

2002



BAVARIAN MOTOR WORKS, MUNICH, GERMANY



The BMW 2002. A unique combination of the car you really want and the car you really need.

There is an obsolescence built into most cars — and most particularly small, practical family sedans — that has nothing to do with the way they're built.

It's called boredom. And it has to do with the way they drive.

Most cars simply are not built to perform in such a way that driving becomes an end — not merely a means of getting somewhere.

The BMW 2002, on the other hand, is.

If a single generalization could be made to describe all BMWs, it would be that each is a unique combination not only of the refined luxury you'd expect in a costly European car, but also of the extraordinary performance you'd expect only in a sports car.

In a time when the concept of the automobile has taken many irrelevant side roads, BMWs are built to be finely tuned machines. A unique harmony, if you will, of performance, safety and comfort.

In an age of mass produced status symbols, marketing wizardry and styling breakthroughs, the engineers at the Bavarian Motor Works, in Munich, Germany, concentrate on building the best driving machines it is physically and technically possible to build.

And the result? Perhaps Motor Trend magazine put it most succinctly when they wrote, "The reaction to a BMW is always the same. The first time driver takes the wheel and

after a few miles no other automobile like this will ever be quite as good again".

Styling, functional not frivolous.

The engineers at the Bavarian Motor Works did not invent the phrase, "form follows function".

But, as Motor Trend magazine put it, "Among all the world's automakers, BMW is perhaps the foremost practitioner of the philosophy".

There is nothing on a BMW that does not contribute in some way to performance,

of visibility in all directions.

In front, a matt-black kidney shaped grill, characteristic of all BMWs.

And in the rear, an oversized four section tail lighting system that makes the 2002 extremely visible at great distances.

Construction, painstaking.

The BMW is not produced on a typical assembly line.

In fact, it takes as long as three full days to complete a single car.

Each car goes through an arduous process of painting, hand examination, sanding



safety, or comfort.

No concession to passing fads or fleeting fashions.

Its shape is classic, uncomplicated, and aerodynamically sound. Its belt line low, to bring down the center of gravity and provide an astonishing amount

and repainting. Not just once, but as many times as is necessary to arrive at a perfect end result.

