. Tire pressure label, see page 235.

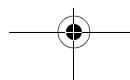
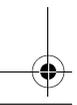
Note that all values apply to cold tires. For tires with an aspect ratio less than /60, increase the tire pressure by 3 psi (20 kPa) for rough roads with potholes to minimize the risk of rim damage.

Never reduce the pressure of a hot tire. If the tires are hot when you check them, only increase the pressure, if necessary.

Soft tires will cause faster wear than over-pressurized tires. They also increase fuel consumption.

If a valve is leaking, simply unscrew it and fit a new one.

Important! Remember to adjust the tire pressures if you change the load in the car or intend to cruise at a substantially higher or lower speed than normal.



Rotating the tires

WARNING

When fitting just **one** new pair of tires, these should be fitted to the rear wheels, as these are more critical to the directional stability of the car (e.g. on braking or in a skid). The existing rear wheels should therefore be moved to the front. Always move left rear to left front and right rear to right front, so that the direction of rotation remains the same.

Because of front wheel drive, the front tires tend to wear faster than the rear ones. New tires should always be fitted in pairs, so that tires on the same axle have the same amount of tread.

The tyre tread must be at least 3 mm deep. The wheels should be marked, L (left) and R (right), when changing between summer and winter (snow) tires. This ensures that the direction of rotation of the wheels is the same when they are refitted. Fit the tires in best condition to the rear wheels.

Store wheels lying flat or hanging – **never** standing upright.

Tire markings

An example of the meaning of the different markings in a tire size is given below for a tire size of 205/55 R16 91V:

- 205 Tire section width, mm
- 55 Aspect ratio, i.e. the section height is 55 % of the section width
- R Radial ply
- 16 Wheel rim diameter 16 in. at bead seats
- 91 Tire load code
- V Speed marking

Load limiters

- 88 max 1201 lbs (545 kg)
- 91 max 1366 lbs (615 kg)

Speed ratings

- Q up to 100 mph (160 km/h)
- S up to 112 mph (180 km/h)
- T up to 118 mph (190 km/h)
- H up to 130 mph (210 km/h)
- V up to 150 mph (240 km/h)
- W up to 167 mph (270 km/h)
- Y up to 186 mph (300 km/h)

Winter tires

Winter (snow) tires are recommended for winter climates where the majority of your driving will be done on snow and ice. Winter tires should be fitted to all four wheels to maintain a proper balance. Your Saab dealer can advise you of the correct size tire for your car (if different from the original size) and also supply Saab approved winter tires pre-mounted on steel or alloy rims.

Tire quality grading (cars sold in U.S.)

New tires must be graded and labeled in accordance with new Federal regulations. Standard tests are conducted to measure performance in the areas of traction and temperature resistance. Refer to the tire sidewall for the specific quality grades of the tires provided on your new Saab. Compact spare tires are exempt.

DOT QUALITY GRADES

- Treadwear.
- Traction AA, A, B, C.
- Temperature A, B, C.

All passenger car tires must conform to Federal safety requirements in addition to these grades.

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Uniform Tire Quality Grading (US)

Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width. For example:

**Treadwear 200 Traction AA
Temperature A**

Treadwear

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one and one half (1 1/2) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

Traction

The traction grades, from highest to lowest, are AA, A, B and C. These grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

WARNING

The traction grade assigned to a tire is based on straight-ahead braking, traction test and does not include acceleration, cornering, hydroplaning or peak traction characteristics.

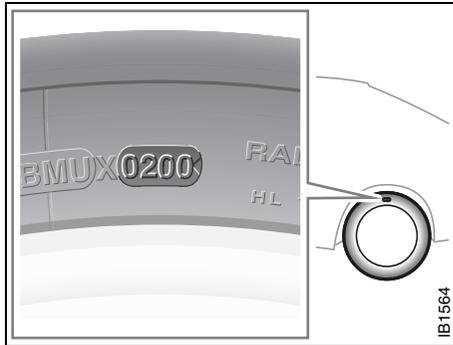
Temperature

The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause the material of the tire to degenerate and reduce tire life. Excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 109.

Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

WARNING

The temperature grade for a tire is established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.



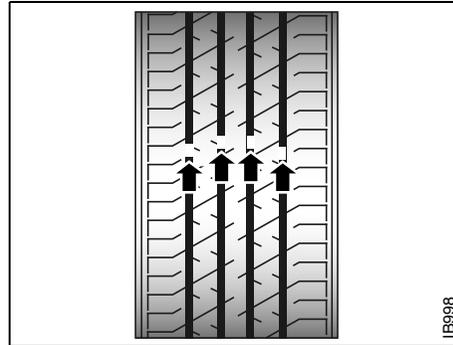
Date code

Date code

Tires should be regarded as perishable goods. As the tires age, the rubber becomes progressively harder, and the roadholding ability of the tires diminishes. This is particularly true on winter tires.

Tires now have a date-code marking for the year of manufacture. The first two digits denote the week number and the last two digits the year. The "<" symbol points to the year.

Accordingly, a date code of 0200 signifies that the tire was manufactured in week 02, 2000.

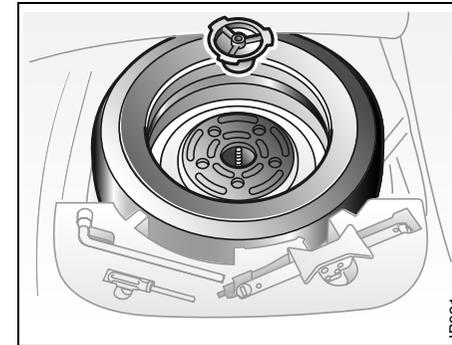


Wear indicators

Wear indicators

The tires incorporate wear indicators in the form of smooth, treadless strips across the width, which become visible when only 2/32" (1.6 mm) of tread remains. As soon as the indicators become visible, new tires should be fitted without delay.

Make sure you are familiar with the legal limit for minimum tread depth in your country and also any regulations governing the use of winter (snow) tires.



Spare wheel (under the carpet in the trunk)

Compact spare wheel

The compact spare is light and easy to handle when changing the wheel. Its use is only permitted when a standard tire has sustained a puncture. The maximum life of the tire is only 2000 miles (3,500 km).

Do not exceed 50 mph (80 km/h) with the compact spare fitted.

The compact spare should be inflated to 60 psi (420 kPa). Carry the punctured tire in the spare-wheel well under the trunk floor. Have the standard tire repaired and refitted as soon as possible.

Driving considerations with compact spare wheel/tire fitted, see page 171.

The spare wheel, the tools and the jack with its crank are carried under a panel in the trunk.

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When changing a wheel, take the tool kit out first, then the spare wheel.

NOTICE

To avoid damaging an alloy wheel with a flat tire, this can be placed outside up in the spare-wheel well but **only** while driving to the closest workshop.

A general rule is that all heavy loads must be well secured in the luggage compartment, see page 130.

Changing a wheel

WARNING

- The car jack is designed solely for use in changing a wheel or fitting snow chains. **It must not be used to support the car during repair work or servicing.**
- **Never** crawl under a car that is supported only by a jack.
- Special care must be taken if the car is on a slope – use wheel chocks!
- Position chocks, one ahead and one behind, the wheel that is diagonally opposite to the one to be changed.
- Switch on the hazard warning lights if the car is on a road.
- Apply the parking brake and leave the car in gear (1st or reverse). Automatic transmission: move selector to the P position.
- Ensure that everybody is out of the car before jacking it up.
- Never start the engine while the car is jacked up.
- The jack must stand on a firm, level surface.

