

Fox Spirit

The Fox by Audi



If spirit is what you expect from a fine sports sedan, discover The Fox.

First-time drivers of The Fox become quickly aware of its indomitable spirit. Because this automobile possesses a steer-



ing response, road-holding ability and power command that is like a full-fledged sports car.

The technical credentials behind the superb performance of The Fox are impressive in

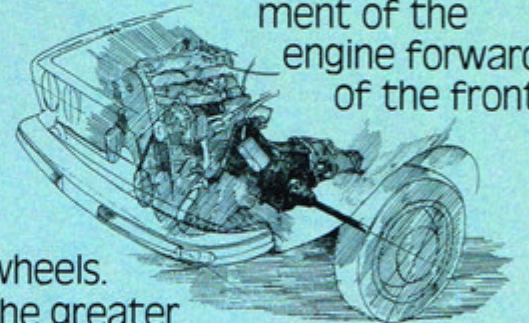
themselves: front-wheel drive, rack-and-pinion steering, overhead cam engine, CIS fuel injection.

These ingredients, of course, are to be found in many fine, high-performance cars. But in The Fox, they have been put together in an engineering package that makes it truly a "driver's automobile." In a short get-acquainted period behind the wheel, you will be quick to sense the Spirit of The Fox. And you will be on your way to discovering the sheer

joy of driving a responsive car.

Superior tracking of front wheel drive

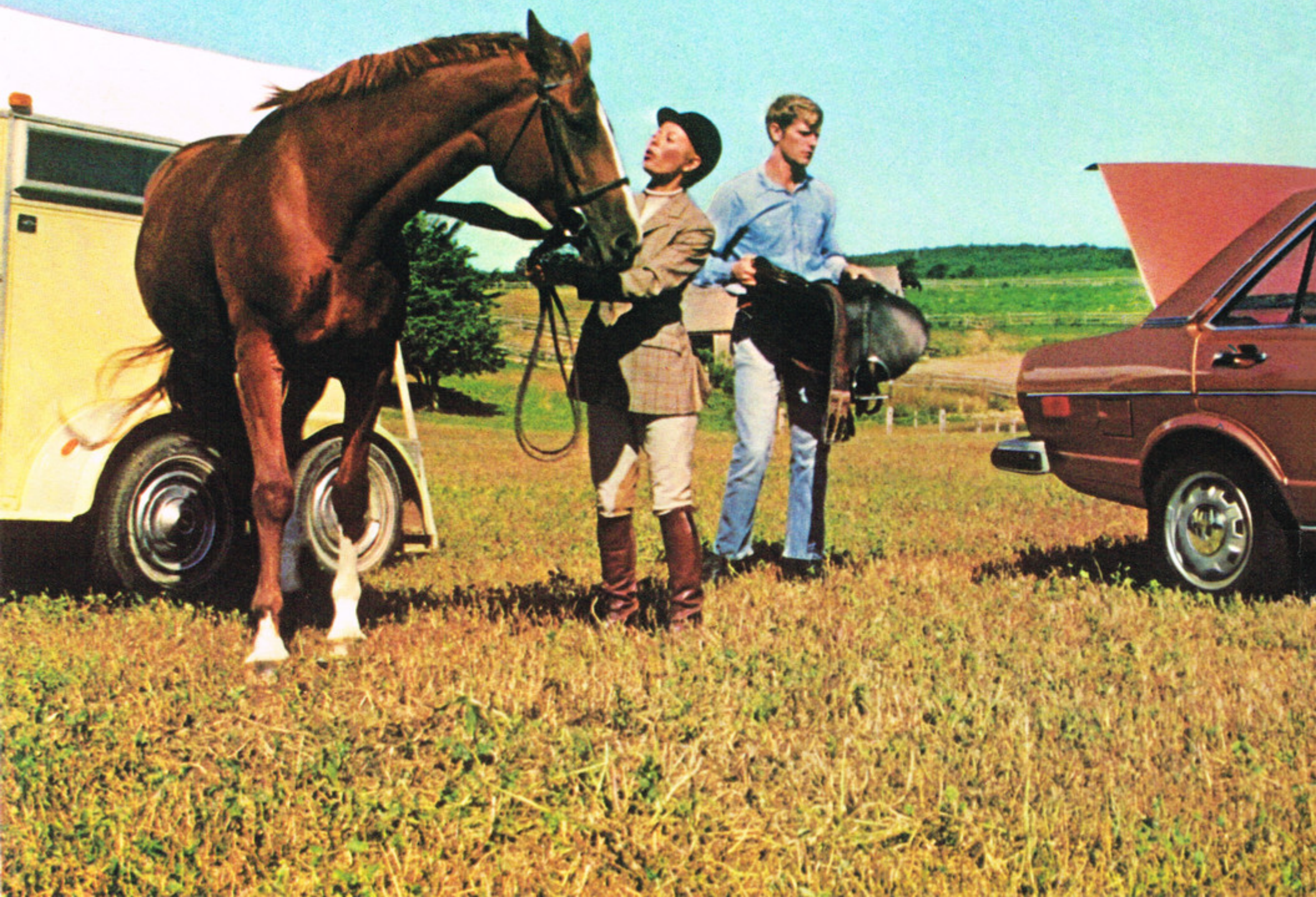
Many of the basic handling traits of The Fox derive from front-wheel drive and placement of the engine forward of the front



wheels.

The greater proportion of weight on the front wheels gives the driver better tracking stability.

Front wheel drive through constant-velocity joints results



in a low unsprung weight (amount of weight between the suspension and the ground), and even power transfer, which improves both handling and ride quality. Since the rear axle does not carry the weight of a differential, it is far lighter than that of cars with rear wheel drive. This light axle neatly follows the contours of the road without the "road hops" typical of cars with heavy rear axles.

The advantages of front-wheel drive are combined with rack-and-pinion steering and

superb front and rear suspension systems to give a ride that has to be experienced to be fully appreciated.

