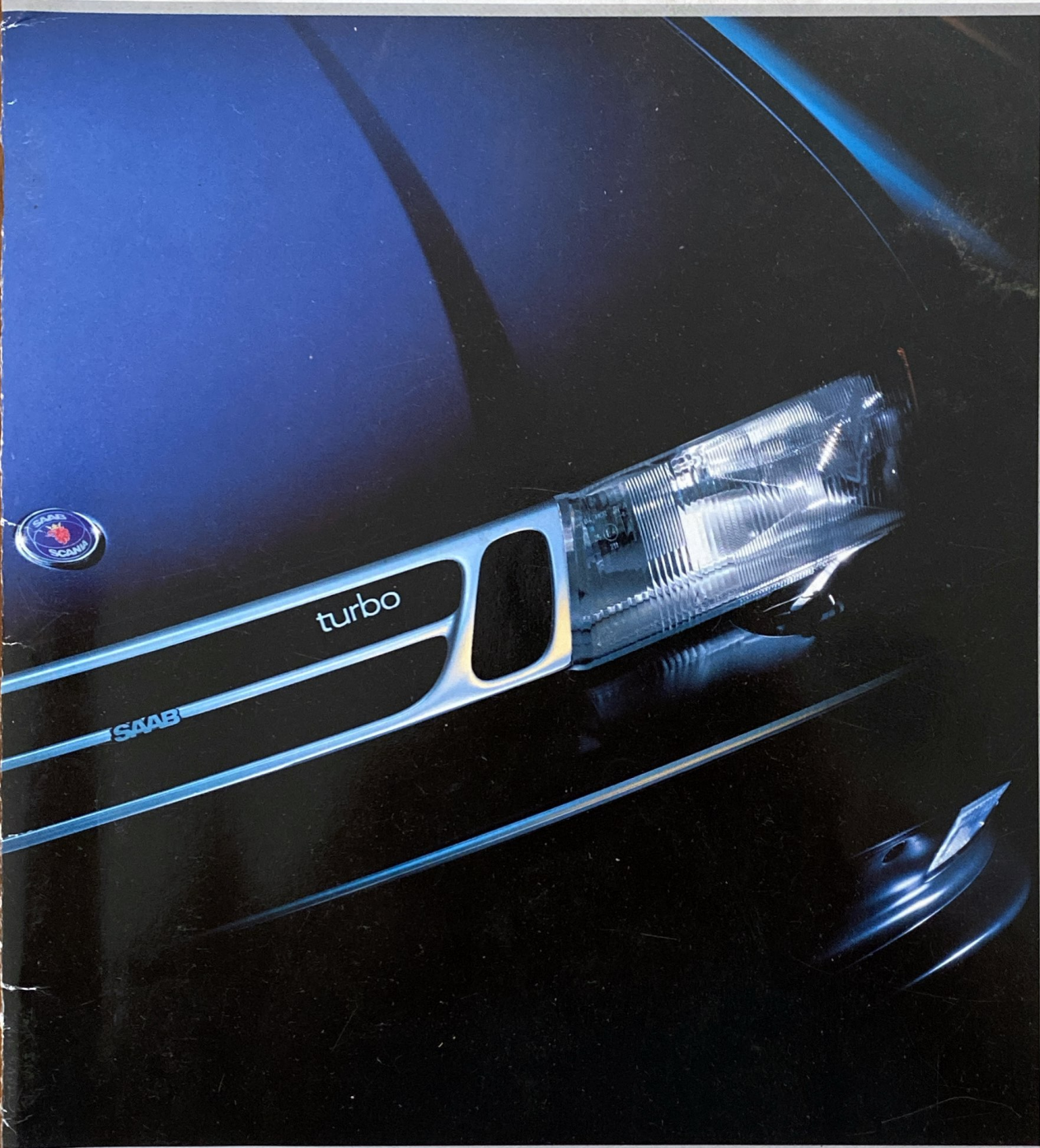


# Saab 9000 CS

SAAB 9000 CSE/CS



1993

**Crossway  
Saab**

365 River St. (Barre-Montpelier Rd.) Montpelier, Vt. 05602

Sales Representative

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**SAAB**



**SAAB**



## Giving fun back its good name. Introducing the Saab 9000 CSE and the 9000 CS.

True sports sedans, engineered for the joy of driving and the beauty of the open road, seem anachronistic in a world where economic and environmental news is presented in somber tones. With this outlook, the traditional sports sedan seems a bit selfish.

Saab introduces a bright spot in this picture, a genuine sports sedan that is not an anachronism. A 9000 CSE or CS is far from selfish; it'll comfortably accommodate five adults, and flexibly adapt their rear seats into cargo space to haul large loads. It generously provides up to 200 horsepower, but does it with an electronic engine management system that squeezes miles from every gallon of fuel.

It soothes its passengers with Automatic Climate Control, but relies on a new coolant that contains no chlorofluorocarbons, and so is less menacing to the environment.

And its strong family values are evident in the lengths to which a 9000 CSE or CS will go to protect its occupants, even to the point of sacrificing its own body to protect yours.

The following pages describe some of the most exciting automobiles Saab has ever built. Or that anyone else has ever built. And it's reintroduced the notion of fun to the world of everyday driving.

The Saab 9000 CSE is the latest reflection of Saab's aviation heritage. The aircraft in the background is the Saab 340B commercial airliner.





Driving a Saab is a course  
in roadway appreciation.

The torsional rigidity of the 9000 CS allows quick and accurate information to be communicated to the driver.



Front-wheel drive, favorable suspension geometry and anti-lock braking all contribute to the Saab's superb handling.



There are nuances to roads — to curves and crowns, surfaces and shoulders — that you don't fully appreciate until you've driven a car that puts you in command of the medium; a Saab 9000 CSE or CS, in other words.

This command comes from a chassis that enables communication between driver and road; from a suspension that more efficiently cushions you from potholes and vi-

bration; and from the superb traction of Saab's front-wheel-drive system that balances 60 percent of the vehicle's weight over the driven wheels.

Handling is also enhanced by MacPherson struts, rack-and-pinion steering, front and rear stabilizer bars and a lightweight beam-type rear axle. As you'd expect, the CSE and CS are also equipped with anti-lock braking systems.

Turbocharged models use another advanced electronics system to enhance handling: Saab's Traction Control System (TCS). TCS measures the relative gripping force of each driven wheel and adjusts the application of power to maintain traction on slippery surfaces.



Saab answers both your love of performance and your dislike of excess.

Saab's third generation of turbocharging technology gives the 9000 CS shown here excellent power from a sensibly sized and fuel-conservative engine.



The 9000 CS offers the power of a large engine for highway safety without its economic and environmental disadvantages.

Striking a balance between performance and environmental responsibility is one of the biggest challenges facing Saab engineers today. Such challenges leave little room for conventional engineering.

Take, for example, Saab's pioneering role in turbocharging. Saab was the first manufacturer to adopt turbochargers to passenger-car engines, increasing power while decreasing engine weight and fuel con-

sumption.

Saab also led in the development of four-valve-per-cylinder technology, gaining power and responsiveness through more efficient use of fuel.

But Saab's approach to environmental responsibility extends beyond the engine compartment. This year all Saab 9000 models carry one of the industry's first chlorofluorocarbon-free air-conditioning systems,

a step toward the protection of the ozone layer. And Saab was also among the first to eliminate asbestos in brake pads, clutches and gaskets.

Of course, drivers have a responsibility to protect the environment, too. Regular maintenance, sensible driving practices and the use of public transportation are just some of the ways you can help.



We don't just make safer cars.  
We make safer drivers.

Today's driving environment offers a lot of chances to get into trouble. The Saab 9000 CSE and 9000 CS are designed to give an alert driver an excellent chance of staying out of trouble.