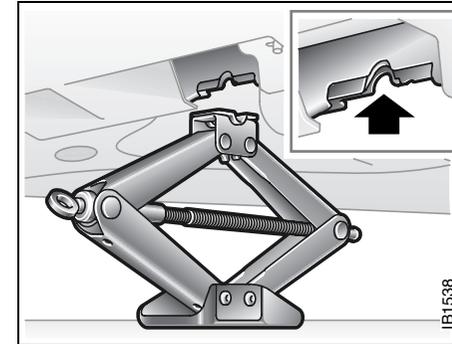
- Stow the jack in the place provided for it under the panel in the floor of the trunk. Secure it properly to avoid injury to passengers in the event of a crash.
- Do not use the jack for any purpose other than for jacking up the car.
- Grit, salt and rust can clog the inner threads of the wheel bolts if the car has been driven for several years exclusively with alloy wheels. If steel wheels are now fitted, the bolt hole threads in the brake hubs should be cleaned before the thinner steel wheels are fitted. It may otherwise not be possible to achieve the required clamping force despite tightening the bolts to the correct torque.

When it is time to raise the car, apply the jack to one of the four jacking points (front or rear) located beneath the sills.

If a floor jack is used it can be applied to the standard jacking points used by the dealer or centrally under the front of the engine subframe. If the car is equipped with a trailer hitch, the jack can also be placed under the hitch.

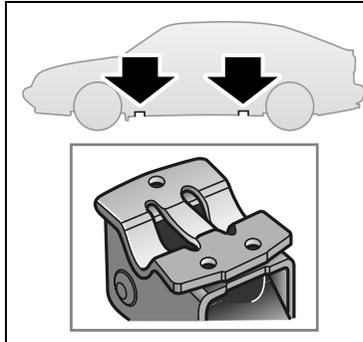
NOTICE

- Do not position the jack under the rear axle or under the rear floor.
- Apply the jack only to the jacking points indicated on the body, specified on page 206.

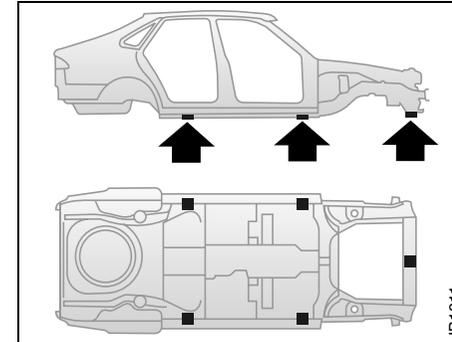
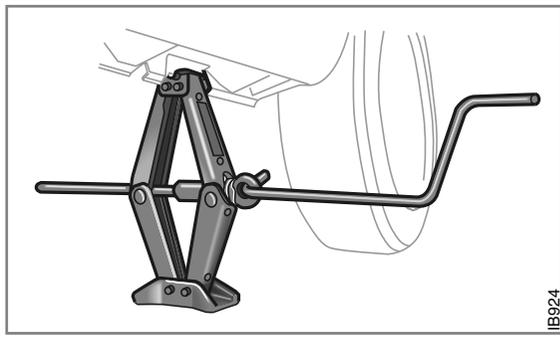


Positioning the jack

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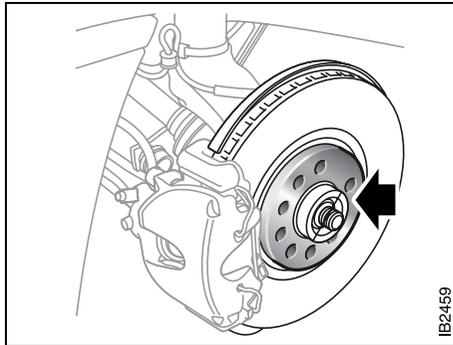


Position for jack

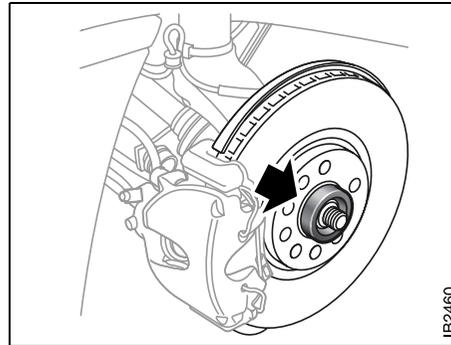


Jacking points for a floor jack.

- 1 Put the car in 1st gear (automatic transmission: move selector to the P position) and apply the parking brake.
- 2 Wind the jack up to a suitable height before placing it under the recess in the sill.
- 3 Make sure that the jack fully engages the recess in the sill and that the base of the jack is steady and flat on the ground.
- 4 Turn the jack handle clockwise until it just begins to lift the car.
- 5 Remove the wheel cover (where applicable). Loosen the wheel bolts by half a turn.
- 6 Turn the jack handle to raise the wheel clear of the ground. Remove the wheel bolts and lift off the wheel.



Clean any rust or dirt from the contact surfaces between the wheel and brake disc.



Do not wipe away the grease in the hub.

- 7 Clean any rust or dirt from the contact surfaces between the wheel and brake disc. Do not wipe away the grease in the hub.
- 8 Fit the wheel and screw in the bolts in the sequence shown (opposite pairs). Tighten the studs enough for the studs and wheel to be seated correctly. See page 208 for sequence.

- 9 Lower the car and tighten the wheel bolts to the correct torque in the sequence shown (opposite pairs).
Tightening torque:
Light-alloy wheels: 80 ft.lbs (110 Nm). Steel wheels: 80 ft.lbs (110 Nm)

NOTICE

When refitting wheel covers (where applicable), make sure that the valve protrudes through the marked hole in the wheel cover.

- 10 Recheck the wheel bolts after a few miles.

Tightening torque:

Light-alloy wheels: 80 ft.lbs (110 Nm)

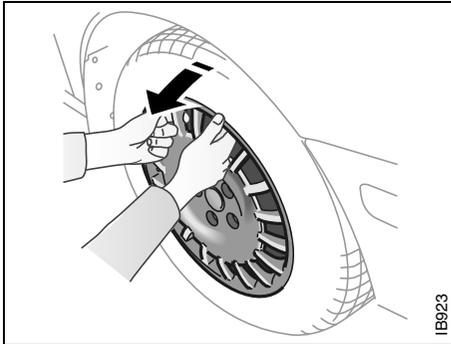
Steel wheels: 80 ft.lbs (110 Nm)

We advise against using wheels with open wheel covers in winter, as the brake components are then more exposed both to slush and to road salt and grit.

NOTICE

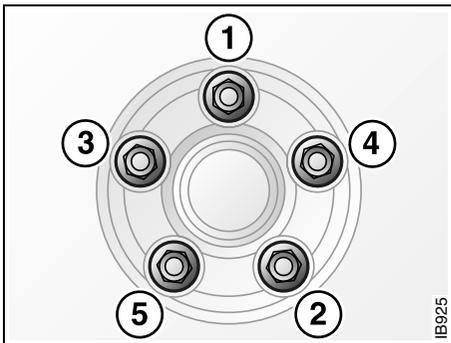
Do not overtighten the bolts using an impact wrench: not only can this damage the wheels but it can also make it impossible to undo the bolts using the wheel wrench in the car's toolkit.

Tire chains; see page 161.



Removing the wheel cover

Tightening sequence, wheel bolts



Flat spotting

All tires get hot, especially on long journeys or when the car is driven hard. After the car has been parked with hot tires and the tires have cooled down, a flat spot can form in the tire, where it is in contact with the ground. The same can occur if the car has not been moved for a long time.