Drivability plus practicality

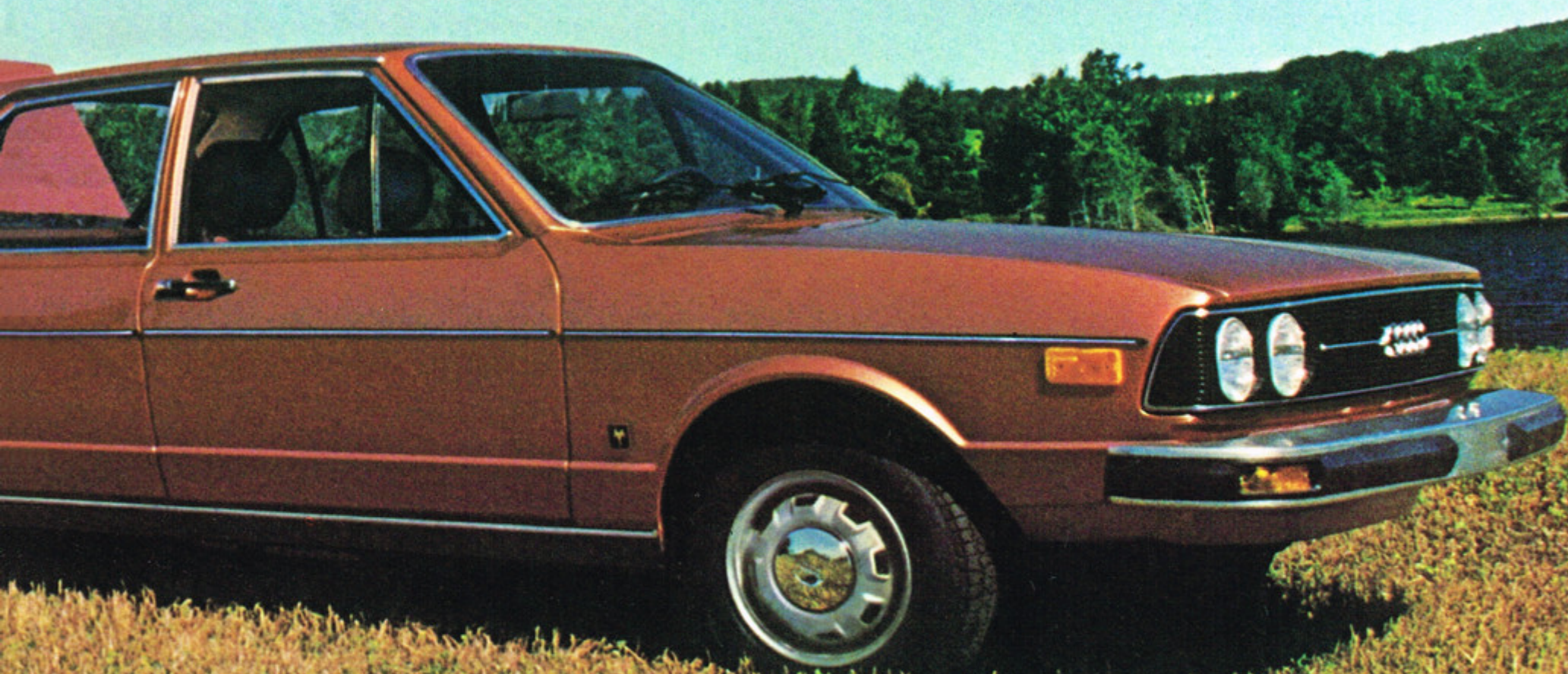
Yet for all its inherent drivability, The Fox does not short-change its owner in the area of practicality. As practical transportation, The Fox delivers. It can carry five adult passengers comfortably. It has a big 18.7 cubic feet of trunk space.



And its economy is remarkable indeed; EPA estimates 37 mpg on the highway and 23 in the city.*

In short, The Fox answers all the practical needs of the modern car buyer. But it fulfills a dream, too: the dream of every driver to own a spirited sports sedan.

*Based on 1978 EPA estimates with manual transmission. Your actual mileage may vary depending on where and how you drive, your car's condition and optional equipment. Ask your dealer for a free copy of the EPA/FEA Gas Mileage Guide for New Car Buyers.



You harness the spirit of a fine-tuned machine when you drive a Fox.

The spirit of The Fox originates under the hood—with a 1.6 liter overhead cam engine—4 cylinder in-line, and placed with its center of gravity ahead of the front axle. This provides firm road contact and superb tracking stability. The engine is inclined 20° to allow for a low, sloping hood. The downward curve of the hood improves visibility, and, together with a low and forward-placed center of

gravity, gives a greater stability in crosswinds.

The Fox engine incorporates every vital feature of modern engine

technology. The shape of the combustion chamber, the swirl inlet ports, the preheating system—every detail is of an advanced and efficient design.

Fuel injection in The Fox is CIS (Continuous Injection System), of the same design used in much more expensive sports cars. It provides several important advantages over carburetion. CIS is more reliable, because it has fewer moving parts than other fuel injection systems. (An air-flow

sensor connected to a hydraulic valve mechanically controls injection quantities.)

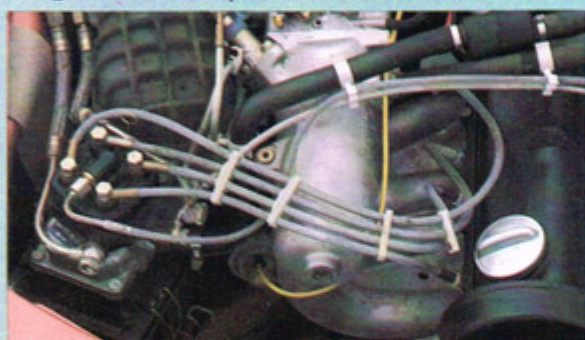
Fuel injection vs. carburetion

As opposed to carburetors, which determine fuel flow by the position of the accelerator pedal and butterfly valve, fuel injection reacts to other factors, such as the engine temperature and outside temperature, to create the ideal mixture of fuel and air at all times. For example, when fuel is not needed—as in deceleration—fuel injection cuts down the supply more rapidly than carburetion, reducing fuel waste. The precise matching of fuel and air to meet operating needs results in cleaner exhaust emissions and more efficient use of fuel.



Easier starts in cold weather

The fuel-injected Fox engine is easy to start under



virtually all weather conditions. When the starter is engaged, a cold-start valve automatically admits additional fuel into the intake manifold and on to the combustion chambers. (The automatic choke, with its inherent difficulties, is eliminated.)

To assure smooth engine operation during warm-up, the CIS system is equipped with a control pressure regulator that is sensitive to engine heat. Thus fuel enrichment needed when the engine is running cold

is achieved automatically.

