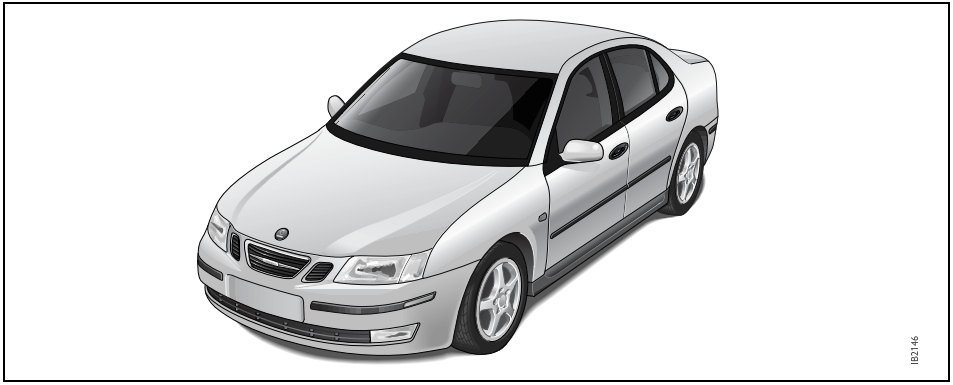
Owner's Manual
Saab 9-3 Sport Sedan M2003

Service Readiness, Saab Automobile AB, Trollhättan, Sweden
Printed in Sweden



Introduction

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

The Saab 9-3 will be available with the following engine variants:

- 2.0t 175 hp
- 2.0 Turbo 210 hp

Although this manual describes the most important differences between model variants, it does not specify the equipment or features included on individual models.

Importation and distribution of Saab automobiles, spare parts and accessories are handled exclusively by Saab Cars, Inc. in the United States and by General Motors of Canada Limited in Canada.

We recommend that you read through the manual before taking the car out for the first time and keep it in the car for future reference.

To find a specific item, use the overviews given on page 3–6. A list of content 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 which contains important warranty information and specifies the regular maintenance to be carried out. Also included is a Quick Reference Guide, an Infotainment System manual, tire warranties and (U.S. customers), a dealer directory with Roadside Assistance Program information.

⚠ 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.

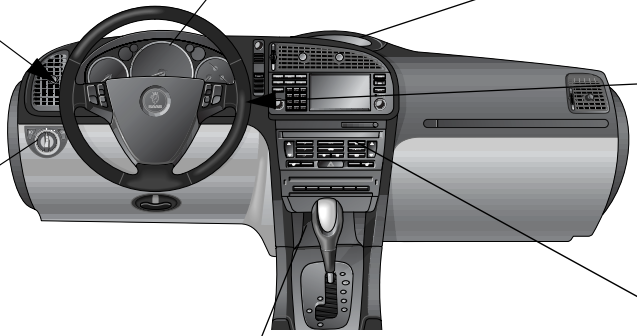
Since the policy at Saab is one of continual improvement, we retain the right to incorporate modifications and to alter specifications during production without prior notice.

If you have any questions concerning your car, its equipment, the warranty conditions, etc., your Saab dealer will be pleased to help, or you may call the Saab Customer Assistance Center in the U.S. at 1-800-955-9007 or email them at saab-crm@saabusa.com. In Canada, please contact the Saab Customer Assistance Center at 1-800-263-1999.

Enjoy the road ahead!

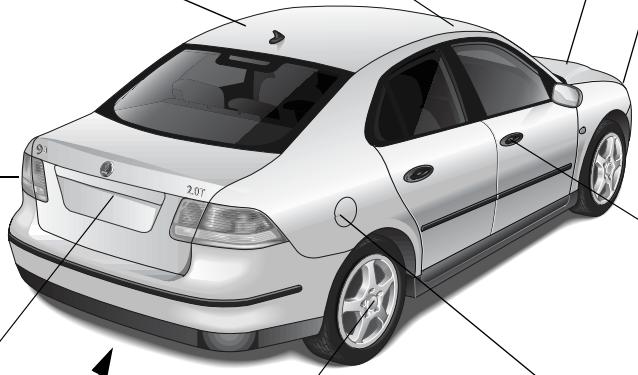
Saab Automobile AB

Instrument panel

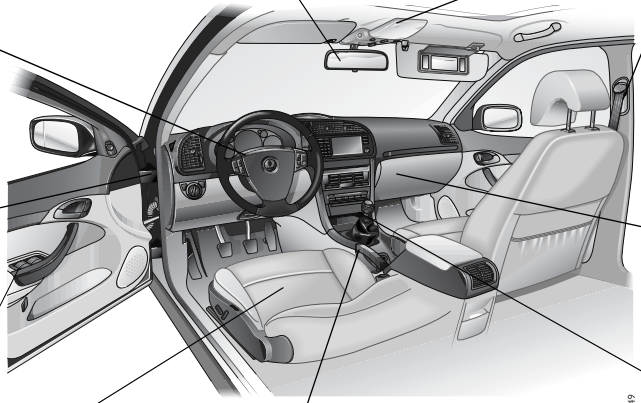


IB2147

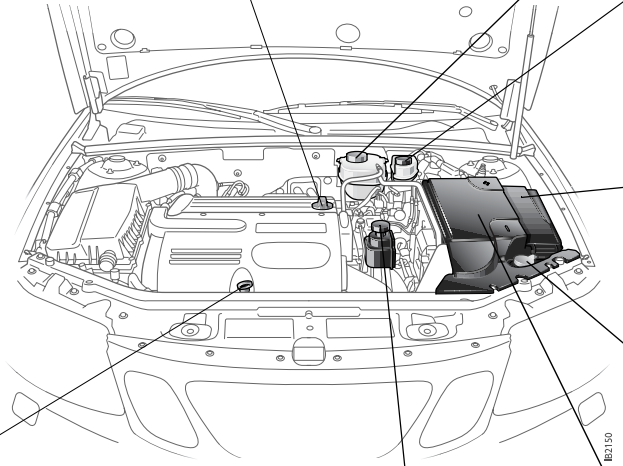
Exterior



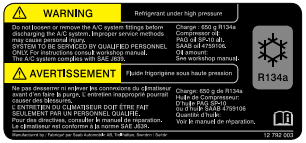
Interior



Engine bay



Warning labels



A/C system:

Refrigerant at high pressure.

Do not loosen or remove the A/C system fittings before discharging the A/C system. Improper service methods may cause personal injury. **System to be serviced by qualified personnel only.** For instructions consult dealer manual.

The A/C system complies with SAE J639.

Charge: 680 g R134a.

Compressor oil: 150 cc PAG oil SP-10 alt.
Saab oil 4759106 SP-10.

IB2771

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

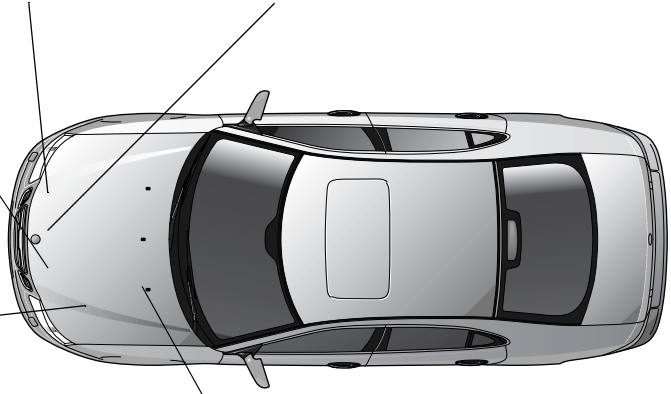
- NO SPARKS, FLAMES OR SMOKING
- SHIELD EYES
- KEEP OUT OF REACH FROM CHILDREN
- ACID
- SEE OWNER'S MANUAL
- EXPLOSIVE GAS

Drive belt:

Danger! Moving belt

Radiator fan:

Radiator fan may start at any time.



CANADA

NETTOYER LE BOUCHON DE REMPLISSAGE AVANT DE L'ENLEVER. UTILISER SEULEMENT DU LIQUIDE DOT 4 PROVENANT D'UN CONTENANT SCELLÉ.

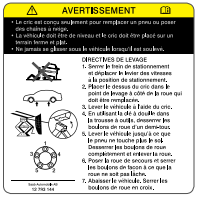
Coolant:

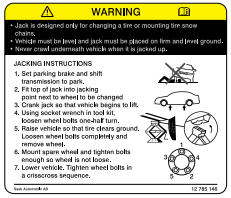
Never open when engine hot!

USA

CANADA

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



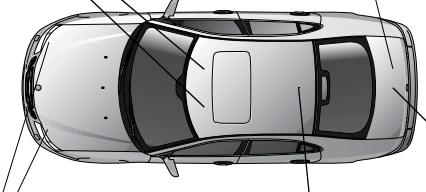


Jack

- Jack is designed only for changing a tire or mounting tire snow chains.
- Vehicle must be level and jack must be placed on firm and level ground.
- Never crawl underneath vehicle when it is jacked up.

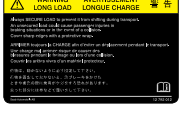
JACKING INSTRUCTION

1. Set parking brake and shift transmission to park.
2. Fit top of jack into jacking point next to wheel to be changed.
3. Crank jack so that vehicle begins to lift.
4. Using socket wrench in tool kit, loosen wheel bolts one-half turn.
5. Raise vehicle so that tire clears ground. Loosen wheel bolts completely and remove wheel.
6. Mount spare wheel and tighten bolts enough so wheel is not loose.
7. Lower vehicle. Tighten wheel bolts in a crisscross sequence.



Contact a Saab dealer if a xenon headlight requires replacement.

This label is only found on cars with xenon headlights.



Long loads:

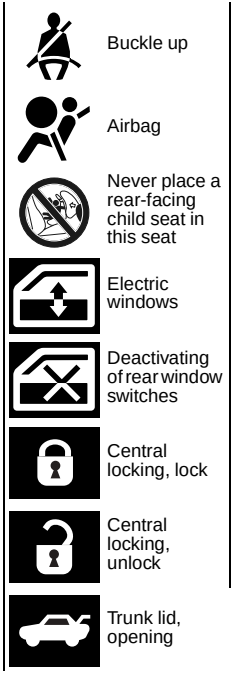
Always secure load to prevent it from shifting during transport.

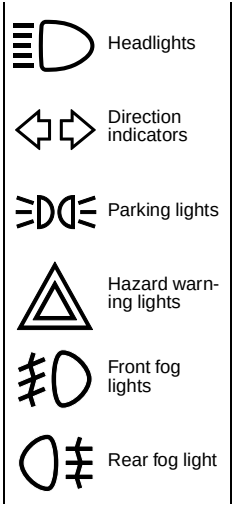
An unsecured load could cause passenger injuries in braking situations or in the event of a crash.

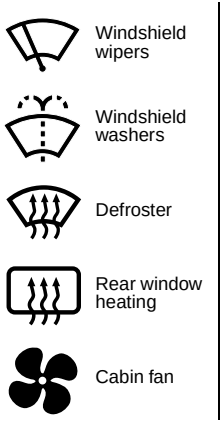
Changing wheels:

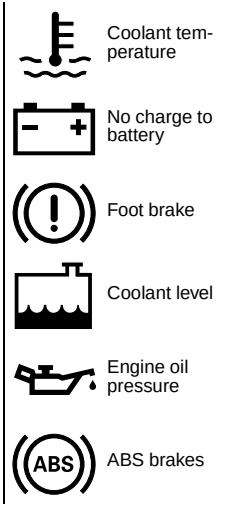
Use on level ground only. Use vehicle support stands. Safe working load 1980 lbs. (900 kg).

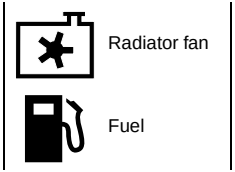
Example of symbols that can be found in your car











Safety

Safety belts

⚠ WARNING

- Buckle up and adjust your safety belt before driving off so that you can pay full attention to the traffic.
- Safety belts must be worn **at all times** by all occupants.
- Child safety, see page 21.
- Check that the locking tongue is properly locked in the belt lock.
- In the event of a crash, a rear-seat passengers not wearing a safetybelt 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.

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.

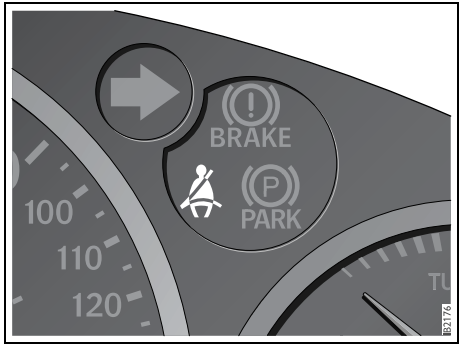
Safety belt reminder

When the ignition is switched on, the safety belt reminder in the main instrument panel will come on if the driver has not buckled up.

In addition an audible signal sounds for 4–8 seconds, or until the driver fastens his belt.

The front seat passenger is reminded to buckle up by the Saab Information Display (SID).

PASS. Use your seatbelt.



Driver seat safety belt reminder

Correct seating position

Correct position for safety belt

⚠ WARNING

Proper positioning of the safety belt is extremely important.

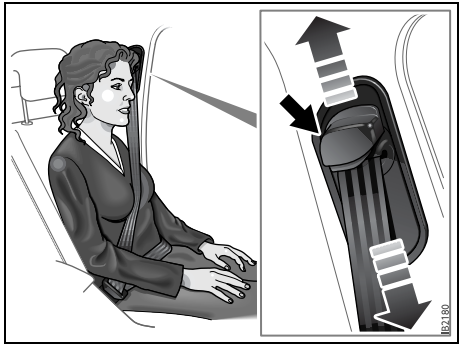
- An out of position safety belt can result in the wearer sliding underneath the belt in a crash (submarining) and injury can result from the lap portion cutting into the abdomen.
- **Never** fasten the safety belt with the shoulder belt behind the body or pull the belt off the shoulder and under the arm.
- Two people must never share one safety belt. In the event of a crash those sharing a belt risk being crushed together and injured.

Consider this:

- Position the lap strap snugly and low across the hips so that it just touches the thighs.
  The shoulder strap must be as far in on the shoulder as possible.
- 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.
- 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!
- 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.
- 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.

To fasten the belt

Press the red button to release the belt



The belt guide on door pillar

Front safety belts

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

Position the lap part low across the hips.

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.

The front safety belts have their lower anchorage points on the seats. The safety belts follow the seats when the legroom is adjusted.

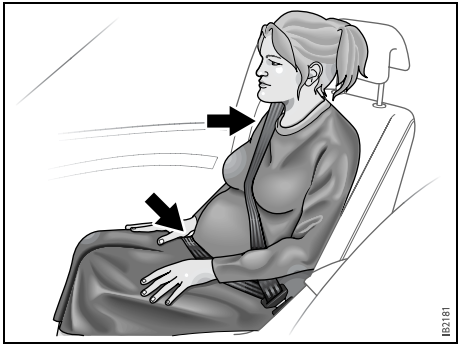
Refer to page 217 for how to check the function of the safety belts, cleaning, etc.

Belt height adjustment

The belt guide on the door pillar for the front safety belts can be set at different heights.

Adjust the belt so that it is as high up as possible without rubbing against the neck. To avoid chafing in the case of a short person, the guide can be lowered until the belt comes about an inch (a few centimetres) from the throat but still provides safe restraint.

Raise the belt guide by pushing it upwards to the desired position. To lower it, depress the catch release button while lowering the guide. Check that the guide locks in its new position.



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 belt pretensioners

⚠ WARNING

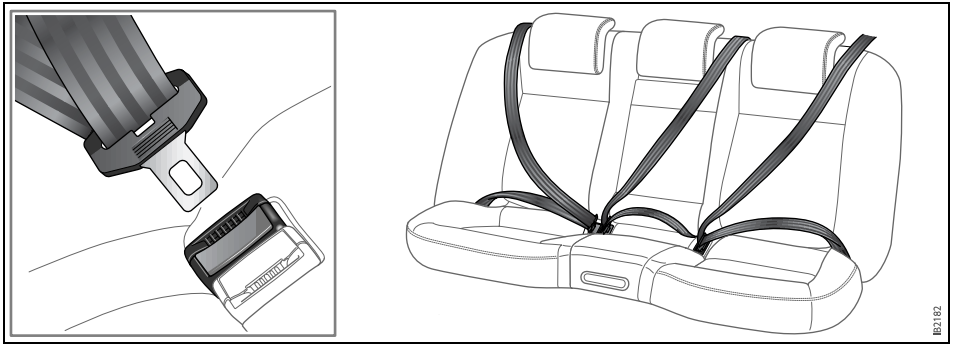
If the car is involved in a crash, the safety belts, belt pretensioners and other components must be inspected by an authorized Saab dealer and replaced as necessary.

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

The belts of the front seats are fitted with automatic pretensioners and force limiters. The pretensioners are activated in the event of a violent frontal or side-on crash. The pretensioners are only activated if the safety belt in question is in use.

The safety belt pretensioners are not activated if the car rolls over.

The safety belt pretensioners serve to reduce the forward movement of the body by tensioning the belt. The force limiters reduce belt loads on the body by "slackening" the safety belt slightly to absorb the body's kinetic energy as gradually as possible.



Rear safety belts

Safety belts, rear seat

The three rear seats all have three-point safety belts with inertia reels.

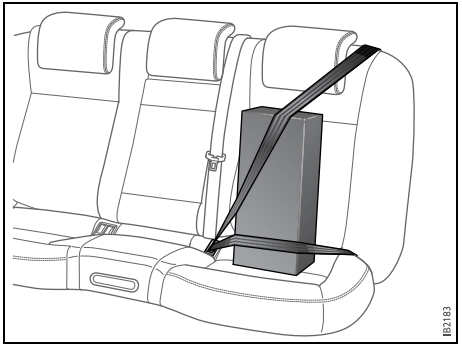
Fasten the belts by pulling the belt across you and inserting the tongue into the buckle. Check that it is securely fastened.

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 buckle to release the belt.

Securing an item on the rear seat



⚠ WARNING

- Make sure that the belt does not become trapped when the backrest is folded down or raised (see page 116).
- 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.
- Make sure you use the correct safety belt buckle. The buckles for the center and left-hand rear seats are close together.

See page 217 for the checking of belt function, cleaning, etc.

Seats

⚠ WARNING

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

Manually adjusted front seats

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

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

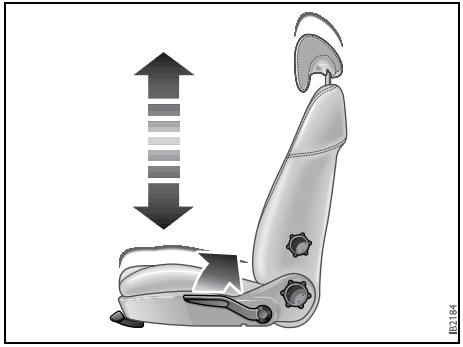
Lastly, adjust the position of the steering wheel (see page 98).

Electrically adjustable front seats

See page 18.

Electric heating, front seats (option)

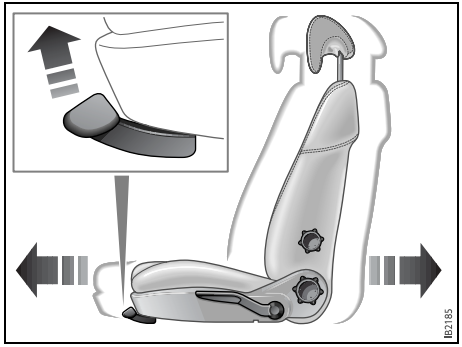
See pages 83 and 92.



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

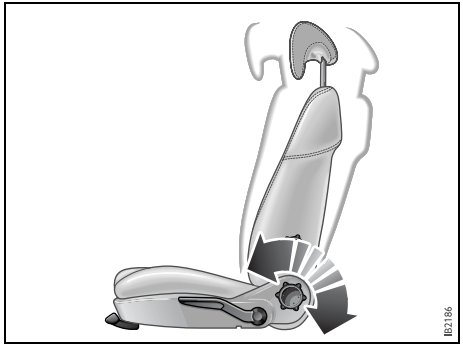
Check that the seat is locked in the new position. If not, it may move while the car is being driven and it could result in injury to the occupant in the event of a crash.

Backrest rake angle

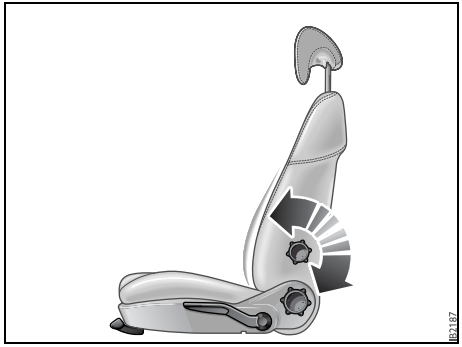
⚠ WARNING

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.

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



Adjusting the backrest



Lumbar support

Adjust the firmness of the lumbar support by turning the knob.

Electrically adjustable front seats (option)

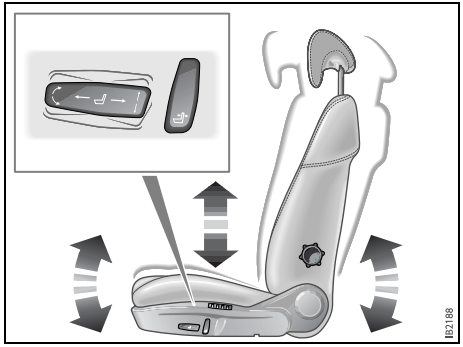
⚠ WARNING

- 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 behind the seat when adjusting it.
- Bear in mind that children can be injured if they play with the electrically-operated seats.
- **Always** remove the remote control when you leave the car to prevent personal injury caused by the electrically adjustable seats, for example, due to children playing.

With the doors closed the seats can only be adjusted when the ignition is ON.

However, there are two exceptions:

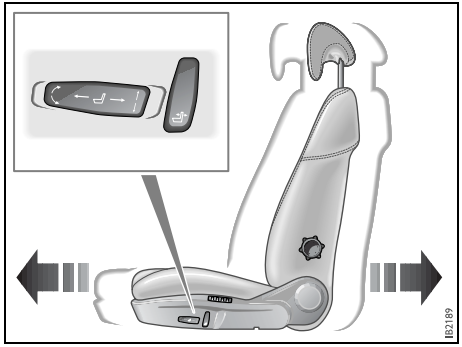
- To facilitate getting into the car, both seats can be adjusted when either of the front doors is open.
- The seats can be adjusted up to 20 seconds after both doors have been closed (applicable only to cars without window and sunroof pinch protection).



Height adjustment and seat angle

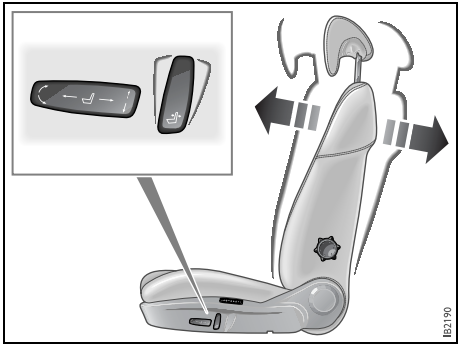
Adjust the height of the seat with the rear section of the front lever.

Adjust the angle of the seat with the front section of the front lever.



Legroom adjustment

Adjust the legroom with the front lever.

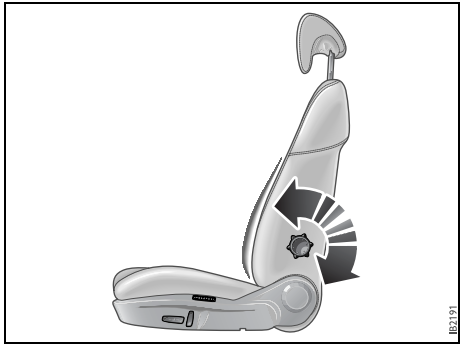


Backrest rake angle

WARNING

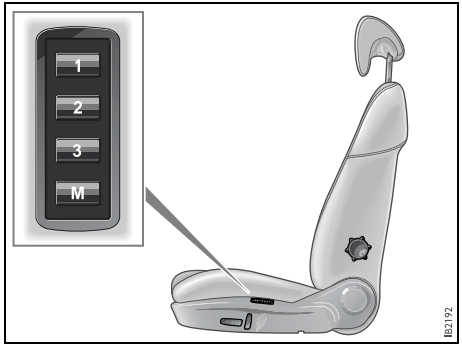
The backrest should be upright during driving, so that the safety belt, airbag and backrest can provide optimum protection in the event of emergency braking or a crash, in particular a rear-end collision.

Adjust the rake angle of the backrest with the rear lever.



Lumbar support, driver's seat

Adjust the firmness of the lumbar support by turning the knob.



Memory function (option)

The legroom of the driver's seat with memory can always be adjusted, irrespective of whether or not one of the front doors is open. Nor does the position of the ignition switch make any difference. If the ignition is ON, all adjustments can be made. When a front door is open, all seat settings can be adjusted for up to 20 minutes.

The memory also includes the door mirror settings.

Storing and restoring settings

1. Adjust the seat and the door mirrors. The lumbar support is not included by the memory function.
2. Press and hold the M-button and then press one of the preselect buttons (1, 2 or 3). A chime will sound to confirm that the settings have been saved.

To recall programmed settings, press and hold the desired memory button while the seat and door mirrors adopt their programmed positions. The memory function also includes the door mirror settings.

To facilitate reversing, the passenger-side door mirror can be angled down, refer to page 110.

Head restraints

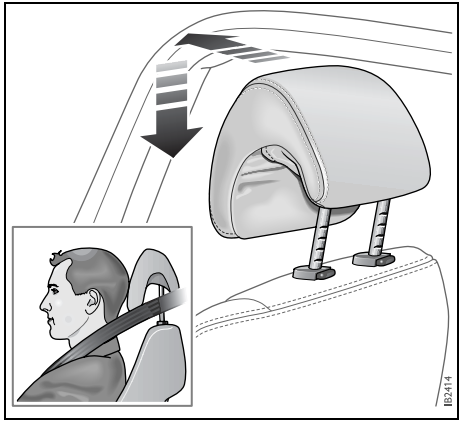
⚠ WARNING

- 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.
- Raise the head restraints in the seats that are occupied.

The front seats are equipped with Saab Active Head Restraints (SAHRs). These reduce the risk of neck 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.



Therefore, the SAHR does not normally need to be replaced or repaired after a rear-end crash.

The front and rear head restraints can be raised and lowered to a number of positions.

- Raising: grasp the head restraint on both sides and pull it straight up.
- Lowering: Press the head restraint forward and downward.

The rear head restraints can be lowered fully to improve rearward vision when the rear seats are unoccupied.

Child safety

⚠ WARNING

- Children must **always** be suitably restrained in the car.

• DEATH or SERIOUS INJURY can occur

•Children 12 and under or shorter than 55 inches (140 cm) can be killed by the airbag

- 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 airbag
- ALWAYS use SAFETY BELTS and CHILD RESTRAINTS

⚠ 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 remote control 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 children from getting into the trunk from inside the car.

The same attention must be given to child safety in the car as is given to adults.

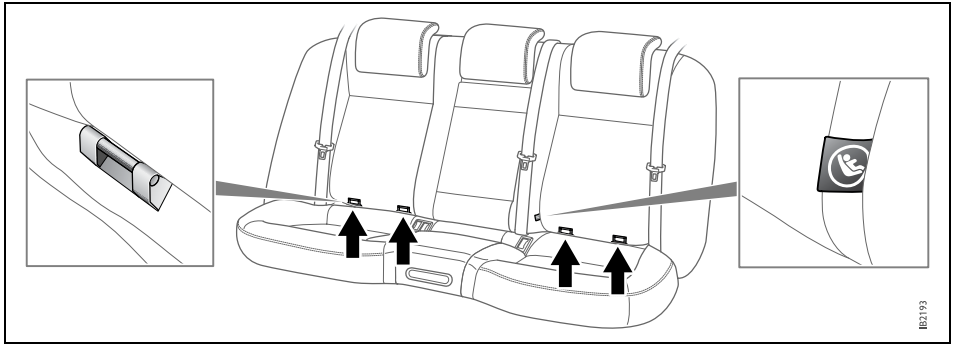
Saab recommends rearward facing restraints for children 3 and under.

Children travel most safely when properly restrained, but restraints must be suitable for the size of the child.

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 restraint instructions.

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



Lower anchorages (ISOFIX) in the rear seat

LATCH

LATCH (Lower Anchorages & Top tethers for CHildren) is a US/Canadian safety standard for a uniform method of fitting child restraints without using the standard safety belts. Only certain child restraints are equipped to utilize the LATCH system.

The LATCH system is installed in the car to facilitate proper fitting of child restraints designed for and equipped with LATCH attachments.

The LATCH system consists of top tether and lower anchorages (also called ISOFIX). In this vehicle, LATCH is installed at the two outboard seating positions in the rear seat, and there is a top tether on the rear center position. The top tethers are located on top of the parcel shelf, see page 24. They are covered by a lid with a child seat anchor symbol. The lower anchorages are located where the seat cushion and seat back come together. There is a label above the inner lower anchorage, see picture above. Label consists of a symbol of a child restrained in a seat inside a circle.

Saab recommends rearward facing restraints for children 3 and under.

If you have any questions regarding LATCH please contact your Saab dealer.

LATCH child seat installation

Before starting the installation, please read through this instruction, and the child seat installation instruction.

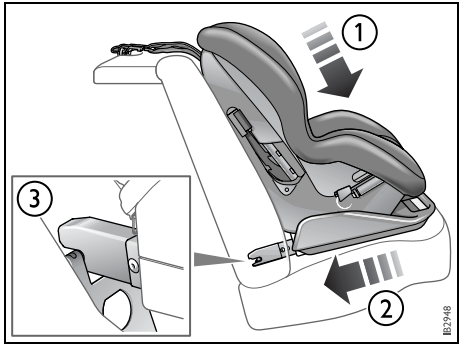
1 Place the child restraint on one of the designated outboard rear seat cushions.
2 Slide the attachment on the child restraint in between the seat cushion and backrest.
3 Press the child restraint down on the seat, **1** in illustration.
4 Press the child restraint rearward, lining up the inner restraint attachment arm with the label, **2** in illustration.
5 Connect the restraint attachment arms to the anchorages **3** in illustration.
6 Follow the child restraint instructions to confirm that both restraint attachment arms are properly attached to the bars.
7 Attach the top tether strap to the in-car anchorage and tighten according to the restraint instructions
8 Pull the child restraint to make a second check that the restraint is securely attached at both the lower anchorage bars and the top tether strap.

Only use the belt supplied with the child restraint.

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

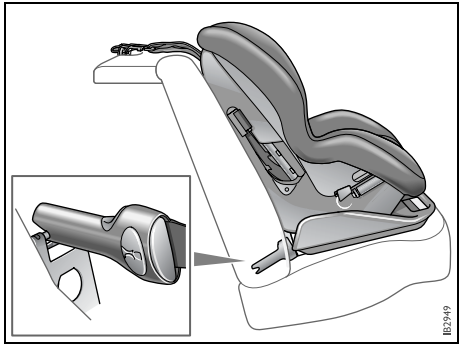
The availability of LATCH child restraints is limited.

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



Rigid 2-point lower anchorage with top tether

Semi-rigid 2-point lower anchorage with top tether



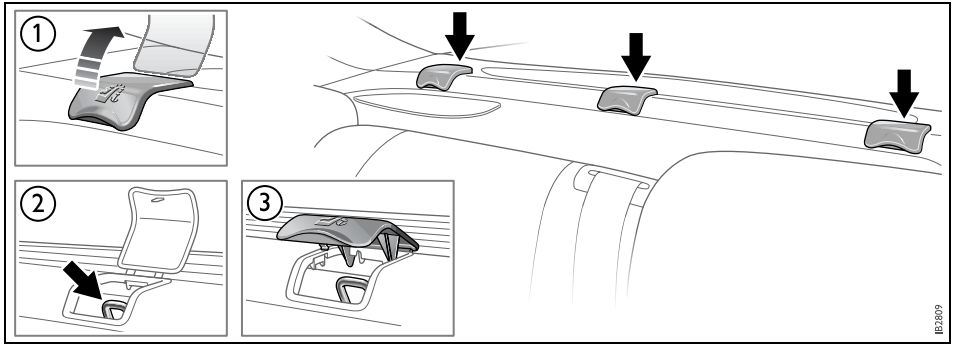
Child tether anchorages for forward facing child seats

⚠ WARNING

Child top 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.

Child restraints with a tether strap must be attached according to Canadian and U.S. safety standards.



Child tether anchorages in parcel shelf

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

1 Open the cover that is right behind the child restraint, **1** in illustration.
2 Place the child restraint in the rear seat.
3 Secure the lower part of the child restraint by means of the lower anchorages (ISOFIX) or the safety belts as described in the child restraint installation instruction.
4 Lower the headrest and route the tether over it.
5 Attach the tether to the anchorage, **2** in illustration.
6 Close the cover to the middle position, **3** in illustration.
7 Tighten the tether so that the back of the child restraint is pressed hard against the backrest.
8 Pull the child restraint to make a second check that the restraint is securely attached at both the lower anchorages bars on the safety belts and the top tether strap.

Installation of child restraint using the standard safety belt

⚠ 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.

Child restraints that are approved for rearward facing installation in the rear seat can be positioned in any of the three 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 restraint manufacturer.

Saab recommends rearward facing restraints for children 3 and under.

If fitting a child restraint that is intended to be secured in position by the standard safety belt, make use of the locking function of the belt.

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

1 Position the child restraint in the back seat.
2 Route the belt in the restraint according to the installation instruction of the restraint.
3 Pull out the belt completely until it stops. Then let the belt slowly pull in the slack. Clicking sound indicates that the lock function is in work.
4 Pull the shoulder belt tight to secure the child restraint in position.
5 Check for correct locking function by pulling on the belt. The belt must not unreel.

The safety belt locking function will be deactivated when the safety belt is retracted.

1 Disengage the safety belt latch from the buckle.
2 Disengage the safety belt from the child restraint, accordning to the instructions from the child restraint manufacturer.
3 Let the safety belt retract until the clicking sound ceases.

Airbag

⚠ WARNING

To reduce risk of death or serious injury:

- **Always** wear your safety belt.
- **Always** adjust your seat so that you are as far back as possible but still able to operate the pedals and reach the steering wheel and controls comfortably.
- Passengers 12 and under or shorter than 55 inches (140 cm) must **always** travel in the rear seat as the car is fitted with a passenger airbag.
- **Never** fit a child seat in front of the passenger airbag.

Airbag system components

- Airbag in steering wheel
- Airbag in instrument panel in front of passenger seat
- Side airbags in front seat backrests
- Inflatable curtains along length of headlining (from front to rear roof pillars)
- Safety belt pretensioners for front seats.

The airbag system supplements the protection provided by the safety belts to further enhance the safety of occupants taller than 55 in. (140 cm).

When the system is activated at the moment of impact, the airbag inflates and then deflates through holes in the back. The whole operation takes roughly 0.1 second, quicker than the blink of an eye.

The steering wheel and passenger airbags are so-called smart airbags. The driver and passenger airbag system compensates for safety belt usage, the force of the crash and the position of the seats at the moment of impact.

- Stage I is activated if the force of the impact is low or if the seat is close to the steering wheel or fascia.
- Stage II is activated in all other cases.

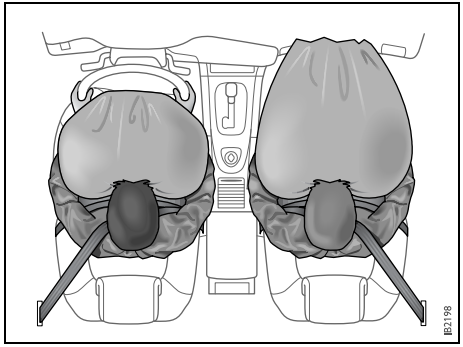
Note:

The sensor reacts differently depending on whether or not the front safety belts on the driver's and passenger sides are used. Situations can therefore arise where only one of the airbags inflates.

If the force of the impact is small, the airbag needs only to inflate to Stage I to provide optimum protection. If the seat is positioned far forward (the person occupying the seat is fairly short), only Stage I is activated to prevent injury caused by the airbag being inflated with full force.

If only Stage I is activated at the moment of impact, Stage II will be activated later. This occurs when the airbag is already fully inflated and thus does not affect the person occupying the seat. Stage II is activated here to render the gas generator harmless (its activation is not noticeable to the occupant).

Inflated airbag (driver's side). Inflation and deflation of airbag takes approx. 0.1 s



Both front airbags inflated

The driver and passenger front airbags are triggered by violent front-end crashs. They are not activated by minor front-end impacts, if the car overturns or by rear- and side-impacts.

There are two impact sensors on the front bumper, under the lacquered shell. Very soon after the moment of impact, these register that the car is involved in a crash. Using this information and data from the central sensor in the control module, the control module determines whether or not to inflate the airbags. The control module also controls whether other components of the airbag system are to be deployed: safety belt pretensioners, side airbags and inflatable curtains.

Which airbag system components are deployed depends on a number of factors, such as the force of the crash and the angle of impact.

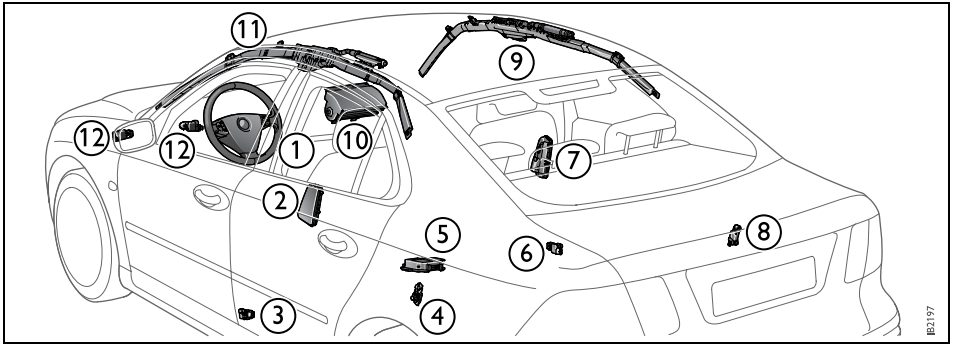
If the airbag system registers forces equivalent to a high-speed crash (airbags inflated to Stage II), the inflatable curtains will also be activated (see page 32).

If the airbags are deployed, the positive terminal of the battery will be disconnected, See page 184.

If a fault arises in the airbag system during a journey, the airbag warning lamp on the main instrument panel will come on and the Saab Information Display (SID) will display:

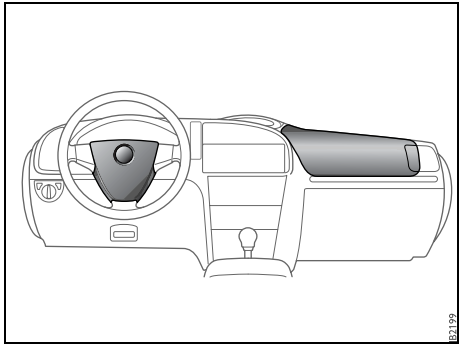
Airbag malfunction.
Contact Saab dealer.

The car is equipped as standard with a passenger airbag.



Airbag system

1 Steering wheel with integral airbag
2 Side airbag
3 Sensor, side airbags and inflatable curtains
4 Sensor, side airbags and inflatable curtains
5 Electronic control module and central sensor
6 Sensor, side airbags and inflatable curtains
7 Side airbag
8 Sensor, side airbags and inflatable curtains
9 Inflatable curtain
10 Passenger airbag
11 Inflatable curtain
12 Sensors in front bumper

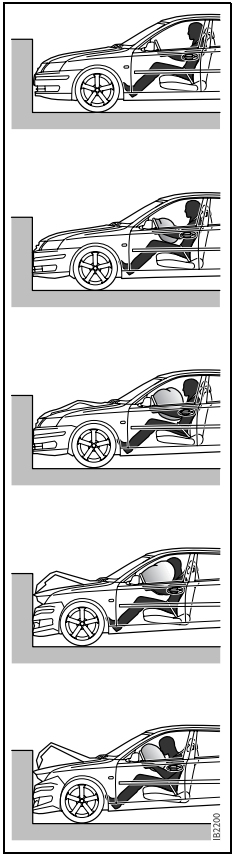


Accessories and other equipment must not be fitted to the surfaces marked as these are where the airbags inflate in the event of a crash.

⚠ WARNING

- Even if the car is equipped with AIRBAGS, 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 airbag 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 57.
- Fumes are generated by the chemical reaction that inflates the airbag.
  Skin surfaces that show signs of irritation should be washed with clean water and a mild soap as soon as possible.
  In the event of eye irritation, flush the eyes thoroughly with clean water for at least 20 minutes.
  In case of persistent irritation, consult a doctor.

Operation of the steering wheel airbag in a front-end crash



Moment of impact.

Sensors detect a decelleration and send a signal via the control module to a gas generator that inflates the airbag.

The inflating airbag cushions the driver.

Airbag now fully inflated.

The airbag starts to deflate.

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 system is the same as that used on the driver's side.

The airbag systems are interconnected and have a common warning light . The passenger airbag module is housed in the fascia above the glove compartment and is marked "AIRBAG".

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.

The car is equipped as standard with a passenger airbag.

⚠ WARNING

• DEATH or SERIOUS INJURY can occur

•Children 12 and under or shorter than 55 inches (140 cm) can be killed by the airbag

- 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 airbag
- ALWAYS use SAFETY BELTS and CHILD RESTRAINTS
- **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.

Head protection

The pillar trim and headlining are designed to absorb energy, softening possible blows to the head. After a crash, these items must be changed in the seat positions that were occupied. Never fit accessories to the pillar trim or headlining as these could reduce the effectiveness of the head protection and inflatable curtain.

Side airbags

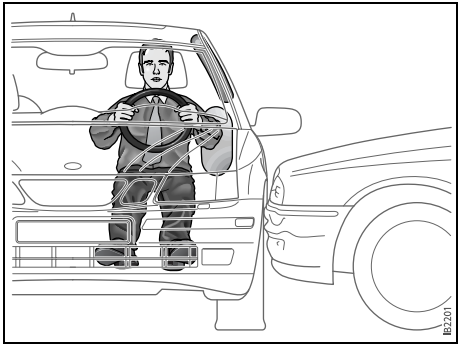
WARNING

- This car is equipped with side airbags and no extra seat cover 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 side-impact protection will only be activated in the event of a side-on crash or high-speed frontal crash (airbags inflated to Stage II), but not in the event of a rear-end crash or the car 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.

