

Press Information

Seat Arosa



Press Information

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Note:

All technical specifications and equipment described in this press folder apply to models available in Spain. The technical specifications and equipment for vehicles available in other countries may vary. Data and errors excepted.

For a diskette containing the textual information presented, call +34 3 402 8387 or send a fax to +34 3 403 6900.

1. Summary

The Arosa.

Seat creates a new automobile class.

With the Arosa, Seat has defined a new class of automobiles.

This compact front-wheel-drive, three-door vehicle offers quality, safety and comfort comparable to that found in larger automobiles. The new Arosa also offers driving fun, unique design, outstanding economy and an attractive, roomy interior. When it comes to price, dimensions and practicality, it offers all of the advantages of a classic, environmentally friendly compact. The Seat Arosa was designed around the platform strategy of the Volkswagen Group and thus features the latest in automotive technology from Europe's No. 1 automobile manufacturer.

Exemplary safety

The Arosa also sets new standards for passive and active safety.

In frontal offset, rear and side crash tests, it easily passed new European safety regulations scheduled to take effect in 1998. And it more than meets strict US safety requirements. Both front and rear-seat passengers enjoy maximum safety in this new Seat. Occupants are protected by specially designed front and rear crush zones, a robust, reinforced passenger cage, flank and side impact protection, a safety steering column and energy-absorbing padding in the side doors.

A pyrotechnic seatbelt retraction system with mechanical sensors is standard while airbags for the driver and front passenger are offered as options.

A diagonal dual-channel brake system with power booster and load-dependent pressure reducer mounted on the rear axle are standard. All models are equipped with front disc brakes (with interior ventilation on models powered by

the 1.4-litre engine) and rear drum brakes. Optional equipment includes Mark 20 ABS brakes from ITT, the most modern anti-lock brake system available today.

Design - clean and harmonious

The clean front, side and rear lines of the Arosa project a sporty, elegant and simultaneously serious image. Wide, oval headlights and a typical Seat grille with chrome emblem reflect the Mediterranean origin of the brand. The long wheelbase, short front and rear body overhangs and high roofline tell you from a distance that this is a vehicle with above-average roominess. The strong side C-column gives the three-door car a robust silhouette, which is further emphasized by 13-inch wheels.

The rear section sports proportional balance, simplicity and clean lines. The taillights wrap around into the side of the vehicle. Their large dimensions are indicative of the vehicle's spacious interior.

Aerodynamic exterior / spacious interior

The shape of body of the new Arosa reflects its aerodynamic qualities. With a 0.32 coefficient of drag, the Arosa is at the top of its class.

At 3.5 meters in length, 1.6 meters in width and a generous 1.4 meters in height, the Arosa accommodates four adults in surprising comfort. The interior of the passenger cabin measures a full 1810 mm length. Engineers designed excellent noise and vibration-dampening qualities into this new automobile. Passengers thus enjoy a quiet, comfortable ride comparable to that found in considerably larger automobiles.

With a trunk capacity of 130 litres, there is enough room for two beverage cases behind the rear seat. A folding trunk

cover keeps cargo out of view. The cargo area can be greatly expanded by folding the rear seatback forward. A symmetrically divided rear seatback is offered as an option. The load capacity is 400 kilograms.

All body sections exposed to the elements are galvanized to ensure high-quality, lasting anti-corrosion. The Arosa comes with a six-year anti-corrosion guarantee.

Engines - responsive and economical

Concealed beneath the elegant, compact hood is state-of-the-art engine technology. The Arosa is initially available with a choice of two efficient four-cylinder petrol engines equipped with multi-point fuel injection (MPI). The modern 1.0-litre aluminum engine develops 37 kW (50 bhp), the 1.4-litre variant turns out 44 kW (60 bhp). A 1.7-litre four-cylinder SDi engine will be available later.

The 37 kW (50 bhp) engine propels the Arosa from 0 to 100 km/h in 17.4 seconds and to a top speed of 151 km/h. When equipped with the more powerful 1.4-litre engine, the Arosa accelerates from 0 to 100 km/h in 14.1 seconds and reaches a top speed of 160 km/h. With torque development of 86 Nm at 3,000-3,600 rpm and 116 Nm at 2,800-3,200 rpm respectively, both engines deliver sovereign elasticity and throttle response.

The 37 kW (50 bhp) engine consumes an average of 5.7 l of unleaded premium petrol per 100 km according to European Standard 116 for fuel consumption. The 44 kW (60 bhp) powerplant burns 6.2 liters per 100 km. The emissions of both engines are below the Euro 2 (EEC '96) standard for exhaust emissions.

The laterally mounted engines drive the front wheels through a standard five-speed manual transmission. The 1.4-litre engine is also available with an automatic transmission.

Road-hugging suspension

A negative roll radius and long castor length ensure directional stability and straight-line braking. A McPherson independent front suspension and an auxiliary connecting frame absorb bumps and help keep vibrations in check. The rear springs and shock absorbers are mounted separately for greater responsiveness. The Arosa owes its wide trunk load width of 960 millimeters to the space-saving design of the rear suspension system.

Rich array of features / seven colors

The Arosa comes in a choice of seven fashionable colors including three metallic shades. Beginning with the basic model, this new Seat is equipped with a host standard features such as a height-adjustable steering column and driver's seat, dual cupholders, tachometer, front and rear headrests and roof-mounted antenna. The Arosa is offered with a choice of four equipment packages: "Estilo", "Comfort", "Electron" and "Musica" as well as with a range of sophisticated accessories including air conditioning.

Outstanding economy and value

The new Arosa offers the unsurpassed value characteristic of Seat automobiles. Its low purchase price is further enhanced by low maintenance costs, excellent fuel economy and low insurance rates. Both engine variants have been granted extremely favorable German insurance category ratings: Arosa models powered by the 37 kW (50 bhp) engine carry a low full-coverage insurance rating of Type Class 10 in Germany. Vehicles with the 44 kW

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(60 bhp) engine are given a Type Class 11 full-coverage insurance rating. With its outstanding price/performance ratio, low insurance, maintenance and repair costs, the Arosa is without doubt one of Europe's least expensive automobiles to buy, own and operate.

2. The Arosa Experience

We live in a new Europe in which all relationships and hierarchies are being reexamined. What is up and what is down? The answers to these questions are no longer subject to the conventional rules of society. Old ways of thinking and concepts of prestige have given way to a new egalitarian order.

Consumers are becoming increasingly critical of the products and services on the market. Lifestyle and luxury are being judged more strongly from the viewpoint of authenticity and value. With the Arosa, Seat is making a major contribution to redefining automotive progress.

Its authenticity is reflected in its closeness with the environment and the road. Its name is derived from the name of a bay (Ria de Arosa), an island (Illa de Arosa) and the nearby towns of Villagarcia de Arosa and Villanueva de Arosa situated in Galicia, the green province in northwestern Spain on the Atlantic coast.

Along the beautiful coastal shoreline and in the long valleys dotted with giant rock formations and gentle meadows lies the cradle of an ancient culture. The landscape is rich and varied: sea, mountains and lush greenery. As you travel through this fascinating region, you experience life's joy and living folk culture with each step. Kermis, folk festivals and regional fairs make Arosa an interesting place to visit all year round. Fruity sparkling white wines complement the world's best seafood. Fresh spiny lobsters, sea spiders, muscles, oysters, octopus, filled empanada and classic veal roast testify to the region's unchanging culinary tradition.