Control and management of engine operating temperature is performed in The Fox by the use of a thermostatic electric radiator fan, instead of the conventional belt-driven fan. The cooling effect is regulated by the temperature of the coolant rather than engine speed. So if necessary, the fan may even operate after the engine has been turned off. It also enables faster warm-up because the fan is not turning while the engine is cold. Fast warm-up is further aided by a thermostat in the cooling system which automatically by-passes the radiator when the engine is cold.

Sharp performance and flat torque

The Fox engine has been designed to produce what is technically known as a relatively flat torque curve. This means performance is smooth and power is available for

quick acceleration—without sluggishness—over a wide range of engine speeds.

In The Fox, the engine's power is transferred to the front wheels through constant-velocity joints. This even trans-



fer of power is matched by the superior "road feel" of rack-and-pinion steering to produce easy handling and tight control.

Behind the wheel of this fine-tuned machine, you need not be aware of the many technical functions being performed for you beneath the hood of The Fox. You need only enjoy your role as the driver of a highly responsive and spirited automobile.



Any time you want to test its spirit, The Fox can take it.

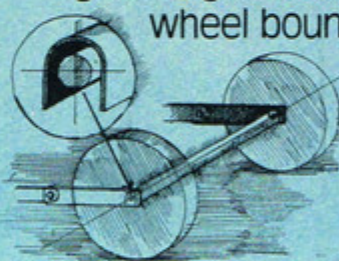
Typical of The Fox spirit is the way the car thrives on being driven long and hard. It is rugged of body and sturdy in construction. Though light in weight, it has great structural strength, because The Fox is built by the well known "unitized construction" technique, in which large sections of pressed steel are welded together for exceptional body strength and durability.

The Fox body is united through 4,500 spot welds and about 18 feet of CO₂ arc-welded seams. The use of welding, rather than bolts, eliminates countless squeaks and rattles over the life of the car. During manufacture, welds are double-checked by skilled inspectors, mechanical separation tests are performed, and measurements are made to

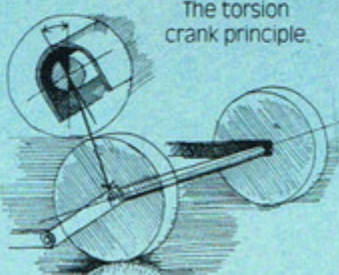
assure proper fitting of doors and windows.

Built to take impact

A tough suspension system supports the rugged Fox body. The suspension is independent in front and torsion-crank construction in the rear—a partly flexible bar whose light weight results in less



The torsion crank principle.



wheel bounce. The stability of tracking that results is complemented by remarkable riding comfort suspension "travel" or maximum spring compression is a full 190 mm

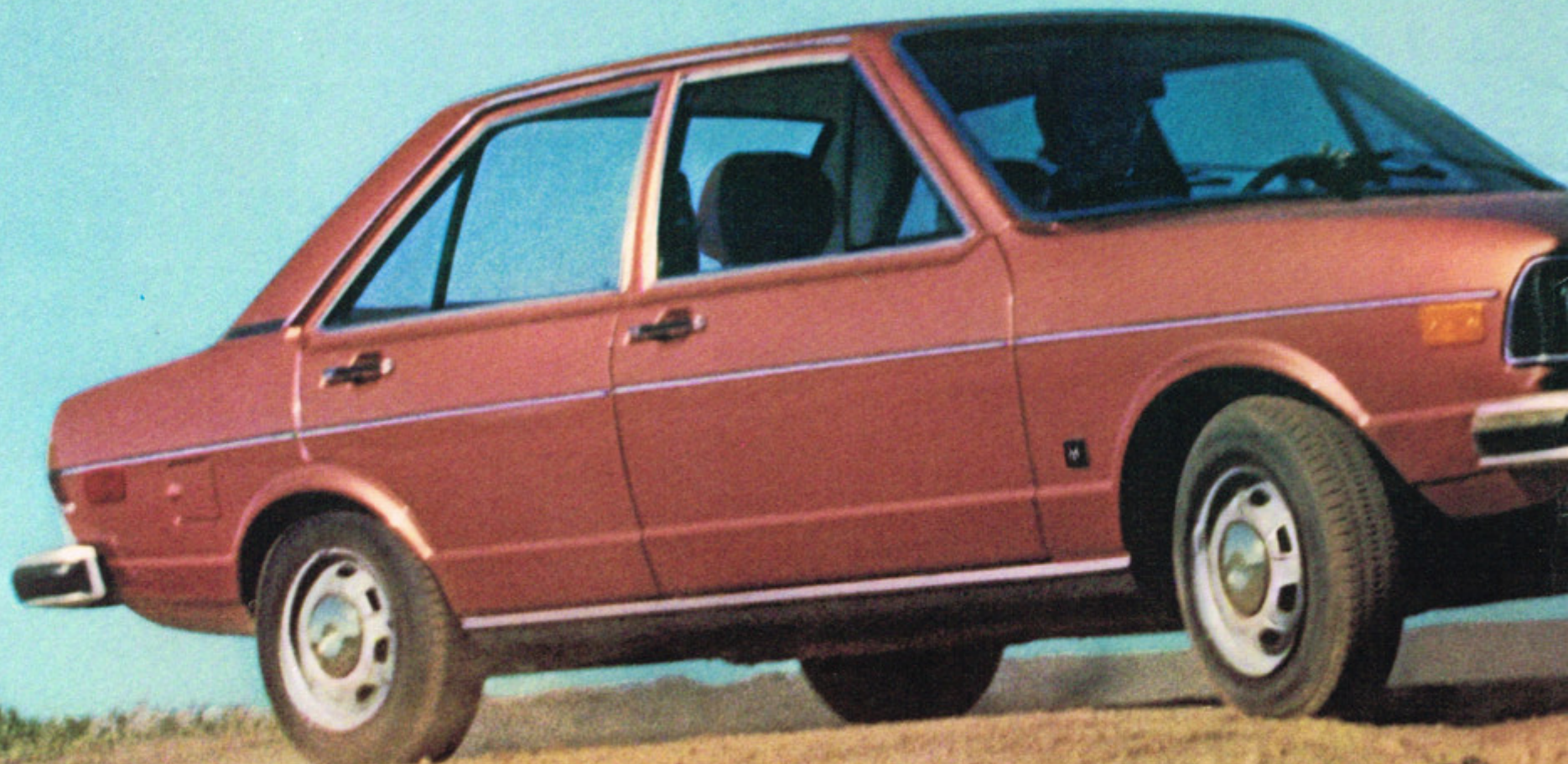
in front and 200 mm in the rear. And the passenger compartment is doubly sound-insulated to reduce road and engine noise.

