# Saab **95**

Owner's Manual

## **In-car safety**

There is an In-car safety & Quick Reference Guide found in your car which contains some quick reference concerning safety issues.

Make sure you keep this Reference Guide readily available for all occupants to review.

Replacement and/or additional Reference Guides may be ordered from your Saab dealer.

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# Owner's Manual Saab 9-5, Model Year 2005

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Safety

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#### Introduction

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

The Saab 9-5 is available with the following engine variants:

- 2.3t 185 hp (Linear)
- 2.3T 220 hp (Arc)
- 2.3 Turbo 250 hp (Aero)

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

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

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

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

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

#### / WARNING

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

#### NOTICE

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

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

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

Best wishes, Saab Automobile AB

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

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

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#### Warning labels



#### Radiator fan

Radiator fan may start at any time.



#### Brake fluid

CLEAN FILLER CAP BEFORE REMOVING. USE ONLY DOT 4 FLUID FROM SEALED CONTAI-NER.



#### Coolant:

Never open when engine hot!



#### 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** authorized personnel only. For instructions consult workshop manual.

The A/C system complies with SAE J639.

Charge: 825 g of R134a.

Compressor oil: PAG oil SP-10 alt.

Saab oil 4759106

Oil amount: See workshop manual.

#### **Battery**

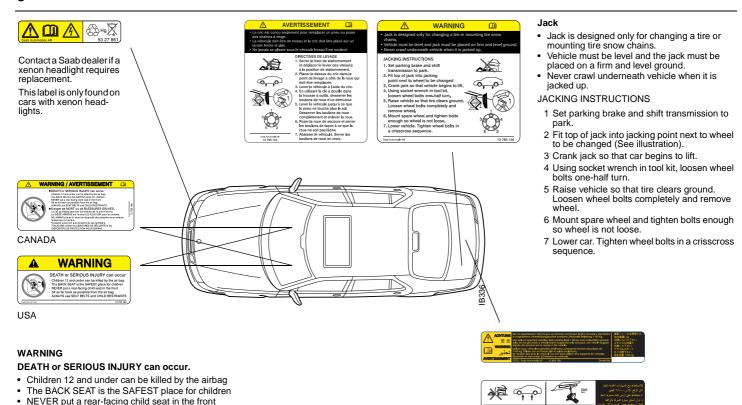
- · No sparks, flames or smoking.
- · Shield eyes, explosive gases can cause blindness or injury.
- · Sulphuric acid can cause blindness or severe burns.
- Flush eyes immediately with water. Get medical help fast.
- · Do not tip battery. Do not open battery.

KEEP OUT OF REACH OF CHILDREN

- AVOID SPARKS AND OPEN FLAMES. NO SMOKING
- WEAR EYE PROTECTION
- KEEP OUT OF REACH OF CHILDREN
- ACID
- SEE OWNER'S MANUAL
- FLAMMABLE GAS

· Sit as far back as possible from the airbag

ALWAYS use SEAT BELTS and CHILD RESTRAINTS.



#### Jack

Use only on specified vehicles. Safe working load 1100 kg. Use on level firm ground only. Do not get under a vehicle that is supported only by a jack, use vehicle support stands. No persons are to remain in the vehicle.

For more information see your owner's manual.

#### Examples of symbols that can be found in your car



No sparks, flames or smoking.



Use protective goggles



Keep out of reach of children.



Battery acid contains sulfuric acid.



Refer to the Owner's Manual.



Risk of explosive gas.



Buckle up



Airbag



Never place a rear-facing child seat in this seat.



Electric windows



Deactivating of rear window switches



Central locking, lock



Central locking, unlock



Trunk lid/tailgate, opening



Headlights



Direction indicators





Hazard warning lights



Front fog lights



Rear fog light



Windshield wipers



Windshield washers



Defroster



Rear window heating



Ventilation fan



Coolant temperature



Battery



Radiator fan



charging



Fuel



Foot brake



Coolant level



Engine oil pressure

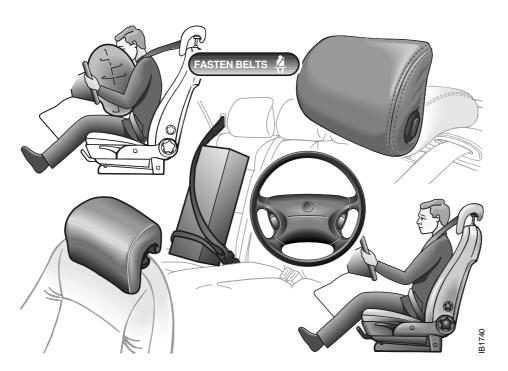


ABS brakes



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## Safety



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#### **Seats**

#### **MARNING**

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

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

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

Both front seats are electrically operated. On certain models the driver's seat is equipped with a memory function.

To facilitate getting into the car, both seats can be adjusted when either of the front doors is open.

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

Note, however, that both seats can be adjusted for 30 seconds after both doors have been closed.

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

- · height
- 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 seat tilt angle
- 4 backrest rake angle

Lastly, adjust the steering wheel (see page 106).

#### **!** WARNING

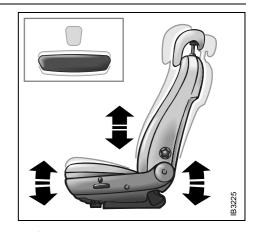
Never adjust the driver's seat except when the car is stationary.

#### Side airbags

(see page 32).

#### **Head restraint**

(see page 15).



#### Height

To raise the seat, lift the lower control straight up.

To lower the seat, press the lower control down.

The same control can be used to adjust the height of the front and rear edges of the seat independently.



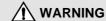
#### Legroom adjustment

To adjust the legroom, push the lower control forward or back.

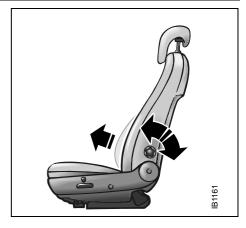


#### Backrest rake angle

To adjust the backrest, move the upper control forward or back.

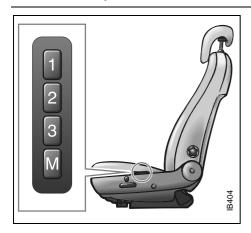


The backrest should be upright during driving, so that the safety belt, airbag and backrest can provide optimum protection in the event of emergency braking or a crash and in particular a rear-end collision.



#### **Lumbar support**

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



## Memory driver's seat (if equipped)

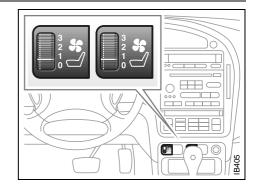
In certain models the driver's seat is equipped with a programmable memory function. This function also includes the door mirrors. Adjust the seat and door mirrors.

To save the settings, press and hold the M button and, at the same time, press one of the preselect buttons (1, 2 or 3). The Saab Information Display (SID) will chime to confirm that the settings have been saved.

To recall the programmed settings, press and hold the appropriate preset button, whereupon the seat and mirrors will be adjusted automatically.

To change the settings stored in a preset button, adjust the seat and mirrors as before and save the new settings by pressing M and the appropriate preset button.

To facilitate reversing, the passenger side door mirror can be tilted down automatically, e.g. to show the curb. To do this, select reverse and press the small grey button adjacent to the door-mirror control. When you deselect reverse, the mirror will automatically return to its original setting (see page 107).

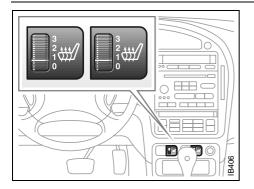


## Ventilated front seats (if equipped)

Ventilated front seats, that enhance seating comfort in hot weather, are an option on Arc and Aero models (certain markets).

Ventilated seats are equipped with two fans that extract the moist air from between the seat and the body.

The fans have three speeds and are OFF when the switch is set to 0.



## Electric heating, front seats (if equipped)

Both front seats have adjustable and thermostat-controlled heating of the seat cushion and backrest, available as an option.

Heating is adjustable in three stages. In position 0 it is turned off.

#### **Head restraint**

#### **MARNING**

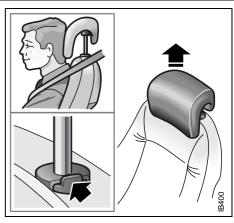
- Adjust the head restraint so that your head is optimally supported and the center of the head restraint is at ear height, thus reducing the likelihood of neck injury in a crash.
- Raise the head restraints in the seat that are occupied.

The front seats in the Saab 9-5 are equipped with Saab Active Head Restraints (SAHRs). These reduce the risk of whiplash injury if the car is hit from behind.

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

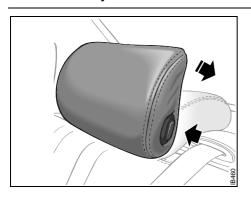
The SAHR is a mechanical system, actuated by body weight. The mechanism is built into the top of the backrest, where it is connected to the head restraint.

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



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

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



#### Rear-seat head restraints

**9-5 Sedan:** The rear head restraints have three adjustment positions for passenger comfort.

They can also be folded down to increase the driver's rearward vision when the seat is unoccupied.

**9-5 SportWagon:** The height of the rear head restraints can be adjusted by depressing the catch on the left-hand collar in the same way as the front head restraints. See page 15 for adjustment procedure.

#### Safety belts

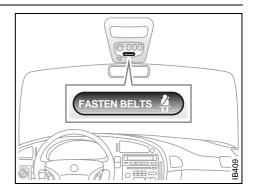
#### **⚠** WARNING

- 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 car occupants.
- Child safety, see page 21.
- Check that the locking tongue is properly locked in the belt lock.
- In the event of a crash, the rear-seat passengers not wearing a seatbelt will be thrown forward against the front-seat backrests. The stresses imposed on the front seat passengers and belts are multiplied and can result in needless injury or even death for all car occupants.

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.

Bear in mind that in certain states/provinces it is a legal requirement for all occupants of the car to wear a safety belt.



#### Safety belt reminder

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

#### Safety belt pretensioners

The belts of the front seats are fitted with automatic pretensioners and force limiters. These are activated in the event of a severe frontal or rear-end crash and a side-on collision, provided that the safety belts are being worn.

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

The safety belt pretensioners are not activated by vehicle rollover.

#### **WARNING**

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

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

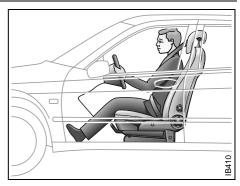
#### Correct position for safety belt

#### **WARNING**

Proper positioning of the safety belt is extremely important.

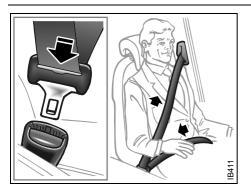
 An out of position safety belt can result in the occupant sliding underneath the belt in a crash (submarining) and injury can result from the lap portion cutting into the abdomen.

- Never fasten the safety belt with the shoulder belt behind the body or pull the belt off the shoulder and under the arm.
- If two people share a belt, they risk injury by being crushed together in the event of a crash.
- 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 a 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 up to 6 years of age must always be seated in a child seat. Saab recommends the use of a child seat for children up to the age of 10.



Correctly positioned safety belt

 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

#### Front safety belts

Fasten the belt by pulling the belt and inserting the tongue in 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.

Then grip the belt at the shoulder, pull it out and, without letting go, allow the slack to be taken up by the reel. Make sure that the belt is well in on the shoulder.

Because the lower belt-anchorage points are on the seat, the belt buckle follows the movement of the seat during seat adjustment.



Press the red button to release the belt

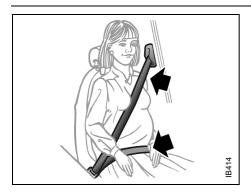
To release the belt, press the red button on the belt buckle, as illustrated.

See page 235 for the checking of belt function, cleaning, etc.

#### Belt height adjustment

The front safety belts and the outside belts in the rear (9-5 Sedan) are equipped with automatic height adjustment.

After fastening the belt, grasp it at chest height, pull it out and, without letting go, allow the slack to be taken up by the reel. Make sure that the belt is well in on the shoulder.



#### 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, rear seat



#### WARNING

- Make sure that the belt does not become trapped when the backrest is folded down or raised (see page 121).
- If 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.

Three-point safety belts are provided for all three rear seat passengers.

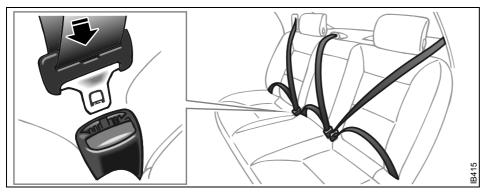
Fasten the belt by pulling out the strap carefully and inserting the tongue in the lock. Check that it is securely fastened.

Then grip the diagonal part of the strap near the lock and pull the belt upwards towards the shoulder to tighten the lap strap. The lap strap should lie low over the hips.

The diagonal part should lie as far in on the shoulder as possible.

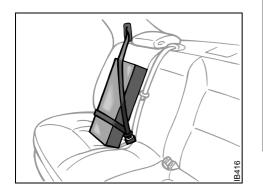
To release the belt, press the red button on the belt lock.

See page 235 for the checking of belt function, cleaning, etc.



Safety belt, rear seat

#### Securing an item on the rear seat



#### **MARNING**

- Safety belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.
- Safety belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A loose belt will greatly reduce the protection afforded to the wearer.

- Care should be taken to avoid contamination of the webbing with polishes, oils and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.
- It is essential to replace the entire assembly after it has been worn in a severe impact even if damage to the assembly is not obvious.
- Belts should not be worn with straps twisted.
- Each belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.
- No modifications or additions should be made by the user which will either prevent the safety belt adjusting device from operating to remove slack, or prevent the safety belt assembly from being adjusted to remove slack.

#### **Child safety**

### **MARNING**

• 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.

#### Car safety tips

### **!** WARNING

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

#### N WARNING

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

- Teach children not to play in or around cars.
- Watch 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 seats closed to help prevent kids from getting into the trunk from inside the car.

For Trunk Release Handle information see page 42 and 130.

#### 22 Safety

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

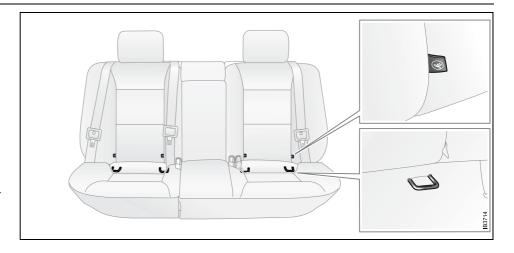
Saab recommends rearward facing child restraints.

Children travel most safely when properly restrained, but restraints must be suitable for the size of the child. Always follow the child seat/booster cushion manufacturer's instructions when installing these devices in your vehicle.

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

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

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



#### LATCH

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

ISOFIX are lower attachments located where the seat and back cushions come together. Top tethers are upper attachments located on parcel shelf or torsion beam, see page 24 and 25.

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

#### **LATCH** installation

To facilitate the proper fitting of new specially-designed child restraints, rigid lower anchorages (ISOFIX) have been installed to the vehicle that shall be used with the top tether anchorages in the two outboard rear seating positions. There is an additional top tether anchorage for the center rear seating position that is to be used together with the safety belt.

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

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

- Place the child restraint on the seat cushion.
- 2 Press the child restraint rearward into the space between the backrest and cushion, lining up the restraint attachment arms with the labels.

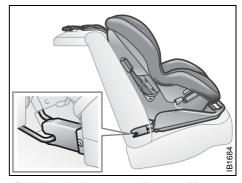
- 3 Follow the child restraint instructions to confirm that both restraint arms are properly attached to the bars.
- 4 Attach the top tether strap to the in-car anchorage and tighten according to the restraint instructions, see page 24 and 25.
- 5 Pull the child restraint to make a second check that restraint is securely attached at both the lower anchorage bars and the top tether strap.

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

Always follow the installation instructions supplied with the child restraint.

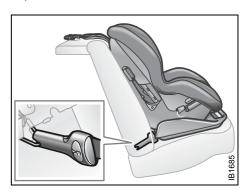
The availability of LATCH child restraints may be limited.

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



Rigid 2-point lower attachment with top tether

Semi-rigid 2-point lower attachment with top tether



## Child tether anchorages for forward facing child car seats



#### **MARNING**

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

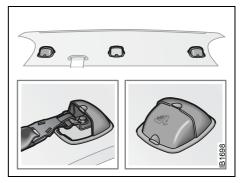
Under no circumstances are they to be used for adult safety belts.

Child restraints with a tether strap must be anchored according to Canadian and USA laws.

If you have any questions regarding child tether anchorages please contact your Saab dealer.

#### 9-5 Sedan:

- 1 Open the cover for the child tether anchorage that is behind the seating position in which the child restraint is to be installed. Make sure it locks.
- 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 mounting instruction.
- 4 Route the tether under the headrest.
- 5 Attach the tether to the anchorage.
- 6 Tighten the tether so that the back of the child restraint is pressed hard against the backrest.
- 7 Pull the child restraints to make a second check that the restraints are securely attached at both the lower anchorages bars and the top tether strap.



Child tether anchorages in parcel shelf, Saab 9-5 Sedan

#### 9-5 SportWagon:

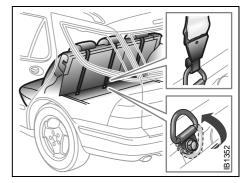
- 1 Fold the backrest of the rear seat forward, see page 121.
- 2 Fold the anchor that is right behind the child restraint to its upright position.
- 3 Place the child restraint in the rear seat.
- 4 Raise the head restraint to its upper position and then route the tether under the head restraint.
- 5 Attach the tether to the anchor.
- 6 Raise the backrest of the rear seat. Make sure it locks properly.
- 7 Secure the lower part of the child restraint by means of the safety belt or lower anchorages (ISOFIX) as described in the child restraint mounting instruction on the previous page.

- 8 Tighten the tether so that the back of the child restraint is pressed hard against the backrest.
- 9 Pull the child restraints to make a second check that the restraints are securely attached at both the lower anchorages bars and the top tether strap.

#### **WARNING**

Make sure the child-restraint anchorages are folded all the way up or down otherwise it can obstruct locking the rear seat backrest.

It is not possible to route the tether through the cargo net (accessory), if one is fitted. Instead we recommend a cargo guard (accessory).



Child tether anchorages, Saab 9-5 Sport-Wagon

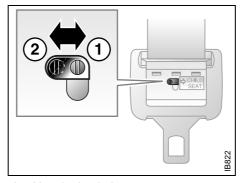
#### Lockable belt tongue

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

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

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

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



Locking the lap belt

- 1 Locked
- 2 Unlocked

## Installation of child restraint using the standard safety belt

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

If you intend to install another make of child restraint make sure that it is possible to fit it in accordance with the manufacturer's instructions.

#### **MARNING**

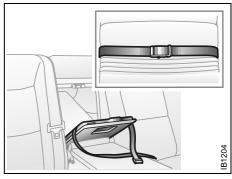
Failure to follow all the manufacturer's instructions on the use of this child restraint system can cause your child to strike the vehicle's interior during a sudden stop or crash.

Saab recommends rearward facing child restraints up to 3 years.

#### **MARNING**

A special accessory is available for locking the center armrest so that a child seat can be installed in the middle seat. See your Saab dealer for details.

When a rear-facing child seat is fitted in the center position of the rear seat in the Saab 9-5 Sedan the center armrest **must** be secured in place with this strap. If this is not done, the center armrest could swing down in the event of a frontal crash and cause injury to the child.



Fitting the locking strap on the center armrest, Saab 9-5 Sedan (not needed on SportWagon).

#### **Airbag**



#### **WARNING**

To reduce risk of injury:

- Always wear your safety belt.
- Always adjust your seat so that you are as far back as possible but still able to operate the pedals and reach the steering wheel and controls comfortably.
- Children 12 and under or shorter than 55 inches (140 cm) should 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.

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

The system supplements the protection provided by the safety belts to further enhance the safety of the occupants. If a fault is detected in the AIRBAG, the AIR BAG warning light on the main instrument panel will come on (see pages 55 and 33).



Inflated airbag (driver side)
Inflation and deflation together take less than
0.1 second.

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

The driver and passenger airbags are referred to as 'smart' airbags. This means that the system compensates for factors such as the force of the collision.

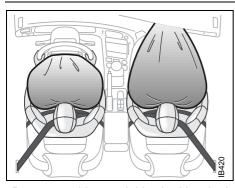
#### Note:

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

It is also possible for only the seatbelt pretensioners to be activated and for the airbags to remain uninflated.

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

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



Passenger airbag and driver's airbag both inflated

#### **WARNING**

- Even if the car is equipped with AIR-BAG, safety belts must still always be worn by all occupants.
- Note that because an airbag inflates and deflates extremely rapidly, it will not provide protection against a second impact occurring in the same incident. Always use your safety belt.

- Always sit with the whole of your back in contact with the backrest of the seat, and with your seat as far back as is practical. Otherwise you will be thrown back against the backrest when the airbag inflates which could cause you injury or death. The airbag needs room in which to inflate.
- Never attach anything to the steering wheel or passenger side of the instrument panel, as this could result in injury if the airbag should inflate. The same applies to anything you might have in your mouth, such as a pipe, for instance.
- Some components of the airbag will be warm for a short time. In some circumstances the airbag can cause minor burns or abrasions to the body when the airbag inflates/deflates.
- To reduce the risk of head injuries in the event of a crash, the headliner and pillar trims incorporate energy absorbing material. These areas must not be modified in any way. Work on these areas must only be carried out by an authorized Saab dealer.

 Fumes are generated by the chemical reaction that inflates the airbag.
 Because the dust/fumes can, in certain cases, cause irritation to the skin, the following measures should be taken:

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.

- **Never** rest your hands or forearms on the steering-wheel center padding.
- If the AIR BAG warning light does not extinguish after the car has been started, or comes on or flashes while 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 55.



Moment of impact.



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



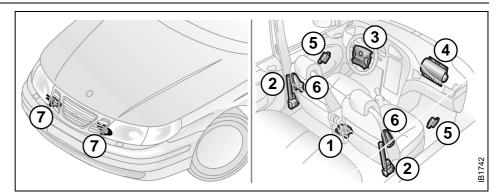
The inflating airbag cushions the driver.



Airbag now fully infla-

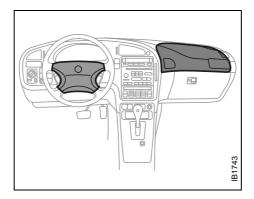


The airbag starts to deflate.



#### AIRBAG system with belt pretensioners

- 1 Central sensor
- 2 Belt pretensioners (for both front safety belts)
  - 3 Steering wheel with integral airbag
  - Passenger airbag
  - 5 Side-airbag sensor 6 Side airbag
- 7 Front sensors



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.

#### Front passenger seat



#### **WARNING**

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

The airbags are interconnected and have a common warning light. The passenger airbag module is housed in the fascia above the glove compartment and is marked "SRS AIRBAG". (SRS = Supplementary Restraint System.)

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

#### **!** WARNING



- 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 fascia, on the seat or out of the window.
- Do not carry anything in your lap.

#### Side airbags



#### **WARNING**

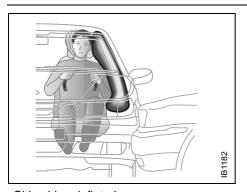
- This car is equipped with side airbags and no extra interior trim should be fitted. Failure to observe this warning could result in the side airbags not inflating as intended and thus not providing the intended protection either.
- Never place any object in the area that would be occupied by the inflated airbag.
- For optimum protection, sit upright in the seat, with your safety belt correctly fastened.
- The sensors for the side airbags are fitted in the front doors. We advise against doing any work on the doors that could affect the moisture barrier in the door or the airbag sensors. It is essential that the moisture barrier (thick plastic film) in the front door is not damaged in any way.

- Improvement of the anticorrosion treatment of the doors should only be carried out by an authorized Saab dealer. Otherwise there is a risk that the side impact sensor and the moisture barrier in the front door could be damaged.
- The side airbags will inflate only in the event of a side impact; not in the event of a front or rear-end crash or of the car's rolling over.
- Damage or wear to the seat cover, or the seat seam, in the area of the side airbag must immediately be repaired by an authorized Saab dealer.
- Do not modify the speaker installation in the front doors or install speakers other than those specifically approved by Saab.

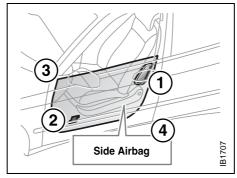
The side airbags, which help protect the upper body are integrated in the outside edges of the front seat backrests.

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

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



Side airbag inflated



#### Side airbag components

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

#### **AIRBAG** warning light

#### **NARNING**

- If the airbag readiness light stays on after you start your vehicle, it means the airbag system may not be working properly. See page 55. 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.

## What Will You See After an Airbag Inflates?

After an airbag inflates, it quickly deflates, so quickly that some people may not even realize the airbag inflated. Some components of the airbag module - the steering wheel hub for the driver's frontal airbag, the instrument panel for the right front passenger's frontal airbag or the ceiling of your vehicle near the side windows - will be hot for a short time. The parts of the bag that come into contact with you may be warm, but not too hot to touch. There will be some smoke and dust coming from the vents in the deflated airbags. airbag inflation does not prevent the driver from seeing or being able to steer the vehicle, nor does it stop people from leaving the vehicle.



When an airbag inflates, there is dust in the air. This dust could cause breathing problems for people with a history of asthma or other breathing trouble. To avoid this, everyone in the vehicle should get out as soon as it is safe to do so. If you have breathing problems but cannot get out of the vehicle after an airbag inflates, then get fresh air by opening a window or a door. If you experience breathing problems following an airbag deployment, you should seek medical attention.

In many crashes severe enough to inflate an airbag, windshields are broken by vehicle deformation. Additional windshield breakage may also occur from the right front passenger airbag.

- Airbags are designed to inflate only once.
   After an airbag inflates, you will need
   some new parts for your airbag system. If
   you do not get them, the airbag system
   will not be there to help protect you in
   another crash. A new system will include
   airbag modules and possibly other parts.
   The service manual for your vehicle
   covers the need to replace other parts.
- Your vehicle is equipped with a crash sensing and diagnostic module which records information after a crash. See Vehicle Data Collection and Event Data Recorders on page 249.

 Let only qualified technicians work on your airbag system. Improper service can mean that your airbag system will not work properly. See your dealer for service.

#### **MARNING**

If you damage the covering for the driver's or the right front passenger's airbag, or the side impact airbag covering on the ceiling near the side windows, the bag may not work properly. You may have to replace the airbag module in the steering wheel, both the airbag module and the instrument panel for the right front passenger's airbag, or side impact airbag module and ceiling covering for the roof-mounted side impact airbag. Do not open or break the airbag coverings.

### **AIRBAG** servicing

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

# Scrapping or working on airbags and belt pretensioners

## **WARNING**

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

- All work involving the scrapping or replacement of airbags or belt pretensioners must only be carried out by knowledgeable personnel.
- The headlining and roof pillar trim must not be modified in any way. Work on these areas must only be carried out at a Saab dealer.

# Frequently asked questions on function of airbags

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

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

The safety belts help reduce the chance of the car occupants from being thrown around and injured or killed inside the car.

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

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

times.

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

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

Don't have your seat too far forward.

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

Airbags inflate extremely rapidly and with great force – to be fast enough to protect an

When do the front airbags inflate?

adult in the seat.

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 front airbags?

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

How loud is the inflation?

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

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

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

### **Definitely not!**

- Children 12 and under 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 child seat in the front.
- Sit as far back as possible from the airbag.
- Always use safety belts and child restraints.

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

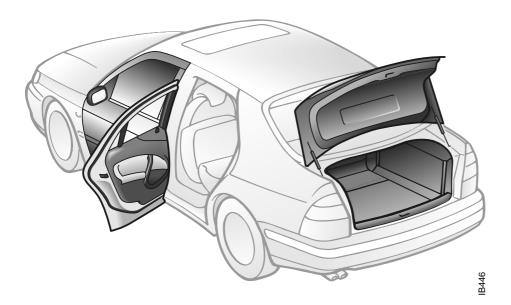
Most people who have remained in a car with little or no ventilation for several minutes complained only of minor irritation of the throat and eyes. Avoid as far as possible getting dust on your skin as there is a risk of skin irritation.

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.

What should I do if the AIRBAG 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.

# Security



Doors	_ 3
Central locking	_ 3
Car alarm	1

### **Doors**

### **Door handles**

Pull the handle to open the door.

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

## **Central locking**



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

### **Key / Remote control**

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

The mechanical key is used for manual locking and unlocking.

The remote control is used for remote locking and unlocking.

The key fits all the car's locks.

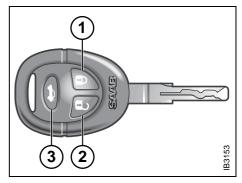
The key supplied with the car has a code number on a black plastic tag that needs to be quoted for ordering additional keys. You should therefore make a careful note of the number.

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

Your car is supplied with two keys. It is possible to have up to four keys for a car at one time. If you loose one key you should have this replaced as soon as possible by contacting your Saab dealer. When the new key is programmed into the system, the missing key is automatically erased.

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

If an additional key is to be added, all of the original keys must be brought to the dealer so that the control module can "learn" to recognize the new components.



Key / Remote control

- 1 To lock
- 2 To unlock
- 3 Opening the trunk (9-5 Sedan) Unlocking the tailgate (9-5 SportWagon)

### NOTICE

The key contains delicate electronics.

- Do not expose it to water.
- Avoid rough handling.
- Do not place the key where it may be subjected to high temperatures, e.g. on the instrument panel.
- The key may malfunction if it becomes very cold. Warm it in your hands for a couple of minutes.
- Never open the key. For changing the battery, see page 41.

To check the number of keys that are programmed for the car; see page 48.

### Locking/unlocking the car



### WARNING

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

Otherwise, the doors may be unintentionally locked or the tailgate unlocked. On Sedan models, the trunk may even be opened.

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

### Remote locking (1)

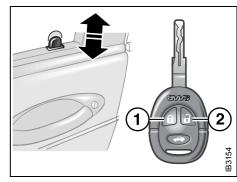
Press once on the control: all doors locked.

The hazard warning lights will flash once. The trunk/tailgate release switch on the driver's door will not work when all doors are locked.

### Remote unlocking (2)

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

The hazard warning lights will flash twice.



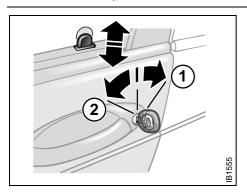
Locking/unlocking by remote control.

- 1 To lock
- 2 To unlock

### If remote unlocking should fail to work

Unlock the front door with the key. To silence the alarm, insert the key into the ignition switch and turn it to the ON position.

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



Locking/unlocking by key

- 1 To lock
- 2 To unlock

### Locking by key (1)

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

Turn the key clockwise: all doors locked. The trunk/tailgate release switch on the dri-

ver's door will not work when all doors are locked.

### Unlocking by key (2)

Turn the key counterclockwise once: the driver's door will unlock.

Turn the key counterclockwise twice: all doors, but not trunk lid/tailgate, unlocked.



Switch for operation of central locking

The central locking can also be operated from inside the car by means of the switch on the center console.

- To lock all doors: press the symbol side of the switch once.
- To unlock the driver's door: press the switch once.
- To unlock all doors: press the switch twice.

This switch is inoperative when the car is locked from the outside using the remote control.

The interior locking buttons on each door affect only the respective door.

If the car is left with the doors open, the interior lighting and the courtesy lights in the doors will be switched off automatically after 20 minutes, to prevent a drain on the battery. In such cases the electrically operated seats will not function.

## **WARNING**

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

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

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

### **Child safety locks**

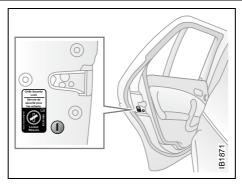
The rear doors are equipped with child safety locks that are operated by means of a catch adjacent to the door lock.

Insert a key and turn the catch 45° clockwise or counterclockwise as indicated by the label on the door.

When the child safety catch is in the locked position, the door cannot be opened from the inside.

## **WARNING**

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



Child safety lock on rear doors

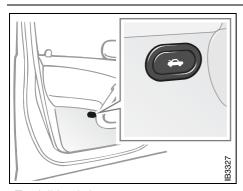
### Changing the key battery

When the battery voltage in the key falls below a predetermined level the Saab Information Display (SID) will issue the following message:

"Remote control battery

low. Replace battery."

Press the CLEAR button on the SID to acknowledge this message. You must then replace the battery without delay to avoid malfunctions. The life of the battery is normally 4 years. Contact a Saab dealer to have the battery replaced.



Trunk lid switch

### Trunk lid lock, 9-5 Sedan

The trunk lid lock is independent of the central-locking system. The trunk lid release switch on the driver's door is inoperative when the car is locked from the outside or moving at a speed greater than 2.7 mph (4 km/h).

### Unlocking

The trunk lid is unlocked using:

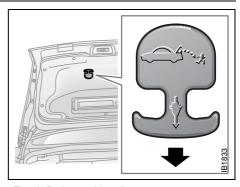
- The button on the key
- The trunk lid switch on the inside of the driver's door (if the car is unlocked and at a standstill)

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

The trunk lid switch on the driver's door is inoperative when the car is locked.

### Locking

The trunk lid release is locked automatically when closed.



Trunk Release Handle

#### Trunk Release Handle

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

### **NOTICE**

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

### Tailgate, 9-5 SportWagon

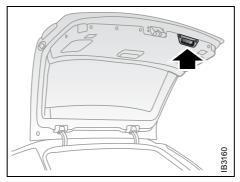
The tailgate is not unlocked when the other car doors are unlocked. The tailgate button on the driver's door is inoperative when the car is locked or moving at a speed greater than 2.7 mph (4 km/h).

### Unlocking

The tailgate is unlocked using:

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

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



Grab handle

### NOTICE

Use the grab handle to assist in closing the tailgate.

Avoid the following, due to the risk of lock mechanism damage when the tailgate is closed.

- Never grasp the lock mechanism as this can lock the mechanism.
- Never close the lock mechanism manually.

### Locking

The tailgate is locked using:

- The fi button on the key
- The button on the centre console
- The key in the driver's door.
- When vehicle speed exceeds 2 mph (4 km/h).

# Electronic starting interlock (immobilizer)

Each time the key is removed from the ignition, the electronic starting interlock is activated and the car is thus immobilized, see also page 45.

# Reprogramming lock system functions

Certain lock system functions can be reprogrammed by your authorized Saab dealer; see page 264.

### Car alarm

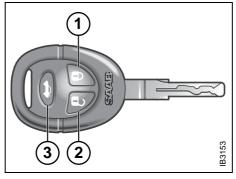
# NARNING

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

The car alarm (anti-theft system) is activated/deactivated when the car is locked/unlocked by the remote control or by the key, see page 39.

The antenna for the alarm system is located in the center console.

All the doors plus trunk lid/tailgate and hood are monitored by microswitches.



Remote control

- 1 Activate/lock
- 2 Deactivate/unlock
- Unlock trunk/tailgate Unlocking the tailgate (9-5 SportWagon)

Your Saab 9-5 is equipped with an Electronic starting interlock (immobilizer), see page 45 for details.

The car alarm is armed 10 seconds after the car has been locked by the remote control. During this ten-second delay period, the doors, trunk lid/tailgate and hood may still be opened without the alarm being triggered.

The LED indicator on the instrument panel fascia will be on continuously during this period, at the end of which it will start to flash (once every other second).

If a door or the trunk lid/tailgate or hood has been left open when the car is locked, the LED on the fascia will flash (three times per second) for ten seconds to indicate this. Check to ensure that all the doors, plus trunk lid/tailgate and hood, are closed properly.

If the fault persists (LED flashing when another attempt is made to activate the car alarm by remote control), lock the car using the key instead. The car alarm will not have been activated and you should contact an authorized Saab dealer

To avoid inconvenience caused by the alarm being triggered inadvertently, make sure that anyone else using the car is familiar with how both the car alarm and the locking system work.

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



button.

### Activating the car alarm

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

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

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

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

### **Electronic starting interlock** (immobilizer)

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

Each time the key is removed from the ignition, the electronic immobilizer is activated. This means that the car cannot be started without the correct key inserted in the ignition and the immobilizer thus deactivated.

If a fault is detected (e.g. in the transmitter) "Key not accepted.

Contact service."

will appear on the Saab Information Display (SID).

In this case, you can still start the car if you turn the ignition key to ON and press one of the buttons on the key (providing that the receiver gets the right signal from the key).

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

The LED double-flashes when the car is immobilized.