The name Arosa was purposefully selected for Seat's newest automobile. Just as the adventurous inhabitants of this

region made history in centuries past, the Arosa promises to leave a mark of its own on future automotive history. The Arosa has a future-oriented character that will take it well into the next century.

The passion with which Arosa designers approached their task finds expression in their quest for perfection. Wherever you look, you'll find features that have been designed down to the smallest detail with the well-being of the driver and passengers in mind. The moment you set foot in this exquisite new Seat you will realize that the whole of the Arosa is truly more than the sum of its parts. But perhaps most important is that this new automobile proves that things can be done better.

The Arosa is a car that people will simply feel good about.

Because it gives them everything they want in automobile comfort without violating their sense of environmental responsibility.

The Arosa combines generosity with understatement, responsibility with emotion. Choosing to own an Arosa is a choice for freedom, for reason, and for the environment. It is an automobile which you can fully enjoy in good conscience.

3. Design

The new Arosa reflects the Mediterranean tradition of its country of origin. Seat design engineers endowed this new vehicle with numerous features characteristic of the automobiles produced by the Spanish manufacturer. The Arosa exhibits excellent design uniformity with the front and rear sections flowing smoothly into the lateral lines to form an elegant silhouette.

The exterior is modern and purposeful. Compact styling gives the car its unique personality with an unmistakable air of driving fun. All elements of the smooth body blend harmoniously into the flowing lines. Excellent aerodynamics are responsible for the vehicle's exemplary fuel economy and low noise level.

The prominent front section with wide oval headlights and black grille with the silver Seat emblem in the center project an image typical of Seat automobiles. Raised parallel feature lines radiating from the left and right corners of the grille lend the hood a dynamic appearance and convey the spirit of power that lurks beneath.

The "Estilo" Package features bumpers painted in vehicle color with an integrated black front spoiler, both of which flow smoothly into the car's elegant contours.

Uniform lateral styling

A long wheelbase, short front and rear overhangs, a sharply sloped windshield and long, high roof tell you that the Arosa has a roomy interior. The strong side C-column and cuneiform lateral styling give the Arosa a robust, compact silhouette. At the same time the Arosa radiates elegance and agility. This was achieved with the help of a small B-column in black that appears to recede into the back-

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ground. The observer gets the impression that the side windows are a single large unit.

Considerable emphasis was also placed on shaping the beltline, which gives the Arosa a secure, solid appearance. The beltline was purposefully set high in keeping with contemporary styling and to permit engineers to design a roomier interior with comfortable seating positions and adequate storage space.

The large doors open wide to make entry and exit more comfortable for all passengers. The massive door handles are both aesthetically and ergonomically designed. Expansive glass area ensures excellent vision in all directions. Side moldings help protect side doors and panels from chips and scratches.

Attractive 13-inch wheels round out the car's smart, charming image. Optional alloy wheels add a sporty, fashionable note to the Arosa.

The rear section features clean, uniform styling. The bumper and spoiler form a single unit. The large taillights wrap around into the sides, and their large dimensions tell you that the Arosa has a spacious interior.

The new Seat is characterized above all by its clean lines. The design exhibits neither brashness nor avant-garde nuances. Instead, it projects an image of harmonious unity, elegance and safety with a good dose of driving fun.

Arosa's design thus fulfills all the expectations of a new generation of drivers – confident young people who are proud to show off their taste in automobiles.

Nameplate

The name Arosa was selected in keeping with the Spanish tradition of the Seat brand. Like Alhambra, Toledo, Cordoba,

Ibiza, Inca and Marbella, the name Arosa is unmistakably rooted in Spanish culture. Arosa is derived from the name of a Galician bay (Ria de Arosa) and neighboring towns of Villagarcia de Arosa and Villanueva de Arosa.

The chrome nameplate is placed on the right side of the trunk lid. The name Seat appears on the left with the brand logo in the center.

4. Interior/Equipment

Spacious and comfortable were the key words for design engineers when they sculpted the Arosa interior. No less important were the acoustic qualities, feel and smell of the materials that go into creating a roomy and aesthetic atmosphere.

The result is an interior that radiates light, freshness and spacious comfort.

The instrument panel is finished in mistral gray to prevent reflection. The rounded lines of the upper section of the instrument panel – further developed from the Ibiza design – extend to the left edge of the middle console. It surrounds the driver-oriented cockpit without fencing off the front passenger.

The upper sections of the doors are painted in vehicle color to give the interior a lighter touch. The mistral gray hue of the instrument panel is continued into the door panels around the door latch and armrest.

The long adjustment track of the front seats allows even the tallest front-seat passenger to find an ideal seating position. An adjustable steering column and optional height-adjustable driver's seat allows drivers to quickly find the optimal driving position. An optional "pump" mechanism further enhances seat adjustment capability. Standard equipment includes front-seat headrests that can also be adjusted for height and angle as well as two height-adjustable rear-seat headrests.

All seats are ergonomically optimized for maximum traveling comfort. Long seat cushions (468 mm front, 453 mm rear) help reduce fatigue on long trips while enhancing safety. The seats are designed to afford all occupants added protection in the event of front, offset, side and

rear impact. The cushions are engineered to prevent occupants from "submarining", i.e., sliding under the seatbelts during impact.

The compact Seat has an amazingly roomy interior. The passenger cabin "comfort zone" (distance from the base of the accelerator pedal to the bottom of the rear seatback) measures a full 1,810 mm. There is a generous 1,367 mm of elbow room in front and 1,343 mm in the back. With 992 mm and 950 mm of space between the roof and front and rear seat cushions respectively, the Arosa provides generous headroom for taller adults in both the front and back seats.

The instruments are ergonomically designed. The light switch is located to the immediate left of the steering wheel. The headlights are switched on by turning the switch. The front and rear fog lights are activated by pulling the switch when the headlights are on. This design ensures that the fog lights are automatically deactivated when the headlights are switched off. An acoustic signal sounds when the headlights are unintentionally left on.

The dimmer switch for the instrument panel lighting is located under the main light switch. The instrument panel lighting in bright red allows the instruments to be quickly and easily read at night without troublesome sight adjustment on the part of the driver. The switch for the electric headlight beam adjustment is located next to the dimmer switch.

The windshield washers for the windshield and rear window are activated via a lever affixed to the right side of the steering column. The turn signals and high/low beams are con-

trolled by a lever located on the left side of the steering column.

All other controls are located in the center console: heated rear window, stereo system, and heating/ventilation (air conditioning) system. The console features integral dual cupholders behind the shifter.

The glove box is located below the passenger-side airbag. Small items can also be stored in the nets integrated into the front doors.

The interior roof features four folding grab handles. The rear grab handles also have integral clothing hooks. Both right and left swivel sun visors have covered make-up mirrors.

The controls for the heating and ventilation system are designed for easy operation. The system features a four-speed fan, "smog" function which shuts off outside air, individually adjustable vents located in the instrument panel, defroster vents for the windshield and front side windows, left and right floor vents for both front and rear-seat occupants and exhaust function. The "Comfort" package also includes a dust/pollen filter.

The trunk lid features interior paneling and opens wide for easy loading and unloading. The carpet and paneling material is equal in quality to that found in the interior of the Arosa. Even the back of the rear seatback is carpeted. The folding trunk cover can be easily unlatched and brought into a fixed, open position so that it is conveniently kept out of the way during loading and unloading. Interior inset grab handles on both sides of the trunk lid make closing the trunk easier while keeping your hands clean.

The Arosa offers 130 litres of cargo space (VDA standard). The rear seatback can be tilted forward five degrees to make

room for larger objects such as two beverages cases.