To absorb the shock of impact on the front wheels, The Fox employs suspension struts, which consist of long telescopic shock absorbers within coil springs. Each spring cushions vertical impact and the hydraulic shock absorber dampens the inevitable vibrations of the spring.



More stable responses

The Fox's suspension system also deals with lateral forces, such as those which tend to lift the inside wheels off the road on a hard turn. The Fox resists this tendency to roll with stabilizer bars front and rear; which help equalize the transfer of weight



and maintain steering response and minimize body roll.

In the rear, The Fox features a diagonal suspension member called a Panhard rod, which maintains alignment between the rear axle and the body. The unique combination of the torsion-crank rear axle and Panhard rod gives The Fox the best of both axle designs: the perfect wheel-positioning or tracking of the solid rear axle and the lightness of an independent suspension for comfort and control.

Armor to battle corrosion

The Fox is also built to combat the corrosive elements that threaten every car's durability. Three separate layers of protective finish are applied to the body shell, doors and hood. The first is a zinc phosphate coating that minimizes the spread of corrosion if the outer finish is

damaged. The first layer is topped with an electrophoretic primer, then follows a hand-



sprayed filler and a hand-sprayed final color coat. In addition, body sections that are highly exposed to corrosion receive a special pliable coating to inhibit rust and peeling.

Every Fox is armed with 12 to 15 pounds of paint and about 30 pounds of undercoating—hand-sprayed on the underside of the car. Then over 5 pounds of polymer are applied to critical areas

such as wheel wells to assure water-tightness.

High performance in hard-driving conditions calls for tires that provide maximum traction. The Fox meets this need with steel-belted radial-ply tires as standard equipment.



Through a combination of more flexible sidewalls and greater tread stiffness, radial tires hold the road better on curves. And so, the spirit of The Fox is conveyed to the very road it rides on.



The Fox is a spirited sports sedan— it's also a very roomy, comfortable car.

The Fox measures just under 15 feet in length. Yet the useful room to be found within is truly astonishing. It is a five-passenger car in the full sense.

Enter The Fox, and you sense at once how carefully it has been designed for maximum utilization

of space. The front seats can be slid back on their tracks so that a tall man can move back far enough for comfort. Even then, there is ample knee room in the back seat.

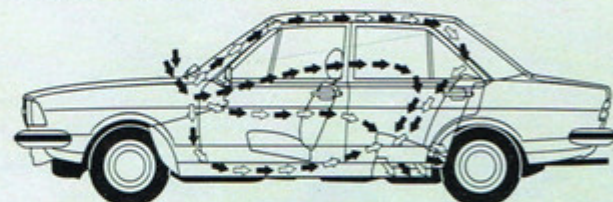
The shape of the seats themselves actually encourage a relaxed posture. Their contour and positioning were determined by orthopedic principles gleaned from scientific fatigue studies. Springs and cushioning are balanced precisely to eliminate tiring vibrations. Front seats are fitted with head

restraints, which are adjustable and can also be tilted at an angle most

comfortable for the driver or front-seat passenger.

Maintaining the ideal climate

As important as space to passenger comfort is the "climate" within the car. The Fox interior is designed with



"Flow-Through Ventilation," which introduces a continuous supply of outside air without opening the windows. The system draws air into the car through intake vents at the base of the windshield. Air supply is passed through a separator, removing drops of water.



Incoming air circulates through the passenger compartment while stale air exits through vents in the doors.



The air flow can be selected to keep the upper layer cooler and the lower layer warmer—

an arrangement that promotes clear heads and warm feet. Dashboard controls allow adjustment of the amount and direction of incoming air. The Fox's efficient ventilation system can actually change the air every 30 seconds at 55 miles per hour. And for further control of air flow, The Fox has adjustable vent windows.

Insulation reduces noise

An important element affecting the psychological comfort inside a car is the

amount of noise present. In The Fox, irritating noise has been minimized with a body shell that is doubly insulated to reduce transmission of sound and vibration from the road and engine.

In every detail, engineering attention to the technical aspects of The Fox interior has been as intensive as that focused on the car's power train. As a result, the devotee of the spirited sports sedan can now drive one without sacrificing either roominess or comfort.

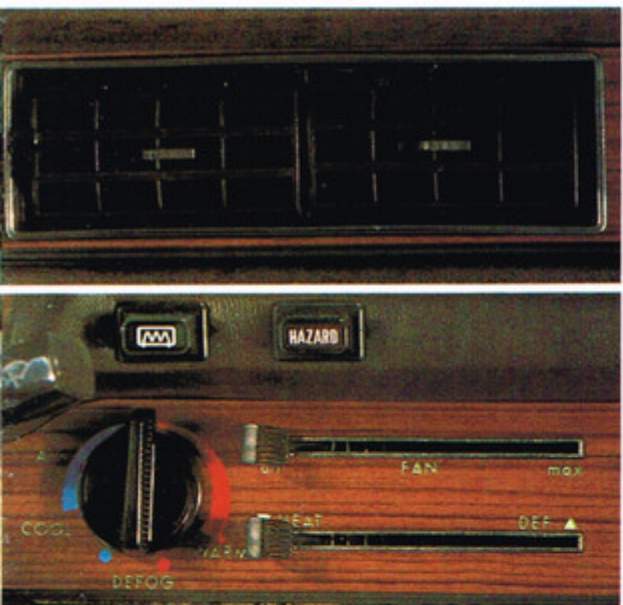




Attractive, durable, easy-to-clean floor mats.