Flat spots can cause vibration that can be felt through the steering wheel, similar to that experienced when the wheels need balancing. Flat spots of this type disappear once the tires get hot again, usually after 10–15 miles (20–25 km) of driving at cruising speed.

Safety belts

WARNING

Safety belts and belt pretensioners that were in use in a serious crash must be replaced even if they are not visibly damaged.

No attempt must be made to repair, or modify the function of, safety belts.

A check should be made periodically to ensure that the safety belts are working properly.

- Hold the diagonal strap and pull it sharply. The safety belt should lock and it should not be possible to withdraw it further.

A sharp tug on the belt should cause the inertia reel to lock. Check the floor anchorage points for corrosion damage. If a belt is worn or has any fraying edges, it should be replaced.

Safety belts must not come into contact with substances such as polishes, oil or chemicals. If the belts get dirty, wash them with warm water and a detergent or have them replaced.



Upholstery and trim

To remove fluff or hairs from the seat upholstery or headlining, use a moist, lint-free cloth or a special lint remover (brush or roller). Remove any dirty marks using a cloth moistened with lukewarm soapy water.

Wet patches left by spilled soft drinks or thin oil must be wiped off immediately using an absorbent material, such as paper toweling.

Cleaning and caring for leather upholstery

The principal reason for treating leather upholstery is to maintain its elegant appearance and to provide it with a protective film. Discoloration caused by dust and wear mainly affects the lighter shades, although this is not detrimental to the leather – indeed, the patina resulting from use is often considered desirable in leather. But if the leather is allowed to become too grubby, it can start to look shabby.

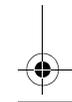
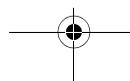
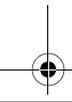
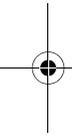
The leather upholstery should be cleaned and reconditioned twice a year in conjunction with spring and autumn inspections. In very warm, dry climates the leather may need more regular reconditioning. Recommended conditioner – Saab Leather Care Lotion.

Do not use unknown harsh polishing agents, cleaning agents, sprays, coarse soap or hot water.

The leather will be clean and attractive for many years.

Textile carpeting

Vacuum clean the carpeting regularly. Carpets can also be cleaned using a brush, or carpet shampoo applied with a sponge. Do not use vacuum cleaners outdoors unless they are properly grounded.



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Engine bay

Clean the engine compartment using an engine detergent and rinse with hot water. Cover the headlights. Do not use a high-pressure washer

Avoid spraying the hood liner, as this can become heavy and hang down and touch the engine when the hood is closed.

Do not use gasoline as a cleaning agent or solvent when carrying out repairs or maintenance. Saab recommends the use of environmentally safe degreasing agents.

Washing

NOTICE

We advise against washing the car in automatic carwashes.

The bodywork must be washed frequently. When the car is new, the body should be washed by hand using plain cold water and a clean, soft brush. Thereafter (5–6 months), use a high quality car wash soap added to lukewarm water. Automatic carwashes with brushes should be avoided.

Do not use a pressure washer at close range on stone chip damage, scratches or other damage to the paintwork. The paint can otherwise start to flake.

Remove any bird droppings without delay, as these can discolor the paintwork and prove difficult to polish out.

Use a soft cloth moistened with methyl alcohol to remove splashes of tar or asphalt. Do not use strong cleaners, as these can dry out the paintwork.

NOTICE

Avoid using any alcohol-based cleaners on the front and rear light clusters, as these can cause cracking of the lenses.

The underside of the car also needs washing regularly, and this should be done very thoroughly at the end of winter. Clean the underside of the car by hand.

Never wash or leave the car to dry in the sun, but wipe it dry with a chamois leather immediately after washing to avoid smears and streaks.

Clean the window glass inside and out using a high quality window cleaner. This is particularly important when the car is new, as upholstery and trim have a tendency to sweat a little at first.

Keep the glass well cleaned, as this helps to prevent misting.

NOTICE

- Try your brakes on leaving a car wash. Wet brake discs may reduce the braking effect.
- Clean the mast of the electrically powered antenna about once a month with a clean, dry rag. **IMPORTANT!** Use no oil, nor any silicone-based cleaning product to lubricate the mast.

Cleaning the soft top

NOTICE

- Note that some automatic car washes can damage a textile soft top. This applies to washes that have mechanical feelers in contact with the bodywork. We advise against washing a Saab 9-3 Convertible in automatic car washes.
- Park in the shade if possible. Long standing in strong sunlight can affect the color and material of the soft top.
- Never use strong bleaches or abrasive cleaning agents, since they can damage the textile soft top.
- Wash bird droppings off at once, since they can have a corrosive effect on the textile soft top and paint.
- During prolonged parking, especially winter storage, the soft top should be up to give optimum airing of the fabric.
- Do not wash the fabric soft-top with a high-pressure jet.
- Strong detergents and solvents can damage the flame retardant treatment of the soft top.

Use mild soap, lukewarm water and a sponge for washing.

Rinse the top thoroughly with plain water to get rid of all the soap. Flush the cleaning agent off the bodywork as well, since it can cause discoloration if it is left to dry on the paintwork.

If further cleaning is needed after soap and water have been used, a mild shampoo may be employed. First rinse the soft top, then use shampoo on the complete top and scrub with a small soft hand brush.

Add water as needed until the cleaning agent lathers. Use a rag or sponge to remove dirt, so as to avoid working it into the cloth. Thoroughly rinse the whole car with plain water and make sure that cleaning agents are not allowed to dry on the paintwork.

NOTICE

After washing, the soft top must be given time to dry completely before being folded down. A wet or damp top that is folded down can be damaged by mold.

Cleaning the rear window

The rear window can be cleaned with a window cleaner or a mild soap solution and a soft, anti-static cloth.

Since the rear window is made of glass, when necessary, you can use an ice scraper on the outside. Never use a scraper on the inside!

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Waxing and polishing

Do not wax a new car during the first three or four months. In fact, there is no need to polish the car before the paintwork has started to go dull through oxidation. Other than in exceptional cases, do not use abrasive polishes containing a cutting agent on a new car. Always wash the car thoroughly before waxing or polishing.

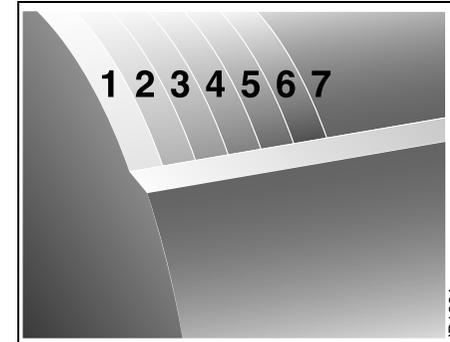
Touching up the paint

Damaged paintwork should be treated as soon as it is discovered: the longer it is left, the greater the risk of corrosion. The anti-perforation warranty does not cover corrosion resulting from untreated defects. Paintwork damage sustained in a crash is usually extensive and can only be properly restored by professionals.

However, you can repair small scratches and stone-chip damage yourself. The necessary tools and materials, such as primer, touch-up paint and brushes, are available from your Saab dealer.

In the case of minor flaws in the paintwork, where the metal has not been exposed and an undamaged layer of paint remains, touch-up paint can usually be applied directly, after any dirt has been scraped away using a pointed knife.

If corrosion has already set in, e.g. as a result of stone-chip damage, use a pointed knife to scrape off all surface rust. If possible, the damaged area should be taken back to the bare metal. The metal should then be primed with two thin coats of primer applied by brush.