By folding down the rear seatback completely, the cargo volume can be expanded to 790 litres. A symmetrically divided (1:1) rear seatback is part of the "Comfort" package.

The Arosa comes with a standard emergency spare tire stored underneath the trunk floor together with a jack and basic tool kit. A first-aid kit, warning triangle and other objects can also be stored here. The spare tire well is also large enough to optionally accommodate a full-size tire.

Equipment variants

The Arosa is available with a number of equipment packages and a wide range of accessories which allows the buyer to customize the vehicle to personal needs and preferences. The equipment packages described here are those available on the Spanish market. The content of the packages may vary in other markets.

Arosa Base (Spain)

Even the basic model of the Arosa comes with a generous array of standard equipment. For example, it features a height-adjustable steering column, pyrotechnic seatbelts up front, two three-point seatbelts in the rear, a heated rear window with washer system, four headrests, parking lights, interior-adjustable outside mirrors, electronic engine immobilizer, a third taillight, radio preparatory package including antenna, four fold-down grab handles (with clothing hooks in the rear), illuminated ash receiver, fold-down rear seatback, acoustic warning signal for headlights on, tinted glass, four-speed ventilation system fan, fastening loops in the trunk for securing luggage and cargo, digital clock and dual cupholders.

The basic model is available with both the 1.0 and 1.4-litre engines. Vehicles with the 1.4-liter powerplant are also available with an automatic transmission.

The 1.0-litre engine is paired with 155 / 70 R 13 tires mounted on 4 1/2 J x 13 steel rims. Cars powered by the 1.4-litre engine feature 5 1/2 J x 13 steel wheels and 175 / 65 R 13 tires.

"Comfort" package

The "Comfort" package adds more conveniences to the Arosa: height-adjustable front seats for both the driver and front passenger, "Menorca" upholstery, a center console, pollen filter and trunk paneling.

"Estilo" package

The styling package adds a further touch of elegance: bumpers in vehicle color, black rocker panels and sporty 6 J x 13 alloy wheels with 175 / 55 R 13 tires.

"Electron" package

This power package consists of electrically operated door locks, which can also be activated from inside through a special switch, and power windows.

"Musica" package

The "Salsa" stereo system delivers excellent music reproduction through four speakers.

Colors

The Arosa is available in seven exterior colors including three metallic shades.

Metallic Colors

- Techno Blue
- Mint Green
- Nordic Blue

Non-metallic Colors

- Candy White
- Flash Red
- Mali Orange
- Black

Only environmentally friendly, water-soluble paints are used with the Arosa.

Special Equipment (Spain)

A wide range of accessories allows the Arosa to be customized to suit individual tastes. The list of special equipment includes features that are not offered by any other vehicles in this class.

Air conditioning is available on models powered by either engine. Medical research has determined that air conditioning is not simply a matter of comfort. Keeping "cool" also enhances traffic safety, because excessively hot, humid weather has a negative effect on driver concentration.

Other available equipment:

- Driver-side airbag
- Dual front airbags
- ABS Mark 20
- Fog lamps
- Split rear seatback
- 13" alloy wheels (for standard tires)

Accessories

A large selection of extra equipment allows drivers to personalize their Arosa. The long list of accessories includes:

- Trailer hitch
- Center console
- Rear spoiler
- Wind deflectors

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- Glass sunroof
- Sport suspension
- Radio-cassette stereo systems with speakers and CD changer
- 13" and 14" alloy wheels
- Carpets, rubber mats, mud deflectors
- Child seats
- Child stroller designed especially to fit into the Arosa's trunk
- Vehicle alarm
- Tow bar
- Cargo, ski and bicycle roof racks

5. Technology

The Arosa incorporates numerous technical innovations. This new technology makes the Arosa one of the most modern vehicles on the road today.

Protecting the environment was, of course, a primary goal in developing this new vehicle. Seat engineers focused on conserving natural resources, reducing fuel consumption and keeping emissions and noise levels to a minimum. Two new petrol engines were selected to power the Arosa. These highly modern powerplants feature new fuel/air mixture technology that helps reduce fuel consumption while improving elasticity and overall performance. Both engines are fitted with multi-point fuel injection (MPI) and a reengineered intake manifold.

Passive safety features built into every Arosa include a strong passenger cage, energy-absorbing front crush zone and an exemplary occupant restraint system. State-of-the-art suspension and brake technology ensure safe handling in critical situations.

The engines are laterally mounted and drive the front wheels. This arrangement saves space, which in turn is put to good use in the passenger cabin. Both engines come equipped with a five-speed manual transmission. An optional four-speed automatic transmission is available in conjunction with the 1.4-litre 44 kW (60 bhp) powerplant.

Engine palette

In addition to the two petrol engines available at the time of launch, a direct-injection, naturally aspirated 1.7-litre diesel – unique to this class – will be added to the power inventory at a later date.

The engines initially offered with the Arosa present customers with two attractive sources of efficient power. Both en-

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gines develop good low-end torque which translates into excellent elasticity and responsive acceleration. This aspect is often overlooked when evaluating performance. When it comes to overall driving enjoyment, the development of torque at lower rpm plays a greater role than maximum power output.

The new MPI engines from the Volkswagen Group prove that low fuel consumption can be achieved without sacrificing performance. The outstanding elasticity of these engines saves fuel and enhances driving enjoyment, especially in higher gears.

Responsive performance and power to spare:

1.4-litre MPI engine, 44 kW (60 bhp)

The top engine in the Arosa power palette delivers impressive performance and economy. This four-cylinder in-line engine develops 116 Nm of torque at 2,800-3,200 rpm and 44 kW (60 bhp) at 4,700 rpm. Thanks to a flat torque curve, the Arosa reaches speeds of 90 km/h and 110 km/h in 4th and 5th gears respectively at an engine speed of only 3,400 rpm. This makes driving both enjoyable and very economical.

The 1.4-litre engine powers the Arosa from 0 to 100 km/h in 14.1 seconds and to a top speed of 160 km/h. In fifth gear the vehicle accelerates from 60 to 100 km/h in 17.0 seconds. Overall fuel consumption is 6.2 litres/100 km in accordance with the new standard for economy (93/116/EC).

When coupled to the optional four-speed automatic transmission, the Arosa accelerates from 0 to 100 km/h in 16.2 seconds and reaches a top speed of 155 km/h. This com-

combination consumes an average of 7.7 litres/100 km (93/116/EC).

The 1.4-litre engine delivers adequate power for long-distance driving as well as outstanding responsiveness for comfortable city driving.

Light and lively:

1.0-litre MPI engine, 37 kW (50 bhp)

The 1.0-litre powerplant is a true lightweight. The aluminum engine block weighs in at a mere 17.4 kilograms, or approximately half as much as a comparable cast iron block. The reduced weight has a positive effect on fuel economy.

The aluminum block with thin-wall cast iron sleeves features an "open-deck" design. Precision ribbing ensures a straight-line power flow between the cylinder head bolts and thrust block. The engine is responsive and nearly vibration-free.

The engine is characterized by small bore (67.1 mm) and relatively long stroke (70.6 mm). Proportionally large intake (31 mm) and exhaust (26 mm) valves allow the powerplant to breathe easily.

This responsive 1.0-litre engine produces a maximum of 86 Nm of torque at 3,000-3,600 rpm for outstanding elasticity. It accelerates from 60 to 100 km/h in fifth gear in 17.5 seconds.