### Alarm signals

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

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

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

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

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

### **Panic-function**

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

To activate panic function:

 Push and hold one of the buttons on the key for 2 seconds. Or, if you are sitting inside the car, push the LOCK-switch on the center console for 2 seconds.

These actions will trigger the alarm (hazard warning lights and horn).

To deactivate panic function:

 Push one of the buttons on the key, push the LOCK-switch in the center console, turn the key in the driver's door or turn the ignition to ON.

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

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

### **Overview of functions**

Locking/ activation	Hazard warning lights flash once. The LED will come on for 10 seconds.
Unlocking/ deactivation	Hazard warning lights flash twice. The LED will come on for two seconds.
Unlocking/ deactivation of trunklid/tailgate alarm	Hazard warning lights flash three times. The LED will flash three times per second for 10 seconds.
Alarm triggered	Hazard warning lights flash for 5 min. Horn wails for 30 seconds. To switch off the alarm, deactivate the system in the normal way (unlocking).
Key	The range of the key is normally 5–10 yds. (5–10 metres), although it can be substantially more than this in ideal conditions (range can vary greatly depending on the position of the car and its surroundings). If the key is not working, it may be because the code signal has not been synchronized with that in the control module for the car alarm. To rectify this, press the unlock button on the key at least four times in quick succession. When it is recognized, the door locks will cycle. If a key is lost, the new one will have to be programmed (all keys must be present) to match the car's unique security code. Contact an authorized Saab dealer.

Battery for key	The battery for the key will normally have a life of 4 years. When the battery needs changing, "Remote control battery low. Replace battery." will appear on the Saab Information Display (SID).  Contact an authorized Saab dealer.
Car-battery voltage	If the battery is disconnected while the alarm is active (car is locked), for example during an attempt to steal the car, the alarm will be triggered.

Alarm signals may differ between model variants for different countries.

Some of the car-alarm functions can be reprogrammed – consult your Saab dealer for further details (see page 264).

## Overview of LED signals and SID messages

Status	LED signal	
Activation (during 10-second delay).	Comes on for 10 seconds.	
Alarm activated (after delay).	Flashes once every other second.	
Deactivation.	Comes on for 2 seconds.	
Alarm not activated.	Off.	
Door, trunk lid/tailgate or hood open or opened during delay period.	Flashes three times per second for 10 seconds.	
Unlocking the trunk lid/tailgate.	Flashes three times per second for 10 seconds.	
Closing of door, trunk lid/tailgate or hood after delay period.	Comes on for 10 seconds.	
Car immobilized but not locked. Car alarm not activated.	Flashes twice at three seconds intervals.	
Fault in a switch serving doors, hood or trunk lid.	Flashing (instead of being on continuously) during delay period.	

Some signals may differ between model variants for different countries.

SID message	Reason/action
Theft protection failure. Contact service.	Probably a fault in one of the sensors or the horn. Have the car checked by an authorized Saab dealer.
Key not accepted. Contact service.	Fault in key transmitter or in ignition-switch receiver. Turn ignition switch to ON and press the unlock button on the key. Start the engine. Have the car checked by an authorized Saab dealer.
Remote control battery low. Replace battery.	Fit a new battery in the key, see page 41.
REMOTE KEY     TRANSPONDR	Turn the ignition key to position ON and then press the button for opening the trunk lid. Saab Information Display (SID) displays the number of keys and transmitters (transponders) coded to the car.

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

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

### Canada only:

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

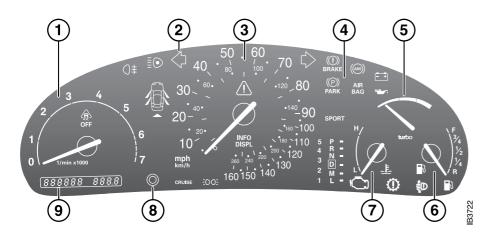
# 50 Security

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# **Instruments and controls**



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U.S. shown, Canada similar

### Main instrument panel

- 1 Tachometer
- 2 Indicator and warning lights
- 3 Speedometer
- 4 Indicator and warning lights
- 5 Pressure gauge

- 6 Fuel gauge
- 7 Engine temperature gauge
- 8 Trip meter reset button
- 9 Odometer and trip meter

# Indicator and warning lights

A number of indicator and warning lights will come on when the ignition is switched on prior to starting. Under normal conditions, these should go out a few seconds after the engine has started (see page 58).



### **Central warning light**

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

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



# Warning, oil pressure (engine oil)

This light will come on together with the engine oil pressure is dangerously low. If the light flashes or comes on while you are driving, stop the car, switch off the engine and check the engine oil level (see page 186).

### **NOTICE**

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



### Warning, charging

This light will come on together with the battery is discharging. If it comes on while you are driving, stop the car as soon as possible and switch off the engine.

Check the alternator drive belt (see page 194). If the belt has broken, the engine may overheat (cooling system will not function properly), the battery will not be charged, the A/C compressor will not run and power assistance for the steering will be lost.



### **Brake warning light**

This light will come on together with there is insufficient brake fluid in the reservoir (see pages 189).

If the ABS warning light is on at the same time, the ABS system may be inoperative because of a fault (see "Anti-lock brake warning", page 54).

# **MARNING**

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

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



### Parking brake warning liaht

This light will show when the parking brake is on (see page 179).

If the car is driven with the parking brake still

will also come on and a chime will sound.

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

## **WARNING**

- Always apply the parking brake when parking, see page 179.
- Always apply the parking brake before removing the ignition key.
- Do **not** apply the parking brake while the car is moving.



### Anti-lock brake warning

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

On certain variants and and shake as well





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

Conventional braking without the ABS function will still be available.

For safety reasons, stop the car and check the level of the brake fluid (see page 189). If the level is normal, depress the brake pedal firmly two or three times. Now check the level again. If the level is still normal, you may drive the car, with considerable caution, to the nearest authorized Saab dealer to have the brake system checked.

## / WARNING

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



### Airbag warning light

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

## **WARNING**

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

The 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.



# 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 driver should be prepared to take action if such unsafe conditions arise (e.g.brake smoothly, engage neutral, stop in a suitable place, switch off the engine, etc.).

This light indicates a malfunction in the fuel-injection or ignition system. The car may still be driven with care and with somewhat diminished performance (see page 136).

### NOTICE

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



### Indicator, fuel

This light comes on when there is less than about 2.5 gallons (10 liters) 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.

### INFO DISPL

## **DISPL** CHECK message indicator

This light indicates that there is a message in the Saab Information Display (SID). A chime will also sound (see page 64).



### Indicator, cruise control

This light shows when the cruise-control system is active (see page 151).



### Indicator, high beam

This light shows when the headlights are on high beam (see page 67).



### Indicator, rear fog light

This light shows when the rear fog light is on (see page 68).

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.

The rear fog light consists of one light so it should not be mistaken for brake lights.



# Xenon headlight fault indicator (if equipped)

This light indicates that there is a fault in the Xenon headlight system, which consists of xenon headlights and an automatic levelling system.

If a fault arises in the Xenon headlight system, the headlights will be angled down to avoid impairing the vision of drivers in oncoming traffic. Adjust your speed accordingly as visibility will be reduced.

### **NOTICE**

If the Xenon headlight fault indicator lights up, have your car checked as soon as possible at an authorized Saab dealer.

If you do not rectify the problem, nighttime visibility will be poor since the range of the headlights is reduced.



### Indicator, open door

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



# Indicator, SPORT-mode automatic transmission

This light will come on in cars with automatic transmission when the S (SPORT) button on the selector lever has been pressed (position N or D) see page 150.

In this mode, the gear changes occur later, at higher engine revs, giving the engine and transmission a sportier feel.

To cancel the SPORT mode, press the S button on the selector lever again. The mode is also deselected automatically when the selector lever is moved to P, R, M or L, or when the ignition is switched off.



# Automatic transmission, fault indicator

On a car with an automatic transmission, this warning symbol is illuminated if a fault has been detected in the transmission.

Switch the ignition off and on again to check if the fault persists.

Even if the fault persists, it is still possible in most cases to drive the car (see page 146). Have the automatic transmission checked by an authorized Saab dealer as soon as possible.

### NOTICE

If the control module has actuated the Limp-home function for the automatic transmission, the car will remain in 5th gear when D is selected, making it very sluggish. To overcome this, select position L to prevent unnecessary wear on the transmission. The transmission then starts in 2nd gear. When the car is moving you can select position D.

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



### **Indicator ESP OFF**

The indicator light goes on when the Electronic Stability Program is switched off with the ESP-button.

IMPORTANT: the system is automatically engaged every time the engine is started (see page 155).

The indicator light also goes on when there is a fault in the system. In this case the light cannot be turned off by means of the ESP button. If a fault is indicated, have the system checked by an authorized Saab dealer.

See also "Electronic Stability Program (ESP) on page 155.



### **Indicator ESP**

The ESP indicator light is located in the tachometer and will be illuminated when ESP regulation is occurring, i.e. when there is insufficient traction between the tires and the road surface to provide the grip required for the acceleration called for. The driver can also sense that the engine is not responding normally to the accelerator. Operation of the ESP indicates reduced

Operation of the ESP indicates reduced traction between the tires and the road, and that extra care should be taken by the driver. In normal driving, the ESP will help to improve both ride comfort and safety, but must not be regarded as a system to enable the driver to drive at or maintain a higher rate of speed. The same precautions for safe cornering and driving on slippery roads must still be applied (see page 155).



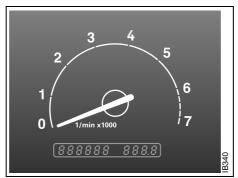
1 Cars with automatic transmission

# Autochecking of lights, main instrument panel

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

The following lights light up until the engine is started, presuming that no fault exists:

- Central warning light
  - Certifal Warriing light
- Oil pressure warning light
- Warning, charging



### Instruments

### **Tachometer**

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

A safety cut-out function (in the fuel system) prevents the engine speed from exceeding approximately 6,000 rpm.



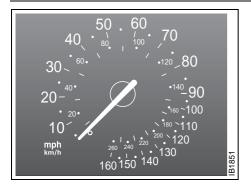
### Odometer and trip meter

The odometer records the distance traveled 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).

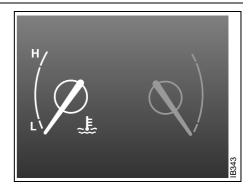
#### Reset button

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

- When the ignition is ON, pressing the button will reset the trip meter.
- When the ignition is OFF, the display lights up for 20 seconds enabling you to read the odometer and trip meter. Pressing the button a second time within these 20 seconds will reset the trip meter.







### **Speedometer**

### (U.S. speedometer shown)

The speedometer receives signals from the wheel sensors in the ABS system.

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

### Fuel gauge

Fuel-tank capacity, 18.5 US gal. (70 liters). The fuel gauge shows the amount of fuel left in the tank. When this is down to about 2.5 gal. (10 liters), a warning light on the main instrument panel will come on (see page 55).

Use the Saab Information display (SID) to check the approximate distance that can be traveled on the remaining fuel (see page 61).

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

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

### **NOTICE**

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

If the needle stays in the red zone, stop the engine.

Check fuse 1 (radiator fan) in the fuse panel under the hood, see page 215.

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

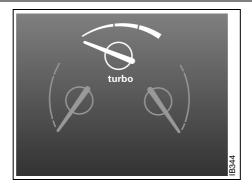
If the coolant level falls below the MIN mark, the Saab Information Display (SID) will display the message

"Coolant level low.

Refill.".

## **MARNING**

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

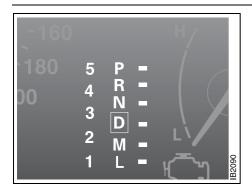


### Pressure gauge

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

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

If the needle repeatedly enters the red zone and the engine at the same time loses power, because the monitoring system is holding the charging pressure down, you should contact an authorized Saab dealer. If the speed exceeds 149 mph/240 km/h (155 mph/250 km/h, 9-5 Aero) the increase in speed will be limited by the lowering of the boost pressure. The pressure gauge then moves towards the middle of the orange zone, indicating reduced engine output and thus reduces the speed of the car as well.



# **Selector lever indication** (Automatic transmission)

The position of the selector lever is indicated on the main instrument panel. If manual mode is selected, the current gear is also displayed.

# Saab Information Display (SID)

## **№** WARNING

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

The Saab Information Display (SID) shows CHECK messages and incorporates eight trip-computer functions.

The SID is also used by the Audio System.



### Trip computer Selecting the function

Use the button to scroll down through the following functions and use the button to scroll back up through the functions:

Dist Distance to destination / Trip

meter.

Arriv Estimated time of arrival.

Alarm Alarm function.

SpeedW Speed warning (chime).

Use the button to scroll through the following functions:

Date Date, month and year

Temp. Outdoor temperature and Date.

D.T.E. Estimated range (distance to

empty fuel tank).

Fuel Ø Average fuel consumption since function last reset.

Speed Ø Average speed since function last reset.

# Outdoor temperature (Frost warning)

Regardless of which function has been selected, except Night Panel Mode, SID will automatically display the outdoor temperature when it is between 26° and 38°F (–3° and +3°C). This also applies if the temperature has moved outside the range of 21° to 43°F (–6° to +6°C) but is again between 26° and 38°F (–3° and +3°C).

## **MARNING**

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.

### **Entering values for the functions**

Values can be entered for the following functions: Speed  $\varnothing$ , Dist, Arriv, Alarm and Speed W.

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

### Average fuel consumption

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

• Select Fuel Ø with .

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

### Setting the date

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

# Turning the Alarm and Speed warning on or off

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

When either function is on, Alarm/Speed W respectively will be visible on the display. An asterisk \* will be visible on the right of the display when either function is selected.

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

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

# Calculation of arrival time and average speed

The settings must be made before the journey is started.

#### Calculation of arrival time:

- 1 Select Dist using the \_\_\_ button.
- 2 Set the destination distance.
- 3 Press SET.

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

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

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

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

### Using Dist as a trip meter

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

Press CLEAR to reset the trip meter. Under 1000 miles the distance will be shown in increments of 0.1 miles, there-after, the reading will change in increments of 1.0 mile.

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

When Dist is functioning as a trip meter, the Arriv function will display the current time.

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

- 1 Select Dist using the \_\_\_ button.
- 2 Set the distance to be covered.
- 3 Press to select Speed Ø.
- 4 Set the average speed you intend to drive.
- 5 Press SET to display the estimated arrival time.

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

### Calculating the requisite average speed:

- 1 Press to select Dist.
- 2 Set the distance to be covered.
- 3 Press to select Arriv.
- 4 Set the desired arrival time.
- 5 Press SET to display the average speed you need to maintain to arrive at the desired time.

At the beginning of a journey, the Speed  $\varnothing$  and Arriv functions will display current values. If values are set during the journey, the new values will be displayed after a delay of about 10 seconds.

### **Resetting values**

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

The following functions will be reset simultaneously:

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

Programmed values for Dist, Alarm and Speed W will not be reset (see the respective function).

### CHECK messages

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

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

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

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

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

The following messages may be displayed:

Message	See page
Fog light failure.	198
Rear light failure.	203
Brake light failure.	203
Washer fluid level low. Refill.	196
Coolant level low. Refill.	188
Remote control battery low. Replace battery.	41
Key not accepted. Contact service.	48
Theft protection failure. Contact service.	48
Gearbox too hot. Make a safe stop.	146
Time for service. 1)	246

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

This message can also be deleted by first briefly pressing the CLEAR button, then depressing it a second time for at least eight seconds until

"SERVICE" appears on the display and a chime sounds. The message can only be deleted when it is shown on the SID.

### **Night panel**

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

When the Night Panel button is pressed, only the speedometer will be illuminated (up to the 87-mph or 140-km/h graduation), all the other instruments illumination being extinguished and their needles moved to zero. Both the SID and the ACC displays will be extinguished and the backlighting for switches and other controls will be dimmed. Note: All indicator and warning lights, together with the display of CHECK messages, will operate as normal, except "Outdoor temperature", see page 62.

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

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

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

### Units and language versions

The SID has four sets of units:

METRIC	IMP. 1	IMP. 2	US
km	miles	miles	miles
km/h	mph	mph	mph
liters	UK gal	UK gal	US gal
°C	°F	°C	°F
24-hour	12-hour	12-hour	12-hour

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

### Selecting units and language

- 1 Press CLEAR and SET simultaneously for four seconds until a chime sounds.
- 2 Press or to select the required units.
- 3 Touch SET.
- 4 Press or to select the required language.
- 5 Touch SET.

### Clock

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

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



### **Switches**



### **Daytime running lights**

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

Note to owners in the U.S.: If you do not want Daytime Running Lights, this feature can be disconnected: switch off the engine and remove fuse No. 35 (see page 213).

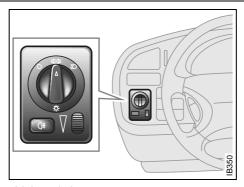
**Note to owners in Canada:** Daytime Running Lights must not be disconnected as they are a Canadian Federal legal requirement.



### **Parking lights**

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

Note: The lighting switch must be in parking light or headlight position (low beam position only) to operate the fog lights (see page 70).



Light switches

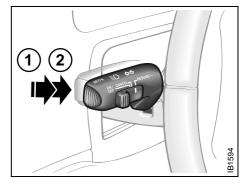


### Headlights

The headlights come on automatically when the ignition is ON and go off when the ignition switch is turned to the LOCK position. The parking lights, however, can be on when the ignition switch is in the LOCK position.

### High/low beam

To switch between high and low beam, pull the control stalk fully towards you (position 2). When the high beam is on, the indicator on the main instrument panel will be illuminated.



- 1 High beam signal
- 2 High/low beam switching

### High beam flasher

The headlights come on to high beam when the stalk is pulled to the first spring-loaded position (position 1) and remain on until the stalk is released.

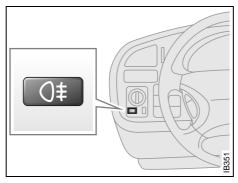
### **Courtesy Headlight Feature**

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

To activate this function,

- Switch off the ignition and remove the key
- · Open the driver's door
- Pull the high/low beam control stalk towards the steering wheel like you are flashing the high beam, see page 67. The low beam headlights will now come on immediately after the driver's door has been closed (within 30 seconds) and will remain on for about 30 seconds.

The length of time for this function can be adjusted by your authorized Saab dealer.



Rear fog light

### Rear fog light

Press the button to switch on the rear fog light, which will only come on if the head-lights are on.

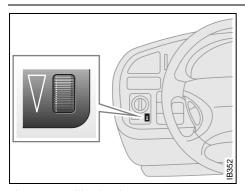
The rear fog light will go off automatically when the engine is switched off. When the fog light is next needed, it will have to be switched on manually again.

The rear fog light consists of one light so it is not be mistaken for brake lights.

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

## **MARNING**

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



Instrument illumination

### Instrument illumination

The brightness of the instrument illumination can be varied by means of the dimmer switch adjacent to the headlight switch. (See also Night panel on page 65).

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

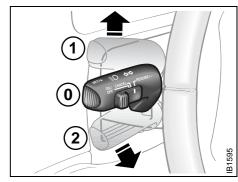
### Turn signal and lane change indicators

To switch on the turn signals/lane change indicators, move the stalk up or down.

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

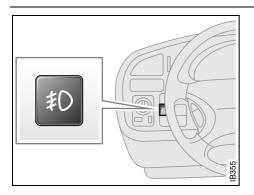
The stalk also has an intermediate. spring-loaded position that is useful for signalling when changing lanes or passing.

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



Turn signal and lane change indicators

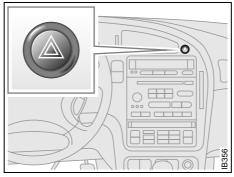
- 1 Right indicators2 Left indicators



# Front fog lights (if equipped)

The front fog lights can be activated in both low beam headlight and parking light positions. Fog lights should only be used in poor visibility conditions.

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



Hazard warning lights

### **Hazard warning lights**

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

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

Hazard warning lights should only be used if the car constitutes a hazard to other road users.

## **MARNING**

Switch on the hazard flashers if the car has to be left at the roadside on account of a crash, engine trouble or a puncture.

If you carry a warning triangle or flares, they should be set up along the side of the road 300 ft. (100 m) behind your vehicle. If the car is not clearly visible (e.g. over the brow of a hill or bridge), place the triangle/flare even further back.

### **Reversing lights**

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

## Wipers and washers

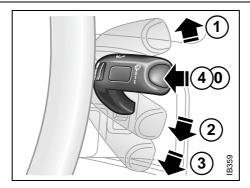
There are three intermittent wiper positions. Moving the control stalk to the spring-loaded position between 0 and 2 will produce a single sweep of the wipers.

The wipers are designed for optimal cleaning at all driving speeds. At higher speeds, it may be possible to detect a slight "sweeping" sound. This may be due to the increased air pressure on the blades at higher speeds.

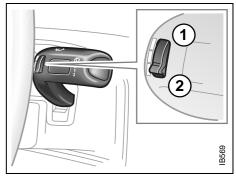
### **Headlight washers** (if equipped)

If low beam is on, the headlights are washed every fifth time the windshield washers are used or if 2 minutes have elapsed since the windshield was last washed. The headlight washers cannot be activated separately.

The headlight washers are of the high-pressure type, which means that other parts of the car may become wet if you activate the washers while the car is stationary.



- 0 OFF
- Intermittent operation
- 2 Low speed
- 3 High speed
- 4 Wäshers



Control for setting wiper delay

- 1 Long delay
- 2 Short delay

### Rain sensing wipers (if equipped)

## WARNING

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

### **NOTICE**

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

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

The system varies between single sweeps of the windshield and continuous wiping depending on how much water or snow there is on the windshield.

Activate the system by lifting the control stalk to position 1. The wipers make one sweep for reference to see how much water and snow is on the windshield. In future, the sensor compares the amount of water and snow on the windshield with this reference value.

# When the engine has been switched off, the control stalk must be moved to position 0 and back to position 1 to reactivate the sensor.

Set the sensitivity using the control on the wiper stalk (the same control as used for wiper delay on cars not fitted with a rain sensor). The sensor has three sensitivity settings. It is most sensitive when in the uppermost position (1). When a higher degree of sensitivity is selected, the wipers make one sweep of the windshield for reference.

The rain sensor has a daylight and a night time mode. The sensor measures the amount of available light and automatically selects the appropriate mode. The sensor is more sensitive at night. The function of the rain sensor is impaired by dry snow.

## Rear-window wiper (9-5 SportWagon)

The rear-window wiper and washer are operated with the same stalk switch as used for washing and wiping the windshield and headlights.

This stalk has two additional switches, ON/OFF and  $\ \Box \$ .

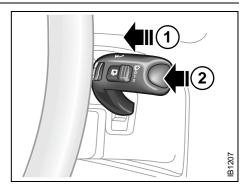
The ON position provides intermittent wiping.

The position provides washing and wiping. After a few sweeps the wiper stops or reverts to intermittent wiping, if this has been chosen. About 15 seconds after completion of the washing/wiping of the rear window, the wiper makes a single sweep to wipe away any remaining washer fluid.

A spring-loaded position between the OFF and ON positions allows for a single sweep of the rear-window wiper.

Intermittent wiping of the rear window occurs when reverse gear is engaged if the windshield wipers are in position 1, 2 or 3, see page 71.

For how to adjust the rear window washer jet on the 9-5 SportWagon, refer to page 195.



Rear-window wiper
1 Intermittent wiping

2 Washers

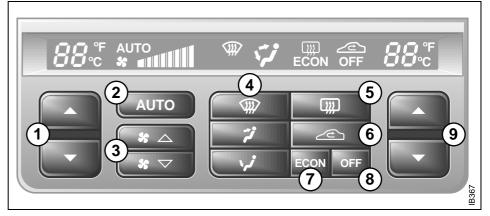
# Automatic climate control (ACC)

The ACC system automatically works to maintain the desired temperature inside the car.

The system will achieve the desired temperature in the quickest possible way. Note that selecting a higher or lower temperature than that desired will not speed up the process.

For the ACC system to be most effective, all windows (and sunroof, if fitted) should be closed.

Fresh air for the cabin is drawn in through an inlet grille adjacent to the bottom edge of the windshield. The air flows through a filter upstream of the ACC system before delivery to the cabin. Cabin air is evacuated via openings in the rear parcel shelf and then through outlets on either side of the car behind the rear bumper.



### ACC panel

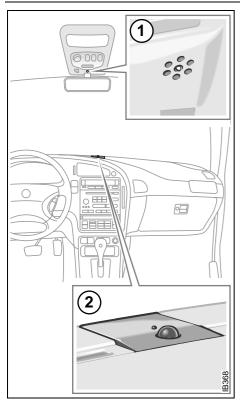
- 1 Temperature setting: LH side
- 2 AUTO: All settings selected automatically
- 3 Manual setting of fan speed
- 4 Manual setting of air distribution
- 5 Rear-window heating: ON/OFF

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

The filter is a combined particle and charcoal filter. It is so efficient that levels of noxious substances such as benzene and toluene are also reduced.

- 6 Recirculation: ON/OFF
- 7 A/C compressor: ON/OFF
- 8 ACC system: ON/OFF
- 9 Temperature setting: RH side

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

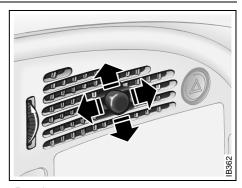


- Interior-temperature sensor
- 2 Sun sensor

The system has five sensors:

- Outdoor temperature sensor
- Interior temperature sensor
- Sun sensor (mounted on top of the fascia)
- Two blended-air temperature sensors (mounted inside the front floor vents)

**Note:** If anything is placed over the sun sensor, the ACC system will not function properly.

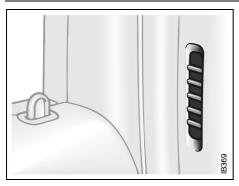


Panel vent

### **Panel vents**

The panel vents swivel in all directions 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 flow of air through the panel vents can be controlled individually for each vent by means of the adjacent control. The climate control system works best if the panel vents are open. If you find the air cold or that it is drafty, start by directing the air away from the body. If the center vent is aimed up, it will cool the interior temperature sensor and you may need to adjust ACC up or down, depending upon temperature desired.



Air vent at rear side window

### **Temperature control**

The cabin is divided into two temperature zones:

- The driver's zone
- The passenger zone (front and rear seats)

The desired temperature can be set between 58 and 82°F (15 and 27°C). In addition, there are also HI and LO settings (see below). The HI and LO settings for the passenger zone can only be selected if they are also selected for the driver's zone.

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

- The most usual temperature setting is 64–76°F (18–24°C), depending on personal preference and what clothing is worn.
- To allow the system time to adjust, changes in the temperature setting can only be made in steps of 2°F (1°C).
- Once the desired climate has been achieved, the rear center vents can be closed to prevent warm air being distributed at face height.

### Settings when HI selected:

- Maximum heat
- · Air distribution to windshield and floor
- Recirculation OFF (even if manually selected before)
- · Fan: high speed
- Settings shown on ACC display Settings when LO selected:
- Maximum cooling (A/C compressor will run even if ECON manually selected before)
- Air distribution through panel vents
- Fan: maximum speed
- Recirculation ON
- · Settings shown on ACC display

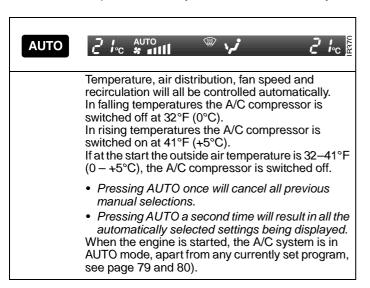
### **Functions**

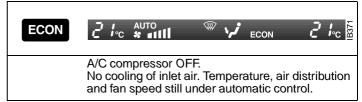
76

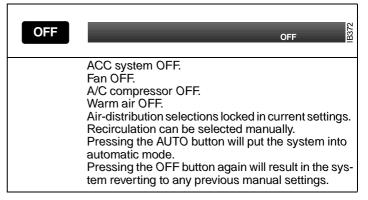
Pressing AUTO will cancel all manual settings.

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.









The rear-window and door-mirror heating is controlled manually.

Switch off the heating as soon as the rear window is clear, to avoid imposing a heavy load on the battery longer than necessary. Note, however, that the heating will go off automatically after 2–10 minutes (depending on the outdoor temperature) or sooner if the voltage in the electrical system falls below 10 V.

The ACC system can be programmed to switch on the heating automatically when the outdoor temperature is below 41°F (+5°C) and the temperature inside the car is below 50°F (+10°C) (see "Programming I and II", on pages 79 and 80).



Recirculation is selected automatically for effective cooling, but it can also be switched on/off manually. Although recirculation does not substantially affect the air quality, it is useful to prevent unpleasant smells or fumes being drawn into the car from outside.

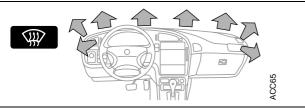


To increase the fan speed in steps. If, after being off, the ignition is switched on but the engine is not started, the fan will run at low speed until the engine is running.



To decrease the fan speed in steps. If the fan is set to 0, the A/C compressor will cut out and ECON will appear on the display. If, after being off, the ignition is switched on but the engine is not started, the fan will run at low speed until the engine is running.

### Air distribution



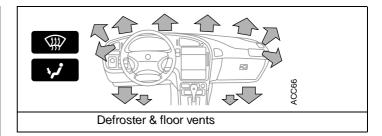
**Press once:** Defrosting of all windows will take place (air flow to rear side windows shut off) with:

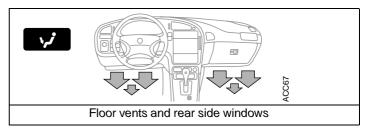
- · The fan running at high speed.
- · Air being distributed to the defroster vents.
- Normal temperature control will operate.
- · Recirculation will be OFF.
- Heating of the rear window and door mirrors will be switched ON.

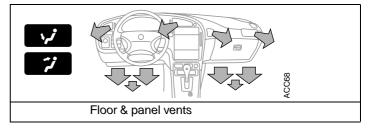
The defroster function will continue to operate until a new selection is made, although the heating for the rear window and door mirrors will be switched off automatically after 2–10 minutes, depending on the temperature outside.

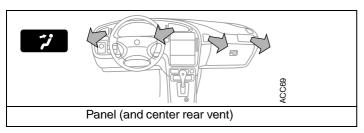
**Press twice:** Air will be directed onto the windshield with no increase in the fan speed. The heating for the rear window will not be switched on.

To revert to the previous selection, press the AUTO button.









### Starting in cold weather

To start with, the system will automatically select the defroster setting, maximum heat and low fan speed.

As the engine warms up, air will also be distributed through the floor vents and the fan speed will be increased.

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

### Starting in hot weather

The system will automatically distribute air through the panel vents at high fan speed and will switch on the A/C compressor (unless the ECON switch has been pressed).

If the outdoor temperature is above  $86^{\circ}F$  ( $30^{\circ}C$ ), the system might select recirculation after approximately 15 seconds if this is required in order to reach the desired temperature.

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

### **Programming I**

Manual selections can be programmed into the ACC system so that these will take effect when the car is started. Note that the ignition must be switched off for at least ten minutes after programming for the selections to be saved in the system's memory.

- 1 Make sure the ignition is ON.
- 2 Select the desired settings.
- 3 Press OFF and , simultaneously (the display will flash to confirm that the settings have been recorded).

Example: If you want air distribution through the panel vents when you start the car, press and then save the setting by pressing OFF and ...

### Cancelling the programmed settings (I)

To cancel the programmed settings, press AUTO and simultaneously (the display will flash to confirm that the settings have been cancelled).

### Programming II

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

Function	Operation in AUTO mode after Programming II	Standard operation in AUTO mode
ECON	The A/C compressor will not activate unless the outdoor temperature is above 55°F (+13°C).  -This function saves fuel by delaying the activation of the A/C compressor. However, in wet weather it is advisable to have the A/C compressor running when outdoor temperatures are below 57°F (+14°C), as the A/C system reduces the likelihood of the windows fogging up.	A/C compressor cuts in when outdoor tem- perature is above 41°F (+5°C)



Recirculation will be switched on if the speed of the car is less than 6 mph (10 km/h) and will be switched off when the speed has risen above 20 mph (30 km/h), but not if the ECON mode has been programmed according to "Programming II". To prevent misting, this function is disengaged at outdoor temperatures lower than 45°F (+7°C) and engaged at temperatures above 50°F

(+10°C). -This function is useful to prevent fumes being drawn into the car in traffic jams.

Recirculation is switched on about 45 seconds after starting if the outdoor temperature is above 86°F (+30°C) and the selected temperature for the cabin is well below the actual temperature in both temperature zones.



The heating will come on about five seconds after the engine has started if the outdoor temperature is below 41°F (+5°C).

-This function helps to prevent ice or mist forming on the rear window in cold. damp weather. Fuel consumption may increase slightly.

Rear-window heating can only be switched on manually.

**To program a function or to cancel** a programmed function, press and hold in the relevant button until the corresponding symbol has flashed four times on the display and a chime has sounded. Make sure the ignition is ON.

Function	Text displayed on SID during programming	Text displayed on SID when cancelling program
ECON	ACC:LO TEMP A/C CTRL	ACC:NORMAL A/C CTRL
(e)	ACC:RECIRC SPEED CTRL	ACC:RECIRC NORMAL CTRL
Ţij.	ACC:AUTO RDEFR CTRL	ACC:MANUAL RDEFR CTRL

Example: To have the ACC system switch the heating for the rear window and door mirrors ON/OFF automatically, press and hold in

until the symbol has flashed four times on the display and a chime has sounded.

The display shows:

ACC:AUTÓ RDEFR CTRL

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

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

### Calibration

If the battery has been disconnected or has died, the system will need to be recalibrated.

To start the calibration procedure:

- 1 Start the engine.
- 2 Press AUTO and OFF simultaneously.

Calibration takes about 30 seconds. During this time and for about 3 seconds after the operation has been completed, the number of fault codes (if any) stored in the system will appear in the temperature display on the left. The fault codes themselves will be shown in the temperature display on the right.

### **Useful tips**

(Before driving the car to an authorized Saab dealer)

- If AUTO is not shown on the display, see "Cancelling the programmed settings (I)" on page 79.
- If you suspect that the ACC system is not functioning properly, cancel (delete) all programmed settings and then recalibrate the system.
  - See "Cancelling the programmed settings (I) and (II)", pages 79 and 80, and "Calibration" above.
  - Note that AUTO will show on the display even if you have completed Programming II, but that this does not apply to Programming I.
- If the battery has been disconnected or has died, the ACC system will need to be recalibrated. See "Calibration" above.
- If the system starts in OFF mode, cancel the programme. Refer to Cancelling the programmed settings (I) on page 79.

### Condensation

When the A/C system is running, the intake air is dehumidified, and the resultant condensation is drained off through two outlets underneath the floor of the car, in the vicinity of the front doors.

It is therefore perfectly normal for water to be seen dripping from these outlets when the car is parked. Greater amounts of condensation will result in warmer, more humid ambient air.

## Formation of ice and mist in extremes of weather

It is only in the most extreme conditions that icing and misting of window glass are likely to be a problem, e.g. 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:

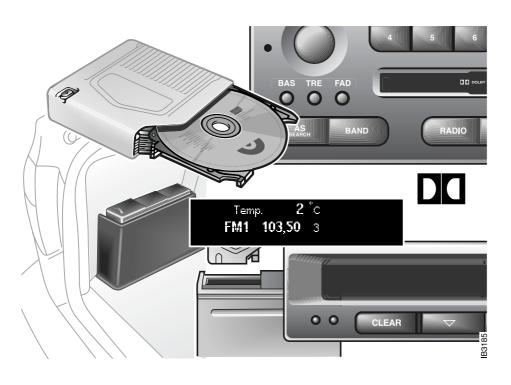
- 1 Select AUTO and 70°F (21°C) for both temperature zones.
- 2 Select Defroster. If this is not enough...
- 3 Increase the fan speed. If this is not enough...
- 4 Select a higher temperature.

The following measures are recommended if the occupants feel that it is cold and drafty in the car:

- 1 Make sure that all the air vents are fully open, including the center rear vent. If this is not enough...
- 2 Direct the air flow away from the body (but not towards the interior temperature sensor).
  - If this is not enough...
- 3 Raise the temperature setting a degree or two. If this is not enough...
- 4 Lower the fan speed.

Fault diagnosis and maintenance, see page 234.

## Saab 9-5 Audio System



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To get the best out of your Saab 9-5 Audio System, we recommend that you read through this entire section.

The Saab 9-5 Audio System is available in two versions: Premium on the 9-5 Linear and Prestige on the 9-5 Arc and 9-5 Aero Both models have been specially matched to the Saab 9-5 cabin.