The side airbags, which protect the upper body, are integrated in the outside edges of the front seat backrests.

The front seats have safety belt pretensioners.

There are two sensors on each side of the car, one at the rear of each door sill. The side-impact protection is only activated on the side of impact, while the safety belt pretensioners on both sides are deployed.



Inflated side airbag

Inflatable curtains

⚠ WARNING

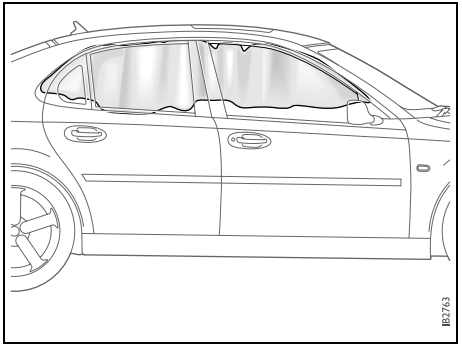
- Do not sit with your head rested against the side window. The inflatable curtain is designed to inflate between the window and the head. Resting the head against the window could prevent the inflatable curtain from providing the intended protection.
- Hang only light clothes from the hooks on the rear seat courtesy handles. The items of clothing must not contain heavy or sharp objects. Do not use wire coat hangers.
- Do not position a sun visor or similar in the area that would be filled by the inflatable curtain.
- To reduce the risk of head injuries in the event of a crash, the roof pillars and headlining incorporate cushioning material. Do not attach anything to the car's headlining, roof pillars or side panels as this could prevent the side-impact protection from providing the intended protection.
- Do not stack loads so high that they could encumber the inflatable curtain in the event of a crash.

The inflatable curtains, which protect the head, are concealed along the lengths of the headlining (all the way from front to rear roof pillars).

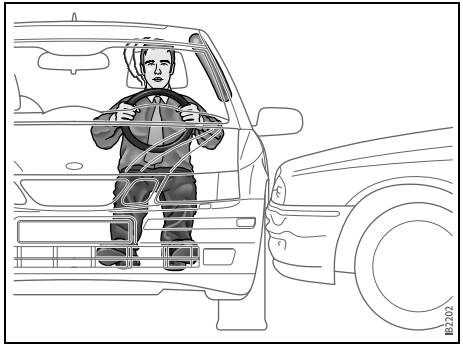
The inflatable curtains inflate at the same time as the side airbags in the front seats in case of a side-on impact.

The inflatable curtains reduce the risk of head injuries to the occupants of the car's outer seats. The inflatable curtains deploys into the window area between the front and rear roof pillars.

If the airbag system registers forces equivalent to a high-speed frontal crash (Stage II for the steering wheel and passenger airbags), the inflatable curtains will also be deployed.



Inflated inflatable curtain



Inflated inflatable curtain

Prohibited seating position

For optimal protection, do not sit too close to the door. Bear this in mind, for example, if someone is sleeping in the car. The inflatable curtain comes down from the headlining and covers a large portion of the side windows.

Airbag warning lamp

⚠ 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 57.
- 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.

Crash sensing

Crash sensing and diagnostic modules have been used in automobiles since airbags were first produced. The technical information gained from these modules can be useful to understanding the circumstances that led to the airbag deployment. In addition, information from many field events can be used in the aggregate to help manufacturers and others better understand real world crashes. This, in turn, can lead to improved automotive safety.

Your vehicle is equipped with two electronic frontal sensors, which helps the sensing system distinguish between a moderate frontal impact and a more severe frontal impact. Your vehicle is also equipped with a crash sensing and diagnostic module, which records information about the frontal airbag system. The module records information about the readiness of the system, when the system commands airbag inflation and driver's safety belt usage at deployment or in a near-deployment crash. The module also records speed, engine rpm, brake and throttle data etc.

Servicing the airbag system

The airbag system 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.
- During any welding, **both** battery cables must be disconnected and covered.
- Before quick drying paint in the vicinity of the electronic control module, the module's grounding points and wiring must be covered.
- Airbags and safety 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 be carried out by authorized personnel only.

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 system components merely supplement the car's normal safety system. Moreover, the front airbags will only be actuated in a moderate to severe frontal, or near-frontal crash, which means, of course, that they provide no protection in minor frontal crashes, major rear- or side-crashes or if the car rolls over.

The safety belts help to reduce the sideway movement of the body in a crash.

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 , 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 frontal 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 of an very short duration 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 or shorter than55 inches (140 cn) can be killed by the airbag.

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.

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.

Are the dust 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.

Security

Doors

Open the door by lifting the door handle.

The following message appears on the Saab Information Display (SID) if a door is not closed (text displayed first when vehicle speed exceeds 15 mph (25 km/h) and the door has still not been closed):

Close doors.

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.

Remote control

The remote control and ignition key are integrated in one unit, and referred to in this manual as the remote control.

The remote control contains a mechanical key, referred to in this manual as the traditional key. This traditional key can be used in an emergency to lock or unlock the driver's door from outside (see page 40). This key does not fit the ignition switch.

A key code number is supplied with your car. This number needs to be quoted for ordering a new traditional key (contained in the remote control). Therefore, keep this number in a safe place.

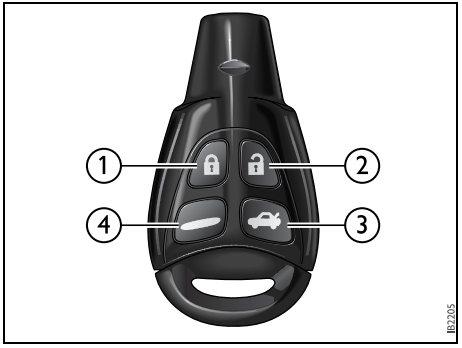
The remote control contains an electronic code that is unique to your car. When the remote control is inserted into the ignition switch, this code is checked. If the code is incorrect, the car will not start.

The car is supplied with two remote controls. It is possible to have up to five remote controls programmed for the car at any one time. If one is lost, a replacement should be obtained as soon as possible. Contact your Saab dealer. When a new key is programmed into the car, the lost key will be deprogrammed automatically.

Note:

If a new remote control has to be ordered and programmed, at least one old one is required for the locking system's electronic unit to recognize the new (ordered) remote control.

Once the new remote control has been programmed, the old unit that is lost will not work. Therefore you should carry two remote controls separately, especially on long journeys.



Remote control

1 Locks car
2 Unlocks car and turns on cabin lighting
3 Unlocks and opens trunk lid.
4 Turns on exterior and cabin lighting. Activates panic function

NOTICE

The remote control contains delicate electronics.

- Do not expose it to water.
- Avoid rough handling.
- Do not place the remote control where it may be subjected to high temperatures, e.g. on the instrument panel.
- Warm the remote control in your hands for a couple of minutes if it has become very cold to prevent malfunction.
- For details on changing the battery, refer to page 44.

Remote control functions

Button	Pressed once	Pressed twice	Hold and press the button >2 s
	Locks all doors, fuel filler door and trunk lid.		Comfort closing, see page 100.
	Unlocks driver´s door and fuel filler door.	The other doors are unlocked and the trunk lid switch is enabled.	Comfort opening, see page 99.
	Unlocks and slightly opens trunk lid. Checks number of remote controls, see page 43.		
	Turns on exterior and cabin lighting *) (for 30 s) or turns off lighting and deactivates panic alarm.		Panic alarm (activates alarm manually), see page 49.

*) parking lights, side direction indicators, tail lights and license plate lighting.

Locking/unlocking the car

⚠ 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.

Never lock anyone in the car.

Remote locking and unlocking also control the car alarm.

Remote locking

Press the button once: all doors and the trunk lid locked.

The hazard warning lights will flash once to confirm.

The car will be locked automatically 3 minutes after it is unlocked unless a door or the trunk lid is opened.

Remote unlocking

Pressing the button once: the driver´s door and the fuel filler door is unlocked. Press a second time to unlock the rest of the doors and enable the trunk lid switch.

The hazard warning lights will flash twice to confirm.

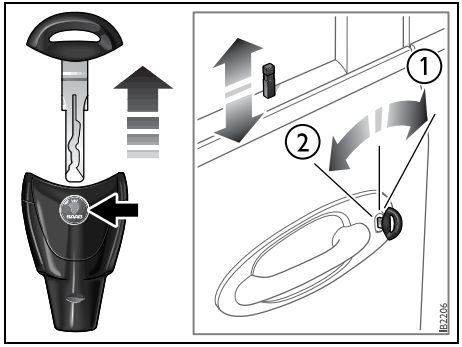
If a fault arises in the locking system, the Saab Information Display (SID) will display:

Lock system failure.
Contact Saab dealer.

Saab Information Display (SID), see page 64.

Intermittent malfunctioning

Equipment in the vicinity of the car that uses the same frequency as the remote control may cause interference to the remote control signal. In this case, retry from another angle and aim at the receiver located by the steering wheel.



Locking/unlocking the front left-hand door with the traditional key
1 Lock
2 Unlock

If remote unlocking should fail to work

1. Remove the traditional key from the remote control by pressing the emblem on the reverse of the remote control. (This key only fits the front left-hand door.)
2. Carefully remove the cover plate from the keyhole in the door.
3. Unlock the door with the key.

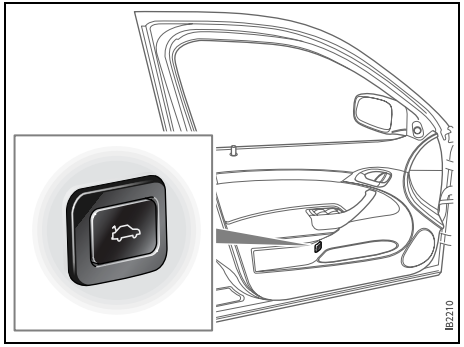
The car alarm will be tripped. To silence the alarm, insert the remote control into the ignition switch.

Locking a car with dead battery

The steering wheel lock requires sufficient battery voltage to lock and unlock. If the battery voltage drops below a certain level while the remote control is in the ignition switch, you will not be able to remove the remote control.

If you must leave the car, proceed as follows:

1. Lock the car by pressing down the lock buttons on the doors.
2. Lock the front left door from outside with the traditional key (see page 40). The car is now locked but the car alarm will remain inactive.



Opening button on driver's door

Trunk lid

Opening

The trunk lid is unlock and slightly opened when the button on the remote control or driver's door is pressed once.

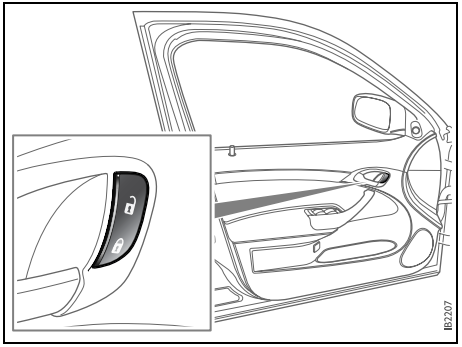
The hazard warning lights will flash three times to confirm.

The movement sensor in the cabin will be disarmed.

Closing

The trunk lid is locked when closed.

If the doors are locked when the trunk lid is closed it is armed and the movement sensor in the cabin will be armed.



Central locking switch

Switches on front doors

The central locking can also be operated from inside the car using the button by each front door handle.

- Locking the car with the remote control renders these buttons inoperative.
- If you are sitting in the car and press the button on the driver's door, this will unlock the driver's door and fuel filler door. Press the button a second time to unlock the remaining doors and the trunk lid. The button on the passenger door works in the same way except that this first unlocks the passenger door and fuel filler flap. In this mode, the other doors cannot be opened from outside the car.

If the car is left with one or more doors open, the interior lighting will be switched off automatically after 20 minutes. This is to prevent the battery from running flat. Also, if the car has electrically adjustable seats, these will cease to operate.

Child safety locks

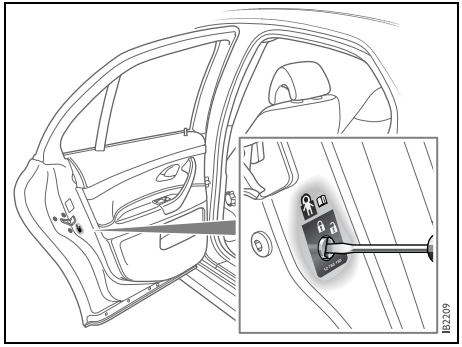
The rear doors are equipped with child safety locks that are activated by means of a catch next to the door latch.

Insert a screwdriver or the traditional key (enclosed in the remote control) and turn it 45° in the direction shown on the label on the door.

When the child safety lock is in the locked position, the door can only be opened from outside the car.

⚠ WARNING

If small children are carried in the rear seat, the safety locks on the rear doors should be activated to prevent unintentional opening from the inside.



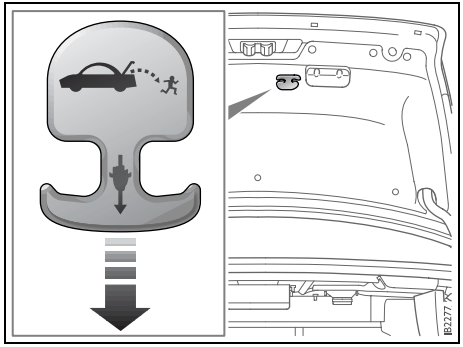
Child safety locks

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 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 Release Handle

Reprogramming lock system functions

Certain lock system functions can be reprogrammed at a Saab dealer (see page 248).

Checking the number of remote controls

To check the number of remote controls that are programmed for the car:

1. Insert the remote control into the ignition switch and turn it to ON.
2. Press the button on the remote control.
3. The Saab Information Display (SID) will now display the number of remote controls that are programmed for your car, and which of these (1–5) is in the ignition switch.

Example of SID message:

X: standard key
Y: valet key
Key No: Z

Changing the key battery

⚠ WARNING

Keep the battery and other small components of the remote control out of reach of children.

NOTICE

The electronics of the remote control are sensitive to electrostatic discharge. Incorrect handling when changing the battery can damage the remote control. Avoid touching electronic components of the remote control with your hands.

When the voltage of the remote control battery drops below a certain level, the Saab Information Display (SID) will display:

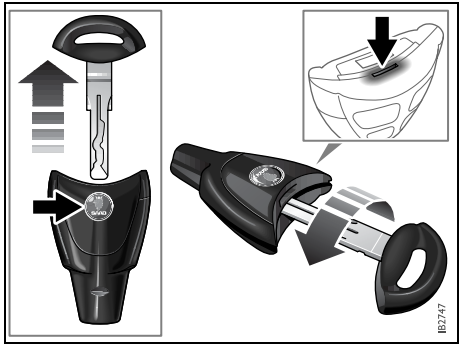
Remote control battery low. Replace battery.

Change the battery as soon as possible to avoid malfunctioning.

Battery type: Panasonic CR2032, 3V Lithium.

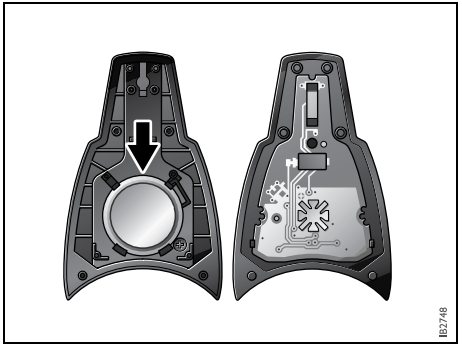
The battery should last for about 4 years of normal use.

The battery type is marked on the inside of the remote control. Avoid leaving fingerprints on the faces of the battery.



Press the emblem to remove the traditional key

1. Press the emblem on the reverse of the remote control to remove the traditional key.
2. Insert the tip of the key into the small slot and turn the key to split the remote control.



Change the battery and fit together the two halves of the remote control

3 Change the battery. Fit the new battery so that it is positioned in the same way as the old battery.
4 Fit together the two halves of the remote control and press them together until you hear a click. Reinsert the traditional key into the remote control.

After changing the battery you must synchronize the remote control with the car's receiver unit so that the car recognizes it. Synchronization takes place when the remote control is inserted into the ignition switch for the first time after a battery change.

If the battery has been changed outside the car and the car is locked, proceed as follows:

1 Unlock the front left door with the traditional key. If the car has a car alarm, this will be tripped.
2 Open the door and insert the remote control into the ignition switch. If the car has a car alarm, this will be silenced. The remote control and receiver unit are now synchronized.

Immobilizer

The remote control contains an electronic code that is unique to your car. When the remote control is inserted into the ignition switch, this code is checked and the LED double-flashes for 3 seconds. If the code is correct, the car can be started.

Each time you remove the remote control from the ignition, the electronic starting interlock is activated, the LED double-flashes for 3 seconds and the car becomes immobilized. If an incorrect remote control is now inserted into the ignition switch (e.g. the remote control of another car), the immobilizer will remain operative (the LED will not flash for 3 s) and it will not be possible to start the car.

If the immobilizer system malfunctions, the Saab Information Display (SID) displays:

Immobilizer failure.
Try starting again.
Contact Saab dealer.

If, when inserted into the ignition switch, there is a problem checking the electronic code of the remote control, the following message will appear on the SID:

Key not accepted.
Contact Saab dealer.

Visit a Saab dealer to have the problem checked and rectified.

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 is armed when the car is locked with the remote control.

The car alarm will not be armed if you lock the car with the traditional key (see page 40).

All the doors, the hood and the trunk lid are monitored by the alarm. A movement sensor triggers the alarm if movement is detected in the cabin, such as if someone sticks in their arm through a smashed window.

All the windows should be shut when the alarm is armed. Otherwise, the movement sensor may interpret a passer-by as an attempted break-in.

The alarm is armed 11 seconds after the car has been locked by remote control.

During the delay period, the LED shines constantly. It will then start to flash once every 3 seconds. The LED is located on the fascia.

If a door or the trunk lid is open when the car is locked with the remote control, the LED will flash 3 times per second for 11 seconds. Check that the doors, hood and trunk lid are closed.

If the signal persists, contact a Saab dealer to have the problem checked and rectified.

If you unlock the trunk lid from outside the car with the button on the remote control, you must lock the car with the button to arm the car alarm.

To avoid any inconvenience, make sure that anyone using the car is familiar with how the car alarm and the locking system work.

If the alarm has been tripped since the car was last locked, the Saab Information Display (SID) will display:

Alarm has been triggered since being armed.

If a fault arises in the car alarm system, the Saab Information Display (SID) will display:

Theft protection failure. Contact Saab dealer.

Arming the car alarm

The alarm is armed when all doors, the hood and the trunk lid are closed and you lock the car with the remote control.

What trips the alarm?

The alarm will be tripped if:

- a door, the hood or the trunk lid is opened
- the movement sensor registers movement in the cabin
- somebody tries to hotwire the car
- the car battery is disconnected.

Signals when the alarm is tripped

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

- all direction indicators flash for 5 minutes.
- the horn sounds for 30-second intervals with 10-second breaks (max. 10 cycles).

The signals can vary between markets and due to legal and insurance requirements.

Switching off the alarm if tripped

If the alarm has been triggered (direction indicators flashing and horn sounding) it can be turned off by pressing one of the buttons on the remote control or, if you are sitting in the car, by turning the ignition to ON (see below).

	Turns off lights and horn. Unlocks car.
	Turns off lights and horn. Car remains locked.
	Turns off lights and horn. Unlocks trunk.
	Turns off lights and horn. Turns on exterior and cabin lighting. Car remains locked.
	If sitting in the car: Turn the remote control to ON in the ignition switch

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. The car will be locked automatically after 3 minutes.
- 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.

Movement sensor

The movement sensor monitors the cabin. The alarm will be triggered if a movement is detected, such as if someone sticks in their arm through a smashed window.

Note: Always contact your Saab dealer if you intend to use a separate cabin heater as this can interfere with the movement sensor.

Disabling the movement and tilt sensors

If, for example, you leave a dog in the car or park on a ferry, you should disable the sensors as described below:

1. Go to Profiler by pressing the CUSTOMIZE button (see also 64).
2. Turn the INFO dial until Theft Alarm is selected.
3. Press in the INFO dial.
4. Select Door alarm only.
5. Confirm this selection by pressing the INFO dial.

Theft Alarm
Full theft alarm
Door alarm only

The movement and tilt sensors will be reactivated automatically the next time you start the car. You can activate the sensors manually before the engine is started as described above.

The functions of Full theft alarm and Door alarm only modes are explained below.

Full theft alarm:

The alarm will be triggered if a window is smashed and someone sticks in their arm to take something from the car. All windows and the sunroof should be shut when the car is locked in Full theft alarm mode.

Door alarm only:

In this mode, the movement and tilt sensors are disabled. This can be useful if you wish to leave a dog in the car or are travelling by ferry, for example.

Panic function

The car alarm includes a panic function. This function allows the alarm to be started manually, for example, to attract attention.

The panic alarm can only be activated while the car is stationary. The alarm is silenced if the car is driven off.

When the alarm is tripped, the lights and horn come on for 3 minutes or until you press one of the remote control buttons.

To start the alarm manually proceed as follows:

- Press and hold the  button on the remote control for more than 2 seconds, or if you are sitting in the car...
- Press and hold the  or  button on one of the front doors for more than 2 seconds.

To switch off the alarm:

- Press one of the remote control buttons or, if you are sitting in the car, the  or  buttons on one of the front doors.

Overview of functions

Locking/arming	Direction indicators flash once.
Unlocking/ disarming	Hazard warning lights flash twice.
Unlocking/ disarming trunk lid	Hazard warning lights flash three times.
Alarm triggered	Direction indicators flash for 5 min. The horn sounds for 30-second intervals with 10-second breaks (max. 10 cycles) or until you press one of the remote control buttons or turn the remote control ON in the ignition switch.

Movement sensor	The movement sensor trips the alarm if it registers a movement in the cabin.
Remote control	Normal range: 5–16 yds. (5–15 metres). In favorable conditions the range can be significantly greater.
Remote control battery	Normal life: approx. 4 years. Change the battery when the SID displays: Remote control battery low. Replace battery. See Changing the key battery, page 44.
Car battery	The alarm will trip if the battery is disconnected when the alarm is armed.

Some car alarm functions and indications can be reprogrammed. Contact a Saab dealer for details of the possibilities and refer to page 248.

Quick guide, LED and Saab Information Display (SID) messages

Activity	LED signal
Arming (delay period)	Shines for 11 s.
Alarm armed	Flashes once every 3 s.
Disarming	Off.
Alarm not armed	Off.
A door, the hood or the tailgate is open or opened during the delay period.	Flashes for 11 s then flashes once every 3 s.
Car immobilized but not locked.	Off.
Change of status of immobilizer system, valid remote control inserted or removed from ignition switch.	Double-flashes for 3 s.

SID message	Reason/action
Key not accepted. Contact Saab dealer.	Error when remote control inserted into ignition switch.
Remote control battery low. Replace battery.	Battery needs replacing. See page 44.
X: standard key Y: valet key Key No: Z	Check of the number of remote controls programmed for your car. See page 43.
Alarm has been triggered since being armed.	The alarm has been tripped since the car was last locked.
Immobilizer failure. Try starting again. Contact Saab dealer.	Error when immobilizer code checked.

Manually opening the fuel filler door

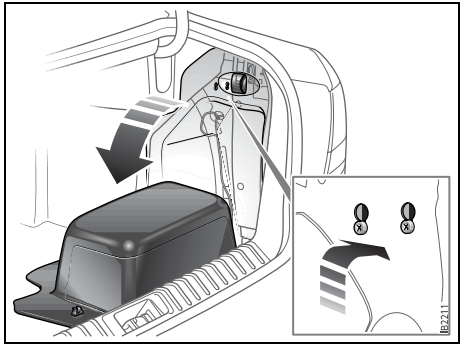
If the fuel filler door, which is controlled by the central locking system, does not unlock, proceed as described below.

Check fuse 7 in the fuse panel at the end of the fascia (see page 201). If this fuse has blown or the new fuse blows, the fuel filler door can be opened as follows:

1. Open the hatch on the right-hand side of the trunk.
2. Loosen the two screws (do not unscrew them fully). Lift up the screws and press them out of their keys.

The fuel filler door can now be opened as usual.

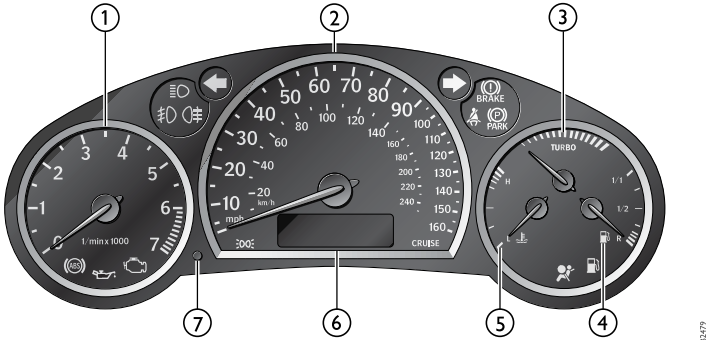
Visit a Saab dealer to have the problem checked and rectified.



Lock motor for fuel filler door

Instruments and controls

Main instrument panel



Main instrument panel

1 Tachometer
2 Speedometer
3 Turbo gauge
4 Fuel gauge
5 Engine temperature gauge
6 Information display
7 Trip meter reset button

Warning and indicator lights

The following warning and indicate lights are found on the main instrument panel.

Antilock braking warning

This warning light illuminates when a fault arises in the antilock brake system.

The following message is shown on the Saab Information Display (SID):

Antilock brake malfunction. Contact Saab dealer.

The brake system will continue to function but without ABS modulation.

Warning, oil pressure (engine oil)

This light will come on if the engine oil pressure is too low. If the warning light flashes or comes on while you are driving, stop immediately in a safe place, switch off the engine and check the oil level (see page 176).

NOTICE

Never drive the car when the oil pressure warning lamp is on. Low oil pressure can cause serious engine damage.

The following message is shown on the Saab Information Display (SID):

Oil pressure low.
Make a safe stop.
Turn off engine.

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 or ignition system. The car may still be driven with care but the performance of the engine will be somewhat diminished (see page 125).

The following message is shown on the Saab Information Display (SID):

Engine malfunction.
Contact Saab dealer.

NOTICE

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

High beam Indicator

This light shows when the high beam is on (see page 72).

Front fog lights

This light indicates when the front fog lights are on (see page 74).

The front fog lights are switched off automatically when the engine is switched off. When the fog lights are next needed, they will have to be switched on manually.

Rear fog light Indicator

This light indicates when the rear fog light is on (see page 74).

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.

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. This light indicates when the brake fluid level is too low (see page 180).

The following message is shown on the Saab Information Display (SID):

Brake fluid level low.
Make a safe stop.
Contact Saab dealer.

WARNING

- Never drive the car if these two lights are on at the same time. Danger of brake failure!
- If the level of brake fluid in the reservoir is below the MIN mark, the vehicle should be transported on a recovery vehicle.
- Have the brake system checked immediately at a Saab dealer.

For safety reasons, stop the car and check the level of the brake fluid (see page 180).

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 Saab dealer to have the brake system checked.

The brake system provides Electronic Brakeforce Distribution (EBD). This 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 load.

If a fault arises in the EBD function, the 

,

and lights will come on. Also, the following message will appear on the Saab Information Display (SID):

Brake malfunction.
Make a safe stop.
Contact Saab dealer.

If this is the case, drive carefully and contact a Saab dealer as soon as possible. Refer to Brake warning light on page 56, Antilock braking warning on page 54 and TCS OFF or ESP OFF indicator (certain variants only) on page 63.

Seatbelt reminder

This light reminds the driver to buckle up.

Parking brake warning light

This light comes on when the parking brake is applied (see page 148).

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

WARNING

- **Always** apply the parking brake when parking, see page 148.
- **Always** apply the parking brake before removing the remote control.
- Do **not** apply the parking brake while the car is moving.

Airbag warning light

This light comes on if a potentially serious fault has occured in the airbag system.

The following message is shown on the Saab Information Display (SID):

Airbag malfunction.
Contact Saab dealer.

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.

Headlight and parking light indicator

This light indicates that the headlights or parking lights are on.

Cruise control indicator light

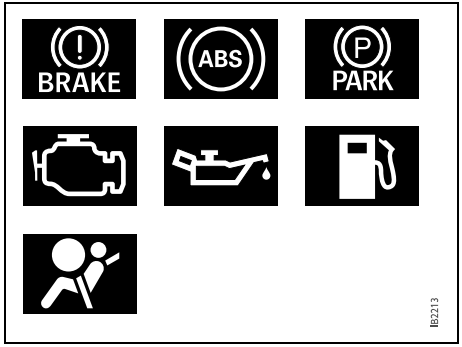
This light comes on when the system is engaged.

Shift-up (US-spec. cars only)

This symbol can be found in cars with manual transmission. The symbol is not activated until the engine is warm.

It is not always necessary or even recommended to shift up to a higher gear when this symbol lights up, such as when driving in heavy traffic or down a steep hill.

Changing up a gear when the symbol comes on does however improve fuel economy. Make it a habit to shift up when the symbol lights up.



Autochecking of lights, main instrument panel

The warning and indicator lights shown above should come on when the ignition switch is turned to ON. They should go out after about 4 seconds once the engine has started or after the fault-free self-diagnosis of each system or function.

Cars with manual transmission

Cars with automatic transmission

Instruments

Tachometer

The tachometer displays the engine speed in thousands of revolutions per minute.

A protective function (interruption of the fuel supply) limits the engine speed within the red zone.

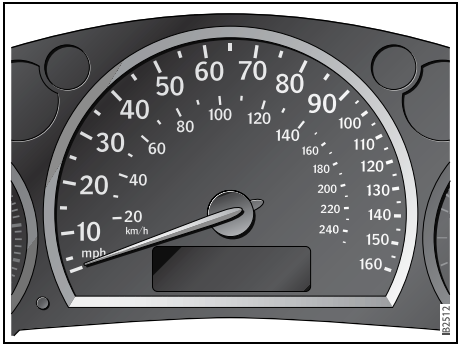
Odometer and trip meter

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

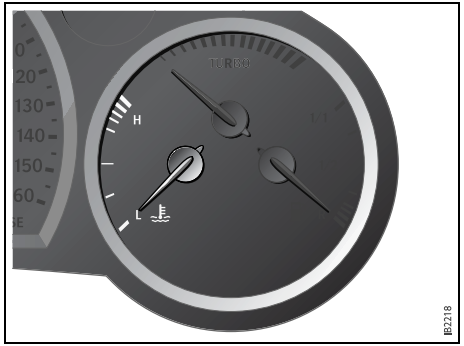
The reset button is positioned immediately to the left of the speedometer.

- Ignition ON:
  Press once – resets the trip meter.
- Ignition OFF:
  Press once – enables you to read the odometer and trip meter.
  Press twice – resets the trip meter.



Speedometer (U.S. speedometer shown)

The speedometer displays the speed of the car in miles per hour (mph). It receives information about vehicle speed from the ABS's wheel sensors.



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 goes into the red zone (which can occur at high outside air temperatures or under heavy engine loads), choose the highest possible gear ratio and the lowest possible engine speed, and avoid shifting down.

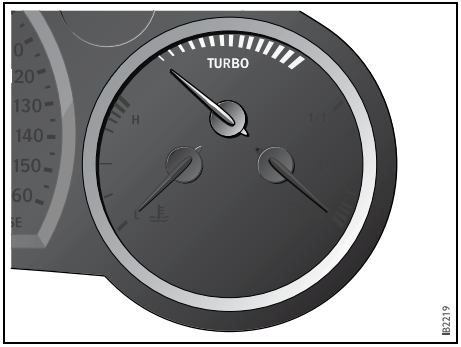
NOTICE

If the needle, despite the above action, enters the red zone, stop the car in a suitable place and allow the engine to idle. If the needle continues to rise, switch off the engine.

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 (see page 179).

⚠ 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.



Turbo gauge

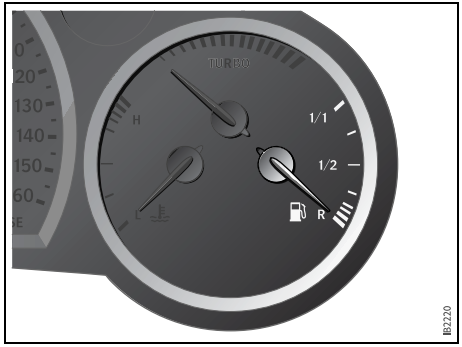
The turbo gauge indicates the air volume used for combustion, which is equivalent to the engine load.

At low loads and when the engine is used for braking, the needle will move within the white zone.

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 limiting the boost pressure, you should contact a Saab dealer as soon as possible.

When the speed of the car exceeds 143 mph (230 km/h), acceleration is limited by reducing the boost pressure. The pressure gauge then moves towards the middle of the white field, indicating a drop in engine power and consequently the car's speed.



Fuel gauge

When less than about 2.5 gallons (10 litre) of fuel is left in the tank, a warning light on the main instrument panel comes on.

Refueling, see page 128.

Information display, main instrument panel

Under the speedometer is a display. The information shown here varies depending on whether the car has a manual transmission or automatic transmission.

Cars with manual transmission:

- The odometer reading is shown on the left-hand side of the display.
- Various information and faults are displayed in the center of the display.
- The trip meter reading is shown on the right-hand side of the display.

Cars with automatic transmission:

- The odometer and trip meter readings are shown on the left-hand side of the display.
- Various information and faults are displayed in the center of the display.
- The selected gear position is shown on the right-hand side of the display.

Information symbol. Read information on SID

This symbol comes on when a message or warning is displayed on the Saab Information Display (SID).

Gear selector indicator (cars with automatic transmission)

The current gear position is displayed on the right-hand side of the information display.

When gears are selected manually, the letter M (manual) and the selected gear are displayed (see page 139).

TCS or ESP indicator (certain variants only)

⚠ WARNING

The system improves ride comfort and safety during normal driving. It must however not be regarded as a system to enable the driver to maintain higher speeds. The same precautions as normal for safe cornering and driving on slippery roads must be adopted (see pages 144/ 146).

This symbol lights up when the system is operative.

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

The car is equipped as standard with TCS and ESP.

TCS OFF or ESP OFF indicator (certain variants only)

⚠ WARNING

The system improves ride comfort and safety during normal driving. It must however not be regarded as a system to enable the driver to maintain higher speeds. The same precautions as normal for safe cornering and driving on slippery roads must be adopted (see pages 144/ 146).

This symbol lights up when the system is disengaged using the TCS/ESP button.

If there is a malfunction, the symbol cannot be turned off by pressing the TCS/ESP button.

The following message is shown on the Saab Information Display (SID):

Traction control failure. Contact Saab dealer.

or

Stability control failure. Contact Saab dealer.

If so, have the system checked at a Saab dealer.

See also Traction Control System (TCS) on page 144 andElectronic Stability Program (ESP) on page 146.

Saab Information Display (SID)

Various types of information are shown on the SID: warnings, indications, trip computer information and information from the car's Infotainment System.

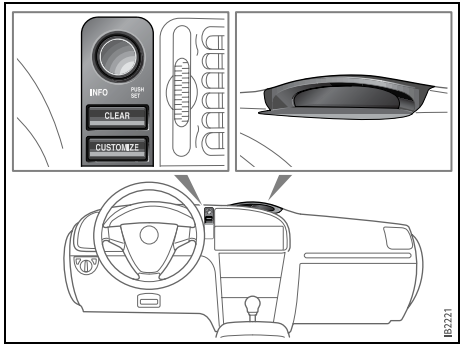
The warnings and indications that can be shown on the SID are listed on page 249.

When the engine is switched off, the current warnings and indications are displayed.

If there is more than one message on the SID, a plus sign will be displayed to the left of the first message. Each message will be displayed for 10 seconds.

Press the CLEAR button to acknowledge a SID message. If you acknowledge a message but do nothing about it, the message will be displayed again the next time you start the car.

You can adjust the settings of several of the car's systems, such as the clock, alarm and climate control system. These are known as Profiler.



SID, control unit and display

Profiler

Adjustments can be made with the control unit situated between the main instrument panel and the audio system. This is called Profiler.

1. Activate Profiler by pressing the CUSTOMIZE button.
2. Turn the INFO dial until the appropriate system is selected.
3. Confirm selection by pressing the INFO dial.

Select Exit once you have made the desired settings.

The number of systems that are displayed on the SID depends on the car's equipment level. The list shown below includes the systems that can be found in your car.

Theft Alarm, page 46.
Full theft alarm
Door alarm only
Park Assistance, page 152.
SPA on
SPA off
Clock / Alarm, page 69.
Set Clock
Set Alarm
Rain Sensor, page 77.
High
Medium
Low

Climate System, page 93.
Rear Defroster
Heated Seats
Fan Settings
Air Distribution
A/C Mode
Dual/Single Zone
Default Settings
System Settings, page 70.
Language
Unit
Speed Scale Illum.
Service Info

Trip computer function of the 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.

SID contains the following functions:

Temp	Outdoor temperature
D.T.E.	Estimated range (distance to empty fuel tank)
Fuel Ø	Average fuel consumption since function last reset
Date	Date
Dist	Distance to destinations. Function can also be used as a trip meter
Arriv	Estimated time of arrival
Speed Ø	Average speed since function last reset
Speed W	Speed warning (chime)

When the engine is started, the function that was selected when the engine was switched off is displayed, with the following exceptions:

- **Temp** is displayed if the outside temperature is between 26 and 38°F (–3 and +3°C).
- **D.T.E** is displayed if less than or equal to 30 miles (50 km).

Outdoor temperature

The **Temp** function is always activated (even in Night Panel mode) if the outdoor temperature rises or falls to between 26 and 38°F (–3 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.

Setting values

1 Select one of the functions using the INFO dial.
- **Speed W** (preset to 55 mph (90 km/h)
- **Dist** (preset to 100 miles (100 km) if not previously set)
- **Speed Ø**
- **Arriv**
- **Date**

2 Press and hold the INFO dial until given audible confirmation.

3 Turn the INFO dial to change the value. (Press CLEAR to reset the value.)

4 Press the INFO dial to finish setup.

Using DIST as a trip meter

1 Select **Dist** using the INFO dial.

2 Press and hold the CLEAR button for approx. 1 second.

An arrow will now appear on the right-hand side of the display, indicating that the trip meter is running.

Resetting a single function

1 Select the function you wish to reset with the INFO dial.
- **Fuel Ø**
- **Speed Ø**
- **Trip** (Dist used as trip meter)

2 Press and hold the CLEAR button for approx. 1 second.

The selected function will now be reset.

Resetting the trip computer

1 Select one of the functions using the INFO dial.
- **Fuel Ø**
- **Speed Ø**
- **D.T.E.**
- **Arriv**
- **Trip** (Dist used as trip meter)

2 Press and hold the CLEAR button (approx. 3 seconds) until audible confirmation is given.

Speed warning

This value is preset to 55 mph (90 km/h). The value can be set to between 0 and 150 mph (0 and 250 km/h).

1 Select **Speed W** using the INFO dial.

2 Press and hold the INFO dial until given audible confirmation.

3 Adjust the speed using the INFO dial.

4 Confirm the setting by pressing the INFO dial.

A star on the right-hand side of the display indicates when the speed warning function is active.

An audible alarm will sound if the set speed is exceeded.

Disengage the function with the CLEAR button. Re-engage the function using the INFO dial.

Calculating the arrival time

(When will I arrive if I know how far I have to drive?)

This function should be used before starting out a journey.

To calculate the arrival time, the distance must first be given.

1 Select the **Dist** function using the INFO dial.
2 Press and hold the INFO dial until given audible confirmation.
3 Set the distance to the destination using the INFO dial.
4 Press the INFO dial to finish setup.

Select **Arriv** during the journey to display the arrival time based on the average speed since **Dist** was set. If you take a break, this time will be added to the previously calculated arrival time.

Similarly, you can check the distance left by selecting **Dist**.

After the distance to destination has decreased to zero, **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 for the **Dist** function.

Example: The **Dist** function is set to 100 miles. After the count-down has reached 0 miles, **Dist** will act as a trip meter beginning at 100 miles.

Calculating the arrival time if a specified average speed is maintained

(When will I arrive if I know how far I have to drive and know what my average speed will be?)

This function should be used before starting out a journey.

First, set the distance under **Dist**.

1 Then use the INFO dial to select the **Speed Ø** function.
2 Press and hold the INFO dial until given audible confirmation.
3 Turn the INFO dial to set the estimated average speed.
4 Press the INFO dial to finish setup.

The time of arrival is updated during the journey based on the average speed since **Dist** was set. The speed of the car must exceed 12 mph (20 km/h).

By selecting **Dist** during the journey, you can see how much distance is left to travel.

When **Dist** reaches zero it acts as a trip meter. The tip meter starts from the distance that was set previously.

Calculating the requisite average speed

(What average speed do I need to maintain to get to my destination in time?)

This function should be used before starting out a journey.

To calculate the requisite average speed, the distance must first be given.

First, set the distance under **Dist**.

1 Then use the INFO dial to select the **Arriv** function.
2 Press and hold the INFO dial until given audible confirmation.
3 Turn the INFO dial to set the estimated time of arrival.
4 Press the INFO dial to finish setup.

The average speed (**Speed Ø**) will be shown for 10 seconds.

This average speed will be updated during the journey.

Setting the date

1 Select the **Date** function using the INFO dial.
2 Press and hold the INFO dial until given audible confirmation.
3 Turn the INFO dial to set the year.
4 Press the INFO dial.
5 Turn the INFO dial to set the month.
6 Press the INFO dial.
7 Turn the INFO dial to set the day.
8 Confirm the setting by pressing the INFO dial.

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.

All other instrument lighting will be switched off and the needles drop to zero.

Note: All indicator and warning lights and messages will operate normally if required.

Temp (when the outside temperature falls or rises to between 26 and 38°F (–3 and +3°C)) and **D.T.E.** (when the remaining fuel is only sufficient for approx. 80 miles (50 km) of driving) are even shown in Night Panel model.

Under Profiler you can choose whether the entire speedometer scale (0–160 mph) or only part of the scale (0–90 mph) should be illuminated in Night Panel mode.

1 Press the CUSTOMIZE button to go to Profiler.
2 Select System Settings using the INFO dial.
3 Press in the INFO dial.
4 Select Speed Scale Illum.

Select 0–160 mph or 0–90 mph.

- **System Settings**
  - Speed Scale Illum.
    - 0–160 mph
    - 0–90 mph

Clock

Settings can be made from Profiler.