The Folksam Award for safety has been presented twice, both times to Saab. The award is given to the safest car of all makes on Swedish roads, based on statistics from actual highway accidents.

The driver is perhaps the single most important safety consideration in any car.

This is why almost every major engineering decision made in the creation of the 9000 CSE and CS is designed to support, inform and respond to the person at the wheel.

Saab's support begins with electrically heated seats that are orthopedically shaped and widely adjustable to hold a driver in

the most effective driving posture.

Saabs also help the driver concentrate on driving with unusually effective climate control systems, including a unique passenger cabin air filter that removes tiny particles and pollen, down to 0.004 mm.

To help the driver see the surrounding highway and traffic environment, Saabs feature excellent visibility, electrically heated sideview mirrors, and wiper/washer sys-

tems for the headlights.

The torsional rigidity of the chassis, Saab's ABS and front-wheel drive help the driver to actually feel (via the steering wheel and driver's seat) the car's responses within that environment.

In general, Saab owners are enthusiastic and skillful drivers. Saab engineers have provided them with the tools to do that consistently.



Saab's aircraft heritage shows more in some places than in others.

Clear visibility in all directions and logical arrangement of controls and instruments put the Saab driver in a position of control.



Saab's design philosophy begins here, with the driver, and works outward to the rest of the car.

Saab learned how to create an efficient and supportive driver's position long before the company decided to build its first automobile.

When you are designing aircraft – which is what Saab engineers were doing in those days – it's hard to overestimate the importance of readable instruments, logically placed controls and a seating and seat belt system that holds a pilot in a relaxed and ready posture.

A belief in the crucial importance of that workspace is one of the attitudes that those engineers carried over into carmaking, and that has been passed down to successive generations of Saab builders. So, when you take control of a 9000 CSE or CS, what you discover first are readable instruments, logically placed controls and a seat that supports you for hours on end in a relaxed and ready posture.

Saabs are designed around the driver. The design process begins from the Seating Reference Point, the point of the driver's hip. Measurements are made from that point to lay out not only the driver's workspace, but the entire automobile.

Working from the inside out to build a controlled and responsive machine is one of the clearest legacies of Saab's aviation heritage.



We hid a large sedan inside the trim lines of the Saab 9000 CSE and 9000 CS.



The generous amount of room for five adults in the 9000 CSE and 9000 CS can quickly become, instead, room for bulky cargo and two, three or four adults just by folding down either or both sides of the rear seat.



Nothing on the outside of the 9000 CSE or 9000 CS suggests the amazing amount of space there is inside.

From the outside, the Saab looks poised, lean and purposeful. It looks like what it is — one of Europe's finest performance sedans. There is certainly nothing about its exterior appearance that says "practical."

Inside, its personality is remarkably different. The interior space is far more than merely practical. It's cavernous. The 9000 CSE or 9000 CS is, in fact, one of a handful of sedans designated by the U.S. Environmental Protection Agency as a "Large" car.

And the 9000 CSE or CS follows a Saab tradition of performance and practicality. The rear seat folds down in two parts, so that the cargo area can be expanded while leaving room for passengers in back. Folded completely, the rear seat gives way to over 55 cubic feet of cargo space.

The people who drive Saabs tend to be a little bit unconventional, like the cars themselves. They lead interesting lives — full of appointments, full of people and full of enthusiasm. The 9000 CSE and 9000 CS were intended from the beginning to accommodate all of that and more.



Saab craftsmen fill all that interior space with a very high level of comfort. Leather seating surfaces, for example, are made from carefully selected hides.



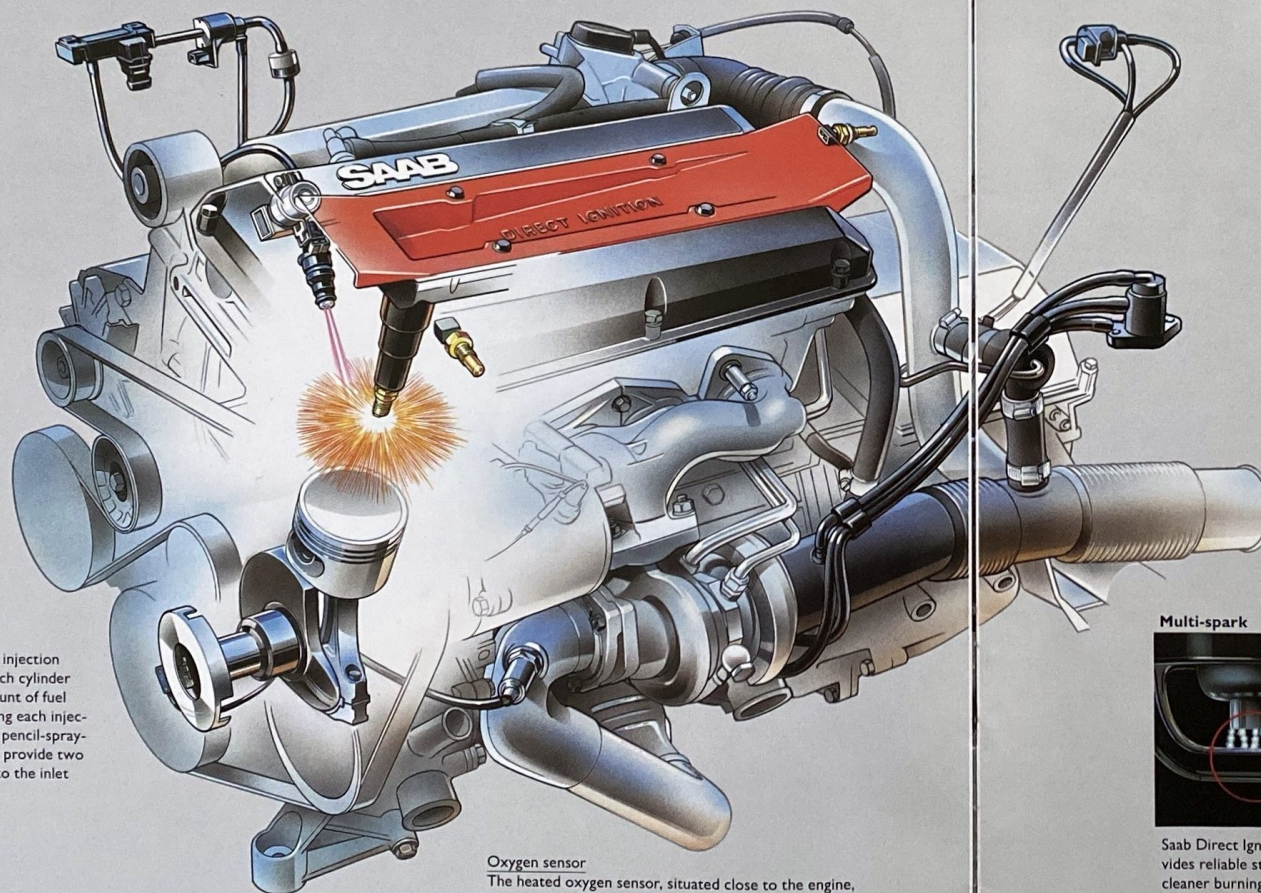
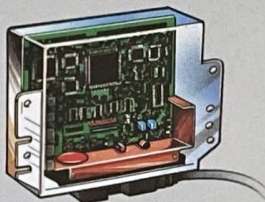
# Saab engines prove the superiority of sheer intelligence over mere mass.

## Saab TRIONIC system

TRIONIC Engine Management System is Saab's own microprocessor-based system for getting the most out of a given amount of fuel. By integrating and coordinating the actions of the Saab's fuel injection, ignition and turbocharging systems, this system produces optimum power with reduced fuel consumption and emissions, and with enhanced reliability.

## Electronic Unit

Samples data, then calculates and governs all functions. Adjusts ignition and fuel injection individually to each cylinder. Contains, for example, a 32-bit processor contributing to more than 10 times the system performance over existing engine electronics.