Surface-treatment composition

- 1 Body panel
- 2 Zinc (certain parts) 7.5 µm
- 3 Phosphate coating
- 4 Cathodic ED 28 µm
- 5 Intermediate coat 35 µm
- 6 Metallic base/solid base 15 µm
- 7 Clear enamel 40 µm

After the primer has dried, apply several thin layers of topcoat enamel until the surface of the repaired area is flush with the surrounding paintwork.

Stir both primer and touch-up enamel thoroughly before use and allow each coat to dry before applying the next.

Two-coat enamel

As the name implies, two-coat enamel is applied in two operations. The first coat, the base color, contains the pigment, metal flakes and binder. The second coat consists of a clear enamel, which provides the final gloss for the paintwork and protects the base from moisture and environmental contaminants.

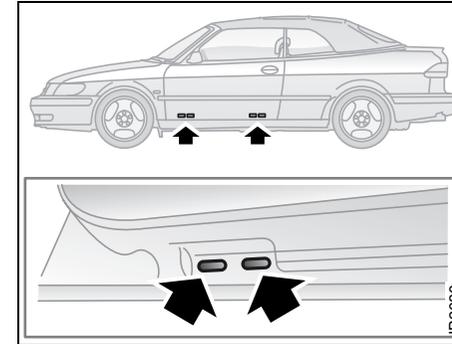
Touch-up stone-chip damage as follows:

- 1 Thoroughly clean the damaged area.
- 2 Then apply the primer, base color, and finally, the enamel. To achieve the best finish, apply two or three coats of primer.

Anti-corrosion treatment

The entire car is corrosion-protected at the factory in different stages by an electrolytic immersion coating and a polyester-based protective coating to protect against corrosion caused by stones flung up by the wheels. A thin penetrating anti-rust oil is also applied in cavities and body members. In addition to conventional anti-corrosion treatment like painting, underbody treatment and cavity treatment, most of the body panel surfaces are galvanized. These include the hood, the doors and the underbody.

The anti-corrosion treatment on the underside of the car and inside the wheel arches is particularly exposed to constant wear and possible damage, the degree of which will obviously depend on driving conditions.



Drainage holes in doors

What causes rust?

Steel body panels of automobiles are subject to rusting whenever air and moisture manage to penetrate the protective finish. Body panels may rust through if the process is unchecked. Rusting can occur wherever water is trapped or where the car's panels are continuously damp.

Damage to paint and undercoating by stones, gravel and minor crashes immediately exposes metal to air and moisture. Road salts used for de-icing will collect on the bottom of the car and promote rusting. Areas of the country with high humidity have a greater potential for rust problems, especially where salt is used on roads or there is moist sea air. Industrial pollution (fallout) may also damage paint and promote rusting.

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Preventive maintenance

The following procedures are necessary to help protect against rusting. Refer also to the terms and conditions of the Performance Limited Warranty described in the warranty booklet.

- 1 Wash the car frequently, and wax at least twice a year.** Under adverse conditions, where there is a rapid buildup of dirt, sand or road salt, wash your car at least once a week. After extreme exposure to salted snow or slush, evidenced by a white film on the car, wash the car immediately. Frequent washing will prevent paint damage from acid rain and other airborne contaminants such as tree sap and bird droppings. If any of these contaminants are noticed on the car the finish should be washed immediately.
 - Begin washing by rinsing the entire car with water to loosen and flush off heavy concentrations of dirt (include the underbody).
 - Sponge the car with a solution of either a good quality car soap or mild general purpose (dish washing) detergent and water.
 - Rinse car thoroughly with clean water.
 - After washing, check and clear all drains in doors and body panels.
 - Wipe the car dry, preferably using a chamois.

- 2 Clean the underside of the car during the winter.** Use high pressure water to clean the car's underside (floor panels, wheel wells) at least at mid-winter and in the spring.

- 3 Inspect the car frequently for leaks or damage, and arrange for needed repairs promptly.** After washing or after heavy rain, check for leaks. When washing the car inspect body surfaces for paint damage. While checking for leaks, lift the floor mats and check underneath them. Water can collect in these areas and remain for prolonged periods. Dry any wet areas including the floor mats. Have leaks repaired as soon as possible.

Use touch-up paint to repair small scratches or minor finish damage. Areas where metal is exposed will rust quickly and **MUST** be repaired immediately by touch-up or professional repainting. Rust must be removed, the bare metal primed and painted. Major body damage should be repaired immediately and new panels or exposed areas should be undercoated with anti-corrosion material.

Repairs of this type are the owner's responsibility and are not covered under warranty.

Inspect the undercoating and touch up if necessary. Pay particular attention to the fenders and wheel housings, which are exposed to abrasion by flying gravel, etc. If the composition has worn or flaked off, the steel must be thoroughly cleaned and dried before a fresh coat is applied. The cleaning is best done with a scraper and a steel wire brush, followed by washing with solvent. Apply the new coating thinly, otherwise it may run off or fall off when dry.

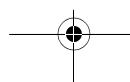
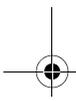
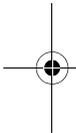


Recovery and/or recycling of automotive materials

A typical car consists of metals (65–75 %), plastics (10–15 %), rubber (5 %) and small quantities of glass, wood, paper and textiles. The recycling of metals has been commonplace for a long time now.

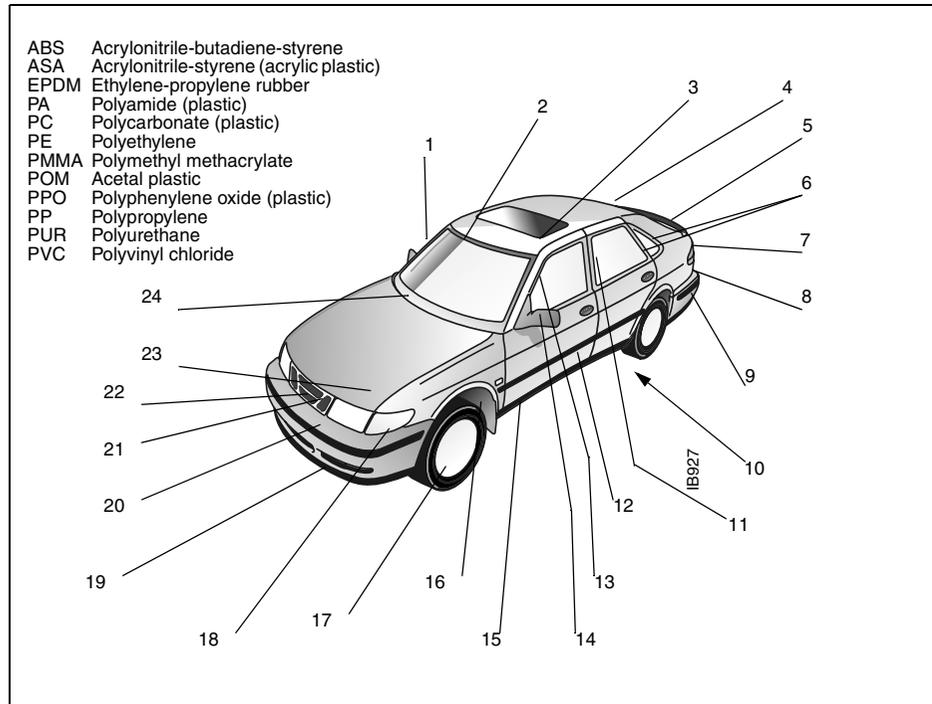
To facilitate sorting of other materials for recycling, plastic parts, for instance, have been marked to identify the precise nature of the plastic.

The quantity of materials in the car that can be recycled or recovered depends on the scrapping facilities in different countries. EU legislation that comes into force in 2006 will require a minimum of 85 % of the total weight of materials to be recycled. However, every major car salvage yard in each market will receive details from Saab of how the highest percentage of materials can be reclaimed.