Maximum power output of 37 kW (50 bhp) is reached at 5,000 rpm. It accelerates from 0 to 100 km/h in 17.4 seconds and reaches a top speed of 151 km/h. Overall fuel consumption according to the new standard for economy (93/116/EC) is 5.7 litres per 100 km/h. This engine thus constitutes an economical alternative to the 1.4-liter

version and is ideal for short to mid-range driving.

MPI: environmentally friendly driving fun

With the new generation of multi-point fuel-injected engines the Volkswagen Group has succeeded in reducing fuel consumption and emissions while improving performance and driving enjoyment.

Multi-point fuel injection (MPI) meters fuel individually to each cylinder immediately before the cylinder's intake valve opens. This provides better fuel/air mixture distribution with relatively low injection pressure. With conventional injection technology (single-point fuel injection), all cylinders are fed from a single central fuel/air mixing unit.

The entire fuel/air mixture system of the new 1.4 and 1.0-litre engines was reengineered to accommodate multi-point fuel injection. The intake manifold, fuel distributor with pressure regulator, injection jets, air filter, sensors and controller are all combined into a single unit. This is a further example of how the use of advanced technologies and production methods helps keep the price of the Arosa low.

The spiral-shaped intake manifold is made from of a fiberglass-reinforced synthetic material produced with innovative dual-shell injection mold technology. The circular intake channels offer a decisive advantage over conventional intake manifolds in that they are all of equal length. This provides better intake and mixture characteristics over the entire rpm range.

The electronic control unit was engineered specifically for MPI engines. It has its own built-in self-diagnostics and controls the engine immobilizer and fuel tank ventilation in addition to the fuel injection system.

Suspension

The electronic ignition system features a high-voltage rotary distributor and a sensor that monitors each cylinder individually. If knocking is detected in a specific cylinder, the sensor sends a signal to the control unit and timing is adjusted accordingly. This system quickly adapts to varying grades of fuel so that the new MPI engines can also operate adequately with regular grade petrol. The exhaust system features a catalytic converter and lambda probe that meet 1997 Euro 2 (MVEGA II) standards.

Automatic transmission

The 1.4-litre engine is also available with an automatic transmission that was specially designed for both the VW Polo and Seat Arosa. Volkswagen and Seat engineers joined forces with a transmission manufacturer to develop a modern, compact automatic that meets the requirements of these smaller vehicles. The result is the "most compact four-speed automatic in its class". The all-new transmission responds efficiently at all speeds, thus helping keep fuel consumption low. Electronic controls allow the driver to switch between sport and economy mode.

Suspension

The Arosa offers pure driving fun. The suspension and steering are precisely coordinated. The new Seat is agile and handles easily. The turning circle is a mere 9.8 meters (10.1 meters with power-assisted steering). The rack-and-pinion steering travels from full left to full right with only 3.9 turns (2.9 turns with power-assisted steering).

The Arosa is equipped with 13-inch wheels. Wide front and rear tracks of 1,372 and 1,400 mm respectively and a long 2,323 mm wheelbase set the Arosa apart from other vehicles in this class. With excellent directional stability

and clean, responsive handling, the Arosa takes you safely and effortlessly through tight corners. This new Seat thus offers the driving fun and traveling comfort found in more expensive automobiles.

Front axle

The front wheels are suspended on wishbones fitted with coil springs. A negative roll radius and long castor length ensure directional stability and straight-line braking. The springs react to the slightest variations in road surface. The kinematics of the front stabilizer is designed to deflect disruptive lateral forces from the McPherson springs to the shock absorbers. The front axle is mounted upon a noise-reducing auxiliary frame, and a highly absorbent hydraulic motor mounts prevent engine vibrations from being transferred to the body.

Rear axle

The rear axle features separate spring action and shock absorption for better road response. The space-saving arrangement of the rear suspension made it possible to design a trunk with a load width of 960 millimeters between rear wheel wells. Large, track-correcting axle bearings ensure good rolling comfort and increase driving safety in the curves. Gas-charged shock absorbers are standard.

Wheels

The entire axle geometry has been designed for 13-inch wheels. Models powered by 1.0-litre engine come with 155/70 R 13 tires mounted on 4 1/2 J x 13 rims. The 1.4-litre engine is paired with 175/65 R 13 tires on 5 1/2 J 13 wheels. Options include 13" and 14" alloy wheels.

Brake system

All Arosa models are equipped with a diagonal dual-channel

Body

brake system with power booster and load-dependent pressure reducer. The front brake discs have a diameter of 239 mm and thickness of 10 mm. The front discs on models powered by the 1.4-litre engine feature interior ventilation. Self-adjusting rear drum brakes with a diameter of 180 mm (200 mm with ABS) are standard on all models.

A specially designed pressure reducer adjusts brake pressure to varying loads, thereby shortening braking distances and preventing over-braking.

A newly developed Mark 20 anti-lock brake system from ITT is offered as an option. This system employs electronic brake pressure distribution which makes the load-independent pressure reducer superfluous. The system provides optimal stopping power and eliminates rear axle over-braking.

Body

The was designed and developed with the aid of CAD/CAM simulation. When it comes to crash safety, torsional stability and body stiffness, the Arosa is at the top of its class.

The partially galvanized body is built upon a modern vehicle platform developed by the Volkswagen Group in accordance with the company's platform strategy. This significantly reduced development time and costs without sacrificing quality.

Body stiffness and noise suppression

The Arosa's exemplary body stiffness helps reduce noise while improving safety aspects. The vehicle's outstanding suspension design, low noise development and torsional stability help avoid problems before they occur.

The Arosa also sets new standards with respect to quietness.

Safety

This is in part due to the design of the engine and transmission mounts. The drive shaft is held by two lateral supports and a center torque-adjustment support that counteracts the relative movement of the engine and transmission when placed under load. The supports are fitted with rubber bushings to absorb engine and transmission vibrations.

The Arosa's pleasant interior acoustics were achieved by employing oscillation technology to determine the optimal thickness of windshield and window supports and frames as well as the roof and roof frame. Effective road noise and vibration suppression is another factor contributing to the Arosa's quiet ride. This was achieved by employing vibration and noise-absorbing plates and foam insulation at strategic points of the body.

The new Seat's exterior design effectively reduces wind noise.

Its excellent aerodynamics are reflected in the low coefficient of drag of 0.32, which is the best in its class.

Corrosion protection

Top quality materials and workmanship ensure a long life for the Arosa which comes with a six-year anti-corrosion and three-year paint guarantee.

All susceptible steel surfaces such as the doors, hood, trunk lid and wheel wells are galvanized for optimal protection against corrosion. The undercarriage is coated with a PVC layer of up to 1,500 μ in thickness. PVC has proven itself highly effective in resisting water while being easy to paint.

Safety

The Seat Arosa meets all current worldwide safety standards as well as future EU standards. It offers outstanding protec-

tion against front, side and rear collisions as well as roll-over.

The stiff body contributes to greater handling stability. A robust passenger cage offers optimal protection for all occupants. The energy-absorbing design of the body also helps protect the occupants of other vehicles involved in an accident.

The Arosa has passed numerous crash tests with high marks. It is especially impressive in the area of head injury criteria (HIC), a new safety criteria for which a maximum allowable rating has yet to be established. It is expected that the maximum limit will be set at 1,000, or more than twice as high as the results achieved by the Arosa. A rating this favorable is normally achieved only by mid-size automobiles.