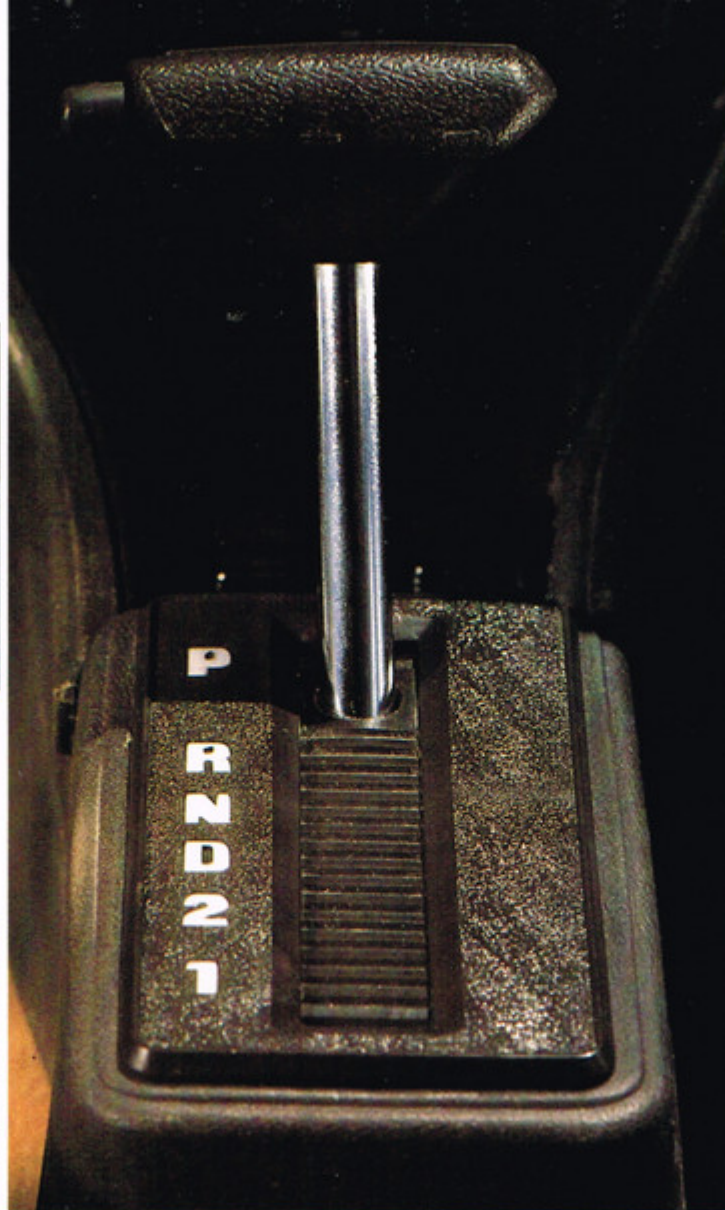
Sun roof offers fresh air and open-top capability.



Simple to operate, powerful air-conditioner, fits neatly into dash.



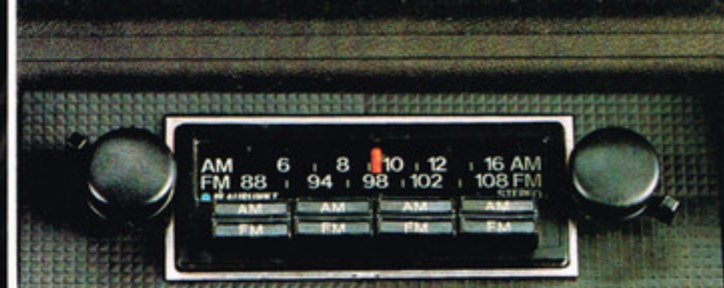
Halogen fog lights for safer driving in adverse weather conditions.



Three-speed floor-mounted automatic transmission.



Large tachometer allows constant monitoring of engine speed.



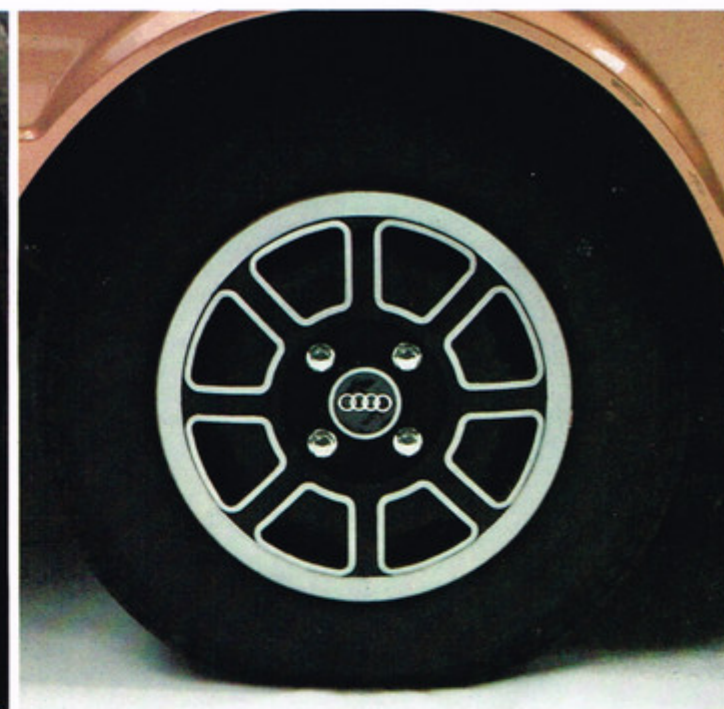
AM/FM stereo radio for low-distortion listening pleasure.



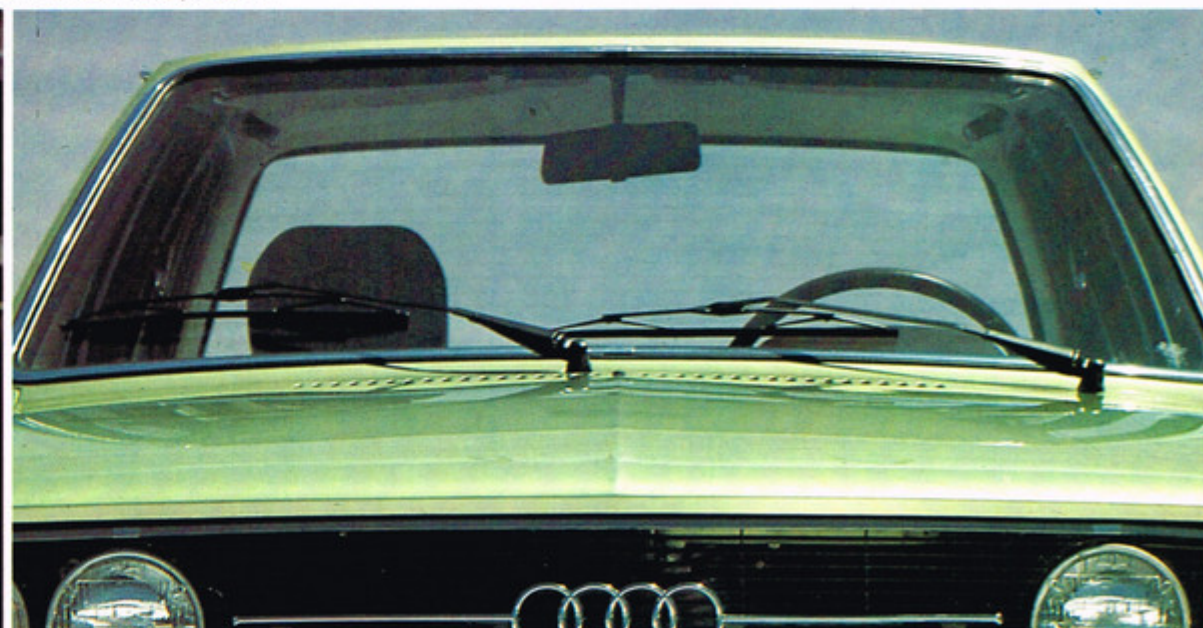
Easy-to-install luggage rack for extra carrying capacity.