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- 1 A-pillar trim: PC/ABS.
- 2 Windshield trim: PP, PP/EPDM.
- 3 Seals: EPDM.
- 4 Rear-window casing PUR.
- 5 Trim panel ABS.
- 6 C/D-pillar trim PP.
- 7 Rear light cluster: PMMA.
- 8 Corner filler panel PPO/PA.
- 9 Rear bumper
Expanded PP core
PP/EPDM sheathing.
- 10 Fuel tank PE.
- 11 Side-window casing:
PP/EPDM.
- 12 Side trim PVC.
- 13 A-pillar upholstery textile trim: polyester.
- 14 Rearview mirror: ABS.
- 15 Sill scuff plate: PP/EPDM.
- 16 Wheel-arch liner: PP.
- 17 Wheel cover: PA.
- 18 Direction-indicator lamp lens: PMMA.
- 19 Front spoiler: PP/EPDM.
- 20 Front bumper,
cellular core, expanded PP,
sheathing: PP/EPDM.
- 21 Fan shroud: PP.
- 22 Radiator grille: ABS.
- 23 Washer-fluid reservoir: PE.
- 24 Cowl trim: PC/ASA.



Air conditioning (A/C system)

WARNING

- All repairs and adjustments on the A/C system must be carried out by a Saab dealer authorized for this kind of work.
- The A/C system is pressurized. Do not break any connections or undo A/C system components.
- Escaping refrigerant gas can cause visual impairment or other injury.

NOTICE

- The A/C system is designed for use with R134a refrigerant.
- Refrigerant handling requires special equipment and special procedures for charging and draining the system.
- Never mix R134a and R12 refrigerants.

Fault diagnosis

If a fault occurs in the A/C system, there are a number of checks you can perform yourself. If the fault persists, however, have the system checked by an authorized Saab dealer.

Important!

When the A/C system is in operation, moisture from the air will condense on the evaporator. When the car is then parked, this condensation will drip off the evaporator and form a small pool of water on the ground. This is normal. The warmer the ambient air and the higher the humidity, the greater the amount of condensation formed.

Inadequate cooling:

- a Make sure that the temperature and air-distribution controls are in the appropriate settings, see page 77.
- b Check that the condenser (forward of the radiator) has not become clogged with dirt and insects.
- c Make sure that the drive belt for the compressor is not slipping, see page 185.
- d Check the fuses for the ventilation fans and compressor, see page 196.

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Maintenance

- The drive belt for the compressor should be inspected under the regular service program.
- Clean dirt and insects away from the condenser and radiator to prevent clogging. When washing the car, use the hose to spray the radiator and condenser (located forward of the radiator) from both sides (both from the front of the car and from inside the engine bay). Do not use a pressure washer.

Caution: Do not use the hose when the engine is hot.

Other than in extremely cold weather, do not cover the radiator, e.g. with screen netting, as this will greatly diminish its cooling capacity.

Note: The A/C system will only operate when the outdoor temperature is above the freezing point (0°C, 32°F). Switch on the A/C system when the car stands in a warm place.

Headlight aiming

WARNING

Before checking/adjusting the headlight aiming, switch off the engine to avoid danger of fingers and hands being injured by moving parts.

The radiator fan can start up even when the engine is switched off.

The vehicle is equipped with vertical and horizontal aim indicators. The aim has been preset at the factory and should normally not need further adjustments. This is true even though your vertical and horizontal aim indicators may not fall exactly on the "0" (zero) marks on their scales.

If your headlight is damaged in a crash, the headlight aim may be affected. If you believe your headlights need to be re-aimed, we recommend that you take it to your Saab dealer for service. However, it is possible for you to re-aim your headlights as described in the following procedure.

To check the aim, the vehicle should be properly prepared as follows:

- Place the vehicle on a level pad or surface
- The vehicle should be unladen and fuel tank full, and one person or 160 lbs. (75 kg) on the drivers seat
- The vehicle should not have any snow, ice or mud attached to it
- Tires should be inflated to the prescribed pressure
- Rock the vehicle to stabilize the suspension

Open the hood and locate the vertical aim level (B) that you can see through the top of the headlight lens.

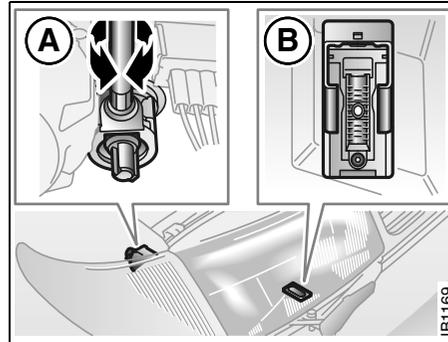
If you find that the headlight needs adjustment follow these steps:

- 1 Locate the vertical aiming device (A) located behind and below the outer headlight assembly.
- 2 Turn the vertical aiming screw with a 0.24 in. (6 mm) Hexagonal Allen wrench until the bubble inside the level is centered between the two red lines (zero).
- 3 Check the horizontal aim (1) and adjust as necessary. The horizontal aiming device (2) is located behind the inner headlight assembly. Turn the horizontal aiming knob until the zero (0) line on the knob aligns with the zero mark on the graduation scale.

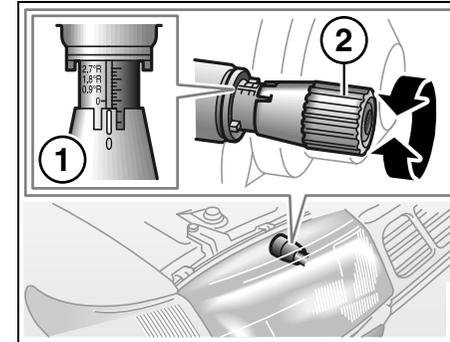
4 Recheck the vertical aim to make sure it is still correct after the horizontal aim adjustment. Readjust as necessary.

NOTICE

To make sure that your headlights are aimed properly read all instructions before beginning. Failure to follow these instructions could cause damage to headlight parts or a not correctly aimed headlight.