The two systems are comprised of a radio, CD player and cassette player.

A six-disc CD changer for installation in the luggage compartment is available as a dealer-installed accessory/option.

The Premium system has seven speakers: three mounted in the fascia (the center speaker further enhances the overall sound image) and one in each door.

The Prestige system (Harman Kardon) has nine speakers (9-5 Sport Wagon has eight speakers): three mounted in the fascia (the center speaker further enhances the sound image), one in each door and two subwoofers in the rear window shelf (9-5 Sport Wagon: one subwoofer in the luggage compartment). The subwoofers enhance reproduction of the lowest bass notes.

The Audio System is connected to the Saab Information Display (SID), which is at the top of the main instrument panel. Messages, indicators and the like for the Audio System are shown on this display.



Indicator	
AS	Radio is in Autostore mode
RDM	Random playback of CD tracks when CD player selected
(DOLBY B)	DOLBY B noise reduction on for cassette player

# Quick guide to the Saab 9-5 Audio System

### Radio (see page 88)



#### ON

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

#### OFF

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

#### VOL

To adjust the volume, rotate the VOL control. **BAL** 

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



#### BAS

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

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

### **FAD**

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

On all of the above selections, there is a detent felt at the mid-point.



Preset station buttons

Press once: play the preset station.
Press & hold briefly: store a new station.



**Auto tunina** 

Press once: auto (seek) tuning.

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



Press once: Autostore ON/OFF.

**Press & hold briefly:** automatic tuning and storing of the 6 strongest stations.



Press once: change waveband.



Press once: activate radio.

### Cassette player. See page 90



**Press once:** Selects cassette player when other source active.

When tape playing: Dolby B ON/OFF.



Switch to playback other side of tape.



Eject.



Press once: Music search (next track).
Press & hold briefly: Fast forward/rewind.
Press SEEK (mid-segment) (a chime will sound): Blank skip ON/OFF.

### CD player. See page 93



**Press once:** switch to CD player when other source active.

Press & hold briefly (a chime will sound): Random playback.



Press once: Track search.

**Press & hold briefly:** Rapid play (passage search) or Fast track search.

Press SEEK (mid-segment) once (a chime will sound): Switches between Rapid play (PLAY) and Fast track search (TRACK).

Press SEEK (mid-segment) & hold briefly (a chime will sound): Scan disc.



Remove CD.

### CD changer (accessory/option). See page 95



**Press once:** Change to CD changer when CD player is active.

**Press twice:** Change to CD changer when radio or cassette player is active.

Press & hold briefly (a chime will sound): Random playback of entire magazine.



**Press once:** Track search on current disc.

Press & hold briefly: Rapid play.

Press SEEK (mid-segment) once: Switch between Rapid play (PLAY) and Fast track search (TRACK).

Press SEEK (mid-segment) & hold briefly (a chime will sound): Scan/disc.

Press SEEK (mid-segment) & hold (2 chimes): Scan/magazine.



Selects disc in magazine.

### Sound controls

### ON/OFF

### The Audio System will come on:

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

### The Audio System will be switched off:

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

### **VOL - Volume**

### BAL - Balance

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



**BAS - Bass** 

### TRE - Treble

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

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

### FAD - Fader

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

The Fader controls must be pressed first to release it.

B1842

## **Radio**

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

### Preset station buttons (1)

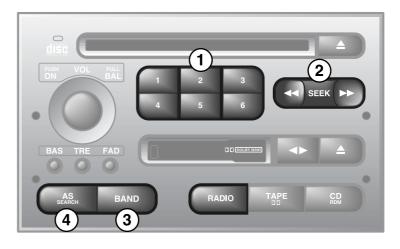
Press once (release within a second) to select a preset station, e.g.



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

### Presetting a station

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



### Tuning (2)

### Automatic seek tuning:

Press SEEK briefly to search for higher frequencies or <- seek for lower frequencies.

### Manual tuning:

To switch to the manual-tuning function, press SEERS or SEERS and release quickly (a chime will sound and the M indicator will appear on the display).

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

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### Waveband selector (3)

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

### AS, Autostore (4)

The autostore mode provides an additional preset function that can be used to search for and to store stations when you are in an area where you are unfamiliar with the stations and their frequencies.

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

Press and hold in the AS/SEARCH button for more than a second to initiate a search for the six strongest stations.

Each time the system finds and stores a station, the number on the far right of the display will change. If the system cannot find six stations with good reception, the remaining preset buttons will be empty. If one of these empty buttons is pressed, U\*\*\*\* (FM) or AM\*\*\*\* will appear on the display.

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

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

## Cassette player

Before playing a tape, make sure that the label is secure and that the cassette is not warped, otherwise the cassette can become jammed in the deck. The cassette player automatically senses whether the tape is normal or metal (Type I or Type II).

## **TAPE (1)**

Turn on the cassette player by pressing

or by inserting a cassette in the deck, with the exposed tape to the right. Playback will start with the side that is facing up (indicated by A on the display). The display will now be as follows:



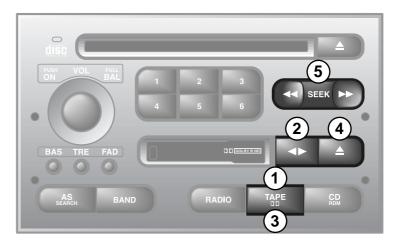
### Playback direction (2)

To play the other side of the tape,

press -



The deck will automatically change the playback direction when the end of the tape is reached, be it during playback, fast forward/rewind or music search.



### Dolby® noise reduction (3)

Press TAPE/DOLBY to switch on Dolby NR B.

Dolby B should be on for playback of tapes recorded with Dolby B, and off for those recorded without Dolby B.

### Eject button (4)

To stop playback of a tape, press the eject

button or select another source.

If you select another source without pressing the eject button, the tape will remain in the deck but the head and pinch rollers will be clear of the tape. The same applies if the Audio System is switched off while a tape is being played. Tapes can still be ejected when the system is turned off.

### Music search forward/reverse (5)

To search forward for a track, press and release quickly (within half a second). The following will now appear on the display:



To perform a backward search, press <a href="#">Instead</a>.

A forward search will continue until a gap of at least 4 seconds is found, or until you press (mid-segment). Pressing and holding the button during a search will initiate the fast-forward function.

### Fast forward/rewind

Press and hold SEEKDD to start fastforward to the end of the tape. The following will now appear on the display:



Press seek>> once to cancel fast-forward.

Press and hold <<seek>> (mid-segment) briefly to switch to music search.

Fast rewind (<< WIND) is performed in the same way as fast forward.

## Auto music search (Blank skip)

To switch the Blank-skip function ON/OFF, press and hold SERRY (mid-segment). When the Blank-skip function is active (display: BL SKIP ON), unrecorded gaps that are longer than 15 seconds will automatically be skipped.

When auto music search is in progress, the following will show on the display:



If a track has been recorded at an unusually low level and is therefore identified incorrectly as a gap between tracks, it could initiate a spurious "auto music search".



### Type II (metal) tapes

The cassette has an automatic tape-type selector.

### Cleaning-due indicator

After 30 hours' playing time, the following message will appear on the display:

Temp. 2 °C
TAPE CLEAN

The message will be displayed for ten seconds each time the cassette player is selected.

A cleaning tape should be used to clean the heads inside the cassette player to maintain good reproduction and to prevent unnecessary wear.

To reset the playing-time meter:

- 1 Remove the current tape.
- 2 Load the cleaning tape and play it for the required time.
- 3 Remove the cleaning tape and reload the other one.

### Tape care

Do not expose cassette tapes to direct sunlight or to extremes of temperature as this can damage the cassette and the tape.

Always keep cassettes in their boxes when not in use.

If a cassette should become jammed in the deck, contact an authorized Saab dealer.

## **CD** player

### NOTICE

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

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

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



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

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



B1845

### Track search (1)

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

### Rapid play (passage search)

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



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

### Fast track search

Press (mid-segment) once to switch between the CD-PLAY and CD-TRACK modes.



The CD-PLAY and CD-TRACK modes change the function of <a href="#seek"><seek"><a href="#seek"><a href="#seek"><

CD PLAY	Pressing and holding	
	starts rapid play	
CD TRACK	Pressing and holding	
	starts Fast track search	

### Random playback (RDM) (2)

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

Press SEEK>> once to move from the current track to the next during random playback.

Press once to repeat the current track during random playback.

Pressing and holding <asee or see will start Rapid play.

### **SCAN**

To start the SCAN function, which enables you to hear a sample of each track on the disc, press and hold MILESTATE (MILESTATE (MILESTATE) (MILESTATE) (MILESTATE) (MILESTATE (MILESTATE) (MI

Temp. 2 °C CD SCAN 5

The sample playback starts 30 seconds after the start of the track and lasts for 8 seconds.

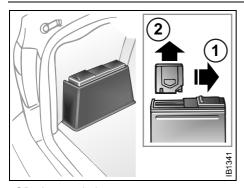
When all the tracks on the disc have been scanned, the system will revert to playback of the track that was playing when SCAN was selected.

Press any segment of the SEEK button during scanning to play the current track from the beginning and simultaneously cancel the SCAN function.

### Eject (3)

Press to remove the disc.

If you press the eject button to open the tray but do not remove the disc, the CD player will automatically close the tray again after 10 seconds, without restarting playback.



CD changer in luggage compartment, Saab 9-5 Sedan

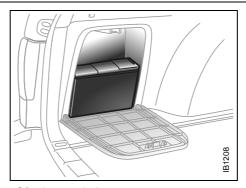


(accessory)

### NOTICE

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

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

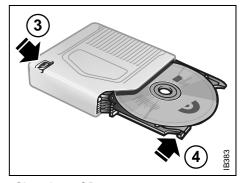


CD changer in luggage compartment, Saab 9-5 SportWagon

To load the CD changer (which is installed in the luggage compartment and can accommodate six CDs) proceed as follows:

- 1 Slide the top back.
- 2 Lift out the CD magazine.
- 3 Press back the catch on the magazine.
- 4 Withdraw one CD tray at a time and swap/load the CD (label side up).
- 5 Slide the tray back into the magazine. Note the position of the magazine for loading (see picture).

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



Changing a CD

### To select the CD changer

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

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

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

Temp. **2** °c **NO MAGAZINE**  If the magazine in the CD changer is empty, the following will appear on the display:

Temp. **2** °c **CD MAG EMPTY** 

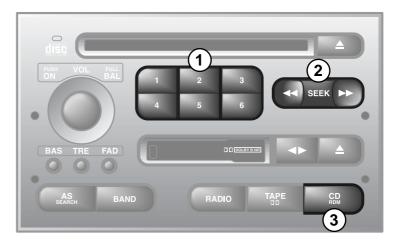
If the CD changer is activated right after a magazine has been loaded, the following will appear on the display:

Temp. **2**°c **CD6 CHECK** 

The CD number will change as each CD is played.

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

Temp. 2 C



Selecting CDs (1)

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

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

If the selected CD-tray is empty, the following will appear on the display:

Temp. **2**°c **CD3 EMPTY** 

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

Temp. 2 °c CD MAG12×456

R1846

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

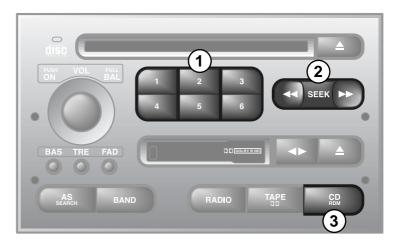
### Track search (2)

Press SEEK or SEEK> repeatedly to move to preceding or following tracks. Pressing SEEK once will restart playback from the beginning of the current track. Thus, to play the preceding track, press SEEK twice.

## Rapid play



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



Fast track search

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



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

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### **SCAN**

### Scanning the current CD:

To start the SCAN function, which enables you to hear a sample of each track on the disc, press and hold AMDED (mid-segment). The display shows that SCAN is in progress and which track is currently being sampled. For instance, if you started SCAN while playing track one, the following display will appear:



The sample playback starts 30 seconds after the start of the track and lasts for 8 seconds.

When all the tracks on the disc have been scanned, the system will revert to playback of the track that was playing when SCAN was selected.

Press any segment of the SEEK button during scanning to play the current track from the beginning and simultaneously cancel the SCAN function.

### Scanning the entire magazine:

Press and hold (mid-segment two chimes) to start a scan of the entire magazine. A message similar to the following will appear on the display:

Temp. 2 °c CD3 SCAN MAG

The sample playback starts 30 seconds after the beginning of the first track on each CD and lasts for 8 seconds.

After the first track of each CD has been sampled, the CD changer will revert to play-back of the track that was playing when SCAN was selected.

Press any segment of the SEEK button during scanning to play the current track from the beginning and simultaneously cancel the SCAN function.

## Random playback (RDM) (3)

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

Press SEEK>> once to move from the current track to the next during random playback.

Press once to repeat the current track during random playback.

**To stop** playback from the CD changer, simply select once to move from the current track to the next during random playback (RADIO/TAPE/ CD). The CD changer will now enter stand-by mode.

# Programmable functions

## **MARNING**

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

### Volume-preset mode

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

Use the **SEEK** button to select the desired function.

The following volume settings can be preselected:

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

### Adjusting the volume

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

Maximum START VOL

Temp. 2 °C START VOL 09

TEL VOL

Temp. 2°c TELVOL 14

To change the volume setting:

- Press and hold the BAND button at the same time as you switch on the Audio System.
- After START VOL appears, release the BAND button.
- Adjust the starting volume using the volume knob.
- Wait 10 seconds or press one of the buttons on the bottom row of the Audio System, e.g. RADIO or BAND, to save the new volume setting.

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

Temp. **2** °C **SP D VOL ON** 

To change the default setting:

The default setting for this function is ON.

- Press and hold the BAND button at the same time as you switch on the Audio System.
- After START VOL appears, release the BAND button.
- Select SP D VOL using <<seek►►</li>
- Select ON or OFF using the VOL control.
- Wait 10 seconds or press one of the buttons on the bottom row of the Audio System, e.g. RADIO or BAND, to save the new default setting.

### **Loudness ON/OFF**

## Temp. 2 °c LOUDNESS ON

To change the default setting:

The default setting for this function is ON.

- Press and hold the BAND button at the same time as you switch on the Audio System.
- After START VOL appears, release the BAND button.
- Select LOUDNESS using <<<sek>►
- Select ON or OFF using the VOL control.
- Wait 10 seconds or press one of the buttons on the bottom row of the Audio System, e.g. RADIO/BAND, to save the new default setting.

## Steering-wheel controls

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

### **Control functions:**

#### NXT:

RADIO mode: preselect buttons

1⇒2⇒...⇒6⇒1⇒...

TAPE mode: Play other side of tape.

CD mode: Inoperative.

CD-changer mode: Select CD in magazine  $1\Rightarrow 2\Rightarrow ...\Rightarrow 6\Rightarrow 1\Rightarrow ...$ 

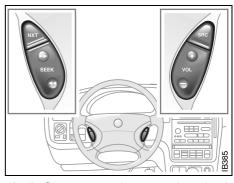
#### << SEEK >>:

RADIO mode: Auto/manual tuning.

TAPE mode:

Music search/Fast forward or rewind.

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



Audio System controls on steering wheel

### SRC (source)

Press repeatedly to switch between RADIO  $\Rightarrow$  TAPE  $\Rightarrow$  CD  $\Rightarrow$  (CD changer)  $\Rightarrow$  RADIO  $\Rightarrow$ ...

### VOL +/-:

Volume adjust.

## **Security lock**

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

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

If not, the following will appear on the display:

Temp. 2 °c RADIO LOCKED

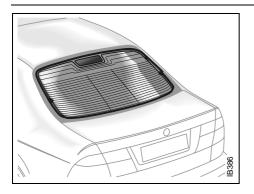
If a CD changer has been installed, it will also have been security coded.

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

Temp. 2 °C CDC LOCKED

If a CD changer is to be retrofitted or if you wish to move the main Audio System module and/or CD changer to another car (Saab 9-5), you *must* consult an authorized Saab dealer so that the modules can be given the correct security codes.

Technical data		Frequency range (FM)	
Tone controls		Distortion (EM)	±1 dB < 0.5 %
Bass	±10 dB at 100 Hz	Distortion (FM)	< 0.5 %
Treble	±10 dB at 10,000 Hz	Cassette player	
Downer output		Fast forward/rewind	< 120 seconds (C-60)
Power output	450.14	Frequency range	40–16000 Hz
Premium	150 W 110 W at 1 % THD (total har-		±2 dB
	monic distortion) and 13.5 V	Wow and flutter	0.2 % WRMS
Prestige	•	Signal-to-noise ratio	45 dB
	150 W at 1 % THD (total harmonic distortion) and 13.5 V	Dolby B NR effect	8/16 dB
		CD player and CD changer	
Radio module		1-bit system and 8 x oversampling	
Radio system	PLL dual-synthesizer tuner	Frequency range	20–20000 Hz
Number of presets:			±0.5 dB
FM	3x6	Distortion	< 0.008 %
AM	2 x 6	Dynamics	> 80 dB (1 kHz)
Frequency range:		CD-changer capacity	6 discs
FM	87.9–107.9 MHz	These specifications comply with the new	IHF Standard
AM	530–1710 kHz	<ul> <li>Since the policy at Saab is one of continua</li> </ul>	I improvement, we retain the right to alter
Tuning steps:		<ul> <li>specifications and design without prior not</li> <li>Dolby noise reduction is produced under li</li> </ul>	
Automatic seek tuning:	FM 200 kHz	Corporation	,
	AM 10 kHz	"Dolby" and the double-D symbol  are sing Corporation	e trademarks of Dolby Laboratories Licen-
Manual tuning:	FM 200 kHz AM 10 kHz	Changes or modifications not expressly appr could void the user's authority to operate the	





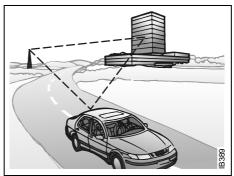
The Audio System has three antennas incorporated in the rear window; two for FM diversity and one for AM.

### **NOTICE**

Refrain from placing hard or sharp objects on the rear parcel shelf, to avoid damaging the antenna leads.

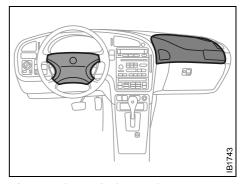
Do not use sun protective film which contains metal particles on the rear window, this can be the cause of radio interference.

The car has a factory-fitted roof antenna for a mobile phone/OnStar. Roof loads may negatively affect telecommunication.



### **Multipath propagation**

Multipath propagation occurs when radio waves from an FM transmitter are reflected by, e.g. large buildings, causing them to arrive slightly later than the direct waves. This can create interference to radio reception. To avoid this problem as much as possible the system is equipped with two FM antennas, so called FM diversity.



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

## **MARNING**

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

## Adjusting the frequency steps North America/Europe

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

Press and hold (mid-segment) and switch the radio on at the same time.
The preset stations will be cancelled and replaced by default frequencies.

## **Fault codes**

### **NOTICE**

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

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

Fault code	Possible cause
CD/CDC ERROR 12/17/19	CD is dirty, loaded wrong side up or defective.
TAPE ERR 01	Tape broken or mechanical fault in deck.
TAPE ERR 02/03	Tape snarled up or mechanical fault in deck.
TAPE ERR 11	Cassette jammed: can- not be loaded/ejected.

## **MARNING**

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

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

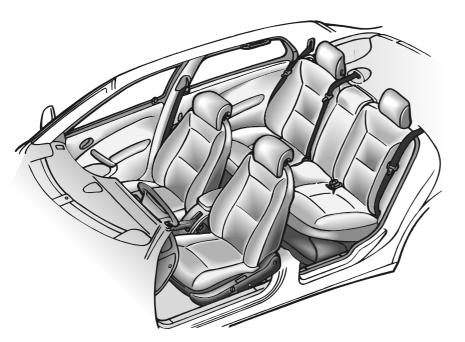
### **NOTICE**

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

### **OnStar System**

Your vehicle may be equipped with OnStar, a vehicle telematics communications system. Please consult the separate OnStar Owner's Manual for system details.

## Interior equipment and trunk



Steering wheel	
adjustment	106
Rearview mirrors	107
Electric windows	113
Sunroof	114
Interior lighting	116
Sun visors	117
Ashtrays	117
Glove compartment	118
Cup holders	120
Trunk	121

B394

# Steering wheel adjustment

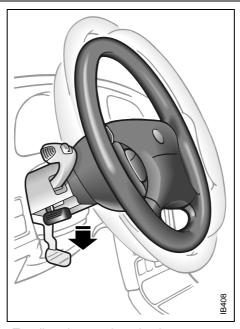
Fore-and-aft and tilt adjustment of the steering wheel is possible.

Pull down the lever fully until you hear a click. Move the steering wheel to the desired position and then raise the lever. The lever should lock with a click.

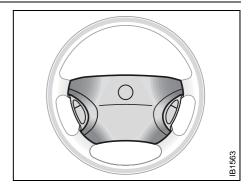
Make sure that the lever is fully locked before driving off.

## **WARNING**

Never adjust the steering wheel unless the car is stationary.

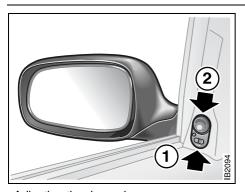


To adjust the steering wheel



### Horn

The horn is sounded by pressing the central part of the steering wheel. Press closest to the steering wheel rim.



Adjusting the door mirrors

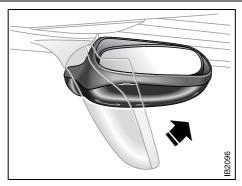
- 1 Select mirror
- 2 Use touch pad to adjust mirror

#### **Rearview mirrors**

#### **Door mirrors**

The door mirrors may have an auto dimming function (option) and the passenger side door mirror is of the wide-angle "aspheric" type.

The door mirrors are designed to fold back if knocked. They can also be fully retracted for parking in tight spaces, such as on the car deck of a ferry. Remember to fold them out again before driving off.



Door mirror folded in

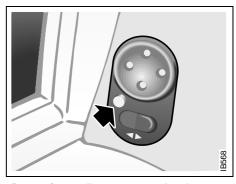
#### **NOTICE**

The door mirrors should be fully retracted before the car enters an automatic car wash.

The adjusting switch is on the driver's door. If the car is equipped with a programmable driver's seat, the settings of the door mirrors can also be stored in the preset buttons for the seat (see page 14).

Cars equipped with a programmable driver's seat also have the ability to angle the passenger's mirror down when reversing, e.g. for a better view of the curb.

- 1 Select reverse.
- 2 Press the tiny button adjacent to the doormirror switch to tilt the mirror. The

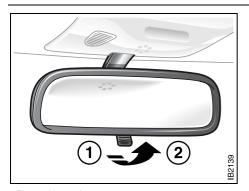


Button for angling passenger's mirror down when reversing

mirror will be reset automatically when reverse gear is deselected.

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

The mirrors are heated, and the heating comes on and goes off with the rear-window heater.



Rearview mirror

- 1 Day position
- 2 Night position

#### Rearview mirror

The rearview mirror has day/night positions that can be selected by means of a knob beneath the mirror. Adjust the mirror in day position.

Interior rearview auto-dimming mirror with garage door opener, and digital compass (if equipped)

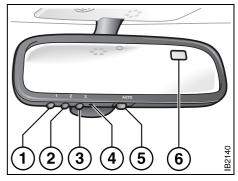
## **∕ NARNING**

Make sure that people and objects are out of the way of a 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. Therefore it is advised to park outside of the garage.

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, signalling 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.

Retain your original garage door 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.



Buttons for garage opener and compass

- 1-3 Garage opener
- 4 LED
- 5 Compass/auto dimming ON/OFF
- 6 Compass bearing

#### Preparations for first-time programming

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

Press and hold the two outer buttons until the indicator light begins to flash-after 20 seconds. Release both buttons. Do not hold for longer that 30 seconds. The garage opener is now in the train (or learning) mode and can be programmed at any time beginning with "Programming" - step 2.

#### **Programming**

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.

**Do not repeat "Programming" - step two** to train additional devices to a second or third button. Begin with "Programming" - step three.

- 1 Turn the ignition ON.
- 2 Press and hold the two outer buttons (buttons one and three) - releasing only when the indicator light begins to flash (after 20 seconds). **Do not** hold the buttons for longer than 30 seconds and **do not repeat step two** to program a second and/or third hand-held transmitter to the remaining two buttons.
- 3 Position the end of your hand-held transmitter 1-3 inches (5-14 cm) away from the button you wish to program while keeping the indicator light in view. The

- transmitter should face the mirror from below or left side of the mirror.
- 4 Simultaneously press and hold both the chosen and hand-held transmitter buttons. Do not release the buttons until step 5 has been completed.

**Note:** Some gate operators and garage door openers may require you to replace this Programming Step 4 with procedures noted in the "Gate Operator / Canadian Programming" section.

- 5 After the indicator light changes from a slow to a rapidly blinking light, release both the mirror and hand-held transmitter buttons.
- 6 Press and hold the just-trained button and observe the indicator light. If the indicator light stays on constantly, programming is complete and your device should activate when the button is pressed and released.

**Note:** To program the remaining two buttons, begin with "Programming" - **step three. Do not repeat step two**.

If the indicator light blinks rapidly for two seconds and then turns to a constant light continue with "Programming" steps 7-9 to complete the programming of a rolling code equipped device (most commonly a garage door opener).

7 At the garage door opener receiver (motor-head unit) in the garage, locate the "learn" or "smart" button. This can usually be found where the hanging

- antenna wire is attached to the motor-head unit.
- 8 Firmly press and release the "learn" or "smart" button. (The name and color of the button may vary by manufacturer.)

**Note:** There are 30 seconds in which to initiate step nine.

9 Return to the vehicle and firmly press, hold for two seconds and release the programmed button. Repeat the "press/hold/release" sequence a second time, and, depending on the brand of the garage door opener (or other rolling code equipped device), repeat this sequence a third time to complete the programming process. The garage opener should now activate your rolling code equipped device.

**Note:** To program the remaining two buttons, begin with "Programming" - *step three*. Do not repeat step two.

#### **Gate Operator / Canadian Programming**

Canadian radio-frequency laws require transmitter signals to "time-out" (or quit) after several seconds of transmission - which may not be long enough for the garage opener to pick up the signal during programming. Similar to this Canadian law, some U.S. gate operators are designed to "time-out" in the same manner.

If you live in Canada or you are having difficulties programming a gate operator by using the "Programming" procedures (regardless of where you live), replace "Programming" step 4 with the following:

**Note:** If programming a garage door opener or gate operator, it is advised to unplug the device during the "cycling" process to prevent possible overheating.

10 Continue to press and hold the button while you press and release - every two seconds ("cycle") your hand-held transmitter until the frequency signal has successfully been accepted by the garage opener. (The indicator light will flash slowly and then rapidly.)

Proceed with "Programming" step five to complete.

#### **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 single button

To program a device to the garage opener using a button previously trained, follow these steps:

- 1 Press and hold the desired button. DO NOT release the button.
- 2 The indicator light will begin to flash after 20 seconds. Without releasing the button, proceed with "Programming" - step 3.

#### Erasing the three buttons

To erase programming from the three buttons (individual buttons cannot be erased but can be "reprogrammed" as outlined below), follow the step noted:

 Press and hold the two outer buttons until the indicator light begins to flash-after 20 seconds. Release both buttons. Do not hold for longer that 30 seconds. The garage opener is now in the train (or learning) mode and can be programmed at any time beginning with "Programming" step 3.

#### Opening a garage door

To operate, simply press and release the programmed button. Activation will now occur for the trained device (i.e. garage door opener, gate operator, security system, entry door lock, home/office lighting, etc.). For convenience, the hand-held transmitter of the device may also be used at any time.

#### 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.

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

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

#### Canada only:

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

## Rearview auto-dimming mirrors (accessory)

The autodimming is activated and deactivated with a short push on button 2.

If the mirror is equipped with Garage Door Opener (option) the letter 1 is displayed on compass bearing display briefly when auto dimming is activated. When deactivating the letter 0 is displayed.

The interior rearview mirror has two sensors, one forward-facing and one rear-facing. They also activate and deactivate the auto dimming feature on door mirrors.

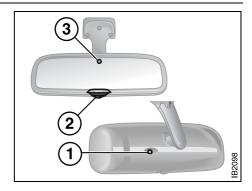
The system is activated when the forward-facing sensor detects that it is dark outside and the rear-facing sensor detects. For example, if the car following has not dimmed its headlights. The rearview mirrors are then darkened to prevent the strong light source from dazzling the driver. This darkening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

The mirrors return to their normal states when the strong light source diminishes.

The auto dimming 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 sense light from the trailer.

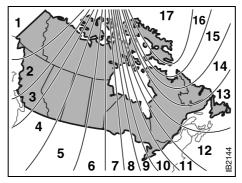


- 1 Forward-facing sensor
- 2 ON/OFF switch, auto dimming function
- 3 Rear-facing sensor

#### Compass

The compass is integrated in 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.

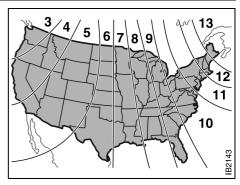


Compass zones in Canada

#### **Changing zones**

The earth's magnetic fields vary 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.

- 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 seconds). The zone number setting now is 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 US

#### Calibration

Calibration is performed automatically during travel. If an accessory, such as a mobile phone, is fitted and it can be assumed that the compass is affected, the compass may need to be calibrated manually.

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

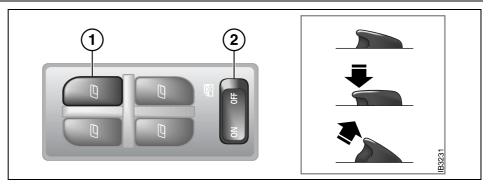
#### **Electric windows**

## **WARNING**

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

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

The electric motors of the front windows are equipped with overload protection (integrated thermal protection). This protection operates when the windows are wound down automatically (switch pressed fully down).



- 1 Window switches
- 2 Switch for rendering rear door window switches inoperative

#### To open:

Front windows: press the front of the switch Rear windows: Press the back of the switch.

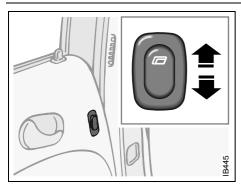
The switches for the front windows have a third position for automatic opening of the window. Press the switch fully down to lower the window completely.

To cancel automatic lowering of the window, lift the switch briefly.

#### To close:

Front windows: Lift the front of the switch.
Rear windows: Lift the back of the switch.
The actuating motor will be switched off
automatically when the window is fully

closed or when the switch is released



Switch for rear side window

## Child safety: rear windows (ON/OFF)

The window switches on the rear doors can be rendered inoperative by the ON/OFF switch in the panel on the center console. When the switch is ON, the rear side windows can be operated by the switch on each rear door. The switch's back lighting will be activated.

When the switch is OFF, the rear side windows can only be operated from the panel on the center console. When off, the switch's back lighting will also be switched off.

#### Sunroof

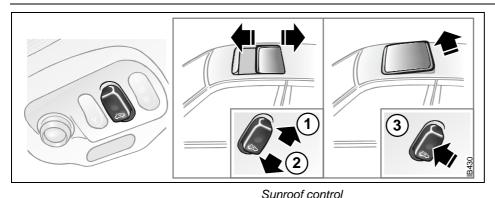
(if equipped)

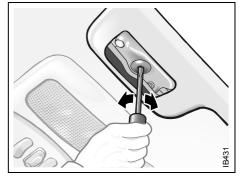
## **♠** WARNING

Bear in mind the pinch hazard when closing the sunroof.

- Always remove the ignition key when you leave the car. This prevents personal injury caused by the electric sunroof, for example, due to children playing.
- The person operating the electric sunroof is responsible for ensuring that no one, especially children, has their head, hands or fingers in the opening, before closing the sunroof. Operating the sunroof could otherwise cause serious or fatal injuries.

The sunroof is operated by the switch on the overhead panel above the rearview mirror. The sunroof can be opened partially or fully.





Manual operation of sunroof

- 1 To open
- 2 To close
- 3 Ventilation position

#### To open:

 Slide the control towards the rear to open the sunroof to the comfort position. To open it fully, slide the control back a second time. Press the control to stop it earlier.

#### To close:

 Slide the control forwards until the sunroof is closed.

#### **Ventilation position**

- Press the middle of the control (when sunroof closed).
- To close: slide the control forwards.

To fully open the sunroof from the ventilation position, slide the control back.

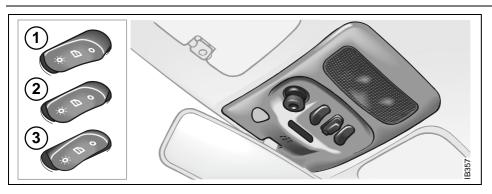
The sunroof incorporates an interior, manual, sliding sun blind.

After the car has been waxed, the sunroof may squeak or squeal on opening to the ventilation position. If this should occur, fully open the sunroof and, using washer fluid, wash the seal along the front edge, together with the paintwork that is in contact with the seal when the roof is closed.

#### **Emergency operation of sunroof**

In an emergency (e.g. if there is an electrical failure) the sunroof can be operated by a screwdriver. Remove the cover at the front of the sunroof opening, insert a screwdriver in the groove, and rotate.

Rotate counterclockwise to close sunroof.



- 1 Interior lighting on continuously
- 2 Lighting comes on when a door is opened
- 3 Lighting always off

## Interior lighting

The interior lighting consists of one dome light in the front and one in the back, a map-reading light in the front, two reading lights in the back, floor courtesy lights in the front (in some model variants) and door courtesy lights on all doors.

The courtesy lights come on automatically when the respective door is opened. Each reading light has its own switch adjacent to the lamp.

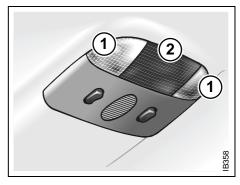
The switch for the dome lights is on the front overhead panel. When the switch is in the mid-position (door-activated), the interior lighting will come on:

- When the car is unlocked from the outside.
- · When any door is opened.
- When the ignition key is withdrawn from the ignition switch.

When the switch on the overhead panel is in the mid-position, the lighting is switched off automatically 30 seconds after the last door has been closed or when the ignition is switched ON.

There is also a light in the sun visors. The light comes on when the cover over the vanity mirror is opened.

When the ignition is OFF, if a door has been left open for 20 minutes, the interior lighting will be switched off automatically to save the battery.

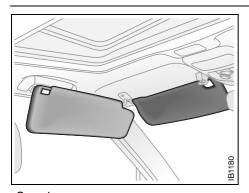


- 1 Reading lights
- 2 Dome light

#### **Luggage-compartment lighting**

The luggage-compartment lighting comes on automatically when the trunk is opened and goes out when the trunk is closed.

The lighting will also be switched off automatically after 20 minutes if the trunk has been left open.

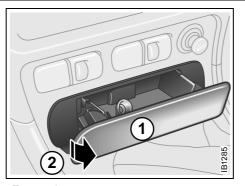


Sun visor

#### **Sun visors**

The car is equipped with double sun visors. One section of the visor can be independently pivoted to the side window.

A vanity mirror is provided on the back of the sun visors. The vanity mirrors are illuminated when the cover is raised.



#### Front ashtray

- 1 Press soft to open/close
- 2 Pull out one side at an angle

## **Ashtrays**

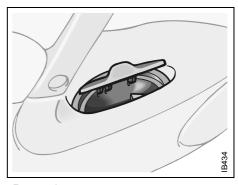
#### (accessory)

The car can be equipped with three ashtrays: one in the instrument panel fascia, and one in each rear door. A cigarette lighter is fitted adjacent to the front ashtray, and there is also one in the back of the center console.

#### Front ashtray

- 1 To open the ashtray, push gently on the center/upper part of the front and release to allow it to spring out.
- 2 Close the ashtray in the same way.

To remove the ashtray, open it and after that pull left side out at an angle.



Rear ashtray

To refit, line up the slots on either side and slide it closed.

#### Rear ashtrays

Open the lid to use ashtray.

To remove the ashtray, fully open the lid and lift the ashtray straight out.

To refit the ashtray, make sure it engages the two square recesses in the door trim.

## Cigarette lighters

#### (accessory/certain markets only)

The car is provided with cigarette lighters next to the front ashtray and in the rear end of the center console.

The cigarette lighter socket can also be used as power point, e.g. for a mobile phone. The ignition should be in the ON position.

The cigarette lighter sockets can also be used for accessories (e.g. to charge a mobile phone) when the ignition is ON.