Chrome-plated vent shades.



Highly styled wheel covers.



Tinted glass all around reduces harsh glare of sunlight and helps to cool car's interior.

Your choice of Fox spirit: a 2-door sedan, 4-door sedan or Foxwagon.

The spirit of The Fox resides in three distinctive body styles, each ideal for different owner requirements. And you also have many options to choose from, which will further tailor The Fox to your needs and desires.



If you must have plenty of carrying space, you needn't

give up spirited performance or fuel economy to get it. The Foxwagon equals The Fox sedan in mpg* performance while it gives you 51.6 cubic feet of useable space, with the back seat folded down. And it moves you up from 0 to 50 in just 8½ seconds.

Some luxury features are standard

The three versions of The Fox are all equipped with standard styling and interior features that are "optional

extras" on many other car brands —such as deluxe interior, electric quartz-crystal clock, oil pressure gauge, voltmeter, reclining bucket seats, and



electric rear-window defogger. The fact that these luxury features are standard in The Fox should be taken into consideration when comparison shopping.

In all Fox models, the spare tire is stored in its own



compartment within the trunk, affording unobstructed cargo space for luggage.

Nationwide service network

An important objective of Audi research, development and testing is reduced maintenance over the life of the car. Many working parts of The Fox are actually maintenance-free. After the initial 1,000 mile service, the entire drive train, including the standard transmission, does not require regular oil changes. Rear and front

suspensions are permanently lubricated. When service is necessary however, Fox owners can call on a nationwide network of conscientious Audi dealers throughout the U.S. and Canada. These dealers have available to them thorough and specialized training in every servicing requirement of The Fox. They are stocked with a large supply of parts.

And for parts that are rarely required, they can draw



on computerized inventory for

quick delivery.

Different drivers look for different things in a car—fuel economy, interior room,



sports car handling, riding comfort. For drivers who require all of these characteristics (and also want a car with spirit). The Fox was made for you.



Standard Equipment

Power assisted brakes
Dual headlights
155 SR 13 steel belted radial ply tires
Reclining front seats
Adjustable headrests
Fingertip windshield washer/wiper
with intermittent cycle
Day/Night rear view mirror
Remote control outside mirror
Electric quartz crystal clock
Electric rear window defogger
Vent windows

Cigarette lighter
Leatherette steering wheel
Center console
Voltmeter
Oil pressure gauge
Trip odometer
Lockable glove compartment
Front storage shelf
Vanity mirror
Passenger assist handles

Optional Equipment

Sunroof (Available on all three models)
Air conditioning
3-speed automatic transmission
White-wall tires

Special paint (Ask dealer for choices)
Tachometer
Tinted glass
Automatic cruise control
AM/FM stereo radio
Fog lights
Luggage rack
Vent shades
Floor mats
Wheel covers





You're securely in control of The Fox spirit in different driving situations.

The exceptional tracking stability and steering characteristics of The Fox make it a sleek and able maneuverer. It is safety-engineered in the best tradition of Audi, a company that invests a full one-third of its research and development efforts in the improvement of safety. Designers of The Fox set out to give its occupants built-in security—both in *active safety* (the ability to avoid accidents) and *passive safety* (the ability to withstand accidents when they cannot be avoided).



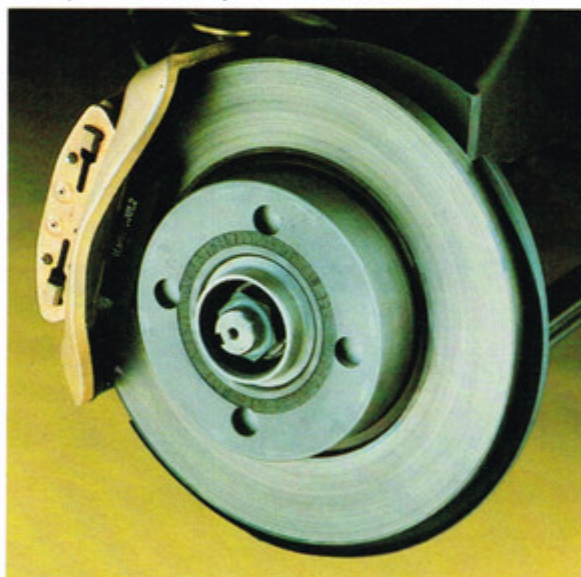
Active safety is mostly a measure of a car's performance. The Fox's front-wheel drive, with its favorable weight distribution over the front axle, gives it excellent tracking stability, good cornering and superior stability even in strong cross winds. Audi engineers have combined front-wheel drive with a feature known as "negative steering roll radius" (see explanation at right), which actually helps to maintain directional stability when roll resistance varies on the front tires while braking.

Power-assisted brakes are standard

Brakes on The Fox are solid disc on the front wheels and drums on the rear wheels. This combination comprises the

ideal braking system to meet the requirements of The Fox's front-wheel drive.

The Fox's disc brakes are of a design known as "floating caliper." This permits the use of

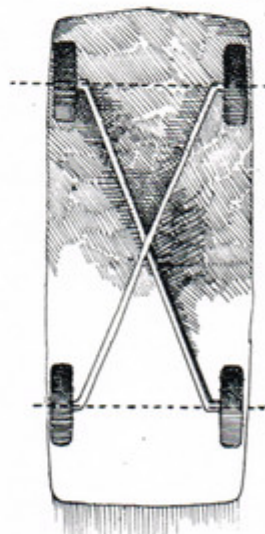


a single piston, which reduces weight and resists "brake fading."