Vertical adjustment
A Vertical aiming device
B Vertical aim level

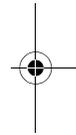


Horizontal adjustment
1 Horizontal aim
2 Horizontal aiming device



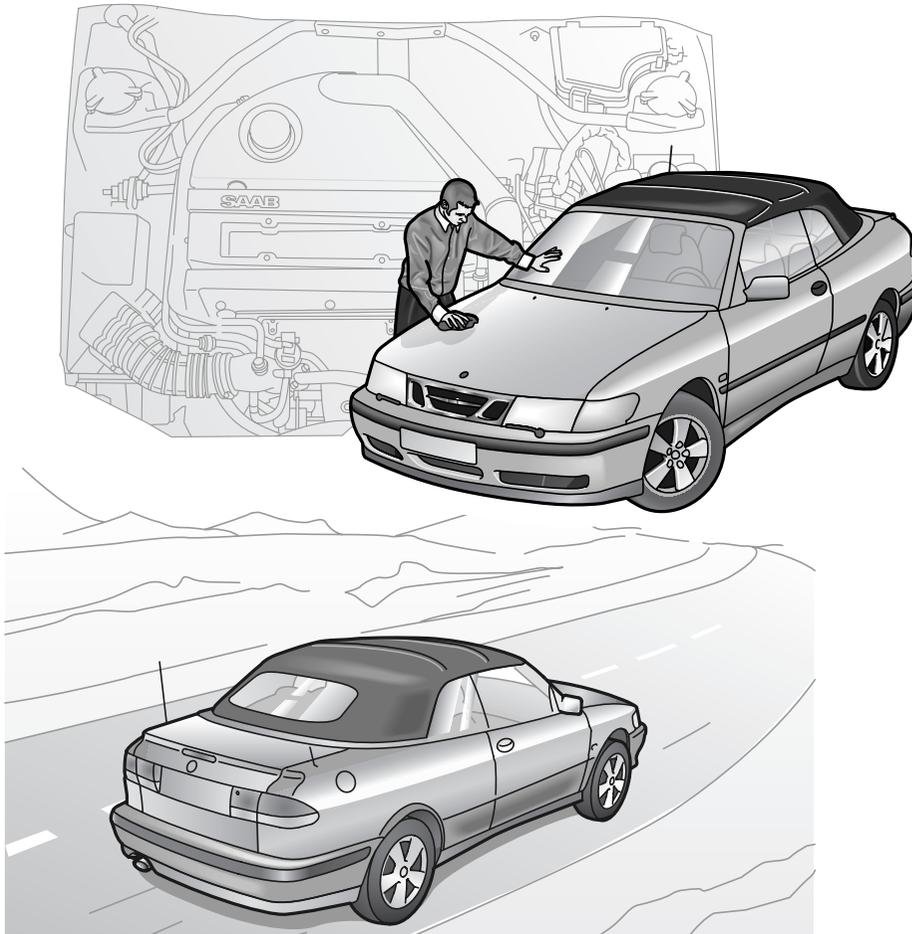
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Maintenance and owner assistance

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222 Maintenance and owner assistance

Maintenance schedule

The Maintenance Schedule prescribes a service program to the purchaser/operator of a Saab that is reasonable and necessary to ensure the proper emission control systems function, safety and reliability of the Saab automobile in normal use. Additional maintenance is recommended for specific components when the car is operated under certain severe conditions. Proper maintenance is always a good practice!

Authorized Saab dealers are equipped and trained to meet your Saab's service needs. They regularly receive up-to-date Saab service manuals and parts and technical service bulletins from Saab and are able, through their franchise agreement, to attend Saab service schools, obtain Saab special tools and technical assistance and purchase original equipment service and replacement parts.

Today's complex automobiles should only be entrusted to the most knowledgeable service professionals. A Saab dealer is your best choice.

Service intervals

The maintenance schedule is comprised of a Check-up 30 days after retail delivery, followed by services at every 10,000 miles (16,000 km) thereafter (10,000, 20,000, 30,000 miles/16,000 32,000, 48,000 km etc.).

NOTICE

The Check-up will be done by your Saab dealer at no charge and should be done as close as possible to the scheduled 30 days.

Engine oil and filter changes

Changing the engine oil and filter is required at every service point. Use only a Saab approved long-life oil filter and engine oils meeting the SAE viscosity ratings and API service classifications stated in the "Technical data" section of this Owner's Manual. The use of extra additives in the oil is not necessary and is not recommended, and may be harmful to turbochargers.

More frequent oil changes are recommended if your vehicle is operated under any of the following conditions:

- Most trips are less than 5–10 miles (8–16 km). This is particularly important when outside temperatures are below freezing.
- Most trips include extensive idling (frequent stop-and-go traffic).
- Most trips are through dusty areas (such as construction zones).
- If the vehicle is used for delivery service, police, taxi or other commercial applications.

If your driving habits match this description, have the engine oil and filter changed in-between normal services at 5,000 mile (8,000 km) intervals. These conditions cause the engine oil to break down faster. The Warranties and Service Record Booklet has provisions to record extra oil changes.

Service record retention

Service instruction coupons and record stubs are provided in the Saab Warranties and Service Record Booklet which accompanies this Owner's Manual. The coupons are arranged in the order that normal service should be performed. The edge of each coupon is shaded to correspond to the type of service point:

- Striped – "Check-up".
- Blue – Oil change/inspection service.
- Black – Major service.

Note that in Canada a combined service and warranty book is used, but not service coupons.

When scheduled services are performed, your dealer will tear out the applicable coupon and use it to check off the operations performed and enter it into the service file at the dealership. The servicing dealer's stamp, along with the date and mileage at which the service was done, should be entered on the corresponding stub which remains in your booklet. The booklet is your permanent record of the services performed. It also includes a log sheet for unscheduled repairs.

It is advisable to retain receipts and, if possible, copies of shop work orders for all service and repair work, wherever performed.

Service costs

Dealer pricing practices and labor for service work vary. Saab's recommended service times for each service point do not include the labor required to replace wear items, such as wiper blades, brake pads or tires. Nor is labor to perform other service or repairs found to be necessary as a result of the inspections included in these times. Additional labor and parts will be charged for such work when necessary, except as covered under an applicable Saab warranty or any optional extended service contract. Transmission fluid changes or suspension alignment, when necessary, are also additional.

Dealer charges for general shop material, regulated hazardous waste removal, recycling expenses or other operation costs may also be applied to service and repair invoices and are apt to vary by dealer and location.

Owner assistance

Warranties and service problem assistance

For complete information about all applicable warranties, including the New Car Warranty, Perforation Warranty, Vehicle Emission Warranty and Emission Perforation Warranty, consult the Warranties and Service Record Booklet which accompanies this Owner's Manual. It also contains owner assistance information including Saab Roadside Assistance. If the booklet is lost or misplaced, a new one may be ordered through a Saab dealer or by contacting Saab.

In the U.S. there is a national Customer Assistance Center at Saab Cars USA, Inc. The toll-free number to call from all 50 states is 1-800-955-9007.

In Canada, please call the Saab Customer Assistance Centre at 1-800-263-1999.

A list of authorized Saab sales and service dealers is available for those planning to travel in the United States and Canada.

Canadian or U.S. travelers may call the Customer Assistance Center in the country in which they are traveling.

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Change of Address Notification (U.S. and Canada)

Two change of address cards are provided at the end of the Warranties and Service Record Booklet. Knowing your current address allows Saab to contact you in the event of a recall or service campaign. Please help us keep our records up to date for your own peace of mind.

Service information

Factory Service Manuals for the Saab 9-3 and 9-5 car lines can be ordered through the dealer. These are comprehensive manuals on CD rom, geared to use by professional technicians.

Consult your Saab dealer for prices for your model.

Reporting Safety Defects (U.S.A.)

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Saab Cars USA, Inc.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Saab Cars USA, Inc.

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 (or 202/366-0123 in Washington D.C. area) or write to: NHTSA, U.S. Department of Transportation, Washington, D.C. 20590. You can also obtain other information about motor vehicle safety from the Hotline.

Reporting Safety Defects to the Canadian government

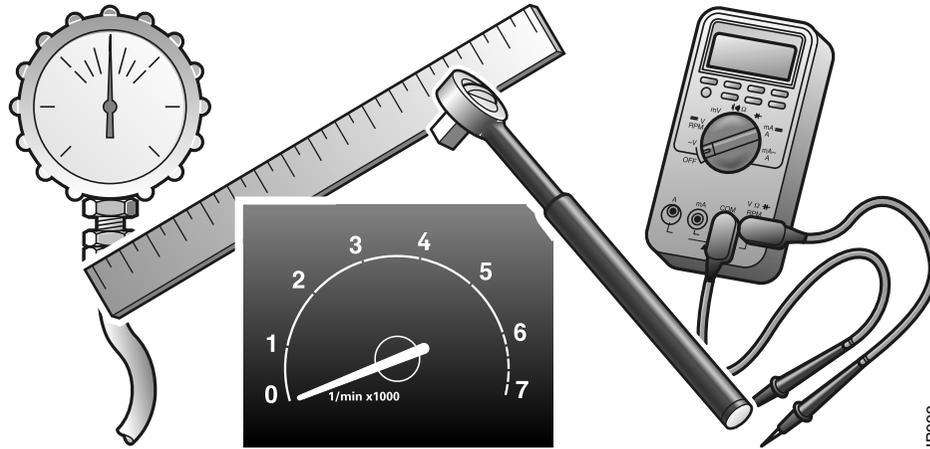
If you live in Canada, and believe that your vehicle has a safety defect, you should immediately notify Transport Canada, in addition to notifying General Motors of Canada Limited.