## Fuel Injection

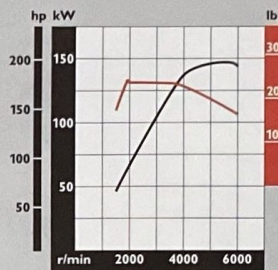
With sequential fuel injection that doses fuel to each cylinder individually, the amount of fuel can be changed during each injection sequence. Twin pencil-spray-type injection valves provide two sprays of fuel close to the inlet valves.

## Oxygen sensor

The heated oxygen sensor, situated close to the engine, senses the composition of the exhaust gases and provides feedback to the electronic unit.

## Torque

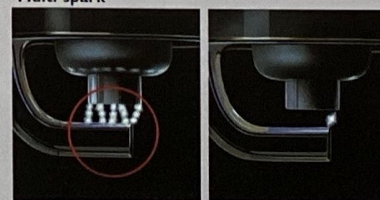
The 2.3-liter turbocharged engine develops very high torque (red curve in the diagram) at critical speeds – 244 foot-pounds at 1,900 rpm with manual transmission. This is the engine characteristic that enhances the Saab's ability to accelerate quickly when the need arises.



## Efficient combustion, Saab Direct Ignition

The Saab engine burns fuel very efficiently, due to its use of four valves per cylinder, centrally mounted spark plugs and dome-shaped combustion chambers. The patented Saab Direct Ignition System fires each plug at 40,000 volts, instead of the normal 25,000 volts, for reliable starts and efficient use of fuel.

## Multi-spark



Saab Direct Ignition provides reliable starts and cleaner burning by firing off a series of sparks...

...instead of just one.

The easy way to produce a lot of power in an automotive engine is to burn a lot of fuel.

The intelligent way is to burn fuel more thoroughly.

The 2.3-liter, 16-valve engine is lightweight, compact and extremely efficient. The application of common sense and high technology results in an engine that delivers the smoothness and power of a much larger power plant.

The Saab engine begins with a modest-size block and a cylinder head made of lightweight aluminum alloy. Instead of smoothing engine vibration with additional bulk and more cylinders, Saab engineers designed a system of counter-rotating balance shafts to do that.

The design of the combustion chambers, with four valves instead of two and a centrally positioned spark plug, improves engine performance dramatically.

The spark plug itself has been made more efficient with the development of Saab's Direct Ignition System. The system provides improved ignition, more precise spark control and more reliable starting in all weather conditions.

In the turbocharged version of this engine, exhaust gases drive a compressor that forces more air into the cylinders to produce more power. An intercooler cools the incoming air, allowing a denser air/fuel mixture.

To further optimize performance, Saab's turbocharged engines also feature Saab's new TRIONIC Engine Management System. This system integrates the ignition, fuel injection and Automatic Performance Control systems to produce more power with reduced emissions and fuel consumption.

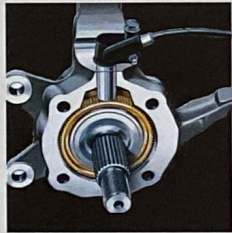
Combining the advantages of both larger and smaller engines, the 2.3-liter powerplant is Saab's proof that you can have it all.



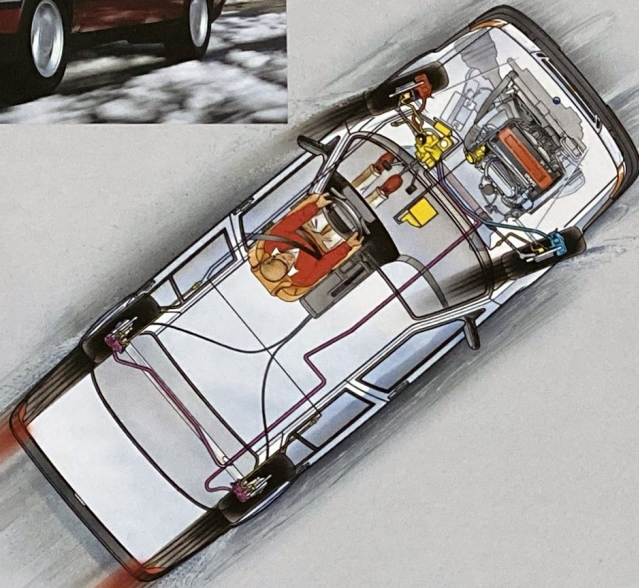
# Saab uses electronics to enhance the driver's skills, not replace them.



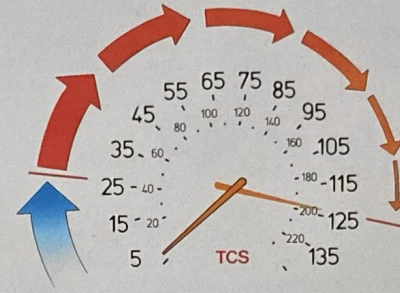
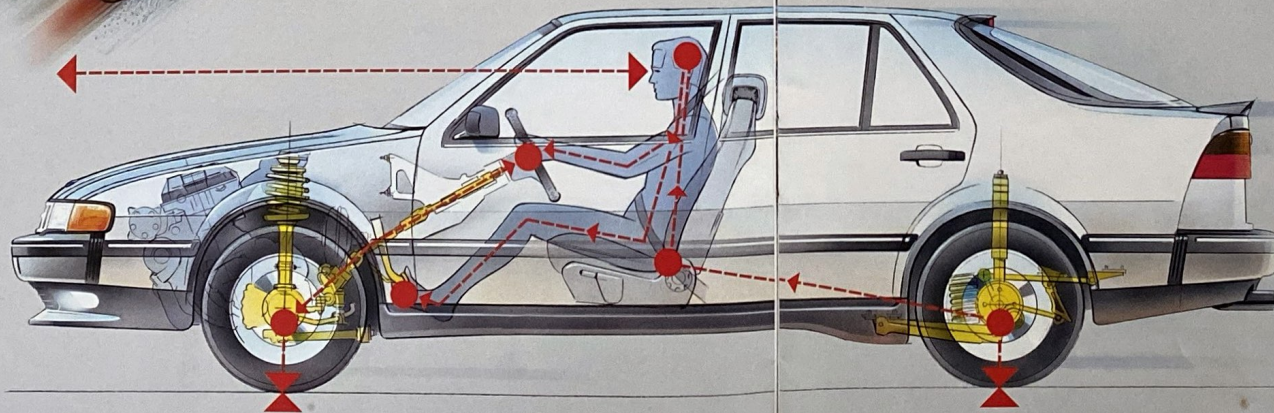
**Keeping a grip on the road**  
Saab's Traction Control System adjusts brakes (manual-transmission cars only) and throttle opening to address slippery road conditions.



**Wheel sensor**  
A moisture-proof sensor at each wheel records the wheel's speed, which is registered by the ABS and TCS systems to immediately detect wheelspin or loss of traction.



**Keeping the driver informed**  
An essential principle of every Saab design, including Saab's use of advanced computer technology, is to help keep the driver accurately informed and in control of the car. Systems such as ABS and TCS systems simply enhance the 9000 CS models' ability to do that.



**Speed-variable operation**  
In cars with manual transmission, Saab TCS responds to a signal of wheelspin by braking that driven wheel if the car is traveling below 25 miles an hour. At higher speeds, TCS corrects wheelspin by reducing throttle. In cars with automatic transmission, only the throttle is utilized by TCS.

Saab's approach to computer technology is more selective than many carmakers'. Only where electronic systems can consistently outperform a driver's physical limits, without lessening the driver's control, have such systems been adapted to Saabs.

Saab's Anti-lock Braking Systems, for example, can slow and stop a Saab in less space and with more control than would be possible with a conventional brake system. For that reason, every Saab model is equipped with anti-lock brakes as standard equipment.