## **WARNING**

The maximum combined load for the two cigarette lighter sockets is 240 W (20 A).

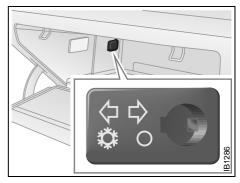
## **Glove compartment**

## NARNING

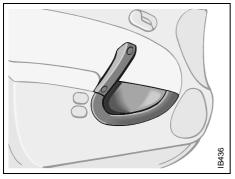
The glove compartment must be closed while travelling. An open glove compartment door could cause leg injuries in the event of a crash.

The glove compartment can be cooled by the air conditioning (ACC) system. Cold air can be directed to the glove compartment for keeping drinks cool, etc.

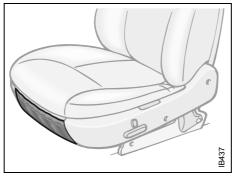
Slide the cover to open/close the air inlet. Additional storage facilities are provided (see next page).



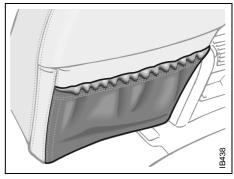
Sliding cover in glove compartment to admit cold air





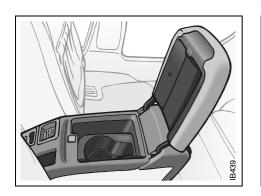


On leading edge of front seats



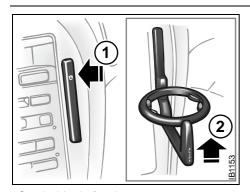
On the back of the front seats

#### Console between front seats



Center armrest for rear seat





Cup holder in fascia
1 Press symbol to open

#### 2 Lift bottom to close

## **Cup holders**

Cup holders are provided in the instrument panel fascia, in the center console compartment between the front seats, and in the rear-seat armrest (certain variants only).

To access the cup holder in the instrument panel, press the symbol and release.

To access the cup holder in the rear seat armrest, lower the armrest and press the front edge of the holder. Close in the same way.

The number of cup holders provided may vary between models.

## **MARNING**

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

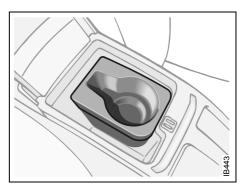
# 1544 1644

Cup holder in rear armrest (if equipped) Press the edge to open/close.

#### NOTICE

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

Cup holder in center console (if equipped)



#### Trunk

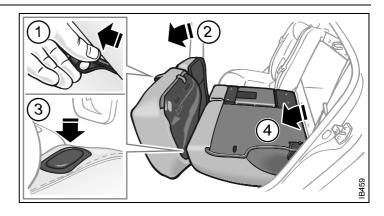
#### Folding the rear seat, 9-5 Sedan

The rear seat is split and the two sections can be folded independently. Folding down of the rear seat is easier if the front seats are not all the way back, and the rear head restraints are folded down.

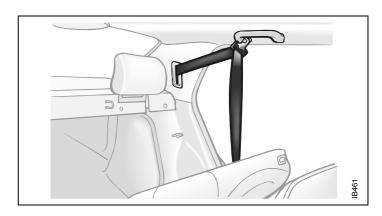
- 1 Raise the rear seat cushions by pulling the loop located between the cushion and the backrest.
- 2 Tip the seat cushion forward.
- 3 Press the button adjacent to the respective backrest to release it.
- 4 Fold down the backrest.

## **MARNING**

- Rear-seat passengers should always ensure that the head restraint is raised and in proper position for the seats to be occupied.
- · Keep hands well clear of all moving parts.
- Never place heavy objects on the rear window shelf. There is always a danger of loose objects flying about and causing injury if the car should brake suddenly or be involved in a crash.
- Before folding up the backrest, hang the outer safety belts onto the hook on the respective courtesy handle to prevent them from becoming trapped.
- Check that the back rest release button (3) is flush with the surround before entering the rear seat.



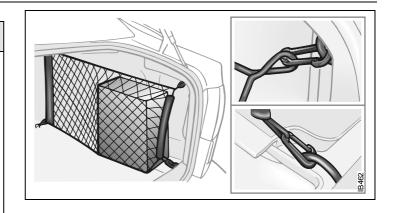
#### Outer safety belt hooked onto courtesy handle



## **M** WARNING

- Place heavy items closest to the backrest and stow smaller and lighter items on top.
- Never overload the cargo net (accessory). If the elastic breaks this may cause personal injury. Do not use a cargo net that shows signs of wear.
- Secure heavy and bulky items using the tie down points 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 (see page 123).
- Secure small items if the backrest is folded down or the load-through hatch is open. Small items can also be thrown around inside the car and cause personal injury.
- Do not exceed the load capacity of the car, as this will alter its handling characteristics (see page 252).
- Make sure that the seat cushions and backrests are properly secured when folding them back to their normal position.
   Check that the button (item 3 on page 121) is flush with the surround before entering the back seat.

The tail pipe of the exhaust system can become very hot during driving. Bear this in mind when loading and unloading the car so that children, for example, do not burn themselves.



#### Trunk pass-through hatch

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

Items should not weigh more than 33 lbs. (15 kg) nor be more than 2 yards (2 metres) in length. See the label on the hatch.

- 1 Fold down the armrest.
- 2 Raise the hatch by lifting the handle.

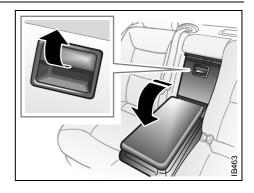
Before loading or unloading long items, switch off the engine and apply the handbrake. This averts the danger of the car moving off suddenly if a long item were to knock the gear or selector lever into gear.

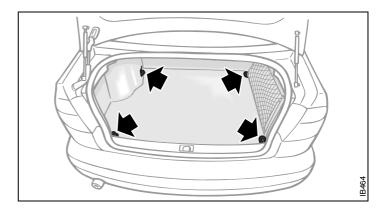
## **MARNING**

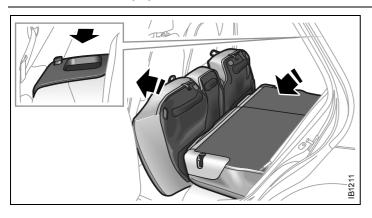
- Anchor the load securely (e.g. using middle safety belt) to avoid danger of injury resulting from displacement of load on hard braking.
- Do not exceed the load capacity of the car, as this will alter its handling characteristics (see page 252).

#### **Tie Downs**

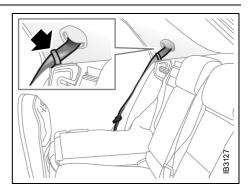
The tie downs for securing the load are fitted inside the trunk. Place the load as far in as possible.







Safety belt located in its belt clip



#### Folding the rear seat, 9-5 SportWagon

Both the narrow and wide sections of the rear seat can be folded separately. Folding is facilitated if the front seats are not located too far back. The wide section cannot be folded separately if a cargo net (accessory) is mounted on the rear of the backrest.

- 1 Make sure that the head restraint is in the down position. For height adjustment refer to page 15.
- 2 Put the safety belts for the outer seat places in their respective belt clips, which are located near the backrest (see illustration).
- 3 Raise the rear seat cushions by pulling the loop located between the cushion and the backrest.
- 4 Fold the narrow section (right) of the backrest forward by raising the opening handle on the right-hand side.
- 5 Fold the wide section of the backrest forward in the corresponding manner.
- 6 Adjust the front seats for optimal driving/passenger comfort.

#### NOTICE

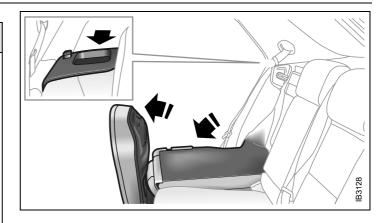
The safety belts for the outer seating positions should be put in their respective belt clips near the backrest to prevent them from being pinched when the rear seat is raised to the upright position.

Alternative location of the parcel shelf if this is removed:

- Folded up on the floor at the rear of the luggage compartment.
- On edge behind the backrests of the front seats.

### **WARNING**

- Do not travel in the back seat without ensuring that the head restraint is set at a suitable height for the seats to be occupied.
- Never allow anyone to sit on a folded backrest.
- Always be aware of the risk of pinching when handling moving parts of the seating.
- Never place heavy objects on the parcel shelf. There is always a danger of loose objects flying about and causing injury if the car should brake suddenly or be involved in a crash.
- Make sure that the backrests are locked when they are folded back upright. Check that the two red warning-indication flags are fully down. This indicates that the backrests are locked.
- Check that the safety belt lock is not trapped under the seat cushions when these are raised back up.
- If the car is equipped with a pull-out cargo net (accessory) on the rear of the backrest, take extra care when folding the rear seat so that no one is injured by the net's storage cassette on the right-hand side.



#### Folding the narrow section of the backrest

The folding is facilitated if the front seat is not too far back.

- 1 Make sure that the head restraint is in the down position. For height adjustment refer to page 15.
- 2 Put the safety belt in the belt clip near the backrest.
- 3 Raise the rear seat cushion by pulling the loop located at the rear of the cushion.
- 4 Fold the narrow section (right) of the backrest forward by raising the opening handle.
- 5 Adjust the front seat for optimal passenger comfort.

#### NOTICE

The safety belts for the outer seating positions should be put in their respective belt clips near the back rest to prevent them being pinched when the rear seat is raised to the upright position, see illustration page 124.

#### Load anchoring

## **WARNING**

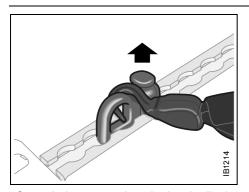
- Put heavy loads as low down and as far forward as possible in the luggage compartment, i.e. against the back of the rear seat.
- Never overload the cargo net (accessory). If the elastic breaks this may cause personal injury. Do not use a cargo net that shows signs of wear.
- Never stack cargo so high that any part of the cargo lies above the edge of the backrest, if a cargo guard (accessory) is not being used.
- Always tie down the cargo so that it cannot be thrown forward during heavy braking or in the event of a crash.
- Unsecured and heavy cargo can increase the risk of injury during hard braking, sudden avoidance maneuvers and in the event of a crash.
- For the best load anchoring, use the special cargo bolts and load straps (accessory).
- Load the cargo bolts evenly. Never attach more than one strap to each tie down eye.

- Provide protection on sharp edges to prevent damage to the load straps.
- Never use the elastic floor net (accessory) and elastic side net (accessory) when the rear seat is folded down.
   These nets are only intended to keep light objects tidy, not for the anchoring of loads.
- If possible, avoid having the rear seat folded down when driving with a heavy load because the anchoring possibilities are restricted when the rear seat is in this position. That the rear seat is in the upright position is a basic requirement for protection against cargo displacement in the event of a crash.
- Cargo can intrude into the passenger compartment during a sudden stop or front crash if the outer safety belts are not fastened. Check that the two red warning-indication flags are fully down. This shows that the backrests are locked.

## **MARNING**

- Match the speed and driving style according to how the car is loaded.
   The driving characteristics of the car can be affected because the center of gravity is altered when there is a cargo in the luggage compartment.
- An object weighing 55 lbs. (25 kg) corresponds to a weight of 2200 lbs. (1000 kg) in a head on crash at 32 mph (50 km/h).
- Adjust the car's load (passengers and luggage) so that the gross vehicle weight or the axle weight is not exceeded, see page 252.

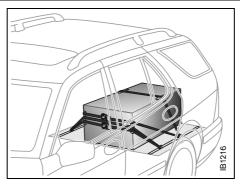
Driving with the trunk lid/tailgate open, see page 171.



Cargo bolts mounted on the longitudinal rails (if equipped)

On the floor of the luggage compartment there may be two longitudinal aluminium rails (CargoTracks<sup>TM</sup>) where accessory cargo bolts can be mounted.

The cargo bolts are mounted by lifting their locks and inserting them into the rail. Each cargo bolt is moved in the following way: pull up its lock and at the same time move it forward or backward to the desired position.



Example of cargo anchoring

Items for load anchoring:

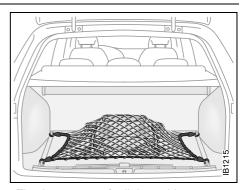
- · Cargo bolts (accessory).
- Special load straps (accessory).

Items to keep light objects tidy (accessories):

- · Elastic floor cargo net (accessory).
- Elastic side cargo net for the right-hand side of the luggage compartment (accessory).

The elastic nets may only be used to keep light objects tidy, not for anchoring.

The floor net should be attached to the cargo bolts that are mounted on the Cargo-Tracks $^{TM}$ . Place the tie down eyes as far forward and as far back as possible on the Cargo-Tracks $^{TM}$ .



Elastic cargo net for lighter objects.

The side netting should be attached to the two tie down eyes which are included in the accessory kit and to two of the eyes mounted on the right-hand CargoTrack™ on the floor.

The cargo bolts, load straps and elastic nets are stored in the two floor lockers on the right- and left-hand side of the luggage compartment. The lockers are opened by lifting the respective fabric loop.

#### **NOTICE**

Do not place any objects so that the demisting and antenna elements on the inside of the window could be damaged.

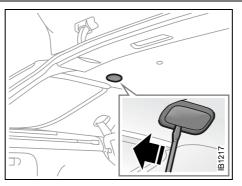
## Cargo net (option)

## **WARNING**

The cargo in the luggage compartment must be anchored properly, even if the cargo net is correctly in position. The only purpose of the net is to prevent light objects from being thrown about in the cabin during heavy braking or in the event of a crash.

Install the net behind the rear seat backrest.

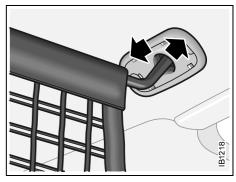
- 1 Remove the rearmost covers from the roof.
- 2 Fasten the attachments at the top of the net to the two attachment points in the roof.
- 3 Secure a lashing eye furthest forward on each of the CargoTracks (see previous page). Attach the hooks on the net to these eyes. Tension the straps.



Cover over the fixing point for the cargo net

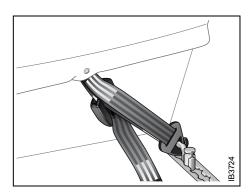
You can also install the cargo net directly behind the front seats when the rear seats are folded.

- 1 Remove the front covers from the roof.
- 2 Fasten the attachments at the top of the net to the two attachment points in the roof.
- 3 Wrap each strap around the tube running under the rear edge of each front seat and attach the hook to the eye on the strap.



Attaching the cargo net to the roof

#### Hook attached to a lashing eye

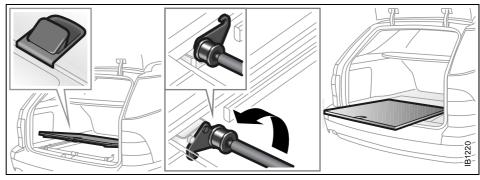


## Sliding load floor (accessory)

## **WARNING**

To avoid personal injury take note of the following:

- Do not leave children unsupervised when the sliding floor is drawn out.
- Be aware of the risk of pinching when handling the sliding floor.
- Never drive the car with the sliding floor pulled out.
- Always use the car's regular cargo anchoring when transporting a cargo.
- Provide protection on sharp edges to prevent damage to the anchoring straps.
- The sliding floor must not be changed or modified in any way.
- Put the sliding floor in the folded-down position when it is not in use.



Setting up the sliding floor

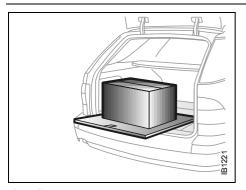
The function of the sliding floor is to facilitate loading and unloading.

Securing loads, see page 123.

When the car is parked and the floor is pulled out, it can bear the weight of two people (maximum 440 lbs./200 kg).

#### Setting up

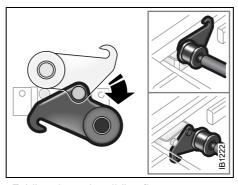
- 1 Lift up the floor.
- 2 Fold out the support wheels.
- 3 Set the floor down on the support wheels.



Loading

#### Loading/Unloading

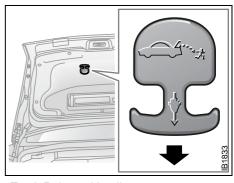
- 1 Lift the handle and pull out the sliding floor to the outer locking position. Make sure that the floor is locked correctly.
- 2 Put on the cargo, but make sure that it does not cover the handle.
- 3 Lift the handle and push in the floor to the inner locking position. Make sure that the floor is locked correctly.
- 4 Tie down the load with Saab's load straps according to the instructions, see page 126.



Folding down the sliding floor

#### When the floor is not in use

- 1 Lift up the floor.
- 2 Fold down the support wheels.
- 3 Lay down the sliding floor and make sure that it is locked in its lower position.



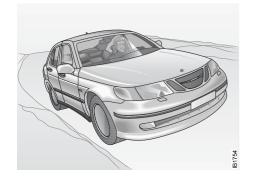
Trunk Release Handle

#### **Trunk Release Handle**

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

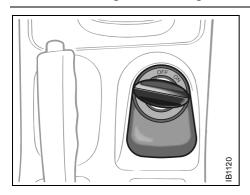
#### **NOTICE**

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



## **Starting and driving**

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## **Ignition switch**

The combined ignition switch and gearlever lock is located in the center console between the front seats. The ignition key can only be removed when reverse is engaged (automatic transmission: selector in "P" position).

The key fits all the locks on the car. The key number is specified on the small plastic strap that comes with the keys when the car is delivered. Keep a note of the key number in a safe place, as you will need to quote it if ordering a replacement key.

See also page 38.



#### **LOCK** position

Engage reverse and turn the key to LOCK. Automatic transmission: select "P".

The gear lever is locked. This is the only position in which the key can be removed.

The parking lights, hazard warning lights and interior lighting all work.



#### **OFF** position

Gear lever no longer locked.

Certain electrical circuits operational



#### **ON** position

All electrical circuits working. **Do not leave the key in the ON position when the engine is not running.** Turn the key to OFF to switch off the electrical circuits. In the ON position certain warning and indicator lights come on as a check, and they normally are extinguished after about 3 seconds.



#### ST (starter) position

The starter operates when the key is turned to this position. When released, the key will spring back to the ON position. If the engine fails to start, the key must first be turned back to the position between OFF and LOCK before the starter can be operated again.

When the starter motor is running, several electrical circuits are disconnected to facilitate starting.

#### **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 key before leaving the car.
- Always apply the parking brake before removing the ignition key.

#### If the car does not start

If the text

"Key not accepted.

Contact service."

is shown on the SID, after a failed start attempt, the cause could be a fault in the transmitter in the key, or in the receiver in the ignition lock. The following should be done:

- Turn the key back to the LOCK position.
- Turn the key to ON.
- Press one of the buttons on the remote control (the LED stops blinking).
- Start the engine.

Try another key. If this works, then the fault is in the first key.

Contact an authorized Saab dealer for checking and rectification.

Note:

Certain electronic items, such as cellular phones, may affect the starting producedure. Be sure that all devices are clear of the key/ignition switch area.

## Starting the engine

## **MARNING**

- When starting the engine:
- Sit down in the driver's seat.
- Depress the clutch pedal fully. If the gear lever is not in the neutral position, the clutch pedal must be fully depressed or the car will jump forwards or backwards, which may cause a crash.
- Never start the car from outside the vehicle, e.g. through a wound down window. This could lead to serious personal injury.
- Engage reverse (R) (position P for automatic transmission) to remove the ignition key. The key can only be removed in this gear position.
- Carbon monoxide (CO) is a colorless, odorless, poisonous gas. Be alert to the danger of CO – always open the garage doors before starting the engine in the garage.
- There is also a danger of CO poisoning if the exhaust system is leaking.

- The tail pipe of the exhaust system can become very hot during driving. Bear this in mind when loading and unloading the car.
- 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.

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 guite normal and does not indicate any malfunction, it is advisable not to exceed 3,000 rpm before the noise has disappeared.

The hydraulic cam lifters are completely service free; the valve clearance is set up at the factory and will not need any subsequent adjustment.

#### Starting the engine

Avoid racing the engine or putting a heavy load on it before it has warmed up. Drive away as soon as the oil warning light has been extinguished to enable the engine to attain its normal temperature as quickly as possible.

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 Depress the clutch pedal fully but do not touch the accelerator.
- 2 Start the engine. Let the ignition key spring back as soon as the engine has started and is running smoothly - at very low temperatures, you may need to run the starter for up to 25 seconds. Wait 20-30 seconds before running the starter again, to give the battery time to recover.

#### Note:

On cars with manual transmission, if the starter fails to engage when the ignition key is turned to the start position, make sure the clutch pedal is full depressed. Mispositioned floor mats or other obstructions under the clutch pedal may affect starting. Let the engine idle for about 10 seconds. Do not open the throttle wide for at least 2-3 minutes after starting.

#### Cars with automatic transmission

- 1 The selector lever must be in the P or N position.
- 2 Keep your foot on the brake pedal.
- 3 Start the engine. Let the ignition key spring back as soon as the engine has started and is running smoothly—at very low temperatures, you may need to run the starter for up to 25 seconds. Wait 20-30 seconds before running the starter again, to give the battery time to recover.

Let the engine idle for about 10 seconds. Do not open the throttle wide for at least 2-3 minutes after starting.

## Useful tips on cold climate starting

If the engine has failed to start after several attempts in very cold weather, press and hold the accelerator down to the floor and run the starter for 5–10 seconds. This will prevent the engine being flooded (excessively rich fuel-air mixture).

Now start the engine in the normal way – do not touch the accelerator.

If the engine stalls immediately after starting (e.g. if the clutch was released too quickly), do not touch the accelerator when restarting the engine.

#### Limp-home mode

The engine management system has a diagnostic feature that continually checks a number of internal functions. If, for example, a fault is detected in the throttle valve, the engine management system will go into Limp-home mode. This limits idling control, disables the cruise-control system and limits the capacity of the A/C compressor.

If the limp-home mode is in operation ("Engine malfunction (CHECK ENGINE)" light on, see below) and the outside temperature is close to or below freezing, you may need to use some throttle on starting (some pressure on the accelerator).

If the diagnostic system has detected a fault in the engine-management system, the "Engine malfunction (CHECK ENGINE)"

light on the main instrument panel will come on (see page 55), indicating that you should have the car checked as soon as possible by an authorized Saab dealer.

#### **NOTICE**

If the CHECK ENGINE warning light starts to flash, ease off the accelerator slightly. If the light does not cease to flash within 5 seconds, stop the car in a suitable place as soon as possible and turn off the engine. The car must be towed to an authorized Saab dealer.

If the CHECK ENGINE warning light flashes, it indicates that the engine is misfiring which can result in damage to the catalytic converter.

## Important considerations for driving

The engine-management system in the Saab 9-5 is called Saab Trionic T7. The system manages the ignition, fuel injection and turbo boost pressure.

The Trionic T7 system developed by Saab is an intelligent engine-management system designed to achieve optimum drivability under differing driving conditions. The system makes adjustments automatically, for instance, if the car is being driven at altitude (oxygen-deficient air), for different grades of fuel (AON 87–93) and for different load conditions.

- 1 Starting and driving
- Refrain from using full throttle before the engine has warmed up (before needle in mid-range on temperature gauge).
- A safety function prevents the engine from revving faster than 6,000 rpm by limiting the induction air.
- 2 Stopping the engine
- Do not rev the engine immediately before switching it off – stop the engine when it is idling.
- 3 Regulating the boost pressure
- 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. 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 adjusted automatically to the knocking or pinging tendency of the engine. Occasional, short-lived knocking when the engine is under a heavy load is perfectly normal; the extent will depend on the grade of fuel in the tank.
- Isolated instances of knocking are more likely to occur with low-octane fuel. This controlled form of knocking, followed by a reduction in the boost pressure, is a sign that the wastegate is functioning and is perfectly safe for the engine.

#### NOTICE

- If the engine sounds strange there is a fault in the system. Have the car checked without delay by an authorized Saab dealer.
- The use of fuel with too low an octane rating can cause serious engine damage.

## **MARNING**

If the engine is being run with the car on a rolling road or dynamometer, longer than for a standard state emission inspection, to ensure adequate cooling, air must be blown into the engine compartment and under the car at a rate equivalent to the ram-air effect that would be obtained at the corresponding road speed.

## Important considerations with catalytic converters

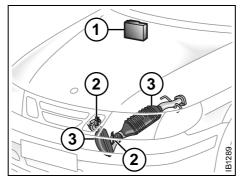
#### **NOTICE**

Use only unleaded gasoline. Leaded gasoline is detrimental to the catalyst and oxygen sensor and will seriously impair the function of the catalytic converter.

The catalytic converter is an emission-control device incorporated in the car's exhaust system. It consists of a metal canister with a honeycomb insert, the cells of which have walls coated in a catalytic layer (mixture of precious metals).

To ensure that the catalytic converter continues to function properly, and also to avoid damage to the converter and its associated components, the following points must be observed:

- Have the car serviced regularly in accordance with the service program. The fuel and ignition systems are particularly important in this context.
- Always be alert to any misfiring of the engine (not running on all cylinders) and any loss of power or performance. At the first sign of a malfunction, reduce speed and take the car to an authorized Saab dealer as soon as possible.
- If the engine fails to start (in very cold weather or if the battery is flat), the car can be push started (manual gearbox only) or started using jumper cables to a donor



Oxygen-sensor-controlled injection system

- 1 Engine control module
- 2 Oxygen sensor (lambda probe)
- 3 Catalytic converters

battery. However, as soon as you have started the engine, it is important that it runs on all cylinders. If it is misfiring, allow it to idle for up to five minutes to give it time to settle and run smoothly. If, after this time, the engine still fails to run properly, turn off the engine and get in touch with an authorized Saab dealer for advice.

- Never park the car on dry grass or other combustible material. The catalytic converter gets very hot and could therefore start a fire.
- Never drive off if the engine is misfiring.
- If you jump start the car when the engine is already up to normal temperature, the

engine must start to run on all cylinders. Stop jump-starting if the engine fails to start immediately.

#### **NOTICE**

If the car runs out of fuel, it is possible for air to get into the fuel system. If this happens, the catalytic converter may overheat and be damaged.

Failure to follow these directions could result in the catalytic converter and associated components being damaged, and could represent a breach of the warranty conditions.

## Refueling

## **MARNING**

If you spill fuel and then something ignites it, you could be badly burned. Fuel can spray out on you if you open the fuel cap too quickly. This spray can happen if your tank is nearly full, and is more likely in hot weather. Open the fuel cap slowly and wait for any "hiss" noise to stop. Then unscrew the cap all the way.

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.

#### **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.
- Clean fuel from painted surfaces as soon as possible.

#### **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 3 distinct clicks.
- Avoid driving with the fuel low level indicator illuminated. The symbol illuminates when less than approximately 2 gallons (8 litres) of fuel remains in the tank.

#### Refueling

## **WARNING**

If a fire starts while you are refueling, do not remove the nozzle. Shut off the flow of fuel by shutting off the pump or by notifying the station attendant. Leave the area immediately.

- 1 Switch off the engine.
- 2 Open the filler cap, located in the righthand 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 springcoil) rest on the flange. Do not withdraw the nozzle while filling is in progress.
- 4 Cease refueling the first time the pump stops, and wait a few seconds after you've finished pumping before you remove the nozzle.

#### NOTICE

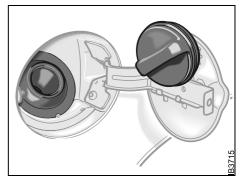
- · Fill to maximum filling capacity
- Stop filling after the first time that the nozzle trips to shut off the flow of fuel.
- Filling capacity can differ between different fuel stations and outside temperature. Fuel tank volume when nozzle trips to shut off, may vary by 0.5 gal. (2 liters).
- Do not fill fuel all the way up the filler pipe. The gasoline must be allowed room for expansion especially during hot weather.

#### Filler cap

When you put the filler cap back on, turn it to the right (clockwise) until you hear **three** clicks. Make sure you fully install the cap.

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

Before the onset of freezing temperatures in winter, it may be advisable to add gasoline anti-freeze to the fuel a few times to dispel any condensation in the system..



When refueling, hang the filler cap inside the fuel door

The fuel door has a built in filler cap holder slot located on the fuel door. Slide the white ring on the cap into the slot.

**Notice:** If you need a new fuel cap, be sure to get the right type. Your dealer can get one for you. If you get the wrong type, it may not fit properly

#### Filling a portable fuel container

## **WARNING**

Never fill a portable fuel container while it is in your vehicle. Static electricity discharge from the container can ignite the gasoline vapor. You can be badly burned and your vehicle damaged if this occurs. To help avoid injury to you and others:

- Dispense gasoline only into approved containers.
- Do not fill a container while it is inside a vehicle, in a vehicle's trunk, pickup bed or on any surface other than the ground.
- Bring the fill nozzle in contact with the inside of the fill opening before operating the nozzle. Contact should be maintained until the filling is complete.
- Do not smoke while pumping gasoline.

#### **Fuel (Gasoline Engine)**

#### **Fuel**

Use of the recommended fuel is an important part of the proper maintenance of your vehicle.

For optimum performance Saab recommends:

- 2.3t 185 hp (Linear) AON 90.
- 2.3T 220 hp (Arc) and
   2.3 Turbo 250 hp (Aero) AON 93.

#### **Gasoline Octane**

For the 2.3T and 2.3 Turbo, use premium unleaded gasoline with a posted octane of 93 or higher for best performance. For the 2.3t, use a mid-grade with a posted octane of 90 for best performance. You may also use regular unleaded gasoline rated at 87 octane or higher, but your vehicle's acceleration may be slightly reduced. If the octane is less than 87, you may get a heavy knocking noise when you drive. If this occurs, use a gasoline rated at 87 octane or higher as soon as possible. Otherwise, you might damage your engine. A little pinging noise when you accelerate or drive uphill is considered normal. This does not indicate a problem exists or that a higher-octane fuel is necessary. If you are using 87 octane or higher-octane fuel and hear heavy knocking, your engine needs service.

#### **Gasoline Specifications**

It is recommended that gasoline meet specifications which were developed by automobile manufacturers around the world and contained in the World-Wide Fuel Charter which is available from the Alliance of Automobile Manufacturers at www.autoalliance.org/fuel\_charter.htm. Gasoline meeting these specifications could provide improved driveability and emission control system performance compared to other gasoline.

#### California Fuel

If your vehicle is certified to meet California Emission Standards (see the underhood emission control label), it is designed to operate on fuels that meet California specifications. If this fuel is 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 may turn on and 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. If it is determined that the condition is caused by the type of fuel used, repairs may not be covered by your warranty.

#### **Additives**

To provide cleaner air, all gasolines in the United States are now required to contain additives that will help prevent engine and fuel system deposits from forming, allowing your emission control system to work properly. You should not have to add anything to your fuel. However, some gasolines contain only the minimum amount of additive required to meet U.S. Environmental Protection Agency regulations. Saab recommends that you buy gasolines that are advertised to help keep fuel injectors and intake valves clean. If your vehicle experiences problems due to dirty injectors or valves, try a different brand of gasoline.

Gasolines containing oxygenates, such as ethers and ethanol, and reformulated gasolines may be available in your area to contribute to clean air. Saab recommends that you use these gasolines, particularly if they comply with the specifications described earlier.

Notice: Your vehicle was not designed for fuel that contains methanol. Do not use fuel containing methanol. It can corrode metal parts in your fuel system and also damage the plastic and rubber parts. That damage would not be covered under your warranty.

Some gasolines that are not reformulated for low emissions may contain an octane-enhancing additive called methylcyclopentadienyl manganese tricarbonyl (MMT); ask the attendant where you buy gasoline whether the fuel contains MMT. Saab does not recommend the use of such gasolines. Fuels containing MMT can reduce the life of spark plugs and the performance of the emission control system may be affected. The malfunction indicator lamp may turn on. If this occurs, return to your authorized Saab dealer for service.

#### **Fuels in Foreign Countries**

If you plan on driving in another country outside the United States or Canada, the proper fuel may be hard to find. Never use leaded gasoline or any other fuel not recommended in the previous text on fuel. Costly repairs caused by use of improper fuel would not be covered by your warranty.

To check the fuel availability, ask an auto club, or contact a major oil company that does business in the country where you will be driving.

## **Engine Break-In Period**

Pistons, 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 during this period.

## Gear changing

#### **Manual transmission**

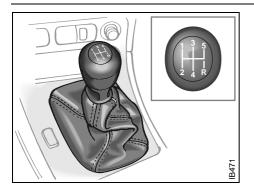
To start the engine the clutch pedal must be fully depressed.

The gear positions are marked on the gear lever. Before reverse (R) can be engaged, you must lift the ring underneath the gear-lever knob.

To change gear, fully depress the clutch pedal and then release it smoothly. It is inadvisable to drive with your hand resting on the gear lever, as this can increase the wear on the transmission.

When changing down from 5th to 4th gear, ease the gear lever straight back, without applying any lateral pressure. This will prevent 2nd gear being engaged by mistake, which can result in overreving and possible damage to the engine.

Before engaging reverse, wait till the car is at a standstill, release the accelerator and fully depress the clutch. From neutral, press the gear lever firmly to the right before easing it back into reverse.



#### NOTICE

When the reverse gear is to be engaged the car must be at a standstill with the accelerator fully released. Lift the reverse lock-out collar and push the gear lever firmly to the right in neutral before easing it into reverse.

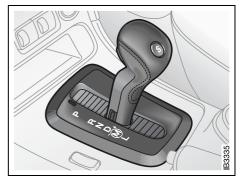
#### **Towing**

Towing of cars with manual transmission, see page 171.

#### **Automatic transmission**

## / WARNING

- Make it a habit to keep your foot on the brake when selecting a drive position, to prevent the car from creeping forward (or backward if reverse is selected).
- The car must be at a standstill before P, R or N is selected. You have to have your foot on the brake pedal to move the lever out of P. If the car is still moving when a drive position is subsequently selected, this could cause a crash or damage the automatic transmission.
- Never park the car with the selector lever in a drive position, even if the parking brake is on.
- If you want to leave the car with the engine running, move the selector lever to P or N and apply the parking brake.

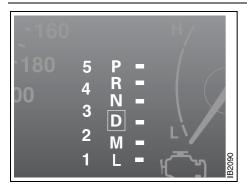


Selector lever

The electronic control module for the automatic transmission receives information on engine torque and road speed, and also controls the hydraulic pressure in the transmission to ensure that gear changing is as smooth as possible.

The position of the selector lever is shown by the symbols adjacent to the lever and also by an indicator on the main instrument panel. If manual mode (M) is selected, the current gear is also displayed on the main instrument panel.

The ignition key can only be removed when the selector lever is in the P position.



Selector-lever indicator on main instrument panel

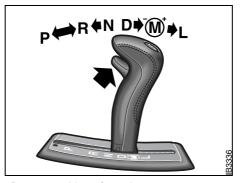
When the car is stationary, the engine must be at idling speed when the selector lever is moved.

## You must have your foot on the brake pedal to move the lever out of park.

If the accelerator is depressed while the lever is moved, this will result in abnormal wear in the transmission.

#### **NOTICE**

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



Detent positions for selector movement

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

Three modes for the automatic transmission can be selected: Normal, Manual and Sport.

#### Normal mode

The Normal mode, which provides the best fuel economy, is the default setting when the engine is started.

Manual mode (Sentronic): see page 148.

#### Sport mode

When the Sport mode is selected, the throttle angle is altered to provide more power at the same throttle setting. The transmission also changes up later than in Normal mode to provide higher performance. In this mode, the SPORT indicator will appear on the main instrument panel (see page 150).

#### Adaptive gear-change pattern

Adaptive gear-change pattern is a transmission function in the Normal and Sport modes which matches gear changing to current driving conditions. The transmission control module senses the load on the engine and temperature of the transmission. A suitable gear change pattern is then selected automatically to avoid unnecessary gear changes and undesired temperature increases in the transmission.

#### Lock-up function

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

When the lock-up function comes into operation, it may give the impression of an overdrive being engaged.

#### Kick-down

When the accelerator is pressed down hard, a change-down to the next gear will be effected to provide maximum acceleration, e.g. for overtaking.

Following this, the next higher gear will be selected at the optimum engine speed for acceleration or, if you ease off the accelerator, before reaching this.

#### Park Brake Shift Lock

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

#### **Shift Lock override**

#### **NOTICE**

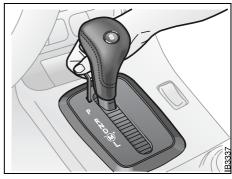
Due to electrical problems it may not be possible to move the selector out of the park position, even if the ignition is ON. If for some reason the selector has to be moved out of the park position (i.e. to tow the car a short distance) do as described below.