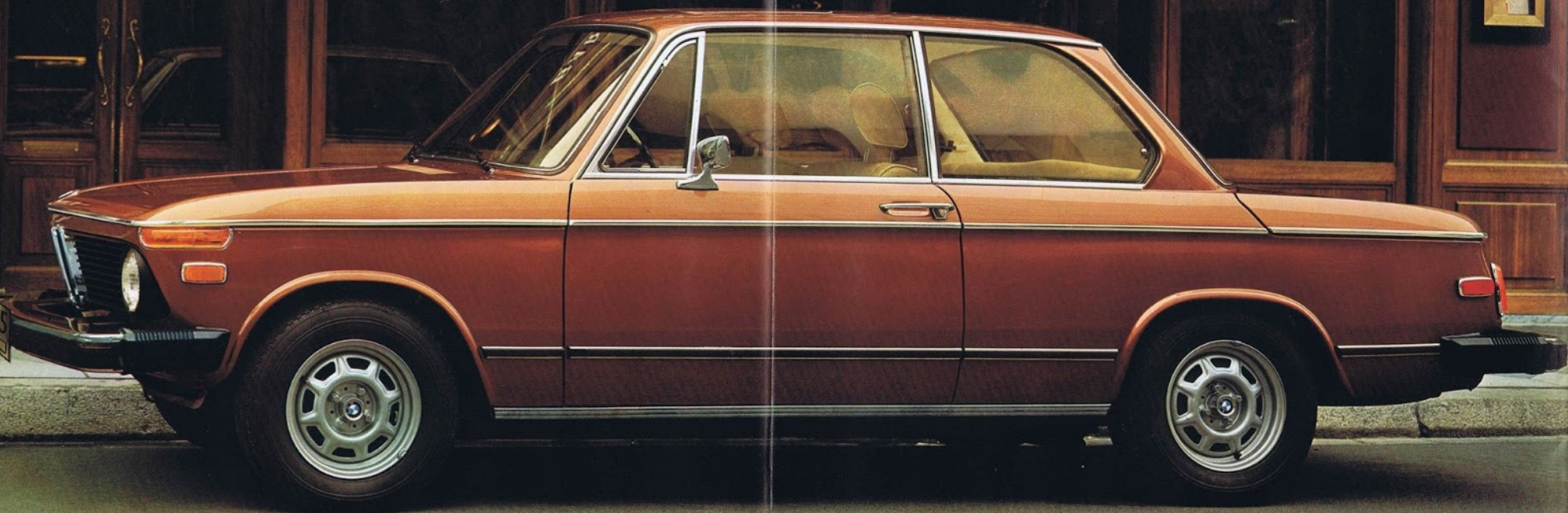
THE VICTORIAN

WAT

BAR

RESTAURANT

CAFÉ



The cockpit, designed for total control.

Inside the BMW 2002, you will find no simulated wood trim and no plastic replicas of Edwardian crests.

The design of the cockpit of the 2002 is the end result of extensive biomechanical simulation testing.

All controls are within easy reach,

precisely where you'd want them.

All instruments are instantly readable and grouped in such a way as to preclude the need for unnecessary movement or a lapse of concentration.

The controls, grouped in the manner of an airplane cockpit,

Switch for directional signal, "visual horn," and high-beam.

Directional switch above — below, for heater and fresh air.

Four-spoke steering wheel with padding and four horn contacts.

Pull switch for light

Combined instrument for fuel, directional indicator, high beam headlight, oil pressure and generator warning lights, and cooling water temperature.

Warning light for fuel reserve, hand brake and brake fluid level.

Speedometer with total and indication.

Reset button for

Pushbutton

daily mileage

daily mileage

for intermittent warning light.

Directional switches for heater and blower.

Pull switch for rear window defroster.

Cigarette lighter.

Optical signal "Fasten Seat Belts," reactor, and EGR service.

Control lever for windshield wipers (normal, fast, intermittent), automatic wiper/washer.



The interior, engineered not decorated.

When you drive a BMW 2002, you will experience a curious sensation of being a part of the car itself. A unique feeling of total and complete control.

If your realm of experience has been confined to conventional domestic sedans, this feeling will be new to you.

But, be assured, you are not imagining it.

It is, in fact, one of the things BMWs are most famous for. In Germany, it's called "speed-feel" — the feeling that the cockpit is a calm eye in the center of the hurricane.

Part of the explanation for this phenomenon lies inside the car itself.

While the interior of the average car is decorated by stylists, the interior of a BMW is designed by engineers.

Careful study has been made of the interaction between seat location, visual position, steering wheel, pedals, and controls.

Consequently, you will find nothing placed in — or on — a BMW merely for the sake of opulence — but totally engineered to prevent driver fatigue and make human driving error easily and safely correctable.

All seats have an orthopedically molded shape that provides firm lateral support in tight, high speed curves.

All individual seats are fully adjustable with reclining back supports.

All instruments and controls are perfectly and precisely positioned.

What's more, the interior of the 2002 has been designed to make the maximum use of space. It does not make a mockery of the word "sedan".

While on the outside it is considerably smaller than conventional domestic sedans — actually the ideal city car — on the inside there's no sacrifice of room. No cramping of

knees. No squashing of heads.

And in the trunk, where small cars are usually smallest, there's sufficient space for more than a modest amount of luggage, golf clubs, and what have you.

Extras:

The following extras (available at additional charge) will allow you to equip your BMW 2002 according to your individual preferences — to add an accent here and there — without changing the basic character or functionality of the automobile.

Automatic transmission.

Limited slip differential.

Tinted glass all around.

Air-conditioning unit with tinted glass all around.

Radios of various types.

Tachometer.

Steelsunroof: manual or electrically operated.

Metallic paint.

Light metal rims.

Torsion bar stabilizer.







Efficient power, unexcelled.

What is it that makes a car so exceptional that — for seven years running — the readers of Car & Driver magazine name it "The Best Sports Sedan in the World"?