The speed, durability and reliability of today's computer circuitry enabled Saab engineers to create a braking system capable of operating the car's brakes as many as 12 times in a second. Wheel speed is constantly monitored to provide a controlled stop while maintaining maneuverability.

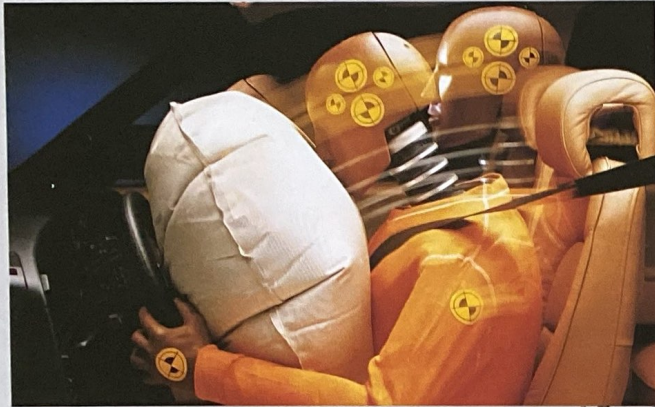
Every 9000 CSE or CS equipped with Saab's turbocharged engine is also equipped with the Traction Control System, or TCS. Building on the computer circuitry of the anti-lock braking systems, TCS is intended to provide the front-wheel-drive Saab with tractive ability in slippery conditions that is comparable to a four-wheel-drive vehicle's.

The Traction Control System measures wheel spin and adjusts either the brakes and the throttle opening (in manual-transmission cars) or the throttle opening alone (in automatic-transmission cars). The system senses a driven wheel's loss of traction earlier than the driver could feel it, and instantly makes adjustments to maintain traction.

After decades of building cars for serious driving enthusiasts, Saab engineers have approached electronics technology discriminately, introducing only systems that add to a driver's control of and pleasure in the car.

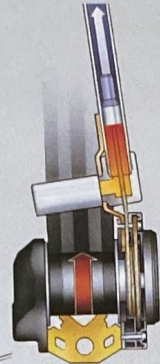


# Saab bodies are designed to know where to yield and where not to yield.



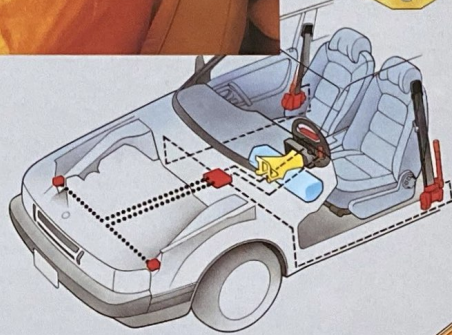
## Supplemental Restraint System with driver's-side air bag

Within the very first moments of an impact, Saab's Supplemental Restraint System (denoted by the "SRS" logo on the steering wheel) deploys the driver's-side air bag. Every Saab model is fitted with a driver's-side air bag as standard equipment.

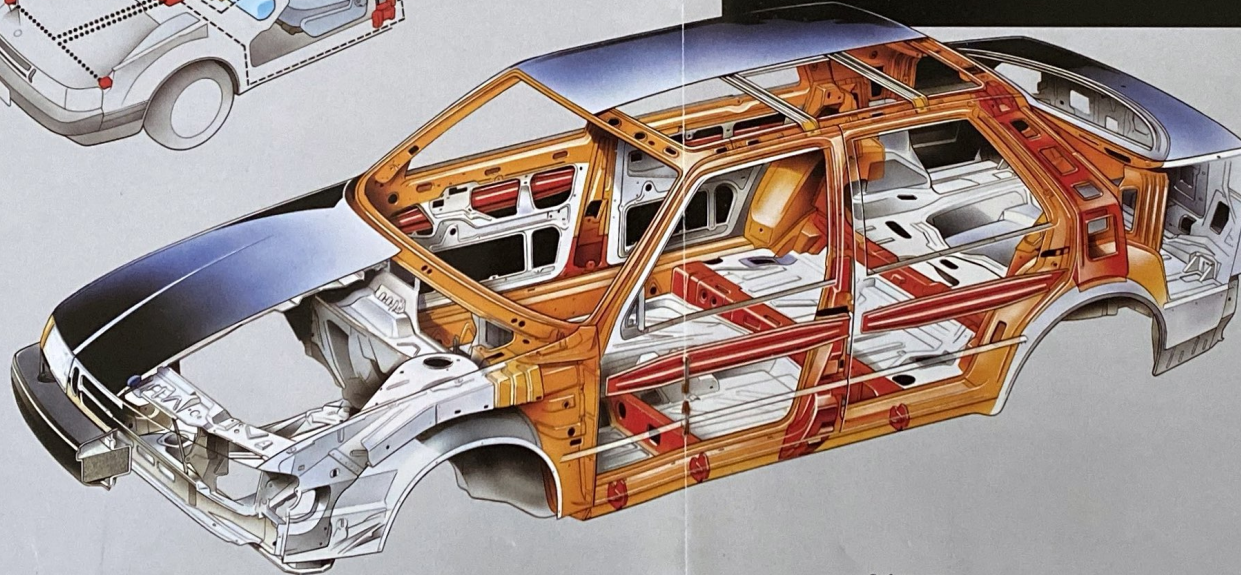
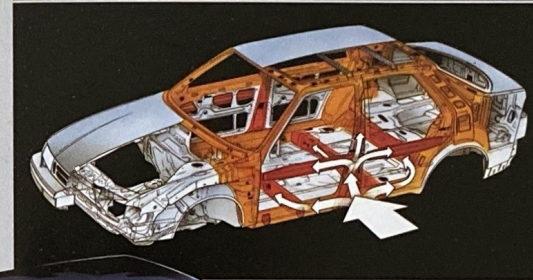
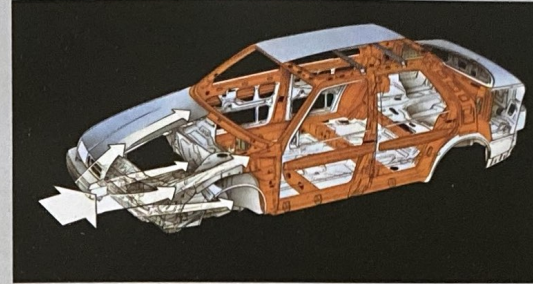


## Seat belt tensioners

The automatic tensioners for the front seat belts provide additional collision protection by instantaneously taking any slack out of the belts.



**Side impact**  
The 1993 9000 CSE and CS are even stronger than their predecessors, meeting all 1997 government side impact safety requirements.



## Safety cage

A strong, welded structure of steel members and reinforcing plates surrounds every Saab's passenger compartment.

Passive safety depends on a car's ability to absorb the force of an impact with a part of its own body, while keeping the rest of its body intact. In the case of the Saab 9000 CSE and CS, the front and rear crumple zones are designed to absorb and redirect the initial energy of a collision by deforming on impact.

More energy absorption goes on inside of the passenger compartment. The Supplemental Restraint System deploys a driver's-side air bag in a serious frontal collision, to provide a cushioning buffer between the driver and the steering column. The system also activates belt tensioners for the three-point seat belts that restrain the front-seat passengers. Padded knee bolsters beneath the dashboard complete the Supplemental Restraint System. The system is designed to work with the seat belts, the primary restraint system.

Passengers in the rear seat are held in place by three-point seat belts in the two outboard seating positions and by a lap belt in the center position.

Of course, there are areas in the Saab body which are designed to remain intact in an accident. The entire passenger compartment is surrounded by a sturdy, welded-steel structure which forms the famous Saab safety cage.

From time to time, letters are received at Saab's U.S. headquarters from owners who have been in terrifying accidents. Such letters are often accompanied by photographs that make it hard to believe the writer's assertion that everyone got out with relatively minor injuries.