Check fuse No. 1 (see page 213). If the problem was cured by changing the fuse or battery, you do not have to contact a Saab dealer.

If the fuse blows again as soon as the Shift Lock feature is activated you should contact your Saab dealer.

If the fuse is OK, check the battery regarding the voltage.

- 1 Apply the parking brake
- 2 Make sure the key is in position ON
- 3 Use a small tool such as a screwdriver and push the lever (see picture) downwards so that the detent button can be pressed approx. 10 mm



- 4 Move the selector out of position P to N
- 5 Remove the tool
- 6 Release the parking brake if the car is to be moved immediately; otherwise keep it applied.



## Automatic transmission, fault indicator

If "Automatic transmission, fault indicator" light appears on the main instrument panel, the system has detected a fault in the automatic transmission or its control module (see page 57).

This also means that the Limp-home mode has been selected, to guard against further damage being done to the transmission. In this mode, the automatic transmission starts in 5th gear, and gear changes (if necessary) will have to be made manually. Stop the car in a safe place. Switch off then restart the appoint of the fault is intermittent.

restart the engine. If the fault is intermittent, the transmission will operate as normal despite the fault indicator being on. Have the car checked at an authorized Saab dealer.

It is not possible to select the SPORT or Sentronic mode when the Limp-home mode is active.

Gear changes must be made manually. The following gears will be engaged in the respective selector positions when the automatic transmission is in Limp-home mode:

Position	R	D	М	L
Gear	Reverse	5th	5th	2nd

#### **NOTICE**

If the control module has actuated the Limp-home function for the automatic transmission, the car will remain in 5th gear when D is selected, making it very sluggish.

Select position L to prevent unnecessary wear on the transmission. The transmission then starts in 2nd gear. Once the car is moving you can select position D.

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

#### Overheated transmission fluid

If the automatic-transmission fluid should overheat, the following message will appear on the SID:

"Gearbox too hot.

Make a safe stop."

In this event, stop the car in a suitable place, switch off the engine and open the hood. Wait for several minutes then turn on the ignition to check that the message has gone out. When driving subsequent to the transmission fluid overheating, select a gear in which the engine speed is about 3,000 rpm. Overheating of the automatic-transmission fluid can occur when the car is towing a heavyload, such as a camping trailer in hilly

fluid can occur when the car is towing a heavy load, such as a camping trailer in hilly country. High ambient temperatures can also increase the temperature of the transmission fluid or the oil cooler may be faulty. Contact an authorized Saab dealer (see also page 161).

## Driving on hilly roads 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 in Normal mode. 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. Contact an authorized Saab dealer (see also page 161).

## **WARNING**

Remember to use engine-braking (selector position D or L) to spare the brakes when you are driving on a long or steep downhill slope.

Brake failure can result from overheated brakes!

### **Towing**

Towing of cars with automatic transmission, see page 171.

### **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 a gear when you brake. If you desire more powerful engine braking, manually select a lower gear.

#### Sentronic, manual mode

Move the selector lever to the M position. Select a higher gear by flicking the right-

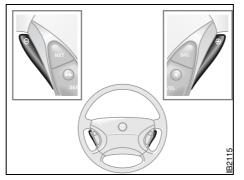
hand paddle towards you. Select a lower gear by flicking the left-hand paddle

towards you.

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.

Changes from 3rd to 4th and from 4th to 5th can be made when the engine speed is above roughly 2,000 rpm.

If you select a gear that is judged too high by the system, the selected gear position will be shown briefly on the main instrument panel and then the gear that is actually engaged.



Paddles on the steering wheel for changing gear manually

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

Manual gear selections are shown on the main instrument panel. The selector position and the current gear are displayed.

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

When in manual mode, kick-down operates for 4th and 5th gears (below 2,000 rpm). Kick-down cannot be activated in 1st, 2nd or 3rd gears.

For optimum performance, gear changes should be made before reaching 6,000 rpm. To avoid damaging the engine and transmission, the transmission will shift up a gear if the engine is in danger of overrevving. You may feel a slight jolt before this gear change is effected.

#### Selector positions



To shift out of the P position you must depress the brake pedal and the ignition must be ON.

The parking position (P) must only be selected when the car is at a complete standstill. The selector lever is locked and the transmission is mechanically immobilized. Always apply the parking brake after parking the car.

The engine can be started. The key can be removed.



The reverse (R) position must only be selected when the car is at a complete standstill. The detent-release button must be pressed before the selector lever can be moved to R. Wait until reverse gear has engaged (car starts to creep) before touching the accelerator.



In the Neutral position (N), the transmission is disengaged from the engine. The engine can be started, but first ensure that the parking brake is on, to prevent the car from moving off unexpectedly.

To prevent the engine and transmission from becoming hotter than necessary, select N for stops other than brief ones, e.g. if stuck in a traffic jam.

The normal drive position (D) is recommended for waiting at traffic lights.



The Drive position (D) is the position for normal motoring. Gear changes between 1st and 5th will take place automatically, the timing of which is determined by the throttle (accelerator) position and the speed of the car.

After moving the selector lever to D, pause to give the gear time to engage (car starts to pull).



Move the selector lever from position D to M to allow you to change gear manually. Refer to page 148.



Select position L if you wish to drive in 1st gear. No upchanges will be made if you pull off in position L. If you move the selector lever from position D or M to L at a high vehicle speed, the transmission will automatically shift down through 4th, 3rd and 2nd gears to 1st gear, depending on the car's speed. Use this position for descending steep hills if the car is heavily loaded to spare the brakes.

If you move the selector lever from D to L, down shifts will follow a set pattern to avoid damaging the engine or transmission.

Manual gear-changing is not recommended on slippery roads.

If one of the drive wheels spins excessively, the engine torque will be reduced to avoid damaging the transmission.

#### Adaptive gear-change patterns

Adaptive gear-change patterns are selected automatically depending on the engine load and the present temperature of the transmission. The function is available in Normal and Sport modes.

The changes occur at a higher engine speed and the car remains in the same gear for longer, if the transmission control module senses that the load has not decreased. These gear-change patterns prevent unnecessary changing up and down, when for example driving up or down long slopes with a trailer or caravan, and to prevent overheating the transmission oil. The adaptive gear-change function is also selected automatically when the transmission oil becomes too hot, to protect the transmission itself from damage and to lower the oil temperature.

The adaptive gear-change pattern function is deselected when:

- . The engine is switched off.
- The load is reduced so much that the function is no longer required.
- "Automatic transmission, fault indicator" appears on main instrument panel, see page 146.

#### SPORT modes



To select Sport mode, press the "S" button on the selector lever when the selector lever is in position N or D.

In this mode, gear changes will take place at higher engine speeds than in Normal mode, in other words, the transmission will change up later and change down earlier for the same throttle (accelerator) position.

The Sport mode will be deselected if:

- The S button is pressed.
- The selector lever is moved to position P,R, M or L.
- The engine is switched off.
- "Automatic transmission, fault indicator" appears on main instrument panel, see page 146.



### **Cruise control**

## **WARNING**

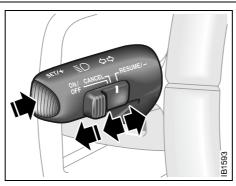
- Do not use the Cruise control system on wet or icy roads, in dense traffic or on winding roads.
- Set the control to OFF when you do not want to use the system, to prevent the system being activated inadvertently.

For safety reasons (brake system function) the brakes must be applied once, when the engine has started, before the cruise control system can be activated.

The system is operated by means of the controls on the stalk switch:

- ON/OFF (switch on/off).
- RESUME/- (Resume preset speed).
- SET/+ (to set the desired speed).
- CANCEL (Cancel operation of system, e.g. to reduce speed temporarily).

When the system is ON, the CRUISE indicator light will appear on the main instrument panel and will be extinguished when the system is switched OFF. If CANCEL is selected, CRUISE will flash once.



Cruise-control switches

#### To set the desired speed

Move the switch to ON. Accelerate to the desired speed (minimum speed: 25 mph (40 km/h))and press SET/+.

#### To increase the preset speed

Accelerate to the desired speed and press SET/+.

You can also increase the speed of the car using the SET/+ button. Press it once to increase the speed by 1 mph (1.6 km/h) or hold it in and release when the desired speed is reached.

#### Temporary increase in speed

Press the accelerator to override the preset speed, e.g. for overtaking.

When you release the accelerator, the system will revert to the preset speed.

#### To cancel temporarily

Move the control stalk to CANCEL (springloaded position before OFF position). This will disengage the system but the preset speed will be retained in the system memory. (The memory is deleted when the engine is switched off.)

### To re-engage the system

To revert to the preset speed, slide the switch to RESUME/–. This will only operate when the car's speed is above 25 mph (40 km/h).

#### To reduce the preset speed

The cruise control system will always disengage automatically the moment that either the brake pedal or the clutch pedal is depressed.

It is also possible to reduce the speed by means of the RESUME/– button.

Sliding the button to RESUME/– once will reduce the speed by 1 mph (1.6 km/h).

Holding the button in the RESUME/– position will effect a gradual reduction in speed until the button is released.

#### Disengaging the system

The system will be disengaged:

- When the brake or clutch pedal is depressed.
- When the switch is moved to CANCEL.
- · When the switch is moved to OFF.
- When the engine is switched off.
- When the selector lever is moved to position N (cars with automatic transmission).
- When the ESP system is operative for more than 1 second.

## **Braking**

To avoid the brakes becoming overheated, (e.g. when negotiating long descents with a drop of several hundred feet), select a low gear to use the braking effect of the engine. If the car has automatic transmission, move the selector lever to position D or L.

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

#### **Brake pad wear indicators**

The outboard brake pads on the front wheels incorporate pad-wear indicators. When the lining is down to 3 mm, the pad will produce a screeching, squealing or scraping noise when the brakes are applied. New pads should be fitted without delay.

Brake pads should only be replaced by an authorized Saab dealer.

To ensure optimum brake performance, it is recommended that you use only Saab original brake pads.

## **WARNING**

- It is prudent to try your brakes from time to time, especially when driving in heavy rain, through water collected on the road, in snow, on a wet road surface or in salty slush. In such conditions, the brakes may take longer than normal to take effect. To rectify this, touch the brake pedal periodically to dry the brakes out.
- The same applies after the car has been washed or when the weather is very humid.
- Avoid parking the car with wet brakes. Before parking, and if the traffic conditions allow, brake quite heavily so that the brake discs and pads warm up and dry.
- The brakes are power assisted and it should be kept in mind that the servo unit only provides the power assistance when the engine is running.
- The brake pressure required when the engine is off,(e.g. when the car is being towed) is roughly four times the normal pedal force required. The pedal also feels hard and unresponsive.

#### **ABS** brakes



- 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 hardwithout letting up (do not pump the pedal), declutching simultaneously, and steer the car to safety.

ABS (antilock braking system) modulates the brake pressure to the respective wheels. Wheel sensors detect if a wheel is about to lock, and the control module reduces the pressure to that wheel and then increases it once more until the tendency is detected again.

The brake system is equipped with an Electronic Brake-force Distribution device (EBD), which distributes the brake pressure between the front and rear wheels, in such a way as to achieve optimum braking performance irrespective of the car's speed and load.

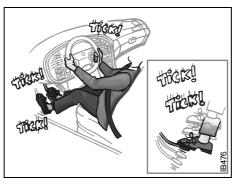
### 154 Starting and driving

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

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

When the ABS system is working, i.e. modulation of the brake pressure is in progress, the brake pedal will pulsate and a ticking noise will be heard. All this is perfectly normal.

Press the pedal **down hard** (you cannot press too hard) and steer the car to safety.



Braking with ABS brakes. When the system is operating, the brake pedal will pulsate gently and the system will make a ticking noise.



Braking with ABS - evasive steering

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

If the road is slippery, the ABS system will operate even when only light pressure is applied to the pedal. This means that you can brake gently to test the condition of the road and adapt your driving accordingly. It is well worth practicing the use of ABS brakes on a skid pad or other suitable facility.

# Electronic Stability Program (ESP)

## **WARNING**

When driving normally, ESP will help to improve the stability of the car. This does not mean that car can be driven faster. The same care and prudence as normally applied should be displayed on cornering and when driving on slippery roads.

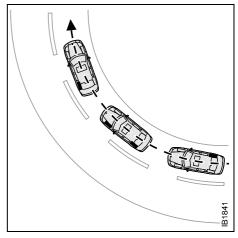
The Electronic Stability Program employs both the antilock braking system (ABS) and the traction control system (TCS). It is a system that helps the driver to stabilize the car in unusual circumstances that can otherwise be difficult to handle.

### 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 acceleration, lateral acceleration, steering wheel position and braking pressure. The values provided by these sensors are used to calculate the actual direction of the car. If this direction does not agree with that intended by the driver, calculated from the steering wheel position, the ESP is engaged.

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

To ensure that the system works as designed, the dimensions of all four tires must be the same.



Increased stability with ESP.
The system applies the brakes to the wheels as shown to help prevent the car from skidding

### **ESP** indicator light

The similar indicator light in the tachometer 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.

#### **ESP OFF**

The light in the rev counter comes on if:

- A fault has been detected and the system has therefore been switched off.
- The system has been switched off manually.
- When the ignition key is turned to the ON position, the lamp is lit for about four seconds while the system undergoes a self-test.

### **Turning ESP off**

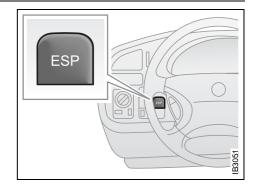
The system can be turned off manually with the ESP button, whereupon the light on the main instrument panel will come on. The ESP system cannot be switched off if the car is travelling faster than 35 mph (60 km/h).

The ESP is always operative during braking, even if it has been switched off manually.

#### **NOTICE**

Suspension modifications, such as changing the type of wheels, dampers or springs, can affect the function of the ESP system.

Always consult a Saab dealer before changing any suspension components.



## **Economical motoring**

## Factors affecting fuel consumption

Fuel consumption is greatly affected by the general driving conditions, the way in which the car is driven and at what speeds, the weather, the state of the road, the condition of the car, etc.

#### **Breaking-in**

Fuel consumption may be somewhat higher during the break-in period (the first 3,000–4,000 miles (5,000–7,000 km) than stated.

#### Weather conditions

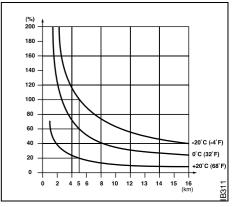
Fuel consumption can be as much as 10 % lower in summer than in winter. The higher consumption in cold weather is explained by the longer time it takes for the engine to reach normal operating temperature, and for the transmission and wheel bearings to warm up. Fuel economy is also affected by the distance driven: short journeys of 3–5 miles (5–8 km) do not give the engine enough time to reach normal temperature. Strong winds can also affect fuel consumption.

How to read the graph above:

If fuel consumption with the engine at normal temperature is 28 mpg (10l/100 km), the actual fuel consumption 3 miles (5 km) after the engine has started from cold will be:

- 23.5 mpg (12l/100 km) at outside temp. of 68°F (20°C) (increase of 20 %).
- 17.7 mpg (16l/100 km) at outside temp. of 32°F (0°C) (increase of 60 %).
- 14 mpg (20l/100 km)) at outside temp. of –4°F (–20°C) (increase of 100 %).

As can be seen, both the distance travelled by the car and the outside temperature have a major impact on fuel consumption after the engine has started from cold. Thus, if the car is mainly used for short journeys of 3–5 miles (5–8 km), the fuel consumption will be 60–80 % higher than normal.



Percentage increase in fuel consumption of engine starting from cold compared to engine at normal temperature.

#### **Driving technique**

- To obtain the best running economy, not only regarding fuel consumption but general wear also, regular service is required.
- High speed, unnecessary acceleration, heavy braking and much low gear work all gives rise to higher fuel consumption.
- Frequent gear changing in traffic, starting in cold weather, the use of studded tires and roof racks, and towing a trailer all increase fuel consumption.
- Do not run the engine when the car is stationary.
   If idling, it will take much longer before the engine becomes hot. Engine wear is greatest during this warming-up phase. Therefore drive away as soon as possible after the engine is started and avoid high revving.

- Driving in a low gear results in higher fuel consumption than in a high gear because of the higher engine speed for a given road speed. Always change up to a higher gear as soon as traffic conditions allow and use the highest gear as much as possible.
- Check the air pressure in the tires once a month. Incorrect pressures increase tire wear. It is better to have slightly higher pressure than lower.
- Check fuel consumption regularly.
   Increased consumption can indicate that something is wrong and that the car needs to be checked by an authorized Saab dealer.

Practical trials on the roads have demonstrated that substantial savings in fuel consumption can be made if the above advice is heeded.

#### **Road conditions**

Wet roads increase fuel consumption, as do unpaved roads and driving in hilly country (the amount of fuel saved driving downhill is less than the additional amount required to climb the hill).



Never switch the engine off while driving as the effect of the brakes and power steering will be greatly reduced.

# Engine block heater (standard equipment in Canada, accessory in U.S.)

The following are just some of the benefits to the car and the environment of using an engine block heater:

- Lower fuel consumption.
- Exhaust emissions substantially reduced over short runs.
- · Reduced wear on the engine.
- · Inside of car warms up faster.

The engine heater is effective at outside temperatures up to +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, electrical cabin heater that is not in use, this should be stored in the luggage compartment.

## **Driving in cold weather**

Before starting a journey in cold weather you should check the following:

- That the wiper blades have not become frozen to the windshield/glass.
- Brush any snow away from the air intake for the heater system (opening between hood and windshield).
- It may be advisable to lubricate the door-lock cylinder (use molybdenum disulphide, MoS<sub>2</sub>) to prevent its freezing.
   If the lock has frozen, take care not to break the key (or use the remote control) heat it first or spray it with de-icer.

· Periodically during the winter, add gaso-

- line anti-freeze to the fuel to dispel any condensation in the fuel tank which could freeze and cause problems in the system. Keep the tank well filled to reduce the risk of condensation forming.

  If the car is parked outside in freezing weather, fuel additives (gasoline antifreeze) will not do any good as it cannot remove water that has already frozen. Park the car in a warm place so that any ice that may have built up melts, then add gasoline anti-freeze when filling up the tank. Condensation is caused by changes in the outdoor temperature or by the car being parked alternately in a garage and
- It is particularly important when the roads are slippery that the brakes and tires be in good condition.

outside.

 Check the anti-freeze in the engine coolant, see page 188.

The car's trip computer will warn you when there is a risk of slippery conditions. For further information on this function, see page 62.

The car is equipped with tires designed to provide optimum grip on both wet and dry roads, although this has been achieved at the expense of somewhat reduced grip on snow and ice. For regular driving on snow and ice, we therefore recommend that winter (snow) tires be fitted.

Winter (snow) tires, particularly studded tires (where use is legally permitted), generally make driving safer on snow and ice.

Acquaint yourself with the legal provisions governing the use of different types of winter tires and snow chains. Studded tires are not allowed in some countries.

If winter tires are fitted, the same type must be fitted on all wheels. Your Saab dealer will be pleased to advise you on the best tires for your car.

Remember that tires age. It may therefore be necessary to change them before they reach the legal wear limit, as they gradually lose their friction properties.

The best response if the car gets into a frontwheel skid is to freewheel (manual gearbox only), i.e. disengage the clutch (so that the wheels are neither driven or retarded by the engine.

If the car has automatic transmission, ease up on the accelerator and steer carefully in the desired direction.

In a rear-wheel skid, steer in the same direction that the rear of the car is moving.

#### Tire chains

If you want to fit tire chains (where legally permitted) they should only be fitted to the tires recommended under "Specifications" (see page 260).

Consult your Saab dealer for details of approved tire chains.

## **WARNING**

- Do not exceed 30 mph (50 km/h) when tire chains are fitted.
- Tire chains can reduce the directional stability of the car.
- Tire chains must not be used on the rear wheels.

#### **NOTICE**

- Check the links frequently for wear.
- Check that the chains do not contact the wheel-arch liner at full lock.
- See section "Specifications", page 260, for information on allowable wheel dimensions for the fitting of tire chains.

## **Driving in hot weather**

- Always check the coolant level before starting a journey. The level should be just below the MAX mark.
- At the end of a journey, if the engine has worked hard, allow it to idle for two or three minutes before switching it off.

If the needle on the temperature gauge enters the red zone:

1 Bring the car to a standstill but leave the engine running. Do **not** remove the cap on the expansion tank even if the tank is empty. If the needle on the temperature gauge continues to rise while the engine is idling, switch off the engine.

- Wait until the needle has dropped back to indicate normal temperature (roughly midway, in the white zone) before stopping the engine. If the coolant needs topping up, unscrew the cap on expansion tank carefully.
  - Top up, as necessary, ideally with a 50/50 mixture of Saab-approved coolant and water. If only water is available, use that, but remember to have the coolant mixture checked as soon as possible.

## **WARNING**

- Exercise care when opening the hood if the engine is overheated. Never remove the expansion tank cap completely when the engine is hot.
- The cooling system is pressurized hot coolant and vapor can escape.
   These can cause injury to your eyes and burns. Open the cap slowly to release the pressure before removing it.
- 3 As soon as possible, have the cooling system checked by an authorized Saab dealer.

## Towing a trailer

## **MARNING**

- When towing a trailer, do not attempt to negotiate a hill having a gradient in excess of 15 %. The weight distribution over the front wheels of the car will be insufficient to prevent wheelspin, making further progress impossible.
- In addition, the parking brake may not always be able to hold the car and trailer securely, with the result that the wheels can start to slide downhill.
- Always apply the trailer's handbrake when unhitching it. There is otherwise a risk of personal injury or damage to the bumper should the trailer start to roll.

#### **Trailer hitch attachment**

Trailer hitch attachments are available as accessories. These are designed for a maximum trailer weight of 3500 lbs. (1588 kg), see also page 253.

Use only the electrical trailer hitch socket provided in the trailer hitch kit.

Saab recommends:

- Use a Saab original hitch kit attachment which is designed and tested by Saab.
- Consult your Saab dealer regarding the appropriate hitch kit for your car.

#### **NOTICE**

Use only a genuine Saab trailer hitch and wiring, since other wiring methods can cause expensive damage to the car's body and electrical system.

Consult an authorized Saab dealer for guidance on how to connect the trailer hitch electrical system.

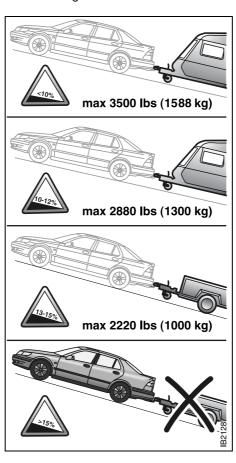
### **Trailer weight**

Maximum recommended trailer weights for different gradients, with a view to comfort and drivability for manual and automatic cars, are shown on the drawing.

Make sure you are familiar with the law regarding speed limits for towing, maximum trailer weights, trailer-braking requirements, and also any special driving-licence provisions (see also page 253).

The specified trailer weights and gradients assume that the journey starts at the hill and therefore apply only to short periods.

Maximum recommended trailer weights for different gradients



## Recommendations for driving in hilly terrain

The following time limits are based on the capacity of the cooling system in warm weather, i.e. approximately 86°F (30°C).

	Maximum trailer weight, lbs. (kg)	Maximum dura- tion, minutes
6–7	3300 (1500)	unlimited
8–9	3300 (1500)	15 max
10–15	1870 (850)	15 max

The following time limits are based on the capacity of the cooling system in hot weather, i.e. approximately 104°F (40°C).

Gradient of hill, %	Maximum trailer weight, lbs. (kg)	Maximum duration, minutes
6–7	2000 (900)	unlimited
8–9	2000 (900)	15 max
10–15	1000 (450)	15 max.

When negotiating long hills, bear the following important considerations in mind:

- Use Normal mode when driving with a caravan or trailer on hilly roads. The adaptive gear change pattern function will prevent the transmission overheating.
- Rises in coolant temperature are indicated by the temperature gauge in the main instrument panel.

## Recommendations for cars with automatic transmission

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 engine increases:

- Gear change pattern is altered.
- A/C compressor is switched off.
- 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.

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, select manual mode and a gear in which the engine speed is about 3,000 rpm until the incline eases (see page 149).

## **MARNING**

Remember to use the braking effect of the engine (position D or L) when you are descending long or steep hills to spare the brakes.

Brake failure can result from overheated brakes!

## Recommendations for cars with manual gearbox

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 engine increases:

- A/C compressor is switched off.
- engine torque is reduced.

When continuing your journey, select a gear in which the engine speed is about 3,000 rpm until the incline eases.

## **WARNING**

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

Brake failure can result from overheated brakes!

### **Driving considerations**

Always take extra care when towing a trailer, as the car's handling will be different and its braking effect reduced. The trailer's braking system and suspension also have a considerable effect on these characteristics, see also "Driving with a load" page 168. If the car has automatic transmission, select position D when ascending steep hills. This ensures that the adaptive gear change patterns are operational, see page 150. Use position D or L for steep descents.

#### **NOTICE**

If the "Automatic transmission, fault indicator" indicator comes on, cease towing until the problem has been rectified.

#### Checks before driving

Make sure that the car and camper or trailer are in good working order. This is essential since towing a camper or trailer increases the strain on the car.

- Check and if necessary adjust the tire pressure of the car and camper or trailer.
- Make sure all wheel bolts are properly tightened.
- Make sure that the equipment joining the car and camper or trailer is properly secured and adjusted.
- Make sure the camper or 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 camper or trailer brakes.
- Make sure that all items on or in the caravan or trailer are properly secured.
- Make sure that the camper or trailer's jockey wheel is raised and locked.
- Check the distribution of the load so that the car and camper or trailer are well balanced.
- Check that the rearview mirrors provide the best possible rearward vision.
- Make sure the camper or trailer's safety cable is correctly attached.

#### **Trailer hitch load**

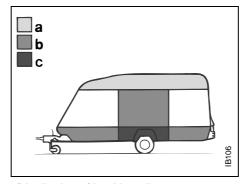
The weight distribution on the trailer makes a lot of difference to the handling properties of the car and trailer combination. As regards single-axle trailers, whenever possible, concentrate the load over the wheels and keep it as low as possible.

The trailer should be loaded so that the maximum load on the towbar ball is 5 % to 7 % of the trailer weight with a maximum permissible tongue weight of 110–165 lbs. (50–75 kg).

Note that this load must be added to the total load for the car. If this now exceeds the specified load capacity, the load in the luggage compartment will have to be reduced by a corresponding amount.

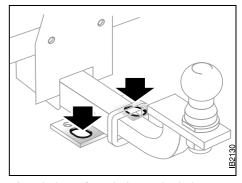
## **WARNING**

When you connect the trailer be sure to attach its safety chains to the holes as illustrated.



Distribution of load in trailer

- a Light
- b Moderate
- c Heavy



Attach the safety chains to the holes as illustrated.

# Driving with a roof rack load

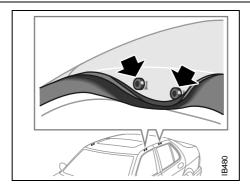
## / WARNING

- A roof load will affect the car's center of gravity and aerodynamics. Be aware of this when cornering and driving in crosswinds.
- Suit your speed to the prevailing conditions.
- Due to higher aerodynamic 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 is included in the car's maximum permissible load (see page 252).

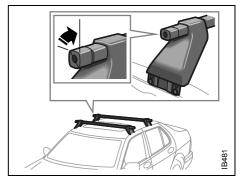
Strong, sturdy roof carriers designed specially for the car are available from your Saab dealer. Always secure the roof load safely.



#### Fitting the roof carriers, 9-5 Sedan and 9-5 Wagon without roof rails (accessory)

The carrier feet are marked with a top view of the car and arrow indicating their positions.

- Slip the plastic cover onto the adjustable foot of the carrier (foot with knob for tightening) to protect the paintwork during assembly.
- 2 Open all the doors. Fold back the rubber strip and find the fixing holes.



3 Start on the left-hand side of the car. Rest the carrier carefully across the roof, with the rigid foot towards you. Hold the foot clear of the roof to avoid damaging the paintwork.

Fold back the rubber strip and insert the pins on the foot into the fixing holes. Make sure that the rubber strip comes inside the plastic cover on the carrier. Repeat the procedure with the other carrier.

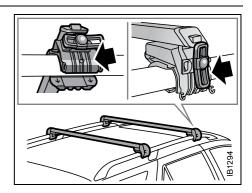
- 4 Close the doors on the left-hand side of the car gently, to hold the carrier feet in place.
- 5 Now go around to the other side of the car and remove the plastic cover from the carrier's adjustable foot. Fold back the rubber strip and insert the pins on the foot into the fixing holes. Do the same with the other carrier and close the doors gently.
- 6 Tighten each carrier by turning the knob clockwise (by hand). Tighten just enough to bring the foot up against the edges of the fixing holes.

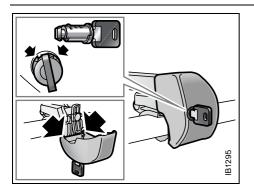
Remove the carriers when not in use, as they increase fuel consumption.

The instructions that accompany the carriers also include advice on driving with a roof load – we strongly recommend that you read them carefully.

#### Fitting the roof carriers, 9-5 Wagon with roof rails (accessory)

- 1 Clean the car's roof rails.
- 2 Check the markings on the cross members to see which is the front and which is the rear roof carrier.
- 3 Place the cross members on the roof rails, on their respective sides of the center supports. The cross members must not be placed beyond the front or rear joint on the rail. Ensure that the distance between the cross members is at least 28 inches (700 mm). If a roof box is to be fitted, the cross members must be positioned so that the tailgate can be opened fully without hitting the roof box.
- 4 Using your thumb, press the bracket so that it lies snugly against the outside of the roof rail. Make sure that the roof carriers are seated centrally on the rubber spacers and that these sit correctly on the roof rail. Pull the spacers down slightly on the inside of the roof rail.
- 5 Center the roof carriers so that they protrude equally on both sides.
- 6 Tighten the roof carriers by hand. Ensure that the tightening knobs are upright once the roof carriers have been tightened.
- 7 Make sure the roof carriers are securely in place.





## **Driving at night**

Bear in mind the following points 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.

## Driving with a load

The driving characteristics of the car are affected by the way it is loaded.

- Place heavy loads as far forward and as low as possible in the trunk.
- Secure the load to the tie downs, see page 123.
- The load should be such that the car's total weight or axle weight are not exceeded, see page 252.
- 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 in 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.
- Roof loads can negatively affect telecommunication.

Tire pressure, see page 262 and back cover.

#### **Tires**

## **WARNING**

Check the tire pressure **at least once a month** and before long journeys. Under-inflation can result in:

- Punctures
- Separation of the tire and tread
- Damage to the sidewalls
- Damage to the rims on poor roads
- Poor handling characteristics
- Premature tire wear
- Increased fuel consumption.

The tire pressure should match the current load and speed of the car; for cars sold in U.S. see page 226; for cars sold in Canada see page 261.

The tire pressures given apply to **cold** tires, that is tires that are the same temperature as the outside air temperature.

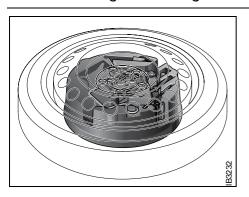
The tire pressure increases as the tires become warm (e.g. during highway driving) with approximately 0.3 bar (4 psi). When the temperature of the tires changes by 50° (10°C), the tire pressure will change 0.1 bar (2 psi).

Never reduce the pressure of a hot tire. If the tires are hot when you check them, only increase the pressure, if necessary.

Underinflated tires wear more quickly than slightly overinflated tires.

If a valve is leaking, simply unscrew it and fit a new one.

**Important!** Remember to adjust the tire pressures if you change the load in the car or intend to drive at substantially lower or higher speeds than normal.



## Spare wheel and tools

The spare wheel, together with the jack and jack handle, front towrope attachment eye and toolkit, are stowed away underneath the trunk.

## **WARNING**

Stow all tools carefully away after use, so that they cannot get loose and cause injury in the event of a crash.

# Driving considerations with compact spare wheel/tire fitted

## **WARNING**

- Do not exceed 50 mph (80 km/h) as the tire can overheat and adversely affect the handling of the car.
- Tire pressure: refer to page 261.
- The spare wheel or punctured tire must be stowed under the trunk floor, and secured in place with the retaining nut.

The following should be observed when the compact spare wheel (T115/70 R16) is fitted:

- The compact spare is light and easy to handle when changing the wheel.
- Do not drive further than necessary with the compact spare fitted – the maximum life of the wheel is only just over 2000 miles (3,500 km).
- Refit the standard tire as soon as possible.

Important considerations when driving with a compact spare tire:

- The car's ground clearance is reduced.
- The car must not be driven with more than one compact tire at a time.
- · Avoid driving against a 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 it 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 123 and 126.

# Driving with the trunk lid/tailgate open

Avoid driving with the trunk lid/tailgate partly or fully open, since exhaust fumes can be drawn into the cabin.

If you must drive with the trunk lid/tailgate open, all windows and the sunroof (if fitted) must be closed and the cabin fan on at its highest speed setting.

## **Driving in deep water**

#### NOTICE

Do not drive in water deeper than 12 inches (30 cm) and do not drive faster than 3–4 mph. Water can otherwise be sucked into the engine. The engine will be seriously damaged if water enters the intake system.

## Towing the car

## **MARNING**

- 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 being towed.
- Always seek professional help if the car needs to be towed.

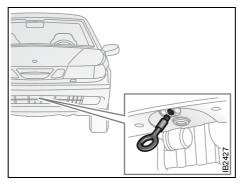
### Front towing eye

## / WARNING

- Make sure that the towing eye at the front is screwed in tightly.
- The towing eye is only designed for use when the car is being towed on the road. 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 break. The towing eye or tow rope could catapult off and cause serious injury.

#### **NOTICE**

- Do not drive the car with the front towing eye in position. If it catches the curb, for example, the engine subframe could be damaged.
- Refit the plastic plug in the hole when the towing eye has been removed, to keep dirt and moisture out of the threads.



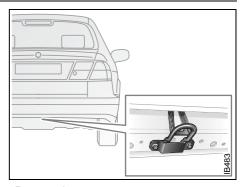
Front towing eye

The front towing eye is stored with the spare wheel.

The attachment point (tapped hole) for the towing eye is midway along the engine subframe at the front of the car.

Remove the plastic plug and screw in the towing eye securely.

To ensure that the towing eye is in far enough, insert the handle of the wheel wrench through the eye for additional leverage.



Rear towing eye

#### Rear towing eye

The car has a permanently mounted towing eye at the back. If the car is equipped with a trailer hitch, this can be used instead of the towing eye.

#### Towing the car

#### NOTICE

 Never use the towing eyes to pull the car unstuck.

Gear lever in neutral (in cars with automatic transmission: selector lever at N (neutral)) Turn on the parking lights.

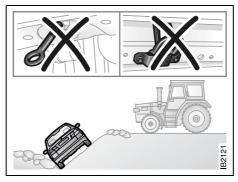
## Drive carefully and do not exceed the speed limit for vehicles being towed.

Always try to keep the towrope taut by gently applying the brake, as necessary. This will avoid the towrope being jerked violently.

The local regulations on towing speeds must be followed.

The highest permissible towing speed is 30 mph (50 km/h), unless the legal limit is lower. The longest permissible towing distance is 30 miles (50 km). If the car has to be transported farther than that, summon a tow truck. A flat bed tow truck is the preferred method to tow.

Failure to follow these guidelines can result in damage.



Never use the towing eyes to pull the car unstuck

#### 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.

The car cannot be push started. In an emergency, it is possible to start the engine using jump leads (see the section, "Jump starting" on page 174).

#### Transporting the car

#### **NOTICE**

If a car with a sport (lowered) chassis is transported, for example on a flat bed truck, take extra care not to damage the spoiler and/or underbody.

## **Jump starting**

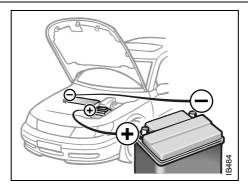
## **∕** WARNING

 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 sulfuric 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.
- Battery posts, terminals and related accessories contain lead and lead compounds. Wash your hands after handling.

If your battery has run down, you may want to use another vehicle and some jumper cables to start your Saab. Follow the steps below to do it safely.



#### NOTICE

Ignoring these steps could result in costly damage to your vehicle that would not be covered by your warranty.

Trying to start your car by pushing or pulling it could damage your vehicle, even if you have a manual transmission. If you have an automatic transmission, your vehicle cannot be started by pushing or pulling it.