1 Press the CUSTOMIZE button to go to Profiler.
2 Select Clock / Alarm using the INFO dial.
3 Press in the INFO dial.
4 Select Set Clock.
5 Select Manual.

- **Clock / Alarm**
  - Set Clock
    - Manual
      - Clock

Explanation of setting the clock.

Set Clock

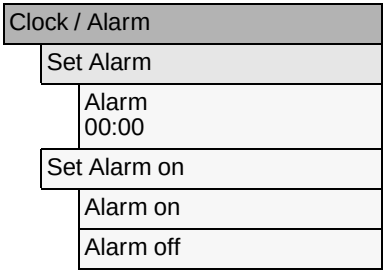
Manual:

Use the INFO dial to set manually.

Alarm

Settings can be made from Profiler.

1 Press the CUSTOMIZE button to go to Profiler.
2 Select Clock / Alarm using the INFO dial.
3 Press in the INFO dial.
4 Select Set Alarm.
If the alarm is not activated: set using the INFO dial.
If the alarm is activated (Set Alarm on): select Alarm on or Alarm off.



Explanation of setting the alarm time.

Set Alarm

Set Alarm:

A new alarm time can be set. Use the INFO dial.

Set Alarm on:

A preset alarm time exists. Select Alarm on or Alarm off.

System Settings

Under this heading you can make system settings, such as change the display language, units and service information.

1 Press the CUSTOMIZE button to go to Profiler.
2 Select System Settings using the INFO dial.
3 Press in the INFO dial.
4 Select the desired heading using the INFO dial.
5 Press in the INFO dial.

- System Settings
  - Language (The number of languages can vary between markets.)
    - English
    - French
    - German
    - Italian
    - Spanish
    - Swedish
  - Unit
    - Metric
    - Imperial
    - US
  - Speed Scale Illum.
    - 0–160 mph
    - 0–90 mph

- Service Info
  - Service Data
    - Time for service? No.
      - Oil quality: xxx %. xxxx days to service.
    - Time for service? Yes.
      - Service Data
        - Oil quality: xxx %. xxxx days to service.
      - Service Type
        - Time for intermediate service.
        - Time for main and intermediate service.
        - Time for main service
      - Reset Service Ind.
        - Are you sure? Yes No

Explanation of the various selections under System Settings.

Language

Select the desired language. The number of languages can vary between markets.

Unit

Select the desired group of units.

Speed Scale Illum.

Select the proportion of the speedometer to be illuminated in Night Panel mode.

Service Info

Service Data:

The approximate condition of the oil is shown here. 100% is equivalent to new engine oil.

Service Type:

The type of service that is required is shown here.

Reset Service Ind.:

The service indicator can be reset here. This is normally done at the dealer in connection with a service.

Switches

Lights off

The car's exterior lights are off.

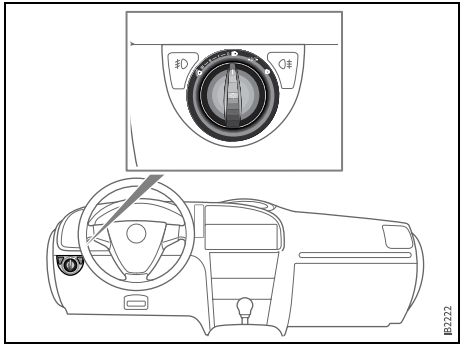
The headlights can be flashed.

Parking lights

The parking lights can be turned on irrespective of the position of the ignition switch. If the parking lights are on and the driver's door is opened, a reminder to turn them off will sound.

Do not use the parking lights alone while driving.

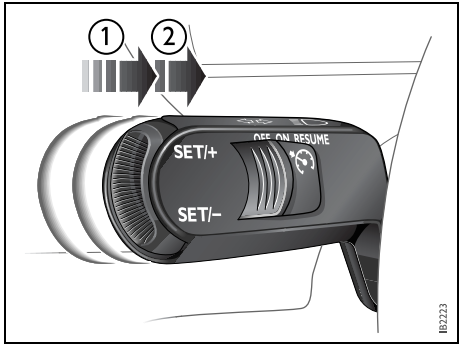
The parking lights may be used in combination with the front fog lights (see page 74).



Light switches

Headlights

Low beam headlights are turned on when the ignition switch is turned to ON and turned off when the switch is turned back to LOCK.



Dipswitch

1 Headlight flasher
2 High/low beam

High/low beam

To switch between high and low beam, pull the control stalk all the way towards the steering wheel. (Headlight switch must be ON.)

The symbol on the main instrument panel shows when the high beam is on.

Headlight flasher

To flash your headlights, pull the control stalk half-way towards the steering wheel. The high beam will remain on until you release the stalk.

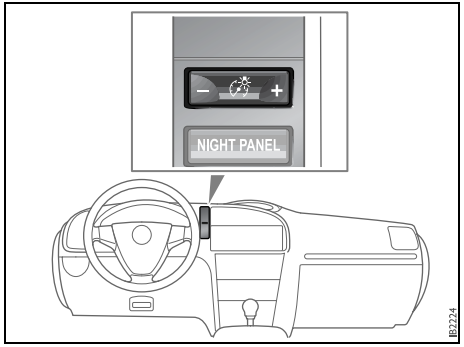
Courtesy Headlamp Feature

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

To activate this function:

1 After turning off the engine, remove the remote control.
2 Open the driver's door.
3 Pull the control stalk all the way towards the steering wheel.

The low beam headlights and reversing lights will come on and remain on for 30 seconds when the door is closed.



Adjusting instrument illumination

Instrument lighting

The brightness of the instrument lighting can be adjusted by pressing the button (+ or - signs on the button above the NIGHT PANEL button).

Headlight levelling

(cars with Bi-Xenon headlights)

Cars with Bi-Xenon headlights are equipped with an automatic headlight levelling system, with self-calibrates each time the vehicle is started. If a fault arises in the automatic headlight levelling system, the headlights will be angled down to avoid dazzling drivers in oncoming traffic. Adjust your speed accordingly as the range of the headlights will be reduced. Check fuse 20 in the engine bay fuse box (see page 203).

A fault in the system will produce the following message on the Saab Information Display (SID):

Headlight levelling malfunction.
Contact Saab dealer.

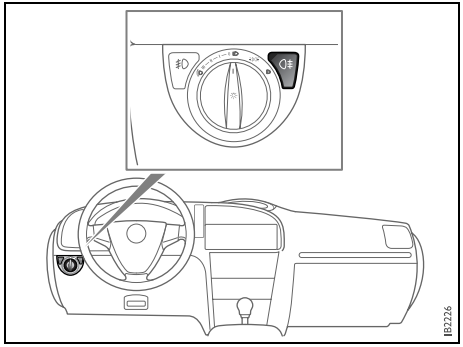
Special equipment is required for adjusting the basic headlight alignment.

Rear fog light

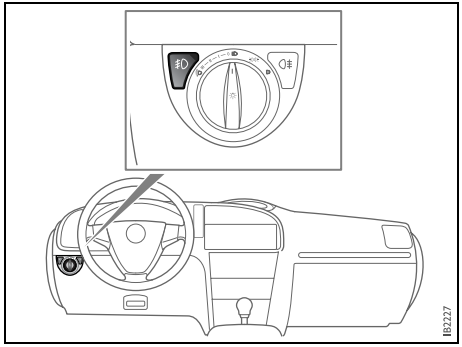
To turn on the rear fog light, press the rear fog light button on the instrument panel. The headlights or front fog lights must be on.

The rear fog light is automatically turned off when the engine is switched off. When the car is next started, the rear fog light will have to be switched back on manually by pressing the rear fog light switch. If the engine is restarted within 30 seconds, the rear fog light will remain on.

Acquaint yourself with the legal provisions governing the use of rear fog lights.



Rear fog light switch



Front fog light switch

⚠ WARNING

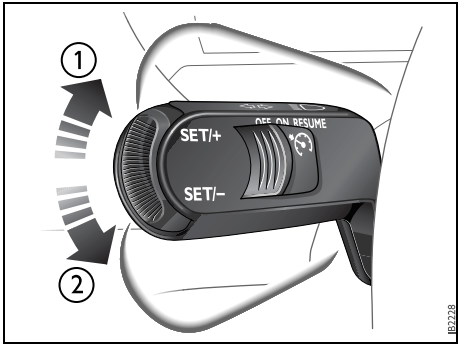
In poor visibility, avoid following the tail lights of the vehicle in front. If the vehicle brakes suddenly, you may be unable to avoid a crash and therefore risk injury to yourself and others.

Front fog lights

The front fog lights should be used in poor visibility.

These are automatically turned off when the engine is switched off. When the car is next started, the fog lights will have to be switched back on manually by pressing the fog light switch. If the engine is restarted within 30 seconds, the front fog lights will remain on.

Acquaint yourself with the legal provisions governing the use of front fog lights.



Turn signal & lane change indicators
1 Right
2 Left

Turn signal & lane change indicators

The stalk switch has an intermediate, spring-loaded position that is useful for signalling when changing lanes or passing. The stalk switch also has fixed positions for indicating a right or left turn, that are cancelled automatically when the steering wheel is centered.

If an indicator bulb breaks, the frequency with which the indicators flash will be doubled.

This frequency is also doubled if a trailer is being towed and one of its indicator bulbs breaks.

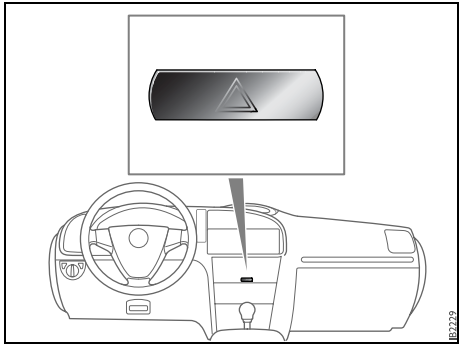
Hazard warning lights

The button for the hazard warning lights is located on the climate control panel.

When the button is pressed, all the direction indicators and the symbol in the button flash simultaneously.

If an indicator bulb breaks, the frequency with which the indicators flash will be doubled.

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



Hazard warning light switch

⚠ 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 flat tire.

If you carry a warning triangle or flares, they should be set up along the side of the road 50–110 yds. (50–100 metres) 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.

Back-Up

The back-up lights come on automatically when reverse gear is engaged or selected with the ignition switched on.

Wipers and washers

Windshield wipers

Position 1 is a spring-loaded position that will produce a single sweep of the wipers.

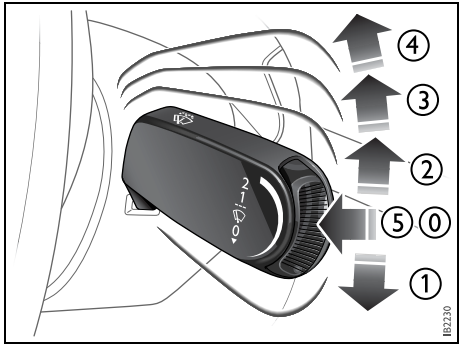
In position 2 you can set the delay period for intermittent wiping using the thumbwheel on the stalk switch. There are 5 delay periods from which to choose, ranging from 2 to 15 seconds.

The wipers always return to their home position when the ignition is turned off.

To leave the wipers positioned vertically on the windshield, proceed as follows:

1. Switch off the engine and remove the remote control.
2. Activate the wipers within the next 16 seconds by pressing the stalk switch down.

When the ignition is next switched on the wipers will return to their home position.

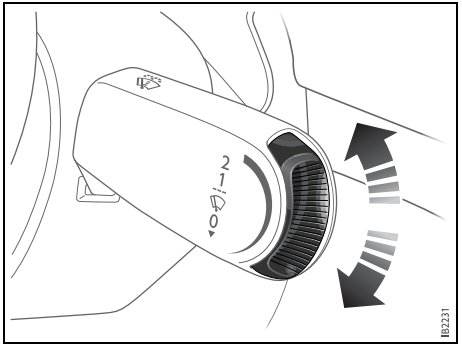


Windshield wipers
0 OFF
1 Single sweep
2 Intermittent wiping
3 Low speed
4 High speed
5 Windshield and headlight washing

Washers

Activate the washers by pulling the stalk switch towards the steering wheel.

When the washers are operated, the wipers will make 3, 4 or 5 sweeps, depending on how long the washers were kept on. If the speed of the car is less than 12 mph (20 km/h), the wipers will make an additional sweep after roughly 8 seconds.



Control for setting wiper delay

When the washer fluid level drops below 1 quart (1 litre), the headlight washers are deactivated. This is in order to prioritize the windshield. The following message is displayed on the SID:

Washer fluid level low.
Refill.

Headlight washers (certain variants only)

The headlights are washed at the same time as the windshield if the h eadlights are on.

The headlights are washed every fifth time the windshield washers are used or if two (2) minutes have elapsed since the windshield was last washed.

The headlight washers are not activated at speeds in excess of 125 mph (200 km/h).

Rain sensor (option)

⚠ WARNING

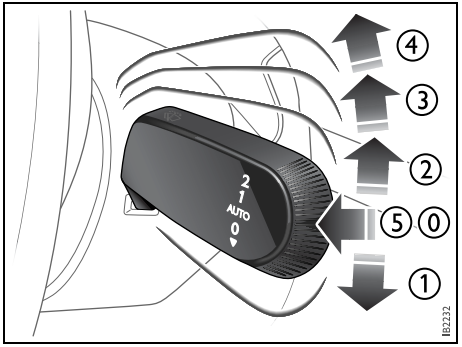
Turn the rain sensor off if the ignition is ON to avoid personal injury when clearing snow and ice from the windshield.

NOTICE

Turn the rain sensor off before washing the car in an automatic carwash, to avoid damaging the windshield wipers.

The rain sensor automatically controls the windshield wipers. The sensor is located on the windshield beside the rearview mirror.

The system varies the frequency of wiping between single sweeps and continuous wiping, depending on the amount of precipitation.



Windshield wipers with rain sensor
0 OFF
1 Single sweep
2 AUTO - rain sensor engaged
3 Low speed
4 High speed
5 Washers

Activate the rain sensor by lifting the stalk switch to the AUTO position. The wipers make one sweep for reference to see how much water is on the windshield. In the future, the sensor compares the amount of water on the windshield with this reference value.

If the system malfunctions, the wipers will operate at low speed when the stalk switch is set to the AUTO position.

Adjusting sensitivity

The sensitivity of the rain sensor can be adjusted under Profiler. If you increase the sensitivity, the wipers will make one sweep for reference.

1 Press the CUSTOMIZE button to go to Profiler.
2 Select Rain Sensor using the INFO dial.
3 Press in the INFO dial.
4 Select the sensitivity by turning the dial.
5 Confirm this selection by pressing the INFO dial.

Rain Sensor
High
Medium
Low

The sensitivity of the sensor is also affected by the amount of daylight. The sensor is somewhat more sensitive at night. This adjustment is automatic.

Explanation of sensor sensitivity.

High

The sensor is set to high sensitivity. The wipers start when there is only a small amount of water on the windshield.

Medium

The sensor is set to normal sensitivity. This is one of the Default Settings.

Low

The sensor is set to low sensitivity (wipers operate only with a large amount of water on the windshield, i.e., downpour).

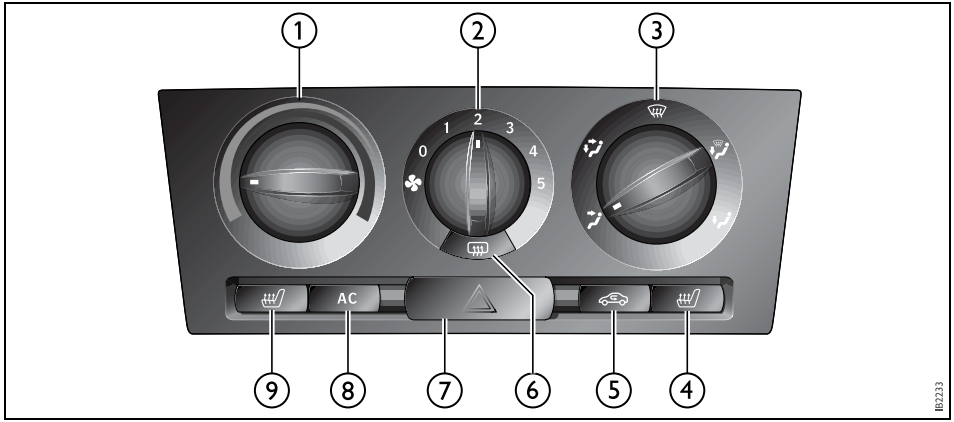
Manual climate-control system

Fresh air for the cabin is drawn in through an inlet grille at the bottom edge of the windshield. It passes through a filter before reaching the climate control system and delivery into the cabin. The air is evacuated via openings in the parcel shelf. It is then led through outlets on either side of the car behind the rear bumper.

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

To optimize the performance of the A/C system, all windows and the sunroof should be shut.

To reduce potential misting on the insides of the windows, the glass should be cleaned with a quality glass cleaner. How often this will need to be done depends on how clean the air is - if there are smokers in the car, the windows will need to be cleaned more frequently.



Control panel: manual climate control

1 Temperature
2 Fan speed
3 Air distribution
4 Seat heating, front right seat
5 Recirculation
6 Rear window/door mirror heating
7 Hazard warning lights
8 Air conditioning (A/C)
9 Seat heating, front left seat

Fan

The output of air is controlled by the fan speed.

Temperature control

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

Air distribution

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

The control also permits settings in between the three main settings defroster, panel and floor:

- defroster and floor 
- panel and floor 
- defroster, panel and floor (11 o'clock position)

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 outer vents on the fascia.

As the winter comfort setting, we recommend that the distribution knob be turned to  .

Recommended settings in severe cold

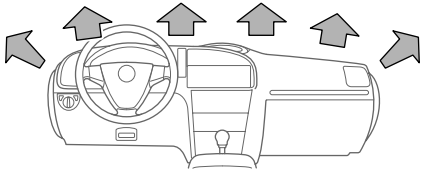
On starting with a cold engine, set the fan speed to 2 or 3 and select maximum heat and defroster to heat the cabin and demist the windshield as quickly as possible.

When the engine is warmer and the temperature gauge starts to rise, fan setting 4 may be chosen. Once the windshield is clear, the air distribution control should be turned to  .

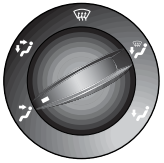
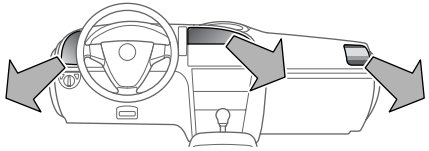
If the rear seat passengers desire more warmth to the feet, turn the distribution knob one step clockwise.

How quickly the engine warms up will depend on how the car is driven. It will take longer for the engine to warm up if the car is driven in a high gear at low engine speeds, such as in town, than if it is driven at high engine speeds on a motorway, for example.

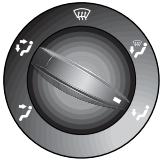
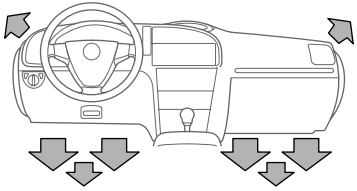
Do not use fan speed 5. This is primarily intended for rapid cooling during the summer.

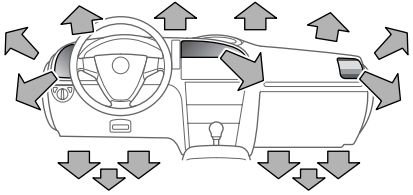
Defroster

Panel

Floor

Defroster, panel and floor

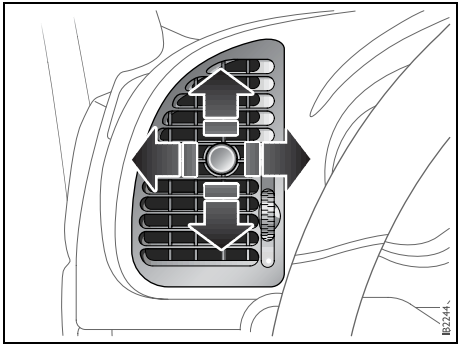
Settings for various weather conditions

Winter – defroster

Winter – comfort setting

Summer – overcast

Summer – sunny



Panel vent

Air vents

The air vents swivel universally, so that air can be directed as desired. In winter, for instance, the outer vents can be directed onto the door windows for enhanced demisting.

The amount of air can be individually controlled by the regulator on each vent. If you wish to reduce the airflow, start by half-shutting the vent in question.

AC Air conditioning (A/C)

The air conditioning is combined with the conventional climate control system and is switched on by pressing the AC button, provided that the fan control is in position 1-5.

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

The air conditioning can be used at outdoor temperatures down to 32°F (0°C). It is not necessary to disengage the air conditioning manually as this is done automatically.

If the engine coolant gets too hot, the A/C compressor will be turned off and the following message will be shown on the Saab Information Display (SID):

A/C off due to high engine temperature.

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 pressed, the regular air intake will be closed. In this mode, the air inside the cabin is recirculated.

Use recirculation when you wish for rapid cooling at very high outside temperatures. Switch the air conditioning (A/C) on first.

If necessary, recirculation can be switched on manually to avoid unpleasant air from entering the car.

Only use recirculation for a short period of time at temperatures lower than 50°F (+10°C), such as to avoid unpleasant air. Mist or ice may otherwise form on the windows.

Electrically heated rear window/external mirrors

This button is located under the fan speed control.

Always switch off the heating as soon as the rear window is free from ice and mist. It will be turned off automatically after 12 minutes.

Refrain from placing sharp objects on the parcel shelf, to avoid damaging the heating element.

Electric heating, front seats (option)

The seat cushions and backrests of the front seats are heated.

Seat heating is thermostatically controlled. It can be switched on when the seat temperature is below 102°F (+39°C) and is switched off at temperatures above 105°F (+41°C).

Switch off the seat heating once the seat is warm.

Automatic climate-control system (ACC)

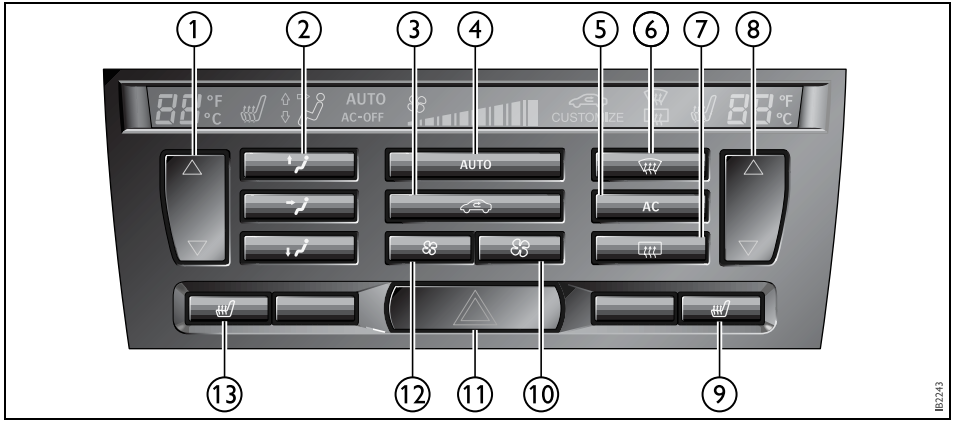
Fresh air for the cabin is drawn in through an inlet at the bottom edge of the windshield. It passes through an effective filter before reaching the climate control system and delivery into the cabin. The air is evacuated via openings in the parcel shelf. It is then led through outlets on either side of the car behind the rear bumper.

The Automatic Climate-Control syatem (ACC) 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 the final temperature you desire.

To optimize the performance of the air conditioning system, all windows and the sunroof should be shut. The air vents in the fascia must be open.



ACC panel

1 Temperature setting: left-hand side
2 Manual setting of air distribution
3 Recirculation
4 AUTO (automatic regulation)
5 A/C
6 Defroster
7 Rear window heating
8 Temperature setting: right-hand side
9 Seat heating, front right seat
10 Manual increase of fan speed
11 Hazard warning lights
12 Manual decrease of fan speed
13 Seat heating, front left seat

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

To reduce potential misting on the insides of the windows, the glass should be cleaned with a quality glass cleaner. How often this will need to be done depends on how clean the air is - if there are smokers in the car, the windows will need to be cleaned more frequently.

Temperature control

The cabin is divided into two temperature zones:

1 Driver's zone.

2 Passenger zone.

The temperature in the rear seat will be a mixture of the two zones.

If you choose the single zone setting, the entire cabin is treated as one zone. If you choose the dual zone setting, settings can be made separately for the driver's zone and passenger zone.

Select between single and dual zone settings under Profiler (see page 93).

The cabin temperature can be set to between 58–82°F (15–27°C). In addition, HI (maximum heating and high fan speed) and LO (maximum cooling and maximum fan speed) can be selected. HI and LO can only be selected for the passenger zone if the driver has selected the same setting.

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

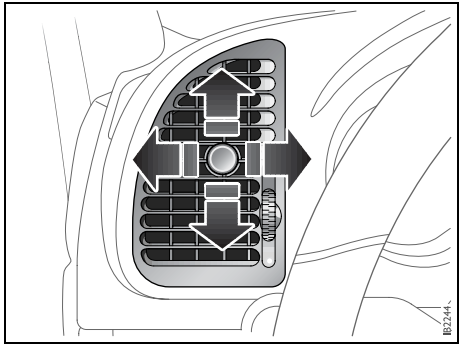
- The most usual temperature setting is between 66–74°F (19–23°C), depending on personal preference and what clothing is worn.
- Change the temperature setting in 2°F (1°C) steps.
- Make sure the air vents are open when cooling the cabin in warm weather.

Settings when HI is selected:

- Maximum heat
- Air distribution to windshield and floor
- High fan speed (6 bars on the fan display).

Settings when LO is selected:

- Maximum cooling
- Air distribution to air vents in fascia
- Maximum fan speed (8 bars on the fan display).
- Recirculation ON (depending on outside temperature).



Panel vent

Air vents

The air vents swivel universally, so that air can be directed as desired. In winter, for instance, the outer vents can be directed onto the door windows for enhanced demisting.

The amount of air can be individually controlled by the regulator on each vent. If you wish to reduce the airflow, start by half-shutting the vent in question.

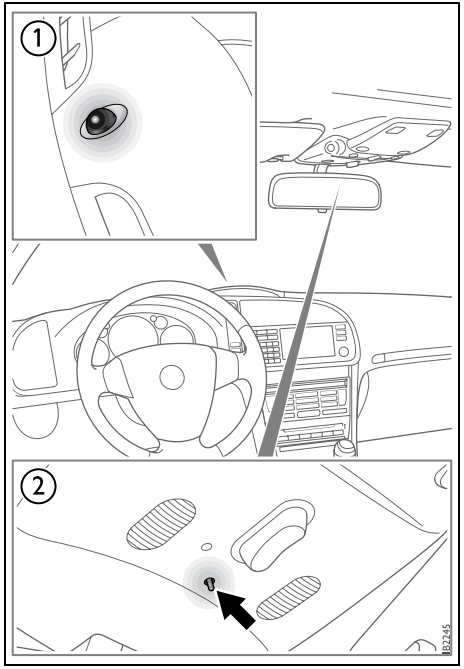
The system uses four sensors:

- Outside air temperature sensor
- Cabin air temperature sensor
- Sun sensor
- Blended air temperature sensors (located in the heater unit and the outer panel vent duct).

The sun sensor is located centrally on the top of the fascia.

Note:

If the sun sensor is covered, the ACC system will not be able to regulate the cabin climate as intended, especially in strong sunshine.



1 Sun sensor
2 Cabin temperature sensor

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

Pressing AUTO will cancel all manual settings.

If a manual function is selected, it will be locked in but other functions will be controlled automatically.

The selected temperature is always maintained automatically.

AUTO

Temperature, air distribution, fan speed and recirculation will be controlled automatically.
In falling temperatures the A/C compressor is switched off at approx. 32°F (0 °C).
In rising temperatures the A/C compressor is switched on at approx. 40°F (+5 °C).
If, when starting the car, the outside air temperature is between 32°F and 40°F (0 and +5 °C), the A/C compressor is switched on.
Pressing AUTO once will cancel all previous manual air distribution selections.
When the engine is started, the ACC system will be in AUTO mode, provided that no air distribution settings are programmed under Profiler (see page 93).

AC

The A/C compressor must be turned on and off manually with the AC button.
The compressor can only be turned on or off while the engine is running.
This function has two modes:

- AC – The system cools and dehumidifies the incoming air. This symbol is not shown in the display.
- AC-OFF – The A/C compressor is switched off. The incoming air is not cooled or dehumidified.

See also Profiler on page 93.

To turn the system OFF, press and hold (or press repeatedly) the button to reduce the fan speed until the fan is switched off. Then release the button and press it once more.
The A/C compressor will now be disengaged. To re-engage the A/C, press one of the following buttons:

AUTO • *The A/C compressor will be switched on if it was previously engaged, and the air distribution and fan speed will switch to AUTO.*

• Higher fan speed
The A/C compressor will be switched on if it was previously engaged, the air distribution will return to its previous setting and fan speed will increase.

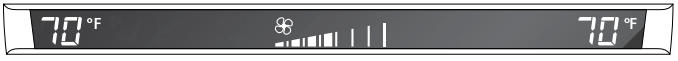
• Defroster
The A/C compressor will be switched on if it was previously disengaged, the air distribution will switch to Defroster and the fan speed will increase (6 bars on the display out of a maximum of 8).

When the system is switched OFF:

- The fan and A/C compressor are switched off.
- The temperature control is set to 0 % heat.
- The current air distribution setting is retained.
- Recirculation can be selected.

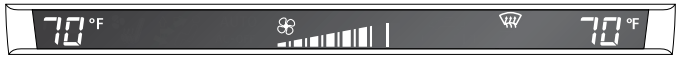
The rear window and door mirror heating can be controlled manually or automatically (refer to Profiler).
Switch off the rear window and door mirror heating as soon as the glass is clear. The heating will be turned off automatically after 12 minutes.
Refrain from placing sharp objects on the parcel shelf, to avoid damaging the heating element.

Recirculation is controlled manually.
Recirculation is not selected when the engine is started (fresh air mode).
To prevent the smell of washer fluid from entering the car, recirculation can be activated temporarily while washing the windshield. The recirculation symbol will however not light up. This function can be programmed; contact a Saab dealer.



Press or to increase or decrease the fan speed. This sets the fan speed (fan speed shown on display).
Refer also to Profiler regarding the possibility to increase/decrease the automatic fan speed.

Air distribution



When defroster is chosen, all the front windows are demisted:

- *High fan speed*
- *The air is directed to the defroster vents*
- *Normal temperature control*
- *Recirculation OFF*
- *Rear window and door mirror heating ON.*

The system will remain in defroster mode until the AUTO or button is pressed.

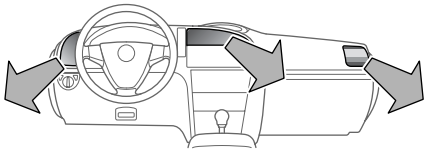
The following three buttons for air distribution can be selected individually or in combination. Press the button or selection of buttons to produce the airflow you desire. Pressing the same button twice will return the system to AUTO. You can also select automatic air distribution by pressing the AUTO button.
Initial air distribution to take effect on starting the engine can be set under Profiler (see page 93).

Airflow to windshield vents.

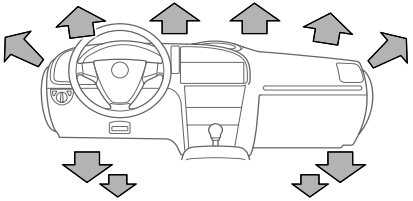
Airflow to facia air vents.

Airflow to floor vents.

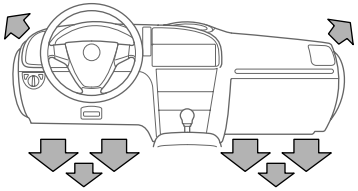
Shown below are several examples of air distribution.



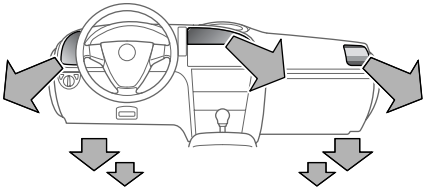
Panel



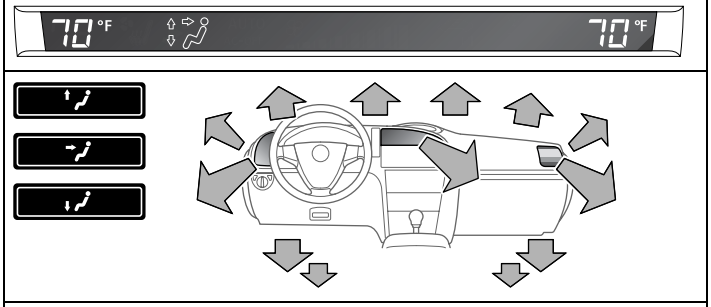
Windshield – floor (front and rear)



Floor, front and rear



Panel – floor (front and rear)

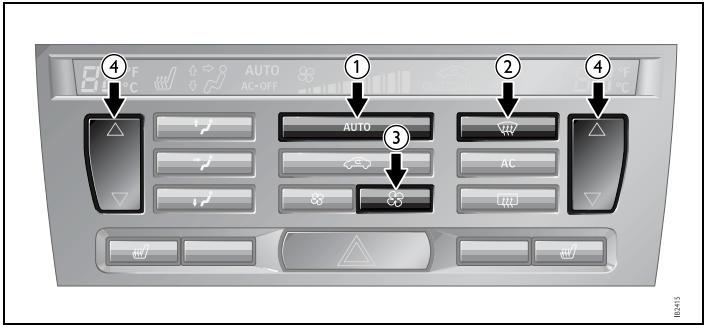


Windshield – panel – floor (front and rear)

Formation of ice and mist in extreme weather conditions

It is only in the most extreme conditions that icing and misting of window glass are likely to be a problem, such as in torrential rain or severe cold coupled with high relative humidity, or when passengers are perspiring heavily or wearing wet clothes. The following measures are recommended if such problems should occur:

1 Select AUTO and set the temperature to 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.



Calibration

Calibration is performed automatically every fifth time the car is started after having been switched off for more than 2 hours.

Programming

A number of functions can be customized under Profiler (see page 93). Further customizations can be made at a Saab dealer.

Electric heating, front seats (option)

The seat cushions and backrests of the front seats are heated.

Heating is thermostatically controlled.

Heating is controlled manually but can also be automatic. Refer to Profiler on page 93.

Three heating levels are available. Pressing the button once will turn the heating on at full power. Press the button again to reduce the heating.

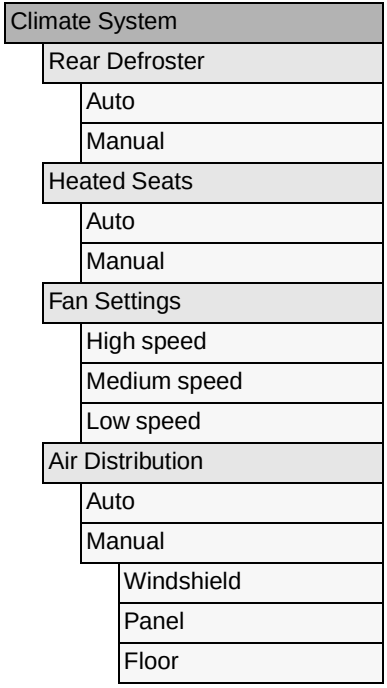
- One press of the button - the thermostat cuts out at 107°F (+42°C) .
- Two presses of the button - the thermostat cuts out at 98°F (+37°C) .
- Three presses of the button - the thermostat cuts out at 91°F (+33°C) .
- Four presses of the button - switches the seat heating off.

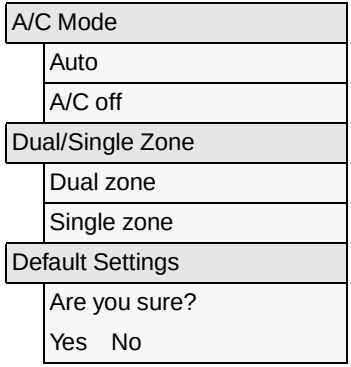
Profiler

Some of the functions of the ACC system can be customized.

1. Press the CUSTOMIZE button to go to Profiler.
2. Select Climate System using the INFO dial.
3. Press in the INFO dial.
4. Select Rear Defroster, Heated Seats, Fan Settings, Air Distribution, A/C Mode, Dual/Single Zone or Default Settings by turning the dial.
5. Confirm this selection by pressing the INFO dial.

Once you have adjusted the ACC system settings under Profiler, CUSTOMIZE will appear on the ACC display.





Explanation of how the ACC system can be customized under Profiler.

Rear Defroster

Auto:

The rear window and door mirror heating is controlled automatically. This is one of the Default Settings.

Manual:

The rear window and door mirror heating is switched on with the button on ACC panel.

Heated Seats

Auto:

The front seat heating is controlled automatically.
Select the level by repeatedly pressing the appropriate button on the ACC panel: 2 arrows on symbol = standard; 3 arrows = high; 1 arrow = low. The selected heating setting is saved when the engine is switched off. Note: The symbol on the ACC panel goes out if the heating is turned off automatically by the system.

Manual:

See Electric heating, front seats (option) on page 92.
This is one of the Default Settings.

Fan Settings

High speed:

This selection give a slightly higher fan speed than Medium speed though with continued automatic regulation.

Medium speed:

Normal automatic fan speed. This is one of the Default Settings.

Low speed:

This selection give a slightly lower fan speed than Medium speed though with continued automatic regulation.

Air Distribution

Auto:

The ACC system adapts air temperature and distribution to the prevailing conditions. This is one of the Default Settings.

Manual:

Windshield:

The ACC system directs almost all air to the windshield.

Panel:

The ACC system directs almost all air to air vents in the fascia.

Floor:

The ACC system directs almost all air to the floor.

A/C Mode

Auto:

Automatic engagement and disengagement of the A/C. This is one of the Default Settings.

A/C off:

A/C compressor OFF (see also page 87). The A/C compressor can be activated temporarily by pressing the AC or AUTO button while on the road and if the outside temperature is above 41°F (+5°C). The A/C will be off the next time the engine is started.

Dual/Single Zone

Dual zone:

Individual temperature setting for each zone (see page 85). The system saves the settings when the engine is switched off. This is one of the Default Settings.

Single zone:

Common temperature setting when the engine is started. If the temperature setting for the passenger zone is changed, the system will switch to Dual zone control. Single zone control will return the next time the engine is started.

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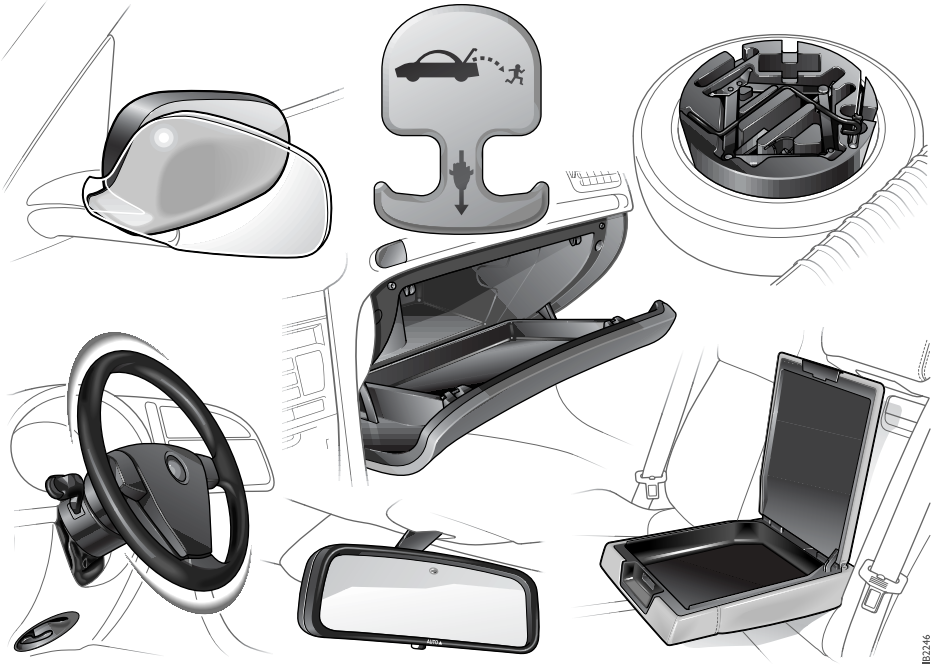
Interior equipment



Steering wheel adjustment

⚠ WARNING

Only adjust the steering wheel while the car is stationary so that you are not distracted from the traffic.

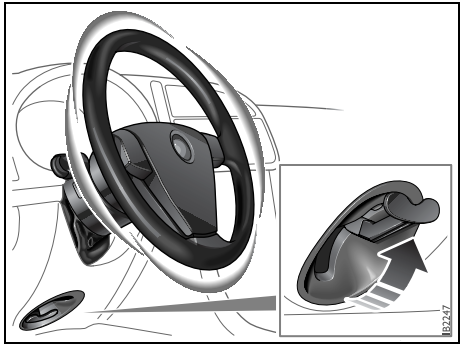
The height and reach of the steering wheel can be adjusted.

There is a release lever under the steering column.

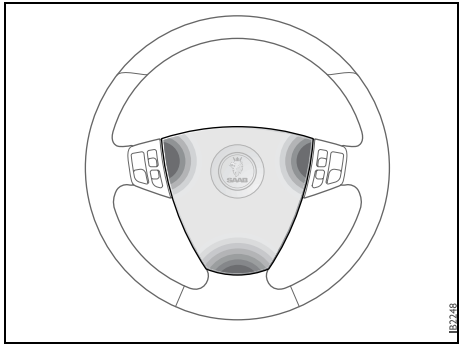
1. Pull down the lever to release the steering wheel.
2. Adjust the position of the steering wheel.
3. Raise the lever to the locked position to lock the steering wheel in position.

When returning the release lever to its locked position, you may need to adjust the position of the steering wheel slightly to allow the lock mechanism to engage correctly.

Steering wheel lock, see page 123.



Lever for steering wheel adjustment



Horn signal

Activate the horn by pressing one of the three areas shown above on the steering wheel pad.

Electric windows

⚠ WARNING

Bear in mind the pinch hazard when closing the side windows. Risk of serious or fatal injuries!