The energy released in a frontal or offset crash is deflected around the passenger cage in two ways. First, the forces are routed through the front fenders, into the reinforcements in the doors and on into the rear fenders. Second, energy is transmitted through the beams in the rocker panels and tunnel as well as the x-frame reinforcement of the undercarriage and on into the rear section of the vehicle.

Steel with highly elastic qualities helps absorb and deflect energy. Tubular reinforcements in the A- and B-columns increases the resistance of the door frames. These reinforcements help provide occupants with vital survival space in the event of a collision or rollover.

Reinforcements in the doors and newly designed thresholds ensure that the doors can be easily opened following a crash. Strong door construction also protects against an

impact from the side and contributes to overall body stiffness.

Elements of hard polyurethane foam in the doors also help absorb energy.

Both the standard and optional divided rear seatbacks are designed to prevent cargo from entering the passenger cage in the event of an impact. Fastening loops in the trunk are provided for securing luggage and cargo.

The fuel tank located underneath the rear seat bench is explosion-resistant. The fuel pump automatically shuts off in the event of a heavy impact.

Additional safety aspects

In addition to the structural qualities of the body, the Arosa offers a host of other features that contribute to passenger safety. Front three-point pyrotechnic seatbelts with automatic retraction are standard equipment. Airbags for the driver and front passenger are optional.

The driver and front-passenger airbags have volumes of 35 and 65 litres respectively. The occupant-restraint system is further enhanced by a newly designed seatbelt retraction system, which is mechanically rather than electrically activated. The new belts are lighter, take up less space and retract more efficiently. The seat cushions are designed to prevent occupants from sliding out from under the belts. Soft, individually adjustable headrests provide additional protection for the head area.

The steering column is engineered to collapse (150 mm deformation zone) in the event of a frontal impact. The deformation occurs in the engine compartment with the column being deflected downward. The driver-side airbag

Electrical System

provides effective protection against injury to the head and chest area.

The instrument panel features rounded edges and is covered with non-splintering, energy-absorbing material.

Polyurethane foam knee-blockers are integrated into the bottom of the instrument panel on the driver's side.

Electrical system

The new Arosa electrical system is based on a decentralized concept for optimal operational reliability. Instead of a complicated central electrical unit, the Arosa employs two relatively simple cable modules. This design makes it easy to identify and correct potential electrical problems. The resulting improved reliability promotes greater customer satisfaction.

The cable units are secured via integral holders. Extra cable channels are employed at critical points. A limited number of standardized RD connector variants ensures optimal operational reliability.

The electronic control units are strategically located to keep cable lengths short, thereby eliminating potential problem sources.

The fuse box is located on the driver side of the vehicle near the battery together with all electrical relays. Fuses are integrated into all Arosa electrical circuits for maximum safety.

Engineers subjected the electrical system to extensive testing to ensure compliance with environmental regulations governing electromagnetic radiation. The Arosa's electronics are designed to function reliably, even when subjected to strong electromagnetic fields.

Environment

Environment

Materials detrimental to the environment are not used in the manufacturing process. The Arosa was also designed with resource conservation in mind. Care was taken to ensure that the vehicle is environmentally friendly in operation while making as many parts as possible recyclable.

The entire Volkswagen Group employs an elaborate, efficient environmental management system to ensure the continual implementation of environmental measures. State-of-the-art technologies are employed in manufacturing to lessen the burden on the environment. For years water consumption has been kept at a low level. By separating the fresh and operational water supplies it has been possible to greatly reduce the consumption of water. Water management policies have led to a recycling rate of 98.4%. Every drop of water passes through the system an average of six to seven times.

Improvements to the manufacturing process have led to a reduction in waste, and the percentage of recycled materials used in the process has been increased. The level of emissions released during manufacturing has also been decisively reduced.

The Arosa is produced in the Wolfsburg plant, which is one of the most environmentally friendly manufacturing facilities in Europe. Viewed against this backdrop, the new Seat is undoubtedly one of the most positive developments in the automobile sector. Only water-soluble primers and paints are used. Thanks to its low fuel consumption, the Arosa helps conserve natural resources while releasing fewer pollutants into the atmosphere. A Lambda-regulat-

ed three-way catalytic converter ensures optimal exhaust gas properties.

Outstanding aerodynamics and the consequent employment of lightweight parts also contribute to the car's good fuel economy. The 1.0-litre engine, for example, features an aluminum engine block. Aluminum parts are also used in the transmission, and the use of synthetic parts also helps lower vehicle weight.

Exemplary environmental properties are built into every Arosa.

All synthetic parts are labeled to make them easier to identify and sort for later recycling. The Arosa is 85 % recyclable by weight.

6. Target Groups

The demand for greater automotive sophistication is continually growing. Buyers of small cars especially want more features coupled with improved suspension, engine and safety technology. They no longer view the automobile as a mere means of transportation but rather as an expression of their personalities and lifestyles.

The Arosa radiates the charm and sophistication that the public wants. And it is not just a vehicle for city driving or cross-town shopping trips. This compact Seat is at home on the open highway as well. The value of this automobile is not only reflected in its price/performance ratio but in its excellent fuel economy and low maintenance costs as well. The exemplary quality, safety and comfort of the Arosa are certain to appeal to a broad spectrum of potential buyers. Owners of both Seat and other makes of automobiles will be quick to recognize the advantages offered by the Arosa.

Young singles between the ages of 18 and 30 in search of their first automobile will find this new Seat especially attractive. Because this group places special emphasis on price, economy and overall value. The Arosa is also in keeping with the trend toward more sophisticated automobiles. Young people also demand excellence in design and a high degree of individuality – qualities in which the Arosa excels, whether it's a drive to the work, trip to the supermarket, or lengthy holiday journey.

Potential Arosa buyers also include younger families with one or two children who already have a first or even second car. And the safety-conscious driver of a top-class automobile need not worry about his wife and children, because the Arosa offers same level of safety as larger vehicles.

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Members of the older generation will also find that the Arosa is optimally suited to their needs and wishes. Their children are usually already grown and have left home. They want a smaller vehicle but do not want to do without the comforts and features they are accustomed to. This active group is also very demanding when it comes to value and interior comfort.

But the Arosa is also certain to attract the attention of people of all ages who are careful with how they spend their money and who are concerned with the environment and preserving resources. This new Seat is a car for smart buyers who take pride in getting the most for their money. They are constantly on the lookout for value and are willing to spend a more for quality when the price is right. For them the purchase of a small car is not simply a way to save money but rather an expression of limitation to the essential qualities of the automobile.

7. Functionality/Economy

Driving an automobile is still affordable for everyone. With the development of the new Arosa, Seat has established a new benchmark with respect to functionality and economy. Short production times and modern production methods save money – an advantage which is then passed on to the buyer. Those who place emphasis on value when acquiring a car also look carefully at insurance rate categories, maintenance, repair and spare parts costs, repair methods, workshop capability and the scope of the dealer network.

The Arosa was conceived in the spirit of simultaneous engineering under which experts from the fields of engineering, design, production and marketing worked closely together. Computer-simulated crash profiles allowed designers to develop an automobile that is easier and less expensive to repair.

Seat automobiles are also designed with insurance costs in mind. Because vehicles that qualify for lower insurance rates enjoy an important competitive advantage. Arosa models powered by the 37 kW (50 bhp) engine carry a low full-coverage insurance rating of Type Class 10 in Germany. Vehicles with the 44 kW (60 bhp) engine are given a Type Class 11 full-coverage insurance rating. Arosa engineers made generous use of bolts in designing the Arosa to minimize repair and maintenance costs. The decentrally designed electrical system not only saves cable but time in the workshop as well. Potential problems are quickly identified and corrected with the help of modern diagnostic procedures. The bumpers are designed to completely absorb impacts at low speeds without

passing the forces of the impact on to other structural elements.