And nowhere is this priceless cache of engineering intelligence more in evidence than at the heart of the 2002: Its utterly sophisticated, four-cylinder, two-liter, triple-hemi-

the spark plugs in a remarkably even, complete and efficient manner.

So complete and so efficient that the engine not only produces a very impressive 96 SAE net horsepower from a mere 121.3 cu. in. capacity, but produces it with exceedingly low emissions and exceedingly high fuel economy.

Further, an overhead camshaft, inclined valves, five main bearings and eight balance weights all combine to give the 2002 a capacity for smooth, reliable turbine-like performance that's totally BMW. And totally unlike any four-cylinder car you've ever owned or driven.

BMW utilizes modern technology for waste gas purification. The engine of the BMW 2002 is equipped with a Thermo-Reactor with controlled air injection that further reduces the HC/CO content in the exhaust gas by after burning under fresh air injection.



To BMW enthusiasts, praise such as this is taken for granted.

If the Bavarian Motor Works is known for anything, it is superb, innovative engineering. Engineering that somehow manages to combine the seemingly incompatible: performance and economy.

In fact, the BMW 2002 is an end result of voluminous amounts of technical and physical research — countless hours on the great racing circuits of the world — and over a half-century of experience in building some of the finest powerplants ever built.

spheric combustion engine.

The technical explanation? Swirl action combustion chambers fan the fuel-air mixture, concentrating it around

An expensive mechanical balance system, as well as a highly effective vibration damping device for crankshaft and crankdrive, results in extremely quiet, almost turbine-like engine performance.

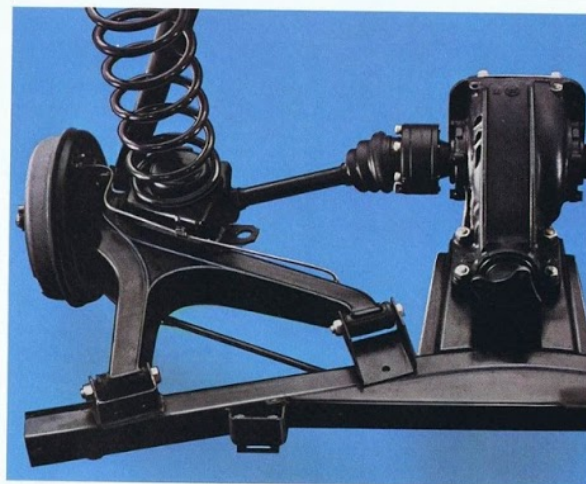


The triple-hemispherical vortex-action combustion chamber is one example of BMW's superior automotive engineering. It's optimally designed flow configuration, as well as vortification of the fuel-air mixture, permit intensive, uniform, and ultra-soft combustion. The result: fast and complete change of gas, fast ignition, superior draft at low as well as high speeds, low fuel consumption, and a minimum of harmful substances in the exhaust gas.





The chassis, uniquely efficient.



If the engine is the heart of an automobile, then the chassis — the suspension system — is its conscience.

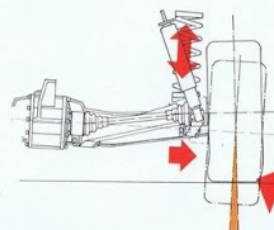
In truth, it is the very essence of a safe automobile.

It must be capable of withstanding speeds higher than the rated speed of the automobile.

It must have sufficient strength and agility to survive violent swerves, fast side-tracking, or panic braking.

In short, a well designed chassis is a technical — but very real — form of life insurance.

The chassis of the BMW 2002 is generally acknowledged to be one of the finest ever built. A carefully synchronized, extensively researched masterpiece of engineering.



Road holding, uncanny.

If you've become accustomed to the leaning and swaying one experiences in the average car, you'll find the legendary road holding capabilities of the 2002 more than a bit reassuring.