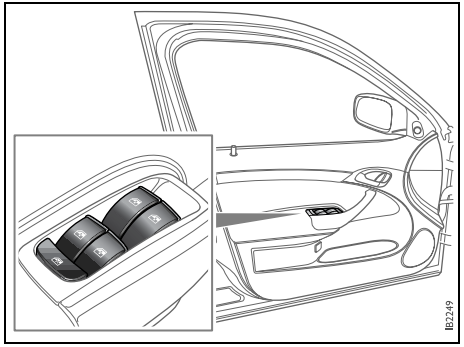
- **Always** remove the remote control from the ignition switch and open one of the front doors when you leave the car to prevent personal injury caused by the activation of the electric windows, for example, due to children playing.
- The person operating the electric window is responsible for ensuring that no one, especially a child, has their head, hands or fingers in the window openings, before raising the window.

The electric windows are operated by means of switches in the door armrests.

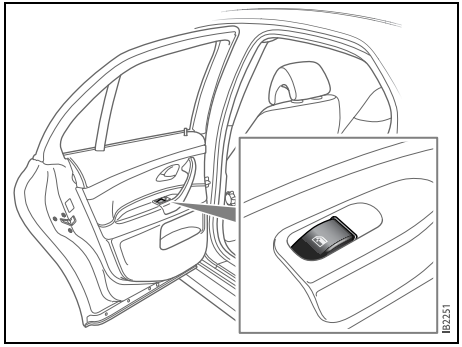
For the electric windows to work, the remote control must be in the ON position in the ignition switch.

At the end of a journey and having removed the remote control, you can still operate the windows, so long as neither of the front doors has been opened.

Windows having the automatic closing function (option) can be operated as long as the car is unlocked and until 20 minutes has passed since the remote control was removed from the ignition switch.



Window switches



Window switch in rear door

To open

Press down the front edge of the button one step.

The window will stop when it is fully open or when the button is released.

Automatic opening: Press the button all the way down and release it.

Comfort opening (option)

Comfort opening is the remote opening of windows and the sunroof.

Press and hold the unlocking button on the remote control until the windows and sunroof start to open (approx. 2 s).

To close

⚠ WARNING

Take care when closing a window to ensure that no one gets caught.

Raise the front edge of the button one step.

The window will stop when it is fully closed or when the button is released.

Automatic closing (option): Raise the button all the way and release it. If the window does not close automatically, refer to Calibration on page 101.

Comfort closing (option)

⚠ WARNING

Make sure no one is so close to the car that they can be injured if comfort closing is activated.

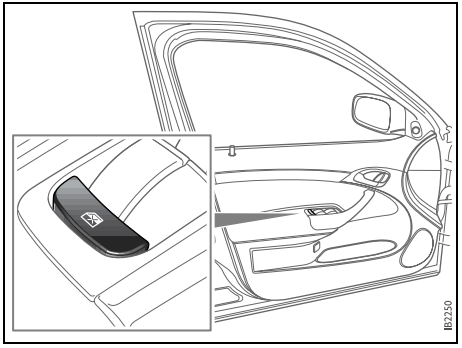
Comfort closing is the remote closing of open windows and the sunroof, and the retracting of electrically retractable door mirrors.

Press and hold the locking button on the remote control until the windows are closed and door mirrors retracted (takes roughly 2 s). The doors must be shut.

Confirmation that closing has finished is provided by the direction indicators, which flash once. No confirmation indicates that closing was not possible. This may be due to a door being open or a window requiring calibration.

Pinch protection

On certain model variants, the electric windows are equipped with pinch protection. This is activated if something gets trapped between the window pane and door frame when the window is closed. The window will stop and lower slightly.



Button for temporary deactivation of rear door window switches and temporary override of window pinch protection

Overriding the pinch protection

⚠ WARNING

Make sure nothing obstructs the window when it is closed without pinch protection.

If dirt, ice or similar create so much resistance that the pinch protection cuts in, the pinch protection can be temporarily disengaged and the window closed.

1 Make sure the ignition is ON.

2 Press and hold the button on the driver's door while operating the window in question.

3 Close the window in question.

The pinch protection will be active the next time a window is operated.

Calibration

⚠ WARNING

The pinch protection will not be engaged after a power break until the electric windows have been calibrated.

After a power break, the electric windows must be calibrated for the pinch protection to work. Fully open and close the windows at least twice. You will hear a chime after successful calibration.

Deactivating the rear window switches

The in the driver's door deactivates the window switches in the rear doors.

The illuminated switch will change colour from green to orange (deactivated).

Sunroof

⚠ WARNING

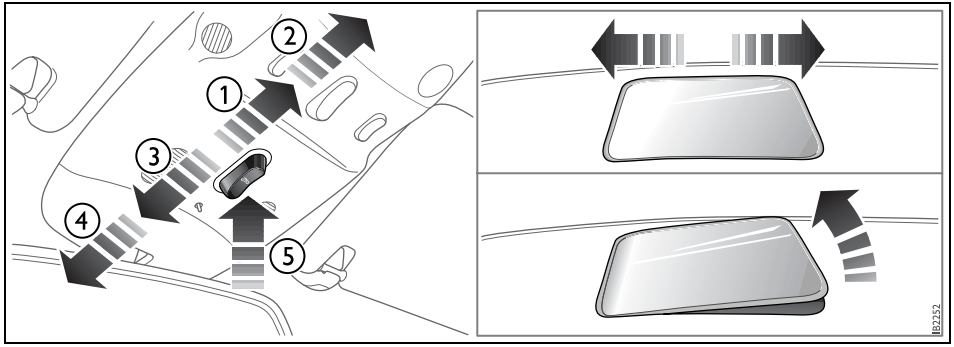
Bear in mind the pinch hazard when closing the electric sunroof. Risk of serious or fatal injuries!

- **Always** remove the remote control from the ignition switch and open one of the front doors when you leave the car to prevent personal injury caused by the activation of the electric sunroof, for example, due to children playing.
- The person operating the electric sunroof is responsible for ensuring that no one, especially a child, has their head, hands or fingers in the opening, before closing the sunroof.

The sunroof is operated by the control in the roof console. For the sunroof to work, the remote control must be in the ON position in the ignition switch.

At the end of a journey and having removed the remote control, you can still operate the sunroof, so long as neither of the front doors has been opened.

If the car is equipped with windows having the automatic closing function, the sunroof can be opened and closed so long as the car is unlocked until 20 minutes has passed since the remote control was removed from the ignition switch.



Sunroof control
1 Manually controlled opening
2 Automatic opening
3 Manually controlled closing
4 Automatic closing
5 Ventilation position

To open

Manually controlled opening

Slide the control rearward to its first position. The sunroof will halt when you release the control. If you do not release the control, the sunroof will open to the comfort position. To open the sunroof further, release the control and then once again press it rearward.

Automatic opening

Slide the control rearward to the second position and release it. The sunroof will open to the comfort position. To open the sunroof further, slide the control rearward a second time.

To close

⚠ WARNING

Exercise great care when closing the sunroof to ensure that nothing gets trapped.

Manually controlled closing

Slide the control forward to its first position. The sunroof will halt when you release the control.

Automatic closing

Slide the control forward to its second position and release it. The sunroof will close fully.

The sunroof pinch protection halts closing and opens the sunroof slightly if something obstructs closing.

Ventilation position (rear edge of sunroof open)

- To open – press in the control.
- To close – slide the control forward to the second position.

It is also possible to select the ventilation position when the sunroof is open by pressing in the control. The sunroof will then close automatically. Press the control once more to open the sunroof to its ventilation position.

If you wish to open the sunroof fully from the ventilation position, you must first close it (slide the control forward). You can then slide the control rearward to open the sunroof.

The sunroof incorporates an interior, manual, sliding sun blind.

Comfort opening (option)

Comfort opening is the remote opening of windows and the sunroof.

Press and hold the unlocking button on the remote control until the windows and sunroof start to open (approx. 2 s).

If the sunroof is in the ventilation position, it will not open.

Comfort closing (option)

⚠ WARNING

Make sure no one is so close to the car that they can be injured if comfort closing is activated.

Comfort closing is the remote closing of open windows and the sunroof, and the retracting of electrically retractable door mirrors.

Press and hold the locking button on the remote control until the windows are closed and door mirrors retracted (takes roughly 2 s). The doors must be shut.

Pinch protection

⚠ WARNING

Make sure nothing obstructs the sunroof when it is closed without pinch protection.

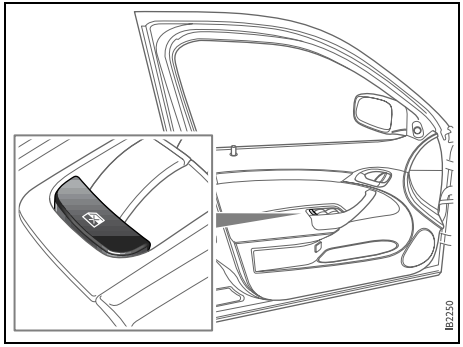
The sunroof is equipped with pinch protection. This is activated if something gets trapped when the sunroof is being closed. The sunroof will stop and open slightly.

Overriding the pinch protection

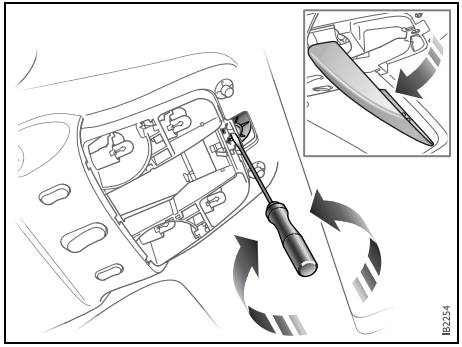
If dirt, ice or similar create so much resistance that the pinch protection cuts in (sunroof cannot be closed), the pinch protection can be temporarily disengaged.

1. Make sure the ignition is ON.
2. Press and hold the button on the driver's door while operating the window in question.
3. Close the sunroof with the button on the roof console.

The pinch protection will be operative the next time the sunroof is operated.



Button for overriding the sunroof pinch protection



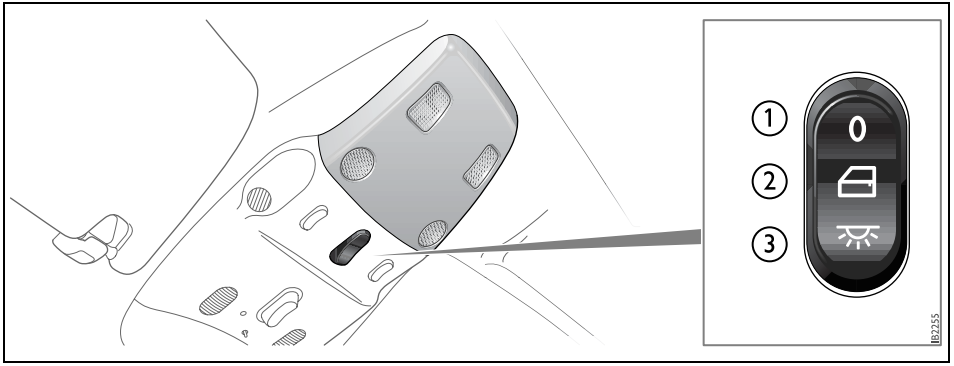
Emergency operation of the sunroof

In an emergency, such as if there is an electrical failure, the sunroof can be operated with a screwdriver.

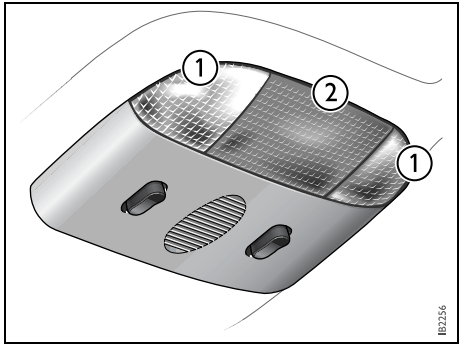
Remove the lens from the roof console. Use a screwdriver to press in the pin in the slot in the center of the motor shaft and turn the screwdriver.

Turn clockwise to close the sunroof.

If the rear edge of the sunroof is open (ventilation position), turn the screwdriver counter-clockwise.



1 Interior lighting always off
2 Interior lighting controlled by the doors
3 Interior lighting on continuously



Rear lighting
1 Reading lights
2 Roof light

Interior lighting

The interior lighting consists of one front and one rear roof light, floor lighting, and courtesy lights in the doors. The light switch for the interior lighting is located on the roof console by the rearview mirror.

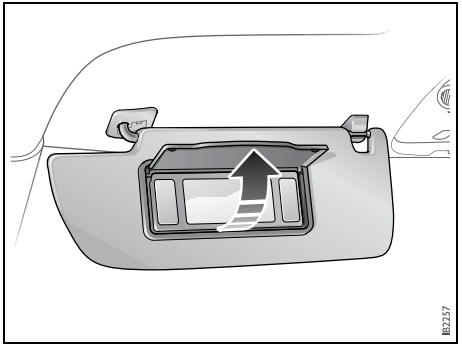
When the switch is in the mid-position (door-activated), the interior lighting will come on:

- When a door is opened and the ignition is OFF.
- When the remote control is removed from the ignition switch.

When the light switch is in the mid-position, the lighting is switched off automatically roughly 20 seconds after the last door is closed or when the ignition is switched ON. The lighting dims gradually until off.

If a door is left open and the light switch is in position 2 or 3 and the ignition is OFF, the interior lighting will be switched off automatically after 20 minutes to save the battery.

The glove compartment lighting is switched on and off automatically when the glove compartment is opened and closed.



Sun visor with vanity mirror

Sun visor

Illuminated vanity mirrors are provided on the sun visors. The lighting comes on when the cover is raised.

Trunk lighting

The trunk lighting is switched on and off when the trunk lid is opened and closed.

If the trunk lid is left open, the lighting will be switched off automatically after 20 minutes to prevent the battery from running flat.

Cup holder

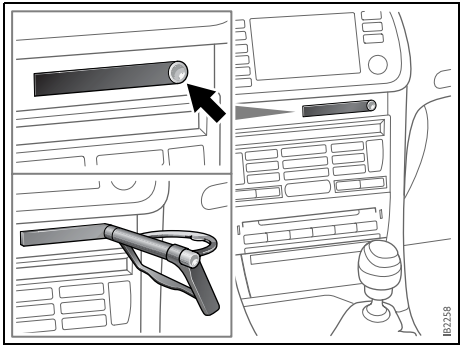
⚠ WARNING

- The cup holder should not be used to hold cups made of china or glass as these can cause personal injury in the event of a crash.
- Use only paper mugs, plastic bottles or aluminium cans.
- Avoid spillage, particularly of hot drinks.

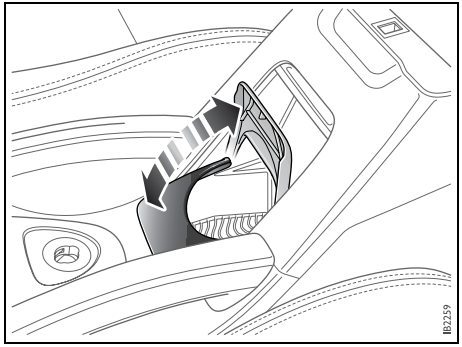
NOTICE

Take care not to spill any liquid on the audio system when using the cup holders. Soft drinks in particular can cause malfunctions.

Cup holders are provided in the fascia, in the center console compartment between the front seats and rear seat cushion. The cup holder between the seats can be raised if you wish to use the compartment for storage.

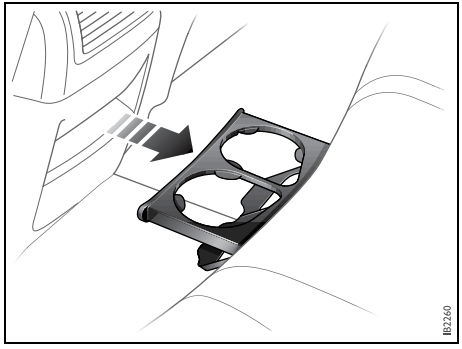


Cup holder in fascia



Cup holder in center console compartment between front seats

Cup holder in rear seat cushion



Ashtray

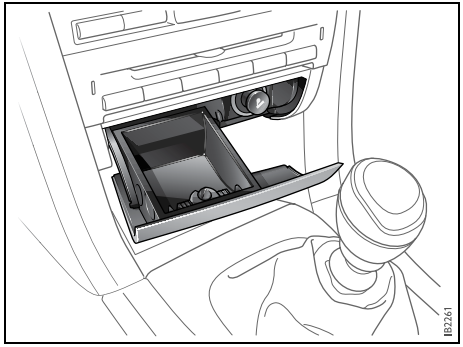
The car has an ashtray in front of the gear lever.

Lightly press the front of the ashtray to open it. Remove the insert by taking hold of the sides and lifting it straight up. Refit the insert by sliding it straight in.

You can use the electrical socket in the storage compartment under the armrest between the front seats to charge a mobile phone, for example. There is a recess on each side of the compartment which will accept a lead so that you can close the lid without damaging the charger lead.

⚠ WARNING

The maximum output of the cigarette lighter socket is 240 W (20 A). The rating of the socket in the compartment between the seats is the same. Overloading can result in melting or even fire.



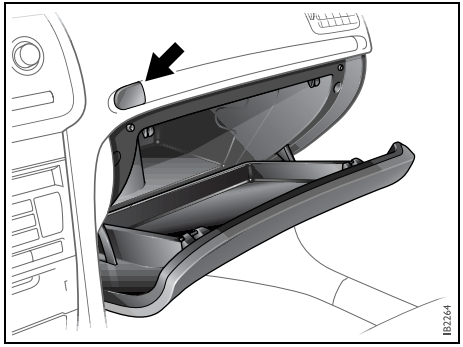
Front ashtray and cigarette lighter

Storage compartments

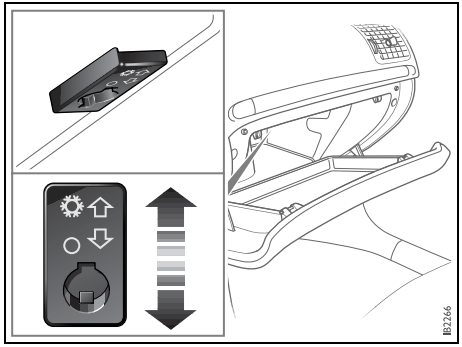
⚠ WARNING

The glove compartment must be closed while travelling. An open glove compartment door could cause personal injury in the event of a crash.

There are additional storage compartments in the rear seat armrest, below the front ashtray and in the doors.

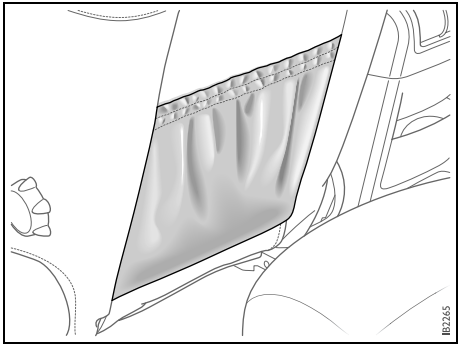


Open the glove compartment with the button on the left of the moulding

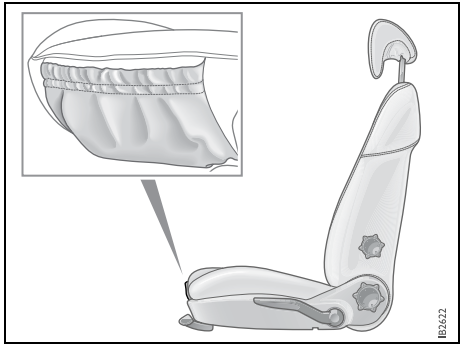


Sliding cover in glove compartment to admit cold air (cars with ACC only). This allows the storage of chocolate and chilled drinks, for example.

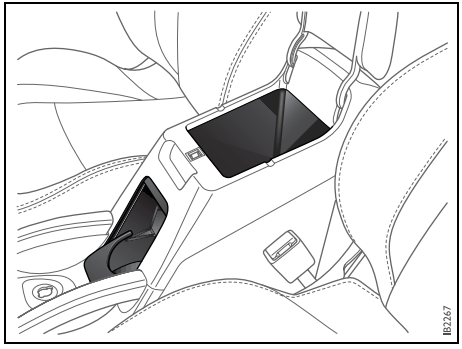
Storage pocket on back of seats



Storage pocket on front edge of seats



Storage compartment between front seats



Rearview mirrors

Door mirrors

To adjust

The door mirrors are electrically adjustable and heated. The controls for adjusting the mirrors are on the driver's door:

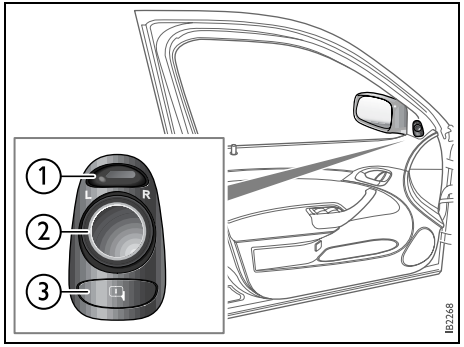
1 Select a door mirror with the upper button.

2 Adjust the mirror using the touch pad.

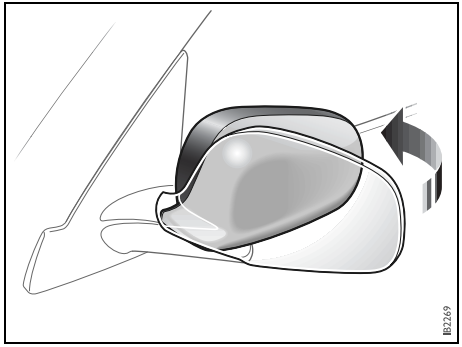
The mirror glass can also be adjusted manually by gently pressing the glass in the desired direction.

The mirror heating is turned on together with the rear window heating.

If the car has an electrically adjustable driver's seat with memory, the mirror settings are stored in the memory (see page 18).



1 Selection of mirror
2 Touch pad for adjustment
3 Reversing position (electric)



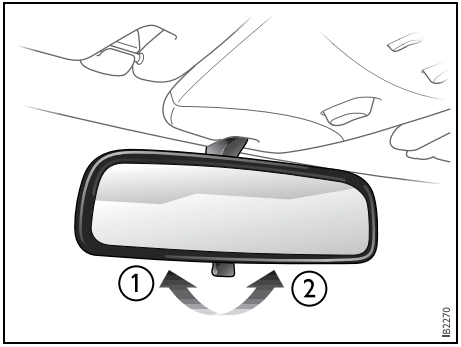
Retracting a door mirror

Manual retraction

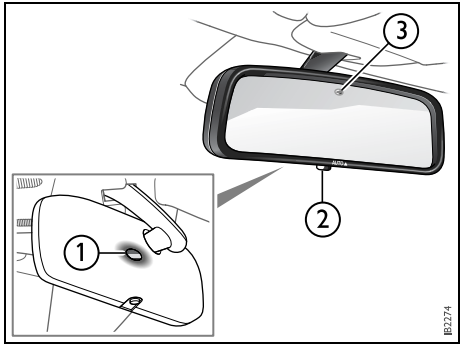
The door mirrors are designed to fold back if knocked. The mirrors can also be retracted manually. This can be useful when parking in tight spaces, such as on the car deck of a ferry. Remember to return the door mirrors to their normal positions before driving off.

Reversing position

On certain model variants, the passenger-side mirror glass can be angled down to facilitate reversing. Press the button shown in the illustration. This is located under the touch pad. Return the mirror to its normal position by pressing the button again. The mirror will also return to its normal position if you drive forward approximately 22 yds. (20 meters).



Mirror position lever
1 Normal position
2 Antidazzle position



Mirror with autodimming
1 Forward-facing sensor
2 Autodimming ON/OFF
3 Rear-facing sensor

Interior rearview mirror

The interior rearview mirror is of the antidazzle type and can be deflected with the lever on its underside. Certain variants have an autodimming rearview mirror.

The lever should be in the normal position when you adjust the mirror.

Interior rearview mirror with autodimming

The system is activated when the forward-facing sensor detects that it is dark outside and the rear-facing sensor detects, for example, if the car following has not dimmed its headlights. The rearview mirror is then darkened to prevent the strong light source from dazzling the driver. This darkening is stepless.

The mirror returns to its normal state when the strong light source diminishes.

The autodimming function can be turned OFF with the switch on the lower edge of the rear-view mirror.

NOTE!

Towing a trailer can cause the system to malfunction, as the rear-facing sensor may shaded by the trailer.

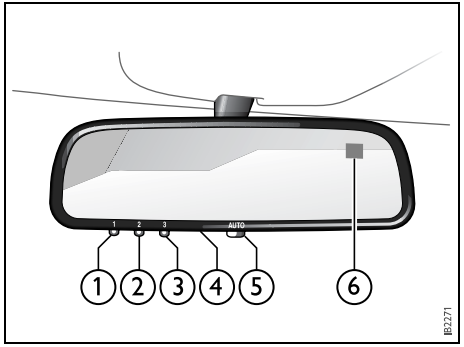
Interior rearview mirror with garage opener, autodimming function and compass (certain variants only)

⚠ WARNING

Make sure that people and objects are out of the way of moving door or gate to prevent potential harm or damage.

When programming the garage opener, you may be operating a garage door or gate operator.

Do not use the garage opener with any garage door opener that lacks the safety stop and reverse feature as required by federal safety standards. (This includes any garage door opener model manufactured before April 1, 1982.). A garage door opener which cannot detect an object, signaling the door to stop and reverse, does not meet current federal safety standards. Using a garage door opener without these features increases risk of serious injury or death.



Buttons for garage opener, autodimming and compass

1–3 Garage opener
4 LED
5 Autodimming/compass ON/OFF
6 Compass bearing

Retain your original garage door opener (transmitter) for future programming procedures (i.e., new vehicle purchase). It is also suggested that upon the sale of the vehicle, the programmed garage opener buttons be erased for security purposes, see page 113.

Preparations for first-time programming

Before programming the garage opener for the first time, you must delete any factory codes.

Press and hold buttons 1 and 3 for about 20 seconds until the LED starts to flash. This deletes the factory codes and initiates the programming phase.

Programming the garage opener

The garage opener can record and store the frequencies of three different remote controls.

The battery in the remote control should be fairly new for programming to work well.

1 Turn the ignition ON.
2 Hold your existing garage door opener 1–3 in. (3–7 cm) below the rearview mirror. Sit where you can see the LED (4) during programming.
3 Press the button on the remote control and the desired button on the rear view mirror at the same time.
4 The LED will now start to flash, slowly at first and then rapidly. The rapidly flashing LED indicates that programming is complete and that you can release the buttons.

The remote control may stop transmitting during programming. If so, continue to hold the button on the rearview mirror and release and press the button on the remote control every other second, "cycling" until programming is completed.

The LED will flash slowly at first and then rapidly. The rapidly flashing LED indicates that programming is complete and that you can release the buttons.

NOTICE

Switch off the power supply to the garage door or gate (or park the car beyond the range of the remote control) while programming using the "cycling" method to prevent damaging the electrical motor.

Reprogramming a button that has previously been programmed

1 Press and hold the desired button on the rearview mirror for the entire programming sequence.
2 The LED will start to flash slowly after 20 seconds.
3 Hold your existing garage door opener 1–3 in. (3–7 cm) from the rearview mirror and press the button on the remote control.
4 Reprogramming is complete when the LED starts to flash rapidly.

The previous frequency is now erased and replaced by the new one. Reprogramming one button does not affect the other buttons.

Complete erase

Completely erase the memory of the garage opener by pressing and holding buttons 1 and 3 simultaneously for 20 seconds. Confirmation is provided by the LED flashing rapidly for 10 seconds.

A complete erase deletes the frequencies from all three buttons. It is not possible to erase the memory of a single button.

Opening a garage door

Press and hold the appropriate button until the garage door starts to open.

You can of course still use your original garage door opener even if you have programmed the garage opener in the rearview mirror.

Garage doors with rolling security codes

Garage doors with rolling security codes manufactured after 1996 can be identified as follows:

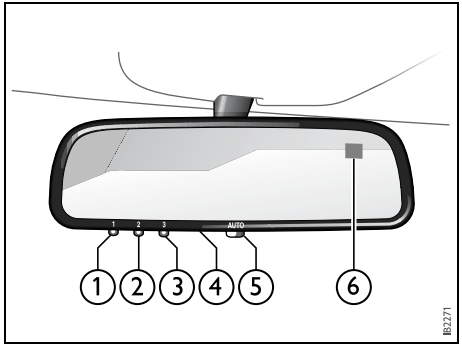
- Read the instruction manual for the garage door.
- Programming the garage opener in the rearview mirror seems to be successful but the garage door does not open.
- Press and hold the programmed button. The garage door uses a rolling security code if the LED flashes rapidly and after 2 seconds shines constantly.

If the garage door remote control uses rolling security codes, proceed as follows having programmed the garage opener:

1 Localise the button labelled "learn" or "smart" on the motor unit of the garage door. The location and color of this button varies between makes.
2 Press and release the "learn" button on the motor unit. Step 3 must be performed within 30 seconds of Step 2.
3 Press the programmed button on the rearview mirror twice (some garage doors require the button to be pressed three times; refer to the door’s instruction manual).

Autodimming

Press button 5 briefly to switch autodimming on or off. When autodimming is switched on, a 1 is displayed briefly in the compass window. A 0 indicates that autodimming is switched off. See page 111 for a description of operation.



Buttons for garage opener, autodimming and compass

1–3 Garage opener
4 LED
5 Autodimming/compass ON/OFF
6 Compass bearing

Compass

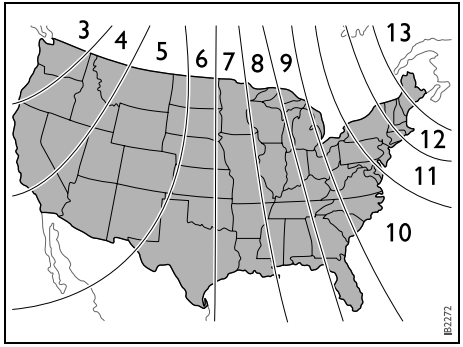
The compass is built into the rearview mirror. The compass bearing is displayed in the top right-hand corner of the mirror and is updated every other second. The compass displays the car's direction of travel: N, NE, E, etc.

Switch the compass display on and off by pressing button 5 for 3 seconds, see illustration on page 114.

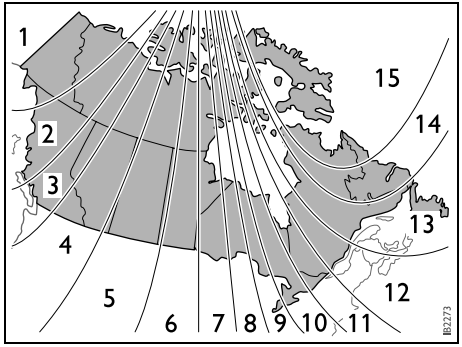
Changing zones

The earth's magnetic field varies depending on one's position on the globe. If you drive your car from one magnetic zone to another the compass setting will need to be changed to ensure a correct bearing.

1 Study the illustrations to determine the correct zone.
2 Press and hold button 5 until "ZONE" is shown in the display on the mirror (6 s). The zone number is now also shown.
3 Press button 5 repeatedly to change the zone number. There are 15 zones from which to choose. Once the correct zone is selected, release the button and wait 4 seconds. The compass will now display the bearing.



Compass zones in USA



Compass zones in Canada

Calibration

Calibration is performed automatically during travel.

If, for any reason, a manual calibration is needed perform as follows:

1 Press and hold button 5 until "CAL" and the compass bearing are displayed (approx. 9 s).
2 Drive in circles (max. 5 mph/8 km/h) or drive as normal until "CAL" is no longer displayed.

Trunk

Folding down the rear seat

For greater flexibility, the rear seat is split so that the narrow and the wide part can be folded down separately.

Next to the hinges in the trunk are handles for unlocking the rear seat backrests.

The operation is easier if the front seats are not too far back and the rear seat head restraints are fully lowered.

1 Unlock the backrest by pulling the appropriate handle in the trunk.

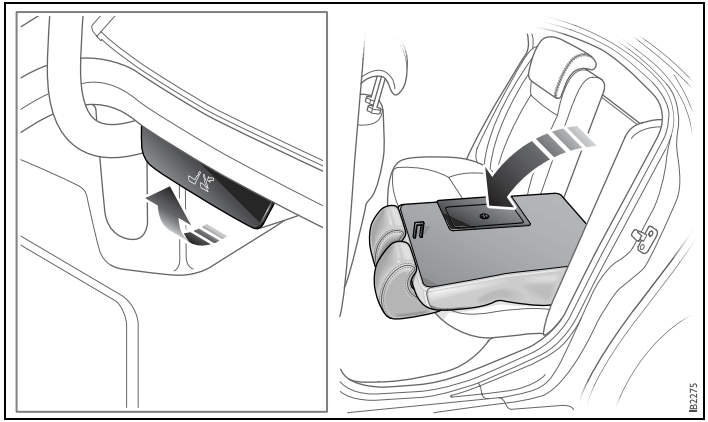
2 Fold the backrest forward.
Note: When returning the backrest to its upright position, make sure that it locks properly in place and that the seatbelt does not get caught.

If the left-hand backrest is not properly locked in position, the following message is displayed on the SID (equivalent message displayed for right-hand backrest):

Rear left seat backrest unlocked.

Trunk Release Handle, see page 118.

Emergency opening of the narrow backrest, see page 119.



WARNING

- Never driver the car if the backrest is not correctly locked into position as this increases the risk of personal injury in the event of heavy braking or a crash.
- Never leave a child or animal unattended in the car. During sunny weather the temperature in the passenger and trunk can climb to 160–180°F (70–80°C). Small children are very susceptible to heat stroke.

WARNING

- Keep hands well clear of all moving parts.
- Never place heavy objects on the parcel shelf. There is always a danger of loose objects being thrown forward and causing injury if the car should brake suddenly or be involved in a crash. See also page 162.
- When folding the backrest back upright, make sure that it is locked correctly on both sides. This is imperative since otherwise objects in the trunk could force their way into the cabin during heavy breaking or a crash.
- Adjust the head restraints for the rear seats to be occupied to a suitable height before riding in the car.

Load-through hatch

A load-through hatch is incorporated in the rear seat backrest to enable long, narrow items to be carried inside the car.

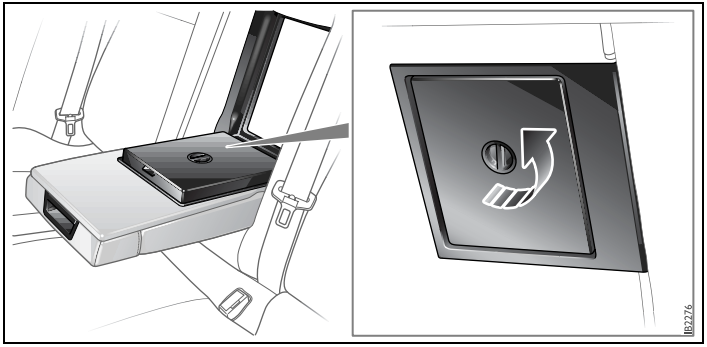
Before loading or unloading long items, switch off the engine and apply the parking brake. This avoids the danger of the car moving off if a long item were to knock the gear or selector lever into gear.

- Fold down the armrest and open the hatch by lifting the handle.

There is a lock on the rear side of the hatch. Use this to lock or unlock the hatch. The position of the lock is designed to prevent unauthorized persons from accessing the trunk from inside the cabin.

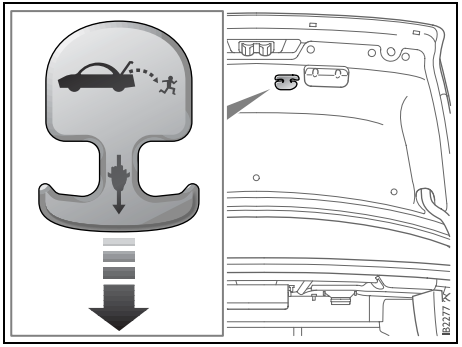
To lock: Open the hatch and lock the lock. Close the hatch. The hatch is now locked.

To unlock: Fold down the wide section of the backrest and unlock the lock. Alternatively, you can unlock the hatch from the trunk.

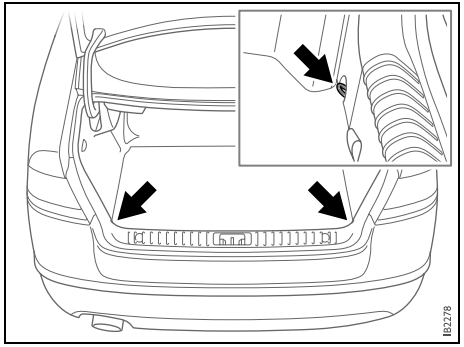


WARNING

- Always secure the load firmly, for example using the middle seatbelt. This reduces the danger of personal injury resulting from the displacement of the load on hard braking or in the event of a crash.
- Do not exceed the load capacity of the car, as this will alter its handling characteristics (see page 236).



Trunk Release Handle



Lashing eyes in the trunk

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 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.

Lashing eyes

There are four lashing eyes in the trunk that should be used to secure loads. In general, loads should be placed as far forward and as low down as possible in the trunk.

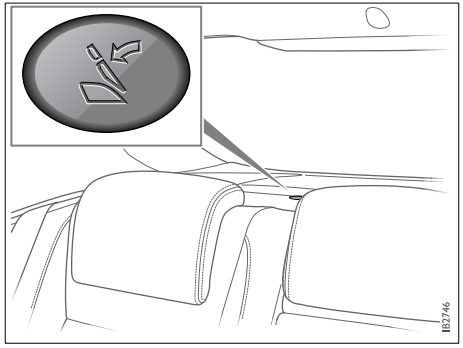
⚠ WARNING

- Lay heavy bags on the floor. Place smaller and lighter bags on top.
- Secure heavy and bulky items using the four lashing eyes provided in the trunk. This will avert the danger of luggage flying around if the car should brake suddenly or be involved in a crash.
- 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 crash.
- Do not exceed the load capacity of the car, as this will alter its handling characteristics (see page 236).
- Match your speed and driving style to how the car is loaded. The handling characteristics of the car can be affected since a load in the trunk will alter the car's center of gravity.

Trunk lighting

On the underside of the parcel shelf is a light that is switched on and off when the trunk is opened and closed.

If the trunk lid is left open, the lighting will be switched off automatically after 20 minutes to prevent the battery from running flat.



Cover over emergency opening lever, on parcel shelf

Emergency opening of the narrow backrest

The narrow section of the backrest can be opened in an emergency if the car is without electricity (not possible to open trunk lid) and you need to access the trunk for a warning triangle, for example.

- Remove the cover and depress the yellow lever forward.

Tools and spare wheel, see page 212.

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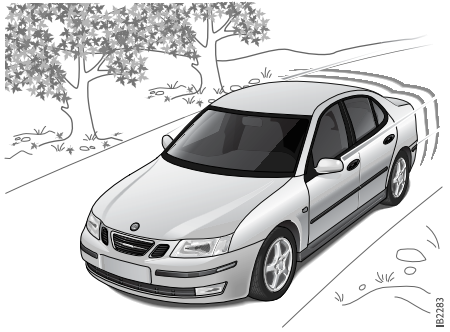
Starting and driving



Ignition switch

The ignition switch is located on the center console between the front seats. In cars with automatic transmission, the remote control can only be removed when the selector lever is in position P.

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.

⚠ WARNING

- Always remove the remote control before leaving children unattended in the car.
- Apply the parking brake before removing the remote control.
- Never remove the remote control while the car is moving. This will activate the steering wheel lock and make it impossible to steer the car.

	**LOCK position** The position lights, hazard warning lights and interior lighting can be turned on. **Cars with automatic transmission:** Move the gear lever to P. The gear lever is locked in position. This is the only position in which the remote control can be removed. **Cars with manual transmission:** The remote control can be removed regardless of the position of the gear lever.
	**OFF position** Parts of the electrical system are operative. **Do not leave the remote control in the OFF position with the engine not running as this could cause the battery to run flat in a matter of hours.** **Cars with automatic transmission:** The gear lever is not locked. See also page 135.
	**ON position** The entire electrical system is operative. **Do not leave the remote control in the ON position when the engine is not running.** Turn the remote control to the OFF position to disconnect the electrical system. When you turn the remote control to ON, some indicator and warning lights will come on in the main instrument panel. These should go out after about 3 seconds.
	**ST - starter position** The starter motor operates (automatic transmission: selector lever must be in P or N) when the remote control is turned to this position. When released, the remote control will spring back to the ON position. The car has an electronic restart lock. If the engine fails to start, the remote control must first be turned back to a position between OFF and LOCK before the starter motor can be operated again.

Steering wheel lock

The steering wheel lock is electronic. The lock engages when the remote control is removed from the ignition and unlocks when the remote control is inserted. A click can be heard when the steering wheel lock locks and unlocks.

If the car is parked with one front wheel touching the curb, for example, you may need to turn the steering wheel slightly when you insert the remote control to allow the steering wheel lock to unlock. If you do not succeed on first attempt you must remove the remote control before trying again. Turn the steering wheel and insert the remote control into the ignition switch.

If the steering wheel lock does not disengage it will not be possible to turn the remote control in the ignition switch.

The following message is shown on the SID:

Steering wheel locked.
Pull out key, turn steering wheel. Try again.

If a fault arises affecting the steering wheel lock, the following message will be displayed on the SID:

Steering lock malfunc.
Make a safe stop.
Contact Saab dealer.

If the steering wheel lock malfunctions while the remote control is in the ignition switch, this may prevent the removal of the remote control or prevent the car from being restarted once the engine has been switched off.

If you have to leave the car, lock the car by pressing down the lock buttons on the doors. Lock the front left door from outside with the traditional key (see page 40). The car is now locked but the alarm is inactive.

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 window that is down. This could lead to serious personal injury.
- Cars with automatic transmission: select position P 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.
- 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.
- There is also a danger of CO poisoning if the exhaust system is leaking.

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.

Starting the engine

Avoid racing the engine or loading it heavily before it has warmed up. Do not drive away before the warning and indicator lights have gone out.

The engine has an automatic choke and should be started as follows:

Cars with manual transmission

To start the engine the clutch pedal must be fully depressed.

1 Make sure the parking brake is applied.
2 Depress the clutch pedal but do not touch the accelerator.
3 Start the engine. Let the remote control spring back as soon as the engine has started and is running smoothly.