But good products alone do not guarantee success in the marketplace. Seat is therefore dedicated to continually improving its sales network in the interest of its customers. At Seat acquiring and keeping satisfied customers is the focal point of all efforts.

The services offered by the Seat sales network encompass both technical and marketing aspects. Personalized financing, leasing and insurance offers complement Seat's extensive guarantees. All new vehicles and spare parts come with a one-year guarantee. The use of galvanized body panels also makes it possible to extend customers six-year anti-corrosion guarantee.

The time a vehicle spends in the workshop can also cost customers money. Seat therefore has designed long maintenance intervals into the Arosa. Inspections are due only every 30,000 kilometers. Drivers need to have the oil changed only every 15,000 kilometers.

A comprehensive network of service outlets and fast spare parts delivery ensures prompt, reliable service anywhere in Europe.

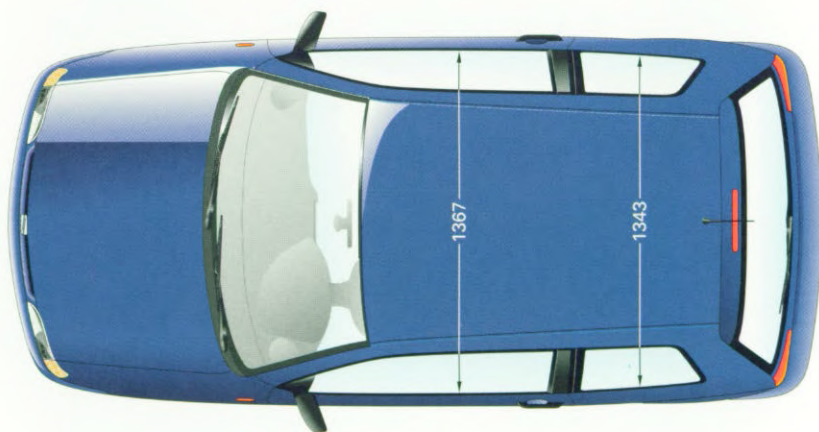
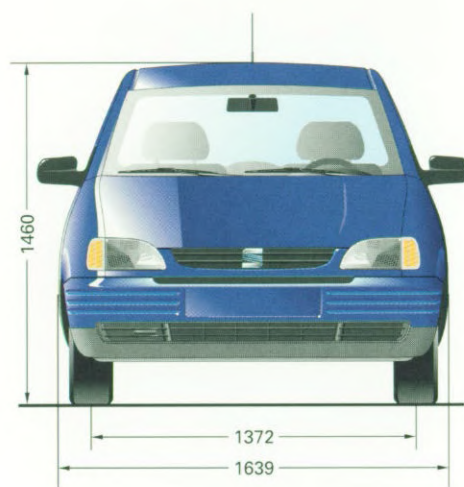
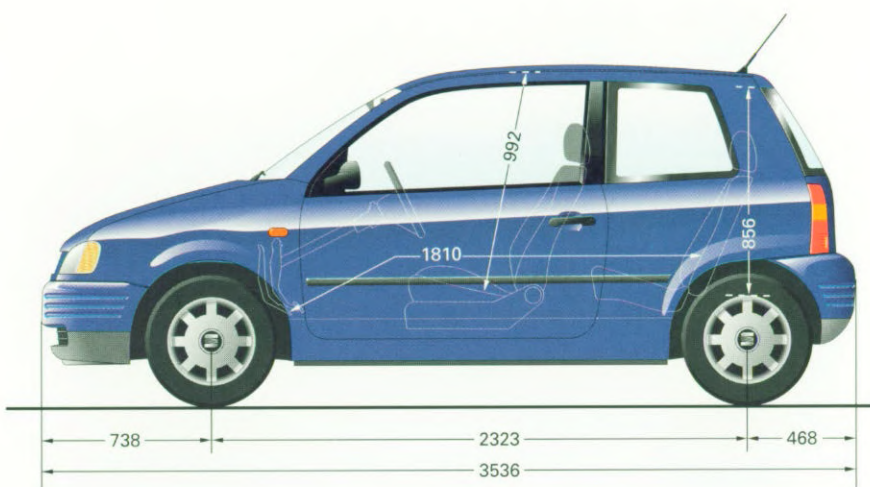
When it comes to functionality, the Arosa has a lot to offer.

Countless small innovations and features make driving and riding in the Arosa a more pleasant experience. The electronic engine immobilizer, airbags for the driver and front passenger, side impact protection, ABS, height-adjustable steering column, ergonomically designed interior and driver-oriented cockpit are all attributes normally associated with larger, more expensive automobiles. The dual cupholders, securing loops in the trunk, easy-to-open

Seat Arosa

fuel filler cap, dual interior trunk lid handles, strategically located fuse box and large spare tire well (emergency tire standard, full-size spare optional) with tools are only a few examples of the Arosa's practical side.