Letters like those remind Saab engineers of how drivers depend on safety engineering when they venture out onto today's highways. And they encourage them to keep designing and building Saabs with active and passive safety as primary goals.



It is possible to care about both cars and the environment. We do.



#### Climate-related emission control

Saab's catalytic converter system is designed to work over a wide temperature range to start cleaning engine emissions earlier and at lower ambient temperatures. Elements of the system include the electrically heated oxygen sensor, shown at right, and a compact exhaust system.



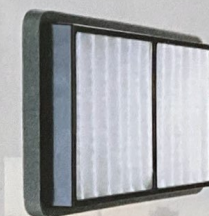
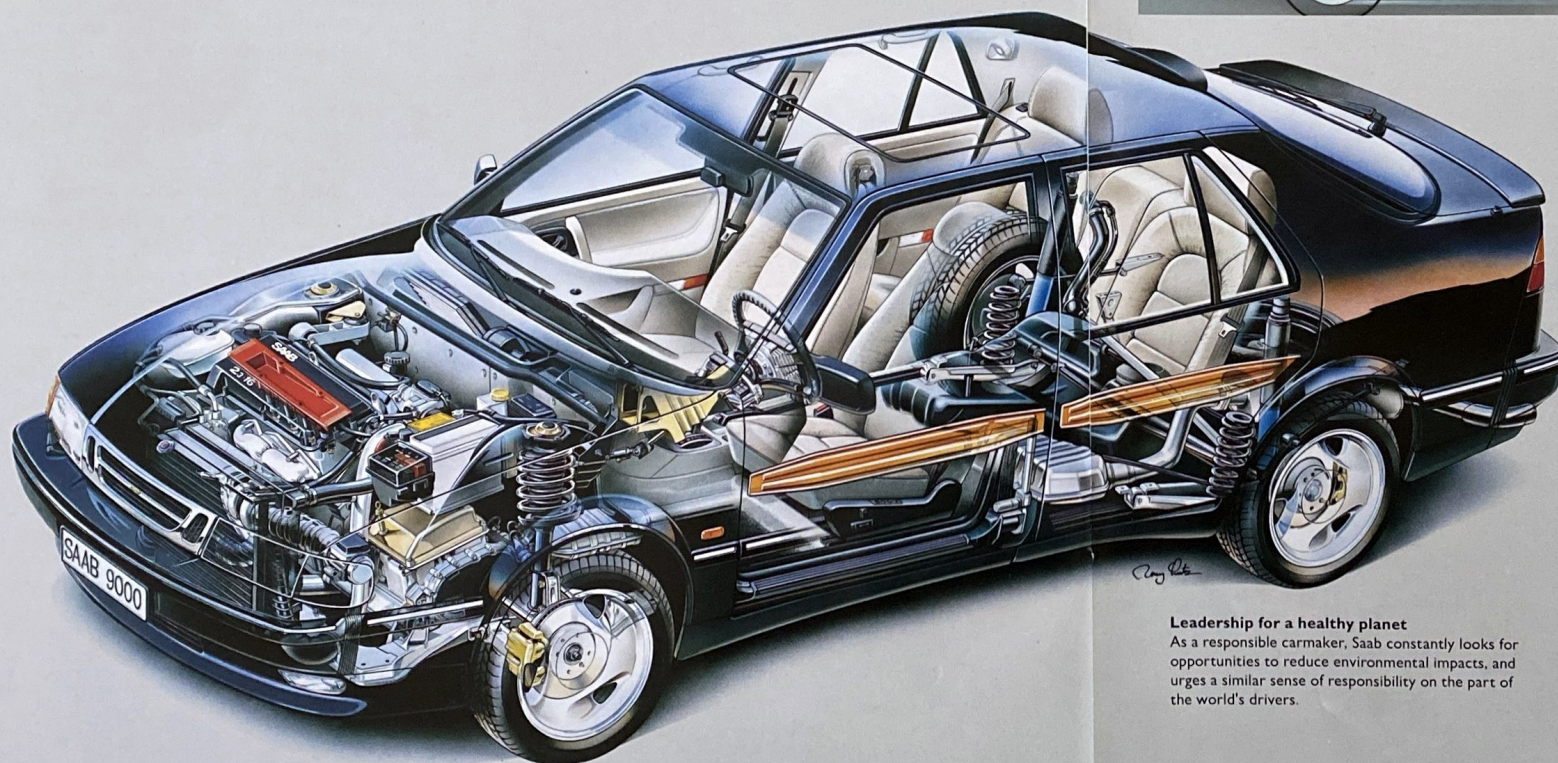
#### CFC-free air-conditioning

Saab was one of the world's first carmakers to introduce CFC-free air-conditioning. Instead of chlorofluorocarbons (CFCs), the Saab air-conditioner uses R134a.



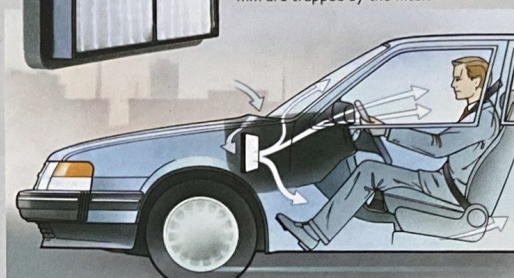
#### Recyclable materials

The plastic and rubber parts of all Saab cars are marked for recycling, in accordance with an international coding system.



#### Protecting your personal environment

Saab's electrostatic air filter removes virtually all pollen, soot and dust from the air before it reaches the car's passenger compartment. Particles as small as 0.004 mm are trapped by the filter.



#### Leadership for a healthy planet

As a responsible carmaker, Saab constantly looks for opportunities to reduce environmental impacts, and urges a similar sense of responsibility on the part of the world's drivers.

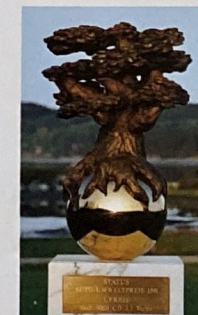
Sweden is a quietly beautiful land of clear lakes, evergreen forests, rich meadows and glacier-scraped hills. Living in such a landscape, Saab engineers naturally think a great deal about building cars in a way that helps preserve the environment.

This is, perhaps, why Saab is one of the first carmakers to introduce air-conditioning that is entirely free of chlorofluorocarbons (CFCs), minimizing harm to the ozone layer.

Saab's environmental engineering has consistently been years ahead of legislative requirements around the world. For example, Saab was an industry leader in the elimination of asbestos from its braking systems, clutch discs and gaskets.

The development of turbocharging at Saab was driven by a desire to create a powerful engine with reduced fuel consumption and emissions. Saab also was a leader in the use of three-way catalytic converters and oxygen sensors in the 1970s to reduce engine emissions.

A car's environmental impact, however, is the responsibility of its owner, as well as its builder. Regular maintenance, sensible driving and the use of car pools or public transportation are some of the ways Saab owners can help protect the planet.



#### Environmental Car Award

In 1991, the German medical journal "Status" recognized Saab for the company's outstanding efforts to limit adverse impacts on the environment. Readers named the Saab 9000 Turbo "the most environmentally friendly car" in its class.



Dedicated to the proposition that responsibility can be joyful.

The fresh design of the 9000 CSE and 9000 CS is just one of the pleasures of this car, a visual stimulation that hints at the greater pleasures of driving such a precisely controlled and high-spirited automobile.

The new body style increases both the active and passive safety of these latest members of the 9000 Series by adding torsional rigidity and safety cage strength. The same qualities add to the simple physical pleasures of driving challenging roads at their speed limits.

In the 9000 CSE and 9000 CS, Saab engineers have created a true driver's car that is nevertheless deeply considerate both of its passengers and of its environment.