Allow the engine to idle for about 10 seconds. Do not apply full throttle for at least 3 minutes after starting.

Cars with automatic transmission

The selector lever must be in the P or N position.

1 The selector lever must be in the P or N position.
2 Keep your foot on the brake pedal. **Note!** Once the engine has started, the brake pedal will sink. This is perfectly normal.
3 Start the engine. Let the remote control spring back as soon as the engine has started and is running smoothly.

Allow the engine to idle for about 10 seconds. Do not apply full throttle for at least 3 minutes after starting.

Useful tips on starting the engine

If the engine has failed to start after several attempts in very cold weather, proceed as follows:

1 Turn the ignition switch to ON (it is essential that you turn the ignition to ON before depressing the accelerator).
2 Press the accelerator to the floor and run the starter motor for 5-10 seconds. This will prevent the engine being flooded (fully depressed accelerator cuts off the fuel supply).
3 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.

Important considerations for driving

1 Starting and driving

- Do not use full throttle until the engine is warm, so as to avoid unnecessary wear. If the needle of the turbo gauge repeatedly enters the red zone, the engine may suddenly lose power, due to the initiation of a monitoring system that limits the boost pressure. Contact a Saab dealer as soon as possible.
- Under certain barometric conditions (high outside temperature and/or high altitude) the needle may enter the first part of the red zone without necessarily indicating that a fault has arisen.
- A protective function (interruption of the fuel supply) limits the engine speed.

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 AON 90. One of the advantages of boost pressure regulation is that the engine can also be run safely on gasoline with a lower octane rating, although not lower than AON 87. Severe engine damage will occur if gasoline lower than 87 octane is used. However, engine performance will fall slightly and heavy loading and laboring should be avoided. For optimum performance, use the recommended grade of fuel.
- The maximum boost pressure is regulated according to the tendency of the engine to knock. Short-lived knocking is perfectly normal. This can occur when the engine is running at about 3,000 rpm under a heavy load. The extent of this knocking will depend on the grade of fuel in the tank.
- Isolated instances of knocking can occur with low-octane fuel. This controlled form of knocking, followed by a reduction in the boost pressure, is a sign that the control system is working normally, and is perfectly safe for the engine.

NOTICE

- If the engine sounds strange there is a malfunction. Contact a Saab dealer immediately.
- The use of fuel with too low an octane rating can cause serious engine damage.

Limp-home

The engine management system has a diagnostic feature that checks a number of internal functions. If a fault is detected in the throttle valve, the engine management system will set the throttle system to the limp-home mode. This means:

- idling control will be poor (uneven idling since regulated by ignition and fuel supply)
- engine performance will be reduced
- the cruise control will not function
- the capacity of the A/C compressor will be limited.

If the diagnosis function detects a fault in the engine management system, the  light "Engine malfunction (CHECK ENGINE)" in the instrument panel will come on (see page 55). Have the car checked at a Saab dealer as soon as possible.

The following message is shown on the SID:

Reduced engine power. Contact Saab dealer.

NOTICE

If  "Engine malfunction (CHECK ENGINE)" warning light starts to flash (indicating that the engine is misfiring and the catalytic converter can be damaged), ease off the accelerator slightly. The light should go out or start to shine constantly. If the light continues to flash despite easing off the accelerator, you may continue to drive the car but at the minimum throttle permitted by the current traffic situation. Have the car checked as soon as possible at a Saab dealer.

Important considarations 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 (precious metal alloy).

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.
- 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 a Saab dealer.
- If the engine fails to start (in severe cold or if the battery is flat), the car can be bump started (manual transmission only) or started using jump leads 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 5 minutes to give it time to settle and run smoothly. If, after this time, the engine still fails to run properly, switch off the engine to avoid serious damage to the catalytic converter. Contact a Saab dealer for advice.
- 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 bump start the car when the engine is already at normal working temperature, the engine must start to run on all cylinders. Abort bump starting if the engine fails to start immediately.

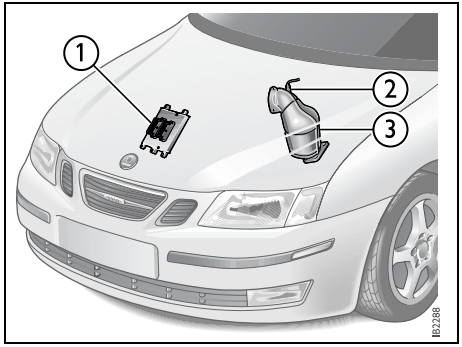
Failure to strictly follow these instructions can result in damage to the catalytic converter and associated components, and could represent a breach of the warranty conditions.

NOTICE

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

⚠ WARNING

If the engine is being run with the car on a rolling road or dynamometer, 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 obtain at the corresponding road speed.



Engine management system with catalytic converter

1 Engine control module
2 Oxygen sensor
3 Catalytic converter

Refueling

⚠ WARNING

Gasoline fumes are highly explosive. Therefore:

- **never** smoke while refueling
- **never** use gasoline for any purpose other than as engine fuel
- gasoline is extremely flammable and can cause severe burns. No open or exposed flames near gasoline
- do not use a mobile phone at the same time as refueling

Only use fuel from a well-known oil company.

All Saab gasoline engines can be driven on gasoline with an octane rating between AON 87–93.

The engine management system monitors the combustion and automatically adapts to the fuel used.

Always use the correct grade of fuel: unleaded AON 87–93.

NOTICE

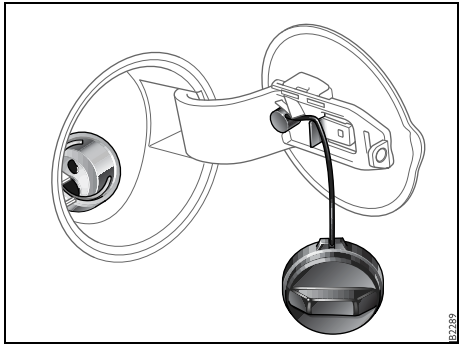
- Do not overfill. Fuel should not come right up the filler pipe as room for expansion is needed for when the temperature rises.
- The use of fuel with too low an octane rating can cause serious engine damage.

For optimum performance Saab recommends:

- **2.0t engine 175 hp – AON 90**.
- **2.0 Turbo engine 210 hp - AON 93.**

Sometimes, gasoline can contain a number of additives containing oxygen. The most common of these are alcohol or some type of ether. The maximum oxygen level is restricted by national regulations.

If fuel containing a mixture of alcohol is used, the maximum levels approved by Saab are: 5 % by volume of methanol; or 10 % by volume of ethanol. The most common type of ether used is MTBE (methyl tertiary butyl ether), of which fuel may contain a maximum of 15 % by volume.



Filler cap removed for refueling

Filler cap

Refueling

1 Switch off the engine.
2 Open the filler cap, located in the right-hand rear fender.
3 Insert the fuel pump nozzle beyond the flange on the filler pipe and let the first mark (a ring, a pimple or the first spring-coil) rest on the flange. Do not withdraw the nozzle while filling is in progress.
4 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 when the temperature rises.

Filler cap

The filler cap has a bayonet fitting. Turn the cap approximately 1/4 of a turn until you hear **one** click.

If the fuel filler cap is not on correctly, the following message is displayed on the SID:

Tighten fuel filler cap.

Manually opening the fuel filler door, see page 52.

The most effective way to prevent condensation forming in the tank (and thus avoid possible running problems) is to keep the tank full.

Refer to page 155 for information regarding gasoline anti-freeze.

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 90 AON for 175 hp engines and 93 AON for 210 hp engines.

Octane rating is determined according to the formula:

$$\frac{MON + RON}{2}$$

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.

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 methlycyclopentadienyl 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 55.

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 a distinct click.

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 "Engine malfunction (CHECK ENGINE)" on page 55. 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.

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

Clutch interlock

To start the car, the clutch pedal must be depressed.

When changing 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.

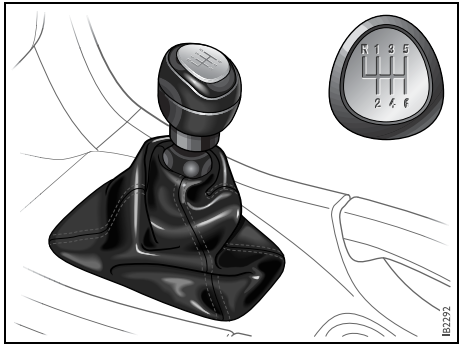
There are two manual gearbox versions: a 5-speed gearbox and a 6-speed gearbox. Reverse gear on the 6-speed gearbox is to the left of 1st gear. Raise the ring under the gear knob to engage reverse.

Before reverse (R) can be engaged, you must lift the ring underneath the gear knob.

NOTICE

When reverse gear is to be engaged, the car must be at a standstill with the accelerator fully released.

Gear positions, 5-speed



Gear positions, 6-speed

Shift up indicator (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.

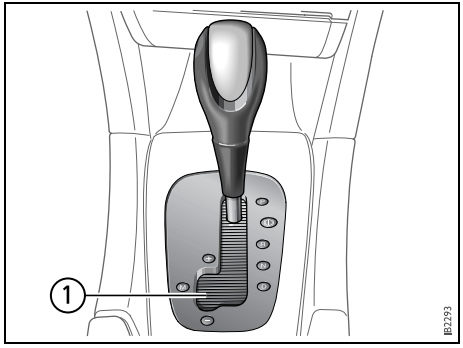
However, shifting with the light should result in improved fuel economy. Therefore, for reduced fuel consumption and better energy conservation, you should make a habit of shifting before or when the shift-up light comes on.

Automatic transmission

⚠ WARNING

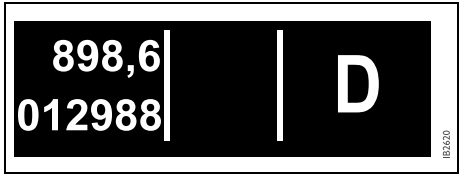
- Depress the brake pedal when shifting the selector lever from P or N.
- The car must be at a standstill before P, R or N is selected. You have to have your foot on the brake pedal to move the lever out of P. If the car is still moving when a drive position is subsequently selected, this could cause 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.

The automatic transmission has an electronic control module. The control module receives information including accelerator position and road speed. Using this and other information, it controls the hydraulic pressure of the transmission to ensure that gear changing is as smooth as possible.



Selector lever
1 Position for manual gear selection

The remote control can only be removed when the selector lever is in the P position.



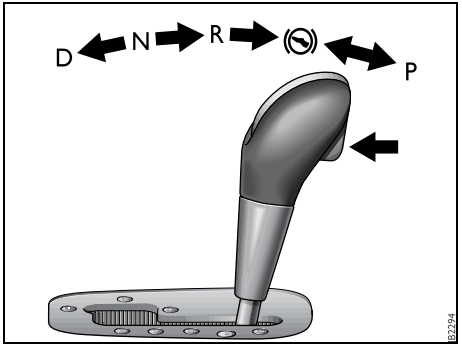
Indication of gear position on main instrument panel

The engine can only be started when the selector lever is in the P or N position.

When the car is stationary, the engine must be idling when you move the selector lever from one position to another. If not, the transmission could be damaged.

NOTICE

After selecting a drive position, pause briefly to allow the gear to engage (the car starts to pull a little) before you accelerate.



Selector lever detent

Park Brake Shift Lock

The transmission has a security function known as Park Brake Shift Lock. To move the gear selector lever out of the P or N position, the gear selector lever detent (catch) must be pressed in at the same time as the brake pedal is held depressed.

The detent button on the selector lever has to be pressed in before the lever can be moved between certain positions.

Temporary override of Park Brake Shift Lock, see page 137.

Adaptive gear change patterns

The adaptive gear change pattern function adapts gear changing to the prevailing driving conditions. The transmission control module senses the engine load, vehicle speed and temperature of the transmission. A suitable gear change pattern is then selected automatically to avoid unnecessary gear changes and undesired increases in transmission temperature.

Certain variants use a special change pattern for the first few minutes after a cold start so that the catalytic converter reaches its working temperature more quickly.

Thermal transmission protection

The transmission has built-in protection against overheating. This protection is provided by the control module, which changes gear change patterns.

1. If the temperature of the transmission fluid exceeds 257°F (125°C), the gear change pattern is changed.
2. If the temperature of the transmission fluid exceeds 275°F (135°C), the gear change pattern is again changed.
3. If the temperature of the transmission fluid exceeds 302°F (150°C), engine torque will be limited to 147 ft.lbs. (200 Nm).

The following message is shown on the SID:

Gearbox too hot.
Make a safe stop.
Open hood to cool down.

If this message appears, stop the car as soon as it is safe to do so and allow the engine to idle until the message has gone out. The selector lever should be in position P.

Lock-up

The transmission's torque converter has a lock-up function. This can lock the torque converter in 3rd, 4th and 5th gears, thus reducing the engine speed and fuel consumption.

Kick-down

When the accelerator is pressed down fully, a down change is made to optimize acceleration, e.g. for overtaking.

Following this, the next higher gear will be selected at the optimum engine speed, unless you ease off the accelerator before reaching this. Kick-down works in manual mode in 4th and 5th gears if the engine speed is lower than 2,000 rpm.

Driving in hilly country with a heavy load

The transmission fluid can overheat when the gearbox is strained, for example, when driving with a trailer on hilly roads. To avoid the transmission fluid overheating, always drive with the selector lever in the D position. The adaptive gear change patterns are then active.

High air temperatures or a faulty oil cooler can also cause the transmission fluid to overheat. Overheating reduces the service life of the fluid.

⚠ WARNING

Remember to use the braking effect of the engine (1st, 2nd or 3rd gear) when you are descending long or steep hills to spare the brakes.

Overheating can cause the brakes to fade!

Towing

Towing of cars with automatic transmission, see page 164.

Descending hills

If the speed of the car increases while descending a steep hill, despite the accelerator being released, the control module will change down to 4th gear. If you desire more powerful engine braking, manually select a lower gear (see page 139).

Limp-home

If the transmission malfunctions, the control module will activate limp-home mode. In this mode, only 2nd and 5th gears are available. Select 2nd gear when driving at low speeds and 5th gear at higher speeds. 2nd gear must be selected manually. Select 5th gear manually or move the selector lever to D (see page 139).

The following message is shown on the SID:

Gearbox malfunction.
Limited performance.
Contact Saab dealer.

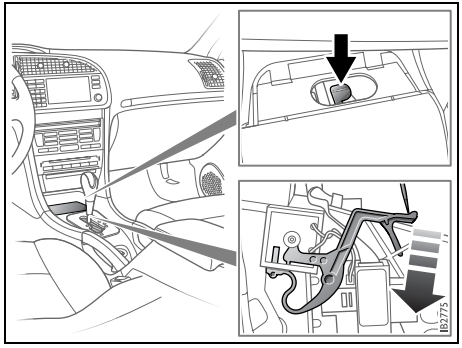
Temporary override of Park Brake Shift Lock

NOTICE

Due to electrical problems it may not be possible to move the selector lever out of the park position, even if the ignition is ON. If for some reason the selector lever has to be moved out of the park position (i.e. to tow the car a short distance) do as described below.

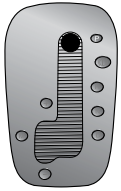
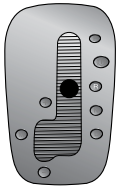
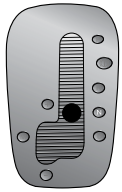
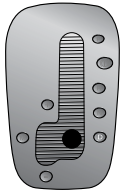
1. Apply the parking brake.
2. Lift up the rubber mat in the storage compartment ahead of the selector lever.
3. Under the floor of the storage compartment is a yellow plastic lever. Use a thin tool, such as a screwdriver, to press and hold the plastic lever while moving the selector lever from P to N.
4. Remove the tool.
5. Release the parking brake if the car is to be moved immediately, otherwise it should remain on.

Check fuse 6 in the engine bay fuse box. If the fuse is OK the battery may be dead. Contact a Saab dealer to have the problem checked and rectified.

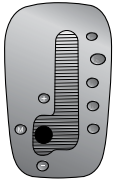


Temporary override of Park Brake Shift Lock

Selector lever positions

	**P** The selector lever is locked and the transmission is mechanically blocked. The engine can be started. To move the selector lever out of the P position, depress the brake pedal and press in the detent (catch) on the selector lever. Only select the park position (P) when the car is stationary.
	**R** Only select the reverse position (R) when the car stationary. The detent release button must be pressed before the selector lever can be moved to R. Wait until reverse gear has engaged before touching the accelerator.
	**N** You must press the brake pedal to move the selector lever from the neutral position (N). In neutral, the transmission is disengaged from the engine. The engine can be started but make sure the parking brake is on to prevent unexpected movement. To prevent the engine and transmission becoming hotter than necessary, select N for long stops with the engine running, e.g. when stuck in a traffic jam. At traffic lights, leave the selector lever in the drive position (D).
	**D** The drive position (D) is the normal one for forward driving. The transmission shifts automatically between all gears from 1st to 5th, the timing of which depends on factors such as the current accelerator position and the speed of the car. Pause for a moment before applying the accelerator, to allow the gears to engage.

M3



Sentronic, manual gear selection

Move the selector lever to the manual position (M) (to the left position D) to select gear manually.

Select a higher gear by pressing the selector lever forward or a lower gear by pulling it back. The selector lever will return to a position adjacent to the letter M after each gear change.

An example of when you may wish to make manual gear changes is when overtaking, to enable you to remain in a low gear for an extended period of time.

If the road surface is slippery, you may wish to pull off in 2nd or 3rd to reduce the risk of wheel spin.

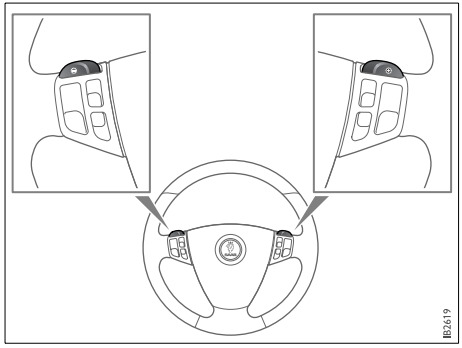
When descending steep hills you should select a low gear to increase the braking effect of the engine and thus spare the brakes.

Manual gear selections are displayed on the main instrument panel. The letter M and the current gear are displayed.

When the selector lever is in the M position, as opposed to the D position, the engine is much more responsive to changes in accelerator position. The accelerator has a different feel.

Kick-down only operates for 4th and 5th gears (below 2,000 rpm).

When changing down, the desired gear can be selected but the transmission will not change down until the engine speed is low enough to avoid overrevving.



Steering wheel controls for manual gear selection (Vector models)

Vector models also have steering wheel controls for manual gear selection. On these models, it is possible to change gear manually using the selector lever and the steering wheel controls. The steering wheel controls are only active when the selector lever is in the M position.

Select a higher gear by pressing the right-hand button and a lower gear by pressing the left-hand button.

Cruise control

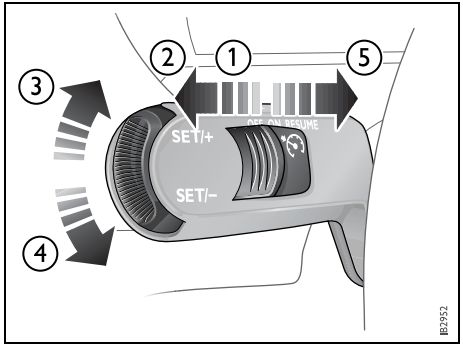
(Cruise control system)

> **⚠ WARNING**
>
> Do not use the cruise control system in wet or icy conditions, in dense traffic or on winding roads.

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 following message is shown on the SID:

Tap brakes lightly before using cruise control.



Cruise control switches

The system has the following functions:

1 ON: engaged
2 OFF: disengaged
3 SET/+: sets the speed and increases the set speed
4 SET/ –: sets the speed and decreases the set speed
5 RESUME: re-engages the system at the set speed

The CRUISE indicator light in the main instrument panel comes on when the switch is slid to ON. If you switch off the engine while the cruise control is ON, the system will be ON the next time the engine is started.

To set the desired speed

1 Slide the switch to ON.
2 Move the thumbwheel up to SET/+ or SET/– when the car has reached the desired speed (above 15 mph (25 km/h)).

To increase the preset speed

You can increase the speed in any of the following ways:

- Accelerate to the desired speed. Jog the control to SET/+ or SET/–.
- Jog the control to SET/+ to increase the speed by 1 mph (1.6 mph) (when cruise control already engaged).
- Hold the control in the SET/+ position until the desired speed is reached (when cruise control already engaged).

To reduce the preset speed

You can reduce speed in any of the following ways:

- Brake to the desired speed. Jog the control to SET/+ or SET/–.
- Jog the control to SET/– to reduce the speed by 1 mph (1.6 km/h).
- Hold the control in the SET/– position until the desired speed is reached.

Temporary increase in speed

Accelerate, without shifting down (manual transmission), to exceed the set speed such as for overtaking. When you release the accelerator, the car will return to the set speed.

To disengage the system temporarily

Slide the switch to the left towards OFF, but only as far as to disengage the cruise control. Allow the switch to spring back.

To re-engage the system

Slide the switch to RESUME. The car will return to the previously set speed. Vehicle speed must exceed 15 mph (25 km/h).

To disengage the system

The system will be disengaged:

- As soon as the brake or clutch pedal is depressed (cars with manual transmission).
- When the switch is slid to To disengage the system temporarily.
- When the switch is slid to OFF.
- When the TCS/ESP system is operative.
- When position N is selected (cars with automatic transmission).

Braking

It is good practice to try your brakes periodically while driving. This is particularly important when driving in heavy rain, on roads with a lot of surface water, in snow or in salty slush. In such conditions a slight delay in the braking effect may be noticed. To minimize this delay, dry the brakes by applying them lightly now and again. This should also be done after the car has been washed, and in extremely damp weather.

To avoid the brakes becoming overheated, such as when negotiating long descents with a drop of several hundred yards (hundred metres), select a low gear to utilize the braking effect of the engine. If the car has automatic transmission, select 1st or 2nd gear.

You can help to prolong the life of the brakes by thinking ahead and braking harder over short periods, rather than braking more moderately over long stretches.

⚠ 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.
- Overheating can cause the brakes to fade!

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.**

The Antilock Braking System (ABS) modulates the brake pressure to each wheel. The pressure is automatically reduced just before the wheel locks up and then increases again to the point at which the wheel is just about to lock. The wheel sensors send information to the brake system's electronic control module for every 4 or so inches (decimetre) that the car rolls. This information is processed continuously to ensure that the adjustment of the brake pressure will be as exact as possible. Adjustment takes place up to 12 times per second.

The brake system provides Electronic Brakeforce Distribution (EBD). This 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 or load.

The ABS has a built-in diagnostics function which will switch on the ABS warning light if a fault is detected in the system (see page 54).

The following message will appear on the SID (and corresponding symbol on main instrument unit) if a fault is detected:

Antilock brake malfunction. Contact Saab dealer.

The ABS system will not reduce the braking distance on loose gravel, snow or ice but, because the wheels cannot lock up, steering control is retained.

When the ABS system operates you will feel the brake pedal pulsate and hear a ticking noise, both of which are perfectly normal.

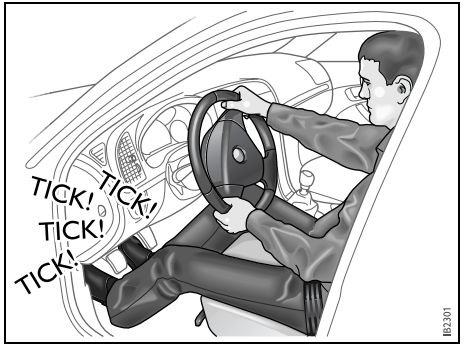
Apply the brake pedal with **full force** (you cannot press too hard), declutch and if necessary steer to safety.

Do not release the brake pedal before the car has come to a halt or the danger is past!

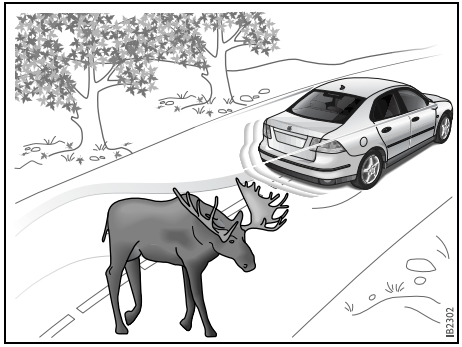
The above is critical.

If the road is slippery, the ABS system will operate even when only light pressure is applied to the brake pedal. This means that the driver can brake gently to test the condition of the road and adapt their driving accordingly.

It is well worth practising the use of ABS brakes on a skid pan or other suitable facility.



Braking with ABS brakes.
Indication that the system is operating: pulsating brake pedal and ticking noise



Braking with ABS – evasive steering

Traction Control System (TCS)

Anti-spin system

⚠ WARNING

When driving normally, the TCS system helps to improve the car's directional stability. The TCS must not be regarded as a system to enable the driver to maintain higher speeds. The same precautions must be adopted as normal for safe cornering and driving on slippery roads.

How the system works

The Traction Control System (TCS) is designed to prevent wheelspin. This enables the car to achieve the best possible grip and, hence, maximum tractive effort, together with greater stability.

The TCS uses information from the ABS wheel sensors to detect when the front (driving) wheels are rotating faster then 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.

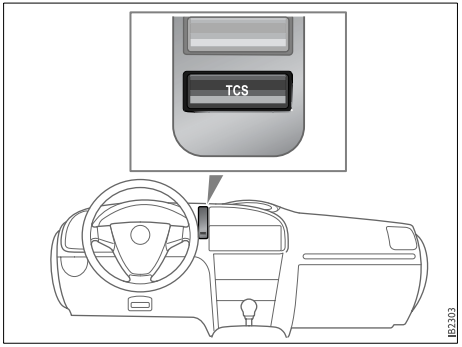
The advantages of the TCS become most apparent when the cohesion between the front wheels and the road surface is so low that one or both of the wheels would lose their grip were the car not equipped with the TCS, e.g.:

- When the car is pulling away or accelerating with the front wheels on different surfaces (e.g. one slippery and one dry), the TCS functions like an electronic differential lock, making sure that both wheels rotate at the same speed.
- When the car is pulling away or accelerating on a slippery surface, in which case the system eliminates wheelspin. The system also functions when the car is reversing.
- When cornering, if the inside front wheel rotates faster than the other wheels.

TCS OFF

 lights up under the speedometer if:

- a fault has been detected and the system has therefore been switched off
- there is a fault in the ABS system
- the system has been switched off manually.



TCS button

TCS indicator

When the remote control is turned to the ON position, the lamp is lit for about 4 seconds while the system performs self-diagnosis.

The light under the speedometer comes on when the TCS is operative, that is when one of the wheels has lost its grip.

The fact that the TCS is operative indicates that the limit for grip has been exceeded and that the driver must exercise greater care.

Turning the TCS off

The TCS is switched on automatically when the engine is started.

You can switch the system off manually with the TCS button, whereupon the light under the speedometer will come on. The TCS 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, the TCS will be switched off automatically.

The following message is shown on the SID:

Traction control failure.
Contact Saab dealer.

The cruise control system (if active) will automatically be disengaged if the TCS is operative.

Electronic Stability Program (ESP)

Anti-skid system

⚠ WARNING

When driving normally, the ESP system helps to improve the car's directional stability. The ESP must not be regarded as a system to enable the driver to maintain higher speeds. The same precautions must be adopted as normal for safe cornering and driving on slippery roads must be adopted.

The Electronic Stability Program employs both the antilock braking system (ABS) and the traction control system (TCS). It is a safety system that helps the driver to stabilize the car in unusual circumstances that can otherwise be difficult to handle.

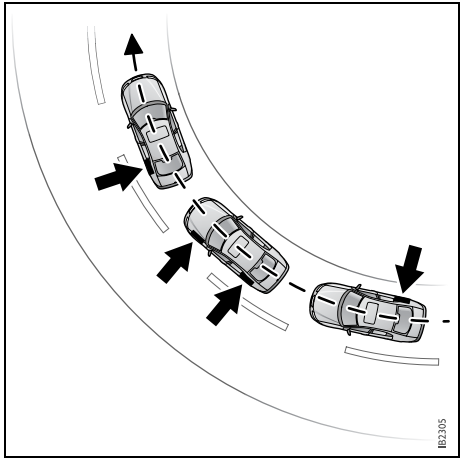


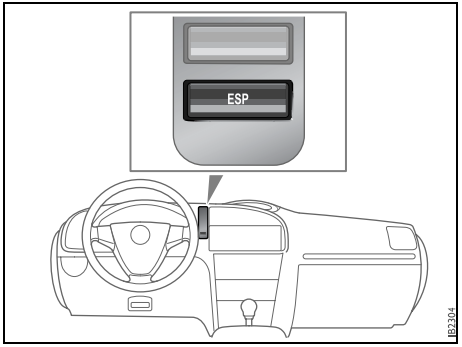
Illustration of how the system applies the brakes on one or several wheels to avoid a skid

How the ESP system works

The Electronic Stability Program can help to prevent the car from skidding by braking one or several wheels independently of the driver. The engine output is then also reduced to prevent the driving wheels from spinning. The car has sensors that measure wheel speed, yaw rate, lateral acceleration, steering wheel position and braking pressure. The values provided by these sensors are used to calculate the actual direction of the car, the intentions of the driver and whether the ESP should be engaged.

If this direction does not agree with that intended by the driver, calculated from the steering wheel position, the ESP is engaged.

The ESP improves the driver's chances of retaining control over the car in critical situations.



ESP button

ESP OFF

lights up under the speedometer if:

- a fault has been detected and the system has therefore been switched off
- the system has been switched off manually
- when the remote control is turned to the ON position, the lamp is lit for about 4 seconds while the system performs self-diagnosis.

ESP indicator light

The light under the speedometer comes on for a short period of time when the ESP system is operative.

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

Turning ESP system off

The system can be turned off manually with the ESP button, whereupon the light under the speedometer will come on. The car must be travelling slower than 35 mph (60 km/h). The TCS is also disengaged.

The ESP is always engaged during braking, even if it has been switched off manually with the ESP button.

If a fault is detected in the system, the following message will be displayed on the SID:

Stability control failure. Contact Saab dealer.

The cruise control system (if active) will automatically be disengaged if the ESP is operative.

NOTICE

Changes to the chassis, such as a change of wheels, shock absorbers or springs, could affect the function of the ESP system.

Always consult your Saab dealer before changing any chassis components.

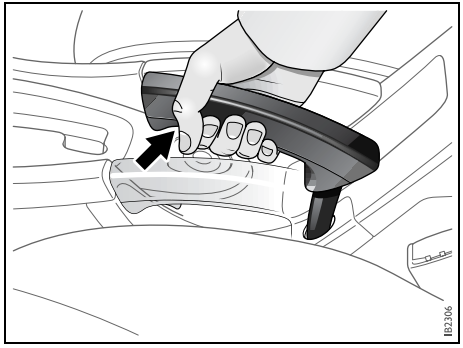
Parking brake

⚠ WARNING

- **Always** apply the parking brake when you park the car. If the car is to be left parked for a long time, refer to page 150.
- Always apply the parking brake before removing the remote control.
- Do not use the parking brake while driving.
- Grasp the parking brake lever in such a way that no fingers get trapped when you release the parking brake.

The parking brake lever is situated between the front seats. The brake acts on the rear wheels. When the parking brake is applied, the PARK indicator light on the main instrument panel will come on.

To release the parking brake, lift the lever slightly, press the pawl button on the underside of the lever and lower the lever.



Correct hold

If the parking brake is applied when the car pulls off, the following message will appear on the SID:

Release park brake.

Parking

⚠ WARNING

- Never 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 (automatic transmission: select P), remove the remote control and lock the car.

NOTICE

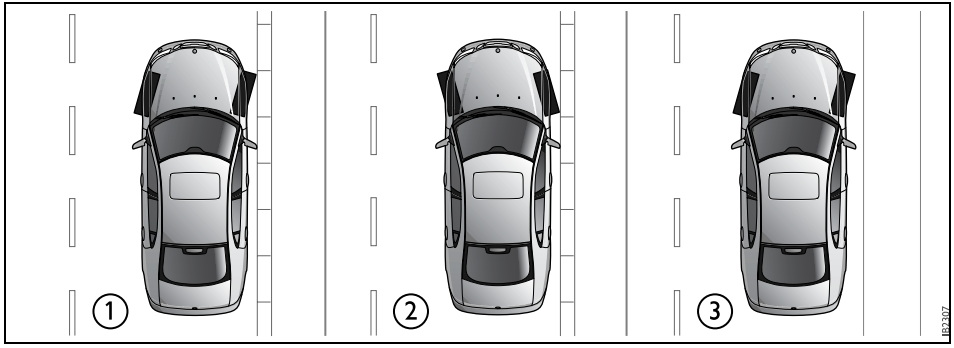
Empty the car yourself and bear in mind:

- Never leave a mobile phone, computer or similar object visible in the 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.

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.

If the car is parked with one front wheel touching the curb, for example, you may need to turn the steering wheel slightly when you insert the remote control to allow the steering wheel lock to unlock.



1 **Downhill with curb** . Turn the wheels toward the curb and edge the car forwards until the wheel lightly touches the curb.

2 **Uphill with curb.** Turn the wheels away from the curb and edge the car backward until the wheel lightly touches the curb.

3 **Uphill or downhill without curb.** Turn the wheel towards the edge of the road so that the car, should it move, will not roll towards the middle of the road.

Long-term parking

If the car is not going to be used for some time, e.g. three to four months, the following steps are recommended:

- 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 (glycerine).
- After washing the car, dry the brake discs to avoid corrosion by taking the car out on the road and applying the brakes a few times.
- Fill the fuel tank 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!
  If necessary, use wheel chocks.
- Disconnect the negative (–) battery lead. If frost is likely to occur during the storage period, remove the battery and store it in a frost-free place.
- If it is not possible to stand the car on axle stands, increase the tire pressure to 43 psi (3 bar).

Leave all the door windows open a crack and cover the car with a non-plastic tarpaulin – not one made of plastic which will not breath.

Saab Parking Assistance

Saab Parking Assistance (option)

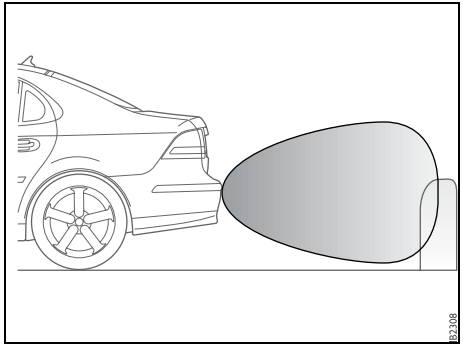
⚠ WARNING

Responsibility **always** lies with the driver when reversing.

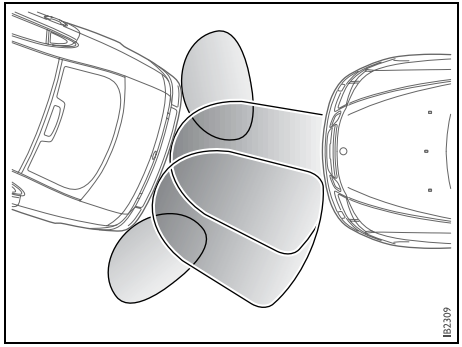
- The parking aid system can facilitate parking and reversing.
- Bear in mind that small objects, such as a child lying on the ground, and narrow objects cannot always be detected by the system.

Saab Parking Assistance facilitates parking and reversing. There are four sensors in the rear bumper that detect objects up to 6 ft (1.8 meters) behind the car.

If the car is heavily laden, the system may falsely indicate that there is an object within the detection range. This is since the sensors are angled towards the ground when the car is tail-heavy.



Area monitored by the sensors seen from the side



Area monitored by the sensors seen from above

The system uses four sensors in the rear bumper. These emit ultrasound signals that bounce back to the sensors off any objects behind the car. The system, however, cannot always detect small or narrow objects, such as a post, since the surface area presented to the car is too small.

The system is activated automatically when reverse is engaged or selected. When the sensors detect an object within the monitored area, pulses of sound (- - - - -) will be heard. The frequency of these pulses increases as the car comes closer to the object.

When the distance to the object is less than 1 ft. (30 cm), a continuous tone will be heard.

When an object is approximately 3 ft. (90 cm) from the car, the sound pulses change character markedly (frequency increases). A distance of about 3 ft. (90 cm) is suitable if you wish to load or unload the trunk.

If the distance between an object and a corner sensor does not change for 3 seconds, for example if you are reversing alongside a wall, the system will switch to monitoring straight back. The system indicates if the distance to the wall decreases again.

If a trailer is hitched up and correctly connected to the trailer contact by the tow bar, the system is automatically deactivated.

NOTICE

The sensors must be kept clean to function well. Ice, snow and dirt can affect their sensitivity.

Do not spray the sensors with a pressure washer, as this can damage them.

You can temporarily deactivate the Saab Parking Assistance as follows:

- Engage reverse and press the CLEAR button on the SID control panel.

The system will be reactivated the next time you engage reverse.

Error messages

If the system malfunctions, the following message will appear on the SID:

Parking assistance malfunction.
Contact Saab dealer.

If the system is subject to interference, the following message will be shown on the SID:

Parking assistance sensor interference.

If this message appears, clean the sensors. The sensors are located in the black trim on the rear bumper

The system can be switched off using Profiler.

1. Press the CUSTOMIZE button to go to Profiler.
2. Select Park Assistance using the INFO dial.
3. Press in the INFO dial.
4. Select SPA on or SPA off.
5. Confirm this selection by pressing the INFO dial.

Park Assistance
SPA on
SPA off

Explanation of SPA on and SPA off.

SPA on

Saab Parking Assistance is activated automatically when reverse is engaged. The system warns of objects behind the car.
If a trailer is hitched up and correctly connected to the trailer contact, the system will be deactivated automatically. You can also deactivate the system temporarily with the CLEAR button if reverse has been engaged and the system is active.

SPA off

Saab Parking Assistance deactivated.

Economical driving

Factors affecting fuel consumption

The fuel consumption of a car is greatly affected by driving conditions, climate, road conditions, speed, driving technique, and so on.

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

Summer temperatures give better fuel economy than winter ones. The difference can be as much as about 10%. Consumption increases in cold weather because the engine takes longer to reach its normal operating temperature. The transmission and wheel bearings also take longer to warm up. Even distance affects consumption: short journeys of 3–5 miles (5–8 km) do not give the engine enough time to reach its optimum temperature. Wind conditions also have a marked effect on fuel consumption.

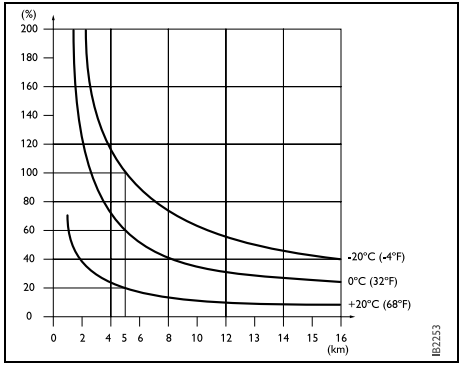
How to read the diagram:

If fuel consumption with the engine at normal temperature is 28 mpg (10 l/100 km), the actual fuel consumption 3 miles (5 km) after the engine has started from cold will be:

– 23.5 mpg (12 l/100 km) at outside temp. of 68°F (+20°C) (increase of 20%).
– 17.7 mpg (16 l/100 km) at outside temp. of 32°F (0°C) (increase of 60%).
– 14 mpg (20 l/100 km) at outside temp. of –4°F (–20°C) (increase of 100%).

It is clear from the diagram that both distance driven and outside temperature have a significant impact on fuel consumption, after a cold start.

If the car is normally driven on short journeys, 3–5 miles (5–8 km), for example to and from work, the average consumption will be 60–80% above the normal level.



Percentage increase in fuel consumption of engine starting from cold compared to engine at normal temperature.

Driving techniques

- To obtain the best running economy, with regard to fuel consumption and general wear, the car must be serviced regularly.
- High speed, unnecessary acceleration, frequent braking and much changing down all give higher fuel consumption.
- Frequent gear changing in traffic, starting in cold weather, the use of studded tires and roof racks, and towing a caravan all increase fuel consumption.
- Do not warm up the engine while the car is stationary.
  If idling, the engine will take much longer to reach its optimum temperature, and

engine wear is at its greatest during this period. Drive off as soon as possible after starting the engine and avoid high engine speeds.

- Drive as smoothly and thoughtfully as possible. Match your driving to the prevailing traffic conditions.
- Driving in a low gear gives rise to higher fuel consumption than driving in a high gear because of the higher engine speed for any given road speed. Always shift up as soon as traffic conditions allow and drive in the highest gear as much as possible.
- Check the tire pressure once a month. Incorrect tire pressure increases tire wear. It is preferable for the tire pressure to be slightly high than too low. Under-pressure increases fuel consumption.
- Check the fuel consumption regularly. Increased fuel consumption can indicate that something is wrong and that the car needs to be checked at a Saab dealer.

Practical road tests have demonstrated that substantial savings in fuel consumption can be made if the above advice is followed.

WARNING

Never switch off the engine while driving as the effect of the brakes and power steering will be greatly reduced.

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.
- Reduced wear on the engine.
- Inside of car warms up faster.
- Exhaust emissions substantially reduced over short runs.

The engine heater is effective at outside temperatures up to 60–70°F (+15–+20°C). The warmer it is outside, the shorter the time the engine heater needs to be connected. Longer than 1.5 hours is unnecessary.

If the car is equipped with a removable, electric cabin heater that is not in use, store this in the trunk.

Driving in cold weather

In cold weather, special attention should be paid to the following:

- Before driving off, make sure that the wiper blades have not frozen to the windshield.
- Remove any snow from the heating system air intakes between the hood and the windshield.
- If necessary, inject oil into the locks to prevent them from freezing. Use molybdenum-sulphide oil (MoS_2). If the locks freeze, exercise care when unlocking the car (manual unlocking) to avoid breaking the key. Warm up the key or use a de-icer.
- It is particularly important when the roads are slippery that the brakes and tires are in good condition.
- For how to check the level of antifreeze in the engine coolant, see page 179.
- Add gasoline anti-freeze when refueling several times before the onset of winter. This will prevent condensation water in the fuel tank from freezing and causing interruptions in the fuel supply. The likelihood of condensation is lowest when the fuel tank is full.
  If the car is parked outside and the temperature is below zero, carburettor spirit is of little use 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 carburettor spirit when refueling.
  Condensation is caused by temperature fluctuations, either in the outside temperature alone or when the car is alternately parked outdoors and in a garage.
  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 tires, particularly studded tires, 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 fitted, the same type must be fitted to all four 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 winter tires before they reach the legal wear limit, as they gradually lose their friction properties with age.