You may write to Transport Canada at Box 8880, Ottawa, Ontario, K1G 3J2.

In addition to notifying Transport Canada in a situation like this, we certainly hope you will notify us. In Canada, please call our Saab Customer Assistance Centre at 1-800-263- 1999.

Or write:

General Motors of Canada Limited
Customer Assistance Centre,
1908 Colonel Sam Drive,
Oshawa, Ontario, L1H 8P7.



IB993

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226 Technical data

General dimensions

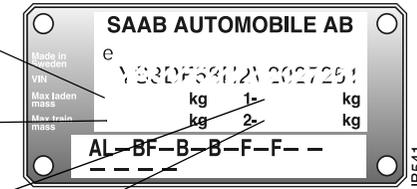
Overall length, with bumper(s):	
Convertible _____	182.3" (4629 mm)
Overall width, including door mirrors _____	76.2" (1936 mm)
Maximum height _____	56.0" (1423 mm)
Maximum height when the soft top is being operated _____	approx. 87" approx. 2200 mm
Wheelbase _____	102.6" (2605 mm)
Track:	
front, Convertible _____	57.2" (1452 mm)
rear, Convertible _____	56.8" (1442 mm)
Ground clearance at max. weight _____	approx. 3.9" (100 mm)
Number of occupants, incl. driver _____	4
Turning circle:	
measured at vehicle extremities _____	36.4 ft. (11.1 m)
curb to curb _____	34.4 ft. (10.5 m)

Gross vehicle weight (GVW)

Maximum train weight (GVW + max. trailer weight)

Maximum axle load, front

Maximum axle load, rear



Permissible load (in addition to the driver) = GVW minus curb weight. The maximum permissible axle load, front or rear, must not be exceeded. The precise curb weight of the vehicle (weight ready for driving + driver á 154 lbs. (70 kg) and load capacity are specified in the vehicle registration documents.

Chassis number plate in engine bay

Length of the trunk:

rear seat raised _____	26.5" (674 mm)
rear seat lowered _____	68.6" (1741 mm)

Volume of trunk according to SAE:

Soft top up _____	12.5 cu.ft. (354 dm ³)
Soft top down _____	10.1 cu.ft. (285 dm ³)

Weight ready for driving (i.e. with full fuel tank, washer- fluid reservoir, standard tools and spare wheel)

Convertible _____ 3160–3260 lbs.
(1435–1480 kg)

Gross vehicle weight (GVW)

Convertible _____ 3940–3990 lbs.
(1785–1810 kg)

Maximum axle load

front _____ 2300 lbs. (1045 kg)
rear _____ 1930 lbs. (875 kg)

Weight distribution:

Curb weight, front/rear _____ approx. 62/38 %
GVW, front/rear _____ approx. 60/40 %

 **WARNING**

- The GVW and maximum axle loads must not be exceeded. Note that if some accessories (e.g. towbar, CD changer) are fitted, the available load capacity is reduced by the weight of these items.
- When carrying a load in the luggage compartment, make sure that it is tied down securely, particularly when part or all of the rear seat is folded down.



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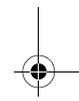
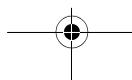
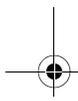
Trailer weights:

Trailer with brakes _____	Max. 3500 lbs. (1588 kg)
Trailer without brakes _____	Max. 1000 lbs. (450 kg)
Recommended towbar-ball load _____	110–165 lbs. (50–75 kg)
Maximum towing speed, trailer with brakes _____	62 mph (100 km/h)

The above max. weights and speed limit are those which Saab Automobile AB permits. Note that the national rules may set limits to permitted weights and speed; see also page 162.

Engine

Type _____	4 cyl, 2 overhead camshafts, 16 valves and 2 bal- ancer shafts
Cylinder bores _____	3.54" (90 mm)
Stroke _____	3.071" (78 mm)
Swept volume _____	121 cu.in. (1,985 dm ³)
Idling speed _____	900 rpm
Antifreeze _____	Saab-approved antifreeze
Coolant volume, cooling system _____	8.7 qts. (8.5 l)



Engine oil

Oil recommendation:

We recommend the use of Saab or Mobil oils, available from you Saab dealer, for regular oil changes. These oils fulfill Saab's requirements as well as the most stringent requirements set by API and ACEA classifications.

Basic recommendations for Saab 9-3 petrol engines

- **SAE 5W-30 or 5W-40.**

The oil should be **semi or fully synthetic** and fulfill grade requirements for ACEA A3/B3, API SJ or higher. In addition to API and ACEA the ILSAC GF-3 specification is approved for use in applicable markets.

Fully synthetic oils with viscosity's 0W-40/50 of well known brands and fulfilling minimum ACEA A3/B3 are also recommended, especially for extreme driving conditions.

Oils that fulfil GM-LL-A 025 requirements for gasoline engines can also be used.

Oil specification

Oil for gasoline engines is classified by the API (American Petroleum Institute) and ACEA (European Automobile Manufacturers Associations) standards.

According to the API standard, engine oils are graded using an alphabetical system with the grade classes SJ (since 1996) and SL (since 2001). The demands of the SL class are most stringent.

Under ACEA nomenclature, oils are divided into Class A for petrol engines and Class B for diesel-engined passenger cars. Class A, for petrol engine oils, is divided into three grades (A1, A2 and A3) where grades A2 and A3 normally encompass semi and fully-synthetic oils.

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Viscosity:

The viscosity of oil is classified according to the SAE standard. Nowadays, multigrade oils are always used in cars. The properties of these oils facilitate starting the car in cold weather but mean that the oil is also viscous enough to coat all moving parts under high pressures and with high outside air temperatures. Multigrade oils are graded with two viscosity's, e.g. 5W-30, where 5W meets certain viscosity requirements at -4°F (-20°C), while 30 fulfils requirements at 212°F (100°C).

Oil capacity inc. filter (on changing) _____ 4.0 l

Fuel

Fuel-tank capacity _____ 17 U.S. gal. (64 l)
 For optimum performance, we recommend 93 AON*), unleaded
 the following _____ gasoline,
 minimum 87 AON

The use of fuel with an octane rating lower than that recommended can cause serious engine damage.

*) If the car is filled with 90 AON gasoline and the outdoor temperature is above $77-86^{\circ}\text{F}$ ($25-30^{\circ}\text{C}$), a slight decrease in engine performance may be noticeable.