To jump start your vehicle:

1 Check the other vehicle. It must have a 12-volt battery with a negative ground system.

#### **NOTICE**

If the other system is not a 12-volt system with a negative ground, both vehicles can be damaged.

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 electrical systems.

## **WARNING**

You could be injured if the vehicles roll. Set the parking brake firmly on each vehicle. Put an automatic transmission in P (Park) or a manual transmission in Neutral.

3 Turn off the ignition on both vehicles. Turn off all lights that are not needed, and radios. This will avoid sparks and help save both batteries and it could save your radio.

#### NOTICE

If you leave your radio on, it could be badly damaged. The repairs would not be covered by your warranty.

4 Open the hood and locate the battery. Find the positive (+) and negative (-) terminals on the battery.

## **WARNING**

An electric fan can start up even when the engine is not running and can injure you. Keep hands, clothing and tools away from any underhood electric fan.

## **WARNING**

Using a match or flame of any kind near a battery can cause battery gas to explode. You can suffer burns or be blinded. Use a flashlight if you need more light.

Be sure the battery has enough water. The battery installed in your new Saab has filler caps. Be sure the right amount of water is there. Add distilled or boiled water if the level is too low. If you don't, explosive gas could be present.

Be sure the electrolyte in the battery is not frozen. Discharged batteries will freeze. When connecting jumper cables to a frozen battery, gas from the chemical reaction inside the battery can build up under the ice and cause an explosion.

Battery fluid contains acid that can burn you. Do not get it on you. If you accidentally get it in your eyes or on your skin, flush the area with water and get medical help immediately.

- 5 Check that the jumper cables do not have loose or missing insulation. If they do, you could get a shock and also the vehicles could be damaged.

  Before you connect the cables, here are some basic things you should know.

  Positive (+) will go to positive (+) and negative (-) will go to a major metal engine part with a good ground. Do not connect (+) to (-) or you will get a short that could injure you or would damage the battery and maybe other parts as well.
- 6 Connect the red positive (+) cable to the positive (+) terminal of the vehicle with the discharged battery.
- 7 Do not let the other end touch metal. Connect it to the positive (+) terminal of the good battery. Use a remote positive (+) terminal if the vehicle has one.
- 8 Now connect the black negative (–) cable to the good battery's negative terminal.

## **MARNING**

Do not let the other end touch anything until the next step. The other end of the negative cable **does not** go to the dead battery. It goes to a major metal part with a good ground on the engine of the vehicle with the discharged battery.

- 9 Attach the cable at least 18 inches (45 cm) away from the discharged battery, but not near engine parts that move. To avoid an arc which could detonate the hydrogen gas around the battery, the final connection must be at least 18" from the battery.
- 10 Start the vehicle with the good battery and run the engine for a while.
- 11 Try to start the vehicle with the discharged battery. If it does not start after a few tries, it probably needs service.
- 12 Remove the cables in reverse order to prevent electrical shorting. Take care that they do not touch each other or any other metal.

## Charging the battery/Jump starting

To avoid damaging the car's electrical system and electronics, the following rules must be followed when charging the battery or jump starting the car.

- If the charger or starter unit can be set to different voltages (6V/12V/18V/24V), 12V must be selected.
- Follow the manufacturer's instructions supplied with the charger or starter unit.
- Nothing that is plugged into an electrical outlet should be connected to the car during charging or jump starting.
- The charger or starter unit must under no conditions produce a voltage greater than:
  - 16V continuous
  - 18V for 60 min.
- If you are unsure about the charge rating of the unit, disconnect the battery clamp from the positive terminal before connecting the unit to the battery.

## Saab Parking Assistance

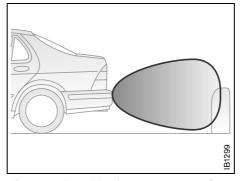
(if equipped)

## **WARNING**

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

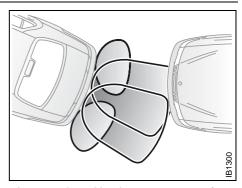
- Saab Parking Assistance can facilitate reversing at low speeds, such as when reverse parking.
- Bear in mind that small and/or narrow objects cannot always be detected by the system.

The parking aid system facilitates parking and reversing. There are four sensors in the rear bumper that detect objects up to 6 feet (1.8 metres) behind the car.



Area monitored by the sensors seen from the side

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 or objects that do not reflect ultrasound back towards the car, such as pipes, or the corner of a house or rectangular post.



Area monitored by the sensors seen from above

The system is activated automatically when reverse is engaged or selected. When the sensors detect an object within the monitored area, the SID will display the text "PARK ASSIST" and pulses of sound (- - - - -) will be heard. The frequency of the pulses increases as the car comes closer to the object.

When the distance to the object is less than 12 in. (30 cm), a continuous tone will be heard.

#### **NOTICE**

Reverse slowly so that you have time to stop the car when the continuous tone is heard at approx. 12 in. (30 cm).

When an object is approximately 3 feet (90 cm) from the car, the sound pulses change character markedly. A distance of about 3 feet (90 cm) is suitable if you wish to load or unload the luggage compartment. If the distance between an object and the corner sensors does not change for three seconds, e.g. 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.

The system can be disengaged for when driving with a trailer. Press and hold the CLEAR button on the SID when the display shows "PARK ASSIST", until the display shows "PARK ASSIST OFF". The system is re-engaged in the same way. The system is also always activated when the ignition key is turned to ON.

Pressing a SID button briefly will not disengage the system, the display will simply show the previously selected function.

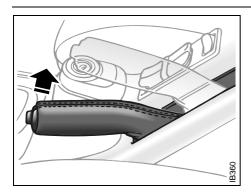
#### **NOTICE**

To function well, the sensors must be kept clean. Ice snow and dirt can affect their sensitivity.

Do not spray the sensors or closer than 8 in. (20 cm) to the sensors with a pressure washer, as this could damage them.

Ice, snow and dirt can affect the sensitivity of the sensors. In such cases a continuous tone will sound warning the driver that the system cannot measure the distance to an object. You can turn the system off by pressing and holding the CLEAR button for 1.5 seconds.

If the text "PARK ASSIST FAILURE" is displayed on the SID, have the system checked by an authorized Saab dealer.



### Parking brake

### **↑** WARNING

- Always apply the parking brake when you park the car.
- Always apply the parking brake before removing the ignition key.
- Do not use the parking brake while driving.

The parking brake is situated between the front seats and acts on the rear wheels.

When the parking brake is on, the indicator

light on the main instrument panel will be on. To release the parking brake, lift the lever slightly, press the release button and release the lever by pushing down on it.

### **Parking**

### **MARNING**

- Do not leave children or pets unattended in the car. In warm, sunny weather, the temperature inside the car can reach 160–180°F (70–80°C).
- Park where the vehicle will not create an obstruction or a hazard to other road users.
- Do not park on dry grass or other combustible material. The catalytic converter gets very hot and could start a fire.
- Apply the parking brake.
- Shift to Reverse for manual transmission (automatic transmission: move selector lever to P (Park)), and remove the ignition key. Lock the car.

#### **NOTICE**

Empty the car yourself and bear in mind:

- Never leave a mobile phone, camera, computer or similar object visible in your car.
- Clothing, packages and bags attract thieves.
- Do not leave small objects such as CDs, sunglasses and coins visible.
- If possible, park in a well-lit, conspicuous parking space.
- Thieves strike whenever and wherever they are given the opportunity.

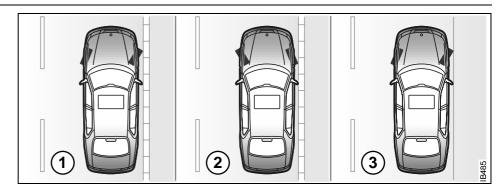
#### Parking on a hill

When parking on a steep hill, turn the front wheels so that they will be blocked by the curb if the car should move.

#### Long-term parking

If the car is not going to be used for some time, e.g. 3–4 months, the following steps are recommended:

- Run the engine to normal temperature before long-term parking.
- Drain the washer-fluid reservoir and hoses.
- Wash and wax the car. Clean the rubber seals on the hood, luggage compartment lid and doors, and lubricate them with glycerol (glycerin).
- After washing the car, dry the brake discs by taking the car out on the road and applying the brakes a few times.
- Fill the fuel tank with fuel to prevent condensation forming in it.
- Top up the coolant and check the antifreeze before the onset of winter.
- Park the car in a dry, covered and wellventilated building. Leave the parking brake OFF!
- Disconnect the negative (-) battery lead.
  If frost is likely to occur during the long-term parking, remove the battery and store it away from the frost.
- Ideally, the car should be put up on blocks, with the wheels off the ground. If this is not



- 1 Pointing downhill and against the curb
  - Turn the wheels into the curb and edge the car forward until the wheels touch the curb.
- 2 Pointing uphill and against the curb
  - Turn the wheels away from the curb and edge the car back until the wheels touch the curb.
- 3 Pointing uphill or downhill no curb
  - Turn the wheels towards the edge of the road. If the car should start rolling, it will not run into the road.

- possible, inflate the tires to about 43 psi (300 kPa).
- Leave all the windows open a crack and cover the car with a fabric tarpaulin – not one made of plastic.



### Car care and technical information

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#### Hood

The hood release handle is located underneath the instrument panel. To open the hood:

- 1 Pull the release handle.
- 2 The front of the hood will now spring up, providing access to the secondary safety catch.
- 3 Push the catch upwards, pushing the hood downward a little bit at the same time. The hood can now be lifted right up.

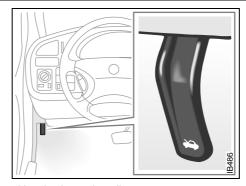
To close the hood, release it from a height of about 8 in (20 cm). **Do not** press down on it.

### / WARNING

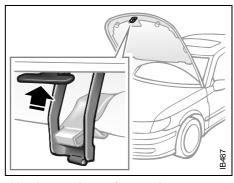
Never hold your fingers between the hood and safety catch if lowering but not closing the hood.

In cold weather, when the mechanism is stiff, the hood might need to be released from twice the height to lock properly.

Check that the hood is now closed securely.

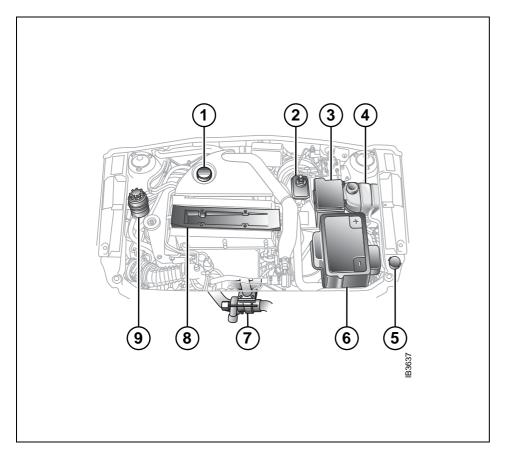


Hood release handle



Hood secondary safety catch

### **Engine compartment**



#### Engine compartment

- 1 Engine-oil dipstick/filler cap 2 Reservoir, brake/clutch fluid
- 3 Fuse box
- 4 Expansion tank, coolant 5 Washer-fluid filler cap
- 6 Battery 7 Turbo unit
- 8 Ignition discharge module 9 Reservoir, power-steering fluid

#### **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 control system
- · On-Board diagnostic (OBD II) 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.

### **WARNING**

Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of CA to cause cancer and birth defects and reproductive harm. In addition, certain fluids contained in vehicles and certain products of component wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

## 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 and
- 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)" lamp in the main instrument illuminates, this indicates that 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)

Hydrocarbon vapors formed when refueling will be recovered by the car and not released into the atmosphere. The hydrocarbons are absorbed in a 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.

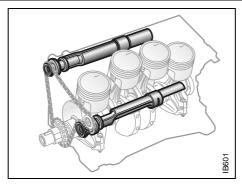
When refueling, make sure you screw the filler cap on and keep turning until it has clicked at least 3 times. Otherwise, it is possible for the CHECK ENGINE light to illuminate.

Refueling, see page 138.

### **Engine**

The 2.3-liter model is a transverse, 4-cylinder in-line engine with twin overhead camshafts and 4 valves per cylinder.

This engine is equipped with balance shafts that reduce engine vibration to a minimum. The balance shafts are chain driven and rotate at twice the speed of the crankshaft. They produce forces and torques that are opposed to those generated by the pistons and connecting rods, an effect that occurs twice for each revolution of the engine. Engine noise is also reduced as the counter-rotating shafts counteract the vibration from the moving parts of the engine.



Balance shafts

The transmission, located on the right (viewed from the front), is integrated with the engine. All models have front-wheel drive.

### **Engine oil**

#### Checking the oil level

Check the engine-oil level regularly. This should be done after the engine has been run to normal temperature and then allowed to cool for 2–5 minutes, with the car standing on level ground. Remove the dipstick and wipe it clean before checking the level.

The oil level must not be allowed to drop below the MIN mark on the dipstick, nor should oil be filled beyond the MAX mark, as this can lead to excessive oil consumption.

The distance between the MIN and MAX marks on the dipstick corresponds to a volume of approximately 1.05 qts (1 liter). When necessary, add oil of the recommended grade via the dipstick tube.

#### Changing engine oil

### **WARNING**

- Prolonged and repeated exposure of the skin to engine oil can cause serious skin disorders. Avoid prolonged skin contact whenever possible.
- Used engine oil contains chemicals that have caused cancer in laboratory animals. Always protect your skin by washing thoroughly with soap and water.
- 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 in the ground or down a drain. Dispose of all used oil and oil filters at an appropriate disposal facility.

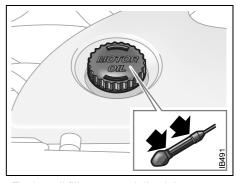
The engine oil must be changed in accordance with the service program, see page 246.

Oil volume and grade, see page 255. Oil changing should be carried out on a warm engine.

- 1 Unscrew the drain plug in the bottom of the sump and leave the oil to drain into an oil tray or other suitable receptacle for at least ten minutes. Take care, as the oil may be hot.
- 2 After the oil has been drained, unscrew and remove the oil filter.
- 3 Fit a new filter and tighten it by hand.
- 4 Refit the drain plug with a new washer.
- 5 Fill with new engine oil.

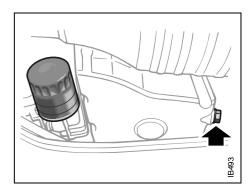
Run the engine to normal temperature and check the oil level.

Change of engine oil and oil filter may be required more frequently, see page 246.



Engine-oil filler cap and dipstick

#### Drain plug and oil filter



#### **Transmission fluid**

#### **Manual transmission**

Check and top up the fluid in accordance with the service program.

#### **Automatic transmission**

Check and top up the fluid in accordance with the service program.

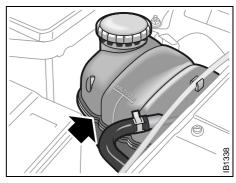
#### Coolant

### **MARNING**

- 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

The expansion tank is transparent to facilitate checking of the coolant level.

When the engine is cold, the coolant must not lie over the KALT/COLD mark on the expansion tank.



Coolant expansion tank

If the message

"Coolant level low.

Refill."

is displayed on the SID, check the level of fluid in the expansion tank.

Top up, as necessary, with equal parts of clean water and Saab-approved coolant. If the expansion tank is empty when coolant

is added, run the engine to normal temperature and top up again, as necessary.

The cooling system is charged at the factory with coolant containing a 45 % concentration of a combined antifreeze and corrosion inhibitor. A weaker mixture will result in reduced anticorrosion protection. For protection against freezing in very cold weather, a stronger concentration will be needed.

A 60 % concentration of antifreeze will provide protection at temperatures down to  $-58 F (-50 ^{\circ}C)$ .

The coolant does not normally have to be changed during the service life of the car. The type of coolant used has a reddish color and should not be mixed with other types of coolant. Saab Original coolant should be used all year round. Only use coolant approved by Saab.

#### Note:

If incorrect coolant is used or added, the lifetime 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.

#### NOTICE

Always mix the antifreeze with the appropriate volume of water before adding it to the cooling system.

If pure antifreeze is added, the engine could still freeze and be damaged. This is because the antifreeze will not mix properly with the coolant before the thermostat has opened to allow full circulation.

#### Brake and clutch fluid

### **∕** WARNING

Brake fluid deteriorates as it becomes old. Because it is hygroscopic, it absorbs water from the air and, in time, could allow vapor to form in the brake system, thus reducing its performance. It is therefore important that brake fluid be changed regularly, as specified in the service program.

#### Checking the fluid level

The combined brake and clutch-fluid reservoir is transparent to facilitate checking of the fluid level.

The level should be between the MAX and MIN marks. Top up, as necessary, with **DOT 4** fluid. Do *not* use DOT 5 brake fluid.

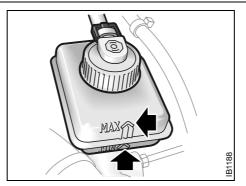
Use only new brake fluid from a sealed container.

Check that there are no leaks in the brake system.

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.

## Changing of the brake fluid should be carried out by an authorized Saab dealer.

The vehicle's regular braking system is adjusted automatically, but the parking brake has to be adjusted manually. This work, involving adjustment of the parking brake cables and brake pads, must only be carried out by an authorized Saab dealer.



Brake and clutch-fluid reservoir

It is not possible to detect, through abnormal pedal or parking brake-lever travel, whether brake pads are worn and need replacing. It is therefore essential that brake pads be checked regularly, as specified in the service program.

#### **NOTICE**

Avoid spilling brake fluid onto paintwork, since it can cause the paint to bubble and lift. If any brake fluid is spilled, the area should be flushed with large quantities of water as quickly as possible.

#### **Brake pad wear indicators**

The outboard brake pads on the front wheels incorporate pad-wear indicators. When the lining is down to 0.11 in (3 mm), the pad will produce a screeching, squealing or scraping noise when the brakes are applied. New pads should be fitted without delay.

Brake pads should only be changed by an authorized Saab dealer. To ensure optimum brake performance, use only Saab original brake pads.

### **Power steering fluid**

### **WARNING**

- Do not fill the power steering fluid to above the MAX mark. Too much fluid can result in leakage.
- Power steering fluid on hot engine components constitutes a fire risk.

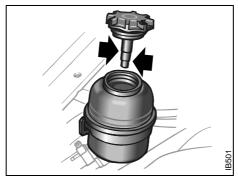
Check the level of the power steering fluid in the reservoir regularly, in accordance with the service program.

The wheels should point forward during the check.

Clean around the cap before it is unscrewed. Clean the dipstick. Screw in the cap completely again before checking the level.

The oil should lie between the MAX and MIN marks when the oil temperature is about 70°F (+20°C). If the oil is colder the level can be lower, and in higher temperatures the level can be higher, both of which are acceptable.

Top up with "Power Steering Fluid CHF 11S".



Power steering fluid reservoir

#### Air filter

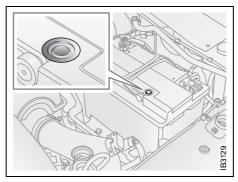
### **MARNING**

- For Service and Repair, parts equivalent to those used by Saab should be used.
- Be aware that some non standard replacement parts may put you in an unsafe condition, even if they might fit.

### **Battery**

### **WARNING**

- Work on the battery may entail an explosion hazard, since the battery gives off hydrogen which forms an explosive mixture with the oxygen in the air.
  - For this reason, always avoid sparks or open flames when working near the battery.
- The battery contains corrosive sulfuric acid. Always wear a face mask or goggles when working on the battery.
- If battery acid gets into the eyes or splashes the skin or clothing, wash the affected area liberally with water.
   If acid gets into the eyes or a large quantity makes contact with the skin, seek medical help.
- Battery posts, terminals and related accessories contain lead and lead compounds. Wash your hands after handling.



Electrolyte level indicator. Level correct if level indicator dark. Battery should be changed if indicator is light

The battery is provided with a cover to protect it from radiated heat. If the battery is exposed to high temperatures, its life will be shortened. To remove the cover, release the two clips along its long sides.

The cover fits the standard battery installed in the car. If a new battery is to be fitted, make sure that its dimensions are the same as the standard one.

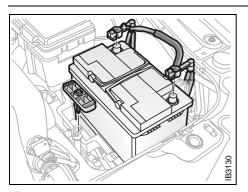
The battery is maintenance free and should be changed if the electrolyte level is too low. The indicator on the top side of the battery will be white if the battery needs replacing. The fluid level and the charge level should be checked regularly.

#### **NOTICE**

A discharged battery can freeze and fracture. Batteries should therefore always be stored away from frost.

If frequent short journeys are made, the battery may need to be given a booster charge. This can be done either using a battery charger or by taking the car for a long run.

A car with a standard equipment specification 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 car phone, the charge may only be sufficient for about 15 days.



Battery

#### Charging/replacing the battery

#### NOTICE

To avert the danger of short-circuiting between the positive (+) terminal on the battery and the inlet manifold on the engine, always disconnect the negative (–) battery lead first and reconnect it last.

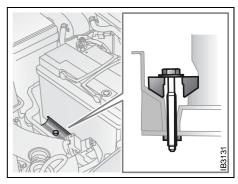
Connect the positive lead to the positive (+) battery terminal (red), and the negative lead to a good ground point, e.g. the lifting lug at the front of the engine.

To remove the battery, always disconnect the negative (black) lead first and reconnect it last when fitting the new battery.

The battery size must comply with DIN 53735 MFI 230/2.16.

#### **NOTICE**

- If boost charging never use anything but a 12-volt charger, see page 176.
- Never reverse the polarity of the battery by connecting the leads to the wrong terminals. The red, positive lead connects to the positive (+) terminal, and the black, negative lead to the negative (-) terminal.
- Serious damage can occur to the car's electrical system if a battery or alternator lead is disconnected while the engine is running.
- The nut on the battery clamp should be tightened to a torque of 10 Nm.



Correct position for battery clamp

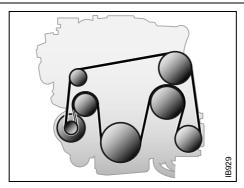
#### **Drive belts**

### **WARNING**

- Keep hands and clothing clear of drive belts when engine is running.
- Always stop the engine before inspecting drive belt.
- The radiator fan is electric and can start even when the engine is switched off.



Serious damage can be done to the car's electrical system if an alternator lead is disconnected while the engine is running.



Routing of the drive belt

The alternator is situated on the right-hand side of the engine, adjacent to the bulkhead. It is driven via a Poly-V-belt from the crankshaft pulley.

The Poly-V-belt also drives the water pump, the A/C compressor and the steering servo pump.

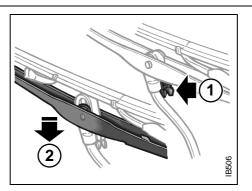
The belt tension is critical and is adjusted automatically by the belt tensioner.

See also page 53, "Warning, charging".

### Wipers and washers

Check and clean all wiper blades regularly. If poor wiper performance is experienced, clean the windshield with a quality glass cleaner. This is particularly important if the car has been through an automatic car wash, as these sometimes leave a wax coating on the windshield.

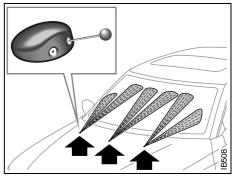
If wiper performance is still unsatisfactory, fit new blades.



## Changing the windshield wiper blades

Lift the wiper arm off the windshield

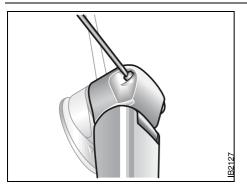
- 1 Depress the catch.
- 2 Pull the complete blade assembly down to free it from the wiper arm, and then lift it off the arm.



Cleaning/adjusting the washer jets

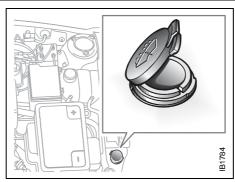
#### Washer jets

The washer jets can be adjusted and, if necessary, unclogged by means of a pin.

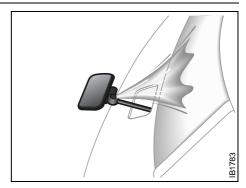


Adjusting the washer jet on the rear window wiper, 9-5 SportWagon

Use a small screwdriver to adjust the washer jet on the rear window wiper of the 9-5 SportWagon, as illustrated.



Washer-fluid filler cap



The headlights have high-pressure washers (certain variants)

#### **Washers**

The washer-fluid reservoir holds 6.4 quarts (6 liters). When

"Washer fluid level low.

Refill."

comes up on the SID, the reservoir is down to about 1 quart (1 liter) of fluid. Add at least 50 % of washer- fluid to water to prevent freezing and for effective cleaning.

### / WARNING

Take care not to spill washer fluid concentrate onto hot surfaces. Washer fluid concentrate contains flammable ingredients such as alcohol.

### **Changing bulbs**

### **MARNING**

Before changing a bulb in the engine bay, 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.

Xenon headlights are high voltage and must therefore be changed at an authorized Saab workshop. Work involving high-voltage components is potentially lethal.

#### **NOTICE**

- Since the headlight lenses are made of plastic, rinse dried-on dirt with water and allow it time to soften up before cleaning the lenses. Avoid rubbing the lenses when dry and never use solvents.
- Use de-icer spray instead of scraping the ice off.

Check that the new bulb is working when finished.

#### Use only "Long Life" bulbs.

Headlight aiming, see page 242.

#### **NOTICE**

- Do not fit bulbs with a higher rating than 55 W, since the headlight reflector and the wiring of the car are not designed for a higher wattage.
- Switch off the ignition before changing a bulb, to avoid possible short-circuiting.
- Do not touch the glass of the bulbs with your fingers. The oil on your skin can shorten the life of the bulb.

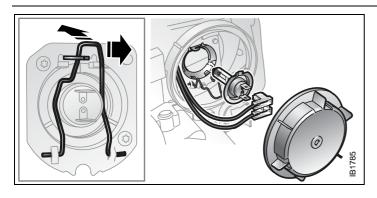
### Xenon headlight

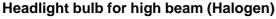
#### (if equipped)

Xenon headlights produce roughly twice 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.

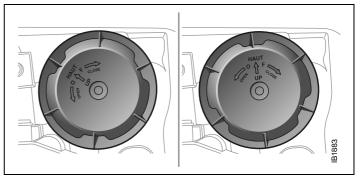
Cars with xenon headlights have automatic levelling. The levelling system comprises two sensors on the front axle, one on the rear axle and a control unit under the headlight housing. Headlight alignment is regulated automatically to prevent dazzling oncoming traffic. Alignment is also adjusted during braking.



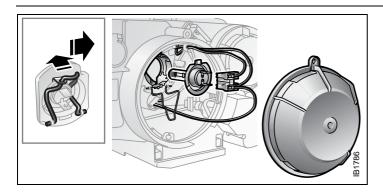


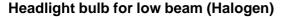
On cars equipped with Xenon lamps the Halogen lamps are used only for high beam flasher if the daytime running lights are deactivated and the headlight switch is in the off position (otherwise Xenon lamp is utilized):

- 1 Unscrew the cover from the back of the lamp unit. To improve accessibility to the right-hand headlight, hold aside the induction air hose. To improve accessibility to the left-hand headlight, remove the battery cover. Release the two clips along the long sides of the cover.
- 2 Unplug the connector.
- 3 To remove the spring clip, push it in and then move it to the right.
- 4 Remove the bulb.
- 5 Without touching the glass with your fingers, insert the new bulb.
- 6 Line up the bulb with the guide in the reflector and secure it with the spring clip. Look through the headlight lens to help fit the bulb correctly.
- 7 Plug in the connector.
- 8 Screw on the cover. Make sure that the guide on the cover is aligned with the recess in the lamp housing.

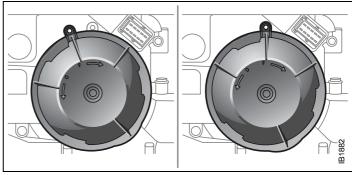


Make sure the cover is correctly fitted before locking it in place



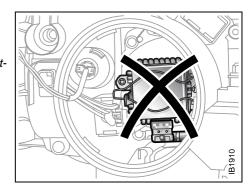


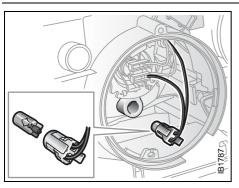
- 1 Unscrew the cover from the back of the lamp unit. To improve accessibility to the right-hand headlight, hold aside the induction air hose. To improve accessibility to the left-hand headlight, remove the battery cover. Release the two clips along the long sides of the cover.
- 2 Unplug the connector.
- 3 To remove the spring clip, push it in and then move it to the right.
- 4 Remove the bulb.
- 5 Without touching the glass with your fingers, insert the new bulb. Look through the headlight lens to help fit the bulb correctly.
- 6 Line up the bulb with the guide in the reflector and secure it with the spring clip.
- 7 Plug in the connector.
- 8 Screw on the cover. Make sure that the guide on the cover is aligned with the recess in the lamp housing.



Make sure the cover is correctly fitted before locking it in place

Contact an authorized Saab workshop if a Xenon headlight requires replacement





Parking-light bulb (cars with halogen low beam)

#### Parking-light bulb

(cars with halogen low beam)

The parking-light bulb is adjacent to the bulb for low beam.

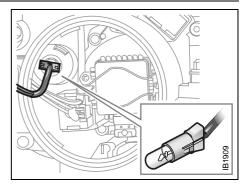
- 1 Unscrew the cover from the back of the lamp unit.
- 2 Withdraw the bulb holder.
- 3 Change the bulb.

#### Parking-light bulb

(cars with xenon low beam)

The parking-light bulb is next to the bulb for xenon low beam.

- 1 Unscrew the cover from the back of the lamp unit.
- 2 Take hold of the lamp leads and pull out the bulb holder. The lamp leads are reinforced to facilitate changing bulbs.
- 3 Change the bulb. Look through the headlight lens to help fit the bulb correctly.



Parking-light bulb (cars with xenon low beam)

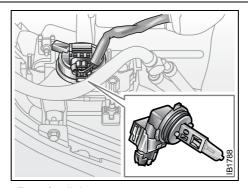
## Front fog lights (if equipped)

### **WARNING**

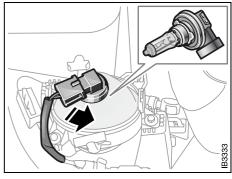
**Never** crawl under a car that is supported only by a jack. Always use axle stands. Refer to the information on jacks on page 231.

- 1 From under the front bumper, grip the bulb holder and twist counterclockwise.
- 2 Unplug the connector.
- 3 Change the bulb.

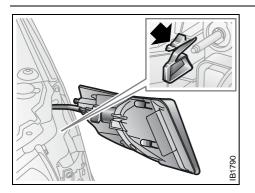
Refit in the reverse order.



Front fog lights



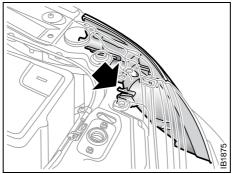
Front fog lights, Aero



## Front turn signal and side marker lights bulbs

To change the bulb, the complete lamp unit has to be removed.

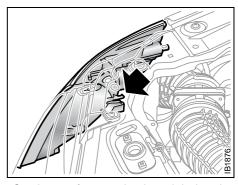
- 1 Depress the catch, accessed from the engine bay.
- 2 Carefully pull out the lamp unit.
- 3 The bulb holder has a bayonet fitting. Grip the holder and twist it counterclockwise.
- 4 Withdraw the bulb holder from the lamp unit.
- 5 The bulb also has a bayonet fitting. Press in the bulb and twist it counterclockwise.
- 6 Fit the new bulb and check that it is correctly seated.



Catch seen from engine bay, left-hand side

#### To re-install the lamp unit

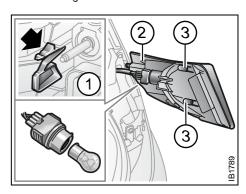
- 1 Align the catch with the recess in the lamp housing holder.
- 2 Press the lamp housing towards the headlight slightly and press the housing towards the rear of the car.
- 3 Make sure the locating pin and the two plastic lugs enter their respective holes.
- 4 Press the lamp housing until it click into place.

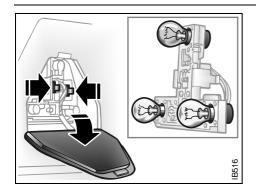


Catch seen from engine bay, right-hand side

#### Front turn signal bulb

- 1 Catch
- 2 Bayonet pin
- 3 Plastic lugs

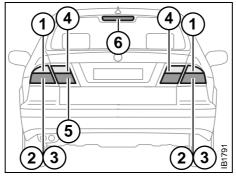




#### Rear light cluster, 9-5 Sedan

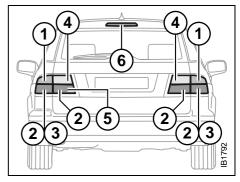
The bulbs for the lamps in the rear light cluster are accessed from the luggage compartment.

- 1 Lower the flap (secured with catches).
- 2 Squeeze the two plastic lugs and remove the bulb holder.
- 3 The bulb has a bayonet fitting. Press in the bulb and twist it counterclockwise.
- 4 Change the bulb.



Rear light clusters, 9-5 Sedan

- Direction indicators
- 2 Taillights
- 3 Stop lights and taillights
- 4 Reversing lights
- 5 Rear fog light
- 6 High-mounted brake light



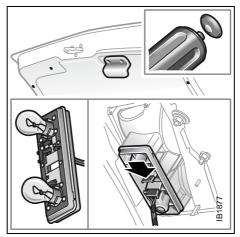
Rear light clusters, 9-5 SportWagon

- 1 Direction indicators 2 Taillights
- 3 Stop lights and taillights
- 4 Reversing lights 5 Rear fog light
- 6 High-mounted brake light

## Trunk lid light and taillights, 9-5 Sedan

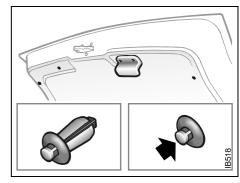
Before changing bulbs in the trunk, you must first release the trim at the foot of the trunk. This involves removing the handle and the three trim fasteners (studs).

- 1 Unscrew the handle on the inside of the tailgate.
- 2 Using the peg in the top of the screwdriver handle, push in the button in the center of the studs.
- 3 Remove the studs.



#### **Changing bulbs**

- 1 Squeeze together the silver plastic lug and the electrical connection and withdraw the lamp holder.
- 2 The bulb has a bayonet fitting. Press in the bulb and twist it counterclockwise.
- 3 Change the bulb.



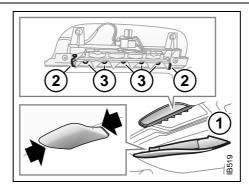
#### Refitting the trim

- 1 Reset the studs by pushing back the center buttons so that they protrude by 0.2 inch (5 mm).
- 2 Insert the studs through the trim and tailgate panel. Press the center buttons in, flush with the collar.
- 3 Screw the handle back onto the trunk.

## High-mounted stop lights, 9-5 Sedan

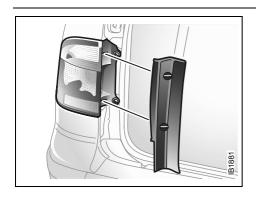
The bulbs can be accessed after the panel in the rear headlining has been removed.

- 1 Remove the panel by carefully pushing in the two clips, one at the time.
- 2 Release the bulb holder, which is retained by a clip at either end.
- 3 Withdraw the bulb gently straight back.
- 4 Push in the new bulb.
- 5 Refit the bulb holder.
- 6 Replace the panel by carefully pushing the panel towards the headlining so that the two clips engage their respective slot.



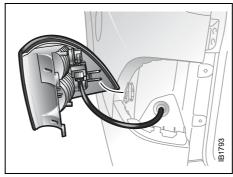
High-mounted stop lights

- 1 Panel
- 2 Retaining clips
- 3 Bulbs

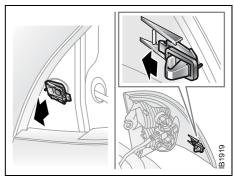


## Rear lights clusters, 9-5 SportWagon

- 1 Open the tailgate.
- 2 Remove the cover by turning the two catches counterclockwise one quarter turn.
- 3 Remove the two screws securing the light cluster to the body.

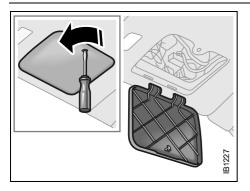


- 4 Pull the light cluster rearwards and angle it outwards (it is seated quite firmly).
- 5 Release the fastener from the body. Reinsert the fastener into the groove in the light cluster. Press in the fastener until you hear a click.
- 6 Take out the bulb holder by twisting it slightly counterclockwise.
- 7 Press in the bulb and twist it counterclockwise.
- 8 Change the bulb.
- 9 Check that the new bulb works.