## Luxurious. And luxuriously capable.

Stronger and more responsive even than the five-door 9000 it replaces, the 9000 CSE represents important advances in both safety and handling. It is, in addition, a luxuriously appointed automobile, equipped to make driving a freshly exciting experience.

In Saab's finest tradition, the CSE is also prepared to play a workhorse role when needed, with cargo space inside that's expandable to over 55 cubic feet.

A car that encourages you to explore your own abilities as a driver, the 9000 CSE nevertheless achieves a traditionally Saab-like level of practicality and supportive comfort.





## More "backbone" for greater safety.

Saab's newest body style, the five-door 9000 CS, has considerably more torsional rigidity than the five-door 9000 that it replaces.

This added stiffness improves both the active and passive safety of the car. Handling is improved because the stiffer chassis responds more positively to driver input. And the car is more protective because the new design strengthens the safety cage surrounding the passenger compartment.

Like its predecessor, the 9000 CS comfortably accommodates five adults in one of the most spacious sedan interiors available — an interior that also allows the option of converting all or part of the rear seating area to additional cargo space.

A natural evolution in the development of the 9000 Series, the CS retains all of the distinctive character of its Saab heritage while bringing a completely new level of excitement and satisfaction to day-to-day driving.





## A higher standard for standard equipment.

Saabs are built for people who conduct their lives with a very high set of expectations, of themselves and of their automobiles. Meeting those expectations has been a continual challenge, demanding innovative engineering, painstaking construction and the thoughtful equipping of Saab cars.

Standard safety equipment on all 1993 9000's includes anti-lock braking, the Supplemental Restraint System with driver's-side air bag and front seat belt tensioners, and a headlamp washer/wiper system.

Additional standard equipment also includes CFC-free Automatic Climate Control, anti-theft removable stereo systems and central locking with integrated anti-theft alarm.

Some of the features available are illustrated here.

1. Electrically adjustable front seats, with driver's-side memory to adjust automatically to your favorite driving position.
2. Electrically heated and adjustable exterior rear-view mirrors.
3. Four-speed automatic transmission with direct drive in fourth gear is an option. (A five-speed manual transmission is standard equipment.)
4. Separate reflectors for bright and low beam headlamps. When the brights are in use, the low beams remain lit, so the driver enjoys the advantages of both long and wide beams of light. The headlamp washer/wiper system keeps the lenses clear during bad weather.
5. The 60/40 split rear seat lets you fold either or both sides to create up to 56.4 cubic feet of cargo space.
6. Worst wool upholstery by the renowned Italian designer Ermenegildo Zegna offers a degree of comfort and understated elegance for the seats and padded door armrests.
7. CFC-free Automatic Climate Control lets you set the temperature you want, or lets you manually override the automatic system.
8. Windows open and close electrically from the Saab's center console. The control button to lock-out the rear window switches is also located on the console, as well as a button to activate the central locking system.
9. Fog lights are integrated into the spoiler below the front bumper.
10. Side guidance reversing lights integrated in the front corner lenses make backing up in the dark safer and easier. The lights come on automatically when the car is put into reverse.





For most Saab owners, mere individuality isn't enough.

In more than 40 years of building cars for intensely individualistic drivers, Saab has learned that most of the cars that leave dealers' showrooms are not going to stay unmodified for very long. Saab owners like to have things their own way.

They make their cars more comfortable, or sportier or more elegant. They adapt them for towing boats, transporting show dogs or driving in nighttime rallies.

Just to be helpful, Saab dealers offer a large variety of options and accessories designed specifically for Saabs, some of which are illustrated here.

Some are available as optional equipment in certain models and standard in others.



#### Walnut veneer fascia

The dashboard inlay of English burled walnut imparts an added glow of warmth and elegance.



#### Saab audio system

Removable Saab/Clarion stereo components enable you to build a car stereo system that rivals most home stereos: components include a compact disc player/graphic equalizer and multi-disc player.



#### Rear wiper and spoiler

The rear window wiper sweeps a broad area of glass to clean the window. The optional rear spoiler on CS models gives the car a sporty appearance and improves aerodynamics.



#### Armrest

The center armrest folds down to provide extra comfort, especially on long trips.



#### Saab mats

Genuine Saab plush mats match and complement your car's carpets while protecting them from normal wear and tear.



#### Leather shift boot cover and shift knob

The handsome look and the supple texture of leather lend both warmth and elegance to the Saab's interior. (Manual transmission only.)



#### Wheel selection

Light-alloy wheels are available in a variety of styles to improve high-speed handling and to individualize your Saab's appearance.

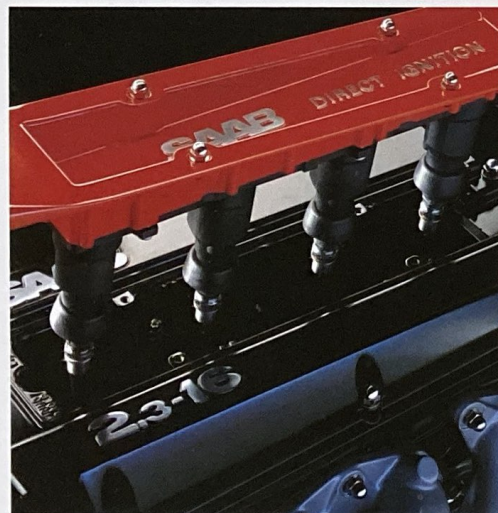


# Technical specifications

Saab 9000 CSE/CS Series, 1993

The Saab 2.3-liter engine is a showcase of advanced engineering technology, providing impressive power and torque from a lightweight, fuel-efficient unit, and doing it with a smoothness usually associated only with larger, multi-cylinder engines.

This is the engine which powers all 9000-Series Saabs, available either naturally aspirated or turbocharged. The specifications listed here provide a complete technical description of both versions. For an even more complete experience of the Saab engine, we urge you to drive a 9000-Series Saab at your earliest convenience.



## Saab 9000 Models with Turbocharged Engine

### ENGINE

Transversely mounted, 2.3 liter, four-cylinder, liquid-cooled engine. Cast iron engine block and light-alloy cylinder head of cross-flow type. Five-bearing crankshaft. Dual counter-rotating balance shafts. Dome-shaped combustion chambers, with the spark plugs located centrally. Double chain-driven overhead camshafts. Self-adjusting hydraulic lifters (maintenance-free). Four overhead valves per cylinder. Saab TRIONIC system that monitors and controls fuel injection, ignition (Saab Direct Ignition System) and turbo boost pressure. Water-cooled turbocharger with integrated waste gate (boost pressure control valve). Saab intercooler. Engine oil cooler. Cooling system with electric motor driven, thermostatically controlled radiator fan. Maintenance-free battery, and alternator. Three-way catalytic converter and exhaust gas oxygen sensor.

**Power rating** SAE net, 200 bhp (147 kW) at 5500 rpm.

**Peak torque** SAE net, 244 ft.lb. (330 Nm) at 1900 rpm. 222 ft.lb. (300 Nm) at 1900 rpm with automatic transmission.

**Max boost pressure** 0.94 bar (with automatic transmission 0.78 bar).

**Compression ratio** 8.5:1

**Displacement** 140 cu.in. (2290 cc).

**Bore** 3.54 in. (90 mm).

**Stroke** 3.54 in. (90 mm).

**Fuel tank capacity** 17.4 U.S. gallons (66 liters).

**Alternator** 1540 W, 115 A.

**Battery** 12 V, 60 Ah.

**Starter motor** 1.9 hp.

**Cooling system capacity** 2.4 U.S. gallons (9 liters).

### TRANSMISSION

Front-wheel drive with fully synchronized, five-speed manual gearbox, or four-speed automatic transmission, with split-torque in 3rd and direct mechanical in top gear. With the manual gearbox, the power train incorporates a hydraulically actuated, single dry-plate clutch. Light-alloy gear-case. Both types of gearbox are integrated with the transversely mounted engine.