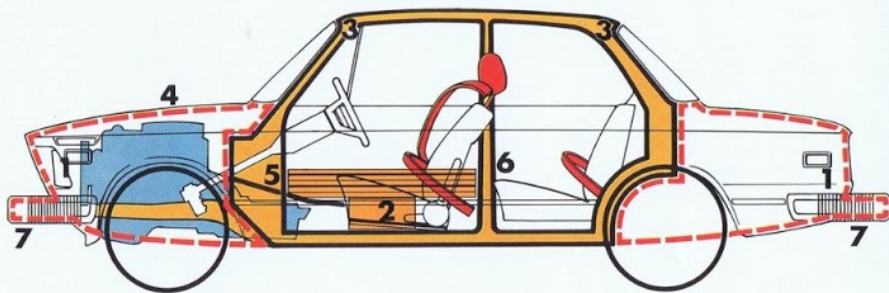
The suspension is fully independent on all four wheels. (McPherson struts and coil springs in front, semi-trailing arms and coil springs in back.)

And this, combined with a multijointed rear axle, allows each wheel to adapt itself instantly to every driving and road condition.

For the enthusiast, here is a technical description of what actually happens while negotiating a curve or while changing lanes at high speed:

The outer wheel will adopt a certain camber in tune with the car's speed while traversing the curve. In this manner, the chassis transmits lateral guidance forces of a high magnitude, braces itself against the curve and permits a high transverse acceleration.

Safety, more than just brute strength.



It's doubtful that there is a car made that's made stronger than the BMW 2002.

A steel safety cell that completely surrounds the passenger compartment and computer determined "crush zones" all contribute to reducing injury to a minimum, should an accident prove unavoidable.

Yet there is another kind of safety, equally important, called "active safety". Simply, this refers to a car's ability to avoid accidents, not merely survive them.

And this is where the 2002's extraordinary performance and handling characteristics come into play.

As does its dual twin-circuit, disc/drum braking system that provides adequate braking power — actually above the legally prescribed limit — even if one of the two systems should fail.

The BMW life saving system.

1. The BMW 2002 has deformable, energy absorbing front and rear sections. These sec-

tions are designed — by computer — to absorb impact energy by buckling or folding up, leaving the passenger compartment untouched.

2. All doors have been reinforced by additional struts.

3. The passenger compartment is resistant against roll-over deformation because of its unique front and rear roof reinforcement.

4. The hood is designed to buckle — according to a pre-determined pattern — absorb impact energy and leave the windshield intact.

5. A specially designed cardan tunnel plus a rigid front partition will prevent the engine from being driven back into the passenger compartment upon frontal impact.

6. Safety locks keep the doors closed during impact, yet permit subsequent opening.

7. The bumpers are braced against sturdy hydraulic shock absorbers, eliminating the possibility of damage to the car in frontal collisions of up to five miles per hour.

Service, as efficient and reliable as the car itself.

BMW owners can now get rapid routine servicing, perfect engine tuning, and pinpoint accuracy in the diagnosis of possible problems.

Because all BMW automobiles are equipped with a special electronic contact. As a result, at BMW electronic centers, regular inspections have never been quicker, nor trouble spotting more precise.

BMW service and original spare parts are available coast to coast in the United States — and in over 100 countries around the world.



Technical Data BMW 2002

Dimensions and weights

All-steel shell welded with lower floor panel assembly, 2-door sedan.
Length: 176.0". Width: 62.6". Height: (unloaded) 55.5". Wheelbase: 98.4". Track front and rear: 52.8". Turning circle dia.: 34.9". Door cutouts: 40.2" wide.
Width at shoulder height: front 50.8", rear 49.6".
Trunk capacity: approx. 15.9 cu. ft. Fuel tank capacity:

city: approx. 13.0 US/gal., including 1.6 US/gal. reserve.
GVWR 3300 lbs.
GAWR front 1680 lbs.
rear 1780 lbs.
Service load 790 lbs.