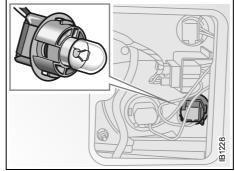
#### Reassembly:

- 1 Align the fastener with the hole in the body.
- 2 Press the lamp unit home into the body until you hear a click.
- 3 Fit the screws and cover.



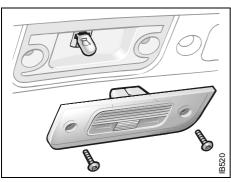
#### Tailgate bulbs, 9-5 SportWagon

- 1 Turn the lock a quarter turn (90°) with a screwdriver or the ignition key.
- 2 Open and remove the cover.
- 3 Take out the bulb holder by twisting it slightly counterlockwise.
- 4 Press in the bulb and twist it counterclockwise.
- 5 Change the bulb.
- 6 Check that the new bulb is working.

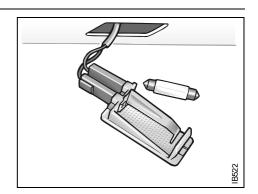


#### Reassembly:

- 1 Place the two "hinges" in the recess in the tailgate.
- 2 Then push the "hinges" into the recess and close the cover.
- 3 Turn the lock a quarter turn.







#### License-plate light

- 1 Undo the two screws and remove the lamp glass.
- 2 Withdraw the bulb.
- 3 Change the bulb.
- 4 Check the seal before fitting the glass.

#### **Side direction indicators**

1 Slide the lamp fitting forward and pull out the back.

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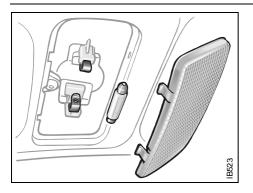
- 2 Remove the bulb.
- 3 Change the bulb.

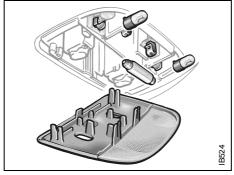
On refitting, make sure that the spring in the lamp fitting engages the edge of the opening in the body panel.

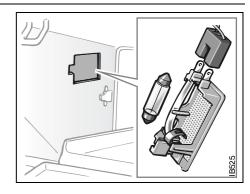
# Courtesy lights (front doors and floor) and luggage-compartment lighting

- 1 Insert a screwdriver carefully into the slot in the end of the lamp fitting. Ease the fitting off to gain access to the bulb.
- 2 Bend out one of the contacts and remove the bulb.
- 3 Change the bulb.

On refitting, insert the connector-end of the lamp fitting first.







#### Dome light, front

- 1 Ease the leading edge of the glass out of the overhead panel.
- 2 Release one of the contacts and remove the bulb.
- 3 Fit the new bulb.

#### Dome light, rear

- 1 Remove the entire overhead panel: ease out the trailing end first, and then both front edges.
- 2 Fit the new bulb.

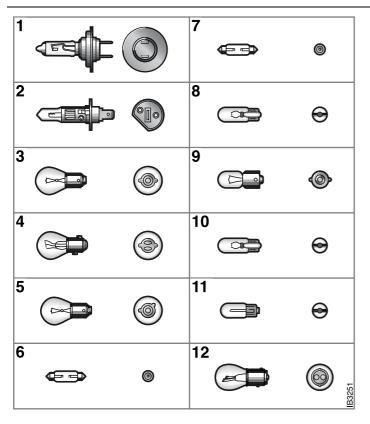
#### **Glove-compartment illumination**

- 1 Insert a small screwdriver in the slot in the end of the lamp fitting and ease it out to gain access to the bulb.
- 2 Bend out one of the contacts and remove the bulb.
- 3 Fit the new bulb.

On refitting, insert the connector-end of the lamp fitting first.

#### Other bulbs

If any other bulbs need changing, you are advised to take the car to an authorized Saab dealer.



#### **Bulb table**

#	Сар	Wattage	
1	H7	55	Headlight
2	H1	55	Fog light
3	P21W	21	Reversing lamp; side reversing lamp; rear fog lamp; cornering lamp
4	P21/5W	21/5	Stop/tail lamp
5	PY21W	21	Direction indicator, rear
6	R10W	10	Dome light; courtesy lights; glove compartment; luggage compartment
7	R5W	5	Safety belt reminder
8	Xenon w9U	6	Reading light, overhead panel
9	T4W	4	Reading light, rear
10	WY5W/ W5W	5	Side indicators (yellow);/ High-mounted stop light (9-5 Sedan); parking lights; license plate illumination
11	W2W	1,2	Switches; front ashtray
12	1157NA	32/2.2 cp	Direction indicator and side marker light, front

#### **NOTICE**

Only fit lamps of the specified rating. Lamps of the wrong wattage could damage the wiring harness and electronics.

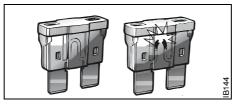
A special kit containing spare bulbs and fuses is available as an accessory from your Saab dealer. A storage space for this is provided adjacent to the toolkit and jack, under the panel in the luggage compartment.

#### **Fuses**

### **WARNING**

To avoid the risk of short-circuiting and/or fire breaking out in the electrical system, the following advice should be heeded:

- Always consult an authorized Saab dealer before modifying or adding any electrical equipment. Failure to do so can result in the electrical system being damaged.
- Never replace a fuse with one having a higher/lower rating than specified (see page 213). The color of the fuse indicates its amperage.
- If the same fuse blows repeatedly, have the electrical system checked by an authorized Saab dealer.
- If a MAXI fuse blows, it means that there is a major fault in the electrical system. Have the car checked by an authorized Saab dealer.

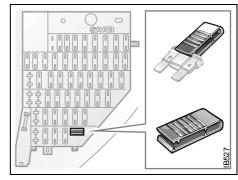


Sound fuse / Blown fuse

The fuses are housed in two fuse panels: one at the end of the instrument panel on the driver's side, and one under the hood.

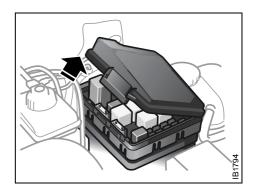
To check if a fuse has blown, first remove it from the panel (see below). If the filament is broken, the fuse has blown.

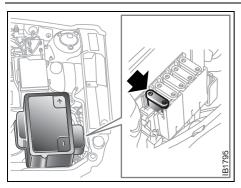
A special tool for removing fuses is provided at the bottom of the fuse panel. Simply push the tool onto the fuse, squeeze and remove the fuse.



Fuse panel in instrument panel

#### Fuse box under the hood





Maxi fuses under the hood

#### Maxi fuses

The Maxi fuses are housed in the fuse box under the hood. These fuses can be checked in the same way as the other fuses.

The Maxi fuses are designed to protect the car's electrical system from being damaged. Each Maxi fuse protects a number of electrical circuits and functions and therefore has a higher rating (amperage) than the standard fuses. No spare Maxi fuses are supplied with the car.

#### **NOTICE**

If a Maxi fuse blows, it means that there is a major fault in the electrical system. Have the car checked without delay by an authorized Saab dealer.

#### **DICE / TWICE**

DICE = Dashboard Integrated Central Electronics

TWICE=Theft-Warning Central Electronics DICE and TWICE are electronic control modules that monitor and control a variety of functions, including:

DICE controls (among other things):

- · Front lights and interior lighting
- Instrument illumination
- · Intermittent wiper operation
- Electric heating of rear window and door mirrors
- Cooling fans

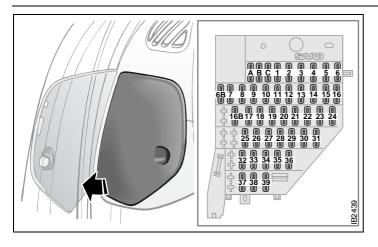
TWICE controls (among other things):

- · Central locking.
- · Car alarm (Anti-theft system)
- Engine immobilizer
- · Autochecking of lights.
- · Electric heating of rear seat
- Safety belt reminder
- Electrically adjustable passenger seat

The DICE and TWICE control modules are linked to a data bus, which is basically an information carrier that allows information to be exchanged between all the control modules and components connected to the bus.

If a fault occurs in any of these components, diagnostic faults codes are set in the relevant control module, which facilitates fault diagnosis at the Saab dealer.

The scan tool connector for fault diagnosis is located under the instrument panel on the drivers side.



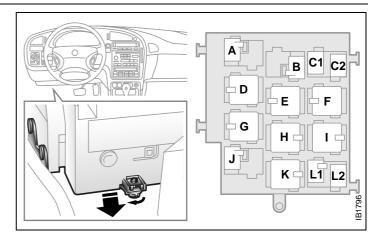
### Fuse panel in instrument panel

#	Amp	Function
Α	30	Trailer lights
В	10	Automatic transmission
С	7.5	Electric door mirrors; DICE: manual beam length adjustment
1	15	Brake lights
2	15	Reversing lights
3	10	Parking lights and taillights, left
4	10	Parking lights and taillights, right
5	7.5	DICE / TWICE
6	30	Electric windows, right; trailer charging
6B	7.5	Brake lights, trailer

7	10	Engine injectors
8	15	Trunk lighting; trunk lock; door lighting, circulation pump; parking assistant; SID
9	15	Audio System; CD changer
10	15	Heating, rear seat; sunroof, remote control receiver
11	30	Electrically adjusted passenger seat
12	7.5	Automatic transmission
13	20	Audio System, amplifier
14	30	Ignition system, engine
15	20	Fuel pump
16	20	DICE (direction indicators)
16B	_	OnStar (if equipped)
17	20	Engine-management system; main instrument; DICE/TWICE
18	40	Door-mirror heating; rear-window heating
19	10	OnStar; Telematics (if equipped)
20	15	ACC; interior lighting; rear fog light; high beam flasher
21	10	Audio System; rear-view mirror; load angle sensor (cars with xenon); navigation (accessory); Cruise Control
22	40	Interior fan
23	15	Central locking; navigation (accessory); door mirror memory
24	_	_
25	30	Electrically adjustable driver's seat
26	7,5	Driver seat memory; mirrors memory; sunroof; parking assistant; seatbelt reminder

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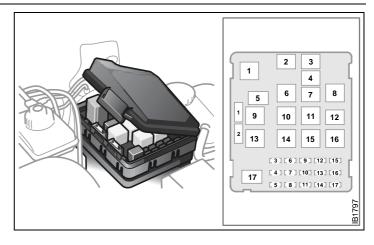
27	10	Engine-management system; SID; main instrument
28	7.5	Airbag
29	7.5	ABS/ESP
30	7.5	Starter motor
31	7.5	Cruise control; water valve; fog lights, front; rain sensor
32	15	Ventilated front seats
33	7.5	Direction-indicator switch
34	30	12-volt socket (cigarette lighter) front/rear
35	15	Daytime running light
36	30	Electric windows, left
37	30	Windshield wipers
38	30	Electric heating, front seats
39	20	Limp-home solenoid; OnStar (if equipped)
		· · · · · · · · · · · · · · · · · · ·



### Relay panel under instrument panel

#	Function
Α	-
В	Electric heating of rear seat
C1	-
C2	-
D	-
E	Main relay (engine management system)
F	-
G	Fuel pump
Н	Ignition switch
ı	Rear-window / door mirrors heating

J	
K	Starter relay
L1	Limp-home function
L2	Trunklid



#### Fuse box under hood

#### **Fuses**

#	Amp	Function
1	40	Radiator fan, high speed
2	40	ABS/ESP
3	30	ABS/ESP
4	7.5	Load angle sensor (cars with xenon headlights)
5	15	Heater
6	10	A/C; car alarm siren
7	15	Bulb test
8	_	_
9	20	Headlight washers

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10	15	High beam headlight, left
11	15	Low beam headlight left
12	15	High beam headlight, right
13	15	Low beam headlight, right
14	30	Radiator fan, high speed
15	15	Fog lights (front spoiler)
16	30	Wiper, rear
17	15	Horn
18	-	-
		·

#### Relays

ittolayo	
#	Function
1	Bulb test; head light; high beam flasher
2	Headlight washer
3	Front fog lights
4	Wiper, rear (9-5 SportWagon)
5	-
6	_
7	Rain sensor
8	Radiator fan, Iow speed
9	Radiator fan, high speed
10	A/C-compressor
11	Radiator fan, high speed, right fan
12	Horn
13	Extra lights (accessory)
14	High beam headlight
15	Low beam headlight
16	-
17	Windshield wipers

#### **Tires**

Your new vehicle comes with high-quality tires made by a leading tire manufacturer. If you ever have questions about your tire warranty and where to obtain service, see your Saab Warranty and Service Record Booklet for details.

## **MARNING**

Poorly maintained and improperly used tires are dangerous.

- Overloading your tires can cause overheating as a result of too much friction. You could have an blow-out and a serious accident. See "Loading Your Vehicle" on page 226.
- Underinflated tires pose the same danger as overloaded tires. The resulting accident could cause serious injury. Check all tires frequently to maintain the recommended pressure. Tire pressure should be checked when your tires are cold.
- Overinflated tires are more likely to be cut, punctured or broken by a sudden impact – such as when you hit a pothole. Keep tires at the recommended pressure.
- Worn, old tires can cause accidents. If your tread is badly worn, or if your tires have been damaged, replace them.

#### **Inflation - Tire Pressure**

The Tire-Loading Information label shows the correct inflation pressures for your tires when they're cold. "Cold" means your vehicle has been sitting for at least three hours or driven no more than 1 mile (1.6 km).

Notice: Don't let anyone tell you that underinflation or overinflation is all right. It's not. If your tires don't have enough air (underinflation), you can get the following:

- Too much flexing
- Too much heat
- Tire overloading
- Bad wear
- Bad handling
- · Bad fuel economy

If your tires have too much air (overinflation), you can get the following:

- Unusual wear
- Bad handling
- · Rough ride

Needless damage from road hazards

Adjust the tire pressure to match the current load and speed of the car (see page 261). 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.

#### When to check

Check your tires once a month or more. Don't forget your compact spare tire. It should be at 60 psi (420 kPa).

#### **How to Check**

Use a good quality pocket-type gauge to check tire pressure. You can't tell if your tires are properly inflated simply by looking at them. Radial tires may look properly inflated even when they're underinflated.

Be sure to put the valve caps back on the valve stems. They help prevent leaks by keeping out dirt and moisture.

#### **Tire Inspection and Rotation**

Any time you notice unusual wear, rotate your tires as soon as possible and check wheel alignment. Also check for damaged tires or wheels. See "When It Is Time for New Tires" on page 219 and "Wheel Replacement" on page 222 for more information.

The purpose of regular rotation is to achieve more uniform wear for all tires on the vehicle. The first rotation is the most important.

When rotating your tires, always use the correct rotation pattern. Left front tire to left rear. Left rear tire to right front. Right front to right rear. Right rear to left front.

Don't include the compact spare tire in your tire rotation.

After the tires have been rotated, adjust the front and rear inflation pressures as shown on the Tire-Loading Information label. Make

certain that all wheel nuts are properly tightened. See page 233.



Rust or dirt on a wheel, or on the parts to which it is fastened, can make wheel nuts become loose after a time. The wheel could come off and cause an accident. When you change a wheel, remove any rust or dirt from places where the wheel attaches to the vehicle. In an emergency, you can use a cloth or a paper towel to do this; but be sure to use a scraper or wire brush later, if you need to, to get all the rust or dirt off. See "Changing a wheel" on page 231.

#### 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.

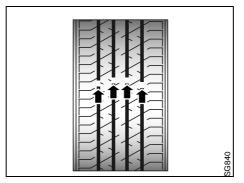
Flat spots of this type disappear once the tires get hot again, usually after 10–15 miles (20–25 km) of driving at cruising speed.

#### When It Is Time for New Tires

One way to tell when it's time for new tires is to check the treadwear indicators, which will appear when your tires have only 1/16 inch (1.6 mm) or less of tread remaining.

You need a new tire if any of the following statements are true:

- You can see the indicators at three or more places around the tire.
- You can see cord or fabric showing through the tire's rubber.
- The tread or sidewall is cracked, cut or snagged deep enough to show cord or fabric.
- The tire has a bump, bulge or split.
- The tire has a puncture, cut or other damage that can't be repaired well because of the size or location of the damage.



Wear indicators

#### **Treadwear 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.

#### **Buying New Tires**

To find out what kind and size of tires you need, look at the Tire-Loading Information label.

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.

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.

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.

Store wheels lying flat or hanging – **never** standing upright.

#### **NOTICE**

**Always** consult your Saab dealer before changing the wheels and tires on your Saab.

Wide wheels and tires with sidewalls that are too low can:

- be damaged in potholes etc.
- cause springs, shock absorbers and wheel bearings and body mountings can be overloaded.
- cause the wheels to come into contact with chassis and body components.
- can affect the function of the Electronic Stability Program (ESP).

The speed and load limits for the tires must not be exceeded; see page 225.

Wheels larger than 17" must not be fitted. The maximum permissible offset is 49 mm.

## **WARNING**

Mixing tires could cause you to lose control while driving. If you mix tires of different sizes or types (radial and biasbelted tires), the vehicle may not handle properly, and you could have a crash. Using tires of different sizes may also cause damage to your vehicle. Be sure to use the same size and type tires on all wheels. It's all right to drive with your compact spare temporarily, it was developed for use on your vehicle. See "Compact spare tire" on page 230.

## **!** WARNING

If you use bias-ply tires on your vehicle, the wheel rim flanges could develop cracks after many miles of driving. A tire and/or wheel could fail suddenly, causing a crash. Use only radial-ply tires with the wheels on your vehicle.

#### **Uniform Tire Quality Grading**

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

The following information relates to the system developed by the United States National Highway Traffic Safety Administration, which grades tires by treadwear, traction and temperature performance. (This applies only to vehicles sold in the United States.) The grades are molded on the sidewalls of most passenger car tires. The Uniform Tire Quality Grading system does not apply to deep tread, winter-type snow tires, space-saver or temporary use spare tires, tires with nominal rim diameters of 10 to 12 inches (25 to 30 cm), or to some limited-production tires.

While the tires available on General Motors passenger cars and light trucks may vary with respect to these grades, they must also conform to federal safety requirements and additional General Motors Tire Performance Criteria (TPC) standards.

#### 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 a half (1.5) 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 - AA, A, B, C

The traction grades, from highest to lowest, are AA, A, B, and C. Those 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 this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning, or peak traction characteristics.

#### Temperature – A, B, C

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, and 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 this 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.

#### Wheel Alignment and Tire Balance

The wheels on your vehicle were aligned and balanced carefully at the factory to give you the longest tire life and best overall performance.

Scheduled wheel alignment and wheel balancing are not needed. However, if you notice unusual tire wear or your vehicle pulling one way or the other, the alignment may need to be reset. If you notice your vehicle vibrating when driving on a smooth road, your wheels may need to be rebalanced.

#### Wheel Replacement

Replace any wheel that is bent, cracked or badly rusted or corroded. If wheel nuts keep coming loose, the wheel, wheel bolts and wheel nuts should be replaced. If the wheel leaks air, replace it (except some aluminum wheels, which can sometimes be repaired). See your dealer if any of these conditions exist.

Your dealer will know the kind of wheel you need.

Each new wheel should have the same load-carrying capacity, diameter, width, offset and be mounted the same way as the one it replaces.

If you need to replace any of your wheels, wheel bolts or wheel nuts, replace them only with new Saab original equipment parts. This way, you will be sure to have the right wheel, wheel bolts and wheel nuts for your vehicle.

Make sure tires with Tire Pressure Monitors are fitted as replacement tires on cars with this system.



Using the wrong replacement wheels, wheel bolts or wheel nuts on your vehicle can be dangerous. It could affect the braking and handling of your vehicle, make your tires lose air and make you lose control. You could have a collision in which you or others could be injured. Always use the correct wheel, wheel bolts and wheel nuts for replacement.

Notice: The wrong wheel can also cause problems with bearing life, brake cooling, speedometer or odometer calibration, headlamp aim, bumper height, vehicle ground clearance and tire or tire chain clearance to the body and chassis. See "Changing a wheel" on page 231.

## **MARNING**

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.

#### **Used Replacement Wheels**



Putting a used wheel on your vehicle is dangerous. You can't know how it's been used or how far it's been driven. It could fail suddenly and cause a crash. If you have to replace a wheel, use a new GM original equipment wheel.

#### **Tire Chains**

## **WARNING**

If your vehicle has 225/45 R17 size tires, don't use tire chains, there's not enough clearance.

Tire chains used on a vehicle without the proper amount of clearance can cause damage to the brakes, suspension or other vehicle parts. The area damaged by the tire chains could cause you to lose control of your vehicle and you or others may be injured in a crash.

Use another type of traction device only if its manufacturer recommends it for use on your vehicle and tire size combination and road conditions. Follow that manufacturer's instructions. To help avoid damage to your vehicle, drive slowly, readjust or remove the device if it's contacting your vehicle, and don't spin your wheels.

If you do find traction devices that will fit, install them on the front tires.

Notice: If your vehicle does not have 225/45R17 size tires, use tire chains only where legal and only when you must. Contact your Saab dealer regarding suitable snow chains. Install them on the front tires and tighten them as tightly as possible with the ends securely fastened. Drive slowly and follow the chain manufacturer's instructions. If you can hear the chains contacting your vehicle, stop and retighten them. If the contact continues, slow down until it stops. Driving too fast or spinning the wheels with chains on will damage your vehicle.

#### If a Tire Goes Flat

It's unusual for a tire to "blow-out" while you're driving, especially if you maintain your tires properly. If air goes out of a tire, it's much more likely to leak out slowly. But if you should ever have a "blow-out", here are a few tips about what to expect and what to do:

If a front tire fails, the flat tire will create a drag that pulls the vehicle toward that side. Take your foot off the accelerator pedal and grip the steering wheel firmly. Steer to maintain lane position, and then gently brake to a stop well out of the traffic lane.

A rear blow-out, particularly on a curve, acts much like a skid and may require the same correction you'd use in a skid. In any rear blowout, remove your foot from the accelerator pedal. Get the vehicle under control by steering the way you want the vehicle to go. It may be very bumpy and noisy, but you can still steer. Gently brake to a stop — well off the road if possible.

If a tire goes flat, the next part shows how to use your jacking equipment to change a flat tire safely.

#### **Tire Sidewall Labeling**

Useful information about a tire is molded into it's sidewall.

**Tire size:** The tire size ia a combination of letters and numbers used to define a particular tire's width, height, aspect ratio, construction type and service description.

#### **Department of Transportation (DOT):**

The Department of Transportation (DOT) code indicates that the tire is in compliance with the U.S. Department of Transportation Motor Vehicle Safety standards.

Tire Identification Number (TIN): The letters and numbers following DOT code are the Tire Identification Number (TIN). The TIN shows the manufacturer and plant code, tire size, and date the tire was manufactured. The TIN is molded onto both sides of the tire.

**Tire Ply Material:** The type of cord and number of plies in the sidewall and under the tread.

#### **Uniform Tire Quality Grading (UTQG):**

Tire manufacturers are required to grade tires based on performance factors: treadwear, traction and temperature resistance. For more information see "Uniform Tire Quality Grading" on page 221.

Maximum Cold Inflation Load Limit: Maximum load that can be carried and the maximum pressure needed to support that load. For information on recommended tire pressure see "Lowest recommended tire pressure, cold tires" on page 261and "Loading Your Vehicle" on page 226.

#### **Tire Size**

The following illustration shows an example of a typical passenger car tire size.

<b>215</b> /	55	R	16	93	Н
١	1	١	1	١	١
а	b	С	d	е	f

- a Tire Width
- b Aspect Ratio
- c Belt Rating
- d Rim diameter
- e Load range
- f Speed rating

**Tire Width:** The three-digit number indicates the tire section width in millimeters from sidewall to sidewall.

Aspect ratio: A two-digit number that indicates the tire height-to-width measurements. For example, if the tire size aspect ratio is "55", as shown in item "C" of the illustration, it would mean that the tire 's sidewall is 55% as high as it is wide.

Belt Rating: A letter code is used to indicate the type of ply construction in the tire. The letter "R" means radial ply construction; the letter "D" means diagonal or bias ply construction; and the letter "B" means belted-bias ply construction.

**Rim Diameter:** Diameter of the wheel in inches.

**Load range:** The load range represents the load carry capacity a tire is certified to carry.

**Speed Rating:** The maximum speed that a tire is certified to carry a load. Speed ratings range from "A" to "Z".

#### Tire markings

An example of the meaning of the different markings in a tire size is given below for a tire size of:

215/55 R16 93 V

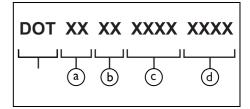
- 215 Tire section width, mm
- 55 Aspect ratio, i.e. the section height is 55 % of the section width
- R Radial ply
- 16 Wheel rim diameter 16 in at bead seats
- 93 Tire load code
- V Speed marking

Tire load index

- 91 Tire approved for max. 1355 lbs. (615 kg)
- 93 Max. 1433 lbs (650 kg)
- 94 Max. 1477 lbs (670 kg)

Speed ratings

- Q Tire approved for speeds up to 100 mph (160 km/h)
- S Max. 112 mph (180 km/h)
- T Max. 118 mph (190 km/h)
- H Max. 130 mph (210 km/h)
- V Max. 150 mph (240 km/h)
- W Max. 167 mph (270 km/h)
- Y Max. 186 mph (300 km/h)



TIN-code

- a Manufacturer's Identification Mark
- b Tire Size
- c Tire Type Code
- d Date of Manufacture

#### **Loading Your Vehicle**

		TIRE AI	ND LOADING INFOR	MATION	
utomobile	SEATING	CAPACITY	, TOTAL O , F	RONT O ¦ REAR O	
1	The combined weight of occupants and cargo should never exceed 000 kg or 000 lbs.				
ě	ORIGINAL TIRE SIZE	COLD TIRE INFLATION PRESSURE			
00 000 000	000/00000 000	FRONT	000 kPa, 00 PSI	SEE OWNER'S	
	000/00000 000	REAR	000 kPa, 00 PSI	MANUAL FOR	
	COMPACT SPARE TIRE	COLD TIRE INFLATION PRESSURE		ADDITIONAL	
읾	0000/00000 00	000 kPa, 00 PSI		INFORMATION	

This label can only be found on vehicles sold in the U.S.

Vehicles sold in Canada have the tire information label in the glovebox, see page 262.

This is an example of what your vehicle's Tire-Loading Information/Certification label might look like. It is located on the B-pillar and shows how much weight your vehicle may properly carry. The label tells you the proper size, and recommended inflation pressures for the tires on your vehicle. It also gives you important information about the number of people that can be in your vehicle and the total weight that you can carry. This weight is called the Vehicle Capacity Weight, and includes the weight of all occupants, cargo and all nonfactory-installed options.

#### **Tire Terminology and Definitions**

**Air Pressure:** The amount of air inside the tire pressing outward on each square inch of the tire. Air pressure is expressed in pounds per square inch (psi) or kilopascal (kPa).

Accessory Weight: This means the combined weight of optional accessories, for example, automatic transmission, power steering, power brakes, power windows, power seats, radio and air conditioning.

**Aspect Ratio:** The relationship of a tire's height to its width.

**Belt:** A rubber coated layer of cords that is located between the plies and the tread. Cords may be made from steel or other reinforcecing materials.

**Bias Ply Tire:** A pneumatic tire in which the ply cords that extend to the beads are laid at alternate angles substantially less than 90 degrees to the centerline of the tread.

**Cold Inflation Pressure:** The amount of air pressure in a tire, measured in pounds per square inch (psi) or kilopascal (kPa), before a tire have built up heat from driving. See "Inflation - Tire Pressure" on page 217.

**Curb weight:** This means the weight of a motor vehicle with standard and optional equipment including the maximum capacity of fuel, oil and coolant, without passengers and cargo.

**DOT Markings:** A code molded into the sidewall of a tire signifying that the tire is in compliance with the U.S. Department of Transportation motor vehicle safety standards. The DOT code includes the Tire Identification Number (TIN), an alphanumeric designator which can also indentify the tire manufacturer, production plant, brand and date of production.

**GVWR:** Gross Vehicle Weight Rating see "Loading Your Vehicle" on page 226.

**GAWR FRT:** Gross Axle Weight Rating for the front axle, see "Loading Your Vehicle" on page 226.

**GAWR RR:** Gross Axle Weight Rating for the rear axle, see "Loading Your Vehicle" on page 226.

Intended Outboard Sidewall: The side of an asymmetrical tire that must always face outward when mounted on a vehicle.

**Kilopascal (kPa):** The metric unit for air pressure. There are 6.9 kPa to one psi.

**Light Truck (LT-Metric) Tire:** A tire used on light duty trucks and some multipurpose passenger vehicles.

**Load Index:** An assigned number ranging from 1 to 279 that corresponds to the load carrying capacity of a tire.

**Maximum Load rating:** The load rating for a tire at the maximum permissible inflation pressure for that tire.

Maximum Loaded Vehicle Weight: The sum of curb weight; accessory weight; vehicle capacity weight; and production options weight.

Maximum Permissible Inflation Pressure: The maximum cold inflation pressure to which a tire may be inflated.

**Normal occupant weight:** The number of occupants a vehicle is designed to seat multipled by 150 pounds (68 kg). See "Loading Your Vehicle" on page 226.

**Occupant Distribution:** Designated seating positions.

Outward Facing Sidewall: The side of a asymmetrical tire that has a particular side that faces outward when mounted on a vehicle. The side of the tire that contains a whitewall bears white lettering or bears manufacturer, brand and or model name molding on the other sidewall of the tire.

Passenger (P-Metric) Tire: A tire used on passenger cars and some light duty trucks and multipurpose vehicles.

#### **Recommended Inflation Pressure:**

Vehicle manufacturer's recommended tire inflation pressure shown on the tire label, see "Inflation - Tire Pressure" on page 217 and "Loading Your Vehicle" on page 226.

Radial Ply Tire: A pneumatic tire in which the ply cords that extend to the beads are laid at substantially 90 degrees to the centerline of the tread.

**Rim:** A metal support for a tire or a tire and tube assembly upon which the tire beads are seated.

**Sidewall:** The portion of a tire between the tread and the bead.

**Speed rating:** An alphanumeric code assigned to a tire indicating the maximum speed at which a tire can operate.

**Traction:** The friction between the tire and the road surface. The amount of grip provided.

**Treadwear Indicators:** Narrow bands, sometimes called "wear bars", that show across the tread of a tire when only 2/32 inch of tread remains. See "When It Is Time for New Tires" on page 219.

**Tread Width:** The width of the tire's tread. **UTQGS:** Uniform Tire Quality Grade Standards, a tire information system that provides consumers with ratings for a tire's traction, temperature and treadwear. Ratings are determined by tire manufacturers using government testing procedures. The rating are molded into the sidewall of the tire. See "Uniform Tire Quality Grading" on page 221.

Vehicle Capacity Weight: Is the number of designated seating positions multipled by 150 pounds (68 kg) plus the rated cargo load. See "Loading Your Vehicle" on page 226.

Vehicle Maximum Load on the Tire: Load on an individual tire due to curb weight, accessory weight, occupant weight and cargo weight.

**Vehicle label:** A label permanently attached to a vehicle showing original equipment tire size and the recommended cold inflation pressure. See "Loading Your Vehicle" on page 226.

## **Steps for Determining Correct Load Limit**

- 1 Locate the statement "The combined weight of occupants and cargo should never exceed XXX pounds" on your vehicle's label.
- 2 Determine the combined weight of the driver and passengers that will be riding in your vehicle.
- 3 Subtract the combined weight of the driver and passengers from XXX kilograms or XXX pounds.
- 4 The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the "XXX" amount equals 1400 lbs. and there will be five 150 lb. passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400–750 (5x150) = 650 lbs.).

- 5 Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.
- 6 If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

#### 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.

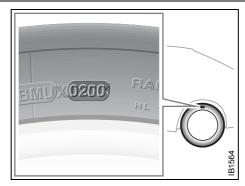
Winter tires normally use a different speed rating compared to summer/all season tires. Make sure not to exceed the stated speed rating on the tires you use.

#### 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 now have a date-code marking for the year of manufacture. The first two digits denote the week number and the two last digits the year. The "<" symbol points to the year.

Accordingly, a date code of 0200 signifies that the tire was manufactured in week 02, 2000.



Tire date code

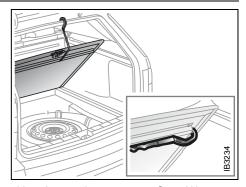


Spare wheel (under panel in luggage compartment)

#### NOTICE

To avoid damaging a punctured alloy wheel it can be placed outside up in the spare-wheel well but **only** while driving to the closest dealer.

A general rule is that all heavy loads must be well secured in the luggage compartment, see page 123 and 126.



Hanging up the cover, 9-5 SportWagon

## Compact spare tire

The compact spare is light and easy to handle when changing the tire. Its use is only permitted when a standard tire has sustained a puncture. The maximum life of the tire is only 2000 miles (3,500 km).

## Do not exceed 50 mph (80 km/h) with the compact spare fitted.

The compact spare should be inflated to 60 psi (420 kPa). Carry the punctured tire in the spare-wheel well under the luggage-compartment floor.

Have the standard tire repaired and refitted as soon as possible (see also page 170).

The spare tire, together with the jack, front towrope attachment eye and toolkit, is stowed away underneath the luggage-compartment floor.

#### Changing a wheel

## **WARNING**

Lifting a vehicle and getting under it to do maintenance or repairs is dangerous without the appropriate safety equipment and training. The jack provided with your vehicle is designed only for changing a flat tire. If it is used for anything else, you or others could be badly injured or killed if the vehicle slips off the jack. Use the jack provided with your vehicle only for changing a flat tire.

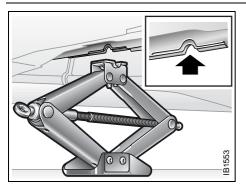
Changing a tire can be dangerous. The vehicle can slip off the jack and roll over or fall on you or other people. You and they could be badly injured or even killed. Find a level place to change your tire. To help prevent the vehicle from moving:

- 1 Set the parking brake firmly.
- 2 If you have an automatic transmission, put the shift lever in PARK (P). For a manual transmission, leave the car in gear (1st or REVERSE (R)).
- 3 Turn off the engine and do not restart while the vehicle is raised.
- 4 Do not allow passengers to remain in the vehicle.

To be even more certain the vehicle won't move, you should put blocks at the front and rear of the tire farthest away from the one being changed. That would be the tire, on the other side, at the opposite end of the vehicle.

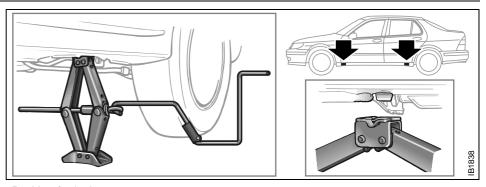
- The car jack is designed solely for use in changing a wheel or fitting snow chains. It must not be used to support the car during repair work or servicing.
- Never crawl under a car that is supported only by a jack.
- Raising your vehicle too high or with the jack improperly positioned can damage the vehicle and even make the vehicle fall. To help avoid personal injury and vehicle damage, be sure to fit the jack lift head into the proper location before raising the vehicle, and raise the vehicle only far enough off the ground so there is enough room for the spare tire to fit (no more than 25 mm or 1 inch clearance between the ground and the bottom of the tire).
- Switch on the hazard warning lights if the car is on a road.

- 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.
- Grit, salt and rust can clog the inner threads of the wheel bolts if the car has been driven for several years exclusively with alloy wheels. If steel wheels are being installed, 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.



Positioning the jack

To jack up the car, apply the jack to one of the special jacking points under the sills. If a floor jack is used, it can be applied to the standard jacking points used by the dealer. A floor jack can lift both front wheels or both rear wheels off the ground simultaneously. A jack stand must then be applied underneath the front of the engine subframe (at the fixing point for the towrope-attachment eye) or to the rear towrope-attachment eye (or under the trailer hitch, if fitted).



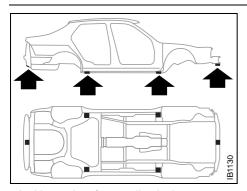
Position for jack

#### **NOTICE**

Apply the jack only to the jacking points indicated on the body.