As standard equipment, The Fox has power-assisted brakes with a large nine-inch booster. The power-assist feature not only makes driving easier but promotes safety by reducing the possibility of driver fatigue.

Senses loads automatically

To compensate for varying rear loads, The Fox is equipped with a unique load-sensing pressure regulator, which automatically changes the pressure on the rear brakes. Thus the proportion of braking force on the front and rear wheels is adjusted to match the distribution of weight. The two separate brake circuits are linked diagonally, rather than front and back. In the highly unlikely event that one circuit fails, the driver will still have partial braking power for front and rear axles. And the car's negative steering roll radius will counter-steer to help maintain direction.

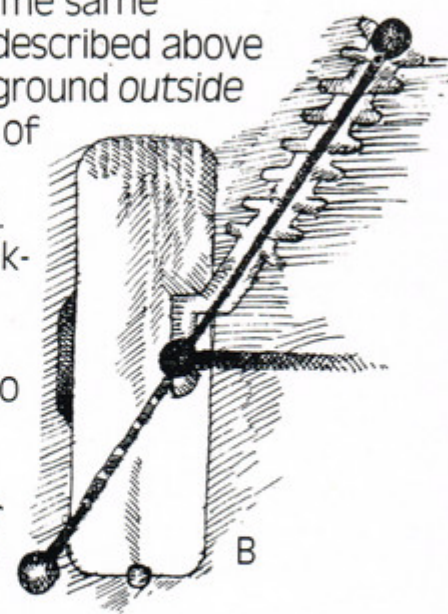
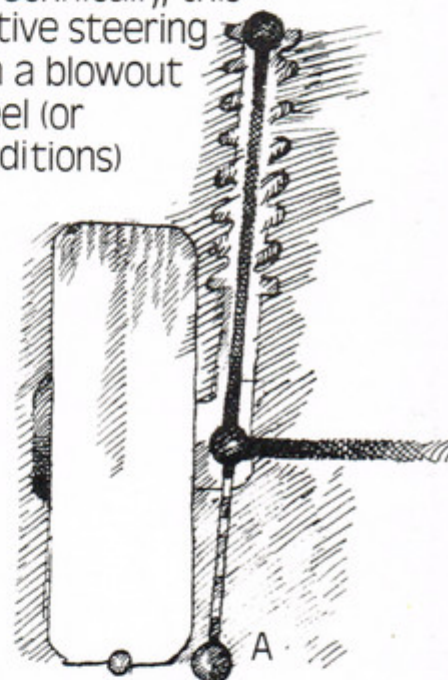


As you can see, The Fox's designers have taken care that the car's spirited performance is more than matched with responsive controls that will help its driver cope with both the usual and the unexpected.

Negative steering roll radius

On a conventional car, an imaginary line drawn through the upper and lower suspension pivots of either front wheel will intersect the ground *inside* the center line of the front tire (see diagram A). Technically, this is known as "positive steering roll radius." When a blowout of the front wheel (or slippery road conditions) cause one front wheel to brake harder than the other, a car with positive steering roll radius tends to steer in the direction of the blowout.

The Fox is designed with "negative steering roll radius." The same imaginary line described above intersects the ground *outside* the center line of the front tire (see diagram B). When front braking conditions are uneven, The Fox tends to steer in the direction that helps the driver maintain directional stability.



The Fox has interior comforts that will soothe your inner spirit.

The comfort you experience inside The Fox is psychological as well as physical. For its designers have created an interior that conveys a "living room" atmosphere, an effect further enhanced by rich velour upholstery and thick pile carpeting. The bucket seats in front recline to a near horizontal position, so you can relax almost as if you were at home.

Viewing the dashboard, a driver is instantly impressed with its simple, sensible

arrangement. Warning lights are centralized. Steering column controls are conveniently



grouped. The design is intentionally functional rather than "showy"—as relaxing in appearance as the car is to drive.

Stalks on either side of the steering column control the headlights and the windshield

wiper/washers. The windshield wiper has two speeds, plus



an intermittent operation for driving in mist or slight rain. An electric rear window defogger is also installed as standard equipment on The Fox—



because of its importance to safe driving.

Orthopedic seat contours

Seated in The Fox, you appreciate the comfort of the modern all-foam seat cushions.

The crushed velour fabric covering the seats of The Fox are available in colors that complement the exterior and match the interior trim. This fabric was selected for its richness and comfort in both summer and winter temperatures.

A relaxing assurance

The Fox interior also offers many reassuring safety features. Large window areas give the driver a high degree of visibility



in every direction. Buckles of the inertia-reel seat belts are mounted directly on the seat

frames instead of the floor, for extra passenger comfort. Child-proof locks are provided on rear doors of The Fox 4-door model. Safety locks on all doors, an energy-absorbing steering column and the absence of dangerous corners and edges also add vital security touches to The Fox's interior.

Inside the car, the effect is singular—a relaxing atmosphere for spirited driving, which promotes both a sense of security and a mode of enjoyment.



Spirited road handling is coupled with advanced safety systems in The Fox.

The response, maneuverability and stability of The Fox give it a high degree of "active safety." And in those cases where an accident is unavoidable, The Fox has also been designed to maximize the "passive safety" of its occupants.

Both the front and rear sections of The Fox are designed to minimize the transfer

of collision forces to the car's occupants. This is achieved through a construction technique employing "crumple zones" in the front and rear. In the event of collision, the front and rear ends will crumple and absorb impact energy—allowing the rigid passenger cell to remain intact. To improve

resistance to side impact, a rugged steel beam has been fitted horizontally into the door panels of The Fox.

Crashes with a purpose

Production-line models of The Fox are periodically subjected to crash tests to assure that the high standard of passive safety is maintained.