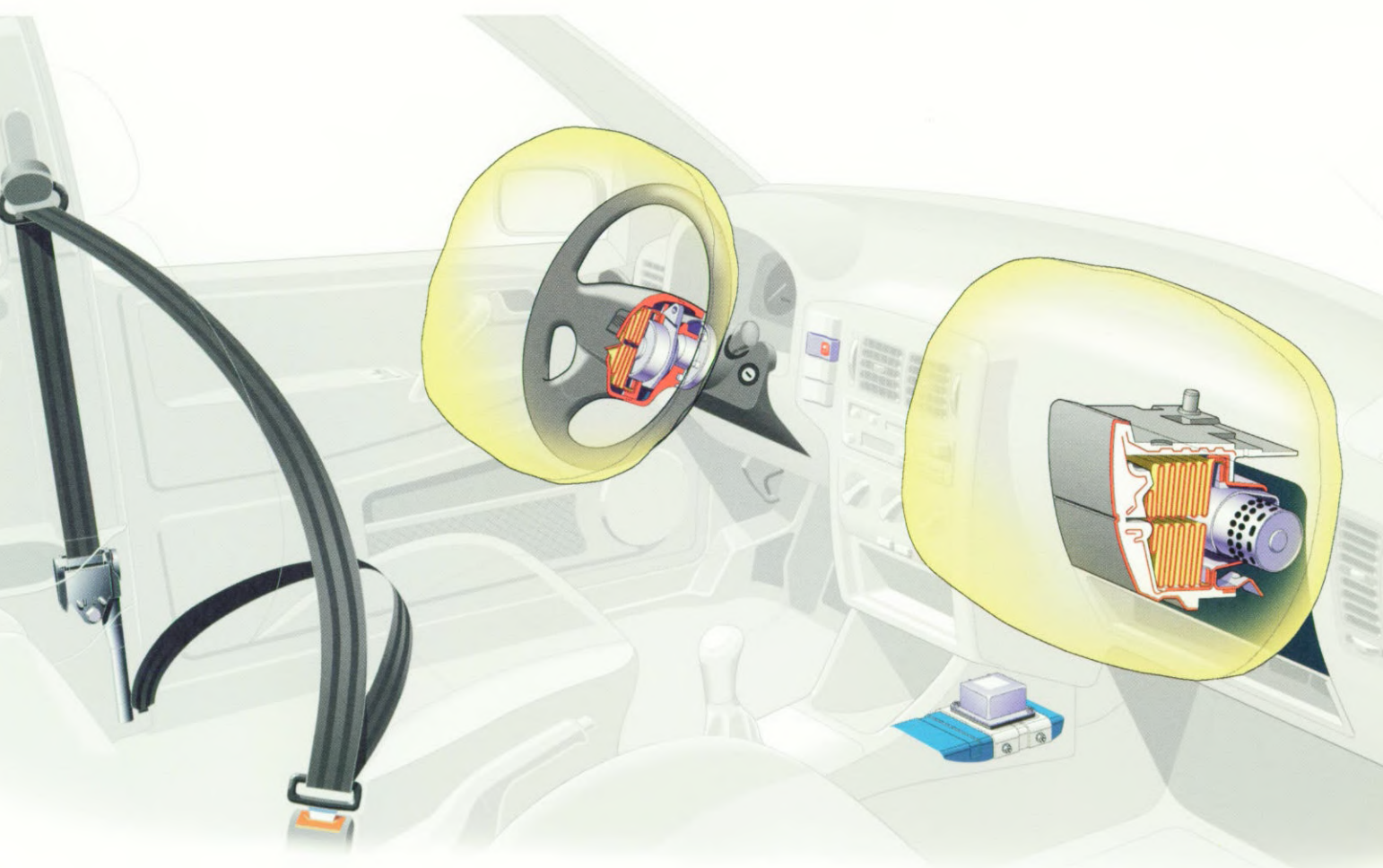
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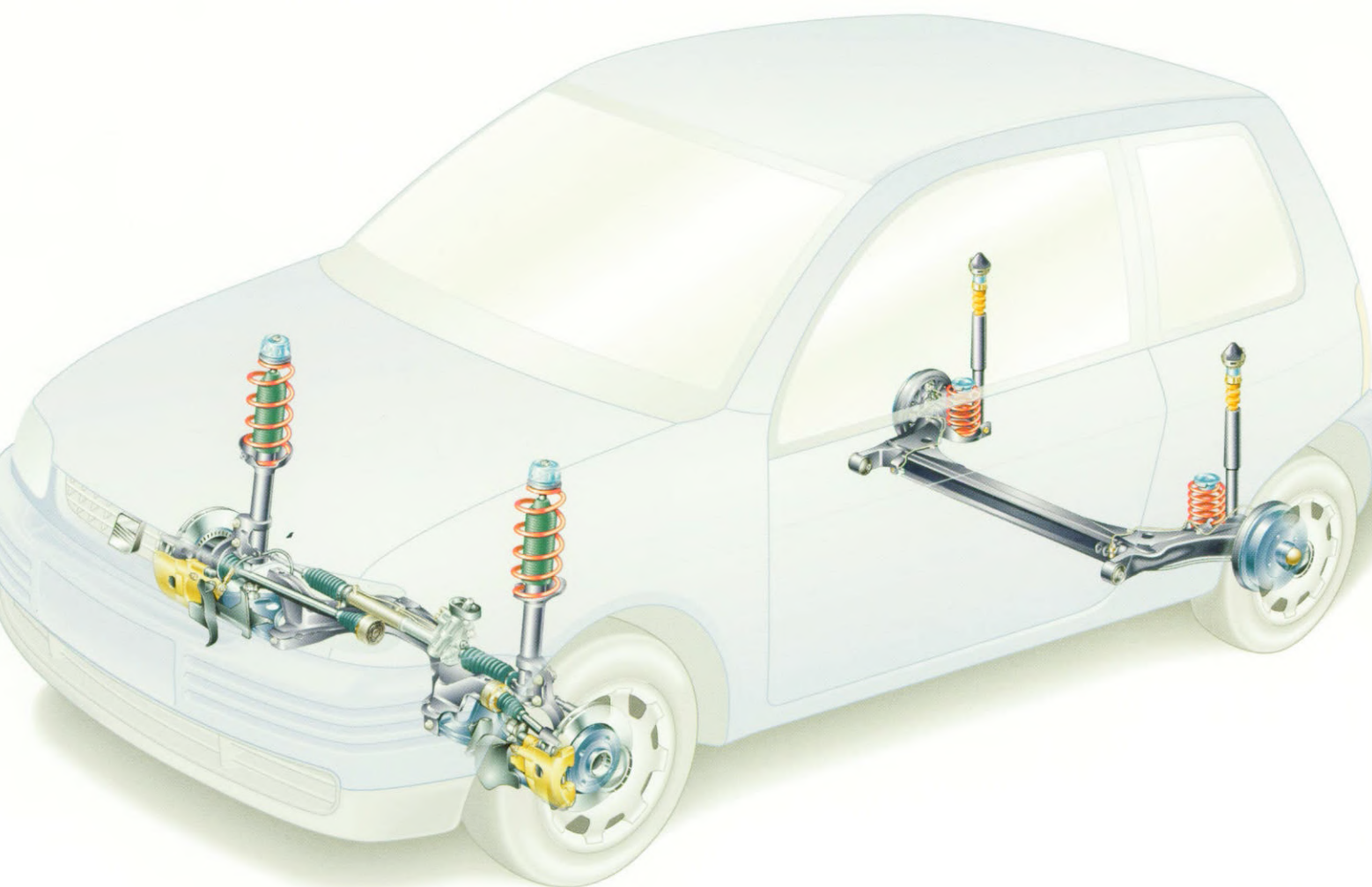
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Technical Specifications 1.0 Liter

Engine/Electrics

Engine type	In-line 4-cylinder petrol engine, water-cooled
Position	Front, transverse
Bore/Stroke	67.10/70.60 mm
Effective displacement	999 cm ³
Compression	10.50 : 1
Mixture formation	Multi-point injection
Ignition system	Bosch Motronic
Emission control system	Catalytic converter, lambda control
Power output	37(50)/5000 kW(bhp)/rpm
Max. torque	86/3000-3600 Nm/rpm
Alternator	70 A
Battery/Capacity	36 (175) A(Ah)

Performance with 50 % load

0 - 80 km/h	10.9 s
0 - 100 km/h	17.4 s
60 - 100 km/h	17.5 s
Top speed	151 km/h

Fuel Consumption (93/116/EG51)

Fuel grade	Premium 95 RON*
Urban	7.5 l/100 km
Extra-urban	4.7 l/100 km
Total	5.7 l/100 km
CO ₂ -Emission	137 g/km

Fuel Consumption (EC guideline 80/1268/EWG)

Constant 90 km/h	4.7 l/100 km
Constant 120 km/h	6.4 l/100 km
Urban cycle	6.4 l/100 km
Combined cycle test	5.8 l/100 km

Power Train

Clutch type	Single-plate dry clutch
Transmission type	Five-speed manual
Gear ratios	
1st	3.45 : 1
2nd	2.10 : 1
3rd	1.45 : 1
4th	1.10 : 1
5th	0.89 : 1
Reverse	3.38 : 1
Differential ratio	4.06 : 1

Suspension

	Independent, front and rear coil springs, negative roll radius, long castor length
Wheels	4 1/2 J x 13
Tires	155/70 R 13