1 Put the car in 1st gear (automatic transmission: move selector to the P position) and apply the parking brake.

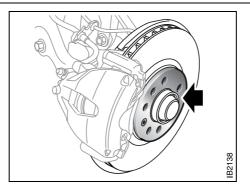
- 2 Wind the jack up to a suitable height before placing it under the recess in the sill.
  - Make sure that the jack fully engages the recess in the sill and that the base of the jack is steady and flat on the ground.
- 3 Remove the wheel cover (where applicable).
  - Loosen the wheel bolts by half 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 hub.
- 6 Fit the wheel and screw in the bolts in the sequence shown (opposite pairs) - see page 234.



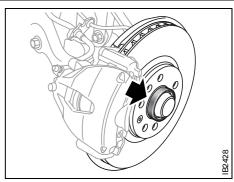
Jacking points for a trolley jack

Tighten the bolts enough for the bolts and wheel to be seated correctly.

Lower the car and tighten the wheel bolts to the correct torque in the sequence shown (opposite pairs).
 Tightening torque
 Light-alloy wheels: 80 ft.lbs. (110 Nm)
 Steel wheels: 80 ft.lbs. (110 Nm).



Clean any rust or dirt from the contact surfaces between the wheel and brake disc



Do not wipe away the grease in the hub.

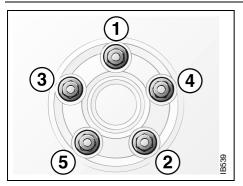
#### **NOTICE**

- When refitting wheel covers (where applicable), make sure that the valve protrudes through the marked hole in the wheel cover.
- Do not overtighten the bolts using an impact wrench: not only can this damage the wheels but it can also make it impossible to undo the bolts using the wheel wrench in the car's toolkit.

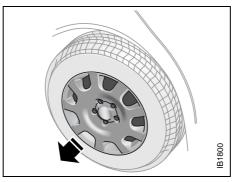
8 Check-tighten the wheel bolts after a few miles.

#### **Tightening torque**

Light-alloy wheels: 80 ft.lbs. (110 Nm) Steel wheels: 80 ft.lbs. (110 Nm)



Tightening sequence, wheel bolts



Removing the wheel cover

## Air conditioning (ACC)

## **WARNING**

- All repairs and adjustments on the A/C system must be carried out by a Saab dealer authorized for this kind of work.
- The A/C system is pressurized. Do not break any connections or undo A/C system components.
- Escaping refrigerant gas can cause visual impairment or other injury.

#### **NOTICE**

- The A/C system is designed for use with R134a refrigerant.
- Refrigerant handling requires special equipment and special procedures for charging and draining the system.
- Never mix R134a and R12 refrigerants.

#### **Fault diagnosis**

If a fault occurs in the A/C system, there are a number of checks you can perform yourself. If the fault persists, however, have the system checked by an authorized Saab dealer.

#### Important!

When the A/C system is running, the intake air is dehumidified, and the resultant condensation is drained off through two outlets underneath the floor of the car in the vicinity of the front doors. It is therefore perfectly normal for water to be seen dripping from these outlets when the car is parked. The warmer the ambient air and the higher the humidity, the greater will be the amount of condensation formed.

#### Inadequate cooling:

- a Check that the condenser (forward of the radiator) has not become clogged with dirt and insects.
- b Make sure that the drive belt for the compressor is not slipping.
- c Check the fuses for the ventilation fans and compressor.

#### **Maintenance**

- The drive belt for the compressor should be inspected under the regular service program.
- Clean dirt and insects away from the condenser and radiator to prevent clogging.
   When washing the car, use the hose to spray the radiator and condenser (located forward of the radiator) from both sides (both from the front of the car and from inside the engine bay). Do not use a pressure washer.

## Caution: Do not use the hose when the engine is hot.

Other than in extremely cold weather, do not screen the radiator, e.g. with netting, as this will greatly diminish its cooling capacity.

**Note:** The A/C system will only operate when the outdoor temperature is above the freezing point (0°C, 32°F).

## Safety belts

## **MARNING**

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

Never make any alterations or repairs to the safety belt yourself.

Regularly check the function of the safety belts 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. There must be no frayed threads in the webbing.

Safety belts must not come into contact with substances such as polishes, oils or other chemicals. If the straps are dirty, wash them with warm water and a detergent or have them replaced.

## **Upholstery and trim**

To remove lint or hairs from the seat upholstery or headlining, use a moist, lint-free cloth or a special lint remover (brush or roller). Remove any dirty marks using a cloth moistened with lukewarm soapy water.

When using a stain remover, always work from the outside towards the center 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.

Wet patches left by spilled soft drinks or thin oil must be wiped off immediately using an absorbent material, such as a paper towel, and treated with stain remover.

Alcohol is recommended for removing grease or oil stains, and a semi-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. Discoloration caused by dust and wear mainly affects the lighter shades, although this is not detrimental to the leather — indeed, the patina resulting from use is often considered desirable in leather. But if the leather is allowed to become too grubby, it can start to look shabby.

It is a good idea to clean and recondition the leather twice a year – in conjunction with a general spring-cleaning of the car – after the winter and in the autumn, for instance. In hot, dry climates, the leather will need to be treated more frequently. Recommended conditioner – Saab Leather Care Lotion. Do not use unknown harsh polishing agents, cleaning agents, sprays, coarse soap or hot water.

## **Textile carpeting**

Vacuum clean the carpeting regularly. Carpets can also be cleaned using a brush, or carpet shampoo applied with a sponge. Do not use vacuum cleaners outdoors unless they are properly grounded.

### Washing the car

Wash your car frequently. To facilitate cleaning, a suitable detergent can be added to the water, which should be lukewarm. Saab offers a full line of car care products, including car wash, for the care of your vehicle. See your dealer for available products or visit www.saabcatalog.com (U.S. residents only).

Do not use a pressure washer at close range on stone chip damage, scratches or other damage to the paintwork. The paint can otherwise start to flake.

Remove any bird droppings without delay, as these can discolor the paintwork and prove difficult to polish out.

Use a soft cloth moistened with methyl alcohol to remove splashes of tar or asphalt. Do not use strong cleaners, as these can dry out the paintwork.

#### **NOTICE**

Avoid using any alcohol-based cleaners on the front and rear light clusters, as these can cause cracking of the lenses. The underside of the car also needs washing regularly, and this should be done 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 window glass inside and out using a high quality window cleaner. This is particularly important when the car is new, as upholstery and trim have a tendency to sweat a little at first.

Keep the glass well cleaned, as this helps to prevent misting.

#### **NOTICE**

- The door mirrors must be fully retracted before the car enters an automatic car wash.
- Remove fixed antennas, e.g. for mobile phone, before putting car through an automatic car wash.
- Try your brakes on leaving a car wash.
   Wet brake discs may reduce the performance of the brakes.
- Cars with Saab Parking Assistance:
   Do not spray the sensors or closer than 20 cm to the sensors with a pressure washer, as this can damage them.

## Waxing and polishing

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.

## **Engine compartment**

Clean the engine compartment using an engine detergent and rinse with hot water. Cover the headlights. Do not use high-pressure washer. Avoid spraying the hood liner, as this can become heavy and hang down and touch the engine when the hood is closed.

Do not use gasoline as a cleaning agent or solvent when carrying out repairs or maintenance. Saab recommends the use of environmentally safe degreasing agents.

## **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 antiperforation warranty does not cover corrosion resulting from untreated defects.

Paintwork damage sustained in a crash is usually extensive and can only be properly restored by professionals.

However, you can repair small scratches and stone-chip damage yourself. The necessary tools and materials, such as primer, touch-up paint and brushes, are available from your Saab dealer.

In the case of minor flaws in the paintwork, where the metal has not been exposed and an undamaged layer of paint remains, touch-up paint can usually be applied directly, after any dirt has been scraped away using a pointed knife.

If corrosion has already set in, e.g. as a result of stone-chip damage, use a pointed knife to scrape off all surface rust. If possible, the damaged area should be taken back to the bare metal. The metal should then be primed with two thin coats of primer applied by brush.

After the primer has dried, apply several thin layers of topcoat enamel until the surface of the repaired area is flush with the surrounding paintwork.

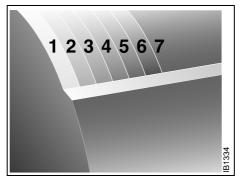
Stir both primer and touch-up enamel thoroughly before use and allow each coat to dry before applying the next.

#### Two-coat enamel

As the name implies, two-coat enamel is applied in two operations. The first coat, the base color, contains the pigment, metal flakes and binder. The second coat consists of a clear enamel, which provides the final gloss for the paintwork and protects the base from moisture and environmental contaminants.

Touch-up stone-chip damage as follows:

- 1 Thoroughly clean the damaged area.
- 2 Apply the primer, base color and finally, the enamel. To achieve the best finish, apply two or three coats of primer.



Surface-treatment composition

- 1 Body panel
- 2 Zinc (certain panel sections only) 7.5 µm
- 3 Phosphate coating
- 4 Cathodic ED 23 µm
- 5 Intermediate coat 35 μm
- 6 Metallic base 15 µm
- 7 Clear enamel /solid enamel 40 µm

## Anti-corrosion treatment

The entire car is corrosion-protected at the factory in different stages by an electrolytic immersion coating and a PVC-based protective coating to protect against corrosion caused by stones flung up by the wheels. A thin penetrating anti-rust oil is also applied in cavities and body members.

In addition to conventional anti-corrosion treatment like painting, underbody treatment and cavity treatment, most of the body panel surfaces are galvanized. These include the hood, the doors and the underbody.

The anti-corrosion treatment on the underside of the car and inside the wheel arches is particularly exposed to constant wear and possible damage, the degree of which will obviously depend on driving conditions.

#### What causes rust?

Steel body panels of automobiles are subject to rusting whenever air and moisture manage to penetrate the protective finish, and 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 great 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 Sheet Metal Coverage 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 beneath 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.

4 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, as otherwise it may run off or fall off when dry.

## For long trips

Before setting off on a long journey, it is advisable to have your car checked over by your Saab dealer.

Obtain a few important items to take along on your journey such as spare bulbs, wiper blades, fuses, a Poly-V-belt and the like. You can check some points yourself beforehand:

- Make sure that the engine is in good condition.
- Check that no oil or gasoline leaks out of the engine or gearbox/transmission.
- Check the coolant and power steering fluid levels. Check also for leaks.
- Inspect the Poly-V-belt and replace it if it shows any signs of hard wear.
- · Check the battery charge.
- Check the tires for tread pattern and air pressure, including the compact spare wheel.
- Check the brakes.
- · Check all bulbs.
- Check for the presence of the tool kit and the jack in the car.

# Recovery and/or recycling of automotive materials

A typical car consists of metals (65–75 %), plastics (10–15 %), rubber (5 %) and small quantities of glass, wood, paper and textiles. The recycling of metals has been commonplace for a long time now.

To facilitate sorting of other materials for recycling, plastic parts, for instance, have been marked to identify the precise nature of the plastic.

The quantity of materials in the car that can be recycled or recovered depends on the scrapping facilities in different countries. EU legislation that comes into force in 2006 will require a minimum of 85 % of the total weight of materials to be recycled. However, every major car salvage yard in each market will receive details from Saab of how the highest percentage of materials can be reclaimed.

## **Headlight aiming**



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 reaimed, 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**

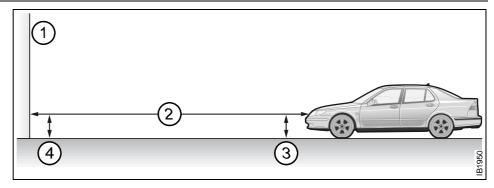
To make sure that your headlights are aimed properly read all instructions before beginning. Failure to follow these instructions could cause damage to headlight parts or a not correctly aimed headlight.

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.
- 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 for vehicles with halogen lamps and 3 inches for vehicles with xenon lamps.

If you find that the headlight needs adjustment follow these steps:

- 1 Open the hood and locate the vertical aiming device.
- 2 Locate the marker on the lens.
- 3 Measure the distance from the ground to the aim marker on each lens. Subtract 2 inches if the vehicle is equipped with halogen lamps, record this distance.

Subtract 3 inches if the vehicle is equipped with xenon lamps, record this distance.

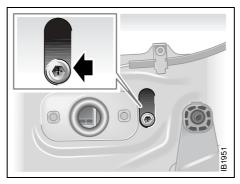
4 At the wall or other flat surface, measure from the ground to the recorded distance (see point 4) and draw a horizontal line the width of the vehicle.

5 Turn on the low beam headlights and 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.

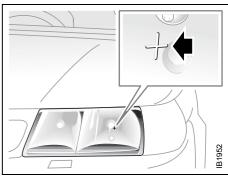
#### **NOTICE**

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 which may cause damage to the headlight.

6 Turn the vertical aiming screw until the horizontal cut-off of the headlight is aligned with the horizontal line on the wall.

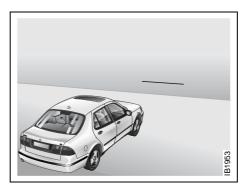


Vertical aiming device



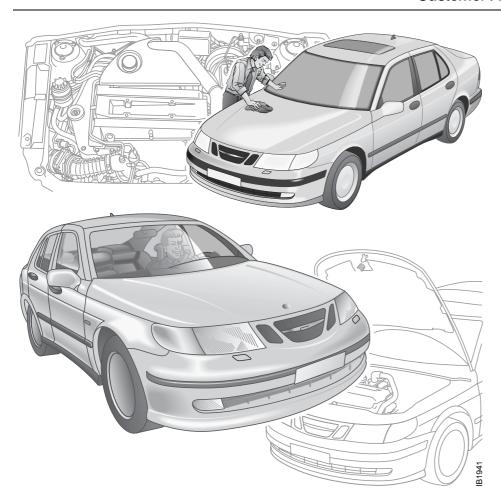
Aiming marker on headlight lens

Horizontal line on wall or other flat surface



Correctly adjusted low beam





# **Customer Assistance and Information**

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#### **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 good advice!

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 prescribes a service at every 15,000 miles (24,000 km) thereafter (15,000, 30,000, 45,000 miles/24,000, 48,000, 72,000 km etc.).

#### 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 stated in the Specification 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 the following conditions:

- Most trips are less than 5 to 10 miles (8 to 16 km). This is particularly important when outside temperatures are below freezing.
- Most trips include extensive idling (such as frequent stop-and-go driving).
- Most trips are through dusty areas.
- You frequently tow a trailer or use a carrier on top of your vehicle.
- If the vehicle is used for delivery service, police, taxi or other commercial applications.

If your driving habits match this description, have the engine oil and filter changed inbetween normal services at 7,500 mile (12,000 km) intervals. The Saab Warranty 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 series of coupons on which to record services as they are performed. There are additional coupons for documenting extra engine oil and filter changes, extra automatic transmission fluid services necessary for severe service conditions, and brake fluid changes.

## HOW TO USE THE SERVICE RECORD COUPONS

When the car is brought to a Saab dealer for scheduled manitenance, present the Saab Warranty and Service Record Booklet to the service manager. When the technician has completed the service, the technician will sign the maintenance record. The person resposible 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 locality.

#### 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 Warranty 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 9-5 car line can be ordered through your Saab dealer or by visiting

www.saabtechinfo.com. These are comprehensive manuals on CD rom, geared to use by professional technicians.

Consult your Saab dealer for prices and for a listing 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.

#### Vehicle Data Collection and Event Data Recorders

Your vehicle, like other modern motor vehicles, has a number of sophisticated computer systems that monitor and control several aspects of the vehicle's performance. Your vehicle uses on-board vehicle computers to monitor emission control components to optimize fuel economy, to monitor conditions for air bag deployment and, if so equipped, to provide anti-lock braking and to help the driver control the vehicle in difficult driving situations. Some information may be stored during regular operations to facilitate repair of detected malfunctions; other information is stored only in a crash event by computer systems commonly called event data recorders (EDR).

In a crash event, computer systems, such as the Air Bag Sensing and Diagnostic Module (SDM) in your vehicle may record information about the condition of the vehicle and how it was operated, such as data related to engine speed, brake application, throttle position, vehicle speed, steering wheel angle, lateral acceleration, safety belt usage, air bag readiness, air bag performance, and the severity of a collision. This information has been used to improve vehicle crash performance and may be used to improve crash performance of future vehicles and driving safety. Unlike the data recorders on many airplanes, these onboard systems do not record sounds, such as conversation of vehicle occupants.

To read this information, special equipment is needed and access to the vehicle or the SDM is required.

Saab will not access information about a crash event or share it with others other than

- with the consent of the vehicle owner or, if the vehicle is leased, with the consent of the lessee,
- in response to an official request of police or similar government office,
- as part of Saab's defense of litigation through the discovery process, or
- · as required by law.

In addition, once Saab collects or receives data, Saab may

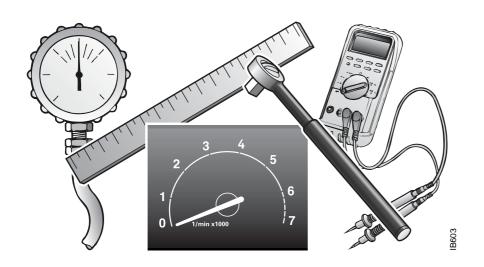
- use the data for Saab research needs,
- make it available for research where appropriate confidentiality is to be maintained and need is shown, or
- share summary data which is not tied to a specific vehicle with non-Saab organizations for research purposes.

Others, such as law enforcement, may have access to the special equipment that can read the information if they have access to the vehicle or SDM.

If your vehicle is equipped with OnStar®, please check Ithe OnStar® subscription service agreement or manual for information on its operations and data collection.

#### 250 Customer Assistance and Information

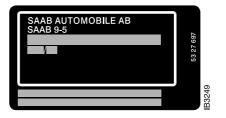
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### General

Overall length, including bumpers:	
9-5 Sedan	190.0 in (4827 mm)
9-5 SportWagon	190.1 in (4828 mm)
Overall width, including door mirrors	80.4 in (2042 mm)
Maximum height:	
9-5 Sedan	58.1 in (1475 mm)
9-5 SportWagon	59.1 in (1501 mm)
Wheelbase	106.4 in (2703 mm)
Ground clearance at gross vehicle weight	approx. 4.6 in (116 mm)
Track:	
Front	59.9 in (1522 mm) *)
Rear	59.9 in (1522 mm) *)
Turning circle (curb to curb)	37,1 ft (11.3 m)
Turning circle (measured at vehicle extremities)	39,0 ft (11.9 m)
Number of seats (incl. driver)	5
*) Specified track applies to wheel sizes:	6 x 15 & 6.5 x 16



Permissible load (in addition to driver) = GVW minus curb weight
The maximum permissible axle load, front or rear, must not be exceeded.
The maximum permissible axle load, front or rear, must not be exceeded.

Chassis number in engine bay

Weight ready for driving (i.e. with full fuel tank, washer-fluid reservoir, standard tools and spare wheel)	3460–3780 lbs. (1570–1715 kg)
Gross vehicle weight (GVW)	4390–4710 lbs. (1990–2135 kg)
Maximum axle load:	
Front	2590 lbs. (1175 kg)
Rear, 9-5 Sedan	2310 lbs. (1050 kg)
Rear, 9-5 SportWagon	2480 lbs. (1125 kg)
Weight distribution:	
Curb weight, front/rear	60/40 %
GVW, front/rear	50/50 %
Maximum roof load	220 lbs (100 kg)

### Luggage compartment

Volume (SAE): 9-5 Sedan 15.9 cu.ft. (450 litres) 9-5 SportWagon, rear seat upright 31.4 cu. ft. (890 litres) 9-5 SportWagon, rear seat folded 73.0 cu. ft. (2067 litres) Luggage compartment, length, 9-5 Sedan: Rear seat upright 43.0 in (1092 mm) Rear seat folded down \_\_\_\_\_ 67.5 in (1714 mm) Luggage compartment, length, 9-5 Sport-Wagon: Rear seat upright \_\_\_\_\_ 42.8 in (1087 mm) Rear seat folded 68.2 in (1732 mm)

# **MARNING**

- 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 luggage compartment, make sure that it is tied down securely, particularly when part or all of the rear seat is folded down.

#### Trailer:

Maximum towing speed, trailer with brakes	60 mph (100 km/h)
Trailer with brakes	Maximum weight: 3500 lbs (1588 kg)
Trailer without brakes	Maximum weight: 1000 lbs (450 kg)
Maximum load on ball hitch	110–165 lbs (50–75 kg)

The above speed and weight restrictions are those specified by Saab Automobile AB.

Note that local restrictions may apply to trailer speeds and weights (see page 161).

Engine		Fuel	
4-cylinder	Four cylinders, twin overhead cams-hafts, 16 valves and	Fuel-tank capacity	18.5 gal. (70 litres)
	two balancer shafts.	For optimum performance Saab	
Cylinder bores	3.54 in (90 mm)	recommends:	2.3t 185 hp (Linear) – AON 90.
Stroke	3.54 in (90 mm)		2.3T 220 hp (Arc) and
Swept volume	139.7 cu.in (2.290 litres)		2.3 Turbo 250 hp (Aero) – AON 93.*
Idling speed	825 rpm (man.)	* If AON 90 is used some decreas	e in engine power can occur.
. J -	860 rpm (aut.)	Gasoline with a lower octane rating can be used, although	
Antifreeze	Saab-approved antifreeze		
Coolant capacity	7.8 qts (7.4 litres)	For further information on fuel, see p	

## **Engine oil**

To meet demands in Saab's extended service intervals all engines are filled with specially designed synthetic factory fill oils. Long service intervals, fuel economy and environmental issues are the base for our choice of oil. By using oils approved by Saab you minimise the tendencies for oil sludge build, by that protecting the engine from harmful, wear increasing, deposits.

### Approved oils:

# All gasoline engines - Fully Synthetic Engine Oil fulfilling GM-LL-A-025 requirements.

Oil used at, or in-between, service must be approved according to the engine specified classification to render possible the usage of Saab Automobile AB specified service intervals.

### Servicing/Oil changes:

To be able to use recommended service intervals the need to use only approved engine oils is vital. **Use only engine oils** approved for your engine. Service should be done according to the recommended service intervals to optimize your engine's function through out its entire life. Saab Automobile AB will not take responsibility for any damage that might occur due to neglecting to meet above mentioned requirements.

At your Saab dealers you can find Saab Genuine or Mobil engine oils. Among those there are oils specially designed to meet your engines specific needs. We recommend that you, with the help of our skilled service personnel, choose your oil from that sortiment.

Other oil companies also have engine oils approved according to GM specifications. Oils meeting these standards may be identified as synthetic. However, not all synthetic oils will meet your engines requirements. You should only use oil that meets your engines specific requirements (GM-LL-A-025).

#### Recommended oil viscosities

Viscosity is a measurement of the oils thickness. The thickness influences, among other things, the fuel economy. For best function Saab recommends:

### For gasoline engines:

SAE 0W-30 SAE 5W-30 or

SAE 0W-40 engine oil

### Extra engine oil additives

Don't add anything to your oil. The recommended oils are all you will need for good engine performance and protection.

### When to change engine oil

Your vehicle will display when it is time for servicing on the SID, based on the mileage and time since the last service.

Under normal circumstances the service indication will come after:

Saab 9-5, 15,000 miles (24,000 km) or 1 year.

For this service system to work it is of outmost importance that the right engine oil is used.

When the message for service is displayed you need to have the required service done as soon as possible.

After the service your service personnel will reset the service indicator. It is important to reset the service indicator in order to optimize the time to the next service.

Oil capacity incl. filter (on changing) \_\_\_\_ 4.1 qts (4.0 litres)

### **Engine variants**

#### 2.3t Ecopower

Rating, EEC at 5500 rpm \_\_\_\_\_ 185 hp (136 kW)

Maximum torque, EEC at 1800 rpm \_\_\_ 206.5 ft.lb (280 Nm)

Compression ratio \_\_\_\_ 9.3:1

### 2.3T Ecopower

 Rating, EEC at 5500 rpm
 220 hp (161 kW)

 Maximum torque, EEC at 1800 rpm
 228.6 ft.lb (310 Nm)

 Compression ratio
 9.3:1

### 2.3 Turbo Ecopower

 Rating, EEC at 5500 rpm
 250 hp (184 kW)

 Maximum torque, EEC at 1900 rpm
 258.0 ft.lb. (350 Nm)

 Compression ratio
 9.3:1

## **Electrical system**

Voltage	12 V
Battery capacity	
Starter motor	1.4 kW
Alternator rating	140 A/14 V
Firing order	1–3–4–2
Spark plugs:	
2.3t	NGK BCPR 6ES-11
Electrode gap	0.0141 in (1.05 mm)
2.3T and 2.3 Turbo	
Electrode gap	0.0374 in (0.95 mm)

### **Drive belts**

# Engine variants

Drive belt \_\_\_\_\_ 95.08 in (2415 mm)

**Outside length** 



Drive belt

#### Manual gearbox **Automatic transmission** Type \_\_\_\_\_ All-synchromesh Type Electronically con-5-speed with final trolled 5-speed, drive and differenfully automatic with hydraulic torque tial converter, plane-Oil \_\_\_\_\_ Saab MTF 0063 tary gear set and Oil capacity \_\_\_\_\_ 1.9 qts (1.8 litres) integral final drive Lock-up function in Oil volume (on changing) 1.6 qts (1.5 litres) selector positions 3, Hydraulic, single Clutch type \_\_\_\_\_ 4 and 5. dry-plate clutch of Selector-lever positions PRNDML diaphragm-spring Transmission-fluid capacity, dry transmistype sion (incl. torque converter and oil cooler) 7.4 qts (7 litres) Speed (mph / km/h) at 1000 rpm in 5th gear: 27–29 / 43–47 Transmission fluid Saab 3309 (mineral oil based) Clutch type Hydraulic plate clutches, brake bands and one-way couplings

Speed (mph / km/h) at 1000 rpm in 5th gear: 29–30 / 46–48

#### Suspension **Brake system** Spring type, front and rear \_\_\_\_ Coil springs Footbrake (ABS) Hydraulic, dualcircuit brake svs-Maximum deflection of springs: tem. Diagonally Front \_\_\_\_\_ 7.09 in (180 mm) split circuit with vacuum servo unit. 7.87 in (200 mm) Disc brakes front Dampers, front and rear Gas-filled dampers and rear. EBD, see page 152. Steering Handbrake Acts on rear wheels Brake fluid DOT 4 Power-assisted ste-Steering Brake-fluid capacity \_\_\_\_\_ 0.951 ats (900 ml) ering of rack-and-pinion Disc diameter: type; telescopic ste-Front, ventilated 11.34 in (288 mm) ering-column shaft with universal joints Front, ventilated, certain variants \* 12.05 in (306 mm) Number of turns, lock to lock \_\_\_\_\_ 2.9 Rear, solid 11.26 in (286 mm) Power-steering fluid Power-steeringfluid Rear, ventilated, certain variants \* 11.81 in (300 mm) CHF 11S \* 15" wheel must not be used on these variants. Total friction area of brake pads: Front \_\_\_\_\_ 36.3 in<sup>2</sup> (234 cm<sup>2</sup>) Rear \_\_\_\_\_ 15.5 in<sup>2</sup> (100 cm<sup>2</sup>)

### Wheels and tires

(recommended dimensions)

	2.3t	2.3T	2.3 Turbo
All season tires		•	
215/55 R16 93 H	Х	Х	Х
225/45 R17 94 V XL/RF	Х	Х	Х
Summer tires			
225/45 R17 94 W XL/RF	Х	Х	Х
Winter tires			
205/65 R15 94 Q	Х	Х	_
215/55 R16 93 Q	Х	Х	Х
225/45 R17 94 Q XL/RF	Х	Х	Х
Wheel sizes	•	1	
6 x 15"	Х	Х	_
6,5 x 16"	Х	Х	Х
7 x 17"	Х	Χ	Х
	·		

<sup>15&</sup>quot; wheels must not be fitted to the 2.3 Turbo since the size of the brake discs prohibits this.

Speed ratings and load indexes, see page 225.

**Always** contact an authorized Saab dealer if you wish to fit other wheels or tires than those fitted as standard.

### Compact spare:

Wheel	4 x 16"
Tire	T115/70 R16
Pressure	60 psi (420 kPa)
Maximum life	2,200 miles (3500 km)
Maximum speed	50 mph (80 km/h)

#### **NOTICE**

#### Snow chains:

Snow chains must **not** be fitted to the rear wheels, and may only be used with the following wheel-tire combinations:

Wheels	Tires
6 x 15"	205/65 R15 or 205/65 R15 M+S
6.5 x 16"	215/55 R16 or 215/55 R16 M+S

Snow chains must not be fitted to 17" wheels.

Max. permissible speed with snow chains fitted is 30 mph (50 km/h).

Contact an authorized Saab dealer for advice on snow chains.

### **NOTICE**

Wheels larger than 17" must not be fitted.

Wheel offset must be 49 mm.

Vehicles with 12.05" in (306 mm) front brake discs must not use 15" rims.

### Lowest recommended tire pressure, cold tires

Tire size	Load/speed mph (km/h) <sup>1)</sup>	Front kPa/psi	Rear kPa/psi
All season tires			_
215/55 R16 93 H	1-3 pers./0-100 (0-160)	240/35	220/32
	4–5 pers./0–100 (0–160)	240/35	220/32
	1-5 pers./100- (160-)	290/42	270/39
225/45 R17 94 V	1-3 pers./0-100 (0-160)	250/36	240/35
XL/RF	4–5 pers./0–100 (0–160)	250/36	240/35
	1-5 pers./100- (160-)	300/43	290/42
Summer tire			
225/45 R17 94 W	1-3 pers./0-120 (0-190)	250/36	240/35
XL/RF	4–5 pers./0–120 (0–190)	250/36	240/35
	1-5 pers./120- (190-)	300/43	290/42

Tire size	Load/speed	Front	Rear
	mph (km/h) <sup>1)</sup>	kPa/psi	kPa/psi
Winter tires			
205/65 R15 94 Q	1-3 pers./0-100 (0-160)	240/35	240/35
Winter tire for 2.3t	4–5 pers./0–100 (0–160)	260/38	260/38
215/55 R16 93 Q	1-3 pers./0-100 (0-160)	240/35	240/35
Winter tire. All variants.	4–5 pers./0–100 (0–160)	260/38	260/38
225/45 R17 94 Q	1-3 pers./0-100 (0-160)	250/36	250/36
XL/RF Winter tire. All variants.	4–5 pers./0–100 (0–160)	270/39	270/39
Compact spare		·	

#### Compact spare

T115/70 R16 Spare wheel	Max 50 (80)	420/60	420/60
Spare wrieer			

<sup>1)</sup> Do not exceed posted speed limits.

By cold tires is meant tires that are the same temperature as the surrounding air temperature.

The values for tire pressure in the table above are for tires at 68°F (20°C).

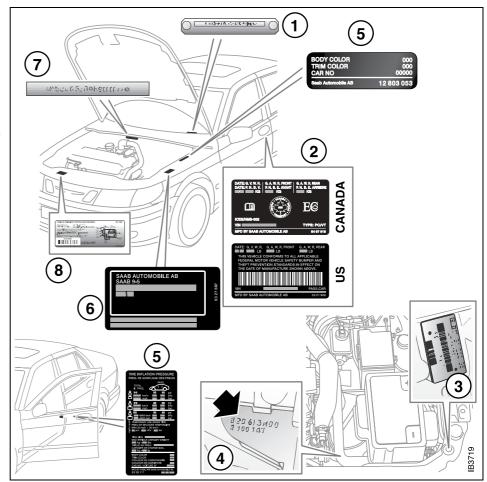
The tire pressure will increase as the tires become warm (e.g. during motorway driving), and decrease as they cool.

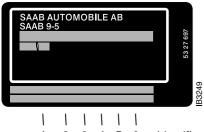
When the temperature of the tires increase or decrease by 10 degrees the tire pressure will correspondingly increase or decrease by 10 kPa/2 psi (0.1 bar).

### Plates and labels

When consulting your Saab dealer, it may be necessary to quote the car's V.I.N., engine and gearbox numbers.

- 1 V.I.N. number, inside windshield.
- 2 Certification label.
- 3 Gearbox number.
- 4 Engine number.
- 5 USA: Label for color codes (trim and body) Tire information label can be found on the B-pillar. See also page 226. Canada: Label for tire pressure and color codes (trim and body).
- 6 Chassis number plate.
- 7 Chassis number, stamped on body.
- 8 Vehicle Emission Control Information.





position: 1 2 3 4 5 6 7 8 9 10 11 12

V.I.N.: Y S 3 E H 4 9 G 6 5 3 045842

1 2 3 4 5 6 = identification codes for certain chassis details

1	Region	Y =	Northern Europe
2	Country	S =	Sweden
3	Manufacturer	3=	Saab Automobile AB
4	Product line	E=	9-5
5	Model series	B=	9-5 Linear with driver's and passenger-side airbags
		D =	9-5 Arc with driver's and passenger-side airbags
		H =	9-5 Aero with driver's and passenger-side airbags
6	Body version	-	4-door 5-door
7	Gearbox	5=	Manual 5-speed
		9=	Automatic 5-speed

8	Engine variant	 A = E = G =	
9	Check digit	 0-9/X	
10	Model year	 5=	2005
11	Factory	 3=	Trollhättan
12	Serial number _		000001-999999

### Several of the systems in your Saab car can be adjusted to better fit your individual needs

Some functions are governed by legal requirements and cannot therefore be reprogrammed.

Consult an authorized Saab dealer for further information.

#### Car alarm/central locking system:

- The number of blinks when locking/ unlocking.
- Automatic locking of the trunk when the car is driven, 1 to 8 mph (2–14 km/h), YES or NO.
- Preclude the unlocking of the trunk while the car is driven, YES or NO.
- Automatic locking of the trunk after 1 second–4 minutes if it has not been opened, YES or NO.
- Automatic locking of the trunk when it is closed, YES or NO.
- Automatic locking of all doors when the car is driven above 7.5 mph (12 km/h), YES or NO.

### Saab Information Display:

Outdoor temperature display can be adjusted.

#### Miscellaneous:

- Select the on-time for heated rear seat.
- Additional sweep of the wipers after windshield washer function (ON or OFF).
- Courtesy Headlight Feature on-time can vary from 20 to 50 seconds.
- Night panel illumination deactivation speed for the speedometer can be adjusted.

# Following adjustments can be done by the driver:

#### **Automatic Climate Control (ACC):**

To alter the preprogrammed "AUTO" start up mode with your own preferences you can manually select the desired settings for:

- Temperature.
- · Fan speed.
- · Air distribution.

See "Programming I" on page 79 and "Programming II" on page 80.

#### Saab 9-5 Audio System (see page 99):

- Maximum starting volume (when the radio is switched on).
- Telephone volume (if the car is equipped with a phone connected to the audio system).
- Speed dependent volume (volume increases or decreases with vehicle speed).
- · Loudness.

### **Daytime Running Lights:**

To disable, turn off the ignition and pull out fuse 35, see page 214.

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### Fuel

Recommended octane rating:

Unleaded gasoline

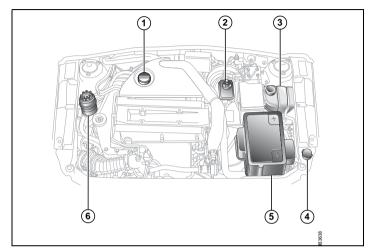
87-93 AON

For optimum performance Saab recommends:

- 2.3t 185 hp (Linear) AON 90.
- 2.3T 220 hp (Arc) and
   2.3 Turbo 250 hp (Aero) –
   AON 93.

Fuel tank 18.5 U.S.gal. capacity: (70 liter)

IMPORTANT: Do not overfill.
The level must not come up into the filler pipe because the fuel must have space room to expand.



### 1 Engine oil

For information see chapter "Technical data".

### 2 Brake/clutch fluid

DOT 4 brake fluid.

**Do not** use DOT 5 silicone fluid.

### 3 Coolant

Do not allow the coolant level to fall below the MIN mark on the expansion tank.

Top up as necessary with a mixture of equal parts Saab Antifreeze and water.

### 4 Washer fluid

### 5 Battery

### 6 Power steering fluid

Power Steering Fluid CHF 11S (P/N 8996860).

### **NOTICE**

Change of engine oil and oil filter may be required more frequently if the car is being used under certain conditions, see section "Customer Assistance and Information.

Saab Automobile AB, Trollhättan, Sweden

US/CA MY2005 Ordering nr. 42 94 98.

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All information and illustrations in this manual are based on the specifications that were available at the time of printing. Model variants, technical data and equipment vary from market to market, and may be altered without prior notice.

Note that illustrations in this manual can depict cars fitted with extra equipment. Your Saab dealer will be pleased to inform you of the exact specifications that apply to your market.