**Manual gearbox** Ratios 3.38:1, 1.76:1, 1.18:1,

0.89:1, 0.70:1; Reverse, 3.21:1; Final drive, 3.61:1. **Automatic transmission** Ratios 2.58:1, 1.41:1, 1.00:1, 0.74:1; Reverse 2.88:1; Final drive 4.28:1.

### CHASSIS

MacPherson struts, stabilizer bar; gas shock absorbers and integrated wheel bearings at the front. Lightweight, beam-type rear axle, with coil springs, gas shock absorbers, stabilizer bar, two trailing and two leading arms and Panhard rod. Disc brakes all around, ventilated in front. Self-adjusting, single piston system with floating brake caliper. Asbestos-free pads. Power-assisted. Saab Anti-lock Brake System with dual microprocessor control unit. Mechanical action of hand brake on rear wheel discs. Saab TCS. Light-alloy wheels. Power-assisted rack-and-pinion steering.

**Turning circle diameter** 35.8 ft. (10.9 m).

**Number of steering wheel turns lock-to-lock** 3.2.

**Wheels** 6J x 15" light-alloy.

**Tires** 205/60 ZR15 high-speed, low profile steel belted radials.

## Saab 9000 Models with Naturally Aspirated Engine

### ENGINE

Transversely mounted, 2.3-liter, four-cylinder, liquid-cooled engine. Cast iron engine block and light-alloy cylinder head of cross-flow type. Five-bearing crankshaft. Dual counter-rotating balance shafts. Dome-shaped combustion chambers, with the spark plugs located centrally. Double chain-driven overhead camshafts. Self-adjusting hydraulic lifters (maintenance-free). Four overhead valves per cylinder. LH Jetronic electronically controlled fuel injection system. Saab Direct Ignition System with knock sensor. Maintenance-free battery, and alternator. Cooling system with electric motor driven, thermostatically controlled radiator fan. Three-way catalytic converter and exhaust gas oxygen sensor.

**Power rating** SAE net, 150 bhp (110 kW) at 5500 rpm.

**Peak torque** SAE net, 157 ft.lb. (212 Nm) at 3800 rpm.

**Compression ratio** 10.1:1

**Displacement** 140 cu.in. (2290 cc).

**Bore** 3.54 in. (90 mm).

**Stroke** 3.54 in. (90 mm).

**Fuel tank capacity** 17.4 U.S. gallons (66 liters).

**Alternator** 1540 W, 115 A.

**Battery** 12 V, 60 Ah.

**Starter motor** 1.9 hp.

**Cooling system capacity** 2.4 U.S. gallons (9 liters).

### TRANSMISSION

Front-wheel drive with fully synchronized, five-speed manual gearbox, or four-speed automatic transmission, with split-torque in 3rd and direct mechanical in top gear. With the manual gearbox, the power train incorporates a hydraulically actuated, single dry-plate clutch. Light-alloy gear-case. Both types of gearbox are integrated with the transversely mounted engine.

**Manual gearbox** Ratios 3.38:1, 1.76:1, 1.18:1, 0.89:1, 0.70:1; Reverse 3.21:1; Final drive 4.45:1.

**Automatic transmission** Ratios 2.58:1,

1.41:1, 1.00:1, 0.74:1; Reverse 2.88:1; Final drive 4.28:1.

### CHASSIS

MacPherson struts, stabilizer bar; gas shock absorbers and integrated wheel bearings at the front. Lightweight, beam-type rear axle, with coil springs, gas shock absorbers, stabilizer bar, two trailing and two leading arms and Panhard rod. Disc brakes all around, ventilated in front. Self-adjusting, single piston system with floating brake caliper. Asbestos-free pads. Power-assisted. Saab Anti-lock Brake System with dual microprocessor control unit. Mechanical action of hand brake on rear wheel discs. Light-alloy wheels. Power-assisted rack-and-pinion steering.

**Turning circle diameter** 35.8 ft. (10.9 m).

**Number of steering wheel turns lock-to-lock** 3.2.

**Wheels** 6J x 15" light-alloy.

**Tires** 195/65 TR15 low rolling resistance, low profile steel belted radials.

## Saab 9000 CSE/CS

### LUGGAGE COMPARTMENT

#### Length

With the back seat raised, 39.8 in. (1010 mm). With the back seat folded down, 65.7 in. (1670 mm).

#### Capacity

EPA Cargo Volume Index with the back seat raised, 23.5 cu.ft. (660 liters).

Total Cargo Space with the back seat folded down, 56.4 cu.ft. (1597 liters).

### WEIGHTS\*

**Curb weight** 3190/3110 lb. (1445/1410 kg).

**Weight distribution at curb weight** 60% at the front; 40% at the rear.

**Maximum permissible load on the roof** 220 lb. (100 kg).

**Maximum permissible trailer weight**

2000 lb. (900 kg) with trailer brakes.

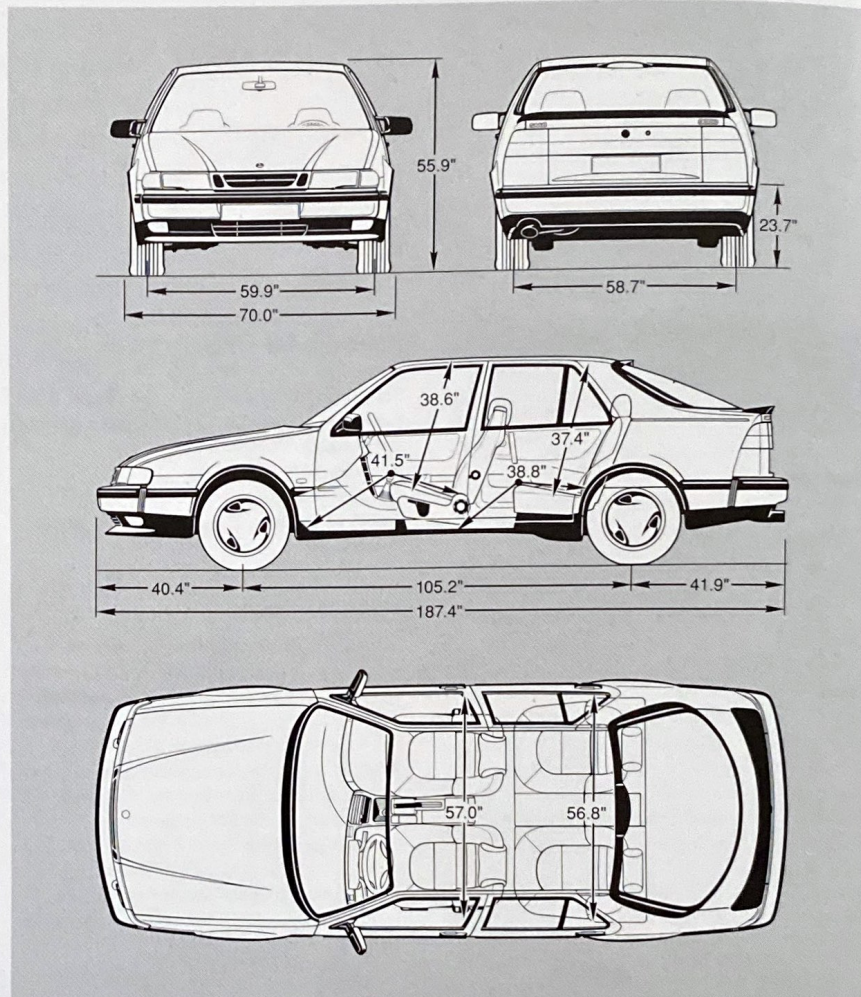
1000 lb. (454 kg) without trailer brakes.

\* Base curb weight with standard equipment.