*With regular 91 RON slight performance decrease

Technical Specifications 1.0 Liter

Brake System	Dual-channel, power assisted; front disc, self-adjusting rear drum
Exterior Dimensions	
Length/width/height	3536/1639/1460 mm
Wheelbase	2323 mm
Track, front/rear	1372/1400 mm
Turning circle	9.8 (with Servo 10.10) m
Coefficient of drag	cw 0.32
Interior Dimensions	
Entry, width/height	1051/983 mm
Comfort zone (passenger cabin length)	1810 mm
Elbow room, front/rear	1367/1343 mm
Seating area	2.43 m ²
Luggage Compartment	
Floor length to back/front seatback	521/1181 mm
Widest point	1100 mm
Width between wheel wells	960 mm
Lower trunk lip height	644 mm
Max. load height (floor to ceiling)	856 mm
Volume (VDA-Standard)	
rear seat raised/folded down	130/465 l
Trunk lid width, top/bottom	1146/880 mm
Weight/Load Capacities	
Net	864 kg
Gross	1265 kg
Maximum load	401 kg
Maximum axle load, front/rear	710/630 kg
Towing capacity, max. 12 %, braked	650 kg
Max. trailer hitch/roof load	50/51 kg
Fluid Capacities	
Motor oil	3.5 l
Coolant	5 l
Windshield washer reservoir	2 l
Fuel tank	34 l
Service	
Oil change interval	Once a year or every 15,000 km
Inspection interval	30,000 km
Warranty	1 year unlimited mileage, 6-year anti-corrosion

Technical Specifications 1.4 Liter

Engine/Electrics

Engine type	In-line 4-cylinder petrol engine, water-cooled
Position	Front, transverse
Bore/Stroke	76.50/75.60 mm
Effective displacement	1390 cm ³
Compression	10.20 : 1
Mixture formation	Multi-point injection
Ignition system	Bosch Motronic
Emission control system	Catalytic converter, lambda control
Power output	44(60)/4700 kW(bhp)/rpm
Max. torque	116/2800-3200 Nm/rpm
Alternator	70 A
Battery/Capacity	36 (175) A (Ah)

Performance with 50 % load

0 - 80 km/h	9.1 s
0 - 100 km/h	14.1 s
60 - 100 km/h	17.0 s
Top speed	160 km/h

Fuel Consumption (93/116/EG51)

Fuel grade	Premium 95 RON*
Urban	8.5 l/100 km
Extra-urban	4.9 l/100 km
Total	6.2 l/100 km
CO ₂ -Emission	149 g/km

Fuel Consumption (EC guideline 80/1268/EWG)

Constant 90 km/h	4.7 l/100 km
Constant 120 km/h	6.6 l/100 km
Urban cycle	7.4 l/100 km
Combined cycle test	6.2 l/100 km

Power Train

Clutch type	Single-plate dry clutch
Transmission type	Five-speed manual
Gear ratios	
1st	3.45 : 1
2nd	2.10 : 1
3rd	1.45 : 1
4th	1.10 : 1
5th	0.89 : 1
Reverse	3.38 : 1
Differential ratio	4.06 : 1

Suspension

	Independent, front and rear coil springs, negative roll radius, long castor length
Wheels	5 1/2 J x 13
Tires	175/65 R 13

*With regular 91 RON slight performance decrease

Technical Specifications 1.4 Liter

Brake System	Dual-channel, power assisted; ventilated front disc, self-adjusting rear drum
Exterior Dimensions	
Length/width/height	3536/1639/1460 mm
Wheelbase	2323 mm
Track, front/rear	1372/1400 mm
Turning circle	9,8 (with Servo 10,1) m
Coefficient of drag	cw 0.32
Interior Dimensions	
Entry, width/height	1051/983 mm
Comfort zone (passenger cabin length)	1810 mm
Elbow room, front/rear	1367/1343 mm
Seating area	2,43 m ²
Luggage Compartment	
Floor length to back/front seatback	521/1181 mm
Widest point	1100 mm
Width between wheel wells	960 mm
Lower trunk lip height	644 mm
Max. load height (floor to ceiling)	856 mm
Volume (VDA-Standard)	
rear seat raised/folded down	130/465 l
Trunk lid width, top/bottom	1146/880 mm
Weight/Load Capacities	
Net	895 kg
Gross	1295 kg
Maximum load	400 kg
Maximum axle load, front/rear	735/630 kg
Towing capacity, max. 12 %, braked	800 kg
Max. trailer hitch/roof load	50/50 kg
Fluid Capacities	
Motor oil	3.5 l
Coolant	5 l
Windshield washer reservoir	2 l
Fuel tank	34 l
Service	
Oil change interval	Once a year or every 15,000 km
Inspection interval	30,000 km
Warranty	1 year unlimited mileage, 6-year anti-corrosion

1.4 Liter Automatic Transmission

Engine/Electrics

Engine type	In-line 4-cylinder petrol engine, water-cooled
Position	Front, transverse
Bore/Stroke	76.50/75.60 mm
Effective displacement	1390 cm ³
Compression	10.20 : 1
Mixture formation	Multi-point injection
Ignition system	Bosch Motronic
Emission control system	Catalytic converter, lambda control
Power output	44(60)/4700 kW(bhp)/rpm
Max. torque	116/2800-3200 Nm/rpm
Alternator	70 A
Battery/Capacity	36 (175) A (Ah)

Performance with 50 % load

0 - 80 km/h	10.3 s
0 - 100 km/h	16.2 s
Top speed	155 km/h

Fuel Consumption (93/116/EG51)

Fuel grade	Premium 95 RON*
Urban	10.4 l/100 km
Extra-urban	6.2 l/100 km
Total	7.7 l/100 km
CO ₂ -Emission	185 g/km

Fuel Consumption (EC guideline 80/1268/EWG)

Constant 90 km/h	6.0 l/100 km
Constant 120 km/h	7.8 l/100 km
Urban cycle	8.9 l/100 km
Combined cycle test	7.6 l/100 km

Power Train

Transmission type	Four-speed automatic
Gear ratios	
1st	2.88 : 1
2nd	1.51 : 1
3rd	1.00 : 1
4th	0.73 : 1
Reverse	2.66 : 1
Differential ratio	4.05 : 1

Suspension

	Independent, front and rear coil springs, negative roll radius, long castor length
Wheels	5 1/2 J x 13
Tires	175/65 R 13

*With regular 91 RON slight performance decrease

1.4 Liter Automatic Transmission

Brake System	Dual-channel, power assisted; ventilated front disc, self-adjusting rear drum
Exterior Dimensions	
Length/width/height	3536/1639/1460 mm
Wheelbase	2323 mm
Track, front/rear	1372/1400 mm
Turning circle	9,8 (with Servo 10,1) m
Coefficient of drag	cw 0.32
Interior Dimensions	
Entry, wide/height	1051/983 mm
Comfort zone (passenger cabin length)	1810 mm
Elbow room, front/rear	1367/1343 mm
Seating area	2.43 m ²
Luggage Compartment	
Floor length to back/front seatback	521/1181 mm
Widest point	1100 mm
Width between wheel wells	960 mm
Lower trunk lip height	644 mm
Max. load height (floor to ceiling)	856 mm
Volume (VDA-Standard)	130/465 l
rear seat raised/folded down	1146/880 mm
Trunk lid width, top/bottom	
Weight/Load Capacities	
Net	925 kg
Gross	1325 kg
Maximum load	400 kg
Maximum axle load, front/rear	770/630 kg
Towing capacity, max. 12 %, braked	800 kg
Max. trailer hitch/roof load	50/50 kg
Fluid Capacities	
Motor oil	3.5 l
Coolant	5 l
Windshield washer reservoir	2 l
Fuel tank	34 l
Service	
Oil change interval	Once a year or every 15,000 km
Inspection interval	30,000 km
Warranty	1 year unlimited mileage, 6-year anti-corrosion