If you get into a front wheel skid and the car has a manual transmission, the best response is to freewheel, which means declutching so that the wheels neither drive nor brake, and to cautiously steer in the desired direction.

If the car has automatic transmission, ease off the accelerator slightly and steer cautiously in the desired direction.

If you get into a rear wheel skid, steer in the same direction as the movement of the rear of the car.

Driving with tire chains

Snow chains must only be fitted to the wheel and tire dimensions that Saab recommends in "Technical data" on page 235.

Contact a Saab dealer regarding approved tire chains.

⚠ WARNING

- Do not drive at speeds above 30 mph (50 km/h) when tire chains are fitted.
- Tire chains can reduce directional stability.
- Do not fit tire chains to the car's rear wheels.

NOTICE

- Check the links frequently for wear.
- Check that the chains do not foul the wheel arch liner at full lock.
- Refer to the "Technical data" section on page 235, for information on wheel and tire dimensions approved for the fitting of tire chains.

Driving in hot climates

Always check the coolant level before starting a journey. When the engine is cold, the coolant must not lie above the KALT/COLD mark on the expansion tank (boundary between the upper and lower sections of the tank).

At the end of a journey, allow the engine to idle for 2–3 minutes before switching it off.

If the needle on the temperature gauge enters the red zone, the following message will be shown on the SID:

Hot engine.
Make a safe stop.
Run engine on idle.

1 Stop the car but do not switch off the engine. **Do not** remove the cap on the cooling system expansion tank, even if the tank is empty. The engine temperature should decrease. If the temperature continues to rise with the engine idling, 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 to be topped up, **carefully** unscrew the expansion tank cap.
Fill as required with a mixture of 50 % antifreeze and 50 % clean water. Use an antifreeze approved by Saab.

⚠ 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 vapour can escape. These can cause injury to your eyes and burns. Open the cap slowly to release the pressure before removing it.

3 Have the car's cooling system checked at a Saab dealer.

Towing a trailer

⚠ WARNING

- Do not drive with a trailer on inclines steeper than 15 %. The load on the drive (front) wheels will be so low that the wheels can start to spin and prevent further progress.
- In addition, the car's parking brake may not always be sufficient to hold the car and trailer securely, as the wheels may start to slide.
- Always apply the trailer's parking brake when unhitching it. There is otherwise a risk of personal injury or damage to the bumper should the trailer start to roll.
- When you hitch up the trailer be sure to attach its safety chains to the holes by the hitch attachment.

Make sure you are familiar with the legal requirements regarding speed limits for towing, maximum trailer weights, trailer braking requirements, and also any special driving licence provisions.

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.

An electrical socket is provided for connecting the trailer electrics. This is located under the floor trim by the left-hand tail light.

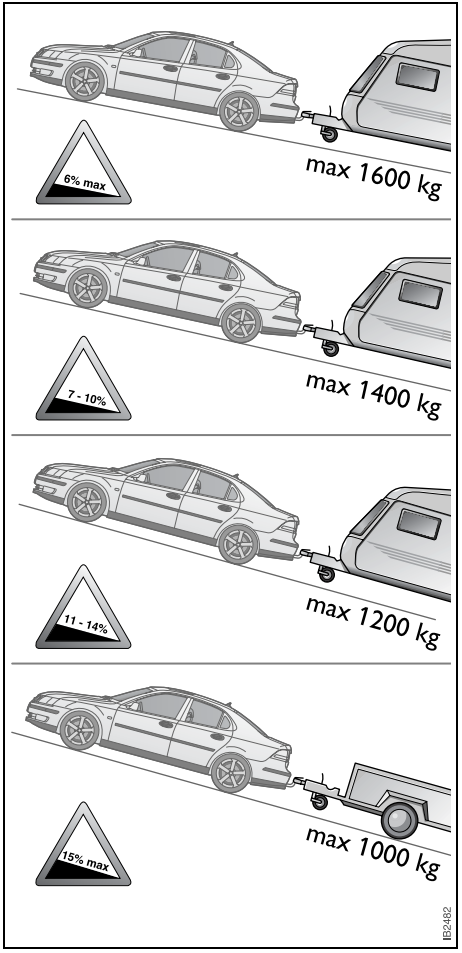
The Saab genuine electrical socket enables the battery in the trailer on tow to be charged during while driving. Also, if the car has SPA, this is deactivated automatically if a trailer is hitched up and correctly connected to the Saab genuine trailer socket.

Saab recommendations:

- Use a genuine Saab towbar that is designed and tested for your Saab.
- Contact your Saab dealer for advice on which towbar is designed for your car.

NOTICE

- Use only a genuine Saab trailer hitch, since other models can damage the car's bodywork and electrical system.
- Consult a Saab dealer for guidance on how to connect a trailer hitch.
- Exercise care when driving on uneven roads or against the curb if the car is heavily laden. This particularly applies to cars with 18" wheels.



Recommendations for cars with automatic transmission

The following driving time limits are based on the capacity of the cooling system in hot weather, i.e. approximately 86°F (+30°C).

Gradient of hill, %	Max. trailer weight, lbs. (kg)	Time limit, minutes
6-8	3330 (1500)	unlimited
9-11	3080 (1400)	max. 15
12-14	2645 (1200)	max. 15
max. 15	2200 (1000)	max. 15

The following driving time limits are based on the capacity of the cooling system in hot weather, i.e. approximately 104°F (+40°C).

Gradient of hill, %	Max. trailer weight, lbs. (kg)	Time limit, minutes
6-8	2200 (1000)	unlimited
9-11	1760 (800)	max. 15
12-14	1100 (500)	max. 15
max. 15	880 (400)	max. 15

When negotiating long hills, bear the following important considerations in mind.

Rises in coolant temperature are indicated by the temperature gauge in the main instrument panel.

The following steps are taken in order as the temperature of the transmission increases:

- Gear change pattern is altered
- A/C compressor is switched off
- Max. engine torque is reduced

The following message will be displayed on the SID if the transmission fluid becomes too hot:

Gearbox too hot.
Make a safe stop.
Open hood to cool down.

If this message appears, stop the car as soon as it is safe to do so and allow the engine to idle until the message has gone out. The selector lever should be in position P.

When continuing your journey, manually select a low gear in which the engine speed is about 3,500 rpm until the incline eases (see page 139).

Recommendations for cars with manual transmission

Rises in coolant temperature are indicated by the temperature gauge in the main instrument panel.

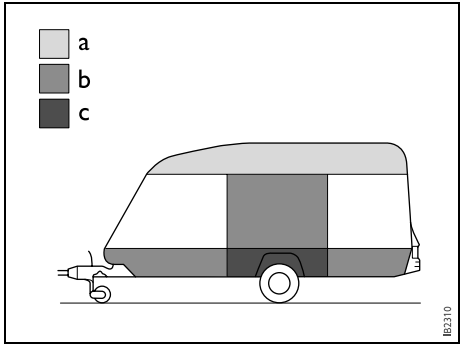
When the needle is just outside the red zone, the A/C compressor will be switched off and, on certain engine variants, the maximum engine torque will be limited.

When continuing your journey, select a low gear in which the engine speed is about 3,500 rpm until the incline eases.

⚠ 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.

Overheating can cause the brakes to fade!



Distribution of load in trailer

a Light
b Moderate
c Heavy

Trailer hitch load

The weight distribution on the trailer makes a lot of difference to the handling properties of the car and trailer combination. As regards two-wheel trailer, concentrate the load over the wheels and keep it as low as possible.

The trailer should be loaded so that the load on the towball is 110–165 lbs. (50–75 kg). Note that this load must be included in the total load for the car. If this now exceeds the specified load capacity, the load in the trunk may have to be reduced by the corresponding amount.

Checks before driving

Make sure that the car and trailer are in good working order. This is essential since towing a trailer increases the strain on the car.

- Check and if necessary adjust the tire pressure of the car and trailer.
- Make sure all wheel bolts are properly tightened.
- Make sure that the equipment joining the car and trailer is properly secured and adjusted.
- Make sure the trailer's electrical cable is properly connected and is not so long that it drags along the ground. Also, make sure the cable is not too short and risks breaking when turning a corner.
- Check all bulbs.
- Check the car and trailer brakes.
- Make sure that all items on or in the caravan or trailer are properly secured.
- Make sure that the trailer's jockey wheel is raised and locked.
- Check the distribution of the load so that the car and trailer are well balanced.
- Check that the rearview mirrors provide the best possible rearward vision.
- Make sure the trailer's safety cable is correctly attached.

Driving considerations

Always take extra care when towing a trailer, as the car's handling will be different and its braking performance reduced. The trailer's braking system and suspension also have a considerable effect on these characteristics. See also "Driving with a load" on page 162.

Drive carefully:

- descending hills
- on uneven roads
- over railway crossings
- when meeting large vehicles

If the car has automatic transmission, select gear M1 when ascending or descending steep hills.

Reversing

Get someone to help you keep an eye out behind the trailer as the door mirrors do not always provide sufficient rearward vision when reversing.

Driving with a roof rack load

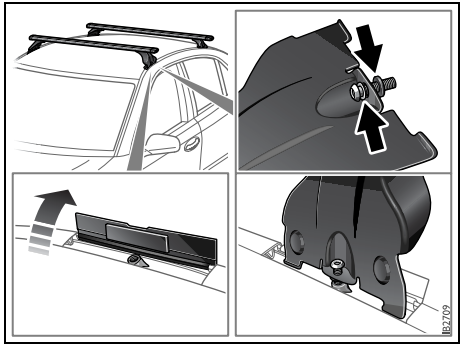
⚠ WARNING

- A roof load will affect the car's center of gravity and aerodynamics. Be aware of this when cornering and driving in crosswinds.
- Adjust your speed to the prevailing conditions.
- Due to higher aerodynamics drag, fuel economy may suffer when driving with a roof rack.

The maximum permissible roof load is 220 lbs. (100 kg). Note that the roof load must be included in the car's maximum permissible payload and axle load.

Strong, sturdy roof carriers designed specially for your car are available from your Saab dealer. Always secure roof loads securely.

1 Open the four covers on the roof of the car.
2 Insert a screw with washer into each roof carrier foot. Fit a seal onto each screw.
3 The roof carriers are marked front and back.
4 Bolt the roof carriers to the brackets in the roof.



Mounting holes for roof carrier

5 Check that the roof carriers are firmly mounted.

Driving with a load

The handling characteristics are affected by how the car is loaded.

- Place the heaviest load as far forward and as low as possible in the trunk.
- Secure the load to the lashing eyes (see page 118).
- Heavy loads mean that the car's center of gravity is further back. As a result, the car will sway more during evasive steering.
- Never exceed the permissible load of the roof box, even if there is room for more.
- 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.
- Do not exceed the car's permissible gross vehicle weight or axle load (see page 236).
- Roof loads can negatively affect telecommunication.

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.

Note: Low tire pressure also causes premature tire wear and increased fuel consumption.

Tire pressure should match the current load and speed of the car (see page 245).

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 approximately 4 psi/27 kPa as the tires become warm (e.g. during highway driving). When the temperature of the tires changes by 50°F (10°C), the tire pressure will change 2 psi/13 kPa.

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.

Note: Remember to adjust the tire pressures if you change the load in the car significantly or intend to drive at substantially lower or higher speeds than normal.

Automatic tire pressure monitoring, see page 207.

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, close all windows and the sunroof (if fitted) and set the cabin fan to its highest speed setting.

Driving in deep water

NOTICE

Do not drive in puddles or water deeper than 7 in. (20 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.

Driving at night

Bear in mind the following points, especially when driving at night:

- Nighttime 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. Also, if you wear glasses, make sure they are 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.
- Wild animals prefer to move at dusk and dawn.
- Check the headlight levelling setting (see page 73).

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 servo 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 when it is on tow.
- Always seek professional help if the car needs to be recovered.
- The ignition switch must be in the ON position if the car is moved with the engine not running.
- The steering wheel lock disengages when the remote control is inserted into the ignition switch, if the battery has sufficient charge.

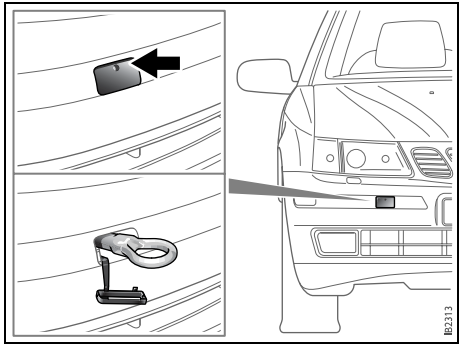
Front towing eye

⚠ WARNING

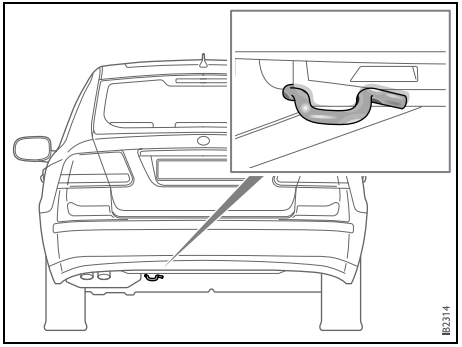
- Make sure that the towing eye is screwed in tightly. It has a **left-hand thread!**
- The towing eye is only designed for towing the car on roads. **It must not be used** to pull the car out of a ditch, for example.
- Make sure that all bystanders keep a suitable distance, in case the towing eye or tow rope should snap. The towing eye or tow rope could catapult off and cause seriously injury.
- Never drive with the towing eye fitted to the front bumper. Return it to its designated storage space.

The front towing eye is stowed by the spare wheel. On the left-hand side of the bumper is a cover concealing the attachment point (tapped hole) for the towing eye.

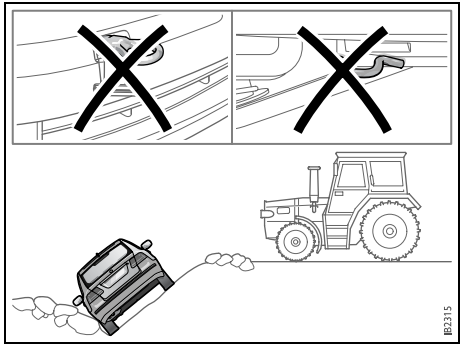
1 Press the knob on the upper section of this cover to open it.
2 Screw in the towing eye. **The towing eye has a left-hand thread!**
3 Insert the wheel wrench into the eye to tighten it properly.



Front towing eye fitted.
The towing eye has a left-hand thread!



Rear towing eye



***Never** use the towing eyes to pull the car unstuck.*

Rear towing eye

The car has a permanent towing eye at the rear under the bumper.

If the car is equipped with a towbar, this can be used instead of the towing eye.

Towing the car

NOTICE

Never use the towing eyes to pull the car unstuck.

Engage neutral (automatic transmission: move the selector lever to N). Turn on the parking lights.

Engage neutral (automatic transmission: move the selector lever to N). Turn on the hazard warning lights.

Drive carefully and do not exceed the speed limit for vehicles on tow.

Always try to keep the towrope taut by gently applying the brake of the car on tow, as necessary. This will avoid the towrope being jerked violently.

Cars with automatic transmission:

NOTICE

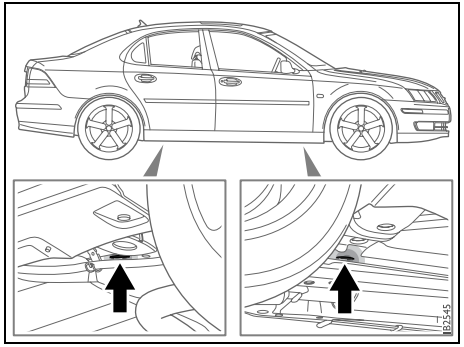
- The car must be towed front first.
- If the car is to be towed with the front wheels off the ground, make sure the parking brake is off, as this acts on the rear wheels.

Always observe the speed limit for vehicles on tow. Whatever the speed limit, the car must not be towed at speeds exceeding 30 mph (50 km/h) nor for a distance of more than 30 miles (50 km). If the car needs to be transported over a longer distance, a tow truck or flatbed truck must be called out.

The engine cannot be started by towing or pushing the car. In an emergency, the engine can be started as described under "Jump starting" on page 168.

Vehicle recovery

If the car has to be transported on a flatbed truck, or similar, it must be securely strapped down. There are attachment points for this purpose on the underside of the car. The attachment points are oblong hole that have been reinforced to cope with the stresses that arise during this type of transport.



Attachment points for anchorage straps

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.

Driving with the compact spare wheel

⚠ WARNING

- Do not exceed 50 mph (80 km/h). The tire can overheat affecting the car's roadholding.
- Tire pressure: refer to page 243.
- The spare wheel or punctured wheel must be stowed under the trunk floor, and secured in place with the retaining nut.

Observe the following when the compact spare wheel is fitted:

- The compact spare is light and easy to handle when changing a wheel.
- Do not drive further than necessary with the compact spare fitted - the maximum life of the wheel is only just over 2,000 miles (approx. 3,500 km).
- Refit the standard wheel as soon as possible.

Important considerations when driving with a compact spare wheel:

- The car's ground clearance is reduced.
- The car must not be driven with more than one compact spare wheel at a time.
- Avoid driving against the curb.
- Do not use snow chains.
- Do not fit the wheel cover - this would conceal the warning text.

NOTICE

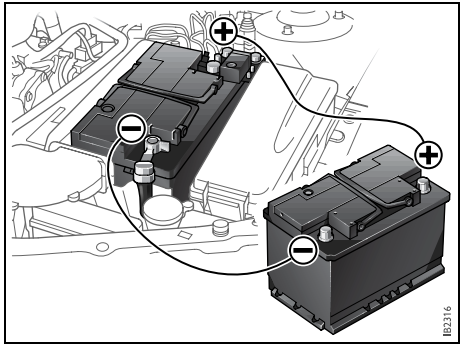
To avoid damaging a punctured alloy wheel, this can be temporarily placed outside up in the spare wheel well but **only** while driving to the closest workshop.

As a general rule, all heavy loads must be well secured in the trunk (see page 118).

Jump starting

WARNING

- When working on the battery, highly explosive gas can build up. A spark could ignite this gas that collects around the battery. Therefore, always avoid sparks and open flames in the vicinity of 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 onto 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.



Jump starting

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.

It is essential when a donor battery is to be used to jump start the car that the jump leads be connected correctly to prevent arcing.

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.

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 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 negative (–). 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 negative (–) cable to the good battery's negative terminal.

9 Attach the cable to the discharged battery's negative terminal.

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.

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 drive belt (poly-V-belt) and the like.

You can check some points yourself beforehand:

- 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 drive belt (poly-V-belt) and replace 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 remote control and keep it separate.
- Check the brakes.
- Check all bulbs.
- Check for the presence of the tool kit and jack in the car.

Car care

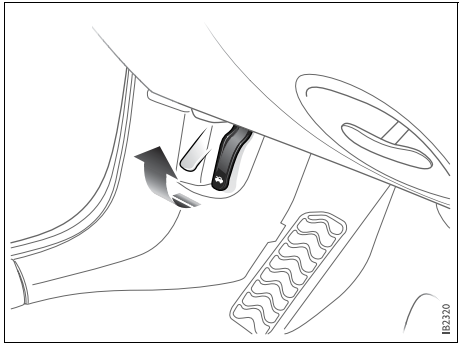
Hood

The handle of the hood lock is located on the left under the instrument panel. Open the hood in the following way:

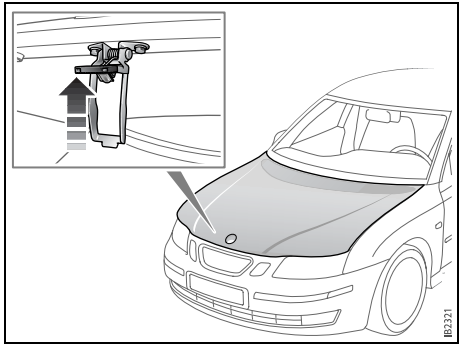
1 Pull the release handle.
2 The hood moves to the half-locked position and is stopped by a safety catch at the front edge.
3 Press the lever of the catch upwards and raise the hood.

When you close the hood you should drop it from a height of about 8 inches (20 cm), **without** slamming it.

To provide better access to the engine bay, the hood can be opened further. Lift the hood towards the windshield once it has been opened as described above.



Hood release handle



Hood release catch plate

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 vibrations 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 turbocharger 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 turbocharger 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.

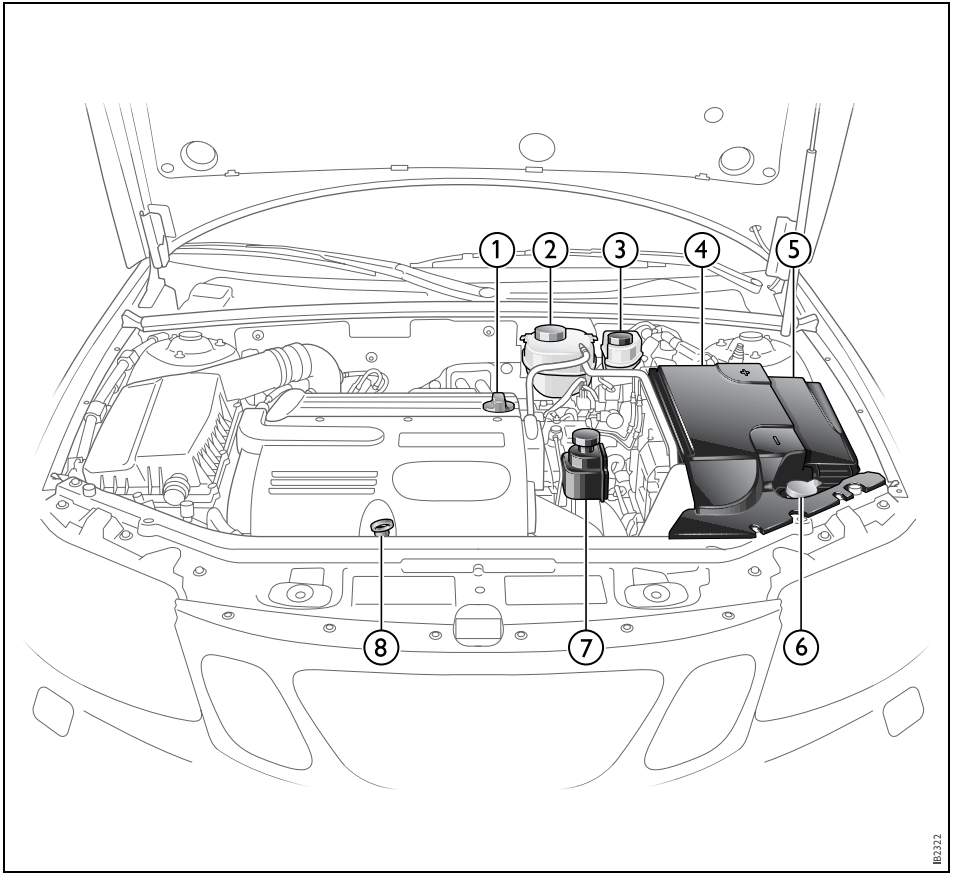
ORVR (Onboard Refueling Vapor Recovery)

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 128.

When refueling, make sure you screw the filler cap on and keep turning until it has clicked 1 time. Otherwise, it is possible for the Engine malfunction (CHECK ENGINE) light to illuminate. The following message will appear on the SID:

Tighten fuel filler cap.

Engine bay



1 Oil filler cap
2 Coolant reservoir
3 Brake and clutch fluid reservoir
4 Battery
5 Fuse box
6 Washer-fluid reservoir
7 Power-steering fluid reservoir
8 Engine-oil dipstick

Engine oil

Checking the oil level

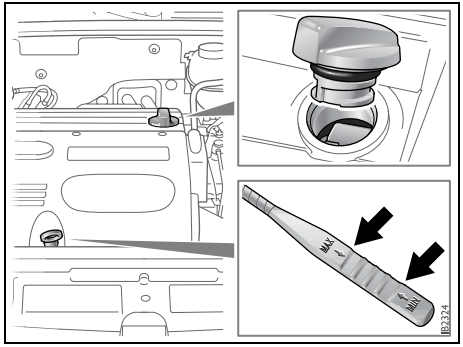
Check the engine oil level regularly.

1 Park the car on a level ground.
2 Switch off the engine and wait for 2–5 minutes. The engine should be at normal operating temperature.
3 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.

If the oil level is too low, the following message will be displayed on the SID:

Low engine oil level.
Fill oil now.



Oil filler cap and dipstick

The distance between the MIN and MAX marks is equivalent to 1.0 qt (1.0 l).

Top up as necessary with oil of the recommended grade (see page 238).

Make sure you screw on the oil filler cap properly after topping up the oil to avoid running problems.

NOTICE

Too high oil level can damage the engine.

During the Break-in Period (approx. 3,000 miles or 5,000 km) and when driving at high speeds or with a trailer, the oil consumption may be higher than normal.

NOTICE

Change of engine oil and oil filter may be required more frequently if the car is being used under certain conditions, see page 231.

Changing engine oil

⚠ WARNING

- Prolonged and repeated exposure of the skin to engine oil can cause serious skin disorders. The risk of cancer cannot be ruled out.
- 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 exhaust 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 into the ground or down a drain. Dispose of all used oil and oil filters at an appropriate disposal facility.

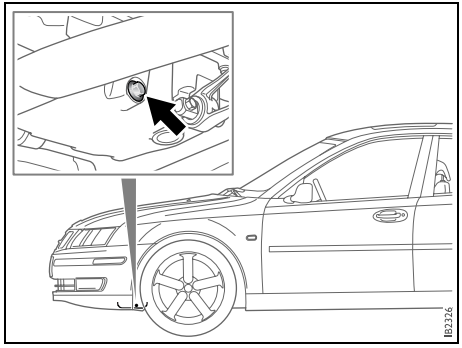
Engine oil and oil filter should be changed according to the service program.

For oil volumes and grades, refer to "Technical data".

The oil should be drained when the engine is warm. The car must stand on level ground.

1. Unscrew the drain plug in the bottom of the sump and leave the oil to drain into a suitable receptacle for at least 10 minutes. Take care, as the oil may be hot.
2. Refit the drain plug with a new washer.
3. Change the oil filter once the engine oil has drained (see page 178).
4. Fill with new oil.

Run the engine to normal temperature and check the oil level.



Drain plug

Changing filter

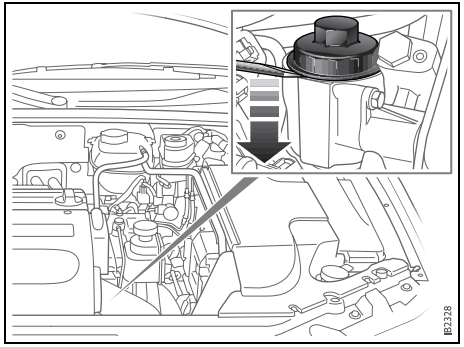
1 Unscrew the oil filter cap.
- Lift the cap slightly and carefully pry apart the cap and the filter housing.
- Remove the filter cap.

2 Remove the filter. Have paper towelling or a rag at hand to catch the oil that escapes from the filter.

3 Fit a new filter.

4 Check the seal in the cap. Apply a small amount of new engine oil to the O-ring.

5 Screw on the cap. The correct tightening torque is 25 Nm (18 lbf ft).



Oil filter

Air filter

⚠ WARNING

To ensure reliable operation, only use an air filter recommended by Saab Automobile AB.

Transmission fluid

Manual transmission

Check and top up the oil in accordance with the service program.

Automatic transmission

Check and top up the oil in accordance with the service program.

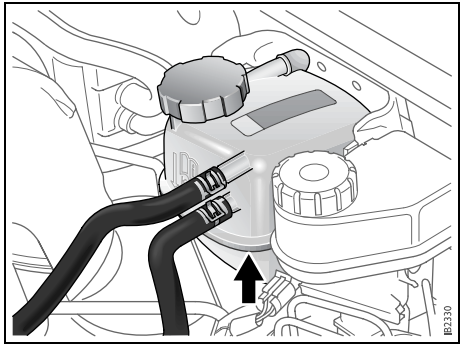
Coolant

⚠ 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.

If the coolant level drops too low, the following message appears on the SID:

Coolant level low.
Refill.



Coolant expansion tank

The properties of the coolant are retained for the entire service life of the car. Therefore, it is not necessary to change the coolant.

The coolant contains 50 % antifreeze and anti-corrosion fluid. This ratio gives the best cooling effect. Lower concentrations should be avoided, in view of the corrosion risk.

Other makes of antifreeze can damage the engine and cooling system.

The expansion tank is transparent to facilitate checking the coolant level.

When the engine is cold, the coolant must not lie above the KALT/COLD mark on the expansion tank (boundary between the upper and lower sections of the tank, see illustration).

Top up with a mixture of equal parts of Saab-approved antifreeze and clean water.

If the expansion tank is empty when coolant is added, run the engine to normal temperature and top up again, as necessary.

NOTICE

If the cooling system needs topping up, mix the antifreeze with the appropriate quantity of drinking water or distilled water before adding it to the system.

If undiluted 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.

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

Brake fluid should be changed according to the service program. Refer to the Warranty and Service Book.

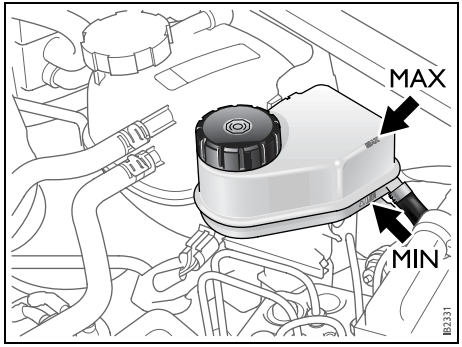
The brake and clutch fluid reservoir is transparent to facilitate checking of the fluid level.

The fluid level should lie between the MAX and MIN marks.

Top up as necessary with **DOT 4** brake fluid. **Do not** use DOT 5 fluid.

Use only new brake fluid from a sealed container.

The brake fluid level will fall somewhat as the brake pads wear. The MAX level in the reservoir corresponds to the amount of brake fluid required with new brake pads. If the fall in fluid level is moderate, due to normal brake pad wear, topping up is not necessary.



Brake fluid reservoir

If the brake fluid should require changing, this must be carried out at a Saab dealer.

The foot brake and parking brake are self-adjusting.

It is not possible to detect, through abnormal pedal or parking brake lever travel, whether the 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 pads should only be changed at a Saab dealer. To ensure optimum brake performance, use only Saab genuine brake pads.

Power steering

⚠ WARNING

Power steering fluid on hot engine components constitutes a fire risk.

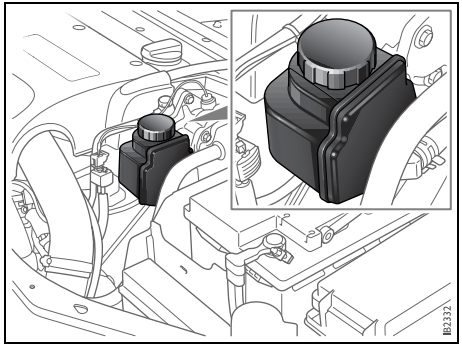
Check the level of the power steering fluid in the reservoir regularly, in accordance with the service program.

The wheels should point directly forwards during this check.

Clean round the cap before unscrewing it. Wipe the dipstick. To check the level, screw down the cap completely and then remove it again.

The oil level should lie between the MAX and MIN marks when the oil temperature is about 68°F (+20°C). If the oil is colder, the level will be lower, and at a higher temperatures the level will be higher, both of which are acceptable.

Top up with "CHF 11S power steering fluid".

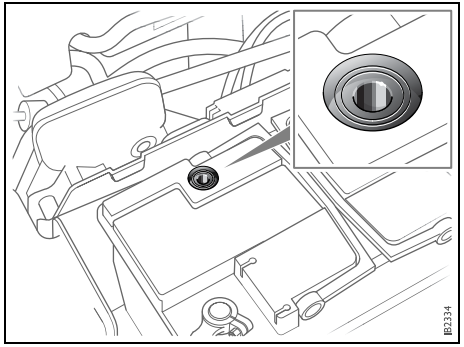


Power steering fluid reservoir

Battery

⚠ WARNING

- When working on the battery, highly explosive gas can build up. A spark could ignite this gas that collects around the battery.
  Therefore, always avoid sparks and open flames in the vicinity of 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 onto 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.



Checking the battery electrolyte level. Level correct if level indicator dark

Check the charge state and electrolyte level of the battery regularly.

NOTICE

A discharged battery can freeze and fracture. Batteries should therefore always be stored away from sub-zero temperatures.

If frequent short journeys are made, the battery may need extra charging. This can be done with a battery charger or by taking the car for a long run.

If the battery is not being charge while the engine is running, the following message will appear on the SID:

Battery not charging.
Make a safe stop.
Contact Saab dealer.

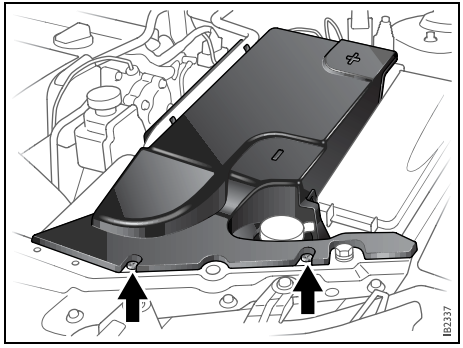
Check the drive belt (see page 185). If the belt is damaged, the engine may overheat, the battery may not be charged and the A/C compressor may not work.

Always connect the positive (red) cable to the battery's positive (+) terminal, and the negative (black) cable to the negative (-) terminal of the battery. Always disconnect both battery leads when boost charging the battery.

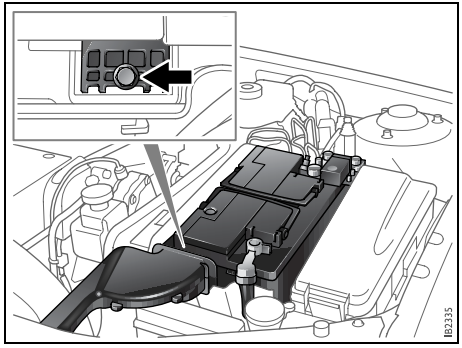
NOTICE

- If boost charging never use anything but a 12-volt charger.
- **Do not connect the battery terminals, + and –, incorrectly.**
- Serious damage can occur to the car's electrical system if a battery or alternator lead is disconnected while the engine is running.
- Exercise special care when removing and fitting the positive (+) cable so as not to damage the battery disconnect switch.

A car with standard equipment specifications 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 phone, the charge may only be sufficient for about 15 days.



Turn the two retainers a quarter turn to unlock the battery cover.



Battery bracket

Battery disconnect switch

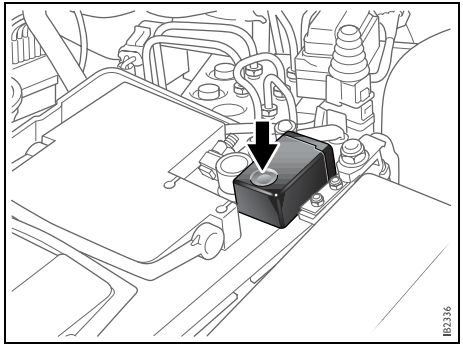
⚠ WARNING

If the battery disconnect switch has tripped, do not reset it until you have visually inspected the car's electrical system. If there are visible signs of damage, have the car checked at a Saab dealer before resetting the disconnect switch.

A crash could cause a short circuit in the alternator or starter motor. A disconnect switch by the battery's positive terminal cuts off the battery from the alternator and starter motor when the airbags and seatbelt pretensioners are detonated.

NOTICE

Exercise special care when removing and fitting the positive (+) cable so as not to damage the battery disconnect switch.



Battery disconnect switch with reset button

Drive belt

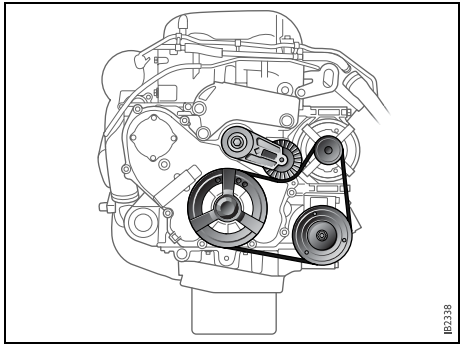
⚠ WARNING

- Keep hands and clothing clear of drive belts when engine is running.
- Always stop the engine before inspecting the drive belt.
- The radiator fan is electric and can start **even** when the engine is switched off.

NOTICE

Serious damage can be done 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 by a poly-V-belt from the crankshaft pulley.



Drive belt

A slipping or broken poly-V-belt can result in:

- insufficient engine cooling
- no charge to the battery
- no A/C compressor function

The belt tension is critical and is adjusted automatically by the belt tensioner.

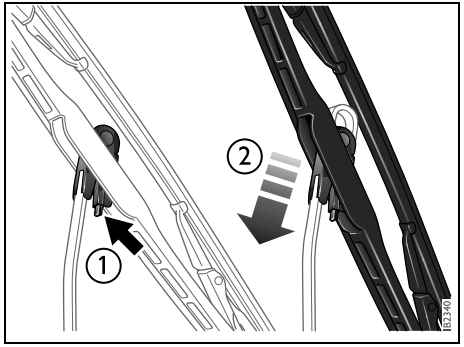
Wipers and washers

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. This is particularly important if the car has been through an automatic car wash, as these sometimes leave a wax coating on the windshield.

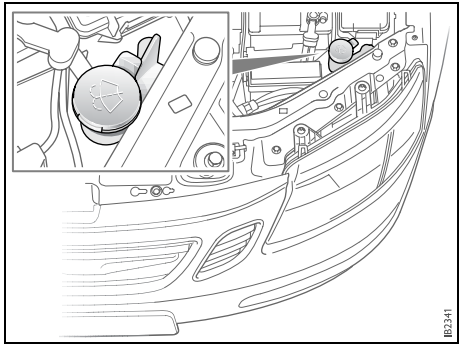
If wiper performance is still unsatisfactory, fit new blades.



Change of wiper blades

To fit new blades:

1 Press in the catch (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.



Washer fluid reservoir

Washers

⚠ WARNING

Take care not to spill washer fluid concentrate onto hot surfaces. Washer fluid concentrate can contain flammable ingredients such as alcohol.

The reservoir capacity is 5.5 qts (5.2 litres).

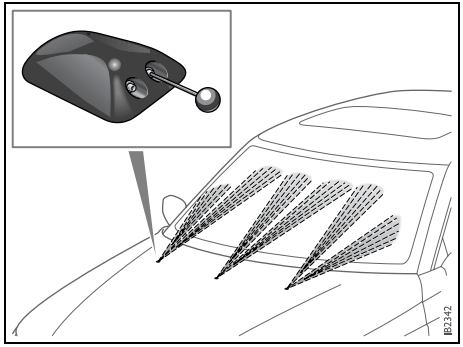
When the washer fluid level drops below 1 quart (1 litre), the headlight washers are deactivated. This is in order to prioritize the windshield. The following message is displayed on the SID:

Washer fluid level low.
Refill.

Headlight washers are only available on certain markets.

Fill with a mixture of "Saab washer fluid" and water as recommended by the table on the packaging to reduce the risk of freezing and to ensure effective cleaning (see also page 76).

To prevent the smell of washer fluid from entering the car, recirculation can be activated temporarily while washing the windshield. This function can be programmed; contact a Saab dealer.



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.

Autochecking of lights

The bulbs that are most important from the point of view of traffic safety are monitored by the car's electrical system. If one of these bulbs should fail, a message will be displayed on the SID.

Example of SID message:

Left low beam failure.

The following bulbs are not checked: parking lights, front fog lights, reversing lights, license plate lighting, side marker lights and side direction indicators.

If a brake light bulb fails

If a brake light bulb fails, the adjacent tail light will act as a brake light to ensure traffic safety. Change the broken bulb when possible.

All rear light bulbs are of the same type and rated 21 W, with the exception of the license plate lighting which is rated 5 W.

Wrong bulb fitted

If a dipped or main beam bulb of too high a rating is fitted, a bulb failure message will be shown on the SID (a too high wattage bulb can damage the reflector).

If the following message is displayed but the bulb shines, it is most likely that an incorrect bulb has been fitted.

Right high beam failure.

Note:

When changing bulbs, fit the same type of bulb (e.g. Long-Life) as that removed.

Headlight aiming, page 226.

Bi-Xenon headlight, main and dipped beam (certain variants only)

⚠ WARNING

Bi-Xenon headlights are high tension. All work on Bi-Xenon headlights, including changing bulbs, must be carried out by dealer personnel.

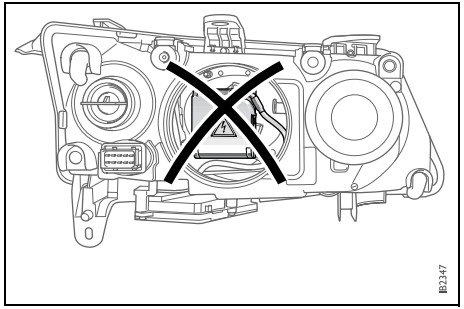
Xenon headlights produce roughly three times as much light as halogen bulbs and have a significantly longer service life.

The lamp units consist of a gas discharge lamp containing xenon. When the lights are switched on a very high voltage activates the xenon gas. The lamps soon reach full intensity.

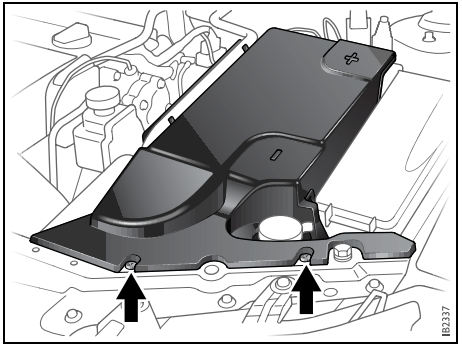
Cars with Bi-Xenon headlights have automatic levelling. The levelling system comprises two sensors, one on the front suspension and one on the rear suspension, and a control unit by the engine bay fuse box. Headlight alignment is adjusted automatically to the car's load to prevent dazzling drivers in oncoming traffic.