# Dimensions

Saab 9000 CSE/CS Series, 1993



■ **An important note regarding this brochure:** We hope you find this brochure informative; we have tried to make it as accurate as possible. However, some of the information presented may have been changed or updated since this brochure was printed; photographs and illustrations may not portray the exact colors of actual paint or materials; and some equipment shown may not be available in the U.S. or is available at extra cost.

We reserve the right to make changes in prices, colors, materials, equipment, specifications and models, including the discontinuation of models, at any time and without notice. For the most complete and up-to-date information, please check with your authorized Saab dealer.



# Individual strength through combined technology.



Saab Automobile AB is a company with a vision, and its strength rests on its employees – a team of individuals for whom the design, engineering and production of unique and premium Swedish cars inspires pride and commitment.

Saab Automobile AB has its roots in Saab-Scania AB, a world leader in specialized transport technology. With origins dating back to the 1890s, the Saab-Scania Group has, over the years, created a vast fund of engineering know-how in road and air transportation, as well as in aerospace and electronics.

In 1901 Scania made its first passenger car, bearing the Griffin symbol on the radiator. The first truck

was produced in 1902 and in 1911, the first bus. In the late 1930s, the production of Saab aircraft was started. The production of Saab passenger cars commenced in 1949.

Today the Saab-Scania symbol, with the Griffin in its center, can be found on a variety of products, including Saab passenger cars, Scania trucks and buses, Saab regional airliners and military aircraft, as well as a wide range of high-tech products made by the Saab-Scania Combitech Group such as space satellites, training systems and military robots.

In every area the Saab-Scania symbol stands for excellence in engineering, long tradition and broad-based experience.



# Interior and exterior colors

## INTERIOR COLORS

Wool



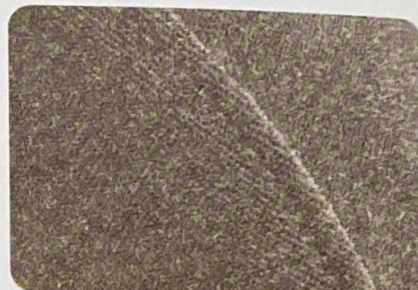
Grey

Leather



Taupe

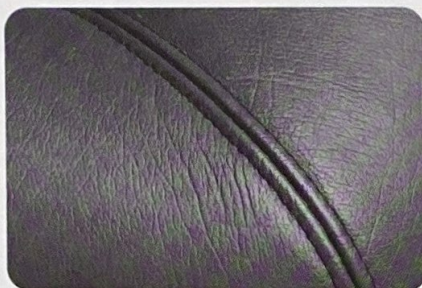
Velour



Taupe



Dashboards are designed to match or complement the Saab's interior.



Light Grey



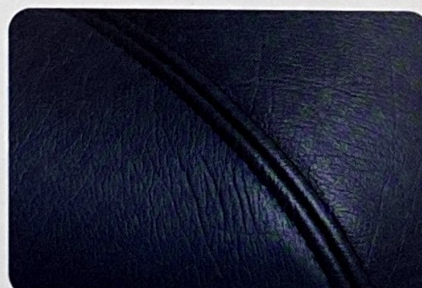
Light Grey



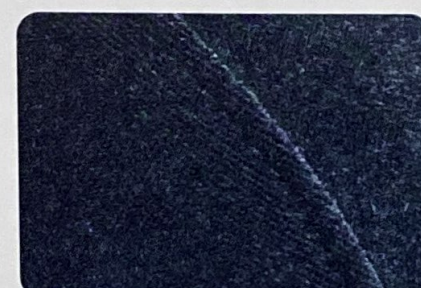
Grey



Grey



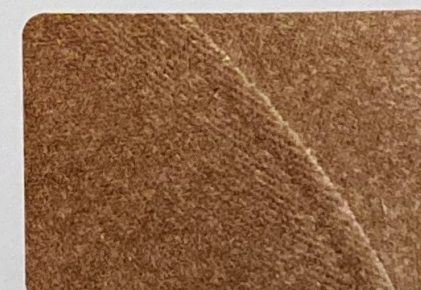
Blue



Blue



Tan



Tan

The 9000 CSE is equipped with leather seating surfaces, but can also be ordered with wool upholstery as a special factory order.\* The 9000 CS comes equipped with velour or optional leather seating surfaces. In addition, by special factory order, wool upholstery is available in certain models.\*

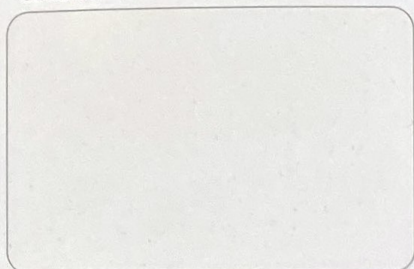
Check with your Saab dealer on color combinations and availability in your area.

(\* Quantities limited.)

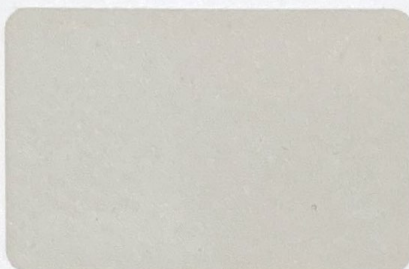


## EXTERIOR COLORS

### Solid colors



Cirrus White



Carrara White



Black

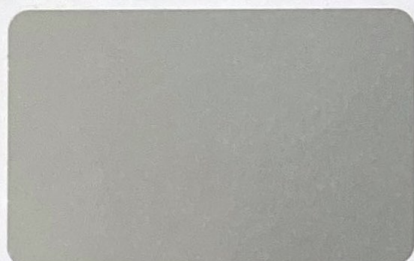


Embassy Blue\*



Imola Red

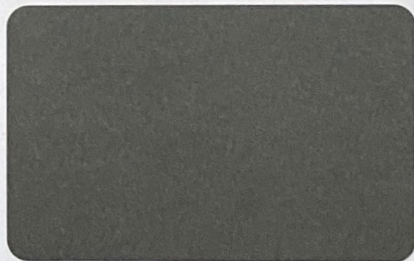
### Metallic colors



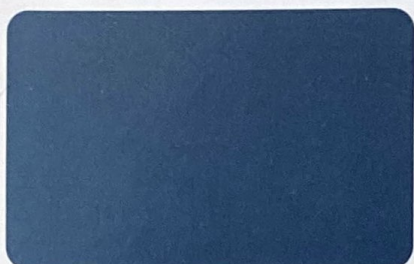
Citrin Beige



Platana Grey



Edwardian Grey\*



Nocturne Blue



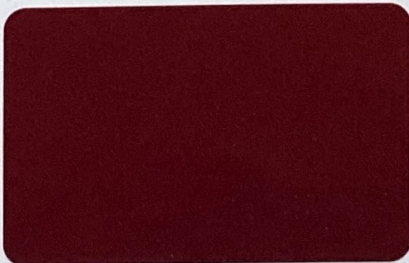
Le Mans Blue



Scarabe Green



Eucalyptus Green



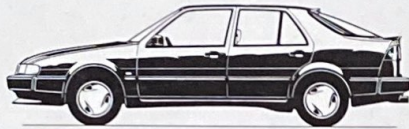
Ruby Red

\* Not available in the U.S.

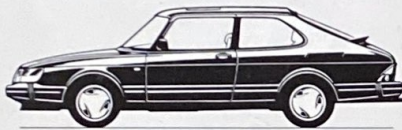




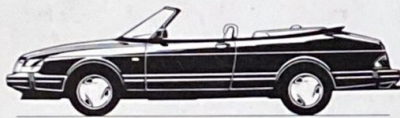
**Saab 9000 CD**



**Saab 9000 CS**



**Saab 900 Turbo**



**Saab 900 Turbo Convertible**

Saab's model range offers a wide choice of different engines, equipment and body types.



**SAAB**

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