Engine, power transmission, performance data

Four-cylinder, four-stroke in-line engine, triple-hemispherical swirl-action combustion chambers (Transverse flow principle), overhead camshaft, parallel-displaced inclined overhead valves in V-arrangement, forced oil lubrication with Eaton-type pump and full-flow oil filter, water cooled. Crankshaft has 5 main bearings plus 8 balance weight.
Capacity 1990 c.c./121.3 cu. in.
Stroke 3.15"
Bore 3.50"
Power 96 h.p. — SAE net at 5,500 rpm
Torque 106 ft/lbs at 3,500 rpm
Compression ratio 8.1:1
Carburetor: SOLEX 32/32 DIDTA, 2-stage downdraft carburetor with booster pump and automatic choke, Thermo-Reactor with air injection.
Ignition distributor with centrifugal advance and vacuum retard system.

12 volts, 630 watts, three-phase current alternator; battery 12 volts, 55 amp hrs.
Gearbox
a. Manual transmission 4-speed synchromesh
I. 3.764 II. 2.02 III. 1.320 IV. 1.000 R 4.096
b. Automatic transmission 3-speed with torque converter (optional)
I. 2.56 II. 1.52 III. 1.00 R 2.00
Final drive ratio: 3.64:1 (hypoid gears).
Maximum speed 102 m.p.h. (Automatic 98 m.p.h.)
Acceleration from 0 to 60 m.p.h.: 12.8 seconds (4 speed manual transmission). Regular gasoline: 91 RON, Gas consumption (EPA):
Manual transmission Highway City
Automatic transmission 30 mpg 19 mpg
(not valid in California) 30 mpg 19 mpg

Chassis and brakes

Front Suspension: McPherson struts and wishbones, coil springs.
Rear Suspension: Individual wheel suspension with rubber mounted steering axles (transverse), helical springs plus additional rubber springing.
ZF-Gemmer steering system with worm and roller, three-part track rod, overall ratio 17.57:1
Rims: 5 J x 13 H 2

Steel belted tires: 165 SR 13
Dual twin-circuit braking system with servo unit.
Front: 4-piston fixed-caliper disc brakes with automatic adjustment.
Disc diameter: 9.43"
Rear: Simplex leading and trailing shoe drums, hand-brake acting on rear wheels mechanically.
Drum diameter: 9.06"

Equipment

Heating and ventilation: water-controlled fresh air heating system with precision temperature setting, three-speed blower, forced air exhaust at the rear windowpane via trunk lid louvers (except with steel sun roof). Defroster nozzles for windshield and front windows.
Impact-absorbing bumpers with rubber welts, braced by means of hydraulic shocks, lateral rubber welts protect against impact, spring-loaded hood and safety lock, crank-operated windows in front completely disappear inside door, vent windows in front and rear, laminated-glass windshield, heated rear windowpane. Rust protection, undercoating.
Instrument panel unit with speedometer, odometer and trip recorder clock, fuel gauge, coolant temperature gauge, cigarette lighter, ignition key simultaneously turns out headlights together with the ignition, 2 backup lights, interior lighting, automatic wiper/

washer unit for windshield with control lever arranged at steering wheel column, 2 wiper speeds plus interval setting, infinitely variable instrument panel lighting. Additional warning lights; fuel reserve, hand brake and brake fluid level, warning lights for "Fasten Seat Belts," Reactor Service and EGR service. Easily accessible storage space: in the glove compartment, above the instrument panel, in middle console; safety ashtray integrated in instrument panel, 2 ashtrays in passenger compartment, carpeting. Reclining seats in front have infinite adjustment and setting; armrests on doors, on right side with integrated handhold; straps suspended from roof with garment hooks in rear; headrests in front, adjustable and detachable; 3-point safety belts in front; 4-spoke steering wheel has large padded area plus 4 horn contacts; outside rearview mirror, tinted; inside mirror, anti-glare.

Optional equipment

Automatic transmission, limited slip differential, air-conditioning unit with tinted glass all around, tachometer, foam rubber-padded steering wheel, rear and front stabilizers, light-alloy rims, second

exterior mirror on right, metallic paint, leather upholstery, lockable glove compartment, lockable tank cap, steel sunroof (manually or electrically operated), tinted glass all around, a choice of radios.

GVWR=gross vehicle weight rate
GAWR=gross axle weight rate



We reserve the right to modify designs, equipment and accessories in the interest of technical progress.

THE ULTIMATE DRIVING MACHINE

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