If a fault is detected in the system, the following message will be displayed on the SID:

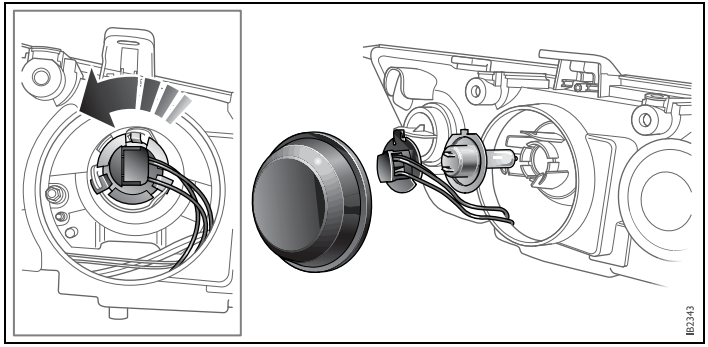
Headlight levelling
malfunction.
Contact Saab dealer.



Contact a Saab dealer to have a Bi-Xenon headlight changed



Retainers on the battery cover



Changing the low beam bulb

Low beam, halogen

Left-hand side

1 Lift aside the hose running along the side of the battery cover.
2 Release the two retainers (a quarter of a turn counterclockwise) in the leading edge of the cover and remove the cover.
3 Pull up the washer fluid filler pipe.
4 Remove the air pipe from the front edge of the battery box.

Both sides

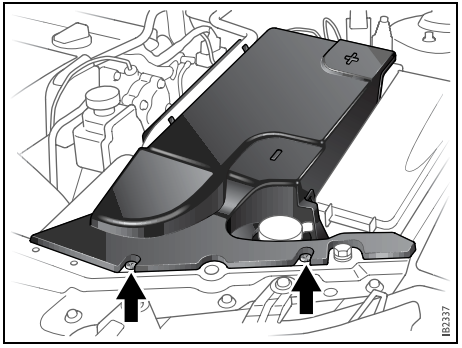
1 Remove the cover from the rear of the headlight.
2 Twist the bulb holder counterclockwise and withdraw the holder from the reflector.
3 Change the bulb without touching the glass with your fingers. Insert the bulb holder into the reflector and twist it clockwise until it locks.
4 Refit the cover over the rear of the headlight.

Left-hand side

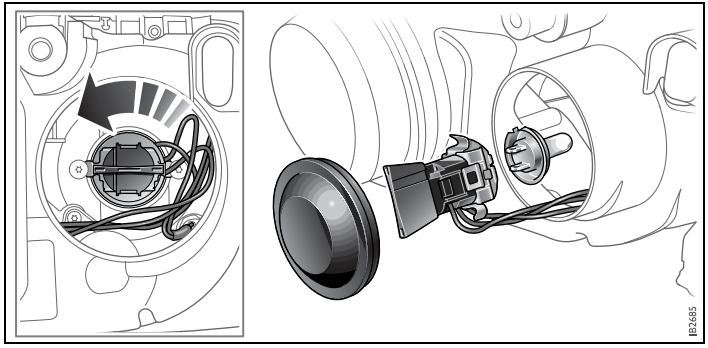
5 Refit the air pipe to the front of the battery box.
6 Refit the washer fluid filler pipe.
7 Refit the battery cover.

NOTICE

Do not fit bulbs with a higher rating than 55 W as this could damage the headlight reflector. Furthermore, the car's wiring is not designed to cope with higher wattages.



Retainers on the battery cover



Changing the high beam bulb

High beam, halogen

Left-hand side

1 Lift aside the hose running along the side of the battery cover.
2 Release the two retainers (a quarter of a turn counterclockwise) in the leading edge of the cover and remove the cover.
3 Pull up the washer fluid filler pipe.
4 Remove the air pipe from the front edge of the battery box.

Both sides

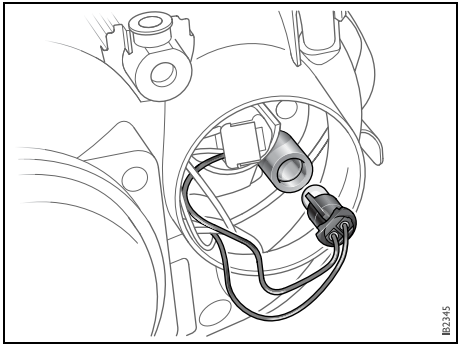
1 Remove the cover from the rear of the headlight.
2 Twist the bulb holder counterclockwise and withdraw the holder from the reflector.
3 Change the bulb without touching the glass with your fingers. Insert the bulb holder into the reflector and twist it clockwise until it locks.
4 Refit the cover over the rear of the headlight.

Left-hand side

5 Refit the air pipe to the front of the battery box.
6 Refit the washer fluid filler pipe.
7 Refit the battery cover.

NOTICE

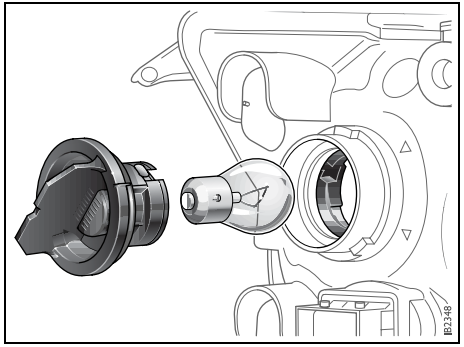
Do not fit bulbs with a higher rating than 55 W as this could damage the headlight reflector. Furthermore, the car's wiring is not designed to cope with higher wattages.



Parking lights

The parking light bulb is located in the same reflector as the main beam bulb.

1 Lift aside the hose running along the side of the battery cover.
2 Remove the battery cover.
3 Remove the cover from the rear of the headlight.
4 Withdraw the bulb holder from the lamp unit.
5 Fit the new bulb.
6 Refit the cover over the rear of the headlight.
7 Refit the battery cover.



Front turn signal bulbs

Left-hand side:

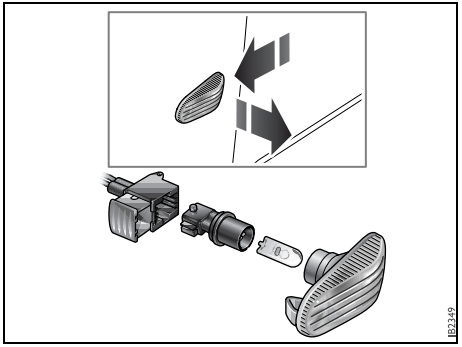
1 Lift aside the hose running along the side of the battery cover.
2 Release the two retainers on the battery cover and remove the cover.
3 Pull up the washer fluid filler pipe.
4 Remove the air pipe from the front edge of the battery box.

Both sides:

1 The bulb holder has a bayonet fitting. Turn the bulb holder counterclockwise and withdraw it.
2 The bulb also has a bayonet fitting. Press in the bulb and twist it counterclockwise.
3 Fit the new bulb.
4 To facilitate fitting, look in through the headlight lens when fitting the bulb. Check that the new bulb is firmly seated.

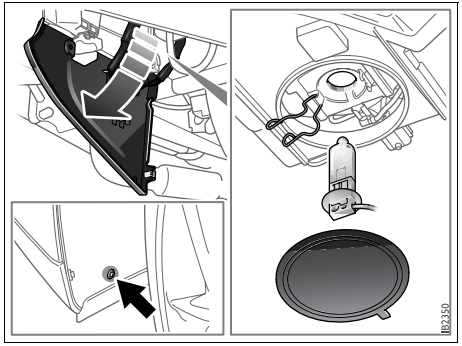
Left-hand side:

5 Refit the washer fluid filler pipe.
6 Refit the battery cover.



Side-mounted turn signal bulbs

1 Slide the lamp fitting forward so that its rear end can be pulled out.
2 Turn the bulb holder counterclockwise and withdraw it from the lamp fitting. Change the bulb.
3 To fit, engage the two catches on the rear edge of the lamp fitting with the edge of the opening. Then press in the front edge of the lamp fitting so that the groove in the spring engages the plastic edge.



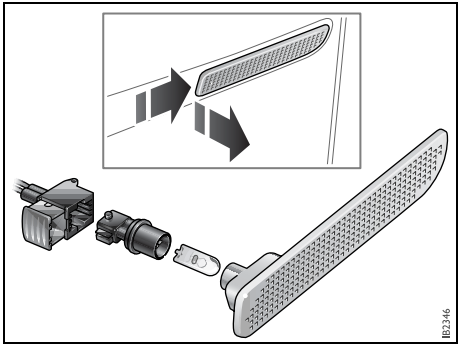
Front fog lights

⚠ WARNING

- **Never** crawl under a car that is supported only by a jack.
- Always use axle stands. Refer to the information on jacks on pages 214 and 215.

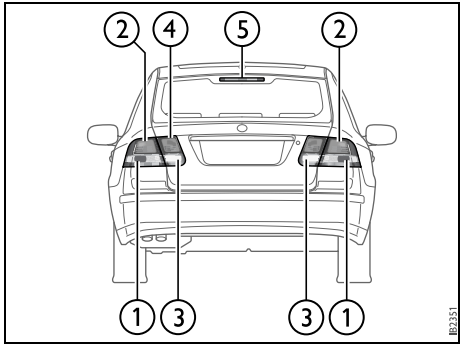
1 Undo one screw in the wheel housing. Lower the air shield.
2 Remove the protective cover. Release the two spring clips securing the bulb.
3 Unplug the connector.
4 Change the bulb. Try not to touch the glass part of the bulb with your fingers.

The height of the beam can be adjusted using a screwdriver inserted through the hole in the lower grille adjacent to the lens.

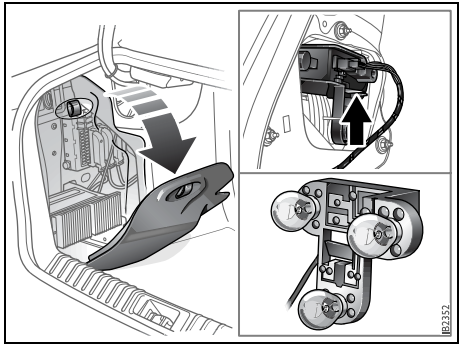


Side marker lights

1 Slide the lens rearward so that its front part can be pulled out.
2 Fit the new bulb.
3 When refitting, make sure that the groove in the spring engages the plastic edge of the bumper trim.



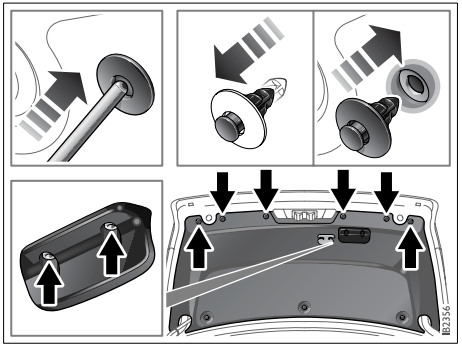
Tail lights
1 Turn signals
2 Tail lights/stop lights
3 Reversing lights
4 Rear fog light (left-hand side)
5 High-mounted stop light



Stop lights, tail lights and turn signal bulbs

1 Lower the cover in the trim behind the lights.
2 Lift the plastic lug on the lamp housing that secures the bulb holder.
3 Carefully remove the entire bulb holder unit from the lamp housing. Change the bulb.
4 Refit the bulb holder. Press the bulb holder home so that the plastic lug snaps into place.

If a brake light bulb fails, the adjacent tail light will act as a brake light to ensure traffic safety. Change the broken bulb when possible.

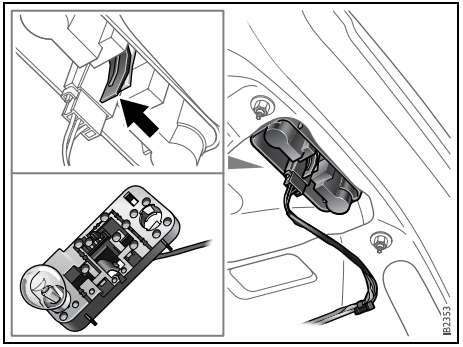


Reversing lights and rear fog light

Removing the trunk lid trim

1 Remove the two screws securing the grab handle to the inside of the trunk lid.
2 Unlock the plastic rivets by pressing in the center of each rivet. Pull out the rivets by taking hold of the rivet's collar.

You can use the button on the handle of the screwdriver supplied with the car to unlock the rivets.

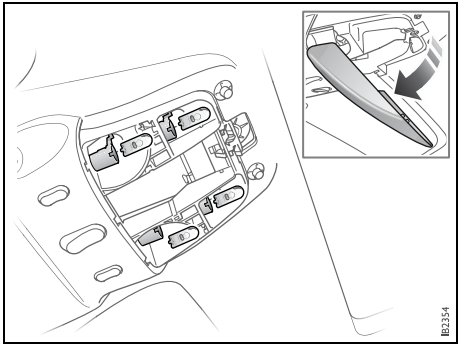


Changing bulbs

1 Press down the plastic lug on the bulb holder.
2 Carefully remove the entire bulb holder unit from the lamp housing. Change the bulb.
3 Refit the bulb holder. Press the lug so that it snaps into place.

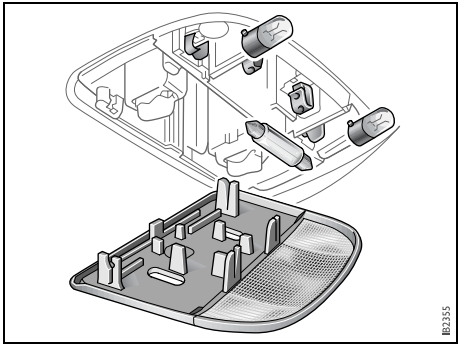
To refit the trunk lid trim

1 Withdraw the center of the rivets.
2 Fit the trim in place on the trunk lid.
3 Fit the rivets. Lock the rivets in place by pressing the center buttons in until flush with the collar.



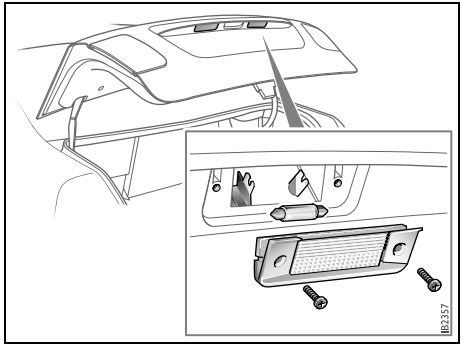
Dome light, front

1 Pull down the rear edge of the lens.
2 Fit the new bulb.
3 Insert the guide lugs on the front edge of the lens and press the lens home.



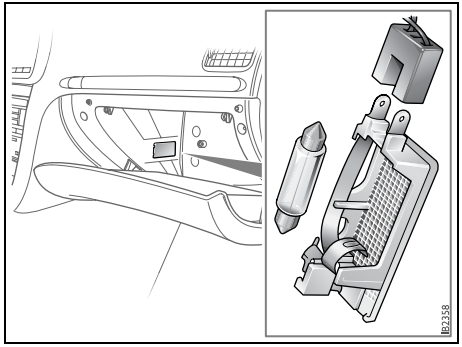
Dome light, rear

1 Remove the entire overhead panel: ease out the trailing end first, and then both sides of the front edge.
2 Fit the new bulb.



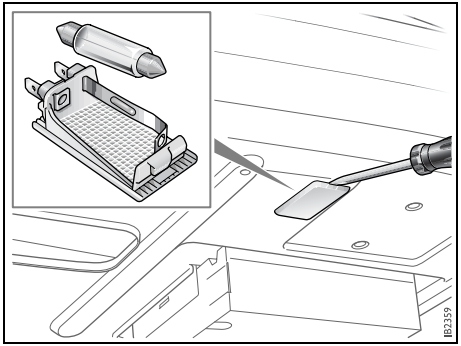
License plate lighting

1 Undo the two screws and remove the lens.
2 Fit the new bulb.
3 Make sure the seal on the lens is correctly seated.
4 Refit the lens and tighten the two screws.



Glove compartment lighting

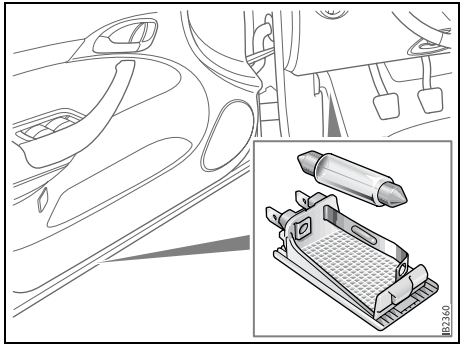
1 Remove the lamp housing using a short screwdriver.
2 Fit the new bulb.
3 Fit the lamp fitting first and then insert the connector.



Trunk lighting

The lamp fitting is located under the parcel shelf.

1. Remove the lamp fitting by pulling down one end.
2. Fit the new bulb.
3. Fit the lamp fitting first and then insert the connector.

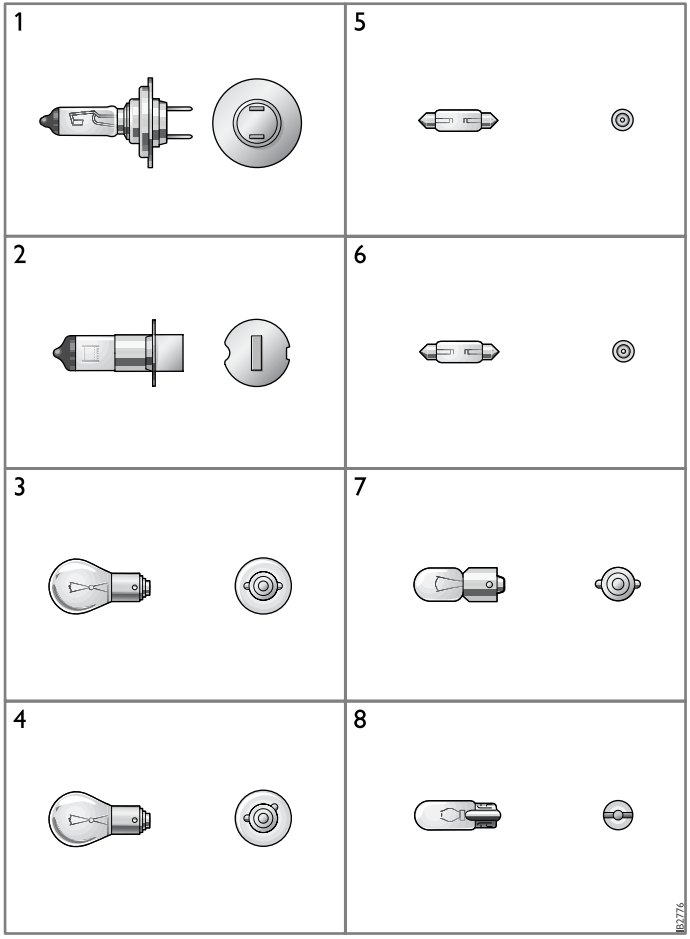


Courtesy/floor lighting

1. Release one edge of the lamp fitting using a screwdriver.
2. Fit the new bulb.
3. Fit the lamp fitting first and then insert the connector.

Other bulbs

If any other bulbs need changing, we recommend that you visit a Saab dealer.



Bulb table

No.	Designation	Watt-age	
1	H7	55	Headlight
2	H3	55	Front fog lights
3	P21W	21	Taillights; rear fog light; brake lights; reversing lights
4	PY21W	21	Direction indicator, front/rear
5	R10W	10	Rear dome lighting; courtesy lighting; glove compartment lighting
6	R5W	5	License plate lighting; trunk lighting
7	T4W	4	Reading light, rear
8	WY5W/W5W	5	Side-mounted turn signal (yellow); parking lights; front dome lighting

NOTICE

Only fit lamps of the specified rating. Lamps of the wrong wattage could damage the wiring harness and electronics.

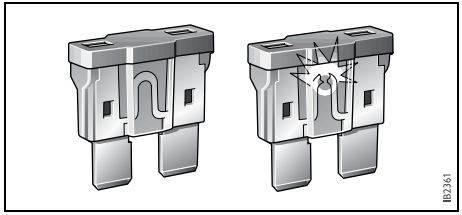
Fuses

⚠ WARNING

To avoid the risk of short-circuiting and/or fire breaking out in the electrical system, the following should be heeded:

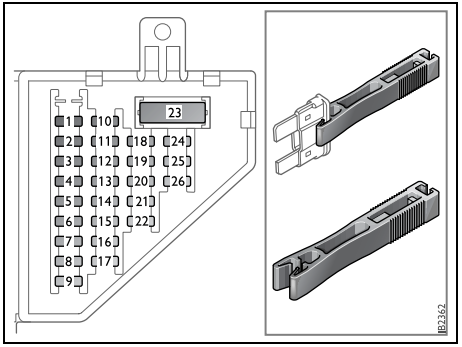
- Always consult an Saab dealer before modifying or adding any electrical equipment. Failure to do so can result in the electrical system being damaged.
- Never replace a fuse with one having a higher rating than specified (see page 201). The color of the fuse indicates its amperage.
- If the same fuse blows repeatedly, have the electrical system checked by an 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 Saab dealer.

The fuses are housed in three fuse panels: one behind a hatch on the left-hand end of the fascia, one in the engine bay (additional small unit in front of battery) and one on the left-hand side of the trunk. There is space for spare fuses in the hatch on the left-hand end of the fascia.



Sound fuse / Blown fuse

To check if a fuse has blown, first remove it from the panel. If the filament is broken, the fuse has blown.



Fuse panel in end of fascia

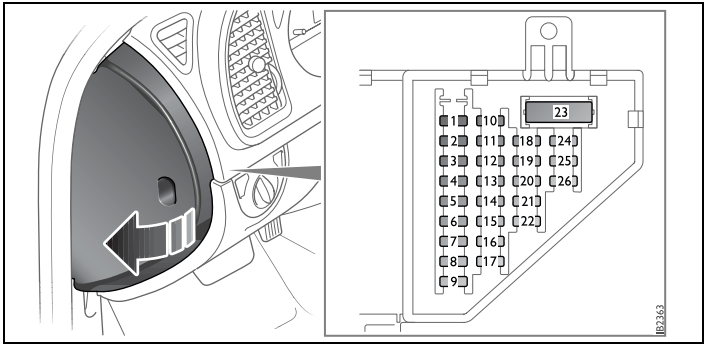
A special tool for removing fuses is provided on the hatch on the left-hand end of the fascia. Simply push the tool onto the fuse, squeeze and remove the fuse.

Some fuses and relays may be fitted but not connected to the car's electrical system.

MAXI fuses

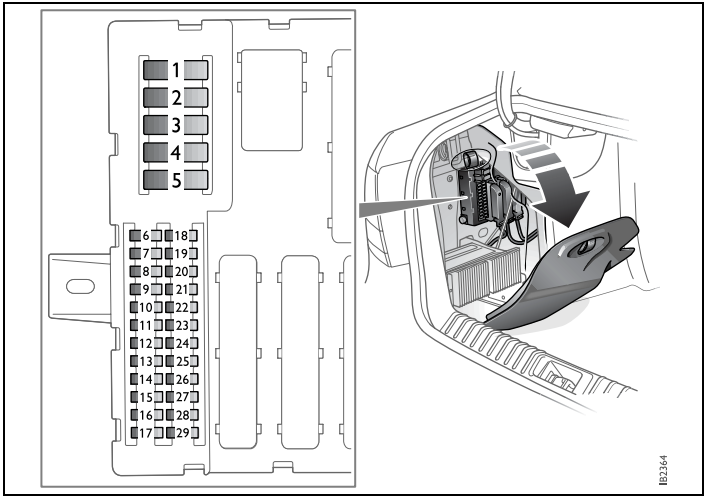
The car also has a number of large fuses known as MAXI fuses. These are designed to protect the car's electrical system from being damaged. Each MAXI fuse protects a number of electrical circuits and functions and therefore has a higher rating (amperage) than the standard fuses. No spare MAXI fuses are supplied with the car.

NOTICE
If a MAXI fuse blows, there is a major fault in the electrical system. Have the car checked at a Saab dealer.



Fuse panel in end of fascia

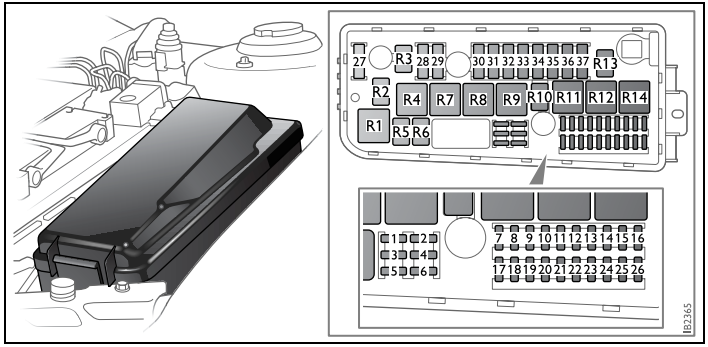
No.	Amp.	Function
1	15	Steering wheel lock
2	5	Steering column unit; ignition switch
3	10	Hands-free; cabin CD changer; SID
4	10	Main instrument unit; manual climate control; automatic climate control (ACC)
5	7.5	Control module in front doors; Park Brake Shift Lock (automatic transmission)
6	7.5	Brake light switch
7	20	Fascia fuse panel; fuel filler door
8	30	Control module in passenger front door
9	10	Fascia fuse panel
10	30	Trailer socket; electrical socket in storage compartment between seats
11	15	Data link connection (diagnostics)
12	15	Interior lighting incl. glove compartment
13	30	Accessories
14	20	Radio, sound system I; control panel, Infotainment System
15	30	Control module in driver's door
16	-	-
17	-	-
18	7.5	Manual climate control; fan
19	-	-
20	7.5	Headlight levelling switch
21	7.5	Hands-free; brake light switch; manual climate control; clutch pedal switch
22	30	Cigarette lighter
23	40	Cabin fan
24	7.5	Airbag control module
25	-	-
26	5	Yaw sensor (cars with ESP)
27	-	-



Trunk fuse panel, left-hand side

No.	Amp.	Function
1–5	MAXI	-
6	30	Control module in left rear door
7	30	Control module in right rear door
8	20	Trailer
9	-	-
10	30	Left-hand brake light; rear right turn signal; right tail light; right reversing light; high-mounted brake light; trailer lights
11	-	-
12	-	-
13	-	-
14	-	-
15	15	Seat heating, left seat
16	15	Seat heating, right seat
17	7.5	Autodimming rearview mirror; rain sensor; tire pressure monitoring
18	15	Sunroof
19	7.5	Telematics (OnStar)
20	7.5	DVD player (navigation system)
21	7.5	Saab Parking Assistance (SPA); control module in rear doors
22	30	Amplifier, sound system III
23	-	-
24	10	Movement sensor; CD changer in trunk (accessory)
25	30	Electrically adjustable driver's seat with memory
26	30	Right-hand stop light; rear left turn signal; left tail light; rear fog light; left reversing light; license plate lighting; trunk lighting; trailer lights
27	-	-
28	-	-
29	-	-

Relays (located on back of fuse panel)
R 1 Electrically adjustable seats without memory
R 2 Ignition +15
R 3 -
R 4 Rear window heating
R 5 -
R 6 -
R 7 Trunk lid earth (ground)
R 8 -
R 9 -
R10 -
R11 -



Fuse panel in engine bay

No.	Amp.	Function
1	-	-
2	10	Engine control module; automatic transmission control module
3	20	Horn
4	10	Engine control module; battery disconnect switch
5	-	-
6	10	Selector lever, automatic transmission
7	-	-
8	-	-
9	-	-
10	-	-
11	-	-
12	-	-

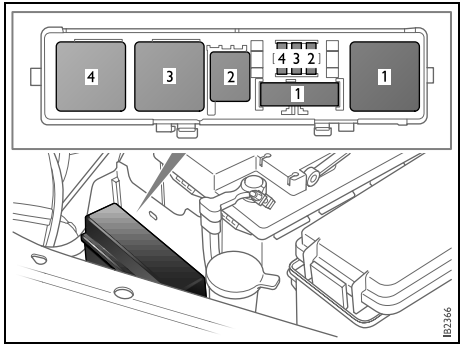
13	-	-
14	-	-
15	30	Washer fluid pump, headlights
16	30	Front right parking light; front right turn signal; left and right side turn signal; right high beam; left low beam; front left fog light
17	30	Windshield wiper motor, low speed
18	30	Windshield wiper motor, high speed
19	20	Parking heater; auxiliary heater
20	10	Headlight levelling
21	-	-
22	30	Washer fluid pump, windshield
23	-	-
24	20	Extra lights
25	20	Amplifier, sound system II
26	30	Front left turn signal; front left parking light; front right fog light; right low beam; left high beam
27 –37	MAXI	

Relays	
R 1	Washer fluid pump, windshield
R 2	-
R 3	-
R 4	-
R 5	Extra lights
R 6	Horn
R 7	-
R 8	Starter motor
R 9	Windshield wipers ON/OFF
R10	-
R11	Ignition +15
R12	Windshield wipers, high/low speed
R13	-
R14	Washer fluid pump, headlights
R15	-
R16	-

Fuse panel in front of battery

No.	Amp.	Function
1	60 MAXI	Secondary air injection pump (certain models)
2	20	Fuel pump; preheated oxygen sensors (lambda probe)
3	10	A/C compressor
4	30	Main relay

Relays	
1	Secondary air injection pump
2	A/C-compressor
3	Preheated oxygen sensors (lambda probe)
4	Main relay, engine (ECM/EVAP/injectors)



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.

NOTICE

Always consult your Saab dealer before changing the car's wheels or 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 to be overloaded
- cause the wheels to come into contact with chassis and body components
- affect the function of the Electronic Stability Program (ESP).

The speed and load limits of the tires must not be exceeded; see page 209.

Wheels larger than 18" must not be fitted on the Saab 9-3. The permissible offset is 1.61 inch (41 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.

Do not take it for granted that a wheel/tire combination will work in the best possible way, just because it can be fitted to the car.

To ensure that the speedometer is as accurate as possible it should be reprogrammed if wheels of a different dimension are fitted. Contact a Saab dealer.

Tire pressure

⚠ 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.

Note: Low tire pressure also causes premature tire wear and increased fuel consumption.

Adjust the tire pressure to match the current load and speed of the car (see page 245). The stated tire pressures apply to cold tires, i.e. tires that are the same temperature as the outside air temperature. Tire pressure increases as the tires become warm (e.g. during highway driving) by approximately 0.3 bar (4 psi). When the temperature of the tires changes by 50°F (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.

Soft tires will cause faster wear than overpressurized tires.

If a valve is leaking, simply unscrew it and fit a new one.

Note: Remember to adjust the tire pressure if you change the load in the car or intend to cruise at a speed that is substantially different from normal.

Automatic tire pressure monitoring (option, certain variants only)

⚠ WARNING

The system is intended to aid the driver. The driver is always ultimately responsible for ensuring that the tire pressure is correct.

The pressure monitoring system consists of a sensor in each wheel, a detector in each wheel housing and a receiver. The sensors are located inside the wheels directly adjacent to the air valves.

NOTICE

Great care must be taken when changing tires so as not to damage the sensors that are integrated in the valves.

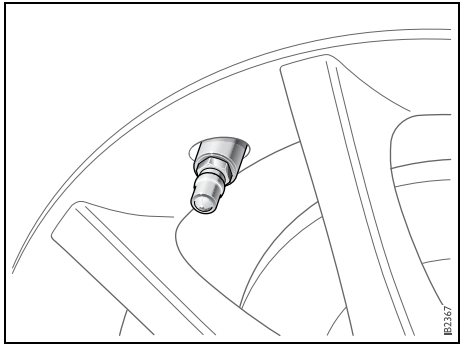
The receiver is located in the trunk. Tire pressure information is sent wirelessly to the receiver.

The system checks the tire pressure when the car is travelling over 18 mph (30 km/h).

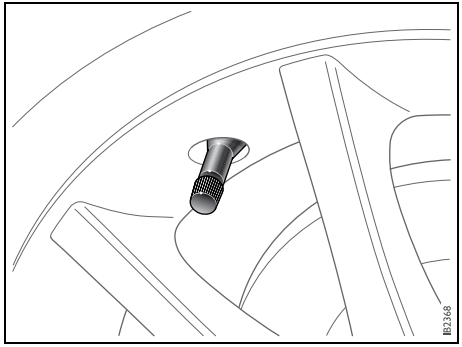
The system is "self-learning", which means that the position of the wheels can be changed without requiring adjustments to the monitoring system. The spare wheel does not have a sensor.

The sensor batteries have an average life of 10 years. The batteries cannot be changed but require the sensor units to be replaced.

The system does not warn if a tire is overinflated.



Valve with sensor



Valve without sensor

If the tire pressure drops

If the tire pressure drops 0.3 bar (4 psi) below the recommended pressure, the SID will issue a warning as to which tire is affected.

Tire pressure low,
front left.
Check tires.

Adjust the tire pressure as soon as possible.

If the tire pressure continues to drop, the SID will issue a warning alarm when the pressure is 0.6 bar (9 psi) below the recommended value.

Flat tire front left.
Make a safe stop.

Reduce speed (avoid heavy braking and violent steering wheel movements) and stop the car as soon as it is safe to do so. Change the wheel.

Malfunction

Tire pressure system failure. Contact Saab dealer.

The message shown above will be displayed on the SID if:

- a wheel without pressure sensor is fitted (e.g. spare wheel)
- one, two or three pressure sensors are broken or missing
- two or more detectors are missing or broken
- the receiver malfunctions
- a fault arises in the system.

The message shown above is not displayed if none of the wheels have sensors, such as if winter wheels without sensors are fitted.

Shifting the wheels

⚠ 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 rear left to front left and rear right to front right, 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 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 195/65 R15 91H:

195	Tire section width, mm
65	Aspect ratio, i.e. the section height as a percentage of the section width
R	Radial ply
15	Wheel rim diameter 15 in at bead seats
91	Tire load index
H	Speed rating

Tire load indices

91	Tire approved for max. 1355 lbs. (615 kg)
93	Max. 1433 lbs. (650 kg)
94	Max. 1477 lbs. (670 kg)

Speed ratings

S	Tire approved for speeds up to 110 mph (180 km/h)
T	Max. 118 mph (190 km/h)
H	Max. 130 mph (210 km/h)
V	Max. 149 mph (240 km/h)
W	Max. 168 mph (270 km/h)
Y	Max. 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 to 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.

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.

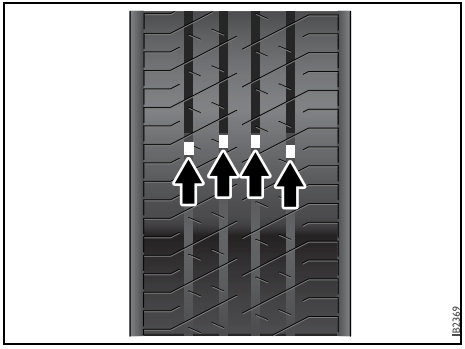
⚠ WARNING

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.

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.



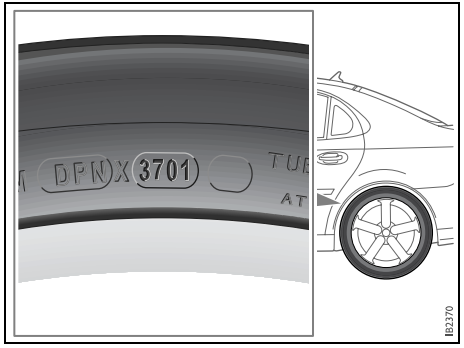
Wear indicator

Tire 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 have a code that specifies their date of manufacture. The first two digits denote the week number and the last two digits the year.

Accordingly, a date code of 3701 signifies that the tire was manufactured in week 37, 2001.



Date code

Compact spare wheel

⚠ WARNING

The spare wheel or punctured wheel must be stowed under the trunk floor, and secured in place with the retaining nut.

Compact spare

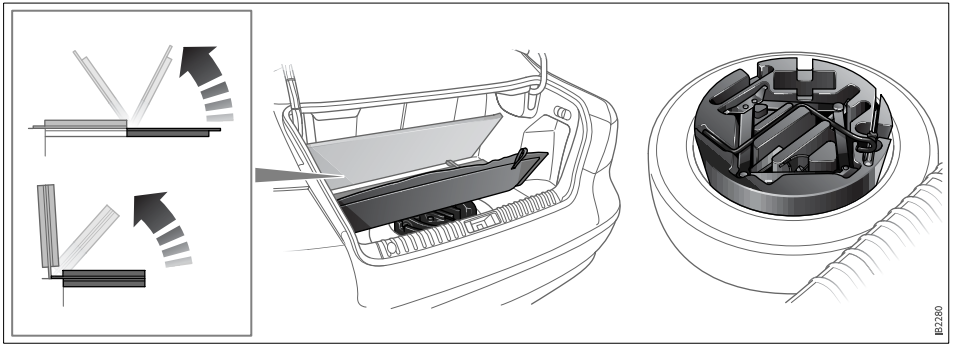
The compact spare is light and easy to handle when changing the wheel. Its use is only permitted when a standard wheel has sustained a puncture. The maximum life of the wheel is only just over 2,000 miles (3,500 km).

Do not exceed 50 mph (80 km/h) with the compact spare fitted.

The tire pressure should be 60 psi (420 kPa). Put the punctured wheel in the spare wheel well under the trunk floor.

Driving with the compact spare wheel, see page 167.

Have the standard wheel repaired and refitted as soon as possible.



The spare wheel, the tools and the jack with its crank are carried under a panel in the trunk.

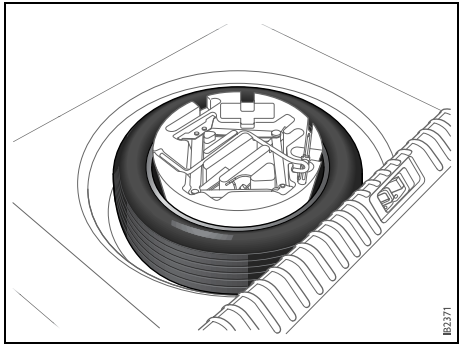
Fold the carpeting forward to ease access to the tools and spare wheel.

The screwdriver handle has a "button" for removing plastic rivets. This type of rivet must be removed when changing the light bulb in the trunk lid (see page 195).

NOTICE

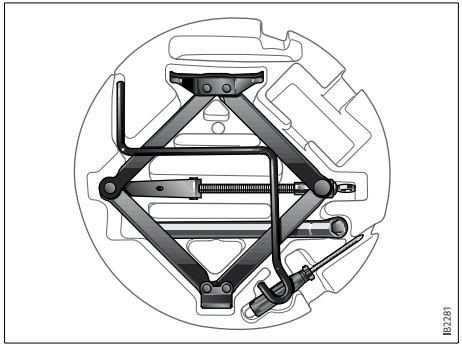
To avoid damaging an alloy wheel with a flat tire, this can be placed outside up in the spare-wheel well but **only** while driving to the closest workshop.

A general rule is that all heavy loads must be well secured in the luggage compartment (see page 118).



Spare wheel (under trunk floor)

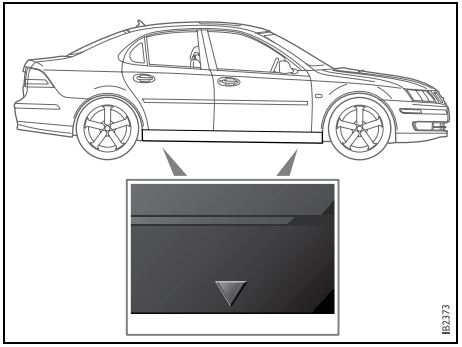
Your Saab is equipped with a trip computer and you can use its "Speed warning" function, to monitor driving speed since you must not exceed 50 mph (80 km/h).



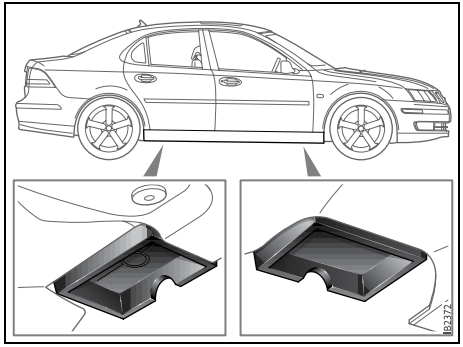
Changing a wheel

⚠ WARNING

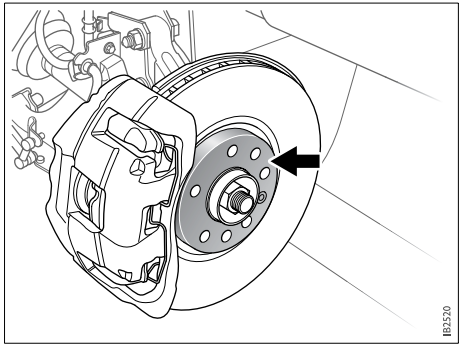
- The car jack is designed solely for use in changing a wheel or fitting snow chains. **It must not be used to support the car during repair work or servicing.**
- **Never** crawl under a car that is supported only by a jack.
- Special care must be taken if the car is on a slope - use wedge-shaped wheel 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 the selector lever 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.
- If possible, make sure the jack is standing on a firm, level surface.
- The jack should be stored correctly under the carpeting in the trunk. If it lies loose in the car, it could thrown forward and cause personal injury in the event of a crash or if the car rolls over.
- Do not use the jack on a car other than your Saab 9-3.
- Grit, salt and rust can clog the inner threads 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 correct clamping force, despite tightening the wheel bolts to the correct torque.



Marking of jacking points



Jacking points



Clean any rust or dirt from the contact surfaces between the wheel and brake disc.

When the car has to be lifted, the jack must be positioned at one of the four jacking points (front or rear) under the sill members.

If a floor jack is used, the lifting plate must be positioned under the normal jacking points. If the car is equipped with a towbar, the jack can also be placed under this.

NOTICE

Apply the jack only to the jacking points indicated on the body.

1 Apply the parking brake and engage 1st or reverse gear (automatic transmission: select P).

2 Wind the jack up to a suitable height before placing it under the jacking point. Each jacking point is indicated by an arrow on the sill (see illustration).
Make sure that the jack fully engages the jacking point in the underside of the sill member and that the entire foot of the jack is steady and flat on the ground.
The jack must not stand on snow, ice or similar.
Wind up the jack until it just begins to lift the car.