Strength and durability of

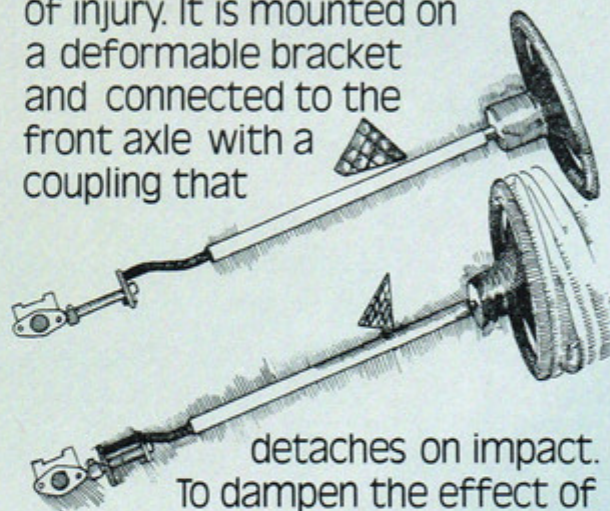


the materials used in manufacture are especially vital to the safety performance of a car. For this reason, every essential Fox component has been subjected to laboratory and bench tests, proving ground tests, and driving expeditions from the Sahara Desert to the Arctic Circle.

Coping with collisions

The Fox's steering wheel and column has also been

engineered to absorb impact energy and reduce the chance of injury. It is mounted on a deformable bracket and connected to the front axle with a coupling that



detaches on impact.
To dampen the effect of

low-speed collisions, The Fox has self-restoring front and rear bumpers, which resist damage in collisions up to five miles per hour. The bumpers also have rubber inserts, guarding against minor scratches.

If you would like a car whose spirit is tempered by security (and who wouldn't?), look closely at The Fox.



Fox spirit is part of a heritage dating back to the origins of the automobile.

The modern Audi company is a respected auto maker known throughout the industry for expertise in front-wheel drive cars and innovation in automotive engineering. A full 10% of Audi's work force of 20,000 is employed in research and development activities. This work is directed by Ferdinand Piëch, well known for the design and engineering of numerous Porsche models. Under Piëch's supervision, Audi engineers work in a



creative atmosphere, where new ideas can be freely advanced, debated, and acted upon.

Audi maintains extensive

testing operations, where the whole car and individual components are put through exhaustive tests. The company has pioneered innumerable testing devices and procedures. One example is a method of judging the durability of components on a statistical test basis. Another is the development of a unique vibration-simulator, which not only "road tests" the car, but subjects it to actual road conditions, based on computer-generated data.

Emphasis on craftsmanship

In addition to crash testing, car bodies are exposed to salt-water corrosion, high temperatures and other excessive conditions. Audi engines are also tested to the breaking point. These tests are complemented by thousands of miles of road tests in many locations,

including the Sahara in summer and Finland in the winter.

The Audi plant in Ingolstadt, Germany, is a facility large enough to take full advantage of modern, automated methods — yet small enough to allow the contributions of individual initiative. The Audi management encourages craftsmanship and pride in the work



accomplished. On the engine production line, for instance, a single worker is responsible for a complex series of high-precision operations culminating in the completed engine.

A half-century of famous Audis

When you buy a Fox, you enter a select tradition, which



was begun by one of Europe's most famous auto designers and builders—August Horch—at the turn of the century. For nearly 30 years, Horch and his Audi sports cars dominated road races, rallies and motor shows throughout Europe.

While he was winning races, Horch was also making engineering history. In 1921 he produced an Audi model with an aluminum engine block, ball-selector transmission and four-wheel brakes. In 1938 his 16-cylinder, 6.3-liter racing car established five new world records in a single week. It was the first car to exceed 250 mph in a speed trial on a public road.

Oddly enough, one of August Horch's strongest competitors for many years was a car bearing his own name. The "Horch" was made by a firm

he had helped found. When he left that company, he could no longer legally build cars under the Horch name. He selected the name *Audi*, as his brand,



1914 Audi

because it is the Latin equivalent of the German word *horch*: to listen. For more than twenty years, the rival firms producing Audi and Horch automobiles competed hotly in the European market. In 1932 they joined forces with the makers of Wanderer and DKW to become Auto Union AG (the four interlocking rings on

the grille of The Fox represent the four companies of the Auto Union merger.)

A great Audi for today: The '78 Fox

In 1966 the company introduced the first modern car that carries the Audi name. In 1973, the first model of The Fox was introduced into the U.S.—a unique sports sedan incorporating the same superb Audi engineering typical of larger Audi automobiles. In the ensuing years, the car has been repeatedly refined and improved.

The 1978 Fox represents the finest expression of its highly original design concept: a spirited sports sedan which also serves the practical transportation needs of its owner.

1938 Horch



AUDI FOX 1978 SPECIFICATIONS

ENGINE:	Type	4 cylinders, in-line water cooled
	Location	Front mounted—20° slanted
	Bore	3.13" (79.5mm)
	Stroke	3.15" (60.0mm)
	Displacement	97 cu. in. (1588 cc)
	Compression Ratio	8.0:1
	Horsepower	78HP/5500 RPM—76HP/5500 RPM, California
	Fuel/Air Supply	CIS fuel injection
	Cooling	Water cooled with thermostatically controlled electric fan
ELECTRICAL SYSTEM:	Ignition	Battery, coil and distributor
	Battery	12 volt, 45 amp/hour
	Alternator	770 watt
DRIVE TRAIN:	Type	Front-wheel drive
	Standard Transmission	4-speed, fully synchronized
	Optional Transmission	3-speed, fully automatic
STEERING:	Type	Rack and pinion
	Turns—lock to lock	3.9
	Turning Circle	31.2' (curb to curb)
BRAKE SYSTEM:	Type	Hydraulic, power-assisted with diagonally linked dual circuits and rear brake pressure regulator
		Disc brakes, front Drums, rear
CHASSIS AND SUSPENSION:	Frame	Unitized body with subframe
	Front Suspension	Independent McPherson struts with negative steering roll radius
	Front Springing	Coil springs and shock absorbers, plus stabilizer bar
	Rear Suspension	Torsion crank axle, with Panhard rod
	Rear Springing	Coil springs and shock absorbers
RIMS AND TIRES:	Wheel Size	5J x 13
	Tire Size	155 SR 13 radial ply steel belted tires
DIMENSIONS:	Wheelbase	96.5"
	Front Track	52.8"
	Rear Track	52.8"
	Overall Length	173.8"
	Overall Width	64.8"
	Height (unloaded)	53.6"
	Trunk Capacity—sedan	18.7 cu. ft.
	Trunk Capacity—wagon	24.7 cu. ft. seat up—51.6 cu. ft. seat down
	Engine Oil	3.7 U.S. quarts
	Cooling System	6.5 U.S. quarts
	Fuel Tank	11.9 gallons U.S.