Engine variants

2.0 Turbo 205 hp, manual transmission

Rating, EEC, at 5500 rpm _____ 205 hp (151 kW)
 Max. torque EEC at 2200 rpm _____ 206.5 ft.lb (280 Nm)
 Compression ratio _____ 8.8:1

2.0 Turbo 205 hp, automatic transmission

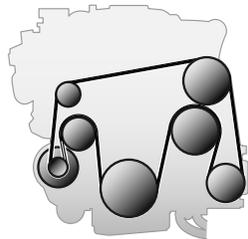
Rating, EEC, at 5750 rpm _____ 205 hp (151 kW)
 Max. torque EEC at 1900 rpm _____ 184.4 ft.lb (250 Nm)
 Compression ratio _____ 8.8:1

Electrical system

Voltage _____	12 V
Battery capacity _____	60 Ah
Starter motor _____	1.4 kW
Alternator rating _____	140 A/14 V
Firing order _____	1-3-4-2
Spark plugs _____	NGK PFR 6H-10
Electrode gap _____	0.95 mm (0.03740")

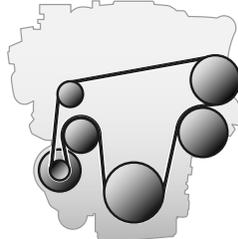
Drive belts

	<u>Outside length</u>
Cars with A/C compressor _____	2345 mm
Cars without A/C compressor _____	1805 mm



IB829

Drive belt, cars with A/C compressor



IB1515

Drive belt, cars without A/C compressor

Manual transmission

Type _____	5-speed, fully synchronized with final-drive gear and differential
Oil type (for topping-up) _____	Saab MTF 0063
Oil capacity _____	1.8 qts. (1.8 l)
Speed (mph/km/h) at 1000 rpm in 5th gear _____	26-27/42-43

Automatic transmission

Type _____	Electronically controlled 4-speed with torque converter and differential
Gear selector positions _____	P R N D 3 2 1
Oil quantity, total _____	7.4 qts. (7.2 litres)
Oil volume (on changing) _____	3.4 qts. (3.25 litres)
Oil type _____	Texaco Texamatic Dexron III, mineral oil based
Clutch type _____	Hydraulically-operated plate clutches, brake bands and one-way clutches
Speed (mph/km/h) at 1000 rpm in 4th gear _____	25-25.5 / 40-41

Rims and tires

Rim size:

Convertible _____ 6.5 x 15, 6.5 x 16 or
7 x 17

Contact an authorized Saab dealer if you wish to fit other wheels than those fitted as standard.

Tire sizes (summer tires):

6.5 x 15 _____ 195/60 R15 88 V
6.5 x 16 _____ 205/55 R16 91 V
7 x 17 _____ 215/45 R17 91W

Tire sizes (winter tires):

6.5 x 16 _____ 205/55 R16 91 Q

Spare wheel:

Tire _____ T115/70 R16
Rim _____ 4.0 x 16
Maximum life _____ 2000 miles
(3500 km)
Maximum speed _____ 50 mph (80 km/h)

NOTICE

Snow chains

Snow chains must **not** be fitted to the rear wheels and must be used on the following tire/wheel combinations:

Wheel	Tire
6.5 x 15 _____	195/60 R15
6.5 x 16 _____	205/55 R16 or 205/55 R16 M+S

Max. speed is 30 mph (50 km/h).

Consult your authorized Saab dealer of approved snow chains.

NOTICE

Bigger rims than 17" must not be used. The offset of the rims must not exceed 49 mm.

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Lowest recommended tire pressure, cold tires

Tire size	Load/speed mph (km/h) ¹⁾	Front psi/kPa	Rear psi/kPa
195/60 R15 88 V	1-2 pers./0-100 (0-160)	32/220	32/220
	3-4 pers./0-100 (0-160)	32/220	32/220
	1-4 pers./100- (160-)	36/250	36/250
205/55 R16 91 V	1-2 pers./0-100 (0-160)	33/230	33/230
	3-4 pers./0-100 (0-160)	33/230	33/230
	1-4 pers./100- (160-)	42/290	42/290
215/45 R17 91W	1-2 pers./0-120 (0-190)	35/240	35/240
	3-4 pers./0-120 (0-190)	35/240	35/240
	1-4 pers./120- (190-)	43/300	43/300
205/55 R16 91 Q Winter tire	1-2 pers./0-100 (0-160)	32/220	32/220
	3-4 pers./0-100 (0-160)	32/220	32/220
T115/70 R16 Spare tire	Max 50 (80)	60/420	60/420

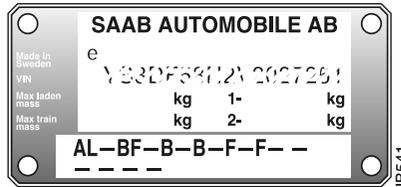
1) Do not exceed posted speed limits.

By cold tires is meant tires that are the same temperature as the surrounding air temperature.

The values for tire pressure in the table above are for tires at 68°F (20°C). The tire pressure will increase as the tires become warm (e.g. during motorway driving), and decrease as they cool.

When the temperature of the tires increase or decrease by 10 degrees the tire pressure will correspondingly increase or decrease by 2 psi/10 kPa (0.1 bar).

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position: 1 2 3 4 5 6 7 8 9 10 11 12
 | | | | | | | | | | | |
 VIN: Y S 3 D F 7 8 K 7 3 7 005543

| | | | | |
 1 2 3 4 5 6 = identification codes for certain chassis details

1 - Region _____ Y = Northern Europe
2 - Country _____ S = Sweden
3 - Manufacturer _____ 3 = Saab Automobile AB
4 - Product line _____ D = 9-3
5 - Model series _____ D = 9-3 with driver's and passenger's airbag
 F = 9-3 SE with driver's and passenger's airbag

6 - Body version _____ 7 = Convertible
7 - Gearbox _____ 5 = Manual 5-speed
 8 = Automatic 4-speed
8 - Engine variant _____ K = 2.0 Turbo (205 bhp)
9 - Check digit _____ 0-9 or X
10 - Model year _____ 3 = 2003
11 - Factory _____ 7 = Nystad
12 - Serial number _____ 000001-999999

Several of the systems in your Saab car may be adjusted to better fit your individual needs

Some functions are governed by legal requirements and cannot therefore be reprogrammed.

Consult an authorized Saab dealer for further information.

Car alarm/central locking system:

- The level of the siren when locking/unlocking, HIGH or LOW.
- The number of blinks when locking/unlocking, 1 to 7.
- Automatic locking of the trunk when the car is driven, 1 to 8 mph (2–14 km/h), YES or NO.
- Preclude the unlocking of the trunk while the car is driven, YES or NO.
- Automatic locking of the trunk after 1 second–4 minutes if it has not been opened, YES or NO.
- Automatic locking of the trunk when it is closed, YES or NO.
- Automatic locking of all doors when the car is driven above 7.5 mph (12 km/h), YES or NO.

Saab Information Display (SID):

- Outdoor temperature display can be adjusted.

Miscellaneous:

- Select the on-time for heated rear seat.
- Coolant temperature gauge adjustment can be increased/decreased.
- Fuel level gauge adjustment can be increased/decreased.
- Additional sweep of the wipers after windshield washer function (ON or OFF).
- Courtesy Headlight Feature (follow-me home) on-time can vary from 20 to 50 seconds.
- Night panel illumination deactivation speed for the speedometer can be adjusted.

Following adjustments can be done by the driver:

Automatic Climate Control (ACC):

To alter the preprogrammed “AUTO” start up mode with your own preferences you can manually select the desired settings for:

- Temperature.
- Fan speed.
- Air distribution.

See “Programming I” on page 87 and “Programming II” on page 88.



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Saab 9-3 Audio System:

The following functions can be adjusted by the driver (see page 103):

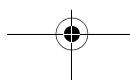
- Maximum starting volume (when the radio is switched on).
- Telephone volume (if the car is equipped with a phone connected to the audio system).
- Speed dependent volume (volume increases or decreases with vehicle speed).
- Loudness.

Alarm System:

The glass breakage sensor can be temporarily disabled, see page 42.

Daytime Running Lights:

To disable, turn off the ignition and pull out fuse 15, see page 196.



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