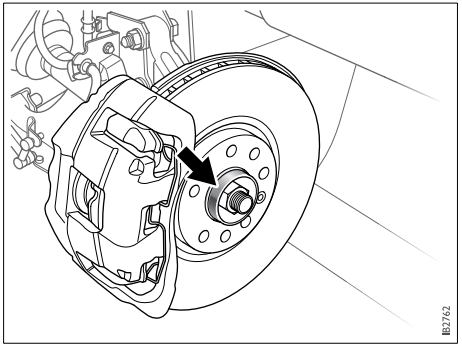
3 It is not necessary to remove the wheel cover.
If, none the less, you wish to remove the wheel cover, take hold of the outer edge and pull it straight out.
Loosen the wheel bolts half a turn.

4 Wind the jack to raise the wheel clear of the ground. Remove the wheel bolts and lift off the wheel.

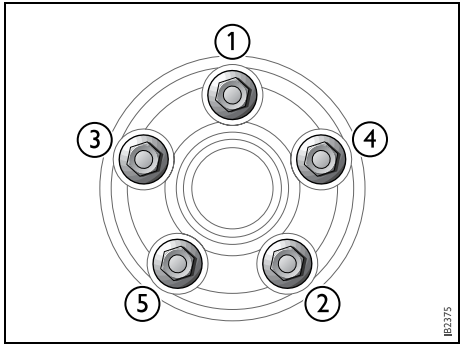
5 Clean any rust or dirt from the contact surfaces between the wheel and brake disc. Do not wipe away the grease in the wheel hub.

6 Fit the wheel and screw in the bolts in the sequence shown on the following page (opposite pairs).
Tighten the bolts enough for the bolts and wheel to be seated correctly.

7 Lower the car and tighten the wheel bolts to torque in sequence as shown on the following page.
Tightening torque:
Light-alloy wheels: 110 Nm.
Steel wheels: 110 Nm.



Do not wipe away the grease in the wheel hub.



Tightening sequence, wheel bolts

NOTICE

- Do not overtighten the bolts using a 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.
- When refitting a wheel cover, make sure that the valve protrudes through the marked recess in the wheel cover.

8 Retighten the wheel bolts after twenty or so miles.
Tightening torque:
Light-alloy wheels: 110 Nm.
Steel wheels: 110 Nm.

We advise against using wheels with large ventilation slots in winter, as the brake components are then more exposed to slush, road salt and grit.

If you fit wheels of a different dimension, the speedometer can be reprogrammed to ensure it is as accurate as possible. Contact a Saab dealer.

Driving with tire chains, see page 156

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

If the car is involved in a crash, the safety belts, belt pretensioners and other associated components must be inspected at a Saab dealer.

Never make any alterations or repairs to the safetybelts yourself but visit a Saab dealer.

Check the function of the safety belts regularly as follows:

- Hold the diagonal strap and pull it sharply. The safety belt should lock and it should not be possible to withdraw it further.

Check the anchorage points in the floor. They must not have suffered rust 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 and hairs from the seats, door armrests and headlining, use a vacuum cleaner, a moist lint-free cloth, or a clothes brush. Remove spots and dirt using a cloth moistened with lukewarm soapy water.

When using a stain remover, always work from the outside towards the centre to avoid leaving a ring. If a soiled ring or spot should remain, it can usually be removed using lukewarm soapy water or water alone.

Spots left by liquids, such as soft drinks or thin oil, must be removed at once with an absorbent material, such as kitchen towelling. Then clean with a stain remover.

White spirit is recommended for removing grease and oil stains. A medium stiff brush may also be used.

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. Discolouration 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.

Textile carpeting

Textile carpeting should be vacuum cleaned regularly. Carpeting can also be cleaned using a brush or sponge and carpet shampoo.

For safety reasons, vacuum cleaners that are not earthed (grounded) must not be used out of doors.

Engine bay

The engine bay should be cleaned with an engine degreasant and rinsed with hot water. The headlights must be covered over. Do not use a pressure washer.

Do not use petrol as a cleaning agent or solvent when carrying out repairs or maintenance. Saab recommends the use of environmentally-friendly degreasants.

Washing

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 through which the water flows. Automatic carwashes should be avoided when the car is new.

After 5–6 months the paintwork will have hardened. To facilitate cleaning, a suitable detergent can be added to the water, which should be lukewarm.

Remove any bird droppings without delay, as these can discolour the paintwork and prove difficult to polish out. Lay a wad of wet paper on the patch of dirt and leave it for a minute or so. It will then be easy to wash off the dirt.

Use a soft cloth moistened with white spirit to remove splashes of tar or asphalt. Do not use strong cleaners, as these can dry out the paintwork.

NOTICE

Do not use alcohol-based cleaners on the plastic lenses of the front or rear lights, as these can cause a crackling effect on the lenses.

The door mirrors should be folded in before the car enters an automatic car wash.

The underside of the car also needs washing regularly, and this should be done extra

thoroughly at the end of winter. Clean the underside of the car by hand if the car is usually washed in an automatic car wash without special facilities for underbody cleaning.

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 inside of window glass using a proprietary 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 polished, as this helps to prevent misting.

Clean the outside of the windows with Saab washer fluid. This is especially important if the car has been washed in an automatic car wash, as sometimes a wax treatment is used that can contaminate the windshield and impair the performance of the wipers.

NOTICE

- Try your brakes on leaving a car wash. Wet brake discs reduce the performance of the brakes.
- Fixed antennae, such as for a mobile phone, must be removed if the car goes through an automatic car wash.
- Cars with Saab Parking Assistance: Do not spray the sensors or closer than 8 in. (20 cm) to the sensors with a pressure washer, as this can damage them.

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-corrosion 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, such as the 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.

After the primer has dried, apply several thin layers of topcoat until the surface of the repaired area is flush with the surrounding paintwork.

Stir both primer and touch-up paint 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 colour and finally, the clear enamel. To achieve the best finish, apply two or three coats of primer.

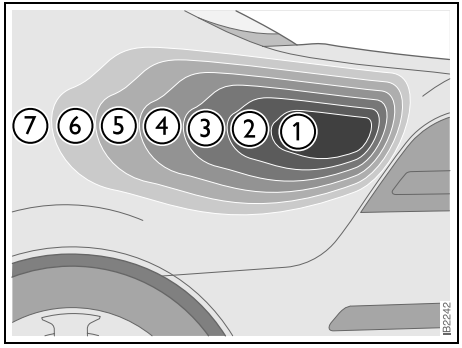
Anti-corrosion treatment

The entire car undergoes a series of anti-corrosion processes during production. These include electrophoretic priming, polyester-based coating to protect against stone chip damage and corrosion, and treatment of body cavities and members with thin, penetrating rustproofing oil.

In addition, most body panels, such as the hood, doors and floor pan are galvanized.

The anti-corrosion treatment on some parts of the car is constantly exposed to wear and prone to damage. This applies particularly to the underside of the car and inside the wheel arches, where grit, road salt and the like that are thrown up can give rise to corrosion where the underseal has worn away. The extent of this obviously depends on the conditions in which the car is used.

Accordingly, make it a habit to hose the underside of the car often and to inspect the condition of the underseal. The anti-corrosion warranty does not relieve the car owner of the need to carry out normal maintenance to the rustproofing and to make good any damage.



Surface treatment composition

1 Body panel
2 Zinc (certain components only) 7.5 µm
3 Phosphate coating 3 –5 µm
4 Cathodic ED 30 µm
5 Intermediate coat 40 –45 µm
6 Metallic base/solid base 13 µm
7 Clear enamel 45 µm

Use a hose to clean the underside of the car thoroughly. After it has dried, use a brush or spray to apply a viscous anti-corrosion agent to any worn or damaged areas, to prevent the onset of corrosion.

Even after the anti-corrosion warranty has expired, it makes good sense to continue to maintain the rustproofing.

Seams in the body, especially those in the doors and trunk lid, are particularly vulnerable to corrosion from the outside, caused by grit and salt thrown up from the road, and to corrosion from the inside, largely as a result of condensation. Keep the seams clean and at the first sign of any rust, apply a thin, penetrating, anti-corrosion oil. Your Saab dealer will be pleased to give you further advice.

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.

Preventive maintenance

The following procedures are necessary to help protect against rusting. Refer also to the terms and conditions of the Performation 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.

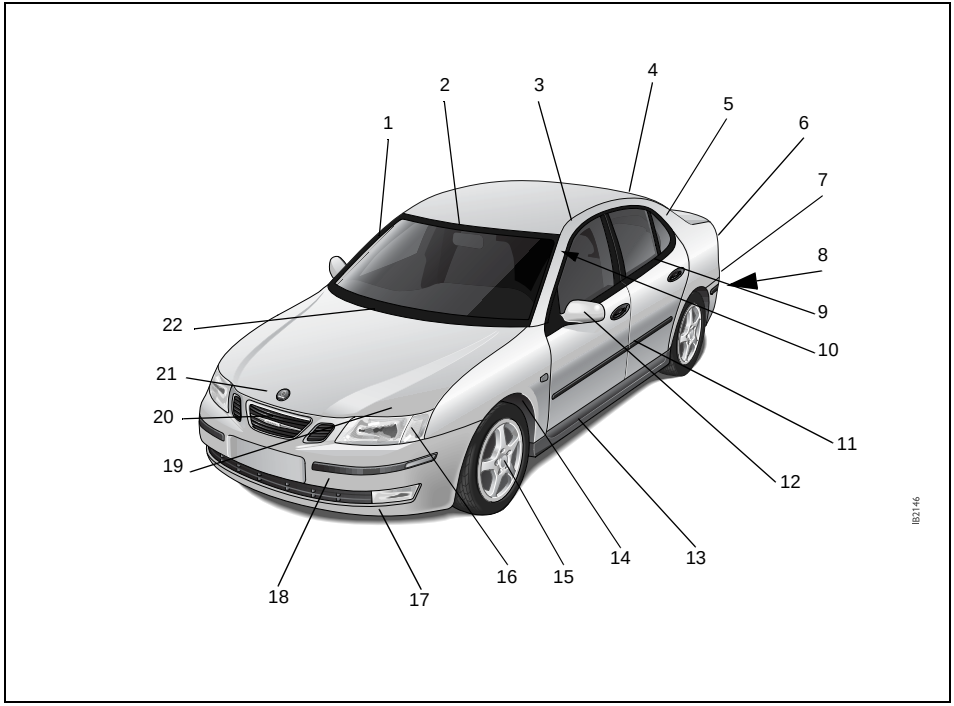
Inspect the undercoating and touch up if necessary. Pay particular attention to the fenders and wheel housings, which are exposed to abrasion by flying gravel, etc. If the composition has worn or flaked off, the steel must be thoroughly cleaned and dried before a fresh coat is applied. The cleaning is 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 the sorting of other materials, plastic parts, for instance, have been marked to identify the precise nature of the plastic.

1 A-pillar trim: PP, PP/EPDM
2 Windshield trim: PP, PP/EPDM
3 Seals: EPDM
4 Rear window seal: PUR
5 C/D-pillar trim: PP
6 Tail light: PMMA
7 Rear bumper:
shell – PP/EPDM
core – expanded PP
8 Fuel tank: PE
9 Side window seal: PP/EPDM
10 A-pillar trim, textile: PC/ABS
11 Side trim: PVC
12 Rearview mirror: ABS
13 Sill scuff plate: PP/EPDM
14 Wheel arch liner: PP
15 Wheel cover: PA
16 Direction indicator lamp lens: PMMA
17 Front spoiler: PP/EPDM
18 Front bumper:
shell – PP/EPDM
core – expanded PP
19 Washer fluid reservoir: PE
20 Grille: ABS
21 Fan shroud: PP
22 Scuttle panel finisher: PC/ASA



ABS	Acrylonitrile-butadiene-styrene
ASA	Acrylonitrile-styrene (acrylic plastic)
EPDM	Ethylene-propylene rubber
PA	Polyamide (plastic)
PC	Polycarbonate (plastic)
PE	Polyethylene
PMMA	Polymethyl methacrylate
POM	Acetal plastic
PPO	Polyphenylene oxide (plastic)
PP	Polypropylene
PUR	Polyurethane
PVC	Polyvinyl chloride

Air conditioning (A/C)

⚠ WARNING

- All repairs and adjustments to the A/C system must be carried out at 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 gas can cause eye injury or other personal 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 R 134a with other refrigerants.

Troubleshooting

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 at a Saab dealer.

Note:

When the A/C system is running, the intake air is dehumidified. The resultant condensation that forms on the evaporator is drained off under the car. When the car is parked, this may result in a small puddle forming on the ground. The warmer the air and the higher the relative humidity, the more condensation will be produced.

Inadequate cooling

a Check that the controls for temperature and air distribution are correctly set; see "Manual climate-control system" on page 79.

b Check that the condenser (in front of the radiator) has not become clogged with dirt and insects.

c Make sure that the compressor drive belt does not slip (see page 185).

d Check the fuses for the ventilation fans and compressor (see page 201).

Maintenance

NOTICE

Do not use a pressure washer when cleaning the condenser or radiator due to the risk of damage.

- The compressor drive belt should be inspected under the regular service program.
- Clean away dirt and insects from the condenser and radiator to prevent clogging. When washing the car, use the hose to spray the radiator and condenser (located in front 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 hose down the radiator and condenser while the engine is hot.

Other than in extremely cold weather, do not screen the radiator, e.g. with netting, as this will greatly diminish its cooling capacity.

- Applicable to the manual climate control system - During cold months the air conditioning should be switched on once or twice a month and run for 5–10 minutes during highway driving once the engine is warm.
  This action saves the gaskets in the compressor from being spoiled. The compressor uses a lubricant that circulates with the coolant.

Note:

The A/C system cannot be switched on when the outside temperature is below 32°F (0°C). Turn on the A/C system when the car is standing in a warm place. Simplest is to always have the A/C button pressed in. The A/C system will then cut in automatically when the outside temperature is high enough.

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 has a visual optical headlight aiming system equipped with vertical aiming device. The aim has been preset at the factory and should normally not need further adjustments.

If your headlights are 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.

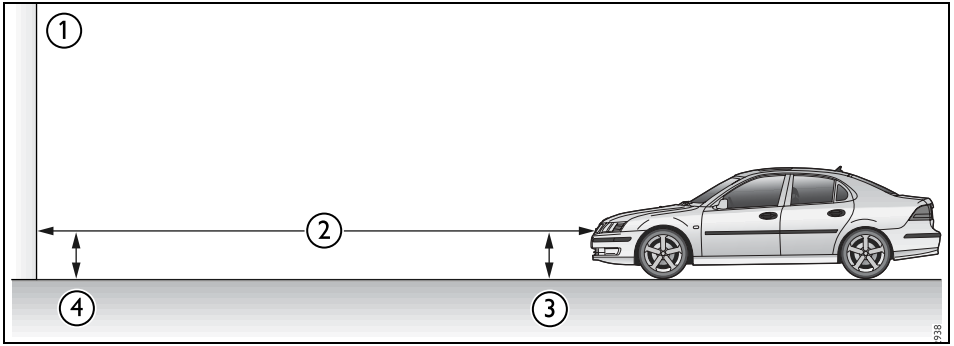
NOTICE

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.

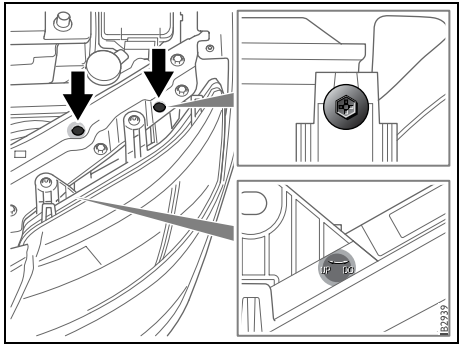
To check the aim, the vehicle should be properly prepared as follows:

- The vehicle shall be placed so that the headlights are 25 ft (7.6 m) from a light colored wall or other flat surface. The aiming area should be darkened, this will improve your ability to see the beam of the low beam headlight being aimed. An optical headlamp aimer can also be used and will than replace the wall.
- The vehicle must have all four wheels on a perfectly level surface which is level all the way to the wall or other flat surface.
- The vehicle should be placed so it is perpendicular to the wall or other flat surface.
- The vehicle should be unloaded and fuel tank full, and one person or 160 lbs. (75 kg) on the drivers seat.
- The vehicle should be fully assembled and all other work stopped while headlight aiming is being done.
- The vehicle should not have any snow, ice or mud attached to it.
- Tires should be inflated to the prescribed pressure.
- Close all doors.
- Rock the vehicle to stabilize the suspension.

Headlight aiming is done with the vehicle low beam lamps. The high beam lamps will be correctly aimed if the low beam lamps are aimed properly.



1 Wall or garage door.
2 25 ft (7.6 m) between wall and headlight lens.
3 Measurement from the ground to the low beam aiming marker on the headlight lens.
4 Same measurement as (3) but substract 2 inches.

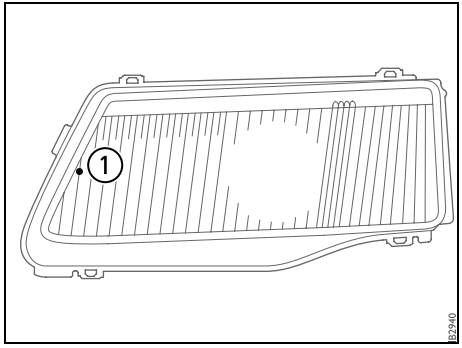


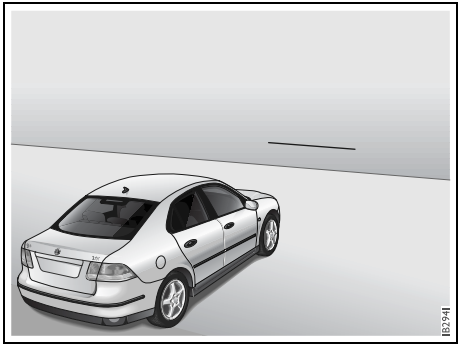
Vertical aiming device

If you find that the headlight needs adjustment follow these steps:

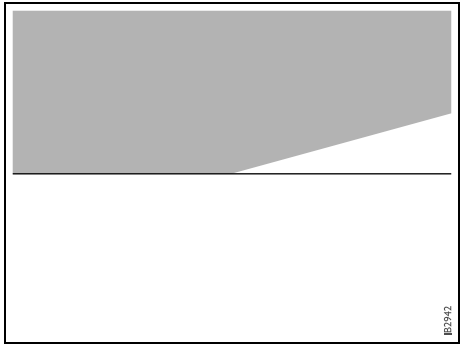
1 Open the hood and locate the vertical aiming devices there are two vertical aiming devices which shall be turned simultaneously and the same amount of turns.
2 Locate the marker on the lens.
3 Measure the distance from the ground to the aim marker No.1 on each lens. Subtract 2 inches.
4 At the wall or other flat surface, measure from the ground to the recorded distance (see point 4) and draw a horizontal line the width of the vehicle.

1 Aiming marker on headlight lens





Horizontal line on wall or other flat surface



Correctly adjusted low beam

5 **Cars with Bi-Xenon lights:**
Bi-Xenon lights with automatic headlight levelling system must first do a reference run before aiming: Start the engine and let the headlights do a reference run. Turn off the engine but leave the low beam on.
Cars with halogen lights:
Turn on the low beam headlights.
Both variants:
Place a piece of cardboard or equivalent (although not directly on the lens) in front of the headlight not being aimed. This should allow the beam cut-off of the headlight being aimed to be seen on the flat surface.

NOTICE

Do not cover a headlight directly on the lens to improve beam cut-off when aiming. Covering a headlight may cause excessive heat build-up that may cause damage to the headlight.

6 Turn the two vertical aiming screws simultaneously in the same direction indicated on the headllight until the horizontal cut-off of the headlight is aligned with the horizontal line on the wall.

7 If an optical headlight aimer device is used follow point 1 and 2 and center the lens of the optical headlight aimer device at the intersection of the two markers on the headlight lens.
Then follow the instructions in the optical headlight aimer instruction manual and point 1, 2, 5, and 6 in this instruction.

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 begins with an Inspection Service at 30 days. A time for service message will illuminate on the Saab Instrument Display (SID) when the car is due for regular maintenance. There are twi different messages that will appear:

TIME FOR INTERMEDIATE SERVICE indicates that an oil/filter change is required along with several inspections. This message is set by the engine management system which calculates service intervals based on several factors including driving habits, ambient temperature, number of cold starts, mileage driven and elapsed time since the last service. Based on this algorithm, this message may appear at mileage as low a 8,000 or as high as 15,000 miles. If mileage accumulation does not occur, the message will be set, and maintenance required at a maximum of 2 years.

TIME FOR MAJOR SERVICE will be set when additional maintenance is necessary, such as air filter or spark plug replacement. This message will appear at 30,000 mile intervals. When either message is displayed, contact your Saab Dealer for a service appointment.

Failure to perform scheduled maintenance in a timely manner may result in serious damage to key components or systems.

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

It is the owner’s responsibility to retain service records. If possible, you should keep copies of all shop work orders for all service and repairs, whenever performed. As indicated in the new car and emission control system warranties, it is important to document that all necessary maintenance has been done.

HOW THE SERVICE RECORD IS ORGANIZED

The service record is comprised of a maintenance log and a separate log sheet for listing any additional service and repairs. There are five coupons at the front of the section, three of which are for documenting extra engine oil and filter changes, one for extra automatic transmission fluid services necessary for severe service conditions, one for brake fluid changes and one for coolant flushes. These are followed by log sheets for all normal scheduled maintenance in the order it is to be performed, beginning with the “First Service”.

HOW TO USE THE SERVICE RECORD COUPONS

When the car is brought to a Saab dealer for scheduled maintenance, present the Warranties & Service Record Booklet to the service manager. When the technician has completed the service, the technician will sign the maintenance record. The person responsible for quality assurance at the dealership will also sign and stamp the record with the dealer identification stamp.

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.

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,

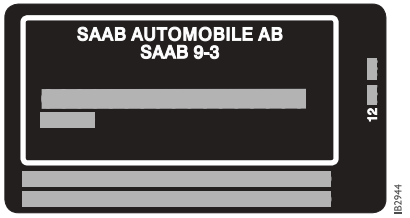
Oshawa, Ontario, L1H 8P7.

Technical data

IB2377

General particulars

Overall length, including bumpers:	182.3" (4630 mm)
Overall width, including door mirrors	80.2" (2038 mm)
Maximum height	56.9" (1445 mm)
Wheelbase	105.3" (2675 mm)
Track:	
Front	59.8" (1520 mm)
Rear	59.3" (1506 mm)
Ground clearance at GVW	approx. 120 mm
Number of seats (incl. driver)	5
Turning circle:	
Measured at vehicle extremities	37.4 ft. (11.4 m)
Curb to curb	35.4 ft. (10.8 m)



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.

V.I.N. plate

Trunk length:	
Rear seat raised	40.8" (1036 mm)
Rear seat lowered	69.8" (1774 mm)
Trunk volume (SAE)	15.0 cu.ft. (425 l)

Curb weight (i.e. with full fuel tank, full washer fluid reservoir, standard tools and spare wheel)	3174–3461 lbs. (1440–1570 kg)
Gross vehicle weight (GVW)	4343–4453 lbs. (1970–2020 kg)
Maximum axle load:	
Front	248 lbs. (1125 kg)
Rear	2226 lbs. (1010 kg)
Weight distribution:	
Curb weight + driver (154 lbs. (70 kg)), front/rear	approx. 60/40 %
GVW, front/rear	approx. 50/50 %
Maximum roof load	220 lbs. (100 kg)
Maximun load in trunk	175 lbs. (80 kg)

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.
- When carrying a load in the trunk, make sure that it is lashed down securely, particularly when part or all of the rear seat is folded down.

Trailer:

Trailer with brakes	Max. 3500 lbs. (1588 kg)
Trailer without brakes	Max. 1000 lbs. (450 kg)
Recommended towball load	110–165 lbs. (50–75 kg)
Maximum theoretical towing speed, trailer with brakes	60 mph (100 km/h)

When towing a trailer, increase the pressure of the rear tires by 0.2 bar (3 psi).

The above speed and weight restrictions are those specified by Saab Automobile AB.
Note that national restrictions may apply to trailer speeds and weights (see page 157).

Engine

Type:	Four cylinders, double overhead camshafts, 16 valves, two balancer shafts, dual-mass flywheel
Cylinder bore	3.386" (86 mm)
Stroke	3.386" (86 mm)
Swept volume	122 cu.in. (1.998 l)
Idling speed	670 rpm
Antifreeze	Saab-approved antifreeze
Coolant capacity	7.5 qts. (7.1 l)

Engine oil

Oil grade:

We recommend the use of Saab or Mobile oils, available from you Saab dealer, for regular oil changes.
These oils are specially developed from high-quality components to meet the demands of extended service intervals (max. 18,000 miles (30,000 km) or 2 years). Saab and Mobil oils are tested and approved in accordance with the GM standard for long-life oils. Such gasoline engine oils are given the designation **GM-LL-A 025**. The requirements are the same for diesel oils, though these are given the designation **GM-LL-B 025**.

To ensure optimum engine performance, with regard to lubrication, the ability to dissolve residues and the neutralisation of combustion products in the oil, for a service interval of 18,000 miles (30,000 km) or a maximum of 2 years, the engine oil used must fulfil GM-LL-A 025 (gasoline engines) or GM-LL-B 025 (diesel engines).

Only oil of the above grades may be used.

Oils of the above grades contain the additives required for the engine to function well. We advise against the use of further additives.

The gasoline engine oil is unique in that not only does it fulfil the stringent requirements demanded by API and ACEA standards but also meets ACEA requirements for fuel-saving properties.

Other grade classifications:

API and ACEA designations can also be found on the packaging alongside the GM designations GM-LL-A 025 and GM-LL-B 025. Oil for gasoline engines classified in accordance with API standards (American Petroleum Institute) can include SH (since 1993), SJ (since 1996) and SL (from 2001) classes. SL class oils fulfil the most stringent requirements. These grade classes are most often combined with the corresponding classes for diesel engines. The class designations for diesel engines begin with the letter "C" (Commercial). For example, a grade combination suitable for both types of engine could be API SJ/CF or SL/CF.

Under ACEA nomenclature, oils are divided into Class A for petrol engines and Class B for diesel engines. There is a further class for heavy diesel engines. Each class is divided into three or four (diesel) grades where grades 2 and 3 (diesel: 4) normally encompass products comprising semi and fully-synthetic components.

In the same way as in the API system, gasoline and diesel engine specifications are combined for products that can be used in both types of engine. For example, a grade designation could be ACEA A2/B2 or ACEA A3/B3-B4.

Viscosity:

The viscosity of oil is classified according to the SAE standard (SAE: Society of Automobile Engineers). 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 sufficiently viscous to coat all moving parts under all operating conditions.

Multigrade oils are graded with two viscosities, e.g. 0W-30, where the 0W meets certain viscosity requirements at –22°F (–30°C), while the 30 fulfils requirements at a temperature of 212°F (100°C).

The approved gasoline engine oil, GM-LL-A 025, has a viscosity of SAE 0W-30.

Oil capacity, including filter (oil change) __ 6.3 qts. (6.0 l)

Fuel

Fuel tank capacity	16.3 U.S. gal. (62 l)
For optimum performance Saab recommends:	
2.0t (175 hp)	Unleaded 90 AON
2.0 Turbo (210 hp)	Unleaded 93 AON

Engines

2.0t Ecopower

Rating, EEC at 5500 rpm	175 hp (129 kW)
Maximum torque, EEC at 2500 rpm	195 ft.lb. (265 Nm)
Compression ratio	9.5:1

2.0 Turbo Ecopower

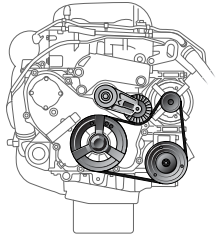
Rating, EEC at 5500 rpm	210 hp (147 kW)
Maximum torque, EEC at 2500 rpm	221 ft.lb. (300 Nm)
Compression ratio	9.5:1

Electrical system

Voltage	12 V
Battery capacity	60 or 70 Ah
Starter motor	1.8 kW
Alternator rating:	140 A/14 V
Firing order	1-3-4-2
Spark plugs	NGK PFR6T-10G
Electrode gap	0.9–1.0 mm

Drive belt

Outside length	40.472" (1028 mm)



Drive belt

Manual transmission

Type	Fully synchronized with final drive gear and differential
Oil type (for topping up)	Saab MTF 0063
Oil capacity	2.0 qts. (1.9 l)
Speed (mph/km/h) at 1000 rpm in highest gear (5th gear):	
1.8t and 2.0t	27–30/43–45

Automatic transmission

Type	Electronically-controlled, 5-speed, fully-automatic with hydraulic torque converter, planetary gears and integral final drive. Lock-up function in selector positions 3, 4 and 5.
Selector lever positions	P, R, N, D, M
Oil capacity, total	7.6 qts. (7.2 litres)
Oil type	Saab 3309
Clutch type	Hydraulic plate clutches, brake bands and one-way couplings
Speed (mph/km/h) at 1000 rpm in top gear:	
1.8t, 2.0t and 2.0T	28–30/46–49

Suspension

Spring type, front and rear	Coil springs
Maximum deflection of springs:	
Front	7.0" (178 mm)
Rear	8.3" (212 mm)
Dampers, front and rear	Gas-filled dampers

Steering

Steering	Power-assisted steering gear of rack-pinion type and telescopic jointed steering column
Number of turns, lock to lock	3.0
Oil type	Power steering fluid CHF 11S

Brake system

Foot brake (ABS)	Hydraulic disc brakes with vacuum servo unit. Diagonally split circuits; ventilated discs on front wheels (some variants also have ventilated rear discs). EBD function (see page 142).
Handbrake	Acts on rear wheels
Brake fluid	To DOT 4. **Do not** use DOT 5.
Disc diameter, 2.0t:	
Front	11.22 in. (285 mm)
Rear	10.94 in. (278 mm)
Total friction area of brake pads:	
Front	9.30 in.² (60 cm²)
Rear	4.96 in.² (32 cm²)
Disc diameter, 2.0 Turbo:	
Front	11.89 in. (302 mm)
Rear	11.57 in. (294 mm)
Total friction area of brake pads:	
Front	9.30 in.² (60 cm²)
Rear	4.96 in.² (32 cm²)

Wheels and tires

Summer tires

6.5 x 15"	215/60R15 94 H
6.5 x 16"	215/55R16 93 H
7 x 17"	215/50R17 91 W or 225/45R17 91 W
7.5 x 18" (accessory)	225/45 R18 91 W

Always contact a Saab dealer if you plan to fit other wheels or tires than those fitted as standard.

Winter (snow) tires:

6.5 x 15" wheel	195/65 R15 91 Q M+S
6.5 x 16" wheel	205/55 R16 91 Q M+S or 215/55 R16 93 Q M+S
7 x 17" wheel	205/50 R17 93 Q RF M+S

Compact spare:

Wheel	4 x 16"
Tire	125/80 R16 97 M or 125/85 R16 97 M
Pressure	4.2 bar (60 psi)
Maximum life	2200 miles (3500 km)
Maximum speed	50 mph (80 km/h)

NOTICE

Contact your Saab dealer regarding suitable snow chains.

Max. permissible speed with snow chains fitted is 30 mph (50 km/h).

Snow chains must not be fitted to wheels larger than 17".

Snow chains must not be used on the rear wheels.

NOTICE

Wheels larger than 18" must not be fitted.

Exercise care when driving on uneven roads or against the curb if the car is heavily laden. This particularly applies to cars with 18" wheels.

Permitted wheel offset is 41 mm.

Recommended tire/engine combinations

	2.0t	2.0 Turbo
Summer tires		
215/60 R15 94 H	x	–
215/55 R16 93 H	x	–
215/50 R17 91 W or 225/45 R17 91 W	x	x
225/45 R18 91 W	x	x
Winter (snow) tires		
195/65 R15 91 Q	x	–
195/65 R15 95 Q RF	x	–
205/55 R16 91 Q	x	x
215/55 R16 93 Q	x	x
205/50 R17 93 Q RF	x	x
Wheel sizes		
6.5 x 15"	–	–
6.5 x 16"	x	x
7 x 17"	x	x
7.5 x 18" (accessory)	x	x

RF = Reinforcement (tire with reinforced sidewalls)

Recommended lowest tire pressure, cold tires

Tire size	Load/speed mph (km/h) *)	Front psi/kPa	Rear psi/kPa
Summer tires			
215/60 R15 94 H	1–3 pers./0–100 (0–160) 4–5 pers./0–100 (0–160) 1–5 pers./100– (160–)	32/220 32/220 38/260	32/220 32/220 38/260
215/55 R16 93 H	1–3 pers./0–100 (0–160) 4–5 pers./0–100 (0–160) 1–5 pers./100– (160–)	35/240 35/240 41/280	32/220 32/220 38/260
215/50 R17 91 W or 225/45 R17 91 W	1–3 pers./0–120 (0–190) 4–5 pers./0–120 (0–190) 1–5 pers./120– (190–)	35/240 35/240 41/280	35/240 35/240 41/280
225/45 R18 91 W	1–3 pers./0–120 (0–190) 4–5 pers./0–120 (0–190) 1–5 pers./120– (190–)	35/240 35/240 41/280	35/240 35/240 41/280
Winter tires			
195/65 R15 91 Q	1–3 pers./0–100 (0–160) 4–5 pers./0–100 (0–160)	33/230 41/280	33/230 41/280
195/65 R15 95 Q RF	1–3 pers./0–100 (0–160) 4–5 pers./0–100 (0–160)	33/230 41/280	33/230 41/280
205/55 R16 91 Q	1–3 pers./0–100 (0–160) 4–5 pers./0–100 (0–160)	32/220 39/270	32/220 39/270
215/55 R16 93 Q	1–3 pers./0–100 (0–160) 4–5 pers./0–100 (0–160)	32/220 39/270	32/220 39/270
205/50 R17 93 Q RF	1–3 pers./0–100 (0–160) 4–5 pers./0–100 (0–160)	33/230 38/260	33/230 38/260
Spare wheel			
125/80 R16 97 M or 125/85 R16 97 M	Max 50 (80)	60/420	60/420

**) Do not exeed 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 table above are for tires at 68°F (20°C).

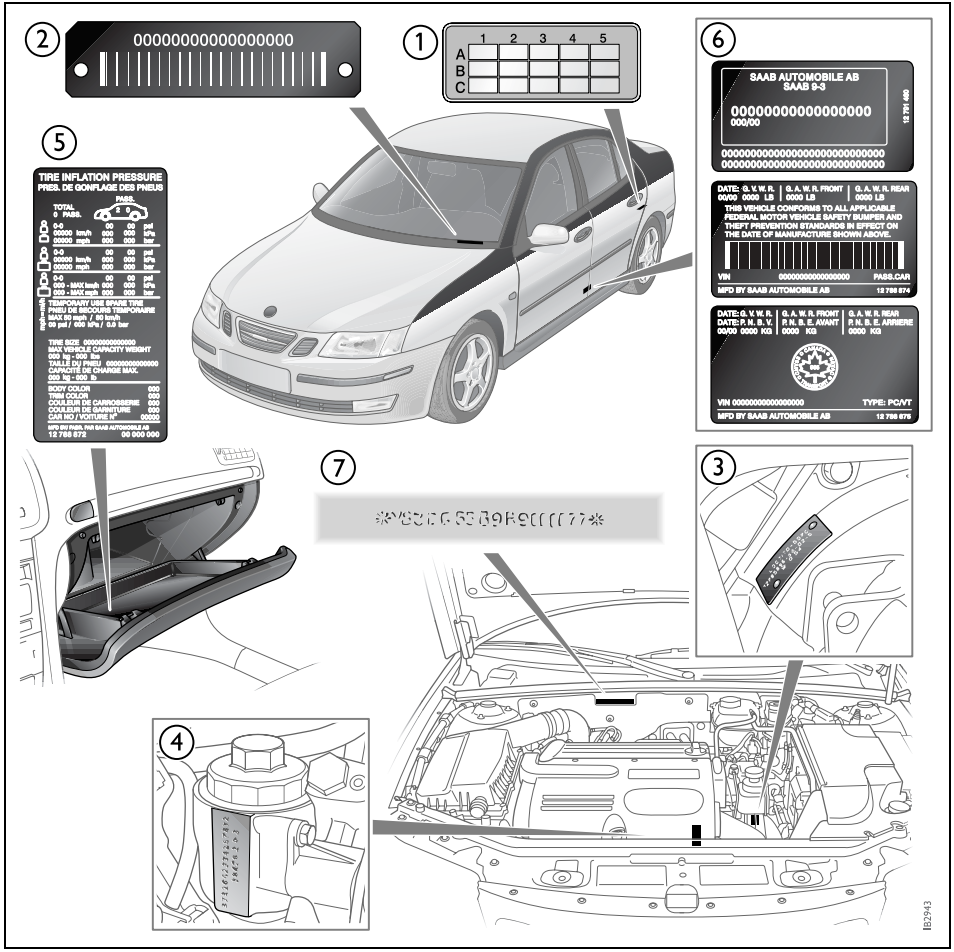
The tire pressure will increase as the tires become warm (e.g. during highway driving), and decrease as they cool.

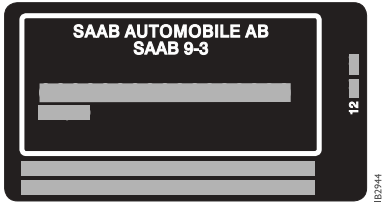
When the temperature of the tires increases or decreases by 10 degrees the tire pressure will correspondingly increase or decrease by 2 psi/10 kPa.

Plates and labels

When contacting your Saab dealer it may sometimes be necessary to quote the car's vehicle identification, engine and gearbox numbers.

1. Modification identity plate (in the spare wheel compartment)
2. V.I.N. number and barcode, inside windshield
3. Gearbox number
4. Engine number
5. Label for tire pressure and color codes (trim and body)
6. Certification label
7. Chassis number (stamped on body).





Position:	1	2	3	4	5	6	7	8	9	10	11	12
Vehicle identification number:	**Y**	**S**	**3**	**F**	**D**	**4**	**5**	**S**	**X**	**3**	**1**	**016584**

1 2 3 4 5 6 = identification codes for certain chassis components

1	**Region**	Y = Northern Europe
2	**Country**	S = Sweden
3	**Manufacturer**	3 = Saab Automobile AB
4	**Product line**	F = 9-3
5	**Model series**	B = 9-3 Linear D = 9-3 Arc F = 9-3 Vector
6	**Body version**	4 = 4-door
7	**Gearbox**	5 = 5-speed manual 6 = 6-speed manual 9 = 5-speed automatic
8	**Engine variant**	S = 2.0t Y = 2.0 Turbo
9	**Check digit**	0-9 or X
10	**Model year**	3 = 2003
11	**Factory**	1 = Trollhättan
12	**Serial number**	000001-999999

Several of the systems in your Saab can be customized to better suit your individual needs. Contact your Saab dealer

Central locking system

Some functions are governed by legal requirements and cannot therefore be reprogrammed.

Consult a Saab dealer for further information.

Listed below are a number of examples of programmable functions.

- Audible confirmation of arming/disarming the car alarm.
- Automatic unlocking when car stopped and remote control removed from the ignition switch.
- Trunk lid locked when car driven off or 30 s after being shut.
- Length of audible and visual acknowledgements.
- Possibility to have the trunk lid unlocked when doors unlocked, yes/no.
- Central locking relocks the car automatically if a door or the trunk lid is not opened, yes/no. If the car has an alarm, this is rearmed.

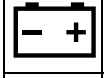
Car alarm

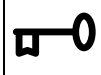
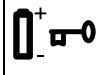
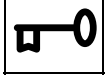
Listed below are a number of examples of programmable functions.

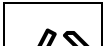
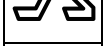
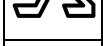
- Cabin lighting switched on when the car alarm is tripped.
- Sensitivity of the movement sensor.
- Audible signal produced by horn or car alarm siren.

Warning and indications that can be shown on the SID

Symbol	Text
	Antilock brake malfunction. Contact Saab dealer.
	Brake malfunction. Make a safe stop. Contact Saab dealer.
	Brake fluid level low. Make a safe stop. Contact Saab dealer.
	Release park brake.
	Oil pressure low. Make a safe stop. Turn off engine.
	Low engine oil level. Fill oil now.
	Engine malfunction. Contact Saab dealer.
	Reduced engine power. Contact Saab dealer.
	Coolant level low. Refill.

	Hot engine. Make a safe stop. Run engine on idle.
	Airbag malfunction. Contact Saab dealer.
	Use your seatbelt.
	Gearbox malfunction. Limited performance. Contact Saab dealer.
	Gearbox too hot. Make a safe stop. Open hood to cool down.
	Battery not charging. Make a safe stop. Contact Saab dealer.
	A/C off due to high engine temperature.
	Headlight levelling malfunction. Contact Saab dealer.
	Tap brakes lightly before using cruise control.
	Traction control failure. Contact Saab dealer.
	Stability control failure. Contact Saab dealer.

	Washer fluid level low. Refill.
	Key not accepted. Contact Saab dealer.
	Remote control battery low. Replace battery.
	X: standard key Y: valet key Key No: Z
	Lock system failure. Contact Saab dealer.
	Steering lock malfunc. Make a safe stop. Contact Saab dealer.
	Steering wheel locked. Pull out key, turn steering wheel. Try again.
	Immobilizer failure. Try starting again. Contact Saab dealer.
	Theft protection failure. Contact Saab dealer.
	Alarm has been triggered since being armed.
	Tighten fuel filler cap.

	Rear left seat backrest unlocked.
	Rear right seat backrest unlocked.
	Parking assistance malfunction. Contact Saab dealer.
	Parking assistance sensor interference.
	Close doors.
	Left brake light failure
	Left high beam failure.
	Left low beam failure.
	Rear fog light failure.
	Right brake light failure.
	Right high beam failure.

	Right low beam failure.
	High mounted brake light failure.
	Left front turn signal failure.
	Left rear turn signal failure.
	Right front turn signal failure.
	Right rear turn signal failure.
	Left rear position light failure.
	Right rear position light failure.
	Tire pressure system failure. Contact Saab dealer.
	Tire pressure low, rear left. Check tires.
	Tire pressure low, rear right. Check tires.

	Tire pressure low, front right. Check tires.
	Tire pressure low, front left. Check tires.
	Flat tire rear left. Make a safe stop.
	Flat tire rear right. Make a safe stop.
	Flat tire front left. Make a safe stop.
	Flat tire front right. Make a safe stop.
	Time for service.

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